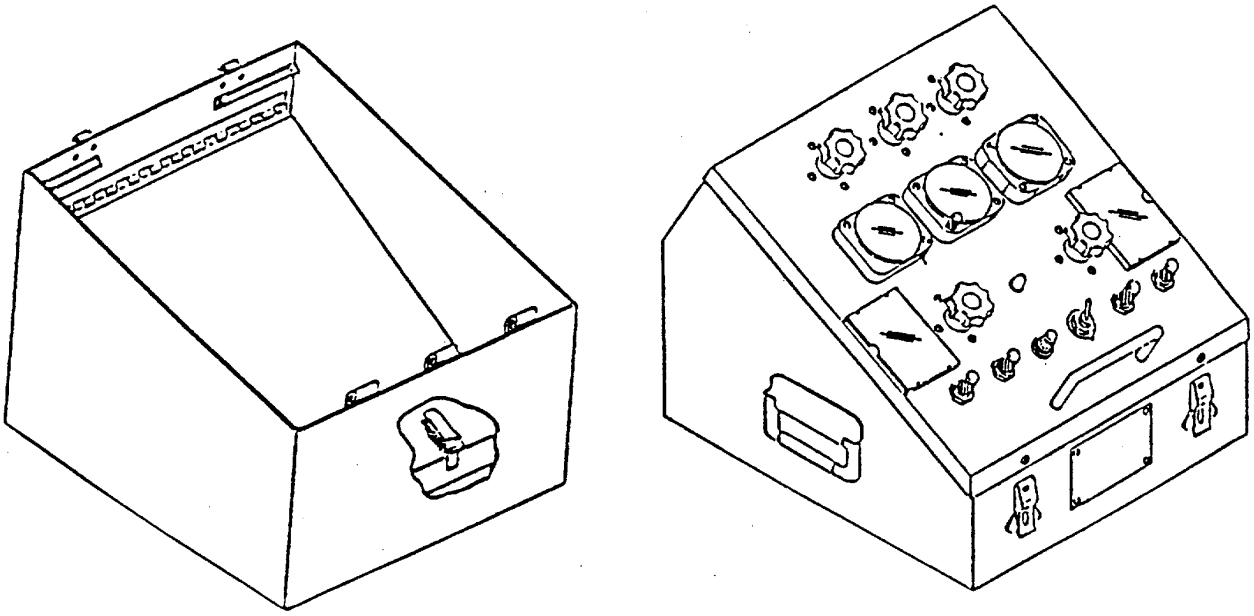
TECHNICAL MANUAL

OPERATOR'S AVIATION UNIT MAINTENANCE AND AVIATION INTERMEDIATE MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST) FOR PITOT AND STATIC SYSTEMS TESTER

P/N 10005071

NSN 4920-01-244-2146



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HEADQUARTERS, DEPARTMENT OF THE ARMY
31 MAY 1989

WARNING

An operating procedure, practice, etc., which, if not correctly followed, could result in personnel injury or loss of life.

HIGH VOLTAGE

is used in the operation of this equipment

DEATH ON CONTACT

May result if personnel fail to observe safety precautions. Learn the areas containing high voltage in each piece of equipment. Be careful not to contact high-voltage connections when installing or operating this equipment. Before working inside the equipment, turn off, and ground points of high potential before touching them.

For Artificial Respiration, refer to FX 21-11.

CAUTION

An operating procedure, practice, etc., which, if not strictly observed, could result in damage to or destruction of equipment.

NOTE

An operating procedure, practice, etc., which is essential to highlight.

COSTLY DAMAGE

may result to instruments and to test unit if personnel fail to observe cautions.

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 31 May 1989

TECHNICAL MANUAL

OPERATOR'S, AVIATION UNIT, AND

INTERMEDIATE MAINTENENCE MANUAL

INCLUDING

REPAIR PARTS AND SPECIAL TOOLS LIST

FOR

PITOT & STATIC

SYSTEMS TESTER

(P/N 10005071)

NSN: 4920-01-244-2146

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA FORM 2028 (Recommended Changes to Publications and Blank Forms), or DA FORM 2028-2 located in the back of this manual direct to: Commander, U.S. Army Aviation Systems Command, ATTN: AMSAV MMD, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798. A reply will be furnished directly to you.

TABLE OF CONTENTS

CHAPTER 1

INTRODUCTION

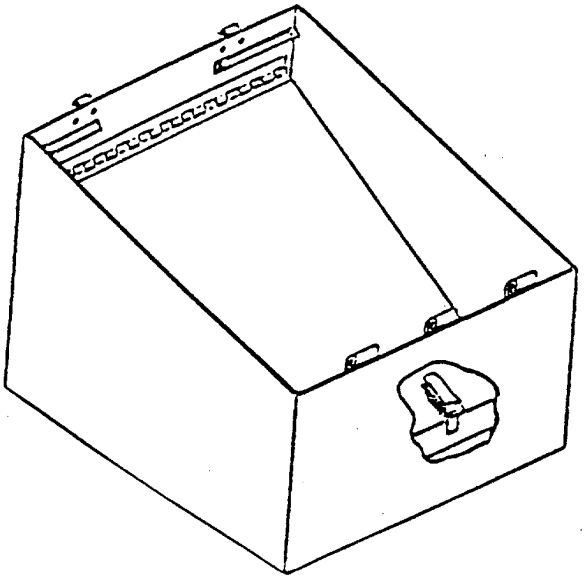
SECTION I - GENERAL INFORMATION

1-1 SCOPE 1-1

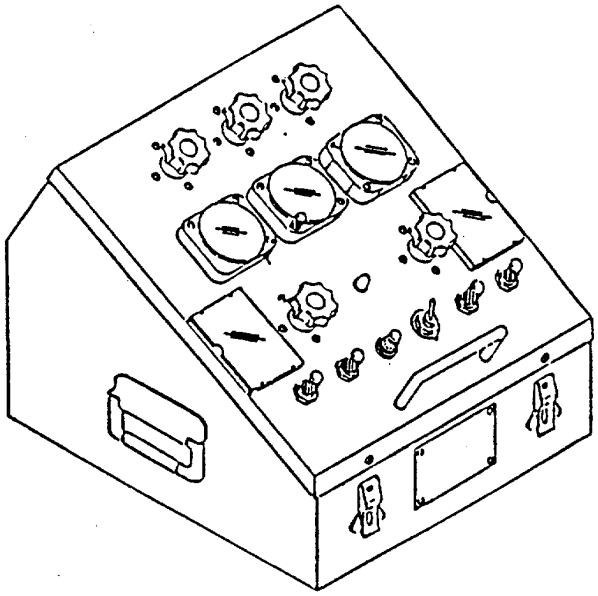
a. This manual contains operation, maintenance, and illustrated parts breakdown, and repair parts list for Pitot and Static Systems Tester, Part Number: 10005071 illustrated below.

b. The Pitot and Static Systems Tester is a portable, self-contained field instrument which is used for checking the performance characteristics of vacuum and pressure aircraft instruments, and pitot and static systems. The Tester accurately simulates the airspeed and atmospheric pressures which are present during normal operation of the aircraft.

c. The Pitot and Static Systems Tester is capable of testing the aircraft pitot and static systems and simulating aircraft airspeed, altitude, and rate of climb ascending or descending for aircraft instrument tests.



COVER/ACCESSORIES



TESTER

1-2 MAINTENANCE FORMS, RECORDS AND REPORTS 1-2

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 738-751, The Army Maintenance Management System - Aviation.

1-3 DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE 1-3

Refer to TM 750-244-1-4, Electrical Materiel, Procedures for Destruction to Prevent Enemy Use.

1-4 PREPARTION FOR STORAGE OF SHIPMENT 1-4

For storage and shipment information, refer to Chapters 3 and 4.

1-5 REPORTING EQUIPMENT IMPROVE RECOMMENDATIONS (EIR) 1-5

Recommendations for the improvement of the Pitot and Static Systems Tester should be submitted on an SF368 form to:

Commander, Headquarters,
U.S. Army Aviation Systems Command
ATTN: AMSAV-MMD
4300 Goodfellow Blvd.
St. Louis, MO. 63120-1798

1-6 EQUIPMENT CHRACRISTICS, CAPABILITIES AND FEATURES 1-6

FUNCTION.

a. General. The Pitot and Static Systems Tester is a pneumatic testing system that simulates aircraft airspeed from 0-400 knots; altitude from -1000 to 35,000 feet; and rate of climb from -6000 to +6000 feet per minute. Pitot and Static Systems Tester can also be tested for leakage. The control panel of the Tester contains the three (3) appropriate aircraft instruments: Rate of Climb, Altimeter, and Airspeed Indicator.

b. Electrical System: The Tester contains two power cables and one cable adapter to permit operation from the following power sources:

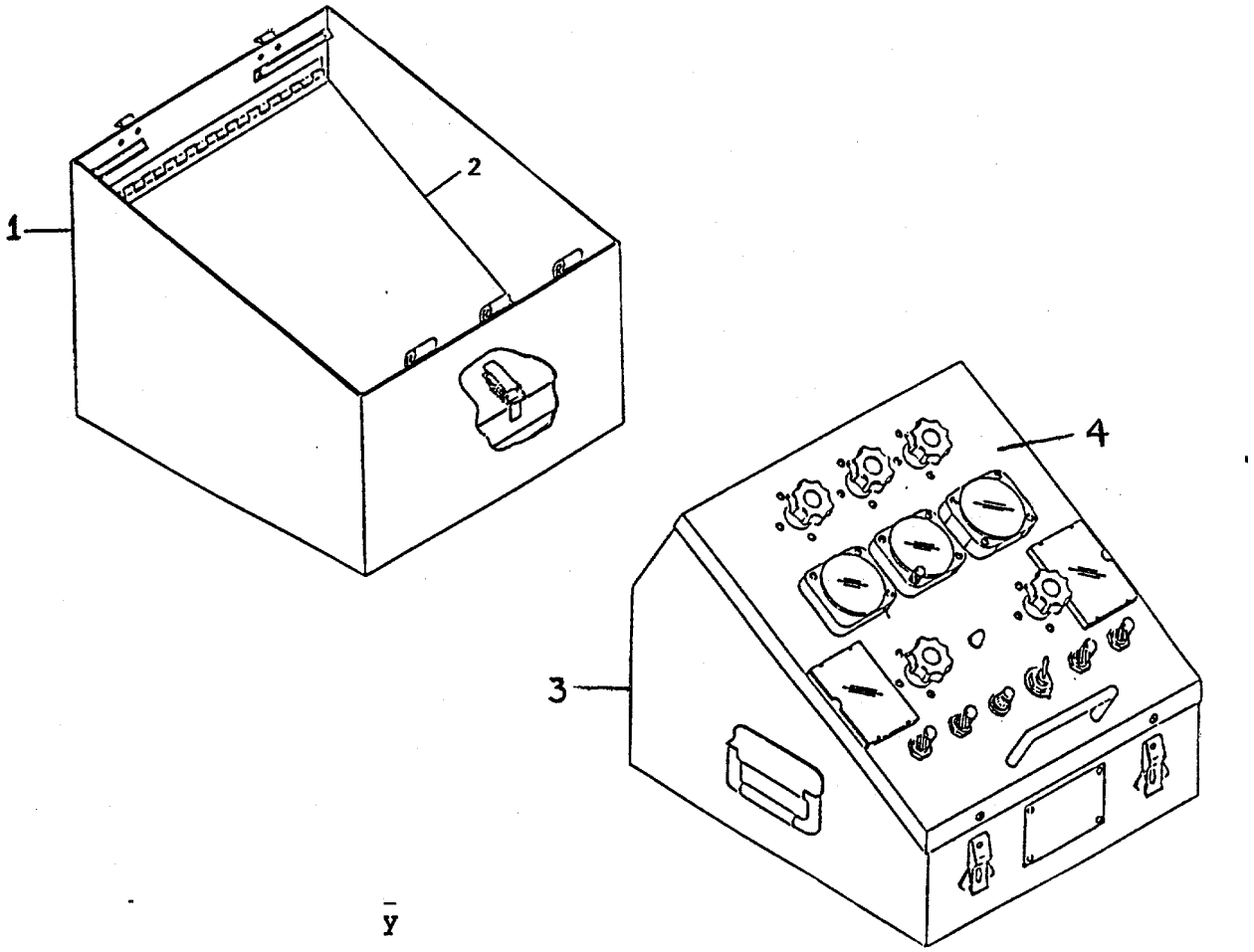
(a) 28 + 4, -6 volts DC

(b) 115 volts ac ± 10 percent, 50 to 500 cycles, single phase.

(c) 115 volts ac ± 10 percent, 50 to 500 cycles, three phase.

1-7 LOCATION AND DESCRIPTION OF MAJOR COMPONENTS 1-7

a. General. The equipment furnished with the Pitot and Static Systems Tester is shown in the following illustration.



Item Description
1 Cover Assembly
2 Accessories
3 Tester Main Chassis
4 Control Panel

1-7 LOCATION AND DESCRIPTION OF MAJOR COMPONENTS (CONT.) 1-7

b. Case Assembly: The Tester is 16.6 inches long, 17.00 inches deep and 15.5 inches high when contained within its removable cover for transit. The cover contains accessories necessary for proper operation of the Tester. When the Cover is removed, all operating controls, indicators, and accessories are accessible for immediate use.

c. Control Panel: The control panel of the Pitot and Static Systems Tester contains three aircraft instruments: Rate of climb, altimeter, and the airspeed indicator. Vacuum and pressure controls, bleed needle valves, a vacuum selector valve, a pressure selector valve, and an "ON-OFF" valve for each of the three respective instruments are also clearly marked on the control panel. Also contained on the control panel are the on-off power switch, power indicator light, and 5 amp fuse. A spare fuse is mounted underneath the operator panel and is accessible when the panel is Open.

d. Chassis-Base: The back of the chassis contains two ports: A "Static" port and a "'Pitot"' port for hook-up to the same respective ports on the aircraft. Hoses and adaptors are provided in the accessory storage compartment. Also, a power connector is provided through which AC and DC power is supplied to the tester.

e. Interior Components: For access to interior components of Tester, captive fasteners on the control panel are released and the panel is then swung upward to the Open," position; with the panel open, the motor-pump assembly oil, reservoir assembly and electrical power supply components are easily accessible as are adjustable pressure/vacuum relief valves, a system pressure relief safety valve, and all fittings and hoses. In addition, rigid pressure lines could be removed if necessary. Located on rear of box is a clear window, which permits observation of fluid level in the oil reservoir and an access door, which permits access to the reservoir drain-fill and run valve, allowing hydraulic fluid.

1-7 LOCATION AND DESCRIPTION OF MAJOR COMPONENTS (CONT.) 1-7

f. Accessories: An accessory storage compartment is housed within the Tester cover and is accessible when the cover is open or removed from the Tester. Accessories supplied with the Tester are listed below:

Accessory/Description	Quantity
AC Power cable, 10 feet	1
DC Power cable, 10 feet	1
Adapter cable, single phase AC, 14 inches	1
Flush static port adapter	1
Hose assembly, 1 ft. AN6270-4D-0120	1
Hose assembly, 5 feet, AN6270-3D-0600	1
Hose assembly, 6 feet, AN6270-3D-0720	2
Pitot head adapter	1
Hose clamp	1
Fitting, AN815-4D	2

1-8 EQUIPMENT DATA 1-8

Refer to Table 1-1 for a summary of capabilities, limitations, and other critical operation and maintenance data.

TABLE 1-1

Depth	14.25 inches
Width	15.63 inches
Height	16.02 inches
Weight (complete with accessory kit)	60lbs. maximum
Voltage input AC	115 VAC ± 10%, 50-500 cycles per second, single phase. 115 VAC + 10%, 50-500 cycles per second, three-phase.
Voltage Input DC	28 Volt Direct Current (DC) +4 - 6 volts
Usable Temperature Range	0 C to 50 C
Power Consumption	120 Watts Maximum
Tester Ranges:	
Rate of Climb	0 to -6000 feet/Min (Ascending) 0 to -6000 feet/Min (Descending)
Altimeter	-1000 feet to 35,000 feet
Airspeed	0 - 400 knots

SECTION III - TECHNICAL PRINCIPLES OF OPERATION

1-9 PRINCIPLES OF OPERATION 1-9

a. A small highspeed pump serves dual functions by producing system vacuums up to 29 inches of mercury and system pressures up to 25 psi to simulate aircraft atmospheric and airspeed conditions. These vacuums and pressures are delivered to the respective aircraft system and tester instruments through oil reservoir, oil sumps, and a network of hoses, rigid pressure lines, fittings, adapters, valves and ports on the tester along with external hoses and adapters supplied with the tester.

b. The pump serves the dual function of developing pressure as well as vacuum for operation of the Tester. In the pressure section, a mixture of air and oil is pumped into the reservoir where the oil and air are separated. The separated oil drops to the bottom of the reservoir where it is bled to the pump for lubrication purposes, the air being forced out at the top of the reservoir under pressure. The pressurized air, after going through the check valve whose function is to prevent oil from entering instrument lines during operation, enters an oil sump and passes through a filter which is an integral part of the sump. Air from the sump blows through two pressure control valves. The pressure INCREASE valve controls the amount of air permitted in the system and the pressure DECREASE valve opens the line to the ambient air, allowing system pressure to bleed off. The available pressure level, as fixed by the control valves is sent to the pressure relief valve and PRESSURE selector valve. Setting the PRESSURE selector valve at the desired test position completes the circuit to the instrument under test and the master instrument to one of the pressure relief valves. The pressure relief valve is in the line at all times and protects the instruments from pressure overload when the pump is producing vacuum which passes through the check valve, and the sump which prevents oil from entering the instrument lines. The vacuum INCREASE valve controls the amount of vacuum in the system and the vacuum DECREASE valve opens the line to the ambient air allowing the system vacuum to bleed off.

1-9 PRINCIPLES OF OPERATION (CONT.) 1-9

c. Setting the vacuum selector valve at the desired test position completes the circuit to the instrument under test and the master instrument to one of the three relief valves which protect the instruments from vacuum overloads. The case leak valves provide isolation for the master instruments of the test set to permit case leak tests and/or calibration of the master instruments without removing them from the tester.

CHAPTER 2

OPERATING INSTRUCTIONS

SECTION I - DESCRIPTION AND USE OF OPERATOR OONTROLS AND INDICATORS.

This chapter contains instructions for operating the Pitot and Static Systems Tester. Operating personnel should be familiar with aircraft pitot and static systems and instruments to be tested.

CAUTION

Handle the tester with care as the delicate instrumentation it incorporates can easily be damaged by shock of improper handling procedures.

To prepare the tester for use; set the tester on a level bench or platform with an AC or DC power source available.

CAUTION

DO NOT force-tighten control valves; damage will occur to the needle point of the valve.

Set power ON-OFF switch to OFF, close four Vacuum and Pressure control valves and set VACUUM and PRESSURE selector valves to off.

CAUTION

Power source voltage must be within limits specified in paragraph 1-6; or damage will cause a blown fuse.

If AC power is used, connect AC power cable to power connector on rear panel. Connect single-phase adapter cable to free end of AC power cable if single phase power is used.

If DC power is used, connect DC power cable to power connector on rear panel and, observing polarity, connect clips of DC power cable to DC power source.

2-3 CONTROLS AND INSTRUMENTS 2-3

a. General. This section describes and furnishes the operator with sufficient information pertaining to the various controls and instruments provided for the proper operation of the equipment.

b. Power Switch. The single pole, double throw, toggle-type power switch, has an OFF position which opens the circuit and shuts off the electrical power supply to the tester. The ON position is in the circuit to provide electrical current to the tester when the power source is connected.

c. Indicator light. The indicator light illuminates when the power circuit in the tester is operating.

d. Cartridge fuse. The 28vdc, 5amp cartridge fuse provides protection against an excessive flow of current which would damage the electrical system.

e. Vacuum Selector Knob. The pressure selector knob has three positions, and operates a valve which controls the vacuum systems required to test aircraft instruments.

f. Pressure Selector Knob. The pressure selector knob has three positions and operates a valve which controls the pressure systems required to test certain types of aircraft instruments.

g. Pressure Bleed Down Knob. Counterclockwise rotation of pressure bleed knob from closed position opens a needle valve allowing system pressure to bleed off. CLOSE for pressure up.

h. Pressure Control Knob. Counterclockwise rotation of pressure control knob from closed position opens a needle valve allowing pressure in system to increase.

i. Vacuum Bleed Knob. Counterclockwise rotation of vacuum bleed knob permits system vacuum to bleed off. CLOSE for vacuum up.

j. Vacuum Control Knob. Counterclockwise rotation of vacuum control knob opens a needle valve and provides increased vacuum in system.

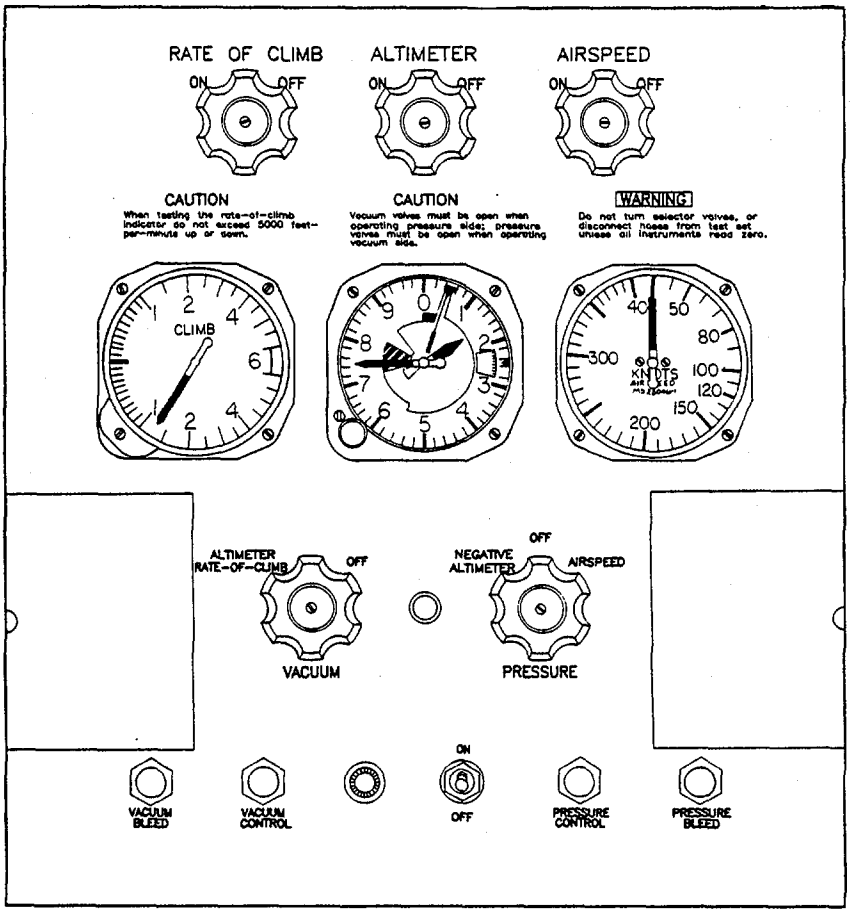
k. Shut-off Valves. Shut-off valves located on the top of the operator panel are provided for testing aircraft instruments and checking the master instruments for leaks.

2-3 CONTROLS AND INSTRUMENTS (CONT.) 2-3

l. Rate-of-Climb Indicator. The rate-of-climb indicator measures from 1,000 feet below to 80,000 feet above sea level. A barometric scale which is operated by the correction knob is an integral part of the altimeter which is used to test the accuracy of aircraft altimeters.

m. Airspeed Indicator. The airspeed indicator measures the differential between pitot and static pressures created by the tester in a range between 0 and 400 knots and is used to test the accuracy of airspeed indicators.

n. Control Panel - The relation of the instruments and controls in the electrical and pneumatic system is illustrated below:

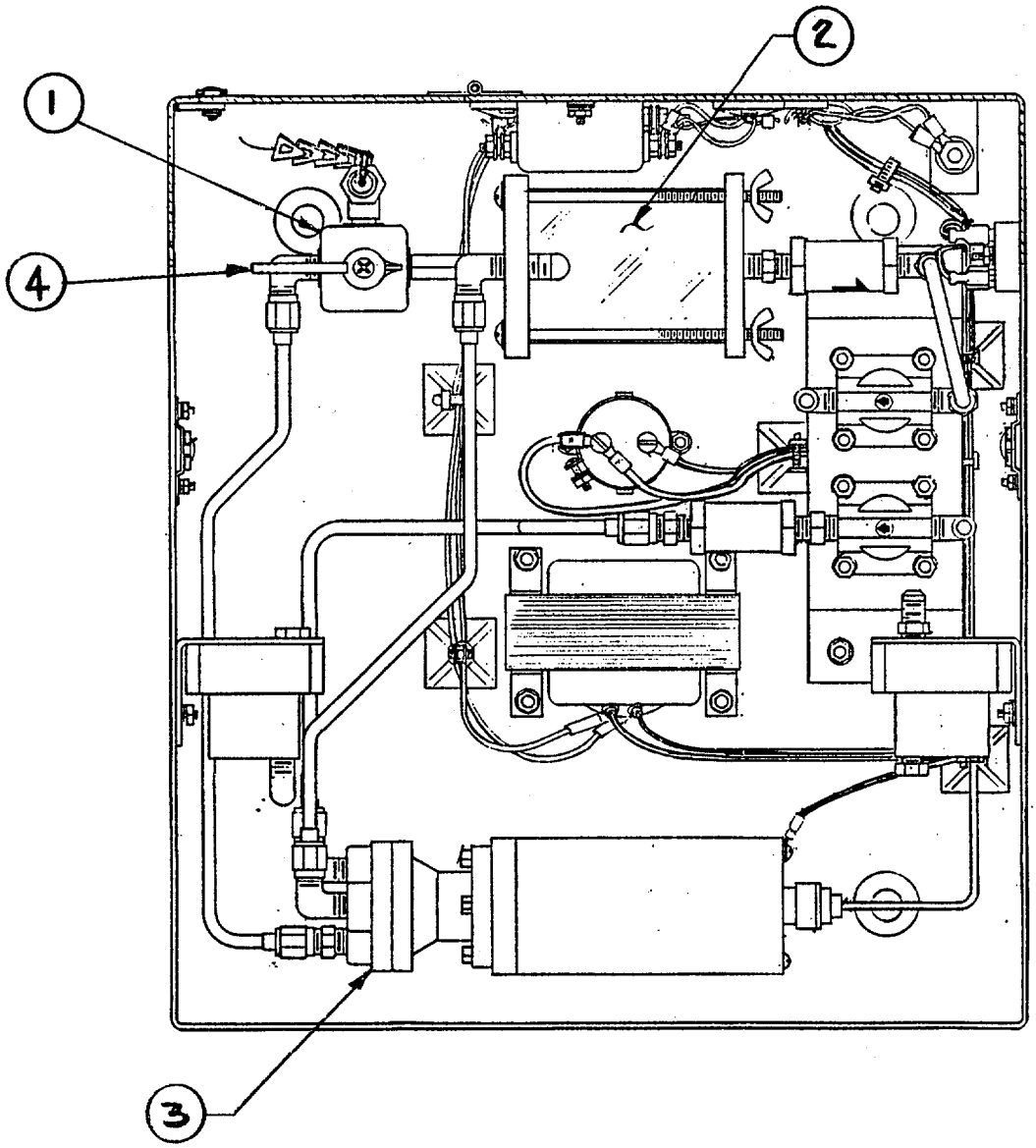


CONTROL PANEL

2-3 C0NTRLS AND INSTRUMENTS (CONT.) 2-3

o. Fill and Run Selector Valve. The selector valve (1) is in line between the oil reservoir (2) and the pump (3) as shown. The handle (4) on the valve has two positions for use as follows:

1. The direction as shown is for "normal operation".
2. When the valve is turned 90 degrees counter clockwise it is in the fill position.



BOTTOM CHASSIS VIEW

SECTION II - OPERATOR PREVENTIVE CHECKS AND SERVICES (PMCS)

2-4 BEFORE YOU OPERATE 2-4

Always keep in mind CAUTIONS and WARNINGS. Handle the pitot and static tester like you would any other delicate piece of electronic equipment. See Table 2-1 for normal preventive maintenance checks and services.

TABLE 2-1 Operator/Crew Preventive Maintenance Checks and Services

NOTE: Within designated interval, these checks are to be performed in the order listed.

	B - Before	A - After			
Item No.	Interval B	Interval A	Item to be inspected	Procedures Check for and have repaired or adjust as necessary	Equipment is not ready/available if contents wet
01	0		Oil level in reservoir	Check oil level before powering and testing.	Oil level in reservoir is not between levels maximum and minimum indicated on reservoir body; or damaged.
02	0		Cover Assy	Check for damage to aluminum case, latches and hinges.1	
03	0	0	Component parts	Check components for damage or dirt Clean as necessary	Indicators, valves lgt etc. damaged or broken (return for repair and calibration
04	0	0	AC-DC Power Cables	Check for loose or broken cables on connectors. Replace as necessary	Cables require repair

2-5 PERFORMANCE CHECK 2-5

Set Tester on level work platform with a source of DC or AC power available.

CAUTION

Ensure oil level within limits before powering up.

TABLE 2-2
PERFORMANCE CHECK

INSTRUMENT	SYSTEM LEAK		OPERATIONAL RATE
	CHECK POINT	MAX. ALLOWABLE LEAK RATE	
AIRSPEED	200 KNOTS	6 KNOTS PER MINUTE	35 SECONDS, MAXIMUM; 25 SECONDS MINIMUM (FOR FULL SCALE INDICATION)
ALTIMETER	25,000 FEET	250 FEET PER MINUTE	RATE-OF-CLIMB (ASCENDING OR DESCENDING) NOT TO EXCEED 5000 FT. PER MINUTE

Look through window on rear of Tester and ensure oil level in reservoir is within MAX. and MIN. indicating lines on oil reservoir. Refer to para. 3-9.

Apply pressure to airspeed indicator in accordance with para. 2-6, using Table 2-2 readings.

Apply vacuum to Altimeter/Rate-of-Climb in accordance with para. 2-6, using Table 2-2 readings.

SECTION III - OPERATION UNDER USUAL CONDITIONS

2-6 OPERATING PROCEDURES 2-6

a. Connect appropriate power source to connector on rear panel of Tester with appropriate power cable (and adaptor for single phase) per paragraph 2-2.

b. Close all three instrument shut-off valves on top end of operator panel to “OFF” position.

c. Select aircraft instrument to be tested.

CAUTION

Vacuum valves must be open when operating pressure side; pressure valves must be open when operating vacuum side.

d. Open "Control" and "Bleed" needle valves of opposite side of Tester selected.

e. Set appropriate vacuum or pressure selector valve to instrument to be tested selection. Make sure "Control" and "Bleed" needle valves to be used are both closed.

f. open "shut-off" valve for appropriate aircraft instrument to be tested only.

g. Connect instrument/aircraft to be tested to appropriate instrument "Pitot or Static" port on rear of Tester.

NOTE

Altimeter and climb tests will be done using the "Static" port whereas airspeed tests will be done using the "Pitot” port.

Appropriate hose(s) and fittings for these hook-ups are in the accessory storage compartment.

h. Turn the power switch to “ON'. Indicator will light and motor/pump assembly will start.

CAUTION

When testing the rate-of-climb indicator do not exceed 5000 feet-per-minute up or down.

i. Open "Control" needle valve to selector valve to test instrument selected. Use small turn to obtain desired deflections and continue opening to obtain maximum deflection of both instrument on tester panel and instrument under test.

2-6 OPERATING PROCEDURES (CONT.) 2-6

j. Close ",Control," needle valve and open ,"Bleed" valve slowly to return to zero deflection.

k. For true readings use needle valves to get applicable instrument readings corresponding to those on calibration cards. Refer to table 2-3, for test data pertaining to aircraft instruments which can be checked using this Tester.

l. After test open applicable "Bleed" needle valve until all instruments read zero.

TABLE 2-3

INSTRUMENT CALIBRATION CARDS

AIR SPEED INDICATOR			
STANDARD AIR SPEED IN KNOTS	INDICATOR READING IN KNOTS	STANDARD AIR SPEED IN KNOTS	INDICATOR READING IN KNOTS
40		220	
60		240	
80		260	
100		280	
120		300	
140		320	
160		340	
180		360	
200		400	
INSTR.		DATE	

CONVERSION CHART			
KNOTS PER HOUR	MILES PER HOUR	KNOTS PER HOUR	MILES PER HOUR
40	46	220	253
60	69	240	276
80	92	260	299
100	115	280	322
120	138	300	346
140	161	320	369
160	184	340	392
180	207	360	415
200	230	400	461
INSTR.		DATE	

RATE OF CLIMB—CALIBRATION AT RATES AND ALTITUDES SHOWN				
TEST RATE FT/MIN	RATE OF CLIMB		RATE OF DIVE	
	WATCH ELAPSED TIME	INDICATED RATE	WATCH ELAPSED TIME	INDICATED RATE
500 Ft				
1000 Ft				
2000 Ft				
3000 Ft				
4000 Ft				
5000 Ft				
6000 Ft				
INSTR.			DATE	

ALTIMETER			
STANDARD ALTITUDE IN FEET	INDICATOR READING IN FEET	STANDARD ALTITUDE IN FEET	INDICATOR READING IN FEET
0		14000	
500		16000	
1000		18000	
2000		20000	
4000		22000	
6000		25000	
8000		30000	
10000		35000	
12000			
INSTR.		DATE	

2-7 SHUT DOWN PROCEDURE 2-7

To disconnect instrument under test and shut down Tester: After test open applicable "Bleed" needle valve until all instruments read zero.

WARNING

Do not turn selector valves, or disconnect hoses from Tester set unless all instruments indicate zero; will cause damage to instruments.

a. Turn power switch to "DOFFS position.

b. Close shut-off valves on top of operator panel to '"OFP, positions.

c. Disconnect instrument under test from appropriate "Pitot", or ,"Static" port on rear of Tester.

d. Set ,"Vacuum," and "Pressure," selector valves to "OFF", positions and close four vacuum and pressure "Control" and "Bleed" needle valves.

e. Disconnect Tester from power source.

f. Return power cables, hoses, adaptors, and fittings to accessory storage compartment and return cover to tester.

SECTION IV - OPERATION UNDER UNUSUAL CONDITIONS

2-8 UNUSUAL CONDITIONS 2-8

a. Normal. The Tester can be carried from one work area to another when the accessories are stowed in the cover compartment which is installed in the Tester.

b. Extremes of Heat and Cold - unusual conditions. The Tester is designed to operate in temperatures from -40 F to +120 F (-40 C to +50 C). When operating in high temperatures to 120 degrees, use extreme caution to keep Tester within operating limits. For low temperature operating range (from +32 to -40 F), run the pump for at least 5 minutes with both selector valve knobs in the OFF position and the knobs turned to open valves before starting tests.

c. Other Unusual Conditions.

CAUTION

Contamination in the pneumatic system will damage the instruments, controls, and the pump.

(1) When operating the Tester in extreme conditions of snow, ice, rain, mud, dust, salt air or similar conditions; do everything possible to prevent foreign material from entering the Pneumatic System.

(2) After operation in extreme conditions, thoroughly clean and dry the Tester and accessories.

2-9 EXTREME ENVIRONMENTAL MAINTENANCE 2-9

There are no requirements for extreme environmental maintenance for the Pitot and Static Systems Tester.

