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T56 TURBOPROP ENGINE MAINTENANCE PLAN.(U)
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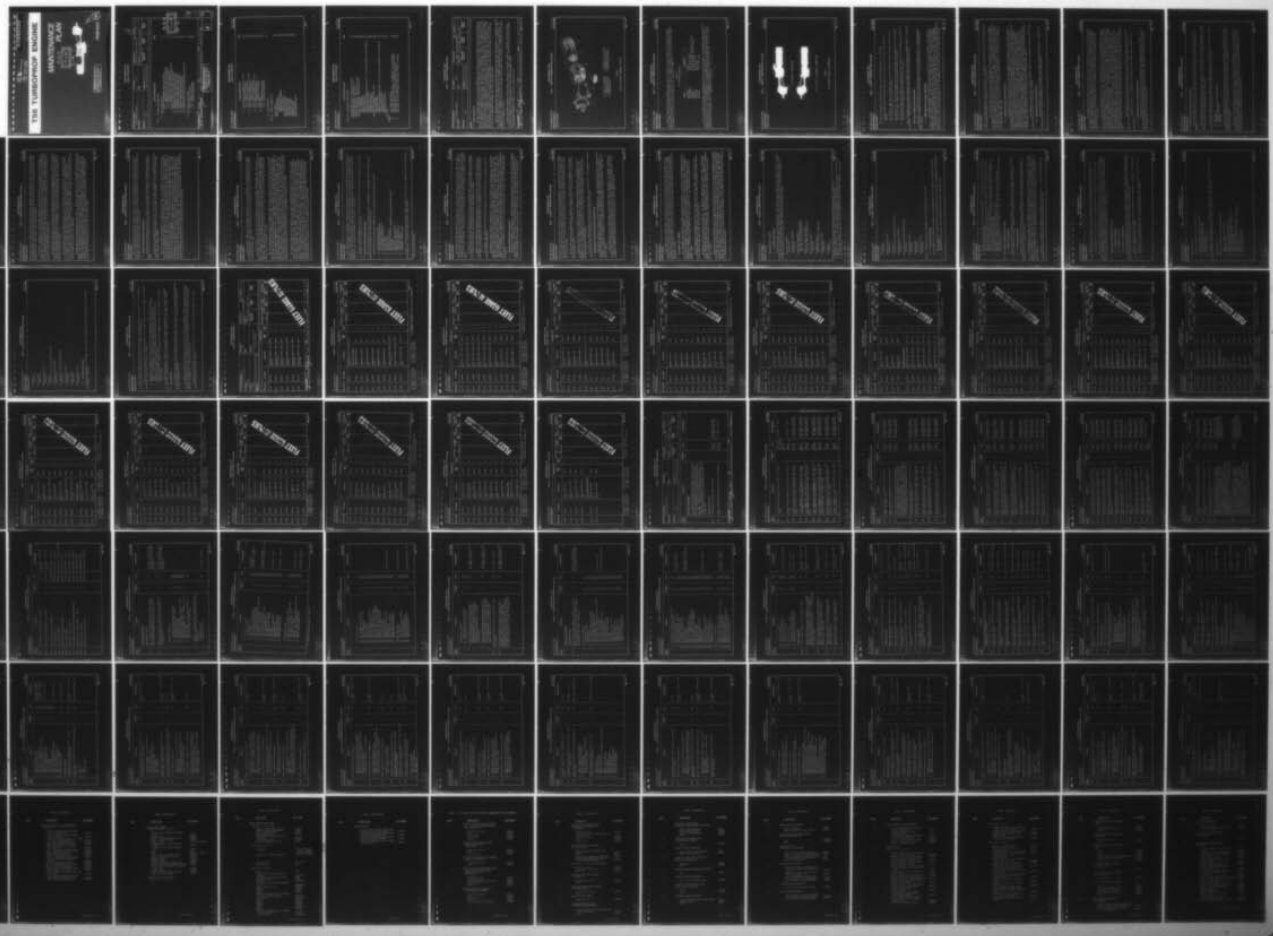

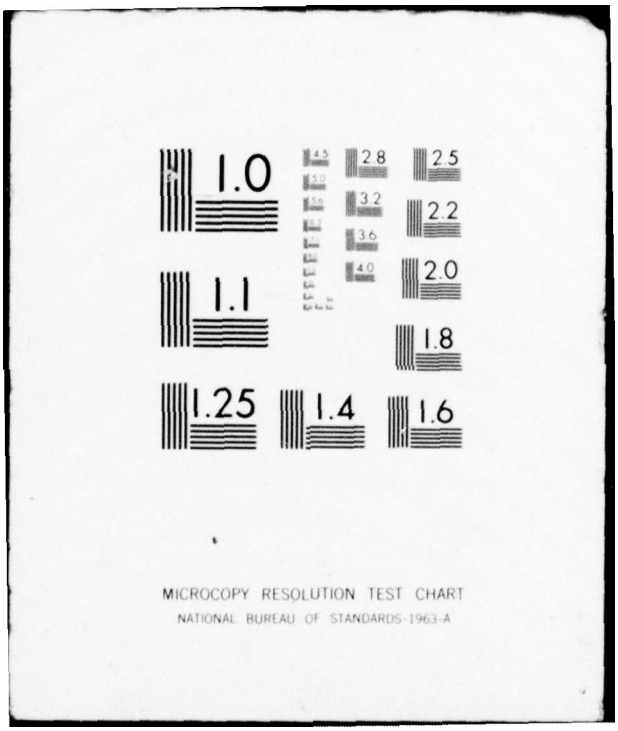
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T56 TURBOPROP ENGINE

MAINTENANCE PLAN

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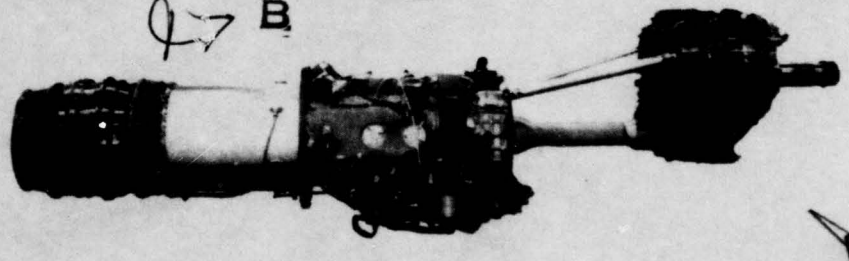

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PPMP0002

MAINTENANCE PLAN

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T56 Turboprop Engine	22300	Naval Air Systems Command	PPMP0002
Part Number	**NSN**	**Prepared by** AIR-4113/ARINC Research Corp.	
FSCM Code 73342	**Application** P-3, E-2, C-2, and C-130 series aircraft	**Date of Initial Submission**	**Revision Number** / **Date of Revision**

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MAINTENANCE PLAN
PART I – GENERAL CONSIDERATIONS

Nomenclature/Designation	WUC/LSACN	Preparing Activity	No.
T56 Turboprop Engine	22300	Naval Air Systems Command	PPMP0002
Part Number	**NSN**	**Prepared by** AIR-4113/ARINC Research Corp.	
FSCM Code 73342	**Application** P-3, E-2, C-2, and C-130 series aircraft	**Date of Initial Submission**	**Revision Number** / **Date of Revision**

Narrative

1.0 Design Description

The T56 turboprop engine is an internal-combustion, gas turbine, aircraft primary power plant manufactured by Detroit Diesel Allison Division of General Motors Corporation in Indianapolis, Indiana. Engine power is developed by the compression of ambient air by an axial compressor and the introduction of fuel with the compressed air. The fuel-air mixture is ignited and the resultant high velocity gases pass through a turbine. The energy of the gas is extracted and converted into a usable form by the turbine to drive engine components and a constant-speed variable-pitch propeller. The engine is essentially a constant-speed unit with the propeller acting as the governor. Power from the engine is converted to thrust, principally by the propeller, with some additional jet thrust provided by the high velocity exhaust gases. The engine also provides bleed-air for operation of engine anti-icing, pressurization, and compressor unloading during the engine start cycle.

The major components which physically make up the T56 engine include a gas turbine power unit assembly connected to a reduction gear section via a torquemeter section and supporting structure (see Figure 1). In addition to the reduction gear and torquemeter sections the power unit assembly contains four sections: a compressor section, a combustion section, a turbine section, and an accessory drive section which is mounted on the bottom of the forward end of the compressor section.

Integral accessory systems of fuel/control, lubrication, electrical, ignition, bleed-air, and water/alcohol injection* provide for coordinated control of engine operation. Hoses, tubing, and electrical wiring interconnect the various equipment which support operation of the engine accessory systems.

* Water/alcohol injection is used on the T56-A-10WA engine only.

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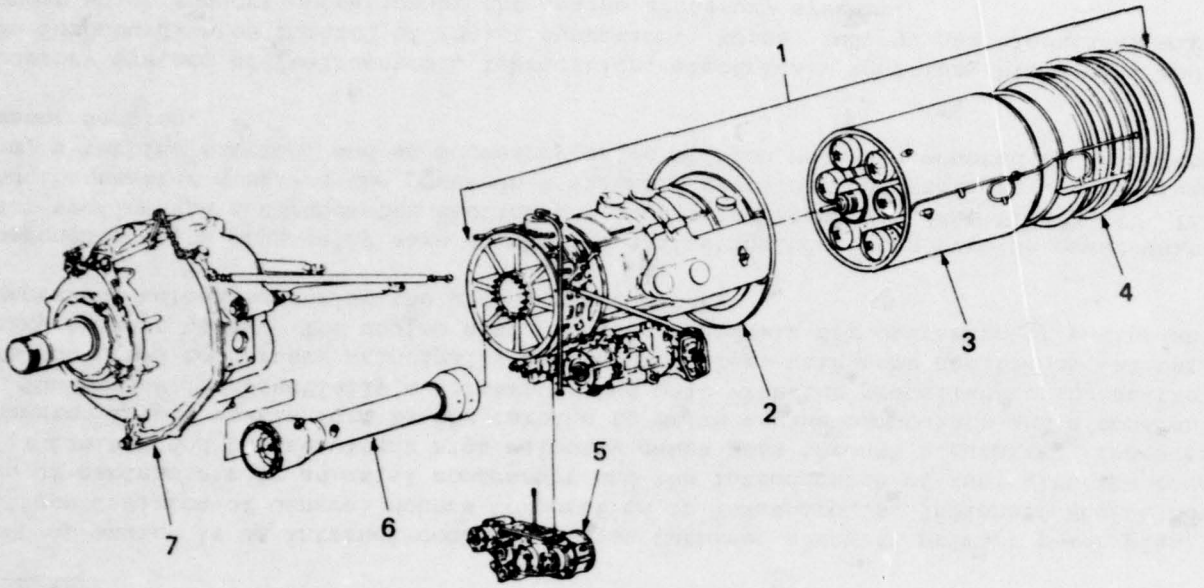


1. Power Unit Assembly
2. Compressor Section
3. Combustion Section
4. Turbine Section
5. Accessory Drive Section
6. Torquemeter Section
7. Reduction Gear Section

FIGURE 1

MAJOR T56 ENGINE COMPONENTS (TYPICAL)

T56 Turboprop Engine

Nomenclature/Designation

Revision Number

Narrative (continued)

Numerous models of the T56 turboprop engine have been placed into both commercial and military service. Current usage and related maintenance responsibility by the Navy is limited to only seven models installed in four series of aircraft -- the C-2, C-130, E-2, and P-3. These T56 engine models, which are covered in this maintenance plan, and their aircraft application are identified in Table 1.

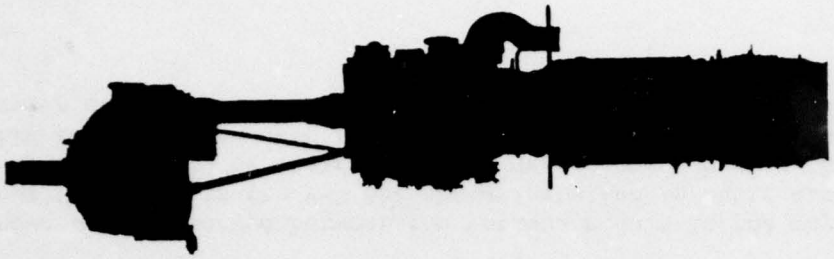
TABLE 1

T56 ENGINE APPLICATION

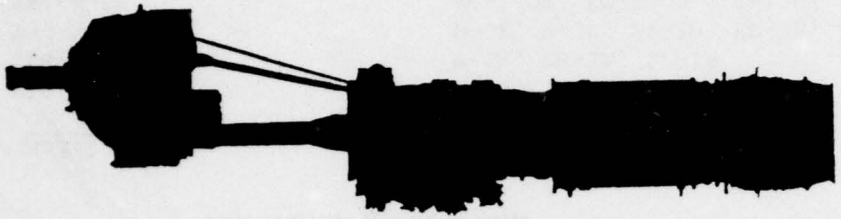
Model	Aircraft
T56-A-7A	C-130F
T56-A-10WA	P-3A, EP-3A, RP-3A
T56-A-14	P-3B, P-3C, EP-3B, EP-3E, RP-3D, YP-3C
T56-A-16	KC-130F, KC-130R, LC-130F, LC-130R
T56-A-423	EC-130G, EC-130Q
T56-A-425	E-2C, TE-2C
T56-A-426	C-2A, E-2B, TE-2A

One of the primary differences to be observed between the various models is the physical orientation of the reduction gear section for engines installed in the P-3 and those installed in other aircraft (see Figure 2). Engines installed in the P-3 are characterized by their reduction gear section having the torquemeter section connected high (pinion high) while the reduction gear section on engines installed in the C-2, C-130, and E-2 aircraft has the torquemeter section connected low (pinion low).

Narrative (continued)



(P-3 AIRCRAFT, PINION HIGH)



(C-2, C-130 & E-2 AIRCRAFT, PINION LOW)

FIGURE 2

T56 TURBOPROP ENGINE CONFIGURATIONS

Narrative (continued)

Principal configuration differences between individual engine models are as follows:

a. The T56-A-10WA engine incorporates water/alcohol injection to gain a higher power rating for takeoff.

b. The T56-A-7A, -10WA, and -426 engines use an internal diffuser assembly scavenge pump and turbine front scavenge pump, and a series II turbine.

c. The T56-A-14, -16, -423, and -425 engines provide a higher power rating through use of a redesigned series III turbine. Also these engines use an external scavenge oil system.

d. The T56-A-423 engine has an additional accessory gear train installed in its reduction gear section to reactivate an existing pad position to drive an extra alternator.

Other differences to be observed between engine models are less significant and apply primarily to specific piece/parts. These differences are identified as required within this maintenance plan.

1.1 Power Unit Assembly Design Description

The power unit assembly consists of a fourteen-stage axial flow compressor section, a combustion section made up of six cylindrical through-flow combustion liners, a four-stage turbine section, and an accessory drive section.

1.1.1 Compressor Section Design Description

The compressor assembly is composed of an air inlet housing, a rotor assembly, a compressor case assembly, and a difusser assembly. The air inlet housing contains the compressor front bearing, compressor extension shaft, and the necessary gearing to drive the accessory drive section. A mounting pad is provided at the bottom for the accessory drive section and the power section breather is at the top. A labyrinth seal is used at the compressor front bearing, and a two-stage labyrinth seal is used at the front of the compressor rear bearing. The air inlet housing incorporates anti-icing valves and passages for directing compressor discharge anti-icing air to the strut leading edges, inlet vane assembly, fuel control pressure and temperature sensing

Narrative (continued)

probes, and torquemeter housing and anti-icing shroud. The compressor case assembly encloses the fourteen-wheel rotor assembly and supports the compressor stator vane assemblies.

The inner rings of the stator vane assemblies support the interstage air seals. Ports for bleeding off compressor air during start are provided in the compressor case. The diffuser assembly serves to diffuse the compressor discharge air and direct it into the combustion chamber. It supports the compressor rear bearing, compressor rear labyrinth seal, and six fuel nozzles. It incorporates external connections for the anti-icing air supply tubes, air supply line for closing the compressor air-bleed valves, oil sump vent line, scavenge oil line, oil sump, drain cover, lube oil line, scavenge oil pump (T56-A-14, -16, -423 and -425) and compressor rear labyrinth seal vent lines.

1.1.2 Combustion Section Design Description

The combustion section consists of six individual through-flow combustion liners evenly spaced in one annulus formed by an outer casing and inner casing. The combustion liners are located radially by the fuel nozzles at the front and by the turbine inlet vane assemblies at the rear. Six crossover tubes are located between the liners to transfer the flame from the two diametrically opposed liners which contain the spark igniters to the other four liners during engine starting. The fuel nozzles are mounted on the diffuser assembly and extend into the center of each liner dome. The combustion section outer casing encloses the combustion liners and serves as a supporting structure between the compressor and turbine sections. The outer casing is bolted to the compressor diffuser assembly at the front and to the turbine inlet casing at the rear. Six adapters for two spark igniters and four liner supports are provided at the forward end of the assembly. To prevent accumulation of unburned fuel in the combustion section, two burner drain valve assemblies are provided, one at the front end, and a second at the rear end of the outer casing.

The combustion section is not a separate assembled entity, but is generally treated as a part of the turbine section, to which it is physically attached.

1.1.3 Turbine Section Design Description

The turbine section consists of the turbine inlet casing and front bearing support, turbine rotor, turbine vane casing, turbine vane assemblies, and turbine rear bearing support.

Narrative (continued)

The combustion section inner casing and liner is also considered as part of the turbine section. The combustion section inner casing consists of an inner and outer shell which are separated by an air space. Both shells incorporate bellows type expansion joints to allow for expansion, contraction, and misalignment. The forward end of the outer shell is supported by a sleeve in the diffuser; the aft end is bolted to the turbine inlet casing. This arrangement allows for differential expansion between the combustion section inner and outer casings.

The front bearing support houses the turbine front bearing and combustion chamber inner casing liner. The turbine rotor assembly consists of four wheels supported by roller bearings at each end. Between adjacent turbine wheels is a turbine spacer disk. These disks are held in close proximity to the inner rings of the turbine vane assembly; they function as axial retainers for the blades and also as a labyrinth seal to minimize gas leakage between turbine stages. The turbine rotor is encased in the one-piece turbine casing assembly which consists of the vane assemblies. The casing assembly is bolted to the turbine inlet casing at the front and the turbine rear bearing support at the rear. The turbine rear bearing support houses the turbine rear bearing and provides a flange for mounting the turbine rear scavenge oil pump support and rear bearing labyrinth seal. In addition, the turbine rear bearing support assembly includes the outlet duct for the turbine rotor exhaust gases. The turbine front scavenge oil pump (T56-A-7A, -10WA and -426 only) is designed to scavenge the oil which gathers in the turbine front bearing area. The rear scavenge oil pump is located at the rear end of the rear turbine bearing support and scavenges oil which gathers in the rear turbine area.

The T56-A-14, -16, -423, and -425 do not have a turbine scavenge oil pump in front or a diffuser scavenge oil pump; these functions are handled by an external scavenge oil pump on the accessory drive.

Labyrinth type seals are incorporated at the front and rear turbine bearing locations on all engine models.

1.1.4 Accessory Drive Section Design Description

The accessory drive section is mounted on the bottom of the compressor air inlet housing. It provides the necessary gearing and mounting pads to drive the fuel pump, external scavenge oil pump (T56-A-14, -16, -423, and -425 only), fuel control, speed sensitive control, speed sensitive valve, main oil pressure and scavenge pump, and oil filter mounting pad.

Narrative (continued)

1.2 Reduction Gear Section Design Description

The reduction gear section includes a single propeller drive shaft, negative torque signal system, thrust sensitive signal system, propeller brake, a dry sump oil system, and gearing to provide the required speed reduction.

The main reduction gear train used to drive the propeller shaft consists of two stages of reduction -- a spur gear first stage and a planetary-type second stage. These two stages provide the necessary speed reduction from the engine speed to the speed required for the propeller.

The reduction gear section also contains an accessory drive gear train which drives the accessories mounted on the rear face of the reduction gear rear housing. These accessories are as follows:

a. Alternator
b. Hydraulic Pump or Engine Driven Compressor
c. Tachometer Generator
d. Oil Pump

Since the T56 engine is used in multi-engine aircraft, the accessories mounted on the reduction gear rear housing will not necessarily be the same in all aircraft engine positions. As previously mentioned, the T56-A-423 engine reduction gear section contains an additional active accessory pad and related gearing which is utilized to drive an alternator.

Front and rear scavenge pumps are driven by gears located on the propeller shaft and on the forward end of the pinion gear. The oil scavenged in the reduction gear assembly is directed through a return port near the bottom on the right side of the rear housing. Inserted in this opening is an indicating magnetic plug with a screen type filter. The threaded plug in the lower front housing (rear housing for T56-A-10WA and -14) is used to drain the residual oil from the reduction gear section.

Narrative (continued)

1.3 Torquemeter Section Design Description

The power unit assembly drives the reduction gear through an extension shaft and torquemeter section. The reduction gear section is secured to the power unit assembly by the torquemeter housing and a pair of tie struts which provide structural support.

The torquemeter section provides for measurement of the shaft power output of the power unit assembly and consists of the following principal components:

a. Concentric Shaft Assembly (Inner and Outer Torquemeter Shafts)
b. Torquemeter Housing
c. Torque Sensing Pickup
d. Safety Coupling
e. Cowl Assembly

The torquemeter measures torsional deflection that occurs in the power transmitting shaft. This torsional deflection is detected by magnetic pickups, measured electronically, and displayed on the aircraft instrument panel. A special type of shafting assembly consisting of two concentric shafts is used to create "windup" sufficient to produce the desired degree of accuracy. The inner, or torque shaft, carries the load that produces the measured "windup". The outer, or reference shaft, is rigidly connected to the torque shaft at the drive input end only and transfers the reference position to the output for measuring purposes. There are separate flanges on both the torque and reference shafts at the reduction gear assembly end. A sensing pickup assembly containing electromagnetic pickups mounted radially over the teeth of the torque and reference shaft flanges produce electrical impulses at the passage of each exciter tooth. As the torque shaft deflects when load is applied, the teeth on the torque flange are displaced with respect to the teeth on the reference flange, thus causing an increase in the phase displacement between impulses produced by the magnetic pickups mounted over these flanges.

A safety coupling is provided to disengage the reduction gear section from the power unit assembly in the event the power section is operating above a preset negative torque value of 6,000 inch pounds.

Narrative (continued)

1.4 Fuel/Control System Design Description

During flight the engine fuel/control system regulates engine speed by propeller constant speed governing and controls engine torque by the regulation of fuel control.

While taxiing, engine speed and torque are controlled by direct control of the propeller blade angle and regulation of fuel flow by the engine operator who maintains control of the engine through a power lever which is installed on the flight deck. A condition lever and a fuel cutoff handle, both installed on the flight deck, serve to feather the propeller and shut down the engine.

