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NRL REPORT 3584-VOL-II

Volume II

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LARK SP-1M RADAR EQUIPMENT

NRL PROTOTYPE FOR ANA/MPQ-5 AND ANA/SPQ-2 RADARS

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NRL REPORT 3584

Volume II

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LARK SP-1M RADAR EQUIPMENT

NRL PROTOTYPE FOR ANA/MPQ-5 AND ANA/SPQ-2 RADARS

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February 1950

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TABLE OF CONTENTS

VOLUME II

Section	Title	Page
VI	GENERAL INFORMATION	6-1
	1. Introduction	6-1
	a. Purpose and Scope of Volume II	6-1
	b. Description and Use of the Tables	6-1
	2. Location of Major Units	6-2
	3. Vacuum Tubes, Lamps, and Synchros	6-9
	4. Recommended Complement of Spares	6-9
	5. Location of Spare Parts	6-9
VII	CABLING AND WIRING DATA	7-1
VIII	PARTS LIST AND RELATED DATA	8-1

[redacted]

DECLASSIFIED

DECLASSIFIED

CONFIDENTIAL

LIST OF ILLUSTRATIONS

VOLUME II

Figure No.	Title	Page
6-1	Equipment Trailer - Location of Equipment	6-3
6-2	Operations Trailer - Location of Equipment	6-4
6-3	Console Assembly - Location of Unit	6-5
6-4	Duplexers and R-F Plumbing	6-6
6-5	Spare Parts Trailer - Location of Boxes	6-7
7-1	A-c Distribution System - Switch S4903	7-167
7-2	A-c Distribution System - Switch S4911	7-169
7-3	A-c Distribution System - Switch S4912	7-171
7-4	A-c Distribution System - Switch S4913	7-172
7-5	(Sheet 1 of 3 Sheets) A-c Distribution System - Switch S4909	7-173
7-5	(Sheet 2 of 3 Sheets) A-c Distribution System - Switch S4909	7-175
7-5	(Sheet 3 of 3 Sheets) A-c Distribution System - Switch S4909	7-177
7-6	A-c Distribution System - Switch S4910	7-179
7-7	A-c Distribution System - Switch S4908	7-181
7-8	A-c Lights and Outlets	7-183
7-9	D-c Supplies - Positive	7-185
7-10	D-c Supplies - Negative	7-187
7-11	Reference Generator Voltage Distribution System	7-188
7-12	Train Antenna Positioning System	7-189
7-13	Elevation Antenna Positioning System	7-191
7-14	Radar Transmitting and Receiving System	7-193
7-15	Camera Recording Equipment Interconnections	7-195
7-16	Camera Wiring	7-197
7-17	Six-volt Indicators	7-198
7-18	Recording Equipment Cables	7-199
7-19	Communication Cables	7-200
7-20	Equipment Trailer Cables	7-201
7-21	Operations Trailer Cables	7-202
7-22	Intertrailer Cabling - Cables and Receptacles	7-203
7-23	Target Range System Interconnections	7-204
7-24	Missile Range System Interconnections	7-205
7-25	Antenna Assembly - Wiring Diagram	7-207
7-26	Equipment Trailer Cable Panel - Wiring Diagram	7-209
7-27	Operations Trailer Cable Panel - Wiring Diagram	7-211
7-28	Power Unit PE137 - Wiring Diagram	7-213
7-29	Telescope Unit - Wiring Diagram	7-214
7-30	Target or Missile Receiver Unit - Schematic Diagram	7-215
7-31	Target or Missile Range Unit - Schematic Diagram	7-217
7-32	Main Power Unit - Schematic Diagram	7-219
7-33	Synchronizer and Missile Coordinate Detector Unit - Schematic Diagram	7-221
7-34	Auxiliary Power Unit - Schematic Diagram	7-223
7-35	PPI Unit - Schematic Diagram	7-225
7-36	High-voltage Power Unit - Schematic Diagram	7-227
7-37	Target or Missile Indicator Unit - Schematic Diagram	7-229
7-38	Target and Manual Coordinate Detector Unit - Schematic Diagram	7-231
7-39	Target and Missile Range Detector and Servo Amplifier - Schematic Diagram	7-233

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DECLASSIFIED

[redacted]

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LIST OF ILLUSTRATIONS (Continued)

VOLUME II

Figure No.	Title	Page
7-40	Power Control Unit - Schematic Diagram	7-234
7-41	System Control Switching Unit - Schematic Diagram	7-235
7-42	Handcrank Servo Amplifier Unit - Schematic Diagram	7-237
7-43	Telescope Servo Preamplifier - Schematic Diagram	7-239
7-44	Local Oscillator Preamplifier - Schematic Diagram	7-241
7-45	Telescope Final Amplifier Power Supply - Schematic Diagram	7-243
7-46	Telescope Final Amplifier - Schematic Diagram	7-245
7-47	Transmitter - Schematic Diagram	7-247
7-48	Transmitter Waveguide - Schematic Diagram	7-249
7-49	Hydrogen Thyratron Modulator - Control Circuit Schematic Diagram	7-251
7-50	Hydrogen Thyratron Modulator - Schematic Diagram	7-253
7-51	Modulator Variac Control - Schematic Diagram	7-254
7-52	Handcrank Isolation Relay Unit - Schematic Diagram	7-254
7-53	Reference Voltage Distribution Unit - Schematic Diagram	7-255
7-54	Missile Cross-pointer Meter	7-256
7-55	D-c Voltage Regulator Unit - Schematic Diagram	7-257
7-56	Antenna Unit and Synchro-Capacitor Unit - Schematic Diagram	7-259
7-57	Antenna Control Unit - Schematic Diagram	7-261
7-58	D-c Servo Amplifier Unit - Schematic Diagram	7-263
7-59	D-c Servo Amplifier Power Unit - Schematic Diagram	7-264
7-60	D-c Servo Equalizer Unit - Schematic Diagram	7-265
7-61	Missile Oscillator Preamplifier Power Supply - Schematic Diagram	7-266
7-62	Missile Oscillator Preamplifier - Schematic Diagram	7-267
7-63	Echo Box and Standing Wave Amplifier - Schematic Diagram	7-269
7-64	Communications Section - Schematic Diagram	7-271
7-65	Power Distribution System - Block Diagram	7-273
7-66	Power Distribution Unit - Schematic Diagram	7-275
7-67	15 Kw Gasoline Engine Alternator - Schematic Diagram	7-277
7-68	Transformer Bank for Conversion From Four-wire to Three-wire System - Schematic Diagram	7-278
7-69	A-c Voltage Regulator - Schematic Diagram	7-279
7-70	Dehumidifier - Schematic Diagram	7-280
7-71	Keep-alive Power Supply - Schematic Diagram	7-281
7-72	Dial Box Unit - Schematic Diagram	7-282
7-73	Camera Control Unit - Schematic Diagram	7-283
7-74	Time Comparator Unit - Schematic Diagram	7-284
7-75	Remote Range Indicator Unit - Schematic Diagram	7-285
7-76	Commutator Unit - Schematic Diagram	7-287
7-77	Telescope Unit - Schematic Diagram	7-289
7-78	Nutator Phasing Unit - Schematic Diagram	7-291
7-79	A-c Voltage Regulator - Schematic Diagram	7-293
7-80	Train and Elevation Servo Amplifier for Simulated Target Programmer	7-295
7-81	Programmer Control Unit - Schematic Diagram	7-297
8-1	Target Receiver Unit - Front View	8-15
8-2	Target Receiver Unit - Top View	8-16
8-3	Target Receiver Unit - Right Side View	8-17
8-4	Target or Missile Receiver Unit - Bottom View	8-18

[redacted]

DECLASSIFIED

DECLASSIFIED

CONFIDENTIAL

LIST OF ILLUSTRATIONS (Continued)

VOLUME II

Figure No.	Title	Page
8-5	Left Half of Target or Missile Receiver Unit - Bottom View	8-19
8-6	Right Half of Target or Missile Receiver Unit - Bottom View	8-20
8-7	Missile Receiver Unit - Front View	8-21
8-8	Missile Receiver Unit - Top View Showing AFC Chassis in Place	8-22
8-9	Missile Receiver Unit - Right Side View	8-23
8-10	Missile Receiver AFC Chassis - Top View	8-24
8-11	Missile Receiver AFC Chassis - Bottom View	8-25
8-12	Range Unit - Front View	8-33
8-13	Range Unit - Right Side View	8-34
8-14	Range Unit - Top View, Electronic Section	8-35
8-15	Range Unit - Bottom View, Electronic Section	8-36
8-16	Left Half of Range Unit - Bottom View, Electronic Section	8-37
8-17	Right Half of Range Unit - Bottom View, Electronic Section.	8-38
8-18	Range Unit - Top View, Mechanical Section	8-39
8-19	Main Power Unit - Front View	8-41
8-20	Main Power Unit - Top View	8-42
8-21	Main Power Unit - Right Side View	8-43
8-22	Main Power Unit - Bottom View	8-44
8-23	Synchronizer and Missile Coordinate Detector Unit - Top View	8-48
8-24	Synchronizer and Missile Coordinate Detector Unit - Right Side View	8-49
8-25	Synchronizer and Missile Coordinate Detector Unit - Bottom View	8-50
8-26	Left Half of Synchronizer and Missile Coordinate Detector Unit - Bottom View	8-51
8-27	Right Half of Synchronizer and Missile Coordinate Detector Unit - Bottom View	8-52
8-28	Auxiliary Power Unit - Front View	8-55
8-29	Auxiliary Power Unit - Top View	8-56
8-30	Auxiliary Power Unit - Right Side View	8-57
8-31	Auxiliary Power Unit - Bottom View	8-58
8-32	PPI Unit - Front View	8-60
8-33	PPI Unit - Top View	8-61
8-34	PPI Unit - Right Side View.	8-62
8-35	PPI Unit - Bottom View.	8-63
8-36	PPI Unit - Back View	8-64
8-37	High Voltage Power Unit - Front View	8-66
8-38	High Voltage Power Unit - Top View	8-67
8-39	High Voltage Power Unit - Bottom View	8-68
8-40	Target or Missile Indicator Unit - Front View	8-71
8-41	Target or Missile Indicator Unit - Top View	8-72
8-42	Target or Missile Indicator Unit - Bottom View.	8-73
8-43	Left Half of Target or Missile Indicator Unit - Bottom View	8-74
8-44	Right Half of Target or Missile Indicator Unit - Bottom View	8-75
8-45	Target and Manual Coordinate Detector Unit - Front View	8-79
8-46	Target and Manual Coordinate Detector Unit - Top View	8-80
8-47	Target and Manual Coordinate Detector Unit - Right Side View.	8-81
8-48	Target and Manual Coordinate Detector Unit - Bottom View.	8-82
8-49	Left Half of Target and Manual Coordinate Detector Unit - Bottom View	8-83

CONFIDENTIAL

DECLASSIFIED

DECLASSIFIED

LIST OF ILLUSTRATIONS (Continued)

VOLUME II

Figure No.	Title	Page
8-50	Right Half of Target and Manual Coordinate Detector Unit - Bottom View	8-84
8-51	Target and Missile Detector and Servo Amplifier Unit - Top View	8-86
8-52	Target and Missile Range Detector and Servo Amplifier Unit - Right Side View	8-87
8-53	Left Half of Target and Missile Range Detector and Servo Amplifier Unit - Bottom View	8-88
8-54	Right Half of Target and Missile Range Detector and Servo Amplifier Unit - Bottom View	8-89
8-55	Power Control Unit - Front View	8-91
8-56	Power Control Unit - Top View	8-92
8-57	Power Control Unit - Right Side View	8-93
8-58	Power Control Unit - Bottom View	8-94
8-59	System Control Switching Unit - Front View	8-95
8-60	System Control Switching Unit - Top View	8-96
8-61	System Control Switching Unit - Right Side View	8-97
8-62	Telescope Servo Preamplifier and Handcrank Servo Amplifier Units - Right Side View	8-100
8-63	Telescope Servo Preamplifier and Handcrank Servo Amplifier Units - Top View	8-101
8-64	Handcrank Servo Amplifier Unit - Top View	8-102
8-65	Handcrank Servo Amplifier Unit - Bottom View	8-103
8-66	Telescope Servo Preamplifier Unit - Top View	8-104
8-67	Telescope Servo Preamplifier Unit - Bottom View	8-105
8-68	Target Local Oscillator Preamplifier Unit - Front View	8-107
8-69	Target Local Oscillator Preamplifier Unit - Top View	8-108
8-70	Target Local Oscillator Preamplifier Unit - Bottom View	8-109
8-71	Telescope Final Amplifier Unit and Telescope Amplifier Power Unit in Cabinet - Front View	8-112
8-72	Telescope Final Amplifier Unit - Top View	8-113
8-73	Telescope Final Amplifier Unit - Bottom View	8-114
8-74	Telescope Amplifier Power Unit - Front View	8-115
8-75	Telescope Amplifier Power Unit - Bottom Unit	8-116
8-76	Transmitter Top Section With Panel Closed - Front View	8-121
8-77	Transmitter Top Section With Panel Dropped Showing Keep-alive Power Supply - Top Oblique View	8-122
8-78	Transmitter Top Section With Panel Dropped Showing Relay	8-123
8-79	Transmitter Lower Section With Doors Open - Front View	8-124
8-80	Transmitter Middle Section With Door Open Showing Duplexer and Units 1700, 4300, 4400, and 4700	8-125
8-81	Hydrogen Thyratron Modulator With Doors to Bottom Section Closed - Front View	8-128
8-82	Hydrogen Thyratron Modulator With Shelf Pulled Out - Front Oblique View	8-129
8-83	Hydrogen Thyratron Modulator With Top Panel Closed - Front View	8-130
8-84	Hydrogen Thyratron Modulator - Right Side View	8-131
8-85	Hydrogen Thyratron Modulator - Left Side View	8-132
8-86	Hydrogen Thyratron Modulator - Back View	8-133
8-87	Hydrogen Thyratron Modulator With Top Panel Open - Front View	8-134

DECLASSIFIED

DECLASSIFIED

CONFIDENTIAL

LIST OF ILLUSTRATIONS (Continued)

VOLUME II

Figure No.	Title	Page
8-88	Hydrogen Thyratron Modulator - Top View	8-135
8-89	Hydrogen Thyratron Modulator - Top Section With Panel Open - Front View	8-136
8-90	Hydrogen Thyratron Modulator Trigger Chassis - Top Oblique View	8-137
8-91	Hydrogen Thyratron Modulator Trigger Chassis - Bottom View	8-138
8-92	Motor Generator - Front Oblique View	8-139
8-93	Filter for Motor Generator Set - Top View	8-140
8-94	Terminal Box on Motor Generator Set - Front View	8-141
8-95	Modulator Variac Control - Top View	8-143
8-96	Handcrank Isolation Relay Unit - Top View	8-144
8-97	Reference Voltage Distribution Unit - Top View	8-146
8-98	Reference Voltage Distribution Unit - Left Side View	8-147
8-99	Reference Voltage Distribution Unit - Bottom View	8-148
8-100	Missile Cross-pointer Meter Unit - Front View	8-149
8-101	Missile Cross-pointer Meter Unit - Back View	8-150
8-102	D-c Voltage Regulator Unit - Front View	8-153
8-103	D-c Voltage Regulator Unit - Top View	8-154
8-104	D-c Voltage Regulator Unit - Bottom View	8-155
8-105	Antenna Unit - Side View Showing Elevation Motors and Counterbalance	8-158
8-106	Antenna Unit - Nutator Drive and Snout Unmounted	8-159
8-107	Antenna Unit - Train Motor and Tachometer in Pedestal	8-160
8-108	Antenna Unit - Main Tracking Camera Unmounted	8-161
8-109	Antenna Unit - Auxiliary Tracking Camera Unmounted	8-162
8-110	Antenna Control Unit, Showing Location of D-c Servo Equalizer, Unit 3500, and D-c Servo Amplifier, Unit 3300	8-163
8-111	D-c Servo Amplifier Unit - Top View	8-165
8-112	D-c Servo Amplifier Unit - Bottom View	8-166
8-113	D-c Servo Amplifier Power Unit - Top View	8-168
8-114	D-c Servo Amplifier Power Unit - Bottom View	8-169
8-115	D-c Servo Equalizer Unit - Top View	8-171
8-116	D-c Servo Equalizer Unit - Bottom View	8-172
8-117	Missile Oscillator Preamplifier Power Supply - Top View	8-174
8-118	Missile Oscillator Preamplifier Unit - Front View	8-176
8-119	Missile Oscillator Preamplifier Unit - Top View	8-177
8-120	Missile Oscillator Preamplifier Unit - Bottom View	8-178
8-121	Standing Wave Amplifier - Front View	8-180
8-122	Standing Wave Amplifier - Top View	8-181
8-123	Standing Wave Amplifier - Bottom View	8-182
8-124	Echo Box - Front View	8-184
8-125	Echo Box - Right Side View	8-185
8-126	Power Distribution Panel With Door Closed - Front View	8-186
8-127	Power Distribution Panel With Door Open - Front View	8-187
8-128	Cable Panel, Equipment Trailer - Exterior View	8-188
8-129	Cable Panel, Equipment Trailer - Interior View	8-189
8-130	Cable Panel, Operations Trailer - Exterior View	8-190
8-131	Cable Panel, Operations Trailer - Interior View	8-191
8-132	Recording Equipment Cable Panel, Operations Trailer	8-192

CONFIDENTIAL

DECLASSIFIED

[redacted]

DECLASSIFIED

LIST OF ILLUSTRATIONS (Continued)

VOLUME II

Figure No.	Title	Page
8-133	Power Unit PE137A - Control Panel	8-194
8-134	Power Panel Unit PE137A - Transformers	8-195
8-135	A-c Voltage Regulator for Power Unit PE137A - Front View	8-196
8-136	A-c Voltage Regulator for Power Unit PE137A - Rear View	8-197
8-137	Dehumidifier Unit - Control Panel	8-198
8-138	Keep-alive Power Supply - Top View	8-199
8-139	Keep-alive Power Supply - Bottom View	8-200
8-140	D-c Relay Box	8-201
8-141	Dial Box Unit - Front View	8-203
8-142	Dial Box Unit - Back View	8-204
8-143	Recording Camera for Dial Box Unit	8-205
8-144	Camera Control Unit - Front View	8-207
8-145	Camera Control Unit - Top View	8-208
8-146	Camera Control Unit - Back View	8-209
8-147	Time Comparator Unit - Front View	8-211
8-148	Time Comparator Unit - Top View	8-212
8-149	Time Comparator Unit - Bottom View	8-213
8-150	Recording Camera for Time Comparator Unit	8-214
8-151	Recording Camera for Remote Range Indicator Unit	8-217
8-152	Remote Range Indicator - Front View	8-218
8-153	Remote Range Indicator - Top View	8-219
8-154	Remote Range Indicator - Right Side View	8-220
8-155	Remote Range Indicator - Left Side View	8-221
8-156	Remote Range Indicator - Bottom View	8-222
8-157	Left Half of Remote Range Indicator - Bottom View	8-223
8-158	Right Half of Remote Range Indicator - Bottom View	8-224
8-159	Commutator Unit - Front View	8-226
8-160	Commutator Unit - Back View	8-227
8-161	Commutator Unit - Bottom View	8-228
8-162	Telescope Column Showing Terminal Boards - Front View	8-230
8-163	Telescope Column Showing Terminal Boards - Rear View	8-231
8-164	Nutator Phasing Unit - Front View	8-234
8-165	Nutator Phasing Unit Keyer Chassis - Upper Shelf Tilted	8-235

[redacted]

DECLASSIFIED

DECLASSIFIED

CONFIDENTIAL

LIST OF TABLES

VOLUME II

Table No.	Title	Page
6-1	Major Units	6-8
6-2	Total Quantities of Vacuum Tubes and Light Sources	6-10
6-3	Vacuum Tubes and Light Sources by Major Units and Part Numbers	6-11
6-4	List of Synchros by Units	6-16
6-5	Recommended Complement of Spare Parts	6-17
6-6	Location of Spare Parts	6-17
7-1	Console Terminal Board Location	7-1
7-2	Junction Points and Interunit Wiring	7-2
7-3	Cabling Data	7-108
7-4	Location and Function of Control Circuits	7-148
8-1	List of Manufacturers	8-3
8-2	Standard Designation for Parts and Spare Parts	8-10
8-3	Replaceable Parts	8-11

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FOREWORD

When the Naval Research Laboratory undertook the development of a mobile ground facility for guidance and performance analysis of guided missiles, it was recognized that the basic elements of such a system could be uniformly applicable to several different types of guidance and to different types of missiles. The development of the Lark SP-1M guidance equipment has demonstrated that with appropriate objectives at the time of project inception, one apparatus can be built to serve successfully a multiplicity of guidance systems without compromising the apparatus for any one function and without significant complication beyond that required to perform any one function well. The resulting potentially wide application in the missile guidance field has given the equipment unusually high utility as a research tool.

The equipment bears the name "Lark" because its development was financed from Lark missile funds. Termination of Lark missile development does not decrease the usefulness of the guidance project to other missiles. In fact, much of the technology of missile guidance that originated in this project has already found its way into other missiles thereby losing its identity of origin. It is anticipated that the same process will continue with increasing benefit to the National effort on missile guidance as the Lark SP-1M equipment, and other equipments manufactured to its pattern, find sustained application in the study of missile guidance.

This report describes the Lark SP-1M and its development. When the project was initially undertaken a primary requirement for the equipment was that it be capable of providing the guidance intelligence necessary for beam rider flight of the Lark missile. This was to be accomplished without compromise of the search and fighter control capabilities of the SP Radar. In its present form, the Lark SP-1M Radar equipment is designed to serve as surface instrumentation for general purpose use in the control and evaluation of short range anti-aircraft guided missiles, having performance capabilities up to and including those of the V-2 rocket. It may be used for either beam-rider or command missile guidance; for the automatic tracking of target and/or missile; for the recording of control station and missile performance data; and for conventional fighter-direction and search operations. The equipment comprises two twelve-ton trailers which contain receiving, transmitting, communications, data recording and associated equipment; and auxiliary trailers that provide power and general service facilities.

Field evaluation of the Lark SP-1M Radar has been accomplished in conjunction with the flight test, in aircraft and missiles, of air-borne automatic missile guidance equipment. These tests have demonstrated consistently reliable performance of the Lark SP-1M equipment.

The Radar is the prototype of the ANA/MPQ-5 (mobile) and the ANA/SPQ-2 (shipborne) missile guiding radars currently being constructed commercially for service application.

The design, development, performance and physical description of the Lark SP-1M radar are contained in this two-volume report. Volume I principally includes theoretical materials, design considerations and procedures, the physical characteristics and performance of the major units, and installation and operation instructions. Volume II provides supplementary data, parts lists, cabling sheets, and schematic wiring diagrams.

Mr. Peter Waterman, Head, Equipment Research Branch and Mr. A. S. Locke, Division Consultant and Project Chairman, directed the design, development, and evaluation of the Lark SP-1M radar system.

The following committee directed the planning, preparation, and review of this two-volume report: W. C. Hodgson (Chairman), G. Bailey, L. F. Gilchrist, M. S. McVay, K. G. Miles, E. W. Peterkin, J. W. Titus and C. F. White.

Others contributing importantly to the design, development, evaluation or reporting of the Lark SP-1M equipment are: J. E. Abel, I. N. Bellavin, N. H. Brown, J. M. Carl, G. C. Collins, L. Q. Delschlepkus, R. Dilks, C. H. Dodge, D. H. Drayer, J. J. Fleming, C. E. Francis, G. L. Franck, R. E. Gaylord, J. J. Giuliani, G. A. Glaubitz, H. Kehm, A. M. King, W. L. Krewson, R. L. Lister, C. M. Loughmiller, M. G. Martin, L. A. Marzetta, J. E. Meade, J. B. O'Neill, J. J. Reeves, V. B. Richards, W. N. Shaddix, P. H. Sloan, J. P. Spaulding, J. S. Sonnabend, E. O. Snyder, B. H. Stafford, C. W. Stoops, H. G. Thompson, R. B. Wagner and W. K. Whiting.

Engineering drawings and artwork were prepared by: J. J. Andary, S. S. Draeger, H. E. Imhoff, N. M. Raskhodoff, L. V. Sipe, W. E. Staymates, C. G. Wilson and H. M. Wright.

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The remaining columns of the table show the function performed by the connection, the terminal board from which the wire comes, the terminal number on that terminal board, the color of the wire, the number of the cable carrying the wire, the component to which the wire is going, its terminal number, color of wire, and the cable carrying it. The functions performed by these columns are self-explanatory. Some of the columns may be left blank if the information called for is not applicable to a particular terminal. For example, if the cable terminates at the terminal board under consideration, the "To" column and successive columns to the right may be left blank; on the other hand, if the terminal board is a tie point connecting two cables all of the columns may be filled in.

b). Cabling data, table 7-3. - Table 7-3, the cabling data, lists in numerical order by cable number, each cable in the equipment with its terminal points and the cable type designation. The table contains three principle subdivisions: Cabling between trailers, operations trailer cables, and equipment trailer cables. Under each individual cable entry is a list of the wires in that cable, giving for each wire the following information: the wire number, the color of insulation, the terminals ("From" and "To"), and the function. The terminals are indicated in the "From" and "To" columns by affixing a number separated by a dash or a letter to the component number. For example: "TB5158-1," which indicates terminal 1 on terminal board TB5158, or "J5109L," which indicates terminal, or pin, L on receptacle J5109.

c). Location and function of control circuits, table 7-4. The purpose of this table, table 7-4, is to facilitate the use of the schematic and interconnection drawings in determining the function and location of all the control circuits of the Lark SP-1M system. The applicable drawings immediately follow the table. The table is divided into the following sections:

Switches
Relays
Motors
Indicator lights
Transformers

The above sections are each arranged numerically by part number and show the following: part number, function of the part, the figure number of the drawing where the part can be found, and the coordinates, if any, showing where the part is located on the drawing. The use of this table should save time in determining the location and operation of any particular part of the Lark SP-1M control system.

5). Parts List and Related Data. - The parts list given in section VIII lists only those parts which were altered or added in the redesign of the original SP-1M radar equipment and is thus incomplete. However, when taken in conjunction with the parts and spare parts list for the original SP-1M equipment, as contained in Navships 900,560.4, "Parts and Spare Parts List for Navy Model SP-1M Radar Equipment," the list of section VIII completely covers the replaceable parts for the Lark SP-1M equipment. The list is used as a standard table of replaceable parts for electronic equipment, except that, where indicated in the description column, reference should be made to corresponding part numbers in Navships 900,560.4. For convenience in reference, two short tables are included in section VIII, preceding the parts list proper. These are: a list of standard part designations, and a list of manufacturers. The list of standard part designations gives the meaning of the letters which are used as a prefix to the part numbers. The list of manufacturers provides a key to the code numbers given in the "Mfr's Code" column of the parts list proper.

In regard to the photographs of section VIII, an attempt has been made to provide complete coverage of the replaceable parts with captioned photographs to assist in locating the parts. For the most part, the illustrations are straightforward; however, the bottom views of some of the units - notably the range unit, the coordinate detectors, and the target or missile indicator units - showed so many parts it was necessary to split the illustration into left and right halves for captioning. Where this was done, an overall bottom view, without captions, is also provided, preceding the split illustration.

2. LOCATION OF MAJOR UNITS

For convenience in reference, the table of major units of the Lark SP-1M equipment and the illustrations showing the location of these units and other equipment in the trailers as given in Volume I, section I, of this report, are repeated here as table 6-1 and figures 6-1 through 6-5. The name, physical location, and unit number of any major unit in the radar equipment may be determined from the table and illustrations; and, when used in conjunction with the illustrations of section VIII, the table and illustrations should make it possible to find the physical location of any specific part without difficulty.

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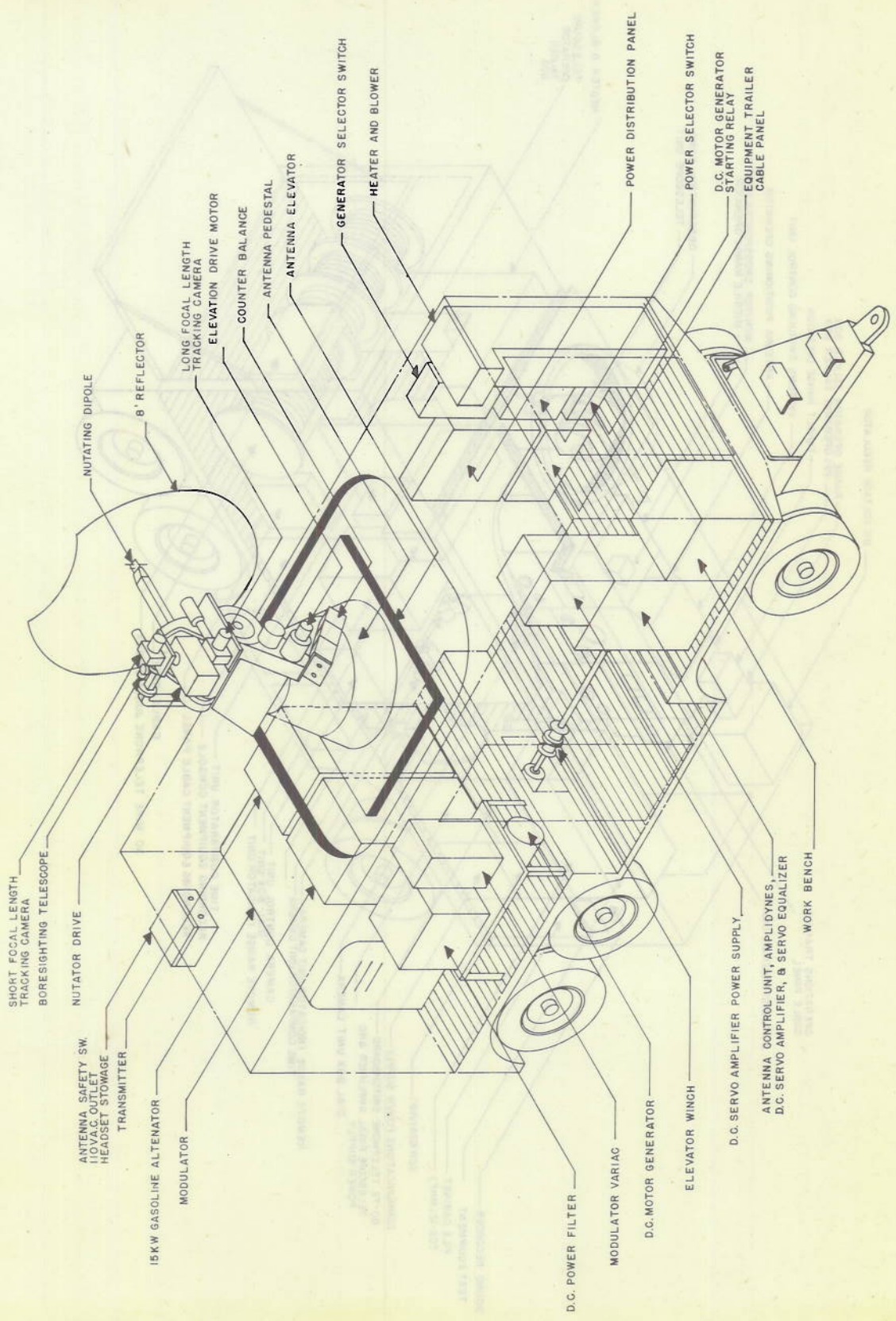

Figure 6-1. Equipment Trailer - Location of Equipment

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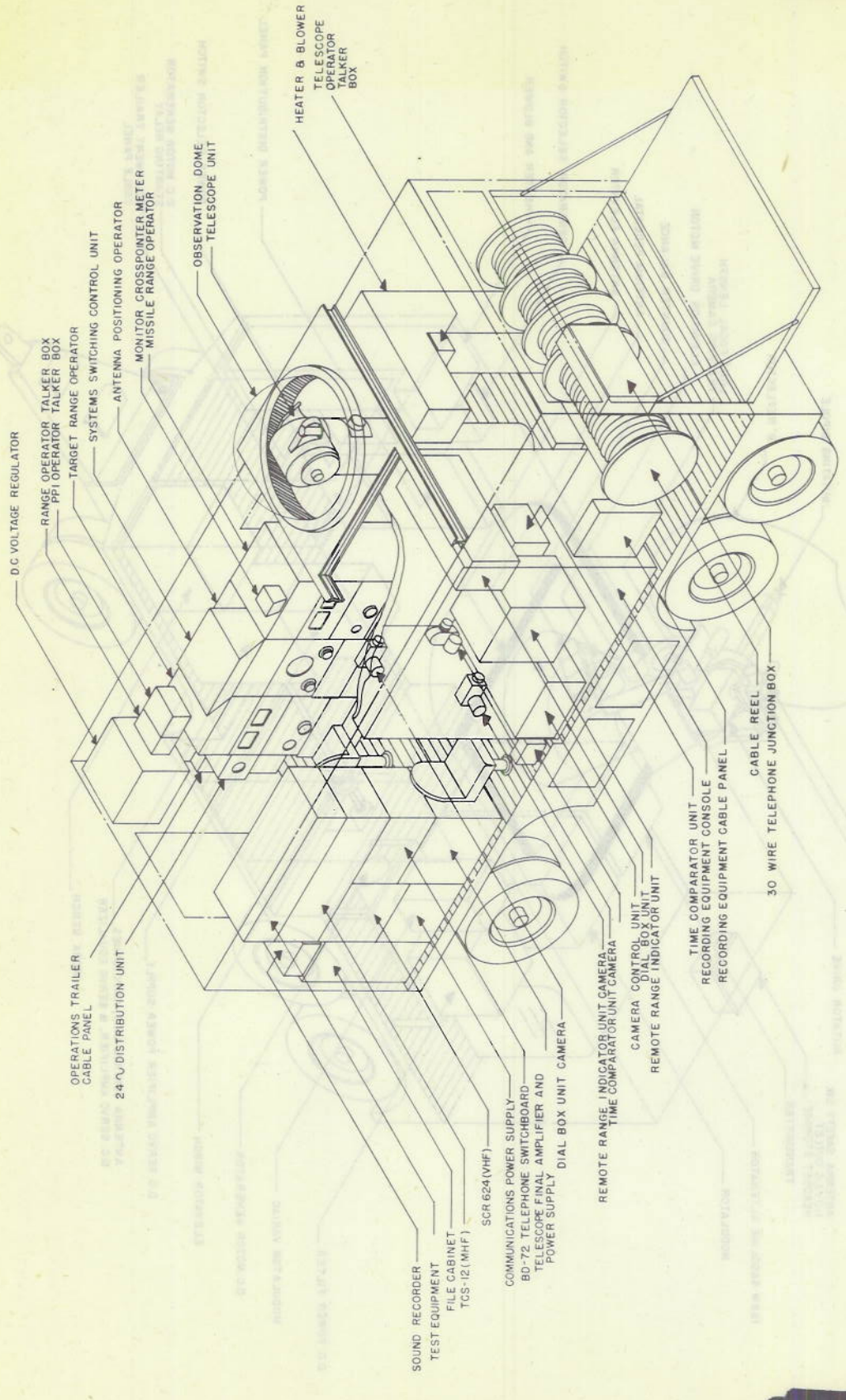

Figure 6-2. Operations Trailer - Location of Equipment

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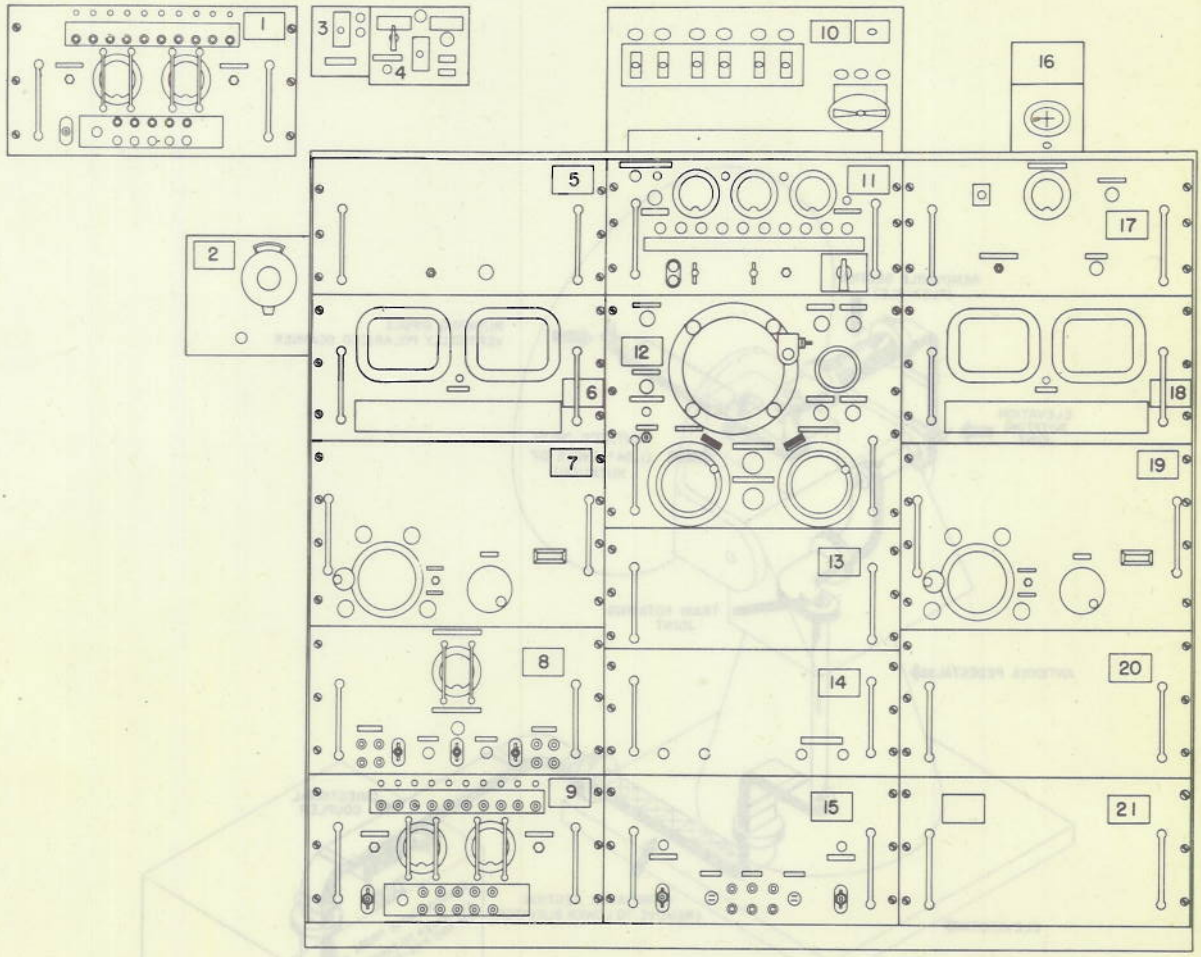

CONSOLE ASSEMBLY

Ref	Description	Lark SP-1M Number	Ref	Description	Lark SP-1M Number
1	D-c Voltage Regulator	2900	13	T & M Range Detector - and Servo Amplifier	1300
2	24-cycle Distribution Unit	2700	14	Target & Manual Coord. Detector Unit	1200
3	Range Operator Talker Box		15	H.V. Power Unit	900
4	PPI Operator Talker Box		16	Monitor Crosspointer Meter	2800
5	Target Receiver Unit	100T	17	Missile Receiver Unit	100M
6	Target Indicator Unit	1000T	18	Missile Indicator Unit	1000M
7	Target Range Unit	300T	19	Missile Range Unit	300M
8	Main Power Unit	500	20	Synchronizer and Missile Coordinate Detector	600
9	Auxiliary Power Unit	700	21	Handcrank Servo Amplifier Unit	1600
10	System Control Switching Unit	1500			
11	Power Control Unit	1400			
12	PPI Unit	800			

Figure 6-3. Console Assembly - Location of Unit

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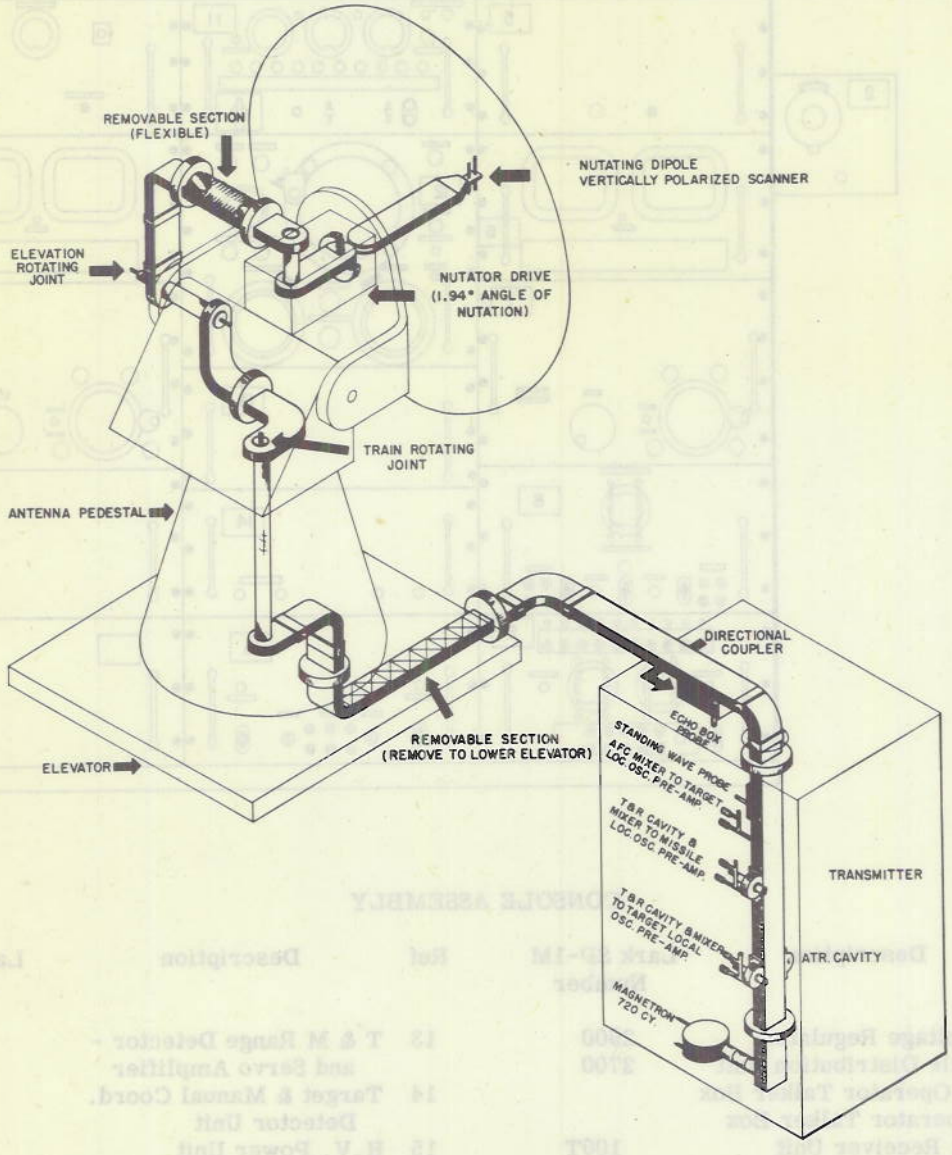

Figure 6-4. Duplexers and R-F Plumbing

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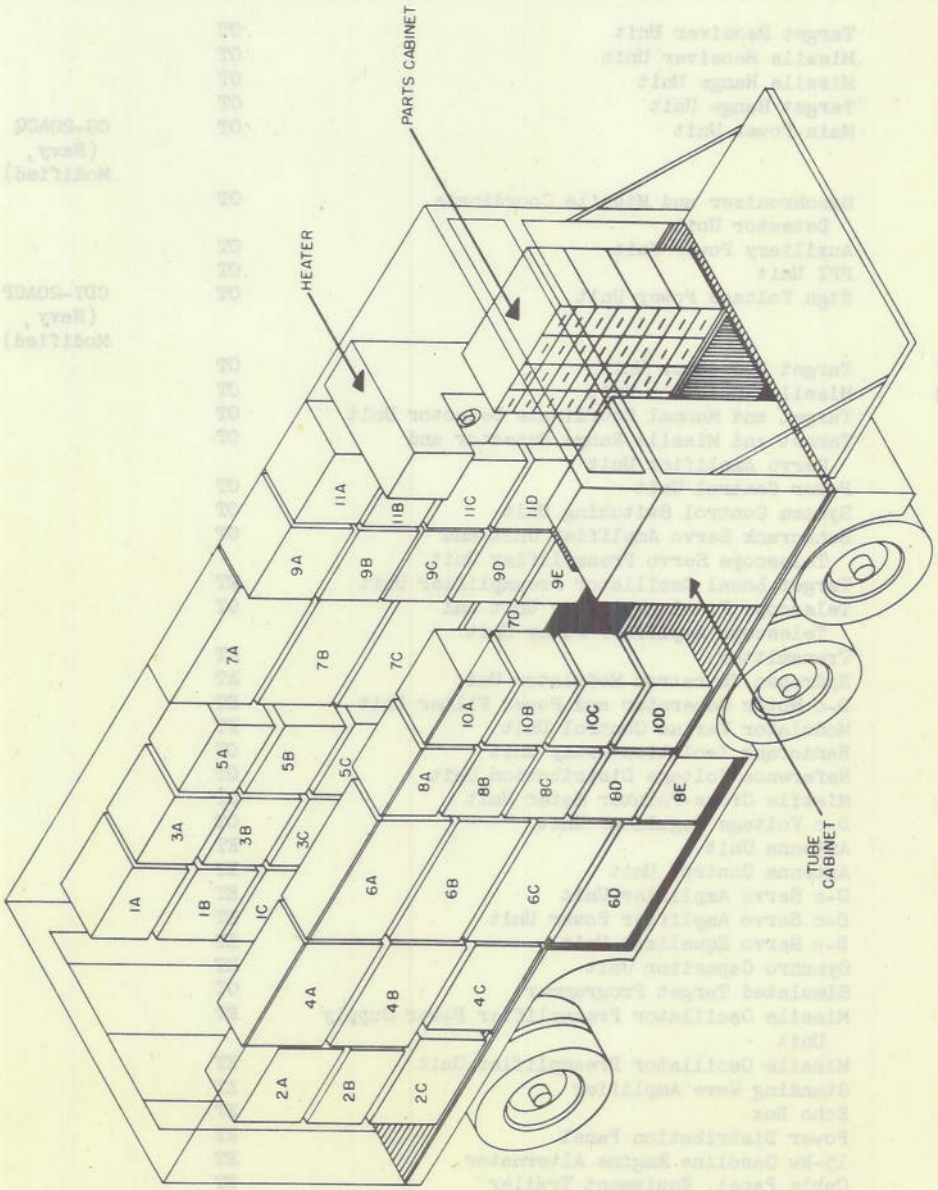

Figure 6-5. Spare Parts Trailer - Location of Boxes

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TABLE 6-1

MAJOR UNITS

NRL Unit No.	Name of Unit	Location*	Army - Navy Designation
100T	Target Receiver Unit	OT	
100M	Missile Receiver Unit	OT	
300M	Missile Range Unit	OT	
300T	Target Range Unit	OT	
500	Main Power Unit	OT	CG-20ACQ (Navy, Modified)
600	Synchronizer and Missile Coordinate Detector Unit	OT	
700	Auxiliary Power Unit	OT	
800	PPI Unit	OT	
900	High Voltage Power Unit	OT	CDY-20ACP (Navy, Modified)
1000T	Target Indicator Unit	OT	
1000M	Missile Indicator Unit	OT	
1200	Target and Manual Coordinate Detector Unit	OT	
1300	Target and Missile Range Detector and Servo Amplifier Unit	OT	
1400	Power Control Unit	OT	
1500	System Control Switching Unit	OT	
1600	Handcrank Servo Amplifier Unit and Telescope Servo Preamplifier Unit	OT	
1700	Target Local Oscillator Preamplifier Unit	ET	
1800	Telescope Final Amplifier Unit and Telescope Amplifier Power Unit	OT	
2000	Transmitter	ET	
2300	Hydrogen Thyratron Modulator Unit	ET	
2400	D-c Motor Generator and Power Filter Unit	ET	
2500	Modulator Variac Control Unit	ET	
2600	Handcrank Isolation Relay Unit	OT	
2700	Reference Voltage Distribution Unit	OT	
2800	Missile Cross-Pointer Meter Unit	OT	
2900	D-c Voltage Regulator Unit	OT	
3000	Antenna Unit	ET	
3200	Antenna Control Unit	ET	
3300	D-c Servo Amplifier Unit	ET	
3400	D-c Servo Amplifier Power Unit	ET	
3500	D-c Servo Equalizer Unit	ET	
3600	Synchro Capacitor Unit	ET	
3800	Simulated Target Programmer	OT	
4200	Missile Oscillator Preamplifier Power Supply Unit	ET	
4300	Missile Oscillator Preamplifier Unit	ET	
4400	Standing Wave Amplifier	ET	
4700	Echo Box	ET	
4900	Power Distribution Panel	ET	
5000	15-kw Gasoline Engine Alternator	ET	
5100	Cable Panel, Equipment Trailer	ET	
5150	Cable Panel, Operations Trailer	OT	
5300	Power Unit PE137		
5400	Dehumidifier Units		CAJH-10306 (Navy, Modified)
5500	Spare Parts Trailer		CAHU-10305 (Navy, Modified)
6200	Keep-Alive Power Supply	ET	

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TABLE 6-1

MAJOR UNITS (Continued

NRL Unit No.	Name of Unit	Location*	Army - Navy Designation
6300	D-c Relay Box	ET	
7100	Equipment Trailer	ET	CAHU-10301 (Navy, Modified)
7200	Operations Trailer	OT	CAHU-10302 (Navy, Modified)
8100	Dial Box Unit	OT	
8200	Camera Control Unit	OT	
8400	Time Comparator Unit	OT	
8500	Remote Range Indicator Unit	OT	
8600	Commutator Unit	OT	
9100	Telescope Unit	OT	
	Sound Recorder	OT	Model B-AVE
4850	Radio Equipment (Communications) VHF	OT	Model TCS-12 (Navy)
4850	Radio Equipment (Communications) VHF (4 channels)	OT	Model SCR-624A (Army)
4850	Telephone Switchboard	OT	Model BD-72B (Army)

* ET = Equipment Trailer
OT = Operations Trailer

3. VACUUM TUBES, LAMPS, AND SYNCHROS

Table 6-2 shows, by tube or bulb type number, the total quantity of each type of vacuum tube and light source used in the Lark SP-1M equipment, regardless of the locations of these components and the individual part numbers assigned to each of them. Table 6-3 lists, in numerical order, these same vacuum tubes and light sources by major units and part numbers. Table 6-4 shows, by major units, the total quantity of each type of synchro in both the Lark SP and the Lark SP-1M equipments. It should be borne in mind that the cross-level synchros of the Lark SP are either not present, or present but not used, in the trailer mounted Lark SP-1M.

4. RECOMMENDED COMPLEMENT OF SPARES

Table 6-5 shows the complement of spare parts recommended for each type of component in the equipment. The recommendation is made (1) as a percentage of the total number of parts of a particular kind in the equipment, (2) as a specific quantity of a given item or (3) as an inclusive quantity recommendation covering all values or sizes of a standard component. Examples of each of these recommendations in the table are: A. Vacuum tubes (percentage); H. Range Unit Crystals (specific quantity); B. Resistors, 20% tolerance, type RC40 (inclusive quantity). The table needs no further explanation.

5. LOCATION OF SPARE PARTS

Table 6-6 gives the stowage location by trailer and spare parts box number of each class of spare part. For parts stowed in the spare parts trailer, the table should be used with reference to figure 6-5.

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TABLE 6-2

TOTAL QUANTITIES OF VACUUM TUBES AND LIGHT SOURCES*

Vacuum Tubes

Tube Type	Quantity	Tube Type	Quantity
2X2	2	6SJ7 or RCA5693+	4
2K28	2	6SG7	2
3B24	4	6SL7GT or RCA5691+	13
5CP1	4	6SN7GT or RCA5692+	84
5C22	2	6V6	16
5R4GY	1	6X5GT	2
5SP11	1	6Y6G	21
5U4G	5	7BP7	1
5Y3GT	2	100-R	6
6AC7	34	VR105	12
6AG5	1	VR150	12
6AG7	20	631-P1	2
6AL5	12	720CY or 4J47/720CY	1
6B4G	6	807	1
6H6	10	814	6
6L6 or RCA1614+	10	866	2
6L6GA	4	884	1
6SH7	4	2050	1

+ Ruggedized or otherwise improved

Light Sources

Bulb Type	Quantity	Bulb Type	Quantity
Mazda C7	3	T7 Lamp 2 C.P.	1
Ne 15	3	115V Candelabra Base	
No. 44	50	Micro Bulb for Surgical Instruments	
NE 51	17	Size 3	4
No. 67	2	No. 222	6
115V 6W Small Base	17		
No. 991 Neon	10		
Red 25W Mazda	1		

* Listing does not include communications (radio) and test equipment.

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TABLE 6-3

VACUUM TUBES AND LIGHT SOURCES BY MAJOR UNITS AND PART NUMBERS

Part No.	Type
Unit 100M-200M, Missile Receiver Unit	
V101	6AC7
V102	6AC7
V103	6AC7
V104	6AC7
V105	6AC7
V106	6H6
V107	6SG7
V108	6AG7
V110	6SN7GT
V112	6L6GA
V113	6AC7
V114	6AC7
V115	6AC7
V116	6H6
V117	6AC7
V118	6AG7
V125	6AG7
V126	6AG7
V127	6AG7
V128	6AG7
V129	6SN7GT
V130	6SN7GT
V131	6L6GA
V132	6SJ7 or RCA5693
V133	NE51
V251	6AC7
V252	6AC7
V253	6H6
Unit 100T-200T, Target Receiver Unit	
V101	6AC7
V102	6AC7
V103	6AC7
V104	6AC7
V105	6AC7
V106	6H6
V107	6SG7
V108	6AG7
V110	6SN7GT
V112	6L6GA
V113	6AC7
V114	6AC7
V115	6AC7
V116	6H6
V117	6AC7
V118	6AG7
V125	6AG7
V126	6AG7
V127	6AG7
V128	6AG7
V129	6SN7GT
V130	6SN7GT
V131	6L6GA
V132	6SJ7 or RCA5693
V133	NE51

Part No.	Type
Unit 300M, Missile Range Unit	
V301	6SN7GT or RCA5692
V302	6SN7GT or RCA5692
V303	6SN7GT or RCA5692
V304	6SN7GT or RCA5692
V305	6SN7GT or RCA5692
V306	6SN7GT or RCA5692
V307	6SN7GT or RCA5692
V308	6SN7GT or RCA5692
V309	6SN7GT or RCA5692
V310	6SN7GT or RCA5692
V311	6SN7GT or RCA5692
V312	6SN7GT or RCA5692
V313	6SN7GT or RCA5692
V314	6SN7GT or RCA5692
V315	6SN7GT or RCA5692
V316	6V6
V317	6AC7
V318	6AC7
V319	6SN7GT or RCA5692
V320	6SN7GT or RCA5692
V321	6SN7GT or RCA5692
I301	Mazda No. 44
I302	Mazda No. 44
I303	Mazda No. 44
I304	Mazda No. 44
I305	Mazda No. 44
Unit 300T, Target Range Unit	
V301	6SN7GT or RCA5692
V302	6SN7GT or RCA5692
V303	6SN7GT or RCA5692
V304	6SN7GT or RCA5692
V305	6SN7GT or RCA5692
V306	6SN7GT or RCA5692
V307	6SN7GT or RCA5692
V308	6SN7GT or RCA5692
V309	6SN7GT or RCA5692
V310	6SN7GT or RCA5692
V311	6SN7GT or RCA5692
V312	6SN7GT or RCA5692
V313	6SN7GT or RCA5692
V314	6SN7GT or RCA5692
V315	6SN7GT or RCA5692
V316	6V6
V317	6AC7
V318	6AC7
V319	6SN7GT or RCA5692
V320	6SN7GT or RCA5692
V321	6SN7GT or RCA5692
I301	Mazda No. 44
I302	Mazda No. 44
I303	Mazda No. 44
I304	Mazda No. 44
I305	Mazda No. 44

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TABLE 6-3

VACUUM TUBES AND LIGHT SOURCES BY MAJOR UNITS AND PART NUMBERS (Continued)

Part No.	Type
Unit 500, Main Power Unit	
V501	5U4G
V502	5U4G
V503	5U4G
V504	5U4G
I501	Mazda No. 44
I502	Mazda No. 44
I503	Mazda C7
Unit 600, Synchronizer and Missile Coordinate Detector Unit	
V601	6AG7
V602	6SL7-GT or RCA5691
V603	6SN7-GT or RCA5692
V604	6V6
V605	6SN7-GT
V606	6V6
V607	6AL5
V608	6AL5
V609	6AL5
V610	6AL5
V611	6SL7-GT
V612	6SL7-GT
V613	6SL7-GT
V614	6SL7-GT
Unit 700, Auxiliary Power Unit	
V701	6Y6-G
V702	6Y6-G
V703	6Y6-G
V704	6Y6-G
V705	6Y6-G
V706	6Y6-G
V707	6SH7
V708	VR150
V709	6B4G
V710	6B4G
V711	6B4G
V712	6SH7
V713	VR150
V714	VR150
V715	VR150
V716	VR105
V717	VR105
V718	6Y6G
V719	VR105
V720	991 Neon Lamp
V721	991 Neon Lamp
V722	991 Neon Lamp
V723	991 Neon Lamp
V724	991 Neon Lamp
V725	991 Neon Lamp

Part No.	Type
Unit 700, (Continued)	
V726	991 Neon Lamp
V727	991 Neon Lamp
V728	991 Neon Lamp
V729	991 Neon Lamp
V730	VR105
V731	VR105
V732	VR105
V733	VR105
V734	VR105
V735	VR150
V736	VR150
V737	VR150
I702	Mazda No. 44
Unit 800, PPI Unit	
V801	7BP7
V802	807
V803	6SN7-GT
V804	6SN7-GT
V805	6AG7
V806	6SN7-GT
V807	6SN7-GT
V808	6SN7-GT
I801	Mazda No. 44
I802	Mazda No. 44
I803	Mazda No. 44
I804	Mazda No. 44
I805	Mazda No. 44
I806	Mazda No. 44
Unit 900, High Voltage Power Unit	
V901	3B24
V902	3B24
V903	3B24
I901	Mazda C7
I902	Mazda C7
Unit 1000T, Target Indicator Unit	
V1001	5CP1
V1002	5CP1
V1003	6SN7GT
V1004	6H6
V1005	6SN7GT
V1006	6SN7GT
V1007	6SN7GT
V1008	6SN7GT

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TABLE 6-3

VACUUM TUBES AND LIGHT SOURCES BY MAJOR UNITS AND PART NUMBERS (Continued)

Part No.	Type
Unit 1000M, Missile Indicator Unit	
V1001	5CP1
V1002	5CP1
V1003	6SN7GT
V1004	6H6
V1005	6SN7GT
V1006	6SN7GT
V1007	6SN7GT
V1008	6SN7GT
Unit 1200, Target and Manual Coordinate Detector Unit	
V1201	6SN7GT
V1202	6V6
V1203	6AL5
V1204	6AL5
V1205	6AG5
V1206	6SL7GT or RCA5691
V1207	6SN7GT or RCA5692
V1208	6V6
V1209	6AL5
V1210	6AL5
V1211	6SN7GT
V1212	6AL5
V1213	6AL5
V1214	6SN7GT
V1215	6AL5
V1216	6AL5
V1217	6V6
V1218	6V6
Unit 1300, Target and Manual Range Detector and Servo Amplifier Unit	
V1301	6AG7
V1302	6AG7
V1303	6AG7
V1304	6SL7-GT or RCA5691
V1305	6SL7-GT or RCA5691
V1306	6SL7-GT or RCA5691
V1307	6SN7-GT or RCA5692
V1308	6SN7-GT or RCA5692
V1309	6SN7-GT
V1310	6V6
V1311	6L6 or RCA1614
V1312	6L6 or RCA1614
Unit 1400, Power Control Unit	
I1402	Mazda No. 44
I1403	Mazda No. 44
I1404	Mazda No. 44
I1405	Mazda No. 44
I1406	Mazda No. 44
Unit 1400, (Continued)	
I1407	NE-15
I1408	NE-15
I1409	NE-15
I1410	Mazda No. 44
I1411	Mazda No. 44
I1412	Mazda No. 44
I1413	Mazda No. 44
I1414	Mazda No. 44
I1415	Mazda No. 44
Unit 1500, System Control Switching Unit	
I1502	115V 6W small screw base
I1504	115V 6W small screw base
I1505	115V 6W small screw base
I1506	115V 6W small screw base
I1507	115V 6W small screw base
I1508	115V 6W small screw base
I1509	115V 6W small screw base
I1510	115V 6W small screw base
I1511	115V 6W small screw base
Unit 1600, Handcrank Servo Amplifier Unit and Telescope Servo Preamplifier Unit	
V1601	6AC7
V1602	6AC7
V1603	6L6
V1604	6L6
V1605	6AC7
V1606	6SN7GT
V1607	6L6
V1608	6L6
Unit 1650	
V1651	6SN7GT
V1652	6SN7GT

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TABLE 6-3

VACUUM TUBES AND LIGHT SOURCES BY MAJOR UNITS AND PART NUMBERS (Continued)

Part No.	Type
Unit 1700, Local Oscillator Preamplifier Unit	
V1701	6AC7
V1702	6AC7
V1703	6AC7
V1704	6AC7
V1705	6H6
V1706	6AC7
V1707	2050
V1708	884
V1709	2K28
I1701	Mazda No. 44
Unit 1801, Power Unit for Telescope Final Amplifier Unit	
V1809	866
V1810	866
Unit 1802, Telescope Final Amplifier Unit	
V1801	6SN7GT
V1802	814
V1803	814
V1804	814
V1805	6SN7GT
V1806	814
V1807	814
V1808	814
Unit 2000, Transmitter	
V2001	720CY or 4J47/720CY
I2001	Mazda No. 44
I2002	Mazda No. 44
I2003	Mazda No. 44
I2004	Mazda No. 44
I2005	Mazda No. 44
Unit 2300, Hydrogen Thyratron Modulator Unit	
V2301	6SN7GT
V2302	6AG7
V2303	5C22
V2304	5C22
V2305	100R
V2306	100R
V2307	100R
V2308	100R
V2309	100R
V2310	100R

Part No.	Type
Unit 2700, Reference Voltage Distribution Unit	
V2701	6S7GT
V2702	6V6
V2703	6V6
V2704	6V6
V2705	6V6
V2706	6V6
V2707	6V6
Unit 2900, D-c Voltage Regulator	
V2901	6Y6G
V2902	6Y6G
V2903	6Y6G
V2904	6Y6G
V2905	6Y6G
V2906	6Y6G
V2907	6Y6G
V2908	6Y6G
V2909	6Y6G
V2910	6Y6G
V2911	6Y6G
V2912	6Y6G
V2913	6Y6G
V2914	6B4G
V2915	6B4G
V2916	6B4G
V2917	6SH7
V2918	VR105
V2919	6SH7
V2920	VR150
V2921	NE51
V2922	NE51
V2923	NE51
V2924	NE51
V2925	NE51
V2926	NE51
V2927	NE51
V2928	NE51
V2929	NE51
V2930	NE51
V2931	NE51
V2932	NE51
V2933	NE51
V2934	NE51
V2935	NE51
I2901	Mazda No. 44
Unit 3000, Antenna Unit	
E3001	Microbulb for Surgical Instruments, Size 3
E3002	Microbulb for Surgical Instruments, Size 3
E3003	Microbulb for Surgical Instruments, Size 3
E3004	Microbulb for Surgical Instruments, Size 3

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TABLE 6-3

VACUUM TUBES AND LIGHT SOURCES BY MAJOR UNITS AND PART NUMBERS (Continued)

Part No.	Type
Unit 3200, Antenna Control Unit	
V3201	5U4G
I3201	Bulb, red, 25 watts, 115 V, Mazda
I3202	Lamp, T7, clear, 115V, 2 CP with candelabra base
Unit 3300, D-c Servo Amplifier Unit	
V3301	6SL7GT or RCA5691
V3302	6SN7GT or RCA5692
V3303	6L6 or RCA1614
V3304	6L6 or RCA1614
V3305	6SL7GT or RCA5691
V3306	6SN7GT or RCA5692
V3307	6L6 or RCA1614
V3308	6L6 or RCA1614
Unit 3400, D-c Servo Amplifier Power Unit	
V3401	5R4GY
V3402	5Y3GT
V3403	6X5GT
V3404	6Y6G
V3405	6SJ7
V3406	VR105
V3407	VR150
Unit 4200, Missile Oscillator Preamplifier Power Supply	
V4201	VR150
V4202	VR150
V4203	VR150
V4204	VR105
Unit 4300, Missile Oscillator Preamplifier Unit	
V4301	6AC7
V4302	6AC7
V4303	6AC7
V4304	6SL7GT
V4305	6SL7GT
V4306	6SL7GT
V4307	6H6
V4308	2K28
I4301	Mazda No. 44

Part No.	Type
Unit 4400, Standing Wave Amplifier	
V4401	6SJ7
V4402	6V6
V4403	6H6
V4404	5Y3GT
V4405	VR150-30
I4401	Mazda No. 44
Unit 4900, Power Distribution Panel	
I4901	Mazda No. 44
I4902	Mazda No. 44
I4903	Mazda No. 44
I4904	Mazda No. 44
I4905	Mazda No. 44
I4908	Mazda No. 44
I4909	Mazda No. 44
I4910	Mazda No. 44
I4911	Mazda No. 44
Unit 5000, 15 Kw Gasoline Engine Alternator	
I5001	Mazda No. 44
I5002	Mazda No. 67
I5003	Mazda No. 67
UNIT 6200, Keep-alive Power Supply	
V6201	3B24
Unit 8100, Dial Box Unit	
I8101	115V 6W small screw base
I8102	115V 6W small screw base
I8103	115V 6W small screw base
I8104	115v 6W small screw base
I8105	115V 6W small screw base
I8106	115V 6W small screw base

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TABLE 6-3

VACUUM TUBES AND LIGHT SOURCES BY MAJOR UNITS AND PART NUMBERS (Continued)

Part No.	Type
Unit 8200, Camera Control Unit	
I8201	G.E. No. 222
I8202	G.E. No. 222
I8203	G.E. No. 222
I8204	G.E. No. 222
I8205	G.E. No. 222
I8206	G.E. No. 222
I8207	115V 6W small screw base
I8208	115V 6W small screw base
Unit 8400, Time Comparator Unit	
V8401	6SN7GT
V8402	6SN7GT
V8403	631P1
V8404	6SN7GT
V8405	631P1
V8406	VR105
Unit 8500, Remote Range Indicator Unit	
V8501	2X2
V8502	2X2
V8503	5SP11
V8504	6SN7GT
V8505	6SN7GT
V8506	6AG7
V8507	6SN7GT
V8508	6SN7GT
I8501	115V 6W small screw base
I8502	115V 6W small screw base
I8503	115V 6W small screw base
I8504	115V 6W small screw base
UNIT 8600, Commutator Unit	
V8601	6X5 GT

TABLE 6-4

LIST OF SYNCHROS BY UNITS

Unit	Synchros - Number and Type	
	Lark SP-1M	Lark SP
Antenna Assembly, Unit 3000	6 - 5G	-------
Antenna Assembly, Unit 50,000	-------	4 - 6G 2 - 5G
PPI Unit, Unit 800	4 - 5CT	2 - 5CT 2 - 5DG 1 - 1F
Range Units, Units 300	5 - 5G 2 - 5F 2 - 1CT	4 - 5G 2 - 5F 2 - 1CT
Camera Control Unit, Unit 8200, and camera equipment	1 - 7G 6 - 5F	1 - 7G) Tentative 6 - 5F)
Dial Box Unit, Unit 8100	14 - 5F	-------
Telescope Unit, Unit 9100	6 - 1CT	6 - 1CT
B Computer, Units 9300 and 9400	-------	4 - 6DG 2 - 5CT
Stable Element, Unit 9200	-------	2 - 5CT 6 - 1CT 1 - 5F 1 - 1F 1 - 5DG

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TABLE 6-5

RECOMMENDED COMPLEMENT OF SPARE PARTS

A. 400% spares on tubes.
B. 20 each of all manufactured types of 20% RC40 resistors to 6 megohms.
C. 10 each of all manufactured types of 10% CM35 condensers to 0.01 mfd.
D. 100% oil filled condensers.
E. 100% transformers.
F. 100 each 1N34 and 1N38 crystals.
G. 100 each 1N21B crystals.
H. 2 each range unit GT crystals.
I. 400% Helipots 0.1% linearity.
J. Cabling accessories, squeeze-on lugs and tools, tape cord, etc.
K. Camera shutter blanks.
L. 50 each all sized instrument batteries.
M. 100% synchros.
N. All special parts, one each.

TABLE 6-6

LOCATION OF SPARE PARTS

I Spare Parts Trailer (See Figure 6-5.)

Location	Contents
Box 1A	General Stowage
Box 1B	Antenna Drive Motor
Box 1C	Nutator (without snout)
Box 3A	Capacitors, large
Box 3B	Capacitors, large
Box 3C	Capacitors, large
Box 5A	General Stowage
Box 5B	Meters
Box 5C	Transformers, small
Box 7A	Tubes 7BP7's
Box 7B	Transformers, large
Box 7C	Transformers, large
Box 7D	Transformers, large
Box 9A	Dehumidifier, Unit 5400, Refrigerant and Gauges
Box 9B	Communications, Unit 4800 BD-72 Switchboard
Box 9C	Radio Equipments TCS-12 and SCR 624
Box 9D	Chokes
Box 9E	Coils
Box 11A-11D	Test Equipment, Stowage: 1. Brush Recorders 2. Multimeters 3. Ballantine a-c meter 4. High-frequency signal generator, Hewlett-Packard 65A 5. Oscilloscope
Box 2A	Potentiometers and Helipots
Box 2B	Relays
Box 2C	Amplidyne
Box 4A	Camera Stowage and Parts
Box 4B	16 mm film stowage
Box 4C	Amplidyne

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TABLE 6-6

LOCATION OF SPARE PARTS (Continued)

I Spare Parts Trailer (See Figure 6-5.) (Continued)

Location	Contents
Box 6A	Tubes - 100R's and 5C22's
Box 6B	Tubes - 5CP1's and 5CP7's
Box 6C	Tubes - 5SP11's
Box 6D	Power Unit PE 137A
Box 8A	Lamp bulbs and indicator lights
Box 8B	Synchros
Box 8C	Servo Motors
Box 8D	Tubes - 2K28's, TR, and ATR
Box 8E	Magnetrons
Box 10A	Fuses
Box 10B	Hook-up wire
Box 10C	Wiring supplies, terminal boards, lugs and solder
Box 10D	Batteries and Battery Acid
Parts Cabinet	Resistors, capacitors (mica, tubular paper and pyranol), crystals (communications), switches (toggle, bandswitch, and micro), insulators, tube sockets, a-c plugs and outlets, miscellaneous hardware.
Tube Cabinet	All small tubes and radar crystals
Floor at Rear	One complete 300-volt d-c generator

II Equipment Trailer

Location	Contents
Tire Compartment Boxes M23, M24, E30	Equipment Trailer and Heater Spares
Box M12	Console General Spares

III Operations Trailer

Location	Contents
Tire Compartment Boxes M26, M27	Operations Trailer and Heater Spares

IV Dehumidifier Trailers

Location	Contents
Parts Box	Dehumidifier Spares

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SECTION VII

CABLING AND WIRING DATA

The cabling and wiring data of section VII consist of four tables:

Table 7-1. Console Terminal Board Location
Table 7-2. junction Points and Interunit Wiring
Table 7-3. Cabling Data
Table 7-4. Location and Function of Control Circuits.

Illustrations are included for use with the tables. The tables are also intended for use with the schematic and wiring diagrams of this report or with the actual equipment. Refer to section VI, pages 6-1 and 6-2 for description of tables contained in section VII.

TABLE 7-1

CONSOLE TERMINAL BOARD LOCATION

Console Target Frame	Console PPI Frame		Console Missile Frame
Rear of frame	Rear of frame	Right side of frame	Rear of frame
TB 1 T	TB 5	TB 15	TB 1 M
TB 2 T	TB 6	TB 16	TB 2 M
TB 3 T	TB 7	TB 17	TB 3 M
TB 4 T	TB 8	TB 18	TB 4 M
TB 22 T	TB 9	TB 19	TB 22 M
	TB 10		TB 23 M
	TB 11		
	TB 12		
	TB 13		
	TB 14		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE PPI CHASSIS										
TB-CR	CR	+7000vdc					TB903	21		
CONSOLE, TARGET FRAME										
Coax T1	A	Gate trigger to automatic switch					K1407	B		581
	B	Gate trigger from target range unit	J304T			583				
	C	Gate trigger to target receiver					J117T			582
Coax T2	A	R-sweep trigger to target A and R scopes					J1004T			584
	B	R-sweep trigger from target range unit	J305T			585				
	C	Target R-sweep trigger to remote range indicator					J8504			586
	D	To PPI unit					J802			547
REFERENCE VOLTAGE DISTRIBUTION UNIT										
Coax T3	A	Shifted 24-cycle in	J2702			596				
	B	Shifted 24-cycle to missile range unit					J303M			595
	C	Shifted 24-cycle to target range unit					J303T			594
CONSOLE, MISSILE FRAME										
Coax T4	A	Missile gate trigger to T and E synchronizer and coord. det.					K1406	A		564
	B	Missile range trigger	J304M			565				
	C	Missile range trigger to missile receiver					J117M			555
Coax T5	A	Missile R-sweep trigger to dial box					J8504			560
	B	Missile R-sweep trigger	J305M			562				
	C	Missile R-sweep trigger to missile A and R scopes					J1004M			561

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, TARGET FRAME										
Coax T7	A	A-sweep trigger	J302T			578				
	B	A-sweep trigger to remote range ind.					J8508			569
	C	A-sweep to PPI					J801			549
	D	A-sweep to target A and R scopes					J1003T			548
CONSOLE, MISSILE FRAME - REAR										
TB1M	1	Ground	TB2801	5	0	203	TB5202	13	0	238
	1	Ground	TB101M	1			TB4M	4		
	2	Heater	Rt Heat				TB14	37	Bl-W	211
	3	Heater	Rt Heat				TB14	38	Bk-R	211
	4	+300 vdc missile receiver	TB101M	4			TB2901	12	0	218
	5	Ground to transmitter	TB102M	1			TB5152	13	0	253
	6	-150 vdc missile receiver	TB101M	6			TB1T	13	Bk	210
	7	-105 vdc missile receiver	TB101M	7			TB1T	14	W	210
	8	Spare	TB101M	8						
	9	Spare	TB101M	9						
	10	+200 vdc missile receiver	TB101M	10			TB1T	10	R	210
	11	Discriminator	TB102M	2			TB5152	7	Bk	253
	12	Tuner finger	TB102M	3			TB5152	11	W	253
	13	115 vac fan	Fan				TB13	21	W-R	211
	14	115 vac fan	Fan				TB13	22	O-R	211
	15	D-c train meter DB	TB2801	2	W	203	TB5202	12	Bk	238
	16	D-c elevation meter DB	TB2801	4	G	203	TB5202	14	W	238
CONSOLE, TARGET FRAME - REAR										
TB1T	1	Ground	TB101T	1			TB4T	4		
	2	Spare								
	3	Spare								
	4	Spare								
	5	Spare								
	6	-150 vdc target receiver	TB101T	6			TB702	17		
	7	-105 vdc target receiver	TB101T	7			TB702	16		
	8	Spare	TB101T	8						
	9	Spare	TB101T	9						
	10	+200 vdc	TB1M	10	R	210				

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, TARGET FRAME - REAR (Continued)										
TB1T	10	+200 vdc	TB101T	10			TB701	1		
	11	Spare								
	12	Spare								
	13	-150 vdc missile receiver	TB1M	6	Bk	210	TB702	18		
	14	-105 vdc missile receiver	TB1M	7	W	210	TB702	15		
	15	Spare								
	16	Spare								
CONSOLE, MISSILE FRAME - REAR										
TB2M	17	Ground	TB2902	22	Bl	218	TB4M	4		
	18	300 vdc missile range unit	TB2901	6	Bk	218	TB302M	12		
	19	300 vdc synchronizer and missile coord. det.	TB2901	7	W	218	TB601	12		
	20	300 vdc telescope preamplifier	TB2902	15	R	218	TB1602	7		
	21	300 vdc missile indicator	TB2901	8	G	218	TB1001M	7		
	22	Spare (don't use)								
	23	+2000 vdc	TB11	2	(H-v lead)	215	TB1001M	11		
	24	-2000 vdc 6.3 vac	TB11	5	(H-v lead)	215	TB1001M	12		
	25	-2000 vdc 6.3 vac	TB11	4	(H-v lead)	215	TB1001M	13		
	26	Spare (don't use)								
	27	Spare								
	28	Tuner	TB102M	4			TB5152	12	R	253
	29	Meter	TB102M	5			TB5152	9	G	253
	30	Cross-pointer meter - train	TB602	19			TB2801	1	Bk	203
	31	Cross-pointer meter - elevation	TB602	20			TB2801	3	R	203
	32	Spare - ground								
CONSOLE, TARGET FRAME - REAR										
TB2T	17	+300 vdc target range unit	TB2901	5	Bk	240	TB302T	12		
	18	+300 vdc T and M range det.	TB2902	17	W	240	TB12	13		
	19	+300 vdc target indicator	TB2901	9	R	240	TB1001T	7		
	20	Spare								
	21	+300 vdc T and M coord. det.	TB2901	10	G	240	TB14	32		
	22	+300 vdc target receiver	TB2901	11	O	240	TB101T	4		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, TARGET FRAME - REAR (Continued)										
TB2T	23	Spare								
	24	Spare								
	25	Spare								
	26	Spare								
	27	Spare								
	28	Spare								
	29	Spare								
	30	Ground								
	31	Ground	TB2902	22	B1	240	TB4T	6		
	32	Ground								
CONSOLE, MISSILE FRAME - REAR										
TB3M	1	Telescope preamplifier unit - elevation signal out	TB1602	5			TB1801	4	B1	204
	2	Telescope preamplifier unit - ground	TB1602	6			TB1801	3	0	204
	3	Telescope final amplifier - ground	TB1602	11			TB1801	14	R-Bk	204
	4	Telescope preamplifier - train signal out	TB1602	12			TB1801	13	W-Bk	204
	5	Telescope - elevation signal	TB1602	3			TB9113	4	G	247
	6	R2 - 1X telescope control transformer - train	TB601	6			TB9113	9	0	247
	7	R2 - 36X telescope control transformer - train	TB601	7			TB9113	10	B1	247
	8	Telescope - ground	TB601	8			TB3M	14		
	9	R2 - 2X telescope control transformer - elevation	TB601	9			TB9113	1	Bk	247
	10	R2 - 36X telescope control transformer - elevation	TB601	10			TB9113	2	W	247
	11	Spare	TB601	11						
	12	Missile Coord. Det.-train a-c signal	TB601	15			TB15	1	B1-Bk	216
	13	Missile coord. det.-elevation a-c signal	TB601	16			TB15	2	Bk-W	216
	14	Telescope - ground	TB1602	4			TB9113	3	R	247
			TB3M	8						

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, TARGET FRAME - REAR										
TB3T	1	+200 vdc local oscillator	TB5157	6	Bl	208	TB701	2		
	2	+200 vdc	TB5157	1	Bk	208	TB701	3		
	2	+200 vdc					TB12	20		
	3	Tuner	TB5157	5	O	208	TB14	35		
	4	-345 vdc	TB5157	7	W-Bk	208	TB501	8		
	5	Spare								
	6	Ground	TB5157	2	W	208	TB4T	5		
	7	Manual AFC relay	TB5157	3	R	208	TB14	36		
	8	-150 vdc	TB5157	4	G	208	TB702	24		
	9	Ground spare	TB5157	8	R-Bk	208				
	10	Ground spare	TB5157	9	G-Bk	208				
	11	Ground spare	TB5157	10	O-Bk	208				
	12	Ground spare	TB5157	11	Bl-Bk	208				
	13	Ground spare	TB5157	12	Bk-W	208				
	14	Ground spare								
CONSOLE, MISSILE FRAME - REAR										
TB4M	1	Spare								
	2	Spare								
	3	Spare								
	4	Ground to telescope	TB1602	13			TB9113	11	W-Bk	247
	4	Ground	TB1M	1						
	4		TB2M	17						
	5	Telescope - train signal	TB1602	14			TB9113	12	R-Bk	247
	6	36X T and E lock in relay	TB602	23			TB6	20	Bk	211
	7	-150 vdc missile indicator	TB4T	8	G	210	TB1001M	5		
	8	36X T and E lock in relay	TB602	25			TB6	21	W	211
	9	115 vac filament	TB4T	9	O	210	TB1602	9		
	9						TB601	13		
	10	115 vac filament	TB4T	10	Bl	210	TB1801	5	Bk	204
									R	204
	10		TB101M	2			TB303M	1		
	11	115 vac filament	TB4T	11	W-Bk	210	TB2801	6	Bl	203
	11		TB22M	1						
	12	115 vac filament	TB4T	12	R-Bk	210	TB1602	10		
	12						TB601	14		
	13	115 vac filament	TB4T	13	G-Bk	210	TB1801	6	W	204
									G	204
	13		TB101M	3			TB303M	2		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, MISSILE FRAME - REAR (Continued)										
TB4M	14	115 vac filament	TB4T	14	O-Bk	210	TB2801	7	W-Bk	203
CONSOLE, TARGET FRAME - REAR										
TB4T	1	Target auto range indicator	TB1301	11			TB5202	17	W-R	237
	2	Missile auto range indicator	TB1302	27			TB5202	16	Bk-R	237
	3	Range indicator light - common	TB1301	14			TB5202	18	O-R	237
	4	Ground	Ground				TB13	25		
							TB1T	1		
	5	Ground	Ground				TB3T	6		
	5	Ground	Ground				TB1001T	4		
	6	Ground	Ground				TB2T	31		
							TB501	2		
	7	Ground	Ground				TB12	11		
	7	Ground	Ground				TB702	22		
	8	-150 vdc T and M indicator	TB1001T	5			TB702	20		
	8	-150 vdc T and M indicator					TB4M	7	G	210
	9	115 vac filament supply					TB4M	9	O	210
							TB702	27		
	10	115 vac filament supply	TB101T	2			TB4M	10	Bl	210
	10	115 vac filament supply					TB303T	1		
	11	115 vac filament supply	TB12	17			TB501	11		
	11	115 vac filament supply					TB4M	11	W-Bk	210
							TB12	17		
	12	115 vac filament supply					TB4M	12	R-Bk	210
							TB702	28		
	13	115 vac filament supply					TB4M	13	G-Bk	210
	13	115 vac					TB101T	3		
							TB303T	2		
	14	115 vac filament supply					TB501	12		
	14						TB4M	14	O-Bk	210
							TB12	15		
CONSOLE, PPI FRAME - REAR										
TB5	1	115 vac spare					TB1401	1		
	2	Timing relay coil	TB5	6			TB1401	2		
			TB5161	8	Bl	209				

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, PPI FRAME - REAR (Continued)										
TB5	3	Timing relay coil	TB5161	9	W-Bk	209	TB1401	3		
	4	Start circuit seal-in	TB5	9			TB1401	4		
	5	Equipment start-stop	TB5161	10	R-Bk	209	TB1401	5		
	6	Standby circuit	TB5	2			TB1401	6		
	6		TB23M	15	R-W	211	TB1201	9		
	7	115 vac for coax switch	TB1503	8	Bk	241	TB1401	7		
	7		TB23M	16	G-W	211	TB1201	11		
	8	Spare								
	9	Start circuit - seal-in	TB5	4			TB1401	9		
	10	Spare								
	11	Heaters	TB6	17			TB1401	11		
TB6	12	Spare								
	13	115 vac power	TB5158	3	Bk	202				
			TB6	14						
	14	115 vac power	TB15	6						
			TB6	13			TB1402	14		
	15	115 vac power	TB901	3						
			TB6	14						
	16	Spare								
	17	115 vac power	TB5158	4	W	202	TB5	11		
			TB6	18						
	18	115 vac power	TB6	17			TB1402	18		
	19	Transmitter contactor	TB13	22						
			TB5162	19	Bl-R	207	TB1402	19		
	20	36X T and E lock in relay	TB1502	6	Bk	242	TB4M	6	Bk	211
	21	36X T and E lock in relay	TB1504	9	G	242	TB4M	8	W	211
	22	Spare								
TB7	23	Spare								
	24	Elevation signal - dc	TB5156	5	O	205	TB1202	28		
	25	Train signal - dc	TB5156	6	Bl	205	TB1202	27		
	26	-150 vdc to T and M coord. det.	TB5156	7	W-Bk	205	TB1202	21		
	27	Ground	TB5156	8	R-Bk	205	TB1202	20		
	28	Spare					TB1403	28		
	29	Spare					TB1403	29		
	30	6.3 vac spare					TB1403	30		
	31	6.3 vac spare					TB1403	31		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, PPI FRAME - REAR (Continued)										
TB7	32	Strip heater supply	TB5161	18	Bk-W	209	TB1403	32		
	32		TB5162	15	Bl-W	207	TB901	8		
	33	115 vac	TB13	21			TB1403	33		
	34	115 vac modulator volts adjust - power	TB5156	2	W	205	TB1403	34		
	34		TB5161	7	O	209				
TB8	35	Spare								
	36	Transmitter contactor	TB5162	18	O-R	207	TB1404	36		
	37	Nutator motor - power	TB5162	13	R-W	207	TB1404	37		
	38	Heaters					TB12	19		
	39	Spare					TB1404	38		
	40	Modulator input volts indicator	TB5162	16	Bk-R	207	TB1404	40		
	41	Modulator input volts indicator	TB5162	17	W-Bk	207	TB1404	41		
	42	Oscillator current - positive	TB5162	2	W	207	TB1404	42		
	43	Oscillator current - negative	TB5162	1	Bk	207	TB1404	43		
	44	Spare								
	45	Spare								
TB9	46	Modulator volts - raise	TB5162	9	G-Bk	207	TB1405	46		
	47	Spare								
	48	Spare								
	49	Modulator volts adjust - common	TB5162	10	O-Bk	207	TB1405	49		
	50	Modulator volts - lower	TB5162	11	Bl-Bk	207	TB1405	50		
	51	Spare								
	52	Modulator volts adjust - power	TB5161	3	R	209	TB1405	52		
	52	Modulator volts adjust	TB5156	1	Bk	205				
	53	Spare								
	54	Radiate control	TB5162	3	R	207	TB1405	54		
	55	Radiate control	TB5162	4	G	207	TB1405	55		
	56	Standby control	TB5161	1	Bk	209	TB1405	56		
	57	Standby control	TB5161	4	G	209	TB1405	57		
TB10	58	Spare								
	59	S3 - 2X radar - elevation	TB5156	13	R-W	205	TB1406	58		
	60	Spare					TB18	6		
	61	Elevation amplidyne overload	TB5156	3	R	205	TB1406	60		
	62	Spare					TB1406	61		
	63	Train amplidyne overload	TB5156	4	G	205	TB1406	62		
							TB1406	63		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE,PPI FRAME - REAR (Continued)										
TB10	64	Spare					TB1406	64		
	65	Spare								
	66	Spare					TB1406	66		
	67	Spare					TB1406	67		
	68	Spare								
TB11	1	Spare								
	2	+2000 vdc	TB2M TB1001T	23 11	(3 leads served together)	215	TB902	12		
	3	Spare								
	4	-2000 vdc 6.3 vac	TB2M TB1001T	25 13	(3 leads served together)	215	TB902	14		
	4	-2000 vdc					TB804	-2000 vdc		
	5	-2000 vdc 6.3 vac	TB2M TB1001T	24 12	(3 leads served together)	215	TB902	15		
	6	Spare								
TB12	7	Auto track relay - train	TB1502	11	O	241	TB1201	10		
	8	Auto track relay - elevation	TB1502	14	W-Bk	241	TB1201	12		
	9	Train slew	TB1504	10	O	242	TB1201	13		
	10	Elevation slew	TB1504	11	Bl	242	TB1201	14		
	11	Ground					TB901	6		
	11	Ground	TB4T	7			TB803	34		
	12	Spare								
	13	+300 vdc range error detector	TB2T	18			TB1301	2		
	14	El handcrank de-energizing relay	TB1502	13	Bl	241	TB805	51		
	15	115 vac	TB4T	14			TB1202	23		
	15	115 vac	TB12	16			TB803	45		
	16	115 vac	TB12	15			TB901	2		
	16	115 vac					TB1301	13		
	17	115 vac	TB4T	11			TB901	1		
	17	115 vac					TB1202	22		
	18	115 vac	TB12	17			TB803	44		
	18	115 vac	TB12	19			TB1301	14		
	19	115 vac	TB12	18			TB8	38		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, PPI FRAME - REAR (Continued)										
TB12	20	+200 vdc	TB3T	2			TB803	35		
TB13	21	115 vac	TB501	13			Fan-out TB7	33		
	21	Fan					TB1M	13	W-R	211
	22	115 vac	TB501	14			Fan-out TB902	17		
	22	Fan	TB6	19			TB1M	14	O-R	211
	23	-210 vdc range error detector	TB1302	19			TB701	11		
	24	+445 vdc	TB5158	5	Bk	219	TB701	14		
	25	Ground	TB5158	6	W	219	TB4T	4		
	26	T and E auto track relay	TB1504	13	R-Bk	242	TB1201	8		
TB14	27	+300 vdc to reference voltage distribution	TB5161	16	Bk-R	209	TB701	5		
	28	-210 vdc PPI	TB803	33			TB702	21		
	29	+300 vdc PPI	TB803	36			TB701	4		
	30	-210 vdc T range error detector	TB1301	3			TB701	12		
	31	+200 vdc T and M coord. det.	TB1202	25			TB5161	15	W-R	209
	32	+300 vdc T and M coord.	TB1202	26			TB2T	21		
	33	115 vac	TB5161	13	G-Bk	209				
			TB901	4			TB501	5		
	34	115 vac	TB5161	14	G-Bk	209	Interlock			
			TB901	5			TB501	6		
	35	-210 vdc local oscillator tuner	TB803	41			TB3T	3		
	36	Manual AFC relay	TB803	42			TB3T	7		
	37	Heater	TB902	18			Left heater			
	37	Heater	Miss.heat.				TB1M	2	Bl-W	211
	38	Heater	TB901	10			Left heater			
	38	Heater	Miss.heat.				TB1M	3	Bk-R	211
	39	R1 synchro bus	TB19	31			TB22T	4		
	39	Spare					TB1301	15		
	39	Spare					TB1201	1		
	40	R2 synchro bus	TB19	32			TB22T	5		
	40	Spare					TB1301	16		
	40	Spare					TB1201	2		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, PPI FRAME - RIGHT SIDE										
TB15	1	Train a-c signal	TB2601	4	G	256	TB3M	12	Bl-Bk	216
	2	Elevation a-c signal	TB2601	6	Bl	256	TB3M	13	Bk-W	216
	3	24-cycle generator - elevation	TB2701	11	Bk	214	TB1202	15		
	4	24-cycle generator - ground	TB2701	10	(Shield)	214	TB1202	16		
	5	24-cycle generator - train	TB2701	12	W	214	TB1202	17		
	6	115 vac	TB6	14						
			TB15	7			TB901	7		
	7	Strip heater supply	TB5161	17	Bl-Bk	209	TB15	6		
	7	Strip heater supply	TB5162	14	G-W	207	TB15	6		
	8	Rl isolation relay - elevation	TB2601	1	Bk	256	TB805	55		
	9	Rl isolation relay - train	TB2601	2	W	256	TB805	54		
	10	Train a-c signal - out	TB2601	5	O	256	TB1202	18		
	11	Elevation a-c signal - out	TB2601	7	W-Bk	256	TB1202	19		
TB16	69	Spare	TB5156	12	Bk-W	205	TB1407	69		
	70	Sl target range - 1000 yds/rev	TB5201	15	Bk	237	TB302T	8		
	71	Indicator - ground	TB5156	10	O-Bk	205	TB1407	71		
	72	Antenna power indicator light	TB5156	9	G-Bk	205	TB1407	72		
	73	Nutator motor ON light	TB5162	12	Bk-W	207	TB1407	73		
	74	Transmitter filament ON light	TB5162	5	O	207	TB1407	74		
	75	Radiate light	TB5162	8	R-Bk	207	TB1407	75		
	76	Standby light	TB5162	6	Bl	207	TB1407	76		
	77	Indicator light circuit - common	TB5162	7	W-Bk	207	TB1407	77		
	78	Modulator ON light	TB5161	2	W	209	TB1407	78		
	79	Spare								
TB17	80	S2 target range - 1000yds/rev	TB5201	16	W	237	TB302T	9		
	81	S3 target range - 1000 yds/rev	TB5201	17	R	237	TB302T	10		
	82	Sl target range - 100,000 yds/rev	TB5201	18	G	237	TB304T	1		
	83	S2 target range - 100,000 yds/rev	TB5201	19	O	237	TB304T	2		
	84	S3 target range - 100,000 yds/rev	TB5201	20	Bl	237	TB304T	3		
	85	Sl missile range - 1000 yds/rev	TB5201	21	W-Bk	237	TB22M	10	R-W	216
	86	S2 missile range - 1000 yds/rev	TB5201	22	R-Bk	237	TB22M	11	G-W	216
	87	S3 missile range - 1000 yds/rev	TB5201	23	G-Bk	237	TB22M	12	Bl-W	216
	88	Sl missile range - 100,000 yds/rev	TB5201	24	O-Bk	237	TB22M	13	Bk-R	216
	89	S2 missile range - 100,000 yds/rev	TB5201	25	Bl-Bk	237	TB22M	14	W-R	216
	90	S3 missile range - 100,000 yds/rev	TB5201	26	Bl-W	237	TB22M	15	O-R	216

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, PPI FRAME - RIGHT SIDE (Continued)										
TB18	1	A-C elevation tach	TB23M	10	Bl	216	TB801	1		
	2	Ground	TB23M	3	R	216	TB801	2		
	3	Motor - elevation	TB23M	11	W-Bk	216	TB801	3		
	4	S1 - 2X radar - elevation	TB5156	11	Bl-Bk	205	TB801	4		
	5	S2 - 2X radar - elevation	TB5156	12	Bk-W	205	TB801	5		
	6	S3 - 2X radar - elevation	TB10	59			TB801	6		
	7	R2 - 2X radar control transformer - elevation	TB23M	4	G	216	TB801	7		
	8	R2 - 36X control transformer - elevation	TB23M	5	O	216	TB801	8		
	9	T and E handcrank de-energizing relay	TB1504	12	W-Bk	242	TB805	50		
	10	S1 - 36X radar - elevation	TB1504	1	Bl-Bk	241	TB801	10		
	11	S2 - 36X radar - elevation	TB1504	2	Bl-W	241	TB801	11		
	12	S3 - 36X radar - elevation	TB1504	3	R-W	241	TB801	12		
	13	A-c tachometer - train	TB801	13			TB23M	13	G-Bk	216
	14	Ground	TB801	14			TB23M	14	O-Bk	216
	14	Ground	TB1201	7			TB1505	1	W	242
	15	A-c motor - train	TB801	15			TB23M	12	R-Bk	216
	16	S1 - 1X radar - train	TB801	16			TB5160	10	R-W	209
TB19	17	S2 - 1X radar train	TB802	17			TB5160	11	G-W	209
	18	S3 - 1X radar train	TB802	18			TB5160	12	Bl-W	209
	19	R2 - 1X control transformer - train	TB802	19			TB23M	1	Bk	216
	20	R2 - 36X control transformer - train	TB802	20			TB23M	2	W	216
	21	Handcrank de-energizing relay - train	TB805	49			TB1502	10	G	241
	22	S1 - 36X train	TB802	22			TB1504	4	G-W	241
	23	S2 - 36X train	TB802	23			TB1504	5	Bl-W	241
	24	S3 - 36X train	TB802	24			TB1504	6	Bk-R	241
	25	Train target meter - in	TB802	25			TB1201	5		
	26	Train target meter - out	TB802	26			TB5202	8	R-W	237
	27	Elevation target meter - in	TB802	27			TB1201	6		
	28	Elevation target meter - out	TB802	28			TB5202	10	Bl-W	237
	29	Ground	TB812	29			TB5202	9	G-W	237
	30	Train slew	TB802	30			TB1502	7	R	241
	31	R1 synchro bus	TB802	31			TB5154	1	G-W	205
							TB5154	2	Bl-W	205

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, PPI FRAME - RIGHT SIDE (Continued)										
TB19	31	R1 synchro bus	TB14	39						
	32	R2 synchro bus	TB802	32			TB5154	3	Bk-R	205
							TB5154	4	W-R	205
	32	R2 synchro bus					TB2601	3	R	256
	32	R2 synchro bus	TB14	40						
CONSOLE, MISSILE FRAME - REAR										
TB22M	1	115 vac	TB22T	1	R	211	TB4M	11		
	2	Slew relay control	TB22T	2	G	211	TB303M	3		
	3	Slew motor control	TB22T	3	O	211	TB302M	7		
	4	R1 synchro bus	TB22T	4	Bl	211	TB302M	5		
	5	R2 synchro bus	TB22T	5	W-Bk	211	TB302M	6		
	6	Track motor control	TB22T	6	R-Bk	211	TB302M	3		
	7	CT rotor slew signal	TB22T	7	G-Bk	211	TB304M	7		
	8	D-c tachometer slew	TB22T	8	O-Bk	211	TB303M	7		
	9	D-c tachomater missile	TB22T	9	Bl-Bk	211	TB302M	2		
	10	S1 missile range 1000 yds/rev	TB17	85	R-W	216	TB302M	8		
	11	S2 missile range 1000 yds/rev	TB17	86	G-W	216	TB302M	9		
	12	S3 missile range 1000 yds/rev	TB17	87	Bl-W	216	TB302M	10		
	13	S1 missile range 100,000 yds/rev	TB17	88	Bk-R	216	TB304M	1		
	14	S2 missile range 100,000 yds/rev	TB17	89	W-R	216	TB304M	2		
	15	S3 missile range 100,000 yds/rev	TB17	90	O-R	216	TB304M	3		
	16	Ground	TB22T	16	Bk-W	211	TB304M	6		
CONSOLE, TARGET FRAME - REAR										
TB22T	1	115 vac	TB22M	1	R	211	TB1302	20		
	2	Slew relay control	TB22M	2	G	211	TB1302	21		
	3	Slew motor control	TB22M	3	O	211	TB1302	22		
	4	R1 synchro bus	TB22M	4	Bl	211				
	4	R1 synchro bus	TB302T	5			TB14	39		
	5	R2 synchro bus	TB22M	5	W-Bk	211				
	5	R2 synchro bus	TB302T	6			TB14	40		
	6	Track motor control	TB22M	6	R-Bk	211	TB1302	23		
	7	1 CT rotor slew signal	TB22M	7	G-Bk	211	TB1302	24		
	8	D-c tachometer slew	TB22M	8	O-Bk	211	TB1302	25		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, TARGET FRAME - REAR (Continued)										
TB22T	9	D-C tachometer missile	TB22M	9	Bl-Bk	211	TB1302	26		
	10	-150 vdc remote range ind.	TB702	19			TB5154	13	Bl	254
	11	R1 remote range designation	TB304T	9			TB5154	5	Bk	254
	12	R2 remote range designation	TB304T	10			TB5154	6	W	254
	13	S1 remote range designation	TB304T	11			TB5154	7	R	254
	14	S2 remote range designation	TB304T	12			TB5154	8	G	254
	15	S3 remote range designation	TB304T	13			TB5154	9	O	254
	16	Ground	TB1301	1			TB22M	16	Bk-W	211
	16	Ground	TB304T	6						
CONSOLE, MISSILE FRAME - REAR										
TB23M	1	R2 - 1X radar CT - train	TB601	1			TB19	19	Bk	216
	2	R2 - 36X radar CT - train	TB601	2			TB19	20	W	216
	3	Ground	TB1601	2						
			TB601	3			TB18	2	R	216
	4	R2 - 2X radar CT - elevation	TB601	4			TB18	7	G	216
	5	R2 - 36X radar CT - elevation	TB601	5			TB18	8	O	216
	6	24-cycle - train	TB602	26			TB2701	14	W	217
	7	24-cycle - elevation	TB602	27			TB2701	13	Bk	217
	8	24-cycle - ground	TB602	28			TB2701	15	(Shield)	217
	9	Spare								
	10	A-c tachometer - elevation	TB1601	3			TB18	1	Bl	216
	11	A-c motor - elevation	TB1601	6			TB18	3	W-Bk	216
	12	A-c motor - train	TB1601	11			TB18	15	R-Bk	216
	13	A-c tachometer - train	TB1601	14			TB18	13	G-Bk	216
	14	Ground	TB1601	15			TB18	14	O-Bk	216
	15	Servo gain relay AGC	TB602	31			TB5	6	R-W	211
	16	Servo gain relay AGC	TB602	32			TB5	7	G-W	211
CONSOLE, MISSILE FRAME, - MISSILE RECEIVER UNIT										
J111M		Video to remote range					J8502			573
J112M		Spare								
J113M		I-f in	J5157			575				

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, MISSILE FRAME - MISSILE RECEIVER UNIT (Continued)										
J114M		Gated video to selector switch					K1403	A		572
J115M		Gated video to range detector					J1304			557
J116M		AGC - out					J5162			554
J117M		Gate in	Coax T4	C		555				
J118M		Gate to A and R scopes					J1001M			598
J119M		Gate to remote range					J8506			588
J120M		Gate to range detector					J1303			556
J121M		AFC					J5155			543
CONSOLE, TARGET FRAME - TARGET RECEIVER UNIT										
J111T		Video to remote range					J8501			587
J112T		Video to PPI					J803			579
J113T		I-f in	J5158			552				
J114T		Gated video to selector switch					K1404	B		574
J115T		Gated video to range detector					J1302			590
J116T		AGC out					J5161			553
J117T		Gate in	Coax T1	C		582				
J118T		Gate to A and R scopes					J1001T			577
J119T		Gate to remote range					J8505			558
J120T		Gate to range detector					J1301			589

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, MISSILE FRAME - MISSILE RECEIVER UNIT										
TB101M	1	Ground	TB1001M	4			TB1M	1		
	2	115 vac					TB4M	10		
	3	115 vac					TB4M	13		
	4	+300 vdc					TB1M	4		
	5	Ungated video					TB1001M	5	(Special lead)	HV
	6	-150 vdc					TB1M	6		
	7	-105 vdc					TB1M	7		
	8	Spare					TB1M	8		
	9	Spare					TB1M	9		
	10	+200 vdc					TB1M	10		
	11	AGC					K1405 (Shield of Cable 250)	B		250
	12	Ground								
CONSOLE, TARGET FRAME - TARGET RECEIVER UNIT										
TB101T	1	Ground					TB1T	1		
	2	115 vac					TB4T	10		
	3	115 vac					TB4T	13		
	4	+300 vdc					TB2T	22		
	5	Ungated video					TB1001T	6	(Special lead)	HV
	6	-150 vdc					TB1T	6		
	7	-105 vdc					TB1T	7		
	8	Spare					TB1T	8		
	9	Spare					TB1T	9		
	10	+200 vdc					TB1T	10		
	11	AGC					TB1402 (Shield of Cable 249)	21		249
	12	AGC ground								
CONSOLE, MISSILE FRAME - MISSILE RECEIVER UNIT										
TB102M	1	Ground to receiver	TB1M	5						
	2	Spare	TB1M	11						
	3	Tuner finger	TB1M	12						

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, MISSILE FRAME - MISSILE RECEIVER UNIT (Continued)										
TB102M	4	Tuner	TB2M	28						
	5	Meter	TB2M	29						
	6	+200 vdc	TB101M	10						
	7	115 vac	TB101M	3						
	8	115 vac	TB101M	2						
	9	Spare								
	10	Spare								
CONSOLE, MISSILE FRAME - MISSILE RANGE UNIT										
J301M		Modulator trigger								
J302M		A-sweep trigger					J1003M			263
J303M		24-cycle shifted					Coax T3	B		295
J304M		Gate trigger					Coax T4	B		265
J305M		R-sweep trigger					Coax T5	B		262
J306M		Timing in					J307T			266
J307M		Timing out								
J308M		Repetition rate sync					J308T			542
CONSOLE, TARGET FRAME - TARGET RANGE UNIT										
J301T		Modulator trigger					J5154			592
J302T		A-sweep trigger					Coax T7	A		578
J303T		24-cycle shifted					Coax T3	B		594
J304T		Gate trigger					Coax T1	B		583
J305T		R-sweep trigger					Coax T2	B		585

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, TARGET FRAME - TARGET RANGE UNIT (Continued)										
J306T		Timing in								
J307T		Timing out					J306M			566
J308T		Repetition rate sync					J308M			542
CONSOLE, MISSILE FRAME - MISSILE RANGE UNIT										
TB301M		Internal connections								
CONSOLE, TARGET FRAME - TARGET RANGE UNIT										
TB301T		Internal connections								
CONSOLE, MISSILE FRAME - MISSILE RANGE UNIT										
TB302M	1	Ground								
	2	D-c tachometer - missile					TB22M	9		
	3	Track motor control					TB22M	6		
	4	Ground					TB1001M	8		
	5	R1 synchro bus	TB304M	4			TB22M	4		
	6	R2 synchro bus	TB304M	5			TB22M	5		
	7	Slew motor control					TB22M	3		
	8	S1 - missile range 1000 yds/rev					TB22M	10		
	9	S2 - missile range 1000 yds/rev					TB22M	11		
	10	S3 - missile range 1000 yds/rev					TB22M	12		
	11	6.3 vac					TB1001M	9		
	12	+300 vdc					TB2M	18		
CONSOLE, TARGET FRAME - TARGET RANGE UNIT										
TB302T	1	Ground	TB4T	6						
	2	D-c tachometer - target					TB1301	10		
	3	Track motor control					TB1301	7		
	4	Ground					TB1001T	8		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, TARGET FRAME - TARGET RANGE UNIT (Continued)										
TB302T	5	R1 synchro bus					TB22T	4		
	6	R2 synchro bus					TB22T	5		
	7	Slew motor control					TB1301	6		
	8	S1 - target range 1000 yds/rev					TB16	70		
	9	S2 - target range 1000 yds/rev					TB17	80		
	10	S3 - target range 1000 yds/rev					TB17	81		
	11	6.3 vac					TB1001T	9		
	12	+300 vdc					TB2T	17		
CONSOLE, MISSILE FRAME - MISSILE RANGE UNIT										
TB303M	1	115 vac					TB4M	10		
	2	115 vac					TB4M	13		
	3	Slew relay control					TB22M	2		
	4	Spare								
	5	Spare								
	6	Spare								
	7	D-c tachometer slew					TB22M	8		
	8	Spare								
	9	Spare								
	10	Spare								
	11	Spare								
	12	Spare								
CONSOLE, TARGET FRAME - TARGET RANGE UNIT										
TB303T	1	115 vac					TB4T	10		
	2	115 vac					TB4T	13		
	3	Slew relay control	TB1301	5						
	4	Spare								
	5	Spare								
	6	Spare								
	7	D-c tachometer slew					TB1301	9		
	8	Spare								
	9	Spare								
	10	Spare								
	11	Spare								

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, TARGET FRAME - TARGET RANGE UNIT (Continued)										
TB303T	12	Spare								
CONSOLE, MISSILE FRAME - MISSILE RANGE UNIT										
TB304M	1	S1 missile range 100,000 yds/rev	TB17-88							
	2	S2 missile range 100,000 yds/rev	TB17-89				TB22M	13		
	3	S3 missile range 100,000 yds/rev	TB17-90				TB22M	14		
	4	R1 synchro bus	TB302M	5			TB22M	15		
	5	R2 synchro bus	TB302M	6						
	6	R2 CT - ground								
	7	CT rotor slew signal					TB22M	16		
	8	D-c tachometer slew					TB22M	7		
	9	R1 remote range designation								
	10	R2 remote range designation								
	11	S1 remote range designation								
	12	S2 remote range designation								
	13	S3 remote range designation								
	14	S1 - 1 CT slew								
	15	S2 - 1 CT slew								
	16	S3 - 1 CT slew								
CONSOLE, TARGET FRAME - TARGET RANGE UNIT										
TB304T	1	S1 target range 100,000 yds/rev								
	2	S2 target range 100,000 yds/rev					TB17	82		
	3	S3 target range 100,000 yds/rev					TB17	83		
	4	R1 synchro bus					TB17	84		
	5	R2 synchro bus								
	6	R2 CT - ground								
	7	CT rotor slew signal					TB22T	16		
	8	D-C tachometer slew					TB1301	8		
	9	R1 remote range designation								
	10	R2 remote range designation					TB22T	11		
	11	S1 remote range designation					TB22T	12		
	12	S2 remote range designation					TB22T	13		
	13	S3 remote range designation					TB22T	14		
	14	S1 - 1 CT slew					TB22T	15		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, TARGET FRAME - TARGET RANGE UNIT (Continued)										
TB304T	15	S2 - 1 CT slew								
	16	S3 - 1 CT slew								
CONSOLE, TARGET FRAME - MAIN POWER UNIT										
TB501	1	-345 vdc					TB501	4		
	2	Ground					TB4T	6		
	3	Spare ground								
	4	-345 vdc	TB501	1			TB702	23		
	5	115 vac console filament					TB14	33		
	6	115 vac interlock					TB14	34		
	7	115 vac interlock					TB702	25		
	8	-345 vdc					TB3T	4		
	9	Spare								
	10	Spare								
	11	115 vac out					TB4T	11		
	12	115 vac out					TB4T	14		
	13	115 vac in					TB13	21		
	14	115 vac in					TB13	22		
CONSOLE, MISSILE FRAME - SYNCHRONIZER AND MISSILE COORDINATE DETECTOR UNIT										
J601		Gated trigger					K1406	c		544
J602		Gated video					K1403	c		597
TB601	1	R2 - 1X train					TB23M	1		
	2	R2 - 36X train					TB23M	2		
	3	Ground					TB23M	3		
	4	R2 - 2X elevation					TB23M	4		
	5	R2 - 36X elevation					TB23M	5		
	6	R2 - 1X train					TB3M	6		
	7	R2 - 36X train					TB3M	7		
	8	Ground telescope unit					TB3M	8		
	9	R2 - 2X elevation					TB3M	9		
	10	R2 - 36X elevation					TB3M	10		
	11	Spare					TB3M	11		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, MISSILE FRAME - SYNCHRONIZER AND MISSILE COORDINATE DETECTOR UNIT (Continued)										
TB601	12	+300 vdc					TB2M	19		
	13	115 vac power					TB4M	9		
	14	115 vac power					TB4M	12		
	15	Train a-c signal					TB3M	12		
	16	Elevation a-c signal					TB3M	13		
TB602	17	Train a-c signal					TB1602	16		
	18	Elevation a-c signal					TB1602	1		
	19	D-c train meter					TB2M	30		
	20	D-c elevation meter					TB2M	31		
	21	Train a-c signal					TB1601	16		
	22	Elevation a-c signal					TB1601	1		
	23	36X T and E lock in					TB4M	6		
	24	Spare								
	25	36X T and E lock in					TB4M	8		
	26	24-cycle T lobing - A					TB23M	6		
	27	24-cycle E lobing - B					TB23M	7		
	28	Ground 24-cycle	TB1602	2			TB23M	8		
	29	AGC					K1405 (Shield of Cable 251)	c		251
	30	Ground								
	31	Servo gain relay AGC	TB23M	15						
	32	Servo gain relay AGC	TB23M	16						
CONSOLE, TARGET FRAME - AUXILIARY POWER UNIT										
TB701	1	+200 vdc					TB1T	10		
	2	+250 vdc local oscillator					TB3T	1		
	3	+200 vdc					TB3T	2		
	4	+300 vdc PPI					TB14	29		
	5	+300 vdc 24-cycle phase shifter					TB14	27		
	6	+300 vdc								
	7	+300 vdc								
	8	+300 vdc								
	9	+300 vdc								
	10	+300 vdc								
	11	-210 vdc M range error detector					TB13	23		
	12	-210 vdc T range error detector					TB14	30		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE TARGET FRAME - AUXILIARY POWER UNIT (Continued)										
TB701	13	+445 vdc spare								
	14	+445 vdc in					TB13	24		
TB702	15	-105 vdc missile receiver					TB1T	14		
	16	-105 vdc target receiver					TB1T	7		
	17	-150 vdc target receiver					TB1T	6		
	18	-150 vdc missile receiver					TB1T	13		
	19	-150 vdc to remote range indicator					TB22T	10		
	20	-150 vdc T and M indicator					TB4T	8		
	21	-210 vdc PPI					TB14	28		
	22	Ground					TB4	7		
	23	-345 vdc					TB501	4		
	24	-150 vdc target oscillator pre-amplifier					TB3T	8		
	25	115 vac					TB501	7		
	26	115 vac					Interlock	E		
	27	115 vac					TB4T	9		
	28	115 vac					TB4T	12		
CONSOLE,PPI FRAME - PPI UNIT										
J801		A-sweep trigger in					Coax T7	C	549	
J802		Delay trigger					Coax T2	D	547	
J803		Video in					J112T		579	
J804		Spare								
J805		Spare								
J806		Spare								
J807		Test points								
J808		Test points								
J809		Test points								

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, PPI FRAME - PPI UNIT (Continued)										
J810		Test points								
J811		Test points								
TB801	1	A-c tachometer - elevation					TB18	1		
	2	Ground					TB13	2		
	3	Motor - elevation					TB18	3		
	4	S1 - 2X radar - elevation					TB18	4		
	5	S2 - 2X radar - elevation					TB18	5		
	6	S3 - 2X radar - elevation					TB18	6		
	7	R2 - 2X CT					TB18	7		
	8	R2 - 36X CT					TB18	8		
	9	Spare								
	10	S1 - 36X radar - elevation					TB18	10		
	11	S2 - 36X radar - elevation					TB18	11		
	12	S3 - 36X radar - elevation					TB18	12		
	13	A-c tachometer - train					TB18	13		
	14	Ground					TB18	14		
	15	A-c motor - train					TB18	15		
	16	S1 - 1X radar - train					TB18	16		
TB802	17	S2 - 1X radar - train					TB19	17		
	18	S3 - 1X radar - train					TB19	18		
	19	R2 - 1X CT - train					TB19	19		
	20	R2 - 36X train					TB19	20		
	21	Spare								
	22	S1 - 36X radar - train					TB19	22		
	23	S2 - 36X radar - train					TB19	23		
	24	S3 - 36X radar - train					TB19	24		
	25	Train meter in					TB19	25		
	26	Train meter out					TB19	26		
	27	Elevation meter in					TB19	27		
	28	Elevation meter out					TB19	28		
	29	Ground					TB19	29		
	30	Train slew					TB19	30		
	31	R1 synchro bus					TB19	31		
	32	R2 synchro bus					TB19	32		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, PPI FRAME - PPI UNIT (Continued)										
TB803	33	-210 vdc					TB14	28		
	34	Ground					TB12	11		
	35	+200 vdc					TB12	20		
	36	+300 vdc					TB14	29		
	37	Spare								
	38	Spare								
	39	Spare								
	40	Spare								
	41	-210 vdc local oscillator					TB14	35		
	42	AFC					TB14	36		
	43	Arm sine pot								
	44	115 vac filament					TB12	18		
	45	115 vac filament					TB12	15		
	46	Spare								
	47	Spare								
	48	Spare								
TB804		-2000 vdc	TB11	4						
TB805	49	Relay coil - train					TB19	21		
	50	Relay coil - common	(Jumped to TB803-45)				TB18	9		
	51	Relay coil - elevation					TB12	14		
	52	Spare								
	53	Spare								
	54	Train					TB15	9		
	55	Elevation					TB15	8		
	56	Spare								
CONSOLE, PPI FRAME - HIGH VOLTAGE POWER UNIT										
TB901	1	115 vac filament					TB12	17		
	2	115 vac filament					TB12	16		
	3	115 vac					TB6	15		
	4	115 vac plate					TB14	33		
	5	115 vac plate					TB14	34		
	6	Ground					TB12	11		
	7	Heating in					TB15	6		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, PPI FRAME - HIGH VOLTAGE POWER UNIT (Continued)										
TB901	8	Heating in					TB7	32		
	9	Heating out	TB902	18						
	10	Heating out	(Right heater)				TB14	38		
TB902	12	+2000 vdc					TB11	2		
	13	Spare								
	14	-2000 vdc 6.3 vac					TB11	4		
	15	-2000 vdc 6.3 vac filament					TB11	5		
	16	Spare								
	17	115 vac					TB13	22		
	18	Heater	TB901	9			TB14	37		
	19	6.3 vac spare								
	20	6.3 vac spare								
TB903	21	+7000 vdc PPI					PPI	CR		
CONSOLE, MISSILE FRAME - MISSILE INDICATOR UNIT										
J1001M		Gate					J104M			598
J1002M		Spare								
J1003M		A-sweep					J302M			563
J1004M		R-sweep					Coax T5	C		561
J1005M		Spare								
CONSOLE, TARGET FRAME - TARGET INDICATOR UNIT										
J1001T		Gate					J118T			577
J1002T		Calibration pips								
J1003T		A-sweep trigger	Range Unit				Coax T7	D		548
J1004T		R-sweep	Range Unit				Coax T2	A		584

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, TARGET FRAME - TARGET INDICATOR UNIT (Continued)										
J1005T		Spare								
J1006T		Spare								
CONSOLE, MISSILE FRAME - MISSILE INDICATOR UNIT										
TB1001M	1	Spare								
	2	Spare								
	3	Spare								
	4	Ground					TB101M	1		
	5	-150 vdc					TB4M	7		
	6	Ungated video					TB101M	5	(Special lead)	HV
	7	+300 vdc					TB2M	21		
	8	Filament voltage	(Ground)				TB302M	4		
	9	Filament voltage					TB302M	11		
	10	Spare								
	11	+2000 vdc					TB2M	23		
	12	-2000 vdc 6.3 vac					TB2M	24		
	13	-2000 vdc 6.3 vac					TB2M	25		
CONSOLE, TARGET FRAME - TARGET INDICATOR UNIT										
TB1001T	1	Spare								
	2	Spare								
	3	Spare								
	4	Ground					TB4	5		
	5	-150 vdc					TB4T	8		
	6	Ungated video					TB101T	5	(Special lead)	HV
	7	+300 vdc					TB2T	19		
	8	Filament voltage	(Ground)				TB302T	4		
	9	Filament voltage					TB302T	11		
	10	Spare								
	11	+2000 vdc					TB11	2		
	12	-2000 vdc +6.3 vac filament					TB11	5		
	13	-2000 vdc 6.3 vac					TB11	5		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, PPI FRAME - TARGET AND MANUAL COORDINATE DETECTOR UNIT										
J1201		Gate trigger	K1407	C		545				
J1202		Gated video	K1404	C		571				
TB1201	1	R1 synchro bus					TB14	39		
	2	R2 synchro bus					TB14	40		
	3	AGC					TB1402	16		252
	4	AGC ground					(Shield of Cable 252)			
	5	Train meter					TB19	25		
	6	Elevation meter					TB19	27		
	7	Ground PPI					TB18	14		
	8	T and E auto track relay					TB13	26		
	9	Servo gain relay					TB5	6		
	10	Auto track switch - train					TB12	7		
	11	Servo gain relay					TB5	7		
	12	Auto track switch - elevation					TB12	8		
	13	Train slew					TB12	9		
	14	Elevation slew					TB12	10		
	15	Elevation 24-cycle					TB15	3		
TB1202	16	Ground 24-cycle					TB15	4		
	17	Train 24-cycle					TB15	5		
	18	A-c train signal					TB15	10		
	19	A-c elevation signal					TB15	11		
	20	Ground					TB7	27		
	21	-150 vdc					TB7	26		
	22	115 vac					TB12	17		
	23	115 vac					TB12	15		
	24	Spare								
	25	+200 vdc					TB14	31		
	26	+300 vdc					TB14	32		
	27	D-c train out					TB7	25		
	28	D-c elevation					TB7	24		
CONSOLE, PPI FRAME - TARGET AND MISSILE RANGE ERROR DETECTOR AND SERVO AMPLIFIER UNIT										
J1301		Delayed gate from target receiver					J120T			589

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, PPI FRAME - TARGET AND MISSILE RANGE ERROR DETECTOR AND SERVO AMPLIFIER UNIT (Continued)										
J1302		Gated video from target receiver					J115T			590
J1303		Delayed gate from missile receiver					J120M			556
J1304		Gated video from missile receiver					J115M			557
TB1301	1	R2 CT - ground	TB22T	16			TB1302	17		
	2	+300 vdc	TB12	13			TB1302	18		
	3	-210 vdc					TB14	30		
	4	Slew relay control					TB1301	14		
	5	Slew relay control	TB303T	3						
	6	Slew motor CF	TB302T	7						
	7	Track motor CF	TB302T	3						
	8	R1 - 1 CT rotor	TB304T	7						
	9	D-c tachometer slew	TB303T	7						
	10	D-c tachometer track	TB302T	2						
	11	Target auto range indicator light					TB4T	1		
	12	Spare					TB1301	13		
	13	115 vac console filament	TB1301	12			TB1302	29		
	13		TB12	16						
	14	115 vac console filament	TB4T	3			TB1302	30		
	14		TB1301	4			TB12	18		
	15	R1 synchro bus	TB14	39			TB1302	31		
	16	R2 synchro bus	TB14	40			TB1302	32		
TB1302	17	R2 CT - ground	TB1301	1						
	18	+300 vdc	TB1301	2						
	19	-210 vdc					TB13	23		
	20	Slew relay control					TB22T	1		
	21	Slew relay control					TB22T	2		
	22	Slew motor CF					TB22T	3		
	23	Track motor CF					TB22T	6		
	24	R1 - 1CT rotor					TB22T	7		
	25	D-c tachometer slew					TB22T	8		
	26	D-c tachometer track					TB22T	9		
	27	Missile auto range indicator					TB4T	2		
	28	115 vac	TB1302	29						
	29	115 vac console filament	TB1301	13						

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, PPI FRAME - TARGET AND MISSILE RANGE ERROR DETECTOR AND SERVO AMPLIFIER UNIT (Continued)										
TB1302	30	115 vac console filament	TB1301	14						
	31	R1 synchro bus	TB1301	15						
	32	R2 synchro bus	TB1301	16						
CONSOLE, PPI FRAME - POWER CONTROL UNIT										
TB1401	1	Spare								
	2	Start coil					TB5	1		
	3	Start					TB5	2		
	4	Start circuit					TB5	3		
	5	Start circuit					TB5	4		
	6	Start					TB5	5		
	7	115 vac for coax switch					TB5	6		
	8	Spare					TB5	7		
	9	Start								
	10	Spare					TB5	9		
	11	Heater					TB5	11		
TB1402	12	Ground	TB1407	71						
	13	115 vac								
	14	115 vac					TB6	14		
	15	115 vac								
	16	AGC					TB1201	3		252
	17	115 vac								
	18	115 vac					TB6	18		
	19	115 vac					TB6	19		
	20	AGC					TB602	29		251
	21	AGC					TB101T	11		249
	22	AGC					TB101M	11		250
K1403	A	Gated video					K1404	B		
	B	Gated video	J114M			572	K1404	A		
	C	Gated video					J602			597
TB1403	23	Spare								
	24	Spare								
	25	Spare								

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, PPI FRAME - POWER CONTROL UNIT (Continued)										
TB1403	26	Spare								
	27	Spare								
	28	Spare					TB7	28		
	29	Spare					TB7	29		
	30	6.3 vac spare					TB7	30		
	31	6.3 vac spare					TB7	31		
	32	115 vac heater					TB7	32		
	33	115 vac					TB7	33		
	34	115 vac raise - lower					TB7	34		
	35	Spare								
	36	Spare								
	37	Spare								
K1404	A	Gated video	K1403	A						
	B	Gated video	K1403	A			J114T			574
	C	Gated video	J1202			571				
TB1404	35	Spare								
	36	Transmitter on relay circuit					TB8	36		
	37	Nutator motor power					TB8	37		
	38	Heaters					TB7	38		
	39	Spare								
	40	Meter - modulator input voltage					TB8	40		
	41	Meter - modulator input voltage					TB8	41		
	42	Meter - oscillator current - positive					TB8	42		
	43	Meter - oscillator current - negative					TB8	43		
	44	Spare								
	45	Spare								
K1405	A	AGC target receiver					TB101T	11		249
	B	AGC missile receiver					TB101M	11		250
	C	AGC	TB602	29		251				
	D	AGC	TB1201	3		252				
TB1405	46	Modulator raise - lower					TB9	46		
	47	Spare								
	48	Spare								

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, PPI FRAME - POWER CONTROL UNIT (Continued)										
TB1405	49	Modulator raise - lower					TB9	49		
	50	Modulator raise - lower					TB9	50		
	51	Spare								
	52	Modulator raise - lower					TB9	52		
	53	Spare								
	54	Radiate control					TB9	54		
	55	Radiate control					TB9	55		
	56	Standby control					TB9	56		
	57	Standby control					TB9	57		
K1406	A	Gate trigger	Coax T4	A		564	K1407	A		
	B	Gate trigger	K1407	B						
	C	Gate trigger to missile coord. detector					J601			544
TB1406	58	Spare					TB10	58		
	59	Spare								
	60	Spare					TB10	60		
	61	Elevation amplidyne over					TB10	61		
	62	Spare					TB10	62		
	63	Train amplidyne over					TB10	63		
	64	Spare					TB10	64		
	65	Spare								
	66	Spare					TB10	66		
	67	Spare					TB10	67		
	68	Spare								
K1407	A	Gate trigger								
	B	Gate trigger	K1406	A			K1406	B		
	C	Gate trigger	J1201			545	Coax T1			581
TB1407	69	Spare					TB16	69		
	70	Spare								
	71	6.3 vac ground	TB1402	12			TB16	71		
	72	Antenna power indicator					TB16	72		
	73	Nutator motor ON indicator					TB16	73		
	74	Transmitter ON light					TB16	74		
	75	Radiate indicator light					TB16	75		
	76	Standby indicator light					TB16	76		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, PPI FRAME - POWER CONTROL UNIT (Continued)										
TB1407	77	Indicator light circuit - common					TB16	77		
	78	Modulator ON light					TB16	78		
	79	Spare								
TB1408	80	Spare								
	81	Spare								
	82	Spare								
	83	Spare								
	84	Spare								
	85	Spare								
	86	Spare								
	87	Spare								
	88	Spare								
	89	Spare								
	90	Spare								
SYSTEM CONTROL SWITCHING UNIT										
TB1501	1	S1 - 36X computer - elevation					TB5151	3	Bk	243
	2	S1 - 36X antenna - elevation					TB5160	6	W	243
	3	R1 - 36X computer - elevation					TB5151	6	R	243
	4	S2 - 36X computer - elevation					TB5151	4	G	243
	5	S2 - 36X antenna - elevation					TB5160	5	O	243
	6	R2 - 36X computer - elevation					TB5151	7	Bl	243
	7	S3 - 36X computer - elevation					TB5151	5	W-Bk	243
	8	S3 - 36X antenna - elevation					TB5160	4	R-Bk	243
	9	R3 - 36X computer - elevation					TB5151	8	G-Bk	243
	10	S1 - 36X computer - train					TB5151	9	O-Bk	243
	11	S1 - 36X antenna - train					TB5160	13	Bl-Bk	243
	12	R1 - 36X computer - train					TB5151	12	Bk-W	243
	13	S2 - 36X computer - train					TB5151	10	R-W	243
	14	S2 - 36X antenna - train					TB5160	14	G-W	243
	15	R2 - 36X computer - train					TB5151	13	Bl-W	243
	16	Spare								
TB1502	1	S3 - 36X computer - train					TB5151	11	Bk-R	243
	2	S3 - 36X antenna - train					TB5160	15	W-R	243
	3	R3 - 36X computer - train					TB5151	14	O-R	243

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
SYSTEM CONTROL SWITCHING UNIT (Continued)										
TB1502	4	Telescope elevation tachometer	TB5157	18	O	244	TB9112	9	Bk	245
	5	Telescope train tachometer	TB5161	5	Bl	244	TB9111	8	W	245
	6	36X T and E lock in relay					TB6	20	Bk	242
	7	PPI search					TB19	30	R	241
	8	Telescope train slew					TB9112	10	R	245
	9	Telescope elevation slew					TB9112	7	G	245
	10	Handcrank de-energizing relay - train					TB19	21	G	241
	11	Automatic tracking relay - train					TB12	7	O	241
	12	Auto dial box indicator - train					TB5202	5	O	239
	13	Handcrank de-energizing relay - elevation					TB12	14	Bl	241
	14	Auto track relay - elevation					TB12	8	W-Bk	241
	15	Auto track dial box in - elevation					TB5202	6	Bl	239
	16	Spare								
TB1503	1	Local dial box indicator					TB5202	2	W	239
	2	Telescope dial box indicator					TB5202	2	R	239
	3	Computer time motor					TB5152	3	G	244
	4	Computer time motor					TB5202	4	G	239
	5	Pulse-time ind. in dial box					TB5202	7	W-Bk	239
	6	Pulse-time ON					TB2701	6	Bk	213
	7	115 vac pulse-time					TB2701	7	W	213
	8	Channel selector Switch					TB5	7	Bk	241
	8						TB5203	19	Bk-W	239
	9	Cameras ON					TB5203	15	O-Bk	239
	10	Camera marker					TB5203	16	Bl-Bk	239
	11	115 vac					TB5161	8	Bk	244
	11						TB5203	20	R-W	239
	12	115 vac					TB5161	9	W	244
	13	115 dial box - common					TB5202	1	Bk	239
TB1504	1	S1 - 36X PPI - elevation					TB18	10	Bl-Bk	241
	2	S2 - 36X PPI - elevation					TB18	11	Bk-W	241
	3	S3 - 36X PPI - elevation					TB18	12	R-W	241
	4	S1 - 36X PPI - train					TB19	22	G-W	241
	5	S2 - 36X PPI - train					TB19	23	Bl-W	241
	6	S3 - 36X PPI - train					TB19	24	Bk-R	241
	7	Telescope elevation tachometer	TB5157	20	W-Bk	244	TB9111	7	O	245

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
SYSTEM CONTROL SWITCHING UNIT (Continued)										
TB1504	8	Telescope train tachometer	TB5161	6	R-Bk	244	TB9112	12	Bl	245
	9	36X T and E lock in relay					TB6	21	G	242
	10	Manual Coord. det. train slew					TB12	9	O	242
	11	Manual coord. det. elevation slew					TB12	10	Bl	242
	12	T and E handcrank de-energizing relay					TB18	9	W-Bk	242
	13	T and E automatic tracking relay					TB13	26	R-Bk	242
	14	Spare								
	15	Computer time motor ON					TB5152	4	R	244
TB1505	1	Manual coord. det. - ground	TB18	14	W	242	TB9112	8	W-Bk	245
	2	Cameras ON					TB5203	13	R-Bk	239
	3	Camera marker					TB5203	14	G-Bk	239
CONSOLE, MISSILE FRAME - TELESCOPE SERVO PREAMPLIFIER UNIT AND HANDCRANK SERVO AMPLIFIER UNIT										
TB1601	1	A-c elevation	TB1603	1			TB602	22		
	2	Ground PPI	TB1603	2			TB23M	3		
	3	A-c elevation tachometer	TB1603	3			TB23M	10		
	4	Spare	TB1603	4						
	5	Ground preamplifier unit	TB1603	5			TB1602	4		
	6	A-c motor - elevation	TB1603	6			TB23M	11		
	7	Spare	TB1603	7						
	8	115 vac filament	TB1603	8			TB1602	9		
	9	115 vac filament	TB1603	9			TB1602	10		
	10	Spare	TB1603	10						
	11	A-c motor - train	TB1603	11			TB23M	12		
	12	+300 vdc	TB1603	12			TB1602	7		
	13	Spare	TB1603	13						
	14	A-c train tachometer	TB1603	14			TB23M	13		
	15	Ground PPI	TB1603	15			TB23M	14		
	16	A-c train signal	TB1603	16			TB602	21		
CONSOLE, MISSILE FRAME - TELESCOPE SERVO PREAMPLIFIER UNIT										
TB1602	1	A-c elevation signal	TB1604	1			TB602	18		
	2	Ground 24-cycle	TB1604	2			TB602	28		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, MISSILE FRAME - TELESCOPE SERVO PREAMPLFIER UNIT (Continued)										
TB1602	3	Telescope signal - elevation	TB1604	3			TB3M	5		
	4	Ground to telescope	TB1604	4			TB3M	14		
	4						TB1601	5		
	5	Telescope preamplifier elevation out	TB1604	5			TB3M	1		
	6	Ground to telescope final amplifier	TB1604	6			TB3M	2		
	7	+300 vdc	TB1604	7			TB2M	20		
	7						TB1601	12		
	8	Ground	TB1604	8			TB1602	2		
	9	115 vac filament	TB1604	9			TB4M	9		
	9						TB1601	8		
	10	115 vac filament	TB1604	10			TB4M	12		
	10						TB1601	9		
	11	Ground to telescope final amplifier	TB1604	11			TB3M	3		
	12	Train signal out	TB1604	12			TB3M	4		
	13	Ground to telescope	TB1604	13			TB4M	4		
	14	Telescope signal - train	TB1604	14			TB4M	5		
	15	Spare	TB1604	15						
	16	A-c train signal	TB1604	16			TB602	17		
CONSOLE, MISSILE FRAME - HANDCRANK SERVO AMPLIFIER UNIT										
TB1603	1	A-c elevation signal					TB1601	1		
	2	Ground PPI					TB1601	2		
	3	A-c elevation tachometer					TB1601	3		
	4	Spare					TB1601	4		
	5	Ground preamplifier unit					TB1601	5		
	6	A-c motor elevation					TB1601	6		
	7	Spare					TB1601	7		
	8	115 vac filament					TB1601	8		
	9	115 vac filament					TB1601	9		
	10	Spare					TB1601	10		
	11	A-c motor - train					TB1601	11		
	12	+300 vdc					TB1601	12		
	13	Spare					TB1601	13		
	14	A-c train tachometer					TB1601	14		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CONSOLE, MISSILE FRAME - HANDCRANK SERVO AMPLIFIER UNIT (Continued)										
TB1603	15	Ground PPI					TB1601	15		
	16	A-c train signal					TB1601	16		
CONSOLE, MISSILE FRAME - TELESCOPE SERVO PREAMPLIFIER UNIT										
TB1604	1	A-c elevation signal					TB1602	1		
	2	Ground - 24-cycle					TB1602	2		
	3	Telescope signal elevation					TB1602	3		
	4	Ground to telescope					TB1602	4		
	5	Telescope preamplifier elevation out					TB1602	5		
	6	Ground to telescope final amplifier					TB1602	6		
	7	+300 vdc					TB1602	7		
	8	Ground					TB1602	8		
	9	115 vac filament					TB1602	9		
	10	115 vac filament					TB1602	10		
	11	Ground to telescope final amplifier					TB1602	11		
	12	Train signal out					TB1602	12		
	13	Ground to telescope					TB1602	13		
	14	Telescope train signal					TB1602	14		
	15	Spare					TB1602	15		
	16	A-c train signal					TB1602	16		
TARGET LOCAL OSCILLATOR PREAMPLIFIER UNIT										
J1704		I-f to receiver					P2029			2010
J1705	A	115 vac					J2024	A		2005
	B	Spare					J2024	B		2005
	C	Meter					J2024	C		2005
	D	Tuner					J2024	D		2005
	E	Ground					J2024	E		2005
	F	Spare					J2024	F		2005
	G	Manual AFC					J2024	G		2005
	H	-150 vdc					J2024	H		2005
	J	Spare					J2024	J		2005
	K	115 vac					J2024	K		2005

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
TARGET LOCAL OSCILLATOR PREAMPLIFIER UNIT (Continued)										
J1705	L	Spare					J2024	L		2005
	M	-345					J2024	M		2005
	N	+200 vdc local oscillator					J2024	N		2005
	P	+200 vdc					J2024	P		2005
J1706		AGC	J1706				J2028			154
TELESCOPE FINAL AMPLIFIER UNIT AND TELESCOPE AMPLIFIER POWER UNIT										
TB1801	1	Elevation control signal					TB9114	10	G	248
	2	Elevation ground					TB9114	9	R	248
	3	Elevation telescope preamplifier - ground					TB3M	2	O	204
	4	Signal from elevation preamplifier					TB3M	1	Bl	204
	5	115 vac in					TB4M	10	BK&R	204
	5	115 vac								
	6	115 vac in					TB4M	13	W&G	204
	6	115 vac								
	7	115 vac out - filament transformer					TB1804	3		
	8	115 vac out - filament transformer					TB1804	4		
	9	115 vac out - plate transformer					TB1804	1		
	10	115 vac out - plate transformer					TB1804	2		
	11	Ground					TB1804	8		
	12	1200 vdc					TB1804	10		
	13	Preamplifier train signal					TB3M	4	W-Bk	204
	14	Train ground					TB3M	3	R-Bk	204
	15	Telescope train control ground					TB9114	7	Bk	248
	16	Telescope train control signal					TB9114	8	W	248
TB1803	1	Spare								
	2	Spare								
TB1804	1	115 vac plate	TB1801	9						
	2	115 vac plate	TB1801	10						
	3	115 vac filament	TB1801	7						
	4	115 vac filament	TB1801	8						
	5	Spare								
	6	Spare								

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
TELESCOPE FINAL AMPLIFIER UNIT AND TELESCOPE AMPLIFIER POWER UNIT (Continued)										
TB1804	7	Ground								
	8	Ground	TB1801	11						
	9	+vdc								
	10	+1200 vdc	TB1801	12						
TRANSMITTER										
J2001		Spare								
J2002		Spare								
J2003		Missile AGC	J5102			152	J4301			
J2004		Missile AFC	J5118			153	J4303			
J2005		Missile i-f	J5101			160	J4302			
J2006		Spare								
J2007		Spare								
J2008		Spare								
J2009		Spare								
J2010		Spare								
J2011		Spare								
J2012		Spare								
J2013		Spare								
J2014		Spare								
J2015		Spare								
J2016		Spare								

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
TRANSMITTER (Continued)										
J2017		Spare								
J2018		Spare								
J2019		Spare								
J2020		Spare								
J2021		Spare								
J2022		Spare								
J2023		Spare								
J2026		Spare								
J2027		Spare								
J2028		Target AGC	J5104			154	J1706			2009
J2029		Target receiver i-f	J5105			155	J1704			2010
J2030		Test set dipole	J4742			151				
J2031		Spare								
J2032		Spare								
J2033		Spare								
J2034		Spare								
J2035		Spare								
J2036		Spare								

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
TRANSMITTER (Continued)										
TB2001	1	Oscillator current - negative	TB5101	1	Bk	112	Ground			
	2	Oscillator current - positive	TB5101	2	W	112	M2002	2		
	3	Radiate control	TB5101	3	R	112	TB2005	3		
	4	Radiate control	TB5101	4	G	112	TB2005	4		
	5	Transmitter filament ON light	TB5101	5	O	112	F2009	2		
	6	Standby light	TB5101	6	Bl	112	TB2005	7		
	6						F2010	1		
	7	Indicator light circuit - common	TB5101	7	W-Bk	112	TB2005	8		
	7						S2007	A		
	8	Spare					TB2005	9		
	9	Modulator volts - raise	TB5101	9	G-Bk	112	TB2005	10		
	10	Modulator volts adjust - common	TB5101	10	O-Bk	112	S2003	3		
TB2002	1	Modulator volts - lower	TB2006	2			TB5101	11	Bl-Bk	112
	2	Nutator motor ON light					TB5101	12	Bk-W	112
	3	Nutator motor contactor relay	S2001	7			TB5101	13	R-W	112
	4	Strip heater supply					TB5101	14	G-W	112
	5	Strip heater supply					TB5101	15	Bl-W	112
	6	Modulator input volts indicator	TB2006	3			TB5101	16	Bk-R	112
	7	Modulator input volts indicator	TB2006	4			TB5101	17	W-R	112
	8	Transmitter contactor					TB5101	18	O-R	112
	9	Transmitter contactor					TB5101	19	Bl-R	112
	10	+445 vdc	TB4201	1			TB5101	20	O-G	112
TB2003	1	115 vac	K2005	A			TB4903	5	Bk	102
	2	115 vac	K2005	B			TB4903	6	W	102
	3	Spare								
	4	115 vac nutator	TB5102	17	Bk					
				18	W	114	F2015	2		
	5	115 vac nutator	TB5102	19	R					
				20	G	114	F2016	1		
	6	Spare								
TB2004	1	Spare								
	2	Spare								
	3	Spare								
	4	115 vac								
	5	115 vac					F2007			
	5						TB2008	13		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
TRANSMITTER (Continued)										
TB2004	6	Spare								
	7	Spare								
	8	Spare								
	9	Spare								
	10	Nutator motor contactor	TB5102	16	O	114				
TB2005	1	Undercurrent seal-in	TB2303	5	Bk	119	K2001	A		
	2	Radiate - standby control circuit	TB2301	6	W	119	S2007			
	2						S2006	1		
	3	Radiate control	Motor of K2006				S2002			
	3		TB2301	8	R	119	TB2001	3		
	3						TB2008	2		
	4	Radiate control	TB2301	9	G	119	TB2001	4		
	4						S2002			
	5	Radiate - standby control circuit	TB2301	5	O	119	F2006			
	5						TB2008	15		
	6	Standby transformer primary	TB2301	3	Bl	119	TB2008	7		
	7	Standby light	TB2301	10	W-Bk	119	TB2001	6		
	8	Indicator light circuit - common	TB2302	2	R-Bk	119	TB2001	7		
	9	Radiate light	TB2301	2	G-Bk	119				
	10	Modulator volts - raise	TB2302	3	O-Bk	119				
TB2006	1	Modulator volts adjust - common	TB2303	2	Bl-Bk	119				
	2	Modulator volts - lower	TB2302	6	Bk-W	119				
	3	Modulator input volts indicator	TB2301	1	R-W	119				
	4	Modulator input volts indicator	TB2303	1	G-W	119	M2001	2		
	4						TB2002	7		
	5	Time relay by-pass	TB2302	7	Bl-W	119	K2001			
	5						TB2008	14		
	6	5-second time relay	TB2302	8	Bk-R	119				
	7	Meter	J4304	C			TB5111	1	Bk	148
	8	Tuning pot	J4304	J			TB5111	3	R	148
	9	Tuning pot finger	J4304	H			TB5111	2	W	148
	10	Ground	J4304	F			TB5111	8	G	148
J2024	A	115 vac	J1705	A		W2005			R-W	111
	B	Spare	J1705	B		W2005	TB5102	11	Bl-Bk	111
	C	Spare	J1705	C		W2005	TB5102	4	G	111

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
TRANSMITTER (Continued)										
J2024	D	Tuner	J1705	D		W2005	TB5102	5	O	111
	E	Ground	J1705	E		W2005	TB5102	2	W	111
	F	Spare ground	J1705	F		W2005	TB5102	12	Bk-W	111
	G	Manual AFC	J1705	G		W2005	TB5102	3	R	111
	H	-150 vdc	J1705	H		W2005	TB5102	8	R-Bk	111
	J	Spare ground	J1705	J		W2005	TB5102	9	G-Bk	111
	K	115 vac	J1705	K		W2005			G-W	111
	L	Spare ground	J1705	L		W2005	TB5102	10	O-Bk	111
	M	-345 vdc	J1705	M		W2005	TB5102	7	W-Bk	111
	N	+250 vdc local oscillator	J1705	N		W2005	TB5102	6	Bl	111
	P	+200 vdc	J1705	P		W2005	TB5102	1	Bk	111
J2025		H-v pulse cable	J2301			157	J2035			W2008
HYDROGEN THYRATRON MODULATOR UNIT										
J2301		H-v pulse cable	J2025			157				
J2302		Spare								
J2303		Spare								
J2304		Spare								
J2305		Modulator trigger					J5103			162
TB2301	1	Modulator input volts indicator	TB2006	3	R-W	119	F2305			
	2	Radiate light	K2305				TB2005	9	G-Bk	119
	2	Radiate light	TB2310	5			TB5101	8	G-Bk	113
	3	Standby transformer - primary	TB2310	4			TB2005	6	Bl	119
	4	Radiate control	K2305	Coil			TB2301	8		
	5	Line contactor	TB2309	4			TB2005	5	O	119
	6	Standby control	TB2308	3			TB2005	2	W	119
	7	Standby control	TB2310	3						
	8	Radiate control	TB2308	4			TB2005	3	R	119
	8	Radiate control	TB2301	4						
	9	Radiate control	TB2308	5			TB2005	4	G	119

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
HYDROGEN THYRATRON MODULATOR UNIT (Continued)										
TB2301	10	Standby light	TB2308	6			TB2005	7	W-Bk	119
TB2302	1	Modulator ON light	TB5103	2	W	113	TB2310	8		
	2	Indicator light circuit - common	TB2005	8	R-Bk	119	TB2310	7		
	3	Modulator volts - raise	TB2005	10	O-Bk	119	TB2307	9		
	3						TB2315	3		
	3	Variac motor	TB2502	3	G-Bk	149				
	4	Modulator volts adjust - common	TB5103	3	R	113	TB2308	7		
	5	Modulator volts adjust - common	TB5103	8	R-Bk	113	TB2308	8		
	6	Modulator volts - lower	TB2006	2	Bk-W	119	TB2307	8		
	6						TB2315	1		
	6	Variac motor	TB2502	1	W-Bk	149				
	7	Time relay by-pass	TB2006	5	Bl	119	TB2307	2		
	8	5-second timing relay	TB2006	6	Bk-R	119				
	9	Variac motor	TB2502	2	R-Bk	149				
	10	Standby control	TB5103	1	BK	113				
TB2303	1	Modulator input volts indicator	TB2006	4	G-W	119	F2306			
	2	Modulator volts adjust - common	TB2006	1	Bl-Bk	119	TB2310	1		
	3	Timing relay coil	TB5103	10	O-Bk	113	TB2310	2		
	4	Timing relay coil	TB2304	2			TB2307	4		
	5	Standby contact	TB2005	1	Bk	119				
	5		TB5103	4	G	113				
	6	+300 vdc	TB5103	14	G-W	113				
	7	Ground	TB5103	7	W-Bk	113				
	8	Spare								
	9	Strip heater supply	TB5103	19	Bl-R	113	S2306	B		
	10	Strip heater supply	TB5103	20	R-G	113	S2306	C		
TB2304	1	115 vac	TB4903	1	Bk	103	E2304			
	1		TB5103	12	Bk-W	113				
	2	115 vac	TB4903	2	W	103	E2305			
	2		TB5103	11	Bl-Bk	113				
	2		TB2303	4						
	3	Variac Arm	TB2501	8	Bk & W	149	F2306			
	4	Variac	F2305				TB2501	4	O & Bl	149
	5	Variac	K2305	B			TB2501	1	R & G	149
	6	Spare								

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
D-C MOTOR GENERATOR AND POWER FILTER UNIT										
TB2401	1	3Ø 115 vac	TB6311	6	Bk	141				
	2	3Ø 115 vac	TB6311	7	W	141				
	3	3Ø 115 vac	TB6311	8	R	141				
	4	+445 vdc					TB5106	8	Bk and W	142
	5	Ground					TB5105	7	R and G	142
	6	Spare								
	7	Spare								
	8	+445 vdc	Generator							
MODULATOR VARIAC CONTROL UNIT										
TB2501	1	Variac	TB2304	5	R and G	149				
	4	Variac	TB2304	4	O and Bl	149				
	8	Arm of variac	TB2304	3	Bk and W	149				
TB2502	1	Variac motor	TB2302	6	W-Bk	149				
	2	Variac motor	TB2302	9	R-Bk	149				
	3	Variac motor	TB2302	3	G-Bk	149				
CONSOLE HANDCRANK ISOLATION RELAY UNIT										
TB2601	1	R1 isolation volt - elevation	TB15	8	Bk	256				
	2	R2 isolation - volt - train	TB15	9	W	256				
	3	R2 synchro bus K2601 and 2 coil	TB19	32	R	256				
	4	A-c train signal	TB15	1	G	256				
	5	A-c train signal out	TB15	10	O	256				
	6	A-c elevation signal	TB15	2	Bl	256				
	7	A-c elevation signal out	TB15	11	W-Bk	256				
REFERENCE VOLTAGE DISTRIBUTION UNIT										
J2701		Shifted 24-cycle to telemetering					J5151			567
J2702		Shifted 24-cycle to range unit					T3	A		596
TB2701	1	24-cycle elevation in					TB5160	7	O	212

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
REFERENCE VOLTAGE DISTRIBUTION UNIT (Continued)										
TB2701	2	24-cycle train in					TB5160	9	Bl	212
	3	24-cycle ground					TB5160	8	W-Bk	212
	4	+300 vdc					TB5161	16	Bk	212
	5	Ground					TB5161	20	W	212
	6	115 vac for relay					TB1503	6	Bk	213
	7	115 vac for relay					TB1503	7	W	213
	8	115 vac for filaments					TB5161	8	R	212
	9	115 vac for filaments					TB5161	9	G	212
	10	24-cycle ground to T and M coord. det.					TB15	4	(Shield)	214
	11	24-cycle elevation to T and M coord. det.					TB15	3	Bk	214
	12	24-cycle train to T and M coord. det.					TB15	5	W	214
	13	24-cycle elevation to missile coord. det.					TB23M	7	Bk	217
	14	24-cycle train to missile coord. det.					TB23M	6	W	217
	15	24-cycle ground					TB23M	8	(Shield)	217
MISSILE CROSS-POINTER METER UNIT										
TB2801	1	Cross-pointer missile train in					TB2M	30	Bk	203
	2	Cross-pointer missile train out					TB1M	15	W	203
	3	Cross-pointer elevation in					TB2M	31	R	203
	4	Cross-pointer elevation out					TB1M	16	G	203
	5	Ground					TB1M	1	O	203
	6	115 vac ill.					TB4M	11	Bl	203
	7	115 vac ill.					TB4M	14	W-Bk	203
	8	Spare								
	9	Spare								
	10	Spare								
D-C VOLTAGE REGULATOR UNIT										
TB2901	1	+200 vdc								
	2	+250 vdc								

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
D-C VOLTAGE REGULATOR UNIT (Continued)										
TB2901	3	+200 vdc								
	4	+300 vdc modulator	TB2903	4			TB5161	12	R	233
	5	+300 vdc target range unit	TB2903	5			TB2T	17	Bk	240
	6	+300 vdc missile range unit	TB2903	6			TB2M	18	Bk	218
	7	+300 vdc T and E synchronizer	TB2903	7			TB2M	19	W	218
	8	+300 vdc missile ind.	TB2903	8			TB2M	21	G	218
	9	+300 vdc target ind.	TB2903	9			TB2T	19	R	240
	10	+300 vdc T and M coord. det.	TB2903	10			TB2T	21	G	240
	11	+300 vdc target receiver	TB2903	11			TB2T	22	O	240
	12	+300 vdc missile receiver	TB2903	12			TB1M	4	O	218
	13	+445 vdc in	TB2903	13						
	14	+445 vdc in	TB2903	14			TB5158	5	Bk	233
TB2902	15	+300 vdc telescope preamplifier and handcrank amplifier	TB2904	15			TB2M	20	R	218
	16	+300 vdc RRI	TB2904	16			TB5161	19	G	233
	17	+300 vdc T and M range det.	TB2904	17			TB2T	18	W	240
	18	+300 vdc spare	TB2904	18						
	19	+300 vdc spare	TB2904	19						
	20	+300 vdc spare	TB2904	20						
	21	Spare								
	22	Ground					TB2M	17	Bl	218
	22	Ground	TB5158	6	W	233	TB2T	31	Bl	240
	23	Spare								
	24	Interlock	TB2900				Int. At	Console top	R-Bl Lead	
	25	Interlock	TB2904	25			Int. Lock TB2900			
	26	Interlock	TB2904	26			Int. F	Console top	R-Bl Lead	
	27	115 vac	TB2904	27			TB5161	8	O	233
	28	115 vac	TB2904	28			TB5161	9	Bl	233
TB2903	1	+200 vdc								
	2	+250 vdc								
	3	+200 vdc								
	4	+300 vdc modulator	TB2901	4						

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
D-C VOLTAGE REGULATOR UNIT (Continued)										
TB2903	5	+300 vdc target range unit	TB2901	5						
	6	+300 vdc missile range unit	TB2901	6						
	7	+300 vdc T and E synchronizer	TB2901	7						
	8	+300 vdc missile indicator	TB2901	8						
	9	+300 vdc target indicator	TB2901	9						
	10	+300 vdc T and M coord. det.	TB2901	10						
	11	+300 vdc target receiver	TB2901	11						
	12	+300 vdc missile receiver	TB2901	12						
	13	+445 vdc in	TB2901	13						
	14	+445 vdc in	TB2901	14						
TB2904	15	+300 vdc telescope preamplifier and handcrank amplifier	TB2902	15						
	16	+300 vdc RRI	TB2902	16						
	17	+300 vdc T and M range det.	TB2902	17						
	18	+300 vdc spare	TB2902	18						
	19	+300 vdc spare	TB2902	19						
	20	+300 vdc spare	TB2902	20						
	21	Spare								
	22	Ground	TB2902	22						
	23	Spare								
	24	Interlock								
	25	Interlock	TB2902	25	R-Bk heavy lead					
	26	Interlock	TB2902	26						
	27	115 vac	TB2902	27						
	28	115 vac	TB2902	28						
ANTENNA UNIT										
Slip Rings	1	A2 elevation tachometer	TB3001	24			TB3007	9		
	2	Dummy	TB3002	1						
	3	R1 and flag cameras	TB3001	23			TB3008	1		
	4	Dummy	TB3002	2						
	5	Cameras S2	TB3001	22			TB3005	1		
	6	Dummy	TB3002	3						
	7	Cameras S3	TB3001	21			TB3005	4		
	8	Dummy	TB3002	4						
	9	Cameras flag 2	TB3001	20			TB3005	5		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
ANTENNA UNIT (Continued)										
Slip Rings	10	Dummy	TB3002	5						
	11	Cameras P1	TB3001	19			TB3005	6		
	12	S1 - 36X dial box - elevation	TB3002	6			TB3007	1		
	13	R2 synchro bus	TB3001	18			TB3008	9		
	14	S2 - 36X dial box - elevation	TB3002	7			TB3006	7		
	15	Spare	TB3001	17			TB3007	10		
	16	S3 - 36X dial box - elevation	TB3002	8			TB3007	4		
	17	R1 synchro bus	TB3001	16			TB3008	11		
	18	Cameras P2	TB3002	9			TB3006	8		
	19	Camera R2 synchro bus	TB3001	15			TB3008	10		
	20	Cameras P2A	TB3002	10			TB3008	7		
	21	Cameras S1	TB3001	14			TB3008	12		
	22	Upper limit switch	TB3002	11			TB3008	6		
	23	Upper limit switch	TB3001	13			TB3005	3		
	24	Camera P1A	TB3002	12			TB3008	8		
	25	Spare	TB3001	12						
	26	115 vac nutator motor	TB3002	13			TB3006	11		
	27	Switch	TB3001	11			TB3006	6		
	28	115 vac nutator motor	TB3002	14			TB3006	9		
	29	Switch	TB3001	10			TB3006	5		
	30	Reference generator A	TB3002	15			TB3006	10		
	31	Switch safety	TB3001	9			TB3006	4		
	32	Reference generator B	TB3002	16			TB3007	8		
	33	Elevation stow switch	TB3001	8			TB3006	3		
	34	Reference generator C	TB3002	17			TB3006	12		
	35	A1 elevation tachometer	TB3001	7			TB3007	7		
	36	S1 - 2X radar - elevation	TB3002	18			TB3008	2		
	37	F2 elevation motor	TB3001	6			TB3007	6		
	38	S2 - 2X radar - elevation	TB3002	19			TB3008	3		
	39	C4 elevation motor	TB3001	5			TB3007	5		
	40	S3 - 2X radar - elevation	TB3002	20			TB3008	4		
	41	Spare	TB3001	4						
	42	S1 - 36X radar - elevation	TB3002	21			TB3008	5		
	43	F1 elevation motor	TB3001	3			TB3007	3		
	44	S2 - 36X radar - elevation	TB3002	22			TB3005	2		
	45	A1 elevation motor	TB3001	2			TB3007	2		
	46	S3 - 36X radar - elevation	TB3002	23			TB3007	12		
	47	Spare	TB3001	1						
	48	Lower limit switch	TB3002	24			TB3007	11		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
ANTENNA UNIT (Continued)										
J3001	A	Spare								
	B	A1 train amplidyne C4 train motor	TB3204	6	Bk	115	TB3004	8		
	C	T and E motor field	TB3203	12	W	115	TB3004	7		
	D	Spare					TB3004	9		
	E	A1 train motor C2 amplidyne	TB3204	5	G	115	TB3004	11		
	F	T and E drive motor field	TB3203	10	O	115	TB3004	10		
	G	A1 train motor tachometer	TB3203	8	Bl	115	TB3004	5		
	H	A2 train motor tachometer	TB3203	11	W-Bk	115	TB3004	6		
	J	A1 elevation motor	TB3204	7	R-Bk	115	TB3001	2		
	K	Spare	TB3203	13	G-Bk	115	TB3001	4		
	L	Raise switch	TB3203	14	O-Bk	115	TB3001	13		
	M	Antenna limit switch	TB3203	15	Bl-Bk	115	TB3002	11		
	N	Down switch	TB3203	16	Bk-W	115	TB3002	24		
	P	C4 elevation motor A1 amplidyne	TB3204	8	R-W	115	TB3001	5		
S3001	A	Safety switch								
	A	Safety switch					TB3001	9		
	B	Safety switch					S3002	C		
							TB3004	2		
TB3001	1	Spare								
	2	A1 elevation motor	J3001	J			SR	47		
	3	F1 elevation motor	TB3004	10			SR	45		
	4	Spare	J3001	K			SR	43		
	5	A1 amplidyne C4 elevation motor	J3001	P			SR	41		
	6	F2 elevation motor	TB3004	7			SR	39		
	7	A1 elevation tachometer	TB3003	6			SR	37		
	8	Elevation stow switch	J3003	E			SR	35		
	9	Safety switch	S3001	A			SR	33		
	10	Safety switch	J3003	D			SR	31		
	11	Safety switch	S3003	A			SR	29		
	12	Spare					SR	27		
	13	Switch	J3001	L			SR	25		
	14	Cameras S1	TB3021	3			SR	23		
	15	Camera R2	TB3021	2			SR	21		
	16	R1 synchro bus	J3003	H			SR	19		
	16	R1 synchro bus	TB3003	11			SR	17		
	17	Spare	J3003	J			SR	15		
	18	R2 synchro bus	J3003	G			SR	13		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
ANTENNA UNIT (Continued)										
TB3001	18	R2 synchro bus	TB3003	12						
	19	Cameras P1	TB3021	7			SR	11		
	20	Cameras flag 2	TB3021	6			SR	9		
	21	Cameras S3	TB3021	5			SR	7		
	22	Cameras S2	TB3021	4			SR	5		
	23	Cameras R1 and flag	TB3021	1			SR	3		
	24	Elevation tachometer TA2	TB3003	5			SR	1		
J3002	A	S3 - 2X radar - elevation	TB5104	1	Bk	117	TB3002	20		
	B	S2 - 2X radar - elevation	TB5104	2	W	117	TB3002	19		
	C	S1 - 2X radar - elevation	TB5104	3	R	117	TB3002	18		
	D	S3 - 36X radar - elevation	TB5104	4	G	117	TB3002	23		
	E	S2 - 36X radar - elevation	TB5104	5	O	117	TB3002	22		
	F	S1 - 36X radar - elevation	TB5104	6	Bl	117	TB3002	21		
	G	Reference generator A	TB5104	7	W-Bk	117	TB3002	15		
	H	Reference generator B	TB5104	8	R-Bk	117	TB3002	16		
	J	Reference generator C	TB5104	9	G-Bk	117	TB3002	17		
	K	S1 - 1X radar - train	TB5104	10	O-Bk	117	TB3003	9		
	L	S2 - 1X radar - train	TB5104	11	Bl-Bk	117	TB3003	8		
	M	S3 - 1X radar - train	TB5104	12	Bl-W	117	TB3003	7		
	N	S1 - 36X radar - train	TB5104	13	R-W	117	TB3003	3		
	P	S2 - 36X radar - train	TB5104	14	G-W	117	TB3003	2		
	Q	S3 - 36X radar - train	TB5104	15	Bl-W	117	TB3003	1		
S3002	A	Train stowing switch					TB3004	4		
	C	Train stowing switch					TB3004	3		
	C	Train stowing switch					S3001	A		
TB3002	1	Dummy rings	SR	2						
	2	Dummy rings	SR	4						
	3	Dummy rings	SR	6						
	4	Dummy rings	SR	8						
	5	Dummy rings	SR	10						
	6	S1 - 36X dial box - elevation	SR	12			TB3022	1		
	7	S2 - 36X dial box - elevation	SR	14			TB3022	2		
	8	S3 - 36X dial box - elevation	SR	16			TB3022	3		
	9	Cameras P2	SR	18			TB3021	8		
	10	Cameras P2A	SR	20			TB3021	10		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
ANTENNA UNIT (Continued)										
TB3002	11	Upper limit switch	SR	22			J3001	M		
	12	Camera P1A	SR	24			TB3021	9		
	13	115 vac nutator	SR	26			J3003	M		
	14	115 vac nutator	SR	28			J3003	P		
	15	Reference generator A	SR	30			J3002	G		
	16	Reference generator B	SR	32			J3002	H		
	17	Reference generator C	SR	34			J3002	J		
	18	S1 - 2X radar - elevation	SR	36			J3002	C		
	19	S2 - 2X radar - elevation	SR	38			J3002	B		
	20	S3 - 2X radar - elevation	SR	40			J3002	A		
	21	S1 - 36X radar - elevation	SR	42			J3002	F		
	21	S1 - 36X radar - elevation synchro capacitors	TB3601	4	G	143				
	22	S2 - 36X radar - elevation	SR	44			J3002	E		
	22	S2 - 36X radar - elevation synchro capacitors	TB3601	5	O	143				
	23	S3 - 36X radar - elevation	SR	46			J3002	D		
	23	S3 - 36X radar - elevation synchro capacitors	TB3601	6	B1	143				
	24	Lower limit switch	SR	48			J3001	N		
B3003	F2	Train motor F2					TB3004	10		
G3003	F1	Train motor F1					TB3004	7		
	C4	Train motor C4					TB3004	8		
	C2-C3	Spare								
	A2-C1	Spare					TB3004	9		
	A1	Train motor A1					TB3004	11		
	D-C tach TA1	Train motor tachometer A1					TB3004	5		
	D-c tach TA2	Train motor tachometer A2					TB3004	6		
J3003	A	Antenna safety switch	TB3202	5	Bk	116	TB3004	2		
	B	Train stow switch	TB3202	6	W	116	TB3004	4		
	C	Pedestal raise - lower	TB3202	7	R	116	TB3004	1		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
ANTENNA UNIT (Continued)										
J3003	D	Pedestal raise - lower	TB3202	8	G	116	TB3001	10		
	E	Elevation stow switch	TB3202	9	O	116	TB3001	8		
	F	Train stow switch	TB3202	10	Bl	116	TB3004	3		
	G	R2 synchro bus	TB3201	11	W-Bk	116	TB3001	18		
	H	Rl synchro bus	TB3201	10	R-Bk	116	TB3001	16		
	J	Spare					TB3001	17		
	K	Spare								
	L	Al elevation tachometer	TB3202	13	Bl-Bk	116	TB3003	6		
	M	115 vac nutator	TB3204	4	Bk-W	116	TB3002	13		
	N	A2 elevation tachometer	TB3202	16	R-W	116	TB3003	5		
	P	115 vac nutator	TB3204	3	G-W	116	TB3002	14		
S3003	A	Elevation motor interlock					TB3001	11		
	C	Elevation motor interlock					TB3004	1		
TB3003	1	S3 - 36X radar - train	B3010	S3			J3002	Q		
	1	S1 - 36X radar - train synchro capacitors	TB3601	1	Bk	143				
	2	S2 - 36X radar - train	B3010	S2			J3002	P		
	2	S2 - 36X radar - train synchro capacitors	TB3601	2	W	143				
	3	S1 - 36X radar - train	B3010	S1			J3002	N		
	3	S3 - 36X radar - train synchro capacitors	TB3601	3	R	143				
	4	S3 - 36X dial box - train	B3011	S3			TB3022	4		
	5	A2 elevation tachometer	J3003	N			TB3001	24		
	6	Al elevation tachometer	J3003	L			TB3001	7		
	7	S3 - 1X radar - train	B3009	S3			J3002	M		
	8	S2 - 1X radar - train	B3009	S2			J3002	L		
	9	S1 - 1X radar - train	B3009	S1			J3002	K		
	10	S2 - 36X dial box	B3011	S2			TB3022	5		
	11	Rl synchro bus	B3010	R1			TB3001	16		
	11		B3011	R1			B3009	R1		
	12	R2 synchro bus	B3010	R2			TB3001	18		
	12		B3011	R2			B3009	R2		
J3004	1	Rl and transformer					TB3008	1	Bk	146
	2	R2					TB3008	10	W	146
	3	S1					TB3008	12	R	146

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
ANTENNA UNIT (Continued)										
J3004	4	S2					TB3005	1	G	146
	5	S3					TB3005	4	O	146
	6	Transformer					TB3005	5	Bl	146
	7	Flag light					TB3005	6	W-Bk	146
	8	Flag light					TB3006	8	R-Bk	146
S3004	A	Lower limit switch					TB3007	11		
	O						S3005	A		
TB3004	1	Pedestal raise - lower	S3003	C			J3003	C		
	2	Antenna safety switch	Switch S3001	B			J3003	A		
	3	Antenna safety switch	Switch S3002	C			J3003	F		
	4	Train stowing switch	S3002	A			J3003	B		
	5	Al d-c train motor tachometer	G3003	Al d-c tach			J3001	G		
	6	A2 d-c train motor tachometer	G3003	A2 d-c tach			J3001	H		
	7	F2 elevation motor	TB3001	6			J3001	C		
	7	Fl train motor	B3003	Fl			J3001	C		
	8	C4 train motor	B3003	C4			J3001	B		
	9	Spare	B3003	A2			J3001	D		
				Cl						
	10	Fl elevation motor	TB3001	3			J3001	F		
	10	F2 train motor	B3003	F2			J3001	F		
	11	Al train motor	B3003	Al			J3001	E		
	12	S1 - 36X dial box - train	B3011	S1			TB3002	6		
J3005	1	Rl and transformer					TB3008	1	Bk	147
	2	R2					TB3008	10	W	147
	3	S1					TB3008	12	R	147
	4	S2					TB3005	1	G	147
	5	S3					TB3005	4	O	147
	6	Transformer					TB3005	5	Bl	147
	7	Flag light					TB3008	8	W-Bk	147
	8	Flag light					TB3008	7	R-Bk	147

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
ANTENNA UNIT (Continued)										
S3005	A	Upper limit					S3004	0		
	A						TB3008	6		
	0	Upper limit					TB3005	3		
TB3005	1	Cameras S2	SR	5			J3005	4	G	147
							J3004	4	G	146
	2	S2 - 36X radar - elevation	SR	44			TB3013	4		
	3	Upper limit switch	SR	23			Switch S3005	0		
	4	Antenna cameras S3	SR	7			J3005	5	O	147
							J3004	5	O	146
	5	Flag 2 cameras	SR	9			J3005	6	B1	147
							J3004	6	B1	146
	6	P1 cameras	SR	11			J3004	7	W-Bk	146
S3006	A	Elevator interlock					TB3006	6		
	0	Elevator interlock					TB3006	5		
TB3006	1	Spare								
	2	Spare								
	3	Elevation stow switch	SR	33			Switch S3007	C		
	4	Safety switch	SR	31			Switch S3007	A		
	5	Elevator interlock	SR	29			Switch S3006	0		
	6	Elevator interlock	SR	27			Switch S3006	A		
	7	S2 - 36X dial box	SR	14			B3013	S2		
	8	Cameras P2	SR	18			J3004	8	R-Bk	146
	9	115 vac nutator	SR	28			TB3023	1	W	107
	10	Reference generator A	SR	30			TB3018	1	G	107
	11	115 vac nutator	SR	26			TB3023	2	R	107
	12	Reference generator C	SR	34			TB3018	3	B1	107
S3007	A	Elevation stowing switch					TB3006	4		
	C	Elevation stowing switch					TB3006	3		
TB3007	1	S1 - 36X dial box - elevation	SR	12			B3013	S1		
	2	A1 elevation motor	SR	45			TB3013	10		
	3	A1 elevation motor	SR	43			TB3013	9		
	4	S3 - 36X dial box - elevation	SR	16			B3013	S3		
	5	C4 elevation motor	SR	39			TB3013	7		
	6	F2 elevation motor	SR	37			TB3013	6		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
ANTENNA UNIT (Continued)										
TB3007	7	A1 elevation tachometer	SR	35			TB3013	11		
	8	Reference generator B	SR	32			TB3018	2	0	107
	9	A2 elevation tachometer	SR	1			TB3013	12		
	10	Spare	SR	15						
	11	Lower limit	SR	48			Switch S3004	A		
	12	S3 - 36X radar - elevation	SR	46			TB3013	3		
B3008										
G3002	F1	F1 elevation motor					TB3013	9		
	F2	F2 elevation motor					TB3013	6		
	C4	C4 elevation motor					TB3013	7		
	C2-C3	Spare								
	A2C1	Spare					TB3013	8		
	DC TAC1	Elevation motor A1 tachometer					TB3013	11		
	A1	A1 elevation motor					TB3013	10		
	DC TAC2	Elevation motor A2 tachometer					TB3013	12		
TB3008	1	Camera R1 and Flag 1	SR	3			J3005	1	Bk	147
							J3004	1	Bk	146
	2	S1 - 2X radar - elevation	SR	36			B3012	S1		
	3	S2 - 2X radar - elevation	SR	38			B3012	S2		
	4	S3 - 2X radar - elevation	SR	40			B3012	S3		
	5	S1 - 36X radar - elevation	SR	42			TB3013	5		
	6	Limit switch	SR	22			S3005	A		
	7	Camera P2A	SR	20			J3005	8	R-Bk	147
	8	Camera P1A	SR	24			J3005	7	W-Bk	147
	9	R2 synchro bus	SR	13			TB3013	2		
	9	R2 synchro bus					B3012	R2		
	9	R2 synchro bus					B3013	R2		
	10	Cameras R2	SR	19			J3005	2	W	147
							J3004	2	W	146
	11	R1 synchro bus	SR	17			TB3013	1		
	11	R1 synchro bus					B3012	R1		
	11	R1 synchro bus					B3013	R1		
	12	Camera S1	SR	21			J3005	3	R	147
							J3004	3	R	146

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
ANTENNA UNIT (Continued)										
B3009	R1	Synchro bus					TB3003	11		
	R2	Synchro bus					TB3003	12		
	S1	S1 1X radar - train					TB3003	9		
	S2	S2 1X radar - train					TB3003	8		
	S3	S3 1X radar - train					TB3003	7		
B3010	R1	R1 synchro bus					TB3003	11		
	R2	R2 synchro bus					TB3003	12		
	S1	36X radar - train					TB3003	1		
	S2	36X radar - train					TB3003	2		
	S3	36X radar - train					TB3003	3		
B3011	R1	R1 synchro bus					TB3003	11		
	R2	R2 synchro bus					TB3003	12		
	S1	36X dial box - train					TB3004	12		
	S2	36X dial box - train					TB3003	10		
	S3	36X dial box - train					TB3003	4		
B3012	R1	R1 synchro bus					TB3008	11		
	R2	R2 synchro bus					TB3008	9		
	S1	S1 - 2X radar elevation					TB3008	2		
	S2	S2 - 2X radar elevation					TB3008	3		
	S3	S3 - 2X radar elevation					TB3008	4		
B3013	R1	S1 synchro bus					TB3008	11		
	R2	R2 synchro bus					TB3008	9		
	S1	S1 - 36X dial box - elevation					TB3007	1		
	S2	S2 - 36X dial box - elevation					TB3006	7		
	S3	S3 - 36X dial box - elevation					TB3007	4		
TB3013	1	R1 synchro bus	B3014	R1			TB3008	11		
	2	R2 synchro bus	B3014	R2			TB3008	9		
	3	S3 - 36X radar - elevation	B3014	S3			TB3007	12		
	4	S2 - 36X radar - elevation	B3014	S2			TB3005	2		
	5	S1 - 36X radar - elevation	B3014	S1			TB3008	5		
	6	F2 elevation motor	B3008	F2			TB3007	6		
	7	C4 elevation motor	B3008	C4			TB3007	5		
	8	Spare A2C1	B3008	A2C1						
	9	F1 elevation motor	B3008	F1			TB3007	3		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
ANTENNA UNIT (Continued)										
TB3013	10	A1 elevation motor	B3008	A1			TB3007	2		
	11	A1 elevation motor tachometer	G3002	Tach 1			TB3007	7		
	12	A2 elevation motor tachometer	G3002	Tach 2			TB3007	9		
B3014	R1	R1 synchro bus					TB3013	1		
	R2	R2 synchro bus					TB3013	2		
	S1	S1 - 36X radar - elevation					TB3013	5		
	S2	S2 - 36X radar - elevation					TB3013	4		
	S3	S3 - 36X radar - elevation					TB3013	3		
TB3018	1	Reference generator A	TB3006	10	G	107				
	2	Reference generator B	TB3007	8	O	107				
	3	Reference generator C	TB3006	12	Bl	107				
	4	Spare			W-Bk	107				
TB3021	1	Cameras R1 and flag 1	TB3001	23	Bk-W		TB5102	11	Bk	144
	2	Cameras R2	TB3001	15	G-Bk		TB5102	12	W	144
	3	Cameras S1	TB3001	14	O-Bk		TB5102	13	R	144
	4	Cameras S2	TB3001	22	R-W		TB5102	14	G	144
	5	Cameras S3	TB3001	21	G-W		TB5102	15	O	144
	6	Cameras flag 2	TB3001	20	R-Bk		TB5104	16	Bl	144
	7	Cameras P1	TB3001	19	Bl-Bk		TB5104	17	W-Bk	144
	8	Cameras P2	TB3002	9	R		TB5104	18	R-Bk	144
	9	Cameras P1A	TB3002	12	Bl		TB5104	19	G-Bk	144
	10	Cameras P2A	TB3002	10	O		TB5104	20	O-Bk	144
	11	Spare								
	12	Spare								
TB3022	1	S1 - 36X dial box - elevation	TB3002	6			TB5105	11	Bl-Bk	144
	2	S2 - 36X dial box - elevation	TB3002	7			TB5105	12	Bk-W	144
	3	S3 - 36X dial box - elevation	TB3002	8			TB5105	13	R-W	144
	4	S3 - 36X dial box - train	TB3003	4			TB5105	16	Bk-R	144
	5	S2 - 36X dial box - train	TB3003	10			TB5105	15	Bl-W	144
	6	S1 - 36X dial box - train	TB3004	12			TB5105	14	G-W	144
	7	Telephone					TB5105	17	W-R	144
	8	Telephone					TB5105	18	G-R	144

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
ANTENNA UNIT (Continued)										
TB3023	1	115 vac for nutator	TB3006	9	W	107	Term ON	Nutator	Bk	106
	2	115 vac for nutator	TB3006	11	R	107	Term ON	Nutator	W	106
	3	Spare			Bk	107				
ANTENNA CONTROL UNIT										
TB3201	1	Elevator motor					TB5106	1	Bk	118
	2	Elevator motor					TB5106	2	W	118
	3	Elevator motor					TB5106	3	R	118
	4	Elevator motor					TB5106	4	G	118
	5	Upper elevator limit switch					TB5107	7	O	118
	6	Lower elevator limit switch					TB5106	6	Bl	118
	7	Elevator interlock	TB3202	7			TB5107	8	W-Bk	118
	8	+200 vdc to T and M coord. det.					TB5103	17	R-Bk	118
	9	Antenna elevator interlock					TB5107	5	G-Bk	118
	10	R1 synchro bus	J3003	H	R-Bk	116	TB5107	10	O-Bk	118
	10						TB5107	11	Bl-Bk	118
	11	R2 synchro bus	J3003	G	W-Bk	116	TB5107	12	Bk-W	118
	11						TB5107	13	R-W	118
	12	Spare								
	13	Spare								
	14	Spare								
	15	Spare								
	16	Spare								
TB3202	1	Spare								
	2	115 vac power out					TB5105	2	W	122
	3	Elevation amplidyne overload indicator					TB5105	3	R	122
	4	Train amplidyne overload indicator					TB5105	4	G	122
	5	Antenna safety switch					J3003	A	Bk	116
	6	Antenna stow - train					J3003	B	W	116
	7	Elevator interlock	TB3201	7			J3003	C	R	116
	8	Elevator interlock					J3003	D	G	116
	9	Antenna stow - elevation					J3003	E	O	116
	10	Antenna safety switch	J3003	F	Bl	116	TB5102	16	Bl-W	122

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING.(Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
ANTENNA CONTROL UNIT (Continued)										
TB3202	11	Spare								
	12	Telescope tachometer - elevation	TB3301	3			TB5107	18	W-R	122
	13	Elevation motor tachometer	TB3501	3			J3003	L	Bl-Bk	116
	14	D-c elevation signal	TB3301	1			TB3203	1		
	15	Telescope tachometer - elevation	TB3302	1			TB5107	20	O-R	122
	16	Elevation motor tachometer	TB3501	4			J3003	N	R-W	116
TB3203	1	D-c elevation signal	TB3202	14			TB5105	5	O	122
	2	D-c train signal	TB3301	16			TB5105	6	Bl	122
	3	-150 vdc to T and M coord. det.					TB5105	7	W-Bk	122
	4	Spare								
	5	Ground (P.A.U.)					TB5105	8	R-Bk	122
	6	Antenna power indicator					TB5105	9	G-Bk	122
	7	Indicator - common					TB5105	10	O-Bk	122
	8	A1 d-c train motor tachometer	TB3501	13			J3001	G	Bl	115
	9	Telescope tachometer - train	TB3302	2			TB5103	6	Bl-R	122
	10	Positive motor fields					J3001	F	O	115
	11	A2 train motor tachometer	TB3501	14			J3001	H	W-Bk	115
	12	Negative motor fields					J3001	C	W	115
	13	Telescope tachometer - train	TB5103	5	Bk-R	122	TB3301	14		
	14	UP					J3001	L	O-Bk	115
	15	Antenna limit switch					J3001	M	Bl-Bk	115
	16	Low					J3001	N	Bk-W	115
TB3204	1	115 vac 60-cycle line power in					TB4903	5	Bk	105
	2	115 vac 60-cycle line power in					TB4903	6	W	105
	3	115 vac nutator motor	TB5102	17	Bl-Bk	122	J3003	P	G-W	116
	3	115 vac nutator motor	TB5102	18	Bk-W	122				
	4	115 vac nutator motor	TB5102	19	R-W	122	J3003	M	Bk-W	116
	4	115 vac nutator motor	TB5102	20	G-W	122				
	5	C2 train ground					J3001	E	G	115
	6	A1 train amplidyne C4 train motor					J3001	B	Bk	115
	7	A1 elevation					J3001	J	R-Bk	115
	8	A1 amplidyne C4 elevation motor					J3001	P	R-W	115
D-C SERVO AMPLIFIER UNIT										
TB3301	1	D-c elevation signal					TB3202	14		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
D-C SERVO AMPLIFIER UNIT (Continued)										
TB3301	2	Equalizer elevation signal					TB3501	5		
	3	Telescope elevation tachometer - ground					TB3202 TB3401	12 3		
	4	+200 vdc					TB3401	4		
	5	F4 elevation amplidyne								
	6	F2 elevation amplidyne								
	7	F1 elevation amplidyne								
	8	115 vac					TB3401	1		
	9	115 vac					TB3401	2		
	10	F4 train amplidyne								
	11	F2 train amplidyne								
	12	F1 train amplidyne								
	13	+540 vdc					TB3401			
	14	Telescope train tachometer spare - ground					TB3203	13		
	15	Equalizer train signal					TB3501	12		
	16	D-c train signal					TB3203	2		
D-C SERVO AMPLIFIER POWER UNIT										
TB3401	1	115 vac								
	2	115 vac								
	3	Ground								
	4	+200 vdc					TB3201 TB3301	8 4		
	5	+540 vdc					TB3301	13		
	6	Ground								
	7	-150 vdc					TB3203	3		
	8	Spare								
D-C SERVO EQUALIZER UNIT										
TB3501	1	Elevation amplidyne								
	2	Ground								
	3	D-c elevation motor tachometer					TB3202	13		
	4	D-c elevation motor tachometer					TB3202	16		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
D-C SERVO EQUALIZER UNIT (Continued)										
TB3501	5	Elevation signal - d-c servo amplifier					TB3301	2		
	6	Ground								
	7	Spare								
	8	Spare								
	9	Spare								
	10	Spare								
	11	Ground								
	12	Train signal - d-c servo amplifier								
	13	D-c train motor tachometer					TB3401	15		
	14	D-c train motor tachometer					TB3203	8		
	15	Ground					TB3203	11		
	16	Train amplidyne								
SYNCHRO CAPACITOR UNIT										
TB3601	1	S3 - 36X radar - train	TB3003	1	Bk	143				
	2	S2 - 36X radar - train	TB3003	2	W	143				
	3	S1 - 36X radar - train	TB3003	3	R	143				
	4	S1 - 36X radar - elevation	TB3002	21	G	143				
	5	S2 - 36X radar - elevation	TB3002	22	O	143				
	6	S3 - 36X radar - elevation	TB3002	23	Bl	143				
		C3601	from TB3003-1 to TB3003-2							
		C3602	from TB3003-2 to TB3003-3							
		C3603	from TB3003-3 to TB3003-1							
		C3604	from TB3002-21 to TB3002-22							
		C3605	from TB3002-22 to TB3002-23							
		C3606	From TB3002-23 to TB3002-31							

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
MISSILE OSCILLATOR PREAMPLIFIER POWER SUPPLY										
TB4201	1	+445 vdc in					TB5101	20	O-G	112
	2	Ground					TB5103	7	Bk-W-R	112
	3	-445 vdc in					TB5102	7	R-Bk	112
	4	Ground					TB5102	2	R-G	112
	5	+300 vdc out					J4304	P		
	6	-225 vdc out					J4304	M		
	7	Ground					J4304	G		
	8	-150 vdc					J4304	B		
MISSILE OSCILLATOR PREAMPLIFIER UNIT										
J4301		Agc in					J5102			152
J4302		I-f out					J5106			160
J4303		Afc signal					J5118			153
J4305		Oscillator out								
J4306		I-f in								
J4304	A	115 vac filament					F2002			
	B	-150 vdc					TB4201	8		
	C	Meter					TB2006	7		
	D	Spare								
	E	Spare								
	F	Ground					TB2006	10		
	G	Ground					TB4201	7		
	H	Tuning pot finger					TB2006	9		
	J	Tuning pot					TB2006	8		
	K	115 vac filament					F2001			
	L	Spare								
	M	-225 vdc					TB4201	6		
	N	Spare								
	P	+300 vdc reg					TB4201	5		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
COMMUNICATIONS BOARD										
TB4850	1	115 vac for communications	TB5158	1	Bk	201	Selector control unit I			322
	1						Radio transmitter foot switch			
	2	115 vac for communications	TB5158	2	W	201	Selector control unit I			322
	2						Radio transmitter foot switch			
	3						Selector control unit II			323
	4						Selector control unit II			323
	5						SCR-624 radio			324
	6						SCR-624 radio			324
	7						TCS-12 radio			325
	7						Soundscriber			
	8						TCS-12 radio			325
	8						Soundscriber			
POWER DISTRIBUTION PANEL										
F4900	1	Spare								
	2	Spare								
	3	R1 synchro bus	TB4904	1			S4911	2		
	4	115 vac	TB4904	4			S4903	2		
	5	115 vac	TB4904	5			S4912	1		
	6	115 vac	TB4904	7			S4913	1		
J4901	B	+12 vdc	Gen. No. 1 J5001	B	Bk	110				
	C	Run normal	Gen. No. 1 J5001	C	W	110				
	D	Spare	Gen. No. 1 J5001	D	R	110				
	E	Ground (shield)	Gen. No. 1 J5001	E	(Shield)	110				
	F	Alarm	Gen. No. 1 J5001	F	G	110				
	G	Remote stop	Gen. No. 1 J5001	G	O	110				
	P	Alarm disconnect switch	Gen. No. 1 J5001	P	Bl	110				
	S	Remote start	Gen. No. 1 J5001	S	Br	110				

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
POWER DISTRIBUTION PANEL (Continued)										
S4901	1	115 vac	S4907	2						
	2	115 vac								
	3	115 vac	S4907	1						
	4	115 vac								
	5	115 vac					S4909	4		
	5	115 vac					S4910	3		
	5	115 vac					S4913	4		
	5						S4912	4		
							S4903	3		
	6	115 vac					S4911	4		
							S4908	3		
	7	115 vac					S4912	3		
	7						S4910	4		
	7						S4913	3		
	8	115 vac					S4911	3		
	8						S4908	4		
	8						S4909	3		
	9	115 vac 3Ø	S4902	6			TB7211	5		
	10	115 vac 3Ø	S4902	4			TB7211	3		
	11	Spare								
	12	115 vac 3Ø	S4902	5			TB7211	4		
J4902	B	12 vdc	TB5106	14	Bk	123				
	C	Run normal indicator	TB5106	15	W	123				
	D	Spare	Spare		R	123				
	E	Ground (shield)	TB5106	16	(Shield)	123				
	F	Alarm	TB5106	17	G	123				
	G	Remote stop	TB5106	18	O	123				
	P	Alarm disconnect	TB5106	19	Bl	123				
	S	Remote start	TB5106	20	Br	123				
S4902	1	115 vac	Gen. No. 1 TB5001	1	Bk	101				
	2	115 vac	Gen. No. 1 TB5001	2	W	101				
	3	115 vac	Gen. No. 1 TB5001	3	R	101				
	4	115 vac					S4901	10		
	5	115 vac					S4901	12		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
POWER DISTRIBUTION PANEL (Continued)										
S4902	6	115 vac								
	7	115 vac	TB5109	1	Bk	125	S4901	9		
	8	115 vac	TB5109	2	W	125				
	9	115 vac	TB5109	3	R	125				
S4903	1	Heaters								
	2	Ventilators					TB4901 thru F4904	3		
							to TB4904	4		
	3	115 vac	S4901	5						
	4	115 vac	S4901	8						
TB4903	1	115 vac	S4908	1						
	2	115 vac	S4908	2			TB2304	1	Bk	103
	3	115 vac	S4909	1			TB2304	2	W	103
	4	115 vac	S4909	2			TB5108	1	Bk	104
	5	115 vac	S4910	1			TB5108	2	W	104
	5						TB2003	1	Bk	102
	6	115 vac	S4910	2			TB3204	1	Bk	105
	6						TB2003	2	W	102
	7	115 vac for coil of synchro bus relay	TB5103	10	R-W	130	TB3204	2	W	105
	8		TB5103	11	G-W	130	Coil of K4901			
							Coil of K4901			
TB4904	1	R1 synchro bus	F4903					10	Bk	
	1						TB5107	11	W	130
	2	R2						12	R	
	2	Synchro bus	S4911	2			TB5107	13	G	130
	3	115 vac heaters	S4903	1				12	O	
	3		Heater motor	L1	G	131	TB5106	12	Bl	130
	4	115 vac heaters	F4904				TB5106	13	W-Bk	
	4		Heater motor	L2	G	131	TB5106	13	R-Bk	130
	5	Communication	F4905				TB5108	7	Bk	126
	6	Communication	S4912	2			TB5108	8	W	126

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
POWER DISTRIBUTION PANEL (Continued)										
TB4904	7	115 vac lights and outlets	F4906				TB5108	3	G-Bk O-Bk	130
	7	Equipment trailer outlet lights	Outlets B		Bk	136	Lights R		R	136
	8	115 vac lights and outlets	S4913	2			TB5108	4	Bl-Bk Bk-W	130
	8	Equipment trailer outlet lights	Outlets W		W	136	Lights Y		G	136
TB4905	1	Lights and outlets	TB4904	7						
	2	115 vac			Bk and R	138	Outlets		Bk	136
	3	115 vac					Lights		R	136
	4	Lights and outlets	TB4904	8						
	5	115 vac			W and G	138	Outlets		W	136
	6	115 vac	Lights		O	136	Lights		G	136
								1		
S4907	1	115 vac					T4903	4		
							S4901	3		
								2		
	2	115 vac					T4903	1		
							S4901	2		
	3	115 vac	TB5110	1	Bk	124				
	4	115 vac	TB5110	2	W	124				
S4910	1	115 vac	TB4903	5						
	2	115 vac	TB4903	6						
	3	115 vac					S4909	4		
	3						S4903	3		
	4	Spare								
S4911	1	Synchro bus					F4903			
	2	Synchro bus					TB4904	2		
	3	Synchro bus	S4901	8						
	4	Synchro bus	S4901	6						
S4912	1	115 vac					TB4904	5		
	2	115 vac					TB4904	6		
	3	115 vac	S4901	7						
	4	115 vac	S4901	5						

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
POWER DISTRIBUTION PANEL (Continued)										
S4913	1	115 vac					TB4904	7		
	2	115 vac					TB4904	8		
	3	115 vac	S4901	7						
	4	115 vac	S4901	5						
ENGINE GENERATOR NO. 1										
J5001	B	12 vdc					J4901	B	Bk	110
	C	Run normal					J4901	C	W	110
	D	Spare					J4901	D	R	110
	E	Ground (Shield)					J4901	E	(Shield)	110
	F	Alarm					J4901	F	G	110
	G	Remote stop					J4901	G	O	110
	P	Alarm disconnect switch					J4901	P	Bl	110
	S	Remote start					J4901	S	Br	110
TB5001	1	115 vac					S4902	1	Bk	101
	2	115 vac					S4902	2	W	101
	3	115 vac					S4902	3	R	101
ENGINE GENERATOR NO. 2										
J5001	B	12 vdc					J5108	B	Bk	27
	C	Run normal					J5108	C	W	27
	D	Spare					J5108	D	R	27
	E	Ground - (Shield)					J5108	E	(Shield)	27
	F	Alarm					J5108	F	G	27
	G	Remote stop					J5108	G	O	27
	P	Alarm disconnect					J5108	P	Bl	27
	S	Remote start					J5108	S	Br	27
TB5001	1	115 vac					TB5109	1	Bk	28
	2	115 vac					TB5109	2	W	28
	3	115 vac					TB5109	3	R	28

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, EQUIPMENT TRAILER										
J5101		Missile receiver i-f	J4302			160	J5157			36
TB5101	1	Oscillator current-negative	J5109	A			TB2001	1	Bk	112
	2	Oscillator current-positive	J5109	B			TB2001	2	W	112
	3	Radiate control	J5109	C			TB2001	3	R	112
	4	Radiate control	J5109	D			TB2001	4	G	112
	5	Transmitter filament ON light	J5109	E			TB2001	5	O	112
	6	Standby light	J5109	F			TB2001	6	Bl	112
	7	Indicator light circuit - common	J5109	G			TB2001	7	W-Bk	112
	8	Radiate light	J5109	H			TB2301	2	G-Bk	113
	9	Modulator volts - raise	J5109	J			TB2001	9	G-Bk	112
	10	Modulator volts adjust - common	J5109	K			TB2001	10	O-Bk	112
	11	Modulator volts - lower	J5109	R			TB2002	1	Bl-Bk	112
	12	Nutator motor ON light	J5109	M			TB2002	2	Bk-W	112
	13	Nutator motor contactor	J5109	P			TB2002	3	R-W	112
	14	Strip heater supply	J5109	Q			TB2002	4	G-W	112
	15	Strip heater supply	J5113	A			TB2002	5	Bl-W	112
	16	Modulator input volts indicator	J5113	B			TB2002	6	Bk-R	112
	17	Modulator input volts indicator	J5113	C			TB2002	7	W-R	112
	18	Transmitter contactor	J5113	D			TB2002	8	O-R	112
	18	115 vac start circuit for d-c motor generator	TB6311	1	W	134				
	19	Transmitter contactor	J5113	E			TB2002	9	Bl-R	112
	19	115 vac start circuit for d-c motor generator	TB6311	2	Bk	134				
	20	+445 vdc	TB4201	1	O-G	112	TB5106	8		
J5102		Missile AGC	J5162			25	J4301			152
TB5102	1	+200 vdc	J5107	C			J2024	P	Bk	111
	2	Ground	J5107	B			J2024	E	W	111
	2	Ground					TB4201	4	R-G	112
	3	Manual AFC relay	J5107	F			J2024	G	R	111
	4	Spare cond.					J2024	C	G	111
	5	Tuner	J5107	G			J2024	D	O	111
	6	+250 vdc local oscillator	J5107	P			J2024	N	Bl	111
	7	-345 vdc	J5107	S			J2024	M	W-Bk	111
	7	-345 vdc					TB4201	3	R-Bk	112

DECLASSIFIED
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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, EQUIPMENT TRAILER (Continued)										
TB5102	8	-150 vdc	J5107	E			J2024	H	R-Bk	111
	9	Spare ground					J2024	J	G-Bk	111
	10	Spare ground					J2024	L	O-Bk	111
	11	Cameras R1 & Flag 1	J5115	J			TB3021	1	Bk	144
	12	Cameras R2	J5115	K			TB3021	2	W	144
	13	Camera S1	J5115	L			TB3021	3	R	144
	14	Camera S2	J5115	M			TB3021	4	G	144
	15	Camera S3	J5115	P			TB3021	5	O	144
	16	Nutator motor contactor	TB3202	10	Bl-W	122	TB2004	10	O	114
	17	115 vac nutator motor	TB3204	3	Bl-Bk	122	TB2003	4	Bk	114
	18	115 vac nutator motor	TB3204	3	Bk-W	122	TB2003	4	W	114
	19	115 vac nutator motor	TB3204	4	R-W	122	TB2003	5	R	114
	20	115 vac nutator motor	TB3204	4	G-W	122	TB2003	5	G	114
J5103		Modulator trigger	J2305			162	J5166 or J5154			26
TB5103	1	Standby control	TB2302	10	Bk	113	J5110	A		
	2	Modulator ON light	TB2302	1	W	113	J5110	B		
	3	Modulator volts adjust - power	TB2302	4	R	113	J5110	C		
	4	Standby control	TB2303	5	G	113	J5110	D		
	5	D-c telescope tachometer - train	TB3203	13	Bk-R	122	J5110	E		
	6	D-c telescope tachometer - train	TB3203	9	Bl-R	122	J5110	F		
	7	Indicator ground	TB2303	7	W-Bk	113	TB5106	7		
	7		TB4201	2	Bk-W-R	112				
	8	Modulator volts adjust - power	TB2302	5	R-Bk	113	J5110	G		
	9	Spare								
	10	Timing relay coil	TB2303	3	O-Bk	113	J5110	H		
	10	Timing relay coil					TB4903	7	R-W	130
	11	Timing relay coil	TB2304	2	Bl-Bk	113	J5110	J		
	11	Timing relay coil					TB4903	8	G-W	130
	12	Equipment start-stop	TB2304	1	Bk-W	113	J5110	K		
	13	Tracer					J5113	M		
	14	+300 vdc to modulator	TB2303	6	G-W	113	J5110	L		
	15	115 vac for 300 vdc ON-OFF relay	TB6312	1	Bk	145	J5110	M		
	16	115 vac dor 300 vdc ON-OFF relay	TB6312	2	W	145	J5110	P		
	17	+300 vdc to T and M coord. det.	TB3201	8	R-Bk	118	J5110	Q		
	18	Spare					J5113	G		
	19	Strip heater supply	TB2303	9	Bl-R	113	J5113	H		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, EQUIPMENT TRAILER (Continued)										
TB5103	20	Strip heater supply	TB2303	10	R-G	113	J5113	J		
J5104		Target AGC	J5161			24	J2028			154
TB5104	1	S3 - 2X radar - elevation	J3002	A	Bk	117	J5111	A		
	2	S2 - 2X radar - elevation	J3002	B	W	117	J5111	B		
	3	S1 - 2X radar - elevation	J3002	C	R	117	J5111	C		
	4	S3 - 36X radar - elevation	J3002	D	G	117	J5111	D		
	5	S2 - 36X radar - elevation	J3002	E	O	117	J5111	E		
	6	S1 - 36X radar - elevation	J3002	F	Bl	117	J5111	F		
	7	Reference generator A	J3002	G	W-Bk	117	J5111	G		
	8	Reference generator B	J3002	H	R-Bk	117	J5111	H		
	9	Reference generator C	J3002	J	G-Bk	117	J5111	J		
	10	S1 - 1X radar - train	J3002	K	O-Bk	117	J5111	K		
	11	S2 - 1X radar - train	J3002	L	Bl-Bk	117	J5111	L		
	12	S3 - 1X radar - train	J3002	M	Bk-W	117	J5111	M		
	13	S1 - 36X radar - train	J3002	N	R-W	117	J5111	P		
	14	S2 - 36X radar - train	J3002	P	G-W	117	J5111	R		
	15	S3 - 36X radar - train	J3002	Q	Bl-W	117	J5112	M		
	16	Camera Flag 2	TB3021	6	Bl	144	J5115	Q		
	17	Camera P1	TB3021	7	W-Bk	144	J5115	R		
	18	Camera P2	TB3021	8	R-Bk	144	J5115	S		
	19	Camera P1A	TB3021	9	G-Bk	144	J5115	V		
	20	Camera P2A	TB3021	10	O-Bk	144	J5115	U		
J5105		Target receiver i-f	J2029			155	J5158			235
TB5105	1	115 vac	TB5107	4			J5112	A		
	2	115 vac	TB3202	2	W	122	J5112	B		
	3	Elevation amplidyne overload indicator	TB3202	3	R	122	J5112	C		
	4	Train amplidyne overload indicator	TB3202	4	G	122	J5112	D		
	5	D-c elevation signal	TB3203	1	O	122	J5112	E		
	6	D-c train signal	TB3203	2	Bl	122	J5112	F		
	7	-150 vdc to T and M coord. det.	TB3203	3	W-Bk	122	J5112	G		
	8	Ground	TB3203	5	R-Bk	122	J5112	H		
	9	Antenna power indicator	TB3203	6	G-Bk	122	J5112	J		
	10	Indicator - common	TB3203	7	O-Bk	122	J5112	K		
	11	S1 - 36X dial box - elevation	TB3022	1	Bl-Bk	144	J5115	A		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, EQUIPMENT TRAILER (Continued)										
TB5105	12	S2 - 36X dial box - elevation	TB3022	2	Bk-W	144	J5115	B		
	13	S3 - 36X dial box - elevation	TB3022	3	R-W	144	J5115	C		
	14	S1 - 36X dial box - train	TB3022	6	G-W	144	J5115	D		
	15	S2 - 36X dial box - train	TB3022	5	Bl-W	144	J5115	E		
	16	S3 - 36X dial box - train	TB3022	4	Bk-R	144	J5115	F		
	17	Telephone	TB3022	7	W-R	144	J5115	G		
	17	Watch operator				108				
	18	Telephone	TB3022	8	O-R	144	J5115	H		
	18	Watch operator				108				
	19	Spare								
	20	Spare								
J5106		Test	(Test point near transmitter)			161	J5165			33
TB5106	1	Elevator motor	TB3201	1	Bk	118	Elevator motor T1	1	Bk	128
	2	Elevator motor	TB3201	2	W	118	Elevator motor T2	2	W	128
	3	Elevator motor	TB3201	3	R	118	Elevator motor T3	3	R	128
	4	Elevator motor	TB3201	4	G	118	Elevator motor T4	4	G	128
	5	Spare								
	6	Elevator cam interlock - common	TB3201	6	Bl	118	TB5107	6		
	6	•		2	W	129				
	7	Ground	TB5103	7						
	7		J5109	U					G	142
				N			TB2401	5	R	
	8	+445 vdc	J5109	S					Bk	
				V			TB2401	4	W	142
	8		TB5101	20						
	9	Spare								
	10	115 vac	TB5108	3			J5110	S		
	10						J5110	V		
	11	115 vac	TB5108	4			J5110	U		
	11						J5110	N		
	12	115 vac	TB4904	3	O	130	J5111	S		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, EQUIPMENT TRAILER (Continued)										
TB5106	12		TB4904	3	Bl	130	J5111	V		
	13	115 vac	TB4904	4	W-Bk	130	J5111	N		
	13		TB4904	4	R-Bk	130	J5111	U		
	14	12 vdc	J4902	B	Bk	123	J5108	B		
	15	Run normal indicator	J4902	C	W	123	J5108	C		
	16	Ground (Shield)	J4902	E	(Shield)	123				
	17	Alarm	J4902	F	G	123	J5108	F		
	18	Remote stop	J4902	G	O	123	J5108	G		
	19	Alarm disconnect	J4902	P	Bl	123	J5108	P		
	20	Remote start	J4902	S	Br	123	J5108	S		
J5107	A	Spare								
	B	Ground	TB5102	2			J5169	B	W	19
	C	+200 vdc	TB5102	1			J5169	C	Bk	19
	D	Ground (Shield)					J5169		(Shield)	19
	E	-150 vdc	TB5102	8			J5169	E	G	19
	F	Manual afc relay	TB5102	3			J5169	F	R	19
	G	Tuner	TB5102	5			J5169	G	O	19
	P	+250 vdc local oscillator	TB5102	6			J5169	P	Bl	19
	S	-345 vdc	TB5102	7			J5169	S	Bk	19
TB5107	1	115 vac elevator	TB7101	1	Bk	127	TB5108	3		
	2	115 vac lights	TB7101	2	W	127	TB5108	4		
	3	Cam switch	TB7101	3	R	127				
	3	Elevation cam interlock	Norm open	1	Bk	129				
	4	Switch interlock top stow	TB7101	4	G	127	TB5105	1		
	5	Top stow switch	TB7101	5	O	127	TB3201	9	G-Bk	118
	6	Elevator lower circuit	TB7101	6	Bl	127	TB5106	6		
	7	Elevator raise circuit	TB7101	7	W-Bk	127	TB3201	5	O	118
	8	Motor common	TB7101	8	R-Bk	127	TB3201	7	W-Bk	118
	9	Spare	TB7101	9	G-Bk	127				
	10	R1 synchro bus	TB3201	10	O-Bk	118	J5113	F		
	10		TB4904	1	Bk	130				
	11	R1 synchro bus	TB3201	10	Bl-Bk	118	J5113	K		
	11		TB4904	1	W	130				
	12	R2 synchro bus	TB3201	11	Bk-W	118	J5113	L		
	12		TB4904	2	R	130				
	13	R2 synchro bus	TB3201	11	R-W	118	J5113	R		
	13		TB4904	2	G	130				

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, EQUIPMENT TRAILER (Continued)										
TB5107	14	Spare								
	15	Spare								
	16	Spare								
	17	Spare								
	18	Telescope tachometer - elevation	TB3202	12	W-R	122	J5113	Q		
	19	Spare								
	20	Telescope tachometer - elevation	TB3202	15	O-R	122	J5113	P		
J5108	A	Spare								
	B	12 vdc	TB5106	14			J5001	B	Bk	27
	C	Run normal indicator	TB5106	15			J5001	C	W	27
	D	Spare					J5001	D	R	27
	E	Ground (Shield)					J5001	E	(Shield)	27
	F	Alarm	TB5106	17			J5001	F	G	27
	G	Remote stop	TB5106	18			J5001	G	O	27
	P	Alarm disconnect	TB5106	19			J5001	P	Bl	27
	S	Remote start	TB5106	20			J5001	S	Br	27
TB5108	1	115 vac	TB4903	3	Bk	104				
	1	115 vac					J5114	A		
	2	115 vac	TB4903	4	W	104				
	2						J5114	B		
	3	115 vac	TB4904	7	G-Bk	130	TB5107	1		
	3		TB4904	7	O-Bk	130	J5112	S		
	3		TB5106	10			J5112	V		
	4	115 vac	TB4904	8	Bl-Bk	130	TB5107	2		
	4		TB4904	8	Bk-W	130	J5112	U		
	4		TB5106	11			J5112	N		
	5	Spare								
	6	Spare								
	7	115 vac					J5113	S		
	7		TB4904	5	Bk	126	J5113	V		
	8	115 vac	TB4904	6	W	126	J5113	U		
							J5113	N		
J5109	A	Oscillator current - negative	TB5101	1			J5170	A	Bk	13
	B	Oscillator current - positive	TB5101	2			J5170	B	W	13
	C	Radiate control	TB5101	3			J5170	C	R	13
	D	Radiate control	TB5101	4			J5170	D	G	13

DECLASSIFIED

TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, EQUIPMENT TRAILER (Continued)										
J5109	E	Transmitter filament ON light	TB5101	5			J5170	E	O	13
	F	Standby light	TB5101	6			J5170	F	Bl	13
	G	Indicator light circuit - common	TB5101	7			J5170	G	W-Bk	13
	H	Radiate light	TB5101	8			J5170	H	R-Bk	13
	J	Modulator volts-raise	TB5101	9			J5170	J	G-Bk	13
	K	Modulator volts adjust - common	TB5101	10			J5170	K	O-Bk	13
	L	Tracer	J5110	R			J5170	L	Bl-Bk	13
	M	Nutator motor ON light	TB5101	12			J5170	M	Bk-W	13
	N	Ground	TB5106	7			J5170	N	Bl-R	13
	P	Nutator motor contactor	TB5101	13			J5170	P	R-W	13
	Q	Strip heater supply	TB5101	14			J5170	Q	G-W	13
	R	Modulator volts - lower	TB5101	11			J5170	R	Bl-W	13
	S	+300 vdc	TB5106	8			J5170	S	Bk-R	13
	T	Spare								
	U	Ground	TB5106	7			J5170	U	O-R	13
	V	+300 vdc	TB5106	8			J5170	V	W-R	13
TB5109	1	115 vac from PE 137	Generator No. 2 TB5001	1	Bk	28	S4902	7	Bk	125
	2		TB5001	2	W	28	S4902	8	W	125
	3		TB5001	3	R	28	S4902	9	R	125
J5110	A	Standby control	TB5103	1			J5171	A	Bk	14
	B	Modulator ON light	TB5103	2			J5171	B	W	14
	C	Modulator volts adjust - power	TB5103	3			J5171	C	R	14
	D	Standby control	TB5103	4			J5171	D	G	14
	E	Telescope tachometer - train	TB5103	5			J5171	E	O	14
	F	Telescope tachometer - train	TB5103	6			J5171	F	Bl	14
	G	Modulator volts adjust - power	TB5103	8			J5171	G	W-Bk	14
	H	Timing relay coil	TB5103	10			J5171	H	R-Bk	14
	J	Timing relay coil	TB5103	11			J5171	J	G-Bk	14
	K	Equipment start-stop	TB5103	12			J5171	K	O-Bk	14
	L	+300 vdc modulator	TB5103	14			J5171	L	Bl-Bk	14
	M	115 vac for 300 vdc ON-OFF relay	TB5103	15			J5171	M	Bk-W	14
	N	115 vac	TB5106	11			J5171	N	Bl-R	14
	P	115 vac for 300 vdc ON-OFF relay	TB5103	16			J5171	P	R-W	14
	Q	+300 vdc for T and M coord. det.	TB5103	17			J5171	Q	G-W	14
	R	Tracer	J5109	L			J5171	R	Bl-W	14

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, EQUIPMENT TRAILER (Continued)										
J5110	S	115 vac	TB5106	10			J5171	S	Bk-R	14
	T	Spare								
	V	115 vac	TB5106	10			J5171	V	W-R	14
	U	115 vac	TB5106	11			J5171	U	O-R	14
J5111	A	S3 - 2X radar - elevation	TB5104	1			J5173	A	Bk	15
	B	S2 - 2X radar - elevation	TB5104	2			J5173	B	W	15
	C	S1 - 2X radar - elevation	TB5104	3			J5173	C	R	15
	D	S3 - 36X radar - elevation	TB5104	4			J5173	D	G	15
	E	S2 - 36X radar - elevation	TB5104	5			J5173	E	O	15
	F	S1 - 36X radar - elevation	TB5104	6			J5173	F	Bl	15
	G	Reference generator A	TB5104	7			J5173	G	W-Bk	15
	H	Reference generator B	TB5104	8			J5173	H	R-Bk	15
	J	Reference generator C	TB5104	9			J5173	J	G-Bk	15
	K	S1 - 1X radar - train	TB5104	10			J5173	K	O-Bk	15
	L	S2 - 1X radar - train	TB5104	11			J5173	L	Bl-Bk	15
	M	S3 - 1X radar - train	TB5104	12			J5173	M	Bk-W	15
	N	115 vac trailer heaters	TB5106	13			J5173	N	Bl-R	15
	P	S1 - 36X radar - train	TB5104	13			J5173	P	R-W	15
	Q	Tracer	J5112	P			J5173	Q	G-W	15
	R	S2 - 36X radar - train	TB5104	14			J5173	R	Bl-W	15
	S	115 vac trailer heat	TB5106	12			J5173	S	Bk-R	15
	T	Spare								
	U	115 vac trailer heat	TB5106	13			J5173	U	O-R	15
	V	115 vac trailer heat	TB5106	12			J5173	V	W-R	15
TB5111	1	Meter	J5116	E			TB2006	7	Bk	148
	2	Tuning pot finger	J5116	G			TB2006	9	W	148
	3	Tuning pot finger	J5116	P			TB2006	8	R	148
	4	Ground	J5116	B						
	5	Discriminator	J5116	C						
	6	Shield (Ground)	J5116	D	(Shield)					
	7	Spare	J5116	F						
	8	Ground for tuning pot	J5116	S			TB2006	10	G	148
	9	Spare								
	10	Spare								
	11	Spare								
	12	Spare								
	13	Spare								

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, EQUIPMENT TRAILER (Continued)										
TB5111	14	Spare								
	15	Spare								
	16	Spare								
	17	Spare								
	18	Spare								
	19	Spare								
	20	Spare								
J5112	A	115 vac 60 cycles	TB5105	1			J5174	A	Bk	16
	B	115 vac 60 cycles	TB5105	2			J5174	B	W	16
	C	Elevation amplidyne overload	TB5105	3			J5174	C	R	16
	D	Train amplidyne overload	TB5105	4			J5174	D	G	16
	E	D-c elevation signal	TB5105	5			J5174	E	O	16
	F	D-c train signal	TB5105	6			J5174	F	Bl	16
	G	-150 vdc T and M coord. det.	TB5105	7			J5174	G	W-Bk	16
	H	Ground to missile coord. det.	TB5105	8			J5174	H	R-Bk	16
	J	Antenna power indicator	TB5105	9			J5174	J	G-Bk	16
	K	Indicator - common	TB5105	10			J5174	K	O-Bk	16
	L	Spare					J5174	L	Bl-Bk	16
	M	S3 - 36X radar train	TB5104	15			J5174	M	Bk-W	16
	N	115 vac trailer lights	TB5108	4			J5174	N	Bl-R	16
	P	Tracer	J5111	Q			J5174	P	R-W	16
	Q	Spare					J5174	Q	G-W	16
	R	Spare					J5174	R	Bl-W	16
	S	115 vac trailer lights	TB5108	3			J5174	S	Bk-R	16
	T	Spare								
	U	115 vac trailer lights	TB5108	4			J5174	U	O-R	16
	V	115 vac trailer lights	TB5108	3			J5174	V	W-R	16
TB5112	1	Spare	J5117	A						
	2	Spare	J5117	B						
	3	Spare	J5117	C						
	4	Spare	J5117	D						
	5	Spare	J5117	E						
	6	Spare	J5117	F						
	7	Spare	J5117	G						
	8	Spare	J5117	H						
	9	Spare	J5117	I						
	10	Spare	J5117	K						

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, EQUIPMENT TRAILER (Continued)										
TB5112	11	Spare	J5117	L						
	12	Spare	J5117	M						
	13	Spare	J5117	N						
	14	Spare	J5117	N						
	14	Spare	J5117	P						
	15	Spare	J5117	Q						
	16	Spare	J5117	R						
	17	Spare	J5117	S						
	18	Spare	J5117	V						
	19	Spare	J5117	U						
	20	Spare								
J5113	A	Strip heater supply	TB5101	15			J5176	A	Bk	17
	B	Modulator input volts indicator	TB5101	16			J5176	B	W	17
	C	Modulator input volts indicator	TB5101	17			J5176	C	R	17
	D	Trans. contactor	TB5101	18			J5176	D	G	17
	E	Trans. contactor	TB5101	19			J5176	E	O	17
	F	R1 synchro bus	TB5107	10			J5176	F	Bl	17
	G	Spare	TB5103	18			J5176	G	W-Bk	17
	H	Strip heater supply	TB5103	19			J5176	H	R-Bk	17
	J	Strip heater supply	TB5103	20			J5176	J	G-Bk	17
	K	R1 synchro bus	TB5107	11			J5176	K	O-Bk	17
	L	R2 synchro bus	TB5107	12			J5176	L	Bl-Bk	17
	M	Tracer	TB5103	13			J5176	M	Bk-W	17
	N	115 vac communications equipment	TB5108	8			J5176	N	Bl-R	17
	P	Telescope tachometer - elevator	TB5107	20			J5176	P	R-W	17
	Q	Telescope tachometer - elevator	TB5107	18			J5176	Q	G-W	17
	R	R2 synchro bus	TB5107	13			J5176	R	Bl-W	17
	S	115 vac communication equipment	TB5108	7			J5176	S	Bk-R	17
	V	115 vac communication equipment	TB5108	7			J5176	V	W-R	17
	U	115 vac communication equipment	TB5108	8			J5176	U	O-R	17
	T	Spare								
J5114	A	115 vac main power	TB5108	1			J5177	A	Bk	18
	B	115 vac main power	TB5108	2			J5177	B	W	18
J5115	A	S1 - 36X dial box - elevation	J5167	A	Bk	35	TB5105	11		
	B	S2 - 36X dial box - elevation	J5167	B	W	35	TB5105	12		
	C	S3 - 36X dial box - elevation	J5167	C	R	35	TB5105	13		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, EQUIPMENT TRAILER (Continued)										
J5115	D	S1 - 36X dial box - train	J5167	D	G	35	TB5105	14		
	E	S2 - 36X dial box - train	J5167	E	O	35	TB5105	15		
	F	S3 - 36X dial box - train	J5167	F	Bl	35	TB5105	16		
	G	Telephone	J5167	G	W-Bk	35	TB5105	17		
	H	Telephone	J5167	H	R-Bk	35	TB5105	18		
	J	Camera R1 and flag	J5167	J	G-Bk	35	TB5102	11		
	K	Camera R2	J5167	K	O-Bk	35	TB5102	12		
	L	Camera S1	J5167	L	Bl-Bk	35	TB5102	13		
	M	Camera S2	J5167	M	Bk-W	35	TB5102	14		
	N	Spare	J5167	N	Bl-R	35				
	P	Camera S3	J5167	P	R-W	35	TB5102	15		
	Q	Flag 2	J5167	Q	G-W	35	TB5104	16		
	R	Camera P1	J5167	R	Bl-W	35	TB5104	17		
	S	Camera P2	J5167	S	Bk-R	35	TB5104	18		
	T	Spare								
	U	Camera P2A	J5167	U	O-R	35	TB5104	20		
	V	Camera P1A	J5167	V	W-R	35	TB5104	19		
J5116	A	Spare	NC				J5172	A		
	B	Ground	TB5111	4			J5172	B	W	39
	C	Discriminator	TB5111	5			J5172	C	Bk	39
	D	Shield	TB5111	6			J5172	D	(Shield)	39
	E	Meter	TB5111	1			J5172	E	G	39
	F	Spare	TB5111	7			J5172	F	R	39
	G	Tuning pot finger	TB5111	2			J5172	G	O	39
	P	Tuning pot finger	TB5111	3			J5172	P	Bl	39
	S	Ground	TB5111	8			J5172	S	Br	39
J5117	A	Spare	TB5112	1			J5175	A		
	B	Spare	TB5112	2			J5175	B		
	C	Spare	TB5112	3			J5175	C		
	D	Spare	TB5112	4			J5175	D		
	E	Spare	TB5112	5			J5175	E		
	F	Spare	TB5112	6			J5175	F		
	G	Spare	TB5112	7			J5175	G		
	H	Spare	TB5112	8			J5175	H		
	J	Spare	TB5112	9			J5175	J		
	K	Spare	TB5112	10			J5175	K		
	L	Spare	TB5112	11			J5175	L		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, EQUIPMENT TRAILER (Continued)										
J5117	M	Spare	TB5112	12			J5175	M		
	N	Spare	TB5112	13			J5175	N		
	P	Spare	TB5112	14			J5175	P		
	Q	Spare	TB5112	15			J5175	Q		
	R	Spare	TB5112	16			J5175	R		
	T	Spare	NC				J5175	T		
	U	Spare	TB5112	19			J5175	U		
	V	Spare	TB5112	18			J5175	V		
J5118		Missile AFC	J5155			40	J4303			153
CABLE PANEL, OPERATIONS TRAILER										
J5151	J5151	24-cycle to telemetering	J2701			567	Telemetering receiver			37
TB5151	1	Spare	J5178	A						
	2	Spare	J5178	B						
	3	S1 - 36X computer - elevation	J5178	C			TB1501	1	Bk	243
	4	S2 - 36X computer - elevation	J5178	D			TB1501	4	G	243
	5	S3 - 36X computer - elevation	J5178	E			TB1501	7	W-Bk	243
	6	R1 - 36X computer - elevation	J5178	F			TB1501	3	R	243
	7	R2 - 36X computer - elevation	J5178	G			TB1501	6	Bl	243
	8	R3 - 36X computer - elevation	J5178	H			TB1501	9	G-Bk	243
	9	S1 - 36X computer - train	J5178	J			TB1501	10	O-Bk	243
	10	S2 - 36X computer - train	J5178	K			TB1501	13	R-W	243
	11	S3 - 36X computer - train	J5178	L			TB1502	1	Bk-R	243
	12	R1 - 36X computer - train	J5178	M			TB1501	12	Bk-W	243
	13	R2 - 36X computer - train	J5178	N			TB1501	15	Bl-W	243
	14	R3 - 36X computer - train	J5178	P			TB1502	3	O-R	243
	15	S1 - 36X computer - range	J5178	Q			TB5201	30	O-Bk	236
	16	S2 - 36X computer - range	J5178	R			TB5201	31	Bl-Bk	236
	17	S3 - 36X computer - range	J5178	S			TB5201	32	Bl-W	236
	18	S1 - 1X computer - range	J5178	T			TB5201	27	W-Bk	236
	19	S2 - 1X computer - range	J5178	U			TB5201	28	R-Bk	236
	20	S3 - 1X computer - range	J5178	V			TB5201	29	G-Bk	236

