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# Aerodynamic Characteristics of 2-, 3-, and 4-, Caliber Tangent-Ogive Cylinders with Nose Bluffness Ratios of 0.00, 0.25, 0.50, and 0.75 at Mach Numbers from 0.6 to 4.0

SYSTEMS ANALYSIS AND SIMULATION BRANCH  
GUIDED WEAPONS DIVISION

JANUARY 1977

FINAL REPORT FOR PERIOD MARCH 1971 TO FEBRUARY 1976

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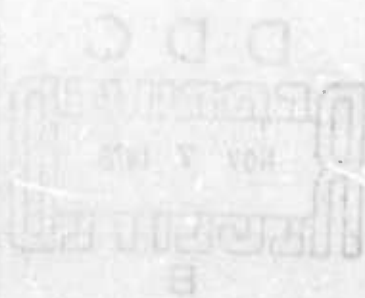
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Item 20 (Concluded) 2.25-caliber tangent ogives ( $R_N/R_B = 0.00, 0.375, 0.575$ ), one 2.5-caliber tangent ogive, two 2.25-caliber power series noses, and a hemispherical nose.



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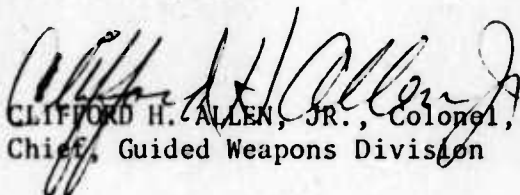
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PREFACE

This report documents a series of wind tunnel tests conducted at Arnold Engineering Development Center for the Air Force Armament Laboratory, Armament Development and Test Center, Eglin Air Force Base, Florida 32542, under Projects 2069 and 670E from March 1971 to February 1976. The effort was jointly sponsored by the Air Force Armament Laboratory (DLMA), the Flight Dynamics Laboratory, and the Army Missile Command. Individuals who have contributed significantly to this project are Messrs. E. G. Allee, (ARO), John Jordan (ARO), and George Landingham (MICOM).

This report has been reviewed and is approved for publication.

FOR THE COMMANDER

  
CLIFFORD H. ALLEN, JR., Colonel, USAF  
Chief, Guided Weapons Division

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LIST OF ABBREVIATIONS, ACRONYMS AND SYMBOLS

$A_b$	AB	Model base area, 1.131 in <sup>2</sup>
$\alpha$	ALPHA	Model angle of attack, deg
$\beta$	BETA	Model sideslip angle, deg
BFR		Model cylindrical fineness ratio (length of midbody + afterbody)/D
$C_{A_F}$	CAF	Forebody axial force coefficient, $C_A - C_{A_b}$
$C_{A_f}$		Calculated skin friction coefficient
$C_{A_b}$		Base axial force coefficient $\frac{(P_\infty - P_b)A_b}{QS}$
$C_{A_P}$		Forebody pressure axial force coefficient, $C_{A_F} - C_{A_f}$
$C_{A_T}$	CAT	Total axial force coefficient, total axial force/ $Q_\infty S$
$C_\ell$	CLL	Rolling moment coefficient, rolling moment/ $Q_\infty S L$
$C_m$	CLM	Pitching moment coefficient, pitching moment/ $Q_\infty S L$
$C_n$	CLN	Yawing moment coefficient, yawing moment/ $Q_\infty S L$
$C_{m_\alpha}$		Slope of the $C_m$ versus $\alpha$ curve at zero alpha, $\frac{dC_m}{d\alpha}$ per degree, calculated from a second degree least squares curve fit from alphas of -1 to 1 degree
$C_N$	CN	Normal force coefficient, normal force/ $Q_\infty S$
$C_{N_\alpha}$		Slope of the CN versus alpha curve at zero alpha, $C_{N_\alpha}$ per degree, calculated from a second degree least squares curve fit from alphas of 0.1 to 1 degree
CONFIG		Model configuration designation
$C_y$	CY	Side force coefficient, side force/ $Q_\infty S$
D		Model base diameter, 1.2 in
PART	PART	Data part number

LIST OF ABBREVIATIONS, ACRONYMS AND SYMBOLS (CONCLUDED)

$L_N$		Length of tangent ogive nose with zero bluntness
$L$		Reference length for pitching, yawing, and rolling moments, and Reynolds number, respectively, 1.2 in
$L_N/D$		Nose fineness ratio
$M_\infty$	MACH	Free-stream Mach number
$P_b$		Average of base pressures
$R_e/FT$		Free-stream unit Reynolds number, per foot
$R_N/R_B$		Model spherical nose radius ratioed to the model base radius
$S$		Reference area for aerodynamic coefficients, 1.131 in <sup>2</sup>
$S_w$		Model total wetted surface area, in <sup>2</sup>
$T_0$		Tunnel stilling chamber temperature, °R
$X_{CP/L}$	XCP	Model center-of-pressure location measured in calibers aft of the moment reference point (negative aft), $C_m/C_N$

## SECTION I

### INTRODUCTION

↙ This report summarizes wind tunnel test data on various body alone configurations which provide a data matrix for bluff and pointed bodies of revolution with systematic variations in nose bluntness, nose fineness ratio, and cylinder afterbody fineness ratio. Modular model components were used to obtain static stability and drag data, with emphasis on the effect of nose bluntness on drag. Although data is included for tangent ogive noses of fineness ratio 2, 2.25, 2.5, 3.0, and 4, the nose fineness ratios of 2, 3, and 4 calibers include a systematic variation in nose bluntness ratios  $(R_N/R_B)$  of 0.00, 0.25, 0.50, and 0.75 on cylindrical midsections of 5, 7, 9, and 11 calibers. A 1-caliber cylindrical afterbody (AI7) is used with all configurations in this report. ↘

## SECTION II

### APPARATUS

#### 1. Wind Tunnel

The tests were conducted in the AEDC PWT/1T, and VKF/A continuous flow test facilities at the Arnold Engineering Development Center. The (1T) is a 12-inch-square perforated test section. The 40-inch supersonic test facility utilizes a solid wall test section. Detailed descriptions of the tunnels are given in Reference 1 and typical model installations are shown in Figures 1 and 2.

#### 2. Test Articles

The test articles consisted of interchangeable nose, midsection, and afterbody configurations: 20 nose configurations, 4 cylindrical midsections of fineness ratio ranging from 5 to 11 and a 1-caliber cylindrical afterbody configuration as shown in Figures 3 and 4. Nose fineness varied from 1 to 4 calibers. Two-, 3- and 4-caliber tangent ogive noses (N14 through N25) were truncated and hemispherical nose caps added to provide three bluntness variations ( $R_N/R_B = 0.25, 0.50, 0.75$ ). Grit or other means of fixing transition were not used to eliminate the drag increment due to the trip and also incremental drag changes resulting from loss of the grit during tunnel operations.

Although only a 1-caliber cylindrical afterbody is considered in this report, various fin configurations were utilized in previous transonic tests (References 2, 3, and 4), which include data for body-cruciform fin configurations with noses N10, N13, and N14. Scale effects utilizing a larger body-fin configuration in the 4T test facility are shown in Reference 5.

A typical assembly of model components is shown in Figure 4. The cylindrical midsections and noses were fabricated from stainless steel (type 303) with a 32-microinch surface finish. Model configuration identifications are shown in Table 1.

#### 3. Instrumentation PWT/1T Test Facility

The internal balance used to measure the model aerodynamic loads in the (1T) test facility is shown in Figure 5. Base pressures were measured with two differential pressure transducers. Angle of attack measurements were corrected for support system and balance deflections.

#### 4. Instrumentation VKF/A Test Facility

Two internal strain gage balances were used to measure the model

TABLE 1. MODEL CONFIGURATION IDENTIFICATION

Model Component	Model Component Length (Caliber)	Type	Nose Bluffness Ratio $R_N/R_B$
A17	1	Cylinder	----
M5, M7, M9, M11	5, 7, 9, 11	Cylinder	----
N10	0.5	Tangent Ogive	1.00
N13	1	Tangent Ogive	0.00
N14	2	Tangent Ogive	0.00
N15	2	Tangent Ogive	0.25
N16	2	Tangent Ogive	0.50
N17	2	Tangent Ogive	0.75
N18	3	Tangent Ogive	0.00
N19	3	Tangent Ogive	0.25
N20	3	Tangent Ogive	0.50
N21	3	Tangent Ogive	0.75
N22	4	Tangent Ogive	0.00
N23	4	Tangent Ogive	0.25
N24	4	Tangent Ogive	0.50
N25	4	Tangent Ogive	0.75
N26	2.25	Tangent Ogive	0.00
N27	2.25	Tangent Ogive	0.575
N28	2.5	Tangent Ogive	0.00
N29	2.25	Tangent Ogive	0.375
N30	2.25	Power Series <sup>(1)</sup>	----
N31	2.25	Power Series <sup>(2)</sup>	----
		(1) N30 Power Series Nose $Y = 0.6(X/2.7)^{0.5}$ (2) N31 Power Series Nose $Y = 0.6(X/2.7)^{0.33}$	

aerodynamic loads in the VKF/A wind tunnel test facility (Figures 6 and 7). The balance shown in Figure 6 was used in the initial test entry (Part Numbers 1 through 247). The balance shown in Figure 7 was used for the second test entry (Part Numbers 248 through 338).

Base pressures were measured with three differential pressure transducers and averaged by the use of fast response pressure transducers located near the model which allowed base static pressure data to be obtained during a continuous pitch sweep. Several pitch-pause sweeps were compared with continuous sweeps to insure that the inherent lag in the base pressure orifice and tubing did not degrade the data.

Angle of attack measurements were corrected for support system and balance deflections. Seventy mm Schlieren photographs were obtained for most configurations at angle of attack increments of approximately 4 degrees. Typical photographs are shown in Figure 8.

## SECTION III

### TEST DESCRIPTION

#### 1. Test Procedures and Conditions

During each data run, the model angle of attack was varied while the roll angle and Mach number were held constant.

Static force data were obtained at angles of attack from -6 to +15 degrees. The transonic tests were conducted at Mach numbers of 0.6, 0.8, 1.0, 1.2, and 1.5. Nominal test conditions were stagnation temperature varied from 150 to 200°F, total pressure varied from 19.3 to 20.7 psia, and dynamic pressure varied from 3.82 to 8.85 psia as Mach number varied from 0.6 to 1.5, respectively. The supersonic tests were conducted at Mach numbers of 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, and 4.5 with the major portions of the data at Mach numbers 1.5, 2.0, 3.0, and 4.0. Nominal test conditions were stagnation temperature 120°F, total pressure varied from 6.5 to 28.0 psia, and dynamic pressure varied from 2.80 to 1.37 psia as Mach number varied from 1.5 to 4.5, respectively.

The moment reference location for all configurations was the nose-body juncture of the model as shown in Figure 4. Sign conventions are shown in Figure 9.

The variation of nominal Reynolds number with Mach number is shown in Figure 10 for the PWT/IT and VKF/A test facilities. The difference in the test Reynolds numbers between the transonic and supersonic test facility should be noted in the comparison of data results at  $M_\infty = 1.5$ . The (IT) test facility does not have a variable density capability. The unit Reynolds number used in the supersonic test phase was  $R_e/ft = 1.8 \times 10^6$  for all Mach numbers.

#### 2. Data Uncertainties (Transonic Test Phase)

Data accuracy is affected by uncertainties in tunnel conditions and balance measurements. The random measurement errors are used to provide a measure of the uncertainty in the data measurements. The systematic measurement errors (bias) were assumed to be negligible for the transonic test phase. The table shown below provides the data uncertainties, assuming a 95 percent confidence level. The precision of setting and maintaining angle of attack is estimated to be  $\pm 0.1$  degree. The methods used to calculate the uncertainties are given in References 4 and 5.

UNCERTAINTY ± [(1T) TRANSONIC TEST PHASE]

Measured Coefficient Value

M	$\Delta C_N$	$\Delta C_m$	$\Delta C_y$	$\Delta C_n$	$\Delta C_l$	$C_{A_T}$	$C_{A_F}$
0.6	0.03	0.03				0.03	
0.8	0.02	0.02				0.02	
1.0	0.02	0.02				0.02	
1.2	0.01	0.01				0.01	
1.5	0.01	0.01				0.01	

3. Data Uncertainties (Supersonic Test Phase)

The general procedure used to calculate the data uncertainty is the same as that used in the transonic test phase. The precision of setting and maintaining angle of attack is estimated to be ±0.1 degree. The data uncertainties shown in the tables below include both systematic measurement errors (bias) and random error measurements. Two separate tables are provided for the two test entries which utilized two different internal six-component strain gage balances.

UNCERTAINTY ± [(A), PART NUMBERS 1 THROUGH 247]

Measured Coefficient Value

$M_\infty$	$\Delta M_\infty$	$\Delta C_N$	$\Delta C_m$	$\Delta C_y$	$\Delta C_m$	$\Delta C_\ell$	$\Delta C_{A_T}$	$C_A$
1.5	0.020	0.016	0.080	0.010	0.049	0.003	0.006	0.020
2.0	0.020	0.016	0.083	0.010	0.051	0.003	0.007	0.014
3.0	0.021	0.020	0.101	0.012	0.061	0.003	0.008	0.010
4.0	0.020	0.028	0.140	0.017	0.085	0.005	0.011	0.012
4.5	0.018	0.032	0.068	0.019	0.044	0.005	0.013	0.014

UNCERTAINTY  $\pm$  [(A), PART NUMBERS 248 THROUGH 338]

Measured Coefficient Value

$M_\infty$	$\Delta M_\infty$	$\Delta C_N$	$\Delta C_m$	$\Delta C_y$	$\Delta C_m$	$\Delta C_\ell$	$\Delta C_{A_T}$	$\Delta C_A$
1.5	0.020	0.013	0.064	0.013	0.064	0.003	0.010	0.021
2.0	0.020	0.016	0.066	0.013	0.066	0.003	0.010	0.016
3.01	0.021	0.016	0.064	0.016	0.064	0.003	0.012	0.014
4.00	0.020	0.022	0.088	0.022	0.088	0.005	0.016	0.017

4. Part Numbers for Specific Configurations in Tabulated Data

Tabulation data for the transonic and supersonic test phases are listed in Appendices A and B. Table 2 may be used to determine the part number for a specific configuration and Mach number. The part numbers are listed consecutively in the appendices for each test phase. Each part includes a sequence of angles of attack at a given Mach number.

TABLE 2. PART NUMBER SUMMARY FOR TRANSONIC AND SUPERSONIC TEST PHASES

Nose Configuration	Midsection/Afterbody	(1) PART NUMBERS					(A) PART NUMBERS						
		0.6	0.8	M <sub>∞</sub> 1.0	1.2	1.5	1.5	2.0	2.5	M <sub>∞</sub> 3.0	3.5	4.0	4.5
10	M5 A17						264	95		313			
13	M5 A17						268	96		314			
14	M5 A17	100	101	104	105	106	269	97		315			
15	M5 A17	114	113	112	110	109	270	98		316			
16	M5 A17						271	99		317			
17	M5 A17	117	118	119	120	121	272	100		318			
18	M5 A17	131	132	133	134	135	273	101		319			
19	M5 A17	144	143	140	139	138	274	102		320			
20	M5 A17	145	148	149	150	151	275	103		321			
21	M5 A17	173	176	177	155	154	276	104 <sup>2</sup>		322			
22	M5 A17	170	169	168	166	167	377	105 <sup>2</sup>		182/323			
23	M5 A17	180	181	181	185	186	278	106		324			
24	M5 A17	193	192	191	190	189	279	107		325			
25	M5 A17	196	197	198	201	202	280	108		326			
26	M5 A17						6/7	309/110	57	129/312	119	216	208
27	M5 A17						8/9	112	58	124	122	213	211
28	M5 A17							109					
29	M5 A17						281	306		327			
30	M5 A17						282	307		328			
31	M5 A17						283	308		329			
10	M7 A17						33	79		148		236	
13	M7 A17						34	80		149		237	
14	M7 A17						35	81		150		238	
15	M7 A17						36	82		151		239	
16	M7 A17						37	83		152		240	
17	M7 A17						38	84		153		241	
18	M7 A17						39	85		154		242	
19	M7 A17						40	86		155		243	
20	M7 A17						41	87		156		244	
21	M7 A17						42	88		157		245	
22	M7 A17						43	89		158		246	
23	M7 A17						44	90		159		247	
24	M7 A17						45	91		160			
25	M7 A17						46	92		161			
28	M7 A17						47	93		162			
10	M9 A17						14	64		133		221	
13	M9 A17						15	65		134		222	
14	M9 A17	35	36	37	39	40	16	66		135		223	
15	M9 A17	47	46	45	44	43	17	67		136		224	
16	M9 A17	50	51	52	53	54	18	68		137		225	
17	M9 A17	65	64	63	61	57	19	69		138		226	
18	M9 A17	68	69	70	71	72	21	70		139		227	
19	M9 A17	79	78	77	76	75	22	71		140		228	
20	M9 A17	84	85	86	87	90	28	72		141		229	
21	M9 A17	97	96	95	94	93	24	73		142		230	
22	M9 A17	3	4	5	6	7	25	74	117	143		231	
23	M9 A17	18	19	20	21	22	26	75		144		232	
24	M9 A17	32	31	30	29	25	27	76		145		233	
25	M9 A17	15	14	13	12	11	23	77		146		234	
26	M9 A17						10	62/305	115	180/333		219/334	
27	M9 A17						12	65	116	132		220	
28	M9 A17						32	78		147		235	
29	M9 A17						286	289		330		335	
30	M9 A17						285	308		331		336	
31	M9 A17						284	284		332		337	
10	M11 A17						249/49	51		163		338	
13	M11 A17							53		164			
14	M11 A17						251	54/290		165			
15	M11 A17						252	291		166			
16	M11 A17						253	292		167			
17	M11 A17						254	293		168			
18	M11 A17						255	294		169			
19	M11 A17						256	295		170			
20	M11 A17						257	296		176			
21	M11 A17						258	297		172			
22	M11 A17						259	298		173			
23	M11 A17						260	299/300		174			
24	M11 A17						261	301		175			
25	M11 A17						262	302		171			
26	M11 A17									178			
27	M11 A17									179			
28	M11 A17									177			

Note:

1. The Reynolds number used in the supersonic test phase (A) was  $Re/Ft = 1.8 \times 10^6$  with the following exceptions.

Part No	Config	M <sub>∞</sub>	Re/Ft x 10 <sup>6</sup>
181	N22N5A17	3.0	3.7
183			1.1
184			1.3

2. Roll attitude = 180 degrees

## SECTION IV

### DATA

#### 1. Tabulated Data

The appendices include tabulated force and moment data for all nose-cylinder body alone configurations used in the transonic and supersonic test phases. Due to the extensive data included in this report, data plots are not included for all configurations. Plotted data for the transonic test phase are included in Reference 7. All of the tabulated data in both appendices are shown for nominal zero roll angle and zero sideslip angle unless noted otherwise.

#### 2. Transonic Data

All transonic data obtained in the (1T) test facility are included in Appendix A. The transonic data includes only 2-, 3-, and 4-caliber tangent ogive noses (N14 through N25) on midsections (M5 and M9). All configurations included the one-caliber afterbody (A17).

For increasing nose bluntness, the center of pressure is moved downstream on the model and the forebody axial force coefficient is also increased. The effect of increasing nose fineness ratio is to move the center of pressure upstream and also to decrease the forebody axial force coefficient at Mach numbers 1.0, 1.2, and 1.5, with minimal effect at Mach numbers of 0.6 and 0.8. Increasing body midsection fineness ratio from 5 to 9 does not significantly affect  $C_N$  for Mach numbers of 0.6 to 1.5, but does increase the forebody axial force coefficient.

#### 3. Supersonic Data

The major portion of the supersonic data was also obtained for the 2-, 3-, and 4-caliber tangent noses and midsection including 5-, 7-, 9-, and 11-caliber lengths; in all cases the 1-caliber afterbody was included. In addition, the supersonic test phase includes data at selected test conditions for a hemisphere nose (N10), 2.25-caliber tangent ogive noses ( $R_N/R_B = 0.00, 0.375, 0.575$ ), 2.5-caliber tangent ogive nose (N28), and two 2.25-caliber power series noses (N30 and N31). Table 3 provides a summary of forebody axial force coefficient, normal force coefficient slope, and pitching moment coefficient slope for all configurations. Plotted data for the forebody axial force coefficients, normal force coefficient slope, pitching moment coefficient slope, and center of pressure are shown in Figures 11 through 26 for the 2-, 3-, and 4-caliber noses on a 9-caliber midsection and 1-caliber afterbody.

TABLE 5. SUMMARY TABLE OF  $C_{A_F}$ ,  $C_{N_\alpha}$ , AND  $C_{m_\alpha}$  FOR SUPERSONIC TEST PHASE  
(a)  $M_\infty = 1.5$

Nose Config	MIDSECTION-AFTERBODY											
	M5 A17			M7 A17			M9 A17			M11 A17		
	$C_{A_F}$	$C_{N_\alpha}$ /Deg	$C_{m_\alpha}$ /Deg	$C_{A_F}$	$C_{N_\alpha}$ /Deg	$C_{m_\alpha}$ /Deg	$C_{A_F}$	$C_{N_\alpha}$ /Deg	$C_{m_\alpha}$ /Deg	$C_{A_F}$	$C_{N_\alpha}$ /Deg	$C_{m_\alpha}$ /Deg
10	0.743	0.036	0.049	0.777	0.045	0.010	0.770	0.050	-0.033	0.779	0.055	-0.090
13	0.552	0.055	0.053	0.568	0.045	0.011	0.581	0.049	-0.027			
14	0.250	0.044	0.034	0.274	0.049	0.018	0.278	0.050	0.010	0.267	0.059	-0.131
15	0.265	0.043	0.039	0.279	0.048	0.023	0.272	0.050	0.013	0.274	0.055	-0.092
16	0.293	0.044	0.029	0.312	0.049	0.018	0.303	0.050	0.010	0.317	0.057	-0.108
17	0.423	0.044	0.025	0.426	0.047	0.014	0.425	0.050	0.006	0.459	0.056	-0.108
18	0.160	0.043	0.051	0.178	0.048	0.043	0.149	0.049	0.029	0.163	0.053	-0.055
19	0.169	0.043	0.052	0.191	0.048	0.034	0.173	0.049	0.030	0.175	0.053	-0.056
20	0.244	0.043	0.053	0.257	0.048	0.035	0.233	0.049	0.027	0.246	0.051	-0.036
21	0.405	0.044	0.039	0.426	0.048	0.030	0.422	0.049	0.020	0.432	0.055	-0.095
22	0.109	0.042	0.069	0.128	0.048	0.054	0.116	0.048	0.046	0.128		
23	0.136	0.042	0.066	0.149	0.047	0.053	0.140	0.048	0.046	0.136		
24	0.225	0.042	0.065	0.228	0.048	0.047	0.226	0.048	0.043	0.228	0.050	-0.028
25	0.394	0.043	0.061	0.408	0.048	0.044	0.391	0.049	0.036	0.400	0.050	-0.014
26	0.213	0.047	0.035				0.304	0.051	-0.003			
27	0.296	0.045	0.040				0.311	0.049	0.015			
28				0.212	0.049	0.027	0.203	0.050	0.022			
29	0.245	0.043	0.037				0.282	0.051	-0.029			
30	0.183	0.042	0.031				0.232	0.047	-0.005			
31	0.208	0.043	0.037				0.229	0.049	-0.027			

TABLE 3. SUMMARY TABLE OF  $C_{AF}$ ,  $C_{N\alpha}$ , AND  $C_{m\alpha}$  FOR SUPERSONIC TEST PHASE (CONTINUED)

(b)  $M_\infty = 2.0$

Nose Config	MIDSECTION-AFTERBODY											
	M5 A17			M7 A17			M9 A17			M11 A17		
	$C_{AF}$	$C_{N\alpha}$ /Deg	$C_{m\alpha}$ /Deg	$C_{AF}$	$C_{N\alpha}$ /Deg	$C_{m\alpha}$ /Deg	$C_{AF}$	$C_{N\alpha}$ /Deg	$C_{m\alpha}$ /Deg	$C_{AF}$	$C_{N\alpha}$ /Deg	$C_{m\alpha}$ /Deg
10	0.831	0.049	-0.005	0.839	0.049	-0.005	0.849	0.049	0.006	0.848	0.050	-0.009
13	0.602	0.053	-0.017	0.602	0.054	-0.028	0.614	0.054	-0.018	0.608	0.054	-0.025
14	0.263	0.057	0.011	0.263	0.058	-0.000	0.268	0.058	0.005	0.274	0.057	0.005
15	0.274	0.056	0.007	0.276	0.057	-0.001	0.278	0.056	0.006	0.287	0.057	-0.040
16	0.341	0.055	0.005	0.339	0.056	-0.003	0.347	0.054	0.006	0.358	0.055	-0.036
17	0.513	0.053	-0.001	0.511	0.054	-0.011	0.524	0.053	-0.003	0.521	0.055	-0.059
18	0.156	0.055	0.034	0.161	0.057	0.018	0.170	0.056	0.023	0.180	0.056	-0.028
19	0.180	0.054	0.028	0.183	0.056	0.014	0.188	0.055	0.019	0.196	0.055	-0.037
20	0.283	0.053	0.026	0.289	0.054	0.014	0.295	0.053	0.018	0.304	0.052	-0.026
21	0.507	0.051	0.017	0.504	0.053	0.007	0.511	0.052	0.011	0.522	0.053	-0.041
22	0.119	0.053	0.054	0.124	0.054	0.037	0.130	0.053	0.042	0.135	0.054	-0.024
23	0.149	0.052	0.049	0.151	0.053	0.033	0.154	0.053	0.037	0.178	0.054	-0.040
24	0.267	0.051	0.045	0.266	0.052	0.031	0.277	0.052	0.032	0.282		
25	0.477	0.051	0.034	0.477	0.053	0.022	0.487	0.052	0.026	0.500		
26	0.224	0.056	0.016				0.239	0.057	0.020			
27	0.354	0.054	0.008				0.371	0.054	0.017			
28	0.197	0.056	0.023	0.202	0.057	0.012	0.206	0.056	0.016			
29	0.283	0.053	0.032				0.286	0.057	-0.026			
30	0.195	0.053	0.026				0.203	0.058	-0.035			
31	0.256	0.051	0.038				0.262	0.056	-0.029			

TABLE 5. SUMMARY TABLE OF  $C_{A_F}$ ,  $C_{N_\alpha}$ , AND  $C_{m_\alpha}$  FOR SUPERSONIC TEST PHASE (CONTINUED)

(c)  $M_\infty = 5.0$

Nose Config	MIDSECTION-AFTERBODY											
	M5 A17			M7 A17			M9 A17			M11 A17		
	$C_{A_F}$	$C_{N_\alpha}$ /Deg	$C_{m_\alpha}$ /Deg	$C_{A_F}$	$C_{N_\alpha}$ /Deg	$C_{m_\alpha}$ /Deg	$C_{A_F}$	$C_{N_\alpha}$ /Deg	$C_{m_\alpha}$ /Deg	$C_{A_F}$	$C_{N_\alpha}$ /Deg	$C_{m_\alpha}$ /Deg
10	0.919	0.044	-0.020	0.902	0.048	-0.051	0.911	0.051	-0.078	0.916	0.044	-0.097
13	0.599	0.052	-0.027	0.587	0.055	-0.057	0.595	0.058	-0.080	0.600	0.059	-0.098
14	0.244	0.060	0.006	0.235	0.062	-0.029	0.242	0.064	-0.043	0.246	0.065	-0.055
15	0.260	0.057	0.004	0.253	0.061	-0.037	0.258	0.063	-0.061	0.262	0.065	-0.082
16	0.363	0.052	-0.002	0.352	0.056	-0.040	0.359	0.058	-0.064	0.363	0.060	-0.088
17	0.570	0.047	-0.009	0.561	0.052	-0.046	0.566	0.054	-0.071	0.573	0.056	-0.093
18	0.150	0.057	-0.040	0.143	0.062	0.000	0.150	0.063	-0.006	0.151	0.064	-0.023
19	0.178	0.053	0.028	0.170	0.059	-0.013	0.178	0.062	-0.037	0.181	0.063	-0.058
20	0.316	0.048	0.022	0.307	0.053	-0.017	0.312	0.056	-0.042	0.318	0.058	-0.064
21	0.582	0.046	0.008	0.567	0.050	-0.026	0.575	0.053	-0.050	0.579	0.054	-0.073
22	0.114	0.055	0.066	0.108	0.059	0.034	0.115	0.060	0.031	0.120	0.061	0.013
23	0.150	0.050	0.055	0.143	0.056	0.013	0.150	0.059	-0.006	0.153	0.060	-0.024
24	0.297	0.046	0.045	0.288	0.052	0.006	0.295	0.054	-0.016	0.297	0.056	-0.039
25	0.549	0.046	0.037	0.537	0.050	-0.008	0.544	0.052	-0.029	0.550	0.054	-0.051
26	0.203	0.060	-0.004				0.223	0.063	-0.027	0.214	0.065	-0.050
27	0.378	0.050	-0.012				0.390	0.057	-0.061	0.391	0.058	-0.081
28				0.178	0.062	-0.013				0.190	0.065	-0.040
29	0.275	0.054	0.006									
30	0.174	0.056	0.004				0.185	0.064	-0.025			
31	0.260	0.051	0.013				0.282	0.057	-0.033			
							0.185	0.059	-0.038			
							0.269	0.055	-0.029			

TABLE 3. SUMMARY TABLE OF  $C_{AF}$ ,  $C_{N\alpha}$ , AND  $C_{m\alpha}$  FOR SUPERSONIC TEST PHASE (CONCLUDED)

(d)  $M_\infty = 4.0$

Nose Config	MIDSECTION-AFTERBODY											
	M5 A17			M7 A17			M9 A17			M11 A17		
	$C_{AF}$	$C_{N\alpha}$ /Deg	$C_{m\alpha}$ /Deg	$C_{AF}$	$C_{N\alpha}$ /Deg	$C_{m\alpha}$ /Deg	$C_{AF}$	$C_{N\alpha}$ /Deg	$C_{m\alpha}$ /Deg	$C_{AF}$	$C_{N\alpha}$ /Deg	$C_{m\alpha}$ /Deg
10	0.911	0.041	-0.038	0.917	0.044	-0.055	0.917	0.044	-0.055	0.932	0.045	0.082
13	0.571	0.052	-0.051	0.571	0.055	-0.069	0.571	0.055	-0.069			
14	0.221	0.061	-0.040	0.227	0.064	-0.060	0.227	0.064	-0.060			
15	0.240	0.057	-0.041	0.245	0.060	-0.063	0.245	0.060	-0.063			
16	0.351	0.050	-0.040	0.351	0.052	-0.059	0.351	0.052	-0.059			
17	0.570	0.045	-0.038	0.573	0.047	-0.057	0.573	0.047	-0.057			
18	0.131	0.063	-0.017	0.140	0.065	-0.031	0.140	0.065	-0.031			
19	0.160	0.056	-0.022	0.170	0.060	-0.046	0.170	0.060	-0.046			
20	0.577	0.043	-0.023	0.509	0.049	-0.041	0.509	0.049	-0.041			
21	0.577	0.043	-0.023	0.584	0.045	-0.040	0.584	0.045	-0.040			
22	0.099	0.062	0.011	0.104	0.063	0.008	0.104	0.063	0.008			
23	0.133	0.055	-0.001	0.140	0.057	-0.020	0.140	0.057	-0.020			
24	0.543	0.043	-0.008	0.293	0.049	-0.020	0.293	0.049	-0.020			
25	0.543	0.043	-0.008	0.552	0.046	-0.025	0.552	0.046	-0.025			
26	0.194	0.061	-0.018	0.209	0.062	-0.067	0.209	0.062	-0.067			
27	0.389	0.047	-0.024	0.390	0.051	-0.056	0.390	0.051	-0.056			
28				0.170	0.064	-0.048	0.170	0.064	-0.048			
29				0.272	0.052	-0.055	0.272	0.052	-0.055			
30				0.172	0.057	-0.068	0.172	0.057	-0.068			
31				0.258	0.049	-0.051	0.258	0.049	-0.051			

Comparisons of the 2-, 3-, and 4-caliber nose at supersonic Mach numbers in Figure 11 show that the effect of bluntness on drag is more pronounced with increasing supersonic Mach numbers.

The variation in forebody axial force coefficient with nose bluntness ratio is shown in Figure 12. The pronounced increase in  $C_{AF}$  for bluntness ratios  $\geq 0.5$  is apparent for a given supersonic Mach number.

Figure 13 shows the variation in forebody axial force coefficient with nose fineness ratio.  $C_{AF}$  generally decreases with increasing supersonic Mach numbers and increasing midsection length increases  $C_{AF}$  as shown in Figure 14.

The variation in the normal force slope with Mach number is shown in Figure 15 for various noses. The effect of nose bluntness on  $C_{N\alpha}$  is more pronounced with increasing supersonic Mach numbers.

The variation in the normal force slope with nose bluntness ratio is shown in Figure 16 for various noses. For a given supersonic Mach number,  $C_{N\alpha}$  generally decreases with increasing nose bluntness.

The variation in the normal force slope with nose fineness ratio is shown in Figure 17 for various noses. For a given supersonic Mach number,  $C_{N\alpha}$  generally decreases slightly with increases in nose fineness ratio.

An increase in midsection length increases  $C_{N\alpha}$  as shown in Figure 18.

The variation in the pitching moment slope with Mach number is shown in Figure 19 for various noses. Aft movement of the center of pressure past the nose cylinder juncture is apparent.  $C_{m\alpha}$  generally decreases with increasing nose bluntness ratios as shown in Figure 20.

The variation in pitching moment slope with nose fineness ratio is shown in Figure 21.  $C_{m\alpha}$  increases with increasing nose fineness ratio.

An increase in midsection length decreases  $C_{m\alpha}$  as shown in Figure 22.

The variation in normal force coefficient with angle of attack for a 3-caliber pointed tangent ogive cylinder and hemisphere tangent ogive cylinder ( $R_N/R_B = 0.75$ ) is shown in Figure 23(a). The effect of nose bluntness over angle of attack range of -6 to 14 degrees is small for a Mach number of 1.5, but a reduction in normal force coefficient is evident for  $M_\infty = 4.0$ . A comparison of 2- and 4-caliber noses at a given angle of attack shows a lower  $C_N$  value for the higher fineness ratio nose as shown in Figure 23(b).

The variation in pitching moment with angle of attack for a 4-caliber pointed tangent ogive cylinder and hemisphere tangent ogive cylinder

( $R_N/R_B = 0.75$ ) is shown in Figure 24(a). The abrupt change in the pitching moment curve at  $\alpha \sim 4^\circ$  is believed to be associated with flow separation on the cylinder. Schlieren photographs generally indicated flow separation for  $\alpha > 5^\circ$ . The effect of increasing nose bluntness results in more negative pitching moment coefficient as angle of attack is increased. This latter effect is more pronounced with increasing supersonic Mach numbers. Given an increase in nose fineness ratio,  $C_m$  is increased for a given  $\alpha$  as shown in Figure 24(b).

The variation in center of pressure with angle of attack for a 3-caliber pointed tangent ogive cylinder and hemisphere-ogive cylinder ( $R_N/R_B = 0.75$ ) is shown in Figure 25(a). The center of pressure moves further downstream at a given angle of attack for the bluff configuration. This latter effect is more pronounced with increasing supersonic Mach numbers. With increasing nose fineness ratio, the center of pressure moves further upstream as shown in Figure 25(b).

The variation of forebody axial force coefficient with Mach number is shown in Figure 26 for a series of 2.25-caliber noses. Data includes two hemisphere-tangent ogives and two power series noses.  $C_{AF}$  for the power series nose (N30) is less than the  $C_{AF}$  for the pointed tangent ogive nose (N26).

#### 4. Supersonic Laminar Skin Friction Calculations and Nose Wave Drag

Test Reynolds numbers were selected to retain a laminar boundary layer over full body length at supersonic Mach numbers. Theoretical skin friction coefficients were calculated by VKF personnel and are given in Table 4 for various body lengths, nose bluntness, and nose lengths. Calculated model wetted areas are used in the calculations in Table 5. The method used for the skin friction calculations was based on reference by Patankar and Spalding as modified by Mayne and Dyer (References 9 and 10). A comparison of  $C_{AF}$  determined from experimental and typical handbook methods such as the USAF Stability and Control Datcom is shown in Figure 27 (Reference 11). The nose pressure drag coefficient was calculated by subtracting the calculated laminar skin friction drag coefficient from the measured forebody axial force coefficient. It should be noted that a fully laminar boundary layer was assumed over the full model length for these calculations and transition was not indicated from the Schlieren photographs or drag measurements. The agreement between the data and the Datcom method improves with increasing Mach number and nose fineness ratio.

TABLE 4. LAMINAR SKIN FRICTION CALCULATIONS ( $C_{AF}$ )

Nose Configuration	$M_\infty = 1.5$												$M_\infty = 2.0$												$M_\infty = 3.0$												$M_\infty = 4.0$											
	MS* M17			M7* A17			M9* A17			M11* A17			MS* A17			M7* A17			M9* A17			M11* A17			MS* A17			M7* A17			M9* A17			M11* A17														
	Nose (cal)	$R_N/R_B$		6	8	10	12	6	8	10	12	6	8	10	12	6	8	10	12	6	8	10	12	6	8	10	12	6	8	10	12																	
N10	0.5	1.0	0.0335	0.0370	0.0405	0.0441	0.0325	0.0360	0.0395	0.0431	0.0312	0.0353	0.0389	0.0422	0.0321	0.0356	0.0391	0.0427	0.0321	0.0356	0.0391	0.0427	0.0321	0.0356	0.0391	0.0427	0.0321	0.0356	0.0391	0.0427	0.0321	0.0356	0.0391	0.0427														
N13	1.0	0	0.0355	0.0396	0.0437	0.0477	0.0353	0.0394	0.0435	0.0475	0.0354	0.0395	0.0436	0.0476	0.0375	0.0416	0.0457	0.0497	0.0375	0.0416	0.0457	0.0497	0.0375	0.0416	0.0457	0.0497	0.0375	0.0416	0.0457	0.0497	0.0375	0.0416	0.0457	0.0497														
N14	2.0	0	0.0365	0.0406	0.0447	0.0487	0.0363	0.0404	0.0445	0.0485	0.0364	0.0405	0.0446	0.0486	0.0385	0.0426	0.0467	0.0507	0.0385	0.0426	0.0467	0.0507	0.0385	0.0426	0.0467	0.0507	0.0385	0.0426	0.0467	0.0507	0.0385	0.0426	0.0467	0.0507														
N15	2.0	0.25	0.0353	0.0388	0.0423	0.0459	0.0347	0.0382	0.0417	0.0453	0.0344	0.0379	0.0414	0.0450	0.0362	0.0397	0.0432	0.0468	0.0362	0.0397	0.0432	0.0468	0.0362	0.0397	0.0432	0.0468	0.0362	0.0397	0.0432	0.0468	0.0362	0.0397	0.0432	0.0468														
N16	2.0	0.50	0.0341	0.0376	0.0411	0.0447	0.0331	0.0366	0.0401	0.0437	0.0324	0.0359	0.0394	0.0430	0.0339	0.0374	0.0409	0.0445	0.0339	0.0374	0.0409	0.0445	0.0339	0.0374	0.0409	0.0445	0.0339	0.0374	0.0409	0.0445	0.0339	0.0374	0.0409	0.0445														
N17	2.0	0.75	0.0329	0.0364	0.0399	0.0435	0.0315	0.0350	0.0385	0.0421	0.0304	0.0339	0.0374	0.0410	0.0316	0.0351	0.0386	0.0422	0.0316	0.0351	0.0386	0.0422	0.0316	0.0351	0.0386	0.0422	0.0316	0.0351	0.0386	0.0422	0.0316	0.0351	0.0386	0.0422														
N18	3.0	0	0.0375	0.0420	0.0461	0.0499	0.0373	0.0414	0.0455	0.0495	0.0374	0.0418	0.0458	0.0495	0.0395	0.0438	0.0480	0.0517	0.0395	0.0438	0.0480	0.0517	0.0395	0.0438	0.0480	0.0517	0.0395	0.0438	0.0480	0.0517	0.0395	0.0438	0.0480	0.0517														
N19	3.0	0.25	0.0363	0.0398	0.0433	0.0469	0.0357	0.0392	0.0427	0.0463	0.0354	0.0389	0.0424	0.0460	0.0372	0.0407	0.0442	0.0478	0.0372	0.0407	0.0442	0.0478	0.0372	0.0407	0.0442	0.0478	0.0372	0.0407	0.0442	0.0478	0.0372	0.0407	0.0442	0.0478														
N20	3.0	0.50	0.0351	0.0386	0.0421	0.0457	0.0342	0.0377	0.0412	0.0448	0.0334	0.0369	0.0404	0.0440	0.0350	0.0385	0.0420	0.0452	0.0350	0.0385	0.0420	0.0452	0.0350	0.0385	0.0420	0.0452	0.0350	0.0385	0.0420	0.0452	0.0350	0.0385	0.0420	0.0452														
N21	3.0	0.75	0.0339	0.0374	0.0409	0.0445	0.0326	0.0361	0.0396	0.0432	0.0314	0.0349	0.0384	0.0420	0.0324	0.0359	0.0394	0.0430	0.0324	0.0359	0.0394	0.0430	0.0324	0.0359	0.0394	0.0430	0.0324	0.0359	0.0394	0.0430	0.0324	0.0359	0.0394	0.0430														
N22	4.0	0	0.0387	0.0431	0.0471	0.0508	0.0384	0.0425	0.0466	0.0506	0.0386	0.0427	0.0468	0.0508	0.0403	0.0446	0.0489	0.0524	0.0403	0.0446	0.0489	0.0524	0.0403	0.0446	0.0489	0.0524	0.0403	0.0446	0.0489	0.0524	0.0403	0.0446	0.0489	0.0524														
N23	4.0	0.25	0.0375	0.0410	0.0445	0.0481	0.0368	0.0403	0.0438	0.0474	0.0366	0.0401	0.0436	0.0472	0.0380	0.0415	0.0450	0.0486	0.0380	0.0415	0.0450	0.0486	0.0380	0.0415	0.0450	0.0486	0.0380	0.0415	0.0450	0.0486	0.0380	0.0415	0.0450	0.0486														
N24	4.0	0.50	0.0363	0.0398	0.0433	0.0469	0.0352	0.0387	0.0422	0.0458	0.0346	0.0381	0.0416	0.0452	0.0357	0.0392	0.0427	0.0463	0.0357	0.0392	0.0427	0.0463	0.0357	0.0392	0.0427	0.0463	0.0357	0.0392	0.0427	0.0463	0.0357	0.0392	0.0427	0.0463														
N25	4.0	0.75	0.0351	0.0386	0.0421	0.0457	0.0336	0.0371	0.0406	0.0442	0.0326	0.0361	0.0396	0.0432	0.0334	0.0369	0.0404	0.0440	0.0334	0.0369	0.0404	0.0440	0.0334	0.0369	0.0404	0.0440	0.0334	0.0369	0.0404	0.0440	0.0334	0.0369	0.0404	0.0440														
N26	2.25	0.575	0.0340	0.0375	0.0410	0.0446	0.0329	0.0364	0.0399	0.0435	0.0321	0.0356	0.0391	0.0427	0.0335	0.0370	0.0405	0.0441	0.0335	0.0370	0.0405	0.0441	0.0335	0.0370	0.0405	0.0441	0.0335	0.0370	0.0405	0.0441	0.0335	0.0370	0.0405	0.0441														
N27	2.25	0	0.0368	0.0409	0.0450	0.0490	0.0366	0.0407	0.0448	0.0488	0.0367	0.0408	0.0449	0.0489	0.0388	0.0429	0.0470	0.0510	0.0388	0.0429	0.0470	0.0510	0.0388	0.0429	0.0470	0.0510	0.0388	0.0429	0.0470	0.0510	0.0388	0.0429	0.0470	0.0510														
N28	2.5	0	0.0370	0.0411	0.0452	0.0492	0.0368	0.0409	0.0450	0.0490	0.0369	0.0410	0.0451	0.0491	0.0390	0.0431	0.0472	0.0512	0.0390	0.0431	0.0472	0.0512	0.0390	0.0431	0.0472	0.0512	0.0390	0.0431	0.0472	0.0512	0.0390	0.0431	0.0472	0.0512														

NOTE: All  $C_{AF}$  values for  $\alpha = 0^\circ$

TABLE 5. WETTED AREA,  $S_w$

Nose	Nose Caliber	$R_N/R_B$	Body Fineness Ratio (BPR)			
			6	8	10	12
N10	0.5	1.0	31.667	38.453	47.501	56.549
N13	1.0	0	30.587	39.635	48.683	57.731
N14	2.0	0	33.398	42.446	51.494	60.542
N15	2.0	0.25	33.344	42.392	51.440	60.488
N16	2.0	0.50	33.129	42.177	51.225	60.273
N17	2.0	0.75	32.539	41.587	50.635	59.683
N18	3.0	0	36.341	45.389	54.437	63.485
N19	3.0	0.25	36.222	45.270	54.318	63.366
N20	3.0	0.50	35.770	44.818	*53.866	62.914
N21	3.0	0.75	34.619	43.667	52.716	61.763
N22	4.0	0	39.319	48.367	57.415	66.463
N23	4.0	0.25	39.130	48.178	57.226	66.274
N24	4.0	0.50	38.415	47.463	56.511	65.559
N25	4.0	0.75	36.697	45.745	*54.793	63.841
N26	2.25	0	34.128	43.176	52.224	61.272
N27	2.25	0.575	33.637	42.685	51.733	60.781
N28	2.5	0	34.862	43.910	52.958	62.006
N29	2.25	0.375	33.959	43.007	52.055	61.103
N30	2.25	-----	34.055	43.103	52.151	61.199
N31	2.25	-----	34.832	43.880	52.938	61.986

Note:  
 $S_w$  = Total Wetted Area, IN<sup>2</sup>

## SECTION V

### RECOMMENDATIONS FOR FUTURE TASKS

1. Assess the methodologies described in References 12 and 13 as predictive techniques for the static aerodynamic characteristics of bluff body alone configurations. The data matrix in this report should be useful in assessing these methods.
2. Determine the Reynolds number effects on the drag and static stability characteristics for selected nose configurations on the 5- and 9-caliber midsection with Reynolds numbers ranging up to  $20 \times 10^6/\text{ft}$  for the existing model sizes and selected larger models similar to that in Reference 5.
3. Measure pressure distributions on selected nose configurations using the larger model scale noted above and the 5-caliber midsection at selected Reynolds numbers to determine  $C_{Ap}$  and utilize oil flow techniques to locate separation and heating rate measurements to locate transition.
4. Obtain additional data for nose bluntness ratio variations of  $R_N/R_B = 0.00$  to  $0.20$  to define the degree of bluntness which will result in a minimum forebody pressure axial force ( $C_{Ap}$ ) for the 2.3- and 4-caliber noses. Also obtain force and moment data for 1-caliber tangent ogive family with bluntness ratios of 0.25, 0.50, and 0.75.

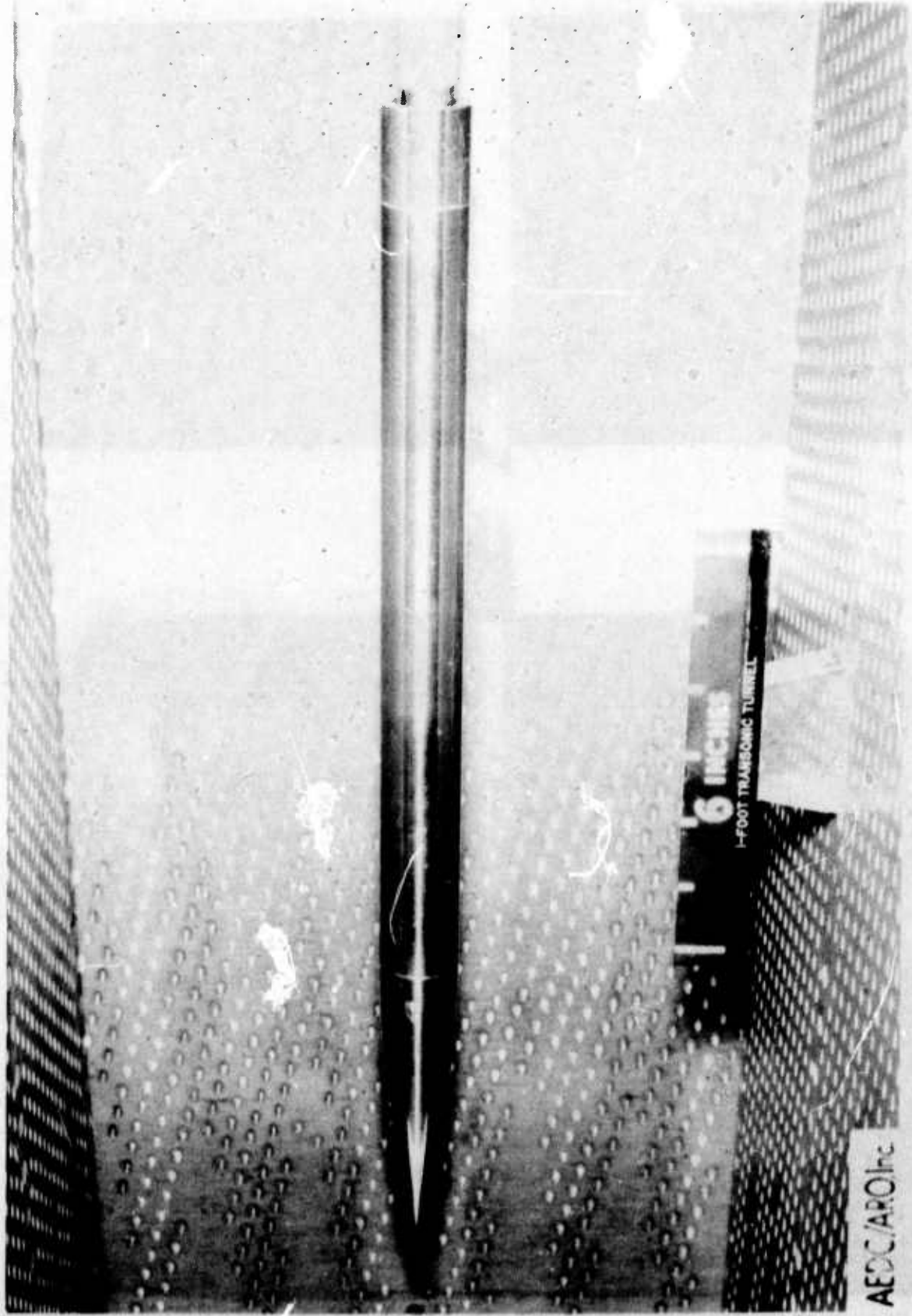


Figure 1. Typical (IT) Model Installation

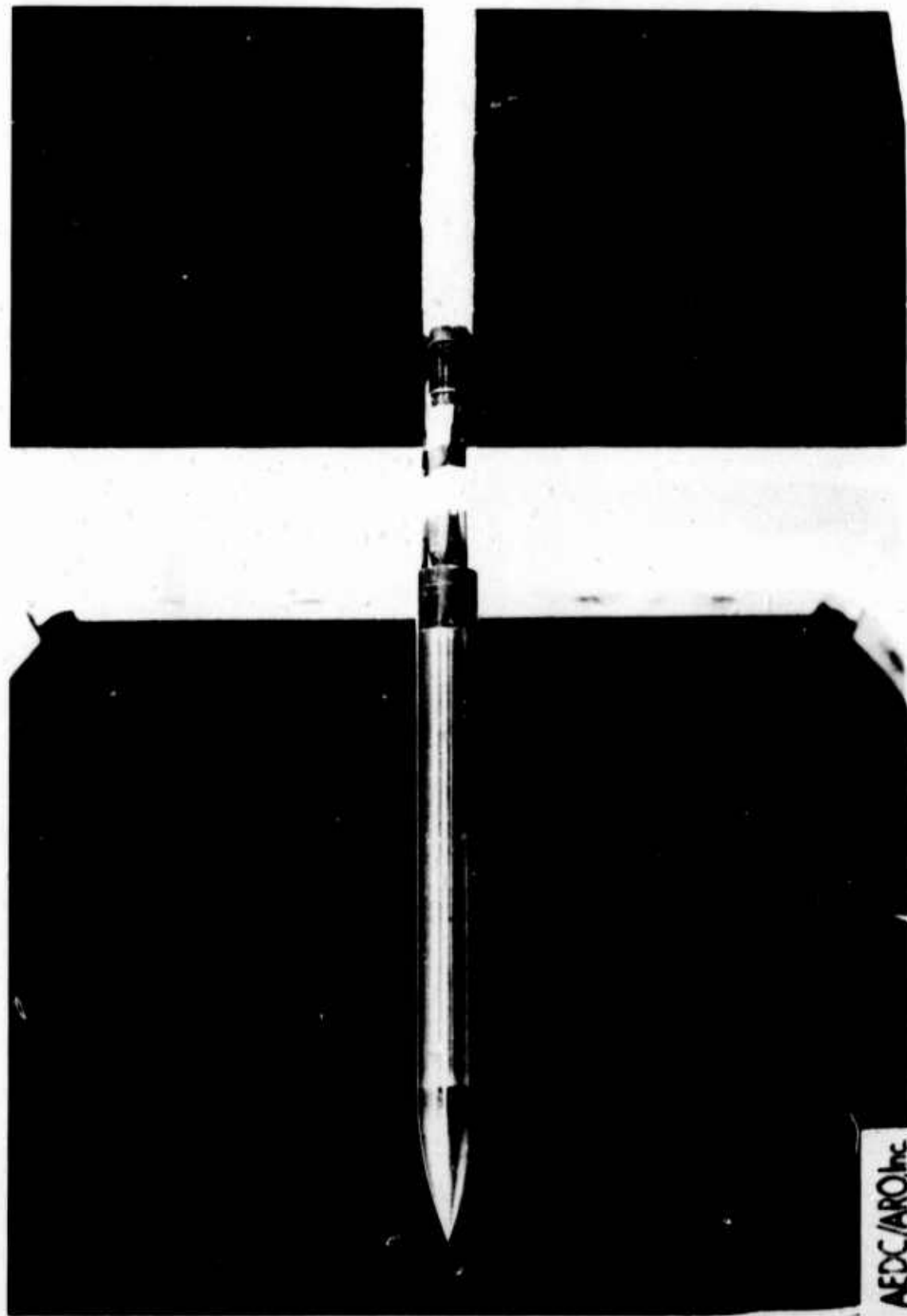
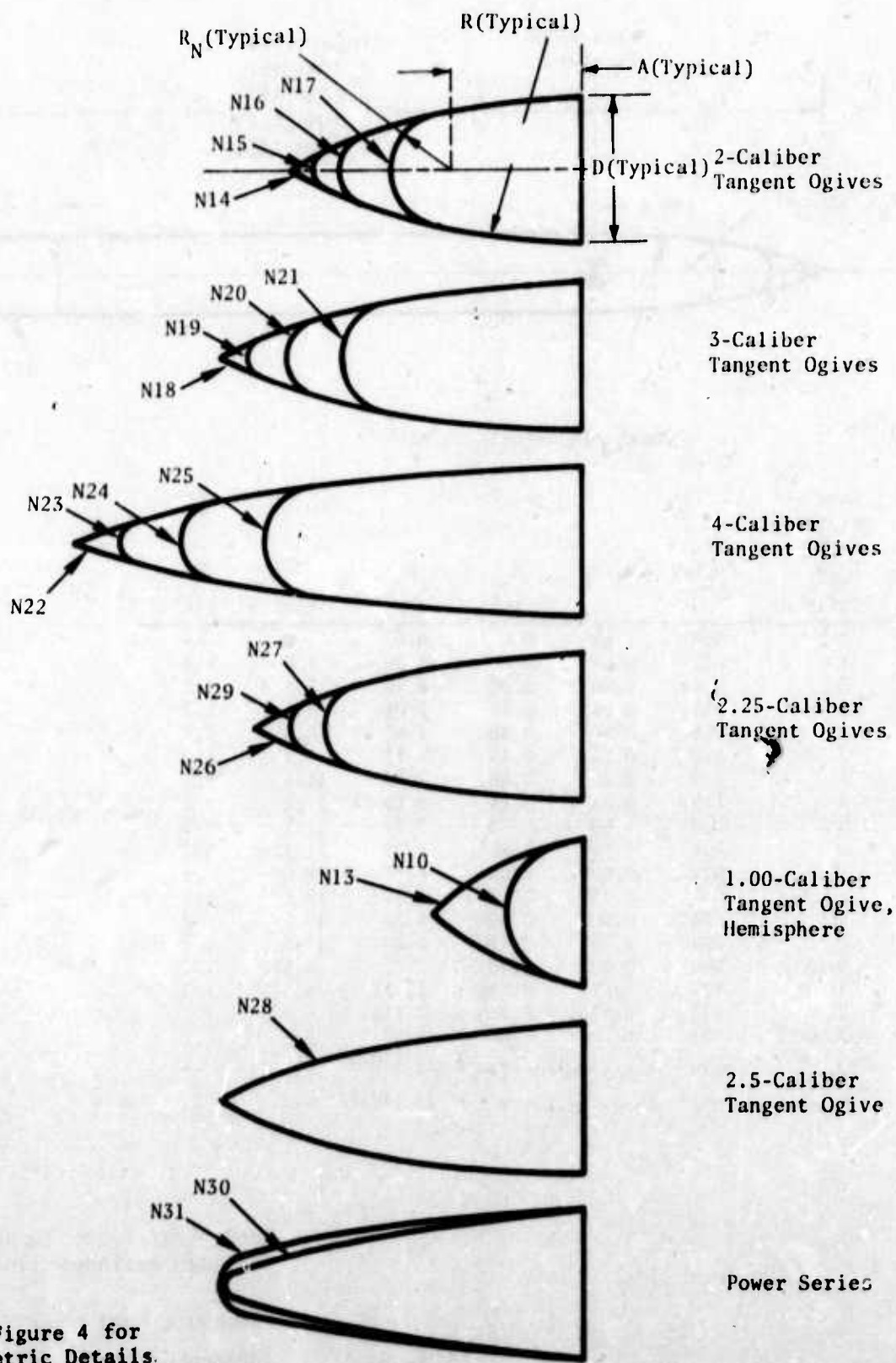
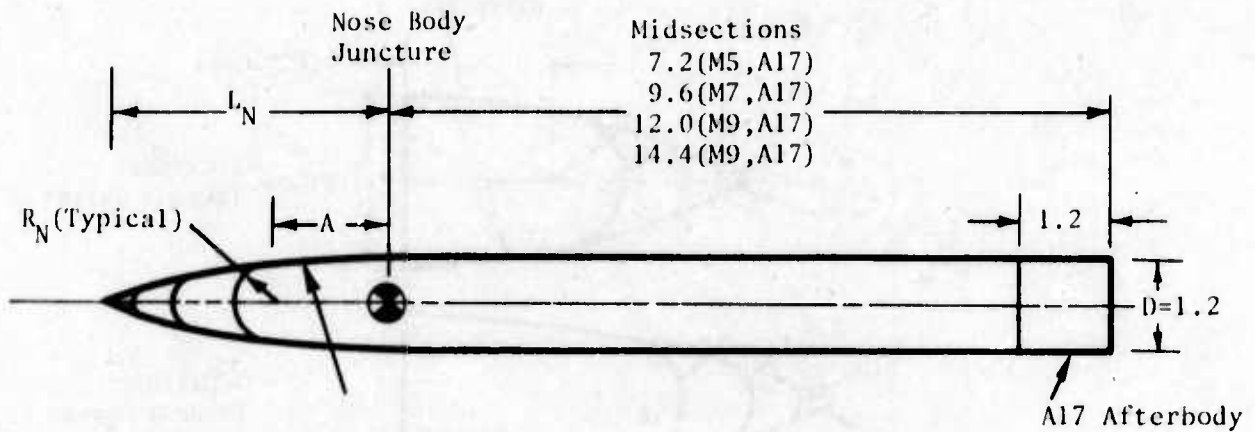


Figure 2. Typical (A) Model Installation



Note:  
See Figure 4 for Geometric Details.