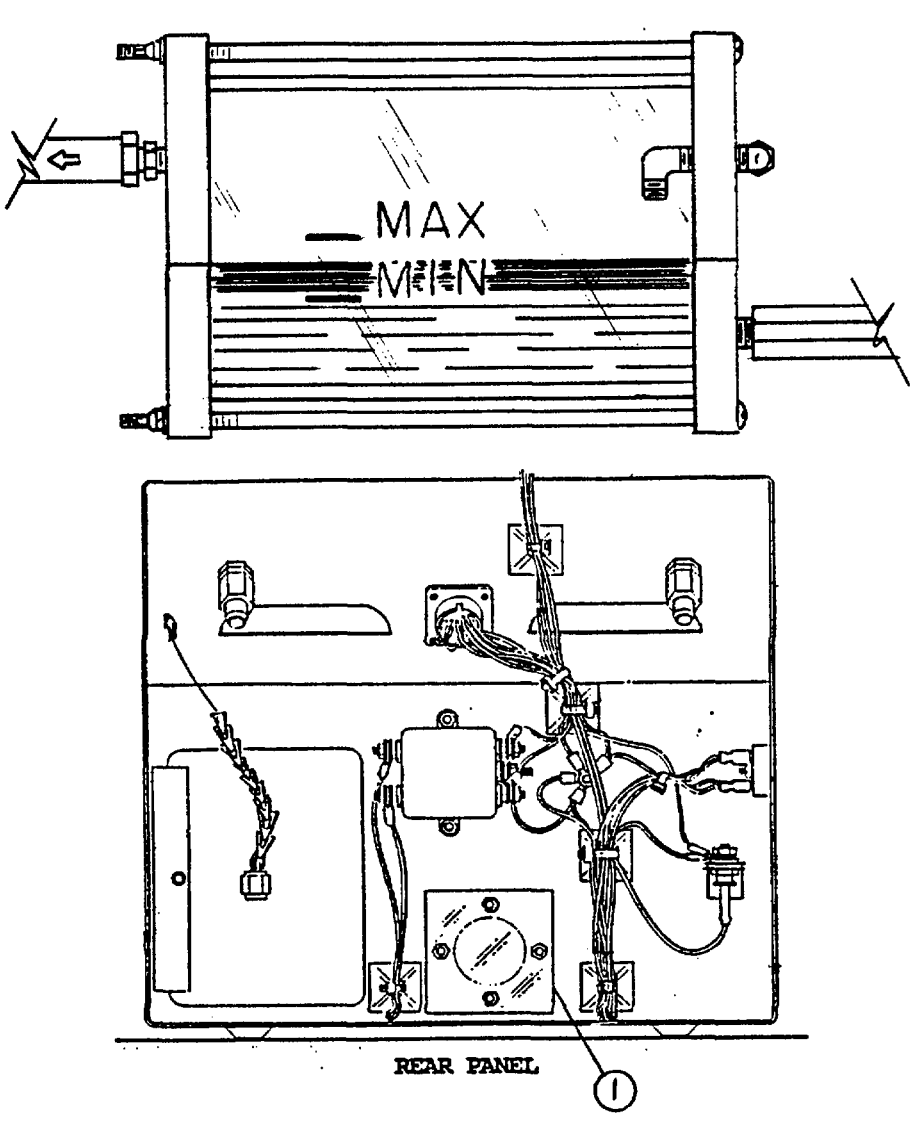
SECTION V - LUBRICATION LEVEL CHECK

2-10 OPERATION 2-10

To prepare the Tester for use; proceed as follows:

a. Place Tester on bench or platform where a source of DC or AC power are available.

b. Look through window item number (1) of the rear panel of Tester and observe oil level in reservoir. Oil level must be within maximum and minimum limits indicated on oil reservoir body. If oil level is low, fill reservoir in accordance with procedure given in para. 3-9.



CHAPTER 3

AVIATION UNIT MAINTENANCE (AVUM) INSTRUCTIONS

3-1 GENERAL 3-1

This chapter contains maintenance procedures that are the responsibility of the aviation unit maintenance technician as authorized by the Maintenance Allocation Chart (MAC) and Source Maintenance and Recoverability (SMR) coded items in the Repair Parts and Special Tools List (RPSTL). The maintenance procedures in this chapter are prepared in the form of summary and detailed procedures.

3-2 OPERATIONS 3-2

These instructions provide the proper technique and detailed procedures required to perform the maintenance operations. Each maintenance operation provides step-by-step instructions in the order in which the work is most logically accomplished. Any unusual or critical steps are covered in detail.

SECTION I - REPAIR PARTS, SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT

3-3 TOOLS AND TEST EQUIPMENT LIST 3-3

Tools and test equipment required for maintenance of the Pitot and Static Systems Tester are identified on page B4 through B8 to perform the operation.

3-4 SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT 3-4

There are no special tools required for test or inspection procedures at the AVUM level.

3-5 REPAIR PARTS 3-5

Repair parts are listed in the Repair Parts and Special Tools List (RPSTL), Appendix C of this manual.

SECTION II - SERVICE UPON RECEIPT

3-6 GENERAL 3-6

Visually check the exterior of the Pitot and Static Systems tester for any apparent damage. Check contents to assure that all components listed in the Repair Parts and Special Tools List (RPSTL) of this manual are enclosed and undamaged.

SECTION III - PREVENTIVE MAINTENNCE CHECKS AND SERVICES (PMCS)

3-7 GENERAL 3-7

Preventive maintenance for the Pitot and Static Systems Tester is covered by the following paragraphs as well as the Notes and Cautions in Chapter 2, and information listed in Table 2-1. These Notes and Cautions, if followed, assure that the equipment will be used in the proper manner.

3-8 CLEANING 3-8

CAUTION

Use a soft cloth dampened with a solution of mild soap and water or isopropyl alcohol for cleaning.

a. Keep equipment free of dirt and grease. Place protective cover over tester operator panel and external ports when not in use.

b. Clean load cells prior to use to assure good mating surfaces for the adapters.

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3-9 FILLING OIL RESERVOIR 3-9

Whenever the oil level of the reservoir falls below the minimum level indicated on the reservoir body, add oil conforming to MIL-H-5606 until oil is again at its proper level. See para. 2-9.

a. Open the access door (1) on the rear of the chassis to gain access to the filler valve port (2).

b. Unscrew cap (3) from nipple fitting on selector valve port pointing upward. Attach filler hose clockwise.

c. Set the valve handle (4) to the fill position, turning it 90 degrees clockwise.

d. Once the filler hose is tightened down, place the opposite end of the hose in a container of oil, MIL-H-5606.

e. On front of the chassis, set the power switch to “ON”; when level is within limits indicated on reservoir body, remove filler hose from oil container to allow for drainage of oil in hose. Set ON-OFF switch to "OFF".

f. Disconnect the filler hose from the filler valve port, reinstall cap, and change the selector valve to RUN position as shown.

g. Close the rear access door.

h. The unit is now ready to perform its functional tests.

Lubricant	Reservoir Capacity	Expected Temperatures	Intervals
Fluid Hydraulic MIL-H-5606	2.5 fl.oz.	All Temperatures	D-Daily 6M 6months

NOTES

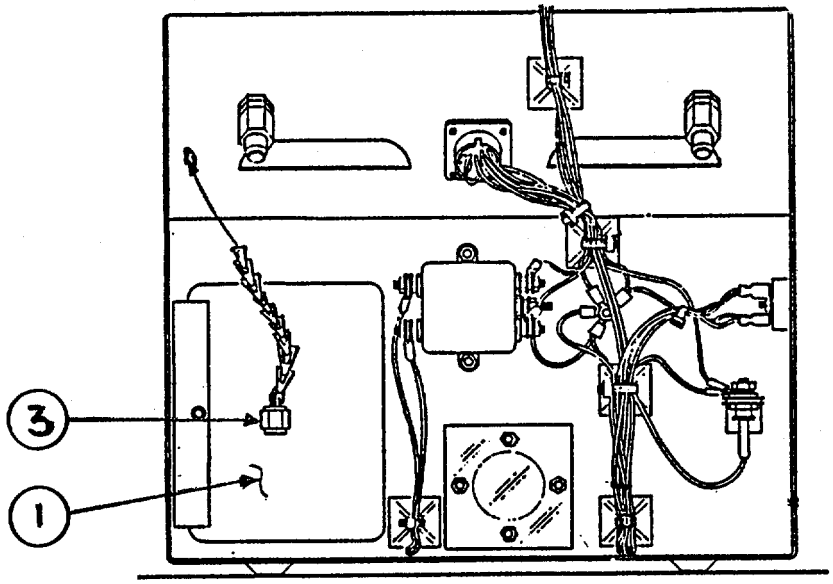
1. Check for the presence of oil in both sump bowls daily when tester is in use. Oil in sump indicates filters need cleaning or repair.

2. The oil in the reservoir shall be cleaned at monthly intervals, or more frequently if conditions warrant.

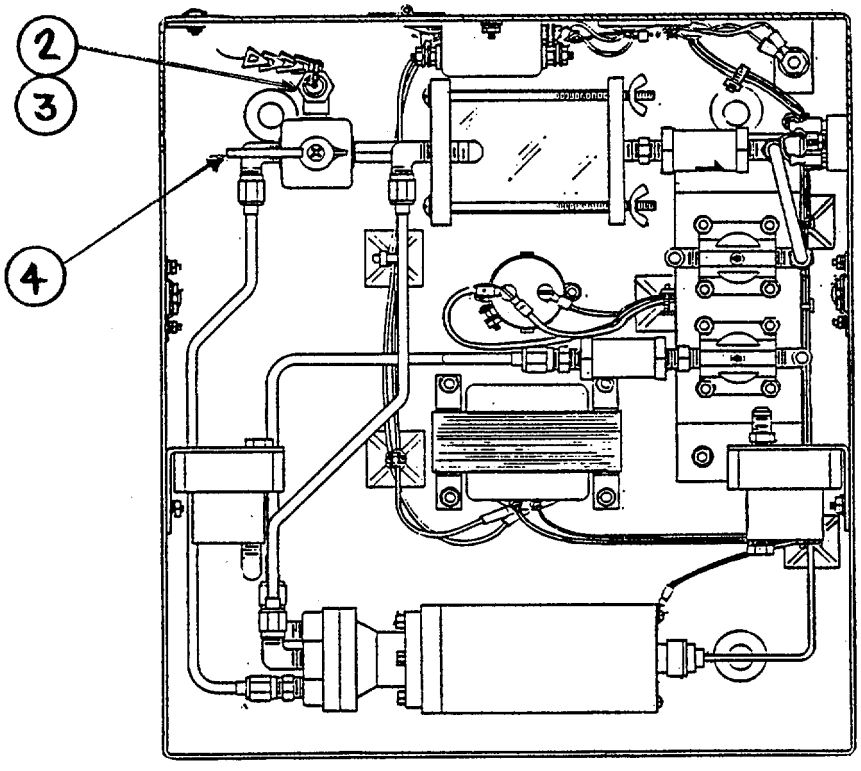
CAUTION

Do not operate pump for more than 10 seconds without oil in reservoir as it will damage pump.

3-9 FILLING OIL RESERVOIR 3-9



REAR PANEL



BOTTOM CHASSIS VIEW

3-10 DRAINING THE OIL SUMPS 3-10

The filters in the system are equipped with oil sumps which permit only air to enter the vacuum and pressure lines to the instruments. Once the oil collects to a level occupying more than 50 percent of the total glass area of the sumps, the sumps must be drained. To drain the sumps proceed as follows:

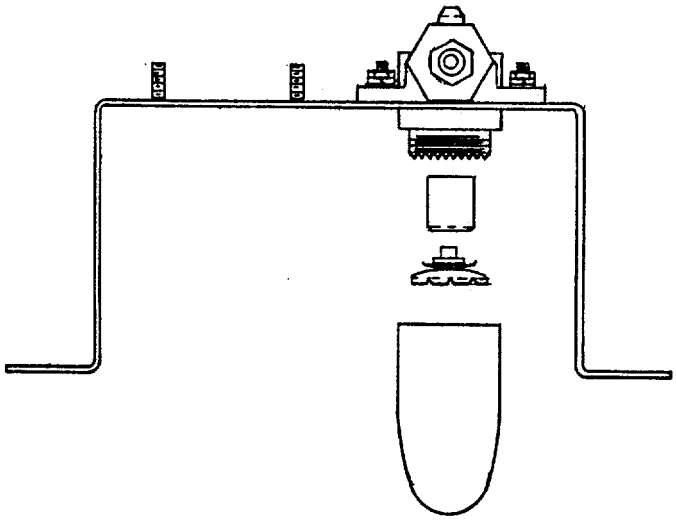
a. Loosen the fasteners on the control panel to gain access to the interior. (2 places).

b. Loosen sump bowl from sump mounting body and remove it from chassis to empty oil.

c. Clean bowl and filter with a lint free cloth dampened in alcohol (D7).

d. Secure bowl tightly into sump mounting body to prevent leakage.

e. Operate test set for maximum pressure as well as vacuum settings to insure no system's leaks exist.



3-11 PERFORMINCE CHECKS 3-11

a. A complete performance check of the Pitot and Static Systems Tester is not possible at the Aviation Unit Maintenance (AVUM) level because results cannot be verified without an accurate pressure and vacuum test gage.

b. Visually inspect the Aircraft Pitot and Static Systems Tester accessories, aircraft indicators, switch, fuse, fuseholder, indicator light, needle valves, selector valves, shut-off valves, connector, and power cables. Refer to the tasks in Chapter 3 and 4 for applicable procedures.

SECTION IV - TROUBLESHOOTING

3-12 GENERAL 3-12

Troubleshooting at the Aviation Unit Maintenance (AVUM) level is limited to checking the system for indications of normal operation and inspecting and replacing AC or DC cables and AC or DC fuses.

NOTE

Electrical components (except fuses and power cables) are factory calibrated and will not be replaced or interchanged in the field or erroneous readings may result.

If the unit is inoperative, switch to alternate power source (AC to DC, DC to AC). Check the initial power source for availability of power. If the source is functioning, inspect the appropriate power cable for signs of damaged, shorted or open wiring, or a faulty connector. If the cable checks are reliable, proceed with next task.

3-13 PITOT AND STATIC SYSTEMS TESTER INSPECTION 3-13

THIS TASK COVERS: INSPECTION

Initial set-up:	
Personnel Required:	68 F Aircraft Electrician
Parts:	Pitot and Static Systems Tester, P/N 10005071
Equipment Condition:	Power Disconnected Tester on Work Bench

a. Examine tester cover for damage.

b. Check that all operator panel and accessory components are accounted for and undamaged.

c. Check latches, hinges, and catches for damage.

d. Replace all missing parts: Refer to Appendix C.

e. Clean all components.

END OF TASK

3-14 ACCESSORY STORAGE INSPECTION 3-14

THIS TASK COVERS: INSPECTION, REMOVAL AND INSTALLATION

Initial Set-Up:	
Personnel Required:	68F Aircraft Electrician
Parts:	Accessory Storage Compartment Components.
Equipment Condition:	Power disconnected, cover removed from tester, storage compartment door open

1. INSPECTION
   a. Check that all components are accounted for and undamaged. Refer to Appendix C, figure C-1.

   b. Account for the following components.

ITEM	QTY	DESCRIPTION
1	2	6ft. hose assembly
2	1	1ft. hose assembly (filler hose)
3	1	5ft. hose assembly
4	1	D.C. power cable
5	2	A.C. 3-phase power cable
6	1	A.C. Single phase cable
7	1	Adaptor flush Static Port
8	1	Pitot head adaptor
9	1	Hose Clamp
10	1	Union Flared Tube Fitting

2 REMOVAL
   Remove any worn or damaged components from the storage compartment.

3. INSTALLATION
   Install new part(s) in storage compartment to replace worn or damaged components.

END OF TASK

SECTION V - MAINTENANCE PROCEDURES

3-15 FUSE - REPLACE 3-15

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:	
Personnel Required:	68F Aircraft Electrician
Tools/Test and Support Equipment:	Shop Set (B4)
Parts:	Fuse, 5 AMP., P/N 27F697
Equipment Condition:	Power disconnected.

1 REMOVAL

a. Remove fuse holder cap (1) from fuse holder body (2) turn 180 degrees counterclockwise.

b. Pull out holder cap (1) and remove fuse from fuse holder body (2).

c. Visually inspect fuse to see if it needs to be replaced.

2 INSTALLATION

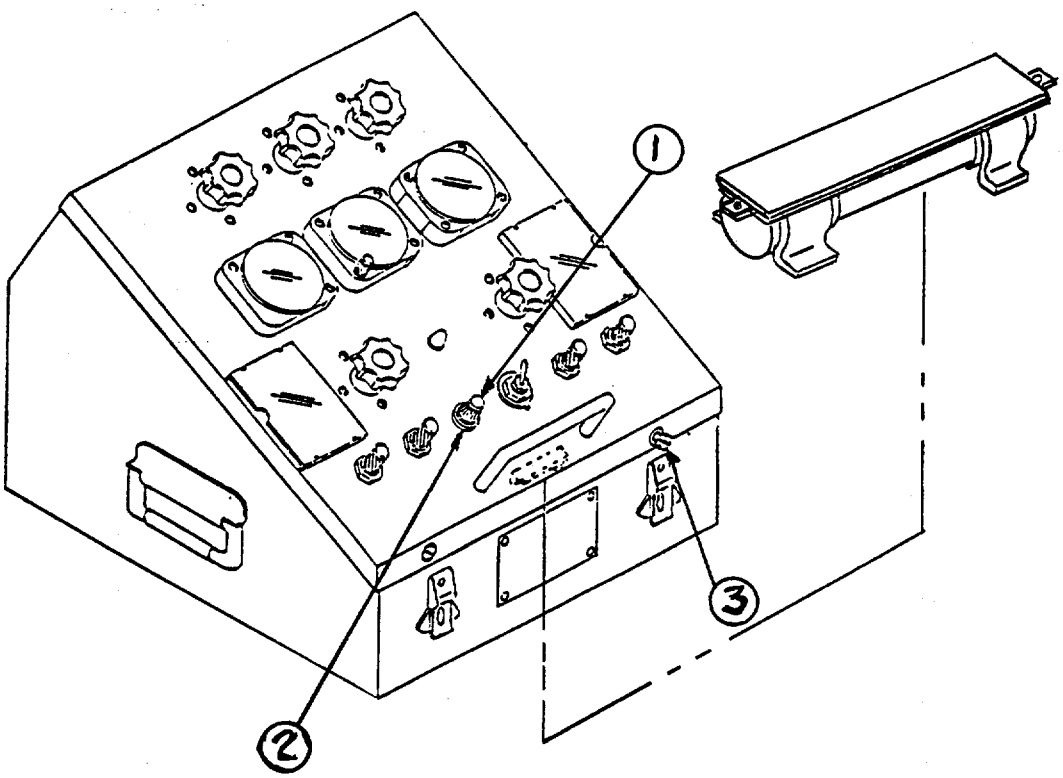
a. Remove control panel fasteners (3) with screwdriver by turning counterclockwise (Two places).

b. Open control panel and get fusefrom spare fuse holder on back side of control panel. Fuse is located under control panel handle.

c. Close control panel and turn fasteners (3) clockwise.

d. Install fuse into fuse holder cap (1) and place it into fuse holder body (2). Press down while turning 180 degrees clockwise.

GO TO NEXT PAGE



END OF TASK

SECTION VI - PREPARATION FOR STORAGE OR SHIPMENT

3-16 PREPARATION FOR STORAGE 3-16

The Pitot and Static Systems Tester may be stored using normal procedures. Instructions are provided in TM 55-1500-204-25/1. The case is drip proof when the lid is closed and secured.

3-17 PREPARATION FOR SHIPMENT 3-17

Preservation and packaging shall be level A or Level C. Packing shall be level A, Level B, or Level C of Specification MIL-P-116.

CHAPTER 4

AVIATION INTERMEDIATE MAINTENANCE (AVIM) -

MAINTENANCE INSTRUCTIONS

SECTIONS I - REPAIR PARTS, SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT

4-1. GENERAL 4-1

This chapter contains maintenance procedures that are the responsibility of the Aviation Intermediate Maintenance (AVIM) technician as authorized by the Maintenance Allocation Chart (MAC) and Source, Maintenance and Recoverability (SMR) coded items in the Repair Parts and Special Tools List (RPSTL). The maintenance procedures in this chapter are prepared in the form of summary and detailed procedures.

4-2. MAINTENANCE OPERATIONS 4-2

These instructions provide the proper technique and detailed procedures required to perform the maintenance operations. Each maintenance operation provides step-by-step instructions in the order in which the work is most logically accomplished. Any unusual or critical steps are covered in detail.

4-3 TOOLS AND TEST EQUIPMENT LIST 4-3

For authorized tools and test equipment refer to Appendix B.

4-4 REPAIR PARTS 4-4

Repair parts are listed in the Repair Parts and Special Tools List (RPSTL), APPENDIX C, of this manual.

SECTION II - SERVICE UPON RECEIPT

4-5 GENERAL 4-5

a. Visually check the exterior of the Pitot and Static Systems Tester for apparent damage. Check contents to assure that all components listed in APPENDIX C (RPSTL) of this manual are enclosed and undamaged.

b. If the equipment has been damaged, report the damage on SF 368, (Report of Discrepancies). Check the equipment against the packing slip to see if the shipment is complete. Report any discrepancies in accordance with the instructions of DA PAM 738- 751.

SECTION III - PREVENTIVE MAINANCE CHECIS AND SERVICE (PMCS)

4-6 GENERAL 4-6

Inspect Pitot and Static Systems Tester for missing or damaged components. Check for physical damage such as breaks, cracks, wear, etc.

4-7 CLEANING 4-7

WARNING

Isopropyl alcohol is flammable and toxic. Use with adequate ventilation, gloves and eye protection. Do not use around heat, open flames or sparks.

CAUTION

Use a soft cloth dampened with isopropyl alcohol for cleaning. Keep equipment free of dirt and grease. Place protective cover over the tester when not in use.

4-8 LUBRICATION 4-8

Perform the following services before operating the Tester.

a. Lubricate in accordance with instructions contained in Chapter 3 (or para. 3-9).

b. Perform the before operation services listed in the Operator's/Crew preventive maintenance checks and services table 2-1.

4-9 EXTREME ENVIRONMENTAL MAINTENANCE 4-9

There are no requirements for extreme environmental maintenance for the Pitot and Static Systems Tester.

4-10 CALIBRATION 4-10

Calibration of the Pitot and Static Systems Tester will be performed by a TMDE Support Team, in accordance with guidelines specified in Calibration and Repair Requirements for the Maintenance of Army Materiel (TB 43-180).

SECTION IV - TROUBLESHOOTING

4-11 GENERAL 4-11

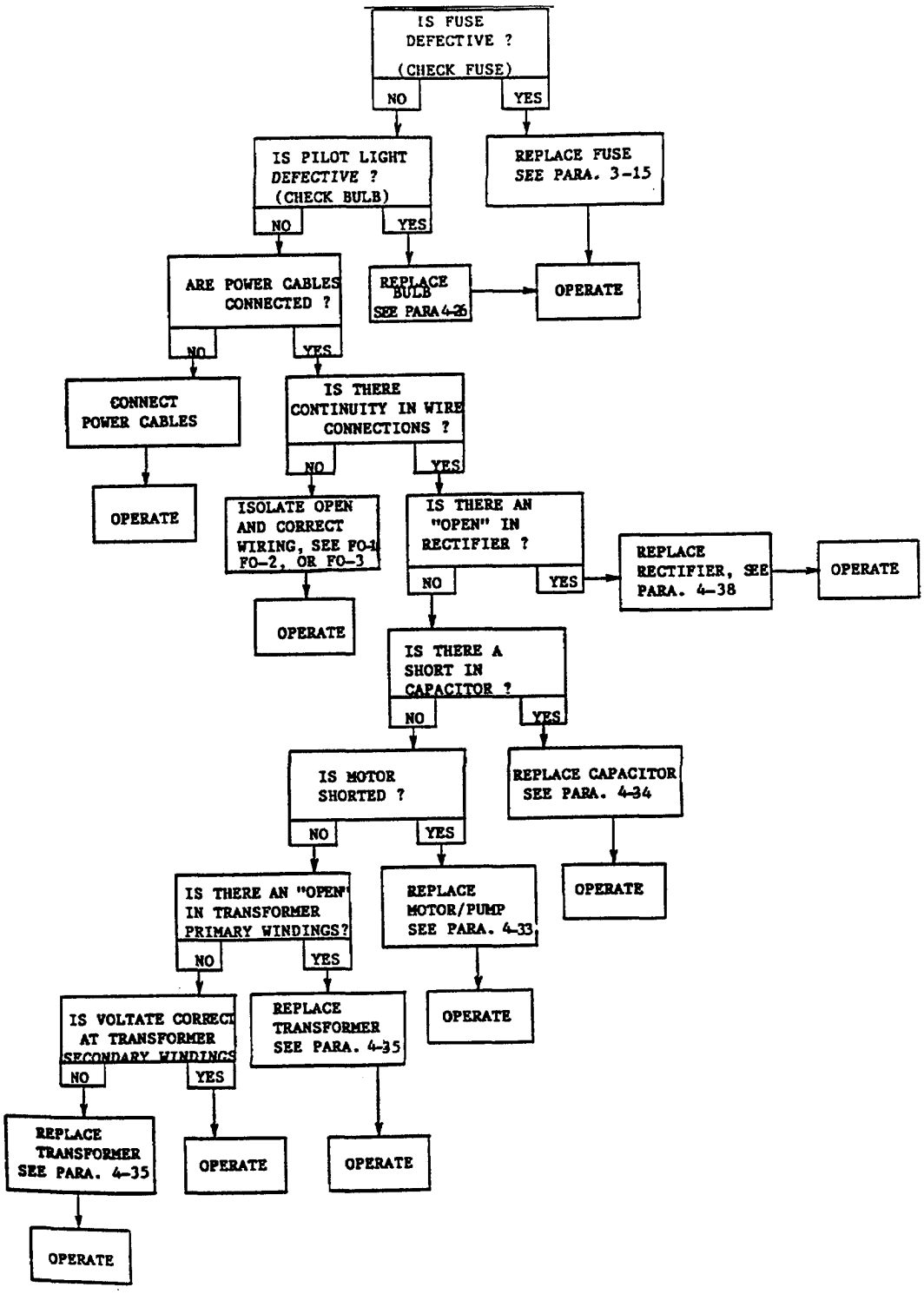
A list of possible failures to the Pitot and Static Systems Tester as well as probable cause and corrective action are shown in the following fault isolation block diagrams. Corrective actions, as shown in the following trouble shooting diagram, are outlined in the applicable removal/replacement paragraphs in the text of this manual.

4-12 PIVOT AND STATIC SYSTEMS TESTER INSPECTION/FAULT ISOLATION 4-12

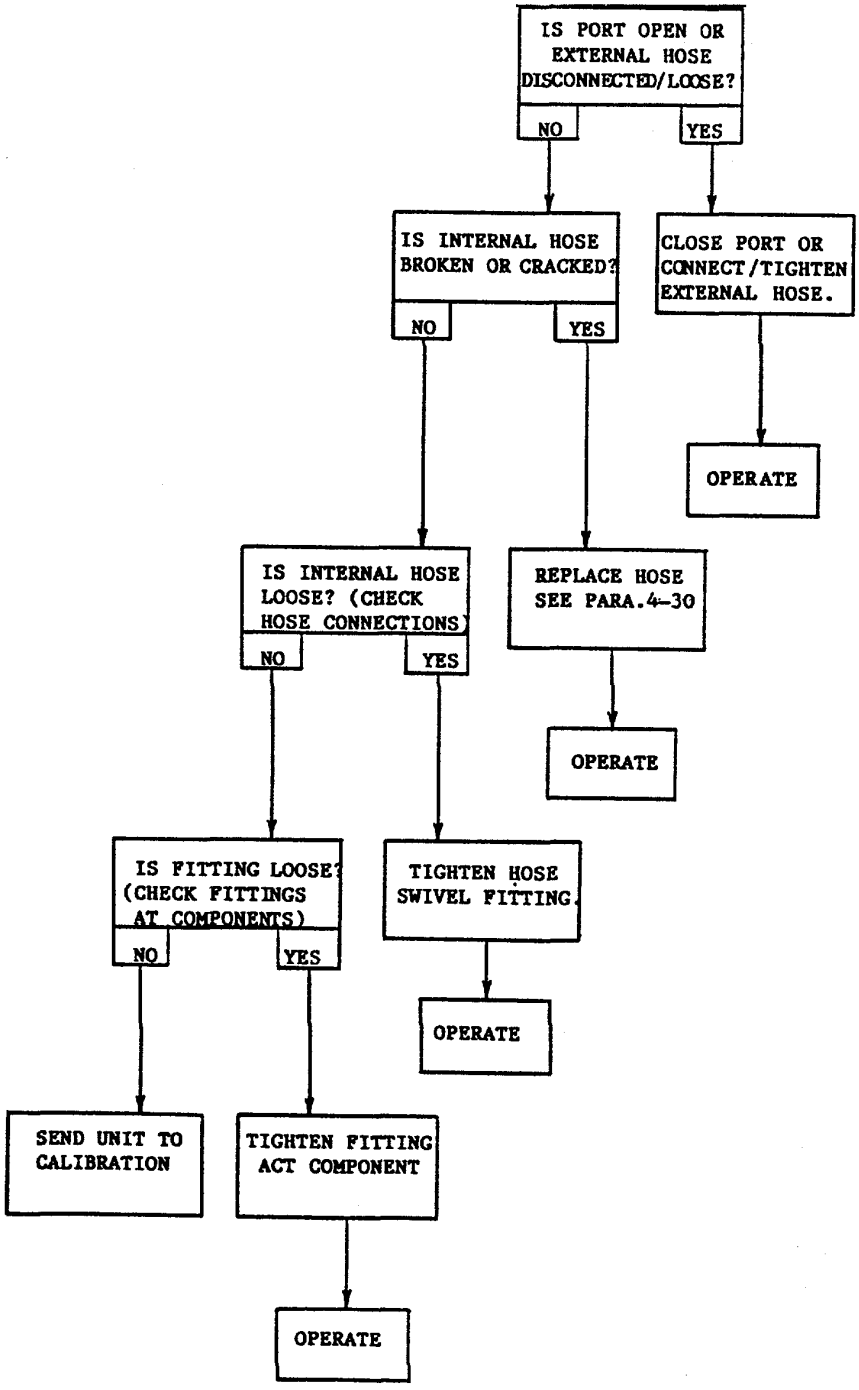
Initial Set-Up:

Personnel Required:	68F Aircraft Electrician or 35H, Test, Measurement Diagnostic Equipment (TMDE) Support Specialist
Tools/Test and Support Equipment:	Tool Kit (B2) or Shop Set (B4)
Equipment Condition:	Tester on Work Bench

4-12 TROUBLESHOOTING PROCEDURE 1: MOTOR AND/OR PILOT LIGHT DOES NOT TURN ON. 4-12



4-12 TROUBLESHOOTING PROCEDURE 2: TESTER DOES NOT (CONT.) BUILD OR HOLD PRESSURE (AIRSPEED/VACUUM ALTIMETER) 4-12



SECTION V - MAINTENANCE PROCEDURES

4-13 MAINTENANCE PROCEDURES - GENERAL 4-13

When a maintenance procedure is required, it usually will involve removal of the part being repaired or replaced. Renewal procedures are given only to the extent necessary to repair or replace authorized parts.

4-14 PITOT AND STATIC SYSTEMS TESTER CALIBRATION 4-14

Maintenance of the Pitot and Static Systems Tester consists of periodic recalibration. Calibration cannot be performed at AVIM level because a calibrated pressure/vacuum test gauge is required.

4-15 RATE OF CLIMB INDICATOR 4-15

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:	
Personnel Required:	68F Aircraft Electrician or 35H, TMDE Support Specialist
Tools/Test and Equipment	Tool Kit (B2) or Shop Set(B4)
References:	TB 43-180
Material/Parts:	Rate of climb indicator
Equipment Condition:	Power disconnected, control panel open

1. REMOVAL
   a. Disconnect hose and fittings from end of indicator.
   b. Remove three nuts (1), lock washers (2), and flat washers (3) from inside tester.
   c. Remove three screws (4) securing indicator to control panel (6).
   d. Remove indicator (5) from tester control panel (6).
2. INSTALLATION
   a. Install indicator (5) in control panel (6) and align mounting holes.
   b. Secure indicator (5) to control panel (6) with three screws (4) from outside tester and install three flat washers (3) three lock washers (2) and three nuts (1). Tighten nut to lockwasher and secure assembly.
   c. Connect hose and fittings to port at end of indicator.

FOLLOW ON MAINTENANCE
Calibration (TB 43-180)
Performance check (para. 2-5)

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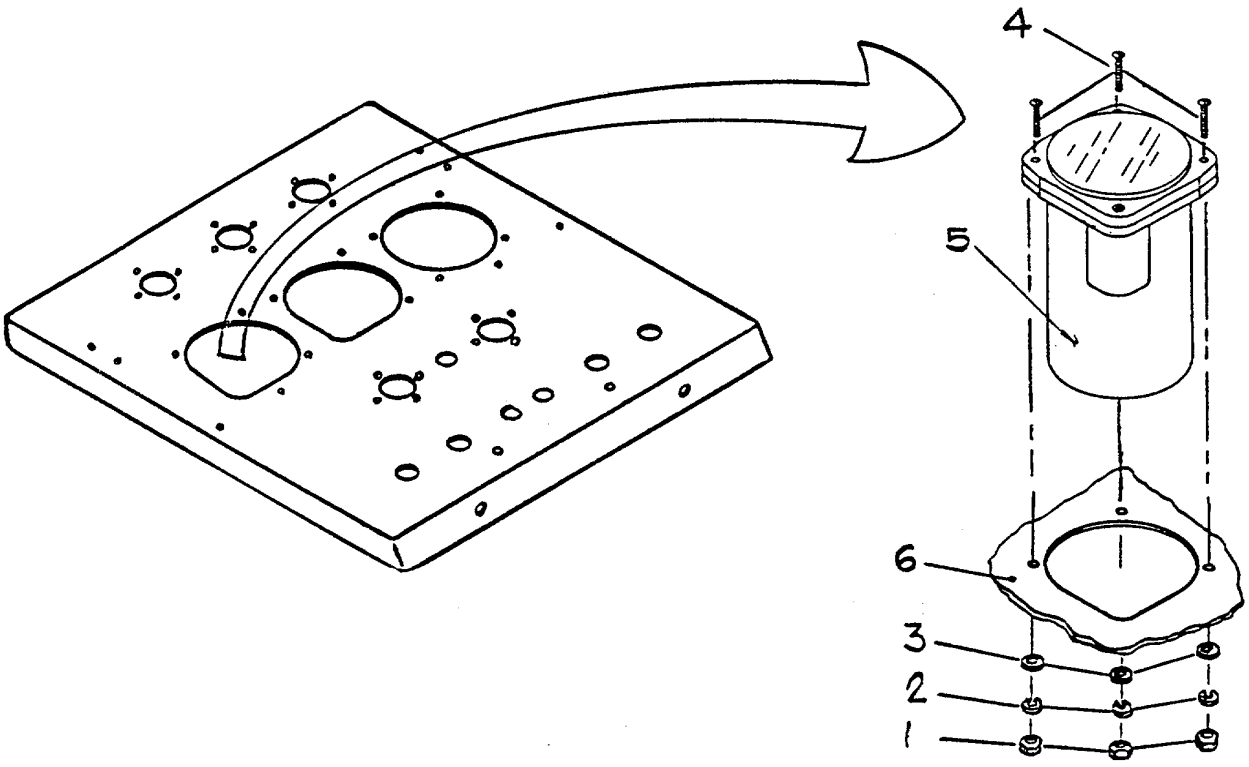
4-15 RATE OF CLIMB INDICATOR (CONT.) 4-15



END OF TASK

4-16 ALTIMETER 4-16

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:	
Personnel Required:	68F Aircraft Electrician or 35H TIDE Support Specialist
Tools and Equipment:	Tool kit (B2) or Shop Set (B4)
Material/Parts:	Altimeter, Tape (D9)
References:	TB 43-180
Equipment Condition:	Power disconnected, control panel open

1. REMOVAL
   a. Disconnect hose and fitting from end of altimeter.
   b. Remove three nuts (1), lock washers (2), and flat washers (3) frominside tester.
   c. Remove three screws (4) securing altimeter(s) to control panel (6).
   d. Remove altimeter (5) from tester control panel (6).
2. INSTALLATION
   a. Install altimeter (5) in control panel (6) and align mounting holes.
   b. Secure altimeter (5) to control panel (6) with three screws (4) from outside tester and install three washers (3), lock washers (2), and nuts (1).
   c. Apply tape (D9) to fitting threads.
   d. Connect hose and fitting to port at end of altimeter.