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, OPERATIONS TRAILER (Continued)										
J5152		Radio timing signal to time comparator	J8403			599	Remote radio			38
TB5152	1	Spare					J5168	D		
	2	Spare					J5168	F		
	3	Computer time meter	TB1503	3	G	244	J5168	A		
	4	Computer time meter	TB1504	15	R	244	J5168	B		
	5	Spare					J5168	H		
	6	Ground					J5172	B		
	7	Discriminator	TB1M	11	Bk	253	J5172	C		
	8	Shield					J5172	D		
	9	Meter	TB2M	29	G	253	J5172	E		
	10	Spare					J5172	F		
	11	Tuning pot finger	TB1M	12	W	253	J5172	G		
	12	Tuning pot finger	TB2M	28	R	253	J5172	P		
	13	Ground	TB1M	5	O	253	J5172	S		
	14	Spare					NC			
	15	Spare					NC			
	16	Spare					NC			
	17	Spare					NC			
	18	Spare					NC			
	19	Spare					NC			
	20	Spare					NC			
J5153		Antenna - SCR-624								
TB5153	1	S1 - 36X dial box - elevation	TB5201	12	R	235	J5167	A		
	2	S2 - 36X dial box - elevation	TB5201	13	G	235	J5167	B		
	3	S3 - 36X dial box - elevation	TB5201	14	O	235	J5167	C		
	4	S1 - 36X dial box - train	TB5201	6	Bl	235	J5167	D		
	5	S2 - 36X dial box - train	TB5201	7	W-Bk	235	J5167	E		
	6	S3 - 36X dial box - train	TB5201	8	R-Bk	235	J5167	F		
	7	Telephone					J5167	G		
	8	Telephone					J5167	H		
	9	Cameras R1 and flag 1	TB5203	1	G-Bk	235	J5167	J		
	10	Cameras R2	TB5203	2	O-Bk	235	J5167	K		
	11	Cameras S1	TB5203	3	Bl-Bk	235	J5167	L		
	12	Cameras S2	TB5203	4	Bk-W	235	J5167	M		
	13	Cameras S3	TB5203	5	R-W	235	J5167	P		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, OPERATIONS TRAILER (Continued)										
TB5153	14	Camera flag 2	TB5203	6	G-W	235	J5167	Q		
	15	Camera P1	TB5203	7	Bl-W	235	J5167	R		
	16	Camera P2	TB5203	8	Bk-R	235	J5167	S		
	17	Camera P1A	TB5203	9	W-R	235	J5167	V		
	18	Camera P2A	TB5203	10	O-R	235	J5167	U		
	19	Spare					J5167	N		
	20	-150 vdc remote range indicator	TB5203	19	Bl-R	235	TB5154	13		
J5154		Target modulator trigger					J301T			592
TB5154	1	R1 synchro bus	TB5201	1	Bk	235				
			TB19	31	G-W	205	TB5159	7		
	1		TB9114	1	W-Bk	246				
	2	R1 synchro bus	TB19	31	Bl-W	205	TB5159	7		
	3	R2 synchro bus	TB5201	2	W	235				
			TB19	32	Bk-R	205	TB5159	8		
	3		TB9114	2	R-Bk	246				
	4	R2 synchro bus	TB19	32	W-R	205	TB5159	8		
	5	R1 remote range designation	TB22T	11	Bk	254	J5179	C		
	6	R2 remote range designation	TB22T	12	W	254	J5179	J		
	7	S1 remote range designation	TB22T	13	R	254	J5179	A		
	8	S2 remote range designation	TB22T	14	O	254	J5179	B		
	9	S3 remote range designation	TB22T	15	G	254	J5179	D		
	10	Spare					J5179	E		
	11	Spare					J5179	F		
	12	Spare					J5179	H		
	13	-150 vdc remote range indicator	TB22T	10	Bl	254	TB5153	20		
	14	Spare					NC			
	15	Spare					NC			
	16	Spare					NC			
	17	Spare					NC			
	18	Spare					NC			
	19	Spare					NC			
	20	Spare					NC			
J5155	J5155	Missile AFC	J121M			543	J5118			40
TB5155	1	Spare	J5175	A						
	2	Spare	J5175	B						

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, OPERATIONS TRAILER (Continued)										
TB5155	3	Spare	J5175	C						
	4	Spare	J5175	D						
	5	Spare	J5175	E						
	6	Spare	J5175	F						
	7	Spare	J5175	G						
	8	Spare	J5175	H						
	9	Spare	J5175	J						
	10	Spare	J5175	K						
	11	Spare	J5175	L						
	12	Spare	J5175	M						
	13	Spare	J5175	N						
	14	Spare	J5175	P						
	15	Spare	J5175	Q						
	16	Spare	J5175	R						
	17	Spare	J5175	S						
	18	Spare	J5175	V						
	19	Spare	J5175	U						
	20	Spare								
J5156		Spare								
TB5156	1	115 vac 60 cycles	TB9	52	Bk	205	J5174	A		
	2	115 vac 60 cycles	TB7	34	W	205	J5174	B		
	3	Elevation amplidyne overload	TB10	61	R	205	J5174	C		
	4	Train amplidyne overload	TB10	63	G	205	J5174	D		
	5	D-c elevation signal	TB7	24	O	205	J5174	E		
	6	D-c train signal	TB7	25	Bl	205	J5174	F		
	7	-150 vdc T and M coord. det.	TB7	26	W-Bk	205	J5174	G		
	8	Ground	TB7	27	R-Bk	205	J5174	H		
	9	Antenna power indicator	TB16	72	G-Bk	205	J5174	J		
	10	Indicator circuit - common	TB16	71	O-Bk	205	J5174	K		
	11	S1 - 2X radar - elevation	TB18	4	Bl-Bk	205	TB5160	3		
	12	S2 - 2X radar - elevation	TB18	5	Bl-W	205	TB5160	2		
	13	S3 - 2X radar - elevation	TB10	59	R-W	205	TB5160	1		
	14	Spare								
	15	Spare								
	16	Spare								
	17	Spare								
	18	Spare								

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, OPERATIONS TRAILER (Continued)										
TB5156	19	Spare								
	20	Spare								
J5157		Missile receiver i-f	J5106			36	J113M			575
TB5157	1	+200 vdc	TB3T	2	Bk	208	J5169	C		
	2	Ground	TB3T	6	W	208	J5169	B		
	2	Ground					TB5161	20		
	3	Manual AFC relay	TB3T	7	R	208	J5169	F		
	4	-150 vdc	TB3T	8	G	208	J5169	E		
	5	Tuner	TB3T	3	O	208	J5169	G		
	6	+250 vdc local oscillator	TB3T	1	Bl	208	J5169	P		
	7	-345 vdc	TB3T	4	W-Bk	208	J5169	S		
	7	-345 vdc					TB5201	33	Bl-W	236
	8	Spare	TB3T	9	R-Bk	208				
	9	Spare	TB3T	10	G-Bk	208				
	10	Spare	TB3T	11	O-Bk	208				
	11	Spare	TB3T	12	Bl-Bk	208				
	12	Spare	TB3T	13	Bk-W	208				
	13	Spare								
	14	Spare								
	15	Spare								
	16	Spare								
	17	Spare								
	18	Telescope tachometer - elevation	TB1502	4	O	244	J5176	Q		
	19	Spare								
	20	Telescope tachometer - elevation	TB1504	7	W-Bk	244	J5176	P		
J5158		Target receiver i-f	J5105			23	J113T			552
TB5158	1	115 vac comm power					J5176	S		
			TB4850	1	Bk	201	J5176	V		
	2	115 vac comm power					J5176	N		
			TB4850	2	W	201	J5176	U		
	3	115 vac power	TB6	13	Bk	202	J5177	A		
	3		TB5203	11	Bk	234				
	4	115 vac power	TB6	17	W	202	J5177	B		
	4		TB5203	12	W	234				

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, OPERATIONS TRAILER (Continued)										
TB5158							J5170	S		
	5	+445 vdc	TB2901	14	Bk	233	J5170	V		
	5		TB13	24	Bk	219				
							J5170	U		
	6	Ground	TB2902	22	W	233	J5170	N		
	6	Ground	TB5161	20			TB13	25	W	219
	7	115 vac	TB5159	5			J5171	S		
			Trailer out	W	Bk	229	J5171	V		
	8	115 vac	TB5159	6			J5171	U		
			Trailer out	Y	W	229	J5171	N		
J5159		Spare								
TB5159	1	115 vac sample	TB4T	12			J5181	C		
	2	115 vac sample	TB4T	9			J5181	D		
	3	Trailer heater	Heater	L1	Bk	224	J5173	S		
			Motor				J5173	V		
	4	Trailer heater	Heater	L2	W	224	J5173	N		
			Motor				J5173	U		
	5	Trailer lights	Trailer lights	G	Bk	230	J5174	S		
			TB5158	7			J5174	V		
	6	Trailer lights	Trailer lights	R	W	230	J5174	N		
			TB5158	8			J5174	U		
	7	R1 synchro bus	TB5154	1-2			J5176	F		
							J5176	K		
	7		J5168	C						
	8	R2 synchro bus	TB5154	3-4			J5176	L		
							J5176	R		
	8		J5168	J						
J5160		Spare								
TB5160	1	S3 - 2X radar - elevation	TB5201	11	Bl	236	J5173	A		
	1		TB5156	13			TB9115	1	G-Bk	246

DECLASSIFIED
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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, OPERATIONS TRAILER (Continued)										
TB5160	2	S2 - 2X radar - elevation	TB5201	10	O	236	J5173	B		
	2		TB5156	12			TB9115	2	O-Bk	246
	3	S1 - 2X radar - elevation	TB5201	9	G	236	J5173	C		
	3		TB5156	11			TB9115	3	Bl-Bk	246
	4	S3 - 36X radar - elevation	TB1501	8	R-Bk	243	J5173	D		
	4						TB9115	6	G-W	246
	5	S2 - 36X radar - elevation	TB1501	5	O	243	J5173	E		
	5						TB9115	5	R-W	246
	6	S1 - 36X radar - elevation	TB1501	2	W	243	J5173	F		
	6						TB9115	4	Bk-W	246
	7	Reference generator A - elevation	TB2701	1	O	212	J5173	G		
	8	Reference generator B - ground	TB2701	3	W-Bk	212	J5173	H		
	9	Reference generator C - train	TB2701	2	Bl	212	J5173	J		
	10	S1 - 1X radar - train	TB18	16	R-W	209	J5173	K		
	10	S1 - 1X radar - train	TB9111	1	Bk	246	TB5201	3	Bk	236
	11	S2 - 1X radar - train	TB19	17	G-W	209	J5173	L		
	11		TB9111	2	W	246	TB5201	4	W	236
	12	S3 - 1X radar - train	TB19	18	Bl-W	209	J5173	M		
	12		TB9111	3	R	246	TB5201	5	R	236
	13	S1 - 36X radar - train	TB1501	11	Bl-Bk	243	J5173	P		
	13		TB9111	4	G	246				
	14	S2 - 36X radar - train	TB1501	14	G-W	243	J5173	R		
	14		TB9111	5	O	246				
	15	S3 - 36X radar - train	TB1502	2	W-R	243	J5174	M		
	15		TB9111	6	Bl	246				
	16	Spare					J5181	F		
	17	Spare					J5181	B		
	18	Spare					J5181	G		
	19	Spare					J5181	A		
	20	Spare					J5181	E		
J5161		Target AGC	J116T			553	J5104			24
TB5161	1	Standby control	TB9	56	Bk	209	J5171	A		
	2	Modulator ON light	TB16	78	W	209	J5171	B		
	3	Modulator volts adjust - power	TB9	52	R	209	J5171	C		
	4	Standby control	TB9	57	G	209	J5171	D		
	5	Telescope tachometer - train	TB1502	5	Bl	244	J5171	E		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, OPERATIONS TRAILER (Continued)										
TB5161	6	Telescope tachometer - train	TB1504	8	R-Bk	244	J5171	F		
	7	Modulator volts adjust - power	TB7	34	O	209	J5171	G		
	8	Timing 115 vac ON-OFF relay coil	TB5	2	Bl	209	J5171	H		
	8	115 vac to switching unit	TB1503	11	Bk	244	TB2701	8	R	212
	8	115 vac	TB2902	27	O	233				
	9	Timing 115 vac ON-OFF relay coil	TB5	3	W-Bk	209	J5171	J		
	9	115 vac to switching unit	TB1503	12	W	244	TB2701	9	G	212
	9	115 vac	TB2902	28	Bl	233				
	10	Equipment start - stop	TB5	5	R-Bk	209	J5171	K		
	11	Tracer					J5170	L		
	12	+300 vac to modulator	TB2901	4	R	233	J5171	L		
	13	115 vac for 300 vdc ON-OFF relay	TB14	33	G-Bk	209	J5171	M		
	14	115 vac for 300 vdc ON-OFF relay	TB14	34	O-Bk	209	J5171	P		
	15	+200 vdc for T and M coord. det.	TB14	31	W-R	209	J5171	Q		
	16	300 vdc reference voltage distribution unit	TB2701	4	Bk	212	TB14	27	Bk-R	209
	17	Strip heater supply	TB15	7	Bl-Bk	209	J5176	H		
	18	Strip heater supply	TB7	32	Bk-W	209	J5176	J		
	19	300 vdc for recording equipment	TB2902	16	G	233	TB5203	17	R-W	236
	20	Ground (300 vdc)	TB5158	6			TB5203	18	G-W	236
	20		TB2701	5	W	212	TB5157	2		
J5162		Missile AGC	J116M			554	J5102			25
TB5162	1	Oscillator current - negative	TB8	43	Bk	207	J5170	A		
	2	Oscillator current - positive	TB8	42	W	207	J5170	B		
	3	Radiate control	TB9	54	R	207	J5170	C		
	4	Radiate control	TB9	55	G	207	J5170	D		
	5	Transmitter filament ON light	TB16	74	O	207	J5170	E		
	6	Standby light	TB16	76	Bl	207	J5170	F		
	7	Indicator light circuit - common	TB16	77	W-Bk	207	J5170	G		
	8	Radiate light	TB16	75	R-Bk	207	J5170	H		
	9	Modulator volts - raise	TB9	46	G-Bk	207	J5170	J		
	10	Modulator volts adjust - common	TB9	49	O-Bk	207	J5170	K		
	11	Modulator volts - lower	TB9	50	Bl-Bk	207	J5170	R		
	12	Nutator motor ON light	TB16	73	Bk-W	207	J5170	M		
	13	Nutator motor ON light	TB8	37	R-W	207	J5170	P		
	14	Strip heater supply	TB15	7	G-W	207	J5170	Q		

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, OPERATIONS TRAILER (Continued)										
TB5162	15	Strip heater supply	TB7	32	Bl-W	207	J5176	A		
	16	Modulator input volts indicator	TB8	40	Bk-R	207	J5176	B		
	17	Modulator input volts indicator	TB8	41	W-R	207	J5176	C		
	18	Trans. contactor	TB8	36	O-R	207	J5176	D		
	19	Trans. contactor	TB6	19	Bl-R	207	J5176	E		
	20	Spare								
J5163		Spare								
J5164		Spare								
J5165		Test cable	J5101			33	(Test point near cons.)			568
J5166		Modulator trigger	J5103			26	J301M			593
J5167	A	S1 - 36X dial box - elevation	J5115	A	Bk	35	TB5153	1		
	B	S2 - 36X dial box - elevation	J5115	B	W	35	TB5153	2		
	C	S3 - 36X dial box - elevation	J5115	C	R	35	TB5153	3		
	D	S1 - 36X dial box - train	J5115	D	G	35	TB5153	4		
	E	S2 - 36X dial box - train	J5115	E	O	35	TB5153	5		
	F	S3 - 36X dial box - train	J5115	F	Bl	35	TB5153	6		
	G	Telephone	J5115	G	W-Bk	35	TB5153	7		
	H	Telephone	J5115	H	R-Bk	35	TB5153	8		
	J	Camera R1 and flag 1	J5115	J	G-Bk	35	TB5153	9		
	K	Camera R2	J5115	K	O-Bk	35	TB5153	10		
	L	Camera S1	J5115	L	Bl-Bk	35	TB5153	11		
	M	Camera S2	J5115	M	Bk-W	35	TB5153	12		
	N	Spare	J5115	N	Bl-R	35	TB5153	19		
	P	Camera S3	J5115	P	R-W	35	TB5153	13		
	Q	Flag 2	J5115	Q	G-W	35	TB5153	14		
	R	Camera P1	J5115	R	Bl-W	35	TB5153	15		
	S	Camera P2	J5115	S	Bk-R	35	TB5153	16		
	U	Camera P2A	J5115	U	O-R	35	TB5153	18		
	V	Camera P1A	J5115	V	W-R	35	TB5153	17		

DECLASSIFIED

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, OPERATIONS TRAILER TO COMPUTER										
J5168	A	Com. time motor	TB5152	3						
	B	Com. time motor	TB5152	4						
	C	R1 synchro bus	TB5159	7						
	D	Spare	TB5152	1						
	E	Spare	NC							
	F	Spare	TB5152	2						
	G	Ground								
	H	Spare	TB5152	5						
	J	R2 synchro bus	TB5159	8						
CABLE PANEL, OPERATIONS TRAILER										
J5169	A	Spare	NC							
	B	Ground	TB5157	2			J5107	B	W	19
	C	+200 vdc	TB5157	1			J5107	C	Bk	19
	D	Ground	Ground				J5107	D	(Shield)	19
	E	-150 vdc	TB5157	4			J5107	E	G	19
	F	Manual AFC relay	TB5157	3			J5107	F	R	19
	G	Tuner	TB5157	5			J5107	G	O	19
	P	+250 vdc local oscillator	TB5157	6			J5107	P	Bl	19
	S	-345 vdc	TB5157	7			J5107	S	Bk	19
J5170	A	Oscillator current - negative	TB5162	1			J5109	A	Bk	13
	B	Oscillator current - positive	TB5162	2			J5109	B	W	13
	C	Radiate control	TB5162	3			J5109	C	R	13
	D	Radiate control	TB5162	4			J5109	D	G	13
	E	Transmitter filament ON light	TB5162	5			J5109	E	O	13
	F	Standby light	TB5162	6			J5109	F	Bl	13
	G	Indicator light circuit - common	TB5162	7			J5109	G	W-Bk	13
	H	Radiate light	TB5162	8			J5109	H	R-Bk	13
	J	Modulator volts - raise	TB5162	9			J5109	J	G-Bk	13
	K	Modulator volts adjust - common	TB5162	10			J5109	K	O-Bk	13
	L	Tracer	TB5161	11			J5109	L	Bl-Bk	13
	M	Nutator motor ON light	TB5162	12			J5109	M	Bk-W	13
	N	Ground (300 vdc)	TB5158	6			J5109	N	Bl-R	13
	P	Nutator motor ON light	TB5162	13			J5109	P	R-W	13
	Q	Strip heater supply	TB5162	14			J5109	Q	G-W	13
	R	Modulator volts - lower	TB5162	11			J5109	R	Bl-W	13
	S	+300 vdc	TB5158	5			J5109	S	Bk-R	13

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, OPERATIONS TRAILER (Continued)										
J5170	T	Spare	NC				NC	T	NC	
	U	Ground (300 vdc)	TB5158	6			J5109	U	O-R	13
	V	+300 vdc	TB5158	5			J5109	V	W-R	13
J5171	A	Standby control	TB5161	1			J5110	A	Bk	14
	B	Modulator ON light	TB5161	2			J5110	B	W	14
	C	Modulator volts adjust - power	TB5161	3			J5110	C	R	14
	D	Standby control	TB5161	4			J5110	D	G	14
	E	Telescope tachometer - train	TB5161	5			J5110	E	O	14
	F	Telescope tachometer - train	TB5161	6			J5110	F	Bl	14
	G	Modulator volts adjust - power	TB5161	7			J5110	G	W-Bk	14
	H	Timing relay coil	TB5161	8			J5110	H	R-Bk	14
	J	Timing relay coil	TB5161	9			J5110	J	G-Bk	14
	K	Equipment start - stop	TB5161	10			J5110	K	O-Bk	14
	L	+300 vdc to modulator	TB5161	12			J5110	L	Bl-Bk	14
	M	115 vac for 300-vdc ON-OFF relay	TB5161	13			J5110	M	Bk-W	14
	N	115 vac outlets	TB5158	8			J5110	N	Bl-R	14
	P	115 vac for 300-vdc ON-OFF relay	TB5161	14			J5110	P	R-W	14
	Q	+200 vdc to T and M coord. det.	TB5161	15			J5110	Q	G-W	14
	R	Tracer	J5173	Q			J5110	R	Bl-W	14
	S	115 vac outlets	TB5158	7			J5110	S	Bk-R	14
	T	Spare	NC				NC	T	NC	
	U	115 vac outlets	TB5158	8			J5110	U	O-R	14
	V	115 vac outlets	TB5158	7			J5110	V	W-R	14
J5172	A	Spare					NC			
	B	Ground					TB5152	6		
	C	Discriminator	J5116	C	Bk	39	TB5152	7		
	D	Shield					TB5152	8		
	E	Meter	J5116	E	G	39	TB5152	9		
	F	Spare					TB5152	10		
	G	Tuning pot	J5116	G	O	39	TB5152	11		
	P	Tuning pot	J5116	P	Bl	39	TB5152	12		
	S	Ground	J5116	S	Br	39	TB5152	13		
J5173	A	S3 - 2X radar - elevation	TB5160	1			J5111	A	Bk	15
	B	S2 - 2X radar - elevation	TB5160	2			J5111	B	W	15
	C	S1 - 2X radar - elevation	TB5160	3			J5111	C	R	15
	D	S3 - 36X radar - elevation	TB5160	4			J5111	D	G	15

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, OPERATIONS TRAILER (Continued)										
J5173	E	S2 - 36X radar - elevation	TB5160	5			J5111	E	O	15
	F	S1 - 36X radar - elevation	TB5160	6			J5111	F	Bl	15
	G	Reference generator A	TB5160	7			J5111	G	W-Bk	15
	H	Reference generator B	TB5160	8			J5111	H	R-Bk	15
	J	Reference generator C	TB5160	9			J5111	J	G-Bk	15
	K	S1 - 1X radar - train	TB5160	10			J5111	K	O-Bk	15
	L	S2 - 1X radar - train	TB5160	11			J5111	L	Bl-Bk	15
	M	S3 - 1X radar - train	TB5160	12			J5111	M	Bk-W	15
	N	115 vac for trailer heaters	TB5159	4			J5111	N	Bl-R	15
	P	S1 - 36X radar - train	TB5160	13			J5111	P	R-W	15
	Q	Tracer	J5171	R			J5111	Q	G-W	15
	R	S2 - 36X radar - train	TB5160	14			J5111	R	Bl-W	15
	S	115 vac trailer heaters	TB5159	3			J5111	S	Bk-R	15
	T	Spare	NC				NC	T	NC	
	U	115 vac trailer heaters	TB5159	4			J5111	U	O-R	15
	V	115 vac trailer heaters	TB5159	3			J5111	V	W-R	15
J5174	A	115 vac 60 - cycle antenna	TB5156	1			J5112	A	Bk	16
	B	115 vac 60 - cycle antenna	TB5156	2			J5112	B	W	16
	C	Elevation amplidyne overload	TB5156	3			J5112	C	R	16
	D	Train amplidyne overload	TB5156	4			J5112	D	G	16
	E	D-c elevation signal	TB5156	5			J5112	E	O	16
	F	D-c train signal	TB5156	6			J5112	F	Bl	16
	G	-150 vdc to T and M coord. det.	TB5156	7			J5112	G	W-Bk	16
	H	Ground (T and M coord. det.)	TB5156	8			J5112	H	R-Bk	16
	J	Antenna power indicator	TB5156	9			J5112	J	G-Bk	16
	K	Indicator - common	TB5156	10			J5112	K	O-Bk	16
	L	Spare	NC				J5112	L	Bl-Bk (NC)	16
	M	S3 - 36X radar - train	TB5160	15			J5112	M	Bk-W	16
	N	115 vac trailer lights	TB5159	6			J5112	N	Bl-R	16
	P	Tracer	J5176	M			J5112	P	R-W	16
	Q	Spare	NC				J5112	Q	G-W (NC)	16
	R	Spare	NC				J5112	R	Bl-W (NC)	16
	S	115 vac trailer lights	TB5159	5			J5112	S	Bk-R	16
	T	Spare	NC				NC	T	NC	
	U	115 vac trailer lights	TB5159	6			J5112	U	O-R	16

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, OPERATIONS TRAILER (Continued)										
J5174	V	115 vac trailer lights	TB5159	5			J5112	V	W-R	16
J5175	A	Spare	TB5155	1			J5117	A		
	B	Spare	TB5155	2			J5117	B		
	C	Spare	TB5155	3			J5117	C		
	D	Spare	TB5155	4			J5117	D		
	E	Spare	TB5155	5			J5117	E		
	F	Spare	TB5155	6			J5117	F		
	G	Spare	TB5155	7			J5117	G		
	H	Spare	TB5155	8			J5117	H		
	J	Spare	TB5155	9			J5117	J		
	K	Spare	TB5155	10			J5117	K		
	L	Spare	TB5155	11			J5117	L		
	M	Spare	TB5155	12			J5117	M		
	N	Spare	TB5155	13			J5117	N		
	P	Spare	TB5155	14			J5117	P		
	Q	Spare	TB5155	15			J5117	Q		
	R	Spare	TB5155	16			J5117	R		
	S	Spare	TB5155	17			J5117	S		
	T	Spare	NC							
	U	Spare	TB5155	19			J5117	U		
	V	Spare	TB5155	18			J5117	V		
J5176	A	Strip heater supply	TB5162	15			J5113	A	Bk	17
	B	Modulator input volts indicator	TB5162	16			J5113	B	W	17
	C	Modulator input volts indicator	TB5162	17			J5113	C	R	17
	D	Trans. contactor	TB5162	18			J5113	D	G	17
	E	Trans. contactor	TB5162	19			J5113	E	O	17
	F	R1 synchro bus	TB5159	7			J5113	F	Bl	17
	G	Spare					J5113	G	W-Bl	17
	H	Strip heater supply	TB5161	17			J5113	H	R-Bk	17
	J	Strip heater supply	TB5161	18			J5113	J	G-Bk	17
	K	R1 synchro bus	TB5159	7			J5113	K	O-Bk	17
	L	R2 synchro bus	TB5159	8			J5113	L	Bl-Bk	17
	M	Tracer	J5174	P			J5113	M	Bk-W	17
	N	115 vac for communication	TB5158	2			J5113	N	Bl-R	17
	P	Telescope tachometer - elevation	TB5157	20			J5113	P	R-W	17
	Q	Telescope tachometer - elevation	TB5157	18			J5113	Q	G-W	17
	R	R2 synchro bus	TB5159	8			J5113	R	Bl-W	17

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, OPERATIONS TRAILER (Continued)										
J5176	S	115 vac communications equipment	TB5158	1			J5113	S	Bk-R	17
	T	Spare	NC				NC	T	NC	
	U	115 vac communications equipment	TB5158	2			J5113	U	O-R	17
	V	115 vac communications equipment	TB5158	1			J5113	V	W-R	17
J5177	A	115 vac main power	TB5158	3			J5114	A	Bk	18
	B	115 vac main power	TB5158	4			J5114	B	W	18
J5178	A	Spare	TB5151	1			Computer			
	B	Spare	TB5151	2			Computer			
	C	S1 - 36X elevation computer	TB5151	3			Computer			
	D	S2 - 36X elevation computer	TB5151	4			Computer			
	E	S3 - 36X elevation computer	TB5151	5			Computer			
	F	R1 - 36X elevation computer	TB5151	6			Computer			
	G	R2 - 36X elevation computer	TB5151	7			Computer			
	H	R3 - 36X elevation computer	TB5151	8			Computer			
	J	S1 - 36X train computer	TB5151	9			Computer			
	K	S2 - 36X train computer	TB5151	10			Computer			
	L	S3 - 36X train computer	TB5151	11			Computer			
	M	R1 - 36X train computer	TB5151	12			Computer			
	N	R2 - 36X train computer	TB5151	13			Computer			
	P	R3 - 36X train computer	TB5151	14			Computer			
	Q	S1 - 36X range computer	TB5151	15			Computer			
	R	S2 - 36X range computer	TB5151	16			Computer			
	S	S3 - 36X range computer	TB5151	17			Computer			
	T	S1 - 1X range computer	TB5151	18			Computer			
	U	S2 - 1X range computer	TB5151	19			Computer			
	V	S3 - 1X range computer	TB5151	20			Computer			
J5179	A	S1 remote range designation	TB5154	7						
	B	S2 remote range designation	TB5154	8						
	C	R1 remote range designation	TB5154	5						
	D	S3 remote range designation	TB5154	9						
	E	Spare	TB5154	10						
	F	Spare	TB5154	11						
	G	Ground	Ground							
	H	Spare	TB5154	12						
	J	R2 remote range designation	TB5154	6						

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, OPERATIONS TRAILER (Continued)										
J5180		Spare								
J5181	A	Spare	TB5160	19			TB5304	5	Bl	41
	B	Spare	TB5160	17			TB5304	6	O	41
	C	115 vac sample	TB5159	1			TB5304	2	W	41
	D	115 vac sample	TB5159	2			TB5304	3	Bk	41
	E	Spare	TB5160	20			TB5304	8	R	41
	F	Spare	TB5160	16			TB5304	7	G	41
	G	Spare	TB5160	18			TB5304	4	Br	41
	P	NC								
	S	Ground	Ground				TB5304	1	(Shield)	41
CABLE PANEL, RECORDING EQUIPMENT										
TB5201	1	R1 synchro bus	TB5154	1	Bk	235	S5202	1	Bk	401
	2	R2 synchro bus	TB5154	3	W	235	S5202	2	W	401
	3	S1 - 1X train	TB5160	10	Bk	236	TB8101	1	Bk	403
	4	S2 - 1X train	TB5160	11	W	236	TB8101	2	W	403
	5	S3 - 1X train	TB5160	12	R	236	TB8101	3	R	403
	6	S1 - 36X train	TB5153	4	Bl	235	TB8101	4	G	403
	7	S2 - 36X train	TB5153	5	W-Bk	235	TB8101	5	O	403
	8	S3 - 36X train	TB5153	6	R-Bk	235	TB8101	6	Bl	403
	9	S1 - 2X elevation	TB5160	3	G	236	TB8102	1	W-Bk	403
	10	S2 - 2X elevation	TB5160	2	O	236	TB8102	2	R-Bk	403
	11	S3 - 2X elevation	TB5160	1	Bl	236	TB8102	3	G-Bk	403
	12	S1 - 36X elevation	TB5153	1	R	235	TB8102	4	O-Bk	403
	13	S2 - 36X elevation	TB5153	2	G	235	TB8102	5	Bl-Bk	403
	14	S3 - 36X elevation	TB5153	3	O	235	TB8102	6	Bk-W	403
	15	S1 target range 1000 yds/rev X	TB16	70	Bk	237	TB8103	1	R-W	403
	16	S2 target range 1000 yds/rev X	TB17	80	W	237	TB8103	2	G-W	403
	17	S3 target range 1000 yds/rev X	TB17	81	R	237	TB8103	3	Bl-W	403
	18	S1 target range 100,000 yds/rev X	TB17	82	G	237	TB8103	4	Bk	404
	19	S2 target range 100,000 yds/rev X	TB17	83	O	237	TB8103	5	W	404
	20	S3 target range 100,000 yds/rev X	TB17	84	Bl	237	TB8103	6	R	404
	21	S1 missile range 1000 yds/rev X	TB17	85	W-Bk	237	TB8104	1	G	404
	22	S2 missile range 1000yds/rev X	TB17	86	R-Bk	237	TB8104	2	O	404
	23	S3 missile range 1000 yds/rev X	TB17	87	G-Bk	237	TB8104	3	Bl	404

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, RECORDING EQUIPMENT (Continued)										
TB5201	24	S1 missile range 100,000 yds/rev X	TB17	88	O-Bk	237	TB8104	4	W-Bk	404
	25	S2 missile range 100,000 yds/rev X	TB17	89	Bl-Bk	237	TB8104	5	R-Bk	404
	26	S3 missile range 100,000 yds/rev X	TB17	90	Bl-W	237	TB8104	6	G-Bk	404
	27	S1 coarse X computer range	TB5151	18	W-Bk	236	TB8105	1	O-Bk	404
	28	S2 coarse X computer range	TB5151	19	R-Bk	236	TB8105	2	Bl-Bk	404
	29	S3 coarse X computer range	TB5151	20	G-Bk	236	TB8105	3	Bk-W	404
	30	S1 fine X computer range	TB5151	15	O-Bk	236	TB8105	4	R-W	404
	31	S2 fine X computer range	TB5151	16	Bl-Bk	236	TB8105	5	G-W	404
	32	S3 fine X computer range	TB5151	17	Bk-W	236	TB8105	6	Bl-W	404
	33	-345 vdc	TB5157	7	Bl-W	236	TB8401	2	R	424
	34	Spare								
	35	Spare								
	36	Spare								
TB5202	1	115 vac indicator light - common	TB1503	13	Bk	239	TB8108	1	Bk	405
	2	Indicator light - local	TB1503	1	W	239	TB8108	2	W	405
	3	Indicator light - telescope unit	TB1503	2	R	239	TB8108	4	R	405
	4	Indicator light - computer time on	TB1503	4	G	239	TB8108	6	G	405
	5	Indicator light auto train	TB1502	12	O	239	TB8108	8	O	405
	6	Indicator light auto elevation	TB1502	15	Bl	239	TB8108	10	Bl	405
	7	Indicator light - pulse time modulation	TB1503	5	W-Bk	239	TB8108	12	W-Bk	405
	8	Cross-pointer meter - horizontal target	TB19	26	R-W	237	TB8109	1	R-Bk	405
	9	Ground	TB19	29	G-W	237	TB8109	2	G-Bk	405
	10	Cross-pointer meter - vertical target	TB19	28	Bl-W	237	TB8109	3	O-Bk	405
	11	Ground								
	12	Cross-pointer meter - horizontal missile	TB1M	15	Bk	238	TB8109	5	Bl-Bk	405
	13	Ground	TB1M	1	O	238	TB8109	6	Bk-W	405
	14	Cross-pointer meter - vertical missile	TB1M	16	W	238	TB8109	7	R-W	405
	15	Ground								
	16	Missile auto range indicator	TB4T	2	Bk-R	237	TB8501	7	Bk	412
	17	Target auto range indicator	TB4T	1	W-R	237	TB8501	8	W	412
	18	115 vac indicator - common	TB4T	3	O-R	237	TB8501	9	R	412
	19	Target control indicator	TB1503	8	Bk-W	239	TB8501	5	G	412
	20	Missile control indicator	TB1503	11	R-W	239	TB8501	6	O	412

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CABLE PANEL, RECORDING EQUIPMENT (Continued)										
TB5203	1	Tracking camera	TB5153	9	G-Bk	235	J8201	1	Bk	406
	1	R1 and trans.					J8202	1	Bk	407
	2	R2 tracking camera	TB5153	10	O-Bk	235	J8201	2	W	406
	2						J8202	2	W	407
	3	S1 tracking camera	TB5153	11	Bl-Bk	235	J8201	3	R	406
	3						J8202	3	R	407
	4	S2 tracking camera	TB5153	12	Bk-W	235	J8201	4	G	406
	4						J8202	4	G	407
	5	S3 tracking camera	TB5153	13	R-W	235	J8201	5	O	406
	5						J8202	5	O	407
	6	Tracking camera transformer	TB5153	14	G-W	235	J8201	6	Bl	406
	6						J8202	6	Bl	407
	7	Tracking camera 1 pilot light	TB5153	15	Bl-W	235	J8201	7	W-Bk	406
	8	Tracking camera 1 pilot light	TB5153	16	Bk-R	235	J8201	8	R-Bk	406
	9	Tracking camera 2 pilot light	TB5153	17	W-R	235	J8202	7	W-Bk	407
	10	Tracking camera 2 pilot light	TB5153	18	O-R	235	J8202	8	R-Bk	407
	11	115 vac	TB5158	3	Bk	234	S5201	1	Bk	410
	12	115 vac	TB5158	4	W	234	S5201	2	W	410
	13	Control box remote ON-OFF	TB1505	2	R-Bk	239	J8207	1	Bk	408
	14	Control box remote ON-OFF	TB1505	3	G-Bk	239	J8207	2	W	408
	15	Control box remote ON-OFF	TB1503	9	O-Bk	239	J8207	4	R	408
	16	Control box remote ON-OFF	TB1503	10	Bl-Bk	239	J8207	3	G	408
	17	+300 vdc	TB5161	19	R-W	236	TB8501	3	Bl	412
	17	+300 vdc					TB8401	1	Bk	424
	18	Ground	TB5161	20	G-W	236	TB8501	4	W-Bk	412
	18	Ground					TB8401	8	W	424
	19	-150 vdc remote range indicator	TB5153	20	Bl-R	235	TB8501	10	(Separate wire)	
	20	Spare								
S5201	1	115 vac	TB5203	11	Bk	410				
	2	115 vac	TB5203	12	W	410				
	3	115 vac					TB8301	1	Bk	411
	4	115 vac					TB8301	2	W	411
S5202	1	R1 synchro bus	TB5201	1	Bk	401				
	2	R2 synchro bus	TB5201	2	W	401				
	3	R1 synchro bus					TB8106	11	Bk	402
	4	R2 synchro bus					TB8107	11	W	402

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
D-C RELAY BOX EQUIPMENT TRAILER										
TB6311	1	MG relay coil	TB5101	18	W	134				
	2	MG relay coil	TB5101	19	Bk	134				
	3	MG 3-phase 115 vac power	S4901	10	Bk	133				
	4	MG 3-phase 115 vac power	S4901	12	Bk	133				
	5	MG 3-phase 115 vac power	S4901	9	Bk	133				
	6	MG 3-phase from relay	TB2401	1	Bk	141				
	7	MG 3-phase from relay	TB2401	2	W	141				
	8	MG 3-phase from relay	TB2401	3	R	141				
TB6312	1	115 vac interlocks	TB5103	15	Bk	145	Relay			
	2	115 vac interlocks	TB5103	16	W	145				
ELEVATOR GIRDER, EQUIPMENT TRAILER										
TB7101	1	115 vac elevator	TB5107	1	Bk	127	S7113-1			
	2	115 vac lights	TB5107	2	W	127	Light then S7113-2			
	3	Cam switch	TB5107	3	R	127	S7108-1 S7105-2 S7107			
	4	Top stow switch	TB5107	4	G	127				
	5	Top stow switch	TB5107	5	O	127				
	6	Elevator lower circuit	TB5107	6	Bl	127	S7108-2			
	7	Elevator raise circuit	TB5107	7	W-Bk	127	S7106-2			
	8	Motor - common	TB5107	8	R-Bk	127	S7106-1			
	9	Spare	TB5107	9	G-Bk	127				
	10	Spare								
DIAL BOX UNIT										
J8101	1	Dial box camera R1 and trans	J8203	1	Bk	419				
	2	R2	J8203	2	W	419				
	3	S1	J8203	3	R	419				
	4	S2	J8203	4	G	419				
	5	S3	J8203	5	O	419				
	6	Trans	J8203	6	Bl	419				
	7	Pilot light	J8203	7	W-Bk	419				
	8	Pilot light	J8203	8	R-Bk	419				

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
DIAL BOX UNIT (Continued)										
TB8101	1	S1 - 1X train	TB5201	3	Bk	403				
	2	S2 - 1X train	TB5201	4	W	403				
	3	S3 - 1X train	TB5201	5	R	403				
	4	S1 - 36X train	TB5201	6	G	403				
	5	S2 - 36X train	TB5201	7	O	403				
	6	S3 - 36X train	TB5201	8	Bl	403				
TB8102	1	S1 - 2X elevation	TB5201	9	W-Bk	403				
	2	S2 - 2X elevation	TB5201	10	R-Bk	403				
	3	S3 - 2X elevation	TB5201	11	G-Bk	403				
	4	S1 - 36X elevation	TB5201	12	O-Bk	403				
	5	S2 - 36X elevation	TB5201	13	Bl-Bk	403				
	6	S3 - 36X elevation	TB5201	14	Bk-W	403				
TB8103	1	S1 target range 1000 yds/rev X	TB5201	15	R-W	403				
	2	S2 target range 1000 yds/rev X	TB5201	16	G-W	403				
	3	S3 target range 1000 yds/rev X	TB5201	17	Bl-W	403				
	4	S1 target range 100,000 yds/rev X	TB5201	18	Bk	404				
	5	S2 target range 100,000 yds/rev X	TB5201	19	W	404				
	6	S3 target range 100,000 yds/rev X	TB5201	20	R	404				
TB8104	1	S1 missile range 1000 yds/rev X	TB5201	21	G	404				
	2	S2 missile range 1000 yds/rev X	TB5201	22	O	404				
	3	S3 missile range 1000 yds/rev X	TB5201	23	Bl	404				
	4	S1 missile range 100,000 yds/rev X	TB5201	24	W-Bk	404				
	5	S2 missile rnage 100,000 yds/rev X	TB5201	25	R-Bk	404				
	6	S3 missile range 100,000 yds/rev X	TB5201	26	G-Bk	404				
TB8105	1	Computer range coarse X	TB5201	27	O-Bk	404				
	2	Computer range coarse X	TB5201	28	Bl-Bk	404				
	3	Computer range coarse X	TB5201	29	Bk-W	404				
	4	Computer range fine X	TB5201	30	R-W	404				
	5	Computer range fine X	TB5201	31	G-W	404				
	6	Computer range fine X	TB5201	32	Bl-W	404				
TB8106	1	R1 - 1X train	TB8106	2						
	2	R1 - 36X train	TB8106	3						
	3	R1 - 2X elevation	TB8106	4						
	4	R1 - 36X elevation	TB8106	5						

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
DIAL BOX UNIT (Continued)										
TB8106	5	R1 target range 1000 yds/rev X	TB8106	6						
	6	R1 target range 100,000 yds/rev X	TB8106	7						
	7	R1 missile range 1000 yds/rev X	TB8106	8						
	8	R1 missile range 100,000 yds/rev X	TB8106	9						
	9	R1 computer range coarse X	TB8106	10						
	10	R1 computer range fine X	TB8106	11						
	11	R1 synchro bus	S5202	3	Bk	402				
TB8107	1	R2 - 1X train	TB8107	2						
	2	R2 - 36X train	TB8107	3						
	3	R2 - 2X elevation	TB8107	4						
	4	R2 - 36X elevation	TB8107	5						
	5	R2 target range 1000 yds/rev X	TB8107	6						
	6	R2 target range 100,000 yds/rev X	TB8107	7						
	7	R2 missile range 1000 yds/rev X	TB8107	8						
	8	R2 missile range 100,000 yds/rev X	TB8107	9						
	9	R2 computer range coarse X	TB8107	10						
	10	R2 computer range fine X	TB8107	11						
	11	R2 synchro bus	S5202	4	W	402				
TB8108	1	115 vac indicator light - common	TB5202	1	Bk	405				
	2	Indicator light - local	TB5202	2	W	405				
	4	Indicator light - telescope unit	TB5202	3	R	405				
	6	Indicator light - computer time motor	TB5202	4	G	405				
	8	Indicator light auto train	TB5202	5	O	405				
	10	Indicator light auto elevation	TB5202	6	Bl	405				
	12	Indicator light pulse time modulation	TB5202	7	W-Bk	405				
TB8109	1	Cross-pointer meter - horizontal	TB5202	8	R-Bk	405				
	2	Ground - target cross-pointer meter - horizontal	TB5202	9	G-Bk	405				
	3	Cross-pointer meter - vertical	TB5202	10	O-Bk	405				
	4	Ground - target cross-pointer meter - vertical								
	5	Cross-pointer meter - horizontal	TB5202	12	Bl-Bk	405				
	6	Ground - missile cross-pointer meter - horizontal	TB5202	13	Bk-W	405				

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
DIAL BOX UNIT (Continued)										
TB8109	7	Cross-pointer meter - vertical	TB5202	14	R-W	405				
	8	Ground - missile cross-pointer meter - vertical								
CAMERA CONTROL UNIT										
J8201	1	Tracking camera, R1 and trans.	TB5203	1	Bk	406				
	2	R2	TB5203	2	W	406				
	3	S1	TB5203	3	R	406				
	4	S2	TB5203	4	G	406				
	5	S3	TB5203	5	O	406				
	6	Trans.	TB5203	6	Bl	406				
	7	Pilot light	TB5203	7	W-Bk	406				
	8	Pilot light	TB5203	8	R-Bk	406				
J8202	1	Tracking camera 2, R1 and trans.	TB5203	1	Bk	407				
	2	R2	TB5203	2	W	407				
	3	S1	TB5203	3	R	407				
	4	S2	TB5203	4	G	407				
	5	S3	TB5203	5	O	407				
	6	Trans.	TB5203	6	Bl	407				
	7	Pilot light	TB5203	9	W-Bk	407				
	8	Pilot light	TB5203	10	R-Bk	407				
J8203	1	Dial box camera 3, R1 and trans.					J8101	1	Bk	419
	2	R2					J8101	2	W	419
	3	S1					J8101	3	R	419
	4	S2					J8101	4	G	419
	5	S3					J8101	5	O	419
	6	Trans.					J8101	6	Bl	419
	7	Pilot light					J8101	7	W-Bk	419
	8	Pilot light					J8101	8	R-Bk	419
J8204	1	Time comparator camera 4, R1 and trans.					J8401	1	Bk	418
	2	R2					J8401	2	W	418
	3	S1					J8401	3	R	418
	4	S2					J8401	4	G	418

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
CAMERA CONTROL UNIT (Continued)										
J8204	5	S3					J8401	5	O	418
	6	Trans.					J8401	6	Bl	418
	7	Pilot light					J8401	7	W-Bk	418
	8	Pilot light					J8401	8	R-Bk	418
J8205	1	Range scope camera 5, R1 and trans.					J8505	1	Bk	417
	2	R2					J8505	2	W	417
	3	S1					J8505	3	R	417
	4	S2					J8505	4	G	417
	5	S3					J8505	5	O	417
	6	Trans.					J8505	6	Bl	417
	7	Pilot light					J8505	7	W-Bk	417
	8	Pilot light					J8505	8	R-Bk	417
J8206	1	R1 commutator unit					J8601	1	Bk	416
	2	R2					J8601	2	W	416
	3	S1					J8601	3	R	416
	4	S2					J8601	4	G	416
	5	S3					J8601	5	O	416
J8207	1	Remote marker	TB5203	15	R	408				
	2	Remote ON switch control box	TB5203	14	W	408				
	3	Remote ON switch	TB5203	13	Bk	408				
	4	Remote marker	TB5203	16	G	408				
J8208		(115 vac					Photofloods		Bk	421
		(115 vac					Photofloods		W	421
J8209		(115 vac	TB8301	3	Bk	415				
		(115 vac	TB8301	4	W	415				
RECORDING EQUIPMENT										
TB8301	1	115 vac	S5201	3	Bk	411	Blower TB8301	3	Bk	422
	2	115 vac	S5201	4	W	411	Blower TB8301	4	W	422

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
RECORDING EQUIPMENT (Continued)										
TB8301	3	115 vac	TB8301	1			J8209	1	Bk	415
							TB8301	5		
	4	115 vac	TB8301	2			J8209	2	W	415
							TB8301	6		
	5	115 vac	TB8301	3			TB8401	4	W	414
							TB8301	7		
	6	115 vac	TB8301	4			TB8401	5	Bk	414
							TB8301	8		
	7	115 vac	TB8301	5			TB8501	1	Bk	413
							TB8301	9		
	8	115 vac	TB8301	6			TB8501	2	W	413
							TB8301	10		
	9	115 vac	TB8301	7						
	10	115 vac	TB8301	8						
TIME COMPARATOR, UNIT										
J8401	1	Camera 4, R1 and trans.	J8204	1	Bk	418				
	2	R2	J8204	2	W	418				
	3	S1	J8204	3	R	418				
	4	S2	J8204	4	G	418				
	5	S3	J8204	5	O	418				
	6	Trans.	J8204	6	Bl	418				
	7	Pilot light	J8204	7	W-Bk	418				
	8	Pilot light	J8204	8	R-Bk	418				
TB8401	1	+300 vdc	TB5203	17	Bk	424				
	2	-345 vdc	TB5201	33	R	424				
	3	Spare								
	4	115 vac	TB8301	5	Bk	414				
	5	115 vac	TB8301	6	W	414				
	6	Spare								
	7	Spare								
	8	Ground	TB5203	18	W	424				
J8402	1	Commutator pulse	J8602	1	Bk	420 2 cond shielded				

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
TIME COMPARATOR, UNIT (Continued)										
J8402	2	Ground - commutator pulse	J8602	2	W	420				
J8403	1	N.O.T.S. pulse	J5152			423				
	2	Ground	J5152		(Shield)	423				
REMOTE RANGE INDICATOR UNIT										
J8501		Target video	Target rec. J111T			587				
		Missile video	Miss. rec. J111M			573				
J8503		Target R sweep trigger	JT2C			586				
J8504		Missile R sweep trigger	JT5A			560				
J8505		Target gate	J119T			558				
J8506		Missile gate	J119M			588				
J8507		Target A sweep trigger	T7B			569				
TB8501	1	115 vac	TB8301	7	Bk	413				
	2	115 vac	TB8301	8	W	413				
	3	+300 vdc	TB5203	17	Bl	412				
	4	Ground	TB5203	18	W-Bk	412				
	5	Target control indicator	TB5202	19	G	412				
	6	Missile control indicator	TB5202	20	O	412				
	7	Missile auto range indicator	TB5202	16	Bk	412				
	8	Target auto range indicator	TB5202	17	W	412				
	9	Indicator - common	TB5202	18	R	412				
	10	-150 vdc	TB5203	19	(Separate wire)					
J8507	1	Camera 5, R1 and trans.	J8205	1	Bk	417				
	2	R2	J8205	2	W	417				
	3	S1	J8205	3	R	417				
	4	S2	J8205	4	G	417				

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
REMOTE RANGE INDICATOR UNIT (Continued)										
J8507	5	S3	J8205	5	O	417				
	6	Trans.	J8205	6	Bl	417				
	7	Pilot light	J8205	7	W-Bk	417				
	8	Pilot light	J8205	8	R-Bk	417				
COMMUTATOR UNIT										
J8601	1	R1	J8206	1	Bk	416				
	2	R2	J8206	2	W	416				
	3	S1	J8206	3	R	416				
	4	S2	J8206	4	G	416				
	5	S3	J8206	5	O	416				
J8602	1	Commutator pulse					J8402	1	Bk	420 2 cond. shielded
	2	Ground					J8402	2	W	420
TELESCOPE UNIT										
TB9111	1	S1 - 1X train					TB5160	10	Bk	246
	2	S2 - 1X train					TB5160	11	W	246
	3	S3 - 1X train					TB5160	12	R	246
	4	S1 - 36X train					TB5160	13	G	246
	5	S2 - 36X train					TB5160	14	O	246
	6	S3 - 36X train					TB5160	15	Bl	246
	7	D-c elevation tachometer					TB1504	7	O	245
	8	D-c train tachometer					TB1502	5	W	245
	9	Spare								
	10	Spare								
	11	Spare								
	12	Spare								
TB9112	1	Spare								
	2	Spare								
	3	Spare								
	4	Spare								

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
TELESCOPE UNIT (Continued)										
TB9112	5	Spare								
	6	Spare								
	7	Elevation slew					TB1502	9	G	245
	8	Elevation slew pot	TB9112	11			TB1505	1	W-Bk	245
	9	D-c elevation tachometer					TB1502	4	Bk	245
	10	Train slew					TB1502	8	R	245
	11	Train slew pot	TB9112	8						
	12	D-c train tachometer					TB1504	8	Bl	245
TB9113	1	R1 - 2X elevation					TB3M	9	Bk	247
	2	R1 - 36X elevation					TB3M	10	W	247
	3	Ground					TB3M	14	R	247
	4	Elevation tachometer					TB3M	5	G	247
	5	Spare								
	6	Spare								
	7	Spare								
	8	Spare								
	9	R1 - 1X train					TB3M	6	O	247
	10	R1 - 36X train					TB3M	7	Bl	247
	11	Ground - train tachometer					TB4M	4	W-Bk	247
		R2 - 1X train								
		R2 - 36X train								
	12	Train tachometer					TB4M	5	R-Bk	247
TB9114	1	R1 synchro bus					TB5154	1	W-Bk	246
	1	R1 synchro bus	TB9114	5			TB9116	1		
	2	R2 synchro bus					TB5154	3	R-Bk	246
	2	R2 synchro bus	TB9114	6			TB9116	2		
	3	Spare								
	4	Spare								
	5	R1 synchro bus					TB9114	1		
	6	R2 synchro bus					TB9114	2		
	7	Control field train motor (3)					TB1801	15	Bk	248
	8	Control field train motor (4)					TB1801	16	W	248
	9	A-c elevation signal to motor (4)					TB1801	2	R	248
	10	A-c elevation signal to motor (2)					TB1801	1	G	248
	11	Spare								
	12	Spare								

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TABLE 7-2

JUNCTION POINTS AND INTERUNIT WIRING (Continued)

Junction Point	Ter.	Function	From	Ter.	Color	Cable	To	Ter.	Color	Cable
TELESCOPE UNIT (Continued)										
TB9115	1	S3 - 2X elevation								
	2	S2 - 2X elevation					TB5160	1	G-Bk	246
	3	S1 - 2X elevation					TB5160	2	O-Bk	246
	4	S1 - 36X elevation					TB5160	3	Bl-Bk	246
	5	S2 - 36X elevation					TB5160	6	Bk-W	246
	6	S3 - 36X elevation					TB5160	5	R-W	246
	7	Spare					TB5160	4	G-W	246
	8	Spare								
	9	Spare								
	10	Spare								
	11	Spare								
	12	Spare								
TB9116	1	115 vac fans R1 synchro bus	TB9114	1						
	2	115 vac fan R2 synchro bus	TB9114	2						
	3	Spare								
	4	115 vac	TB9116	2						
	5	Spare								
	6	Spare								
	7	Spare								
	8	Spare								
	9	Spare								
	10	Telephone T								
	11	Telephone C								
	12	Telephone R								

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TABLE 7-3

CABLING DATA

BETWEEN TRAILERS

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
13	MCOP-19	Equipment trailer to Operations Trailer	1	Bk	J5109A	J5170A	Oscillator current - negative
			2	W	J5109B	J5170B	Oscillator current - positive
			3	R	J5109C	J5170C	Radiate control
			4	G	J5109D	J5170D	Radiate control
			5	O	J5109E	J5170E	Transmitter filament ON light
			6	Bl	J5109F	J5170F	Standby light
			7	W-Bk	J5109G	J5170G	Indicator light circuit - common
			8	R-Bk	J5109H	J5170H	Radiate light
			9	G-Bk	J5109J	J5170J	Modulator volts - raise
			10	O-Bk	J5109K	J5170K	Modulator volts - common
			11	Bl-Bk	J5109L	J5170L	Spare
			12	Bk-W	J5109M	J5170M	Nutator motor ON light
			13	R-W	J5109P	J5170P	Nutator motor control light
			14	G-W	J5109Q	J5170Q	Strip heater supply
			15	Bl-W	J5109R	J5170R	Modulator volts - lower
			16	Bk-R	J5109S	J5170S	300 vdc supply
			17	W-R	J5109V	J5170V	300 vdc supply
			18	O-R	J5109U	J5170U	Ground (300 vdc supply)
			19	Bl-R	J5109N	J5170N	Ground (300 vdc supply)
14	MCOP-19	Equipment trailer to Operations Trailer	1	Bk	J5110A	J5171A	Standby control
			2	W	J5110B	J5171B	Modulator ON light
			3	R	J5110C	J5171C	Modulator volts adjust - power
			4	G	J5110D	J5171D	Standby control
			5	O	J5110E	J5171E	Telescope train tachometer
			6	Bl	J5110F	J5171F	Telescope train tachometer
			7	W-Bk	J5110G	J5171G	Modulator volts adjust - power
			8	R-Bk	J5110H	J5171H	Timing relay coil
			9	G-Bk	J5110J	J5171J	Timing relay coil
			10	O-Bk	J5110K	J5171K	Equipment start-stop
			11	Bl-Bk	J5110L	J5171L	300 vdc to modulator
			12	Bk-W	J5110M	J5171M	115 vac for 300 vdc ON-OFF relay
			13	R-W	J5110P	J5171P	115 vac for 300 vdc ON-OFF relay
			14	G-W	J5110Q	J5171Q	+300 vdc T and M coord. det.
			15	Bl-W	J5110R	J5171R	Spare
			16	Bk-R	J5110S	J5171S	115 vac
			17	W-R	J5110V	J5171V	115 vac
			18	O-R	J5110U	J5171U	115 vac
			19	Bl-R	J5110N	J5171N	115 vac
15	MCOP-19	Equipment trailer to Operations Trailer	1	Bk	J5111A	J5173A	S3 - 2X radar elevation
			2	W	J5111B	J5173B	S2 - 2X radar elevation
			3	R	J5111C	J5173C	S1 - 2X radar elevation

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TABLE 7-3

CABLING DATA (Continued)

BETWEEN TRAILERS (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
15	MCOP-19	(Continued)	4	G	J5111D	J5173D	S3 - 36X radar elevation
			5	O	J5111E	J5173E	S2 - 36X radar elevation
			6	Bl	J5111F	J5173F	S1 - 36X radar elevation
			7	W-Bk	J5111G	J5173G	24-cycle reference generator A
			8	R-Bk	J5111H	J5173H	24-cycle reference generator B
			9	G-Bk	J5111J	J5173J	24-cycle reference generator C
			10	O-Bk	J5111K	J5173K	S1 - 1X radar train
			11	Bl-Bk	J5111L	J5173L	S2 - 1X radar train
			12	Bk-W	J5111M	J5173M	S3 - 1X radar train
			13	R-W	J5111P	J5173P	S1 - 36X radar train
			14	G-W	J5111Q	J5173Q	Spare
			15	Bl-W	J5111R	J5173R	S2 - 36X radar train
			16	Bk-R	J5111S	J5173S	115 vac trailer heaters
			17	W-R	J5111V	J5173V	115 vac trailer heaters
			18	O-R	J5111U	J5173U	115 vac trailer heaters
			19	Bl-R	J5111N	J5173N	115 vac trailer heaters
16	MCOP-19	Equipment Trailer to Operations Trailer	1	Bk	J5112A	J5174A	115 vac antenna control
			2	W	J5112B	J5174B	115 vac antenna control
			3	R	J5112C	J5174C	Elevation amplidyne overload
			4	G	J5112D	J5174D	Train amplidyne overload
			5	O	J5112E	J5174E	D-c elevation signal
			6	Bl	J5112F	J5174F	D-c train signal
			7	W-Bk	J5112G	J5174G	-150 vdc T and M coord. det.
			8	R-Bk	J5112H	J5174H	Ground
			9	G-Bk	J5112J	J5174J	Antenna power light
			10	O-Bk	J5112K	J5174K	Indicator circuit - common
			11	Bl-Bk	J5112L	J5174L	Spare
			12	Bk-W	J5112M	J5174M	S3 - 36X radar train
			13	R-W	J5112P	J5174P	Spare
			14	G-W	J5112Q	J5174Q	Spare
			15	Bl-W	J5112R	J5174R	Spare
			16	Bk-R	J5112S	J5174S	115 vac trailer lights
			17	W-R	J5112V	J5174V	115 vac trailer lights
			18	O-R	J5112U	J5174U	115 vac trailer lights
			19	Bl-R	J5112N	J5174N	115 vac trailer lights
17	MCOP-19	Equipment Trailer to Operations Trailer	1	Bk	J5113A	J5176A	Strip heater supply
			2	W	J5113B	J5176B	Modulator input volts indicator
			3	R	J5113C	J5176C	Modulator input volts indicator
			4	G	J5113D	J5176D	Transmitter control
			5	O	J5113E	J5176E	Transmitter control
			6	Bl	J5113F	J5176F	R1 synchro bus

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TABLE 7-3

CABLING DATA (Continued)

BETWEEN TRAILERS (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
17	MCOP-19	(Continued)	7	W-Bk	J5113G	J5176G	Spare
			8	R-Bk	J5113H	J5176H	Strip heater supply
			9	G-Bk	J5113J	J5176J	Strip heater supply
			10	O-Bk	J5113K	J5176K	R1 synchro bus
			11	Bl-Bk	J5113L	J5176L	R2 synchro bus
			12	Bk-W	J5113M	J5176M	Spare
			13	R-W	J5113P	J5176P	Telescope elevation tachometer
			14	G-W	J5113Q	J5176Q	Telescope elevation tachometer
			15	Bl-W	J5113R	J5176R	R2 synchro bus
			16	Bk-R	J5113S	J5176S	115 vac communications equipment
			17	W-R	J5113V	J5176V	115 vac communications equipment
			18	O-R	J5113U	J5176U	115 vac communications equipment
			19	Bl-R	J5113N	J5176N	115 vac communications equipment
18	DCOP-23	Equipment Trailer to Operations Trailer	1	Bk	J5114A	J5177A	115 vac main power
			2	W	J5114B	J5177B	115 vac main power
19	MCOS-7	Equipment Trailer to Operations Trailer (Local Oscillator Control Cable)	1	Bk	J5107C	J5169C	+200 vdc
			2	W	J5107B	J5169B	Ground
			3	R	J5107F	J5169F	Manual afc relay
			4	G	J5107E	J5169E	-150 vdc
			5	O	J5107G	J5169G	Tuner
			6	Bl	J5107P	J5169P	+250 vdc local oscillator
			7	Br	J5107S	J5169S	-345 vdc
			8	(Shield)	J5107D	J5169D	Ground
23	RG-13/U	Equipment Trailer to Operations Trailer			J5105	J5158	Target i-f
24	RG-11/U	Equipment Trailer to Operations Trailer			J5104	J5161	Target AGC
25	RG-11/U	Equipment Trailer to Operations Trailer			J5102	J5162	Missile AGC
26	RG-11/U	Equipment Trailer to Operations Trailer			J5103	J5166 or J5154	Modulator trigger
27	MCOS-7	Equipment Trailer to Engine Generator No. 2	1	Bk	J5108B	J5001B	+12 vdc
			2	W	J5108C	J5001C	Run normal indicator
			3	R	J5108D	J5001D	Spare
			4	G	J5108F	J5001F	Alarm
			5	O	J5108G	J5001G	Remote stop
			6	Bl	J5108P	J5001P	Alarm disconnect switch
			7	Br	J5018S	J5001S	Remote start

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TABLE 7-3

CABLING DATA (Continued)

BETWEEN TRAILERS (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
27	MCOS-7	(Continued)	8	(Shield)	J5108E	J5001E	Ground
28	TCOP-150	Equipment Trailer to Engine Generator No. 2 or Power Unit PE 137	1	Bk	TB5109-1	TB5001-1	115 vac } 3Ø generator No. 2
			2	W	TB5109-2	TB5001-2	115 vac } 3Ø generator No. 2
			3	R	TB5109-3	TB5001-3	115 vac } 3Ø generator No. 2
					or	or	
			1	Bk	TB5109-1	Ø 1	} PE 137
			2	W	TB5109-2	Ø 2	} PE 137
			3	R	TB5109-3	Ø 3	} PE 137
33	RG-11/U	Operations Trailer to Equipment Trailer			J5165	J5106	Video to test at modulator
35	MCOP-19	Equipment Trailer J5115 to Operations Trailer J5167	1	Bk	J5115A	J5167A	S1 - 36X dial box synchro elevation
			2	W	J5115B	J5167B	S2 - 36X dial box synchro elevation
			3	R	J5115C	J5167C	S3 - 36X dial box synchro elevation
			4	G	J5115D	J5167D	S1 - 36X dial box synchro train
			5	O	J5115E	J5167E	S2 - 36X dial box synchro train
			6	Bl	J5115F	J5167F	S3 - 36X dial box synchro train
			7	W-Bk	J5115G	J5167G	Telephone
			8	R-Bk	J5115H	J5167H	Telephone
			9	G-Bk	J5115J	J5167J	Camera R1 and flag 1
			10	O-Bk	J5115K	J5167K	Camera R2
			11	Bl-Bk	J5115L	J5167L	Camera S1
			12	Bk-W	J5115M	J5167M	Camera S2
			13	R-W	J5115P	J5167P	Camera S3
			14	G-W	J5115Q	J5167Q	Flag 2
			15	Bl-W	J5115R	J5167R	Camera P1
			16	Bk-R	J5115S	J5167S	Camera P2
			17	W-R	J5115V	J5167V	Camera P1 A
			18	O-R	J5115U	J5167U	Camera P2 A
			19	Bl-R	J5115N	J5167N	Spare
36	RG-13/U	Operations Trailer to Equipment Trailer			J5157	J5101	Missile receiver i-f
37	RG-11/U	Operations Trailer to Telemetering Unit			J5151	Tel. Unit	24-cycle reference voltage

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TABLE 7-3

CABLING DATA (Continued)

BETWEEN TRAILERS (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
38	RG-11/U	Radio Timing Truck to Operations Trailer				J5152	Radio camera synchronizing signal
39	MCOS-7	Equipment Trailer to Operations Trailer	1	Bk	J5172C	J5116C	Discriminator
			2	W	J5172B	J5116B	Spare
			3	R	J5172F	J5116F	Spare
			4	G	J5172E	J5116E	Tuning indicator meter
			5	O	J5172G	J5116G	Tuning pot finger
			6	Bl	J5172P	J5116P	Tuning pot
			7	Br	J5172S	J5116S	Ground
			8	(Shield)	J5172D	J5116D	Spare
40	RG-11/U	Operations Trailer to Equipment Trailer			J5155	J5118	Missile AFC
41	MCOS-7	Operations Trailer to Power Unit PE 137	1	Bk	J5181D	TB5304-3	115 vac sample
			2	W	J5181C	TB5304-2	115 vac sample
			3	R	J5181E	TB5304-8	Spare
			4	G	J5181F	TB5304-7	Spare
			5	O	J5181B	TB5304-6	Spare
			6	Bl	J5181A	TB5304-5	Spare
			7	Br	J5181G	TB5304-4	Spare
			8	(Shield)	J5181S	TB5304-1	Ground

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TABLE 7-3

CABLING DATA (Continued)

EQUIPMENT TRAILER

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
101	THFA-60	Power Panel to Engine Generator No. 1	1	Bk	TB5001-1	S4902-1	115 vac }
			2	W	TB5001-2	S4902-2	115 vac } 3ϕ
			3	R	TB5001-3	S4902-3	115 vac }
102	DHFA-14	Transmitter to Power Distribution Panel	1	Bk	TB2003-1	TB4903-5	115 vac
			2	W	TB2003-2	TB4903-6	115 vac
103	DHFA-23	Hydrogen Thyratron Modulator to Power Distribution Panel	1	Bk	TB2304-1	TB4903-1	115 vac
			2	W	TB2304-2	TB4903-2	115 vac
104	DHFA-14	Power Distribution Panel to Cable Panel	1	Bk	TB4903-3	TB5108-1	115 vac
			2	W	TB4903-4	TB5108-2	115 vac
105	DHFA-9	Power Distribution Panel to Antenna Control Unit	1	Bk	TB4903-5	TB3204-1	115 vac
			2	W	TB4903-6	TB3204-2	115 vac
106	DCOP-3	Nutator Case to Nutator Motor	1	Bk	TB3023-1	Term. on Motor	115 vac
			2	W	TB3023-2	Term. on Motor	115 vac
107	MHFF-7	Antenna Above Slip Rings to Nutator Case	1	Bk		TB3023-3	Spare
			2	W	TB3006-9	TB3023-1	115 vac
			3	R	TB3006-11	TB3023-2	115 vac
			4	G	TB3006-10	TB3018-1	Reference generator A
			5	O	TB3007-8	TB3018-2	Reference generator B
			6	Bl	TB3006-12	TB3018-3	Reference generator C
			7	W-Bk		TB3018-4	Spare
108	2 Cond. Telephone	Cable Panel to Watch Operator Telephone	1	Bk	TB5105-17	Watch Op.	Telephone
			2	W	TB5105-18	Watch Op.	Telephone

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TABLE 7-3

CABLING DATA (Continued)

EQUIPMENT TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
110	MCOS-7	Engine Generator No. 1 to Power Distribution Panel	1	Bk	J5001B	J4901B	+12 vdc
			2	W	J5001C	J4901C	Run normal
			3	R	J5001D	J4901D	Spare
			4	G	J5001F	J4901F	Alarm
			5	O	J5001G	J4901G	Remote stop
			6	Bl	J5001P	J4901P	Alarm disconnect switch
			7	Br	J5001S	J4901S	Remote start
			8	(Shield)	J5001E	J4901E	Ground
111	MHFA-14	Cable Panel to Transmitter	1	Bk	TB5102-1	J2024P	+200 vdc
			2	W	TB5102-2	J2024E	Ground
			3	R	TB5102-3	J2024G	Manual AFC relay
			4	G	TB5102-4	J2024C	Ground
			5	O	TB5102-5	J2024D	Tuner
			6	Bl	TB5102-6	J2024N	+250 vdc local oscillator
			7	W-Bk	TB5102-7	J2024M	-345 vdc
			8	R-Bk	TB5102-8	J2024H	-150 vdc
			9	G-Bk	TB5102-9	J2024J	Ground (spare)
			10	O-Bk	TB5102-10	J2024L	Ground (spare)
			11	Bl-Bk		J2024B	Ground (spare)
			12	Bk-W		J2024F	Ground (spare)
			13	R-W			Spare
			14	G-W			Spare
112	MHFA-26	Cable Panel to Transmitter	1	Bk	TB5101-1	TB2001-1	Oscillator current - negative
			2	W	TB5101-2	TB2001-2	Oscillator current - positive
			3	R	TB5101-3	TB2001-3	Radiate control
			4	G	TB5101-4	TB2001-4	Radiate control
			5	O	TB5101-5	TB2001-5	Transmitter filament ON light
			6	Bl	TB5101-6	TB2001-6	Standby light
			7	W-Bk	TB5101-7	TB2001-7	Indicator light circuit - common
			8	R-Bk	TB5102-7	TB4201-3	-445 vdc
			9	G-Bk	TB5101-9	TB2001-9	Modulator volts - raise
			10	O-Bk	TB5101-10	TB2001-10	Modulator volts adjust - common
			11	Bl-Bk	TB5101-11	TB2002-1	Modulator volts - lower
			12	Bk-W	TB5101-12	TB2002-2	Nutator motor ON light
			13	R-W	TB5101-13	TB2002-3	Nutator motor contactor
			14	G-W	TB5101-14	TB2002-4	Strip heater supply
			15	Bl-W	TB5101-15	TB2002-5	Strip heater supply
			16	Bk-R	TB5101-16	TB2002-6	Modulator input volts indicator
			17	W-R	TB5101-17	TB2002-7	Modulator input volts indicator

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TABLE 7-3

CABLING DATA (Continued)

EQUIPMENT TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
112	MHFA-26	(Continued)	18	O-R	TB5101-18	TB2002-8	Transmitter contactor
			19	Bl-R	TB5101-19	TB2002-9	Transmitter contactor
			20	R-G	TB5102-2	TB4201-4	Ground
			21	O-G	TB5101-20	TB4201-1	+445 vdc
			22	Bk-W-R	TB5103-7	TB4201-2	Ground
			23	W-Bk-R			Spare
			24	R-Bk-W			Spare
			25	G-Bk-W			Spare
			26	O-Bk-W			Spare
113	MHFA-26	Cable Panel to Hydrogen Thyratron Modulator	1	Bk	TB5103-1	TB2302-10	Standby control
			2	W	TB5103-2	TB2302-1	Modulator ON light
			3	R	TB5103-3	TB2302-4	Modulator volts adjust - power
			4	G	TB5103-4	TB2303-5	Standby control
			5	O			Spare
			6	Bl			Spare
			7	W-Bk	TB5103-7	TB2303-7	Ground
			8	R-Bk	TB5103-8	TB2302-5	Modulator volts adjust - power
			9	G-Bk	TB5101-8	TB2301-2	Radiate light
			10	O-Bk	TB5103-10	TB2303-3	Timing relay coil
			11	Bl-Bk	TB5103-11	TB2304-2	Timing relay coil
			12	Bk-W	TB5103-12	TB2304-1	Equipment start-stop
			13	R-W			Spare
			14	G-W	TB5103-14	TB2303-6	+300 vdc
			15	Bl-W			Spare
			16	Bk-R			Spare
			17	W-R			Spare
			18	O-R			Spare
			19	Bl-R	TB5103-19	TB2303-9	Strip heater supply
			20	R-G	TB5103-20	TB2303-10	Strip heater supply
			21	O-G			Spare
			22	Bk-W-R			Spare
			23	W-Bk-R			Spare
			24	R-Bk-W			Spare
			25	G-Bk-W			Spare
			26	O-Bk-W			Spare
114	MHFA-7	Cable Panel to Transmitter	1	Bk	TB5102-17	TB2003-4	115 vac
			2	W	TB5102-18	TB2003-4	115 vac

DECLASSIFIED

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TABLE 7-3

CABLING DATA (Continued)

EQUIPMENT TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
114	MHFA-7	(Continued)	3	R	TB5102-19	TB2003-5	115 vac
			4	G	TB5102-20	TB2003-5	115 vac
			5	O	TB5102-16	TB2004-10	Nutator motor contactor
			6	Bl			Spare
			7	W-Bk			Spare
115	MCOP-19	Antenna Control Unit to Antenna	1	Bk	TB3204-6	J3001B	A1 train amplidyne C4 train motor
			2	W	TB3203-12	J3001C	T and E motor fields
			3	R		J3001D	Spare
			4	G	TB3204-5	J3001E	A1 train motor C2 amplidyne
			5	O	TB3203-10	J3001F	T and E drive motor field
			6	Bl	TB3203-8	J3001G	A1 train motor tachometer
			7	W-Bk	TB3203-11	J3001H	A2 train motor tachometer
			8	R-Bk	TB3204-7	J3001J	A1 elevation motor
			9	G-Bk	TB3203-13	J3001K	Spare
			10	O-Bk	TB3203-14	J3001L	Raise switch
			11	Bl-Bk	TB3203-15	J3001M	Antenna limit switch
			12	Bk-W	TB3203-16	J3001N	Down switch
			13	R-W	TB3204-8	J3001P	C4 elevation motor A1 amplidyne
			14	G-W			Spare
			15	Bl-W			Spare
			16	Bk-R			Spare
			17	W-R			Spare
			18	O-R			Spare
			19	Bl-R			Spare
116	MCOP-19	Antenna Control Unit to Antenna	1	Bk	TB3202-5	J3003A	Antenna safety switch
			2	W	TB3202-6	J3003B	Antenna stow - train
			3	R	TB3202-7	J3003C	Elevator interlock
			4	G	TB3202-8	J3003D	Elevator interlock
			5	O	TB3202-9	J3003E	Antenna stow - elevation
			6	Bl	TB3202-10	J3003F	Antenna stow - train
			7	W-Bk	TB3201-11	J3003G	R2 synchro bus
			8	R-Bk	TB3201-10	J3003H	R1 synchro bus
			9	Gr-Bk		J3003J	Spare
			10	O-Bk		J3003K	Spare
			11	Bl-Bk	TB3202-13	J3003L	A1 tachometer elevation
			12	Bk-W	TB3204-4	J3003M	115 vac nutator
			13	R-W	TB3202-16	J3003N	A2 tachometer elevation
			14	G-W	TB3204-3	J3003P	115 vac nutator
			15	Bl-W			Spare

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TABLE 7-3

CABLING DATA (Continued)

EQUIPMENT TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
116	MCOP-19	Antenna Control Unit to Antenna	16	Bk-R			Spare
			17	W-R			Spare
			18	O-R			Spare
			19	Bl-R			Spare
117	MCOP-19	Cable Panel to Antenna	1	Bk	TB5104-1	J3002A	S3 - 2X radar elevation
			2	W	TB5104-2	J3002B	S2 - 2X radar elevation
			3	R	TB5104-3	J3002C	S1 - 2X radar elevation
			4	G	TB5104-4	J3002D	S3 - 36X radar elevation
			5	O	TB5104-5	J3002E	S2 - 36X radar elevation
			6	Bl	TB5104-6	J3002F	S1 - 36X radar elevation
			7	W-Bk	TB5104-7	J3002G	Reference generator A
			8	R-Bk	TB5104-8	J3002H	Reference generator B
			9	G-Bk	TB5104-9	J3002J	Reference generator C
			10	O-Bk	TB5104-10	J3002K	S1 - 1X radar train
			11	Bl-Bk	TB5104-11	J3002L	S2 - 1X radar train
			12	Bk-W	TB5104-12	J3002M	S3 - 1X radar train
			13	R-W	TB5104-13	J3002N	S1 - 36X radar train
			14	G-W	TB5104-14	J3002P	S2 - 36X radar train
			15	Bl-W	TB 5104-15	J3002Q	S3 - 36X radar train
			16	Bk-R			Spare
			17	W-R			Spare
			18	O-R			Spare
			19	Bl-R			Spare
118	MHFA-14	Antenna Control Unit to Cable Panel	1	Bk	TB3201-1	TB5106-1	Elevator motor
			2	W	TB3201-2	TB5106-2	Elevator motor
			3	R	TB3201-3	TB5106-3	Elevator motor
			4	G	TB3201-4	TB5106-4	Elevator motor
			5	O	TB3201-5	TB5107-7	Upper elevator limit
			6	Bl	TB3201-6	TB5106-6	Lower elevator limit
			7	W-Bk	TB3201-7	TB5107-8	Elevator interlock
			8	R-Bk	TB3201-8	TB5103-17	+300 vdc missile coordinate detector
			9	G-Bk	TB3201-9	TB5107-5	Antenna elevator interlock
			10	O-Bk	TB3201-10	TB5107-10	R1 synchro bus
			11	Bl-Bk	TB3201-10	TB5107-11	R1 synchro bus
			12	Bk-W	TB3210-11	TB5107-12	R2 synchro bus
			13	R-W	TB3201-11	TB5107-13	R2 synchro bus

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TABLE 7-3

CABLING DATA (Continued)

EQUIPMENT TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
118	MHFA-14	(Continued)	14	G-W			Spare
119	MHFA-19	Transmitter to Hydrogen Thyratron Modulator	1	Bk	TB2005-1	TB2303-5	Undercurrent seal-in
			2	W	TB2005-2	TB2301-6	Radiate-standby control circuit
			3	R	TB2005-3	TB2301-8	Radiate control
			4	G	TB2005-4	TB2301-9	Radiate control
			5	O	TB2005-5	TB2301-5	Radiate-standby control circuit
			6	Bl	TB2005-6	TB2301-3	Standby transformer primary
			7	W-Bk	TB2005-7	TB2301-10	Standby light
			8	R-Bk	TB2005-8	TB2302-2	Indicator light circuit - common
			9	G-Bk	TB2005-9	TB2301-2	Radiate light
			10	O-Bk	TB2005-10	TB2302-3	Modulator volts - raise
			11	Bl-Bk	TB2006-1	TB2303-2	Modulator volts adjust - common
			12	Bk-W	TB2006-2	TB2302-6	Modulator volts - lower
			13	R-W	TB2006-3	TB2301-1	Modulator input volts indicator
			14	G-W	TB2006-4	TB2303-1	Modulator input volts indicator
			15	Bl-W	TB2006-5	TB2302-7	Time relay by-pass
			16	Bk-R	TB2006-6	TB2302-8	5-second time relay
			17	W-R			Spare
			18	O-R			Spare
			19	Bl-R			Spare
122	MHFA-19	Antenna Control Unit to Cable Panel	1	Bk			Spare
			2	W	TB3202-2	TB5105-2	115 vac
			3	R	TB3202-3	TB5105-3	Amplidyne overload indicator elevation
			4	G	TB3202-4	TB5105-4	Amplidyne overload indicator train
			5	O	TB3203-1	TB5105-5	Elevation signal dc
			6	Bl	TB3203-2	TB5105-6	Train signal dc
			7	W-Bk	TB3203-3	TB5105-7	-150 vdc T and M coordinate detector
			8	R-Bk	TB3203-5	TB5105-8	Ground
			9	G-Bk	TB3203-6	TB5105-9	Antenna power indicator
			10	O-Bk	TB3203-7	TB5105-10	Indicator - common
			11	Bl-Bk	TB3204-3	TB5102-17	115 vac nutator motor
			12	Bk-W	TB3204-3	TB5102-18	115 vac nutator motor
			13	R-W	TB3204-4	TB5102-19	115 vac nutator motor
			14	G-W	TB3204-4	TB5102-20	115 vac nutator motor
			15	Bl-W	TB3202-10	TB5102-16	Antenna safety switch

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TABLE 7-3

CABLING DATA (Continued)

EQUIPMENT TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
122	MHFA-19	(Continued)	16	Bk-R	TB3203-13	TB5103-5	Telescope tachometer train
			17	W-R	TB3202-12	TB5107-18	Telescope tachometer elevation
			18	O-R	TB3202-15	TB5107-20	Telescope tachometer elevation
			19	Bl-R	TB3203-9	TB5103-6	Telescope tachometer train
123	MCOS-7	Cable Panel to Power Distribution Panel	1	Bk	TB5106-14	J4902B	+12 vdc
			2	W	TB5106-15	J4902C	Run normal indicator
			3	R		J4902D	Spare
			4	G	TB5106-17	J4902F	Alarm
			5	O	TB5106-18	J4902G	Remote stop
			6	Bl	TB5106-19	J4902P	Alarm disconnect switch
			7	Br	TB5106-20	J4902S	Remote start
			8	(Shield)	TB5106-16	J4902E	Ground
124	DHFA-100	Cable Panel to Power Distribution Panel	1	Bk	TB5110-1	S4907-3	115 vac
			2	W	TB5110-2	S4907-4	115 vac
125	THFA-60	Power Distribution Panel to Cable Panel	1	Bk	S4902-7	TB5109-1	115 vac)
			2	W	S4902-8	TB5109-2	115 vac } 3Ø Generator No. 2
			3	R	S4902-9	TB5109-3	115 vac)
126	DHFA-9	Power Distribution Panel to Cable Panel	1	Bk	TB4904-5	TB5108-7	115 vac
			2	W	TB4904-6	TB5108-8	115 vac
127	MCOP-19	Cable Panel to Elevator	1	Bk	TB5107-1	TB7101-1	115 vac elevator lights
			2	W	TB5107-2	TB7101-2	115 vac elevator lights
			3	R	TB5107-3	TB7101-3	Cam switch
			4	G	TB5107-4	TB7101-4	Top stow switch
			5	O	TB5107-5	TB7101-5	Top stow switch
			6	Bl	TB5107-6	TB7101-6	Elevator lower circuit
			7	W-Bk	TB5107-7	TB7101-7	Elevator raise circuit
			8	R-Bk	TB5107-8	TB7101-8	Motor - common
			9	G-Bk	TB5107-9	TB7101-9	Spare
			10	O-Bk			Spare
			11	Bl-Bk			Spare
			12	Bk-W			Spare
			13	R-W			Spare
			14	G-W			Spare
			15	Bl-W			Spare
			16	Bk-R			Spare

DECLASSIFIED

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TABLE 7-3

CABLING DATA (Continued)

EQUIPMENT TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
127	MCOP-19	(Continued)	17	W-R			Spare
			18	O-R			Spare
			19	Bl-R			Spare
128	FHFA-4	Cable Panel to Elevator Motor	1	Bk	TB5106-1	T1	115 vac run
			2	W	TB5106-2	T2	115 vac run
			3	R	TB5106-3	T3	115 vac start
			4	G	TB5106-4	T4	115 vac start
129	DHFA-3	Cable Panel to Elevator Cam Interlock Switch	1	Bk	TB5107-3	Norm.Open.	Overtravel interlock
			2	W	TB5106-6	Common	Overtravel interlock
130	MHFA-14	Power Distribution Panel to Cable Panel	1	Bk	TB4904-1	TB5107-10	R1 synchro bus
			2	W	TB4904-1	TB5107-11	R1 synchro bus
			3	R	TB4904-2	TB5107-12	R2 synchro bus
			4	G	TB4904-2	TB5107-13	R2 synchro bus
			5	O	TB4904-3	TB5106-12	115 vac heaters
			6	Bl	TB4904-3	TB5106-12	115 vac heaters
			7	W-Bk	TB4904-4	TB5106-13	151 vac heaters
			8	R-Bk	TB4904-4	TB5106-13	115 vac heaters
			9	G-Bk	TB4904-7	TB5108-3	115 vac lights and outlets
			10	O-Bk	TB4904-7	TB5108-3	115 vac lights and outlets
			11	Bl-Bk	TB4904-8	TB5108-4	115 vac lights and outlets
			12	Bk-W	TB4904-8	TB5108-4	115 vac lights and outlets
			13	R-W	TB4903-7	TB5103-10	115 vac for coil of synchro
			14	G-W	TB4903-8	TB5103-11	Bus relay K4901
131	BX-14	Power Distribution Panel to Heater	1	Bk	TB4904-3	L1	115 vac hunter heater
			2	W	TB4904-4	L2	115 vac hunter heater
133	3 Leads No. 12 Wire	Power Distribution Panel to D-c Relay Box	1	Bk	S4902-4	TB6311-3	115 vac to relay
			2	W	S4902-5	TB6311-4	115 vac to relay
			3	R	S4902-6	TB6311-5	115 vac to relay

DECLASSIFIED

DECLASSIFIED

TABLE 7-3

CABLING DATA (Continued)

EQUIPMENT TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
134	DCOP-3	D-c Relay Box to Cable Panel	1	Bk	TB6311-2	TB5101-19	115 vac motor generator relay coil excitation
			2	W	TB6311-1	TB5101-18	115 vac motor generator relay coil excitation
136	MHFA-7	Power Distribution Panel to Roadside Front Wall Receptacle	1	Bk	TB4904-7	BK	Outlets
			2	W	TB4904-8	W	Outlets
			3	R	TB4904-7	R	Lights
			4	G	TB4904-8	Y	Lights
			5	O			Spare
			6	Bl			Spare
			7	W-Bk			Spare
137	FHFA-3	Roadside Rear Wall Receptacle to Curbside Rear Wall Receptacle	1	Bk	Outlet	Outlet	115 vac outlet
			2	W	Outlet	Outlet	115 vac outlet
			3	R	138 R & 140 Bk	139 Bk	115 vac light
			4	G	138 G & 140 W	139 W	115 vac light
138	FHFA-3	Power Distribution Unit to Roadside Rear Wall Receptacle	1	Bk	TB4904-1	Outlet	115 vac outlet
			2	W	TB4904-2	Outlet	115 vac outlet
			3	R	TB4904-7	137 R & 140 Bk	115 vac light
			4	G	TB4903-8	137 G & 140 W	115 vac light
139	DHFA-3	Curbside Rear Wall Receptacle to Curbside Rear Dome Light	1	Bk	137 R	Light	115 vac
			2	W	137 G	Switch	115 vac
140	DHFA-3	Roadside Rear Wall Receptacle to Roadside Rear Dome Light	1	Bk	137 R & 138 R	Light	115 vac
			2	W	137 G & 138 G	Switch	115 vac

DECLASSIFIED

TABLE 7-3

CABLING DATA (Continued)

EQUIPMENT TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
141	TCOP-9	D-c Relay Box to D-c Motor Generator	1	Bk	TB6311-6	TB2401-1	115 vac 3Ø
			2	W	TB6311-7	TB2401-2	115 vac 3Ø
			3	R	TB6311-8	TB2401-3	115 vac 3Ø
142	MHFF-7	D-c Motor Generator to Cable Panel	1	Bk	TB2401-4	TB5106-8	+445 vdc
			2	W	TB2401-4	TB5105-8	+445 vdc
			3	R	TB2401-5	TB5106-7	Ground
			4	G	TB2401-5	TB5106-7	Ground
			5	O			Spare
			6	Bl			Spare
			7	W-Bk			Spare
143	MCOP-7	Synchro Capacitor to Antenna	1	Bk	TB3601-1	TB3003-1	S1 - 36X train radar
			2	W	TB3601-2	TB3003-2	S2 - 36X train radar
			3	R	TB3601-3	TB3003-3	S3 - 36X train radar
			4	G	TB3601-4	TB3002-21	S1 - 36X elevation radar
			5	O	TB3601-5	TB3002-22	S2 - 36X elevation radar
			6	Bl	TB3601-6	TB3002-23	S3 - 36X elevation radar
			7	W-Bk			Spare
144	MHFF-19	Antenna to Cable Panel	1	Bk	TB3021-1	TB5102-11	Camera R1 and flag 1
			2	W	TB3021-2	TB5102-12	Camera R2
			3	R	TB3021-3	TB5102-13	Camera S1
			4	G	TB3021-4	TB5102-14	Camera S2
			5	O	TB3021-5	TB5102-15	Camera S3
			6	Bl	TB3021-6	TB5104-16	Camera flag 2
			7	W-Bk	TB3021-7	TB5104-17	Camera P1
			8	R-Bk	TB3021-8	TB5104-18	Camera P2
			9	G-Bk	TB3021-9	TB5104-19	Camera P1A
			10	O-Bk	TB3021-10	TB5104-20	Camera P2A
			11	Bl-Bk	TB3022-1	TB5105-11	S1 - 36X dial box - elevation
			12	Bk-W	TB3022-2	TB5105-12	S2 - 36X dial box - elevation
			13	R-W	TB3022-3	TB5105-13	S3 - 36X dial box - elevation
			14	G-W	TB3022-6	TB5105-14	S1 - 36X dial box - train
			15	Bl-W	TB3022-5	TB5105-15	S2 - 36X dial box - train
			16	Bk-R	TB3022-4	TB5105-16	S3 - 36X dial box - train
			17	W-R	TB3022-7	TB5105-17	Telephone
			18	O-R	TB3022-8	TB5105-18	Telephone

DECLASSIFIED

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TABLE 7-3

CABLING DATA (Continued)

EQUIPMENT TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
144	MHFF-19	(Continued)	19	Bl-R			Spare
145	DCOP-3	Cable Panel to D-c Relay Box	1	Bk	TB5103-15	TB6312-1	115 vac interlocks
			2	W	TB5103-16	TB6312-2	115 vac interlocks
146	MHFF-10	6-inch Tracking Camera to Antenna Pedestal	1	Bk	J3004-1	TB3008-1	R1 and transformer
			2	W	J3004-2	TB3008-10	R2 camera synchro
			3	R	J3004-3	TB3008-12	S1 camera synchro
			4	G	J3004-4	TB3005-1	S2 camera synchro
			5	O	J3004-5	TB3005-4	S3 camera synchro
			6	Bl	J3004-6	TB3005-5	Transformer
			7	W-Bk	J3004-7	TB3005-6	Flag light
			8	R-Bk	J3004-8	TB3006-8	Flag light
			9	G-Bk			Spare
			10	O-Bk			Spare
147	MHFF-10	15-inch Tracking Camera to Antenna Pedestal	1	Bk	J3005-1	TB3008-1	R1 and transformer
			2	W	J3005-2	TB3008-10	R2 camera synchro
			3	R	J3005-3	TB3008-12	S1 camera synchro
			4	G	J3005-4	TB3005-1	S2 camera synchro
			5	O	J3005-5	TB3005-4	S3 camera synchro
			6	Bl	J3005-6	TB3005-5	Transformer
			7	W-Bk	J3005-7	TB3008-8	Flag light
			8	R-Bk	J3005-8	TB3008-7	Flag light
			9	G-Bk			Spare
			10	O-Bk			Spare
148	MHFF-7	Cable Panel to Transmitter	1	Bk	TB5111-1	TB2006-7	Tuning indicator meter
			2	W	TB5111-2	TB2006-9	Tuning pot finger
			3	R	TB5111-3	TB2006-8	Tuning pot
			4	G	TB5111-8	TB2006-10	Ground
			5	O			Spare
			6	Bl			Spare
			7	W-Bk			Spare

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TABLE 7-3

CABLING DATA (Continued)

EQUIPMENT TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
149	MCOP-10	Modulator Variac Control to Hydrogen Thyratron Modulator	1	Bk	TB2501-8	TB2304-3	115 vac input to voltage regulator
			2	W	TB2501-8	TB2304-3	115 vac input to voltage regulator
			3	R	TB2501-1	TB2304-5	Voltage regulator output
			4	G	TB2501-1	TB2304-5	Voltage regulator output
			5	O	TB2501-4	TB2304-4	Common input and output of voltage regulator
			6	Bl	TB2501-4	TB2304-4	Common input and output of voltage regulator
			7	W-Bk	TB2502-1	TB2302-6	One phase to motor
			8	R-Bk	TB2502-2	TB2302-9	Common lead to motor
			9	G-Bk	TB2502-3	TB2302-3	One phase to motor
			10	O-Bk			Spare
151	RG-9/U	Echo Box to Transmitter			J4742	J2030	Coax for test set dipole
152	RG-11/U	Cable Panel to Missile Oscillator Preamplifier			J5102	J4301 (VIA J2003)	Missile agc
153	RG-11/U	Cable Panel to Missile Oscillator Preamplifier			J5118	J4303 (VIA J2004)	Missile afc
154	RG-11/U	Trailer Cable Panel to Transmitter			J5104	J2028	Target agc
155	RG-13/U	Cable Panel to Transmitter			J5105	J2029	Target i-f (30 mc)
157	RG-27/U	Hydrogen Thyratron Modulator to Transmitter			J2301	J2025	High-voltage pulse cable
160	RG-13/U	Cable Panel to Missile Oscillator Preamplifier			J5101	J4302	Missile i-f
161	RG-11/U	Cable Panel to Test Point Near Transmitter			J5106		Test point
162	RC-11/U	Cable Panel to Hydrogen Thyratron Modulator			J5103	J2305	Modulator trigger

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
201	DHFA-4	Cable Panel to Communications Equipment	1	Bk	TB5158-1	TB4850-1	115 vac communications equipment
			2	W	TB5158-2	TB4850-2	115 vac communications equipment
202	DHFA-14	Cable Panel to Console PPI Frame	1	Bk	TB5158-3	TB6-13	115 vac PPI frame
			2	W	TB5158-4	TB6-17	115 vac PPI frame
203	MCOP-7	Console Missile Frame to Missile Cross-Pointer Meter	1	Bk	TB2M-30	TB2801-1	Cross-pointer meter - train in
			2	W	TB1M-15	TB2801-2	Cross-pointer meter - train out
			3	R	TB2M-31	TB2801-3	Cross-pointer meter - elevation in
			4	G	TB1M-16	TB2801-4	Cross-pointer meter - elevation out
			5	O	TB1M-1	TB2801-5	Ground
			6	Bl	TB4M-11	TB2801-6	115 vac illumination
			7	W-Bk	TB4M-14	TB2801-7	115 vac illumination
204	MCOP-10	Telescope Final Amplifier and Telescope Amplifier Power Unit to Console Missile Frame	1	Bk	TB1801-5	TB4M-10	115 vac main power
			2	W	TB1801-6	TB4M-13	115 vac main power
			3	R	TB1801-5	TB4M-10	115 vac main power
			4	G	TB1801-6	TB4M-13	115 vac main power
			5	O	TB1801-3	TB3M-2	Ground
			6	Bl	TB1801-4	TB3M-1	Elevation signal from telescope servo preamplifier
			7	W-Bk	TB1801-13	TB3M-4	Train signal from telescope servo preamplifier
			8	R-Bk	TB1801-14	TB3M-3	Ground
			9	G-Bk			Spare
			10	O-Bk			Spare
205	MHFA-19	Cable Panel to Console PPI Frame	1	Bk	TB5156-1	TB9-52	115 vac antenna control
			2	W	TB5156-2	TB7-34	115 vac antenna control
			3	R	TB5156-3	TB10-61	Amplidyne overload - elevation
			4	G	TB5156-4	TB10-63	Amplidyne overload - train
			5	O	TB5156-5	TB7-24	Elevation signal - dc
			6	Bl	TB5156-6	TB7-25	Train signal - dc
			7	W-Bk	TB5156-7	TB7-26	Spare
			8	R-Bk	TB5156-8	TB7-27	Spare
			9	G-Bk	TB5156-9	TB16-72	Antenna power indicator light
			10	O-Bk	TB5156-10	TB16-71	Indicator light - common

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals From	Terminals To	Function
205	MHFA-19	(Continued)	11	Bl-Bk	TB5156-11	TB18-4	S1 - 2X elevation radar
			12	Bk-W	TB5156-12	TB18-5	S2 - 2X elevation radar
			13	R-W	TB5156-13	TB10-59	S3 - 2X elevation radar
			14	G-W	TB5154-1	TB19-31	R1 synchro bus
			15	Bl-W	TB5154-2	TB19-31	R1 synchro bus
			16	Bk-R	TB5154-3	TB19-32	R2 synchro bus
			17	W-R	TB5154-4	TB19-32	R2 synchro bus
			18	O-R			Spare
			19	Bl-R			Spare
207	MHFA-26	Cable Panel to Console PPI Frame	1	Bk	TB5162-1	TB8-43	Oscillator current - negative
			2	W	TB5162-2	TB8-42	Oscillator current - positive
			3	R	TB5162-3	TB9-54	Radiate control
			4	G	TB5162-4	TB9-55	Radiate control
			5	O	TB5162-5	TB16-74	Transmitter filament ON light
			6	Bl	TB5162-6	TB16-76	Standby light
			7	W-Bk	TB5162-7	TB16-77	Indicator circuit - common
			8	R-Bk	TB5162-8	TB16-75	Radiate light
			9	G-Bk	TB5162-9	TB9-46	Modulator volts - raise
			10	O-Bk	TB5162-10	TB9-49	Modulator volts adjust - common
			11	Bl-Bk	TB5162-11	TB9-50	Modulator volts - lower
			12	Bk-W	TB5162-12	TB16-73	Nutator motor ON light
			13	R-W	TB5162-13	TB8-37	Nutator motor control
			14	G-W	TB5162-14	TB15-7	Strip heater
			15	Bl-W	TB5162-15	TB7-32	Strip heater
			16	Bk-R	TB5162-16	TB8-40	Modulator input volts indicator
			17	W-R	TB5162-17	TB8-41	Modulator input volts indicator
			18	O-R	TB5162-18	TB8-36	Transmitter control
			19	Bl-R	TB5162-19	TB6-19	Transmitter control
			20	R-G			Spare
			21	O-G			Spare
			22	Bk-W-R			Spare
			23	W-Bk-R			Spare
			24	R-Bk-W			Spare
			25	G-Bk-W			Spare
			26	O-Bk-W			Spare
208	MHFA-14	Cable Panel to Console Target Frame	1	Bk	TB5157-1	TB3T-2	+200 vdc
			2	W	TB5157-2	TB3T-6	Ground
			3	R	TB5157-3	TB3T-7	Manual auto. frequency control relay

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals From	Terminals To	Function
208	MHFA-14	(Continued)	4	G	TB5157-4	TB3T-8	-150 vdc
			5	O	TB5157-5	TB3T-3	Tuner
			6	Bl	TB5157-6	TB3T-1	Local oscillator +250 vdc
			7	W-Bk	TB5157-7	TB3T-4	-345 vdc
			8	R-Bk	TB5157-8	TB3T-9	Spare
			9	G-Bk	TB5157-9	TB3T-10	Spare
			10	O-Bk	TB5157-10	TB3T-11	Spare
			11	Bl-Bk	TB5157-11	TB3T-12	Spare
			12	Bk-W	TB5157-12	TB3T-13	Spare
			13	R-W			Spare
			14	G-W			Spare
209	MHFF-19	Cable Panel to Console PPI Frame	1	Bk	TB5161-1	TB9-56	Standby control
			2	W	TB5161-2	TB16-78	Modulator ON light
			3	R	TB5161-3	TB9-52	Modulator volts adjust - power
			4	G	TB5161-4	TB9-57	Standby control
			5	O	TB5161-7	TB7-34	Modulator volts adjust - power
			6	Bl	TB5161-8	TB5-2	Timing relay coil
			7	W-Bk	TB5161-9	TB5-3	Timing relay coil
			8	R-Bk	TB5161-10	TB5-5	Equipment start-stop
			9	G-Bk	TB5161-13	TB14-33	115 vac (300 vdc ON-OFF relay)
			10	O-Bk	TB5161-14	TB14-34	115 vac (300 vdc ON-OFF relay)
			11	Bl-Bk	TB5161-17	TB15-7	Strip heater supply
			12	Bk-W	TB5161-18	TB7-32	Strip heater supply
			13	R-W	TB5160-10	TB18-16	S1 - 1X synchro train
			14	G-W	TB5160-11	TB19-17	S2 - 1X synchro train
			15	Bl-W	TB5160-12	TB19-18	S3 - 1X synchro train
			16	Bk-R	TB5161-16	TB14-27	+300 vdc to 24-cycle dist. unit
			17	W-R	TB5161-15	TB14-31	+200 vdc to T and M coord. det.
			18	O-R			Spare
			19	Bl-R			Spare
210	MHFF-19	Console Missile Frame to Console Target Frame	1	Bk	TB1M-6	TB1T-13	-150 vdc missile receiver
			2	W	TB1M-7	TB1T-14	-105 vdc missile receiver
			3	R	TB1M-10	TB1T-10	+200 vdc missile receiver
			4	G	TB4M-7	TB4T-8	-150 vdc missile indicator
			5	O	TB4M-9	TB4T-9	115 vac filament supply
			6	Bl	TB4M-10	TB4T-10	115 vac filament supply
			7	W-Bk	TB4M-11	TB4T-11	115 vac filament supply

DECLASSIFIED

TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals From	Terminals To	Function
210	MHFF-19	(Continued)	8	R-Bk	TB4M-12	TB4T-12	115 vac filament supply
			9	G-Bk	TB4M-13	TB4T-13	115 vac filament supply
			10	O-Bk	TB4M-14	TB4T-14	115 vac filament supply
			11	Bl-Bk			Spare
			12	Bk-W			Spare
			13	R-W			Spare
			14	G-W			Spare
			15	Bl-W			Spare
			16	Bk-R			Spare
			17	W-R			Spare
			18	O-R			Spare
			19	Bl-R			Spare
211	MHFF-19	Console Missile Frame to Console Target Frame	1	Bk	TB4M-6	TB6-20	36X T and E lock in relay
			2	W	TB4M-8	TB6-21	36X T and E lock in relay
			3	R	TB22M-1	TB22T-1	115 vac
			4	G	TB22M-2	TB22T-2	Slew relay control
			5	O	TB22M-3	TB22T-3	Slew motor control
			6	Bl	TB22M-4	TB22T-4	R1 synchro bus
			7	W-Bk	TB22M-5	TB22T-5	R2 synchro bus
			8	R-Bk	TB22M-6	TB22T-6	Track motor control
			9	G-Bk	TB22M-7	TB22T-7	1 ct rotor slew signal
			10	O-Bk	TB22M-8	TB22T-8	D-c tachometer slew
			11	Bl-Bk	TB22M-9	TB22T-9	D-c tachometer missile
			12	Bk-W	TB22M-16	TB22T-16	Ground
			13	R-W	TB23M-15	TB5-6	Agc servo gain relay
			14	G-W	TB23M-16	TB5-7	Agc servo gain relay
			15	Bl-W	TB1M-2	TB14-37	Strip heater
			16	Bk-R	TB1M-3	TB14-38	Strip heater
			17	W-R	TB1M-13	TB13-21	Fan
			18	O-R	TB1M-14	TB13-22	Fan
			19	Bl-R			Spare
212	MCOP-7	Cable Panel to 24-cycle Reference Voltage Distribution Unit	1	Bk	TB5161-16	TB2701-4	+300 vdc
			2	W	TB5161-20	TB2701-5	Ground
			3	R	TB5161-8	TB2701-8	115 vac filament
			4	G	TB5161-9	TB2701-9	115 vac filament
			5	O	TB5160-7	TB2701-1	24-cycle elevation - in
			6	Bl	TB5160-9	TB2701-2	24-cycle train - in
			7	W-Bk	TB5160-8	TB2701-3	24-cycle ground - in

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals From	Terminals To	Function
213	DCOP-3	24-cycle Reference Voltage Distribution Unit to System Control Switching Unit	1	Bk	TB2701-6	TB1503-6	Pulse-time modulation - on
			2	W	TB2701-7	TB1503-7	Pulse-time modulation - on
214	MCOS-2	24-cycle Reference Voltage Distribution Unit to Console PPI Frame	1	Bk	TB2701-11	TB15-3	24-cycle elevation to auto
			2	W	TB2701-12	TB15-5	24-cycle train to auto
			3	(Shield)	TB2701-10	TB15-4	24-cycle ground to auto
215	No. 3 High Voltage	Console Missile Frame to Console PPI Frame	1	Bk	TB2M-23	TB11-2	+2000 vdc
			2	W	TB2M-24	TB11-5	-2000 vdc and 6.3 vac
			3	R	TB2M-25	TB11-4	-2000 vdc and 6.3 vac
216	MHFF-19	Console Missile Frame to Console PPI Frame	1	Bk	TB23M-1	TB19-19	R2 - 1X train
			2	W	TB23M-2	TB19-20	R2 - 36X train
			3	R	TB23M-3	TB18-2	Ground
			4	G	TB23M-4	TB18-7	R2 - 2X elevation
			5	O	TB23M-5	TB18-8	R2 - 36X elevation
			6	Bl	TB23M-10	TB18-1	Ac tachometer - elevation
			7	W-Bk	TB23M-11	TB18-3	Ac motor - elevation
			8	R-Bk	TB23M-12	TB18-15	Ac motor - train
			9	G-Bk	TB23M-13	TB18-13	Ac tachometer - train
			10	O-Bk	TB23M-14	TB18-14	Ground
			11	Bl-Bk	TB3M-12	TB15-1	Train signal - ac
			12	Bk-W	TB3M-13	TB15-2	Elevation signal - ac
			13	R-W	TB22M-10	TB17-85	S1 fine range
			14	G-W	TB22M-11	TB17-86	S2 fine range
			15	Bl-W	TB22M-12	TB17-87	S3 fine range
			16	Bk-R	TB22M-13	TB17-88	S1 coarse range
			17	W-R	TB22M-14	TB17-89	S2 coarse range
			18	O-R	TB22M-15	TB17-90	S3 coarse range
			19	Bl-R			Spare
217	MCOS-2	24-cycle Reference Voltage Distribution Unit to Console Missile Frame	1	Bk	TB2701-13	TB23M-7	24-cycle elevation to missile coordinate detector
			2	W	TB2701-14	TB23M-6	24-cycle train to missile coordinate detector
			3	(Shield)	TB2701-15	TB23M-8	24-cycle ground

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals From	Terminals To	Function
218	MCOP-10	D-c Voltage Regulator to Console Missile Frame	1	Bk	TB2901-6	TB2M-18	+300 vdc missile range unit
			2	W	TB2901-7	TB2M-19	+300 vdc T and E synchronizer
			3	R	TB2902-15	TB2M-20	+300 vdc tel. preamp. and hand-crank servo amp.
			4	G	TB2901-8	TB2M-21	+300 vdc missile indicator
			5	O	TB2901-12	TB1M-4	+300 vdc missile range unit
			6	Bl	TB2902-22	TB2M-17	Ground (300 vdc)
			7	W-Bk			Spare
			8	R-Bk			Spare
			9	G-Bk			Spare
			10	O-Bk			Spare
219	DCOP-3	Cable Panel to Console PPI Frame	1	Bk	TB5158-5	TB13-24	+445 vdc
			2	W	TB5158-6	TB13-25	Ground
224	DHFA-3	Cable Panel to Heater Motor	1	Bk	TB5159-3	TBL1	115 vac
			2	W	TB5159-4	TBL2	115 vac
229	DHFA-4	Cable Panel to Operations Trailer Outlets	1	Bk	TB5158-7	Outlet W	115 vac
			2	W	TB5158-8	Outlet Y	115 vac
230	DHFA-4	Cable Panel to Trailer Lights	1	Bk	TB5159-5	Lights G	115 vac
			2	W	TB5159-6	Lights R	115 vac
233	MCOP-10	Cable Panel to D-c Voltage Regulator	1	Bk	TB5158-5	TB2901-14	+445 vdc unregulated
			2	W	TB5158-6	TB2902-22	Ground
			3	R	TB5161-12	TB2901-4	+300 vdc modulator
			4	G	TB5161-19	TB2902-16	+300 vdc remote range indicator
			5	O	TB5161-8	TB2902-27	115 vac
			6	Bl	TB5161-9	TB2902-28	115 vac
			7	W-Bk			Spare
			8	R-Bk			Spare
			9	G-Bk			Spare
			10	O-Bk			Spare

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
234	DCOP-14	Operations Cable Panel to Recording Equipment Cable Panel	1	Bk	TB5158-3	TB5203-11	115 vac - in
			2	W	TB5158-4	TB5203-12	115 vac - in
235	MHFF-19	Operations Cable Panel to Recording Equipment Cable Panel	1	Bk	TB5154-1	TB5201-1	R1 synchro bus
			2	W	TB5154-3	TB5201-2	R2 synchro bus
			3	R	TB5153-1	TB5201-12	S1 - 36X elevation
			4	G	TB5153-2	TB5201-13	S2 - 36X elevation
			5	O	TB5153-3	TB5201-14	S3 - 36X elevation
			6	Bl	TB5153-4	TB5201-6	S1 - 36X train
			7	W-Bk	TB5153-5	TB5201-7	S2 - 36X train
			8	R-Bk	TB5153-6	TB5201-8	S3 - 36X train
			9	G-Bk	TB5153-9	TB5203-1	Cameras R1 and flag 1
			10	O-Bk	TB5153-10	TB5203-2	Cameras R2
			11	Bl-Bk	TB5153-11	TB5203-3	Cameras synchro S1
			12	Bk-W	TB5153-12	TB5203-4	Cameras synchro S2
			13	R-W	TB5153-13	TB5203-5	Cameras synchro S3
			14	G-W	TB5153-14	TB5203-6	Cameras flag 2
			15	Bl-W	TB5153-15	TB5203-7	Cameras pilot light P1
			16	Bk-R	TB5153-16	TB5203-8	Camera pilot light P2
			17	W-R	TB5153-17	TB5203-9	Camera pilot light P1A
			18	O-R	TB5153-18	TB5203-10	Camera pilot light P2A
			19	Bl-R	TB5153-20	TB5203-19	-150 vdc to remote range indicator
236	MHFF-19	Operations Cable Panel to Recording Equipment Cable Panel	1	Bk	TB5201-3	TB5160-10	S1 - 1X train
			2	W	TB5201-4	TB5160-11	S2 - 1X train
			3	R	TB5201-5	TB5160-12	S3 - 1X train
			4	G	TB5201-9	TB5160-3	S1 - 2X elevation
			5	O	TB5201-10	TB5160-2	S2 - 2X elevation
			6	Bl	TB5201-11	TB5160-1	S3 - 2X elevation
			7	W-Bk	TB5201-27	TB5151-18	S1 - 1X computer range synchro
			8	R-Bk	TB5201-28	TB5151-19	S2 - 1X computer range synchro
			9	G-Bk	TB5201-29	TB5151-20	S3 - 1X computer range synchro
			10	O-Bk	TB5201-30	TB5151-15	S1 - 36X computer range synchro
			11	Bl-Bk	TB5201-31	TB5151-16	S2 - 36X computer range synchro
			12	Bk-W	TB5201-32	TB5151-17	S3 - 36X computer range synchro
			13	R-W	TB5203-17	TB5161-19	+300 vdc
			14	G-W	TB5203-18	TB5161-20	Ground
			15	Bl-W	TB5201-33	TB5157-7	-345 vdc
			16	Bk-R			Spare
			17	W-R			Spare
			18	O-R			Spare
			19	Bl-R			Spare

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals From	Terminals To	Function
237	MHFF-19	Console PPI and Target Frame to Recording Equipment Cable Panel	1	Bk	TB5201-15	TB16-70	S1 target range 1000 yds/rev
			2	W	TB5201-16	TB17-80	S2 target range 1000 yds/rev
			3	R	TB5201-17	TB17-81	S3 target range 1000 yds/rev
			4	G	TB5201-18	TB17-82	S1 target range 100,000 yds/rev
			5	O	TB5201-19	TB17-83	S2 target range 100,000 yds/rev
			6	Bl	TB5201-20	TB17-84	S3 target range 100,000 yds/rev
			7	W-Bk	TB5201-21	TB17-85	S1 missile range 1000 yds/rev
			8	R-Bk	TB5201-22	TB17-86	S2 missile range 1000 yds/rev
			9	G-Bk	TB5201-23	TB17-87	S3 missile range 1000 yds/rev
			10	O-Bk	TB5201-24	TB17-88	S1 missile range 100,000 yds/rev
			11	Bl-Bk	TB5201-25	TB17-89	S2 missile range 100,000 yds/rev
			12	Bk-W	TB5201-26	TB17-90	S3 missile range 100,000 yds/rev
			13	R-W	TB5202-8	TB19-26	Train meter target
			14	G-W	TB5202-9	TB19-29	Ground
			15	Bl-W	TB5202-10	TB19-28	Elevator meter target
			16	Bk-R	TB5202-16	TB4T-2	Missile auto range indicator
			17	W-R	TB5202-17	TB4T-1	Target auto. range indicator
			18	O-R	TB5202-18	TB4T-3	Range indicator circuit - common
			19	Bl-R			Spare
238	MCOP-7	Console Missile Frame to Recording Equipment Cable Panel	1	Bk	TB5202-12	TB1M-15	Horizontal missile cross-pointer meter
			2	W	TB5204-14	TB1M-16	Vertical missile cross-pointer meter
			3	R			Spare
			4	G			Spare
			5	O	TB5202-13	TB1M-1	Ground
			6	Bl			Spare
			7	W-Bk			Spare
239	MHFF-19	Recording Equipment Cable Panel to System Control Switching Unit	1	Bk	TB5202-1	TB1503-13	115 vac indicator - common
			2	W	TB5202-2	TB1503-1	Indicator light - local
			3	R	TB5202-3	TB1503-2	Ind. light - telescope unit
			4	G	TB5202-4	TB1503-4	Ind. light - time motor comp. - ON
			5	O	TB5202-5	TB1502-12	Ind. light - auto train
			6	Bl	TB5202-6	TB1502-15	Ind. light - auto elevation
			7	W-Bk	TB5202-7	TB1503-5	Ind. light - pulse-time mod.
			8	R-Bk	TB5203-13	TB1505-2	Remote camera ON-OFF
			9	G-Bk	TB5203-14	TB1505-3	Remote camera mark

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
239	MHFF-19	(Continued)	10	O-Bk	TB5203-15	TB1503-9	Remote camera ON-OFF
			11	Bl-Bk	TB5203-16	TB1503-10	Remote camera mark
			12	Bk-W	TB5202-19	TB1503-8	Target-missile control ind.
			13	R-W	TB5202-20	TB1503-11	Target-missile control ind.
			14	G-W			Spare
			15	Bl-W			Spare
			16	Bk-R			Spare
			17	W-R			Spare
			18	O-R			Spare
			19	Bl-R			Spare
240	MCOP-10	D-c Voltage Regulator to Console Target Frame	1	Bk	TB2901-5	TB2T-17	300 vdc target range unit
			2	W	TB2902-17	TB2T-18	300 vdc T and M range det.
			3	R	TB2901-9	TB2T-19	300 vdc target indicator unit
			4	G	TB2901-10	TB2T-21	300 vdc T and M coord. det.
			5	O	TB2901-11	TB2T-22	300 vdc target receiver
			6	Bl	TB2902-22	TB2T-31	Ground (300 vdc)
			7	W-Bk			Spare
			8	R-Bk			Spare
			9	G-Bk			Spare
			10	O-Bk			Spare
241	MHFF-19	System Control Switching Unit to Console	1	Bk	TB1503-8	TB5-7	115 vac for coax switch
			2	W			Spare
			3	R	TB1502-7	TB19-30	Train slew PPI search
			4	G	TB1502-10	TB19-21	Handcrank de-energizing relay - train
			5	O	TB1502-11	TB12-7	Auto track relay - train
			6	Bl	TB1502-13	TB12-14	Handcrank de-energizing relay - elevation
			7	W-Bk	TB1502-14	TB12-8	Auto track relay - elevation
			8	R-Bk			Spare
			9	G-Bk			Spare
			10	O-Bk			Spare
			11	Bl-Bk	TB1504-1	TB18-10	S1 - 36X radar - elevation
			12	Bk-W	TB1504-2	TB18-11	S2 - 36X radar - elevation
			13	R-W	TB1504-3	TB18-12	S3 - 36X radar - elevation
			14	G-W	TB1504-4	TB19-22	S1 - 36X radar - train
			15	Bl-W	TB1504-5	TB19-23	S2 - 36X radar - train

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DECLASSIFIED

TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
241	MHFF-19	(Continued)	16	Bk-R	TB1504-6	TB19-24	S3 - 36X radar - train
			17	W-R			Spare
			18	O-R			Spare
			19	Bl-R			Spare
242	MCOP-10	Console to System Control Switching Unit	1	Bk	TB1502-6	TB6-20	36X T and E lock in relay
			2	W	TB1505-1	TB18-14	Ground
			3	R			Spare
			4	G	TB1504-9	TB6-21	36X T and E lock in relay
			5	O	TB1504-10	TB12-9	Train slew
			6	Bl	TB1504-11	TB12-10	Elevation slew
			7	W-Bk	TB1504-12	TB18-9	T and E handcrank de-energizing relay
			8	R-Bk	TB1504-13	TB13-26	T and E auto track relay
			9	G-Bk			Spare
			10	O-Bk			Spare
243	MHFF-19	Cable Panel to System Control Switching Unit	1	Bk	TB5151-3	TB1501-1	S1 - 36X computer - elevation
			2	W	TB5160-6	TB1501-2	S1 - 36X radar - elevation
			3	R	TB5151-6	TB1501-3	R1 - 36X computer - elevation
			4	G	TB5151-4	TB1501-4	S2 - 36X computer - elevation
			5	O	TB5160-5	TB1501-5	S2 - 36X radar - elevation
			6	Bl	TB5151-7	TB1501-6	R2 - 36X computer - elevation
			7	W-Bk	TB5151-5	TB1501-7	S3 - 36X computer - elevation
			8	R-Bk	TB5160-4	TB1501-8	S3 - 36X radar - elevation
			9	G-Bk	TB5151-8	TB1501-9	R3 - 36X computer - elevation
			10	O-Bk	TB5151-9	TB1501-10	S1 - 36X computer - train
			11	Bl-Bk	TB5160-13	TB1501-11	S1 - 36X radar - train
			12	Bk-W	TB5151-12	TB1501-12	R1 - 36X computer - train
			13	R-W	TB5151-10	TB1501-13	S2 - 36X computer - train
			14	G-W	TB5160-14	TB1501-14	S2 - 36X radar - train
			15	Bl-W	TB5151-13	TB1501-15	R2 - 36X computer - train
			16	Bk-R	TB5151-11	TB1502-1	S3 - 36X computer - train
			17	W-R	TB5160-15	TB1502-2	S3 - 36X radar - train
			18	O-R	TB5151-14	TB1502-3	R3 - 36X computer - train
			19	Bl-R			Spare

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
244	MCOP-10	Cable Panel to System Control Switching Unit	1	Bk	TB5161-8	TB1503-11	115 vac
			2	W	TB5161-9	TB1503-12	115 vac
			3	R	TB5152-4	TB1504-15	Computer time motor - ON
			4	G	TB5152-3	TB1503-3	Computer time motor - ON
			5	O	TB5157-18	TB1502-4	Telescope elevation tachometer
			6	Bl	TB5161-5	TB1502-5	Telescope train tachometer
			7	W-Bk	TB5157-20	TB1504-7	Telescope elevation tachometer
			8	R-Bk	TB5161-6	TB1504-8	Telescope train tachometer
			9	G-Bk			Spare
			10	O-Bk			Spare
245	MCOP-10	System Control Switching Unit to Telescope	1	Bk	TB1502-4	TB9112-9	Elevation d-c tachometer
			2	W	TB1502-5	TB9111-8	Train d-c tachometer
			3	R	TB1502-8	TB9112-10	Telescope train slew
			4	G	TB1502-9	TB9112-7	Telescope elevation slew
			5	O	TB1504-7	TB9111-7	Telescope elevation tachometer
			6	Bl	TB1504-8	TB9112-12	Telescope train tachometer
			7	W-Bk	TB1505-1	TB9112-8	Ground
			8	R-Bk			Spare
			9	G-Bk			Spare
			10	O-Bk			Spare
246	MHFF-19	Cable Panel to Telescope	1	Bk	TB5160-10	TB9111-1	S1 - 1X train
			2	W	TB5160-11	TB9111-2	S2 - 1X train
			3	R	TB5160-12	TB9111-3	S3 - 1X train
			4	G	TB5160-13	TB9111-4	S1 - 36X train
			5	O	TB5160-14	TB9111-5	S2 - 36X train
			6	Bl	TB5160-15	TB9111-6	S3 - 36X train
			7	W-Bk	TB5154-1	TB9114-1	R1 synchro bus
			8	R-Bk	TB5154-3	TB9114-2	R2 synchro bus
			9	G-Bk	TB5160-1	TB9115-1	S3 - 2X elevation
			10	O-Bk	TB5160-2	TB9115-2	S2 - 2X elevation
			11	Bl-Bk	TB5160-3	TB9115-3	S1 - 2X elevation
			12	Bk-W	TB5160-6	TB9115-4	S1 - 36X elevation
			13	R-W	TB5160-5	TB9115-5	S2 - 36X elevation
			14	G-W	TB5160-4	TB9115-6	S3 - 36X elevation
			15	Bl-W			Spare
			16	Bk-R			Spare
			17	W-R			Spare

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
246	MHFF-19	(Continued)	18	O-R			Spare
			19	Bl-R			Spare
247	MCOP-10	Telescope to Console	1	Bk	TB9113-1	TB3M-9	R2 - CT 2X - elevation
			2	W	TB9113-2	TB3M-10	R1 - CT 36X - elevation
			3	R	TB9113-3	TB3M-14	Ground
			4	G	TB9113-4	TB3M-5	Elevation signal tachometer
			5	O	TB9113-9	TB3M-6	R2 - CT 1X train
			6	Bl	TB9113-10	TB3M-7	R2 - CT 36X train
			7	W-Bk	TB9113-11	TB4M-4	Ground
			8	R-Bk	TB9113-12	TB4M-5	Train signal tachometer
			9	G-Bk			Spare
			10	O-Bk			Spare
248	MCOP-7	Telescope to Telescope Final Amplifier and Telescope Amplifier Power Unit	1	Bk	TB9114-7	TB1801-15	Control field motor - train
			2	W	TB9114-8	TB1801-16	Control field motor - train
			3	R	TB9114-9	TB1801-2	A-c signal motor - elevation
			4	G	TB9114-10	TB1801-1	A-c signal motor - elevation
			5	O			Spare
			6	Bl			Spare
			7	W-Bk			Spare
249	Microphone Cable	Target Receiver to Power Control Unit (Selector Switch K1405)	1	Bk	TB101T-11	TB1402-21	Target receiver agc
			2	(Shield)	TB101T-12		Ground
250	Microphone Cable	Missile Receiver to Power Control Unit (Selector Switch K1405)	1	Bk	TB101M-11	TB1402-22	Missile receiver agc
			2	(Shield)	TB101M-12		Ground
251	Microphone Cable	Missile Coordinate Detector to Power Control Unit (Selector Switch K1405)	1	Bk	TB602-29	TB1402-20	Missile coordinate detector agc
			2	(Shield)	TB602-30		Ground
252	Microphone Cable	Target and Manual Coordinate Detector to Power Control Unit (Selector Switch K1405)	1	Bk	TB1201-3	TB1402-16	Target and manual coordinate detector agc
			2	(Shield)	TB1201-4		Ground

DECLASSIFIED
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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
253	MCOP-7	Console Missile Frame to Cable Panel	1	Bk	TB1M-11	TB5152-7	Discriminator
			2	W	TB1M-12	TB5152-11	Fine tuning pot arm
			3	R	TB2M-28	TB5152-12	Fine tuning pot end
			4	G	TB2M-29	TB5152-9	Tuning indicator meter
			5	O	TB1M-5	TB5152-13	Ground
			6	Bl			Spare
			7	W-Bk			Spare
254	MCOP-7	Cable Panel to Console Target Channel	1	Bk	TB5154-5	TB22T-11	R1 remote range synchro
			2	W	TB5154-6	TB22T-12	R2 remote range synchro
			3	R	TB5154-7	TB22T-13	S1 remote range synchro
			4	G	TB5154-8	TB22T-14	S2 remote range synchro
			5	O	TB5154-9	TB22T-15	S3 remote range synchro
			6	Bl	TB5154-13	TB22T-10	-150 vdc to remote range indicator
			7	W-Bk			Spare
255	DCOP-6	D-c Voltage Regulator to Console Target Frame	1	Bk	TB2902-26	Interlock F	Interlock circuit
			2	W	TB2902-24	Interlock AT	Interlock circuit
256	MHFF-7	Handcrank Isolation Relay to Console	1	Bk	TB2601-1	TB15-8	R1 isolation voltage - elevation
			2	W	TB2601-2	TB15-9	R1 isolation voltage - train
			3	R	TB2601-3	TB19-32	R2 synchro bus (coil)
			4	G	TB2601-4	TB15-1	A-c signal IN - train
			5	O	TB2601-5	TB15-10	A-c signal OUT - train
			6	Bl	TB2601-6	TB15-2	A-c signal IN - elevation
			7	W-Bk	TB2601-7	TB15-11	A-c signal OUT - elevation
304	TTOP-3	30-wire Box to Relay Box	1	W-Bk	Line 5	TB4809-18 & 17	Telephone lines
			2	R-Bk	Line 6	TB4809-20 & 19	Telephone lines
			3	G-Bk			Spare

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
305	TTOP-15	30-wire Box to BD 72	1	W-Bk	Line 1	Line 1	
			2	R-Bk	Line 2	Line 2	
			3	G-Bk	Line 3	Line 3	
			4	O-Bk	Line 4	Line 4	
			5	Bl-Bk	Line 10	Line 10	
			6	Br-Bk			Spare
			7	S-Bk	Line 30	G-Bk of Cable 309	
			8	Y-Bk			Spare
			9	P-Bk			Spare
			10	T-Bk	Line 11	Line 11	Spare
			11	Pk-Bk			Spare
			12	R-W			Spare
			13	G-W			Spare
			14	O-W			Spare
			15	Bl-W			Spare
336	DCOP-3	Communications Equipment to Console Radio Foot Switch (S4813)	1	Bk	TB4850-1	Foot Switch	115 vac
			2	W	K4811	Foot Switch	115 vac
401	DCOP-3	Cable Panel Recording Equipment to Switch No. S5202	1	Bk	TB5201-1	S5202	R1 synchro bus
			2	W	TB5201-2	S5202	R2 synchro bus
402	DCOP-3	Switch No. S5202 to Dial Box	1	Bk	S5202-3	TB8106-11	R1 synchro bus
			2	W	S5202-4	TB8107-11	R2 synchro bus
403	MHFF-19	Recording Equipment Cable Panel to Dial Box	1	Bk	TB5201-3	TB8101-1	S1 - 1X train
			2	W	TB5201-4	TB8101-2	S2 - 1X train
			3	R	TB5201-5	TB8101-3	S3 - 1X train
			4	G	TB5201-6	TB8101-4	S1 - 36X train
			5	O	TB5201-7	TB8101-5	S2 - 36X train
			6	Bl	TB5201-8	TB8101-6	S3 - 36X train
			7	W-Bk	TB5201-9	TB8102-1	S1 - 2X elevation
			8	R-Bk	TB5201-10	TB8102-2	S2 - 2X elevation

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
403	MHFF-19	(Continued)	9	G-Bk	TB5201-11	TB8102-3	S3 - 2X elevation
			10	O-Bk	TB5201-12	TB8102-4	S1 - 36X elevation
			11	Bl-Bk	TB5201-13	TB8102-5	S2 - 36X elevation
			12	Bk-W	TB5201-14	TB8102-6	S3 - 36X elevation
			13	R-W	TB5201-15	TB8103-1	S1 target range 1000 yds/rev
			14	G-W	TB5201-16	TB8103-2	S2 target range 1000 yds/rev
			15	Bl-W	TB5201-17	TB8103-3	S3 target range 1000 yds/rev
			16	Bk-R			Spare
			17	W-R			Spare
			18	O-R			Spare
			19	Bl-R			Spare
404	MHFF-19	Recording Equipment Cable Panel to Dial Box	1	Bk	TB5201-18	TB8103-4	S1 target range 100,000 yds/rev X
			2	W	TB5201-19	TB8103-5	S2 target range 100,000 yds/rev X
			3	R	TB5201-20	TB8103-6	S3 target range 100,000 yds/rev X
			4	G	TB5201-21	TB8104-1	S1 missile range 1000 yds/rev X
			5	O	TB5201-22	TB8104-2	S2 missile range 1000 yds/rev X
			6	Bl	TB5201-23	TB8104-3	S3 missile range 1000 yds/rev X
			7	W-Bk	TB5201-24	TB8104-4	S1 missile range 100,000 yds/rev X
			8	R-Bk	TB5201-25	TB8104-5	S2 missile range 100,000 yds/rev X
			9	G-Bk	TB5201-26	TB8104-6	S3 missile range 100,000 yds/rev X
			10	O-Bk	TB5201-27	TB8105-1	S1 computer range course X
			11	Bl-Bk	TB5201-28	TB8105-2	S2 computer range course X
			12	Bk-W	TB5201-29	TB8105-3	S3 computer range course X
			13	R-W	TB5201-30	TB8105-4	S1 computer range fine X
			14	G-W	TB5201-31	TB8105-5	S2 computer range fine X
			15	Bl-W	TB5201-32	TB8105-6	S3 computer range fine X
			16	Bk-R			Spare
			17	W-R			Spare
			18	O-R			Spare
			19	Bl-R			Spare
405	MHFF-19	Recording Equipment Cable Panel to Dial Box	1	Bk	TB5202-1	TB8108-1	Indicator - common
			2	W	TB5202-2	TB8108-2	Local indicator
			3	R	TB5202-3	TB8108-4	Telescope indicator
			4	G	TB5202-4	TB8108-6	Computer time indicator
			5	O	TB5202-5	TB8108-8	Automatic indicator - train
			6	Bl	TB5202-6	TB8108-10	Automatic indicator - elevation
			7	W-Bk	TB5202-7	TB8108-12	Pulse-time modulator indicator
			8	R-Bk	TB5202-8	TB8109-1	Target cross-pointer meter - horizontal
			9	G-Bk	TB5202-9	TB8109-2	Target cross-pointer meter - common

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals From	Terminals To	Function
405	MHFF-19	(Continued)	10	O-Bk	TB5202-10	TB8109-3	Target cross-pointer meter - vertical
			11	Bl-Bk	TB5202-12	TB8109-5	Missile cross-pointer meter - horizontal
			12	Bk-W	TB5203-13	TB8109-6	Missile cross-pointer meter - common
			13	R-W	TB5202-14	TB8109-7	Missile cross-pointer meter - vertical
			14	G-W			Spare
			15	Bl-W			Spare
			16	Bk-R			Spare
			17	W-R			Spare
			18	O-R			Spare
			19	Bl-R			Spare
406	MHFF-10	Recording Equipment Cable Panel to Camera Control Unit	1	Bk	TB5203-1	J8201-1	Rl tracking camera #1 and transformer
			2	W	TB5203-2	J8201-2	R2 tracking camera
			3	R	TB5203-3	J8201-3	Sl tracking camera
			4	G	TB5203-4	J8201-4	S2 tracking camera
			5	O	TB5203-5	J8201-5	S3 tracking camera
			6	Bl	TB5203-6	J8201-6	Tracking camera transformer
			7	W-Bk	TB5203-7	J8201-7	Tracking camera #1 pilot light
			8	R-Bk	TB5203-8	J8201-8	Tracking camera #1 pilot light
			9	G-Bk			Spare
			10	O-Bk			Spare
407	MHFF-10	Recording Equipment Cable Panel to Camera Control Unit	1	Bk	TB5203-1	J8202-1	Rl tracking camera #2 and transformer
			2	W	TB5203-2	J8202-2	R2 tracking camera
			3	R	TB5203-3	J8202-3	Sl tracking camera
			4	G	TB5203-4	J8202-4	S2 tracking camera
			5	O	TB5203-5	J8202-5	S3 tracking camera
			6	Bl	TB5203-6	J8202-6	Tracking camera transformer
			7	W-Bk	TB5203-9	J8202-7	Tracking camera #2 pilot light
			8	R-Bk	TB5203-10	J8202-8	Tracking camera #2 pilot light
			9	G-Bk			Spare
			10	O-Bk			Spare
408	MHFF-7	Recording Equipment Cable Panel to Camera Control Unit	1	Bk	TB5203-13	J8207-3	Control box remote ON-OFF
			2	W	TB5203-14	J8207-2	Control box remote ON-OFF
			3	R	TB5203-15	J8207-1	Control box remote marker

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals From	Terminals To	Function
408	MHFF-7	(Continued)	4	G	TB5203-16	J8207-4	Control box remote marker
			5	O			Spare
			6	Bl			Spare
			7	W-Bk			Spare
410	DCOP-6	Recording Equipment Cable Panel to Switch No. S5201	1	Bk	TB5203-11	S5201	115 vac
			2	W	TB5203-12	S5201	115 vac
411	DCOP-6	Switch No. S5201 to TB8301	1	Bk	S5201-3	TB8301-1	115 vac
			2	W	S5201-4	TB8301-2	115 vac
412	MHFF-7	Recording Equipment Cable Panel to Remote Range Indicator	1	Bk	TB5202-16	TB8501-7	Missile range auto indicator
			2	W	TB5202-17	TB8501-8	Target range auto indicator
			3	R	TB5202-18	TB8501-9	Indicator - common
			4	G	TB5202-19	TB8501-5	Target control indicator
			5	O	TB5202-20	TB8501-6	Missile control indicator
			6	Bl	TB5203-17	TB8501-3	+300 vdc
			7	W-Bk	TB5203-18	TB8501-4	Ground
413	DCOP-3	TB8301 to Remote Range Indicator	1	Bk	TB8301-7	TB8501-1	115 vac
			2	W	TB8301-8	TB8501-2	115 vac
414	DCOP-3	TB8301 to Time Comparator	1	Bk	TB8301-5	TB8401-4	115 vac
			2	W	TB8301-6	TB8401-5	115 vac
415	DCOP-6	TB8301 to Camera Control Unit	1	Bk	TB8301-3	J8209-1	115 vac
			2	W	TB8301-4	J8209-2	115 vac
416	MHFF-7	Camera Control Unit to Commutator	1	Bk	J8206-1	J8601-1	R1 115 vac
			2	W	J8206-2	J8601-2	R2 115 vac
			3	R	J8206-3	J8602-3	S1 commutator
			4	G	J8206-4	J8602-4	S2 commutator
			5	O	J8206-5	J8602-5	S3 commutator
			6	Bl			Spare

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
416	MHFF-7	(Continued)	7	W-Bk			Spare
417	MHFF-10	Camera Control Unit to Remote Range Indicator (Scope Camera)	1	Bk	J8205-1	J8505-1	R1 camera #5 and transformer
			2	W	J8205-2	J8505-2	R2 camera
			3	R	J8205-3	J8505-3	S1 camera
			4	G	J8205-4	J8505-4	S2 camera
			5	O	J8205-5	J8505-5	S3 camera
			6	Bl	J8205-6	J8505-6	Transformer
			7	W-Bk	J8205-7	J8505-7	Pilot light #5
			8	R-Bk	J8205-8	J8505-8	Pilot light #5
			9	G-Bk			Spare
			10	O-Bk			Spare
418	MHFF-10	Camera Control Unit to Time Comparator Camera	1	Bk	J8204-1	J8401-1	R1 camera #4 and transformer
			2	W	J8204-2	J8401-2	R2 camera
			3	R	J8204-3	J8401-3	S1 camera
			4	G	J8204-4	J8401-4	S2 camera
			5	O	J8204-5	J8401-5	S3 camera
			6	Bl	J8204-6	J8401-6	Transformer
			7	W-Bk	J8204-7	J8401-7	Pilot light #4
			8	R-Bk	J8204-8	J8401-8	Pilot light #4
			9	G-Bk			Spare
			10	O-Bk			Spare
419	MHFF-10	Camera Control Unit to Dial Box Camera	1	Bk	J8203-1	J8101-1	R1 dial box camera #3 and transformer
			2	W	J8203-2	J8101-2	R2 dial box camera
			3	R	J8203-3	J8101-3	S1 dial box camera
			4	G	J8203-4	J8101-4	S2 dial box camera
			5	O	J8203-5	J8101-5	S3 dial box camera
			6	Bl	J8203-6	J8101-6	Transformer
			7	W-Bk	J8203-7	J8101-7	Pilot light #3
			8	R-Bk	J8203-8	J8101-8	Pilot light #3
			9	G-Bk			Spare
			10	O-Bk			Spare

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
420	MCOS-2	Commutator Unit to Time Comparator	1	Bk	J8602-1	J8402-1	Commutator pulse
			2	W	J8602-2	J8402-2	Commutator pulse
421	DCOP-6	Foto Floods to Control Box	1	Bk	Foto Floods	J8208-1	115 vac
			2	W	Foto Floods	J8208-2	115 vac
422	DCOP-3	Recording Equipment TB8301 to Blowers	1	Bk	TB8301-1	Blowers	115 vac
			2	W	TB8301-2	Blowers	115 vac
424	MHFF-7	Cable Panel to Time Comparator	1	Bk	TB5203-17	TB8401-1	+300 vdc
			2	W	TB5203-18	TB8401-8	Ground
			3	R	TB5201-33	TB8401-2	-345 vdc
			4	G			Spare
			5	O			Spare
			6	Bl			Spare
			7	W-Bk			Spare
542	RG-59 U	Target Range Unit to Missile Range Unit			J308T	J308M	Repetition rate sync
543	RG-59 U	Missile Receiver to Cable Panel			J121M	J5155	Missile afc
545	RG-59 U	Power Control Unit (Coax Relay) to Target and Manual Coordinate Detector			K1407C	J1201	Target gate trigger
547	RG-59 U	PPI Unit to Coax T2			J805	T2-D	R-sweep trigger
548	RG-59 U	Target Indicator to Coax T7			J1003T	T7-D	A-sweep trigger
549	RG-59 U	PPI Unit to Coax T7			J801	T7-C	A-sweep trigger

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
552	RG-13 U	Cable Panel to Target Receiver			J5158	J113T	Target i-f
553	RG-59 U	Cable Panel to Target Receiver			J5161	J116T	Target agc
554	RG-59 U	Cable Panel to Missile Receiver			J5162	J116M	Missile agc
555	RG-59 U	Missile Receiver to Coax T4			J117M	T4-C	Gate trigger
556	RG-59 U	Missile Receiver to Target and Missile Range Error Detector and Servo Amplifier			J120M	J1303	Gate
557	RG-59 U	Missile Receiver to Target and Missile Range Error Detector and Servo Amplifier			J115M	J1304	Gated video
558	RG-59 U	Target Receiver to Remote Range Indicator			J119T	J8505	Target gate
560	RG-59 U	Coax T5 to Remote Range Indicator			T5-A	J8504	R-sweep trigger
561	RG-59 U	Missile Indicator to Coax T5			J1004M	T5-C	R-sweep trigger
562	RG-59 U	Missile Range Unit to Coax T5			J305M	T5-B	R-sweep trigger
563	RG-59 U	Missile Range Unit to Missile Indicator			J302M	J1003M	A-sweep trigger
564	RG-59 U	Power Control Unit (Coax Relays) to Coax T4			K1406-A	T4-A	Missile gate trigger
565	RG-59 U	Missile Range Unit to Coax T4			J304-M	T4-B	Missile gate trigger

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
566	RG-59 U	Target Range Unit to Missile Range Unit			J307T	J306M	Timing
567	RG-59 U	Reference Voltage Distribution Unit to Cable Panel			J2701	J5151	24-cycle to telemetering
568	RG-59 U	Cable Panel to Test Point Near Console			J5165		Test
569	RG-59 U	Coax T7 to Remote Range Indicator			T7-B	J8508	A-sweep trigger (target)
571	RG-59 U	Target and Manual Coordinate Detector to Power Control Unit (Coax Relays)			J1202	K1404C	Target gated video
572	RG-59 U	Missile Receiver to Power Control Unit (Coax Relays)			J114M	K1403B	Missile gated video
573	RG-59 U	Missile Receiver to Remote Range Indicator			J111M	J8502	Ungated video
574	RG-59 U	Target Receiver to Power Control Unit (Coax Relays)			J114T	K1404B	Gated video
575	RG-13 U	Cable Panel to Missile Receiver			J5157	J113M	Missile receiver i-f
577	RG-59 U	Target Receiver to Target Indicator			J118T	J1001T	Gate
578	RG-59 U	Coax T7 to Target Range Unit			T7-A	J302T	A-sweep trigger
579	RG-59 U	Target Receiver to PPI Unit			J112T	J803	Ungated video

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
581	PG-59 U	Coax T1 to Power Control Unit (Coax Relays)			T1-A	K1407B	Gate trigger
582	RG-59 U	Coax T1 to Target Receiver			T1-C	J117T	Gate trigger
583	RG-59 U	Target Range Unit to Coax T1			J304T	T1-B	Gate trigger
584	RG-59 U	Target Indicator to Coax T2			J1004T	T2-A	R-sweep trigger
585	RG-59 U	Target Range Unit to Coax T2			J305T	T2-B	R-sweep trigger
586	RG-59 U	Coax T2 to Remote Range Indicator			T2-C	J8503	R-sweep trigger
587	RG-59 U	Target Receiver to Remote Range Indicator			J111T	J8501	Ungated video
588	RG-59 U	Missile Receiver to Remote Range Indicator			J119M	J8506	Missile gate
589	RG-59 U	Target Receiver to Target and Missile Range Error Detector and Servo Amplifier			J120T	J1301	Gate
590	RG-59 U	Target Receiver to Target and Missile Range Error Detector and Servo Amplifier			J115T	J1302	Gated video
592	RG-59 U	Target Range Unit to Cable Panel			J301T	J5154	Modulator trigger
593	RG-59 U	Missile Range Unit to Cable Panel			J301M	J5166	Modulator trigger

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TABLE 7-3

CABLING DATA (Continued)

OPERATIONS TRAILER (Continued)

Cable No.	Cable Type	Connections	Wire No.	Color	Terminals		Function
					From	To	
594	RG-59 U	Target Range Unit to Coax T3			J303T	T3-C	Shifted 24-cycle
595	RG-59 U	Missile Range Unit to Coax T3			J303M	T3-B	Shifted 24-cycle
597	RG-59 U	Power Control Unit (Coax Relays) to Synchronizer and Missile Coordinate Detector			K1403C	J602	Gated video (missile)
598	RG-59 U	Missile Receiver to Missile Indicator			J118M	J1001M	Gate
599	RG-59 U	Cable Panel to Time Comparator			J5152	J8403	NOTS radio pulse

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS

SWITCHES

Part No.	Function	Location Figure No.	Grid Location
S101T	Manual - AGC, Target	7-30	
S101M	Manual - AGC, Missile	7-30	
S251	Reversing - AFC	7-30	
S252	Manual - AFC	7-30	
S301T	Slew - Auto		
A	Energizes Relay K1301T Automatic Slew Relay	7-5	B - 13
B	Energizes Relay K301T Dynamic Brake	7-9	B - 5
S301M	Slew - Auto		
A	Energize Relay K1301M Slew Automatic Relay	7-5	B - 16
B	Energize Relay K301M Dynamic Brake	7-9	B - 5
S302T	Limit switch	7-31	
S302M	Limit switch	7-31	
S501	Main Power Console Fil		
A	Supplies Power to one side of Fil	7-5	B - 10
B	Supplies Power to one side of Fil	7-5	D - 10
S502	Plate Power Switch		
A	Applies power to one side of line	7-5	B - 17
B	Applies power to one side of line	7-5	D - 17
C	Applies power to I502 plate power ind	7-17	B - 4
S503	Battle short switch		
A	Turns on indicator light I503	7-5	C - 10
B	Shorts interlocks	7-5	B - 18
S701	Not used		
S702	Local oscillator switch		
A	Supplies +250V Dc	7-9	A - 8
B	Turns on indicator light I702	7-17	B - 4
S801	PPI range switch	7-35	
A	Determines sweep length	7-35	
B	Determines sweep length	7-35	
C	Determines sweep length	7-35	
D	Determines sweep length	7-35	
E	Determines marker pip frequency	7-35	
S802	PPI pattern switch	7-35	
	Switch Position: 1 / 2 / 3		
A	Normal Trig / Normal Trig / Delayed Trig	7-35	
B	Not used	7-35	
C	Delayed Trig / Spare / Spare	7-35	
S803	AFC OFF ON	7-9	B - 8
S804	Marker Switch	7-35	
S805	Not used		
S806	PPI search		
A	Applies power to train handcrank motor	7-2	B - 7
S807	PPI search		
A	Applies power to slew trans	7-2	B - 7
S901	High voltage		
A	Applies power to one side of line	7-5	B - 18
B	Applies power to one side of line	7-5	C - 18
S902	Heater switch		
A	Applies power to one side of line	7-5	A - 9
B	Applies power to one side of line	7-5	C - 9
S1001	Test switch 1 Normal sweep 2 Not used 3 Test scope		
S1401	Not used		
S1402	Radar start-stop switch		
A	Start	7-7	B - 2
B	Stop	7-7	B - 2

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

SWITCHES (Continued)

Part No.	Function	Location Figure No.	Grid Location
S1403	Modulator volt AGC raise-lower		
	Raise	7-5	B - 22
	Lower	7-5	B - 22
S1404	Standby-radiate		
A	Standby	7-6	C - 10
B	Radiate	7-6	B - 11
S1405	Nutator on		
A	Applies power through S2001 E and D to K2005 nutator on relay	7-5	B - 21
S1406	Overload selector switch		
	1 Not used		
	2 Not used		
	3 Not used		
	4 Elevation amplidyne and motor	7-17	B - 3
	5 Not used		
	6 Train amplidyne and motor	7-17	B - 3
	7 Not used		
	8 Not used		
	9 Not used		
	10 Not used		
S1501	Computer-telescope-manual		
	I PPI EL 36 speed S1	7-13	E - 2
	II Computer EL R-1	7-13	E - 2
	III PPI EL 36 speed S2	7-13	E - 2
	IV Computer EL R2	7-13	E - 2
	V PPI EL 36 speed S3	7-13	E - 2
	VI Computer EL R3	7-13	E - 2
	VII PPI train 36 speed S1	7-12	B - 2
	VIII Computer train R1	7-12	C - 2
	IX PPI train 36 speed S2	7-12	B - 2
	X Computer train R2	7-12	C - 2
	XI PPI train 36 speed S3	7-12	B - 2
	XII Computer train R3	7-12	C - 2
	XIII Telescope elevation tach	7-13	D - 2
	XIV Telescope train tach	7-12	D - 2
	XV 36 speed train and elevation lock	7-5	B - 17
	XVI Train slew	7-12	E - 2
	XVII Elevation slew	7-13	C - 2
	XVIII Train and elevation handcrank de-energizing	7-5	B - 11
	XIX Indicator lights	7-7	C - 4
S1502	Manual-automatic track-train		
	I Train handcrank de-energizing relay	7-5	B - 11
	II Train automatic tracking relay	7-5	C - 11
	III Train automatic track indicator light	7-7	C - 3
S1503	Manual-automatic track-elevation		
	I Elevation handcrank de-energizing relay	7-5	B - 11
	II Elevation automatic tracking relay	7-5	C - 12
	III Elevation automatic track indicator light	7-7	C - 4
S1504	Computer time motor switch		
A			
B	Turns on indicator lights	7-7	C - 5
S1505	Pulse time on		
A	Turns on indicator light	7-7	C - 5
B	Turns on pulse time on relay	7-7	C - 5
S1506	Channel selector switch		
A	Energizes all relays to switch channels	7-7	C - 3
S1507	Camera ON-OFF		
A	Turns on indicator light	7-7	C - 5
B	Turns cameras on	7-5	C - 4

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

SWITCHES (Continued)

Part No.	Function	Location Figure No.	Grid Location
S1508	Camera marker		
A	Turns on indicator	7-7	C - 5
B	Turns on marker lights	7-5	C - 5
S1701	Crystal current selector switch		
A	Manual	7-44	
B	AFC	7-44	
S1702	AFC - Manual		
A	AFC	7-9	B - 9
S1801	Telescope final amp interlock		
A		7-5	C - 15
S2001	Transmitter OFF-ON		
A	Supplies power to lower variac raise-lower motor	7-5	C - 23
B	Supplies power to one side variac motor	7-5	C - 22
C	Supplies power to raise voltage of modulator	7-5	B - 22
D	Nutator on-off relay	7-5	C - 21
E	Nutator on-off relay	7-5	C - 21
F	Transmitter on-off relay	7-5	C - 9
G	Transmitter on-off relay	7-5	C - 9
S2002	Standby - radiate		
A	Standby	7-6	A - 9
B	Radiate	7-6	B - 11
S2003	Modulator raise - lower		
A	Raise	7-5	C - 22
B	Lower	7-5	C - 22
S2004	Not used		
S2005	Not used		
S2006	Interlock	7-6	A - 10
S2007	Battle short		
A	Shorts interlocks	7-6	A - 9
B	Turns on indicator light	7-17	A - 3
S2008	Heater switch 115V - 230V		
A	Turns on heaters	7-5	B - 8
B	Turns on heaters	7-5	B - 8
S2009	Not used		
S2010	Interlock	7-6	A - 9
S2301	Modulator power switch		
A	Not used		
B	Power to standby light trans T2005	7-6	A - 12
C	Power to radiate relay K2305	7-6	C - 11
D	Power to standby circuit	7-6	A - 10
E	Power to standby circuit	7-6	B - 10
F	Power to radiate switch	7-6	A - 12
G	Power to radiate switch	7-6	A - 12
H	Power to standby indicator I2304	7-17	A - 4
I	Power to modulator on indicator I1413	7-17	A - 1
J	Power to all indicator lights in modulator	7-17	A - 1
K	Power to modulator raise lower	7-5	D - 22
L	Power to modulator raise lower	7-5	A - 22
M	Power to modulator raise lower	7-5	C - 22
N	Power to modulator on relay K2302	7-7	B - 6
O	Power to modulator on relay K2302	7-7	C - 6
P	Spare		
S2302	Interlock		
A	Interlock	7-6	B - 10
S2303	Battle short		
A	Shorts interlocks	7-6	B - 10
B	Lights indicator lights	7-6	A - 2

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

SWITCHES (Continued)

Part No.	Function	Location Figure No.	Grid Location
S2304	Standby - radiate		
A	Standby	7-6	A - 12
B	Radiate	7-6	B - 10
S2305	Modulator voltage raise-lower		
A	Raise	7-5	D - 22
B	Lower	7-5	C - 22
S2306	Not used		
S2307	Interlock		
A	Interlock	7-6	B - 10
S2308	Interlock		
A	Interlock	7-6	A - 10
S2309	Not used		
S2310	Not used		
S2311	Screen interlock		
A	Screen interlock	7-7	B - 8
S2501	Lower limit	7-5	A - 22
S2502	Upper limit	7-5	A - 22
S2901	Voltage regulator	7-55	
S3001	Safety switch		
A	Removes power from antenna	7-5	C - 20
S3002	Train stow switch		
A	Applies power to train amplidyne relay K3203	7-5	C - 21
S3003	Elevator motor interlock		
A	Applies power to raise antenna pedistal	7-6	B - 5
S3004	Lower limit switch		
A	Applies power to lower limit relay K3206	7-6	B - 2
S3005	Upper limit switch		
A	Applies power to upper limit relay K3205	7-6	B - 2
S3006	Elevation interlock at elevation stow handwheel		
A	Applies power to raise antenna pedistal	7-6	A - 5
S3007	Elevation stow switch		
A	Applies power to elevation amplidyne relay K3202	7-5	C - 21
S3201	Battle short		
A	Shorts out interlocks	7-5	C - 20
B	Turns on indicator light	7-6	B - 3
S3202	Off reset		
A	Not used		
B	Applies power to antenna	7-5	C - 20
S3203	Raise elevator	7-6	C - 5
S3204	Lower elevator	7-6	C - 5
S3205	Stop elevator	7-6	A - 5
S3206	Interlock	7-5	C - 20
S3207	Interlock	7-5	C - 20
S3208	Interlock	7-5	C - 20
S3209	Interlock	7-5	C - 20
S3210	Interlocks	7-5	C - 20
S3211	Not used		
S3212	Elevation amplidyne motor de-energizing switch		
A	Applies power to elevation amplidyne	7-5	C - 21
S3213	Train amplidyne de-energizing switch		
A	Applies power to train amplidyne	7-5	C - 21
S3301	Test switch	7-58	
S3302	Test switch	7-58	
S4401	------		
A	Bolometer	7-63	
B	A-c crystal		
C	D-c crystal		
S4402	Standing wave amp. OFF-ON	7-6	B - 8
S4741	Multiplier shunt around ammeter	7-63	

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

SWITCHES (Continued)

Part No.	Function	Location Figure No.	Grid Location
S4801	Selector switch	7-64	
	1 VHF		
	2 SCR 624		
	3 VHF#2		
	4 Tactical		
	5 BD 72		
S4802	Emergency control - selects crystal channels	7-64	
S4803	Microphone key	7-64	
S4804	Microphone key	7-64	
S4805	Microphone key	7-64	
S4806	Not used		
S4808	Not used		
S4809	Tactical key switch	7-64	
S4810	Microphone key	7-64	
S4811	------		
	1 VHF#1	7-64	
	2 SCR 624	7-64	
	3 VHF#2	7-64	
	4 Tactical	7-64	
	5 BD - 72	7-64	
S4812	Microphone key	7-64	
S4813	Radio transmitter foot switch	7-64	
S4901	Three phase-single phase	7-65	
S4902	Power selector switch	7-65	
S4903	Heaters and ventilators	7-65	
S4904	Voltmeter line selector	7-66	
S4905	Start engine No. 1	7-66	
S4906	Stop engine No. 1	7-66	
S4907	Single phase input	7-66	
S4908	Radar	7-65	
S4910	Antenna control	7-65	
S4911	Synchro bus	7-65	
S4912	Communication equipment	7-65	
S4913	Trailer lights and outlets	7-65	
S4914	Start engine No. 2	7-66	
S4915	Stop engine No. 2	7-66	
S4916	Alarm disconnect switch - engine No. 1	7-66	
S4917	Alarm disconnect switch - engine No. 2	7-66	
S5201	Recording equipment power		
A	Applies power to recording equipment	7-5	A - 2
B	Applies power to recording equipment	7-5	D - 2
S5301	Turns on PE137 a-c voltage regulator	7-5	A - 13
S7113	Trailer roof safety switch	7-5	C - 20
S8201	Camera excitation switch		
A	Supplies camera excitation	7-5	A - 2
B	Supplies camera excitation	7-5	D - 2
S8202	Camera ON-OFF mark	7-5	C - 4
S9101	Telescope slew switch	7-2	B - 5

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

RELAYS

Part No.	Function	Location Figure No.	Grid Location
K301T	Slew dynamic brake		
Coil	------	7-9	B - 5
A	Mechanically applies brake	7-31	
K301M	Slew dynamic brake		
Coil	------	7-9	B - 5
A	Mechanically applies brake	7-31	
K601	36 and 1 speed telescope train synchronizer		
Coil	------	7-33	
A	Normally closed connects 36 speed train drive signal	7-13	B - 2
B	Normally open connects 1 speed train drive signal	7-13	B - 2
K602	36 and 2 speed telescope elevation synchronizer		
Coil	------	7-33	
A	Normally closed connects 36 speed telescope elevation drive signal	7-13	F - 8
B	Normally open connects 2 speed telescope elevation drive signal	7-13	F - 8
K603	36 and 1 speed radar train synchronizing		
Coil	------	7-33	
A	Normally closed connects 36 speed radar drive system to drive antenna	7-12	E - 2
B	Normally open connects 1 speed radar drive system to drive antenna	7-12	E - 2
K604	36 and 1 speed telescope train synchronizing		
Coil	------	7-33	
A	Normally closed connects 36 speed radar drive system to drive antenna	7-12	B - 6
B	Normally open connects 2X speed radar drive system to drive antenna	7-12	B - 6
K605	36 speed train and elevation lock in		
Coil	------	7-5	C - 17
A	Normally open locks radar elevation manual drive system in 36 speed	7-33	
B	Normally open locks radar train manual drive system in 36 speed	7-33	
K606	Target and missile gain equalizer		
Coil	------	7-7	B - 1
A	Normally closed opens to reduce gain	7-33	
K801	Elevation handcrank de-energizing relay		
Coil	Energized when in computer or local-manual operation	7-5	C - 11
A	Normally closed opens to de-energize elevation handcrank motor	7-2	B - 7
K802	Train handcrank de-energizing relay		
Coil	Energized in computer or local-manual operation	7-5	C - 11
A	Normally closed opens to de-energize train handcrank motor	7-2	B - 7
K1201	Train automatic tracking		
Coil	------	7-5	B - 11
A	Normally closed connects manual train circuits to drive antenna	7-12	E - 3
B	Normally open connects automatic train tracking circuits to drive antenna	7-12	E - 3
C	Changes band pass of servo loop	7-38	
D	Changes band pass of servo loop		
K1202	Elevation automatic tracking		
Coil	------	7-79	B - 12
A	Normally closed connects manual elevation tracking circuits to drive antenna	7-13	C - 3
B	Normally open connects automatic elevation tracking circuits to drive antenna	7-13	C - 3
C	Changes band pass of servo loop	7-38	

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

RELAYS (Continued)

Part No.	Function	Location Figure No.	Grid Location
K1202 (Cont'd)			
D	Changes band pass of servo loop	7-38	
K1203	Gain level relay		
Coil	Energized in missile video	7-7	B - 2
A	Normally open closes to increase gain of V1207-B	7-38	
K1301T	Target slew-track relay		
Coil	------	7-5	C - 13
A	Slew motor (CFI)	7-39	
B	Track motor (CFI)	7-39	
C	Provides slewing signal	7-39	
D	Grounds	7-39	
E	Tach feedback in slew	7-39	
F	Grounds	7-39	
G	Energizes I8504 target auto ranges	7-5	B - 12
H	Grounds	7-39	
I	Connects in the automatic tracking signal	7-39	
K1301M	Missile slew-track relay		
Coil	------	7-5	C - 16
A	Slew motor (CFI)	7-39	
B	Track motor (CFI)	7-39	
C	Provides slewing signal	7-39	
D	Grounds	7-39	
E	Tach feedback in slew	7-39	
F	Grounds	7-39	
G	Energizes I8503 missile auto range indicator	7-5	B - 12
H	Grounds	7-39	
I	Connects in the automatic tracking signal	7-39	
K1401	Starting relay motor drive timing		
Coil	------	7-7	2 - C
A	Normally closed opens to turn off strip heaters	7-5	7 - C
B	Not used		
C	Normally open closes to apply power to one side of group of relays	7-5	9 - B
D	Normally open closes to apply power to radar	7-5	10 - A
E	Normally open closes to apply power to radar	7-5	9 - D
F	Normally closed opens to remove power to relay motor	7-7	2 - B
K1402	Start button seal in		
Coil	------	7-7	2 - 6
A	Normally closed seals in around start switch	7-7	2 - B
K1403	Gated video selector relay		
Coil	------	7-7	C - 3
A	Gated video target	7-14	
B	Gated video missile	7-14	
C	Gated video input to missile coord. det.	7-14	
K1404	Gated video selector relay		
Coil	------	7-7	C - 3
A	Gated video missile	7-14	
B	Gated video target	7-14	
C	Gated video input to target and manual coord. det.	7-14	
K1405	Automatic gain selector relay		
Coil	------	7-7	C - 3
A	Target AGC	7-14	
B	Missile AGC	7-14	
C	AGC input to missile coord det.	7-14	
D	AGC input to target and manual coord. det.	7-14	

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

RELAYS (Continued)

Part No.	Function	Location Figure No.	Grid Location
K1406	Gate trigger selector relay		
Coil	-----	7-7	C - 3
A	Gate trigger target	7-14	
B	Gate trigger missile	7-14	
C	Gate trigger input to missile coord. det.	7-14	
K1407	Gate trigger selector relay		
Coil	-----	7-7	C - 2
A	Gate trigger missile	7-14	
B	Gate trigger target	7-14	
C	Gate trigger input to target and manual coord. det.	7-14	
K1701	AFC manual control		
Coil	-----	7-9	B - 9
A	Connects AFC voltage input	7-44	
B	Disconnects AFC input	7-44	
C	Connects AFC sweep voltage	7-44	
D	Manual adjustment	7-44	
K1801	Telescope on relay		
Coil	-----	7-5	B - 15
A	Time delay control	7-5	C - 15
K2001	Magnetron under current		
Coil	-----	7-48	
A	Normally closed opens standby circuit	7-6	B - 11
B	Normally open energizes crystal protecting solenoid	7-6	B - 8
C	Not used		
K2002	Magnetron over current		
Coil	-----	7-48	
A	Series with standby radiate circuit	7-6	A - 9
K2003	Filament timing relay		
Coil	-----	7-6	B - 9
A	Normally open closes after 60 sec closing standby circuit	7-6	A - 11
K2004	Transmitter ON-OFF		
Coil	-----	7-5	C - 9
A	Applies power to transmitter	7-6	A - 7
B	Applies power to transmitter	7-6	C - 7
K2005	Nutator motor ON-OFF		
Coil	-----	7-5	C - 21
A	Applies power to nutator motor	7-6	A - 6
B	Applies power to nutator motor	7-6	C - 6
K2006	Under current seal in relay		
Coil	-----	7-6	B - 11
A	Normally closed around under current relay contact-opens in 60 sec	7-6	B - 10
K2301	Not used		
K2302	Modulator on		
Coil	-----	7-7	6 - C
A	Modulator power OFF-ON	7-7	7 - A
B	Modulator power OFF-ON	7-7	7 - C
C	Blower motor OFF-ON	7-7	7 - A
D	Blower motor OFF-ON	7-7	7 - C
K2303	Not used		
K2304	Modulator d-c voltage safety relay		
Coil	------	7-9	B - 4
A	Normally open-series with standby power	7-6	A - 10
K2305	Radiate relay		
Coil	-----	7-6	B - 11
A	Normally closed turns off standby lights	7-6	A - 12
B	Normally open applies power to one side of modulator high voltage trans.	7-7	C - 8

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

RELAYS (Continued)

Part No.	Function	Location Figure No.	Grid Location
K2305 (Cont'd)			
C	Normally open applies power to one side of modulator high voltage trans.	7-7	A - 8
D	Turns on radiate light	7-17	A - 2
E	Not used		
F	Normally open seals around radiate switch	7-6	A - 12
K2306	Thyratron heating relay		
Coil	------	7-7	B - 9
A	Reduces voltage on thyratron fil	7-7	B - 8
B	Reduces voltage thyratron fil	7-7	B - 8
C	Normally open series with standby power	7-6	A - 10
K2307	3 min time delay		
Coil	------	7-7	B - 8
A	Normally closed energized thyratron heating relay K2307	7-7	B - 8
K2308	Screen interlock relay		
Coil	------	7-7	B - 8
A	Normally open series with standby power	7-6	B - 10
K2309	Condenser discharge relay		
Coil	------	7-7	B - 8
A	Discharges condenser	7-44	
K2601	Train manual de-energizing		
Coil	------	7-2	C - 7
A	------	7-12	E - 3
K2602	Elevation manual de-energizing		
Coil	------	7-2	C - 7
A	------		
K2701	Pulse-time modulation on		
Coil	------	7-7	B - 5
A	Turns on pulse-time modulation	7-53	
K3201	Control power relay		
Coil	------	7-5	B - 21
A	Applies power to one side of control circuits of antenna control unit	7-6	A - 2
B	Applies power to one side of control circuits of antenna control unit	7-6	C - 2
C	Turns on indicator light	7-17	B - 2
K3202	Elevation amplidyne power relay		
Coil	------	7-5	B - 21
A	Applies power to elevation amplidyne	7-6	A - 4
B	Applies power to elevation amplidyne	7-6	C - 4
C	Turns on indicator light	7-17	B - 2
K3203	Train amplidyne power relay		
Coil	------	7-5	C - 21
A	Applies power to train amplidyne	7-6	A - 4
B	Applies power to train amplidyne	7-6	C - 4
C	Turns on indicator light	7-17	B - 2
K3204	Elevator raise lower		
Coil L	------	7-6	C - 5
Coil R	------	7-6	C - 5
L	Raises and lowers antenna pedestal	7-6	C - 5
R	Raises and lowers antenna pedestal	7-6	C - 5
L	Raises and lowers antenna pedestal	7-6	A - 5
R	Raises and lowers antenna pedestal	7-6	A - 5
L	Raises and lowers antenna pedestal	7-6	C - 5
R	Raises and lowers antenna pedestal	7-6	C - 5
L	Raises and lowers antenna pedestal	7-6	B - 6
R	Raises and lowers antenna pedestal	7-6	B - 5

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

RELAYS (Continued)

PART No.	Function	Location Figure No.	Grid Location
K3205	Upper limit relay		
Coil	-----	7-6	C - 2
A	Puts rectifier parallel with control field of amplidyne	7-13	C - 5
B	Shorts out part of elevation amplidyne motor field	7-13	B - 5
K3206	Lower limit relay		
Coil	-----	7-6	C - 2
A	Puts rectifier in parallel with control field of amplidyne	7-13	C - 5
B	Shorts out part of elevation amplidyne field	7-13	A - 5
K3207	Elevation amplidyne control		
Coil	-----	7-6	B - 3
A	Shorts amplidyne control field	7-13	C - 5
B	Shorts part of amplidyne motor field	7-13	B - 5
K3208	Train amplidyne control		
Coil	-----	7-6	B - 3
A	Normally closed opens in 1 min removing short around control winding of amplidyne	7-12	D - 5
B	Shorts part of amplidyne motor field	7-12	E - 5
K3209	Amplidyne time delay		
Coil	1 minute time delay	7-6	B - 3
A	Normally open series with amplidyne control relays	7-6	B - 3
K4801,2,3 and 4	4V d-c relay		
Coil	-----	7-64	
A	Applies power to communications equipment	7-64	
K4811	Remote radio XMTR relay		
Coil	-----	7-3	A - 1
A	Applies power to radio	7-64	
K4911	Synchro bus OFF-ON		
Coil	-----	7-7	6 - C
A	Normally open applies power to one side of synchro bus	7-2	1 - A
B	Normally open applies power to one side of synchro bus	7-2	1 - B
K5301	PE 137 a-c voltage regulator relay		
Coil	-----	7-5	A - 14
A	Connects component of fil supply voltage to operate regulator	7-5	A - 14
K6313	D-c motor generator power on		
Coil	------	7-5	B - 9
A	Applies power to generator motor	7-9	B - 1
B	Applies power to generator motor	7-9	B - 1
C	Applies power to generator motor	7-9	B - 1
K6314	D-c motor generator control relay		
Coil	-----	7-5	C - 18
A	Applies power to d-c motor generator relay K6315	7-5	C - 9
K6315	45 sec d-c motor gen time delay		
Coil	-----	7-5	C - 9
A	Applies power to d-c generator control relay K6313	7-5	C - 9
K8201	Flag light 5 sec time delay		
Coil	-----	7-5	C - 4
A	Turns off flag lights	7-5	C - 4
K8202	Camera on relay		
Coil	-----	7-5	B - 4
A	Power to cameras	7-5	A - 4
B	Power to cameras	7-5	D - 4
K8501	Antenna control indicator selector relay		
Coil	-----	7-7	C - 3
A	Normally closed applies power to target antenna control indicator	7-5	B - 6
B	Normally open applies power to missile control indicator	7-5	B - 7

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

MOTORS AND SYNCHRO

Part No.	Function	Location Figure No.	Grid Location
B301T	5F synchro remote range target	7-31	
	Excitation		
	Control		
B301M	5F synchro remote range missile	7-31	
	Excitation		
	Control		
B302T	5G fine range target		
R1,R2	Excitation	7-2	B - 8
S1,S2,S3	Control	7-23	
B302M	5G fine range missile		
R1,R2	Excitation	7-2	B - 8
S1,S2,S3	Control	7-24	
B303T	5G course range target		
R1,R2	Excitation	7-2	B - 7
S1,S2,S3	Control	7-23	
B303M	5G course range missile		
R1,R2	Excitation	7-23	B - 8
S1,S2,S3	Control	7-24	
B304T	1CT slew target		
R1,R2	Excitation	7-23	
S1,S2,S3	Control	7-23	
B304M	1CT slew missile		
R1,R2	Excitation	7-24	
S1,S2,S3	Control	7-24	
B305T	Track motor target		
	Excitation	7-2	B - 8
	Control	7-23	
B305M	Track motor missile		
	Excitation	7-2	B - 9
	Control	7-24	
B306T	Slew motor target		
	Excitation	7-2	B - 9
	Control	7-23	
B801	Not used		
B802	Not used		
B803	Not used		
B804	Not used		
B805	Not used		
B806	Not used		
B807	Not used		
B808	5CT 2X elevation		
	R1, S1, S2, S3	7-13	B - 1
B809	5CT 36 speed elevation		
	R1, S1, S2, S3	7-13	B - 1
B810	Elevation handcrank motor		
	Excitation	7-2	B - 7
	Control	7-13	A - 1
B811	5CT 1 speed train		
	R1, S1, S2, S3	7-12	E - 1
B812	5CT 1 speed train		
	R1, S1, S2, S3	7-12	E - 1
B813	Train handcrank motor		
	Excitation	7-2	B - 7
	Control	7-12	E - 1
BL1801	Telescope final amplifier blower plugs into socket X1809	7-46	
		7-5	B - 14
B2001	Magnetron cooling motor	7-6	A - 8
B2301	Not used		
B2302	Modulator blower motor	7-7	B - 7

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

MOTORS AND SYNCHRO (Continued)

Part No.	Function	Location Figure No.	Grid Location
B2401	D-c motor generator-motor	7-9	B - 2
G2401	D-c motor generator-generator	7-9	B - 2
B2501	Variac raise-lower motor	7-5	A - 22
B3001	Not used		
B3002	Not used		
B3003	Train drive motor		
	Excitation	7-9	A - 1
	Control	7-12	D - 6
B3004	Not used		
B3005	Not used		
B3006	Not used		
B3007	Not used		
B3008	Elevation drive motor		
	Excitation	7-9	A - 2
	Control	7-13	B - 6
B3009	5G 1 speed train radar		
R1,R2	Excitation	7-2	B - 3
S1,S2,S3	Control	7-12	B - 6
B3010	5G 36 speed train radar		
R1,R2	Excitation	7-2	B - 2
S1,S2,S3	Control	7-12	C - 6
B3011	5G 36 speed train dial box		
R1,R2	Excitation	7-2	B - 2
S1,S2,S3	Control	7-12	D - 6
B3012	5G 2 speed elevation dial box		
R1,R2	Excitation	7-2	B - 2
S1,S2,S3	Control	7-13	E - 7
B3013	5G 36 speed elevation dial box		
R1,R2	Excitation	7-2	B - 2
S1,S2,S3	Control	7-13	C - 6
B3014	5G 36 speed radar dial box		
R1,R2	Excitation	7-2	B - 1
S1,S2,S3	Control	7-13	E - 7
G3001	Reference generator		
A,B,C,	Output	7-11	
B3015	Nutator Motor	7-6	B - 6
B3016	Camera motor		
R1,R2	Excitation	7-5	B - 3
S1,S2,S3	Control	7-5	
B3017	Camera motor		
R1,R2	Excitation	7-5	B - 2
S1,S2,S3	Control	7-16	
G3002	Tachometer elevation	7-13	D - 7
G3003	Tachometer train	7-12	D - 6
B3201	Elevation amplidyne motor	7-13	B - 5
B3202	Train amplidyne motor	7-12	E - 5
B5401	Dehumidifier compressor motor	7-70	
B8101	1 speed 5F train dial box		
R1,R2	Excitation	7-2	B - 5
S1,S2,S3	Control	7-12	B - 5
B8102	5F 36 speed train dial box		
R1,R2	Excitation	7-2	B - 5
S1,S2,S3	Control	7-12	B - 6
B8103	5F 2 speed elevation dial box		
R1,R2	Excitation	7-2	B - 5
S1,S2,S3	Control	7-13	E - 9
B8104	5F 36 speed elevation dial box		
R1,R2		7-2	B - 5
S1,S2,S3		7-13	D - 9

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

MOTORS AND SYNCHRO (Continued)

Part No.	Function	Location Figure No.	Grid Location
B8105	5F 1000 yds/rev. target range dial box		
R1,R2	Excitation	7-2	B - 5
S1,S2,S3	Control	7-23	
B8106	5F 100,000 yds/rev. target range dial box		
R1,R2	Excitation	7-2	B - 5
S1,S2,S3	Control	7-23	
B8107	5F 1000 yds/rev. missile range dial box		
R1,R2	Excitation	7-2	B - 6
S1,S2,S3	Control	7-24	
B8108	5F 100,000 yds/rev. missile range dial box		
R1,R2	Excitation	7-2	B - 6
S1,S2,S3	Control	7-24	
B8109	5F coarse computer range dial box		
R1,R2	Excitation	7-2	B - 6
S1,S2,S3	Control	7-72	
B8110	5F fine computer range dial box		
R1,R2	Excitation	7-2	B - 6
S1,S2,S3	Control	7-72	
B8201	Camera drive motor	7-5	B - 5
B8202	7G camera control drive		
R1,R2	Excitation	7-5	B - 4
S1,S2,S3	Control	7-73	
B8203	Timer motor	7-73	
B8601	5F commutator synchro		
R1,R2	Excitation	7-76	
S1,S2,S3	Control	7-76	
B9101	Elevation drive motor telescope		
	Control	7-13	E - 7
	Excitation	7-2	B - 3
B9102	Elevation drive motor telescope		
	Control	7-13	E - 7
	Excitation	7-2	B - 3
B9103	Elevation drive motor telescope		
	Control	7-13	E - 6
	Excitation	7-2	B - 3
B9104	Elevation excitation control tach. telescope		
	Control	7-13	E - 6
	Excitation	7-2	A - 4
B9105	1CT 2 speed elevation telescope		
R1,R2,S1, S2,S3	Control	7-13	E - 7
B9106	1CT 36 speed elevation telescope		
R1,R2,S1, S2,S3	Control	7-13	E - 7
B9107	Telescope train control tach		
	Excitation	7-2	A - 4
	Control	7-12	A - 5
B9108	Telescope train drive motor		
	Control	7-12	
	Excitation	7-12	A - 5
B9109	1CT 1 speed train telescope		
R1,R2,S1, S2,S3	Control	7-12	B - 5
B9110	1CT 36 speed train telescope		
R1,R2,S1, S2,S3	Control	7-12	A - 5
B9111	Telescope d-c tach. elevation handwheel	7-13	D - 1
B9112	Telescope d-c tach. train handwheel	7-12	D - 1
B9113	Telescope blower	7-2	B - 3

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

INDICATOR LIGHTS (Continued)

Part No.	Function	Location Figure No.	Grid Location
I4801	Communications indicators	7-64	
I4803	Bell	7-64	
I4901	Motor #1 indicator	7-66	
I4902	Motor #2 indicator	7-66	
I4903	Sigle phase indicator	7-66	
I4904	Running indicator, motor #1	7-66	
I4905	Running indicator, motor #2	7-66	
I4906	Bell, warning indicator, motor #1	7-66	
I4907	Bell, warning indicator, motor #1	7-66	
I4908	Emergency panel illumination	7-66	
I4909	Emergency panel illumination	7-66	
I4910	Auxiliary indicator lamp	7-66	
I4911	Auxiliary indicator lamp	7-66	
I5001	Manual crank lamp	7-67	
I5002	Panel lamps	7-67	
I5003	Panel lamps	7-67	
I5301	A-c voltage regulator on light	7-5	A - 14
I8101	Local indicator	7-7	B - 3
I8102	Telescope indicator	7-7	B - 3
I8103	Computor time motor	7-7	B - 3
I8104	Auto train indicator light	7-7	B - 2
I8105	Auto elevation indicator light	7-7	B - 2
I8106	Pulse-time modulation indicator	7-7	B - 3
I8201	Flag light indicator - 6" tracking camera	7-73	
I8202	Flag light indicator - 15" tracking camera	7-73	
I8203	Flag light indicator - dial box camera	7-73	
I8204	Flag light indicator - time camera	7-73	
I8205	Flag light indicator - remote range camera	7-73	
I8206	Flag light indicator - spare	7-73	
I8207	Excitation indicator	7-5	B - 2
I8208	Start indicator	7-5	B - 4
I8501	Missile antenna control	7-5	B - 7
I8502	Target antenna control	7-5	B - 6
TRANSFORMERS			
T101T	Filament transformer		
	Primary	7-5	C - 13
	Secondary	7-30	
T101M	Filament transformer		
	Primary	7-5	C - 16
	Secondary	7-30	
T102T	Pulse transformer		
	Primary and secondary	7-30	
T102M	Pulse transformer		
	Primary and secondary	7-30	
T301T thru T312T	Pulse transformer		
	Primary and secondary	7-31	
T301M thru T312M	Pulse transformers		
	Primary and secondary	7-31	
T313T	Filament transformer		
	Primary	7-5	C - 13
	Secondary	7-31	
T313M	Filament transformer		
	Primary	7-5	C - 16
	Secondary	7-31	

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

INDICATOR LIGHTS

Part No.	Function	Location Figure No.	Grid Location
I301T	Dial illumination	7-31	
I301M	Dial illumination	7-31	
I302T	Dial illumination	7-31	
I302M	Dial illumination	7-31	
I303T	Dial illumination	7-31	
I303M	Dial illumination	7-31	
I304T	Dial illumination	7-31	
I304M	Dial illumination	7-31	
I305T	Counter illumination	7-31	
I305M	Counter illumination	7-31	
I501	Console power indicator	7-17	B - 4
I502	Plate power indicator	7-17	B - 4
I503	Battle short indicator	7-5	C - 10
I702	Local oscillator indicator	7-17	B - 4
I801 thru I806	Dial illumination	7-35	
I900	High voltage indicator	7-5	B - 14
I902	Heating unit indicator	7-5	C - 9
I1402	Standby	7-17	A - 4
I1403	Radiate	7-17	A - 2
I1404	Transmitter filaments	7-17	A - 3
I1405	SE and DTC (not used)	7-40	
I1406	Antenna power on	7-17	B - 2
I1407	Train (not used)		
I1408	Elevation (not used)		
I1409	C. L. (not used)		
I1410	Meter illumination	7-17	B - 2
I1411	Meter illumination	7-17	B - 2
I1412	Relative bearing indication (not used)	7-17	
I1413	Modulator on	7-17	A - 1
I1414	Scanner motor	7-17	A - 1
I1415	Overload	7-17	B - 2
I1501	Not used		
I1502	Train auto. ind. light	7-7	C - 2
I1504	Elevation auto. ind. light	7-7	C - 2
I1505	Computer position	7-7	C - 2
I1506	Local position	7-7	C - 3
I1507	Telescope position	7-7	C - 3
I1508	Computer time motor on	7-7	C - 3
I1509	Pulse time on	7-7	C - 3
I1510	Cameras on	7-7	C - 4
I1511	Camera markers	7-7	C - 4
I2001	Radiate light	7-17	A - 2
I2002	Transmitter filament light	7-17	A - 3
I2003	Battle short	7-17	A - 3
I2004	Standby	7-17	A - 4
I2005	Battle short	7-17	A - 3
I2301	Battle short	7-17	A - 2
I2302	Modulator on	7-17	A - 2
I2303	Radiate	7-17	A - 2
I2304	Standby	7-17	A - 4
I2305	Battle short	7-17	A - 2
I2306	Battle short	7-17	A - 2
I2801	Dial light	7-54	
I3201	Battle short	7-6	left
I3202	Off- reset indicator	7-6	left
I4401	Power on indicator	7-63	

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

TRANSFORMERS (Continued)

Part No.	Function	Location Figure No.	Grid Location
T501	Plate transformer		
	Primary	7-5	C - 17
	Secondary	7-32	
T502	Filament transformer		
	Primary	7-5	B - 6
	Secondary	7-17	B - 4
T601,2,6, 7,8,9,10	Pulse transformers		
	Primary	7-33	
	Secondary		
T605	Filament transformer		
	Primary	7-5	C - 17
	Secondary	7-33	
T603	Pulse transformer	7-33	
T604	Pulse transformer	7-33	
T701	Indicator light transformer		
	Primary	7-5	C - 13
	Secondary	7-17	B - 4
T801	Pulse transformer		
	Primary and secondary	7-35	
T802	Filament transformer		
	Primary	7-5	C - 11
	Secondary	7-35	
T803	PPI search		
	Primary	7-2	B - 7
	Secondary	7-12	E - 1
T804	Antenna ambiguity transformer		
	Primary	7-2	B - 7
	Secondary	7-12	E - 1
T901	Plate transformer		
	Primary	7-5	C - 18
	Secondary	7-36	
T902	Filament transformer		
	Primary	7-5	C - 10
	Secondary	7-36	
T903	Plate transformer		
	Primary	7-5	C - 18
	Secondary	7-36	
T1201	Radar train reference generator transformer		
	Primary	7-11	
	Secondary	7-38	
T1202	Radar train error signal transformer		
	Primary	7-38	
	Secondary	7-38	
T1203	Radar automatic error signal transformer		
	Primary	7-11	
	Secondary	7-38	
T1204	Radar automatic error signal transformer		
	Primary	7-38	
	Secondary	7-38	
T1205	Telescope train error signal		
	Primary	7-2	B - 7
	Secondary	7-38	
T1206	Telescope train error signal		
	Primary	7-38	
	Secondary	7-38	
T1207	Telescope elevation error signal		
	Primary	7-2	
	Secondary	7-38	

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

TRANSFORMERS (Continued)

Part No.	Function	Location Figure No.	Grid Location
T1208	Telescope elevation error signal		
	Primary	7-38	
	Secondary	7-38	
T1209	Filament and bias transformer		
	Primary	7-5	C - 12
	Secondary	7-38	
T1301T&M	Pulse transformer		
	Primary and secondary	7-39	
T1302T&M	Pulse transformer		
	Primary and secondary	7-39	
T1303T	Reference voltage		
	Primary	7-2	B - 9
T1303M	Reference voltage		
	Primary	7-2	B - 10
T1304,5,6	Pulse transformers		
	Primary and secondary	7-39	
T1307T	Filament transformer		
	Primary	7-5	C - 13
	Secondary	7-39	
T1307M	Filament transformer		
	Primary	7-5	C - 12
	Secondary	7-39	
T1401	Indicator lights transformer		
	Primary	7-5	B - 19
	Secondary	7-40	
T1601	Pulse transformer		
	Primary and secondary	7-42	
T1602	Pulse transformer		
	Primary and secondary	7-42	
T1603	Pulse transformer		
	Primary and secondary	7-42	
T1604	Pulse transformer		
	Primary and secondary	7-42	
T1605	Filament transformer		
	Primary	7-5	C - 13
	Secondary	7-42	
T1651	Pulse transformer		
	Primary and secondary	7-43	
T1652	Pulse transformer		
	Primary and secondary	7-43	
T1653	Filament transformer		
	Primary	7-5	C - 14
	Secondary	7-43	
T1701	I-f transformer	7-44	
	Primary and secondary		
T1702	I-f transformer	7-44	
	Primary and secondary		
T1703	Discriminator transformer	7-44	
	Primary and secondary		
T1704	Filament transformer		
	Primary	7-6	B - 9
	Secondary	7-44	
T1801	Output transformers	7-46	
T1802	Output transformers	7-46	
T1803	Filament transformer		
	Primary	7-5	B - 14
	Secondary	7-46	

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

TRANSFORMERS (Continued)

Part No.	Function	Location Figure No.	Grid Location
T1804	Filament transformer		
	Primary	7-5	C - 15
	Secondary	7-45	
T1805	Filament transformer		
	Primary	7-5	C - 15
	Secondary	7-45	
T2001	Pulse transformer	7-47	
T2002	Indicator light supply		
	Primary	7-6	B - 9
	Secondary	7-17	A - 3
T2003	Double stub tuner	7-6	A - 7
T2004	Magnetron filament supply		
	Primary	7-6	A - 8
	Secondary	7-47	
T2005	Standby lights		
	Primary	7-6	B - 12
	Secondary	7-17	A - 4
T2006	Nutator motor supply		
	Primary	7-6	B - 6
	Secondary	7-17	A - 1
T2301	High voltage transformer		
	Primary and secondary	7-7	A - 9
T2302	Indicator light supply		
	Primary	7-7	B - 6
	Secondary	7-17	A - 1
T2303	Filament transformer		
	Primary	7-7	B - 6
	Secondary	7-50	
T2304	Filament transformer		
	Primary	7-7	B - 6
	Secondary	7-50	
T2305	Filament transformer		
	Primary	7-7	B - 6
	Secondary	7-50	
T2306	Filament transformer		
	Primary	7-7	B - 6
	Secondary	7-50	
T2307	Pulse transformer	7-50	
T2701	Filament transformer		
	Primary	7-7	B - 4
	Secondary	7-53	
T2801	Illumination transformer		
	Primary	7-5	B - 16
	Secondary	7-54	
T2901	Filament transformer		
	Primary	7-7	C - 6
	Secondary	7-55	
T3001	Flag light transformer		
	Primary	7-5	B - 3
	Secondary	7-16	
T3002	Flag light transformer		
	Primary	7-5	B - 2
	Secondary	7-16	
T3201	Plate transformer		
	Primary	7-6	B - 2
	Secondary	7-57	
T3202	Filament transformer		
	Primary	7-6	B - 3
	Secondary	7-57	

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TABLE 7-4

LOCATION AND FUNCTION OF CONTROL CIRCUITS (Continued)

TRANSFORMERS (Continued)

Part No.	Function	Location Figure No.	Grid Location
T3301	Filament transformer		
	Primary	7-6	B - 2
	Secondary	7-58	
T3401	Filament transformer		
	Primary	7-6	B - 3
	Secondary	7-59	
T4401	Input transformer		
	Primary and secondary	7-63	
T4402	Pulse transformer		
	Primary and secondary	7-63	
T4403	Filament transformer		
	Primary	7-6	A - 8
	Secondary	7-63	
T4801	Communications transformer	7-64	
T4802	Communications transformer	7-64	
T4901	Indicator transformers	7-66	
T4902	Indicator transformers	7-66	
T4903	Line indicators	7-66	
T4904	Dial lights	7-66	
T5301,2,3	4-wire "Y" a-c input to 3-wire "delta" output	7-68	
T5304	A-c voltage regulator		
	Primary	7-5	A - 14
	Secondary	7-69	
T5305	A-c voltage regulator		
	Primary and secondary	7-69	
T6201	Filament transformer		
	Primary	7-6	B - 8
	Secondary	7-71	
T8401	Signal transformer		
	Primary and secondary	7-74	
T8402	Signal transformer		
	Primary and secondary	7-74	
T8403	Filament transformer		
	Primary	7-5	C - 6
	Secondary	7-74	
T8501	High voltage transformer		
	Primary	7-5	B - 6
	Secondary	7-75	
T8502	Filament transformer		
	Primary	7-5	B - 6
	Secondary	7-75	
T8503	Filament transformer		
	Primary	7-5	B - 6
	Secondary	7-75	
T8601	Filament transformer		
	Primary	7-5	B - 4
	Secondary	7-76	
T9101	Elevation slew voltage transformer		
	Primary	7-2	A - 5
	Secondary	7-13	C - 1
T9102	Train slew voltage transformer		
	Primary	7-2	A - 5
	Secondary	7-12	D - 1
T9103	Anti-ambiguity transformer		
	Primary	7-2	B - 4
	Secondary	7-77	

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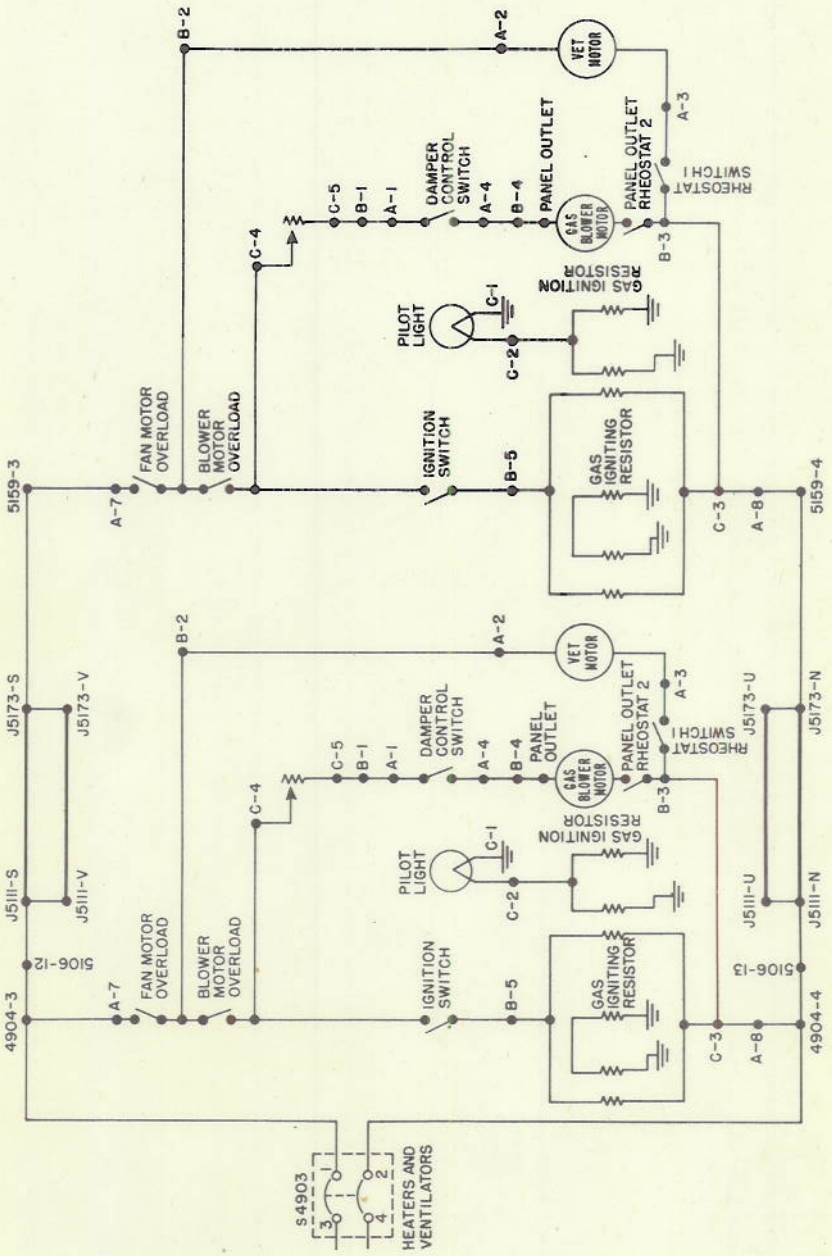

Figure 7-1. A-c Distribution System - Switch S4903

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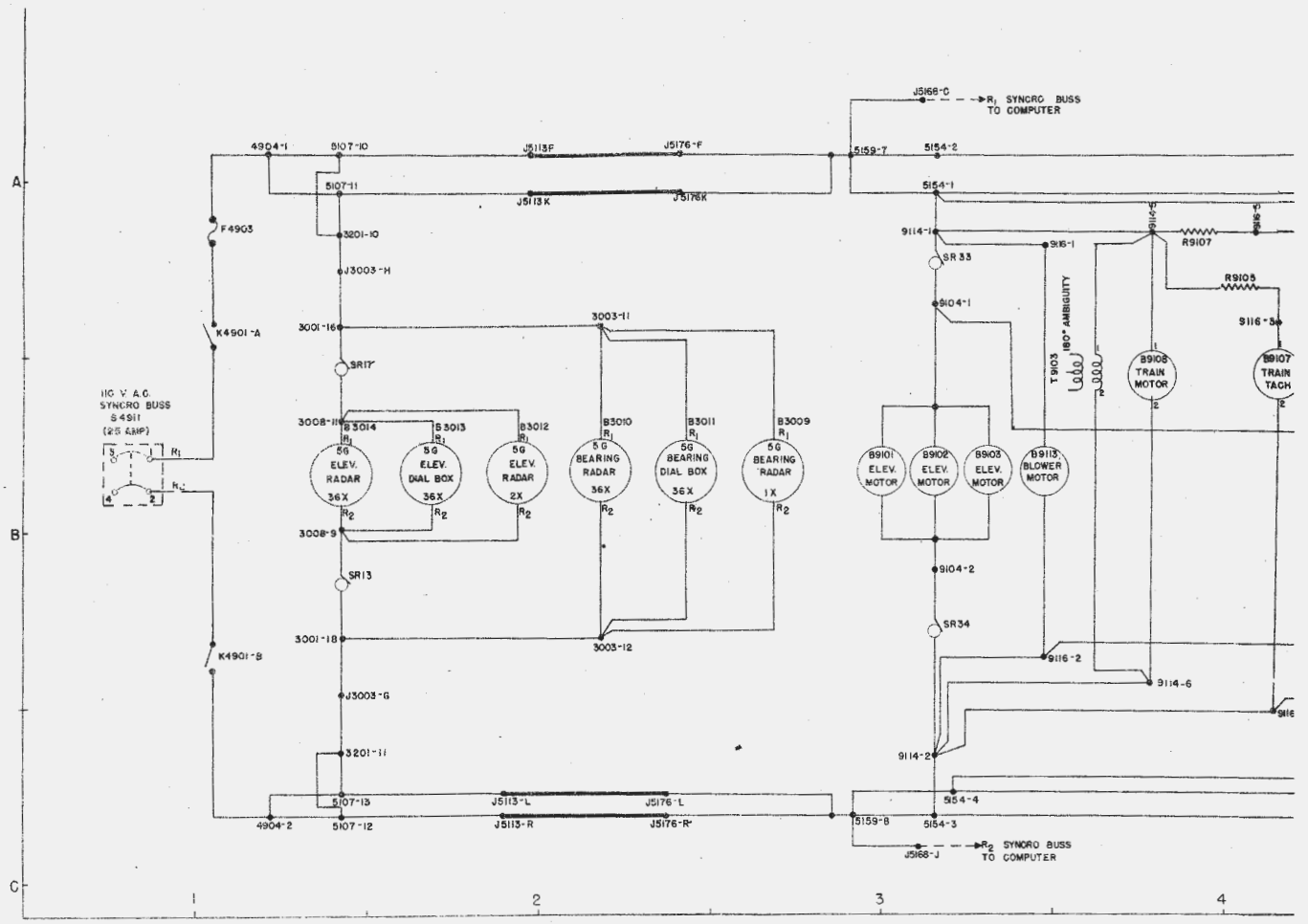
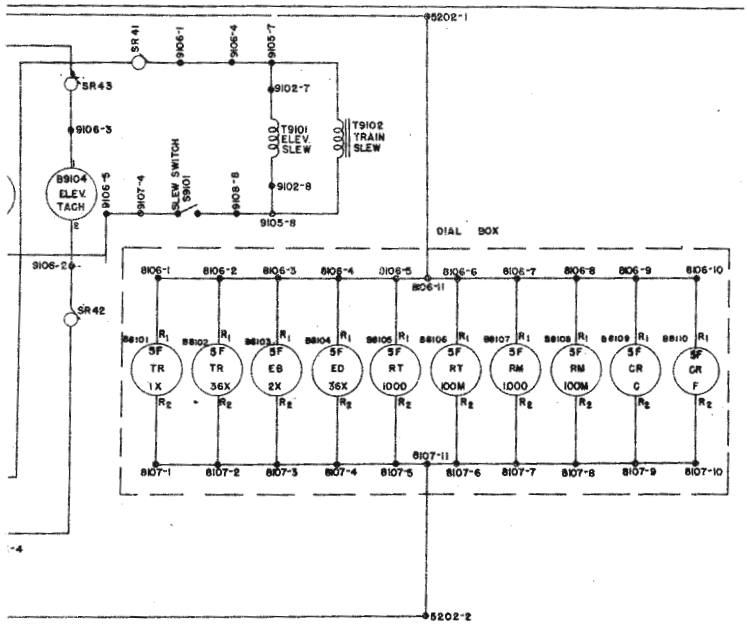


Figure 7-2. A-c Distribution System - Switch S4911


S5202-1
SR41
9106-1
9106-4
9105-7
SR43
9102-7
9106-3
T9101
ELEV.
SLEW
T9102
TRAIN
SLEW
B9104
ELEV.
TACH
9106-5
9107-4
SLEW SWITCH
S9101
9108-8
9102-8
9105-8
DIAL BOX
9106-2
SR42
8106-1
8106-2
8106-3
8106-4
8106-5
8106-6
8106-7
8106-8
8106-9
8106-10
8106-11
S8101
S8102
S8103
S8104
S8105
S8106
S8107
S8108
S8109
S8110
5F
TR
1X
TR
36X
EB
2X
ED
36X
RT
1000
RT
100M
RM
1000
RM
100M
CR
C
CR
F
R1
R2
8107-11
8107-1
8107-2
8107-3
8107-4
8107-5
8107-6
8107-7
8107-8
8107-9
8107-10
S5202-2

5 6

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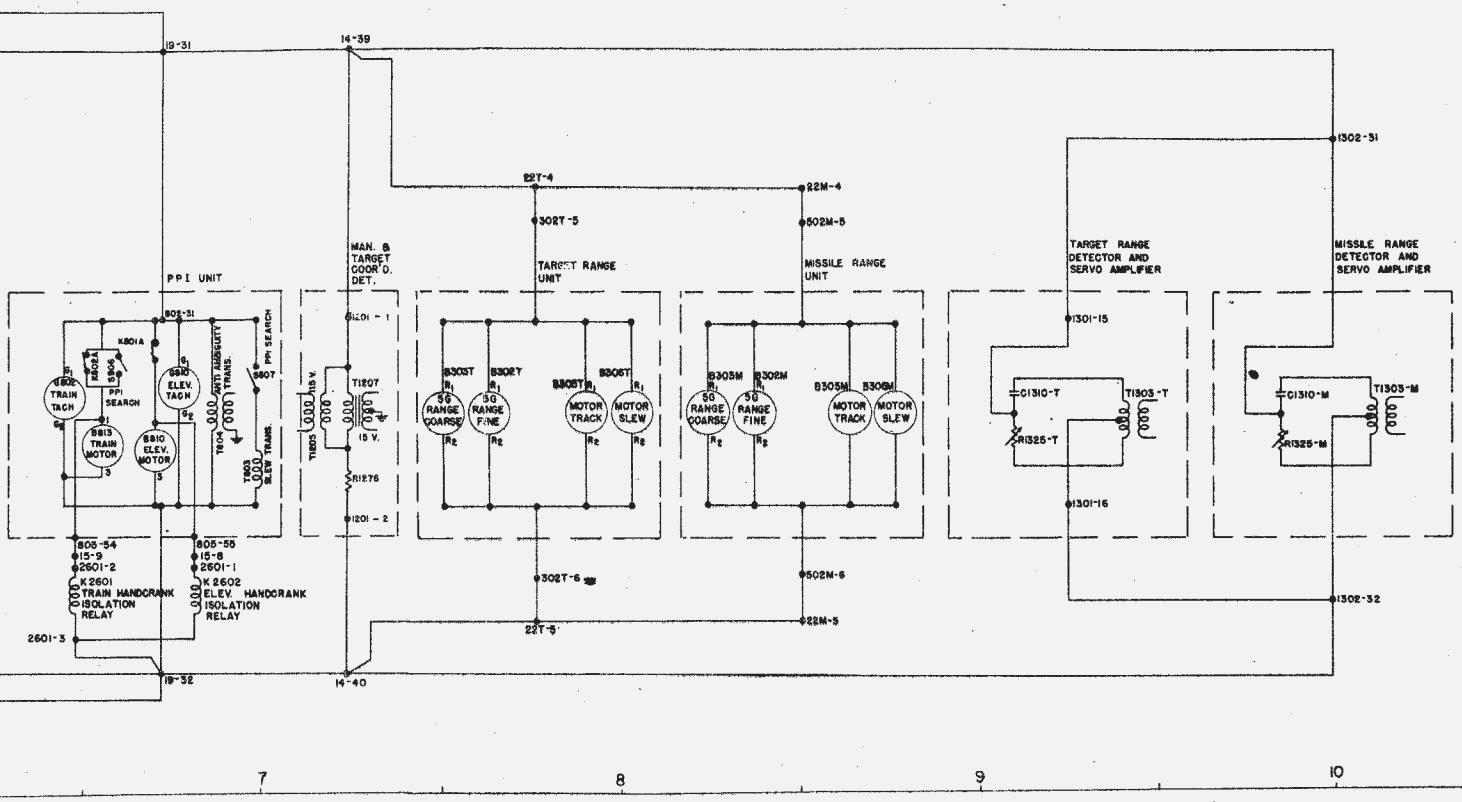

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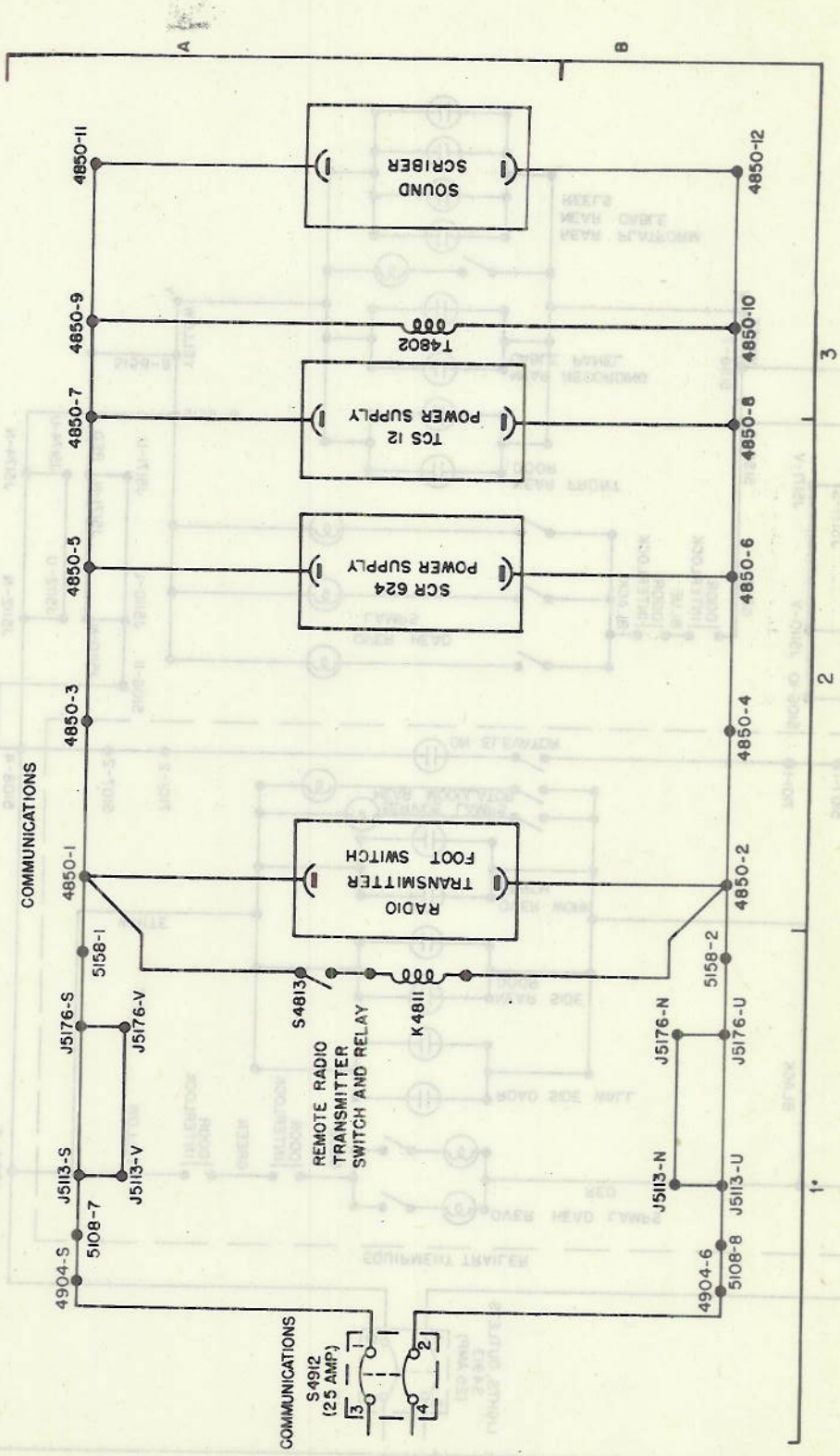

Figure 7-3. A-c Distribution System - Switch S4912

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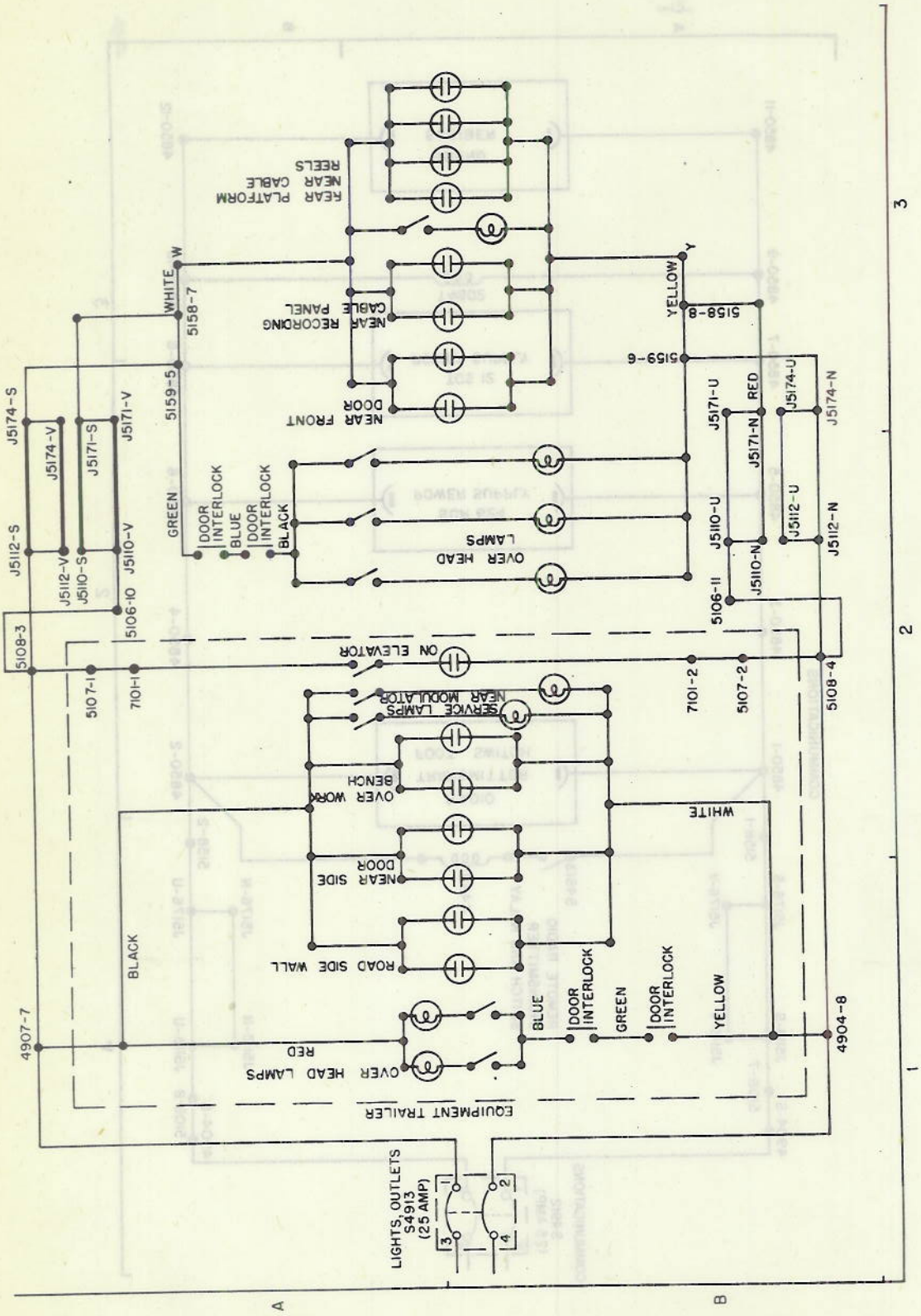

Figure 7-4. A-c Distribution System - Switch S4913

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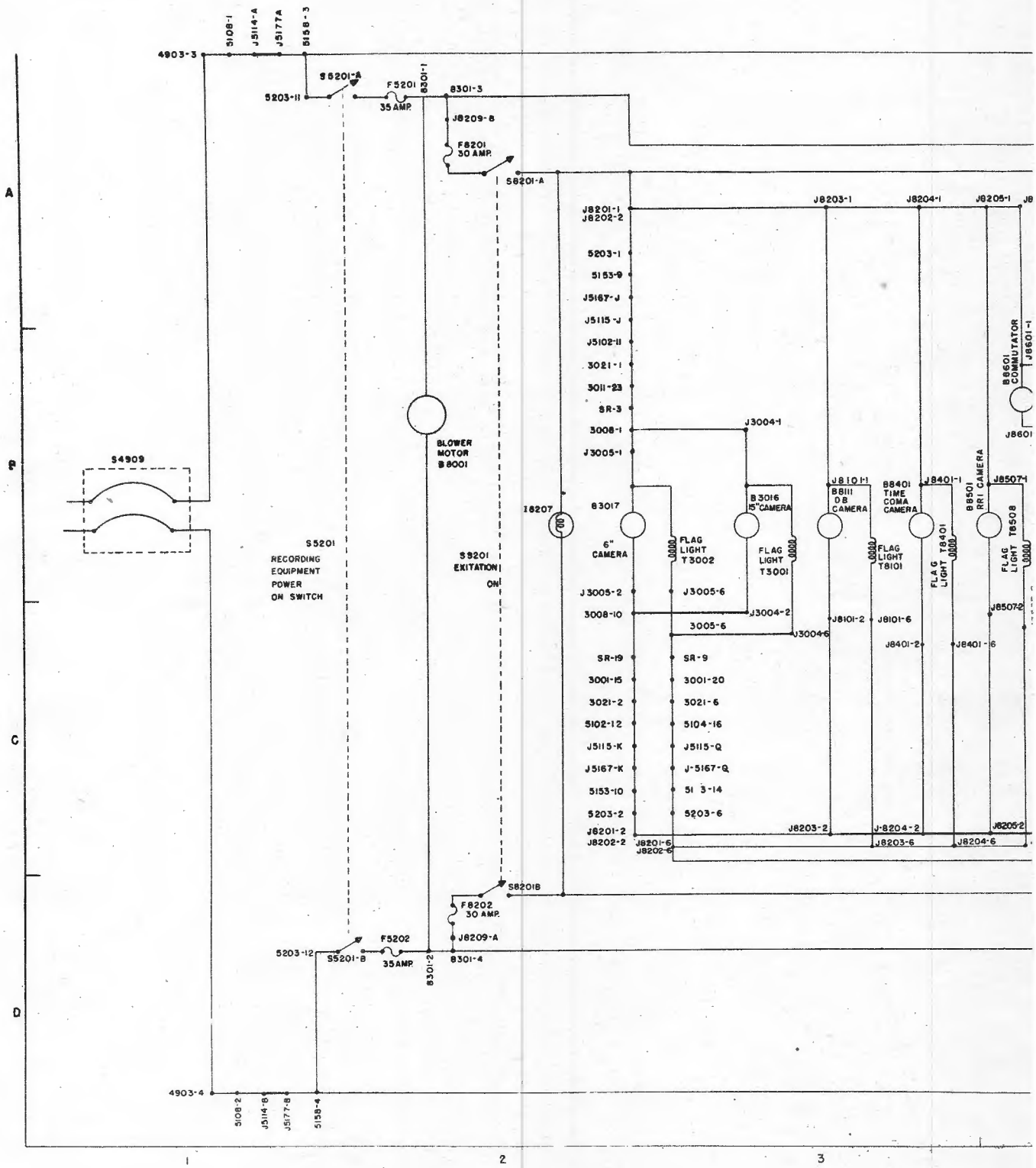
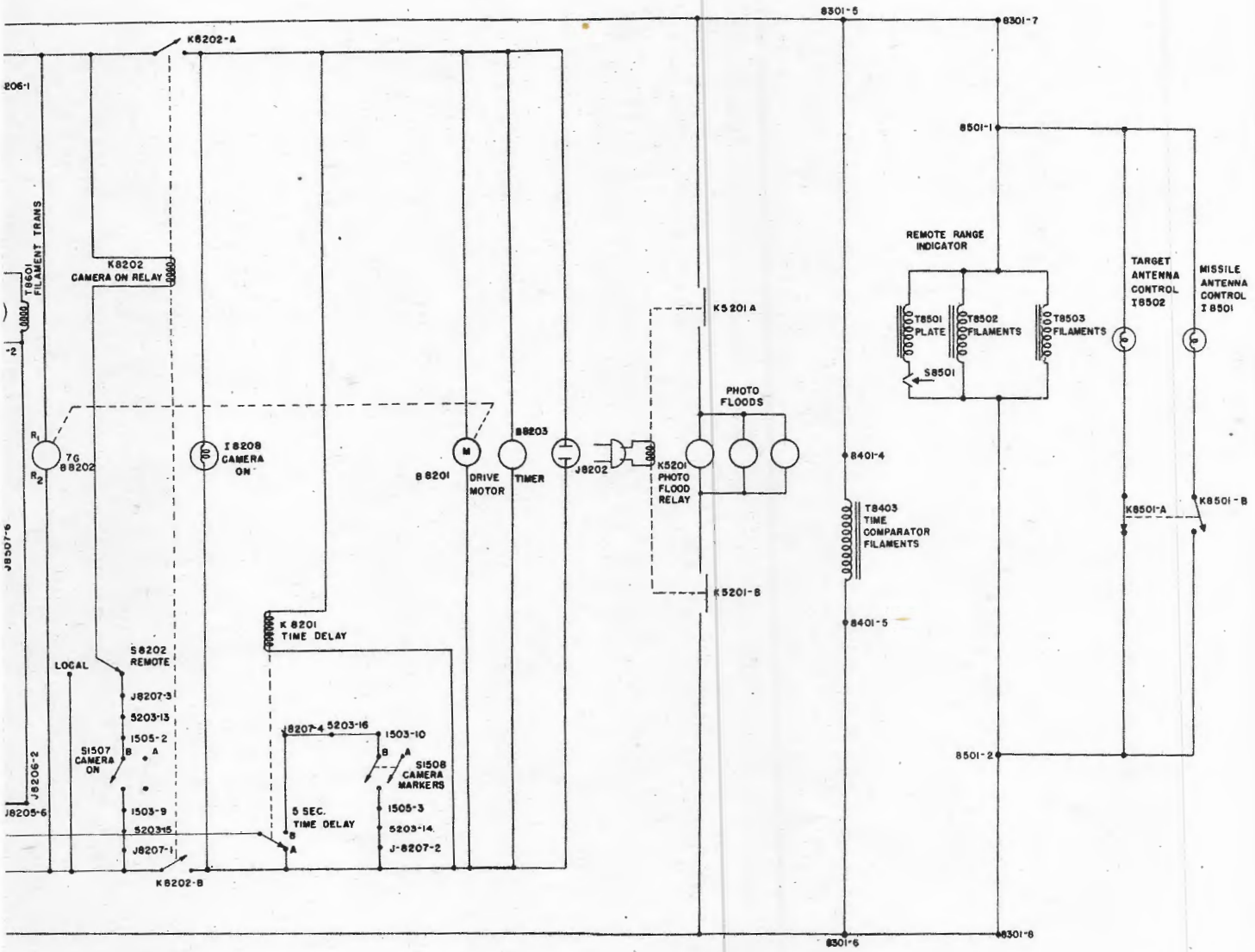


Figure 7-5. (Sheet 1 of 3 Sheets.) A-c Distribution System - Switch S4909


8301-5
8301-7
K8202-A
8501-1
REMOTE RANGE INDICATOR
TARGET ANTENNA CONTROL I8502
MISSILE ANTENNA CONTROL I8501
T8501 PLATE
T8502 FILAMENTS
T8503 FILAMENTS
S8501
K8202 CAMERA ON RELAY
T8601 FILAMENT TRANS
K5201A
PHOTO FLOODS
I 8208 CAMERA ON
7G 8202
B 8201
DRIVE MOTOR
88203 TIMER
J8202
K5201 PHOTO FLOOD RELAY
8401-4
T8403 TIME COMPARATOR FILAMENTS
K8501-A
K8501-B
K5201-B
8401-5
K 8201 TIME DELAY
S8202 REMOTE
LOCAL
J8207-3
5203-13
1505-2
S1507 CAMERA ON
J8207-4
5203-16
1503-10
S1508 CAMERA MARKERS
5 SEC. TIME DELAY
1503-9
1505-3
520315
5203-14
J8207-1
J-8207-2
K8202-B
8501-2
8301-6
8301-8