Figure 3. Nose Components and Nose Configurations



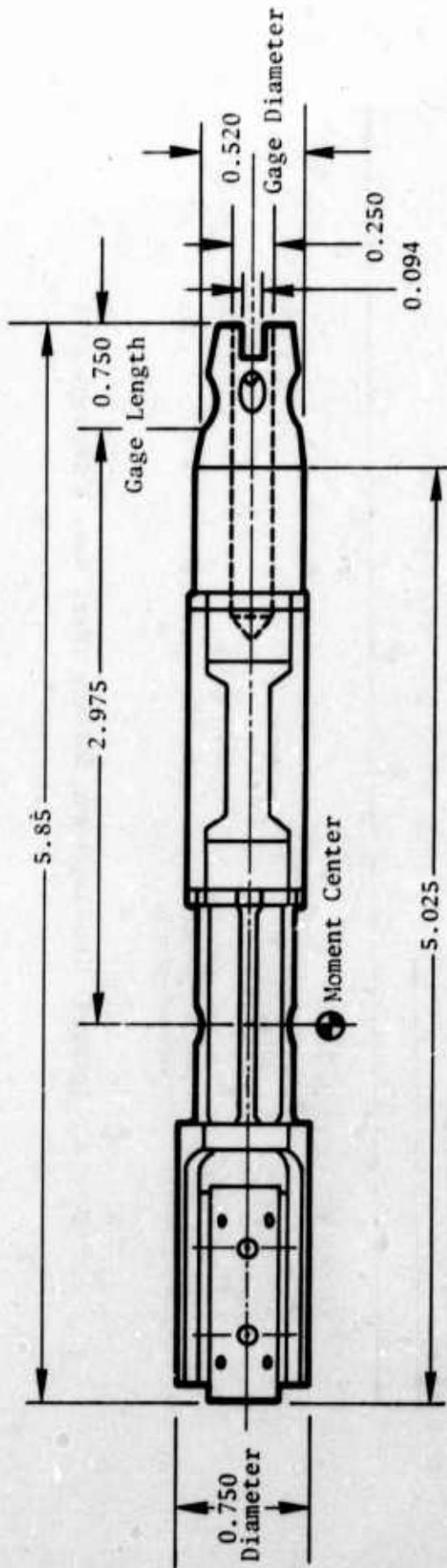
MODEL DIMENSIONAL DETAILS

Nose Fineness Ratio $L_N/D$ (Caliber)	Nose Config	$R_N/R_B$	$R_N$ (in)	A (in)	R (in)	$D$ (in)
0.5	N10	1.00	0.6	0.6	--	--
1	N13	0.00	0.00	1.20	1.5	1.2
2	N14	0.00	0.00	2.40	5.1	1.2
2	N15	0.25	0.15	2.06	5.1	1.2
2	N16	0.50	0.30	1.67	5.1	1.2
2	N17	0.75	0.45	1.17	5.1	1.2
3	N18	0.00	0.00	3.60	11.1	1.2
3	N19	0.25	0.15	3.10	11.1	1.2
3	N20	0.50	0.30	2.53	11.1	1.2
3	N21	0.75	0.45	1.78	11.1	1.2
4	N22	0.00	0.00	4.80	19.5	1.2
4	N23	0.25	0.15	4.15	19.5	1.2
4	N24	0.50	0.30	3.38	19.5	1.2
4	N25	0.75	0.45	2.38	19.5	1.2
2.25	N26	0.00	0.00	2.70	6.375	1.2
2.25	N27	0.575	0.345	1.735	6.375	1.2
2.25	N29	0.375	0.225	2.115	6.375	1.2
2.50	N28	0.00	0.00	3.00	7.8	1.2
2.25	N30	Local Radius $Y = (X/2.7)^{0.5}$			--	--
2.25	N31	Local Radius $Y = (X/2.7)^{0.33}$			--	--

Note:

1. Moment reference location at the nose cylinder juncture
2. Reference Area =  $\frac{\pi D^2}{4}$
3. Reference Length = D
4. All dimensions in inches

Figure 4. Midsections, Afterbody, and Assembly of Model Components

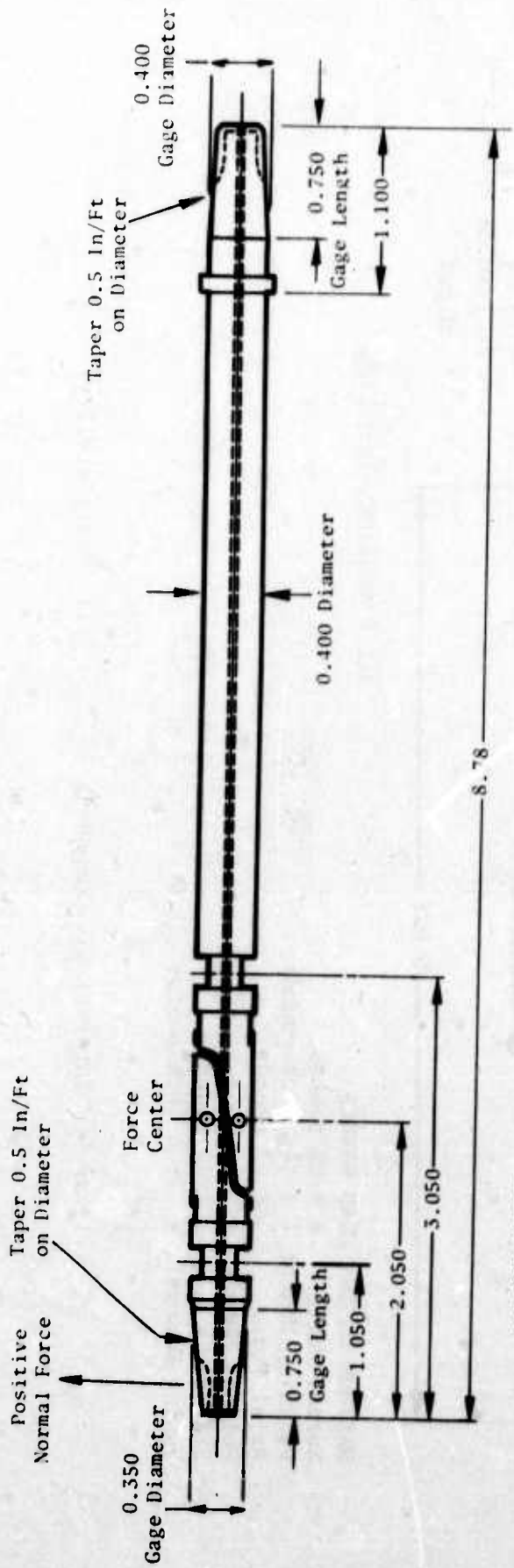


ALL DIMENSIONS IN INCHES

MAXIMUM DESIGN LOAD RANGES

Normal Force	= ± 80 pounds
Pitching Moment	= ± 160 inch-pounds
Axial Force	= ± 50 pounds
Rolling Moment	= ± 30 inch-pounds
Side Force	= ± 40 pounds
Yawing Moment	= ± 120 inch-pounds

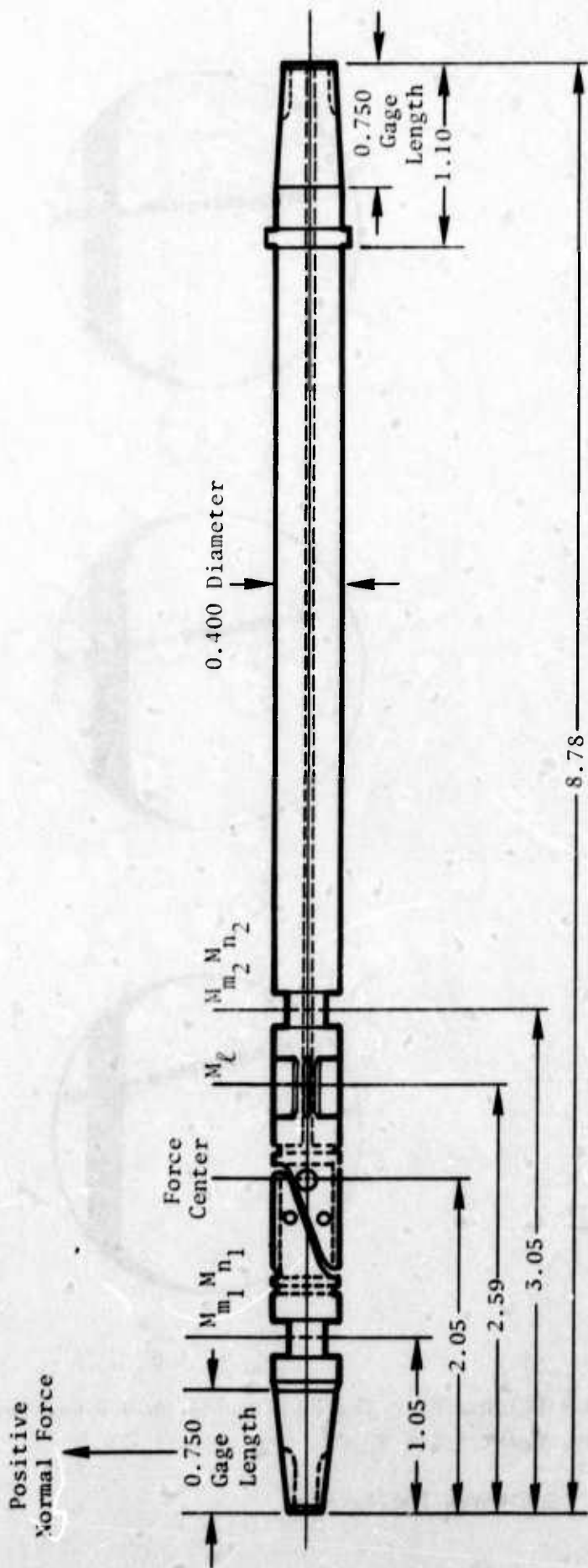
Figure 5. Internal Six-Component Balance [(IT) Test Facility]



**BALANCE DESIGN LOADS**

Normal Force	= ± 20 pounds
Side Force	= ± 20 pounds
Axial Force	= ± 6 pounds
Rolling Moment	= ± 6 inch-pounds
Pitching Moment	= ± 20 inch-pounds
Yawing Moment	= ± 20 inch-pounds

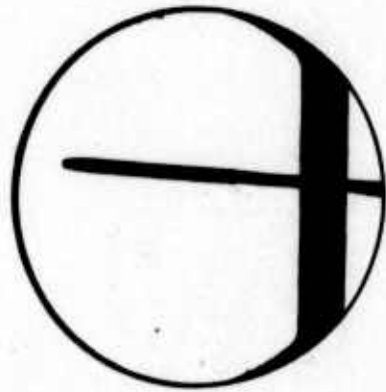
Figure 6. Internal Six-Component Balance (Part Nos. 1 Through 247)



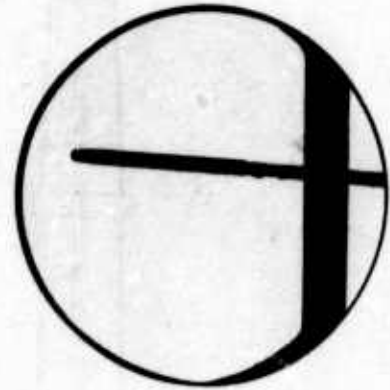
**BALANCE DESIGN LOADS**

Normal Force	= ± 10 pounds
Side Force	= ± 10 pounds
Axial Force	= ± 6 pounds
Rolling Moment	= ± 2.25 inch-pounds
Pitching Moment	= ± 10 inch-pounds
Yawing Moment	= ± 10 inch-pounds

Figure 7. Internal Six-Component Balance (Part Nos. 248 Through 558)



$\alpha = 3.5^\circ$   
 $M_\infty = 1.5$



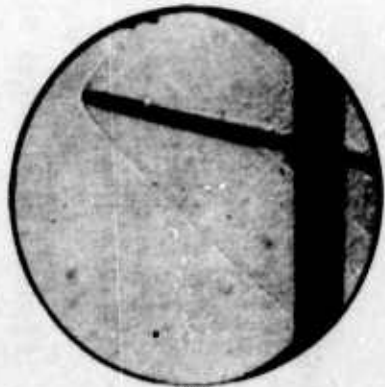
$\alpha = 3.5^\circ$   
 $M_\infty = 4.0$



$\alpha = 7.30^\circ$   
 $M_\infty = 1.5$



$\alpha = 7.4^\circ$   
 $M_\infty = 4.0$



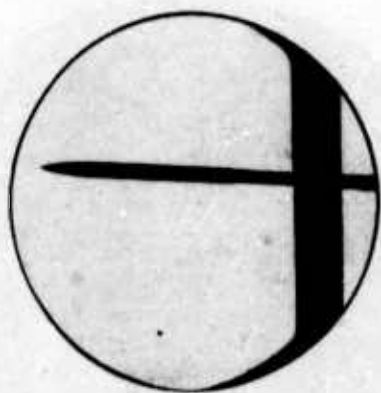
$\alpha = 12.7^\circ$   
 $M_\infty = 1.5$



$\alpha = 12.8^\circ$   
 $M_\infty = 4.0$

(a) Mach Number Variation on a 4-Caliber Nose ( $R_N/R_B = 0.75$ ) on a 9-Caliber Midsection,  $R_C/F_t = 1.8 \times 10^6$

Figure 8. Schlieren Photographs



$\alpha = 3.5^\circ$   
 $M_\infty = 1.5$



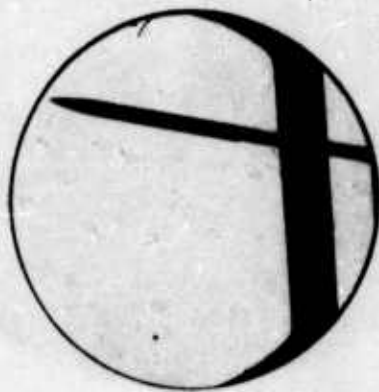
$\alpha = 3.5^\circ$   
 $M_\infty = 4.0$



$\alpha = 7.3^\circ$   
 $M_\infty = 1.5$



$\alpha = 7.3^\circ$   
 $M_\infty = 4.0$



$\alpha = 12.7^\circ$   
 $M_\infty = 1.5$



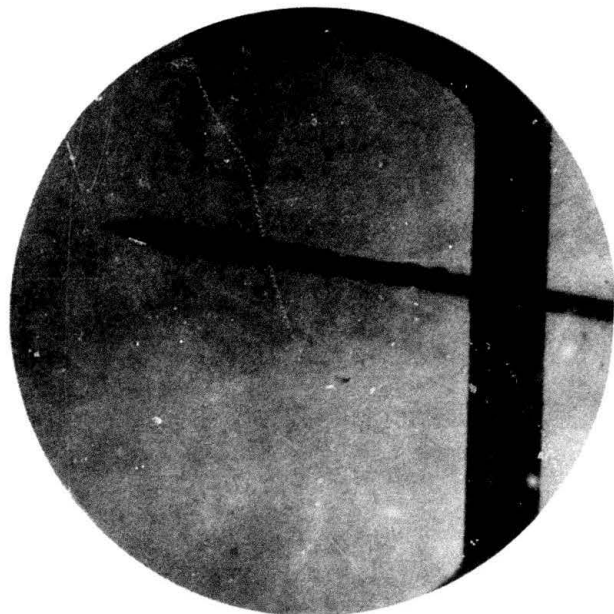
$\alpha = 12.8^\circ$   
 $M_\infty = 4.0$

(b) Mach Number Variation on a 4-Caliber Nose ( $R_N/R_B = 0.00$ ) on a 9-Caliber Midsection,  $R_e/F_t = 1.8 \times 10^6$

Figure 8. Schlieren Photographs (Continued)



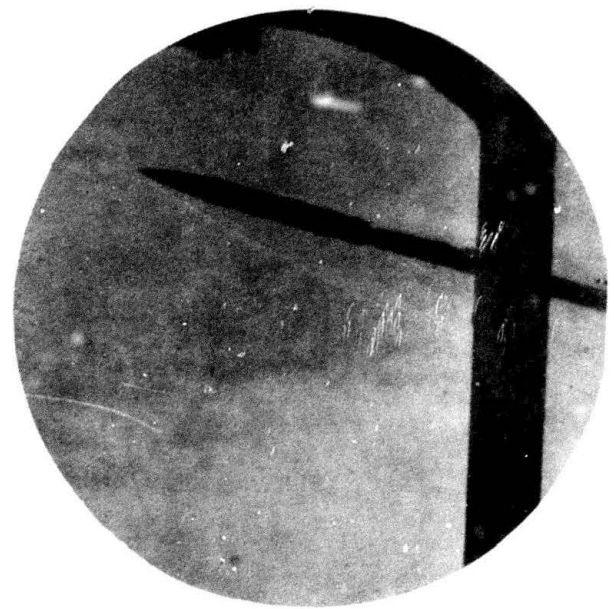
$$\alpha = 7.3^\circ$$
$$R_e/Ft = 1.14 \times 10^6$$



$$\alpha = 7.3^\circ$$
$$R_e/Ft = 5.67 \times 10^6$$



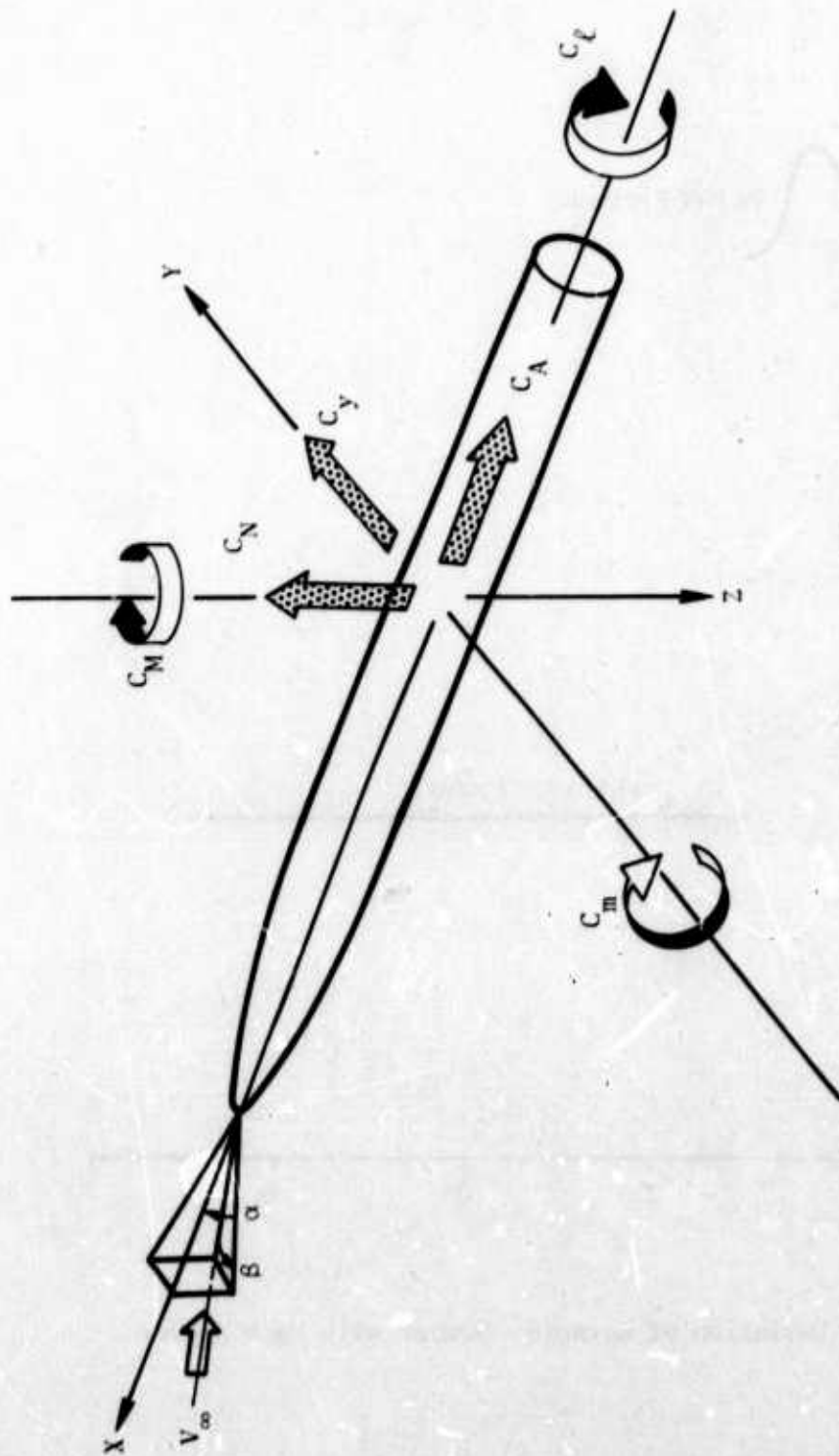
$$\alpha = 12.8^\circ$$
$$R_e/Ft = 1.14 \times 10^6$$



$$\alpha = 12.8^\circ$$
$$R_e/Ft = 5.67 \times 10^6$$

(c) Reynolds Number Variation on 4-Caliber Nose ( $R_N/R_B = 0.00$ )  
on a 9-Caliber Midsection

Figure 8. Schlieren Photographs (Concluded)



- Note:
1. Only positive coefficients shown
  2. All forces and moments are referenced to the body axis system

Figure 9. Sign Convention

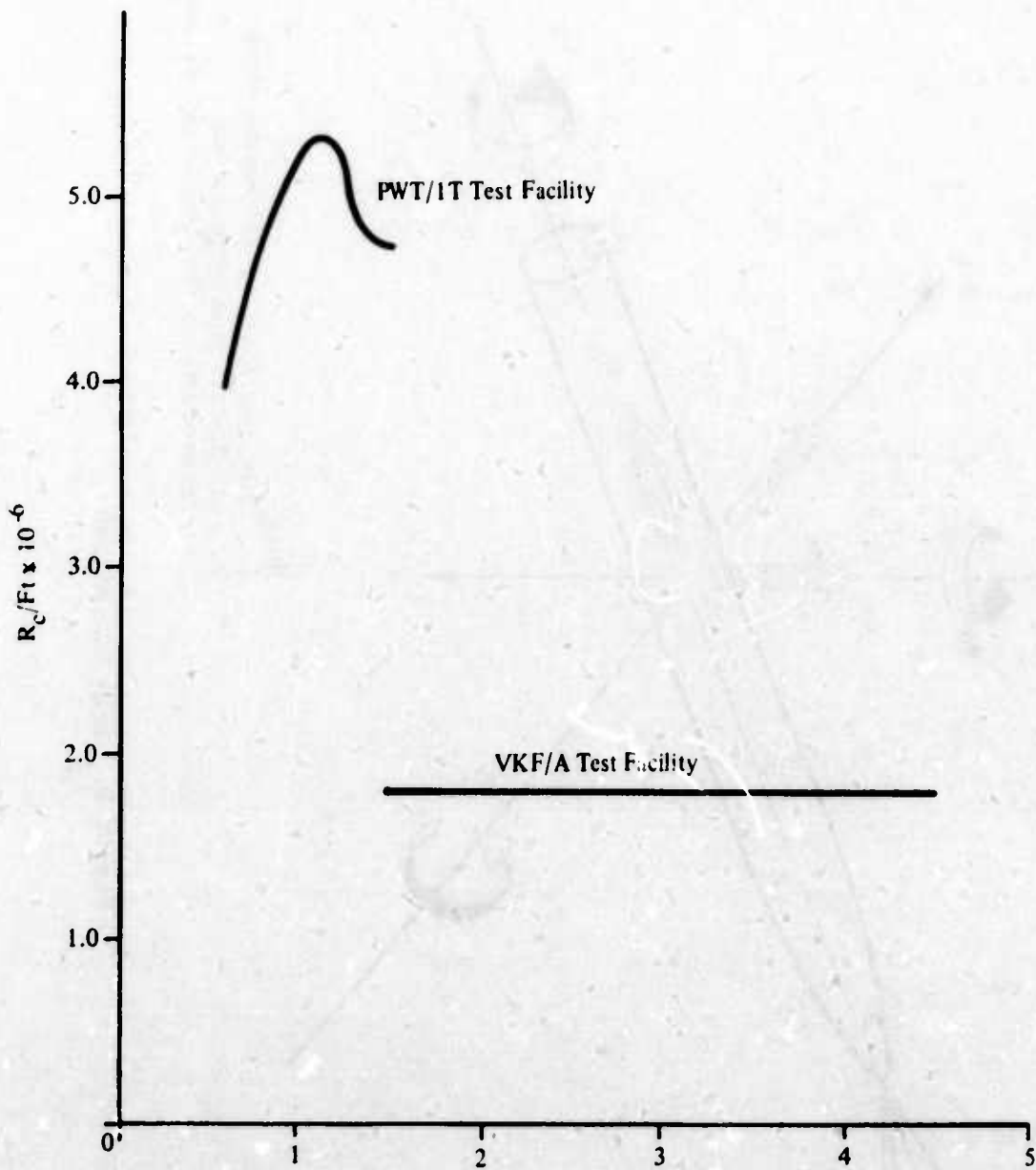
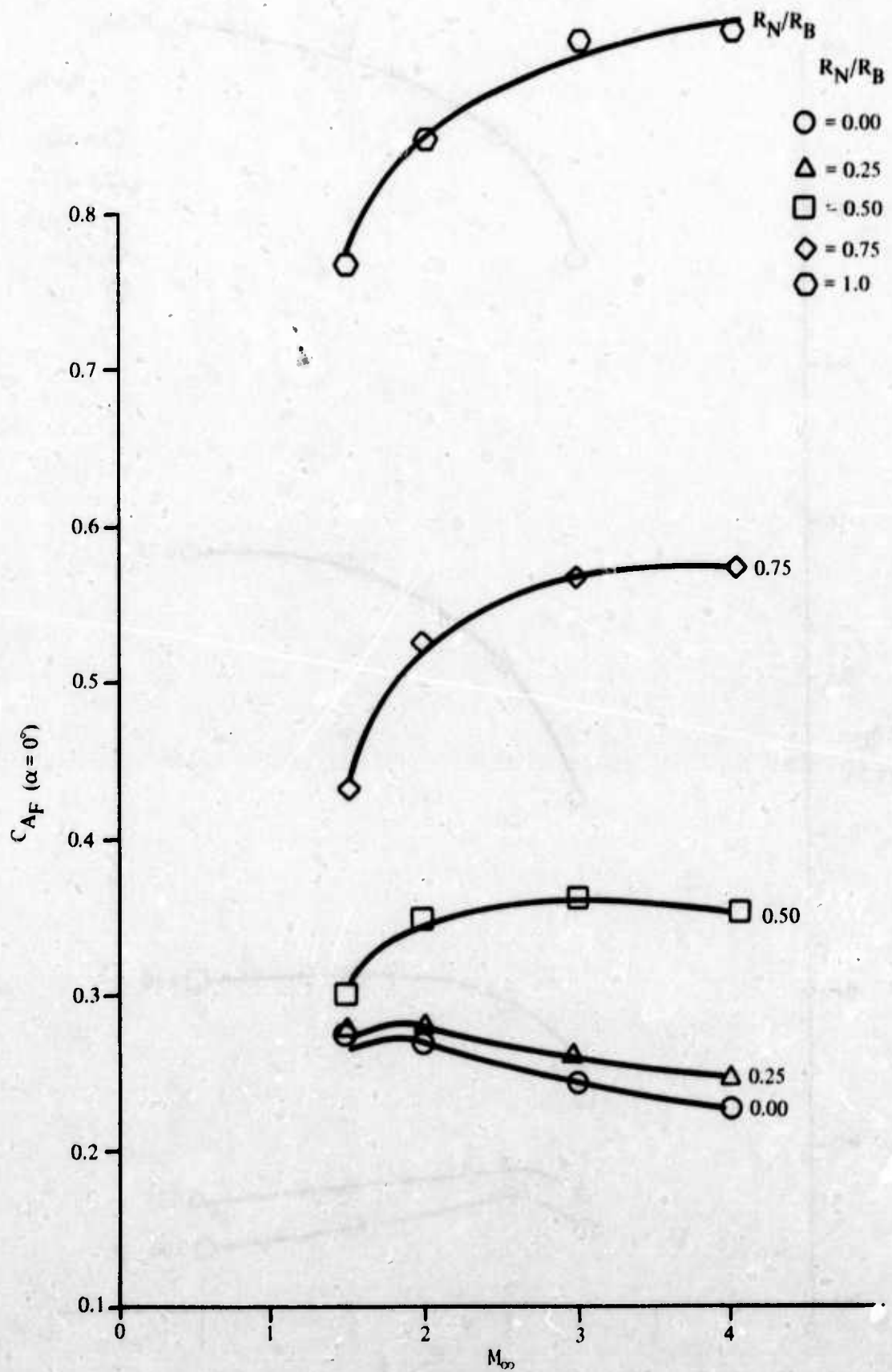


Figure 10. Variation of Reynolds Number with Mach Number



(a) 2-Caliber Noses

Figure 11. Variation of Forebody Axial Force Coefficient with Mach Number for Various Noses on 9-Caliber Midsection

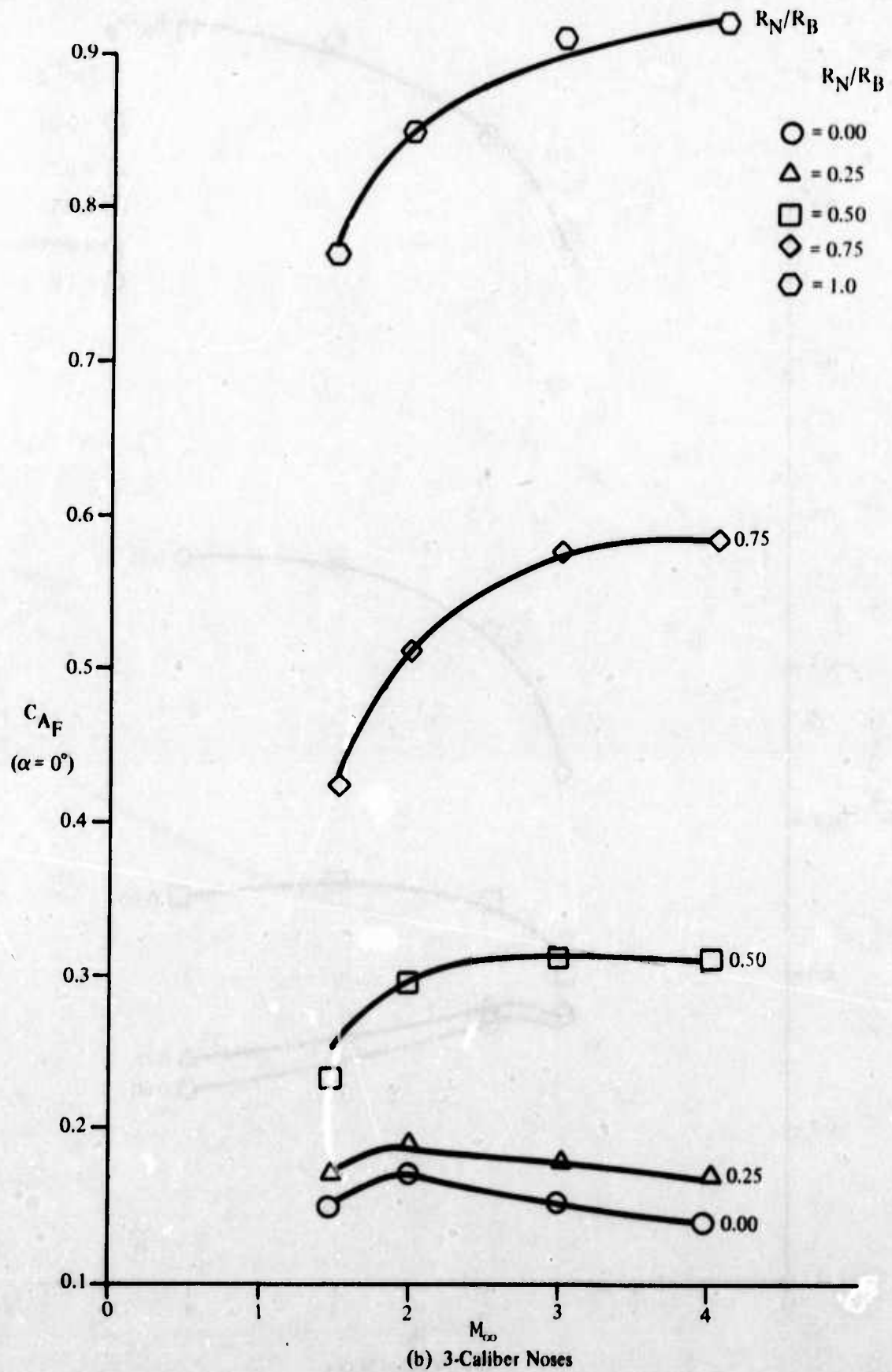
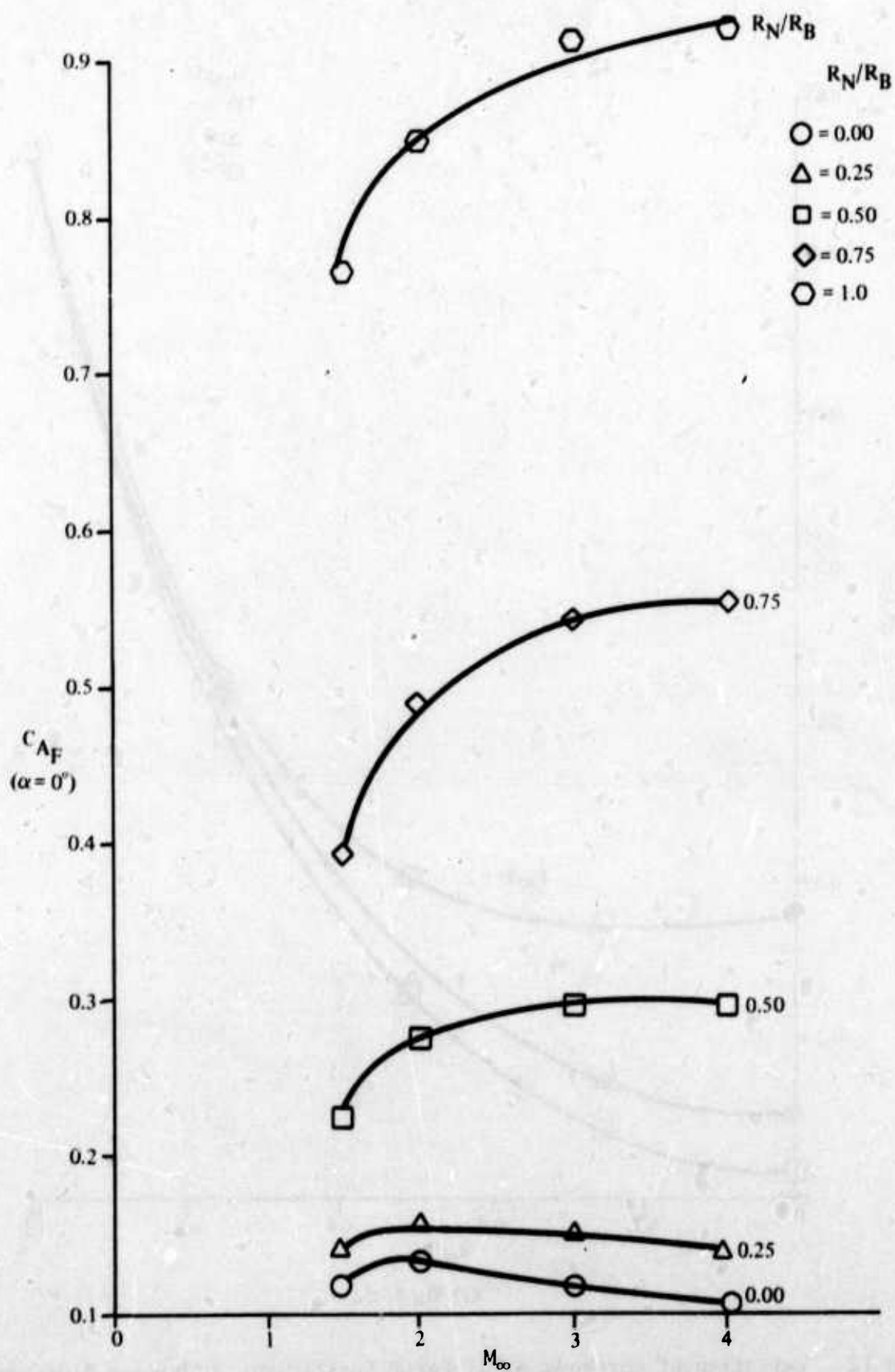


Figure 11. Variation of Forebody Axial Force Coefficient with Mach Number for Various Noses on 9-Caliber Midsection (Continued)



(c) 4-Caliber Noses

Figure 11. Variation of Forebody Axial Force Coefficient with Mach Number for Various Noses on 9-Caliber Midsection (Concluded)

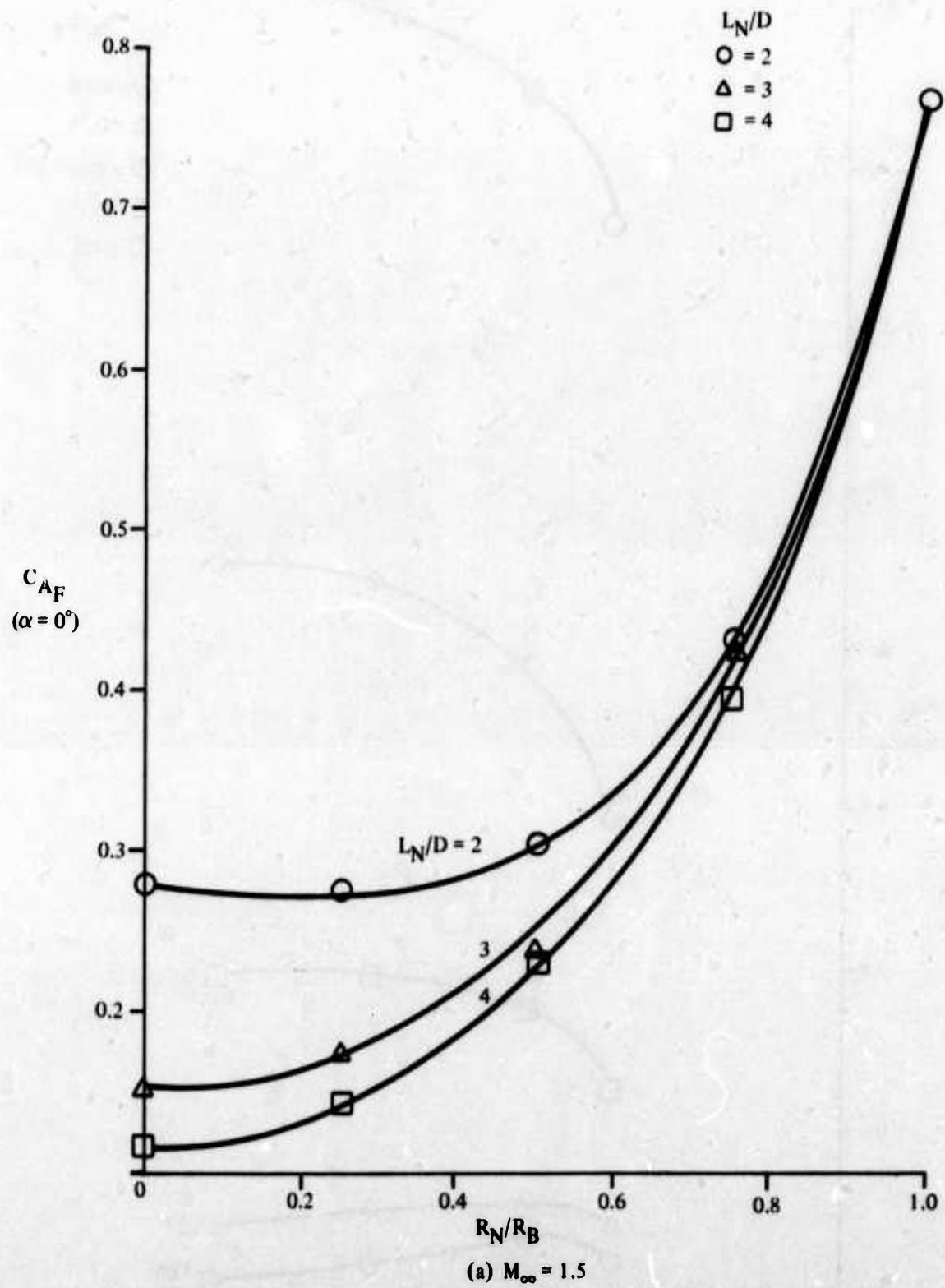


Figure 12. Variation of Forebody Axial Force Coefficient with Nose Bluntness Ratio for Various Noses on 9-Caliber Midsection

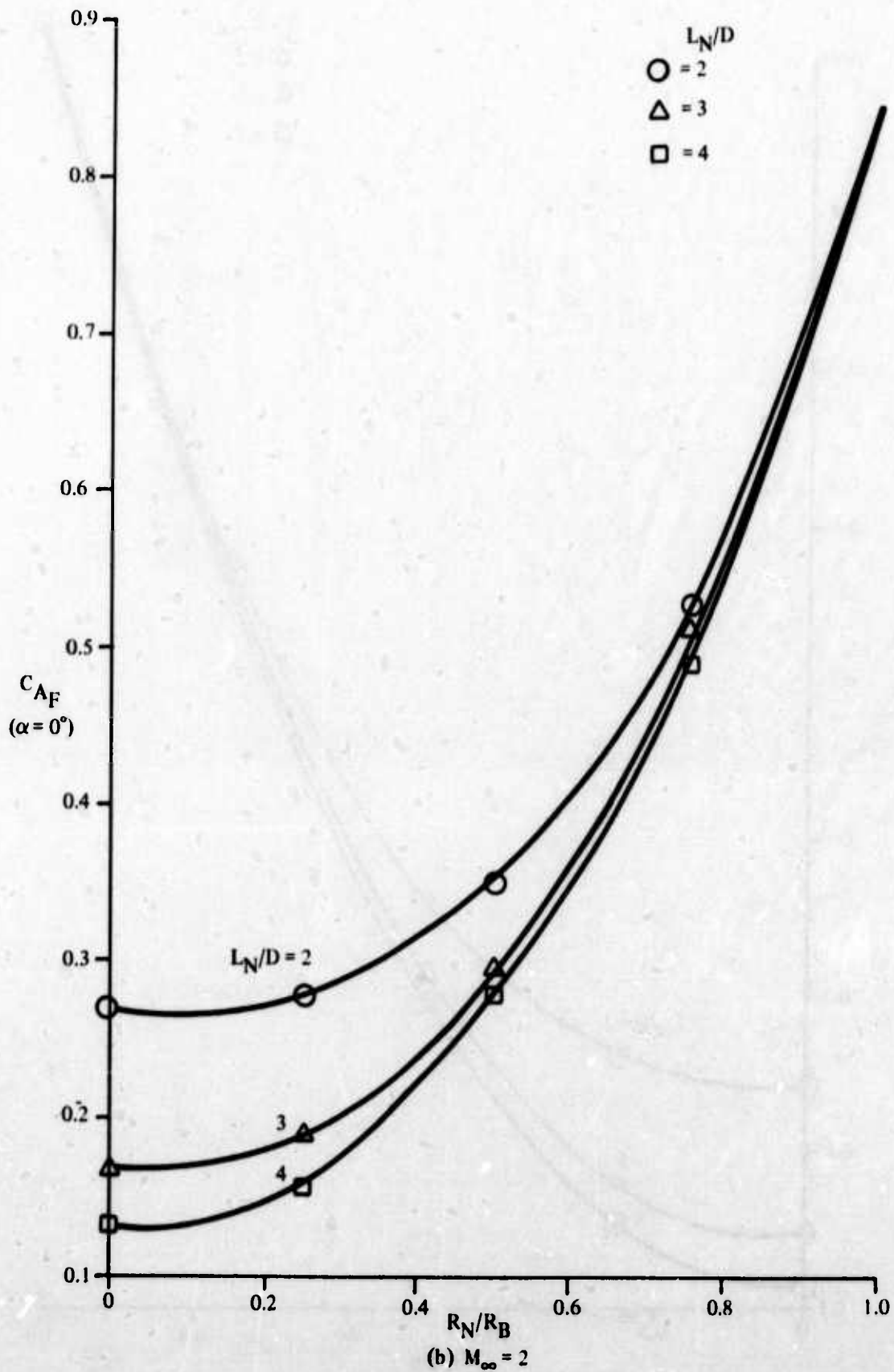


Figure 12. Variation of Forebody Axial Force Coefficient with Nose Bluffness Ratio for Various Noses on 9-Caliber Midsection (Continued)

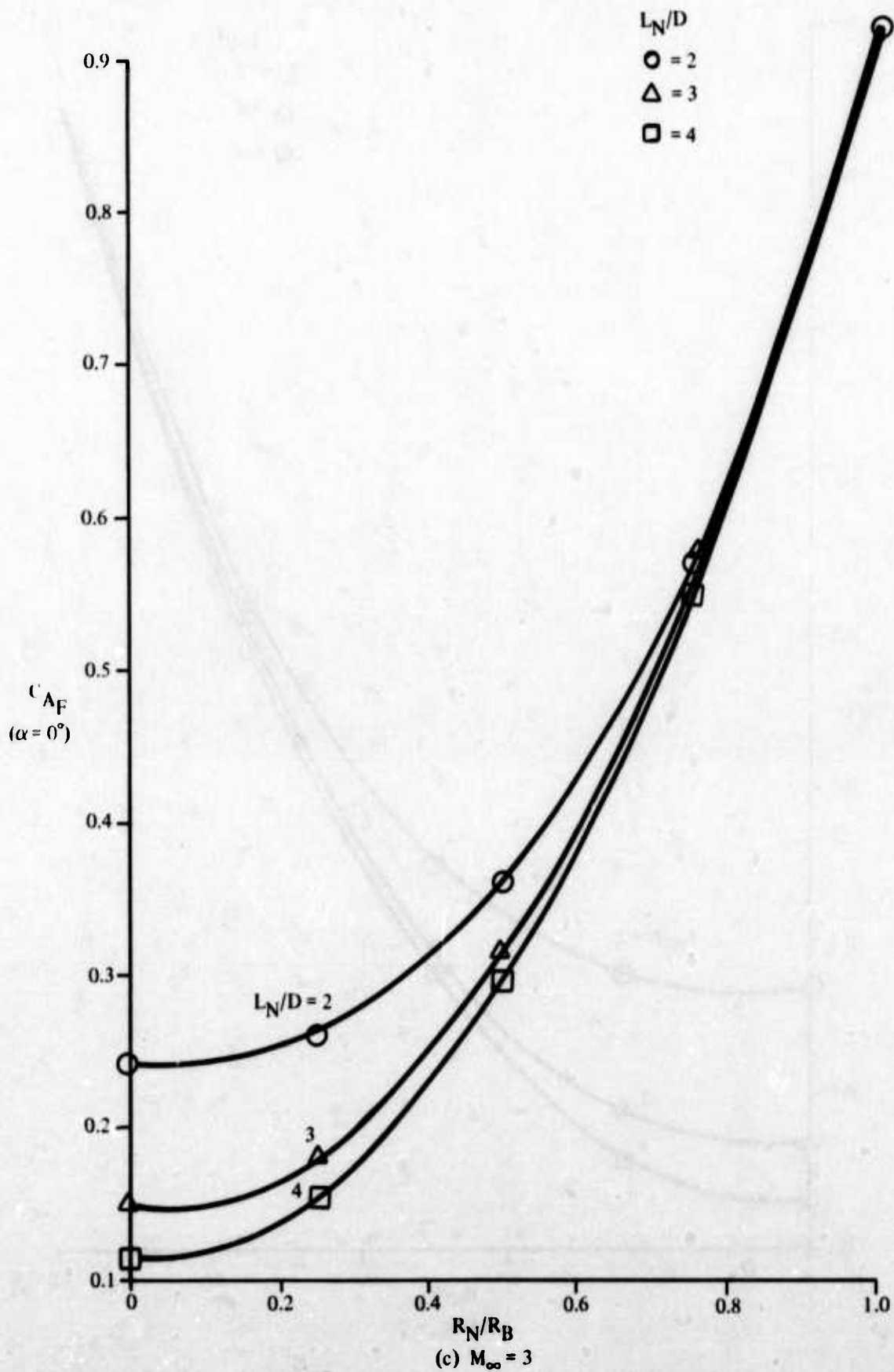


Figure 12. Variation of Forebody Axial Force Coefficient with Nose Bluntness Ratio for Various Noses on 9-Caliber Midsection (Continued)

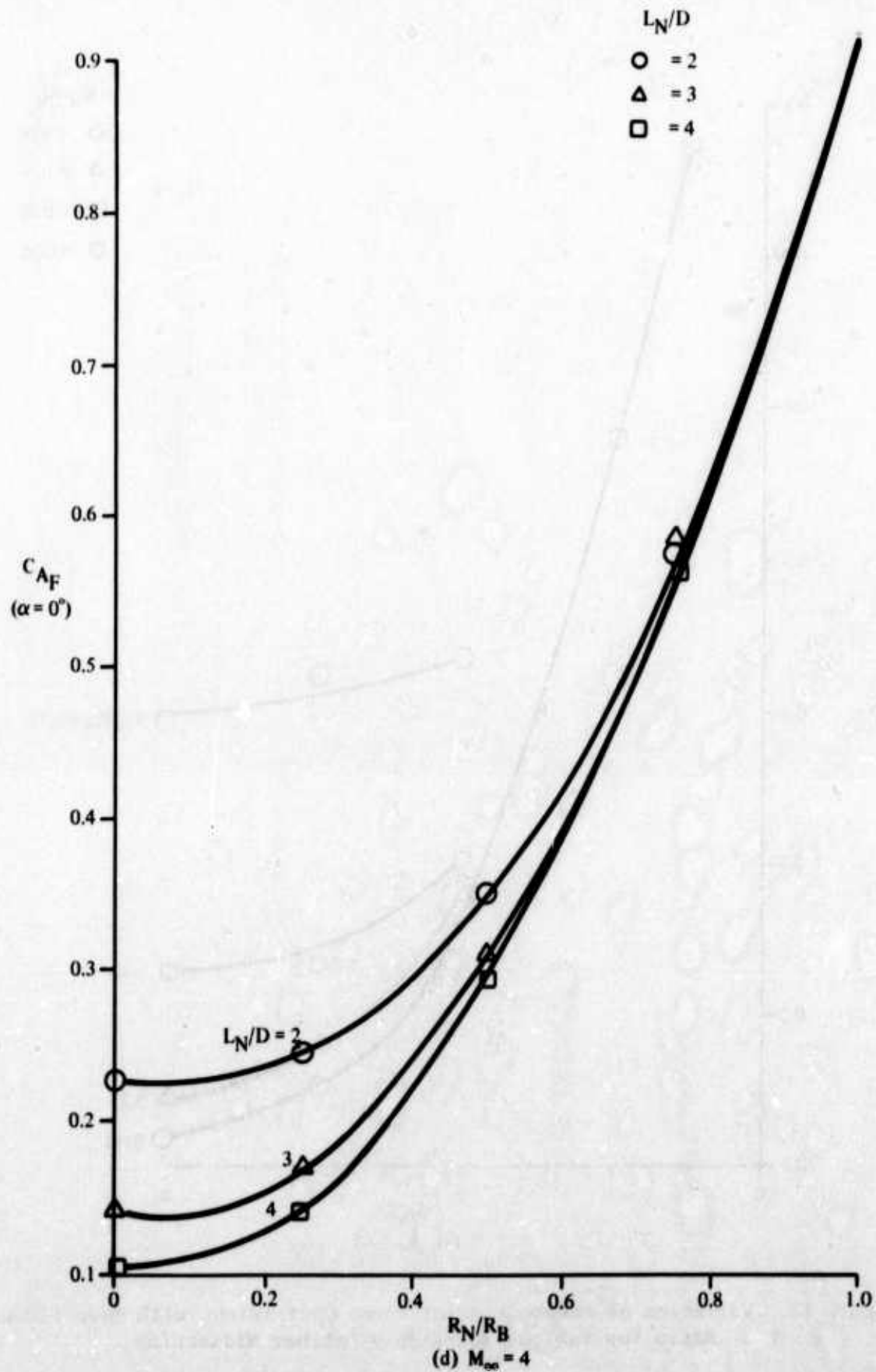


Figure 12. Variation of Forebody Axial Force Coefficient with Nose Bluffness Ratio for Various Noses on 9-Caliber Midsection (Concluded)

