UNCLASSIFIED

AD 404 839

DEFENSE DOCUMENTATION CENTER

FOR

SCIENTIFIC AND TECHNICAL INFORMATION

CAMERON STATION, ALEXANDRIA, VIRGINIA

UNCLASSIFIED

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.

404 839

63-3-5

404839

CATALOGED BY ASTIA
AS AD NO.

DDC
MAY 29 1963
TISIA A

MCDONNELL

DATE 15 July 1958

REVISED U 30 September 1961
V 30 November 1961
W 30 May 1962
X 30 September 1962
Y 30 January 1963

VOLUME I

ENGINEERING DATA

FOR GROUND SUPPORT EQUIPMENT

GAM-72

REPORT 6170 SERIAL NO. 77
Title Unclassified

McDONNELL Aircraft Corporation

Classification cancelled or changed to Unclassified, by authority of DD 254 Revised 1 Oct. 1959.

Data pages 4 thru 42.62.1

SUBMITTED UNDER Contract No. AF33(600)-29850 E.O. No. 56-2-122A

PREPARED BY C. L. Moore
C. L. Moore

APPROVED BY J. T. Mayes
J. T. Mayes
Assistant Project Engineer

APPROVED BY C. L. Wagner
C. L. Wagner

APPROVED BY R. W. Lowe
R. W. Lowe
Project Engineer

MAC 273 (REV 10 JUN 57)

MCDONNELL

ST. LOUIS, MISSOURI

DATE (v) 30 January 1963

REVISED

REVISED

PAGE a 82

REPORT 6170

MODEL GAM-72

INDEX OF REVISIONS

DATE	PAGES AFFECTED			REMARKS	REVISED BY	APPROVED
	REVISED	ADDED	REMOVED			
30 Jan 1963	Title (Vol. I) I, II, III, V VIII, IX X, XV XVII, XXI, XXII, XXIII, XXV, XXVII, XXVIII, XXXIII, XXXIV, XXXV XXXVI, XXXVIII, XXXIX, XLI XLII, XLIX, L, LI, LIII, LV, LXII, LXV LXVI LXVIII LXIX LXXIII LXXIV LXXVI LXXVII LXXVIII LXXIX	a 82 42.64 42.65 42.66 42.67 42.68 42.69 42,69.01		To incorporate the last periodic updating of this report per requirements of Contract No. AF33(600)-41719	G. L. Higgins	J. E. Kleusner
	Title (Vol.III) 49.247	49.396 49.397 49.398				
	Title (Vol.IV)	77.209 77.210				

Date Rev. U	30 September 1961
Date Rev. V	30 November 1961
Date Rev. W	30 May 1962
Date Rev. X	30 September 1962
Date Rev. Y	30 January 1963

Report No.	6170
Page No.	I
End Item Ident.	GAM-72
Rev.	T
Date Original	15 July 1958
Date Rev. A	3 November 1958
Date Rev. B	30 January 1959
Date Rev. C	27 February 1959
Date Rev. D	30 May 1959
Date Rev. E	30 July 1959
Date Rev. F	30 September 1959
Date Rev. G	30 November 1959
Date Rev. H	30 January 1960
Date Rev. J	30 March 1960
Date Rev. K	30 May 1960
Date Rev. L	30 July 1960
Date Rev. M	30 September 1960
Date Rev. N	30 November 1960
Date Rev. P	30 January 1961
Date Rev. R	30 March 1961
Date Rev. S	30 May 1961
Date Rev. T	30 July 1961

TABLE OF CONTENTS

	Page
List of Revised and Deleted Pages	a3
Table of Contents and Legend	I
Alphabetical Index	II
Alpha-Numerical Index	LVIX
List of Pages	LXXIII
Introduction	3
Information Sources	85
Appendix A - Support Equipment Recommendation Breakdown	A-1

LEGEND

*	Indicates that an illustration follows the descriptive text pages.
(*)	Indicates Illustration was added or changed by latest Revision.
I	Indicates that text page was added or changed by latest Revision.
D	Indicates Depot level of organizational use.
F	Indicates Field level of organizational use.
T	Indicates Test Phase.
Id	Indicates that text page title is double indexed.

ALPHABETICAL INDEX

Item	Page	Usage D	Usage F	Usage T
Accelerometer Model 2224	49.360	X		
Accelerometer-Vibration Pickup (A.T.G.) 321T Glenite	42.1*	X		X
Adapter-Accelerometer Mounting (A.T.G.) - 281142	42.2*	X		X
Adapter-Actuator Test 270121	77.169	X		
Adapter-Bearing Press 910C451-5	49.389	X		
Adapter-Bearing Press 910C451-10	49.388	X		
Adapter-Bearing Pressing (Wingfold Actuator) - AT-664	45.26*	X		
Adapter-Cable, Insulation Resistance - KT327027 (Kearfott)	49.125*	X		
Adapter-Calibrator, Governor 281574-1	42.56*	X		
Adapter-End Play Gauge KT219412 (Kearfott) .	49.115*	X		
Adapter-Engine Run Up MDE 4415	15.3*	X	X	
Adapters-Fluid Coupling	18.63		X	
Adapter-Gearshaft Spur 2109	77.143*	X		
Adapter-Governor Balancing 281573-1	42.53	X		
Adapter-K1 Relay Local Manufacture	70.7*	X		
Adapter-Load Test AT-2226	45.50	X		
Adapter-Motor (Elevon Actuator) LT-1630 ...	49.288*	X		
Adapter-Motor (Vertical Gyro) QB 85898-1 ..	49.185	X		
Adapter-Mounting (Elevon Actuator) LT-1561	49.287*	X		
Adapter-Mounting (Throttle Actuator) - LT-1562	49.279*	X		
Adapter-Shaft, Anti-Marring 701-305-093 ...	49.201*	X		

Item		Page	Usage D	F	T
	Adapter-Socket, 3/4" Drive to 1" LA-72.....	80.12*	X	X	
	Adapter-Socket, 1/2" Drive to 3/4" LA-12.....	80.13*	X	X	
I	Adapter, Spring Test 281832-1.....	42.66	X		
	Adapter-Test, Missile Position Indicator MDE 4446070	49.90*	X	X	X
	Adapter-Test, Module MDE 4446039-1.....	49.84*	X	X	
	Adapter-Torque Wrench LT-4417.....	49.292*	X		
	Adapter-Torque Wrench LT-4346.....	49.294*	X		
	Adapter-Torque Wrench 2099.....	77.144*	X		
	Adapter-Torque Wrench 281569-1.....	42.54*	X		
	Adapter-Torque Wrench TMA-3-1.....	49.334	X	X	
	Adapter-Valve Test (A.T.G.) 281132.....	42.3*	X		
	Adapter-Valve Test (A.T.G.) 257562-29.....	42.4*	X		
	Adapter-Valve Test (A.T.G.) 281312.....	42.41*	X		
	Adapters - Coaxial (See List on 6170 Page)...	84.46*		X	X
	Adapters - Fluid Coupling.....	18.63*		X	X
	Adapter Assy. - Depreserve, Variable Geom..... Control MDE 4406007.....	42.0.2*		X	X
	Adapter Assy. - MB-2 Oiler MDE 4406002.....	41.6*	X	X	X
	Adapter Assy. - Pressure Seal, Air Control Valve MDE 4416028.....	84.151*	X	X	
	Adapter Assy. - Torque Wrench (Throttle Actuator) MDE 4446018-5.....	49.56*	X	X	
	Adapter Assy. - Torque Wrench (Elevon Actuator) MDE 4446018-303.....	49.56.4*	X	X	X

Item	Page	Usage D	Usage F	Usage T
Altitude Chamber TMST-100350.....	49.256	X		
Ammeter - AC 528-2901004.....	45.41*	X		
Ammeter - AC 433.....	49.375	X		
Amplifier (A.T.G.) F 408 (Glenite).....	42.5*	X		X
Amplifier (Control Unit) C-823/AIC-10.....	42.19*		X	X
Amplifier - I.F. 1216A.....	84.29*			X
Amplifier - Power Model CP 3/4.....	49.350	X		
Amplifier - Video (Wide Band) 395A.....	49.327	X		
Antenna SA-334.....	82.16*	X	X	X
Antenna - AT-335/ARW 5821-090-0006.....	49.69*			X
Anvil (Mach No. Transducer) T 611.....	49.166*	X		
Anvil and Punch (Mach No. Transducer) T 531..	49.165*	X		
Applicator - "E" Rings E6.....	77.156	X		
Arbor - Balancing, Governor Assy. (Air Turbine Gen.) 281222.....	42.34*	X		
Arbor - End Bell, Concentricity Checking 281604-1.....	42.61*	X		
Arbor Set - Balancing (A.T.G.) 281395-1.....	42.37*	X		
I Arbor - Turbine Wheel, Spin Test 281381-1	42.64	X		
Assembly Block - Motor KT 130650 (Kearfott)...	49.112*	X		
Attenuator - Fixed AA-16N BNC.....	49.320	X		
Attenuator - Fixed AT-50.....	84.49*	X	X	X
Attenuator - Step (Channel 1, 2 and 3)..... AT-104B	84.52			X
Attenuator - Switchable 20.....	49.319	X		

Item	Page	Usage D	Usage F	Usage T
Cable Assy. - Intercommunication RCA MI-23018A.....	42.31		X	X
Cable Assy. - Power, Electrical MDE 440601-1..	49.335*		X	
Cable Assy. - Power, Engine Connector MDE 446007-3.....	49.74*			X
Cable Assy. - Propulsion Console E.G.T. Test MDE 446090-1.....	52.3*		X	
Cable Assy. - Pulse Generator Tester MDE 446088.....	49.107.2	X		
Cable Assy. - Pyrotester, Connecting MDE 446033.....	15.17*	X	X	
Cable Assy. - Test, Missile Ignition System MDE 446084-1.....	18.93*		X	
Cable Assy. - Video AC-16K, AC-16F.....	84.84*	X	X	X
Cable Assy. - Wingfold Actuator Test Bench MDE 446006.....	45.16*	X		
Cable Assy. - A.C. Power MDE 448704-9.....	82.20*		X	
Cable Kit - Coaxial (Interconnecting) MDE 446086-1.....	82.18*	X	X	X
Cable Kit - Counter Test MDE 446097.....	77.173*	X		
Cable Kit - Pyrotechnic Testing MDE 446095-1...	43.11*	X	X	
Calibrator - Bearing Tester 6625-049-6023.....	18.8*	X		
I Calibratpr.-,Metering Valve 281798-1	42.65	X		
Calibrator - Speed Sensor (A.T.G.) 280975.....	42.35*	X		
Calibrator Assy. - Safety Brake MDE 446004-1..	77.37*			X
Calibrator Assy. - Throttle Position Indication System MDE 446026-1 and -301.....	18.26*		X	X

Item	Page	Usage D	Usage F	Usage T
Caliper - Micrometer, Outside 5210	77.139	X		
I Caliper - Micrometer, Outside 200 P-1	49.391	X		
CAM Plate - Load Test AT-2899	45.56	X		
Capacitor CM60B393J, MIL-C-5B	18.56*	X	X	X
Capacitor - Fixed MIL Spec Type CP05A1EC105K ...	49.89		X	X
Capillary Tube 44-580118	84.152*	X	X	
Cap Assy. - Pressure Seal, Flareless Tube Fitting AN929A4D	49.332	X	X	
Cart - Mobile, Small Equipment and Parts Transporting C142 RHD	82.3*	X	X	X
Cartridge and Plunger 950-CP6	38.9*	X	X	X
Case - Slotted Line, Carrying 8A-45	84.32.1			X
Caster - Rack, F.C.S. Console Test RC 7756	49.110.2*	X		
Cathode Follower Model 2614	49.361	X		
Chain - Fork Lift Utility	66.1	X	X	X
Chamber - Heat Cycle (Controlled) Model FBV-9-3-3	49.345	X		
Check Fixture - Missile Rigging Fixture Certification MDE 4446022-1	62.1*		X	X
Checking Block T-616	49.339	X		
Checkout Box - Relay Monitoring MDE 4406020-1 ..	77.206	X	X	
Checkout Box Assy. - Launch Electrical MDE 3442-301	72*			X
I Clamp 29C71	84.168	X		
Clamp - End Play, Gauge KT319392 (Kearfott)	49.120*	X		
Clamp - Soldering QB-75647-1	18.10*	X		