4 5 6

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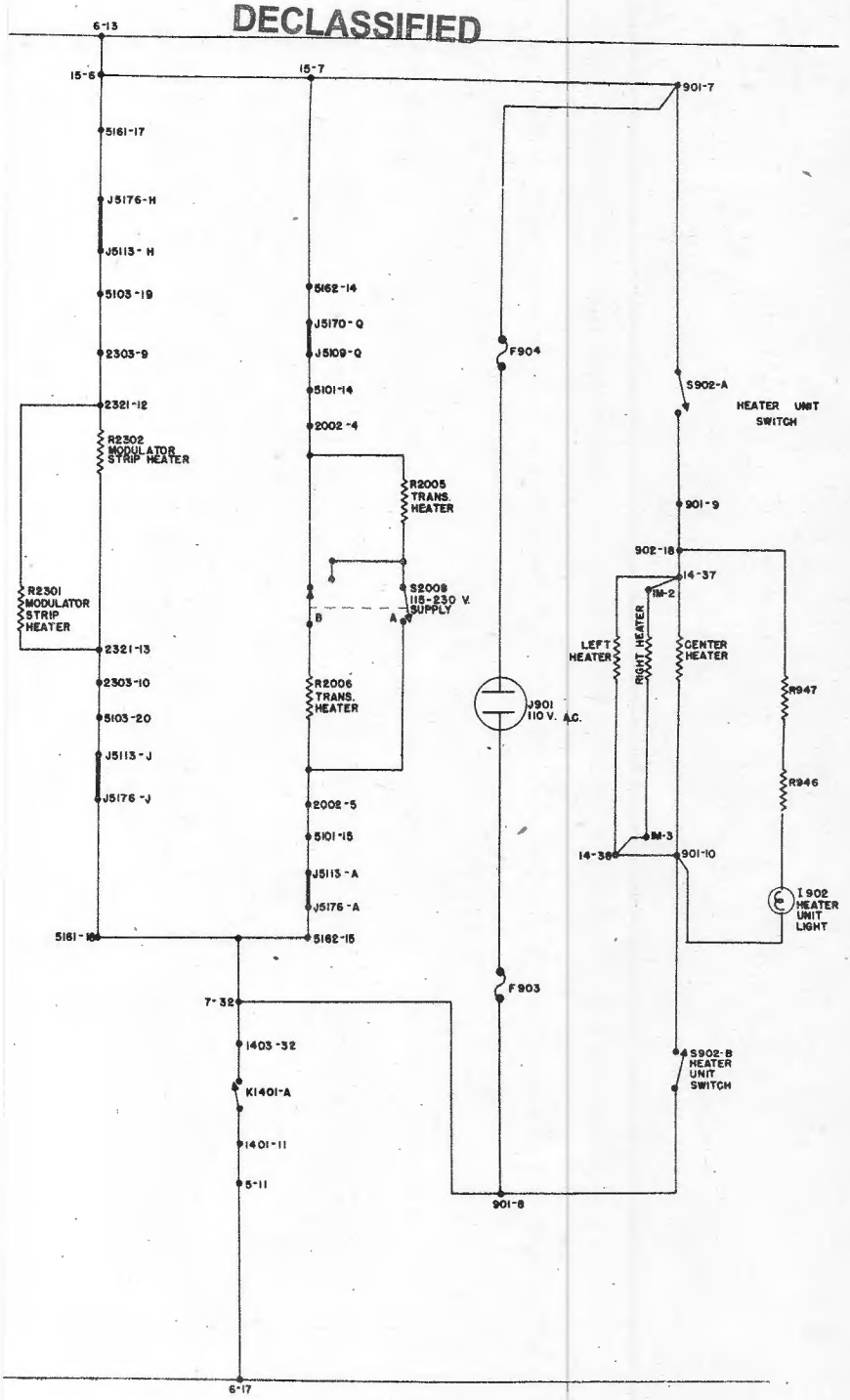

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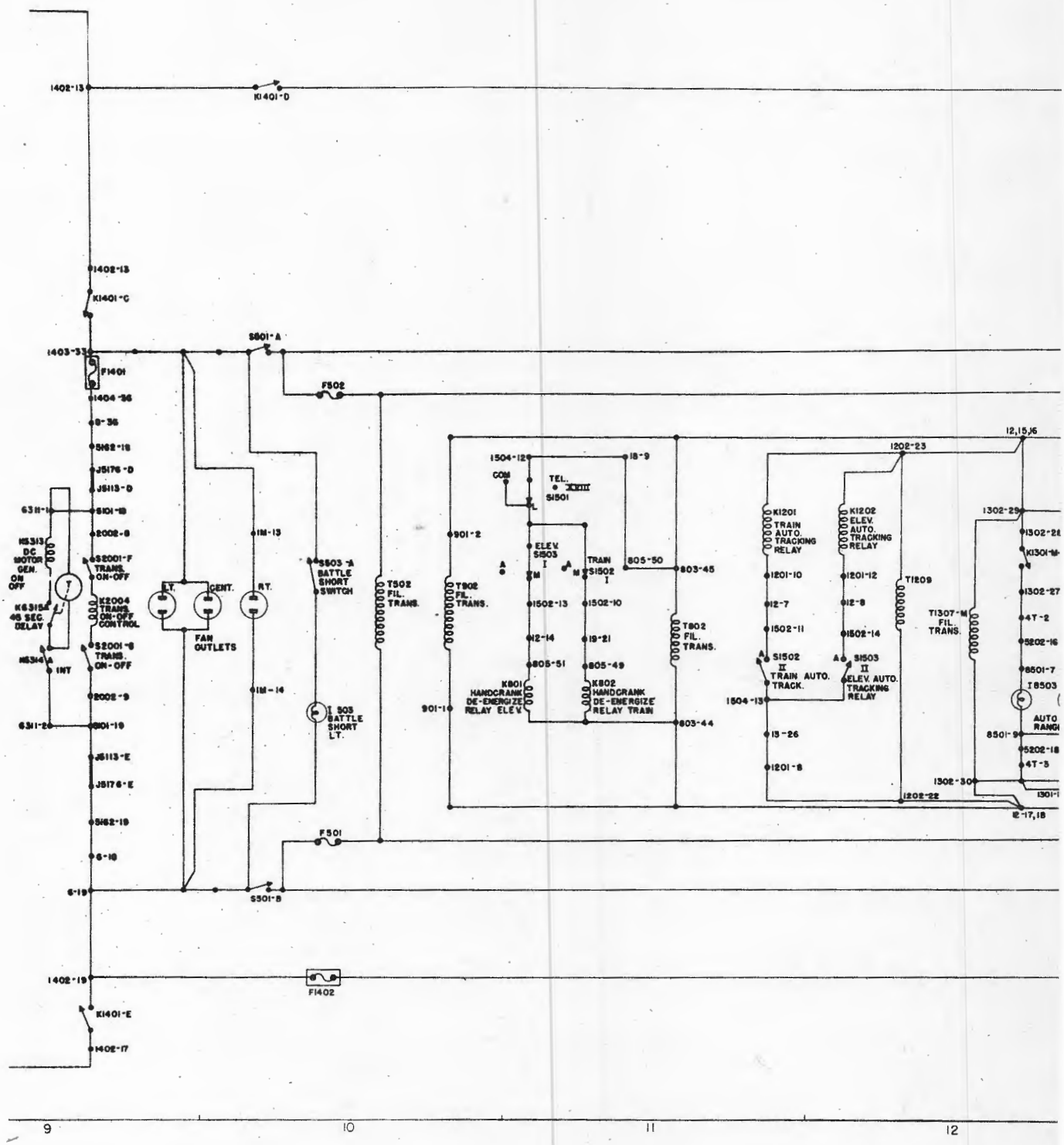

Figure 7-5. (Sheet 2 of 3 Sheets.) A-c Distribution System - Switch S4909

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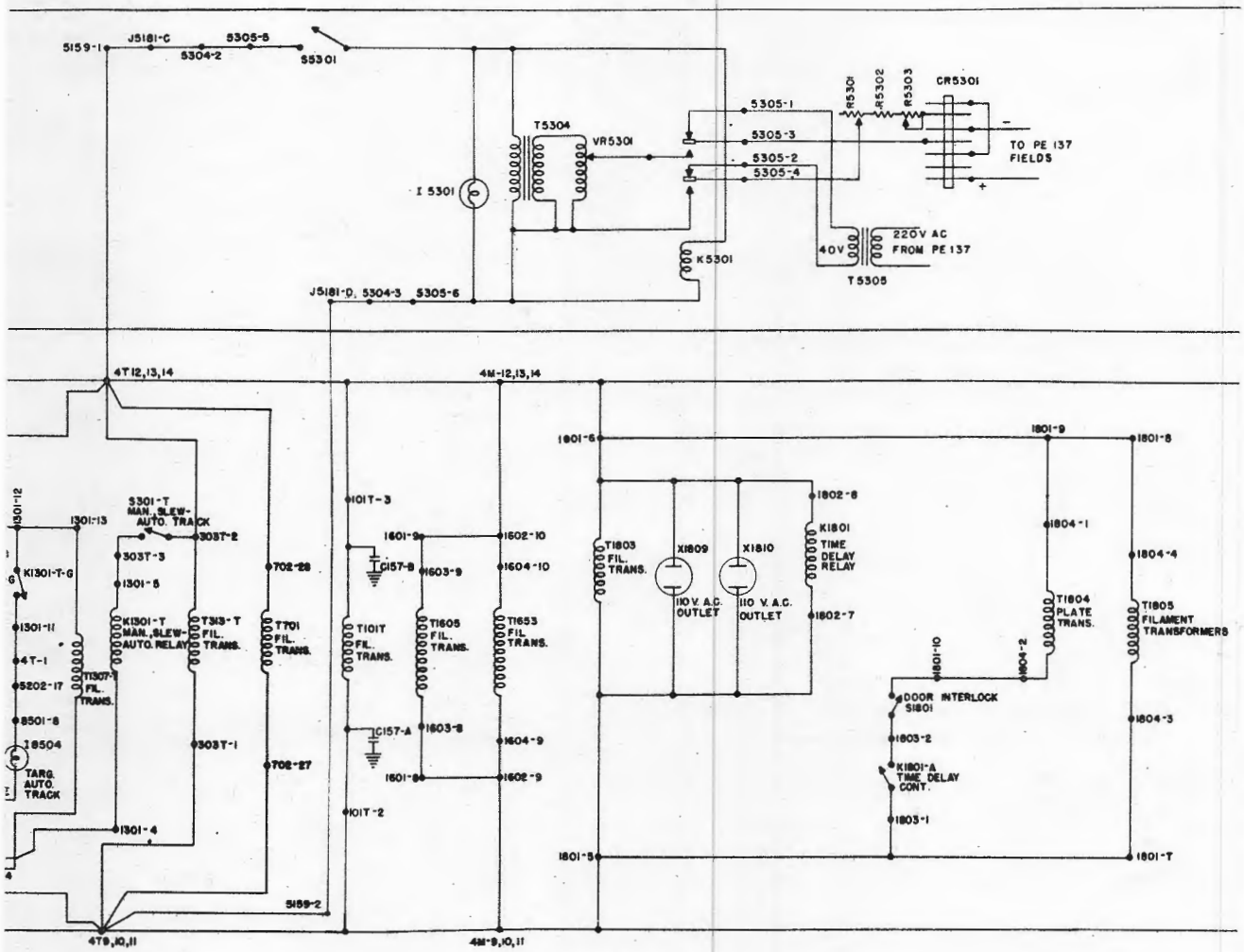
5159-1
J5181-C
5305-5
5304-2
S5301
T5304
VR5301
I 5301
5305-1
5305-3
5305-2
5305-4
R5301
R5302
R5303
CR5301
TO PE 137 FIELDS
220V AC FROM PE 137
40V
T5305
K5301
J5181-D, 5304-3 5305-6
4T12,13,14
4M-12,13,14
1801-6
1801-9
1801-8
1301-12
1301-13
3301-T MAN. SLEW-AUTO. TRACK
303T-2
303T-3
1301-5
K1301-T-G
1301-11
4T-1
5202-17
8501-8
18504
TARG. AUTO. TRACK
T1307-T FIL. TRANS.
K1301-T MAN.,SLEW-AUTO. RELAY
T313-T FIL. TRANS.
303T-1
1301-4
702-28
T701 FIL. TRANS.
702-27
5159-2
4T9,10,11
1101T-3
1601-9
1502-10
C157-B
1603-9
1604-10
T1101T FIL. TRANS.
T1605 FIL. TRANS.
T1653 FIL. TRANS.
C157-A
1603-8
1604-9
1601-8
1502-9
1101T-2
4M-9,10,11
T1803 FIL. TRANS.
X1809
X1810
110 V. A.C. OUTLET
110 V. A.C. OUTLET
1802-8
K1801 TIME DELAY RELAY
1802-7
1804-1
1804-4
T1804 PLATE TRANS.
T1805 FILAMENT TRANSFORMERS
1801-10
1804-2
DOOR INTERLOCK S1801
1803-2
K1801-A TIME DELAY CONT.
1803-1
1804-3
1801-5
1801-7

13 14 15

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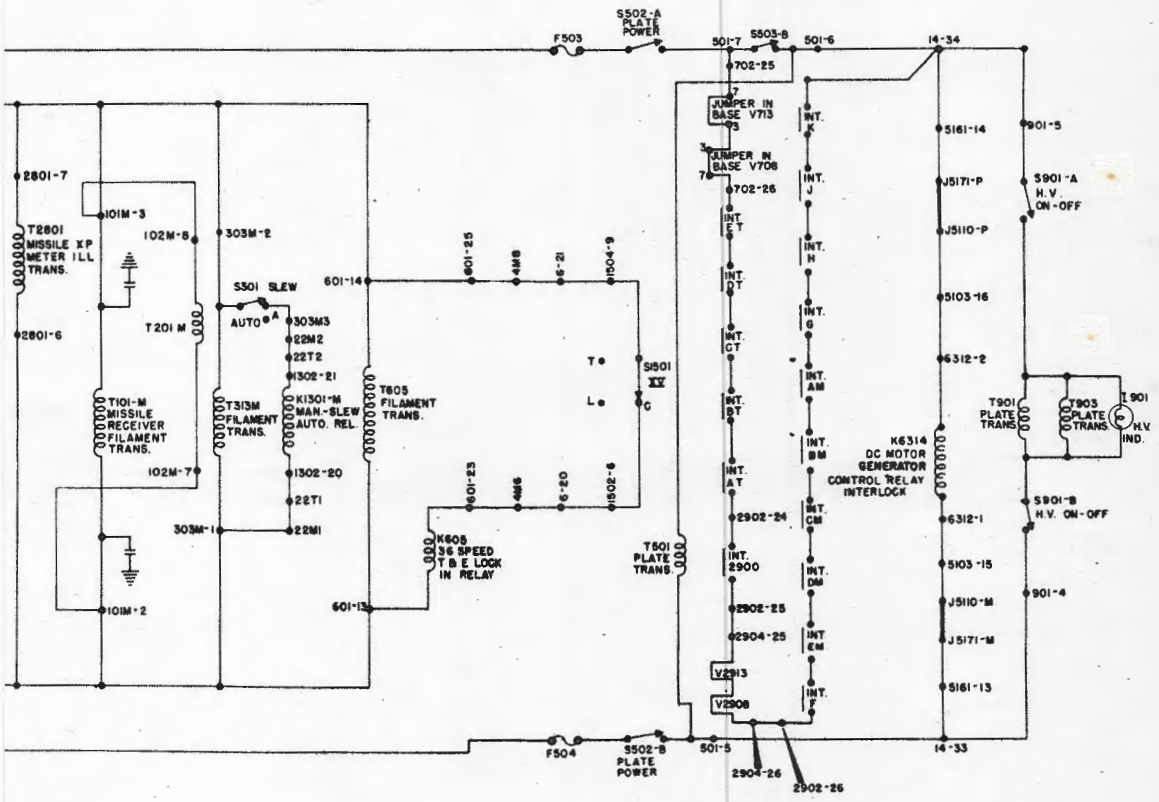

16 17 18

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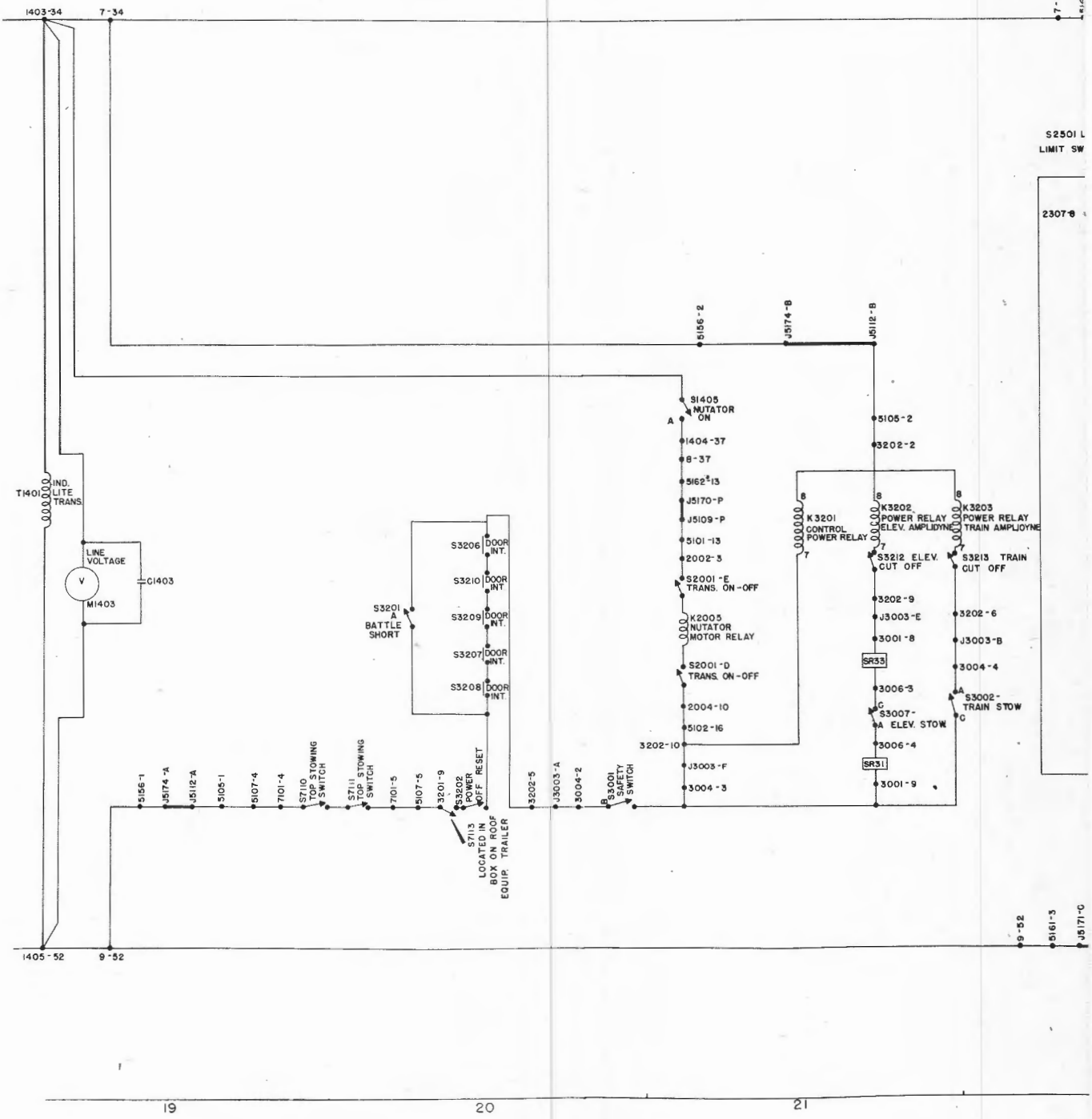

Figure 7-5. (Sheet 3 of 3 Sheets.) A-c Distribution System - Switch S4909

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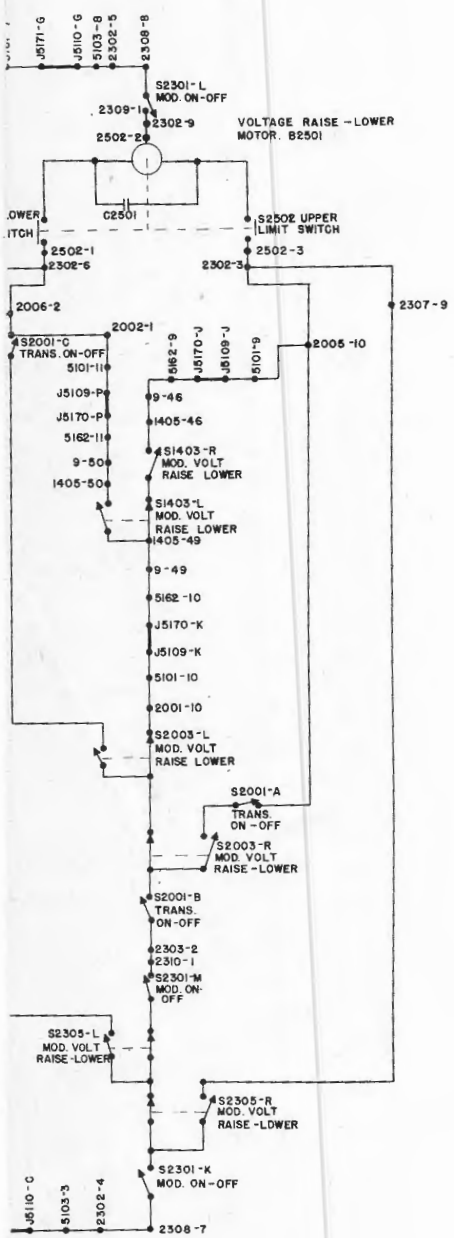
J5171-G
J5110-G
5103-8
2302-5
2308-8
S2301-L
MOD. ON-OFF
2309-1
2302-9
VOLTAGE RAISE - LOWER
MOTOR. B2501
2502-2
C2501
S2502 UPPER
LIMIT SWITCH
2502-1
2302-6
2502-3
2302-3
2006-2
2307-9
2002-1
S2001-C
TRANS. ON-OFF
5101-11
5162-9
J5170-J
J5109-J
5101-9
2005-10
J5109-P
9-46
J5170-P
1405-46
5162-11
S1403-R
MOD. VOLT
RAISE LOWER
9-50
1405-50
S1403-L
MOD. VOLT
RAISE LOWER
1405-49
9-49
5162-10
J5170-K
J5109-K
5101-10
2001-10
S2003-L
MOD. VOLT
RAISE LOWER
S2001-A
TRANS.
ON - OFF
S2003-R
MOD. VOLT
RAISE - LOWER
S2001-B
TRANS.
ON-OFF
2303-2
2310-1
S2301-M
MOD. ON-
OFF
S2305-L
MOD. VOLT
RAISE-LOWER
S2305-R
MOD. VOLT
RAISE - LOWER
S2301-K
MOD. ON-OFF
J5110-C
5103-3
2302-4
2308-7

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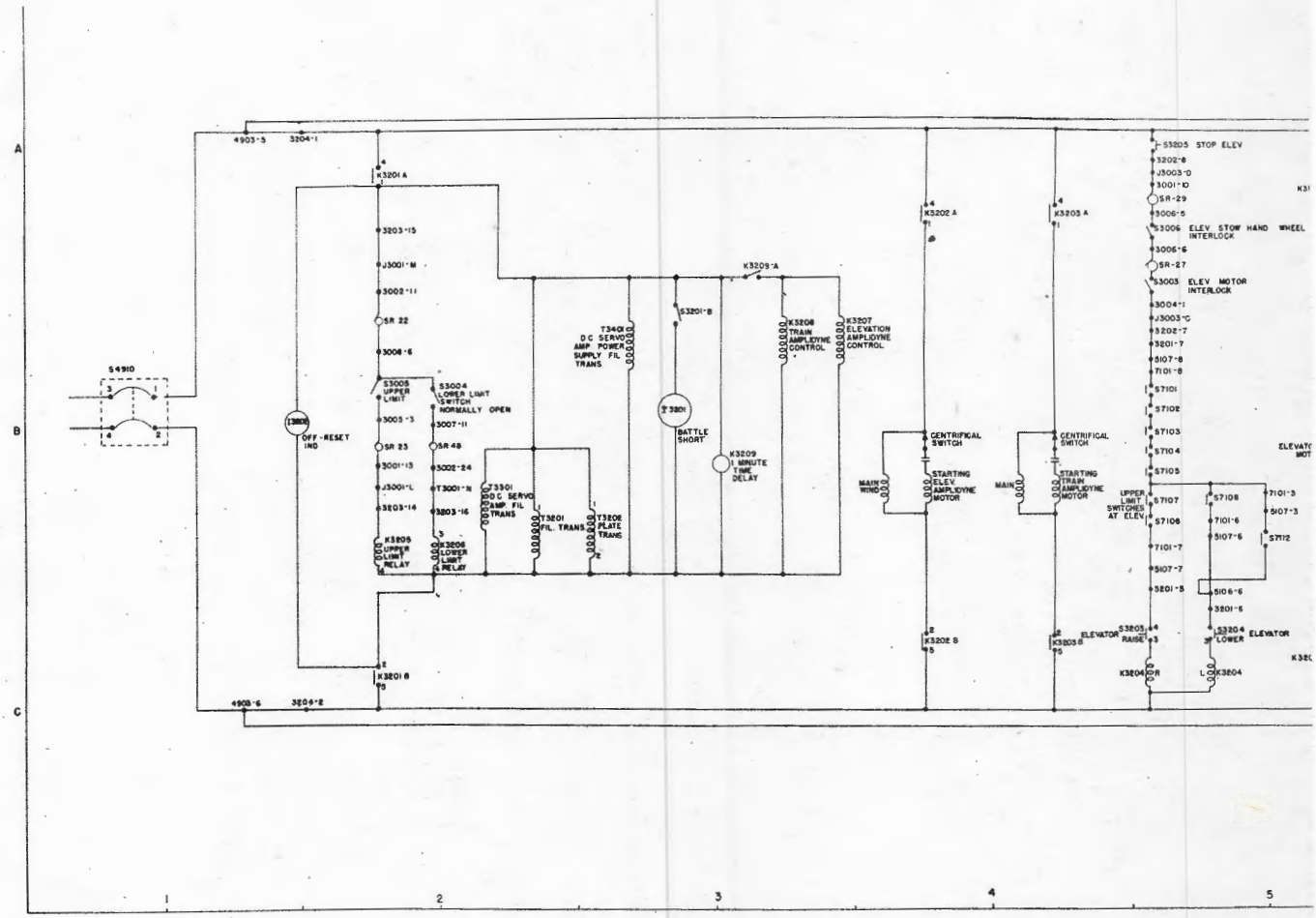

Figure 7-6. A-c Distribution System - Switch S4910

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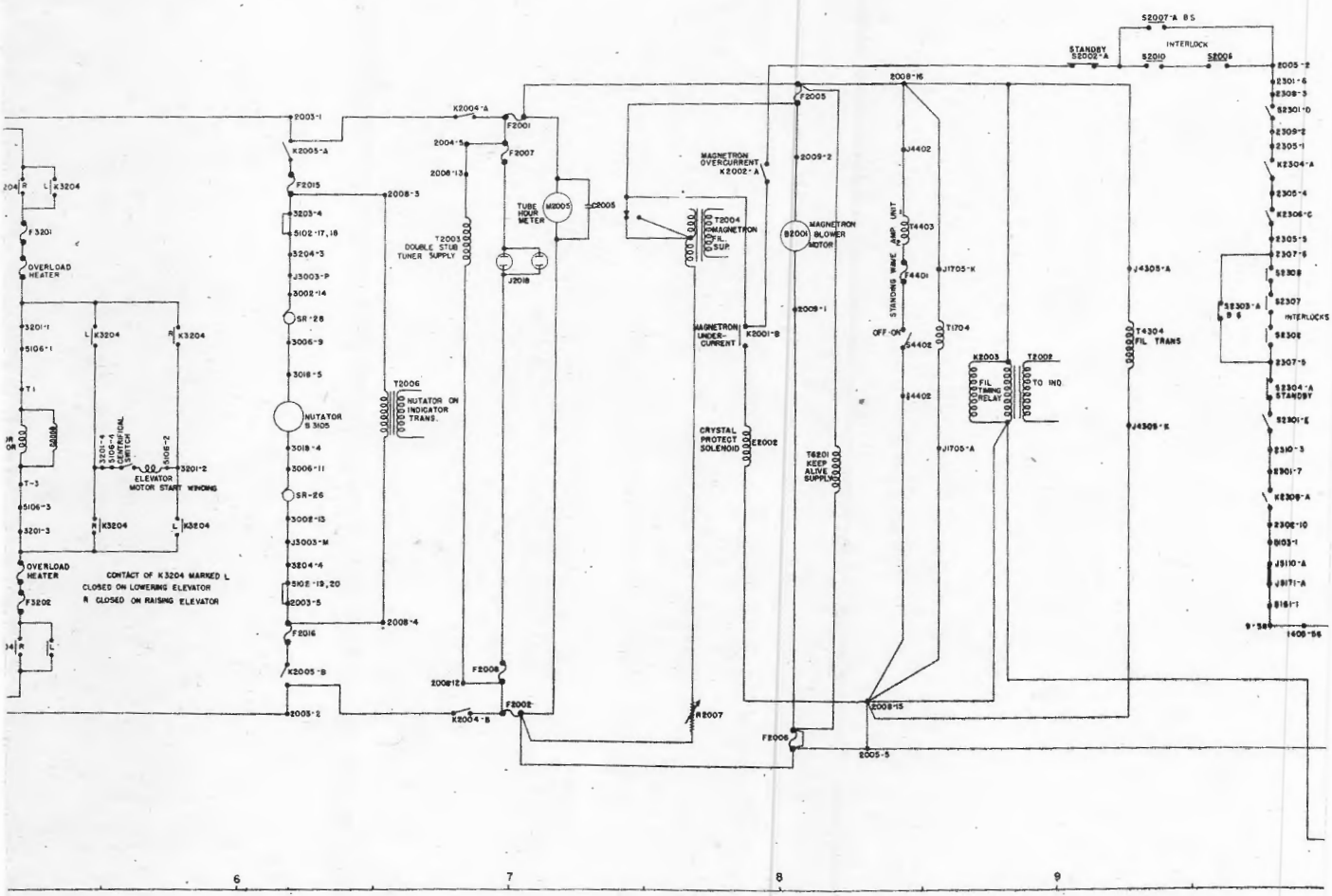
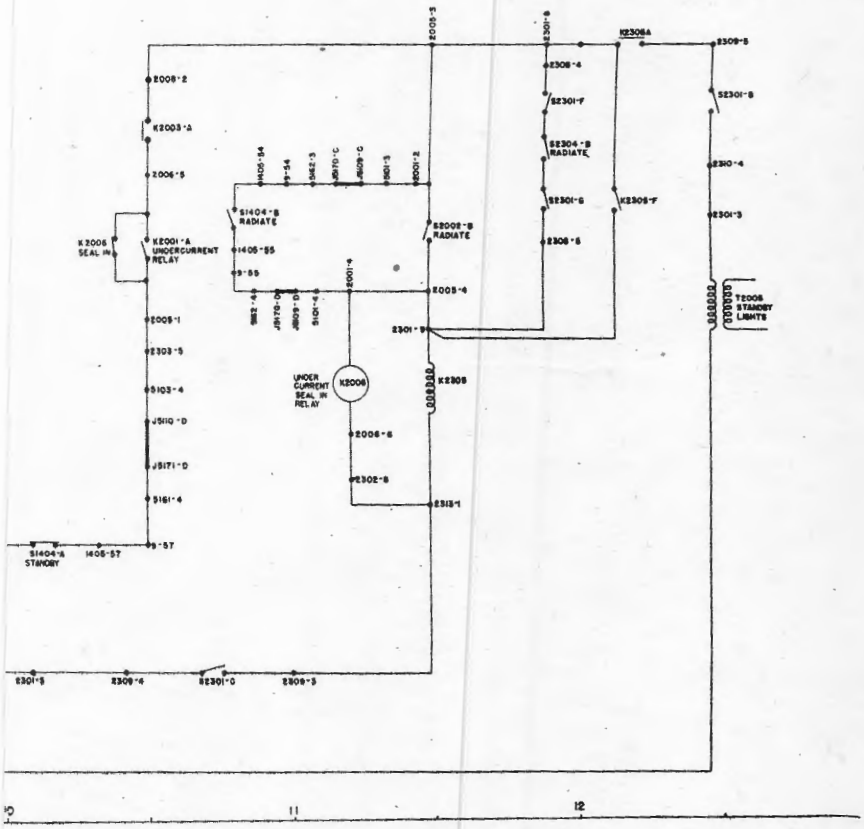

OVERLOAD HEATER
F3201
K3204
ELEVATOR MOTOR START WINDING
CONTACT OF K3204 MARKED L CLOSED ON LOWERING ELEVATOR
R CLOSED ON RAISING ELEVATOR
NUTATOR S 3105
SR-28
SR-26
T2003 DOUBLE STUB TUNER SUPPLY
T2006 NUTATOR ON INDICATOR TRANS.
TUBE HOUR METER M2005
MAGNETRON OVERCURRENT K2002-A
T2004 MAGNETRON FIL. SUP.
MAGNETRON BLOWER MOTOR B2001
MAGNETRON UNDER-CURRENT K2001-B
CRYSTAL PROTECT SOLENOID K2002
T6201 KEEP ALIVE SUPPLY
STANDBY S2002-A
INTERLOCK
S2010
S2006
S2007-A B S
S2303-A B S
INTERLOCKS
S2304-A STANDBY
STANDBY AMP UNIT
OFF-ON
K2003 FIL TIMING RELAY
T2005 TO IND.
T4304 FIL TRANS
T1704
T4403
T4401
S4402
J4402
J1705-K
J1705-A
J4305-A
J4305-K
1408-56


2005-3
2301-8
K2308A
2309-5
2308-4
2008-2
S2301-7
S2301-8
K2003-A
S2304-B RADIATE
2310-4
2006-5
S2301-6
K2308-F
2301-3
1406-54
S1-54
SME2-3
JB170-C
JB109-C
2501-3
2001-2
S1404-B RADIATE
S2002-B RADIATE
K2006 SEAL IN
K2001-A UNDERCURRENT RELAY
1406-55
S-55
2001-4
2005-4
2308-6
T2006 STANDBY LIGHTS
SME2-4
JB170-D
JB109-D
S101-4
2005-1
2301-9
2303-5
S103-4
UNDER CURRENT SEAL IN RELAY
K2006
K2308
JS110-D
2006-6
JS171-D
2302-6
S161-4
2313-1
S1404-6 STANDBY
1406-57
S-57
2301-5
2309-4
S2301-0
2309-3
10
11
12

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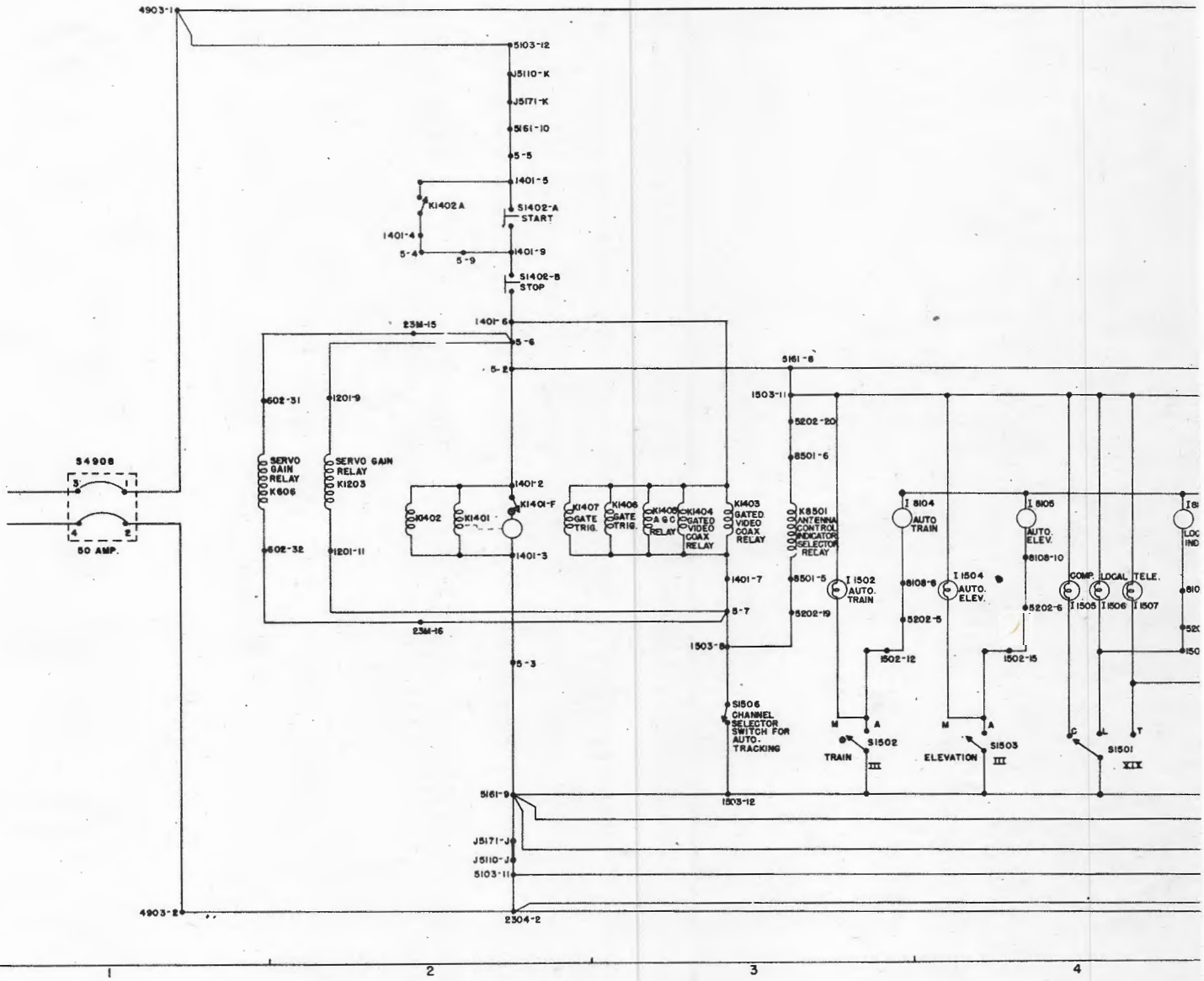

Figure 7-7. A-c Distribution System - Switch S4908

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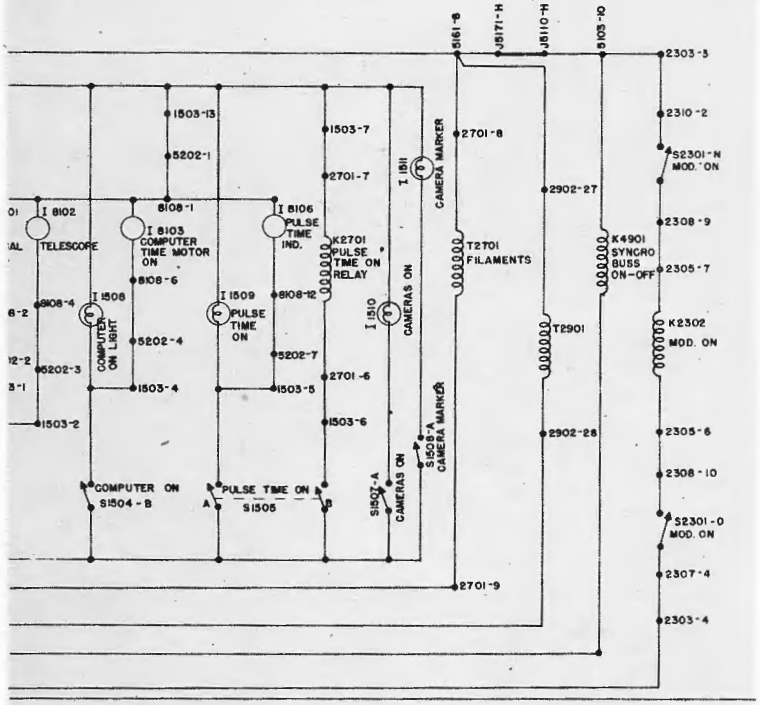
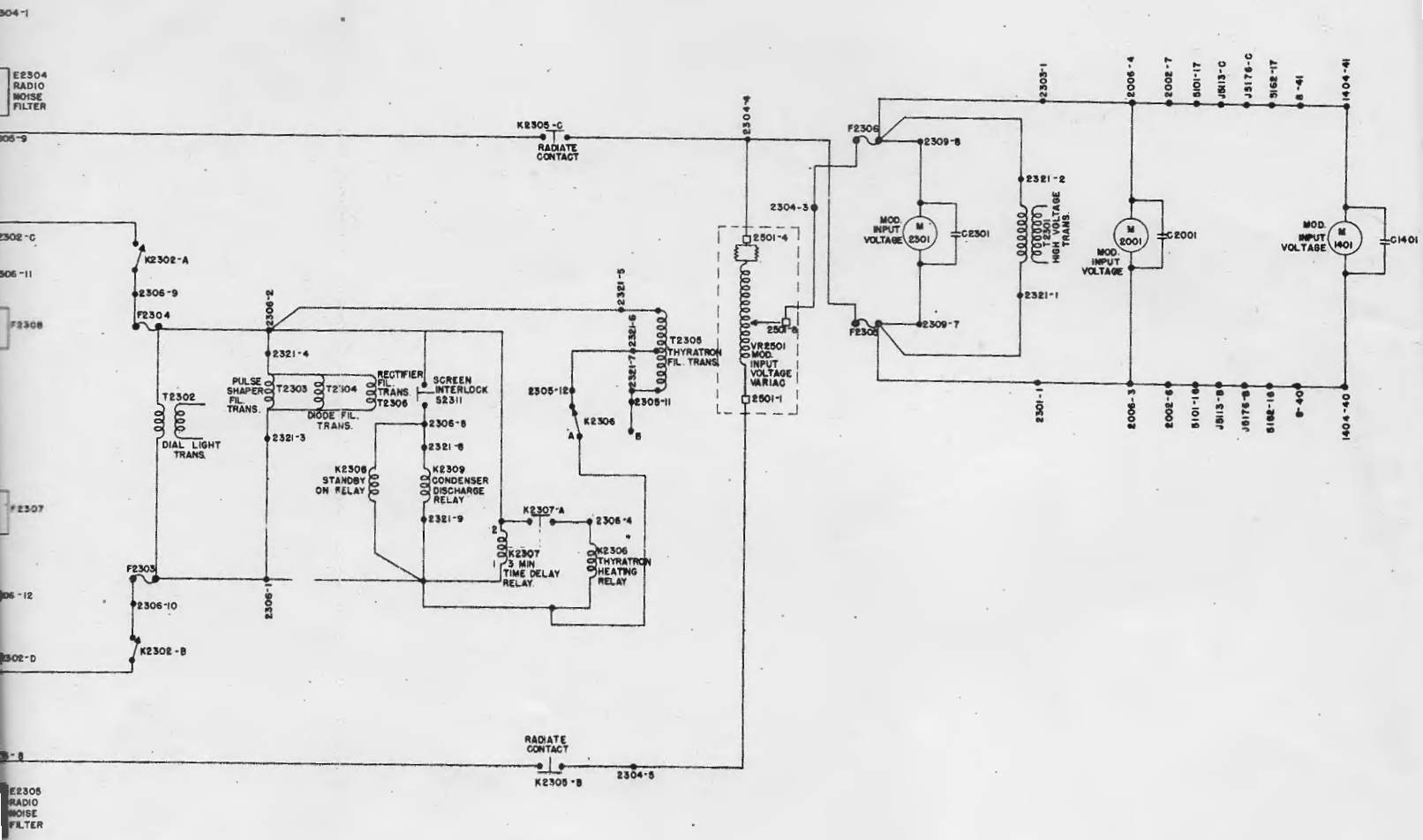

5161-B
J5171-H
J5110-H
5103-D
2303-3
2310-2
S2301-N MOD. ON
2308-9
2305-7
K2302 MOD. ON
2305-6
2308-10
S2301-O MOD. ON
2307-4
2303-4
2902-27
2902-28
2701-8
2701-9
T2701 FILAMENTS
T2901
K4901 SYNCRO BUSS ON-OFF
I 1511 CAMERA MARKER
I 1510 CAMERAS ON
S1508-A CAMERA MARKER
S1507-A CAMERAS ON
1503-13
5202-1
8108-1
1503-7
2701-7
I 8102 TELESCOPE
I 8103 COMPUTER TIME MOTOR ON
I 8106 PULSE TIME IND.
K2701 PULSE TIME ON RELAY
8108-6
8108-12
I 1508 COMPUTER ON LIGHT
I 1509 PULSE TIME ON
5202-4
5202-7
2701-6
1503-4
1503-5
1503-6
1503-2
COMPUTER ON S1504-B
PULSE TIME ON S1505
A
B


E2304 RADIO NOISE FILTER
K2305-C
RADIATE CONTACT
2304-4
F2306
2309-8
2303-1
2006-4
2002-7
5101-17
J5113-C
J5176-C
5162-17
8-41
1404-41
2304-3
2321-2
MOD. INPUT VOLTAGE
M 2501
C2301
T2301 HIGH VOLTAGE TRANS.
M 2001
C2001
MOD. INPUT VOLTAGE
MOD. INPUT VOLTAGE
M 1401
C1401
2501-4
2309-7
F2305
2321-1
2501-1
2301-1
2006-3
2002-6
5101-16
J5113-B
J5176-B
5162-16
8-40
1404-40
K2302-A
2306-9
F2304
2306-2
2321-5
2321-6
2321-7
T2305 THYRATRON FIL. TRANS.
2321-4
PULSE SHAPER FIL. TRANS.
T2303
T2104
RECTIFIER FIL. TRANS. T2306
DIODE FIL. TRANS.
SCREEN INTERLOCK S2311
T2302
DIAL LIGHT TRANS.
2321-3
2306-8
2321-8
2305-12
2305-11
K2306
A
B
VR2501 MOD. INPUT VOLTAGE VARIAC
K2308 STANDBY ON RELAY
K2309 CONDENSER DISCHARGE RELAY
2321-9
K2307-A
2306-4
K2307 3 MIN TIME DELAY RELAY
K2306 THYRATRON HEATING RELAY
F2303
2306-10
2306-1
K2302-B
RADIATE CONTACT
K2305-B
2304-5
E2305 RADIO NOISE FILTER

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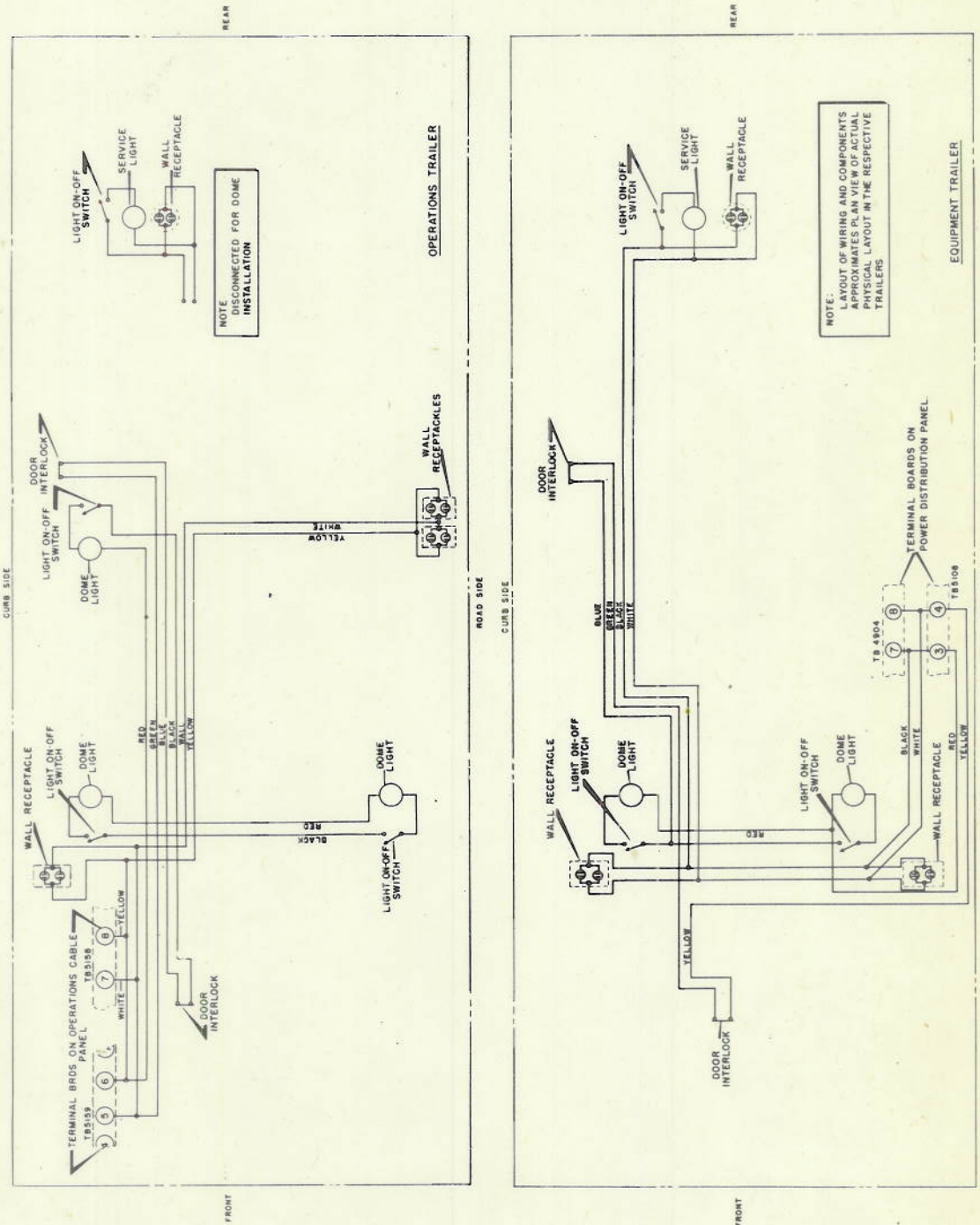

Figure 7-8. A-c Lights and Outlets

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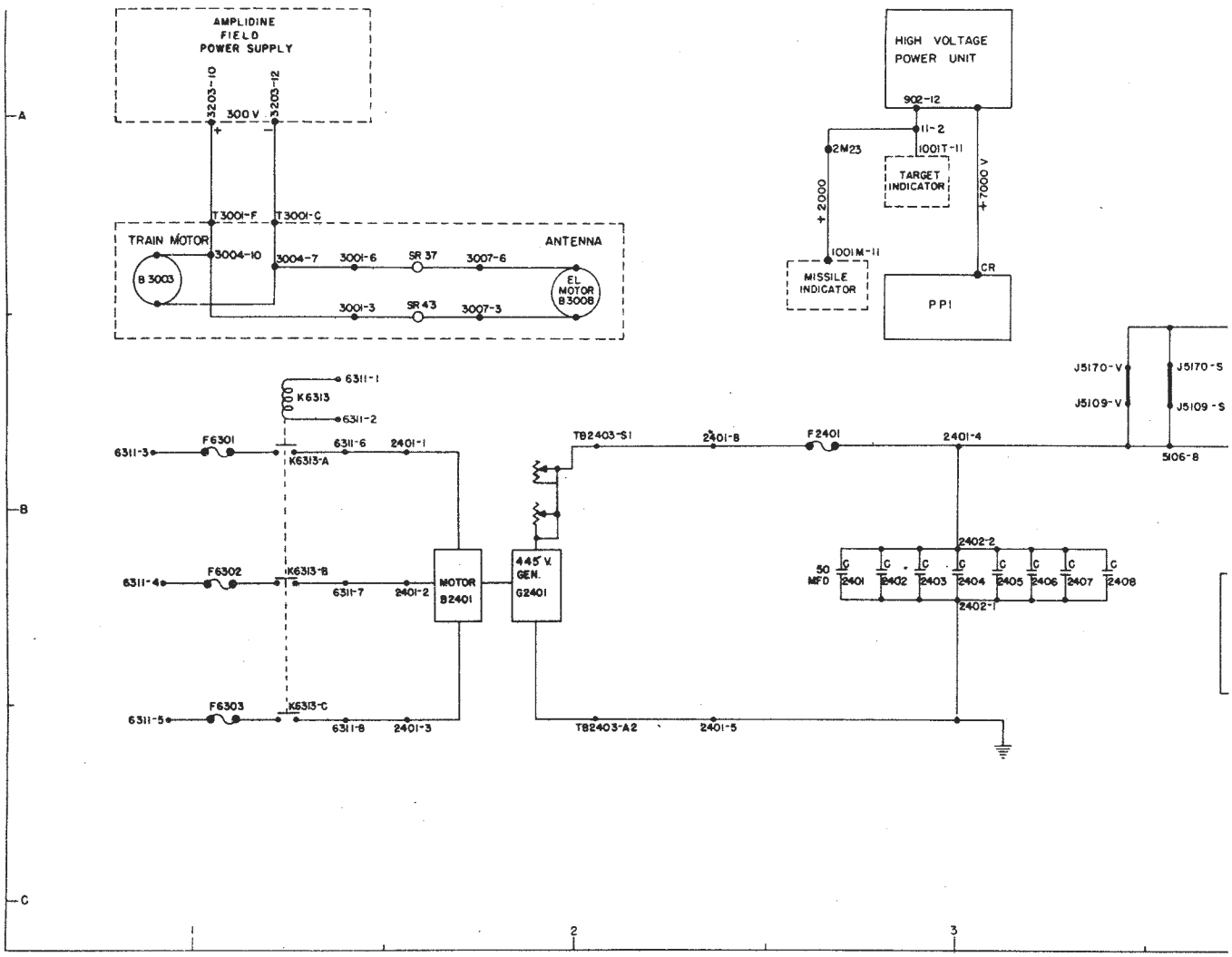

Figure 7-9. D-c Supplies - Positive

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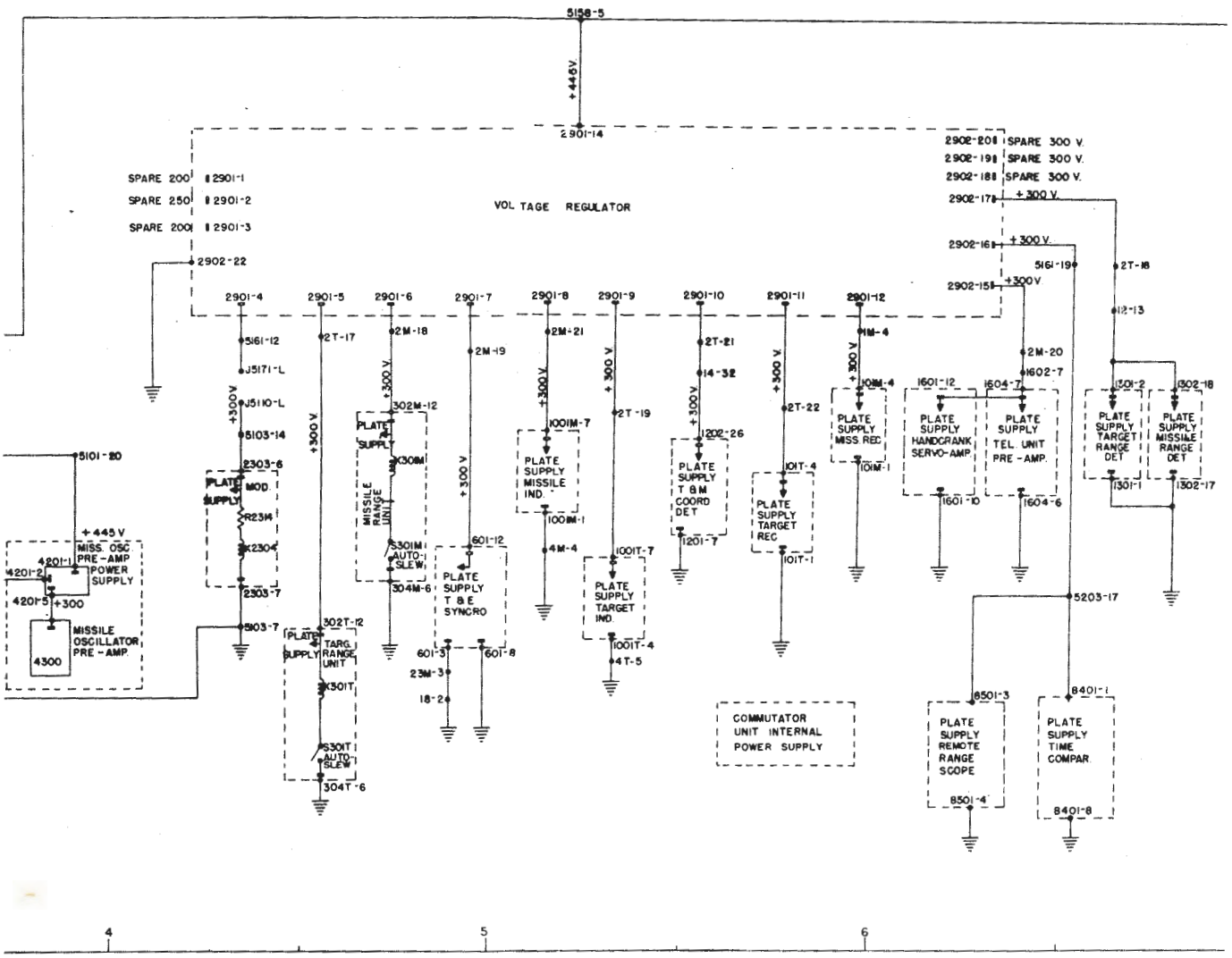
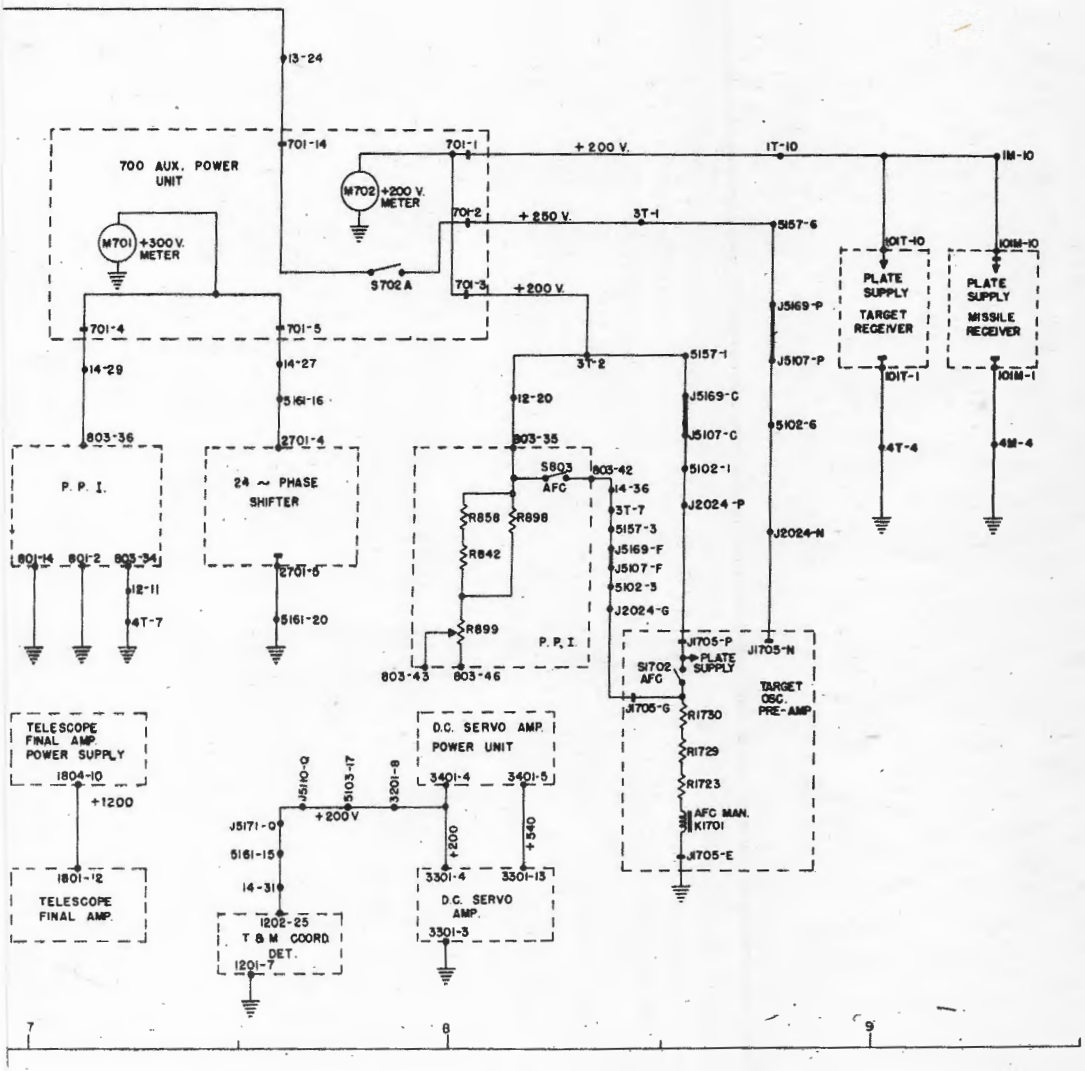

5158-5
+445 V
2901-14
SPARE 200 2901-1
SPARE 250 2901-2
SPARE 200 2901-3
VOL TAGE REGULATOR
2902-22
2902-20 SPARE 300 V.
2902-19 SPARE 300 V.
2902-18 SPARE 300 V.
2902-17 +300 V.
2902-16 +300 V.
2902-15 +300 V.
2901-4
2901-5
2901-6
2901-7
2901-8
2901-9
2901-10
2901-11
2901-12
5161-12
J5171-L
J5110-L
5103-14
2303-6
MOD.
R234
2304
2303-7
5903-7
5101-20
+445 V
MISS. OSC. PRE-AMP POWER SUPPLY
4201-1
4201-2
4201-5
+300
MISSILE OSCILLATOR PRE-AMP
4300
+300 V
2T-17
302T-12
TARG. RANGE UNIT
K301T
S301T AUTO-SLEW
304T-6
2M-18
302M-12
PLATE SUPPLY
K308M
MISSILE RANGE UNIT
S301M AUTO-SLEW
304M-6
2M-19
601-12
PLATE SUPPLY T & E SYNCRO
601-3
601-8
23M-3
18-24
2M-21
1001M-7
PLATE SUPPLY MISSILE IND.
1001M-1
4M-4
2T-19
1001T-7
PLATE SUPPLY TARGET IND.
1001T-4
4T-5
2T-21
14-32
1202-26
PLATE SUPPLY T & M COORD DET
1201-7
2T-22
101T-4
PLATE SUPPLY TARGET REC
101T-1
1M-4
101M-4
PLATE SUPPLY MISS. REC
101M-1
1601-12
1604-7
PLATE SUPPLY HANDCRANK SERVO-AMP.
1601-10
PLATE SUPPLY TEL. UNIT PRE-AMP.
1604-6
2M-20
1602-7
5161-19
2T-18
12-13
1301-2
1302-18
PLATE SUPPLY TARGET RANGE DET
1301-1
PLATE SUPPLY MISSILE RANGE DET
1302-17
5203-17
8501-3
PLATE SUPPLY REMOTE RANGE SCOPE
8501-4
8401-1
PLATE SUPPLY TIME COMPAR.
8401-8
COMMUTATOR UNIT INTERNAL POWER SUPPLY
4
5
6


13-24
700 AUX. POWER UNIT
701-14
701-1
+200 V.
1T-10
1M-10
M702 +200 V. METER
701-2
+250 V.
3T-1
5157-6
M701 +300 V. METER
S702 A
701-3
+200 V.
PLATE SUPPLY TARGET RECEIVER
PLATE SUPPLY MISSILE RECEIVER
101T-10
101M-10
J5169-P
J5107-P
5102-6
701-4
701-5
14-29
14-27
5161-16
31-2
5157-1
101T-1
101M-1
4T-4
4M-4
12-20
J5169-C
J5107-C
803-36
2701-4
803-35
S803 AFC
803-42
5102-1
J2024-P
J2024-N
14-36
3T-7
5157-3
J5169-F
J5107-F
5102-3
J2024-G
P. P. I.
24 ~ PHASE SHIFTER
801-14
801-2
803-34
12-11
4T-7
2701-5
5161-20
R858
R898
R842
R899
803-43
803-46
P. P. I.
J1705-P
PLATE SUPPLY
J1705-N
S1702 AFC
J1705-G
R1730
R1729
R1723
AFC MAN. K1701
J1705-E
TARGET OSC. PRE-AMP
TELESCOPE FINAL AMP. POWER SUPPLY
1804-10
+1200
1801-12
TELESCOPE FINAL AMP.
D.C. SERVO AMP. POWER UNIT
3401-4
3401-5
J5110-Q
5103-17
3201-8
+200 V
J5171-Q
5161-15
14-31
+200
+540
3301-4
3301-13
D.C. SERVO AMP.
3301-3
1202-25
T & M COORD DET.
1201-7
7
8
9

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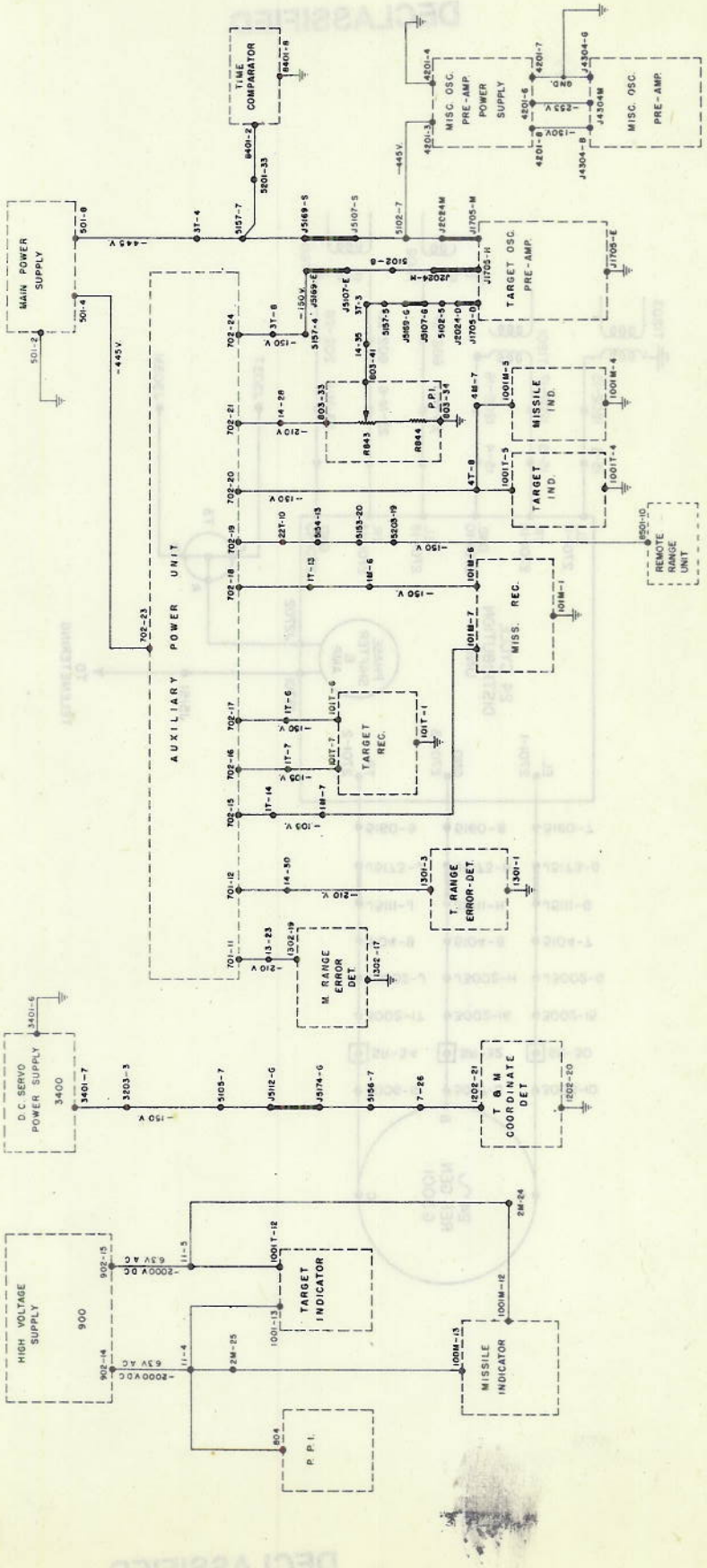

Figure 7-10. D-c Supplies - Negative

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CONFIDENTIAL

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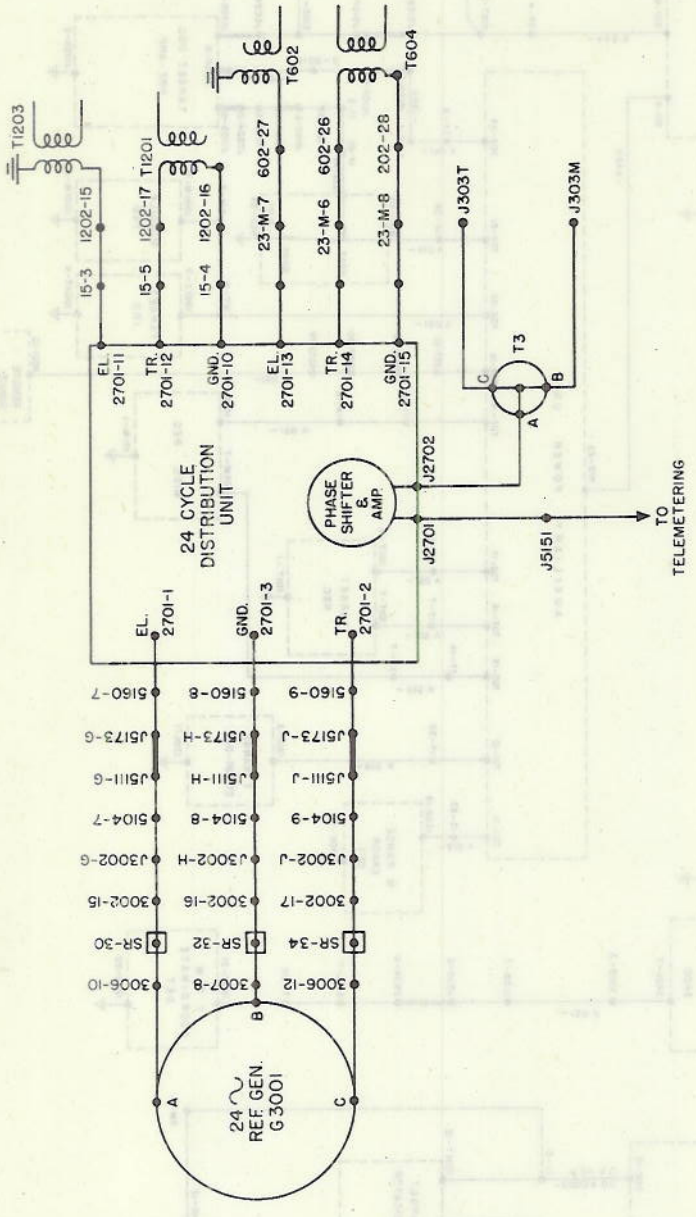

Figure 7-11. Reference Generator Voltage Distribution System

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DECLASSIFIED

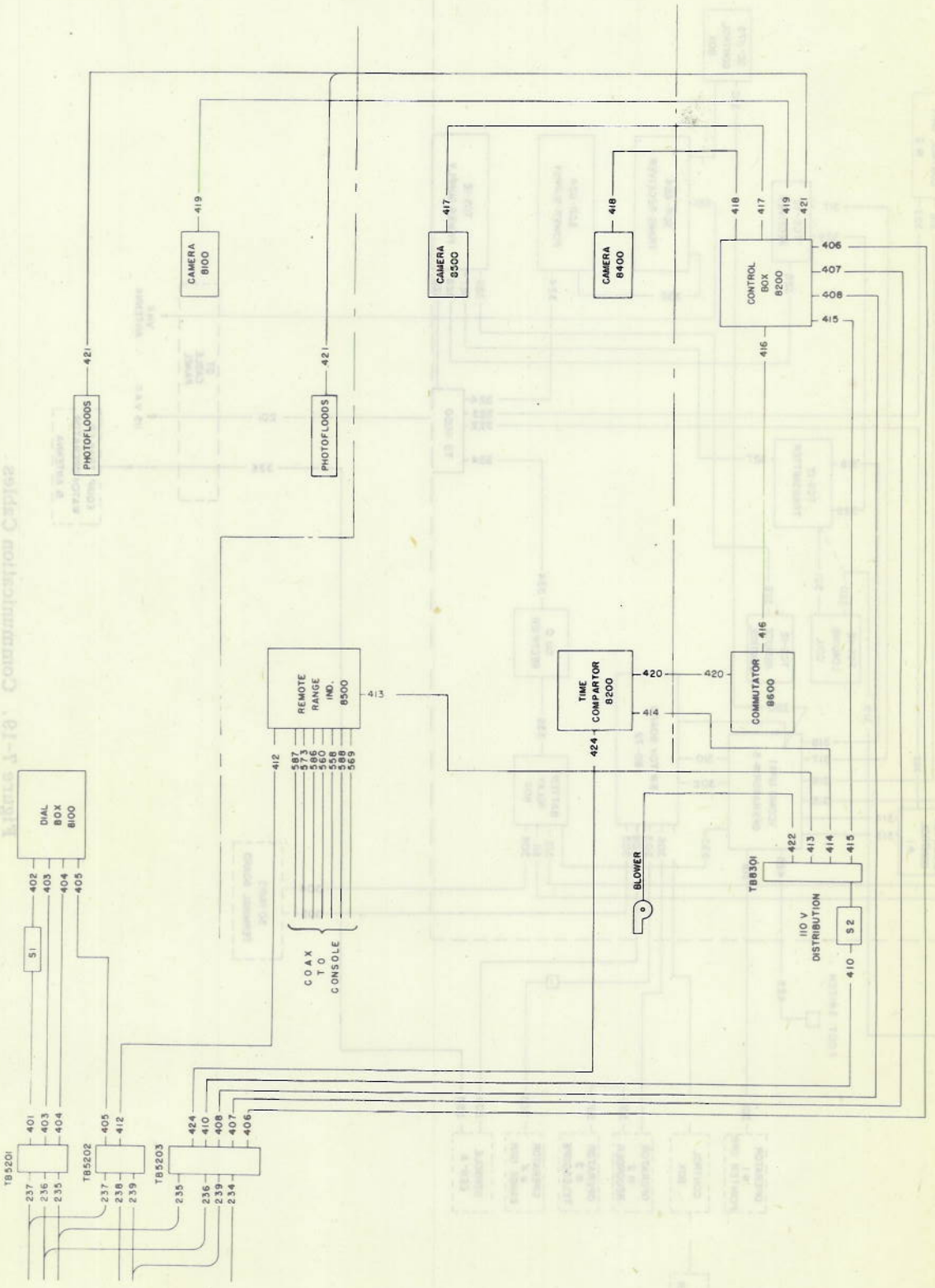

Figure 7-18. Recording Equipment Cables

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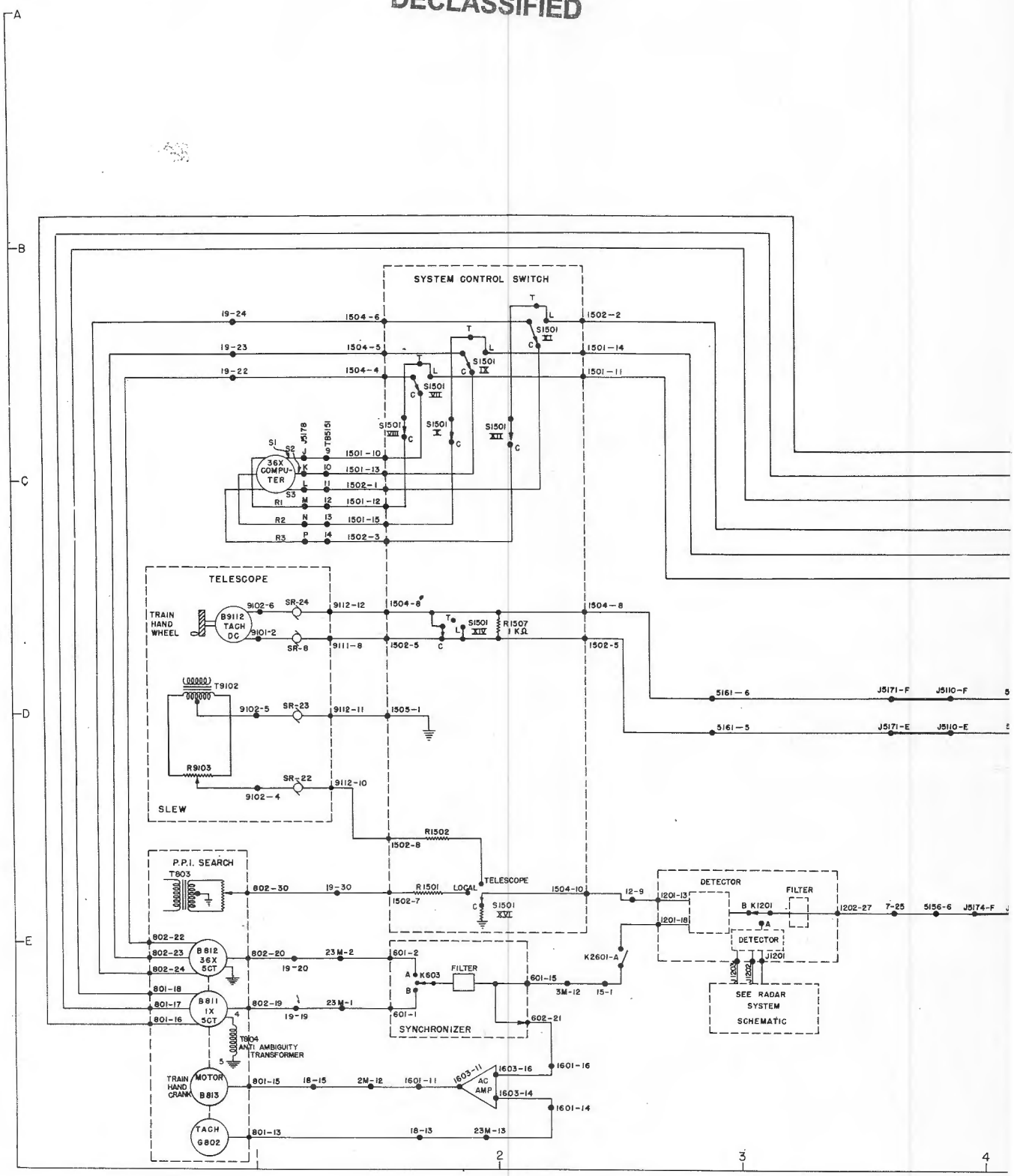

Figure 7-12. Train Antenna Positioning System

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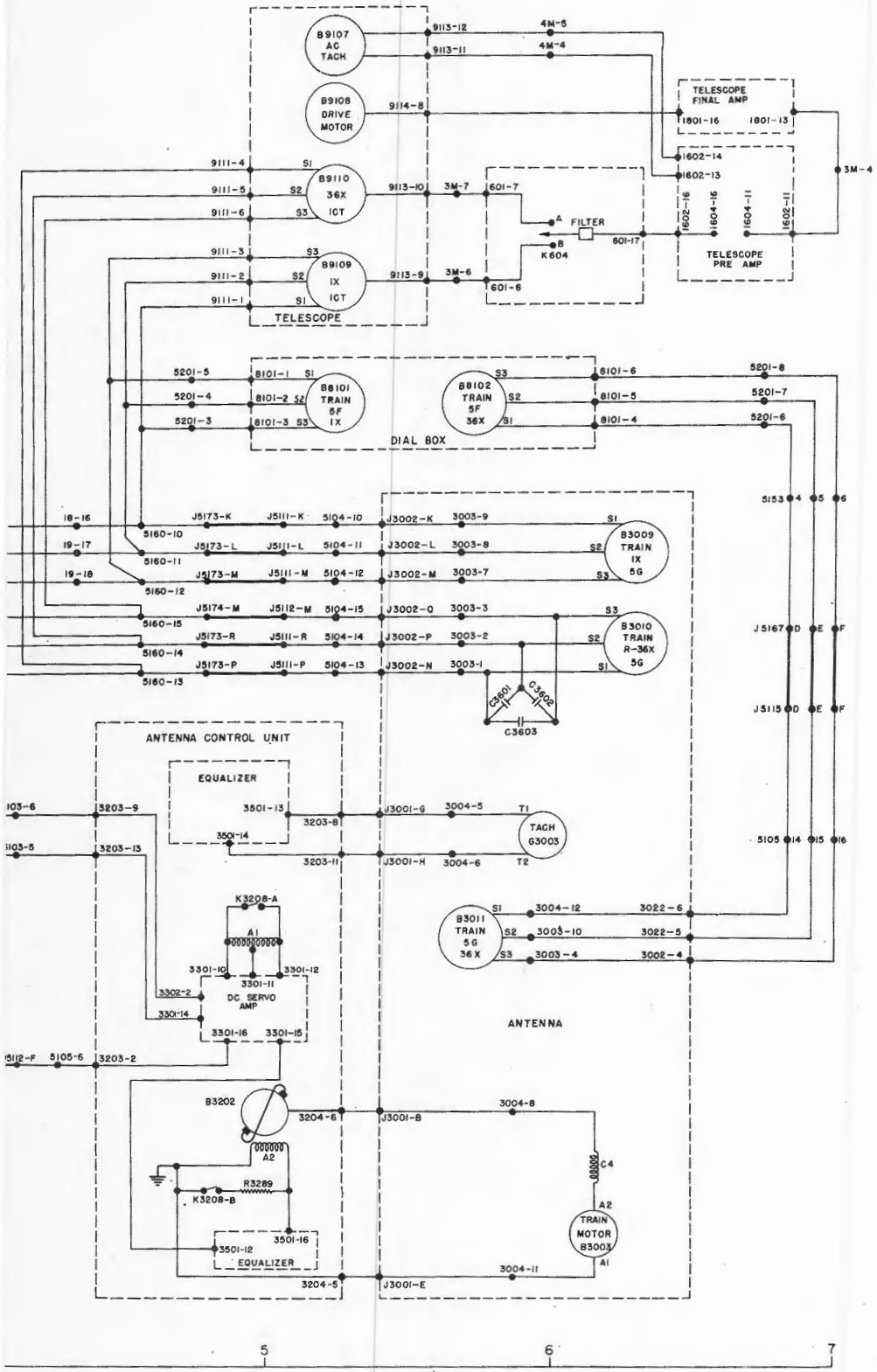
B9107 AC TACH
B9108 DRIVE MOTOR
B9110 36X ICT
B9109 IX ICT
TELESCOPE
TELESCOPE FINAL AMP
TELESCOPE PRE AMP
FILTER
K604
DIAL BOX
B8101 TRAIN 5F IX
B8102 TRAIN 5F 36X
B3009 TRAIN IX 5G
B3010 TRAIN R-36X 5G
B3011 TRAIN 5G 36X
C3601
C3602
C3603
ANTENNA CONTROL UNIT
EQUALIZER
TACH G3003
K3208-A
A1
DC SERVO AMP
ANTENNA
B3202
A2
R3289
K3208-B
C4
TRAIN MOTOR B3003
5
6
7

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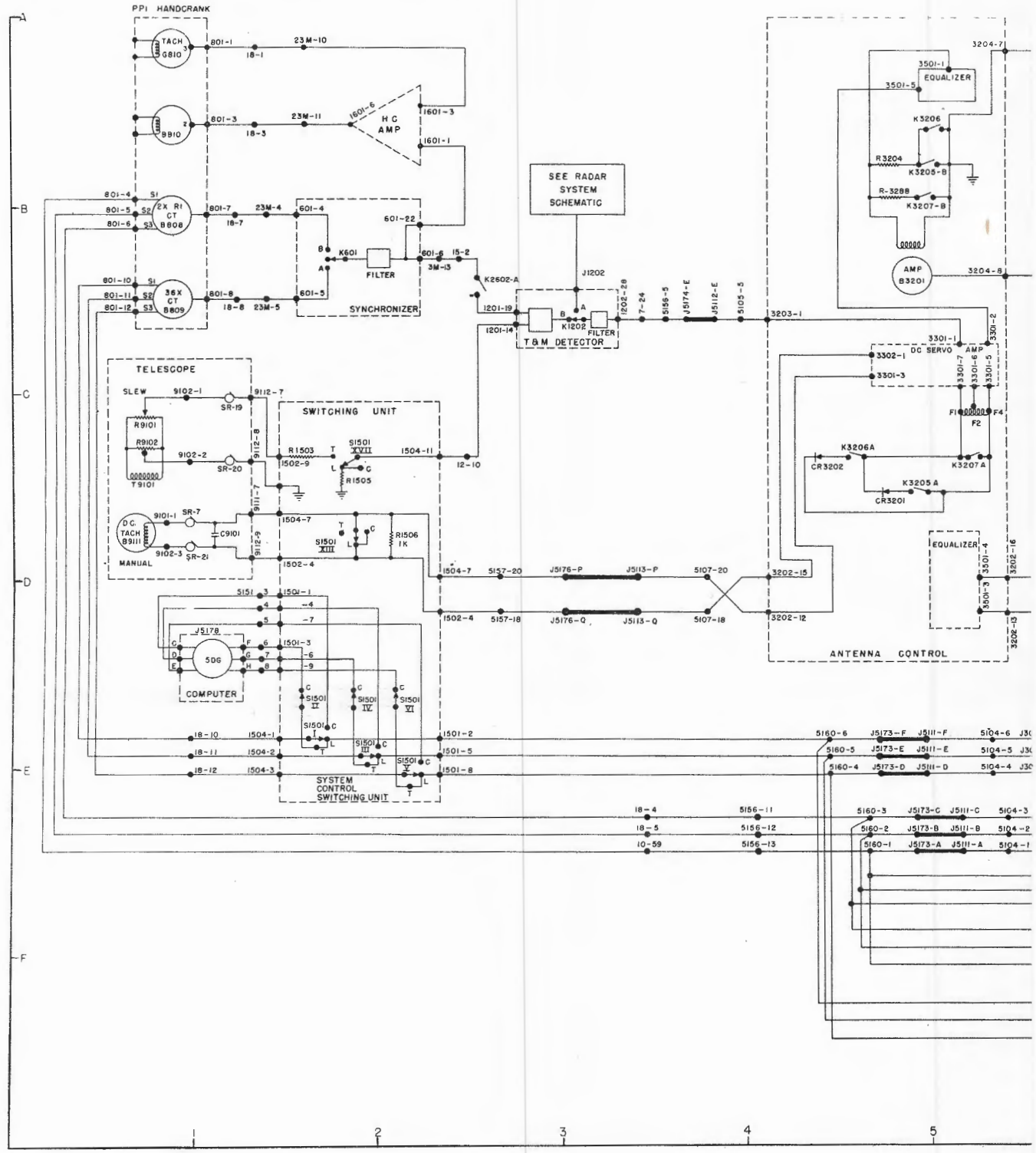

Figure 7-13. Elevation Antenna Positioning System

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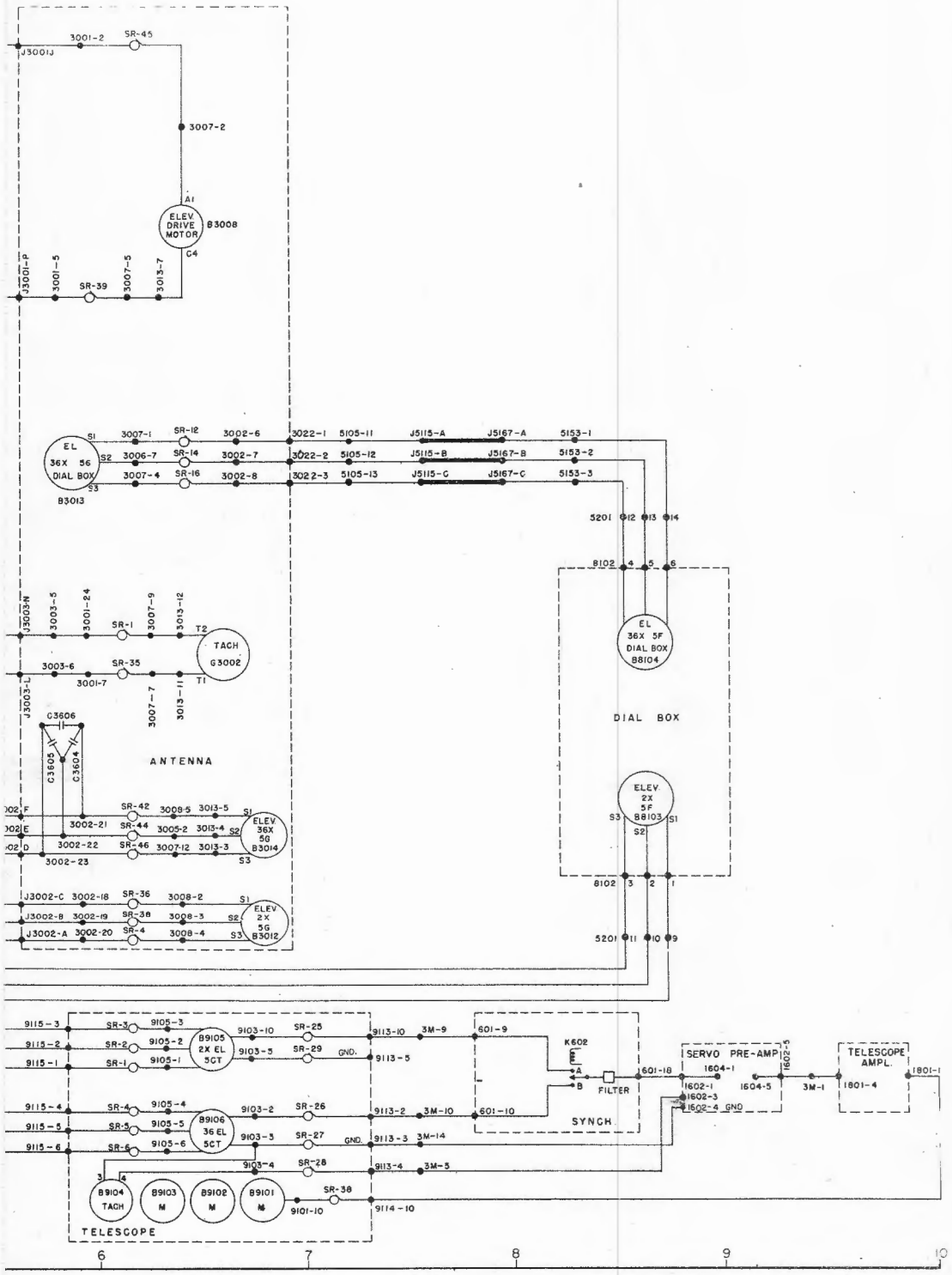
J3001J
3001-2
SR-45
3007-2
A1
ELEV DRIVE MOTOR
B3008
C4
J3001-P
3001-5
SR-39
3007-5
3013-7
EL 36X 56 DIAL BOX
B3013
S1
S2
S3
3007-1
3006-7
3007-4
SR-12
SR-14
SR-16
3002-6
3002-7
3002-8
3022-1
3022-2
3022-3
5105-11
5105-12
5105-13
J5115-A
J5115-B
J5115-C
J5167-A
J5167-B
J5167-C
5153-1
5153-2
5153-3
5201
8102
EL 36X 5F DIAL BOX B8104
DIAL BOX
ELEV 2X 5F B8103
J3003-N
3003-5
3001-24
3007-9
3013-12
SR-1
T2
TACH G3002
T1
3003-6
3001-7
SR-35
3003-L
3007-7
3013-11
C3606
C3605
C3604
ANTENNA
SR-42
SR-44
SR-46
3008-5
3005-2
3007-12
3013-5
3013-4
3013-3
3002-21
3002-22
3002-23
ELEV 36X 5G B3014
J3002-C
J3002-B
J3002-A
3002-18
3002-19
3002-20
SR-36
SR-38
SR-4
3008-2
3008-3
3008-4
ELEV 2X 5G B3012
9115-3
9115-2
9115-1
9115-4
9115-5
9115-6
SR-3
SR-2
SR-1
SR-4
SR-5
SR-6
9105-3
9105-2
9105-1
9105-4
9105-5
9105-6
B9105 2X EL 5CT
B9106 36 EL 5CT
9103-10
9103-5
9103-2
9103-3
9103-4
SR-25
SR-29
SR-26
SR-27
SR-28
GND.
9113-10
9113-5
9113-2
9113-3
9113-4
3M-9
3M-10
3M-14
3M-5
601-9
601-10
K602
A
B
FILTER
601-18
SYNCH
SERVO PRE-AMP
1604-1
1602-1
1602-3
1602-4
GND
1604-5
1602-5
3M-1
TELESCOPE AMPL.
1801-4
1801-1
B9104 TACH
B9103 M
B9102 M
B9101 M
SR-38
9101-10
9114-10
TELESCOPE
6
7
8
9
10

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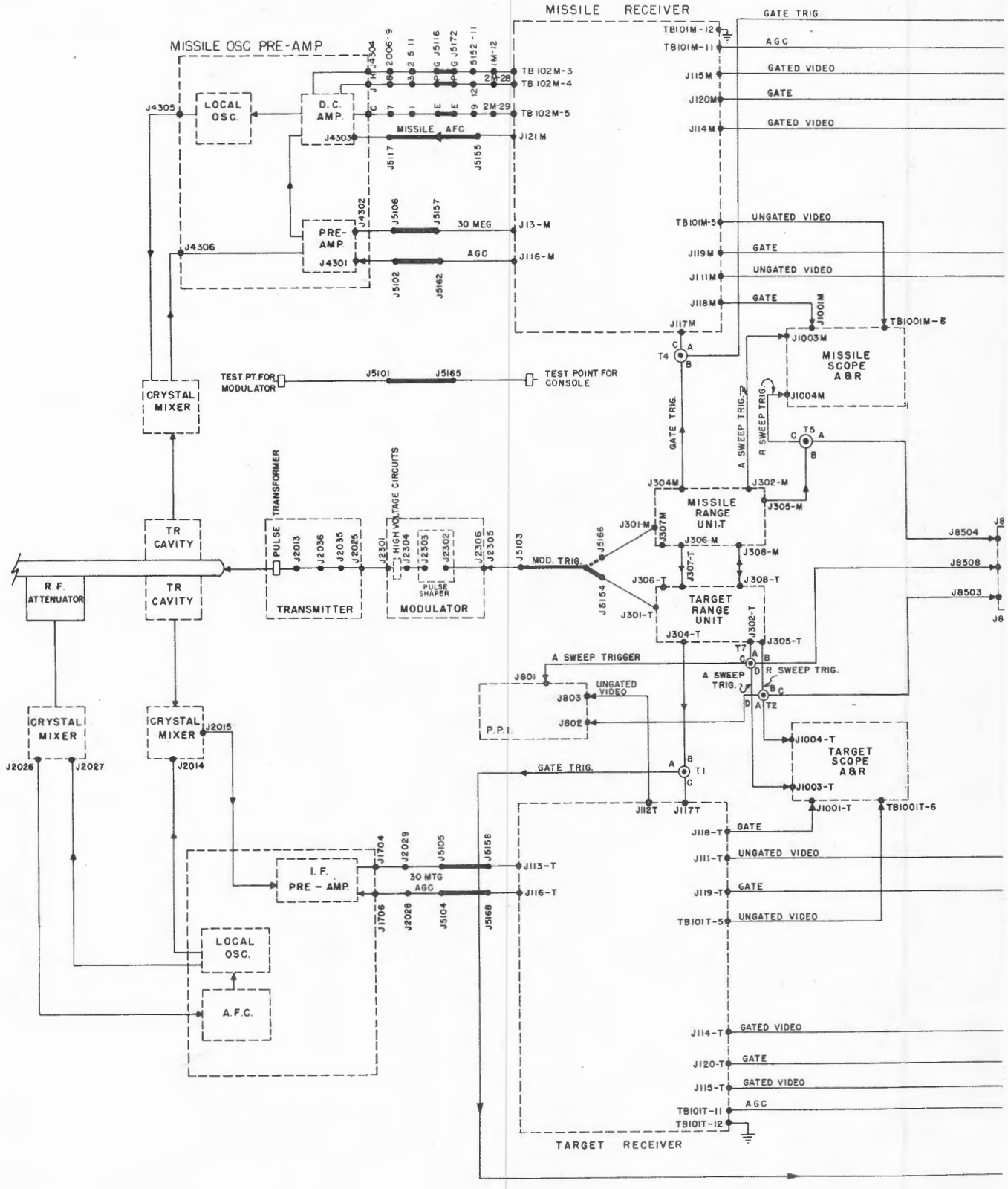

Figure 7-14. Radar Transmitting and Receiving System

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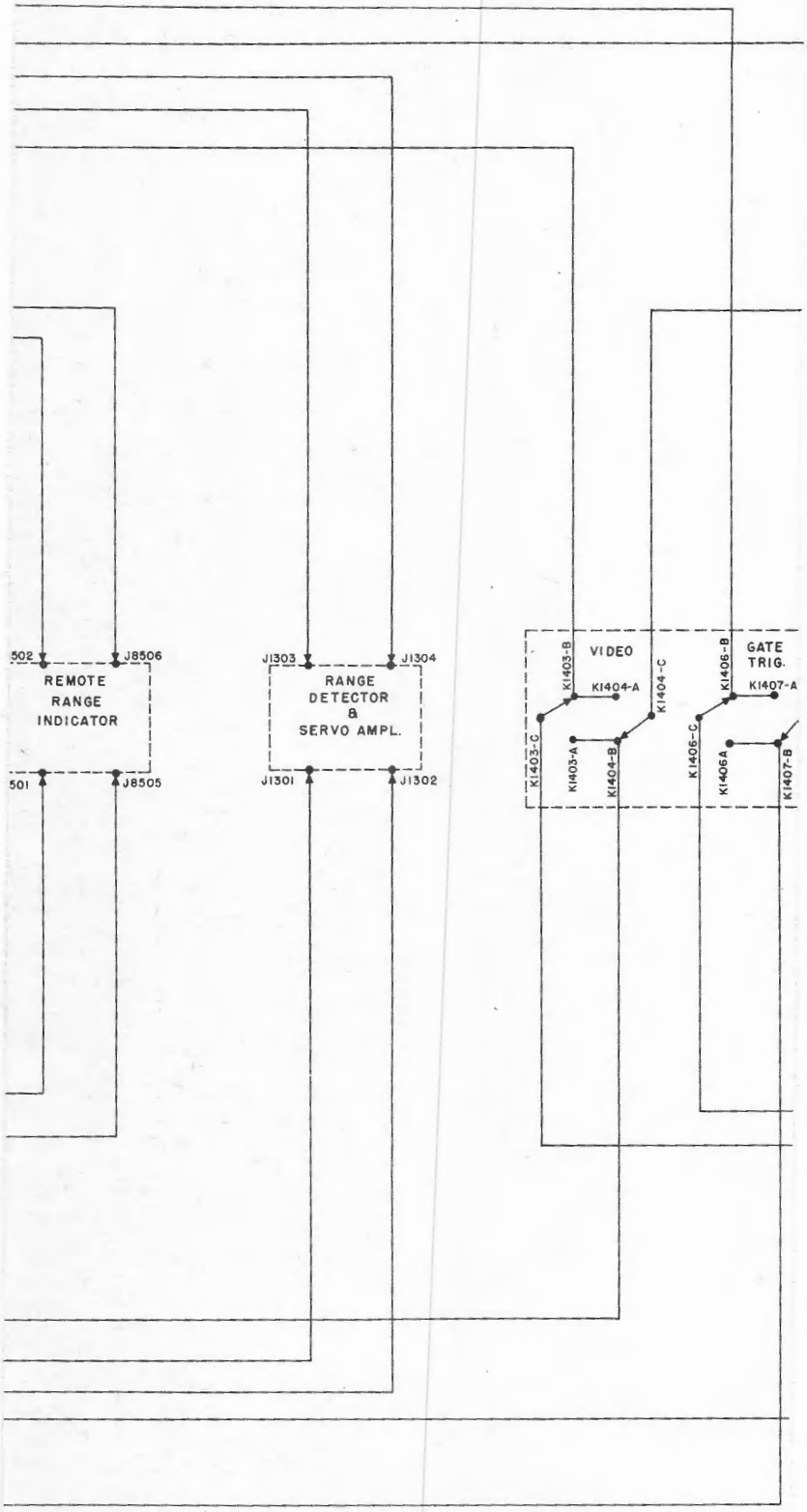
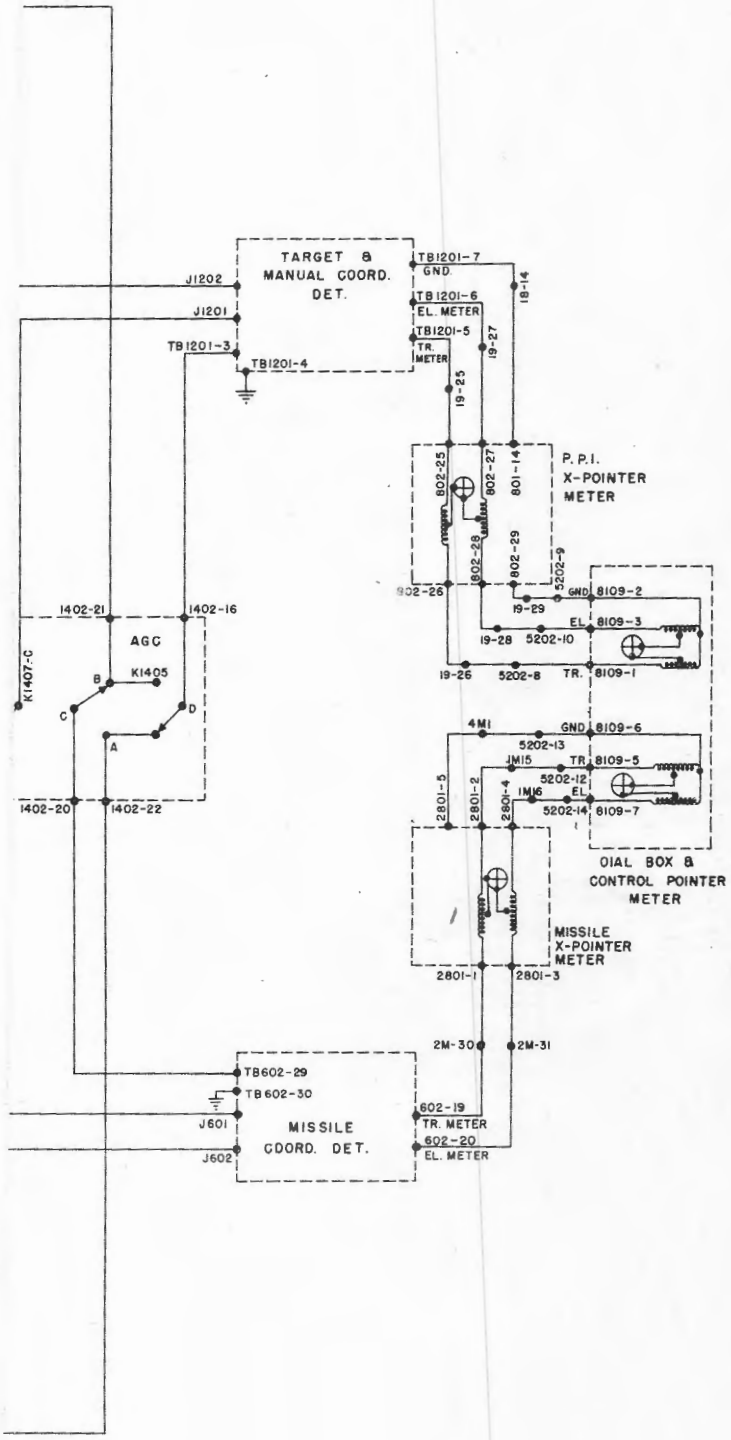

502
J8506
REMOTE
RANGE
INDICATOR
501
J8505
J1303
J1304
RANGE
DETECTOR
&
SERVO AMPL.
J1301
J1302
VIDEO
K1403-B
K1404-A
K1404-C
K1403-C
K1403-A
K1404-B
GATE
TRIG.
K1406-B
K1407-A
K1406-C
K1406A
K1407-B


TARGET & MANUAL COORD. DET.
J1202
J1201
TB1201-3
TB1201-4
TB1201-7
GND
TB1201-6
EL. METER
TB1201-5
TR. METER
18-14
19-27
19-25
P.P.I. X-POINTER METER
802-25
802-27
801-14
802-28
802-29
5202-9
902-26
GND 8109-2
19-29
EL 8109-3
19-28 5202-10
19-26 5202-8 TR. 8109-1
1402-21
1402-16
AGC
K1407-C
K1405
B
C
D
A
1402-20
1402-22
4M1
GND 8109-6
5202-13
JM15
TR. 8109-5
5202-12
IM6
EL.
5202-14 8109-7
2801-5
2801-2
2801-4
DIAL BOX & CONTROL POINTER METER
MISSILE X-POINTER METER
2801-1
2801-3
2M-30
2M-31
TB602-29
TB602-30
J601
J602
MISSILE COORD. DET.
602-19
TR. METER
602-20
EL. METER

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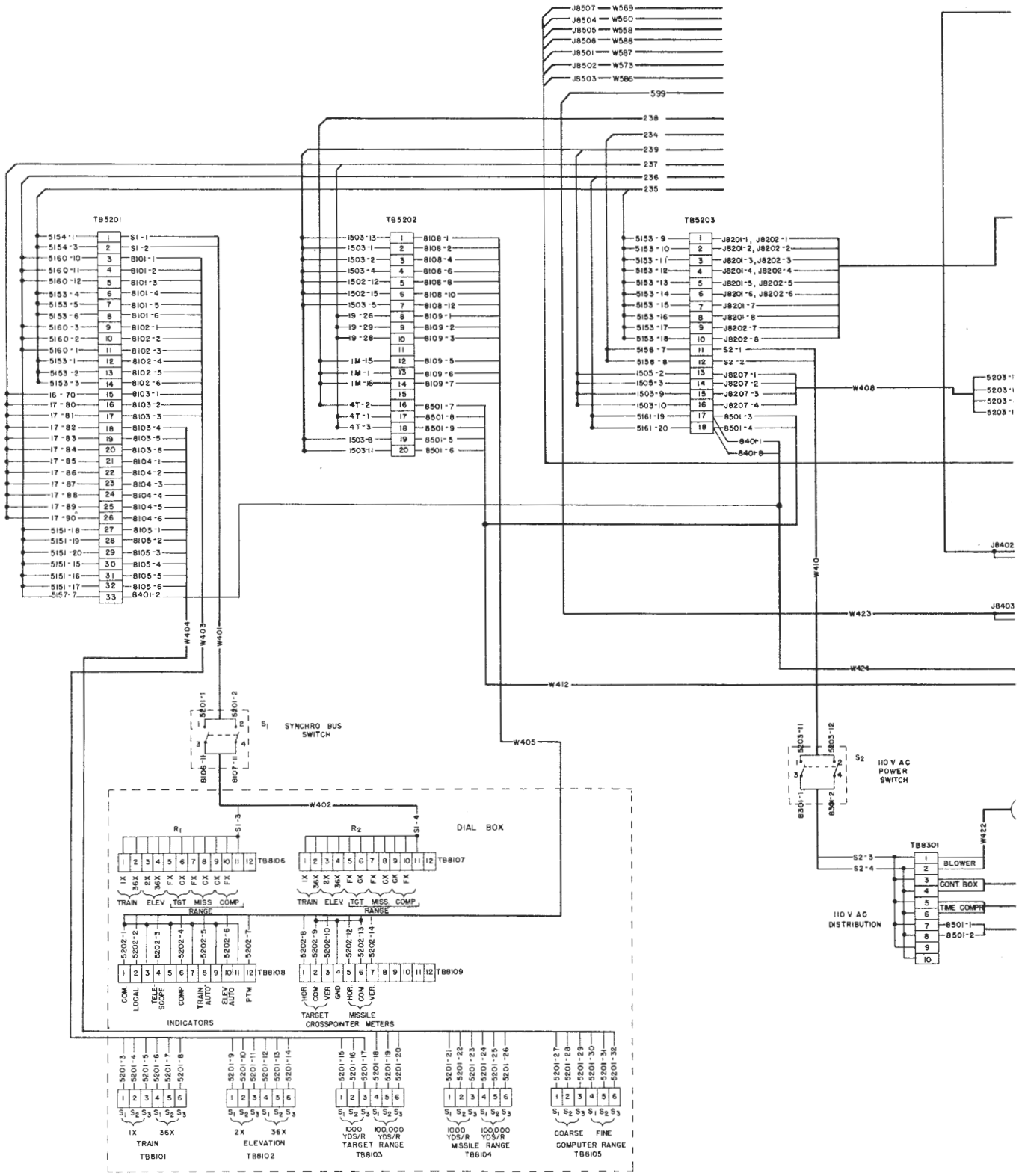

Figure 7-15. Camera Recording Equipment Interconnections

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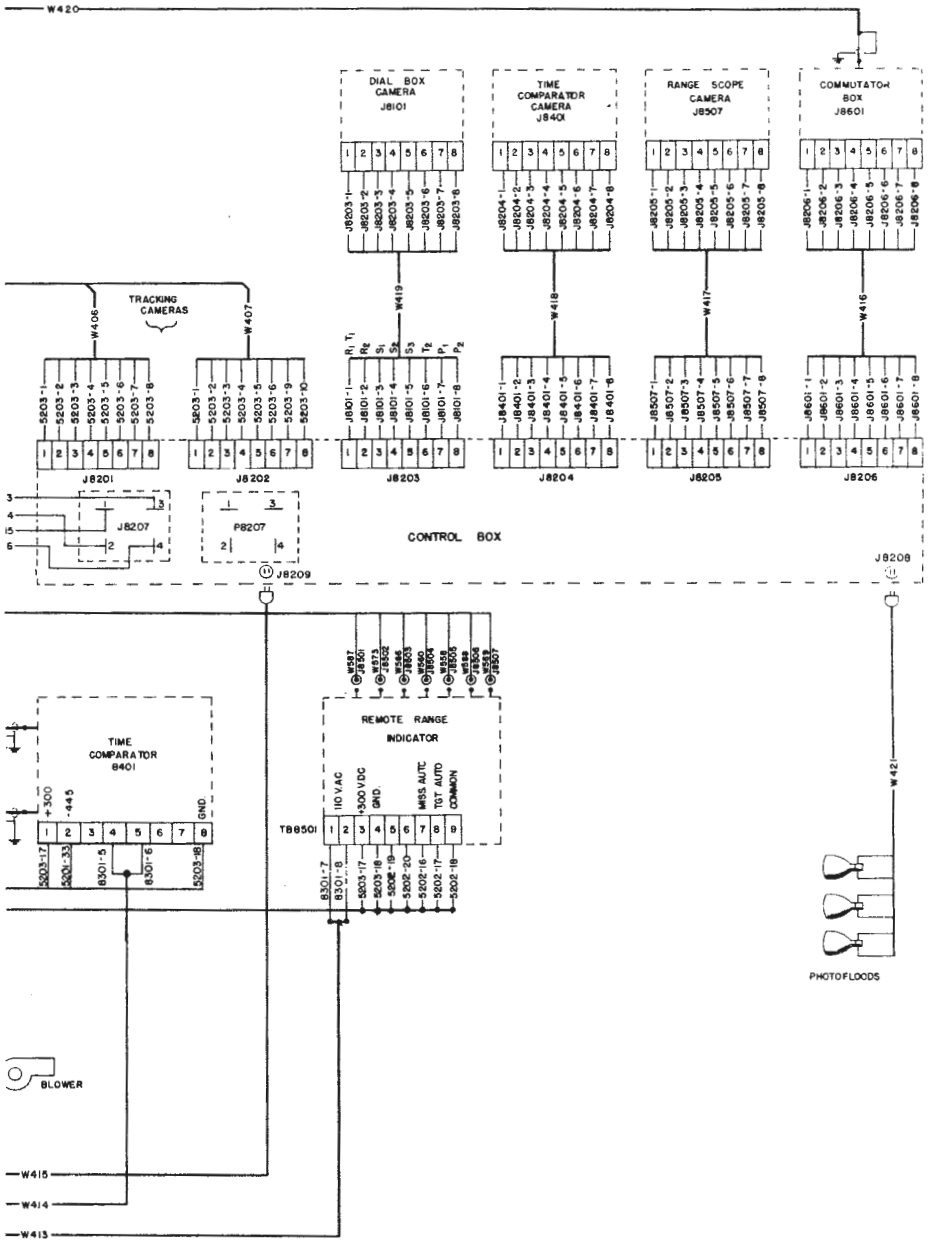
W420
DIAL BOX CAMERA J8101
TIME COMPARATOR CAMERA J8401
RANGE SCOPE CAMERA J8507
COMMUTATOR BOX J8601
TRACKING CAMERAS
W406
W407
W419
W418
W417
W416
J8201
J8202
J8203
J8204
J8205
J8206
J8207
P8207
CONTROL BOX
J8209
J8208
TIME COMPARATOR 8401
+300
-445
GND
REMOTE RANGE INDICATOR
T8850I
110 V AC
+300 VDC
GND.
MISS AUTO
TGT AUTO
COMMON
W421
PHOTOFLOODS
BLOWER
W415
W414
W413

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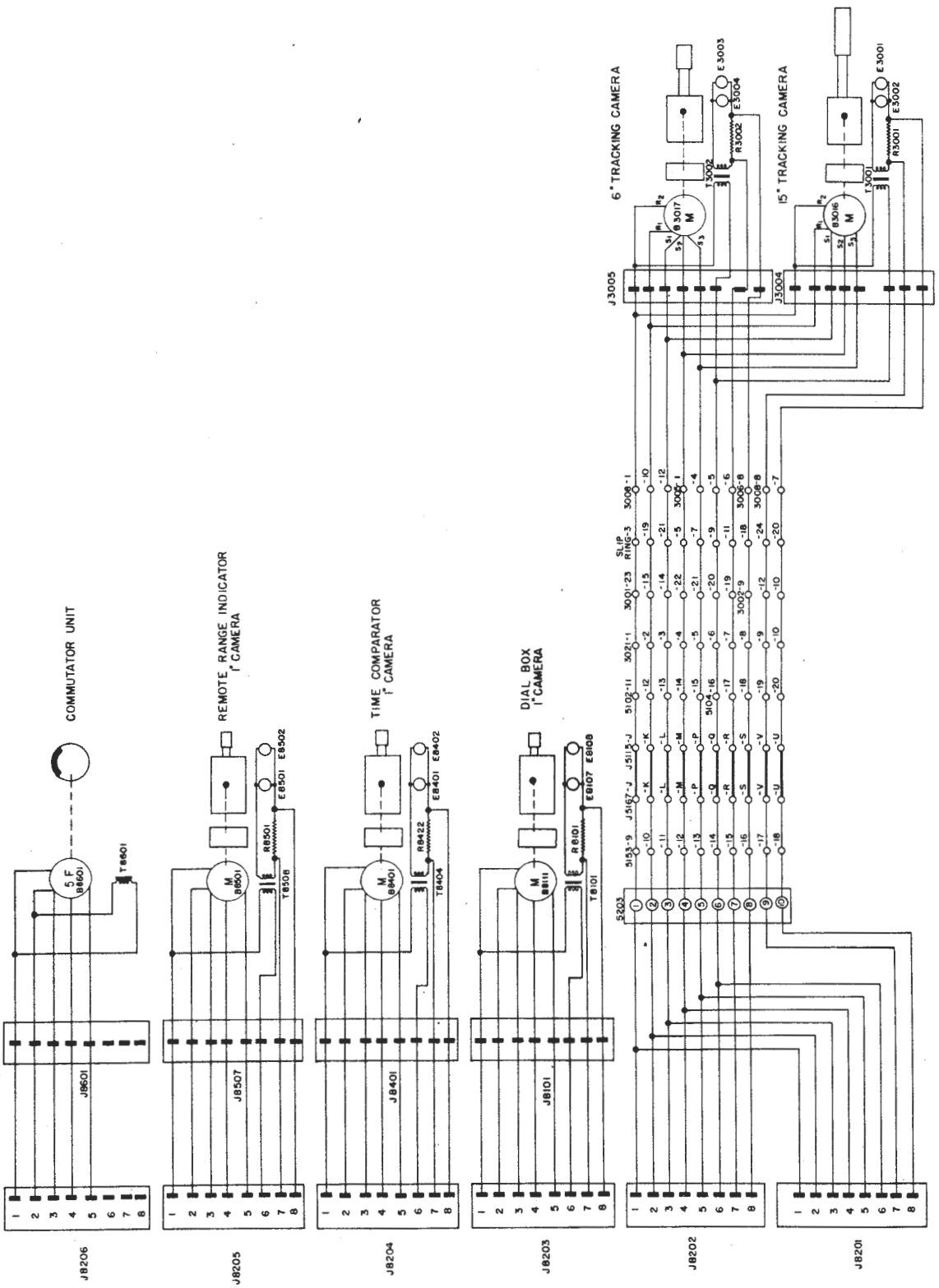

Figure 7-16. Camera Wiring

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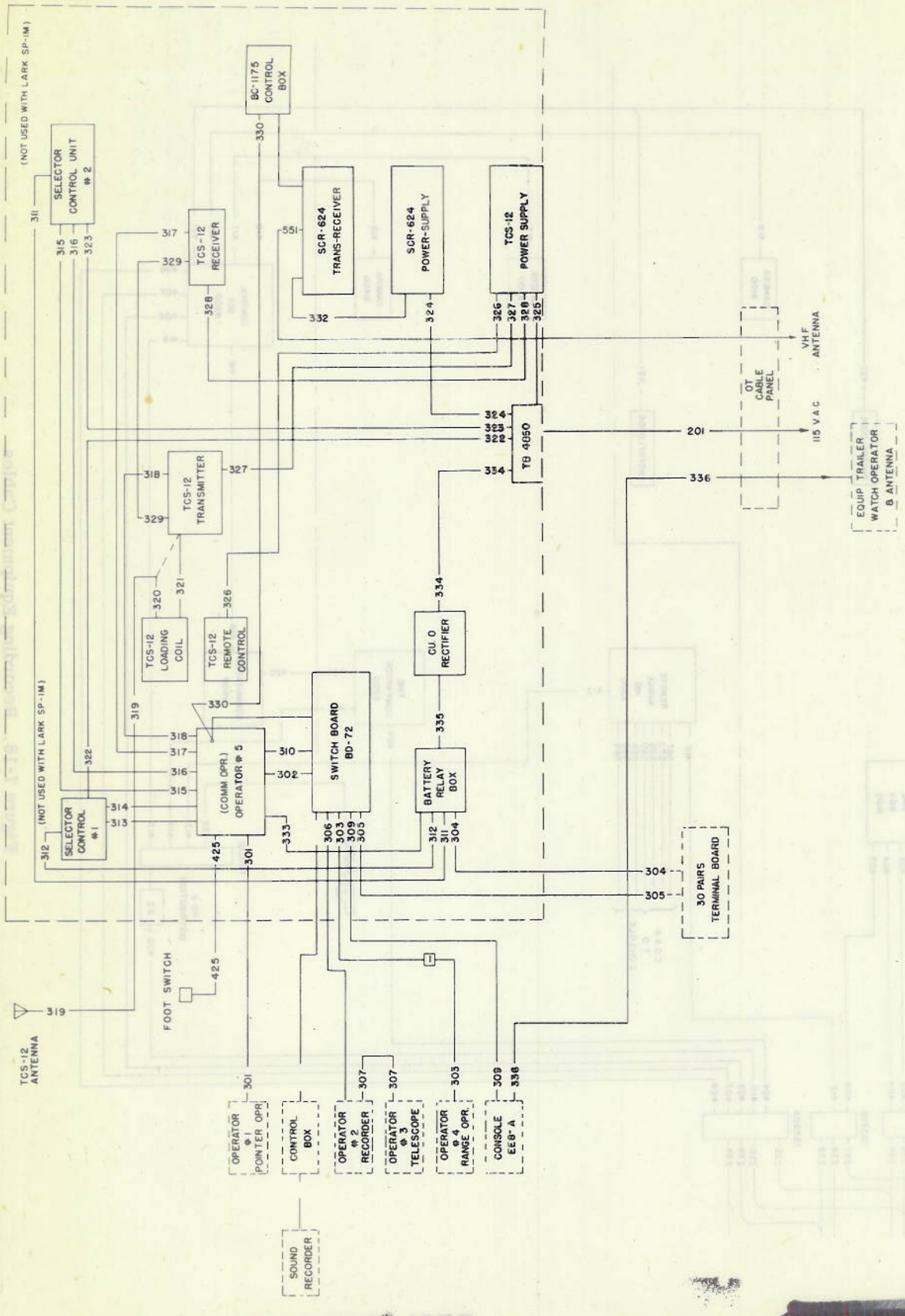

Figure 7-19. Communication Cables

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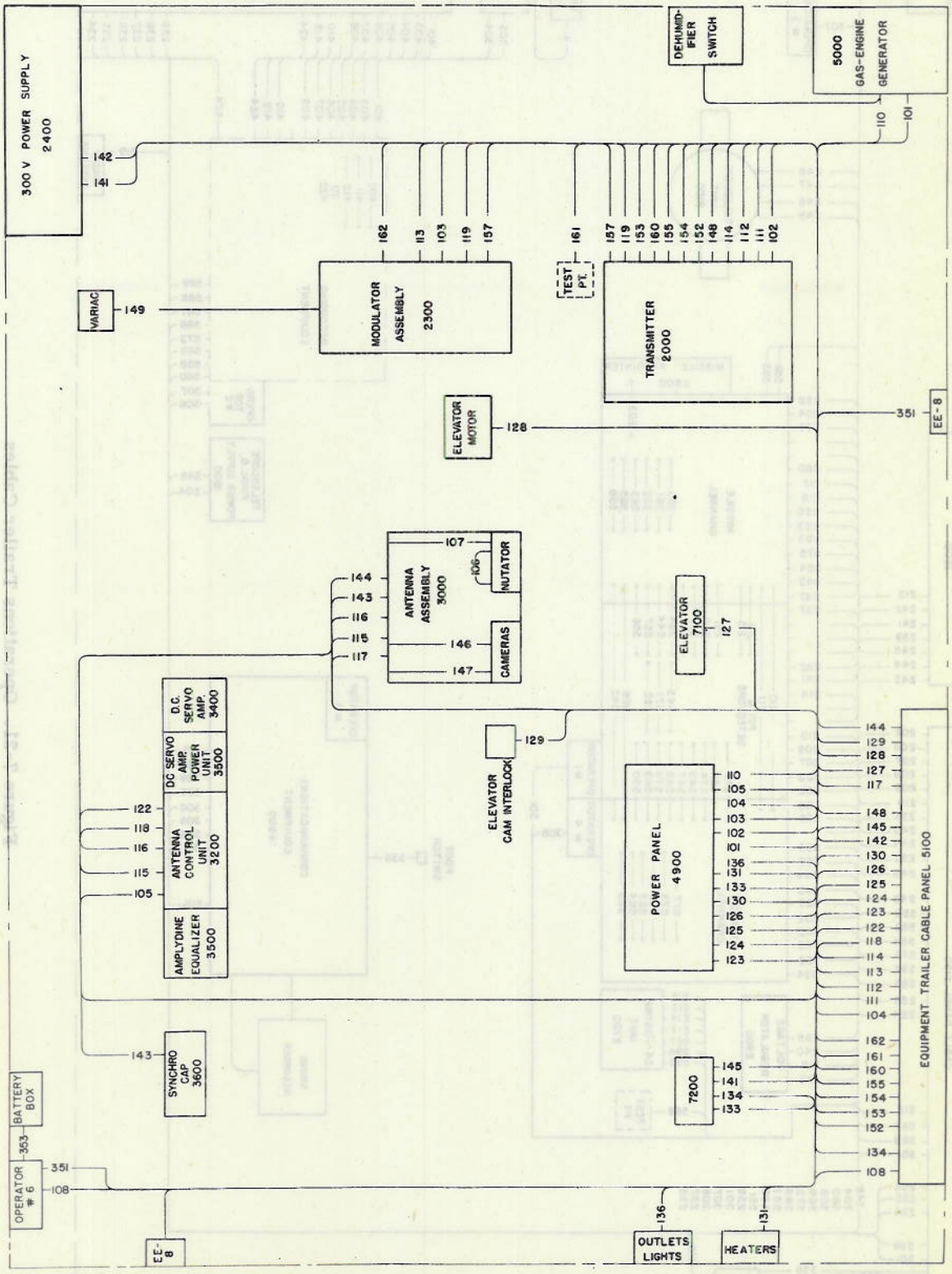

Figure 7-20. Equipment Trailer Cables

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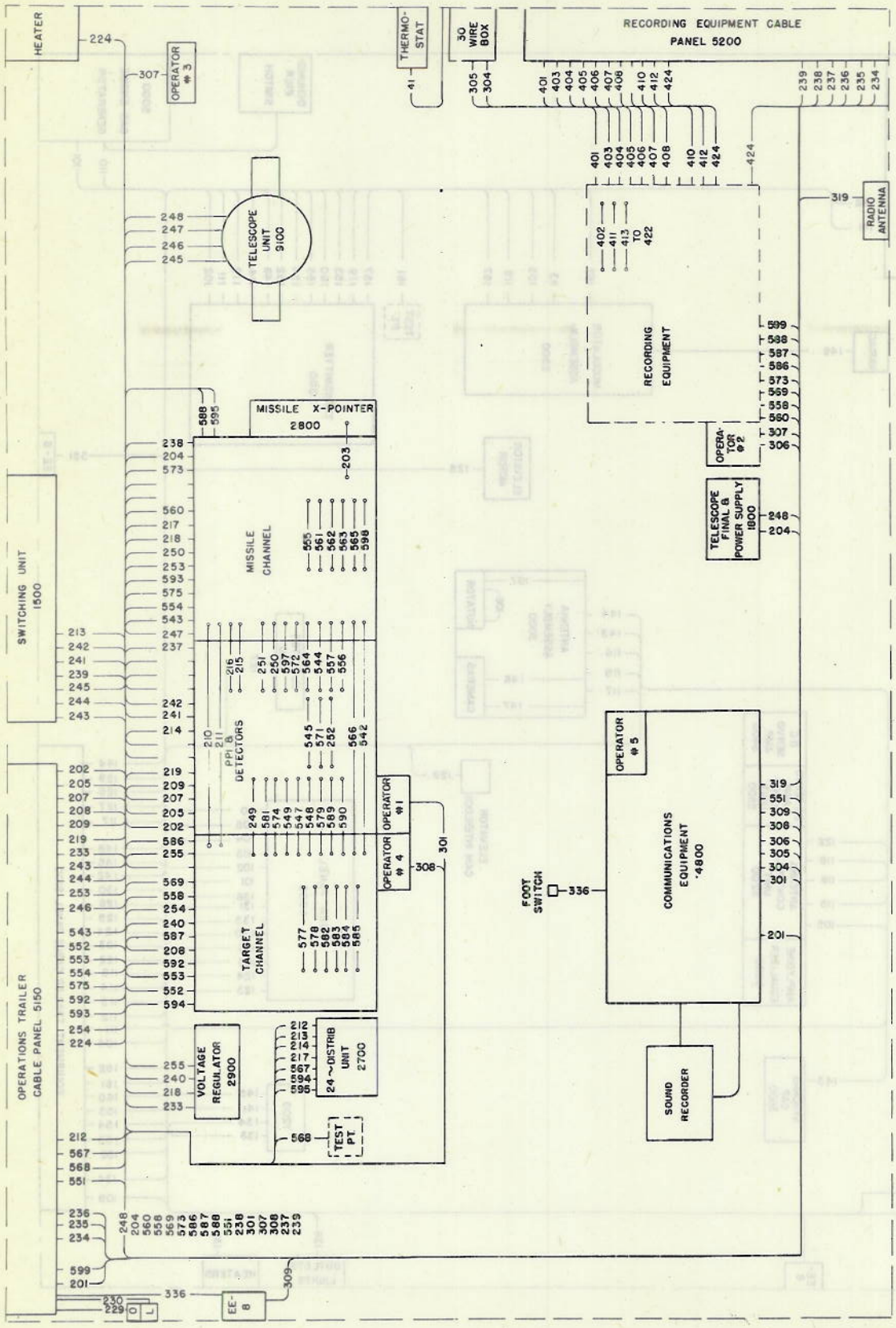

Figure 7-21. Operations Trailer Cables

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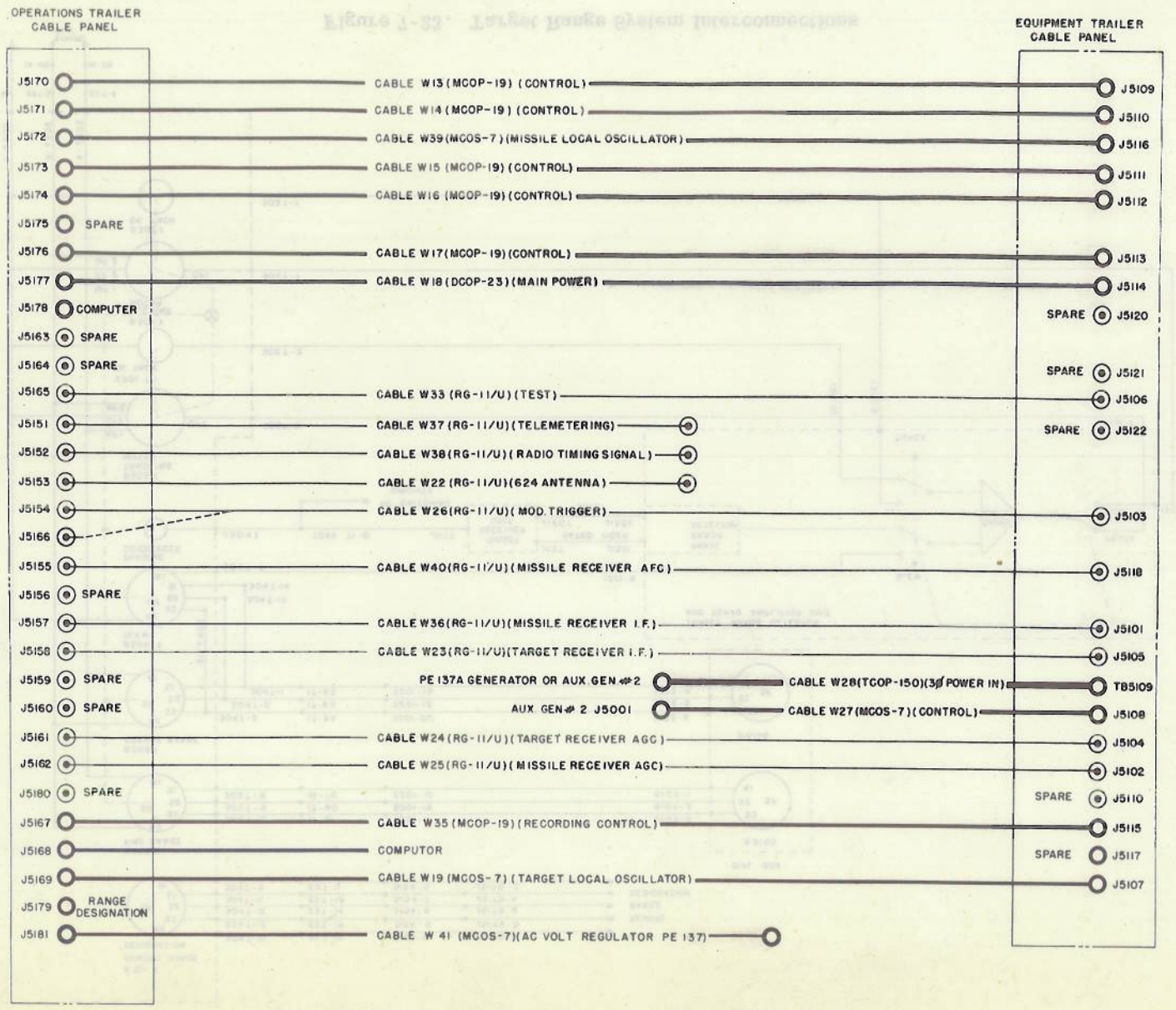

Figure 7-22. Intertrailer Cabling - Cables and Receptacles

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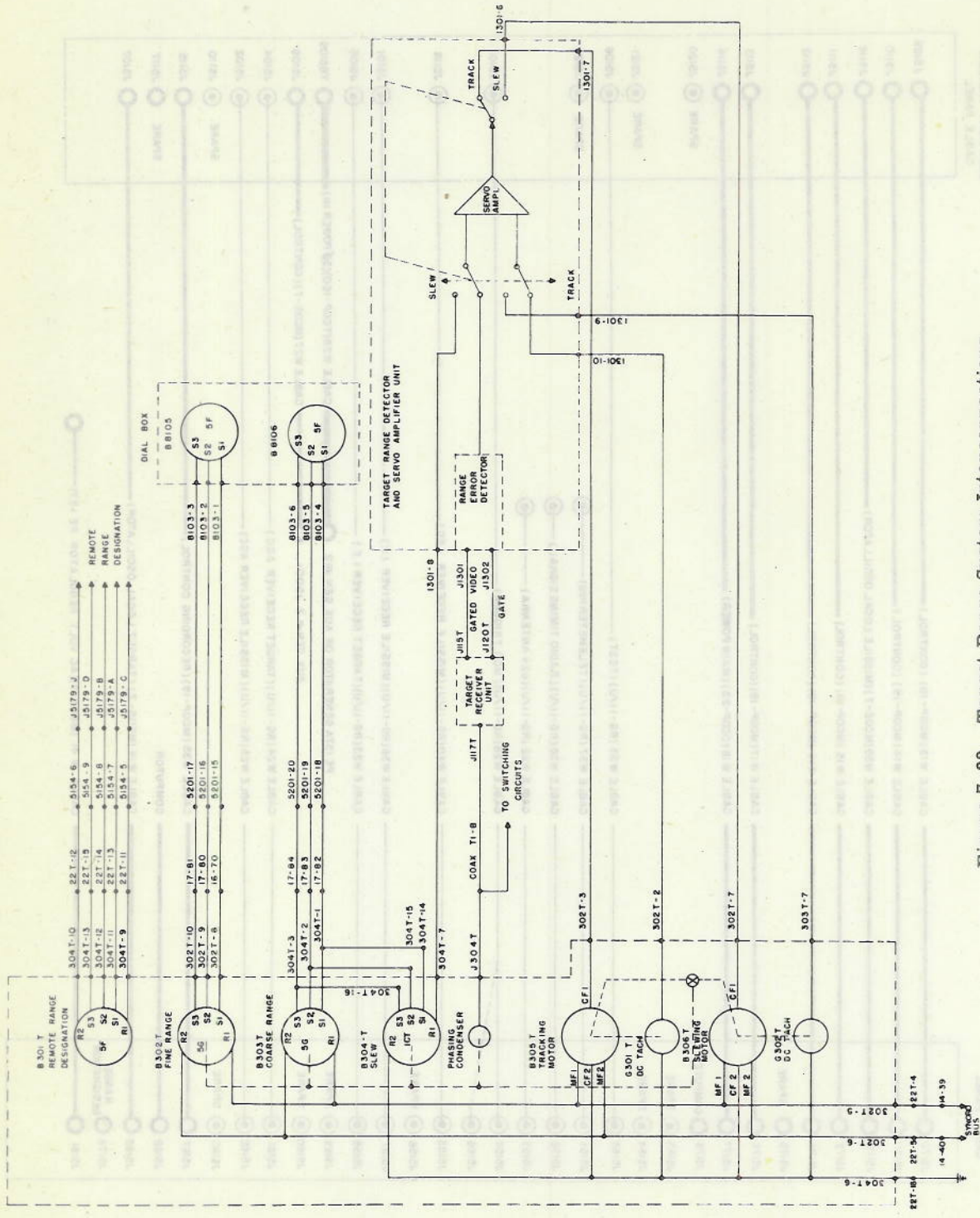

Figure 7-23. Target Range System Interconnections

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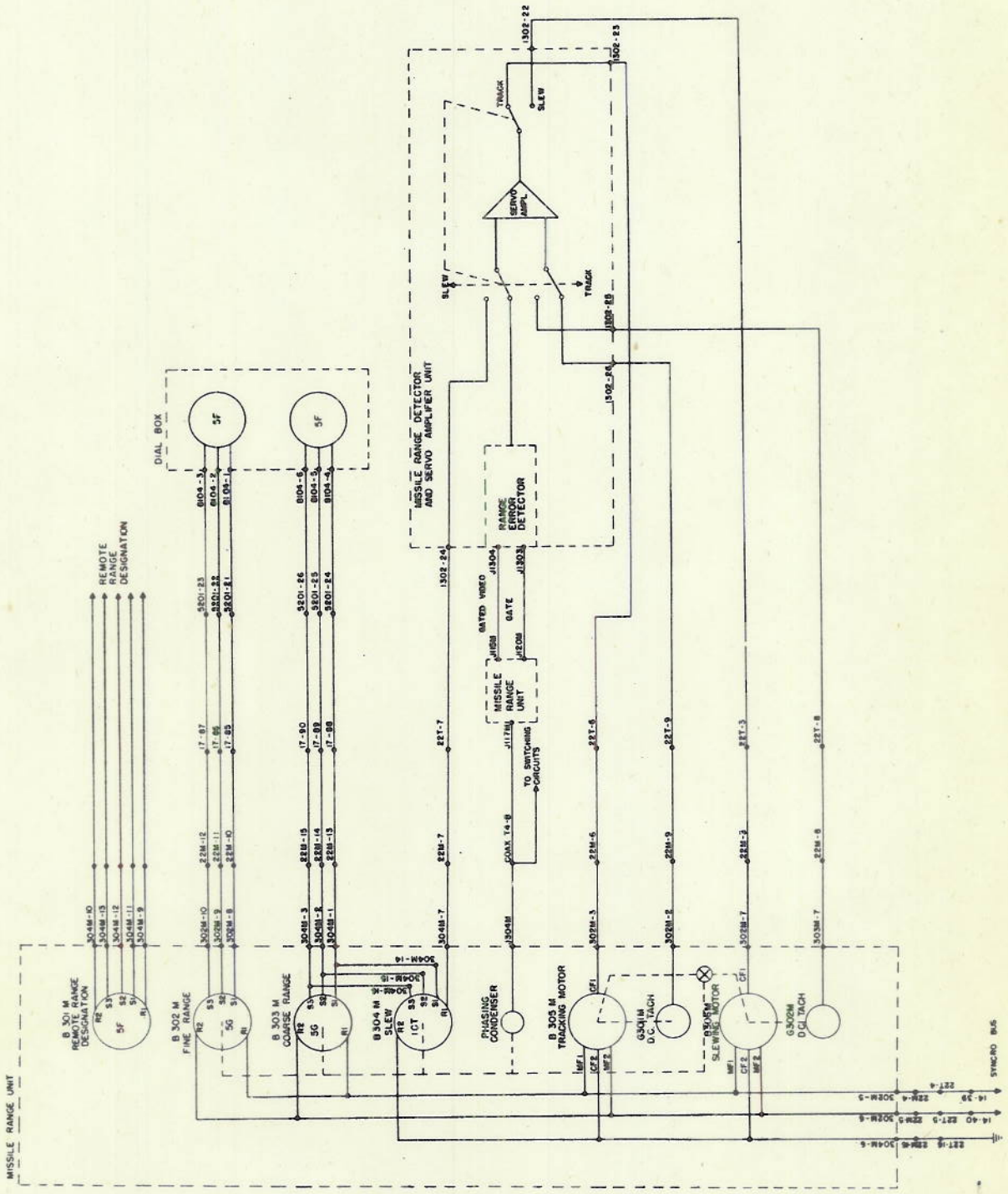

Figure 7-24. Missile Range System Interconnections

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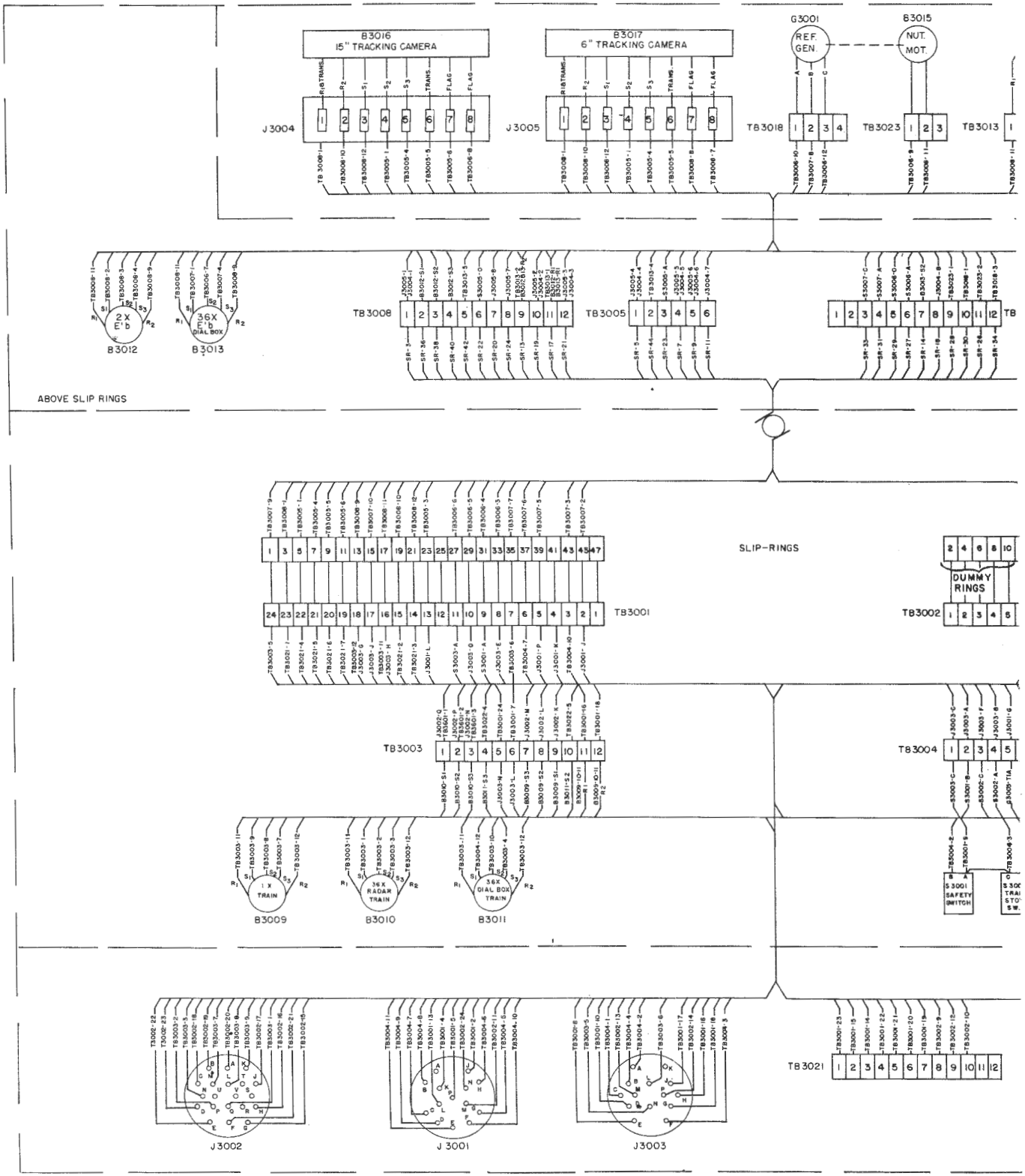
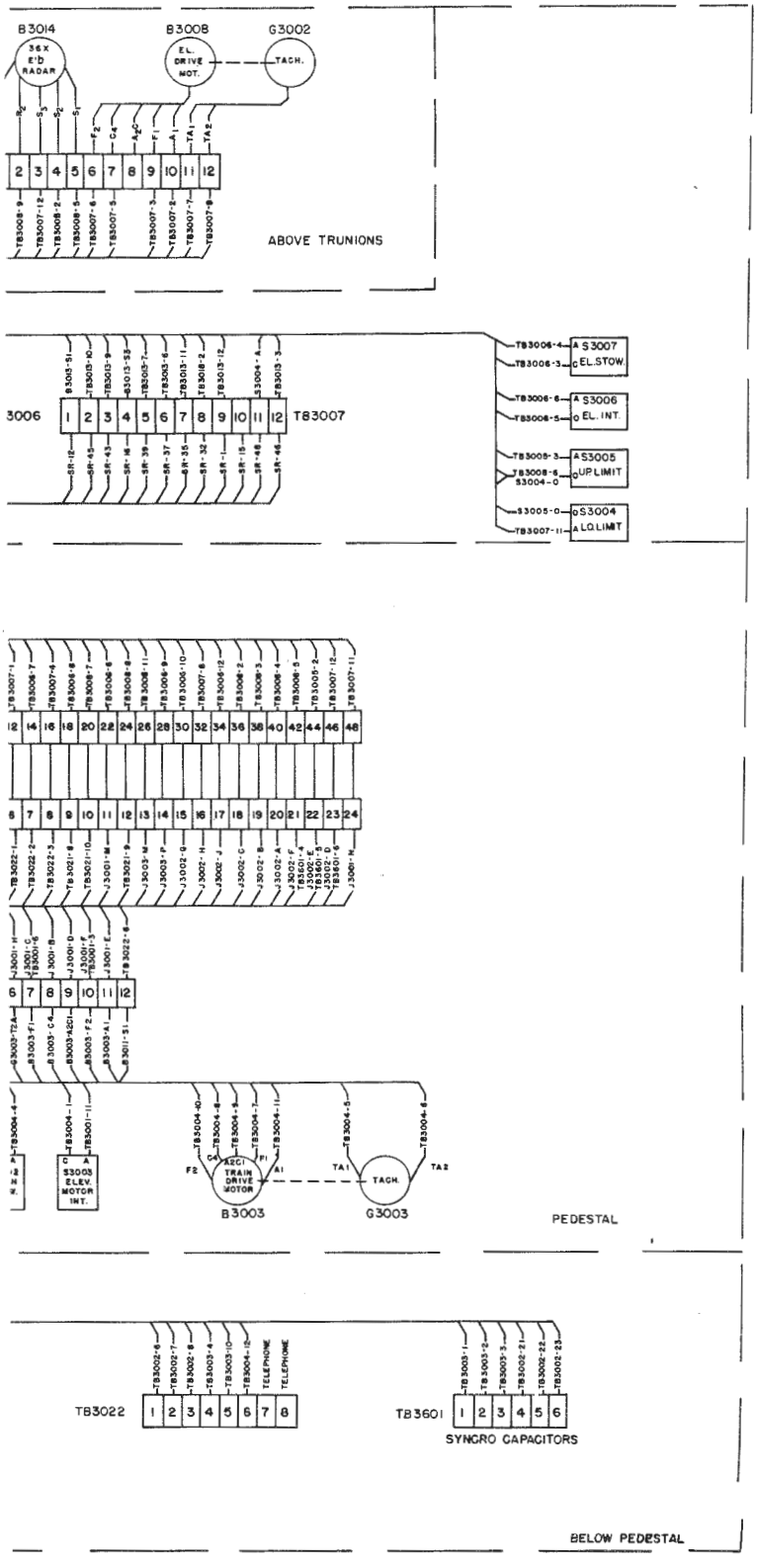
[redacted]




B3014
36X E'b RADAR
B3008
E.L. DRIVE MOT.
G3002
TACH.
ABOVE TRUNIONS
TB3007
S3007 EL.STOW.
S3006 EL. INT.
S3005 UP LIMIT
S3004 LO.LIMIT
TB3022
TB3601
SYNCRO CAPACITORS
B3003
TRAIN DRIVE MOTOR
G3003
TACH.
S3003 ELEV. MOTOR INT.
PEDESTAL
BELOW PEDESTAL

[redacted]DECLASSIFIED

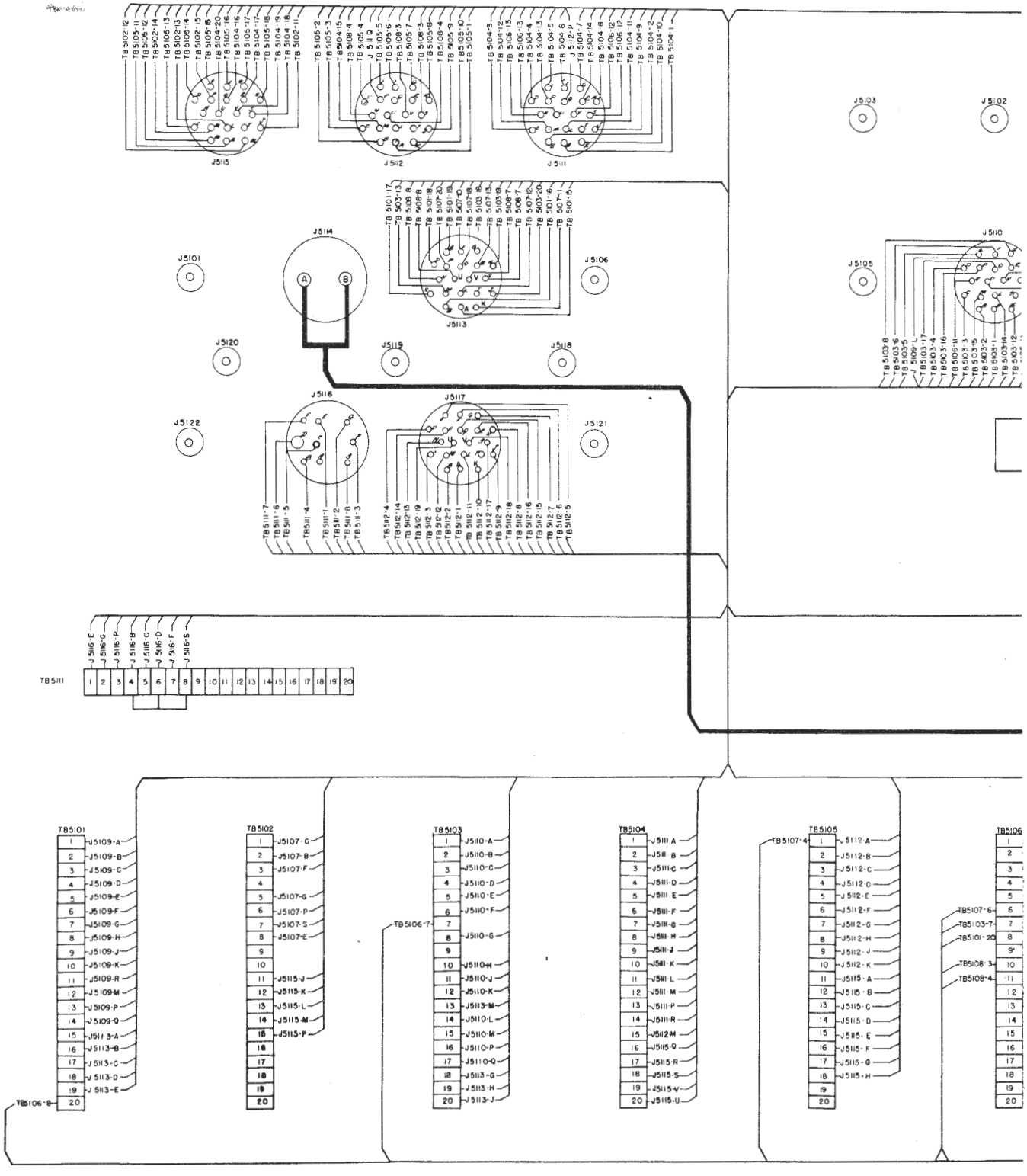
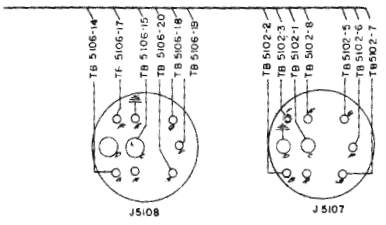
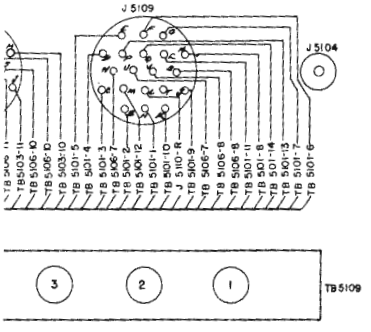
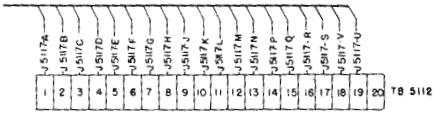


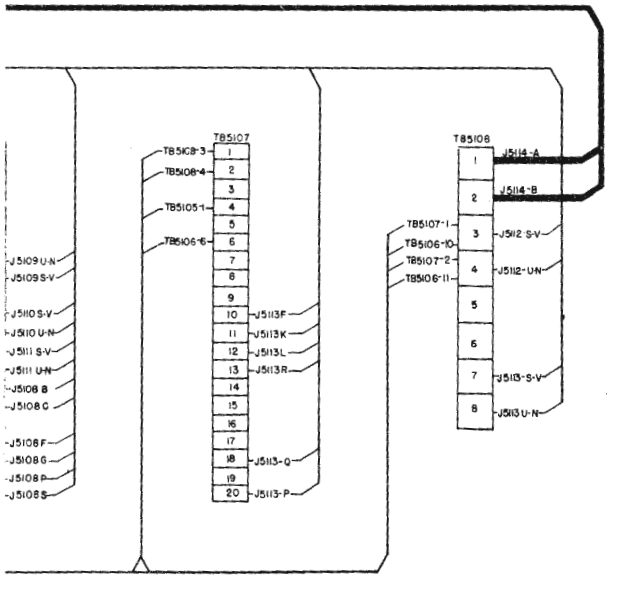
Figure 7-26. Equipment Trailer Cable Panel - Wiring Diagram

[redacted]DECLASSIFIED


TB 5106-14
TB 5106-17
TB 5106-15
TB 5106-20
TB 5106-18
TB 5106-19
TB 5102-2
TB 5102-3
TB 5102-1
TB 5102-4
TB 5102-5
TB 5102-6
TB 5102-7
J5108
J 5107


J 5109
J 5104
TB 5103-11
TB 5106-10
TB 5106-12
TB 5103-10
TB 5101-5
TB 5101-4
TB 5101-3
TB 5106-2
TB 5101-12
TB 5101-1
TB 5101-10
J 5110-R
TB 5101-9
TB 5106-7
TB 5106-8
TB 5106-9
TB 5101-11
TB 5101-8
TB 5101-14
TB 5101-13
TB 5101-7
TB 5101-6
3
2
1
TB5109


J 5117A
J 5117B
J 5117C
J 5117D
J 5117E
J 5117F
J 5117G
J 5117H
J 5117J
J 5117K
J 5117L
J 5117M
J 5117N
J 5117P
J 5117Q
J 5117-R
J 5117-S
J 5117-V
J 5117-U
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
TB 5112


TB5107
TB5108-3
TB5108-4
TB5105-1
TB5106-6
J5109 U-N
J5109 S-V
J5110 S-V
J5110 U-N
J5111 S-V
J5111 U-N
J5108 B
J5108 C
J5108 F
J5108 G
J5108 P
J5108 S
J5113F
J5113K
J5113L
J5113R
J5113-Q
J5113-P
TB5108
TB5107-1
TB5106-10
TB5107-2
TB5106-11
J5114-A
J5114-B
J5112-S-V
J5112-U-N
J5113-S-V
J5113 U-N

DECLASSIFIED

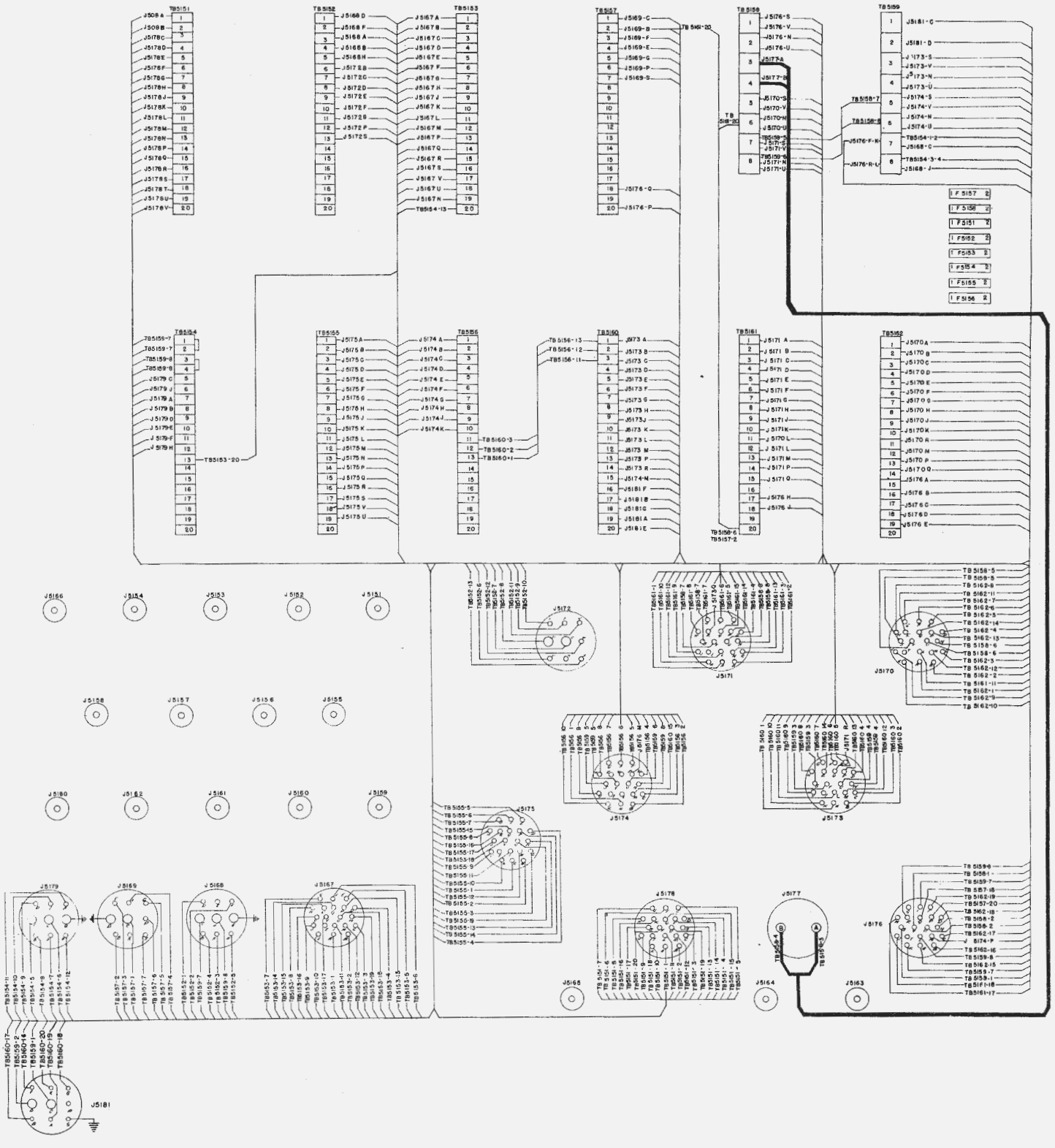


Figure 7-27. Operations Trailer Cable Panel - Wiring Diagram

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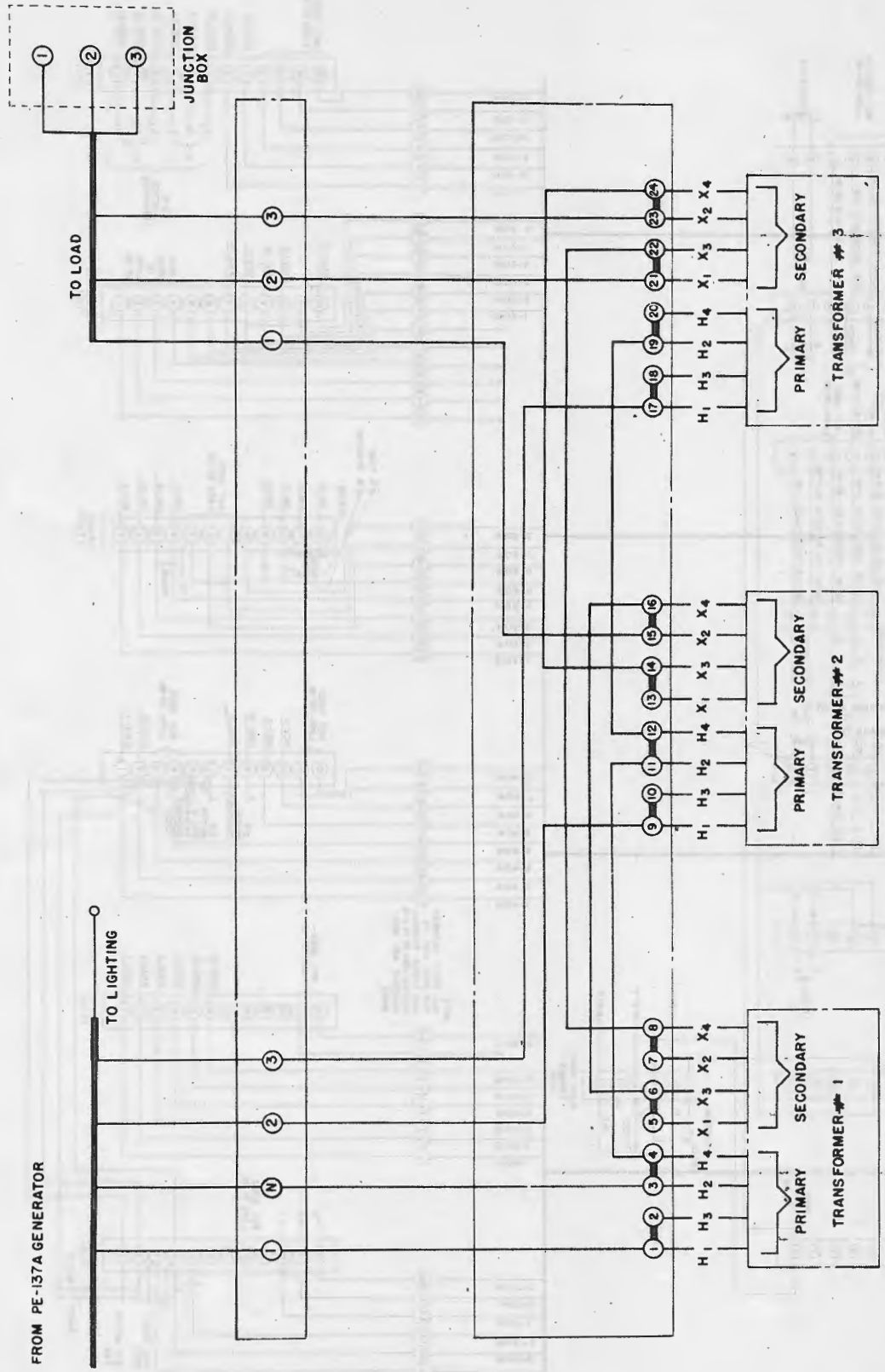

Figure 7-28. Power Unit PE137 - Wiring Diagram

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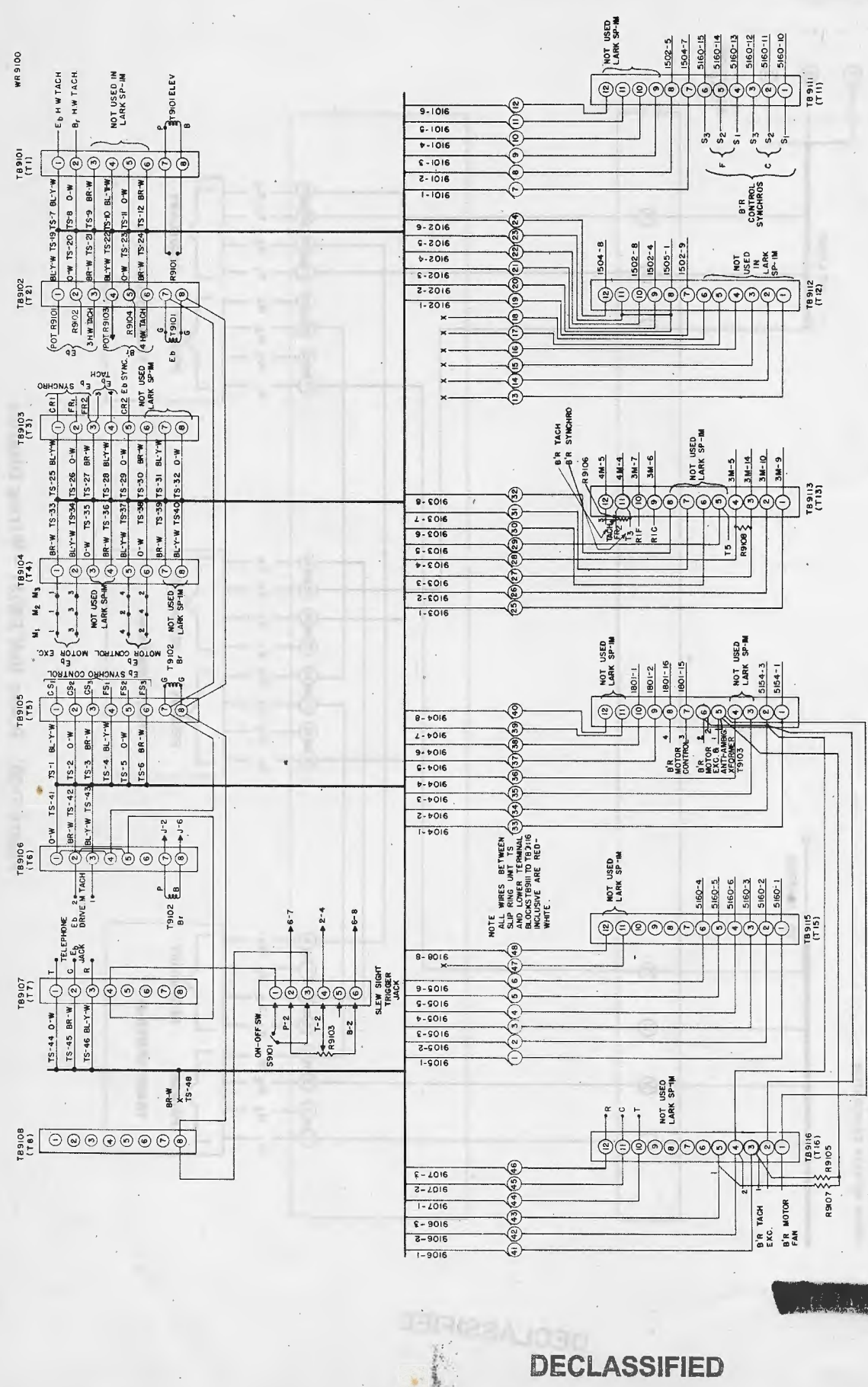

Figure 7-29. Telescope Unit - Wiring Diagram

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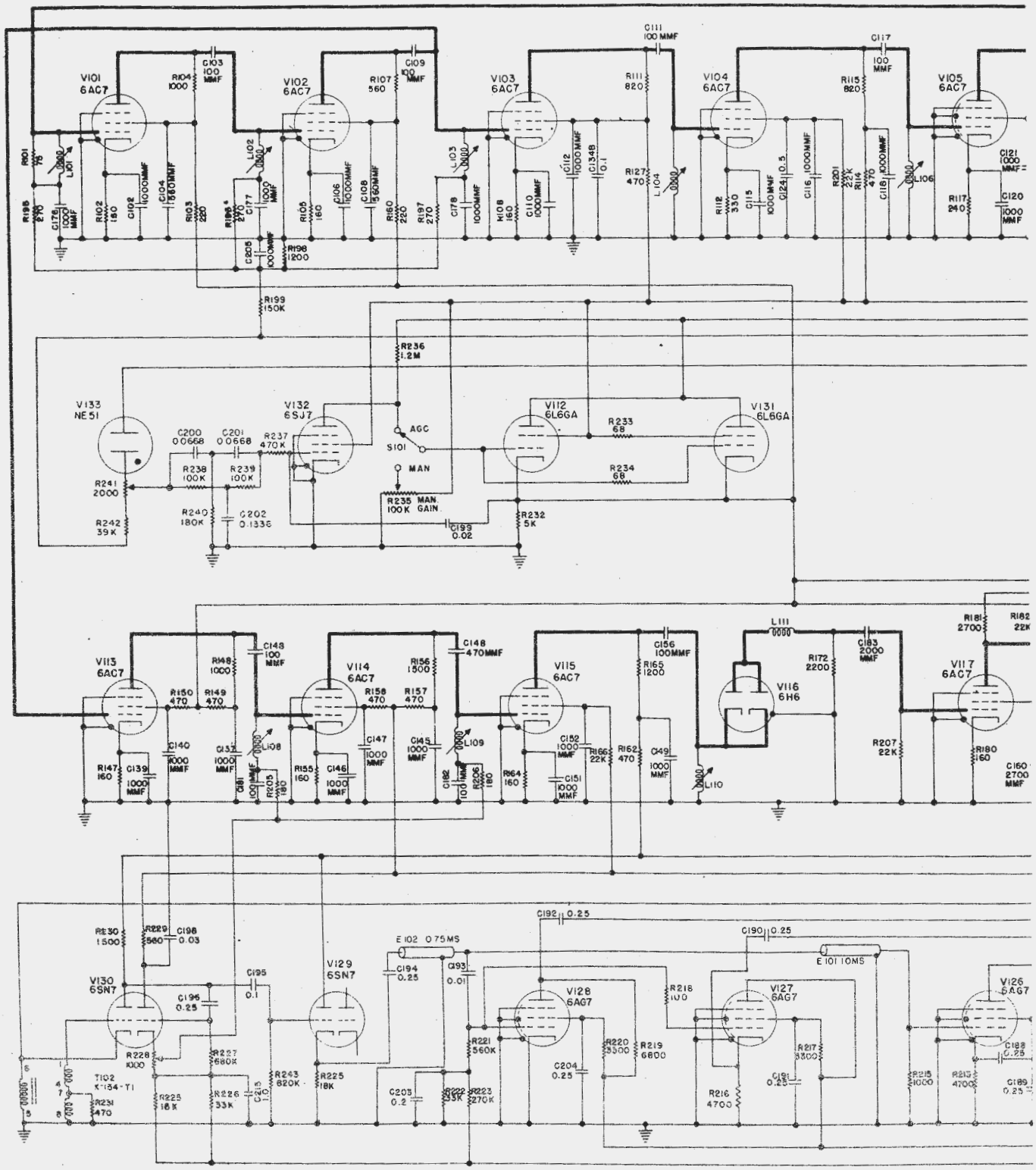

Figure 7-30. Target or Missile Receiver Unit - Schematic Diagram

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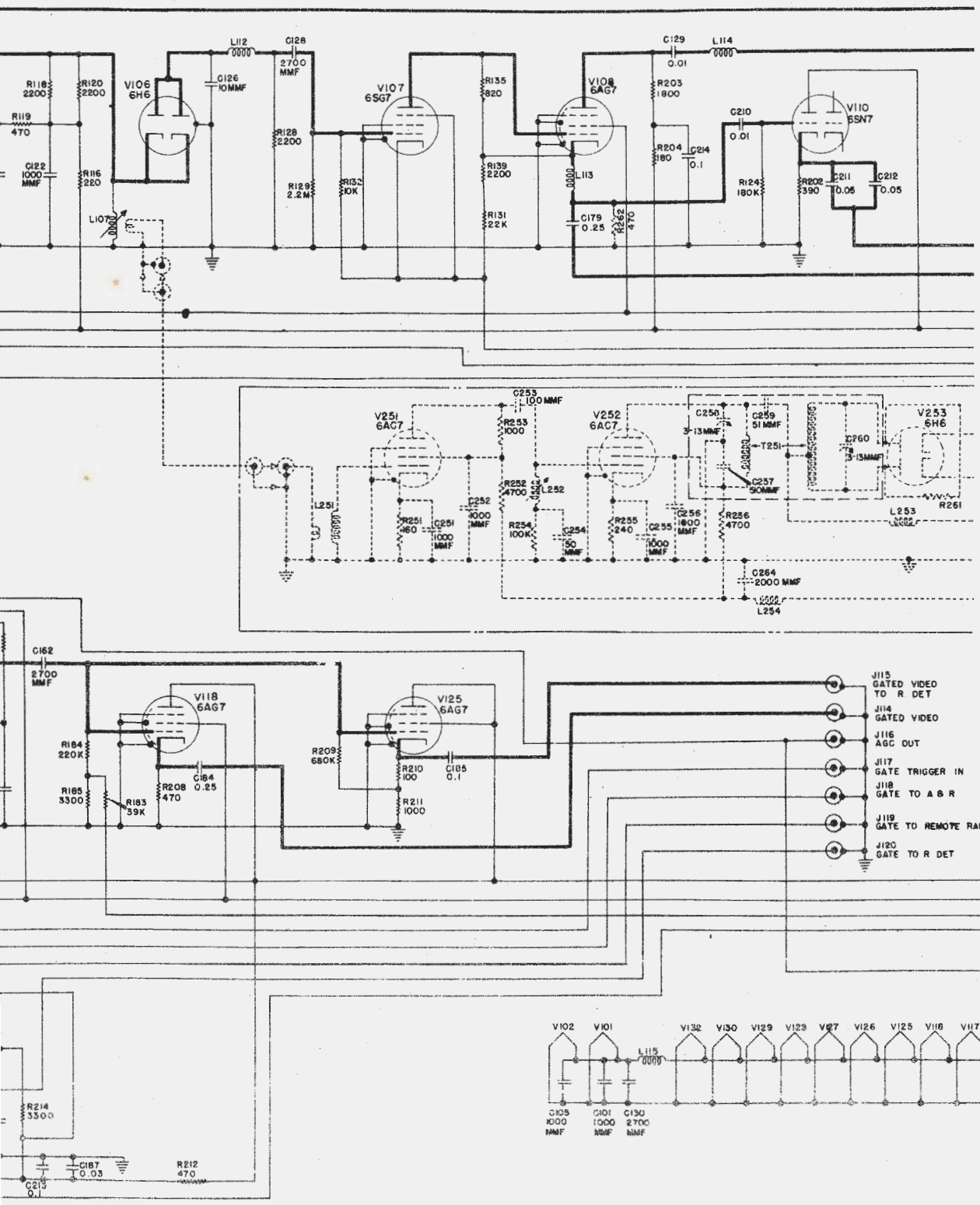
V106 6H6
V107 6SG7
V108 6AG7
V110 6SN7
V251 6AC7
V252 6AC7
V253 6H6
V118 6AG7
V125 6AG7
L112
C128 2700 MMF
C126 10MMF
C129 0.01
L114
R118 2200
R120 2200
R119 470
C122 1000 MMF
R116 220
L107
R128 2200
R129 2.2M
R132 10K
R135 820
R139 2200
R131 22K
L113
C179 0.25
R262 470
R203 1800
R204 180
C214 0.1
C210 0.01
R124 180K
R202 390
C211 0.05
C212 0.05
C253 100 MMF
R253 1000
L251
R251 60
C251 1000 MMF
C252 1000 MMF
R252 4700
L252
R254 100K
C254 50 MMF
R255 240
C255 1000 MMF
C256 1000 MMF
R256 4700
C258 3-13MMF
C259 51 MMF
T251
C260 3-13MMF
C257 50MMF
L253
R261
C264 2000 MMF
L254
C162 2700 MMF
R184 220K
R185 3300
R183 39K
C184 0.25
R208 470
R209 680K
R210 100
C185 0.1
R211 1000
J113 GATED VIDEO TO R DET
J114 GATED VIDEO
J116 AGC OUT
J117 GATE TRIGGER IN
J118 GATE TO A & R
J119 GATE TO REMOTE RANGE
J120 GATE TO R DET
R214 3300
C187 0.03
C213 0.1
R212 470
V102
V101
L115
V132
V130
V129
V123
V127
V126
V125
V118
V117
C105 1000 MMF
C101 1000 MMF
C130 2700 MMF

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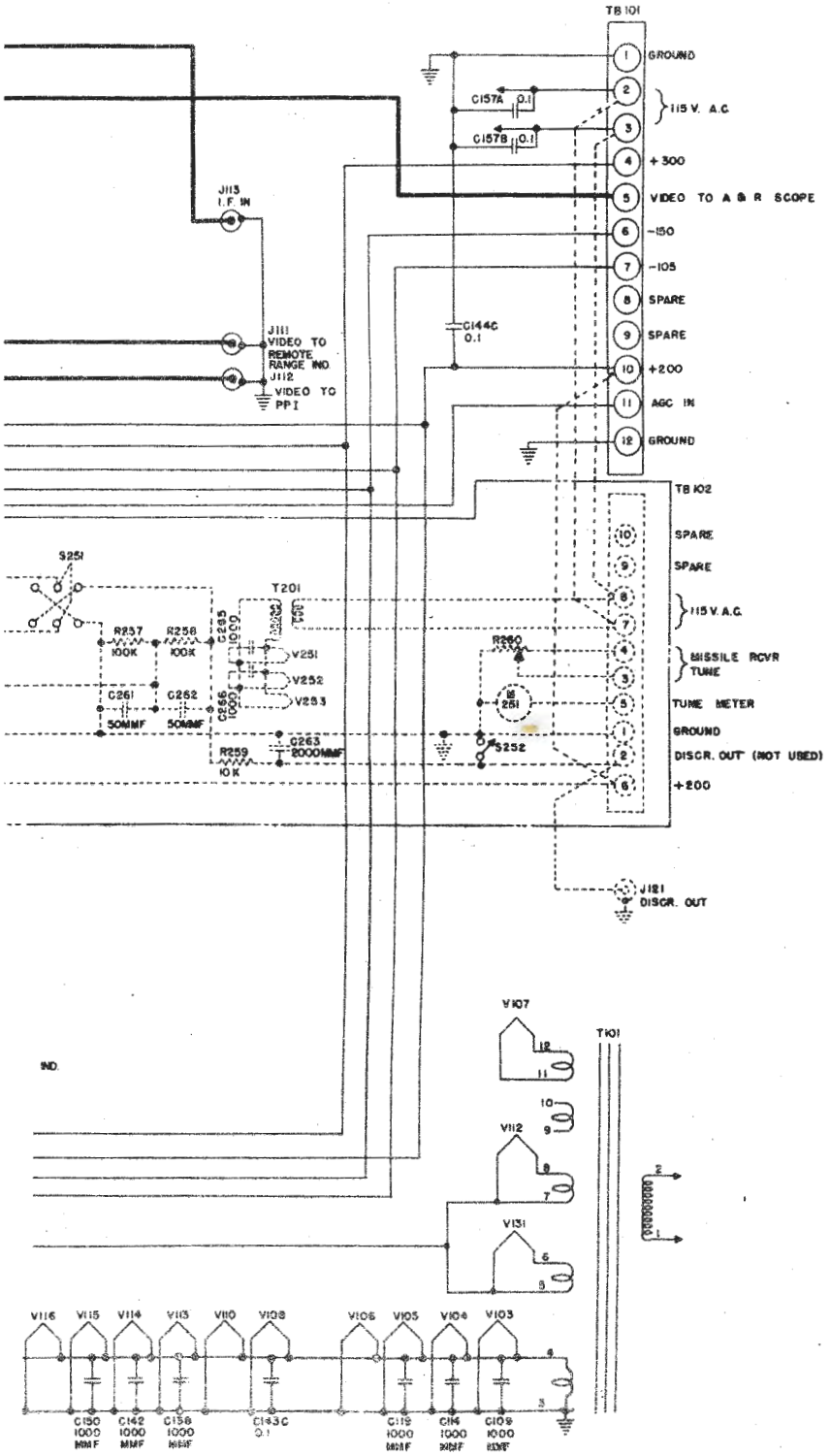

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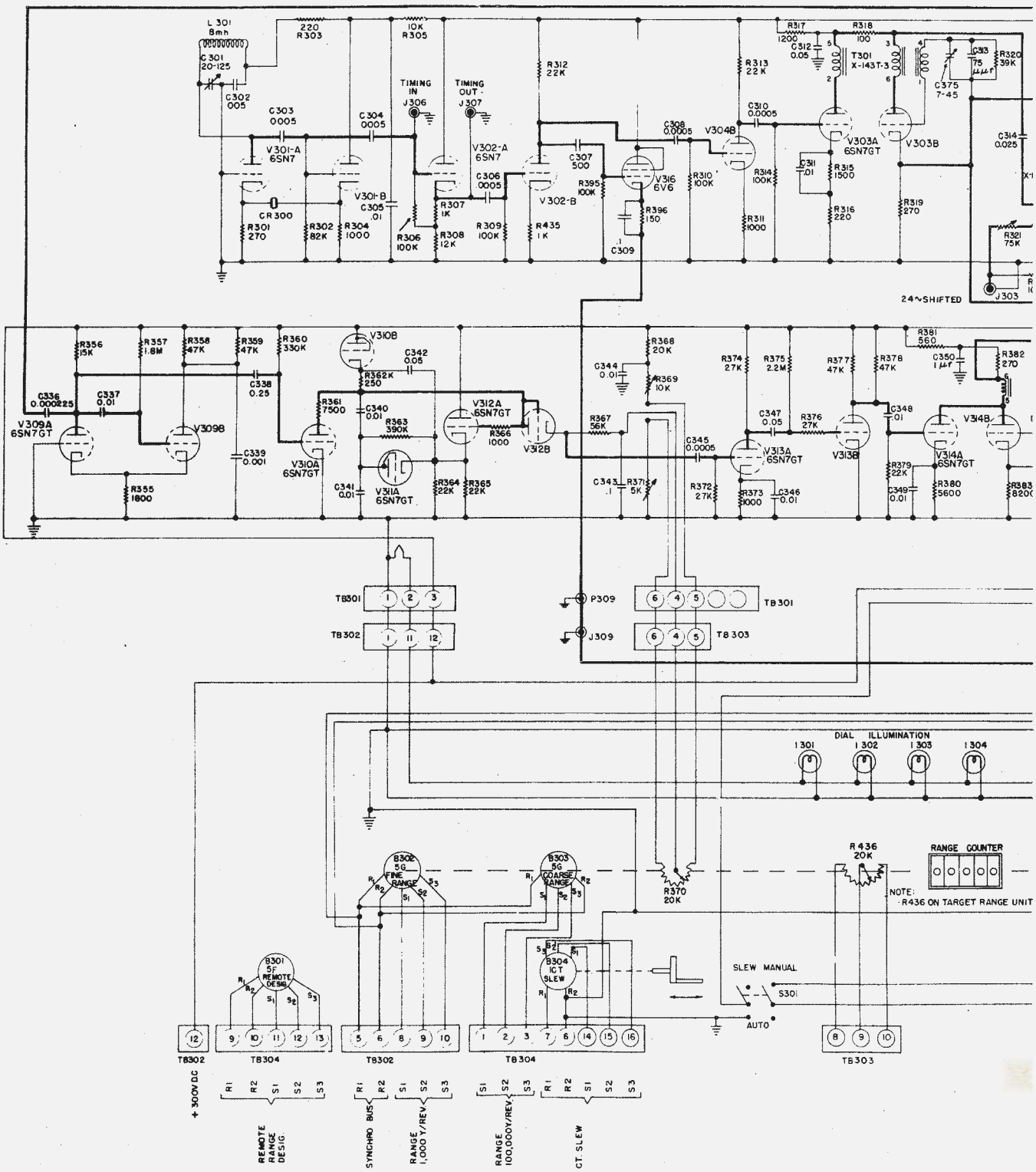

Figure 7-31. Target or Missile Range Unit - Schematic Diagram

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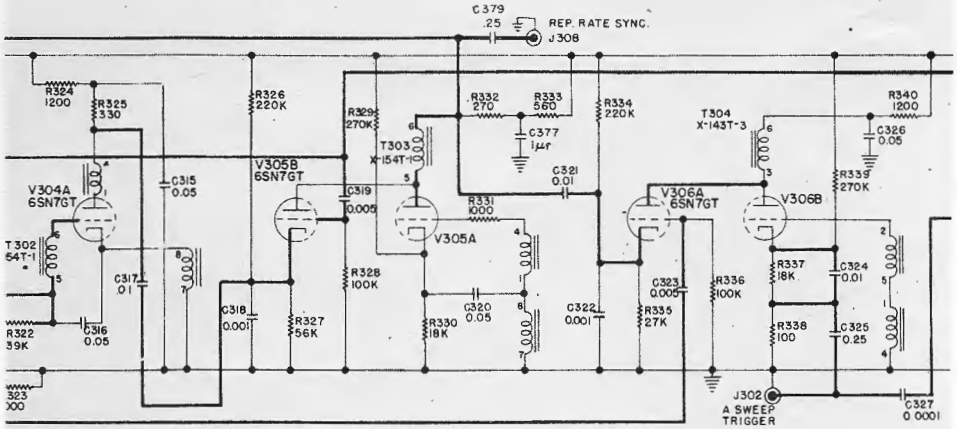
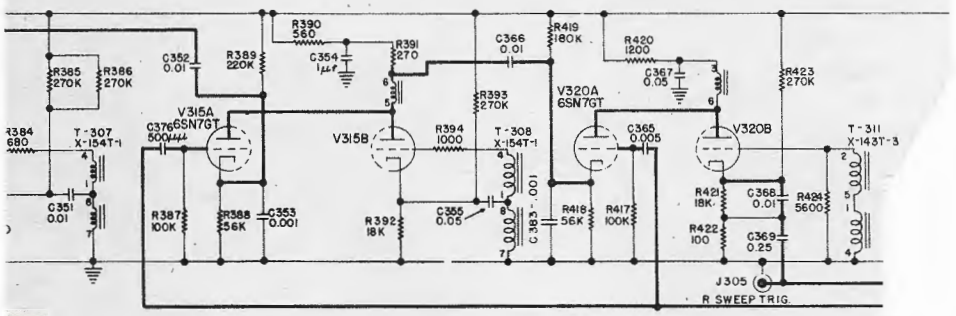
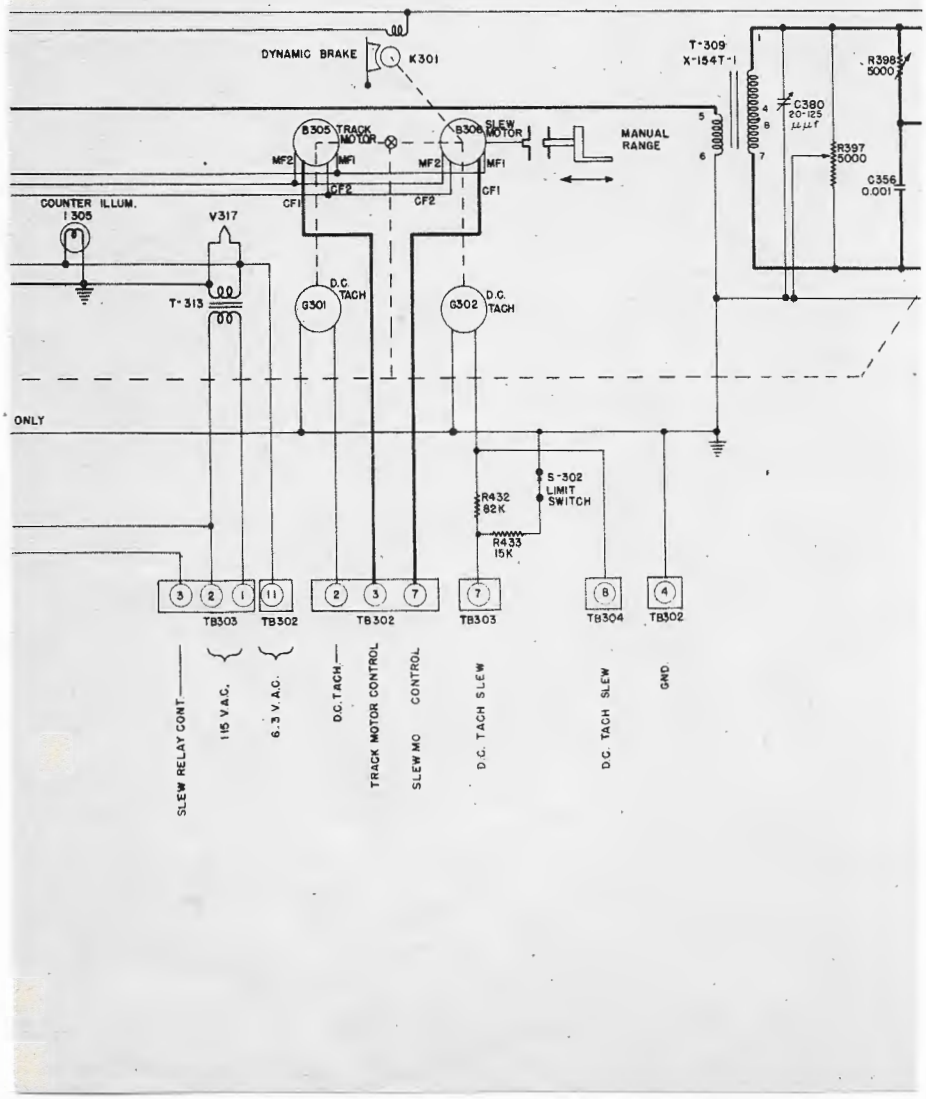
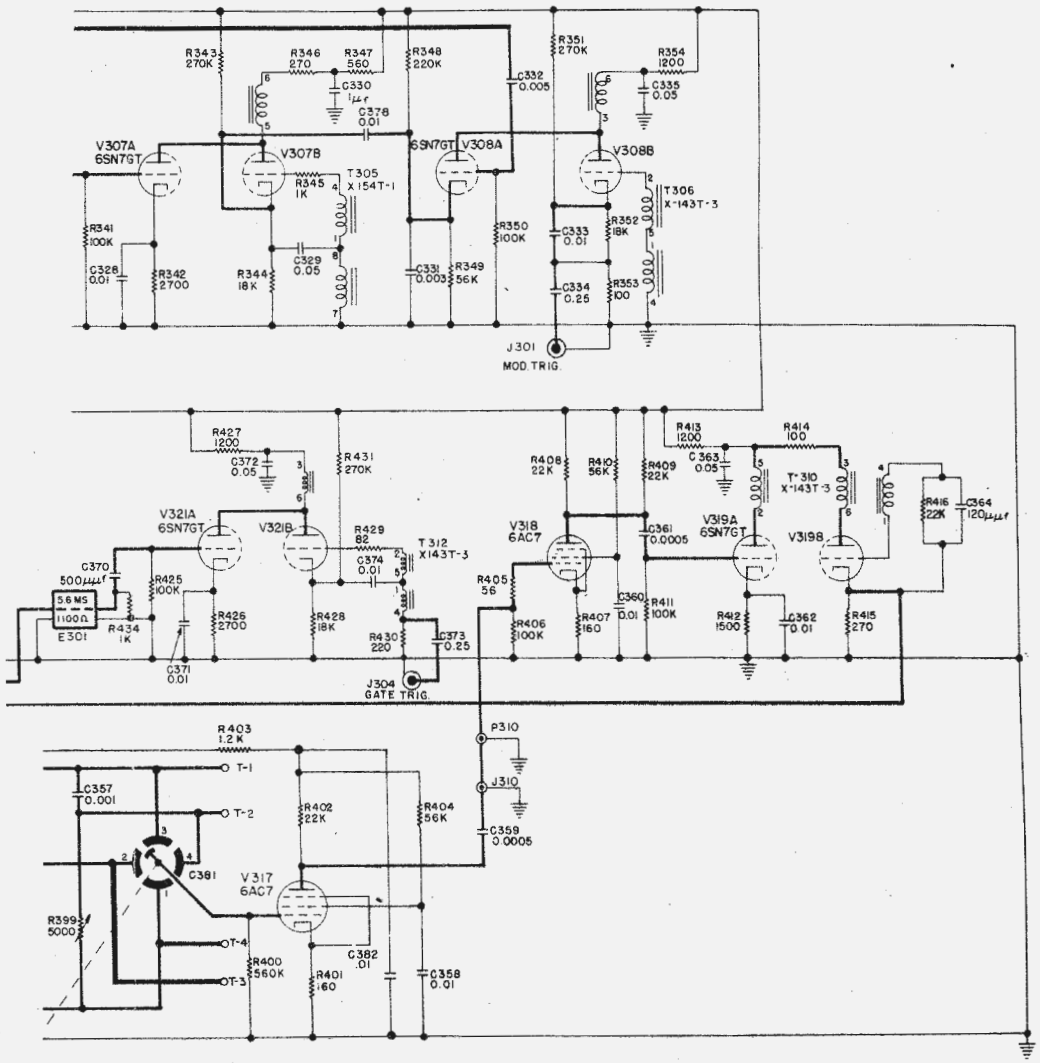

C379 .25
REP. RATE SYNC.
J308
R324 1200
R325 330
R326 220K
R329 270K
R332 270
R333 560
R334 220K
T304 X-143T-3
R340 1200
C326 0.05
C377 1μf
C321 0.01
R339 270K
V304A 6SN7GT
C315 0.05
V305B 6SN7GT
C319 0.005
T303 X-154T-1
V305A
R331 1000
V306A 6SN7GT
V306B
T302 54T-1
C317 .01
R328 100K
R337 18K
C324 0.01
C323 0.005
R336 100K
R322 39K
C316 0.05
C318 0.001
R327 56K
R330 18K
C320 0.05
C322 0.001
R335 27K
R338 100
C325 0.25
323 000
J302
A SWEEP TRIGGER
C327 0.0001


R390 560
C352 0.01
R389 220K
C354 1μf
R391 270
C366 0.01
R419 180K
R420 1200
C367 0.05
R423 270K
R385 270K
R386 270K
R393 270K
V320A 6SN7GT
V315A
C376 6SN7GT 500μμf
V315B
R394 1000
T-308 X-154T-1
C365 0.005
V320B
T-311 X-143T-3
R384 680
T-307 X-154T-1
C351 0.01
R387 100K
R388 56K
C353 0.001
R392 18K
C355 0.05
C383 .001
R418 56K
R417 100K
R421 18K
C368 0.01
R424 5600
R422 100
C369 0.25
J305
R SWEEP TRIG.