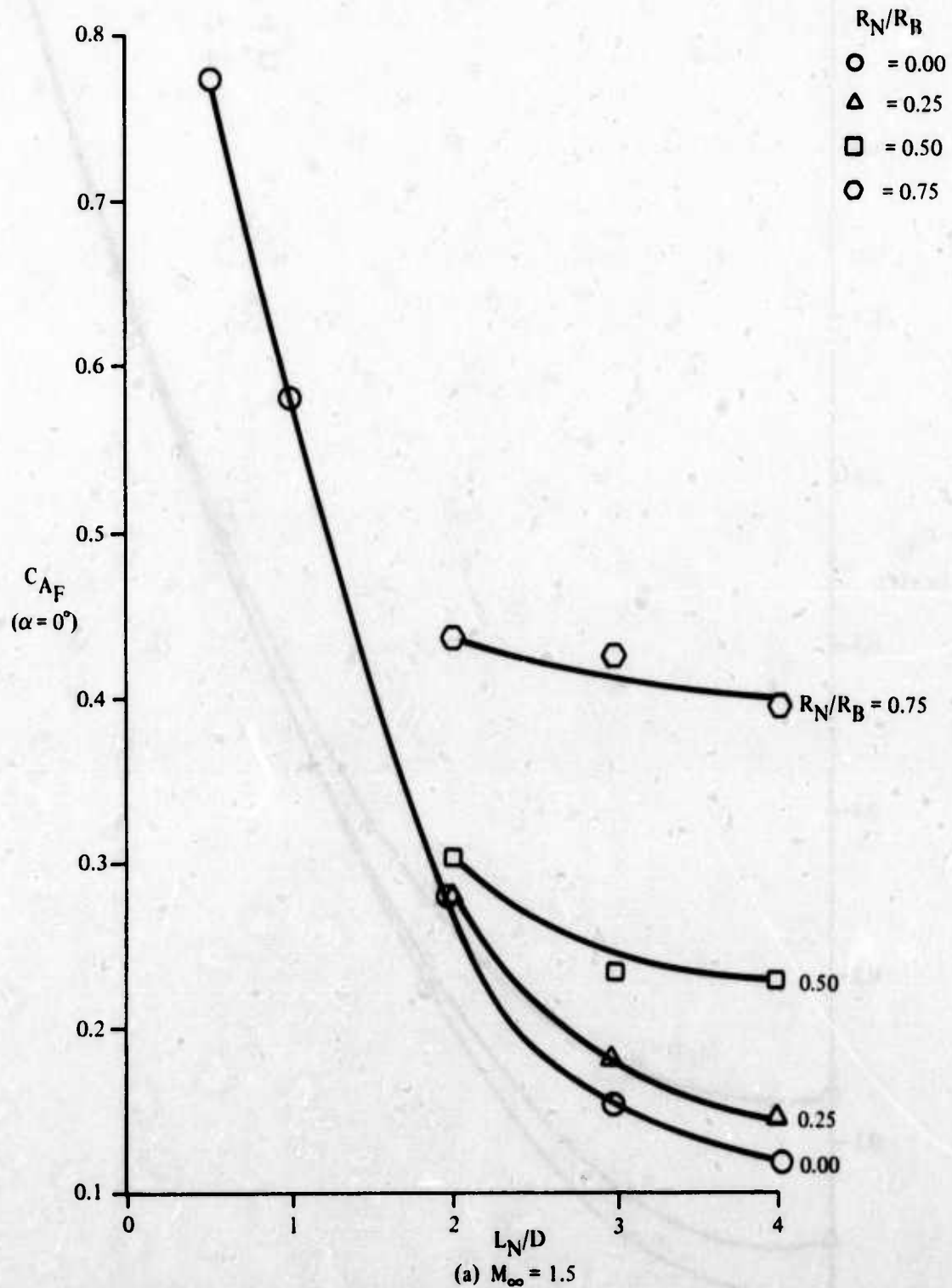


Figure 13. Variation of Forebody Axial Force Coefficient with Nose Fineness Ratio for Various Noses on 9-Caliber Midsection

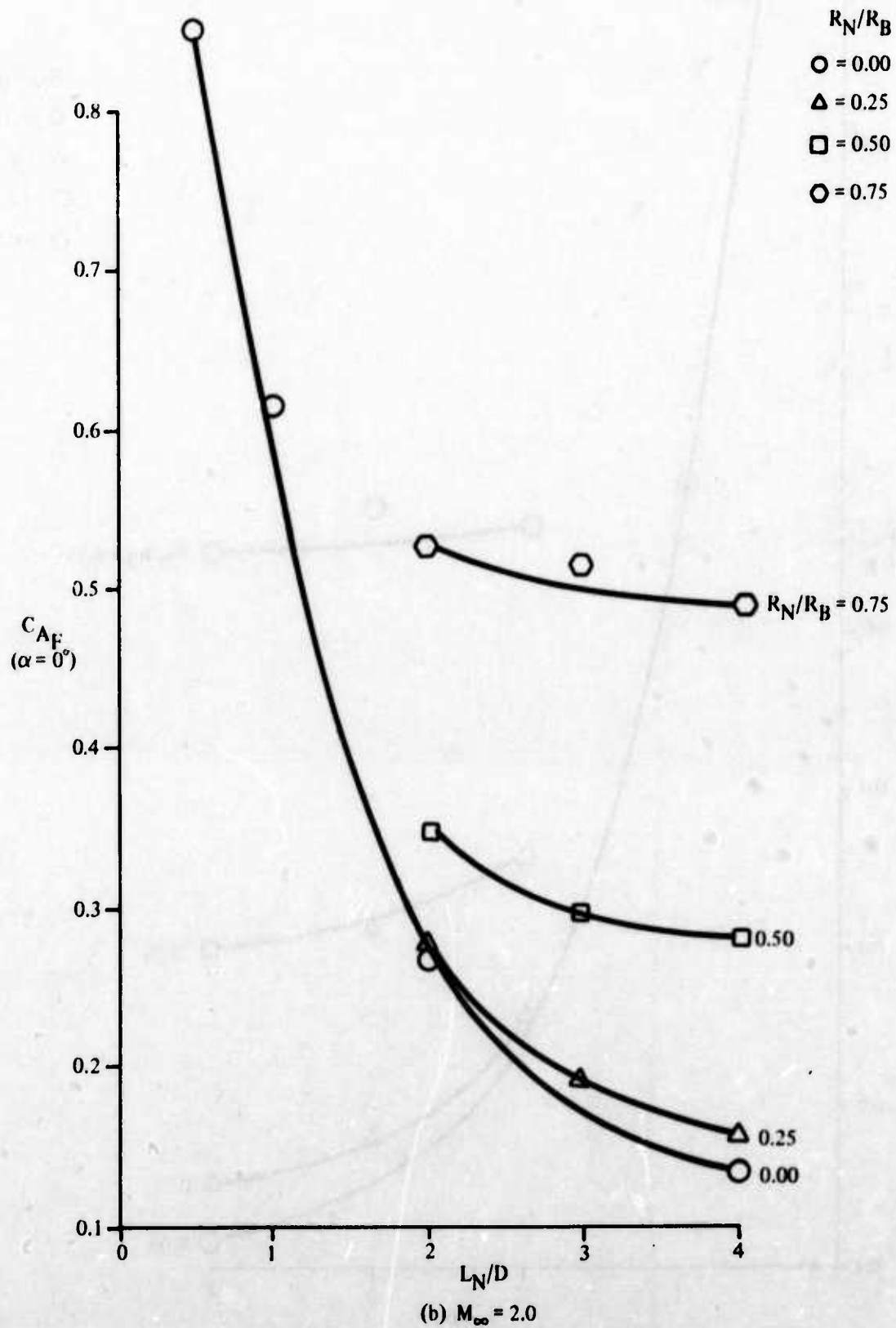


Figure 13. Variation of Forebody Axial Force Coefficient with Nose Fineness Ratio for Various Noses on 9-Caliber Midsection (Continued)

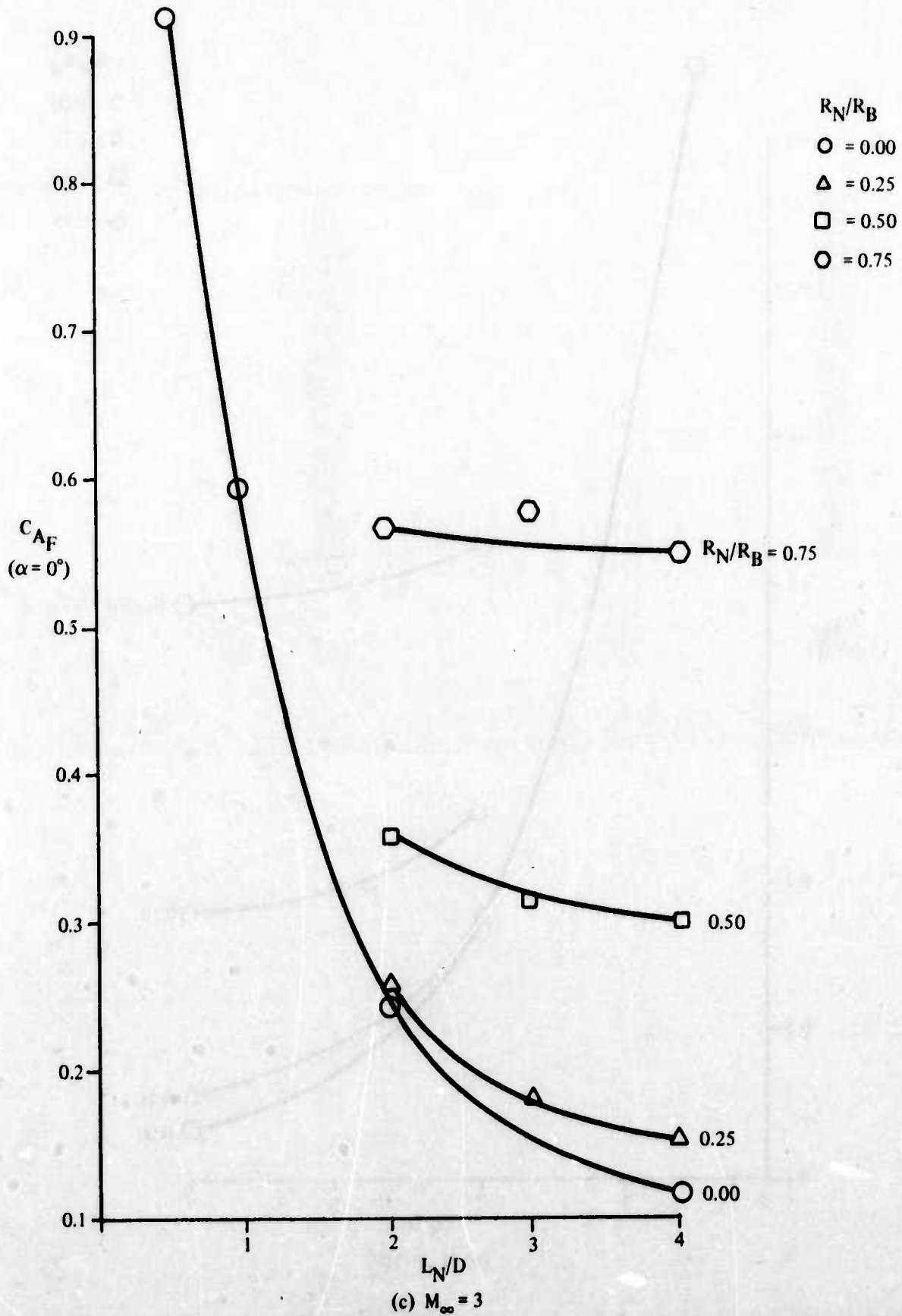


Figure 13. Variation of Forebody Axial Force Coefficient with Nose Fineness Ratio for Various Noses on 9-Caliber Midsection (Continued)

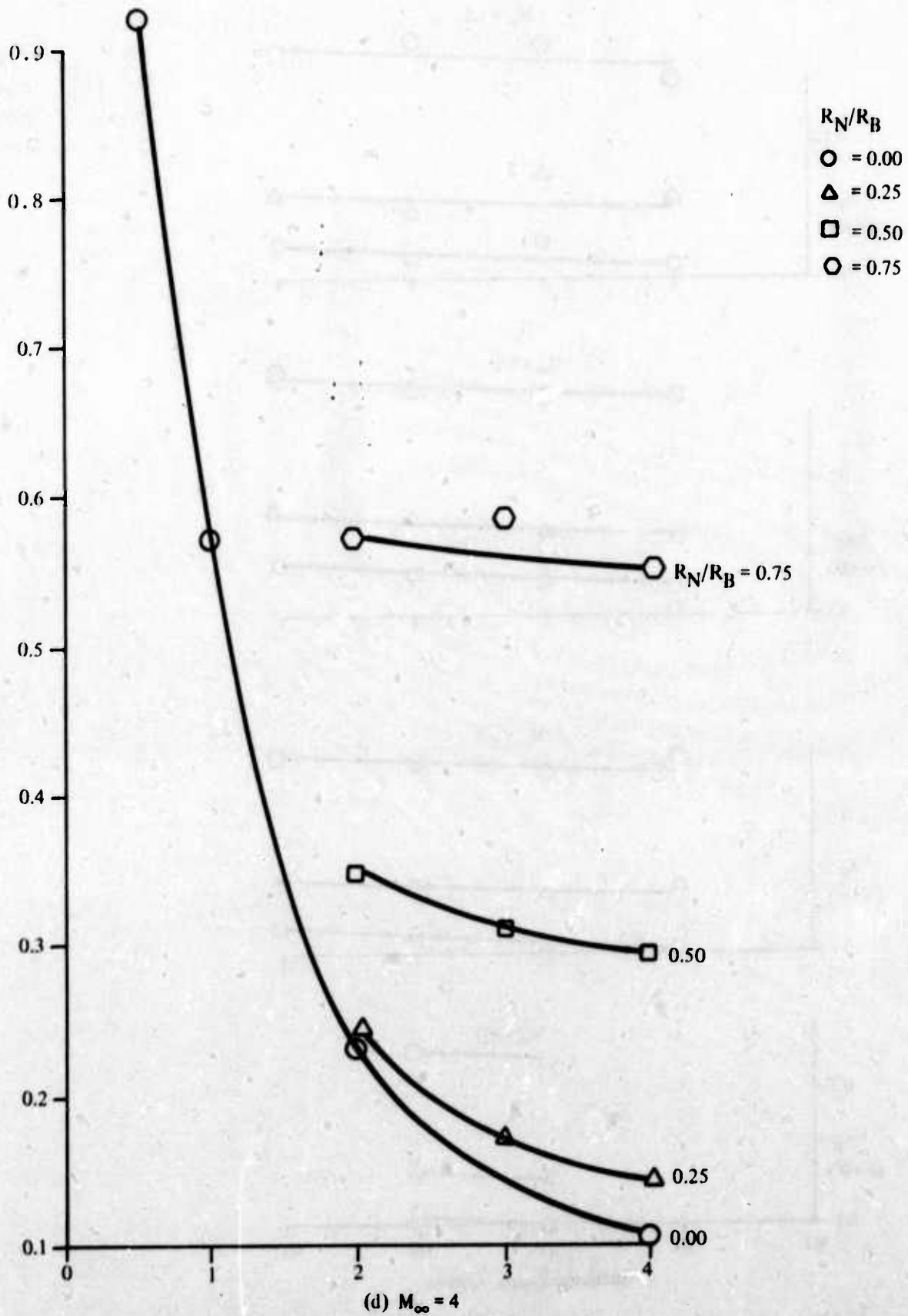


Figure 13. Variation of Forebody Axial Force Coefficient with Nose Fineness Ratio for Various Noses on 9-Caliber Midsection (Concluded)

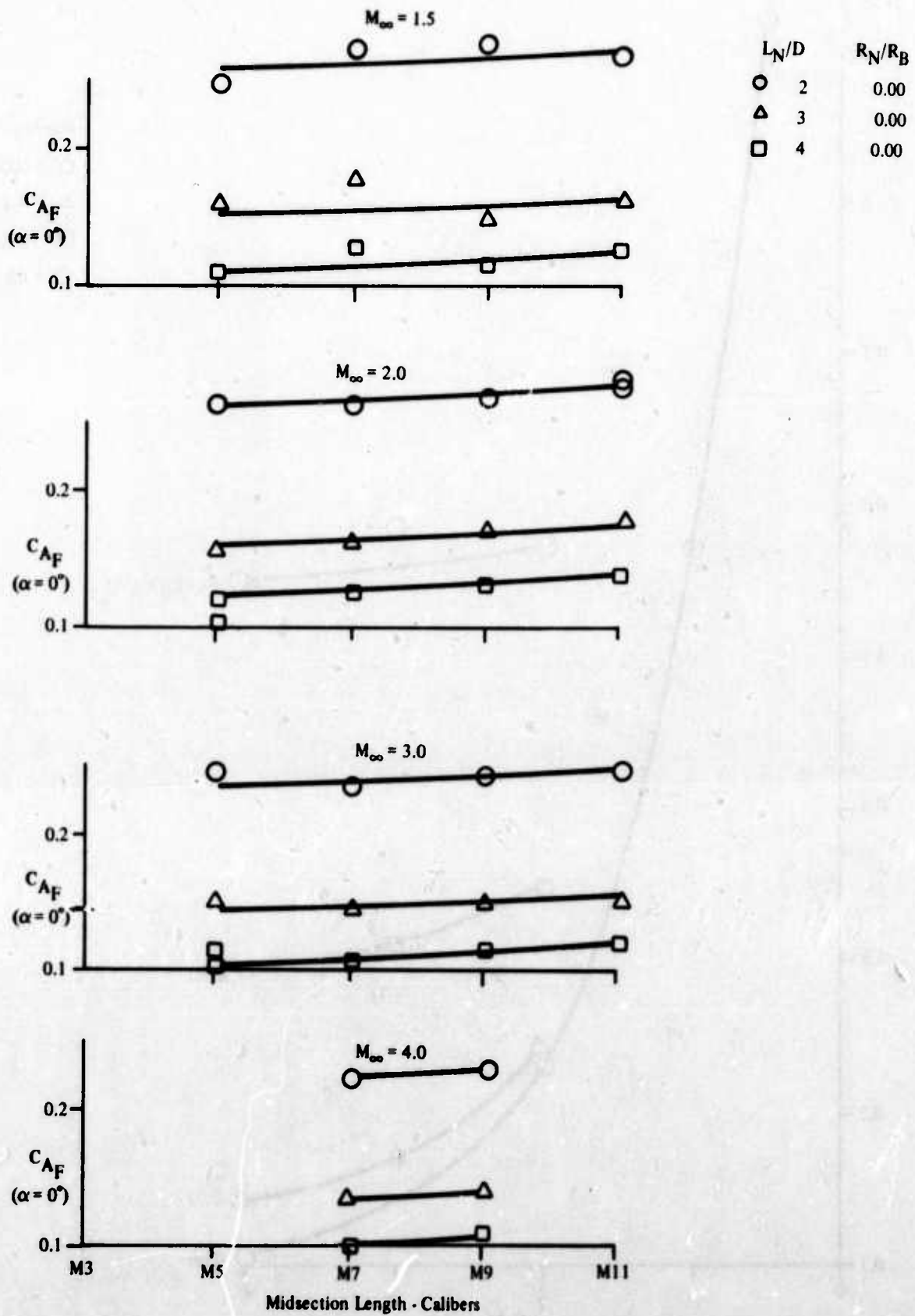


Figure 14. Variation of Forebody Axial Force Coefficient with Body Midsection Length for Various Noses on 9-Caliber Midsection

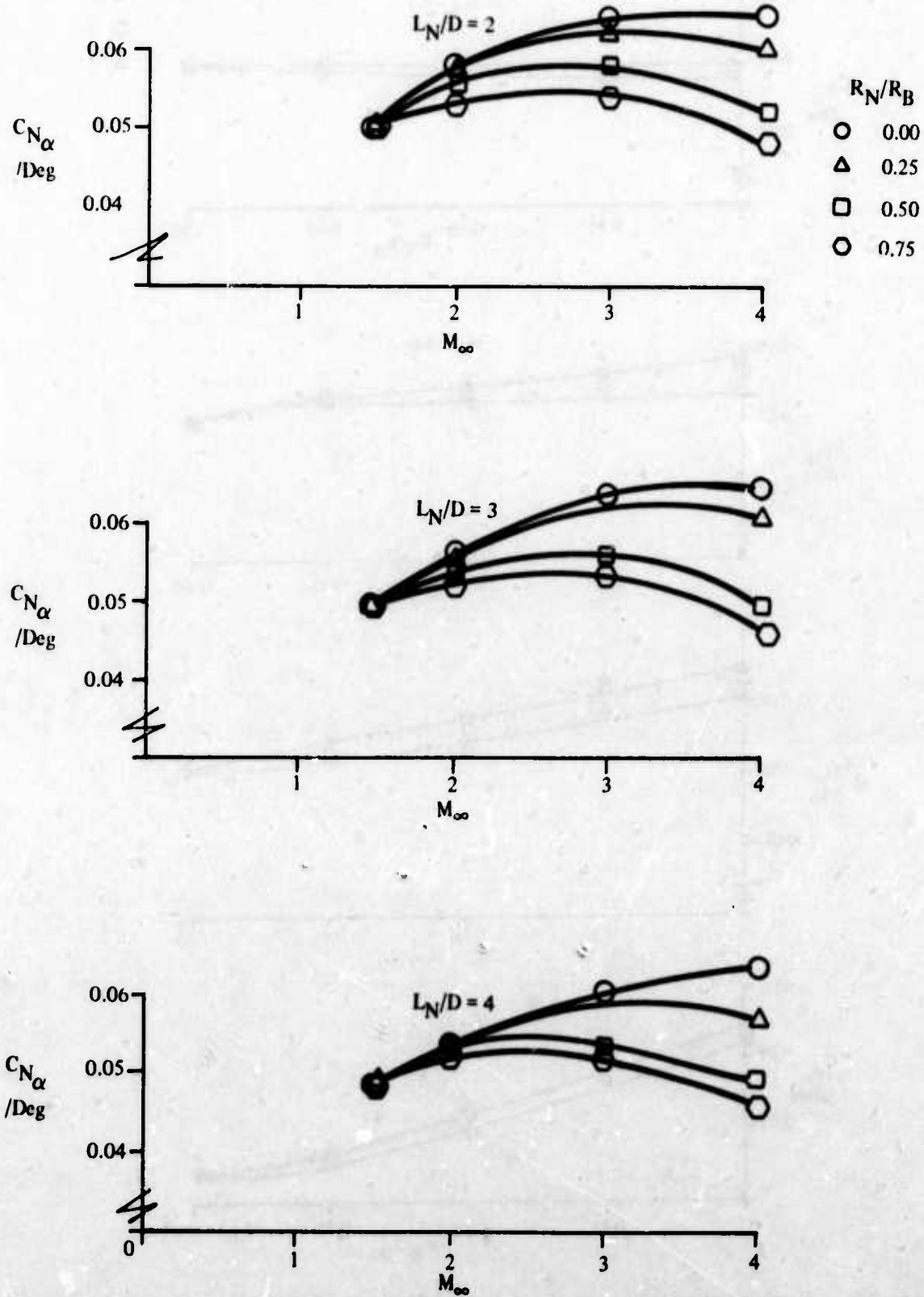


Figure 15. Variation of Normal Force Coefficient Slope with Mach Number for Various Noses on 9-Caliber Midsection

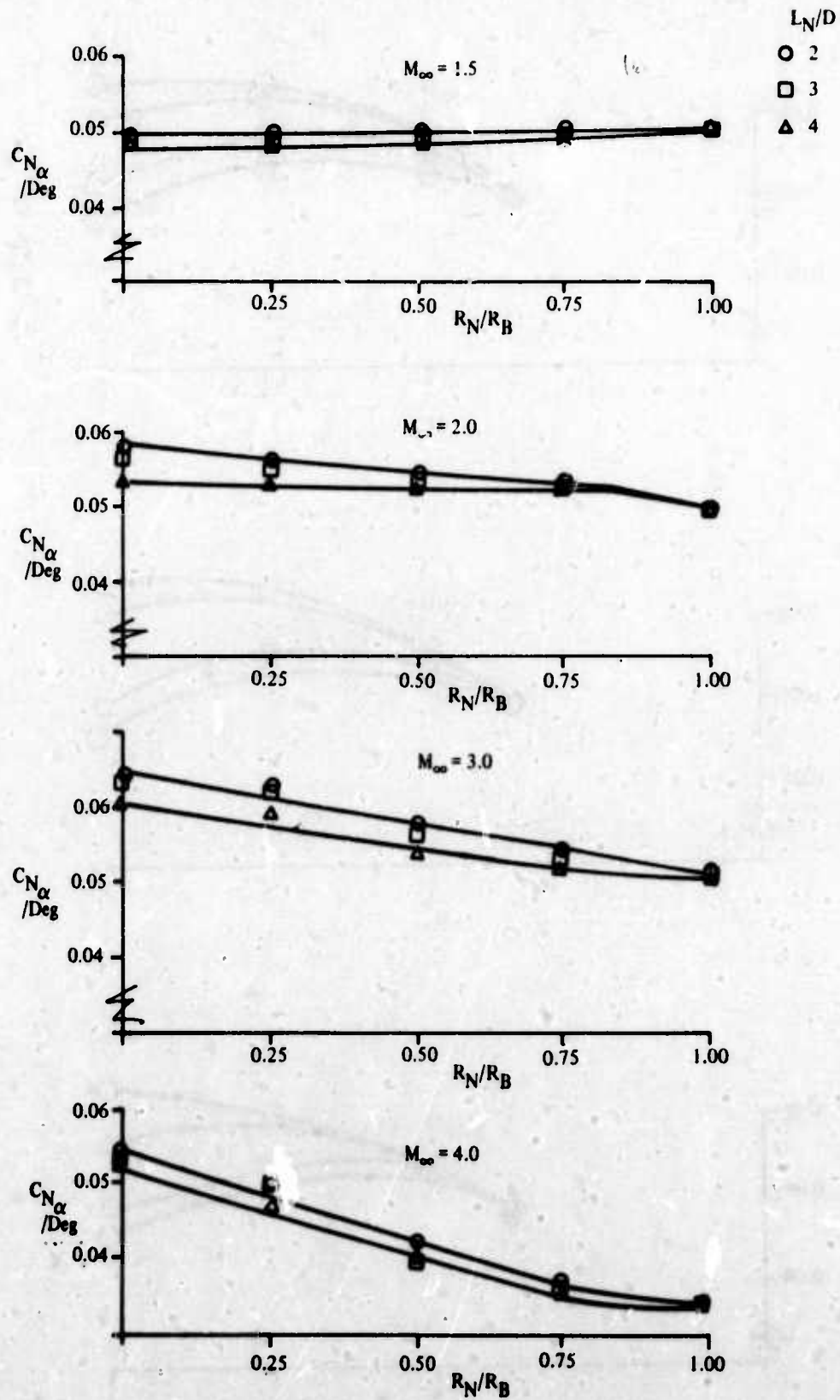


Figure 16. Variation of Normal Force Coefficient Slope with Nose Bluntness Ratio for Various Noses on 9-Caliber Midsection

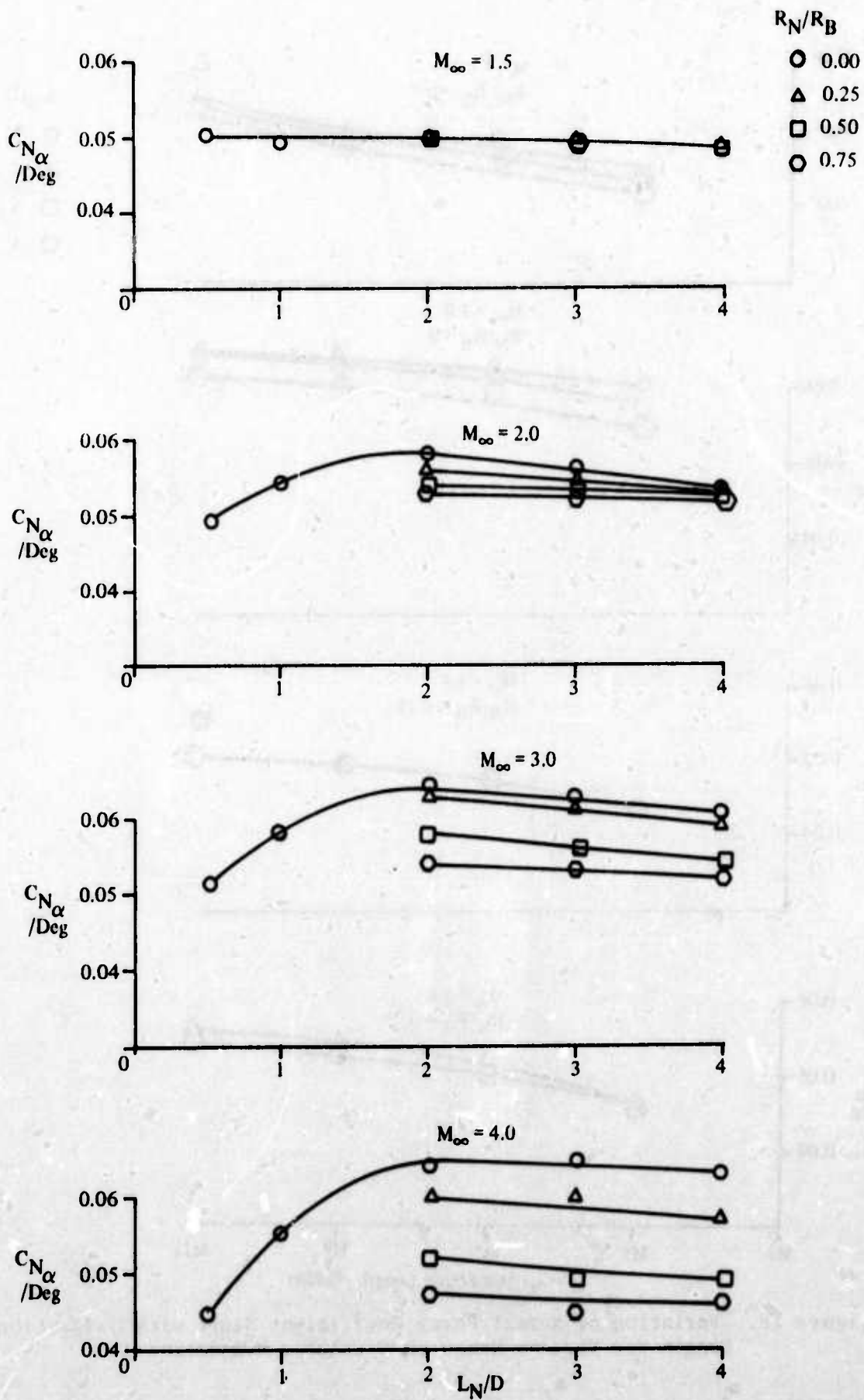


Figure 17. Variation of Normal Force Coefficient Slope with Nose Fineness Ratio for Various Noses on 9-Caliber Midsection

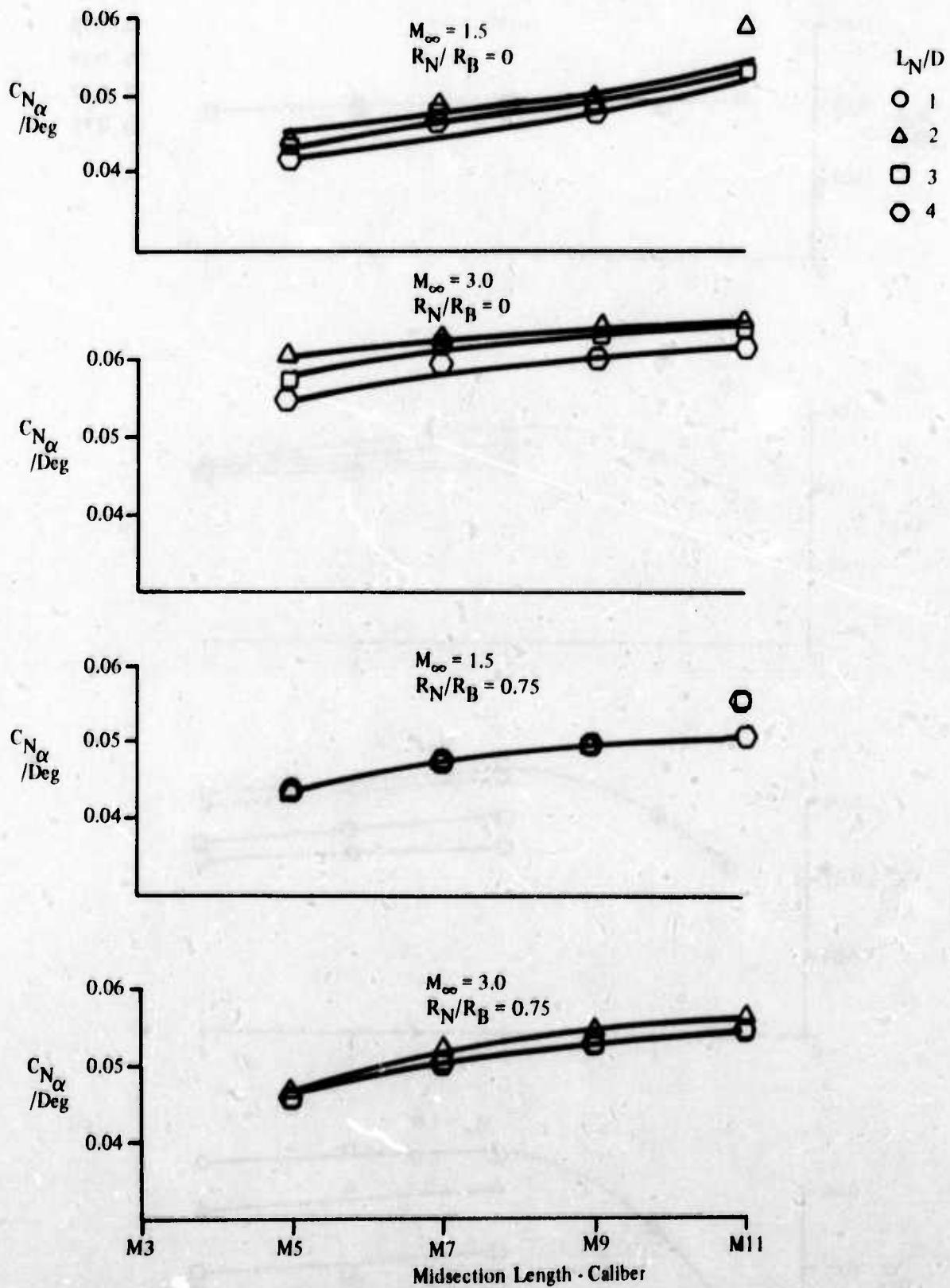


Figure 18. Variation of Normal Force Coefficient Slope with Midsection Length for Various Noses on 9-Caliber Midsection

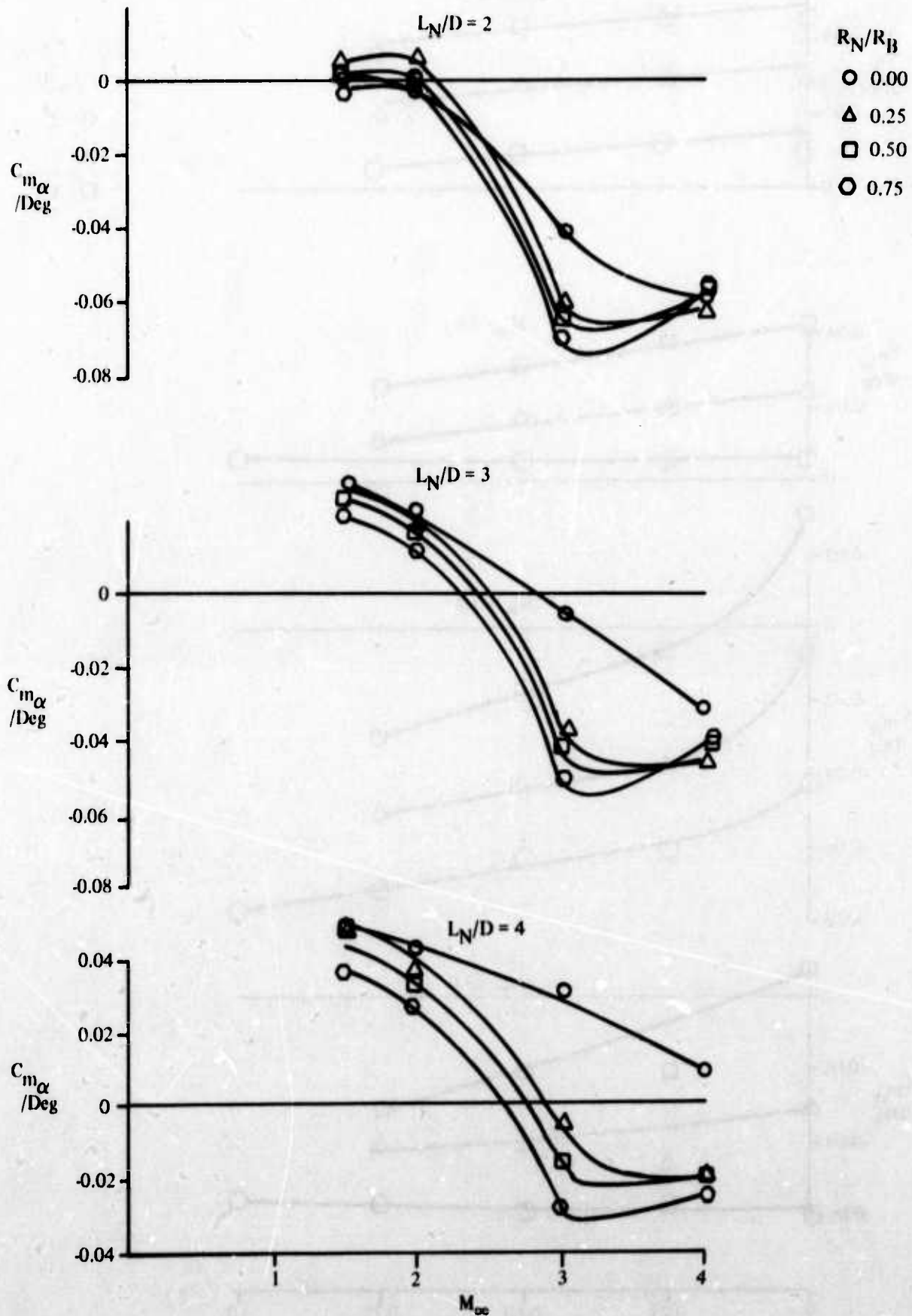


Figure 19. Variation of Pitching Moment Coefficient Slope with Mach Number for Various Noses on 9-Caliber Midsection

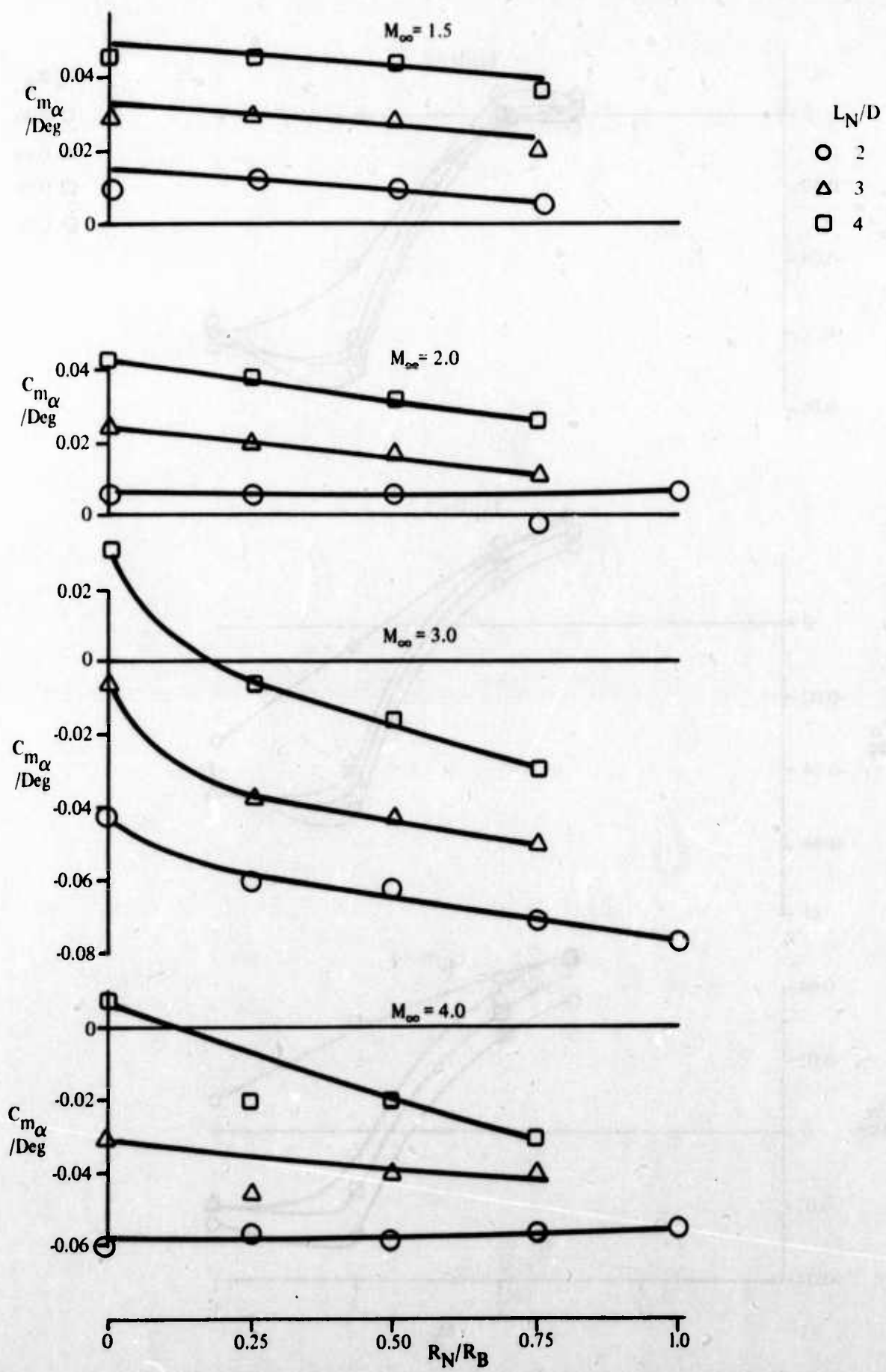


Figure 20. Variation of Pitching Moment Coefficient Slope with Nose Bluntness Ratio for Various Noses on 9-Caliber Midsection

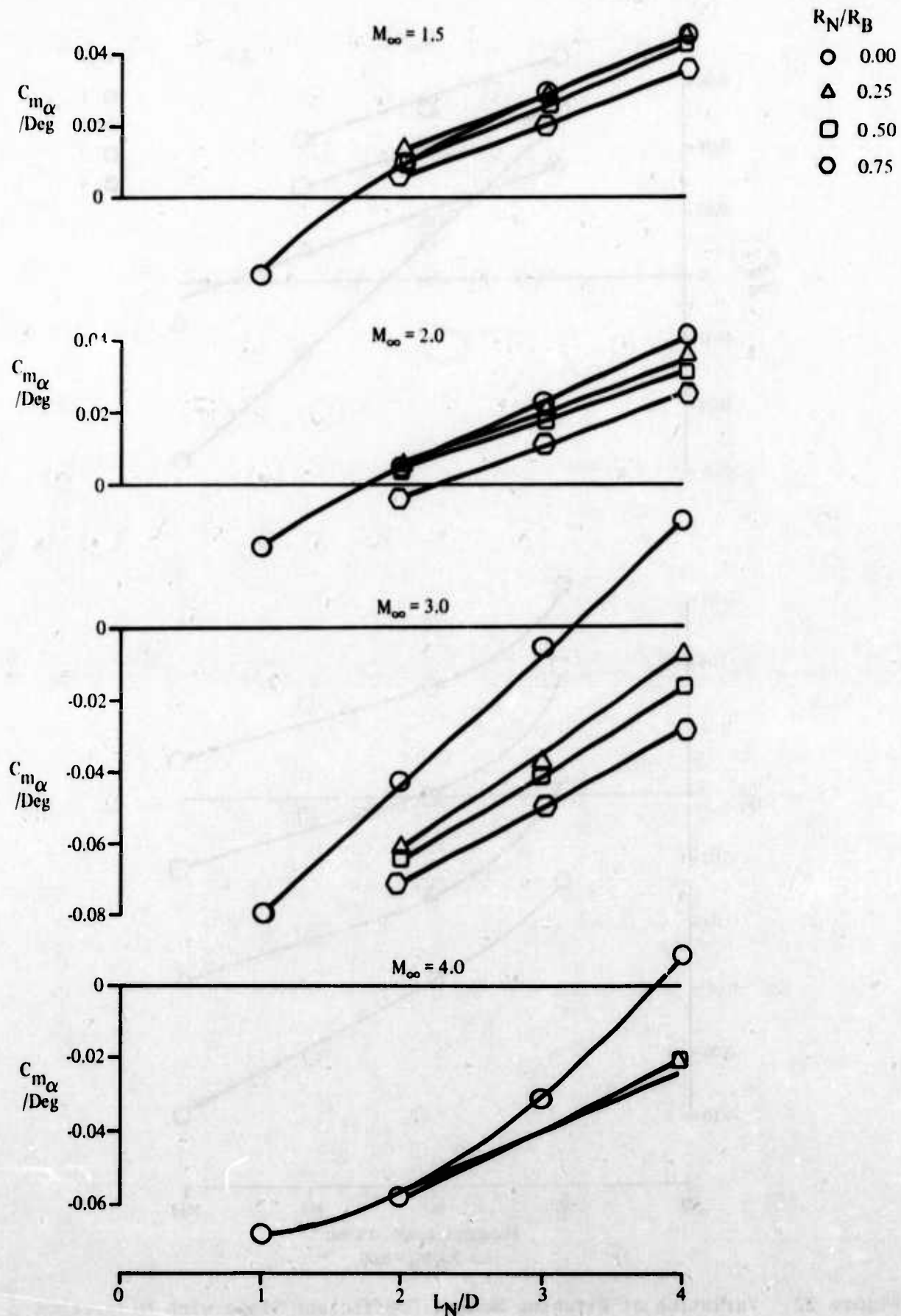


Figure 21. Variation of Pitching Moment Coefficient Slope with Nose Fineness Ratio for Various Noses on 9-Caliber Midsection

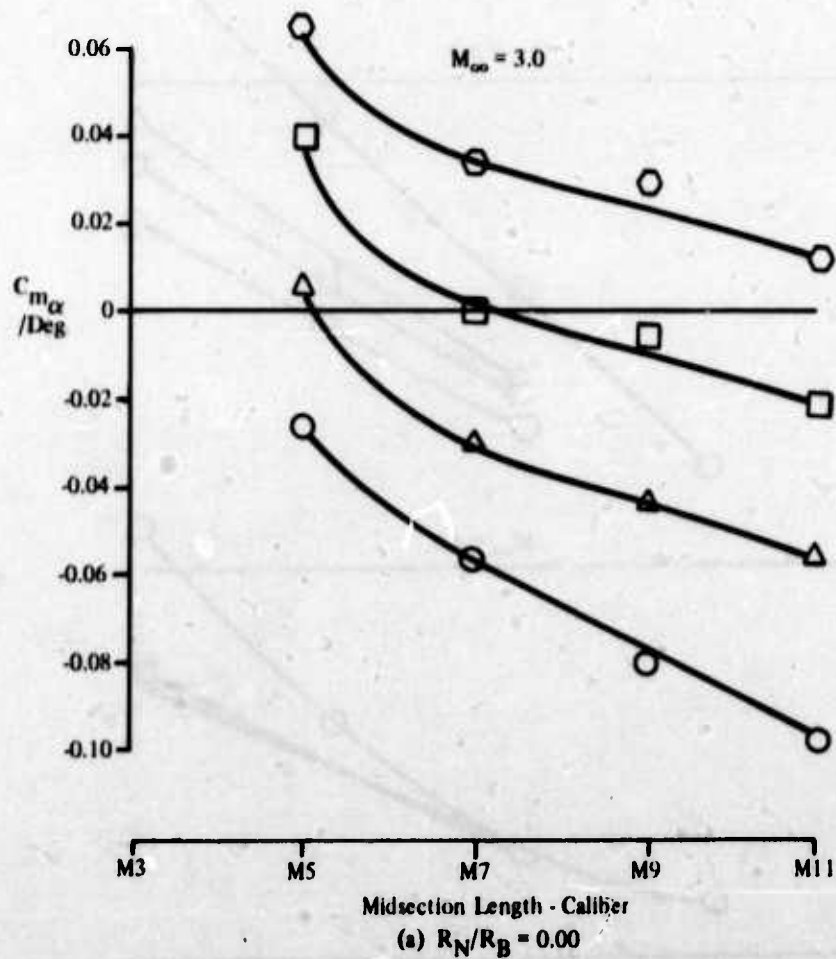
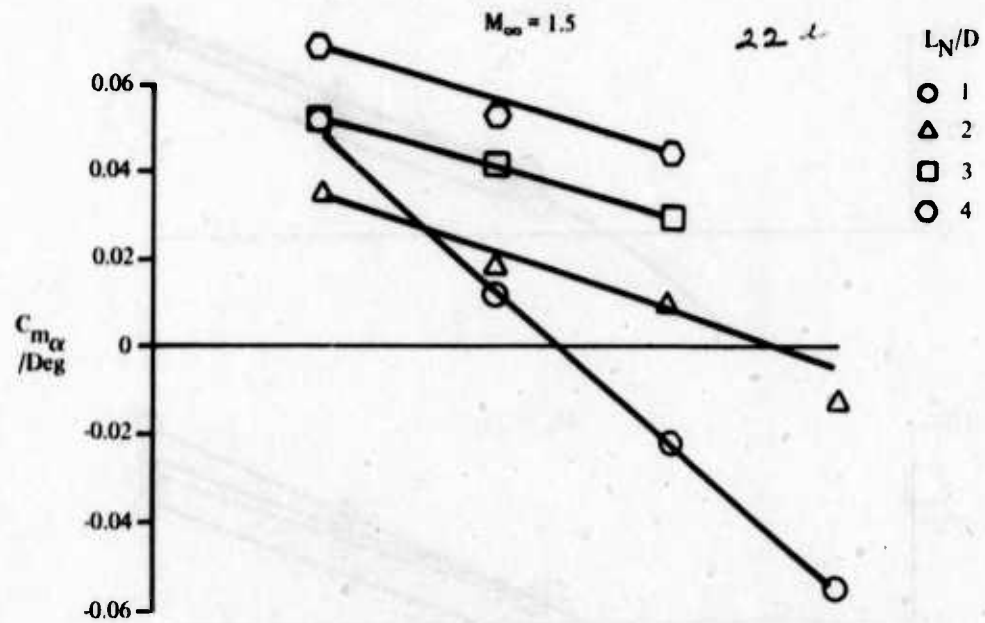


Figure 22. Variation of Pitching Moment Coefficient Slope with Midsection Length for Various Noses on 9-Caliber Midsection

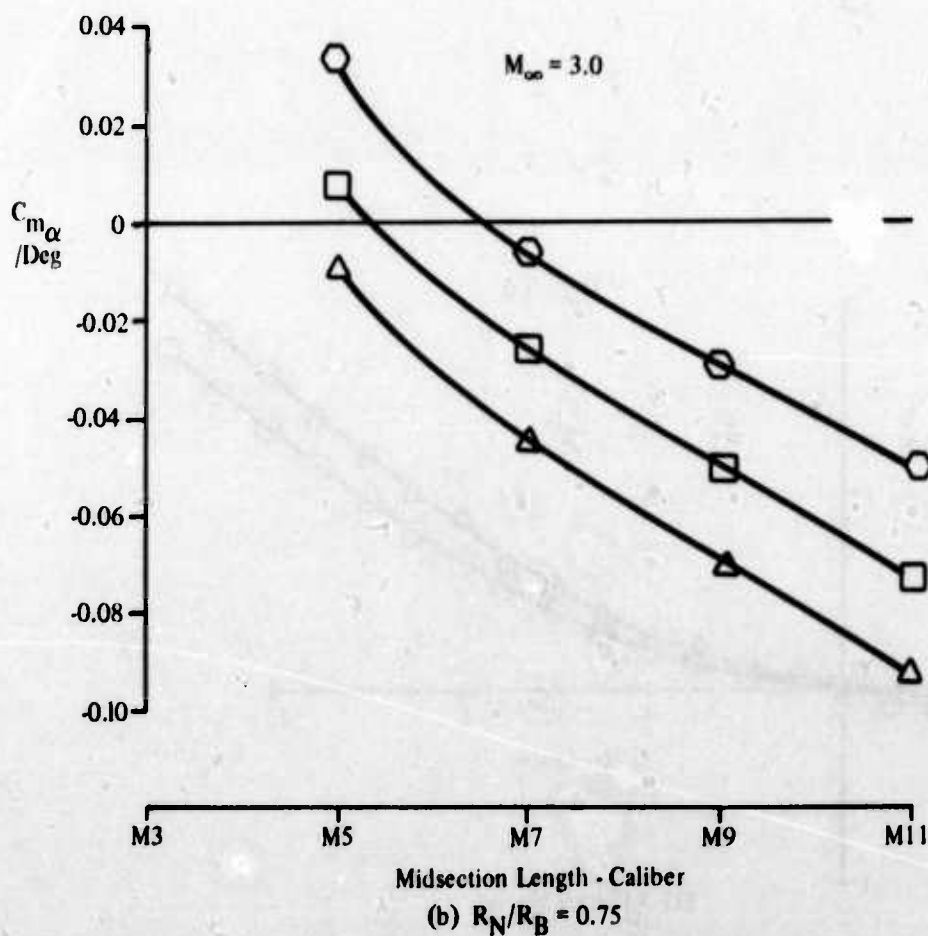
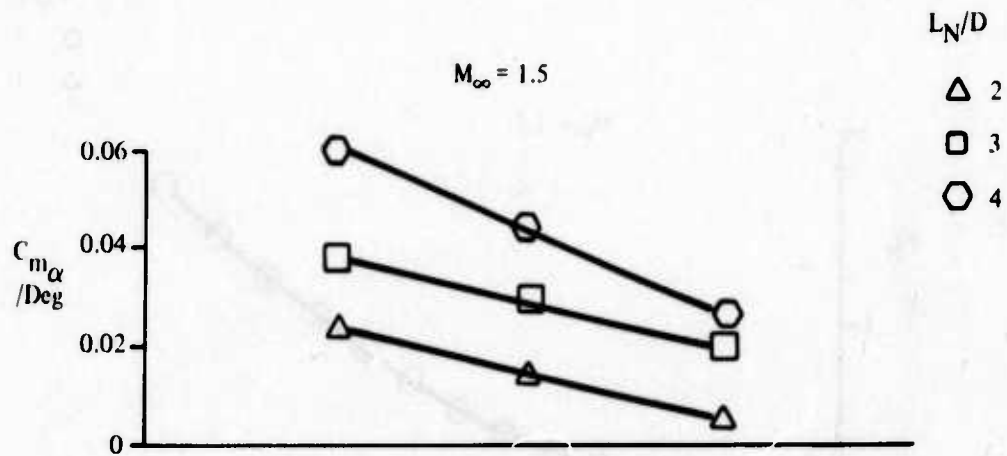


Figure 22. Variation of Pitching Moment Coefficient Slope with Midsection Length for Various Noses on 9-Caliber Midsection (Concluded)