Item		Page	Usage D	F	T
	Clamp - Soldering QB-75684-1	18.11*	X		
	Cleaner - Bearing 4920-216-7135	18.13*	X		
	Cleaning Equipment	69.11	X		
	Clevis Assy. - Rod End 270 119	77.170	X		
	Clinometer Mark 5 USA	49.63*	X	X	X
	Comparator (Ames) 13 (.001)	77.162	X		
	Compressor - Air 4310-693-2653	42.18	X	X	X
Id	Compressor - Air, Type MA-1A 1730-540-9914	42*	X	X	X
	Connector - Electrical, Dummy, Location Device Missile Package C/O MDE 4416033-1	77.122	X		
I	Connector - Plug Electrical JMSS	84.169			
	Console - Control Model 64 B-H	49.342	X		
	Console - Instrumentation Pneumatic Test Accessories Type 1-A E-107-47-36	84.163	X		
	Console Assy. - Bomber Checkout MDE 4453-1	77.51*	X	X	X
	Console Assy. - Bomber Relay Box C/O MDE 4459-1	77.164*	X	X	
	Console Assy. - Flight Control Subsystem and OSS #2 C/O MDE 4440-3, -5, -301, -7	47*	X	X	X
	Console Assy. - Missile Package Checkout MDE 4456	77.56*		X	X
	Console Assy. - OSS #1 Checkout 40-005-100	83*			X
	Console Assy. - Propulsion Subsystem and OSS #3 C/O MDE 4441	16 & 17*	X	X	X
	Container Assy. - Pyrotechnic Continuity Tester MDE 4446003	43.2*	X	X	X

Item		Page	Usage D	Usage F	Usage T
	Ejector Assy. - Engine Cooling MDE 4446083.....	12.3*		X	
	Electron Tube Test Set 6625-557-0945.....	49.1*	X	X	X
	Electronic Counter (Totalizing) 325.....	45.10*	X		
	End Play Tool 4699.....	77.186	X		
	Expander - Spring (A.T.G.) 281366.....	42.40*	X		
	Extension Bar - (Arc CGompensator Universal Joint) 5463 (10" Ext).....	77.87		X	X
	Extension Cord - Multiple Outlet #5267 Cap 31593 Box 14 Cond.....	49.82*		X	X
	Filter - Air Line 30AE-2(5).....	18.44*		X	X
	Filter - Band Pass. Variable (A.T.G.) Model 310AB.....	42.9*	X		X
I	Filter, Radio Interference MDE 4406025-1.....	77.209	X	X	
Id	Filter Assy. - and Water Trap 30AE-4-25.....	49.61*	X	X	X
	Filter Element - Dummy 902114TT.....	41.37*	X		
	Fixture - Alignment, Back-Up Assy. Latch Control MDE 4416045-1.....	77.178*	X	X	
	Fixture - Alignment, Pitot Cover (Mach No. Transdueer) T 790.....	49.145*	X		
	Fixture - Angle Checking T-637.....	49.337	X		
	Fixture - Assy. - Aft Body and Main Tank Splice AF44-330000-501TD.....	62.14*	X		
	Fixture - Assy. - Back-Up Structure AF44-461011-501TD.....	77.105*	X		
	Fixture - Assy. - Back-Up Structure AF44-461011-502TD.....	77.106	X		

Item	Page	Usage D	F	T
Fixture - Carriage Assy. Inspection IF44-472000-501TD	77.101*	X		
Fixture - Carriage Assy. Inspection IF44-472000-502TD	77.102	X		
Fixture Centering and Null Setting (Vertical Gyro) QB85835-1	49.178*	X		
Fixture - Checkout, Air Control Valve MDE 4446081	84.153*	X	X	
Fixture - Concentricity, Shaft and Mounting Dia. KT426369 (Kearfott)	49.122*	X		
Fixture - Contact Positioning (Globe Motor Switch) T-7253	77.153*	X		
Fixture - Decoder Test 201-37851	49.308	X		
Fixture - Depth and Position (Mach No. Transducer) T-527	49.156*	X		
Fixture - Dial Gage 4679	77.184	X		
Fixture - Drill Assembly (Track Fold Actuator) AT-2356	45.33*	X		
Fixture - Drill, Assembly (Track Fold Actuator) AT-2354	45.32*	X		
Fixture - Drill, Assembly (Wingfold Actuator) AT-2220	45.20*	X		
Fixture - Drill Assembly (Wingfold Actuator) AT-2221	45.21*	X		
Fixture - Electrolytic Switch Setting (Vertical Gyro) QB85798-1	49.179*	X		
Fixture, Encapsulation PF44-610000-501TD	49.384	X		
Fixture - End Play Test (Track Fold Actuator) AT-2352	45.35*	X		

Item	Page	Usage D	F	T
Fixture - Test, Ground Plane Antenna MDE 4446092	82.23*	X	X	
Fixture - Test, Motor Generator KT324722 (Kearfott)	49.124*	X		
Fixture - Test, Rotatable (Directional Gyro) QB85836-1	49.194*	X		
Fixture - Torque Test Actuator MDE 4446012-1	49.46*	X	X	X
Fixture - Track Assy. Inspection IF44-461012-501TD	77.109*	X		
Fixture - Track Assy. Inspection IF44-461012-502TD	77.110	X		
Fixture - Track Extension Drill, Knuckle DJ44-461012-503TD	77.108*	X		
Fixture - Valve Set Metering TE8902-0005	49.381	X		
Fixture Application - Missile Fuel Tank Sealant MDE 4426	38.1*	X		
Fixture Assy. - Air Turbine Generator, Check-out Mtg. MDE 4455-1 and -3	42.10*		X	X
Fixture Assy. - Back-Up to Track Inspection and Rigging AF44-461012-503TD	77-92*	X		
Fixture Assy. - Back-Up to Track Inspection and Rigging AF44-461012-504TD	77.92.2	X		
Fixture Assy. - Calibration, Missile Position Indicator MDE 4446023	49.5.3*	X	X	X
Fixture Assy. - Launch Gear Checkout MDE 3423	75*			X
Fixture Assy. - Missile Package Checkout MDE 4447	77.54*	X	X	X
Fixture Assy. - Missile Rigging MDE 4448	60*		X	X

Item	Page	Usage D	F	T
Fixture Assy. - Pressure Test, Fuel Cap SK122358	18.68*	X		
Fixture Assy. - Pressure Transmitter and Indicator S-148900A	18.19*	X		
Fixture Assy. - Propulsion Circuit Checkout MDE 4450	59.1*		X	X
Fixture Assy. - Wing Spread and Fold MDE 4406012-1	62.20*	X	X	
Fixture Set - Clearance TE2995-5006	49.257*	X		
Floor Crane Model HP-1/4 CJ	77.40*		X	X
Fork Lift Truck 48" Fork AF Stock No. 5015-800108-225	66*	X	X	X
Fork Lift Truck 3930-541-2487	66.02		X	
Frequency Converter 6625-519-3778	67.31*	X	X	
Frequency Sweep Cycler Model 57A	49.344	X		
Fuel Mixer Assy. - Anti-Icing Additive MDE 4416032	41.34*		X	
Fume Tester (Indicator Combustible Gas) 6665-530-0985	68*	X	X	X
Gage Block (.400 Inch Thick)	77.175		X	
I Gage, Depth, Dial Indicating 599-281-10	49.392	X		
I Gage, Depth, Dial Indicating - Setting Ring 599-281-1080	49.393	X		
Gage-End Bell, Parallelism Checking 281603-1	42.60*	X		
Gage -Gram 70-J	49.234	X		
Gage - Gram GIBVO	49.235	X		
Gage - Gram Model AB 50-0-50	49.248	X		
Gage, Humidity & Temperature Element M2A4	49.387	X		

Item	Page	Usage D	Usage F	Usage T
Gage - Inspection, Carriage Sync. Shaft 1BG2364	77.1.*		X	
Gage - Spacer TE815-5010	49.377			
Gage - Wiper Tension TF-356	49.241*	X		
Gage - Compensation TE 1357 BU-5005	49.300	X		
Gage - End Play (Vertical and Directional Gyros) QB85630-1	49.175	X		
Gage - Hydraulic Pressure, 0-3000 PSI 6685-515-6166	56.11*	X	X	
Gage - Laboratory Test Pressure 1082A (0-30 PSI)	18.46*		X	X
Gage - Laboratory Test Pressure 1082A (0-60 PSI)	18.67*		X	X
Gage - Laboratory Test Pressure 1082A (0-160 PSI)	18.48*		X	X
Gage - Pressure Type 1-BP	69.3*			X
Gage - Pressure Type 3-BP	69.2*	X		X
Gage - Push-Pull (Track Fold Actuator) 719-40	45.34*	X		
Gage - Push-Pull (Wingfold Actuator) 767	45.28*	X		
Gage - Radial and End Play KT419195 (Kearfott)	49.121*	X		
Generator - Variable Frequency Model 1470B	49.357	X		
Generator - Void, Switch TF-286	49.240*	X		
Goniometer 1010B	49.262	X		
Ground Station Series M	67.12*			X
Grounding Strap 99	82.8*		X	X

	Item	Page	Usage D	Usage F	Usage T
	Hoist Assy. - Back-Up Structure MDE 4416520-1	77.27*			X
	Hoist Assy. - Track MDE 4416519-1	77.25*			X
	Holder - Rotating Assembly (A.T.G.) 281365	42.39*	X		
I	Holder, Leakage Test, Piston Assembly 281891-1	42.68	X		
	Holder - Step Pilot F80-0-112	41.1*	X		
	Holder - Terminal Plate 4759	77.191	X		
I	Holder, Test, Capillary Metering Valve 281849-1	42.67	X		
	Holder - Test, Generator (A.T.G.) 281140	42.51	X		
	Holder - Test Pneumatic Valve (A.T.G.) AiResearch P/N 253030	42.17*	X		
	Hood - Oscilloscope Viewing TEK H510	67.17.1*	X	X	X
	Hose - Defueling MDE 4406005	41.19*		X	X
	Hose Assy. - Detachable End Fitting, Medium Pressure MS28741-4-0450	49.331	X	X	
	Hose Assy. - Sealant Gun 920-5	38.13*	X	X	X
	Hydrometer 6630-527-6149	18.60*	X	X	X
	Impedance Bridge 6625-553-7482	49.65*	X	X	X
Id	Indicator - Dial Model No. 2	49.135*	X		
	Indicator - Electronic Tachometer 500C	49.227*	X		
	Indicator - Phase Angle (Vertical and Directional Gyros) 13678-2-A	49.189	X		
	Indicator - Phase Sequence Model K-6 or K-5	18.32*	X	X	X
	Indicator - Synchro Servoed Test (Vertical and Directional Gyros) 13678-2-A	49.188	X		

Item		Page	Usage D	F	T
	Kit - Cable Repair MDE 4416047-1	77.179*	X		
	Kit - Pressure MK20A/Up	84.124*	X	X	X
	Lapping Tool - Bearing Seat KT219067 (Kearfott)	49.113*	X		
	Lead - Jumper MDE 4406016-1	49.352	X		
	Lead - Jumper MDE 4406017-1	49.353		X	
	Lead - Test MDE 4406015-1	49.336*		X	
	Leveling Plate P65-0-81	41.5*	X		
	Lifter - Pointer S-1489011	18.84*	X		
Id	Load Checking Fixture AT-2039-R-1550M9-1	45.4*	X		
Id	Load Checking Fixture AT-2039-R-1550M9-2	45.4.2	X		
	Locking Tool - Impeller T-73	41.2*	X		X
	Loupe - Watchmaker's Eye 18-41-05	49.132*	X		
	Low Pass Filter (700 Megacycles Cutoff Frequency) 360A	82.25	X	X	
	Lubricator - Portable, High Pressure 4930-517-4264	56.9	X	X	
	Lug - Launch Gear Component Hoist MDE 4416004	77.19*	X	X	X
	Manometer - U Tube 6685-527-7262	49.15.2*	X	X	X
	Manometer (0-60" Hg) 6685-549-4803	49.143.5	X		
	Manometer (30" Water) Type A 324 TM	69.9*			X
	Manometer System - Pressure, Differential and Absolute Type E-1 or 1070C	49.16*	X	X	X