DYNAMIC BRAKE
K301
T-309 X-154T-1
R398 5000
C380 20-125 μμf
R397 5000
C356 0.001
B305 TRACK MOTOR
B306 SLEW MOTOR
MANUAL RANGE
MF2
MF1
CF2
CF1
COUNTER ILLUM. I 305
V317
T-313
G301 D.C. TACH
G302 D.C. TACH
ONLY
S-302 LIMIT SWITCH
R432 82K
R433 15K
TB303
TB302
TB302
TB303
TB304
TB302
SLEW RELAY CONT
115 V.A.C.
6.3 V.A.C.
D.C. TACH
TRACK MOTOR CONTROL
SLEW MO CONTROL
D.C. TACH SLEW
D.C. TACH SLEW
GND


R343 270K
R346 270
R347 560
R348 220K
C330 1μf
C378 0.01
C332 0.005
R351 270K
R354 1200
C335 0.05
V307A 6SN7GT
V307B
T305 X154T-1
R345 1K
6SN7GT V308A
V308B
T306 X-143T-3
R341 100K
C328 0.01
R342 2700
R344 18K
C329 0.05
C331 0.003
R349 56K
R350 100K
C333 0.01
R352 18K
C334 0.25
R353 100
J301 MOD. TRIG.
R427 1200
C372 0.05
R431 270K
R408 22K
R410 56K
R409 22K
R413 1200
C363 0.05
R414 100
T-310 X-143T-3
V321A 6SN7GT
V321B
R429 82
C374 0.01
T 312 X143T-3
V318 6AC7
C361 0.0005
V319A 6SN7GT
V319B
R416 22K
C364 120μμf
C370 500μμf
5.6 MS 1100Ω
E301
R434 1K
R425 100K
R426 2700
R428 18K
R430 220
C373 0.25
J304 GATE TRIG.
R405 56
R406 100K
R407 160
C360 0.01
R411 100K
R412 1500
C362 0.01
R415 270
C371 0.01
R403 1.2K
T-1
T-2
C357 0.001
R402 22K
R404 56K
P310
J310
C359 0.0005
C381
V317 6AC7
R399 5000
T-4
T-3
R400 560K
R401 160
C382 .01
C358 0.01

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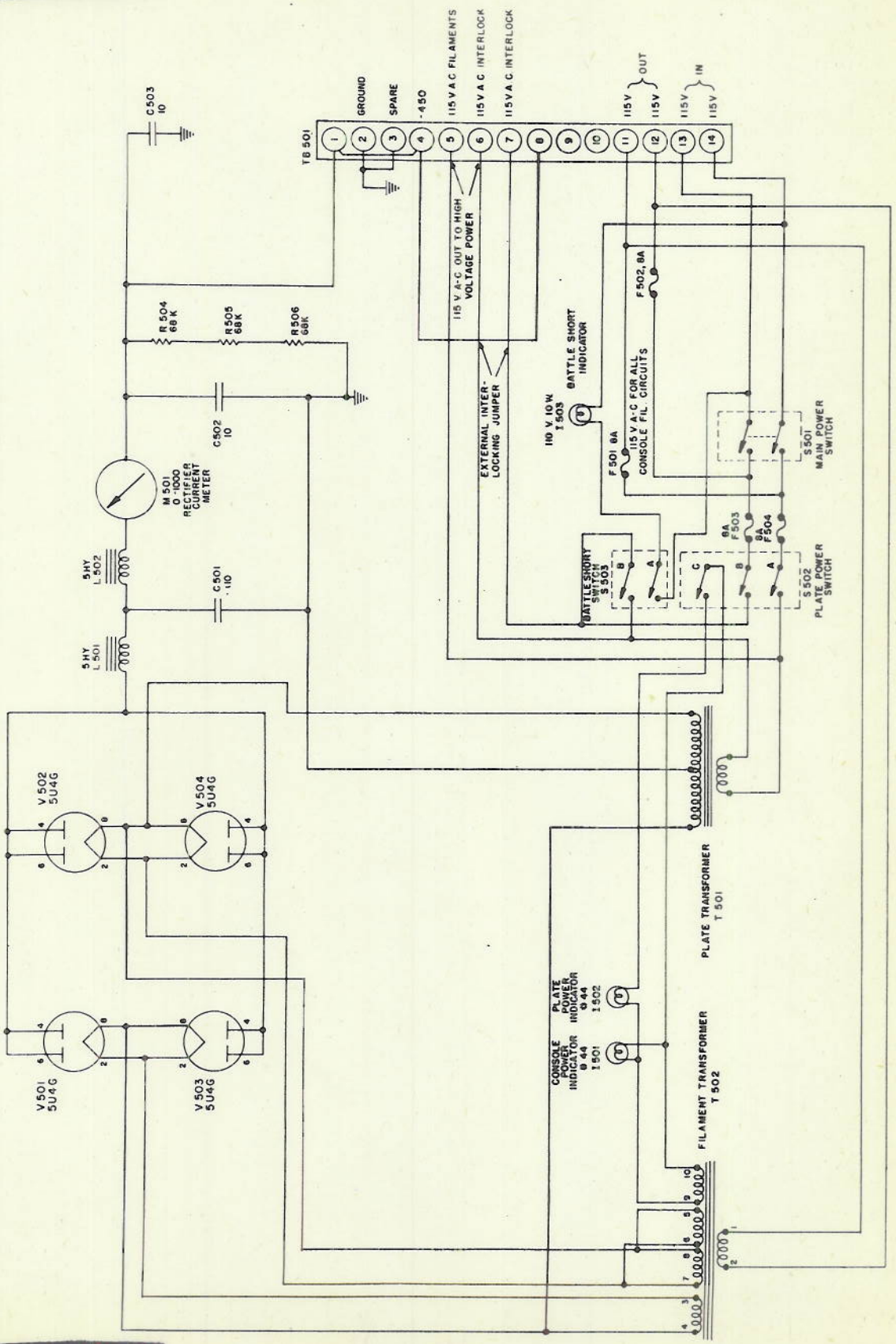

Figure 7-32. Main Power Unit - Schematic Diagram

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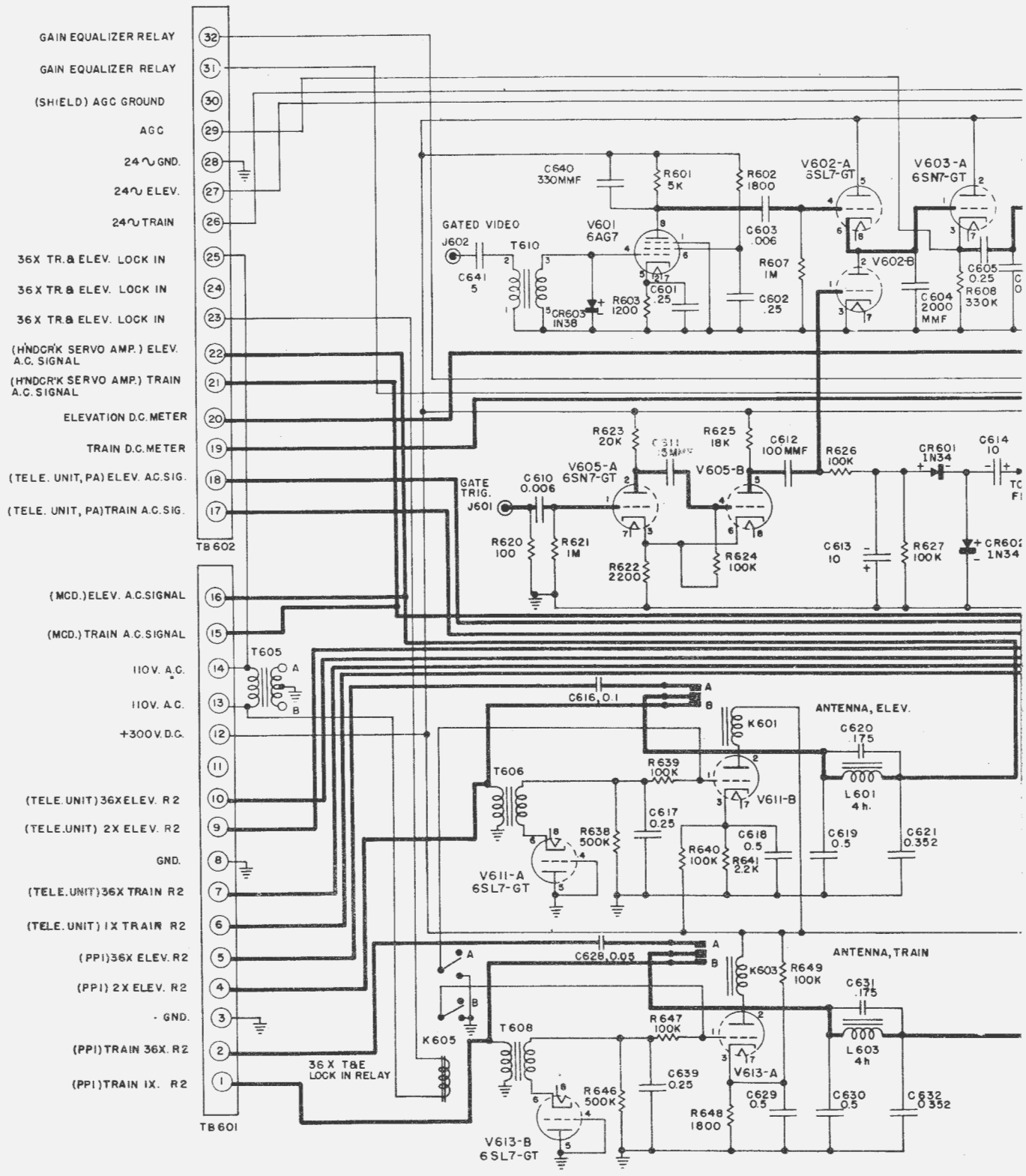

Figure 7-33. Synchronizer and Missile Coordinate Detector Unit - Schematic Diagram

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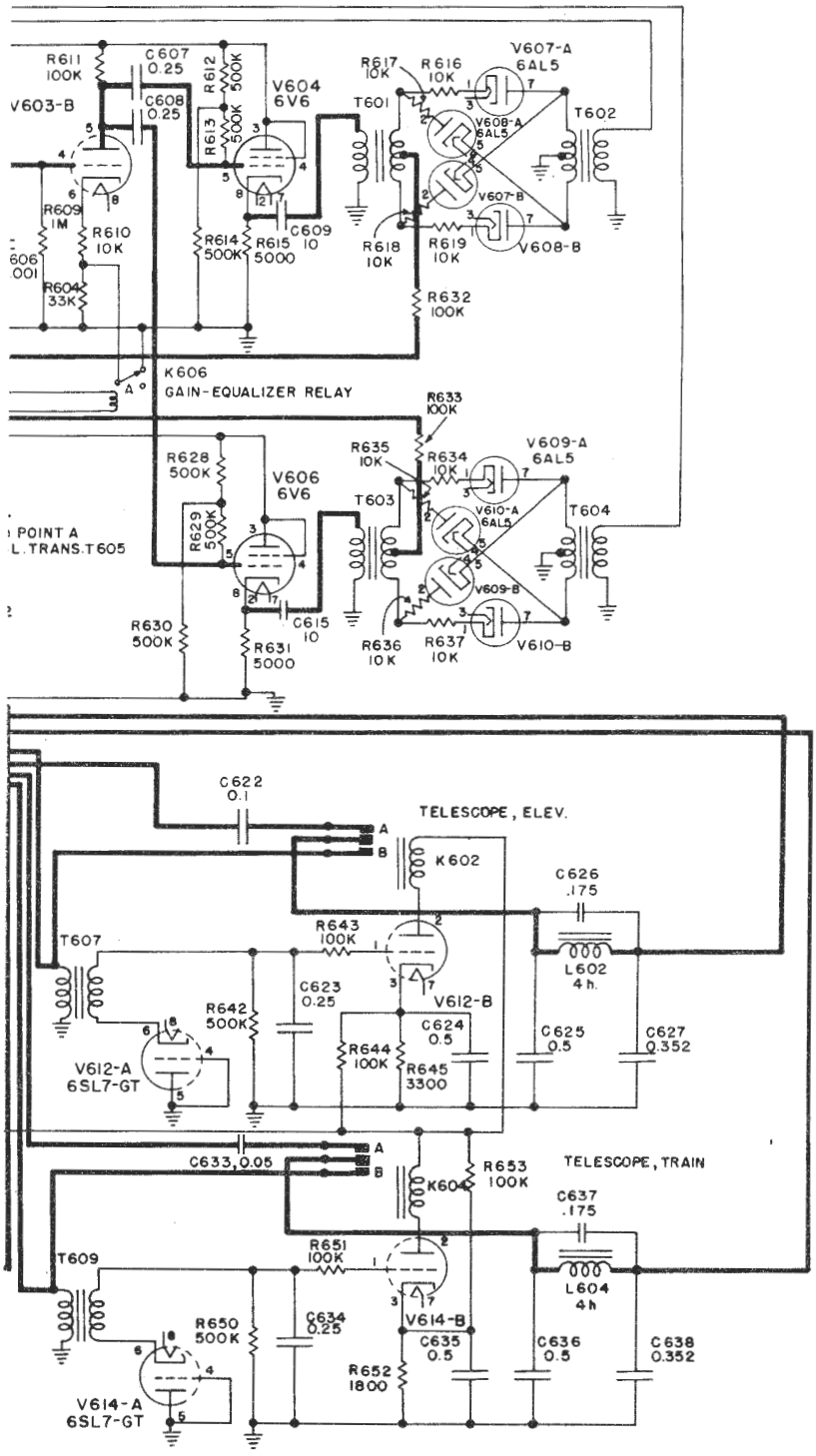
R611 100K
C607 0.25
R612 500K
V604 6V6
V603-B
C608 0.25
R613 500K
T601
R617 10K
R616 10K
V607-A 6AL5
T602
V608-A 6AL5
V607-B
V608-B
R609 1M
R610 10K
R614 500K
R615 5000
C609 10
R618 10K
R619 10K
R604 33K
R632 100K
K606
GAIN-EQUALIZER RELAY
R633 100K
R635 10K
R634 10K
V609-A 6AL5
R628 500K
V606 6V6
T603
V610-A 6AL5
T604
R629 500K
POINT A
L.TRANS.T605
V609-B
V610-B
R630 500K
C615 10
R631 5000
R636 10K
R637 10K
C622 0.1
TELESCOPE, ELEV.
K602
C626 .175
T607
R643 100K
L602 4h.
C623 0.25
V612-B
R642 500K
C624 0.5
C625 0.5
C627 0.352
R644 100K
R645 3300
V612-A 6SL7-GT
C633, 0.05
TELESCOPE, TRAIN
R653 100K
K604
C637 .175
T609
R651 100K
L604 4h
V614-B
R650 500K
C634 0.25
C635 0.5
C636 0.5
C638 0.352
R652 1800
V614-A 6SL7-GT

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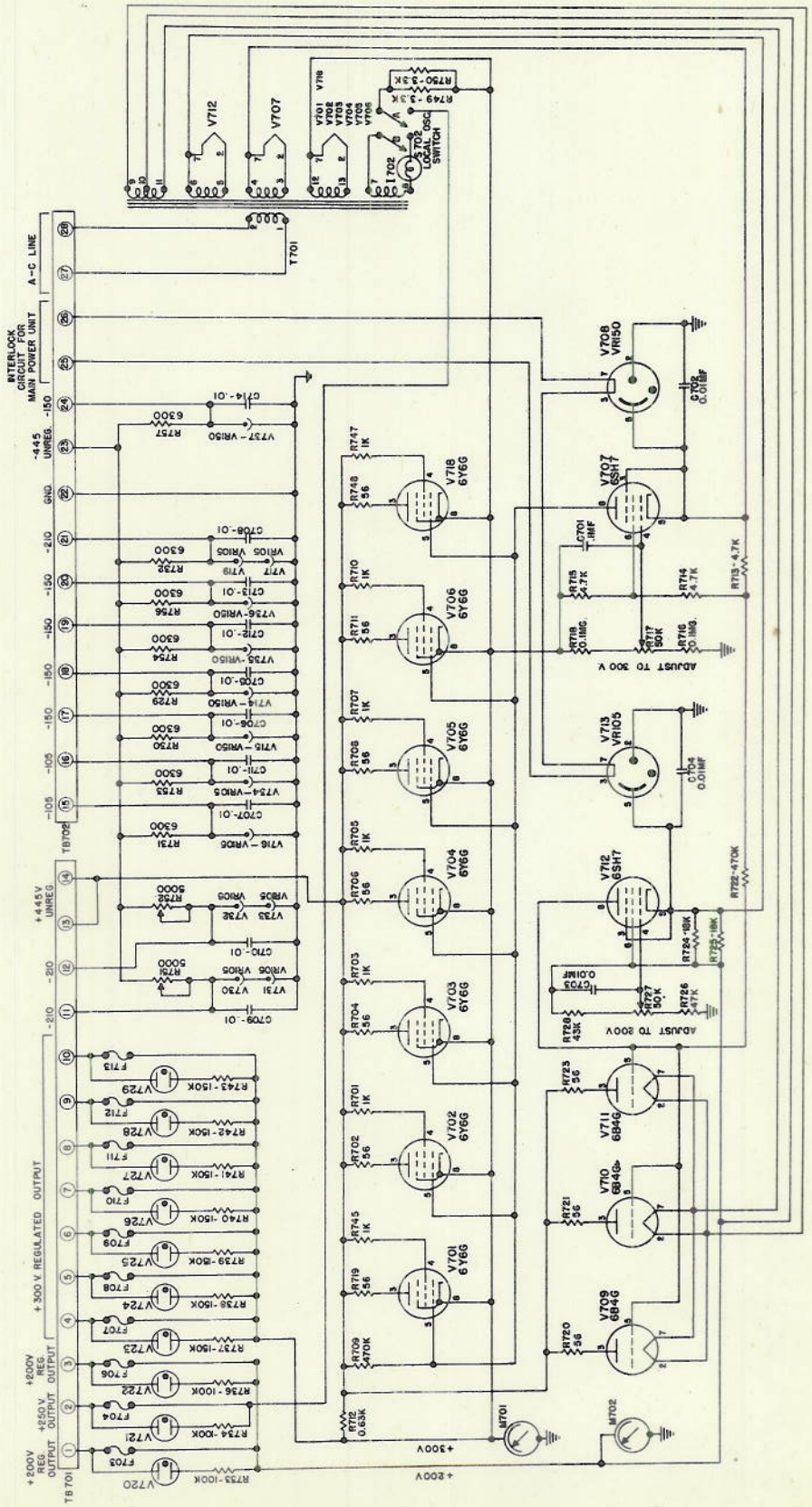

Figure 7-34. Auxiliary Power Unit - Schematic Diagram

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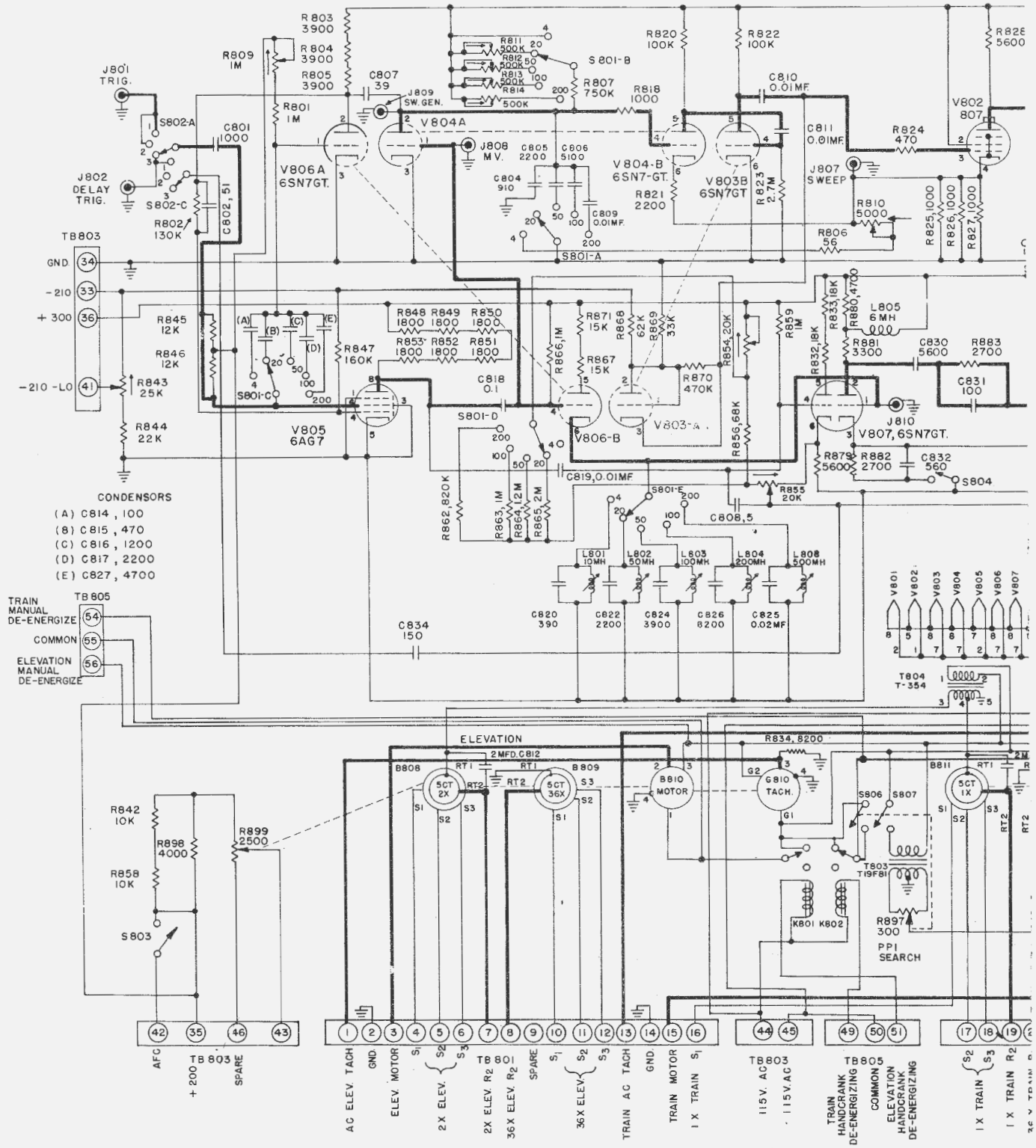

Figure 7-35. PPI Unit - Schematic Diagram

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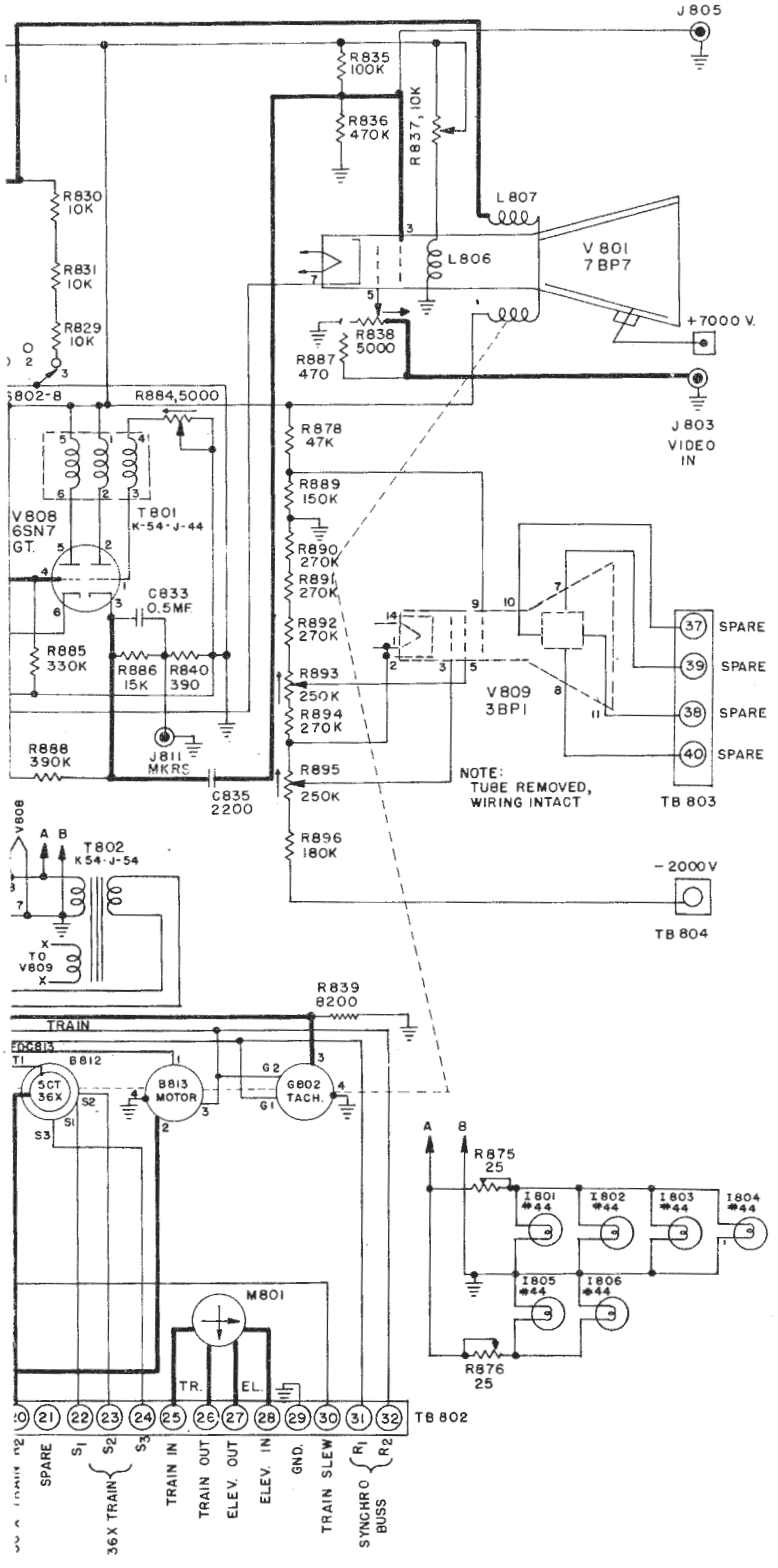
J805
R835 100K
R836 470K
R837, 10K
L807
L806
V801 7BP7
+7000 V.
R838 5000
R887 470
J803 VIDEO IN
R830 10K
R831 10K
R829 10K
S802-8
R884, 5000
R878 47K
R889 150K
R890 270K
R891 270K
R892 270K
R893 250K
R894 270K
R895 250K
R896 180K
V808 6SN7 GT.
T801 K-54-J-44
C833 0.5MF
R885 330K
R886 15K
R840 390
R888 390K
J811 MKRS
C835 2200
V809 3BP1
SPARE
SPARE
SPARE
SPARE
TB 803
NOTE: TUBE REMOVED, WIRING INTACT
-2000V
TB 804
T802 K54-J-54
TO V809
R839 8200
TRAIN
B812
SCT 36X
B813 MOTOR
G802 TACH.
M801
TR.
EL.
R875 25
R876 25
I801 #44
I802 #44
I803 #44
I804 #44
I805 #44
I806 #44
TB 802
SPARE
36X TRAIN
TRAIN IN
TRAIN OUT
ELEV. OUT
ELEV. IN
GND.
TRAIN SLEW
SYNCHRO BUSS

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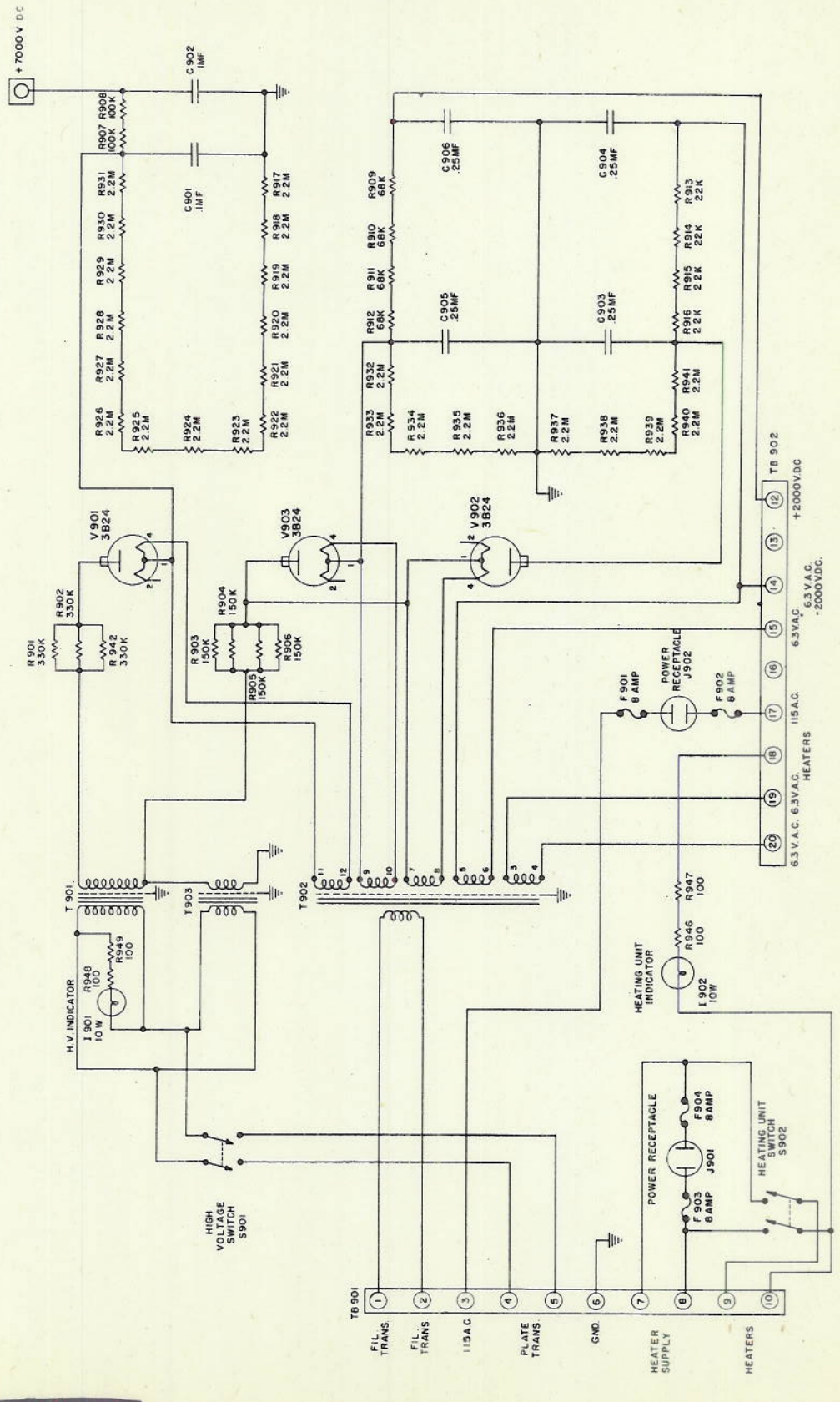

Figure 7-36. High-voltage Power Unit - Schematic Diagram

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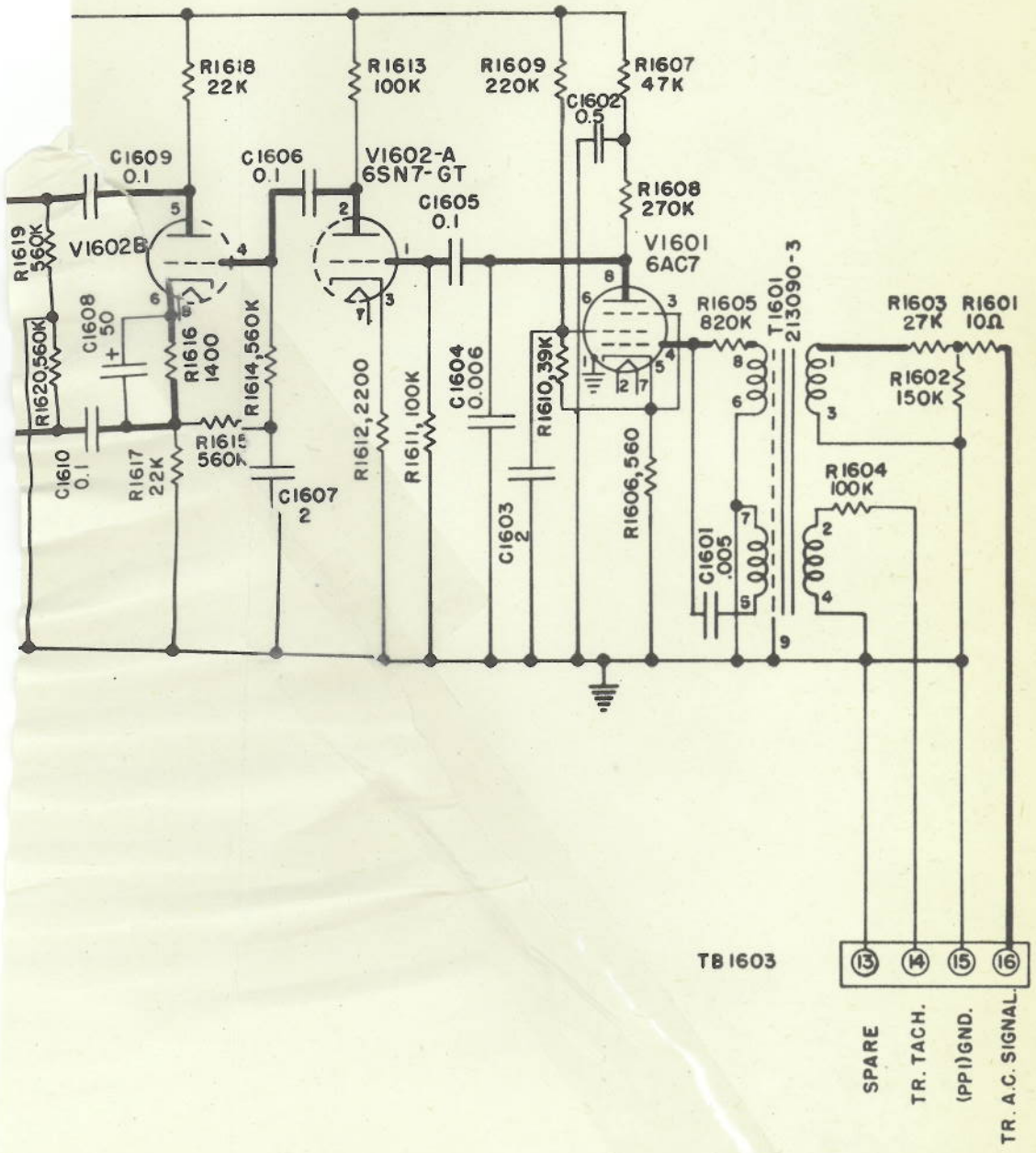
R1618 22K
R1613 100K
R1609 220K
R1607 47K
C1602 0.5
C1609 0.1
C1606 0.1
V1602-A 6SN7-GT
C1605 0.1
R1608 270K
V1601 6AC7
R1619 560K
V1602B
C1608 + 50
R1620 560K
R1616 1400
R1614 560K
R1605 820K
T1601 213090-3
R1603 27K
R1601 10Ω
R1602 150K
R1612 2200
R1611 100K
C1604 0.006
R1610 39K
R1606 560
R1604 100K
C1610 0.1
R1617 22K
R1615 560K
C1607 2
C1603 2
C1601 .005
TB1603
13
14
15
16
SPARE
TR. TACH.
(PP)GND.
TR. A.C. SIGNAL

DECLASSIFIED

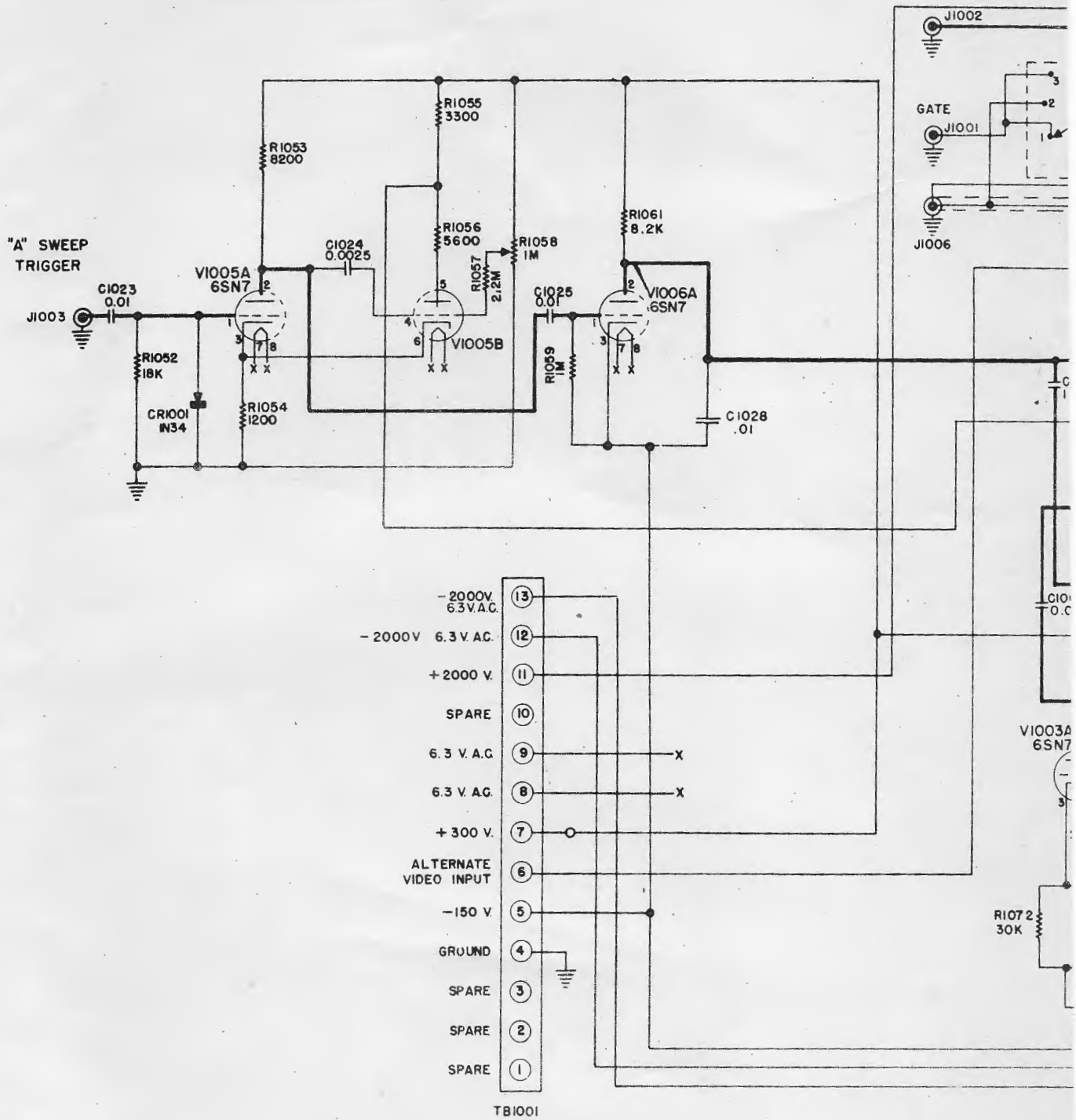

Figure 7-37. Target or Missile Indicator Unit - Schematic Diagram

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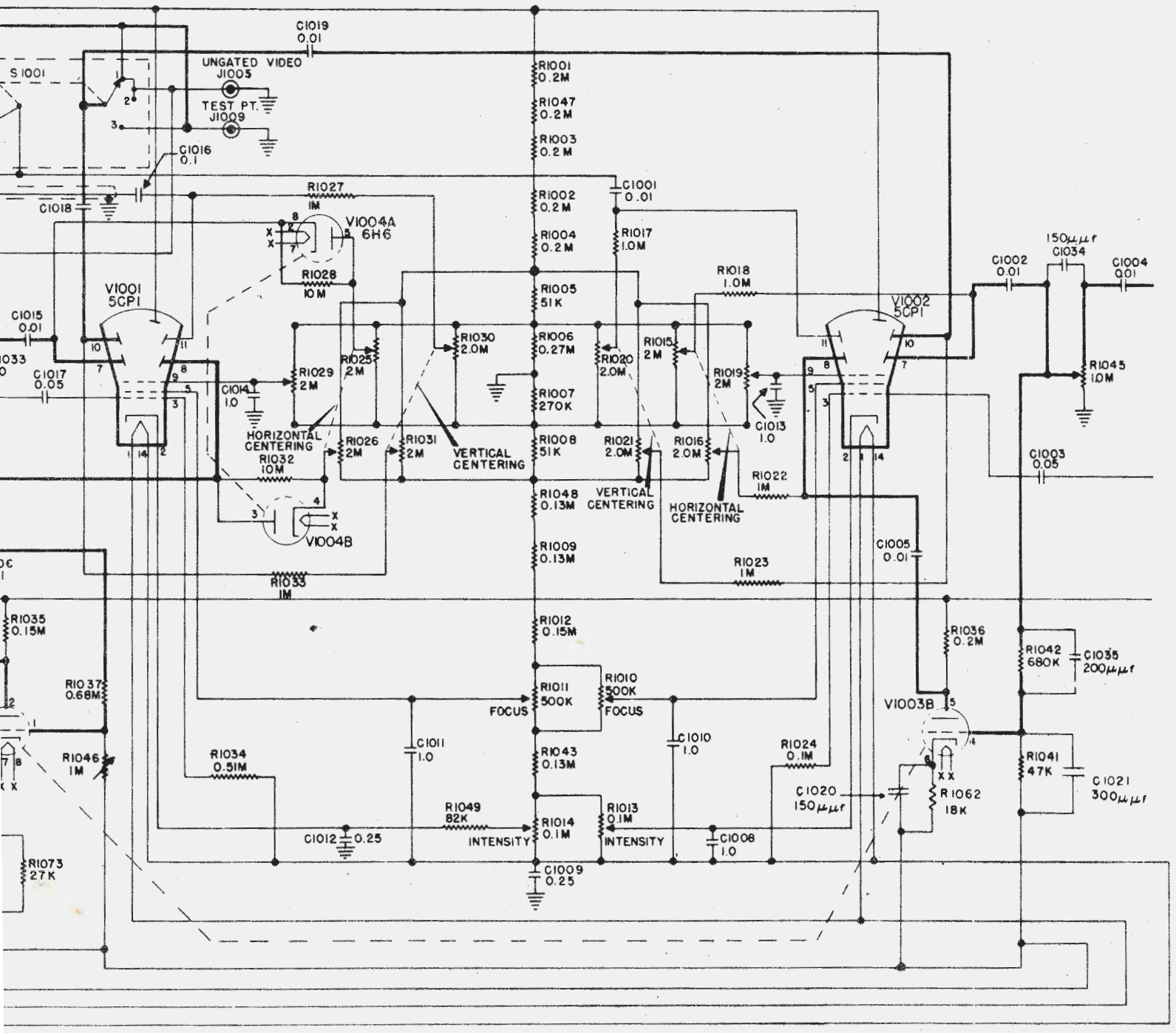
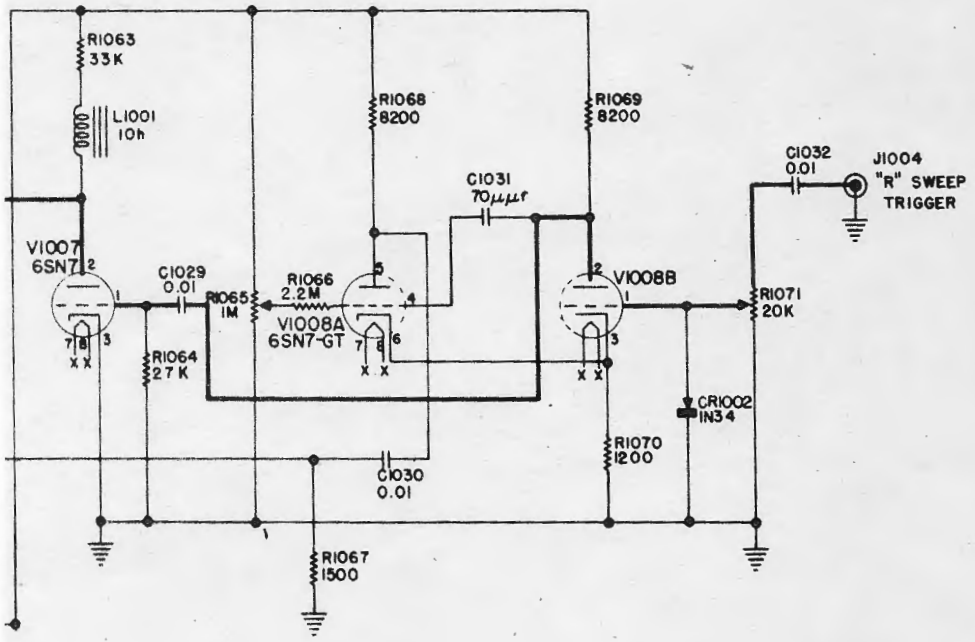

S1001
C1019 0.01
UNGATED VIDEO J1005
TEST PT. J1009
C1016 0.1
C1018
R1027 1M
V1004A 6H6
R1028 10M
V1001 5CP1
C1015 0.01
C1017 0.05
R1029 2M
R1025 2M
C1014 1.0
HORIZONTAL CENTERING
R1026 2M
R1031 2M
R1032 10M
V1004B
R1033 1M
R1030 2.0M
VERTICAL CENTERING
R1001 0.2M
R1047 0.2M
R1003 0.2M
R1002 0.2M
R1004 0.2M
R1005 51K
R1006 0.27M
R1007 270K
R1008 51K
R1048 0.13M
R1009 0.13M
R1012 0.15M
R1011 500K
FOCUS
R1043 0.13M
R1014 0.1M
R1049 82K
INTENSITY
C1009 0.25
C1012 0.25
C1001 0.01
R1017 1.0M
R1020 2.0M
R1021 2.0M
VERTICAL CENTERING
R1018 1.0M
R1015 2M
R1016 2.0M
HORIZONTAL CENTERING
R1019 2M
C1013 1.0
R1022 1M
R1023 1M
C1005 0.01
R1010 500K
FOCUS
C1010 1.0
R1013 0.1M
INTENSITY
C1008 1.0
R1024 0.1M
C1020 150μμf
V1002 5CP1
C1002 0.01
150μμf C1034
C1004 0.01
R1045 1.0M
C1003 0.05
R1036 0.2M
V1003B
R1062 18K
R1042 680K
C1035 200μμf
R1041 47K
C1021 300μμf
R1035 0.15M
R1037 0.68M
R1046 1M
R1034 0.51M
C1011 1.0
R1073 27K


R1063
33K
L1001
10h
R1068
8200
R1069
8200
C1031
70μμf
C1032
0.01
J1004
"R" SWEEP
TRIGGER
V1007
6SN7
C1029
0.01
R1065
1M
R1066
2.2M
V1008A
6SN7-GT
V1008B
R1071
20K
R1064
27K
CR1002
IN34
R1070
1200
C1030
0.01
R1067
1500

DECLASSIFIED

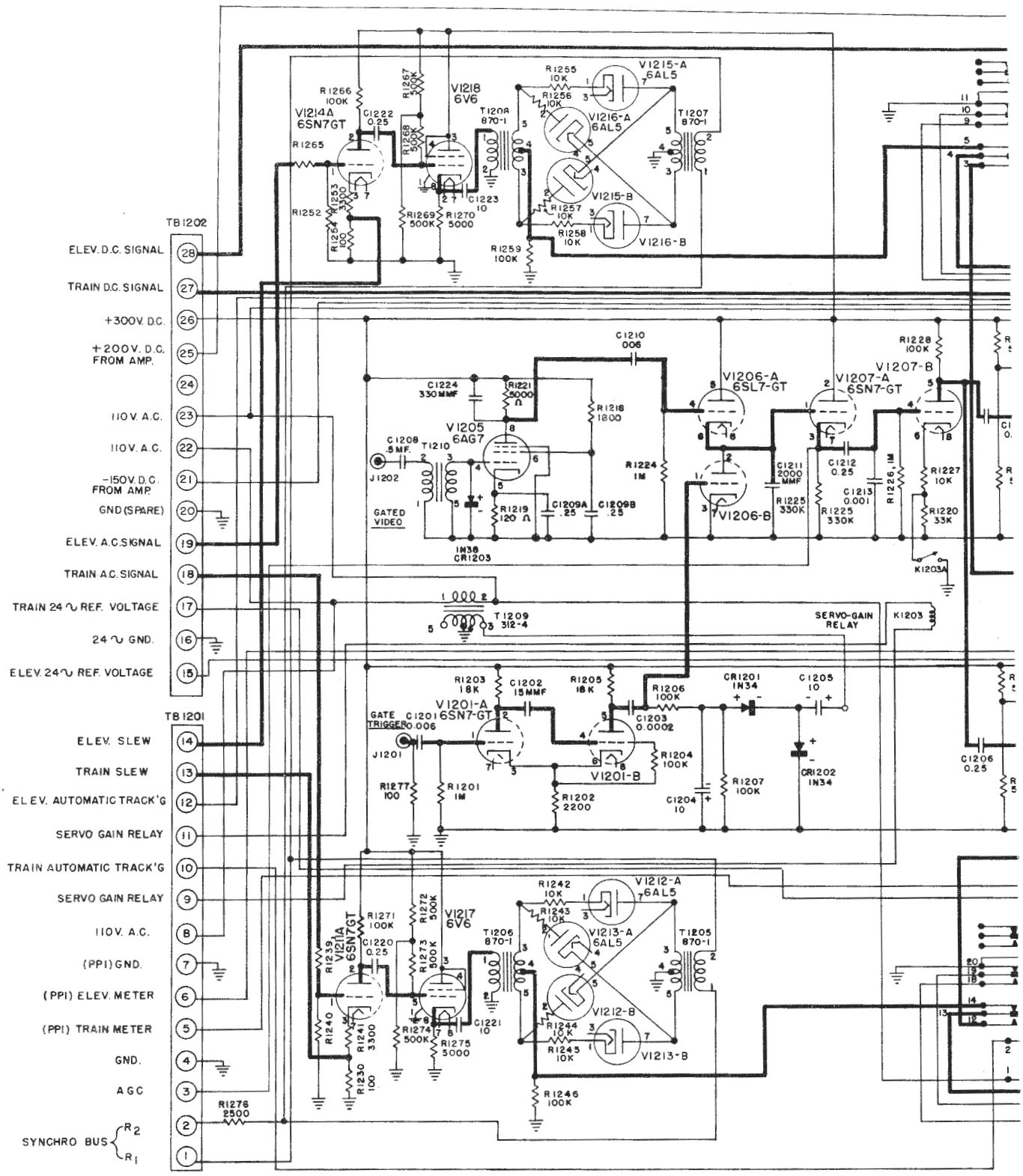


Figure 7-38. Target and Manual Coordinate Detector Unit - Schematic Diagram

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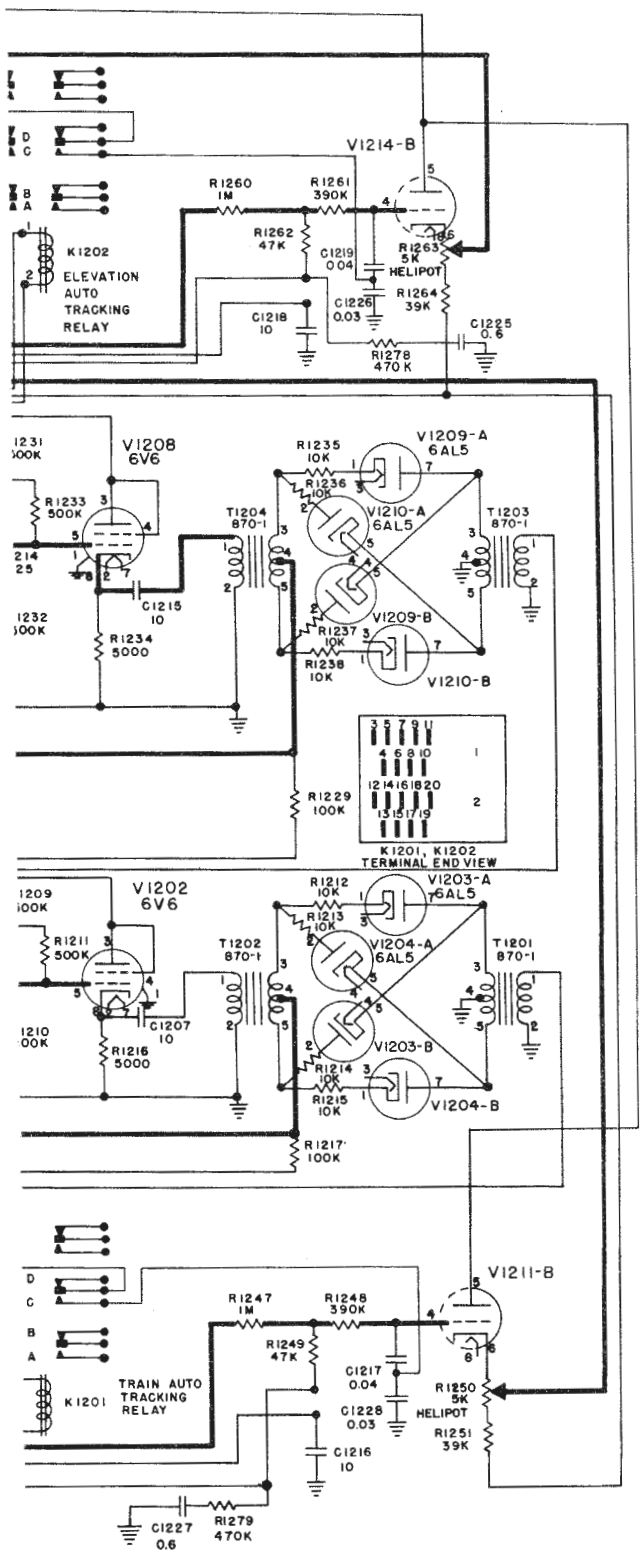
V1214-B
R1260 1M
R1261 390K
R1262 47K
C1219 0.04
R1263 5K HELIPOT
C1226 0.03
R1264 39K
C1225 0.6
C1218 10
R1278 470K
K1202 ELEVATION AUTO TRACKING RELAY
V1208 6V6
R1233 500K
R1234 5000
C1215 10
T1204 870-1
T1203 870-1
R1235 10K
R1236 10K
R1237 10K
R1238 10K
V1209-A 6AL5
V1210-A 6AL5
V1209-B
V1210-B
R1229 100K
K1201, K1202 TERMINAL END VIEW
V1202 6V6
R1211 500K
R1216 5000
C1207 10
T1202 870-1
T1201 870-1
R1212 10K
R1213 10K
R1214 10K
R1215 10K
V1203-A 6AL5
V1204-A 6AL5
V1203-B
V1204-B
R1217 100K
V1211-B
R1247 1M
R1248 390K
R1249 47K
C1217 0.04
C1228 0.03
R1250 5K HELIPOT
R1251 39K
C1216 10
K1201 TRAIN AUTO TRACKING RELAY
C1227 0.6
R1279 470K

DECLASSIFIED

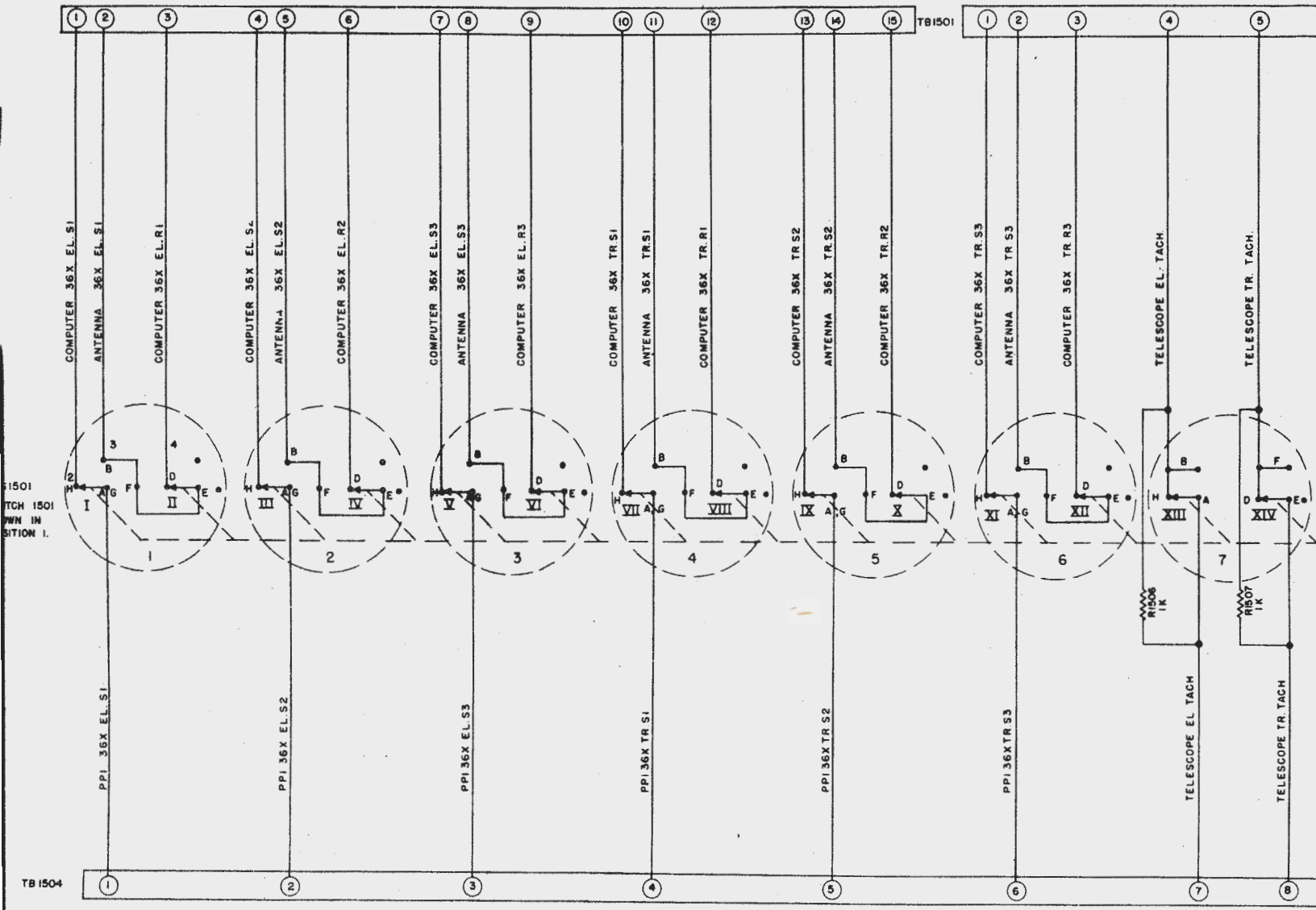

Figure 7-41. System Control Switching Unit - Schematic Diagram

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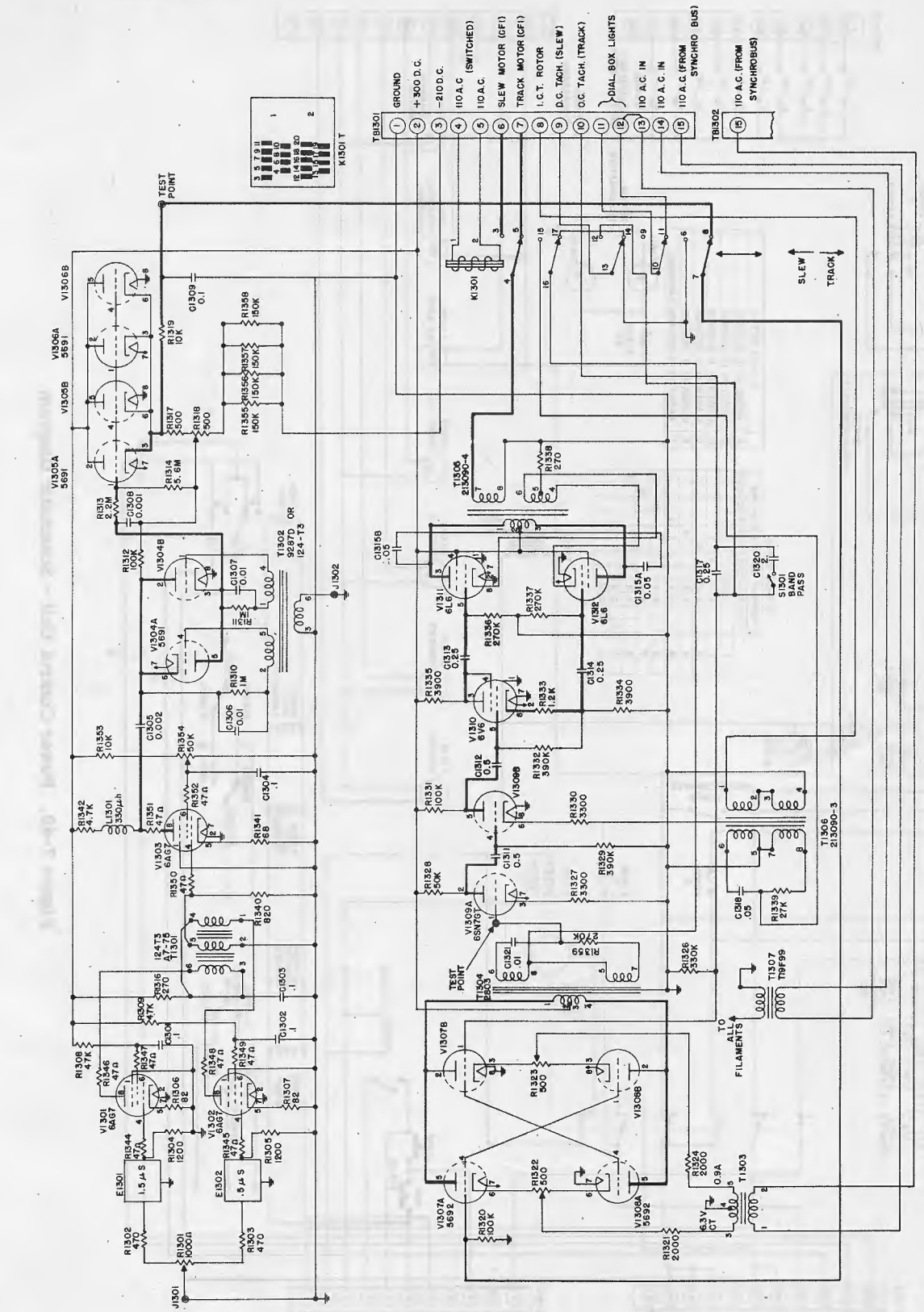

Figure 7-39. Target and Missile Range Detector and Servo Amplifier - Schematic Diagram

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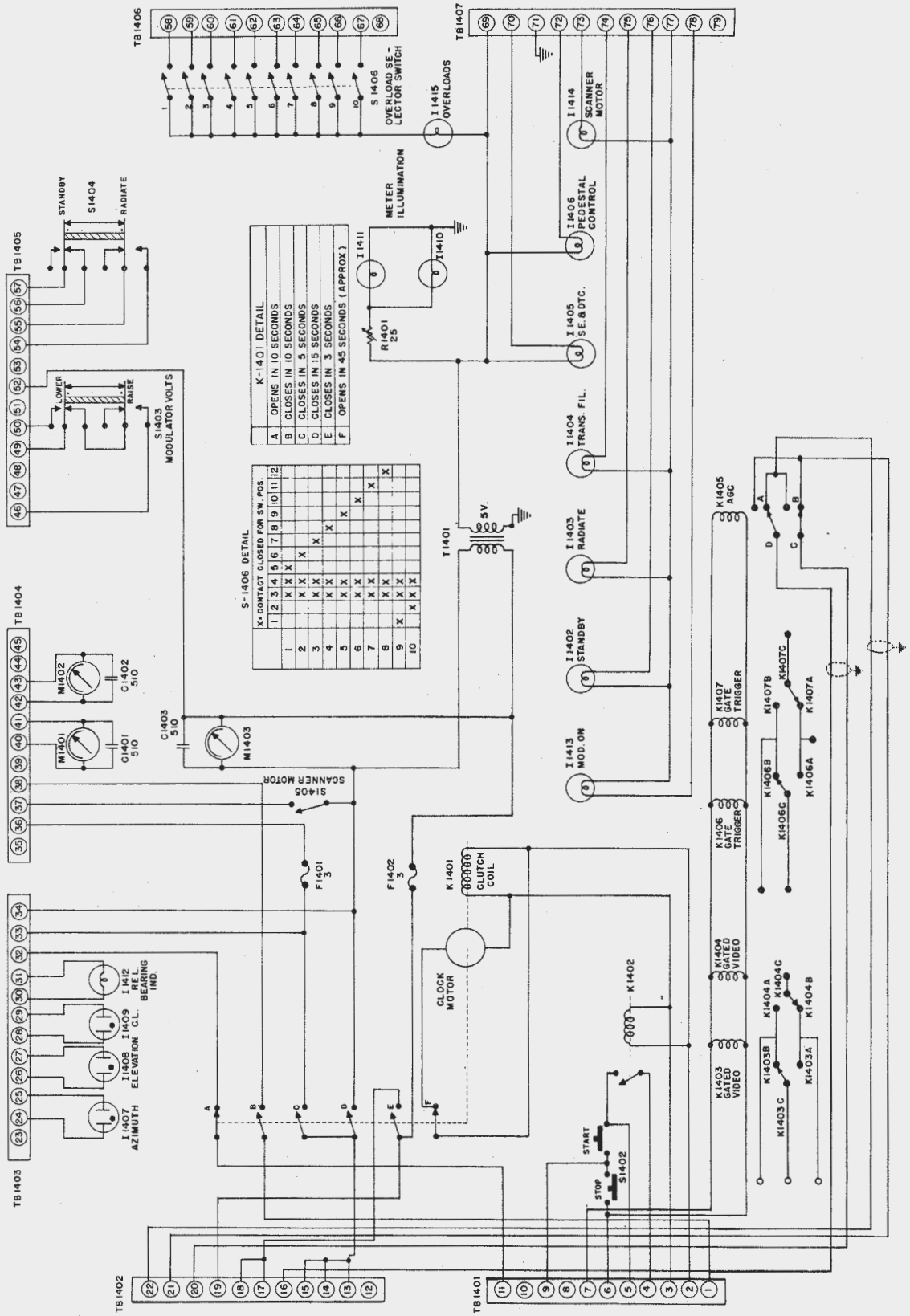

Figure 7-40. Power Control Unit - Schematic Diagram

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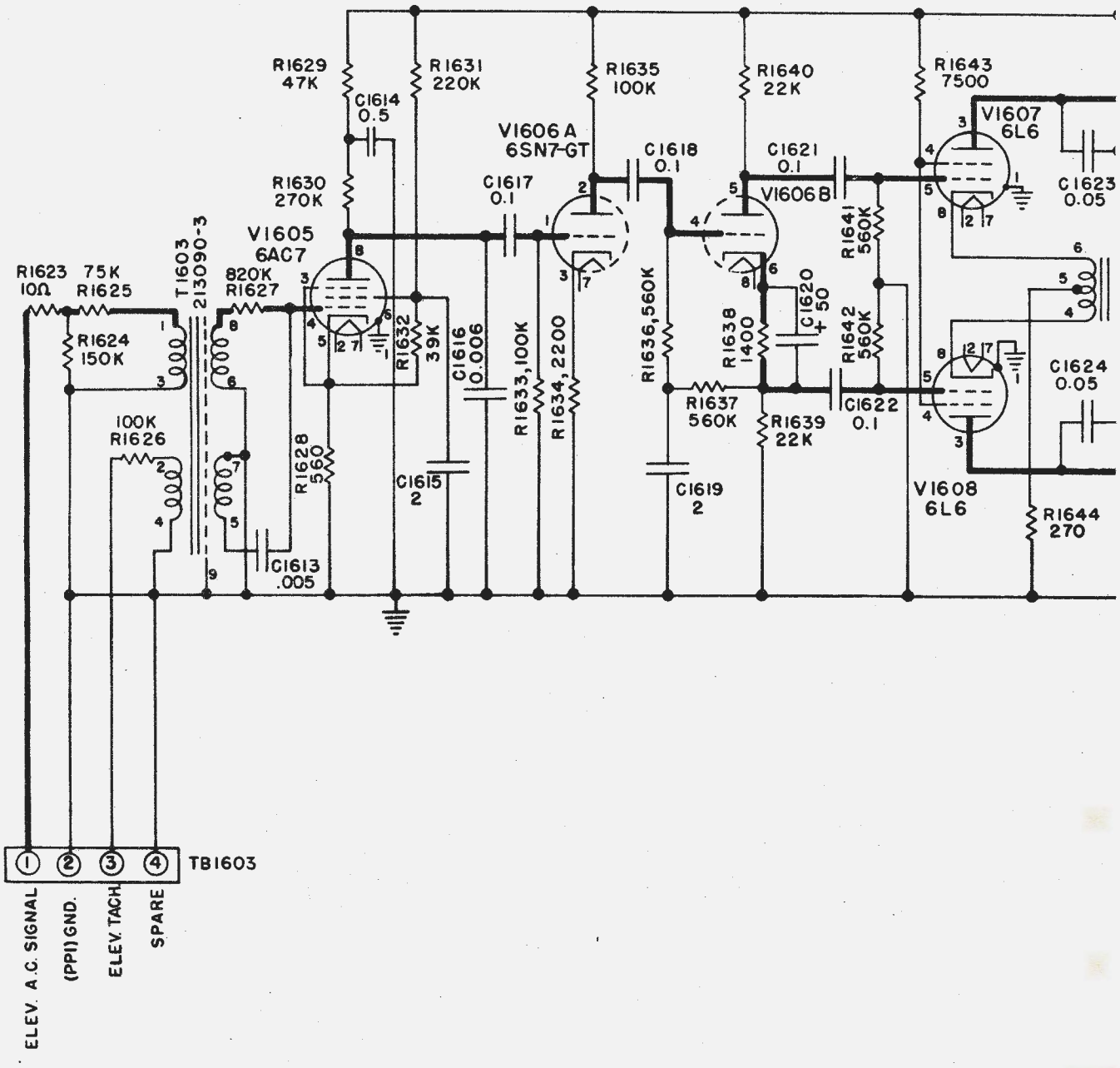

Figure 7-42. Handcrank Servo Amplifier Unit - Schematic Diagram

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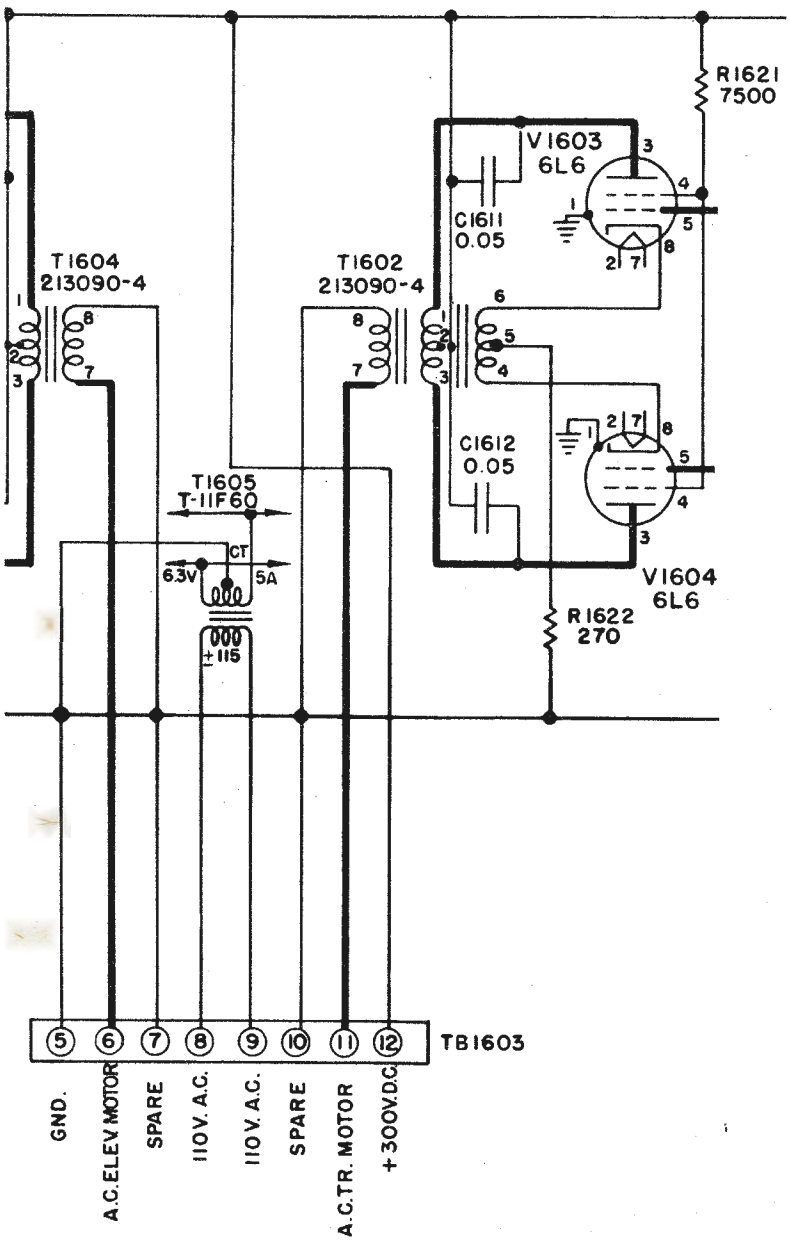
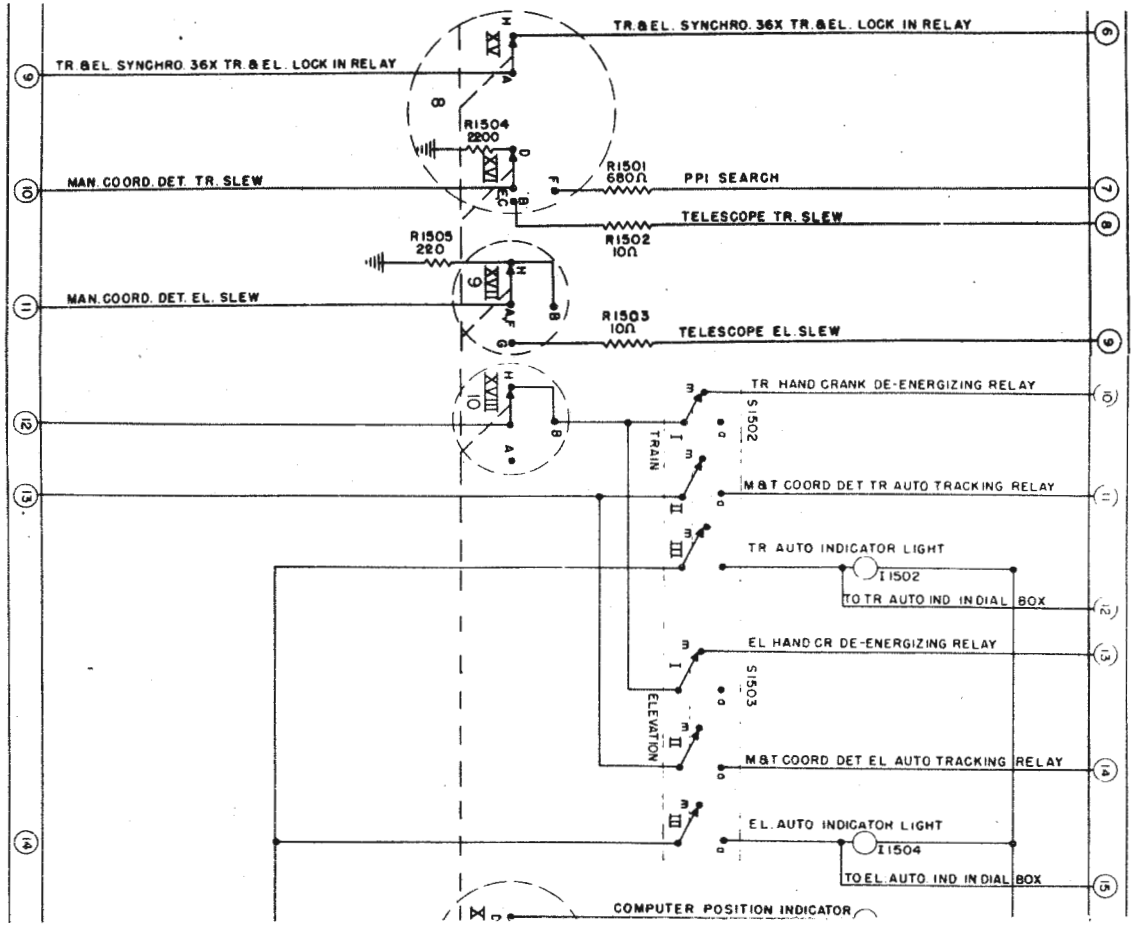
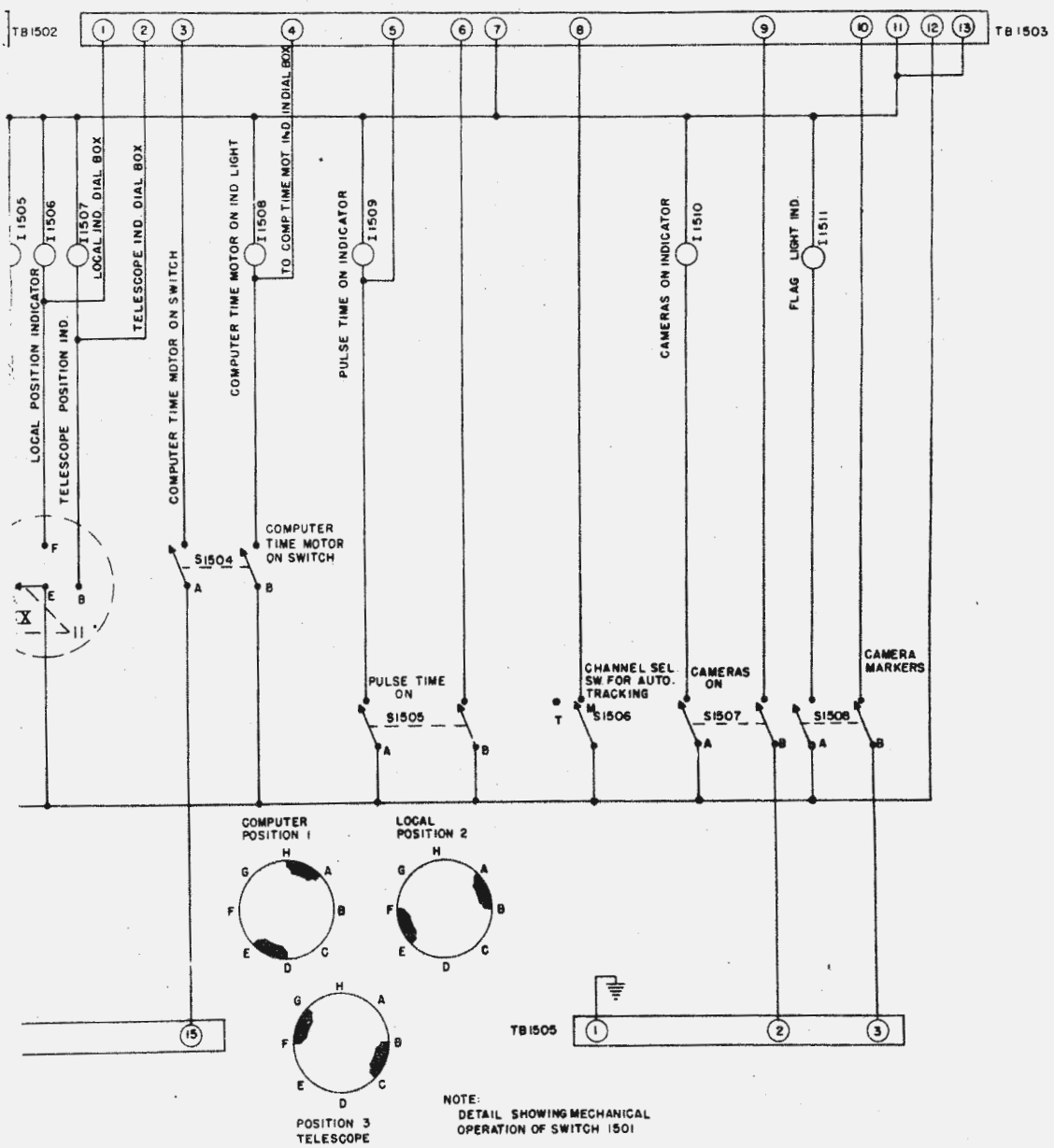

R1621
7500
V1603
6L6
C1611
0.05
T1604
213090-4
T1602
213090-4
C1612
0.05
T1605
T-11F60
CT
6.3V
5A
115
V1604
6L6
R1622
270
TB1603
5
6
7
8
9
10
11
12
GND.
A.C. ELEV MOTOR
SPARE
110 V. A.C.
110 V. A.C.
SPARE
A.C. TR. MOTOR
+300 V.D.C.


TR.&EL. SYNCHRO. 36X TR.&EL. LOCK IN RELAY
TR.&EL. SYNCHRO. 36X TR.&EL. LOCK IN RELAY
R1504 2200
MAN. COORD. DET. TR. SLEW
R1501 680Ω
PPI SEARCH
TELESCOPE TR. SLEW
R1502 10Ω
R1505 220
MAN. COORD. DET. EL. SLEW
R1503 10Ω
TELESCOPE EL. SLEW
TR. HAND CRANK DE-ENERGIZING RELAY
S1502
TRAIN
M&T COORD DET TR AUTO TRACKING RELAY
TR AUTO INDICATOR LIGHT
I 1502
TO TR AUTO IND IN DIAL BOX
EL. HAND CR DE-ENERGIZING RELAY
S1503
ELEVATION
M&T COORD DET EL AUTO TRACKING RELAY
EL. AUTO INDICATOR LIGHT
I 1504
TO EL. AUTO IND IN DIAL BOX
COMPUTER POSITION INDICATOR


TB1502
TB1503
LOCAL POSITION INDICATOR I1505
TELESCOPE POSITION IND. I1506
LOCAL IND. DIAL BOX I1507
TELESCOPE IND. DIAL BOX
COMPUTER TIME MOTOR ON SWITCH
COMPUTER TIME MOTOR ON IND LIGHT I1508
TO COMP TIME MOT IND IN DIAL BOX
PULSE TIME ON INDICATOR I1509
CAMERAS ON INDICATOR I1510
FLAG LIGHT IND. I1511
COMPUTER TIME MOTOR ON SWITCH S1504
PULSE TIME ON S1505
CHANNEL SEL SW FOR AUTO. TRACKING S1506
CAMERAS ON S1507
CAMERA MARKERS S1508
COMPUTER POSITION 1
LOCAL POSITION 2
POSITION 3 TELESCOPE
TB1505
NOTE:
DETAIL SHOWING MECHANICAL OPERATION OF SWITCH 1501

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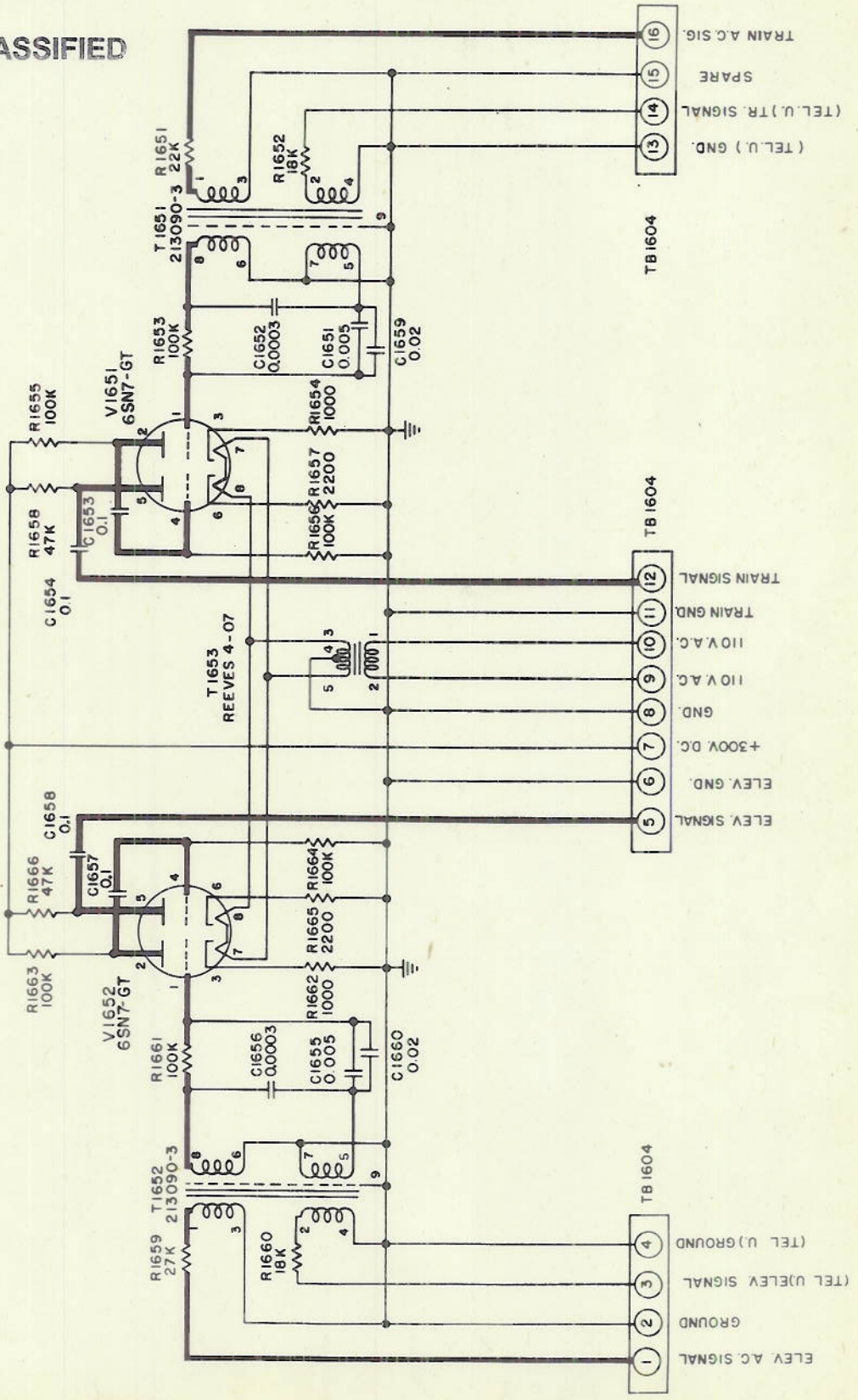

Figure 7-43. Telescope Servo Preamplifier - Schematic Diagram

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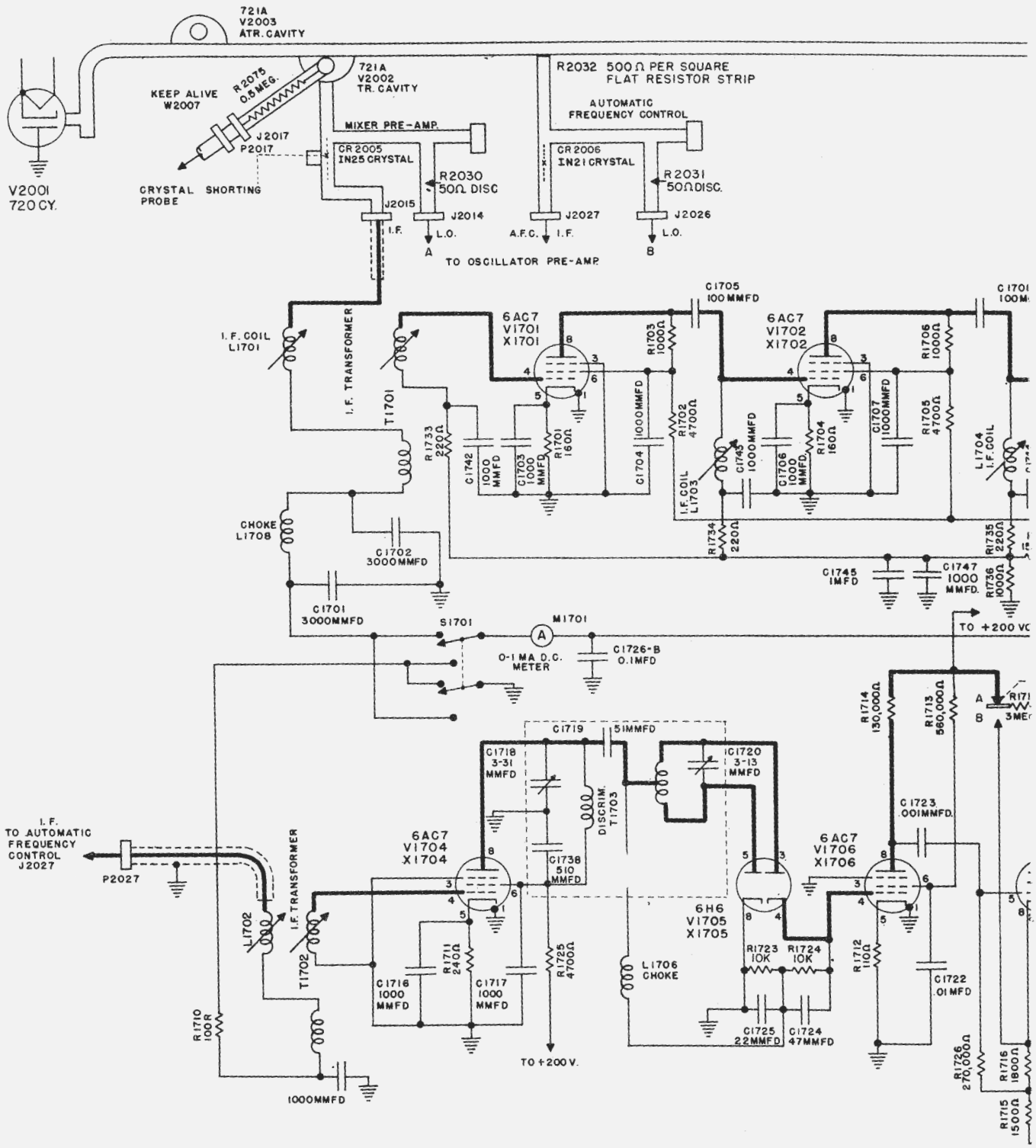

Figure 7-44. Local Oscillator Preamplifier - Schematic Diagram

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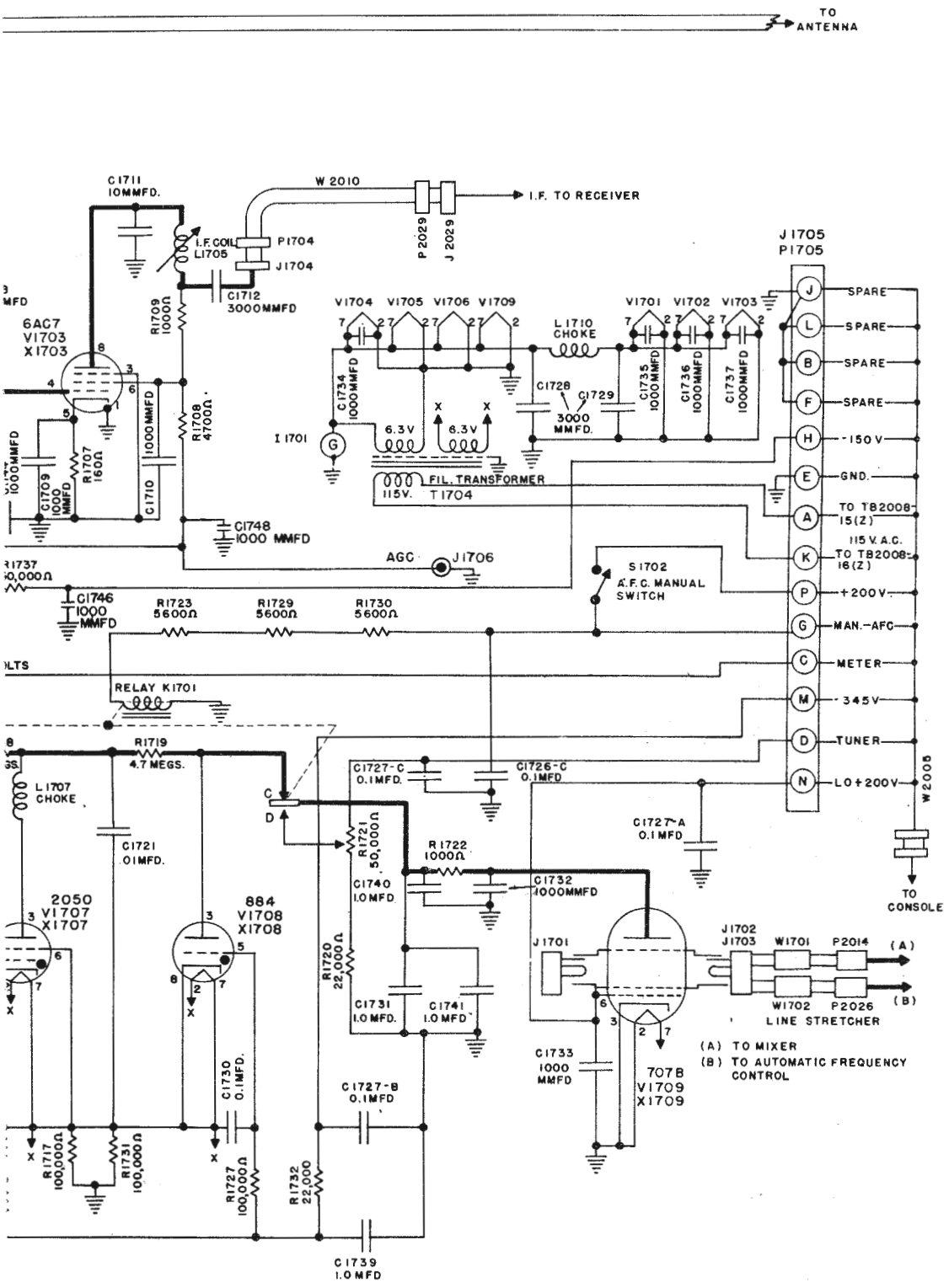
TO ANTENNA
C1711 10MMFD.
W 2010
I.F. TO RECEIVER
P 2029
J 2029
I.F. COIL L1705
P1704
J1704
C1712 3000MMFD
R1709 10000Ω
6AC7 V1703 X1703
R1708 4700Ω
C1709 1000 MMFD
R1707 160Ω
C1710
C1748 1000 MMFD
AGC
J1706
R1737 10,000Ω
C1746 1000 MMFD
R1723 5600Ω
R1729 5600Ω
R1730 5600Ω
RELAY K1701
S1702 A.F.C. MANUAL SWITCH
R1719 4.7 MEGS.
L1707 CHOKE
C1721 .01MFD.
2050 V1707 X1707
884 V1708 X1708
C1727-C 0.1MFD.
C1726-C 0.1MFD
C1727-A 0.1MFD
R1721 50,000Ω
R1722 1000Ω
C1740 1.0MFD.
C1732 1000MMFD
R1720 22,000Ω
C1731 1.0MFD.
C1741 1.0MFD.
C1730 0.1MFD.
C1727-B 0.1MFD
R1717 100,000Ω
R1731 100,000Ω
R1727 100,000Ω
R1732 22,000
C1739 1.0MFD
V1704 V1705 V1706 V1709
V1701 V1702 V1703
L1710 CHOKE
C1734 1000MMFD
C1735 1000MMFD
C1736 1000MMFD
C1737 1000MMFD
C1728
C1729
3000 MMFD.
I 1701
6.3V
6.3V
FIL. TRANSFORMER 115V. T1704
J1705 P1705
SPARE
SPARE
SPARE
SPARE
-150 V
GND.
TO TB2008-15(Z)
115 V.A.C. TO TB2008-16(Z)
+200V
MAN.-AFC
METER
-345V
TUNER
LO+200V
W 2008
TO CONSOLE
J1701
J1702 J1703
W1701
P2014
(A)
W1702
P2026
(B)
LINE STRETCHER
C1733 1000 MMFD
707B V1709 X1709
(A) TO MIXER
(B) TO AUTOMATIC FREQUENCY CONTROL

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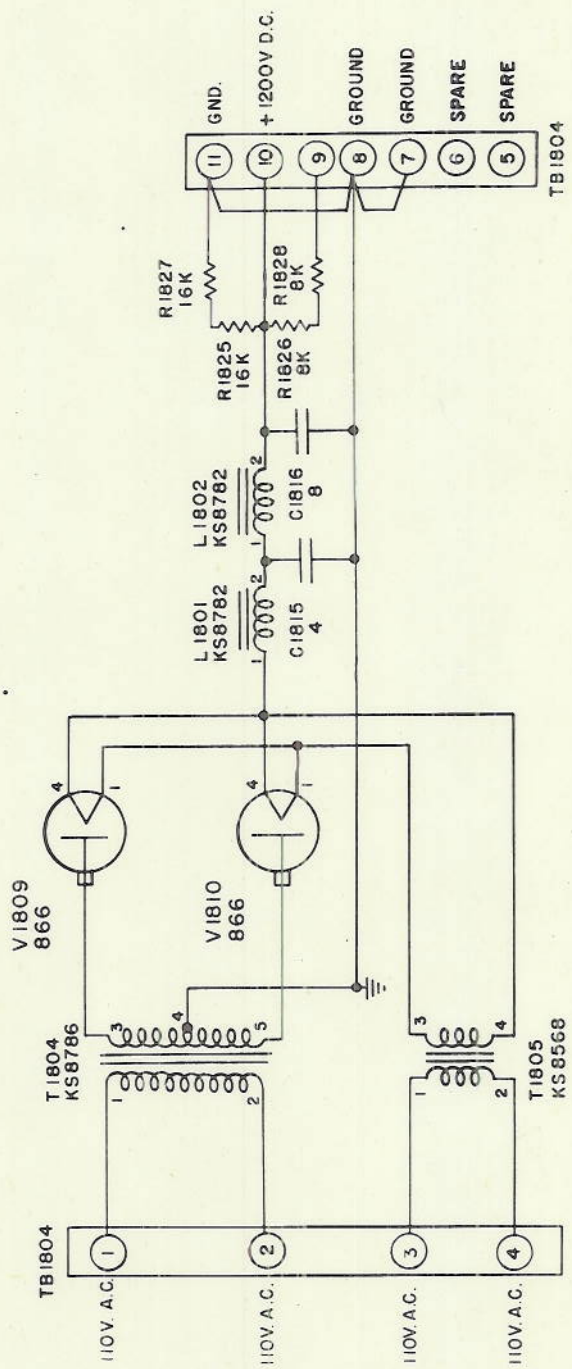

Figure 7-45. Telescope Final Amplifier Power Supply - Schematic Diagram

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[redacted]

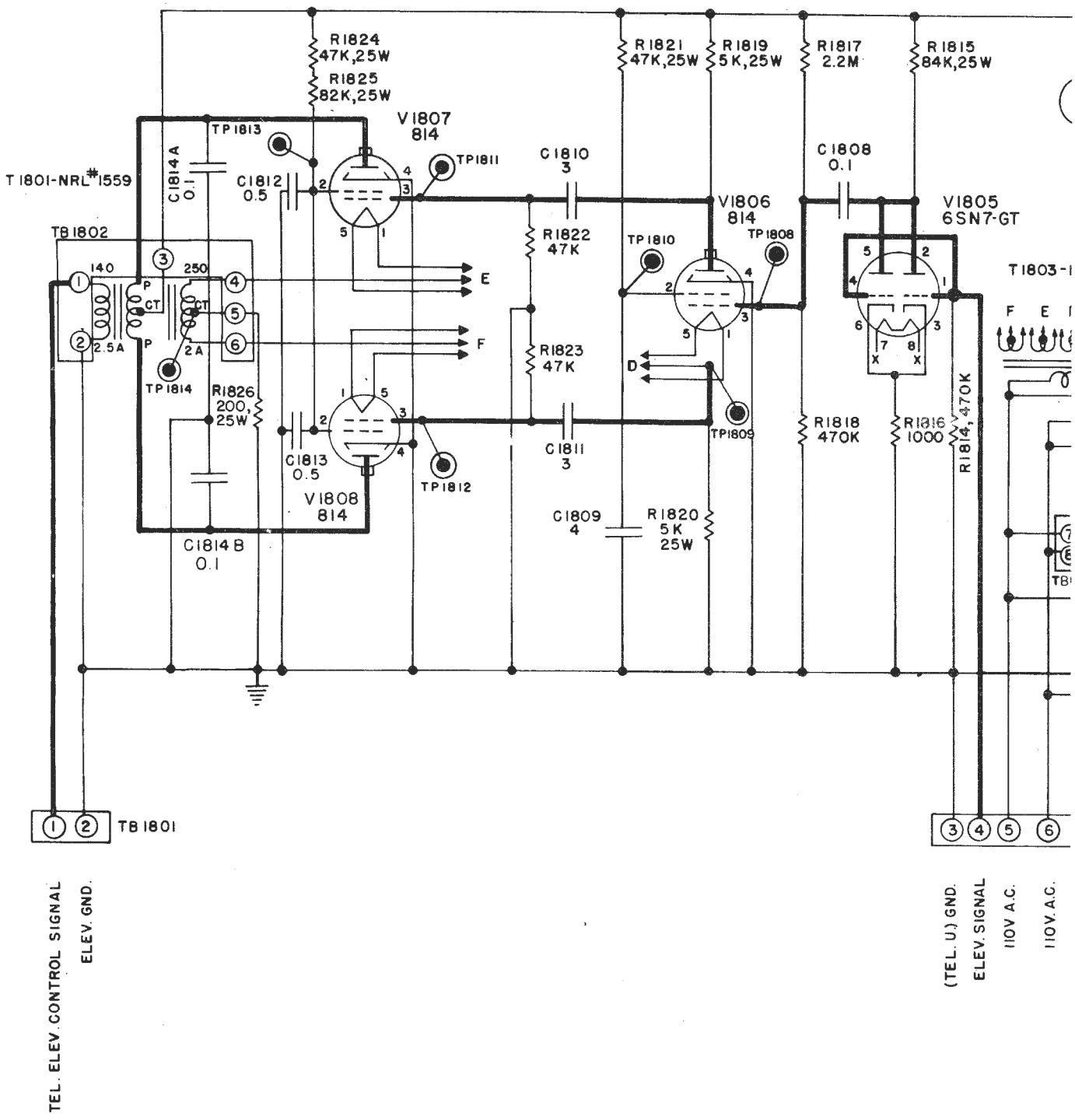

Figure 7-46. Telescope Final Amplifier - Schematic Diagram

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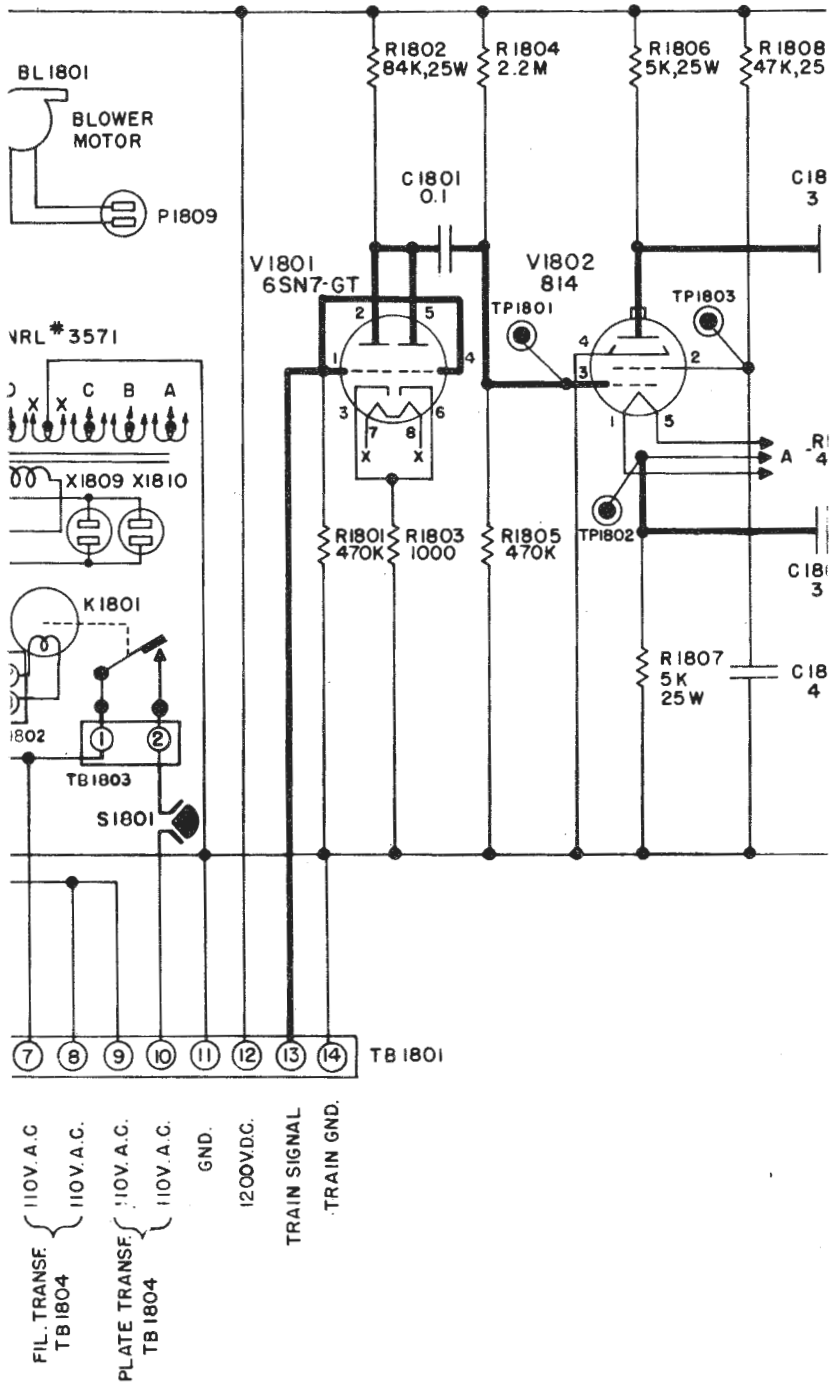
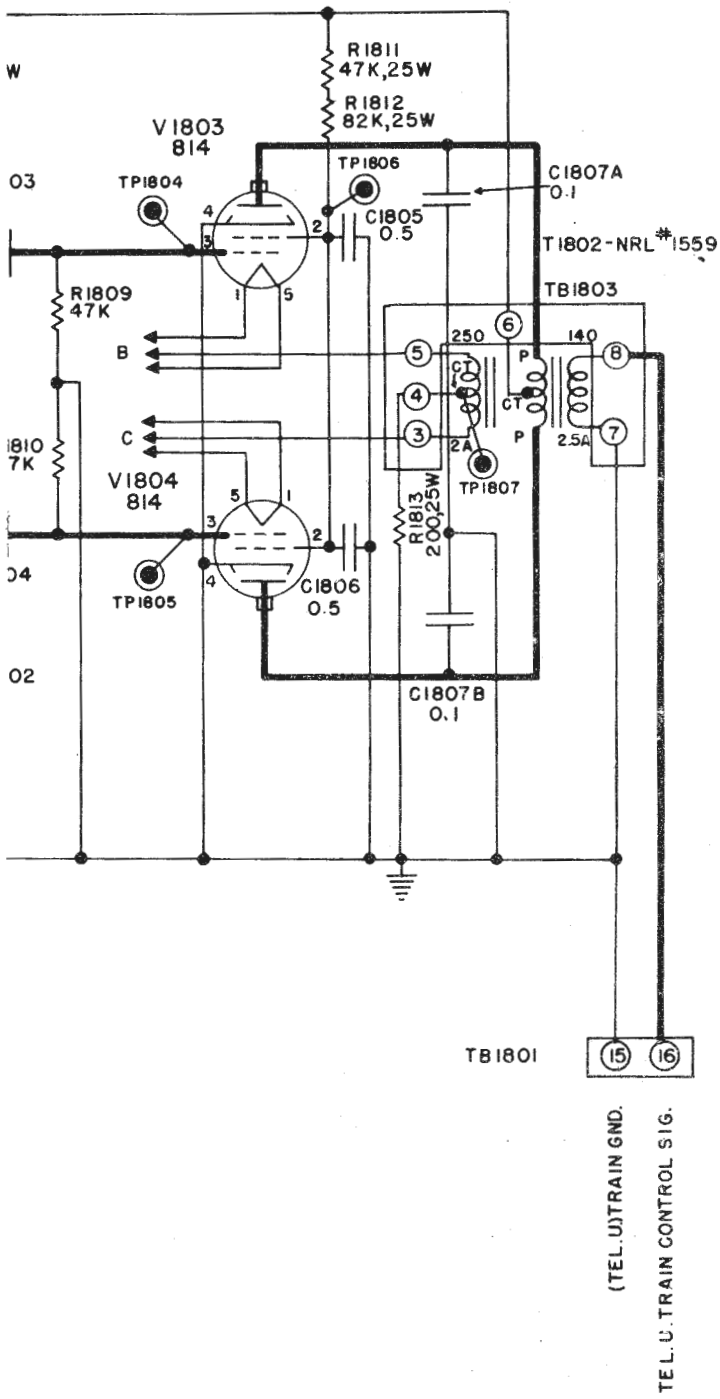

BL1801
BLOWER MOTOR
P1809
R1802 84K,25W
R1804 2.2M
R1806 5K,25W
R1808 47K,25
C1801 0.1
V1801 6SN7-GT
V1802 814
TP1801
TP1803
TP1802
R1801 470K
R1803 1000
R1805 470K
R1807 5K 25W
K1801
X1809 X1810
TB1803
S1801
TB1801
7 8 9 10 11 12 13 14
FIL. TRANSF. TB1804
110V.A.C.
110V.A.C.
PLATE TRANSF. TB1804
110V.A.C.
110V.A.C.
GND.
1200V.D.C.
TRAIN SIGNAL
TRAIN GND.


R1811
47K,25W
R1812
82K,25W
V1803
814
TP1806
C1807A
0.1
TP1804
C1805
0.5
T1802-NRL #1559
TB1803
R1809
47K
250
140
B
CT
P
C
2A
2.5A
TP1807
V1804
814
R1813
200,25W
TP1805
C1806
0.5
C1807B
0.1
TB1801
(TEL.U)TRAIN GND.
TEL.U.TRAIN CONTROL SIG.

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[redacted]

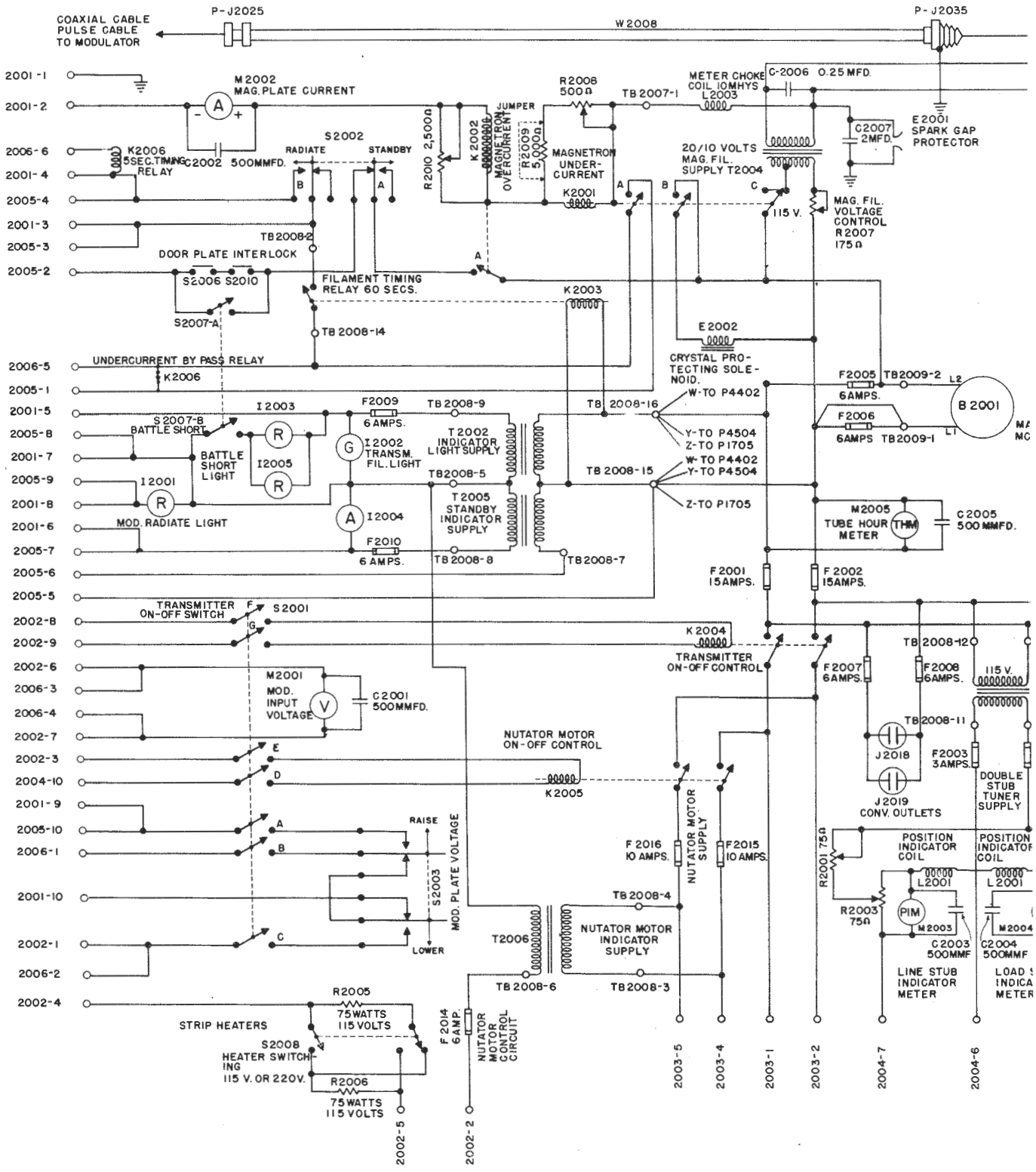

Figure 7-47. Transmitter - Schematic Diagram

[redacted]

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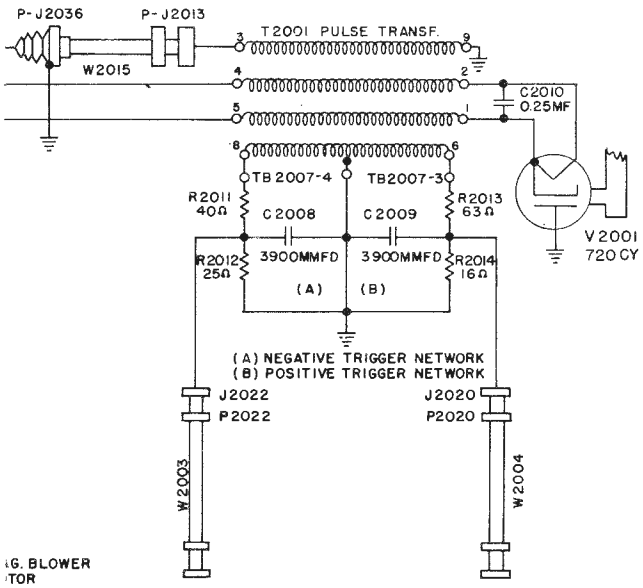
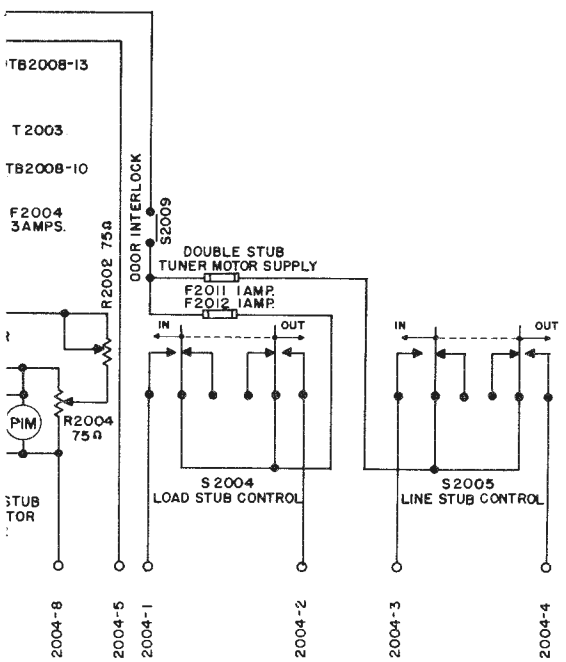

P-J2036
P-J2013
T2001 PULSE TRANSF.
W2015
C2010
0.25MF
TB 2007-4
TB2007-3
R2011
40Ω
C2008
C2009
R2013
63Ω
V2001
720 CY
R2012
25Ω
3900MMFD
3900MMFD
R2014
16Ω
(A)
(B)
(A) NEGATIVE TRIGGER NETWORK
(B) POSITIVE TRIGGER NETWORK
J2022
P2022
J2020
P2020
W2003
W2004
G. BLOWER
TOR


TB2008-13
T2003
TB2008-10
F2004
3AMPS.
R2002 75Ω
DOOR INTERLOCK
S2009
DOUBLE STUB
TUNER MOTOR SUPPLY
F2011 1AMP.
F2012 1AMP.
IN
OUT
IN
OUT
PIM
R2004
75Ω
S 2004
LOAD STUB CONTROL
S 2005
LINE STUB CONTROL
STUB
TOR
2004-8
2004-5
2004-1
2004-2
2004-3
2004-4

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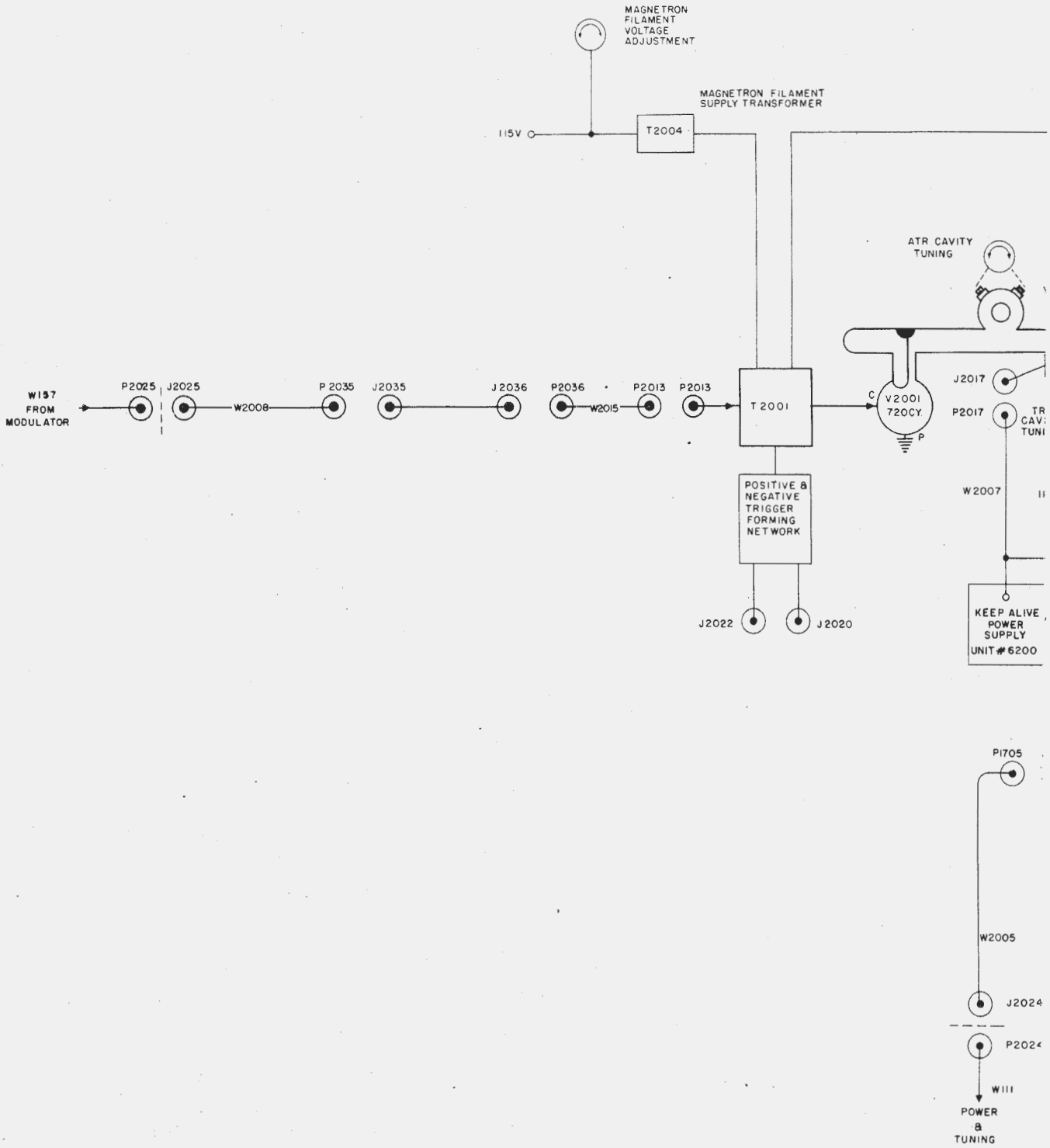

Figure 7-48. Transmitter Waveguide - Schematic Diagram

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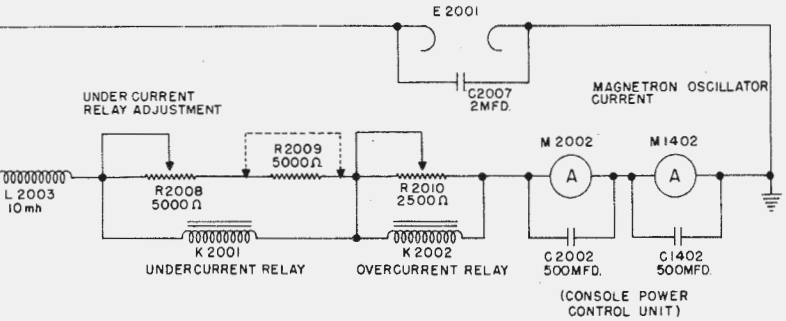
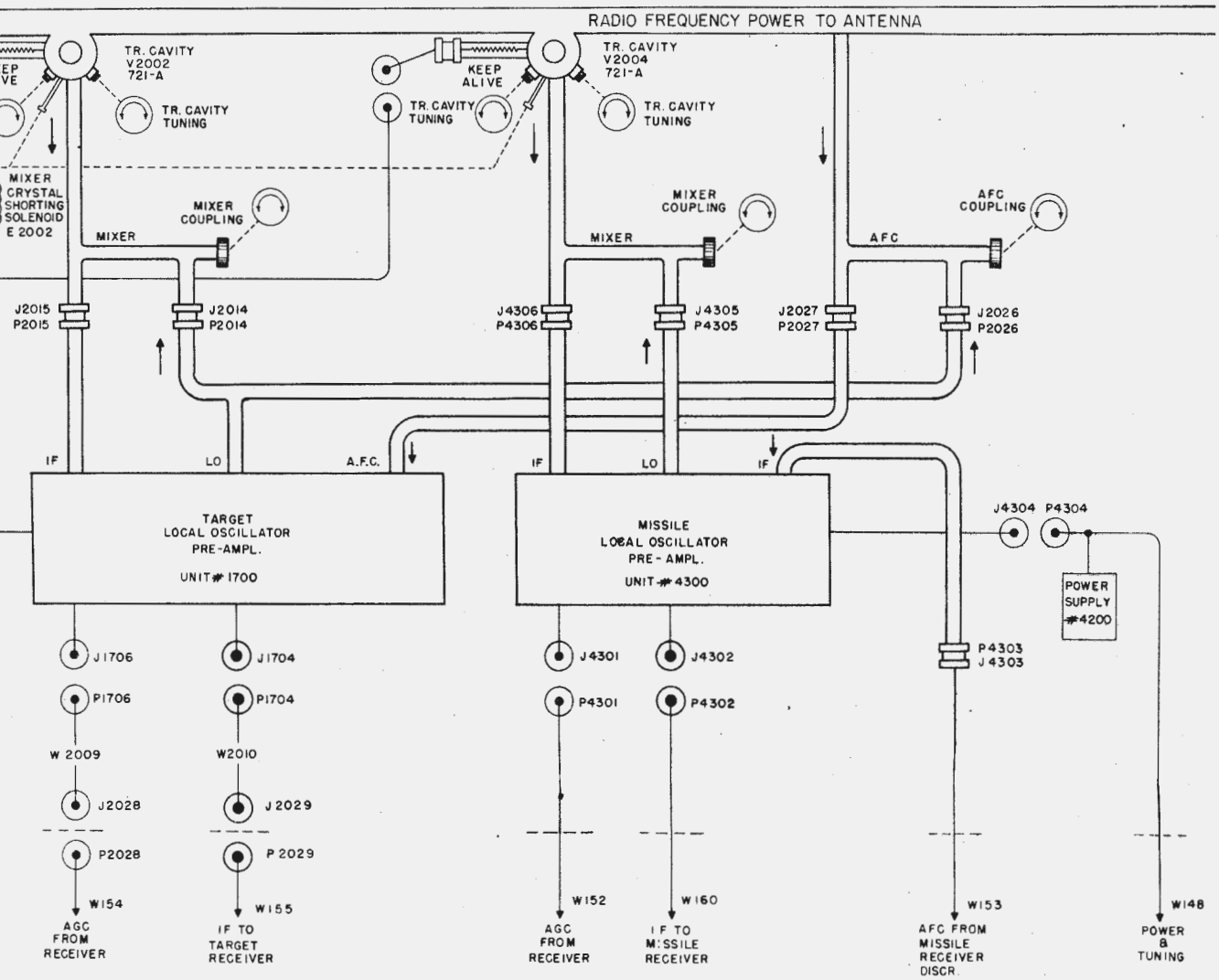
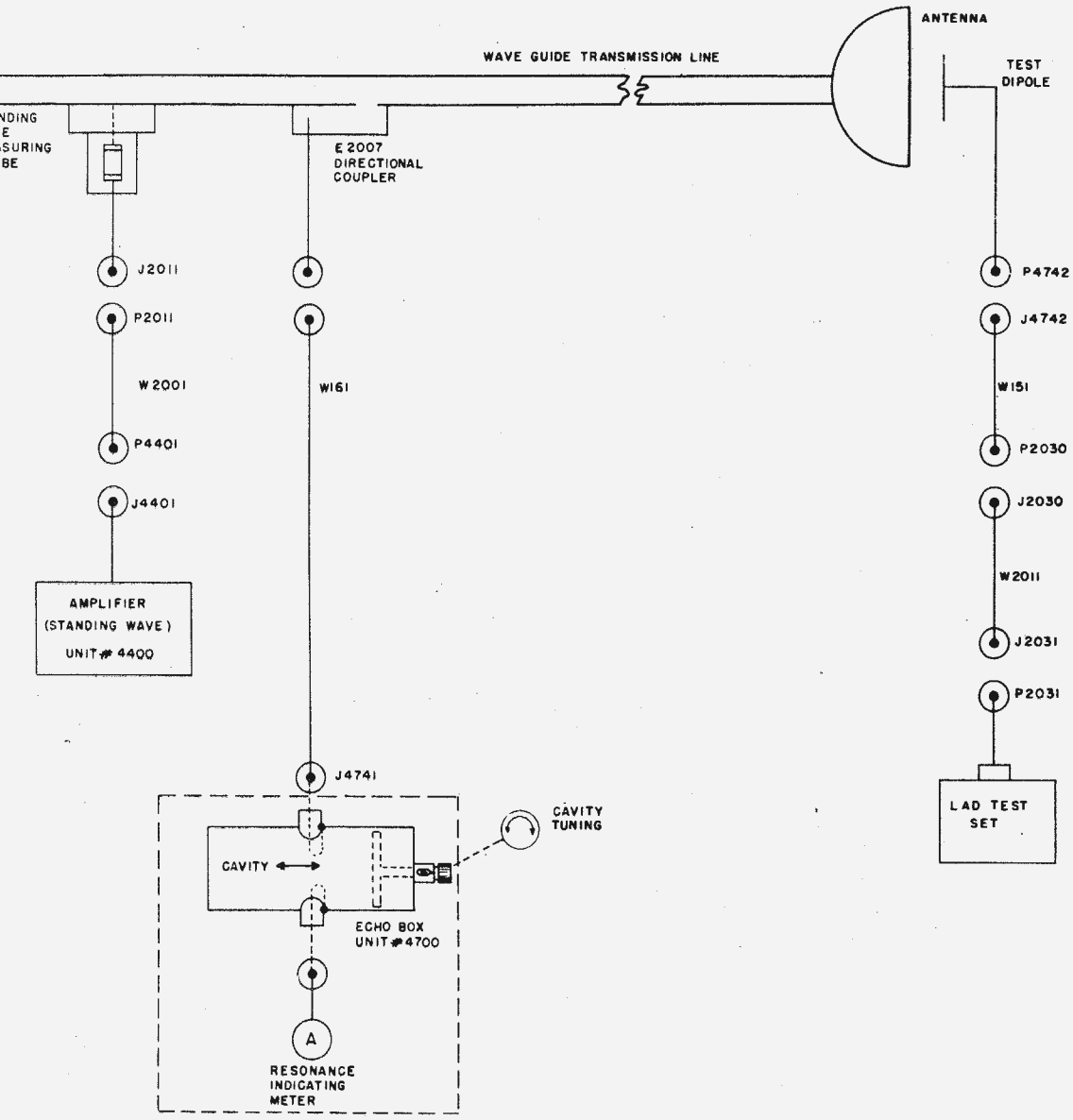

E 2001
C2007
2MFD.
UNDER CURRENT
RELAY ADJUSTMENT
MAGNETRON OSCILLATOR
CURRENT
R2009
5000Ω
M 2002
M1402
L 2003
10mh
R2008
5000Ω
R 2010
2500Ω
A
A
K 2001
UNDERCURRENT RELAY
K 2002
OVERCURRENT RELAY
C 2002
500MFD.
C1402
500MFD.
(CONSOLE POWER
CONTROL UNIT)

AVITY
721-A


RADIO FREQUENCY POWER TO ANTENNA
TR. CAVITY
V2002
721-A
TR. CAVITY
TUNING
KEEP
ALIVE
TR. CAVITY
V2004
721-A
MIXER
CRYSTAL
SHORTING
SOLENOID
E 2002
MIXER
COUPLING
MIXER
AFC
COUPLING
AFC
J2015
P2015
J2014
P2014
J4306
P4306
J4305
P4305
J2027
P2027
J2026
P2026
IF
LO
A.F.C.
TARGET
LOCAL OSCILLATOR
PRE-AMPL.
UNIT# 1700
MISSILE
LOCAL OSCILLATOR
PRE-AMPL.
UNIT-# 4300
J4304
P4304
POWER
SUPPLY
#4200
J1706
P1706
J1704
P1704
J4301
P4301
J4302
P4302
P4303
J4303
W 2009
W2010
J2028
J2029
P2028
P2029
W154
W155
W152
W160
W153
W148
AGC
FROM
RECEIVER
IF TO
TARGET
RECEIVER
AGC
FROM
RECEIVER
IF TO
MISSILE
RECEIVER
AFC FROM
MISSILE
RECEIVER
DISCR.
POWER
&
TUNING


ANTENNA
WAVE GUIDE TRANSMISSION LINE
TEST DIPOLE
NDING
E
SURING
BE
E 2007 DIRECTIONAL COUPLER
J2011
P2011
W2001
P4401
J4401
AMPLIFIER (STANDING WAVE) UNIT# 4400
W161
J4741
CAVITY
CAVITY TUNING
ECHO BOX UNIT# 4700
A
RESONANCE INDICATING METER
P4742
J4742
W151
P2030
J2030
W2011
J2031
P2031
LAD TEST SET

DECLASSIFIED

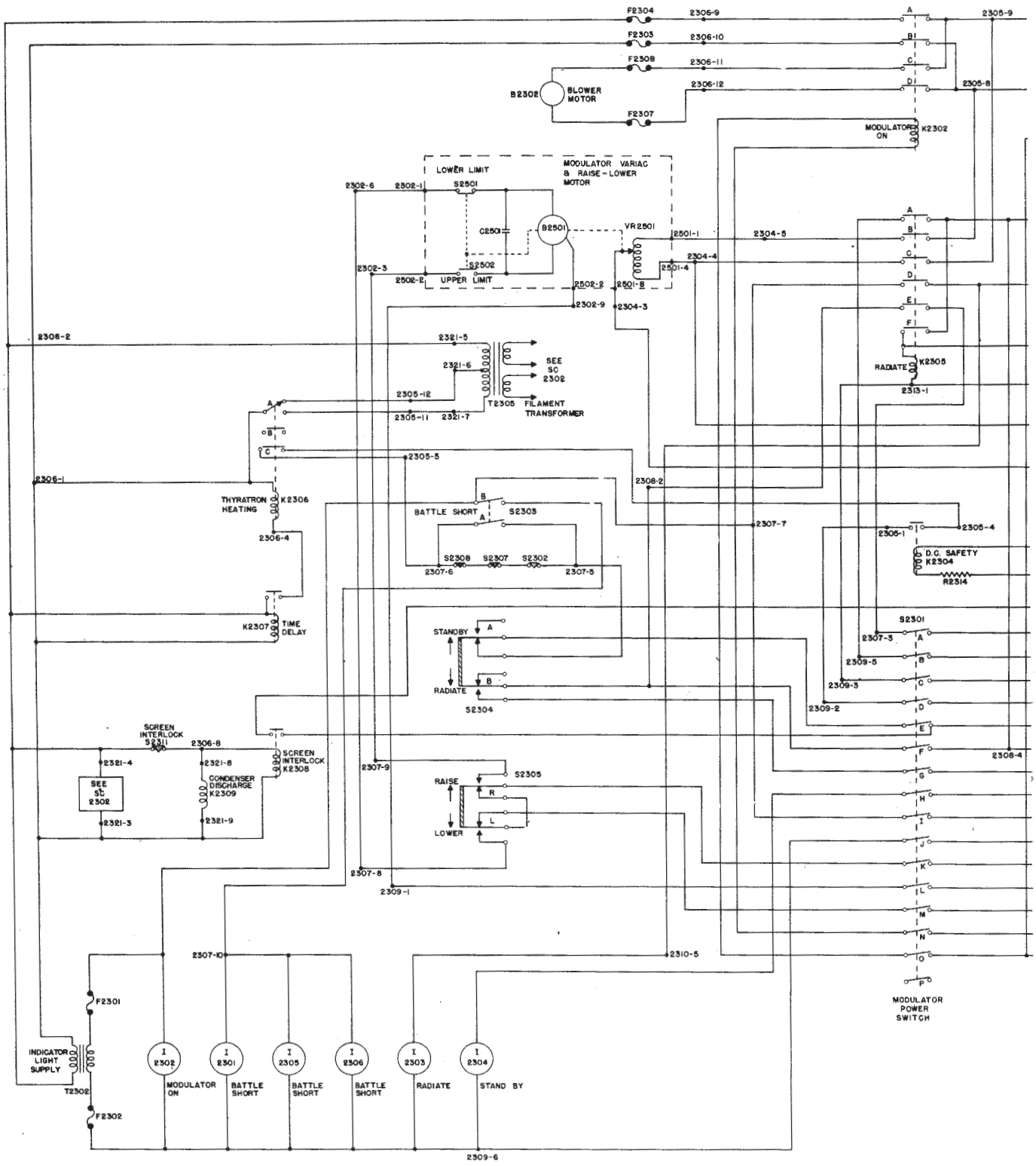
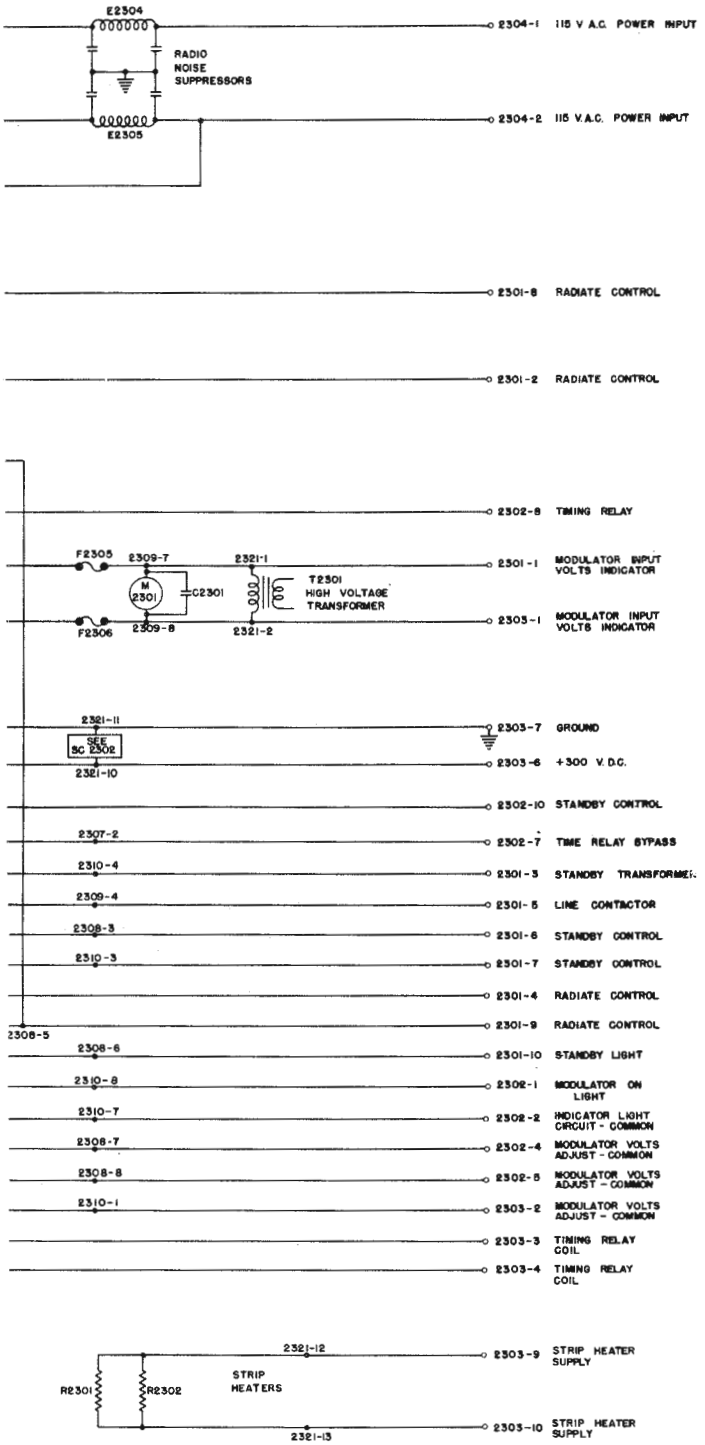


Figure 7-49. Hydrogen Thyratron Modulator - Control Circuit Schematic Diagram

DECLASSIFIED


E2304
RADIO NOISE SUPPRESSORS
E2305
2304-1 115 V A.C. POWER INPUT
2304-2 115 V.A.C. POWER INPUT
2301-8 RADIATE CONTROL
2301-2 RADIATE CONTROL
2302-8 TIMING RELAY
F2305
2309-7
2321-1
M 2301
C2301
T2301 HIGH VOLTAGE TRANSFORMER
F2306
2309-8
2321-2
2301-1 MODULATOR INPUT VOLTS INDICATOR
2303-1 MODULATOR INPUT VOLTS INDICATOR
2321-11
SEE SC 2302
2321-10
2303-7 GROUND
2303-6 +300 V.D.C.
2302-10 STANDBY CONTROL
2307-2
2302-7 TIME RELAY BYPASS
2310-4
2301-3 STANDBY TRANSFORMER
2309-4
2301-5 LINE CONTACTOR
2308-3
2301-6 STANDBY CONTROL
2310-3
2301-7 STANDBY CONTROL
2301-4 RADIATE CONTROL
2301-9 RADIATE CONTROL
2308-5
2308-6
2301-10 STANDBY LIGHT
2310-8
2302-1 MODULATOR ON LIGHT
2310-7
2302-2 INDICATOR LIGHT CIRCUIT - COMMON
2308-7
2302-4 MODULATOR VOLTS ADJUST - COMMON
2308-8
2302-5 MODULATOR VOLTS ADJUST - COMMON
2310-1
2303-2 MODULATOR VOLTS ADJUST - COMMON
2303-3 TIMING RELAY COIL
2303-4 TIMING RELAY COIL
2321-12
R2301
R2302
STRIP HEATERS
2321-13
2303-9 STRIP HEATER SUPPLY
2303-10 STRIP HEATER SUPPLY

DECLASSIFIED

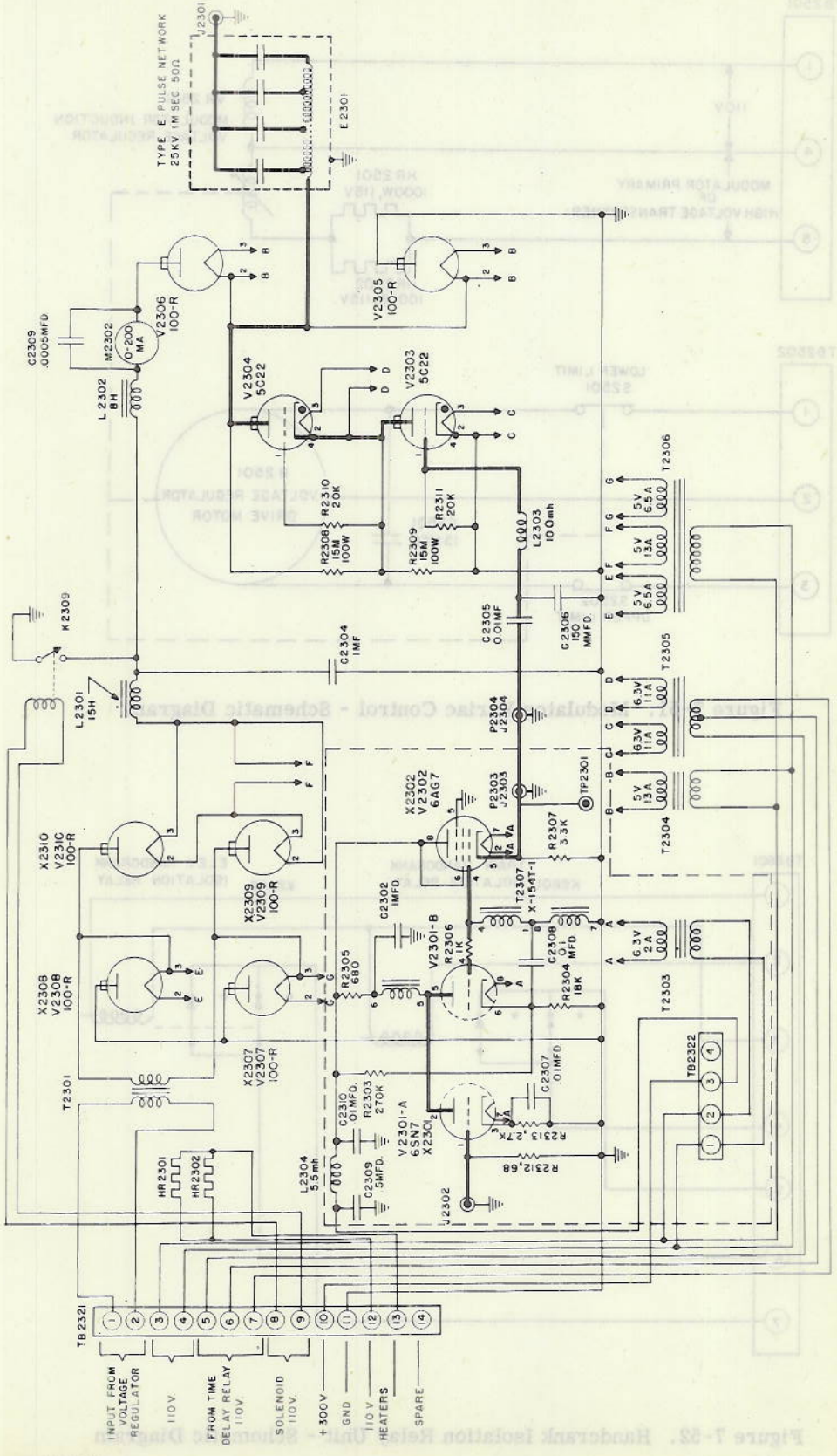


Figure 7-50. Hydrogen Thyratron Modulator - Schematic Diagram

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DECLASSIFIED

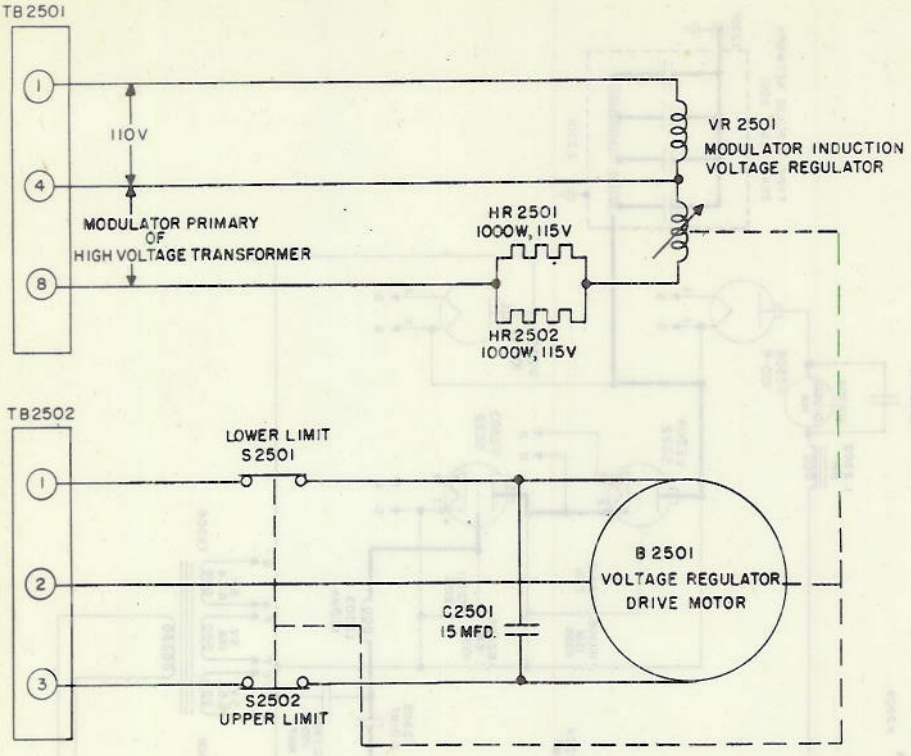

Figure 7-51. Modulator Variac Control - Schematic Diagram

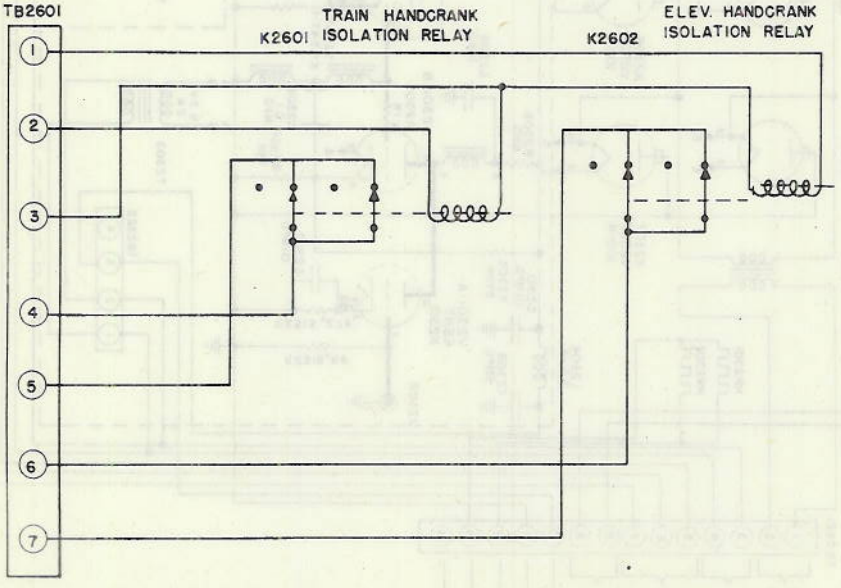

Figure 7-52. Handcrank Isolation Relay Unit - Schematic Diagram

DECLASSIFIED

DECLASSIFIED

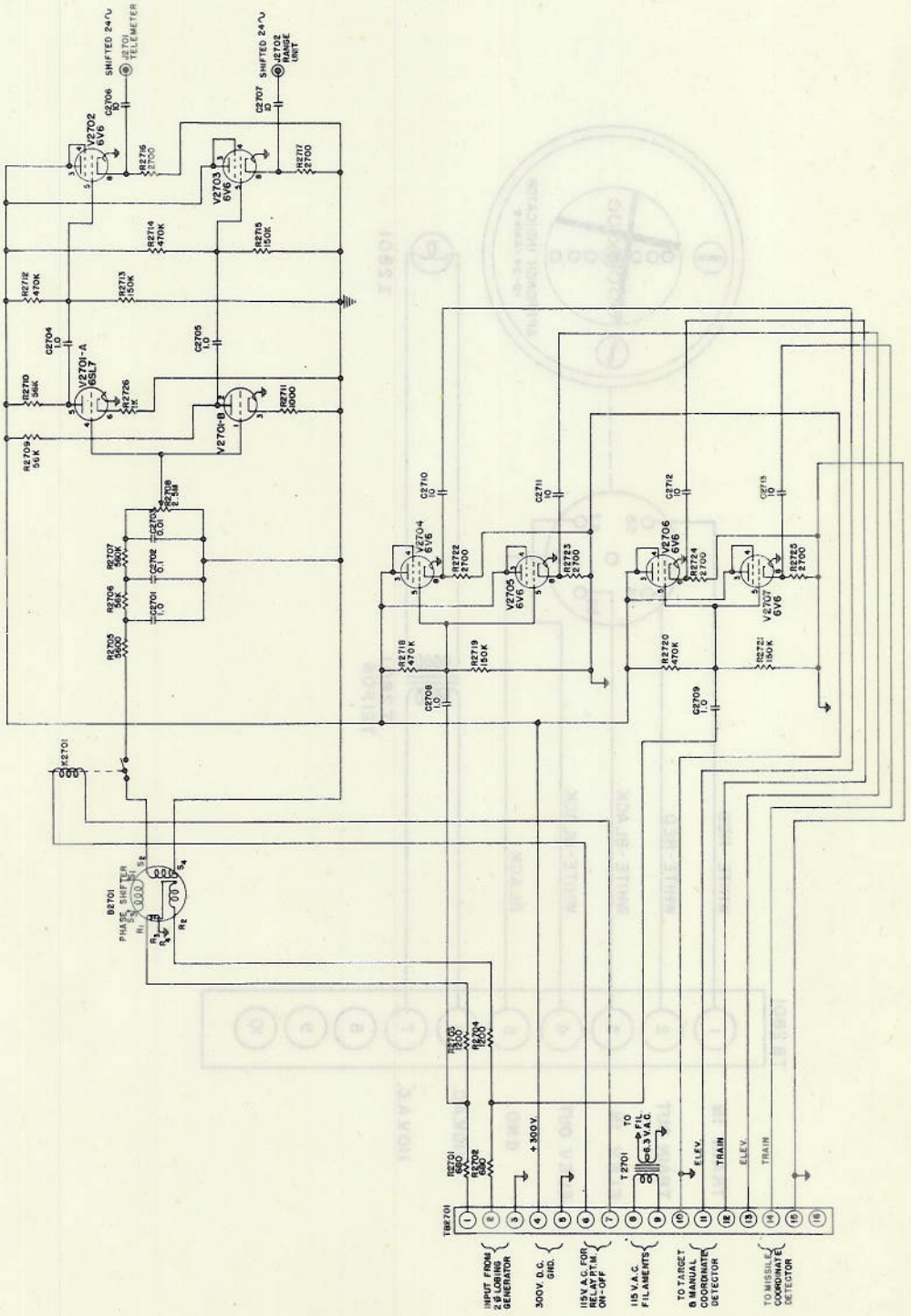

Figure 7-53. Reference Voltage Distribution Unit - Schematic Diagram

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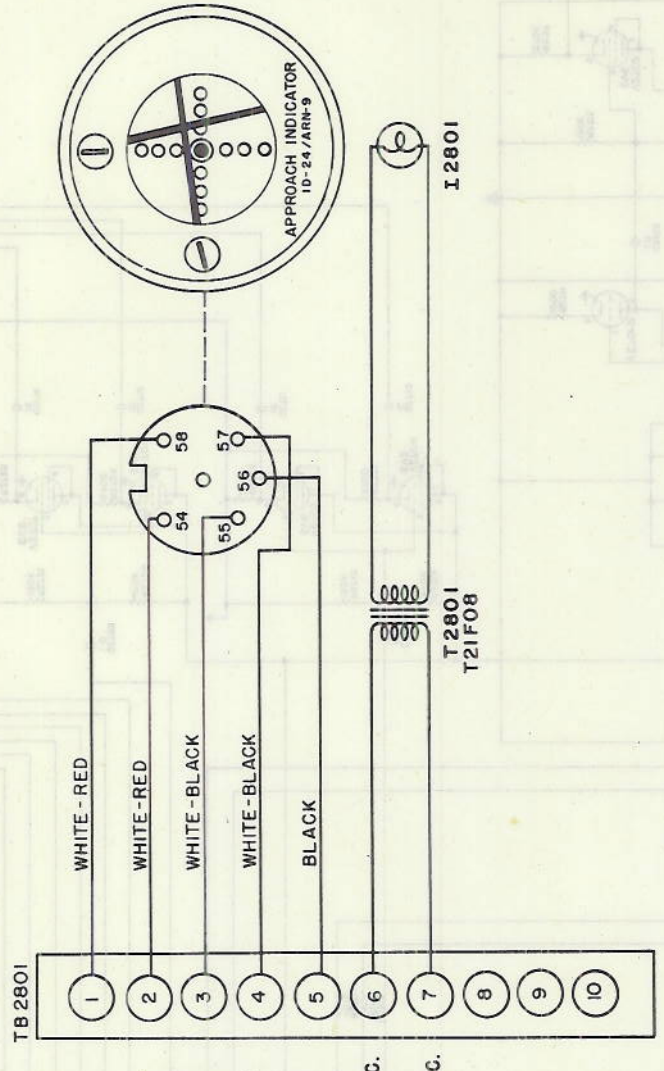

Figure 7-54. Missile Cross-pointer Meter

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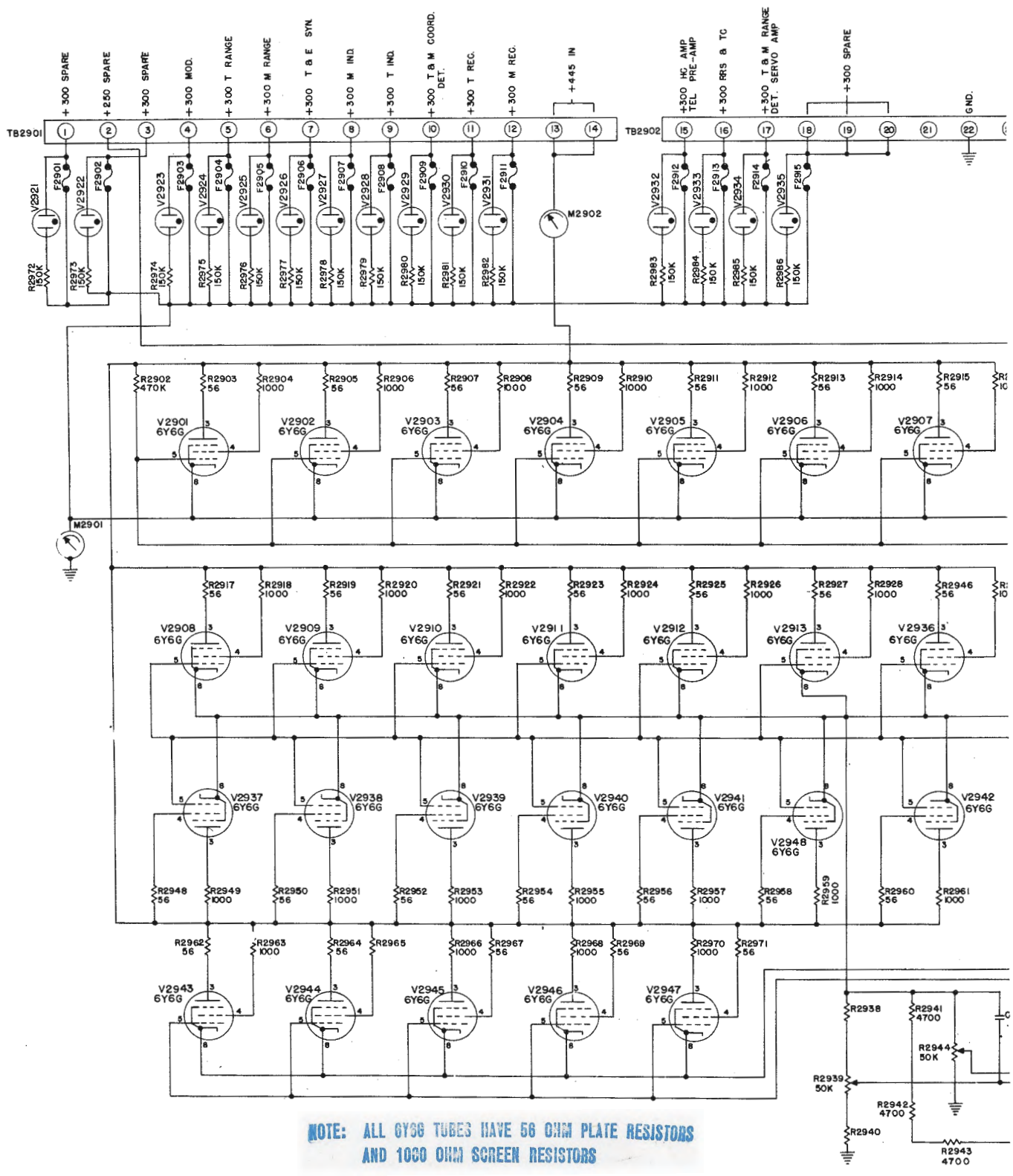
[redacted]

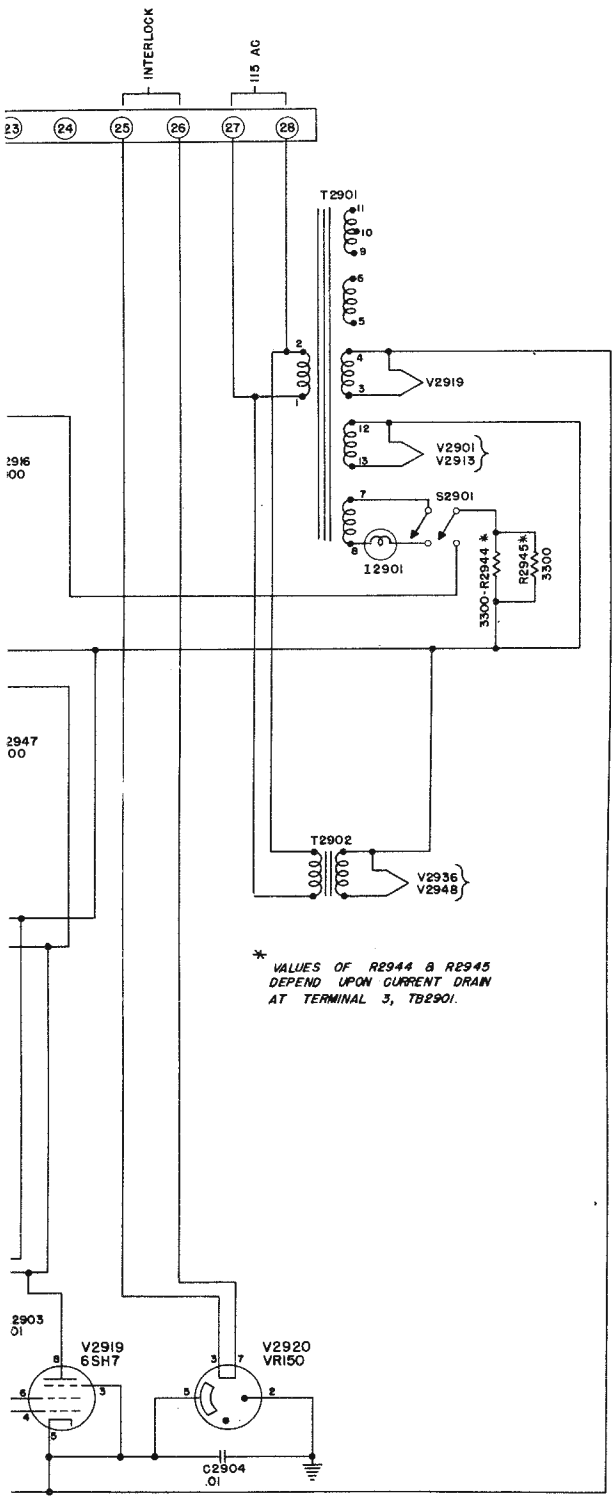


NOTE: ALL 6Y6G TUBES HAVE 56 OHM PLATE RESISTORS AND 1000 OHM SCREEN RESISTORS

Figure 7-55. D-c Voltage Regulator Unit - Schematic Diagram

[redacted]

DECLASSIFIED


INTERLOCK
115 AC
23
24
25
26
27
28
T2901
11
10
9
8
5
2
1
4
3
V2919
12
13
V2901
V2913
7
S2901
6
12901
3300-R2944 *
R2945*
3300
T2902
V2936
V2948
* VALUES OF R2944 & R2945 DEPEND UPON CURRENT DRAIN AT TERMINAL 3, TB2901.
V2919
6SH7
V2920
VR150
C2904
.01

DECLASSIFIED

[redacted]

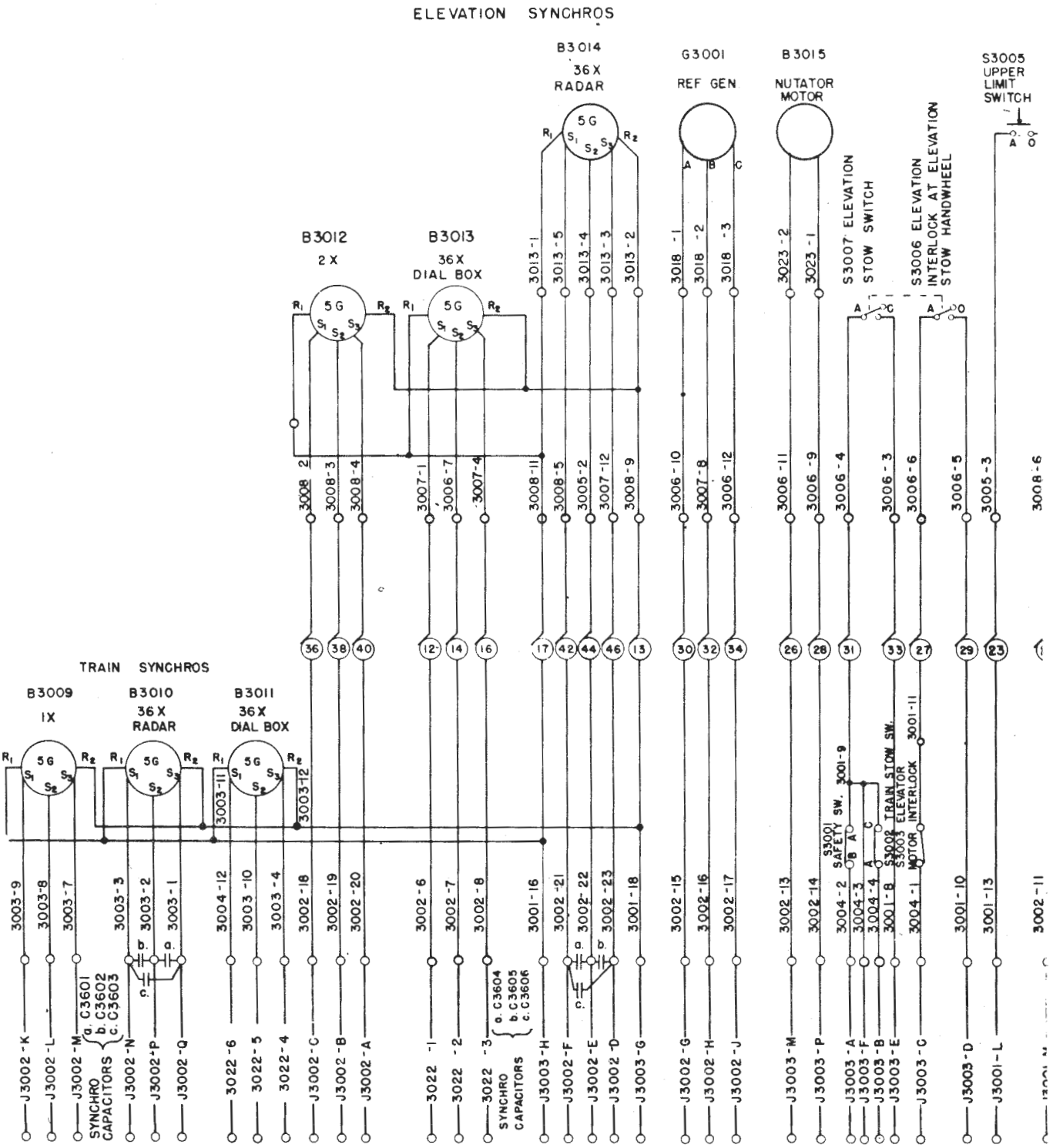


Figure 7-56. Antenna Unit and Synchro-Capacitor Unit - Schematic Diagram

[redacted]

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DECLASSIFIED

[redacted]

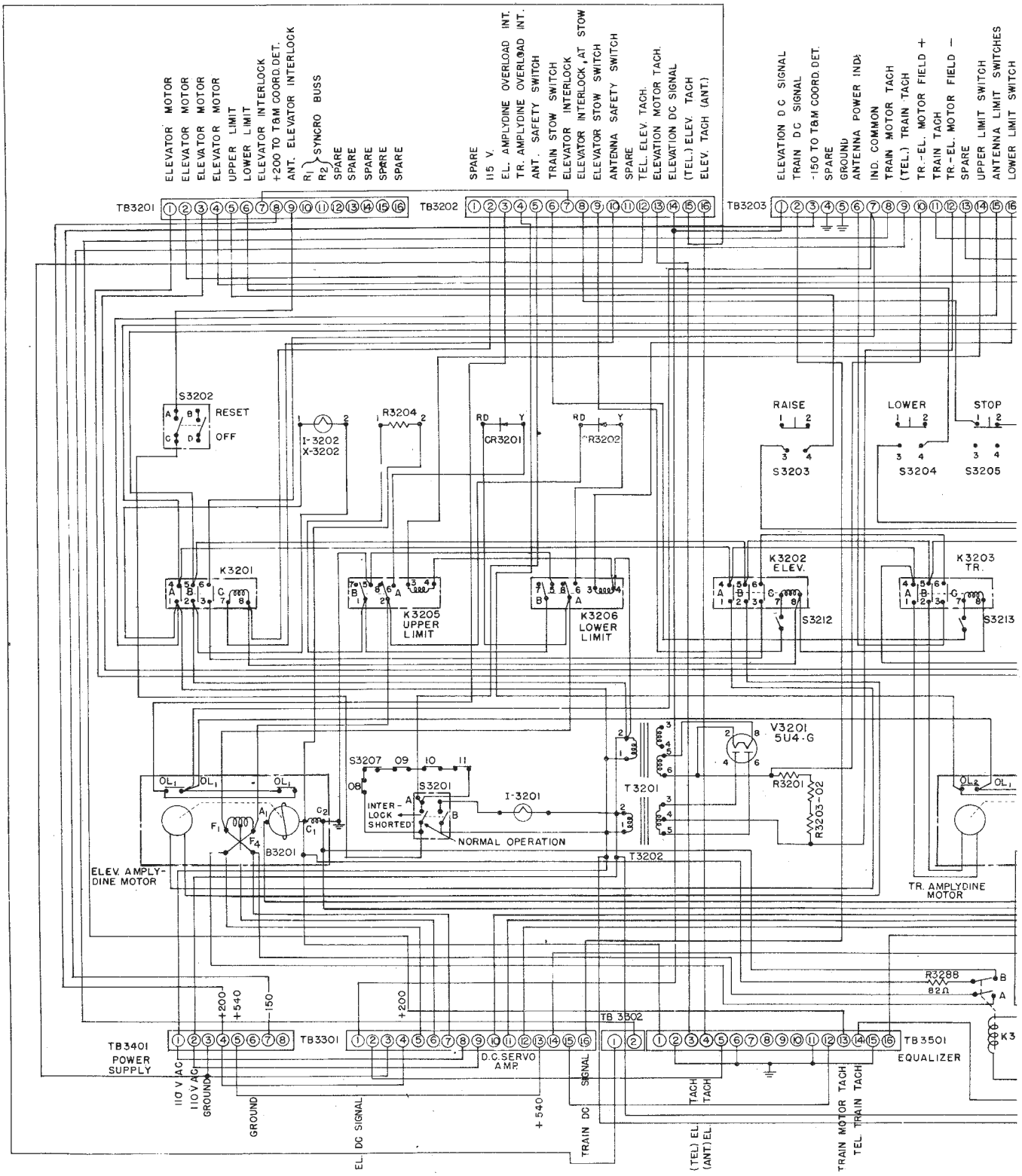
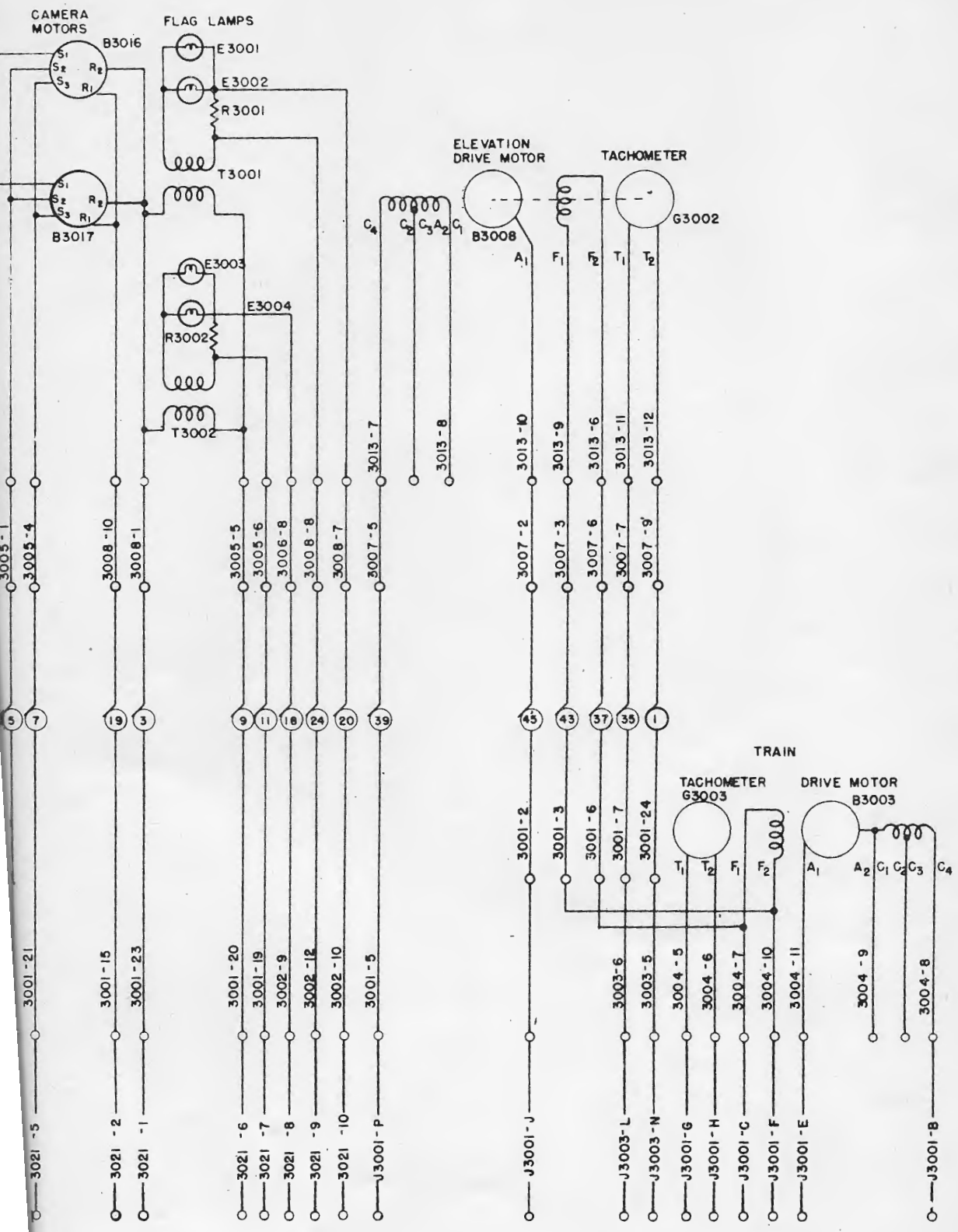
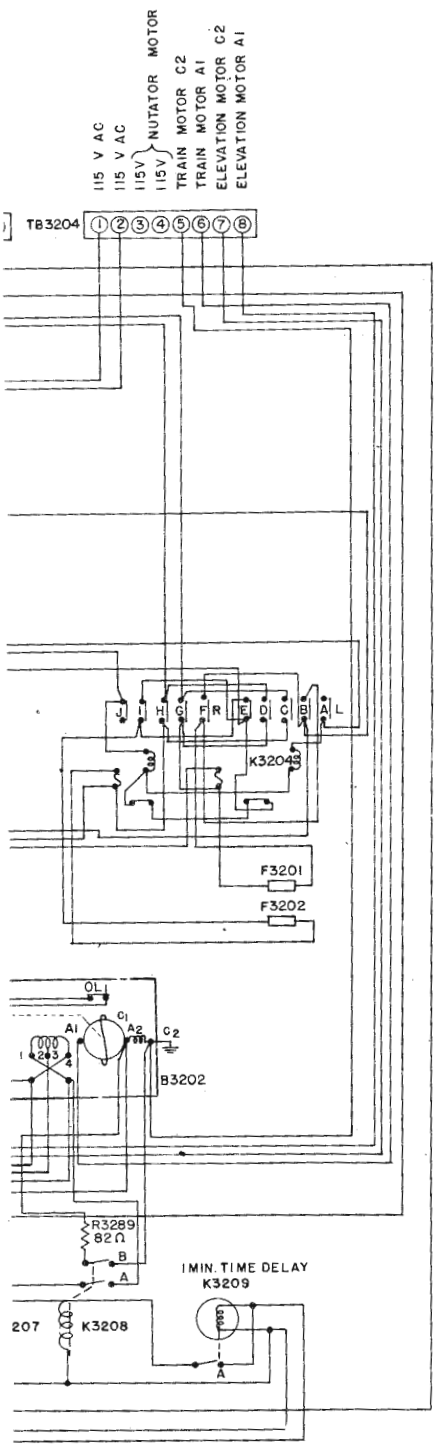


Figure 7-57. Antenna Control Unit - Schematic Diagram

[redacted]

DECLASSIFIED


CAMERA MOTORS
B3016
B3017
FLAG LAMPS
E3001
E3002
R3001
T3001
E3003
E3004
R3002
T3002
ELEVATION DRIVE MOTOR
B3008
TACHOMETER
G3002
TRAIN
TACHOMETER G3003
DRIVE MOTOR B3003


115 V AC
115 V AC
115V
115V
NUTATOR MOTOR
TRAIN MOTOR C2
TRAIN MOTOR A1
ELEVATION MOTOR C2
ELEVATION MOTOR A1
TB3204
1 2 3 4 5 6 7 8
J I H G F R E D C B A L
K3204
F3201
F3202
OL
A1
C1
A2
C2
1 2 3 4
B3202
R3289
82Ω
B
A
1MIN. TIME DELAY
K3209
207
K3208

DECLASSIFIED

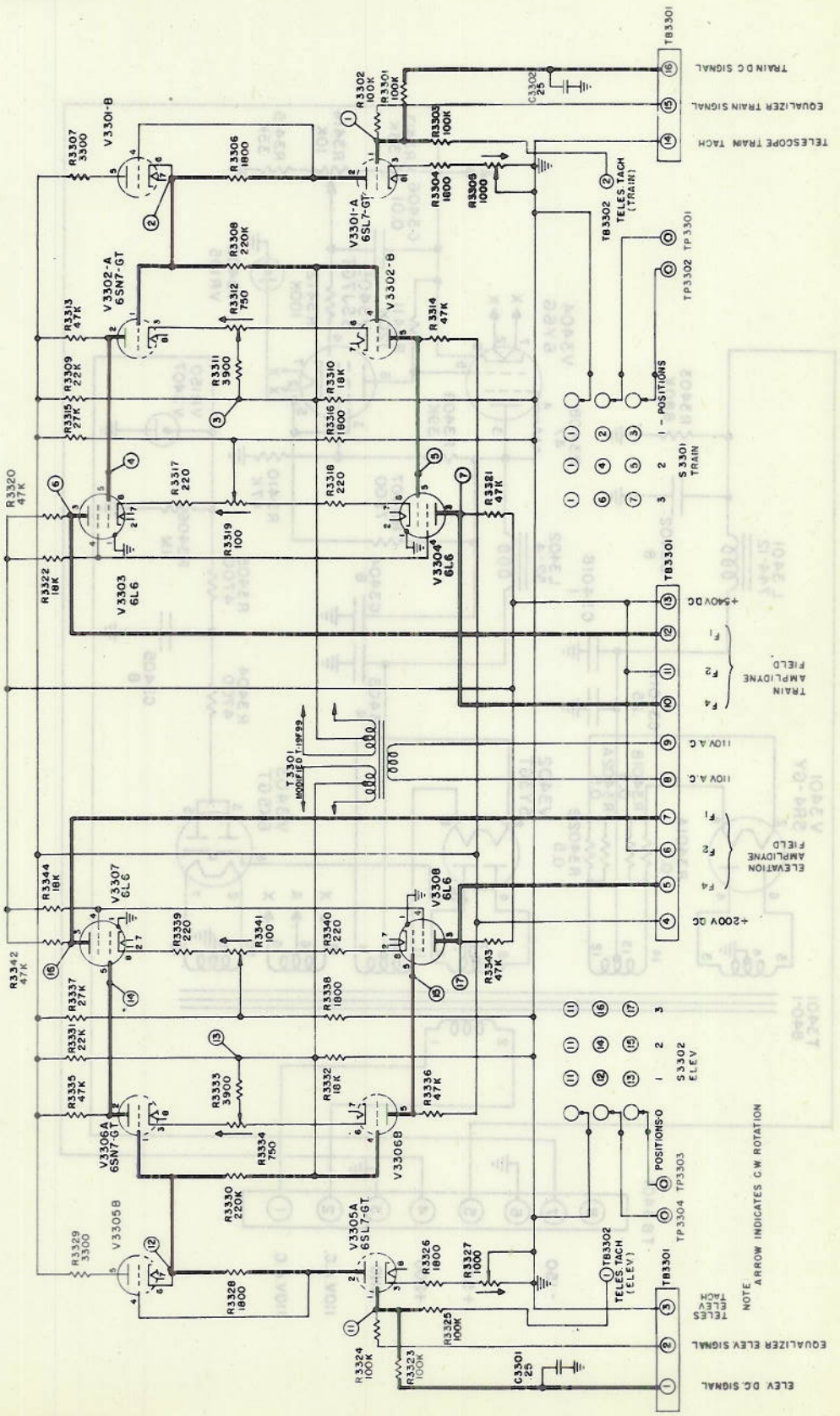


Figure 7-58. D-c Servo Amplifier Unit - Schematic Diagram

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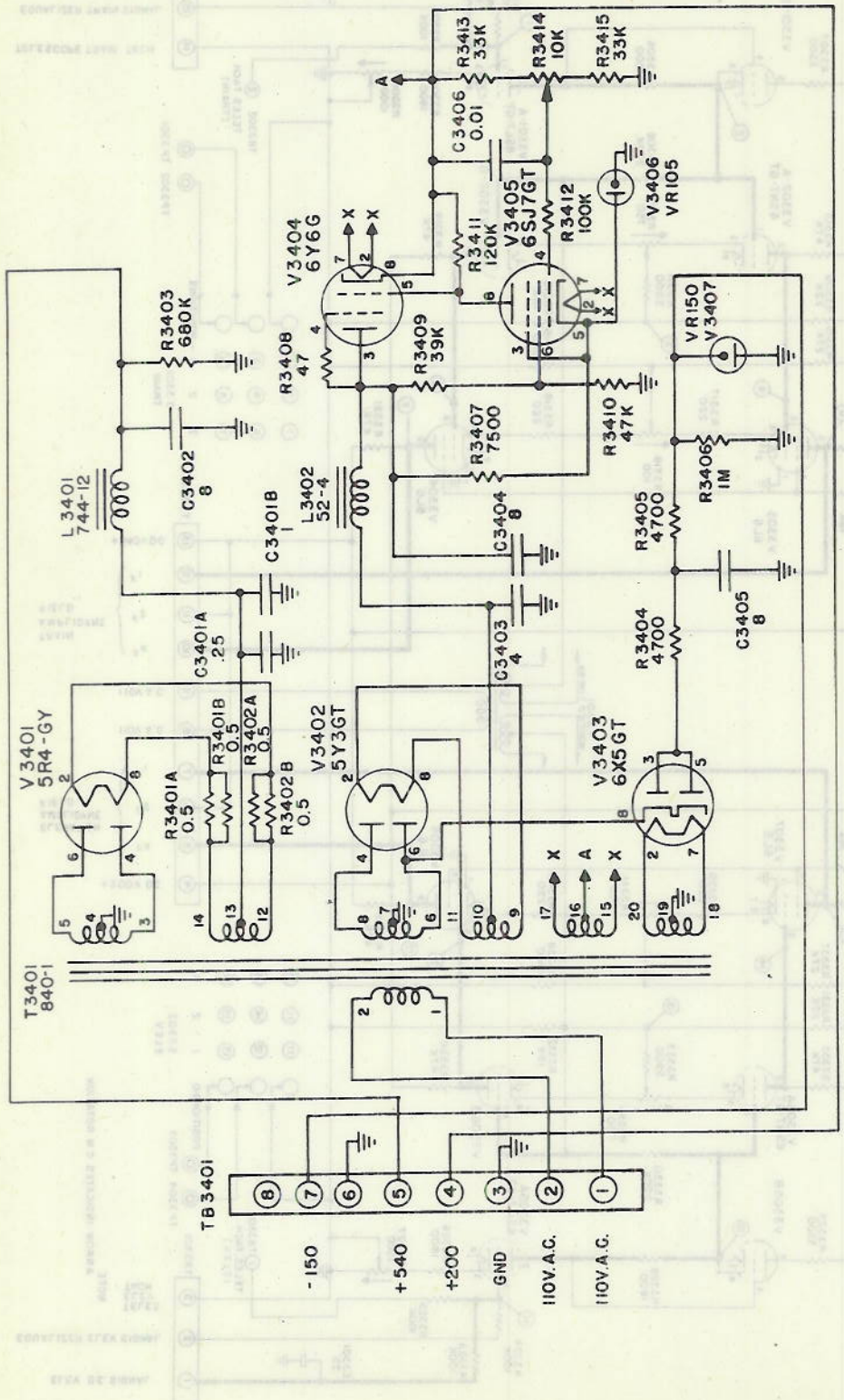

Figure 7-59. D-c Servo Amplifier Power Unit - Schematic Diagram

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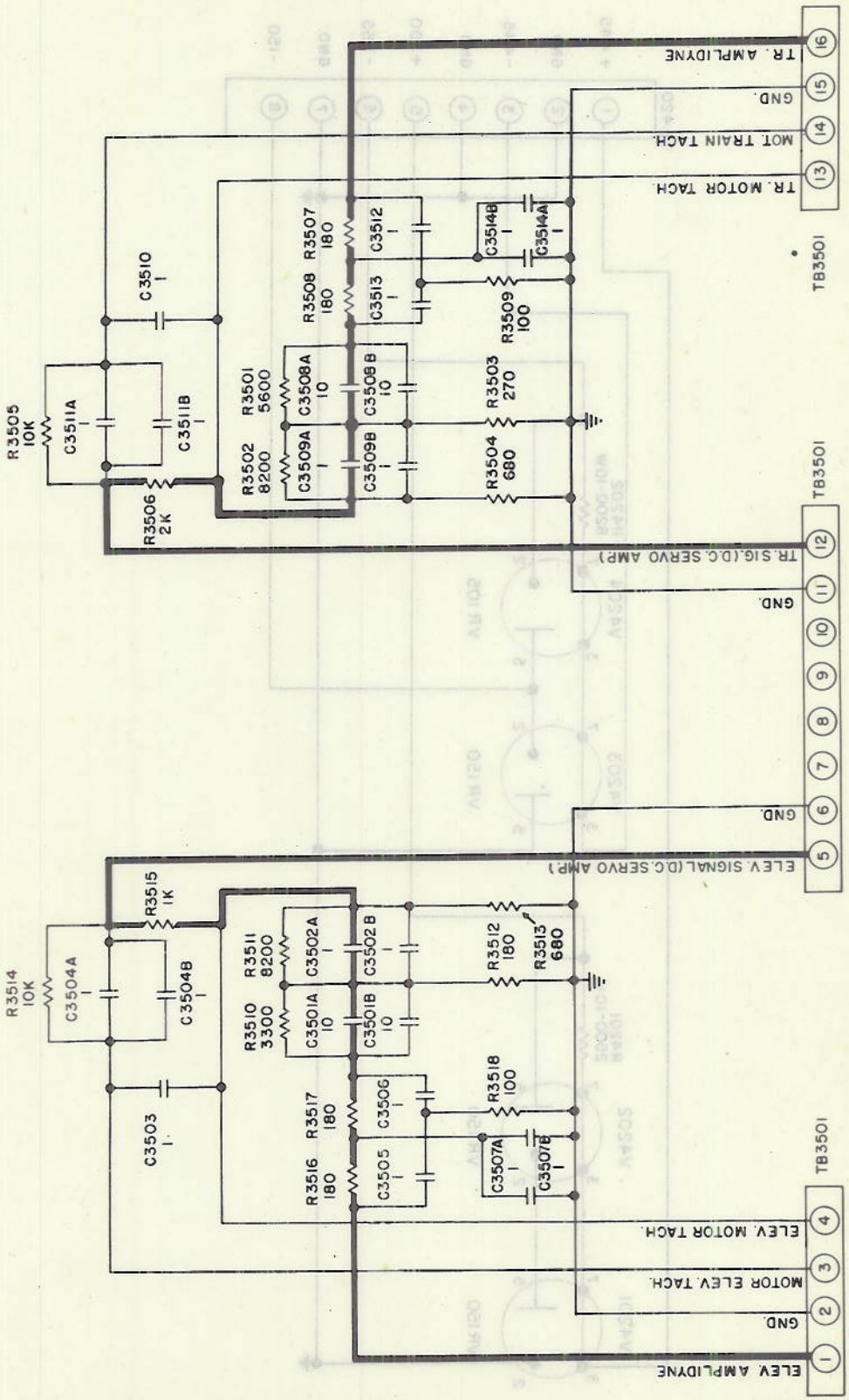

Figure 7-60. D-c Servo Equalizer Unit - Schematic Diagram

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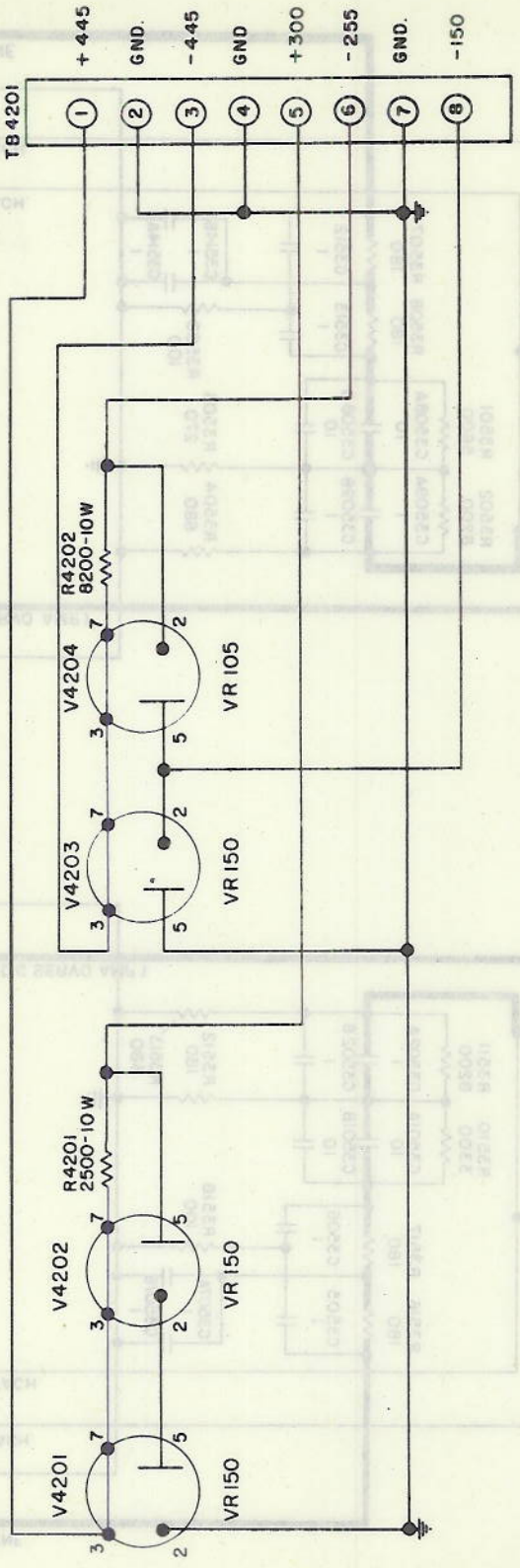

Figure 7-61. Missile Oscillator Preamplifier Power Supply - Schematic Diagram

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[redacted]

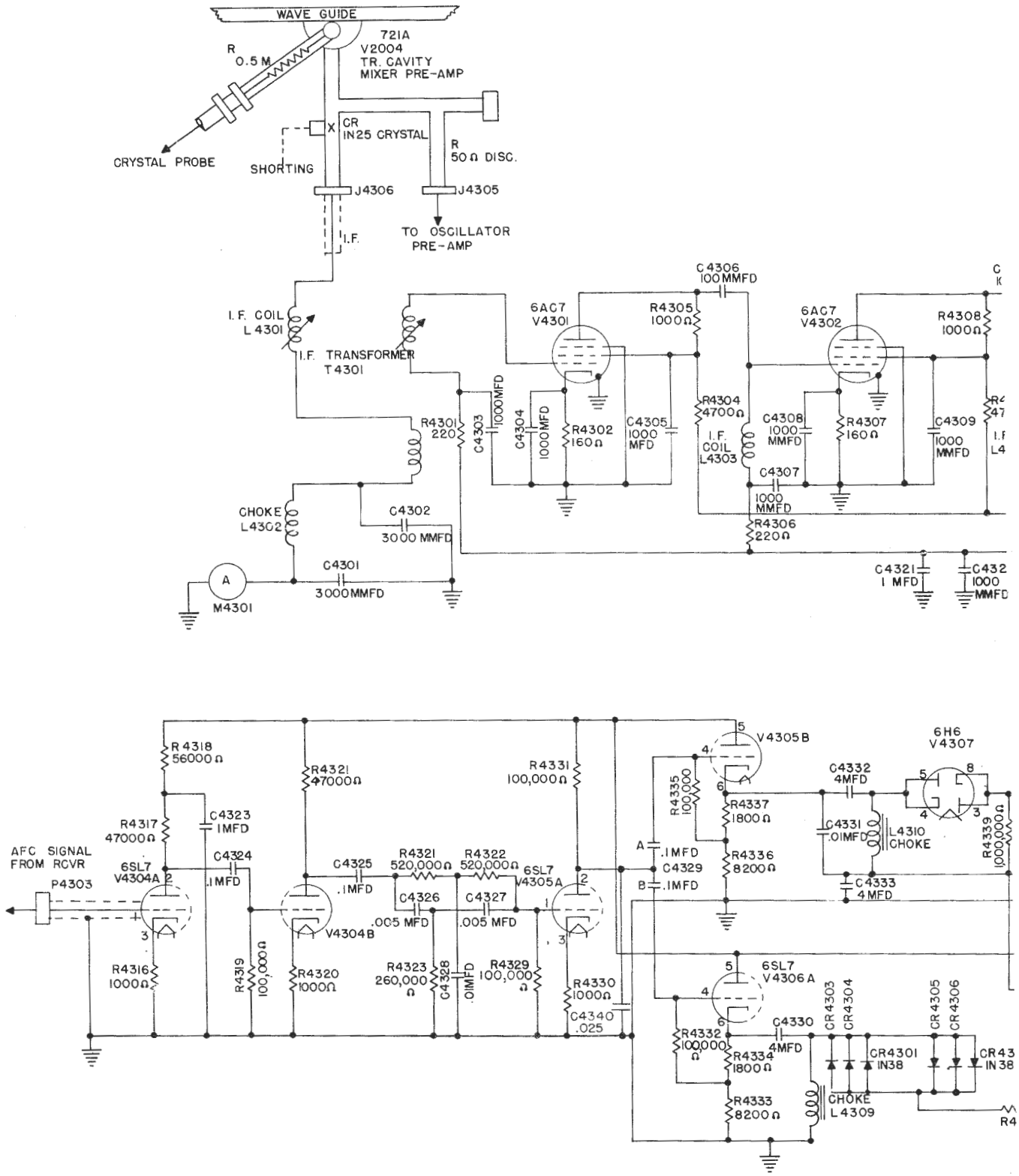

Figure 7-62. Missile Oscillator Preamplifier - Schematic Diagram

[redacted]

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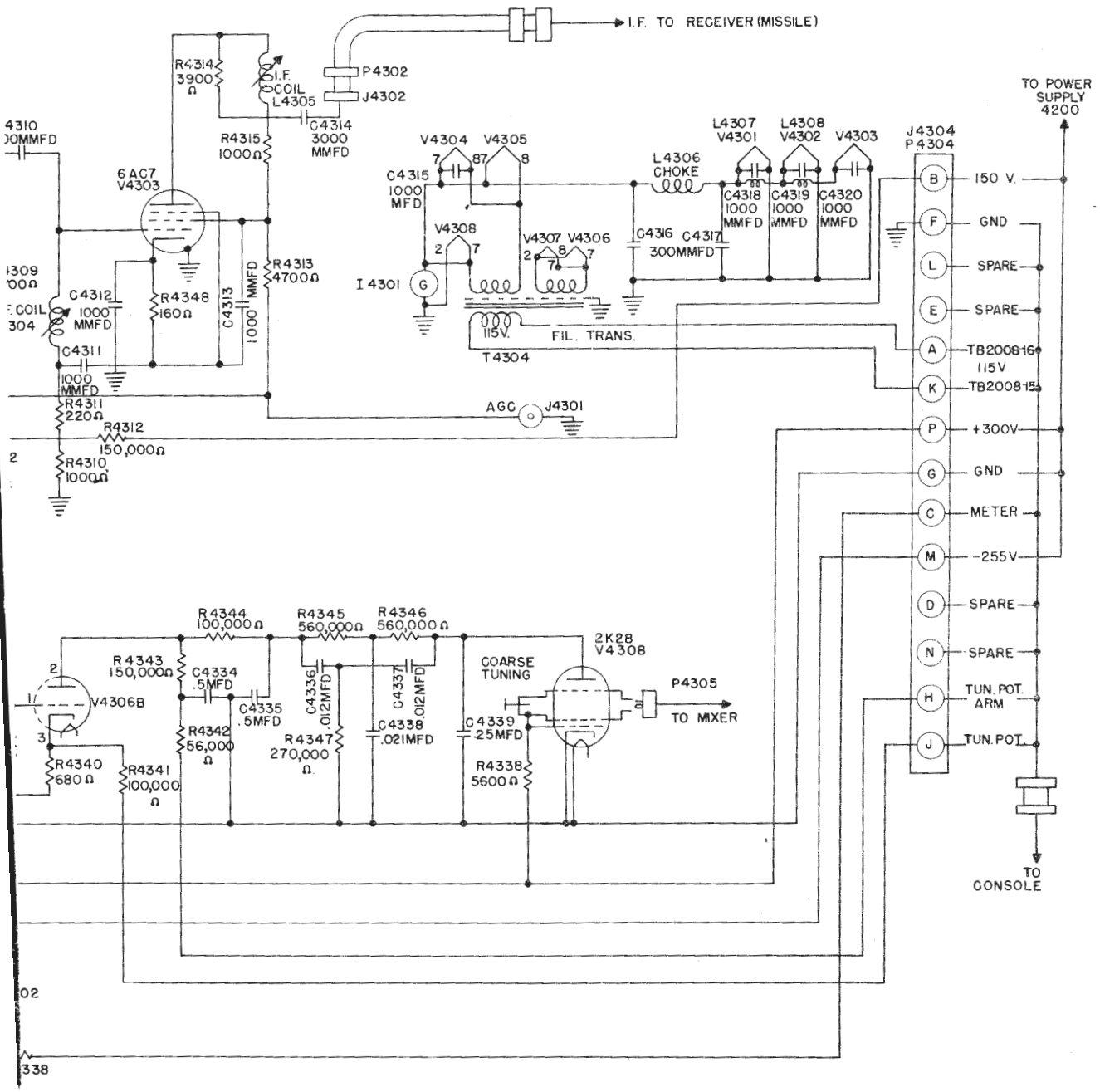

I.F. TO RECEIVER (MISSILE)
P4302
J4302
R4314 3900 Ω
I.F. COIL L4305
C4314 3000 MMFD
R4315 1000Ω
6AC7 V4303
V4304 V4305
C4315 1000 MFD
L4306 CHOKE
L4307 V4301
L4308 V4302
V4303
C4318 1000 MMFD
C4319 1000 MMFD
C4320 1000 MMFD
C4316 C4317 300MMFD
V4308
V4307 V4306
I 4301
115V. FIL. TRANS. T4304
R4313 4700Ω
C4312 1000 MMFD
R4348 160Ω
C4313 1000 MMFD
C4311 1000 MMFD
R4311 220Ω
R4312 150,000Ω
R4310 1000Ω
AGC J4301
J4304 P4304
TO POWER SUPPLY 4200
B 150 V.
F GND
L SPARE
E SPARE
A TB200816 115V
K TB200815
P +300V
G GND
C METER
M -255V
D SPARE
N SPARE
H TUN. POT. ARM
J TUN. POT.
TO CONSOLE
R4344 100,000Ω
R4345 560,000Ω
R4346 560,000Ω
R4343 150,000Ω
C4334 .5MFD
C4335 .5MFD
V43068
R4342 56,000 Ω
R4340 680 Ω
R4341 100,000 Ω
C4336 .012MFD
C4337 .012MFD
R4347 270,000 Ω
C4338 .021MFD
COARSE TUNING
2K28 V4308
C4339 .25MFD
R4338 5600Ω
P4305
TO MIXER

DECLASSIFIED

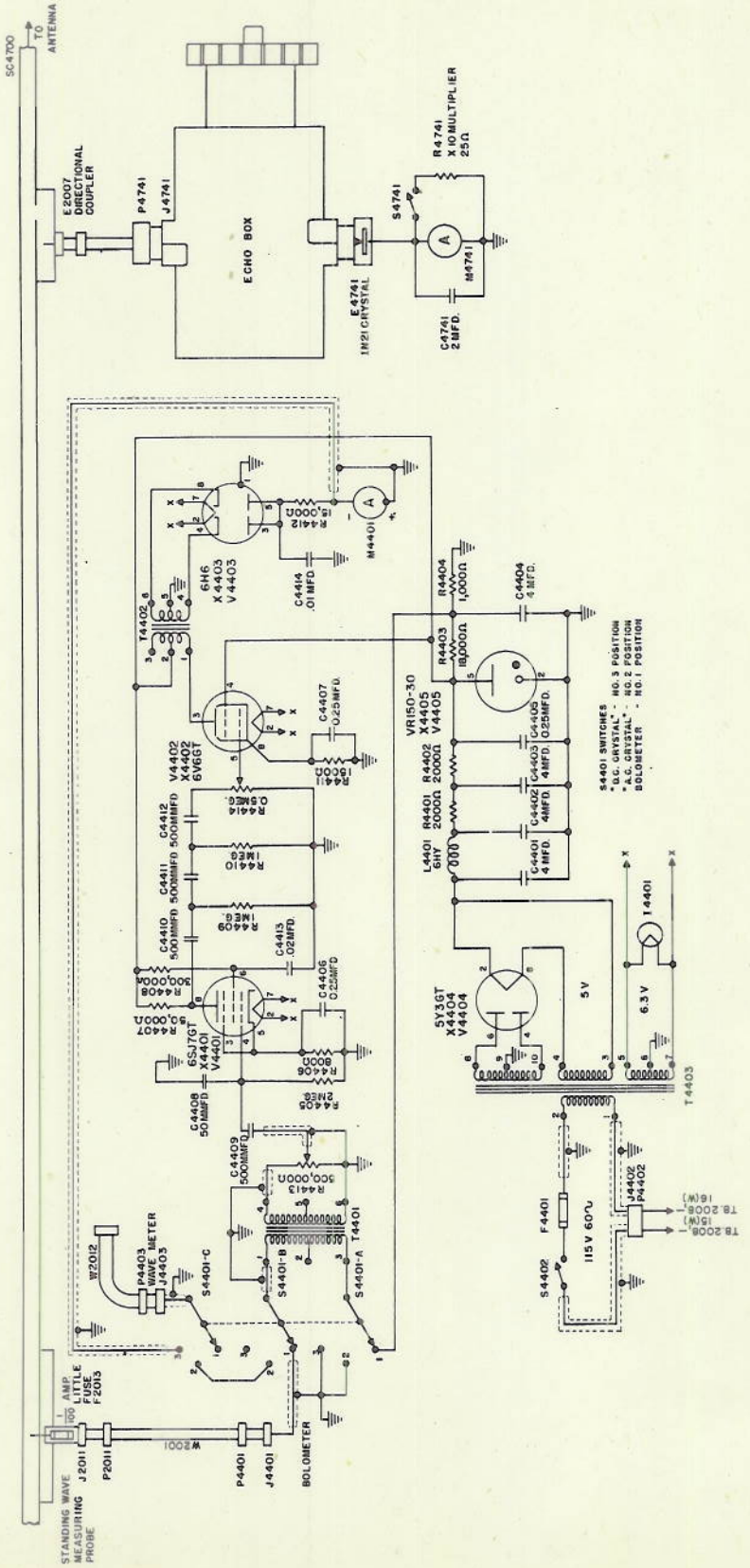


Figure 7-63. Echo Box and Standing Wave Amplifier - Schematic Diagram

DECLASSIFIED

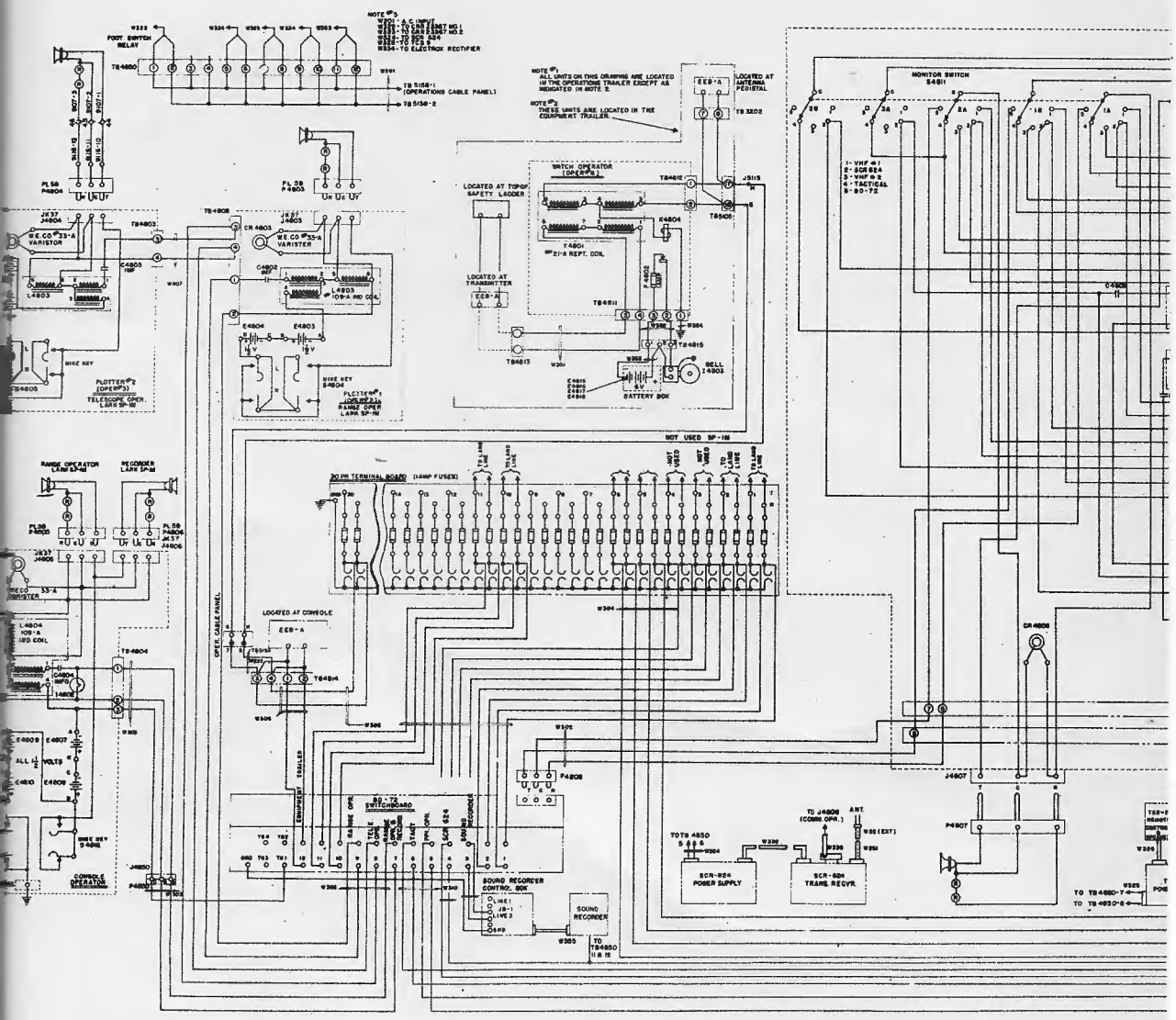
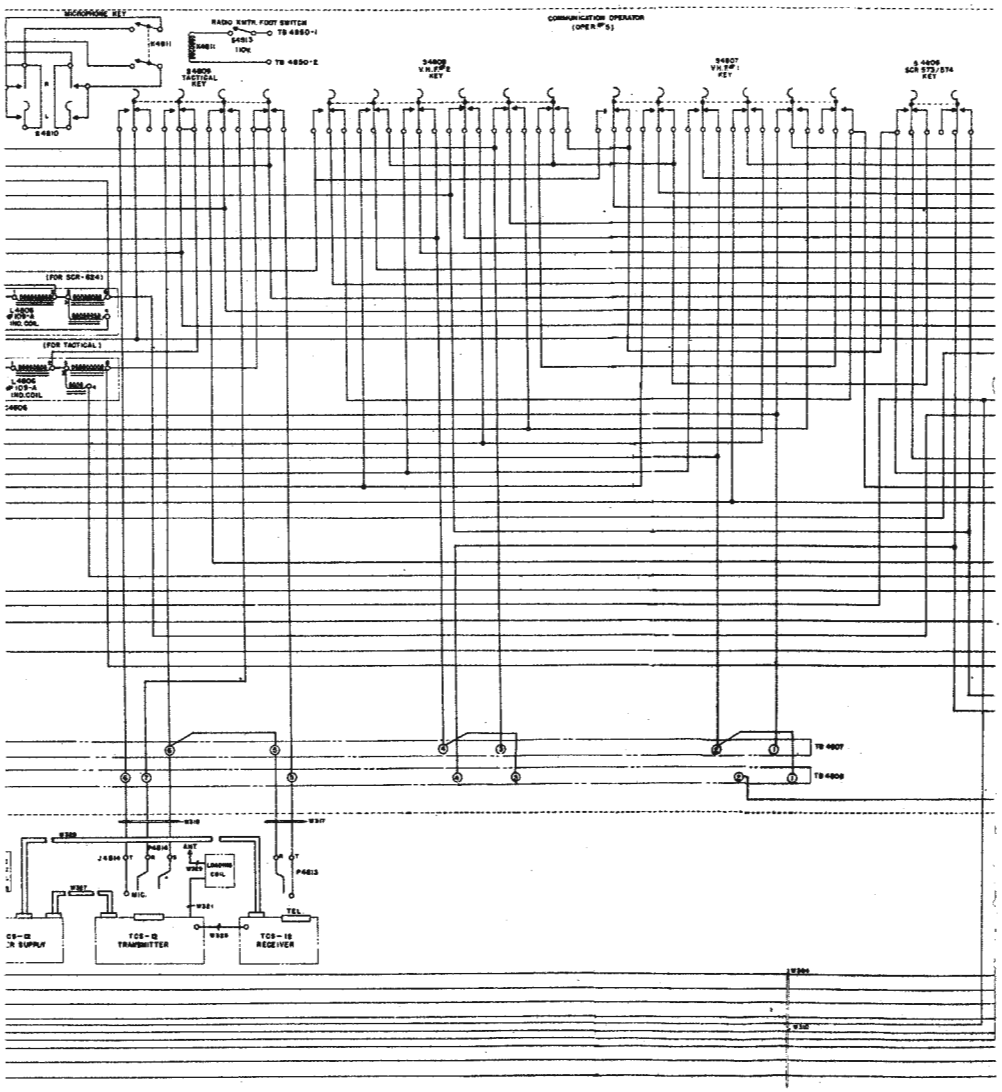
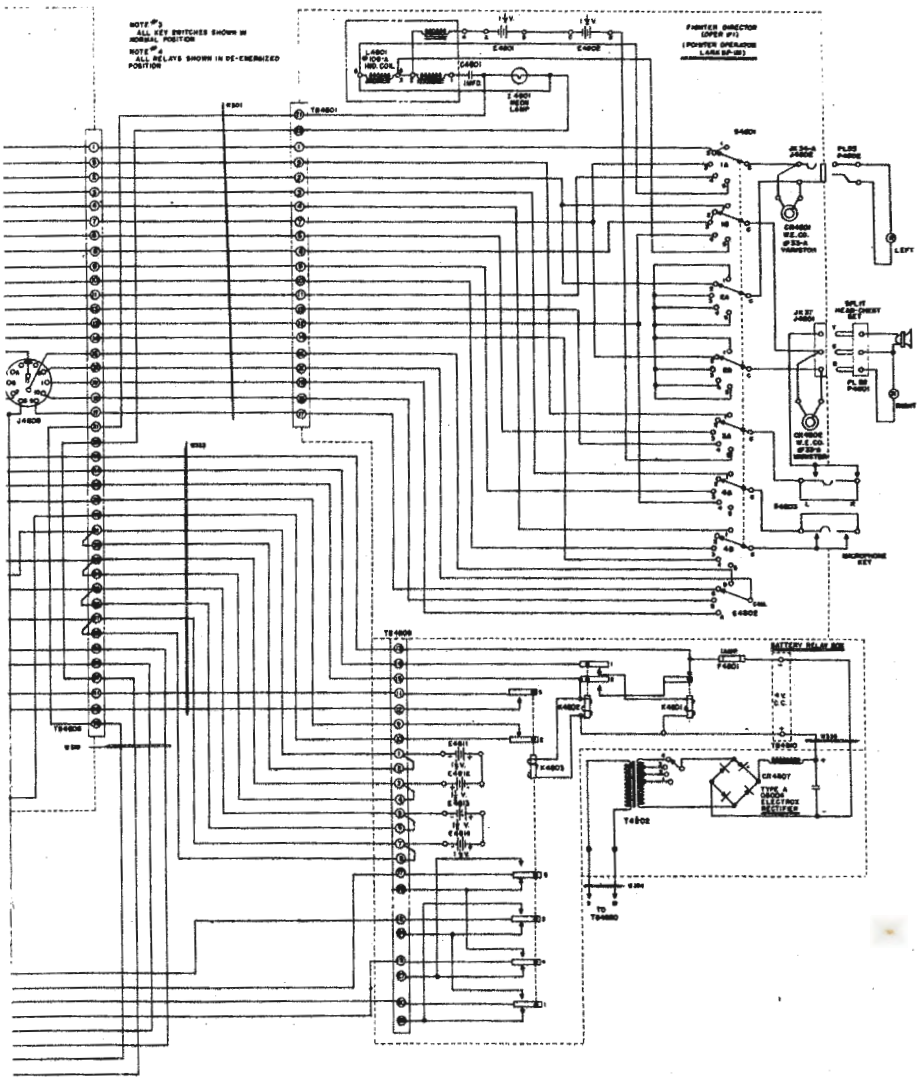


Figure 7-64. Communications Section - Schematic Diagram


MICROPHONE SET
RADIO XMTR FOOT SWITCH
COMMUNICATION OPERATOR
(OPER #5)
TB 4850-1
TB 4850-2
S4809
TACTICAL
KEY
S4808
V.H.F/E
KEY
S4807
V.H.F/F
KEY
S 4809
SCR 573/574
KEY
S4810
(FOR SCR-624)
(FOR TACTICAL)
TB 4807
TB 4808
W310
W317
W309
J 4804
P4814
ANT
WIRE
LOADING
COIL
P4813
MIC.
W321
W319
TEL
TCS-1B
TRANSMITTER
TCS-1B
RECEIVER
W306
W307



DECLASSIFIED

DECLASSIFIED

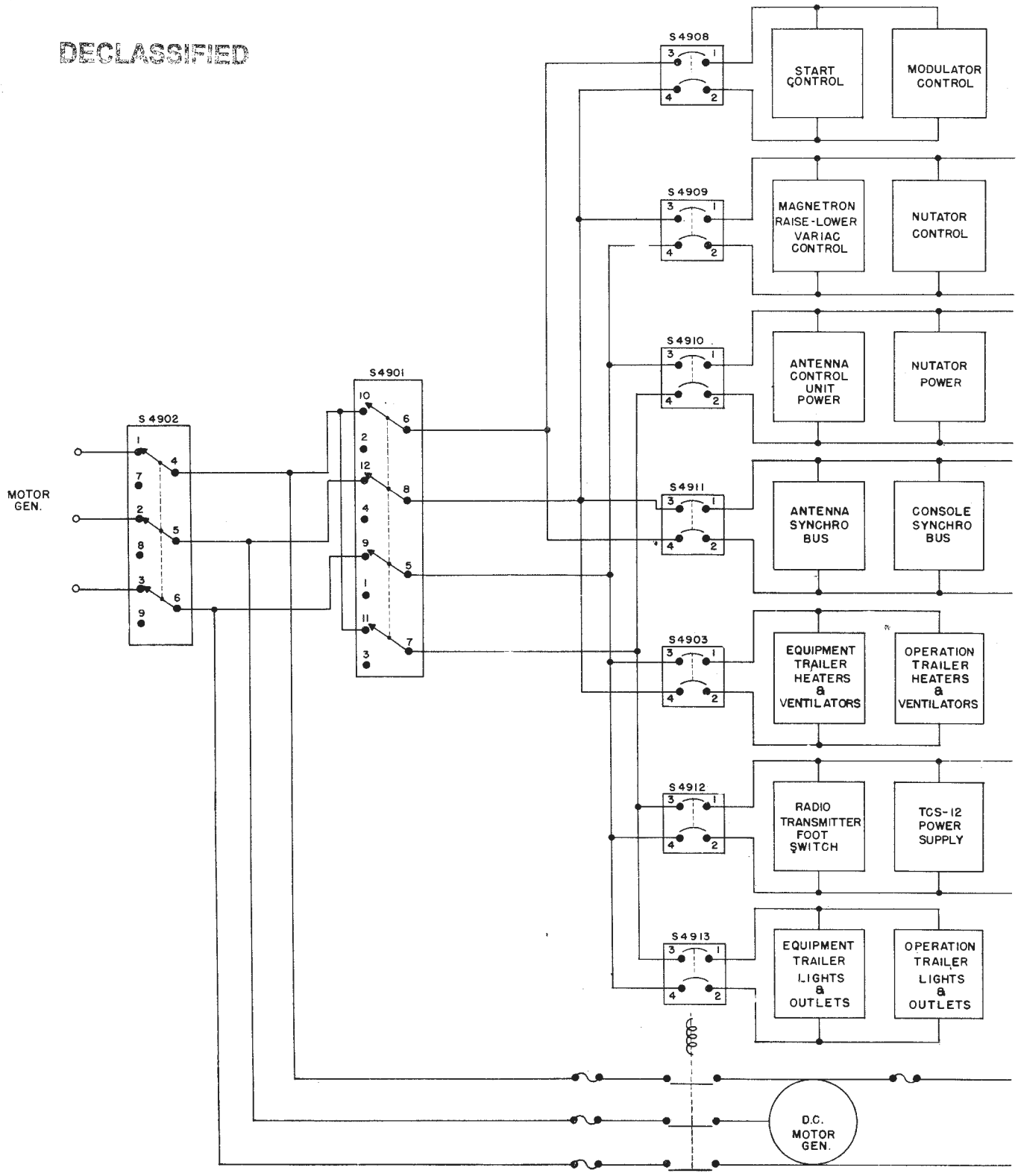


Figure 7-65. Power Distribution System - Block Diagram

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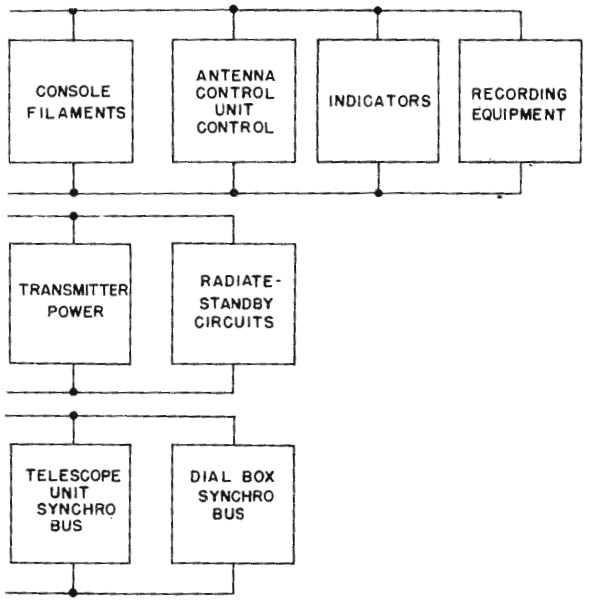
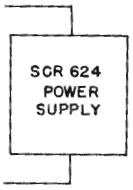
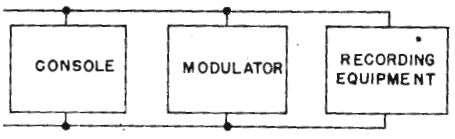

CONSOLE FILAMENTS
ANTENNA CONTROL UNIT CONTROL
INDICATORS
RECORDING EQUIPMENT
TRANSMITTER POWER
RADIATE-STANDBY CIRCUITS
TELESCOPE UNIT SYNCHRO BUS
DIAL BOX SYNCHRO BUS


SCR 624 POWER SUPPLY


CONSOLE
MODULATOR
RECORDING EQUIPMENT

DECLASSIFIED

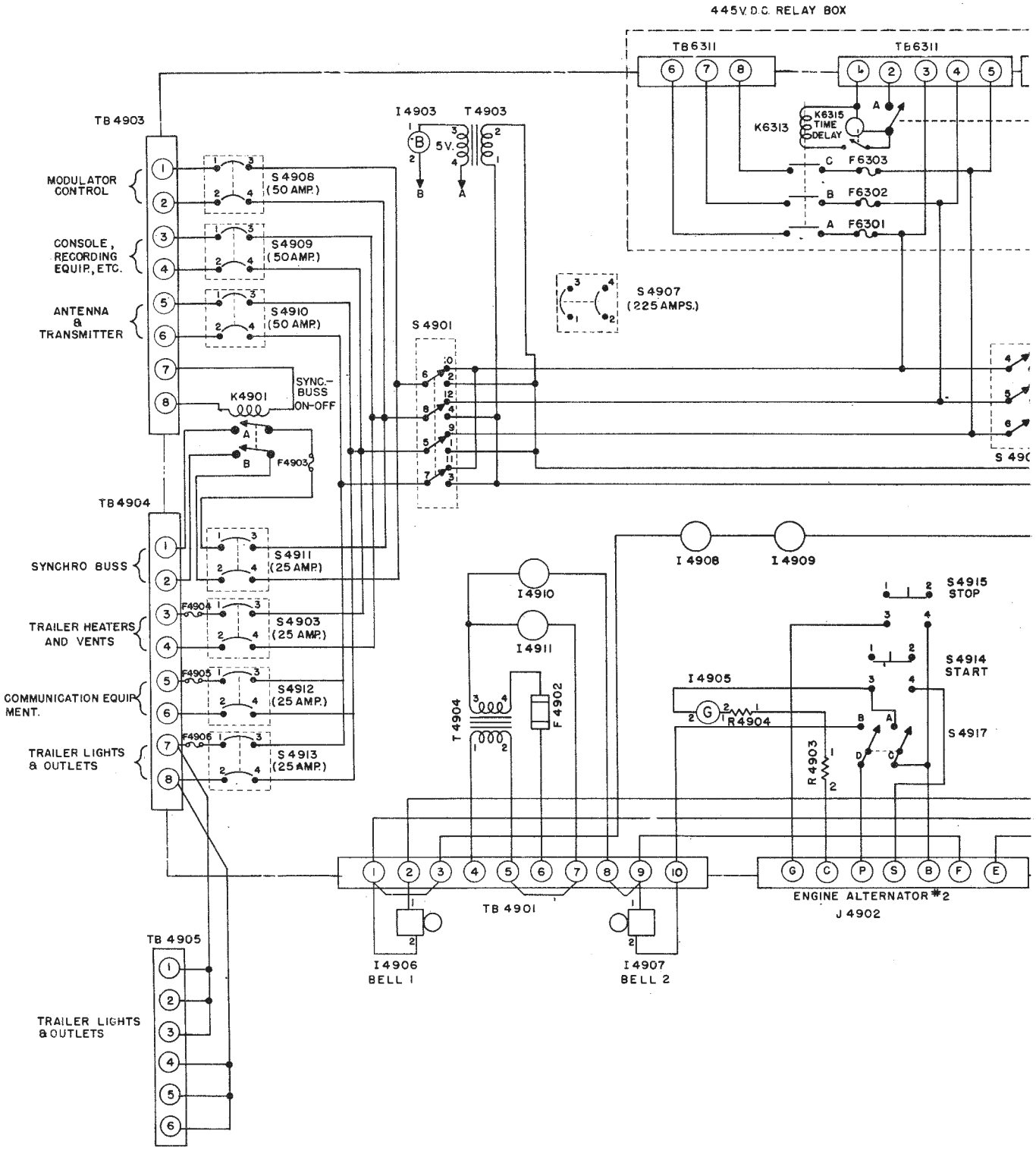
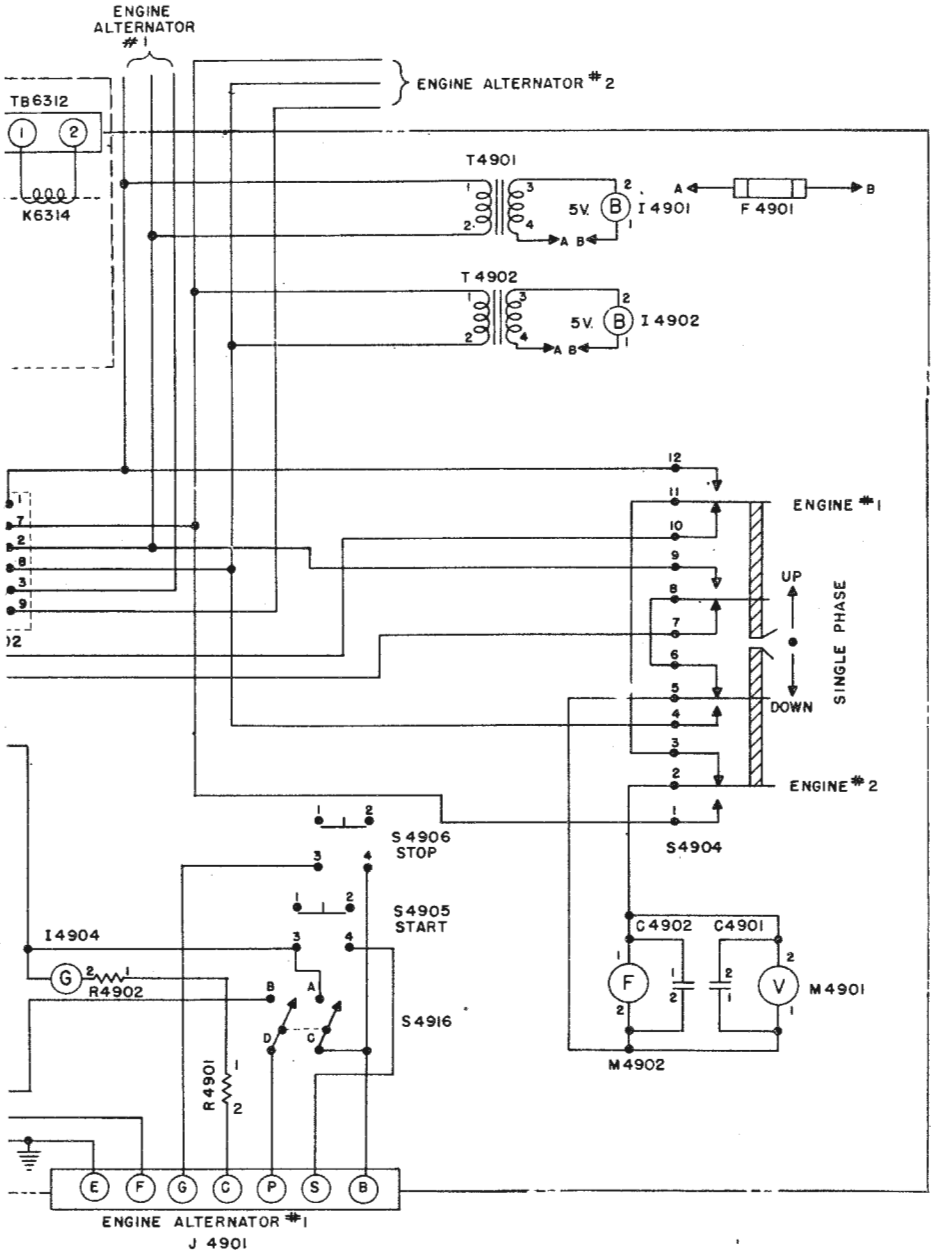


Figure 7-66. Power Distribution Unit - Schematic Diagram

DECLASSIFIED


ENGINE ALTERNATOR #1
ENGINE ALTERNATOR #2
TB6312
K6314
T4901
5V.
I4901
F4901
T4902
I4902
ENGINE #1
ENGINE #2
UP
DOWN
SINGLE PHASE
S4906 STOP
S4905 START
S4904
I4904
R4902
S4916
R4901
C4902
C4901
M4901
M4902
E F G C P S B
ENGINE ALTERNATOR #1
J 4901

DECLASSIFIED

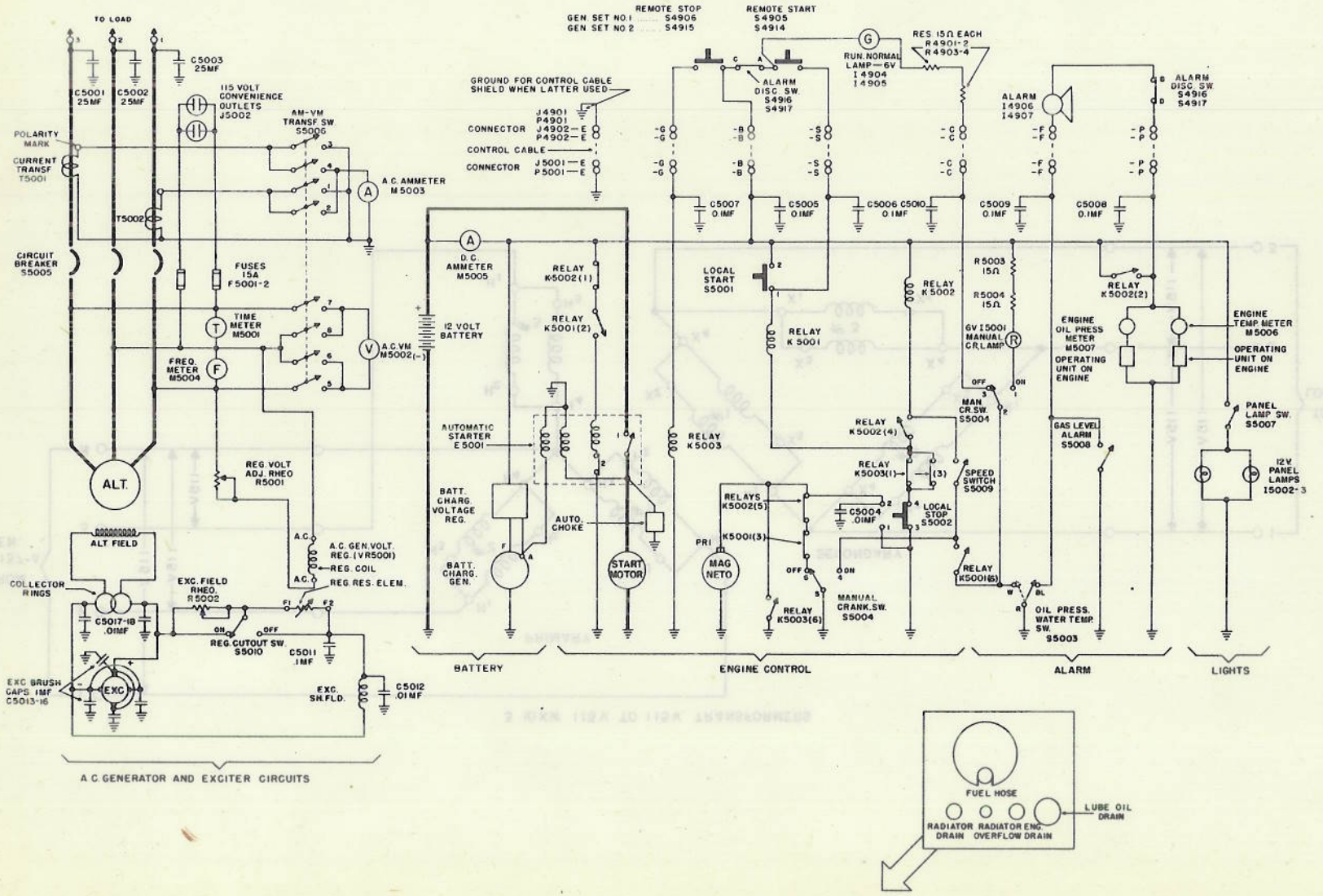


Figure 7-67. 15 Kw Gasoline Engine Alternator - Schematic Diagram

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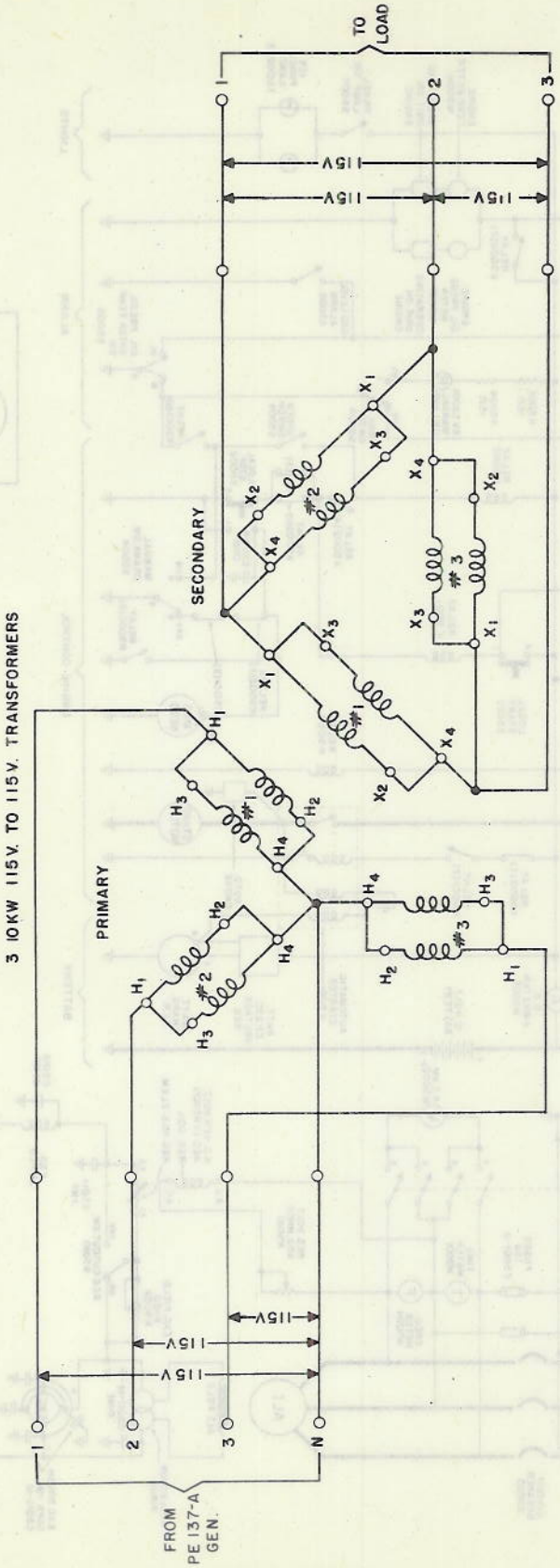

Figure 7-68. Transformer Bank for Conversion From Four-wire to Three-wire System - Schematic Diagram

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DECLASSIFIED

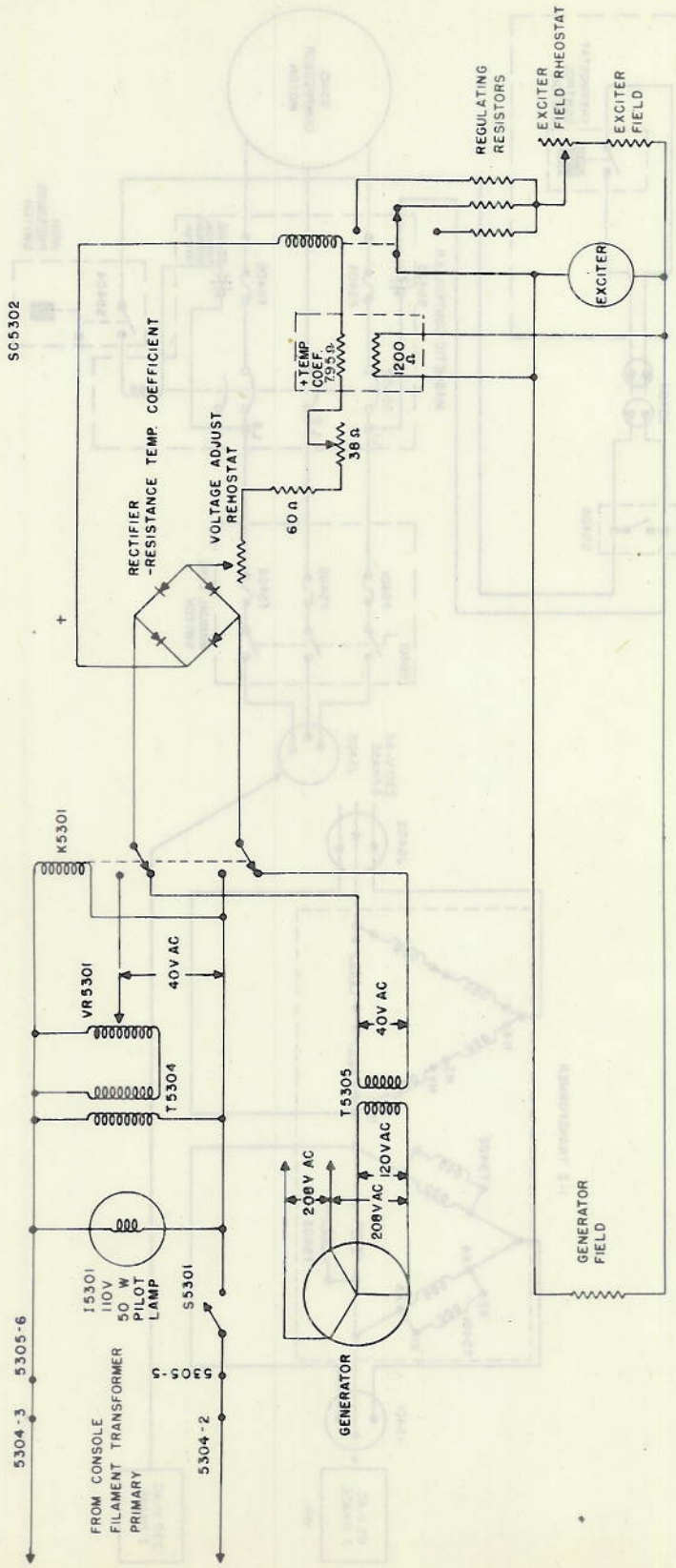

Figure 7-69. A-c Voltage Regulator - Schematic Diagram

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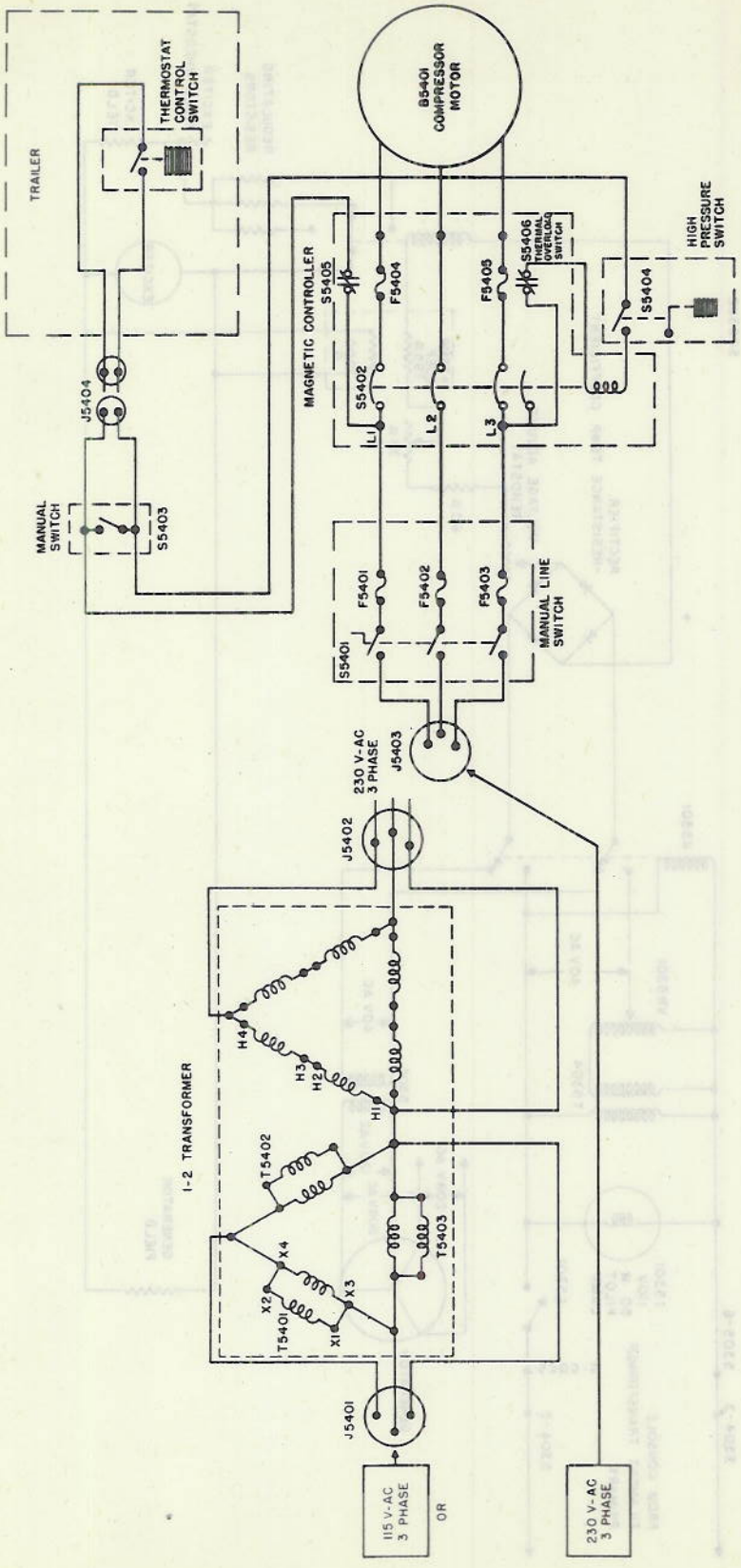