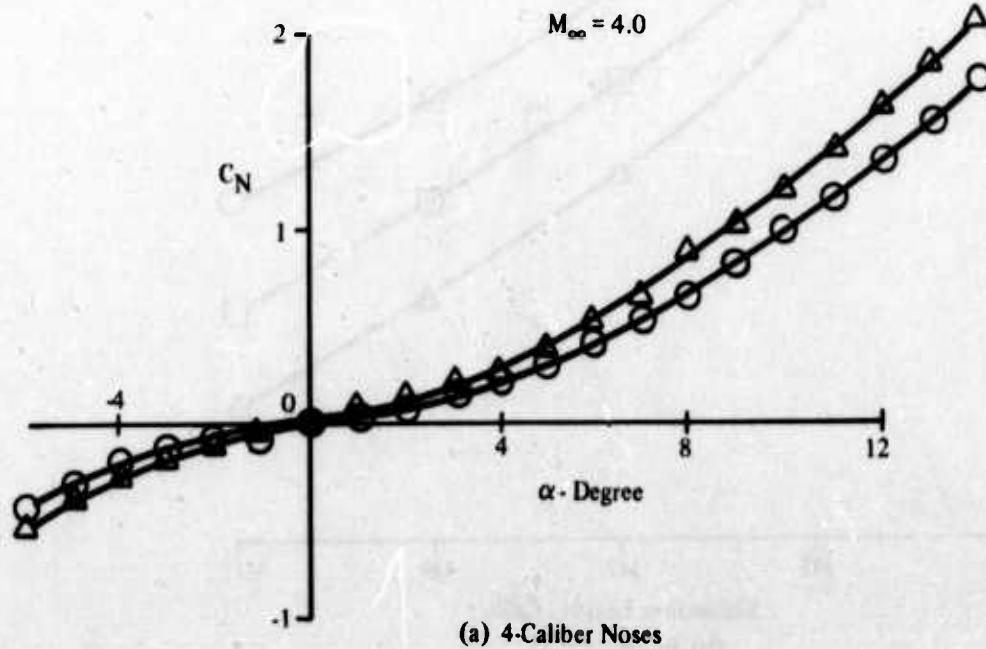
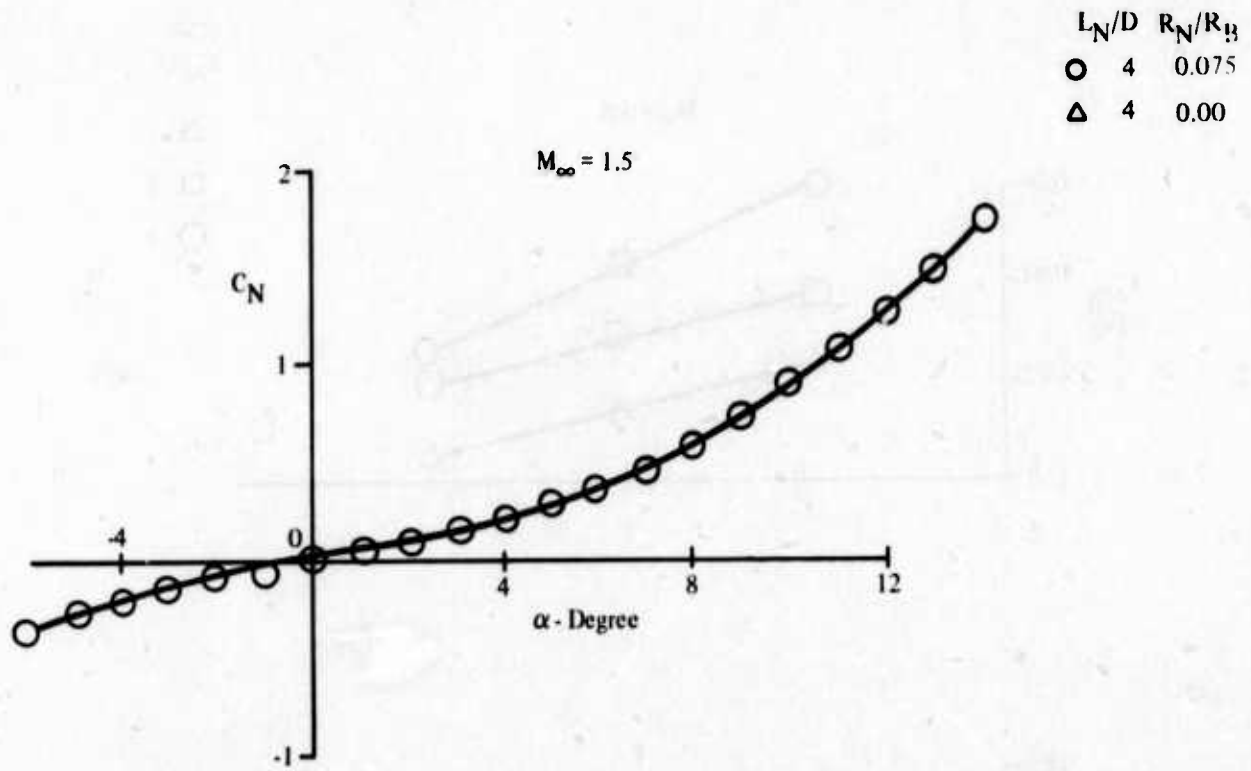
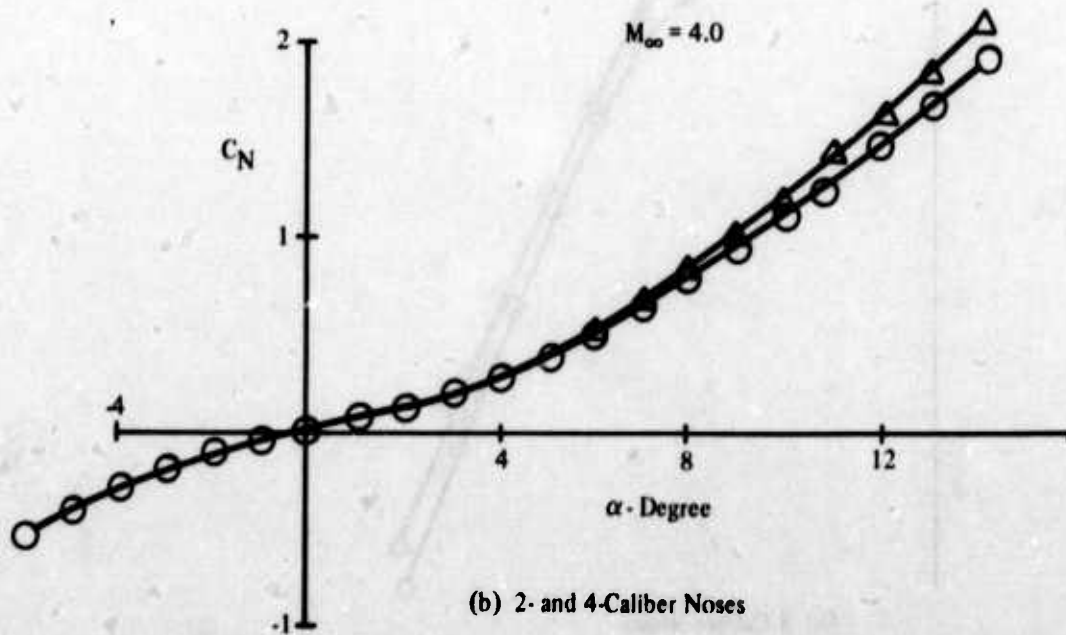
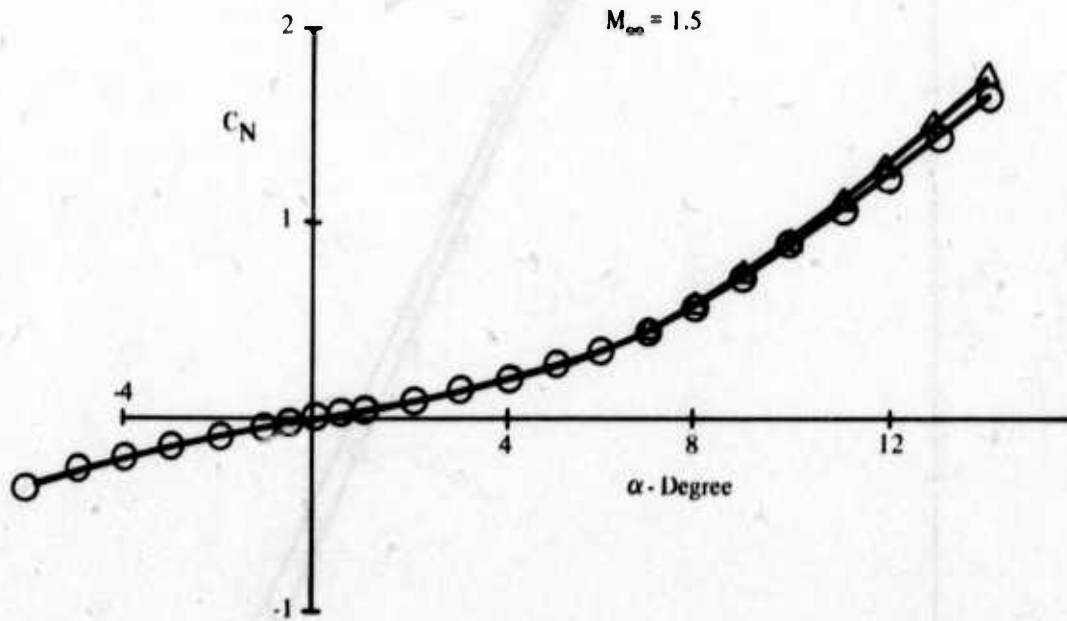


Figure 23. Variation of Normal Force Coefficient with Angle of Attack for 2- and 4-Caliber Noses on 9-Caliber Midsection

$L_N/D$	$R_N/R_B$
○ 2	0.00
△ 4	0.00



(b) 2- and 4-Caliber Noses

Figure 23. Variation of Normal Force Coefficient with Angle of Attack for 2- and 4-Caliber Noses on 9-Caliber Midsection (Concluded)

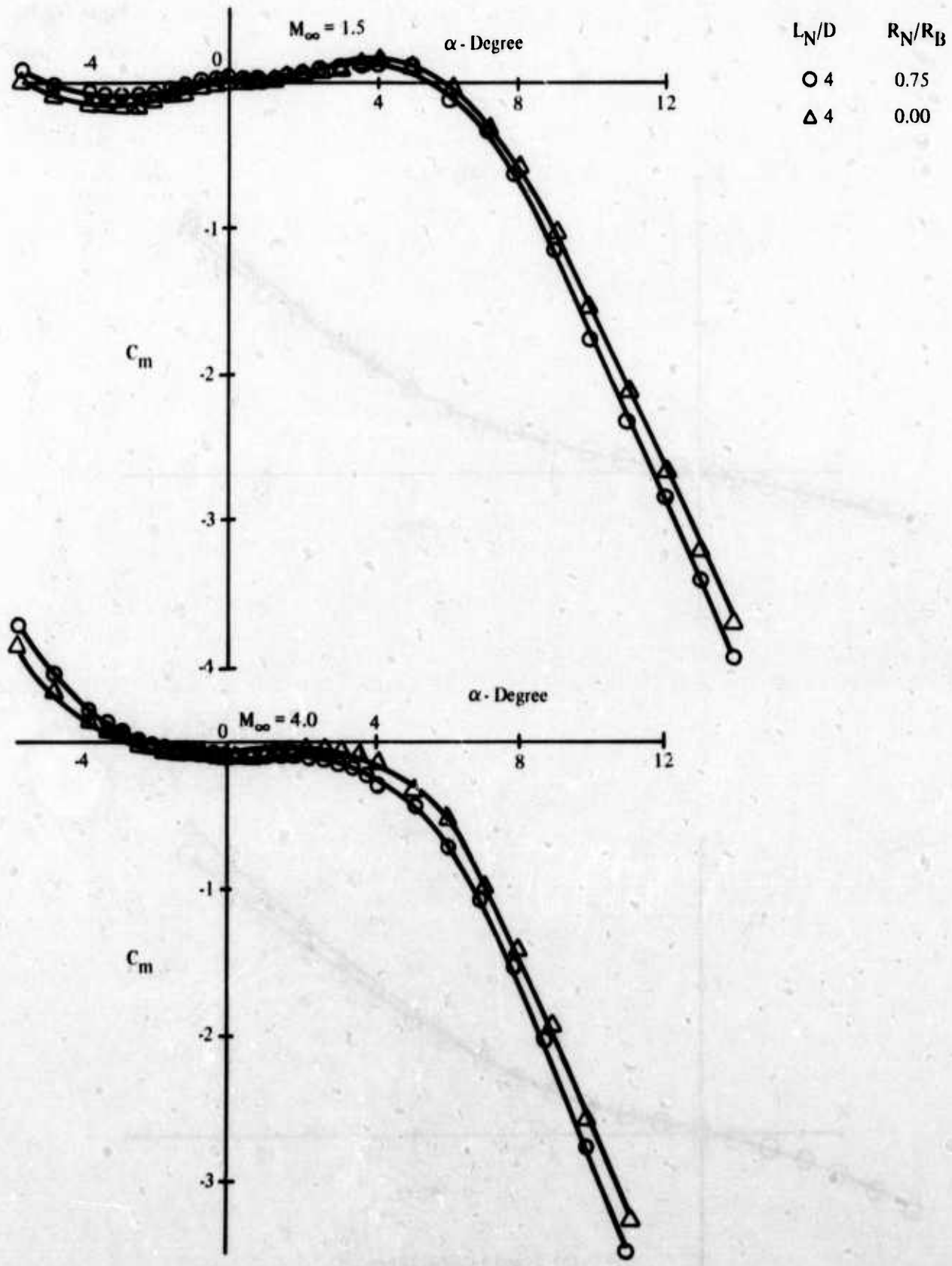
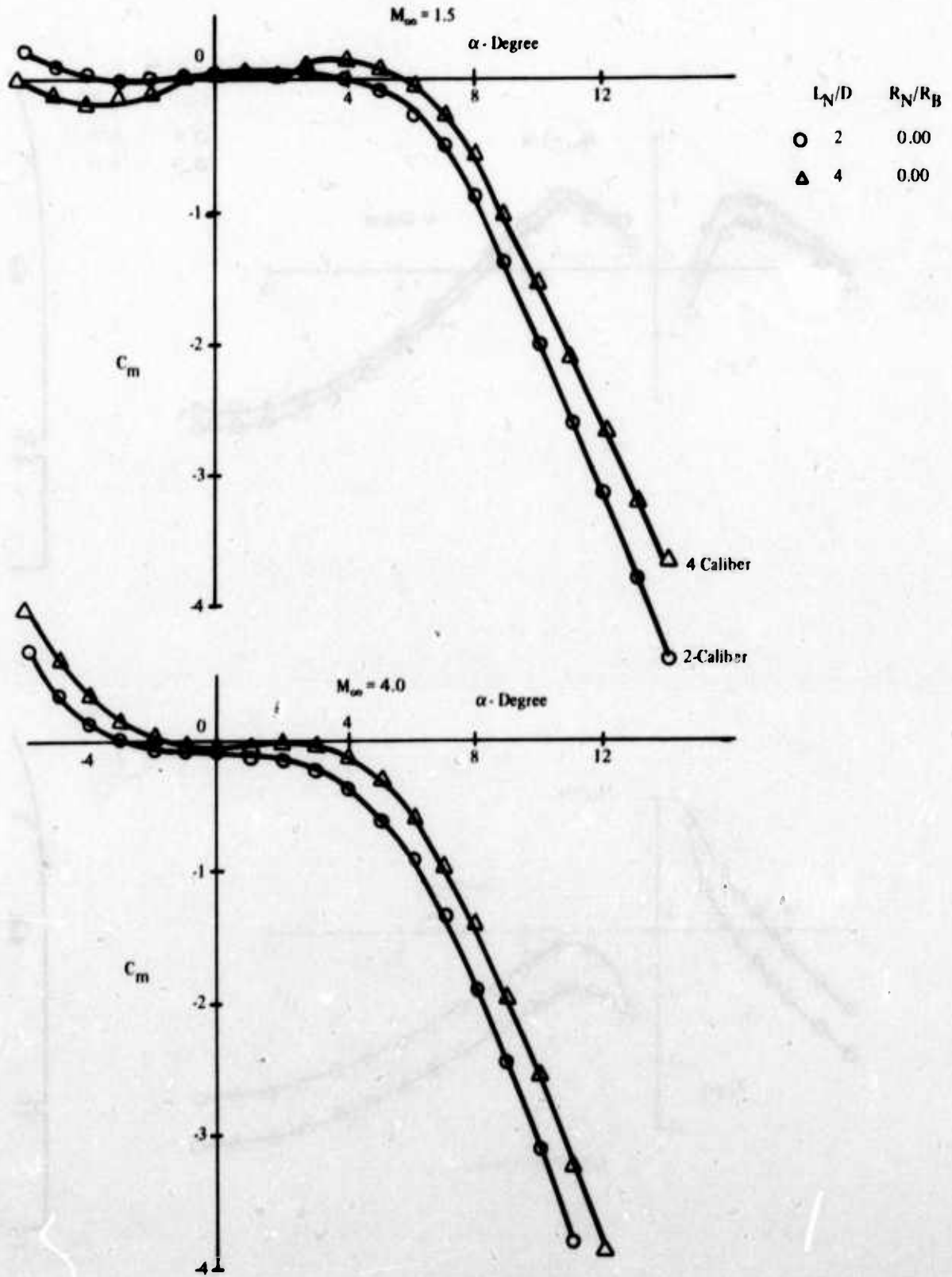


Figure 24. Variation of Pitching Moment Coefficient with Angle of Attack for 2- and 4-Caliber Noses on 9-Caliber Midsection



(b) 2- and 4-Caliber Noses

Figure 24. Variation of Pitching Moment Coefficient with Angle of Attack for 2- and 4-Caliber Noses on 9-Caliber Midsection (Concluded)

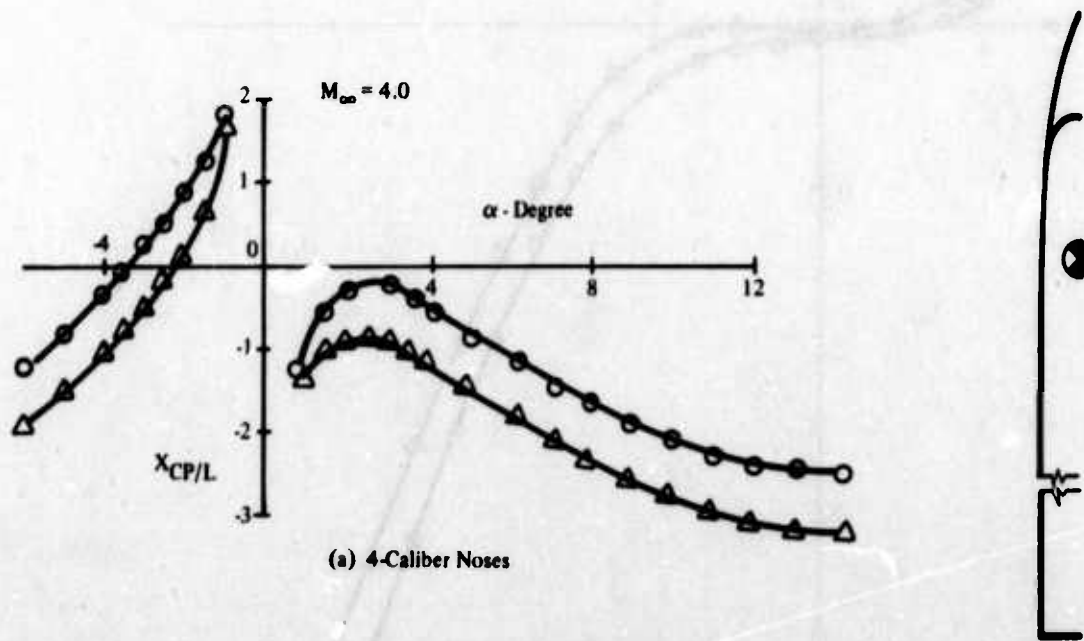
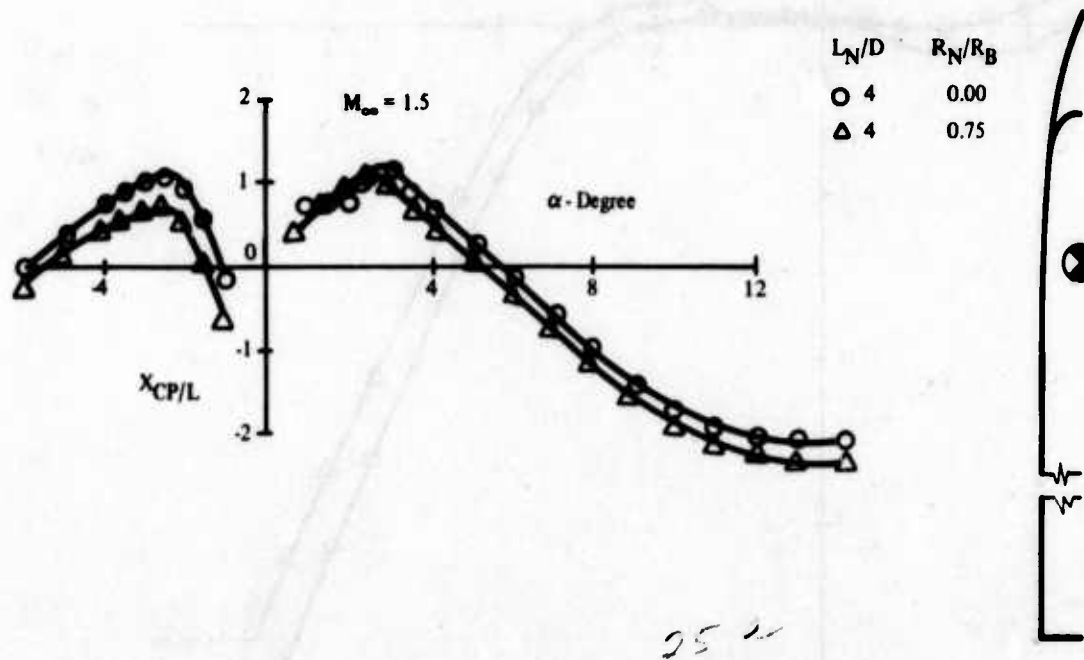


Figure 25. Variation of Center of Pressure with Angle of Attack for 2- and 4-Caliber Noses on 9-Caliber Midsection

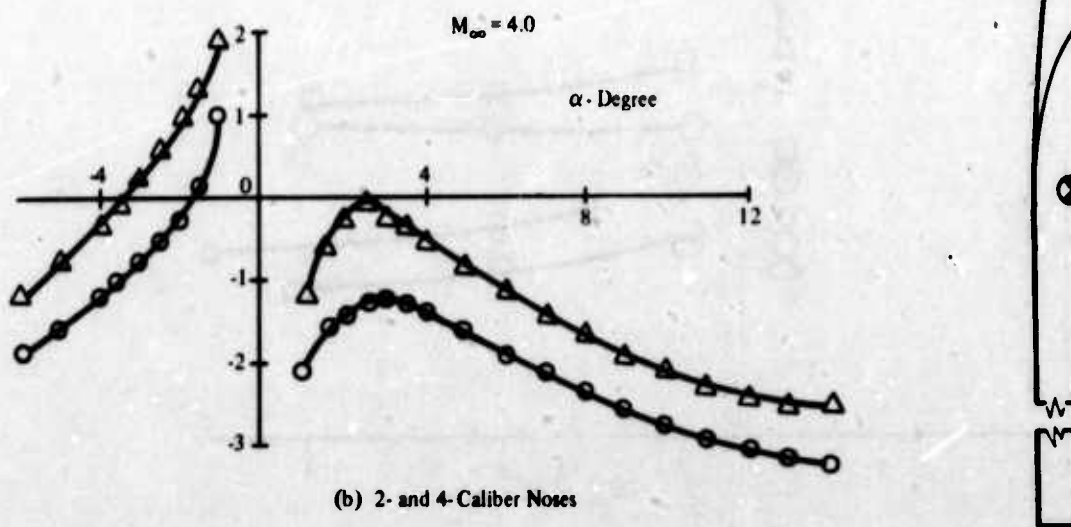
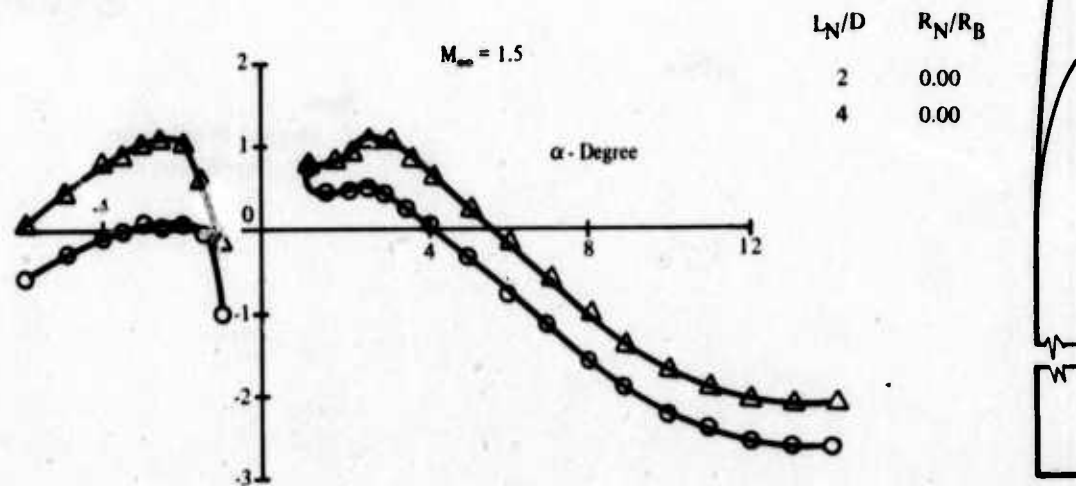


Figure 25. Variation of Center of Pressure with Angle of Attack for 2- and 4-Caliber Noses on 9-Caliber Midsection (Concluded)

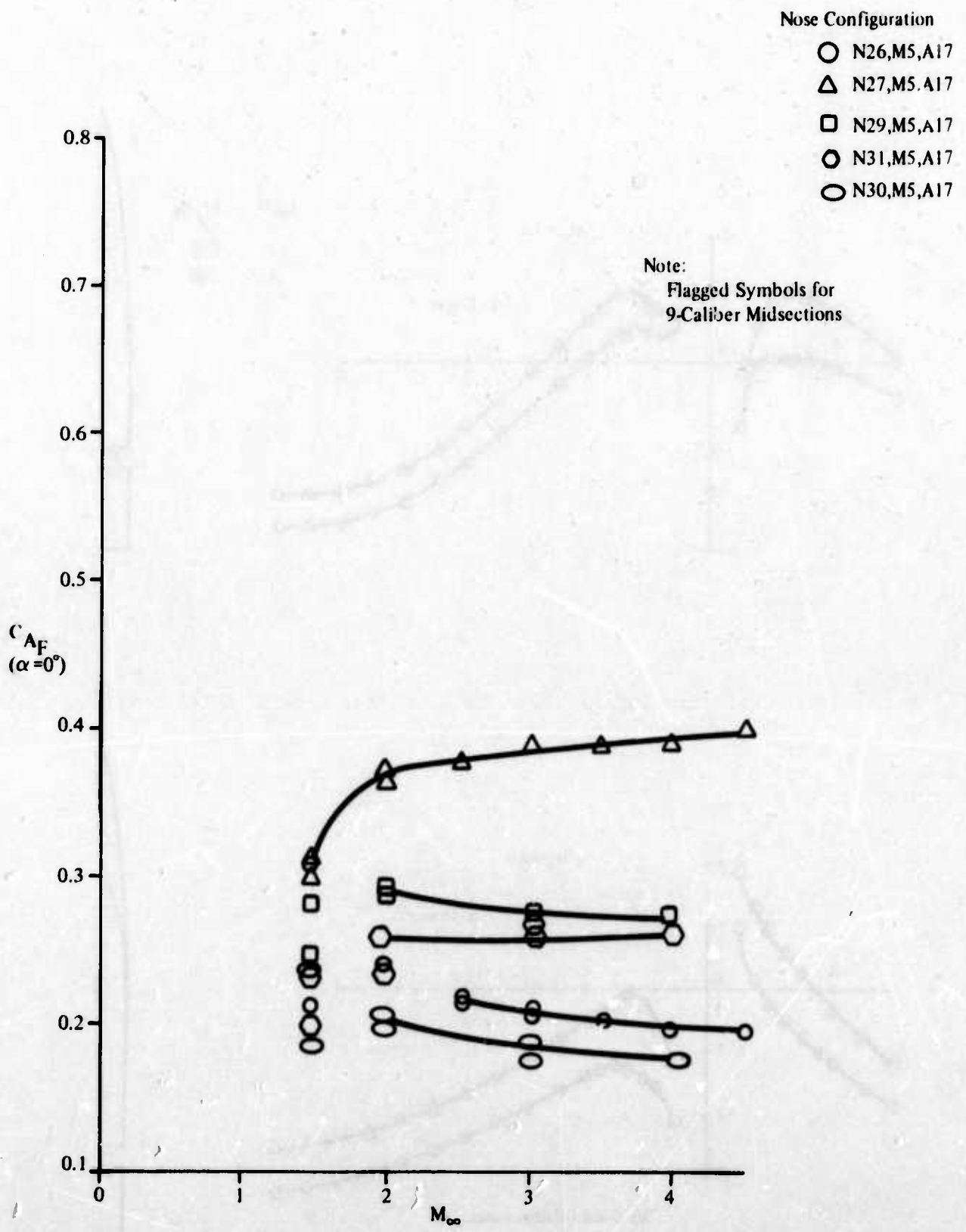
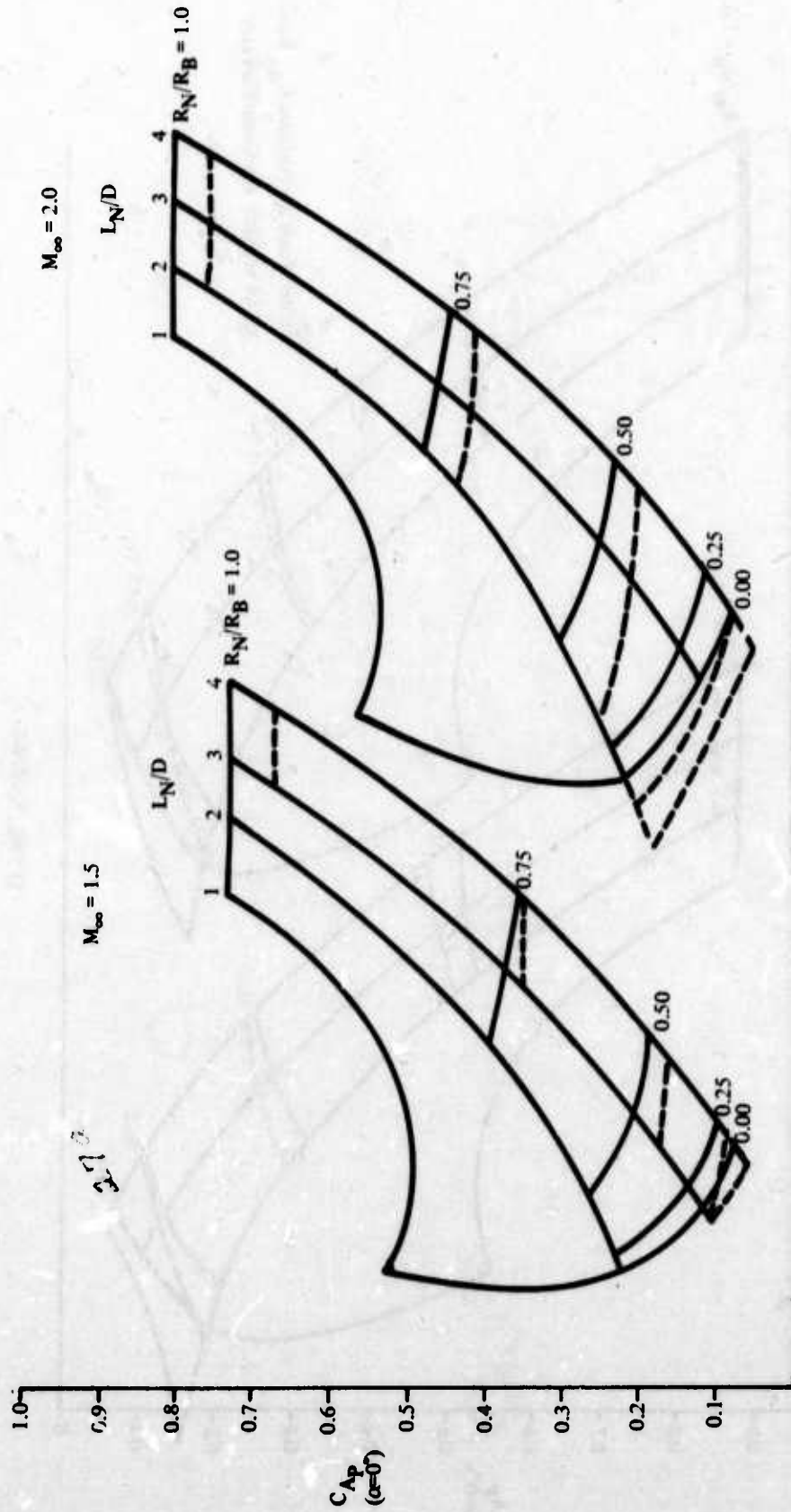
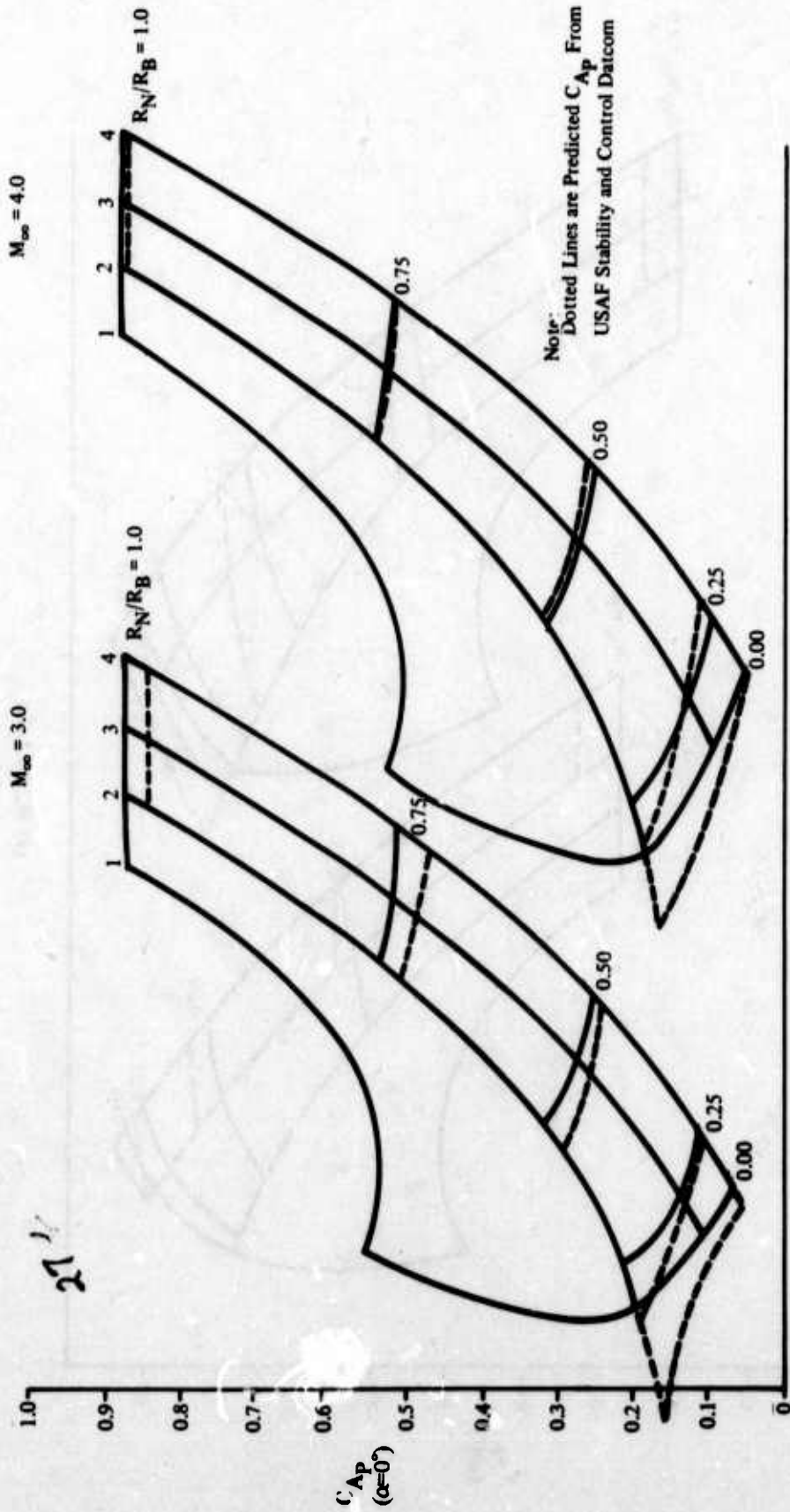


Figure 26. Variation of Forebody Axial Force Coefficient with Mach Number for 2.25-Caliber Noses on 5- and 9-Caliber Midsections



(a)  $M_\infty = 1.5, 2.0$

Figure 27. Comparison of Measured Nose Pressure Axial Force Coefficient with DATCOM Predictions for 2-, 3-, and 4-Caliber Noses



(b)  $M_\infty = 3.0, 4.0$

Figure 27. Comparison of Measured Nose Pressure Axial Force Coefficient with DATCOM Predictions for 2-, 3-, and 4-Caliber Noses (Concluded)

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APPENDIX A

(1T) Transonic Tabulated Data

Case No.	Mach	Angle	Cl	Cd	Cl/Cd	Cl/q	Cd/q	Cl/Cd	Cl/q	Cd/q
1	0.8	0	0.00	0.00						
1	0.8	5	0.00	0.00						
1	0.8	10	0.00	0.00						
1	0.8	15	0.00	0.00						
1	0.8	20	0.00	0.00						
1	0.8	25	0.00	0.00						
1	0.8	30	0.00	0.00						
1	0.8	35	0.00	0.00						
1	0.8	40	0.00	0.00						
1	0.8	45	0.00	0.00						
1	0.8	50	0.00	0.00						
1	0.8	55	0.00	0.00						
1	0.8	60	0.00	0.00						
1	0.8	65	0.00	0.00						
1	0.8	70	0.00	0.00						
1	0.8	75	0.00	0.00						
1	0.8	80	0.00	0.00						
1	0.8	85	0.00	0.00						
1	0.8	90	0.00	0.00						
1	0.8	95	0.00	0.00						
1	0.8	100	0.00	0.00						
1	0.8	105	0.00	0.00						
1	0.8	110	0.00	0.00						
1	0.8	115	0.00	0.00						
1	0.8	120	0.00	0.00						
1	0.8	125	0.00	0.00						
1	0.8	130	0.00	0.00						
1	0.8	135	0.00	0.00						
1	0.8	140	0.00	0.00						
1	0.8	145	0.00	0.00						
1	0.8	150	0.00	0.00						
1	0.8	155	0.00	0.00						
1	0.8	160	0.00	0.00						
1	0.8	165	0.00	0.00						
1	0.8	170	0.00	0.00						
1	0.8	175	0.00	0.00						
1	0.8	180	0.00	0.00						

PWT/(1T) RUN SCHEDULE

Part No	Config	M <sub>∞</sub>	Part No	Config	M <sub>∞</sub>	Part No	Config	M <sub>∞</sub>	Part No	Config	M <sub>∞</sub>
3	N22 M9	0.6	50	N16 M9	0.6	100	N14 M5	0.6	154	N21 M5	1.5
4	N22 M9	0.8	51	N16 M9	0.8	101	N14 M5	0.8	155	N21 M5	1.2
5	N22 M9	1.0	52	N16 M9	1.0	104	N14 M5	1.0	166	N22 M5	1.2
6	N22 M9	1.2	53	N16 M9	1.2	105	N14 M5	1.2	167	N22 M5	1.5
7	N22 M9	1.5	54	N16 M9	1.5	106	N14 M5	1.5	168	N22 M5	1.0
11	N25 M9	1.5	57	N17 M9	1.5	109	N15 M5	1.5	169	N22 M5	0.8
12	N25 M9	1.2	61	N17 M9	1.2	110	N15 M5	1.2	170	N22 M5	0.6
13	N25 M9	1.0	63	N17 M9	1.0	112	N15 M5	0.0	173	N21 M5	0.6
14	N25 M9	0.8	64	N17 M9	0.8	113	N15 M5	0.8	176	N21 M5	0.8
15	N25 M9	0.6	65	N17 M9	0.6	114	N15 M5	0.6	177	N21 M5	1.0
18	N23 M9	0.6	68	N18 M9	0.7	117	N17 M5	0.6	180	N23 M5	0.6
19	N23 M9	0.8	69	N18 M9	0.8	118	N17 M5	0.8	181	N23 M5	0.8
20	N23 M9	1.0	70	N18 M9	1.0	119	N17 M5	1.0	184	N23 M5	1.0
21	N23 M9	1.2	71	N18 M9	1.2	120	N17 M5	1.2	185	N23 M5	1.2
22	N23 M9	1.5	72	N18 M9	1.5	121	N17 M5	1.5	186	N23 M5	1.5
25	N24 M9	1.5	75	N19 M9	1.5	131	N18 M5	0.6	189	N24 M5	1.5
29	N24 M9	1.2	76	N19 M9	1.2	132	N18 M5	0.8	190	N24 M5	1.2
30	N24 M9	1.0	77	N19 M9	1.0	133	N18 M5	1.0	191	N24 M5	1.0
31	N24 M9	0.8	78	N19 M9	0.8	134	N18 M5	1.2	192	N24 M5	0.8
32	N24 M9	0.6	79	N19 M9	0.6	135	N18 M5	1.5	193	N24 M5	0.6
35	N14 M9	0.6	84	N20 M9	0.6	138	N19 M5	1.5	196	N25 M5	0.6
36	N14 M9	0.8	85	N20 M9	0.8	139	N19 M5	1.2	197	N25 M5	0.8
37	N14 M9	1.0	86	N20 M9	1.0	140	N19 M5	1.0	198	N25 M5	1.0
39	N14 M9	1.2	87	N20 M9	1.2	143	N19 M5	0.8	201	N25 M5	1.2
40	N14 M9	1.5	90	N20 M9	1.5	144	N19 M5	0.6	202	N25 M5	1.5
43	N15 M9	1.5	93	N21 M9	1.5	147	N20 M5	0.6	205	N16 M5	1.5
44	N15 M9	1.2	94	N21 M9	1.2	148	N20 M5	0.8	206	N16 M5	1.2
45	N15 M9	1.0	95	N21 M9	1.0	149	N20 M5	1.0	207	N16 M5	1.0
46	N15 M9	0.8	96	N21 M9	0.8	150	N20 M5	1.2	208	N16 M5	0.8
47	N15 M9	0.6	97	N21 M9	0.6	151	N20 M5	1.5	209	N16 M5	0.6

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M09A17	3	.60	2.0255	0.0000	0.926	5.05	1.002	0.0914	0.002	1.94	2.56	1.35
M09A17	3	.60	1.0010	0.0000	0.0000	0.0000	0.0000	0.0958	0.002	1.00	2.56	1.12
M09A17	3	.60	1.0035	0.0000	0.0000	0.0000	0.0000	0.0958	0.001	1.00	2.56	1.12
M09A17	3	.60	1.0042	0.0000	0.0000	0.0000	0.0000	0.0825	0.004	1.00	2.56	1.12
M09A17	3	.60	1.0082	0.0000	0.0000	0.0000	0.0000	0.0622	0.007	1.00	2.56	1.12
M09A17	3	.60	1.0117	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	1.00	2.56	1.12
M09A17	3	.60	1.0117	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	1.00	2.56	1.12
M09A17	3	.60	1.0242	0.0000	0.0000	0.0000	0.0000	0.0246	0.008	1.00	2.56	1.06
M09A17	4	.60	2.0336	0.0000	0.093	0.55	0.001	0.0726	0.003	1.50	2.69	1.15
M09A17	4	.60	1.0019	0.0000	0.0000	0.0000	0.0000	0.0853	0.002	1.20	2.69	1.12
M09A17	4	.60	1.0035	0.0000	0.0000	0.0000	0.0000	0.0853	0.002	1.20	2.69	1.12
M09A17	4	.60	1.0035	0.0000	0.0000	0.0000	0.0000	0.0700	0.000	1.20	2.69	1.12
M09A17	4	.60	1.0121	0.0000	0.0000	0.0000	0.0000	0.0829	0.000	1.20	2.69	1.12
M09A17	4	.60	1.0121	0.0000	0.0000	0.0000	0.0000	0.0829	0.000	1.20	2.69	1.12
M09A17	4	.60	1.0230	0.0000	0.0000	0.0000	0.0000	0.0829	0.001	1.20	2.69	1.12
M09A17	4	.60	1.0237	0.0000	0.0000	0.0000	0.0000	0.0829	0.001	1.20	2.69	1.12
M09A17	5	1.00	2.0255	0.0000	1.061	16.97	0.002	0.0570	0.001	1.50	3.54	1.22
M09A17	5	1.00	1.0022	0.0000	0.0000	0.0000	0.0000	0.0710	0.000	1.20	3.54	1.15
M09A17	5	1.00	1.0022	0.0000	0.0000	0.0000	0.0000	0.0710	0.000	1.20	3.54	1.15
M09A17	5	1.00	1.0099	0.0000	0.0000	0.0000	0.0000	0.0602	0.000	1.20	3.54	1.15
M09A17	5	1.00	1.0116	0.0000	0.0000	0.0000	0.0000	0.0602	0.000	1.20	3.54	1.15
M09A17	5	1.00	1.0139	0.0000	0.0000	0.0000	0.0000	0.0602	0.000	1.20	3.54	1.15
M09A17	5	1.00	1.0237	0.0000	0.0000	0.0000	0.0000	0.0602	0.000	1.20	3.54	1.15
M09A17	6	1.00	2.0259	0.0000	1.020	16.97	0.005	0.157	0.003	1.50	4.05	1.68
M09A17	6	1.00	1.0031	0.0000	0.0000	0.0000	0.0000	0.157	0.002	1.20	4.05	1.73
M09A17	6	1.00	1.0031	0.0000	0.0000	0.0000	0.0000	0.157	0.002	1.20	4.05	1.73
M09A17	6	1.00	1.0061	0.0000	0.0000	0.0000	0.0000	0.157	0.001	1.20	4.05	1.69
M09A17	6	1.00	1.0116	0.0000	0.0000	0.0000	0.0000	0.157	0.001	1.20	4.05	1.69
M09A17	6	1.00	1.0116	0.0000	0.0000	0.0000	0.0000	0.157	0.001	1.20	4.05	1.69
M09A17	6	1.00	1.0237	0.0000	0.0000	0.0000	0.0000	0.157	0.001	1.20	4.05	1.68
M09A17	6	1.00	1.0246	0.0000	0.0000	0.0000	0.0000	0.157	0.001	1.20	4.05	1.65
M09A17	6	1.00	1.0246	0.0000	0.0000	0.0000	0.0000	0.157	0.001	1.20	4.05	1.65



CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CV	CLN	CLL	KCP	CAT	CAF
N25M09A17	14	.60	2.036	.0000	.005	.057	.005	.0023	.004	.62	300	148
N25M09A17	14	.60	1.019	.0000	.005	.056	.005	.0033	.004	.32	300	149
N25M09A17	14	.60	1.039	.0000	.005	.057	.005	.0033	.004	.22	300	149
N25M09A17	14	.60	1.076	.0000	.005	.057	.005	.0033	.004	.57	300	149
N25M09A17	14	.60	1.165	.0000	.005	.057	.005	.0033	.004	.00	300	149
N25M09A17	14	.60	1.291	.0000	.005	.057	.005	.0033	.004	.30	300	149
N25M09A17	14	.60	1.336	.0000	.005	.057	.005	.0033	.004	.32	300	149
N25M09A17	15	.60	2.020	.0000	.005	.057	.005	.0033	.004	.30	300	149
N25M09A17	15	.60	2.100	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	15	.60	2.120	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	15	.60	2.142	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	15	.60	2.164	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	15	.60	2.186	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	15	.60	2.208	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	15	.60	2.230	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	18	.60	2.020	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	18	.60	2.100	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	18	.60	2.120	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	18	.60	2.142	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	18	.60	2.164	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	18	.60	2.186	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	18	.60	2.208	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	18	.60	2.230	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	19	.60	2.020	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	19	.60	2.100	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	19	.60	2.120	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	19	.60	2.142	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	19	.60	2.164	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	19	.60	2.186	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	19	.60	2.208	.0000	.005	.057	.005	.0033	.004	.69	300	149
N25M09A17	19	.60	2.230	.0000	.005	.057	.005	.0033	.004	.69	300	149











CONFIG	PAPT NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N16M09A17	52	1.00	2.0451	0.0000	0.22	165	0.01	0.49	0.02	7.96	4.97	1.86
N16M09A17	52	1.00	2.0123	0.0000	0.50	0.40	0.00	0.51	0.00	1.03	3.07	1.88
N16M09A17	52	1.00	2.0237	0.0000	0.50	0.40	0.00	0.51	0.00	1.13	3.09	1.89
N16M09A17	52	1.00	2.0669	0.0000	1.00	0.55	0.00	0.53	0.00	0.80	3.09	1.90
N16M09A17	52	1.00	2.0459	0.0000	3.20	2.59	0.00	0.62	0.00	1.12	4.42	1.78
N16M09A17	52	1.00	2.1453	0.0000	6.36	4.44	0.00	0.71	0.00	0.92	4.56	1.74
N16M09A17	52	1.00	2.2323	0.0000	8.25	2.54	0.00	0.83	0.00	1.02	4.75	1.69
N16M09A17	52	1.00	2.3409	0.0000	1.00	2.53	0.00	0.93	0.00	1.13	4.86	1.57
N16M09A17	53	1.20	2.0540	0.0000	0.94	1.15	0.00	1.25	0.00	1.22	5.34	3.03
N16M09A17	53	1.20	2.0227	0.0000	2.47	0.00	0.00	1.19	0.00	2.22	5.39	3.02
N16M09A17	53	1.20	2.0525	0.0000	3.32	0.00	0.00	1.11	0.00	2.22	5.39	3.02
N16M09A17	53	1.20	2.0947	0.0000	4.94	0.00	0.00	1.11	0.00	2.22	5.39	3.02
N16M09A17	53	1.20	2.2331	0.0000	6.97	0.00	0.00	1.11	0.00	2.22	5.39	3.02
N16M09A17	53	1.20	2.3413	0.0000	9.27	0.00	0.00	1.14	0.00	2.22	5.39	3.02
N16M09A17	54	1.50	2.0507	0.0000	0.55	0.25	0.00	0.25	0.00	2.71	5.39	3.45
N16M09A17	54	1.50	2.0716	0.0000	1.07	0.60	0.00	0.26	0.00	2.71	5.39	3.45
N16M09A17	54	1.50	2.1071	0.0000	1.61	1.00	0.00	0.26	0.00	2.71	5.39	3.45
N16M09A17	54	1.50	2.2232	0.0000	2.55	1.40	0.00	0.26	0.00	2.71	5.39	3.45
N16M09A17	54	1.50	2.3629	0.0000	3.56	1.90	0.00	0.26	0.00	2.71	5.39	3.45
N16M09A17	54	1.50	2.4773	0.0000	4.50	2.40	0.00	0.26	0.00	2.71	5.39	3.45
N17M09A17	57	1.50	2.0527	0.0000	0.57	0.25	0.00	0.25	0.00	2.51	5.39	4.65
N17M09A17	57	1.50	2.0716	0.0000	1.07	0.60	0.00	0.26	0.00	2.51	5.39	4.65
N17M09A17	57	1.50	2.1099	0.0000	1.62	1.00	0.00	0.26	0.00	2.51	5.39	4.65
N17M09A17	57	1.50	2.2269	0.0000	2.57	1.40	0.00	0.26	0.00	2.51	5.39	4.65
N17M09A17	57	1.50	2.3657	0.0000	3.59	1.90	0.00	0.26	0.00	2.51	5.39	4.65
N17M09A17	57	1.50	2.4773	0.0000	4.53	2.40	0.00	0.26	0.00	2.51	5.39	4.65

CONFIG	PART NO	MAC	ALPHA	RETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M17M09A17	61	1.00	2.050	00	09	17	0000	17	00	13	595	365
M17M09A17	61	1.00	2.037	00	00	10	0000	00	00	13	585	361
M17M09A17	61	1.00	1.059	00	00	05	0000	05	00	13	585	359
M17M09A17	61	1.00	1.059	00	00	05	0000	05	00	13	595	359
M17M09A17	61	1.00	1.059	00	00	05	0000	05	00	13	600	361
M17M09A17	61	1.00	1.177	00	11	10	0000	10	00	13	600	376
M17M09A17	61	1.00	1.242	00	12	15	0000	12	00	13	681	376
M17M09A17	61	1.00	1.347	00	15	19	0000	15	00	13	681	373
M17M09A17	61	1.00	1.457	00	17	23	0000	17	00	13	694	373
M17M09A17	63	1.00	2.050	00	09	17	0000	17	00	14	401	195
M17M09A17	63	1.00	2.037	00	00	10	0000	00	00	14	401	195
M17M09A17	63	1.00	1.059	00	00	05	0000	05	00	14	401	195
M17M09A17	63	1.00	1.059	00	00	05	0000	05	00	14	401	195
M17M09A17	63	1.00	1.059	00	00	05	0000	05	00	14	401	195
M17M09A17	63	1.00	1.177	00	11	10	0000	10	00	14	401	195
M17M09A17	63	1.00	1.242	00	12	15	0000	12	00	14	401	195
M17M09A17	63	1.00	1.347	00	15	19	0000	15	00	14	401	195
M17M09A17	63	1.00	1.457	00	17	23	0000	17	00	14	401	195
M17M09A17	64	1.00	2.050	00	09	17	0000	17	00	15	401	195
M17M09A17	64	1.00	2.037	00	00	10	0000	00	00	15	401	195
M17M09A17	64	1.00	1.059	00	00	05	0000	05	00	15	401	195
M17M09A17	64	1.00	1.059	00	00	05	0000	05	00	15	401	195
M17M09A17	64	1.00	1.059	00	00	05	0000	05	00	15	401	195
M17M09A17	64	1.00	1.177	00	11	10	0000	10	00	15	401	195
M17M09A17	64	1.00	1.242	00	12	15	0000	12	00	15	401	195
M17M09A17	64	1.00	1.347	00	15	19	0000	15	00	15	401	195
M17M09A17	64	1.00	1.457	00	17	23	0000	17	00	15	401	195
M17M09A17	65	1.00	2.050	00	09	17	0000	17	00	16	401	195
M17M09A17	65	1.00	2.037	00	00	10	0000	00	00	16	401	195
M17M09A17	65	1.00	1.059	00	00	05	0000	05	00	16	401	195
M17M09A17	65	1.00	1.059	00	00	05	0000	05	00	16	401	195
M17M09A17	65	1.00	1.059	00	00	05	0000	05	00	16	401	195
M17M09A17	65	1.00	1.177	00	11	10	0000	10	00	16	401	195
M17M09A17	65	1.00	1.242	00	12	15	0000	12	00	16	401	195
M17M09A17	65	1.00	1.347	00	15	19	0000	15	00	16	401	195
M17M09A17	65	1.00	1.457	00	17	23	0000	17	00	16	401	195

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N18M09A17	68	.60	4	0.000	69	.039	.001	.079	.003	.500	.269	.120
N18M09A17	68	.60	021	0.000	69	.056	.001	.080	.003	.441	.265	.120
N18M09A17	68	.60	010	0.000	69	.065	.001	.087	.005	.541	.264	.120
N18M09A17	68	.60	023	0.000	69	.053	.002	.094	.005	.434	.266	.120
N18M09A17	68	.60	036	0.000	69	.046	.003	.080	.004	.390	.260	.120
N18M09A17	68	.60	073	0.000	69	.093	.000	.100	.007	.336	.263	.120
N18M09A17	68	.60	091	0.000	69	.069	.000	.088	.006	.372	.308	.110
N18M09A17	68	.60	148	0.000	69	.115	.000	.100	.009	.188	.313	.110
N18M09A17	68	.60	224	0.000	69	.161	.000	.205	.009	.473	.323	.110
N18M09A17	69	.60	034	0.000	69	.069	.002	.059	.003	.749	.286	.120
N18M09A17	69	.60	010	0.000	69	.055	.002	.067	.003	.480	.285	.120
N18M09A17	69	.60	035	0.000	69	.065	.002	.061	.004	.374	.280	.120
N18M09A17	69	.60	055	0.000	69	.024	.003	.061	.004	.510	.288	.120
N18M09A17	69	.60	117	0.000	69	.047	.000	.057	.005	.210	.286	.120
N18M09A17	69	.60	117	0.000	69	.157	.000	.057	.005	.527	.287	.120
N18M09A17	69	.60	222	0.000	69	.271	.000	.150	.005	.676	.315	.120
N18M09A17	69	.60	346	0.000	69	.815	.000	.401	.006	.309	.323	.120
N18M09A17	70	1.00	049	0.000	70	.142	.001	.056	.002	.309	.267	.120
N18M09A17	70	1.00	027	0.000	70	.052	.001	.064	.003	.344	.265	.120
N18M09A17	70	1.00	062	0.000	70	.100	.001	.062	.003	.520	.278	.120
N18M09A17	70	1.00	142	0.000	70	.376	.000	.039	.003	.709	.378	.120
N18M09A17	70	1.00	247	0.000	70	.667	.000	.059	.005	.443	.409	.120
N18M09A17	70	1.00	347	0.000	70	.942	.000	.078	.006	.681	.427	.120
N18M09A17	71	1.25	054	0.000	71	.073	.000	.069	.000	.310	.294	.120
N18M09A17	71	1.25	062	0.000	71	.075	.000	.069	.000	.322	.294	.120
N18M09A17	71	1.25	060	0.000	71	.063	.000	.061	.001	.766	.444	.120
N18M09A17	71	1.25	060	0.000	71	.063	.000	.061	.001	.725	.446	.120
N18M09A17	71	1.25	104	0.000	71	.238	.005	.114	.001	.253	.456	.120
N18M09A17	71	1.25	104	0.000	71	.992	.000	.101	.002	.189	.470	.120
N18M09A17	71	1.25	251	0.000	71	.515	.000	.201	.005	.572	.504	.120
N18M09A17	71	1.25	351	0.000	71	.912	.000	.381	.005	.310	.513	.120
N18M09A17	71	1.25	451	0.000	71	.213	.000	.452	.005	.581	.520	.120