FOLLOW ON MAINTENANCE
Calibration (TB 43-180)
Performance check (para. 2-5)

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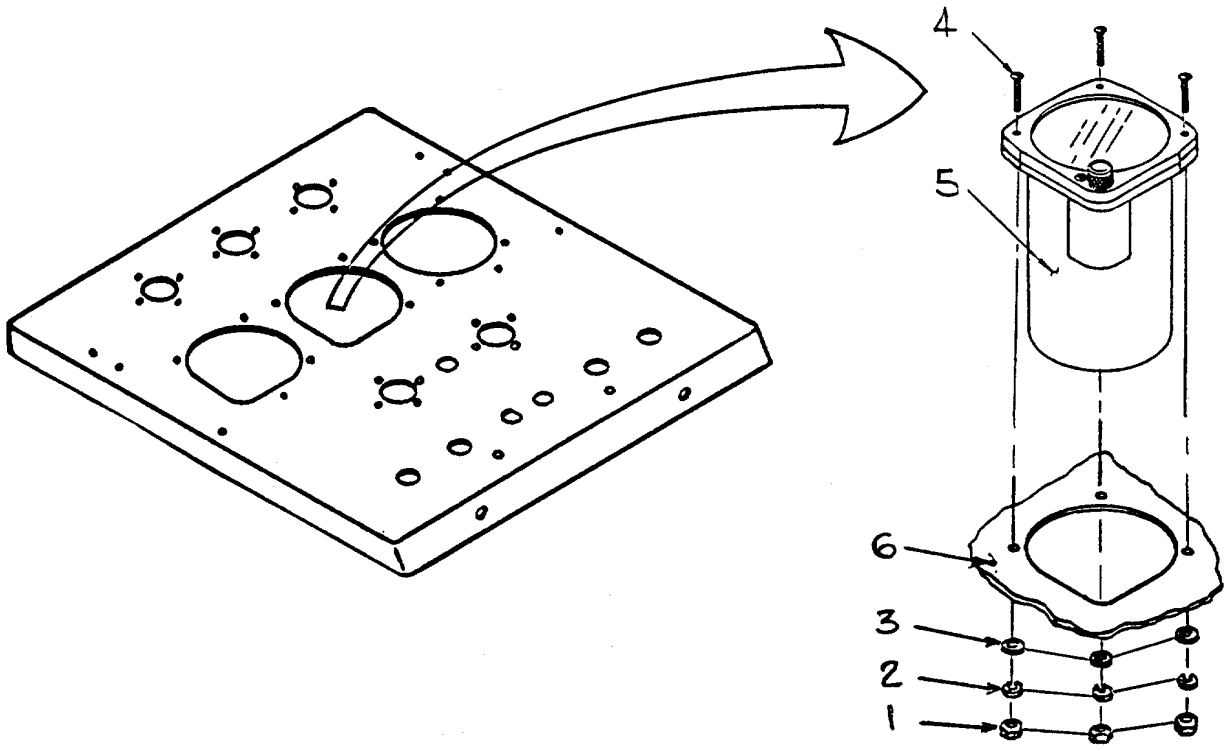

END OF TASK

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment:: Tool kit (B2) or Shop Set (B4)

Material/Parts: Airspeed Indicator, Tape (D9)

References: TB 43-180

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:
   a. Disconnect hose and fitting from end of airspeed.

   b. Remove three nuts (1), lock washers (2) and flat washers (3) from inside tester.

   c. Remove four screws (4) securing indicator (5) from control panel (6).

   d. Remove airspeed indicator (5) from tester control panel (6).

2. INSTALLATION:
   a. Install altimeter (5) in control panel (6) and align mounting holes.

   b. Secure airspeed (5) to control panel (6) with four screws (4) from outside tester and install three flat washers (3), lock washers (2), and nuts (1).

   c. Apply tape (D9) to fitting.

   d. Connect hose and fitting to port at end of airspeed indicator.

FOLLOW ON MAINTENANCE
Calibration (TB 43-180)
Performance check (para. 2-5)

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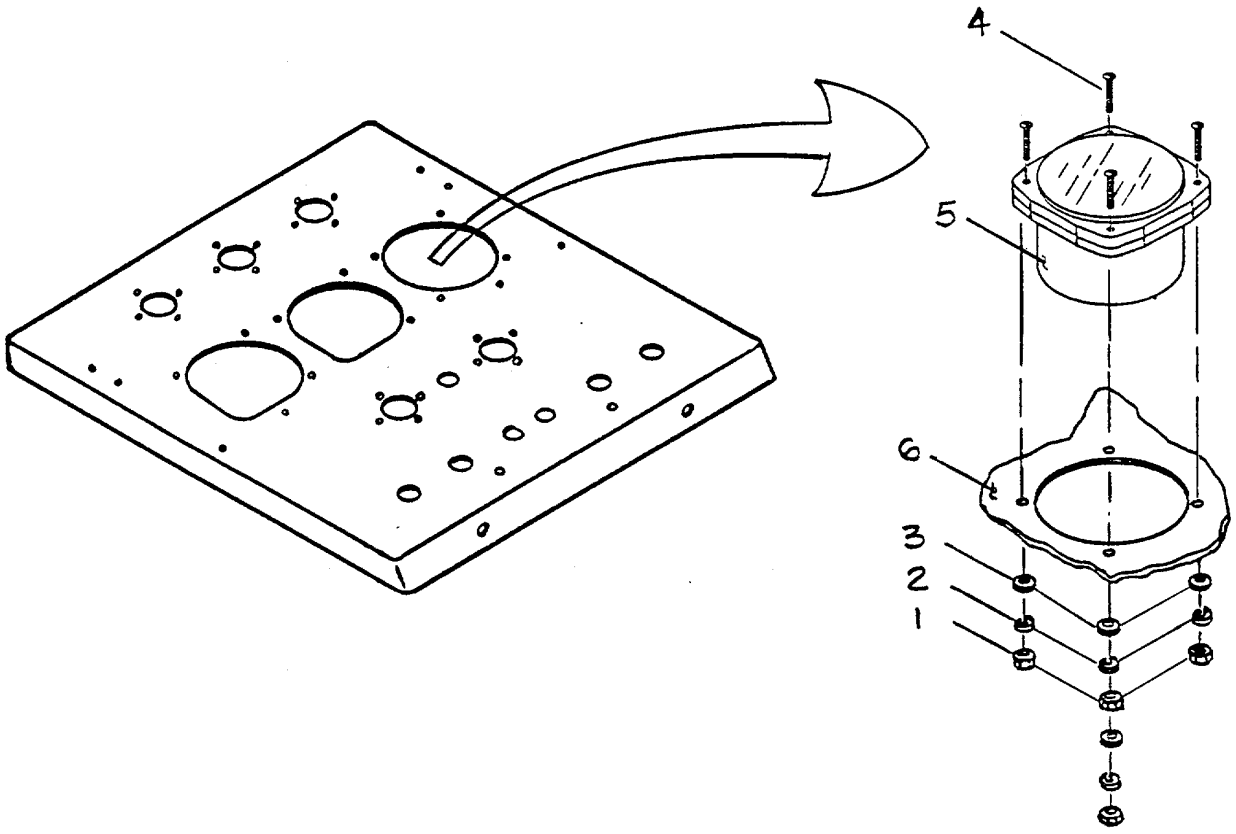
4
5
6
3
2
1

4-18 PRESSURE THREE WAY SELECTOR VALVE 4-18

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:	
Personnel Required:	68F Aircraft Electrician or 35H TMDE Support Specialist
Tools and Equipment:	Tool Kit (B2) or Shop Set (B4)
Material/Parts:	Selector valve, Tape (D9)
Equipment Condition:	Power disconnected, control panel open

1. REMOVAL:

a. Position knob white marking on “OFF” position, remove screw (1) from end of knob; loosen two allen screws mounted on side of knob remove knob (2) from valve.

b. Remove mounting screws (3) from panel (4).

c. Disconnect hoses from valve fittings (5).

d. Remove elbow fitting from valve (6).

2. INSTALLATION:

a. Apply tape (D9) on to elbow fittings (5) before installing into valve.

b. Install elbow fittings into valve.

c. Position valve (5) into panel (4) per note and secure with four screws (3).

d. Place knob (2) on valve stem and orient to panel and stem position. Tighten two allen screws to valve stem flats.

e. Install screw (1) through knob to valve stem.

f. Install rubber hoses back to their respective location. If needed use pneumatic system diagram fig. C-4.

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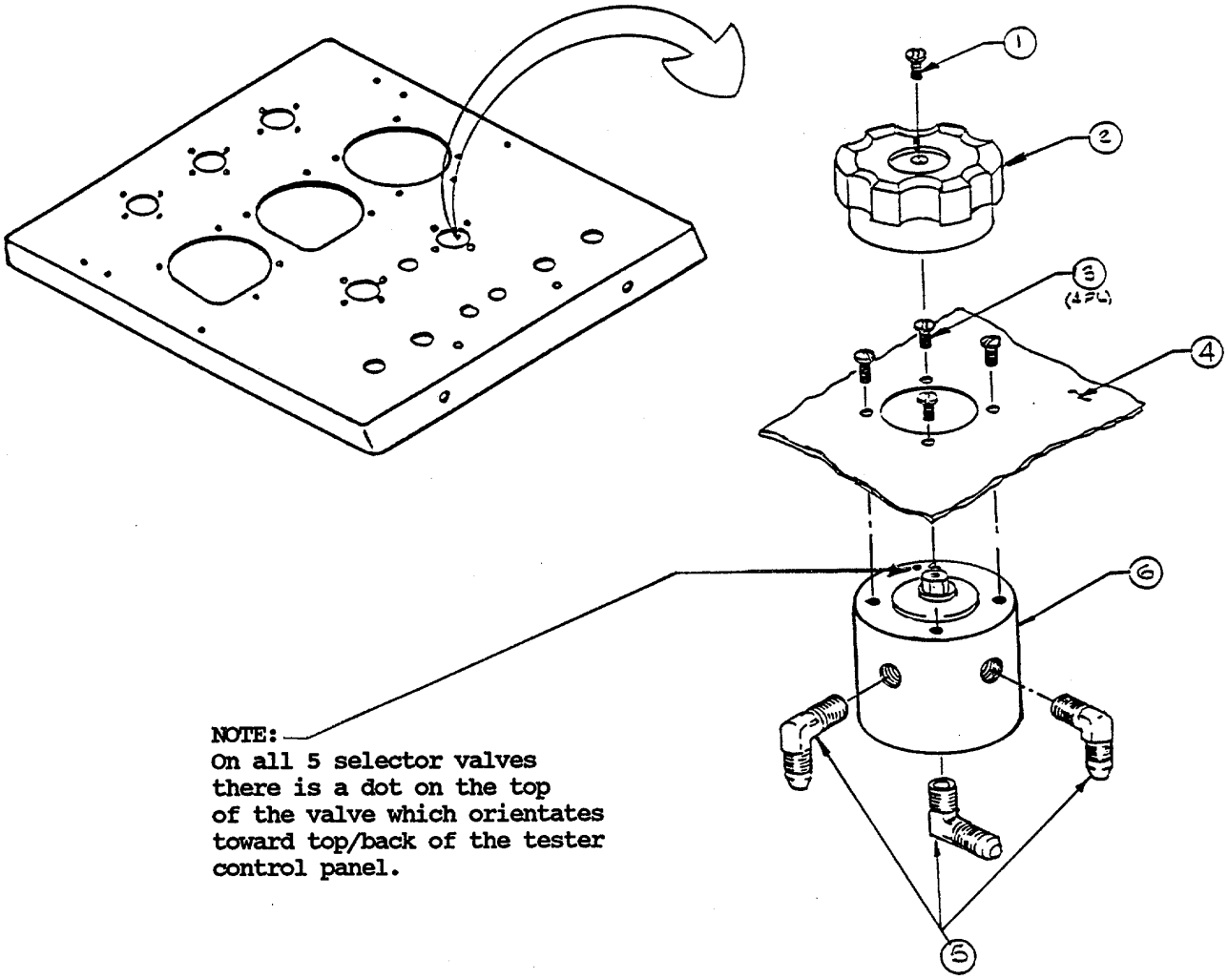
1
2
3
(4 PL)
4
6
5
NOTE:
On all 5 selector valves there is a dot on the top of the valve which orientates toward top/back of the tester control panel.

END OF TASK

4-19 RATE OF CLIMB TWO-WAY SHUT-OFF VALVE 4-19

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:	
Personnel Required:	68F Aircraft electrician or 35H TMDE Support Specialist
Tools and Equipment:	Tool Kit (B2) or Shop Set (B4)
Material/Parts:	Shut off valve, Tape (D9)
Equipment Condition:	Power disconnected, control panel open

1. REMOVAL:

a. Position knobs white marking on '"OFF", position, then Remove screw (1) from end of knob, loosen two allen screws mounted on side of knob, then remove knob (2) from valve.

b. Remove mounting screws (3) from panel (4).

c. Disconnect hoses from all fittings on valve (5).

d. Remove elbow fitting (6) from valve.

e. Remove tee fitting (7) from bottom of valve.

2. INSTALLATION:

a. Apply tape (D9) on all threaded fittings (6 & 7).

b. Install elbow & tee fittings, on valve.

c. Position valve (5) into panel (4) and secure with four screws (3).

d. Place knob (2) on valve stem and orient to panel and stem position. Tighten two allen screws to valve stem flats.

e. Install screw (1) through knob to valve stem.

f. Install rubber hoses back to their respective location. If needed use pneumatic system diagram fig. C-4.

Performance check (para. 2-5)

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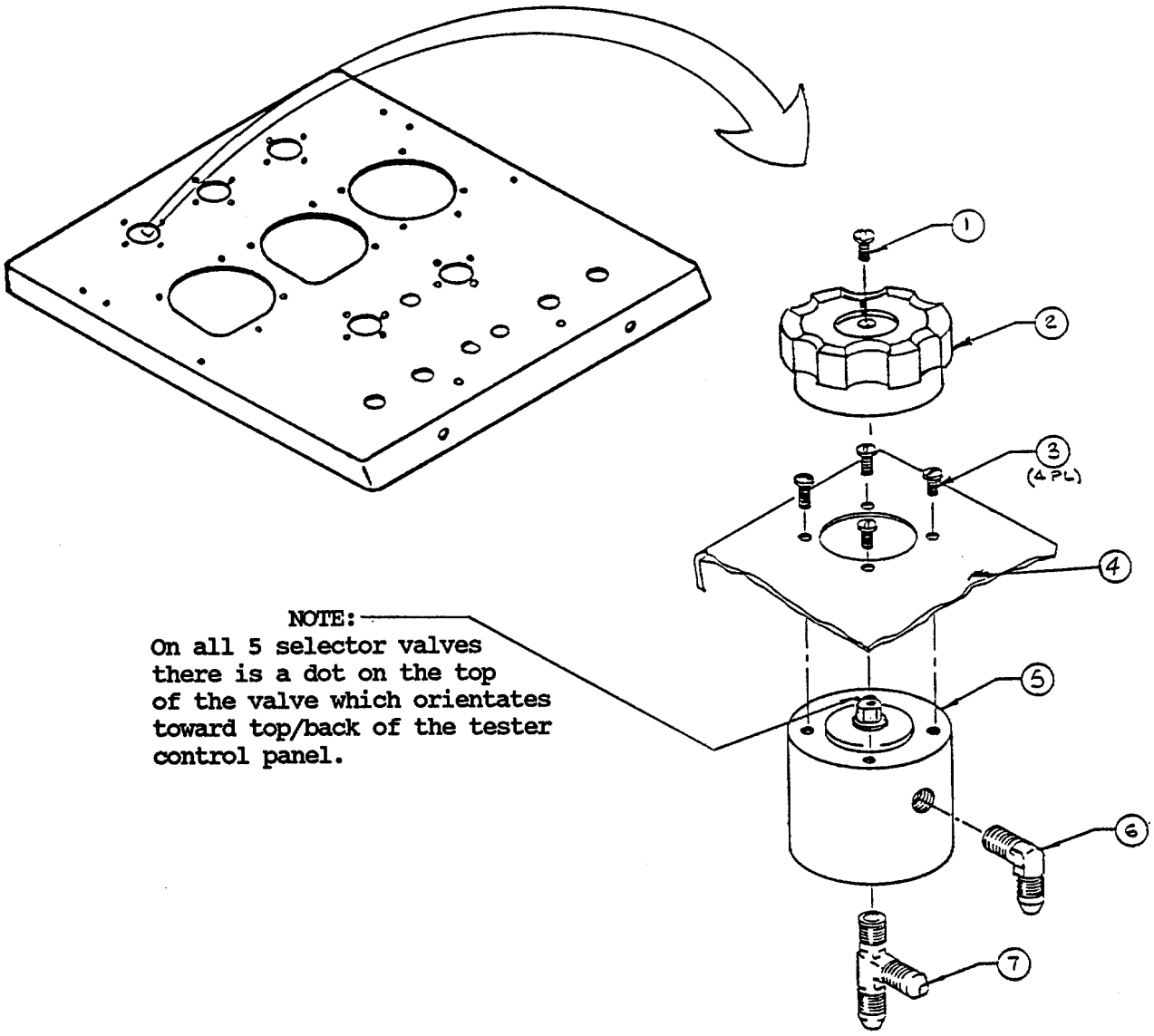

NOTE:
On all 5 selector valves there is a dot on the top of the valve which orientates toward top/back of the tester control panel.

END OF TASK

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment: Tool Kit (B2) or Shop Set (B4)

Material/Parts: Shut off valve, Tape (9)

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:

a. Remove screw (1) from end of knob (2), loosen two allen screws mounted on side of knob, then remove knob from valve.

b. Remove mounting screws (3) from panel (4).

c. Disconnect hoses from valve fittings.

d. Remove elbow fittings (6) from valve.

e. Remove tee fitting (7) from valve.

2. INSTALLATION:

a. Apply tape (D9) to fittings (6 & 7).

b. Install fittings into valve.

c. Install rubber hose to fittings before mounting valve.

d. Position valve (5) into panel (4) per note and secure it. with four screws (3).

e. Place knob (2) on valve stem and orient to panel and stem position. Tighten two allen screws to valve stem flats.

f. Install screw (1) through knob to valve stem.

g. Install rubber hoses back to their respective location, If needed use pneumatic system diagram fig. C-4.

Performance check (para. 2-5)

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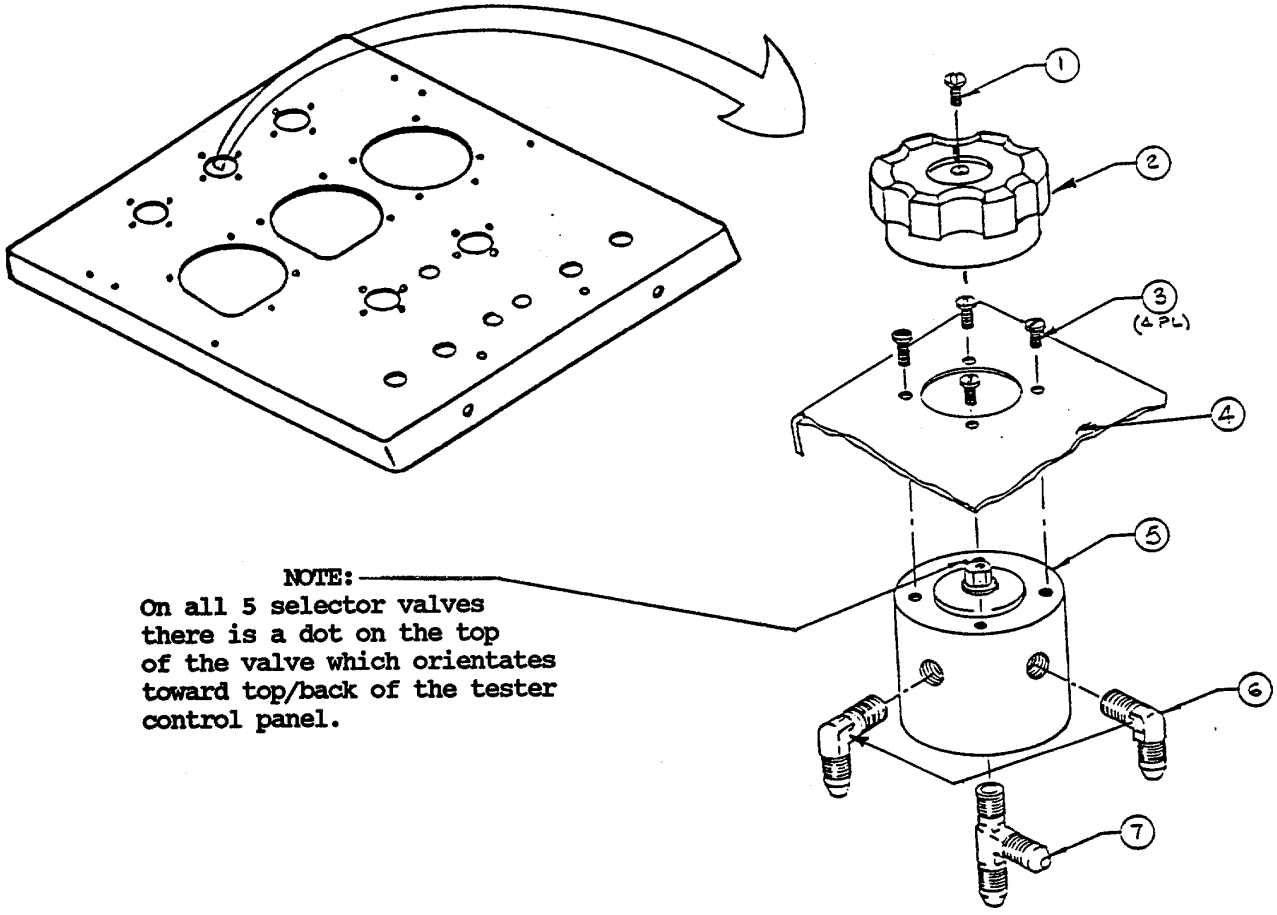

NOTE:
On all 5 selector valves there is a dot on the top of the valve which orientates toward top/back of the tester control panel.

END OF TASK

4-21 AIRSPEED SHUT-OFF VALVE 4-21

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:	68F Aircraft Electrician or
Personnel Required:	35H, Calibration and Repair Specialist.
Tools and Equipment:	Tool kit, (B2) or Shop Set (B4)
Material/Parts:	Airspeed shut-off valve
Equipment Condition:	Power disconnected, control panel open

1. REMOVAL:
   a. Remove screw (1) from end of knob (2), loosen two allen screws mounted on side of knob, remove knob from valve (5).

   b. Remove mounting screws (3) from panel (4).

   c. Disconnect hoses from valve fitting (6 & 7).

   d. Remove elbow fittings (6) from valve.

   e. Remove tee fitting (7) from valve.

2. INSTALLATION:
   a. Apply tape (D9) to elbow & tee fitting threads (6 & 7).

   b. Install fittings into valve.

   c. Install rubber hose to elbow fitting.

   d. Position valve (5) into panel (4) per note and secure with four screws (3).

   e. Place knob (2) on valve stem and orient to panel and stem position. Tighten two allen screws to valve stem flats.

   f. Install screw (1) through knob to valve stem.

   g. Install rubber hoses back to their respective location, If needed use pneumatic system diagram fig. C-4.

Performance check (para. 2-5)

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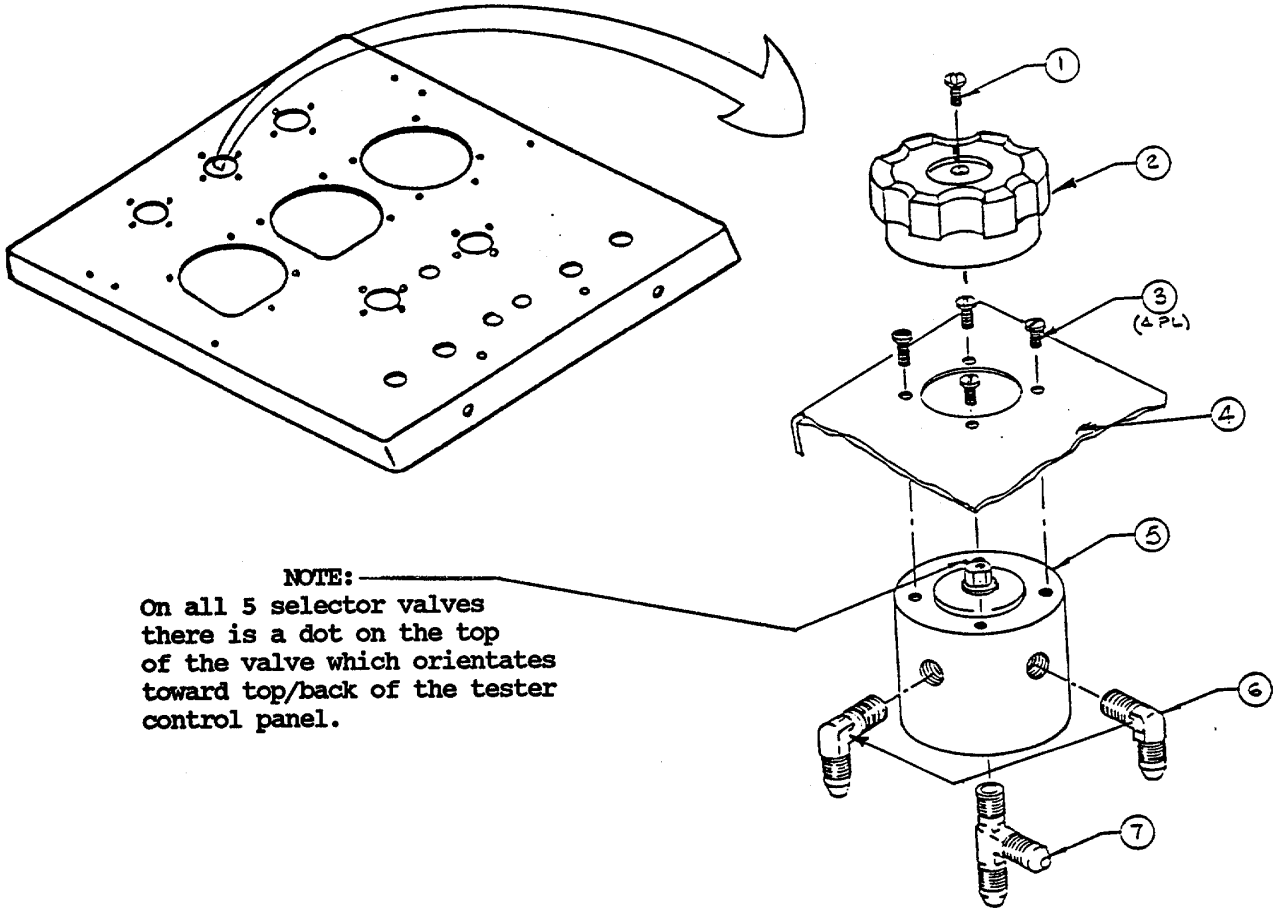
1
2
3
(4 PL)
4
5
6
7
NOTE:
On all 5 selector valves there is a dot on the top of the valve which orientates toward top/back of the tester control panel.

END OF TASK

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment: Tool kit (B2) or Shop Set (B4)

Material/Parts: Shut off Valve, Tape (D9)

Equipment Condition: Power disconnected, control panel open

1. REMOVAL

   a. Remove screw (1) from end of knob (2), loosen two allen screws mounted on side of knob, then remove knob from valve.

   b. Remove mounting screws (3) from panel (4).

   c. Disconnect hoses from all fittings on valve (5).

   d. Remove nipple (6) from valve.

   e. Remove elbow (7) from valve.

2. INSTALLATION:

   a. Apply tape (D9) on all threaded fitting ends.

   b. Install elbow (7) back to bottom port of valve.

   c. Install nipple pipe thread fitting (6) into side of port.

   d. Position valve (5) into panel (4) as per note and secure with four screws (3).

   e. Place knob (2) on valve stem and orient to panel and stem position. Tighten two allen screws to valve stem flats.

   f. Install screw (1) through knob to valve stem.

Performance check (para. 2-5)

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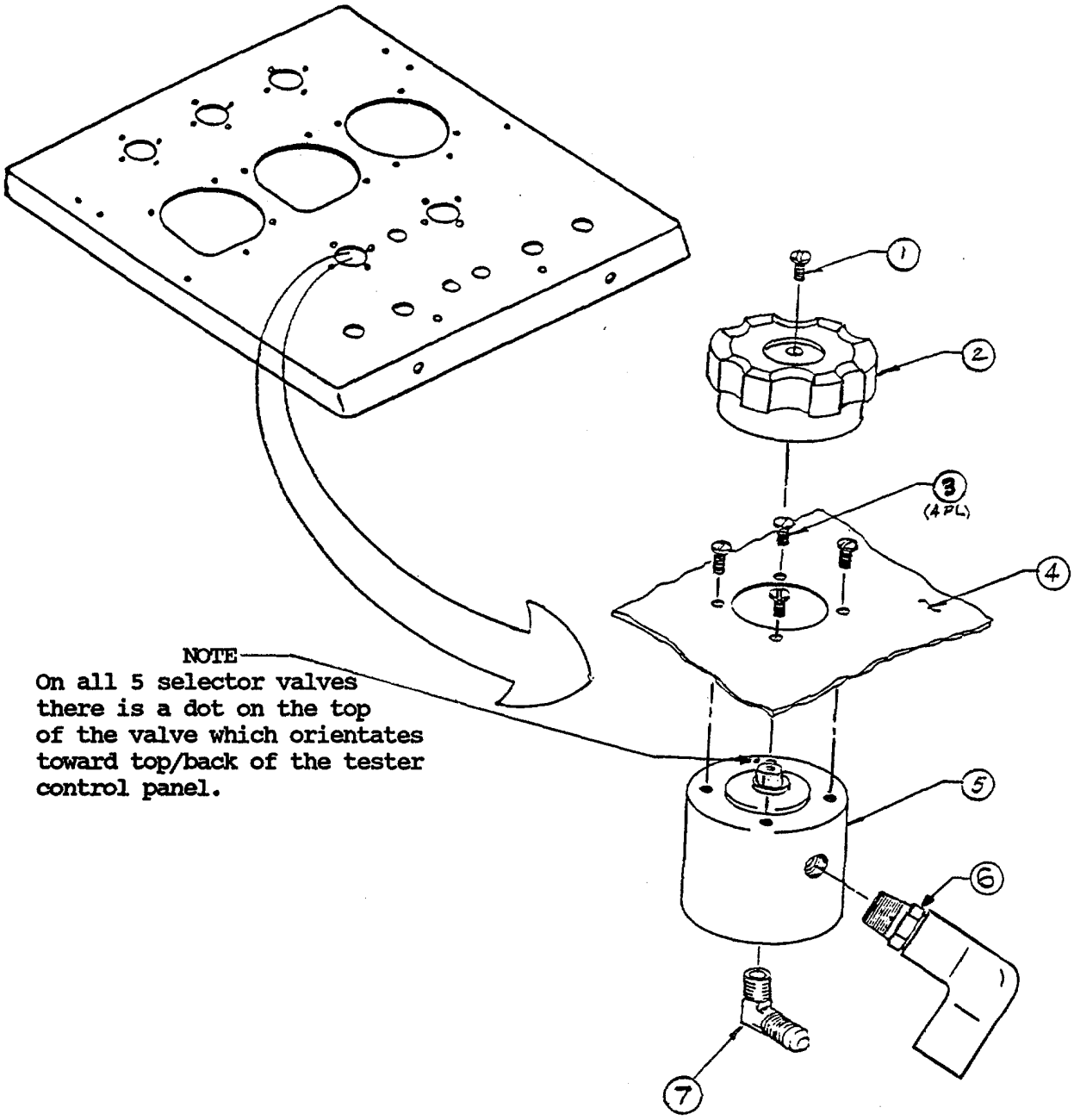

NOTE
On all 5 selector valves there is a dot on the top of the valve which orientates toward top/back of the tester control panel.

END OF TASK

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:	
Personnel Required:	68F Aircraft Electrician or 35H TMDE Support Specialist
Tools and Equipment::	Tool kit (B2) or Shop Set (B4)
Material/Parts:	Needle valve, Tape (D9)
Equipment Condition:	Power disconnected, control panel open

1. REMOVAL
   a. Disconnect hose(s) from fitting(s).

   b. Remove fitting(s) and vent plug (1) (as required) from needle valve (2).

   c. Remove panel mounting nut (3), washer (4), and remove needle valve from panel (5).

2. INSTALLATION:
   a. Apply tape (D9) to fitting(s) and vent plug threads (as required).

   b. Install fitting(s) and vent plug (as required) into needle valve (2).

   c. Position valve (2) into panel (5) and secure with panel mounting nut (3) and washer (4).

   d. Connect hoses to fitting(s).

Performance check (para. 2-5)

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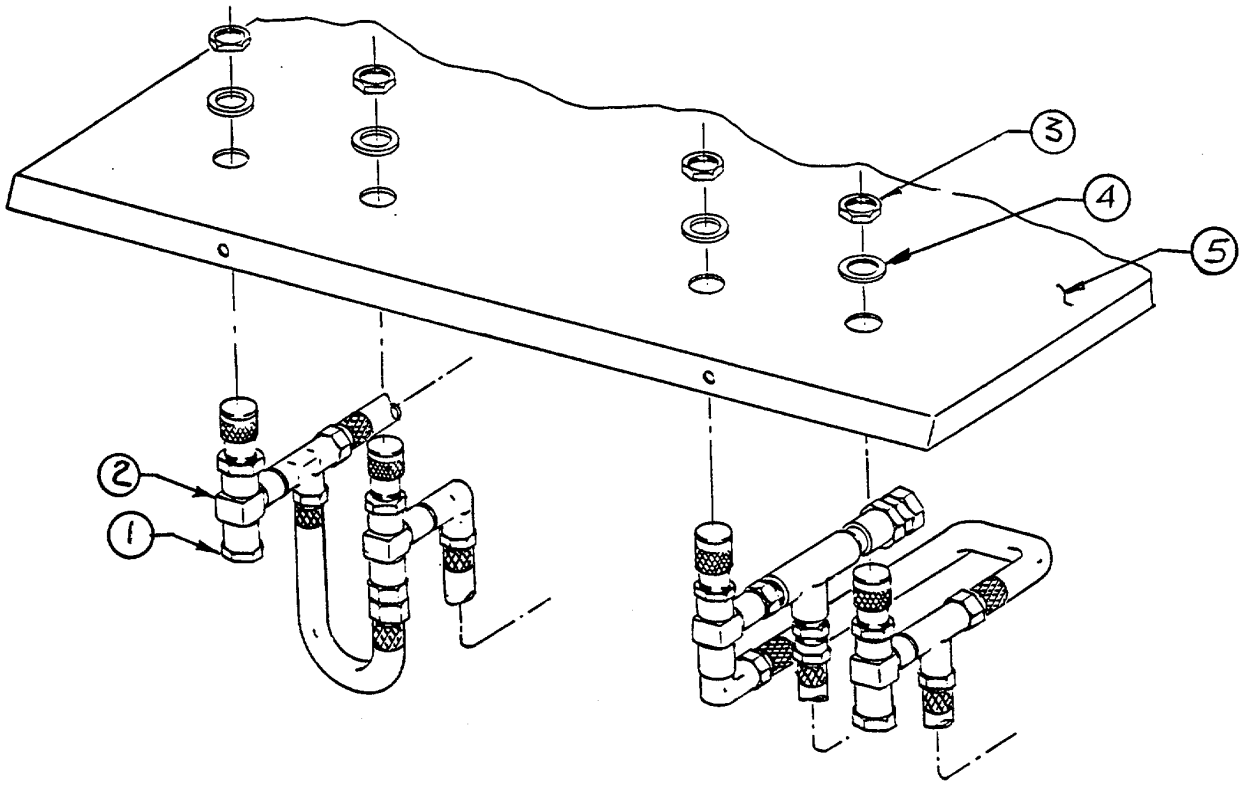

END OF TASK

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment: Tool kit (B2) or Shop Set (B4)

Material/Parts: Toggle Switch, Heat Shrink (D5), Solder (D8)

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:
   a. Remove wire from switch leads.

   b. Remove mounting nut (1), washers (2) from top of operator panel (3).

   c. Remove switch (4) from the bottom of the operator panel (3).

2. INSTALLATION:
   a. Mount switch (4) into operator panel (3) from the bottom up with mounting nut (1), washers (2).

   b. Secure switch (4) to operator panel (3) by installing mounting washers (2) and nut (1) from top of panel.

   c. Solder two wires to switch using solder (DS) and cover connections with heat shrink (D5).