Item	Page	Usage D	Usage F	Usage T
Megger 6625-538-9497	71*	X	X	X
Megohmmeter 1862B	49.17*	X	X	X
Meter - F. M. Deviation TF791D	49.310	X		
I Meter, Fluid Flow Indicating HR43T	84.167			
Meter - Frequency FM3	49.62*			X
Meter - Frequency TS-117/GP	84.21	X	X	X
Meter - Frequency (Channel #2) Type 587 UHF	84.36*			X
Meter - Frequency (Channel #3) N-410A	84.34*			X
Meter - Frequency, 380-420 CPS 5097-3 MF21	41.30*	X		
Meter - Frequency, Ignition System 5098, Type MF-21	45.40*	X		
Meter - Kilowatt Model 641 W/TY52 External Resistor	41.29*			X
Meter - Megacycle (Combination) 59	84.38*	X		
Meter - Micro Wave Power 430C	84.88*	X	X	X
Meter - Orifice Tube 3" Orifice Tube Meter	69.8*			X
Meter - Standing Wave Ratio H05-415B	84.16*	X	X	X
Microammeter - Multi-Range Model 622	18.28*		X	X
Micrometer - Tubular Inside 121C	77.126*	X		
Milliohmmeter Model 502	43.8*	X	X	
Millivolt Potentiometer 8662	18.107	X		
Mixer - Continuous, Fuel Tank Sealant 1600	38.15*	X		
Mixer - (UHF) 874-MR	84.98*			X

Item	Page	Usage D	F	T
Preloading Tool - Wheel and Rotor 281572-1	42.59*	X		
Press Tool - Bearing 4739	77.189	X		
Press Tool - Lock Nut 4689	77.185	X		
Probe - Attenuator P510A	84.78*	X	X	X
Probe - Pressure (A.T.G.) 3705	42.45*	X		
Probe - Wire Heater BH1278	70.10*		X	
Production Test Panel AT-1927	45.6*	X		
Protective Clothing	69		X	X
Protractor - Adjusting, Throttle Actuator MDE 4416036-1	18.101*	X	X	
Protractor - Bevel 491-12	41.26*		X	X
Puller - Bearing 253722	77.167	X		
Puller - Bearing 1011	49.390	X		
Puller - Bearing, Motor Generator (External) KT319022 (Kearfott)	49.118*	X		
Puller - Bearing, Motor Generator (Internal) KT319069 (Kearfott)	49.119*	X		
Puller - Bearing Removal (Track Fold Actuator) AT-252	45.36*	X		
Puller - Bearing (Wingfold Actuator) AT-770-2	45.24*	X		
Puller - Flanged Bearing (Vertical and Directional Gyros) QB85588-1	49.183	X		
Puller - Mechanical Wheel 281570-1	42.57*	X		
Puller - 3 Inch Round Indicator BH 3097	18.105	X		

Item	Page	Usage D	Usage F	Usage T
Pulley - Motor Load Test AT-1901-3	45.3*	X		
Pulley - Motor Load Test AT-1826-6	45.47	X		
Pulley - Motor Load Test AT-2798	45.54	X		
Pulse Generator 2140A, MP-1A AN/UPM-15(6625-519-7599)	49.51*	X	X	X
Pulse Generator 6625-519-5593	84.27*			X
Pump - Vacuum Model KC-2	69.6*			X
Pump - Vacuum and Pressure 1410N	49.264	X		
Pusher - Bearing 4629	77.180	X		
Pusher - Bevel Gear 4659	77.182	X		
Pusher - Plug 4669	77.183	X		
Pyro Tester Model 9B	15.13*		X	X
Rack - Cabinet, FCS Console Test CR-1773	49.110*	X		
Rack - Missile Shipping and Storage MDE 4414	57*	X		X
Receiver - F.M. - A.M. - (Communication) 770R ...	49.312	X		
Receiver - F.M. - A.M. - (Communication) 770U ...	49.311	X		
Receiver - Telemetering Model 842C-2	67.4*			X
I Recorder 101 & ROS 6-90.....	49.247	X		
Recorder - Curvilinear RD252100	49.199*	X	X	
Recorder - Rectilinear 152-5460	49.23*	X		X
Recorder - Rectilinear (A.T.G.) 154-5460	42.47*	X		

Item	Page	Usage D	F	T
Recorder - Tape, (with FM Electronics) Model FR114	67.8*			X
Recorder - Watchmaster Model G-57	49.254	X		
Refrigerator, Mechanical, Commercial RZS-503	49.386	X		
Remover - Pointer Hand No. 310-A	18.86*	X		
Resistance Decade Box Model 510-AA	18.58*	X	X	X
Resistance Decade Box 1432K	18.24*	X	X	X
Resistor RW21G122, MIL-R-26/31C	18.53*	X	X	X
Resistor RW31G122 or RW56G122, MIL-R-56/31C	18.52*	X	X	X
Resistor MS35044-125	18.109		X	
Resistor MS35350-82	49.232*	X	X	X
Resistor - Dropping 59505-660-6402	18.36*		X	X
Resistor - 47K ohms 1/4 Watt BTR-1/4-47000	43.9	X	X	
Resistor Assembly MDE 4406019-1	49.356	X		
Restrictor Unit - Air Flow	42.63	X		
RF Filter Assembly - Power Line MDE 4406013-1	49.233*	X	X	
RF Voltmeter 91C	49.314	X		
Rigging Installation - Engine Run Up MDE 343712	15.1*	X	X	X
Ring Adapter QB71013-15	18.81*	X		
Rod - Bearing Seating KT219283 (Kearfott)	49.114*	X		
Rotary Power Supply Model 45B	49.341	X		

Item		Page	Usage D	F	T
	Rotor - Bearing Test 5220-347-2140	18.7*	X		
	Rotor - Bearing Test (Vertical and Directional Gyros) QB72217-3	49.180*	X		
	Rotor - Jig 4719	77.187	X		
	Rule - Steel, 6", Machinist 5210-273-1965	18.64*	X	X	X
	Rule - Steel, 48", Machinist 5210-287-4923	18.65*	X	X	X
	Rule - Steel, 72", Machinist 416-R-72 Inches	77.128*	X		
	Safety Goggles or Eye Shields 527-C	82.9*		X	X
	Safety Tool Assy. - Launch Gear Shackle MDE 3432	77.1*			X
	Safety Tool Assy. - Launch Gear Shackle MDE 4416002-301	77.17*			X
I	Scale - Beam Indicating V7518	49.383	X		
	Scale - Bench Dial 12038A	38.19*	X	X	
	Scale - Gram (Mach No. Transducer) T 788	49.149*	X		
	Scale - Gram T 1072	49.298	X		
	Scale - Push Pull, Spring Gauge "R" (0 to 2 lbs.)	49.255	X		
	Scale - Spring (Vertical and Directional Gyros) QB72966-10	49.181	X		
	Scope Mobile 500/53A	49.57*	X	X	X
	Screen and Bellmouth Assembly - Engine Inlet MDE 4449	24*		X	X
	Screw Driver (Mach No. Transducer) T 664	49.152*	X		
I	Screw Driver - Calibration TE 1442-5008	49.379	X		
I	Screw Driver - Eccentric Jewel TE 865-5162	49.378	X		
	Screw Driver - Jewelers 555A (T-416)	49.351	X		

Item	Page	Usage D	F	T
Sleeve and Thimble - Oil Seal Installation INS-1-C	49.226*	X		
Sleeve - Rotor Shaft 4729	77.188	X		
Sling - Engine Hoist 8220 - X21C766 (-7 engine).	35*	X	X	X
Sling - Launch Gear Assy. Hoisting MDE 4425	77.62*		X	X
Sling Assy. - Launch Gear Component Hoisting MDE 4424	77.45*	X	X	X
Sling Assy. - Missile Hoisting MDE 3451	7*	X	X	X
Slotted Line 805-A	84.31*			X
Socket Hansen 3200 or 3300	42.25*		X	X
Socket - 2" x 3/4" Sq. Drive LDH-642	80.16*	X	X	
Socket - 2-3/8" x 1" Sq. Drive L-763	80.15*	X	X	
Solution - Bearing Cleaning 6505-113-9000	18.5*	X		
Solution - Gas and Air Leak Detector	82.17	X	X	X
Splicing Tool - Shielded Wire 16 Gage 59255	84.17*		X	X
Splicing Tool - Shielded Wire 20 Gage 59254	84.18*		X	X
Staking Set - Jewel Bearings Model 18-R	18.85*	X		
Stand - Aux. Missile Storage MDE 4416041-1	80.18*		X	
Stand - Calibration TE 3119-5002	49.380	X		
Stand - Calibrating (Alt. Controller) TE-2995-5007	49.302	X		
Stand - Gyro Test (Vertical and Directional Gyros) 13073-1-C	49.186*	X		
Stand - Hermetic Sealing 4920-329-8844	18.22*	X		

Item	Page	Usage D	Usage F	Usage T
Stand - Mounting, Tilt-Turn Table MDE 4446020 ..	49.78*	X	X	X
Stand - Roll and Pitch Test 13617-2-A	18.77*	X		
Standing Wave Detector PRD 219	82.22*	X	X	
Stand Assy. - Forward Body Maintenance MDE 4423	84.5*	X	X	X
Stand Assy. - Missile Maintenance MDE 4418	21.1*	X	X	X
Static Proof Clothing	82.6			X
Stool 7110-270-6099	49.50.9		X	X
Stop Watch 116A (Minerva)	82.4*	X	X	X
Straightedge #385	77.42*		X	X
Strap Assy. - Umbilical MDE 342434-1	77.176*		X	
Strap Wrench #18 #5	77.53*		X	X
Stripper, Wire, Power 45-130	49.383	X		
Strobotac 631-B	45.9*	X		
Supermicrometer G2100	13.3*	X		
Support - Balancing Rotating Assy. (Air Turbine Gen.) 4920-336-0647	42.33*	X		
Support - Magnetic Pick-up Coil AT-2799	45.55	X		
Support Assy. - Air Line, Engine Start MDE 4406001	33.3*	X	X	X
Support Fixture - Rotary Components KT426607 (Kearfott)	49.131*	X		
Suppressor (Choke Inductor) JW14-250	18.57*	X	X	X
Surface Plate (Local Manufacture)	49.169*	X		

Item	Page	Usage D	Usage F	Usage T
Swager - Pressure Tool PS	49.206*	X	X	
Swager - Punch, Pressure PSP-1	49.207*	X	X	
Swager - Punch, Pressure PSP-2	49.269	X	X	
Swager - Punch, Pressure PSP-3	49.208*	X	X	
Swager - Punch, Pressure PSP-4	49.209*	X	X	
Swager - Punch, Pressure PSP-5	49.210*	X	X	
Swager - Punch, Pressure PSP-7	49.211*	X	X	
Swager - Punch, Pressure PSP-10	49.212*	X	X	
Swager - Punch, Pressure PSP-11	49.270	X	X	
Sweep Generator 602	49.318	X		
Switches - Coaxial (Manual) 4 Position 4AB	84.24*			X
Switch - Reversing MS35059-23	18.61*		X	X
Table - Laminated Work 7195-285-5924	49.50.7*		X	
Table - Shaker Model 44	49.343	X		
Table - Shaker Model B-285	49.348	X		
Table - Tilt Turn Type F1-4	49.26*	X		X
Tank - Pressure VF44-610001-501	49.385			
Template Assy. - Elevon Rigging MDE 4446001	13.1*			X
Terminations 535 MB & 535 FB	84.47*	X	X	X
Test Bench - Fuel 4920-337-9843	41.35	X		
Test Bench - Fuel Booster and Fuel Transfer Pumps S-527	41.32	X		
Test Bench - Fuel Flow 4920-535-1065 311AHT ...	18.110*	X		