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
NI9M09417	72	1.50	-2.065	0.000	0.000	0.025	0.000	0.255	0.004	0.035	3.95	1.99
NI9M09417	72	1.50	1.037	0.000	0.045	0.075	0.000	0.020	0.000	1.660	3.95	2.01
NI9M09417	72	1.50	3.036	0.000	0.000	0.115	0.000	0.225	0.000	0.215	3.97	2.01
NI9M09417	72	1.50	1.106	0.000	0.000	0.135	0.000	0.050	0.000	0.555	4.10	2.02
NI9M09417	72	1.50	1.137	0.000	0.000	0.111	0.000	0.050	0.000	1.557	4.37	2.13
NI9M09417	72	1.50	0.290	0.000	0.350	0.359	0.000	0.140	0.000	1.607	4.43	2.10
NI9M09417	72	1.50	10.411	0.000	0.000	1.655	0.000	0.361	0.000	0.222	4.57	1.98
NI9M09417	72	1.50	12.733	0.000	1.350	1.561	0.000	0.47	0.000	0.399	4.57	1.98
NI9M09417	75	1.50	-2.062	0.000	0.000	0.24	0.000	0.09	0.000	2.00	3.95	2.15
NI9M09417	75	1.50	0.000	0.000	0.000	0.020	0.000	0.063	0.000	0.571	3.95	2.12
NI9M09417	75	1.50	0.037	0.000	0.000	0.070	0.000	0.050	0.000	1.1	3.95	2.22
NI9M09417	75	1.50	0.067	0.000	0.000	0.125	0.000	0.070	0.000	0.6	4.01	2.22
NI9M09417	75	1.50	1.133	0.000	0.000	0.111	0.000	0.050	0.000	0.6	4.01	2.22
NI9M09417	75	1.50	2.222	0.000	0.000	0.940	0.000	0.002	0.000	0.9	4.01	2.22
NI9M09417	75	1.50	4.424	0.000	0.000	1.50	0.000	0.00	0.000	0.266	4.65	2.25
NI9M09417	75	1.50	12.471	0.000	0.000	6.99	0.000	0.00	0.000	0.474	4.65	2.25
NI9M09417	76	1.20	-2.051	0.000	0.000	0.70	0.000	0.06	0.000	0.383	4.50	2.22
NI9M09417	76	1.20	0.000	0.000	0.000	0.00	0.000	0.00	0.000	0.4	4.50	2.22
NI9M09417	76	1.20	0.050	0.000	0.000	0.23	0.000	0.00	0.000	0.5	4.50	2.22
NI9M09417	76	1.20	0.000	0.000	0.000	0.00	0.000	0.00	0.000	0.29	4.50	2.22
NI9M09417	76	1.20	1.117	0.000	0.000	0.220	0.000	0.021	0.000	0.141	4.50	2.22
NI9M09417	76	1.20	2.330	0.000	0.000	0.235	0.000	0.00	0.000	0.371	4.50	2.22
NI9M09417	76	1.20	4.455	0.000	0.000	1.96	0.000	0.05	0.000	0.32	4.50	2.22
NI9M09417	76	1.20	12.471	0.000	0.000	2.21	0.000	0.00	0.000	0.1	4.50	2.22
NI9M09417	77	1.00	-2.037	0.000	0.000	0.30	0.000	0.02	0.000	0.57	3.72	1.50
NI9M09417	77	1.00	0.000	0.000	0.000	0.00	0.000	0.00	0.000	0.1	3.72	1.50
NI9M09417	77	1.00	0.040	0.000	0.000	0.25	0.000	0.00	0.000	0.2	3.72	1.50
NI9M09417	77	1.00	0.093	0.000	0.000	0.60	0.000	0.00	0.000	0.5	3.72	1.50
NI9M09417	77	1.00	1.141	0.000	0.000	1.51	0.000	0.00	0.000	0.160	3.72	1.50
NI9M09417	77	1.00	2.330	0.000	0.000	2.26	0.000	0.00	0.000	0.2	3.72	1.50
NI9M09417	77	1.00	4.473	0.000	0.000	1.99	0.000	0.00	0.000	0.1	3.72	1.50
NI9M09417	77	1.00	12.471	0.000	0.000	6.99	0.000	0.00	0.000	0.2	3.72	1.50



CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
NZ0M09A17	86	1.00	-2.0493	0.0000	-.094	162	-.0000	-.049	.0000	1.7625	.385	.174
NZ0M09A17	86	1.00	-.0033	0.0000	-.047	1050	-.0000	-.057	.0000	1.5112	.381	.172
NZ0M09A17	86	1.00	1.0245	0.0000	-.053	-.0722	-.0000	-.057	.0000	1.6192	.381	.171
NZ0M09A17	86	1.00	3.0472	0.0000	-.107	-.0722	-.0000	-.057	.0000	1.805	.385	.173
NZ0M09A17	86	1.00	4.0722	0.0000	-.157	-.0722	-.0000	-.057	.0000	1.805	.405	.168
NZ0M09A17	86	1.00	6.092	0.0000	-.211	-.0722	-.0000	-.057	.0000	1.6237	.425	.153
NZ0M09A17	86	1.00	8.144	0.0000	-.338	-.0722	-.0000	-.057	.0000	1.4515	.450	.145
NZ0M09A17	86	1.00	9.193	0.0000	-.487	-.0722	-.0000	-.057	.0000	1.6889	.450	.145
NZ0M09A17	86	1.00	10.255	0.0000	-.670	-.0722	-.0000	-.057	.0000	1.6889	.479	.144
NZ0M09A17	86	1.00	12.351	0.0000	1.115	-.2368	-.0000	-.302	.0000	1.123	.479	.144
NZ0M09A17	86	1.00	14.442	0.0000	1.115	-.2368	-.0000	-.302	.0000	1.123	.479	.144
NZ0M09A17	87	1.20	-2.0493	0.0000	-.091	104	-.0000	-.115	.0000	1.136	.486	.258
NZ0M09A17	87	1.20	-.0033	0.0000	-.095	1060	-.0000	-.115	.0000	1.359	.483	.257
NZ0M09A17	87	1.20	1.0245	0.0000	-.105	53	-.0000	-.115	.0000	1.559	.483	.257
NZ0M09A17	87	1.20	3.0472	0.0000	-.156	402	-.0000	-.115	.0000	1.428	.491	.255
NZ0M09A17	87	1.20	4.0722	0.0000	-.199	402	-.0000	-.115	.0000	1.428	.491	.255
NZ0M09A17	87	1.20	6.092	0.0000	-.241	644	-.0000	-.115	.0000	1.713	.504	.254
NZ0M09A17	87	1.20	8.144	0.0000	-.349	644	-.0000	-.115	.0000	1.290	.524	.254
NZ0M09A17	87	1.20	9.193	0.0000	-.513	129	-.0000	-.115	.0000	1.290	.524	.254
NZ0M09A17	87	1.20	10.255	0.0000	-.733	129	-.0000	-.115	.0000	1.475	.553	.251
NZ0M09A17	87	1.20	12.351	0.0000	1.214	24	-.0000	-.115	.0000	1.475	.553	.251
NZ0M09A17	87	1.20	14.442	0.0000	1.214	24	-.0000	-.115	.0000	1.475	.553	.251
NZ0M09A17	90	1.50	-2.0526	0.0000	-.091	005	-.0000	-.435	.0000	1.019	.469	.281
NZ0M09A17	90	1.50	-.0033	0.0000	-.093	070	-.0000	-.435	.0000	1.502	.469	.280
NZ0M09A17	90	1.50	1.0308	0.0000	-.096	110	-.0000	-.435	.0000	1.205	.470	.280
NZ0M09A17	90	1.50	3.0472	0.0000	-.154	601	-.0000	-.435	.0000	1.335	.471	.281
NZ0M09A17	90	1.50	4.0722	0.0000	-.215	601	-.0000	-.435	.0000	1.492	.492	.290
NZ0M09A17	90	1.50	6.092	0.0000	-.336	204	-.0000	-.435	.0000	1.335	.514	.290
NZ0M09A17	90	1.50	8.144	0.0000	-.566	304	-.0000	-.435	.0000	1.220	.526	.290
NZ0M09A17	90	1.50	9.193	0.0000	-.767	304	-.0000	-.435	.0000	1.995	.534	.290
NZ0M09A17	90	1.50	10.255	0.0000	1.033	22	-.0000	-.435	.0000	1.995	.534	.290
NZ0M09A17	90	1.50	12.351	0.0000	1.033	22	-.0000	-.435	.0000	1.995	.534	.290
NZ0M09A17	90	1.50	-2.0526	0.0000	-.091	005	-.0000	-.435	.0000	1.420	.639	.451
NZ0M09A17	93	1.50	-.0033	0.0000	-.097	000	-.0000	-.435	.0000	1.523	.639	.451
NZ0M09A17	93	1.50	1.0308	0.0000	-.099	000	-.0000	-.435	.0000	1.236	.639	.449
NZ0M09A17	93	1.50	3.0472	0.0000	-.155	000	-.0000	-.435	.0000	1.477	.644	.448
NZ0M09A17	93	1.50	4.0722	0.0000	-.214	000	-.0000	-.435	.0000	1.661	.644	.448
NZ0M09A17	93	1.50	6.092	0.0000	-.344	000	-.0000	-.435	.0000	1.963	.694	.468
NZ0M09A17	93	1.50	8.144	0.0000	-.567	000	-.0000	-.435	.0000	1.963	.694	.468
NZ0M09A17	93	1.50	9.193	0.0000	-.794	000	-.0000	-.435	.0000	1.336	.702	.469
NZ0M09A17	93	1.50	10.255	0.0000	1.141	000	-.0000	-.435	.0000	1.336	.702	.469
NZ0M09A17	93	1.50	12.351	0.0000	1.141	000	-.0000	-.435	.0000	1.322	.719	.459
NZ0M09A17	93	1.50	14.442	0.0000	1.141	000	-.0000	-.435	.0000	1.322	.719	.459

CONFIG	PART NO	MACH	ALPHA	RETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M09A17	94	1.20	-2	0.000	0.32	0.97	0.06	0.94	0.01	1.36	5.85	0.00
M09A17	94	1.20	0.000	0.00	0.00	0.63	0.00	0.77	0.00	0.35	5.82	0.00
M09A17	94	1.20	0.000	0.00	0.00	0.40	0.00	0.72	0.00	0.44	5.83	0.00
M09A17	94	1.20	0.000	0.00	0.00	0.16	0.00	0.71	0.00	2.79	5.85	0.00
M09A17	94	1.20	0.000	0.00	0.00	0.33	0.00	0.99	0.00	0.96	5.86	0.00
M09A17	94	1.20	0.000	0.00	0.00	0.33	0.00	1.01	0.00	0.85	5.89	0.00
M09A17	94	1.20	0.000	0.00	0.00	0.66	0.00	1.26	0.00	0.07	6.52	0.00
M09A17	94	1.20	0.000	0.00	0.00	1.57	0.00	1.36	0.00	0.50	6.52	0.00
M09A17	94	1.20	0.000	0.00	0.00	1.97	0.00	1.25	0.00	0.17	6.62	0.00
M09A17	95	1.00	-2	0.000	0.00	1.51	0.00	1.41	0.00	0.92	4.05	0.00
M09A17	95	1.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	1.01	4.00	0.00
M09A17	95	1.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	4.00	0.00
M09A17	95	1.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	4.00	0.00
M09A17	95	1.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	4.00	0.00
M09A17	95	1.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	4.00	0.00
M09A17	95	1.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	4.00	0.00
M09A17	95	1.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	4.00	0.00
M09A17	95	1.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	4.00	0.00
M09A17	96	0.00	-2	0.000	0.70	0.52	0.00	0.40	0.00	0.40	3.02	0.00
M09A17	96	0.00	0.000	0.00	0.00	0.61	0.00	0.40	0.00	0.91	3.03	0.00
M09A17	96	0.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	3.06	0.00
M09A17	96	0.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	3.06	0.00
M09A17	96	0.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	3.06	0.00
M09A17	96	0.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	3.06	0.00
M09A17	96	0.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	3.06	0.00
M09A17	96	0.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	3.06	0.00
M09A17	96	0.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	3.06	0.00
M09A17	96	0.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	3.06	0.00
M09A17	96	0.00	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	3.06	0.00
M09A17	97	0.60	-2	0.000	0.73	0.49	0.00	0.43	0.00	0.67	2.79	0.00
M09A17	97	0.60	0.000	0.00	0.00	0.16	0.00	0.50	0.00	2.69	2.75	0.00
M09A17	97	0.60	0.000	0.00	0.00	0.60	0.00	0.71	0.00	1.19	2.75	0.00
M09A17	97	0.60	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	2.76	0.00
M09A17	97	0.60	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	2.76	0.00
M09A17	97	0.60	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	2.76	0.00
M09A17	97	0.60	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	2.76	0.00
M09A17	97	0.60	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	2.76	0.00
M09A17	97	0.60	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	2.76	0.00
M09A17	97	0.60	0.000	0.00	0.00	0.00	0.00	0.50	0.00	0.00	2.76	0.00

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CV	CLN	CLL	XCP	CAT	CAF
M05A17	100	.60	-1	000	05	10	00	00	00	12	27	077
M05A17	100	.60	00	000	02	05	00	00	00	13	27	081
M05A17	100	.60	00	000	04	06	00	00	00	14	27	084
M05A17	100	.60	00	000	05	05	00	00	00	15	27	087
M05A17	100	.60	00	000	07	04	00	00	00	16	27	090
M05A17	100	.60	00	000	08	03	00	00	00	17	27	093
M05A17	100	.60	00	000	09	02	00	00	00	18	27	096
M05A17	100	.60	00	000	10	01	00	00	00	19	27	099
M05A17	100	.60	00	000	11	00	00	00	00	20	27	102
M05A17	101	.60	-2	000	00	02	00	00	00	21	26	095
M05A17	101	.60	00	000	01	01	00	00	00	22	26	098
M05A17	101	.60	00	000	02	00	00	00	00	23	26	101
M05A17	101	.60	00	000	03	00	00	00	00	24	26	104
M05A17	101	.60	00	000	04	00	00	00	00	25	26	107
M05A17	101	.60	00	000	05	00	00	00	00	26	26	110
M05A17	101	.60	00	000	06	00	00	00	00	27	26	113
M05A17	101	.60	00	000	07	00	00	00	00	28	26	116
M05A17	101	.60	00	000	08	00	00	00	00	29	26	119
M05A17	101	.60	00	000	09	00	00	00	00	30	26	122
M05A17	101	.60	00	000	10	00	00	00	00	31	26	125
M05A17	101	.60	00	000	11	00	00	00	00	32	26	128
M05A17	104	.60	-2	000	00	05	00	00	00	33	26	121
M05A17	104	.60	00	000	01	04	00	00	00	34	26	124
M05A17	104	.60	00	000	02	03	00	00	00	35	26	127
M05A17	104	.60	00	000	03	02	00	00	00	36	26	130
M05A17	104	.60	00	000	04	01	00	00	00	37	26	133
M05A17	104	.60	00	000	05	00	00	00	00	38	26	136
M05A17	104	.60	00	000	06	00	00	00	00	39	26	139
M05A17	104	.60	00	000	07	00	00	00	00	40	26	142
M05A17	104	.60	00	000	08	00	00	00	00	41	26	145
M05A17	104	.60	00	000	09	00	00	00	00	42	26	148
M05A17	104	.60	00	000	10	00	00	00	00	43	26	151
M05A17	105	.60	-2	000	00	09	00	00	00	44	26	144
M05A17	105	.60	00	000	01	08	00	00	00	45	26	147
M05A17	105	.60	00	000	02	07	00	00	00	46	26	150
M05A17	105	.60	00	000	03	06	00	00	00	47	26	153
M05A17	105	.60	00	000	04	05	00	00	00	48	26	156
M05A17	105	.60	00	000	05	04	00	00	00	49	26	159
M05A17	105	.60	00	000	06	03	00	00	00	50	26	162
M05A17	105	.60	00	000	07	02	00	00	00	51	26	165
M05A17	105	.60	00	000	08	01	00	00	00	52	26	168
M05A17	105	.60	00	000	09	00	00	00	00	53	26	171
M05A17	105	.60	00	000	10	00	00	00	00	54	26	174
M05A17	105	.60	00	000	11	00	00	00	00	55	26	177

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M05A17	106	1.50	-2.042	0.000	0.09	0.020	0.13	0.52	0.01	0.51	4.68	2.54
M05A17	106	1.50	0.019	0.000	0.05	0.027	0.11	0.51	0.02	0.77	4.66	2.55
M05A17	106	1.50	0.054	0.000	0.05	0.057	0.13	0.54	0.03	0.97	4.65	2.55
M05A17	106	1.50	0.062	0.000	0.05	0.060	0.16	0.64	0.03	0.69	4.66	2.55
M05A17	106	1.50	0.086	0.000	0.10	0.124	0.18	0.69	0.02	0.14	4.69	2.55
M05A17	106	1.50	0.157	0.000	0.30	0.193	0.21	0.66	0.01	0.65	4.73	2.55
M05A17	106	1.50	0.223	0.000	0.45	0.295	0.21	0.63	0.01	0.16	5.07	2.55
M05A17	106	1.50	0.305	0.000	0.60	0.247	0.16	0.50	0.01	0.16	5.27	2.55
M05A17	106	1.50	0.415	0.000	1.01	0.251	0.10	0.37	0.01	0.05	5.39	2.55
M05A17	106	1.50	0.515	0.000	1.01	0.251	0.10	0.37	0.01	0.05	5.39	2.55
M05A17	109	1.50	-2.042	0.000	0.09	0.020	0.13	0.52	0.02	0.77	4.75	2.62
M05A17	109	1.50	0.019	0.000	0.05	0.027	0.11	0.51	0.02	0.97	4.73	2.62
M05A17	109	1.50	0.054	0.000	0.05	0.057	0.13	0.54	0.03	0.69	4.73	2.62
M05A17	109	1.50	0.062	0.000	0.05	0.060	0.16	0.64	0.03	0.14	4.76	2.62
M05A17	109	1.50	0.086	0.000	0.10	0.124	0.18	0.69	0.02	0.57	4.80	2.62
M05A17	109	1.50	0.157	0.000	0.30	0.193	0.21	0.66	0.02	0.29	4.95	2.62
M05A17	109	1.50	0.223	0.000	0.45	0.247	0.21	0.63	0.02	0.28	5.11	2.62
M05A17	109	1.50	0.305	0.000	0.60	0.251	0.16	0.50	0.02	0.28	5.31	2.62
M05A17	109	1.50	0.415	0.000	1.01	0.251	0.10	0.37	0.02	0.09	5.44	2.62
M05A17	109	1.50	0.515	0.000	1.01	0.251	0.10	0.37	0.02	0.09	5.44	2.62
M05A17	110	2.00	0.030	0.000	0.05	0.040	0.05	0.21	0.00	0.22	4.87	2.62
M05A17	110	2.00	0.100	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	110	2.00	0.200	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	110	2.00	0.300	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	110	2.00	0.400	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	110	2.00	0.500	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	110	2.00	0.600	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	110	2.00	0.700	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	110	2.00	0.800	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	110	2.00	0.900	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	110	2.00	1.000	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	111	2.00	0.030	0.000	0.05	0.040	0.05	0.21	0.00	0.22	4.87	2.62
M05A17	111	2.00	0.100	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	111	2.00	0.200	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	111	2.00	0.300	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	111	2.00	0.400	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	111	2.00	0.500	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	111	2.00	0.600	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	111	2.00	0.700	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	111	2.00	0.800	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	111	2.00	0.900	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62
M05A17	111	2.00	1.000	0.000	0.05	0.050	0.05	0.21	0.00	0.22	4.86	2.62

CONFIG	PART NO	MACH	ALP-1A	RETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M15M05A17	113	60	2	0000	078	006	00	01	005	074	251	074
M15M05A17	113	60	1	0000	004	005	00	03	005	276	252	076
M15M05A17	113	60	1	0000	004	005	00	04	005	277	253	077
M15M05A17	113	60	3	0000	074	007	00	05	004	337	254	074
M15M05A17	113	60	5	0000	156	006	00	06	004	617	254	072
M15M05A17	113	60	6	0000	243	074	00	09	004	306	264	060
M15M05A17	113	60	9	0000	345	051	00	14	003	123	275	053
M15M05A17	113	60	10	0000	457	212	00	15	001	132	286	053
M15M05A17	113	60	14	0000	746	449	00	46	001	301	302	034
M15M05A17	114	60	2	0000	052	002	00	15	006	028	228	078
M15M05A17	114	60	1	0000	012	044	00	19	006	049	230	061
M15M05A17	114	60	2	0000	022	041	00	20	005	233	231	082
M15M05A17	114	60	3	0000	094	061	00	23	004	235	232	078
M15M05A17	114	60	4	0000	099	000	00	24	004	401	233	076
M15M05A17	114	60	5	0000	141	002	00	17	003	193	243	076
M15M05A17	114	60	6	0000	214	121	00	00	002	319	233	064
M15M05A17	114	60	9	0000	314	191	00	05	001	519	243	058
M15M05A17	114	60	10	0000	421	021	00	06	001	227	267	058
M15M05A17	114	60	11	0000	541	134	00	05	002	020	277	036
M15M05A17	117	60	2	0000	035	103	00	23	001	189	228	075
M15M05A17	117	60	1	0000	041	013	00	20	001	262	223	072
M15M05A17	117	60	2	0000	080	011	00	35	002	102	222	071
M15M05A17	117	60	3	0000	155	025	00	33	003	207	222	068
M15M05A17	117	60	6	0000	236	047	00	10	002	254	223	061
M15M05A17	117	60	8	0000	263	000	00	20	000	271	223	053
M15M05A17	117	60	9	0000	290	000	00	25	000	205	223	042
M15M05A17	117	60	10	0000	359	237	00	30	001	404	250	025
M15M05A17	117	60	14	0000	559	417	00	40	000	604	250	005
M15M05A17	118	60	2	0000	082	016	00	15	003	194	263	087
M15M05A17	118	60	1	0000	096	036	00	17	003	232	259	088
M15M05A17	118	60	2	0000	032	057	00	17	003	366	261	090
M15M05A17	118	60	3	0000	115	050	00	15	003	366	261	085
M15M05A17	118	60	6	0000	243	250	00	21	004	200	269	074
M15M05A17	118	60	9	0000	308	250	00	21	004	161	280	060
M15M05A17	118	60	10	0000	443	250	00	21	004	200	280	050
M15M05A17	118	60	14	0000	559	417	00	21	003	514	303	050

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N17M05A17	119	1.00	-2.031	0.000	0.930	0.290	0.002	0.025	0.002	3.590	3.810	1.137
N17M05A17	119	1.00	1.0014	0.000	0.000	0.025	0.002	0.025	0.002	3.590	3.810	1.135
N17M05A17	119	1.00	1.0036	0.000	0.000	0.023	0.002	0.023	0.002	3.590	3.810	1.133
N17M05A17	119	1.00	1.0059	0.000	0.000	0.020	0.002	0.020	0.002	3.590	3.810	1.134
N17M05A17	119	1.00	1.0079	0.000	0.000	0.016	0.002	0.016	0.002	3.590	3.810	1.135
N17M05A17	119	1.00	1.0109	0.000	0.000	0.012	0.002	0.012	0.002	3.590	3.810	1.139
N17M05A17	119	1.00	1.0141	0.000	0.000	0.009	0.002	0.009	0.002	3.590	3.810	1.142
N17M05A17	119	1.00	1.0173	0.000	0.000	0.007	0.002	0.007	0.002	3.590	3.810	1.147
N17M05A17	119	1.00	1.0205	0.000	0.000	0.005	0.002	0.005	0.002	3.590	3.810	1.151
N17M05A17	120	1.20	-2.031	0.000	0.930	0.290	0.002	0.025	0.002	3.590	3.810	1.119
N17M05A17	120	1.20	1.0014	0.000	0.000	0.025	0.002	0.025	0.002	3.590	3.810	1.137
N17M05A17	120	1.20	1.0036	0.000	0.000	0.023	0.002	0.023	0.002	3.590	3.810	1.135
N17M05A17	120	1.20	1.0059	0.000	0.000	0.020	0.002	0.020	0.002	3.590	3.810	1.134
N17M05A17	120	1.20	1.0079	0.000	0.000	0.016	0.002	0.016	0.002	3.590	3.810	1.135
N17M05A17	120	1.20	1.0109	0.000	0.000	0.012	0.002	0.012	0.002	3.590	3.810	1.139
N17M05A17	120	1.20	1.0141	0.000	0.000	0.009	0.002	0.009	0.002	3.590	3.810	1.142
N17M05A17	120	1.20	1.0173	0.000	0.000	0.007	0.002	0.007	0.002	3.590	3.810	1.147
N17M05A17	120	1.20	1.0205	0.000	0.000	0.005	0.002	0.005	0.002	3.590	3.810	1.151
N17M05A17	121	1.50	-2.031	0.000	0.930	0.290	0.002	0.025	0.002	3.590	3.810	1.119
N17M05A17	121	1.50	1.0014	0.000	0.000	0.025	0.002	0.025	0.002	3.590	3.810	1.137
N17M05A17	121	1.50	1.0036	0.000	0.000	0.023	0.002	0.023	0.002	3.590	3.810	1.135
N17M05A17	121	1.50	1.0059	0.000	0.000	0.020	0.002	0.020	0.002	3.590	3.810	1.134
N17M05A17	121	1.50	1.0079	0.000	0.000	0.016	0.002	0.016	0.002	3.590	3.810	1.135
N17M05A17	121	1.50	1.0109	0.000	0.000	0.012	0.002	0.012	0.002	3.590	3.810	1.139
N17M05A17	121	1.50	1.0141	0.000	0.000	0.009	0.002	0.009	0.002	3.590	3.810	1.142
N17M05A17	121	1.50	1.0173	0.000	0.000	0.007	0.002	0.007	0.002	3.590	3.810	1.147
N17M05A17	121	1.50	1.0205	0.000	0.000	0.005	0.002	0.005	0.002	3.590	3.810	1.151
N18M05A17	131	1.60	-2.031	0.000	0.930	0.290	0.002	0.025	0.002	3.590	3.810	1.119
N18M05A17	131	1.60	1.0014	0.000	0.000	0.025	0.002	0.025	0.002	3.590	3.810	1.137
N18M05A17	131	1.60	1.0036	0.000	0.000	0.023	0.002	0.023	0.002	3.590	3.810	1.135
N18M05A17	131	1.60	1.0059	0.000	0.000	0.020	0.002	0.020	0.002	3.590	3.810	1.134
N18M05A17	131	1.60	1.0079	0.000	0.000	0.016	0.002	0.016	0.002	3.590	3.810	1.135
N18M05A17	131	1.60	1.0109	0.000	0.000	0.012	0.002	0.012	0.002	3.590	3.810	1.139
N18M05A17	131	1.60	1.0141	0.000	0.000	0.009	0.002	0.009	0.002	3.590	3.810	1.142
N18M05A17	131	1.60	1.0173	0.000	0.000	0.007	0.002	0.007	0.002	3.590	3.810	1.147
N18M05A17	131	1.60	1.0205	0.000	0.000	0.005	0.002	0.005	0.002	3.590	3.810	1.151



CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
NI9M05	138	1.50	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	176
NI9M05	138	1.50	-0.056	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	175
NI9M05	138	1.50	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	173
NI9M05	138	1.50	0.057	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	173
NI9M05	138	1.50	0.055	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	172
NI9M05	138	1.50	0.089	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	177
NI9M05	138	1.50	0.163	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	169
NI9M05	138	1.50	0.236	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	169
NI9M05	138	1.50	0.332	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	165
NI9M05	138	1.50	0.469	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	160
NI9M05	139	1.20	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	189
NI9M05	139	1.20	-0.026	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	195
NI9M05	139	1.20	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	190
NI9M05	139	1.20	0.025	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	181
NI9M05	139	1.20	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	181
NI9M05	139	1.20	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	181
NI9M05	139	1.20	0.025	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	181
NI9M05	139	1.20	0.025	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	171
NI9M05	139	1.20	0.025	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	166
NI9M05	139	1.20	0.025	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150
NI9M05	139	1.20	0.025	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150
NI9M05	144	1.00	0.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	125
NI9M05	144	1.00	-0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	125
NI9M05	144	1.00	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	112
NI9M05	144	1.00	0.057	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105
NI9M05	144	1.00	0.078	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105
NI9M05	144	1.00	0.116	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	95
NI9M05	144	1.00	0.232	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85
NI9M05	144	1.00	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85
NI9M05	144	1.00	0.492	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75
NI9M05	144	1.00	0.618	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75
NI9M05	144	1.00	0.744	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65
NI9M05	144	1.00	0.87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65
NI9M05	144	1.00	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55
NI9M05	144	1.00	1.124	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45
NI9M05	144	1.00	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45
NI9M05	144	1.00	1.376	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35
NI9M05	144	1.00	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35
NI9M05	144	1.00	1.624	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25
NI9M05	144	1.00	1.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25
NI9M05	144	1.00	1.876	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15
NI9M05	144	1.00	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15

CONFIG	PART NO	MACH	ALPHA	BETA	CN	C	CY	CLN	CLL	XCP	CAT	CAF
M05A17	144	60	-1.007	00	02	02	00	02	00	49	221	070
M05A17	144	60	0.001	00	04	00	00	03	00	61	220	072
M05A17	144	60	0.012	00	02	00	00	03	00	04	229	071
M05A17	144	60	0.034	00	02	00	00	03	00	04	223	071
M05A17	144	60	0.061	00	15	00	00	03	00	09	225	071
M05A17	144	60	0.097	00	34	00	00	02	00	27	225	066
M05A17	144	60	0.136	00	25	00	00	02	00	26	224	054
M05A17	144	60	0.184	00	90	00	00	02	00	10	226	025
M05A17	147	60	-1.006	00	73	02	00	03	00	95	233	047
M05A17	147	60	0.001	00	06	00	00	03	00	26	231	044
M05A17	147	60	0.022	00	11	00	00	03	00	08	230	066
M05A17	147	60	0.041	00	60	00	00	03	00	07	232	079
M05A17	147	60	0.071	00	17	00	00	03	00	07	230	076
M05A17	147	60	0.092	00	66	00	00	03	00	06	234	057
M05A17	147	60	0.121	00	35	00	00	03	00	50	235	046
M05A17	147	60	0.154	00	58	00	00	03	00	02	235	029
M05A17	147	60	0.184	00	98	00	00	03	00	07	236	014
M05A17	148	60	-1.007	00	00	02	00	03	00	97	267	090
M05A17	148	60	0.001	00	26	00	00	03	00	50	267	095
M05A17	148	60	0.013	00	11	00	00	03	00	37	269	092
M05A17	148	60	0.034	00	22	00	00	03	00	35	269	092
M05A17	148	60	0.061	00	10	00	00	03	00	91	279	061
M05A17	148	60	0.097	00	35	00	00	03	00	17	285	072
M05A17	148	60	0.121	00	16	00	00	03	00	09	295	053
M05A17	148	60	0.154	00	47	00	00	03	00	00	304	040
M05A17	149	11	-1.002	00	09	02	00	03	00	71	361	120
M05A17	149	11	0.001	00	57	00	00	03	00	15	356	122
M05A17	149	11	0.022	00	11	00	00	03	00	05	360	123
M05A17	149	11	0.041	00	22	00	00	03	00	02	367	121
M05A17	149	11	0.061	00	05	00	00	03	00	04	374	121
M05A17	149	11	0.097	00	21	00	00	03	00	02	377	101
M05A17	149	11	0.136	00	62	00	00	03	00	04	379	102
M05A17	149	11	0.184	00	95	00	00	03	00	02	373	079

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
0M05A17	150	10	040	00	7	045	00	0263	00	465	443	11133
0M05A17	150	10	0025	00	3	012	00	0023	00	533	444	11133
0M05A17	150	10	007	00	4	013	00	0025	00	27	444	22025
0M05A17	150	10	007	00	1	002	00	0025	00	070	444	22025
0M05A17	150	10	009	00	3	022	00	0029	00	4	444	22025
0M05A17	150	10	009	00	3	008	00	0036	00	722	446	22025
0M05A17	150	10	0205	00	1	136	00	0037	00	656	451	22025
0M05A17	150	10	0205	00	3	160	00	0042	00	202	493	22025
0M05A17	150	10	02366	00	3	101	00	0042	00	002	493	22025
0M05A17	150	10	0241	00	2	115	00	0042	00	125	493	22025
0M05A17	151	150	046	00	9	091	00	003	00	025	459	22025
0M05A17	151	150	0049	00	4	035	00	0037	00	677	459	22025
0M05A17	151	150	0057	00	1	068	00	0037	00	16	459	22025
0M05A17	151	150	009	00	3	117	00	0037	00	132	459	22025
0M05A17	151	150	0145	00	1	202	00	0037	00	22	459	22025
0M05A17	151	150	022	00	7	233	00	0037	00	11	459	22025
0M05A17	151	150	023	00	3	106	00	0037	00	11	459	22025
0M05A17	151	150	023	00	2	229	00	0037	00	11	459	22025
0M05A17	151	150	023	00	1	150	00	0037	00	11	459	22025
0M05A17	151	150	023	00	7	229	00	0037	00	11	459	22025
0M05A17	154	150	046	00	9	091	00	003	00	025	493	22025
0M05A17	154	150	0049	00	4	035	00	0037	00	677	493	22025
0M05A17	154	150	0057	00	1	068	00	0037	00	16	493	22025
0M05A17	154	150	009	00	3	117	00	0037	00	132	493	22025
0M05A17	154	150	0145	00	1	202	00	0037	00	11	493	22025
0M05A17	154	150	022	00	7	233	00	0037	00	11	493	22025
0M05A17	154	150	023	00	3	106	00	0037	00	11	493	22025
0M05A17	154	150	023	00	2	229	00	0037	00	11	493	22025
0M05A17	154	150	023	00	1	150	00	0037	00	11	493	22025
0M05A17	154	150	023	00	7	229	00	0037	00	11	493	22025
0M05A17	155	200	040	00	9	092	00	003	00	025	493	22025
0M05A17	155	200	0069	00	4	032	00	003	00	677	493	22025
0M05A17	155	200	007	00	1	069	00	003	00	16	493	22025
0M05A17	155	200	009	00	3	117	00	003	00	132	493	22025
0M05A17	155	200	0145	00	1	202	00	003	00	11	493	22025
0M05A17	155	200	022	00	7	233	00	003	00	11	493	22025
0M05A17	155	200	023	00	3	106	00	003	00	11	493	22025
0M05A17	155	200	023	00	2	229	00	003	00	11	493	22025
0M05A17	155	200	023	00	1	150	00	003	00	11	493	22025
0M05A17	155	200	023	00	7	229	00	003	00	11	493	22025

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M05A17	166	1.20	2.20	0.00	0.97	0.01	0.00	0.37	0.00	1.15	377	1.39
M05A17	166	1.20	2.20	0.00	0.47	0.00	0.01	0.00	0.00	3.47	377	1.39
M05A17	166	1.20	2.20	0.00	0.44	0.00	0.02	0.00	0.00	5.33	377	1.39
M05A17	166	1.20	2.20	0.00	0.56	0.00	0.02	0.00	0.00	6.66	377	1.39
M05A17	166	1.20	2.20	0.00	1.21	0.00	0.02	0.00	0.00	1.47	377	1.39
M05A17	166	1.20	2.20	0.00	1.76	0.00	0.02	0.00	0.00	3.73	377	1.39
M05A17	166	1.20	2.20	0.00	2.20	0.00	0.02	0.00	0.00	4.65	377	1.39
M05A17	166	1.20	2.20	0.00	4.44	0.00	0.05	0.00	0.00	1.88	377	1.39
M05A17	166	1.20	2.20	0.00	7.64	0.00	0.10	0.00	0.00	2.98	377	1.39
M05A17	167	1.50	2.20	0.00	0.99	0.00	0.02	0.19	0.00	1.07	342	1.29
M05A17	167	1.50	2.20	0.00	0.39	0.00	0.02	0.00	0.00	3.15	342	1.29
M05A17	167	1.50	2.20	0.00	0.00	0.00	0.00	0.00	0.00	5.09	342	1.29
M05A17	167	1.50	2.20	0.00	1.21	0.00	0.00	0.00	0.00	2.52	342	1.29
M05A17	167	1.50	2.20	0.00	2.27	0.00	0.00	0.00	0.00	5.44	342	1.29
M05A17	167	1.50	2.20	0.00	5.66	0.00	0.03	0.00	0.00	1.32	342	1.29
M05A17	168	1.00	2.20	0.00	0.99	0.00	0.00	0.00	0.00	1.60	353	1.00
M05A17	168	1.00	2.20	0.00	0.52	0.00	0.00	0.00	0.00	4.96	353	1.00
M05A17	168	1.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00	7.71	353	1.00
M05A17	168	1.00	2.20	0.00	1.11	0.00	0.00	0.00	0.00	1.44	353	1.00
M05A17	168	1.00	2.20	0.00	2.33	0.00	0.00	0.00	0.00	4.86	353	1.00
M05A17	168	1.00	2.20	0.00	5.35	0.00	0.05	0.00	0.00	1.25	353	1.00
M05A17	168	1.00	2.20	0.00	7.67	0.00	0.10	0.00	0.00	1.92	353	1.00
M05A17	169	1.00	2.20	0.00	1.61	0.00	0.00	0.00	0.00	1.00	214	1.00
M05A17	169	1.00	2.20	0.00	0.35	0.00	0.00	0.00	0.00	3.25	214	1.00
M05A17	169	1.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00	5.09	214	1.00
M05A17	169	1.00	2.20	0.00	1.11	0.00	0.00	0.00	0.00	2.52	214	1.00
M05A17	169	1.00	2.20	0.00	2.27	0.00	0.00	0.00	0.00	5.44	214	1.00
M05A17	169	1.00	2.20	0.00	5.66	0.00	0.03	0.00	0.00	1.32	214	1.00
M05A17	169	1.00	2.20	0.00	7.67	0.00	0.10	0.00	0.00	1.92	214	1.00

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLM	CLL	XCP	CAT	CAF
N22M05A17	170	.60	-2.018	0.000	.087	.068	.006	.003	.000	.781	.226	.076
N22M05A17	170	.60	-1.002	0.000	.009	.037	.003	.006	.002	.420	.221	.073
N22M05A17	170	.60	1.013	0.000	.039	.027	.003	.009	.000	.151	.215	.064
N22M05A17	170	.60	3.035	0.000	.067	.150	.003	.012	.000	.189	.214	.061
N22M05A17	170	.60	4.045	0.000	.146	.261	.003	.022	.001	.336	.235	.065
N22M05A17	170	.60	6.069	0.000	.331	.383	.009	.029	.003	.790	.252	.062
N22M05A17	170	.60	8.099	0.000	.448	.384	.016	.025	.003	1.457	.261	.053
N22M05A17	170	.60	10.178	0.000	.582	.319	.010	.010	.003	1.859	.269	.039
N22M05A17	170	.60	14.220	0.000	.735	.215	.031	.054	.004	5.48	.290	.042
N21M05A17	173	.60	-2.014	0.000	.072	.037	.001	.034	.002	.513	.242	.094
N21M05A17	173	.60	-1.002	0.000	.036	.012	.003	.042	.002	.325	.238	.093
N21M05A17	173	.60	1.012	0.000	.045	.016	.002	.039	.003	.864	.237	.092
N21M05A17	173	.60	3.030	0.000	.091	.047	.002	.047	.003	3.77	.238	.089
N21M05A17	173	.60	4.040	0.000	.120	.080	.002	.069	.003	5.10	.240	.088
N21M05A17	173	.60	6.059	0.000	.164	.096	.002	.090	.002	5.88	.251	.088
N21M05A17	173	.60	8.092	0.000	.243	.091	.001	.100	.000	3.86	.265	.079
N21M05A17	173	.60	10.132	0.000	.358	.089	.001	.087	.000	2.19	.274	.068
N21M05A17	173	.60	14.198	0.000	.587	.121	.016	.061	.001	2.06	.286	.052
N21M05A17	176	.80	-2.027	0.000	.090	.022	.002	.029	.001	.18	.278	.105
N21M05A17	176	.80	-1.005	0.000	.034	.014	.002	.029	.001	.055	.272	.104
N21M05A17	176	.80	1.018	0.000	.042	.041	.002	.035	.002	.269	.271	.102
N21M05A17	176	.80	3.033	0.000	.084	.050	.002	.045	.002	.985	.274	.099
N21M05A17	176	.80	4.049	0.000	.125	.066	.002	.033	.002	5.19	.275	.098
N21M05A17	176	.80	6.092	0.000	.166	.086	.004	.037	.000	5.31	.289	.097
N21M05A17	176	.80	8.137	0.000	.266	.054	.009	.023	.001	3.71	.309	.094
N21M05A17	176	.80	10.232	0.000	.391	.024	.005	.044	.001	1.48	.315	.091
N21M05A17	176	.80	14.285	0.000	.605	.173	.008	.053	.001	.276	.323	.080
N21M05A17	177	1.00	-2.031	0.000	.094	.028	.002	.030	.001	.06	.385	.150
N21M05A17	177	1.00	-1.022	0.000	.043	.027	.002	.027	.001	.428	.382	.148
N21M05A17	177	1.00	1.059	0.000	.073	.034	.002	.030	.001	1.55	.384	.147
N21M05A17	177	1.00	3.090	0.000	.135	.034	.003	.034	.001	3.25	.389	.146
N21M05A17	177	1.00	4.098	0.000	.185	.052	.004	.029	.001	3.86	.425	.146
N21M05A17	177	1.00	6.172	0.000	.285	.046	.005	.022	.000	1.618	.470	.145
N21M05A17	177	1.00	8.301	0.000	.445	.027	.010	.014	.001	0.152	.470	.137
N21M05A17	177	1.00	12.358	0.000	.704	.223	.019	.014	.001	.221	.498	.122

CONFIG	PART NO	MACH	ALPHA	PETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M05A117	100	60	16	00	55	14	00	50	00	06	0	057
M05A117	100	60	00	00	00	16	00	00	00	02	2	062
M05A117	100	60	00	00	00	00	00	00	00	00	2	063
M05A117	100	60	00	00	00	00	00	00	00	00	2	067
M05A117	100	60	00	00	00	00	00	00	00	00	2	067
M05A117	100	60	00	00	00	00	00	00	00	00	2	055
M05A117	100	60	00	00	00	00	00	00	00	00	2	055
M05A117	100	60	00	00	00	00	00	00	00	00	2	040
M05A117	100	60	00	00	00	00	00	00	00	00	2	020
M05A117	101	00	02	00	06	24	00	00	00	03	2	073
M05A117	101	00	00	00	00	00	00	00	00	00	2	073
M05A117	101	00	00	00	00	00	00	00	00	00	2	076
M05A117	101	00	00	00	00	00	00	00	00	00	2	073
M05A117	101	00	00	00	00	00	00	00	00	00	2	073
M05A117	101	00	00	00	00	00	00	00	00	00	2	070
M05A117	101	00	00	00	00	00	00	00	00	00	2	063
M05A117	101	00	00	00	00	00	00	00	00	00	2	055
M05A117	101	00	00	00	00	00	00	00	00	00	2	044
M05A117	104	10	45	00	45	47	00	00	00	07	2	091
M05A117	104	10	00	00	00	00	00	00	00	00	2	092
M05A117	104	10	00	00	00	00	00	00	00	00	2	094
M05A117	104	10	00	00	00	00	00	00	00	00	2	089
M05A117	104	10	00	00	00	00	00	00	00	00	2	084
M05A117	104	10	00	00	00	00	00	00	00	00	2	082
M05A117	104	10	00	00	00	00	00	00	00	00	2	070
M05A117	104	10	00	00	00	00	00	00	00	00	2	073
M05A117	104	10	00	00	00	00	00	00	00	00	2	064
M05A117	104	10	00	00	00	00	00	00	00	00	2	056
M05A117	105	10	04	00	33	03	00	00	00	01	3	132
M05A117	105	10	00	00	00	00	00	00	00	00	3	120
M05A117	105	10	00	00	00	00	00	00	00	00	3	120
M05A117	105	10	00	00	00	00	00	00	00	00	3	132
M05A117	105	10	00	00	00	00	00	00	00	00	3	135
M05A117	105	10	00	00	00	00	00	00	00	00	3	130
M05A117	105	10	00	00	00	00	00	00	00	00	3	130
M05A117	105	10	00	00	00	00	00	00	00	00	3	120
M05A117	105	10	00	00	00	00	00	00	00	00	3	120

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
NZ3M05A17	186	1.50	-2.045	0.000	0.78	154	0.08	0.13	0.04	1.969	367	139
NZ3M05A17	186	1.50	-1.020	0.000	0.04	0.69	0.06	0.02	0.04	0.760	357	139
NZ3M05A17	186	1.50	1.035	0.000	0.06	0.96	0.08	0.01	0.04	0.711	357	139
NZ3M05A17	186	1.50	1.050	0.000	0.06	0.96	0.08	0.01	0.04	0.335	357	139
NZ3M05A17	186	1.50	1.097	0.000	0.13	1.14	0.10	0.02	0.04	0.776	366	139
NZ3M05A17	186	1.50	1.122	0.000	0.14	1.17	0.12	0.02	0.04	0.318	367	139
NZ3M05A17	186	1.50	1.357	0.000	0.33	1.27	0.14	0.03	0.03	0.997	416	138
NZ3M05A17	186	1.50	12.454	0.000	6.13	3.94	0.21	0.00	0.02	0.482	416	138
NZ3M05A17	186	1.50	14.456	0.000	1.107	3.94	0.33	0.07	0.01	0.306	425	120
NZ4M05A17	189	1.50	-2.044	0.000	0.70	186	0.08	0.15	0.04	3.520	442	215
NZ4M05A17	189	1.50	-1.019	0.000	0.12	0.90	0.07	0.19	0.04	0.960	442	215
NZ4M05A17	189	1.50	1.033	0.000	0.54	0.42	0.09	0.10	0.04	0.961	442	215
NZ4M05A17	189	1.50	1.055	0.000	0.95	0.42	0.09	0.10	0.04	0.502	442	215
NZ4M05A17	189	1.50	1.113	0.000	1.90	0.61	0.10	0.02	0.03	0.303	442	215
NZ4M05A17	189	1.50	1.141	0.000	3.07	0.61	0.11	0.02	0.03	0.303	442	215
NZ4M05A17	189	1.50	1.244	0.000	6.24	0.61	0.16	0.02	0.03	0.600	442	215
NZ4M05A17	189	1.50	1.356	0.000	1.22	0.61	0.12	0.02	0.03	0.537	442	215
NZ4M05A17	189	1.50	9.647	0.000	2.27	0.61	0.12	0.02	0.03	0.537	442	215
NZ4M05A17	189	1.50	12.454	0.000	1.1	0.61	0.12	0.02	0.03	0.537	442	215
NZ4M05A17	189	1.50	14.456	0.000	1.1	0.61	0.12	0.02	0.03	0.537	442	215
NZ4M05A17	190	1.20	-2.041	0.000	0.87	0.79	0.02	0.31	0.02	0.921	435	195
NZ4M05A17	190	1.20	-1.016	0.000	0.43	0.79	0.02	0.25	0.02	0.321	435	195
NZ4M05A17	190	1.20	1.022	0.000	0.93	0.69	0.03	0.25	0.02	0.411	435	195
NZ4M05A17	190	1.20	1.052	0.000	1.38	0.69	0.03	0.25	0.02	0.220	435	195
NZ4M05A17	190	1.20	1.150	0.000	1.88	0.69	0.03	0.25	0.02	0.410	435	195
NZ4M05A17	190	1.20	1.209	0.000	2.22	0.69	0.03	0.25	0.02	0.903	435	195
NZ4M05A17	190	1.20	12.454	0.000	4.756	0.69	0.03	0.25	0.02	0.262	435	195
NZ4M05A17	190	1.20	14.456	0.000	1.1	0.69	0.03	0.25	0.02	0.10	435	195
NZ4M05A17	191	1.00	-2.034	0.000	0.90	0.20	0.03	0.69	0.04	0.255	354	121
NZ4M05A17	191	1.00	-1.015	0.000	0.02	0.20	0.03	0.20	0.04	0.827	354	121
NZ4M05A17	191	1.00	1.024	0.000	0.48	0.20	0.03	0.20	0.04	0.510	354	121
NZ4M05A17	191	1.00	1.065	0.000	0.94	0.20	0.03	0.20	0.04	0.510	354	121
NZ4M05A17	191	1.00	1.166	0.000	1.30	0.20	0.03	0.20	0.04	0.667	354	121
NZ4M05A17	191	1.00	1.266	0.000	2.97	0.20	0.03	0.20	0.04	0.667	354	121
NZ4M05A17	191	1.00	12.454	0.000	1.5	0.20	0.03	0.20	0.04	0.1	354	121
NZ4M05A17	191	1.00	14.456	0.000	1.6	0.20	0.03	0.20	0.04	0.1	354	121

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N2M05A17	192	.80	-2.025	0.000	16	-.035	-.005	.025	-.007	.977	.276	.099
N2M05A17	192	.80	1.016	0.000	16	-.035	-.005	.025	-.007	.977	.276	.103
N2M05A17	192	.80	3.027	0.000	16	-.035	-.005	.025	-.007	.977	.276	.105
N2M05A17	192	.80	4.066	0.000	16	-.035	-.005	.025	-.007	.977	.276	.107
N2M05A17	192	.80	5.066	0.000	16	-.035	-.005	.025	-.007	.977	.276	.109
N2M05A17	192	.80	6.149	0.000	16	-.035	-.005	.025	-.007	.977	.276	.109
N2M05A17	192	.80	8.255	0.000	16	-.035	-.005	.025	-.007	.977	.276	.109
N2M05A17	192	.80	12.312	0.000	16	-.035	-.005	.025	-.007	.977	.276	.106
N2M05A17	193	.60	-2.017	0.000	16	-.035	-.005	.025	-.007	.977	.276	.105
N2M05A17	193	.60	1.004	0.000	16	-.035	-.005	.025	-.007	.977	.276	.106
N2M05A17	193	.60	3.025	0.000	16	-.035	-.005	.025	-.007	.977	.276	.104
N2M05A17	193	.60	4.067	0.000	16	-.035	-.005	.025	-.007	.977	.276	.101
N2M05A17	193	.60	5.067	0.000	16	-.035	-.005	.025	-.007	.977	.276	.097
N2M05A17	193	.60	6.151	0.000	16	-.035	-.005	.025	-.007	.977	.276	.090
N2M05A17	193	.60	10.177	0.000	16	-.035	-.005	.025	-.007	.977	.276	.073
N2M05A17	193	.60	14.224	0.000	16	-.035	-.005	.025	-.007	.977	.276	.060
N2M05A17	193	.60	19.224	0.000	16	-.035	-.005	.025	-.007	.977	.276	.048
N2M05A17	196	.60	-2.007	0.000	16	-.035	-.005	.025	-.007	.977	.276	.098
N2M05A17	196	.60	1.000	0.000	16	-.035	-.005	.025	-.007	.977	.276	.100
N2M05A17	196	.60	3.022	0.000	16	-.035	-.005	.025	-.007	.977	.276	.097
N2M05A17	196	.60	4.065	0.000	16	-.035	-.005	.025	-.007	.977	.276	.093
N2M05A17	196	.60	5.065	0.000	16	-.035	-.005	.025	-.007	.977	.276	.086
N2M05A17	196	.60	6.137	0.000	16	-.035	-.005	.025	-.007	.977	.276	.079
N2M05A17	196	.60	10.171	0.000	16	-.035	-.005	.025	-.007	.977	.276	.067
N2M05A17	196	.60	14.220	0.000	16	-.035	-.005	.025	-.007	.977	.276	.053
N2M05A17	196	.60	19.220	0.000	16	-.035	-.005	.025	-.007	.977	.276	.020
N2M05A17	197	.80	-2.024	0.000	16	-.035	-.005	.025	-.007	.977	.276	.102
N2M05A17	197	.80	1.011	0.000	16	-.035	-.005	.025	-.007	.977	.276	.103
N2M05A17	197	.80	3.033	0.000	16	-.035	-.005	.025	-.007	.977	.276	.103
N2M05A17	197	.80	4.069	0.000	16	-.035	-.005	.025	-.007	.977	.276	.101
N2M05A17	197	.80	5.069	0.000	16	-.035	-.005	.025	-.007	.977	.276	.101
N2M05A17	197	.80	6.136	0.000	16	-.035	-.005	.025	-.007	.977	.276	.096
N2M05A17	197	.80	10.171	0.000	16	-.035	-.005	.025	-.007	.977	.276	.085
N2M05A17	197	.80	14.220	0.000	16	-.035	-.005	.025	-.007	.977	.276	.078
N2M05A17	197	.80	19.220	0.000	16	-.035	-.005	.025	-.007	.977	.276	.060

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
NS5M5A17	198	1.00	-2.0316	0.000	0.052	0.02	0.00	0.00	0.00	0.16	376	145
NS5M5A17	198	1.00	-1.0021	0.000	0.030	0.136	0.00	0.027	0.00	0.524	369	142
NS5M5A17	198	1.00	1.0049	0.000	0.030	0.077	0.00	0.029	0.00	-4.442	374	141
NS5M5A17	198	1.00	3.0059	0.000	0.120	0.093	0.00	0.027	0.00	7.293	378	142
NS5M5A17	198	1.00	4.0064	0.000	0.179	0.139	0.00	0.031	0.00	6.433	366	141
NS5M5A17	198	1.00	5.0072	0.000	0.270	0.166	0.00	0.030	0.00	4.916	437	136
NS5M5A17	198	1.00	6.0081	0.000	0.339	0.166	0.00	0.029	0.00	3.120	458	130
NS5M5A17	198	1.00	7.0090	0.000	0.497	0.209	0.00	0.019	0.00	1.094	474	121
NS5M5A17	198	1.00	8.0099	0.000	0.697	0.209	0.00	0.042	0.00	-0.332	491	112
NS5M5A17	201	1.20	-2.0411	0.000	0.091	0.62	0.00	0.45	0.00	0.95	0	103
NS5M5A17	201	1.20	-1.0010	0.000	0.101	0.520	0.00	0.40	0.00	0.35	60	100
NS5M5A17	201	1.20	0.0000	0.000	0.100	0.470	0.00	0.40	0.00	1.0	53	100
NS5M5A17	201	1.20	1.0022	0.000	0.140	0.500	0.00	0.40	0.00	1.16	69	102
NS5M5A17	201	1.20	2.0031	0.000	0.220	0.520	0.00	0.40	0.00	0.00	55	102
NS5M5A17	201	1.20	3.0040	0.000	0.260	0.520	0.00	0.40	0.00	0.00	55	102
NS5M5A17	201	1.20	4.0049	0.000	0.320	0.520	0.00	0.40	0.00	0.00	55	102
NS5M5A17	201	1.20	5.0058	0.000	0.360	0.520	0.00	0.40	0.00	0.00	55	102
NS5M5A17	201	1.20	6.0067	0.000	0.420	0.520	0.00	0.40	0.00	0.00	55	102
NS5M5A17	201	1.20	7.0076	0.000	0.460	0.520	0.00	0.40	0.00	0.00	55	102
NS5M5A17	201	1.20	8.0085	0.000	0.520	0.520	0.00	0.40	0.00	0.00	55	102
NS5M5A17	202	1.50	-2.0470	0.000	0.090	0.57	0.00	0.49	0.00	0.00	19	100
NS5M5A17	202	1.50	-1.0020	0.000	0.090	0.440	0.00	0.55	0.00	0.00	62	100
NS5M5A17	202	1.50	0.0000	0.000	0.140	0.410	0.00	0.40	0.00	0.00	63	100
NS5M5A17	202	1.50	1.0030	0.000	0.180	0.410	0.00	0.40	0.00	0.00	63	100
NS5M5A17	202	1.50	2.0040	0.000	0.220	0.410	0.00	0.40	0.00	0.00	63	100
NS5M5A17	202	1.50	3.0050	0.000	0.260	0.410	0.00	0.40	0.00	0.00	63	100
NS5M5A17	202	1.50	4.0060	0.000	0.300	0.410	0.00	0.40	0.00	0.00	63	100
NS5M5A17	202	1.50	5.0070	0.000	0.340	0.410	0.00	0.40	0.00	0.00	63	100
NS5M5A17	202	1.50	6.0080	0.000	0.380	0.410	0.00	0.40	0.00	0.00	63	100
NS5M5A17	202	1.50	7.0090	0.000	0.420	0.410	0.00	0.40	0.00	0.00	63	100
NS5M5A17	202	1.50	8.0100	0.000	0.460	0.410	0.00	0.40	0.00	0.00	63	100
N16M5A17	205	1.50	-2.0470	0.000	0.094	0.67	0.00	0.7	0.00	7.65	507	100
N16M5A17	205	1.50	-1.0020	0.000	0.110	0.500	0.00	0.27	0.00	0.00	505	100
N16M5A17	205	1.50	0.0000	0.000	0.150	0.470	0.00	0.23	0.00	0.00	505	100
N16M5A17	205	1.50	1.0030	0.000	0.190	0.470	0.00	0.23	0.00	0.00	505	100
N16M5A17	205	1.50	2.0040	0.000	0.230	0.470	0.00	0.23	0.00	0.00	505	100
N16M5A17	205	1.50	3.0050	0.000	0.270	0.470	0.00	0.23	0.00	0.00	505	100
N16M5A17	205	1.50	4.0060	0.000	0.310	0.470	0.00	0.23	0.00	0.00	505	100
N16M5A17	205	1.50	5.0070	0.000	0.350	0.470	0.00	0.23	0.00	0.00	505	100
N16M5A17	205	1.50	6.0080	0.000	0.390	0.470	0.00	0.23	0.00	0.00	505	100
N16M5A17	205	1.50	7.0090	0.000	0.430	0.470	0.00	0.23	0.00	0.00	505	100
N16M5A17	205	1.50	8.0100	0.000	0.470	0.470	0.00	0.23	0.00	0.00	505	100