Figure 7-70. Dehumidifier - Schematic Diagram

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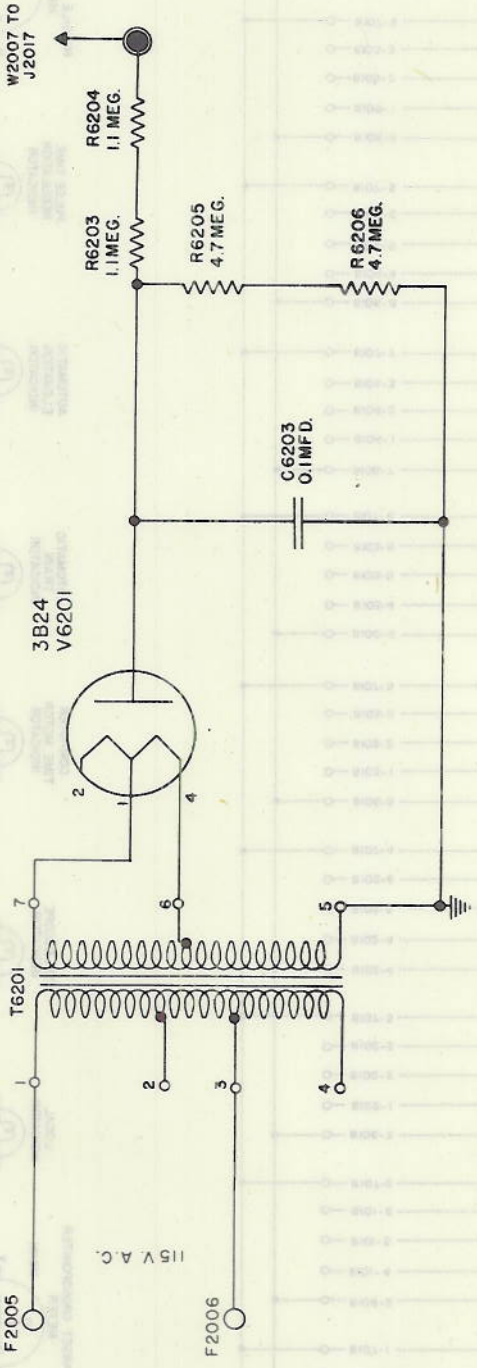

Figure 7-71. Keep-alive Power Supply - Schematic Diagram

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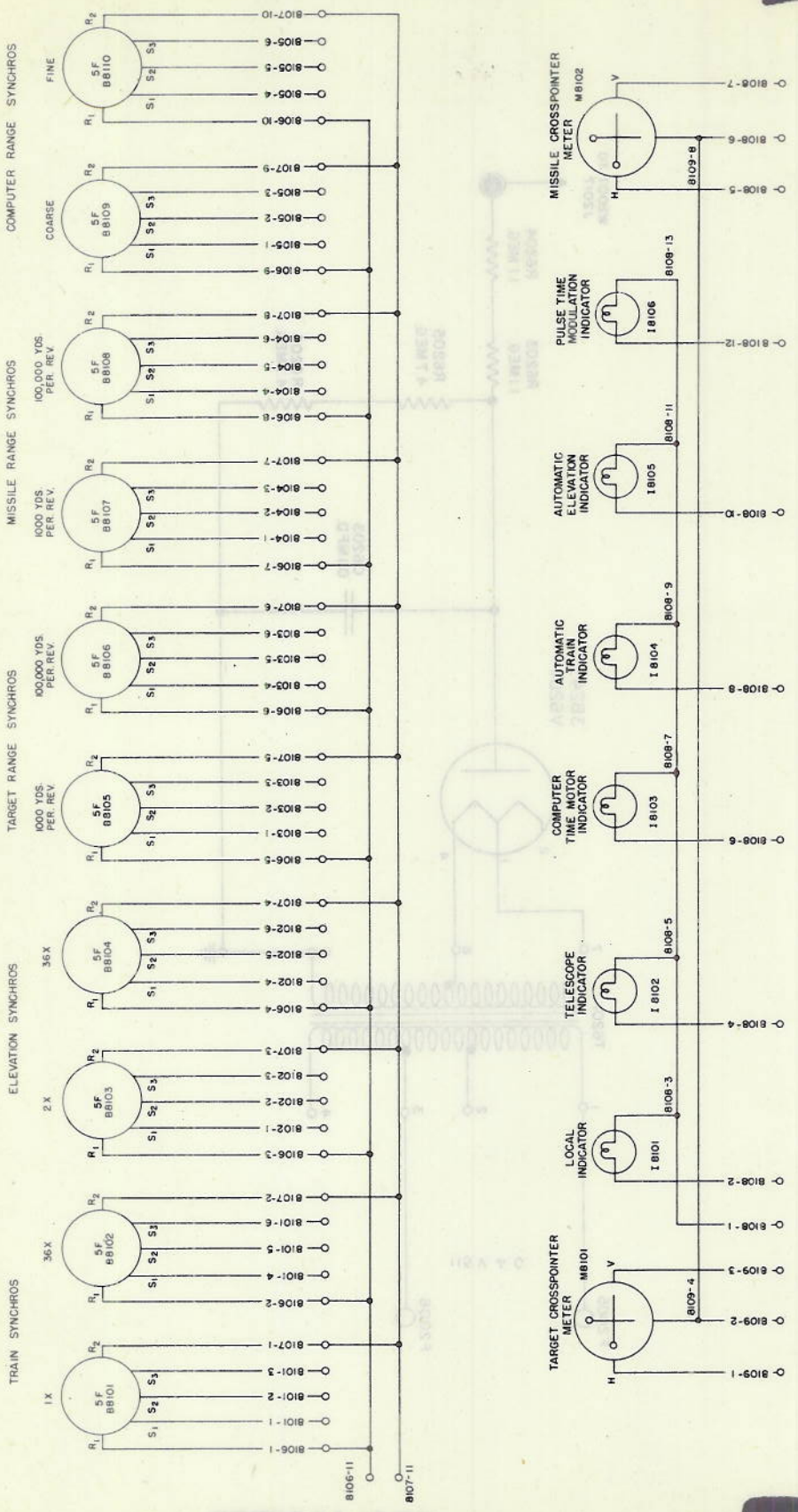

Figure 7-72. Dial Box Unit - Schematic Diagram

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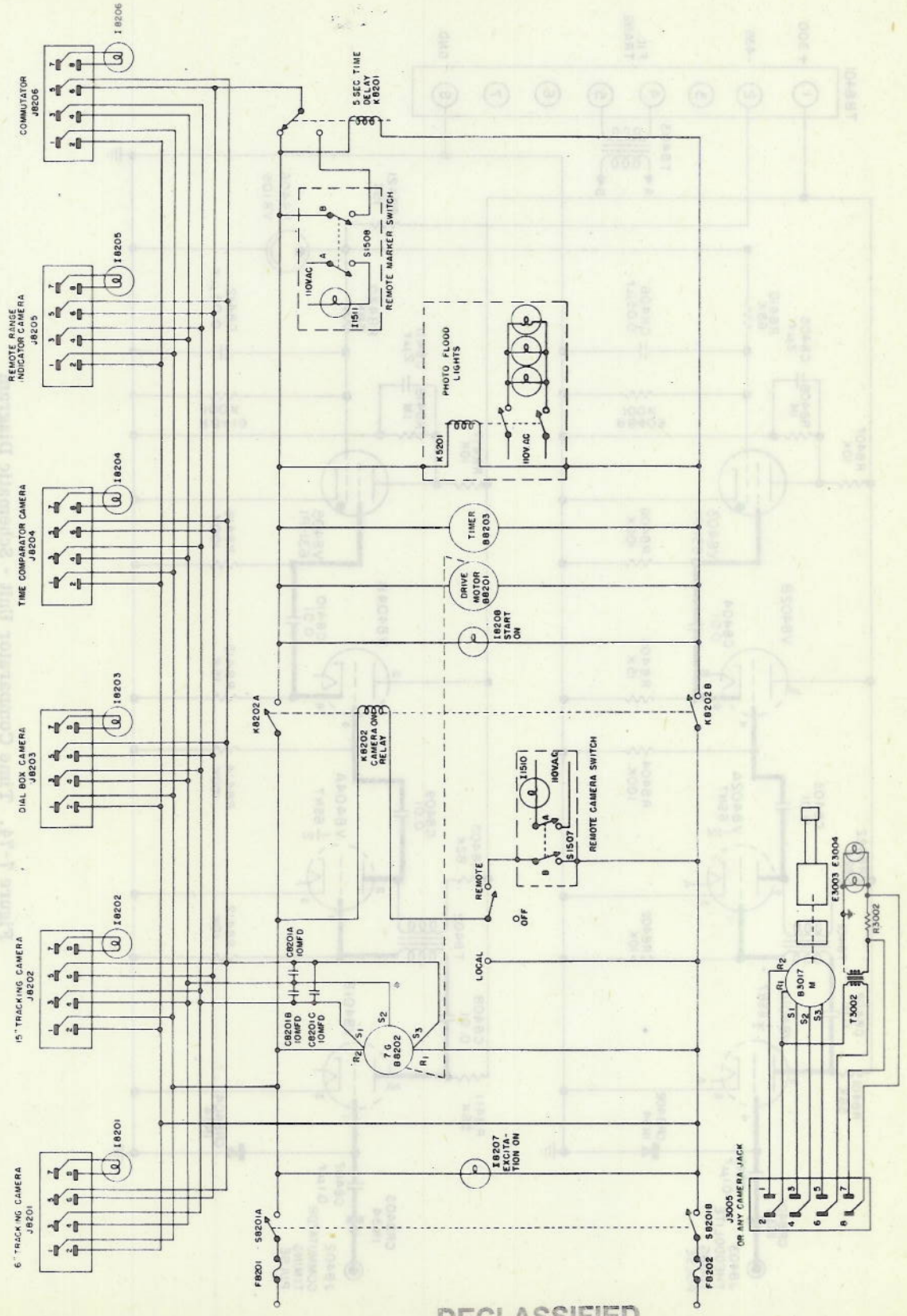

Figure 7-73. Camera Control Unit - Schematic Diagram

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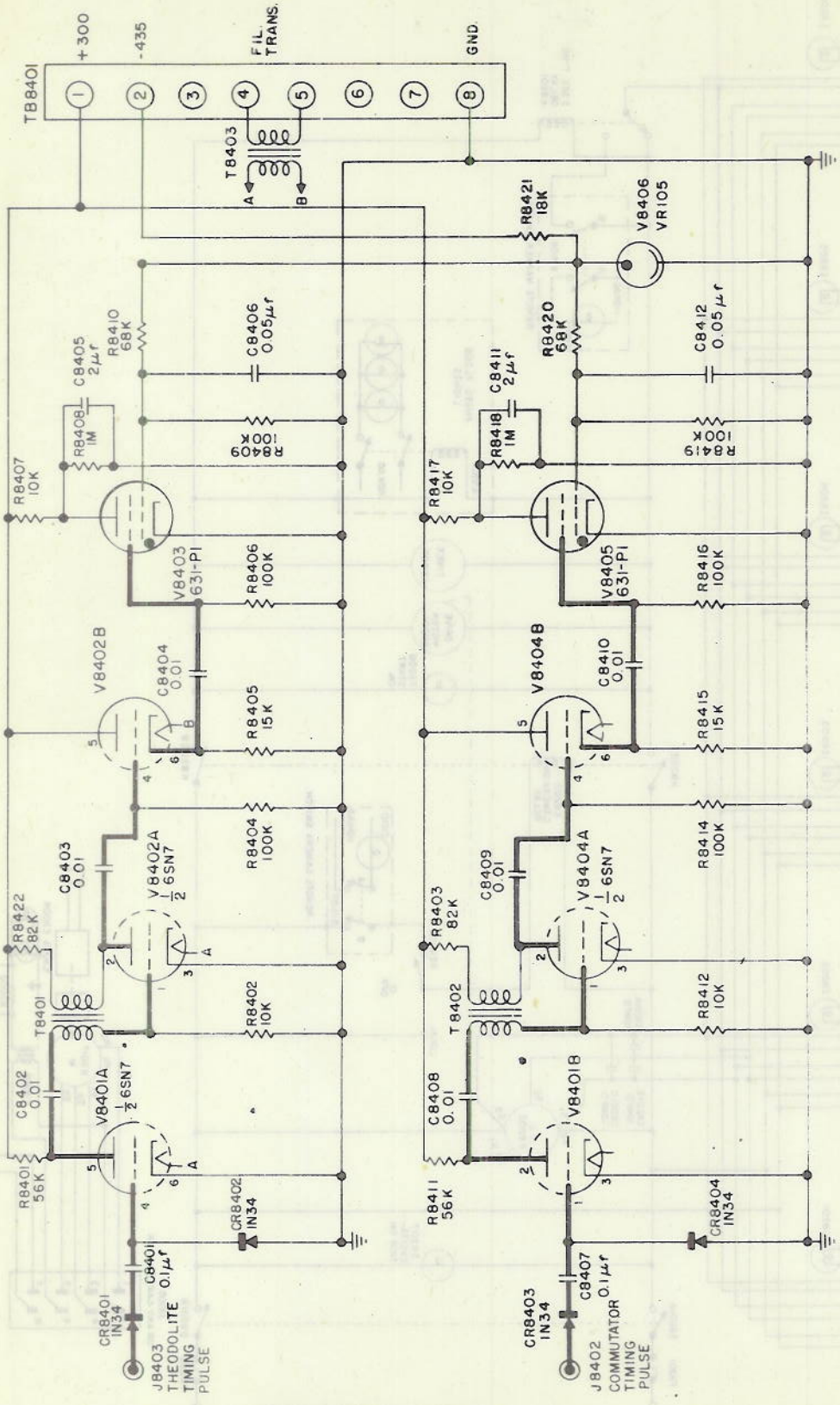

Figure 7-74. Time Comparator Unit - Schematic Diagram

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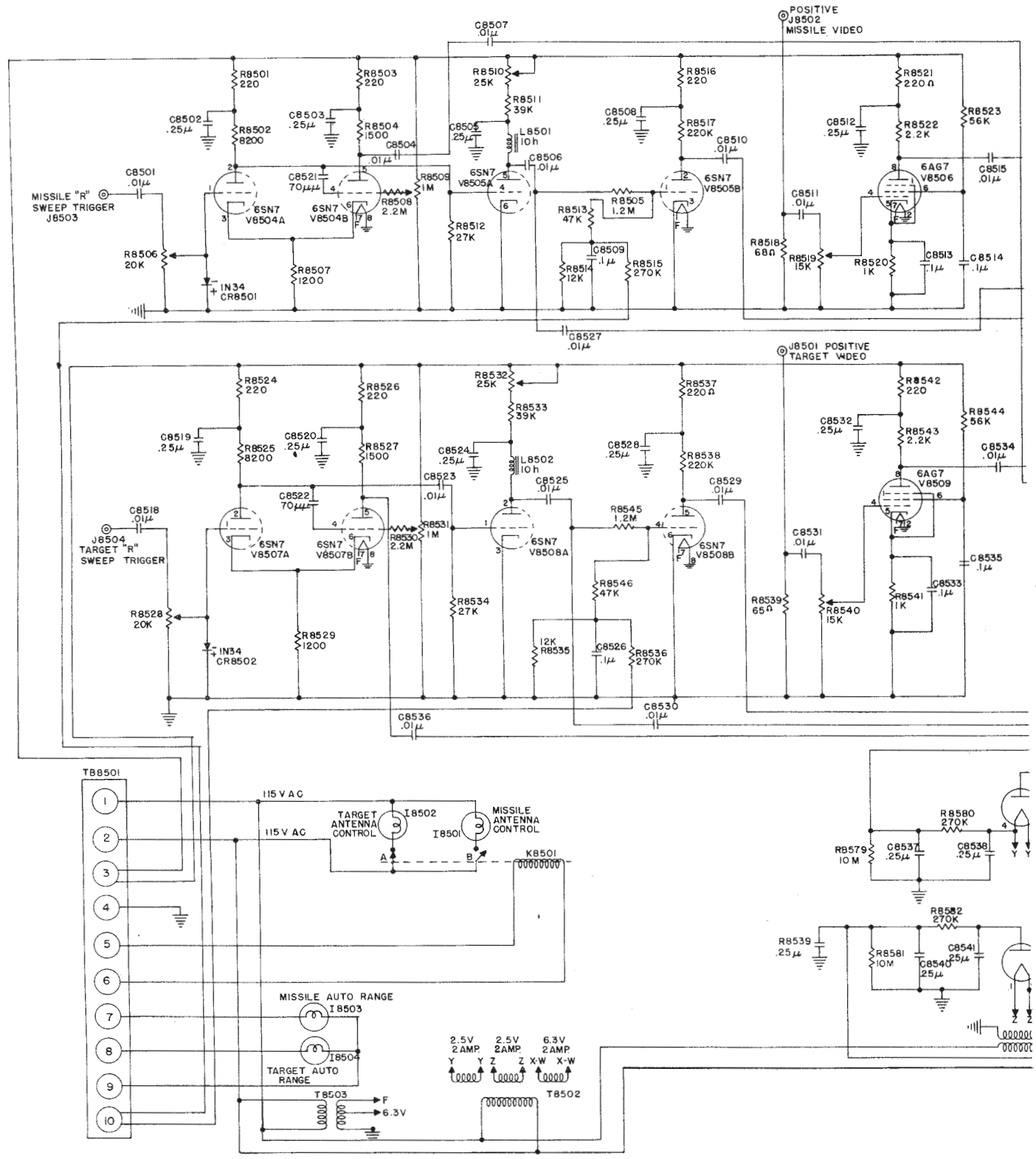

Figure 7-75. Remote Range Indicator Unit - Schematic Diagram

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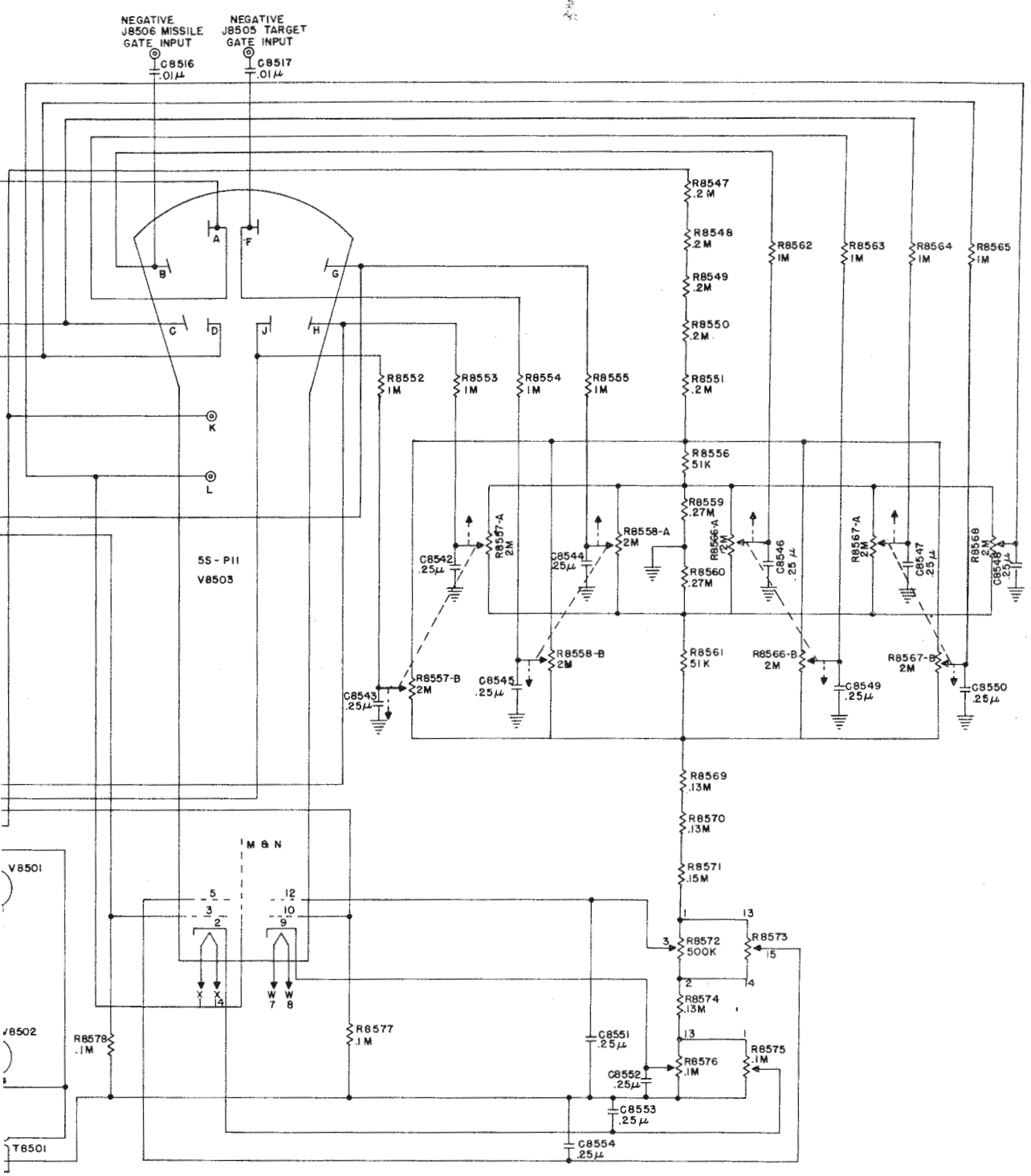

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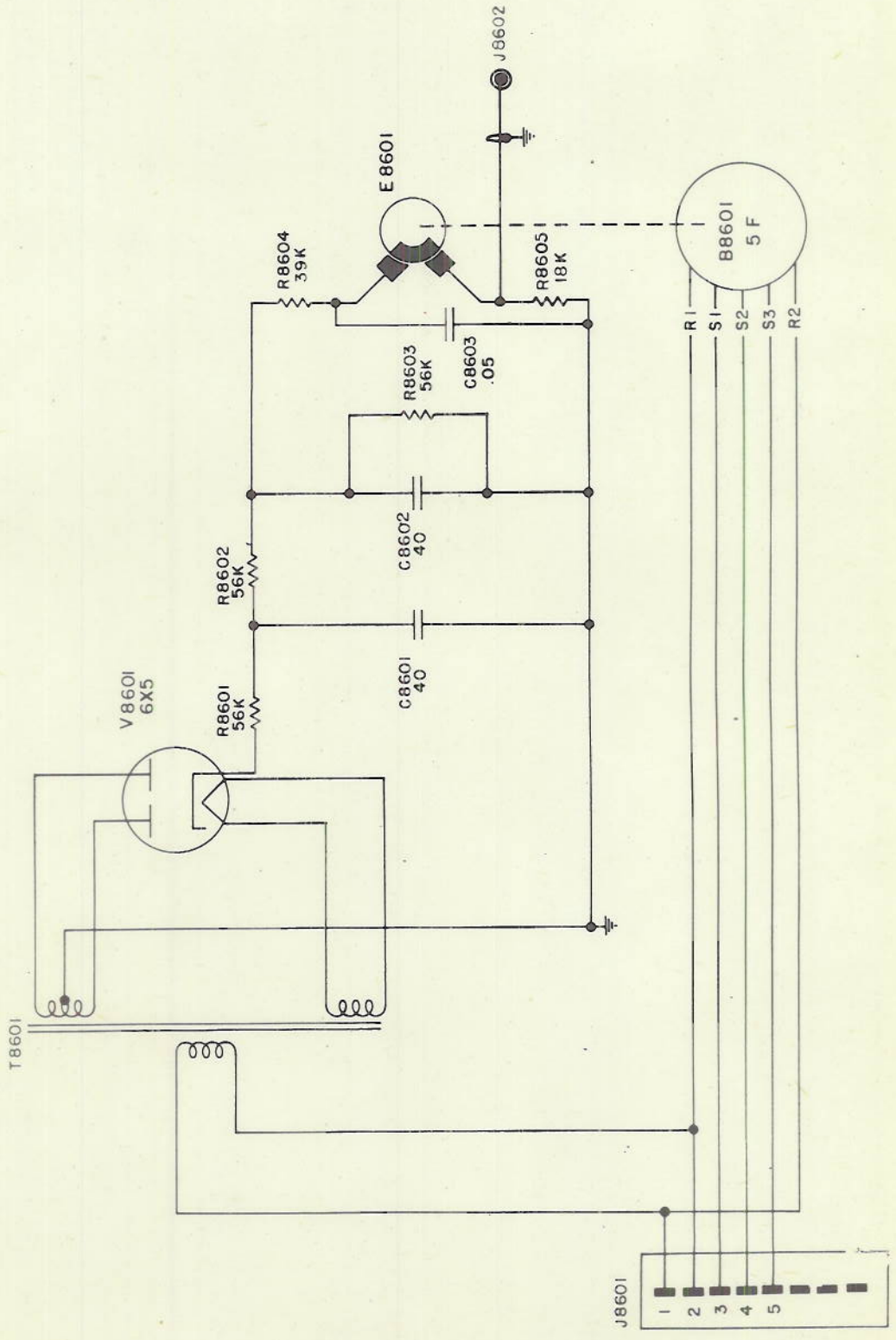

Figure 7-76. Commutator Unit - Schematic Diagram

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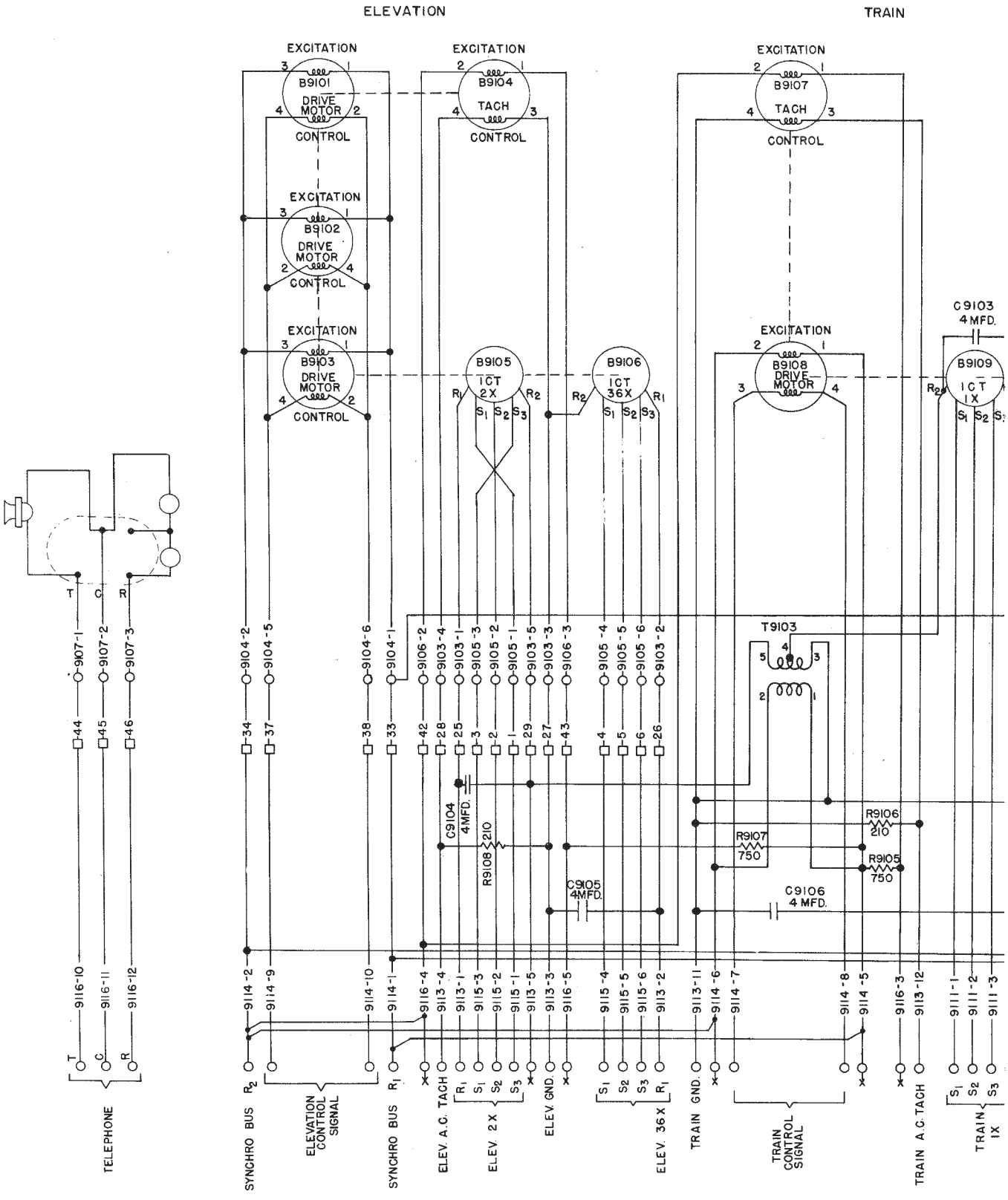

Figure 7-77. Telescope Unit - Schematic Diagram

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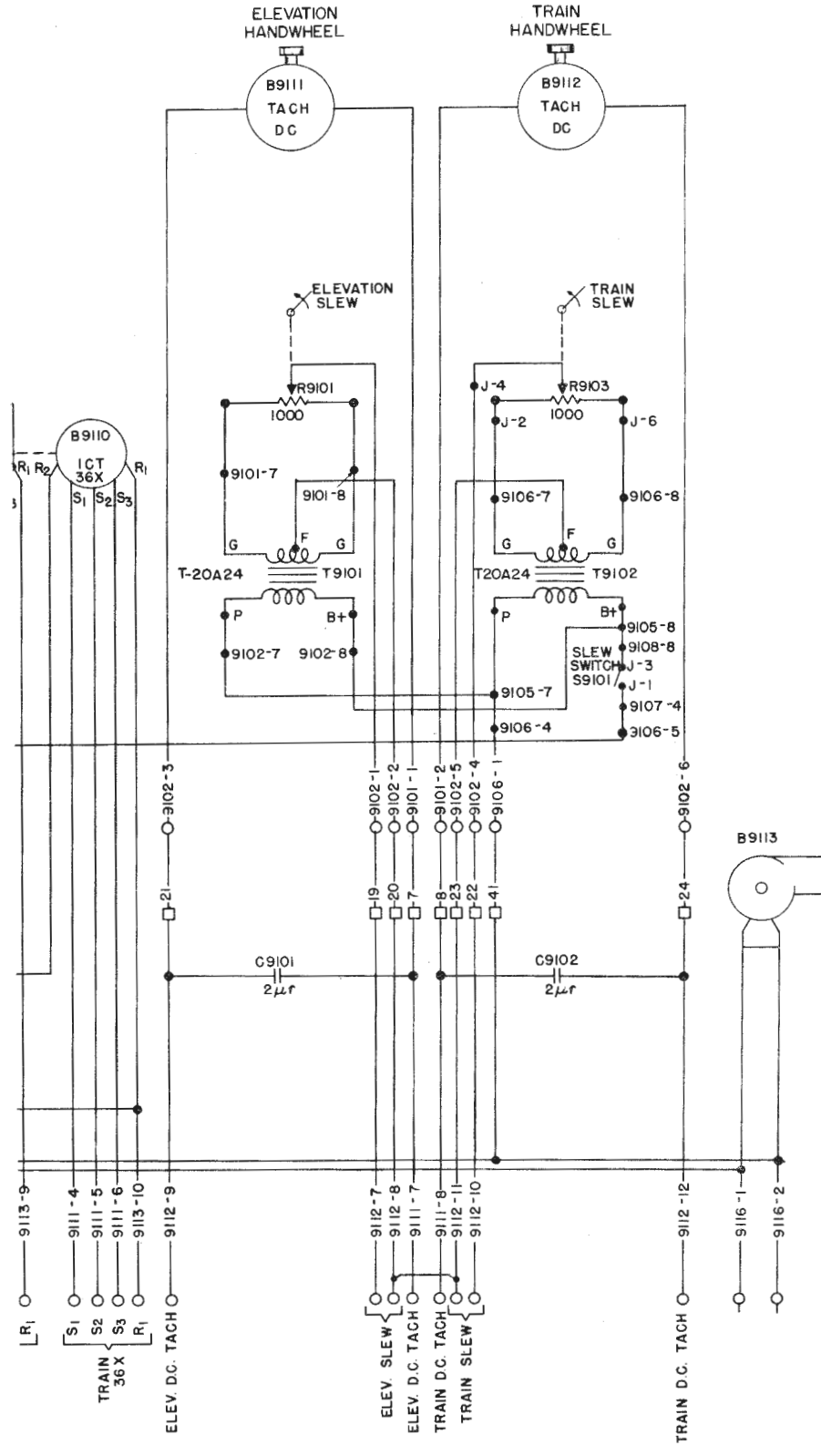
ELEVATION HANDWHEEL
B9111 TACH DC
TRAIN HANDWHEEL
B9112 TACH DC
ELEVATION SLEW
TRAIN SLEW
R9101
1000
R9103
1000
B9110 ICT 36X
9101-7
9101-8
9106-7
9106-8
T-20A24
T9101
T20A24
T9102
9102-7
9102-8
9105-7
9105-8
9108-8
9107-4
9106-4
9106-5
SLEW SWITCH S9101
C9101
2μf
C9102
2μf
B9113
9113-9
9111-4
9111-5
9111-6
9113-10
9112-9
9102-3
9102-1
9102-2
9101-1
9101-2
9102-5
9102-4
9106-1
9102-6
9112-7
9112-8
9111-7
9111-8
9112-11
9112-10
9112-12
9116-1
9116-2
TRAIN 36X
ELEV. D.C. TACH
ELEV. SLEW
TRAIN D.C. TACH
TRAIN SLEW
TRAIN D.C. TACH

DECLASSIFIED

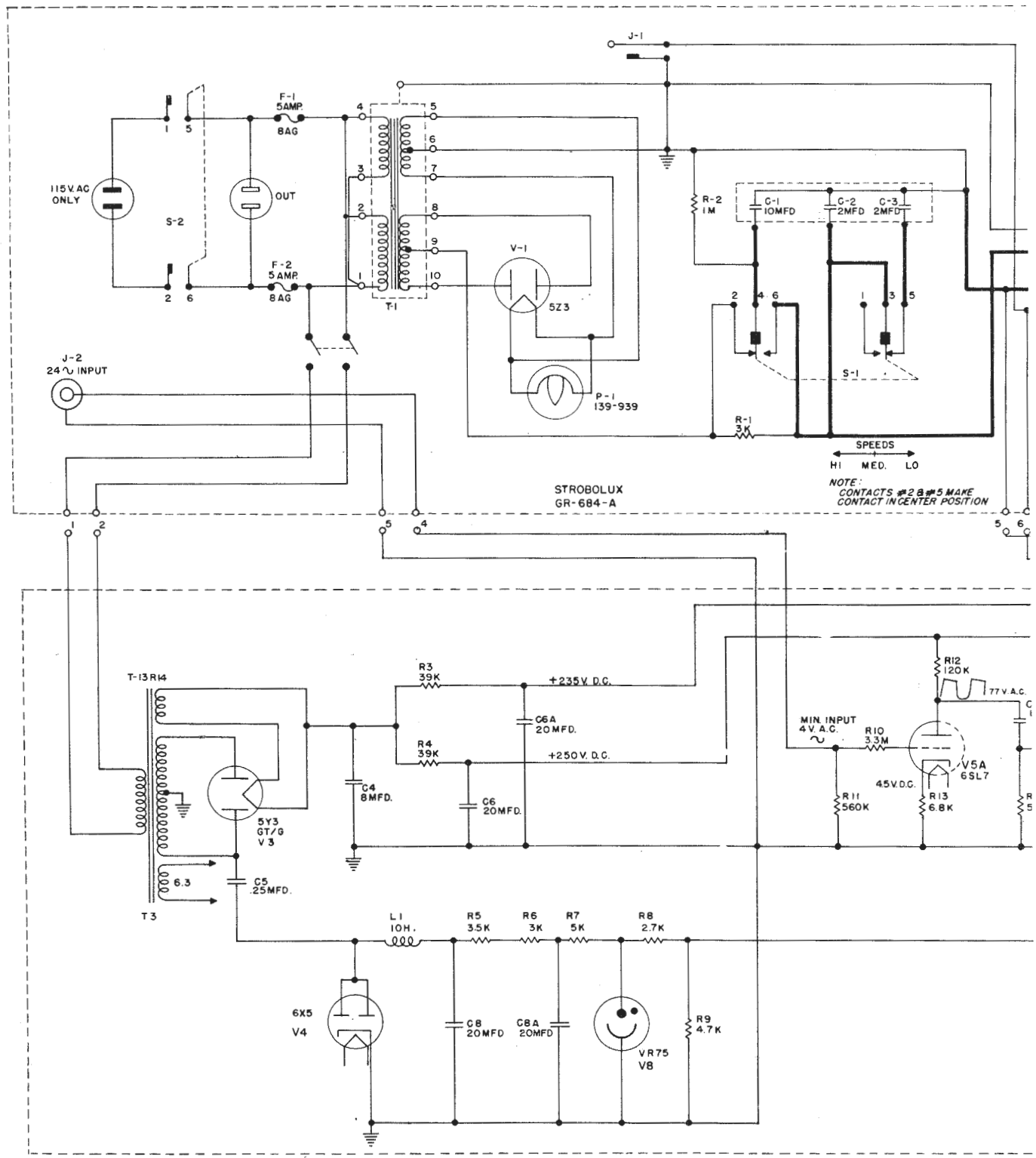

Figure 7-78. Nutator Phasing Unit - Schematic Diagram

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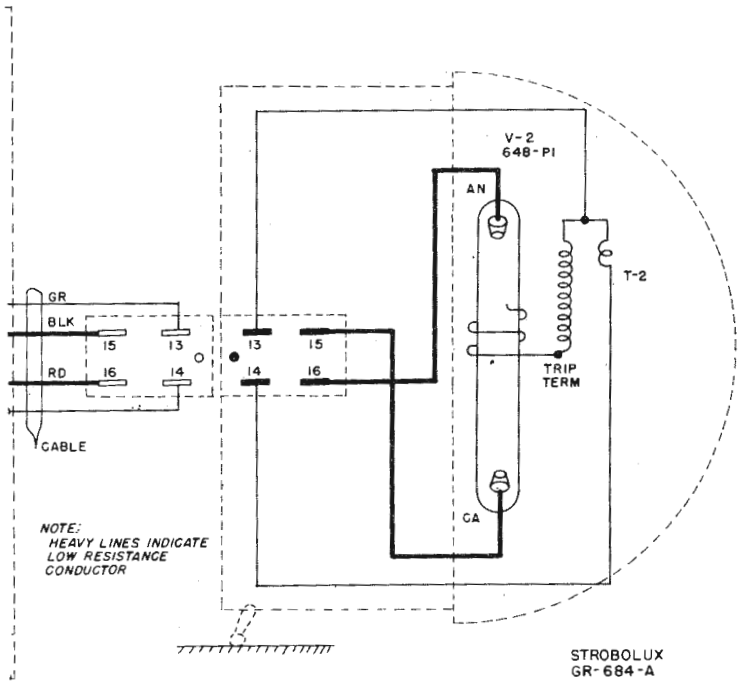
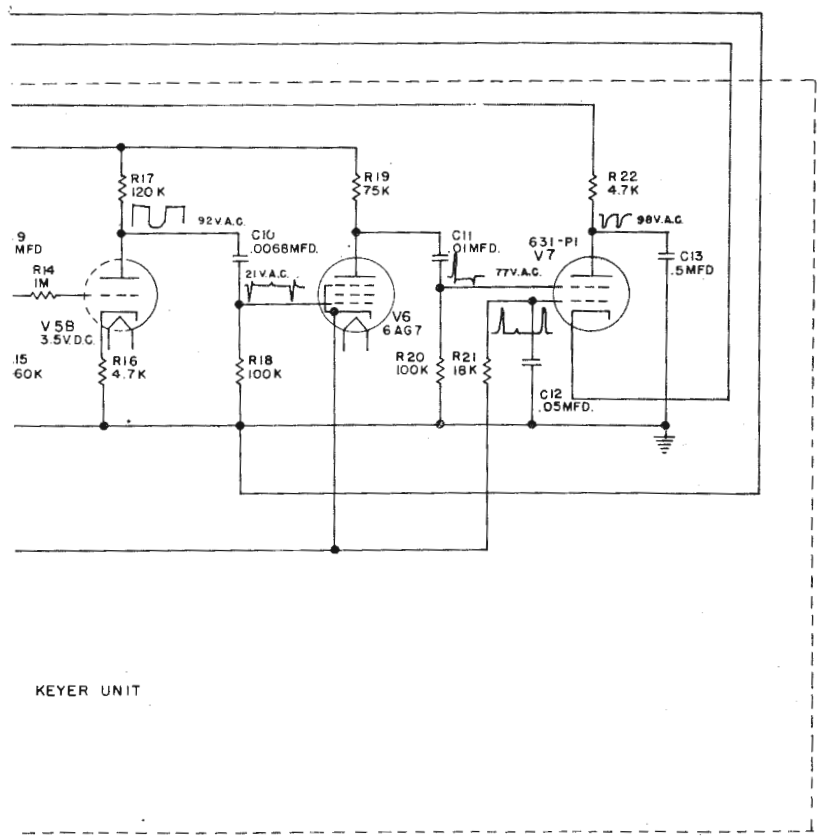


STROBOLUX
GR-684-A



KEYER UNIT

DECLASSIFIED

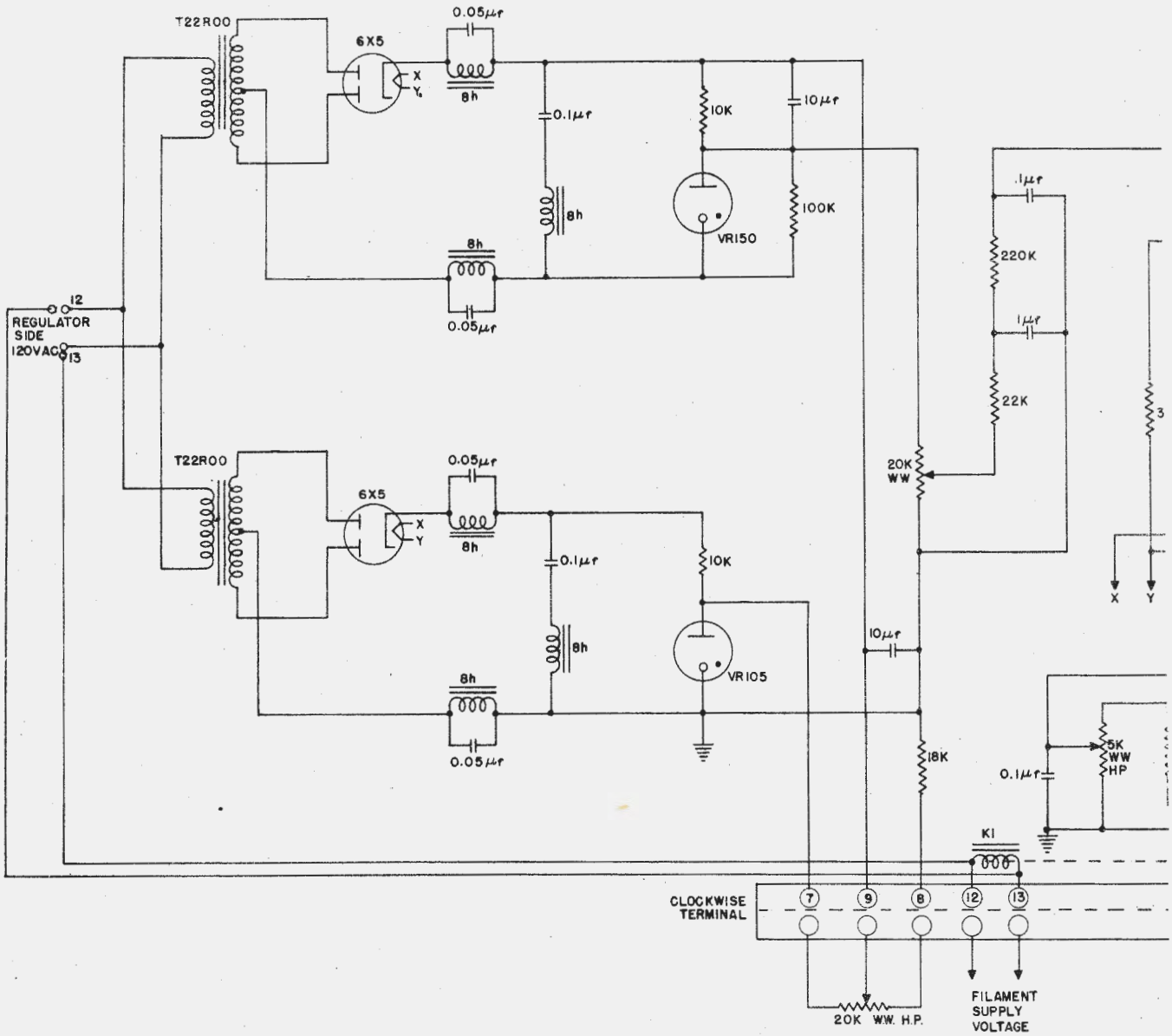
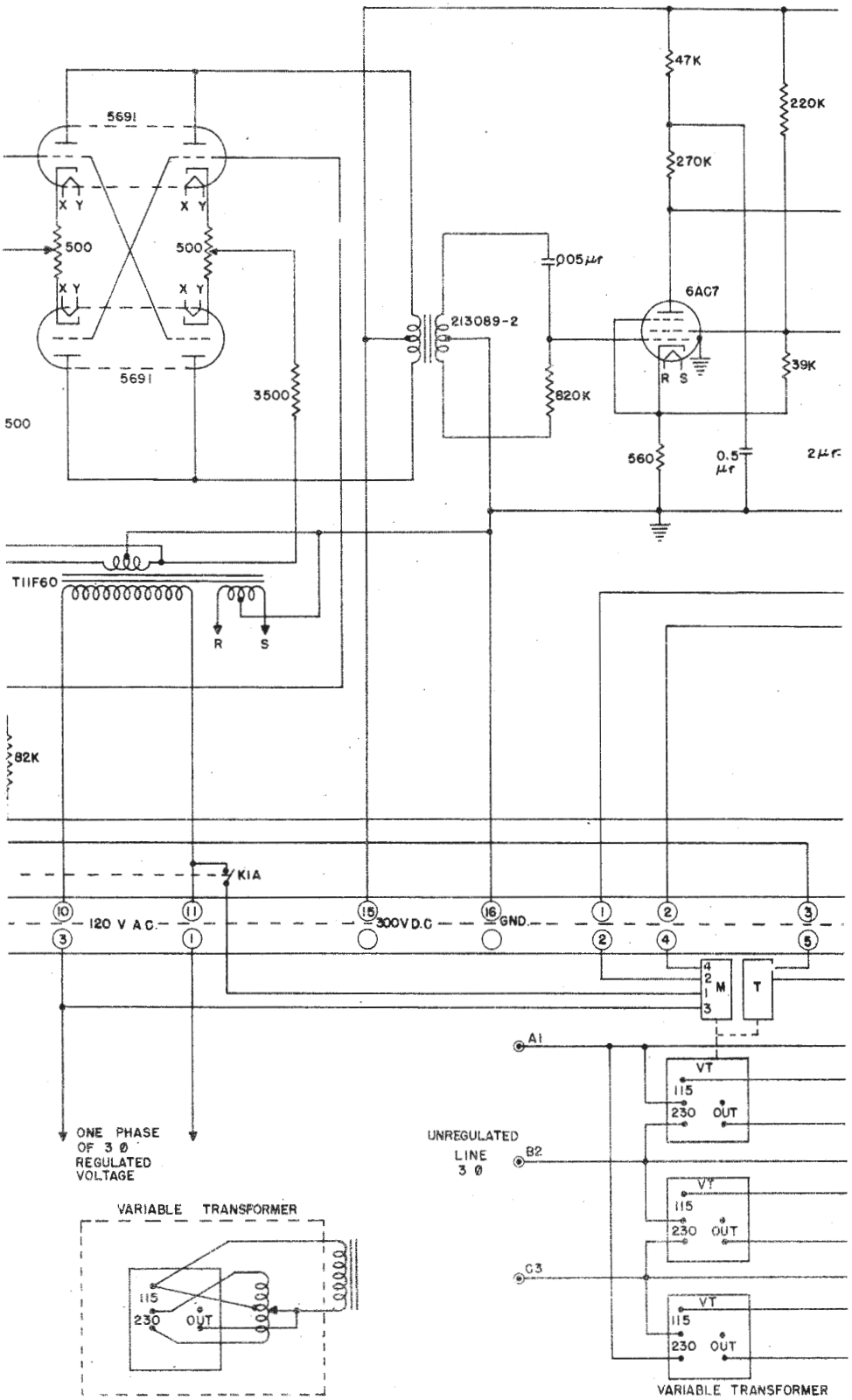


Figure 7-79. A-c Voltage Regulator - Schematic Diagram



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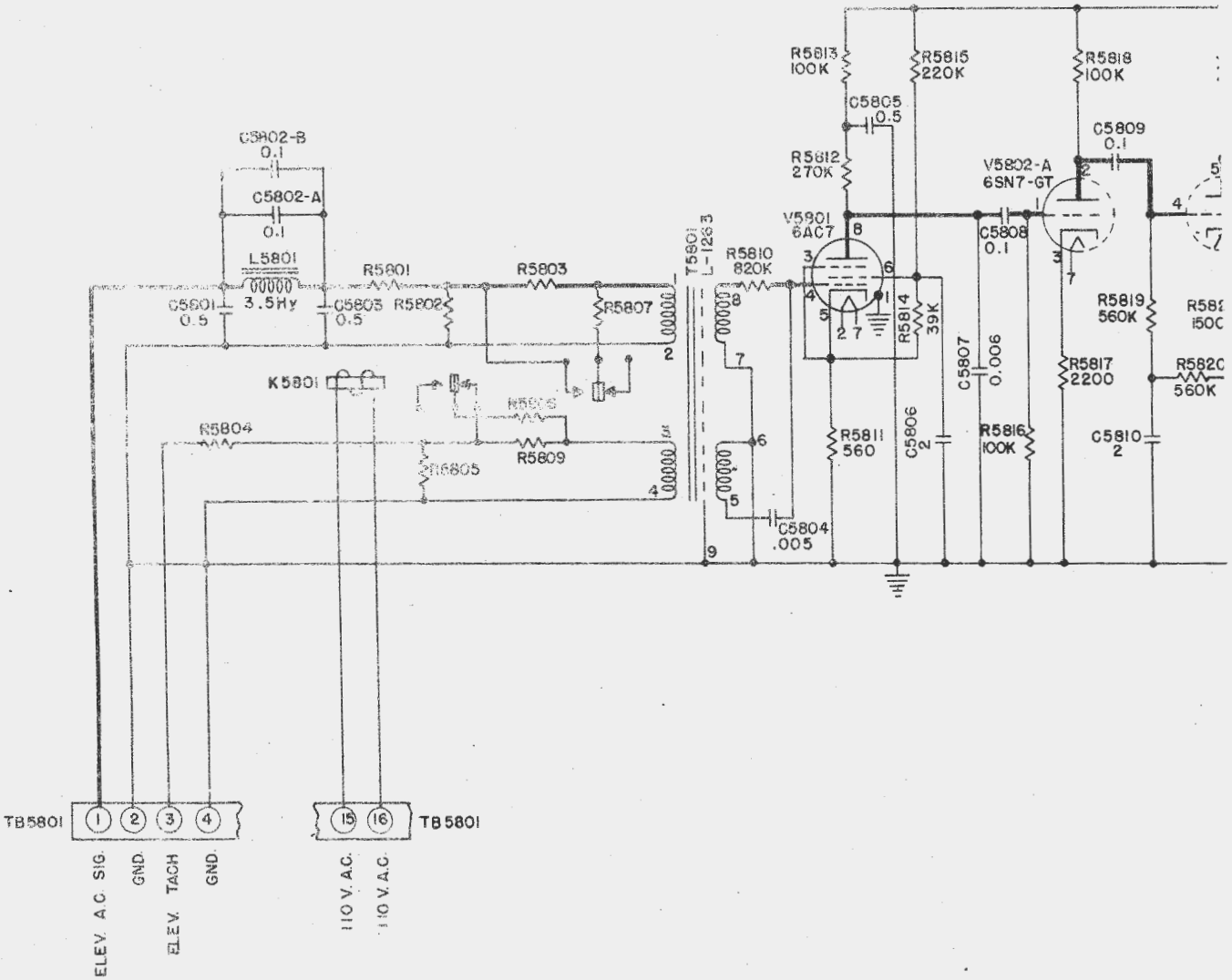
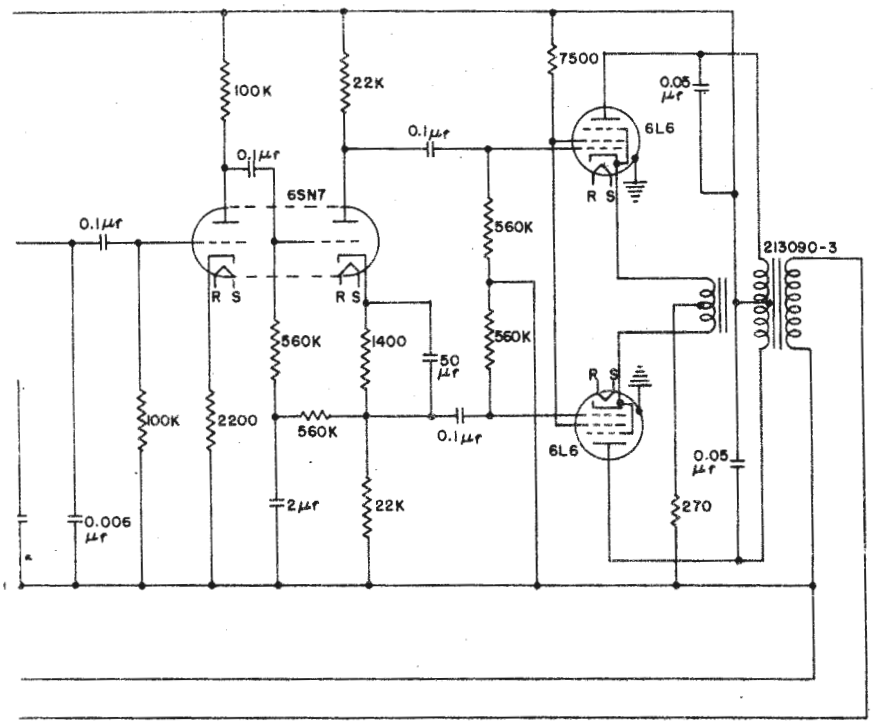
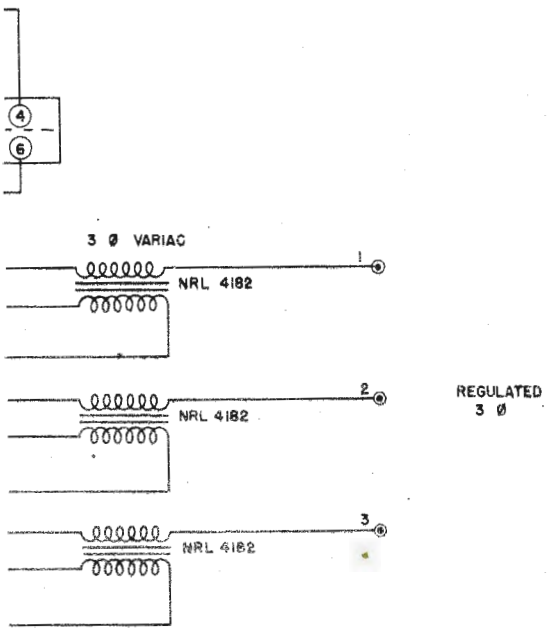
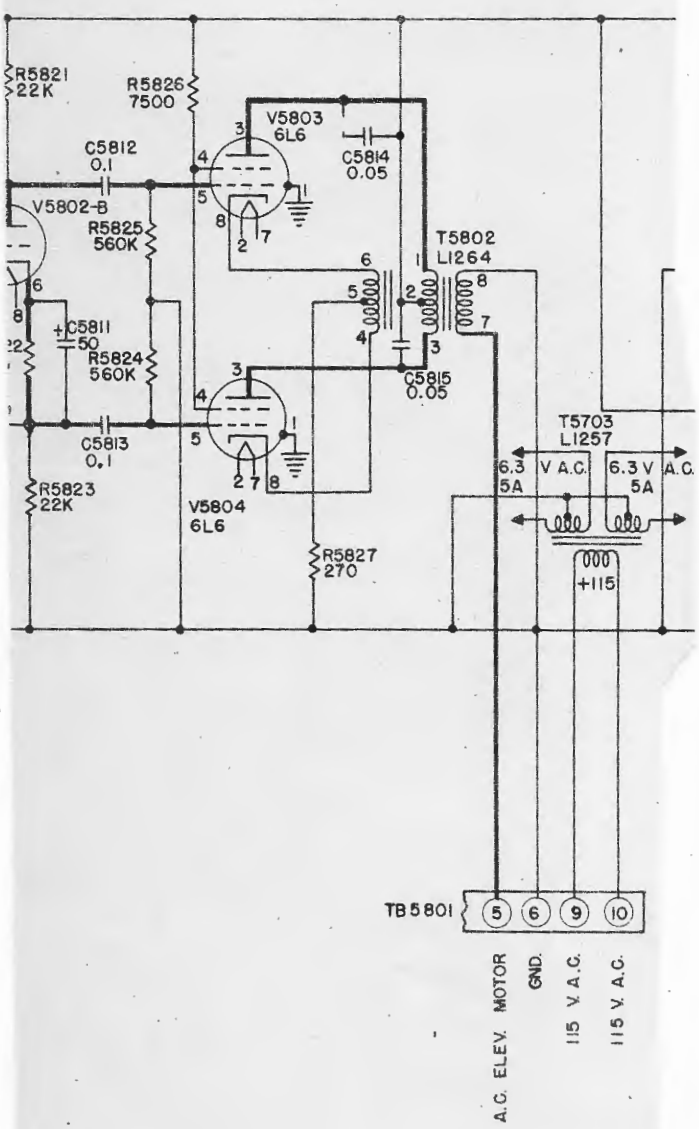


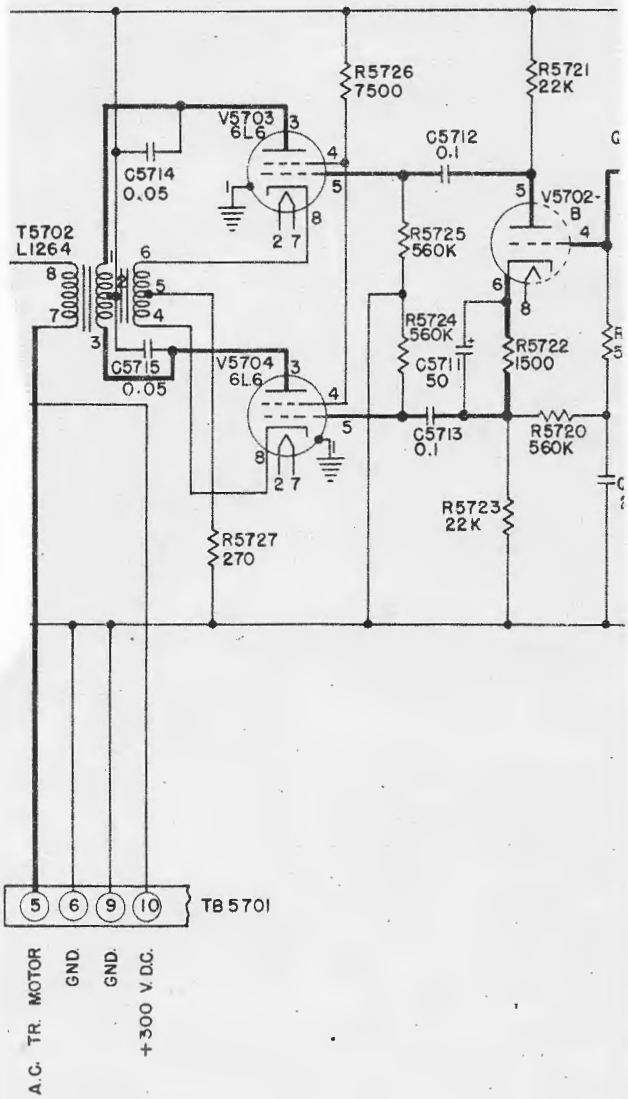
Figure 7-80. Train and Elevation Servo Amplifier for Simulated Target Programmer


100K
22K
7500
0.05 μf
0.1μf
6L6
0.1μf
6SN7
R S
560K
213090-3
0.1μf
R S
R S
560K
1400
50 μf
560K
R S
100K
2200
560K
0.1μf
6L6
0.05 μf
2μf
22K
270
0.006 μf


4
6
3 Ø VARIAC
1
NRL 4182
2
NRL 4182
REGULATED
3 Ø
3
NRL 4182


R5821
22K
R5826
7500
V5803
6L6
C5812
0.1
C5814
0.05
V5802-B
R5825
560K
T5802
L1264
+C5811
50
R5824
560K
C5815
0.05
T5703
L1257
6.3 V A.C.
5A
6.3 V A.C.
5A
C5813
0.1
R5823
22K
V5804
6L6
R5827
270
+115
TB5801
5
6
9
10
A.C. ELEV. MOTOR
GND.
115 V. A.C.
115 V. A.C.

DEC


R5726
7500
R5721
22K
V5703
6L6
C5712
0.1
C5714
0.05
V5702-
B
T5702
L1264
R5725
560K
R5724
560K
C5711
50
R5722
1500
C5715
0.05
V5704
6L6
C5713
0.1
R5720
560K
R5723
22K
R5727
270
5
6
9
10
TB 5701
A.C. TR. MOTOR
GND.
GND.
+300 V.D.C.

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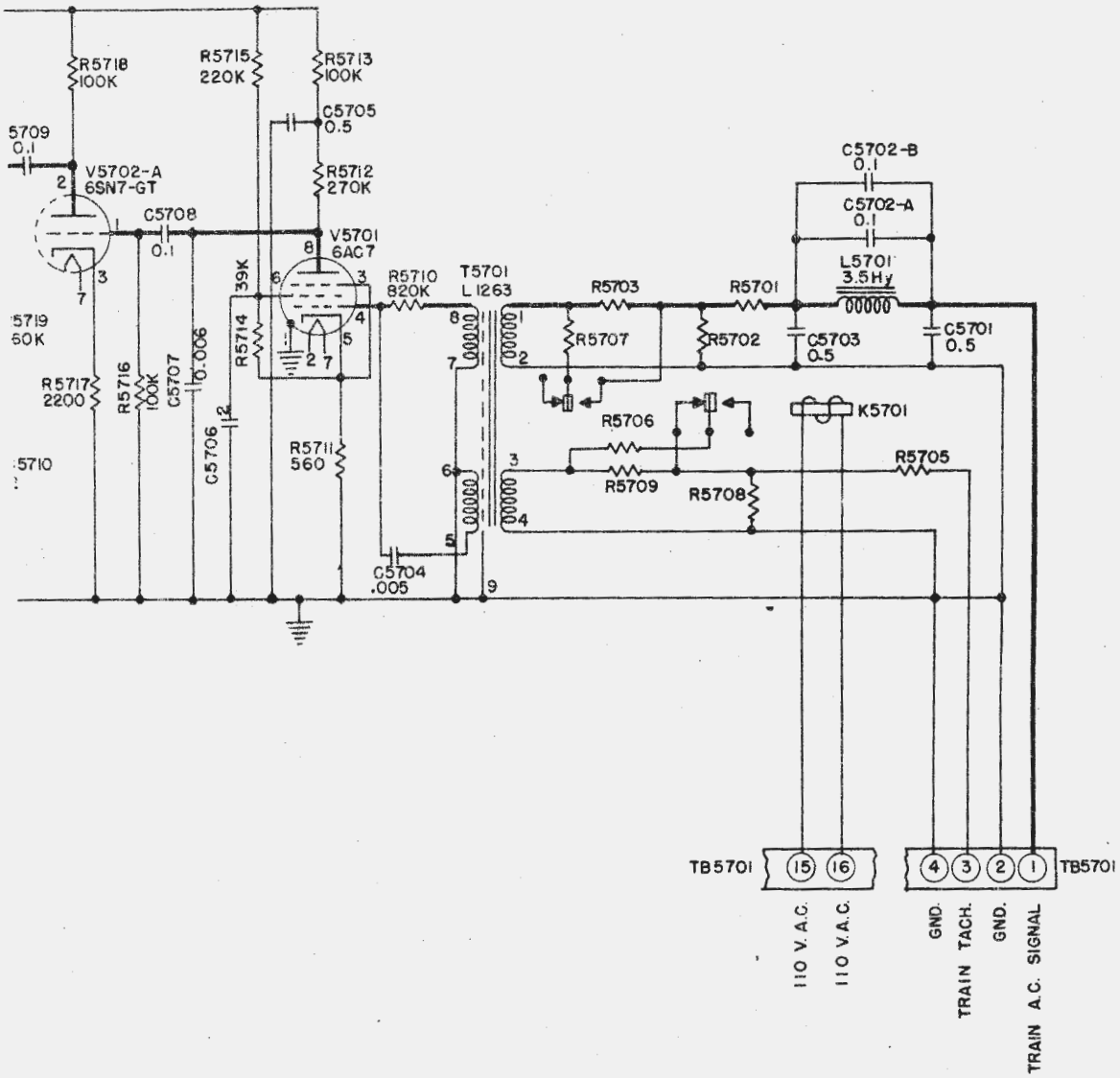
R5718
100K
R5715
220K
R5713
100K
C5705
0.5
5709
0.1
V5702-A
6SN7-GT
R5712
270K
C5708
0.1
V5701
6AC7
39K
R5710
820K
T5701
L1263
R5703
R5701
C5702-B
0.1
C5702-A
0.1
L5701
3.5Hy
R5707
R5702
C5703
0.5
C5701
0.5
R5714
R5717
2200
R5716
100K
C5707
0.006
C5706
.2
R5711
560
R5706
K5701
R5709
R5708
R5705
C5704
.005
TB5701
15
16
4
3
2
1
TB5701
110 V.A.C.
110 V.A.C.
GND.
TRAIN TACH.
GND.
TRAIN A.C. SIGNAL

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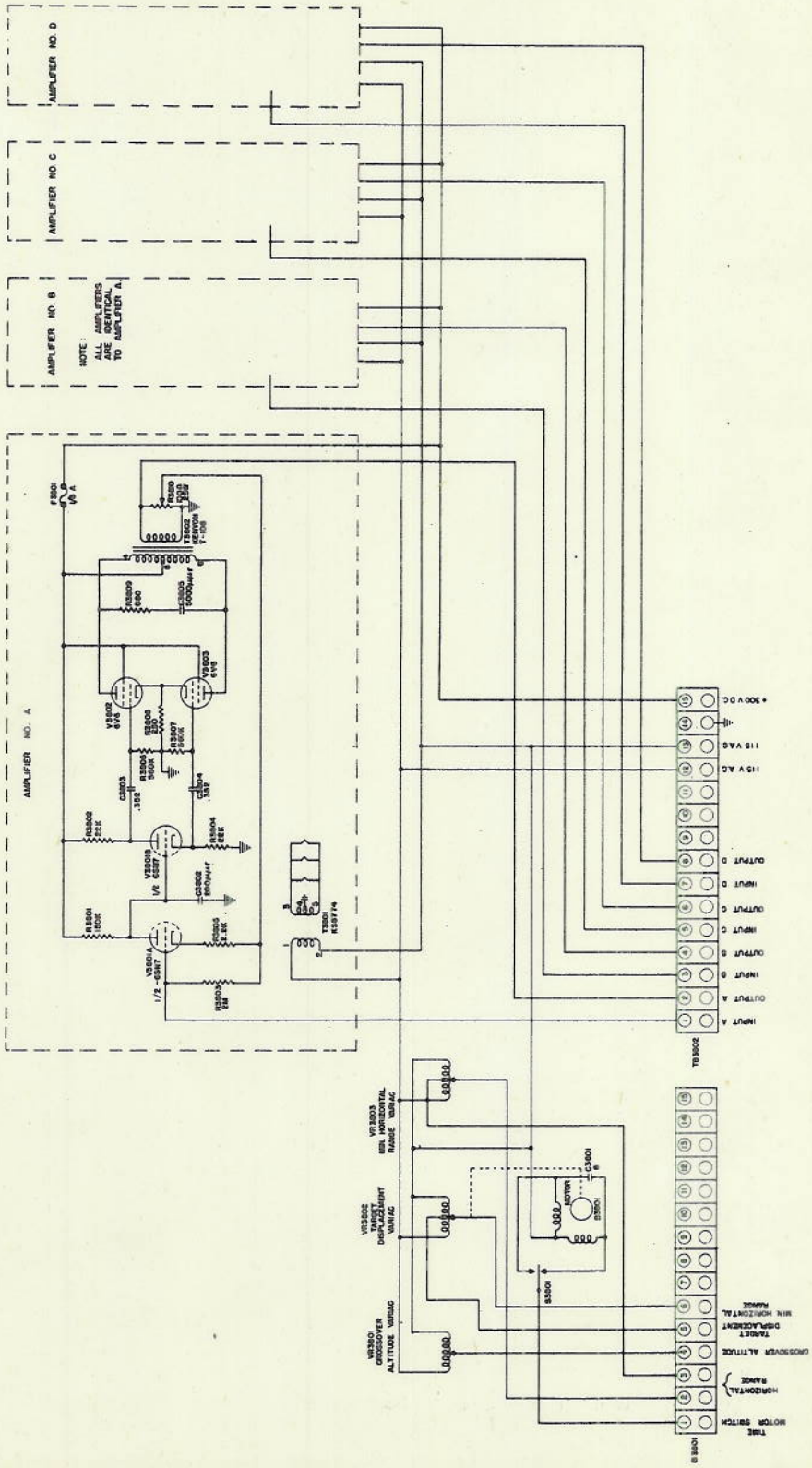

Figure 7-81. Programmer Control Unit - Schematic Diagram

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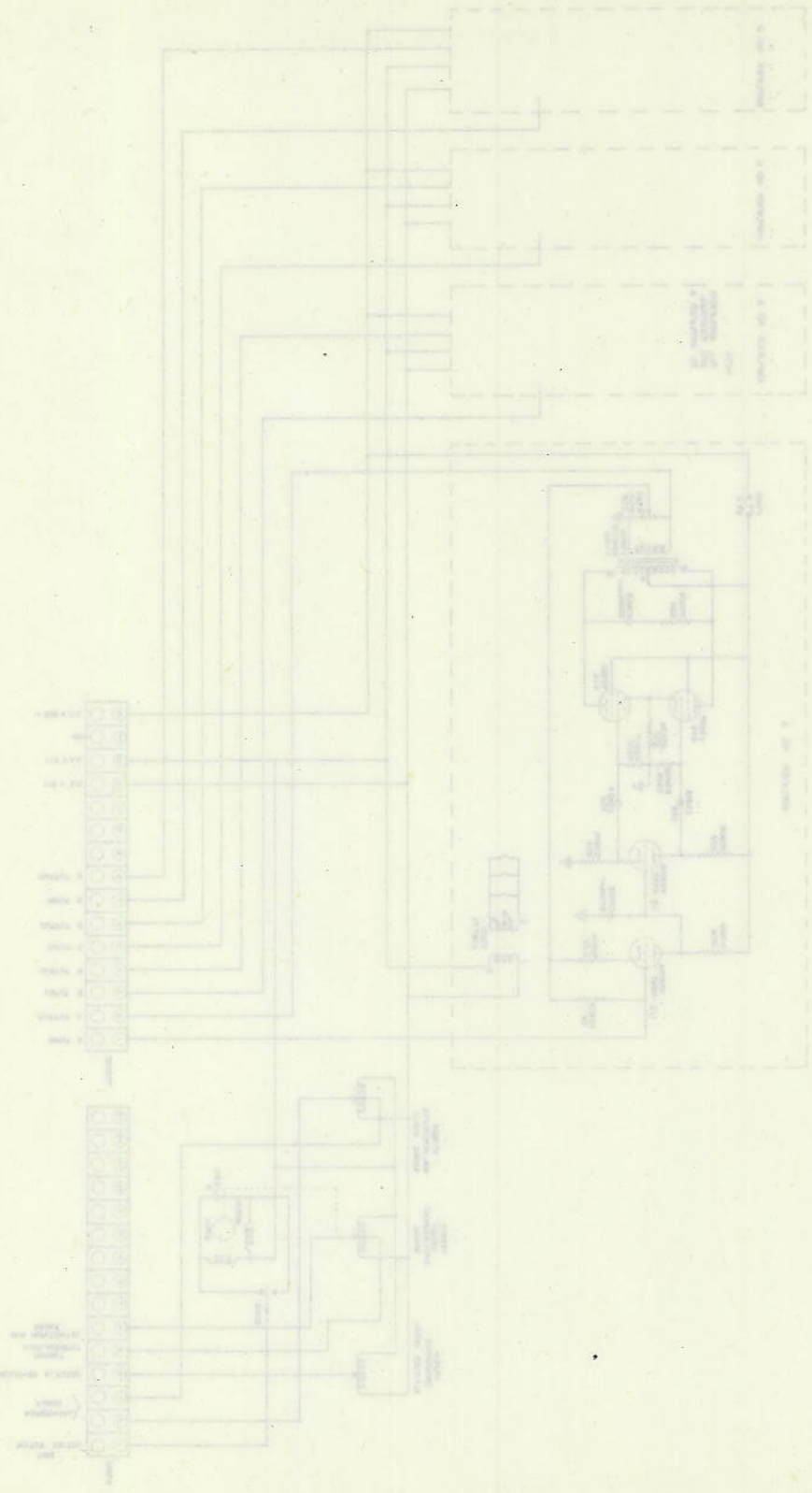

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SECTION VIII

PARTS LIST AND RELATED DATA

This section contains the following tables:

Table 8-1. List of Manufacturers
Table 8-2. Standard Designation for Parts and Spare Parts
Table 8-3. Table of Replaceable Parts

Photographs of each of the major units are included with table 8-3 to facilitate location and identification of parts. The parts listed in table 8-3 are only those which were added, or altered, in the redesign of the original SP-1M radar. The list consequently should be used in conjunction with Navships 900,560.4, "Parts and Spare Parts List for Navy Model SP-1M Radar Equipment." For further information on the use of the tables and for the stowage location of spare parts refer to section VI of this volume.

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TABLE 8-1

LIST OF MANUFACTURERS

Code No.	Name	Address	Code No.	Name	Address
1	Radio Corp. of America	Camden, N.J.	37	Ward Leonard Elec. Co.	Mt. Vernon, N.Y.
1a	Radio Corp. of America	Harrison, N.J.	38	Westinghouse Elec. and Mfg. Co.	Philadelphia, Pa.
2	Aerovox Corp.	New Bedford, Mass.	39	Weston Electric Instrument Co.	Newark, N.J.
3	Alden Products Co.	Brockton, Mass.	40	Wirt Co.	Philadelphia, Pa.
4	Allen-Bradley Co.	Milwaukee, Wis.	49	Air-Maze Corp.	Cleveland, Ohio
5	Standard Transformer Co.	Chicago, Ill.	50	Allied Control Co., Inc.	New York, N.Y.
6	American Phenolic Corp.	Chicago, Ill.	58	American Blower Corp.	Detroit, Mich.
7	Arrow-Hart and Hegeman Electric Co.	Hartford, Conn.	60a	American Brass Co.	Waterbury, Conn.
10	General Electric Co.	Pittsfield, Mass.	63	American Lava Corp.	Chattanooga, Tenn.
11	Cinch Mfg. Corp.	Chicago, Ill.	65	Am. Radio Hdwre Co.	New York, N.Y.
12	Clare and Co., C.P.	Chicago, Ill.	76	Astatic Corp., The	Conneaut, Ohio
13	Cornell Dubilier Electric Co.	S. Plainfield, N.J.	79	Automatic Elec. Co.	Mankato, Minn.
14	Cutler-Hammer, Inc.	Milwaukee, Wis.	80	Automatic Winding Co.	Harrison, N.J.
15	Drake Mfg. Co.	Chicago, Ill.	86	Electric Auto-Lite Co.	Toledo, Ohio
16	Erie Resistor Corp.	Erie, Pa.	87	Electronic Transformer Co.	New York, N.Y.
18	General Electric Co.	Schenectady, N.Y.	97	Biddle Co., James G.	Philadelphia, Pa.
21	International Resistance Corp.	Philadelphia, Pa.	99	Bodine Electric Co.	Chicago, Ill.
22	Isolantite, Inc.	Belleville, N.Y.	106	Boston Gear Works, Inc.	N. Quincy, Mass.
23	Johnson, Co., E.F.	Waseca, Minn.	111	The Bristol Co.	Waterbury, Conn.
25	Leach Relay Co.	Los Angeles, Calif.	112	Bud Radio Inc.	Cleveland, Ohio
26	Littelfuse Inc.	Chicago, Ill.	121	Bussmann Mfg. Co.	St. Louis, Mo.
27	Lord Mfg. Co.	Erie, Pa.	129	Canfield Rubber Co.	Bridgeport, Conn.
28	Mallory and Co., Inc.	Indianpolis, Ind.	133	Carborundom Co. (Glovar Div)	Niagara Falls, N.Y.
29	Micamold Radio Corp.	Brooklyn, N.Y.	141	Ceramic Specialties Co.	E. Liverpool, Ohio
30	Minneapolis-Honeywell Regulator Co.	Minneapolis, Minn.	145	Chase Brass and Copper Co.	Philadelphia, Pa.
31	Oak Mfg. Co.	Chicago, Ill.	149	Chicago Tel. and Supply Co.	Elkhart, Ind.
32	Ohmite Mfg. Co.	Chicago, Ill.	153	Chirpler Corp (Amplex Div)	Detroit, Mich.
34	Solar Mfg. Corp.	North Bergen, N.J.	155	Clarostat Mfg. Co., Inc.	Brooklyn, N.Y.

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TABLE 8-1

LIST OF MANUFACTURERS (Continued)

Code No.	Name	Address	Code No.	Name	Address
160	Cole-Hersee Co.	Boston, Mass.	261	Fafnir Bearing Co.	New Britain, Conn.
171	Continental Carbon Co.	New York, N.Y.	265	Fast & Co., John E.	Chicago, Ill.
172	Duff-Norton Manufacturing Co., The	Pittsburgh, Pa.	268	Fed. Tel. and Radio Corp.	Newark, N.J.
173	Continental Electric Co., Inc.	Newark, N.J.	276	A.W. Franklin and Co.	New York, N.Y.
177	Corbin Screw Div. of American Hdwre Corp.	New Britain, Conn.	281	Federal Electric Prod. Co.	Newark, N.J.
179	Corning Glass Works	Corning, N.Y.	282	Federal Bearing Co.	W. Poughkeepsie, N.Y.
182	Crescent Tool and Die Co.	Lincoln City, Mich.	283	Freed Transformer Co.	New York, N.Y.
195	Culver Stearns Mfg. Co.	Worcester, Mass.	285	Ford Inst. Co.	L.I. City, N.Y.
197	Cramer, R.W. Co., Inc.	Centerbrook, Conn.	288	Forged Steel Product Co.	Newport, Pa.
201	Daven Co.	Newark, N.J.	289	Fruehauf Trailer Co.	Detroit, Mich.
202	Davison Chemical Corp.	Baltimore, Md.	290	Forshay, John M.	New York, N.Y.
203	Dejur-Amsco Corp.	L.I. City, N.Y.	292	Garlock Packing Co.	Palmyra, N.Y.
208	Dial Light Co. of Am. Inc.	New York, N.Y.	293	Gates Rubber Co.	Denver, Colo.
210	Drake Mfg. Co.	Chicago, Ill.	298	Gen.Elec.Vapor Lamp Mfg.Co.	Hoboken, N.J.
218	Dzuz Fastner Co., Inc.	Babylon, N.Y.	301a	Gen.Motors Corp.(Packard Elec.Div.)	Warren, Ohio
220	Duro Metal Products Co.	Chicago, Ill.	304	General Radio Co.	Cambridge, Mass.
221	Dow Corning Corp.	Midland, Mich.	306	Gen.Transformer Corp.	Chicago, Ill.
224	Davies Maulding Co. H.	Chicago, Ill.	310	G-M Laboratories, Inc.	Chicago, Ill.
225	Daniels, C.R., Inc.	New York, N.Y.	320	Greenfield Tap and Die Co.	Greenfield, Conn.
226	Dietzgen, Eugene Co.	Chicago, Ill.	326	Great Eastern Brass Works	L.I. City, N.Y.
227	Eaton Mfg. Co.	Cleveland, Ohio	329	Gothard Mfg. Co.	Springfield, Ill.
230	Elby Co., H.H.	Philadelphia, Pa.	330a	Haines, William S. & Co.	Boston, Mass.
231	Eclipse Mach. Div. (Bendix Corp)	Elmira, N.Y.	332	Hammacher-Schlemmer and Co.	New York, N.Y.
245	Electro Motive Mfg. Co.	Willimantic, Conn.	351	Hubell, Inc. Harvey	Bridgeport, Conn.
252	Euclid Lamp Factory No. 2	Cleveland, Ohio	354	Hytron Radio and Electronics Corp.	Salem, Mass.
255	Edwards and Co.	Philadelphia, Pa.	356	Haudes Spring Co.	Hartford, Conn.
258	Elroy Metal Products	Shelton, Conn.	370	International Tel. & Radio Mfg. Corp.	E. Newark, N.J.

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TABLE 8-1

LIST OF MANUFACTURERS (Continued)

Code No.	Name	Address
372	Insulating Fabricators, Inc.	New York, N.Y.
373	Industrial Condenser Corp.	Chicago, Ill.
374	Industrial Supply Service	Bridgeport, Conn.
377	International Diesel Elec. Co. Inc.	L.I. City, N.Y.
378	Ideal Industries Inc.	Sycamore, Ill.
380	Janette Mfg. Co.	Chicago, Ill.
386	Jones Co., Howard B.	Chicago, Ill.
388	John Hancock	Bridgeport, Conn.
389	John Larrabee Co.	Amsterdam, N.Y.
397	Kellogg Switchboard and Supply Co.	Chicago, Ill.
398	Ken-Rad.Tube and Lamp Corp.	Owensboro, Ky.
402	Kurz-Kasch, Inc.	Dayton, Ohio
406	K-D Lamp Co., The	Cincinnati, Ohio
412	Lectrohm, Inc.	Chicago, Ill.
422	Louthan Mfg. Co.	E. Liverpool, Ohio
431	L and B Machine Co.	Bridgeport, Conn.
433	Noma Electric Corp.	New York City, N.Y.
435	Lindquist Hardware Co.	Bridgeport, Conn.
436	Lyon Metal Products, Inc.	Aurora, Ill.
446	Marion Elec. Inst.Co.	Manchester, N.H.
450	McGill Mfg. Co.	Valapraiso, Ind.
457	Micro Switch Corp.	Freeport, Ill.
459	Millen Mfg.Co.Inc.,James	Malden, Mass.
468	Messman,Inc.,Donald P.	Chicago, Ill.
471	Muter Co., The	Chicago, Ill.
477	Mendelson Speed Gun Co.	Bloomfield, N.J.
483	National Co., Inc.	Malden, Mass.
489	National Union Radio Corp.	Newark, N.J.
485	Nat'l Elec.Mach. Shops	Washington, D.C.
490	New Departure Div. of GM	Bristol, Conn.
492	Norma-Hoffman Bearing Co.	Stamford, Conn.
504	Osborne Mfg. Co.	Detroit, Mich.
507	Ostby and Barton	Providence, R.I.
508	Armond Tool Co.	New York, N.Y.
519	Parker-Kalon Corp.	New York, N.Y.
536	Precision Apparatus Co.	Elmhurst, L.I., N.Y.
539	Premier Metal Etching Co.	L.I. City, N.Y.
540	Price Electric Corp.	Fredrick, Md.
556	Radex Corp.	Chicago, Ill.
565	Raytheon Mfg. Co.	Waltham, Mass.
579	C.B. Rodgers	Danbury, Conn.
582	Rochester Mfg. Co.	Rochester, N.Y.
583	Rieff and Nestor Co.	Lykens, Pa.
584	Randall Graphite Prod.Corp.	Chicago, Ill.
591	Sangamo Electric Co.	Springfield, Ill.
597	Selectar Industries Inc.	New York, N.Y.
599	Shakeproof Inc.	Chicago, Ill.
602	Sickeles Co., F. W. (Factory) Chicopee, Mass.	Springfield, Mass.
607	Simpson Electric Co.	Chicago, Ill.
608	SKF Industries, Inc.	Philadelphia, Pa.
616	Specialty Leather Prod. Co.	Newark, N.J.
617	Speer Resistor Corp.	St. Mary's, Pa.
618	Spencer Thermostat Co.	Attleboro, Mass.
623	Sprague Specialties Co.	N. Adams, Mass.
624	Sangamo Elec. Co.	Springfield, Ill.

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TABLE 8-1

LIST OF MANUFACTURERS (Continued)

Code No.	Name	Address
626	Standard Pressed Steel Co.	Jenkintown, Pa.
630	Stanley Works, The	New Britain, Conn.
632	Starrett Co., L.S.	Athol, Mass.
636	Stewart-Warner Corp.	Chicago, Ill.
649	Sylvania Elec.Prods. Inc.	Emporium, Pa.
650	Shakeproof, Inc.	New York, N.Y.
654	Semon-Bache Co.	New York, N.Y.
663	Technical Device Corp.	Bloomfield, N.J.
669	Thordarson Elec.Mfg. Co.	Chicago, Ill.
670	Tobe-Deutschmann Corp.	Canton, Mass.
675	Trumbull Elec.Mfg. Co.	Plainsville, Conn.
676	Tung-Sol Lamp Works, Inc.	Newark, N.J.
677	Turner Co., The	Cedar Rapids, Iowa
680	Tropper Brass Co.	New York, N.Y.
681	Torrington Mfg. Co.	Torrington, Conn.
682	Teckna Plastics	Brooklyn, N.Y.
683	Timken Roller Bearing Co.	Canton, Ohio
684	D.R. Templeman	Plainville, Conn.
686	Tilletson Mfg. Co.	Troy, N.Y.
690	Ucinite Co. The, Div. of United Carr Fastner Co.	Newtonville, Mass.
701	U.S. Rubber Co.	Passaic, N.J.
702	Utah Radio Products Co.	Chicago, Ill.
704	United Screw and Bdt Corp.	Chicago, Ill.
705	Veeder Root, Inc.	Hartford, Conn.
707	Utica Drop Forge and Tool Corp.	Utica, N.Y.
715	Valley Mfg. Co.	Waterbury, Conn.
716	Van Hooten Machine Shop	Danbury, Conn.
731	Western Elec.Co., Inc. (Factory)	New York, N.Y. Kearney, N.J.
734	White Dental Mfg.Co.SS	New York, N.Y.
749	W. Barnes Co.	Bristol, Conn.
752	Wilson Co., The H.A.	Newark, N.J.
754	Wright Products	New York, N.Y.
757	York Corp.	York, Pa.
759	Zenith Radio Corp.	Chicago, Ill.
761	Aircraft Marine Products Inc.	Elizabeth, N.J.
762	Naval Gun Factory	Washington, D.C.
765	Hoover Ball Bearing Co.	Ann Arbor, Mich.
767	McClusky and Sons	New Haven, Conn.
770	Cundy Bettoney Co., Inc.	Boston, Mass.
784	Phillips Mfg. Co.	Chicago, Ill.
785	Pittsburgh Plate Glass	Pittsburgh, Pa.
789	Handy Button Mark Co.	New York, N.Y.
797	Bound Brook Oilless Bearing Co.	Bound Brook, N.J.
804	Bernard Products	New York, N.Y.
805	Graybar Electrical Co.	New York, N.Y.
806	Ansonia Electrical Co.	Ansonia, Conn.
807	Nat'l Tool and Machine Co.	New York, N.Y.
808	Groov-Pin Corp.	Union City, N.J.
810	Gen.Elec. Supply Co.	New York, N.Y.
814	B and B Chemical Co.	Cambridge, Mass.
815	Marlin Rockwell Corp.	Jamestown, N.Y.
817	Bantam Roller Bearing Co.	South Bend, Ind.
818	Printloid, Inc.	New York, N.Y.
819	G and W Elect. Specialty Co.	Chicago, Ill.

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TABLE 8-1

LIST OF MANUFACTURERS (Continued)

Code No.	Name	Address
831	Columbia Machine Wks.	New York, N.Y.
832	Marathon Co.	Attleboro, Mass.
837	Boonton Radio Corp.	Boonton, N.J.
839	General Electric Co.	Bridgeport, Conn.
840	General Electric Co.	Fort Wayne, Ind.
841	Schauer Machine Co.	Cincinnati, Ohio
842	Star Packing and Supply Co.	Chicago, Ill.
843	General Electric Co.	Hoboken, N.J.
844	Miller Tool and Mfg. Co.	Detroit, Mich.
845	Mossberg Co.	Attleboro, Mass.
846	Williams Volcan Weldless Eye Bolt Co.	Worcester, Mass.
849	Browning Laboratories Inc.	Winchester, Mass.
852	The Vellumoid Co.	Worcester, Mass.
853	Eagle Signal Corp.	Moline, Ill.
856	Eaton Mfg.Co.(Reliance Spring Div.)	Masillon, Ohio
861	G. Fisher Spring Co.	Brooklyn, N.Y.
868	General Electric Co.	Pittsfield, Mass.
869	General Electric Co.	Bridgeport, Conn.
870	Atlantic India Rubber Wks. Inc.	Chicago, Ill.
872	Synthane Corp.	Oaks, Pa.
875	Signal Indicator Co.	New York, N.Y.
876	Wilbur B. Driver Co.	Newark, N.J.
880	Ellsworth Supply	Stratford, Conn.
881	Beede Electrical Inst.Co.	Pencook, N.H.
882	Trailer Co. of Am.	Cincinnati, Ohio
883	Stackpole Carbon Co.	St. Mary's,Pa.
884	Geler, P.A. Co.	Cleveland, Ohio
885	Hunter and Co.	Cleveland, Ohio
886	Fairbanks Morse and Co.	Chicago, Ill.
887	Weatherhead Co., The	Cleveland, Ohio
888	Midland Electric Co.	Midland, Mich.
889	A-C Spark Plug Div. General Motors	Flint, Mich.
892	Disston Henry and Sons, Inc.	Philadelphia, Pa.
893	Kester Solder Co.	Chicago, Ill.
895	Snap-on Tools Corp.	Kenosha, Wis.
897	Union Twist Drill Co.	Athol, Mass.
898	Peck, Stowe & Wilcox Co.	Southington, Conn.
900	Gudeman Co.	Chicago, Ill.
901	General Electric Co.	Cleveland, Ohio
902	Crowe Nameplate Co.	Chicago, Ill.
907	General Electric Co.	Lynn, Mass.
921	Willys Overland Motors, Inc.	Toledo, Ohio
951	Otto Bernz Co.	Rochester, N.Y.
953	Evansville Tool Works of the Am. Fork and Hoe Co.	Evansville, Ind.
956	Behr-Manning Corp.	Troy, N.Y.
957	Desmond and Stephan Mfg. Co.	Urbana, Ohio
958	Klein Mfg. Co.	Burlington, Iowa
961	Brown and Sharpe Mfg. Co.	Providence, R.I.
962	Millers Falls Co.	Greenfield, Mass.
963	Industrial Tape Co.	New Brunswick, N.J.
964	Covert Mfg. Co.	Troy, N.Y.
966	Warner Elec.Brake Mfg. Co.	Beloit, Wis.
967	Budd Wheel Co.	Detroit, Mich.
968	Luminator, Inc.	Chicago, Ill.
970	National Brass Co.	Grand Rapids, Mich.

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TABLE 8-1

LIST OF MANUFACTURERS (Continued)

Code No.	Name	Address
971	Appleton Electric Co.	Chicago, Ill.
972	Austin Co.,(M.B.)	Chicago, Ill.
973	Sturges Mfg.Co., Inc.	Utica, N.Y.
976	Carpenter, E.W. Mfg. Co.	Bridgeport, Conn.
977	Alco Valve Co.	St. Louis, Mo.
978	Gilmer Co., L.H.	Philadelphia, Pa.
979	G.E. Prentice Mfg. Co., The	Kensington, Conn.
980	Guyot Brothers Co.	Attleboro, Mass.
981	Bausch & Lomb Optical Co.	Rochester, N.Y.
982	Booth Felt Co.	Brooklyn, N.Y.
983	Auburn Mfg. Co.	Middleton, Conn.
984	Willor Mfg. Corp.	New York, N.Y.
985	Weston Felt Works	Chicago, Ill.
986	Electrical Insulation Co.	New York, N.Y.
988	J. T. McCoy	New York, N.Y.
989	Laminated Shim Co., Inc.	Glenbrook, Conn.
990	Nat'l Vulcanized Fiber Co.	Wilmington, Del.
991	Dearborn Glass Co.	Chicago, Ill.
992	American Felt Co.	New York, N.Y.
994	Electric Indicator Co.	Stamford, Conn.
995	F. C. Phillips	Stoughton, Mass.
996	Mitchell and Smith Co.	Detroit, Mich.
997	Spaulding Moss Co.	Boston, Mass.
998	Board Fabricators, Inc.	L.I. City, N.Y.
999	Curtis Develop. and Mfg. Co.	Milwaukee, Wis.
1000	Felters Co.,Inc.	Boston, Mass.
1001	Trico Products Corp.	Buffalo, N.Y.
1002	Metropolitan Body Co.	Bridgeport, Conn.
1003	Modern Die Cutting Co.	New York, N.Y.
1004	John J. Nesbitt, Inc.	Philadelphia, Pa.
1005	V.A. Baker and Sons	Minneapolis, Minn.
1007	Libby Owens Ford Co.	Toledo, Ohio
1008	General Electric Co.	Cambridge, Mass.
1113	Electric Insulation Co.	New York, N.Y.
1133	Guyot Bros., Co.	Attleboro, Mass.
1170	Minature Precision Bearing	Keene, N.H.
1171	Acheson Colloids Corp.	Port Huron, Mich.
1174	Allen Cardwell Mfg. Co.	Brooklyn, N.Y.
2001	Wico Electric Co.	W. Springfield, Mass.
2002	King-Seeley Corp.	Ann Harbor, Mich.
2003	Purolator Prods. Inc.	Newark, N.J.
2004	Parfex Corp.	Milwaukee, Wis.
2005	Acro Electric Co.	Cleveland, Ohio
2006	Haremout Auto. Prod.	Chicago, Ill.
2007	Carter Carburetor Co.	St. Louis, Mo.
2008	Vibration Eliminator Co.	Astoria, L.I., N.Y.
2009	Hallett Mfg. Co.	Inglewood, Calif.
2011	Industrial Wire Cloth Prod.Co.	Wayne, Mich.
2012	B. L. Haver Sales Co.	Kingston, N.Y.
2013	Auto-Lite Battery Corp.	Niagara Falls, N.Y.
2014	Kent-Moore Organization	Detroit, Mich.
2015	Springfield Electric Specialties Corp.	New York, N.Y.
2016	Wm. A. Reynolds Co.	Cleveland, Ohio
2017	Central Equipment Co.	Chicago, Ill.
2018	Standard Commercial Prod.	New York, N.Y.

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TABLE 8-1

LIST OF MANUFACTURERS (Continued)

Code No.	Name	Address	Code No.	Name	Address
2019	Resistoflex Corp.	Belleville, N.J.			
2020	Penn Electric Switch Co.	Goshen, Ind.			
2021	Centralab Div. of Globe Union Inc.	Milwaukee, Wis.			
2022	Reeves Instrument Co.	New York, N.Y.			
2023	Arma Corp.	Brooklyn, N.Y.			
2024	Borg Warner Corp.	Detroit, Mich.			
2025	Shallcross Mfg. Co.	Collingdale, Pa.			
2026	Helipot Corporation	So. Pasadena, Calif.			
2027	Federal AC Instr. Co.	Buffalo, N.Y.			
2028	Micro Switch Co.	Canton, Mass.			
2029	Diehl Mfg. Co.	Somerville, N.J.			
2030	Kenyon Trans. Co. Inc.	New York, N.Y.			
2031	Reeves Hoffman Corp.	Carlisle, Pa.			
2032	General Cement Co.	Rockford, Ill.			

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TABLE 8-2

STANDARD DESIGNATION FOR PARTS AND SPARE PARTS

STANDARD DESIGNATIONS	TITLE
A	Structural parts, panels, frames, castings, etc.
B	Motors and prime movers.
C	Capacitors of all types.
D	Dynamotors.
E	Miscellaneous electrical parts; insulators, knobs, brushes, etc.
F	Fuses.
G	Generators, exciters, etc.
H	Hardware, screws, bolts, studs, pins, snap-slides, tools, etc.
I	Indicating devices (except meters and thermometers), pilot lamps, etc.
J	Jacks and receptacles (stationary).
K	Contactors, relays, circuit breakers, etc.
L	Inductors, radio-frequency, and audio-frequency.
M	Meters of all types, gauges, thermometers, etc.
N	Nameplates, dials, charts, etc.
O	Mechanical parts, bearings, shafts, couplings, gears, ferrules, flexible shafts, housings, etc.
P	Plugs.
Q	Diaphragms (microphone, telephone, projector, etc.).
R	Resistors, fixed and variable (potentiometers, etc.).
S	Switches, interlocks, thermostats.
T	Transformers, radio-frequency, audio-frequency and power.
U	Hydraulic parts.
V	Vacuum and gaseous discharge tubes.
W	Wires, interconnecting cables, without plugs.
X	Sockets.
Y	Mechanical oscillators, crystals, magnetostriction tubes, etc.
Z	Impedances, such as traps (wave) etc.
BL	Blower
BT	Batteries.
CR	Rectifiers (electrochemical, copper-oxide, selenium, crystal, etc., except vacuum or gaseous tubes).
HR	Heaters.
HS	Handset (telephone and microphone combination).
HT	Head telephones.
HX	Heat exchangers.
LS	Loud speakers.
MG	Motor generators (single unit).
MI	Microphones (hand or chest type).
TY	Surge eliminators (special discharge resistors).
VR	Voltage regulators (except vacuum or gaseous tubes).

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TABLE 8-3

REPLACEABLE PARTS

UNIT 100T OR 100M, MISSILE OR TARGET RECEIVER UNIT

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
C101	1000 mmf, 10% tol; 500v; mica	623	K-44J897		C101
C102	Same as C101				C102
C103	100 mmf, 10% tol; 500v; mica	245			C103
C104	560 mmf, 10% tol; 500v; mica	623			C104
C105	Same as C101				C105
C106	Same as C101				C106
C107	Same as C103				C107
C108	Same as C104				C108
C109	Same as C101				C109
C110	Same as C101				C110
C111	Same as C103				C111
C112	Same as C101				C112
C114	Same as C101				C114
C115	Same as C101				C115
C116	Same as C101				C116
C117	Same as C103				C117
C118	Same as C101				C118
C119	Same as C101				C119
C120	Same as C101				C120
C121	Same as C101				C121
C122	Same as C101				C122
C124	0.5 mf, 10% tol; 600v; paper	18			C124
C126	10 mmf, 10% tol; 500v; mica	245			C126
C128	2700 mmf, 10% tol; 500v; mica	623			C128
C129	0.10 mf, 20% tol; 400v; paper	13			C129
C130	Same as C128				C130
C134B	0.1 mf, 20% tol; 600v; paper	18	Cat. No. 25F 469		C134B
C137	Same as C101				C137
C138	Same as C101				C138
C139	Same as C101				C139
C140	Same as C101				C140
C141	Same as C103				C141
C142	Same as C101				C142
C143A					C143A
C143B					C143B
C143C	0.1 mf, 20% tol; 600v; paper oil-filled	13	DYT-6011		C143C
C144A					C144A
C144B					C144B
C144C	Same as C134B				C144C
C145	Same as C101				C145
C146	Same as C101				C146
C147	Same as C101				C147
C148	470 mmf, 10% tol; 500v; mica	245			C148
C149	Same as C101				C149
C150	Same as C101				C150
C151	Same as C101				C151
C152	Same as C101				C152
C156	Same as C103				C156
C157A	Same as C143C				C157A
C157B	Same as C143C				C157B
C157C	Same as C143C				C157C
C160	Same as C128				C160
C162	Same as C128				C162
C176	Same as C101				C176
C177	Same as C101				C177
C178	Same as C101				C178
C179	0.25 mf, 20% tol; 1000v; paper	13	DY-10025		C179
C181	Same as C103				C181

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 100T OR 100M, MISSILE OR TARGET RECEIVER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
C182	Same as C103				C182
C183	2000 mmf, 10% tol; 500v; mica	13	Type 1W		C183
C184	Same as C179				C184
C185	0.1 mf, 20% tol; 600v; paper	623	TC-1		C185
C187	0.03 mf, 10% tol; 500v; mica	13	Type 1W		C187
C188	Same as C179				C188
C189	Same as C179				C189
C190	Same as C179				C190
C191	Same as C179				C191
C192	Same as C179				C192
C193	0.01 mf, 10% tol; 600v; mica	13	Type 1W		C193
C194	Same as C179				C194
C195	0.1 mf, part of C144				C195
C196	Same as C179				C196
C198	0.03 mf, 10% tol; 500v; mica	670	Type D		C198
C199	0.02 mf, 10% tol; 500v; mica	670	Type D		C199
C200	0.0668 mf (Replacement unit, exact values for Parallel-T Filter)	NRL			C200
C201	Same as C200				C201
C202	0.1336 mf (Replacement unit, exact values for Parallel-T Filter)	NRL			C202
C203	Same as C179				C203
C204	Same as C179				C204
C205	Same as C101				C205
C210	0.01 mf, 10% tol; 500v; mica	13	Type 1W		C210
C211	0.15 mf, 20% tol; 400v; paper	34	SL-4-05		C211
C212	0.05 mf, 20% tol; 400v; paper	34	SL-4-05		C212
C213	Same as C185				C213
C214	Same as C185				C214
E101	Delay Line, flexible, 1 microsecond	459			E101
E102	Delay Line, flexible, 0.75 microsecond	459			E102
J111	Receptacle, chassis	6	83-1R		J111
J112 thru J121	Same as J111				J112 thru J121
J122	Receptacle, chassis	6	31-003		J122
L101	Coil, i-f, 13-3/4T, 0.26 ohms dc	18	Per GE Dwg.		L101
L102	Coil, i-f, 11-3/4T, 0.02 ohms dc	18	Per GE Dwg.		L102
L103	Coil, i-f, 7-3/4T, 0.0135 ohms dc	18	Per GE Dwg.		L103
L104	Coil, i-f, 12-1/2T, 0.22 ohms dc	18	Per GE Dwg.		L104
L106	Coil, i-f, 13-3/4T, 0.02 ohms dc	18	Per GE Dwg.		L106
L107	Coil, i-f, 12-3/4T, 0.022 ohms dc	18	Per GE Dwg.		L107
L108	Coil, i-f, 12-3/4T, 0.024 ohms dc	18	Per GE Dwg.		L108
L109	Same as L106				L109
L110	Coil, i-f, 14-3/4T, 0.0277 ohms dc	18	Per GE Dwg.		L110
L111	Choke, 3 pt., 46T per PI type	602			L111
L112	Same as L111				L112
L113	Same as L111				L113
L114	Same as L111				L114

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 100T OR 100M, MISSILE OR TARGET RECEIVER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R101	75 K, 5% tol; 1/2 w	21	BT-1/2		R101
R102	160 ohms, 5% tol; 1/2 w	21	BT-1/2		R102
R103	220 ohms, 10% tol; 1/2 w	21	BT-1/2		R103
R104	1 K, 10% tol; 1/2 w	4	EB		R104
R105	Same as R102				R105
R107	560 ohms, 10% tol; 1/2 w	4	EB		R107
R108	Same as R102				R108
R111	820 ohms, 10% tol; 1/2 w	4	EB		R111
R112	330 ohms, 5% tol; 1/2 w	21	BT-1/2		R112
R114	470 ohms, 10% tol; 1/2 w	21	BT-1/2		R114
R115	Same as R111				R115
R116	Same as R103				R116
R117	240 ohms, 5% tol; 1/2 w	21	BT-1/2		R117
R118	2.2 K, 10% tol; 1 w	4	GB		R118
R119	Same as R114				R119
R120	Same as R118				R120
R124	180 K, 1 w	4	GB		R124
R127	Same as R114				R127
R128	2.2 K, 10% tol; 1/2 w	21	BT-1/2		R128
R129	2.2 meg, 10% tol; 1/2 w	21	BT-1/2		R129
R131	22 K, 10% tol; 2 w	21	BT-2		R131
R132	10 K, 10% tol; 1/2 w	21	BT-1/2		R132
R135	Same as R111				R135
R139	Same as R118				R139
R147	Same as R102				R147
R148	Same as R104				R148
R149	Same as R114				R149
R150	Same as R114				R150
R155	Same as R102				R155
R156	1.5 K, 10% tol; 1/2 w	4	EB		R156
R157	Same as R114				R157
R158	Same as R114				R158
R160	220 ohms, 10% tol; 1 w	4	GB		R160
R162	Same as R114				R162
R164	Same as R102				R164
R165	1.2 K, 10% tol; 1 w	4	GB		R165
R166	22 K, 10% tol; 1 w	4	GB		R166
R172	Same as R128				R172
R180	Same as R102				R180
R181	2.7 K, 10% tol; 1 w	21	BT-1		R181
R182	22 K, 10% tol; 1 w	21	BT-1		R182
R183	39 K, 10% tol; 1 w	21	BT-1		R183
R184	220 K, 10% tol; 1/2 w	4	EB		R184
R185	3.3 K, 10% tol; 1/2 w	4	EB		R185
R195	270 ohms, 10% tol; 1 w	4	GB		R195
R196	Same as R195				R196
R197	Same as R195				R197
R198	Same as R165				R198
R199	150 K, 10% tol; 1 w	4	GB		R199
R201	Same as R166				R201
R202	390 ohms, 10% tol; 1 w	4	GB		R202
R203	1.8 K, 5% tol; 10 w	623	10 KT		R203
R204	180 ohms, 10% tol; 1 w	4	GB		R204
R205	Same as R204				R205
R206	Same as R204				R206
R207	Same as R166				R207
R208	470 ohms, 10% tol; 1 w	4	GB		R208
R209	680 K, 10% tol; 1 w	4	GB		R209
R210	100 ohms, 10% tol; 1 w	4	GB		R210

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 100T OR 100M, MISSILE OR TARGET RECEIVER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R211	1 K, 10% tol; 1 w	4	GB		R211
R212	Same as R208				R212
R213	4.7 K, 10% tol; 1 w	4	GB		R213
R214	3.3 K, 10% tol; 1 w	4	GB		R214
R215	Same as R211				R211
R216	6.8 K, 10% tol; 1 w	4	GB		R216
R217	Same as R214				R217
R218	Same as R210				R218
R219	Same as R216				R219
R220	Same as R214				R220
R221	560 K, 10% tol; 1 w	4	GB		R221
R222	33 K, 10% tol; 1 w	4	GB		R222
R223	270 K, 10% tol; 1 w	4	GB		R223
R224	18 K, 10% tol; 1 w	4	GB		R224
R225	Same as R224				R225
R226	Same as R222				R226
R227	Same as R209				R227
R228	1 K, 10% tol; 1/2 w; pot.	4			R228
R229	560 ohms, 10% tol; 1 w	4	GB		R229
R230	1.5 K, 10% tol; 1 w	4	GB		R230
R231	Same as R208				R231
R232	5 K, 5% tol; 10 w	623	10 KT		R232
R233	68 ohms, 10% tol; 1 w	4	GB		R233
R234	Same as R233				R234
R235	100 K, wire wound, pot.	155	10-100 K		R235
R236	1.2 meg, 10% tol; 1 w	4	GB		R236
R237	470 K, 10% tol; 1 w	4	GB		R237
R238	100 K, 1% tol; 1/2 w; precision	2025	1101		R238
R239	Same as R238				R239
R240	180 K, 1% tol; 1/2 w; precision	2025	1101		R240
R241	2 K, pot.	155	M-15-5		R241
R242	39 K, 10% tol; 1 w	4	GB		R242
R243	820 K, 10% tol; 1 w	4	GB		R243
S101	Switch, toggle, SPDT	112	SW 1118		S101
T101	Filament Transformer	18	Per GE Dwg.		T101
	Primary 115v, 60 cycles				
	Secondary 1- 6.3v, 3% tol; 8.5 amps				
	Secondary 2- 6.3v, 3% tol; 0.9 amps				
	Secondary 3- 6.3v, 3% tol; 0.9 amps				
	Secondary 4- 6.3v, 3% tol; 0.6 amps				
	Secondary 5- 6.3v, 3% tol; 0.3 amps				
T102	Pulse Transformer	702	X154-T1		T102
TB101	Terminal Strip, 12 terminals	386	12-142-Y		TB101
TB102	Terminal Strip, 10 terminals	386	10-142-Y		TB102
UNIT 100M, MISSILE RECEIVER UNIT ONLY					
C251	1000 mmf, 200 mmf tol; 500v; ceramic	16	GP		C251
C252	Same as C251				C252
C253	100 mmf, 20% tol; 500v; ceramic	16	GP		C253
C254	50 mmf, 5 mmf tol; 500v	16	GP		C254
C255	Same as C251				C255
C256	Same as C251				C256
C257	510 mmf, 10% tol; 500v	16	GP		C257
C258	3-13 mmf, variable	18	N300		C258
C259	51 mmf, 10% tol; 500v	16	GP		C259
C260	Same as C258				C260
C261	Same as C254				C261
C262	Same as C254				C262

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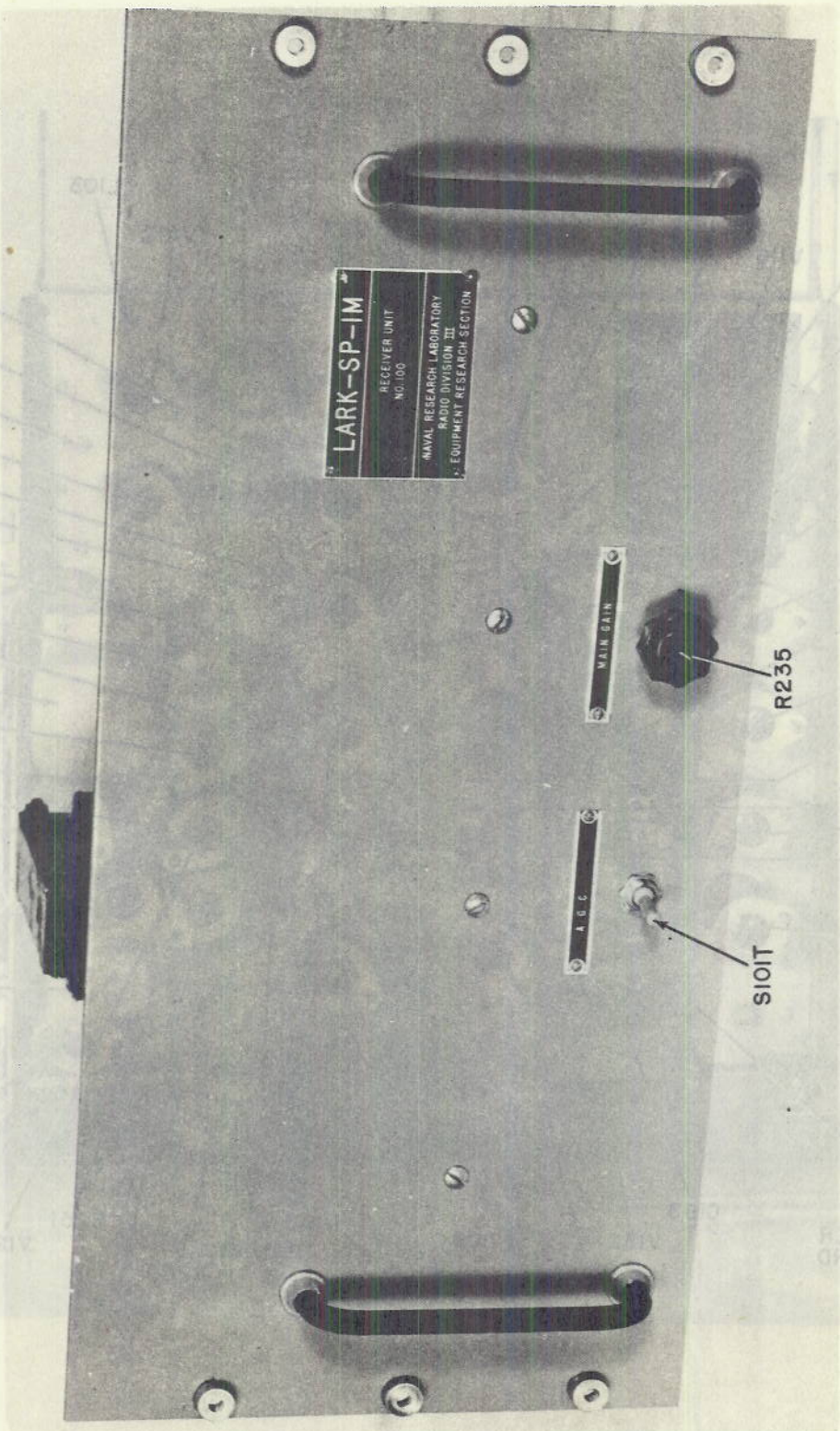

Figure 8-1. Target Receiver Unit - Front View

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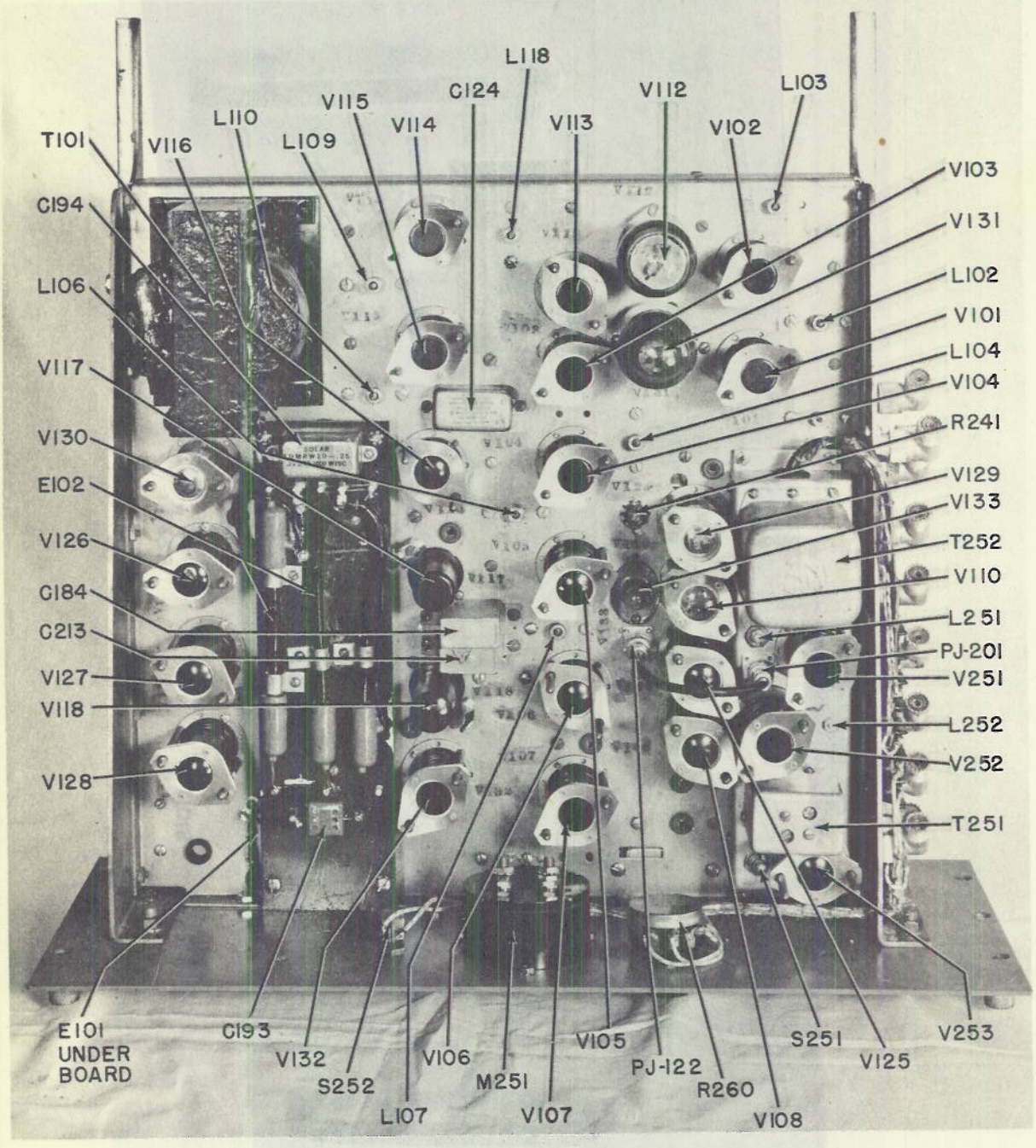

Figure 8-2. Target Receiver Unit - Top View

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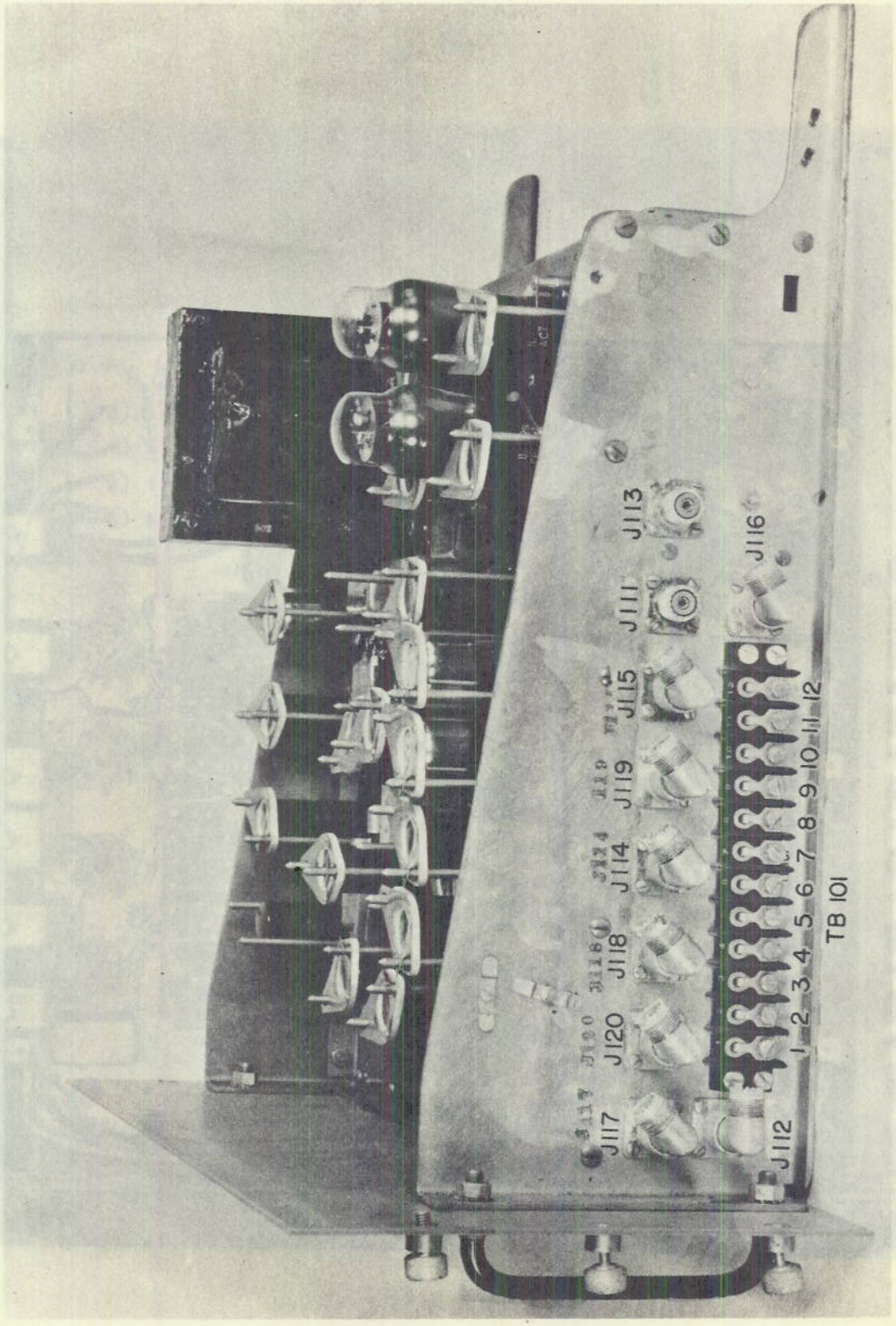

Figure 8-3. Target Receiver Unit - Right Side View

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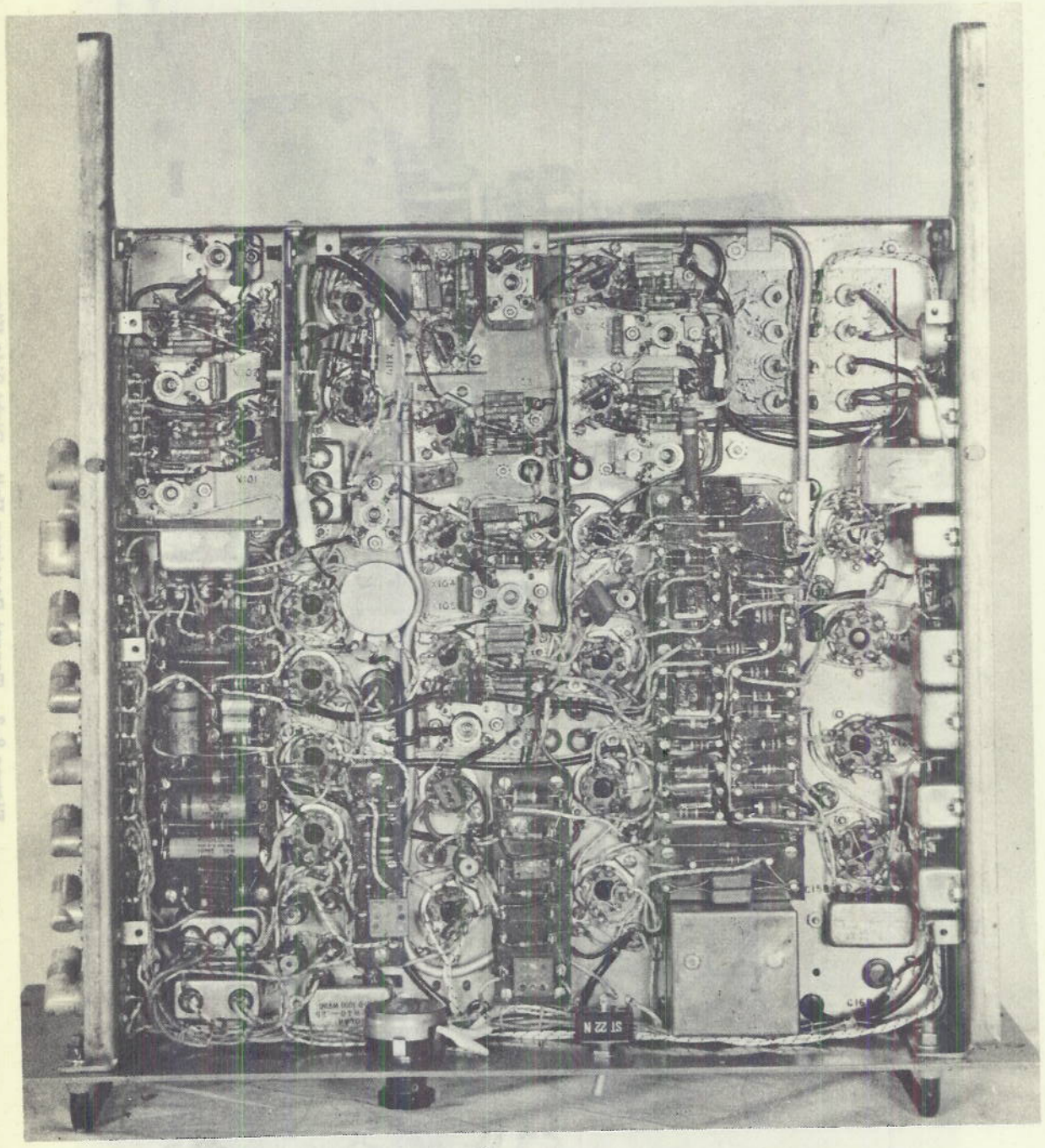

Figure 8-4. Target or Missile Receiver Unit - Bottom View

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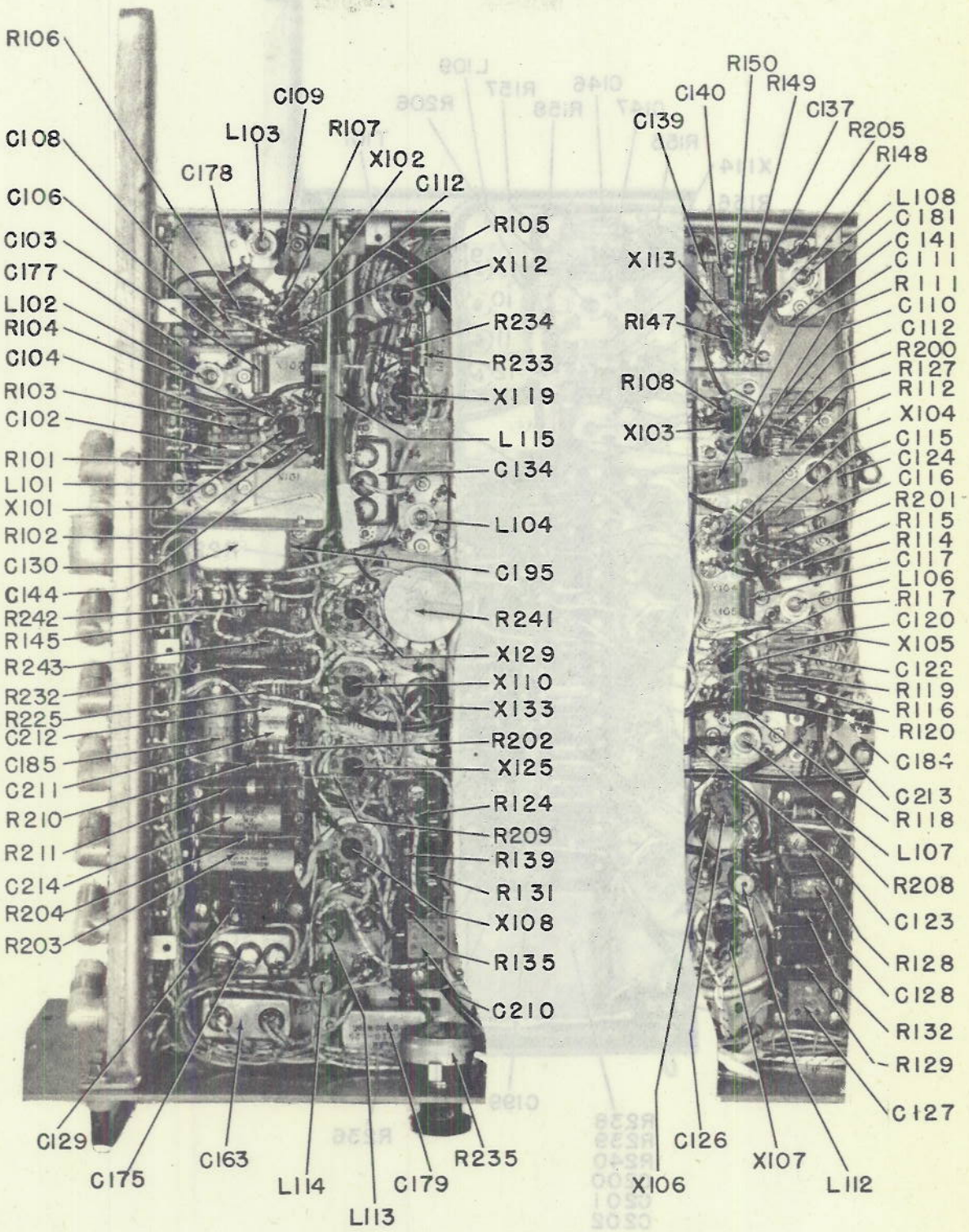

Figure 8-5. Left Half of Target or Missile Receiver Unit - Bottom View

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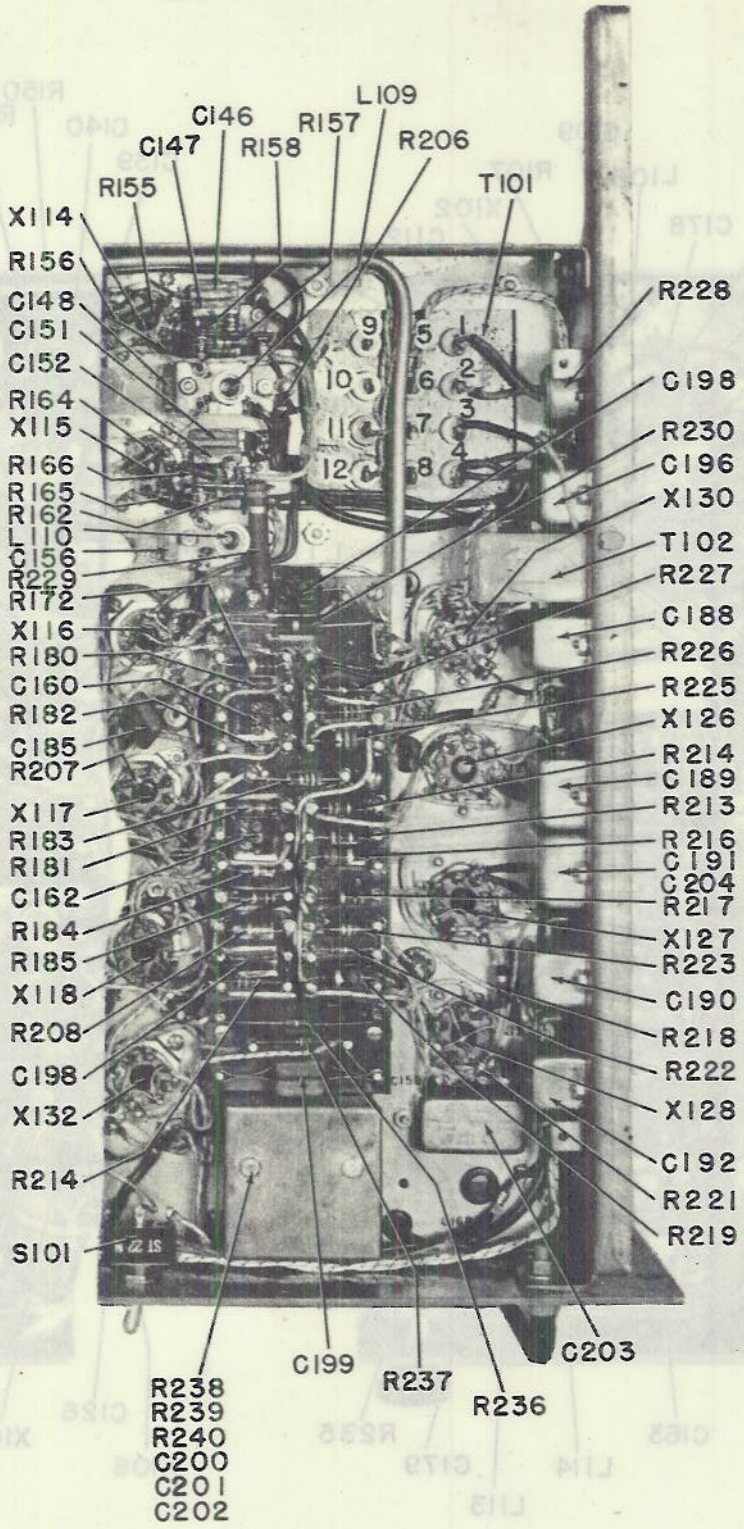

Figure 8-6. Right Half of Target or Missile Receiver Unit - Bottom View

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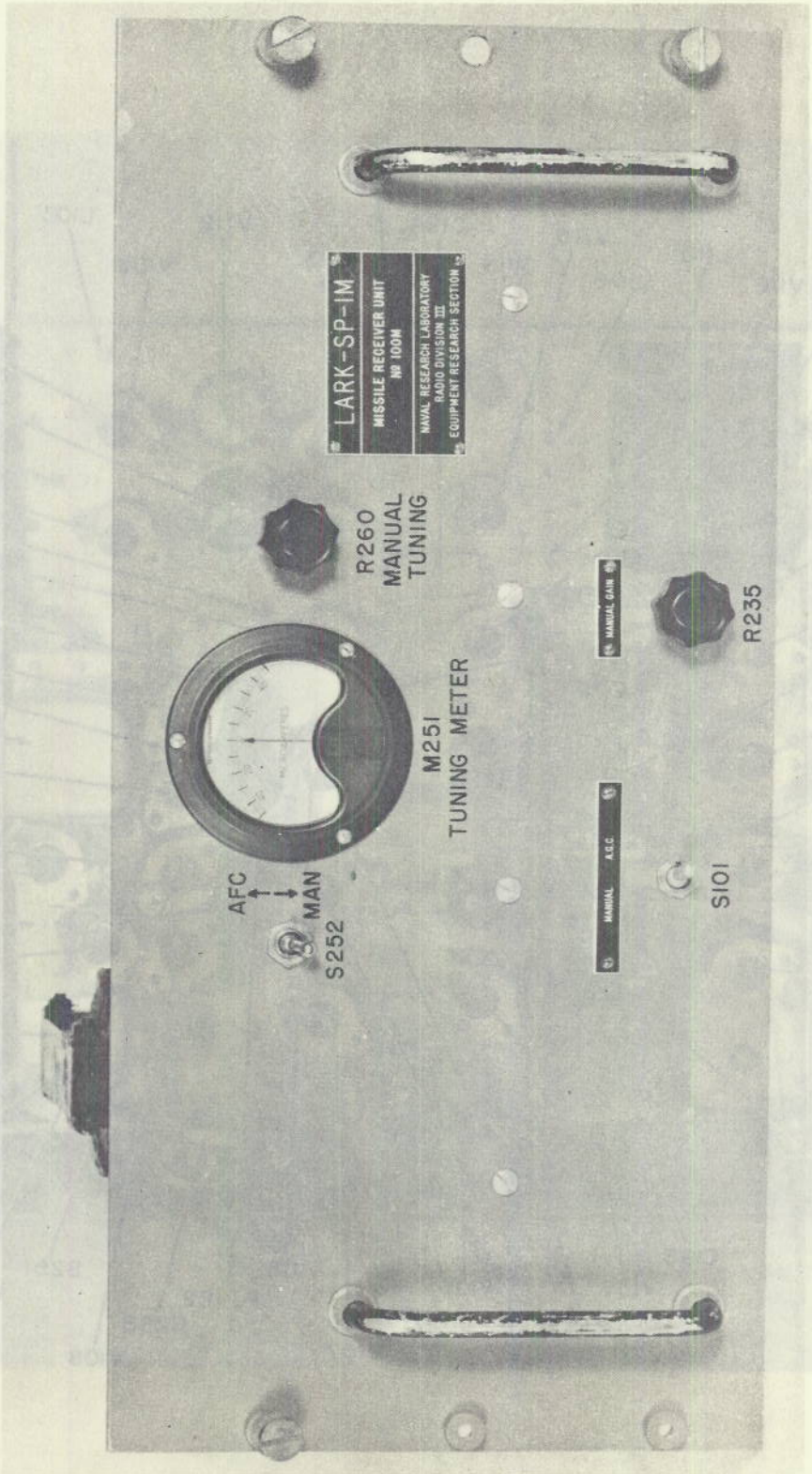

Figure 8-7. Missile Receiver Unit - Front View

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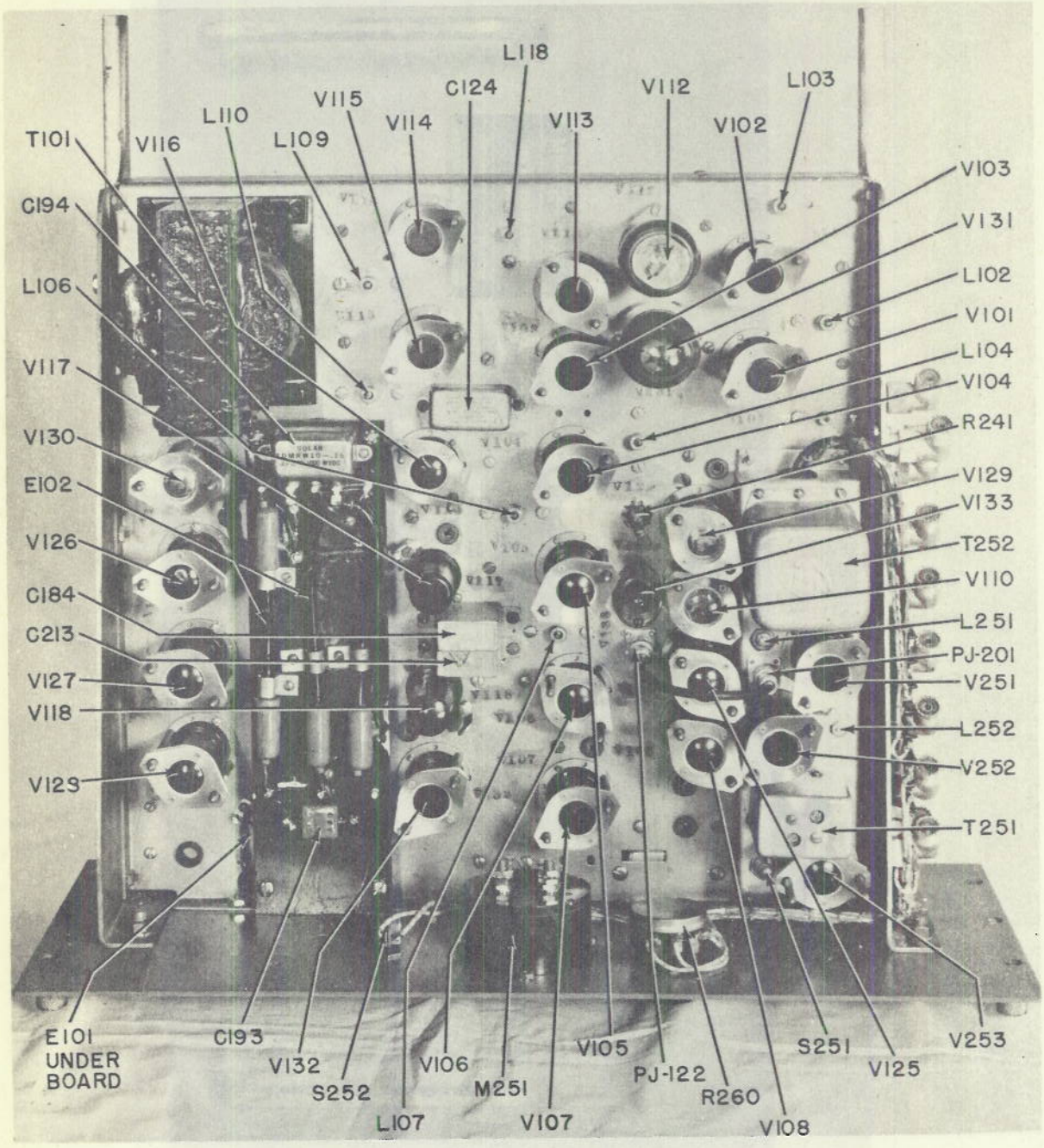

Figure 8-8. Missile Receiver Unit - Top View Showing AFC Chassis in Place

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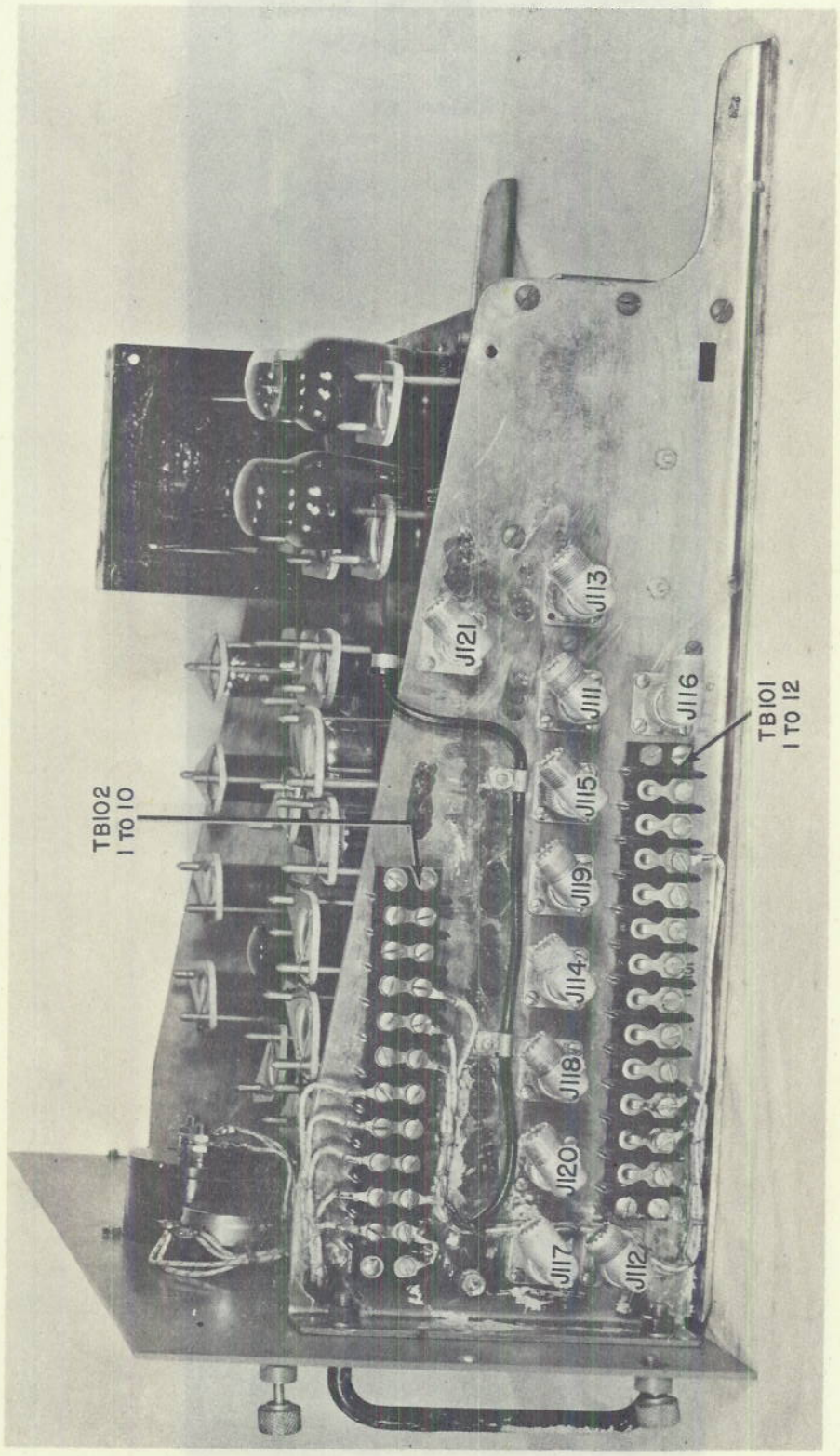

Figure 8-9. Missile Receiver Unit - Right Side View

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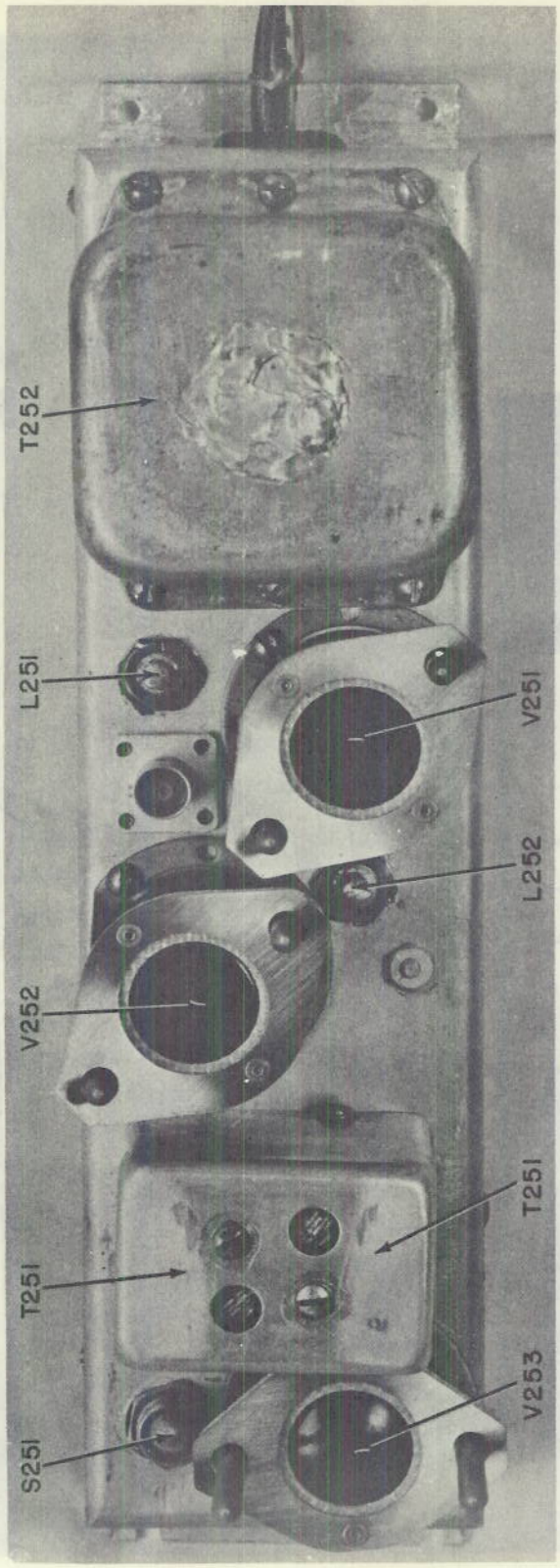

Figure 8-10. Missile Receiver AFC Chassis - Top View

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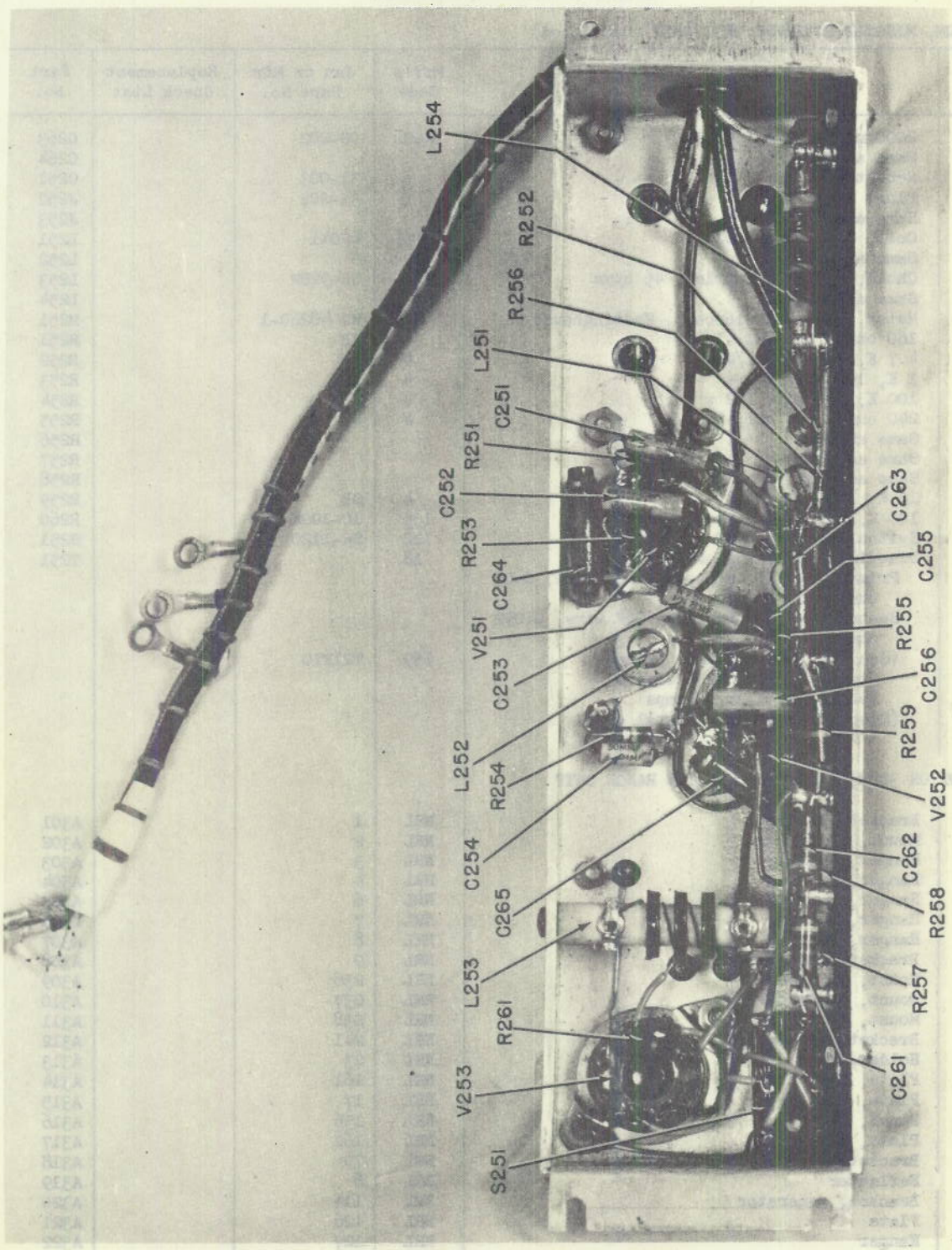

Figure 8-11. Missile Receiver AFC Chassis - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 100M, MISSILE RECEIVER UNIT ONLY (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
C263	2000 mmf, 10% tol; 500v	2021	DG-202		C263
C264	Same as C263				C264
J251	Receptacle	6	31-003		C251
J252	Plug	6	31-002		J252
J253	Same as J252				J253
L251	Coil, i-f, No. 28 wire	459	69041		L251
L252	Same as L251				L252
L253	Choke, 2.5 millihenries, 45 ohms	112	CH-920W		L253
L254	Same as L253				L254
M251	Meter, 50-0-50, microamp, Westinghouse	38	WG 48260-1		M251
R251	160 ohms, 10% tol; 1/2 w	4	EB		R251
R252	4.7 K, 10% tol; 1/2 w	4	EB		R252
R253	1 K, 10% tol; 1/2 w	4	EB		R253
R254	100 K, 10% tol; 1/2 w	4	EB		R254
R255	240 ohms, 10% tol; 1/2 w	4	EB		R255
R256	Same as R252				R256
R257	Same as R254				R257
R258	Same as R254				R258
R259	10 K, 10% tol; 1 w	4	GB		R259
R260	100 K, wire wound, pot.	155	10-100K		R260
S251	Switch, toggle, DPDT	112	SW-1120		S251
T251	Discriminator Transformer Primary- 7-1/2 turns, No. 26F wire, 0.05 ohms dc Secondary- 18 turns, No. 26F wire, 0.092 ohms dc (See T1703 in SP spare parts) Primary- 117v, 60 cycles Secondary- 6.3v, 3 amps (Specially potted in metal case)	18 669	 T21F10		T251
	UNIT 300T OR 300M, TARGET OR MISSILE RANGE UNIT				
A301	Bracket, Helipot	NRL	1		A301
A302	Mount, #1 Synchro	NRL	2		A302
A303	Hanger, bearing	NRL	3		A303
A304	Hanger, bearing	NRL	4		A304
A305	Hanger, bearing	NRL	6		A305
A306	Hanger, bearing	NRL	7		A306
A307	Hanger, bearing	NRL	8		A307
A308	Bracket, condenser	NRL	9		A308
A309	Mount, #5 Synchro	NRL	236		A309
A310	Mount, #5 Synchro	NRL	237		A310
A311	Mount, #5 Synchro	NRL	238		A311
A312	Bracket, generator	NRL	241		A312
A313	Holder, tube	NRL	23		A313
A314	Plate, left side	NRL	161		A314
A315	Plate, bottom	NRL	17		A315
A316	Panel, front	NRL	156		A316
A317	Plate, right side	NRL	162		A317
A318	Bracket	NRL	79		A318
A319	Reflector	NRL	8		A319
A320	Bracket, generator	NRL	114		A320
A321	Plate	NRL	126		A321
A322	Hanger	NRL	127		A322
A323	Frame, window	NRL	139		A323
A324	Window	NRL	140		A324
A325	Microswitch	NRL	170		A325

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 300T OR 300M, TARGET OR MISSILE RANGE UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
A326	Bracket, switch	NRL	147		A326
A327	Bracket, pivot	NRL	150		A327
A328	Support, chassis	NRL	166		A328
A329	Support, chassis	NRL	167		A329
A330	Runner	NRL	168		A330
A331	Runner	NRL	169		A331
A332	Ring, clamp	NRL	243		A332
A333	Mount, Arma #5 motor	NRL	243		A333
B301	Synchro 5 F	285	5F MK4MOD3		B301
B302	Synchro 5 G	285	5G MK1MOD3		B302
B303	Same as B302				B303
B304	Synchro 1 CT	285	1CT MK5MOD3A		B304
B305	Arma #5 Motor	2023	213053-1		B305
B306	Arma #5 Motor	2023	213053-1		B306
C301	20-125 mmf	2021	823-AN		C301
C302	0.005 mf, 10% tol; 300v; mica	13	1-W		C302
C303	0.0005 mf, 10% tol; 500v; mica	13	5-W		C303
C304	Same as C303				C304
C305	0.01 mf, 10% tol; 300v; mica	13	1-W		C305
C306	Same as C303				C306
C307	500 mmf, 10% tol; 500v; mica	13	5-W		C307
C308	Same as C307				C308
C309	0.1 mf, 10% tol; 400v; paper	34	SL-4-1		C309
C310	Same as C307				C310
C311	Same as C305				C311
C312	0.05 mf, 10% tol; 1000v; pyranol	18	23F470		C312
C313	75 mmf, 10% tol; 500v; mica	13	5-W		C313
C314	0.025 mf, 10% tol; 600v; paper	623	TC13		C314
C315	0.05 mf, 10% tol; 600v; paper	18	23F470		C315
C316	Same as C315				C316
C317	Same as C305				C317
C318	0.001 mf, 10% tol; 500v; mica	13	1-W		C318
C319	0.005 mf, 10% tol; 300v; mica	13	1-W		C319
C320	Same as C312				C320
C321	Same as C305				C321
C322	Same as C318				C322
C323	Same as C319				C323
C324	Same as C305				C424
C325	0.25 mf, 10% tol; 1000v; pyranol	18	23F472		C325
C326	Same as C312				C326
C327	0.0001 mf, 10% tol; 500v; mica	13	5-W		C327
C328	Same as C305				C328
C329	Same as C312				C329
C330	1.0 mf, 10% tol; 600v; pyranol	18	23F467		C330
C331	0.003 mf, 10% tol; 500v; mica	13	1-W		C331
C332	Same as C319				C332
C333	Same as C305				C333
C334	Same as C325				C334
C335	Same as C312				C335
C336	225 mmf, 10% tol; 500v; mica	13	5-W		C336
C337	Same as C305				C337
C338	Same as C325				C338
C339	Same as C318				C339
C340	Same as C305				C340
C341	Same as C305				C341
C342	Same as C312				C342
C343	0.1 mmf, 10% tol; 1000v; pyranol	18	23F471		C343
C344	Same as C305				C344
C345	Same as C303				C345

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 300T OR 300M, TARGET OR MISSILE RANGE UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
C346	Same as C305				C346
C347	Same as C312				C347
C348	Same as C305				C348
C349	Same as C305				C349
C350	Same as C330				C350
C351	Same as C305				C351
C352	Same as C305				C352
C353	Same as C318				C353
C354	Same as C330				C354
C355	Same as C312				C355
C356	Same as C318				C356
C357	Same as C318				C357
C358	Same as C305				C358
C359	Same as C319				C359
C360	Same as C305				C360
C361	Same as C303				C361
C362	Same as C305				C362
C363	Same as C312				C363
C364	120 mmf, 10% tol; 500v; mica	13	5-W		C364
C365	Same as C319				C365
C366	Same as C305				C366
C367	Same as C312				C367
C368	Same as C305				C368
C369	Same as C325				C369
C370	Same as C307				C370
C371	Same as C305				C371
C372	Same as C312				C372
C373	Same as C325				C373
C374	Same as C305				C374
C375	7-45 mmf, trimmer	2021	822-BN		C375
C376	Same as C307				C376
C377	Same as C330				C377
C378	Same as C305				C378
C379	Same as C325				C379
C380	20-125 mmf, trimmer	2021	823-AN		C380
C381	Capacitor, phase shift	731	D150734		C381
C382	Same as C305				C382
CR300	Crystal, 164 kc	2031	RH51B		CR300
E301	Delay Line, flexible, 1100 ohms, 5.6 microseconds	459			E301
G301	Generator, permanent magnet, dc	994	CB-29		G301
G302	Same as G301				G302
J301	Jack, coaxial	6	SO-239 CPH-49194		J301
J302 thru J308	Same as J301				J302 thru J308
J309	Jack, coaxial	6	UG290/u		J309
J310	Same as J309				J310
J311	Receptacle, pilot light, 224	211	2220516		J311
J312	Receptacle, counter light, 224	211	2220516		J312
K301	Relay, less contacts, with right hand armature and lock screw residual	12	Type C Coil No. W2-1090		K301
L301	Choke, r-f, 8 millihenries	112	CH1215		L301
N301	Dial, fixed	NRL	26		N301
N302	Dial, fixed	NRL	27		N302
N303	Dial, outer	NRL	28		N303
N304	Dial, intermediate	NRL	29		N304

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 300T OR 300M, TARGET OR MISSILE RANGE UNIT (Continued)

Part No.	Description	P	T	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
N305	Dial, center			NRL	30		N305
N306	Cover, center dial			NRL	31		N306
0301	Plate, spring			NRL	5		0301
0302	Shaft			NRL	10		0302
0303	Shaft			NRL	11		0303
0304	Shaft			NRL	12		0304
0305	Shaft			NRL	13		0305
0306	Shaft			NRL	14		0306
0307	Shaft			NRL	15		0307
0308	Coupling, Oldham			NRL	213		0308
0309	Bushing			NRL	21		0309
0310	Coupling, center			NRL	213		0310
0311	Handwheel			NRL	65		0311
0312	Hub, dial			NRL	36		0312
0313	Bracket, fixed dial			NRL	38		0313
0314	Hub, outer dial			NRL	40		0314
0315	Hub, fixed dial			NRL	37		0315
0316	Hub, intermediate dial			NRL	30		0316
0317	Fastener, intermediate dial			NRL	41		0317
0318	Bracket, intermediate dial			NRL	42		0318
0319	Bracket, outer dial			NRL	44		0319
0320	Clip, outer dial			NRL	43		0320
0321	Spacer, fixed dial			NRL	45		0321
0322	Mounting Plate, fixed dial			NRL	46		0322
0323	Bushing			NRL	51		0323
0324	Face, clutch			NRL	53		0324
0325	Seat, clutch			NRL	55		0325
0326	Washer			NRL	57		0326
0327	Plate, clutch			NRL	52		0327
0328	Washer			NRL	54		0328
0329	Spring			NRL	59		0329
0330	Handwheel			NRL	61		0330
0331	Holder, lamp			NRL	60		0331
0332	Cover, lamp			NRL	62		0332
0333	Plate, friction			NRL	71		0333
0334	Plate, clutch			NRL	72		0334
0335	Nut, clutch plate			NRL	73		0335
0336	Plate, friction			NRL	74		0336
0337	Spring			NRL	75		0337
0338	Plate, clutch			NRL	76		0338
0339	Pin			NRL	77		0339
0340	Pin			NRL	78		0340
		P	T				
0341	Spur Gear	32,	96	NRL	82		0341
0342	Spur Gear	32,	25	NRL	83		0342
0343	Spur Gear	32,	28	NRL	84		0343
0344	Spur Gear	32,	60	NRL	85		0344
0345	Spur Gear	32,	32	NRL	86		0345
0346	Spur Gear	32,	96	NRL	87		0346
0347	Spur Gear	32,	28	NRL	88		0347
0348	Spur Gear	32,	48	NRL	89		0348
0349	Spur Gear	48,	23	NRL	90		0349
0350	Spur Gear	48,	144	NRL	91		0350
0351	Spur Gear	48,	28	NRL	92		0351
0352	Spur Gear	48,	48	NRL	93		0352
0353	Spur Gear	48,	48	NRL	94		0353
0354	Spur Gear	32,	120	NRL	95		0354
0355	Spur Gear	48,	148	NRL	96		0355
0356	Spur Gear	48,	48	NRL	97		0356

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 300T OR 300M, TARGET OR MISSILE RANGE UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
	P T				
0357	Spur Gear 48, 65	NRL	98		0357
0358	Spur Gear 48, 28	NRL	99		0358
0359	Spur Gear 48, 112	NRL	100		0359
0360	Cluster Gear { 32, 140 / 32, 96 }	NRL	101		0360
0361	Cluster Gear { 32, 108 / 32, 96 }	NRL	102		0361
0362	Cluster Gear { 48, 110 / 32, 112 }	NRL	103		0362
0363	Cluster Gear { 48, 24 / 48, 140 }	NRL	104		0363
0364	Cluster Gear { 48, 20 / 48, 120 }	NRL	105		0364
0365	Cluster Gear { 32, 140 / 32, 20 }	NRL	106		0365
0366	Cluster Gear { 32, 120 / 32, 24 }	NRL	107		0366
0367	Cluster Gear { 32, 28 / 32, 100 }	NRL	108		0367
0368	Cluster Gear { 32, 60 / 30, 100 }	NRL	109		0368
0369	Bushing	NRL	110		0369
0370	Screw	NRL	111		0370
0371	Spring	NRL	112		0371
0372	Spacer	NRL	113		0372
	P T				
0373	Cluster Gear { 48, 26 / 48, 120 }	NRL	115		0373
0374	Spacer	NRL	121		0374
0375	Clamp	NRL	122		0375
0376	Clamp	NRL	123		0376
	P T				
0377	Spur Gear 32, 112	NRL	124		0377
0378	Spur Gear 48, 48	NRL	125		0378
0379	Spur Gear 32, 140	NRL	136		0379
0380	Spur Gear 32, 108	NRL	137		0380
0381	Spur Gear 32, 96	NRL	138		0381
0382	Spring	NRL	171		0382
0383	Bushing	NRL	146		0383
0384	Stop, gear	NRL	149		0384
0385	Lever, stop	NRL	148		0385
0386	Counter	705			0386
0387	Bearing 5F	261			0387
0388	Bearing R2	490			0388
0389	Clip, #5 Synchro	NRL	9		0389
0390	Clip, #1 Synchro	NRL	3		0390
0391	Differential	NRL	249		0391
0392	Miter Gears	NRL	0393		0392
P309	Connector, coaxial	6	UG88U		P309
P310	Same as P309				P310
R301	270 ohms, 10% tol; 1 w	4			R301
R302	82 K, 10% tol; 1 w	4			R302

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 300T OR 300M, TARGET OR MISSILE RANGE UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R303	220 ohms, 10% tol; 1 w	4			R303
R304	1 K, 10% tol; 1 w	4			R304
R305	10 K, 10% tol; 1 w	4			R305
R306	100 K, 10% tol; 1 w	4			R306
R307	Same as R304				R307
R308	12 K, 10% tol; 2 w	4			R308
R309	Same as R306				R309
R310	Same as R306				R310
R311	Same as R304				R311
R312	22 K, 10% tol; 2 w	4			R312
R313	Same as R312				R313
R312	Same as R306				R312
R315	1.5 K, 10% tol; 1 w	4			R315
R316	Same as R303				R316
R317	100 ohms, 10% tol; 1 w	4			R317
R318	Same as R317				R318
R319	Same as R301				R319
R320	39 K, 10% tol; 1 w	4			R320
R321	75 K, 10% tol; 1 w; pot.	4			R321
R322	Same as R320				R322
R323	Same as R304				R323
R324	1.2 K, 10% tol; 1 w	4			R324
R325	330 ohms, 10% tol; 1 w	4			R325
R326	220 K, 10% tol; 2 w	4			R326
R327	56 K, 10% tol; 2 w	4			R327
R328	Same as R306				R328
R329	270 K, 10% tol; 2 w	4			R329
R330	18 K, 10% tol; 2 w	4			R330
R331	Same as R304				R331
R332	Same as R301				R332
R333	560 ohms, 10% tol; 1 w	4			R333
R334	Same as R326				R334
R335	27 K, 10% tol; 2 w	4			R335
R336	Same as R306				R336
R337	Same as R330				R337
R338	Same as R317				R338
R339	Same as R329				R339
R340	Same as R324				R340
R341	Same as R306				R341
R342	2.7 K, 10% tol; 2 w	4			R342
R343	Same as R329				R343
R344	Same as R330				R344
R345	Same as R304				R345
R346	Same as R301				R346
R347	Same as R333				R347
R348	Same as R326				R348
R349	Same as R327				R349
R350	Same as R306				R350
R351	Same as R329				R351
R352	Same as R330				R352
R353	Same as R317				R353
R354	Same as R324				R354
R355	1.8 K, 10% tol; 1 w	4			R355
R356	15 K, 10% tol; 2 w	4			R356
R357	1.8 meg, 10% tol; 1 w	4			R357
R358	47 K, 10% tol; 2 w	4			R358
R359	Same as R358				R359
R360	330 K, 10% tol; 1 w	4			R360
R361	7.5 K, 1% tol; 1 w; wire wound	21			R361

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 300T OR 300M, TARGET OR MISSILE RANGE UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R362	250 K, 1% tol; 1 w; wire wound	21			R362
R363	390 K, 10% tol; 1 w	4			R363
R364	Same as R312				R364
R365	Same as R312				R365
R366	Same as R304				R366
R367	Same as R327				R367
R368	20 K, 1% tol; 1 w; wire wound	21			R368
R369	10 K, 10% tol; 2 w; pot.	155			R369
R370	20 K, Helipot; 10 turns; linear within 0.5%	2026	20,000AZ		R370
R371	5 K; pot.; 10% tol; 2 w	155			R371
R372	27 K, 10% tol; 1 w	4			R372
R373	Same as R304				R373
R374	Same as R335				R374
R375	2.2 meg, 10% tol; 1 w	4			R375
R376	Same as R372				R376
R377	Same as R358				R377
R378	Same as R358				R378
R379	22 K, 10% tol; 1 w	4			R379
R380	5.6 K, 10% tol; 1 w	4			R380
R381	Same as R333				R381
R382	Same as R301				R382
R383	8.2 K, 10% tol; 2 w	4			R383
R384	680 ohms, 10% tol; 1 w	4			R384
R385	270 K, 10% tol; 1 w	4			R385
R386	Same as R385				R386
R387	Same as R306				R387
R388	Same as R327				R388
R389	220 K, 10% tol; 1 w	4			R389
R390	Same as R333				R390
R391	Same as R301				R391
R392	Same as R330				R392
R393	Same as R385				R393
R394	Same as R304				R394
R395	Same as R306				R395
R396	150 ohms, 10% tol; 2 w	4			R396
R397	5 K, pot; 10% tol; 1 w	4			R397
R398	Same as R397				R398
R399	Same as R397				R399
R400	560 K, 10% tol; 1 w	4			R400
R401	160 ohms, 10% tol; 1 w	4			R401
R402	Same as R312				R402
R403	1.2 K, 10% tol; 2 w	4			R403
R404	56 K, 10% tol; 1 w	4			R404
R405	56 ohms, 10% tol; 1 w	4			R405
R406	Same as R306				R406
R407	Same as R401				R407
R408	Same as R312				R408
R409	Same as R312				R409
R410	Same as R404				R410
R411	Same as R306				R411
R412	1.5 K, 10% tol; 2 w	4			R412
R413	Same as R324				R413
R414	Same as R317				R414
R415	Same as R301				R415
R416	Same as R379				R416
R417	Same as R306				R417
R418	Same as R327				R418
R419	180 K, 10% tol; 1 w	4			R419
R420	Same as R324				R420

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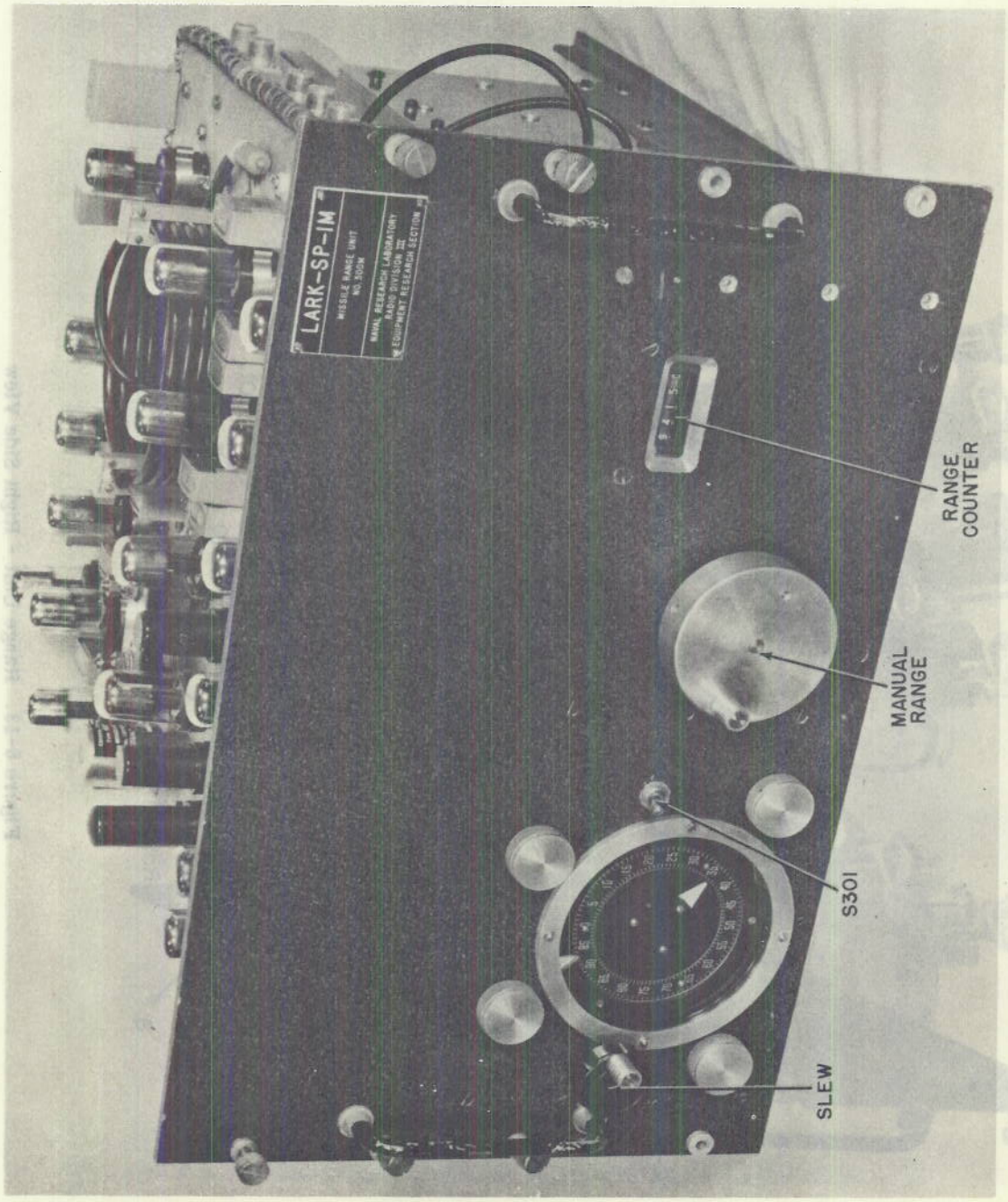

Figure 8-12. Range Unit - Front View

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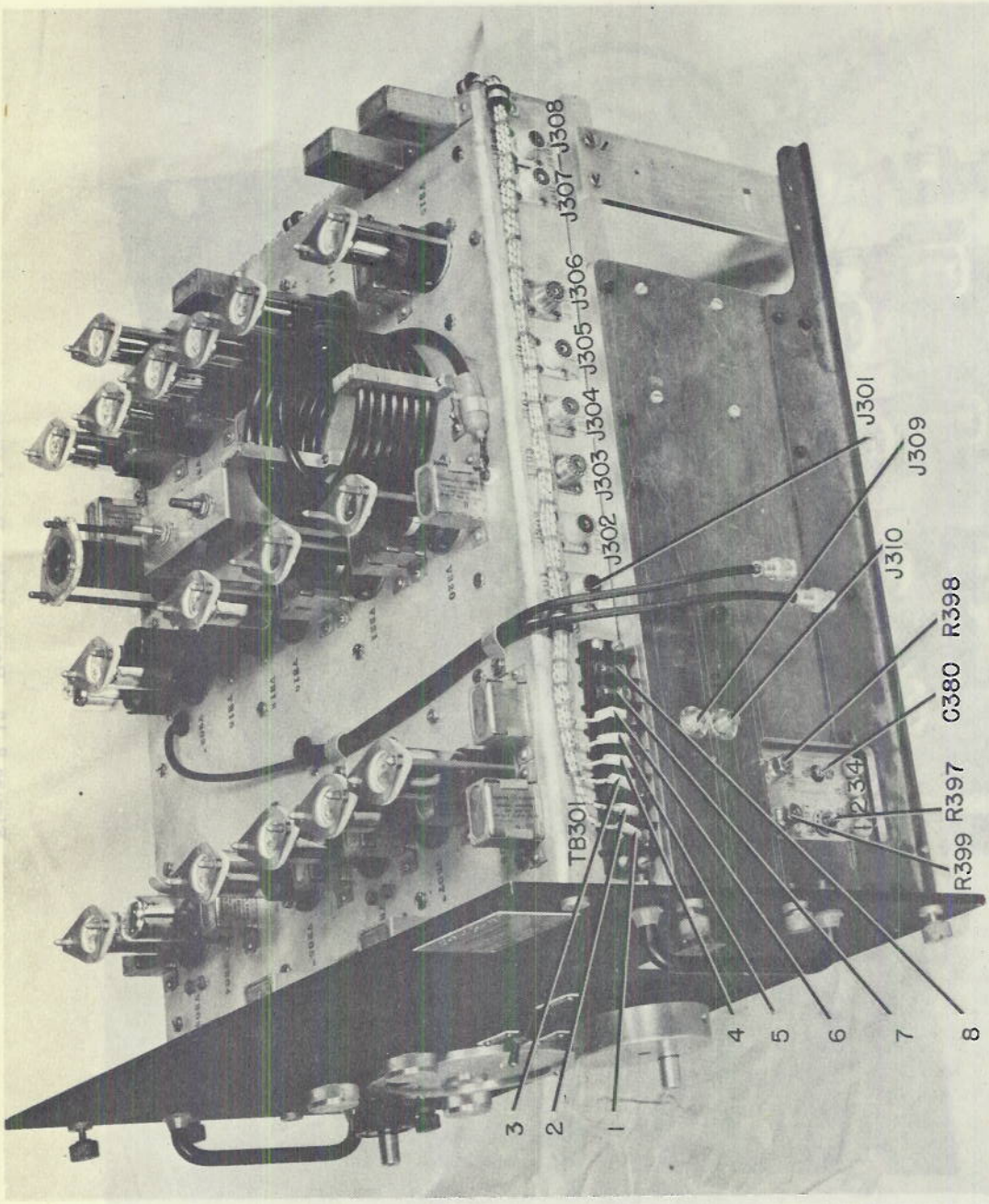

Figure 8-13. Range Unit - Right Side View

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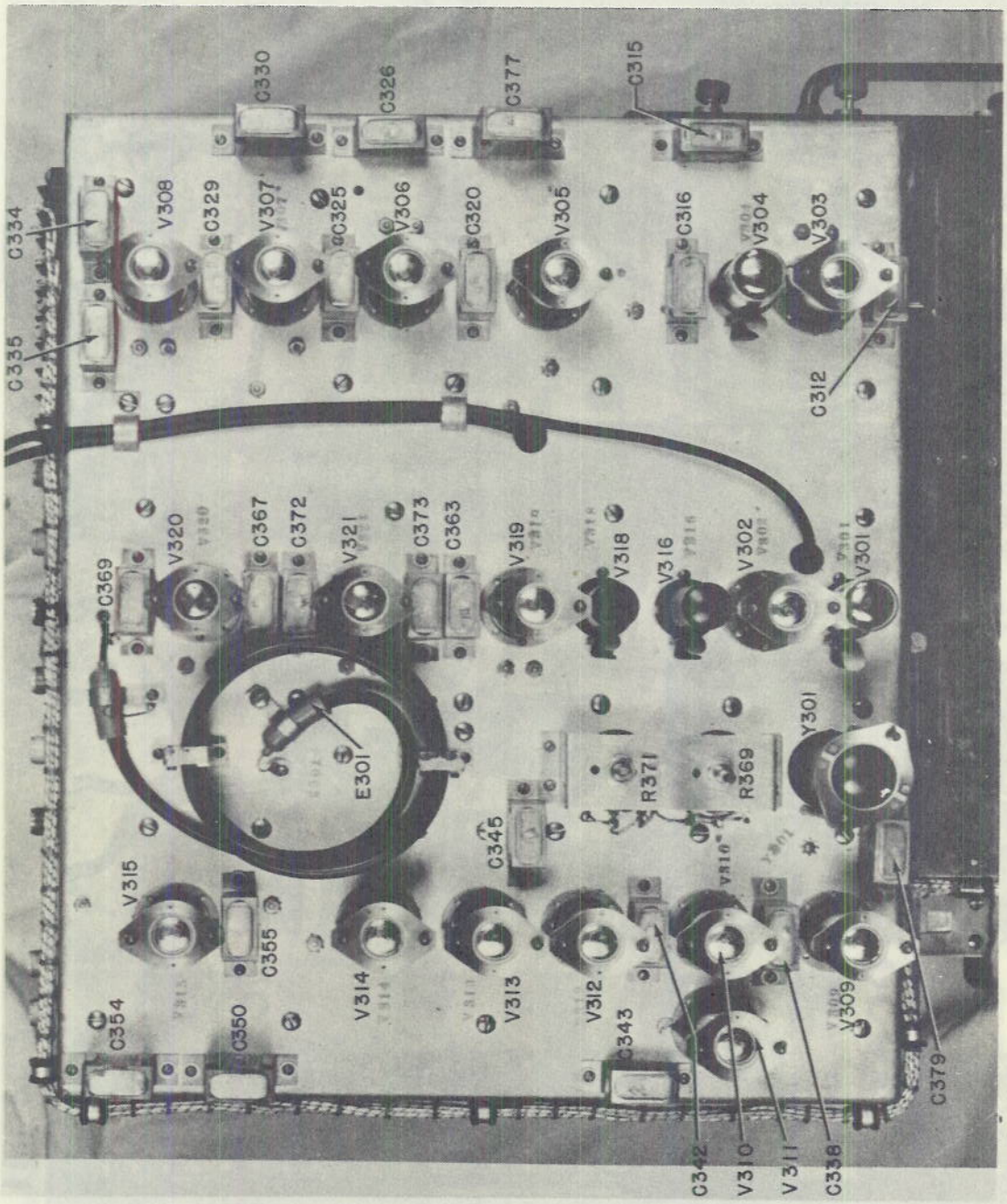

Figure 8-14. Range Unit - Top View, Electronic Section

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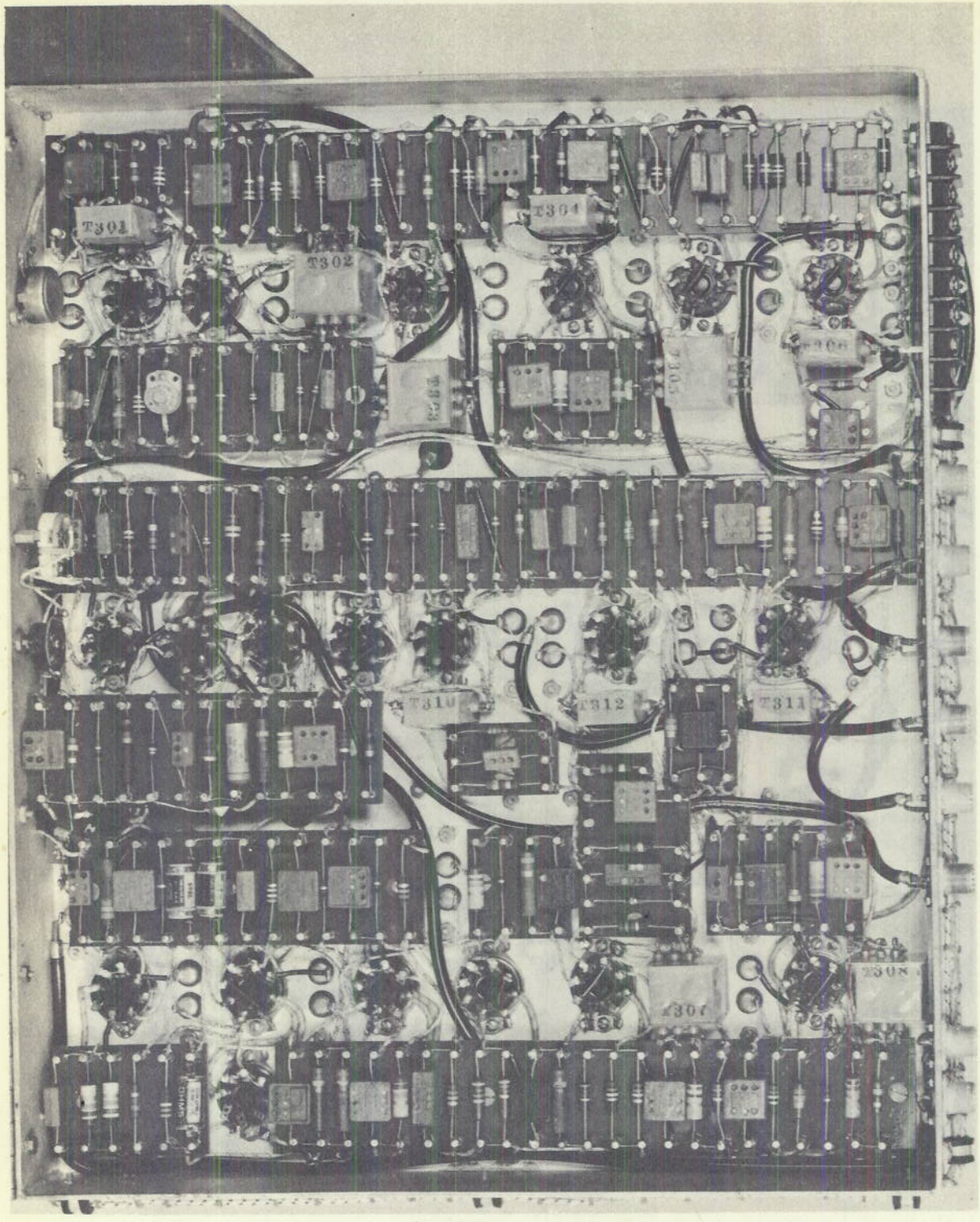

Figure 8-15. Range Unit - Bottom View, Electronic Section

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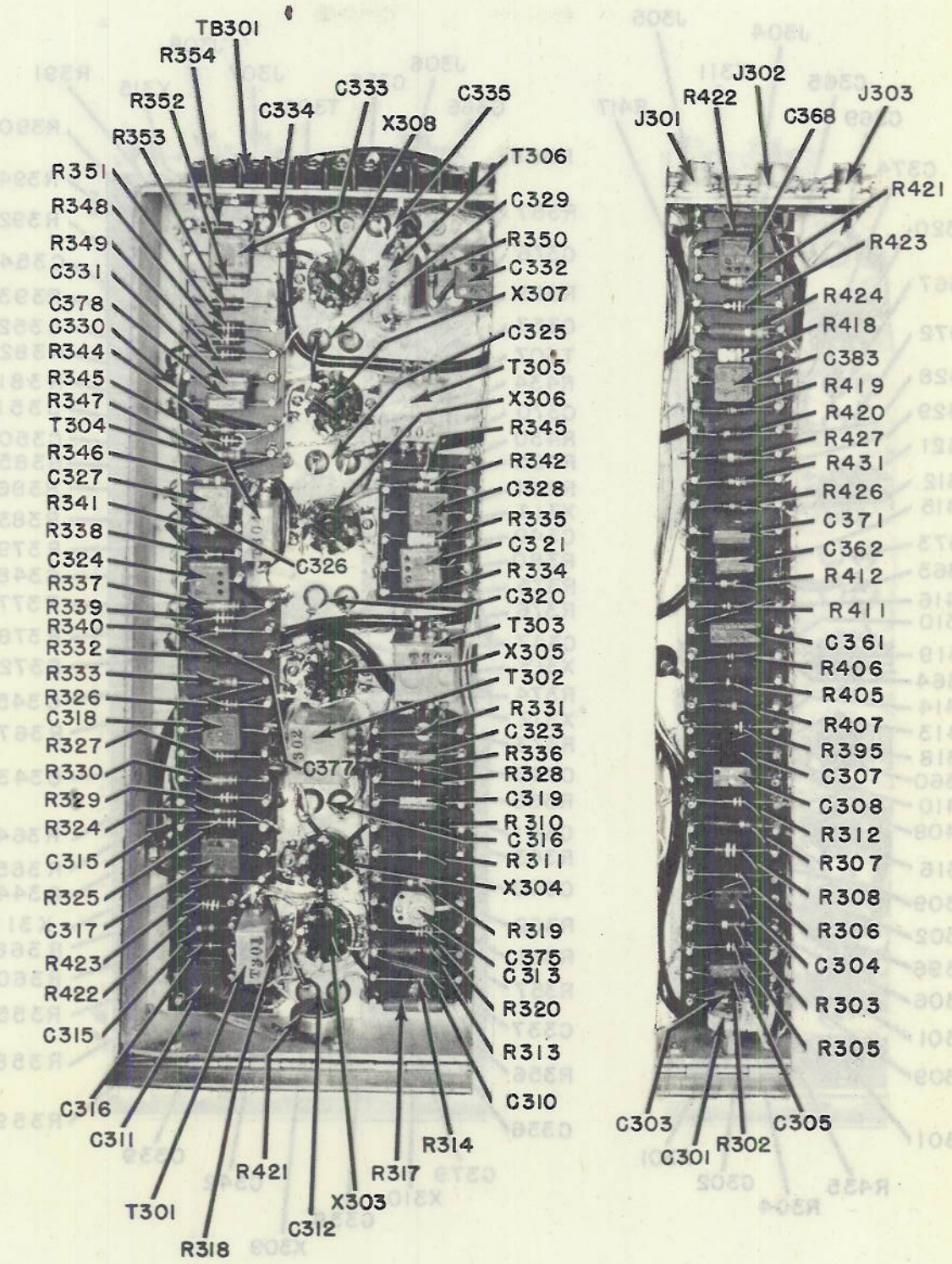

Figure 8-16. Left Half of Range Unit - Bottom View, Electronic Section

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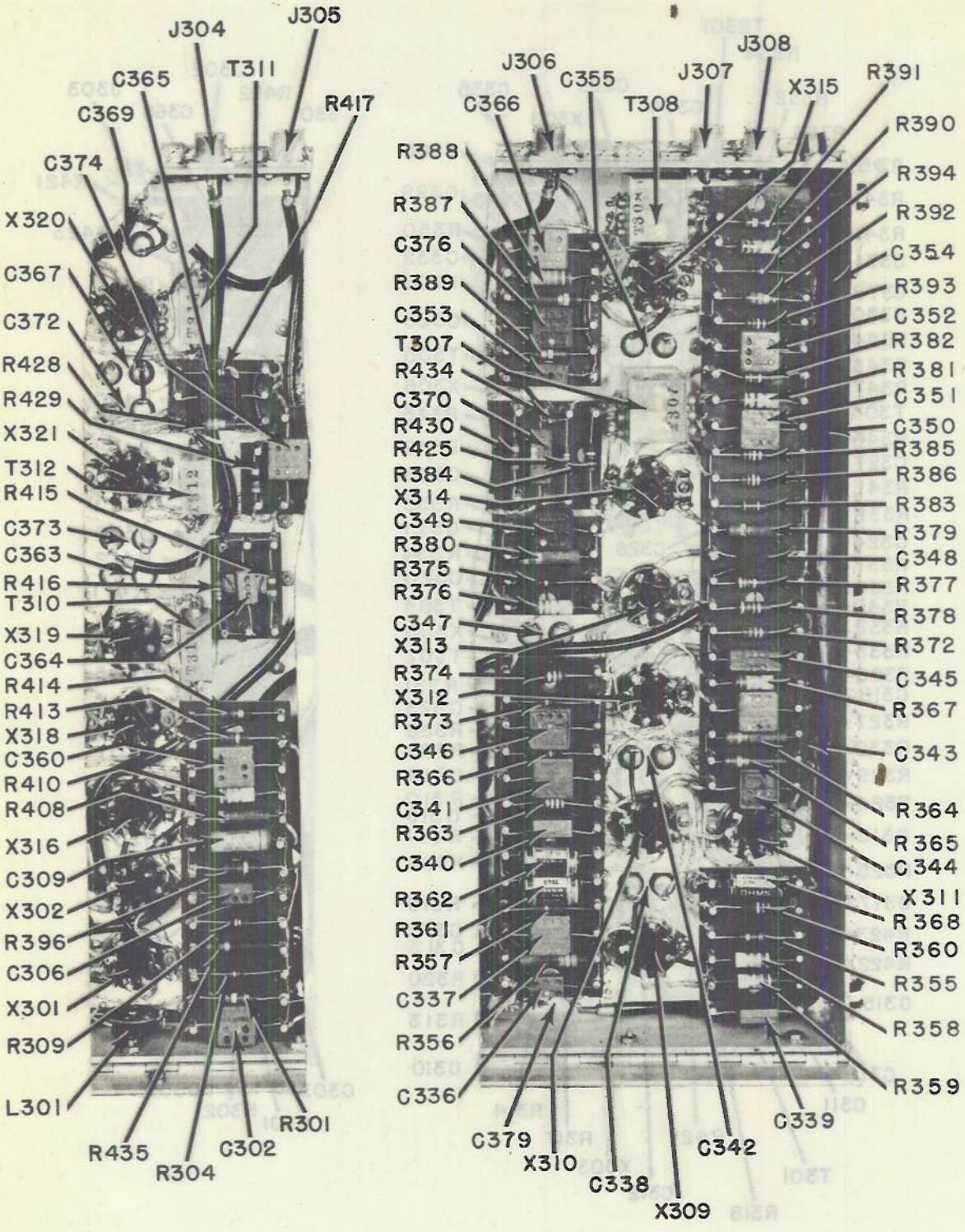

Figure 8-17. Right Half of Range Unit - Bottom View, Electronic Section

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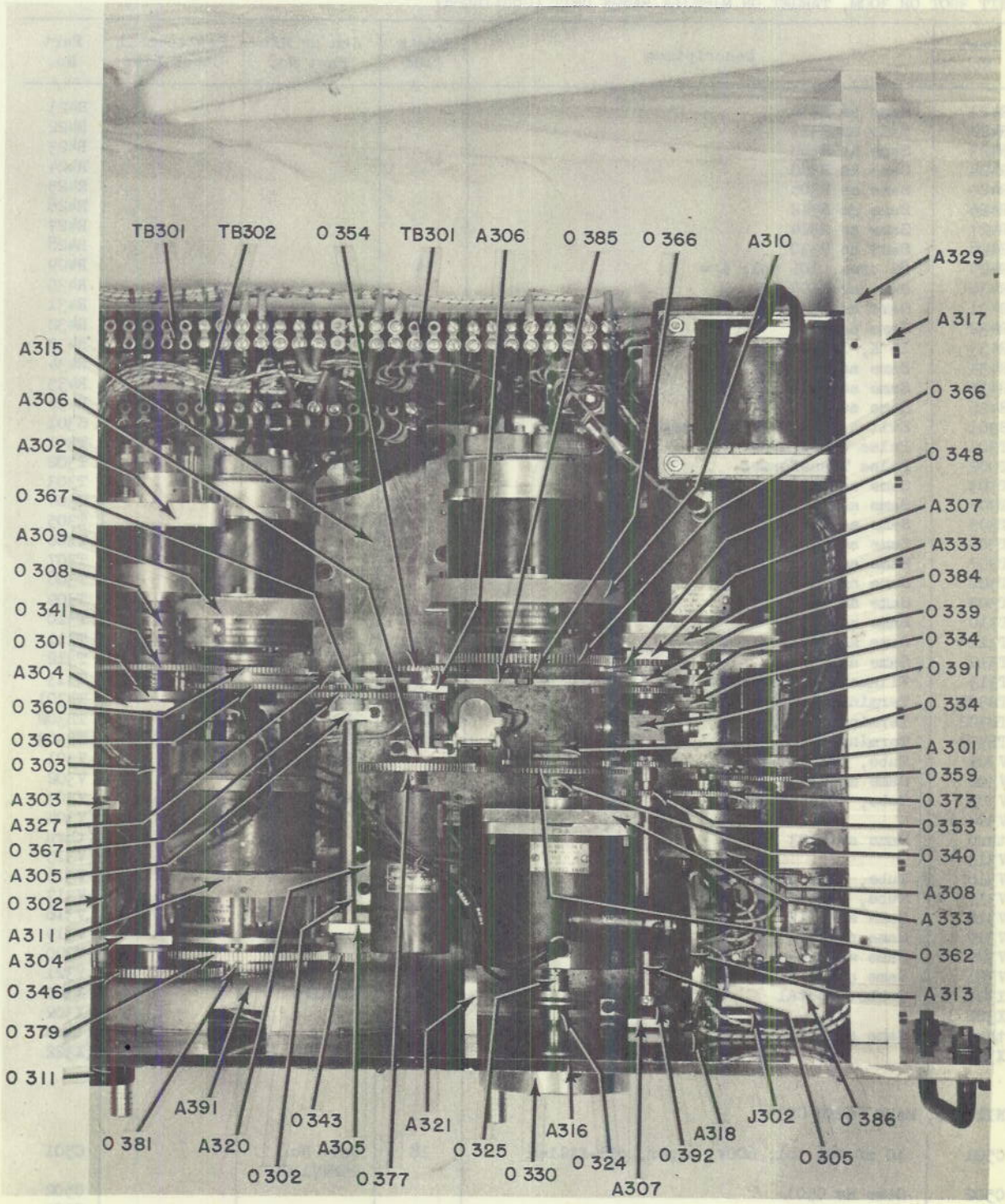

Figure 8-18. Range Unit - Top View, Mechanical Section

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 300T OR 300M, TARGET OR MISSILE RANGE UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R421	Same as R330				R421
R422	Same as R317				R422
R423	Same as R385				R423
R424	Same as R380				R424
R425	Same as R306				R425
R426	Same as R342				R426
R427	Same as R324				R427
R428	Same as R330				R428
R429	82 ohms, 10% tol; 1 w	4			R429
R430	Same as R303				R430
R431	Same as R385				R431
R432	Same as R302				R432
R433	15 K, 10% tol; 1 w	4			R433
R434	Same as R304				R434
R435	Same as R304				R435
R436	Same as R370				R436
S301	Switch, DPDT; 250v, 3 amps, or 125v, 6 amps	7			S301
T301	Pulse Transformer	209	X-143T-3		T301
T302	Pulse Transformer	209	X-154T-1		T302
T303	Same as T302				T303
T304	Same as T301				T304
T305	Same as T302				T305
T306	Same as T301				T306
T307	Same as T302				T307
T308	Same as T302				T308
T309	Same as T302				T309
T310	Same as T301				T310
T311	Same as T301				T311
T312	Same as T301				T312
T313	Filament Transformer	5	P6309		T313
TB301	Terminal Strip	386	221		TB301
TB302	Terminal Strip	386	222		TB302
TB303	Terminal Ring	386	263		TB303
V301	Tube, twin triode		6SN7		V301
V302	Same as V301				V302
V303	Tube, twin triode		6SN7GT		V303
V304 thru V315	Same as V303				V304 thru V315
V316	Tube, beam power amplifier		6V6		V316
V317	Tube, television amplifier pentode		6AC7		V317
V318	Same as V317				V318
V319	Same as V303				V319
V320	Same as V303				V320
V321	Same as V303				V321
X301	Socket, octal	6	77-M1P8		X301
X302 thru X322	Same as X301				X302 thru X322
UNIT 500, MAIN POWER UNIT					
C501	10 mf, 10% tol; 600v; paper, oil-filled	18	Cat. No. 25F471-G2		C501
C502	Same as C501				C502
C503	Same as C501				C503
E501	Fuse Holder for 3 AG	6			E501
E502	Same as E501				E502

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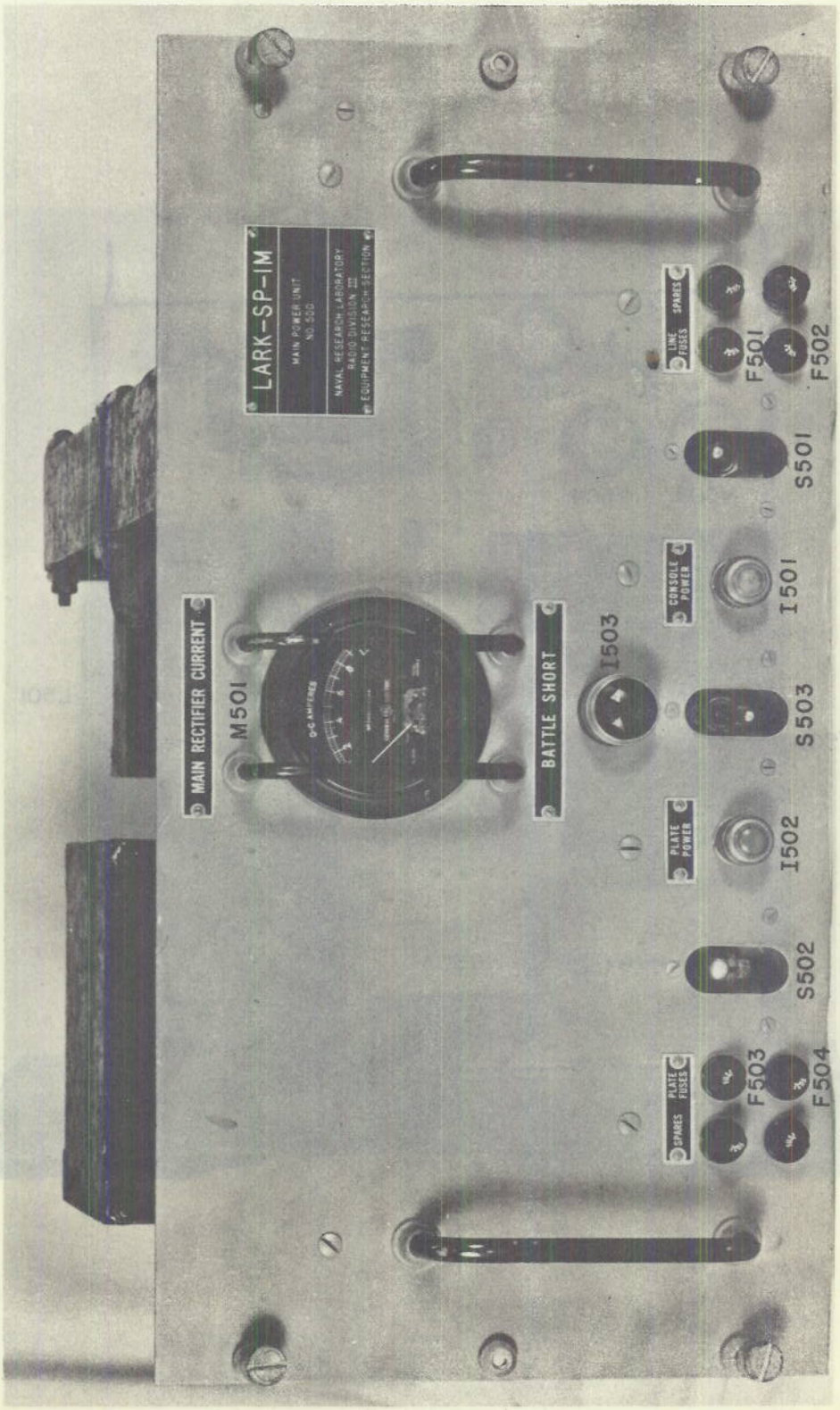

Figure 8-19. Main Power Unit - Front View

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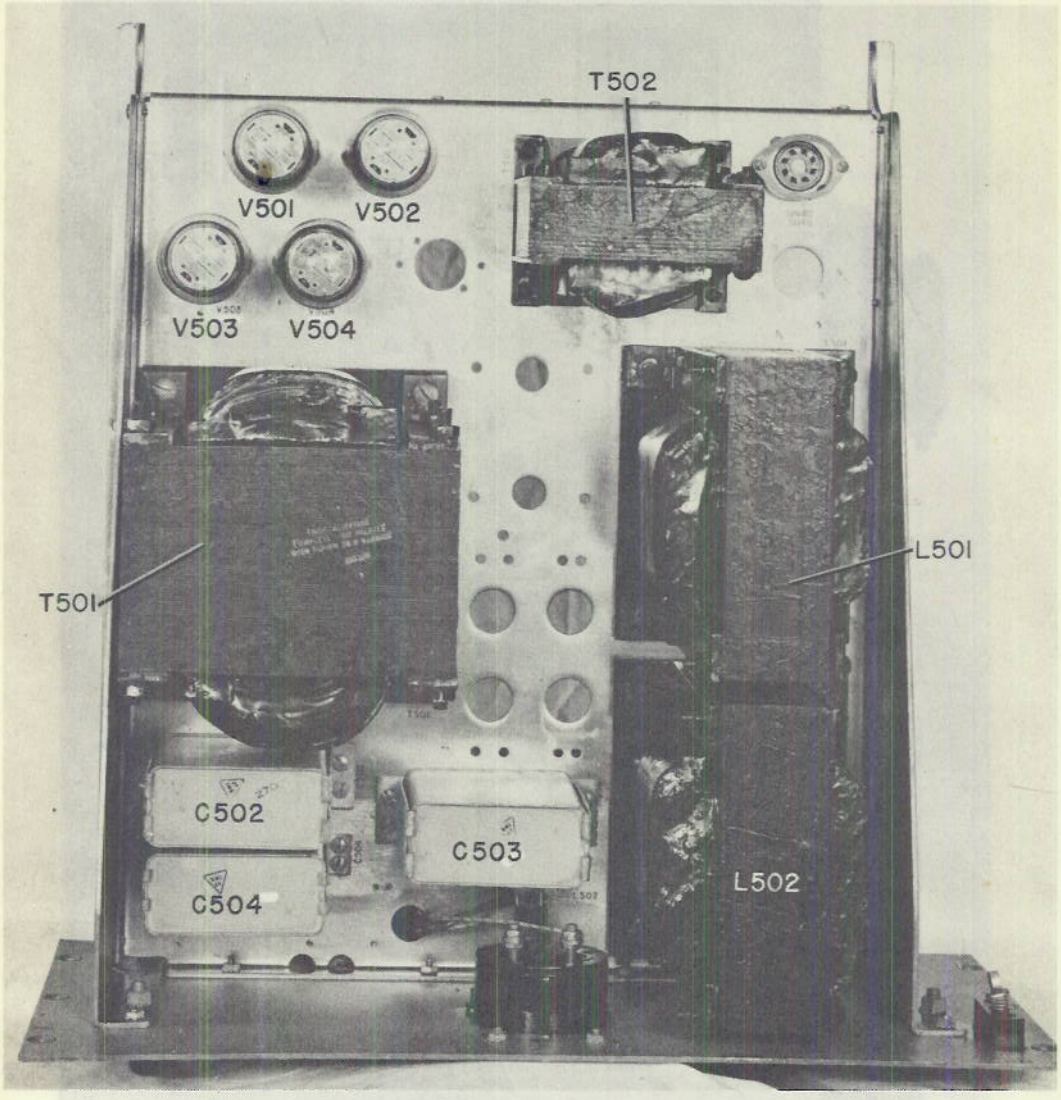

Figure 8-20. Main Power Unit - Top View

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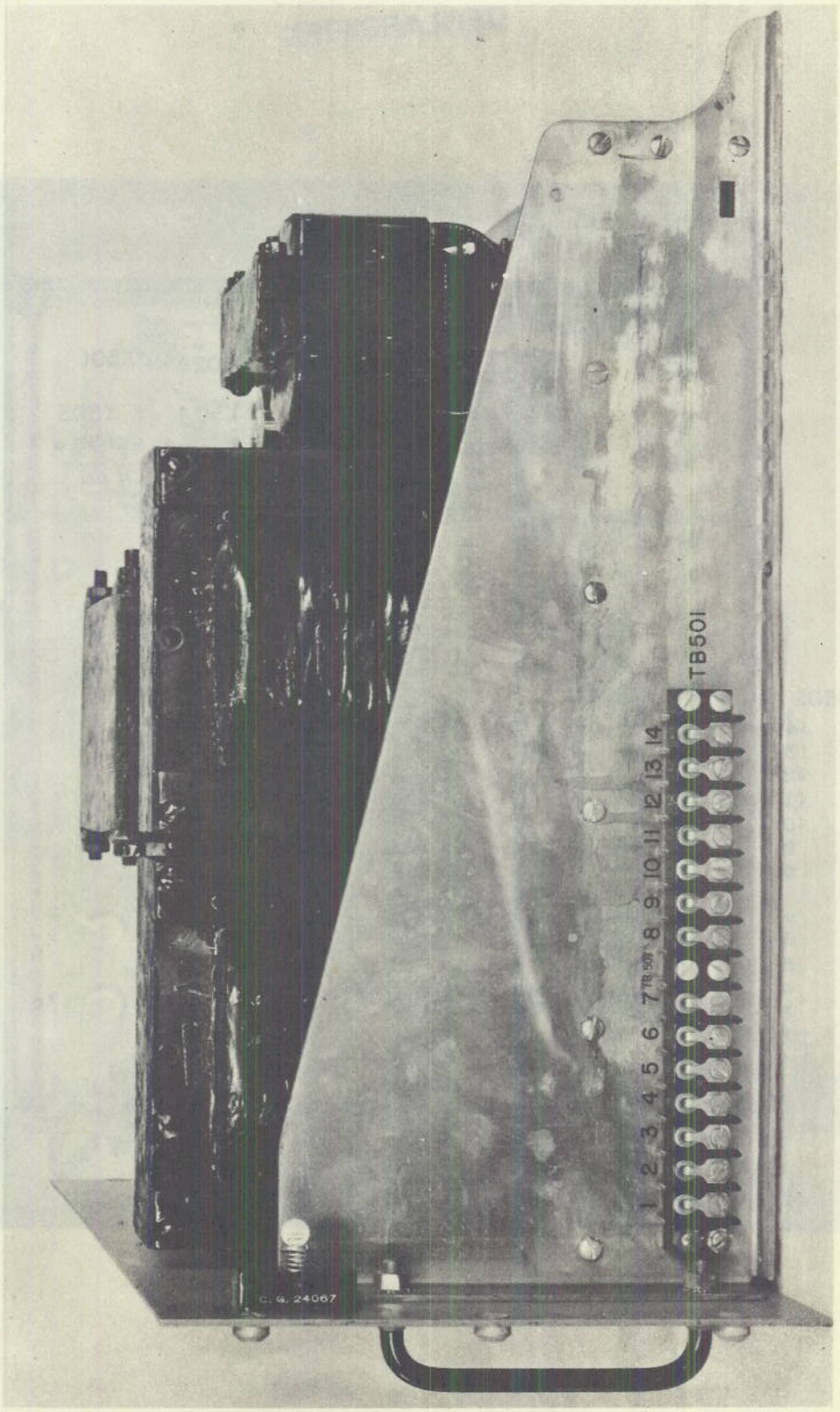

Figure 8-21. Main Power Unit - Right Side View

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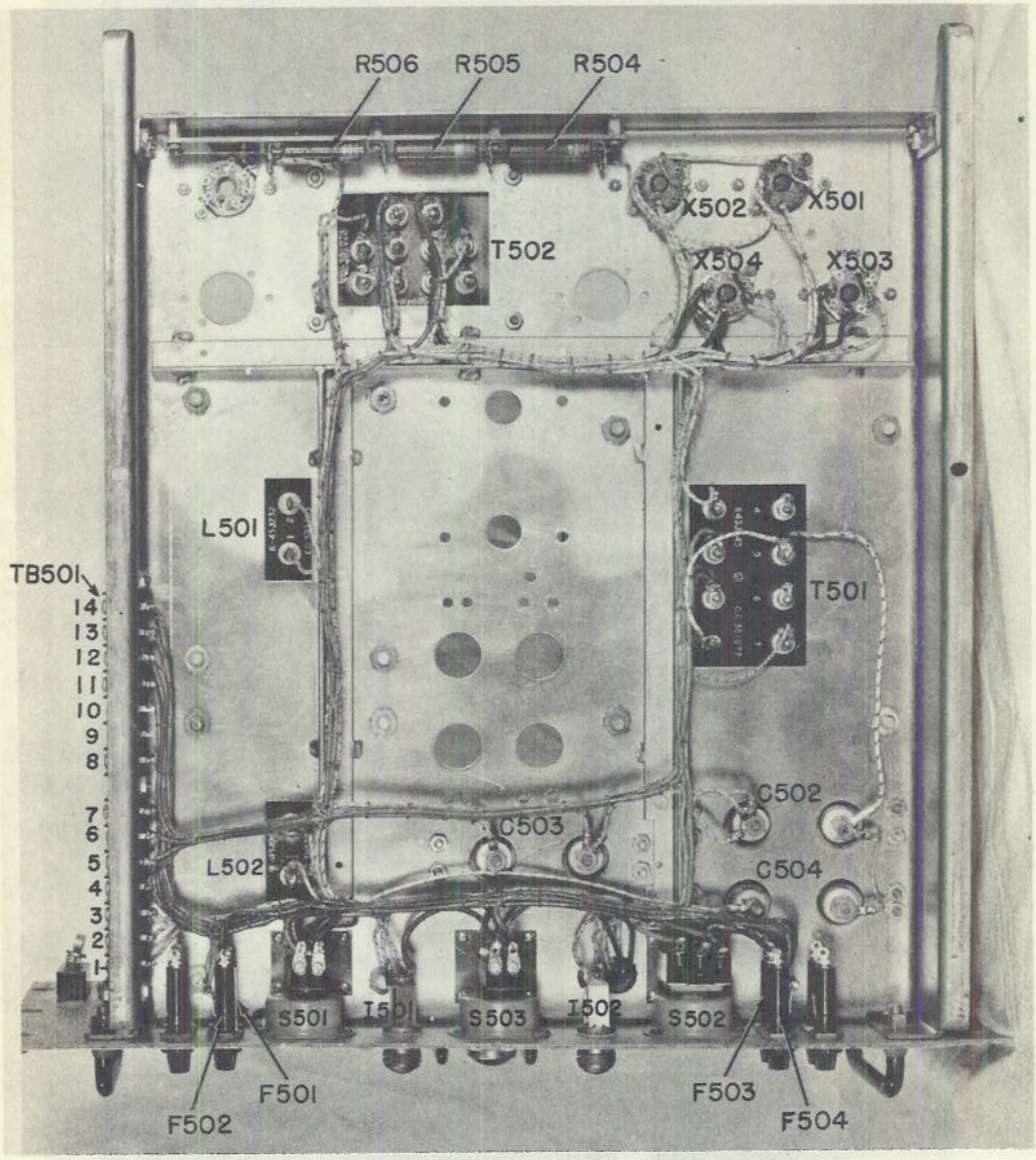

Figure 8-22. Main Power Unit - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 500, MAIN POWER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
F501	Line Fuse, 8 amps	121	Type 3AG Cat No.1360		F501
F502	Same as F501				F502
F503	Same as F501				F503
F504	Same as F501				F504
I501	Pilot Light, 6.3v, 0.25 amp	18	Mazda No.44		I501
I502	Same as I501				I502
I503	Lamp, 110v, 10wc7, candelabra base	18	Mazda C7		I503
L501	Filter Reactor, 10.3 ohms, 6% tol, dc resistance at 25°C	18			L501
L502	Same as L501				L502
M501	Meter, rectifier current, 0-1000 milliamps	18			M501
R504	68 K, 10% tol; 2 w	21	BT-2		R504
R505	Same as R504				R505
R506	Same as R504				R506
S501	Switch, on-off, DPST	7	No.80600-AN		S501
S502	Switch, on-off, 3 pole, ST	14	No.8342		S502
S503	Same as S501				S503
T501	Plate Transformer Primary-115v, 60 cycles Secondary-1100v, 0.8 amp Secondary center tapped at 1% electrostatic shield present.	18			T501
T502	Filament Transformer Primary-115v, 60 cycles Secondary 1- 6.3v, 3% tol; 7.5 amps Secondary 2- 2.5v, 3% tol; 10 amps Secondary 3- 6.3v, 3% tol; 1 amp Secondary 4- 6.3v, 3% tol; 1 amp Secondary 5- 6.3v, 3% tol; 5 amps Secondary 6- 6.3v, 3% tol; 1 amp (All 500v to ground)	18			T502
TB501	Terminal Strip	386	14-142-Y		TB501
V501	Tube, full-wave rectifier	398	5U4G		V501
V502	Same as V501				V502
V503	Same as V501				V503
V504	Same as V501				V504
X501	Socket, octal tube	6	77M1P-8		X501
X502	Same as X501				X502
X503	Same as X501				X503
X504	Same as X501				X504
UNIT 600, SYNCHRONIZER AND MISSILE COORDINATE DETECTOR UNIT					
C601	0.25 mf, 600v, paper	623	TC2		C601
C602	Same as C601				C602
C603	0.006 mf, 600v, mica	623	1FM26		C603
C604	2000 mmf, mica	623	1FM22		C604
C605	Same as C601				C605
C606	0.001 mf, 600v, mica	623	1FM21		C606
C607	Same as C601				C607
C608	Same as C601				C608
C609	10 mf, 600v, paper	623	CR106		C609
C610	Same as C603				C610
C611	15 mmf, 600v, mica	623	MS415		C611
C612	100 mmf, 600v, mica	623	1FM31		C612
C613	Same as C609				C613
C614	Same as C609				C614

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 600, SYNCHRONIZER AND MISSILE COORDINATE DETECTOR UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
C615	Same as C609				C615
C616	0.1 mf, 600v, paper	623	TC1		C616
C617	Same as C601				C617
C618	0.5 mf, 600v, paper	623	TC5		C618
C619	Same as C618				C619
C620	0.175 mf, paper	34	2131666-B		C620
C621	0.352 mf, paper	2	P05 1309458		C621
C622	Same as C616				C622
C623	Same as C601				C623
C624	Same as C618				C624
C625	Same as C618				C625
C626	Same as C620				C626
C627	Same as C621				C627
C628	0.05 mf, 600v, paper	623	TC15		C628
C629	Same as C618				C629
C630	Same as C618				C630
C631	Same as C620				C631
C632	Same as C621				C632
C633	Same as C628				C633
C634	Same as C601				C634
C635	Same as C618				C635
C636	Same as C618				C636
C637	Same as C620				C637
C638	Same as C621				C638
C639	Same as C601				C639
C640	330 mmf, mica	623	1FM335		C640
C641	Same as C618				C641
CR601	Crystal Rectifier	649	1N34		CR601
CR602	Same as CR601				CR602
CR603	Crystal Rectifier	649	1N38		CR603
J601	Jacks	6	SO-239 CPH-49194		J601
J602	Same as J601				J602
K601	Relay, DPDT, dc coil	12	A13751		K601
K602	Same as K601				K602
K603	Same as K601				K603
K604	Same as K601				K604
K605	Relay, DPDT, 110vac coil	731	KS10128		K605
K606	Same as K605				K606
L601	Filter Choke, 4 henries	NRL	3167		L601
L602	Same as L601				L602
L603	Same as L601				L603
L604	Same as L601				L604
R601	5 K, 10 w, wire wound	623	BR0L0		R601
R602	1.8 K, 5% tol; 2 w; composition	4	HB1825		R602
R603	1.2 K, 5% tol; 2 w; composition	4	HB1225		R603
R604	33 K, 5% tol; 1 w; composition	4	GB3335		R604
R607	1 meg, 5% tol; 1 w; composition	4	GB1055		R607
R608	330 K, 5% tol; 1 w; composition	4	GB3345		R608
R609	Same as R607				R609
R610	10 K, 5% tol; 1 w; composition	4	GB1035		R610
R611	100 K, 5% tol; 1 w; composition	4	GB1045		R611
R612	500 K, 5% tol; 1 w; composition	4	GB5145		R612
R613	Same as R612				R613
R614	Same as R612				R614
R615	Same as R601				R615
R616	10 K, 0.25% tol; wire wound	2025	BX193		R616
R617	Same as R616				R617
R618	Same as R616				R618