Item		Page	Usage D	Usage F	Usage T
	Test Bench - Hydraulic KG-100.....	56.13	X		
	Test Bench - Pneumatic 8100-NL 94040-25.....	41.33	X		
	Test Board - Control Assy. (Fire Detector) Local Manufacture.....	70.3*	X		
	Test Board - K1 Relay Local Manufacture.....	70.6*	X		
	Test Box - Pneumatic, Drawer #8 F.C.S. Console MDE 4446038.....	49.83*		X	
	Test Box - Propulsion Console MDE 4446034.....	18.70*	X	X	
	Test Box - Throttle System and Fire Detector, Propulsion Console MDE 4446093-1.....	18.102	X	X	
	Test Box Assy. - Actuator MDE 4446091.....	45.42*	X		
	Test Cable - Missile Position Synchro Indicator Local Manufacture.....	49.263	X		
I	Test Chamber and Console, Overspeed Rotary 281800-1.....	42.69	X		
	Test Console - Insulation Resistance KT426598 (Kearfott).....	49.129*	X		
	Test Fixture - Breakaway Connector, Alignment MDE 4446077-1.....	77.113*	X	X	
	Test Fixture - Torque Transmitting (Mach No. Trans.) T 1109.....	49.296	X		
	Test Head TE3506-5002.....	49.261*	X		
Id	Test Indicator - Universal Model No. 2.....	49.135*	X		
	Test Kit - Elevon Alignment MDE 4446096-1.....	49.286*		X	
	Test Machine - Linear Actuator Multi-Purpose 4920-724-2877.....	77.171	X		
	Test Panel AT-2866.....	45.59	X		

Item		Page	Usage D	F	T
	Tester Panel #2 - Propulsion System Checkout Console ETE MDE 4441033-501TD	18.95*	X		
	Tester Panel #3 - Propulsion System Checkout Console ETE MDE 4441036-501TD	18.96*	X		
	Tester Panel #4 - Propulsion System Checkout Console ETE MDE 4441039-501TD	18.97*	X		
	Tester Panel #5 - Propulsion System Checkout Console ETE MDE 4441042-501TD	18.98*	X		
	Tester Panel #6 - Propulsion System Checkout Console ETE MDE 4441045-501TD	18.99*	X		
	Thermistor 477B-95A	84.138	X	X	X
	Thermocouple - 0° - 1800°F (A.T.G.) T 1033	42.43*	X		
	Thermometer 6685-526-8257	18.92		X	
	Thermometer Model 21410	69.4*			X
	Timer - Electrical 6645-547-4472	49.3*	X	X	X
	Timer - Electrical 6645-171-9639	49.3.2*	X	X	X
	Tip - Unsoldering (K1 Relay) Local Manufacture	70.4*	X		
	Tip - Unsoldering (K2 Relay) Local Manufacture	70.5*	X		
	Tone Generator BCC 6	49.316	X		
Id	Tool - Activator, A.T.G. Pressure Shutoff Control 662757	42.52 *	X	X	
I	Tool - Alignment Bridget T1216	49.395	X		
	Tool - Alignment 7495	18.113	X		
	Tool - Alignment 8282	49.79*			X

Item		Page	Usage D	F	T
	Tool - Alignment 8606	49.80*			X
	Tool - Alignment, Altitude Beam and Counter Weight (Mach No. Transducer) T 786	49.147*	X		
	Tool - Alignment (Mach No. Transducer) T 779 ...	49.148*	X		
	Tool Bearing Assy. Female QB-85500-130	18.82*	X		
	Tool - Bearing Assy. Male QB-85500-30	18.83*	X		
	Tool - Bearing Press 4639	77.181	X		
	Tool - Block, Clinching and Knockout (Dzus Fastener) 5120-391-0120	77.131*	X	X	
	Tool - Block, Cup Installation (Dzus Fastener) 5120-391-0119	77.133*	X	X	
	Tool - Brush Alignment, High Speed S-633	77.158*	X		
	Tool - Brush Alignment, Low Speed S-590	77.157*	X		
	Tool - Clapper Adjusting S-597	49.253*	X		
I	Tool - Contact Inserting 11-6781	77.203	X		
I	Tool - Contact Inserting 11-6782	77.204	X		
I	Tool - Crimping 11-7350-16	77.202	X		
I	Tool - Crimping 11-7350-20	77.201	X		
	Tool - Crimping - Deutsch Connector, Contact 15500-20	67.28*	X		
	Tool - Cup Installation (Dzus Fasteners) 5120-391-0098	77.134*	X	X	
	Tool - Cup Installation (Dzus Fastener) 5120-391-0117	77.132*	X	X	
	Tool - Dowel, Pressing (Mach No. Transducer) T 596	49.167*	X		
	Tool - Dowel, Pressing (Mach No. Transducer) T 854	49.168*	X		
	Tool - Drain, Fuel Vent Fitting MDE 4416540-1 ..	41.12*			X

Item	Page	Usage D	Usage F	Usage T
Tool - Extraction AMP380305-1.....	49.277	X	X	
Tool-- Filter Holding MDE 4416051-1.....	49.358	X	X	
Tool - Fuel Tank Sealant Filleting MDE 4416019.....	38.11*	X	X	X
Tool - Hand Crimp 48698.....	49.140*	X	X	
Tool - Hand Crimp 47044.....	49.141*	X	X	
I Tool - Hand Crimp (Taper Tab) 45592.....	77.210	X	X	
Tool - Hand Crimping 107-0903-2.....	67.25*			X
Tool - Hand Crimping 59527.....	77.199	X		
Tool - Hi-Torque Socket Adapter.....	77.68*	X	X	X
Tool - Housing Removal S-589.....	49.252*	X		
Tool-- Inner Brain Bearing Staking.....	49.340	X		
Tool - Inserter, Contact, 90° 11-3692.....	77.116*	X	X	
Tool - Insertion 380306-3	49.366	X	X	
Tool-- Insertion - Deutsch Connector, Contact 15510-20.....	67.29*	X		
Tool-- Insertion Heli-Coil 535-3N.....	49.382	X		
Tool-- Insertion, Pin 107-1015.....	67.24*			X
Tool - Insertion, Pull Test Type 380375-1.....	49.39*	X	X	
Tool - Insertion, Taper Tab 380306-5.....	77.195	X		
Tool - Insertion, Taper Tab 380306-6.....	77.196	X		
Tool - Insertion, Test Type 380375-2.....	49.138*	X	X	
Tool - Jewel Insertion T-415.....	49.347	X		
Tool - Knockout Punch (Dzus Fastener) 5120-391-0118.....	77.135*	X	X	
Tool - Limit Switch Activator MDE 4416049-1...	77.194	X	X	
Tool - Link Adjustment T-413.....	49.338	X		
Tool - Locators - Universal Pin 107-0930.....	67.27*			X

	Item	Page	Usage D	F	T
	Tool Kit - Bearing Cleaning QB-70606-2.....	18.6*	X		
	Tool Kit - Calibrating (Mach No. Transducer)T571	49.142*	X		
	Tool Kit - Contact Removing 11-6900.....	77.200	X		
	Tool Set - Ignition Lead Installation MDE 4416018.....	77.72*	X	X	X
	Tool Set - Limit Switch Activation Inspection MDE 4416049-1.....	77.194	X	X	
	Torch - Soldering Type 5 in 1 and an MC Prestolite Tank.....	69.7*			X
I	Torque Indicator T1-701-1.5-2.....	49.396	X		
	Torque Indicator T1-701-15-5.....	49.200*	X		
I	Torque Indicator T1-701-5-2.....	49.397	X		
	Track Extension Assy. - Stub, Launch Gear Checkout MDE 4446005-1 and -2.....	77.23*		X	X
	Track Extension Assy. - Stub Launch Gear (Carriage Removal) MDE 4416013-9 and -10	77.60*	X	X	X
Id	Tractor - Wheeled, Warehouse, Gasoline Powered (Draw Bar Tow TR) 5015-640055.....	4*	X	X	X
Id	Trailer - Air Supply, Type MA-1A 1730-540-9914.....	42*	X	X	X
	Trailer - Aircraft Engine, Aluminum Frame 1740-516-7929; 1740-516-7930.....	64.1*	X		
	Trailer - Bomb Lift (Type MF5) 1730-141-2083.	15.14*	X	X	
	Trailer (MB-1) Stock # (52J6207) 2330-041-1290.....	77.60*		X	X
	Trailer - Type MHU-7/M, Bomb AF29(601)-506....	77.47*		X	X
	Trailer Assy. - Engine Handling MDE 3411.....	22*			X
	Trailer Assy. - Engine Handling MDE 4411-1....	23.03*	X	X	

	Item	Page	Usage D	Usage F	Usage T
	Vacuum Pump - Manometer HY 14 91705 Type 10	49.204*	X		
	Vacuum Tube Voltmeter D.C. 412	49.315	X		
	Valve - Air, Beacon Pressurizing MDE 4446031	82.14	X	X	X
	Valve - Air Pressure Relief 649X-1-4	18.50*		X	X
	Valve - Pressure Relief 644-4-1/4	18.114	X	X	
	Valve - Restrictor Assy. MDE 4406023-1	84.166	X		
	Valve - Shutoff 649T-PP(P)	18.115	X	X	
Id	Variac W110G3	18.42*	X	X	X
	Voltmeter R-2A	67.14*			X
	Voltmeter 410B	84.66*	X	X	X
I	Voltmeter, Digital MDE 4406024-1	49.398	X	X	X
	Voltmeter, Electronic Model 803	49.365	X		
	Voltmeter - Electronics (A.T.G.) Ballentine Labs Model 300	42.16*	X		X
	Voltmeter - (Electrodynameter) Weston Model L341 341-190200A	49.229*	X		
	Voltmeter - Phase Angle 202BR - S110	49.299	X		
	Voltmeter - Vacuum Tube, AC 400H	49.36*	X	X	X
	Voltmeter - Vacuum Tube DC MV17-C	49.35*	X		
	Washer - Hoist, Ground Handling MDE 4416533-3	77.58*			X
Id	Water Trap and Filter Assy. 3 OAE-4-25	49.61*	X	X	X
	Wattmeter - Model University Type UWADK	49.376	X		
	Wattmeter - Termiline Model 611-RF (AN/URM 83)	67.20*			X
	Wedge - Cam Follower S-592	77.159*	X		