The principal components of the fuel system are as follows:

a. Fuel Pump
b. Low-pressure Filter Assemblies
c. High-pressure Fuel Filter Assembly
d. Fuel Control
e. Starting Fuel Enrichment System
f. Temperature Datum Valve
g. Fuel Manifold
h. Fuel Nozzles
i. Fuel Manifold Solenoid Drain Valve
j. Burner Drain Valves
k. Coordinator
l. Speed Sensitive Control

Fuel enters the engine-driven fuel pump and passes through the centrifugal boost pump which raises the pressure. From the outlet of the centrifugal boost pump the fuel is passed through the low-pressure filter. The filtered fuel is then returned to the inlet of the gear pump elements. During normal operation the pump elements operate in series. Fuel then passes through the high-pressure filter assembly to the fuel control. Parallel operation of the pump elements is provided for starting purposes through the incorporation of a paralleling valve in the filter assembly. The fuel control is essentially a scheduled control which functions to meter fuel as demanded by the control lever setting. From the fuel control the fuel passes through the temperature datum valve which bypasses the amount of fuel necessary to maintain a desired turbine inlet temperature

Narrative (continued)

in conjunction with a signal received from the electronic temperature datum control. Fuel leaving the temperature datum valve passes to the fuel manifold which distributes the fuel to the six fuel nozzles. Burner drain valves are incorporated on the bottom of the combustion section outer casing to prevent the accumulation of fuel in the combustion section after a false start or after shutdown.

The engine incorporates a starting fuel enrichment system which provides an increased fuel flow during an engine start. In addition to the normal flow through the fuel control, an enrichment bypass line allows pump discharge fuel to enter the system downstream of the metering portion of the fuel control. The fuel is then directed to the temperature datum valve, and to the fuel manifold and nozzles. A normally closed solenoid enrichment valve is located in the enrichment bypass line. It opens when the circuits are energized to allow pump discharge flow to parallel the flow from the fuel control.

The temperature datum valve is located between the fuel control and the fuel manifold. It acts in conjunction with the fuel control and responds to electrical signals from the electronic temperature datum control to provide a preselected schedule of turbine inlet temperature. The valve is motor-driven and receives its signal from the electronic temperature datum control which adjusts the position of the temperature datum valve to allow more or less fuel flow to the engine.

The fuel output from the temperature datum valve is connected to the fuel manifold. The manifold consists of y-fittings and flexible hoses which connects directly to the six fuel nozzles and to a manifold drain valve at the bottom of the engine. Each nozzle extends into the dome of a combustion liner. At pressures below 70 psi, fuel flows around a metering valve assembly and through the primary orifice to create a spray pattern at low fuel flow rates. At pressures above 70 psi, the metering valve opens and permits flow through both the secondary and primary orifices for normal operation.

A spring-loaded, solenoid-operated, drain valve is located at the bottom of the fuel manifold which drains the manifold when the pressure drops below eight to ten psi while the power unit is being stopped, thus minimizing the amount of fuel dripping into the combustion chambers at low pressures. During the starting cycle, the valve is closed by the speed sensitive control and is held closed by the subsequent build-up of fuel pressure within the manifold. Two combusion chamber drain valves are located in the bottom of the combustion chamber assembly (one at the forward end and the other at the aft end). The valves prevent the accumulation of fuel in the burner section after an unsuccessful start or after stopping the engine.

Narrative (continued)

The coordinator bolts to the rear face of the fuel control and coordinates the operation of the propeller, electronic temperature datum control, and fuel control. It receives signals through linkage from the flight deck power lever and the flight deck condition lever and transmits these signals to the fuel control and propeller regulator through a system of levers, and bellcranks.

1.5 Lubrication System Design Description

The power unit assembly of the T56-A-7A, -10WA, and -426 engines incorporates an independent dry sump oil system which includes one combination main pressure and scavenge oil pump assembly, and three separate scavenge pumps.

The power unit assembly of the T56-A-14, -16, -423, and -425 engines incorporates an independent dry sump oil system which includes a combination main pressure and scavenge oil pump assembly, a rear turbine scavenge pump and an external scavenge pump.

The main oil pump is located on the assessory drive section. Oil, supplied to the pump from the aircraft oil tank, is pumped through passages to a full-flow filter. This filter is also located on the accessory drive section and incorporates a check valve to keep oil from seeping into the power unit assembly after shutdown. A pressure regulating valve, located in the main oil pump, senses pressure at the filter outlet and limits the oil pressure delivered by the pump to 55 psi. A filter bypass valve is incorporated between the passages leading into and out of the filter and bypasses oil around the filter in the event the filter becomes clogged. A tube passes the oil to the diffuser assembly to provide compressor rear bearing lubrication. An internal line from the compressor rear bearing position goes through the inner combustion chamber casing assembly and carries oil to the turbine front bearing. The turbine rear bearing is lubricated by a continuation of the external tube from the diffuser to the turbine rear bearing support. The oil is returned from the compressor front bearing, extension shaft bearing, and extension shaft splines by gravity through drilled passages in the air inlet housing to the accessories housing where it is scavenged by the main scavenge pump.

Narrative (continued)

In the T56-A-7A, -10WA, and -426 engines lubricating oil in the compressor rear bearing drains to a sump in the diffuser assembly; the diffuser scavenge pump picks it up and returns the oil through tubes in the diffuser to an external line. The external line returns oil to the accessory drive section and then to the outlet side of the main scavenge pump.

Since the T56-A-14, -16, -423, and -425 engines do not have a diffuser scavenge pump, the oil from the diffuser sump is drawn out by the external scavenge oil pump and from there to the outlet side of the main scavenge pump. Lubricating oil is scavenged from the turbine front bearing by the turbine front scavenge oil pump and directed through a tube in the combustion section inner casing to the outlet side of the diffuser scavenge pump (T56-A-7A, -10WA, and -426 only). In the T56-A-14, -16, -423 and -425 the oil is drawn from the turbine front bearing sump by the external oil pump.

The oil flows through a tube in the combustion section inner casing to an outlet connector on the diffuser case and to the inlet of the external scavenge oil pump. Oil which lubricates the turbine rear bearing falls into the sump of the rear turbine scavenge oil pump support assembly and is directed by the scavenge oil pump through the turbine-to-compressor tie bolt. Drilled holes in the tie bolt provide lubrication for the front and rear turbine coupling shaft splines. Oil drains through splines in the turbine coupling shaft to either the turbine front bearing sump or the diffuser sump and is picked up by the turbine front scavenge oil pump in the T56-A-7A, -10WA and -426, or external scavenge oil pump in the T56A-14, -16, -423 and -425 and returned to the main scavenge oil pump outlet. A scavenge pressure relief valve located in the accessory drive relieves pressure in the event the scavenge outlet becomes restricted by congealed oil in the aircraft system. The power unit oil pressure pump maintains positive oil pressure at all engine speeds and operating altitudes.

The reduction gear section incorporates a dry sump oil system which consists of a gear type oil pump, filter, and two scavenge oil pumps. Both scavenge pumps are mounted internally, one at the bottom and one in the nose of the reudction gear assembly. Oil from the pressure pump passes through the filter assembly which includes a safety bypass valve that opens in the event the filter becomes clogged. From the filter the oil passes through a check valve and passages to a pinion oil nozzle, the propeller brake, the planetary gearing, the main bearings, and the propeller shaft bearings. The nose scavenge pump scavenges oil which collects in the front housing and delivers the oil to a common outlet connected with the main scavenge pump. The main pump scavenges the oil which collects in the bottom of the rear housing and them returns the oil through the common outlet to the aircraft oil supply tank. The reduction gear assembly oil pressure pump maintains positive oil pressure at all engine speeds and operating altitudes.

Narrative (continued)

The reduction gear oil system has a pressure adjusting valve in the oil pump body cover which allows the oil pressure to be increased, if necessary, to compensate for pump wear. The valve should not be used to decrease pressure as high pressure is usually caused by clogged oil passages which could cause oil starvation to vital components. The oil system also has a pressure relief valve that opens at approximately 280 psi to protect the magnesium alloy casting from rupture due to excessive oil pressure.

The engine breather mounted on top of the air inlet housing, vents the aircraft oil supply tank, the power unit assembly, and the reduction gear section.

1.6 Electrical System Design Description

The electrical system consists of an ignition system, thermocouples, thermocouple harness, power unit and reduction gear harnesses, and special purpose cables.

The following engine-furnished components are interconnected by the electrical system:

a. Anti-Icing Solenoid Valve
b. Fuel Manifold Pressure Switch
c. Fuel Enrichment Shutoff Valve
d. Fuel Manifold Drain Valve
e. Ignition Relay
f. Ignition Exciter
g. Speed Sensitive Control
h. High-Pressure Fuel Filter (Paralleling Valve and Pressure Switch)
i. Fuel Control
j. Temperature Datum Amplifier*
k. Temperature Datum Valve
l. Turbine Inlet Thermocouples
m. Coordinator Control
n. Torquemeter Sensing Pickup

Electrical power utilized by the electrical system and operation of the above components includes both 115 Vac 400 Hz and 28 Vdc. Variable voltages are used in some circuits.

* Aircraft mounted equipment

Narrative (continued)

The ignition system consists of an ignition relay, an ignition exciter, two high tension leads and spark igniters. When the ignition relay energizes during an engine start (approximately 16% or 2200 rpm) it completes the necessary electrical circuits to the ignition exciter, manifold drain valve, paralleling valve, and fuel enrichment valve. The ignition exciter raises the potential to provide the necessary ignition currents and voltages to arc the two spark igniters. The spark igniters are located near the front of Number 2 and Number 5 combustion liners.

The power unit electrical harnesses and cables connect engine mounted electrical components and terminate all wiring at three points for interfacing with aircraft connections. All engine models have a right hand and left hand electrical harness, and a right hand and left hand thermocouple harness.

Eighteen dual thermocouple assemblies are mounted in the turbine inlet casing to measure turbine inlet temperature. The output of the eighteen thermocouples are averaged and the resulting signal is transmitted to the temperature datum amplifier and furnishes turbine inlet temperature signals to the flight deck indicator.

The reduction gear wiring harness interconnects electrical components mounted on the reduction gear and propeller control components.

The temperature datum amplifier compensates for change in fuel density and characteristics, manufacturing tolerances in fuel controls, and variations in fuel requirements between engines. The amplifier is aircraft mounted and incorporates the electrical circuits necessary for operation of the temperature datum valve. The amplifier receives a turbine inlet temperature signal from the thermocouples in the turbine inlet casing and a desired temperature signal from the coordinator control which varies with power lever position according to a predetermined schedule. The temperature datum amplifier compares the actual and desired turbine inlet temperature signals. If the difference is greater than 4.5°F, an electrical signal is sent to the temperature datum valve which reduces or increases the fuel flow to the engine as necessary to bring the turbine inlet temperature back on schedule.

1.7 Bleed-Air System Design Description

The power unit assembly incorporates a bleed-air system which extracts air from the fifth- and tenth-stages of the compressor. The bleed-air system is utilized during the starting cycle to unload the compressor thereby reducing the possibility of "surge" or "stall" during engine start. Eight pneumatically operated air-bleed valves are located on the compressor case assembly. Four of these valves are mounted on the fifth-stage

Narrative (continued)

manifolds; the other four valves are mounted on the tenth-stage manifolds. The speed sensitive valve, mounted on the accessory drive section, controls the operation of the compressor air-bleed valves. Flex lines connect the speed sensitive valve to the diffuser and also interconnect the eight compressor air-bleed valves to the speed sensitive valve. The air, bled by the bleed valves, is collected by two manifolds which duct the bleed air aft and overboard.

During engine operation pressurized air entering the fifth or sixth-stage of the compressor is directed through internal engine passages to the compressor front labyrinth seal. This seal prevents oil from entering the compressor section.

Compressed and heated air is extracted from the diffuser (fourteenth-stage) for pressurization within the engine anti-icing. Heated air from the diffuser is provided to specific engine areas subject to the formation of ice. The extracted air is directed to the eight-radial struts of the air inlet housing, the compressor air inlet temperature probe anti-icer, the air inlet anti-icing vane assembly, and the lower half of the torquemeter housing shroud.

The anti-icing system consists of an anti-icing solenoid valve, two anti-icing air valve assemblies, attached tubing and flex lines, and the necessary electrical circuits for control.

1.8 Water/Alcohol Injection System Design Description

Water/alcohol injection is used on the T56-A-10WA engine only. The system provides a means of power recovery during takeoff on high ambient temperature days. On standard days additional power for short run takeoff is available. The system is composed of a storage tank, distribution system, injection nozzles, and controls. Injection fluid consists of a mixture of 2/3 distilled water by volume and 1/3 methyl alcohol by volume measured prior to mixing.

A common manifold fed by two pumps feeds all four engines from a storage tank. The system is preset to furnish a flow of 8 gallons per minute to each engine at 120 to 200 psi regulator inlet pressure. This allows 1.2 minutes of augmented takeoff power and empties the 38.5 U.S. gallon usable quantity storage tank. It is necessary to refill the storage tank after each water/alcohol injection augmented takeoff.

Narrative (continued)

A check valve in each pump discharge line prevents loss of water/alcohol injection fluid pressure by preventing back flow through a failed pump. The manifold feeds each engine through a flow regulator which controls injection fluid flow to its particular engine. From the regulator, the fluid flows through a hose to the engine torquemeter shroud inlet connection. From the engine inlet, the fluid flows through a line that runs between the torque shaft housing and its anti-icing duct to eight equally spaced nozzles located radially at the aft end of the torquemeter housing.

2.0 Maintenance Plan Summary

This maintenance plan identifies primary maintenance requirements as a function of the maintenance level for the basic T56 engine and for major components, assemblies, and sections comprising the engine. Additionally, the ground support equipment facilitating these maintenance requirements is also identified as are all repairable components and assemblies. The maintenance plan does not include engine related assemblies which are not an integral part of the engine unless identified by the engine WUC; i.e., the temperature datum amplifier and sequence relay.

Specific maintenance requirements associated with tubing, hoses, wires, cables, brackets, fasteners and miscellaneous hardware are not identified in this maintenance plan. These parts are maintained by hand reworking at the applicable maintenance level from pre-expended stock.

Maintenance on the T56 engine is divided into two categories, scheduled and corrective, and is conducted at three levels ranging from the organizational level, through the intermediate level (which is comprised of three separate degrees of capability), to the depot level. Each maintenance level (and each degree within the intermediate level) is responsible for performing the maintenance normally authorized as well as that which is authorized for lower levels.

Maintenance at all maintenance levels is basically the same for each of the T56 engine configurations; however, differences exist between ground support equipment since four different series of aircraft are involved. Maintenance on the T56-A-425 and -426 engines is limited during carrier deployment. On-aircraft replacement of accessories and components comprising the fuel/control, lubrication, electrical, and bleed-air systems can be accomplished. However, engine "spares" support is in the form of complete QEC kits. Once a QEC is removed from the aircraft, additional maintenance in the form of section troubleshooting or replacement is not performed and the faulty engine is returned to a land-based repair facility.

T56 Turboprop Engine

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Narrative (continued)

2.1 Organizational (0) Level

2.1.1 Scheduled Maintenance

Scheduled maintenance at the organizational level includes engine washing, cleaning (walnut shell injection), inspections (for physical damage or deterioration, fuel or oil leakage, and attaching hardware security), operational and functional checks, and removal/replacement of the complete engine or turbine change assembly to accommodate overhaul of time limited items. Time limited items are as follows:

Power Unit Assembly -
Conditional

Compressor Rotor Assembly -
Conditional

Turbine Rotor Assembly -
High time 2400 hours/conditional[1]
High time 1600 hours/conditional[2]

Turbine 1st Stage Rotor Wheel -
High time 7500 hours/conditional[3]

Reduction Gear Section -
Conditional

Torquemeter Section -
High time 5000 hours/conditional[4]

Accessory Drive Section -
Conditional

Fuel Pump -
Conditional

1. T56-A-7A & -10WA w/o PPC-44 is time limited; with PPC-44 overhaul is conditional.
2. T56-A-426 w/o PPC-44 is time limited; with PPC-44 overhaul is conditional.
3. T56-A-14, -16, -423, & -425 Series III turbine P/N 6846932 is time limited; superseded by P/N 6875431 which has conditional overhaul -- all other 1st stage rotor wheels have conditional overhaul.
4. All T56 engines w/o PPC-4A have time limited torquemeter sections; with PP-4A overhaul is conditional.

Narrative (continued)

Fuel Control -
Conditional

Temperature Datum Valve -
Conditional

Fuel Nozzle -
High time 1200 hours (T56-A-425 and -426)

Coordinator Control Assembly -
Conditional

Main Engine Oil Pressure/Scavange Pump -
Conditional

Speed Sensitive Control -
Conditional

Ignition Exciter -
Conditional

Speed Sensitive Valve -
Conditional

Specific scheduled maintenance requirements are individually listed in Part III.

2.1.2 Corrective Maintenance

The performance of corrective maintenance at the organizationa level includes the following activities:

a. Engine operational checks and on-aircraft troubleshooting using aircraft instrumentation and applicable test equipment.
b. Adjustment of fuel/control system components and oil pressure regulating valves.

T56 Turboprop Engine

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Revision Number

Narrative (continued)

c. Servicing of fuel, lubrication, and bleed-air systems (i.e., cleaning/replacing filters and screens).
d. Complete engine replacement.
e. Over-the-wing turbine change assembly replacement (T56-A-10WA, &-14)/under-the-wing turbine change assembly replacement (T56-A-7A, -16, & -423).
f. Replacement of accessories and components comprising the fuel/control, lubrication, electrical and bleed-air systems with the exception of the diffuser scavenge pump, turbine front scavenge pump and two reduction gear scavenge pumps.
g. Replacement of combustion section burner drain valve.
h. Replacement of turbine rear bearing support, support cone, and inner rear exhaust cone.
i. Replacement of torquemeter cowl assembly, cowl cover, cowl dome, cowl duct, and water/alcohol injection manifolds/nozzles.

2.2 Third Degree Intermediate (I3) Level

2.2.1 Scheduled Maintenance

Inspect spark igniters, combustion liner supports, ignition harness, and spark igniter leads in accordance with Part III whenever an engine is removed and its operating time since new/overhaul is $\geq$ 500 hours.

2.2.2 Corrective Maintenance

Corrective maintenance at the third degree intermediate level includes restoration of a faulty engine to a serviceable status by testing and troubleshooting to isolate the fault to a defective removable accessory or component, or to a replaceable section.

I3 level maintenance includes partial dismantling of the engine into its constituent sections. The turbine section (including the combustion liner assembly), the reduction gear section, and the torquemeter section may be removed and replaced. The accessory drive section and compressor section can be separated from the turbine section as an integral assembly, but the accessory drive cannot be removed at the I3 level. I3 level maintenance of the accessory drive is limited to removal of the attaching accessories and components, and inspection of shaft splines.

In addition to accessories and components replaceable at the O level, the I3 level can remove/replace the compressor 5th and 10th stage bleed manifolds and diffuser scavenge pump.

Narrative (continued)

I3 maintenance activities also include: compressor blade/vane inspection; borescope inspection of the turbine 1st stage blades and vanes, and combustion liners; and turbine rotor axial clearance check.

I3 level maintenance does not have engine test stands and must, therefore, use an aircraft for run-up.

Defects which are identified by require further disassembly of the faulty engine sections to facilitate repair cannot be accomplished at the I3 maintenance level. Restoration of the engine to a serviceable condition must be accomplished by complete section replacement and the defective or faulty section forwarded to a higher maintenance level where disassembly can be accomplished. For example, the I3 maintenance level can remove and install a turbine section; however, they cannot build-up a turbine section.

2.3 Second Degree Intermediate (I2) Level

2.3.1 Scheduled Maintenance

See I3 scheduled maintenance.

2.3.2 Corrective Maintenance

Corrective maintenance at the second degree intermediate level permits complete engine dismantling (separation of the accessory drive section and compressor section, and removal of the combustion liner assembly from the turbine section), and limited disassembly of engine sections as discussed below.

Removal of the turbine front scavenge pump, which requires the combustion liner assembly to be removed to gain access, is permitted at the I2 level.

In addition to the repairs authorized at the lower maintenance level, the following maintenance activities can be accomplished on engine sections at the I2 level involving section disassembly.

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Narrative (continued)

Compressor Section:

Removal and replacement of the following items -

a. Extension shaft, housing, and side gear
b. Air inlet housing and inlet vane
c. Front bearing and labyrinth seal
d. Diffuser assembly
e. Rear bearing and seal

The compressor case assembly can be removed and reinstalled (same case assembly only), and minor repairs can be performed to parts exhibiting nicks, scratches, or abrasions by light polishing.

Turbine Section:

Removal and replacement of the following items -

a. Combustion chamber outer casing
b. Combustion liners
c. Inner casing and inner casing liner
d. Turbine rear bearing, support and seal
e. Turbine front bearing, support, cage and seals
f. Turbine inlet casing
g. Turbine stator vanes and vane casing
h. Turbine front bearing inner ring and labyrinth seal
i. Turbine rotor
j. Inner front exhaust cone
k. Turbine coupling shaft

Narrative (continued)

Minor repairs can be performed to parts exhibiting nicks, dents, scratches, and abrasions. No repair of turbine blades or vanes can be accomplished because of the ALPAK coating. Combustion liner repair includes inert gas arc welding.

Accessory Drive Section:

Section removal and replacement, and repair by replacement of shaft gears, spin gears, idler and drive gears, and associated bearings, gaskets and seals.

Torquemeter Section

Section removal and replacement, and replacement of anti-ice shroud, pick-ups, safety coupling/torque shaft and mid-bearings.

Reduction Gear Section:

Section removal and replacement. Total repair of rear housing diaphragm assembly of reduction gear section including replacement of the propeller brake and starter gear; bearing inner diaphragm; drain plug inserts; tachometer drive shafts and bearings; alternator gears, shaft and bearings; hydraulic pump/engine driven compressor gears and bearings; pinion shaft gear assembly; main drive gear assembly and bearings; sun gear assembly; and rear scavenge pump. No repairs are permited internally to the front housing.

2.4 First Degree Intermediate (I1) Level

2.4.1 Scheduled Maintenance

See I3 scheduled maintenance

2.4.2 Corrective Maintenance

Corrective maintenance at the I1 level consists of all maintenance activities necessary to facilitate complete engine repair by removal/replacement or repair/rework of all engine sections and/or components. In addition to all maintenance activities performed at lower levels, and I1 level provides the capability

Narrative (continued)

of removing and replacing the compressor rotor. Additionally, a limited rework capability is provided for the compressor rotor blades and stator vanes. Rework is limited to cleaning, grinding, and polishing.

2.5 Depot Level

2.5.1 Scheduled Maintenance

Scheduled maintenance at the depot level consists of overhaul (zero timing) of time limited items. Time limited items are as follows:

Power Unit Assembly -
Conditional

Compressor Rotor Assembly -
Conditional

Turbine Rotor Assembly -
High time 2400 hours/conditional[1]
High time 1600 hours/conditional[2]

Turbine 1st Stage Rotor Wheel -
High time 7500 hours/conditional[3]

Reduction Gear Section -
Conditional

Torquemeter Section -
High time 5000 hours/conditional[4]

Accessory Drive Section -
Conditional

1. T56-A-7A & -10WA w/o PPC-44 is time limited; with PPC-44 overhaul is conditional.
2. T56-A-426 w/o PPC-44 is time limited; with PPC-44 overhaul is conditional.
3. T56-A-14, -16, -423 & -425 Series III turbine P/N 6846932 is time limited; superceded by P/N 6875431 which has conditional overhaul -- all other 1st stage rotor wheels have conditional overhaul.
4. All T56 engines w/o PPC-4A have time limited torquemeter sections; with PP-4A overhaul is conditional.

Narrative (continued)

Fuel Pump -
Conditional

Fuel Control -
Conditional

Temperature Datum Valve -
Conditional

Fuel Nozzle -
High time 1200 hours (T56-A-425 and -426)

Coordinator Control Assembly -
Conditional

Main Engine Oil Pressure/Scavenge Pump -
Conditional

Speed Sensitive Control -
Conditional

Ignition Exciter -
Conditional

Speed Sensitive Valve -
Conditional

2.5.2 Corrective Maintenance

Corrective maintenance at the depot level includes a complete engine repair capability and an overhaul (zero timing) capability.