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 600, SYNCHRONIZER AND MISSILE COORDINATE DETECTOR UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R619	Same as R616				R619
R620	100 ohms, 5% tol; 1 w; composition	4	GB1015		R620
R621	Same as R607				R621
R622	2.2 K, 5% tol; 2 w; composition	4	HB2225		R622
R623	20 K, 5% tol; 2 w; composition	4	HB2035		R623
R624	Same as R611				R624
R625	18 K, 5% tol; 2 w; composition	4	HB1835		R625
R626	Same as R611				R626
R627	Same as R611				R627
R628	Same as R612				R628
R629	Same as R612				R629
R630	Same as R612				R630
R631	Same as R601				R631
R632	Same as R611				R632
R633	Same as R611				R633
R634	Same as R616				R634
R635	Same as R616				R635
R636	Same as R616				R636
R637	Same as R616				R637
R638	Same as R612				R638
R639	Same as R611				R639
R640	Same as R611				R640
R641	2.2 K, 5% tol; 1 w; composition	4	HB2225		R641
R642	Same as R612				R642
R643	Same as R611				R643
R644	Same as R611				R644
R645	3.3 K, 5% tol; 1 w; composition	4	GB3325		R645
R646	Same as R612				R646
R647	Same as R611				R647
R648	1.8 K, 5% tol; 1 w; composition	4	GB1825		R648
R649	Same as R611				R649
R650	Same as R612				R650
R651	Same as R611				R651
R652	Same as R648				R652
R653	Same as R611				R653
T601	Transformer Primary- 2000 ohms Secondary- 32000 ohms	2022	870-1		T601
T602	Same as T601				T602
T603	Same as T601				T603
T604	Same as T601				T604
T605	Filament Transformer Primary- 110v Secondary- 6.3v, 10 amps	2022	3124		T605
T606	Universal Interstage Transformer, recased	669	T20A24		T606
T607	Same as T606				T607
T608	Same as T606				T608
T609	Same as T606				T609
T610	Pulse Transformer	2024	903245		T610
TB601	Terminal Board, 16 terminals, with long lugs	386	16-142-Y		TB601
TB602	Same as TB601				TB602
V601	Tube, video beam power amplifier		6AG7		V601
V602	Tube, twin triode		6SL7GT		V602
V603	Tube, twin triode		6SN7GT		V603
V604	Tube, beam power amplifier		6V6		V604
V605	Same as V603				V605
V606	Same as V604				V606
V607	Tube, double diode		6AL5		V607
V608	Same as V607				V608

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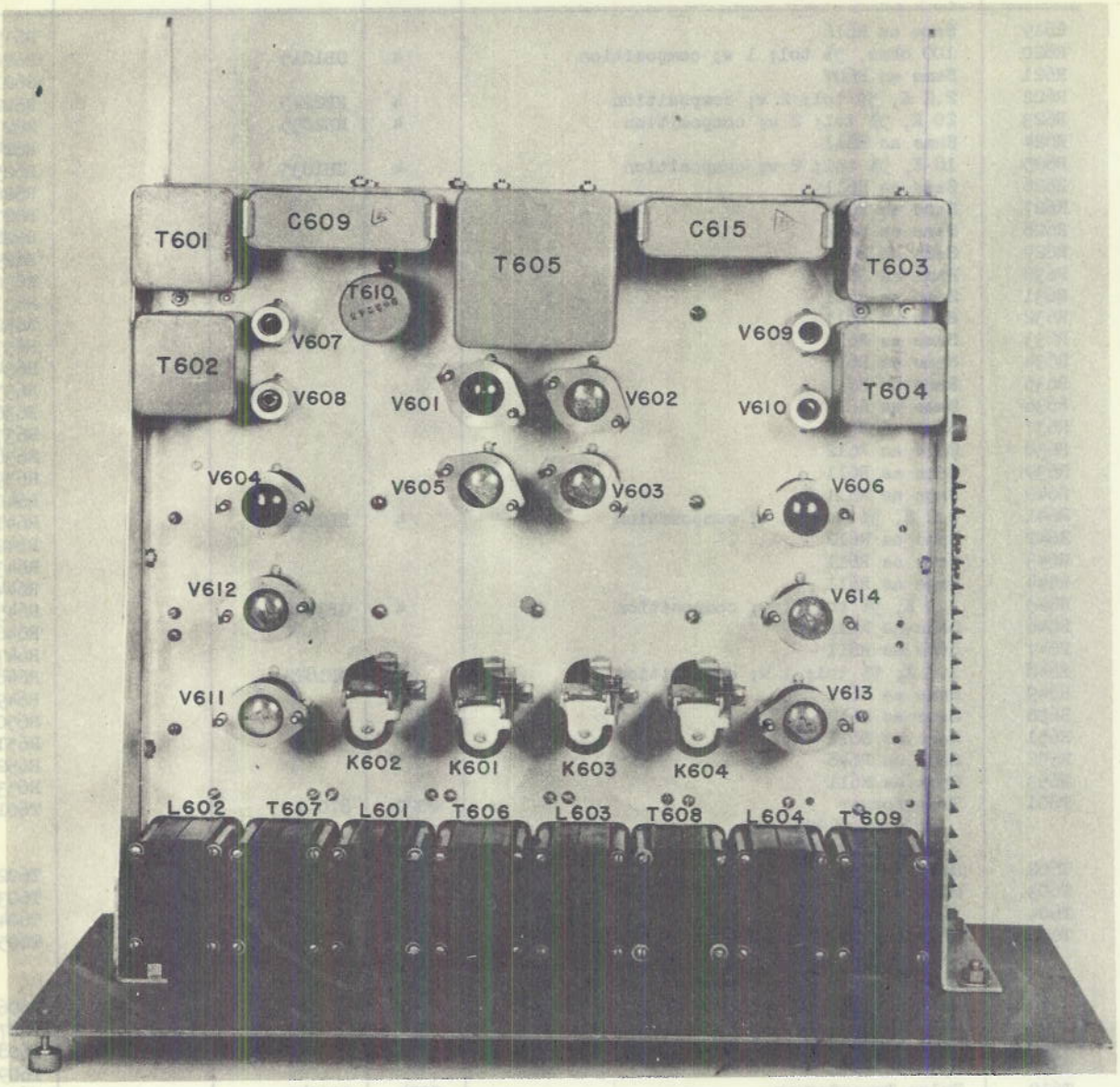

Figure 8-23. Synchronizer and Missile Coordinate Detector Unit - Top View

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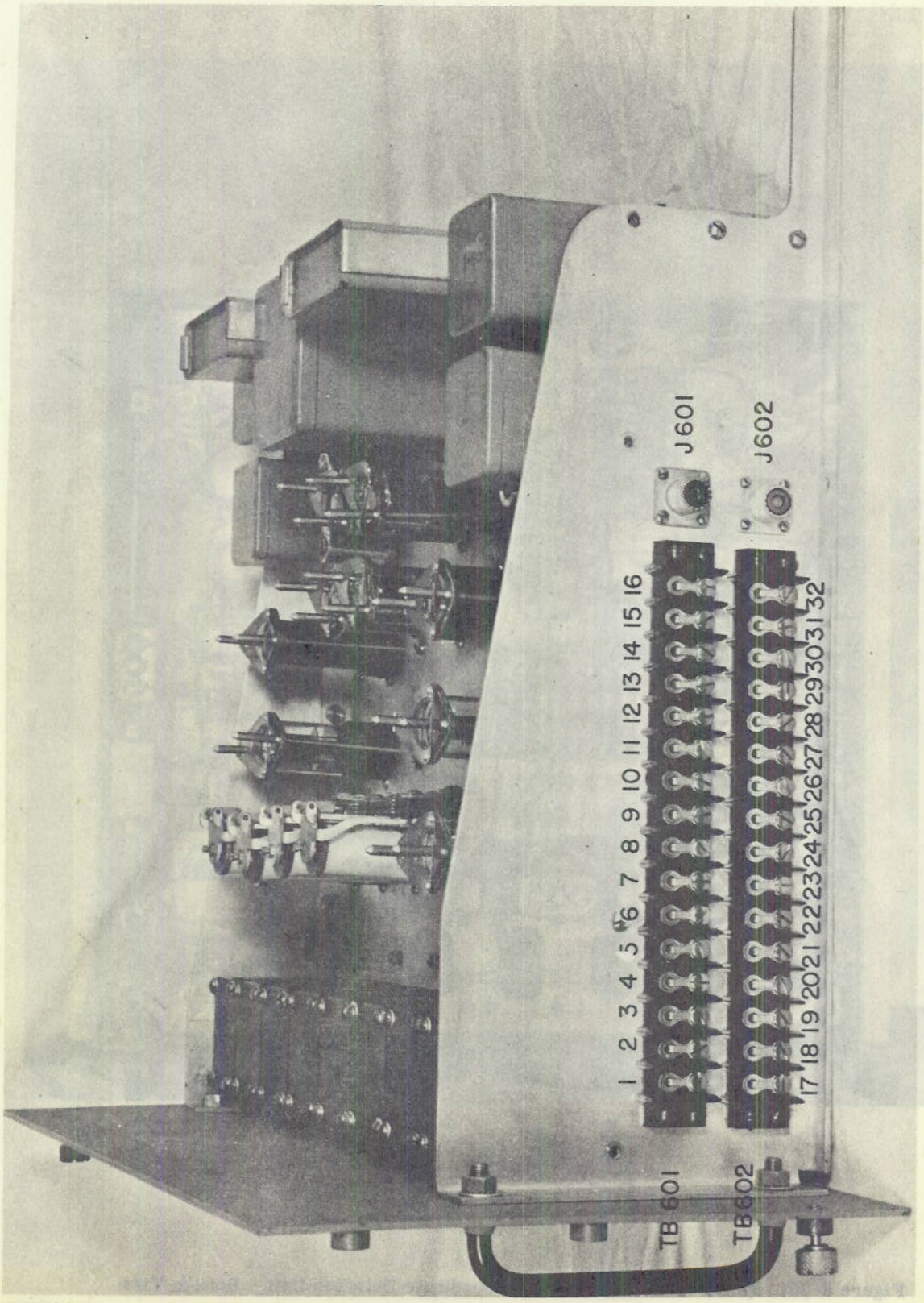

Figure 8-24. Synchronizer and Missile Coordinate Detector Unit - Right Side View

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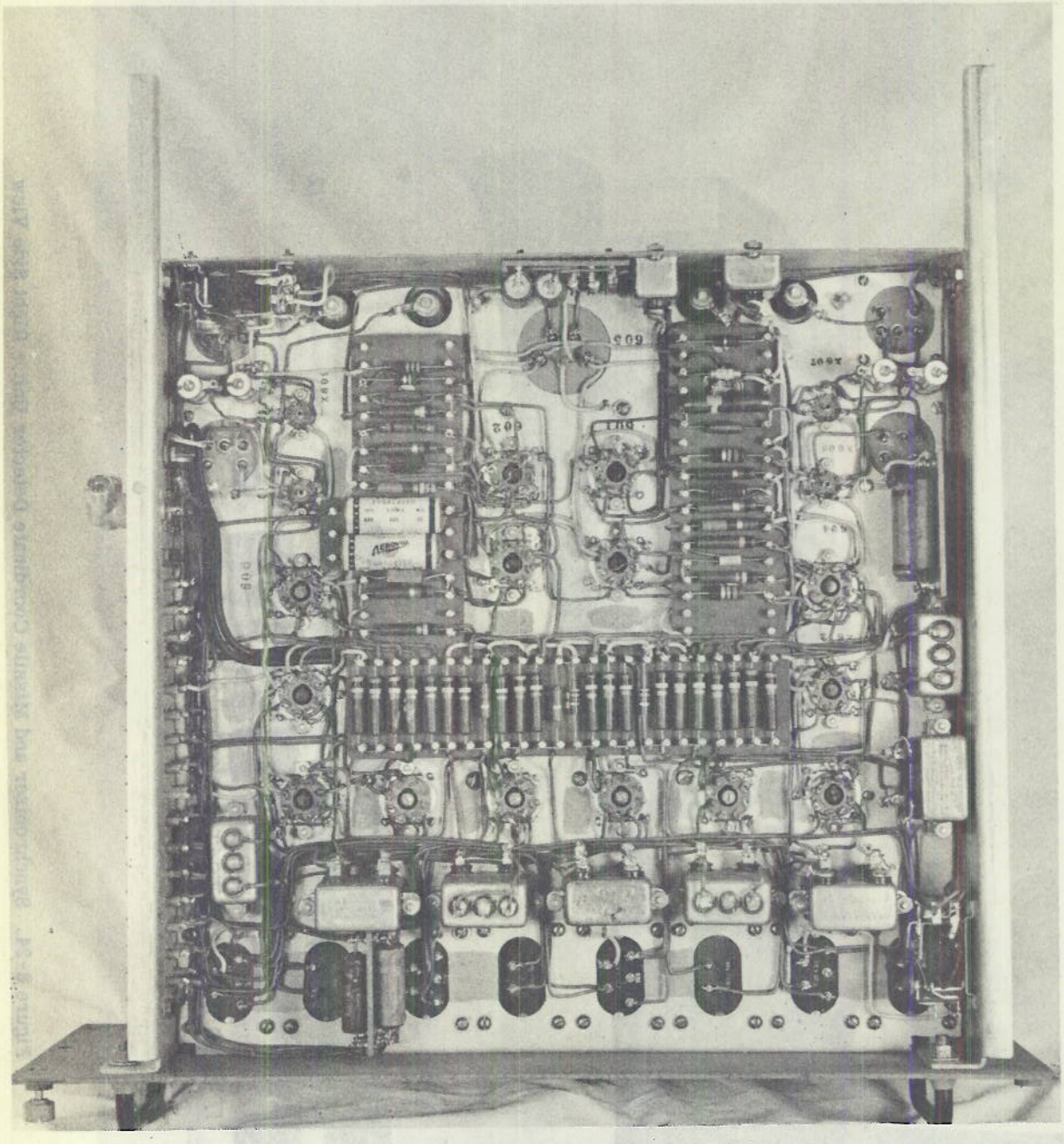

Figure 8-25. Synchronizer and Missile Coordinate Detector Unit - Bottom View

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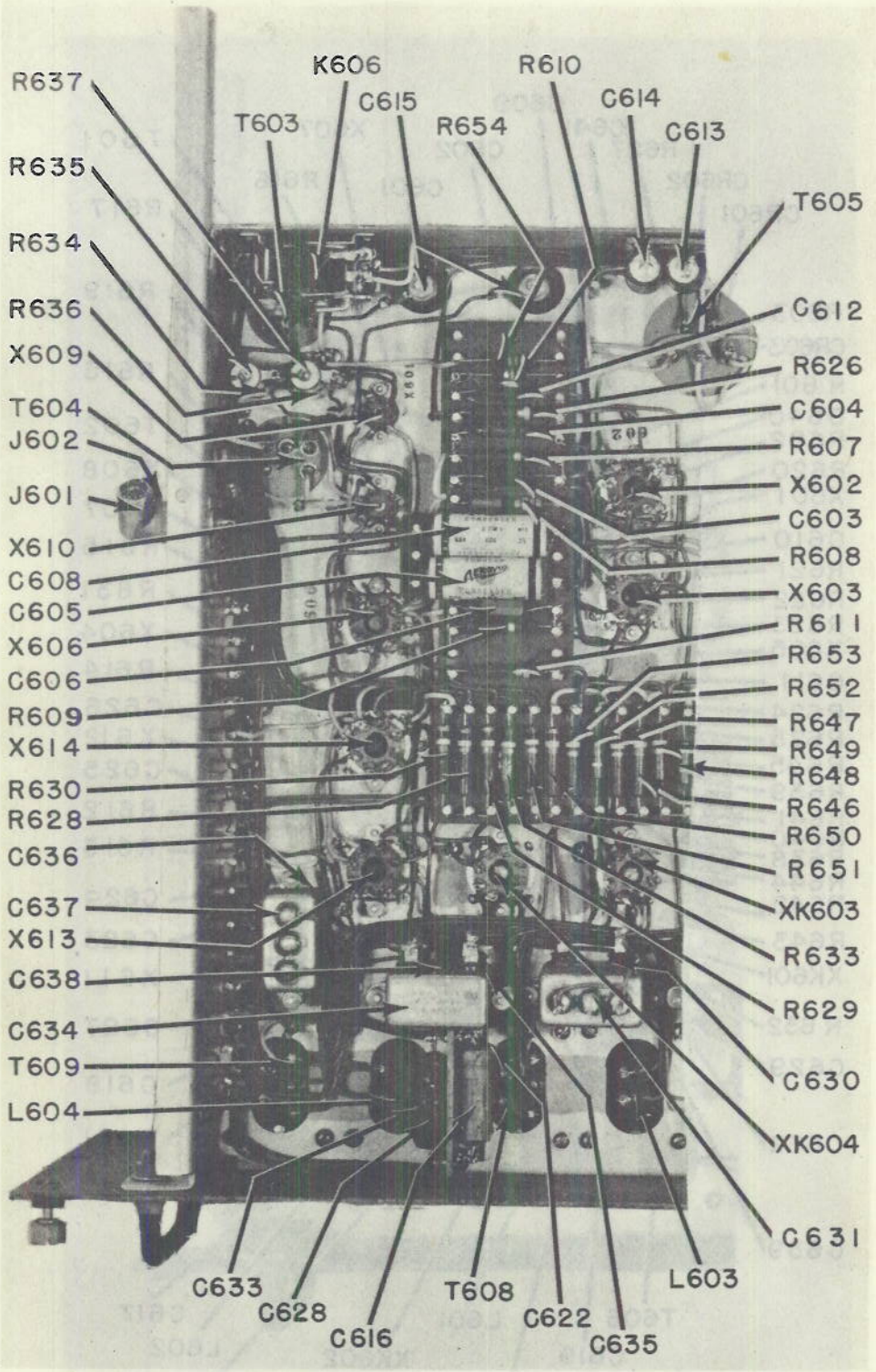

Figure 8-26. Left Half of Synchronizer and Missile Coordinate Detector Unit - Bottom View

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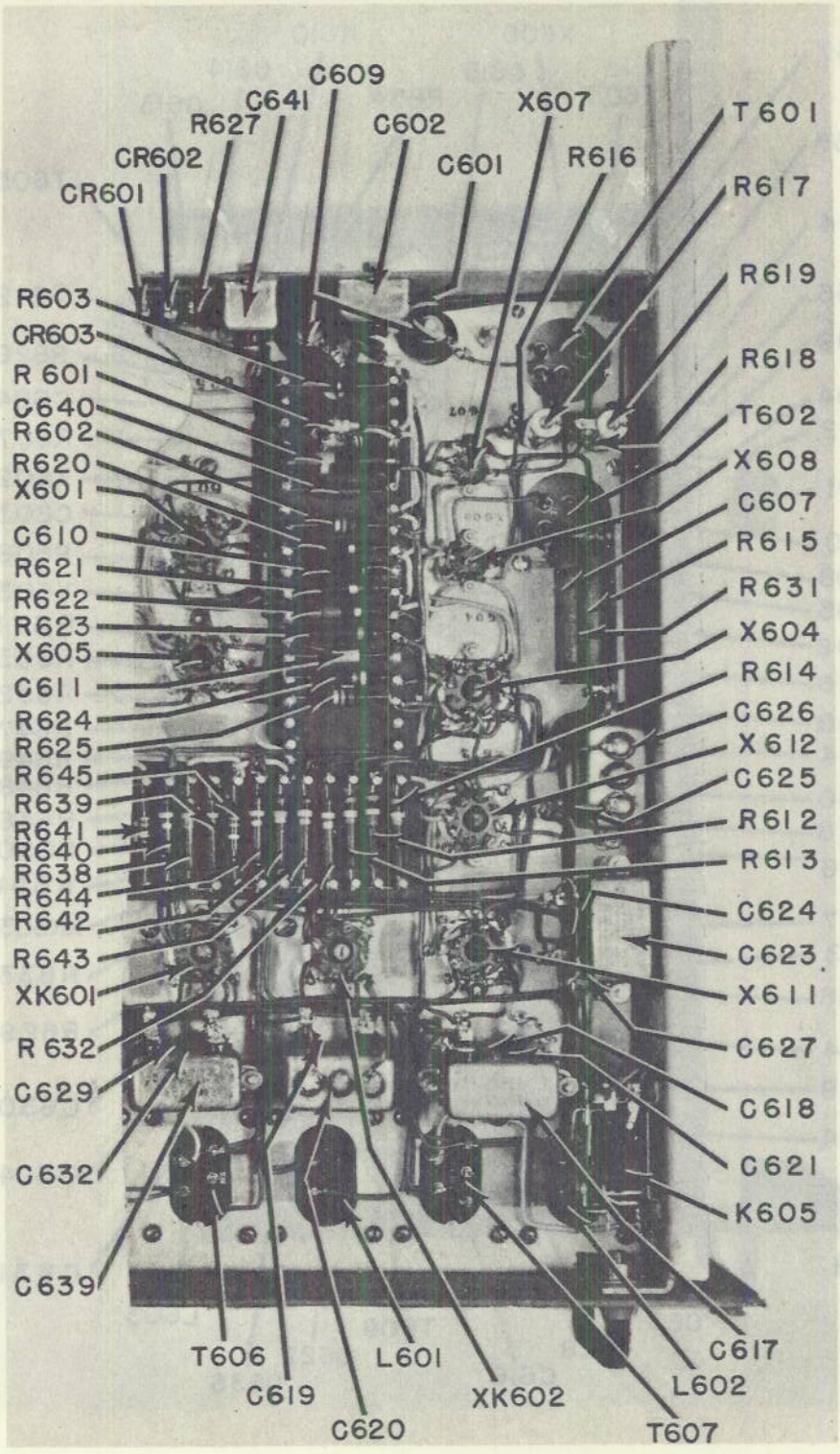

Figure 8-27. Right Half of Synchronizer and Missile Coordinate Detector Unit - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 600, SYNCHRONIZER AND MISSILE COORDINATE DETECTOR UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
V609	Same as V607				V609
V610	Same as V607				V610
V611	Same as V602				V611
V612	Same as V602				V612
V613	Same as V602				V613
V614	Same as V602				V614
X601	Socket, Octal	6	77-MIP8		X601
X602 thru X606	Same as X601				X602 thru X606
X607	Socket, Miniature 7-Pin	11			X607
X608 thru X610	Same as X607				X608 thru X610
X611 thru X614	Same as X601				X611 thru X614
UNIT 700, AUXILIARY POWER UNIT					
C701	0.1 mf, 600v, bath tub	13	DY6010		C701
C702	0.01 mf, 300v, mica	13	Type 1W		C702
C703	0.01 mf, 600v, bath tub	13	DY6010		C703
C704 thru C714	Same as C702				C704 thru C714
E703	Fuse Holder, 3AG	6			E703
E704	Same as E703				E704
E706 thru E713	Same as E703				E706 thru E713
F703	Fuse, 3AG, 1/2 amp	26	Cat.No.1046		F703
F704	Same as F703				F704
F706 thru F713	Same as F703				F706 thru F713
I702	Pilot light, 6.3v, 0.25 amp	18	Mazda 44		I702
M701	Meter, 0-500v, Navy type No. MR34B500DCW	18			M701
M702	Meter, 0-300v, Navy type No. MR34B300DCW	18			M702
R701	1 K, 10% tol; 1 w	4			R701
R702	56 ohms, 10% tol; 1 w	4			R702
R703	Same as R701				R703
R704	Same as R702				R704
R705	Same as R701				R705
R706	Same as R702				R706
R707	Same as R701				R707
R708	Same as R702				R708
R709	470 K, 10% tol; 1 w	4			R709
R710	Same as R701				R710
R711	Same as R702				R711
R712	630 ohms, 5% tol; 150 w; wire wound; Navy type No. 63843	623			R712
R713	4.7 K, 10% tol; 2 w	4			R713
R714	Same as R713				R714
R715	Same as R713				R715
R716	100 K, 10% tol; 2 w	4			R716
R717	50 K, pot., 10% tol; 4 w	155	Type 10		R717

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 700, AUXILIARY POWER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R718	Same as R716				R718
R719	Same as R702				R719
R720	Same as R702				R720
R721	Same as R702				R721
R722	Same as R709				R722
R723	Same as R702				R723
R724	18 K, 10% tol; 2 w	4			R724
R725	Same as R724				R725
R726	47 K, 10% tol; 2 w	4			R726
R727	Same as R717				R727
R728	43 K, 10% tol; 2 w	155			R728
R729	6.3 K, 5% tol; 70 w	623			R729
R730	Same as R729				R730
R731	Same as R729				R731
R732	6.3 K, 5% tol; 70 w; wire wound; Navy type No. 63863	623			R732
R733	100 K, 10% tol; 1 w	623			R733
R734	Same as R733				R734
R736	Same as R733				R736
R737	150 K, 10% tol; 1 w	623			R737
R738	Same as R737				R738
R739	Same as R737				R739
R740	Same as R737				R740
R741	Same as R737				R741
R742	Same as R737				R742
R743	Same as R737				R743
R745	Same as R701				R745
R747	Same as R701				R747
R748	Same as R702				R748
R749	3.3 K, 10% tol; 2 w				R749
R750	Same as R749				R750
R751	5 K, 100 w	21	EPA		R751
R752	Same as R751				R752
R753	Same as R729				R753
R754	Same as R729				R754
R756	Same as R729				R756
R757	Same as R729				R757
S702	Switch, on-off, DPST	7	No. 80600AN		S702
T701	Filament Transformer Primary- 115 vac, 60 cycles Secondary 1- 6.3v, 7.5 amps Secondary 2- 2.5v, 10 amps Secondary 3- 6.3v, 1 amp Secondary 4- 6.3v, 1 amp Secondary 5- 6.3v, 5 amps Secondary 6- 6.3v, 1 amp	18			T701
TB701	Terminal Strip, 14 terminals	386	14-142-Y		TB701
TB702	Same as TB701				TB702
V701	Tube, beam power amplifier		6Y6G		V701
V702	Same as V701				V702
V703	Same as V701				V703
V704	Same as V701				V704
V705	Same as V701				V705
V706	Same as V701				V706
V707	Tube, triple-grid amplifier		6SH7		V707
V708	Tube, voltage regulator		VR150		V708
V709	Tube, triode power amplifier		6B4G		V709
V710	Same as V709				V710
V711	Same as V709				V711

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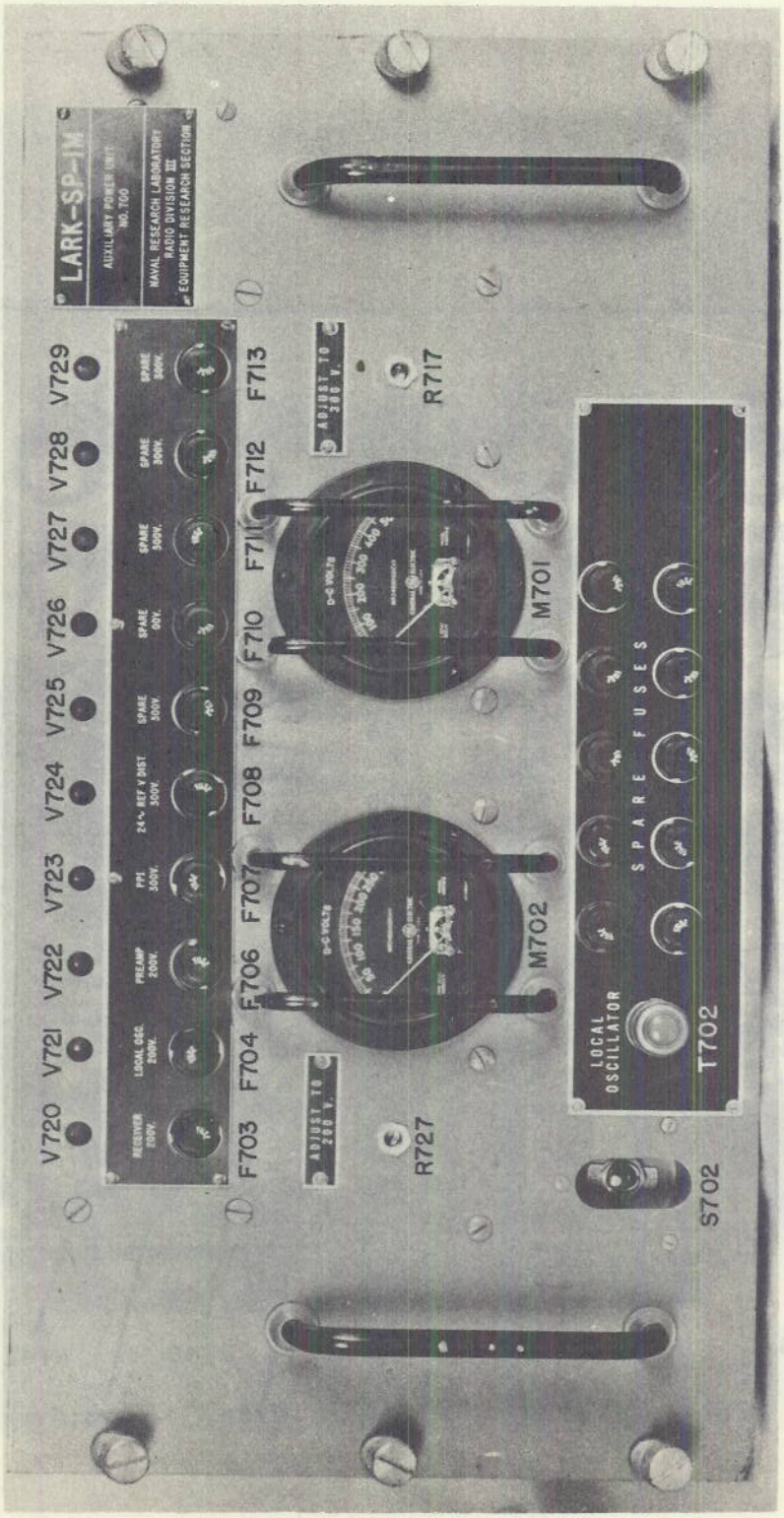

Figure 8-28. Auxiliary Power Unit - Front View

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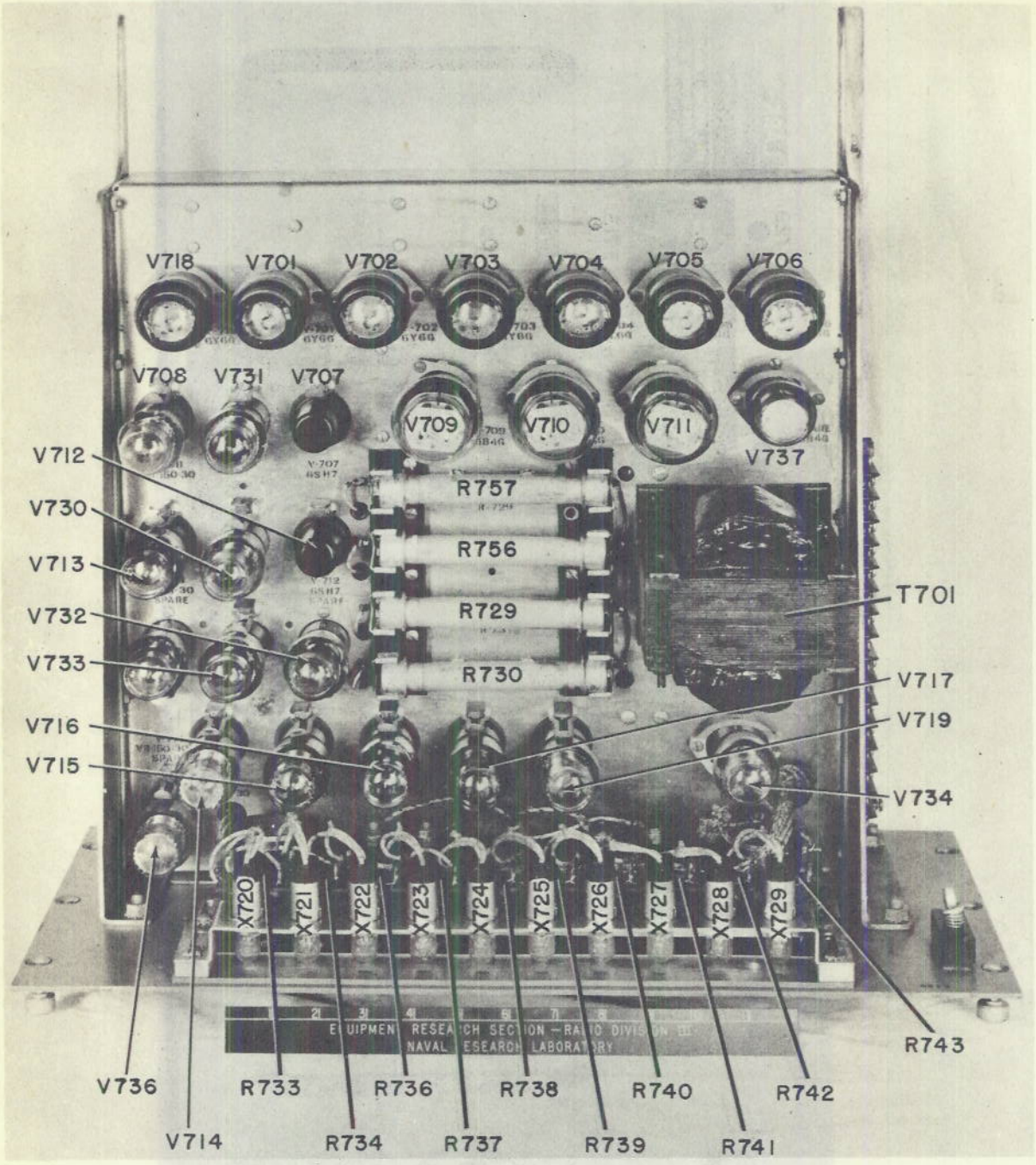

Figure 8-29. Auxiliary Power Unit - Top View

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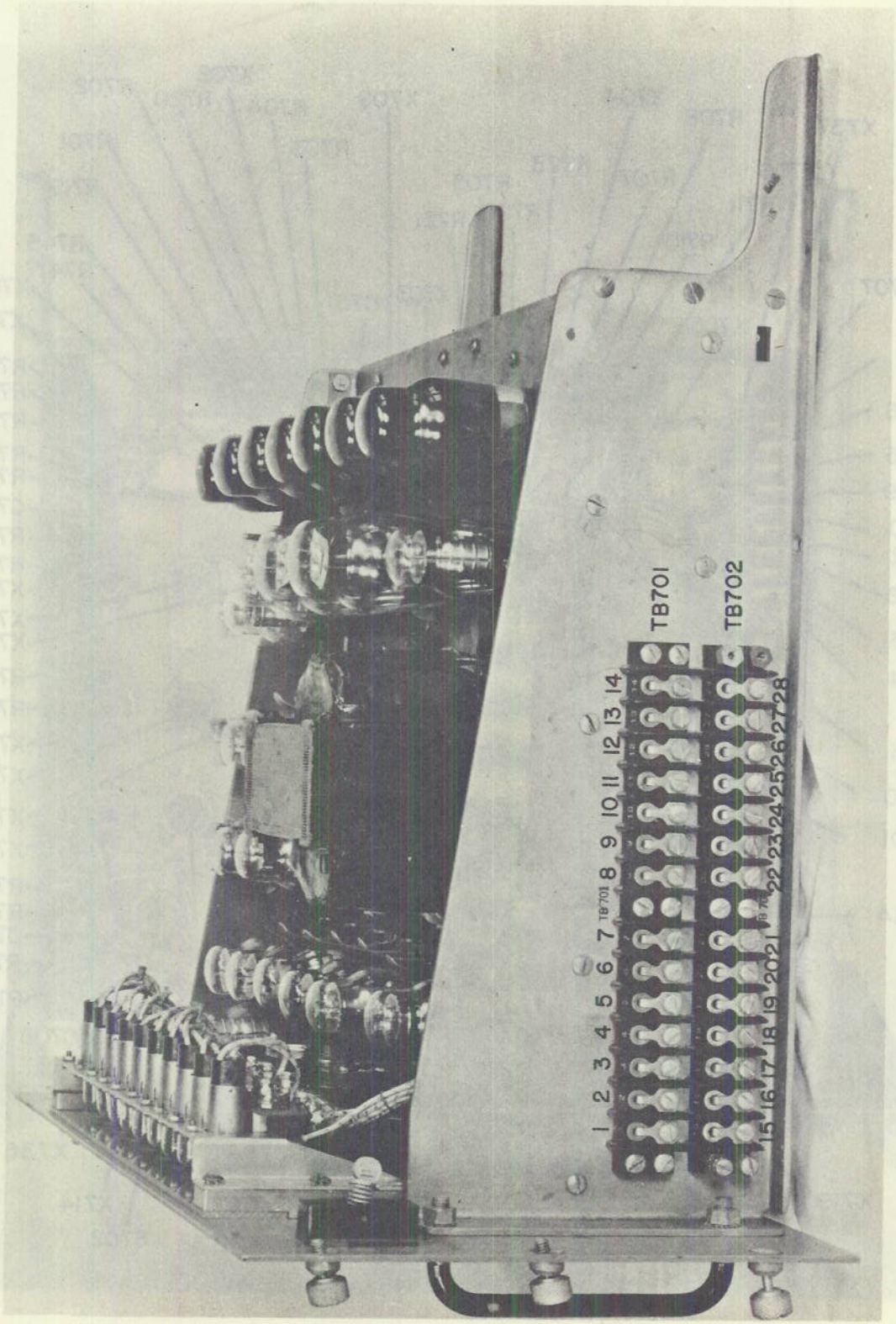

Figure 8-30. Auxiliary Power Unit - Right Side View

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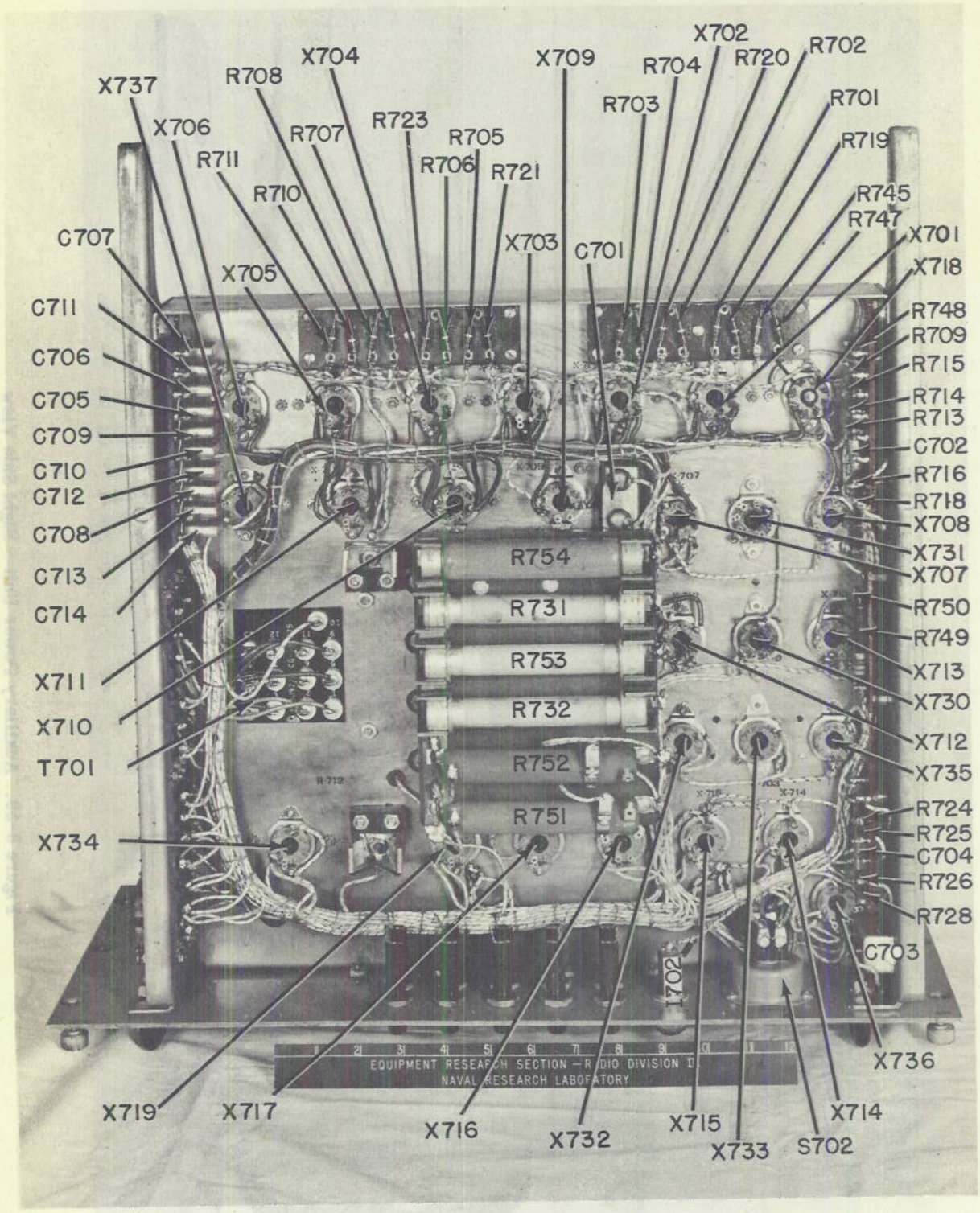

Figure 8-31. Auxiliary Power Unit - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 700, AUXILIARY POWER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
V712	Same as V707				V712
V713	Tube, voltage regulator		VR105		V713
V714	Same as V708				V714
V715	Same as V708				V715
V716	Same as V713				V716
V717	Same as V713				V717
V718	Same as V701				V718
V719	Same as V713				V719
V720 thru V729	Tube, neon voltage regulator		991		V720 thru V729
V730 thru V734	Same as V713				V730 thru V734
V735	Same as V708				V735
V736	Same as V708				V736
V737	Same as V708				V737
X701 thru X719	Socket, octal tube	11			X701 thru X719
X720 thru X729	Socket, neon	195			X720 thru X729
X730 thru X737	Socket, octal tube	11			X730 thru X737
UNIT 800, PPI UNIT					
B810	Motor, 10 w, 2 phase, control	2029			B810
B813	Same as B810				B813
C812	2 mf, 600v	13	T-6020		C812
C813	Same as C812				C813
G802	Generator, a-c tachometer, 110v excitation	399			G802
G810	Same as G802				G810
K801	Coil, DPDT, 110v	731	KS10128		K801
K802	Same as K801				K802
M801	Cross-pointer meter, two element, (Approach Indicator ID-24/ARN-9)				M801
R834	8.2 K, 5% tol; 1 w	4	GB8225		R834
R839	Same as R834				R839
R897	300 ohms, pot., 25 w, wire wound	32	0155		R897
S806	Microswitch	2028	5530		S806
S807	Same as S806				S807
T802	Filament Transformer		K54-J-54		T802
T803	Filament Transformer		T19F81		T803
T804	Filament Transformer Primary- 110v Secondary- 5v, 5 amps	2030	T-354		T804
TB801	Terminal Board, 16 terminals, with long lugs	386	16-142-Y		TB801
TB802	Same as TB801				TB802
TB803	Same as TB801				TB803
TB804	Terminal Board, 3 terminals	386	3-142-Y		TB804
TB805	Terminal Board, 8 terminals, with long lugs	386	8-142-Y		TB805
V801	Tube, cathode-ray		7BP7		V801
V802	Tube, tetrode		807		V802
V803	Tube, twin triode		6SN7GT		V803
V804	Same as V803				V804

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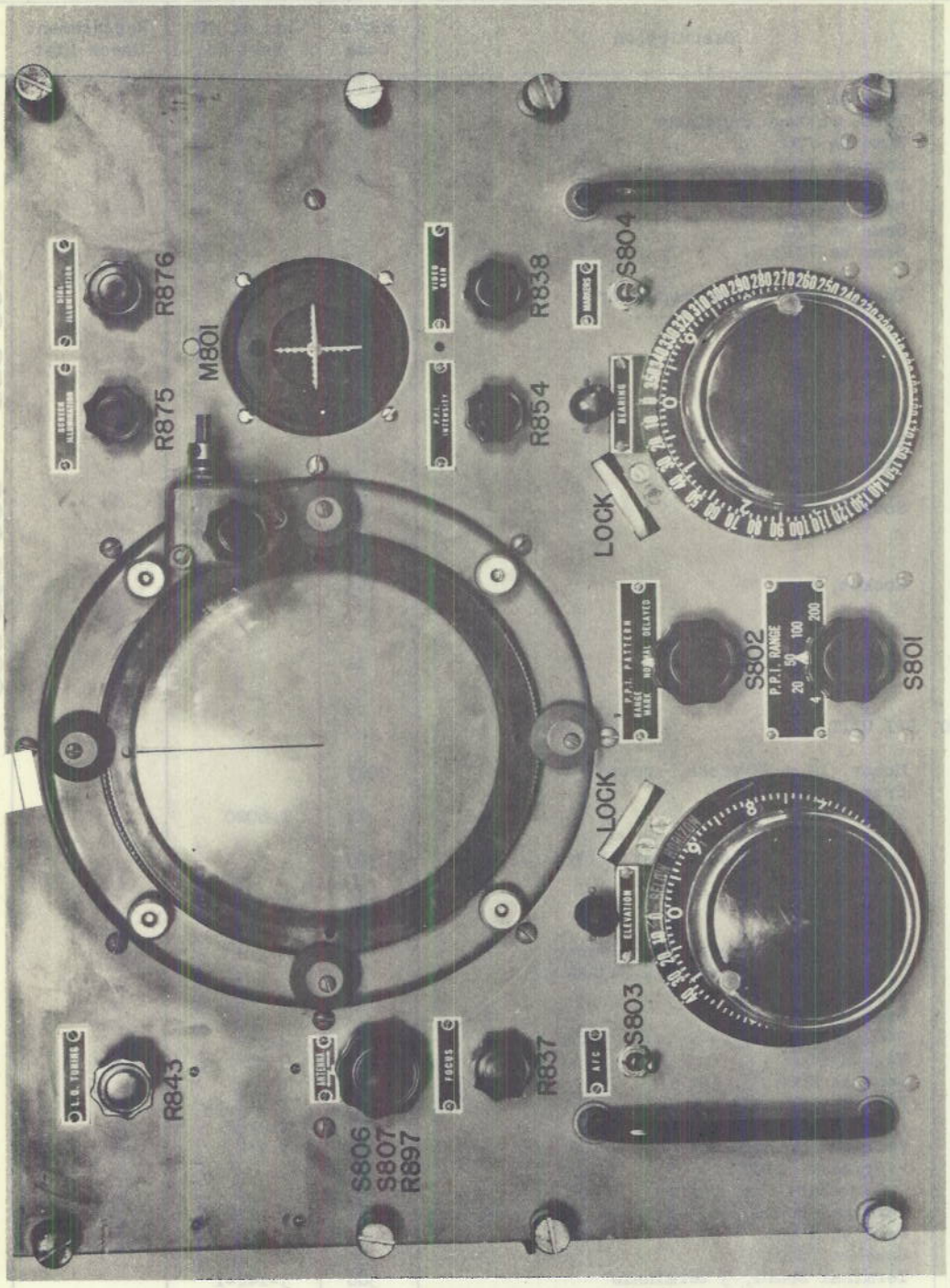

Figure 8-32. PPI Unit - Front View

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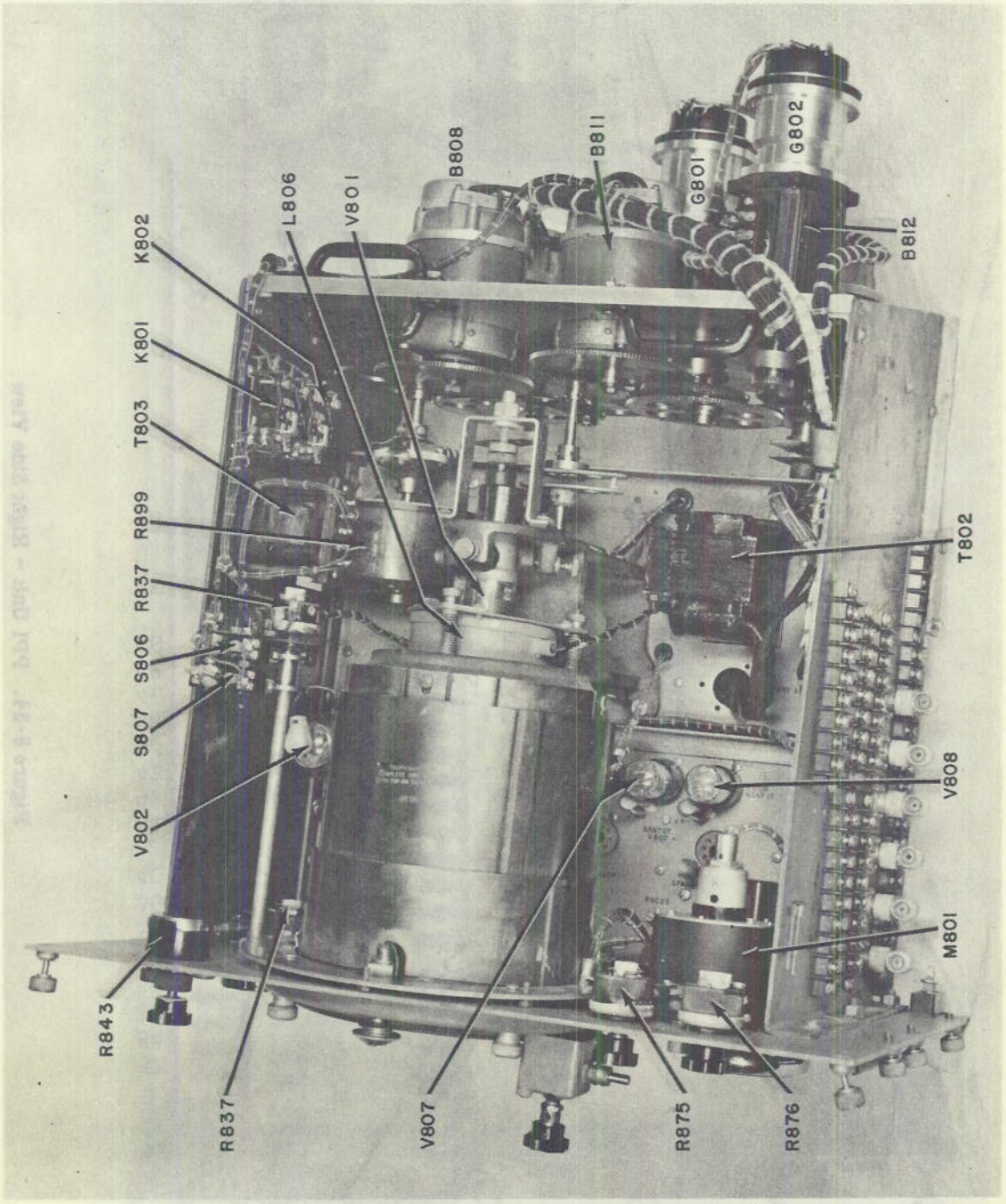

Figure 8-33. PPI Unit - Top View

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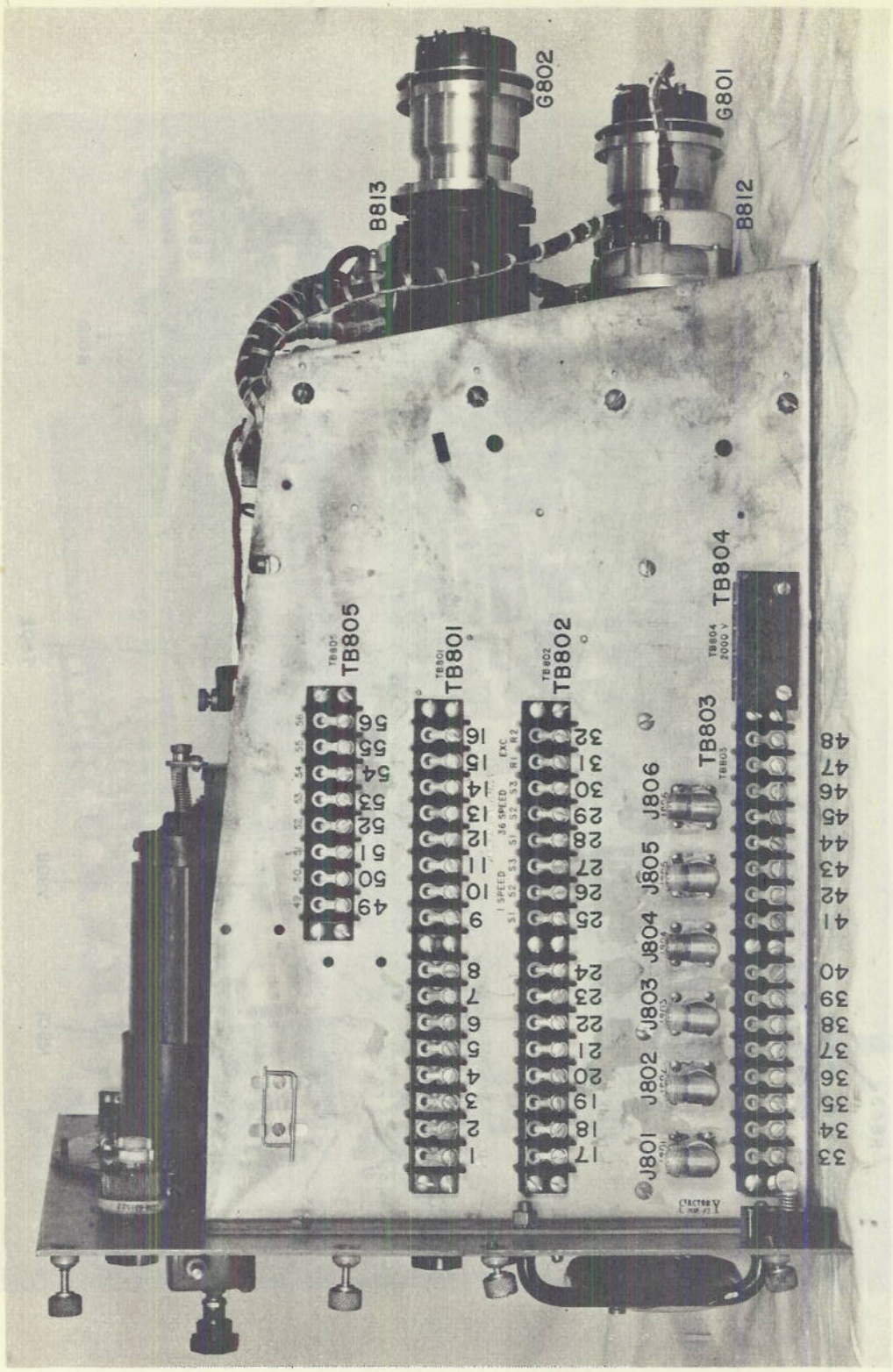

Figure 8-34. PPI Unit - Right Side View

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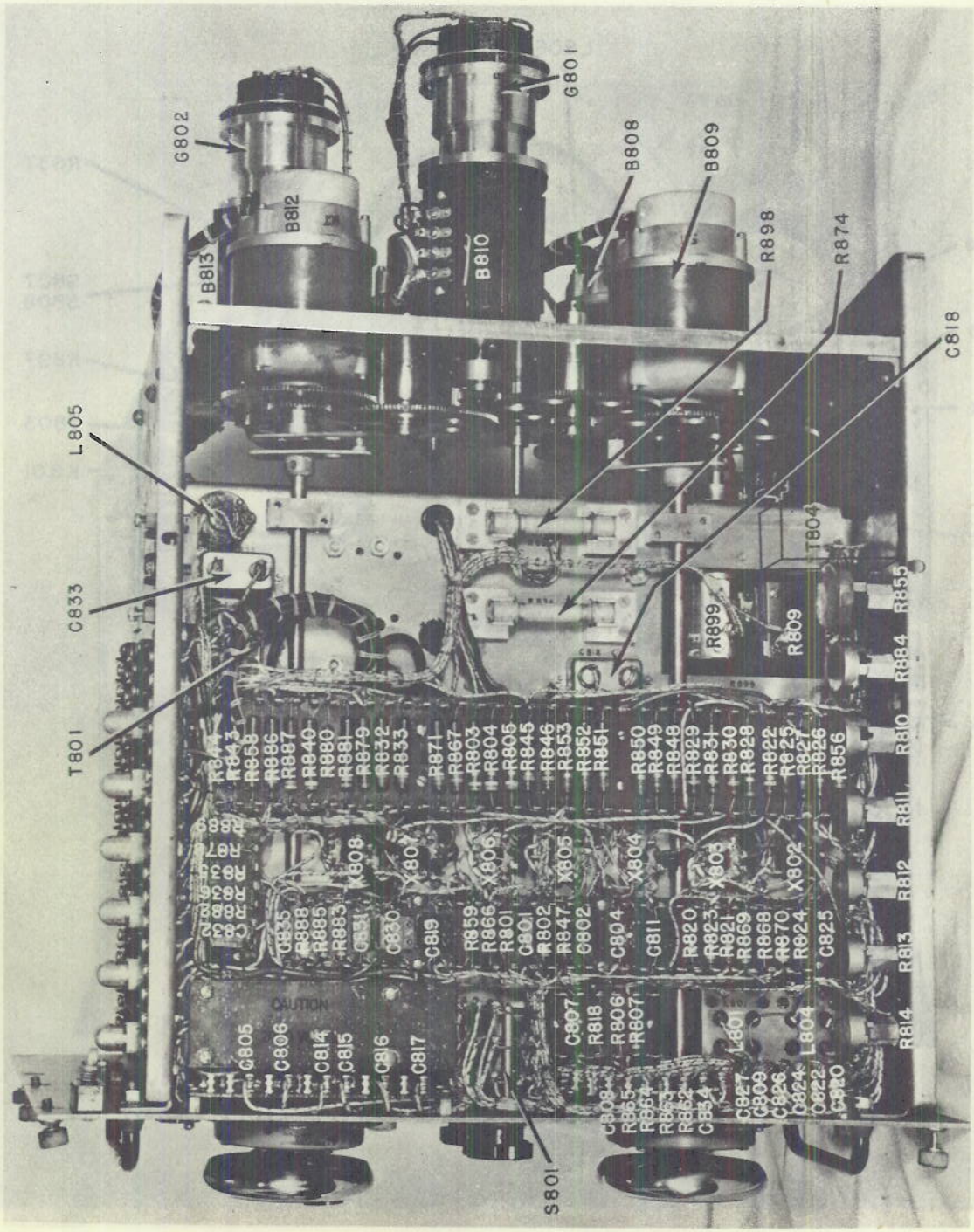

Figure 8-35. PPI Unit - Bottom View

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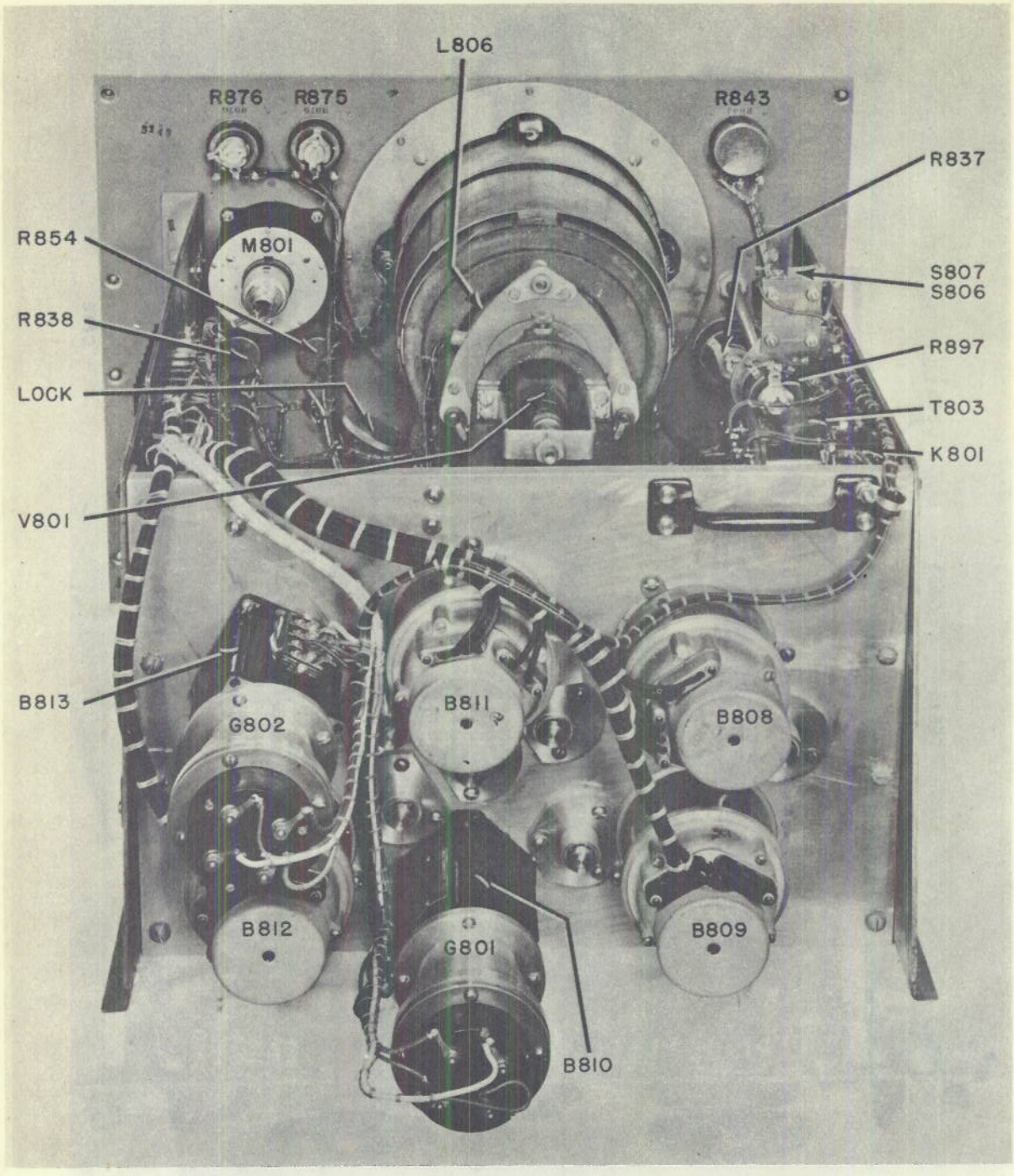

Figure 8-36. PPI Unit - Back View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 800, PPI UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacemsnt Check List	Part No.
V805	Tube, video beam power amplifier		6AG7		V805
V806	Same as V803				V806
V807	Same as V803				V807
V808	Same as V803				V808
X801	Socket, octal	11			X801
X802	Socket, 5 Pin. Med.	1	5106		X802
X803	Socket, octal	11			X803
X804 thru X808	Same as X803				X804 thru X808
UNIT 900, HIGH VOLTAGE POWER UNIT					
C901	0.1 mf, 10% tol; 10000v; paper, oil-filled	18	Cat.No.26F644		C901
C902	Same as C901				C902
C903	0.25 mf, 10% tol; 3500 v; paper, oil-filled	18	Cat.No.25F637		C903
C904	Same as C903				C904
C905	Same as C903				C905
C906	Same as C903				C906
F901	Fuse, power outlet, 8 amps	121	Type 3AG Cat.No.1360		F901
F902	Same as F901				F902
F903	Fuse, line, 8 amps	121	Type 3AG Cat.No.1360		F903
F904	Same as F903				F904
I901A	Lamp, 110v, 10 w, candelabra base	18	Mazda C7		I901A
I901B	Pilot Light, jewel	65			I901B
I902A	Same as I901A				I902A
I902B	Same as I901B				I902B
J901	Receptacle, female	6	Cat. No. MID 61FM		J901
J902	Same as J901				J902
R901	330K, 10% tol; 1 w	4	Type GB		R901
R902	Same as R901				R902
R903	150 K, 10% tol; 1 w		Type GB		R903
R904	Same as R903				R904
R905	Same as R903				R905
R906	Same as R903				R906
R907	100 K, 10% tol; 1/2 w	21	BT-1/2		R907
R908	Same as R907				R908
R909	68 K, 10% tol; 1/2 w	21	BT-1/2		R909
R910	Same as R909				R910
R911	Same as R909				R911
R912	Same as R909				R912
R913	22 K, 10% tol; 1/2 w	21	BT-1/2		R913
R914	Same as R913				R914
R915	Same as R913				R915
R916	Same as R913				R916
R917	2.2 meg, 10% tol; 1 w	21	BT-1		R917
R918 thru R941	Same as R917				R918 thru R941
R942	Same as R901				R942
R946	100 ohms, 10% tol; 2 w	21	BT-2		R946
R947	Same as R946				R947
R948	Same as R946				R948
R949	Same as R946				R949
S901	Switch, on-off, DPST	7	No. 80600AN		S901

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Figure 8-37. High Voltage Power Unit - Front View

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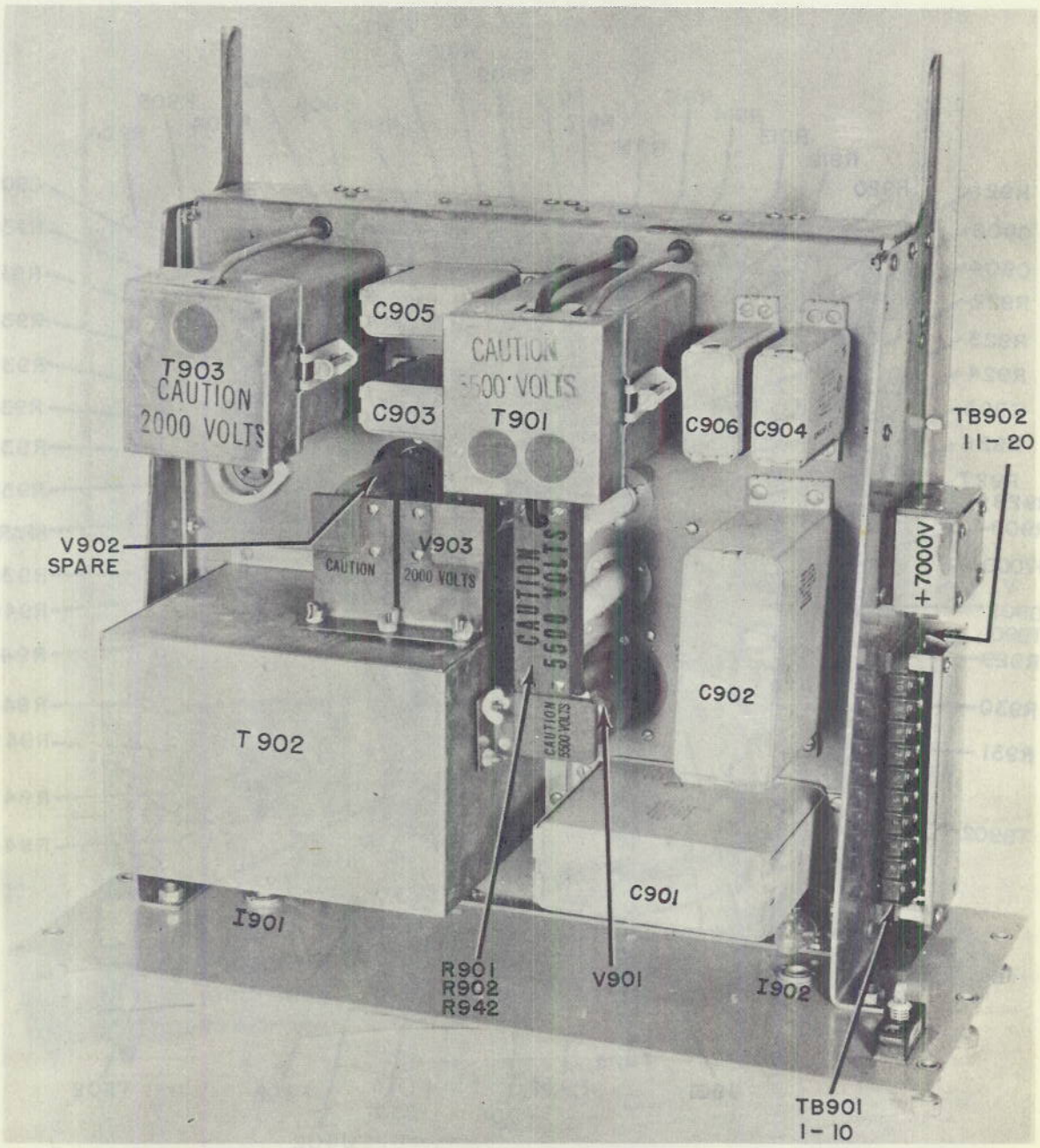

Figure 8-38. High Voltage Power Unit - Top View

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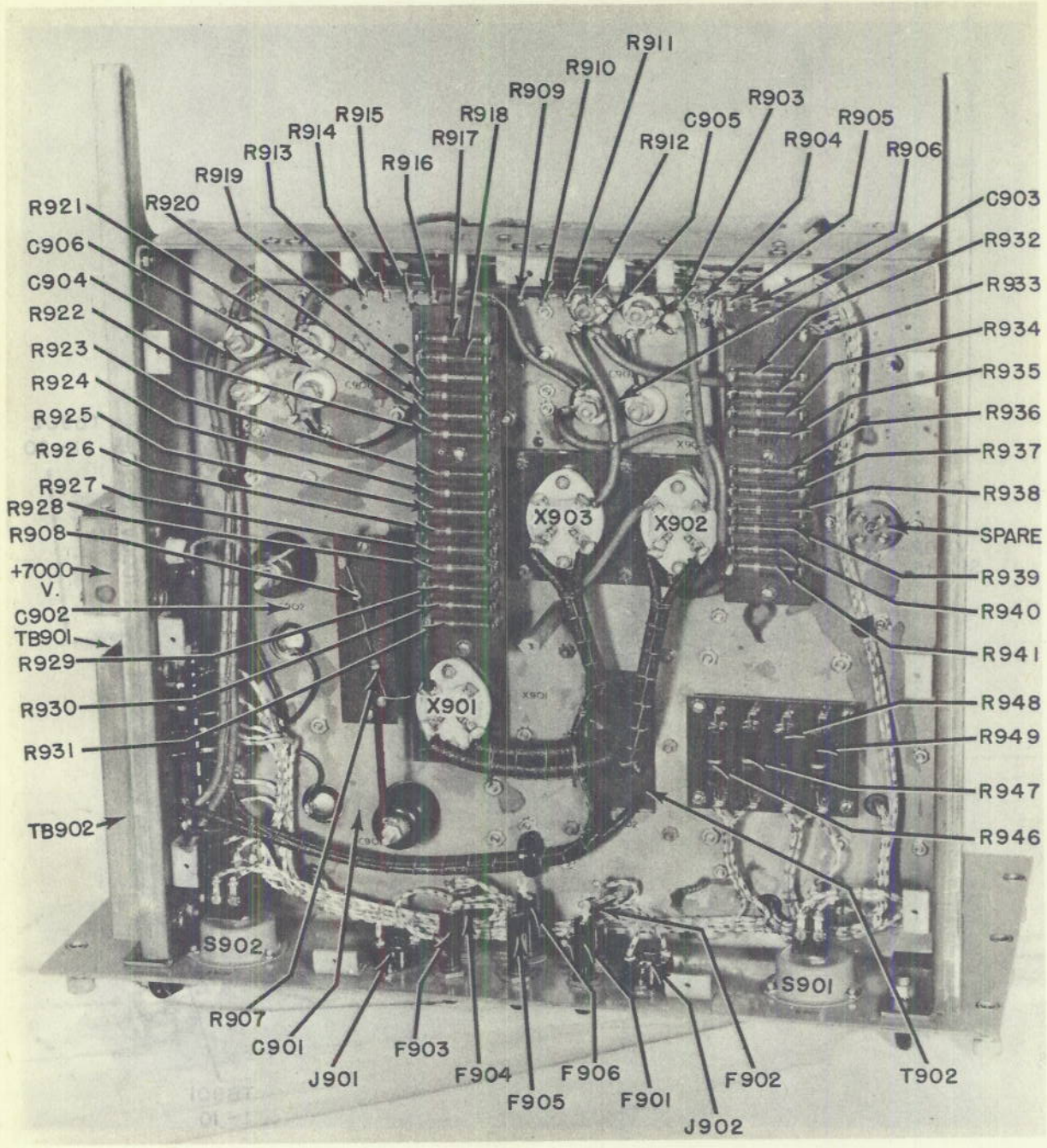

Figure 8-39. High Voltage Power Unit - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 900, HIGH VOLTAGE POWER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
S902	Same as S901				S902
T901	High Voltage Plate Transformer, electrostatic shielded, grounded to case	18	Per GE Dwg. M32J708		T901
T902	Filament Transformer Primary- 115v, 60 cycles Secondary 1- 6.3v, 2 amps Secondary 2- 6.3v, 2 amps Secondary 3- 6.3v, 3 amps Secondary 4- 6.3v, 3 amps Secondary 5- 6.3v, 3 amps	18	K44J473		T902
T903	High Voltage Plate Transformer Primary- 115v, 60 cycles Secondary- 2300v, 0.014 amp	18	M32J703		T903
TB901	Terminal Strip, 10 terminals	386	10-142Y		TB901
TB902	Same as TB901				TB902
V901	Tube, rectifier	731	3B24		V901
V902	Same as V901				V902
V903	Same as V901				V903
X901	Socket, tube	23	Cat.No. 224		X901
X902	Same as X901				X902
X903	Same as X901				X903
	UNIT 1000T OR 1000M, TARGET OR MISSILE INDICATOR UNIT				
C1001	0.01 mf, 500v, mica	13	1-W		C1001
C1002	Same as C1001				C1002
C1003	0.05 mf, 3000v	18	K52J53-12		C1003
C1004	Same as C1001				C1004
C1005	Same as C1001				C1005
C1006	Same as C1001				C1006
C1008	1 mf, 1500v	18	K52J53-10		C1008
C1009	.25 mf, 3000v	18	K52J53-11		C1009
C1010	Same as C1008				C1010
C1011	Same as C1008				C1011
C1012	Same as C1009				C1012
C1013	1 mf, 600v	18	K47J668-5		C1013
C1014	Same as C1013				C1014
C1015	Same as C1001				C1015
C1016	0.1 mf, 600v		K47J668-11		C1016
C1017	Same as C1003				C1017
C1018	Same as C1001				C1018
C1019	Same as C1001				C1019
C1020	150 mmf, 500v, mica	13	5-W		C1020
C1023	Same as C1001				C1023
C1024	0.0025 mf, 500v, mica	13	1-W		C1024
C1025	Same as C1001				C1025
C1028	Same as C1001				C1028
C1029	Same as C1001				C1029
C1030	Same as C1001				C1030
C1031	70 mmf, 500v, mica	13	5-W		C1031
C1032	Same as C1001				C1032
C1034	Same as C1020				C1034
C1035	40 mmf, 500v, mica	13	5-W		C1035
CR1001	Crystal Rectifier	649	IN34		CR1001
CR1002	Same as CR1001				CR1002
J1001	Jack, coaxial	6	SO-239 CPH-49-194		J1001
J1002	Same as J1001				J1002

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 1000T OR 1000M, TARGET OR MISSILE INDICATOR UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
J1003	Same as J1001				J1003
J1004	Same as J1001				J1004
J1005	Same as J1001				J1005
J1006	Same as J1001				J1006
J1007	Jack, spare		SO-239 CPH-49-194		J1007
J1008	Same as J1007				J1008
J1009	Jack, test	6	781-M		J1009
R1001	200 K, 2 w	4			R1001
R1002	Same as R1001				R1002
R1003	Same as R1001				R1003
R1004	Same as R1001				R1004
R1005	51 K, 2 w	4			R1005
R1006	270 K, 2 w	4			R1006
R1007	Same as R1006				R1007
R1008	Same as R1005				R1008
R1009	130 K, 2 w	4			R1009
R1010	500 K, 1 w, pot.	4			R1010
R1011	Same as R1010				R1011
R1012	150 K, 2 w	4			R1012
R1013	100 K, 1 w, pot.	4			R1013
R1014	Same as R1013				R1014
R1015	2 meg, 1 w, pot.) -- dual	4			R1015
R1016	2 meg, 1 w, pot.)	4			R1016
R1017	1 meg, 2 w	4			R1017
R1018	Same as R1017				R1018
R1019	2 meg, 1 w , pot.	4			R1019
R1020	2 meg, 1 w, pot.) -- dual	4			R1020
R1021	2 meg, 1 w, pot.)	4			R1021
R1022	Same as R1017				R1022
R1023	Same as R1017				R1023
R1024	100 K, 2 w	4			R1024
R1025	2 meg, 2 w, pot.) -- dual	4			R1025
R1026	2 meg, 2 w, pot.)	4			R1026
R1027	Same as R1017				R1027
R1028	10 meg, 1 w	4			R1028
R1029	Same as R1019				R1029
R1030	2 meg, 1 w, pot.) -- dual	4			R1030
R1031	2 meg, 1 w, pot.)	4			R1031
R1032	10 meg, 1 w	4			R1032
R1033	Same as R1017				R1033
R1034	510 K, 2 w	4			R1034
R1035	Same as R1012				R1035
R1036	Same as R1001				R1036
R1037	680 K, 2 w	4			R1037
R1040	18 K, 2 w	4			R1040
R1041	47 K, 2 w	4			R1041
R1042	Same as R1037				R1042
R1043	Same as R1009				R1043
R1045	1 meg, 1 w, pot.	4			R1045
R1046	Same as R1045				R1046
R1047	Same as R1001				R1047
R1048	Same as R1009				R1048
R1049	82 K, 2 w	4			R1049
R1052	Same as R1040				R1052
R1053	8.2 K, 2 w	4			R1053
R1054	1.2 K, 2 w	4			R1054
R1055	3.3 K, 2 w	4			R1055
R1056	5.6 K, 2 w	4			R1056

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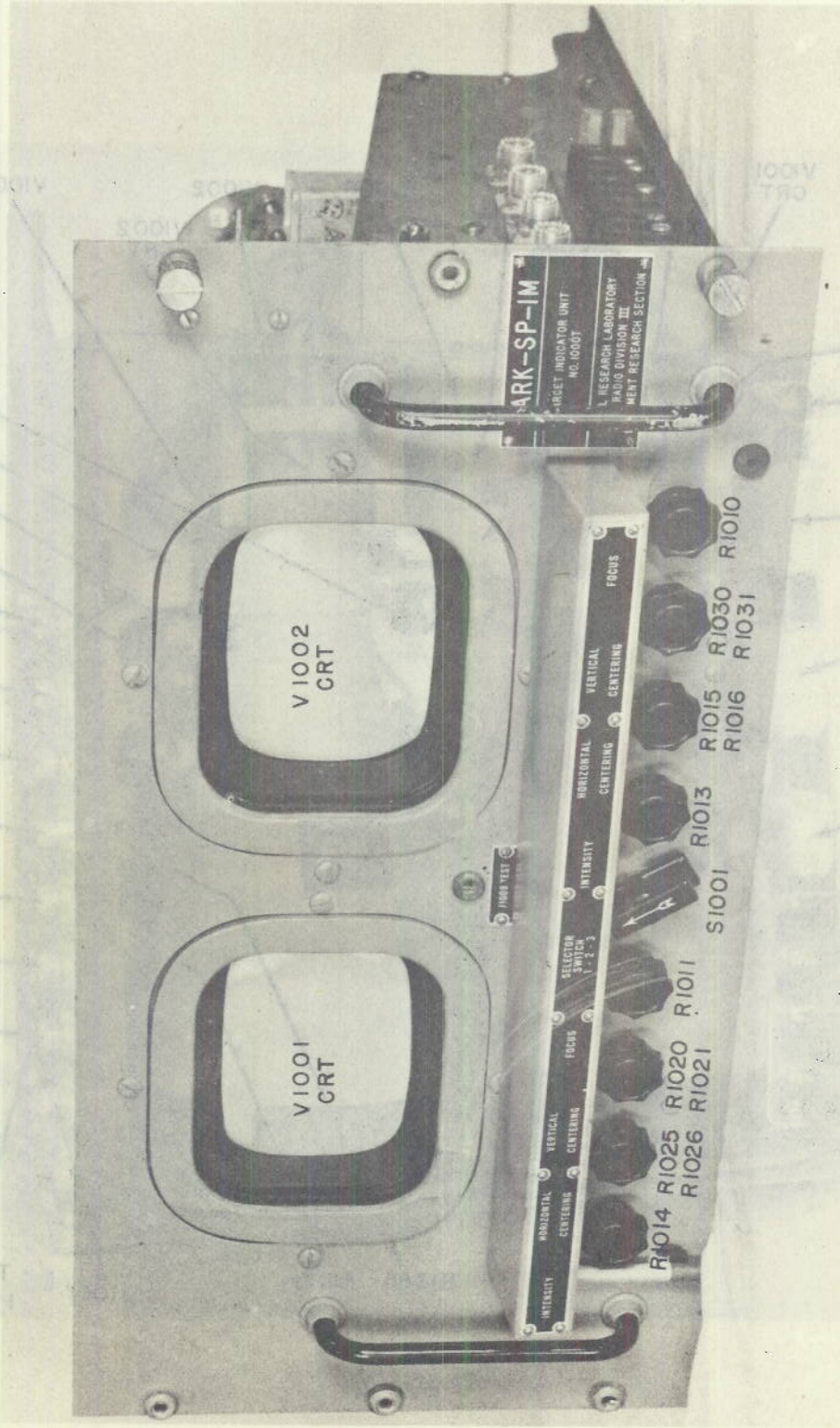

Figure 8-40. Target or Missile Indicator Unit - Front View

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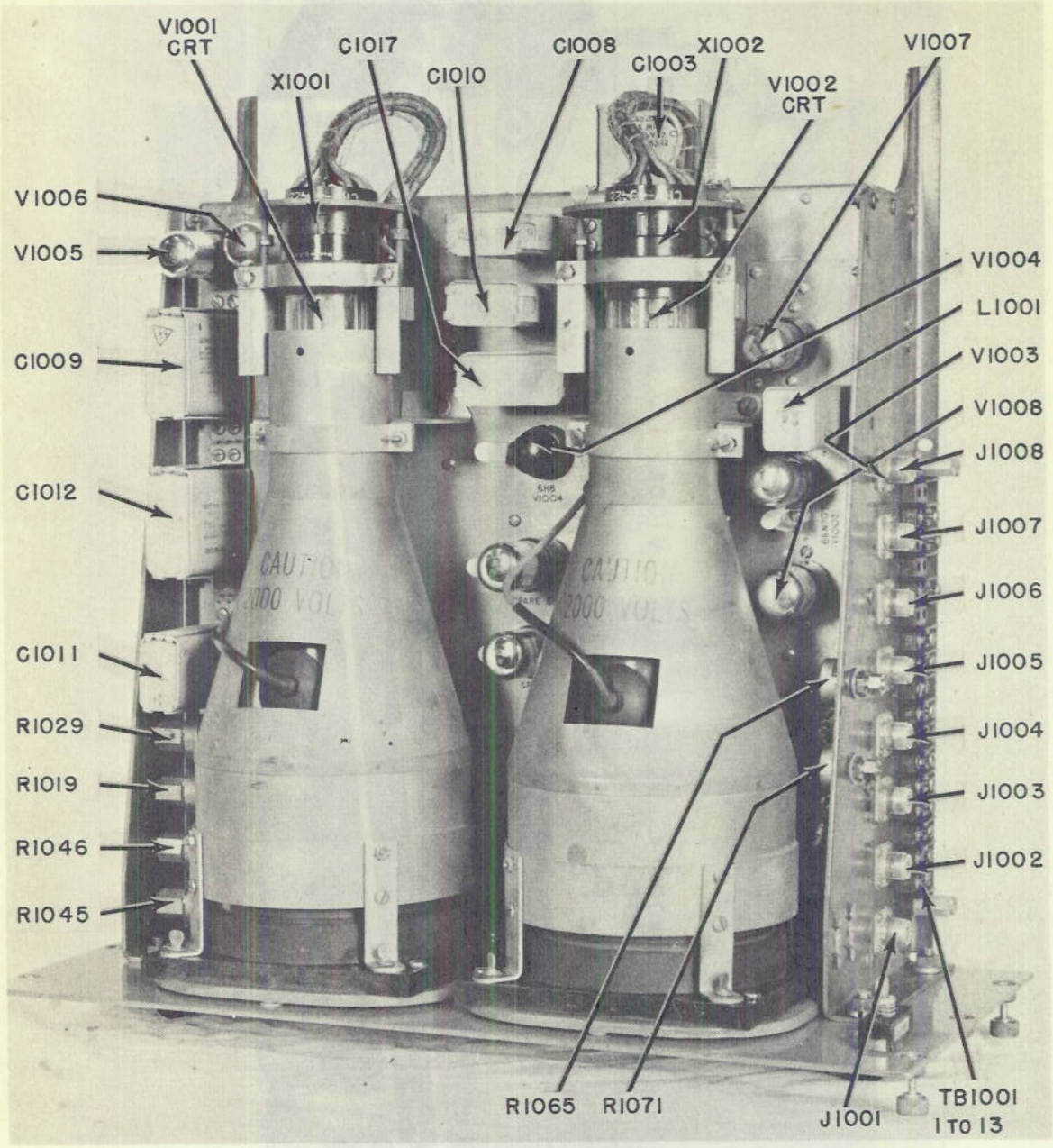

Figure 8-41. Target or Missile Indicator Unit - Top View

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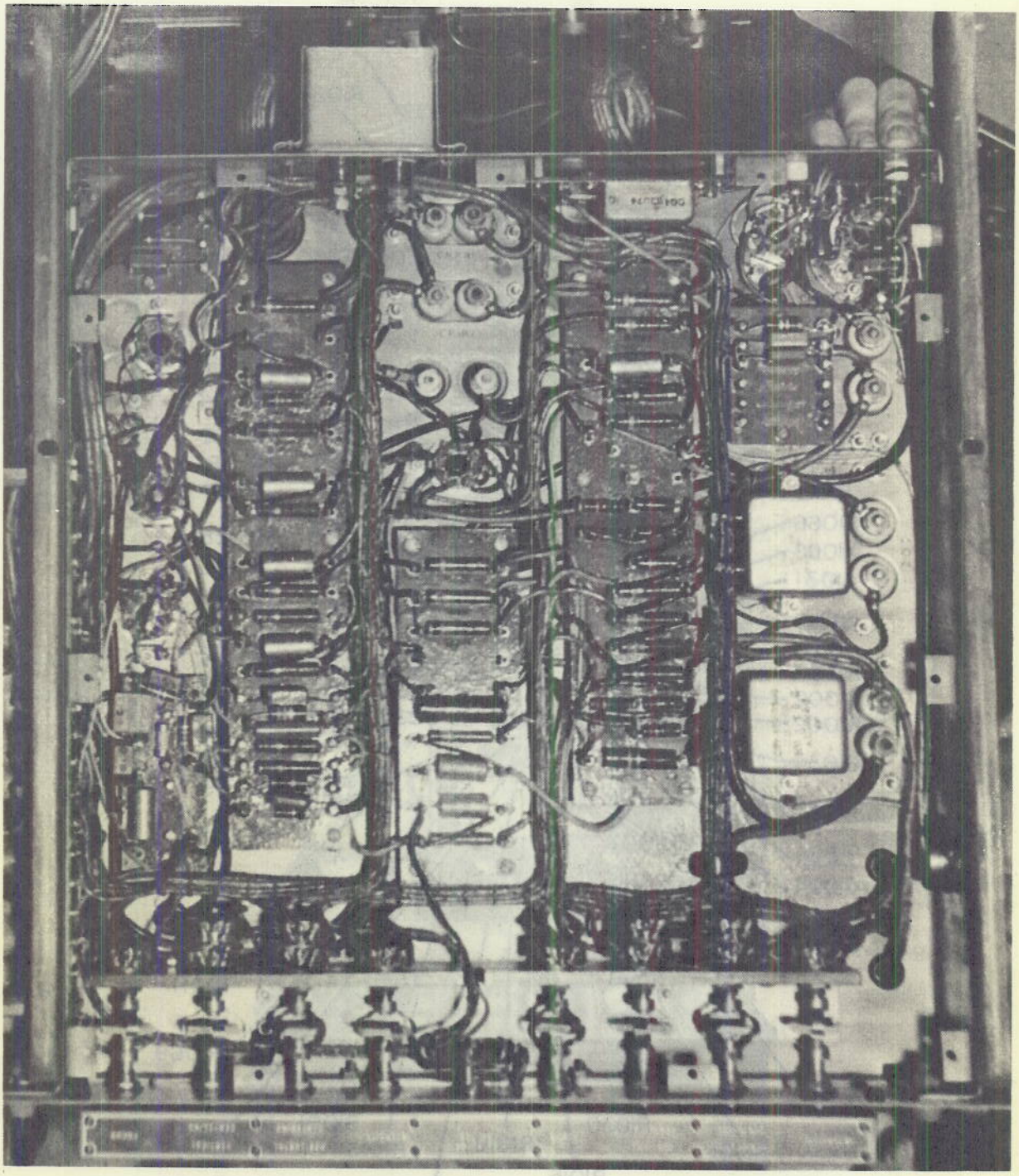

Figure 8-42. Target or Missile Indicator Unit - Bottom View

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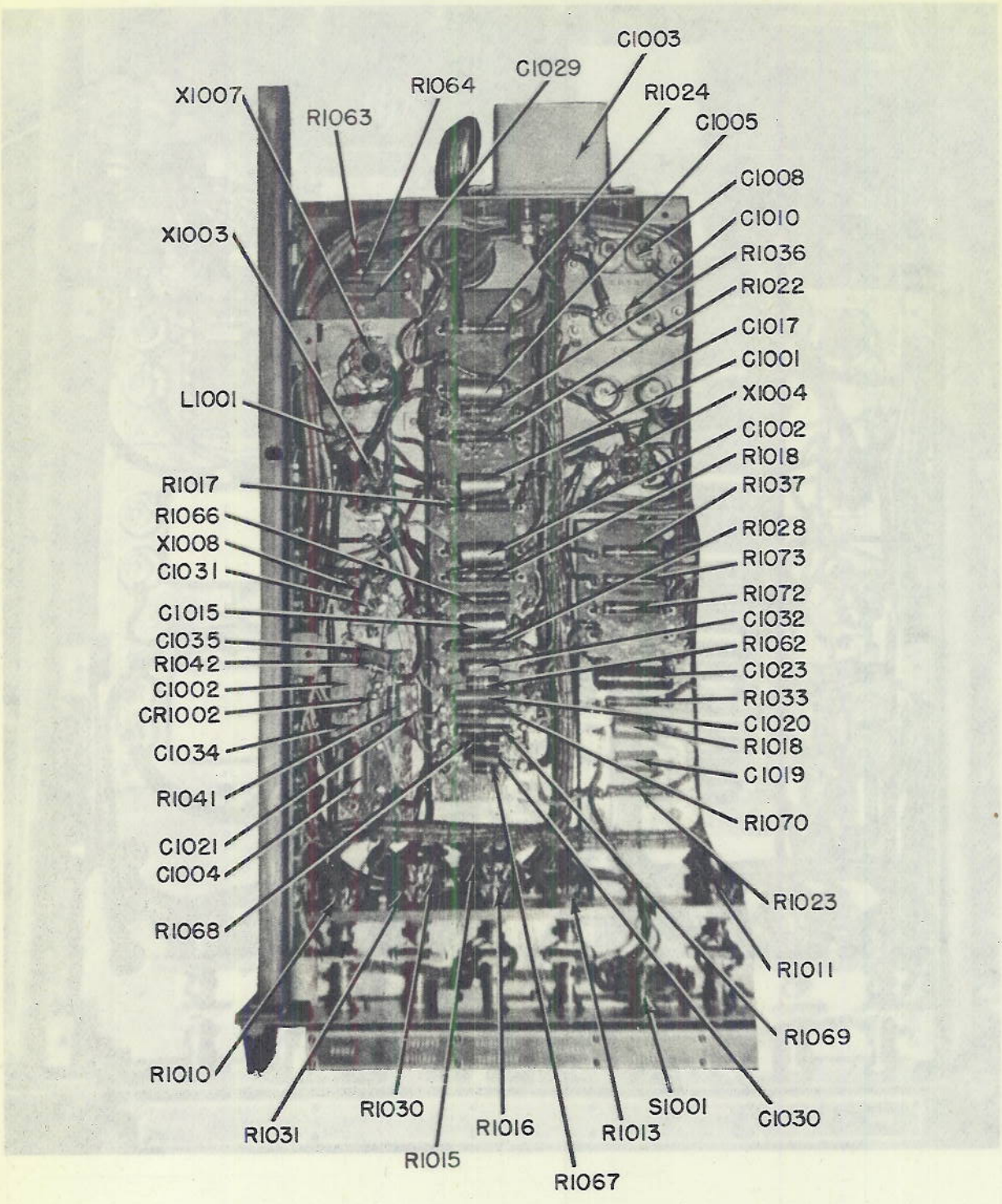

Figure 8-43. Left Half of Target or Missile Indicator Unit - Bottom View

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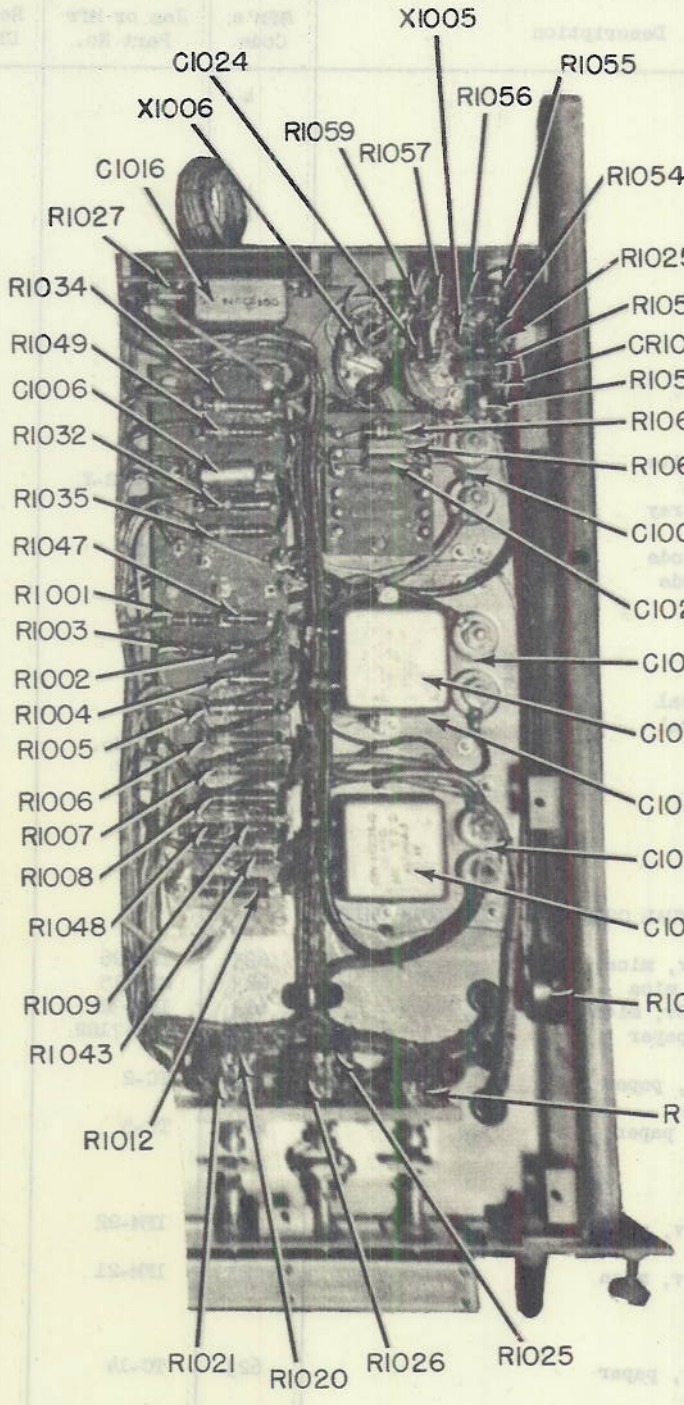

Figure 8-44. Right Half of Target or Missile Indicator Unit - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 1000T OR 1000M, TARGET OR MISSILE INDICATOR UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R1057	2.2 meg, 2 w	4			R1057
R1058	Same as R1045				R1058
R1059	Same as R1017				R1059
R1061	Same as R1049				R1061
R1063	33 K, 2 w	4			R1063
R1064	27 K, 2 w	4			R1064
R1065	Same as R1045				R1065
R1066	Same as R1057				R1066
R1067	1.5 K, 2 w	4			R1067
R1068	Same as R1053				R1068
R1069	Same as R1053				R1069
R1070	Same as R1054				R1070
R1071	20 K, 1 w, pot.	4			R1071
R1072	30 K, 2 w	4			R1072
R1073	Same as R1064				R1073
S1001	Switch, Textolite	31	D-H		S1001
TB1001	Terminal Board	386	16-142-Y		TB1001
V1001	Tube, cathode-ray	1	5CP1		V1001
V1002	Same as V1001				V1002
V1003	Tube, twin triode		6SN7		V1003
V1004	Tube, twin diode		6H6		V1004
V1005	Same as V1003				V1005
V1006	Same as V1003				V1006
V1007	Same as V1003				V1007
V1008	Same as V1003				V1008
X1001	Socket, diheptal	1			X1001
X1002	Socket, diheptal	1			X1002
X1003	Socket, octal	11	Cat. No. 9857		X1003
X1004 thru X1008	Same as X1003				X1004 thru X1008
UNIT 1200, TARGET AND MANUAL COORDINATE DETECTOR UNIT					
C1201	0.006 mf, 600v, mica	623	1FM-26		C1201
C1202	15 mmf, 600v, mica	623	MS-415		C1202
C1203	0.0002 mf, 600v, mica	623	1FM-32		C1203
C1204	10 mf, 600v, paper	10	25F471G2		C1204
C1205	Same as C1204				C1205
C1206	0.25 mf, 600v, paper	623	TC-2		C1206
C1207	Same as C1204				C1207
C1208	0.5 mf, 600v, paper	623	TC-5		C1208
C1209A	Same as C1206				C1209A
C1209B	Same as C1206				C1209B
C1210	Same as C1201				C1210
C1211	2000 mmf, 600v, mica	623	1FM-22		C1211
C1212	Same as C1206				C1212
C1213	0.001 mf, 600v, mica	623	1FM-21		C1213
C1214	Same as C1206				C1214
C1215	Same as C1204				C1215
C1216	Same as C1204				C1216
C1217	0.04 mf, 600v, paper	623	TC-14		C1217
C1218	Same as C1204				C1218
C1219	Same as C1217				C1219
C1220	Same as C1206				C1220
C1221	Same as C1204				C1221
C1222	Same as C1206				C1222

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 1200, TARGET AND MANUAL COORDINATE DETECTOR UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
C1223	Same as C1204				C1223
C1224	330 mmf, 600v, mica	623	1FM-335		C1224
C1225	0.6 mmf				C1225
C1226	0.03 mmf				C1226
C1227	Same as C1225				C1227
C1228	Same as C1226				C1228
CR1201	Crystal Rectifier	649	1N34		CR1201
CR1202	Same as CR1201				CR1202
CR1203	Crystal Rectifier	649	1N38		CR1203
K1201	Relay, 110v coil, 6 pole double throw	12	A30427		K1201
K1202	Same as K1201				K1202
K1203	Relay, 110v coil, 2 pole double throw	731	KS1012B		K1203
R1201	1 meg, 5% tol; 1 w; composition	4	GB1055		R1201
R1202	2.2 K ohms, 5% tol; 2 w; composition	4	HB2225		R1202
R1203	18 K, 5% tol; 2 w; composition	4	HB1835		R1203
R1204	100 K, 5% tol; 1 w; composition	4	GB1045		R1204
R1205	Same as R1203				R1205
R1206	Same as R1204				R1206
R1207	Same as R1204				R1207
R1209	500 K, 5% tol; 1 w; composition	4	GB5145		R1209
R1210	Same as R1209				R1210
R1211	Same as R1209				R1211
R1212	10 K, 1/4% tol; wire wound	2025	BX193		R1212
R1213	Same as R1212				R1213
R1214	Same as R1212				R1214
R1215	Same as R1212				R1215
R1216	5 K, 10% tol; 10w; wire wound	32	BR0L0		R1216
R1217	Same as R1204				R1217
R1218	1.8 K, 5% tol; 2 w; composition	4	HB1825		R1218
R1219	1.2 K, 5% tol; 2 w; composition	4	HB1225		R1219
R1220	33 K, 5% tol; 1 w; composition	4	GB3335		R1220
R1221	Same as R1216				R1221
R1224	Same as R1201				R1224
R1225	330 K, 5% tol; 1 w; composition	4	GB3345		R1225
R1226	Same as R1201				R1226
R1227	10 K, 5% tol; 1 w; composition	4	GB1035		R1227
R1228	Same as R1204				R1228
R1229	Same as R1204				R1229
R1230	100 ohms, 5% tol; 1 w; composition	4	GB1015		R1230
R1231	Same as R1209				R1231
R1232	Same as R1209				R1232
R1233	Same as R1209				R1233
R1234	Same as R1216				R1234
R1235	Same as R1212				R1235
R1236	Same as R1212				R1236
R1237	Same as R1212				R1237
R1238	Same as R1212				R1238
R1241	3.3 K, 5% tol; 1 w; composition	4	GB3325		R1241
R1242	Same as R1212				R1242
R1243	Same as R1212				R1243
R1244	Same as R1212				R1244
R1245	Same as R1212				R1245
R1246	Same as R1204				R1246
R1247	Same as R1201				R1247
R1248	390 K,5% tol; 1 w; composition	4	GB3945		R1248
R2149	47 K, 5% tol; 1 w; composition	4	GB4735		R2149
R1250	5 K, Helipot	2026	5000A1		R1250
R1251	39 K, 5% tol; 1 w; composition	4	GB3935		R1251
R1253	Same as R1241				R1253

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 1200, TARGET AND MANUAL COORDINATE DETECTOR UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R1254	Same as R1230				R1254
R1255	Same as R1212				R1255
R1256	Same as R1212				R1256
R1257	Same as R1212				R1257
R1258	Same as R1212				R1258
R1259	Same as R1204				R1259
R1260	Same as R1201				R1260
R1261	Same as R1248				R1261
R1262	Same as R1249				R1262
R1263	Same as R1250				R1263
R1264	Same as R1251				R1264
R1266	Same as R1204				R1266
R1267	Same as R1209				R1267
R1268	Same as R1209				R1268
R1269	Same as R1209				R1269
R1270	Same as R1216				R1270
R1271	Same as R1204				R1271
R1272	Same as R1209				R1272
R1273	Same as R1209				R1273
R1274	Same as R1209				R1274
R1275	Same as R1216				R1275
R1276	2.5 K, 10% tol; 10w; wire wound	32	BROLO		R1276
R1277	Same as R1230				R1277
R1278	470 K				R1278
R1279	470 K				R1279
T1201	Transformer Primary - 2000 ohms impedance Secondary - 32000 ohms, center tap	2022	870-1		T1201
T1202) thru T1208)	Same as T1201				(T1202 thru T1208)
T1209	Filament Transformer, 6.3v, 10 amps	2024	903245		T1209
T1210	Pulse Transformer	2022	312-4		T1210
TB1201	Terminal Board, 14 terminals, with long lugs	386	14-142-Y		TB1201
TB1202	Same as TB1201				TB1202
V1201	Tube, twin triode		6SN7GT		V1201
V1202	Tube, beam power amplifier		6V6		V1202
V1203	Tube, double diode		6AL5		V1203
V1204	Same as V1203				V1204
V1205	Tube, video beam power amplifier		6AG7		V1205
V1206	Tube, twin triode		6SL7GT		V1206
V1207	Same as V1201				V1207
V1208	Same as V1202				V1208
V1209	Same as V1203				V1209
V1210	Same as V1203				V1210
V1211	Same as V1201				V1211
V1212	Same as V1203				V1212
V1213	Same as V1203				V1213
V1214	Same as V1201				V1214
V1215	Same as V1203				V1215
V1216	Same as V1203				V1216
V1217	Same as V1202				V1217
V1218	Same as V1202				V1218
X1201	Socket - octal	11			X1201
X1202	Same as X1201				X1202
X1203	Socket - Minature 7-pin	11	S010C		X1203
X1204	Same as X1203				X1204

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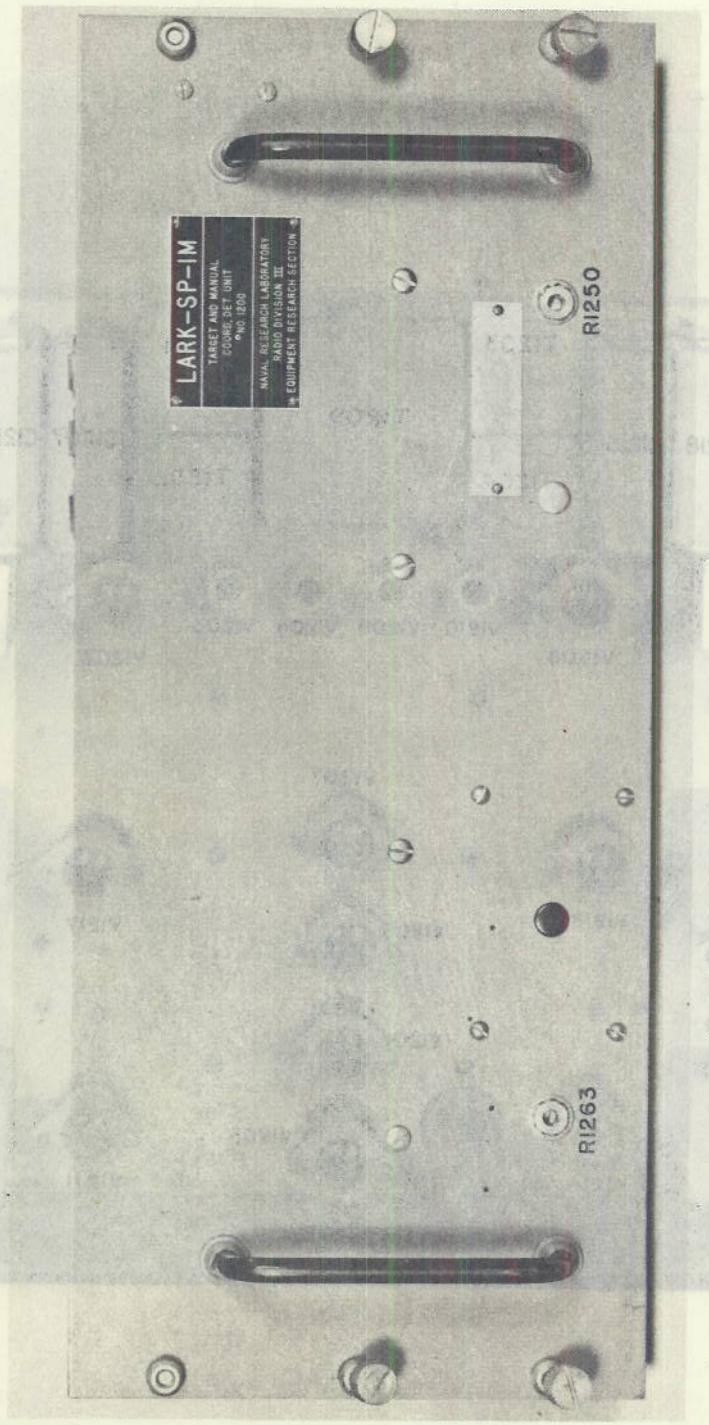

Figure 8-45. Target and Manual Coordinate Detector Unit - Front View

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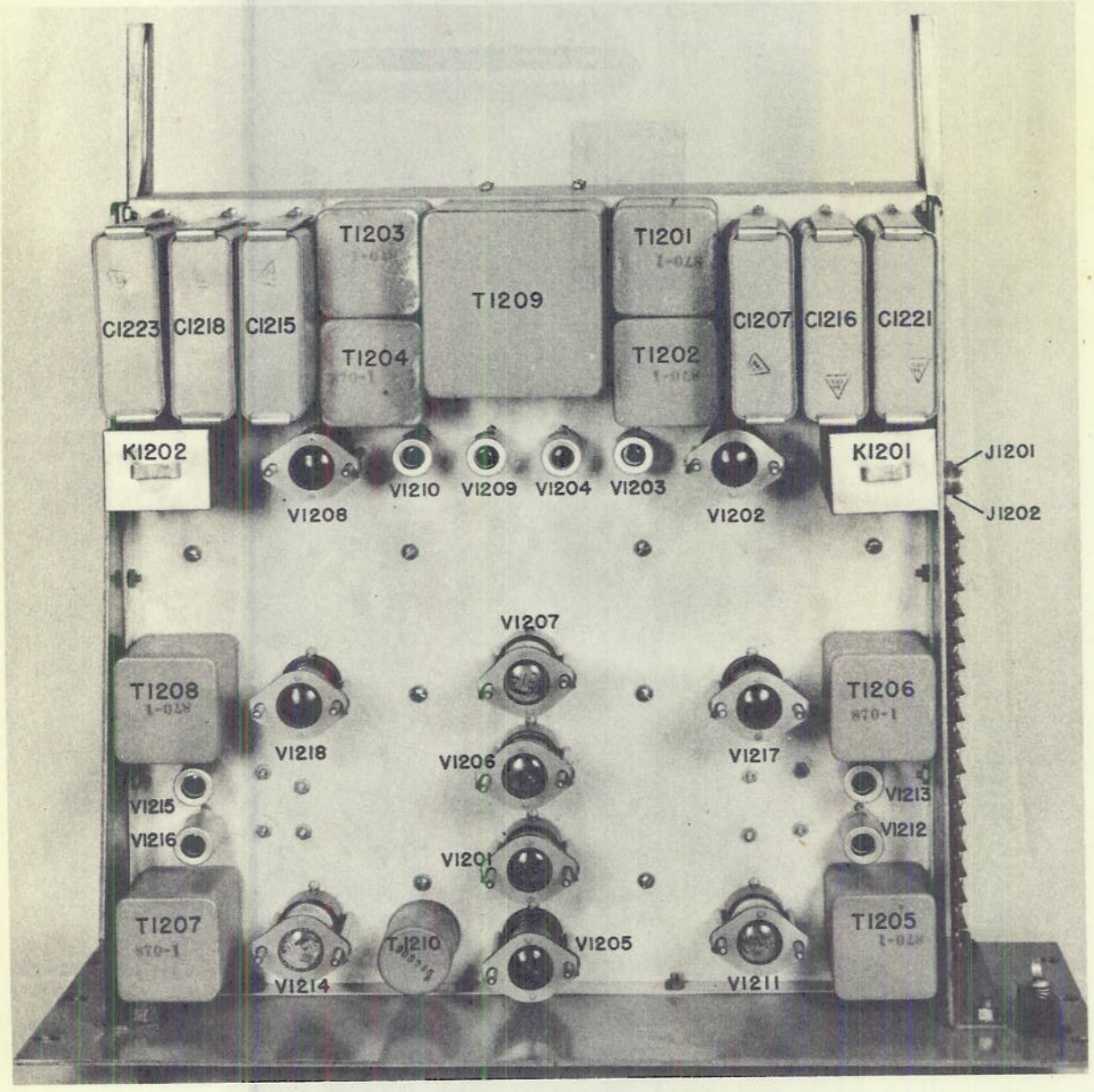

Figure 8-46. Target and Manual Coordinate Detector Unit - Top View

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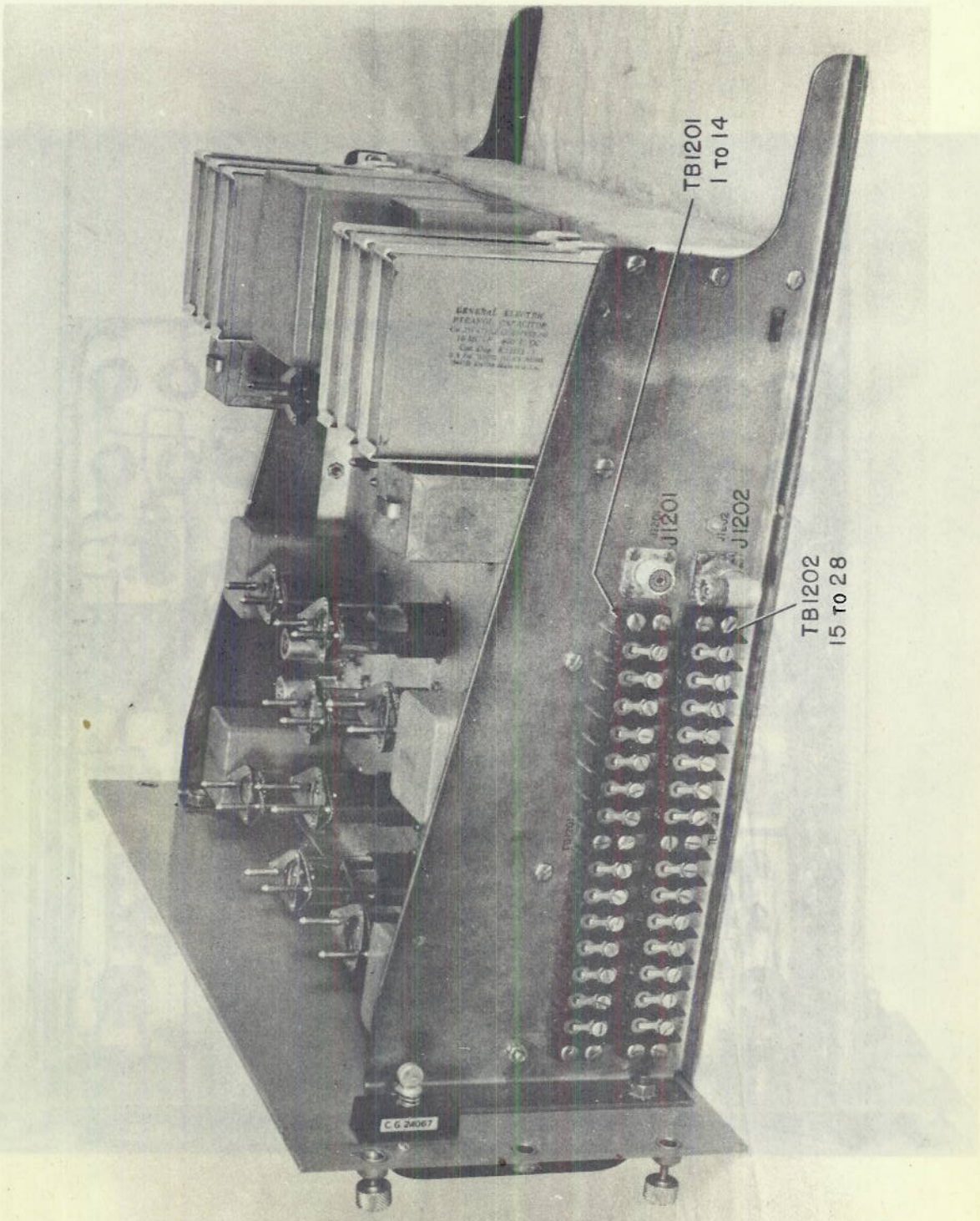

Figure 8-47. Target and Manual Coordinate Detector Unit - Right Side View

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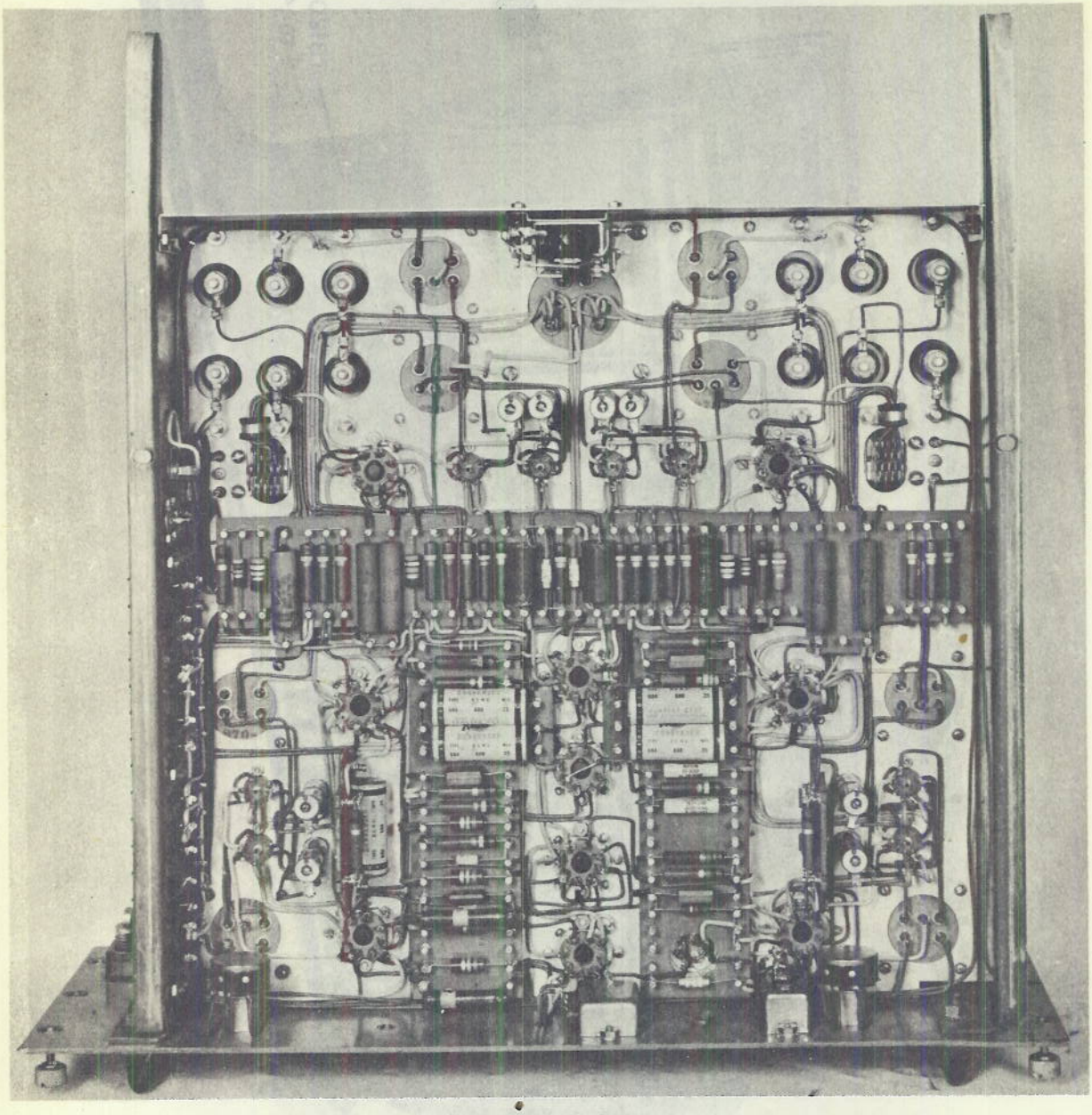

Figure 8-48. Target and Manual Coordinate Detector Unit - Bottom View

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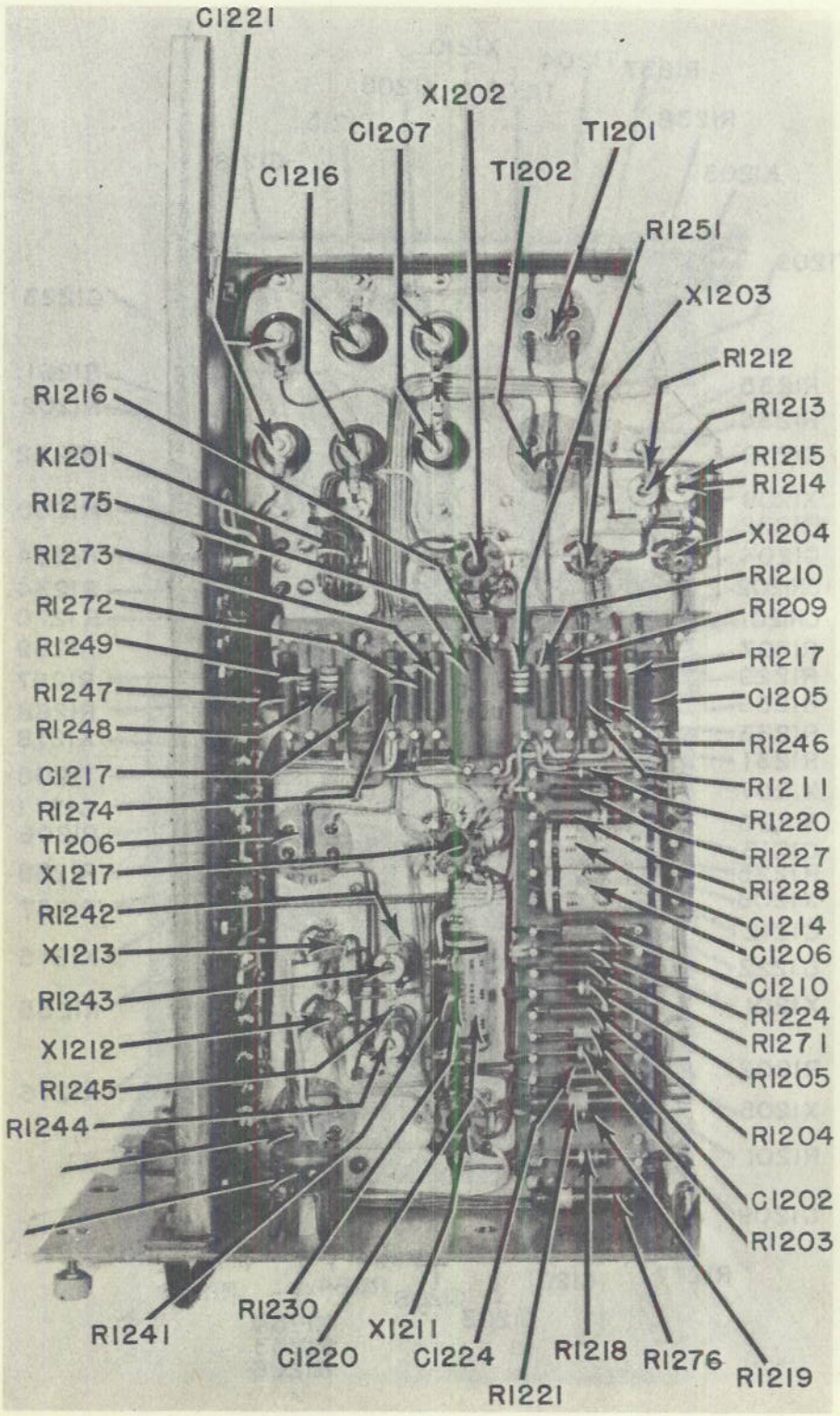

Figure 8-49. Left Half of Target and Manual Coordinate Detector Unit - Bottom View

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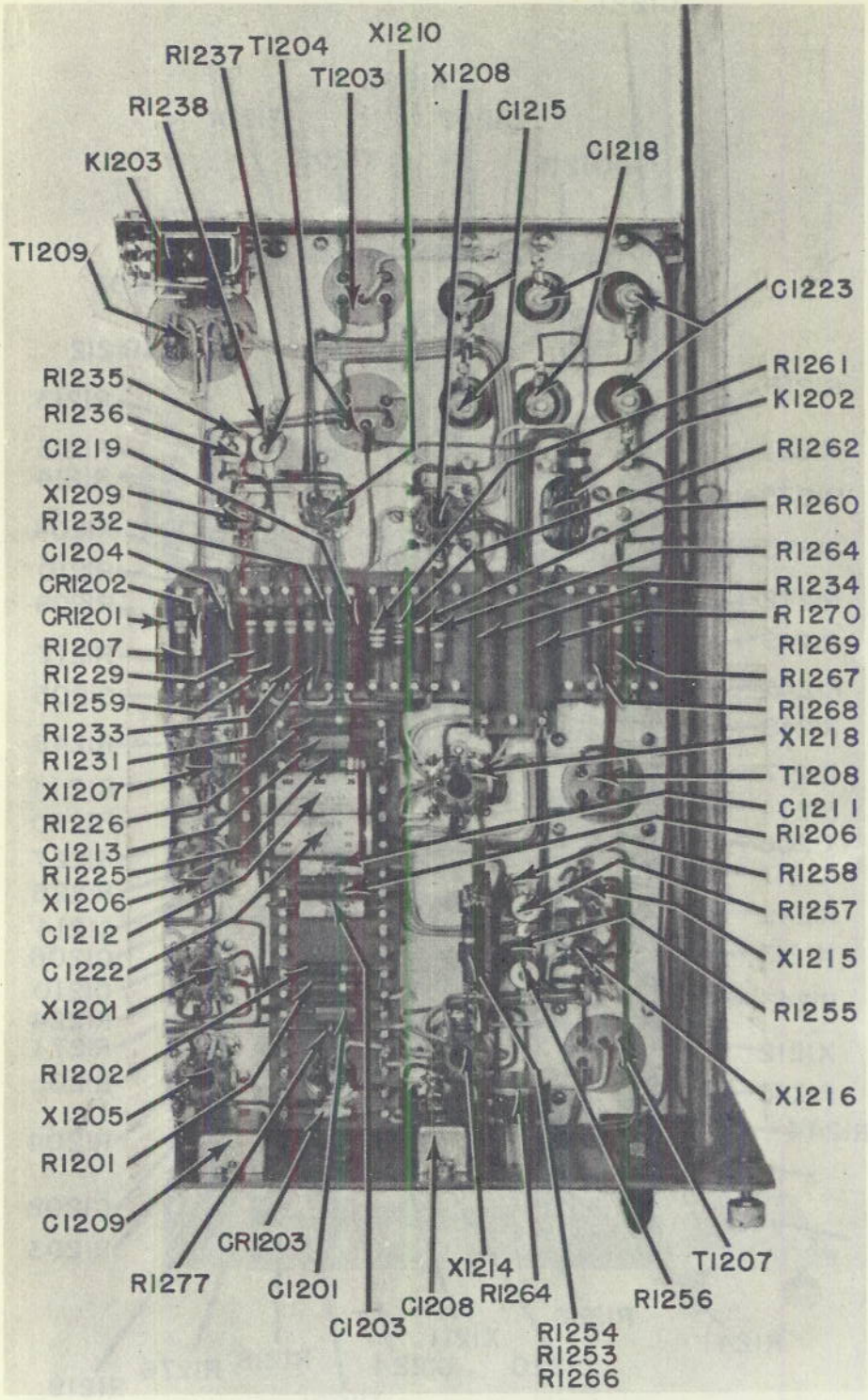

Figure 8-50. Right Half of Target and Manual Coordinate Detector Unit - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 1200, TARGET AND MANUAL COORDINATE DETECTOR UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
X1205 thru X1208	Same as X1201				(X1205 thru X1208
X1209	Same as X1203				X1209
X1210	Same as X1203				X1210
X1211	Same as X1201				X1211
X1212	Same as X1203				X1212
X1213	Same as X1203				X1213
X1214	Same as X1201				X1214
X1215	Same as X1203				X1215
X1216	Same as X1203				X1216
X1217	Same as X1201				X1217
X1218	Same as X1201				X1218
UNIT 1300, TARGET AND MISSILE RANGE DETECTOR AND SERVO AMPLIFIER UNIT					
C1301	0.1 mf, 1000v, pyranol	18			C1301
C1302	Same as C1301				C1302
C1303	Same as C1301				C1303
C1304	0.1 mf, 1000v, solite	34			C1304
C1305	0.002 mf, 500v, mica	13			C1305
C1306	0.01 mf, 300v, mica	13			C1306
C1307	Same as C1306				C1307
C1308	0.001 mf, 500v, mica	13			C1308
C1309	Same as C1301				C1309
C1310	2 mf, 330vac	13	KG3020		C1310
C1311	0.5 mf, 1000v, pyranol	18			C1311
C1312	Same as C1311				C1312
C1313	0.25 mf, 1000v, pyranol	18			C1313
C1314	Same as C1313				C1314
C1315	Same as C1311				C1315
C1316	Same as C1311				C1316
C1317	Same as C1313				C1317
C1318	Same as C1301				C1318
E1301	Delay Line, 1.5 microseconds, 1100 ohms	459			E1301
E1302	Delay Line, 0.5 microsecond, 1100 ohms	459			E1302
J1301	Jack, coaxial	6	SO-239 CPH-49-194		J1301
J1302	Same as J1301				J1302
K1301	Relay, 110vac coil, 6 pole double throw	12	A30427		K1301
L1301	Peaking Coil, 330 microhenries	NRL			L1301
R1301	1 K, 1 w, pot.	4			R1301
R1302	470 ohms, 1 w	4			R1302
R1303	Same as R1302				R1303
R1304	1.2 K, 1 w	4			R1304
R1305	Same as R1304				R1305
R1306	82 ohms, 2 w	4			R1306
R1307	Same as R1306				R1307
R1308	47 K, 2 w	4			R1308
R1309	Same as R1308				R1309
R1310	1 meg, 2 w	4			R1310
R1311	Same as R1310				R1311
R1312	100 K, 2 w	4			R1312
R1313	2.2 meg, 2 w	4			R1313
R1314	5.6 meg, 2 w	4			R1314
R1315	10 K, 10 w, wire wound	32			R1315
R1316	270 ohms, 1 w	4			R1316
R1317	500 ohms, 10 w, wire wound	4			R1317

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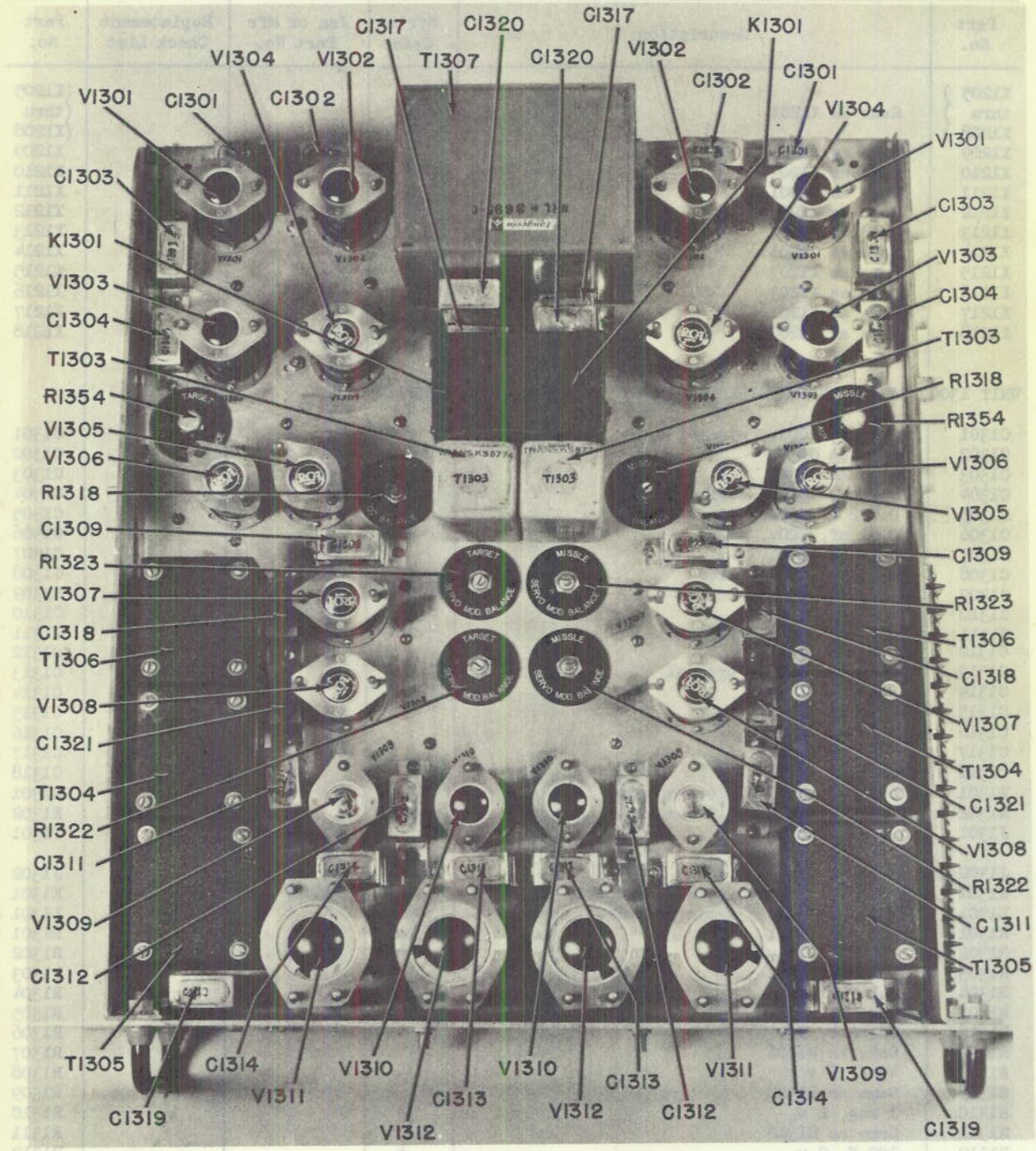

Figure 8-51. Target and Missile Detector and Servo Amplifier Unit - Top View

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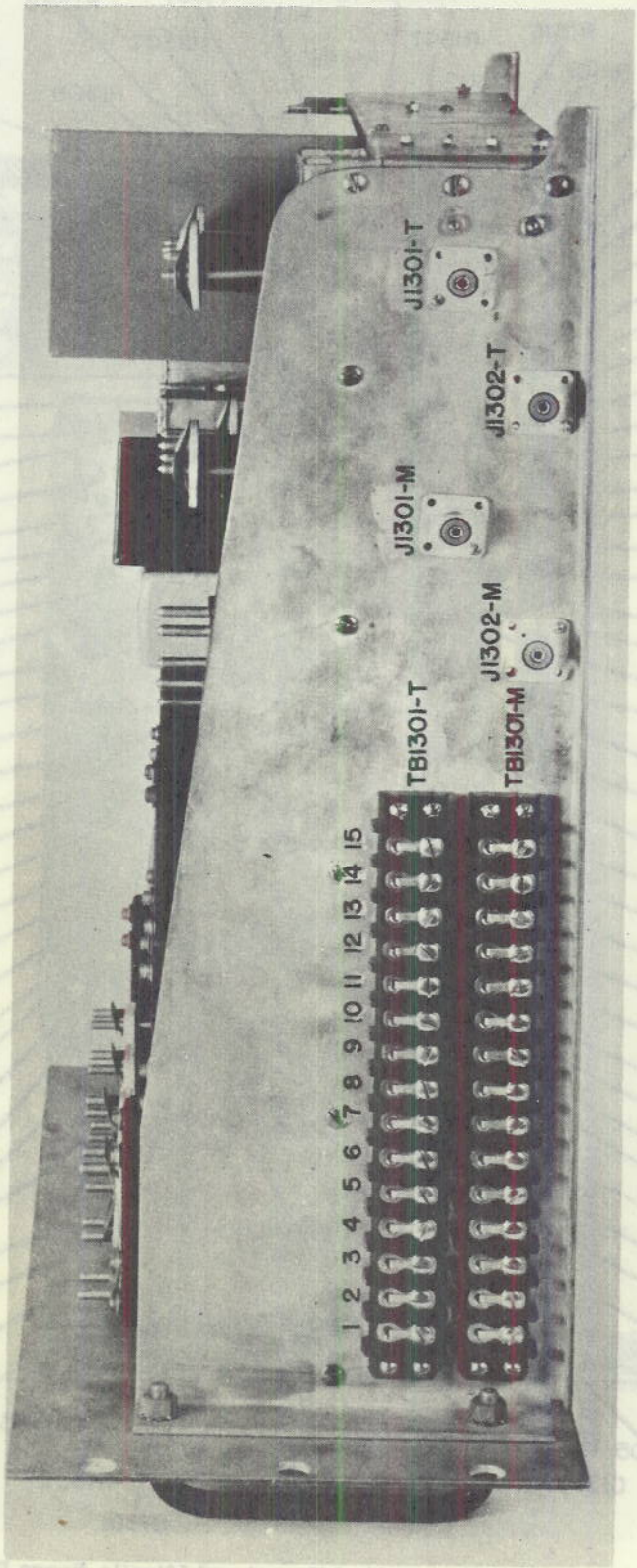

Figure 8-52. Target and Missile Range Detector and Servo Amplifier Unit - Right Side View

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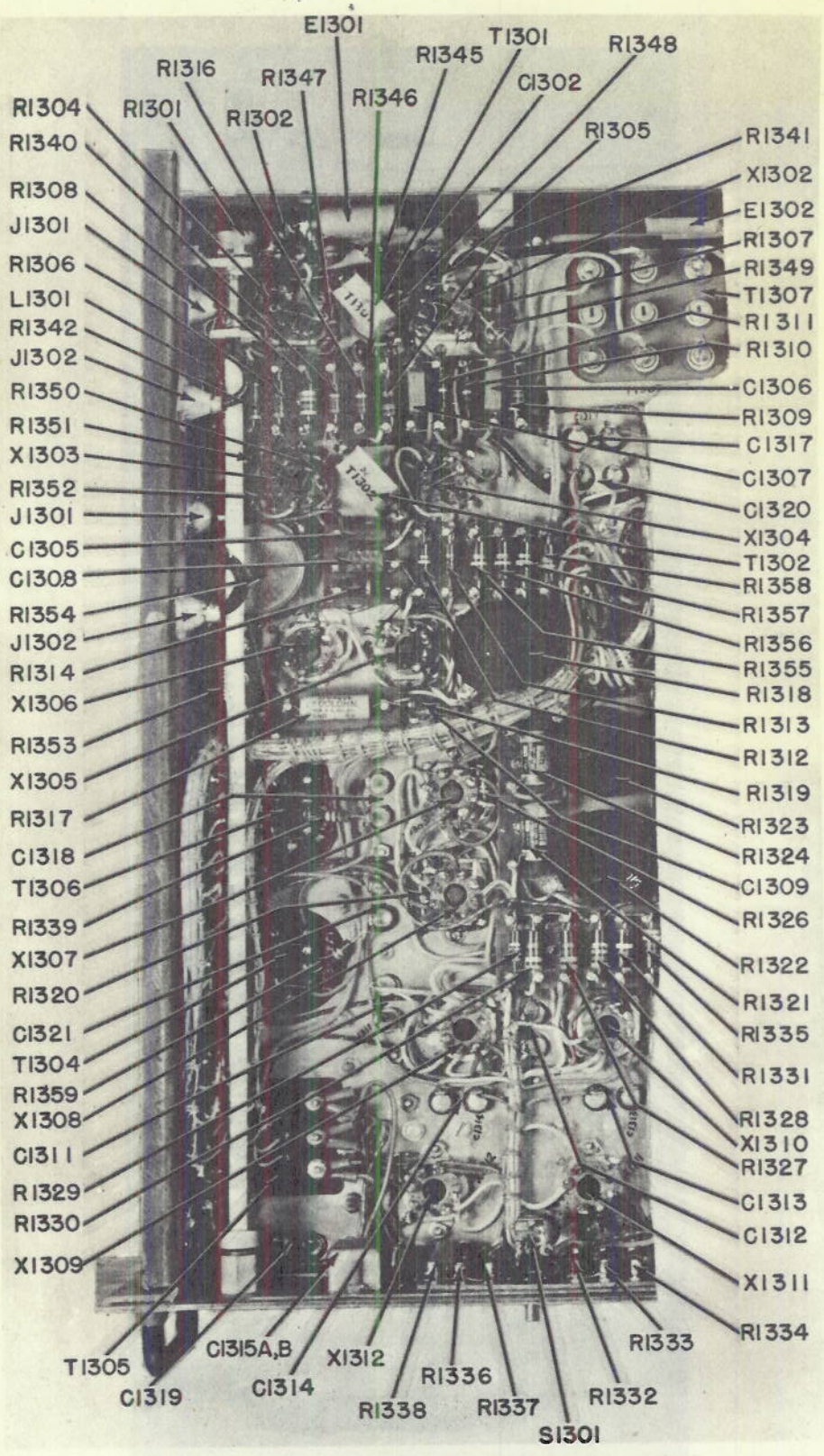

Figure 8-53. Left Half of Target and Missile Range Detector and Servo Amplifier Unit - Bottom View

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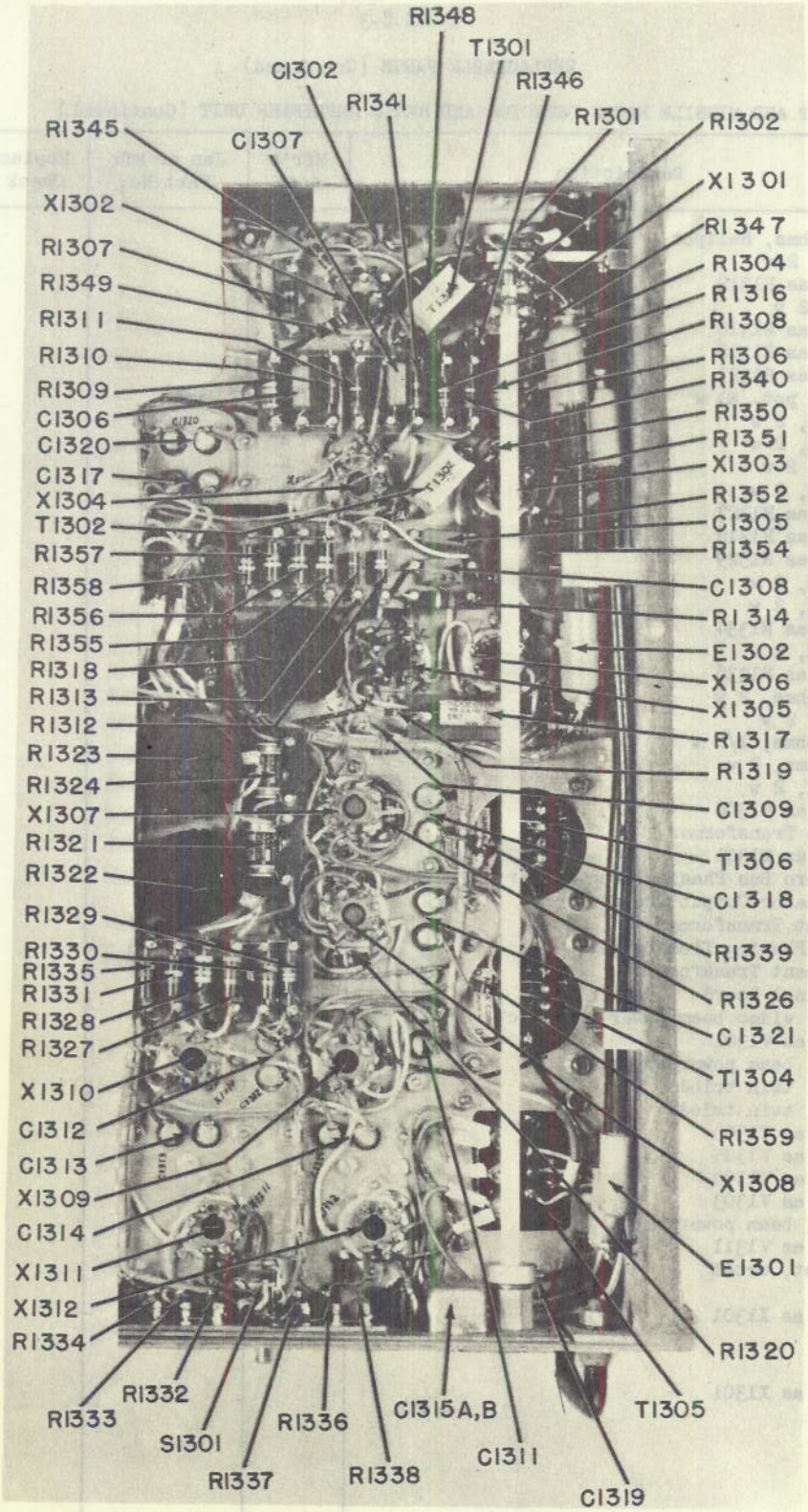

Figure 8-54. Right Half of Target and Missile Range Detector and Servo Amplifier Unit - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 1300, TARGET AND MISSILE RANGE DETECTOR AND SERVO AMPLIFIER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R1318	500 ohms, Helipot	2026			R1318
R1319	10 K, 2 w	4			R1319
R1320	Same as R1312				R1320
R1321	2 K, 2 w	4			R1321
R1322	Same as R1318				R1322
R1323	Same as R1318				R1323
R1324	Same as R1321				R1324
R1325	10 K, pot. 50 w	32	0332		R1325
R1326	330 K, 2 w	4			R1326
R1327	3.3 K, 2 w	4			R1327
R1328	50 K, 2 w	4			R1328
R1329	390 K, 2 w	4			R1329
R1330	Same as R1327				R1330
R1331	Same as R1312				R1331
R1332	Same as R1329				R1332
R1333	1.2 K, 2 w	4			R1333
R1334	3.9 K, 2 w	4			R1334
R1335	Same as R1334				R1335
R1336	270 K, 2 w	4			R1336
R1337	Same as R1336				R1337
R1338	270 ohms, 2 w	4			R1338
R1339	27 K, 2 w	4			R1339
R1340	820 ohms, 1/2 w	4			R1340
R1341	68 ohms, 2 w	4			R1341
R1342	4.7 K, 2 w	4			R1342
R1343	Same as R1308				R1343
T1301	Pulse Transformer	209	124-T3		T1301
T1302	Same as T1301				T1302
T1303	Synchro Bus Phasing Transformer	2030	145		T1303
T1304	Modulator Output Transformer	2023	2803		T1304
T1305	Output Transformer	38	213090-4		T1305
T1306	1 CT Phasing Transformer	38	213026-3		T1306
T1307	Filament Transformer	669	T19F99		T1307
TB1301	Terminal Board	386	2-142-Y		TB1301
V1301	Tube, video beam power amplifier		6AG7		V1301
V1302	Same as V1301				V1302
V1303	Tube, beam power amplifier		6V6		V1303
V1304	Tube, twin triode		6SL7		V1304
V1305	Tube, twin triode		6SN7GT		V1305
V1307	Same as V1305				V1307
V1308	Same as V1305				V1308
V1309	Same as V1305				V1309
V1310	Same as V1303				V1310
V1311	Tube, beam power amplifier		6L6		V1311
V1312	Same as V1311				V1312
X1301	Socket, octal	6	77-MIP-8		X1301
X1302 thru X1305	Same as X1301				X1302 thru X1305
X1307 thru X1312	Same as X1301				X1307 thru X1312

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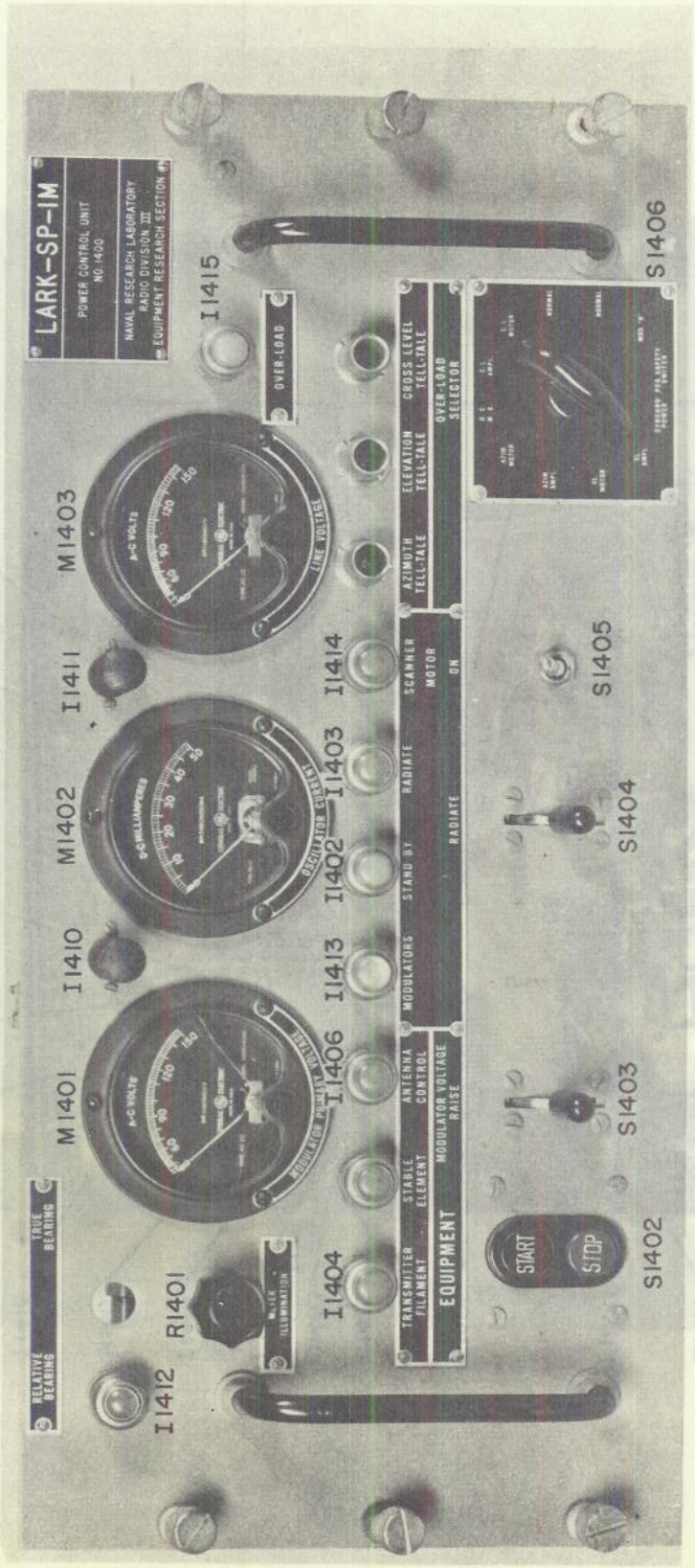

Figure 8-55. Power Control Unit - Front View

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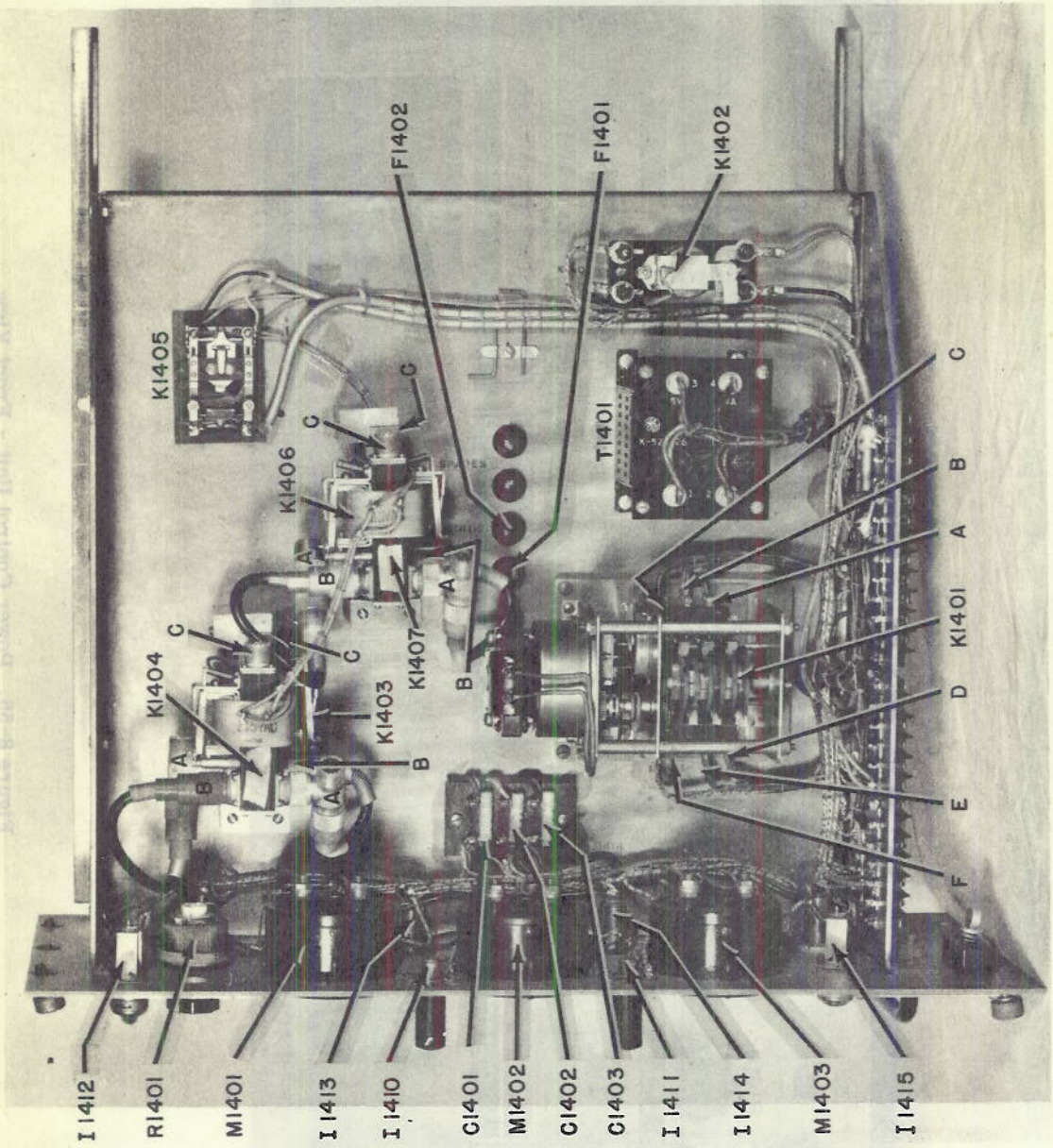

Figure 8-56. Power Control Unit - Top View

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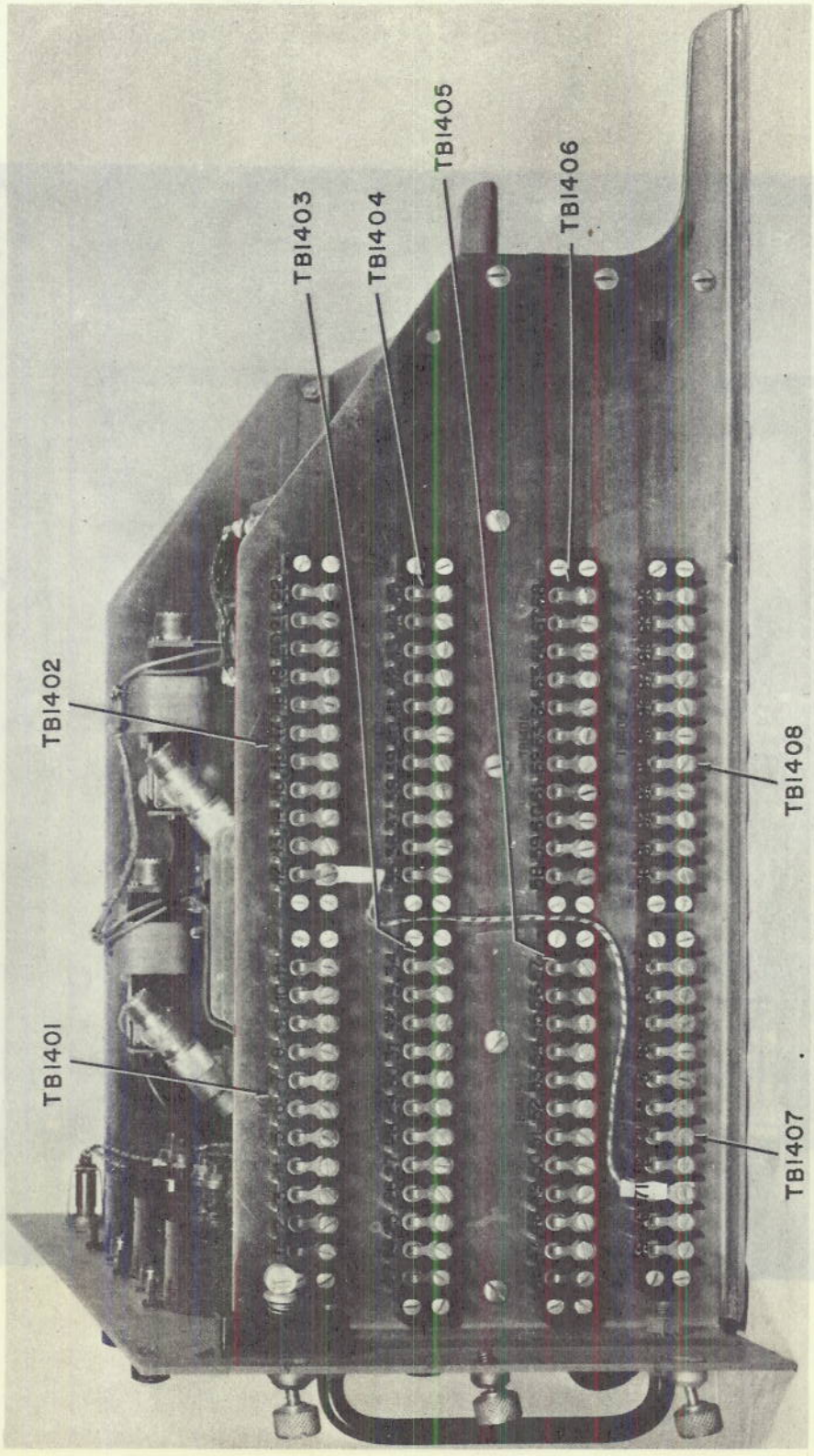

Figure 8-57. Power Control Unit - Right Side View

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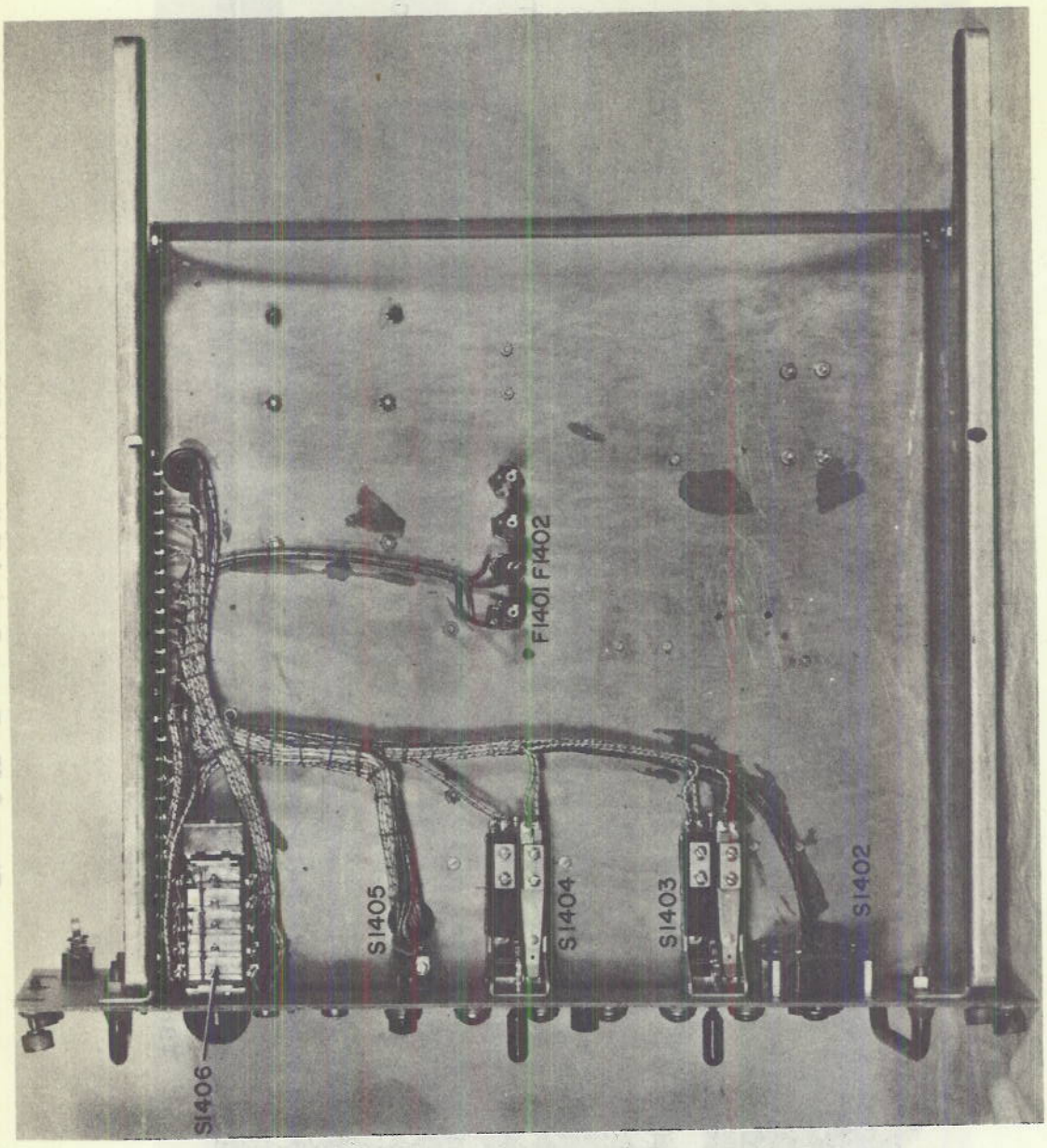

Figure 8-58. Power Control Unit - Bottom View

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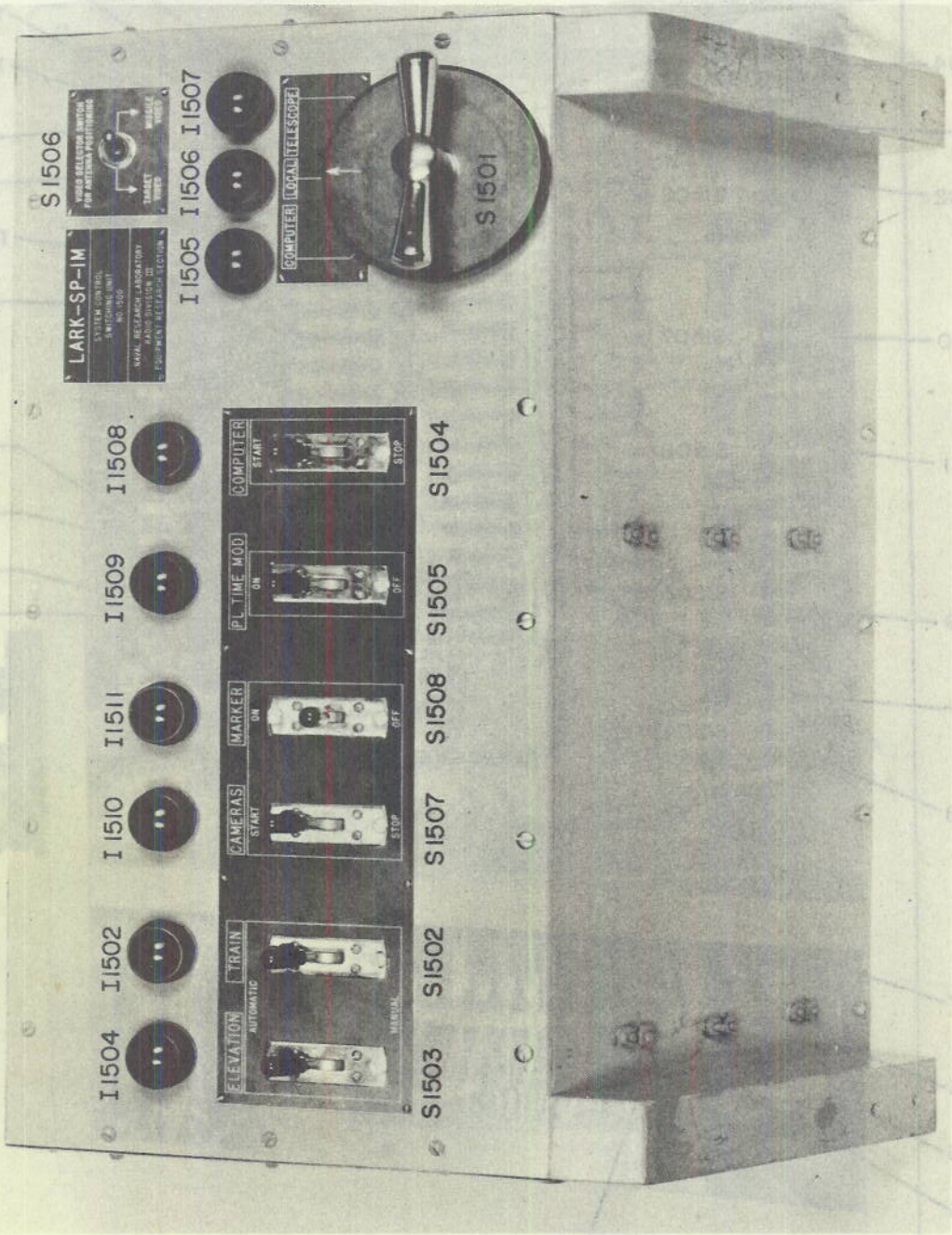

Figure 8-59. System Control Switching Unit - Front View

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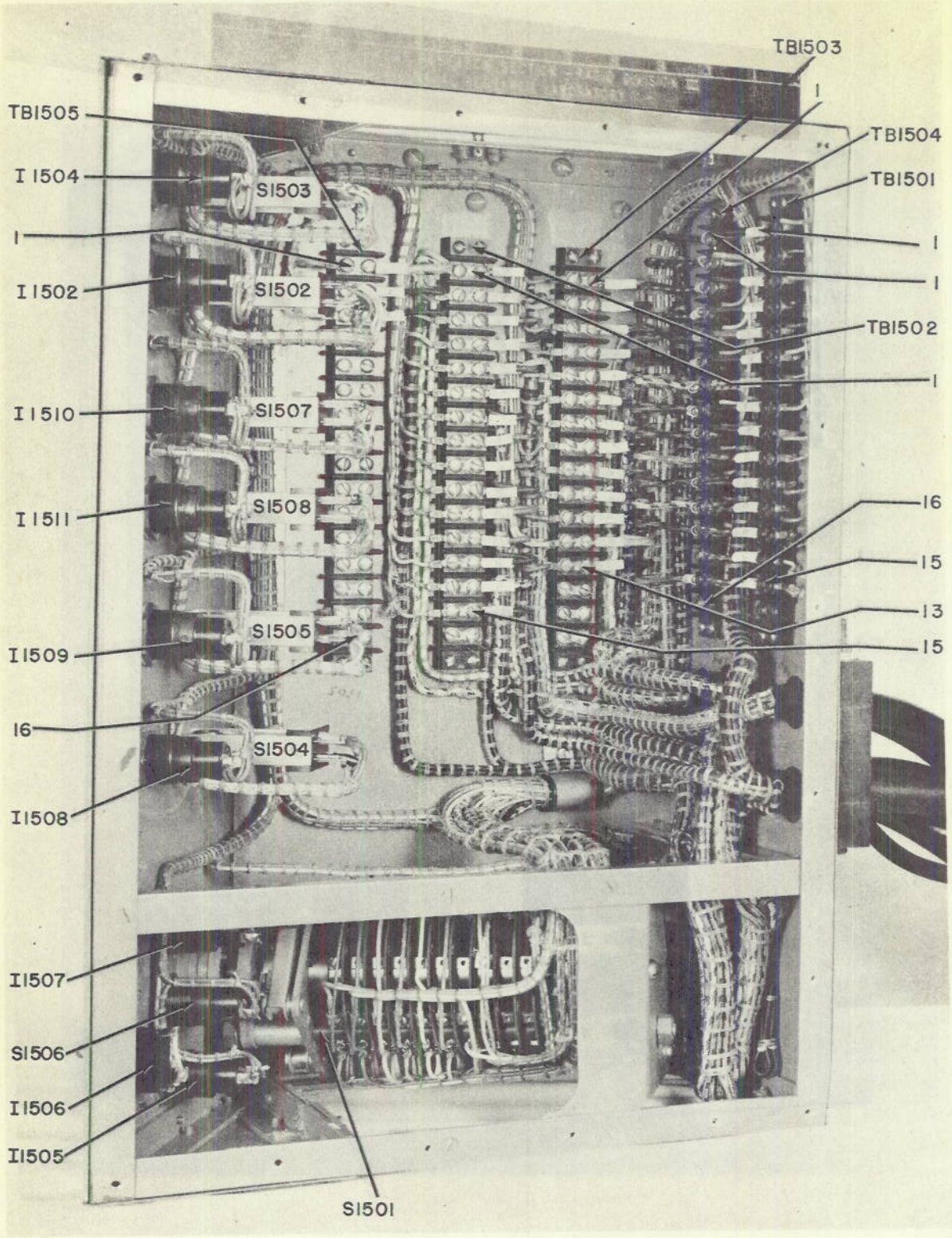

Figure 8-60. System Control Switching Unit - Top View

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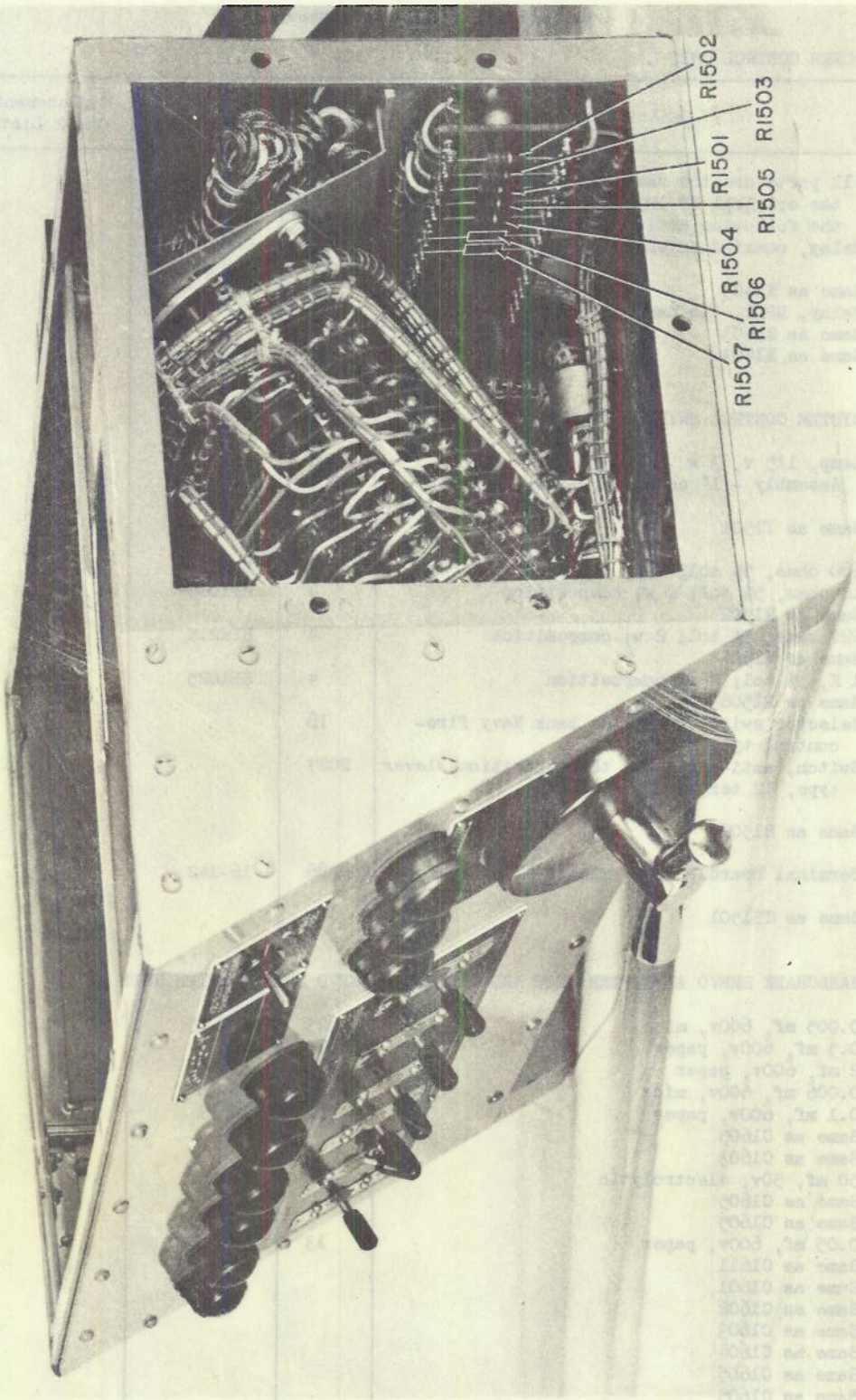

Figure 8-61. System Control Switching Unit - Right Side View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 1400, POWER CONTROL UNIT

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
	All parts are the same as those listed in the original SP-1M Spare Parts List with the following additions:				
K1403	Relay, coaxial antenna transfer, SPDT	540	Cat. No. 6350		K1403
K1404	Same as K1403				K1404
K1405	Relay, DPDT, (no name on relay)				K1405
K1406	Same as K1403				K1406
K1407	Same as K1403				K1407
UNIT 1500, SYSTEM CONTROL SWITCHING UNIT					
I1501	Lamp, 115 v, 3 w	298			I1501
	Assembly - 1" enclosed, 75 w	208			
I1502) thru I1511)	Same as I1501				I1502 thru I1511
R1501	680 ohms, 5% tol; 2 w; composition	4	HB2225		R1501
R1502	10 ohms, 5% tol; 2 w; composition	4	HB1005		R1502
R1503	Same as R1502				R1503
R1504	220 ohms, 5% tol; 2 w; composition	4	HB2215		R1504
R1505	Same as R1504				R1505
R1506	1 K, 5% tol; 2 w; composition	4	HB1025		R1506
R1507	Same as R1506				R1507
S1501	Selector switch, multiple bank Navy fire-control type	18			S1501
S1502	Switch, anti-capacity, three-position, lever type, 12 terminals	2027			S1502
S1503) thru S1508)	Same as S1502				S1503 thru S1508
TB1501	Terminal Boards, 16 terminals	386	16-142		TB1501
TB1502) thru TB1505)	Same as TB1501				TB1502 thru TB1505
UNIT 1600, HANDCRANK SERVO AMPLIFIER UNIT AND TELESCOPE SERVO PREAMPLIFIER UNIT					
C1601	0.005 mf, 600v, mica	623	1FM-25		C1601
C1602	0.5 mf, 600v, paper	623	PX-56		C1602
C1603	2 mf, 600v, paper	13	DA4200		C1603
C1604	0.006 mf, 600v, mica	623	MS-26		C1604
C1605	0.1 mf, 600v, paper	13	DT6P1		C1605
C1606	Same as C1605				C1606
C1607	Same as C1603				C1607
C1608	50 mf, 50v, electrolytic	623	TA-550		C1608
C1609	Same as C1605				C1609
C1610	Same as C1605				C1610
C1611	0.05 mf, 600v, paper	13	DT6S5		C1611
C1612	Same as C1611				C1612
C1613	Same as C1601				C1613
C1614	Same as C1602				C1614
C1615	Same as C1603				C1615
C1616	Same as C1604				C1616
C1617	Same as C1605				C1617
C1618	Same as C1605				C1618
C1619	Same as C1607				C1619
C1620	Same as C1608				C1620

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 1600, HANDCRANK SERVO AMPLIFIER UNIT AND TELESCOPE SERVO PREAMPLIFIER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
C1621	Same as C1605				C1621
C1622	Same as C1605				C1622
C1623	Same as C1611				C1623
C1624	Same as C1611				C1624
C1651	Same as C1601				C1651
C1652	0.0003 mf, 600v, mica	623	1FM-335		C1652
C1653	0.1 mf, 600v	623	TC-1		C1653
C1654	Same as C1653				C1654
C1655	Same as C1601				C1655
C1656	Same as C1652				C1656
C1657	Same as C1653				C1657
C1658	Same as C1653				C1658
C1659	0.02 mf, 600v	623	TC-12		C1659
C1660	Same as C1659				C1660
R1601	10 ohms, 5% tol; 1 w; composition	4	GB1005		R1601
R1602	150 K, 5% tol; 1 w; composition	4	GB1545		R1602
R1603	27 K, 5% tol; 1 w; composition	4	GB2735		R1603
R1604	100 K, 5% tol; 1 w; composition	4	GB1045		R1604
R1605	820 K, 5% tol; 1 w; composition	4	GB8245		R1605
R1606	560 ohms, 5% tol; 1 w; composition	4	GB5615		R1606
R1607	47 K, 5% tol; 1 w; composition	4	GB4735		R1607
R1608	270 K, 5% tol; 1 w; composition	4	GB2745		R1608
R1609	220 K, 5% tol; 1 w; composition	4	GB2245		R1609
R1610	39 K, 5% tol; 1 w; composition	4	GB3935		R1610
R1611	Same as R1604				R1611
R1612	2.2 K,5% tol; 1 w; composition	4	GB2225		R1612
R1613	Same as R1604				R1613
R1614	560 K, 5% tol; 1 w; composition	4	GB5645		R1614
R1615	Same as R1614				R1615
R1616	1.4 K, 5% tol; 1 w; composition	4	GB1325		R1616
R1617	22 K, 5% tol; 1 w; composition	4	GB2235		R1617
R1618	Same as R1617				R1618
R1619	Same as R1614				R1619
R1620	Same as R1614				R1620
R1621	7.5 K, 10% tol; 10 w; wire wound	32	BR0L0		R1621
R1622	270 ohms, 10% tol; 10 w; wire wound	623	10-AD		R1622
R1623	10 ohms, 5% tol; 1 w; composition	4	GB1005		R1623
R1624	Same as R1602				R1624
R1625	75 K, 5% tol; 1 w; composition	4	GB7535		R1625
R1626	Same as R1604				R1626
R1627	Same as R1605				R1627
R1628	Same as R1606				R1628
R1629	Same as R1607				R1629
R1630	Same as R1608				R1630
R1631	Same as R1609				R1631
R1632	Same as R1610				R1632
R1633	Same as R1604				R1633
R1634	Same as R1612				R1634
R1635	Same as R1604				R1635
R1636	Same as R1614				R1636
R1637	Same as R1614				R1637
R1638	Same as R1616				R1638
R1639	Same as R1617				R1639
R1640	Same as R1617				R1640
R1641	Same as R1614				R1641
R1642	Same as R1614				R1642
R1643	Same as R1621				R1643
R1644	Same as R1622				R1644
R1651	Same as R1617				R1651

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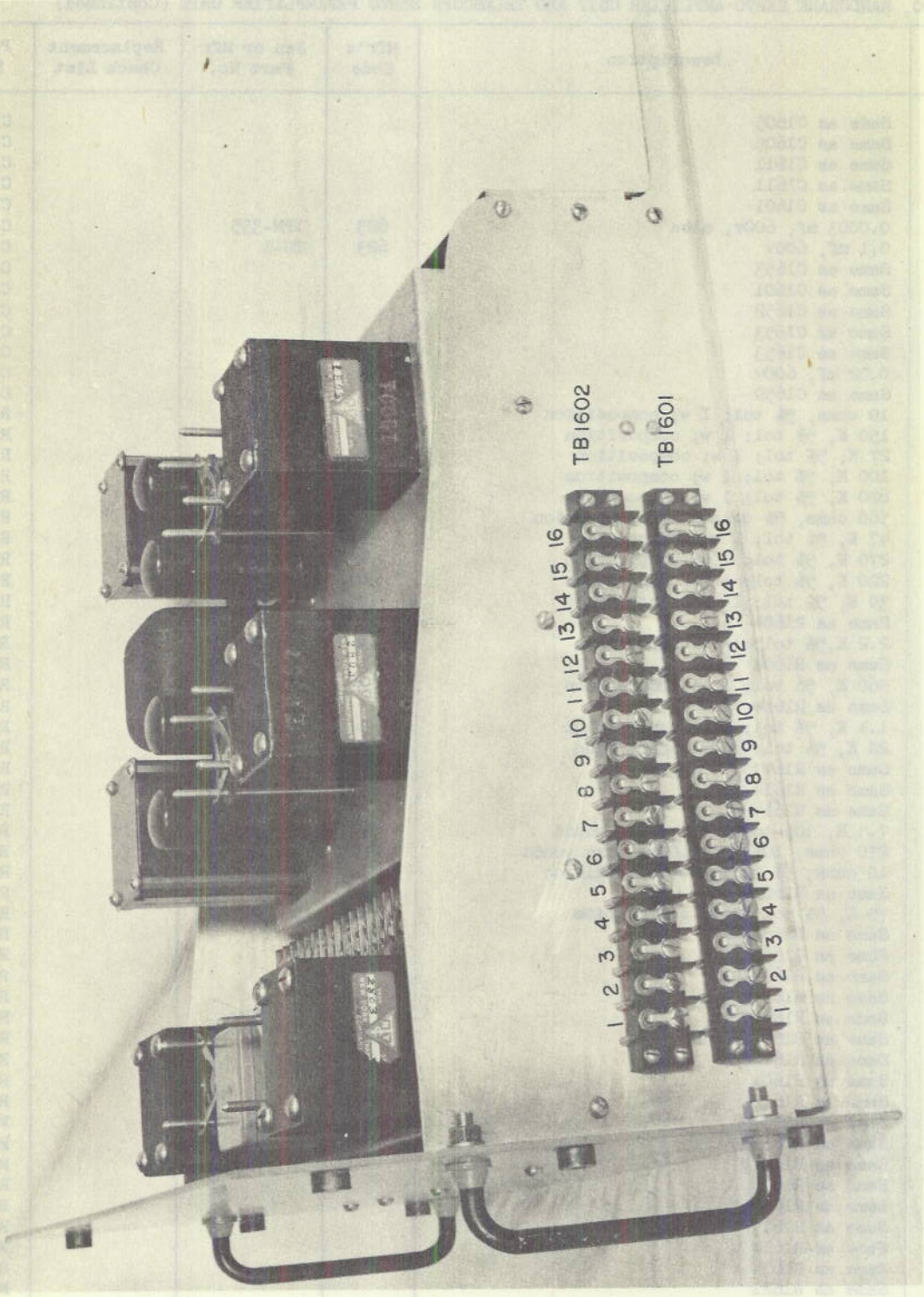

Figure 8-62. Telescope Servo Preamplifier and Handcrank Servo Amplifier Units - Right Side View

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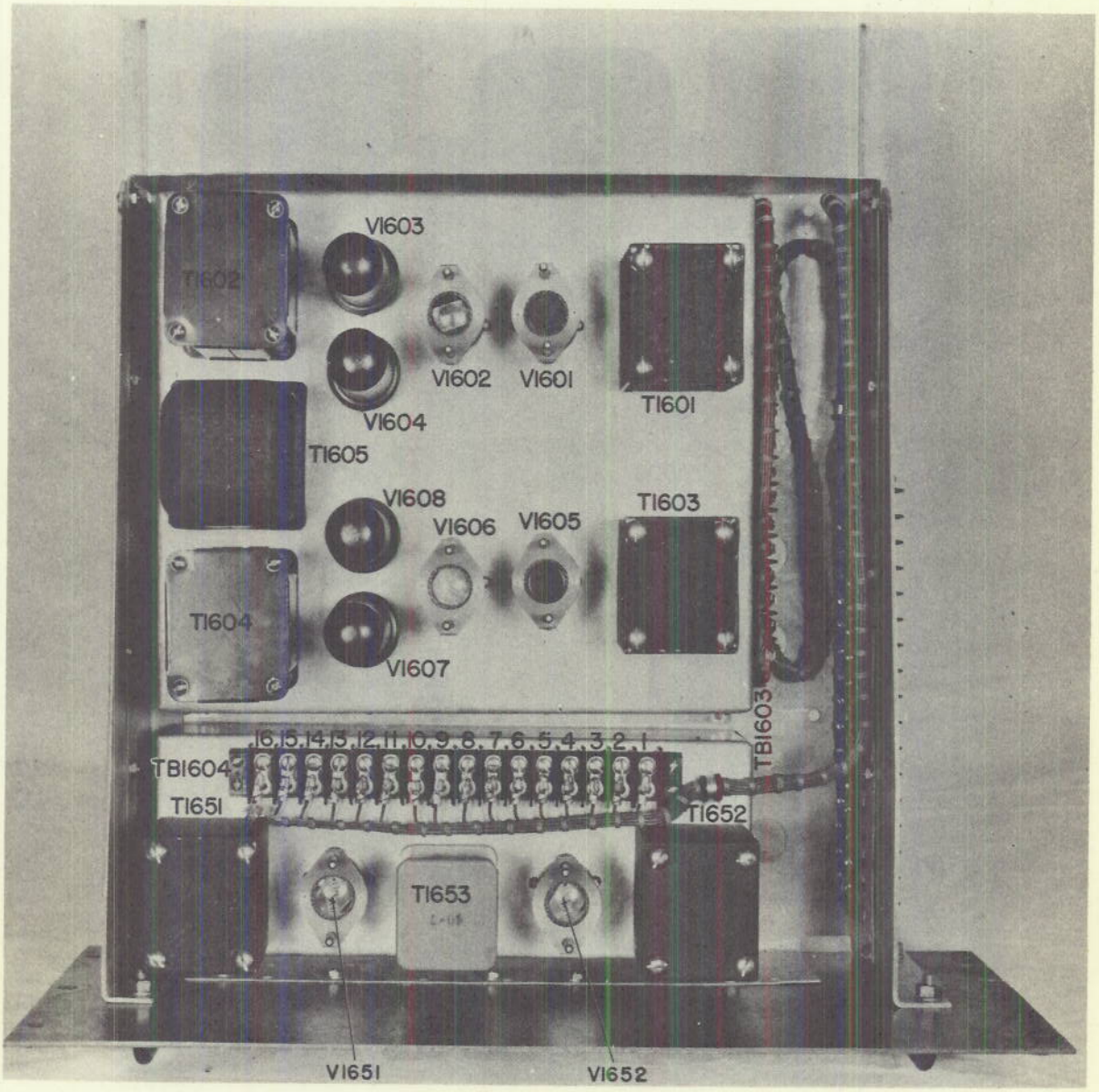

Figure 8-63. Telescope Servo Preamplifier and Handcrank Servo Amplifier Units - Top View

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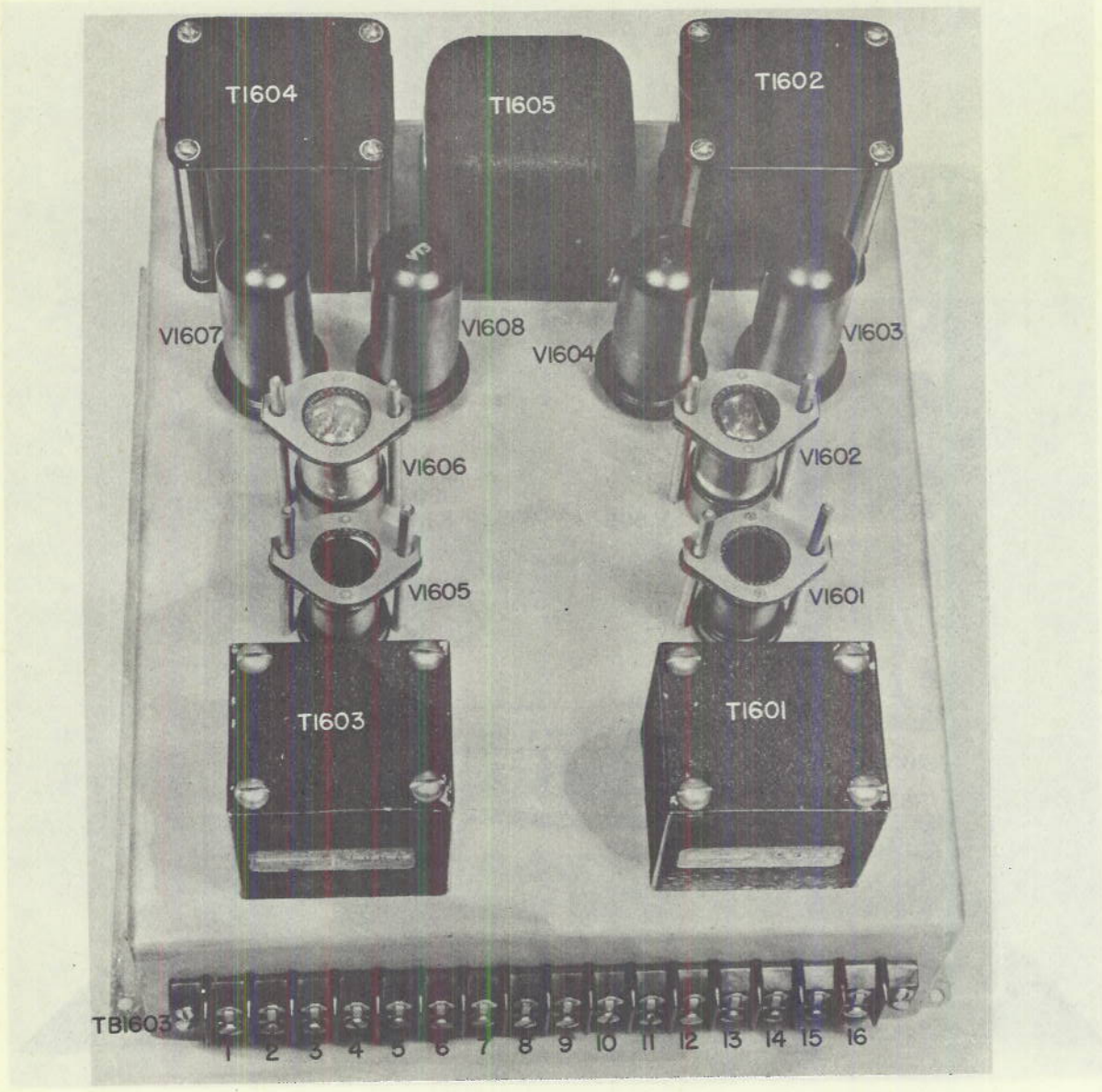

Figure 8-64. Handcrank Servo Amplifier Unit - Top View

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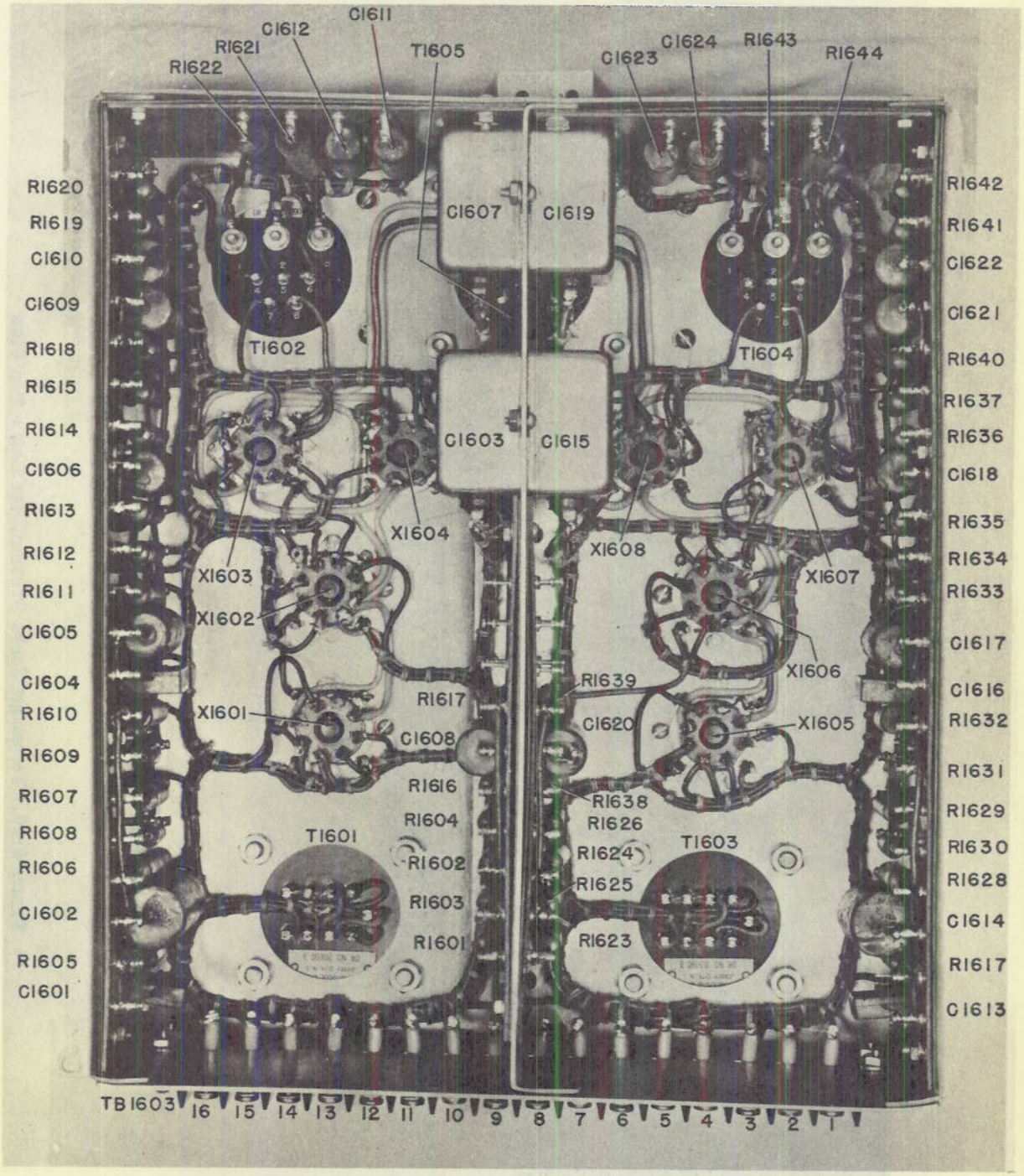

Figure 8-65. Handcrank Servo Amplifier Unit - Bottom View

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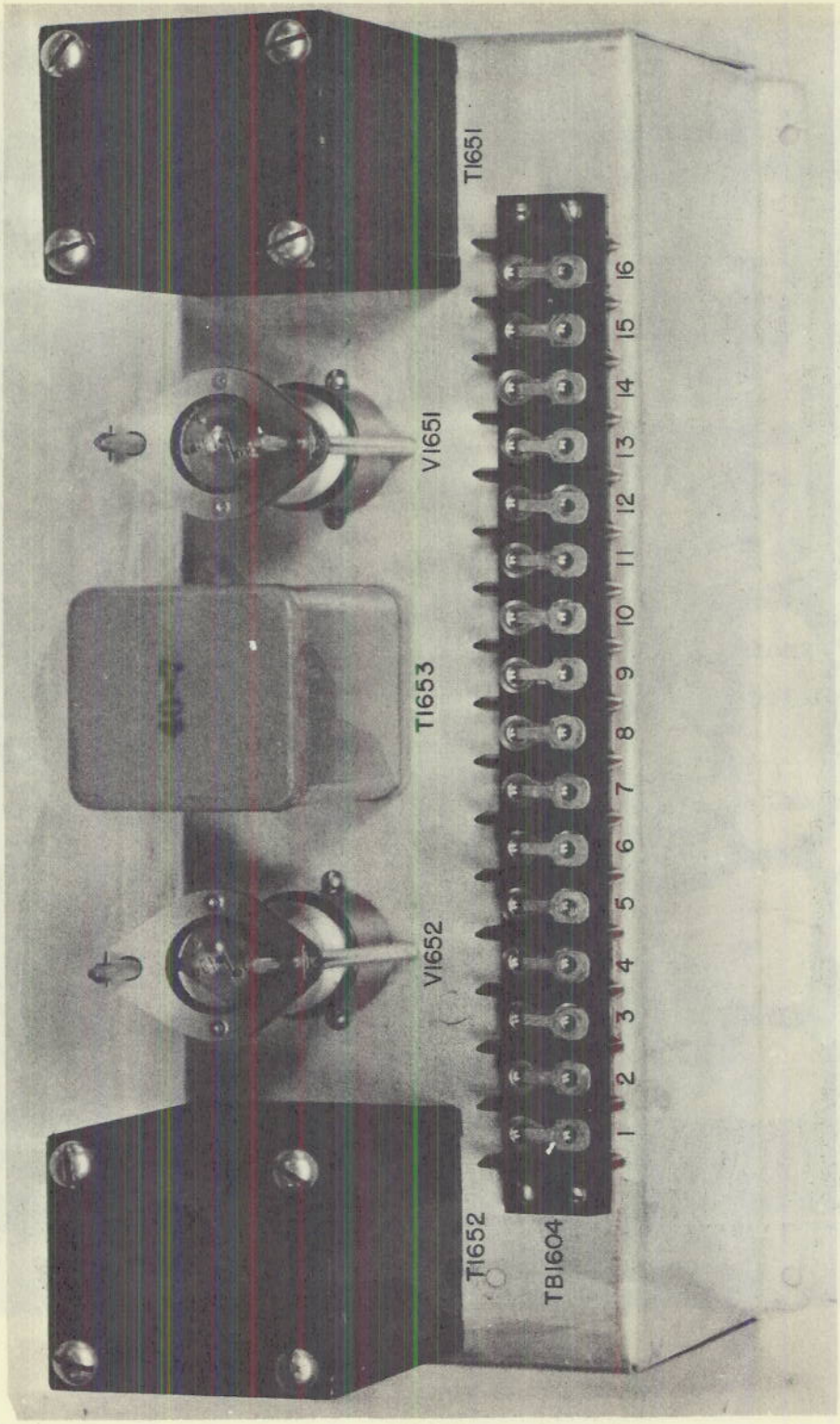

Figure 8-66. Telescope Servo Preamplifier Unit - Top View

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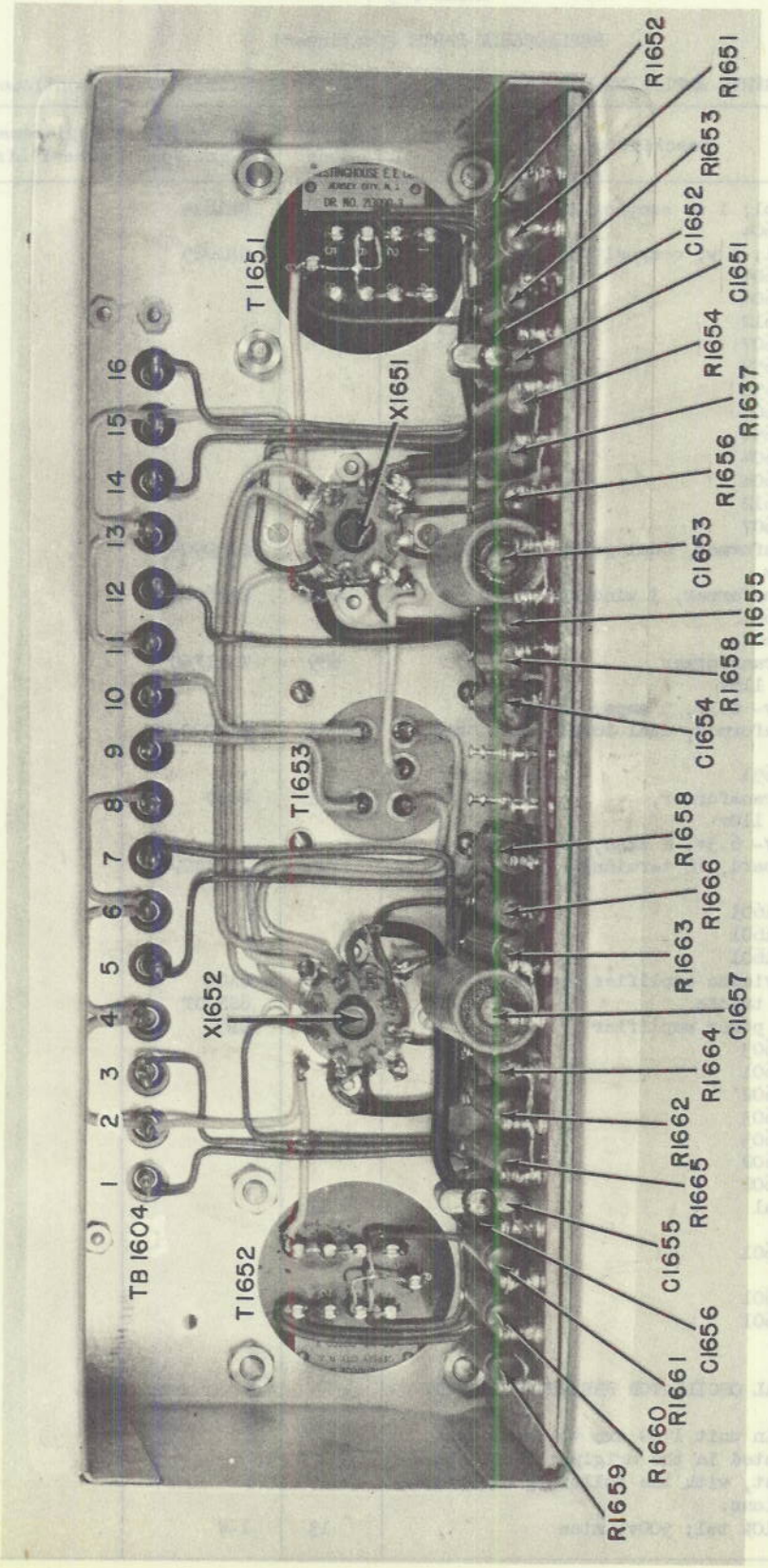

Figure 8-67. Telescope Servo Preamplifier Unit - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 1600, HANDCRANK SERVO AMPLIFIER UNIT AND TELESCOPE SERVO PREAMPLIFIER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R1652	18 K, 5% tol; 1 w; composition	4	GB1835		R1652
R1653	Same as R1604				R1653
R1654	1 K, 5% tol; 1 w; composition	4	GB1025		R1654
R1655	Same as R1604				R1655
R1656	Same as R1604				R1656
R1657	Same as R1612				R1657
R1658	Same as R1607				R1658
R1659	Same as R1652				R1659
R1660	Same as R1652				R1660
R1661	Same as R1604				R1661
R1662	Same as R1654				R1662
R1663	Same as R1604				R1663
R1664	Same as R1604				R1664
R1665	Same as R1612				R1665
R1666	Same as R1607				R1666
T1601	Input Transformer, dual primary, dual secondary	2023	213090-3		T1601
T1602	Output Transformer, 3 windings	2023	213090-4		T1602
T1603	Same as T1601				T1603
T1604	Same as T1602				T1604
T1605	Filament Transformer Primary- 115v Secondary- 6.3v, 5 amps, center tap	669	T-11F60		T1605
T1651	Input Transformer, dual input, dual output windings	2023	213090-3		T1651
T1652	Same as T1651				T1652
T1653	Filament Transformer, Primary- 110v Secondary- 6.3v, 2 amps, center tap	2022	4-07		T1653
TB1601	Terminal Board, 16 terminals, with long lugs	386	16-142-Y		TB1601
TB1602	Same as TB1601				TB1602
TB1603	Same as TB1601				TB1603
TB1604	Same as TB1601				TB1604
V1601	Tube, television amplifier pentode		6AC7		V1601
V1602	Tube, twin triode		6SN7GT		V1602
V1603	Tube, beam power amplifier		6L6		V1603
V1604	Same as V1603				V1604
V1605	Same as V1601				V1605
V1606	Same as V1602				V1606
V1607	Same as V1603				V1607
V1608	Same as V1603				V1608
V1651	Same as V1602				V1651
V1652	Same as V1602				V1652
X1601	Socket-octal	11			X1601
X1602 thru X1608	Same as X1601				X1602 thru X1608
X1651	Same as X1601				X1651
X1652	Same as X1601				X1652
	UNIT 1700, TARGET LOCAL OSCILLATOR PREAMPLIFIER UNIT				
	All parts in unit 1700 are the same as those listed in the original SP-1M Spare Parts List, with the following exceptions or additions:				
C1742	1000 mmf, 10% tol; 500v; mica	13	1-W		C1742

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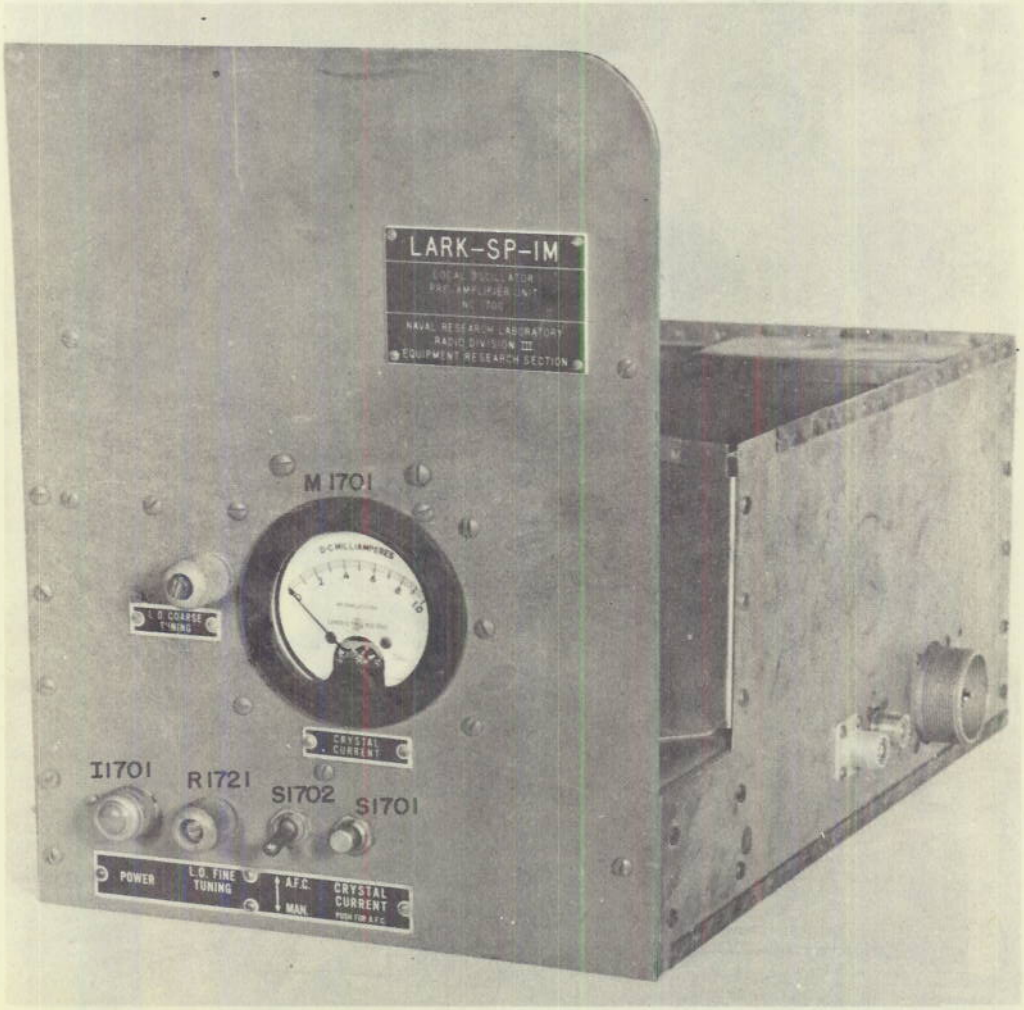

Figure 8-68. Target Local Oscillator Preamplifier Unit - Front View

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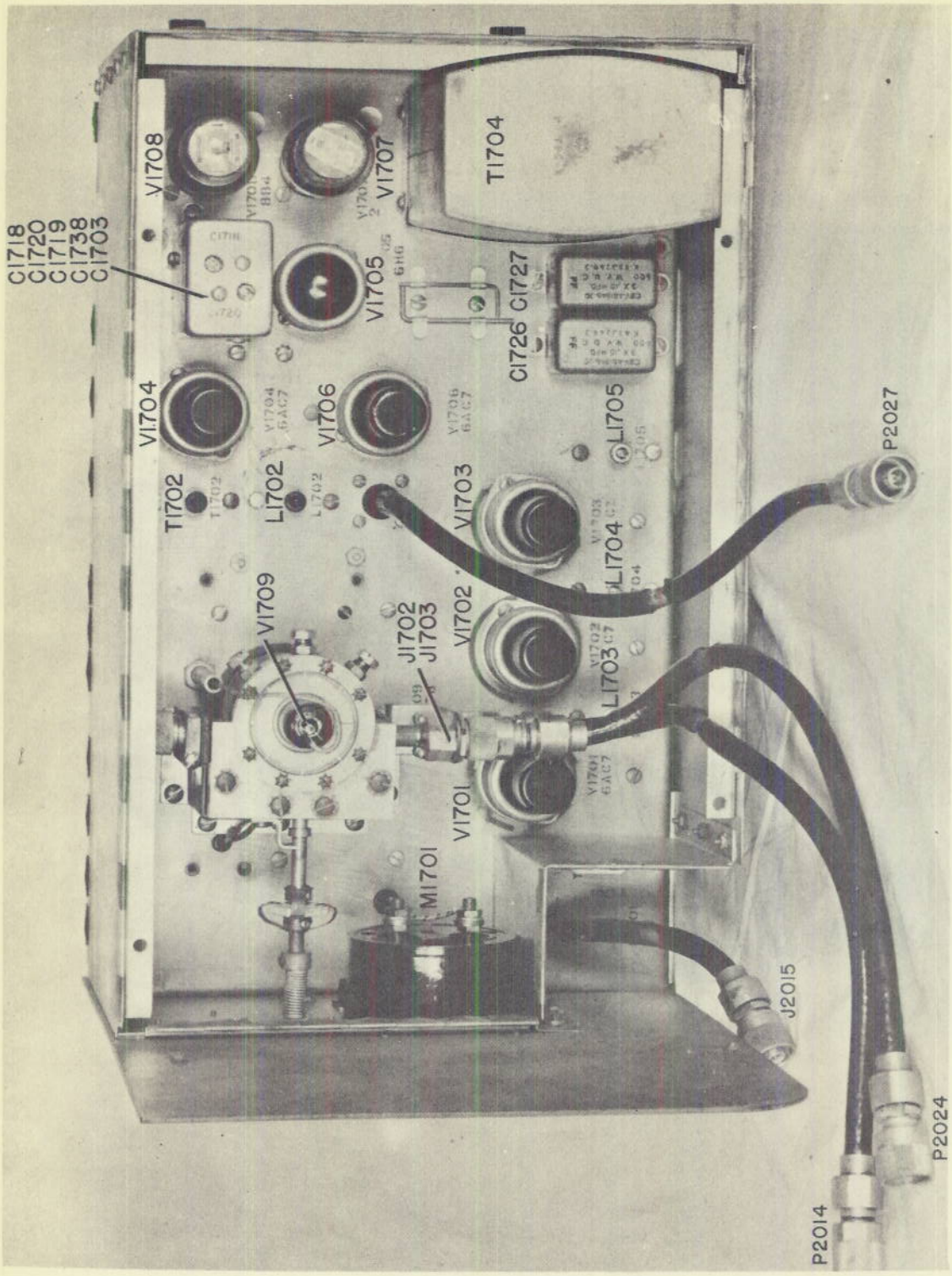

Figure 8-69. Target Local Oscillator Preamplifier Unit - Top View

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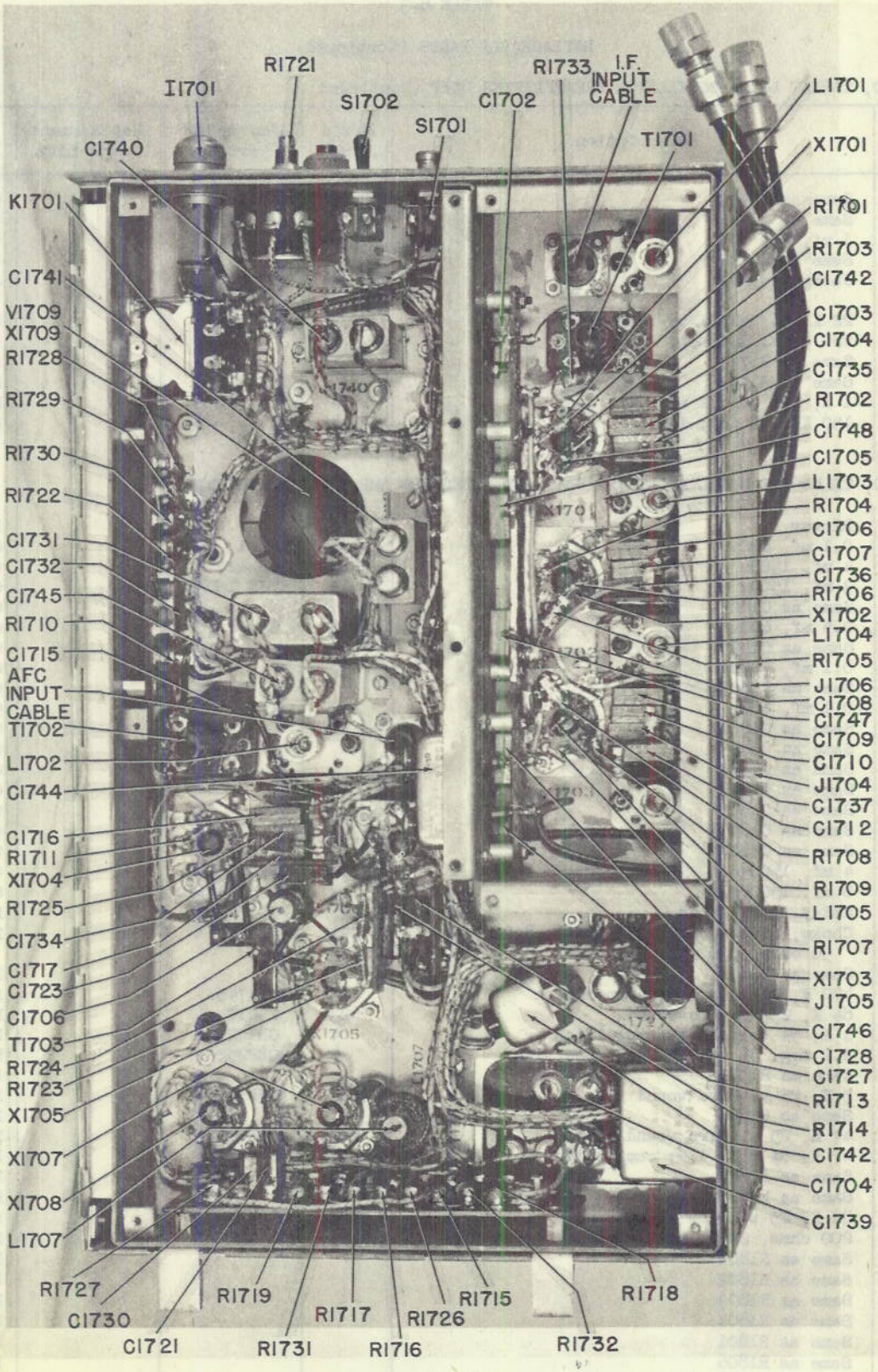

Figure 8-70. Target Local Oscillator Preamplifier Unit - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 1700, TARGET LOCAL OSCILLATOR PREAMPLIFIER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
C1743	Same as C1742				C1743
C1744	Same as C1742				C1744
C1745	1 mf, 10% tol				C1745
C1747	Same as C1742				C1747
J1706	Jack, coaxial	6	SO-239 CPH-49194		J1706
R1732	22 K, 5% tol; 1 w; composition	4	GB2235		R1732
R1733	220 ohms, 10% tol; 1 w	4			R1733
R1734	Same as R1733				R1734
R1735	Same as R1733				R1735
R1736	1 K, 10% tol; 1 w	4			R1736
R1737	150 K, 10% tol; 1 w	4			R1737
UNIT 1800, TELESCOPE FINAL AMPLIFIER UNIT AND TELESCOPE AMPLIFIER POWER UNIT					
BL1801	Blower	58			BL1801
C1801	0.1 mf, 600v	623	TC-1		C1801
C1802	4 mf, 1500v	623	CR-415		C1802
C1803	3 mf, 1500v	13	TJV 15030		C1803
C1804	Same as C1803				C1804
C1805	0.5 mf, 600v	623	TC-5		C1805
C1806	Same as C1805				C1806
C1807A	0.1 mf, 7000v	10			C1807A
C1807B	Same as C1807A				C1807B
C1808	0.1 mf, 600v	13	TC-1		C1808
C1809	Same as C1802				C1809
C1810	Same as C1803				C1810
C1811	Same as C1803				C1811
C1812	Same as C1805				C1812
C1813	Same as C1805				C1813
C1814A	Same as C1807A				C1814A
C1814B	Same as C1807A				C1814B
C1815	4 mf, 1500vdc	13	CD481261-10		C1815
C1816	8 mf, 1500vdc	13	CD481431-10		C1816
K1801	Relay, time delay	197	TD10-60S		K1801
L1801	Choke, filter, RET, CTH 30861, 8 henries, 50 ohms, 500 milliamps	731	KS8782		L1801
L1802	Same as L1801				L1802
R1801	470 K, 5% tol; 1 w; composition	4	GB4745		R1801
R1802	84 K, 25 w, wire wound	623	25NIT		R1802
R1803	1 K, 5% tol; 1 w; composition	4	GB1025		R1803
R1804	2.2 meg. 5% tol; 1 w; composition	4	GB2255		R1804
R1805	Same as R1801				R1805
R1806	5 K, 25 w, wire wound	623	25NIT		R1806
R1807	Same as R1806				R1807
R1808	47 K, 25 w, wire wound	623	25NIT		R1808
R1809	47 K, 5% tol; 1 w; composition	4	GB4735		R1809
R1810	Same as R1809				R1810
R1811	Same as R1808				R1811
R1812	82 K, 25 w, wire wound	623	25NIT		R1812
R1813	200 ohms, 25 w, wire wound	623	25NIT		R1813
R1814	Same as R1801				R1814
R1815	Same as R1802				R1815
R1816	Same as R1803				R1816
R1817	Same as R1804				R1817
R1818	Same as R1801				R1818
R1819	Same as R1806				R1819
R1820	Same as R1806				R1820