Part No.	Page No.
MDE3411	22
MDE3423	75
MDE342371	77.59
MDE342434	77.176
MDE3432	77.1
MDE3437	14
MDE343712	15.1
MDE3442	72
MDE3451	7
MDE3458-1	54
MDE3458-301, -303, -305	15.7
MDE406001	33.3
MDE406002	41.6
MDE406003	77.48.1
MDE406005	41.19
MDE406006-1	42.23
MDE406006-3	42.22
MDE406007	42.0.2
MDE406008	41.25
MDE406010	41.31
MDE406012	62.20
MDE406013	49.233
MDE406014	49.335
MDE406015	49.336
MDE406016	49.352
MDE406017	49.353
MDE406018	49.354
MDE406019	49.356
MDE406020	77.206
MDE406021	49.363
MDE406022	49.374
MDE406023	84.166
MDE406024-1	49.398
MDE406025-1	77.209
MDE4411	23.03
MDE4411111001	23.01
MDE4412	9
MDE4412009	11011
MDE4413	79
MDE4414	57
MDE4415	15.3
MDE4416001	84.22
MDE4416002	77.17
MDE4416003	77.43
MDE4416004	77.19
MDE4416005	84.100
MDE4416006	84.102
MDE4416008	84.106
MDE4416012	84.142
MDE4416013	77.64
MDE4416015	15.11
MDE4416016	15.5
MDE4416018	77.72
MDE4416019	38.11
MDE4416020	80.7
MDE4416021	80.9
MDE4416022	80.5
MDE4416023	80.11
MDE4416024	77.41.1
MDE4416025	50.5
MDE4416026	50.6
MDE4416027-1	84.159
MDE4416027-3	84.160
MDE4416027-15	84.165
MDE4416028	84.151
MDE4416030	84.150
MDE4416031	56.1
MDE4416032	41.34
MDE4416033	77.122
MDE4416035	77.118
MDE4416036	18.101
MDE4416037	77.120
MDE4416038	80.17
MDE4416040	42.52
MDE4416041	80.18
MDE4416043	84.164
MDE4416044	77.177
MDE4416045	77.178
MDE4416046	49.330
MDE4416047	77.179
MDE4416049	77.194
MDE4416050	18.117
MDE4416051	49.358
MDE4416500	77.7
MDE4416502	77.9
MDE4416503	77.11
MDE4416509	77.13
MDE4416513	77.15
MDE4416518	77.31
MDE4416519	77.25
MDE4416520	77.27

Part No.	Page No.
PSP-11	49.270
PS-12	80.5
PU-8C	80.5
P1-4	49.26
P510A	84.78
QB-14634-1	18.5
QB-70606-2	18.6
QB-70747-1	18.80
QB-71013-15	18.81
QB-72217-2	18.7
QB-72217-3	49.180
QB-72218-1	18.8
QB-72260-1	18.9
QB-72966-10	49.181
QB-75514-2	18.17
QB-75647-1	18.10
QB-75684-1	18.11
QB-85500-130	18.82
QB-85500-30	18.83
QB-85588-1	49.183
QB-85620-1	49.171
QB-85621-1	49.172
QB-85622-1	49.173
QB-85623-1	49.174
QB-85630-1	49.175
QB-85798-1	49.179
QB-85834-1	49.176
QB-85835-1	49.178
QB-85836-1	49.194
QB-85897-1	49.184
QB-85898-1	49.185
R-1A	67.14
R(Gauge-0-2")	49.255
RA20NAFK5R0A	18.55
RC-7756	49.110.2
RD252100	49.199
RMF44-100101-501TD	62.16
RMF44-100101-502TD	62.17
RN2	18.69
RCS6 -90	18.247
RF101SD102JJ	18.54
RT4650	18.1
RV4NAYSG353A	18.91

Part No.	Page No.
RV5NAYSD105A	18.62
RW21G122	18.53
RW31G122	18.52
RW56G122	18.52
RZS-503	49.386
S-CO-2	49.349
S-10	49.3
S-1489004	18.19
S-1489006	18.18
S-1489007	18.20
S-1489008	18.21
S-1489011	18.84
S-527	41.32
S-589	49.252
S-590	77.157
S-591	77.158
S-592	77.159
S-593	77.155
S-594	49.251
S-595	49.250
S-597	49.253
SA-334	82.16
SK122358	18.68
SPT2-44-200111-3-4	62.25
SPT3-44-200111-3-4	62.26
SS10	77.90
ST5242	49.321
SX-20	80.5
SYC2Z-1196	69.12
S300-1	49.48
S600-1	77.150
S633	77.158
T-73	41.2
T-88	41.28
T-413	49.338
T-415	49.347
T-616	49.339
T-637	49.337
T-706	49.340
T-1186	18.75
T-1211	49.364
T-1216	49.375
T-7253	77.153
TD1289N	77.130

Part No.	Page No.
TE0950-5045	49.326
TE0950-5085	49.323
TE0950-4107	49.322
TE1357-BU-5005	49.300
TE1442-5008	49.379
TE1849-5007	49.303
TE2995-5006	49.257
TE2995-5007	49.302
TE3056-5004	49.304
TE3119-5002	49.380
TE3506-5002	49.261
TE5400-0059	49.258
TE5483	49.324
TE5813	49.259
TE5815	49.260
TE6721-0005	49.301
TE7603-0371	49.305
TE815-5010	49.377
TE865-5162	49.378
TE8902-0005	49.381
TF-212	49.245
TF-286	49.240
TF-323	49.246
TF-324	49.242
TF-325-1 & -2	49.243
TF-356	49.241
TF-76	49.244
TF-81	49.238
TF-1066	82.10
TF7910	49.310
TMA-3-1	49.334
TMA-3-2-3 1/2-OA	49.338
TMST100350	49.256
TN-50M	84.47
TS117/GP	84.21
TS-125/AP	84.19
TS-382E/U	51
TS-80EU	45.9
TS653/APG	18.3
TS-723/U	49.75
T1-701-1.5-2	49.396
T1-701-5-2	49.397
T1-701-15-5	49.200
T1033	42.43
T1072	49.298
T1082	49.297
T1109	49.296
T1114	49.329

Part No.	Page No.
T417	49.153
T421	49.154
T505	49.160
T511	49.142
T527	49.156
T531	49.165
T560	49.161
T571	49.142
T576	49.143
T596	49.167
T598	49.151
T611	49.166
T664	49.152
T719	49.150
T720	49.144
T777	49.146
T779	49.148
T786	49.147
T788	49.149
T790	49.145
T854	49.168
UF106L	43.10
USAF54F548	50
UWADK	49.376
V-22	56.3
V-51	49.58
VF44-610001-501	49.385
V7518	49.383
W-1003	18.42
WBC60086	77.48.1
WW-4	41.17
WW60-16	45.37
X21C521	33
YBC-1	49.133
Y5136FS	77.127
Z-30NX	49.21.3
AM3A/U	18.59
0	18.87
0 (4 flute)	77.160
.035	49.203
1-BP	69.3
1S	42.42
1	45.14
10	42.24
1000	77.89
101	49.247
1010B	49.262
1011	49.390
106	49.311
107-0903-2	67.25
107-9030	67.27

Part No.	Page No.	Part No.	Page No.
1679	77.151	274-NP	42.32
1690-328166250	34	28M507	18.38
1730-141-2083	15.14	280975	42.35
1730-294-8883	77.38	281132	42.3
1730-540-9914	42	281140	42.51
1740-516-7929	64.1	281141 (4920)	42.7
18	77.53	281142	42.2
18-R	18.85	281160	42.14
18-41-05	49.132	281220	42.27
18 0001 00343	49.325	281222	42.34
1862B	49.17	281224	42.28
1949	77.149	281312	42.41
2	49.135	281365	42.39
2	45.13	281366	42.40
2 (4 flute)	77.161	281381-1	42.64
2C069	84.114	281395-1	42.37
20	49.139	281569-1	42.54
20AG-2G	18.66	281570-1	42.57
20a/UP	84.124	281571-1	42.58
200P-1	49.391	281572-1	42.59
201-37848	49.309	281573-1	42.53
201-37581	49.308	281574-1	42.56
201-37862	49.306	281581-1	42.55
201-37863	49.307	281603-1	42.60
202BR-S110	49.299	281604-1	42.61
202C	67.18	281636-1	42.62
2099	77.144	281798-1	42.65
21C609	33.4.1	281800-1	42.69
2109	77.143	281832-1	42.66
211A	84.45	281849-1	42.67
212A	84.27	281891-1	42.68
2140A	49.51	282971-15	42.63
21410	69.4	29C71	84.168
2224	49.360	3-BP	69.2
2330-041-1290	77.60	30 AE2(5)	18.44
24-210A	18.88	30 AE-4(25)	49.61
25	18.74	300	42.16
250-06	38.5	3001-200	84.42
253030	42.17	3002-20	84.40
253566	42.38	3003-20	84.96
253622	42.33	310-A	18.86
253722	77.167	310AB	42.9
256377-9	42.36	311 AHT	18.110
257562-29	42.4	315D	67.16
2614	49.361	31593	49.82
2623	49.362	32-101	84.62
270119	77.170	3200	42.25
270121	77.169	32IT	42.1
2714	42.44	325	45.10

Part No.	Page No.
341-1902004	49.229
360A	82.25
368000-7	41.23
368000-9	41.21
3705	42.45
370305	49.277
380306-3	49.366
380306-5	77.195
380306-6	77.196
380375-1	49.139
380375-2	49.138
385	77.42
3930-541-2487	66.02
3930-554-1524	4
395A	49.327
4AB	84.24
40-001-134	84.130
40-005-100	83
40-005-727	84.112
400H	49.36
40299	77.74
40307	77.76
410B	84.66
412A	49.315
415B	84.16
416R-72"	77.128
417A	84.25
420A	84.90
420A-95B	84.91.1
4240-202-5811	69
4240-270-4399	69
428	43.4
428-199	49.237
428-200	49.239
430C	84.88
4310-693-2653	42.18
433	49.375
44	49.343
44-580118	84.152
440	38.7
45-130	49.394
45B	49.341
45062-2	49.367
45592	77.210
45983	84.136
47043	49.141
4730-494-3271	42.24
4629	77.180
4639	77.181
4659	77.182
4669	77.183
4679	77.184
4689	77.185
4699	77.186
47042	49.368
4719	77.187
4729	77.188
4739	77.189
4749	77.190
4759	77.191
4769	77.192
477B	84.86
477B-95A	84.138
47907	49.369
48698	49.140
491-12	41.26
4920-217-7135	18.13
4920-311-3532	49.115
4920-311-3533	49.120
4920-329-8844	18.22
4920-334-5137	42.38
4920-334-7433	50.2
4920-336-0647	42.33
4920-337-9843	41.35
4920-342-6446	84.124
4920-503-6951	18.9
4920-511-6977	18.14
4920-535-1065	18.110
4920-546-8521	42.17
4920-547-0592	49.123
4920-547-0607	49.122
4920-547-0608	49.124
4920-564-3830	49.128
4920-574-8999	42.14
4920-575-1798	49.23
4920-602-5469	49.112
4920-610-8867	49.131
4920-612-9730	49.125
4920-612-9732	49.130
4920-624-2637	49.284
4920-625-3777	42.14
4920-625-9854	41.36
4920-628-1121	41.8

LIST OF PAGES

3
4 & 4.0.1
4.1 & 4.2
5 & 6
6.1 & 6.2
7 & 8
9 & 10
10.1 & 10.2
11 & 12
12.1 & 12.2
12.3 & 12.3.1
13 & 13.0.1
13.1 & 13.2
13.3 & 13.3.1
14 & 15
15.1 & 15.2
15.3 & 15.4
15.5 & 15.6
15.7, 15.7.1 & 15.8
15.11 & 15.12
15.13 & 15.13.1
15.14 & 15.15
15.16 & 15.16.1
15.17 & 15.17.1
16, 17 & 18
18.3 & 18.4
18.5 & 18.5.1
18.6 & 18.6.1
18.7 & 18.7.1
18.8 & 18.8.1
18.9 & 18.9.1
18.10 & 18.10.1
18.11 & 18.11.1
18.13 & 18.13.1
18.14 & 18.14.1
18.16 & 18.16.1
18.17 & 18.17.1
18.18 & 18.18.1
18.19 & 18.19.1
18.20 & 18.20.1
18.21 & 18.21.1
18.22 & 18.22.1
18.23 & 18.23.1
18.24 & 18.24.1
18.25 & 18.25.1
18.26 & 18.26.1
18.28 & 18.29
18.30 & 18.30.1
18.32 & 18.33
18.34 & 18.35
18.36 & 18.36.1
18.38 & 18.38.1
18.42 & 18.42.1
18.44 & 18.45
18.46 & 18.47
18.48 & 18.49
18.50 & 18.51
18.52 & 18.52.1
18.53 & 18.53.1
18.54 & 18.54.1
18.55 & 18.55.1
18.56 & 18.56.1
18.57 & 18.57.1
18.58 & 18.58.1
18.59 & 18.59.1
18.60 & 18.60.1
18.61 & 18.61.1
18.62 & 18.62.1
18.63 & 18.63.1
18.64 & 18.64.1
18.65 & 18.65.1
18.66 & 18.66.1
18.67 & 18.67.1
18.68 & 18.68.1
18.69 & 18.69.1
18.70 & 18.70.1
18.72 & 18.72.1
18.74 & 18.74.1
18.75 & 18.75.1
18.76 & 18.76.1
18.77 & 18.77.1
18.78 & 18.78.1
18.79 & 18.79.1
18.80 & 18.80.1
18.81 & 18.81.1
18.82 & 18.82.1
18.83 & 18.83.1
18.84 & 18.84.1
18.85 & 18.85.1
18.86 & 18.86.1
18.87 & 18.87.1
18.88 & 18.88.1
18.89 & 18.89.1
18.90 & 18.90.1
18.91 & 18.91.1
18.92
18.93 & 18.93.1
18.94 & 18.94.1
18.95 & 18.95.1
18.96 & 18.96.1
18.97 & 18.97.1
18.98 & 18.98.1
18.99 & 18.99.1
18.100 & 18.100.1
18.101, 18.101.01 & 18.101.1
18.102 & 18.102.1
18.103 & 18.103.1
18.105
18.106
18.107
18.108
18.109
18.110 & 18.110.1
18.111 & 18.111.1
18.112
18.113
18.114
18.115
18.116
18.116.0.1
18.116.0.2
18.116.1
18.117
21.1 & 21.2
21.3
22 & 23
23.01 & 23.02
23.03, 23.03.01 & 23.03.1
23.1 & 23.2
24, 25 & 26
27 & 28
29 & 30