Performance check (para. 2-5)

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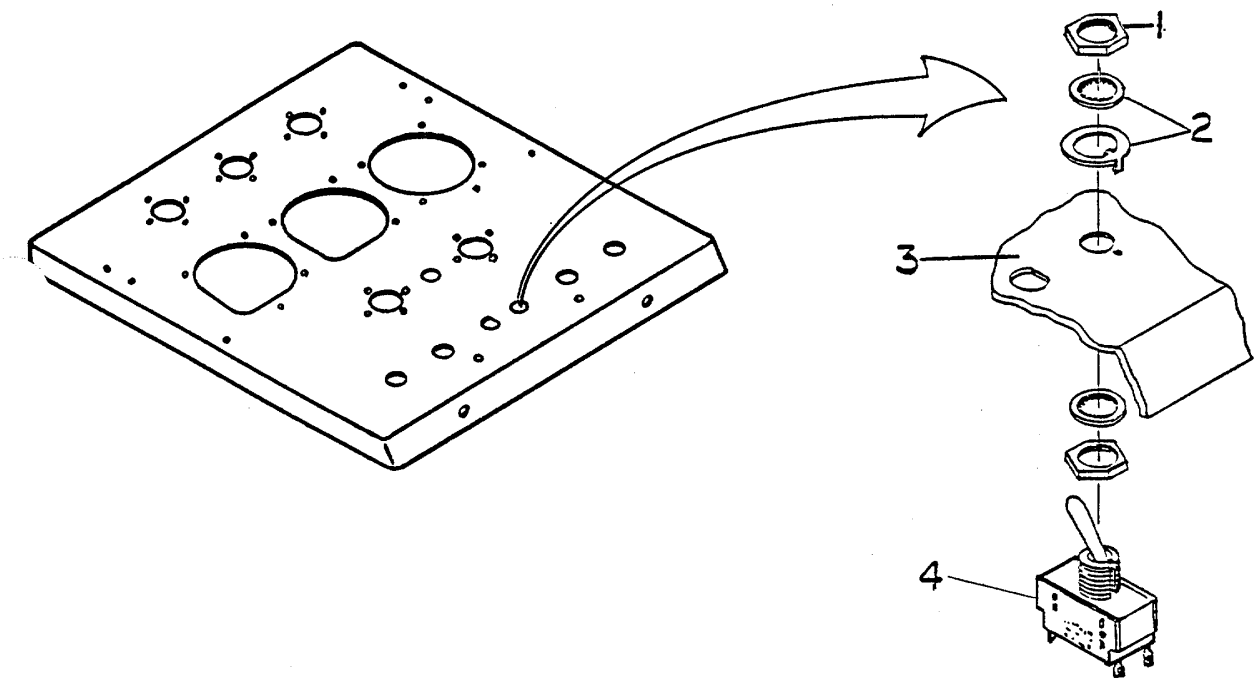

END OF TASK

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment: Tool kit (B2) or Shop Set (B4)

Material/Parts: Fuse holder, Heat Shrink (D5), Solder (D8)

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:
   a. Remove wire from fuse holder leads.
   b. Remove mounting nut (1) from fuse holder (2) on bottom side of operator panel (3).
   c. Remove fuse holder (2) from the top of operator panel (3).
2. INSTALLATION:
   a. Mount fuse holder (2) from the top of operator panel.
   b. Secure fuse holder (2) to operator panel (3) by installing mounting nut (1).
   c. Solder two wires to fuse holder using solder (Ds), and cover connections with heat shrink (D5).

Performance check (para. 2-5)

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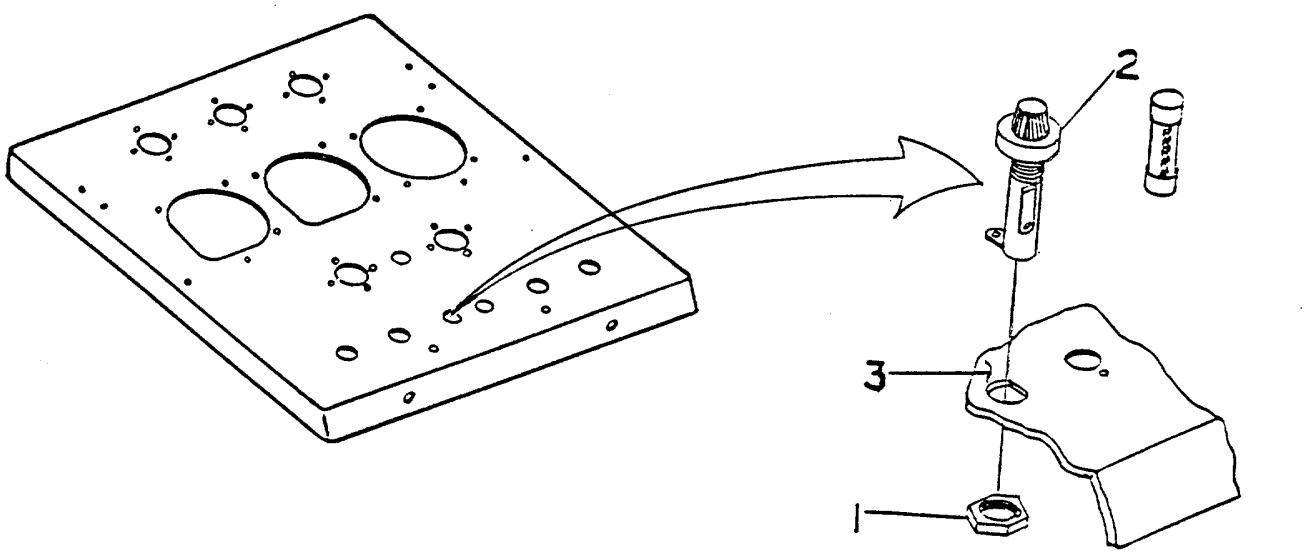

END OF TASK

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment: Tool kit (B2) or Shop Set (B4)

Material/Parts: Pilot lamp socket, Pilot lamp bulb
Heat Shrink (D5), Solder (DS8)

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:
   a. Remove wires from lamp socket leads.

   b. Remove mounting nut (1), washer (2) from the lamp socket, remove pilot lamp socket from operator panel (3).

   c. Hold the lamp socket (4) and remove the pilot lamp (5) turning it counterclockwise.

2. INSTALLATION:
   a. Turn the pilot lamp (5) clockwise into the lamp socket (4) hand tighten.

   b. Install the pilot lamp into panel and secure with mounting washer (1) and nut (2).

   c. Solder two wire to lamp socket using solder (D8), and cover connections with heat shrink (D5).

Performance check (para. 2-5)

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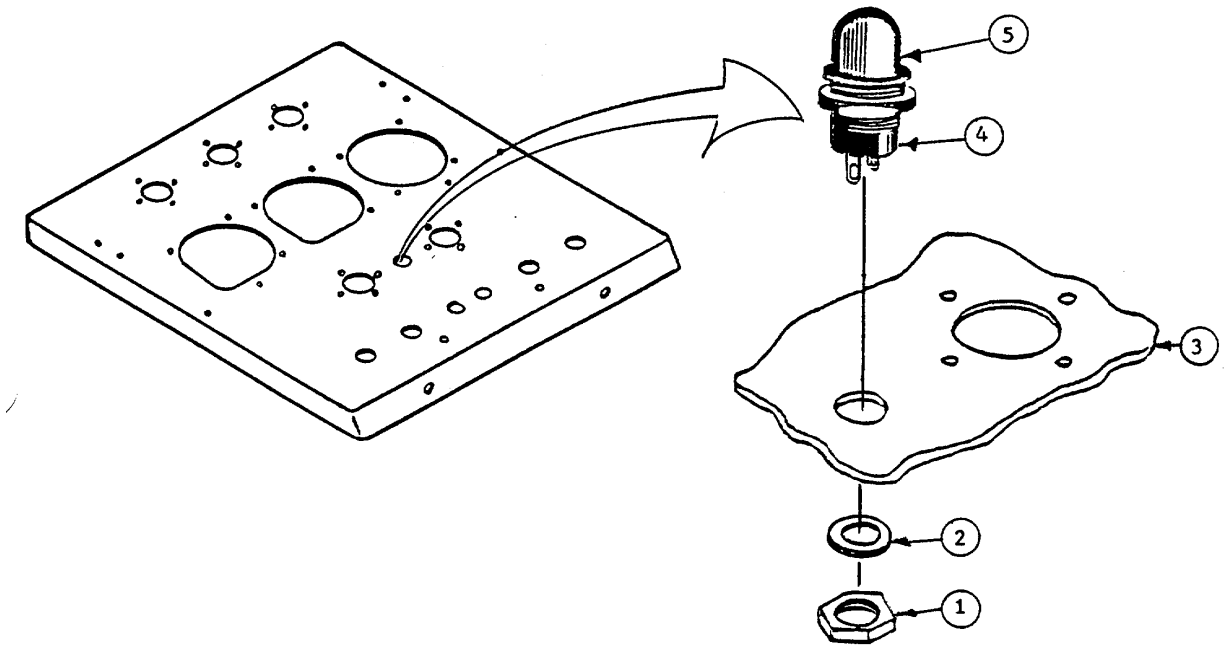

END OF TASK

4-27. PRESSURE RELIEF VALVE 4-27

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment: Tool kit (B2) or Shop Set (B4)

Material/Parts: Pressure relief valve, Tape (D9)

References: TB 43-180

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:
   a. Disconnect hose from fitting (1) on relief valve (2).
   b. Remove two nuts (3), lock washers (4), and flat washers (5) from support bracket (6).
   c. Remove four screws (7), lock washers (8) and flat washers (9) from relief valve.
   d. Remove fitting and vent plug (10) from relief valve.
2. INSTALLATION:
   a. Apply tape (D9) to vent plug and fitting threads.
   b. Install fitting and vent plug into relief valve (2).
   c. Position relief valve on support bracket (6) and secure with four flat washers (9), lock washers (8), and screws (7).
   d. Position support bracket and relief valve on chassis, secure with two flat washers (5), lock washers (4) and nuts (3).
   e. Install hose on fitting (1).

FOLLOW ON MAINTENANCE
Calibration (TB 43-180)
Performance check (para. 2-5)

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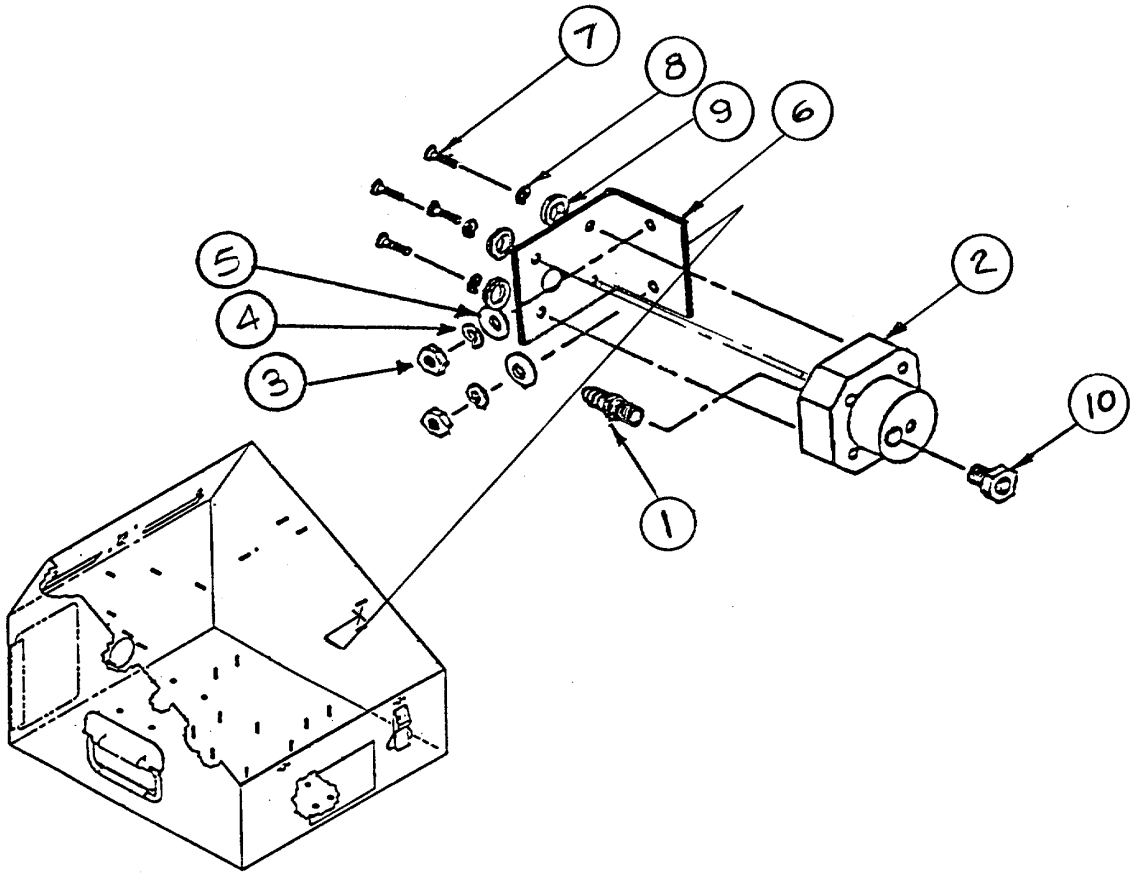

END OF TASK

4-28. VACUUM RELIEF VALVE 4-28

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment: Tool kit (B2) or Shop Set (B4)

Material/Parts: Vacuum relief valve, Tape (D9)

References: TB 43-180

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:
   a. Disconnect hose from fitting (1) on relief valve (2).
   b. Remove two nuts (3), lock washers (4), and flat washers (5) from support bracket (6).
   c. Remove four screws (7), lock washers (8) and flat washers (9) from relief valve.
   d. Remove fitting and vent plug (10) from relief valve.
2. INSTALLATION:
   a. Apply tape (D9) to vent plug and fitting threads.
   b. Install fitting and vent plug into relief valve (2).
   c. Position relief valve on support bracket (6) and secure with four flat washers (9), lock washers (8), and screws (7).
   d. Position support bracket and relief valve on chassis, secure with two flat washers (5), lock washers (4) and nuts (3).
   e. Install hose on fitting (1).

FOLLOW ON MAINTENANCE
Calibration (TB 43-180)
Performance check (para 2-5)

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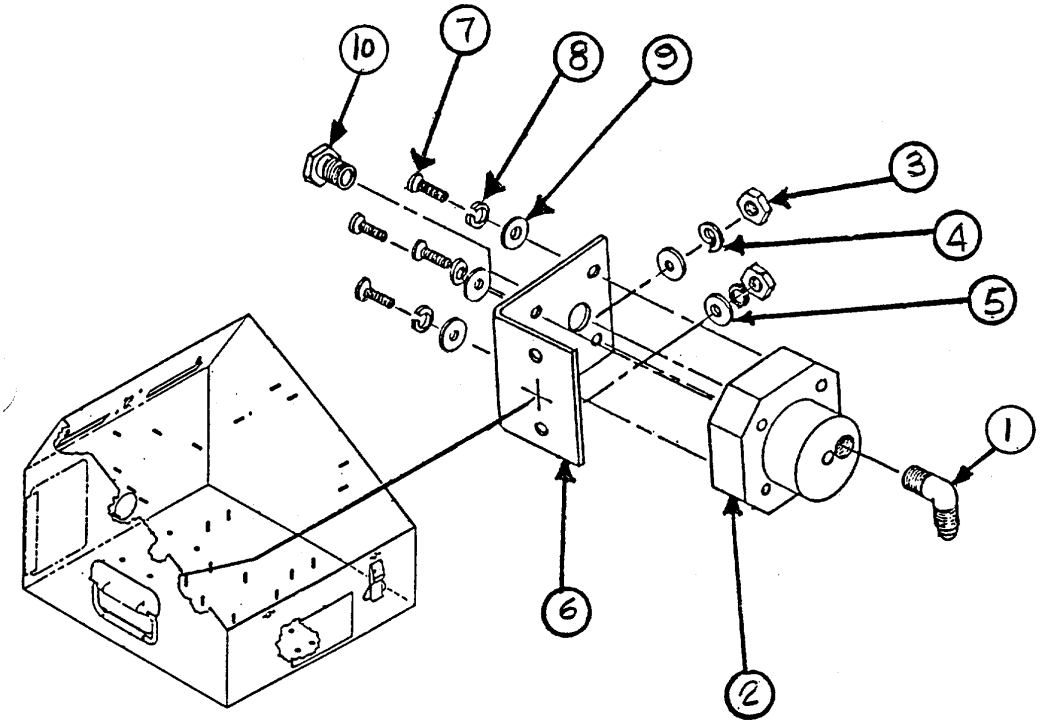

END OF TASK

4-29. OVER PRESSURE RELIEF VALVE 4-29

THIS TASK COVERS: **REMOVAL AND INSTALLATION**

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment: Tool kit (B2) or Shop Set (B4)

Material/Parts: Filter, Tape (D9)

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:
   Remove over pressure relief valve (1) from tee fitting (2) on needle valve (3), by turning relief valve counterclockwise.

2. INSTALLATION:
   a. Apply tape (D9) to over pressure relief valve (1).

   b. Install over pressure relief valve (1) into tee fitting (2) on needle valve (3) by turning relief valve clockwise.

Performance check (para. 2-5)

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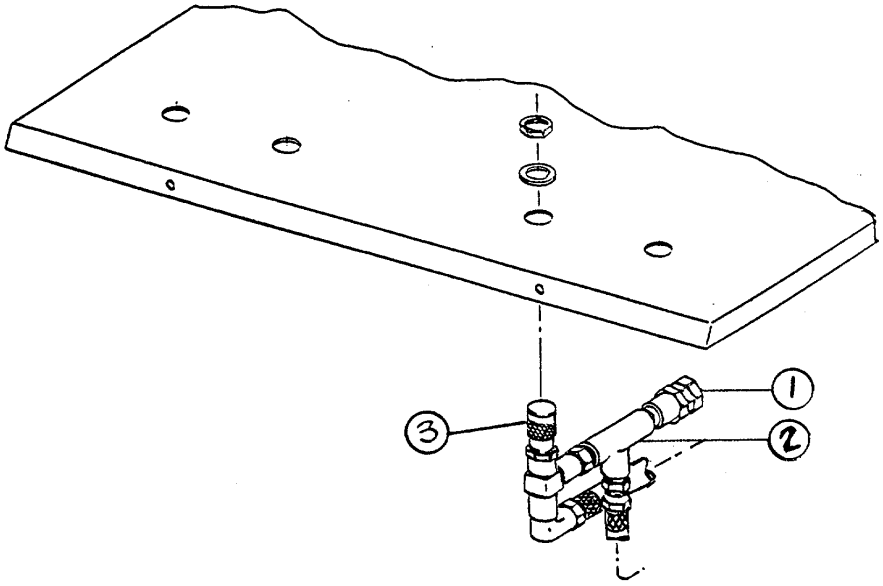

END OF TASK

4-30. HOSES AND FITTINGS (TYPICAL) 4-30

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment: Tool Kit (B2) or Shop Set (B4)

Material/Parts: Hoses and fittings, Tape (D9)

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:
   a. Remove hose (1) by turning swivel nut (2) on each end counterclockwise.

   b. Remove fittings (3) by turning counterclockwise.

2. INSTALLATION:
   a. Apply tape (D9) to fittings (3) threads.

NOTE

Insure hoses and fittings are clean and free of foreign materiel to avoid contamination to the instrument indicating system.

   b. Install fitting (3) by turning clockwise.

   c. Install hose (1) by turning swivel nut (2) on both ends clockwise

Performance check (para. 2-5)

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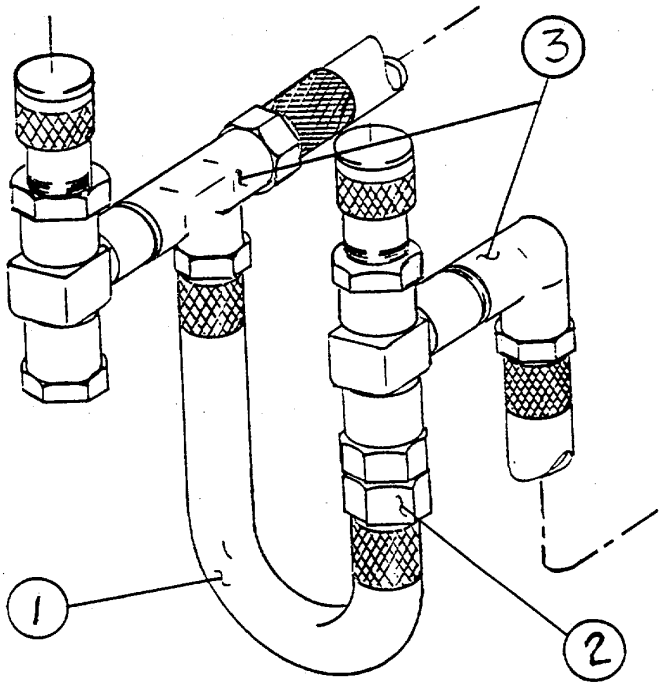

END OF TASK

4-31. OIL SUMP (TYPICAL) 4-31

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment: Tool Kit (B2) or Shop Set (B4)

Material/Parts: Oil sump, Tape (D9)

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:
   a. Disconnect hose from fittings (1) on sump assembly (2).
   b. Disconnect rigid pressure line (3) from fitting on check valve (4).
   c. Remove four nuts (5), and lock washers (6) from support bracket (7).
   d. Remove oil sump assembly from support bracket.
   e. Remove fittings and check valve from oil sump housing.
2. INSTALLATION:
   a. Apply tape (D9) to fitting threads.
   b. Install fittings and/or check valve on sump housing.
   c. Install oil sump assembly on support bracket and secure with four lock washers (6), and nuts (5).
   d. Connect rigid pressure line (3) to fittings on check valve (4) on oil sump housing (2).
   e. Connect hose to fitting on sump assembly.

Performance check (para. 2-5)

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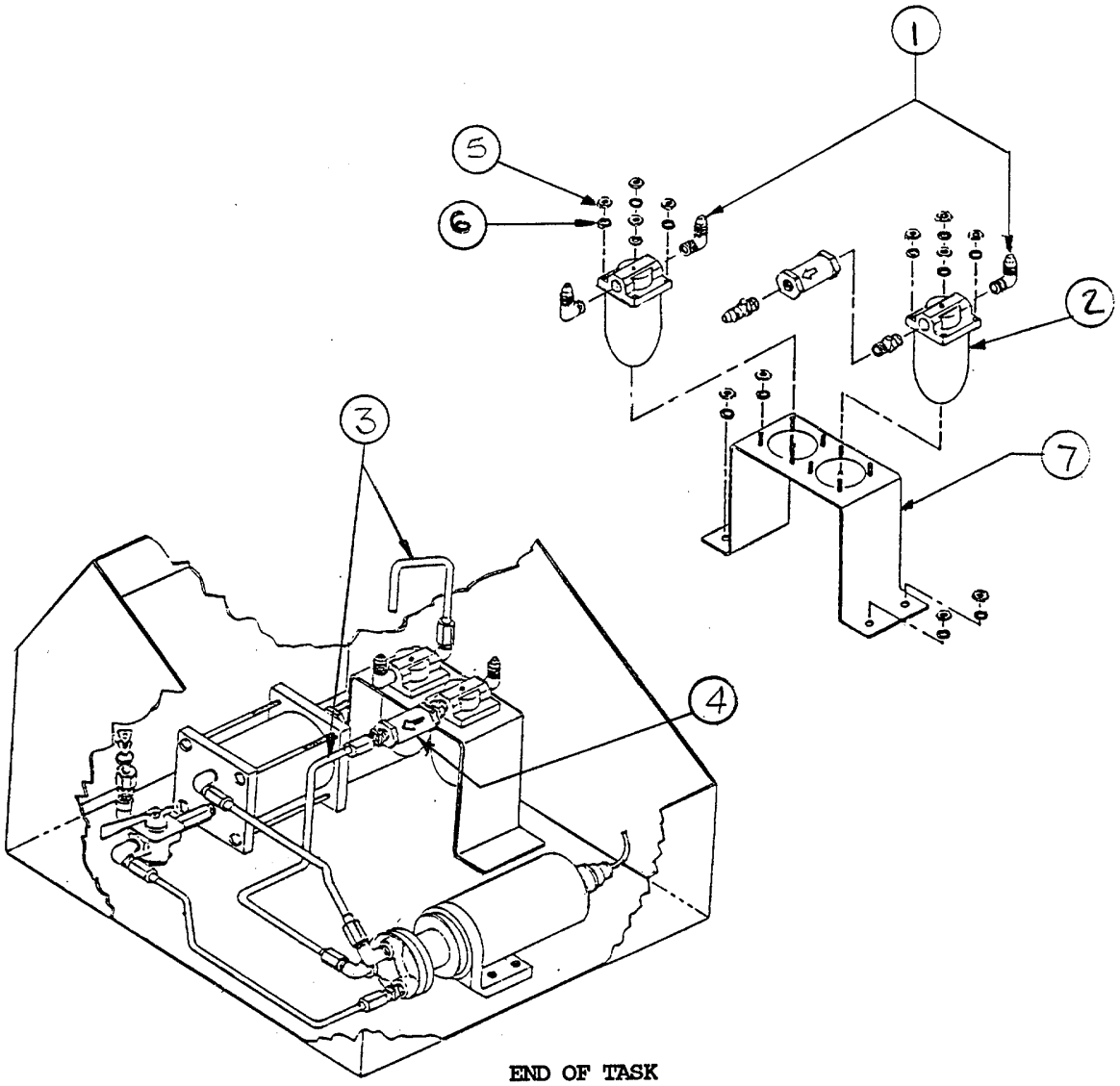

END OF TASK

4-32. OIL FILTER 4-32

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment: Tool Kit (B2) or Shop Set (B4)

Material/Parts: Filter

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:
   a. Remove oil sump (task 4-31).
   b. Remove sump bowl (1) from sump housing (2) by turning counterclockwise.
   c. Remove filter retainers (3) by turning counterclockwise.
   d. Remove filter (4).
2. INSTALLATION:
   a. Install filter on sump housing and secure with retainer by turning clockwise.
   b. Install sump bowl on sump housing by turning clockwise.
   c. Install oil sump (task 4-31).

Performance check (para. 2-5)

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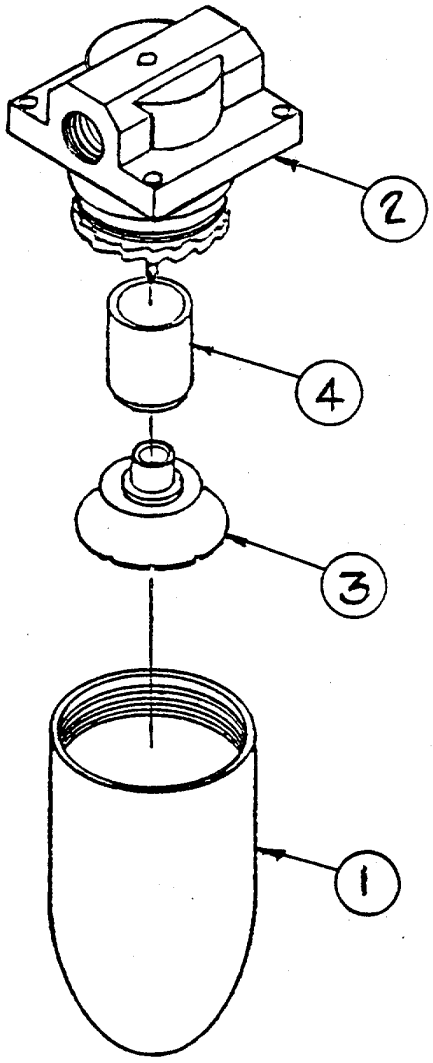


END OF TASK

4-33. MOTOR/PUMP 4-33

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment: Tool kit (B2) or Shop Set (B4)

Material/Parts: Motor/Pump, Tape (D9)

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:
   a. Disconnect rigid pressure lines (1, 2, & 3) from motor/pump (4).

   b. Disconnect connector (5) from motor receptacle by turning it counterclockwise, then disconnect ground wire (6).

NOTE

Do not tip tester with oil in reservoir to avoid flooding in check valve.

   c. Remove four screws (7) from bottom chassis.

   d. Remove motor/pump.

   e. Remove fittings (8) from motor/pump.

2. INSTALLATION:
   a. Apply tape (D9) on all threads of fittings (8).

   b. Install fittings on motor/pump (4).

NOTE

Do not tip tester with oil in the reservoir to avoid flooding in check valve.

   c. Position motor/pump (4) over mounting holes in chassis and secure with four screws (7) through bottom of chassis.

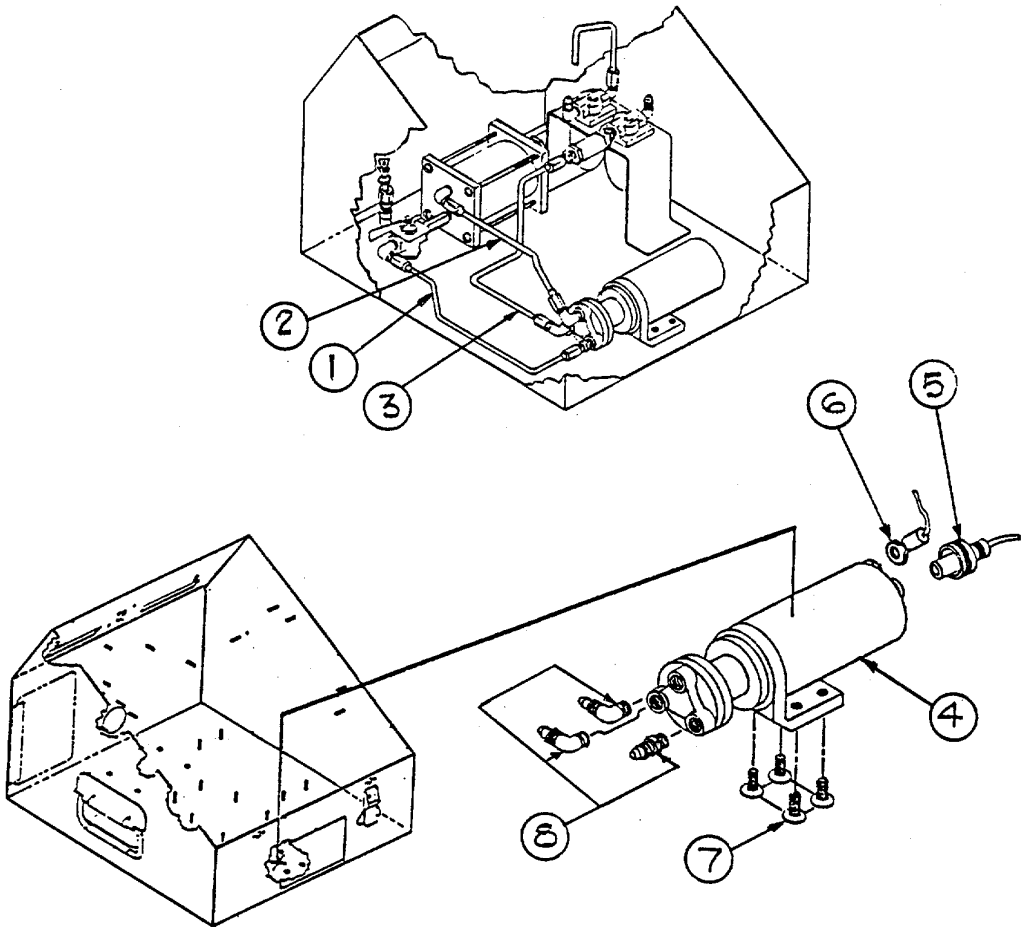
GO TO NEXT PAGE

THIS TASK COVERS: REMOVAL AND INSTALLATION

d. Connect the connector (5) to the receptacle connector on motor body by rotating clockwise until connector is handtight, then connect the ground wire (6).

e. Reconnect all rigid pressure lines (1, 2 & 3) to theirrespective ports.

Performance check (para. 2-5)



END OF TASK

4-34. CAPACITOR 4-34

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment: Tool kit (B2) or Shop Set (B4)

Material/Parts: Capacitor

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:
   a. Remove two screws (1) that secure the terminated wire connections and disconnect them. Install screws (1) back into capacitor (2).
   b. Loosen capacitor clamp screw (3) from capacitor clamp.
   c. Remove capacitor.

2. INSTALLATION:
   a. Install capacitor (2) into clamp and tighten clamp screw (3) to hold capacitor.

NOTE

Insure correct polarity when connecting electrical wiring.

   b. Remove screws (1) from capacitor (2), and connect terminated wires to capacitor.

Performance check (para. 2-5)

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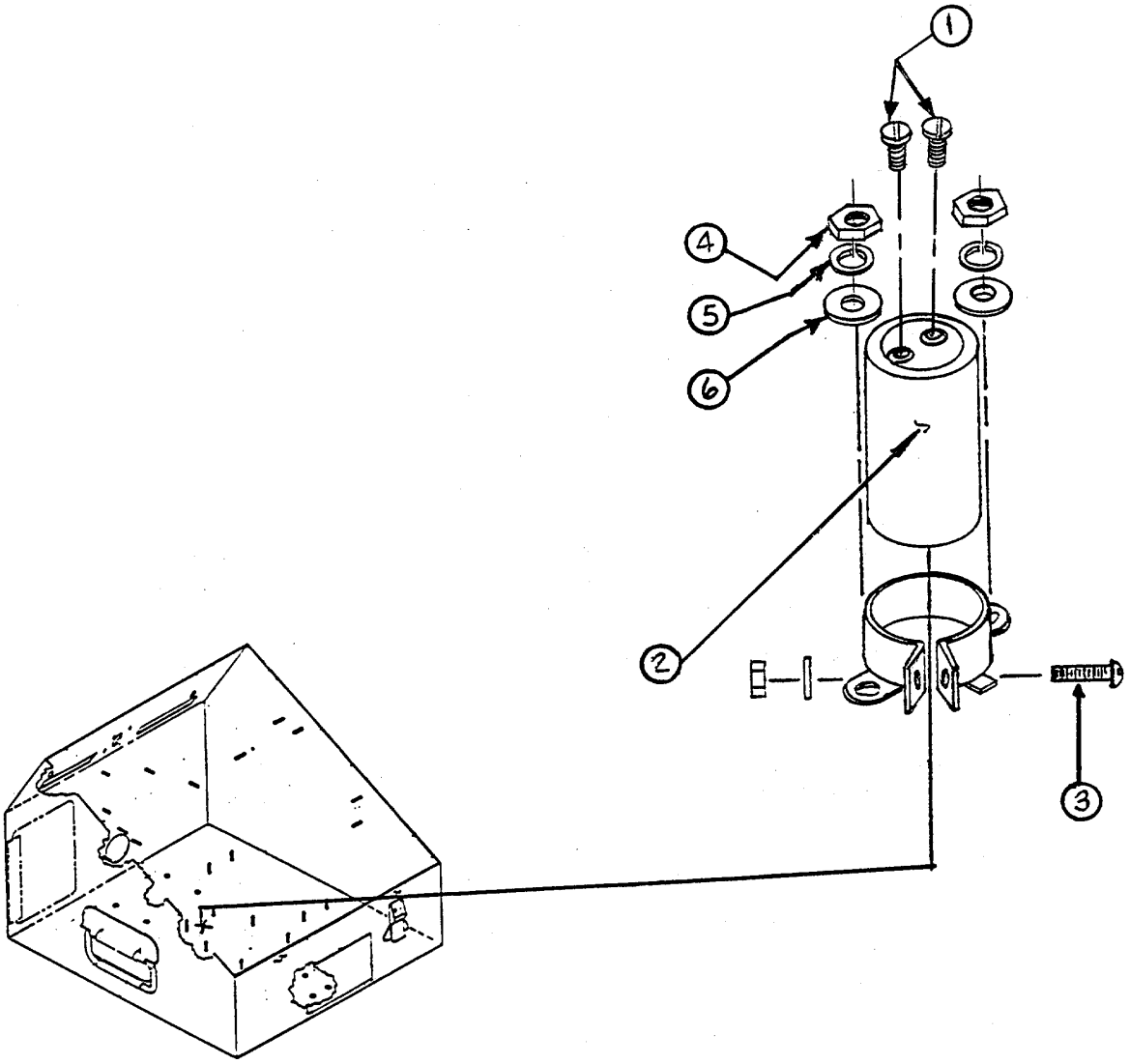

END OF TASK

4-35. TRANSFORMER 4-35

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment: Tool kit (B2) or Shop Set (B4)

Material/Parts: Transformer, Heat shrink (D5), Solder (D8)

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:
   a. Remove wires from transformer leads.

   b. Remove four nuts (1), lock washers (2), and flat washers (3) from studs holding transformer (4) to the base.

   c. Remove transformer (4) from base of tester.