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 1800, TELESCOPE FINAL AMPLIFIER UNIT AND TELESCOPE AMPLIFIER POWER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacemsnt Check List	Part No.
R1821	Same as R1808				R1821
R1822	Same as R1809				R1822
R1823	Same as R1809				R1823
R1824	Same as R1808				R1824
R1825	16 K, 100 w, wire wound, Globar		CSF-63030F		R1825
R1826	Same as R1813				R1826
R1827	16 K, 100 w, wire wound, Globar		CSF-63030F		R1827
S1801	Switch, interlock	10			S1801
T1801	Output Transformer, P-CT-P 140- 2.5A, 250-CT-2A, 350 w		NRL #1559		T1801
T1802	Same as T1801				T1802
T1803	Filament Transformer Primary- 115 v Six secondary windings- 10v, 3.25 amps, center tap One secondary winding- 6.3v, 2 amps, center tap		NRL #3571		T1803
T1804	Plate Transformer, turns ratio-1:28.2 Primary- 0.062 ohms, 100 millihenries (no load) Secondary- 124.5 ohms, 35 millihenries (no load)	731	KS8568 CTH-30794		T1804
T1805	Filament Transformer Primary- 11.73 ohms, 110v, 1 henry Secondary- 0.017 ohms, 2.5v, 10 amps, 1 millihenry	731	KS8786 CJE-30863		T1805
TB1801	Terminal Board, 16 terminals, with special lugs	386	16-142-Y		TB1801
TB1802	Terminal Board, 8 terminals, with special lugs	386	8-142-Y		TB1802
TB1803	Same as TB1802				TB1803
TB1804	Terminal Board, 8 terminals	386	8-140		TB1804
TP1801	Pin Jack	304			TP1801
TP1802 thru TP1814	Same as TP1801				TP1802 thru TP1814
V1801	Tube, twin triode		6SN7GT		V1801
V1802	Tube, tetrode		814		V1802
V1803	Same as V1802				V1803
V1804	Same as V1802				V1804
V1805	Same as V1801				V1805
V1806	Same as V1802				V1806
V1807	Same as V1802				V1807
V1808	Same as V1802				V1808
V1809	Tube, half-wave rectifier		866		V1809
V1810	Same as V1809				V1810
X1801	Socket, octal	11			X1801
X1802	Socket, medium 5-pin, glazed porcelain	11			X1802
X1803	Same as X1802				X1803
X1804	Same as X1802				X1804
X1805	Same as X1801				X1805
X1806	Same as X1802				X1806
X1807	Same as X1802				X1807
X1808	Same as X1802				X1808
X1809	Socket, 2-prong, unpolarized, 115 vac	11			X1809
X1810	Same as X1809				X1810

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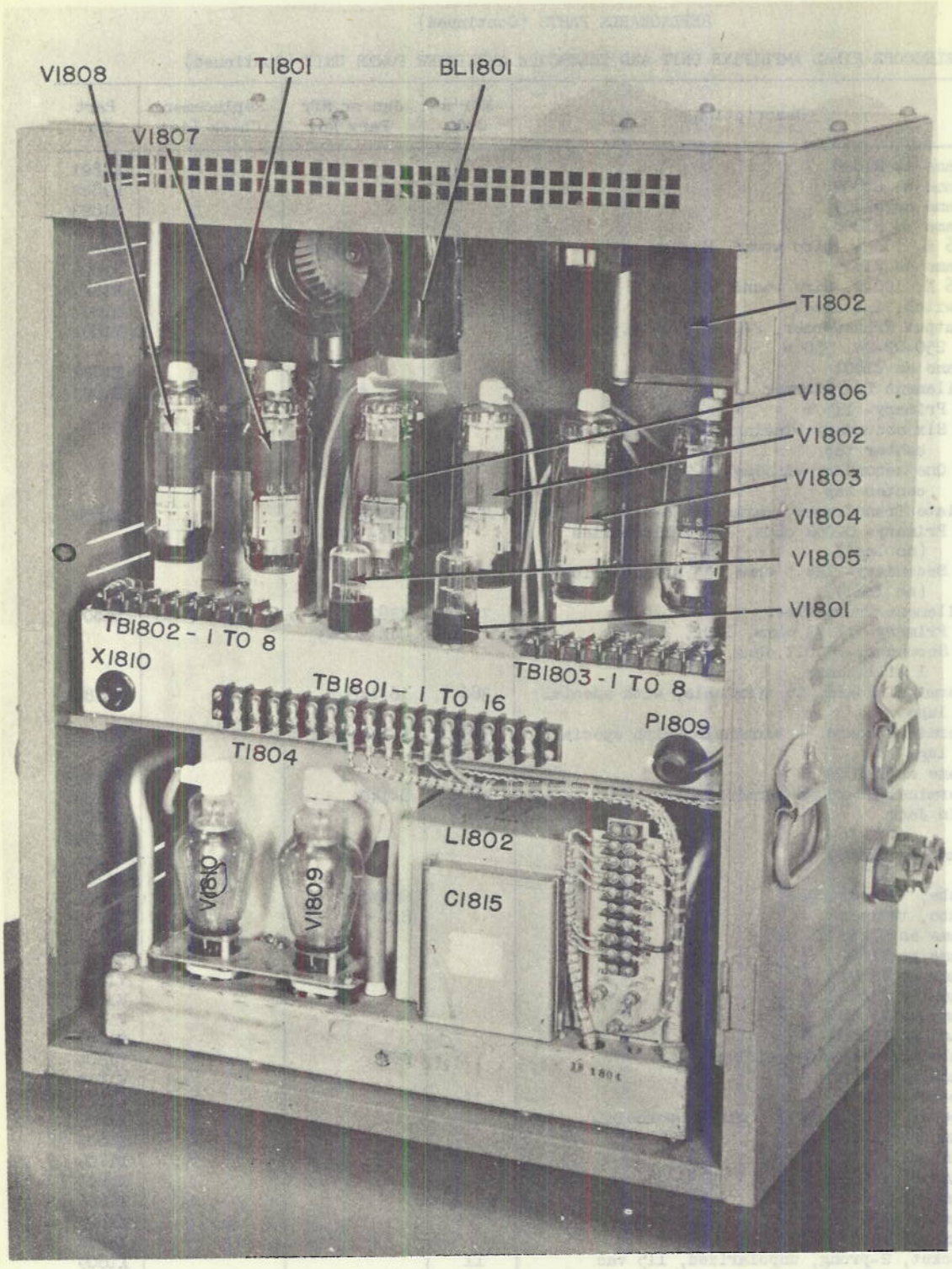

Figure 8-71. Telescope Final Amplifier Unit and Telescope Amplifier Power Unit in Cabinet - Front View

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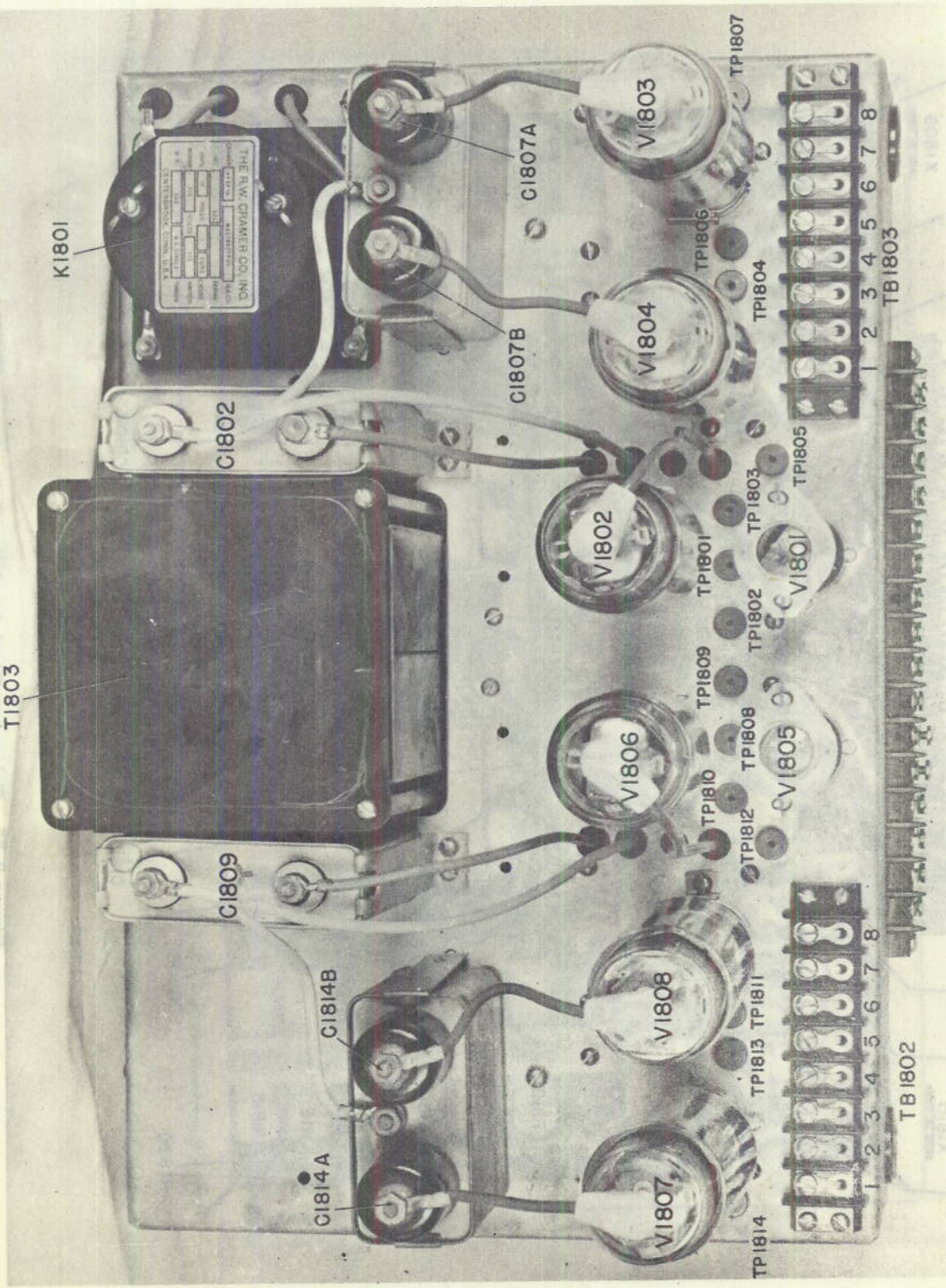

Figure 8-72. Telescope Final Amplifier Unit - Top View

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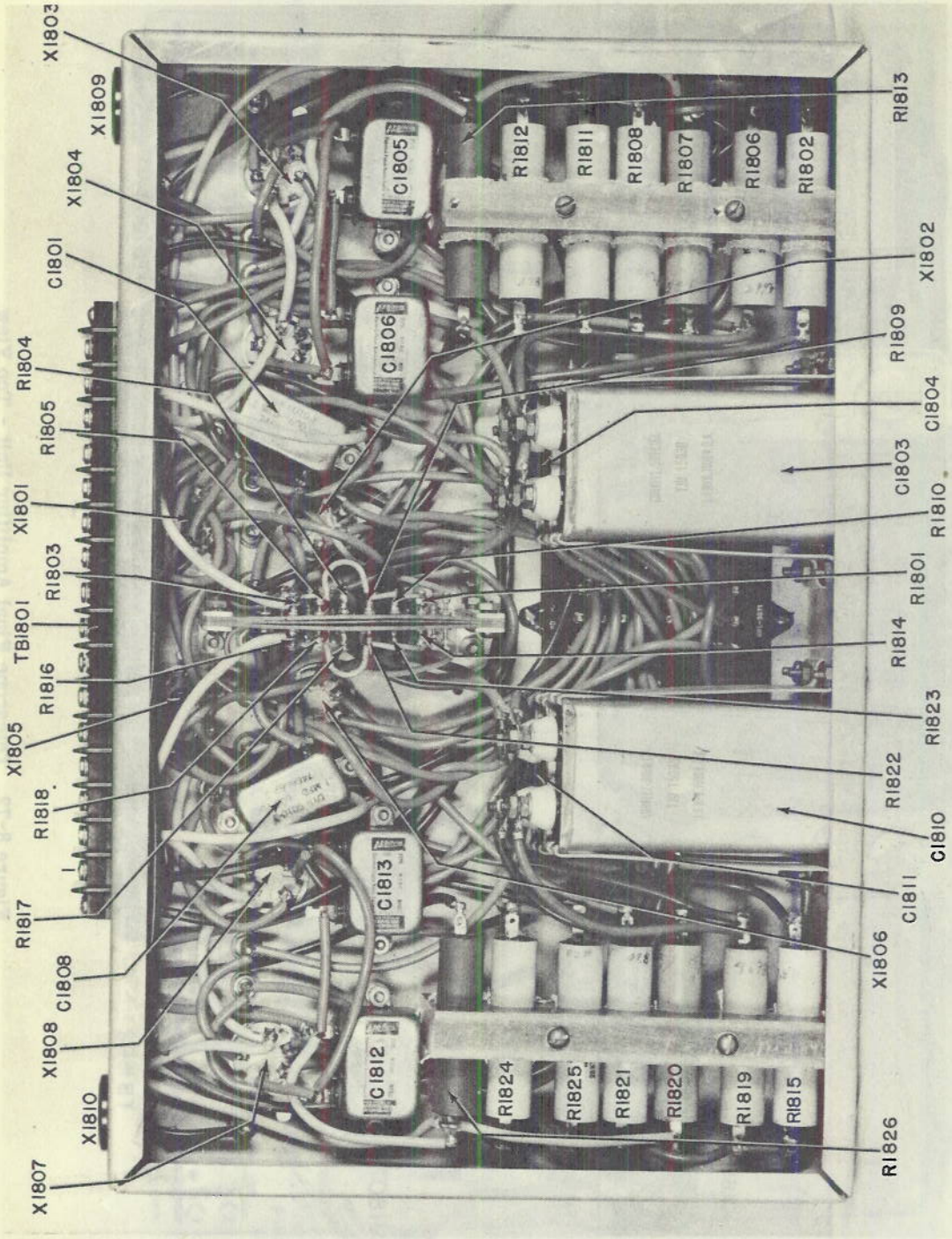

Figure 8-73. Telescope Final Amplifier Unit - Bottom View

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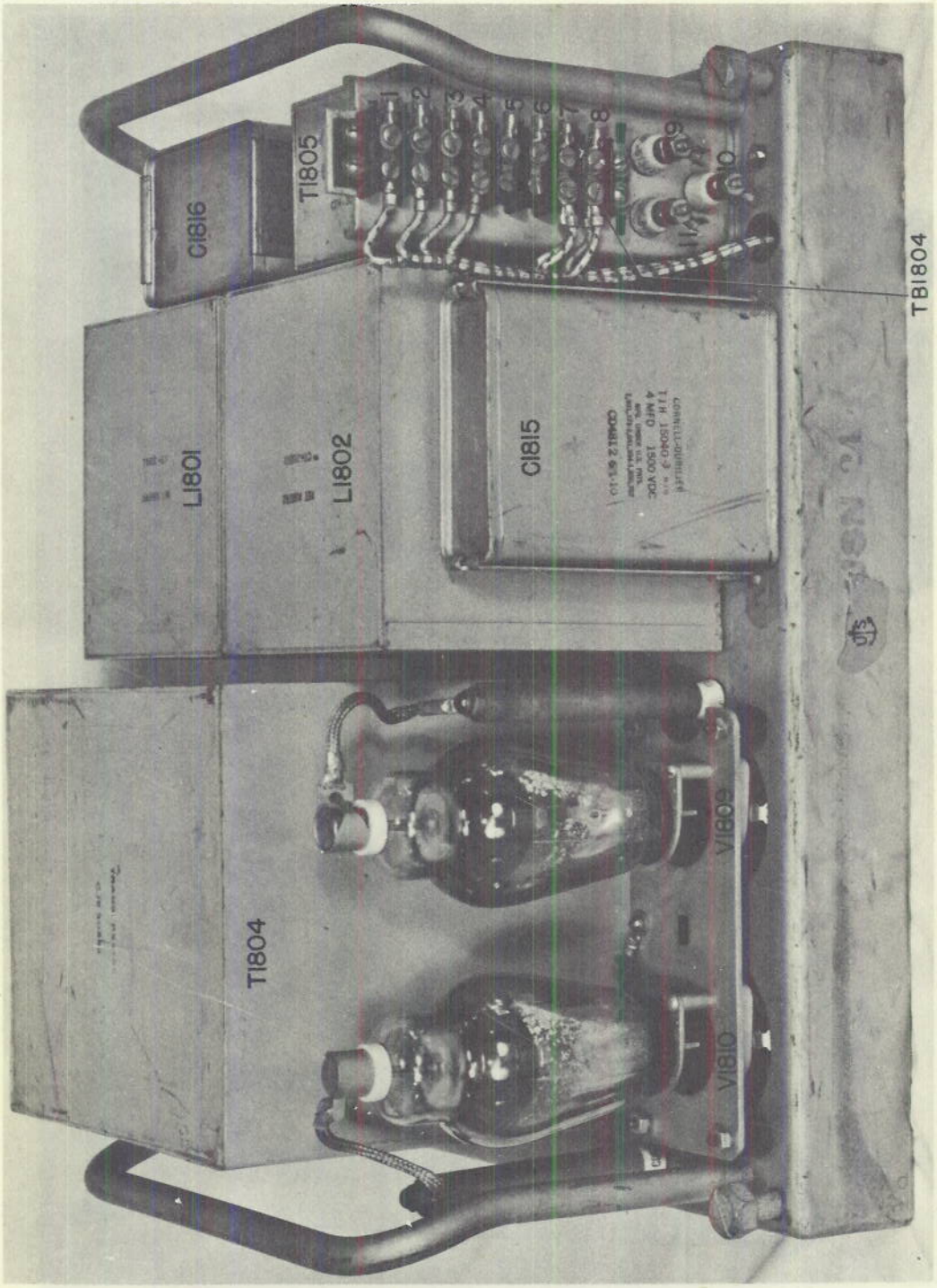

Figure 8-74. Telescope Amplifier Power Unit - Front View

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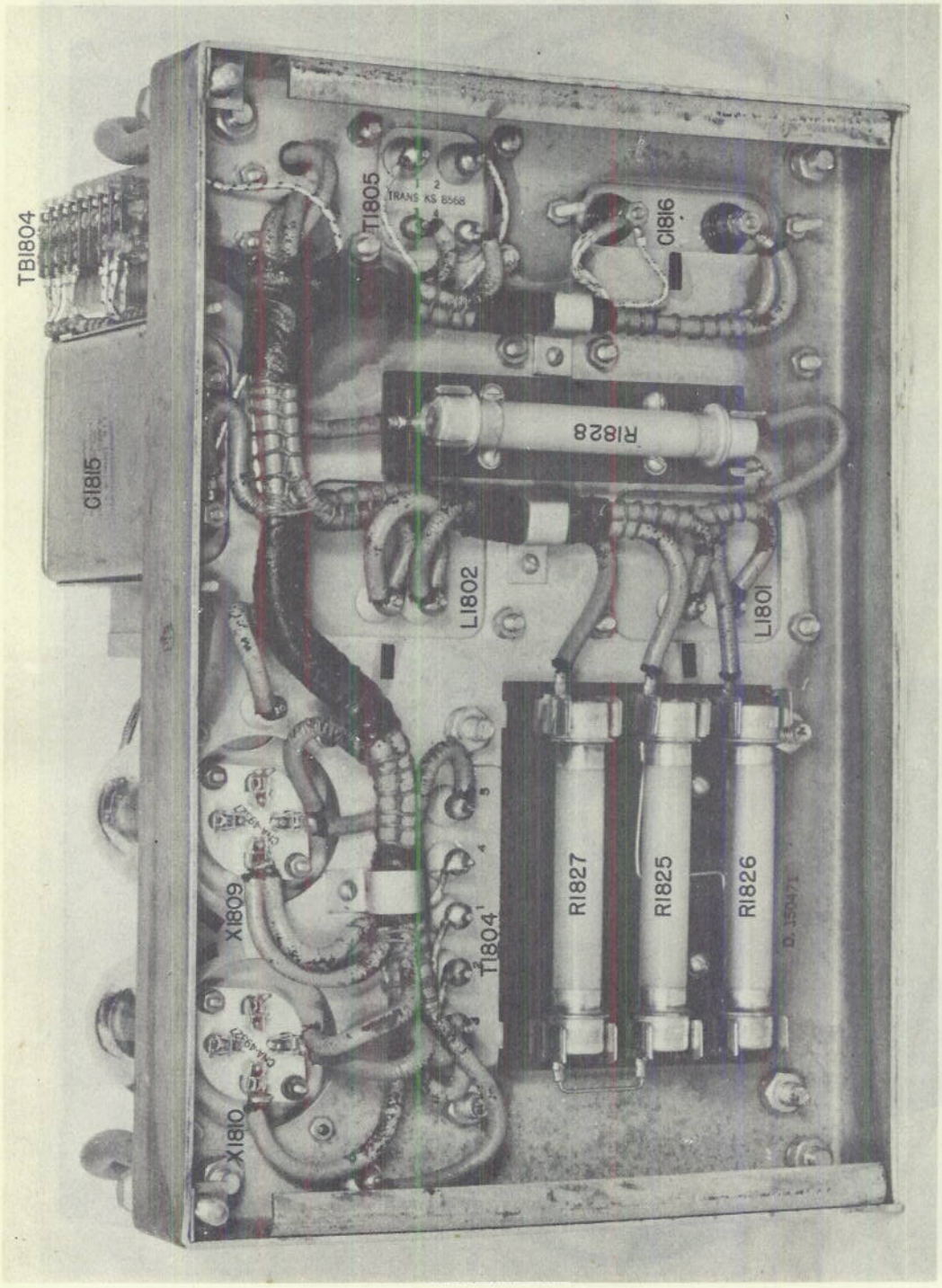

Figure 8-75. Telescope Amplifier Power Unit - Bottom Unit

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 2000, TRANSMITTER

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
B2001	Motor, 1/8 hp, 3450 rpm, 115v, 60 cycles, single phase open, single shielded bearings. Furnished with E2010	18	Model No. 5KH47EB242 Style F2 Flat face type		B2001
B2001A	Ball Bearings	608 815 261 492 765 765	6202Z 2025F 202KDD 202P 7202 7502		B2001A
C2001	500 mmf, 10% tol; 500v; ceramic; with a temperature coefficient of - 0.00075 mmf per mmf per degree c	16	Style D		C2001
C2002	Same as C2001				C2002
C2003	Same as C2001				C2003
C2004	Same as C2001				C2004
C2005	Same as C2001				C2005
C2006	0.25 mf, +10%, - 3% tol; 1000v; paper, pyranol, Askarel - filled	34 13 18			C2006
C2007	2 mf, 1000v, paper, pyranol, Askarel - filled	18	23F106		C2007
C2008	3900 mmf, 10% tol; 500v	18	CM35B392K		C2008
C2009	Same as C2006				C2009
C2010	Same as C2006				C2010
E2001	Meter Protection Spark GAP 3-1/2" x 2-1/8" x 2-3/8"	79	Type 16 Cat. No. SA-57 with type 2106 Discharge Block		E2001
E2001A	Discharge Block without bimetal element	79	Type 2106		E2001A
E2002	Solenoid, 115v, 60 CPS	18	Cat. No. 5726979-AB-302 Type CR-9503-209-F		E2002
E2003	Measuring Probe, standing wave	18			E2003
E2004	Probe Assembly, echo box	18			E2004
E2005	Silicon Crystal	649	Type 1N21 or 1N21B		E2005
E2006	Silicon Crystal	649	Type 1N21 or 1N21B		E2006
E2010	Blower and Motor	58	Sirocco Utility Blower Type No. 0 (Modified)		E2010
E2011	Magnet; flux density 2700, tol. ± 50 Gauss at center of gap measured with No. 400 coil	18	8272597		E2011
E2012	TR Section	18			E2012
E2013	Input Section	18			E2013
E2014	Resistor and Contact for B2025	831			E2014
E2015	Filter	49			E2015
F2001	Fuse, 250v, 15 amps, non-renewable	18	GE1463		F2001
F2002	Same as F2001				F2002
F2005	Fuse, 250v, 6 amps, non-renewable	18	GE1457		F2005
F2006	Same as F2005				F2006
F2007	Same as F2005				F2007

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 2000, TRANSMITTER (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
F2008	Same as F2005				F2008
F2009	Same as F2005				F2009
F2010	Same as F2005				F2010
F2013	Fuse, 1/100 amp	26	1001		F2013
F2014	Same as F2005				F2014
F2015	Fuse, 250v, 20 amps or 10 amps, non-renewable	18	GE1464 or GE1461		F2015
F2016	Fuse, 250v, 20 amps or 10 amps, non-renewable	18	GE1461		F2016
H2001	Spanner Wrench, 20-1/4" long	18			H2001
H2002	Spanner Wrench, 5/16" diameter x 6-7/32" long	18			H2002
	Special tools consisting of:				
	1 - Loader	18	5110		
	1 - Compressor				
	1 - Sealing compound (No. 4 ignition compound, 8 oz. cartridge)				
	1 - Spanner wrench (furnished with echo box)				
I2001	Red Jewel: cap without poloroid feature	65	1920 with 1874 cap		I2001
I2001A	Bulb, 6-8v, 0.25 amp	18	Mazda 44		I2001A
I2002	Green Jewel: cap without poloriod feature	65	1920 with 1874 cap		I2002
I2002A	Same as I2001A				I2002A
I2003	Same as I2001				I2003
I2003A	Same as I2001A				I2003A
I2004	Amber Jewel: cap without poloroid feature	65	1920 with 1874 cap		I2004
I2004A	Same as I2001A				I2004A
I2005	Red Color Cap	18			I2005
I2005A	Same as I2001A				I2005A
J2011	Jack, standing wave measuring probe, part of E2003				J2011
J2012	Jack, echo box probe connection, part of E2004				J2012
J2013	Receptacle, pulse transformer pulse cable, part of T2001				J2013
J2014	Jack, local oscillator connection, part of E2012				J2014
J2015	Jack, preamplifier connection, part of E2012				J2015
J2016	Guide Insert Probe, type "N"	330A			J2016
J2017	Jack, keep-alive connection, part of E2012				J2017
J2018	Receptacle, 115v; Jack, 2 position	6	MIP-61F		J2018
J2019	Same as J2018				J2019
J2020	Receptacle, single contact, mica-filled bakelite	6	83-1R		J2020
J2021	Same as J2020				J2021
J2022	Same as J2020				J2022
J2023	Same as J2020				J2023
J2024	Receptacle, solid shell type; 2 No. 13 contacts, 12 No. 16 contacts; included with W2005	6	3100-28-2P		J2024
J2025	Receptacle, female, for cable RG-27/U, included with W2008	18	Type 8B98		J2025
J2026	Jack, local oscillator connection (AFC), part of E2012				J2026
J2027	Jack, i-f connection (AFC), part of E2012				J2027
J2028	Same as J2020 except used with W2009				J2028

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 2000, TRANSMITTER (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
J2029	Same as J2020 except used with W2010				J2029
J2030	Receptacle, used with cable W2011 RG-8/V, (single braid)	597	Type JNPT5-28		J2030
J2031	Same as J2030				J2031
J2032	Same as J2020				J2032
J2033	Same as J2020				J2033
J2034	Same as J2020				J2034
J2035	Jack, female, 1-7/8", 24 threads, used with W2008	18	79 X 763		J2035
J2036	Same as J2035				J2036
J2039	Used with W2017				J2039
K2001	Relay, 1800 ohms, 0.02 amp dc or less	79	Type AMS Cat. No. H-77030-1		K2001
K2001A	Relay, spring assembly	79	H-77030-14		K2001A
K2001B	Relay, switch assembly	79	H-77030-15		K2001B
K2001C	Relay, coil assembly	79	H-77030-16		K2001C
K2002	Relay, 1800 ohms, 0.02 amp dc or less	79	Type AMS Cat. No. H-77030-1		K2002
K2002A	Same as K2001A				K2002A
K2002B	Same as K2001B				K2002B
K2002C	Same as K2001C				K2002C
K2003	Timing Relay, 115v working, 60 cycles	18	Type PQ-26N		K2003
K2003A	Relay, spring assembly, movable contacts	18	189342G5		K2003A
K2003B	Relay, spring assembly, stationary contacts	18	2124661-G3		K2003B
K2003C	Relay, coil	18			K2003C
K2004	Relay, 115v working, 50/60 cycles, DPDT, 2 normally open, 2 normally closed contacts	18	Type 12HMA19AGN		K2004
K2005	Same as K2004				K2005
K2006	Relay, coil rated 115v, 60 cycles, 0-60 seconds, normally closed contacts	197	TD10-60s (Modified)		K2006
L2001	Coil, 1320 turns No. 26 double formex, enameled copper wire, 0.0181" diameter, close wound in 6 layers and soldered to copper wire 0.063" diameter	18			L2001
L2002	Same as L2001				L2002
L2003	Coil, 330 turns, copper wire, 0.005" diameter, bare, 0.0077" diameter, E. S. Universal wound, 3 crosses per turn				L2003
M2001	Voltmeter, 150 vac	18	Type 8A0-22		M2001
M2002	Milliammeter, 50 milliamps dc	18	8D0-41		M2002
M2003	Voltmeter, 3vac, 3-1/2" flush	18	8D046VAW7		M2003
M2004	Same as M2003				M2004
M2005	Meter, 110v, 60 cycles, 99999 total hours, 3-1/2" flush, plain glass	13	Type 8KT8E3		M2005
02001	Bearing, 1-3/8" diameter x 3/8"	797			02001
02002	Bearing, 1-3/16" diameter x 9/16"	797			02002
02003	Felt Pad, 3-1/2" O.D. x 2-13/16" I.D. x 1/16"	18	83-1H		02003
02004	Hood for W2012, W2013 and W2014. W 1" x 1" approximately	6			02004
02005	Adapter Plate, 0.09" x 3" x 3"	18			02005
P2011A	Straight Plug, single contact	6	83-1-SP		P2011A
P2012A	Connector, type N, coaxial, (right angle fitting)	597	NAR		P2012A
P2012B	Plug, cable connector to echo box probe, used with cable RG-8/U (single braid)	597	PNPT5S		P2012B
P2013	Plug, male, for cable RG-27/U	18	Type SB99		P2013

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 2000, TRANSMITTER (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
P2014	Plug, coaxial connector, type N	597	PNPT5S		P2014
P2015	Same as P2014				P2015
P2017	Plug, socket insert, one No. 16 contact	6	3108-168-3S		P2017
P2020A	Plug, single contact	6	83-1AP		P2020A
P2020B	Same as P2011A				P2020B
P2021	Same as P2011A				P2021
P2022A	Same as P2020A				P2022A
P2022B	Same as P2011A				P2022B
P2023	Same as P2011A				P2023
P2024	Plug, socket inserts, two No. 2 contacts, twelve No. 16 contacts	6	Type AN3160-28-2S		P2024
P2025	Plug, male connector for cable RG-27/U	18	Type 8B99		P2025
P2026	Same as P2014				P2026
P2027	Same as P2014				P2027
P2028	Same as P2011A				P2028
P2029	Same as P2011A				P2029
P2030	Plug, used with cable RG-9/U (double braid)	597	PNPT55D		P2030
P2031	Same as P2012A				P2031
P2032	Same as P2020A				P2032
P2033	Same as P2020A				P2033
P2034	Same as P2020A				P2034
P2035	Same as P2025				P2035
P2036	Same as P2025				P2036
P2039	Plug, used with W2017				P2039
R2001	25 ohms, 10% tol; 25 w; wire wound; rheostat, furnished with screwdriver slot in shaft	32	Model H Cat. No. 0147		R2001
R2002	Same as R2001				R2002
R2003	Same as R2001				R2003
R2004	Same as R2001				R2004
R2005	Strip heater, 115v, 75 w	18	2A244G5		R2005
R2006	Same as R2005				R2006
R2007	175 ohms, 10% tol; 25 w; wire wound; rheostat, furnished with screwdriver slot in shaft	35	Model H Cat. No. 0153		R2007
R2008	5 K, 10% tol; 25 w; wire wound; rheostat, furnished with screwdriver slot in shaft	32	Model H Cat. No. 0162		R2008
R2009	5 K, 5% tol; wire wound; grade 1, class 1, style D	37			R2009
R2010	2.5 K, 10% tol; 25 w; wire wound; rheostat, furnished with screwdriver slot in shaft	32	Model H Cat. No. 1060		R2010
R2011	40 ohms, 10% tol; 16 w; composition	133	Type CX		R2011
R2012	25 ohms, 10% tol; 16 w; composition	133	Type CX		R2012
R2013	63 ohms, 10% tol; 16 w; composition	133	Type CX		R2013
R2014	16 ohms, 10% tol; 16 w; composition	133	Type CX		R2014
R2025	510 K, 10% tol; 1/2 w	4			R2025
S2001	Switch rated 3.5 amps, 24vdc; 0.2 amp, 125vdc; 10 amps, 230vac	18	Type CR1072-116-L2		S2001
S2001A thru S2001J	Switchettes included in S2001				S2001A thru S2001J
S2002	Switch, two-way lever; extra heavy duty contacts; 110vac, 20 amps	468	Type No. 4101		S2002
S2003	Same as S2002				S2003
S2004	Same as S2002				S2004
S2005	Same as S2002				S2005
S2006	Switch, ac or dc, 110v or 220v, 10 amps	18			S2006
S2007	Switch, toggle, DPDT; 250v, 6 amps, or 125v, 12 amps	7	80300		S2007

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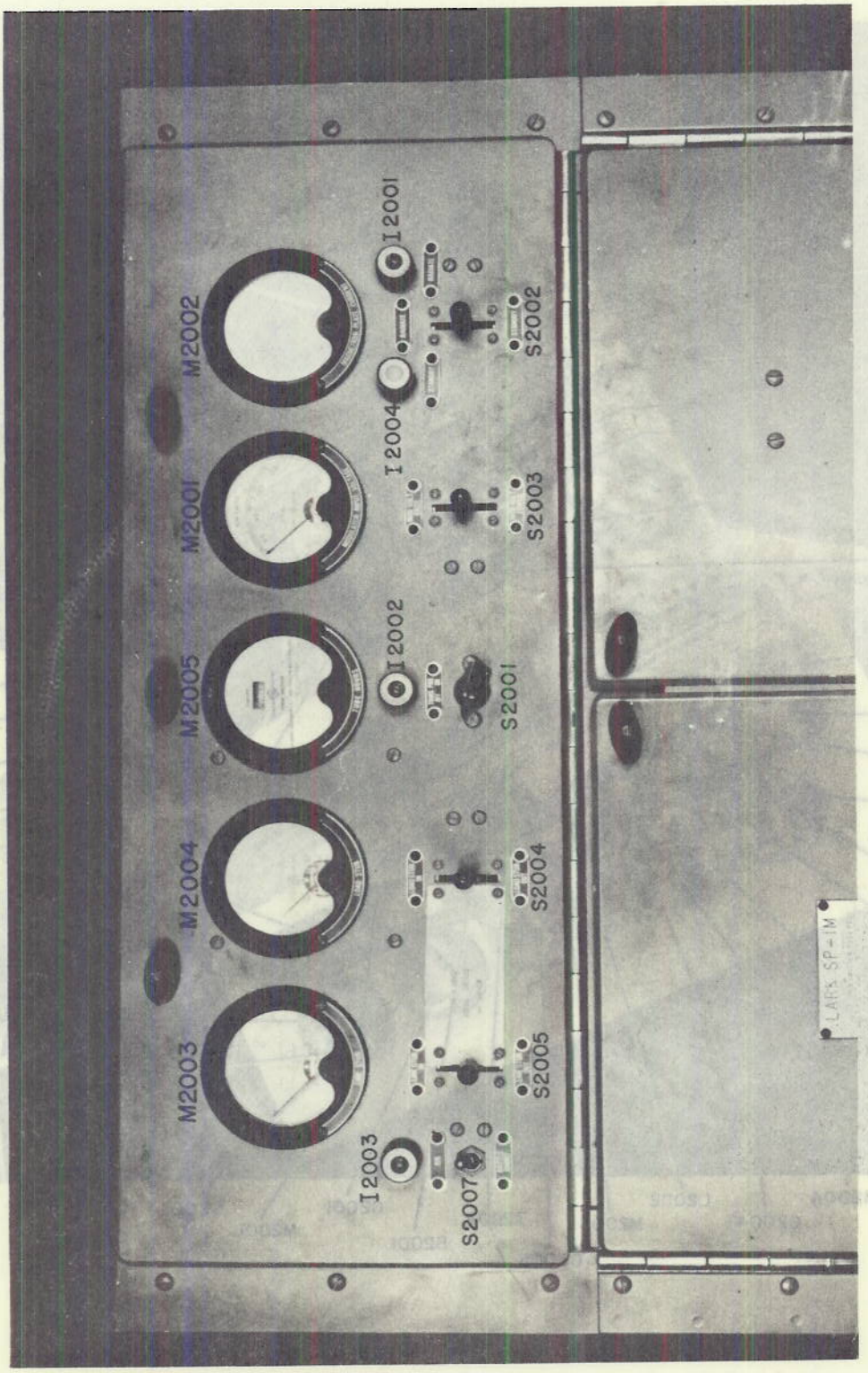

Figure 8-76. Transmitter Top Section With Panel Closed - Front View

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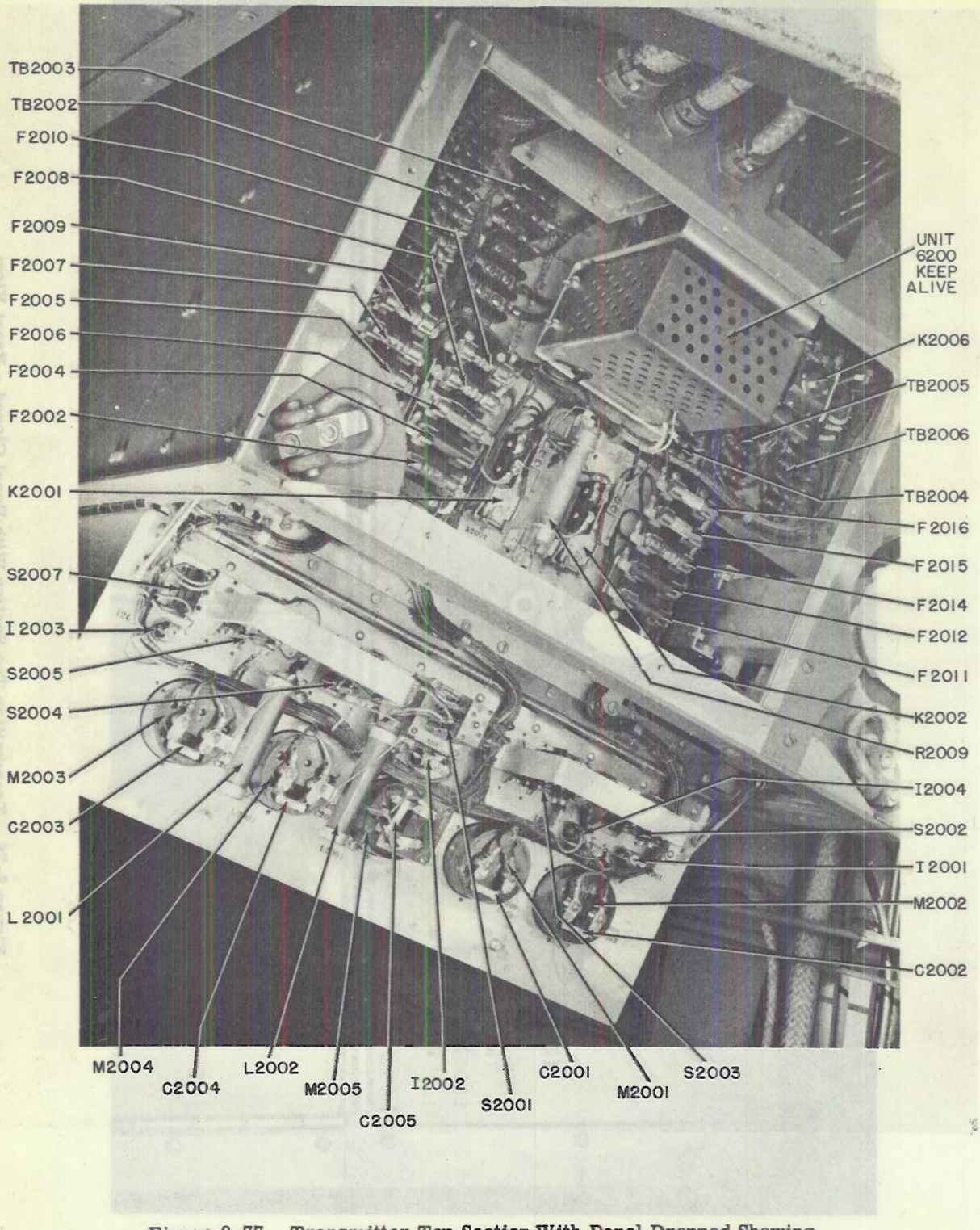

Figure 8-77. Transmitter Top Section With Panel Dropped Showing Keep-alive Power Supply - Top Oblique View

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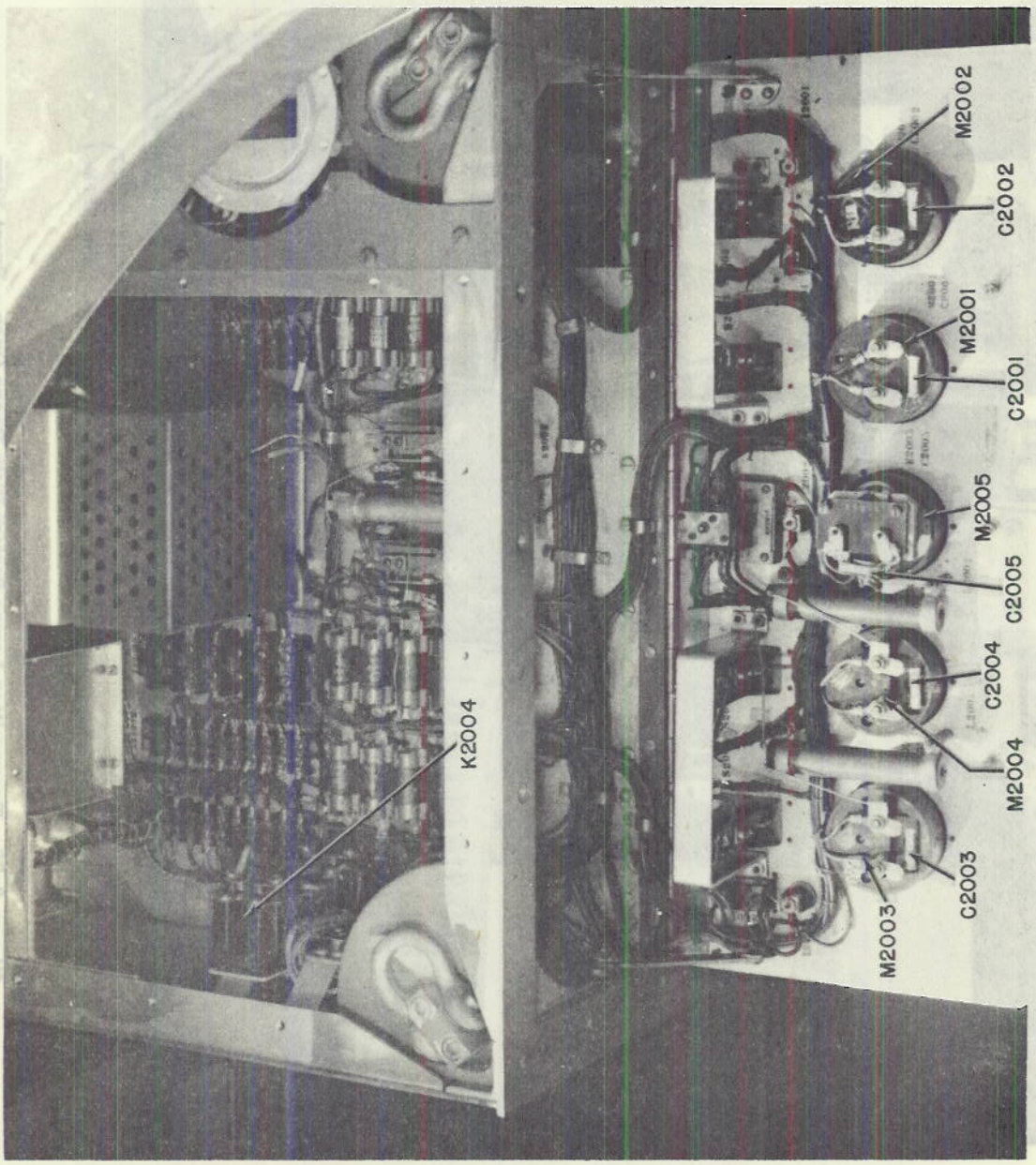

Figure 8-78. Transmitter Top Section With Panel Dropped Showing Relay

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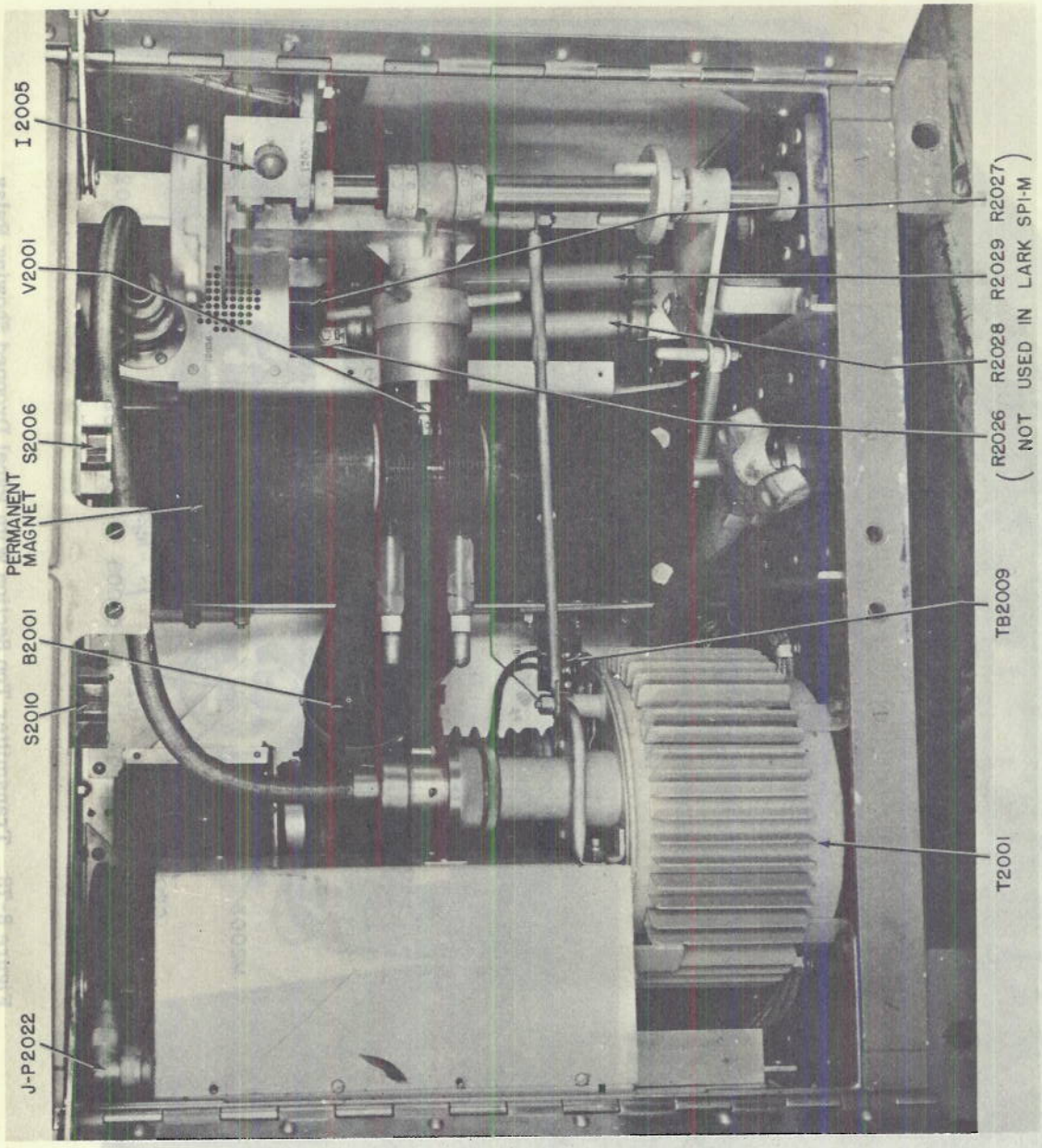

Figure 8-79. Transmitter Lower Section With Doors Open - Front View

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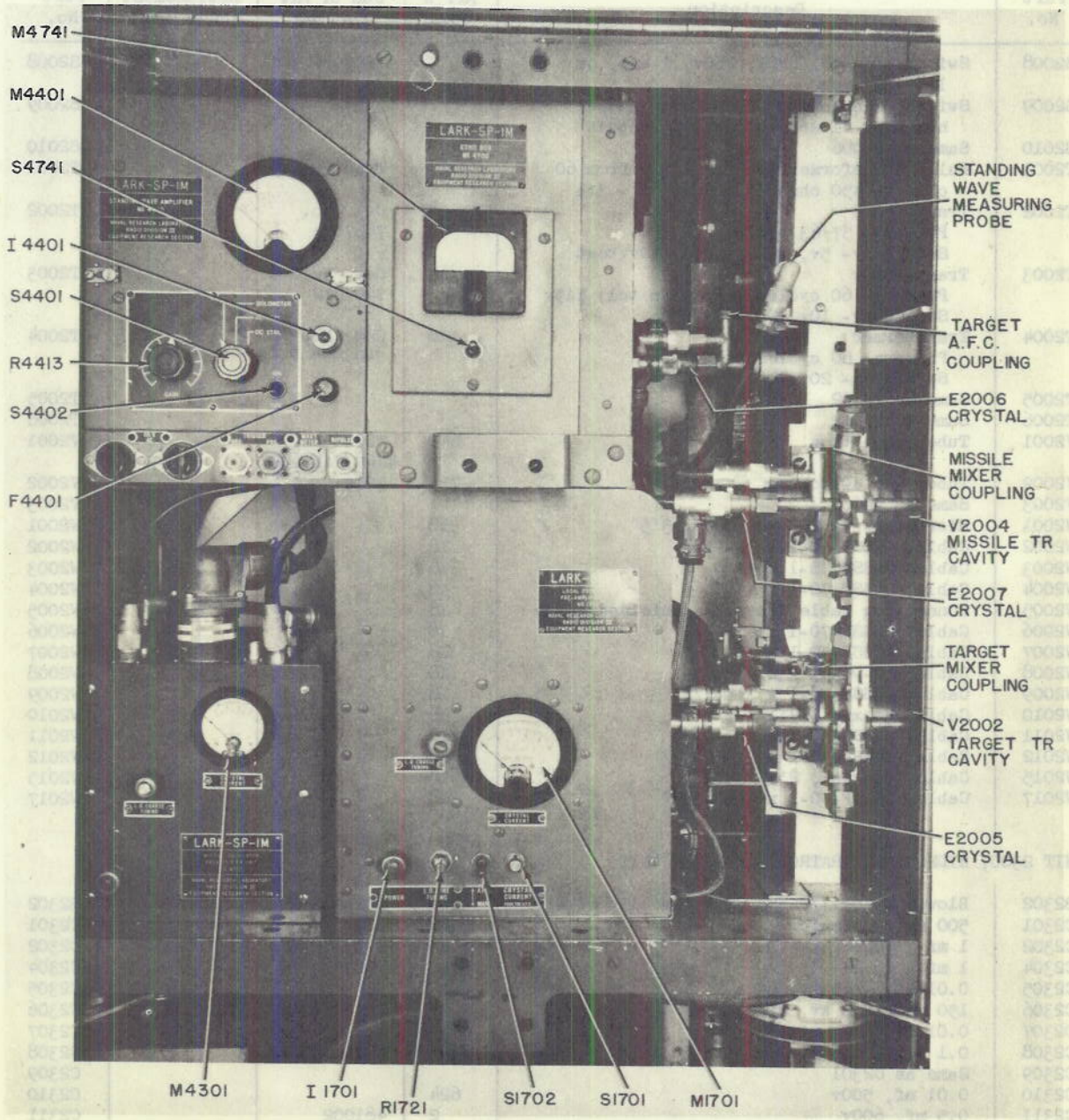

Figure 8-80. Transmitter Middle Section With Door Open Showing Duplexer and Units 1700, 4300, 4400, and 4700

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 2000, TRANSMITTER (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
S2008	Switch, toggle, DPDT; 250v, 1 amp, or 125v, 3 amps	7	20905		S2008
S2009	Switch, single circuit, 250v, 3 amps, normally closed, momentary contact	7	3592		S2009
S2010	Same as S2006				S2010
T2001	Pulse Transformer for operation from 60 ohms to 450 ohms, turns ratio - 3:1	18	Type K-2449		T2001
T2002	Transformer Primary- 57/63 cycles, 115v Secondary- 5v, 0.02 kva, 1230v test	18	Cat. No. 7467834		T2002
T2003	Transformer Primary- 60 cycles ±3 cycles tol; 115v Secondary- 10v, 0.03 kva	18	Cat. No. 7467842		T2003
T2004	Transformer Primary- 60 cycles, 115v Secondary- 20v, 1.6 amps	18	Cat. No. 7471994		T2004
T2005	Same as T2002				T2005
T2006	Same as T2002				T2006
V2001	Tube, magnetron	649	720CY or 4J47/JAN720CY		V2001
V2002	Tube, gas switching	731	721A		V2002
V2003	Same as V2002				V2003
W2001	Microphone Cable, No. 8664, 3'5"	18			W2001
W2002	Cable, CASSF-50-1 x 13-7/8"	18			W2002
W2003	Cable, CASSF-70-1 x 4'	18			W2003
W2004	Cable, CASSF-70-1 x 4'8"	18			W2004
W2005	Connecting Cable Assembly, shielded cable	18			W2005
W2006	Cable, CASSF-70-1 x 3'	18			W2006
W2007	Cable, CASSF-50-1 x 3'	18			W2007
W2008	Cable, KS-90361 x 2'9"	18			W2008
W2009	Cable, CASSF-70-1 x 3'7-1/2"	18			W2009
W2010	Cable, coaxial, 3'1-1/2"	18			W2010
W2011	Cable, CASSF-50-1 x 2'7-1/4"	18			W2011
W2012	Cable, CASSF-70-1 x 2'11-1/2"	18			W2012
W2015	Cable, coaxial, 2'9"	18			W2015
W2017	Cable, CASSF-70-1 x 3'10-1/2"	18			W2017
UNIT 2300, HYDROGEN THYRATRON MODULATOR UNIT					
B2302	Blower Motor 1/2 hp. 3450 rpm 115v 60-cycles	18	KH25AC224		B2302
C2301	500 mmf, ceramic	16			C2301
C2302	1 mf , 600v	18	K-35J639-4		C2302
C2304	1 mf , 10 kv	18	14F267		C2304
C2305	0.01 mf , 2.5 kv, mica	13	9L		C2305
C2306	150 mmf, 2.5 kv, mica	13	CM45A-151M		C2306
C2307	0.01 mf, 600v, mica	624			C2307
C2308	0.1 mf, 600v	623	CSF481001		C2308
C2309	Same as C2301				C2309
C2310	0.01 mf, 500v	624			C2310
C2311	0.5 mf, 600v	2	481002		C2311
E2301	Pulse network, 25 kv, 1 millisecond, 50 ohms	18	14F128		E2301
E2304	Filter, noise 115v 25 amps	18	1C208		E2304
E2305	Same as E2304				E2305
F2301	Fuse, 6 amp	18	3168		F2301
F2302	Same as F2301				F2302
F2303	Fuse, 15 amp	18	3170		F2303
F2304	Same as F2303				F2304
F2305	Fuse, 30 amp	18	3173		F2305

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 2300, HYDROGEN THYRATRON MODULATOR UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
F2306	Same as F2305				F2306
F2307	Fuse, 10 amp	18	3169		F2307
F2308	Same as F2307				F2308
HR2301	Heater, 75 w; 115v	18	2A244G5		HR2301
HR2302	Same as HR2301				HR2302
I2301	Light, panel-red	65	1920 with 1874 cap		I2301
I2302	Light, panel-clear frosted	65	1920 with 1874 cap		I2302
I2303	Same as I2302				I2303
I2304	Light, panel-amber	65	1920 with 1874 cap		I2304
I2305	Light, pilot	18	7465291 G-2		I2305
I2306	Same as I2305				I2306
J2301	Socket, 12 kv	18	79 X 763		J2301
J2302	Connector, coaxial	6	83-1R		J2302
J2303	Same as J2302				J2303
J2304	Same as J2302				J2304
J2305	Connector, coaxial feed thru	6	83-1F		J2305
J2306	Same as J2305				J2306
K2302	Contactor, 115v; 60 cycles	18	2820-1746M22		K2302
K2304	Relay	18	M83768874		K2304
K2305	Contactor	18	CR-5181-1A6		K2305
K2306	Relay	50	BO/6A/115		K2306
K2307	Relay, time delay 3 min.	853	Type HXS-250		K2307
K2308	Same as K2306				K2308
K2309	Relay, solenoid 110 vac	18	4382675 AB202		K2309
L2301	Choke, 15 henries, 10 kv	NRL	2300-C-271		L2301
L2302	Choke, 8 henries, 10 kv	NRL	2300-C-269		L2302
L2303	Choke, 10.5 millihenries	NRL	2300-A-382		L2303
L2304	Choke, 5.5 millihenries	112	CH1280		L2304
M2301	Meter, 0-150 vac	18	MR3535W150 ACVV		M2301
M2302	Meter, 0-200 milliamps	38	NX-35		M2302
P2302	Plug, coaxial	6	83-1SP		P2302
P2303	Same as P2302				P2303
P2304	Same as P2302				P2304
P2306	Same as P2302				P2306
R2303	Resistor, 270 K, 2 w	4			R2303
R2304	Resistor, 18 K, 2 w	4			R2304
R2305	Resistor, 680 ohms, 2 w	4			R2305
R2306	Resistor, 1 K, 2 w	4			R2306
R2307	Resistor, 3.3 K, 2 w	4			R2307
R2308	Resistor, 15 meg. 100 w	21	631026-5		R2308
R2309	Same as R2308				R2309
R2310	Resistor,20 K, 2 w	4			R2310
R2311	Same as R2310				R2311
R2312	Resistor, 68 ohms, 1 w	4			R2312
R2313	Resistor, 2.7 K, 2 w	4			R2313
R2314	Resistor, 5 K	623	63015-F		R2314
S2301	Switch, anti-capacity	468	4101-X18A		S2301
S2302	Interlock	18	7460330 G-2		S2302
S2303	Switch, toggle	7	80600-ZB		S2303
S2304	Switch, anti-capacity	468	4101-X16A		S2304
S2305	Same as S2304				S2305
S2307	Same as S2302				S2307
S2308	Same as S2302				S2308
S2311	Same as S2302				S2311

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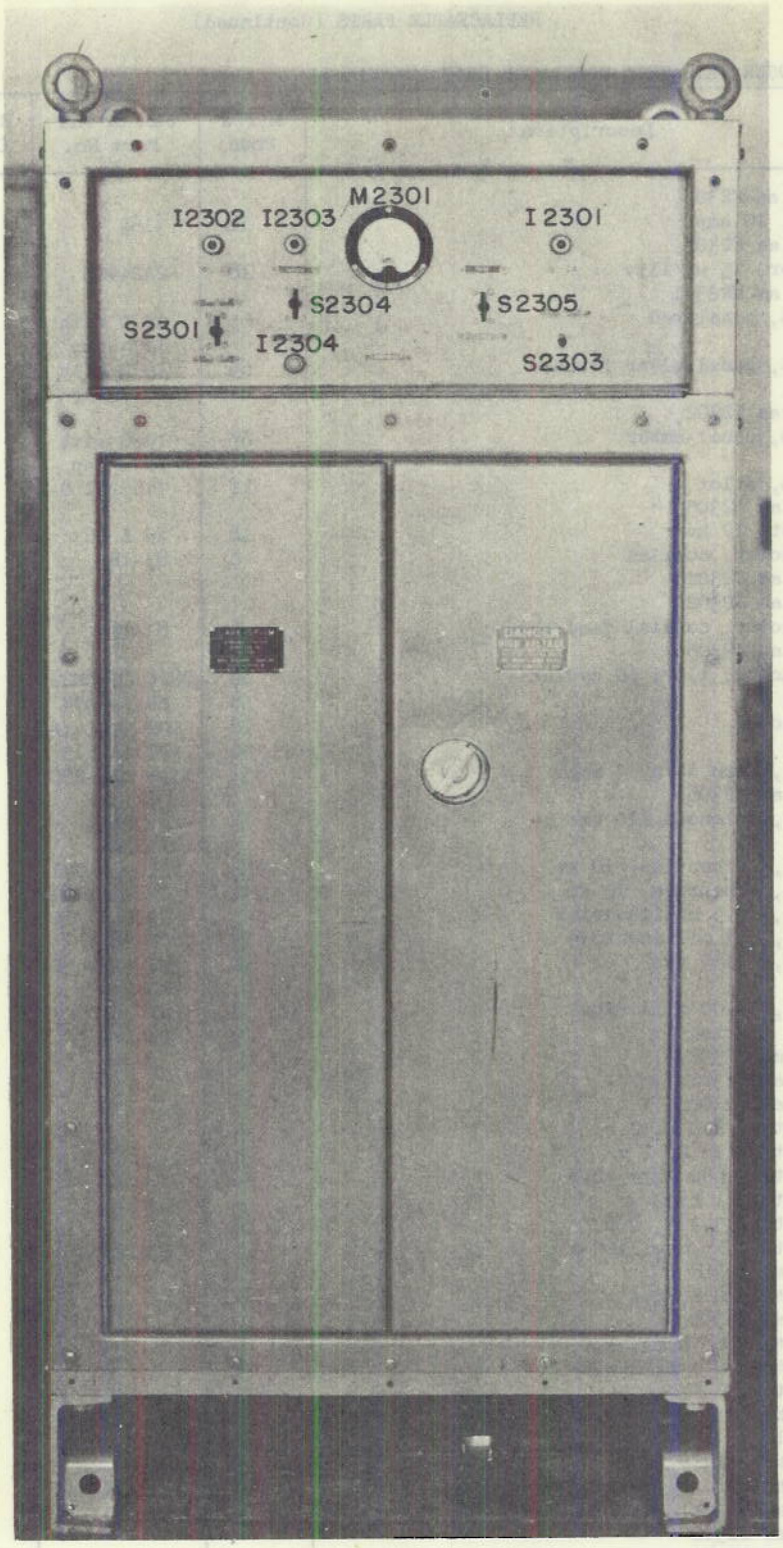

Figure 8-81. Hydrogen Thyratron Modulator With Doors to Bottom Section Closed - Front View

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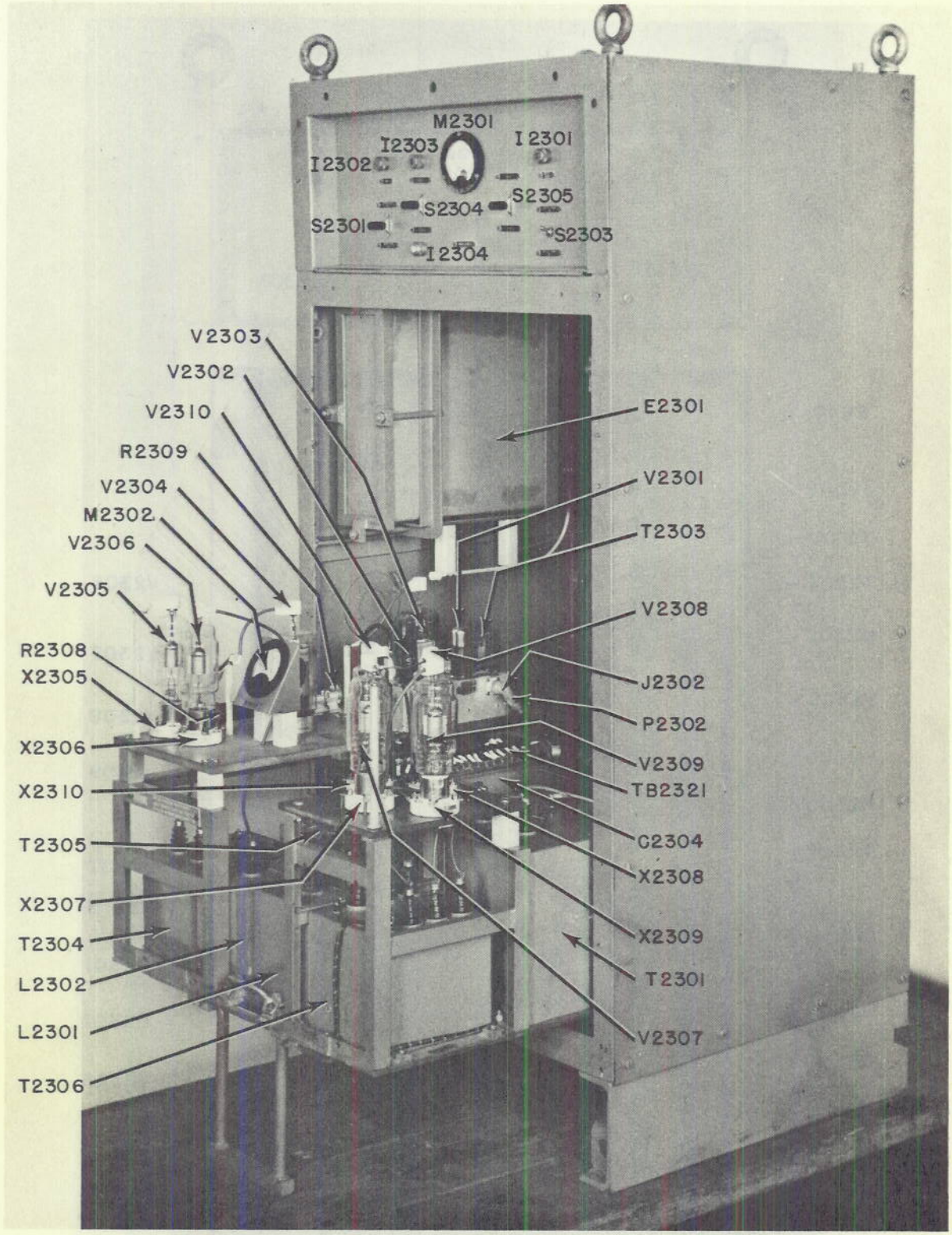

Figure 8-82. Hydrogen Thyratron Modulator With Shelf Pulled Out - Front Oblique View

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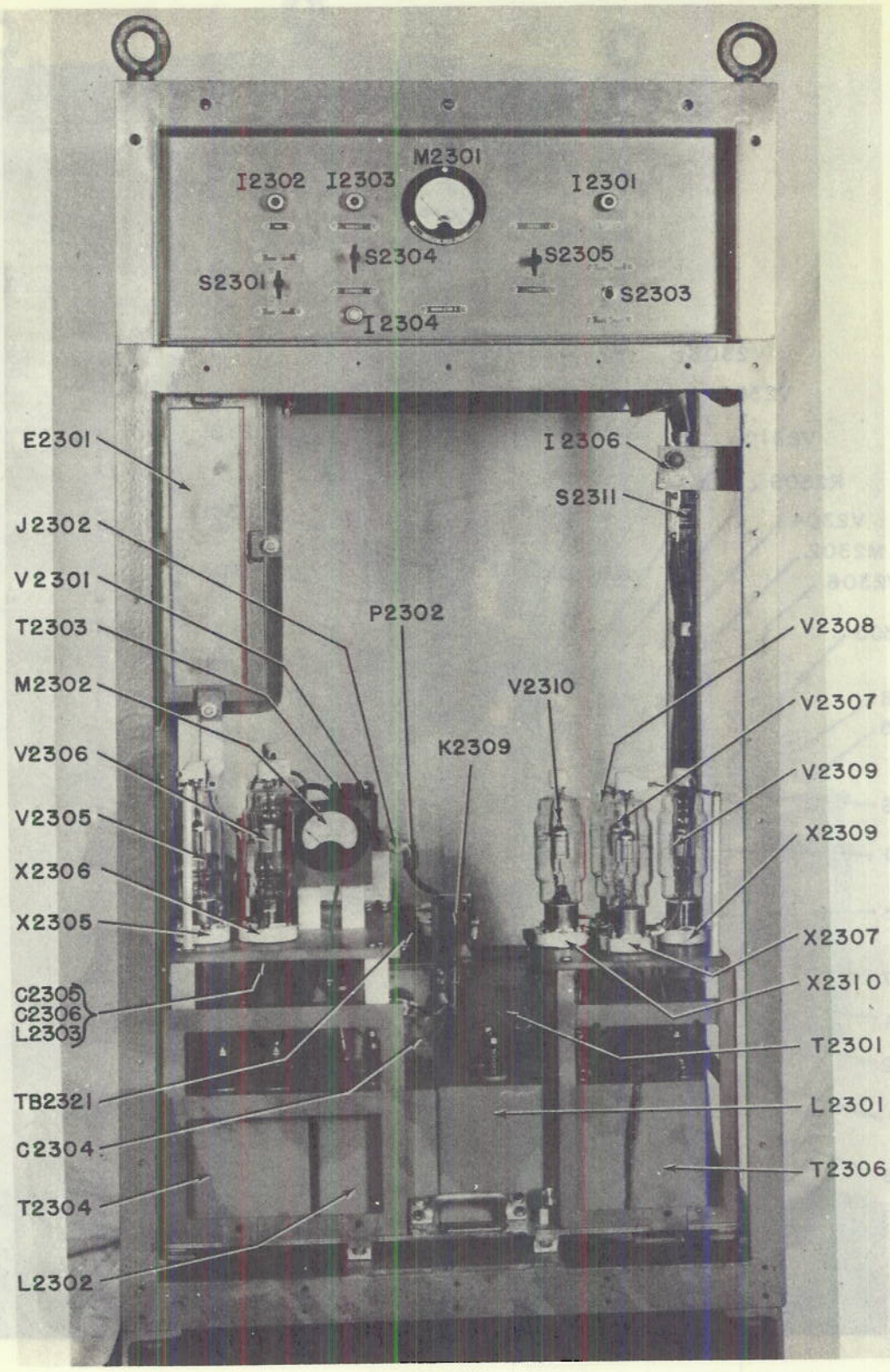

Figure 8-83. Hydrogen Thyratron Modulator With Top Panel Closed - Front View

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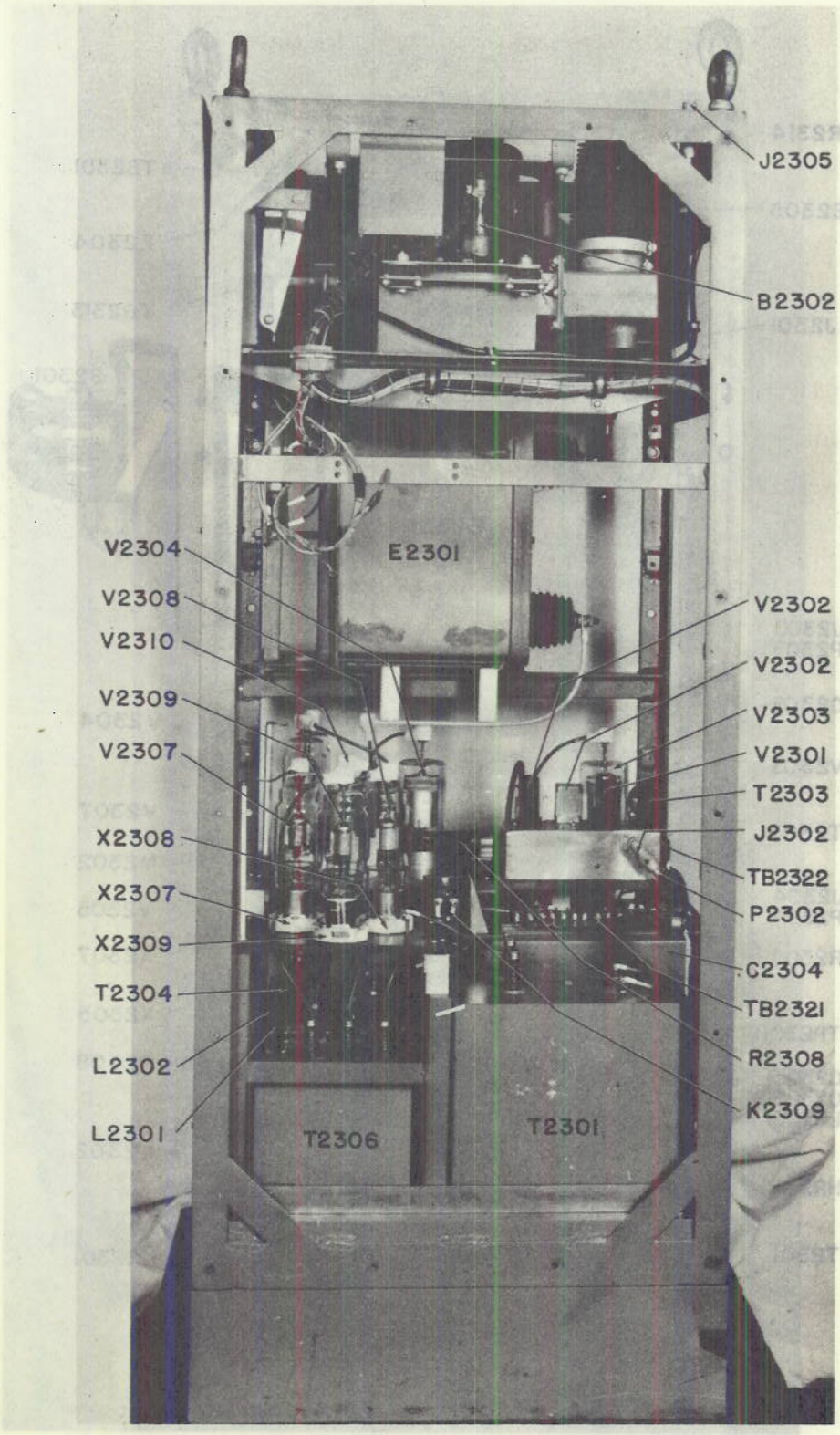

Figure 8-84. Hydrogen Thyratron Modulator - Right Side View

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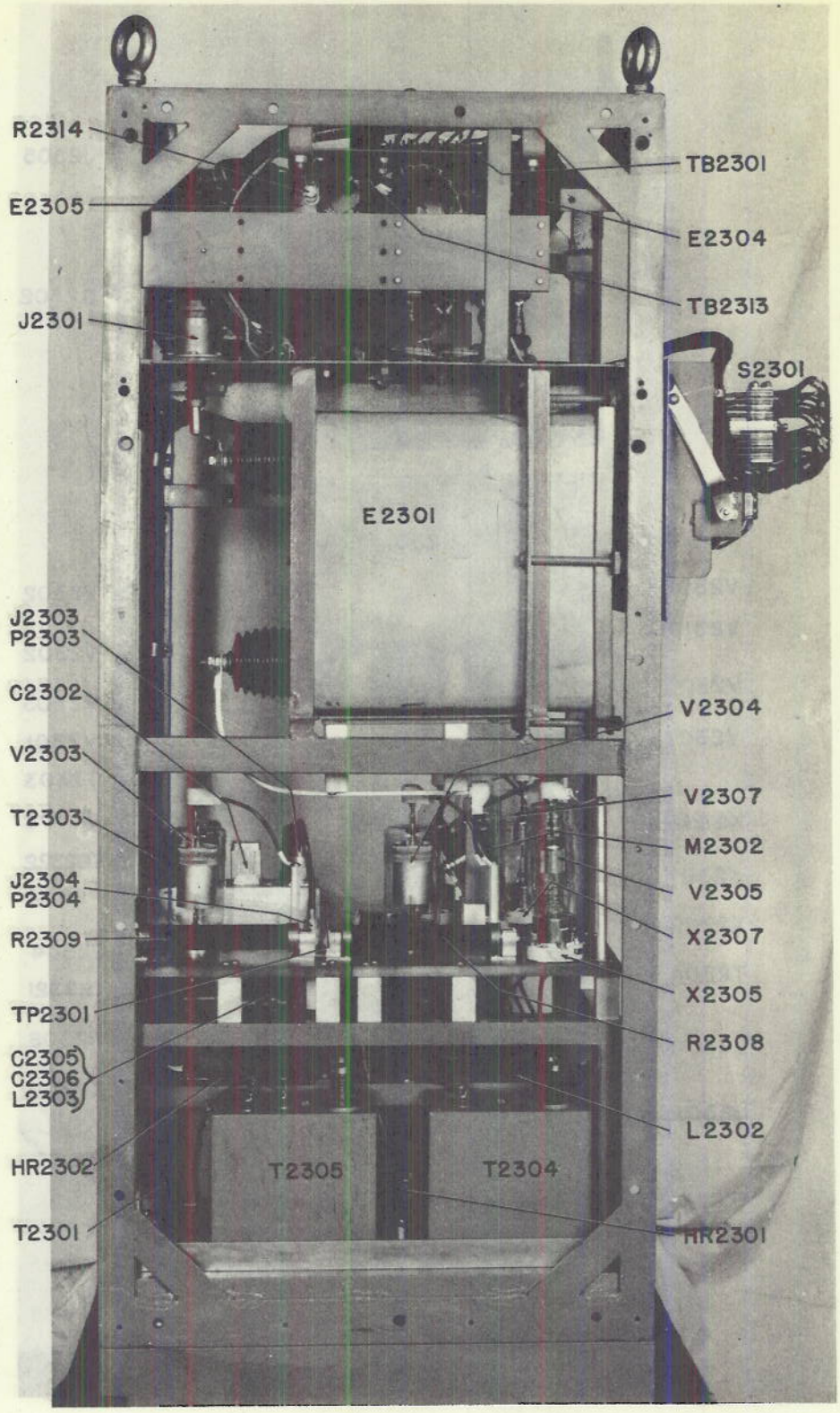

Figure 8-85. Hydrogen Thyratron Modulator - Left Side View

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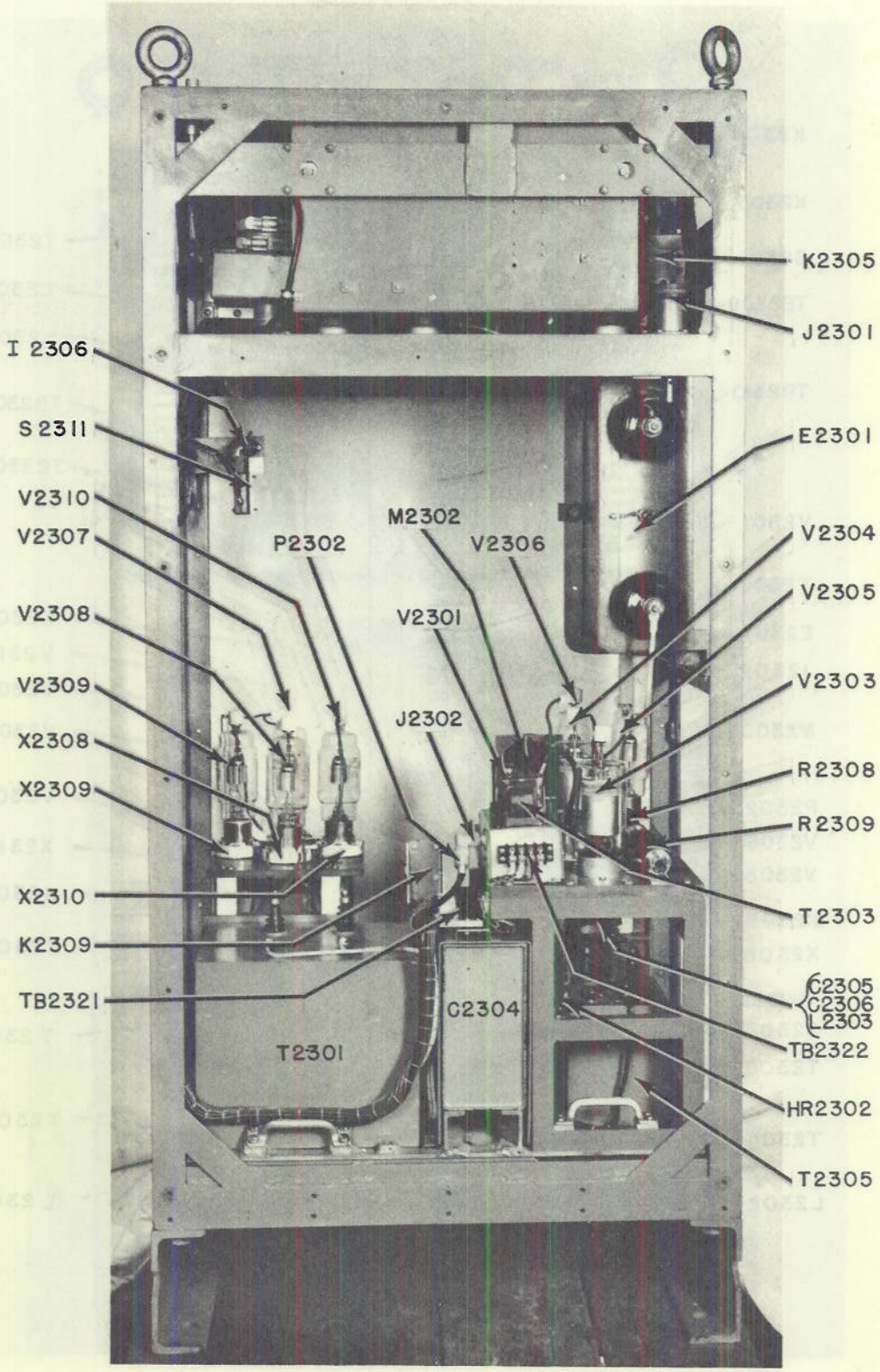

Figure 8-86. Hydrogen Thyratron Modulator - Back View

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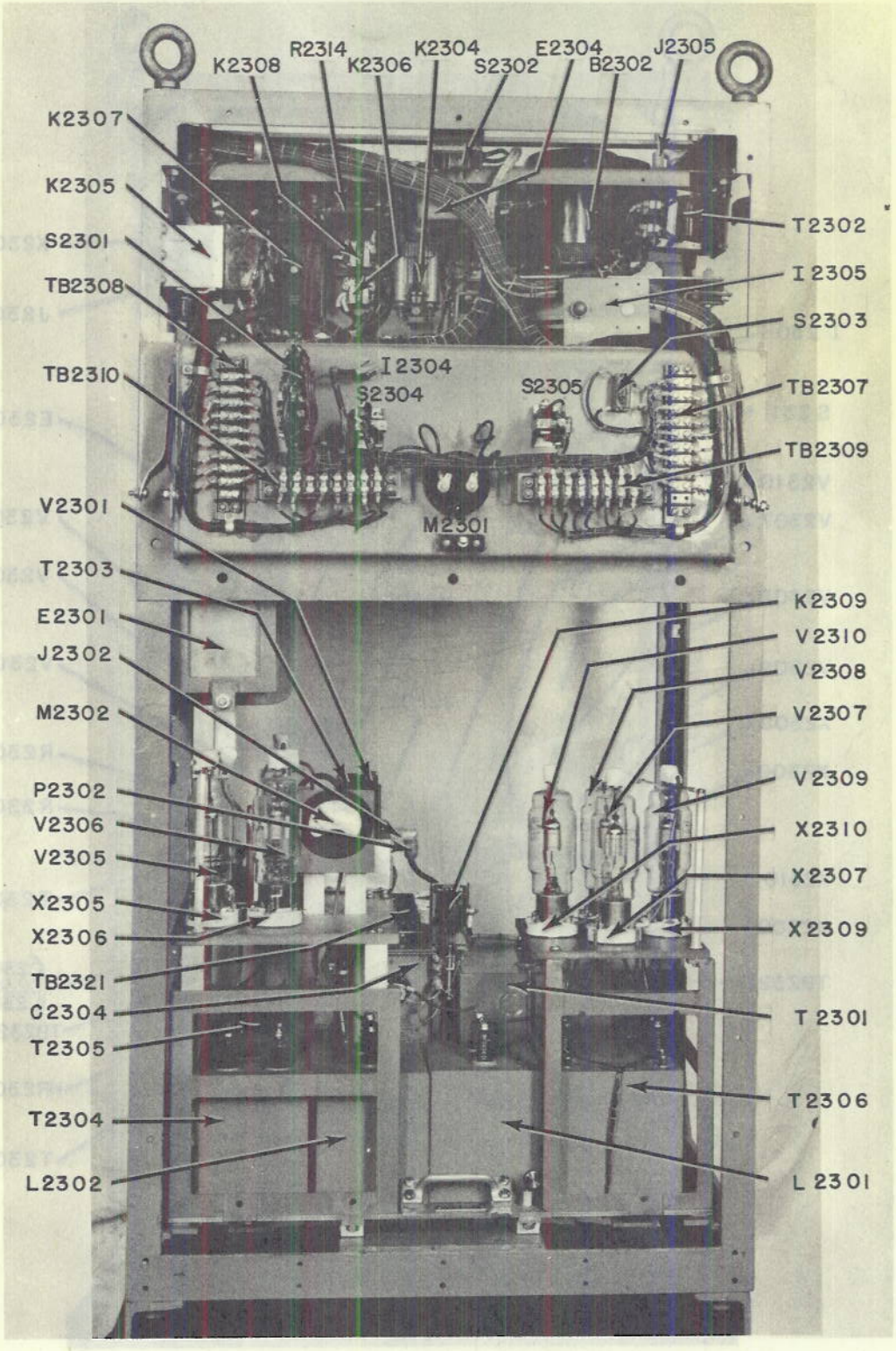

Figure 8-87. Hydrogen Thyratron Modulator With Top Panel Open - Front View

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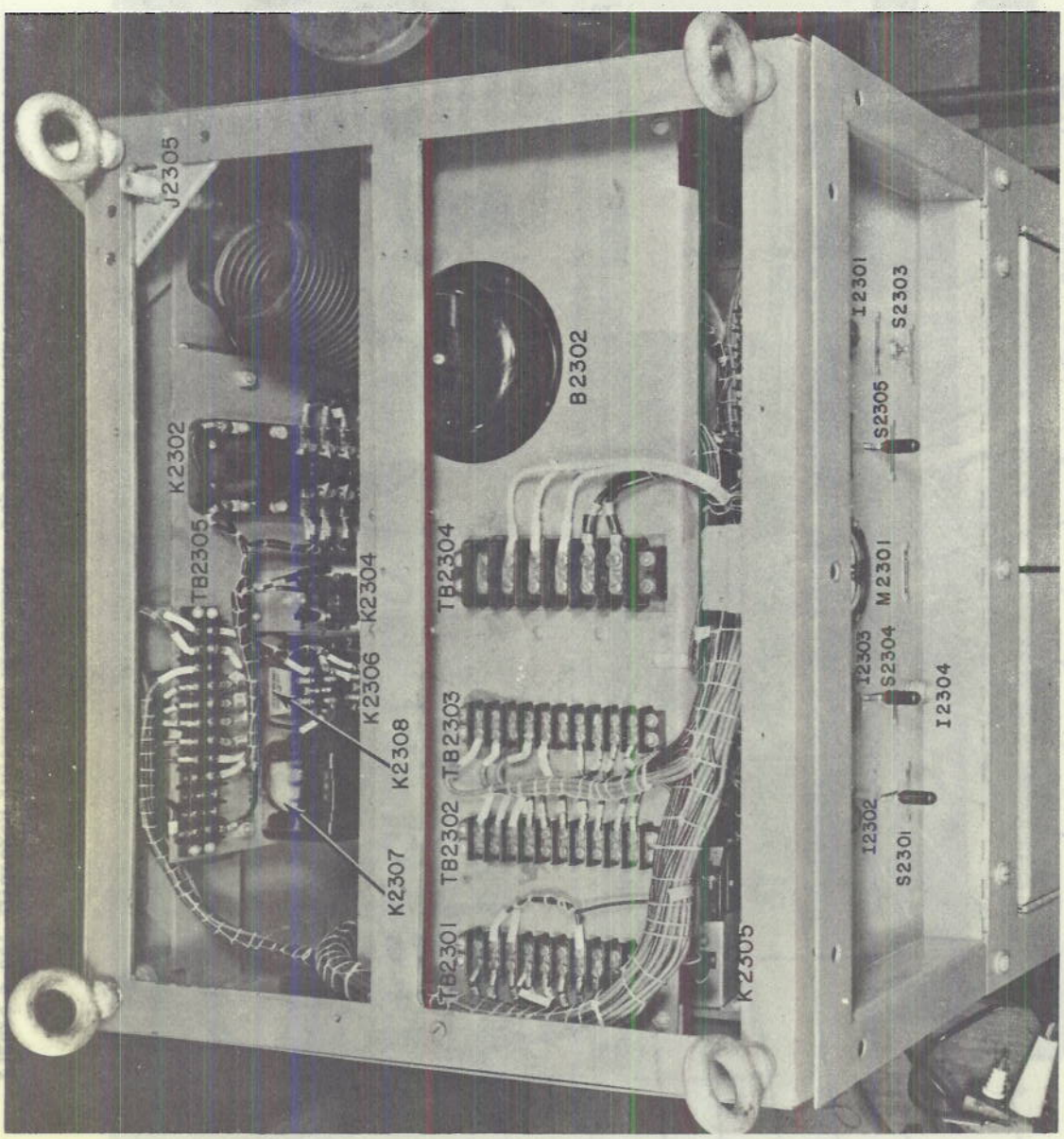

Figure 8-88. Hydrogen Thyratron Modulator - Top View

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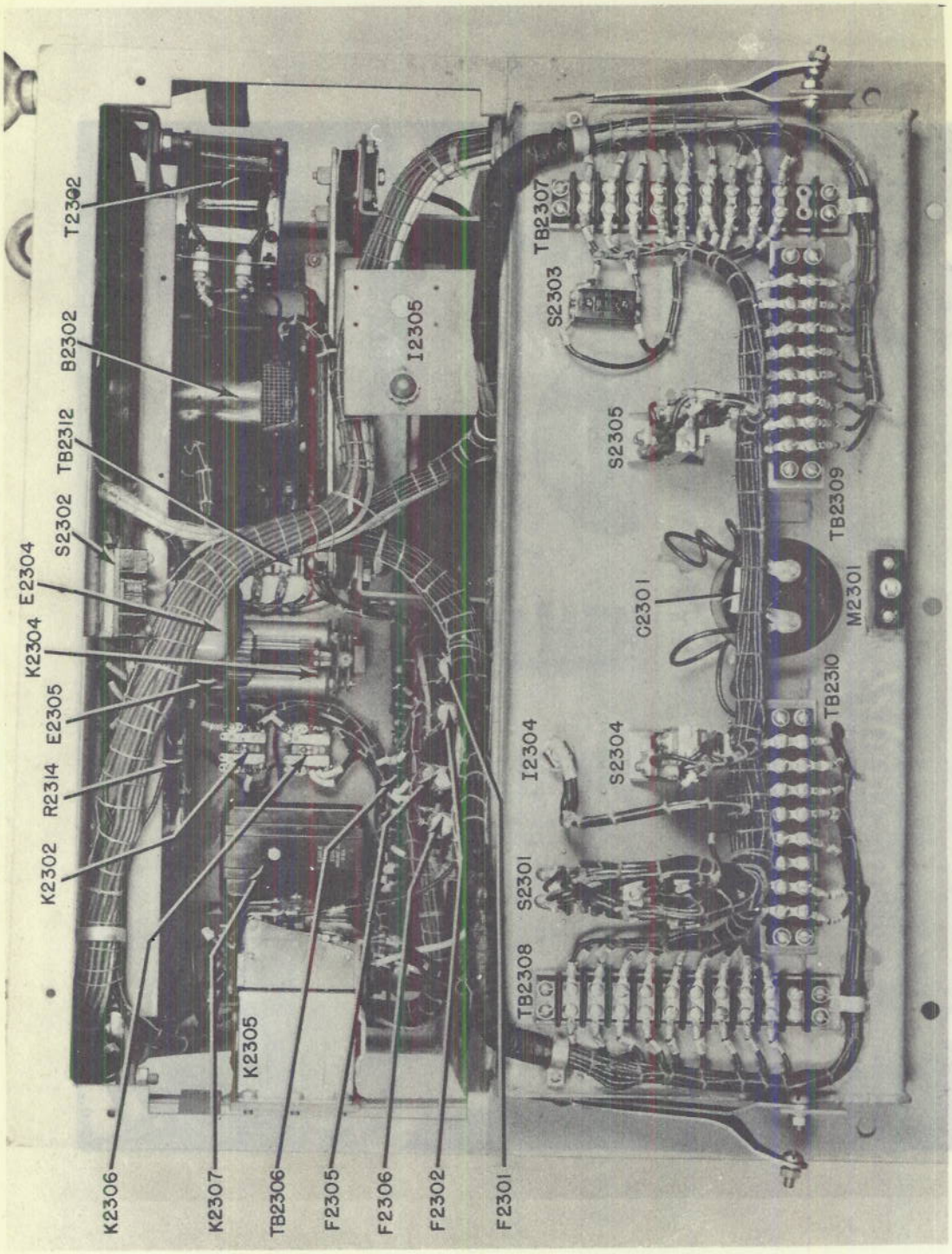

Figure 8-89. Hydrogen Thyratron Modulator - Top Section With Panel Open - Front View

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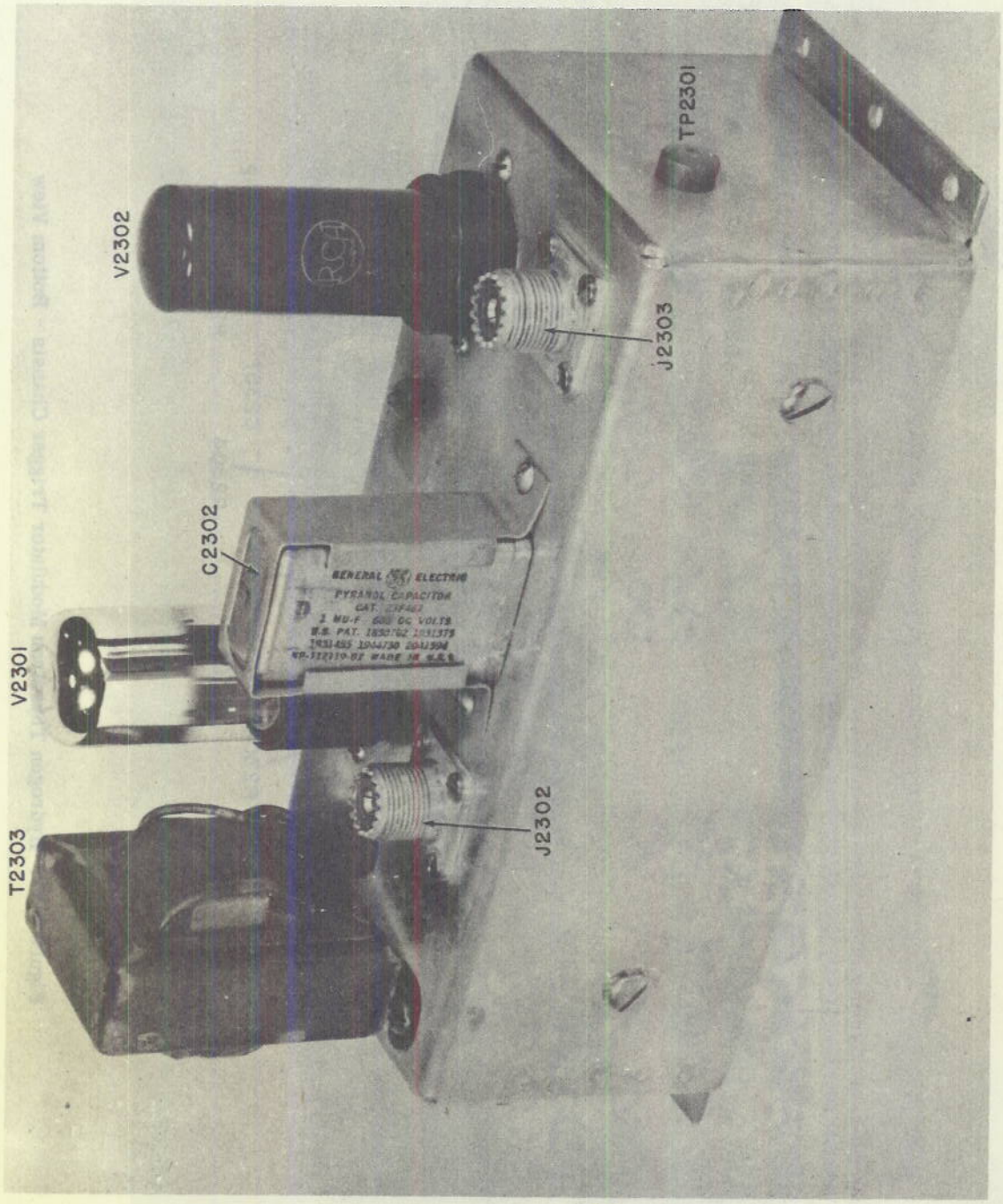

Figure 8-90. Hydrogen Thyratron Modulator Trigger Chassis - Top Oblique View

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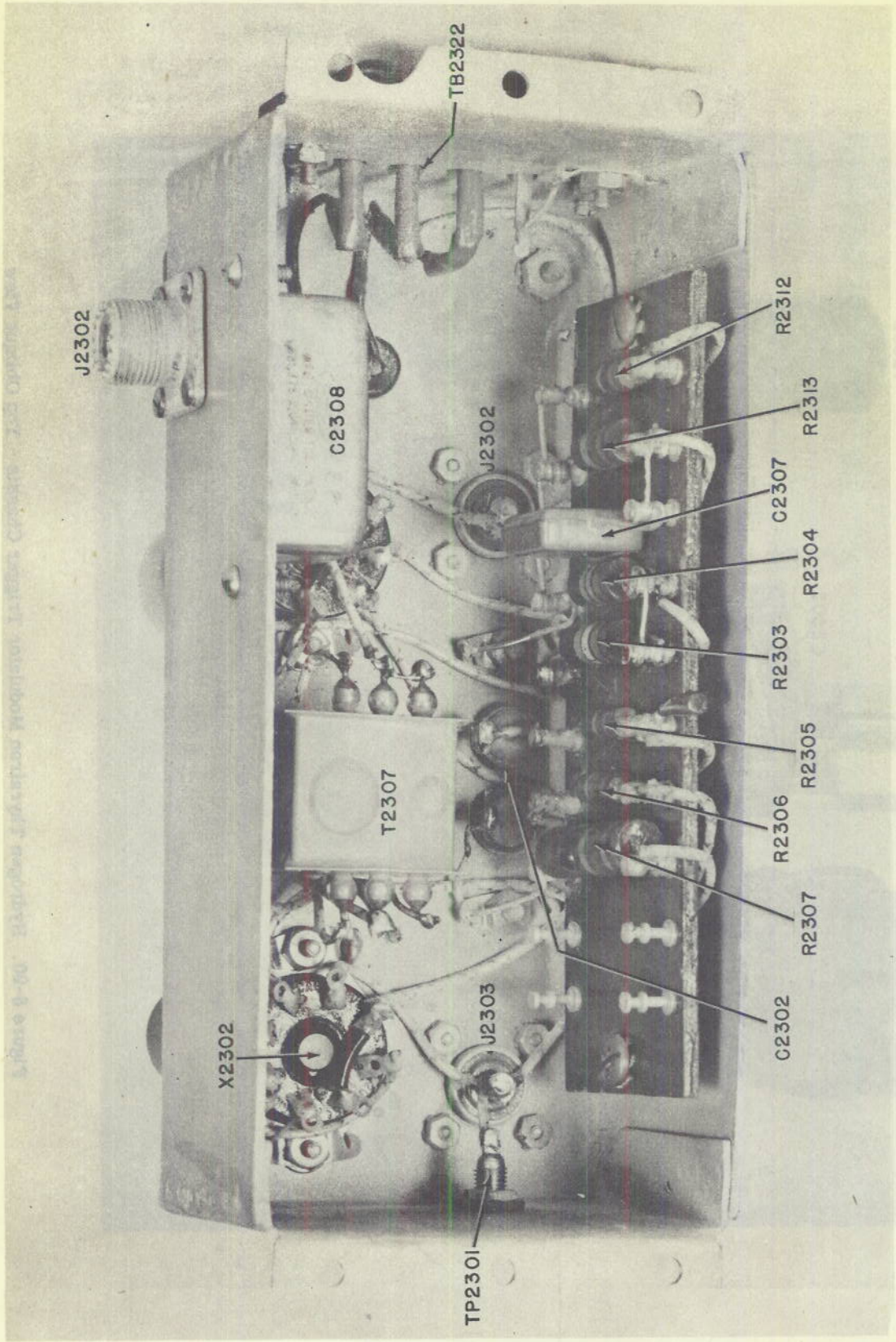

Figure 8-91. Hydrogen Thyratron Modulator Trigger Chassis - Bottom View

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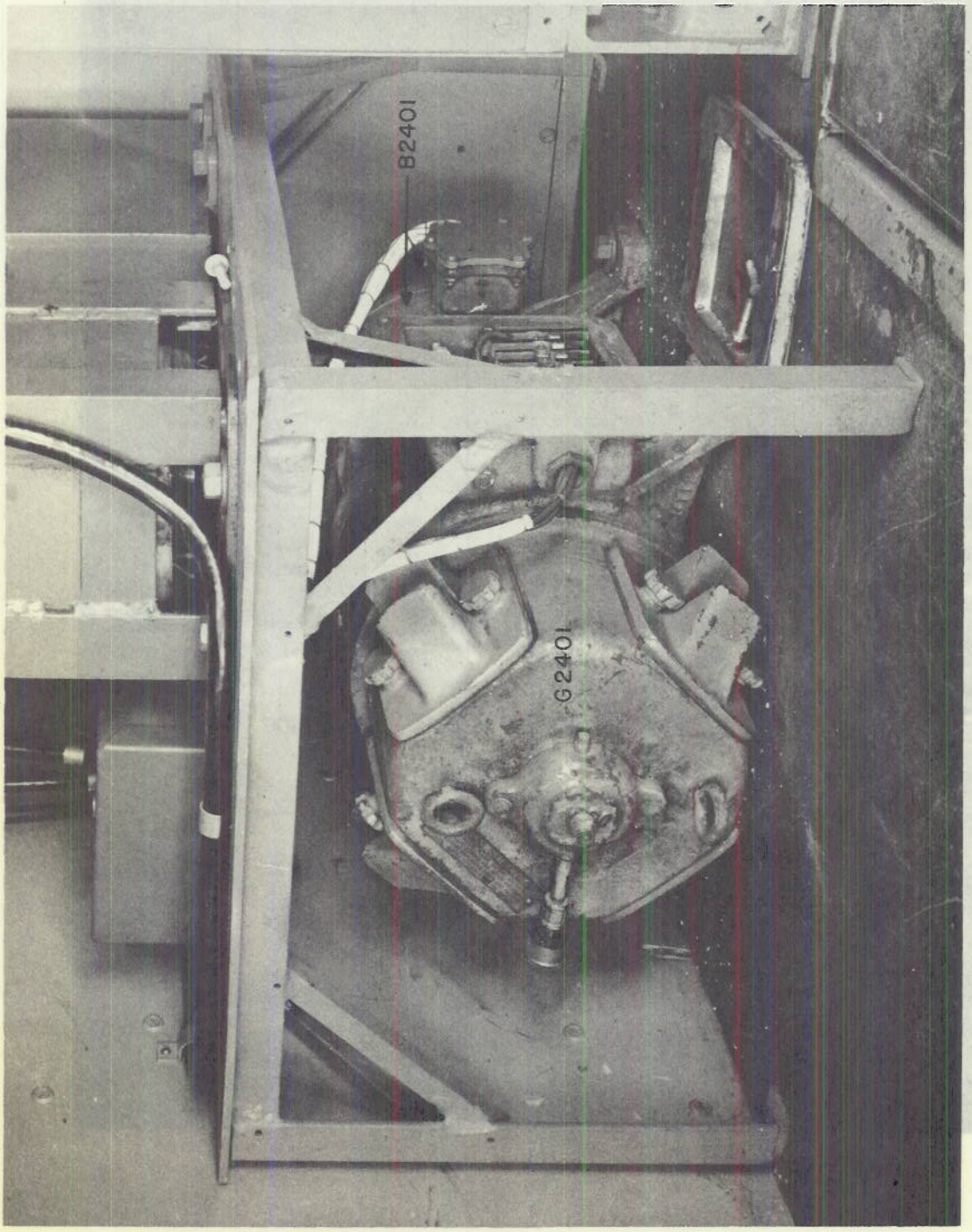

Figure 8-92. Motor Generator - Front Oblique View

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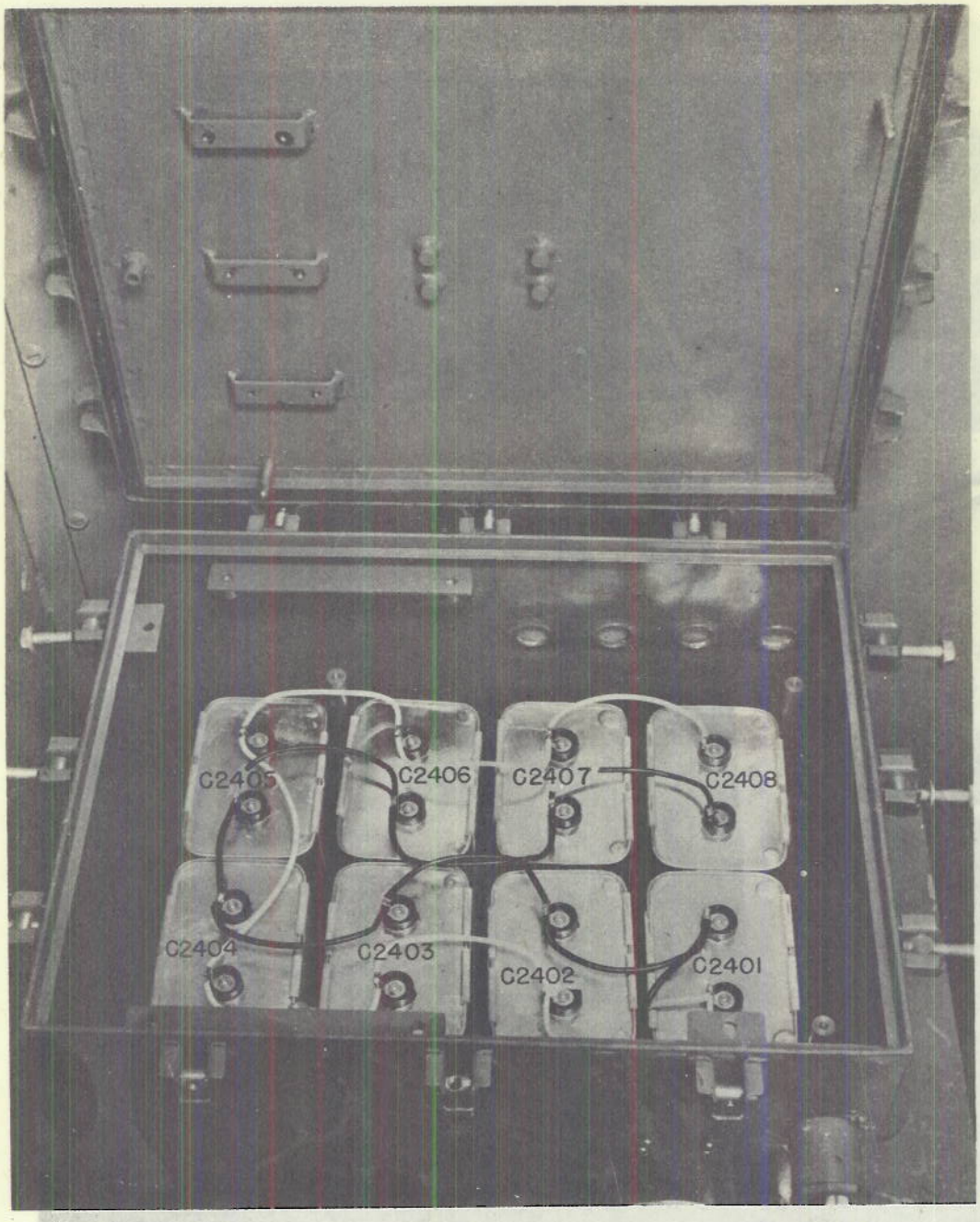

Figure 8-93. Filter for Motor Generator Set - Top View

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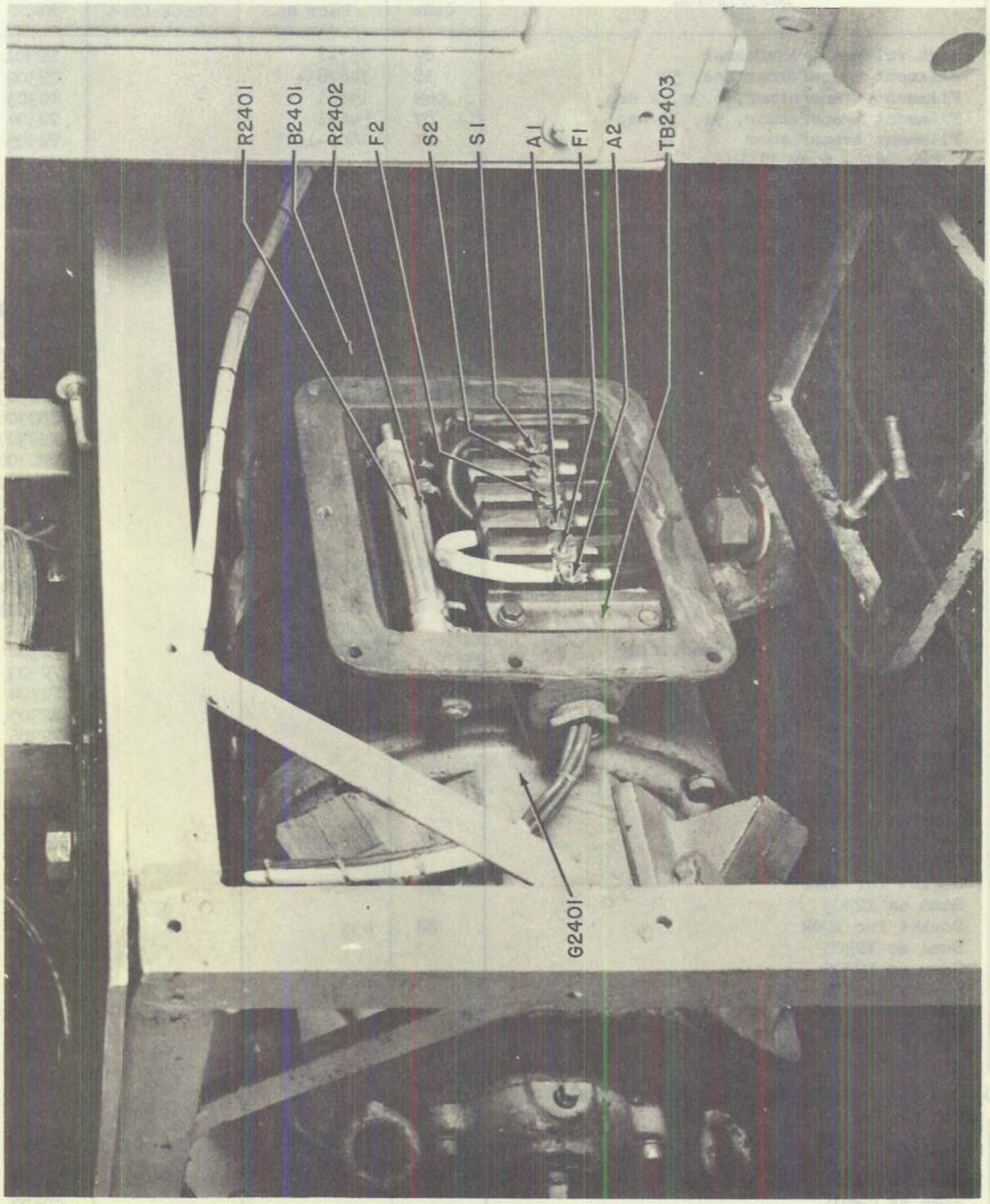

Figure 8-94. Terminal Box on Motor Generator Set - Front View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 2300, HYDROGEN THYRATRON MODULATOR UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
T2301	High voltage transformer	87	757-1		T2301
T2302	Filament transformer Sec. 5v	18	7467834		T2302
T2303	Filament transformer, 6.3v, 2 amp	669	19F81		T2303
T2304	Filament transformer, 5v, 13 amp	87	544-1		T2304
T2305	Filament transformer Sec. #1 - 6.3v 11 amp Sec. #2 - 6.3v 11 amp	87	1609-1		T2305
T2306	Filament transformer Sec. #1 - 5v 6.5 amp Sec. #2 - 5v-13 amp Sec. #3 - 5v 6.5 amp	87	578-1		T2306
T2307	Pulse transformer	209	X-154T-1		T2307
TB2301	Terminal board	386	142-10		TB2301
TB2302	Same as TB2301				TB2302
TB2303	Same as TB2301				TB2303
TB2304	Terminal board	386	151-6		TB2304
TB2305	Terminal board	386	142-12		TB2305
TB2306	Same as TB2305				TB2306
TB2307	Same as TB2301				TB2307
TB2308	Same as TB2301				TB2308
TB2309	Terminal board	386	142-8		TB2309
TB2310	Same as TB2309				TB2310
TB2312	Terminal board	386	142-2		TB2312
TB2313	Same as TB2312				TB2313
TB2321	Terminal board	386	142-14		TB2321
TB2324	Terminal board	386	141-4		TB2324
TP2301	Terminal	6	78-1S		TP2301
V2301	Tube, twin triode		6SN7		V2301
V2302	Tube, video beam power amplifier		6AG7		V2302
V2303	Hydrogen thyratron		5C22		V2303
V2304	Same as V2303				V2304
V2305	High vacuum diode		100R		V2305
V2306	Same as V2305				V2306
V2307	Same as V2305				V2307
V2308	Same as V2305				V2308
V2309	Same as V2305				V2309
V2310	Same as V2305				V2310
X2301	Socket, octal	6	MIP-8TM		X2301
X2302	Same as X2301				X2302
X2303	Socket for 5C22	351	49892		X2303
X2304	Same as X2303				X2304
X2305	Socket for 100R	88	435		X2305
X2306	Same as X2305				X2306
X2307	Same as X2305				X2307
X2308	Same as X2305				X2308
X2309	Same as X2305				X2309
X2310	Same as X2305				X2310
UNIT 2400, D-C MOTOR GENERATOR AND POWER FILTER UNIT					
C2401	50 mf, 400 vdc	13	KGT-4500 -INCL		C2401
C2402	Same as C2401				C2402
C2403	Same as C2401				C2403
C2404	Same as C2401				C2404
C2405	Same as C2401				C2405
C2406	Same as C2401				C2406
C2407	Same as C2401				C2407
C2408	Same as C2401				C2408

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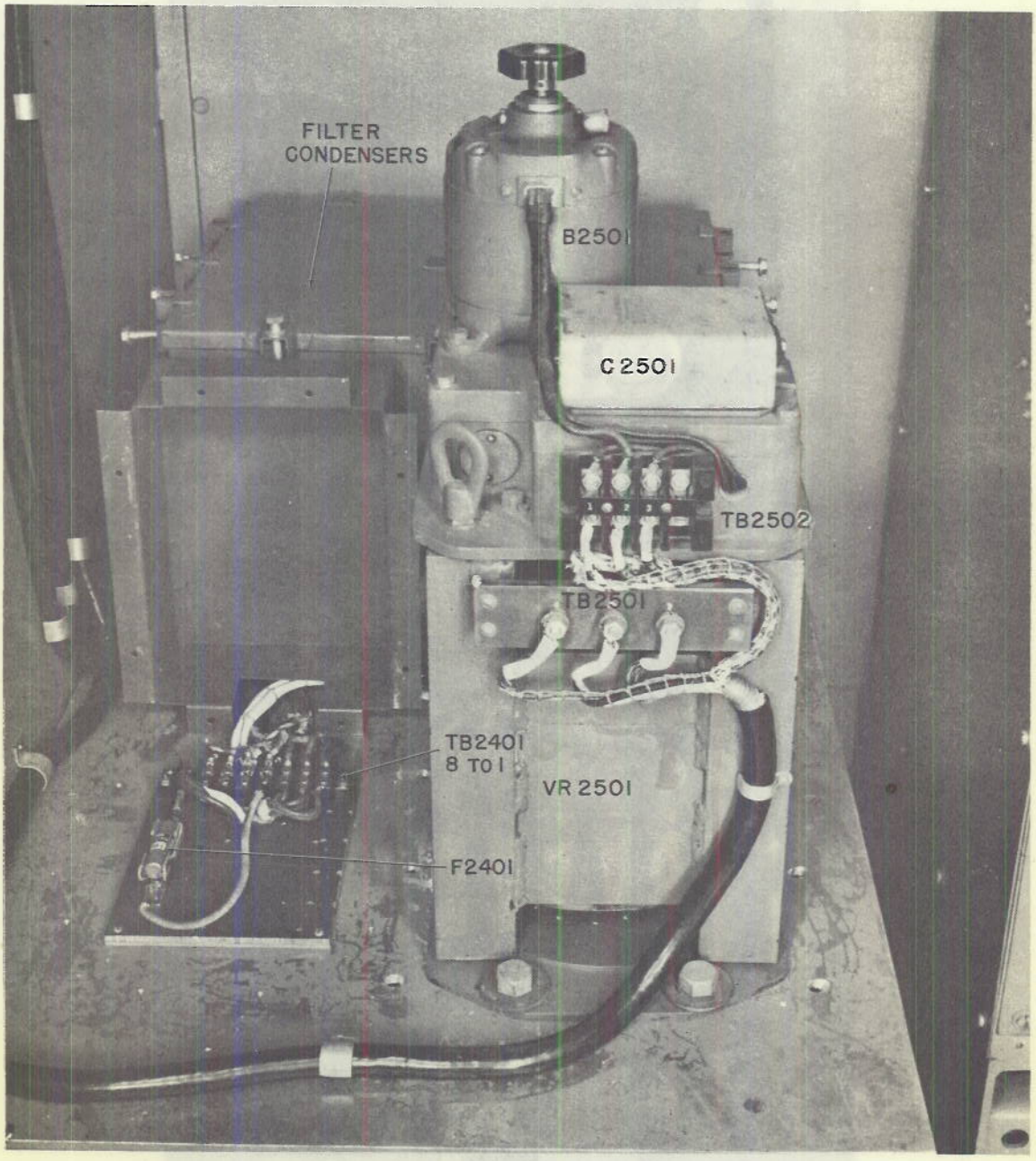

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Figure 8-95. Modulator Variac Control - Top View

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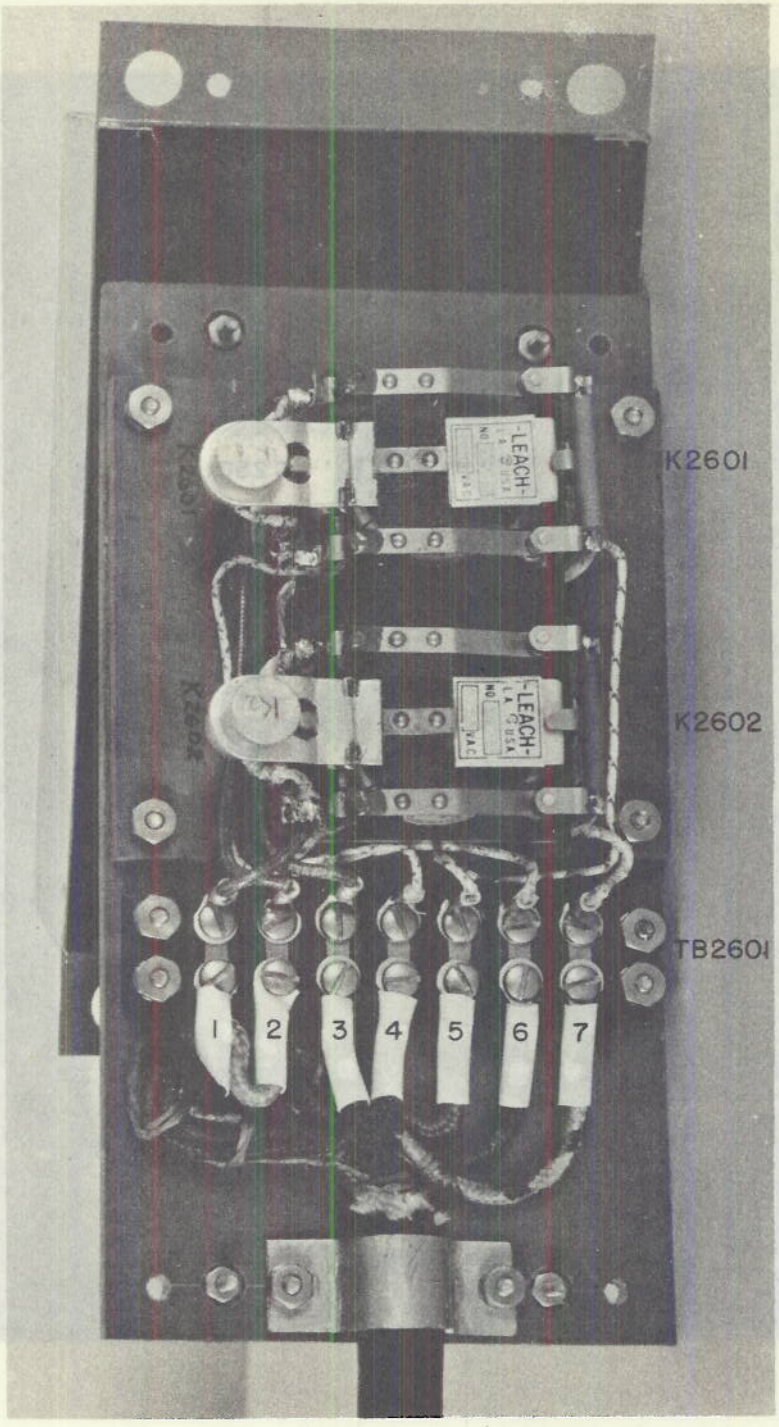

Figure 8-96. Handcrank Isolation Relay Unit - Top View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 2500, MODULATOR VARIAC CONTROL UNIT

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
B2501	Motor, 1/40 hp, 1000 rpm, 120v, 60 cycles, 1 phase, 3 wire reversible with handwheel and worm	18	5KCP 25AC34		B2501
C2501	15 mf, 330 vac	18	Cat. No. 26F577 Mod.		C2501
S2501	Switch, SPST, snap action, normally closed	457	Cat. No. R-RL2		S2501
S2502	Same as S2501				S2502
TB2501	Terminal Board, 3 terminals				TB2501
VR2501	Induction Voltage Regulator, input - 115v, 60 cycles, single phase; output- 115v, ±35v tol; 16.2 amps	18	CS-3263 384		VR2501
UNIT 2600, HANDCRANK ISOLATION RELAY UNIT					
K2601	Relay, DPDT, 115v, 60 cps	731	KS10128		K2601
K2602	Relay, DPDT, 115v, 60 cps	731	KS10128		K2602
TB2601	Terminal Strip	386			TB2601
UNIT 2700, REFERENCE VOLTAGE DISTRIBUTION UNIT					
B2701	Resolver, Dwg. 213044, serial No. 295B	2023	No. 2959		B2701
C2701	1.0 mf, 10% tol; 600v; pyranol	18	Cat. No. 23F467		C2701
C2702	0.1 mf, 10% tol; 1000v; pyranol	18	Cat. No. 23F471		C2702
C2703	0.01 mf, 10% tol; 1000v; pyranol	18	Cat. No. 23F181		C2703
C2704	Same as C2701				C2704
C2705	Same as C2701				C2705
C2706	10.0 mf, 10% tol; 600v; pyranol	18	Cat. No. 25F471G2		C2706
C2707	Same as C2706				C2707
C2708	Same as C2701				C2708
C2709	Same as C2701				C2709
C2710	Same as C2706				C2710
C2711	Same as C2706				C2711
C2712	Same as C2706				C2712
C2713	Same as C2706				C2713
J2701	Receptacle, coaxial	6	SO-239		J2701
J2702	Same as J2701				J2702
K2701	Relay, DPDT, 115 vac, Western Electric	731			K2701
02701	Dial, precision velvet vernier	483	Type N		02701
R2701	680 ohms, 10% tol; 1 w	4			R2701
R2702	Same as R2701				R2702
R2703	1.2 K, 10% tol; 1 w	4			R2703
R2704	Same as R2703				R2704
R2705	5.6 K, 10% tol; 1 w	4			R2705
R2706	56 K, 10% tol; 1 w	4			R2706
R2707	560 K, 10% tol; 1/2 w	4			R2707
R2708	2.5 meg, 10% tol; 1 w; pot.	4			R2708
R2709	Same as R2706				R2709
R2710	Same as R2706				R2710
R2711	1 K, 10% tol; 1 w	4			R2711
R2712	470 K, 10% tol; 1 w	4			R2712
R2713	150 K, 10% tol; 1 w	4			R2713
R2714	Same as R2712				R2714

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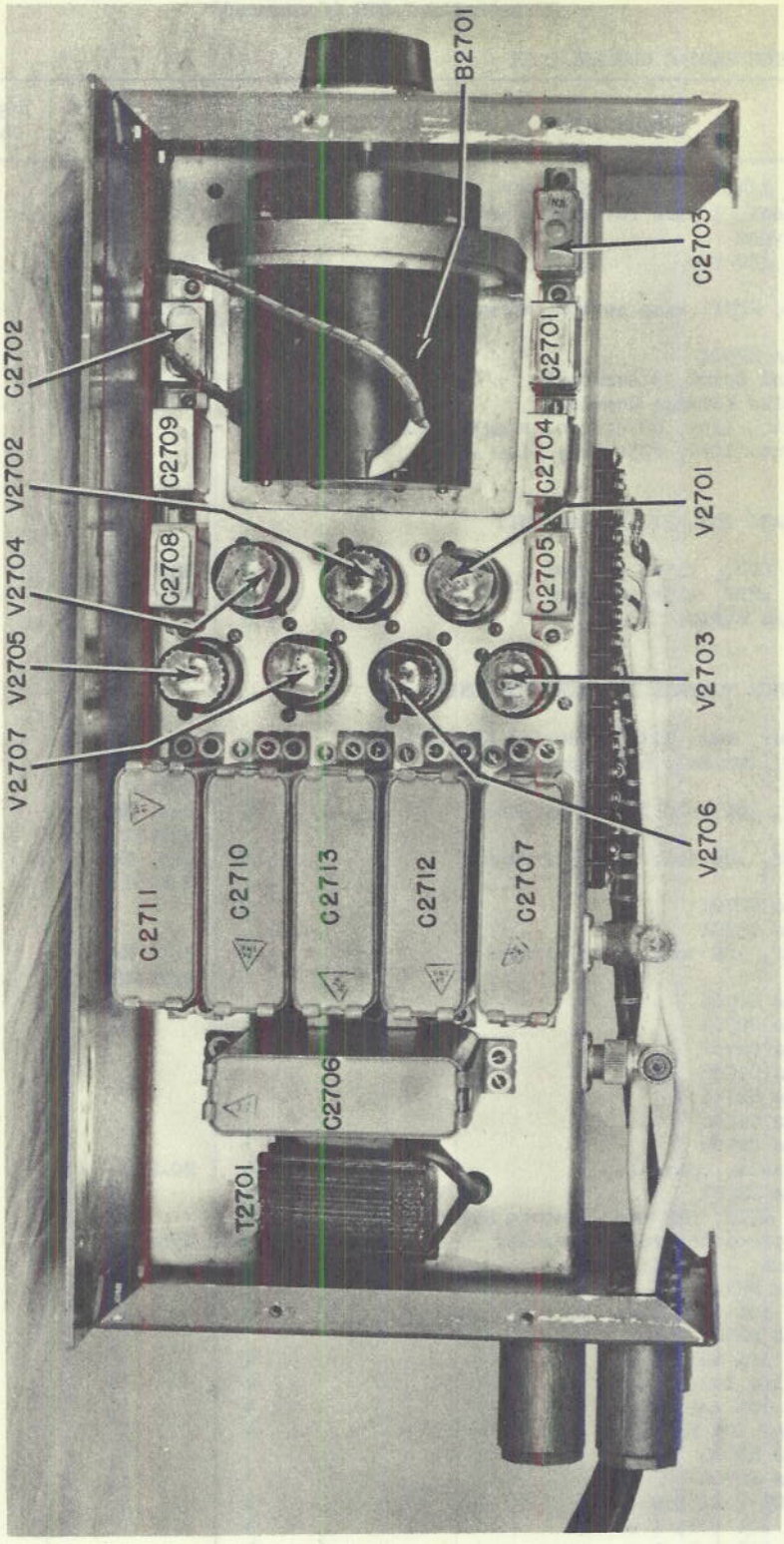

Figure 8-97. Reference Voltage Distribution Unit - Top View

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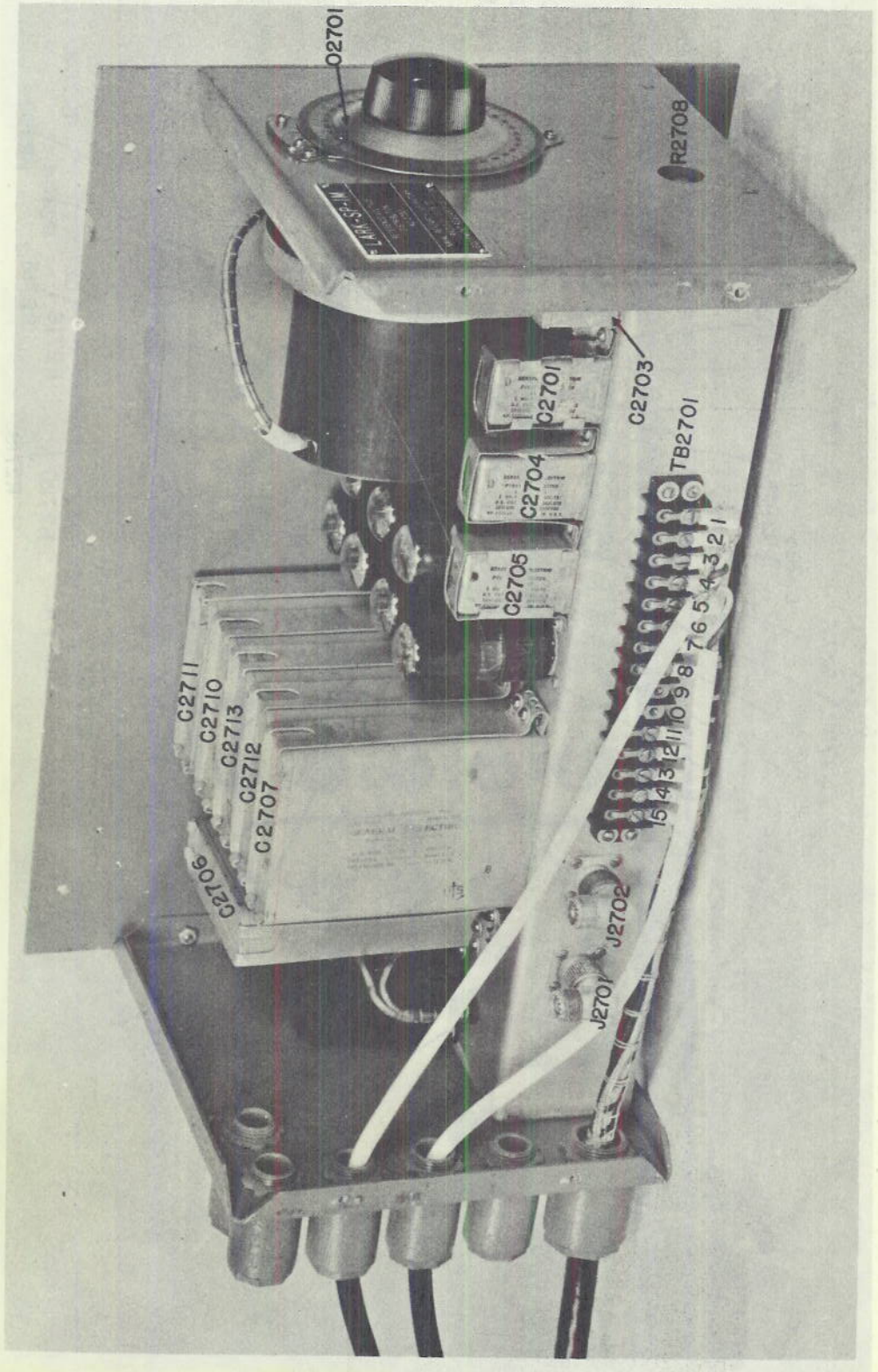

Figure 8-98. Reference Voltage Distribution Unit - Left Side View

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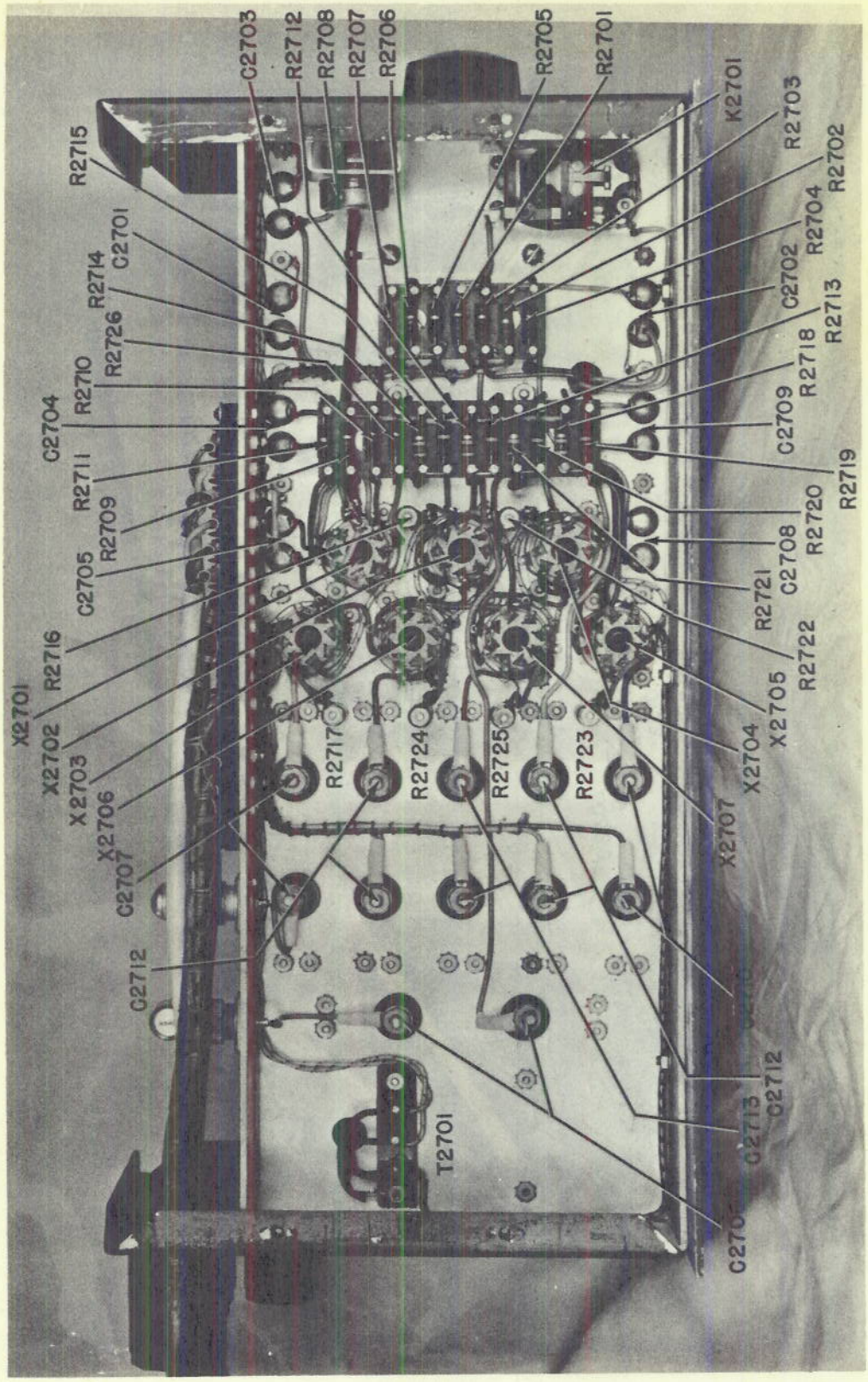

Figure 8-99. Reference Voltage Distribution Unit - Bottom View

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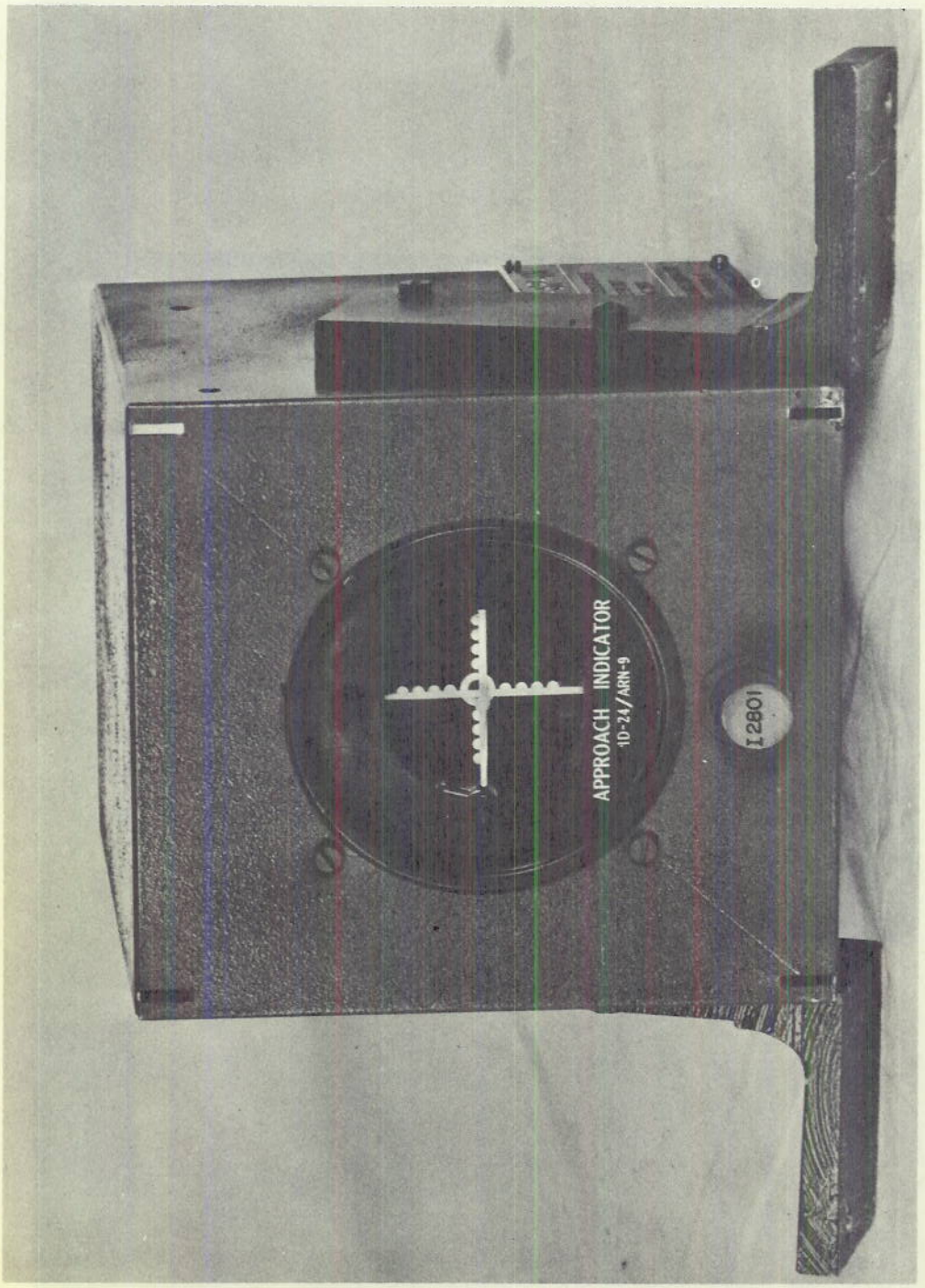

Figure 8-100. Missile Cross-pointer Meter Unit - Front View

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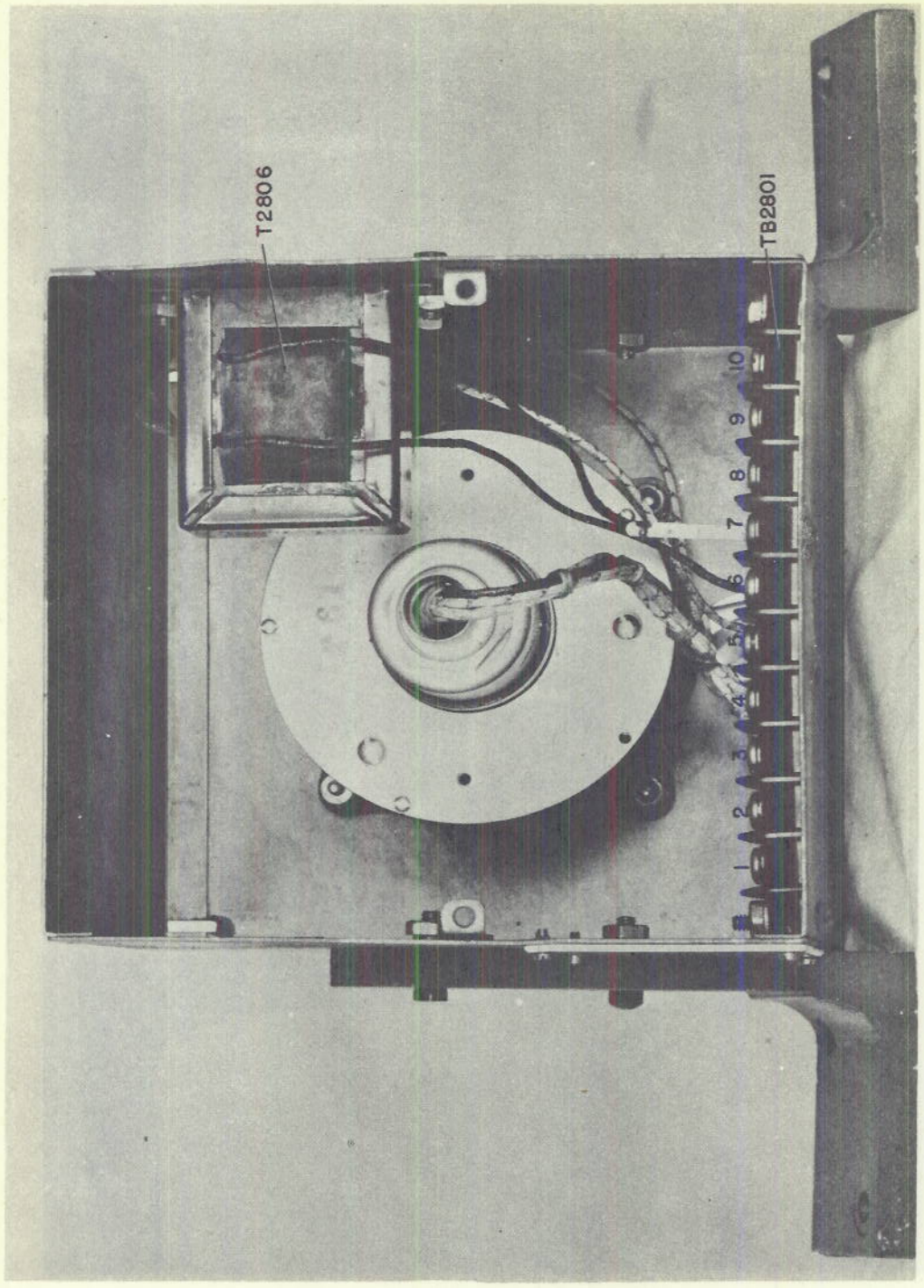

Figure 8-101. Missile Cross-pointer Meter Unit - Back View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 2700, REFERENCE VOLTAGE DISTRIBUTION UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R2715	Same as R2713				R2715
R2716	2.7 K, 10 w, Brown Devil	32			R2716
R2717	Same as R2716				R2717
R2718	Same as R2712				R2718
R2719	Same as R2713				R2719
R2720	Same as R2712				R2720
R2721	Same as R2713				R2721
R2722	Same as R2716				R2722
R2723	Same as R2716				R2723
R2724	Same as R2716				R2724
R2725	Same as R2716				R2725
R2726	Same as R2711				R2726
T2701	Filament Transformer Primary - 115 vac (50-60 cycles) Secondary - 6.3v, 6 amps, center tap, (T19F98)	669			T2701
TB2701	Terminal Strip	386	16-141-Y		TB2701
V2701	Tube, twin triode	565	6SL7		V2701
V2702	Tube, beam power amplifier	565	6V6		V2702
V2703 thru V2707	Same as V2702				V2703 thru V2707
X2701 thru X2707	Socket, octal	11			X2701 thru X2707

UNIT 2800, MISSILE CROSS-POINTER METER UNIT

I2801	Bulb, bayonet type, 6.3v Bayonet Socket, small	210	44		I2801
M2801	Meter, two element with plug, Westinghouse	38	1D-24/ARN-9 1205649-A		M2801
T2801	Filament Transformer Primary - 110v Secondary - 6.3v, 1 amp	669	T21F08		T2801
TB2801	Terminal Board, 10 terminals	141			TB2801

UNIT 2900, D-C VOLTAGE REGULATOR UNIT

C2901	0.01 mf, mica	29			C2901
C2902	Same as C2901				C2902
C2903	Same as C2901				C2903
C2904	Same as C2901				C2904
F2901	Fuse, instrument, 1/2 amp	26	3 AG		F2901
F2902 thru F2915	Same as F2901				F2902 thru F2915
I2901	Pilot Light Assembly, 6 v				I2901
M2901	Meter, 0-500v	18			M2901
M2902	Meter, 0-300v	18			M2902
R2901	60 ohms, 100 w, pot.	32			R2901
R2902	470 K, 1 w	4			R2902
R2903	56 ohms, 1 w	4			R2903
R2904	1 K, 1 w	4			R2904
R2905	Same as R2903				R2905
R2906	Same as R2904				R2906

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 2900, D-C VOLTAGE REGULATOR UNIT

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R2907	Same as R2903				R2907
R2908	Same as R2904				R2908
R2909	Same as R2903				R2909
R2910	100 ohms, 1 w	4			R2910
R2911	Same as R2903				R2911
R2912	Same as R2910				R2012
R2913	Same as R2903				R2913
R2914	Same as R2904				R2914
R2915	Same as R2903				R2915
R2916	Same as R2904				R2916
R2917	Same as R2903				R2917
R2918	Same as R2904				R2918
R2919	Same as R2903				R2919
R2920	Same as R2904				R2920
R2921	Same as R2903				R2921
R2922	Same as R2904				R2922
R2923	Same as R2903				R2923
R2924	Same as R2904				R2924
R2925	Same as R2903				R2925
R2926	Same as R2904				R2926
R2927	Same as R2903				R2927
R2928	Same as R2904				R2928
R2929	Same as R2903				R2929
R2930	Same as R2903				R2930
R2931	Same as R2903				R2931
R2932	43 K, 2 w	4			R2932
R2933	50 K, 4 w, pot.	155			R2933
R2934	47 K, 2 w	4			R2934
R2935	18 K, 2 w	4			R2935
R2936	Same as R2935				R2936
R2937	Same as R2902				R2937
R2938	100 K, 2 w	4			R2938
R2939	Same as R2933				R2939
R2940	Same as R2938				R2940
R2941	4.7 K, 2 w	4			R2941
R2942	Same as R2941				R2942
R2943	Same as R2941				R2943
R2944	3.3 K, 2 w	4			R2944
R2945	Same as R2944				R2945
R2946	150 K, 1 w	4			R2946
R2947 thru R2960	Same as R2946				R2947 thru R2960
S2901	Switch, on-off, DPST	7	24201		S2901
T2901	Filament, Transformer	18	301075		T2901
TB2901	Terminal Board	386	142-14		TB2901
TB2902	Same as TB2901				TB2902
V2901	Tube, beam power amplifier		6Y6G		V2901
V2902 thru V2913	Same as V2901				V2902 thru V2913
V2914	Tube, triode power amplifier		6B4G		V2914
V2915	Same as V2914				V2915
V2916	Same as V2914				V2916
V2917	Tube, triple-grid amplifier		6SH7		V2917
V2918	Tube, voltage regulator		VR105		V2918
V2919	Same as V2917				V2919
V2920	Tube, voltage regulator		VR150		V2920
V2921			NE51		V2921

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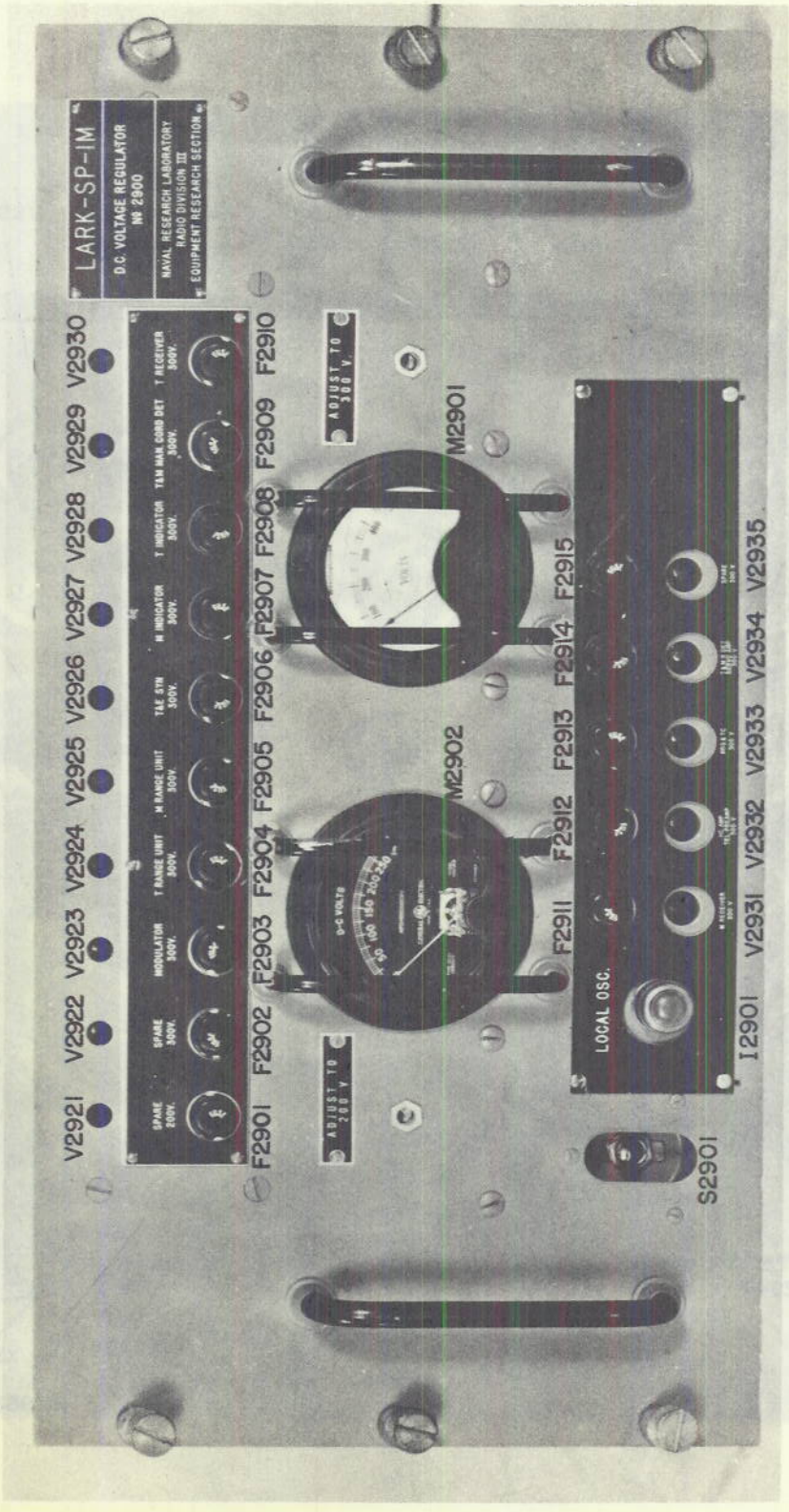

Figure 8-102. D-c Voltage Regulator Unit - Front View

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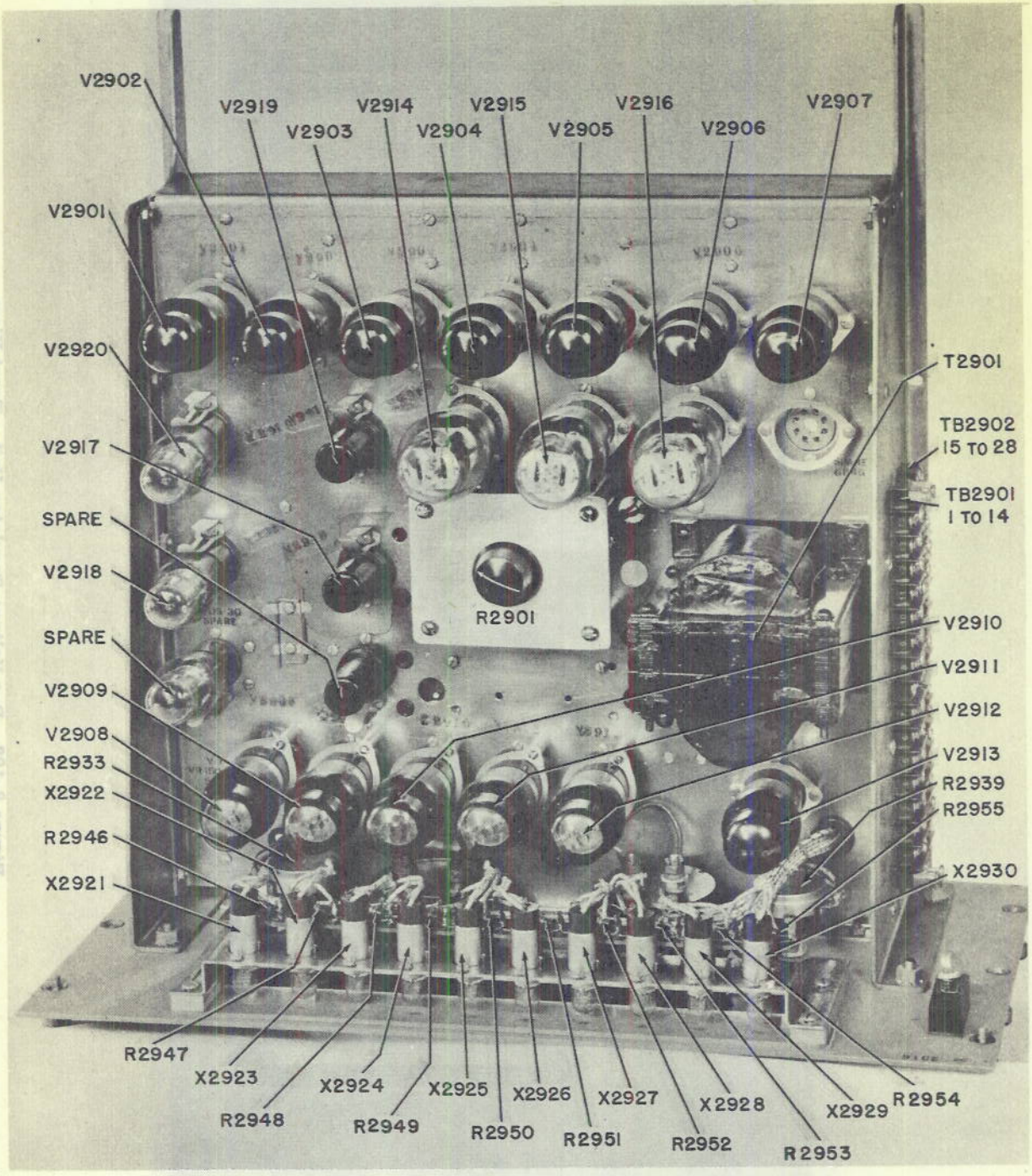

Figure 8-103. D-c Voltage Regulator Unit - Top View

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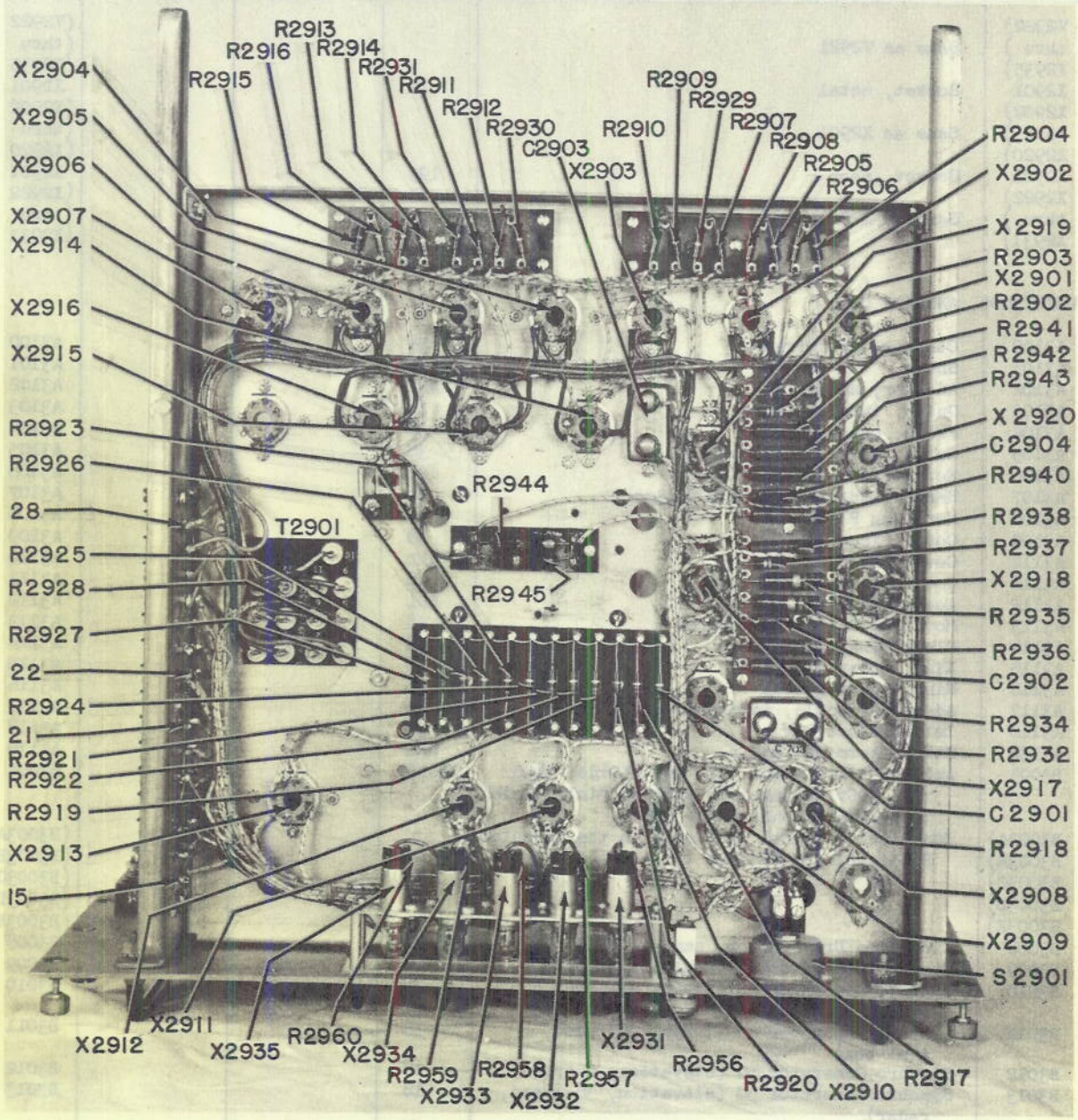

Figure 8-104. D-c Voltage Regulator Unit - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 2900, D-C VOLTAGE REGULATOR UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
V2922) thru V2935)	Same as V2921				(V2922 thru V2935
X2901	Socket, octal	11			X2901
X2902) thru X2920)	Same as X2901				(X2902 thru X2920
X2921	Socket, neon	195			X2921
X2922) thru X2931)	Same as X2921				(X2922 thru X2931
UNIT 3000, ANTENNA UNIT					
A3100	Casting, main frame	38			A3100
A3101	Snout	NRL			A3101
A3102	Adapter, snout	NRL			A3102
A3103	Guide, internal wave	38			A3103
A3104	Frame, eccentric	38			A3104
A3105	Guide, eccentric throw-out	38			A3105
A3106	Eccentric Throw-out	38			A3106
A3107	Hanger, eccentric drive pulley	38			A3107
A3108	Mounting Plate	38			A3108
A3109	Cover Piece 1	38			A3109
A3110	Cover Piece 2	NRL			A3110
A3111	Cover Piece, wave guide	38			A3111
A3112	Access Cover	NRL			A3112
A3113	Mounting Plate, tachometer	38			A3113
A3114	Clamp Ring, tachometer	38			A3114
A3115	Ring, outer gimbal	38			A3115
A3116	Ring, inner gimbal	38			A3116
A3117	Adjusting Angle, internal wave guide	38			A3117
A3118	Interference Bar	38			A3118
A3138	Mount, terminal strip	NRL			A3138
B3003	Azimuth Drive Motor, 1/2 hp, 250vdc; 3450 rpm, 300v; separately excited field; Model 5BC46AB857, modified by NRL	18-NRL			B3003
B3003A) B3003B) B3003C) B3003D) B3003E)	Identical to parts as listed in the Navships Publication 900,560.4				(B3003A (B3003B (B3003C (B3003D (B3003E
B3008	Elevation Drive Motor, same as B3003	18-NRL			B3008
B3009	Synchro Generator 5G (train, 1-speed)	18			B3009
B3010	Synchro Generator 5G (train, 36-speed, radar)	18			B3010
B3011	Synchro Generator 5G (train, 36-speed, dial box)	18			B3011
B3012	Synchro Generator 5G (elevation, 2-speed)	18			B3012
B3013	Synchro Generator 5G (elevation, 36-speed, radar)	18			B3013
B3014	Synchro Generator 5G (elevation, 36-speed, dial box)	18			B3014
B3015	Nutator Motor, 1/6 hp, 120v, 60 cycles, 1-phase, 1725 rpm, 2.4 amps; frame 145, type FH, 45°c cont. encl.	38			B3015
B3016	Synchro Generator 5G (camera motor)	18			B3016
B3017	Synchro Generator 5G (camera motor)	18			B3017

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 3000, ANTENNA UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
E3001 and E3002	Identical to parts as listed in SP-1M Parts List				E3001 and E3002
G3001	Reference Generator	399	753G01-371		G3001
H3136	Terminal Tube, size B	762			H3136
H3137	Terminal Tube, size C	762			H3137
J3001 thru J3005	Identical to parts as listed in SP-1M Parts List				J3001 thru J3005
J3135	Terminal Block	386	140-4		J3135
03001 thru 03002I	Identical to parts as listed in SP-1M Parts List				03001 thru 03002I
03002J	Gasket "L" for 36-speed synchro box	18			03002J
03003 thru 03004L	Identical to parts as listed in SP-1M Parts List				03004 thru 03004L
03004M thru 03004R	Bearings in 36-speed Azimuth Control Unit	261			03004M thru 03004R
03004S thru 03004X	Bearings in 36-speed Elevation Control Unit	261			03004S thru 03004X
03005 thru 03005Y	Identical to parts as listed in SP-1M Parts List				03005 thru 03005Y
03005Z	Azimuth Coupling Half and Gear	18	Dr. No. M9057800 PT-1		03005Z
03005AA	Gear	18	Dr. No. M9057801		03005AA
03005AB	Gear	18	Dr. No. M9057802		03005AB
03005AC	Gear	18	Dr. No. M9057803		03005AC
03005AD	Gear, Azimuth 36-speed synchro (radar)	18			03005AD
03005AE	Elevation Coupling Half and Gear	18	Dr. No. M9057806 PT-1		03005AE
03005AF	Gear	18	Dr. No. M9057807		03005AF
03005AG	Gear	18	Dr. No. M9057808		03005AG
03005AH	Gear	18	Dr. No. M9057809		03005AH
03005AI	Gear	18	Dr. No. M9057810		03005AI
03005AJ	Gear, elevation 36-speed synchro (radar)	18			03005AJ
03006 thru 03052	Identical to parts as listed in SP-1M Parts List				03006 thru 03052
03053	Coupling, tachometer	NRL			03053
03054	Mount, 15" camera	NRL			03054
03055	Mount, 6" camera	NRL			03055
03058	Wave Guide Modification	NRL	Dr. No. 1100-A-156-91		03058

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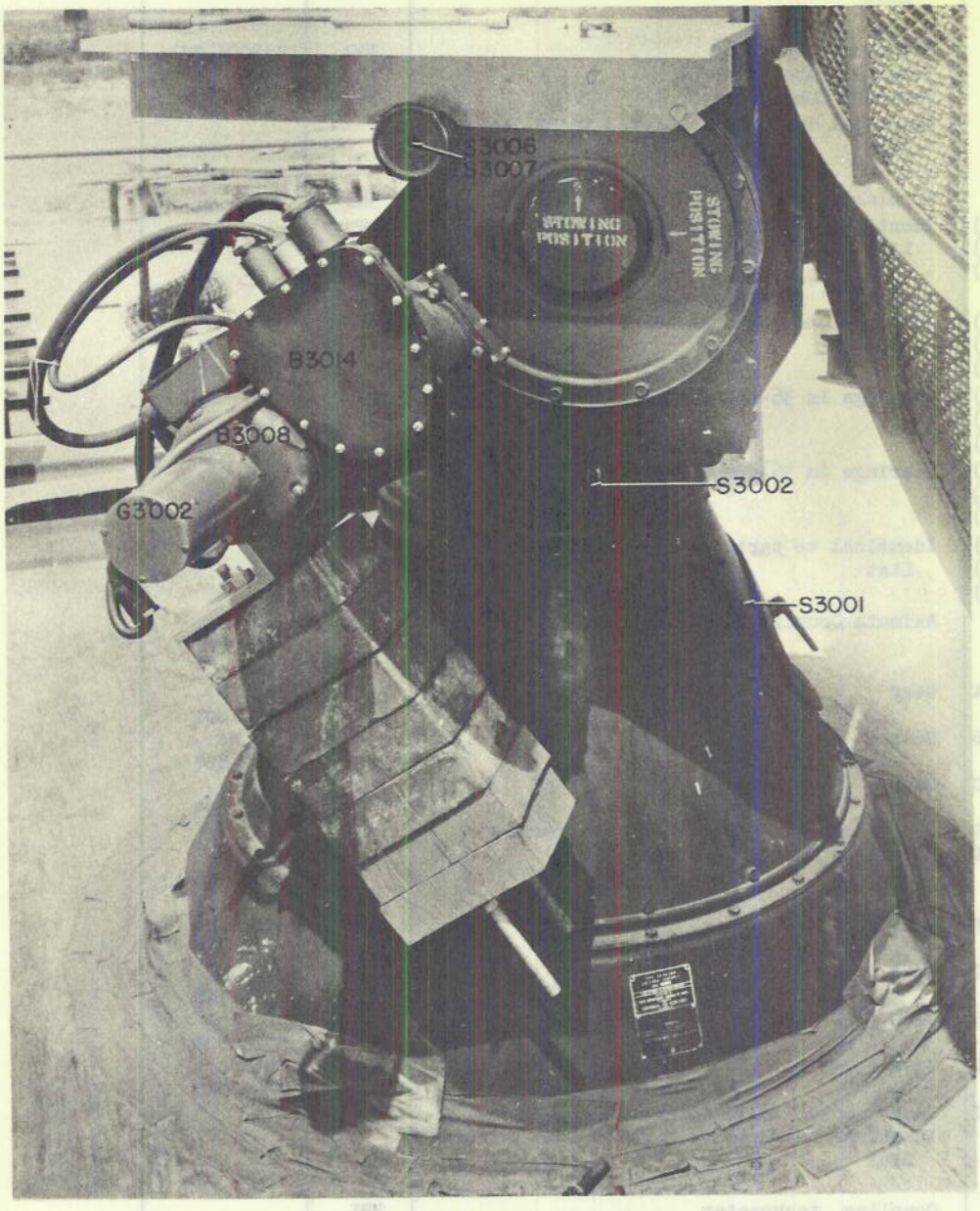

Figure 8-105. Antenna Unit - Side View Showing Elevation Motors and Counterbalance

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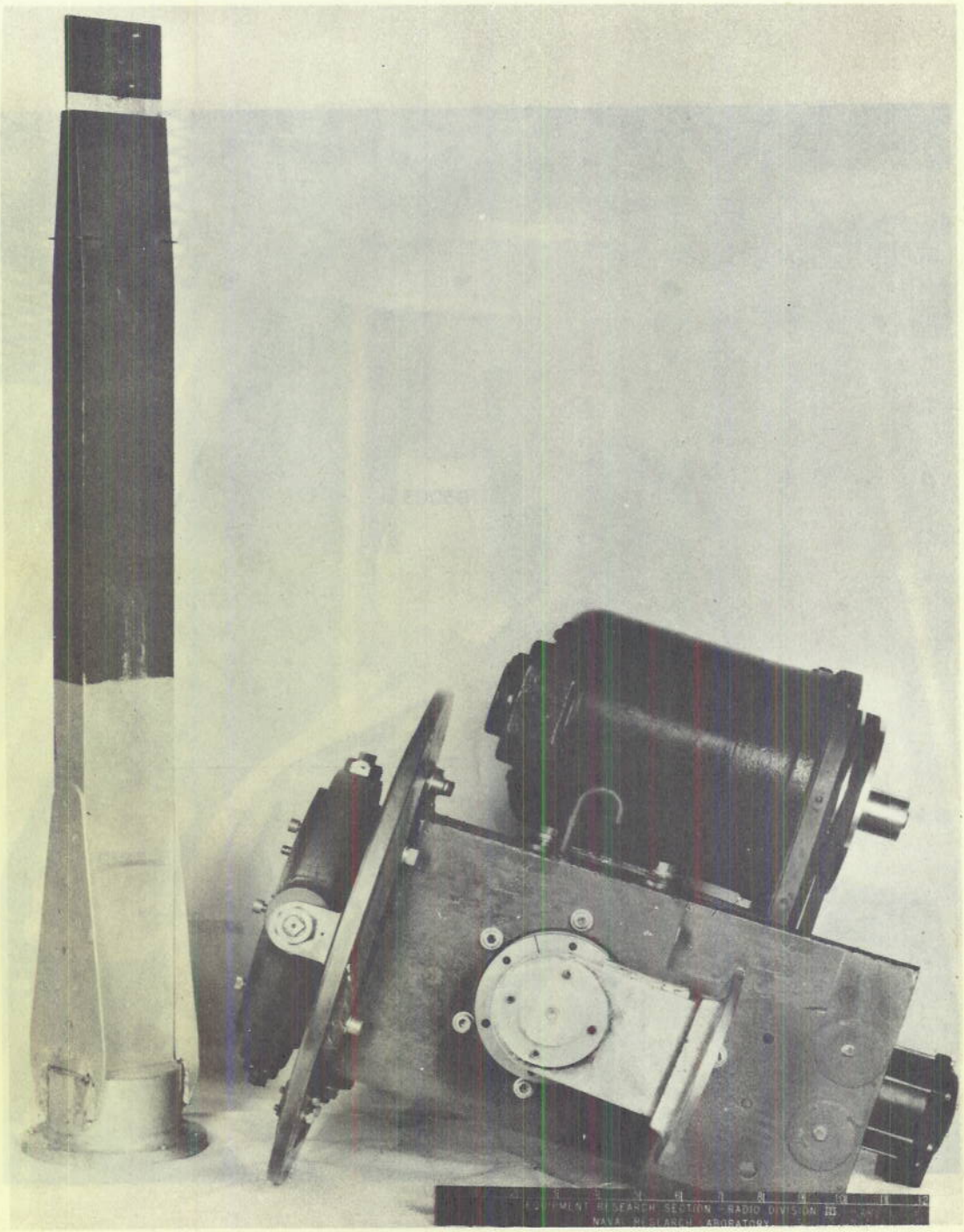

Figure 8-106. Antenna Unit - Nutator Drive and Snout Unmounted

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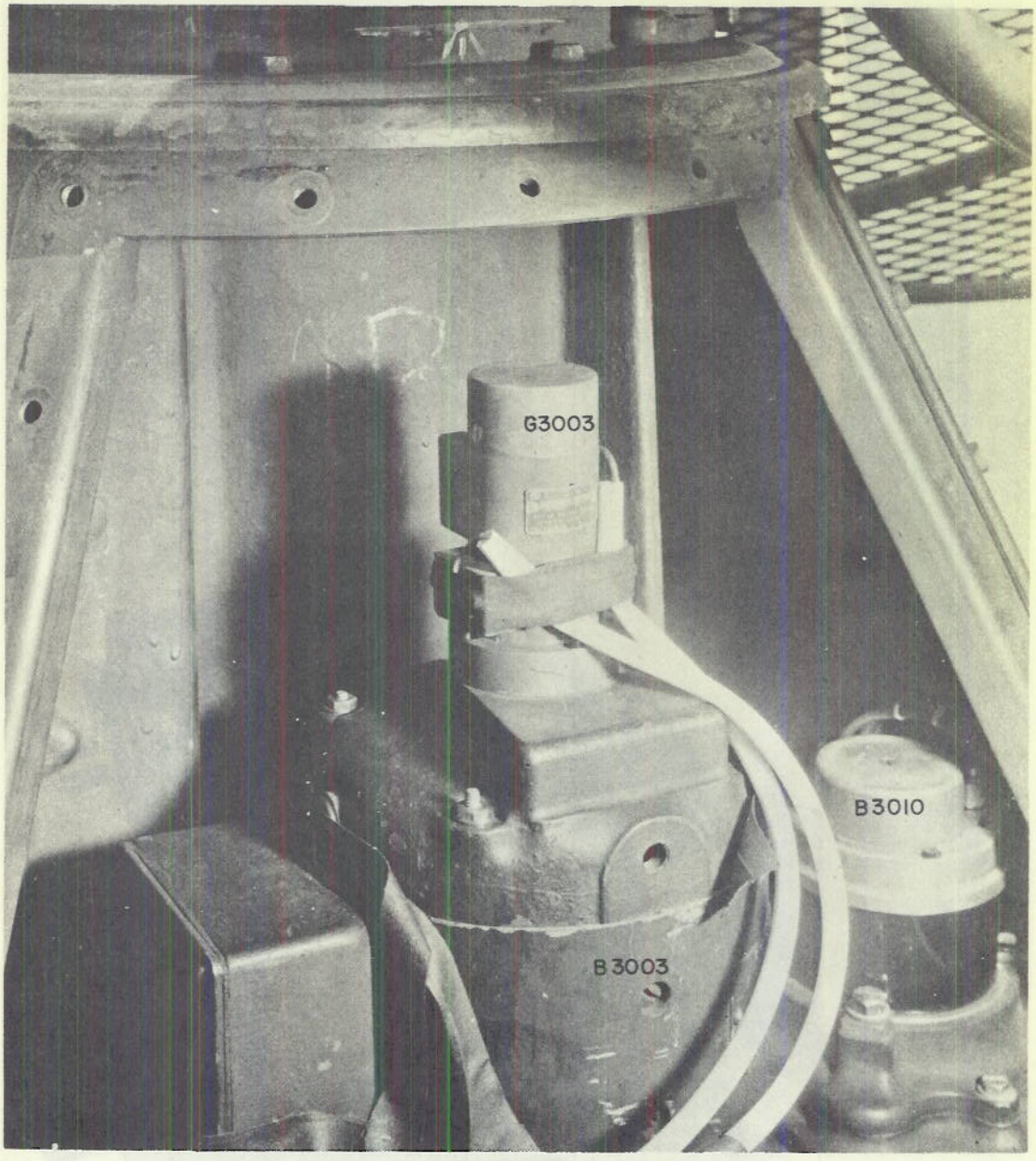

Figure 8-107. Antenna Unit - Train Motor and Tachometer in Pedestal

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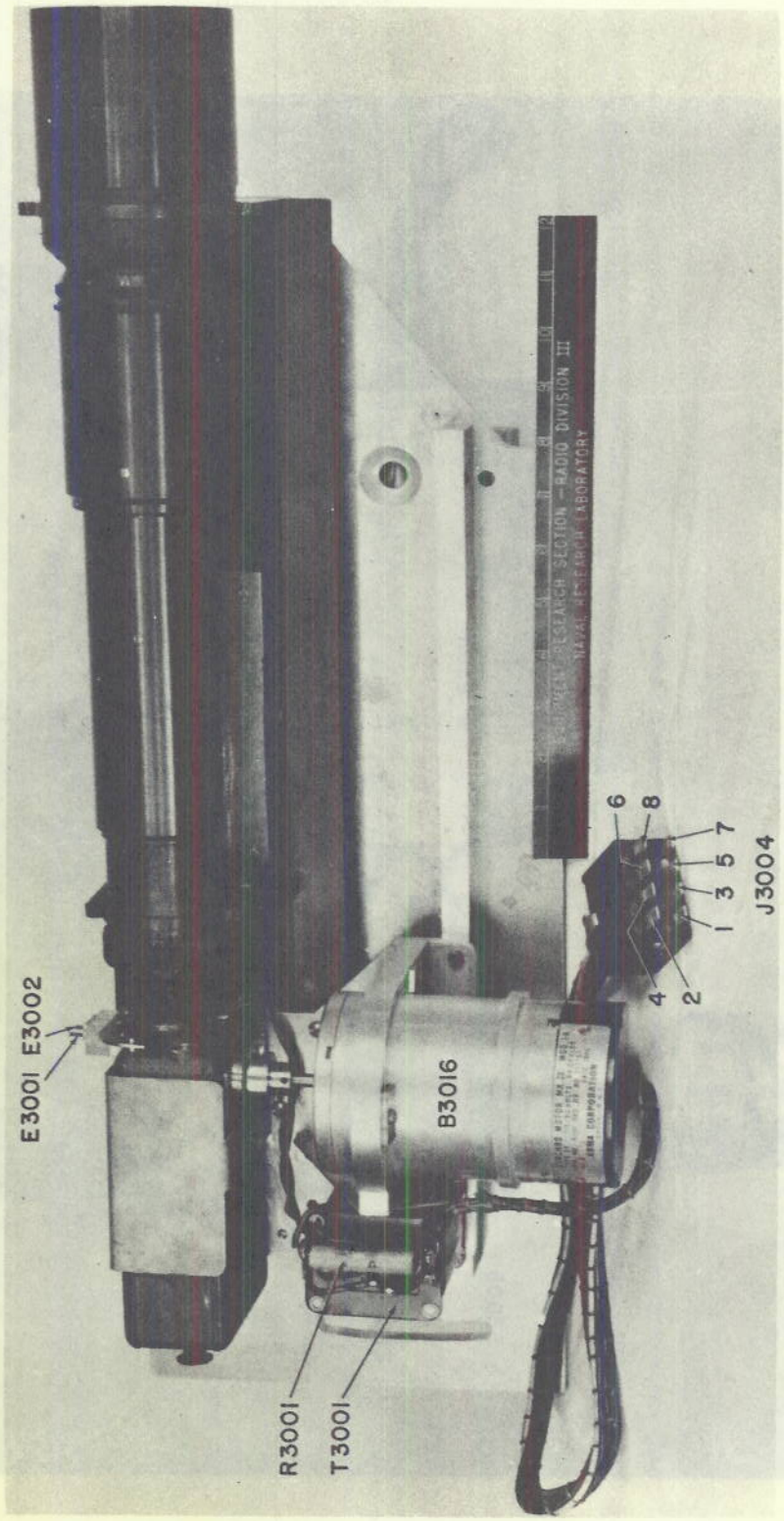

Figure 8-108. Antenna Unit - Main Tracking Camera Unmounted

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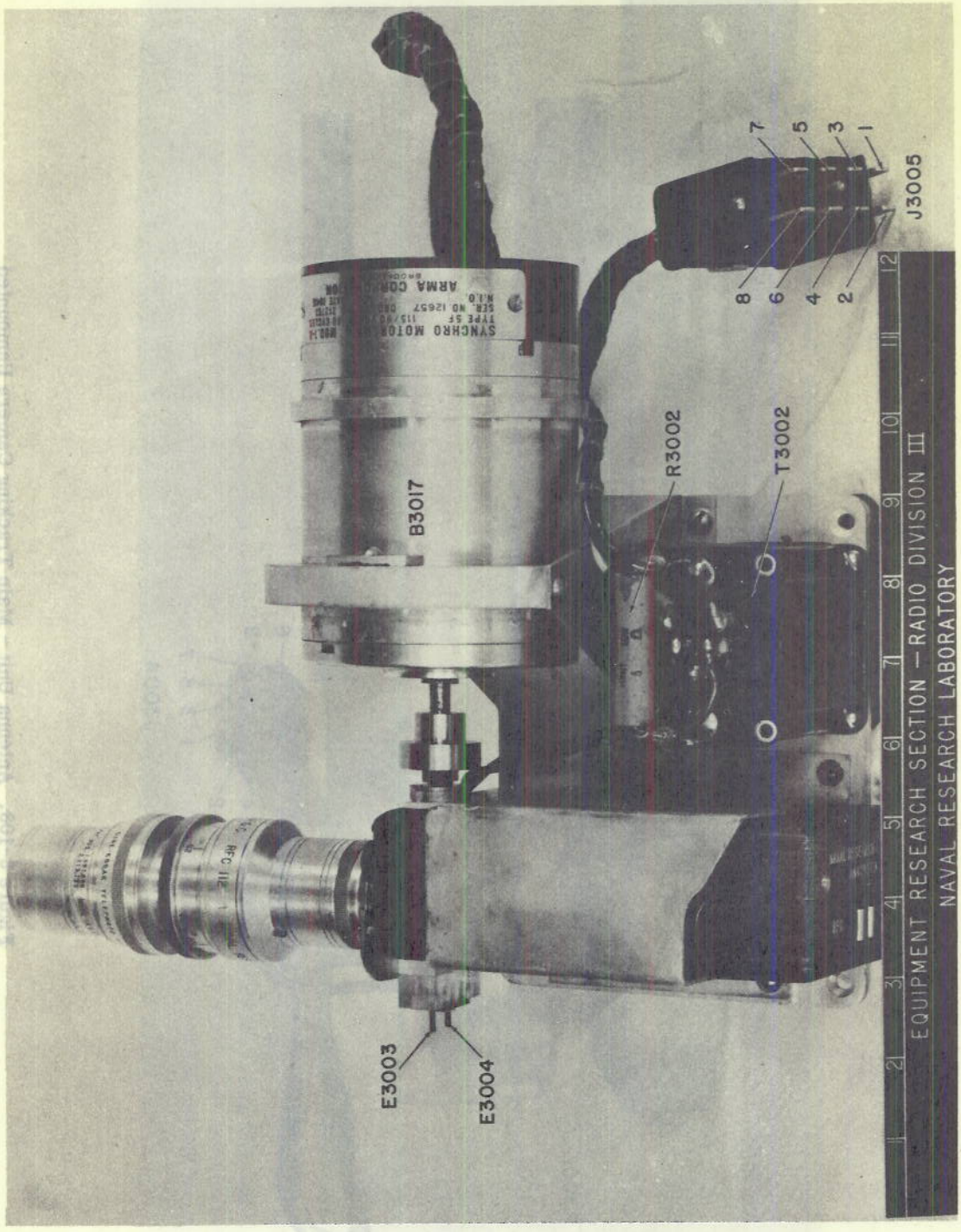

Figure 8-109. Antenna Unit - Auxiliary Tracking Camera Unmounted

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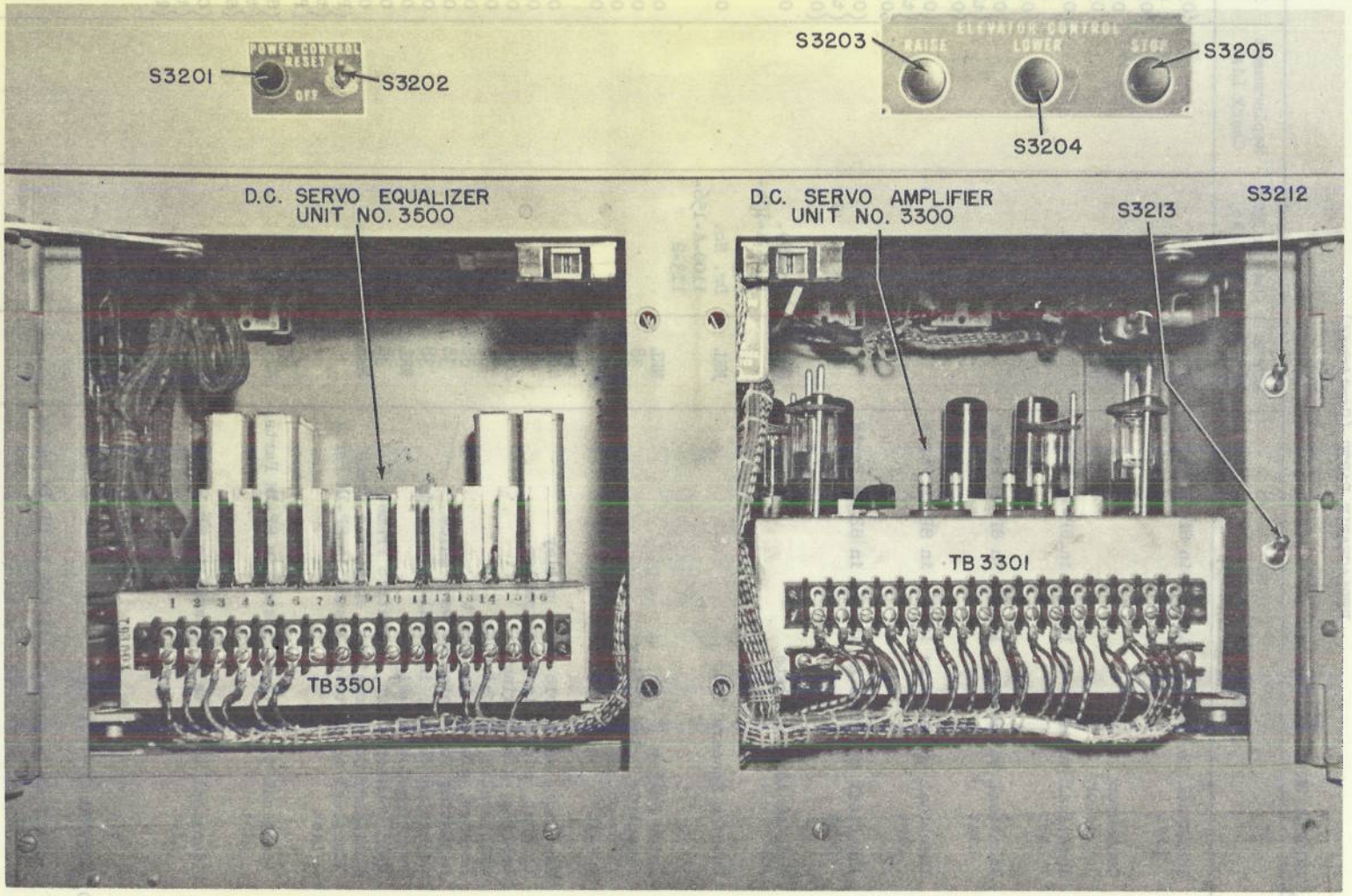

Figure 8-110. Antenna Control Unit, Showing Location of D-c Servo Equalizer, Unit 3500, and D-c Servo Amplifier, Unit 3300.