LIST OF PAGES

30.1 & 30.2
31 & 32
33 & 33.01
33.1 & 33.2
33.3 & 33.4
33.4.1 & 33.4.2
33.5 & 33.5.1
33.6 & 33.7
33.8 & 33.8.1
33.11 & 33.11.1, & 33.11.2
34, 34.1 & 34.2
35 & 35.1
36, 37 & 38
38.1 & 38.2
38.5 & 38.6
38.7 & 38.8
38.9 & 38.10
38.11 & 38.12
38.13 & 38.14
38.15 & 38.15.1
38.17 & 38.18
38.19 & 38.20
39, 40 & 41
41.1 & 41.1.1
41.2 & 41.2.1
41.3 & 41.3.1
41.4 & 41.4.1
41.5 & 41.5.1
41.6 & 41.7
41.8 & 41.9
41.10 & 41.11
41.12 & 41.12.1
41.13 & 41.13.1
41.14 & 41.14.1
41.15 & 41.15.1
41.16 & 41.16.1
41.17 & 41.18
41.19 & 41.20
41.21 & 41.22
41.23 & 41.24
41.25 & 41.25.1
41.26 & 41.26.1
41.27 & 41.27.1
41.28 & 41.28.1
41.29 & 41.29.1
41.30 & 41.30.1
41.31 & 41.31.1
41.32
41.33
41.34 & 41.34.1
41.35, 41.35.1, 41.35.2, 41.35.3
41.36, 41.36.1
41.37 & 41.37.1
42 & 42.0.1
42.0.2 & 42.0.3
42.0.4, 42.0.4. & 42.0.5
42.1 & 42.1.1
42.2 & 42.2.1
42.3 & 42.3.1
42.4 & 42.4.1
42.5 & 42.6
42.7 & 42.7.1
42.9 & 42.9.1
42.10 & 42.10.1
42.12 & 42.12.1
42.14, 42.14.01 & 42.14.1
42.16 & 42.16.1
42.17 & 42.17.1
42.18
42.19 & 42.19.1
42.20 & 42.21
42.22 & 42.22.1
42.23 & 42.23.1
42.24 & 42.24.1
42.25 & 42.25.1
42.26 & 42.26.1
42.27 & 42.27.1
42.28 & 42.29
42.30 & 42.30.1, 42.30.2
42.31
42.32 & 42.32.1
42.33 & 42.33.1
42.34 & 42.34.1
42.35, 42.35.01 & 42.35.1
42.36 & 42.36.1
42.37 & 42.37.1
42.38 & 42.38.1
42.39 & 42.39.1
42.40 & 42.40.1
42.41 & 42.41.1
42.42 & 42.42.1
42.43 & 42.43.1
42.44 & 42.44.1
42.45 & 42.45.1
42.46 & 42.46.1
42.47 & 42.47.1
42.48 & 42.48.1
42.49 & 42.49.1
42.50 & 42.50.1
42.51 & 42.51.1
42.52
42.52.1
42.53
42.54 & 42.54.1
42.55 & 42.55.1
42.56 & 42.56.1
42.57 & 42.57.1
42.58 & 42.58.1
42.59 & 42.59.1
42.60 & 42.60.1
42.61 & 42.61.1
42.62 & 42.62.1
42.63
42.64
42.65
42.66
42.67
42.68
42.69
42.69.01
43 & 43.1
43.2 & 43.3
43.4 & 43.5
43.6 & 43.6.1
43.8 & 43.8.1
43.9
43.10
43.11 & 43.11.1
44 & 45
45.1 & 45.2
45.3 & 45.3.1
45.4 & 45.4.1
45.4.2
45.5 & 45.5.1
45.6 & 45.6.1
45.7 & 45.7.1
45.9 & 45.9.1

LIST OF PAGES (Continued)

49.110 & 49.110.1
49.110.2 & 49.110.3
49.111 & 49.111.1
49.112 & 49.112.1
49.113 & 49.113.1
49.114 & 49.114.1
49.115 & 49.115.1
49.116 & 49.116.1
49.117 & 49.117.1
49.118 & 49.118.1
49.119 & 49.119.1
49.120 & 49.120.1
49.121 & 49.121.1
49.122 & 49.122.1
49.123 & 49.123.1
49.124 & 49.124.1
49.125 & 49.125.1
49.126 & 49.126.1
49.127 & 49.127.1
49.128 & 49.128.1
49.129 & 49.129.1
49.130 & 49.130.1
49.131 & 49.131.1
49.132 & 49.132.1
49.133 & 49.133.1
49.134 & 49.134.1
49.135 & 49.135.1
49.136 & 49.136.1
49.137 & 49.137.1
49.138 & 49.138.1
49.139 & 49.139.1
49.140 & 49.140.1
49.141 & 49.141.1
49.142 & 49.142.1
49.143 & 49.143.1
49.143.5
49.144 & 49.144.1
49.145 & 49.145.1
49.146 & 49.146.1
49.147 & 49.147.1
49.148 & 49.148.1
49.149 & 49.149.1
49.150 & 49.150.1
49.151 & 49.151.1
49.152 & 49.152.1
49.153 & 49.153.1
49.154 & 49.154.1
49.156 & 49.156.1
49.160 & 49.160.1
49.161 & 49.161.1
49.165 & 49.165.1
49.166 & 49.166.1
49.167 & 49.167.1
49.168 & 49.168.1
49.169 & 49.169.1
49.171
49.172
49.173
49.174
49.175
49.176 & 49.176.1
49.178 & 49.178.1
49.179 & 49.179.1
49.180 & 49.180.1
49.181
49.182 & 49.182.1
49.183
49.184
49.185
49.186 & 49.186.1
49.188
49.189
49.190 & 49.190.1
49.191 & 49.191.1
49.194 & 49.194.1
49.197 & 49.197.1
49.198 & 49.198.1
49.199 & 49.199.1
49.200 & 49.200.1
49.201 & 49.201.1
49.203 & 49.203.1
49.204 & 49.204.1
49.206 & 49.206.1
49.207 & 49.207.1
49.208 & 49.208.1
49.209 & 49.209.1
49.210 & 49.210.1
49.211 & 49.211.1
49.212 & 49.212.1
49.213 & 49.213.1
49.214 & 49.214.1
49.215 & 49.215.1
49.216 & 49.216.1
49.217 & 49.217.1
49.218 & 49.218.1
49.219 & 49.219.1
49.220 & 49.220.1
49.221 & 49.221.1
49.222 & 49.222.1
49.223 & 49.223.1
49.224 & 49.224.1
49.225 & 49.225.1
49.226 & 49.226.1
49.227 & 49.227.1
49.228 & 49.228.1
49.229 & 49.229.1
49.231 & 49.231.1
49.232 & 49.232.1
49.233 & 49.233.1
49.234
49.235
49.236
49.237 & 49.237.1
49.238 & 49.238.1
49.239 & 49.239.1
49.240 & 49.240.1
49.241 & 49.241.1
49.242 & 49.242.1
49.243 & 49.243.1
49.244 & 49.244.1
49.245 & 49.245.1
49.246 & 49.246.1
49.247
49.248
49.249

LIST OF PAGES (Continued)

49.250 & 49.250.1
49.251 & 49.251.1
49.252 & 49.252.1
49.253 & 49.253.1
49.254
49.255
49.256
49.257 & 49.257.1
49.258 & 49.258.1
49.259 & 49.259.1
49.260 & 49.260.1
49.261 & 49.261.1
49.262
49.263
49.264
49.265
49.266
49.267
49.268
49.269
49.270
49.271
29.272
49.273
49.274
49.275
49.276
49.277
49.278 & 49.278.1
49.279 & 49.279.1
49.280 & 49.280.1
49.281 & 49.281.1
49.282 & 49.282.1
49.283 & 49.283.1
49.284 & 49.284.1
49.285 & 49.285.1
49.286 & 49.286.1
49.287 & 49.287.1
49.288 & 49.288.1
49.289 & 49.289.1
49.290 & 49.290.1
49.291 & 49.291.1
49.292 & 49.292.1
49.293 & 49.293.1
49.294 & 49.294.1
49.295
49.296
49.297
49.298
49.299
49.300
49.301
49.302
49.303
49.304
49.305
49.306
49.307
49.308
49.309
49.310
49.311
49.312
49.313
49.314
49.315
49.316
49.317
49.318
49.319
49.320
49.321
49.322
49.323
49.324
49.325
49.326
49.327
49.328 & 49.328.1
49.329
49.330
49.331
49.332
49.333 & 49.333.1
49.334 & 49.334.1
49.335 & 49.335.1
49.336 & 49.336.1
49.337
49.338
49.339
49.340
49.341
49.342
49.343
49.344
49.345
49.346
49.347
49.348
49.349
49.350
49.351
49.352
49.353
49.354
49.355
49.356
49.357
49.358
49.359
49.360
49.361
49.362
49.363
49.363.1
49.364
49.365
49.366
49.367
49.368
49.369
49.370
49.371
49.372
49.373
49.374
49.375
49.376
49.377
49.378
49.379
49.380
49.381
49.382
49.383
49.384
49.385
49.386
49.387
49.388
49.389
49.390
49.391
49.392
49.393
49.394
49.395
49.396
49.397
49.398

LIST OF PAGES (Continued)