2. INSTALLATION:
   a. Install transformer (4) on base studs.

   b. Secure transformer (4) to base with flat washers (3), lockwashers (2) and nuts (1) on studs.

   c. Solder two wires to transformer using solder (D8) and cover connections with heat shrink (D5).

Performance check (para. 2-5)

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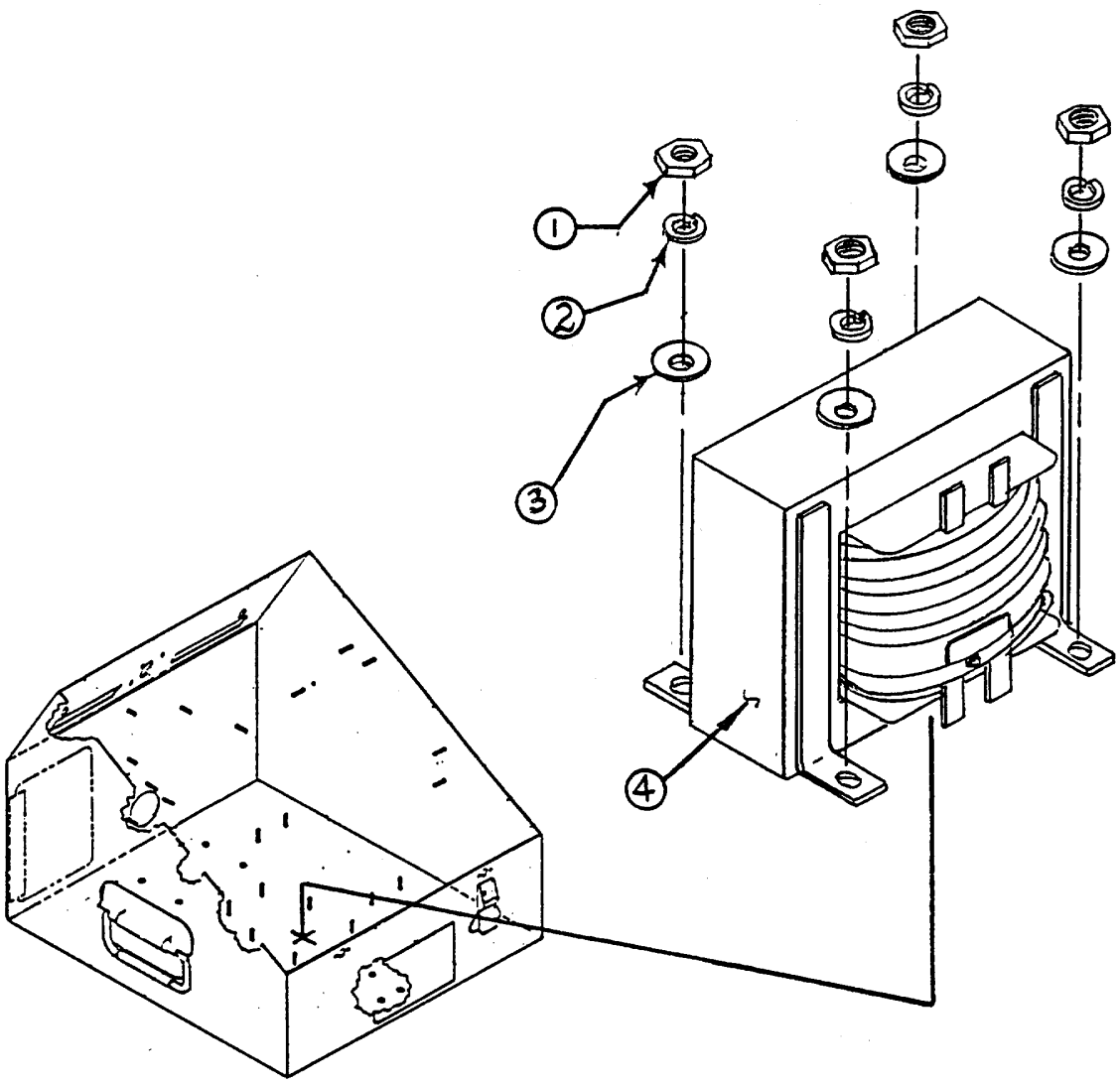

END OF TASK

4-36. EMI FILTER 4-36

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools and Equipment: Tool kit (B2) or Shop Set (B4)

Material/Parts: EMI Filter

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:
   a. Remove five nuts (1), five washers (2) securing wire terminations to EMI filter (3). Disconnect wires from EMI filter leads.

   b. Remove two mounting nuts (4), lockwashers (5) flat washers (6) from mounting studs.

   c. Remove EMI filter (3) from chassis assembly.

2. INSTALLATION:
   a. Install EMI filter (3) on mounting studs in chassis.

   b. Secure EMI filter to chassis with two flat washers (6), lockwashers (5) and nuts (4). Tighten to hold EMI filter.

   c. Position wire on EMI filter and secure with five washers (2) and nuts (1).

Performance check (para. 2-5)

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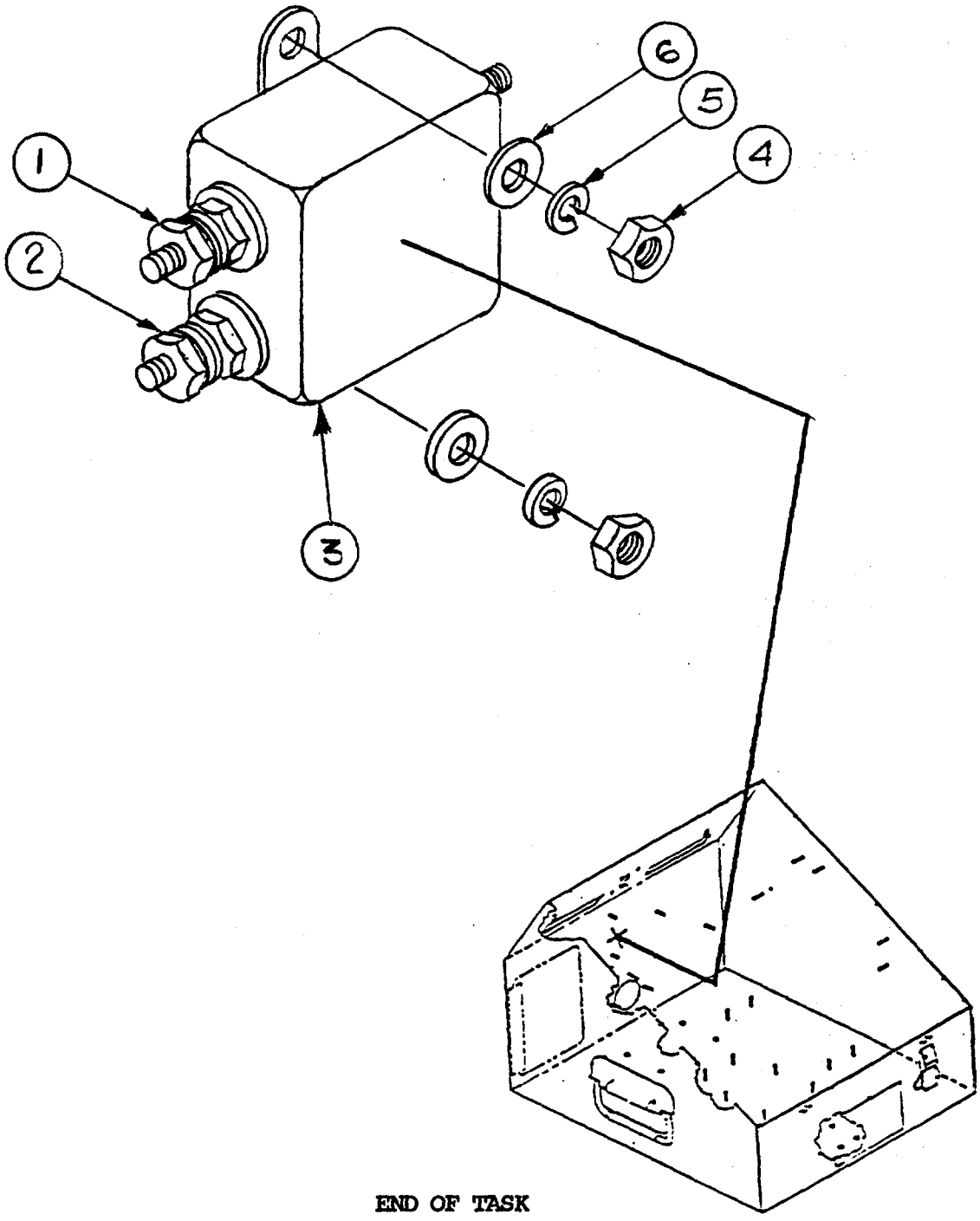

END OF TASK

4-37. POWER CONNECTOR 4-37

THIS TASK COVERS: REMOVAL AND INSTALLATION

Personnel Required:	68F Aircraft Electrician or 35H TMDE Support Specialist
Tools/Test and Equipment:	Tool Kit (B2) or Shop Set (B4)
Material/Parts:	Connector, Heat Shrink (D5), Solder (D8)
Equipment Condition:	Power disconnected, control panel open

1. REMOVAL:
   a. Remove wires from connector pins.
   b. Remove connector cap (1) from power connector (2).
   c. Remove four mounting screws (3) from power connector.
   d. Remove power connector (2).
2. INSTALLATION:
   a. Install connector (2) in chassis assembly and secure with four screws (3).
   b. Install heat shrink on wires and wires on connector solder cups (See FO-1 thru FO-3).
   c. Solder wires in cups, and install shrink tubing over solder connections.
   d. Install cap (1) on power connector.

Performance check (para. 2-5)

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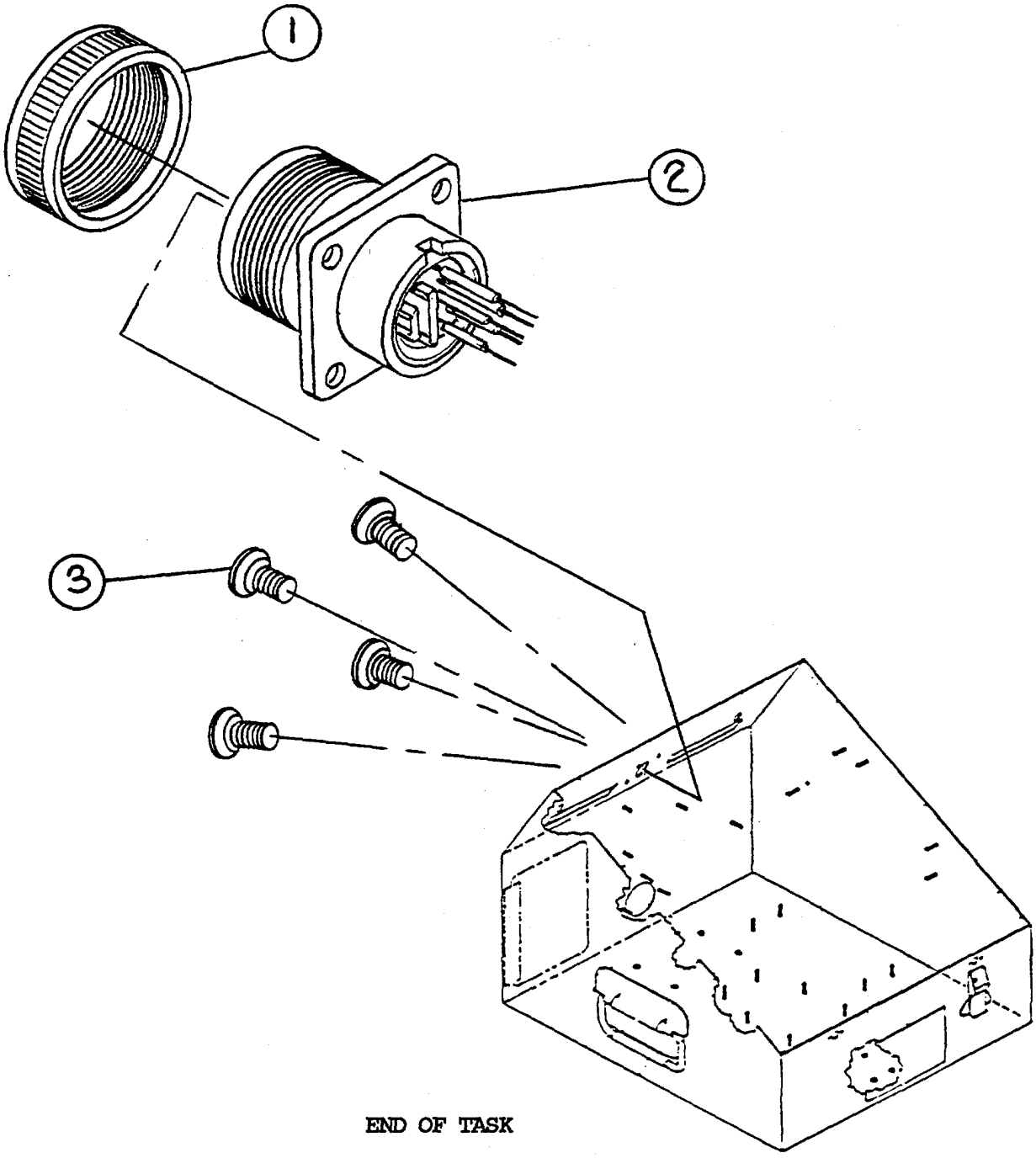

END OF TASK

4-38. RECTIFIER 4-38

THIS TASK COVERS: **REMOVAL AND INSTAL LATION**

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H 7DE Support Specialist

Tools/Test and Equipment: Tool kit (B2), Shop Set (B4)

Material/Parts: Rectifier

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:
   a. Remove terminated wires from rectifier terminals and pull wires straight out.
   b. Remove nut (1), lock washer (2), and flat washer (3), from mounting stud.
   c. Remove rectifier (4) from chassis.
2. INSTALLATION:
   a. Mount rectifier (4) to chassis mounting stud.
   b. Secure rectifier (4) with flat washer (3), lock washer (2) and nut (1) on stud.
   c. Connect four wires to rectifier terminals (See FO-2).

Performance check (para. 2-5)

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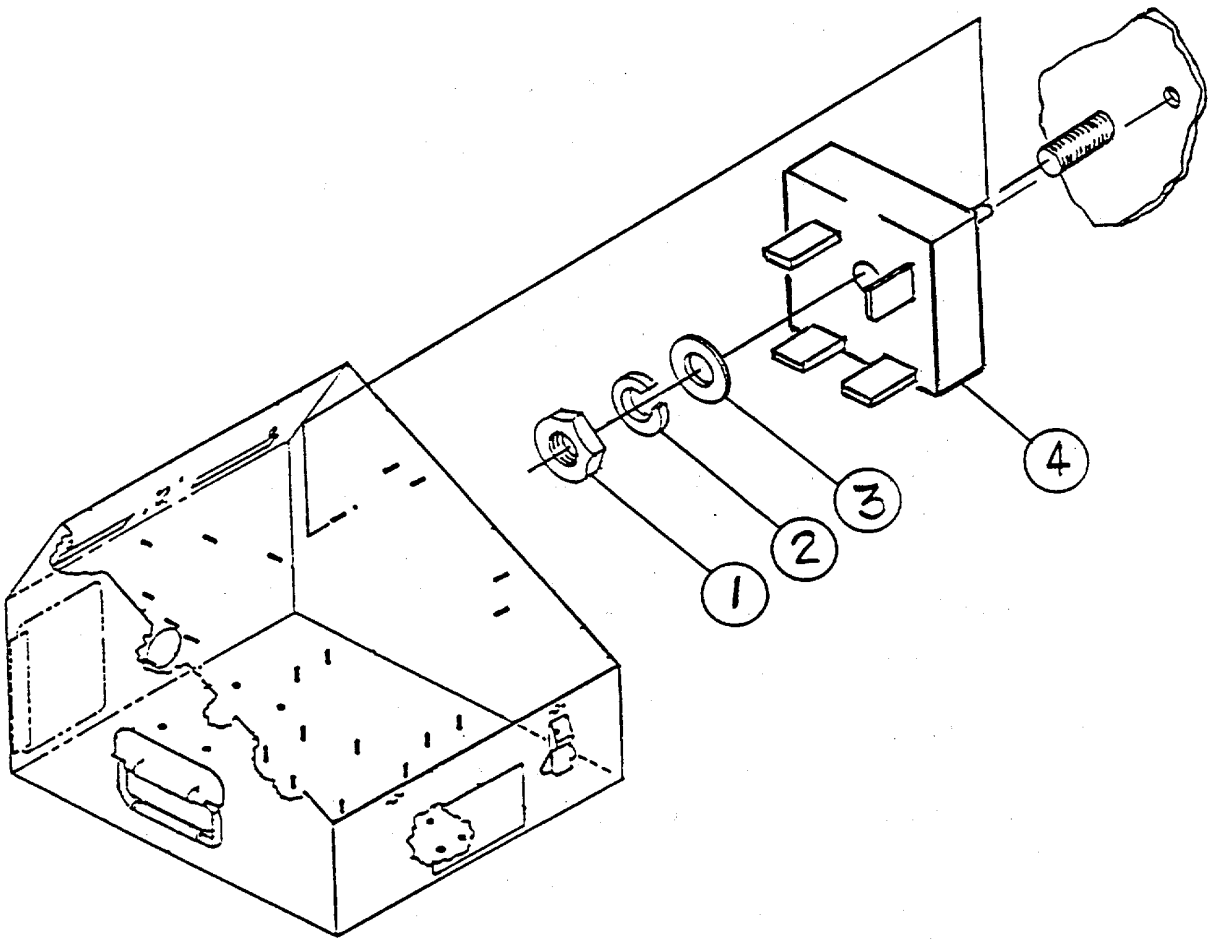

END OF TASK

4-39. DIODE 4-39

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required:	68F Aircraft Electrician or 35H TMDE Support Specialist
Tools/Test and Equipment:	Tool kit (B2) or Shop Set (B4)
Material/Parts:	Diode, Heat Shrink (D5), Solder (D8), Thermal Compound (D10)
Equipment Condition:	Power disconnected, control panel open

1. REMOVAL:

   a. Remove nut (1), flat washer (2) terminated wires (3) and insulator (4) from cathode end of diode (5).

   b. Remove diode (5), bushing (6) and insulator (4) from support bracket (7).

   c. Remove wire from anode end of diode eyelet (8).

2. INSTALLATION:

   a. Slip heat shrink tubing over wire connected to diode eyelet (8).

   b. Solder wire to diode eyelet (8), and install heat shrink (D5).

   c. Apply thermal compound on both surfaces of diode bracket (7) and diode (5).

   d. Position diode in support bracket, install terminated wires (3) and secure with flat washer (2) and nut (1).

Performance check (para. 2-5)

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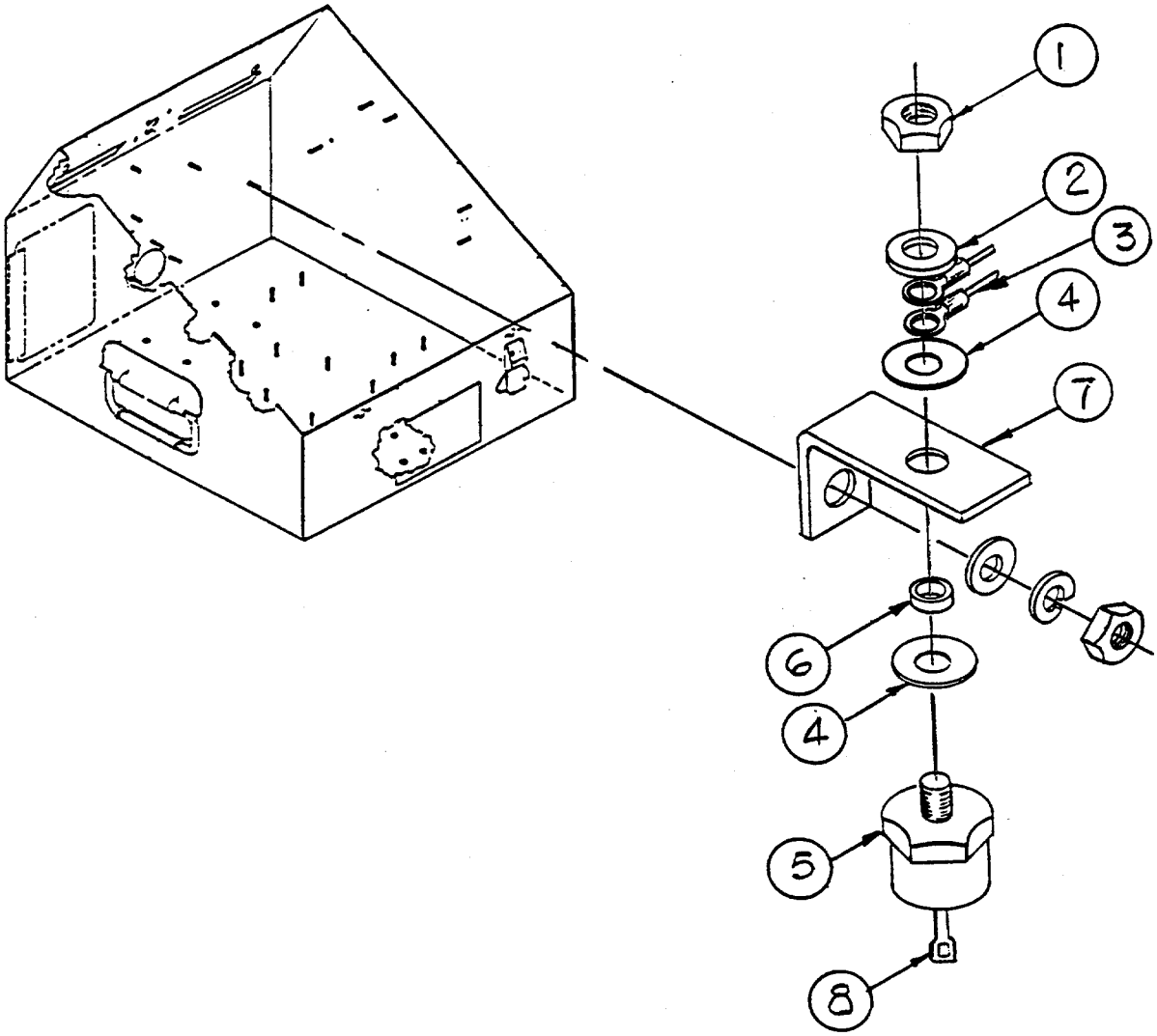
4-39. DIODE (CONT.) **4-39**



END OF TASK

4-40. WIRING HARNESS 4-40

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required:	68F Aircraft Electrician or 35H TNDE Support Specialist
Tools/Test and Equipment:	Tool kit (B2) or Shop Set (B4)
Material/Parts:	See FO-1 thru FO-3, Heat Shrink (D5) Solder (D8)
Equipment Condition:	Power disconnected, control panel open

1. REMOVAL

   a. Disconnect rigid pressure line from oil sump to check valve (Task 4-31).

   b. Disconnect wire harness by removing heat shrink and solder from connections, and pull wires from solder connections. Mechanically fastened wire leads are disconnected by removing associated hardware (nuts, washers, screws, etc.), or by pulling outward.

   c. After wire leads are disconnected, remove harness from unit.

NOTE

No repair to wires authorized except to replace a wire segment, terminal ends or to resolder connections as needed.

2. INSTALLATION:

   a. Install harness (See FO-3).

   b. Solder wire to component leads, using solder (D8) and cover solder connections with heat shrink tubing (D5). Mechanically fastened wire leads are connected by installing associated hardware (nuts, washers, screws, etc.) or by pushing inward.

Performance check (para. 2-5)

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4-41. OIL RESERVOIR 4-41

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools/Test and Equipment: Tool kit (B2) or Shop Set (B4)

Material/Parts: Oil Reservoir, Tape (D9)

Equipment Condition: Power disconnected, control panel open

1. REMOVAL:

   a. Disconnect rigid pressure lines (1, 2, 3 & 4) from fitting on oil reservoir (5).

   b. Remove cap (6).

NOTE
Do not tip tester with oil in the reservoir to avoid flooding check valve.

   c. Remove screws (7) from bottom of chassis securing oil reservoir (5).

   d. Remove oil reservoir.

   e. Remove check valve assembly (8) and pour oil from reservoir

   f. Remove fill and run selector valve assembly (9).

   g. Remove fitting (10).

2. INSTALLATION:

   a. Apply tape (D9) to fitting threads.

   b. Install fitting (10) to oil reservoir (5).

   c. Install fill and run selector valve assembly (9) to reservoir.

GO TO NEXT PAGE

d. Install check valve assembly (8) to reservoir.

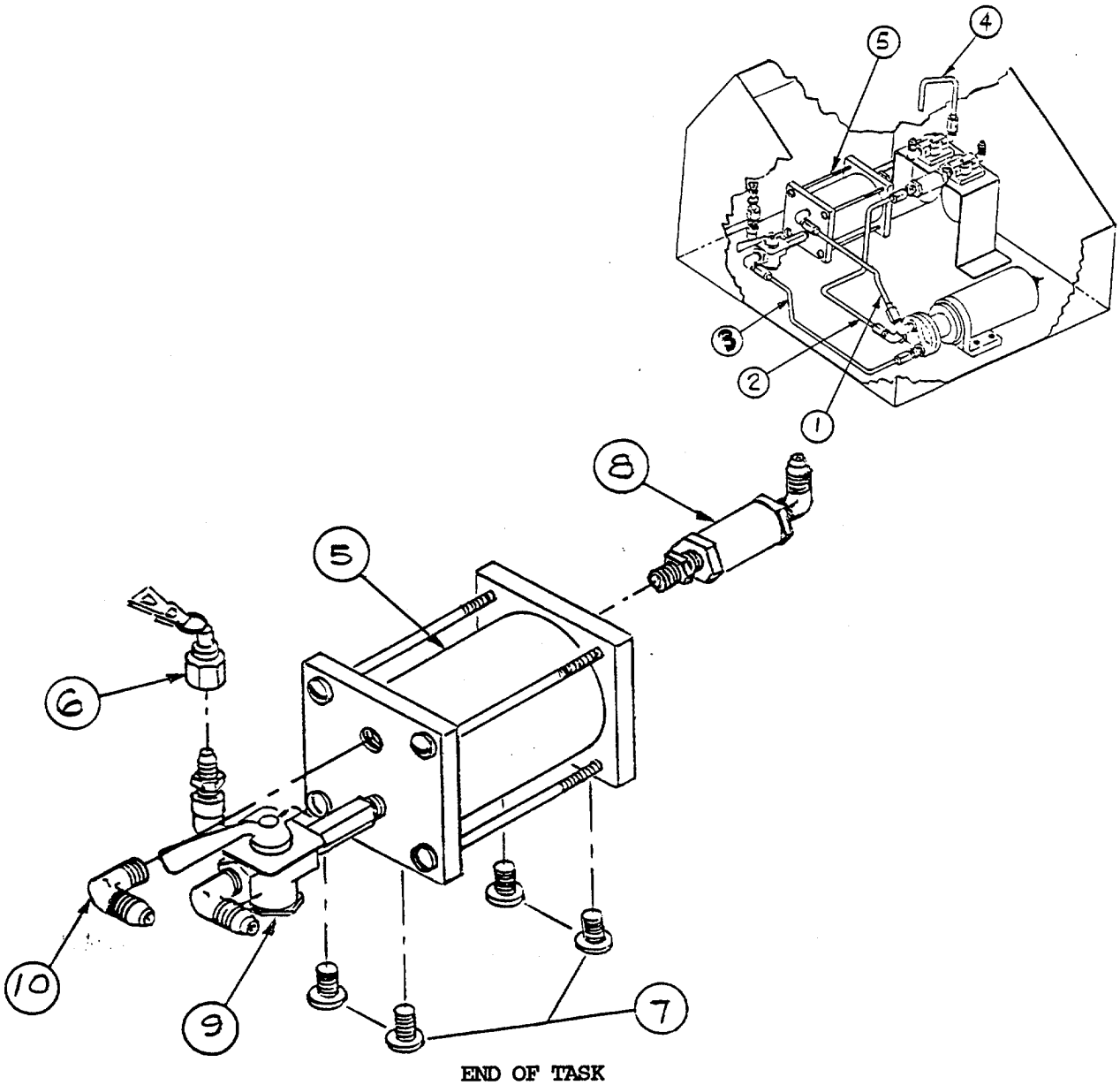
e. Position reservoir on chassis and secure from bottom of chassis with four screws.

f. Connect rigid pressure lines (1, 2, 3 & 4).

g. Service reservoir (Chapter 3).

h. Install cap (6.

Performance check (para. 2-5).



END OF TASK

4-42. FILL AND RUN SELECTOR VALVE 4-42

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H T1DE Support Specialist

Tools/Test and Equipment: Tool kit (B2) or Shop Set (B4)

Material/Parts: Valve, Tape (D9)

Equipment Condition: Power disconnected, control panel open

1. REMOVAL

   a. Remove oil reservoir (task 4-41).

   b. Remove elbow fittings (1 & 2) and nipple (3) from fill and run selector valve (4).

2. INSTALLATION:

   a. Apply tape (D9) to elbows (1 & 2) and nipple (3) fitting threads.

   b. Install elbow fittings and nipple fitting on fill and run selector valve.

   c. Install oil reservoir (task 4-41).

Performance check (para. 2-5)

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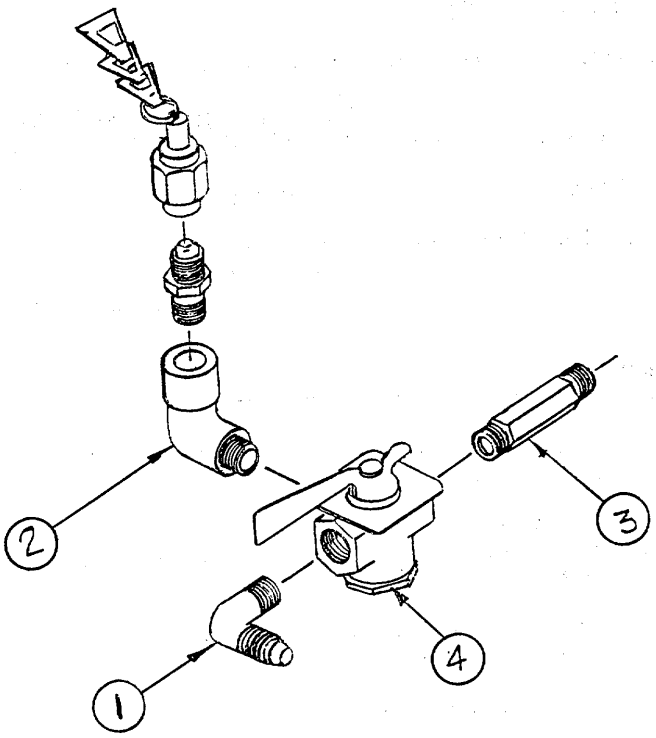
4-42. FILL AND RUN SELECTOR VALVE (CONT.) 4-42



END OF TASK

4-43. RIGID PRESSURE LINES 4-43

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required:	68F Aircraft Electrician or 35H TMDE Support Specialist
Tools/Test and Equipment:	Tool kit (B2) or Shop Set (B4)
Material/Parts:	Rigid Pressure lines, Tape (D9)
Equipment Condition:	Power disconnected, control panel open

1. REMOVAL:

   Disconnect pressure line (1, 2, 3 or 4) by turning end fitting counterclockwise until disconnected. Repeat the same process for opposite end.

2. INSTALLATION:

   a. Apply tape (D9) to threaded fittings.

   b. Install pressure line (1, 2, 3 or 4) by turning end fitting clockwise.

Performance check (para. 2-5)

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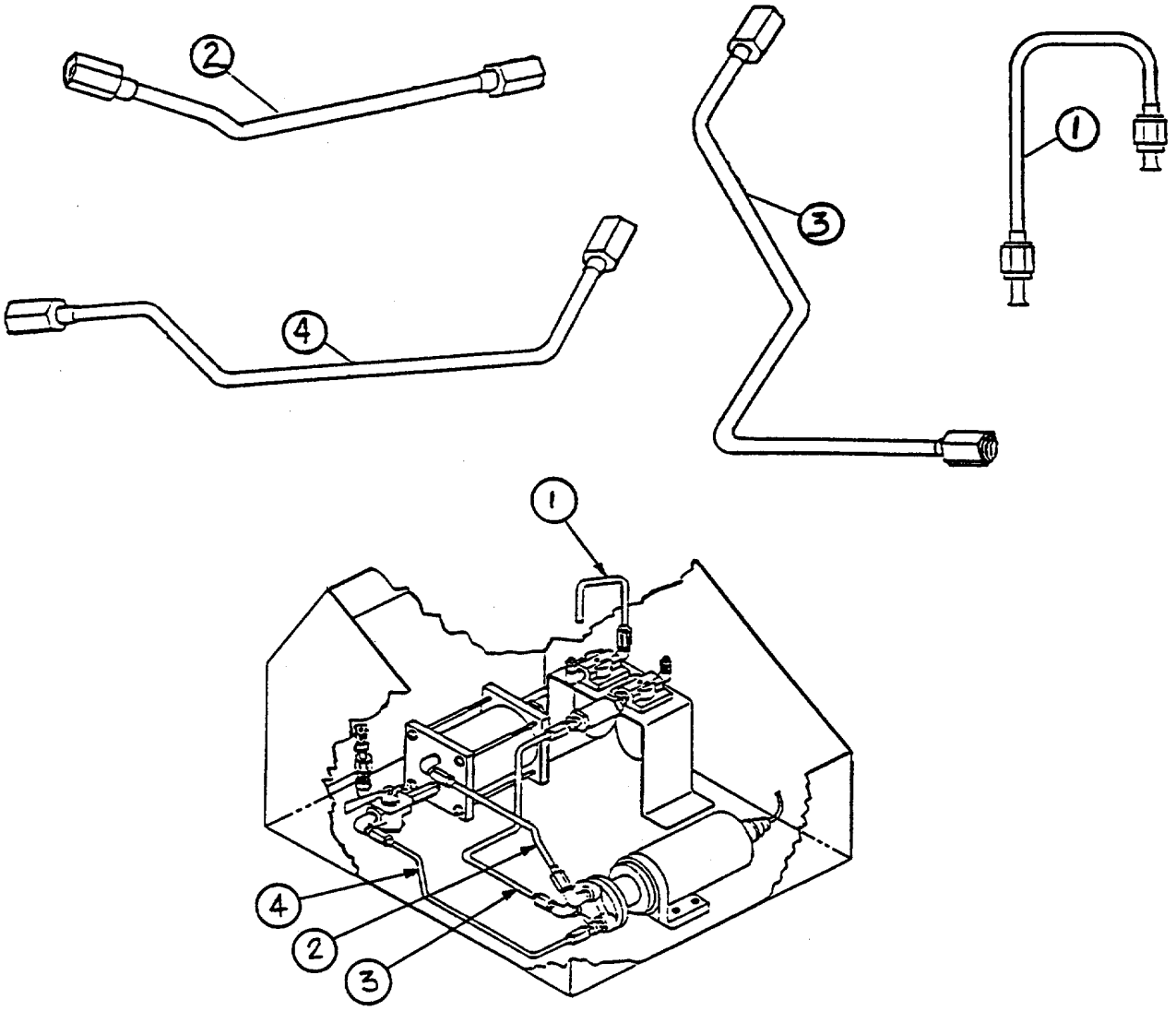


END OF TASK

4-44. CHECK VALVES 4-44

THIS TASK COVERS: REMOVAL AND INSTALLATION

Initial Set-Up:

Personnel Required: 68F Aircraft Electrician
or
35H TMDE Support Specialist

Tools/Test and Equipment: Tool kit (B2) or Shop (B4)

Material/Parts: Check valve, Tape (D9)

Equipment Condition: Power disconnected, control panel open

1. REMOVAL

   a. Remove rigid pressure line (1) or (2) at fitting on check valve (3).

   b. Remove check valve with fittings attached from oil sump or oil reservoir (as required).

   c. Remove fittings from check valve (3).

2. INSTALLATION:

   a. Apply tape (D9) to fitting threads.