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 3000, ANTENNA UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
03060 and 03060A	Identical to parts as listed in SP-1M Parts List				03060 and 03060A
03063	Connector	597			03063
03063A	Connector	597			03063A
03064 and 03065	Identical to parts as listed in SP-1M Parts List				03064 and 03065
03067 thru 03075A	Identical to parts as listed in SP-1M Parts List				03067 thru 03075A
03077 thru 03082	Identical to parts as listed in SP-1M Parts List				03077 thru 03082
03088 thru 03119	Identical to parts as listed in SP-1M Parts List				03088 thru 03119
03120	Nutator Adapter Plate	NRL	Dr. No. 1100-A-156-113-1		03120
03120A	Nutator Spacers	NRL	Dr. No. 1100-A-156-113-2		03120A
03121	Motor Pulley	NRL			03121
03122	Eccentric Drive Pulley	38			03122
03123	Throw-out Spring	38			03123
03124	V Belt	293 or 978			03124
03125	Bearings, eccentric drive pulley	492			03125
03126	Locknut, eccentric drive pulley	38			03126
03127	Bearing, gimbal ring	608			03127
03128	Stub Shafts, gimbal ring	38			03128
03129	Locknut, gimbal ring shaft	38			03129
03130	Adjusting Nut, internal wave guide	38			03130
03131	Adjusting Washer, internal wave guide	38			03131
03132	Rotating Counterweight	NRL			03132
03133	Main Counterweight, eccentric frame	38			03133
03134	Auxiliary Counterweight, eccentric frame	NRL			03134
P3001 thru P3005	Identical to parts as listed in SP-1M Parts List				P3001 thru P3005
S3001 thru S3007	Identical to parts as listed in SP-1M Parts List				S3001 thru S3007
C3001 thru T3001	Identical to parts as listed in SP-1M Parts List				C3001 thru T3001
UNIT 3200, ANTENNA CONTROL UNIT					
All parts	Identical to parts as listed in SP-1M Parts List				All parts

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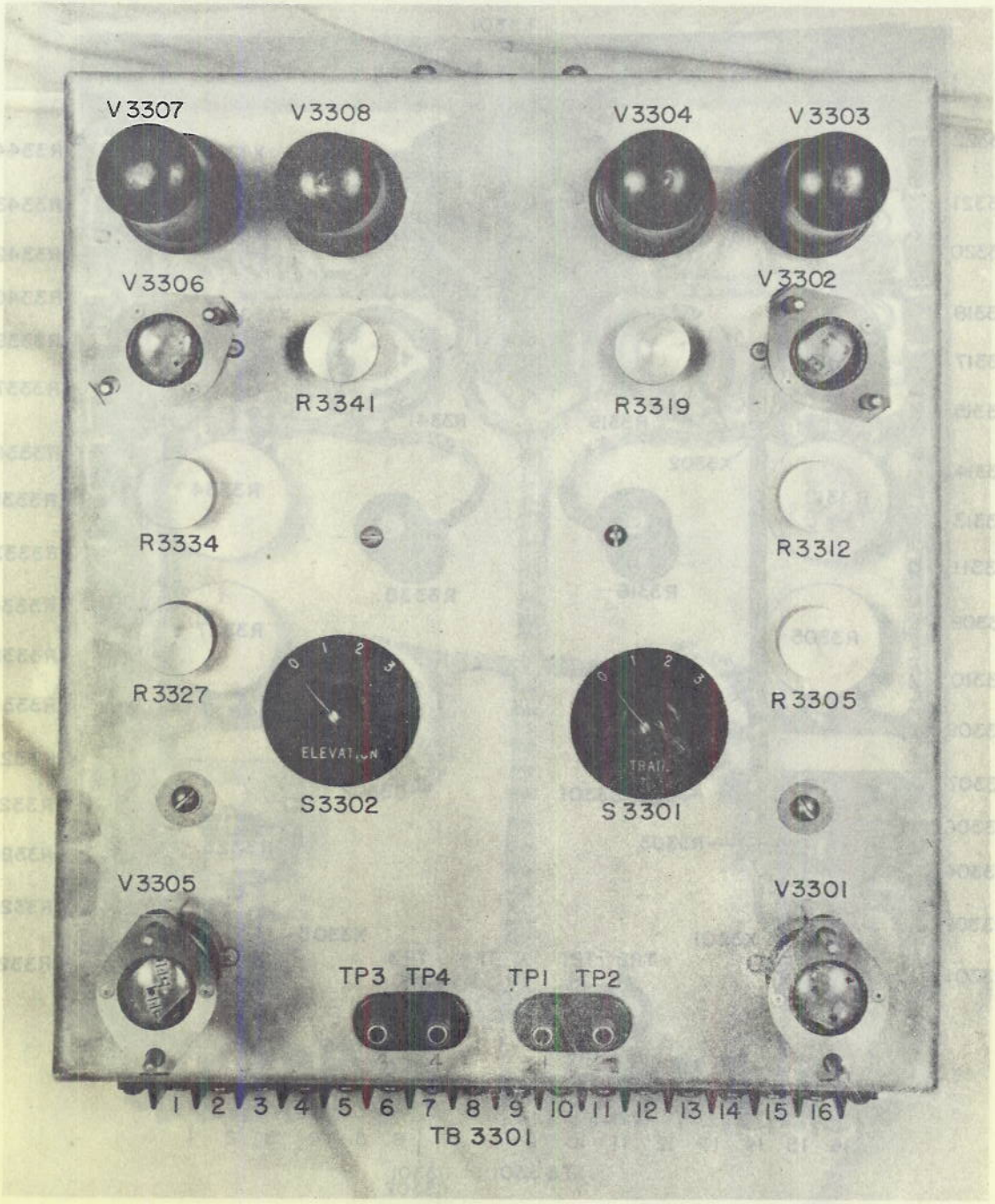

Figure 8-111. D-c Servo Amplifier Unit - Top View

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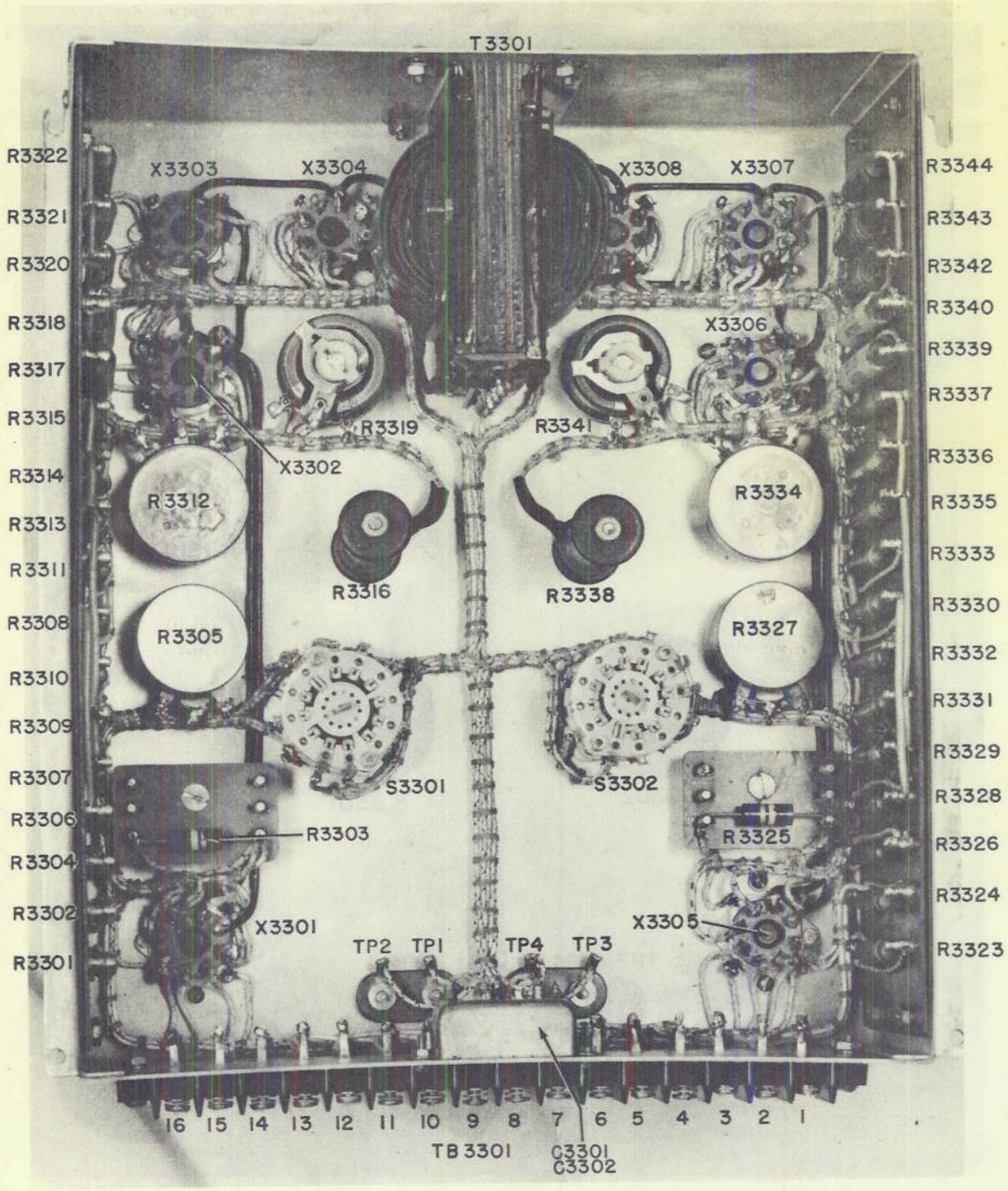

Figure 8-112. D-c Servo Amplifier Unit - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 3300, D-C SERVO AMPLIFIER UNIT

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
C3301	0.25 mf, 600v	13	DYR 6025		C3301
C3302	Same as C3301				C3302
R3301	100 K, 5% tol; 2 w; composition	4	HB1045		R3301
R3302	Same as R3301				R3302
R3303	Same as R3301				R3303
R3304	1.8 K, 5% tol; 2 w; composition	4	HB1825		R3304
R3305	1 K, pot.	155	58-1000		R3305
R3306	Same as R3304				R3306
R3307	3.3 K, 5% tol; 2 w; composition	4	HB3325		R3307
R3308	220 K, 5% tol; 2 w; composition	4	HB2245		R3308
R3309	22 K, 5% tol; 2 w; composition	4	HB2235		R3309
R3310	18 K, 5% tol; 2 w; composition	4	HB1835		R3310
R3311	3.9 K, 5% tol; 2 w; composition	4	HB3925		R3311
R3312	750 ohms, pot.	155	58-750		R3312
R3313	47 K, 5% tol; 2 w; composition	4	HB4735		R3313
R3314	Same as R3313				R3314
R3315	27 K, 5% tol; 2 w; composition	4	HB2735		R3315
R3316	1.8 K, 25 w, wire wound	623	25 N1T		R3316
R3317	220 ohms, 10 w, wire wound	32	BR0L0		R3317
R3318	Same as R3317				R3318
R3319	100 ohms, 25 w, pot.	32	0151		R3319
R3320	Same as R3313				R3320
R3321	Same as R3313				R3321
R3322	Same as R3310				R3322
R3323	Same as R3301				R3323
R3324	Same as R3301				R3324
R3325	Same as R3301				R3325
R3326	Same as R3304				R3326
R3327	Same as R3305				R3327
R3328	Same as R3304				R3328
R3329	Same as R3307				R3329
R3330	Same as R3308				R3330
R3331	Same as R3309				R3331
R3332	Same as R3310				R3332
R3333	Same as R3311				R3333
R3334	Same as R3312				R3334
R3335	Same as R3313				R3335
R3336	Same as R3313				R3336
R3337	27 K, 5% tol; 2 w; composition	4	HB2735		R3337
R3338	Same as R3316				R3338
R3339	Same as R3317				R3339
R3340	Same as R3317				R3340
R3341	Same as R3319				R3341
R3342	Same as R3313				R3342
R3343	Same as R3313				R3343
R3344	Same as R3310				R3344
S3301	Switch, 3 wafer, 4 position, with dial plate and knob, non-shorting type	2021	Type U Wafer		S3301
S3302	Same as S3301				S3302
T3301	Filament Transformer (modified-secondary removed and replaced with two 5-amp, center -tap windings)	669	T-19F99 (modified)		T3301
TB3301	Terminal Board, 16 terminals, with special lugs	386	16-142-Y		TB3301
TP3301 thru TP3304	Binding Posts	483	FWH		TP3301 thru TP3304
V3301	Tube, twin triode		6SL7GT		V3301

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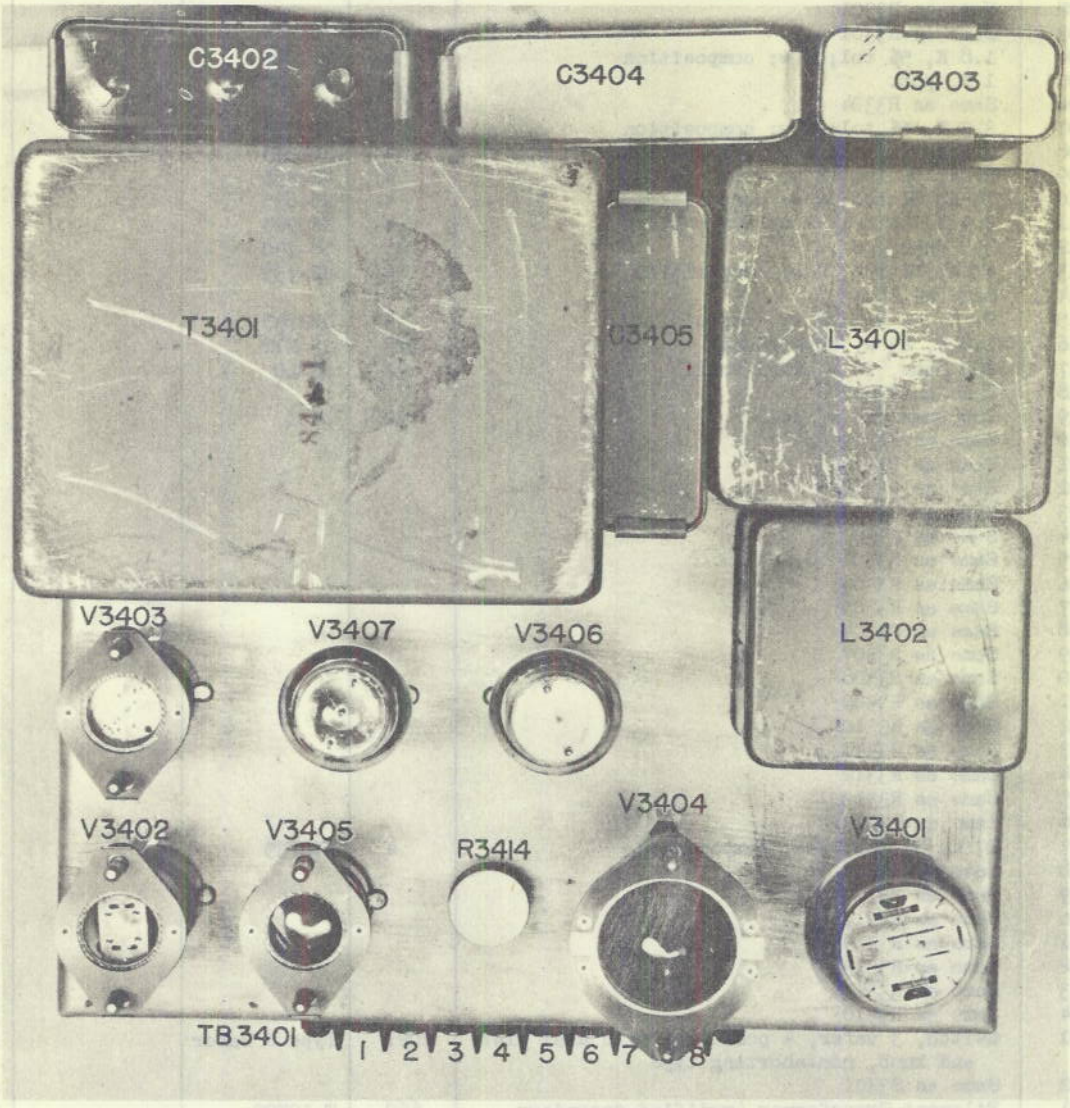

Figure 8-113. D-c Servo Amplifier Power Unit - Top View

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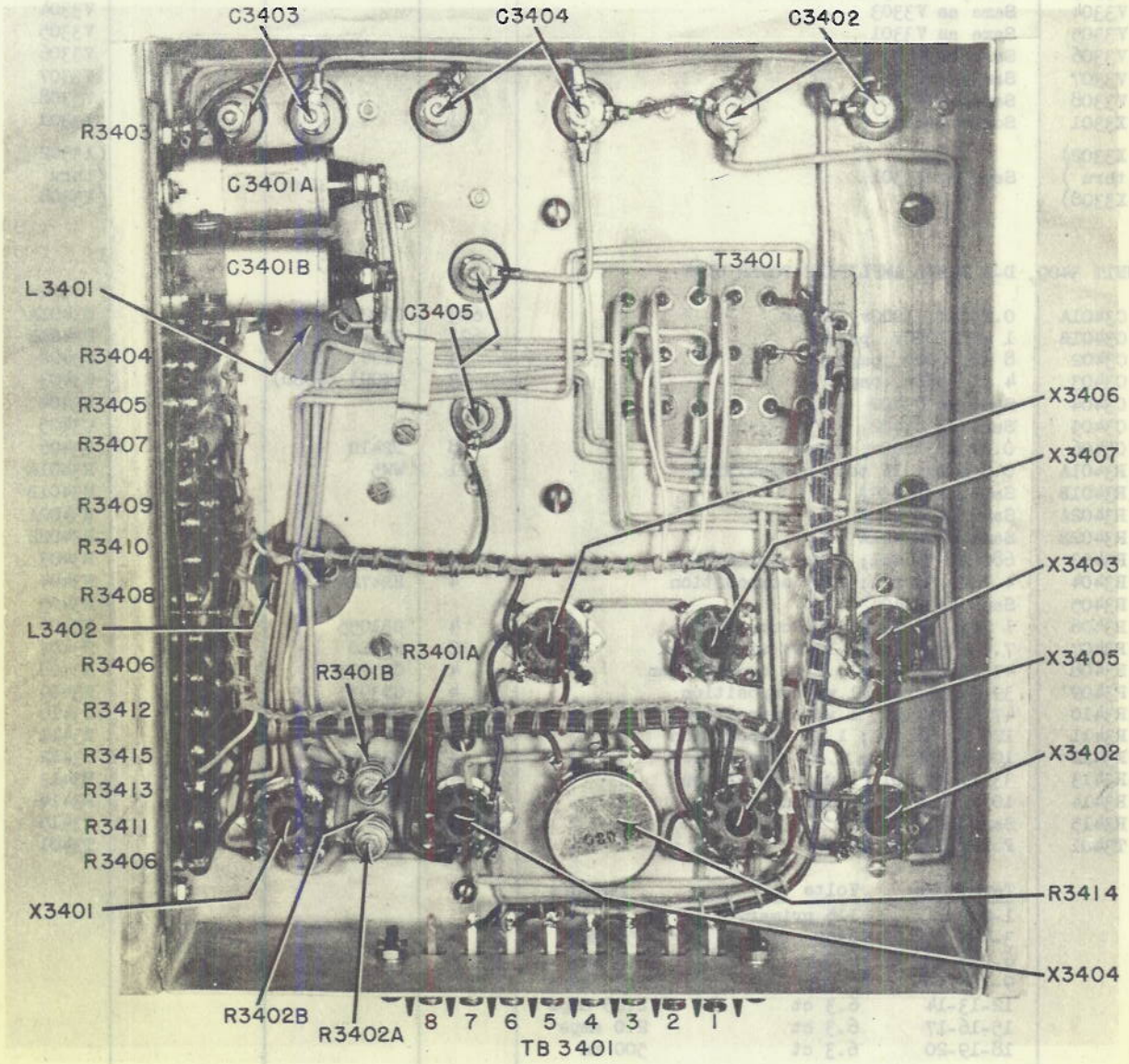

Figure 8-114. D-c Servo Amplifier Power Unit - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 3300, D-C SERVO AMPLIFIER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
V3302	Tube, twin triode		6SN7GT		V3302
V3303	Tube, beam power amplifier		6L6		V3303
V3304	Same as V3303				V3304
V3305	Same as V3301				V3305
V3306	Same as V3302				V3306
V3307	Same as V3303				V3307
V3308	Same as V3303				V3308
X3301	Socket-octal	11			X3301
X3302 thru X3308	Same as X3301				X3302 thru X3308

UNIT 3400, D-C SERVO AMPLIFIER POWER UNIT

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
C3401A	0.25 mf, 1000v, paper	623	CR0251		C3401A
C3401B	1 mf, 1000v, paper	623	305-1030		C3401B
C3402	8 mf, 600v, paper	13	(TUU) (6080)		C3402
C3403	4 mf, 600v, paper	13	(TUU) (6060)		C3403
C3404	Same as C3402				C3404
C3405	Same as C3402				C3405
C3406	0.01 mf, 600v, paper	28	TP410		C3406
R3401A	0.5 ohms, 1% tol; composition	21	WW5		R3401A
R3401B	Same as R3401A				R3401B
R3402A	Same as R3401A				R3402A
R3402B	Same as R3401A				R3402B
R3403	680 K, 5% tol; 2 w; composition	4	HB6845		R3403
R3404	4.7 K, 5% tol; 2 w; composition	4	HB4725		R3404
R3405	Same as R3404				R3405
R3406	1 meg, 5% tol; 1 w; composition	4	GB1055		R3406
R3407	7.5 K, 10% tol; 10 w; wire wound	32	BR0L0		R3407
R3408	47 ohms, 5% tol; 1 w; composition	4	GB4705		R3408
R3409	39 K, 5% tol; 1 w; composition	4	GB3935		R3409
R3410	47 K, 5% tol; 1 w; composition	4	GB4735		R3410
R3411	120 K, 5% tol; 1 w; composition	4	GB1245		R3411
R3412	100 K, 5% tol; 1 w; composition	4	GB1045		R3412
R3413	33 K, 5% tol; 1 w; composition	4	GB3335		R3413
R3414	10 K, 3 w, wire wound, pot.	155	58-10000		R3414
R3415	Same as R3413				R3415
T3401	Power Transformer	2022	840-1		T3401

Terminals	Volts	Current
1-2	115 primary	
3-4-5	1350 ct	250 ma
6-7-8	650 ct	100 ma
9-10-11	5.0 ct	2.25 amps
12-13-14	6.3 ct	2.25 amps
15-16-17	6.3 ct	2.0 amps
18-19-20	6.3 ct	500 ma

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
TB3401	Terminal Board, 8 terminals, with long lugs	386	8-142-Y		TB3401
V3401	Tube, full-wave rectifier		5R4GY		V3401
V3402	Tube, full-wave rectifier		5Y3GT		V3402
V3403	Tube, full-wave rectifier		6X5GT		V3403
V3404	Tube, beam power amplifier		6Y6G		V3404
V3405	Tube, twin triode		6SN7GT		V3405
V3406	Tube, voltage regulator		VR105		V3406
V3407	Tube, voltage regulator		VR150		V3407
X3401	Socket - 5 pin	1			X3401

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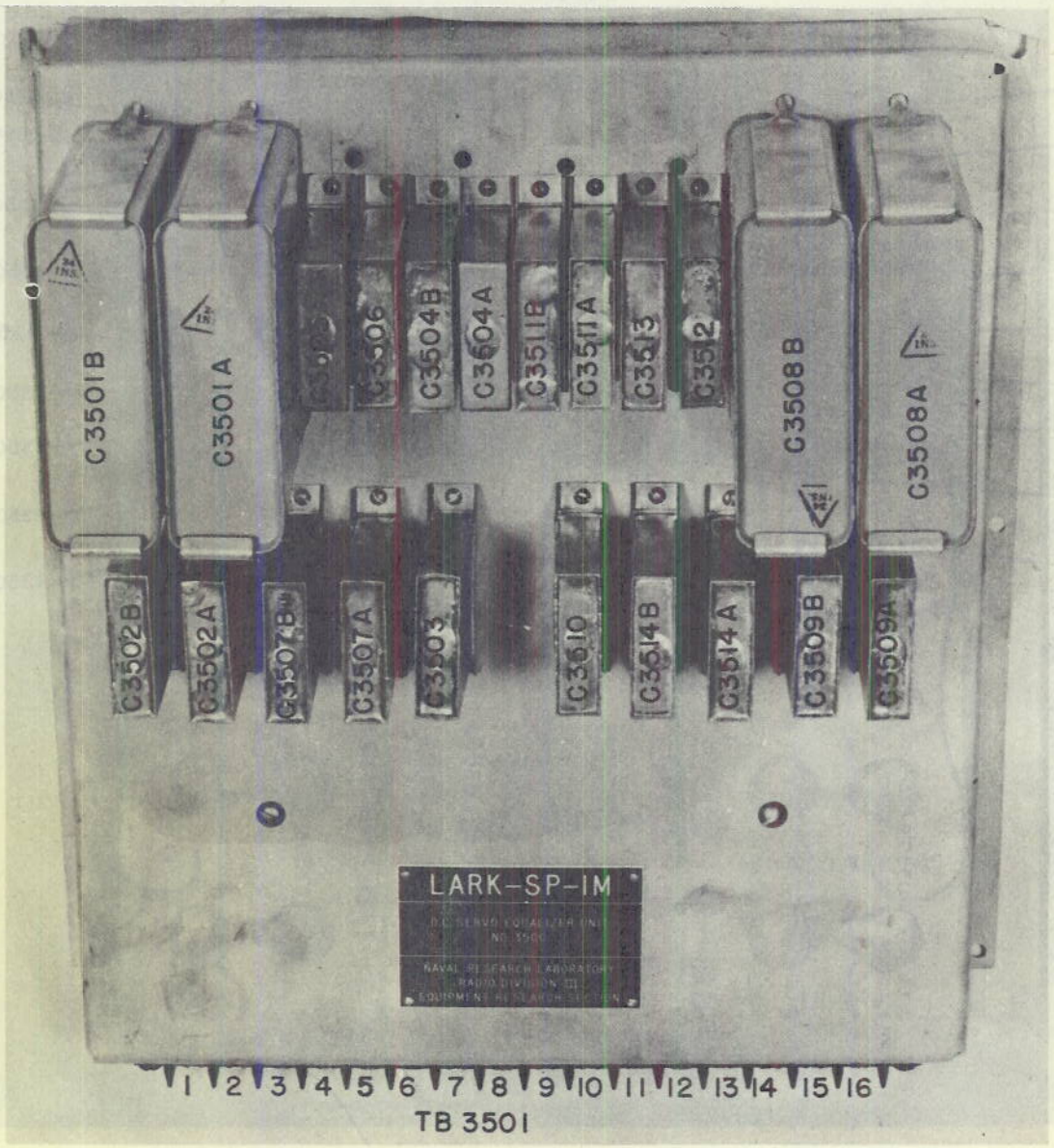

Figure 8-115. D-c Servo Equalizer Unit - Top View

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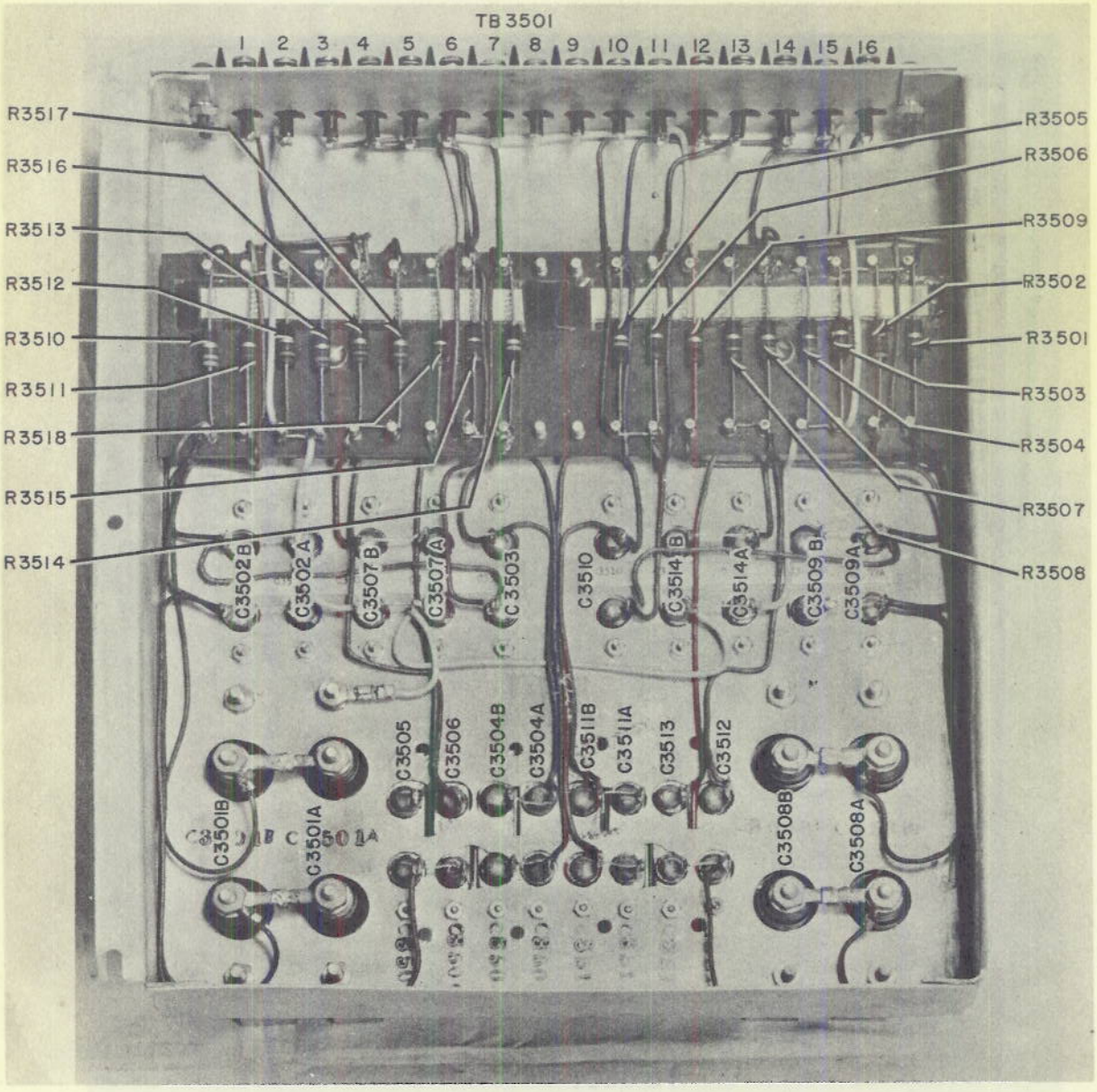

Figure 8-116. D-c Servo Equalizer Unit - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 3400, D-C SERVO AMPLIFIER POWER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
X3402	Socket-octal	11			X3402
X3403 thru X3405	Same as X3402				X3403 thru X3405
X3406	Socket-octal	1			X3406
X3407	Socket-octal	1			X3407
UNIT 3500, D-C SERVO EQUALIZER UNIT					
C3501A	10 mf, 600v, paper	10	25F47162		C3501A
C3501B	Same as C3501A				C3501B
C3502A	1 mf, 600v, paper	13	Y436100G		C3502A
C3502B	Same as C3502A				C3502B
C3503	Same as C3502A				C3503
C3504A	Same as C3502A				C3504A
C3504B	Same as C3502A				C3504B
C3505	Same as C3502A				C3505
C3506	Same as C3502A				C3506
C3507A	Same as C3502A				C3507A
C3507B	Same as C3502A				C3507B
C3508A	Same as C3501A				C3508A
C3508B	Same as C3501A				C3508B
C3509A	Same as C3502A				C3509A
C3509B	Same as C3502A				C3509B
C3510	Same as C3502A				C3510
C3511A	Same as C3502A				C3511A
C3511B	Same as C3502A				C3511B
C3512	Same as C3502A				C3512
C3513	Same as C3502A				C3513
C3514A	Same as C3502A				C3514A
C3514B	Same as C3502A				C3514B
R3501	5.6 K, 5% tol; 1 w; composition	4	GB5625		R3501
R3502	8.2 K, 5% tol; 1 w; composition	4	GB8225		R3502
R3503	270 ohms, 5% tol; 1 w; composition	4	GB2715		R3503
R3504	680 ohms, 5% tol; 1 w; composition	4	GB6815		R3504
R3505	10 K, 5% tol; 1 w; composition	4	GB1035		R3505
R3506	2 K, 5% tol; 1 w; composition	4	GB2025		R3506
R3507	180 ohms, 5% tol; 1 w; composition	4	GB1815		R3507
R3508	Same as R3507				R3508
R3509	100 ohms, 5% tol; 1 w; composition	4	GB1015		R3509
R3510	3.3 K, 5% tol; 1 w; composition	4	GB3325		R3510
R3511	Same as R3502				R3511
R3512	Same as R3507				R3512
R3513	Same as R3504				R3513
R3514	Same as R3505				R3514
R3515	1 K, 5% tol; 1 w; composition	4	GB1025		R3515
R3516	Same as R3507				R3516
R3517	Same as R3507				R3517
R3518	Same as R3509				R3518
TB3501	Terminal Board, 16 terminals, with lugs	386	16-142-Y		TB3501
UNIT 3600, SYNCHRO CAPACITOR UNIT					
C3601	10-10-10 mf, 90v, 60 cycles, delta-connected, paper, oil-filled		MK1 MOD3 Ord. 423426		C3601
C3602	Same as C3601				C3602

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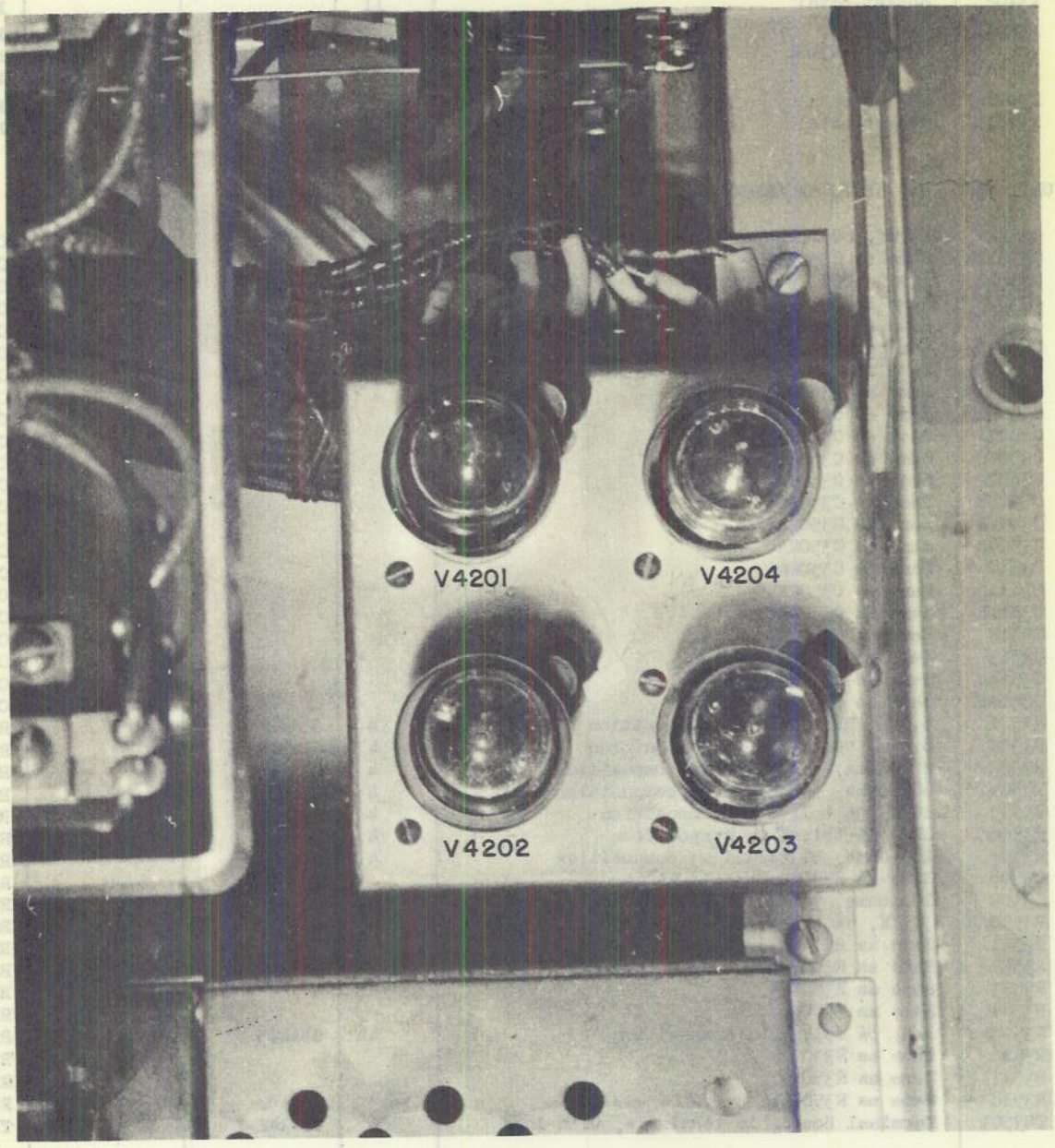

Figure 8-117. Missile Oscillator Preamplifier Power Supply - Top View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 4200, MISSILE OSCILLATOR PREAMPLIFIER POWER UNIT

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R4201	2.5 K, 10 w	623			R4201
R4202	8.2 K, 10 w	623			R4202
TB4201	Terminal Board	386	142-8		TB4201
V4201	Tube, voltage regulator		VR150		V4201
V4202	Same as V4201				V4202
V4203	Same as V4201				V4203
V4204	Tube, voltage regulator		VR105		V4204
X4201	Socket, octal	6	MIP-8TM		X4201
X4202	Same as X4201				X4202
X4203	Same as X4201				X4203
X4204	Same as X4201				X4204
UNIT 4300, MISSILE OSCILLATOR PREAMPLIFIER UNIT					
C4301	3000 mmf, 500v, mica	623			C4301
C4302	Same as C4301				C4302
C4303	1000 mmf, ceramic	16			C4303
C4304	Same as C4303				C4304
C4305	Same as C4303				C4305
C4306	100 mmf, ceramic	16			C4306
C4307	Same as C4303				C4307
C4308	Same as C4303				C4308
C4309	Same as C4303				C4309
C4310	Same as C4306				C4310
C4311	Same as C4303				C4311
C4312	Same as C4303				C4312
C4313	Same as C4303				C4313
C4314	3000 mmf, ceramic	16			C4314
C4315	Same as C4303				C4315
C4316	300 mmf, mica	623			C4316
C4317	Same as C4316				C4317
C4318	Same as C4303				C4318
C4319	Same as C4303				C4319
C4320	Same as C4303				C4320
C4321	5 mf, 400v, Solite	34			C4321
C4322	1000 mmf, mica	623			C4322
C4323	1 mf, 600vdc	18	K-35J639-4		C4323
C4324	0.1 mf, 600vdc	623	CSF481001		C4324
C4325	Same as C4324				C4325
C4326	0.005 mf, mica	623			C4326
C4327	Same as C4326				C4327
C4328	0.01 mf, mica	623			C4328
C4339	0.1 mf, 1000vdc	13	DYR10011		C4339
C4330	5 mf, 600 vdc	13	TJV6050G		C4330
C4331	Same as C4328				C4331
C4332	Same as C4330				C4332
C4333	Same as C4330				C4333
C4334) C4335)	0.5 mf, 600vdc } dual 0.5 mf, 600vdc }	13	DYR6055		C4334) C4335)
C4336	0.015 mf, mica	623			C4336
C4337	Same as C4336				C4337
C4338	0.021 mf, mica	623			C4338
C4339	0.25 mf, 600vdc	2	481003		C4339
CR4301	Crystal Rectifier	649	1N38		CR4301
CR4302	Same as CR4301				CR4302
I4301	Pilot Light Assembly	18	Mazda-44		I4301
J4301	Connector, coaxial	374	UG290V		J4301
J4302	Connector, coaxial	374	UG58V		J4302

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Figure 8-118. Missile Oscillator Preamplifier Unit - Front View

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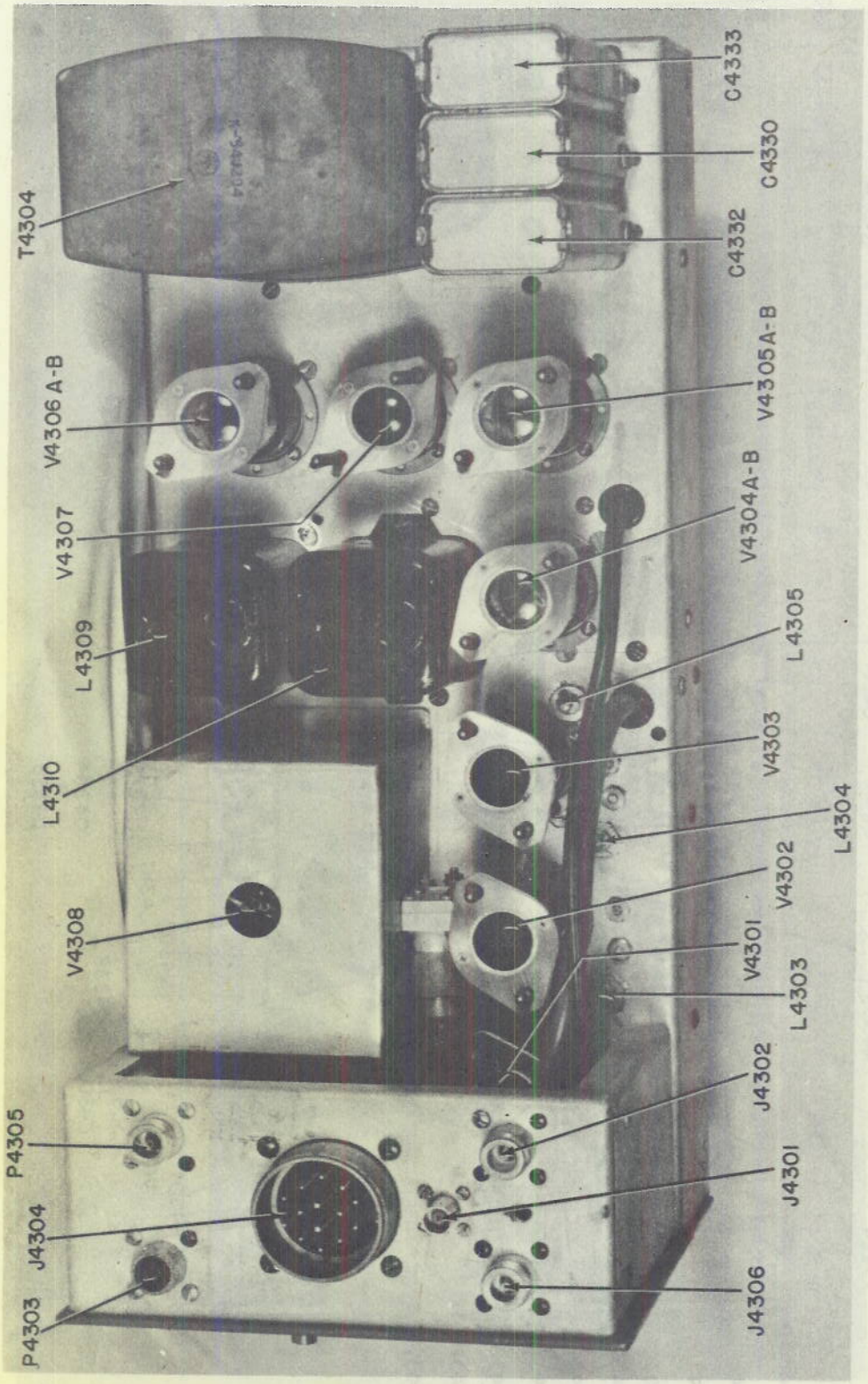

Figure 8-119. Missile Oscillator Preamplifier Unit - Top View

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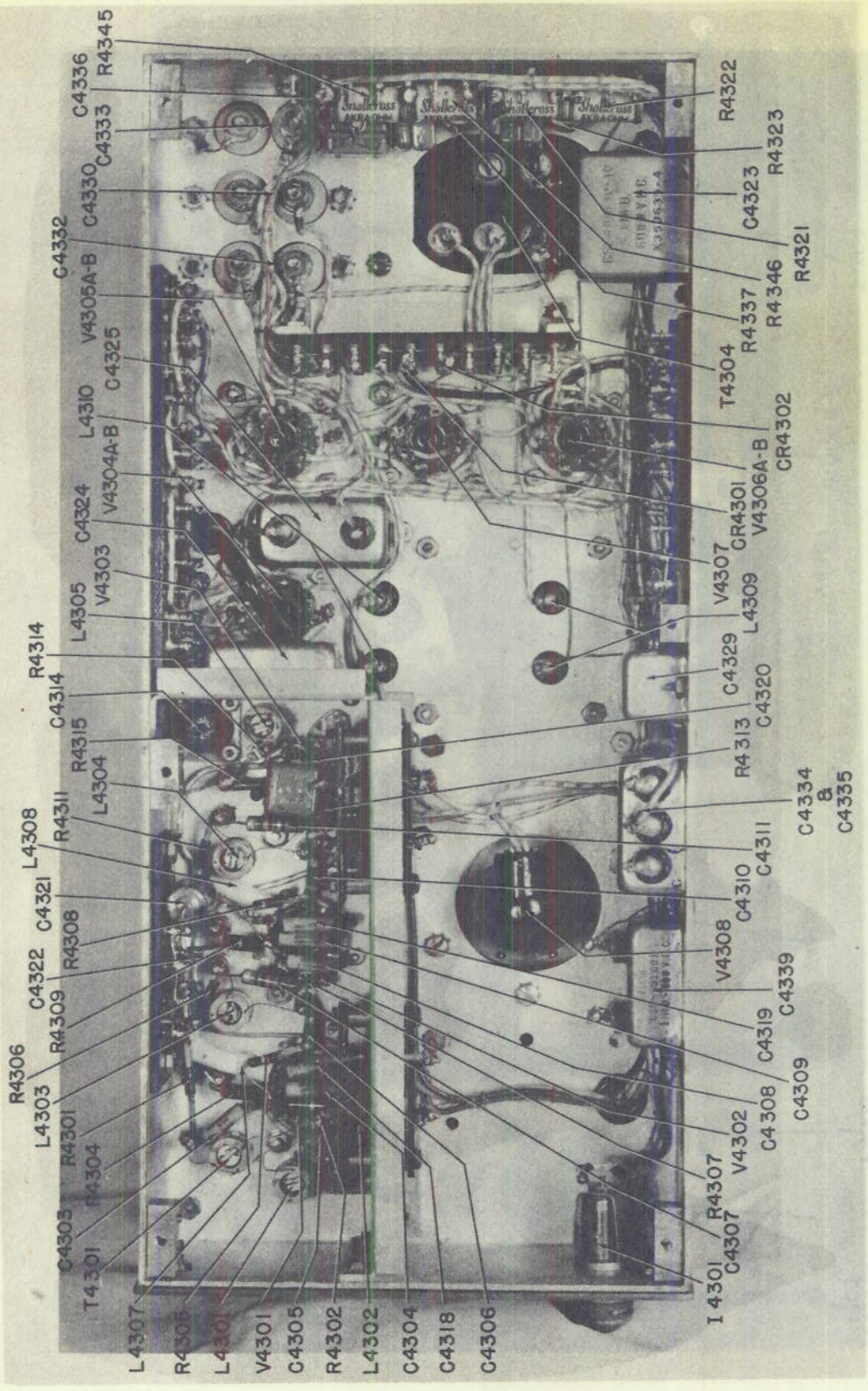

Figure 8-120. Missile Oscillator Preamplifier Unit - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 4300, MISSILE OSCILLATOR PREAMPLIFIER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
J4303	Connector, socket cable	597	JPT-5		J4303
J4304	Receptacle	6	AN-2102-28 2P		J4304
J4305	Same as J4302				J4305
J4306	Same as J4302				J4306
L4301	Coil, i-f	NRL			L4301
L4302	Coil, i-f	NRL			L4302
L4303	Coil, i-f	NRL			L4303
L4304	Coil, i-f	NRL			L4304
L4305	Coil, i-f	NRL			L4305
L4306	Filament Choke	NRL			L4306
L4307	Filament Choke	NRL			L4307
L4308	Filament Choke	NRL			L4308
L4309	Inductance		352-7184		L4309
L4310	Same as L4309				L4310
M4301	Milliameter, 0-1 milliamp	18	MR34W001 DC MA		M4301
R4301	220 ohms, 1 w	4			R4301
R4302	160 ohms, 1 w	4			R4302
R4304	4.7 K, 1 w	4			R4304
R4305	1 K, 1 w	4			R4305
R4306	Same as R4301				R4306
R4307	Same as R4302				R4307
R4308	Same as R4305				R4308
R4309	Same as R4304				R4309
R4310	Same as R4305				R4310
R4311	Same as R4301				R4311
R4312	150 K, 1 w	4			R4312
R4313	Same as R4304				R4313
R4314	3.9 K, 1 w	4			R4314
R4315	Same as R4305				R4315
R4316	Same as R4305				R4316
R4317	47 K, 1 w	4			R4317
R4318	56 K, 1 w	4			R4318
R4319	100 K, 1 w	4			R4319
R4320	Same as R4305				R4320
R4321	Same as R4317				R4321
R4322	520 K, wire wound, precision	2025			R4322
R4323	260 K, wire wound, precision	2025			R4323
R4324	Same as R4322				R4324
R4329	Same as R4319				R4329
R4330	Same as R4305				R4330
R4331	Same as R4319				R4331
R4332	Same as R4319				R4332
R4333	8.2 K, 1 w				R4333
R4334	1.8 K, 1 w				R4334
R4335	Same as R4319				R4335
R4336	Same as R4333				R4336
R4337	Same as R4334				R4337
R4338	5.6 K, 1 w				R4338
R4339	1 meg, 1 w				R4339
R4340	680 ohms, 1 w				R4340
R4341	Same as R4319				R4341
R4342	Same as R4318				R4342
R4343	Same as R4312				R4343
R4344	Same as R4319				R4344
R4345	560 K, wire wound, precision	2025			R4345
R4346	Same as R4345				R4346
R4347	Same as R4345				R4347

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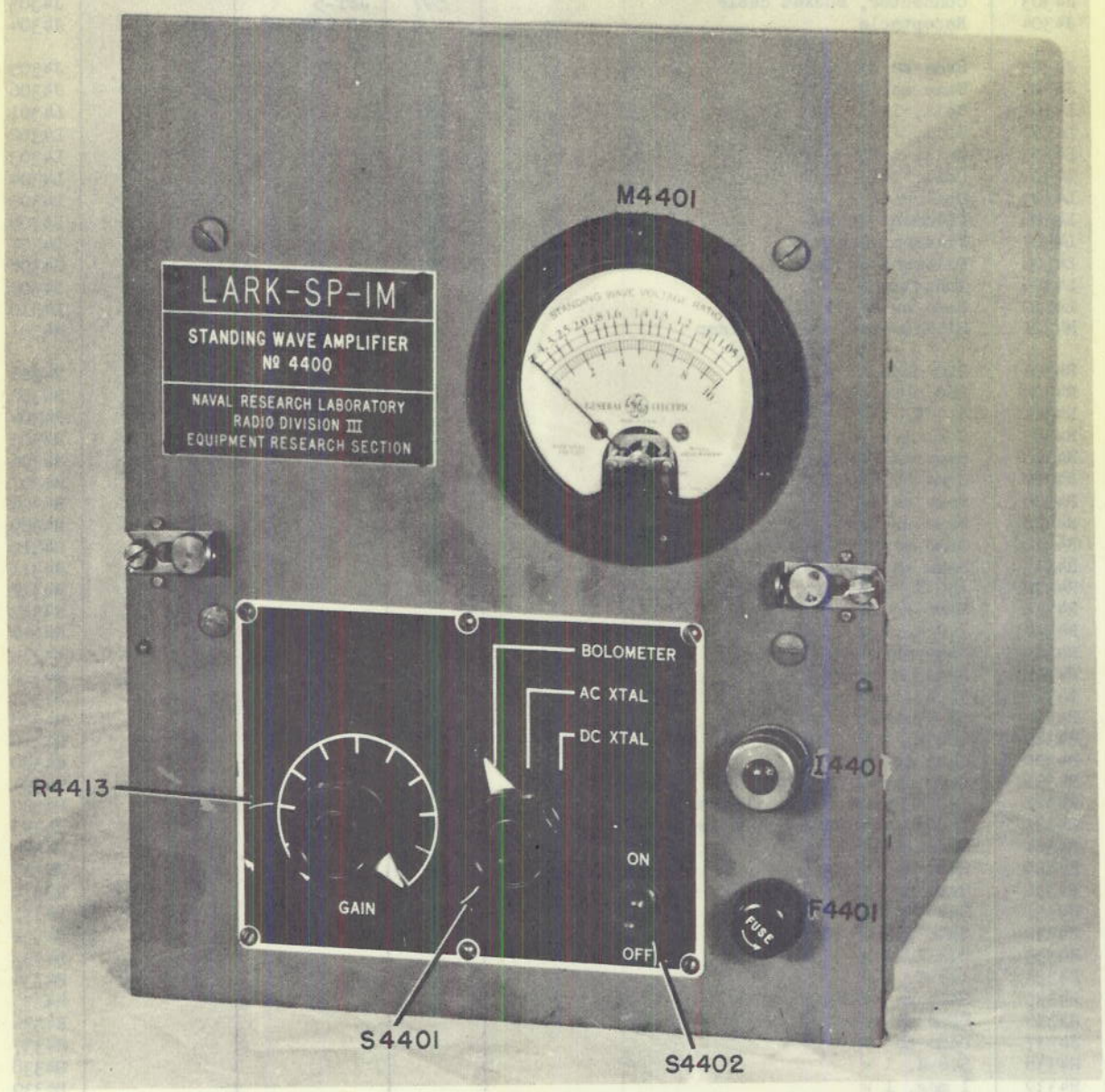

Figure 8-121. Standing Wave Amplifier - Front View

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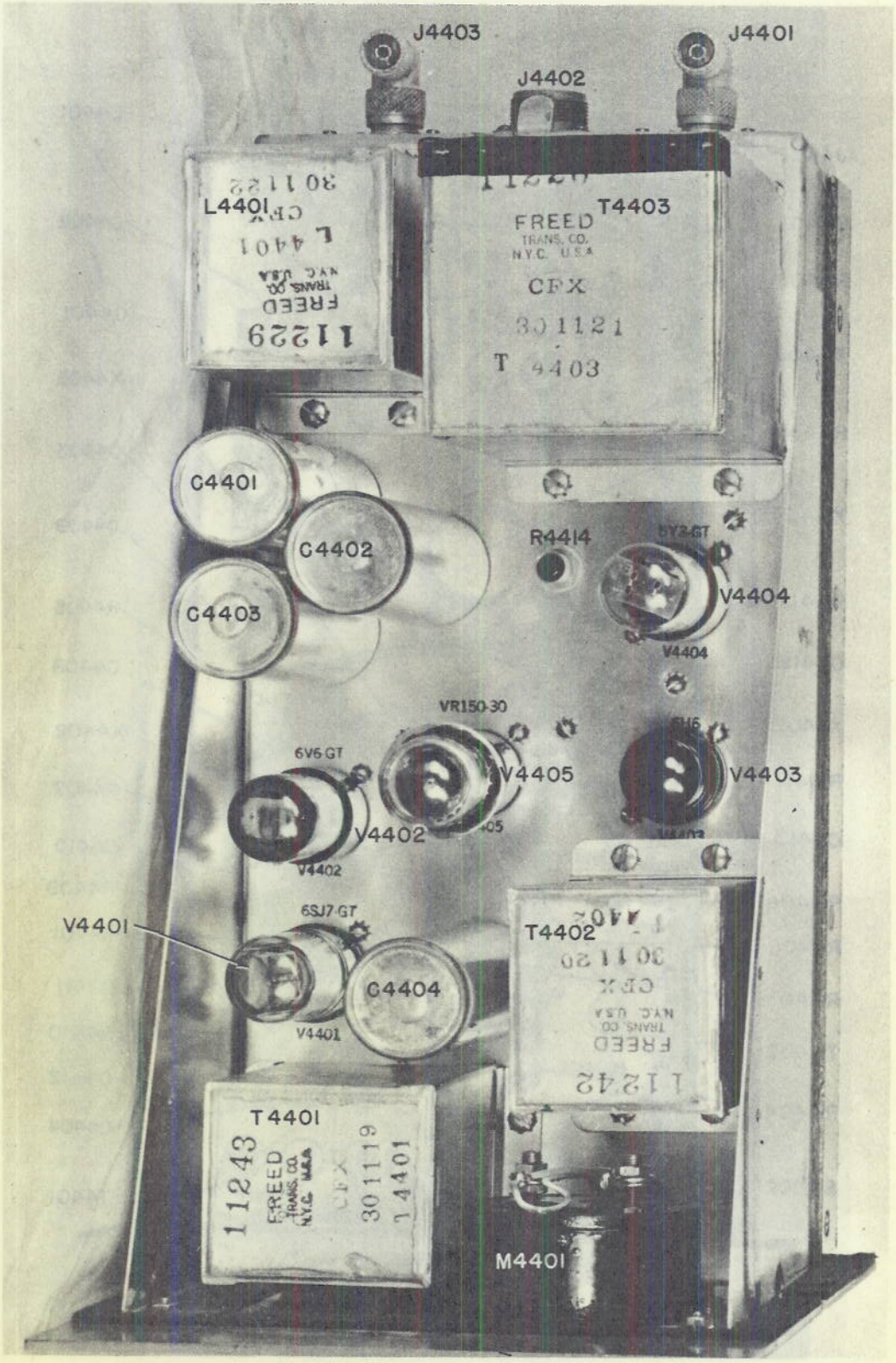

Figure 8-122. Standing Wave Amplifier - Top View

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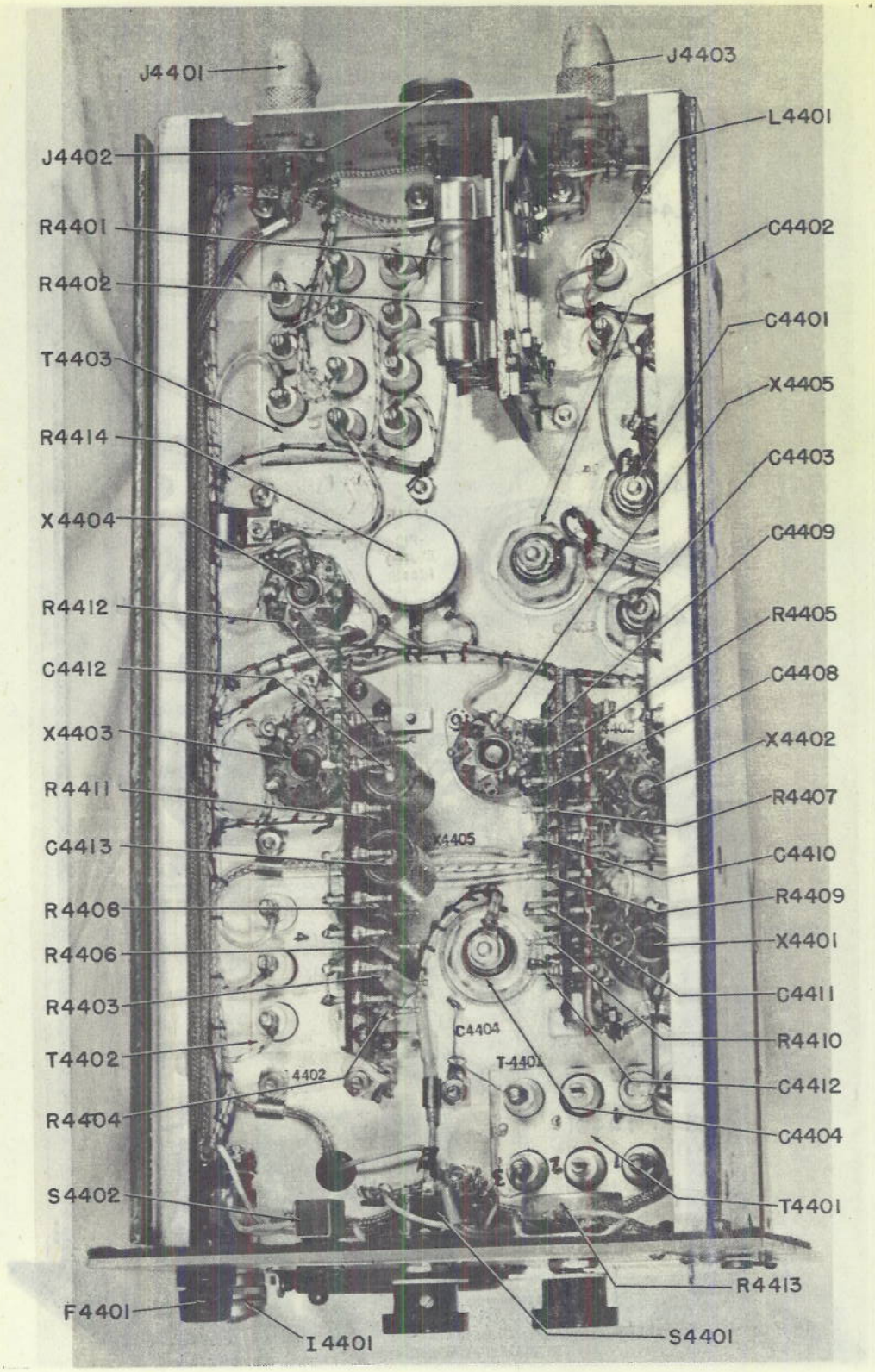

Figure 8-123. Standing Wave Amplifier - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 4300, MISSILE OSCILLATOR PREAMPLIFIER UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R4348	Same as R4302				R4348
T4304	Filament Transformer	18	K54J204		T4304
V4301	Tube, television amplifier pentode		6AC7		V4301
V4302	Same as V4301				V4302
V4303	Same as V4301				V4303
V4304	Tube, twin triode		6SL7		V4304
V4305	Same as V4304				V4305
V4306	Same as V4304				V4306
V4307	Tube, twin diode		6H6		V4307
V4308			2K28		V4308
X4301	Socket, octal	6	MIP-8TM		X4301
X4302 thru X4307	Same as X4301				X4302 thru X4307
X4308	Socket for V4308	11	9861-W1		X4308
UNIT 4400, STANDING WAVE AMPLIFIER					
C4401	4 mf, 600v	13	TLA6040		C4401
C4402	Same as C4401				C4402
C4403	Same as C4401				C4403
C4404	Same as C4401				C4404
C4405	0.25 mf, 1000v	34	XDMRW-10-.25 -10		C4405
C4407	Same as C4405				C4407
C4408	50 mmf, 500v, mica	18	BSC		C4408
C4409	500 mmf, 500v, mica	18	BSC		C4409
C4410	Same as C4409				C4410
C4411	Same as C4409				C4411
C4412	Same as C4409				C4412
C4413	0.02 mf, 600v	34	XT1MW-6		C4413
C4414	0.01 mf, 400v	34	XT1MW-4		C4414
F4401	Fuse, 2 amps	26	4AG		F4401
I4401	Pilot Light, 6.3v, 25 amps, bayonet socket	649	S-44		I4401
J4401	Connector, bolometer	6	83-1R		J4401
J4402	Line Connector Assembly	6	AN-3012-16S -4P		J4402
J4403	Connector, wavemeter	6	83-1R		J4403
L4401	Filter Choke, 10 henries, 65 milliamps	283	11229		L4401
M4401	Milliameter, 0-1 milliamp, dc, 3-1/2 inches	18	80041AA M231		M4401
R4401	2 K, 10 w	623			R4401
R4402	Same as R4401				R4402
R4403	18 K, 2 w	4			R4403
R4404	1 K, 1/2 w	4			R4404
R4405	2 meg, 1/2 w	4			R4405
R4406	800 ohms, 1 w	4			R4406
R4407	50 K, 1 w	4			R4407
R4408	300 K, 1 w	4			R4408
R4409	1 meg, 1 w	4			R4409
R4410	Same as R4409				R4410
R4411	1.5 K, 1 w	4			R4411
R4412	15 K, 1 w	4			R4412
R4413	500 K, 1/2 w, pot.	21	VC-9861		R4413
R4414	Same as R4413				R4414
S4401	Switch, 3 pole, 3 throw	31	2541A-HI		S4401
S4402	Switch, toggle, SPST	7	20992-DQ		S4402
T4401	Audio Input Transformer	283	11243		T4401

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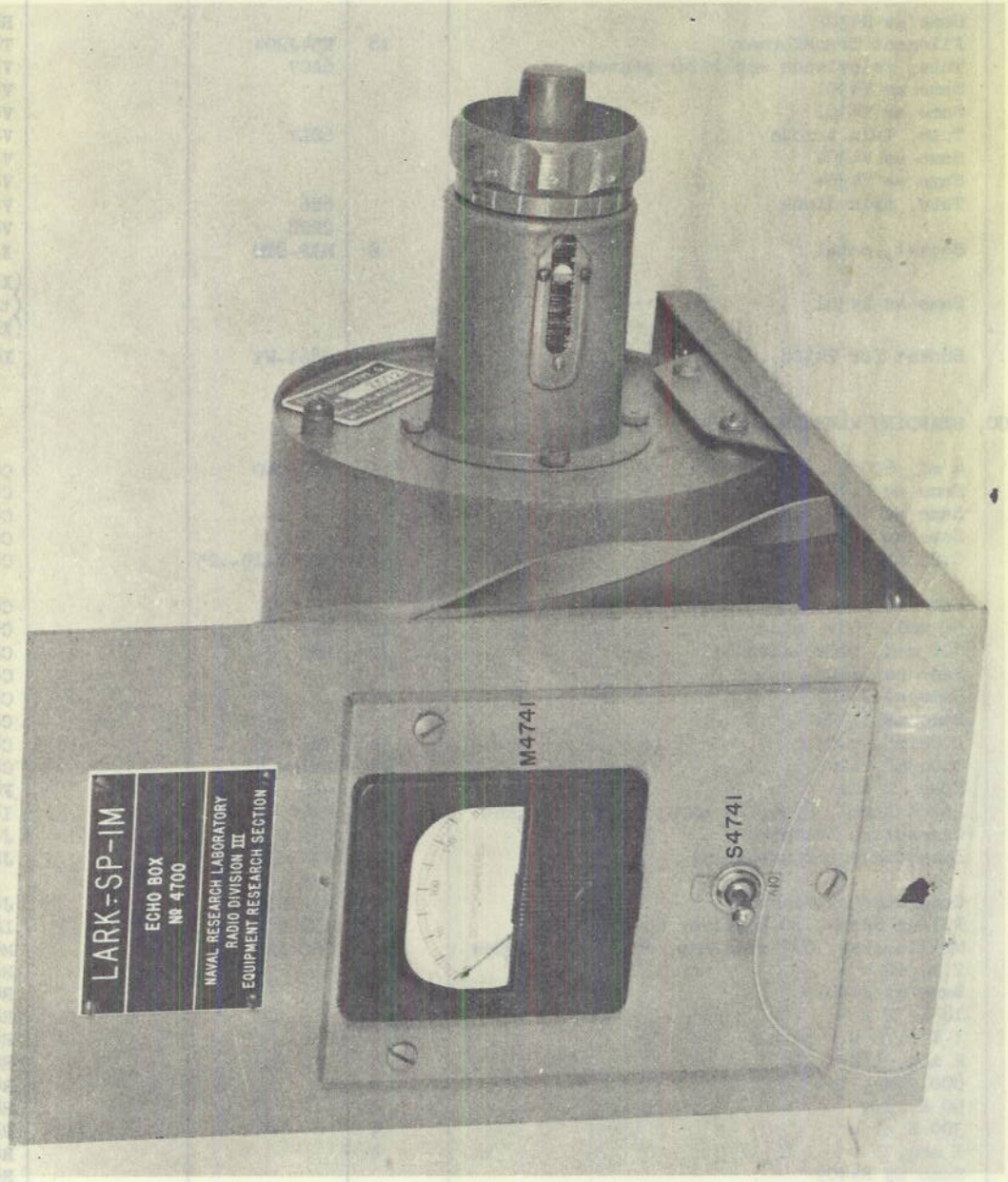

Figure 8-124. Echo Box - Front View

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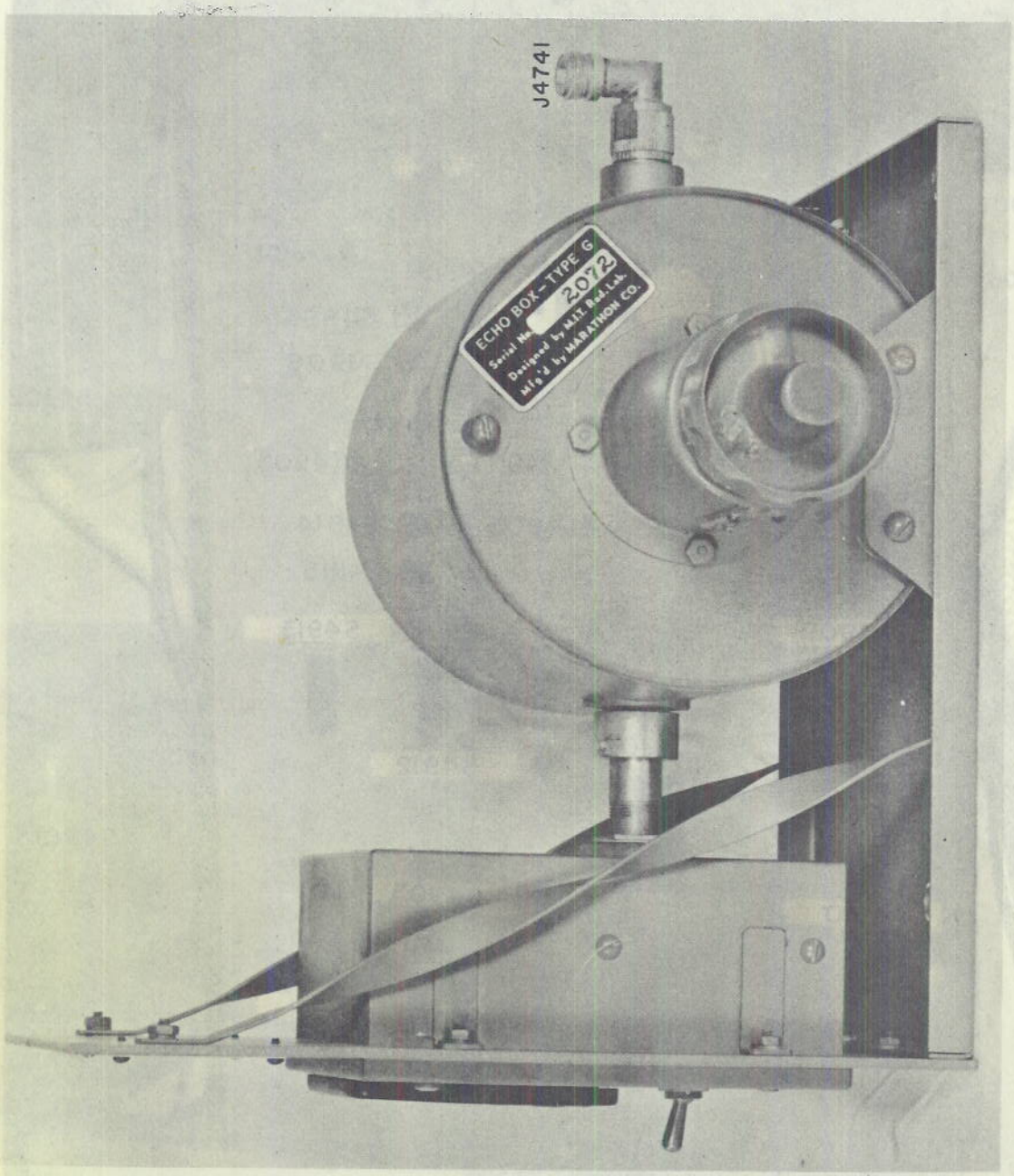

Figure 8-125. Echo Box - Right Side View

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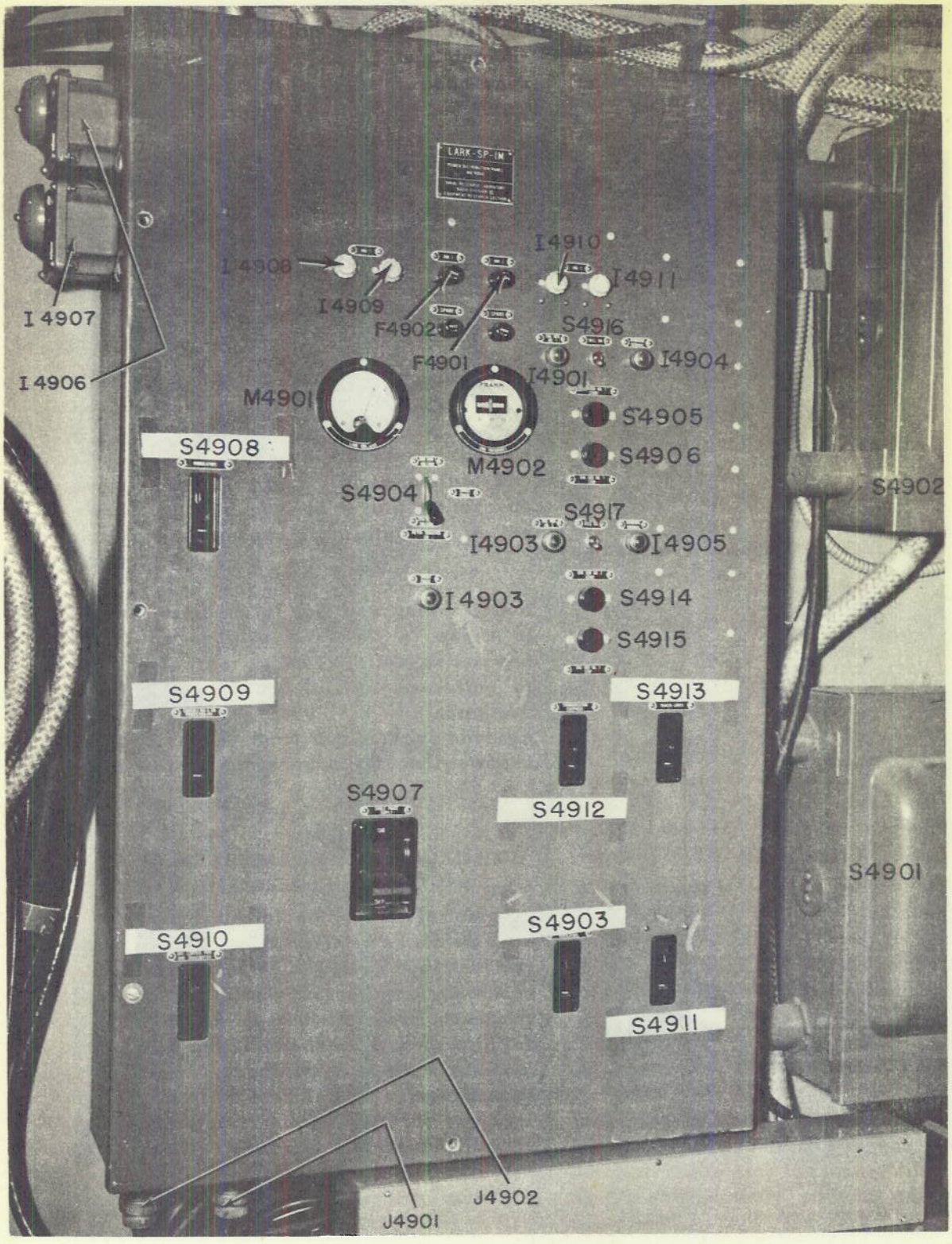

Figure 8-126. Power Distribution Panel With Door Closed - Front View

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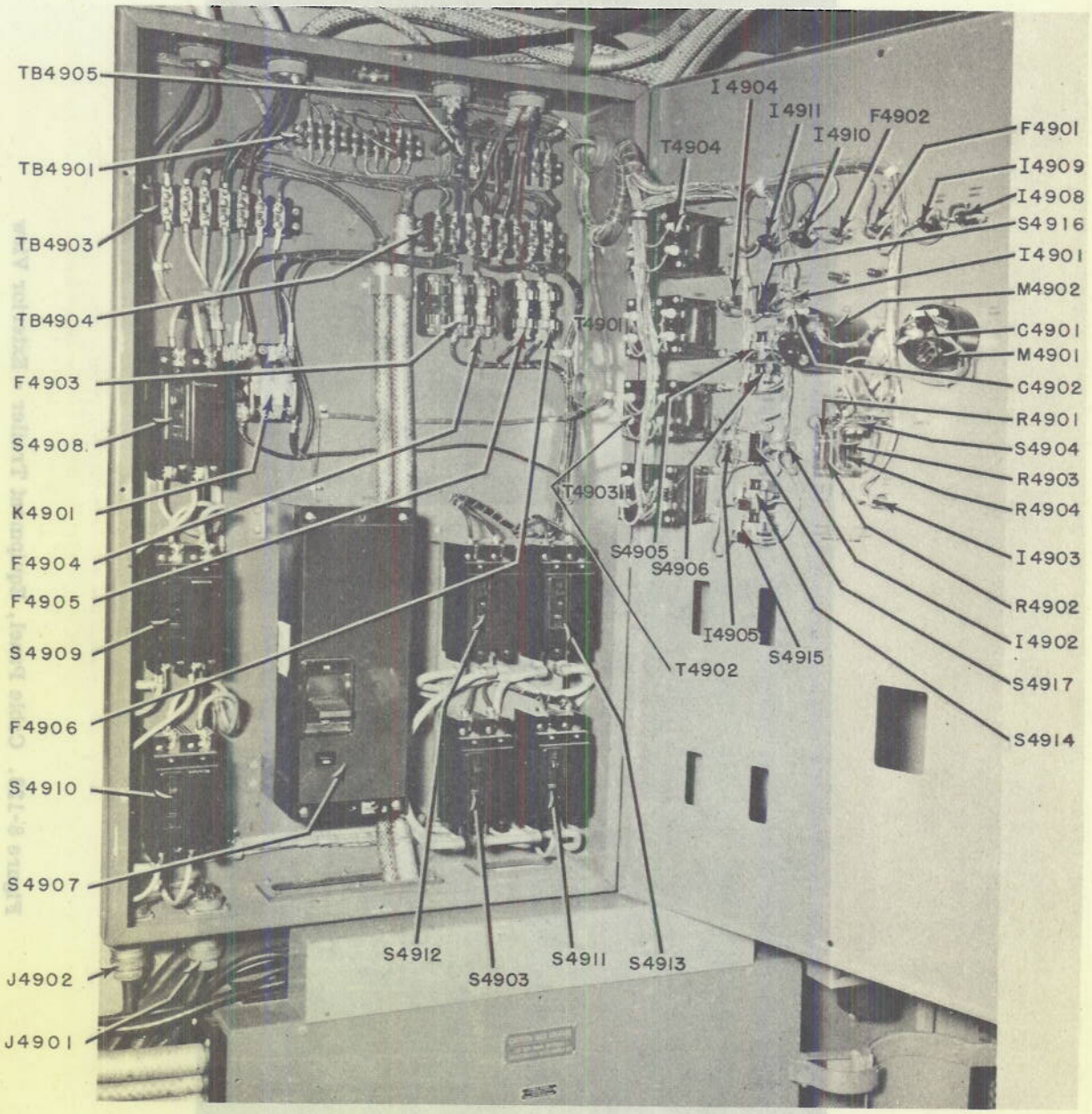

Figure 8-127. Power Distribution Panel With Door Open - Front View

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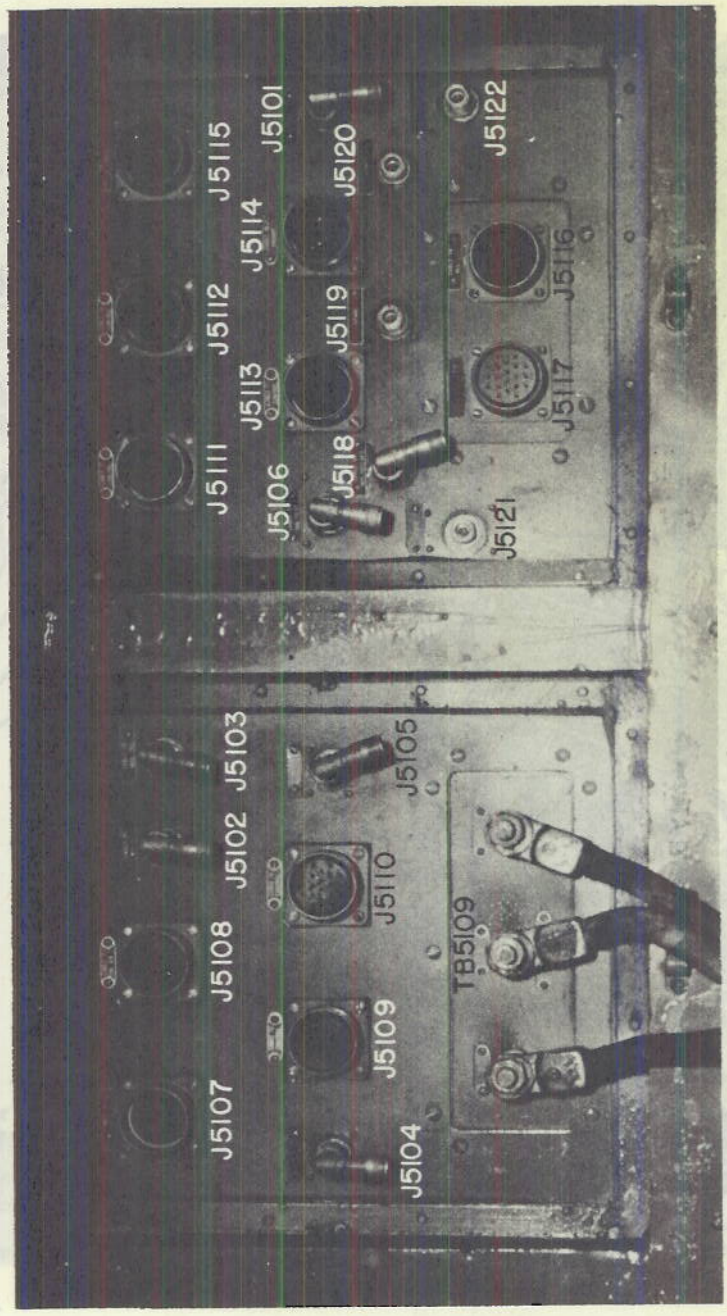

Figure 8-128. Cable Panel, Equipment Trailer - Exterior View

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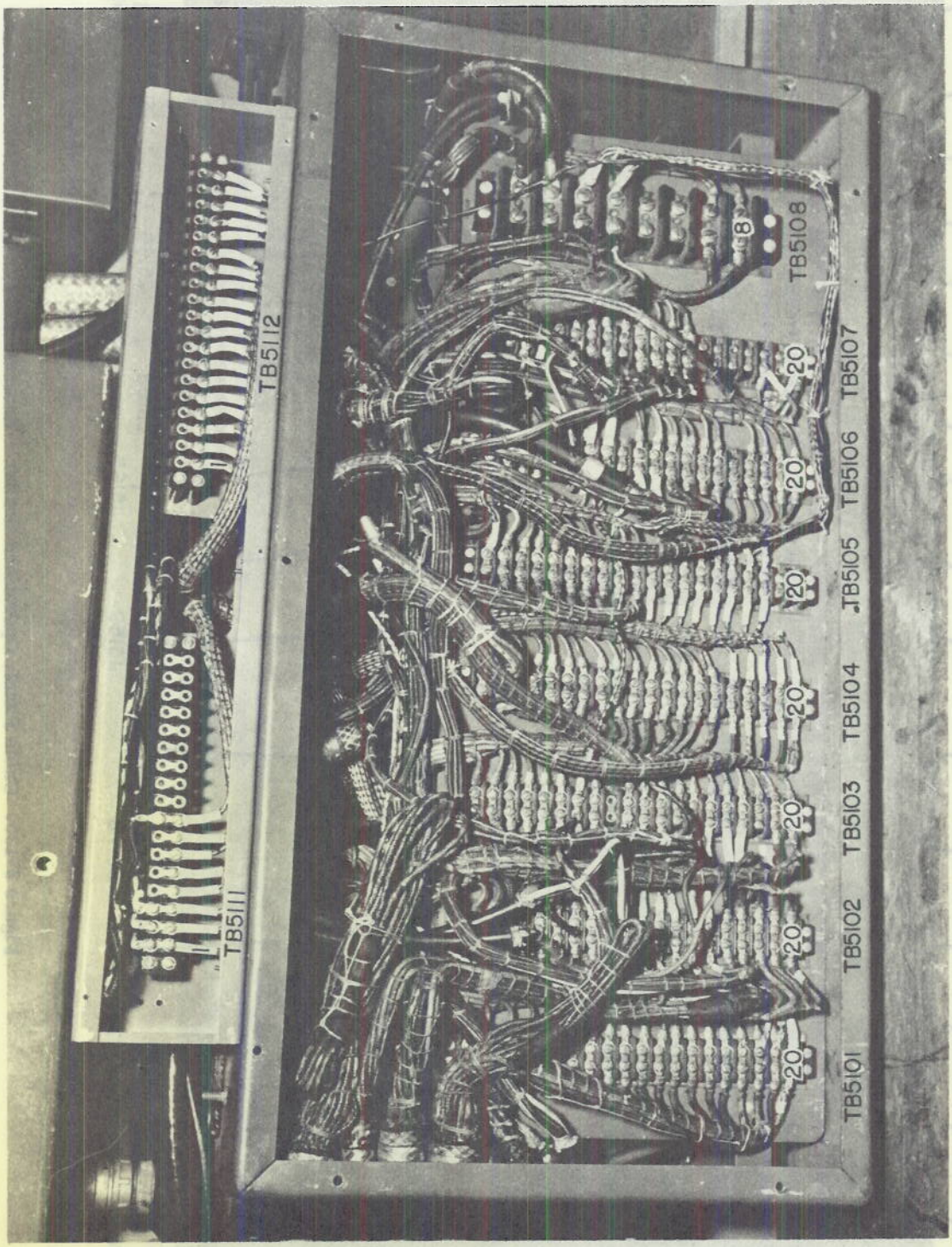

Figure 8-129. Cable Panel, Equipment Trailer - Interior View

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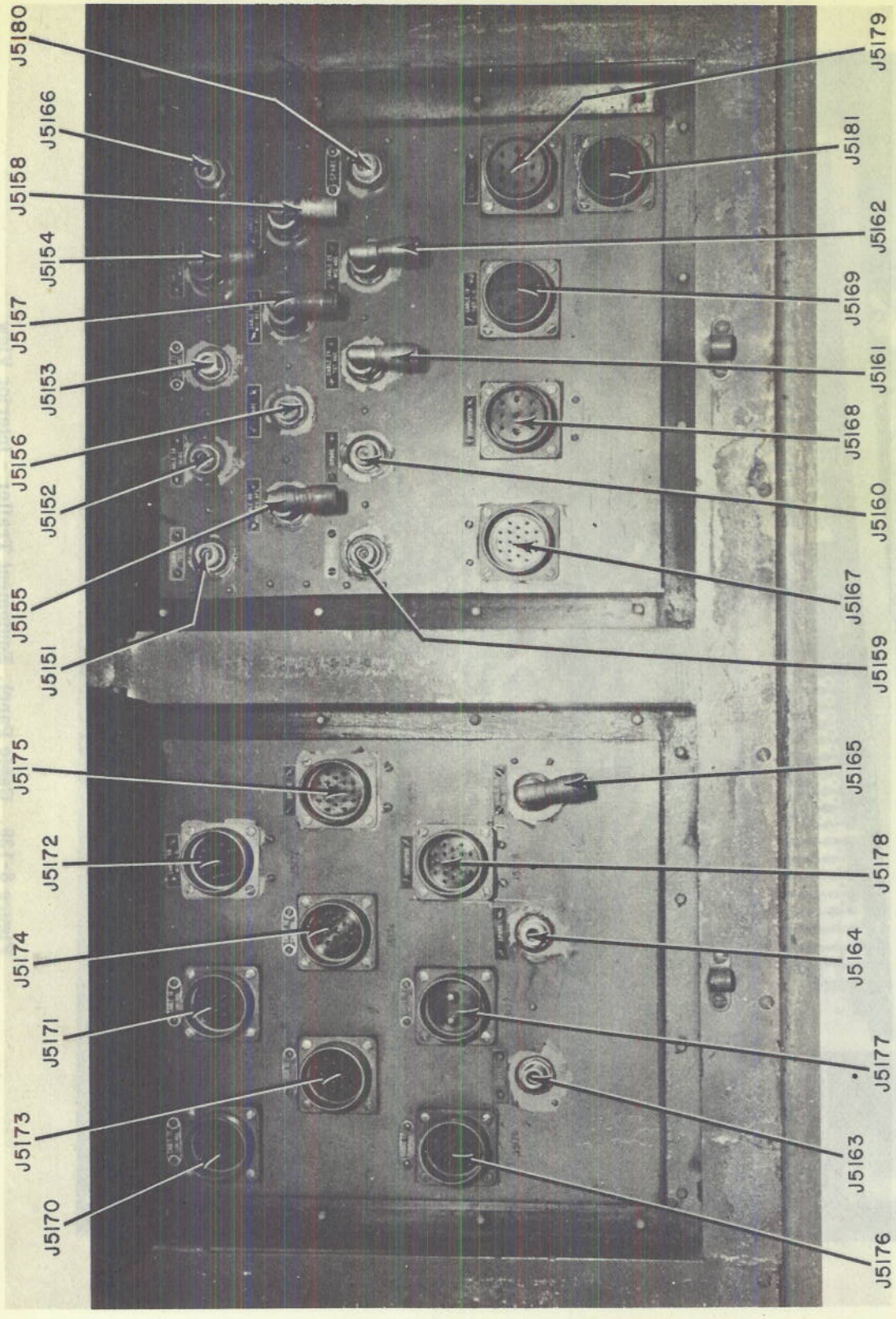

Figure 8-130. Cable Panel, Operations Trailer - Exterior View

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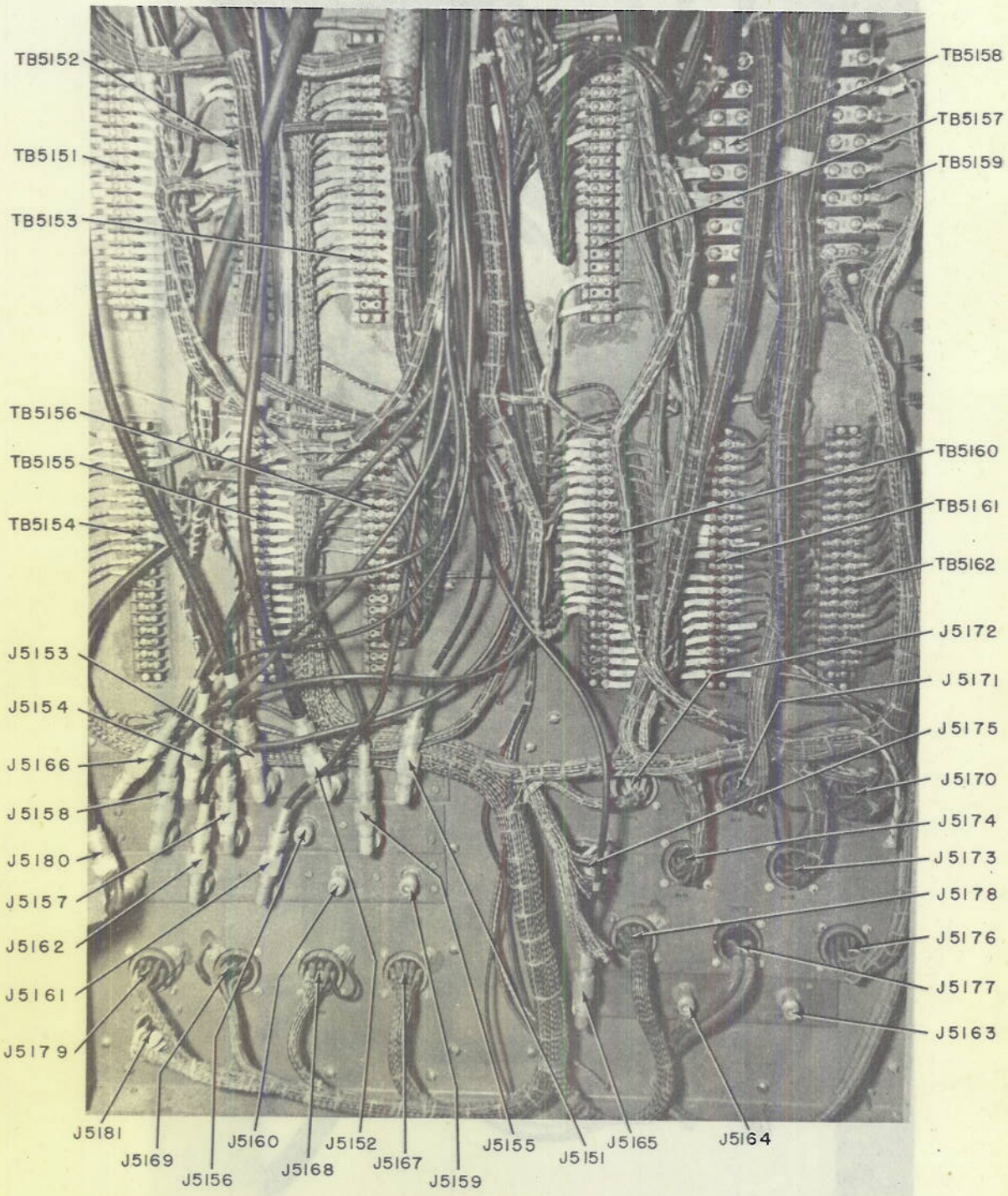

Figure 8-131. Cable Panel, Operations Trailer - Interior View

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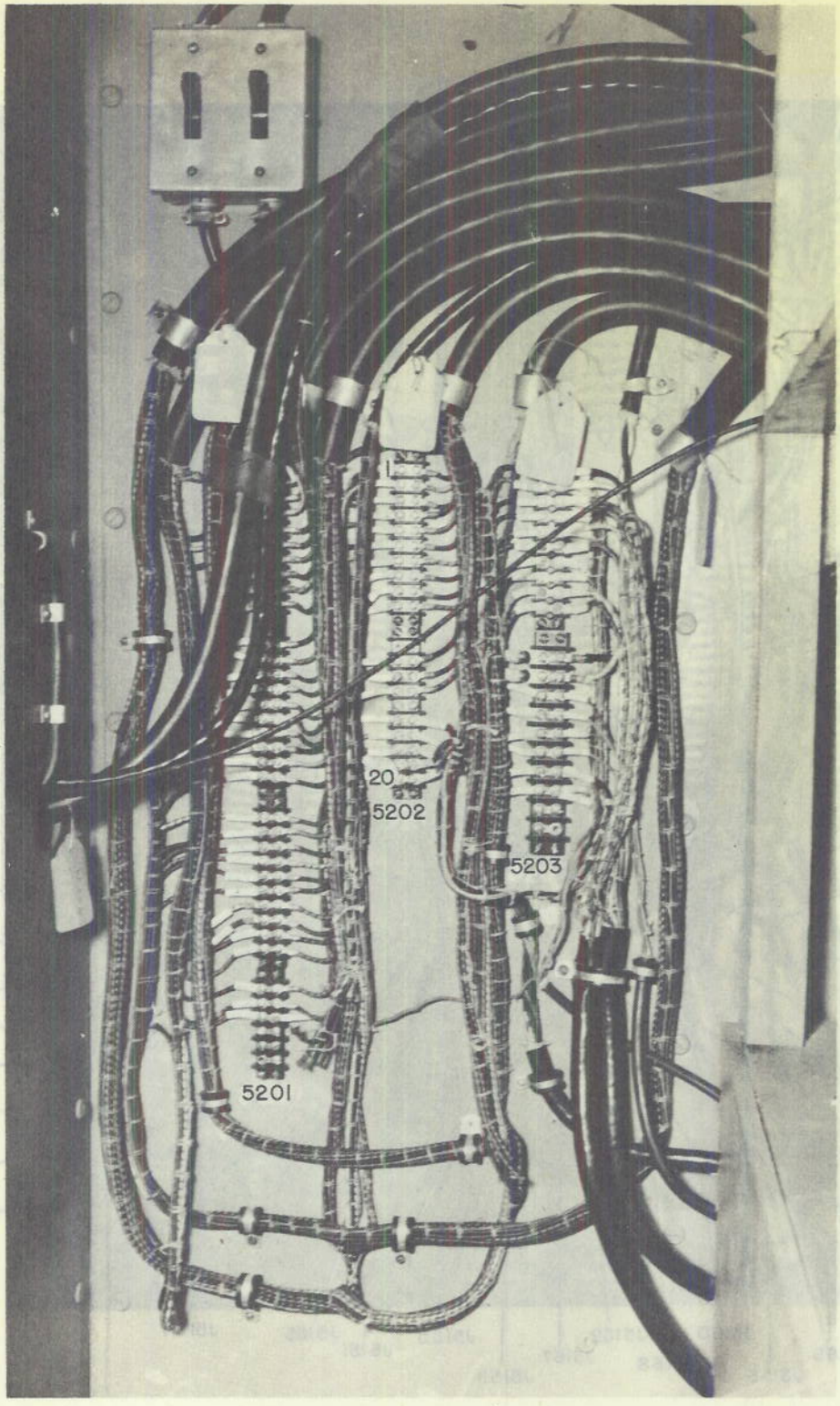

Figure 8-132. Recording Equipment Cable Panel, Operations Trailer

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 4400, STANDING WAVE AMPLIFIER (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
T4402	Audio Output Transformer	283	11242		T4402
T4403	Power Transformer	283	11220		T4403
V4401	Tube, triple-grid amplifier		6SJ7		V4401
V4402	Tube, beam power amplifier		6V6		V4402
V4403	Tube, twin diode		6H6		V4403
V4404	Tube, full-wave rectifier		5Y3GT		V4404
V4405	Tube, voltage regulator		VR150		V4405
X4401	Socket, octal	6	MIP-8TM		X4401
X4402 thru X4405	Same as X4401				X4402 thru X4405

UNIT 4700, ECHO BOX

C4741	2 mf, 600v	13	DYR6200		C4741
E4741	Crystal	18	IN21		E4741
J4741	Jack	832	T-7663279-G2		J4741
M4741	Ammeter, 0-200w	18	D053		M4741
R4741	25 ohms	21	BW-1/2		R4741
S4741	Switch, SPST	7	81015K		S4741

UNIT 4800, COMMUNICATIONS EQUIPMENT

Complete parts and spare parts lists can be found in SP-1M Parts List as follows:

1. Communications Unit: sheets 328 to 342
2. BD-72-B, Telephone Switchboard: Instruction Book, pages 21 to 23
3. SCR-624, VHF Radio: Instruction Book AN-08-10-185, pages 79 to 119
4. TCS-12, MHF Radio: Instruction Book, pages 85 to 136, sheets 585A to 585B
5. CRR-23367, Selector Control Unit: Instruction Book, pages 34 to 38

UNIT 4900, POWER DISTRIBUTION PANEL

All parts of this unit are the same as those listed in the SP-1M Spare Parts List with the following additions:

K4901	Relay, 115 vac, 30 amps, Leach Relay Co.	25	Type 6104		K4901
TB4905	Terminal Board, 6 terminals				TB4905

UNIT 5000, 15-KW GASOLINE ENGINE ALTERNATOR

Complete parts and spare parts lists can be found in SP-1M Parts List, sheets 585C to 585N

UNIT 5300, POWER UNIT PE137

See section IV of War Department Technical Manual, Power Unit PE-137A, dated 15 Sept 1943, TM 11-921

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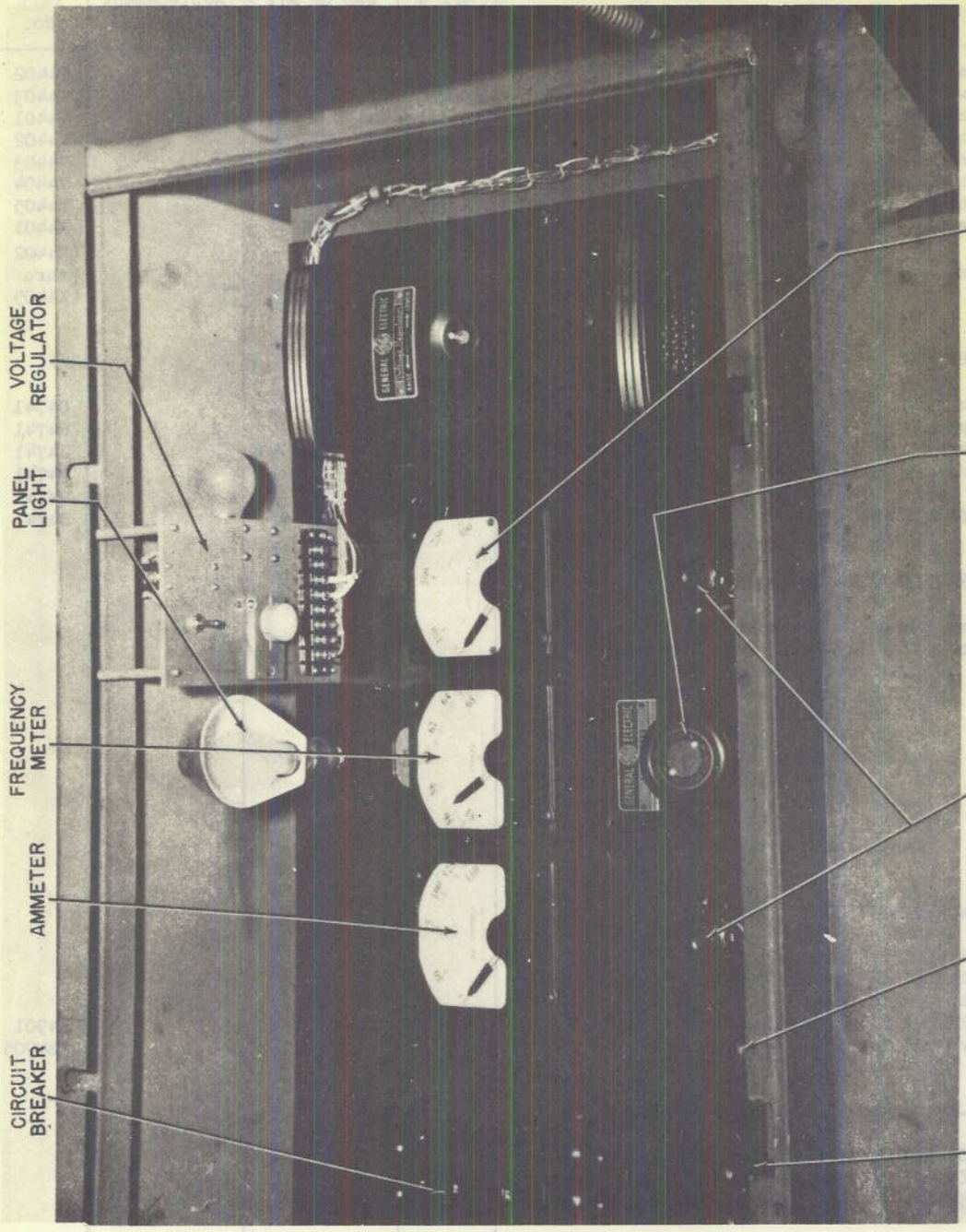

Figure 8-133. Power Unit PE137A - Control Panel

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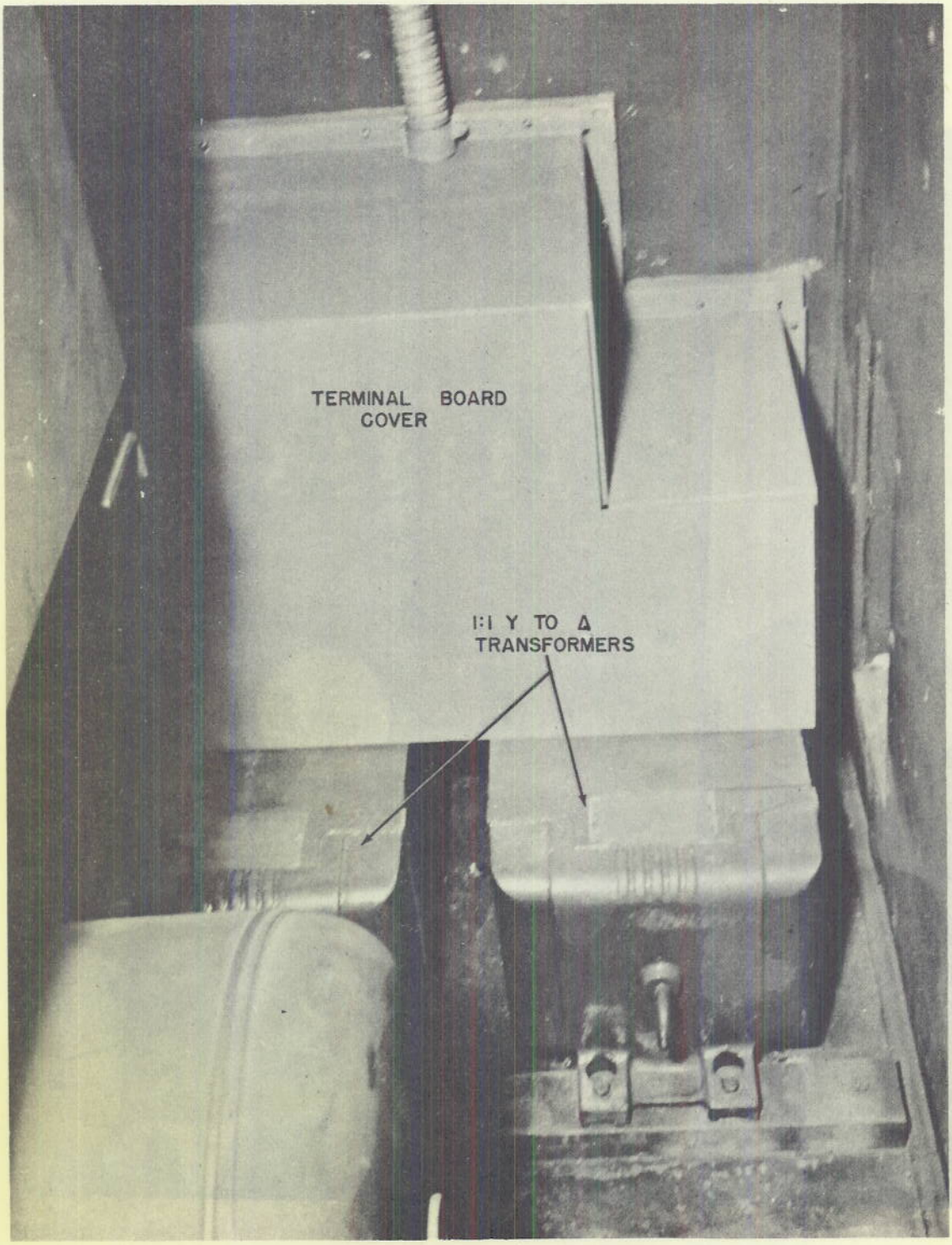

Figure 8-134. Power Panel Unit PE137A - Transformers

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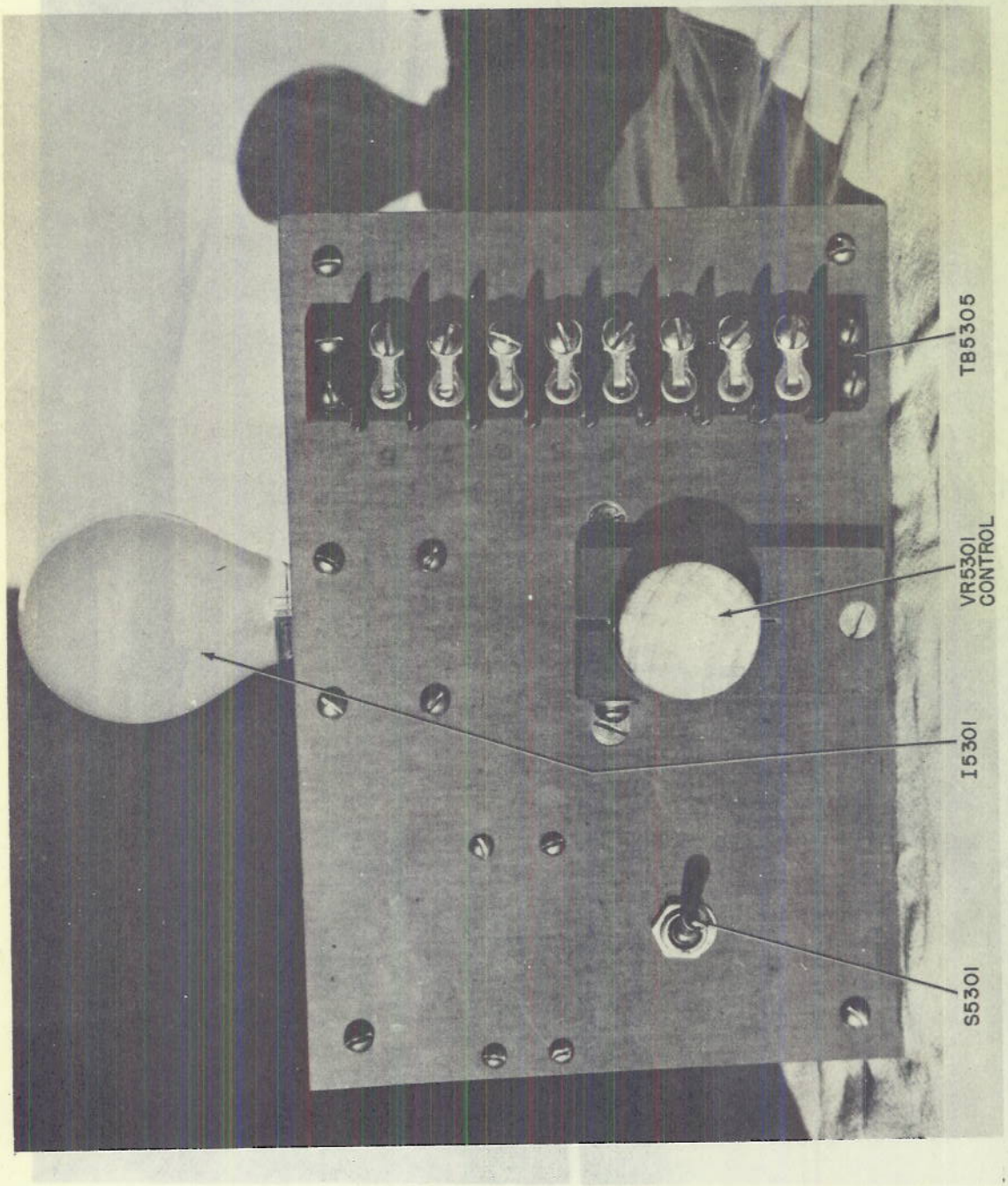

Figure 8-135. A-c Voltage Regulator for Power Unit PE137A - Front View

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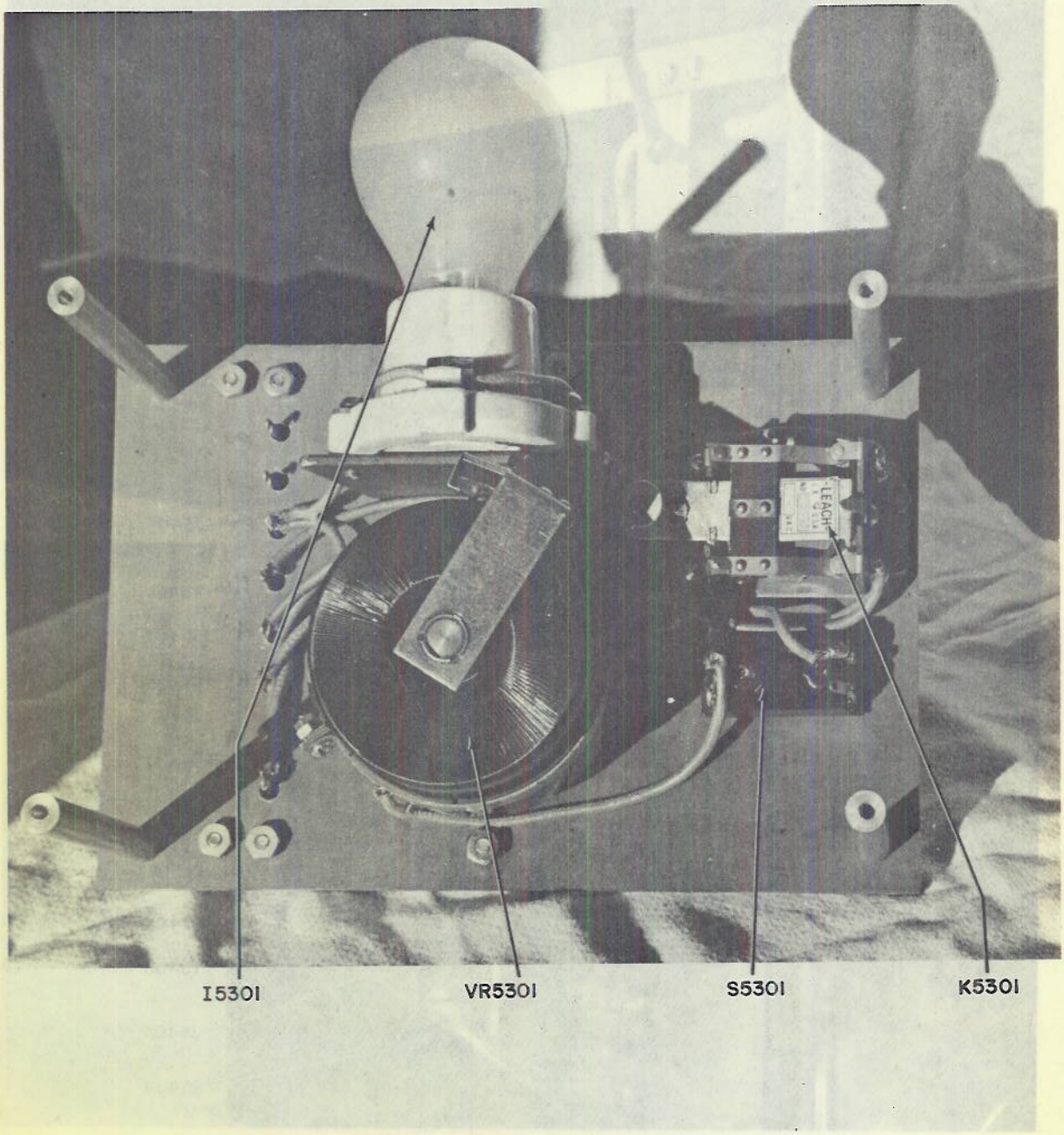

Figure 8-136. A-c Voltage Regulator for Power Unit PE137A - Rear View

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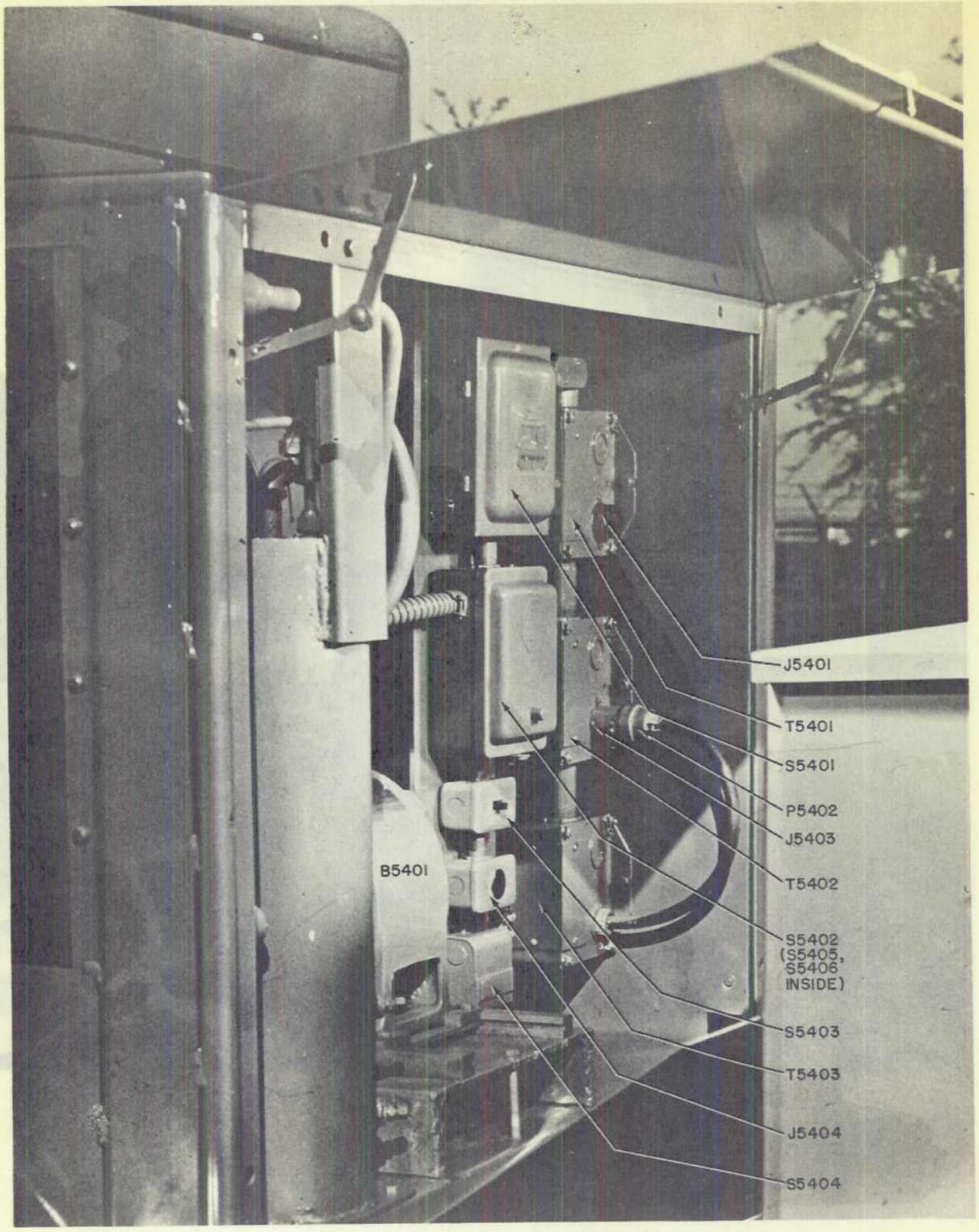

Figure 8-137. Dehumidifier Unit - Control Panel

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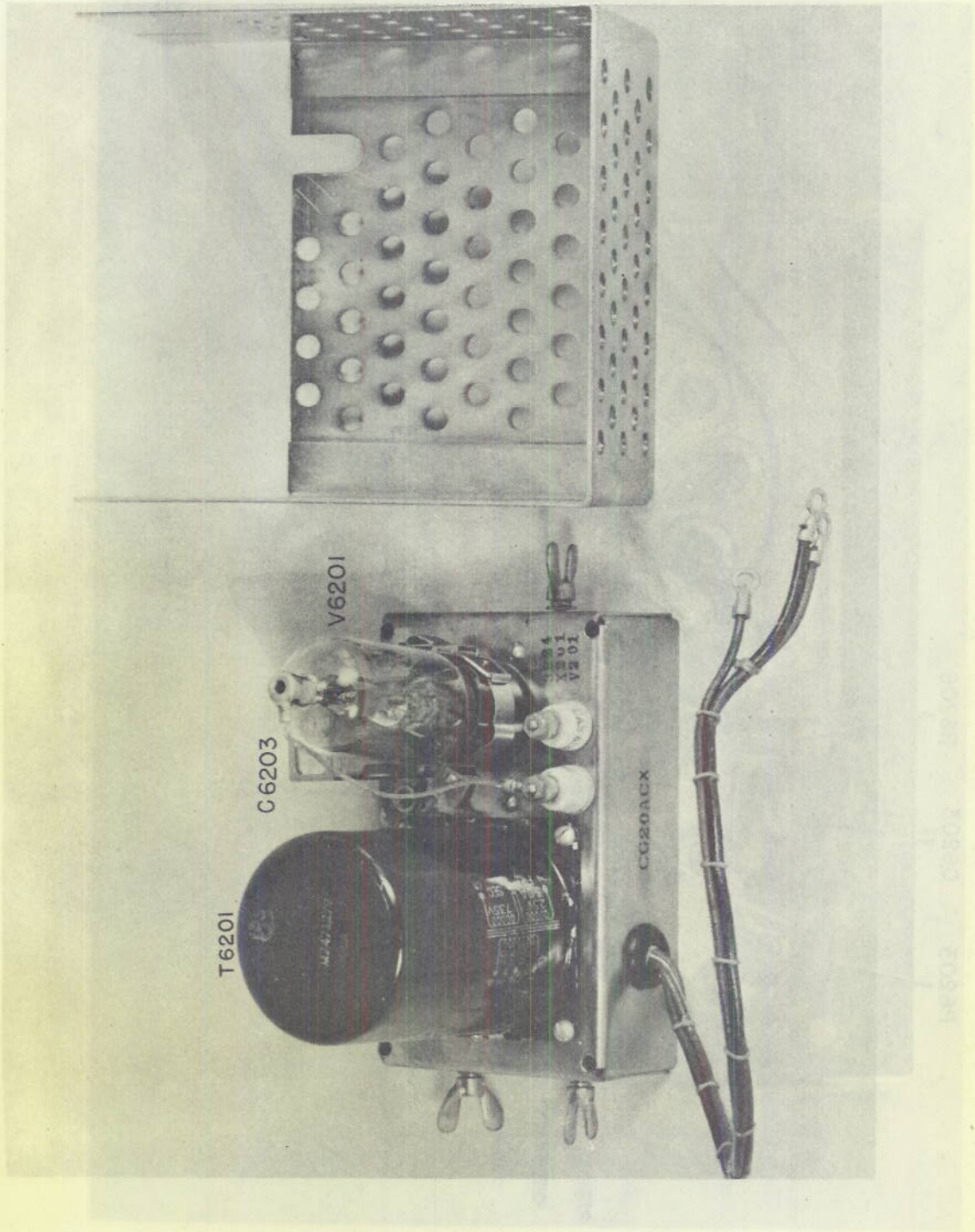

Figure 8-138. Keep-alive Power Supply - Top View

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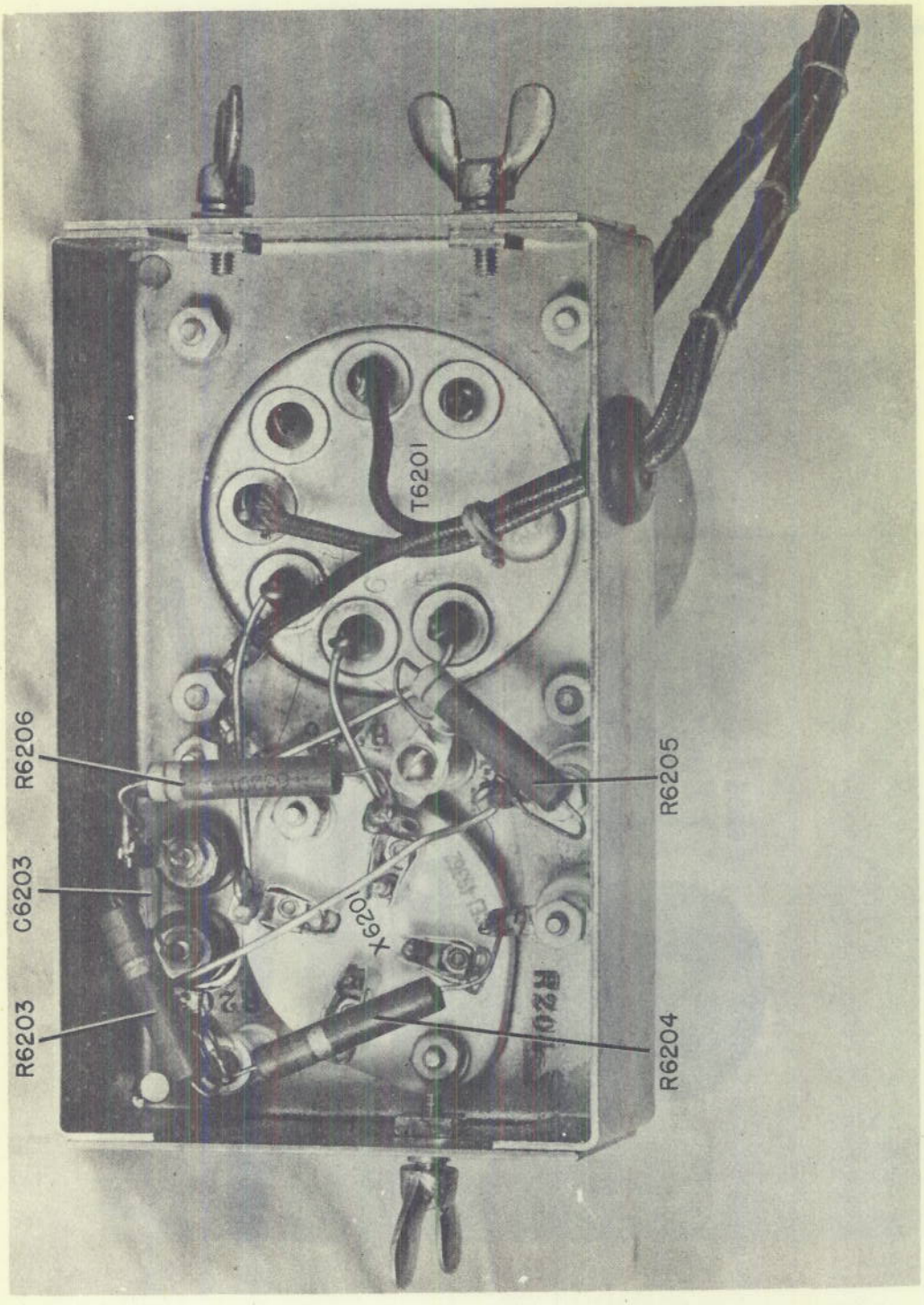

Figure 8-139. Keep-alive Power Supply - Bottom View

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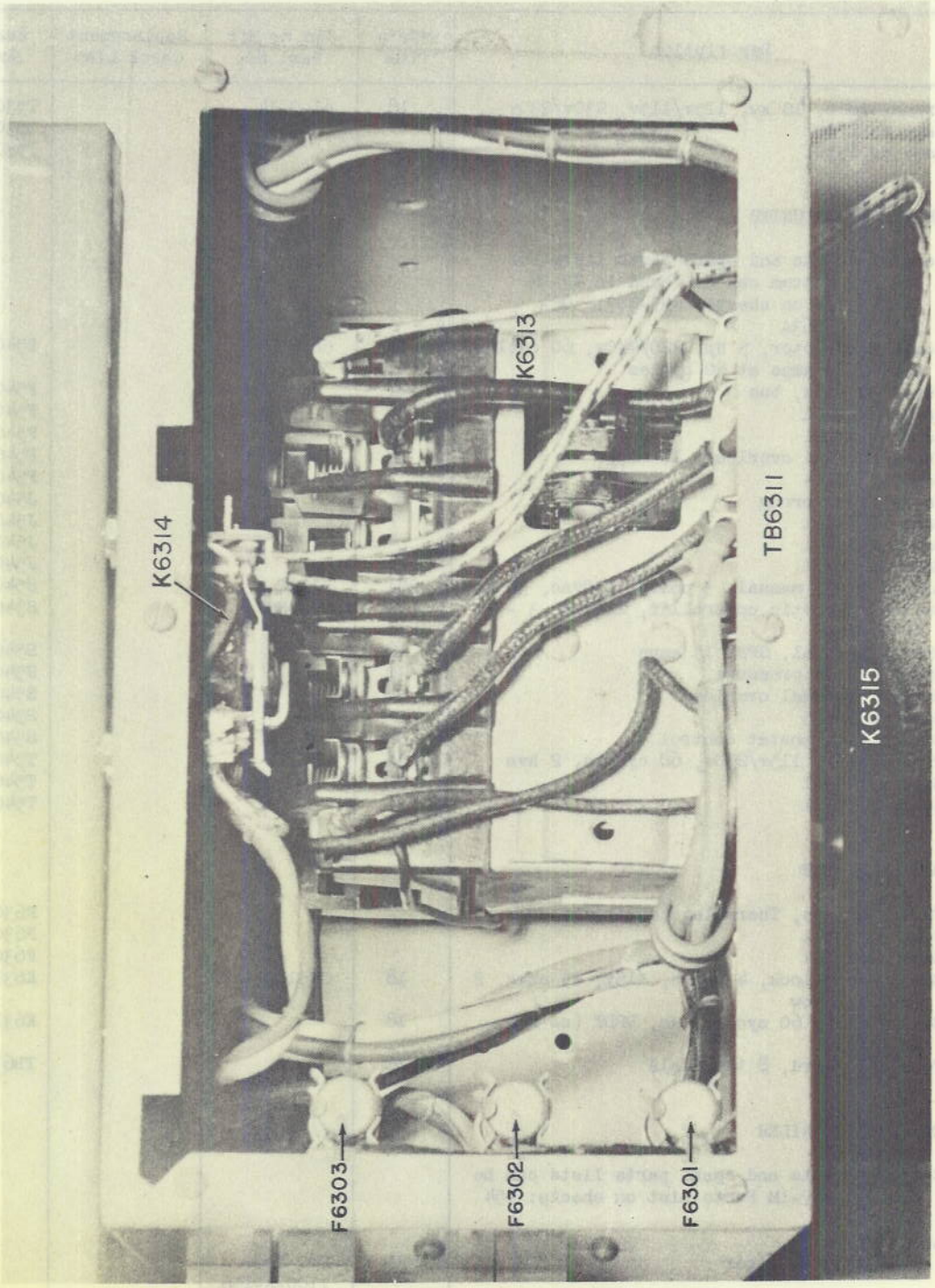

Figure 8-140. D-c Relay Box

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 5300, POWER UNIT PE137 (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
T5301	Transformer, 10 kw, 115v/115v, 230v/230v	18	61-G-14		T5301
T5302	Same as T5301				T5302
T5303	Same as T5301				T5303
UNIT 5400, DEHUMIDIFIER UNITS					
	Complete parts and spare parts lists for Cooling System can be found in SP-1M Parts List on sheets: 499-503, 505-512, 554-563A				
B5401	Compressor Motor, 5 hp, 220/440v, 60 cycles, 14.4/7.20 amps at 60 cycles	18	5K225D3		B5401
F5401	Fuse, 30 amps, bus	121			F5401
F5402	Same as F5401				F5402
F5403	Same as F5401				F5403
F5404	Fuse, thermal overload, 18 amps	4	Type N34		F5404
F5405	Same as F5404				F5405
J5401	Jacks, four prong				J5401
J5402	Same as J5401				J5402
J5403	Same as J5401				J5403
J5404	Same as J5401				J5404
S5401	Line Switch, manual, 3 poles, 230vac, 30 amps	281	51332		S5401
S5402	Switch, magnetic controller, 220vac, 3 - 60 cycles	4	58AGN5		S5402
S5403	Switch, manual, SPST 15 amps	18			S5403
S5404	Switch, high pressure	30			S5404
S5405	Switch, thermal overload	4			S5405
S5406	Same as S5405				S5406
S5407	Switch, thermostat control	30			S5407
T5401	Transformer, 115v/230v, 60 cycles, 2 kva	18	76G110		T5401
T5402	Same as T5401				T5402
T5403	Same as T5401				T5403
UNIT 6300, D-C RELAY BOX					
F6301	Fuse, 15 amps, Thermalag (cartridge)				F6301
F6302	Same as F6301				F6302
F6303	Same as F6301				F6303
K6313	Relay, interlock, 4 poles, 115v, 25 amps, 2 double throw	18	CR5181-1A6		K6313
K6314	Relay, 115v, 60 cycles, ac, DPDT (no name on relay)	18			K6314
TB6311	Terminal Board, 8 terminals	386			TB6311
UNIT 7100, EQUIPMENT TRAILER					
	Complete parts and spare parts lists can be found in SP-1M Parts List on sheets: 454 to 474B				
	Added Parts:				
	Forward Stabilizer	NRL	Dr. No. 1100-A-156-68		
	Jack, forward stabilizer	172			
	Jack Shoe	NRL	Dr. No. 1100-A-156-64		

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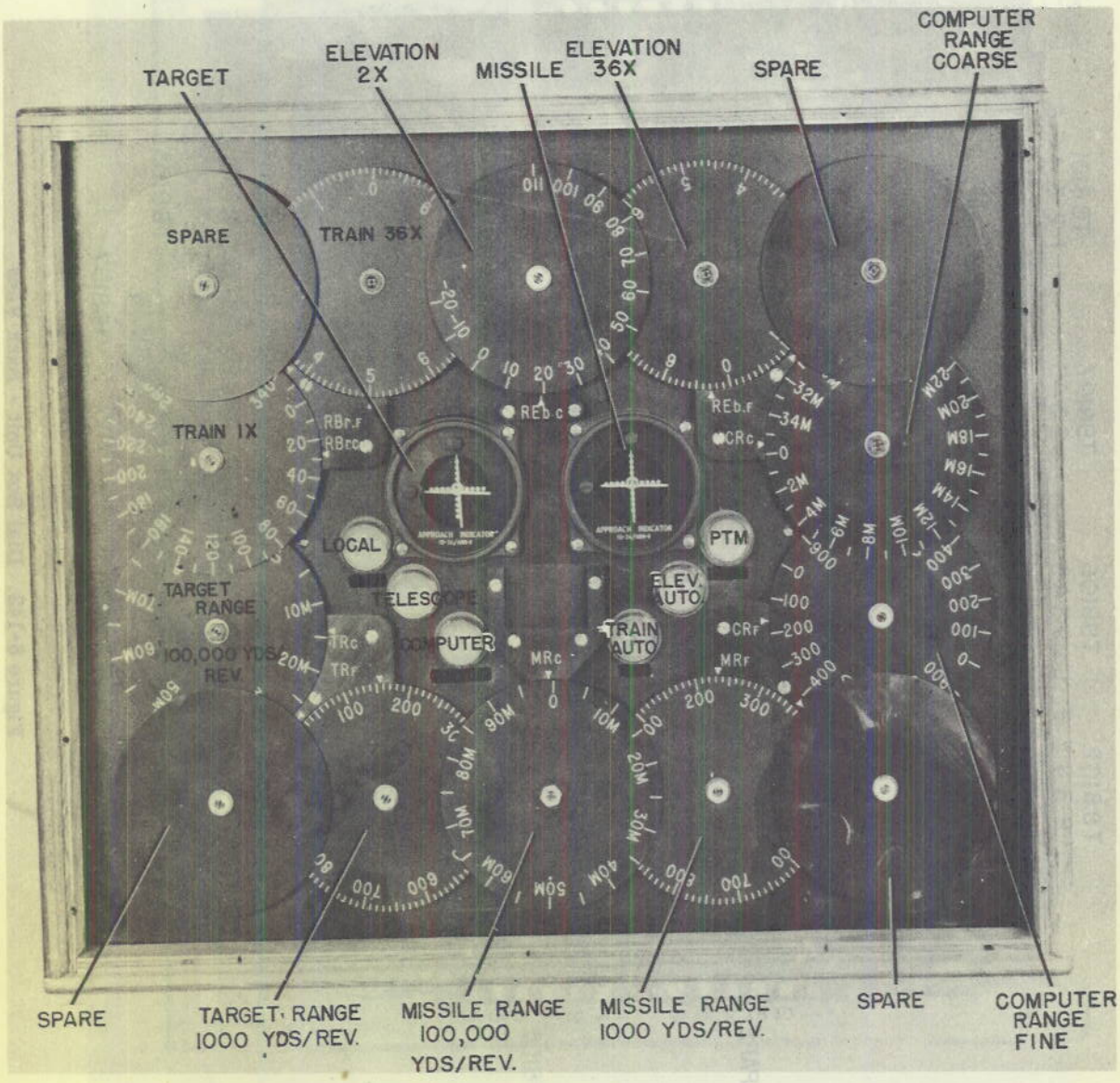

Figure 8-141. Dial Box Unit - Front View

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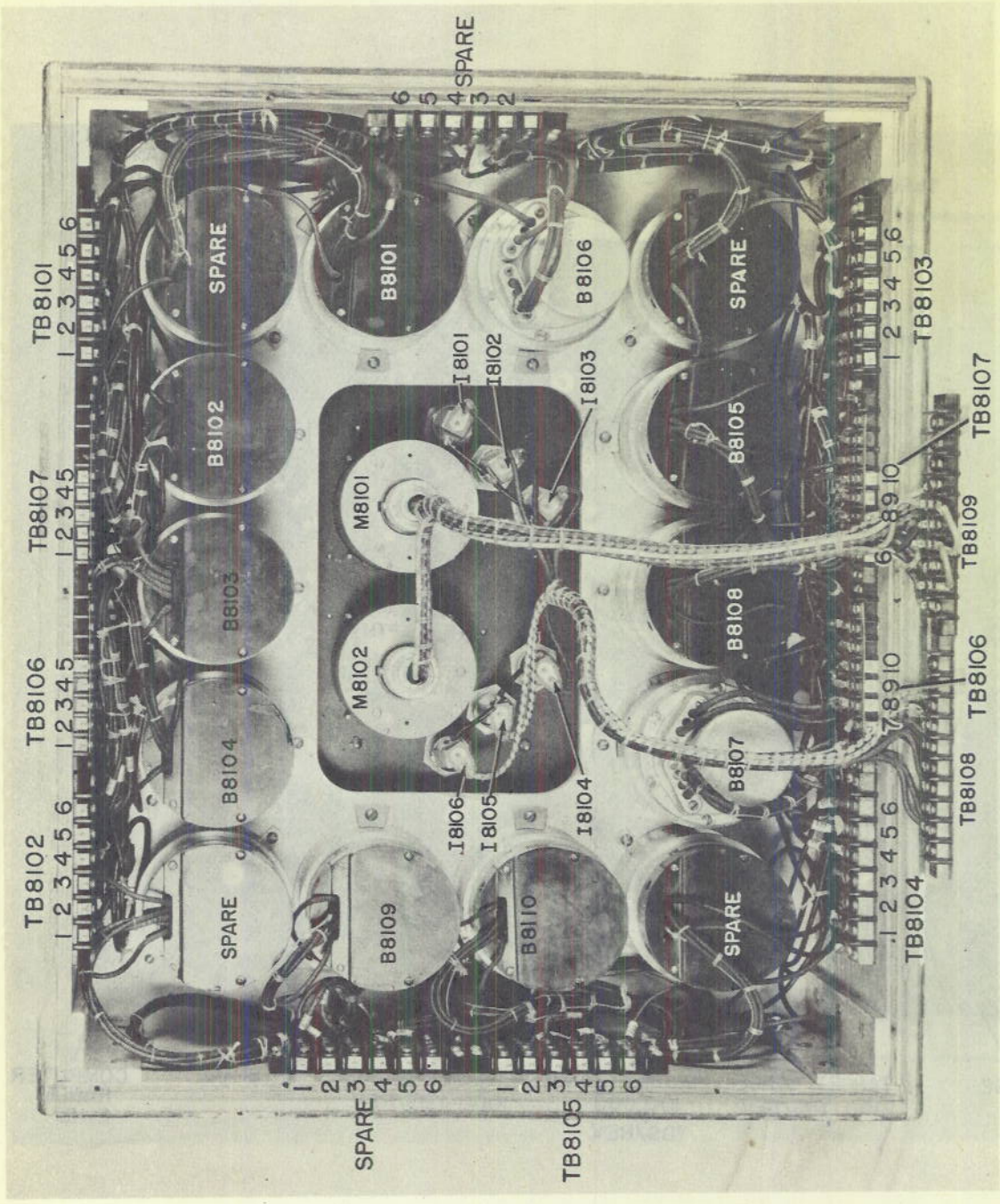

Figure 8-142. Dial Box Unit - Back View

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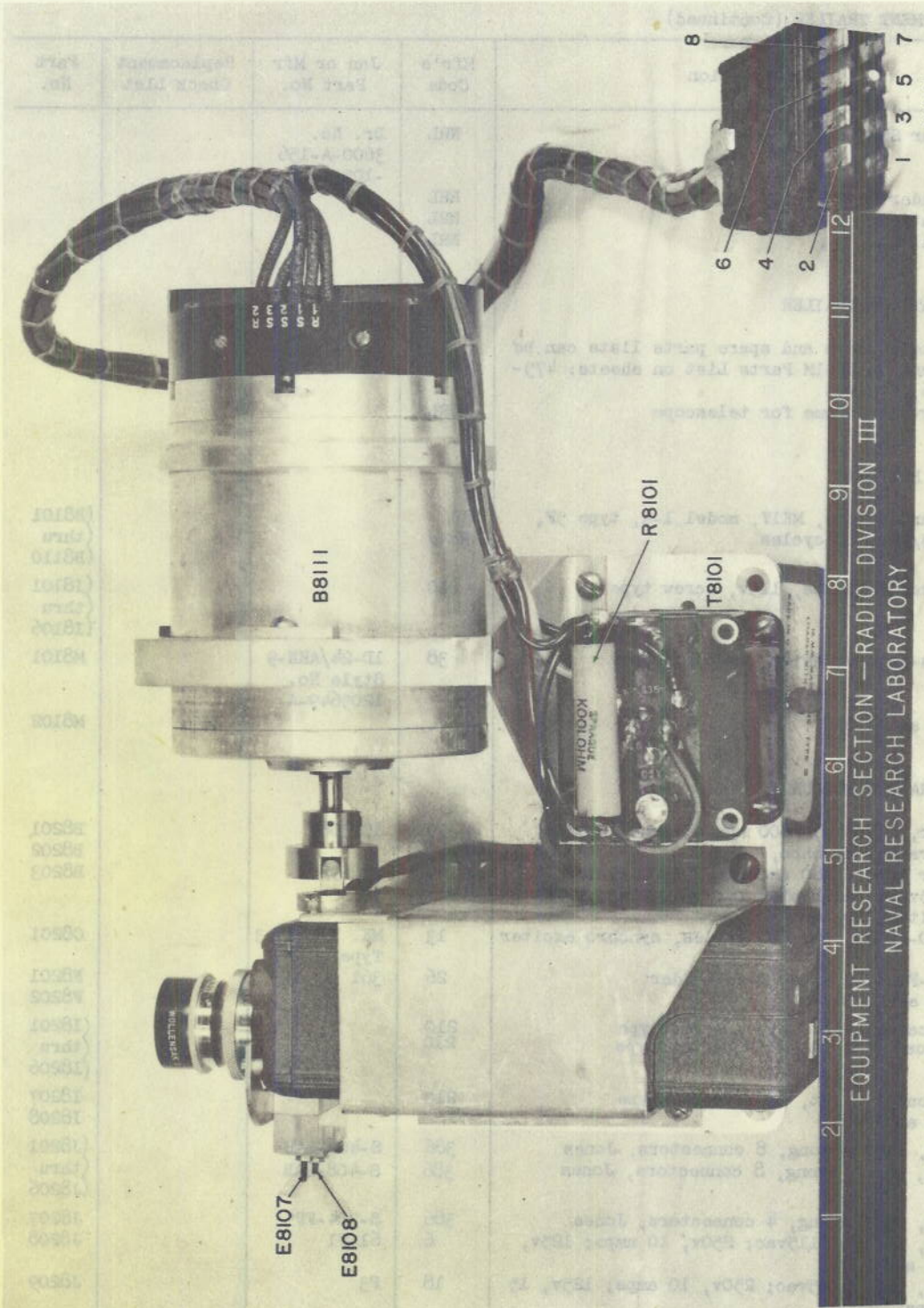

Figure 8-143. Recording Camera for Dial Box Unit

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 7100, EQUIPMENT TRAILER (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
	Rear Support, trailer	NRL	Dr. No. 3600-A-156 -105		
	Ladder	NRL			
	Platform	NRL			
	Railing	NRL			
UNIT 7200, OPERATIONS TRAILER					
	Complete parts and spare parts lists can be found in SP-1M Parts List on sheets: 475-476, 479-495				
	Observation Dome for telescope	NRL			
UNIT 8100, DIAL BOX UNIT					
B8101 thru B8110	Synchro Motors, MK1V, model 1-A, type 5F, 115/90v, 60 cycles	Std Navy			(B8101 thru (B8110
I8101 thru I8106	Indicator Lights, 115v, screw type	210			(I8101 thru (I8106
M8101	Cross-pointer Meter, Westinghouse	38	1D-24/ARN-9 Style No. 1205649-A		M8101
M8102	Same as M8101				M8102
UNIT 8200, CAMERA CONTROL UNIT					
B8201	Motor, 1/20 hp, 1800 rpm, 115vac, Bodine	99	1023067		B8201
B8202	Generator, synchro, 7G				B8202
B8203	Timer Motor, 180 seconds, 50/70 cycles, 115vac, calibrated for 60 cycles; SPDT switch, 10 amps	197	28669D		B8203
C8201	10-10-10 mf, 90v, 60 cycles, synchro exciter	13	MK. 1 Mod. 3 Type 3C		C8201
F8201	Lite-Fuse, 5 amps, fuse holder	26	361		F8201
F8202	Same as F8201				F8202
I8201	Indicator Light, 2.5v, screw type	210			(I8201
thru					thru
I8206	Indicator Light, 2.5v, screw type	210			(I8206
I8207	Indicator Light, 115v, screw type	210			I8207
I8208	Same as I8207				I8208
J8201	Jack, eight prong, 8 connectors, Jones	386	S-408-LAB		(J8201
thru					thru
J8206	Jack, eight prong, 8 connectors, Jones	386	S-408-LAB		(J8206
J8207	Jack, four prong, 4 connectors, Jones	386	S-304-FP		J8207
J8208	Plug, female, 115vac; 250v, 10 amps; 125v, 15 amps	6	61-F1		J8208
J8209	Plug, male, 115vac; 250v, 10 amps; 125v, 15 amps	18	P3		J8209
K8201	Time Delay Relay, item 33, SP-1M FC-43				K8201
K8202	Power Relay, 115vac, 50-60 cycles, 10 amps	2032	1000		K8202
08201	Reduction Gear Box	NRL			08201

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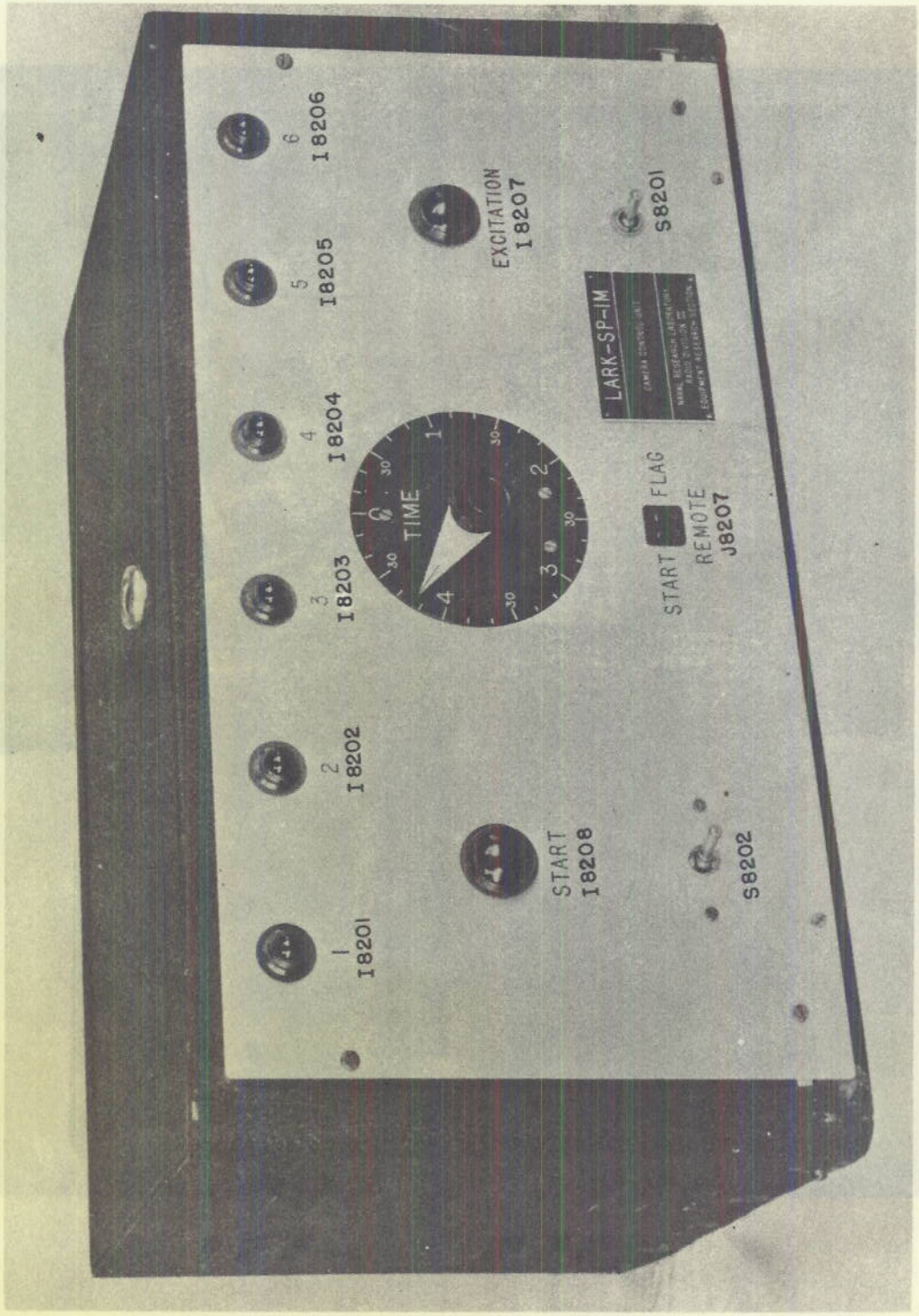

Figure 8-144. Camera Control Unit - Front View

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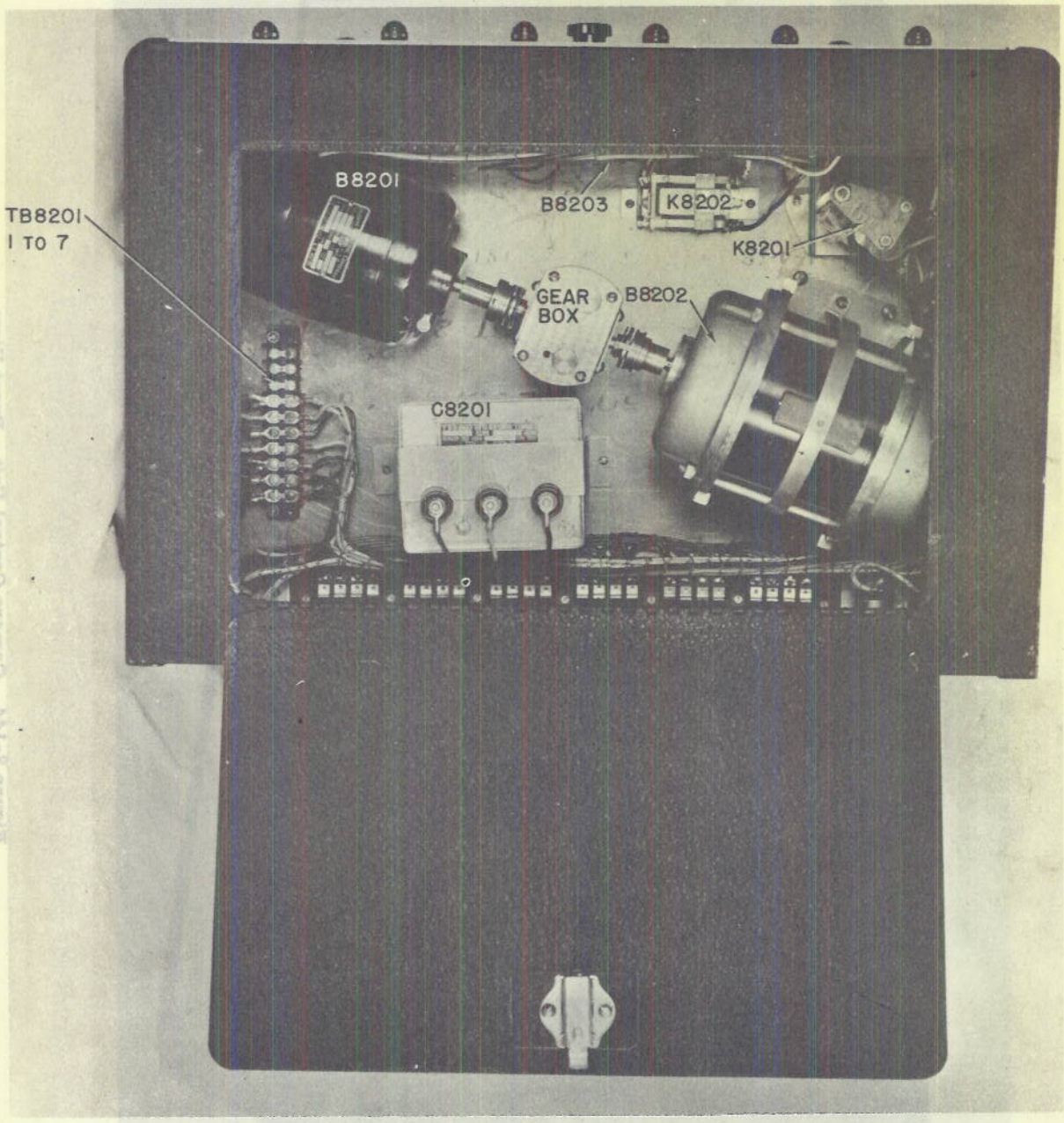

Figure 8-145. Camera Control Unit - Top View

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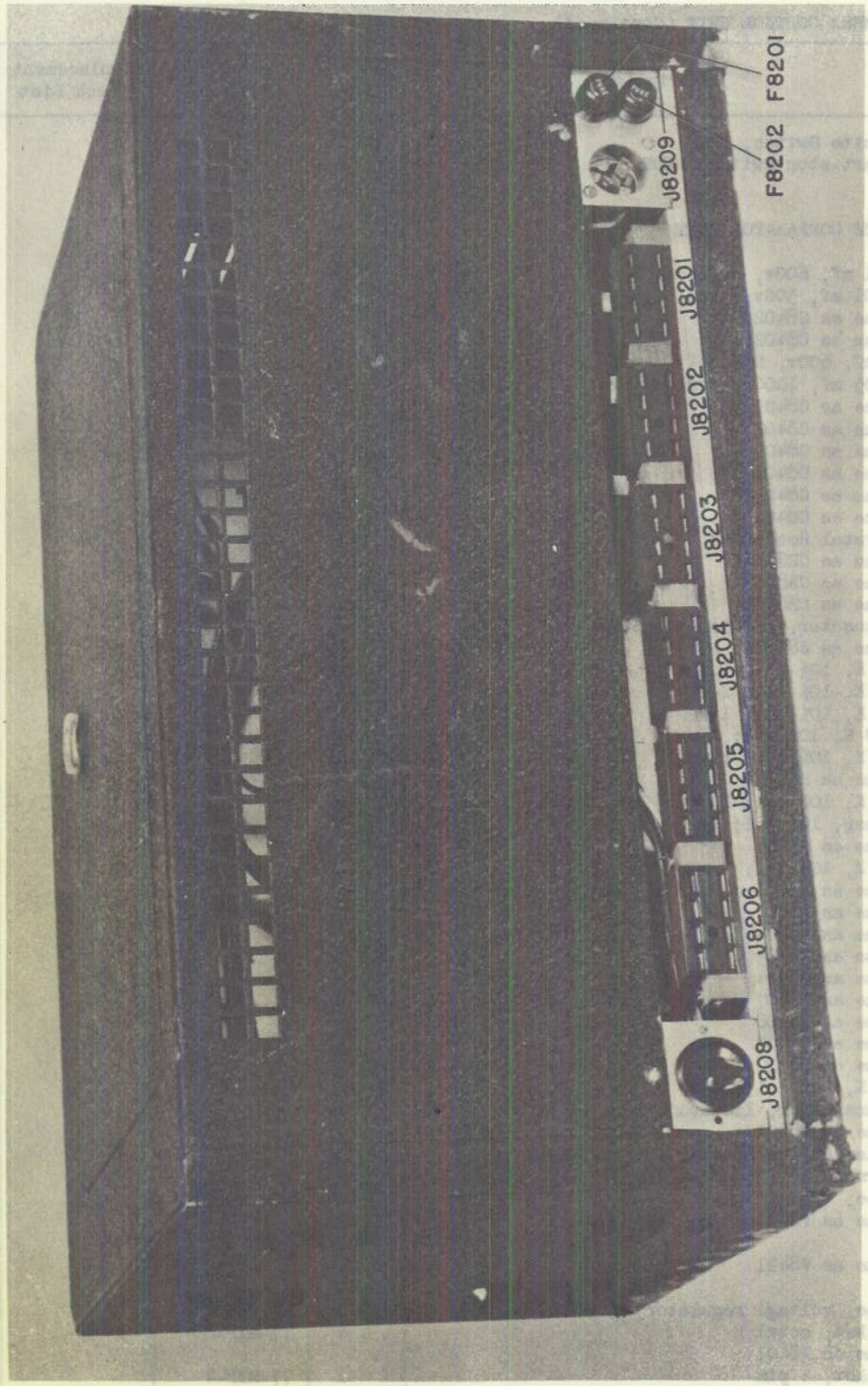

Figure 8-146. Camera Control Unit - Back View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 8200, CAMERA CONTROL UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
S8201	Excite Switch, DPST				S8201
S8202	Start-stop Switch, DPDT				S8202
UNIT 8400, TIME COMPARATOR UNIT					
C8401	0.1 mf, 600v, pyranol	18			C8401
C8402	0.01 mf, 500v, mica	13	1-W		C8402
C8403	Same as C8402				C8403
C8404	Same as C8402				C8404
C8405	2 mf, 600v, Dykanol	13			C8405
C8406	0.05 mf, 1000v, pyranol	18			C8406
C8407	Same as C8401				C8407
C8408	Same as C8402				C8408
C8409	Same as C8402				C8409
C8410	Same as C8402				C8410
C8411	Same as C8405				C8411
C8412	Same as C8406				C8412
CR8401	Crystal Rectifier	649	1N34		CR8401
CR8402	Same as CR8401				CR8402
CR8403	Same as CR8401				CR8403
CR8404	Same as CR8401				CR8404
J8402	Connector, female, 1 contact	6	80-C		J8402
J8403	Same as J8402				J8403
R8401	56 K, 10% tol; 1 w	4			R8401
R8402	10 K, 10% tol; 1 w	4			R8402
R8403	82 K, 10% tol; 1 w	4			R8403
R8404	100 K, 10% tol; 1 w	4			R8404
R8405	15 K, 10% tol; 1 w	4			R8405
R8406	Same as R8404				R8406
R8407	10 K, 10% tol; 10 w	32			R8407
R8408	1 meg, 10% tol; 1/2 w	4			R8408
R8409	Same as R8404				R8409
R8410	68 K, 10% tol; 1 w	4			R8410
R8411	Same as R8401				R8411
R8412	Same as R8402				R8412
R8414	Same as R8404				R8414
R8415	Same as R8405				R8415
R8416	Same as R8404				R8416
R8417	Same as R8407				R8417
R8418	Same as R8408				R8418
R8419	Same as R8404				R8419
R8420	Same as R8410				R8420
R8421	18 K, 10% tol; 25 w				R8421
T8401	Transformer, 1:2 audio	1	208T-3		T8401
T8402	Same as T8401				T8402
T8403	Filament Transformer, 6.3v, 3 amps	2030	T-351		T8403
TB8401	Terminal Strip, 8 terminals	386	8-141		TB8401
V8401	Tube, twin triode		6SN7		V8401
V8402	Same as V8401				V8402
V8403		649	631-P1		V8403
V8404	Same as V8401				V8404
V8405		649	631-P1		V8405
V8406	Tube, voltage regulator		VR105		V8406
X8401	Socket, octal	6	77-MIP-8		X8401
X8402	Same as X8401				X8402
X8403	Socket, 4 pin	6	77-MIP-4		X8403
X8404	Same as X8401				X8404
X8405	Same as X8403				X8405

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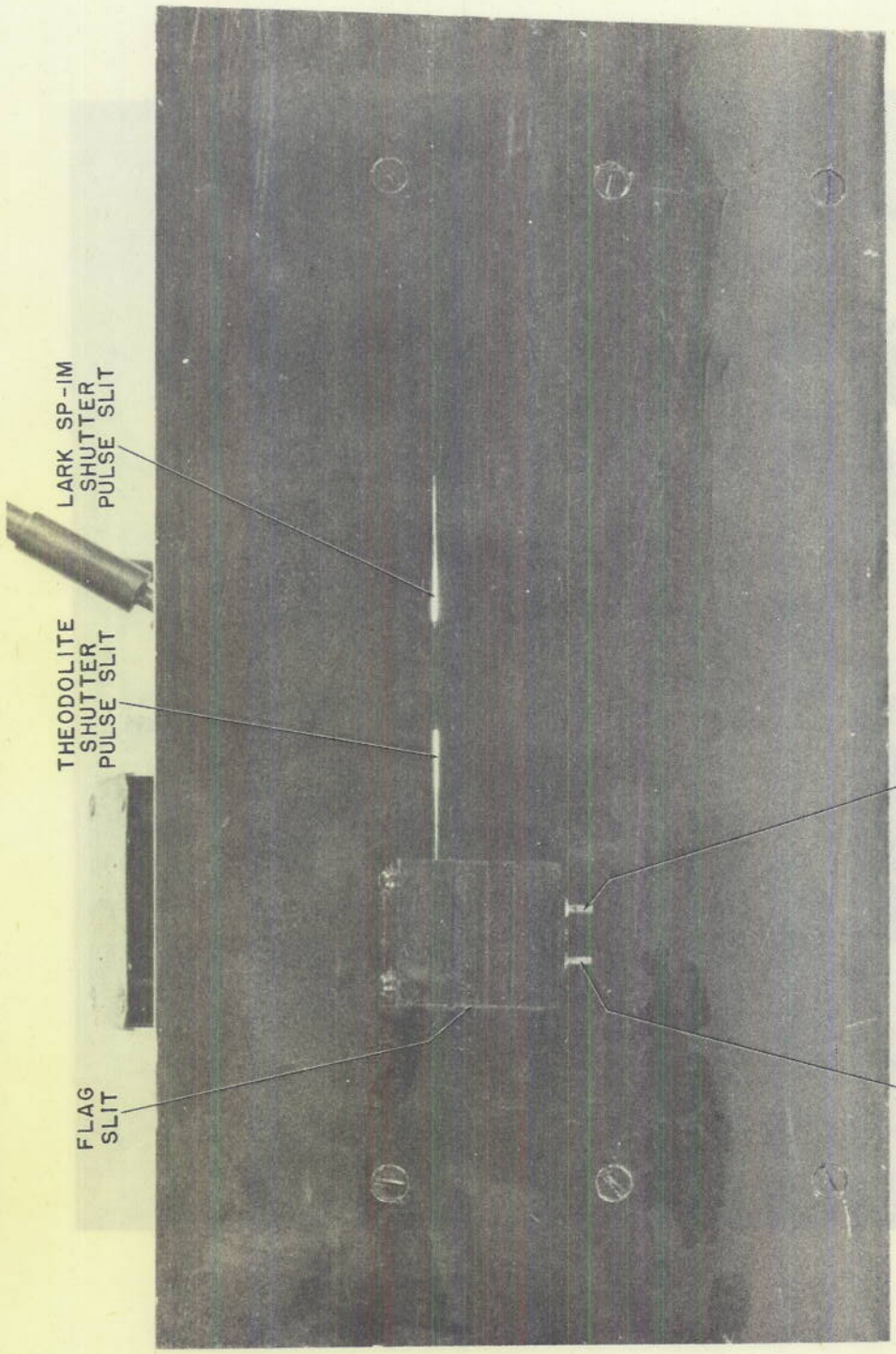

Figure 8-147. Time Comparator Unit - Front View

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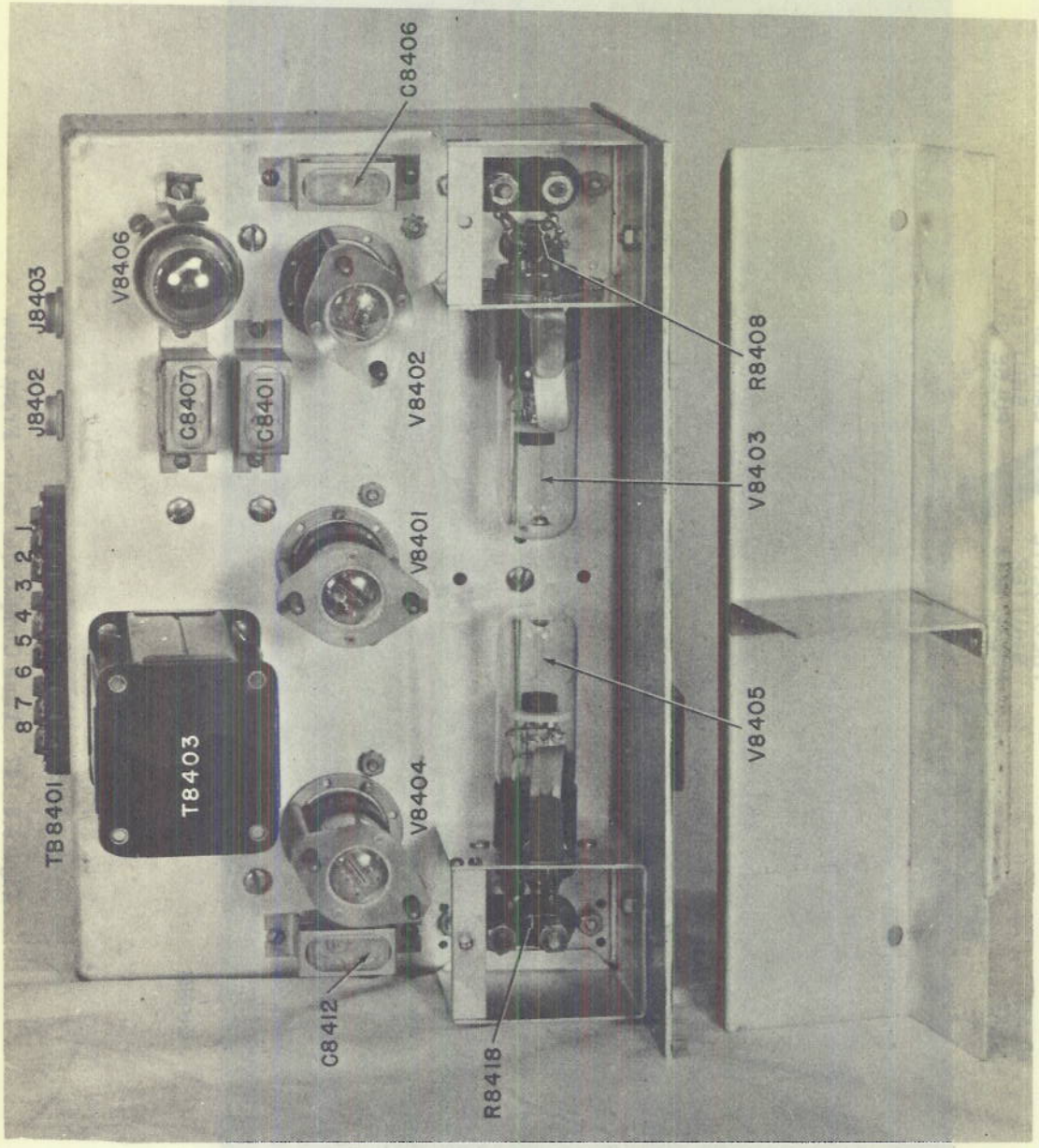

Figure 8-148. Time Comparator Unit - Top View

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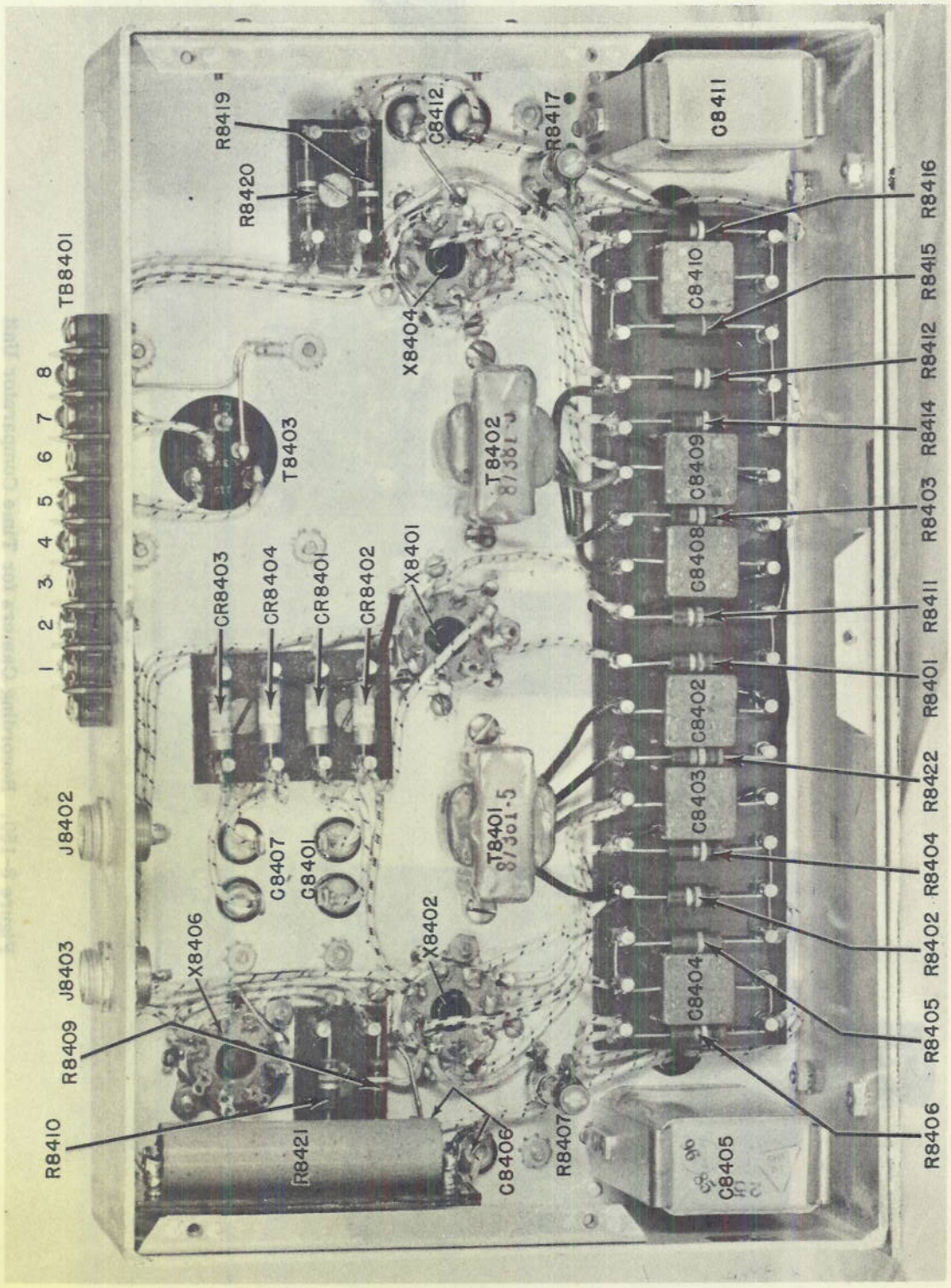

Figure 8-149. Time Comparator Unit - Bottom View

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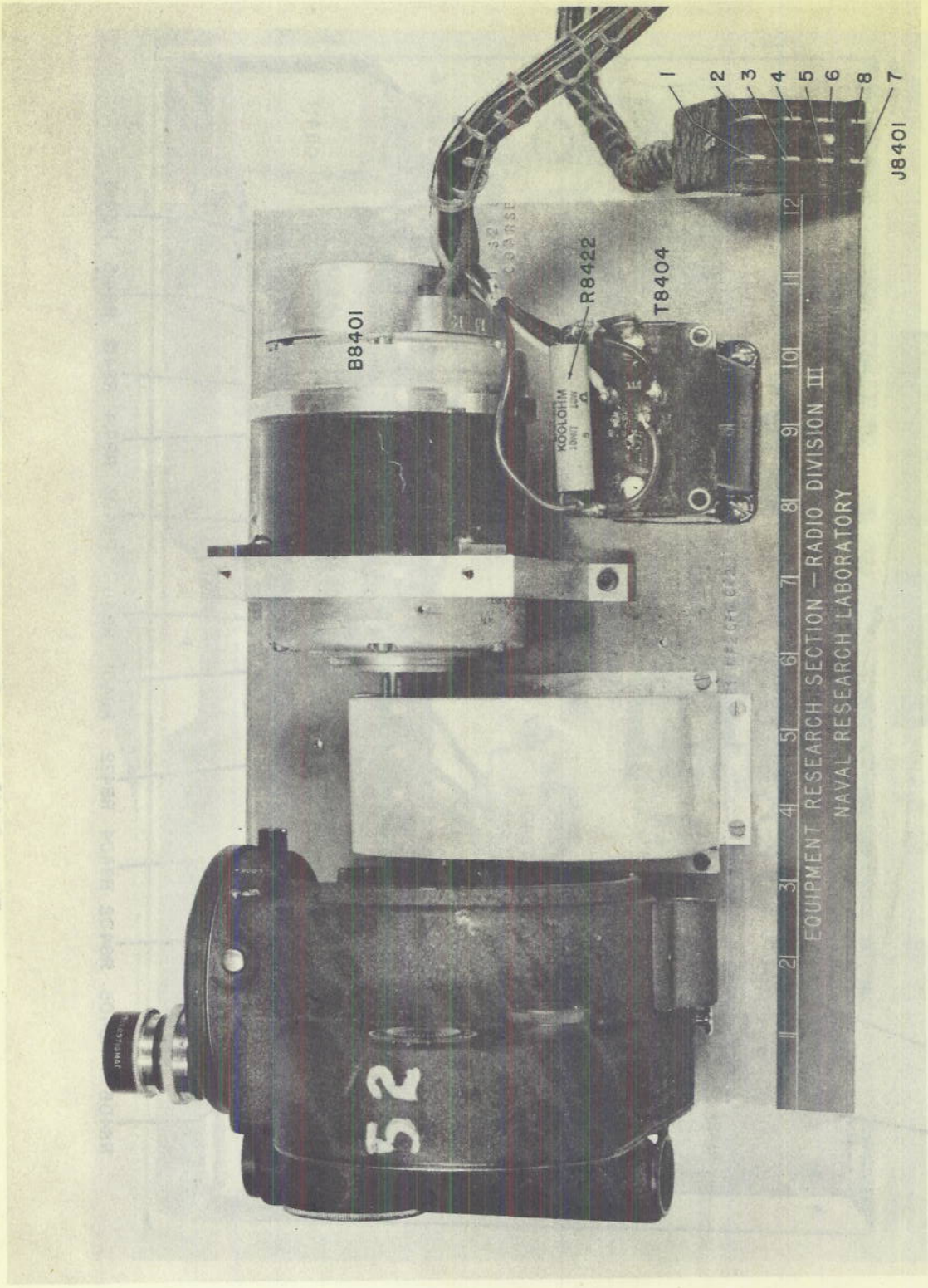

Figure 8-150. Recording Camera for Time Comparator Unit

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 8400, TIME COMPARATOR UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
X8406	Same as X8401				X8406
UNIT 8500, REMOTE RANGE INDICATOR UNIT					
C8501	0.25 mf, 3000v	373	SAU		C8501
C8502	Same as C8501				C8502
C8503	Same as C8501				C8503
C8504	Same as C8501				C8504
C8505	1.0 mf, 600v, paper	13	DYT6100		C8505
C8506	1.0 mf, 2000v, oil-filled	623	*P8569		C8506
C8507	Same as C8506				C8507
C8508	0.5 mf, 3000v, Dykanol A	13	T30005		C8508
C8509	0.5 mf, 1000v, pyranol	18	Cat. No. 23F473		C8509
C8510	0.05 mf, 400v, Solite	34			C8510
C8511	Same as C8510				C8511
C8512	0.1 mf, 1000v, pyranol	18	Cat. No. 23F471		C8512
C8513	20 mmf, ceramic	16			C8513
C8514	Same as C8512				C8514
C8515	Same as C8512				C8515
C8516	25 mf, 25v, electrolytic	13	CA360		C8516
C8517	25 mf, 25v, electrolytic	13	CA360		C8517
C8518	0.1 mf, 400v, Solite	34			C8518
C8519	70 mmf, mica	13	Type 5W		C8519
C8520	0.01 mf, mica	13	Type 1W		C8520
C8521	0.25 mf, 1000v, pyranol	18	Cat. No. 23F472		C8521
C8522	Same as C8521				C8522
C8523	Same as C8512				C8523
C8524	Same as C8521				C8524
C8525	Same as C8509				C8525
C8526	Same as C8521				C8526
C8527	150 mmf, mica	13	Type 5W		C8527
C8528	Same as C8512				C8528
C8529	51 mmf, mica	13	Type 5W		C8529
C8530	Same as C8509				C8530
C8531	Same as C8521				C8531
C8532	Same as C8512				C8532
C8533	Same as C8518				C8533
C8534	Same as C8521				C8534
C8535	Same as C8518				C8535
C8536	Same as C8512				C8536
C8537	Same as C8512				C8537
C8538	Same as C8519				C8538
C8539	Same as C8512				C8539
C8540	Same as C8512				C8540
C8541	Same as C8521				C8541
C8542	Same as C8512				C8542
C8543	Same as C8521				C8543
C8544	Same as C8521				C8544
C8545	Same as C8518				C8545
C8546	Same as C8521				C8546
C8547	Same as C8518				C8547
C8548	Same as C8518				C8548
C8549	Same as C8518				C8549
C8550	Same as C8521				C8550
C8551	Same as C8512				C8551

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 8500, REMOTE RANGE INDICATOR UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
C8552	Same as C8518				C8552
C8553	Same as C8518				C8553
C8554	Same as C8521				C8554
C8555	Same as C8521				C8555
C8556	0.25 mf, 2000v, oil-filled	623	P8569		C8556
CR8501	Crystal Rectifier	649	1N34		CR8501
CR8502	Same as CR8501				CR8502
CR8503	Same as CR8501				CR8503
I8501	Panel Lamp, 120vac, 6 w, screw base	298			I8501
	Panel Lamp Assembly	15			
I8502	Same as I8501				I8502
I8503	Same as I8501				I8503
I8504	Same as I8501				I8504
J8501	Receptacle, coaxial	6	SO-239		J8501
J8502 thru J8507	Same as J8501				J8502 thru J8507
K8501	Relay, 115vac, DPDT	12	B30427		K8501
L8501	Choke, 10 henries	10	K54J72		L8501
R8501	270 K, 10% tol; 2 w	4			R8501
R8502	10 meg, 10% tol; 2 w	4			R8502
R8503	Same as R8501				R8503
R8504	Same as R8502				R8504
R8505	560 K, 10% tol; 2 w	4			R8505
R8506	Same as R8505				R8506
R8507	51 K, 10% tol; 2 w	4			R8507
R8508	Same as R8501				R8508
R8509	Same as R8501				R8509
R8510	Same as R8507				R8510
R8511	390 K, 10% tol; 2 w	4			R8511
R8512	Same as R8505				R8512
R8513	120 K, 10% tol; 2 w	4			R8513
R8514	100 K, 10% tol; 2 w	4			R8514
R8515	100 K, 10% tol; 1 w; pot.	4			R8515
R8516	500 K, 10% tol; 1 w; pot.	4			R8516
R8517A	2 meg, 10% tol; 1 w; pot. dual	4			R8517A
R8517B	2 meg, 10% tol; 1 w; pot. dual				R8517B
R8517A	2 meg, 10% tol; 1 w; pot. dual	4			R8518A
R8518B	2 meg, 10% tol; 1 w; pot. dual				R8518B
R8519	1.2 meg, 10% tol; 1 w	4			R8519
R8520	Same as R8519				R8520
R8521	Same as R8519				R8521
R8522	Same as R8519				R8522
R8523	Same as R8514				R8523
R8524	3.3 K, 10% tol; 2 w	4			R8524
R8525	1.5 K, 10% tol; 2 w	4			R8525
R8526	150 K, 10% tol; 1 w	4			R8526
R8527	560 K, 10% tol; 1/2 w	4			R8527
R8528	18 K, 10% tol; 2 w	4			R8528
R8529	470 ohms, 10% tol; 1 w	4			R8529
R8530	Same as R8527				R8530
R8531	100 K, 10% tol; 1 w	4			R8531
R8532	22 K, 10% tol; 1 w	4			R8532
R8533	1 meg, 10% tol; 1 w	4			R8533
R8534	39 K, 10% tol; 1 w	4			R8534
R8535	1 meg, 10% tol; pot.	4			R8535
R8536	Same as R8533				R8536
R8537	39 K, 10% tol; 2 w	4			R8537

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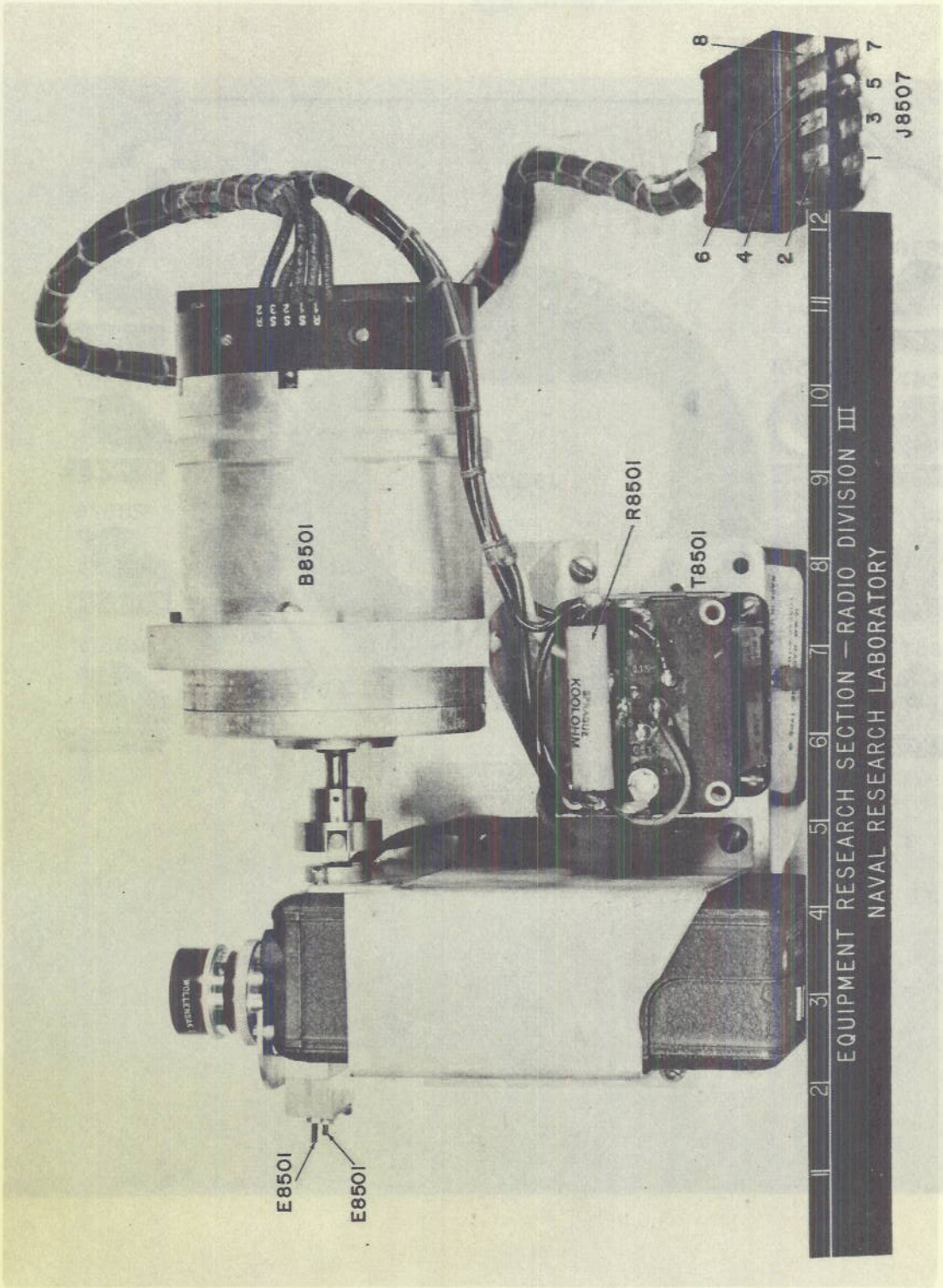

Figure 8-151. Recording Camera for Remote Range Indicator Unit

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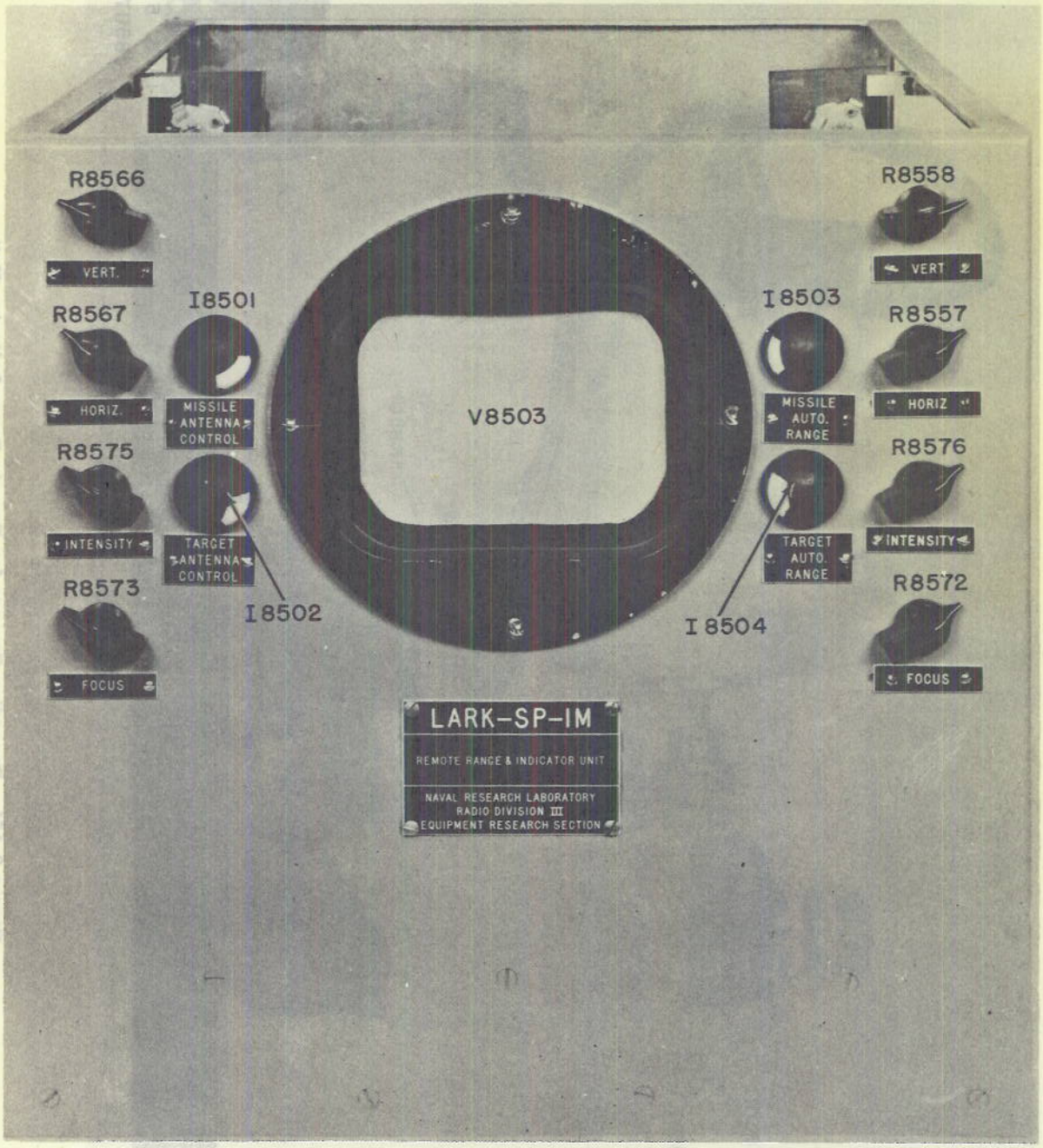

Figure 8-152. Remote Range Indicator - Front View

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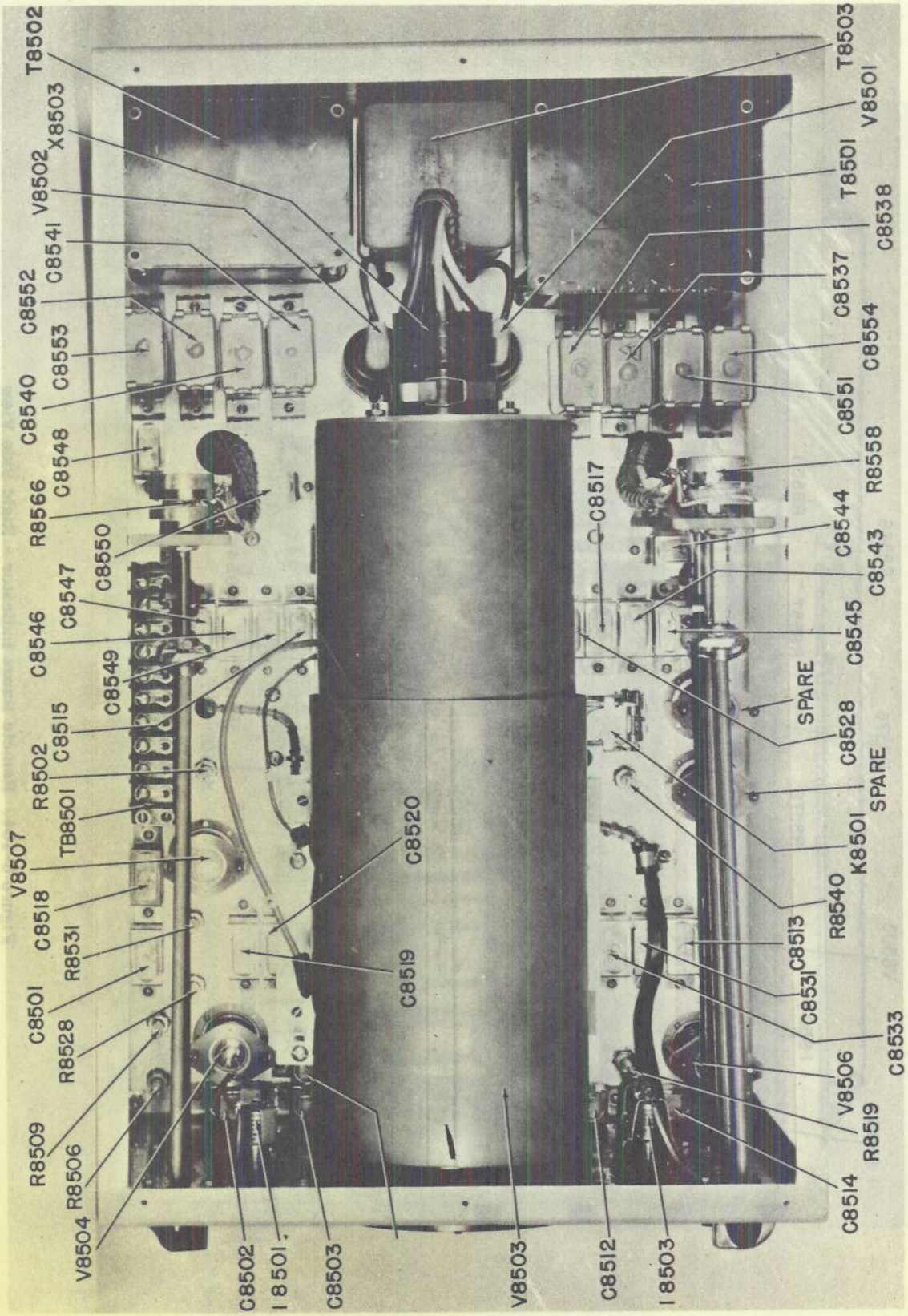

Figure 8-153. Remote Range Indicator - Top View

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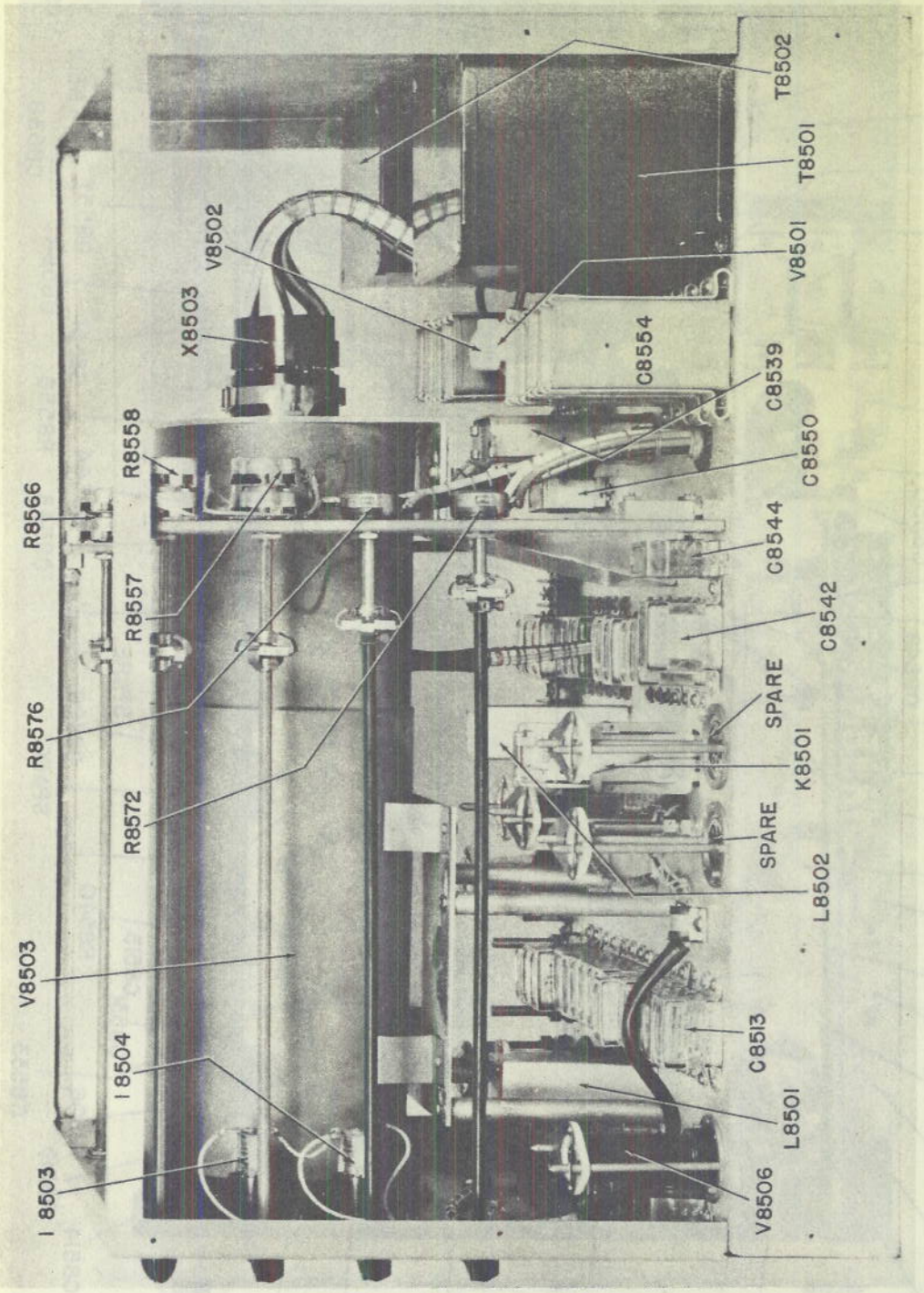

Figure 8-154. Remote Range Indicator - Right Side View

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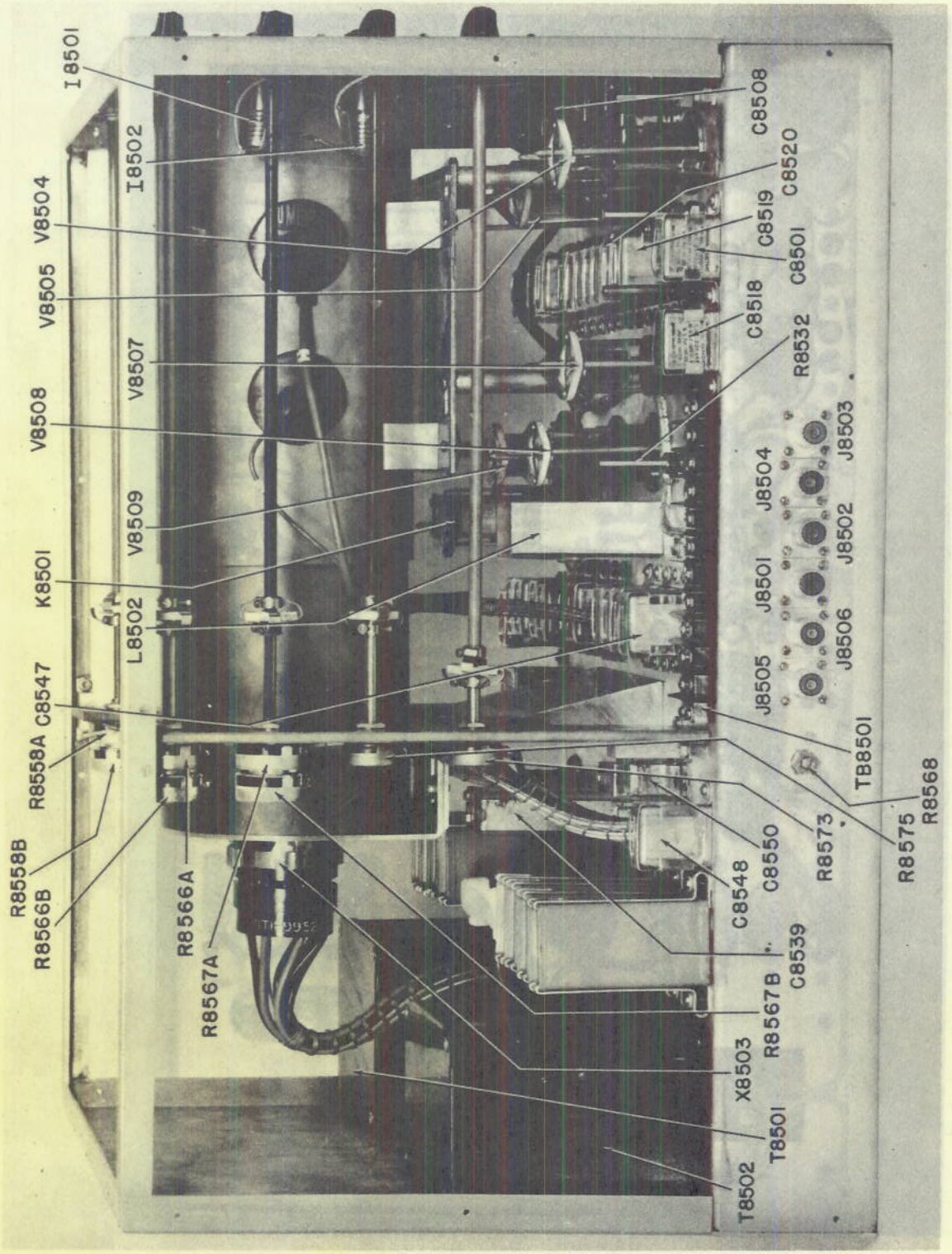

Figure 8-155. Remote Range Indicator - Left Side View

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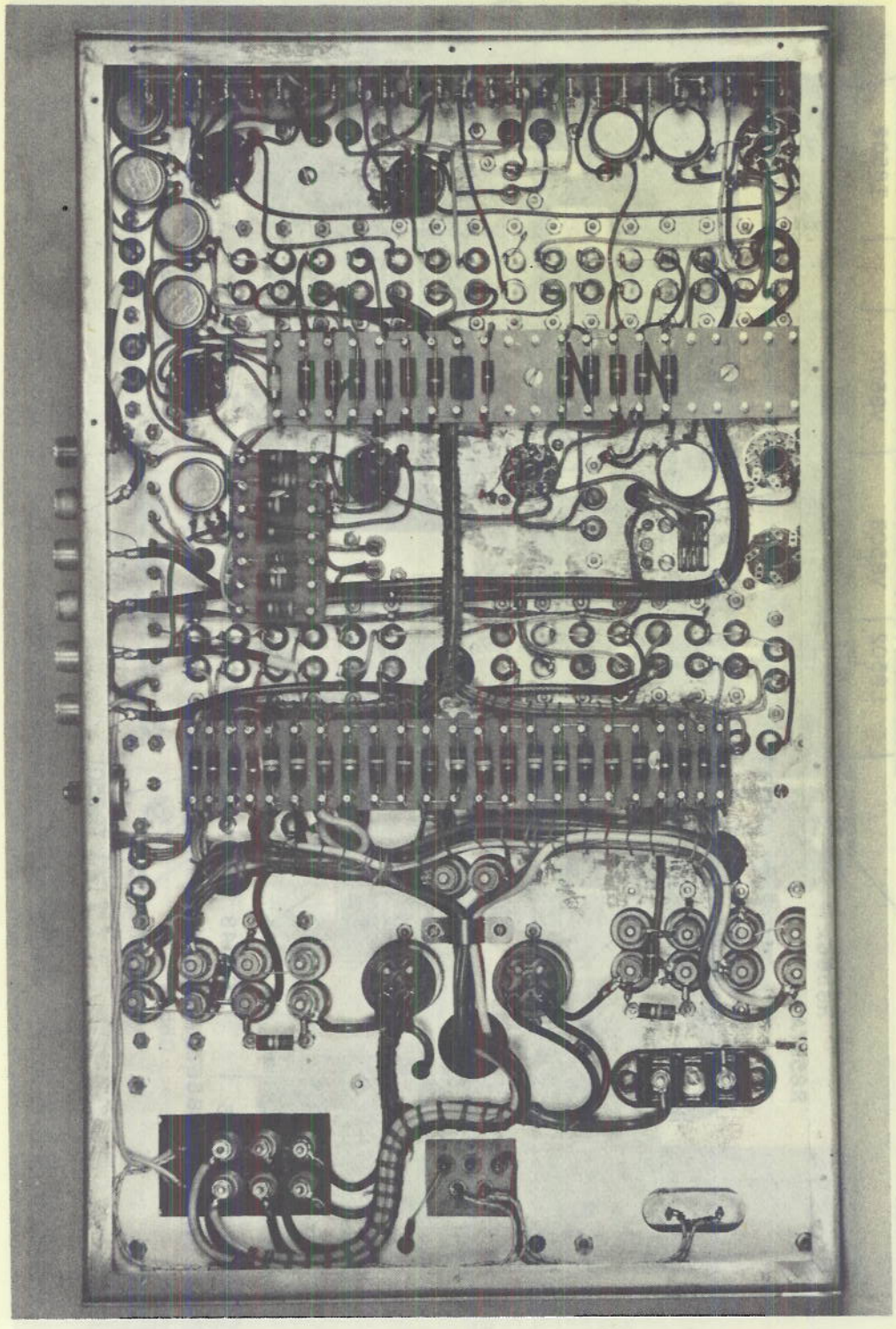

Figure 8-156. Remote Range Indicator - Bottom View

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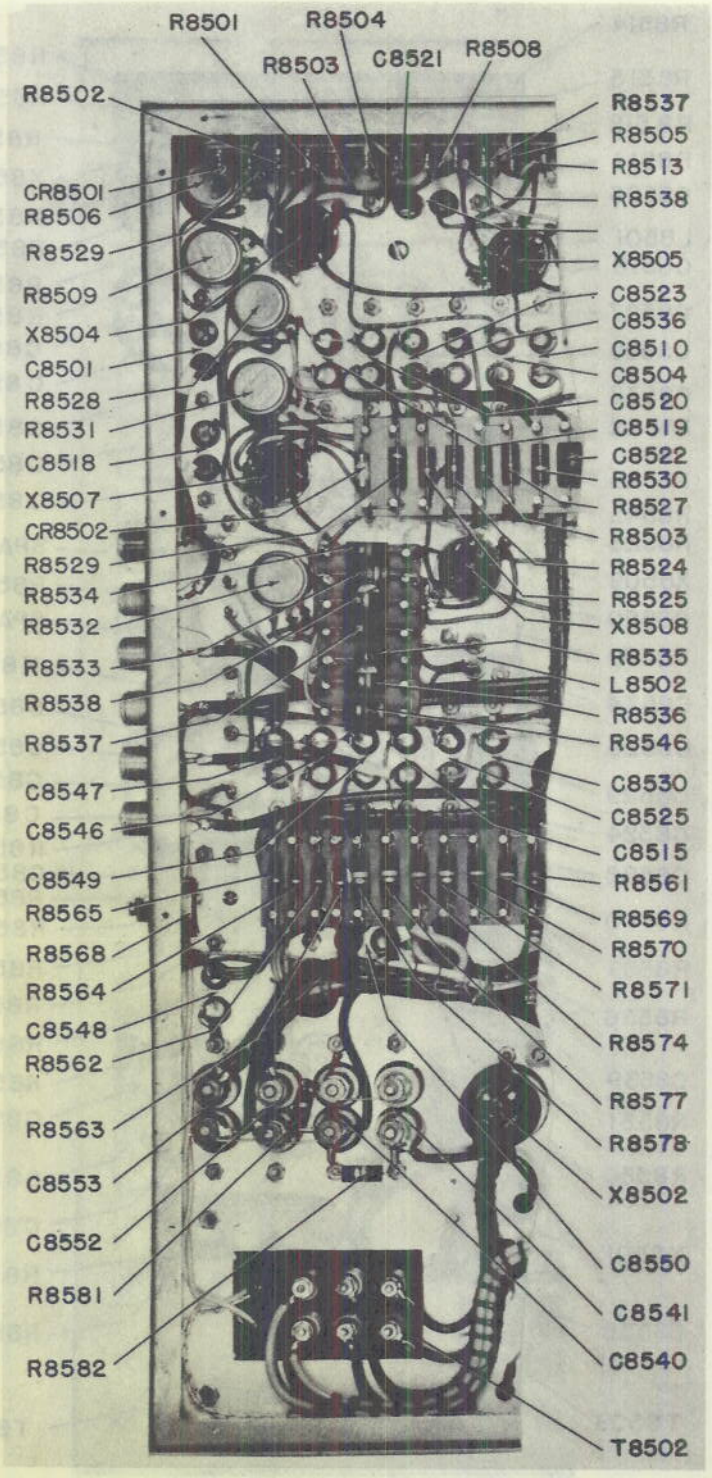

Figure 8-157. Left Half of Remote Range Indicator - Bottom View

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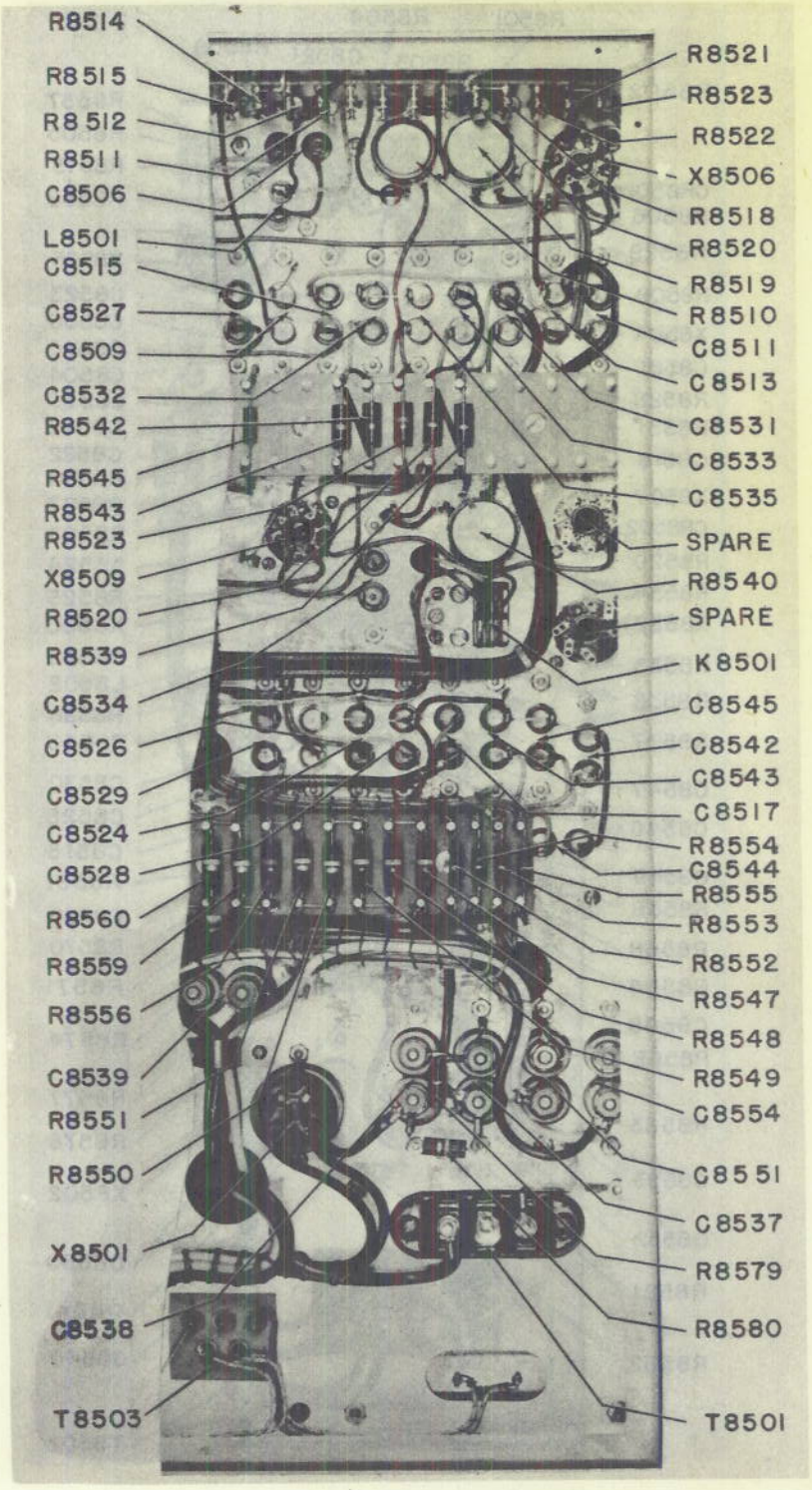

Figure 8-158. Right Half of Remote Range Indicator - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 8500, REMOTE RANGE INDICATOR UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R8538	Same as R8537				R8538
R8539	Same as R8535				R8539
R8540	2.2 meg, 10% tol; 1 w	4			R8540
R8541	3.3 K, 10% tol; 1 w	4			R8541
R8542	6.8 K, 10% tol; 1 w	4			R8542
R8543	1.2 K, 10% tol; 2 w	4			R8543
R8544	8.2 K, 10% tol; 1 w	4			R8544
R8545	50 K, 10% tol; 1 w; pot.	4			R8545
R8546	680 ohms, 10% tol; 1 w	4			R8546
R8547	8.2 K, 10% tol; 2w	4			R8547
R8548	270 ohms, 10% tol; 1 w	4			R8548
R8549	1.2 K, 10% tol; 1 w	4			R8549
R8550	5.6 meg, 10% tol; 1/2 w	4			R8550
R8551	Same as R8547				R8551
R8552	Same as R8548				R8552
R8553	270 K, 10% tol; 1 w	4			R8553
R8554	390 K, 10% tol; 1 w	4			R8554
R8555	Same as R8533				R8555
R8556	12 K, 10% tol; 2 w	4			R8556
R8557	Same as R8556				R8557
R8558	Same as R8548				R8558
R8559	Same as R8547				R8559
R8560	Same as R8554				R8560
R8561	Same as R8533				R8561
R8562	Same as R8553				R8562
R8563	Same as R8548				R8563
R8564	Same as R8547				R8564
R8565	Same as R8550				R8565
R8566	Same as R8549				R8566
R8567	1.5 meg, 10% tol; 1/2 w	4			R8567
R8568	Same as R8544				R8568
R8569	Same as R8548				R8569
R8570	820 K, 10% tol; 1/2 w	4			R8570
R8571	33 ohms, 10% tol; 1 w	4			R8571
R8572	18 ohms, 10% tol; 1 w	4			R8572
R8573	1.5 K, 10% tol; 1 w	4			R8573
R8574	Same as R8524				R8574
R8575	Same as R8570				R8575
R8576	3.9 K, 10% tol; 1 w	4			R8576
R8577	2.7 K, 10% tol; 1 w	4			R8577
R8578	Same as R8548				R8578
R8579	470 K, 10% tol; 1 w	4			R8579
R8580	1 K, 10% tol; 1 w	4			R8580
R8581	51 K, 10% tol; 2 w	4			R8581
R8582	Same as R8567				R8582
R8583	Same as R8544				R8583
R8584	Same as R8548				R8584
R8585	Same as R8570				R8585
R8586	Same as R8571				R8586
R8587	Same as R8572				R8587
R8588	Same as R8573				R8588
R8589	Same as R8524				R8589
R8590	Same as R8548				R8590
R8591	Same as R8570				R8591
R8592	Same as R8576				R8592
R8593	Same as R8577				R8593
R8594	Same as R8579				R8594
R8595	Same as R8580				R8595
R8596	Same as R8581				R8596

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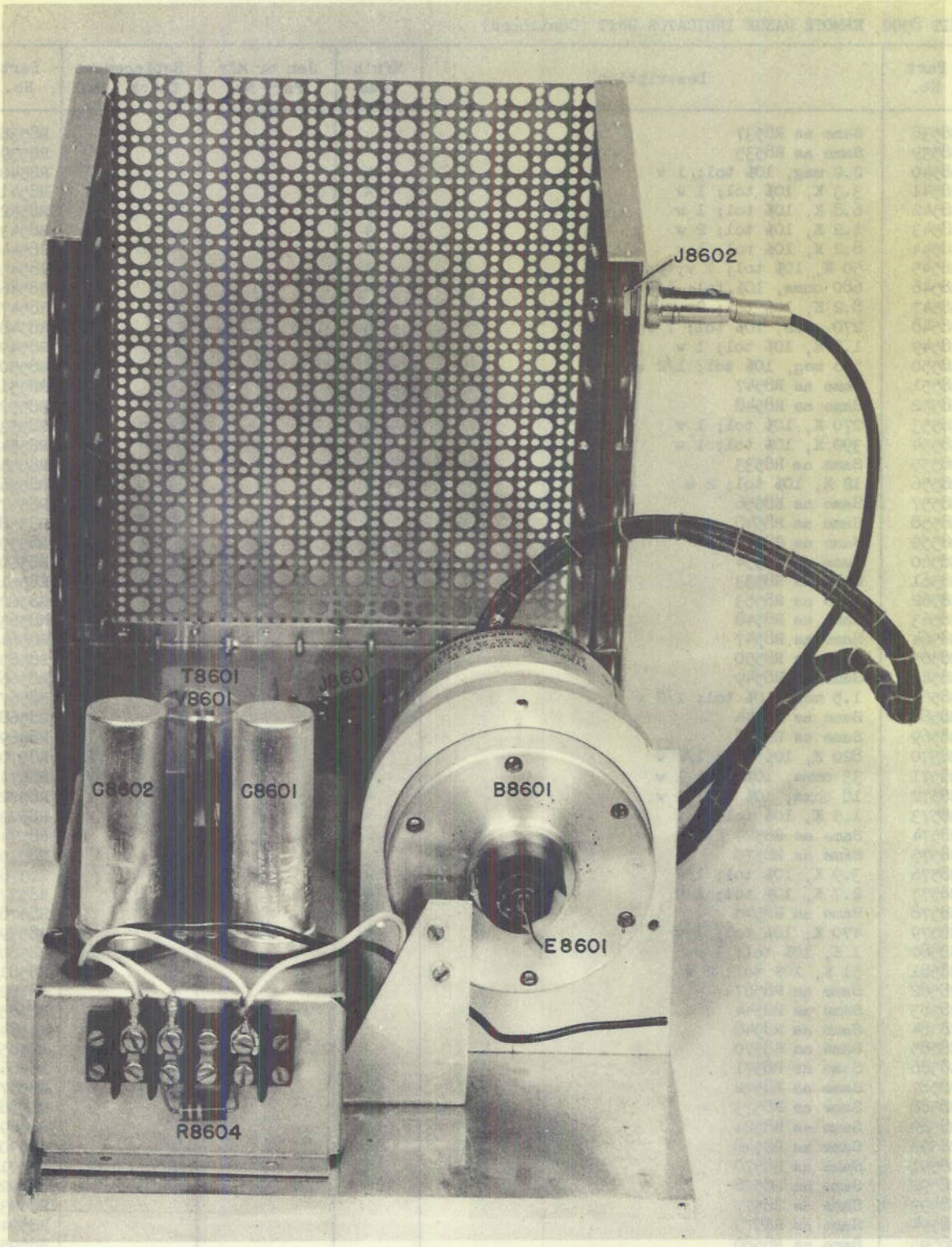

Figure 8-159. Commutator Unit - Front View

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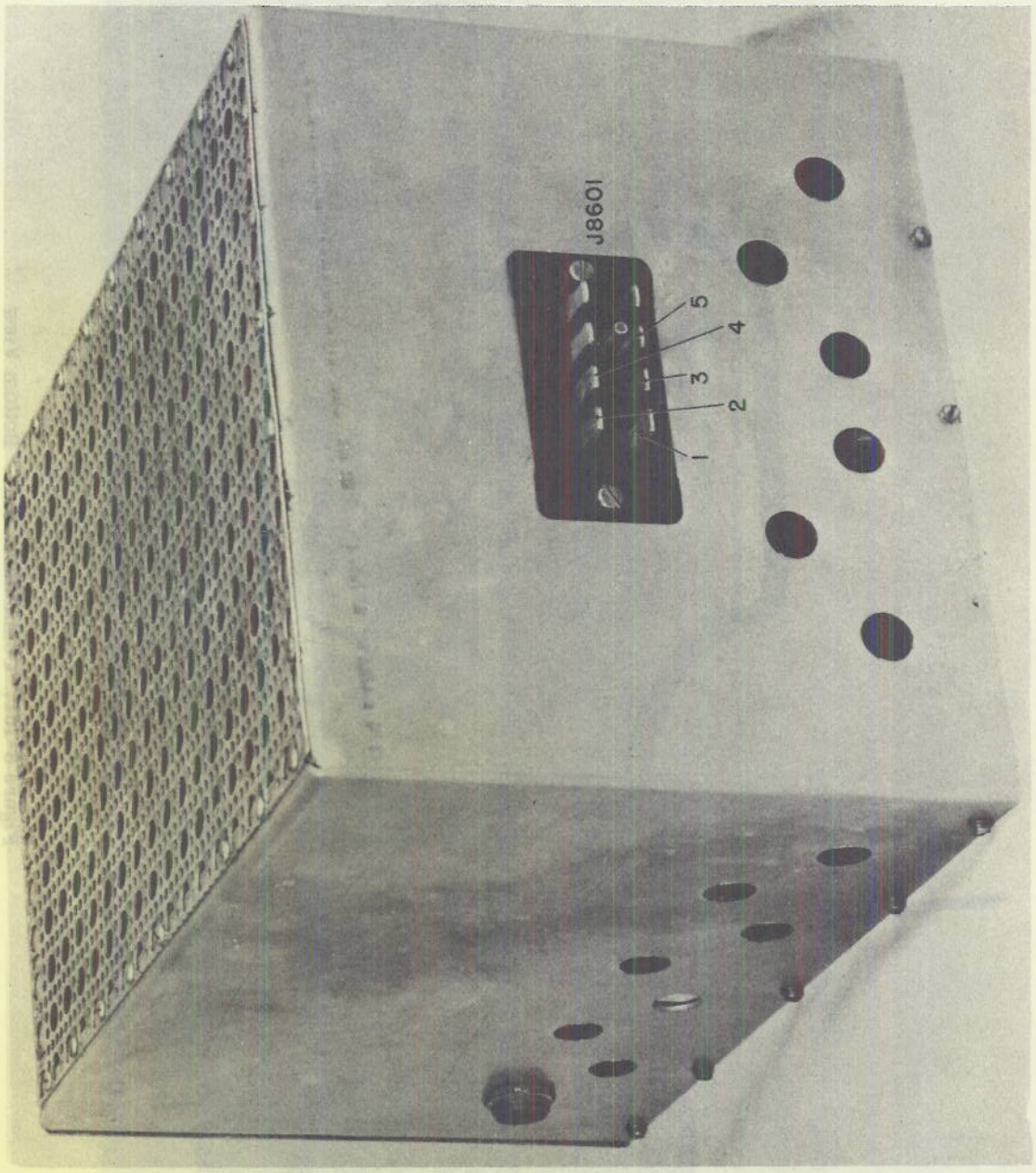

Figure 8-160. Commutator Unit - Back View

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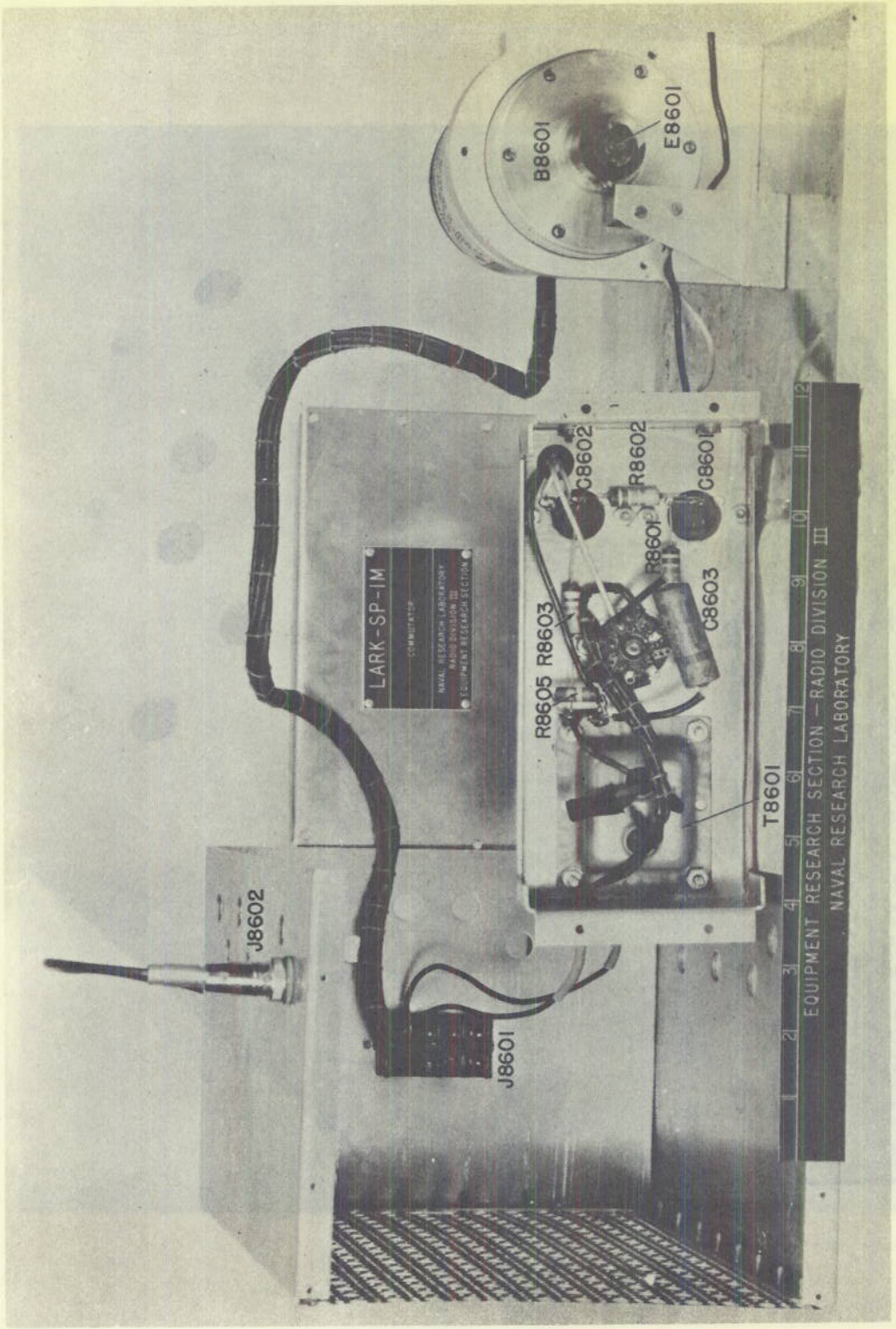

Figure 8-161. Commutator Unit - Bottom View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 8500, REMOTE RANGE INDICATOR UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
R8597	Same as R8580				R8597
R8598	Same as R8580				R8598
S8501	Switch, interlock, door half with spring,	18	M-7460330-G4		S8501
	frame half with sockets, CW 24067A	18	M-7460330-G		
T8501	High Voltage Plate Transformer	2030	Type S13322		T8501
T8502	Filament Transformer, cathode-ray tube	2030	Type S13323		T8502
T8503	Filament Transformer, 6.3v, 10 amps	2022	312-4		T8503
T8504	Pulse Transformer	702	X124-T3		T8504
T8505	Same as T8504				T8505
T8506	Pulse Transformer	38	145-EW2		T8506
T8507	Same as T8506				T8507
TB8501	Terminal Strip	386	141-Y-10		TB8501
V8501	Tube, half-wave rectifier		2X2		V8501
V8502	Same as V8501				V8502
V8503	Tube, cathode-ray		CR5CP11		V8503
V8504	Tube, twin triode		6SN7		V8504
V8505 thru V8512	Same as V8504				(V8505 thru V8512
V8513	Tube, television amplifier pentode		6AC7		V8513
V8514	Same as V8504				V8514
V8515	Same as V8513				V8515
X8501	Socket, 4 pin, high voltage	6	77-A-4T		X8501
X8502	Same as X8501				X8502
X8503	Socket, 14 pin, cathode-ray				X8503
X8504	Socket, octal	6	77-MIP-8		X8504
X8505 thru X8515	Same as X8504				(X8505 thru X8515

UNIT 8600, COMMUTATOR UNIT

B8601	Synchro Motor 5F				B8601
C8601	40 mf, electrolytic	28	FP		C8601
C8602	Same as C8601				C8602
C8603	0.05 mf, 600v, paper	34			C8603
E8601	Commutator Brush Assembly	NRL			E8601
J8601	Plug, series	386	P-408-SB		J8601
J8602	Connector, female, 1 contact	6	80-C		J8602
R8601	56 K, 2 w	4			R8601
R8602	56 K, 1 w	4			R8602
R8603	Same as R8602				R8603
R8604	39 K, 1 w	4			R8604
R8605	18 K, 1 w	4			R8605
T8601	Power Transformer	669	T22R01		T8601
V8601	Tube, full-wave rectifier		6X5		V8601
X8601	Socket, octal	6	77-MIP-8		X8601

UNIT 9100, TELESCOPE UNIT

B9101	A-C Control Motor, 5 w, 75v field	2029			B9101
B9102	Same as B9101				B9102
B9103	Same as B9101				B9103
B9111	D-c Tachometer Generator	994			B9111
B9112	Same as B9111				B9112
C9101	2 mf, 600v	13	DY6200		C9101

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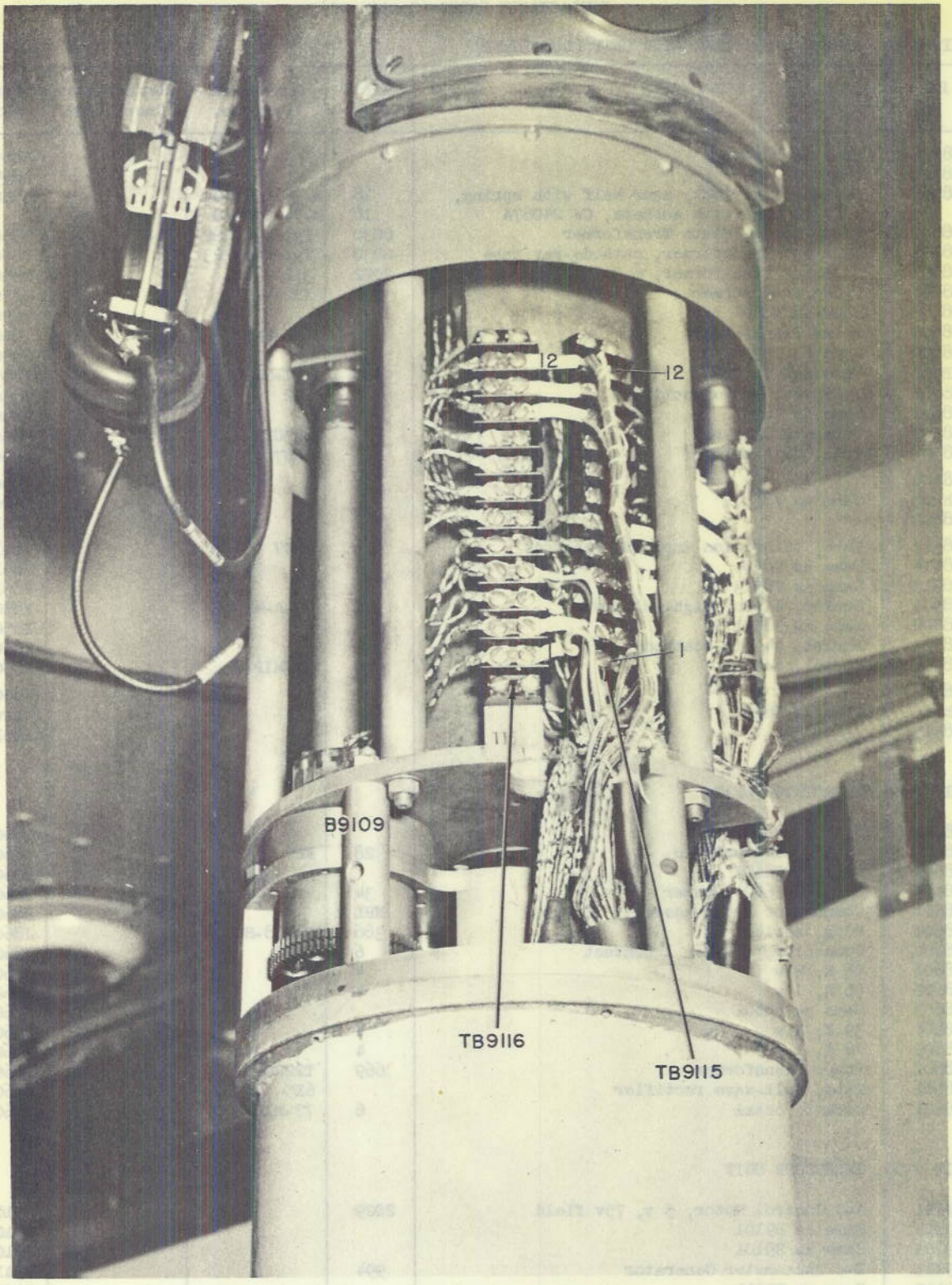

Figure 8-162. Telescope Column Showing Terminal Boards - Front View

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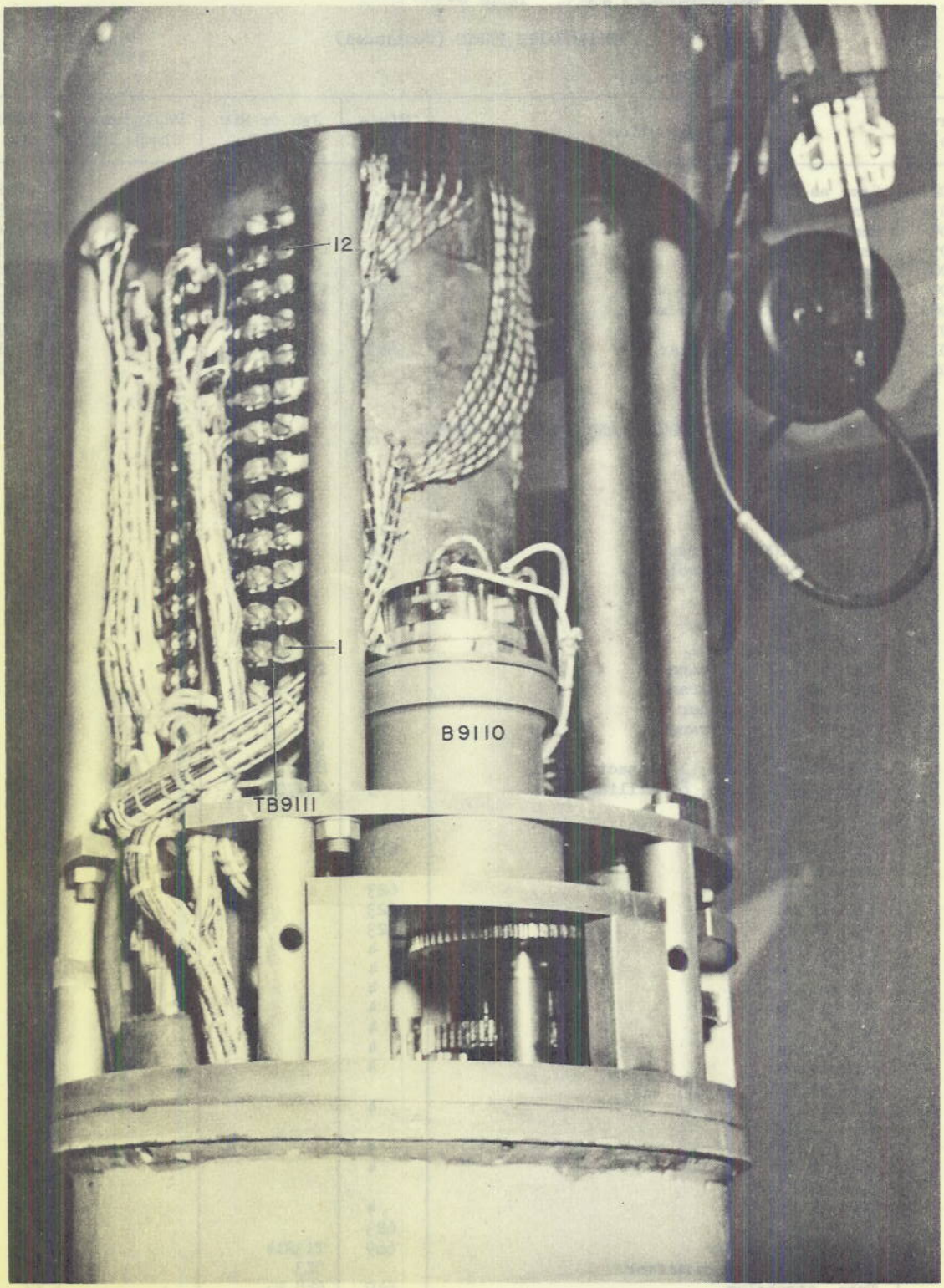

Figure 8-163. Telescope Column Showing Terminal Boards - Rear View

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT 9100, TELESCOPE UNIT (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
C9102	Same as C9101				C9102
C9103	4 mf, 600v	13	T6040		C9103
C9104	Same as C9103				C9104
C9105	Same as C9103				C9105
C9106	Same as C9103				C9106
R9105	750 ohms, 10 w, wire wound	32	BR0L0		R9105
R9106	210 ohms, 10 w, wire wound	32	BR0L0		R9106
R9107	Same as R9105				R9107
T9101	Interstage Transformer	669	T20A24		T9101
T9102	Same as T9101				T9102
UNIT NUTATOR PHASING UNIT (STROBOLUX AND STROBOLUX KEYER)					
C1	10 mf				C1
C2	2 mf				C2
C3	2 mf				C3
C4	8 mf, 600v	13			C4
C5	0.25 mf, 1000v, pyranol	18			C5
C6	20 mf, 450v, electrolytic	2			C6
C6A	Same as C6				C6A
C8	Same as C6				C8
C8A	Same as C6				C8A
C9	1 mf, 600v, pyranol	18			C9
C10	0.0068 mf, 300v, mica	13	1-W		C10
C11	0.01 mf, 1000v, pyranol	18			C11
C12	0.05 mf, 400v, paper	34			C12
C13	0.5 mf, 1000v, pyranol	18			C13
J1	Jack	6	316		J1
J2	Connector, female, 1 contact	6	80-C		J2
L1	Choke, 10 henries, 65 milliamps	5	C-1708		L1
R1	3 K				R1
R2	1 meg				R2
R3	39 K, 10 w	623			R3
R4	Same as R3				R4
R5	3.5 K, 10 w	623			R5
R6	3 K, 10 w	623			R6
R7	5 K, 10 w	623			R7
R8	2.7 K, 2 w	4			R8
R9	4.7 K, 2 w	4			R9
R10	3.3 meg, 1 w	4			R10
R11	560 K, 1 w	4			R11
R12	120 K, 1 w	4			R12
R13	6.8 K, 1 w	4			R13
R14	1 meg, 1 w	4			R14
R15	Same as R11				R15
R16	4.7 K, 1 w	4			R16
R17	Same as R12				R17
R18	100 K, 1 w	4			R18
R19	75 K, 2 w	4			R19
R20	Same as R18				R20
R21	18 K, 1 w	4			R21
R22	4.7 K, 10 w	623			R22
T3	Power Transformer	669	T13R14		T3
V1	Tube, full-wave rectifier		5Z3		V1
V2	Tube, strobolux	649	648-P1		V2
V3	Tube, full-wave rectifier		5Y3GT/G		V3
V4	Tube, full-wave rectifier		6X5		V4
V5	Tube, twin triode		6SL7		V5

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TABLE 8-3

REPLACEABLE PARTS (Continued)

UNIT NUTATOR PHASING UNIT (STROBOLUX AND STROBOLUX KEYER) (Continued)

Part No.	Description	Mfr's Code	Jan or Mfr Part No.	Replacement Check List	Part No.
V6	Tube, video beam power amplifier		6AG7		V6
V7	Tube, strobotron	649	631-P1		V7
V8	Tube, voltage regulator		VR75		V8
	NOTE Tube type 648-P1 must be the type having cylindrical anode and cathode elements.				
X1	Socket, octal	6	77-MIP-8		X1
X2	Socket, 4 pin	6	77-MIP-4		X2
X3	Same as X1				X3
X4	Same as X1				X4
X5	Same as X1				X5
X6	Same as X1				X6
X7	Same as X2				X7
X8	Same as X1				X8

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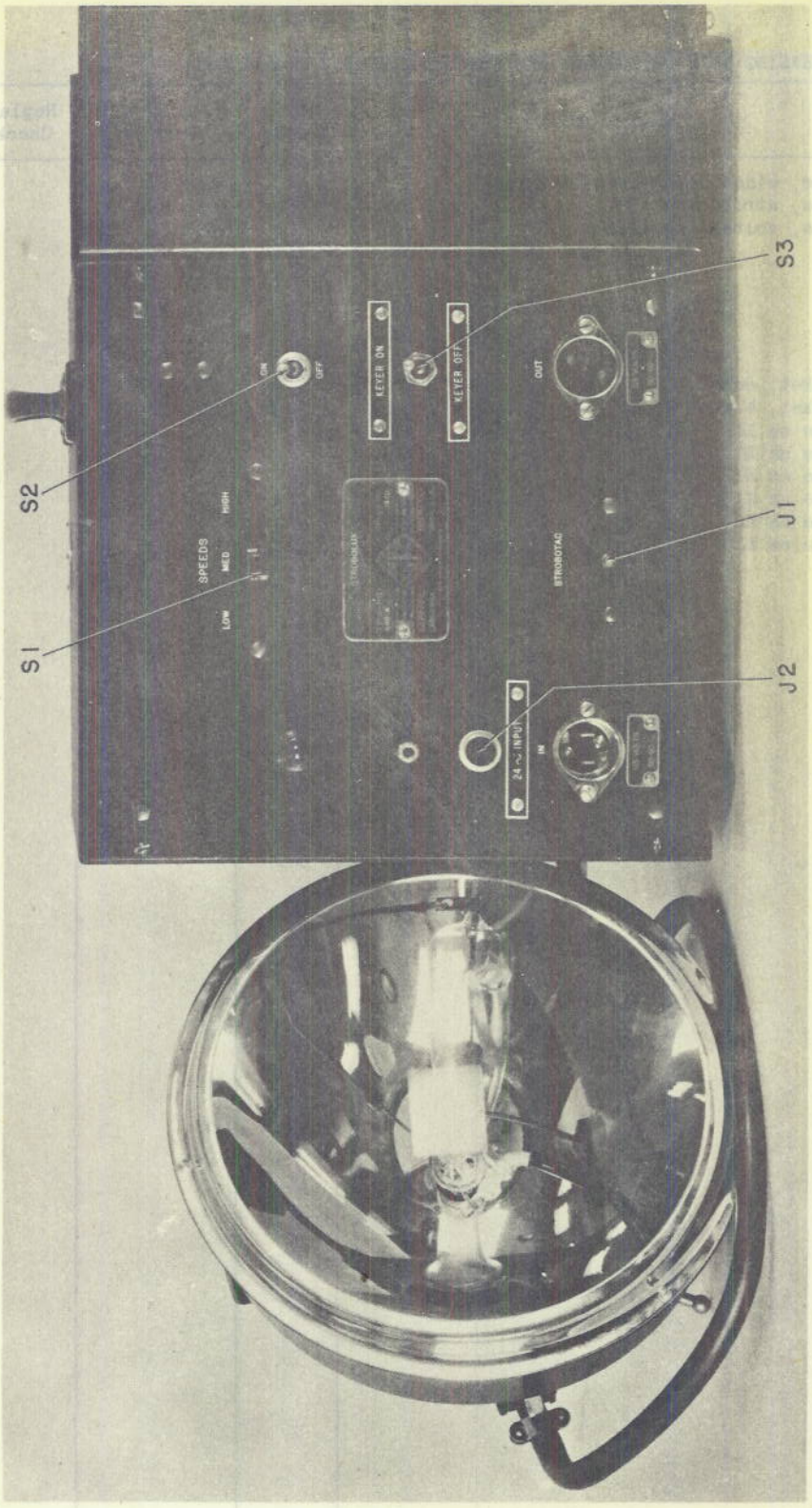

Figure 8-164. Nutator Phasing Unit - Front View

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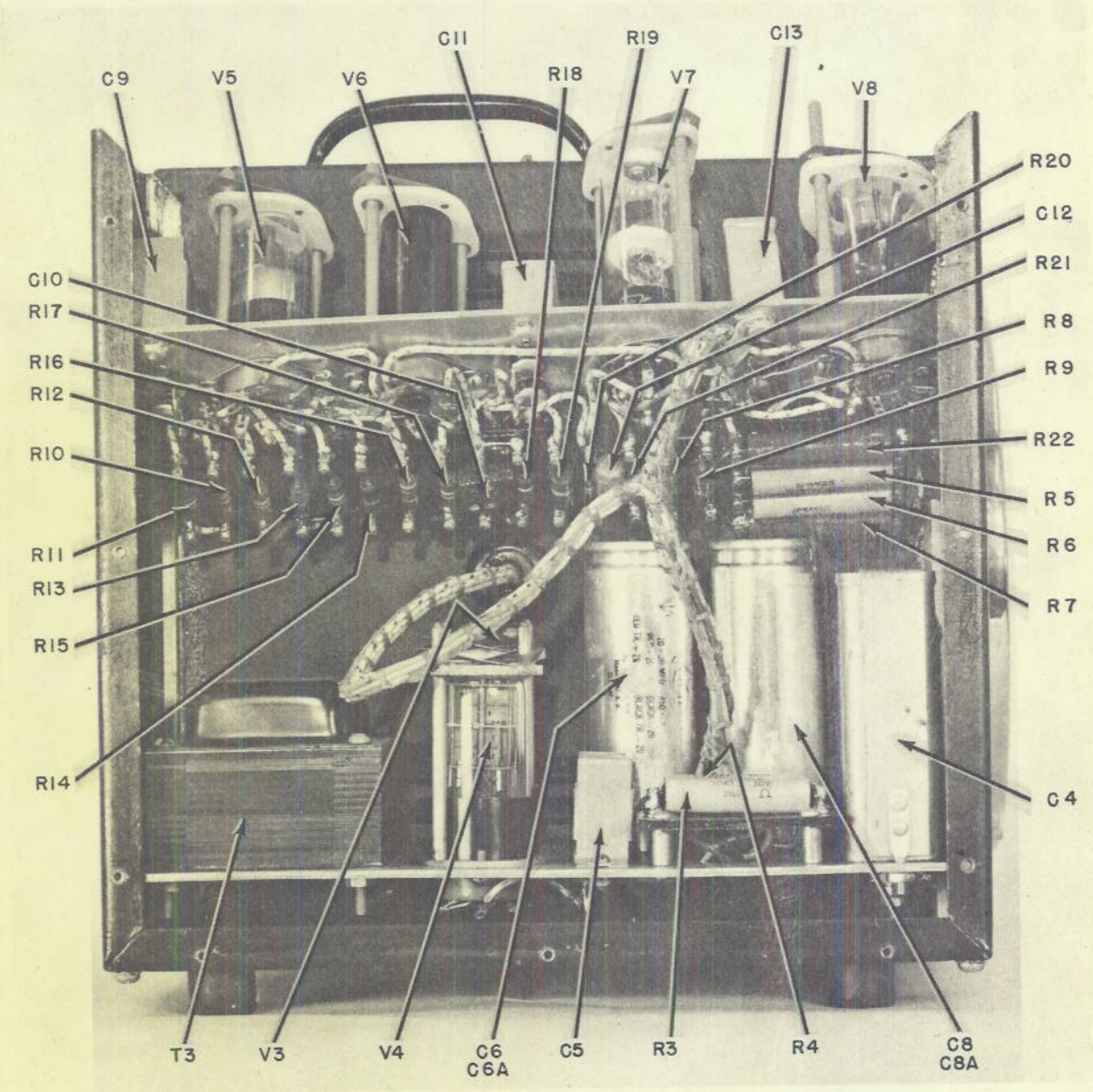

Figure 8-165. Nutator Phasing Unit Keyer Chassis - Upper Shelf Tilted

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