50 & 50.1
50.2 & 50.2.1
50.3 & 50.3.1
50.5 & 50.5.1
50.6 & 50.6.1
51 & 51.1
52 & 52.1
52.2 & 52.2.1
52.3 & 52.3.1
54, 55 & 56
56.1 & 56.1.1
56.3 & 56.3.1
56.9
56.11 & 56.11.1
56.13
57 & 59
59.1 & 59.1.1
60, 61 & 62
62.1 & 62.2
62.6 & 62.6.1
62.6.2
62.7 & 62.7.1
62.7.2
62.9 & 62.9.1
62.10 & 62.10.1
62.11 & 62.11.1
62.13 & 62.13.1
62.13.2
62.14 & 62.14.1
62.16 & 62.16.1
62.17
62.18 & 62.18.1
62.19
62.20 & 62.20.1
62.21
62.22
62.23
62.24
62.25
62.26
63 & 63.1
64.1 & 64.2 & 65
66 & 66.0.1
66.02
66.1
67.1 & 67.1.1
67.2 & 67.3
67.4 & 67.5
67.6 & 67.7
67.8 & 67.9
67.12 & 67.13
67.14 & 67.15
67.16 & 67.17
67.17.1 & 67.17.2
67.18 & 67.19
67.20 & 67.21
67.22 & 67.23
67.24 & 67.24.1
67.25 & 67.25.1
67.26 & 67.26.1
67.26.2
67.27 & 67.27.1
67.28 & 67 .28.1
67.29 & 67.29.1
67.30 & 67.30.1
67.31 & 67.31.1
68 & 68.1
69
69.1 & 69.1.1
69.2 & 69.2.1
69.3 & 69.3.1
69.4 & 69.4.1
69.6 & 69.6.1
69.7 & 69.7.1
69.8 & 69.8.1
69.9 & 69.10
69.11
69.12 & 69.12.1
70.2 & 70.2.1
70.3 & 70.3.1
70.4 & 70.4.1
70.5 & 70.5.1
70.6 & 70.6.1
70.7 & 70.7.1
70.8 & 70.8.1
70.9 & 70.9.1
70.10 & 70.10.1
71 & 71.1
72, 73 & 74
75, 76 & 77
77.1 & 77.2
77.3 & 77.3.1
77.7 & 77.8
77.9 & 77.10
77.11 & 77.12
77.13 & 77.14
77.15 & 77.16
77.16.1 & 77.16.2
77.17 & 77.18
77.19 & 77.20
77.23 & 77.24
77.25 & 77.26
77.27 & 77.28
77.31,177.31.1 & 77.32
77.37, 77.38 & 77.39
77.40 & 77.41
77.41.1 & 77.41.2
77.42 & 77.42.1
77.43 & 77.44
77.45 & 77.46
77.47 & 77.48
77.48.1 & 77.48.2
77.49 & 77.50
77.51, 77.51.01 & 77.52
77.53 & 77.53.1
77.54, 77.54.1 & 77.55
77.56 & 77.57
77.58 & 77.58.1
77.59 & 77.59.1
77.60 & 77.61
77.62 & 77.63
77.64 & 77.65
77.66 & 77.67
77.68 & 77.69
77.70 & 77.70.1
77.71 & 77.71.1
77.72 & 77.72.1
77.74 & 77.75
77.76 & 77.77
77.78 & 77.78.1
77.80 & 77.80.1
77.81 & 77.81.1

LIST OF PAGES (Continued)

77.82 & 77.82.1
77.83 & 77.83.1
77.84 & 77.84.1
77.85 & 77.85.1
77.86
77.87
77.88 & 77.88.1
77.89 & 77.89.1
77.90 & 77.90.1
77.91 & 77.91.1
77.91.2
77.92 & 77.92.1
77.92.2
77.93 & 77.93.1
77.93.2
77.94 & 77.94.1
77.95 & 77.95.1
77.96
77.97 & 77.97.1
77.98 & 77.98.1
77.99 & 77.99.1
77.100
77.101 & 77.101.1
77.102
77.103 & 77.103.1
77.104
77.105 & 77.105.1
77.106
77.107 & 77.107.1
77.108 & 77.108.1
77.109 & 77.109.1
77.110
77.111 & 77.111.1
77.112 & 77.112.1
77.113 & 77.113.1
77.114 & 77.114.1
77.114.2 & 77.114.3
77.115 & 77.115.1
77.116 & 77.116.1
77.117 & 77.117.1
77.118 & 77.118.1
77.120 & 77.120.1
77.121 & 77.121.1
77.122
77.126 & 77.126.1
77.127
77.128 & 77.128.1
77.129 & 77.129.1
77.130 & 77.130.1
77.131 & 77.131.1
77.132 & 77.132.1
77.133 & 77.133.1
77.134 & 77.134.1
77.135 & 77.135.1
77.139
77.142 & 77.142.1
77.143 & 77.143.1
77.144 & 77.144.1
77.145 & 77.145.1
77.146 & 77.146.1
77.147 & 77.147.1
77.148 & 77.148.1
77.149
77.150
77.151
77.152 & 77.152.1
77.153 & 77.153.1
77.154
77.155 & 77.155.1
77.156
77.157 & 77.157.1
77.158 & 77.158.1
77.159 & 77.159.1
77.160
77.161
77.162
77.164, 77.164.01 &
77.164.1
77.166
77.167
77.168
77.169
77.170
77.171
77.173 & 77.173.1
77.174 & 77.174.1
77.175
77.176 & 77.176.1
77.177 & 77.177.1
77.178 & 77.178.1
77.179, 77.179.01,
77.179.02 & 77.179.1
77.180
77.181
77.182
77.183
77.184
77.185
77.186
77.187
77.188
77.189
77.190
77.191
77.192
77.193
77.194
77.195
77.196
77.199
77.200
77.201
77.202
77.203
77.204
77.205
77.205.1
77.206
77.207
77.208, 77.209 & 77.210
78, 78.0.1 & 78.1
79, 79.1 & 80
80.1 & 80.2
80.3 & 80.4
80.5, 80.6 & 80.6.1
80.7 & 80.8
80.9 & 80.10
80.11 & 80.11.1
80.12 & 80.12.1
80.13 & 80.13.1
80.14 & 80.14.1
80.15 & 80.15.1
80.16 & 80.16.1
80.17 & 80.17.1
80.18 & 80.18.1
81 & 81.1
81.2 & 81.3
81.4 & 81.4.1
82.3, 82.3.1 & 82.3.2
82.4 & 82.5

ENGINEERING DATA FOR Arbor - Turbine Wheel, Spin Test

I SYSTEM ANALYSIS DATA - A means is required to mount and adapt the turbine wheel (355073) to the motor shaft of the overspeed test during overhaul and repair of the 356698-3 Air Turbine Generator Set.

II DESCRIPTION OF GSE RECOMMENDED - There is no known GFE that will meet the above requirement. Recommend the use of Arbor - Turbine Wheel, Spin Test, AiResearch P/N 281381-1 which has been designed for this purpose. This Arbor has maximum dia. of 1.37 inches and is 6.09 inches long. This tool slips over the turbine wheel shaft and is held in position by a cotter pin. The holder is held on the test chamber motor shaft by set screws.

III ITEM NAME

IDENTIFY NO. (PART, DRAWING, ETC)	GFP OR CFE	EST. TIME TO PRODUCE 1st ARTICLE IF CFE	LEVEL OF ORGANIZATIONAL USE			REQUIRED FOR TEST PHASE	REQUIRED FOR MANUFACTURING FACILITY	MEE	RESP. LAB OR CENTER	FUNC. AREA TO WHICH EQUIP. APPLIES
			ORGAN	FIELD	DEPOT					
281381-1	CFE				1					Generator Set

D.1.3.1.1(a)(c)

MAC 1832CC (23 JUN 59)

ENGINEERING DATA FOR Calibrator, Metering Valve

I SYSTEM ANALYSIS DATA - A means is required to perform a leakage check on the 93655-12 Metering Valve Assemblies prior to final assembly into the 118747-1 Body Assembly during overhaul and repair of the 356698-3 Air Turbine Generator (Reference T.O. 9P7-4-3)

II DESCRIPTION OF GSE RECOMMENDED - There is no known GFE that will meet the above requirement. Recommend the use of Calibrator, Metering Valve, AiResearch P/N 281798-1 which has been designed for this purpose. This tool is approximately 1.9 inches in diameter and 1-1/2 inches high. This calibrator will hold the metering valve assembly and provides a fitting for connecting an air source to perform the leakage check. The metering valve is placed in this tool and a holding plate is slid over edge of the valve body and held in place by tightening a thumb screw.

III ITEM NAME - Calibrator, Metering Valve

IDENTIFY NO. (PART, DRAWING, ETC)	GFP OR CFE	EST. TIME TO PRODUCE 1st ARTICLE IF CFE	LEVEL OF ORGANIZATIONAL USE			REQUIRED FOR TEST PHASE	REQUIRED FOR MANUFACTURING FACILITY	MEE	RESP. LAB OR CENTER	FUNC. AREA TO WHICH EQUIP. APPLIES
			ORGAN	FIELD	DEPOT					
281798-1	CFE				1					Generator Set

D.1.3.1.1(a)(c)

MAC 1082CC (28 JUN 58)

ENGINEERING DATA FOR Adapter, Spring Test

I SYSTEM ANALYSIS DATA - A means is required to apply either a 5 lb. or 10 lb. load simultaneously to three surfaces of the 661668 Spring Assembly to insure that specific dimensions are kept when the Spring Assembly is in a loaded condition during overhaul and repair of the 356698-3 Air Turbine Generator. (Reference T.O. 9P7-4-3).

II DESCRIPTION OF GSE RECOMMENDED - There is no known GFE that will meet the above requirement. Recommend the use of Adapter, Spring Test, AiResearch P/N 281832-1 which has been designed for this purpose. The dimensions of this adapter is 0.625 inches in diameter and 0.401 inches high.

III ITEM NAME - Adapter, Spring Test

IDENTIFY NO. (PART, DRAWING, ETC)	GFP OR CFE	EST. TIME TO PRODUCE 1st ARTICLE IF CFE	LEVEL OF ORGANIZATIONAL USE			REQUIRED FOR TEST PHASE	REQUIRED FOR MANUFACTURING FACILITY	MEE	RESP. LAB OR CENTER	FUNC. AREA TO WHICH EQUIP. APPLIES
			ORGAN	FIELD	DEPOT					
281832-1	CFE				1					Generator Set

ENGINEERING DATA FOR Holder, Test, Capillary Metering Valve

I SYSTEM ANALYSIS DATA - A means is required to check the 115665 Capillary Metering Valve Assembly for pressure drop within a prescribed range during overhaul and repair of the 356698-3 Air Turbine Generator. (Reference T.O. 9P7-4-3)

II DESCRIPTION OF GSE RECOMMENDED - There is no known GFE that will meet the above requirement. Recommend the use of Holder, Test, Capillary Metering Valve, AiResearch P/N 281849-1 which has been designed for this purpose. This tool consists of a flat plate with a two piece cylindrical test chamber.

III ITEM NAME - Holder, Test, Capillary Metering Valve

IDENTIFY NO. (PART, DRAWING, ETC)	GFP OR CFE	EST. TIME TO PRODUCE 1st ARTICLE IF CFE	LEVEL OF ORGANIZATIONAL USE			REQUIRED FOR TEST PHASE	REQUIRED FOR MANUFACTURING FACILITY	MEE	RESP. LAB OR CENTER	FUNC. AREA TO WHICH EQUIP. APPLIES
			ORGAN	FIELD	DEPOT					
281849-1	CFE				1					Generator Set

D.1.3.1.1 (a) (c)

MAC 1032CC (23 JUN 59)

ENGINEERING DATA FOR Holder, Leakage Test, Piston Assembly

I SYSTEM ANALYSIS DATA - A means is required to leakage test the 661388-2 cylinder and 661386-2 Piston Assembly prior to final assembly during overhaul and repair of the 356698-3 Air Turbine Generator. (Reference T.O. 9P7-4-3)

II DESCRIPTION OF GSE RECOMMENDED - There is no known GFE that will meet the above requirement. Recommend the use of Holder, Leakage Test, Piston Assembly, AiResearch P/N 281891-1 which has been designed for this purpose. This tool consists of two cylindrical chambers approximately 3.25 inches in dia. and 2 inches high.

III ITEM NAME - Holder, Leakage Test

IDENTIFY NO. (PART, DRAWING, ETC)	GFP OR CFE	EST. TIME TO PRODUCE 1st ARTICLE IF CFE	LEVEL OF ORGANIZATIONAL USE			REQUIRED FOR TEST PHASE	REQUIRED FOR MANUFACTURING FACILITY	MEE	RESP. LAB OR CENTER	FUNC. AREA TO WHICH EQUIP. APPLIES
			ORGAN	FIELD	DEPOT					
281891-1	CFE				1					Generator Set

D.1.3.1.1 (a)(c)

MAC 1832CC (23 JUN 59)

ENGINEERING DATA FOR Test Chamber and Console, Overspeed, Rotary

I SYSTEM ANALYSIS DATA - A means is required to subject the turbine wheels and impellers to an overspeed spin test to detect possible metal fatigue or high speed unbalance during overhaul and repair of the 356698-3 Air Turbine Generator. A suitable test chamber with a high speed drive motor is required to contain and rotate the components under test, and a control console is necessary for monitoring and controlling the critical test operation.