Narrative (continued)

Depot complete engine repair activities are basically the same as those at the Il level with the exception that the depot has increased facilities; hence, increased rework capabilities.

In addition to the capabilities of lower maintenance levels, depot capabilities which support both complete engine repair and overhaul include the following:

a. Performance of magnetic and fluorescent penetrant inspections of metal parts as required.
b. Rework of case assemblies, combustion liners, rotor blades/wheels/spacers, stator vanes, by blending, plating, welding, cold reforming, machining, grinding, and polishing.
c. Rework of gears, shafts, splines, and bearings/supports/journals, by plating, welding, metallizing, grinding, and polishing.
d. Dynamic balancing of compressor and turbine rotors, torquemeter shaft, safety coupling, and turbine coupling shaft.

Also complete disassembly, inspection, disposition, repair, replacement, test, and overhaul is performed on accessories, components, and sections returned from the fleet resulting in zero-timing of these items.

3.0 Plan Rationale

The maintenance plan for the T56 turboprop engine is based on the provisions of the Naval Aviation Maintenance Maintenance Program OPNAVINST 4790.2A, and the Gas Turbine Engine Three Degree Intermediate Level Mainenance Program, NAVAIRINST 13700.6A.

Although the maintenance requirements for the T56 are within the capability of most intermediate facilities, the cost and complexity of required special GSE does not justify complete engine repair (CER) at all the intermediate maintenance facilities. Maintenance requirements are allocated to specific maintenance levels and/or degrees in accordance with current GSE resources.

Aircraft and GSE usage data are not provided in Part II. Current fleet usage data applies and can be obtained through the Navy supply system.

MAINTENANCE PLAN
PART II – REPAIR CAPABILITY

Nomenclature/Designation	WUC/LSACN	Preparing Activity	No.
T56 Turboprop Engine	22300	Naval Air Systems Command	PPMP0002
Part Number	**NSN**	**Prepared by**	
See below		AIR-4113/ARINC Research Corp.	
FSCM Code	**Application**	**Date of Initial Submission**	**Revision Number** / **Date of Revision**
73342	P-3, E-2, C-2 and C-130 series aircraft		
SM&R Code			

Repairable Items

WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
22300	6845701	TURBOPROP ENGINE, MODEL T56-A-7A	AHOOD	B				
22300	6793301	TURBOPROP ENGINE, MODEL T56-A-10WA	AHOOD	B				
22300	6846953	TURBOPROP ENGINE, MODEL T56-A-14	AHOOD	B				
22300	6855053	TURBOPROP ENGINE, MODEL T56-A-16	AHOOD	B				
22300	6876303	TURBOPROP ENGINE, MODEL T56-A-423	AHOOD	B				
22300	6887126	TURBOPROP ENGINE, MODEL T56-A-425	AHOOD	B				

FLEET USAGE APPLIES

Approved By (Navy)	Title	Date	Page
J. C. Doubleday	Leader, Propulsion Maintenance Engineering	6 January 1978	Page 27 of 130

T56 Turboprop Engine

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PART II – REPAIR CAPABILITY (continued)

Revision Number

Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
22300	6887122	TURBOPROP ENGINE, MODEL T56-A-426	AHOOD	B				
		POWER UNIT ASSEMBLY						
22310	6844918	COMPRESSOR SECTION (1)	REF	B				
22310	6845903	COMPRESSOR SECTION (2)	REF	B				
22310	6846957	COMPRESSOR SECTION (3)	REF	B				
22310	6859047	COMPRESSOR SECTION (4,5)	REF	B				
22310	6876323	COMPRESSOR SECTION (6)	REF	B				
22310	6845898	COMPRESSOR SECTION (7)	REF	B				
223110	6847236	CPRSR AIR INLET HOUSING (1,2,4,5,6,7)	PAHDD2*	B				
223110	6848669	CPRSR AIR INLET HOUSING (3)	PAHDD2*	B				
223120	6873624	CPRSR AIR INLET VANE (all)	PAHDD2*	B				

FLEET USAGE APPLIES

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426
* Included on project RECOVER list (see addendum)

MAINTENANCE PLAN

PART II – REPAIR CAPABILITY (continued)

T56 Turboprop Engine

Nomenclature/Designation

Revision Number

Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
223130	6852465	CPRSR CASE ASSY (ATCH PT) (1)	PBHDD1*	B				
223130	6809430	CPRSR CASE ASSY (ATCH PT) (2)	ADDDD	B				
223130	6846996	CPRSR CASE ASSY (ATCH PT) (3)	PBHDD1*	B				
223130	6870209	CPRSR CASE ASSY (ATCH PT) (4, 5)	PBHDD1*	B				
223130	6877290	CPRSR CASE ASSY (ATCH PT) (6)	PBHDD1*	B				
223130	6821510	CPRSR CASE ASSY (ATCH PT) (7)	PBHDD1*	B				
223140	6875764	CPRSR ROTOR ASSY (all)	PBHDD1*	B				
223160	6876496	CPRSR DIFFUSER ASSY (all)	PAHDD2*	B				
223210	6805532	COMB CHMBR OUTER CSG (1)	PAHDD2*	B				
223210	6824647	COMB CHMBR OUTER CSG (2, 7)	PAHDD2*	B				

FLEET USAGE APPLIES

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426
* Included on project RECOVER list

T56 Turboprop Engine

Nomenclature/Designation

Revision Number

Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
223210	6842689	COMB CHMBR OUTER CSG (3,4,5,6)	PAHDD2*	B				
223220	6847392	COMBUSTION LINER (1,2,7)	PAHHD2*	B				
223220	6876880	COMBUSTION LINER (3,4,5,6)	PAHHD2*	B				
223230	6789860	COMB CHMBR INNER CSG (all)	PAHHD2	B				
223240	6859485	BURNER DRAIN VALVE ASSY (all)	PAOOO	B				
TBD	TBD	TURBINE CHANGE ASSY (1)	PBOHH	B				
TBD	TBD	TURBINE CHANGE ASSY (2)	PBOHH	B				
TBD	TBD	TURBINE CHANGE ASSY (3)	PBOHH	B				
TBD	TBD	TURBINE CHANGE ASSY (4,5)	PBOHH	B				
22330	6788920	TURBINE SECTION (1)	REF	B				

FREE COPIES

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426
* Included on project RECOVER list

T56 Turboprop Engine

Nomenclature/Designation

Revision Number

Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
22330	6808600	TURBINE SECTION (2)	REF	B				
22330	6883334	TURBINE SECTION (3)	REF	B				
22330	6873335	TURBINE SECTION (4,5)	REF	B				
22330	6876324	TURBINE SECTION (6)	REF	B				
22330	6824070	TURBINE SECTION (7)	REF	B				
223311	6793327	TURB FR BRG SPRT (1,2,7)	PAHDD2*	B				
223311	6842678	TURB FR BRG SPRT (3,4,5,6)	PAHDD2*	B				
2233114	6873603	TURB FR BRG CAGE (1,2)	PAHDD2*	B				
223312	6871561	1st STG TURB VANE (1,2)	PAHDD2*	B				
223312	6870726	1st STG TURB VANE (3,4,5,6,7)	PAHDD2*	B				

FLEET CODE - ES

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426
* Included on project RECOVER list

Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
223312	6870272	1st STG TURB VANE (3,4,5,6,7)	PAHDD2*	B				
223312	6870728	1st STG TURB VANE (3,4,5,6,7)	PAHDD2*	B				
223312	6870729	1st STG TURB VANE (3,4,5,6,7)	PAHDD2*	B				
2233122	6852318	1st STG TURB VANE SPRT (1,2,7)	PAHDD2*	B				
2233122	6870409	1st STG TURB VANE SPRT (3,4,5,6)	PAHDD2*	B				
223313	6859680	TURB INLET CASE (1,2,7)	PAHDD2*	B				
223313	6842349	TURB INLET CASE (3,4,5,6)	PAHDD2*	B				
223320	6793745	TURB VANE CASING (1,2,7)	PAHDD2*	B				
223320	6844618	TURB VANE CASING (3,4,5,6)	PAHDD2*	B				
223321	6848799	2nd STG TURB VANE (3,4,5,6,7)	PAHDD2*	B				

FLEET USAGE APPLIES

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426
* Included on project RECOVER list

T56 Turboprop Engine

Nomenclature/Designation

Revision Number

Repairable Items

WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
223330	6821322	TURB REAR BRG SPRT (all)	PAHDD2*	B				
223340	6859000	TURBINE ROTOR (1)	PAHDD2*	B				
223340	6888600	TURBINE ROTOR (2,7)	PAHDD2*	B				
223340	6877108	TURBINE ROTOR (3,4,5,6)	PAHDD2*	B				
		REDUCTION GEAR SECTION						
223510	6876176	REDUCTION GEAR SECTION (1)	REF (XC)	B				
223510	6825800	REDUCTION GEAR SECTION (2)	REF (XC)	B				
223510	6846962	REDUCTION GEAR SECTION (3)	REF (XC)	B				
223510	6858176	REDUCTION GEAR SECTION (4)	REF (XC)	B				
223510	6876305	REDUCTION GEAR SECTION (5)	REF (XC)	B				
223510	6887135	REDUCTION GEAR SECTION (6)	REF (XC)	B				

FLEET ONLY FILES

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426

* Included on project RECOVER list

T56 Turboprop Engine
Nomenclature/Designation

Revision Number

Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
223510	6875801	REDUCTION GEAR SECTION (7)	REF (XC)	B				
TBD	6858685	PROPELLER BRAKE ASSY (all)	PAHDD2*	B				
TBD	6874602B	SHAFTGEAR ASSY, ACC (1,4,5)	PAHDD2*	B				
TBD	6844208D	SHAFTGEAR ASSY, ACC (2,3)	PAHDD2*	B				
TBD	6842704C	SHAFTGEAR ASSY, ACC (6,7)	PAHDD2*	B				
TBD	6876682	SPUR GEAR ASSY, MAIN DR (1,2,3,4,5)	PAHDD2*	B				
TBD	6877516	SPUR GEAR ASSY, MAIN DR (6,7)	PAHDD2*	B				
		TORQUEMETER SECTION						
223520	6858339	TORQUEMETER UNIT ASSY (1,4,5)	REF (XC)	B				
223520	6841080	TORQUEMETER UNIT ASSY (2)	REF (XC)	B				

FLEET USAGE PLUS

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426
* Included on project RECOVER list

Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
223520	6846964	TORQUEMETER UNIT ASSY (3)	REF (XC)	B				
223520	6841060	TORQUEMETER UNIT ASSY (6,7)	PAHHD3	B				
2235221	6841049	TORQUEMETER SAF CPLG (1,4,5,6,7)	ADDDD	B				
2235211	6828456	TORQUEMETER SAF CPLG (2,3)	ADDDD	B				
223523	6843147	TORQUEMETER COWL ASSY (1,3,4,5,6,7)	AOOOH	B				
223523	6825625	TORQUEMETER COWL ASSY (2)	AOOOH	B				
2235231	6840992	TORQUEMETER COWL COVER (1,3,4,5,6,7)	PAOHH	B				
2235231	6825627	TORQUEMETER COWL COVER (2)	PAOHH	B				
2235232	6840993	TORQUEMETER COWL DOME (1,3,4,5,6,7)	PAOHH	B				
2235232	6792340	TORQUEMETER COWL DOME (2)	PAOHH	B				

FLEET USAGE APPLIES

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426

Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
2235233	6840990	TORQUEMETER COWL DUCT (1,3,4,5,6,7)	PAOHH	B				
2235233	6825626	TORQUEMETER COWL DUCT (2)	PAOHH	B				
223530	6859427	ACCESS DRIVE SECTION (1,3,4,5,6)	PAHHD2*	B				
223530	6859426	ACCESS DRIVE SECTION (2,7)	PAHHD2*	B				
		FUEL CONTROL SYSTEM						
223610	6827283	FUEL PUMP (1,4,5,6,7)	PAOOD	B				
223610	6824278	FUEL PUMP (2,3)	PAOOD	B				
223620	330043-7	FUEL CONTROL (1)	PAOOD*	B				
223620	6824297	FUEL CONTROL (2)	PAOOD*	B				
223620	6895550	FUEL CONTROL (3)	PAOOD*	B				
223620	6870451	FUEL CONTROL (4,5)	PAOOD*	B				

FLEET USAGE APPLIES

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426
* Included on project RECOVER list

Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
223620	6876342	FUEL CONTROL (6)	PAOOL*	B				
223620	6821461	FUEL CONTROL (7)	PAOOD*	B				
223624	179307	ELMCH ROTARY ACTR (1,4,5)	PAODD*	B				
223624	181635	ELMCH ROTARY ACRT (2,3,6,7)	PAODD*	B				
223630	6827239	TEMP DATUM VALVE (1,4,5)	PAOGD	B				
TBD	338375	MOTOR GENERATOR (1,4,5)	PAGDD*	B				
223630	6809574	TEMP DATUM VALVE (2,3,6,7)	PAOGD	B				
TBD	183438	MOTOR GENERATOR (2,3,6,7)	PAGDD*	B				
223640	6824286	FUEL MANF DRAIN VALVE (all)	PAOGD	B				
223650	6815651	FUEL ENRICH PRESS SW (all)	PAOGA	B				

FLEET USAGE APPLIES

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426

* Included on project RECOVER list

Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
223660	6809611	FUEL SPRAY NOZ ASSY (all)	PAODD*	B				
2236AO	6876766	COORD CONTROL ASSY (1,4,5)	PAODD*	B				
2236A0	6889847	COORD CONTROL ASSY (6,7)	PAODD*	B				
2236A0	6875121	COORD CONTROL ASSY (2,3)	PAODD*	B				
2236A1	6843210	COORD HARNESS ASSY (1,4,5)	ADDDD	B				
2236A1	6843211	COORD HARNESS ASSY (2,3,6,7)	ADDDD	B				
2236DO	6805387	LOW PRESS FUEL FILTER (1,4,5)	AOOOO	B				
2236DO	6805436	LOW PRESS FUEL FILTER (2,3,6,7)	AOOOO	B				
2236EO	6821460	HIGH PRESS FUEL FILTER (1,4,5)	PAOOD	B				
2236E0	6841776	HIGH PRESS FUEL FILTER (2,3,6,7)	PAOOD	B				

FLEET USAGE APPLIES

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426
* Included on project RECOVER list

T56 Turboprop Engine

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Revision Number

Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
2236E1	6827960	FILTER DISC/STUD ASSY (all)	PAOGG	B				
2236E2	190772-2	PARALLELING VALVE (all)	PAODD*	B				
2236E3	6827995	FUEL FILTER HI PRESS SW (all)	PAOGA	B				
2236H0	6813272	3 WAY ELBOW VALVE (all)	PAOGA	B				
2236J0	190585-1	FUEL ENRICH SO VALVE (all)	PAOGD	B				
2236K0	6827293	FUEL REDUCER CHK VALVE (2,3,6,7)	PAOGA	B				
2236L0	6843160	LOW PRESS FLTR DIF IND (2,3,6,7)	PAOGD	B				
		LUBRICATION SYSTEM						
223710	6793049	MN ENG OIL PRESS/SCAV PMP (all)	PAOOD	B				
223711	6870955	OIL PRESS RGLT VALVE (all)	PAOOO	B				
223720	6846567	EXT OIL SCAV PUMP (3,4,5,6)	PAODD*	B				

FLEET USAGE APPLIES

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426
* Included on project RECOVER list

T56 Turboprop Engine
Nomenclature/Designation

Revision Number

Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
223730	6809974	DIFFUSER SCAV PUMP (1,7)	PAHDD2*	B				
223730	6791490	DIFFUSER SCAV PUMP (2)	PAHDD2*	B				
223740	6792283	TURB SCAV PMP, FRONT (1,7)	PAHDD2*	B				
223740	6791835	TURB SCAV PMP, FRONT (2)	PAHDD2*	B				
223750	6821270	TURB SCAV PMP, REAR (all)	PAODD*	B				
223770	6850818	RDCN GR LUB PMP (1)	PAOOD	B				
223770	6846397	RDCN GR LUB PMP (2,3,4,5,6,7)	PAOOD	B				
223771	6877256	RDCN GR FLTR ASSY (all)	PBOGG	B				
223780	6871879	RDCN GR SCAV PMP, FR (all)	ADDDD	B				
2237AO	6871879	RDCN GR SCAV PMP, REAR (1,4,5,6,7)	ADHDD2	B				

FLEET USAGE APPLIES

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426
* Included on project RECOVER list

T56 Turboprop Engine

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Revision Number

Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
2237AO	6871876	RDCN GR SCAV PMP, REAR (2,3)	ADHDD2	B				
2237DO	6842844	RDCN GR EXT PRESS RV (all)	PAOGG	B				
		ELECTRICAL SYSTEM						
223810	6827055	PWR UNIT HARN ASSY, RH (1,4,5,6,7)	PAODD	B				
223810	6822184	PWR UNIT HARN ASSY, RH (2,3)	PAODD	B				
223810	6821701	PWR UNIT HARN ASSY, LH (1,4,5)	PAODD	B				
223810	6821702	PWR UNIT HARN ASSY, LH (6,7)	PAODD	B				
223810	6807784	PWR UNIT HARN ASSY, LH (2,3)	PAODD	B				
223811	6805799	SP CA, TEMP DAT V TO AMPL (1,4,5)	PAODD	B				
223811	6828341	SP CA, TEMP DAT V TO (6,7)	PAODD	B				
223811	6829257	SP CA, POT TO AMPL (6,7)	PAODD	B				

FLEET USAGE APPLIES

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426

MAINTENANCE PLAN

PART II – REPAIR CAPABILITY (continued)

T56 Turboprop Engine
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Revision Number

Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
223820	6887091	TEMP DATUM AMPL** (1)	PAOGD	B				
223830	6892894	TEMP DATUM AMPL** (2,3,6,7)	PAOGD	B				
223820	6870095	TEMP DATUM AMPL** (4,5)	PAOGD	B				
223830	6875755	RDCN GR HARN ASSY (6,7)	AGOGG	B				
223840	6816064	FEATHER SOLENOID (6,7)	PAODD*	B				
223850	6870559	THRUST SENS SW (2,3)	PAODD*	B				
223850	6828506	THRUST SENS SW (6,7)	PAODD*	B				
2238CO	6809639	SEQ RELAY BOX ASSY (1,4,5)	PAODD*	B				
2238K	6873465	SPEED SENS CONTROL (1,4,5,6,7)	PAODD*	B				
2238K	6873466	SPEED SENS CONTROL (2,3)	PAODD*	B				

FLEET USAGE ONLY

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426
* Included on project RECOVER list
** Aircraft Mounted Equipment

T56 Turboprop Engine
Nomenclature/Designation

Revision Number

Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
223910	6805230	IGNITION EXCITER (1)	PAODD*	B				
223910	6805307	IGNITION EXCITER (2,3,4,5,6,7)	PAODD*	B				
223930	6816058-1	SPARK IGNITER LEAD (1,4,5)	PAOGA	B				
223930	6816058-2	SPARK IGNITER LEAD (1,4,5)	PAOGA	B				
223930	6811819-1	SPARK IGNITER LEAD (2,3)	PAOGA	B				
223930	6811819-2	SPARK IGNITER LEAD (2,3)	PAOGA	B				
223930	6829298	SPARK IGNITER LEAD (6,7)	PAOGA	B				
223930	6829299	SPARK IGNITER LEAD (6,7)	PAOGA	B				
		BLEED-AIR SYSTEM						
223A10	6809573	ANTIICING AIR VALVE (all)	PAOOG	B				
223A40	6788650	CPRSR AIR-BLEED DUCT (2,3)	PAOGG	B				

FLEET USAGE RULES

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426
* Included on project RECOVER list

T56 Turboprop Engine

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Repairable Items								
WUC/LSACN	Part Number	Nomenclature	SM&R Code	Demil. Code	A/C Failures / GSE Intvl	A/C BCM Actions / GSE MRF	A/C Removals / GSE RPF	A/C AIMD Scrap / GSE MC
223A50	6821493	SPEED SENS VALVE (all)	PAOOD	B				
223A80	35-055	ANTIICING SOL VALVE (all)	PAODD*	B				
223AAO	6809125	CPRSR AIR-BLEED VALVE (all)	PAOOG	B				
223ABO	6871805	CPRSR AIR-BLEED FLTR (all)	PAOOG	B				
		WATER INJECTION SYSTEM						
223C10	6792774	WTR/ALC INJ MANF (2)	PAOGD	B				
223C10	6792775	WTR/ALC INJ MANF (2)	PAOGD	B				

FLEET USAGE RULES

(1) Usable on T56-A-7A
(2) Usable on T56-A-10WA
(3) Usable on T56-A-14
(4) Usable on T56-A-16
(5) Usable on T56-A-423
(6) Usable on T56-A-425
(7) Usable on T56-A-426
* Included on project RECOVER list

MAINTENANCE PLAN
PART III – MAINTENANCE REQUIREMENTS

Nomenclature/Designation	WUC/LSACN	Preparing Activity	No.
T56 Turboprop Engine	22300	Naval Air Systems Command	PPMP0002
Part Number	**NSN**	**Prepared by** AIR-4113/ARINC Research Corp.	
FSCM Code 73342	**Application** P-3, E-2, C-2 and C-130 series aircraft	**Date of Initial Submission**	**Revision Number** / **Date of Revision**

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
	SCHEDULED MAINTENANCE The scheduled maintenance requirements contained in this maintenance plan represent the minimum engine requirements and maximum intervals determined by NARF Alameda as a result of the T56 Engine Analytical Maintenance Program (AMP). Additional scheduled maintenance may be implemented and maintenance requirements may be performed at more frequent intervals at the discretion of the aircraft CFA. Organizational Level			
001S	Perform QEC zonal examination (internal).	0	Phased 1200 hrs.	Maintenance platform and common hand tools
002S	Conduct engine performance trend analysis (T56-A-10WA, & -14).	0	Special 28 Days	See Table 2, Group 1

Approved By (Navy)	Title	Date	Page
G. C. Doubleday III	Leader, Propulsion Maintenance Engineering	6 January 1978	45 of 130

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
003S	Conduct engine performance trend analysis (T56-A-425, & -426).	0	Phased 100 hrs. ashore 200 hrs. afloat	See Table 2, Group 1
004S	Conduct engine performance trend analysis (T56-A-7A, -16, & -423).	0	Phased 150/200 hrs	See Table 2, Group 1
005S	Inspect compressor air inlet housing for FOD, cracks, corrosion, and salt deposits (T56-A-10WA, -14, -425, & -426).	0	Special 56 days	Maintenance platform and common hand tools
006S	Inspect compressor air inlet housing for FOD cracks, corrosion, and salt deposits (T56-A-7A, -16, & -423).	0	Phased 300 hrs.	Maintenance platform and common hand tools
007S	Inspect compressor blades and vanes for evidence of oil leakage from #1 bearing area (T56-A-10WA, -14, -425, & 426).	0	Special 56 days	Maintenance platform and common hand tools
008S	Inspect compressor blades and vanes for evidence of oil leakage from #1 bearing area (T56-A-7A, -16 & -423).	0	Phased 300 hrs.	Maintenance platform and common hand tools
009S	Inspect compressor air inlet guide vanes, stator vanes and rotor blades for FOD cracks corrosion and salt deposits (T56-A-10WA, -14, 425, & -426).	0	Special 56 days	Maintenance platform and common hand tools
010S	Inspect compressor air inlet guide vanes, stator vanes and rotor blades for FOD cracks corrosion and salt deposits (T56-A-7A, -16, & -423).	0	Phased 300 hrs.	Maintenance platform and common hand tools
011S	Inspect compressor air inlet guide vanes, stator vanes, and rotor blades for FOD.	0	Phased 400/600 hrs.	Maintenance platform and common hand tools