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M16M05A17	206	1.20	-2.037	0.000	0.033	0.225	0.043	0.219	0.000	4.938	4.92	270
M16M05A17	206	1.20	-1.016	0.000	0.005	0.005	0.005	0.020	0.000	5.305	4.90	267
M16M05A17	206	1.20	0.026	0.000	0.000	0.000	0.000	0.000	0.000	5.505	4.89	268
M16M05A17	206	1.20	0.041	0.000	0.000	0.000	0.005	0.019	0.000	5.525	4.93	269
M16M05A17	206	1.20	0.092	0.000	0.000	0.000	0.005	0.022	0.000	5.547	4.97	270
M16M05A17	206	1.20	0.139	0.000	0.000	0.000	0.005	0.032	0.000	5.571	5.00	271
M16M05A17	206	1.20	0.237	0.000	0.000	0.000	0.005	0.052	0.000	5.604	5.12	272
M16M05A17	206	1.20	0.372	0.000	0.000	0.000	0.005	0.079	0.000	5.655	5.16	273
M16M05A17	207	1.00	-2.029	0.000	0.067	0.255	0.002	0.244	0.000	2.463	3.95	152
M16M05A17	207	1.00	-1.010	0.000	0.042	0.022	0.002	0.245	0.000	2.469	3.92	151
M16M05A17	207	1.00	0.033	0.000	0.000	0.000	0.000	0.254	0.000	2.471	3.93	150
M16M05A17	207	1.00	0.056	0.000	0.000	0.000	0.000	0.257	0.000	2.474	3.94	149
M16M05A17	207	1.00	0.074	0.000	0.000	0.000	0.000	0.260	0.000	2.477	3.94	148
M16M05A17	207	1.00	0.100	0.000	0.000	0.000	0.000	0.269	0.000	2.481	4.01	147
M16M05A17	207	1.00	0.160	0.000	0.000	0.000	0.000	0.295	0.000	2.491	4.27	146
M16M05A17	207	1.00	0.209	0.000	0.000	0.000	0.000	0.309	0.000	2.509	4.47	145
M16M05A17	207	1.00	0.334	0.000	0.000	0.000	0.000	0.329	0.000	2.522	4.61	144
M16M05A17	207	1.00	0.494	0.000	0.000	0.000	0.000	0.389	0.000	2.572	4.76	143
M16M05A17	208	0.80	-2.100	0.000	0.274	0.700	0.003	0.191	0.000	0.929	2.57	001
M16M05A17	208	0.80	-1.005	0.000	0.140	0.370	0.003	0.215	0.000	0.957	2.55	000
M16M05A17	208	0.80	0.029	0.000	0.040	0.020	0.000	0.254	0.000	1.103	2.55	009
M16M05A17	208	0.80	0.057	0.000	0.051	0.050	0.000	0.260	0.000	1.107	2.56	009
M16M05A17	208	0.80	0.077	0.000	0.053	0.050	0.000	0.265	0.000	1.109	2.56	009
M16M05A17	208	0.80	0.094	0.000	0.055	0.050	0.000	0.269	0.000	1.113	2.56	009
M16M05A17	208	0.80	0.130	0.000	0.057	0.050	0.000	0.295	0.000	1.124	2.56	009
M16M05A17	208	0.80	0.194	0.000	0.057	0.050	0.000	0.329	0.000	1.143	2.56	009
M16M05A17	208	0.80	0.319	0.000	0.057	0.050	0.000	0.389	0.000	1.172	2.56	009
M16M05A17	209	0.60	-2.103	0.000	0.171	0.620	0.003	0.16	0.000	0.710	2.33	085
M16M05A17	209	0.60	-1.035	0.000	0.030	0.225	0.002	0.211	0.000	0.929	2.33	087
M16M05A17	209	0.60	0.021	0.000	0.060	0.060	0.000	0.252	0.000	0.938	2.33	085
M16M05A17	209	0.60	0.050	0.000	0.061	0.060	0.000	0.258	0.000	0.938	2.33	085
M16M05A17	209	0.60	0.089	0.000	0.062	0.060	0.000	0.265	0.000	0.938	2.33	085
M16M05A17	209	0.60	0.150	0.000	0.062	0.060	0.000	0.280	0.000	0.938	2.33	085
M16M05A17	209	0.60	0.250	0.000	0.062	0.060	0.000	0.329	0.000	0.938	2.33	085
M16M05A17	209	0.60	0.375	0.000	0.062	0.060	0.000	0.389	0.000	0.938	2.33	085
M16M05A17	209	0.60	0.493	0.000	0.062	0.060	0.000	0.406	0.000	0.938	2.33	085
M16M05A17	209	0.60	0.627	0.000	0.062	0.060	0.000	0.479	0.000	0.938	2.33	085
M16M05A17	209	0.60	1.024	0.000	0.062	0.060	0.000	0.616	0.000	0.938	2.33	085

APPENDIX B

(A) Supersonic Tabulated Data

VFK/A RUN SCHEDULE

Part No	Config	M <sub>∞</sub>	Part No	Config	M <sub>∞</sub>	Part No	Config	M <sub>∞</sub>	Part No	Config	M <sub>∞</sub>
2	N22 M5	1.5	42	N21 M7	1.5	80	N13 M7	2.0	116	N27 M9	2.5
4	N22 M5	1.5	43	N22 M7	1.5	81	N14 M7	2.0	117	N22 M9	2.5
5	N22 M5	1.5	44	N23 M7	1.5	82	N15 M7	2.0	119	N26 M5	3.5
6	N26 M5	1.5	45	N24 M7	1.5	85	N16 M7	2.0	122	N27 M5	3.5
8	N27 M5	1.5	46	N20 M7	1.5	84	N17 M7	2.0	124	N27 M5	3.0
9	N27 M9	1.5	47	N28 M7	1.5	85	N18 M7	2.0	126	N27 M5	3.0
10	N26 M9	1.5	49	N10 M11	1.5	86	N19 M7	2.0	129	N26 M5	3.0
12	N27 M9	1.5	51	N10 M11	2.0	87	N25 M7	2.0	132	N27 M9	3.0
14	N10 M9	1.5	53	N13 M11	2.0	88	N21 M7	2.0	133	N10 M9	3.0
15	N13 M9	1.5	54	N14 M11	2.0	89	N22 M7	2.0	134	N13 M9	3.0
16	N14 M9	1.5	55	N14 M11	2.0	90	N23 M7	2.0	136	N15 M9	3.0
17	N15 M9	1.5	57	N26 M5	2.5	91	N24 M7	2.0	137	N16 M9	3.0
18	N16 M9	1.5	58	N27 M5	2.5	92	N20 M7	2.0	138	N17 M9	3.0
19	N17 M9	1.5	59	N27 M5	2.0	93	N28 M7	2.0	139	N18 M9	3.0
21	N18 M9	1.5	61	N26 M5	2.0	95	N10 M5	2.0	140	N10 M9	3.0
22	N19 M9	1.5	62	N26 M9	2.0	96	N10 M5	2.0	141	N25 M9	3.0
23	N25 M9	1.5	63	N27 M9	2.0	97	N14 M5	2.0	142	N21 M9	3.0
24	N21 M9	1.5	64	N10 M9	2.0	98	N15 M5	2.0	143	N22 M9	3.0
25	N22 M9	1.5	65	N13 M9	2.0	99	N16 M5	2.0	144	N23 M9	3.0
26	N23 M9	1.5	66	N14 M9	2.0	100	N17 M5	2.0	145	N24 M9	3.0
27	N24 M9	1.5	67	N15 M9	2.0	101	N18 M5	2.0	146	N20 M9	3.0
28	N20 M9	1.5	68	N16 M9	2.0	102	N19 M5	2.0	147	N28 M9	3.0
29	N17 M9	1.5	69	N17 M9	2.0	103	N25 M5	2.0	148	N10 M7	3.0
32	N28 M7	1.5	70	N18 M9	2.0	104	N21 M5	2.0	149	N13 M7	3.0
33	N10 M7	1.5	71	N19 M9	2.0	105	N22 M5	2.0	150	N14 M7	3.0
34	N13 M7	1.5	72	N25 M9	2.0	106	N23 M5	2.0	151	N15 M7	3.0
35	N14 M7	1.5	73	N21 M9	2.0	107	N24 M5	2.0	152	N16 M7	3.0
36	N15 M7	1.5	74	N22 M9	2.0	108	N20 M5	2.0	153	N17 M7	3.0
37	N16 M7	1.5	75	N23 M9	2.0	109	N28 M5	2.0	154	N18 M7	3.0
38	N17 M7	1.5	76	N24 M9	2.0	110	N26 M5	2.0	155	N19 M7	3.0
39	N18 M7	1.5	77	N20 M9	2.0	112	N27 M5	2.0	156	N25 M7	3.0
40	N19 M7	1.5	78	N28 M9	2.0	114	N22 M5	2.0	157	N21 M7	3.0
41	N25 M7	1.5	79	N10 M7	2.0	115	N26 M9	2.5	158	N22 M7	3.0

VKF/A RUN SCHEDULE (CONCLUDED)

Part No	Config	M <sub>∞</sub>	Part No	Config	M <sub>∞</sub>	Part No	Config	M <sub>∞</sub>	Part No	Config	M <sub>∞</sub>
159	N23 M7	3.0	222	N13 M9	4.0	257	N20 M11	1.5	297	N21 M11	2.0
160	N24 M7	3.0	223	N14 M9	4.0	258	N21 M11	1.5	298	N22 M11	2.0
161	N20 M7	3.0	224	N15 M9	4.0	259	N22 M11	1.5	299	N23 M11	2.0
162	N28 M7	3.0	225	N16 M9	4.0	260	N23 M11	1.5	304	N29 M9	2.0
163	N10 M11	3.0	226	N17 M9	4.0	264	N10 M5	1.5	305	N26 M9	2.0
164	N13 M11	3.0	227	N18 M9	4.0	268	N13 M5	1.5	306	N29 M5	2.0
165	N14 M11	3.0	228	N19 M9	4.0	269	N14 M5	1.5	307	N30 M5	2.0
166	N15 M11	3.0	229	N25 M9	4.0	270	N15 M5	1.5	308	N31 M5	2.0
167	N16 M11	3.0	230	N21 M9	4.0	271	N16 M5	1.5	309	N26 M5	2.0
168	N17 M11	3.0	231	N22 M9	4.0	272	N17 M5	1.5	312	N26 M5	3.0
169	N18 M11	3.0	232	N23 M9	4.0	273	N18 M5	1.5	313	N10 M5	3.0
170	N19 M11	3.0	233	N24 M9	4.0	274	N19 M5	1.5	314	N13 M5	3.0
171	N25 M11	3.0	234	N20 M9	4.0	275	N20 M5	1.5	315	N14 M5	3.0
172	N21 M11	3.0	235	N28 M9	4.0	276	N21 M5	1.5	316	N15 M5	3.0
173	N22 M11	3.0	236	N10 M7	4.0	277	N22 M5	1.5	317	N16 M5	3.0
174	N23 M11	3.0	237	N13 M7	4.0	278	N23 M5	1.5	318	N17 M5	3.0
175	N24 M11	3.0	238	N14 M7	4.0	279	N24 M5	1.5	319	N18 M5	3.0
176	N20 M11	3.0	239	N15 M7	4.0	280	N25 M5	1.5	320	N19 M5	3.0
177	N28 M11	3.0	240	N16 M7	4.0	281	N29 M5	1.5	321	N20 M5	3.0
178	N26 M11	3.0	241	N17 M7	4.0	282	N30 M5	1.5	322	N21 M5	3.0
179	N27 M11	3.0	242	N18 M7	4.0	283	N30 M5	1.5	323	N22 M5	3.0
180	N26 M9	3.0	243	N19 M7	4.0	284	N31 M9	1.5	324	N23 M5	3.0
181	N22 M5	3.0	244	N25 M7	4.0	285	N30 M9	1.5	325	N24 M5	3.0
182	N22 M5	3.0	245	N21 M7	4.0	286	N29 M9	1.5	326	N25 M5	3.0
183	N22 M5	3.0	246	N22 M7	4.0	288	N30 M9	1.5	327	N29 M5	3.0
184	N22 M5	3.0	247	N23 M7	4.0	289	N31 M9	2.0	328	N30 M5	3.0
187	N26 M5	4.5	249	N10 M11	1.5	290	N14 M11	2.0	329	N31 M5	3.0
211	N27 M5	4.5	251	N14 M11	1.5	291	N15 M11	2.0	330	N29 M9	3.0
213	N27 M5	4.0	252	N16 M11	1.5	292	N16 M11	2.0	331	N30 M9	3.0
216	N26 M5	4.0	253	N16 M11	1.5	293	N17 M11	2.0	332	N31 M9	3.0
219	N26 M9	4.0	254	N17 M11	1.5	294	N18 M11	2.0	333	N26 M9	3.0
220	N27 M9	4.0	255	N18 M11	1.5	295	N19 M11	2.0	334	N26 M9	4.0
221	N10 M9	4.0	256	N19 M11	1.5	296	N20 M11	2.0	335	N29 M9	4.0
									336	N30 M9	4.0
									337	N31 M9	4.0









Table with columns: CONFIG, PART NO, MACH, ALPHA, RETN, QTY, QTY, QTY, QTY, CLM, CLL, XCP, CAT, CAF. Two main data blocks are present, one on the left and one on the right of the page.









CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CV	CLN	CLL	XCP	CAT	CAF
M2	25	1	15	00	354	001	010	159	01	002	94	150
M2	25	1	15	00	272	105	000	000	00	475	297	150
M2	25	1	15	00	272	152	000	000	00	800	257	150
M2	25	1	15	00	144	146	000	000	00	108	267	150
M2	25	1	15	00	194	093	000	000	00	186	252	150
M2	25	1	15	00	051	009	000	000	00	589	252	150
M2	25	1	15	00	007	067	000	000	00	168	252	150
M2	25	1	15	00	043	054	000	000	00	000	252	150
M2	25	1	15	00	027	052	000	000	00	977	252	150
M2	25	1	15	00	092	034	000	000	00	802	252	150
M2	25	1	15	00	120	031	000	000	00	091	252	150
M2	25	1	15	00	145	143	000	000	00	101	252	150
M2	25	1	15	00	175	137	000	000	00	066	262	150
M2	25	1	15	00	235	050	000	000	00	228	252	150
M2	25	1	15	00	352	269	000	000	00	071	252	150
M2	25	1	15	00	587	025	000	000	00	585	299	150
M2	25	1	15	00	903	555	000	000	00	723	299	150
M2	25	1	15	00	302	109	000	000	00	923	200	150
M2	25	1	15	00	525	179	000	000	00	000	200	150
M3	26	1	15	00	357	052	000	000	00	495	307	174
M3	26	1	15	00	267	129	000	000	00	755	297	174
M3	26	1	15	00	139	149	000	000	00	000	297	174
M3	26	1	15	00	112	135	000	000	00	237	297	174
M3	26	1	15	00	065	025	000	000	00	000	275	174
M3	26	1	15	00	022	047	000	000	00	505	252	174
M3	26	1	15	00	109	027	000	000	00	000	252	174
M3	26	1	15	00	056	017	000	000	00	319	252	174
M3	26	1	15	00	073	048	000	000	00	000	252	174
M3	26	1	15	00	125	265	000	000	00	665	252	174
M3	26	1	15	00	158	474	000	000	00	880	252	174
M3	26	1	15	00	200	150	000	000	00	666	252	174
M3	26	1	15	00	361	261	000	000	00	000	252	174
M3	26	1	15	00	482	458	000	000	00	000	252	174
M3	26	1	15	00	725	653	000	000	00	000	252	174
M3	26	1	15	00	927	948	000	000	00	000	252	174
M3	26	1	15	00	132	231	000	000	00	000	252	174



























CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M5A17	59	N	00	005	365	035	010	000	000	097	426	761
M5A17	59	N	000	005	380	065	010	000	000	213	428	761
M5A17	59	N	000	006	214	067	000	000	000	277	411	761
M5A17	59	N	000	006	153	074	000	000	000	277	411	761
M5A17	59	N	000	006	126	075	000	000	000	307	407	761
M5A17	59	N	000	006	197	077	000	000	000	104	407	761
M5A17	59	N	000	006	225	077	000	000	000	706	407	761
M5A17	59	N	000	005	000	052	000	000	000	100	407	761
M5A17	59	N	000	004	029	058	000	000	000	360	397	761
M5A17	59	N	000	003	055	079	000	000	000	429	402	761
M5A17	59	N	000	002	111	077	000	000	000	961	407	761
M5A17	59	N	000	002	177	077	000	000	000	787	407	761
M5A17	59	N	000	002	207	086	000	000	000	619	428	761
M5A17	59	N	000	001	356	056	000	000	000	302	444	761
M5A17	59	N	000	000	477	072	000	000	000	202	444	761
M5A17	59	N	000	000	577	073	000	000	000	250	444	761
M5A17	59	N	000	000	59	073	000	000	000	165	456	761
M5A17	59	N	000	000	597	073	000	000	000	350	456	761
M5A17	59	N	000	000	697	073	000	000	000	165	456	761
M5A17	59	N	000	000	977	022	000	001	001	516	456	761
M5A17	59	N	000	000	097	020	000	001	001	911	456	761
M5A17	59	N	000	000	237	022	000	001	001	162	456	761
M5A17	59	N	000	000	417	022	000	002	002	114	456	761
M5A17	61	N	000	005	077	074	010	000	000	429	456	761
M5A17	61	N	000	005	097	074	000	000	000	119	456	761
M5A17	61	N	000	005	247	074	000	000	000	277	456	761
M5A17	61	N	000	005	160	051	000	000	000	322	456	761
M5A17	61	N	000	005	107	025	000	000	000	277	456	761
M5A17	61	N	000	005	460	044	000	000	000	309	456	761
M5A17	61	N	000	005	100	052	000	000	000	821	456	761
M5A17	61	N	000	005	000	072	000	000	000	051	456	761
M5A17	61	N	000	005	000	045	000	000	000	276	456	761
M5A17	61	N	000	004	000	090	000	000	000	696	456	761
M5A17	61	N	000	004	000	193	000	000	000	161	456	761
M5A17	61	N	000	003	000	057	000	000	000	371	456	761
M5A17	61	N	000	002	000	067	000	000	000	200	456	761
M5A17	61	N	000	002	000	097	000	000	000	119	456	761
M5A17	61	N	000	002	000	097	000	000	000	330	456	761
M5A17	61	N	000	002	000	097	000	000	000	200	456	761
M5A17	61	N	000	002	000	197	000	000	000	449	456	761
M5A17	61	N	000	002	000	257	000	000	000	371	456	761
M5A17	61	N	000	002	000	497	000	000	000	165	456	761
M5A17	61	N	000	002	000	597	000	000	000	350	456	761
M5A17	61	N	000	002	000	697	000	000	000	165	456	761
M5A17	61	N	000	002	000	977	000	000	000	516	456	761
M5A17	61	N	000	000	097	022	000	000	000	911	456	761
M5A17	61	N	000	000	237	022	000	000	000	162	456	761
M5A17	61	N	000	000	417	022	000	000	000	114	456	761
M5A17	61	N	000	000	697	022	000	000	000	350	456	761
M5A17	61	N	000	000	977	022	000	000	000	114	456	761
M5A17	61	N	000	000	197	022	000	000	000	330	456	761
M5A17	61	N	000	000	257	022	000	000	000	200	456	761
M5A17	61	N	000	000	497	022	000	000	000	449	456	761
M5A17	61	N	000	000	597	022	000	000	000	350	456	761
M5A17	61	N	000	000	697	022	000	000	000	165	456	761
M5A17	61	N	000	000	977	022	000	000	000	516	456	761

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N25	62	2	5	.011	45	318	.00	.05	.01	24	71	25
N26	62	2	4	.010	25	29	.00	.02	.00	2	2	25
N25	62	2	3	.009	22	0	.00	.02	.00	3	2	25
N26	62	2	2	.009	18	0	.00	.02	.00	4	2	25
N25	62	2	1	.000	10	0	.00	.02	.00	4	2	25
N26	62	2	0	.008	7	0	.00	.01	.00	0	2	23
N25	62	2	1	.008	0	0	.00	.01	.00	0	2	23
N26	62	2	1	.007	0	0	.00	.01	.00	0	2	23
N25	62	2	2	.005	0	0	.00	.01	.00	0	2	23
N26	62	2	3	.005	0	0	.00	.01	.00	0	2	23
N25	62	2	4	.005	0	0	.00	.01	.00	0	2	23
N26	62	2	5	.004	0	0	.00	.01	.00	0	2	23
N25	62	2	6	.002	0	0	.00	.01	.00	0	2	23
N26	62	2	7	.002	0	0	.00	.01	.00	0	2	23
N25	62	2	8	.002	0	0	.00	.01	.00	0	2	23
N26	62	2	9	.002	0	0	.00	.01	.00	0	2	23
N25	62	2	10	.002	0	0	.00	.01	.00	0	2	23
N26	62	2	11	.002	0	0	.00	.01	.00	0	2	23
N25	62	2	12	.002	0	0	.00	.01	.00	0	2	23
N26	62	2	13	.002	0	0	.00	.01	.00	0	2	23
N25	62	2	14	.002	0	0	.00	.01	.00	0	2	23
N27	62	2	5	.007	0	4	.00	.05	.01	3	4	33
N27	62	2	4	.007	2	0	.00	.02	.00	0	4	33
N27	62	2	3	.007	2	0	.00	.02	.00	0	4	33
N27	62	2	2	.007	1	0	.00	.02	.00	0	4	33
N27	62	2	1	.007	0	0	.00	.02	.00	0	4	33
N27	62	2	0	.007	0	0	.00	.02	.00	0	4	33
N27	62	2	1	.006	0	0	.00	.01	.00	0	4	33
N27	62	2	2	.006	0	0	.00	.01	.00	0	4	33
N27	62	2	3	.006	0	0	.00	.01	.00	0	4	33
N27	62	2	4	.006	0	0	.00	.01	.00	0	4	33
N27	62	2	5	.006	0	0	.00	.01	.00	0	4	33
N27	62	2	6	.006	0	0	.00	.01	.00	0	4	33
N27	62	2	7	.006	0	0	.00	.01	.00	0	4	33
N27	62	2	8	.006	0	0	.00	.01	.00	0	4	33
N27	62	2	9	.006	0	0	.00	.01	.00	0	4	33
N27	62	2	10	.006	0	0	.00	.01	.00	0	4	33
N27	62	2	11	.006	0	0	.00	.01	.00	0	4	33
N27	62	2	12	.006	0	0	.00	.01	.00	0	4	33
N27	62	2	13	.006	0	0	.00	.01	.00	0	4	33
N27	62	2	14	.006	0	0	.00	.01	.00	0	4	33





CONFIG	PAPT NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N16	68	2	-5.0000	008	33	42	00	00	00	00	476	83
N15	68	2	-3.5000	007	35	40	00	00	00	00	478	72
N16	68	2	-3.5000	008	34	40	00	00	00	00	458	69
N15	68	2	-2.5000	008	31	40	00	00	00	00	477	66
N16	68	2	-1.5000	007	30	40	00	00	00	00	477	65
N16	68	2	0.5000	007	30	40	00	00	00	00	477	64
N16	68	2	1.5000	006	31	40	00	00	00	00	477	63
N15	68	2	1.5000	006	30	40	00	00	00	00	477	62
N16	68	2	2.5000	006	27	40	00	00	00	00	477	61
N16	68	2	3.5000	005	26	40	00	00	00	00	477	60
N16	68	2	4.5000	005	24	40	00	00	00	00	477	59
N16	68	2	5.5000	004	23	40	00	00	00	00	477	58
N16	68	2	6.5000	004	22	40	00	00	00	00	477	57
N16	68	2	7.5000	003	21	40	00	00	00	00	477	56
N16	68	2	8.5000	003	20	40	00	00	00	00	477	55
N16	68	2	9.5000	002	19	40	00	00	00	00	477	54
N16	68	2	10.5000	002	18	40	00	00	00	00	477	53
N16	68	2	11.5000	001	17	40	00	00	00	00	477	52
N16	68	2	12.5000	001	16	40	00	00	00	00	477	51
N16	68	2	13.5000	001	15	40	00	00	00	00	477	50
N16	68	2	14.5000	000	14	40	00	00	00	00	477	49
N17	69	2	-5.0000	006	33	40	00	00	00	00	576	83
N17	69	2	-3.5000	006	35	40	00	00	00	00	578	72
N17	69	2	-3.5000	007	34	40	00	00	00	00	558	69
N17	69	2	-2.5000	007	31	40	00	00	00	00	577	66
N17	69	2	-1.5000	007	30	40	00	00	00	00	577	65
N17	69	2	0.5000	007	30	40	00	00	00	00	577	64
N17	69	2	1.5000	006	31	40	00	00	00	00	577	63
N17	69	2	1.5000	006	30	40	00	00	00	00	577	62
N17	69	2	2.5000	006	27	40	00	00	00	00	577	61
N17	69	2	3.5000	005	26	40	00	00	00	00	577	60
N17	69	2	4.5000	005	24	40	00	00	00	00	577	59
N17	69	2	5.5000	004	23	40	00	00	00	00	577	58
N17	69	2	6.5000	004	22	40	00	00	00	00	577	57
N17	69	2	7.5000	003	21	40	00	00	00	00	577	56
N17	69	2	8.5000	003	20	40	00	00	00	00	577	55
N17	69	2	9.5000	002	19	40	00	00	00	00	577	54
N17	69	2	10.5000	002	18	40	00	00	00	00	577	53
N17	69	2	11.5000	001	17	40	00	00	00	00	577	52
N17	69	2	12.5000	001	16	40	00	00	00	00	577	51
N17	69	2	13.5000	001	15	40	00	00	00	00	577	50
N17	69	2	14.5000	000	14	40	00	00	00	00	577	49





Table with columns: CONFIG, PART NO, MACH, ALPHA, PETA, CN, CLM, CV, CLN, CLL, XCP, CAT, CAF. The table contains two sets of data, one on the left and one on the right. Each row represents a specific configuration and part number, detailing various parameters like MACH, ALPHA, PETA, CN, CLM, CV, CLN, CLL, XCP, CAT, and CAF. The values are often in scientific notation or decimal form.

Table with columns: CONFIG, FAFT NO, MACH, ALPHA, BETA, CN, CLV, CY, CLN, CLL, XCP, CAT, C4F. Contains alphanumeric data for two columns of configurations.



CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	YCP	CAT	CAF
N13	M7A17	00	000000	002	375	312	00	001	001	834	729	613
N13	M7A17	00	000000	004	396	137	000	001	001	575	708	614
N13	M7A17	00	000000	005	210	039	000	001	001	483	709	615
N13	M7A17	00	000000	005	181	000	000	001	001	543	697	616
N13	M7A17	00	000000	005	154	000	000	001	001	547	694	617
N13	M7A17	00	000000	005	101	000	000	001	001	716	682	618
N13	M7A17	00	000000	005	074	000	000	001	001	375	667	619
N13	M7A17	00	000000	005	047	000	000	001	001	000	660	620
N13	M7A17	00	000000	005	007	000	000	001	001	123	665	607
N13	M7A17	00	000000	005	034	000	000	001	001	000	673	607
N13	M7A17	00	000000	005	051	000	000	001	001	189	686	607
N13	M7A17	00	000000	005	102	000	000	001	001	379	692	605
N13	M7A17	00	000000	005	024	000	000	001	001	000	699	607
N13	M7A17	00	000000	005	052	000	000	001	001	353	726	611
N13	M7A17	00	000000	005	091	000	000	001	001	648	725	611
N13	M7A17	00	000000	005	139	000	000	001	001	328	747	623
N13	M7A17	00	000000	005	287	000	000	001	001	000	757	623
N13	M7A17	00	000000	005	357	000	000	001	001	000	757	623
N13	M7A17	00	000000	005	472	000	000	001	001	000	767	626
N13	M7A17	00	000000	005	504	000	000	001	001	000	767	626
N13	M7A17	00	000000	004	535	000	000	001	001	000	755	616
N13	M7A17	00	000000	004	535	000	000	001	001	000	755	616
N13	M7A17	00	000000	004	136	000	000	001	001	000	741	605
N14	M7A17	00	000000	005	375	175	00	000	000	000	326	326
N14	M7A17	00	000000	005	396	009	000	000	000	000	372	326
N14	M7A17	00	000000	006	210	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	181	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	154	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	101	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	074	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	047	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	007	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	034	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	051	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	102	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	024	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	052	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	091	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	139	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	287	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	357	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	472	000	000	000	000	000	326	326
N14	M7A17	00	000000	006	504	000	000	000	000	000	326	326
N14	M7A17	00	000000	004	535	000	000	000	000	000	326	326
N14	M7A17	00	000000	004	535	000	000	000	000	000	326	326
N14	M7A17	00	000000	004	136	000	000	000	000	000	326	326







CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N2I N2I N2I N2I N2I N2I N2I N2I N2I N2I N2I N2I N2I	99 99 99 99 99 99 99 99 99 99 99 99 99	N2 N2 N2 N2 N2 N2 N2 N2 N2 N2 N2 N2 N2	15 3 2 2 1 1 1 1 1 1 1 1 1	005 006 006 006 006 006 006 006 006 006 006 006 006	3 2 2 2 2 2 2 2 2 2 2 2 2	100 6 6 6 6 6 6 6 6 6 6 6 6	007 006 006 006 006 006 010 010 011 011 011 011 025 037	007 006 006 006 006 006 010 010 011 011 011 011 025 037	003 004 015 023 039 055 074 090 107 123 139 156 173	001 001 001 001 001 001 001 001 001 001 001 001 001	2 2 2 2 2 2 2 2 2 2 2 2 2	5 5 5 5 5 5 5 5 5 5 5 5 5
N2I N2I N2I N2I N2I N2I N2I N2I N2I N2I N2I N2I N2I	99 99 99 99 99 99 99 99 99 99 99 99 99	N2 N2 N2 N2 N2 N2 N2 N2 N2 N2 N2 N2 N2	15 3 2 2 1 1 1 1 1 1 1 1 1	006 007 007 007 007 007 007 007 006 006 005 005 005	3 2 2 2 2 2 2 2 2 2 2 2 2	100 6 6 6 6 6 6 6 6 6 6 6 6	007 006 006 006 006 006 010 010 011 011 011 011 025 037	007 006 006 006 006 006 010 010 011 011 011 011 025 037	003 004 015 023 039 055 074 090 107 123 139 156 173	001 001 001 001 001 001 001 001 001 001 001 001 001	2 2 2 2 2 2 2 2 2 2 2 2 2	5 5 5 5 5 5 5 5 5 5 5 5 5

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CV	CLN	CLL	XCP	CAT	CAF
M7A17	90	2	00	006	397	095	07	002	00	22	27	175
M7A17	90	2	00	006	307	130	00	000	00	50	16	150
M7A17	90	2	00	006	207	153	00	000	00	44	20	150
M7A17	90	2	00	006	195	117	00	000	00	75	20	150
M7A17	90	2	00	006	158	164	00	000	00	44	20	150
M7A17	90	2	00	006	126	025	00	000	00	20	20	150
M7A17	90	2	00	006	055	040	00	000	00	44	20	150
M7A17	90	2	00	006	025	023	00	000	00	44	20	150
M7A17	90	2	00	006	018	036	00	000	00	09	20	150
M7A17	90	2	00	006	014	053	00	000	00	09	20	150
M7A17	90	2	00	006	012	053	00	000	00	09	20	150
M7A17	90	2	00	006	011	032	00	000	00	09	20	150
M7A17	90	2	00	006	010	116	00	000	00	09	20	150
M7A17	90	2	00	006	009	155	00	000	00	09	20	150
M7A17	90	2	00	006	008	193	00	000	00	09	20	150
M7A17	90	2	00	006	007	108	00	000	00	09	20	150
M7A17	90	2	00	006	006	176	00	000	00	09	20	150
M7A17	90	2	00	006	005	325	00	000	00	09	20	150
M7A17	90	2	00	006	004	458	00	000	00	09	20	150
M7A17	90	2	00	006	003	857	00	000	00	09	20	150
M7A17	90	2	00	006	002	157	00	000	00	09	20	150
M7A17	90	2	00	006	002	471	00	000	00	09	20	150
M7A17	90	2	00	006	002	109	00	000	00	09	20	150
M7A17	91	2	00	006	380	555	00	000	00	13	20	170
M7A17	91	2	00	006	330	160	00	000	00	13	20	170
M7A17	91	2	00	006	274	133	00	000	00	13	20	170
M7A17	91	2	00	006	247	107	00	000	00	13	20	170
M7A17	91	2	00	006	200	473	00	000	00	13	20	170
M7A17	91	2	00	006	170	220	00	000	00	13	20	170
M7A17	91	2	00	006	142	600	00	000	00	13	20	170
M7A17	91	2	00	006	122	000	00	000	00	13	20	170
M7A17	91	2	00	006	107	033	00	000	00	13	20	170
M7A17	91	2	00	006	080	047	00	000	00	13	20	170
M7A17	91	2	00	006	060	050	00	000	00	13	20	170
M7A17	91	2	00	006	041	000	00	000	00	13	20	170
M7A17	91	2	00	006	025	143	00	000	00	13	20	170
M7A17	91	2	00	006	015	157	00	000	00	13	20	170
M7A17	91	2	00	006	009	543	00	000	00	13	20	170
M7A17	91	2	00	006	007	650	00	000	00	13	20	170
M7A17	91	2	00	006	006	131	00	000	00	13	20	170
M7A17	91	2	00	006	005	173	00	000	00	13	20	170
M7A17	91	2	00	006	004	323	00	000	00	13	20	170
M7A17	91	2	00	006	003	494	00	000	00	13	20	170
M7A17	91	2	00	006	003	859	00	000	00	13	20	170
M7A17	91	2	00	006	002	157	00	000	00	13	20	170
M7A17	91	2	00	006	002	471	00	000	00	13	20	170
M7A17	91	2	00	006	002	109	00	000	00	13	20	170

CONFIG PAPT NO MACH ALPHA BETA CN CLM CY CLM CLN CLL XCB CAT CAF

CONFIG PAPT NO MACH ALPHA BETA CN CLM CY CLM CLN CLL XCB CAT CAF

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCF	CAT	CAF
N10	05	2	15	004	2	13	00	005	00	04	025	23
N10	05	2	00	004	7	00	00	007	00	00	027	33
N10	05	2	00	005	2	00	00	008	00	00	027	44
N10	05	2	00	005	7	00	00	009	00	00	027	49
N10	05	2	00	005	2	00	00	010	00	00	027	50
N10	05	2	00	005	7	00	00	011	00	00	027	51
N10	05	2	00	005	2	00	00	012	00	00	027	52
N10	05	2	00	005	7	00	00	013	00	00	027	53
N10	05	2	00	005	2	00	00	014	00	00	027	54
N10	05	2	00	005	7	00	00	015	00	00	027	55
N10	05	2	00	005	2	00	00	016	00	00	027	56
N10	05	2	00	005	7	00	00	017	00	00	027	57
N10	05	2	00	005	2	00	00	018	00	00	027	58
N10	05	2	00	005	7	00	00	019	00	00	027	59
N10	05	2	00	005	2	00	00	020	00	00	027	60
N10	05	2	00	005	7	00	00	021	00	00	027	61
N10	05	2	00	005	2	00	00	022	00	00	027	62
N10	05	2	00	005	7	00	00	023	00	00	027	63
N10	05	2	00	005	2	00	00	024	00	00	027	64
N10	05	2	00	005	7	00	00	025	00	00	027	65
N10	05	2	00	005	2	00	00	026	00	00	027	66
N10	05	2	00	005	7	00	00	027	00	00	027	67
N10	05	2	00	005	2	00	00	028	00	00	027	68
N10	05	2	00	005	7	00	00	029	00	00	027	69
N10	05	2	00	005	2	00	00	030	00	00	027	70
N10	05	2	00	005	7	00	00	031	00	00	027	71
N10	05	2	00	005	2	00	00	032	00	00	027	72
N10	05	2	00	005	7	00	00	033	00	00	027	73
N10	05	2	00	005	2	00	00	034	00	00	027	74
N10	05	2	00	005	7	00	00	035	00	00	027	75
N10	05	2	00	005	2	00	00	036	00	00	027	76
N10	05	2	00	005	7	00	00	037	00	00	027	77
N10	05	2	00	005	2	00	00	038	00	00	027	78
N10	05	2	00	005	7	00	00	039	00	00	027	79
N10	05	2	00	005	2	00	00	040	00	00	027	80
N10	05	2	00	005	7	00	00	041	00	00	027	81
N10	05	2	00	005	2	00	00	042	00	00	027	82
N10	05	2	00	005	7	00	00	043	00	00	027	83
N10	05	2	00	005	2	00	00	044	00	00	027	84
N10	05	2	00	005	7	00	00	045	00	00	027	85
N10	05	2	00	005	2	00	00	046	00	00	027	86
N10	05	2	00	005	7	00	00	047	00	00	027	87
N10	05	2	00	005	2	00	00	048	00	00	027	88
N10	05	2	00	005	7	00	00	049	00	00	027	89
N10	05	2	00	005	2	00	00	050	00	00	027	90
N10	05	2	00	005	7	00	00	051	00	00	027	91
N10	05	2	00	005	2	00	00	052	00	00	027	92
N10	05	2	00	005	7	00	00	053	00	00	027	93
N10	05	2	00	005	2	00	00	054	00	00	027	94
N10	05	2	00	005	7	00	00	055	00	00	027	95
N10	05	2	00	005	2	00	00	056	00	00	027	96
N10	05	2	00	005	7	00	00	057	00	00	027	97
N10	05	2	00	005	2	00	00	058	00	00	027	98
N10	05	2	00	005	7	00	00	059	00	00	027	99
N10	05	2	00	005	2	00	00	060	00	00	027	00







CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N25	103	2	5	05	365	132	007	003	001	363	502	485
N25	103	2	5	05	233	141	007	003	001	533	502	477
N25	103	2	5	05	306	137	008	009	001	516	502	477
N25	103	2	5	05	151	039	008	009	001	517	502	477
N25	103	2	5	05	124	054	009	010	001	510	502	477
N25	103	2	5	05	074	033	009	011	001	510	502	477
N25	103	2	5	05	025	015	009	011	001	510	502	477
N25	103	2	5	05	001	022	010	010	001	509	502	477
N25	103	2	5	05	016	042	011	007	001	502	502	477
N25	103	2	5	05	078	051	010	005	001	505	502	477
N25	103	2	5	05	103	095	011	005	001	509	502	477
N25	103	2	5	05	124	120	010	003	001	509	502	477
N25	103	2	5	05	162	136	010	003	001	509	502	477
N25	103	2	5	05	280	149	010	003	001	509	502	477
N25	103	2	5	05	407	191	011	003	001	509	502	477
N25	103	2	5	05	510	158	017	005	001	509	502	477
N25	103	2	5	05	951	153	025	009	001	509	502	477
N25	103	2	5	05	1268	175	036	015	001	509	502	477
N25	103	2	5	05	1	238	023	010	001	509	502	477

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N21	104	2	5	05	362	143	008	003	000	000	502	502
N21	104	2	5	05	220	057	008	003	000	000	502	502
N21	104	2	5	05	295	038	009	003	000	000	502	502
N21	104	2	5	05	149	037	009	003	000	000	502	502
N21	104	2	5	05	127	044	010	003	000	000	502	502
N21	104	2	5	05	107	014	010	003	000	000	502	502
N21	104	2	5	05	047	007	010	003	000	000	502	502
N21	104	2	5	05	024	028	010	003	000	000	502	502
N21	104	2	5	05	025	035	011	003	000	000	502	502
N21	104	2	5	05	147	052	011	003	000	000	502	502
N21	104	2	5	05	137	056	011	003	000	000	502	502
N21	104	2	5	05	193	061	012	003	000	000	502	502
N21	104	2	5	05	232	060	012	003	000	000	502	502
N21	104	2	5	05	474	075	016	003	000	000	502	502
N21	104	2	5	05	531	075	016	003	000	000	502	502
N21	104	2	5	05	796	131	026	003	000	000	502	502
N21	104	2	5	05	1	296	032	010	000	000	502	502



Table with columns: CONFIG, PART NO, MACH, ALPHA, BETA, CN, CLM, CY, CLN, CLL, XCP, CAT, CAF. Two main sections of data are visible, one starting at row 24 and one at row 28.

	CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N23	M5A17	109	22	1.5	0.004	8	0.37	0.007	0.04	0.02	0.5	0.303	0.197
N23	M5A17	109	22	1.4	0.004	8	0.50	0.002	0.03	0.01	1.7	0.294	0.197
N23	M5A17	109	22	1.5	0.005	11	0.90	0.002	0.03	0.01	2.2	0.294	0.193
N23	M5A17	109	22	1.5	0.005	11	0.43	0.009	0.09	0.01	3.0	0.272	0.193
N23	M5A17	109	22	1.5	0.006	11	0.35	0.009	0.08	0.01	3.2	0.267	0.193
N23	M5A17	109	22	1.5	0.006	11	0.10	0.010	0.03	0.01	3.1	0.264	0.193
N23	M5A17	109	22	1.5	0.006	11	0.17	0.010	0.07	0.01	2.0	0.252	0.197
N23	M5A17	109	22	1.5	0.006	11	0.32	0.010	0.04	0.01	2.0	0.252	0.197
N23	M5A17	109	22	1.2	0.006	11	0.43	0.011	0.02	0.01	9.9	0.260	0.200
N23	M5A17	109	22	1.2	0.006	11	0.55	0.011	0.02	0.01	7.0	0.275	0.200
N23	M5A17	109	22	1.3	0.006	11	0.7	0.011	0.02	0.01	5.1	0.287	0.209
N23	M5A17	109	22	1.3	0.005	11	0.7	0.011	0.02	0.01	7.9	0.287	0.209
N23	M5A17	109	22	1.5	0.005	11	0.7	0.011	0.02	0.01	3.3	0.295	0.204
N23	M5A17	109	22	1.5	0.005	11	0.7	0.011	0.02	0.01	4.0	0.295	0.204
N23	M5A17	109	22	1.6	0.007	11	0.47	0.011	0.02	0.01	1.6	0.310	0.112
N23	M5A17	109	22	1.6	0.007	11	0.50	0.011	0.02	0.01	2.2	0.311	0.112
N23	M5A17	109	22	1.6	0.005	11	0.90	0.011	0.02	0.01	3.5	0.322	0.213
N23	M5A17	109	22	1.6	0.005	11	1.0	0.013	0.02	0.01	3.5	0.322	0.213
N23	M5A17	109	22	1.8	0.003	11	1.2	0.014	0.03	0.01	0.1	0.338	0.213
N23	M5A17	109	22	1.8	0.003	11	1.7	0.014	0.03	0.01	0.1	0.338	0.213
N23	M5A17	109	22	1.1	0.004	11	7.0	0.017	0.03	0.01	4.2	0.347	0.212
N23	M5A17	109	22	1.1	0.004	11	1.4	0.017	0.03	0.01	7.6	0.347	0.212
N23	M5A17	109	22	1.4	0.005	11	1.4	0.016	0.05	0.01	9.9	0.355	0.209
N23	M5A17	109	22	1.5	0.005	11	1.4	0.016	0.05	0.01	9.9	0.355	0.209
N23	M5A17	110	22	1.6	0.003	11	0.10	0.010	0.03	0.01	1.0	0.303	0.221
N23	M5A17	110	22	1.5	0.003	11	0.16	0.010	0.03	0.01	1.9	0.291	0.221
N23	M5A17	110	22	1.5	0.005	11	0.35	0.010	0.03	0.01	1.9	0.291	0.221
N23	M5A17	110	22	1.5	0.005	11	0.35	0.010	0.03	0.01	1.9	0.291	0.221
N23	M5A17	110	22	1.5	0.005	11	0.35	0.010	0.03	0.01	2.2	0.296	0.221
N23	M5A17	110	22	1.5	0.006	11	0.40	0.011	0.03	0.01	2.2	0.296	0.221
N23	M5A17	110	22	1.5	0.006	11	0.40	0.011	0.03	0.01	2.2	0.296	0.221
N23	M5A17	110	22	1.5	0.006	11	0.40	0.011	0.03	0.01	2.2	0.296	0.221
N23	M5A17	110	22	1.5	0.007	11	0.44	0.011	0.03	0.01	2.2	0.297	0.221
N23	M5A17	110	22	1.5	0.007	11	0.44	0.011	0.03	0.01	2.2	0.297	0.221
N23	M5A17	110	22	1.5	0.007	11	0.44	0.011	0.03	0.01	2.2	0.297	0.221
N23	M5A17	110	22	1.5	0.007	11	0.44	0.011	0.03	0.01	2.2	0.297	0.221
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222
N23	M5A17	110	22	1.5	0.006	11	0.32	0.011	0.03	0.01	2.2	0.288	0.222





CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CV	CLN	CLL	XCP	CAT	CAF
N23	M9A1	E	1.5	.00	55	297	0	22	00	57	2	15
N23	M9A1	E	1.5	.00	37	292	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	27	190	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	15	234	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	14	211	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	13	146	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	10	088	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	105	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	149	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	226	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	647	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	373	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	192	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	212	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	476	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	619	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	315	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	516	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	316	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	316	0	00	00	00	2	14

N23	M9A1	E	1.5	.00	55	297	0	22	00	57	2	15
N23	M9A1	E	1.5	.00	37	292	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	27	190	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	15	234	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	14	211	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	13	146	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	10	088	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	105	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	149	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	226	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	647	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	373	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	192	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	212	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	476	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	619	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	315	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	516	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	316	0	00	00	00	2	14
N23	M9A1	E	1.5	.00	08	316	0	00	00	00	2	14



























CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLM	CLM	CLM	CLL	XCP	CAT	CAF
N19	M7A17	01	00	07	07	469	00	034	001	065	001	5	280	203
N19	M7A17	01	00	08	02	294	02	031	001	797	001	7	250	197
N19	M7A17	01	00	09	00	188	02	029	001	297	001	2	222	194
N19	M7A17	01	00	00	00	052	01	022	001	216	001	2	222	184
N19	M7A17	01	00	00	00	009	01	019	001	125	001	1	222	173
N19	M7A17	01	00	00	00	017	01	016	001	091	001	1	222	173
N19	M7A17	01	00	00	00	017	01	015	001	088	001	1	222	170
N19	M7A17	01	00	00	00	015	01	013	001	068	001	0	222	169
N19	M7A17	01	00	00	00	015	01	013	001	062	001	2	222	171
N19	M7A17	01	00	00	00	024	01	014	001	059	001	2	222	172
N19	M7A17	01	00	00	00	073	01	017	001	053	001	3	222	175
N19	M7A17	01	00	00	00	109	01	017	001	049	001	2	222	177
N19	M7A17	01	00	00	00	140	01	020	001	047	001	2	242	183
N19	M7A17	01	00	00	00	289	00	007	001	048	001	9	272	191
N19	M7A17	01	00	00	00	634	00	003	001	039	001	9	281	195
N19	M7A17	01	00	00	00	238	00	003	001	035	001	2	281	205
N19	M7A17	01	00	00	00	299	00	002	001	032	001	5	280	211
N19	M7A17	01	00	00	00	691	00	003	001	023	001	5	300	221
N19	M7A17	01	00	00	00	479	00	003	001	020	001	5	300	221
N19	M7A17	01	00	00	00	221	00	003	001	019	001	1	304	222
N19	M7A17	01	00	00	00	91	00	003	001	018	001	1	312	226
N25	M7A17	01	00	00	00	49	02	032	001	7	000	3	627	56
N25	M7A17	01	00	00	00	79	02	029	001	2	000	0	403	55
N25	M7A17	01	00	00	00	19	01	019	001	2	000	2	603	55
N25	M7A17	01	00	00	00	02	01	016	001	2	000	0	470	54
N25	M7A17	01	00	00	00	09	01	015	001	0	000	0	505	54
N25	M7A17	01	00	00	00	09	01	014	001	0	000	0	571	54
N25	M7A17	01	00	00	00	05	01	014	001	0	000	0	405	53
N25	M7A17	01	00	00	00	20	01	014	001	0	000	0	500	53
N25	M7A17	01	00	00	00	90	01	014	001	0	000	0	470	53
N25	M7A17	01	00	00	00	16	01	014	001	0	000	0	505	53
N25	M7A17	01	00	00	00	77	01	014	001	0	000	0	500	53
N25	M7A17	01	00	00	00	07	01	014	001	0	000	0	571	53
N25	M7A17	01	00	00	00	21	01	014	001	0	000	0	405	53
N25	M7A17	01	00	00	00	57	01	014	001	0	000	0	500	53
N25	M7A17	01	00	00	00	00	01	013	001	0	000	0	603	53
N25	M7A17	01	00	00	00	00	00	013	001	0	000	0	403	53
N25	M7A17	01	00	00	00	00	00	013	001	0	000	0	503	53
N25	M7A17	01	00	00	00	00	00	013	001	0	000	0	603	53
N25	M7A17	01	00	00	00	00	00	013	001	0	000	0	403	53
N25	M7A17	01	00	00	00	00	00	013	001	0	000	0	503	53
N25	M7A17	01	00	00	00	00	00	013	001	0	000	0	603	53
N25	M7A17	01	00	00	00	00	00	013	001	0	000	0	403	53
N25	M7A17	01	00	00	00	00	00	013	001	0	000	0	503	53
N25	M7A17	01	00	00	00	00	00	013	001	0	000	0	603	53
N25	M7A17	01	00	00	00	00	00	013	001	0	000	0	403	53
N25	M7A17	01	00	00	00	00	00	013	001	0	000	0	503	53
N25	M7A17	01	00	00	00	00	00	013	001	0	000	0	603	53











CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N15M11111111	167	M	1	007	0	1	000	000	002	705	1	6
N15M11111111	167	M	1	007	1	405	000	000	000	397	4	4
N15M11111111	167	M	1	007	2	549	000	000	000	726	4	4
N15M11111111	167	M	1	008	1	321	000	000	001	450	4	4
N15M11111111	167	M	1	008	1	324	000	000	001	254	4	4
N15M11111111	167	M	1	008	1	120	000	000	001	054	4	4
N15M11111111	167	M	1	007	1	228	000	000	001	875	3	3
N15M11111111	167	M	1	007	1	088	000	000	001	539	3	3
N15M11111111	167	M	1	006	0	088	000	000	000	000	3	3
N15M11111111	167	M	1	006	1	101	000	000	000	000	4	4
N15M11111111	167	M	1	005	1	136	000	000	000	257	4	4
N15M11111111	167	M	1	005	1	137	000	000	000	502	4	4
N15M11111111	167	M	1	005	1	139	000	000	000	126	4	4
N15M11111111	167	M	1	005	1	140	000	000	000	596	4	4
N15M11111111	167	M	1	005	1	141	000	000	000	766	4	4
N15M11111111	167	M	1	005	1	142	000	000	000	061	4	4
N15M11111111	167	M	1	005	1	143	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	144	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	145	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	146	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	147	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	148	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	149	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	150	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	151	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	152	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	153	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	154	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	155	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	156	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	157	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	158	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	159	000	000	000	177	4	4
N15M11111111	167	M	1	005	1	160	000	000	000	177	4	4

N17M11111111	168	M	1	007	1	447	000	000	003	214	5	3
N17M11111111	168	M	1	004	4	666	000	000	002	461	5	4
N17M11111111	168	M	1	007	1	595	000	000	000	101	5	3
N17M11111111	168	M	1	008	1	101	000	000	000	949	5	3
N17M11111111	168	M	1	008	1	147	000	000	000	333	5	3
N17M11111111	168	M	1	007	1	052	000	000	000	206	5	3
N17M11111111	168	M	1	007	1	052	000	000	000	509	5	3
N17M11111111	168	M	1	007	1	052	000	000	000	600	5	3
N17M11111111	168	M	1	006	1	020	000	000	000	405	5	3
N17M11111111	168	M	1	006	1	145	000	000	000	793	5	3
N17M11111111	168	M	1	005	1	145	000	000	000	606	5	3
N17M11111111	168	M	1	005	1	146	000	000	000	742	5	3
N17M11111111	168	M	1	005	1	147	000	000	000	606	5	3
N17M11111111	168	M	1	005	1	148	000	000	000	437	5	3
N17M11111111	168	M	1	005	1	149	000	000	000	509	5	3
N17M11111111	168	M	1	005	1	150	000	000	000	202	5	3
N17M11111111	168	M	1	005	1	151	000	000	000	606	5	3
N17M11111111	168	M	1	005	1	152	000	000	000	437	5	3
N17M11111111	168	M	1	005	1	153	000	000	000	509	5	3
N17M11111111	168	M	1	005	1	154	000	000	000	606	5	3
N17M11111111	168	M	1	005	1	155	000	000	000	437	5	3
N17M11111111	168	M	1	005	1	156	000	000	000	509	5	3
N17M11111111	168	M	1	005	1	157	000	000	000	606	5	3
N17M11111111	168	M	1	005	1	158	000	000	000	437	5	3
N17M11111111	168	M	1	005	1	159	000	000	000	509	5	3
N17M11111111	168	M	1	005	1	160	000	000	000	606	5	3



CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLN	CY	CLN	CLL	XCP	CAT	CAF
N25M11A17	171	01	000	006	495	1	208	007	016	3	620	585
N25M11A17	171	01	000	007	369	1	403	009	016	4	620	585
N25M11A17	171	01	000	007	257	1	966	012	000	5	620	585
N25M11A17	171	01	000	008	176	1	199	015	000	1	594	585
N25M11A17	171	01	000	009	104	1	048	017	000	1	585	585
N25M11A17	171	01	000	009	106	1	072	017	000	1	585	585
N25M11A17	171	01	000	009	023	1	028	017	000	1	585	585
N25M11A17	171	01	000	008	026	1	062	017	001	0	587	585
N25M11A17	171	01	000	007	051	1	081	017	001	2	590	585
N25M11A17	171	01	000	007	077	1	107	016	001	1	593	585
N25M11A17	171	01	000	007	103	1	148	015	001	1	593	585
N25M11A17	171	01	000	007	165	1	185	015	005	1	605	585
N25M11A17	171	01	000	007	204	1	258	015	005	1	606	585
N25M11A17	171	01	000	006	348	1	457	016	002	2	611	585
N25M11A17	171	01	000	005	463	1	833	029	002	2	621	585
N25M11A17	171	01	000	005	627	1	139	039	004	2	626	585
N25M11A17	171	01	000	002	965	1	281	043	003	3	636	585
N25M11A17	171	01	000	003	175	1	412	036	003	3	649	585
N25M11A17	171	01	000	002	305	1	584	007	004	3	649	585
N25M11A17	171	01	000	005	953	1	926	002	005	3	649	585

N21M11A17	172	01	000	007	486	1	342	007	068	3	656	617
N21M11A17	172	01	000	009	395	1	501	007	049	7	656	617
N21M11A17	172	01	000	009	271	1	555	008	000	9	638	617
N21M11A17	172	01	000	010	136	1	162	010	000	1	634	617
N21M11A17	172	01	000	010	107	1	174	011	000	1	614	617
N21M11A17	172	01	000	010	071	1	090	011	000	0	614	617
N21M11A17	172	01	000	009	021	1	026	011	000	0	611	617
N21M11A17	172	01	000	008	051	1	052	010	001	0	616	617
N21M11A17	172	01	000	008	073	1	082	010	001	0	616	617
N21M11A17	172	01	000	008	103	1	105	010	001	0	625	617
N21M11A17	172	01	000	008	136	1	137	010	001	0	625	617
N21M11A17	172	01	000	008	169	1	162	010	001	0	614	617
N21M11A17	172	01	000	007	240	1	232	010	001	0	616	617
N21M11A17	172	01	000	006	371	1	347	013	001	0	638	617
N21M11A17	172	01	000	005	515	1	468	015	001	0	654	617
N21M11A17	172	01	000	005	677	1	648	020	002	0	654	617
N21M11A17	172	01	000	002	944	1	944	024	002	0	667	617
N21M11A17	172	01	000	001	147	1	156	015	003	0	671	617
N21M11A17	172	01	000	003	315	1	354	005	003	0	671	617
N21M11A17	172	01	000	006	471	1	518	007	004	0	680	617



CO4FIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CV	CLN	CLL	XCP	CAT	CAF
N20M11A17	175	01	000	008	5296	1.204	00	018	001	99	6	4
N20M11A17	175	01	000	008	274	1.415	00	050	001	97	3	5
N20M11A17	175	01	000	007	181	1.277	00	029	001	97	4	2
N20M11A17	175	01	000	008	171	1.101	00	010	000	99	5	1
N20M11A17	175	01	000	009	001	1.055	00	029	000	95	4	3
N20M11A17	175	01	000	009	051	1.032	00	002	000	99	2	0
N20M11A17	175	01	000	007	024	1.028	00	014	000	90	2	9
N20M11A17	175	01	000	007	022	1.038	00	035	000	95	2	9
N20M11A17	175	01	000	006	077	1.047	00	029	001	97	3	0
N20M11A17	175	01	000	005	105	1.057	00	024	001	97	3	0
N20M11A17	175	01	000	005	130	1.082	00	016	001	97	3	0
N20M11A17	175	01	000	005	170	1.230	00	009	001	97	3	0
N20M11A17	175	01	000	005	254	1.364	00	008	002	97	3	0
N20M11A17	175	01	000	005	364	1.515	00	005	002	97	3	0
N20M11A17	175	01	000	002	810	1.616	00	008	002	97	3	0
N20M11A17	175	01	000	000	100	1.266	00	193	002	97	3	0
N20M11A17	175	01	000	000	233	1.571	00	005	003	97	3	0
N20M11A17	175	01	000	000	554	1.704	00	007	003	97	3	0
N20M11A17	175	01	000	000	737	1.843	00	005	004	97	3	0
N20M11A17	175	01	000	000	925	1.952	00	003	004	97	3	0
N20M11A17	176	01	000	005	529	1.266	00	042	002	57	0	2
N20M11A17	176	01	000	006	376	1.369	00	028	002	57	0	2
N20M11A17	176	01	000	008	222	1.225	00	000	002	57	0	2
N20M11A17	176	01	000	009	181	1.169	00	000	002	57	0	2
N20M11A17	176	01	000	009	052	1.090	00	000	002	57	0	2
N20M11A17	176	01	000	008	024	1.054	00	000	002	57	0	2
N20M11A17	176	01	000	007	054	1.060	00	033	002	57	0	2
N20M11A17	176	01	000	007	111	1.092	00	000	002	57	0	2
N20M11A17	176	01	000	007	177	1.147	00	000	002	57	0	2
N20M11A17	176	01	000	006	242	1.231	00	000	002	57	0	2
N20M11A17	176	01	000	006	395	1.354	00	000	002	57	0	2
N20M11A17	176	01	000	005	529	1.462	00	000	002	57	0	2
N20M11A17	176	01	000	005	655	1.571	00	000	002	57	0	2
N20M11A17	176	01	000	003	925	1.697	00	000	002	57	0	2
N20M11A17	176	01	000	004	997	1.734	00	000	002	57	0	2
N20M11A17	176	01	000	003	860	1.641	00	000	002	57	0	2
N20M11A17	176	01	000	003	777	1.594	00	000	002	57	0	2
N20M11A17	176	01	000	003	655	1.501	00	000	002	57	0	2
N20M11A17	176	01	000	003	529	1.408	00	000	002	57	0	2
N20M11A17	176	01	000	003	400	1.315	00	000	002	57	0	2
N20M11A17	176	01	000	003	271	1.222	00	000	002	57	0	2
N20M11A17	176	01	000	003	142	1.129	00	000	002	57	0	2
N20M11A17	176	01	000	003	012	1.036	00	000	002	57	0	2
N20M11A17	176	01	000	003	200	0.943	00	000	002	57	0	2

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N23M11A17	177	01	000	008	767	32	00	9	007	2957	7828	22
N23M11A17	177	00	000	009	520	700	00	57	000	557	628	22
N23M11A17	177	00	000	009	220	000	00	55	000	321	658	22
N23M11A17	177	00	300	010	650	000	01	00	000	616	537	10
N23M11A17	177	00	500	009	507	000	01	00	000	557	337	10
N23M11A17	177	00	500	008	652	000	01	00	000	402	337	10
N23M11A17	177	00	500	008	110	000	01	00	000	002	337	10
N23M11A17	177	00	500	007	100	000	01	00	000	002	337	10
N23M11A17	177	00	500	007	160	000	01	00	000	657	337	10
N23M11A17	177	00	500	007	557	000	01	00	000	474	337	10
N23M11A17	177	00	500	007	077	000	01	00	000	474	337	10
N23M11A17	177	00	500	007	077	000	01	00	000	474	337	10
N23M11A17	177	00	500	006	077	000	01	00	000	474	337	10
N23M11A17	177	00	500	000	000	000	00	00	000	000	337	10
N23M11A17	177	00	500	002	000	000	00	00	000	000	337	10
N23M11A17	177	00	500	002	000	000	00	00	000	000	337	10
N23M11A17	177	00	500	001	000	000	00	00	000	000	337	10
N23M11A17	177	00	500	002	000	000	00	00	000	000	337	10
N23M11A17	177	00	500	001	000	000	00	00	000	000	337	10
N23M11A17	177	00	500	002	000	000	00	00	000	000	337	10
N23M11A17	177	00	500	001	000	000	00	00	000	000	337	10
N23M11A17	177	00	500	002	000	000	00	00	000	000	337	10
N23M11A17	177	00	500	001	000	000	00	00	000	000	337	10
N23M11A17	177	00	500	002	000	000	00	00	000	000	337	10

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N25M11A17	178	01	000	008	767	32	00	9	007	500	628	50
N25M11A17	178	00	000	009	520	700	00	57	000	400	628	50
N25M11A17	178	00	300	010	650	000	01	00	000	200	628	50
N25M11A17	178	00	500	009	507	000	01	00	000	700	628	50
N25M11A17	178	00	500	008	652	000	01	00	000	200	628	50
N25M11A17	178	00	500	008	110	000	01	00	000	200	628	50
N25M11A17	178	00	500	007	100	000	01	00	000	200	628	50
N25M11A17	178	00	500	007	160	000	01	00	000	200	628	50
N25M11A17	178	00	500	007	557	000	01	00	000	200	628	50
N25M11A17	178	00	500	007	077	000	01	00	000	200	628	50
N25M11A17	178	00	500	007	077	000	01	00	000	200	628	50
N25M11A17	178	00	500	007	077	000	01	00	000	200	628	50
N25M11A17	178	00	500	006	077	000	01	00	000	200	628	50
N25M11A17	178	00	500	000	000	000	00	00	000	200	628	50
N25M11A17	178	00	500	002	000	000	00	00	000	200	628	50
N25M11A17	178	00	500	002	000	000	00	00	000	200	628	50
N25M11A17	178	00	500	001	000	000	00	00	000	200	628	50
N25M11A17	178	00	500	002	000	000	00	00	000	200	628	50
N25M11A17	178	00	500	001	000	000	00	00	000	200	628	50
N25M11A17	178	00	500	002	000	000	00	00	000	200	628	50
N25M11A17	178	00	500	001	000	000	00	00	000	200	628	50
N25M11A17	178	00	500	002	000	000	00	00	000	200	628	50
N25M11A17	178	00	500	001	000	000	00	00	000	200	628	50
N25M11A17	178	00	500	002	000	000	00	00	000	200	628	50
N25M11A17	178	00	500	001	000	000	00	00	000	200	628	50

CONFIG PART NO

MACH

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Table with 11 columns: CONFIG, PART NO, MACH, ALPHA, BETA, CN, CLM, CY, CLN, CLL, XCP, CAT, CAF. Rows include configurations like M5A117, M5A117, M5A117, etc.