II DESCRIPTION OF GSE RECOMMENDED - There is no known GFE that will meet the above requirement. Recommend the use of Test Chamber and Console, Overspeed, Rotary, AiResearch P/N 281800-1 which has been designed for this purpose. This console is approximately 24 x 60 x 84 inches in size. This console consists basically of the following items:

A. Test Chamber

1. Overspeed Tank
2. Pneumatic Pressure and Vacuum Connections
3. Removable Cover Assembly which includes the air "drive" motor with associated sensing instrumentation and lubrication connections.
4. An electrical 1/4 ton hoist to facilitate removal and re-installation of the cover assembly.

III ITEM NAME - Test Chamber and Console, Overspeed, Rotary

IDENTIFY NO. (PART, DRAWING, ETC)	GFP OR CFE	EST. TIME TO PRODUCE 1st ARTICLE IF CFE	LEVEL OF ORGANIZATIONAL USE			REQUIRED FOR TEST PHASE	REQUIRED FOR MANUFACTURING FACILITY	MEE	RESP. LAB OR CENTER	FUNC. AREA TO WHICH EQUIP. APPLIES
			ORGAN	FIELD	DEPOT					
281800-1	CFE				1					Generator Set

D.1.3.1.1 (a)(c)

MAC 1032CC (23 JUN 59)

ENGINEERING DATA FOR Test Chamber and Console, Overspeed, Rotary

II DESCRIPTION OF GSE RECOMMENDED - Continued

B. Control Console

1. Speed Indication Recorder
2. Electronic Counter and Tachometer
3. Oscilloscope
4. Vibration Indicator
5. (3) Pressure Gauges
6. Vacuum Pump and Controls
7. Lubrication System for the Test Chamber Air Motor
8. Miscellaneous Manual Valves and Regulators

DATE 15 July 1958

REVISED U 30 September 1961
V 30 November 1961
W 30 May 1962
X 30 September 1962
Y 30 January 1963

VOLUME III

ENGINEERING DATA

FOR GROUND SUPPORT EQUIPMENT

GAM-72

REPORT 6170 SERIAL NO. 77

McDONNELL Aircraft Corporation

Classification cancelled or changed to
Unclassified, by authority of DD 254
Revised 1 Oct. 1959

Data pages 49.222 thru 77.100

MAC 1888CC (28 JUN 58)

ENGINEERING DATA FOR RECORDER

I SYSTEM ANALYSIS DATA - A recorder is required to measure the time-sequence pattern on the A. W. Haydon pulsing switches used on the E7870 Clock Assembly and the D7833 Clock Assembly. A 3 pen recorder is required with a response time of 2.5 milliseconds required. This is required since a tolerance requirement of 25 milliseconds is needed.

II DESCRIPTION OF GSE RECOMMENDED . - There is no known GFE which will fulfill this requirement. Recommend a Larson Instrument Co (of Terrytown New York) Recorder P/N 101 or equal be used.

Note: 1. An ROS 6-90 recorder manufactured by Larson Instrument Co. is an acceptable equivalent to P/N 101 recorder.

III ITEM NAME - Recorder

IDENTIFY NO. (PART, DRAWING, ETC)	GFP OR CFE	EST. TIME TO PRODUCE 1st ARTICLE IF CFE	LEVEL OF ORGANIZATIONAL USE			REQUIRED FOR TEST PHASE	REQUIRED FOR MANUFACTURING FACILITY	MEE	RESP. LAB OR CENTER	FUNC. AREA TO WHICH EQUIP. APPLIES
			ORGAN	FIELD	DEPOT					
Larson 101 ROS 6-90	CFE				1					Flight Control System

D.2.(a)

ENGINEERING DATA FOR Torque Indicator

I SYSTEM ANALYSIS DATA - A means is required to measure the minimum no load torque (drag) in both the energized and de-energized condition of the clutch-brake (Autotronics P/N MC-4-1) which is part of the servo zeroing unit (MDE 4440940) of the MDE 4440 Console. A lower range is required, reference T.O. 31X2-66-2-3, than the previously recommended part T1-701-15-5, M.A.C. Report 6170 Page 49.200.

II DESCRIPTION OF GSE RECOMMENDED - There is no known GFE that will meet this requirement. Recommend use of a torque indicator (Autotronics Inc. P/N T1-701-1.5-2) or equal for this purpose.

III ITEM NAME - Torque Indicator

IDENTIFY NO. (PART, DRAWING, ETC)	GFP OR CFE	EST. TIME TO PRODUCE 1st ARTICLE IF CFE	LEVEL OF ORGANIZATIONAL USE			REQUIRED FOR TEST PHASE	REQUIRED FOR MANUFACTURING FACILITY	MEE	RESP. LAB OR CENTER	FUNC. AREA TO WHICH EQUIP. APPLIES
			ORGAN	FIELD	DEPOT					
T1-701-1.5-2	CFE				1					FCS & OSS #2 Checkout

D.2.C

MAC 1832CC (29 JUN 59)

ENGINEERING DATA FOR Torque Indicator

I SYSTEM ANALYSIS DATA - A means is required to measure the minimum brake and clutch torque of the clutch-brake (Autotronics P/N MC-4-1) which is part of the servo zeroing unit (MDE 4440940) of the MDE 4440 Console. This has a more accurate range than the presently recommended T1-701-15-5. Reference M.A.C. Report 6170 Page 49.200, for use in accordance with T.O. 31X2-66-2-3.

II DESCRIPTION OF GSE RECOMMENDED - There is no known GFE that will meet the above requirement. Recommended use of a torque indicator (Autotronics Inc. P/N T1-701-5-2) or equal for this purpose.

III ITEM NAME - Torque Indicator

IDENTIFY NO. (PART, DRAWING, ETC)	GFP OR CFE	EST. TIME TO PRODUCE 1st ARTICLE IF CFE	LEVEL OF ORGANIZATIONAL USE			REQUIRED FOR TEST PHASE	REQUIRED FOR MANUFACTURING FACILITY	MEE	RESP. LAB OR CENTER	FUNC. AREA TO WHICH EQUIP. APPLIES
			ORGAN	FIELD	DEPOT					
T1-701-5-2	CFE				1					FCS & OSS #2 Checkout

D.2.C

MAC 1032CC (23 JUN 59)

ENGINEERING DATA FOR Voltmeter, Digital

I **SYSTEM ANALYSIS DATA** - A high impedance voltmeter is required to determine the potential level of D.C. voltages at high and/or low impedance level test points throughout the flight control system and A.C. voltages at high and/or low impedance test points in the electronic portion of FCS. The voltmeter must be capable of measuring A.C. and D.C. input and output signals, signal nulls and zero's and reference supplies. (1) 0 to 450V D.C.; ±0.01% accuracy; (2) -0 to 220V A.C.; ±0.1% accuracy is required for FCS Console Calibration as well as bench maintenance testing.

II **DESCRIPTION OF GSE RECOMMENDED** - Recommend the use of a Cubic Digital Voltmeter composed of the following units:

(a) D.C. Voltmeter Unit, Model V-51, FSN 6625-771-4065

(b) A.C. Converter Unit, Model AC-2, FSN 6125-724-9056

(c) Control Unit, Model C-1, FSN 4935-769-9139

The above units are to be used and calibrated as a complete assembly. In the event that procurement is preferred, M.A.C. Part Number MDE 4406024-1 has been assigned.

Procurement of Digital Voltmeter by individual components was previously recommended on Pg. 49.58.

III **ITEM NAME** - Voltmeter, Digital

IDENTIFY NO. (PART, DRAWING, ETC)	GFP OR CFE	EST. TIME TO PRODUCE 1st ARTICLE IF CFE	LEVEL OF ORGANIZATIONAL USE			REQUIRED FOR TEST PHASE	REQUIRED FOR MANUFACTURING FACILITY	MEE	RESP. LAB OR CENTER	FUNC. AREA TO WHICH EQUIP. APPLIES
			ORGAN	FIELD	DEPOT					
MDE 4406024-1	CFE			3	3	5*				Flight Control System

* GAM-72B Retrofit

D.2.1.4(a)(c)

MAC 1 0882C (25 JUN 59)

McDONNELL AIRCRAFT CORPORATION

DATE 15 July 1958

REVISED V 30 November 1961
W 30 May 1962
X 30 September 1962
Y 30 January 1963

VOLUME IV

ENGINEERING DATA

FOR GROUND SUPPORT EQUIPMENT

GAM-72

REPORT 6170 SERIAL NO. 77

McDONNELL Aircraft Corporation

Classification cancelled or changed to
Unclassified, by authority of DD 254
Dated 24 August 1961

Data pages 77.101 and up
Appendix A pages A-1 and up

ENGINEERING DATA FOR Filter, Radio Interference

I SYSTEM ANALYSIS DATA - A means is required to eliminate spurious signals which could cause erroneous indications when using an electronic counter to check the accuracy of the MDE 4459 Bomber Relay Box Checkout Console Time Clock. (Reference T.O. 33D2-31-3-1, November 1962 revision)

II DESCRIPTION OF GSE RECOMMENDED - There is no known GFE that will meet the above requirement. Recommend the use of a locally manufactured filter assembly consisting of a 68K resistor (MS 35043-131), an 11K resistor (MS 35043-112) and a 0.33 microfarad capacitor be manufactured per instructions contained in section V of T.O. 33D2-31-3-1, 1 November 1962. In the event that procurement is preferred, M.A.C. Part Number MDE 4406025-1 has been assigned.

Note: 1. This page was incorrectly numbered on preliminary release as page 77.205.

III ITEM NAME - Filter, Radio Interference

IDENTIFY NO. (PART, DRAWING, ETC)	GFP OR CFE	EST. TIME TO PRODUCE 1st ARTICLE IF CFE	LEVEL OF ORGANIZATIONAL USE			REQUIRED FOR TEST PHASE	REQUIRED FOR MANUFACTURING FACILITY	MEE	RESP. LAB OR CENTER	FUNC. AREA TO WHICH EQUIP. APPLIES
			ORGAN	FIELD	DEPOT					
MDE 4406025-1	GFE			1	1					Bomber Component Checkout

MAC 1032CC (28 JUN 59)

ENGINEERING DATA FOR Tool - Hand Crimp (Taper Tab)

I SYSTEM ANALYSIS DATA - A means is required to crimp the (AMP Inc. P/N 60015-3) taper tabs to electrical wire. These tabs are used on the Tarus Corp. K-2-1400A Card Sensor, P/N MDE 4458008-3 which is installed on the MDE 449-301 Bomber Relay Box Checkout Console. This tool supersedes AMP P/N 48698, reference Pg. 49.140, and is necessary to obtain a better connection.

II DESCRIPTION OF GSE RECOMMENDED - Recommend use of No. 45592 Hand Crimp Tool, made by AMP Inc. Harrisburg, Pa., which has been designed for use with 24-22 wire size and an insulation range of .040-.060 diameter.

III ITEM NAME - Tool - Hand Crimp (Taper Tab)

IDENTIFY NO. (PART, DRAWING, ETC)	GFP OR CFE	EST. TIME TO PRODUCE 1st ARTICLE IF CFE	LEVEL OF ORGANIZATIONAL USE			REQUIRED FOR TEST PHASE	REQUIRED FOR MANUFACTURING FACILITY	MEE	RESP. LAB OR CENTER	FUNC. AREA TO WHICH EQUIP. APPLIES
			ORGAN	FIELD	DEPOT					
45592 AMP INC	CFE			1	2					Bomber Component Check-out

J.1.8.1 (a) (c)

MAC 1888C (28 JUN 58)