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
012S	Inspect compressor case assembly for corrosion (T56-A-10WA, -14, -425, & -426).	0	Special 84 days	Maintenance platform and common hand tools
013S	Inspect compressor case assembly for corrosion (T56-A-10WA, -14, -425, & -426).	0	Phased 150 hrs.	Maintenance platform and common hand tools
014S	Inspect spark igniters for excessive carbon deposits; center electrodes for looseness and specified length. Check combustion liner supports for cracks (especially in the flange-to-shell brack area). Inspect ignition harness and spark igniter leads for cleanliness, evidence of burning, breaks, fraying, chafing, isulation deterioration and looseness (T56-A-7A, -10WA-14, -16, & -423).	0	Phased 600 hrs.	Maintenance platform and common hand tools
015S	Inspect turbine rear bearing support struts for cracks and distortion (T56-A-10WA, & -14).	0	Phased 600 hrs.	Maintenance platform and common hand tools
016S	Inspect turbine rear bearing support struts for cracks and distortion (T56-A-7A, -16, -423, -425, & -426).	0	Phased 400/600 hrs.	Maintenance platform and common hand tools
017S	Inspect turbine exhaust cone for distortion, buckling, cracks, and security (T56-A-10WA, & -14).	0	Phased 600 hrs.	Maintenance platform and common hand tools
018S	Inspect turbine exhaust cone for distortion, buckling, cracks, and security (T56-A-7A, -16, -423, -425, & -426).	0	Phased 400/600 hrs.	Maintenance platform and common hand tools
019S	Inspect turbine section for cracks, tears, burn damage, looseness, and oil leakage (T56-A-10WA, & -14).	0	Phased 600 hrs.	Maintenance platform and common hand tools

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
020S	Inspect turbine section for cracks, tears, burn damage, looseness, and oil leakage (T56-A-7A, -16, -423, -425, & -426).	0	Phased 400/600 hrs.	Maintenance platform and common hand tools
021S	Perform borescope inspection of 1st stage turbine blades and vanes for cracks, breaks, warpage, sulfidation melting, and erosion through thermocouple holes.	0	Phased 600 hrs.	Maintenance platform, borescope and common hand tools
022S	Inspect 4th stage turbine blades and vanes for cracks, warpage, nicks, and blade tips for clearance and evidence of rubbing from aft end with tailpipe removed (T56-A-10WA, & -14).	0	Phased 600 hrs.	Maintenance platform and common hand tools
023S	Inspect 4th stage turbine blades and vanes for cracks, warpage, nicks, and blade tips for clearance and evidence of rubbind from aft end with tailpipe removed (T56-A-7A, -16, -423, -425, & -426).	0	Phased 400/600 hrs.	Maintenance platform and common hand tools
024S	Inspect reduction gear section oil filter for damage and contamination.	0	Phased 600 hrs.	Maintenance platform and common hand tools
025S	Inspect reduction gear section scavenge pump screen for damage and contamination (T56-A-10WA-14, -425, & -426).	0	Phased 1200 hrs.	Maintenance platform and common hand tools
026S	Inspect reduction gear section scavenge pump screen for damage and contamination (T56-A-7A, -16, & -423).	0	Phased 600 hrs.	Maintenance platform and common hand tools
027S	Perform contamination check of reduction gear section magnetic plug (T56-A-10WA, -14, -425, & -426).	0	Phased 1200 hrs.	Maintenance platform and common hand tools
028S	Perform continuity check of reduction gear section magnetic plug (T56-A-7A, -16, & -423).	0	Phased 150 hrs.	Maintenance platform and common hand tools

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
029S	Inspect reduction gear section starter splines and cavity for wear and corrosion (T56-A-7A, -16, & -423).	O	Phased 1000 hrs.	Maintenance platform and common hand tools
030S	Inspect reduction gear section starter splines and cavity for wear and corrosion (T56-A-425, & -426).	O	Phased 600 hrs.	Maintenance platform and common hand tools
031S	Inspect reduction gear section generator splines and cavity for wear and corrosion (T56-A-425, & -426).	O	Phased 1000 hrs.	Maintenance platform and common hand tools
032S	Inspect reduction gear section generator and starter splines and cavities for wear and corrosion (T56-A-10WA, & -14).	O	Phased 600 hrs.	Maintenance platform and common hand tools
033S	Perform contamination check of accessory drive section magnetic plug (T56-A-10WA, -14, -425, & -426).	O	Phased 1200 hrs.	Maintenance platform and common hand tools
034S	Perform continuity check of accessory drive section magnetic plug (T56-A-7A, -16, & -423).	O	Phased 150 hrs.	Maintenance platform and common hand tools
035S	Inspect nacelle area for fuel/oil leakage (external).	O	Daily	Common hand tools
036S	Inspect fuel/oil components for fuel/oil leakage (internal).	O	Phased 600 hrs.	Maintenance platform and common hand tools
037S	Inspect fuel control air sensing tip (CIT probe) for obstructions (T56-A-10WA, -14, -425, & -426).	O	Special 56 days	Maintenance platform and common hand tools
038S	Inspect fuel control air sensing tip (CIT probe) for obstructions (T56-A-7A, -16, & -423).	O	Phased 300 hrs.	Maintenance platform and common hand tools
039S	Inspect differential indicator on low pressure fuel filter for contamination and bypass condition (T56-A-425, & -426).	O	Daily Phased 300 hrs.	Common hand tools

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
040S	Inspect low pressure fuel filter case for contamination and filter element for contamination and paper disintegration.	O	Phased 1200 hrs.	Maintenance platform and common hand tools
041S	Inspect high pressure fuel filter for contamination and and damage.	O	Phased 1200 hrs.	Maintenance platform and common hand tools
042S	Inspect main engine oil pressure/scavenge pump filter for contamination and damage.	O	Phased 600 hrs.	Maintenance platform and common hand tools
043S	Remove each center thermocouple from all combustion liners if accessible (otherwise the most accessible thermocouple) and inspect for deformation and burned tips. Where non-air cooled thermocouples are used check for probe inlet hole elonguation. Inspect adjacent thermocouples (through center thermocouple hole using borescope) for deformation and burned tips. Check thermocouples for broken ceramic loose terminals, nuts, and lugs. Check resistance of all removed thermocouples (T56-A-10WA, & -14).	O	Phased 600 hrs.	Maintenance platform, borescope, thermocouple warpage measuring fixture, thermocouple tester and common hand tools
044S	Remove each center thermocouple from all combustion liners if accessible (otherwise the most accessible thermocouple) and inspect for deformation and burned tips. Where non-air cooled thermocouples are used check for probe inlet hole elonguation. Inspect adjacent thermocouples (through center thermocouple hole using borescope) for deformation and burned tips. Check thermocouples for broken ceramic loose terminals, nuts, and lugs. Check resistance of all removed thermocouples (T56-A-7A, -16, -423, -425, & -426).	O	Phased 300/400	Maintenance platform, borescope, thermocouple warpage measuring fixture, thermocouple tester and common hand tools

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
045S	Perform resistance check on terminal block studs in accordance with appropriate maintenance instructions manual. Check thermocouple harness for evidence of red residue (powder) at thermocouple lead connections. Inspect thermocouple harness and cable leads for burning, chafing, or cracking of conduit.	0	Phased 600 hrs.	Maintenance platform, multimeter, and common hand tools
046S	Check ignition exciter for security and lockwire.	0	Phased 1200 hrs.	Maintenance platform and common hand tools
047S	Inspect compressor air-bleed valve filter for contamination and damage (T56-A-7A, -425, & -426).	0	Phased 600 hrs.	Maintenance platform and common hand tools
048S	Inspect visible bleed-air/de-ice lines and components for leakage (T56-A-7A, -16, -423, -425, & -426).	0	Phased 300 hrs.	Maintenance platform and common hand tools
049S	Inspect visible bleed-air/de-ice lines and components for leakage (T56-A-10WA, & -14).	0	Phased 1200 hrs.	Maintenance platform and common hand tools
050S	Perform compressor washing procedure (T56-A-10WA, & -14).*	0	Special 28 days	Trailer mounted engine wash cart
051S	Perform compressor washing procedure (T56-A-425, & -426).*	0	Special 56 days	Trailer mounted engine wash cart
052S	Perform engine cleaning procedure (walnut shell injection).**	0	Conditional	See Table 2, Group 5
053S	Drain and refill engine lubricating oil supply.	0	Phased 1200 hrs.	Common hand tools

* Do not perform compressor cleaning procedure if temperature is less than 40°F.
** The frequency of walnut shell injection utilization should be held to a minimum.

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
	Intermediate Level			
054S	Inspect spark igniters for excessive carbon deposits; center electrodes for looseness and specified length. Check combustion liner supports for cracks (especially in the flange-to-shell brace area). Inspect ignition harness and spark igniter leads for cleanliness, evidence of burning, breaks, fraying, chafing, insulation deterioration and looseness (T56-A-425, & -426).	I	Whenever engine is removed & time since new/overhaul is ≥ 500 hrs.	Common hand tools
	Depot Level			
055S	Power unit assembly overhaul	D	Conditional	See Table 5, Groups 1 thru 17
056S	Compressor rotor overhaul	D	Conditional	See Table 5, Group 6
057S	Turbine rotor overhaul (T56-A-7A, & -10WA, w/o PPC-44)	D	HT 2400 hrs.	See Table 5, Group 16
058S	Turbine rotor overhaul (T56-A-426, w/o PPC-44)	D	HT 1600 hrs.	See Table 5, Group 16
059S	Turbine rotor overhaul (with PPC-44)	D	Conditional	See Table 5, Group 16
060S	Discard 1st stage turbine wheel P/N 6846932 and install P/N 6875431 if available.	D	HT 7500 hrs.	See Table 5, Group 16
061S	All other 1st stage turbine wheels	D	Conditional	See Table 5, Group 16
062S	Reduction gear section overhaul	D	Conditional	See Table 5, Groups 22 thru 26

MAINTENANCE PLAN

PART III – MAINTENANCE REQUIREMENTS (continued)

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
063S	Torquemeter section overhaul (w/o PPC-4A)	D	5000 hrs.	See Table 5, Groups 19 thru 21
064S	Torquemeter section overhaul (w PPC-4A)	D	Conditional	See Table 5, Groups 19 thru 21
065S	Accessory drive section overhaul	D	Conditional	See Table 5, Group 18
066S	Fuel pump overhaul	D	Conditional	See Table 4, Group 21
067S	Fuel control overhaul	D	Conditional	See Table 4, Groups 19 and 20
068S	Temperature datum valve overhaul	D	Conditional	Common hand tools
069S	Fuel nozzle overhaul	D	Conditional	See Table 4, Group 7
070S	Coordinator control overhaul	D	Conditional	See Table 4, Group 3
071S	Main engine oil pressure/scavenage pump overhaul	D	Conditional	See Table 4, Group 10
072S	Speed sensitive control control erhaul	D	Conditional	Common hand tools
073S	Ignition exciter overhaul	D	Conditional	Common hand tools
074S	Speed sensitive valve overhaul	D	Conditional	See Table 4, Group 16

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
	CORRECTIVE MAINTENANCE			
	Organizational Level			
001C	Fault isolate to associated engine section, system, and/or component conducting an operational checkout and following documented troubleshooting procedures	O	N/A	See Table 2, Group 1 as required, and use aircraft instrumentation and common hand tools
002C	Based on the results of the operational checkout and troubleshooting procedure repair the T56 engine in the aircraft by:	O	N/A	See Table 2, Group 1 as required, and use aircraft instrumentation and common hand tools
	1. Adjust as required.			
	a. Coordinator potentiometer and switch	O	N/A	
	b. Coordinator/fuel control linkage	O	N/A	
	c. Fuel control governor	O	N/A	
	d. Low speed ground idle	O	N/A	
	e. Desensitized minimum-flow stop fuel control	O	N/A	
	f. Temperature datum control system	O	N/A	
	g. Power unit assembly pressure regulating valve (main oil pump)	O	N/A	
	h. Reduction gear section pressure regulating valve (to increase pressure only)	O	N/A	
	2. Remove, clean and/or replace the following components (listed by section/system in which located) as required.			
	(Combustion Section)			
	a. Burner drain valve	O	N/A	See Table 4, Group 2

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
	(Fuel/Control System)			
	b. Coordinator control	O	N/A	Multimeter
	c. Fuel control	O	N/A	See Table 4, Group 19
	d. Fuel control cutoff actuator	O	N/A	See Table 4, Group 23
	e. Fuel enrichment pressure switch	O	N/A	
	f. Fuel enrichment shutoff valve[1]*	O	N/A	
	g. Low pressure filter differential indicator	O	N/A	
	h. Fuel filter, high pressure	O	N/A	Ultrasonic cleaner
	i. Fuel filter, low pressure	O	N/A	See Table 4, Groups 5 and 19
	j. Fuel filter high pressure switch	O	N/A	
	k. Fuel hose assemblies[2]	O	N/A	
	l. Fuel manifold drain valve	O	N/A	
	m. Fuel spray nozzle assembly	O	N/A	
	n. Fuel pump	O	N/A	See Table 4, Group 1
	o. Fuel reducer check valve[3]	O	N/A	
	p. Paralleling valve	O	N/A	
	q. Speed sensitive control	O	N/A	
	r. Temperature datum valve	O	N/A	See Table 4, Group 19
	s. Three-way elbow valve	O	N/A	
	(Lubrication System)			
	t. External oil scavenge pump[4,5]	O	N/A	
	u. Main engine oil pressure/scavenge pump	O	N/A	
	v. Oil pressure regulating valve[1]	O	N/A	
	w. Power unit oil filter[2]	O	N/A	Ultrasonic cleaner
	x. Reduction gear external pressure relief valve	O	N/A	
	y. Reduction gear lube pump/filter	O	N/A	
	z. Turbine scavenge pump, rear	O	N/A	See Table 4, Group 13

*All numbered footnotes appear on page 130.

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
	(Electrical System)			
	aa. Box assembly, distribution[2]	O	N/A	
	ab. Box assembly, sequence relay[6]	O	N/A	
	ac. Feather solenoid[5,7]	O	N/A	
	ad. Ignition exciter[5]	O	N/A	
	ae. Ignition relay[2]	O	N/A	
	af. Negative torque signal actuator	O	N/A	
	ag. Power unit magnetic plug[2]	O	N/A	
	ah. Power unit thermocouple cables[2]	O	N/A	
	ai. Power unit special cable assemblies	O	N/A	
	aj. Power unit wiring harness assemblies	O	N/A	
	ak. Reduction gear wiring harness[2]	O	N/A	
	al. Reduction gear magnetic plug[2]	O	N/A	
	am. Spark igniter plugs[2]	O	N/A	
	an. Spark igniter leads	O	N/A	
	ao. Temperature datum amplifier[6]	O	N/A	
	ap. Thermocouples[2]	O	N/A	See Table 4, Group 24
	aq. Thrust sensitive actuator[3]	O	N/A	
	ar. Thrust sensitive switch[3]	O	N/A	
	as. Torquemeter sensing pickup[2]	O	N/A	
	(Bleed-Air Systems)			
	at. Air bleed valve	O	N/A	See Table 4, Group 23
	au. Anti-ice air hose assemblies[2]	O	N/A	
	av. Anti-ice air valve[1]	O	N/A	
	aw. Anti-ice solenoid valve[5]	O	N/A	
	ax. Compressor air bleed filter[1]	O	N/A	
	ay. Speed sensitive valve	O	N/A	See Table 4, Groups 1 and 19

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
	(Water/Alchol System) [8]			
	az. Water/alchol injection manifold [8]	O	N/A	
	ba. Water/alchol injection nozzles [8]	O	N/A	
	3. Perform over-the-wing removal/installation of turbine change assembly in accordance with appropriate removal/installation procedures (T56-A-10WA, and -14 engines). Send removed turbine change assembly section to supply for disposition.	O	N/A	See Table 2, Group 2, and use common hand tools
	4. Perform under-the-wing removal/installation of turbine change assembly in accordance with appropriate removal/installation procedures (T56-A-7A, -16, and -423 engines). Send removed turbine change assembly to supply for disposition.	O	N/A	See Table 2, Group 3, and use common hand tools
003C	Verify engine corrective action by operational test and check out.	O	N/A	See Table 2, Group 1
004C	If the engine cannot be repaired on the aircraft by adjustment, cleaning or replacing components, or replacing sections as called out in req. #002C, remove/replace the faulty engine (QEC) in accordance with appropriate engine removal/installation procedure and send the faulty engine to supply for disposition.	O	N/A	See Table 2, Group 4, and use common hand tools

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
	CORRECTIVE MAINTENANCE			
	Intermediate Level			
005C	Remove the following components (listed by section in which located) from the T56 turboprop engine and replace, disassemble, clean, inspect, adjust, repair, reassemble, and install as required:	I3	N/A	See Table 3 as required, and use common shop equipment and hand tools (CET)
	(Power Unit Assembly)			
	a. Burner drain valve	I3	N/A	
	b. Coordinator control	I3	N/A	
	c. Fuel control	I3	N/A	
	d. Fuel control cutoff valve actuator	I3	N/A	
	e. Fuel enrichment pressure switch	I3	N/A	
	f. Fuel enrichment shutoff valve[1]	I3	N/A	
	g. Low pressure fuel filter differential indicator	I3	N/A	
	h. Fuel filter, high pressure	I3	N/A	Ultrasonic cleaner
	i. Fuel filter, low pressure	I3	N/A	
	j. Fuel filter high pressure switch	I3	N/A	Flourescent dye penetrant
	k. Fuel hose assemblies[2]	I3	N/A	
	l. Fuel manifold drain valve	I3	N/A	
	m. Fuel spray nozzle assembly	I3	N/A	
	n. Fuel pump	I3	N/A	
	o. Fuel reducer check valve[3]	I3	N/A	
	p. Paralleling valve	I3	N/A	
	q. Speed sensitive control	I3	N/A	
	r. Temperature datum valve	I3	N/A	
	s. 3-way elbow valve	I3	N/A	
	t. Diffuser scavenge pump[1,8]	I2	N/A	
	u. External oil scavenge pump[4,5]	I3	N/A	

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
	v. Main engine oil pressure/scavenge pump	I3	N/A	
	w. Oil pressure regulating valve[1]	I3	N/A	
	x. Power unit oil filter [2]			Ultrasonic cleaner
	y. Turbine scavenge pump, front[9,10]	I2	N/A	See Table 3, Group 63
	z. Turbine scavenge pump, rear	I3	N/A	
	aa. Box assembly, distribution[2]	I3	N/A	
	ab. Box assembly, sequence relay[6]	I3	N/A	
	ac. Ignition exciter[5]	I3	N/A	Power supply (28 Vdc)
	ad. Ignition relay[2]	I3	N/A	Power supply (10 Vdc-28 Vdc)
	ae. Power unit magnetic plug[2]	I3	N/A	
	af. Power unit thermocouple cables[2]	I3	N/A	
	ag. Power unit special cable assemblies	I3	N/A	
	ah. Power unit wiring harness assemblies	I3	N/A	
	ai. Spark igniter plugs[2]	I3	N/A	
	aj. Spark igniter leads	I3	N/A	
	ak. Temperature datum amplifier[6]	I3	N/A	
	al. Thermocouples [2]	I3	N/A	
	am. Air bleed valve	I3	N/A	See Table 4, Group 23
	an. Anti-ice air hose assemblies [2]	I3	N/A	
	ao. Anti-ice air valve[1]	I3	N/A	
	ap. Anti-ice solenoid valve [5]	I3	N/A	
	aq. Compressor air bleed filter [1]	I3	N/A	
	ar. Speed sensitive valve	I3	N/A	
	(Reduction Gear Section)			
	as. Reduction gear housing plugs[2]	I3	N/A	
	at. Reduction gear external pressure relief valve[1]	I3	N/A	See Table 3, Group 37
	au. Reduction gear lube pump/filter	I3	N/A	See Table 3, Group 43
	av. Reduction gear magnetic plug[2]	I3	N/A	
	aw. Reduction gear magnetic plug housing[2]	I3	N/A	
	ax. Reduction gear wiring harness[2]	I3	N/A	
	ay. Rear housing oil seals [2]	I3	N/A	

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
	az. Feather solenoid[5,7]	I3	N/A	
	ba. Thrust sensitive switch[1,3]	I3	N/A	
	bb. Thrust sensitive actuator[1,3]	I3	N/A	Spring compressor 6796828
	bc. Scavenge oil screen	I3	N/A	
	(Torquemeter Section)			
	bd. Torquemeter sensing pickup[2]	I3	N/A	See Table 3, Group 52
	be. Water/alcohol injection manifold[8]	I3	N/A	
	bf. Water/alcohol injection nozzles[8]	I3	N/A	Ultrasonic cleaner
	Engine Dismantling			
006C	Install complete engine in engine overhaul stand.	I3	N/A	See Table 3, Groups 27, 34, and 35
007C	Separate reduction gear and torquemeter as an assembly from the power unit assembly leaving the torquemeter attached to the reduction gear section. Install the reduction gear/torquemeter assembly in the transportation and storage stand.	I3	N/A	See Table 3, Groups 26, 37, and 42
008C	Remove the torquemeter from the reduction gear at the safety coupling interface and install on plate and fixture. Then remove safety coupling from the reduction gear pinion shaft.	I3	N/A	See Table 3, Groups 26, 37, 44, 53, and 54
009C	Remove accessory drive section from the power unit assembly and install in its housing adaptor on the engine component stand.	I2	N/A	See Table 3, Group 7
010C	Remove turbine section (including combustion liner assembly) and install in engine component stand.	I3	N/A	See Table 3, Groups 26, 57, 61, 63, and 64

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
011C	Install compressor section in engine component stand.	I2	N/A	See Table 3, Group 23
	Compressor Section			
012C	Remove, replace/install compressor extension shaft, housing and side gear.	I2	N/A	See Table 3, Groups 12 and 45
013C	Remove, replace/install compressor air inlet housing and air inlet vane.	I2	N/A	Pusher 6797664
014C	Remove, replace/install compressor front bearing and labyrinth seal.	I2	N/A	See Table 3, Groups 13, 14, and 16
015C	Remove/reinstall compressor case assembly.	I2	N/A	See Table 3, Groups 15 and 22
016C	Remove, replace/install compressor rotor and case assemblies.	I1	N/A	See Table 3, Groups 15, 19, 20 and 22
017C	Perform compressor blade and vane inspection.	I3	N/A	See Table 3, Groups 21 and 24
018C	Repair compressor blades and vanes. Rework is limited to minor nicks, scratches or abrasions in the leading and trailing edges which can be removed by light polishing.	I2	N/A	See Table 3, Group 11
019C	Remove, inspect, and replace/install compressor diffuser, rear bearing, and seal.	I2	N/A	See Table 3, Group 18