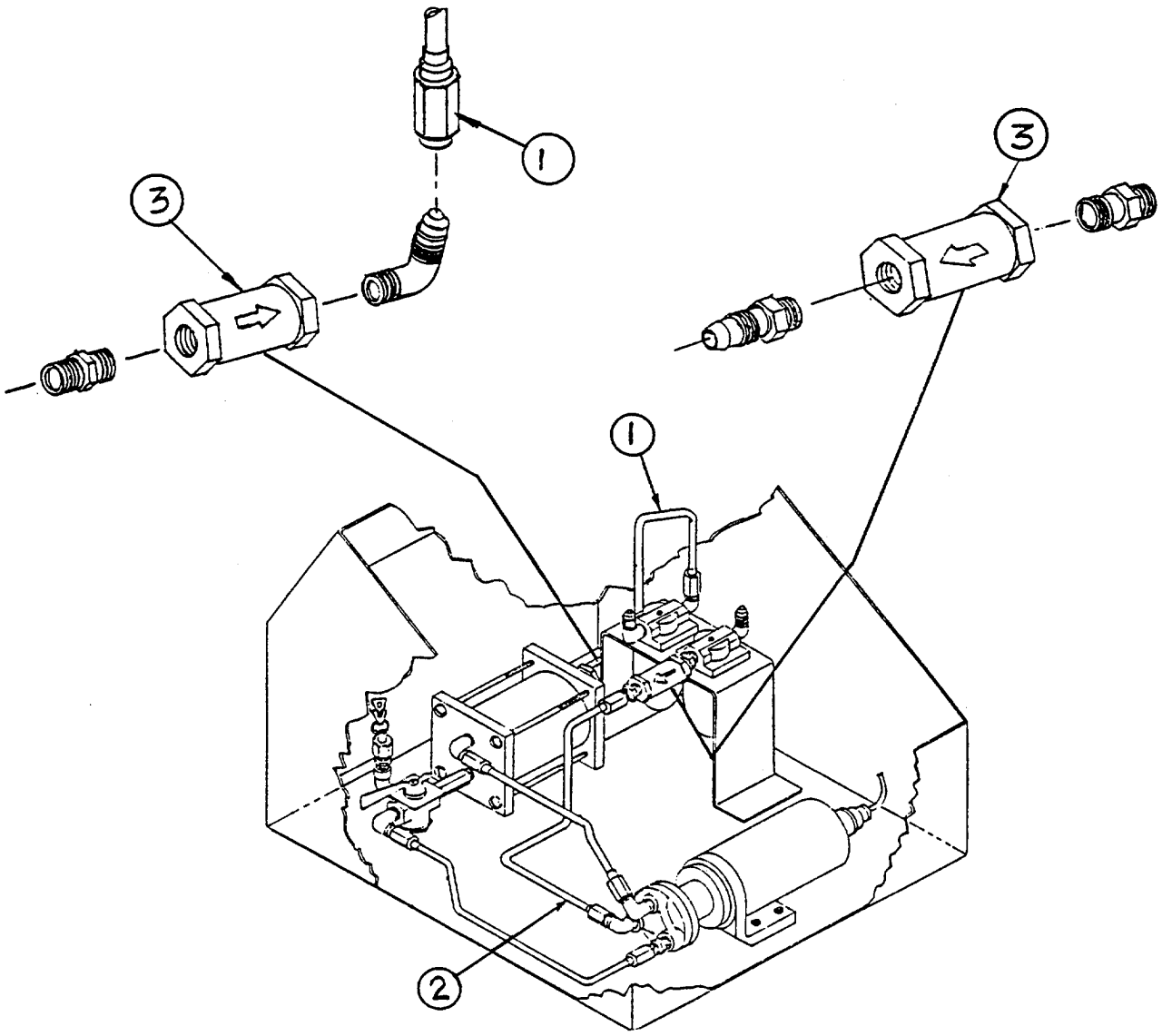
   b. Install fittings on check valve (3) (as required).

   c. Install check valve with fittings attached to oil sump or oil reservoir.

   d. Install rigid pressure line (1) or (2) on fitting.

Performance check (para. 2-5)

GO TO NEXT PAGE



END OF TASK

APPENDIX A

REFERENCES

A-1 DICTIONARIES OF TERMS AND ABBREVIATIONS

AR	310-25	Dictionary of United States Army Terms
AR	310-50	Authorized Abbreviations and Brevity Codes

A-2 PUBLICATION INDEXES

DA PAM	25-30	Consolidated Index of Army Publications and Blank Forms

A-3 LOGISTICS AND STORAGE

TM	55-1500-204-25/1	General Aircraft Maintenance Manual
TM	743-200-1	Storage and Materials Handling

A-4 MAINTENANCE OF SUPPLIES AND EQUIPMENT

AR	750-1	Army Material Maintenance Concepts and Policies
DA PAM	738-751	Functional Users Manual for The Army Maintenance Management System - Aviation (TAMMS)
TM	43-0139	Painting Operations Instructions for Field Use
TB	43-180	Calibration and Repair Requirements for the Maintenance of Army Materiel.

A-5 OTHER PUBLICATIONS

AR	420-90	Fire Prevention and Protection
AR	55-38	Reporting of Transportation Discrepancies in Shipments
AR	700-58	Packaging Improvement Report
DA PAM	310-13	Military Publications Posting and Filing
FM	21-11	First Aid for Soldiers
TM	750-244-1-4	Procedures for the Destruction of Aviation Ground Support Equipment (FSC 4920) to Prevent Enemy Use

APPENDIX B

MAINTENANCE ALLOCATION CHART

SECTION I. - INTRODUCTION

B-1. GENERAL

a. This section provides a general explanation of all maintenance and repair functions authorized at various maintenance categories.

b. The Maintenance Allocation Chart (MAC) in Section II designates overall authority and responsibility for the performance of maintenance functions on the identified end item or component. The application of the maintenance functions to the end item or component will be consistent with the capacities and capabilities of the designated maintenance categories.

c. Section III lists the tools and test equipment (both special tools and common tool sets) required for each maintenance function as referenced from Section II.

d. Section IV contains supplemental instructions and explanatory notes for a particular maintenance function.

B-2. MAINTENANCE FUNCTIONS

a. Inspect - To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination (e.g. - by sight, sound or feel).

b. Replace - To remove an unserviceable item and install a serviceable counterpart in its place "Replace" is authorized by the MAC and is shown as the 3rd position code of the SMR code.

c. Repair - The application of maintenance services, including fault location/troubleshooting, removal/installation, and disassembly/assembly procedures, and maintenance actions to identify troubles and restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

d. Calibrate - To determine and cause corrections to be made or to be adjusted on instruments or test, measuring, and diagnostic equipments used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

e. Test - To verify serviceability be measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards.

B-3. EXPLANATION OF COLUMNS IN THE MAC, SECTION II

a. Column 1, Group Number - Column 1 lists functional group code numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the next higher assembly. End item group number shall be "00".

b. Column 2, Component/Assembly - Column 2 contains the names of components assemblies, subassemblies, and modules for which maintenance is authorized.

c. Column 3, Maintenance Function - Column 3 lists the functions to be performed on the item listed in Column 2. (For detailed explanation of these functions, see paragraph B-2).

d. Column 4, Maintenance Category -

(1) AVUM - Aviation Unit Maintenance. AVUM activities will be staffed and equipped to perform high frequency "On-Equipment" maintenance tasks required to retain or return equipment to a serviceable condition.

(2) AVIM - Aviation Intermediate Maintenance. AVIM provides mobile, responsive "one-stop", maintenance support. Authorized maintenance includes replacement and repair of modules/components and end items which can be accomplished efficiently with available skills, tools, and equipment. AVIM inspects, troubleshoots, tests, diagnoses, repairs, adjusts, calibrates, and aligns system modules and components.

e. Column 5, Tools and Equipment- Column 5 specifies, by code, those common tool sets (not individual tools) and special tools, TMDE, and support equipment required to perform the designated function.

f. Column 6, Remarks - This column shall, when applicable, contain a letter code, in alphabetic order, which shall be keyed to the remarks contained in Section IV.

B-4 EXPLANATION OF COLUMNS IN TOOL AND TEST EQUIPMENT REQUIREMENTS, SECTION III.

a. Column 1, Reference Code - The code recorded in column 5, Section II.

b. Column 2, Maintenance Category - This column lists information pertinent to the maintenance function being performed as indicated in the MAC, Section II.

c. Column 3, Nomenclature

d. Column 4, National Stock Number (NSN)

e. Column 5, Tool Number

SECTION II. MAINTENANCE ALLOCATION CHART

PITOT AND STATIC SYSTEMS TESTER
NSN: 4920-01-244-2146

GROUP NUMBER	COMPONENT ASSEMBLY	MAINTENANCE FUNCTION	MAINTENANCE		TOOLS & EQUIPMENT	REMARKS
			AVUM	AVIM		
00	Pitot and Static Systems Tester	Inspect	.5			A
		Replace	.5	_._		
		Repair		_._	1,2,3,4	B,C
		Calibrate		_*_*	1,2	
01	Accessories	Inspect	.5			A
		Replace		.5		
02	Instruments					
0201	Rate-of-Climb Indicator	Inspect	.1			A
		Replace		.3	1,2	C
		Calibrate		_._*	1,2	C
0202	Pressure Altimeter	Inspect	.1			A
		Replace		.3	1,2	C
		Calibrate		_._*	1,2	C
0203	Air speed Indicator	Inspect	.1			A
		Replace		.3	1,2	C
		Calibrate		_._*	1,2	C
03	Pneumatic System	Inspect	.1		2,4	A
0301	Selector Valves	Replace		.5	2,4	C
0302	Needle Valves	Inspect	.1		2,4	A
		Replace		.5	2,4	C
0303	Shut-off Valves	Inspect	.1		2,4	A
		Replace		.5	2,4	C
0304	Vacuum Relief Valve	Inspect	.1			A
		Replace		.5	2,4	C
		Calibrate		_._*	1,2	C

PITOT AND STATIC SYSTEMS TESTER

NSN: 4920-01-244-2146

GROUP NUMBER	COMPONENT ASSEMBLY	MAINTENANCE FUNCTION	MAINTENANCE		TOOLS & EQUIPMENT	REMARKS
			AVUM	AVIM		
0305	Pressure Relief Valve	Inspect	.1			A
		Replace		.5	2,4	C
		Calibrate		_._*	1,2	C
0306	Hoses and Fittings	Inspect	.1			A
		Replace	.5		2,4	A,C
0307	Filter/Oil Sump	Inspect		.1		A
		Replace		.5	2,4	A,C
0308	Oil Reservoir	Inspect	.1			A
		Replace		.5	2,4	A,C
0309	Check Valves	Inspect	.1			A
		Replace		.5	4	C
04	Motor and Pump Assembly	Inspect		.3		A
		Replace		.5	4	C
05	Electrical system					
0501	Capacitor	Inspect		.1		A,B
		Replace		.5	2	C
0502	Transformer	Inspect		.1		A,B
		Replace		.5	2	C
0503	EMI Filter	Inspect		.1	4	A,B
		Replace		.5	4	C

PITOT AND STATIC SYSTEMS TESTER

NSN: 4920-01-244-2146

GROUP NUMBER	COMPONENT ASSEMBLY	MAINTENANCE FUNCTION	MAINTENANCE		TOOLS & EQUIPMENT	REMARKS
			AVUM	AVIM		
0504	Connector Power	Inspect	.1			A,B
		Replace		1.0	4	C
0505	Rectifier	Inspect	.1			A
		Replace			4	B,C
0506	Diode	Inspect	2			A
		Replace		.7	4	B,C
0507	Harness	Inspect		.5		A,B
		Replace		2.0	4	C
		Repair		.5	4	
0508	Toggle Switch	Inspect	.1			A
		Replace		.5	4	C
0509	Fuse	Inspect	.1			A
		Replace	.1			C
0510	Fuse Holder	Inspect	.1			A
		Replace		.5	4	C
0511	Spare Fuse Clip	Inspect	.1			A
		Replace		.3	4	C
0512	Pilot Lamp	Inspect	.1		4	A
		Replace		.5	4	C
06	Cover and Case	Inspect	.2			
		Replace		1.0	3	

PITOT AND STATIC SYSTEMS TESTER

NSN: 4920-01-244-2146

GROUP NUMBER	COMPONENT ASSEMBLY	MAINTENANCE FUNCTION	MAINTENANCE		TOOLS & EQUIPMENT	REMARKS
			AVUM	AVIM		
	*PERFOIR BY UNITED STATES ARMY TEST, MEASURMENT, AND DIAGNS-TIC EQUIP-MENT SUPPORT GROUP (USATSG)					

SECTION III. TOOL AND TEST EQUIPMENT REQUIREMENTS

(1) REFERENCE CODE	(2) MAINTENANCE CATEGORY	(3) NOMENCLATURE	(4) NATIONAL/NATO STOCK NUMBER	(5) TOOL NUMBER
1	F	AN/GSM-286/287	6695-01-081-0960	-------
2	F	Tool Kit JTK-17 or equivalent	4931-01-073-3845	JTK-17LAL
3	F	Took Kit, Air-Frame Repair	5180-00-323-4876	SC518099-CLA-02
4	F	Shop Set AVIM, Electric/Instrument	4920-00-165-1453	SC492099-CLA-A80

SECTION IV. MAC REFERENCE CODE & REMARKS

MAINTENANCE ALLOCATION CHART	
REFERENCE CODE	**REMARKS**
A	Visual inspection only
B	Continuity test
C	Replace components

APPENDIX C

REPAIR PARTS AND SPECIAL TOOLS LIST

SECTION I. INTRODUCTION

C-1 SCOPE.

This RPSTL lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of unit, direct support and general support maintenance of the Air Conditioner. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the source, maintenance and recoverability (SMR) codes.

C-2 GENERAL.

In addition to this section, Introduction, this Repair Parts and Special Tools List is divided into the following sections:

a. Section II. Repair Parts List - A list of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. This list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Bulk materials are listed in item name sequence. Repair parts kits are listed separately in functional groups in Section II. Repair parts for repairable special tools are also listed in this section. Items listed are shown in the associated illustration(s)/figure(s).

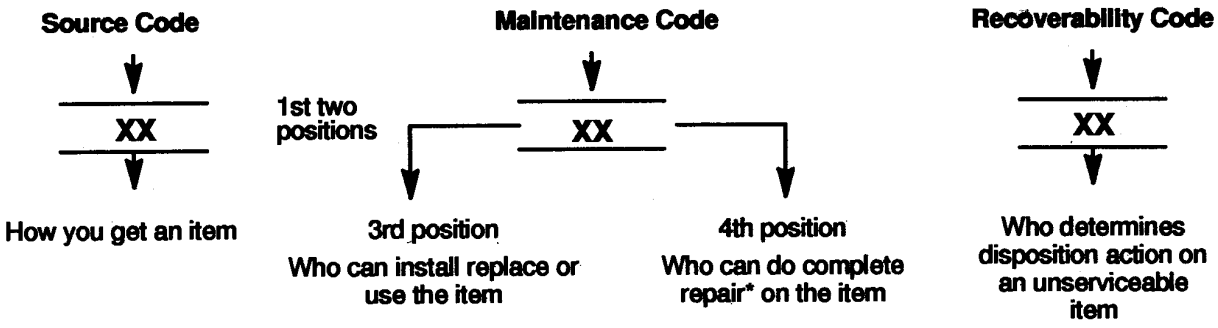
b. Section III. Special Tools List.- A list of special tools, special TMDE, and other special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in DESCRIPTION AND USABLE ON CODE column) for the performance of maintenance.

c. Section IV. Cross-Reference Index.- A list, in National Item Identification Number (NIIN) sequence, of all national stock numbered items appearing in the listing, followed by a list in alphanumeric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross referenced to each illustration figure and item number appearance.

C-3. EXPLANATION OF COLUMNS (SECTIONS II AND III).

a. ITEM NO. (Column (1)).-Indicates the number used to identify items called out in the illustration.

b. SMR Code (Column (2)).-The Source, Maintenance, and Recoverability (SMR) code is a 5-position code containing supply/requisitioning information, maintenance category authorization criteria, and disposition instruction, as shown in the following breakout:



* Complete Rear: Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

(1) Source Code. The source code tells you how you get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follow.

Code	Explanation
PA PB PC** PD PE PF PG	Stocked items; use the applicable NSN to request/requisition items with these source codes. They are authorized to the category indicated by the code entered in the 3rd position of the SMR code.
KD KF KB	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance category indicated in the 3rd position of the SMR code. The complete kit must be requisitioned and applied.

**NOTE: Items coded PC are subject to deterioration.

MO (Made at org AVUM level) MF (Made at DS/AVUM level) MH (Made at GS level) ML (Made at Specialized Repair Activity (SRA)) MD (Made at Depot)	Items with these codes are not to be requested/requisitioned individually. They must be made from bulk material which is identified by the part number in the DESCRIPTION and USABLE ON CODE (UOC) column and listed in the Bulk Material group of the repair parts list in the RPSTL. If the item is authorized to you by the 3rd position code of the SMR code, but the source code indicates it is made at a higher level, order the item from the higher level of maintenance.
AO (Assembled by org AVUM Level) AF (Assembled by DS/AVUM Level) AH (Assembled by GS Category) AL (Assembled by SRA) AD (Assembled by Depot)	Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the 3rd position code of the SMR code, authorizes you to replace the item, but the source code indicates the items are assembled at a higher level, order the item from the higher level of maintenance.

XA - Do not requisition an "XA"-coded item. Order its next higher assembly. (Also, refer to the NOTE below.)
XB - If an "XB" item is not available from salvage, order it using the CAGE Code and part number given.
XC - Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturer's part number.
XD - Item is not stocked. Order an "XD"-coded item through normal supply channels using the CAGE Code and part number given, if no NSN is available.

NOTE Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes, except for those source coded "XA" or those aircraft support items restricted by requirements of AR 750-1

(2) Maintenance Code.-Maintenance codes tell you the level(s) of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the SMR code as follows:

(a.) The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to the following levels of maintenance.

Code	Application/Explanation
C	- Crew or operator maintenance done within organizational or aviation unit maintenance.
O	- Organizational or aviation unit category can remove, replace, and use the item.
F	- Direct support or aviation intermediate level can remove, replace, and use the item.
H	- General support level can remove, replace, and use the item.
L	- Specialized repair activity can remove, replace, and use the item.
D	- Depot level can remove, replace, and use the item.

(b.) The maintenance code entered in the fourth position tells whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (i.e., perform all authorized repair functions).

NOTE Some limited repair may be done on an item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes.

This portion will contain one of the following maintenance codes.

Code	Application/Explanation
O	- Organizational or (aviation unit) is the lowest level that cn do complete repair of the item.
F	- Direct support or aviation intermediate is the lowest level that can do complete repair of the item.
H	- General support is the lowest level that can do complete repair of the item..

Code	Application/Explanation
L	- Specialized repair activity (designates the specialized repair activity) is the lowest level that can do complete repair of the item.
D	- Depot is the lowest level that can do complete repair of the item.
Z	- Nonreparable. No repair is authorized.
B	- No repair is authorized. No parts or special tools are authorized for the maintenance of a "B" coded item. However, the item may be reconditioned by adjusting, lubricating, etc., at the user level.

(3) Recoverability.Code - Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifty position of the SMR Code as follows:

Recoverability Codes	**Application/Explanation**
Z	- Nonreparable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in 3rd position of SMR Code.
O	- Reparable item. When not economically reparable, condemn and dispose of the item at organizational or aviation unit level.
F	- Reparable item. When uneconomically reparable, condemn and dispose of the item at the general support level.
H	- Reparable item. When uneconomically reparable, condemn and dispose of the item at the general support level.
D	- Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item not authorized below depot level.
L	- Reparable item. Condemnation and disposal not authorized below specialized repair activity (SRA).

Recoverability Codes	Application/Explanation
A	- Item requires special handling or condemnation procedures because of specific reasons (e.g., precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions.

c. FSCM (Column (3)). The Federal Supply Code for Manufacturer (FSCM) is a 5-digit numeric code which is used to identify the manufacturer, distributor, or Government agency/activity that supplies the item.

d. PART NUMBER (Column (4)). Indicates the primary number used by the manufacturer, (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

NOTE: When you use an NSN to requisition an item, the item you receive may have a different part number from the number listed.

e. DESCRIPTION AND USABLE ON CODE (UOC) (Column (5). This column includes the following information:

(1.) The Federal item name and, when required, a minimum description to identify the item.

(2.) The physical security classification of the item is indicated by the parenthetical entry (insert applicable physical security classification abbreviation, e.g., Phy Sec C1 (C)-Confidential, Phy Sec C1 (S)-Secret, Phy Sec C1 (T)-Top-Secret).

(3.) Items that are included in kits and sets are listed below the name of the kit or set.

(4.) Spare/repair parts that make up an assembled item are listed immediately following the assembled item line entry.

(5.) Part numbers of bulk materials are referenced in this column in the line entry for the item to be manufactured/fabricated.

(6.) When the item is not used with all serial numbers of the same model, the effective serial numbers are shown on the last line(s) of the description (before UOC).

(7.) The usable on code, when applicable (reference paragraph C 5, Special Information).

(8.) In the Special Tools List Section, the basis of issue (BOI) appears as the last line(s) in the entry for each special tool, special TMDE, and other special support equipment. When density of equipment supported exceeds density spread indicated in the basis of issue, the total authorization is increased proportionately.

(9.) The statement END OF FIGURE" appears just below the last item description in Column (5) for a given figure in both Section II and Section III.

f. QTY (Column (6)). The QTY (quantity per figure) column indicates the quantity of the item used in the breakout shown on the illustration/figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column instead of a quantity indicates that the quantity is variable and may vary from application to application.

C-4. EXPLANATION OF INDEX FORMAT AND COWMNS (SECTION IV).

a. NATIONAL STOCK NUMBER (NSN) INDEX.

(1.) STOCK NUMBER Column. This column lists the NSN by National item identification number (NIIN)sequence. The NIIN consists of the last nine digits of the NSN.

example: 5305-01-674-1467-NIIN

When using this column to locate an item, ignore the first four digits of the NSN. However, the complete NSN should be used when ordering items by stock number.

(2.) FIG. Column.-This column lists the number of the figure where the item is identified/located. The figures are in numerical order in Section II and Section III.

(3.) ITEM Column. The item number identifies the item associated with the figure listed in the adjacent FIG. column. This item is also identified by the NSN listed on the same line.

b. PART NUMBER INDEX. Part numbers in this index are listed in ascending alphanumeric sequence (i. e., vertical arrangement of letter and number combinations which place the first letter or digit of each group in order A through Z, followed by the numbers 0 through 9, and each following letter or digit in like order).

(1.) FSCM Column. The Federal Supply Code for Manufacturer (FSCM) is a 5-digit numeric code which is used to identify the manufacturer, distributor, or Government agency, etc. that supplies the item.

(2.) PART NUMBER Column. Indicates the primary number used by the manufacturer (individual, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

(3.) STOCK NUMBER Column. This column lists the NSN for the associated part number and manufacturer identified in the PART NUMBER and FSCM columns to the left.

(4.) FIG. Column. This column lists the number of the figure where the item is identified/located in Section II and Section III.

(5.) ITEM Column. The item number is that number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

C-5. FIGURE AND ITEM NUMBER INDEX .

a. USABLE ON CODE. The usable on code appears in the lower left comer of the Description column heading. Usable on codes are shown as "UOC:.." in the Description Column justified left) on the last line of the applicable item description/nomenclature. Uncoded items are applicable to all models. Identification of the usable on codes used in this RPSTL are:

Code	Used On
N/A	N/A

b. FABRICATION INSTRUCTIONS. Bulk materials required to manufacture items are listed in the Bulk Material Functional Group of this RPSTL. Part numbers for bulk materials are also referenced in the description column of the line item entry for the item to be manufactured/fabricated. Detailed fabrication instructions for items source coded to be manufactured/fabricated.

c. ASSEMBLY INSTRUCTIONS-N/A

d. KITS.-Line item entries for repair parts kits appear in a group in Section II

e. INDEX NUMBERS. Items which have the work BULK in the Figure column will have an index number shown in the item number column. This number is cross-reference between the National Stock Number/Part Number Index and the bulk material list in Section II.

f. ASSOCIATED PUBLICATIONS-N/A

C-6. HOW TO LOCATE REPAIR PARTS.

A. When National Stock Numbers or Part Numbers are not known.

STEP 1 Using the table of contents, determine the assembly or subassembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and listings are divided into the same groups.

STEP 2 Find the figure covering the assembly group or subassembly group to which the item belongs.

STEP 3 Identify the item on the figure and note the item number.

STEP 4 Refer to the Repair Parts List for the figure to find the part number for the item number noted on the figure.

STEP 5 Refer to the Part Number Index to find the NSN, if assigned.

B. When National Stock Number or Part Number is Known.

STEP 1 Using the Index of National Stock Number and Part Numbers, find the pertinent National Stock Number or Part Number. The NSN index is in National Item Identification Number (NIIN) sequence (see C-4.1(a)). The part numbers in the Part Number Index are listed in ascending alphanumeric sequence (see C-4.B.). Both indexes cross-reference you to the illustration figure and Item Number of the item you are looking for.

STEP 2 After finding the figure and item number, verify that the item is the one you are looking for, then locate the item number in the repair parts list for the figure.

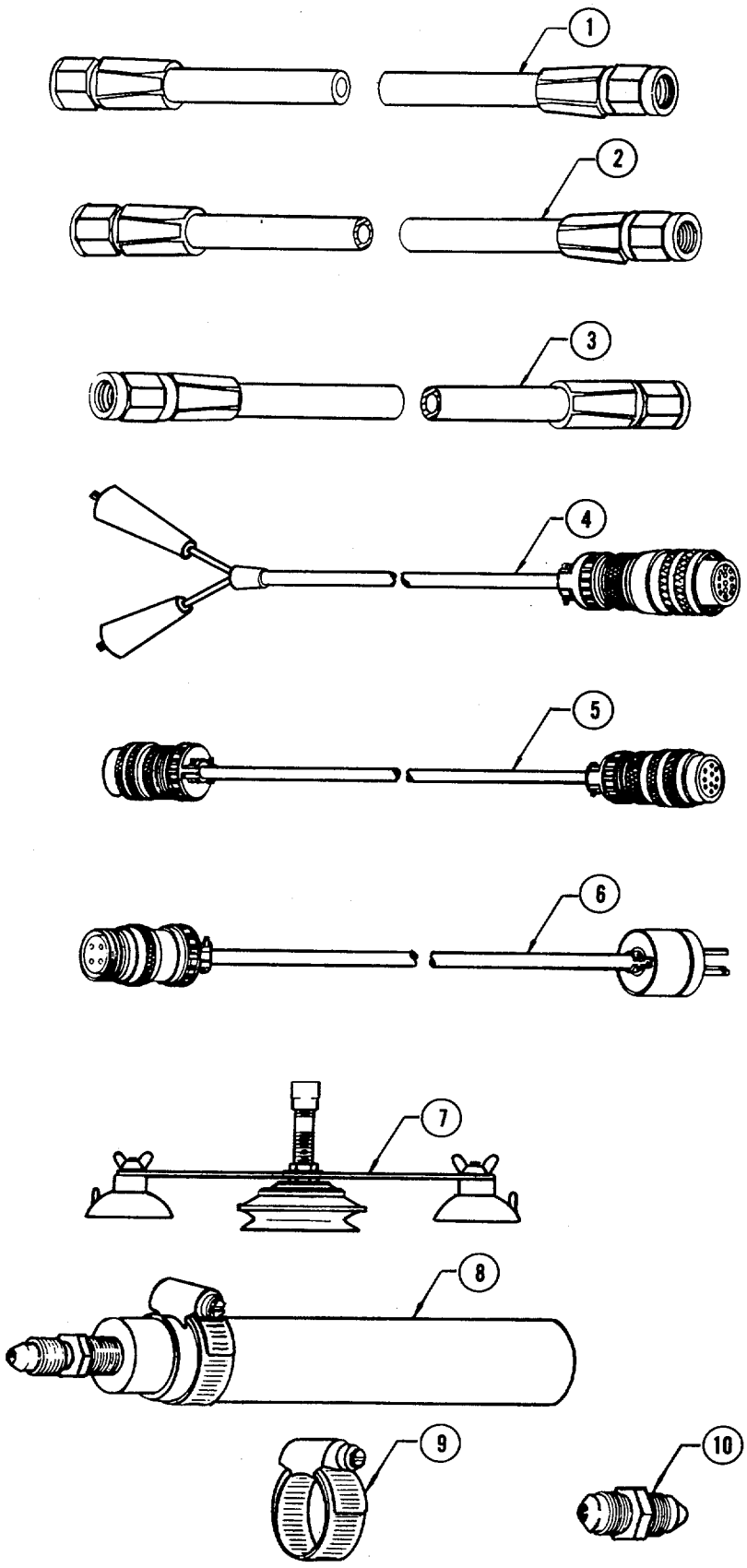


Figure C-1. Accessories

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 01. ACCESSORIES	
				FIGURE C-1. ACCESSORIES	
1	XDOZZ	88044	AN6270-4D-0720	HOSE ASSY 6FT	2
2	XDOZZ	88044	AN6270-4D-0120	HOSE ASSY 12 INCH	1
3	XDOZZ	88044	AN6270-4D-0600	HOSE ASSY 5 FT	1
4	XDOFF	1EK10	10005185	CABLE ASSY,DC POWER (SEE FIGURE C-10 FOR BREAKDOWN)	1
5	XDOFF	1EK10	10005186	CABLE,AC 3 PHASE SEE FIG C-11 FOR BREAKDOWN	1
6	XDOFF	1EK10	10005187	ADAPTER CABLE AC SEE FIG C-12 FOR BREAKDOWN	1
7	XDOFF	1EK10	SK-ED-0017	ADAPTER,FLUSH STATI SEE FIG C-5 FOR BREAKDOWN	1
8	XDOFF	1EK10	SK-ED-0018	ADAPTER,PITOT HEAD SEE FIG C-9 FOR BREAKDOWN	1
9	PAOZZ	88044	AN737TW34-38	CLAMP,HOSE	1
10	PAOZZ	88044	AN815-4D	NIPPLE,TUBE	2

END OF FIGURE

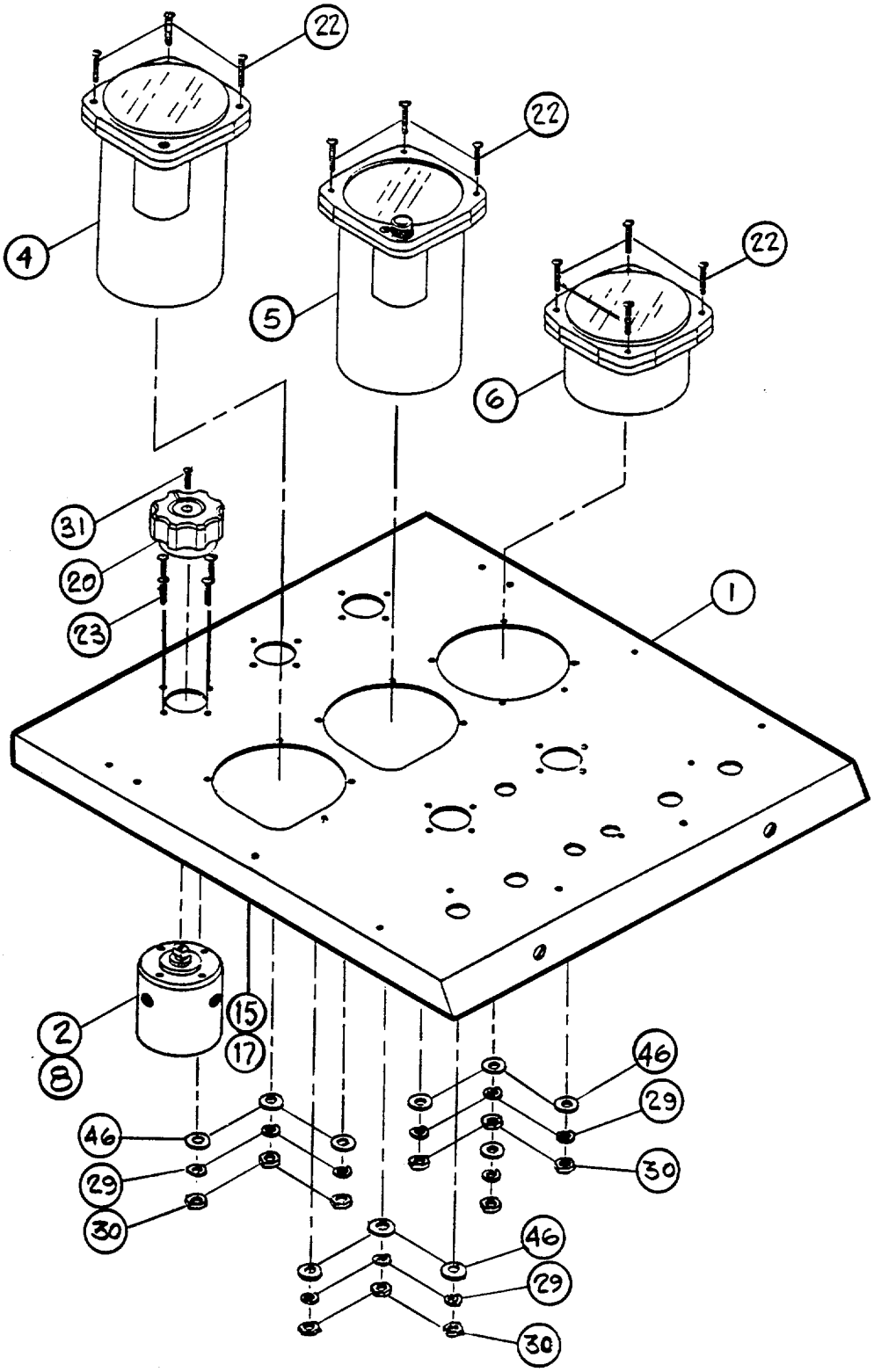


Figure C-2. Operator Panel (Sheet 1 of 5)

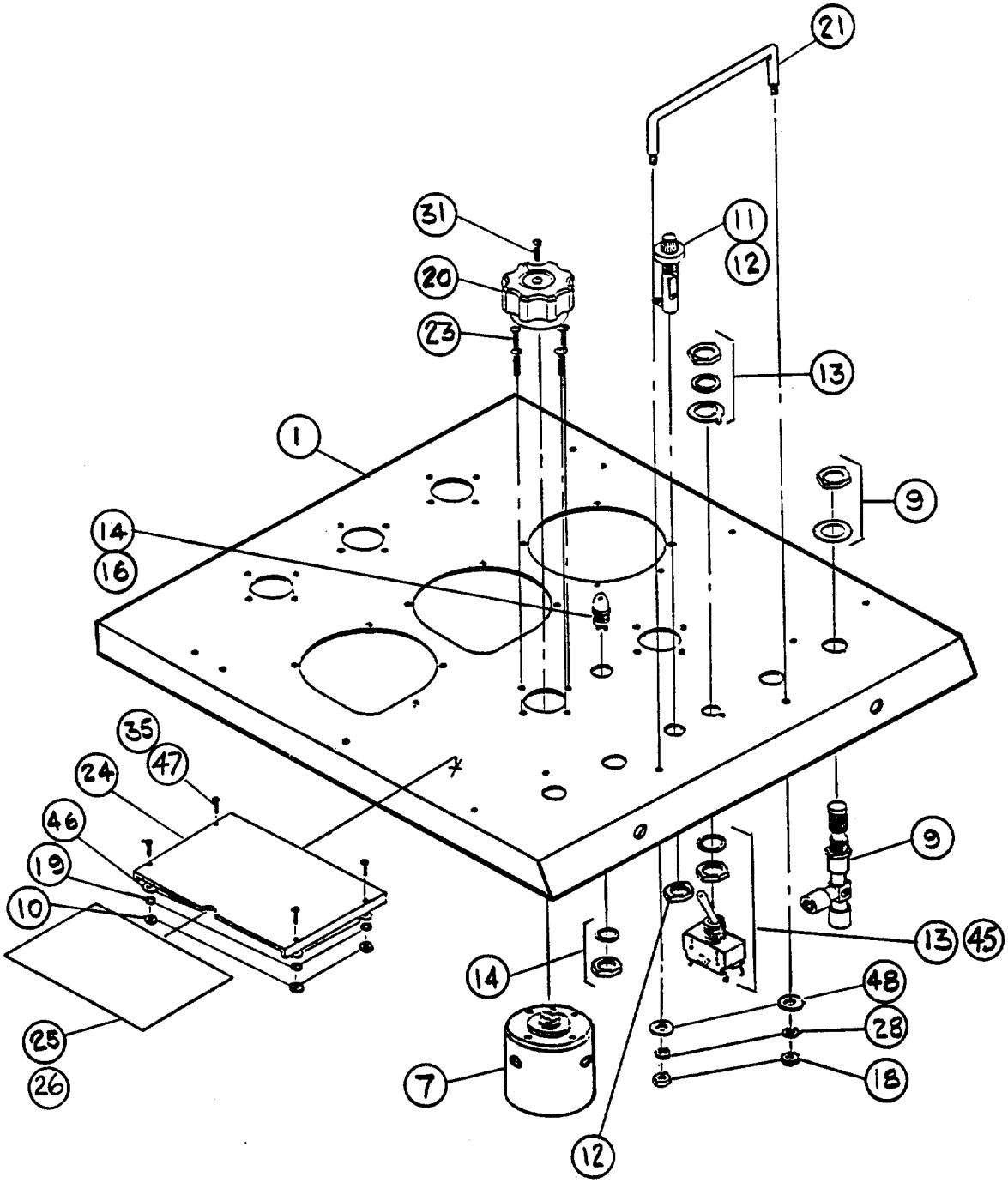


Figure C-2. Operator Panel (Sheet 2 of 5).