Table with 11 columns: CONFIG, PART NO, MACH, ALPHA, BETA, CN, CLM, CY, CLN, CLL, XCP, CAT, CAF. Rows include configurations like M5A117, M5A117, M5A117, etc.



	CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N20	M5A17	107	450	000	001	328	727	047	062	001	375	-	
N20	M5A17	107	450	000	004	310	267	050	057	001	325	-	
N20	M5A17	107	450	000	004	317	025	036	025	000	141	-	
N20	M5A17	107	450	000	007	317	625	025	015	000	201	-	
N20	M5A17	107	450	000	002	316	338	035	045	000	770	-	
N20	M5A17	107	450	000	005	325	152	000	023	000	879	-	
N20	M5A17	107	450	000	005	227	112	000	023	000	517	-	
N20	M5A17	107	450	000	004	157	027	000	011	000	476	-	
N20	M5A17	107	450	000	004	160	055	000	017	000	468	-	
N20	M5A17	107	450	000	004	059	045	000	018	000	586	-	
N20	M5A17	107	450	000	004	050	033	000	039	000	600	-	
N20	M5A17	107	450	000	004	077	031	000	023	000	000	-	
N20	M5A17	107	450	000	004	067	037	000	035	000	997	-	
N20	M5A17	107	450	000	002	066	027	000	030	000	447	-	
N20	M5A17	107	450	000	006	066	019	000	039	000	107	-	
N20	M5A17	107	450	000	007	168	003	000	033	000	308	-	
N20	M5A17	107	450	000	007	204	053	000	025	000	419	-	
N20	M5A17	107	450	000	007	204	057	000	025	000	525	-	
N20	M5A17	107	450	000	000	237	103	000	015	000	677	-	
N20	M5A17	107	450	000	010	368	025	000	005	000	975	-	
N21	M5A17	211	450	000	002	376	279	000	051	000	133	-	
N21	M5A17	211	450	000	002	229	490	000	029	000	644	-	
N21	M5A17	211	450	000	002	190	063	000	035	000	277	-	
N21	M5A17	211	450	000	000	125	040	000	020	000	500	-	
N21	M5A17	211	450	000	000	072	225	000	033	000	134	-	
N21	M5A17	211	450	000	002	025	021	000	030	000	510	-	
N21	M5A17	211	450	000	000	024	025	000	036	000	000	-	
N21	M5A17	211	450	000	004	062	050	000	039	000	723	-	
N21	M5A17	211	450	000	006	146	060	000	025	000	694	-	
N21	M5A17	211	450	000	007	165	042	000	010	000	697	-	
N21	M5A17	211	450	000	000	201	129	000	004	000	739	-	
N21	M5A17	211	450	000	000	161	247	000	000	000	565	-	
N21	M5A17	211	450	000	003	044	094	000	000	000	453	-	
N21	M5A17	211	450	000	003	044	094	000	000	000	565	-	
N21	M5A17	211	450	000	000	201	129	000	004	000	739	-	
N21	M5A17	211	450	000	000	161	247	000	000	000	565	-	
N21	M5A17	211	450	000	000	161	247	000	000	000	565	-	
N21	M5A17	211	450	000	000	201	129	000	004	000	739	-	
N21	M5A17	211	450	000	000	161	247	000	000	000	565	-	
N21	M5A17	211	450	000	000	161	247	000	000	000	565	-	
N21	M5A17	211	450	000	000	201	129	000	004	000	739	-	
N21	M5A17	211	450	000	000	161	247	000	000	000	565	-	
N21	M5A17	211	450	000	000	161	247	000	000	000	565	-	
N21	M5A17	211	450	000	000	201	129	000	004	000	739	-	
N21	M5A17	211	450	000	000	161	247	000	000	000	565	-	
N21	M5A17	211	450	000	000	161	247	000	000	000	565	-	



CONFIG

PART NO

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CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M9A17	229	4	16	002	426	797	026	125	002	175	2	594
M9A17	229	4	15	002	314	469	015	101	001	103	2	593
M9A17	229	4	15	002	314	225	000	037	001	074	2	582
M9A17	229	4	15	002	130	155	000	037	001	179	2	566
M9A17	229	4	12	002	104	015	000	027	001	190	2	555
M9A17	229	4	11	002	035	059	000	047	001	166	2	552
M9A17	229	4	10	002	015	069	000	022	001	000	2	550
M9A17	229	4	10	005	046	064	000	030	001	000	2	554
M9A17	229	4	11	005	070	064	000	064	001	002	2	552
M9A17	229	4	11	007	094	085	000	093	001	010	2	553
M9A17	229	4	12	007	111	108	000	112	001	010	2	557
M9A17	229	4	13	007	127	140	000	132	000	090	2	550
M9A17	229	4	15	006	152	154	000	143	000	039	2	560
M9A17	229	4	15	006	206	244	000	125	001	175	2	562
M9A17	229	4	15	006	219	277	000	156	001	080	2	563
M9A17	229	4	15	006	255	300	000	021	000	000	2	567
M9A17	229	4	15	006	272	320	000	040	000	040	2	574
M9A17	229	4	16	006	315	370	000	000	000	000	2	575
M9A17	229	4	16	006	335	370	000	000	000	000	2	574
M9A17	229	4	16	006	358	419	000	000	000	000	2	579
M9A17	229	4	17	003	368	429	000	000	000	000	2	584
M9A17	229	4	17	003	376	415	000	016	000	000	2	589
M9A17	229	4	17	003	365	415	000	016	000	000	2	589

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M9A17	230	4	16	002	492	826	026	125	002	175	2	627
M9A17	230	4	15	004	327	529	015	101	001	103	2	610
M9A17	230	4	15	004	166	269	000	037	001	074	2	612
M9A17	230	4	12	004	107	150	000	037	001	179	2	605
M9A17	230	4	11	004	075	090	000	027	001	190	2	597
M9A17	230	4	10	003	032	099	000	047	001	166	2	592
M9A17	230	4	10	003	015	099	000	022	001	000	2	590
M9A17	230	4	10	004	046	099	000	030	001	000	2	594
M9A17	230	4	11	004	070	108	000	064	001	002	2	593
M9A17	230	4	11	007	094	140	000	093	001	010	2	597
M9A17	230	4	12	007	111	140	000	112	000	090	2	590
M9A17	230	4	13	007	127	154	000	132	000	039	2	595
M9A17	230	4	15	006	152	177	000	125	001	175	2	602
M9A17	230	4	15	006	206	200	000	156	001	080	2	603
M9A17	230	4	15	006	219	220	000	021	000	000	2	607
M9A17	230	4	15	006	255	249	000	040	000	040	2	603
M9A17	230	4	15	006	272	269	000	000	000	000	2	607
M9A17	230	4	16	006	315	315	000	000	000	000	2	614
M9A17	230	4	16	006	335	315	000	000	000	000	2	614
M9A17	230	4	16	006	358	349	000	000	000	000	2	619
M9A17	230	4	17	003	368	349	000	000	000	000	2	614
M9A17	230	4	17	003	376	349	000	000	000	000	2	619
M9A17	230	4	17	003	365	349	000	000	000	000	2	614





CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M9A17	35	44	0000	001	537	946	026	9	00	759	330	204
M9A17	35	44	0000	002	400	570	018	1264	00	400	230	297
M9A17	35	44	0000	004	241	206	007	064	00	055	212	192
M9A17	35	44	0000	004	195	179	006	003	00	670	209	186
M9A17	35	44	0000	004	117	040	005	004	00	337	194	173
M9A17	35	44	0000	005	057	005	006	033	00	069	190	173
M9A17	35	44	0000	005	027	052	006	033	00	000	189	170
M9A17	35	44	0000	005	034	093	004	033	00	480	196	172
M9A17	35	44	0000	005	067	100	001	020	00	530	190	174
M9A17	35	44	0000	005	067	118	001	049	00	210	206	176
M9A17	35	44	0000	006	130	154	004	035	00	922	206	178
M9A17	35	44	0000	006	164	191	004	085	00	046	212	180
M9A17	35	44	0000	006	245	257	013	175	00	935	217	184
M9A17	35	44	0000	006	287	336	013	140	00	144	217	184
M9A17	35	44	0000	006	307	590	006	143	00	731	223	195
M9A17	35	44	0000	006	307	899	000	068	00	922	223	195
M9A17	35	44	0000	006	543	269	004	043	00	122	223	195
M9A17	35	44	0000	006	902	350	000	060	00	382	256	205
M9A17	35	44	0000	006	946	306	000	000	00	580	267	205
M9A17	35	44	0000	007	133	660	012	000	00	749	273	224
M9A17	35	44	0000	007	157	716	003	077	00	877	273	224
M9A17	35	44	0000	007	192	116	005	077	00	053	288	224
M7A17	36	44	0000	002	9	594	004	457	01	753	996	005
M7A17	36	44	0000	000	356	292	001	000	01	520	964	005
M7A17	36	44	0000	000	145	323	002	023	01	377	964	005
M7A17	36	44	0000	001	123	050	000	005	01	027	943	009
M7A17	36	44	0000	002	081	023	000	002	01	616	922	008
M7A17	36	44	0000	002	059	015	000	002	01	100	922	008
M7A17	36	44	0000	005	010	027	000	000	01	000	931	013
M7A17	36	44	0000	005	011	053	000	004	01	000	931	013
M7A17	36	44	0000	007	062	079	006	061	01	335	940	016
M7A17	36	44	0000	007	123	102	003	028	01	979	940	016
M7A17	36	44	0000	006	157	173	004	028	01	049	944	012
M7A17	36	44	0000	006	173	349	004	069	01	140	944	012
M7A17	36	44	0000	007	235	549	004	043	01	233	948	013
M7A17	36	44	0000	007	398	753	002	033	01	710	961	010
M7A17	36	44	0000	001	501	032	001	020	02	891	964	009
M7A17	36	44	0000	001	576	378	001	005	02	061	964	009
M7A17	36	44	0000	001	871	274	004	000	02	230	966	002
M7A17	36	44	0000	003	154	225	001	005	02	473	966	002
M7A17	36	44	0000	004	154	225	001	000	02	694	966	002
M7A17	36	44	0000	004	154	225	001	000	02	794	966	002









CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N21	245	44	00	00	376	559	019	055	002	505	647	612
N21	245	44	00	01	295	349	005	024	002	266	636	605
N21	245	44	00	02	162	132	003	019	002	813	616	599
N21	245	44	00	03	100	046	003	024	002	429	609	573
N21	245	44	00	04	057	010	003	042	002	163	592	573
N21	245	44	00	05	023	037	003	044	002	000	577	577
N21	245	44	00	06	003	042	001	044	001	000	599	580
N21	245	44	00	07	023	045	004	023	001	005	602	581
N21	245	44	00	08	066	050	003	053	001	075	605	584
N21	245	44	00	09	110	053	001	053	002	782	607	584
N21	245	44	00	10	134	096	001	073	002	649	609	584
N21	245	44	00	11	191	134	001	082	002	829	612	584
N21	245	44	00	12	261	176	000	074	001	912	616	585
N21	245	44	00	13	349	316	001	054	002	222	622	585
N21	245	44	00	14	467	507	005	074	002	460	634	585
N21	245	44	00	15	566	745	004	023	002	620	641	585
N21	245	44	00	16	639	032	001	019	001	001	659	585
N21	245	44	00	17	695	095	003	003	002	161	662	585
N21	245	44	00	18	745	223	002	012	002	390	664	585
N21	245	44	00	19	795	369	002	002	002	467	662	585
N21	245	44	00	20	846	699	006	014	002	533	660	585
N22	246	44	00	03	397	357	017	054	010	695	726	622
N22	246	44	00	04	281	154	004	044	000	345	150	122
N22	246	44	00	05	197	036	001	055	000	035	150	122
N22	246	44	00	06	120	057	001	079	000	181	136	110
N22	246	44	00	07	063	073	002	090	000	551	127	106
N22	246	44	00	08	004	069	004	074	000	219	122	100
N22	246	44	00	09	054	065	006	065	000	105	123	100
N22	246	44	00	10	085	057	006	050	000	000	126	100
N22	246	44	00	11	150	030	004	023	000	636	134	105
N22	246	44	00	12	180	012	004	034	001	109	134	105
N22	246	44	00	13	230	005	004	057	001	062	141	106
N22	246	44	00	14	254	022	005	074	001	290	147	106
N22	246	44	00	15	273	024	005	095	001	096	150	112
N22	246	44	00	16	307	125	003	095	001	371	157	112
N22	246	44	00	17	340	235	003	055	001	620	165	112
N22	246	44	00	18	377	350	006	070	001	945	174	112
N22	246	44	00	19	411	406	010	099	001	141	184	112
N22	246	44	00	20	461	592	016	052	001	301	198	112
N22	246	44	00	21	517	799	012	033	001	451	209	112
N22	246	44	00	22	590	1189	007	033	001	528	214	112
N22	246	44	00	23	615	1503	006	025	001	662	214	112
N22	246	44	00	24	663	2003	006	025	001	999	220	112







CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CV	CLN	CLL	KCF	CAT	CAF
NISMI11A17	255	111	1.0000	0.0017	7.00	0.07	1.0000	0.15	0.0000	0.0000	4.40	196
NISMI11A17	255	111	1.0000	0.0017	7.00	1.027	1.0000	0.079	0.0000	0.0000	3.40	176
NISMI11A17	255	111	1.0000	0.0017	7.00	0.003	1.0000	0.079	0.0000	0.0000	3.10	177
NISMI11A17	255	111	1.0000	0.0017	7.00	0.003	1.0000	0.079	0.0000	0.0000	2.80	167
NISMI11A17	255	111	1.0000	0.0017	7.00	0.003	1.0000	0.079	0.0000	0.0000	2.50	168
NISMI11A17	255	111	1.0000	0.0017	7.00	0.003	1.0000	0.079	0.0000	0.0000	2.20	179
NISMI11A17	255	111	1.0000	0.0017	7.00	0.003	1.0000	0.079	0.0000	0.0000	1.90	189
NISMI11A17	255	111	1.0000	0.0017	7.00	0.003	1.0000	0.079	0.0000	0.0000	1.60	199
NISMI11A17	255	111	1.0000	0.0017	7.00	0.003	1.0000	0.079	0.0000	0.0000	1.30	175
NISMI11A17	255	111	1.0000	0.0017	7.00	0.003	1.0000	0.079	0.0000	0.0000	1.00	171
NISMI11A17	255	111	1.0000	0.0017	7.00	0.003	1.0000	0.079	0.0000	0.0000	0.70	180
NISMI11A17	255	111	1.0000	0.0017	7.00	0.003	1.0000	0.079	0.0000	0.0000	0.40	196
NISMI11A17	255	111	1.0000	0.0017	7.00	0.003	1.0000	0.079	0.0000	0.0000	0.10	105
NISMI11A17	256	111	5.0000	0.0017	10.00	0.067	1.0000	0.19	0.0000	0.0000	5.40	179
NISMI11A17	256	111	5.0000	0.0017	10.00	0.067	1.0000	0.19	0.0000	0.0000	3.40	173
NISMI11A17	256	111	5.0000	0.0017	10.00	0.067	1.0000	0.19	0.0000	0.0000	3.10	175
NISMI11A17	256	111	5.0000	0.0017	10.00	0.067	1.0000	0.19	0.0000	0.0000	2.80	171
NISMI11A17	256	111	5.0000	0.0017	10.00	0.067	1.0000	0.19	0.0000	0.0000	2.50	180
NISMI11A17	256	111	5.0000	0.0017	10.00	0.067	1.0000	0.19	0.0000	0.0000	2.20	189
NISMI11A17	256	111	5.0000	0.0017	10.00	0.067	1.0000	0.19	0.0000	0.0000	1.90	199
NISMI11A17	256	111	5.0000	0.0017	10.00	0.067	1.0000	0.19	0.0000	0.0000	1.60	105
NISMI11A17	256	111	5.0000	0.0017	10.00	0.067	1.0000	0.19	0.0000	0.0000	1.30	175
NISMI11A17	256	111	5.0000	0.0017	10.00	0.067	1.0000	0.19	0.0000	0.0000	1.00	171
NISMI11A17	256	111	5.0000	0.0017	10.00	0.067	1.0000	0.19	0.0000	0.0000	0.70	180
NISMI11A17	256	111	5.0000	0.0017	10.00	0.067	1.0000	0.19	0.0000	0.0000	0.40	196
NISMI11A17	256	111	5.0000	0.0017	10.00	0.067	1.0000	0.19	0.0000	0.0000	0.10	105

CONFIG	PAPT NO	MACH	ALPHA	BETA	CN	CLM	CY	CLM	CLW	CLL	XCP	CAT	CAF
NZ0M11111	257	11511	30000	005	176	00	00	00	7	00	2	437	281
NZ0M11111	257	11511	50000	002	142	00	00	00	15	00	5	437	281
NZ0M11111	257	11511	50000	006	110	00	00	00	5	00	5	437	281
NZ0M11111	257	11511	50000	009	65	00	00	00	0	00	3	437	281
NZ0M11111	257	11511	50000	007	25	00	00	00	0	00	0	437	281
NZ0M11111	257	11511	50000	015	000	00	01	00	6	00	0	437	281
NZ0M11111	257	11511	50000	019	054	00	02	00	1	00	4	437	281
NZ0M11111	257	11511	50000	017	101	00	00	00	1	00	4	437	281
NZ0M11111	257	11511	50000	012	113	00	00	00	1	00	2	437	281
NZ0M11111	257	11511	50000	014	113	00	01	00	1	00	0	437	281
NZ0M11111	257	11511	50000	020	111	00	02	00	1	00	0	437	281
NZ0M11111	257	11511	50000	024	111	00	03	00	1	00	3	437	281
NZ0M11111	257	11511	50000	026	111	00	02	00	1	00	1	437	281
NZ0M11111	257	11511	50000	028	111	00	02	00	1	00	1	437	281
NZ0M11111	257	11511	50000	030	111	00	02	00	1	00	1	437	281
NZ0M11111	257	11511	50000	031	111	00	02	00	1	00	1	437	281
NZ0M11111	257	11511	50000	033	111	00	02	00	1	00	1	437	281
NZ0M11111	257	11511	50000	032	111	00	02	00	1	00	1	437	281
NZ0M11111	257	11511	50000	012	111	00	02	00	1	00	1	437	281
NZ0M11111	258	11511	30000	006	217	00	00	00	0	00	4	602	462
NZ0M11111	258	11511	50000	004	47	00	00	00	0	00	1	602	462
NZ0M11111	258	11511	50000	002	97	00	00	00	0	00	1	602	462
NZ0M11111	258	11511	50000	001	69	00	00	00	0	00	1	602	462
NZ0M11111	258	11511	50000	011	00	00	01	00	0	00	1	602	462
NZ0M11111	258	11511	50000	017	00	00	00	00	0	00	1	602	462
NZ0M11111	258	11511	50000	016	00	00	00	00	0	00	1	602	462
NZ0M11111	258	11511	50000	013	00	00	00	00	0	00	1	602	462
NZ0M11111	258	11511	50000	019	00	00	01	00	0	00	1	602	462
NZ0M11111	258	11511	50000	021	00	00	01	00	0	00	1	602	462
NZ0M11111	258	11511	50000	027	00	00	01	00	0	00	1	602	462
NZ0M11111	258	11511	50000	029	00	00	01	00	0	00	1	602	462
NZ0M11111	258	11511	50000	030	00	00	01	00	0	00	1	602	462
NZ0M11111	258	11511	50000	028	00	00	01	00	0	00	1	602	462
NZ0M11111	258	11511	50000	024	00	00	01	00	0	00	1	602	462
NZ0M11111	258	11511	50000	022	00	00	01	00	0	00	1	602	462
NZ0M11111	258	11511	50000	021	00	00	01	00	0	00	1	602	462

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N22M1A17	259	1.51	0.000	0.027	0.000	0.000	0.000	0.000	0.000	0.000	240	1258
N22M1A17	259	1.51	0.500	0.017	0.056	0.000	0.012	0.000	0.000	0.208	240	1258
N22M1A17	259	1.51	1.000	0.017	0.056	0.000	0.012	0.000	0.000	0.208	240	1258
N22M1A17	259	1.51	2.000	0.011	0.106	0.000	0.008	0.000	0.001	0.000	240	1258
N22M1A17	259	1.51	3.000	0.009	0.150	0.000	0.010	0.000	0.001	0.000	240	1258
N22M1A17	259	1.51	4.000	0.015	0.225	0.000	0.014	0.000	0.001	0.000	240	1258
N22M1A17	259	1.51	5.000	0.018	0.295	0.000	0.016	0.000	0.001	0.000	240	1258
N22M1A17	259	1.51	6.000	0.023	0.306	0.000	0.027	0.000	0.002	0.000	240	1258
N22M1A17	259	1.51	7.000	0.024	0.425	0.000	0.027	0.000	0.003	0.000	240	1258
N22M1A17	259	1.51	8.000	0.025	0.559	0.000	0.037	0.000	0.004	0.000	240	1258
N22M1A17	259	1.51	9.000	0.020	0.709	0.000	0.037	0.000	0.005	0.000	240	1258
N22M1A17	259	1.51	10.000	0.012	1.000	0.000	0.040	0.000	0.005	0.000	240	1258
N22M1A17	259	1.51	11.000	0.012	1.000	0.000	0.040	0.000	0.005	0.000	240	1258
N22M1A17	259	1.51	12.000	0.012	1.000	0.000	0.040	0.000	0.005	0.000	240	1258
N23M1A17	260	1.51	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	240	1258
N23M1A17	260	1.51	0.500	0.016	0.057	0.000	0.009	0.000	0.000	0.000	240	1258
N23M1A17	260	1.51	1.000	0.017	0.085	0.000	0.009	0.000	0.000	0.000	240	1258
N23M1A17	260	1.51	1.500	0.012	0.105	0.000	0.009	0.000	0.000	0.000	240	1258
N23M1A17	260	1.51	2.000	0.010	0.150	0.000	0.009	0.000	0.000	0.000	240	1258
N23M1A17	260	1.51	3.000	0.014	0.209	0.000	0.011	0.000	0.000	0.000	240	1258
N23M1A17	260	1.51	4.000	0.017	0.267	0.000	0.014	0.000	0.000	0.000	240	1258
N23M1A17	260	1.51	5.000	0.021	0.379	0.000	0.017	0.000	0.001	0.000	240	1258
N23M1A17	260	1.51	6.000	0.027	0.500	0.000	0.021	0.000	0.001	0.000	240	1258
N23M1A17	260	1.51	7.000	0.026	0.643	0.000	0.025	0.000	0.001	0.000	240	1258
N23M1A17	260	1.51	8.000	0.032	0.745	0.000	0.031	0.000	0.002	0.000	240	1258
N23M1A17	260	1.51	9.000	0.031	0.935	0.000	0.031	0.000	0.003	0.000	240	1258
N23M1A17	260	1.51	10.000	0.024	1.100	0.000	0.024	0.000	0.003	0.000	240	1258
N23M1A17	260	1.51	11.000	0.010	1.300	0.000	0.010	0.000	0.004	0.000	240	1258
N23M1A17	260	1.51	12.000	0.010	1.300	0.000	0.010	0.000	0.004	0.000	240	1258
N23M1A17	260	1.51	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	240	1258
N23M1A17	260	1.51	0.500	0.016	0.057	0.000	0.009	0.000	0.000	0.000	240	1258
N23M1A17	260	1.51	1.000	0.017	0.085	0.000	0.009	0.000	0.000	0.000	240	1258
N23M1A17	260	1.51	1.500	0.012	0.105	0.000	0.009	0.000	0.000	0.000	240	1258
N23M1A17	260	1.51	2.000	0.010	0.150	0.000	0.009	0.000	0.000	0.000	240	1258
N23M1A17	260	1.51	3.000	0.014	0.209	0.000	0.011	0.000	0.000	0.000	240	1258
N23M1A17	260	1.51	4.000	0.017	0.267	0.000	0.014	0.000	0.000	0.000	240	1258
N23M1A17	260	1.51	5.000	0.021	0.379	0.000	0.017	0.000	0.001	0.000	240	1258
N23M1A17	260	1.51	6.000	0.027	0.500	0.000	0.021	0.000	0.001	0.000	240	1258
N23M1A17	260	1.51	7.000	0.026	0.643	0.000	0.025	0.000	0.001	0.000	240	1258
N23M1A17	260	1.51	8.000	0.032	0.745	0.000	0.031	0.000	0.002	0.000	240	1258
N23M1A17	260	1.51	9.000	0.031	0.935	0.000	0.031	0.000	0.003	0.000	240	1258
N23M1A17	260	1.51	10.000	0.024	1.100	0.000	0.024	0.000	0.003	0.000	240	1258
N23M1A17	260	1.51	11.000	0.010	1.300	0.000	0.010	0.000	0.004	0.000	240	1258
N23M1A17	260	1.51	12.000	0.010	1.300	0.000	0.010	0.000	0.004	0.000	240	1258

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N2	M11	I	1	02	046	022	011	127	000	469	367	340
N2	M11	I	1	03	002	000	006	050	000	501	345	220
N2	M11	I	0	05	025	000	010	050	000	070	351	226
N2	M11	I	1	08	036	000	035	123	000	980	355	223
N2	M11	I	1	03	078	000	010	161	000	717	370	224
N2	M11	I	2	00	127	000	012	112	000	475	391	225
N2	M11	I	3	03	157	000	011	112	000	615	394	226
N2	M11	I	3	05	187	000	013	123	000	932	403	227
N2	M11	I	5	08	293	000	016	123	000	548	416	228
N2	M11	I	7	00	377	000	024	125	000	848	426	229
N2	M11	I	9	02	525	000	030	135	000	497	447	230
N2	M11	I	9	05	925	000	033	155	000	862	463	231
N2	M11	I	9	08	922	000	030	152	000	468	473	232
N2	M11	I	1	05	113	000	040	152	000	668	479	233
N2	M11	I	1	07	119	000	038	152	000	483	483	234
N2	M11	I	1	00	137	000	045	152	000	897	490	235
N5	M11	I	2	02	080	128	000	092	000	462	564	444
N5	M11	I	0	04	065	000	000	217	000	214	552	604
N5	M11	I	1	09	023	000	000	607	000	629	524	409
N5	M11	I	0	07	027	000	012	370	000	364	525	405
N5	M11	I	0	05	090	000	010	401	000	418	527	412
N5	M11	I	1	08	090	000	010	401	000	684	551	411
N5	M11	I	1	00	131	000	010	501	000	637	551	411
N5	M11	I	1	02	161	000	011	501	000	791	507	411
N5	M11	I	2	09	220	000	010	411	000	069	507	411
N5	M11	I	2	06	276	000	016	411	000	359	520	411
N5	M11	I	2	03	475	000	020	459	000	697	597	411
N5	M11	I	2	05	507	000	032	459	000	559	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
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N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	507	000	030	459	000	232	600	411
N5	M11	I	2	05	507	000	030	459	000	400	600	411
N5	M11	I	2	08	507	000	030	459	000	232	600	411
N5	M11	I	2	00	507	000	030	459	000	400	600	411
N5	M11	I	2	03	50							

CONFIG	PART NO	MACH	ALPHA	RETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M3	264	11	5	092	269	171	015	033	001	653	870	756
M3	264	11	5	090	259	171	015	033	001	816	870	756
M3	264	11	5	090	259	171	015	033	001	976	870	756
M3	264	11	5	090	259	171	015	033	001	053	870	756
M3	264	11	5	090	259	171	015	033	001	086	870	756
M3	264	11	5	090	259	171	015	033	001	285	870	756
M3	264	11	5	090	259	171	015	033	001	380	870	756
M3	264	11	5	090	259	171	015	033	001	528	870	756
M3	264	11	5	090	259	171	015	033	001	948	870	756
M3	264	11	5	090	259	171	015	033	001	000	870	756
M3	264	11	5	089	264	000	007	029	002	486	870	756
M3	264	11	5	088	264	000	007	029	002	505	870	756
M3	264	11	5	088	264	000	006	030	002	333	870	756
M3	264	11	5	087	264	000	006	030	002	133	870	756
M3	264	11	5	086	264	000	005	031	002	926	870	756
M3	264	11	5	085	264	000	005	031	002	816	870	756
M3	264	11	5	084	264	000	006	032	002	682	870	756
M3	264	11	5	082	264	000	006	032	002	527	870	756
M3	264	11	5	079	264	000	008	020	003	127	870	756
M3	264	11	5	073	264	000	015	100	003	322	870	756
M3	264	11	5	071	264	000	017	142	002	885	870	756
M3	264	11	5	068	264	000	024	179	001	825	870	756
M3	264	11	5	068	264	000	036	225	001	055	870	756
M3	264	11	5	069	264	000	062	305	000	208	870	756
M3	264	11	5	074	264	000	117	441	000	363	870	756
M3	264	11	5	074	264	000	117	441	000	000	870	756

CONFIG	PART NO	MACH	ALPHA	RETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M3	268	11	5	091	275	106	016	041	000	365	692	579
M3	268	11	5	091	275	106	016	041	000	697	692	579
M3	268	11	5	090	275	106	016	041	000	743	692	579
M3	268	11	5	090	275	106	016	041	000	979	692	579
M3	268	11	5	090	275	106	016	041	000	054	692	579
M3	268	11	5	090	275	106	016	041	000	350	692	579
M3	268	11	5	090	275	106	016	041	000	645	692	579
M3	268	11	5	089	275	106	016	041	000	600	692	579
M3	268	11	5	089	275	106	016	041	000	425	692	579
M3	268	11	5	088	275	106	016	041	000	287	692	579
M3	268	11	5	088	275	106	016	041	000	048	692	579
M3	268	11	5	087	275	106	016	041	000	859	692	579
M3	268	11	5	085	275	106	016	041	000	000	692	579
M3	268	11	5	084	275	106	016	041	000	528	692	579
M3	268	11	5	083	275	106	016	041	000	279	692	579
M3	268	11	5	080	275	106	016	041	000	000	692	579
M3	268	11	5	074	275	106	016	041	000	124	692	579
M3	268	11	5	070	275	106	016	041	000	300	692	579
M3	268	11	5	067	275	106	016	041	000	528	692	579
M3	268	11	5	066	275	106	016	041	000	908	692	579
M3	268	11	5	064	275	106	016	041	000	000	692	579
M3	268	11	5	064	275	106	016	041	000	323	692	579
M3	268	11	5	065	275	106	016	041	000	459	692	579
M3	268	11	5	064	275	106	016	041	000	000	692	579

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M5A117	269	151	000	091	227	248	015	045	001	867	397	270
M5A117	269	151	000	090	227	200	014	047	002	027	370	265
M5A117	269	151	000	088	113	124	014	050	002	125	373	265
M5A117	269	151	000	088	113	036	012	052	001	767	357	245
M5A117	269	151	000	090	067	042	008	023	001	695	352	245
M5A117	269	151	000	090	022	030	007	022	001	651	354	248
M5A117	269	151	000	090	020	010	006	021	001	703	350	255
M5A117	269	151	000	089	025	039	005	022	001	003	352	247
M5A117	269	151	000	087	086	058	005	029	001	914	352	247
M5A117	269	151	000	085	106	082	005	027	001	852	351	252
M5A117	269	151	000	085	117	152	005	053	001	072	365	252
M5A117	269	151	000	083	147	160	005	025	001	125	365	252
M5A117	269	151	000	077	226	176	004	059	002	015	379	255
M5A117	269	151	000	077	355	165	011	104	002	795	379	255
M5A117	269	151	000	067	595	220	017	150	002	154	374	267
M5A117	269	151	000	067	894	705	020	159	002	468	374	265
M5A117	269	151	000	066	970	705	016	156	000	855	374	265
M5A117	269	151	000	071	130	272	052	162	001	009	355	252
M5A117	269	151	000	092	284	261	007	015	001	095	394	287
M5A117	270	151	000	090	227	209	005	017	001	219	380	276
M5A117	270	151	000	089	114	169	005	019	001	242	376	271
M5A117	270	151	000	089	116	104	004	020	001	952	369	271
M5A117	270	151	000	090	066	053	001	002	001	806	361	275
M5A117	270	151	000	090	021	009	001	004	001	000	367	275
M5A117	270	151	000	087	023	009	002	003	001	043	355	265
M5A117	270	151	000	086	052	059	001	003	001	875	355	265
M5A117	270	151	000	084	047	069	000	000	001	902	356	265
M5A117	270	151	000	083	150	133	000	000	001	034	371	268
M5A117	270	151	000	082	150	157	000	000	000	903	377	268
M5A117	270	151	000	077	226	124	002	000	002	697	369	268
M5A117	270	151	000	070	360	098	004	003	002	111	370	268
M5A117	270	151	000	066	560	251	000	003	000	444	370	267
M5A117	270	151	000	066	701	986	014	047	002	733	374	267
M5A117	270	151	000	067	976	764	017	055	000	906	374	267
M5A117	270	151	000	067	143	021	016	046	001	132	374	267
M5A117	270	151	000	067	143	260	052	027	001	096	374	266

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M16	771	151	000	091	287	233	15	70	000	842	322	170
M16	271	151	000	091	227	233	00	22	000	013	221	501
M16	271	151	000	091	153	009	10	47	001	105	151	501
M16	271	151	000	091	134	009	10	47	001	105	151	501
M16	271	151	000	091	114	009	10	47	001	105	151	501
M16	271	151	000	091	109	009	10	47	001	105	151	501
M16	271	151	000	091	065	009	10	47	001	105	151	501
M16	271	151	000	091	047	009	10	47	001	105	151	501
M16	271	151	000	090	022	009	10	47	000	000	161	601
M16	271	151	000	090	024	009	10	47	000	000	161	601
M16	271	151	000	089	044	031	50	91	000	000	161	601
M16	271	151	000	085	067	050	00	47	000	000	161	601
M16	271	151	000	085	107	071	00	47	000	000	161	601
M16	271	151	000	085	177	071	00	47	000	000	161	601
M16	271	151	000	085	291	071	00	47	000	000	161	601
M16	271	151	000	083	173	071	00	47	000	000	161	601
M16	271	151	000	078	221	071	00	47	000	000	161	601
M16	271	151	000	072	291	071	00	47	000	000	161	601
M16	271	151	000	070	363	071	00	47	000	000	161	601
M16	271	151	000	071	162	071	00	47	000	000	161	601

M16	271	151	000	091	287	233	15	70	000	842	322	170
M16	271	151	000	091	227	233	00	22	000	013	221	501
M16	271	151	000	091	153	009	10	47	001	105	151	501
M16	271	151	000	091	134	009	10	47	001	105	151	501
M16	271	151	000	091	114	009	10	47	001	105	151	501
M16	271	151	000	091	109	009	10	47	001	105	151	501
M16	271	151	000	091	065	009	10	47	001	105	151	501
M16	271	151	000	091	047	009	10	47	001	105	151	501
M16	271	151	000	090	022	009	10	47	000	000	161	601
M16	271	151	000	090	024	009	10	47	000	000	161	601
M16	271	151	000	089	044	031	50	91	000	000	161	601
M16	271	151	000	085	067	050	00	47	000	000	161	601
M16	271	151	000	085	107	071	00	47	000	000	161	601
M16	271	151	000	085	177	071	00	47	000	000	161	601
M16	271	151	000	085	291	071	00	47	000	000	161	601
M16	271	151	000	083	173	071	00	47	000	000	161	601
M16	271	151	000	078	221	071	00	47	000	000	161	601
M16	271	151	000	072	291	071	00	47	000	000	161	601
M16	271	151	000	070	363	071	00	47	000	000	161	601
M16	271	151	000	071	162	071	00	47	000	000	161	601

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CV	CLN	CLL	XCP	CAT	CAF
M5A17	273	1.51	-6.000	.092	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	-4.500	.092	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	-3.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	-2.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	-1.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	0.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	1.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	2.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	3.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	4.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	5.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	6.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	7.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	8.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	9.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	10.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	11.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	12.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	273	1.51	13.500	.091	227	375	-.015	.033	0.00	1.337	294	175
M5A17	274	1.51	-6.000	.092	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	-4.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	-3.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	-2.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	-1.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	0.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	1.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	2.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	3.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	4.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	5.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	6.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	7.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	8.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	9.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	10.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	11.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	12.500	.091	274	398	-.016	.038	0.00	1.538	302	186
M5A17	274	1.51	13.500	.091	274	398	-.016	.038	0.00	1.538	302	186

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M5A17	275	51	0	09	279	378	014	315	000	342	0	0
M5A17	275	51	0	09	221	378	014	037	000	539	0	265
M5A17	275	51	0	09	166	246	013	039	000	539	0	265
M5A17	275	51	0	09	106	201	012	048	000	539	0	265
M5A17	275	51	0	09	067	130	007	016	000	097	0	265
M5A17	275	51	0	09	021	096	006	014	000	180	0	265
M5A17	275	51	0	09	003	052	005	015	000	230	0	265
M5A17	275	51	0	09	000	000	004	012	000	000	0	265
M5A17	275	51	0	09	000	000	003	011	000	000	0	265
M5A17	275	51	0	09	000	054	002	012	000	143	0	265
M5A17	275	51	0	09	000	078	002	015	000	201	0	265
M5A17	275	51	0	09	000	114	004	033	001	201	0	265
M5A17	275	51	0	09	000	154	006	049	001	319	0	265
M5A17	275	51	0	09	000	207	004	040	001	467	0	265
M5A17	275	51	0	09	000	251	004	049	001	627	0	265
M5A17	275	51	0	09	000	277	004	060	001	549	0	265
M5A17	275	51	0	09	000	263	007	062	002	222	0	265
M5A17	275	51	0	09	000	294	011	109	002	605	0	265
M5A17	275	51	0	09	000	306	014	130	002	216	0	265
M5A17	275	51	0	09	000	335	015	145	002	439	0	265
M5A17	275	51	0	09	000	357	015	156	002	145	0	265
M5A17	275	51	0	09	000	386	014	150	000	67	0	265
M5A17	275	51	0	09	000	415	014	160	000	82	0	265
M5A17	275	51	0	09	000	445	014	163	000	92	0	265
M5A17	276	51	0	09	276	334	016	325	000	273	0	5
M5A17	276	51	0	09	220	352	015	035	000	529	0	42
M5A17	276	51	0	09	148	220	014	036	000	529	0	42
M5A17	276	51	0	09	088	148	012	036	000	491	0	42
M5A17	276	51	0	09	046	075	009	016	000	898	0	42
M5A17	276	51	0	09	020	029	008	015	000	930	0	42
M5A17	276	51	0	09	007	000	007	012	000	009	0	42
M5A17	276	51	0	09	007	027	006	010	000	009	0	42
M5A17	276	51	0	09	000	074	005	010	000	108	0	42
M5A17	276	51	0	09	000	110	006	010	000	108	0	42
M5A17	276	51	0	09	000	152	007	023	000	351	0	42
M5A17	276	51	0	09	000	209	007	034	001	523	0	42
M5A17	276	51	0	09	000	254	007	037	001	523	0	42
M5A17	276	51	0	09	000	273	007	044	001	426	0	42
M5A17	276	51	0	09	000	293	000	090	001	756	0	42
M5A17	276	51	0	09	000	318	013	099	001	450	0	42
M5A17	276	51	0	09	000	347	016	116	001	169	0	42
M5A17	276	51	0	09	000	370	019	131	001	210	0	42
M5A17	276	51	0	09	000	394	019	139	001	139	0	42
M5A17	276	51	0	09	000	419	021	152	000	593	0	42
M5A17	276	51	0	09	000	446	024	162	001	706	0	42
M5A17	276	51	0	09	000	470	025	167	001	959	0	42
M5A17	276	51	0	09	000	490	025	169	001	667	0	42
M5A17	276	51	0	09	000	516	025	170	001	959	0	42

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N22	277	1.51	-6.000	.092	276	508	.016	.037	.000	0.051	259	539
N22	277	1.51	-4.500	.091	276	497	.015	.037	.001	1.165	234	1329
N22	277	1.51	-3.500	.089	699	344	.013	.039	.002	2.378	222	1123
N22	277	1.51	-2.500	.089	101	242	.013	.043	.002	2.402	222	1114
N22	277	1.51	-1.500	.090	000	109	.007	.027	.001	1.749	207	1104
N22	277	1.51	-1.000	.090	000	074	.005	.015	.001	1.720	207	1104
N22	277	1.51	0.500	.089	000	036	.004	.017	.001	0.000	205	1104
N22	277	1.51	1.000	.089	000	031	.004	.016	.001	1.453	206	1113
N22	277	1.51	1.500	.086	062	065	.003	.017	.001	1.553	206	1108
N22	277	1.51	2.000	.085	000	150	.004	.034	.001	1.710	211	1104
N22	277	1.51	2.500	.085	000	190	.006	.050	.001	1.908	217	1104
N22	277	1.51	3.000	.085	000	257	.004	.041	.002	2.095	217	1102
N22	277	1.51	3.500	.083	000	362	.006	.044	.002	2.204	223	1117
N22	277	1.51	4.000	.080	477	477	.006	.058	.002	2.332	225	1116
N22	277	1.51	4.500	.077	276	477	.008	.065	.002	2.527	225	1116
N22	277	1.51	5.000	.075	000	327	.011	.105	.003	2.750	229	1120
N22	277	1.51	6.000	.074	000	025	.019	.149	.002	3.336	285	1128

N23	278	1.51	-5.000	.094	275	484	.015	.035	.000	1.747	254	1514
N23	278	1.51	-4.500	.092	275	442	.014	.023	.001	1.525	254	1514
N23	278	1.51	-3.500	.090	107	324	.012	.040	.002	1.825	238	1514
N23	278	1.51	-2.500	.092	006	190	.007	.016	.001	1.529	226	1325
N23	278	1.51	-1.500	.091	002	065	.006	.014	.001	1.558	222	1325
N23	278	1.51	-1.000	.091	000	000	.000	.010	.000	0.000	222	1325
N23	278	1.51	0.500	.090	000	000	.002	.005	.000	1.619	222	1347
N23	278	1.51	1.000	.089	062	000	.002	.012	.001	1.669	222	1305
N23	278	1.51	1.500	.087	000	154	.000	.029	.001	1.895	222	1323
N23	278	1.51	2.000	.085	000	249	.000	.041	.001	2.009	222	1323
N23	278	1.51	2.500	.084	000	349	.000	.036	.001	2.009	222	1323
N23	278	1.51	3.000	.082	000	490	.000	.054	.001	2.297	222	1323
N23	278	1.51	3.500	.079	000	660	.000	.079	.002	2.629	222	1323
N23	278	1.51	4.000	.077	000	770	.000	.105	.002	2.629	222	1323
N23	278	1.51	4.500	.072	000	834	.000	.145	.002	2.629	222	1323
N23	278	1.51	5.000	.072	000	990	.000	.151	.002	2.629	222	1323
N23	278	1.51	6.000	.073	000	1000	.000	.145	.002	2.629	222	1323
N23	278	1.51	7.000	.073	000	1000	.000	.145	.002	2.629	222	1323
N23	278	1.51	8.000	.073	000	1000	.000	.145	.002	2.629	222	1323
N23	278	1.51	9.000	.073	000	1000	.000	.145	.002	2.629	222	1323
N23	278	1.51	10.000	.074	000	1000	.000	.145	.002	2.629	222	1323

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N24	279	151	6.000	092	279	470	015	033	000	60	357	247
N24	279	151	5.000	091	279	426	015	034	000	65	357	245
N24	279	151	5.000	090	279	309	015	034	001	65	357	243
N24	279	151	5.000	091	279	273	015	049	002	54	357	230
N24	279	151	5.000	092	279	126	019	032	001	35	357	219
N24	279	151	5.000	091	279	064	006	016	000	46	357	214
N24	279	151	5.000	091	279	033	004	019	000	54	357	219
N24	279	151	5.000	091	279	000	003	007	001	60	357	219
N24	279	151	5.000	091	279	067	002	004	001	47	357	227
N24	279	151	5.000	090	279	100	002	005	001	52	357	245
N24	279	151	5.000	085	279	140	000	022	001	79	357	222
N24	279	151	5.000	085	279	190	000	022	001	52	357	215
N24	279	151	5.000	086	279	151	005	039	001	11	357	215
N24	279	151	5.000	085	279	285	004	039	001	11	357	215
N24	279	151	5.000	083	279	361	006	059	001	00	357	219
N24	279	151	5.000	076	279	342	006	079	002	30	357	235
N24	279	151	5.000	076	279	292	015	094	002	67	357	255
N24	279	151	5.000	076	279	256	000	122	002	20	357	236
N24	279	151	5.000	073	279	198	018	142	002	00	357	240
N24	279	151	5.000	073	279	320	021	153	001	33	357	241
N24	279	151	5.000	076	279	347	019	143	000	55	357	239
N24	279	151	5.000	077	279	751	027	136	001	41	357	237
N24	279	151	5.000	080	279	949	000	150	001	68	357	230
N25	280	151	6.000	091	280	424	014	030	001	00	521	410
N25	280	151	5.000	090	280	323	014	030	001	60	521	403
N25	280	151	5.000	090	280	242	014	030	001	60	521	403
N25	280	151	5.000	090	280	153	014	030	001	60	521	403
N25	280	151	5.000	091	280	123	014	030	001	60	521	403
N25	280	151	5.000	091	280	059	000	010	000	40	521	403
N25	280	151	5.000	091	280	000	005	006	000	40	521	403
N25	280	151	5.000	091	280	032	004	005	000	40	521	403
N25	280	151	5.000	091	280	063	003	006	000	40	521	403
N25	280	151	5.000	088	280	130	005	006	001	99	521	403
N25	280	151	5.000	088	280	145	005	006	001	99	521	403
N25	280	151	5.000	087	280	275	003	027	001	99	521	403
N25	280	151	5.000	086	280	294	005	027	001	99	521	403
N25	280	151	5.000	086	280	229	005	027	001	99	521	403
N25	280	151	5.000	084	280	149	009	055	002	40	521	403
N25	280	151	5.000	084	280	115	010	055	002	40	521	403
N25	280	151	5.000	075	280	095	010	055	002	40	521	403
N25	280	151	5.000	075	280	149	010	055	002	40	521	403
N25	280	151	5.000	077	280	162	016	055	002	40	521	403
N25	280	151	5.000	077	280	135	016	055	002	40	521	403
N25	280	151	5.000	077	280	050	016	055	002	40	521	403
N25	280	151	5.000	077	280	122	016	055	002	40	521	403
N25	280	151	5.000	077	280	022	016	055	002	40	521	403





CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N90	285	1	1.5	0.66	19	12	0	0.1	0	27	49	3
N30	285	1	1.5	0.66	20	13	0	0	0	29	50	2
N30	285	1	1.5	0.66	21	14	0	0	0	30	51	2
N30	285	1	1.5	0.66	22	15	0	0	0	31	52	2
N30	285	1	1.5	0.66	23	16	0	0	0	32	53	2
N30	285	1	1.5	0.66	24	17	0	0	0	33	54	2
N30	285	1	1.5	0.66	25	18	0	0	0	34	55	2
N30	285	1	1.5	0.66	26	19	0	0	0	35	56	2
N30	285	1	1.5	0.66	27	20	0	0	0	36	57	2
N30	285	1	1.5	0.66	28	21	0	0	0	37	58	2
N30	285	1	1.5	0.66	29	22	0	0	0	38	59	2
N30	285	1	1.5	0.66	30	23	0	0	0	39	60	2
N30	285	1	1.5	0.66	31	24	0	0	0	40	61	2
N30	285	1	1.5	0.66	32	25	0	0	0	41	62	2
N30	285	1	1.5	0.66	33	26	0	0	0	42	63	2
N30	285	1	1.5	0.66	34	27	0	0	0	43	64	2
N30	285	1	1.5	0.66	35	28	0	0	0	44	65	2
N30	285	1	1.5	0.66	36	29	0	0	0	45	66	2
N30	285	1	1.5	0.66	37	30	0	0	0	46	67	2
N30	285	1	1.5	0.66	38	31	0	0	0	47	68	2
N30	285	1	1.5	0.66	39	32	0	0	0	48	69	2
N30	285	1	1.5	0.66	40	33	0	0	0	49	70	2
N30	285	1	1.5	0.66	41	34	0	0	0	50	71	2
N30	285	1	1.5	0.66	42	35	0	0	0	51	72	2
N30	285	1	1.5	0.66	43	36	0	0	0	52	73	2
N30	285	1	1.5	0.66	44	37	0	0	0	53	74	2
N30	285	1	1.5	0.66	45	38	0	0	0	54	75	2
N30	285	1	1.5	0.66	46	39	0	0	0	55	76	2
N30	285	1	1.5	0.66	47	40	0	0	0	56	77	2
N30	285	1	1.5	0.66	48	41	0	0	0	57	78	2
N30	285	1	1.5	0.66	49	42	0	0	0	58	79	2
N30	285	1	1.5	0.66	50	43	0	0	0	59	80	2
N30	285	1	1.5	0.66	51	44	0	0	0	60	81	2
N30	285	1	1.5	0.66	52	45	0	0	0	61	82	2
N30	285	1	1.5	0.66	53	46	0	0	0	62	83	2
N30	285	1	1.5	0.66	54	47	0	0	0	63	84	2
N30	285	1	1.5	0.66	55	48	0	0	0	64	85	2
N30	285	1	1.5	0.66	56	49	0	0	0	65	86	2
N30	285	1	1.5	0.66	57	50	0	0	0	66	87	2
N30	285	1	1.5	0.66	58	51	0	0	0	67	88	2
N30	285	1	1.5	0.66	59	52	0	0	0	68	89	2
N30	285	1	1.5	0.66	60	53	0	0	0	69	90	2
N30	285	1	1.5	0.66	61	54	0	0	0	70	91	2
N30	285	1	1.5	0.66	62	55	0	0	0	71	92	2
N30	285	1	1.5	0.66	63	56	0	0	0	72	93	2
N30	285	1	1.5	0.66	64	57	0	0	0	73	94	2
N30	285	1	1.5	0.66	65	58	0	0	0	74	95	2
N30	285	1	1.5	0.66	66	59	0	0	0	75	96	2
N30	285	1	1.5	0.66	67	60	0	0	0	76	97	2
N30	285	1	1.5	0.66	68	61	0	0	0	77	98	2
N30	285	1	1.5	0.66	69	62	0	0	0	78	99	2
N30	285	1	1.5	0.66	70	63	0	0	0	79	100	2
N30	285	1	1.5	0.66	71	64	0	0	0	80	101	2
N30	285	1	1.5	0.66	72	65	0	0	0	81	102	2
N30	285	1	1.5	0.66	73	66	0	0	0	82	103	2
N30	285	1	1.5	0.66	74	67	0	0	0	83	104	2
N30	285	1	1.5	0.66	75	68	0	0	0	84	105	2
N30	285	1	1.5	0.66	76	69	0	0	0	85	106	2
N30	285	1	1.5	0.66	77	70	0	0	0	86	107	2
N30	285	1	1.5	0.66	78	71	0	0	0	87	108	2
N30	285	1	1.5	0.66	79	72	0	0	0	88	109	2
N30	285	1	1.5	0.66	80	73	0	0	0	89	110	2
N30	285	1	1.5	0.66	81	74	0	0	0	90	111	2
N30	285	1	1.5	0.66	82	75	0	0	0	91	112	2
N30	285	1	1.5	0.66	83	76	0	0	0	92	113	2
N30	285	1	1.5	0.66	84	77	0	0	0	93	114	2
N30	285	1	1.5	0.66	85	78	0	0	0	94	115	2
N30	285	1	1.5	0.66	86	79	0	0	0	95	116	2
N30	285	1	1.5	0.66	87	80	0	0	0	96	117	2
N30	285	1	1.5	0.66	88	81	0	0	0	97	118	2
N30	285	1	1.5	0.66	89	82	0	0	0	98	119	2
N30	285	1	1.5	0.66	90	83	0	0	0	99	120	2
N30	285	1	1.5	0.66	91	84	0	0	0	100	121	2
N30	285	1	1.5	0.66	92	85	0	0	0	101	122	2
N30	285	1	1.5	0.66	93	86	0	0	0	102	123	2
N30	285	1	1.5	0.66	94	87	0	0	0	103	124	2
N30	285	1	1.5	0.66	95	88	0	0	0	104	125	2
N30	285	1	1.5	0.66	96	89	0	0	0	105	126	2
N30	285	1	1.5	0.66	97	90	0	0	0	106	127	2
N30	285	1	1.5	0.66	98	91	0	0	0	107	128	2
N30	285	1	1.5	0.66	99	92	0	0	0	108	129	2
N30	285	1	1.5	0.66	100	93	0	0	0	109	130	2

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N30	M9A17	2	-5.0000	.066	410	.413	.014	.007	.001	-1.006	356	.221
N30	M9A17	2	-4.5000	.068	322	.101	.010	.029	.001	-.452	348	.216
N30	M9A17	2	-3.5000	.069	194	.036	.009	.036	.001	.196	335	.217
N30	M9A17	2	-2.5000	.069	165	.042	.010	.031	.000	.258	325	.209
N30	M9A17	2	-1.5000	.068	109	.027	.011	.024	.000	.062	315	.206
N30	M9A17	2	-1.5000	.069	057	.032	.012	.013	.000	.581	296	.198
N30	M9A17	2	0.5000	.066	000	.000	.014	.001	.000	-.000	295	.203
N30	M9A17	2	1.5000	.066	059	.038	.015	.004	.000	.820	294	.203
N30	M9A17	2	2.5000	.064	115	.035	.016	.005	.000	.550	273	.201
N30	M9A17	2	3.5000	.064	141	.011	.016	.015	.000	.321	272	.209
N30	M9A17	2	4.5000	.064	168	.012	.016	.010	.000	.071	271	.230
N30	M9A17	2	5.5000	.063	222	.018	.016	.008	.000	.146	248	.230
N30	M9A17	2	6.5000	.063	322	.153	.016	.008	.000	.077	247	.243
N30	M9A17	2	7.5000	.063	454	.203	.027	.010	.001	.945	275	.249
N30	M9A17	2	8.5000	.063	571	.408	.031	.027	.002	.452	292	.250
N30	M9A17	2	9.5000	.063	864	.712	.031	.091	.002	.180	303	.252
N30	M9A17	2	10.5000	.063	1235	.192	.025	.067	.003	.105	405	.254
N30	M9A17	2	11.5000	.062	1658	.752	.021	.027	.005	.238	407	.254
N30	M9A17	2	12.5000	.062	232	.452	.038	.004	.006	.344	409	.253
N30	M9A17	2	13.5000	.063	389	.758	.048	.172	.007	.454	411	.253
N31	M9A17	2	-5.0000	.065	417	.378	.017	.005	.002	-.498	413	.285
N31	M9A17	2	-4.5000	.067	329	.122	.011	.019	.001	.929	408	.276
N31	M9A17	2	-3.5000	.069	192	.051	.010	.027	.000	.268	392	.272
N31	M9A17	2	-2.5000	.068	136	.045	.010	.026	.000	.331	381	.268
N31	M9A17	2	-1.5000	.068	102	.010	.010	.019	.000	.121	362	.261
N31	M9A17	2	-1.5000	.069	057	.006	.013	.018	.000	.314	352	.266
N31	M9A17	2	0.5000	.069	009	.000	.015	.013	.000	-.000	349	.261
N31	M9A17	2	1.5000	.069	027	.024	.015	.017	.000	.200	330	.262
N31	M9A17	2	2.5000	.067	052	.000	.015	.014	.000	.859	350	.263
N31	M9A17	2	3.5000	.067	087	.052	.017	.004	.000	.593	350	.263
N31	M9A17	2	4.5000	.067	137	.000	.017	.005	.000	.322	305	.271
N31	M9A17	2	5.5000	.067	207	.001	.016	.002	.000	.997	395	.273
N31	M9A17	2	6.5000	.067	307	.031	.017	.008	.000	.000	385	.273
N31	M9A17	2	7.5000	.066	425	.000	.017	.005	.000	.147	415	.291
N31	M9A17	2	8.5000	.066	577	.000	.017	.005	.000	.045	405	.294
N31	M9A17	2	9.5000	.066	867	.000	.021	.008	.001	.044	423	.290
N31	M9A17	2	10.5000	.066	1235	.473	.021	.023	.001	.973	455	.291
N31	M9A17	2	11.5000	.066	1625	.733	.025	.051	.002	.410	471	.300
N31	M9A17	2	12.5000	.066	232	.125	.025	.057	.003	.179	455	.316
N31	M9A17	2	13.5000	.066	389	.610	.026	.172	.003	.917	466	.314
N31	M9A17	2	14.5000	.069	571	.868	.026	.470	.005	.232	467	.322
N31	M9A17	2	15.5000	.069	868	.833	.026	.021	.005	.454	470	.322



CONFIG	PART NO	MACH	ALPHA	BETA	CN	CL4	CY	CLN	CLL	XCP	CAT	CAF
N16M11A117	292	2	0	016	027	32	00	2	002	06	51	29
N16M11A117	292	2	0	016	320	22	00	002	001	25	01	30
N16M11A117	292	2	0	016	120	06	00	002	001	42	49	31
N16M11A117	292	2	0	016	127	02	00	002	001	56	46	32
N16M11A117	292	2	0	016	027	02	00	002	001	54	42	33
N16M11A117	292	2	0	016	028	00	00	002	000	00	45	34
N16M11A117	292	2	0	016	028	00	00	002	000	00	42	35
N16M11A117	292	2	0	016	027	00	00	002	000	00	43	36
N16M11A117	292	2	0	016	027	00	00	002	000	00	45	37
N16M11A117	292	2	0	016	027	00	00	002	000	00	45	38
N16M11A117	292	2	0	016	027	00	00	002	000	00	40	39
N16M11A117	292	2	0	016	027	00	00	002	000	00	52	40
N16M11A117	292	2	0	016	027	00	00	002	000	00	40	41
N16M11A117	292	2	0	016	027	00	00	002	000	00	40	42
N16M11A117	292	2	0	016	027	00	00	002	000	00	40	43
N16M11A117	292	2	0	016	027	00	00	002	000	00	40	44
N16M11A117	292	2	0	016	027	00	00	002	000	00	40	45
N16M11A117	292	2	0	016	027	00	00	002	000	00	40	46
N16M11A117	292	2	0	016	027	00	00	002	000	00	40	47
N16M11A117	292	2	0	016	027	00	00	002	000	00	40	48
N16M11A117	292	2	0	016	027	00	00	002	000	00	40	49
N16M11A117	292	2	0	016	027	00	00	002	000	00	40	50

N17M11A117	293	2	0	015	027	20	00	2	001	07	67	32
N17M11A117	293	2	0	015	027	22	00	001	001	26	53	33
N17M11A117	293	2	0	015	027	21	00	001	001	19	54	34
N17M11A117	293	2	0	015	027	21	00	001	001	62	46	35
N17M11A117	293	2	0	015	027	22	00	001	001	18	52	36
N17M11A117	293	2	0	015	027	21	00	001	001	25	49	37
N17M11A117	293	2	0	015	027	22	00	001	001	25	51	38
N17M11A117	293	2	0	015	027	21	00	001	001	40	52	39
N17M11A117	293	2	0	015	027	21	00	001	001	57	50	40
N17M11A117	293	2	0	015	027	21	00	001	001	11	55	41
N17M11A117	293	2	0	015	027	21	00	001	001	11	55	42
N17M11A117	293	2	0	015	027	21	00	001	001	11	55	43
N17M11A117	293	2	0	015	027	21	00	001	001	11	55	44
N17M11A117	293	2	0	015	027	21	00	001	001	11	55	45
N17M11A117	293	2	0	015	027	21	00	001	001	11	55	46
N17M11A117	293	2	0	015	027	21	00	001	001	11	55	47
N17M11A117	293	2	0	015	027	21	00	001	001	11	55	48
N17M11A117	293	2	0	015	027	21	00	001	001	11	55	49
N17M11A117	293	2	0	015	027	21	00	001	001	11	55	50

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M18M11A17	294	2	0.000	0.17	0.97	5.85	0.00	0.00	0.00	0.29	200	1.42
M18M11A17	294	2	0.500	0.17	1.52	0.00	0.00	0.00	0.00	0.42	200	1.42
M18M11A17	294	2	1.500	0.17	2.57	0.00	0.00	0.00	0.00	0.50	200	1.42
M18M11A17	294	2	0.000	0.19	0.20	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	294	2	0.500	0.19	0.20	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	294	2	1.500	0.19	0.20	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	294	2	0.000	0.21	0.11	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	294	2	0.500	0.21	0.11	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	294	2	1.500	0.21	0.11	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	294	2	0.000	0.19	0.19	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	294	2	0.500	0.19	0.19	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	294	2	1.500	0.19	0.19	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	294	2	0.000	0.20	0.20	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	294	2	0.500	0.20	0.20	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	294	2	1.500	0.20	0.20	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	294	2	0.000	0.19	0.19	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	294	2	0.500	0.19	0.19	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	294	2	1.500	0.19	0.19	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	0.000	0.18	0.97	0.29	0.00	0.00	0.00	0.29	200	1.42
M18M11A17	295	2	0.500	0.18	1.52	0.00	0.00	0.00	0.00	0.42	200	1.42
M18M11A17	295	2	1.500	0.18	2.57	0.00	0.00	0.00	0.00	0.50	200	1.42
M18M11A17	295	2	0.000	0.18	0.20	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	0.500	0.18	0.20	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	1.500	0.18	0.20	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	0.000	0.17	0.11	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	0.500	0.17	0.11	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	1.500	0.17	0.11	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	0.000	0.17	0.11	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	0.500	0.17	0.11	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	1.500	0.17	0.11	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	0.000	0.18	0.18	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	0.500	0.18	0.18	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	1.500	0.18	0.18	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	0.000	0.19	0.19	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	0.500	0.19	0.19	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	1.500	0.19	0.19	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	0.000	0.20	0.20	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	0.500	0.20	0.20	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	1.500	0.20	0.20	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	0.000	0.19	0.19	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	0.500	0.19	0.19	0.00	0.00	0.00	0.00	0.00	200	1.42
M18M11A17	295	2	1.500	0.19	0.19	0.00	0.00	0.00	0.00	0.00	200	1.42

CONFIG	PART NO	MACH	ALPHA	PETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N20M11A17	296	2	0	0	164	020	007	036	000	124	557	7
N20M11A17	296	2	0	0	102	086	007	40	000	194	421	31
N20M11A17	296	2	0	0	074	037	008	35	000	221	407	10
N20M11A17	296	2	0	0	050	002	009	029	000	501	491	3
N20M11A17	296	2	0	0	067	000	006	31	000	041	391	3
N20M11A17	296	2	0	0	025	021	009	06	000	250	399	3
N20M11A17	296	2	1	0	047	049	010	19	000	797	375	3
N20M11A17	296	2	1	0	107	071	019	22	001	845	374	3
N20M11A17	296	2	2	0	137	054	010	35	001	003	390	3
N20M11A17	296	2	3	0	162	039	011	03	001	423	430	3
N20M11A17	296	2	4	0	195	015	011	15	001	253	430	3
N20M11A17	296	2	5	0	327	035	012	05	001	053	451	3
N20M11A17	296	2	6	0	490	567	014	00	002	149	456	3
N20M11A17	296	2	7	0	590	106	014	05	003	365	474	3
N20M11A17	296	2	8	0	938	635	014	09	003	265	480	3
N20M11A17	296	2	9	0	133	975	024	05	004	456	493	3
N20M11A17	296	2	10	0	133	675	029	09	004	256	499	3
N21M11A17	297	2	0	0	157	04	019	13	000	203	570	5
N21M11A17	297	2	0	0	124	064	009	02	000	519	643	5
N21M11A17	297	2	0	0	074	009	011	04	000	024	635	5
N21M11A17	297	2	0	0	026	015	011	05	000	108	612	5
N21M11A17	297	2	0	0	007	027	011	09	000	029	604	5
N21M11A17	297	2	0	0	042	000	011	09	000	000	604	5
N21M11A17	297	2	1	0	092	055	012	03	001	015	666	5
N21M11A17	297	2	1	0	104	060	012	05	001	044	659	5
N21M11A17	297	2	2	0	130	033	012	09	001	001	673	5
N21M11A17	297	2	3	0	167	023	013	13	001	027	652	5
N21M11A17	297	2	4	0	232	065	015	05	001	110	674	5
N21M11A17	297	2	5	0	327	277	015	09	001	182	673	5
N21M11A17	297	2	6	0	442	633	014	10	002	437	703	5
N21M11A17	297	2	7	0	557	185	014	14	002	037	703	5
N21M11A17	297	2	8	0	724	437	014	18	002	267	718	5
N21M11A17	297	2	9	0	921	148	017	24	003	397	718	5
N21M11A17	297	2	10	0	121	148	020	28	003	000	743	5

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M2M11A17	298	2	-1	.015	.042	.015	.008	.026	.001	.183	.51	.144
M2M11A17	298	2	-1	.015	.020	.022	.007	.040	.001	.794	.22	.144
M2M11A17	298	2	0	.019	.000	.000	.008	.040	.001	.000	.21	.144
M2M11A17	298	2	0	.017	.000	.000	.009	.019	.001	.609	.21	.144
M2M11A17	298	2	1	.019	.000	.000	.010	.033	.002	.121	.20	.144
M2M11A17	298	2	2	.021	.135	.050	.008	.040	.002	.242	.22	.144
M2M11A17	298	2	3	.020	.101	.083	.010	.037	.002	.374	.26	.144
M2M11A17	298	2	4	.020	.222	.091	.010	.025	.003	.454	.28	.144
M2M11A17	298	2	5	.019	.323	.075	.012	.006	.003	.323	.30	.144
M2M11A17	298	2	6	.018	.585	.312	.014	.030	.004	.717	.32	.144
M2M11A17	298	2	8	.018	.757	.795	.016	.020	.005	.373	.33	.144
M2M11A17	298	2	9	.017	.437	.330	.025	.041	.005	.049	.33	.144
M2M11A17	298	2	10	.018	.134	.153	.032	.021	.006	.215	.34	.144
M3M11A17	299	2	-1	.018	.078	.024	.008	.033	.001	.055	.07	.167
M3M11A17	299	2	0	.020	.030	.054	.006	.027	.001	.806	.16	.167
M3M11A17	299	2	0	.017	.027	.024	.006	.027	.001	.000	.25	.167
M3M11A17	299	2	1	.018	.056	.060	.010	.043	.001	.893	.44	.167
M3M11A17	299	2	1	.020	.040	.077	.009	.027	.002	.165	.23	.167
M3M11A17	299	2	2	.019	.131	.037	.009	.043	.002	.335	.42	.167
M3M11A17	299	2	3	.019	.162	.053	.009	.035	.002	.450	.47	.167
M3M11A17	299	2	4	.017	.232	.078	.011	.028	.002	.393	.22	.167
M3M11A17	299	2	5	.017	.313	.054	.010	.042	.002	.262	.66	.167
M3M11A17	299	2	6	.015	.506	.019	.014	.021	.003	.171	.55	.167
M3M11A17	299	2	8	.015	.761	.631	.022	.044	.004	.397	.90	.167
M3M11A17	299	2	9	.013	.939	.959	.022	.057	.004	.000	.66	.167
M3M11A17	299	2	10	.013	.134	.226	.033	.025	.005	.101	.22	.167
M3M11A17	299	2	11	.011	.134	.153	.032	.021	.006	.215	.34	.167

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N23M11A17	300	2	0.5000	0.11	0.000	0.000	0.015	0.41	0.001	0.000	221	170
N23M11A17	300	2	1.5000	0.02	0.040	0.025	0.015	0.50	0.001	1.000	221	170
N23M11A17	300	2	2.5000	0.04	0.071	0.071	0.015	0.50	0.001	1.000	221	170
N23M11A17	300	2	3.5000	0.05	0.092	0.163	0.015	0.50	0.002	1.000	221	170
N23M11A17	300	2	4.5000	0.07	0.11	0.233	0.015	0.50	0.002	1.000	221	170
N23M11A17	300	2	5.5000	0.05	0.130	0.344	0.016	0.32	0.002	1.000	221	170
N23M11A17	300	2	6.5000	0.00	0.160	0.44	0.017	0.00	0.002	1.000	221	170
N23M11A17	300	2	7.5000	0.00	0.290	0.219	0.017	0.00	0.003	1.000	221	170
N23M11A17	300	2	8.5000	0.00	0.559	0.584	0.019	0.00	0.003	1.000	221	170
N23M11A17	300	2	9.5000	0.00	0.902	1.063	0.015	0.00	0.004	1.000	221	170
N24M11A17	301	2	0.5000	0.15	0.000	0.000	0.000	0.20	0.001	0.000	221	206
N24M11A17	301	2	1.5000	0.05	0.063	0.091	0.000	0.00	0.001	0.000	221	206
N24M11A17	301	2	2.5000	0.00	0.090	0.600	0.000	0.00	0.001	0.000	221	206
N24M11A17	301	2	3.5000	0.00	0.067	0.500	0.000	0.00	0.000	0.000	221	206
N24M11A17	301	2	4.5000	0.00	0.129	0.950	0.000	0.00	0.000	0.000	221	206
N24M11A17	301	2	5.5000	0.00	0.11	1.43	0.000	0.00	0.000	0.000	221	206
N24M11A17	301	2	6.5000	0.00	0.227	1.51	0.000	0.00	0.000	0.000	221	206
N24M11A17	301	2	7.5000	0.00	0.316	1.77	0.000	0.00	0.000	0.000	221	206
N24M11A17	301	2	8.5000	0.00	0.474	1.11	0.000	0.00	0.000	0.000	221	206
N24M11A17	301	2	9.5000	0.00	0.925	0.39	0.000	0.00	0.000	0.000	221	206
N25M11A17	302	2	0.5000	0.17	0.000	0.000	0.000	0.10	0.000	0.000	221	509
N25M11A17	302	2	1.5000	0.05	0.022	0.51	0.000	0.00	0.000	0.000	221	509
N25M11A17	302	2	2.5000	0.00	0.070	0.200	0.000	0.00	0.000	0.000	221	509
N25M11A17	302	2	3.5000	0.00	0.060	0.420	0.000	0.00	0.000	0.000	221	509
N25M11A17	302	2	4.5000	0.00	0.121	0.450	0.000	0.00	0.000	0.000	221	509
N25M11A17	302	2	5.5000	0.00	0.149	0.230	0.000	0.00	0.000	0.000	221	509
N25M11A17	302	2	6.5000	0.00	0.310	0.330	0.000	0.00	0.000	0.000	221	509
N25M11A17	302	2	7.5000	0.00	0.423	0.400	0.000	0.00	0.000	0.000	221	509
N25M11A17	302	2	8.5000	0.00	0.573	0.270	0.000	0.00	0.000	0.000	221	509
N25M11A17	302	2	9.5000	0.00	0.932	0.333	0.000	0.00	0.000	0.000	221	509

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
M9A17	304	2	-6.000	.066	397.0	186	015	003	002	.472	430	285
M9A17	304	2	-5.000	.066	397.0	186	015	003	002	.121	430	285
M9A17	304	2	-3.500	.066	397.0	186	015	003	002	.924	430	285
M9A17	304	2	-3.500	.067	154.3	140	012	012	001	1.094	414	305
M9A17	304	2	-2.500	.067	154.3	140	012	012	001	1.125	414	305
M9A17	304	2	-1.500	.067	154.3	140	012	012	001	.878	402	305
M9A17	304	2	-1.500	.068	154.3	140	012	012	001	.448	372	305
M9A17	304	2	-	.067	0.000	0.000	013	009	001	.248	362	305
M9A17	304	2	-	.067	0.000	0.000	013	009	001	.009	362	305
M9A17	304	2	1.500	.067	0.000	0.000	014	006	000	.061	350	305
M9A17	304	2	1.500	.065	0.000	0.000	017	007	000	.381	307	305
M9A17	304	2	2.500	.065	0.000	0.000	017	007	000	.528	293	305
M9A17	304	2	3.500	.065	0.000	0.000	019	009	000	.528	293	305
M9A17	304	2	4.500	.066	0.000	0.000	019	009	000	.340	441	305
M9A17	304	2	5.000	.065	0.000	0.000	021	023	000	.000	441	305
M9A17	304	2	6.000	.064	0.000	0.000	025	029	001	.500	459	305
M9A17	304	2	7.000	.064	0.000	0.000	025	029	001	.115	459	305
M9A17	304	2	9.000	.064	0.000	0.000	027	035	001	.574	481	305
M9A17	304	2	10.000	.063	0.000	0.000	032	055	002	.106	481	305
M9A17	304	2	11.000	.063	0.000	0.000	039	140	003	.062	499	305
M9A17	304	2	-	.063	0.000	0.000	039	140	003	-.216	499	305
M9A17	305	2	-5.000	.067	396	181	015	005	001	.399	393	271
M9A17	305	2	-4.500	.067	396	181	015	005	001	.162	393	271
M9A17	305	2	-3.500	.067	396	181	015	005	001	.787	393	271
M9A17	305	2	-2.500	.067	396	181	015	005	001	.956	393	271
M9A17	305	2	-1.500	.069	396	181	015	005	001	.323	393	271
M9A17	305	2	-1.500	.068	396	181	015	005	001	.251	393	271
M9A17	305	2	.500	.067	396	181	015	005	001	.000	393	271
M9A17	305	2	1.500	.067	396	181	015	005	001	.211	393	271
M9A17	305	2	2.500	.066	396	181	015	005	001	.469	393	271
M9A17	305	2	3.500	.066	396	181	015	005	001	.158	393	271
M9A17	305	2	4.500	.066	396	181	015	005	001	.574	393	271
M9A17	305	2	5.000	.066	396	181	015	005	001	.587	393	271
M9A17	305	2	7.000	.065	396	181	015	005	001	.095	393	271
M9A17	305	2	8.000	.065	396	181	015	005	001	.555	393	271
M9A17	305	2	9.000	.063	396	181	015	005	001	.462	393	271
M9A17	305	2	10.000	.063	396	181	015	005	001	.462	393	271
M9A17	305	2	11.000	.062	396	181	015	005	001	.061	393	271
M9A17	305	2	-	.062	396	181	015	005	001	-.112	393	271





CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N26	222	3	0.000	1.00	467	298	0.019	0.024	0.001	539	270	220
N26	222	3	0.000	1.00	362	172	0.018	0.023	0.001	475	260	221
N26	222	3	0.000	0.99	270	190	0.017	0.022	0.001	429	250	221
N26	222	3	0.000	0.99	269	190	0.017	0.022	0.001	429	250	221
N26	222	3	0.000	0.97	151	005	0.017	0.022	0.001	033	240	221
N26	222	3	0.000	0.97	151	005	0.017	0.022	0.001	033	240	221
N26	222	3	0.000	0.97	059	008	0.016	0.021	0.001	110	235	221
N26	222	3	0.000	0.97	029	008	0.016	0.021	0.001	234	235	221
N26	222	3	0.000	0.97	009	008	0.016	0.021	0.001	203	235	221
N26	222	3	0.000	0.97	002	008	0.017	0.022	0.001	210	235	221
N26	222	3	0.000	0.96	002	014	0.017	0.022	0.001	102	235	221
N26	222	3	0.000	0.96	002	010	0.017	0.022	0.001	005	235	221
N26	222	3	0.000	0.96	002	010	0.017	0.022	0.001	005	235	221
N26	222	3	0.000	0.96	002	010	0.017	0.022	0.001	005	235	221
N26	222	3	0.000	0.96	002	010	0.017	0.022	0.001	005	235	221
N26	222	3	0.000	0.96	002	010	0.017	0.022	0.001	005	235	221
N26	222	3	0.000	0.96	002	010	0.017	0.022	0.001	005	235	221
N26	222	3	0.000	0.95	031	045	0.019	0.024	0.002	099	252	224
N26	222	3	0.000	0.95	031	045	0.019	0.024	0.002	099	252	224
N26	222	3	0.000	0.95	031	045	0.019	0.024	0.002	099	252	224
N26	222	3	0.000	0.95	031	045	0.019	0.024	0.002	099	252	224
N26	222	3	0.000	0.94	361	152	0.021	0.027	0.002	276	281	231
N26	222	3	0.000	0.94	361	152	0.021	0.027	0.002	276	281	231
N26	222	3	0.000	0.93	573	395	0.022	0.028	0.002	550	307	242
N26	222	3	0.000	0.93	573	395	0.022	0.028	0.002	550	307	242
N26	222	3	0.000	0.92	222	777	0.020	0.026	0.001	610	307	242
N26	222	3	0.000	0.92	222	777	0.020	0.026	0.001	610	307	242
N26	222	3	0.000	0.91	69	1022	0.027	0.034	0.001	945	319	253
N26	222	3	0.000	0.91	69	1022	0.027	0.034	0.001	945	319	253
N26	222	3	0.000	0.89	1015	1566	0.030	0.038	0.001	174	328	256
N26	222	3	0.000	0.89	1015	1566	0.030	0.038	0.001	174	328	256
N26	222	3	0.000	0.88	15	121	0.032	0.041	0.000	302	337	263
N26	222	3	0.000	0.88	15	121	0.032	0.041	0.000	302	337	263
N10	222	3	0.000	0.97	379	413	0.019	0.024	0.001	16	97	92
N10	222	3	0.000	0.97	379	413	0.019	0.024	0.001	16	97	92
N10	222	3	0.000	0.96	207	179	0.017	0.022	0.001	89	97	92
N10	222	3	0.000	0.96	207	179	0.017	0.022	0.001	89	97	92
N10	222	3	0.000	0.96	145	106	0.016	0.021	0.001	74	97	92
N10	222	3	0.000	0.96	145	106	0.016	0.021	0.001	74	97	92
N10	222	3	0.000	0.95	065	052	0.016	0.021	0.001	67	97	92
N10	222	3	0.000	0.95	065	052	0.016	0.021	0.001	67	97	92
N10	222	3	0.000	0.95	020	021	0.016	0.021	0.001	45	97	92
N10	222	3	0.000	0.95	020	021	0.016	0.021	0.001	45	97	92
N10	222	3	0.000	0.95	020	021	0.016	0.021	0.001	45	97	92
N10	222	3	0.000	0.95	020	021	0.016	0.021	0.001	45	97	92
N10	222	3	0.000	0.95	020	021	0.016	0.021	0.001	45	97	92
N10	222	3	0.000	0.95	020	021	0.016	0.021	0.001	45	97	92
N10	222	3	0.000	0.95	020	021	0.016	0.021	0.001	45	97	92
N10	222	3	0.000	0.95	020	021	0.016	0.021	0.001	45	97	92
N10	222	3	0.000	0.95	020	021	0.016	0.021	0.001	45	97	92
N10	222	3	0.000	0.94	143	102	0.016	0.021	0.001	70	97	92
N10	222	3	0.000	0.94	143	102	0.016	0.021	0.001	70	97	92
N10	222	3	0.000	0.94	143	102	0.016	0.021	0.001	70	97	92
N10	222	3	0.000	0.93	275	266	0.017	0.022	0.000	57	97	92
N10	222	3	0.000	0.93	275	266	0.017	0.022	0.000	57	97	92
N10	222	3	0.000	0.92	331	325	0.017	0.022	0.000	11	97	92
N10	222	3	0.000	0.92	331	325	0.017	0.022	0.000	11	97	92
N10	222	3	0.000	0.91	597	420	0.020	0.026	0.001	326	97	92
N10	222	3	0.000	0.91	597	420	0.020	0.026	0.001	326	97	92
N10	222	3	0.000	0.89	997	785	0.022	0.029	0.001	709	97	92
N10	222	3	0.000	0.89	997	785	0.022	0.029	0.001	709	97	92
N10	222	3	0.000	0.88	112	114	0.023	0.031	0.001	84	97	92
N10	222	3	0.000	0.88	112	114	0.023	0.031	0.001	84	97	92
N10	222	3	0.000	0.87	11	11	0.024	0.032	0.001	94	97	92
N10	222	3	0.000	0.87	11	11	0.024	0.032	0.001	94	97	92





CONFIG	PAPT NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
MSA17	310	01	00	04	388	385	02	02	01	992	634	581
MSA17	310	01	00	05	309	253	01	02	00	862	614	575
MSA17	310	01	00	06	115	107	01	02	00	548	604	573
MSA17	310	01	00	07	127	124	01	02	00	379	604	571
MSA17	310	01	00	08	072	001	01	02	00	129	592	572
MSA17	310	01	00	09	263	001	01	02	00	220	593	570
MSA17	310	01	00	10	005	010	01	02	00	006	593	571
MSA17	310	01	00	11	027	010	01	02	00	217	593	571
MSA17	310	01	00	12	750	020	01	02	00	424	601	575
MSA17	310	01	00	13	001	060	01	02	00	471	601	577
MSA17	310	01	00	14	117	111	01	02	00	552	610	577
MSA17	310	01	00	15	205	121	01	02	00	677	610	577
MSA17	310	01	00	16	302	232	01	02	00	803	623	580
MSA17	310	01	00	17	401	345	01	02	00	928	635	586
MSA17	310	01	00	18	591	457	01	02	00	040	643	586
MSA17	310	01	00	19	688	571	01	02	00	133	654	593
MSA17	310	01	00	20	853	682	01	02	00	225	664	593
MSA17	310	01	00	21	1025	793	01	02	00	317	664	593
MSA17	310	01	00	22	1488	904	01	02	00	410	664	593
MSA17	310	01	00	23	2023	015	01	02	00	503	664	593
MSA17	310	01	00	24	2591	126	01	02	00	596	664	593
MSA17	310	01	00	25	3225	237	01	02	00	689	664	593
MSA17	310	01	00	26	3925	348	01	02	00	782	664	593
MSA17	310	01	00	27	4688	459	01	02	00	875	664	593
MSA17	310	01	00	28	5523	570	01	02	00	968	664	593
MSA17	310	01	00	29	6432	681	01	02	00	061	664	593
MSA17	310	01	00	30	7417	792	01	02	00	154	664	593
MSA17	310	01	00	31	8478	903	01	02	00	247	664	593
MSA17	310	01	00	32	9615	014	01	02	00	340	664	593
MSA17	310	01	00	33	10858	125	01	02	00	433	664	593
MSA17	310	01	00	34	16233	236	01	02	00	526	664	593
MSA17	310	01	00	35	22258	347	01	02	00	619	664	593
MSA17	310	01	00	36	29043	458	01	02	00	712	664	593
MSA17	310	01	00	37	36688	569	01	02	00	805	664	593
MSA17	310	01	00	38	45203	680	01	02	00	898	664	593
MSA17	310	01	00	39	54698	791	01	02	00	991	664	593
MSA17	310	01	00	40	65173	902	01	02	00	084	664	593
MSA17	310	01	00	41	76638	013	01	02	00	177	664	593
MSA17	310	01	00	42	89103	124	01	02	00	270	664	593
MSA17	310	01	00	43	102568	235	01	02	00	363	664	593
MSA17	310	01	00	44	115213	346	01	02	00	456	664	593
MSA17	310	01	00	45	129068	457	01	02	00	549	664	593
MSA17	310	01	00	46	144133	568	01	02	00	642	664	593
MSA17	310	01	00	47	160518	679	01	02	00	735	664	593
MSA17	310	01	00	48	178233	790	01	02	00	828	664	593
MSA17	310	01	00	49	197278	901	01	02	00	921	664	593
MSA17	310	01	00	50	217653	012	01	02	00	014	664	593
MSA17	310	01	00	51	239368	123	01	02	00	107	664	593
MSA17	310	01	00	52	262513	234	01	02	00	200	664	593
MSA17	310	01	00	53	288108	345	01	02	00	293	664	593
MSA17	310	01	00	54	316153	456	01	02	00	386	664	593
MSA17	310	01	00	55	346658	567	01	02	00	479	664	593
MSA17	310	01	00	56	379713	678	01	02	00	572	664	593
MSA17	310	01	00	57	415328	789	01	02	00	665	664	593
MSA17	310	01	00	58	453553	900	01	02	00	758	664	593
MSA17	310	01	00	59	494388	011	01	02	00	851	664	593
MSA17	310	01	00	60	538833	122	01	02	00	944	664	593
MSA17	310	01	00	61	586878	233	01	02	00	037	664	593
MSA17	310	01	00	62	638523	344	01	02	00	130	664	593
MSA17	310	01	00	63	693768	455	01	02	00	223	664	593
MSA17	310	01	00	64	752613	566	01	02	00	316	664	593
MSA17	310	01	00	65	815058	677	01	02	00	409	664	593
MSA17	310	01	00	66	881103	788	01	02	00	502	664	593
MSA17	310	01	00	67	950748	899	01	02	00	595	664	593
MSA17	310	01	00	68	102309	010	01	02	00	688	664	593
MSA17	310	01	00	69	110774	121	01	02	00	781	664	593
MSA17	310	01	00	70	120149	232	01	02	00	874	664	593
MSA17	310	01	00	71	131424	343	01	02	00	967	664	593
MSA17	310	01	00	72	144699	454	01	02	00	060	664	593
MSA17	310	01	00	73	159974	565	01	02	00	153	664	593
MSA17	310	01	00	74	177349	676	01	02	00	246	664	593
MSA17	310	01	00	75	196824	787	01	02	00	339	664	593
MSA17	310	01	00	76	218509	898	01	02	00	432	664	593
MSA17	310	01	00	77	242394	009	01	02	00	525	664	593
MSA17	310	01	00	78	268479	120	01	02	00	618	664	593
MSA17	310	01	00	79	296764	231	01	02	00	711	664	593
MSA17	310	01	00	80	327249	342	01	02	00	804	664	593
MSA17	310	01	00	81	360034	453	01	02	00	897	664	593
MSA17	310	01	00	82	395219	564	01	02	00	990	664	593
MSA17	310	01	00	83	432804	675	01	02	00	083	664	593
MSA17	310	01	00	84	473789	786	01	02	00	176	664	593
MSA17	310	01	00	85	518174	897	01	02	00	269	664	593
MSA17	310	01	00	86	566059	008	01	02	00	362	664	593
MSA17	310	01	00	87	617444	119	01	02	00	455	664	593
MSA17	310	01	00	88	672329	230	01	02	00	548	664	593
MSA17	310	01	00	89	730714	341	01	02	00	641	664	593
MSA17	310	01	00	90	792699	452	01	02	00	734	664	593
MSA17	310	01	00	91	858284	563	01	02	00	827	664	593
MSA17	310	01	00	92	927469	674	01	02	00	920	664	593
MSA17	310	01	00	93	100024	785	01	02	00	013	664	593
MSA17	310	01	00	94	108309	896	01	02	00	106	664	593
MSA17	310	01	00	95	117424	007	01	02	00	199	664	593
MSA17	310	01	00	96	127369	118	01	02	00	292	664	593
MSA17	310	01	00	97	138144	229	01	02	00	385	664	593
MSA17	310	01	00	98	149859	340	01	02	00	478	664	593
MSA17	310	01	00	99	162514	451	01	02	00	571	664	593
MSA17	310	01	00	100	177129	562	01	02	00	664	664	593



CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N21	22	33	-6	.097	.385	.274	.021	.025	.002	.711	.640	.590
N21	22	33	-4	.097	.216	.167	.018	.019	.001	.548	.625	.587
N21	22	33	-3	.097	.151	.042	.018	.019	.001	.335	.620	.585
N21	22	33	-2	.097	.121	.009	.016	.017	.001	.145	.617	.582
N21	22	33	-1	.096	.073	.005	.016	.017	.002	.092	.605	.580
N21	22	33	0	.097	.027	.000	.016	.017	.002	.039	.603	.580
N21	22	33	1	.097	.006	.000	.017	.017	.002	.107	.603	.580
N21	22	33	2	.097	.022	.001	.017	.017	.002	.211	.603	.580
N21	22	33	3	.098	.095	.001	.017	.017	.002	.108	.613	.582
N21	22	33	4	.098	.122	.011	.017	.017	.001	.089	.617	.584
N21	22	33	5	.098	.151	.029	.017	.017	.001	.182	.624	.587
N21	22	33	6	.098	.216	.047	.019	.017	.001	.256	.631	.587
N21	22	33	7	.098	.293	.073	.022	.016	.001	.354	.644	.591
N21	22	33	8	.098	.382	.110	.025	.019	.001	.425	.651	.599
N21	22	33	9	.098	.491	.145	.026	.029	.001	.497	.664	.601
N21	22	33	10	.096	.633	.182	.029	.040	.000	.575	.664	.603
N21	22	33	11	.096	.845	.227	.030	.052	.000	.621	.672	.604
N21	22	33	12	.095	1.027	.287	.030	.072	.000	.644	.674	.605
N21	22	33	13	.094	1.267	.364	.031	.094	.001	.633	.676	.606
N21	22	33	14	.094	1.409	.427	.031	.112	.001	.533	.674	.606
N22	22	33	15	.098	.432	.039	.021	.025	.000	.085	.176	.126
N22	22	33	16	.097	.359	.142	.017	.019	.000	.375	.162	.120
N22	22	33	17	.097	.210	.136	.017	.019	.000	.027	.152	.119
N22	22	33	18	.097	.140	.122	.017	.017	.000	.076	.146	.117
N22	22	33	19	.097	.118	.107	.017	.017	.000	.179	.139	.116
N22	22	33	20	.097	.095	.066	.016	.016	.000	.179	.139	.114
N22	22	33	21	.098	.027	.032	.016	.016	.001	.000	.136	.114
N22	22	33	22	.098	.055	.063	.017	.017	.001	.325	.136	.114
N22	22	33	23	.098	.082	.093	.017	.017	.001	.135	.137	.114
N22	22	33	24	.098	.110	.122	.017	.017	.001	.057	.149	.114
N22	22	33	25	.098	.146	.138	.017	.017	.001	.135	.149	.114
N22	22	33	26	.099	.182	.122	.017	.017	.001	.057	.149	.114
N22	22	33	27	.099	.220	.133	.018	.018	.002	.038	.149	.114
N22	22	33	28	.102	.260	.123	.019	.019	.002	.502	.154	.118
N22	22	33	29	.102	.347	.176	.024	.024	.002	.167	.166	.122
N22	22	33	30	.102	.471	.231	.029	.029	.002	.100	.194	.140
N22	22	33	31	.101	.573	.287	.029	.029	.002	.160	.204	.150
N22	22	33	32	.101	.664	.327	.029	.029	.002	.100	.223	.156
N22	22	33	33	.100	.734	.364	.031	.031	.002	.452	.223	.161
N22	22	33	34	.100	.845	.427	.031	.031	.002	.324	.235	.166
N22	22	33	35	.100	1.027	.472	.031	.031	.002	.633	.235	.166
N22	22	33	36	.100	1.267	.533	.031	.031	.002	.633	.235	.166
N22	22	33	37	.100	1.409	.533	.031	.031	.002	.533	.235	.166

CONFIG	PART NO	MACH	ALPHA	RETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N23	324	333	-5.000	.099	4375	.091	.020	.015	.000	025	57	195
N23	324	333	-4.500	.099	2457	.106	.021	.015	.000	2571	220	195
N23	324	333	-3.500	.099	2170	.123	.018	.014	.000	1565	220	195
N23	324	333	-3.500	.099	1377	.114	.017	.014	.000	725	198	195
N23	324	333	-2.500	.099	1078	.100	.017	.012	.000	636	197	195
N23	324	333	-1.500	.099	1051	.097	.017	.012	.000	230	177	195
N23	324	333	0.500	.099	0000	.080	.016	.019	.001	110	172	195
N23	324	333	1.500	.099	0570	.020	.017	.006	.001	44	170	195
N23	324	333	2.500	.099	1068	.073	.017	.005	.001	165	177	195
N23	324	333	3.500	.100	1370	.094	.019	.005	.001	300	175	195
N23	324	333	4.500	.100	2350	.091	.019	.007	.001	435	160	195
N23	324	333	5.000	.100	3457	.065	.022	.015	.001	88	170	195
N23	324	333	6.000	.101	583	.027	.024	.020	.001	110	222	195
N23	324	333	8.000	.101	872	.027	.024	.020	.002	22	222	195
N23	324	333	10.000	.100	99	.055	.030	.030	.000	45	222	195
N23	324	333	11.000	.100	158	.052	.032	.030	.000	95	222	195
N23	324	333	12.000	.100	152	.061	.033	.030	.000	708	222	195
N23	324	333	13.000	.099	170	.171	.034	.042	.001	816	222	195
N24	324	333	-6.000	.097	412	.079	.021	.016	.001	80	59	204
N24	324	333	-5.000	.097	226	.069	.019	.015	.001	154	59	204
N24	324	333	-4.500	.097	161	.067	.019	.015	.001	408	59	204
N24	324	333	-3.500	.097	157	.065	.019	.015	.001	55	59	204
N24	324	333	-2.500	.097	60	.045	.018	.015	.000	24	59	204
N24	324	333	-1.500	.097	72	.027	.017	.013	.000	97	59	204
N24	324	333	0.500	.098	000	.020	.017	.010	.000	60	59	204
N24	324	333	1.500	.099	47	.035	.017	.009	.000	3	59	204
N24	324	333	2.500	.099	97	.030	.016	.009	.000	7	59	204
N24	324	333	3.500	.100	126	.072	.016	.009	.000	6	59	204
N24	324	333	4.500	.100	131	.052	.015	.009	.000	2	59	204
N24	324	333	5.000	.101	99	.040	.014	.008	.000	9	59	204
N24	324	333	6.000	.101	99	.047	.014	.008	.000	2	59	204
N24	324	333	7.000	.101	64	.055	.013	.008	.000	9	59	204
N24	324	333	8.000	.101	117	.053	.013	.008	.000	1	59	204
N24	324	333	9.000	.101	117	.066	.013	.008	.000	1	59	204
N24	324	333	10.000	.100	11	.060	.012	.008	.000	1	59	204
N24	324	333	11.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	12.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	13.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	14.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	15.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	16.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	17.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	18.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	19.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	20.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	21.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	22.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	23.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	24.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	25.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	26.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	27.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	28.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	29.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	30.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	31.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	32.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	33.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	34.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	35.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	36.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	37.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	38.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	39.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	40.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	41.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	42.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	43.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	44.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	45.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	46.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	47.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	48.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	49.000	.100	11	.063	.012	.008	.000	1	59	204
N24	324	333	50.000	.100	11	.063	.012	.008	.000	1	59	204

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N25	226	M	-5.000	.095	397	149	019	029	000	303	609	569
N25	226	M	-3.500	.095	291	015	014	014	000	174	590	555
N25	226	M	-3.500	.095	216	015	014	014	000	203	590	555
N25	226	M	-2.500	.095	152	015	013	013	000	203	584	553
N25	226	M	-2.500	.095	152	015	013	013	000	203	584	553
N25	226	M	-1.500	.095	076	015	012	012	000	203	577	551
N25	226	M	-1.500	.095	076	015	012	012	000	203	577	551
N25	226	M	0.500	.097	022	015	009	009	000	0	570	549
N25	226	M	0.500	.097	022	015	009	009	000	0	570	549
N25	226	M	1.500	.098	066	015	006	006	001	735	570	554
N25	226	M	1.500	.098	066	015	006	006	001	735	570	554
N25	226	M	2.500	.098	096	015	006	006	001	550	571	555
N25	226	M	2.500	.098	096	015	006	006	001	550	571	555
N25	226	M	3.500	.098	123	015	007	007	001	206	570	555
N25	226	M	3.500	.098	123	015	007	007	001	206	570	555
N25	226	M	4.500	.099	152	015	007	007	001	103	570	555
N25	226	M	4.500	.099	152	015	007	007	001	103	570	555
N25	226	M	5.500	.100	221	015	005	005	001	0	570	564
N25	226	M	5.500	.100	221	015	005	005	001	0	570	564
N25	226	M	6.500	.100	305	010	004	004	001	342	613	574
N25	226	M	6.500	.100	305	010	004	004	001	342	613	574
N25	226	M	7.500	.101	365	022	012	012	001	174	622	573
N25	226	M	7.500	.101	365	022	012	012	001	174	622	573
N25	226	M	8.500	.101	427	022	019	019	001	0	635	573
N25	226	M	8.500	.101	427	022	019	019	001	0	635	573
N25	226	M	9.500	.100	483	027	039	039	000	0	641	577
N25	226	M	9.500	.100	483	027	039	039	000	0	641	577
N25	226	M	11.000	.100	544	027	043	043	000	1	648	580
N25	226	M	11.000	.100	544	027	043	043	000	1	648	580
N25	226	M	12.000	.100	604	029	043	043	000	1	650	580
N25	226	M	12.000	.100	604	029	043	043	000	1	650	580
N29	227	M	-5.000	.095	431	342	029	029	001	255	343	285
N29	227	M	-3.500	.095	291	020	024	024	001	59	323	289
N29	227	M	-3.500	.095	291	020	024	024	001	59	323	289
N29	227	M	-2.500	.096	152	010	022	022	001	59	316	277
N29	227	M	-2.500	.096	152	010	022	022	001	59	316	277
N29	227	M	-1.500	.096	076	010	020	020	001	59	307	276
N29	227	M	-1.500	.096	076	010	020	020	001	59	307	276
N29	227	M	0.500	.097	022	010	017	017	001	0	299	276
N29	227	M	0.500	.097	022	010	017	017	001	0	299	276
N29	227	M	1.500	.098	066	010	015	015	001	0	298	277
N29	227	M	1.500	.098	066	010	015	015	001	0	298	277
N29	227	M	2.500	.098	096	010	017	017	001	0	298	277
N29	227	M	2.500	.098	096	010	017	017	001	0	298	277
N29	227	M	3.500	.099	123	010	019	019	001	0	297	280
N29	227	M	3.500	.099	123	010	019	019	001	0	297	280
N29	227	M	4.500	.100	152	010	016	016	001	0	296	280
N29	227	M	4.500	.100	152	010	016	016	001	0	296	280
N29	227	M	5.500	.100	221	020	024	024	000	0	295	282
N29	227	M	5.500	.100	221	020	024	024	000	0	295	282
N29	227	M	6.500	.100	283	020	027	027	000	0	294	282
N29	227	M	6.500	.100	283	020	027	027	000	0	294	282
N29	227	M	7.500	.100	344	020	035	035	000	0	293	283
N29	227	M	7.500	.100	344	020	035	035	000	0	293	283
N29	227	M	8.500	.100	406	020	043	043	000	0	292	283
N29	227	M	8.500	.100	406	020	043	043	000	0	292	283
N29	227	M	9.500	.100	467	020	051	051	000	0	291	284
N29	227	M	9.500	.100	467	020	051	051	000	0	291	284
N29	227	M	11.000	.100	528	020	059	059	000	0	290	284
N29	227	M	11.000	.100	528	020	059	059	000	0	290	284
N29	227	M	12.000	.100	589	020	066	066	000	0	289	285
N29	227	M	12.000	.100	589	020	066	066	000	0	289	285

CONFIG	PART NO	MACH	ALPHA	BETA	CN	CLM	CY	CLN	CLL	XCP	CAT	CAF
N30	MSA17	3	1.00000	0.093	4.57	335	0.021	0.36	0.000	7.46	243	187
N30	MSA17	3	1.00000	0.094	3.47	305	0.020	0.32	0.000	5.93	222	180
N30	MSA17	3	1.00000	0.094	2.17	174	0.019	0.29	0.000	4.32	216	177
N30	MSA17	3	1.00000	0.094	1.17	142	0.018	0.27	0.000	3.35	202	173
N30	MSA17	3	1.00000	0.095	1.14	114	0.018	0.27	0.000	1.62	199	174
N30	MSA17	3	1.00000	0.095	0.55	085	0.019	0.27	0.000	0.69	196	173
N30	MSA17	3	1.00000	0.096	0.20	000	0.018	0.25	0.000	0.33	197	174
N30	MSA17	3	1.00000	0.096	0.00	000	0.018	0.25	0.000	0.04	196	174
N30	MSA17	3	1.00000	0.096	0.00	000	0.018	0.25	0.000	0.00	197	174
N30	MSA17	3	1.00000	0.097	0.55	085	0.019	0.26	0.001	0.97	198	176
N30	MSA17	3	1.00000	0.097	0.84	119	0.019	0.26	0.001	0.57	201	176
N30	MSA17	3	1.00000	0.097	1.14	149	0.019	0.26	0.001	0.22	205	177
N30	MSA17	3	1.00000	0.098	1.14	149	0.019	0.27	0.001	1.12	211	180
N30	MSA17	3	1.00000	0.098	2.22	262	0.020	0.27	0.001	3.24	222	198
N30	MSA17	3	1.00000	0.099	3.51	425	0.020	0.28	0.001	4.50	227	198
N30	MSA17	3	1.00000	1.000	5.67	817	0.023	0.30	0.001	7.09	256	204
N30	MSA17	3	1.00000	1.001	8.17	1099	0.024	0.38	0.001	8.43	265	209
N30	MSA17	3	1.00000	1.001	9.63	1255	0.025	0.47	0.001	9.65	274	213
N30	MSA17	3	1.00000	1.009	12.55	1697	0.026	0.49	0.000	1.07	296	225
N30	MSA17	3	1.00000	1.011	13.62	1975	0.028	0.55	0.000	1.34	301	225
N30	MSA17	3	1.00000	1.011	14.55	2119	0.028	0.55	0.000	1.45	309	233
N31	MSA17	3	1.00000	0.095	4.28	288	0.018	0.30	0.000	6.51	6	270
N31	MSA17	3	1.00000	0.095	3.35	205	0.018	0.28	0.000	4.28	370	269
N31	MSA17	3	1.00000	0.095	2.07	137	0.017	0.25	0.000	1.98	308	264
N31	MSA17	3	1.00000	0.095	1.07	106	0.017	0.23	0.000	0.15	293	262
N31	MSA17	3	1.00000	0.095	0.52	026	0.017	0.21	0.001	0.33	285	261
N31	MSA17	3	1.00000	0.096	0.00	000	0.017	0.20	0.001	1.89	282	269
N31	MSA17	3	1.00000	0.096	0.25	025	0.017	0.19	0.001	0.00	281	269
N31	MSA17	3	1.00000	0.097	0.47	097	0.017	0.19	0.001	0.00	281	269
N31	MSA17	3	1.00000	0.097	0.77	111	0.017	0.19	0.001	0.00	281	269
N31	MSA17	3	1.00000	0.098	1.05	136	0.017	0.19	0.001	0.32	282	269
N31	MSA17	3	1.00000	0.098	1.69	199	0.018	0.19	0.001	1.03	284	261
N31	MSA17	3	1.00000	0.099	2.03	273	0.019	0.19	0.001	0.95	294	265
N31	MSA17	3	1.00000	0.099	3.29	473	0.020	0.20	0.001	1.76	300	269
N31	MSA17	3	1.00000	1.000	5.34	827	0.022	0.25	0.001	2.79	301	269
N31	MSA17	3	1.00000	1.001	7.65	1101	0.024	0.28	0.001	4.71	309	269
N31	MSA17	3	1.00000	1.001	9.34	1374	0.026	0.30	0.001	7.07	316	270
N31	MSA17	3	1.00000	1.001	10.80	1561	0.028	0.33	0.001	9.12	322	270
N31	MSA17	3	1.00000	1.001	12.37	1838	0.029	0.35	0.000	1.19	327	270
N31	MSA17	3	1.00000	1.010	14.53	2119	0.030	0.40	0.000	1.33	330	270









CONFIG	PART NO	MACH	ALPHA	BETA	CM	CLH	CY	CLM	CLL	XCP	CAT	CAF
MUM11A17	330	4.02	0.000	0.02	4.18	1.450	0.019	1.142	0.03	3.473	996	969
MUM11A17	330	4.02	0.000	0.04	3.150	0.990	0.013	1.121	0.02	3.170	983	958
MUM11A17	330	4.02	0.000	0.05	2.280	0.637	0.013	1.213	0.02	2.790	976	956
MUM11A17	330	4.02	0.000	0.04	1.150	0.378	0.013	1.117	0.02	2.620	973	955
MUM11A17	330	4.02	0.000	0.02	1.180	0.279	0.014	1.113	0.02	2.360	965	949
MUM11A17	330	4.02	0.000	0.03	0.632	0.203	0.015	1.116	0.02	2.330	967	947
MUM11A17	330	4.02	0.000	0.05	0.021	0.193	0.014	1.116	0.01	2.200	940	929
MUM11A17	330	4.02	0.000	0.05	0.020	0.040	0.013	1.213	0.01	0.000	930	930
MUM11A17	330	4.02	0.000	0.06	0.044	0.077	0.012	1.215	0.01	0.000	943	937
MUM11A17	330	4.02	0.000	0.07	0.097	0.119	0.011	1.231	0.01	0.755	959	945
MUM11A17	330	4.02	0.000	0.08	0.126	0.167	0.010	1.266	0.01	1.735	968	952
MUM11A17	330	4.02	0.000	0.08	0.156	0.265	0.007	1.193	0.01	1.919	974	958
MUM11A17	330	4.02	0.000	0.05	0.197	0.449	0.006	1.103	0.00	2.082	984	959
MUM11A17	330	4.02	0.000	0.05	0.209	0.582	0.005	1.060	0.00	2.359	986	959
MUM11A17	330	4.02	0.000	0.04	0.303	0.893	0.005	1.004	0.00	2.905	995	966
MUM11A17	330	4.02	0.000	0.06	0.437	1.208	0.005	0.991	0.00	3.191	999	979
MUM11A17	330	4.02	0.000	0.07	0.637	1.693	0.000	0.955	0.01	3.655	0.02	994
MUM11A17	330	4.02	0.000	0.08	0.837	2.277	0.001	0.935	0.01	4.199	0.02	994
MUM11A17	330	4.02	0.000	0.09	1.033	3.232	0.001	0.951	0.01	4.929	0.02	992
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