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
	Turbine Change Assembly/Turbine Section (including Combustion Liner Assembly)			
020C	Perform rotor axial clearance check	I3*	N/A	See Table 3, Group 41
021C	Remove, clean, inspect, and replace/install combustion chamber outer casing.	I2	N/A	See Table 3, Groups 10 and 63
022C	Remove, clean, inspect, repair, and replace/install combustion liners. Repair consists of inert gas arc welding.	I2	N/A	See Table 3, Group 10
023C	Remove, clean, inspect, repair, and replace/install combustion chamber inner casing and inner casing liner.	I2	N/A	See Table 3, Groups 56 and 63
024C	Remove, replace/install turbine rear bearing, and rear bearing support and oil seal.	I2	N/A	See Table 3, Groups 57 and 63
025C	Remove, replace/install turbine front bearing support, bearing cage, bearing, and ring seals.	I2	N/A	See Table 3, Group 56
026C	Remove, replace/install turbine inlet casing.	I2	N/A	See Table 3, Group 63
027C	Remove, replace/install turbine stator vanes and vane casing.	I2	N/A	See Table 3, Group 63
028C	Remove, replace/install turbine front bearing inner ring and labyrinth seal.	I2	N/A	See Table 3, Group 56
029C	Remove, replace/install turbine rotor.	I2	N/A	See Table 3, Group 58
030C	Remove, inspect, replace/install inner front exhaust cone.	I2	N/A	

*May be accomplished at "O" level also

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
0031	Remove, replace/install rear bearing and rear bearing support.	I2	N/A	See Table 3, Group 57
0032	Remove, replace/install turbine coupling shaft.	I2	N/A	
	Accessory Drive Section			
033C	Remove, replace/install accessory drive section.	I2	N/A	See Table 3, Groups 7 and 17
034C	Remove/replace the following external components mounted on the accessory drive section: a. External scavenge oil pump[4,5] b. Speed sensitive valve c. Speed sensitive control d. Main engine oil pressure/scavenge pump e. Power unit oil filter f. Oil pressure regulating valve[1] g. Oil pressure reducing plug[2]	I3	N/A	Use common hand tools
035C	Inspect accessory drive shaft splines. No other maintenance is performed on the accessory drive section at the intermediate level. If accessory drive section is found faulty it is rejected as beyond capability of maintenance and forwarded to the depot for repair/overhaul.	I3	N/A	
036C	Drain, disassemble, clean, and inspect accessory drive section. Replace worn or damaged parts.	I2	N/A	See Table 3, Groups 1 through 7

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
	Torquemeter Section			
037C	Remove, replace/install torquemeter.	I3	N/A	See Table 3, Group 53
038C	Remove, clean, inspect, repair/install torquemeter anti-ice cowl assembly components.	I3	N/A	Common hand tools
039C	Remove, clean, inspect, replace/install torquemeter pickup assembly.	I3	N/A	See Table 3, Group 54
040C	Remove, replace/install torquemeter mid-bearing.	I2	N/A	See Table 3, Group 53
041C	Remove, clean, inspect, replace/install water/alcohol injection nozzles.[8]	I3	N/A	Water/alcohol alignment gage 6795789 (-10WA only)
	Reduction Gear Section			
042C	Remove, replace/install reduction gear section (including torquemeter and safety coupling).	I3	N/A	See Table 3, Group 42
043C	Remove/replace the following external reduction gear components:	I3	N/A	See Table 3 as required and use CET
	a. Reduction gear housing plugs[2]	I3	N/A	
	b. Reduction gear external pressure relief valve[1]	I3	N/A	See Table 3, Group 37
	c. Reduction gear lube pump/filter	I3	N/A	See Table 3, Group 43
	d. Reduction gear magnetic plug[2]	I3	N/A	
	e. Reduction gear magnetic plug housing[2]	I3	N/A	
	f. Reduction gear wiring harness	I3	N/A	
	g. Rear housing oil seals	I3	N/A	See Table 3, Group 43
	h. Feather solenoid[5]	I3	N/A	
	i. Thrust sensitive switch[3]	I3	N/A	Spring compressor 6796828
	j. Thrust sensitive actuator[3]	I3	N/A	Spring compressor 6796828
	k. Scavenge oil screen	I3	N/A	

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
044C	Inspect accessory shaft splines	I3	N/A	Internal spline gage 6872245
045C	Replace drain plug inserts	I2	N/A	See Table 3, Group 43
046C	Remove/replace propeller shaft oil seal	I3	N/A	See Table 3, Group 43
047C	Remove/replace propeller shaft plug	I3	N/A	See Table 3, Group 37
048C	Remove, replace/install propeller brake and starter gear	I2	N/A	See Table 3, Group 37
049C	Remove, replace/install bearing inner diaphragm	I2	N/A	See Table 3, Group 43
050C	Disassemble, clean and inspect reduction gear section -- replace worn or damaged parts (rear housing only -- no disassembly may be performed of front housing at the intermediate maintenance level).	I2	N/A	See Table 3, Groups 8, 9, 28 through 33, 36 through 43, and 46 through 51

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
	CORRECTIVE MAINTENANCE			
	Depot Level			
	Depot level maintenance consists of complete engine repair (CER) and overhaul (zero timing) capabilities. CER activities are similar to those conducted at the Il level; however, the depot has increased rework capabilities. In addition to those maintenance activities which are singular to the depot level, all intermediate activities can also be accomplished at the depot. Those activities which are singular to the depot level or require increased rework capabilities are covered in the following section.			
051C	Remove power unit assembly from shipping container, install into power unit assembly stand, dismantle into comprising work sections and install into appropriate workstands.	D	N/A	See Table 3 as required
052C	Remove, replace, disassemble, clean, inspect, adjust, repair/rework, overhaul, reassemble and install the following components as required:	D	N/A	See Table 4 as required, and use CET
	a. Burner drain valve	D	N/A	
	b. Coordinator control	D	N/A	See Table 4, Group 3
	c. Fuel control	D	N/A	See Table 4, Group 20
	d. Fuel control cutoff valve actuator	D	N/A	
	e. Fuel enrichment pressure switch	D	N/A	See Table 4, Group 4
	f. High pressure fuel filter	D	N/A	See Table 4, Group 5
	g. Low pressure fuel filter	D	N/A	
	h. Fuel filter pressure switch	D	N/A	See Table 4, Group 4
	i. Fuel hose assemblies[2]	D	N/A	
	j. Fuel manifold drain valve	D	N/A	
	k. Fuel spray nozzle assembly	D	N/A	See Table 4, Group 7
	l. Fuel pump	D	N/A	See Table 4, Group 21
	m. Speed sensitive control	D	N/A	See Table 4, Group 19

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
	n. Temperature datum valve	D	N/A	See Table 4, Group 22
	o. Diffuser scavenge pump[9]	D	N/A	See Table 4, Group 8
	p. External oil scavenge pump[4]	D	N/A	See Table 4, Group 9
	q. Main engine oil pressure/scavenge pump	D	N/A	See Table 4, Group 10
	r. Power unit oil filter[2]	D	N/A	
	s. Turbine scavenge pump, front[9]	D	N/A	See Table 4, Group 12
	t. Turbine scavenge pump, rear	D	N/A	
	u. Ignition exciter	D	N/A	
	v. Ignition relay[2]	D	N/A	
	w. Power unit magnetic plug[2]	D	N/A	
	x. Power unit wiring harness assembly	D	N/A	See Table 4, Group 15
	y. Spark igniter plugs[2]			
	z. Anti-ice air hose assemblies[2]			
	aa. Anti-ice solenoid valve[5]			
	bb. Speed sensitive valve	D	N/A	See Table 4, Group 16
	Compressor Section			
053C	Disassemble and clean compressor section, visually inspect for worn or damaged parts.	D	N/A	See Table 5, Group 1, and use CET
054C	Perform magnetic inspection of the following compressor section parts: a. Tie bolts b. Nuts c. Gears d. Extension shaft	D	N/A	Magnetizer, demagnetizer

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
055C	Perform fluorescent penetrant inspection of the following compressor section parts: a. Tie bolt (threaded or splined areas only) b. Diffuser assembly c. Air inlet housing assembly d. Extension shaft housing assembly e. Rear labyrinth seals f. Vane assemblies g. Wheel assembly	D	N/A	Ultraviolet light, air drier
056C	Remove/replace compressor section parts that are damaged, worn or out of tolerance.	D	N/A	See Table 5 as required, and use CET
057C	Remove and rework applicable compressor section parts by plating, welding and/or grinding as required.	D	N/A	Use CET
058C	Repair compressor side gear by: a. Rework gear bearing journal by grinding and chrome plating. b. Replace side gear and bearing retaining ring if worn beyond serviceable limits. c. Replace bearing cage if worn.	D	N/A	See Table 5, Group 8, and use CET
059C	Repair compressor extension shaft and housing by: a. Rework shaft by grinding and chrome plating. b. Rework housing by welding, or machining and spray metallizing as required. c. Replace housing and shaft if worn or damaged beyond serviceable limits.	D	N/A	Use CET

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
060C	Repair compressor air inlet housing by: a. Perform pressure test, no leakage allowed. b. Rework housing as required by welding and/or blending cracks, scratches, dents or oversized holes. c. Replace housing when serviceable limits are exceeded or practicable repair is prevented.	D	N/A	See Table 5, Group 2, and use CET
061C	Repair compressor air inlet vane assembly by: a. Rework vane assembly by welding, blending, or peening nicks and trailing edge cracks. b. Replace vane assembly by cutting and brazing.	D	N/A	See Table 5, Group 3, and use CET
062C	Repair compressor case assembly by:	D	N/A	See Table 5, Group 4, and use CET
	a. Rework case for cracks, scratches and dents by welding, blending or recoating.	D	N/A	
063C	Repair compressor vane assembly by: a. Rework vane assembly by blending, welding and ni-cad plating. b. Replace vane assembly if beyond serviceable limits. c. At each overhaul, replace air seals and perform seal break-in run during functional run of engine test.	D	N/A	Use CET
064C	Repair compressor seal assemblies by: a. Rework seals by relining solder seal. b. Replace seals if beyond serviceable limits.	D	N/A	See Table 5, Group 7, and use CET

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
065C	Repair compressor rotor assembly by: a. Rework rotor by grinding, plating, blending or reforming rotor blades, wheels and spacers. b. Replace rotor parts beyond serviceable limits. c. Perform static balance on wheels. d. Assemble rotor assembly. e. Perform dynamic balance on rotor assembly.	D	N/A	See Table 5, Group 6, and use CET
066C	Repair compressor diffuser assembly by: a. Perform diffuser pressure test. b. Rework diffuser by welding, blending, peening, grinding or ni-cad plating struts, rims or sleeve. c. Replace diffuser components as required.	D	N/A	See Table 5, Group 5, and use CET
067C	Repair compressor air bleed collectors by: a. Rework collectors by welding. b. Replace baffles and plug weld.	D	N/A	Use CET
068C	Reassemble compressor section and verify repairs. Turbine change assembly/turbine section (including combustion liner assembly)	D	N/A	Use CET
069C	Disassemble combustion liner assembly and clean, visually inspect for worn or damaged parts.	D	N/A	See Table 5, Group 9, and use CET
070C	Perform fluorescent penetrant inspection of the following combustion liner assembly parts: a. Inner Casing Assembly b. Outer Casing Assembly c. Inner Casing Liner Assembly d. Inner Exhaust Cone	D	N/A	Ultraviolet light, air drier

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
071C	Repair/replace combustion liner assembly parts that are damaged, worn or out of tolerance.	D	N/A	Use CET
072C	Repair combustion chamber outer casing by: a. Rework casing by welding or coating. b. Rework casing holes by tapping. c. Replace casing beyond serviceable limits.	D	N/A	Use CET
073C	Repair combustion liners by: a. Rework liners by welding. b. Replace liners beyond serviceable limits.	D	N/A	See Table 5, Group 11, and use CET
074C	Repair combustion chamber inner casing by: a. Perform pressure test of inner casing. b. Rework casing by blending and welding. c. Replace casing if cracked in bellows area or beyond serviceable limits.	D	N/A	See Table 5, Group 10, and use CET
075C	Repair combustion chamber inner casing liner by: a. Perform inner casing liner pressure test. b. Rework casing liner by welding and blending. c. Replace casing liner if worn or damaged beyond serviceable limits.	D	N/A	See Table 5, Group 10, and use CET

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
076C	Reassemble combustion liner assembly and verify repairs.	D	N/A	Use CET
077C	Disassemble and clean turbine section, visually inspect for worn or damaged parts.	D	N/A	See Table 5, Group 9
078C	Perform magnetic inspection of the following turbine section parts: a. Turbine coupling shaft assembly b. Turbine coupling shaft adapter c. Turbine clamp nuts d. Turbine rear scavenge oil pump assembly (shafts and gear assembly)	D	N/A	Magnetizer, demagnetizer
079C	Perform fluorescent penetrant inspection of the following turbine section parts: a. Turbine blades b. Turbine vane casing c. Turbine inlet casing d. Turbine coupling shaft (threaded or splined areas only) e. Turbine seal assemblies f. Turbine spacers g. Turbine bearing supports h. Turbine pump supports i. Turbine vane and seal support j. Turbine vane assemblies k. Turbine wheel assemblies	D	N/A	Ultraviolet light, air drier

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
080C	Repair/replace turbine section parts if worn, damaged or out of tolerance.	D	N/A	Use CET
081C	Repair turbine coupling shaft by: a. Rework shaft by light stoning and polishing of splines. b. Replace shaft parts if beyond serviceable limits. c. Reassemble and balance coupling shaft assembly.	D	N/A	See Table 5, Group 12, and use CET
082C	Replace turbine front bearing cage if beyond serviceable limits.	D	N/A	Use CET
083C	Repair turbine bearing supports, front and rear, by: a. Rework supports by welding, grinding, plating, and/or polishing. b. Replace supports if wear or damage exceeds serviceable limits.	D	N/A	See Table 5, Group 15, and use CET
084C	Replace turbine labyrinth seals if serviceable limits are exceeded.	D	N/A	See Table 5, Group 13, and use CET

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
085C	Repair turbine inlet casing by: a. Rework casing by welding or blending. b. Replace loose or broken studs. c. Replace casing if beyond serviceable limits.	D	N/A	See Table 5, Group 14, and use CET
086C	Repair turbine vane casing by: a. Rework casing by welding or blending. b. Replace casing if beyond serviceable limits.	D	N/A	See Table 5, Group 17, and use CET
087C	Repair turbine rotor assembly by: a. Disassemble turbine rotor assembly. b. Rework turbine blades by light polishing, blending, grinding and ALPAK processing. c. Rework turbine wheels and spacers by blending, grinding, metalizing and polishing. d. Rework vane assembly by blending, welding, polishing and ALPAK processing. e. Replace turbine rotor parts which exceed serviceable limits. f. Static balance turbine wheels and spacers. g. Reassemble turbine rotor assembly. h. Dynamic balance turbine rotor assembly. i. Verify repair of turbine rotor assembly.	D	N/A	See Table 5, Group 16, and use CET

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
088C	Reassemble turbine section and verify repair.	D	N/A	Use CET
	Accessory drive section			
089C	Drain, disassemble and clean accessory drive section, visually inspect for worn or damaged parts.	D	N/A	See Table 5, Group 18, and use CET
090C	Perform magnetic inspection of the following accessory drive section components: a. Pressure and scavenge oil pump assembly parts b. External scavenge oil pump assembly parts	D	N/A	Magnetizer, demagnetizer
091C	Perform fluorescent penetrant inspection of the following accessory drive section parts: a. Accessory drive housing cover assembly b. Accessory drive housing assembly	D	N/A	Ultraviolet light, air drier
092C	Repair/replace accessory drive section parts which are worn, damaged or out of tolerance.	D	N/A	See Table 5 Group 18
093C	Repair accessory drive housing assembly by: a. Rework housing by grinding, welding, or machining and metallizing. b. Replace housing if beyond serviceable limits.	D	N/A	See Table 5, Group 18, and use CET

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
094C	Repair accessory drive housing gears and shaft gears by: a. Rework bearing journals by grinding and chrome plating. b. Rework gears by light stoning of minor nicks and scratches. c. Replace gears if cracked, spalled, chipped or bent.	D	N/A	See Table 5, Group 18, and use CET
095C	Reassemble accessory drive section, and verify repairs. Torquemeter section	D	N/A	
096C	Remove, disassemble, clean, inspect, adjust, repair/rework, replace, reassemble and install the following components as required: a. Water/alcohol injection manifold[8] b. Water/alcohol injection nozzles[8] c. Torquemeter sensing pickup[2]	D	N/A	Use CET
097C	Disassemble and clean torquemeter section, visually inspect for wear and/or damage.	D	N/A	See Table 5, Group 19, and use CET
098C	Perform magnetic inspection of the following torquemeter section parts: a. Torquemeter coupling b. Lock nut c. Safety coupling members d. Shaft assembly, inner and outer	D	N/A	Magnetizer, demagnetizer

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
099C	Perform fluorescent penetrant inspection of the torquemeter housing.	D	N/A	Ultraviolet light, air drier
100C	Repair torquemeter housing assembly by: a. Rework housing by blending nicks. b. Replace housing if cracked, dented or exceeds serviceable limits.	D	N/A	Use CET
101C	Repair torquemeter inner and outer shafts by: a. Rework shaft teeth by welding and machining. b. Rework shaft by vapor blasting, stoning. c. Rework splines by blending. d. Replace shafts if beyond serviceable limits.	D	N/A	See Table 5, Group 20, and use CET
102C	Balance torquemeter shaft and safety coupling assembly.	D	N/A	See Table 5, Group 21
103C	Reassemble torquemeter section and verify repair.	D	N/A	
	Reduction gear section			
104C	Remove, disassemble, clean, inspect, adjust, repair/rework, replace, reassemble and install the following components: a. Reduction gear lube pump/filter b. Reduction gear scavenge pumps	D	N/A	See Table 4 as required, and use CET See Table 4, Group 17 See Table 4, Group 18

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
105C	Disassemble and clean reduction gear section, visually inspect for wear and damage.	D	N/A	See Table 5, Group 22, and use CET
106C	Perform magnetic inspection of the following reduction gear section parts: a. Planet gear carrier b. Reduction gear eyebolt c. Gears d. Sun gear hub e. Propeller brake outer member f. Propeller shaft assembly g. Coupling shaft	D	N/A	Magnetizer, demagnetizer
107C	Perform fluorescent penetrant inspection of the following reduction gear section parts: a. Inner rear housing diaphragm assembly b. Main diaphragm assembly c. Reduction gear eyebolt (threaded areas only) d. Planet gear and bearing journal (threaded areas only) e. Front and rear housing assemblies f. Bearing separators g. Propeller shaft (threaded areas only) h. Pinion spur shaft gear (threaded areas only)	D	N/A	Ultraviolet light, air drier
108C	Repair/replace reduction gear parts which are worn, damaged or out of tolerance.	D	N/A	Use CET

MAINTENANCE PLAN

PART III – MAINTENANCE REQUIREMENTS (continued)

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Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
109C	Repair reduction gear housings, front and rear, by: a. Rework housings by grinding, milling, welding, blending, and/or metallizing. b. Replace bearing cages, bushings and inserts as required. c. Replace housing if cracked in stress areas or exceeds serviceable limits.	D	N/A	See Table 5, Group 26, and use CET
110C	Repair propeller brake by: a. Rework brake by grinding, chrome plating, vapor blasting or polishing. b. Replace brake members if beyond serviceable limits. c. Replace outer member lining at each overhaul. d. Balance propeller brake. e. Assemble propeller brake. f. Test propeller brake.	D	N/A	See Table 5, Group 25, and use CET
111C	Repair gears, shafts, and bearings by: a. Rework gears by light stoning and polishing or grinding. b. Rework journals by grinding and plating. c. Replace bushings if beyond serviceable limits. d. Replace gears if beyond serviceable limits. e. Balance gears.	D	N/A	See Table 5, Group 24, and use CET
112C	Reassemble reduction gear assembly and verify repair.	D	N/A	See Table 5, Group 23, and use CET

TABLE 2 - TOOL GROUP LIST FOR T56 ENGINE, ORGANIZATIONAL LEVEL MAINTENANCE

GROUP	NOMENCLATURE	PART NUMBER
1	OPERATIONAL CHECK AND TROUBLESHOOTING	
	Adapter, Torque, Reduction gear filter	6796891
	Borescope, 1st-stage turbine vanes	6798917
	Borescope, 1st-stage turbine vanes and thermocouple viewing (-10WA, and -14)	6797314
	Borescope, 1st-stage turbine vanes without disassembly	6796572
	Cable, Adapter, Electrical components checkout test set (-10WA, and -14)	6799150
	Cable, Adapter, Torquemeter runout (use with 6893546 test set)	6893705
	Cable, Adapter, Torquemeter runout (-7A, -16, and -423)	6799877
	Cable Assy, Temp trim system test set (-7A, -15, and -423)	6799217
	Cable Assy, Temp trim system test set (-425, and -426)	6799297
	Cable Assy, Temp trim system test set (-10WA, and -14)	6799216
	Cable, Power Adapter (-426)	6798141
	Cable Set, Temperature indicator checking	6799881
	Calculator, Engine performance (-7A, -10WA, and -426)	6795880
	Calculator, Engine performance (-7A, -14, -16, -423, and -425)	6799970
	Calculator, Engine performance (-10WA, and -14)	6796953
	Calculator, Minimum power (-7A, -16, and -423)	6796785
	Calculator, Minimum power (-425, and -426)	6796960
	Cover, Main oil filter	6798246
	Cover, Reduction gear oil filter (-425, and -426)	6798247
	Depressor, Spring, Fuel filter element	6796975
	Expander, Accessory drive shaft oil seal	6796355
	Expander, Propeller shaft thrust bearing seal	6796651
	Expander, Switch drive shaft oil seal	6796588
	Expander, Tach drive shaft oil seal	6796354

TABLE 2 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	OPERATIONAL CHECK AND TROUBLESHOOTING (Continued)	
	Fixture, Propeller control linkage (-7A, -16, and -423)	6796708
	Fixture, Propeller control linkage (-425, and -426)	6796446
	Fixture, Starter shaft seal (-7A, -10WA, -14, -16, -423, and -426)	6872288
	Gage, Depth, Torquemeter pickup	6797571
	Gage, Internal spline, 1.200 P.D.	6872245
	Pliers, Low pressure fuel filter retaining ring	6796975
	Probe, Compressor air bleed valve	6797963
	Probe, Pressure breather vent (-7A)	6799210
	Probe, Thermocouple tester	6799359
	Pusher, Tach drive oil seal	6797574
	Test Set, Temp Datum Control System	6799215
	Test Set, Electrical components checkout	6799209
	Test Set, Torquemeter runout	6893546
	Tester, Thermocouple high current	6799323
	Wrench, Fuel pump flange nut	6796584
	Wrench, Offset, Fuel/Control System	T27300
	Wrench, Spanner, Oil Screen	6796735
	Wrench, Spanner, Oil Screen (-7A, -16, and -423)	6796748
	Wrench, Spanner, Reduction gear oil pump pressure adjustment valve	6798131
	Wrench, Speed sensitive switch	6799538

TABLE 2 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
2	OVER-THE-WING TURBINE CHANGE (T56-A-10WA, and -14)	
	Adapter, engine component attaching (4 ea.)	6799764
	Adapter, gage	6796535
	Adapter, turbine attaching (2 ea.)	6796818
	Adapter, turbine lifting	6798116
	Crane - scale	(1000 lb. capacity)
	Fixture, inner oil tube alignment (-10WA)	6796672
	Fixture, inner oil tube alignment (-14)	6799708
	Gage	3856
	Hoist	(1000 lb. capacity)
	Puller, inner rear exhaust cone	6799754
	Stand, turbine section (2 ea.)	6795905
	Support, wrench	6796382
	Vibration tester	6798134
	Wrench, positioning turbine rotor	6796569
	Wrench, rear bearing clamp nut spanner	6796529
	Wrench, spanner, turbine rear bearing clamp nut	6796529
	Wrench, support	6796382
	Wrench, tie bolt lock nut spanner	6796530
	Wrench, tie bolt spanner	6796533
3	UNDER-THE-WING TURBINE CHANGE (T56-A-7A, -16, and -423)	
	TBD	