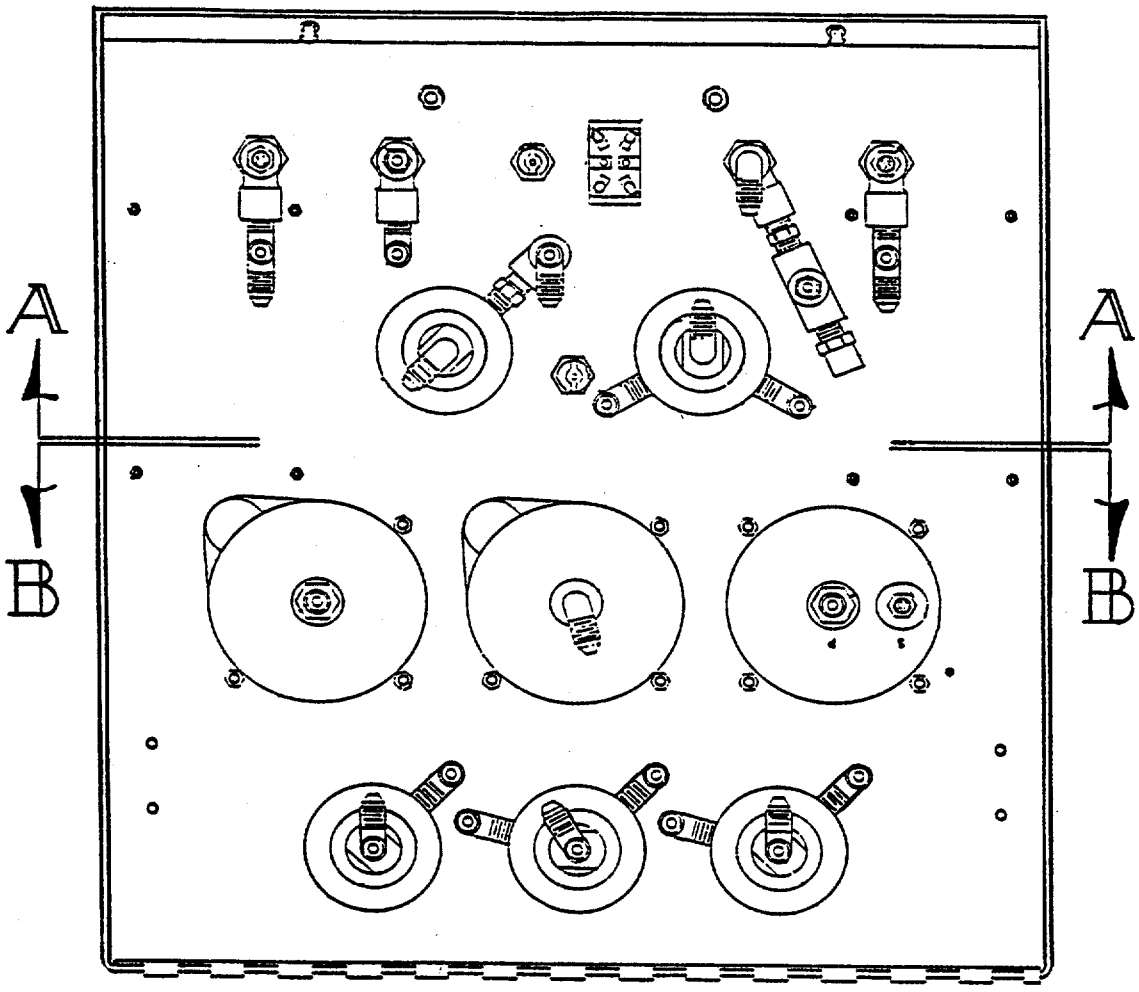


Figure C-2. Operator Panel (Sheet 3 of 5).

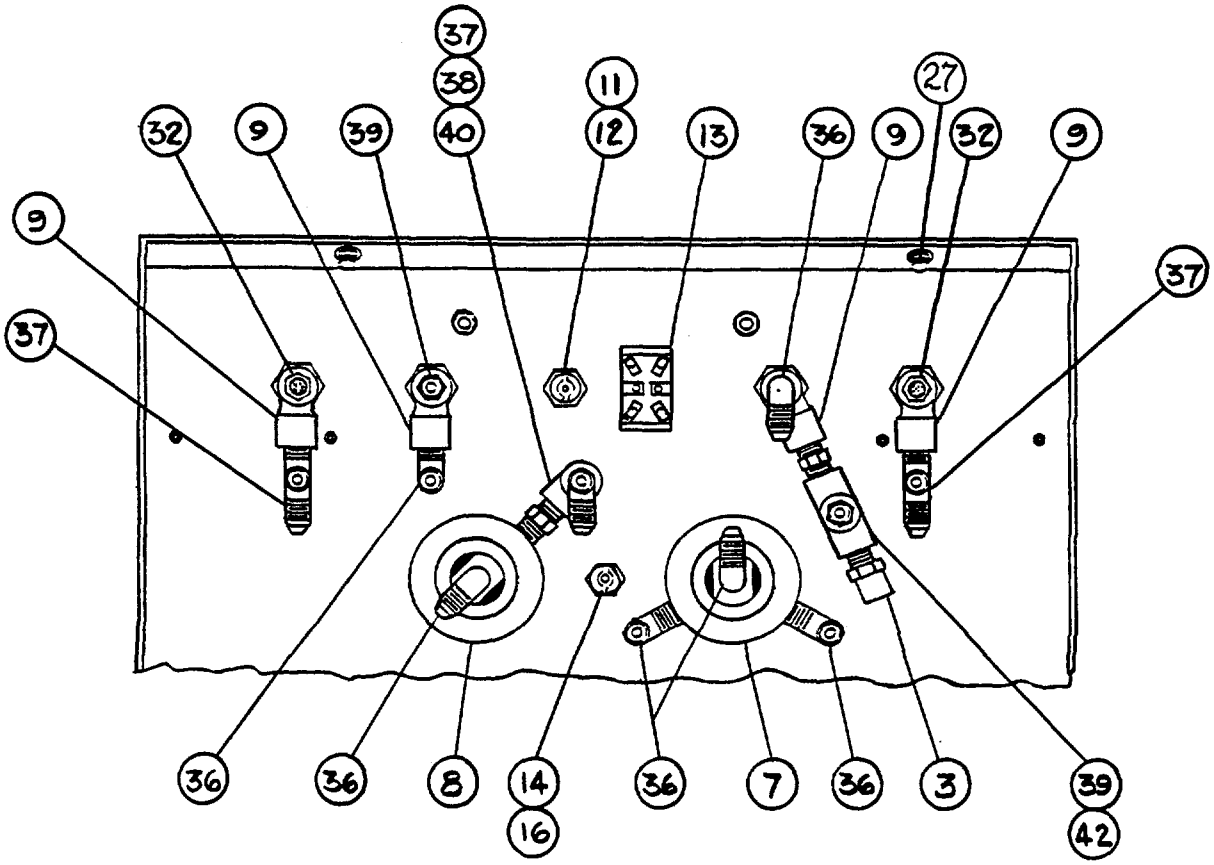


Figure C-2. Operator Panel (Sheet 4 of 5).

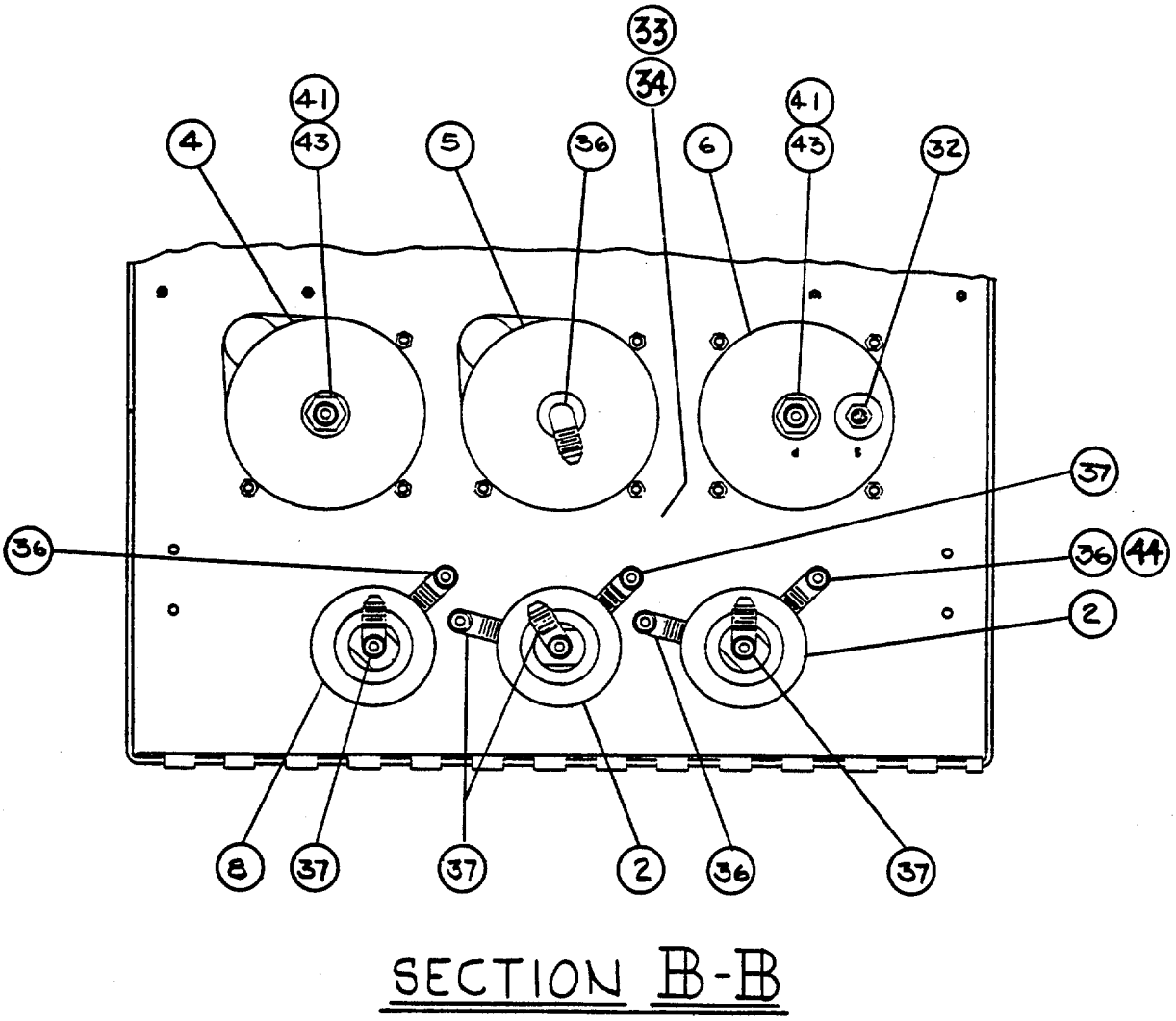


Figure C-2. Operator Panel (Sheet 5 of 5).

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 02. INSTRUMENTS	
				FIGURE C-2. OPERATOR PANEL	
	XDFFF	1EK10	10005072	PANEL ASSY FRONT	1
1	XDFZZ	1EK10	10005073	PANEL, CONTROL FAB	1
2	PAFZZ	54966	MODEL 1-1852	VALVE, STOP-CHECK	2
3	PAFZZ	54966	559A-IM-20	VALVE, SAFETY RELIEF	1
4	PAFZZ	98810	RC60MS	INDICATOR, VERTICAL	1
5	PAFZZ	98810	A80AAU8A	ALTIMETER, SERVO CON	1
6	PAFDD	96906	MS28046T1	INDICATOR, AIR SPEED	1
7	PAFZZ	54966	MODEL 3-1852	VALVE, STOP-CHECK	1
8	PAFZZ	54966	MODEL 2-1852	VALVE, STOP-CHECK	2
9	PAFZZ	18034	B-2MA4	VALVE, METERING	4
10	PAFZZ	96906	MS35649-222	NUT, PLAIN, HEXAGON	8
11	PAOZZ	1JS85	27F697	FUSE, CARTRIDGE	2
12	PAFZZ	1JS85	27F752	FUSE, CARTRIDGE	1
13	PAFZZ	02929	23F210	SWITCH, TOGGLE	1
14	PAFZZ	72619	359-8430-0931-502	LIGHT, INDICATOR	1
15	PAFZZ	62676	270-739	FUSE, CARTRIDGE	1
16	PAOZZ	96906	MS25237-327	LAMP, INCANDESCENT	1
17	XDFZZ	62676	64-2344	TAPE, DOUBLE SIDED	1
18	PAFZZ	96906	MS35649-202	NUT, PLAIN, HEXAGON	2
19	PAFZZ	96906	MS122026	WASHER, LOCK	8
20	PAFZZ	86797	CR-20-WL-H	KNOBB	5
21	XDFZZ	1EK10	10005132	HANDLE, PANEL	1
22	PAFZZ	96906	MS35206-248	SCREW, MACHINE	10
23	PAFZZ	96906	MS35206-226	SCREW, MACHINE	20
24	XDFZZ	1EK10	10005170	HOLDER, CARD	2
25	XDFZZ	1EK10	10005188	CARD, CALIB CLIMB/ ALTIMETER	1
26	XDFZZ	1EK10	10005189	CARD, CALIB AIRSPEED	1
27	PAFZZ	94222	PS10-032-40	SCREW, FLUSH MOUNT	2
28	PAFZZ	96906	MS35338-43	WASHER, LOCK	2
29	PAFZZ	96906	MS35338-42	WASHER, LOCK	10
30	PAFZZ	96906	MS35649-282	NUT, PLAIN, HEXAGON	10
31	PAFZZ	96906	MS35207-267	SCREW, MACHINE	5
32	PAFZZ	7S124	ASP1BV	PLUG, VENT	4
33	XDFZZ	56563	MB4A	ADHESIVE, BASE MOUNT	2
34	PAFZZ	06383	SST2SM	STRAP, TIEDOWN, ELECT	3
35	PAFZZ	96906	MS35206-207	SCREW , MACHINE	8
36	PAFZZ	88044	AN822-3D	ELBOW, FLARED	12
37	PAFZZ	96906	MS20826	TEE	6
38	PAFZZ	88044	AN911-1D	NIPPLE, PIPE	2
39	PAFZZ	88044	AN816-3D	ADAPTER, STRAIGHT	2
40	PAFZZ	88044	AN916-1D	ELBOW, PIPE	2
41	PAFZZ	88044	AN919-2D	REDUCER, TUBE	2
42	PAFZZ	88044	AN917-1D	TEE, PIPE	1
43	PAFZZ	96906	MS28778-4	PACKING, PREFORMED	2
44	XDFZZ	81349	MIL-T-27730A	TAPE, POLYTETRAFLUID	6
45	XDFZZ	1EK10	10005045	WASHER, FLAT	4
46	PAFZZ	96906	MS27183-7	WASHER, FLAT	10

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
47	PAFZZ	96906	MS27183-4	WASHER, FLAT.....	8
48	PAFZZ	96906	MS27183-8	WASHER, FLAT.....	2

END OF FIGURE

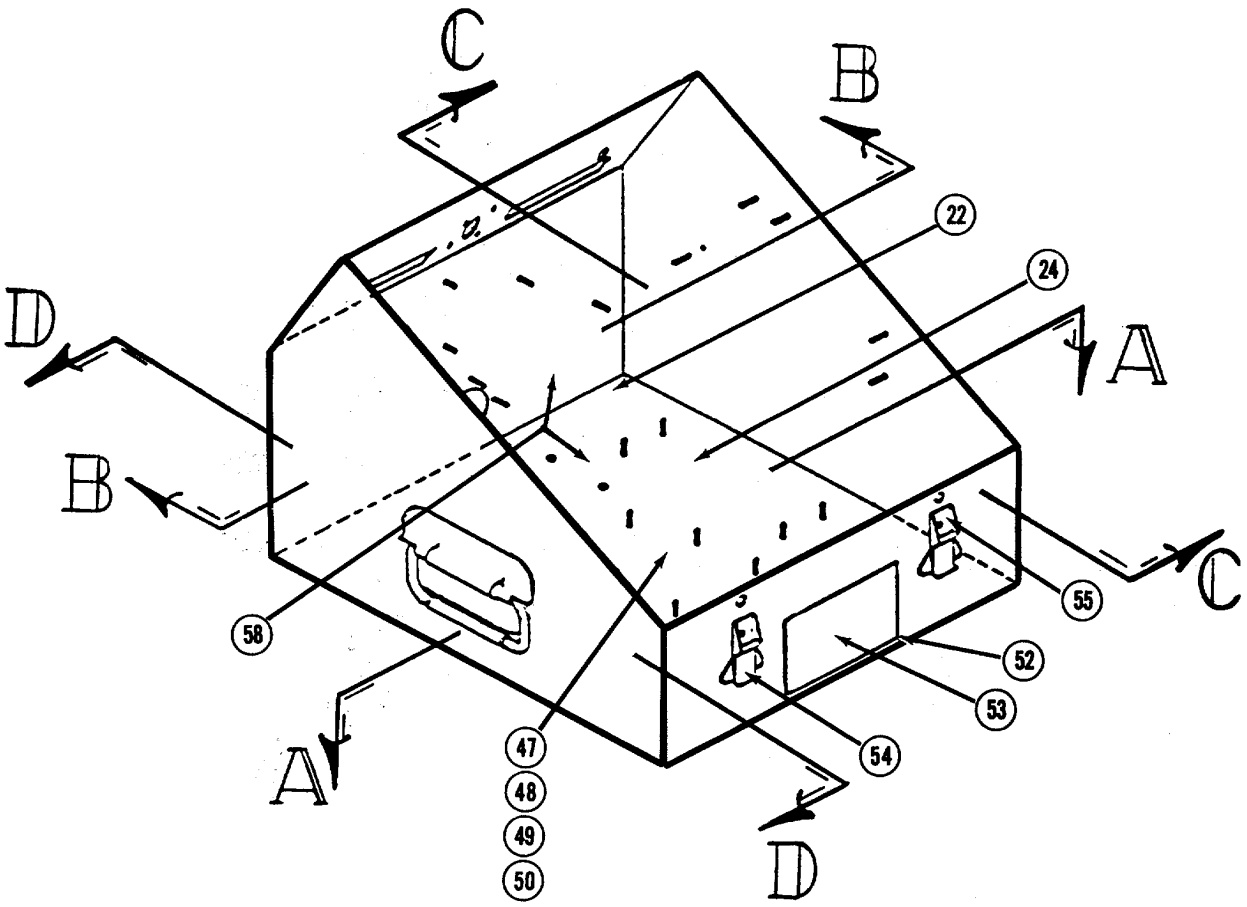


Figure C-3. Chassis Base Assembly (Sheet 1 of 5)

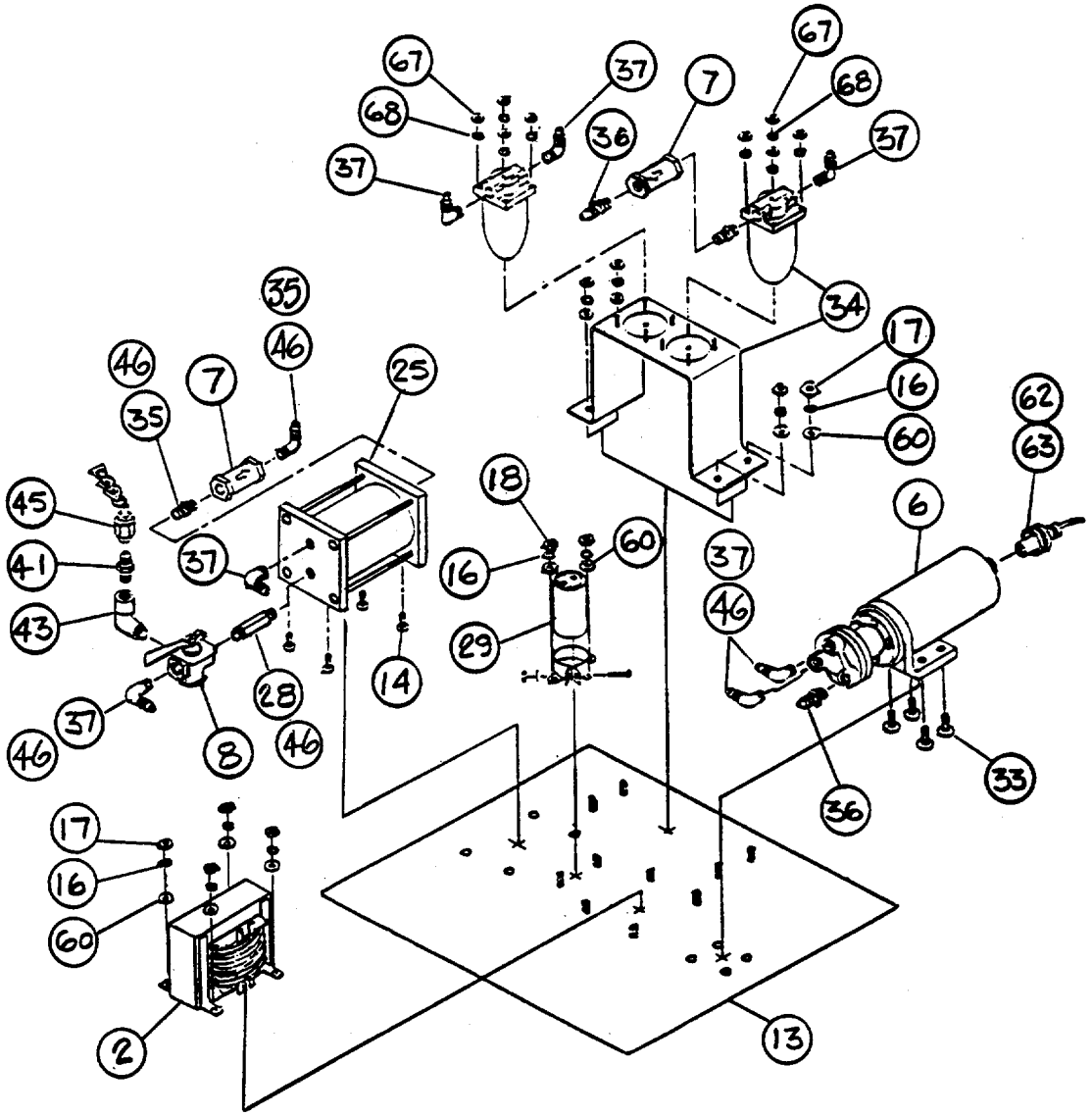


Figure C-3. Chassis Base Assembly (Sheet 2 of 5)

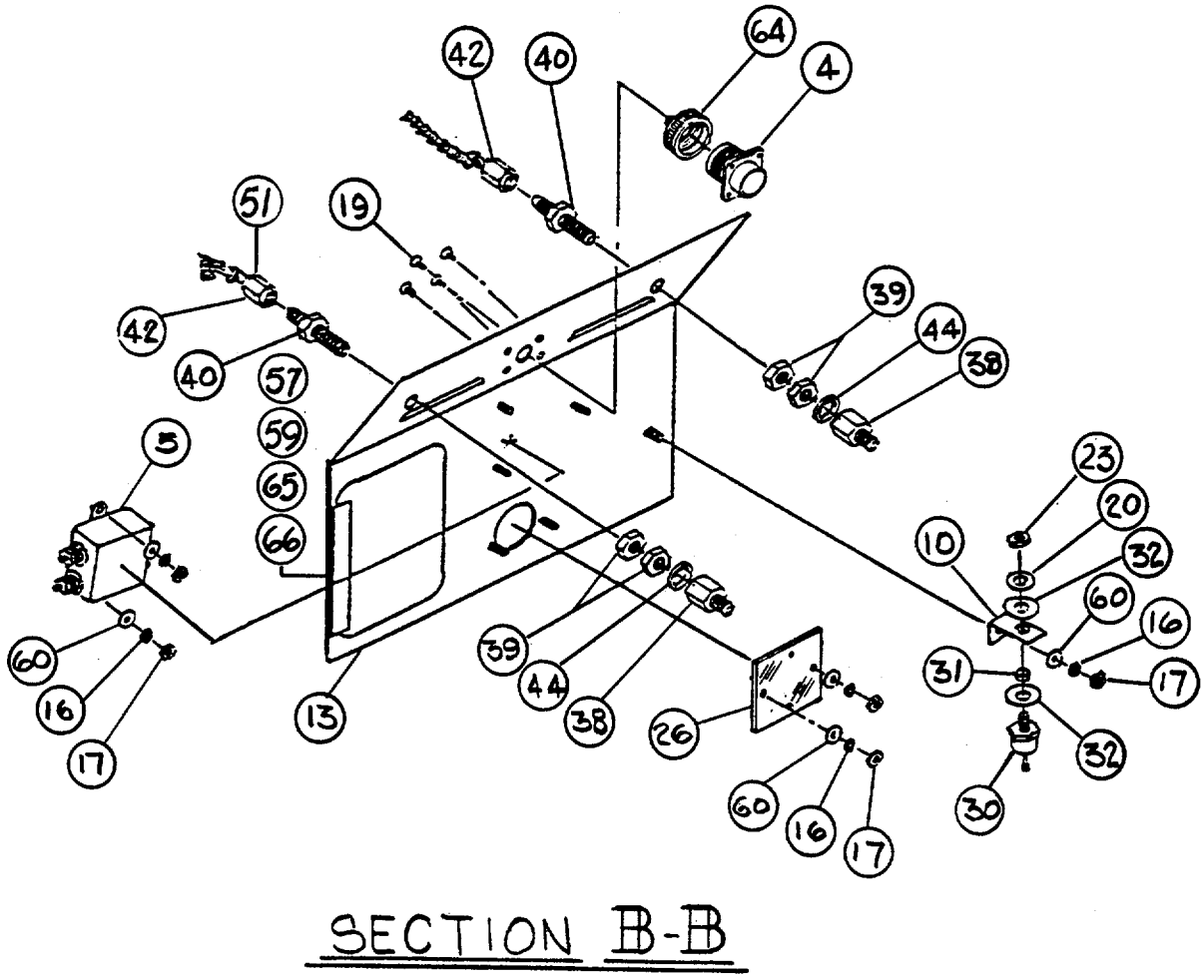


Figure C-3. Chassis Base Assembly (Sheet 3 of 5)

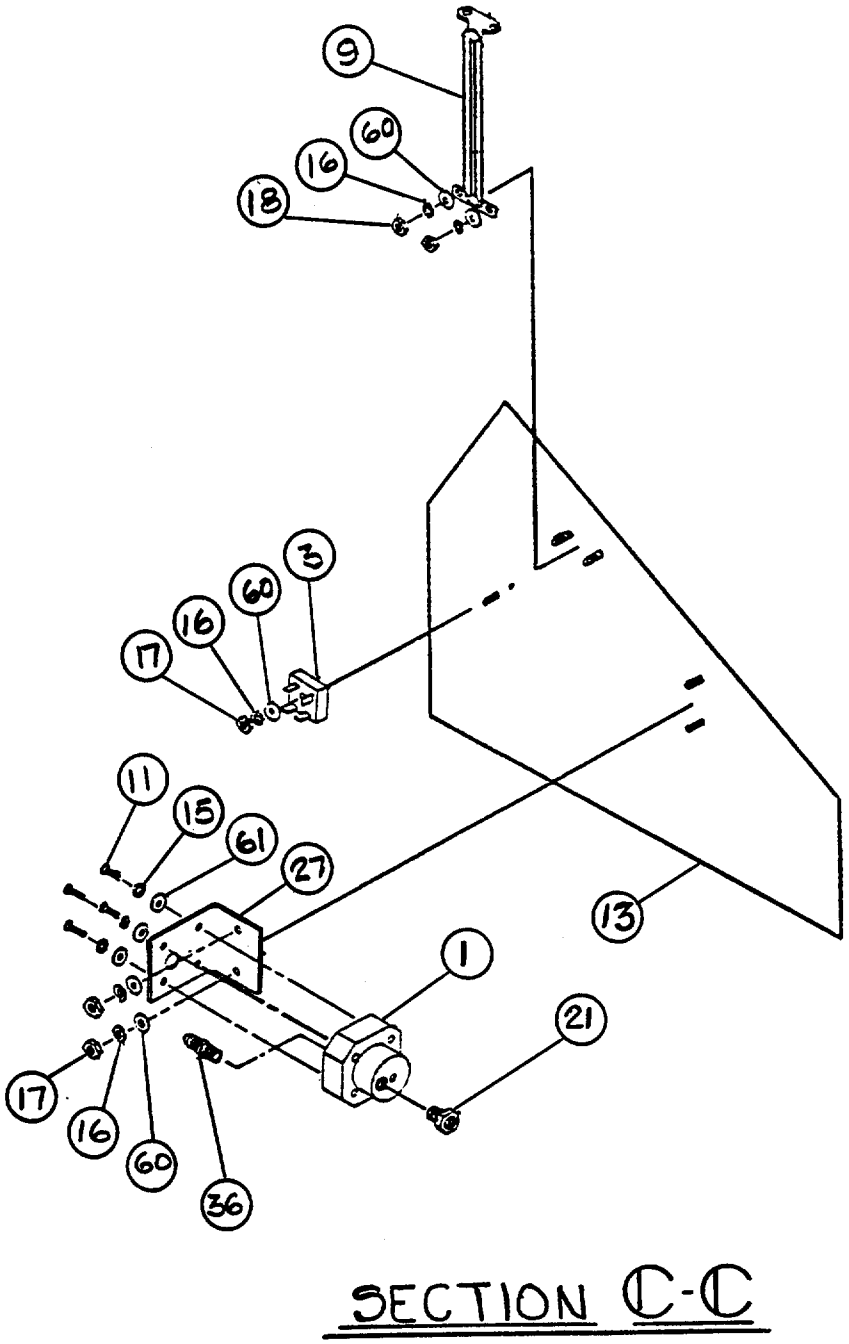


Figure C-3. Chassis Base Assembly (Sheet 4 of 5)

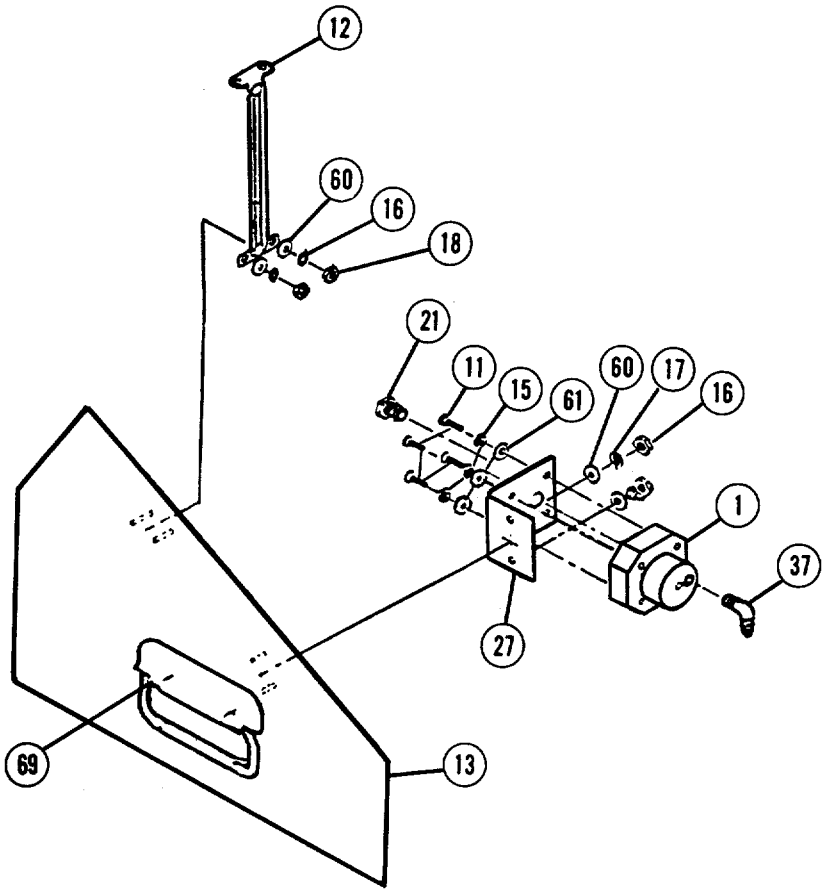


Figure C-3. Chassis Base Assembly (Sheet 5 of 5)

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 03. PNEUMATIC SYSTEM, MOTOR /PUMP, ELECTRICAL SYSTEM	
				FIGURE C-3. CHASSIS BASE ASSEMBLY	
	XAFFF	1EK10	10005265	BASE ASSY, PS TESTER	1
1	PAFZZ	54966	MODEL 352	VALVE, SAFETY RELIEF UMM RELIEF	2
2	XDFZZ	3F802	JM 2214	TRANSFORMER STEP- DOWN 115-22V 6.5 AMP	1
3	PAFZZ	2R076	8418 SCBA 2F	RECTIFIER, BRIDGE	1
4	XDFZZ	1EK10	10005098	CONNECTOR, MADE FROM MS3102A-18-1P MODIFIED TO MIN.OF .68 INCH ON THREADED END	1
5	PAFZZ	05245	10K6	FILTER, RADIO FREQUE AC 10A	1
6	XDFFF	1EK10	10005266	MOTOR/PUMP ASSY	1
	PAFZZ	92270	P345	VACUUM PUMP, ROTARY	1
	PAFZZ	25140	10127	MOTOR, DIRECT CURREN	1
	PAFZZ	97852	10-24X5-8	SCREW, MACHINE	4
7	PAFZZ	751244	81-1/8-D1-2	VALVE, CHECK	2
8	PAFZZ	1A768	710-13-1/8D	VALVE, CHECK	1
9	PAFZZ	03007	781-14-RH	BRACKET, MOUNTING	1
10	XDFZZ	1EK10	10005153	BRACKET, DIODE	1
11	PAFZZ	96906	MS35207-261	SCREW, MACHINE	8
12	PAFZZ	03007	781-14-LH	BRACKET, MOUNTING	1
13	XDFZZ	1EK10	10005165	CHASSIS, BASE	1
14	PAFZZ	96906	MS35190-251	SCREW, MACHINE	4
15	PAFZZ	96906	MS35338-43	WASHER, LOCK	8
16	PAFZZ	96906	MS35338-42	WASHER, LOCK	34
17	PAFZZ	969D6	MS35649-282	NUT, PLAIN, HEXAGON	22
18	PAFZZ	96906	MS25082-2	NUT, PLAIN, HEXAGON	8
19	PAFZZ	96906	MS35190-251	SCREW, MACHINE	4
20	XDFZZ	2R076	B51567F025	WASHER, FLAT	11
21	PAFZZ	7S124	ASP-1BV	PLUG, VENT	2
22	XDFZZ	56563	MB4A	ADHESIVE, BASE MOUNT	9
23	XDFZZ	2R076	B51568F029	NUT, HEX	1
24	PAFZZ	06383	SST2SM	STRAP, TIEDOWN, ELECT	13
25	XDFFF	1EK10	10005237	RESERVOIR ASSY OIL (SEE FIGURE C-6 FOR BREAKDOWN)	1
26	XDFZZ	1EK10	10005242	WINDOW, RESERVOIR	1
27	XDFZZ	1EKI0	10005154	BRACKET ASSY VACUUM	2
28	XDFZZ	SA17	8SS-2-HLN-200	FITTING, NIPPLE	1
29	PAFZZ	49815	3186BC492U050AM	CAPACITOR, FIXED, ELE	1
30	PAFZZ	2R076	1N1186A	DIODE, CR1 200V-40A	1
31	XDFZZ	2R076	B51547F013	DIODE BUSHING	1
32	XDFZZ	2R076	B52600F002	MICA WASHER	2
33	PAFZZ	96906	MS35190-287	SCREW, MACHINE	4
34	XDFFF	1EK10	10005267	OIL SUMP ASSY (SEE FIGURE C-8 FOR BREAKDOWN)	1
35	PAFZZ	88044	AN911-1D	NIPPLE, PIPE	2
36	PAFZZ	88044	AN816-3D	ADAPTER, STRAIGHT P	3
37	PAFZZ	88044	AN822-3D	ELBOW, FLARED	6
38	PAFZZ	88044	AN894-4-3D	FITTING, EXPANDER	2