TABLE 2 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
4	ENGINE REMOVAL/INSTALLATION	
	(T56-A-7A, -16, and -423)	
	Adapter, Lifting Power Section	6796570
	Adapter, Lifting Power Section	6796871
	Cover, Propeller Shaft	6796300
	Engine Buildup Truck	404190-1
	Hoisting Unit, Engine Nacelle and Propeller	404051-1
	Lift, Reduction Gear	6796064
	QEC Sling Assembly, Nacelle	404055
	(T56-A-10WA, and -14)	
	Dynamometer	TD5-5000 (part of 926146-1 propeller weight simulator)
	Nose Ballast Cradle and Adapter	905458-21, 917590-1
	QEC Sling Assy	STC II000
	Stand Assy QEC	B228
	(T56-A-425, and -426)	
	Puller	2308
	Engine Lateral Vibration Isolator Wrench	123GT40029
	Installation and Removal Trailer	4000A
	Transport Trailer	63A92
	QEC Unit	123GT10116
	Main Landing Gear Scissor Mechanism Lock	123GT10109
	Cable Disconnect Tool	98GT1040
	Adapter	6796814
	Adapter	6797587
	Tube (2)	6796816
	Adapter (Used when sling 123GT10089 is used to remove engine)	6799587
	Engine Sling	123GT10089
	Tube (2)	6795870
	Spacer	6797711
	Adapter	6797684
	Adapter	6799514
	Yoke	6795877
	Adapter	6795869
	Adapter (Used when engine is removed without propeller)	6799449
	Tail Jack Pad	123GT10014

TABLE 2 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
5	ENGINE CLEANING	
	Fixture, Engine cleaning, Walnut shell injection (-7A, -16, and -423)	6797918
	Fixture, Engine cleaning, Walnut shell injection (-10WA, and -14)	6797389
	Fixture, Engine cleaning, Walnut shell injection (-425, and -426)	6795916
	Protector Kit, Engine cleaning, Walnut shell injection	6795955

TABLE 3 - TOOL GROUP LIST FOR T56 ENGINE, INTERMEDIATE LEVEL MAINTENANCE

GROUP	NOMENCLATURE	PART NUMBER
1	ACCESSORY DRIVE CENTER GEAR AND MAIN DRIVE SHAFTGEAR BEARINGS REMOVAL AND INSTALLATION	
	Installation Plate	6796211
	Plug	6796208
	Puller Plate	6796202
	Puller Plate	6796204
	Support	6796250
2	ACCESSORY DRIVE IDLER GEAR SHAFT BEARINGS REMOVAL AND INSTALLATION	
	Installation Plate	6796211
	Plug	6796209
	Puller Plates	6796201
3	ACCESSORY DRIVE MAIN DRIVE SHAFTGEAR BEARINGS INSTALLATION	
	Installation Plate	6796211
	Plug	6796254
4	ACCESSORY DRIVE SIDE ACCESSORY DRIVE SHAFT (FUEL PUMP DRIVE GEAR) BEARINGS REMOVAL AND INSTALLATION	
	Expander-Oil seal	6796355
	Installation Plate	6796211
	Plug-Accessory drive shaft gear	6796209
	Puller Plates	6796201
	Support	6796250
5	ACCESSORY DRIVE SIDE SHAFTGEAR DISASSEMBLY AND ASSEMBLY	
	Installation Plate	6796211
	Plug	6796209
	Puller Plates	6796205
	Holder	6796594
	Wrench-Retainer bolt spanner	6796593

TABLE 3 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
6	ACCESSORY DRIVE TACHOMETER DRIVE GEAR BEARINGS REMOVAL AND INSTALLATION	
	Expander-Oil seal	6796354
	Fixture-Installation, speed sensitive control seal	6799596
	Installation Plate	6796211
	Plug	6796209
	Puller Plates	6796201
7	ACCESSORY DRIVE SECTION REMOVAL AND INSTALLATION	
	Adapter, Housing to 6796987 stand mounting	6797707
	Lift	3826
	Protector, Accessory main drive shaft	6799969
	Stand, Engine components assembly and disassembly turnover	6796987
8	ALTERNATOR DRIVE SHAFT BEARING REMOVAL	
	Drift-Inner ring	6796525
	Plate-Inner ring puller	6796524
	Support	6796250
9	ALTERNATOR DRIVE SHAFT BEARING RETAINER NUT	
	Holder-Starter shaft	3738
	Wrench	6796019
10	COMBUSTION LINER ASSEMBLY REMOVAL AND INSTALLATION	
	Adapter, Liner lifting	6796515
11	COMPRESSOR BLADE REWORK	
	Templates, Limit	6796786
12	COMPRESSOR EXTENSION SHAFT DISASSEMBLY AND REASSEMBLY	
	Fixture, Checking, extension shaft and side gear assembly	6797590
	Holder	3732

TABLE 3 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	COMPRESSOR EXTENSION SHAFT DISASSEMBLY AND REASSEMBLY (Continued)	
	Puller, Bearing housing	3838
	Puller Plate, Bearing	6796235
	Support, Bearing Removal	6796249
	Wrench	3464-4
13	COMPRESSOR FRONT BEARING AND LABYRINTH SEAL REMOVAL	
	Puller	6796971
14	COMPRESSOR FRONT BEARING NUT	
	Holder, Shaft (use with 3464-4)	3464-5
	Wrench (use with 3464-5)	3464-4
15	COMPRESSOR FRONT BEARING OUTER RING REMOVAL AND INSTALLATION	
	Compressor	6796901
	Drift	6796194
16	COMPRESSOR FRONT LABYRINTH SEAL STORAGE	
	Box	6796970
17	COMPRESSOR LOWER CASE REMOVAL	
	Sling, Lift, accessory drive	6795866
18	COMPRESSOR REAR BEARING AND SEAL REMOVAL AND INSTALLATION	
	Driver	6796190
	Puller	6797708
19	COMPRESSOR REAR BEARING NUT	
	Holder, Extension shaft forward spline	3755
	Support, Wrench	6796262
	Wrench	3855

TABLE 3 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
20	COMPRESSOR ROTOR HANDLING	
	Adapter, Lifting	6796540
	Stand, Transportation and storage	6796833
21	COMPRESSOR ROTOR TO VANE ASSEMBLY AXIAL CLEARANCE CHECKING	
	Gage	6796042-1
	Gage	6796042-3
22	COMPRESSOR UNIT DISASSEMBLY AND REASSEMBLY	
	Guide Pin, Rotor front bearing cap	3762
	Guide Pin, Rotor rear bearing and seal	6796169
	Holder, Extension shaft forward spline	3755
	Puller, Tee handle, 1/4-28 thread	2308
	Puller, Split line bolt	3718
23	COMPRESSOR UNIT HANDLING	
	Adapter, Attaching, compressor unit (air inlet housing) to maintenance stand	6796965
	Adapter, Attaching, compressor unit to 6796847 adapter	6796819
	Adapter, Attaching, 6795905 stand to compressor unit 6796819 adapter	6796847
	Stand, Turnover, engine component	6795905
24	COMPRESSOR VANE INSPECTION	
	Fixture, Checking, axial location	6798227
25	ENGINE COMPONENT HANDLING	
	Adapter, Rotating, engine components to parallel rail maintenance stand	6796980
	Stand, Turnover, engine component	6795905

TABLE 3 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
26	ENGINE DISMANTLING AND REASSEMBLY	
	Cover, Torquemeter inner or outer shaft pickup teeth	679304
	Fixture, Scavenge oil tube alignment check	6796673
	Holder, Bolt, reduction gear-power section strut assembly	6796618
	Kit, Oil jet restriction checking	6798012
	Spline, Starter shaft turning	6796182
	Support, Torquemeter spline	6796301
27	ENGINE HANDLING	
	(T56-A-7A, -16, and -423)	
	Adapter, Double roller, engine adapter, to parallel rail system (-7)	6796850
	Adapter, Housing, QEC bottom shell	6797687
	Adapter, Locating, connector tube to 6796850 roller adapter (-7)	6796851
	Adapter, Mounting, diffuser bracket to parallel rail stands	6796813
	Adapter, Mounting, air inlet housing adapter (6796815) to parallel rail stands	6796814
	Adapter, Mounting, QEC to parallel rail stands	6796846
	Adapter, Stabilizing, QEC upper shell	6797683
	Adapter, Supporting, power package reduction gear to positioning trailer	6799758
	Adapter, Supporting, power section to parallel rail system	6799777
	Adapter, Trunnion, air inlet housing bottom pad to 6796814 adapter	6796815
	Adapter, Uploading, QEC to 6799758 adapter	6799449
	Tube, Connecting, power package reduction gear adapter to air inlet trunnion adapter	6795870
	Tube, Connector air inlet housing adapter (6796814) to diffuser adapter (6796813)	6796816
	Yoke, Support, 6796814 adapter	6796845

TABLE 3 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	(T56-A-10WA, and -14)	
	Adapter, Mounting diffuser mounting bracket to 6796784 stand	6796870
	Adapter, Trunnion, air inlet housing mounting pad to 6796784 stand	6796869
	Stand, Overhaul	6796784
	Stand, Turnover, engine component, assembly and disassembly	6796832
	(T56-A-425, and -426)	
	Adapter, Engine component	6799764
	Adapter, Diffuser bracket to parallel stand	6799514
	Adapter, Mounting, air inlet housing to adapter to parallel rail stand	6796814
	Adapter, Reduction gear to 6799764 adapter	
	Adapter, Rotating, engine components to parallel rail stand	6796980
	Adapter, Stabilizer QEC housing	6797684
	Adapter, Supporting, power unit assembly to parallel rail stand	6799777
	Adapter, Supporting power unit assembly reduction gear to parallel rail stand	6799758
	Adapter, Trunnion, air inlet housing bottom pad and filter bracket to 6796814 adapter	6797587
	Adapter, Turbine unit to 6799764 adapter	6796818
	Adapter, Uploading, QEC to 6799758 adapter	6799449
	Spacer, 6796814 mounting adapter	6797711
	Tube, Connector, 6796814 air inlet housing adapter-to-6799514 diffuser adapter	6796816
	Tube, Connecting, power package to air inlet trunnion adapter	6795870
	Yoke, Collapsible support, 6796814 adapter	6795877

TABLE 3 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
28	HYDRAULIC PUMP DRIVE GEAR BEARING REMOVAL	
	Drift-Inner ring	6796525
	Plate-Inner ring puller	6796524
	Support	6796250
29	HYDRAULIC PUMP DRIVE GEAR BEARING RETAINER NUT	
	Holder-Starter shaft	3738
	Wrench	6796019
30	HYDRAULIC PUMP IDLER GEAR BEARING REMOVAL	
	Drift	6796608
	Drift	6797985
	Drift	6799793
	Plate-Hydraulic pump idler gear puller	6797986
	Puller-Rear bearing outer ring	6796521
	Support	6796250
31	LINK ROD END BEARING INTERNAL CLEARANCE CHECK	
	Fixture	6796889
32	MAIN DRIVE GEAR BEARING REMOVAL AND INSTALLATION	
	Puller-Outer ring	6796178
33	MAIN IDLER GEAR BEARING REMOVAL	
	Drift	6799793
	Plate-Front bearing puller	6799792
	Plate-Rear bearing puller	6799791
	Puller-Outer ring (front)	6796522
	Puller-Outer ring (rear)	6796521
	Support	6796250
34	POWER SECTION AND REDUCTION GEAR HANDLING	
	Adapter, Attaching, engine assembly to 6797692 adapter (use with 6797692)	6798146
	Adapter, Lifting, engine assembly (use with 6798146)	6797692

TABLE 3 (Continuation)

GROUP	NOMENCALTURE	PART NUMBER
35	POWER SECTION HANDLING	
	Adapter, Lifting	6797690
	Adapter, Supporting power section to rollover stand	6799776
36	PROPELLER SHAFT THRUST BEARING SEAL STORAGE	
	Protector	6799646
37	REDUCTION GEAR DISASSEMBLY AND REASSEMBLY	
	Adapter, Holding, No. 60 propeller shaft	6796359
	Attachment, Propeller brake release	6796089
	Compressor, Pinion front bearing outer ring	6797968
	Cover, Propeller shaft	6796300
	Expander, Propeller shaft thrust bearing seal	6796651
	Fixture, Alignment, swivel arm	6799775
	Fixture, Eyebolt alignment	6799765
	Fixture, Installation and removal, starter shaft seal	6872288
	Gage, Plug, pinion gear bushing	6797564
	Pin, Rigging, propeller control linkage	6796757
	Puller, Propeller shaft plug	6796467
	Puller, Scavenge pump drive gear (pinion)	6796559
	Puller, Splitline bolt	3718
	Puller, Starter idler gear front bearing outer race	6796522
	Pusher, Starter shaft bearing cage	6796221
	Spline, Starter shaft turning	6796182
	Wrench, Eyebolt nut	6796059
	Wrench, Eyebolt pin	6796079
	Wrench, Propeller shaft thrust bearing nut	6796645
	Wrench, Spanner rear carrier bearing retaining nut	6799875
	Wrench, Spanner, scavenge oil screen	6796748

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T56 TURBOPROP ENGINE MAINTENANCE PLAN.(U)
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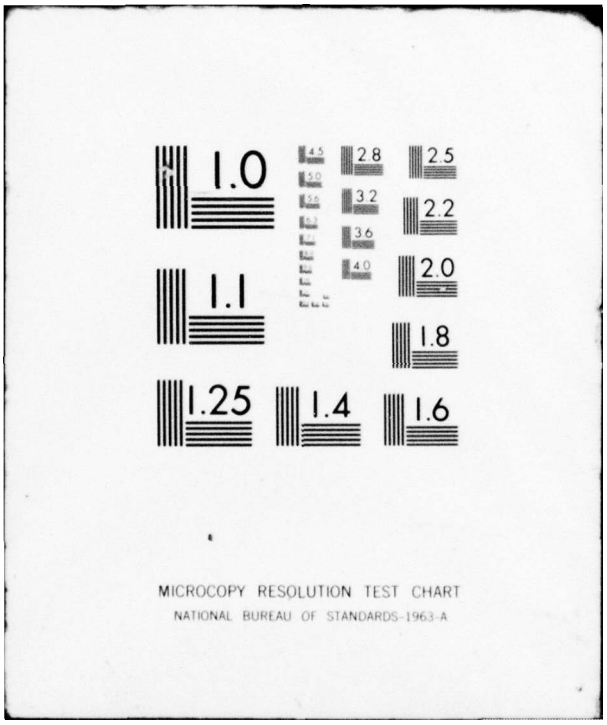
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NATIONAL BUREAU OF STANDARDS-1963-A

TABLE 3 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
38	REDUCTION GEAR OIL PUMP DRIVE IDLER GEAR SPANNER NUT	
	Fixture-Dimpling, cup washer	6799537
	Holder	3738
	Wrench	6796074
	Wrench-Spanner, end slot spanner nut	6799535
39	REDUCTION GEAR OIL PUMP DRIVE IDLER JOURNAL BEARING REMOVAL	
	Puller plate	6796206
	Support	6796250
40	REDUCTION GEAR OIL PUMP DRIVE SHAFT BEARING REMOVAL	
	Puller Plate	6796206
	Support	6796250
41	REDUCTION GEAR SCAVENGE PUMP DRIVE GEAR REMOVAL	
	Puller	6796877
42	REDUCTION GEAR HANDLING	
	Adapter, Attaching, engine component adapter	6799764
	Adapter, Attaching, reduction gear unit to 6799764 adapter	6796820
	Adapter, Lifting	6798160
	Adapter, Lifting	6797682
	Adapter, Lifting, rear case	6799782
	Adapter, Trunnion, rear case to 6796987 stand	6797706
	Stand, Transportation and storage	6796832
	Stand, Turnover, engine component	6795905
	Stand, Turnover, engine components disassembly and reassembly	6796987
43	REDUCTION GEAR OIL SYSTEM	
	Adapter, Installation and removal, front case screw thread insert	6797899
	Adapter, Oil filter torque	6796891
	Jig, Drill, front case screw thread insert lockpin	6797898

TABLE 3 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	REDUCTION GEAR OIL SYSTEM (Continued)	
	Jig, Drill and driver, drain plug insert lockpin hole	6799863
	Wrench, Oil screen spanner	6796735
	Wrench, Scavenge oil screen spanner	6796748
	Wrench, Spanner oil pump pressure adjustment valve threaded bushing	6798131
44	SAFETY COUPLING OUTER MEMBER RETAINING NUT	
	Support, Wrench	6796351
	Wrench	6796136
45	SIDE ACCESSORIES GEAR BEARING REMOVAL	
	Base	6796125-6
	Plug	6796125-5
46	STARTER SHAFT BEARING REMOVAL	
	Drift-Inner ring	6796525
	Plate-Inner ring puller	6796524
	Support	6796250
47	SUN GEAR INSTALLATION	
	Fixture-Sun gear hub lock tab bending	6797589
48	TACHOMETER AND OIL PUMP GEAR (SPUR) SPANNER NUT	
	Holder	3738
	Wrench	6796020
	Wrench-Spanner, end slot spanner nut	6799535
49	TACHOMETER DRIVE IDLER GEAR (SPUR) BEARING REMOVAL	
	Puller Plate	6796206
	Support	6796250
50	TACHOMETER DRIVE IDLER GEAR (SPUR) SPANNER NUT	
	Fixture-Dimpling, cup washer	6799537
	Fixture-Holding	6798239
	Wrench	6796074
	Wrench-Sapnner, end slot spanner nut	6799535

TABLE 3 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
51	TACHOMETER DRIVE SHAFT BEARING REMOVAL	
	Puller Plate	6796206
	Support	6796250
52	TORQUEMETER EXTERNAL PICKUP BLOCK ATTACHING BOLT	
	Puller, Tee handle, 1/4-28 thread	2308
53	TORQUEMETER MID-BEARING REMOVAL AND INSTALLATION	
	Fixture, Shaft pulling	6797754
	Guide	6797753
	Plate, Inner ring puller	6797757
	Pusher, Inner ring	6797756
	Retainer, Rollers	6797881
54	TORQUEMETER PICKUP INSTALLATION CLEARANCE CHECKING	
	Gage, Depth	6797571
55	TORQUEMETER-TO-SAFETY COUPLING MOUNTING BOLT	
	Fixture, Lock tab	6799868
	Wrench, Box	6797637
56	TURBINE FRONT BEARING AND SEAL REMOVAL AND INSTALLATION	
	Compressor, 3.921 O.D. split seal ring	6797939
	Cover, Inlet casing	6796552
	Drift, Inner race	6796736
	Guide, Inner ring and rollers	6799634
	Holder, Forward spline extension shaft	3755
	Holder, Retainer nut wrench	6796652
	Holder, Rollers	6796782
	Holder, Rotor	6796030
	Puller, Labyrinth Seal	6799623
	Puller, Labyrinth seal	6799902
	Puller, Labyrinth seal	6796654
	Puller, Outer ring	6796653
	Puller, Outer ring	6799642
	Puller, 1/4-28 thread tee handle	2308
	Pusher, Inner ring	6799641
	Wrench, Coupling clamp nut spanner	6796537
	Wrench, Nut, coupling clamp	6799621

TABLE 3 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
57	TURBINE REAR BEARING AND SEAL REMOVAL AND INSTALLATION	
	Holder, Compressor extension shaft forward spline	3755
	Holder, Turbine rotor	6796030
	Pliers, Metal O-ring seal removing	6796619
	Plug, Puller, labyrinth seal spacer	6799814
	Puller	6799622
	Puller, Cage	6796531
	Puller, Inner ring	6796534
	Puller, Inner ring	6798161
	Puller, Outer ring	6796541
	Support, Wrench	6796382
	Wrench, Clamp nut spanner	6796529
58	TURBINE ROTOR HANDLING	
	Adapter, Lifting	6799619
	Adapter, Trunnion, stand	6799523
	Cover	6796546
	Sling	3436
	Stand, Transportation and storage	6796836
59	TURBINE ROTOR INSPECTION	
	Gage, First-stage blade erosion	6798014
	Borescope, First-stage blade and vane	6798917
60	TURBINE ROTOR TO VANE ASSEMBLY AXIAL CLEARANCE CHECK	
	Adapter, Gage	6796535
	Gage	3856
	Wrench, Positioning, rotor axial movement	6796569
61	TURBINE-TO-COMPRESSOR TIE BOLT	
	Holder, Forward spline, extension shaft	3755
	Support, Wrench	6796382
	Wrench, Clamp nut spanner	6796529
	Wrench, Locknut spanner	6796530
	Wrench, Spanner	6796533

TABLE 3 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
62	TURBINE UNIT ASSEMBLY INSPECTION	
	Borescope, First-stage vane and thermocouple viewing	6796572/6797314
	Borescope, Turbine First-stage blades and vanes (sulfidation inspection)	6798917
	Fixture, Alignment, inner casing oil tubes	6799708
	Fixture, Alignment, inner casing oil tubes	6796672
	Fixture, Check, scavenge oil tube alignment	6796673
63	TURBINE UNIT DISASSEMBLY AND REASSEMBLY	
	Clamp, Inlet guide vane	6796731
	Compressor, 6.250 OD aplit seal ring	6797940
	Compressor, Coupling shaft assembly retaining ring	6796917
	Cover, Inlet case (-10WA, -14, -16, -423, and -425)	6799717
	Cover, Inlet casing (-7A, and -426)	6796552
	Fixture, Second-stage vane assy checking	6796712
	Fixture, Turbine coupling shaft holding	6796621
	Fixture, Vane locking key checking	6796711
	Guide, Rear Bearing	6799803
	Jack, Adjusting, rotor clearance	6797484
	Plate, Preliminary build retaining	6799768
	Puller, Tee handle, 1/4-28 thread	2308
	Retainer, Rear bearing rollers	6798242
	Separator, Inlet casing	6796730
	Separator, Vane casing and vane assy	6796676
	Wedge, Inlet guide vane	6796732
64	TURBINE UNIT HANDLING	
	Adapter, Attaching, engine component adapter	6799764
	Adapter, Attaching, turbine unit to 6799764 adapter	6796818
	Adapter, Installation	6798116
	Adapter, Lifting	6799620
	Stand, Turnover, engine components disassembly and reassembly	6796987

TABLE 4 - TOOL GROUP LIST FOR ENGINE ACCESSORIES AND COMPONENTS

GROUP	NOMENCLATURE	PART NUMBER
1	ACCESSORIES OIL SEALS REMOVAL AND INSTALLATION	
	Expander, Accessory drive shaft oil seal	6796355
	Expander, Speed sensitive valve drive shaft assembly seal	6796538
	Expander, Tachometer drive shaft gear oil seal (use with 6799596)	6796354
	Fixture, Installation, speed sensitive control seal (use with 6796354)	6799596
	Puller, Accessories housing tachometer generator drive oil seal	6796460
	Puller, Fuel pump drive oil seal	6796461
	Puller, Tachometer drive oil seal	6798804
	Pusher, Tachometer drive oil seal	6797574
2	BURNER DRAIN VALVE	
	Adapter, Valve testing	6799192
	Tester, Spring	6799675
3	COORDINATOR CONTROL	
	Adapter, Shaft	6799331
	Bushing, Shaft adapter	6799330
	Calibrator, Switch actuation and travel	6799329
	Fixture, Potentiometer	6799205
	Fixture, Indexing	T-4289
	Fixture, Positioning	6799335
	Fixture, Holding	6799328
	Fixture, Potentiometer and gear buildup	6171X-PG-AF1
	Stand, Test	6799286
	Stand, Test	6872414
	Tester, Spring	6799676
4	FUEL FILTER AND ENRICHMENT PRESSURE SWITCHES	
	Stand, Universal pressure switch test	7036-3
5	HIGH PRESSURE FUEL FILTER	
	Adapter, Testing	6799163
	Stand, Fuel accessories test	6799206
	Stand, Fuel accessories test	6799866
	Tester, Spring	6799675

TABLE 4 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
6	LOW PRESSURE FUEL FILTER	
	Depressor, Filter element support spring	6796975
	Fixture, Disposable paper element pressure test	6799201
	Pliers, Filter retaining ring removal and installation	6796974
	Reamer, Relief valve seat (60° included angle)	6797727
	Reamer, Relief valve seat (flat bottom)	6797728
	Reamer, Relief valve seat (120° included angle)	6797729
	Stand, Fuel accessories	6799206
	Stand, Fuel accessories test	6799866
	Tester, Spring	6799676
7	FUEL SPRAY NOZZLE ASSEMBLY	
	Adapter, Test	7084
	Adapter, Test	7112
	Case, Fuel nozzle storage	6796219
	Fixture, Holding	7100
	Stand, Nozzle testing	7111
	Tester, Spring	6799675
	Wrench, Adjusting	6799184
	Wrench, Filter	6799183
8	DIFFUSER SCAVENGE PUMP	
	Puller, Driven gear bearing	6797906
	Puller, Intermediate shaftgear bearing	6797905
	Wrench, Shaftgear spanner	6796075
9	EXTERNAL OIL SCAVENGE PUMP	
	Adapter, Test	6798091
	Fixture, Bushing ream	6799801
	Gage, Bushing go - no go	6799802
	Stand, Lube and scavenge test	7057
10	MAIN ENGINE OIL PRESSURE/SCAVENGE PUMP	
	Adapter, Oil pump test	6799057
	Adapter, Press. regulator valve	6799193
	Stand, Lube and scavenge test	7057
	Tester, Spring	6799675

TABLE 4 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
11	POWER UNIT OIL FILTER	
	Tester, Spring	6799675
12	TURBINE SCAVENGE PUMP, FRONT	
	Puller, Oil pump gear bearing	6797902
13	INNER REAR EXHAUST CONE REMOVAL	
	Puller	6799754
14	IGNITION RELAY	
	Adapter Cable, Test set	6799209
	Test Set, Electrical components checkout	6799150
15	POWER UNIT WIRING HARNESS ASSEMBLY	
	Analyzer, Check	200DIT MCO
	Expander, Teflon tubing	6796992
16	SPEED SENSITIVE VALVE	
	Adapter, Test	6799373
	Drift, Speed switch drive shaft assembly bearing	6796590
	Expander, Drive shaft gear assembly seal	6796588
	Fixture, Flyweight carrier speed calibration pin assembly	6795871
	Fixture, Flyweight carrier roll-pin installation	6795873
	Fixture, Flyweight snapring removal and installation	6795872
	Holder, Speed switch drive shaft assembly	6796591
	Holding Fixture, Speed switch	7106
	Installation Plate, Accessories bearings	6796211
	Plate, Speed switch drive shaft assembly bearing	6796589
	Puller, Plug orifice	6799377
	Stand, Testing	6799152
	Support, Accessory drive bearing removal	6796249
	Tester, Spring	6799675
	Wrench, Spanner	281184
	Wrench, Speed switch drive shaft bearing retaining nut spanner	6796592

TABLE 4 (Continued)

GROUP	NOMENCLATURE	PART NUMBER
17	REDUCTION GEAR LUBE PUMP/FILTER	
	Adapter, Oil pump test	7079
	Adapter, Reduction gear filter torque	6796891
	Drift, Body and cover bushing installation	6795906[8]
	Drift, Body and cover bushing installation	6799515
	Drift, Body bushing installation (large)	6795908
	Drift, Body flanged bushing lock pin hole	6872246
	Fixture, Gear bushing rework	6796753
	Gage, Body and cover bushing go - no go (small)	6799594
	Gage, Body and cover plug (small)(-10WA)	6795911
	Gage, Body bushing go - no go (large)	6799593
	Gage, Body plug (large)(-10WA)	6795910
	Gage, Bushing countersink depth flush pin (large)	6795914
	Gage, Bushing countersink depth flush pin (small)	6795915
	Jig, Body and cover ream (-10WA)	6795912
	Jig, Bushing lock pin hole drill (-10WA)	6795907
	Jig, Bushing lock pin hole drill	6796969
	Jig, Body ream (-10WA)	6795909
	Jig, Body ream	6799517
	Jig, Cover bushing lock pin hole drill	6795913
	Jig, Cover ream	6799516
	Jig, Drill, flanged bushing lock pin hole	6872253
	Jig, Drill, flanged bushing lock pin hole	6872254
	Stand, Lube and scavenge test	7057
	Tester, Spring	6799676
	Wrench, Pressure adjusting valve bushing	6799838
18	REDUCTION GEAR SCAVENGE PUMP	
	Drift, Body flanged bushing	6872246
	Jig, Drill, body flanged bushing lock pin hole	6872254
	Jig, Drill, flanged bushing lock pin hole	6872253

TABLE 4 (Continued)

GROUP	NOMENCLATURE	PART NUMBER
19	FUEL AND CONTROL SYSTEM	
	Adapter, Torque, coordinator control shaft	6796568
	Case, Fuel nozzle	6796219
	Depressor, Spring, low pressure fuel filter element support (-7)	6796975
	Fixture, Checking, rod end internal clearance	6796889
	Fixture, Fuel control holding	6796698
	Fixture, Installation and removal, flyweight carrier snapring (-16)	6795872
	Fixture, Setting, fuel cutoff rod assembly	6796774
	Plate, Alignment, temperature datum valve mounting brackets	6799796
	Pointer, Fuel control	6796658
	Puller, Anti-icing probe tube	6799760
	Puller, 1/4-28 thread tee handle	2308
	Wrench, Box	CX1416
	Wrench, Box, fuel pump flange nut	6796584
	Wrench, Box, speed sensitive switch (control) mounting nut (7/16)	6799538
	Wrench, Offset, box end	T27300
20	FUEL CONTROL	
	Puller	T25333
	Fixture	T25335
	Slinger Bolt	T25601
	Puller	T25684
	Fixture	T25758
	Puller	T25761
	Fixture	T25774
	Puller	T25776
	Adapter	T25779
	Fitting	T25784
	Inserting Arbor	T25786
	Inserting Arbor	T25787
	Fixture	T25795
	Fixture	T25796
	Fixture	T25822
	Fixture	T25827
	Fixture	T25844
	Fixture	T25851
	Protractor	T25862
	Adapter	T25872
	Measuring Tool	T25876
	Positioner	T25877
		T25880

TABLE 4 (Continued)

Group	Nomenclature	Part Number
	FUEL CONTROL (Continued)	
	Fixture	T25881
	Fixture	T25885
	Fixture	T25946
	Fixture	T26698
	Fixture	T26758
	Holder	T26759
	Adapter	T26760
	Wrench	T26764
	Fixture	T26767
	Alignment Tool	T26768
	Fixture	T26769
	Fixture	T26786
	Fixture	T26788
	Inserting Tool	T26836
	Fixture	T27238
	Inserting Tool	T27251
	Fixture	T27253
	Fixture	T27254
	Fixture	T27256
	Assembly Tool	T27258
	Adapter	T27259
	Fixture	T27261
	Fixture	T27263
	Positioner	T27265
	Fixture	T27285
	Fixture	T27339
	Puller	T27340
	Puller	T27341
	Fixture	T27342
	Fixture	T27344
	Fixture	T27345
	Fixture	T27349
	Adapter	T27362
	Inserting Tool	T27365
	Fixture	2550667
	Fixture	2550668
	Fixture	2550669
	Fixture	2550670
	Plug Gage	2550693
	Adapter	2550698
	Punch	2550700
	Adapter	2550701
	Adapter	2550702
	Punch	2550703
	Adapter	2550704
	Adapter	2550705
	Punch	2550706
	Adapter	2550707
	Punch	2550708

TABLE 4 (Continued)

GROUP	NOMENCLATURE	PART NUMBER
	FUEL CONTROL (Continued)	
	Adapter	2550709
	Punch	2550710
	Punch	2550712
	Adapter	2550713
	Punch	2550714
	Punch	2550715
	Fixture	2550716
	Punch	2550717
	Punch	2550718
	Adapter	2550719
	Punch	2550720
	Adapter	2550721
	Punch	2550722
	Adapter	2550723
	Punch	2550724
	Gage	2550725
	Adapter	2550727
	Punch	2550728
	Punch	2550729
	Adapter	2550730
	Punch	2550731
	Punch	2550732
	Punch	2550733
	Adapter	2550734
	Punch	2550735
	Adapter	2550736
	Punch	2550737
	Adapter	2550738
	Punch	2550739
	Adapter	2550740
	Punch	2550741
	Fixture	2550742
	Gage	2550743
	Fixture	2550744
	Adapter	2550745
	Punch	2550746
	Gage	2550747
	Punch	2550751
	Sleeve	2550902
	Fixture	2550903
	Assembly Tool	2550904
	Forming Tool	2550907

TABLE 4 (Continued)

GROUP	NOMENCLATURE	PART NUMBER
21	FUEL PUMP	
	Jig, Bearing seal pin drill	T12379
	Wrench, Impeller	T15652
	Plug Set, Dowelling	T12814
22	TEMPERATURE DATUM VALVE	
	Puller, Mechanical	T25622
	Puller, Emergency transfer and by-pass valve plugs	T25640
	Fixture, Holding, valve assembly	T25716
	Puller, Pinion shaft bearing	T25756
	Fixture, Pressurizing valve leakage test	T25758
	Puller, Mechanical	T25761
	Puller, Mechanical	T25762
	Puller, Mechanical	T25763
	Puller, Mechanical	T25801
	Adapter, Drive shaft torque	T25817
	Torque Test Set, Temperature datum valve motor	T27282
	Fixture, Solenoid valve test	T27288
	Fixture, Holding, metering valve assembly preset	T27289
	Puller, Mechanical, variable stop pinion sleeve	T27292
	Puller, Take stop piston sleeve	T27293
	Sizing Tool, Teflon seal	T27295
	Installing Tool, Seal, stop positioning piston	T27296
	Installing Tool, Seal, stop positioning piston	T27297
	Adjusting Tool, Metering valve stop spline	T27298
	Puller, Gear box	T27304
	Setting Fixture, Metering valve	T27306
	Test Set, Motor gear train	T27321
23	TESTING EQUIPMENT	
	Adapter Cable, Electrical components checkout test set (use with 6799150)	6799209
	Adapter Cable, Torquemeter runout test set (Phase Detector)	6799877
	Adapter Cable, Torquemeter runout test set (UTM1)	6799878
	Adapter Kit, Power package to 6799207 mobile engine test stand (use with 6799207)	6799285

TABLE 4 (Continued)

GROUP	NOMENCLATURE	PART NUMBER
	TESTING EQUIPMENT (Continued)	
	Adapter, Mounting, horizontal vibration pickup	6796726
	Adapter, Mounting, vertical vibration pickup	6796727
	Adapter, Scavenge oil pressure test	6887894
	Adapter Kit, Power package to 6799207 mobile engine test stand	6799283
	Calculator, Engine performance	6795880
	Calculator, Engine performance (-16 and -423)	6799970
	Calculator, Minimum power	6796785
	Probe, Compressor air bleed valve piston position	6797963
	Probe, Pressure, breather	6799210
	Protector, Thread, propeller shaft	6797950
	Shroud, Turbine case	6799750
	Shroud, Turbine case	6799819
	Stand, Mobile engine test	6799207
	Stand, Mobile engine test	6872153
	Test Set, Electrical components checkout	6799150
	Test Set, Torquemeter runout	6799876
	Test Set, Unitized torquemeter indicator	6799450
	Vibration Meter	6798134
24	THERMOCOUPLE INSPECTION AND TEST	
	Fixture, Warpage measuring	6799628
	Probe, Tester	6799359
	Tester, High current	6799323
	Tester, Resistance	6799327

TABLE 5 - TOOL GROUP LIST FOR T56 ENGINE, DEPOT LEVEL OVERHAUL AND REPAIR

GROUP	NOMENCLATURE	PART NUMBER
COMPRESSOR SECTION		
1	INSPECTIONS	
	AIR INLET HOUSING	
	Adapter, Checking	6799647
	Fixture, Concentricity checking	6799595
	Gage, Pilot OD checking	6799682
	Gage, Pilot sleeve bore ID checking	6799686
	Gage, Shim installation measurement	6799573
	Master, Pilot ID checking gage	6799685
	Master, Pilot OD checking gage	6799683
	Master, Pilot sleeve bore ID	6799687
	CASE	
	Adapter, Boring fixture center	6796792
	Base	6796790
	Gage, ID rotary	6796788
	EXTENSION SHAFT AND SIDE GEAR	
	Fixture, Checking, backlash	6799531
	EXTENSION SHAFT BEARING	
	Adapter, Internal radial clearance checking ring	6797656
	Fixture, Internal clearance check	6796964
	Plate, Clamp	6797602
	Plate, Roller bearing guide	6797603
	FRONT BEARING	
	Fixture, Internal clearance check	6796964
	Fixture, Out-of-round bearing outer ring inspection	6796945
	Gage, Ring	6796940
	Gage, Ring	6797604
	Plate, Clamp	6797602
	Plate, Roller bearing guide	6797603

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	FRONT LABYRINTH SEAL	
	Fixture, Checking	6799630
	REAR BEARING	
	Adapter, Roller bearing internal clearance checking ring	6797609
	Fixture, Internal clearance check	6796964
	Plate, Clamp	6797602
	Plate, Roller bearing guide	6797603
	REAR LABYRINTH SEAL	
	Fixture, Checking	6799629
	Gage Set, Stator step depth	6799631
	ROTOR	
	Gage, Blade OD final check	6796273
	Inspection Fixture	3780
	Sling	3435
	VANE ASSEMBLY SEAL	
	Adapter, Boring fixture center	6796792
	Base	6796790
	Fixture, Holding	6797670
	Gage, Rotary	6796789
	Gage Block Unit, Vanes	6796902
	WHEEL	
	Gage, 14th-stage wheel permanent dish	6796247
2	AIR INLET HOUSING	
	REPAIR	
	Fixture, Holding	6797971

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	TESTING	
	Fixture, Hydraulic pressure test	6796985
	Fixture, Pneumatic testing	6796984
	Fixture, Pressure test (anti-icing passages)	6799597
3	AIR INLET VANE REPAIR	
	Peening Tool, Pneumatic	6799678
	Pliers, Trailing edge forming	6799669
4	CASE REPAIR	
	Adapter, Grit blast	6796666
	Adapter, Metallizing front	6796663
	Adapter, Metallizing lifting	6796665
	Adapter, Metallizing rear	6796664
	Bar, Inside boring	6796787
	Fixture, Boring	6796768
	Fixture, Chamfer	6797399
	Fixture, Grit blast holding	6796667
	Machine, Grit blast	6796647
	Machine, Metallizing	6796646
	Mask, Vane groove 5/8 inch	6796668
	Mask, Vane groove 7/8 inch	6796669
	Punch, Bleed hole insert	6796853
	Spacer, Axial split line	6796671
	Support Plate	6797680
5	DIFFUSER ASSEMBLY	
	CONCENTRICITY CHECKING	
	Fixture	6799595
	INNER CASING SLEEVE REMOVAL	
	Plate, Pressing	6799961
	PNEUMATIC PRESSURE TEST	
	Fixture	6799572

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	REPAIR	
	Fixture, Welding	6799891
	Fixture, Ring and clamp	6799892
	Mask, Scavenge sump	6798815
6	ROTOR ASSEMBLY	
	BLADE REMOVAL AND INSTALLATION	
	Bar, First-stage pry	6796895
	Protector, First-stage hub	6796894
	Puller, Retaining pin	6796360
	Support, Removal	6796274
	Support, Wheel and blade assembly (1st- and 14th-stage)	6796586
	Support, Wheel and blade assembly (2nd- thru 13th-stage)	6796587
	BLADE REWORK	
	Templates, Limit	6796786
	BLADE TIP OD GRINDING	
	Adapter Set	6796344
	Sling	3435
	DYNAMIC BALANCING	
	Adapter, Chuck	6796906
	Bar, GMR machine nodal	6796913
	Bearing, Machine forward pedestal	6796907
	Bearing, Machine rear pedestal	6796908
	Bracket, Shroud	6796909
	Chuck	6796905
	Drill Jig, 14th-stage balance weight	6796091
	Shroud	6796910
	Sling	3435
	Wrench, Chuck socket	6796912

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	REASSEMBLY	
	Adapter, 1st-stage end press	6796899
	Adapter, 14-stage end press	6796900
	Cover	6796886
	Fixture, Assembly	6796872
	Heater, Wheel assembly	6796855
	Press, 20 ton capacity hydraulic	6796898
	Stand, Transportation and storage	6796833
	SEPARATION	
	Fixture, Disassembly	6796872
	Holder, Forward spline	3482
	Puller, 10-32 tee handle	6796236
	Separator, Wheel (1 through 5)	6796080-201
	Separator, Wheel (6 through 13)	6796080-202
	Stand, Transportation and storage	6796833
	WHEEL BLADE TIP OD GRINDING	
	Adapter Ring, All stages	6796343
	Clamping Plate, All stages	6796342
	Fixture, 1st- and 14th-stage	6796340
	Fixture, 2nd- through 13th-stage	6796341
	Gage	6796361
	Gage, Master	6796362
	WHEEL REPAIR	
	Protector, 14th-stage wheel shot-peen hub	6796864
	Protector, 14th-stage wheel shot-peen rim	6796865
	Protector, 13-stage wheel shot-peen blade	6796862
	Protector, 13th-stage wheel shot-peen web	6796863

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	WHEEL STATIC BALANCING	
	Adapter Collet (2nd- through 13th-stage)	6796804
	Adapter, Dial	6796800
	Adapter, Drive	6796844
	Adapter, Support	6796801
	Jig, Weight and rivet hold drill (stages 2 and 3)	6796866
	Jig, Weight and rivet hole drill (stages 4 through 7)	6796867
	Jig, Weight and rivet hole drill (stages 8 through 13)	6796868
	Machine, Vertical rotating	6796797
7	SEAL ASSEMBLIES	
	FRONT LABYRINTH SEAL REPAIR	
	Fixture, Machining	6799618
	Fixture, Solder pouring	6799616
	Fixture, Tinning	6799617
	REAR LABYRINTH SEAL REPAIR	
	Fixture, Primary stator machining	6799633
	Fixture, Secondary stator machining	6799632
	VANE ASSEMBLY SEAL REPAIR	
	Clip, Corrugated seal end retaining	6796767
	Fixture, Corrugated seal assembly	6796764
	Fixture, Corrugated seal boring	6796768
	Fixture, Groove straightening	6799813
	Fixture, Seal corrugating	6796761
	Gage, Boring fixture cutting tool setting	6796609
	Gage, Groove width	6796763
	Mandrel, Groove	6796777
	Masks, Groove plating	6798288
	Sealant Gun	6798228
8	SIDE GEAR BEARING	
	Puller, Cage	6872235

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	SIDE GEAR SPLINE REPAIR	
	Broach	6799671
	Fixture, Internal spline broach	6799697
	Mask, Plating	6799672
TURBINE SECTION (INCLUDING COMBUSTION LINER ASSEMBLY)		
9	INSPECTIONS	
	COMBUSTION LINER	
	Adapter, Igniter plug ferrule height gage	6799720
	Adapter, Locating, transition section	6799721
	Fixture, Checking	6796793
	Template	6799724
	FIRST-STAGE BLADE	
	Probe, Cleaning cavity, cooling passage	6872195
	Probe, Light, cooling air passage	6872196
	FRONT BEARING	
	Adapter, Roller bearing checking ring	6799756
	Fixture, Check	6796964
	Plate, Roller bearing guide	6799755
	Plate, Roller clamp	6799757
	REAR BEARING	
	Adapter, Roller bearing internal clearance checking ring	6797609
	Fixture, Internal clearance check	6796964
	Plate, Clamp	6797602
	Plate, Guide	6797603
	REAR BEARING SUPPORT	
	Fixture	6799520
	Gage, Plug, key slot (0.2395-0.2400 Dim., GO and NO-GO)	6799806
	Gage, Plug, key slot (0.2410 Max. width, NO-GO)	6799807

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	ROTOR	
	Fixture, Inspection	6798009
	Support, Checking	6799639
	VANE CASING AFT FLANGE	
	Gage, Plug, key slot (0.2395-0.2400 Dim., GO and NO-GO)	6799806
	Gage, Plug, key slot (0.2410 Max. width, NO-GO)	6799807
	WHEEL AND SPACER	
	Fixture	6796688
	Inspection Kit	6799899
10	INNER CASING PRESSURE TEST	
	Fixture (inner casing liner)	6799817
	Fixture (inner casing)	6799818
11	LINER	
	CROSSOVER TUBE FERRULE FLANGE REPLACEMENT	
	Adapter, Transition section locating	6799723
	Bar, Flange aligning	6796611
	Fixture, Holding	6796795
	Gage, Plug	6796641
	FRONT SECTION REPLACEMENT	
	Adapter, Locating	6799723
	Fixture, Holding	6796795
	FUEL NOZZLE, FERRULE REPLACEMENT	
	Fixture, Saw	6796794
	Fixture, Welding	6797678
	IGNITER FERRULE MOUNT REPLACEMENT	
	Adapter, Locating, transition section	6799727
	Fixture, Weld	6799780

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	TRANSITION SECTION REPLACEMENT	
	Adapter, Locating	6799723
	Fixture, Holding	6796795
	Fixture, Saw	6796794
	Mandrel, Exit sizing	6799725
12	TURBINE COUPLING SHAFT	
	DISASSEMBLY AND REASSEMBLY	
	Drift, Adapter assembly	6796269
	Drift, Bolt spacer roll	6796270
	Drift, Spacer disassembly	6796267
	Holder	6797663
	Holder, Spacer	6796268
	Holding fixture	6796263
	Puller, Adapter	6797662
	Wrench	6796264
	DYNAMIC BALANCING	
	Adapter, Front	6797847
	Adapter, Rear	6797848
	Belt, Drive	6797783
	Half Bearings, Front and rear	6797849
	Machine, Balance, horizontal rotating static and dynamic	6798183
	Machine, High speed	6796636
	Pulley, Drive	6797782
	Shaft, High speed whip balance machine master calibration	6797959
	REPAIR	
	Holder	6796272
	Jig, Lockpin	6797661
13	FRONT AND REAR LABYRINTH SEAL CHECKING	
	Adapter Kit	6799898
	Fixture	6799837

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
14	INLET CASING REPAIR	
	Fixture, Milling	6797958
15	REAR BEARING SUPPORT REPAIR	
	Fixture, Heat treat	6799649
	Fixture, Milling	6797958
	Fixture, Pressure test	6799512
	Fixture, Weld	6799650
16	ROTOR ASSEMBLY	
	DISASSEMBLY AND REASSEMBLY	
	Adapter, Lifting	6799619
	Adapter, Support (4th-stage)	6799753
	Fixture, Holding	6799698
	Gage, Aligning, clamp bolt nut	6799635
	Heater, Wheel	6797342
	Stand, Transportation	6796836
	Support, Checking	6799639
	DYNAMIC BALANCING	
	Bar, GMR nodal	6796913
	Bearing, Block (front)	6799829
	Bearing, Forward pedestal	6796907
	Bearing, Rear pedestal	6796908
	Bracket, Shroud	6796909
	Chuck, Front	6799830
	Hood, Air	6799828
	Sling	3436
	Wrench, Chuck socket	6796912
	VANE MACHINING	
	Fixture, 2nd-stage (checking)	6799707
	Fixture, 2nd-stage (machining)	6799704
	Fixture, 3rd-stage (machining and inspection)	6799901
	Fixture, 4th-stage (machining and inspection)	6799900

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	WHEELS AND BLADES DISASSEMBLY AND REASSEMBLY	
	Fixture	6799627
	Protector, Curvic coupling	6796783
	WHEEL AND SPACER DISASSEMBLY AND REASSEMBLY	
	Adapter, Press	6799637
	Press, Hydraulic (20 ton capacity)	6796898
	Support	6799638
	WHEEL STATIC BALANCING	
	Adapter, Dial	6796800
	Adapter, 1st- and 4th-stage collet	6796798
	Adapter, 1st-stage wheel collet	6799832
	Adapter, 2nd- and 3rd-stage curvic	6796803
	Adapter, Support	6796801
	Knob, Hold down	6796831
	Machine, Vertical rotating	6796797
	Retainer, 1st- and 4th-stage collet	6796799
	Retainer, 1st-stage wheel collet	6799833
17	VANE CASING AFT FLANGE REPAIR	
	Adapter, Milling, locating slots	6798818
	Fixture, Milling	6797958
ACCESSORY DRIVE SECTION		
18	ACCESSORY DRIVE	
	CENTER GEAR AND MAIN DRIVE SHAFT GEAR BEARINGS REMOVAL AND INSTALLATION	
	Installation Plate	6796211
	Plug	6796208
	Puller plate	6796202
	Puller plate	6796204
	Support	6796250

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	DISASSEMBLY AND REASSEMBLY	
	Adapter, Housing to 6796987 stand mounting	6797707
	Lift	3826
	Protector, Accessory main drive shaft	6799969
	Puller Plate, Main Drive shaft gear bearings	6796203
	Stand, Engine components assembly and disassembly turnover	6796987
	Support, Bearing removal	6796249
	IDLER SHAFT BEARINGS REMOVAL AND INSTALLATION	
	Installation Plate	6796211
	Plug	6796209
	Puller plates	6796201
	MAIN DRIVE SHAFTGEAR BEARINGS INSTALLATION	
	Installation Plate	6796211
	Plug	6796254
	SIDE ACCESSORY DRIVE AND FUEL PUMP DRIVE SHAFT GEAR BEARINGS REMOVAL AND INSTALLATION	
	Expander, Oil seal	6796355
	Installation Plate	6796211
	Plug, Accessory drive shaft gear	6796209
	Puller Plates	6796201
	Support	6796250
	SIDE SHAFT GEAR BEARINGS REMOVAL AND INSTALLATION	
	Installation Plate	6796211
	Plug	6796209
	Puller Plates	6796205
	Support	6796250
	SIDE SHAFT GEAR DISASSEMBLY AND ASSEMBLY	
	Holder	6796594
	Wrench, Retainer bolt spanner	6796593

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	SPEED SENSITIVE CONTROL DRIVE GEAR BEARINGS REMOVAL AND INSTALLATION	
	Expander, Oil seal	6796354
	Fixture, Installation, speed sensitive control seal	6799596
	Installation Plate	6796211
	Plug	6796209
	Puller Plates	6796201
TORQUEMETER SECTION		
19	MID-BEARING INSPECTION	
	Fixture, Bearing internal clearance check	6796964
	Fixture, Out-of-round bearing outer ring inspection	6796945
	Gage, Ring	6799821
	Plate, Clamp	6797602
	Plate, Roller bearing guide	6797649
20	TORQUEMETER INNER AND OUTER SHAFTS	
	DISASSEMBLY	
	Holder, Spline	6797880
	Support	6797879
	Wrench, Inner shaft plug spanner	6797755
	EXTERNAL PICKUP BLOCK INSTALLATION	
	Punch, Attaching bolt swage	6797983
	Support, Attaching bolt swaging	6797984
	INNER SHAFT SLEEVES REMOVAL AND INSTALLATION	
	Drift, Inner shaft	6797878
	Fixture, Installation	6796988
	Plate, Flanged sleeve installation and puller	6797876
	Pusher and Puller, Forward	6797877

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	REASSEMBLY	
	Fixture, Alignment	6797786
	Fixture, Outer shaft heating	6799575
	Holder, Spline	6797880
	Shield, Outer shaft heat	6796807
	Support	6797879
	Wrench, Inner shaft plug spanner	6797755
	SAFETY COUPLING INNER AND OUTER MEMBER REMOVAL AND INSTALLATION	
	Compressor	6796187
	Drift	6796195
	Support	6796728
	SAFETY COUPLING INNER AND OUTER MEMBER REPAIR	
	Fixture, Lapping	6796997
	SAFETY COUPLING TESTING	
	Fixture, Torque check	6797903
21	DYNAMIC BALANCING	
	Adapter, Front	6797775
	Adapter, Rear	6797776
	Belt, Drive	6797781
	Belt, Drive	6797783
	Half Bearing, Front and rear	6797777
	Machine, Balance, horizontal rotating static and dynamic	6798183
	Pulley	6797780
	Pulley, Drive	6797782
REDUCTION GEAR SECTION		
22	INSPECTIONS	
	MAIN DRIVE GEAR BEARING	
	Fixture, Internal clearance check	6796964
	Fixture, Out-of-round bearing outer ring inspection	6796945

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	MAIN DRIVE GEAR BEARING (Continued)	
	Gage, Ring	6797645
	Gage, Ring	6799795
	Plate, Roller bearing inspection guide	6797643
	Plate, Roller or ball bearing inspection clamp	6797642
	PINION GEAR FRONT BEARING	
	Fixture, Bearing internal clearance check	6796964
	Fixture, Out-of-round outer bearing ring	6796945
	Gage, Ring (Hyatt)	6797648
	Gage, Ring (SKF)	6796989
	Plate, Guide	6797647
	Plate, Roller bearing clamp	6797646
	PINION GEAR REAR BEARING	
	Adapter, Ring, roller bearing internal clearance checking	6796978
	Fixture, Bearing internal clearance check	6796964
	Plate, Bearing clamp	6797602
	Plate, Roller bearing inspection guide	6797649
	PLANETARY GEAR BEARING	
	Adapter, Internal clearance checking	6797926
	Adapter, Ring, internal clearance checking	6796978
	Fixture, Internal clearance check	6796964
	PROPELLER BRAKE	
	Fixture, Face grooving holding	6796439
	Fixture, Facing boring	6796436
	Gage, Facing bore diameter	6796373

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	PROPELLER BRAKE (Continued)	
	Gage, Facing concentricity and angle	6796374
	Gage, Facing groove depth	6796377
	Gage, Facing groove width	6796740
	Gage, Facing rivet countersink depth	6796371
	Gage, Facing rivet head depth	6796372
	Gage, Facing spacing	6796739
	Gage, Facing trim	6796378
	PROPELLER SHAFT BEARING	
	Adapter, Roller bearing internal clearance checking ring	6797654
	Fixture, Internal clearance check	6796964
	Plate, Ball bearing inspection guide	6797657
	Plate, Inspection clamp	6797651
	Plate, Roller bearing inspection guide	6797652
	REAR CARRIER BEARING	
	Adapter, Roller bearing internal clearance checking ring	6797658
	Fixture, Internal clearance check	6796964
	Plate, Roller bearing inspection	6797643
	Plate, Roller or ball bearing inspection clamp	6797642
	SPLINE	
	Gage, P.D. dial bore, internal spline	6799576
	Gage, P.D. dial bore, internal spline	6799577
	Gage, P.D. dial bore, internal spline	6799578
	Gage, P.D. dial bore, internal spline	6799579
	Gage Kit, Retractable dial snap, external spline P.D.	6799783
	Gage Kit, Retractable dial snap, external spline P.D.	6799784

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
23	REDUCTION GEAR DISASSEMBLY AND REASSEMBLY	
	Attachment, Propeller brake release	6796089
	Cover, Propeller shaft	6796300
	Holder, Starter shaft	3738
	Puller, Starter idler gear front bearing outer ring	6796522
	Pusher, Starter shaft bearing cage	6796221
	Spline, Starter shaft turning	6796182
24	GEARS, SHAFTS, AND BEARINGS	
	ALTERNATOR DRIVE SHAFT BEARING REMOVAL	
	Drift, Inner ring	6796525
	Plate, Inner ring puller	6796524
	Support	6796250
	ALTERNATOR DRIVE SHAFT BEARING RETAINER NUT	
	Holder, Starter shaft	3738
	Wrench	6796019
	HYDRAULIC PUMP DRIVE GEAR BEARING REMOVAL	
	Drift, Inner ring	6796525
	Plate, Inner ring puller	6796524
	Support	6796250
	HYDRAULIC PUMP DRIVE GEAR BEARING RETAINER NUT	
	Holder, Starter shaft	3738
	Wrench	6796019
	HYDRAULIC PUMP IDLER GEAR BEARING REMOVAL	
	Drift	6796608
	Drift	6799793
	Puller, Rear bearing outer ring	6796521
	Puller Plate	6796214
	Support	6796250

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	MAIN DRIVE GEAR BEARING REMOVAL AND INSTALLATION	
	Puller, Outer ring	6796178
	MAIN IDLER GEAR BEARING REMOVAL	
	Drift	6799793
	Plate, Front bearing puller	6799792
	Plate, Rear bearing puller	6799791
	Puller, Outer ring	6796521
	Puller Plate	6796214
	Support	6796250
	PINION GEAR BUSHING REPAIR	
	Boring Fixture	6796345
	Drift, Installation	6796185
	Drift, Removal	6796138
	Fixture, Concentricity check	6796937
	Gage, Plug	6797564
	Support	6796253
	PINION GEAR DYNAMIC BALANCING	
	Belt, Drive (use with 6797591, 6797592, 6797600, and 6797629)	6797631
	Belt, Drive (use with 6797591, 6797592, 6797600, and 6797630)	6797632
	Half Bearing, Front (37TG-5651)	6797591
	Half Bearing, Rear (37TG-5652)	6797592
	Machine, Balance, horizontal rotating static and dynamic	6798183
	Pulley (use with 6797591, 6797592, 6797600, and 6797632)	6797630
	Pulley, Drive (use with 6797591, 6797592, 6797600, and 6797631)	6797629
	Support, Half bearing (use with 6797591, 6797592, 6797630, and 6797632)	6797600

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	PINION GEAR FRONT BEARING REMOVAL AND INSTALLATION	
	Compressor, Outer ring	6797968
	Puller (hydraulic)	6799614-100
	PINION GEAR FRONT BEARING SPANNER NUT	
	Support	6796253
	Wrench	6797897
	PINION GEAR (MAIN ACCESSORY DRIVE) REMOVAL AND INSTALLATION	
	Punch, Attaching bolts swage	6797627
	Support	6797566
	Wrench, Box	6797713
	PINION GEAR REAR BEARING REMOVAL	
	Puller (hydraulic)	6799643-100
	PINION GEAR REAR BEARING RETAINER NUT	
	Holder	6796639
	Wrench	6796046
	PINION GEAR FRONT AND REAR CARRIER BEARING CAGE BORES	
	Template, Locating	6798962
	PLANETARY GEAR AND BEARING REMOVAL AND INSTALLATION	
	Fixture, Holding	6797917
	Protector	6796835
	Puller	6796566
	Stand, Propeller shaft and planetary gear	6796834

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	PLANETARY GEAR JOURNAL FRONT SPLINED RETAINER NUT	
	Adapter, Power wrench pivot	6796561
	Holder	6796634
	Plate, Power wrench adapter support	6799826
	Wrench	6799822
	Wrench, Power 7.7:1 ratio	SWE-102
	PLANETARY GEAR JOURNAL REAR SPLINED RETAINER NUT	
	Adapter, Power wrench	6799823
	Fixture, Power wrench torque	6796631
	Wrench	6797788
	Wrench, Power 7.7:1 ratio	SWE-102
	PLANETARY GEAR REAR CARRIER BEARING RETAINER NUT INSTALLATION	
	Wrench, Spanner	6799875
	PLANETARY GEAR REAR CARRIER BEARING RETAINER INNER RINGS REMOVAL	
	Puller	6796472
	PLANETARY GEAR REAR CARRIER REMOVAL	
	Pusher	6796565
	PROPELLER SHAFT AND PLANETARY GEAR REMOVAL AND INSTALLATION	
	Guide, Propeller shaft to roller bearing	6796056
	Guide Pin, Reduction gear thrust bearing retainer	6796169
	Lift	6796010
	PROPELLER SHAFT BEARING REMOVAL AND INSTALLATION	
	Puller, Propeller shaft thrust bearing and scavenge pump drive gear	6796877
	Retainer, Roller	6796691

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	PROPELLER SHAFT FLANGE TO REAR CARRIER FLANGE BOLT SPANNER NUT	
	Wrench	6799615
	REDUCTION GEAR MAIN DRIVE GEAR BALANCING	
	Adapter, Collet	6797915
	Machine, Vertical rotating static balance	6796797
	REDUCTION GEAR OIL PUMP DRIVE IDLER GEAR SPANNER NUT	
	Holder	3738
	Wrench	6796074
	REDUCTION GEAR OIL PUMP DRIVE IDLER JOURNAL BEARING REMOVAL	
	Puller plate	6796206
	Support	6796250
	REDUCTION GEAR OIL PUMP DRIVE SHAFT BEARING REMOVAL	
	Puller Plate	6796206
	Support	6796250
	REDUCTION GEAR SCAVENGE PUMP DRIVE GEAR REMOVAL	
	Puller	6796877
	STARTER SHAFT BEARING REMOVAL	
	Drift, Inner ring	6796525
	Plate, Inner ring puller	6796524
	Support	6796250
	SUN GEAR INSTALLATION	
	Fixture, Sun gear hub lock tab bending	6797589

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	SUN GEAR LUBRICATION TUBE REMOVAL	
	Puller	6796616
	TACHOMETER AND OIL PUMP DRIVE GEAR (SPUR) SPANNER NUT	
	Holder	3738
	Wrench	6796020
	TACHOMETER DRIVE IDLER (SPUR) BEARING REMOVAL	
	Puller Plate	6796206
	Support	6796250
	TACHOMETER DRIVE IDLER GEAR (SPUR) SPANNER NUT	
	Fixture, Holding	6798239
	Wrench	6796074
	TACHOMETER DRIVE SHAFT BEARING REMOVAL	
	Puller Plate	6796206
	Support	6796250
25	PROPELLOR BRAKE	
	DYNAMIC BALANCING	
	Belt	6797636
	Belt, Drive	6797635
	Fixture, Balance	6797596
	Half Bearing, Front and rear	6797595
	Machine, Balance, horizontal rotating static and dynamic	6798183
	Pulley	6797634
	Pulley, Drive	6797633
	OUTER MEMBER RETAINER NUT	
	Holder	6796078
	Wrench, Spanner	6799536

TABLE 5 (Continuation)

GROUP	NOMENCLATURE	PART NUMBER
	REPAIR	
	Arbor, Grinding	6797977
	Drill, Facing Rivet Hole Special	6796441
	Fixture, Drill	6796380
	Gage, Angle and diameter	6797978
	TEST	
	Fixture	6796770
26	REDUCTION GEAR HOUSING	
	FRONT HOUSING OVERHAUL	
	Compressor, Reverse torque springs	6796513

Req. Number	Requirement	Maintenance Level	Interval	GSE Requirement
	FOOTNOTES 1. Equipment disposition at intermediate level- not returned to depot 2. Consumable item 3. T56-A-1OWA, -14, -425, and -426 engines only 4. T56-A-14, -16, -423, and -425 engines only 5. If found defective reject as beyond capability of maintenance (BCM) and forward to depot for repair/overhaul 6. Aircraft mounted equipment 7. T56-A-425, and -426 engines only 8. T56-A-1OWA only 9. T56-A-7A, -1OWA, and -426 engines only 10. Requires section separation			

ADDENDUM

Project RECOVER List for T56 Turboprop Engine

Project RECOVER List for T56 Turboprop Engine

	WUC	PART NUMBER	NOMENCLATURE	SM&R CODE	APPLICATION
1.	223110	6847236	Compressor Air Inlet Housing	PAHDD2	-7A,-10WA,-16,-423,-425,-426
2.	223110	6848669	Compressor Air Inlet Housing	PAHDD2	-14
3.	223120	6873624	Compressor Air Inlet Vane	PAHDD2	All
4.	223130	6852465	Compressor Case Assembly	PBHDD1	-7A
5.	223130	6846996	Compressor Case Assembly	PBHDD1	-14
6.	223130	6870209	Compressor Case Assembly	PBHDD1	-16,-423
7.	223130	6877290	Compressor Case Assembly	PBHDD1	-425
8.	223130	6821510	Compressor Case Assembly	PBHDD1	-426
9.	223140	6875764	Compressor Rotor Assembly	PBHDD1	All
10.	223160	6876496	Compressor Diffuser Assembly	PAHDD2	All
11.	223210	6805532	Combustion Chamber Outer Casing	PAHDD2	-7A
12.	223210	6824647	Combustion Chamber Outer Casing	PAHDD2	-10WA,-426
13.	223210	6842689	Combustion Chamber Outer Casing	PAHDD2	-14,-16,-423,-425
14.	223220	6847392	Combustion Liner	PAHHD2*	-7A,-10WA,-426
15.	223220	6876880	Combustion Liner	PAHHD2*	-14,-16,-423,-425
16.	223311	6793327	Turbine Front Bearing Support	PAHDD2	-7A,-10WA,-426
17.	223311	6842678	Turbine Front Bearing Support	PAHDD2	-14,-16,-423,-425
18.	2233114	6873603	Turbine Front Bearing Cage	PAHDD2	-7A,-10WA
19.	223312	6871561	1st Stage Turbine Vane	PAHDD2	-7A,-10WA
20.	223312	6870726	1st Stage Turbine Vane	PAHDD2	-14,-16,-423,-425,-426
21.	223312	6870272	1st Stage Turbine Vane	PAHDD2	-14,-16,-423,-425,-426
22.	223312	6870728	1st Stage Turbine Vane	PAHDD2	-14,-16,-423,-425,-426
23.	223312	6870729	1st Stage Turbine Vane	PAHDD2	-14,-16,-423,-425,-426
24.	2233122	6852318	1st Stage Turbine Vane Support	PAHDD2	-7A,-10WA,-426
25.	2233122	6870409	1st Stage Turbine Vane Support	PAHDD2	-14,-16,-423,-425
26.	223313	6859680	Turbine Inlet Case	PAHDD2	-7A,-10WA,-426
27.	223313	6842349	Turbine Inlet Case	PAHDD2	-14,-16,-423,-425
28.	223320	6793745	Turbine Vane Casing	PAHDD2	-7A,-10WA,-426
29.	223320	6844618	Turbine Vane Casing	PAHDD2	-14,-16,-423,-425
30.	223321	6848799	2nd Stage Turbine Vane	PAHDD2	-14,-16,-423,-425,-426
31.	223330	6821322	Turbine Rear Bearing Support	PAHDD2	All
32.	223340	6859000	Turbine Rotor	PAHDD2	-7A
33.	223340	6888600	Turbine Rotor	PAHDD2	-10WA,-426
34.	223340	6877108	Turbine Rotor	PAHDD2	-14,-16,-423,-425
35.	TBD	6858685	Propeller Brake Assembly	PAHDD2	All
36.	TBD	6874602B	Shaftgear Assembly, Accessory	PAHDD2	-7A,-16,-423
37.	TBD	6844208D	Shaftgear Assembly, Accessory	PAHDD2	-10WA,-14
38.	TBD	6842704C	Shaftgear Assembly, Accessory	PAHDD2	-425,-426
39.	TBD	6876682	Spur Gear Assembly, Main Drive	PAHDD2	-7A,-10WA,-14,-16,-423
40.	TBD	6877516	Spur Gear Assembly, Main Drive	PAHDD2	-425,-426
41.	223530	6859427	Accessory Drive Section	PAHDD2	-7A,-14,-16,-423,-425
42.	223530	6859426	Accessory Drive Section	PAHDD2	-10WA,-426
43.	223620	33004307	Fuel Control	PAOOD*	-7A
44.	223620	6824297	Fuel Control	PAOOD*	-10WA
45.	223620	6895550	Fuel Control	PAOOD*	-14
46.	223620	6870451	Fuel Control	PAOOD*	-16,-423
47.	223620	6876342	Fuel Control	PAOOD*	-425
48.	223620	6821461	Fuel Control	PAOOD*	-426

* Items for which the degree of repair that can be accomplished is minimal at maintenance levels other than the depot.

Project RECOVER List for T56 Turboprop Engine (cont'd)

	WUC	PART NUMBER	NOMENCLATURE	SM&R CODE	APPLICATION
49.	223624	179307	Electromechanical Rotary Actuator	PAODD	-7A,-16,-423
50.	223624	181635	Electromechanical Rotary Actuator	PAOOD	-10WA,-14,-425,-426
51.	TBD	338375	Motor Generator	PAGDD	-7A,-16,-423
52.	TBD	183438	Motor Generator	PAGDD	-10WA,-14,-425,-426
53.	223660	6809611	Fuel Spray Nozzle Assembly	PAODD	All
54.	2236A0	6876766	Coordinator Control Assembly	PAODD	-7A,-16,-423
55.	2236A0	6889847	Coordinator Control Assembly	PAODD	-425,-426
56.	2236A0	6875121	Coordinator Control Assembly	PAODD	-10WA,-14
57.	2236E2	190772-2	Paralleling Valve	PAODD	All
58.	223720	6846567	External Oil Scavenge Pump	PAODD	-14,-16,-423,-425
59.	223730	6809974	Diffuser Scavenge Pump	PAHDD2	-7A,426
60.	223730	6791490	Diffuser Scavenge Pump	PAHDD2	-10WA
61.	223740	6792283	Turbine Scavenge Pump, Front	PAHDD2	-7A,-426
62.	223740	6791835	Turbine Scavenge Pump, Front	PAHDD2	-10WA
63.	223750	6821270	Turbine Scavenge Pump, Rear	PAODD	All
64.	223840	6816064	Feather Solenoid	PAODD	-425,-426
65.	223850	6870559	Thrust Sensitive Switch	PAODD	-10WA,-14
66.	223850	6828506	Thrust Sensitive Swithc	PAODD	-425,-426
67.	2238CO	6809639	Sequence Relay Box Assembly	PAODD	-7A,-16,-423
68.	2238K	6873465	Speed Sensitive Control	PAODD	-7A,-16,-423,-425,-426
69.	2238K	6873466	Speed Sensitive Control	PAODD	-10WA,-14
70.	223910	6805230	Ignition Exciter	PAODD	-7A
71.	223910	6805307	Ignition Exciter	PAODD	-10WA,-14,-16,-423,-425,-426
72.	223A80	35-055	Anti-icing Solenoid Valve	PAODD	All

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