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
39	PAFZZ	88044	AN924-4D	NUT	4
40	PAFZZ	88044	AN832-4D	NIPPLE, TUBE	2
41	PAFZZ	88044	AN816-4D	ADAPTER, STRAIGHT, PI	1
42	PAFZZ	88044	AN929-A4	CAP, TUBE	2
43	PAFZZ	88044	AN914-1D	ELBOW, 90 DEGREE	1
44	PAFZZ	96906	MS28778-4	PACKING, PREFORMED	2
45	XDFZZ	56563	SS-12	CHAIN, STAINLESS	24
46	XDFZZ	81349	MIL-T-27730A	TAPE	6
47	XDFZZ	1EK10	10005176-47	TUBING, RESERVOIR TO PUMP	1
48	XDFZZ	1EK10	10005177-48	TUBING, SELECTOR VALVE TO PUMP	1
49	XDFZZ	1EK10	10005178-49	TUBING, PUMP PORT	1
50	XDFZZ	1EK10	10005179-50	TUBING, OIL SUMP TO CHECK VALVE	1
51	XDFZZ	56563	SR-5	SPLIT RING	3
52	XDFZZ	96906	MS24243/1-A403	RIVET, DOMED HEAD	4
53	XDFZZ	1EK10	10005140	ID PLATE	1
54	PAFZZ	03007	8201-02	CATCH, FLUSH	2
55	XDFZZ	96906	MS24243/1-A403	RIVET, DOMED HEAD	4
57	XDFZZ	96906	MS24243/1-A304	POP RIVET	6
58	XAFFF	1EK10	10005271	PNEUMATIC SYSTEM (SEE FIGURE C-4 FOR BREAKDOWN)	1
59	XDFZZ	94222	82-16-260-16	FASTENER, 1/4 TURN	1
60	PAFZZ	96906	MS27183-7	WASHER, FLAT	32
61	PAFZZ	96906	MS27183-8	WASHER, FLAT	8
62	PAFZZ	96906	MS3456WIOS2S	CONNECTOR, PLUG, ELEC	1
63	PAFZZ	81349	M85049/41-3A	CLAMP, CABLE, ELECTRI	1
64	PAFZZ	02660	9760-18	COVER, ELECTRICAL	1
65	PAFZZ	94222	82-32-101-20	WASHER, SPLIT	1
66	XDFZZ	94222	82-35-302-15	RECEPTACLE	1
67	PAFZZ	96906	MS35649-262	NUT, PLAIN, HEXAGON	8
68	PAFZZ	96906	MS1222028	WASHER, LOCK	8
69	PAFZZ	96906	MS18012-1	HANDLE, BAIL	2

END OF FIGURE

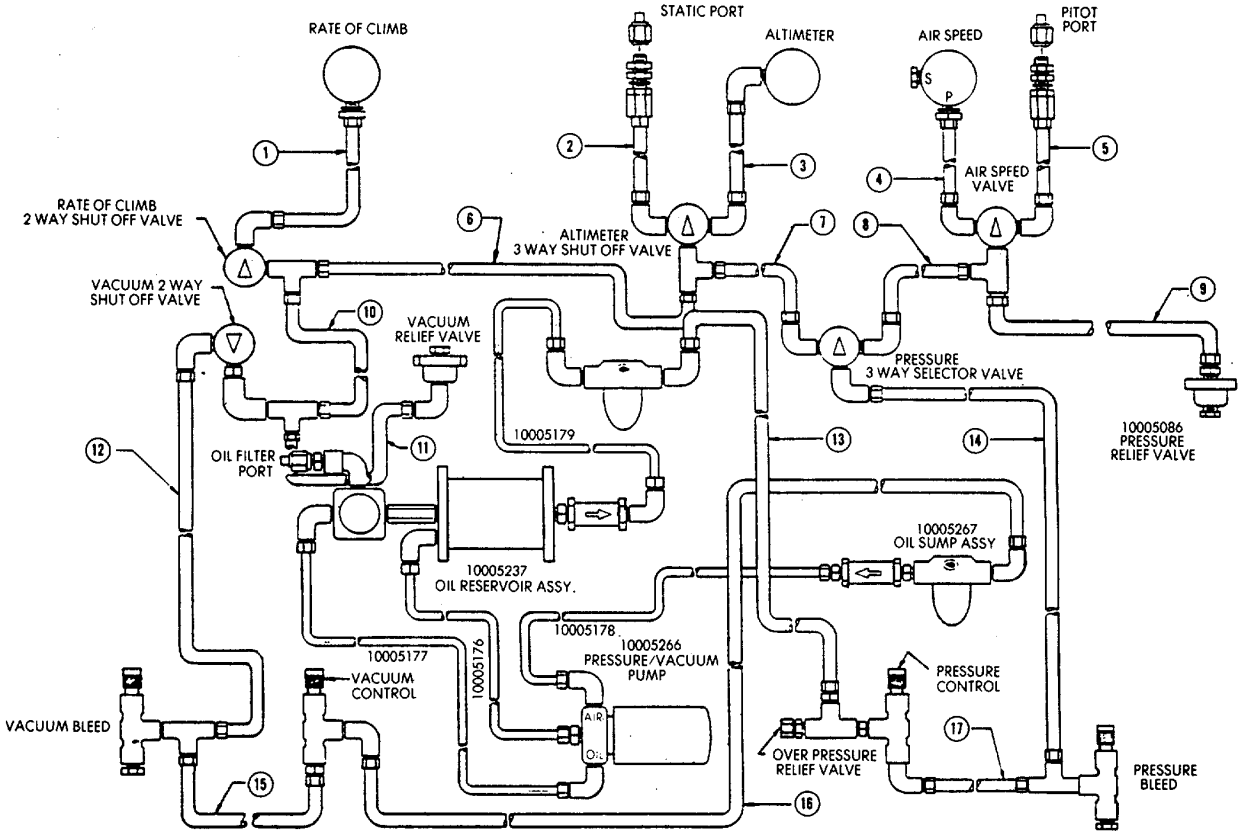


Figure C-4. Pneumatic Diagram Breakdown.

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
1	XDFZZ	88044	AN6270-3D-0083	HOSE ASSY 8.375 IN	1
2	XDFZZ	88044	AN6270-3D-0084	HOSE ASSY 8.50 IN	1
3	XDFZZ	88044	AN6270-3D-0056	HOSE ASSY 5.75 IN	1
4	XDFZZ	88044	AN6270-3D-0064	HOSE ASSY 7.1 IN	1
5	XDFZZ	88044	AN6270-3D-0075	HOSE ASSY 7.625 IN	1
6	XDFZZ	88044	AN6270-3D-0066	HOSE ASSY 7.4 IN	1
7	XDFZZ	88044	AN6270-3D-0085	HOSE ASSY 9.3 IN	1
8	XDFZZ	88044	AN6270-3D-0081	HOSE ASSY 8.125 IN	1
9	XDFZZ	88044	AN6270-3D-0080	HOSE ASSY 8.6 IN	1
10	XDFZZ	88044	AN6270-3D-0122	HOSE ASSY 12.25 IN	1
11	XDFZZ	88044	AN6270-3D-0230	HOSE ASSY 23.0 IN	1
12	XDFZZ	88044	AN6270-3D-0062	HOSE ASSY 6.9 IN	1
13	XDFZZ	88044	AN6270-3D-0192	HOSE ASSY 19.25 IN	1
14	XDFZZ	88044	AN6270-3D-0060	HOSE ASSY 6.6 IN	1
15	XDFZZ	88044	AN6270-3D-0061	HOSE ASSY 6.125 IN	1
16	XDFZZ	88044	AN6270-3D-0191	HOSE ASSY 19.125 IN	1
17	XDFZZ	88044	AN6270-3D-0070	HOSE ASSY 7.0 IN	1

END OF FIGURE

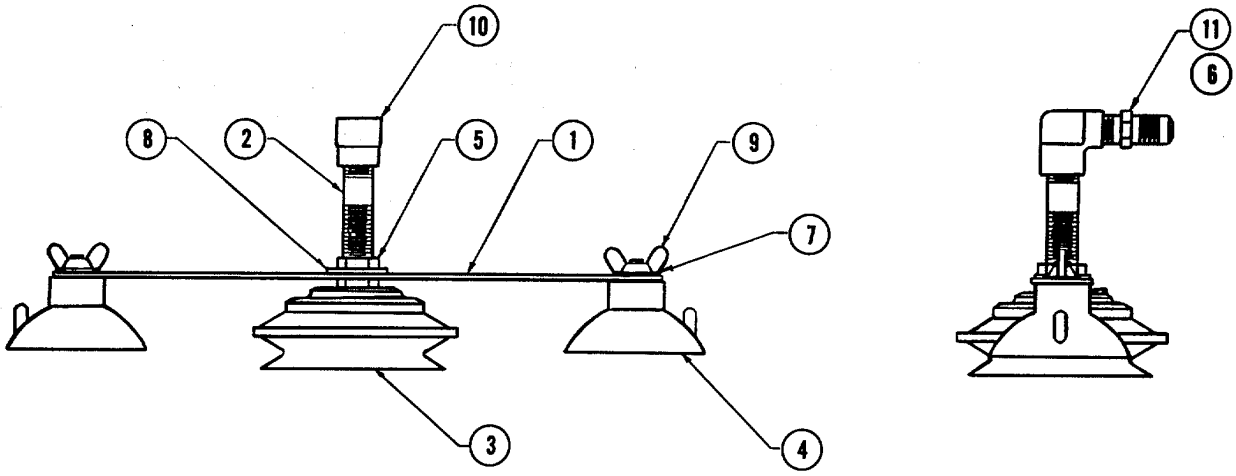


Figure C-5. Flush Static Port Adaptor

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
1	XDFZZ	1EK10	10005114	STRIP, ADAPTER	1
2	XDFZZ	1EK10	10005115	TUBE ADAPTER	1
3	PAFZZ	7S124	B75-31-50-029	CUP, BELLOWS VACUUM	1
4	PAFZZ	75543	312-MS	CUP, SUCTION 31/3 DI	2
5	PAFZZ	12204	144030	LOCKNUT, PIPE	2
6	XDFZZ	81349	MIL-T-27730A	TAPE	2
7	PAFZZ	96906	MS27183-48	WASHER, FLAT	2
8	PAFZZ	96906	MS27183-17	WASHER, FLAT	1
9	PAFZZ	96906	MS35425-70	NUT, PLAIN, WING	2
10	PAFZZ	88044	AN916-1D	ELBOW, PIPE	1
11	PAFZZ	88044	AN816-4D	ADAPTER, STRAIGHT, PI	1

END OF FIGURE

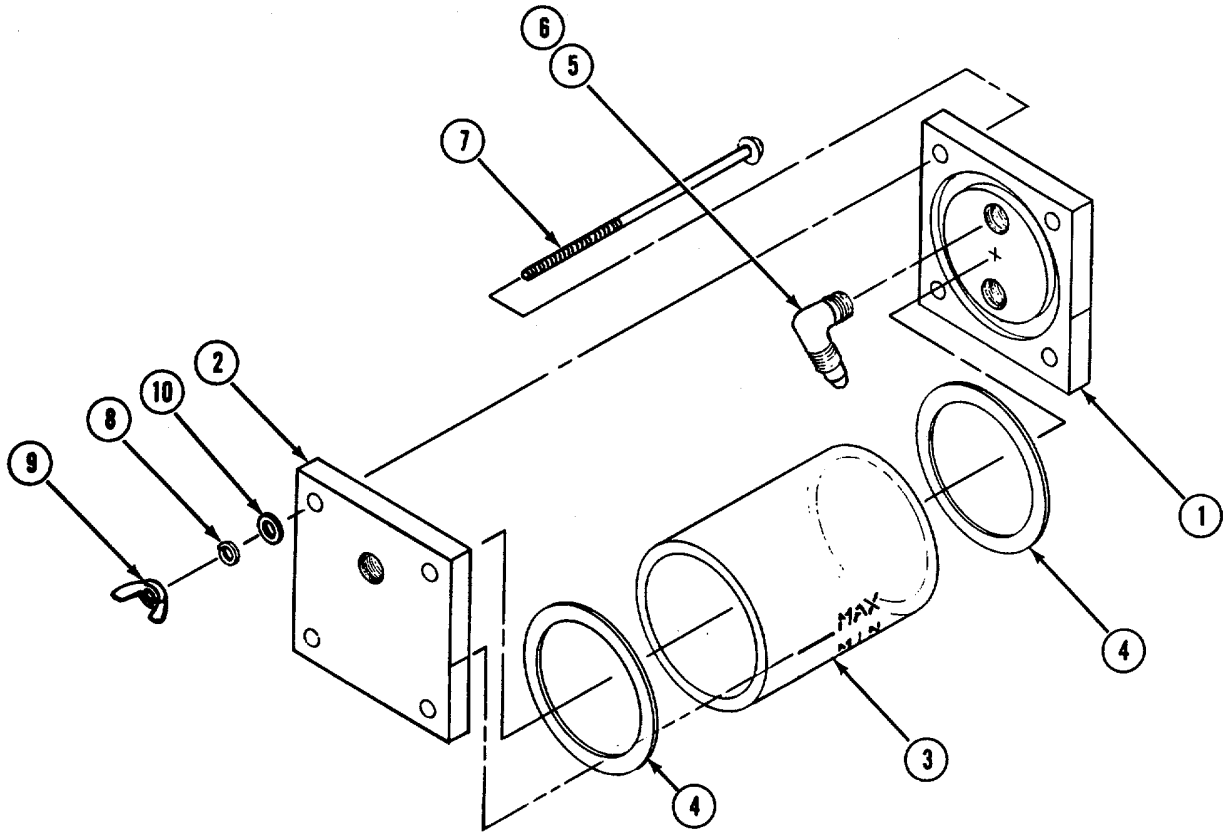


Figure C-6. Oil Reservoir

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
1	XDFZZ	1EK10	10005263	PLATE, OIL RES. L/H	1
2	XDFZZ	1EK10	10005264	PLATE, OIL RES. R/H	1
3	XDFZZ	13440	PYREX7740	TUBING, OIL RESERVOI	1
4	XDFZZ	81349	MIL-P-5516CLA	GASKET	2
5	PAFZZ	88044	AN822-3D	ELBOW	1
6	XDFZZ	81349	MIL-T-27730A	TAPE	1
7	XDFZZ	56563	10-24-4.5	SCREW, PAN HEAD	4
8	PAFZZ	96906	MS35338-43	WASHER, LOCK	4
9	PAFZZ	96906	MS35425-68	NUT, PLAIN, WING	4
10	PAFZZ	96906	MS27183-8	WASHER, FLAT	4

END OF FIGURE

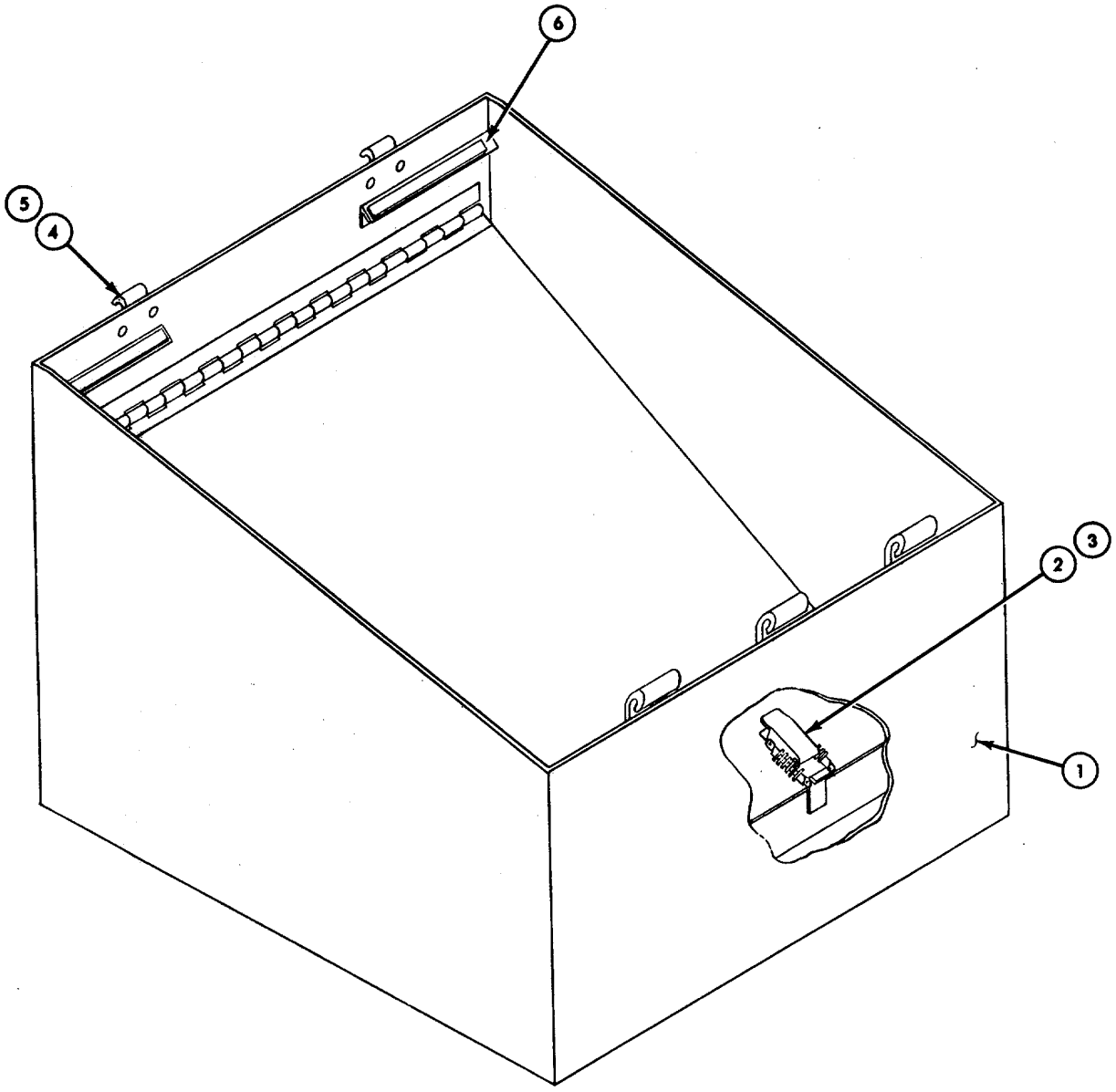


Figure C-7. Cover

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 04. COVER ASSY AND COMPONENTS	
				FIGURE C-7. COVER	
1	XDFZZ	1EK10	10005074	COVER ASSY WELDMENT	1
2	PAFZZ	98003	SC-D-206482E	CATCH,CLAMPING	2
3	XDFZZ	96906	MS24243/1-A404	RIVET,DOMED HEAD	4
4	PAFZZ	03007	8207-02	CLAMP,RIM CLENCHING	2
5	XDFZZ	96906	MS24243/1-A403	RIVET,DOMED HEAD	4
6	XDFZZ	20982	411N-1/4X3/8	ADHESIVE,FOAM BACK	8

END OF FIGURE

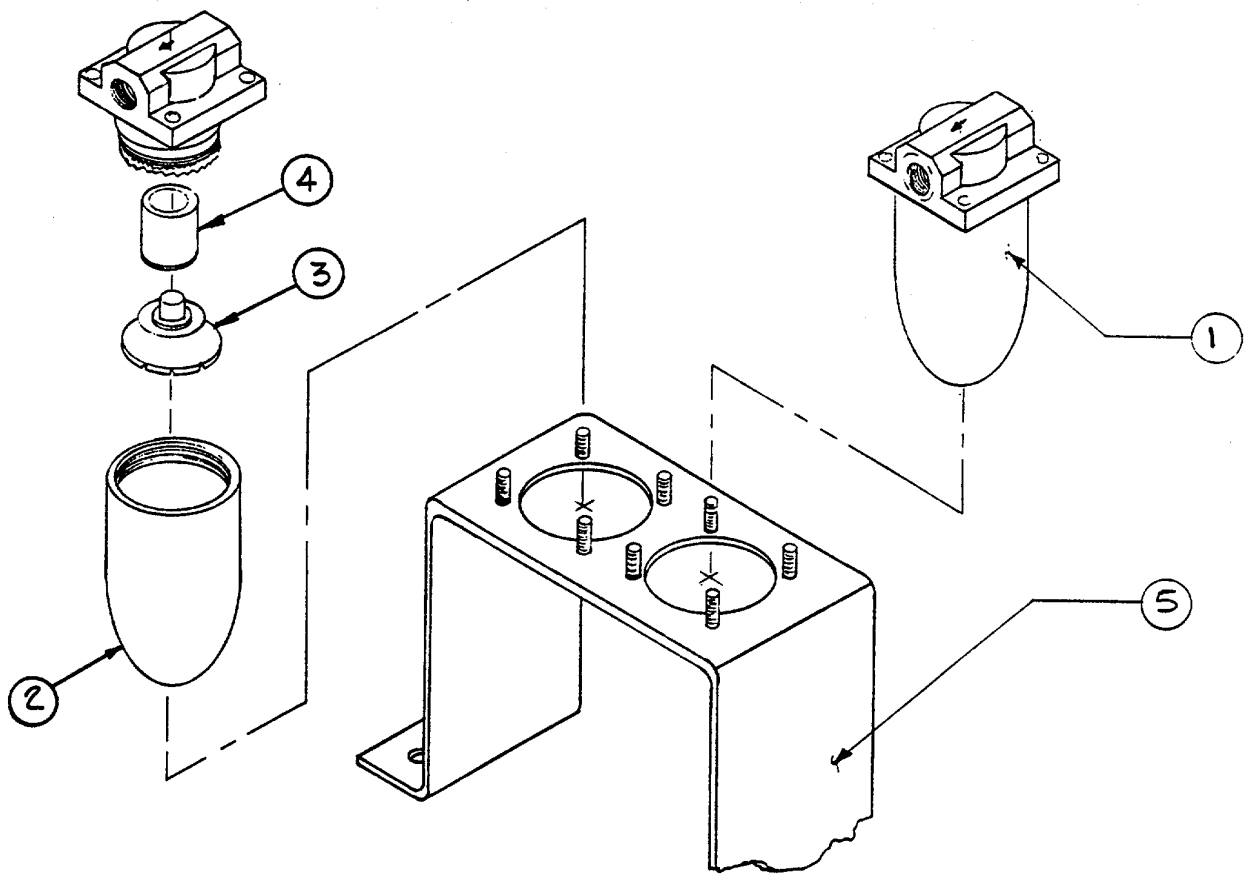


Figure C-8. Oil Pump

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				FIGURE C-8. OIL SUMP	
1	PAFZZ	9G188	F00-01-000	OIL SUMPS	2
2	PAFZZ	9G188	GRP-96-506	BOWL,SUMP PLASTIC	2
3	PAFZZ	9G188	FRP-95-069	BAFFLE	2
4	PAFZZ	9G188	FRP-96-235	MICRON ELEMENT	2
5	XDFZZ	1EK10	10005149	BRACKET,OIL SUMP	1

END OF FIGURE

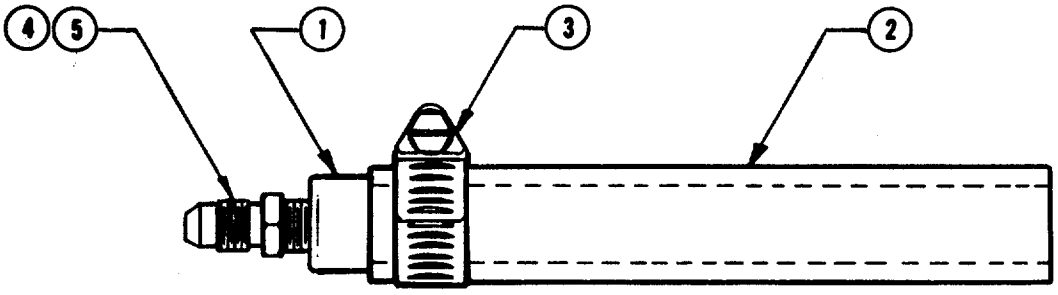


Figure C-9. Pilot Head Adaptor

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				FIGURE C-9. PILOT HEAD ADAPTOR	
1	XDFZZ	1EK10	10005127	HOSE CONNECTOR	1
2	XDFZZ	1EK10	10005125	HOSE,PITOT ADAPTER	1
3	PAFZZ	88044	AN737TW34-38	CLAMP,HOSE	1
4	PAFZZ	88044	AN816-4D	ADAPTER,STRAIGHT,PI	1
5	XDFZZ	81349	MIL-T-27730A	TAPE	1

END OF FIGURE

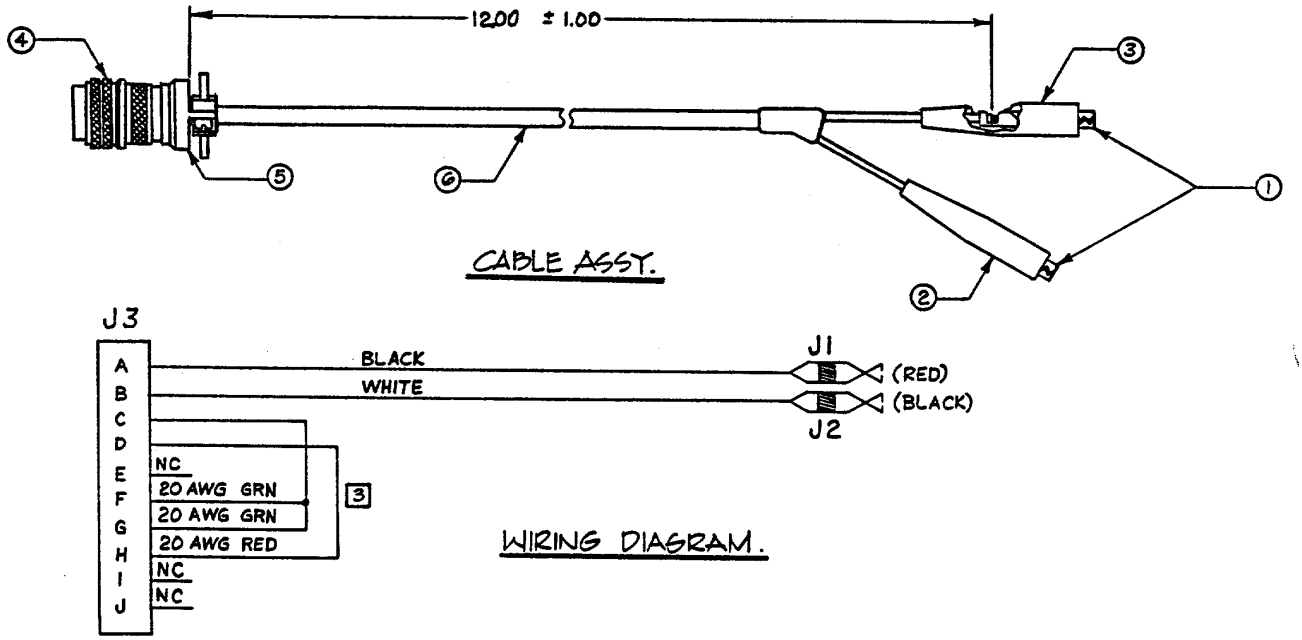


Figure C-10. DC Cable Assembly

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				FIGURE C-10 DC CABLE ASSEMBLY	
1	PAFZZ	94494	27A	CLIP,ELECTRICAL	2
2	PAFZZ	94494	29B	INSULATOR,SPACER	1
3	PAFZZ	94494	29R	INSULATOR,SPACER	1
4	PAFZZ	96906	MS3456W18-lS	CONNECTOR,PLUG,ELEC	1
5	PAFZZ	81349	M85049/41-10A	CLAMP,CABLE,ELECTRI	1
6	XDFZZ	70903	5053 18/3	CABLE,POWER	120

END OF FIGURE

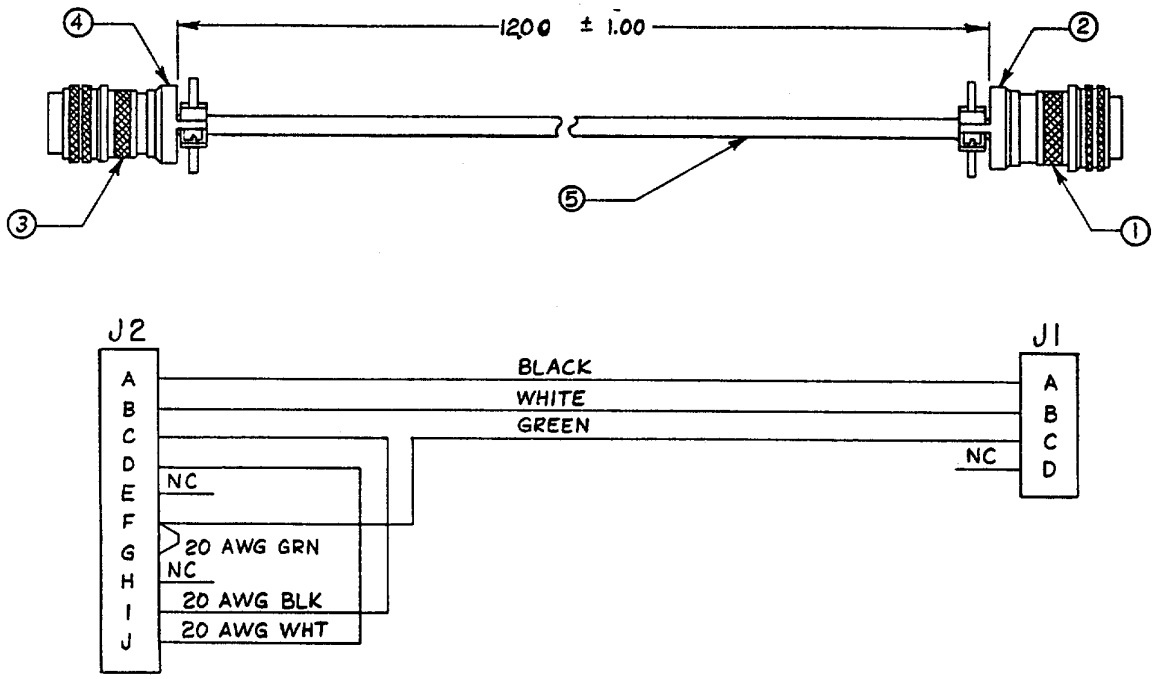


Figure C-11. AC 3-Phase Supply

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				FIGURE 11. AC 3-PHASE SUPPLY	
1	PAFZZ	96906	MS3106A-20-4P	CONNECTOR	1
2	PAFZZ	96906	MS3057-12A	CLAMP,CABLE	1
3	PAFZZ	96906	MS3456W18-1S	CONNECTOR,PLUGPELEC	1
4	PAFZZ	81349	M85049/41-10A	CLAMP, CABLE, ELECTRI	1
5	XDFZZ	70903	5053 18/3	CABLE,POWER	120

END OF FIGURE

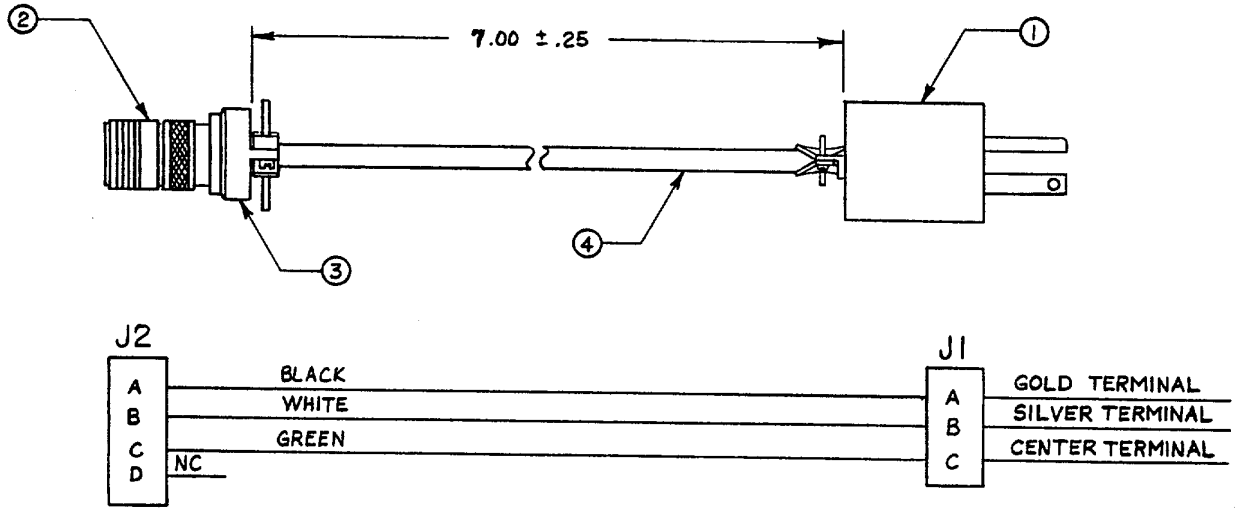


Figure C-12. AC Single Phase

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				FIGURE C-12. AC SINGLE PHASE	
1	PAFZZ	5F964	477C	CONNECTOR PLUG	1
2	PAFZZ	96906	MS3101A-20-4S	CONNECTOR	1
3	PAFZZ	96906	MS3057-12A	CLAMP,CABLE	1
4	XDFZZ	70903	5053 18/3	CABLE,POWER	1

END OF FIGURE

SECTION IV. CROSS-REFERENCE INDEXES

NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIG.	ITEM
5310-00-045-3296	C-2	28
	C-3	15
	C-6	8
5310-00-045-3299	C-2	29
	C-3	16
5340-00-051-0029	C-3	64
6610-00-111-3159	C-2	4
5340-00-141-6548	C-3	69
6240-00-155-7836	C-2	16
4730-00-186-7783	C-2	38
	C-3	35
4730-00-187-0085	C-2	39
	C-3	36
4730-00-187-1391	C-2	40
	C-5	10
4730-00-240-5905	C-3	41
	C-5	11
	C-9	4
5305-00-242-4732	C-3	
4730-00-277-6445	C-3	40
4730-00-287-3699	C-2	42
4730-00-350-9619	C-5	5
4730-00-555-1352	C-1	9
	C-9	3
4730-00-585-8770	C-3	42
5935-00-622-2830	C-10	4
	C-11	3
5310-00-660-2971	C-3	18
6210-00-717-2900	C-2	14
6610-00-774-5656	C-2	5
5330-00-805-2966	C-2	43
	C-3	44
5310-00-809-5997	C-5	8
5310-00-809-8544	C-2	46
	C-3	60
5310-00-809-8546	C-2	48
	C-3	61
	C-6	10
4730-00-812-5036	C-2	41
6610-00-899-7445	C-2	6
4730-00-925-4752	C-1	10
5310-00-934-9738	C-2	10
5310-00-934-9747	C-3	67
5310-00-934-9757	C-2	30
	C-3	17
5310-00-934-9758	C-2	18
5310-00-949-6139	C-3	65
5310-00-950-1310	C-2	47
5305-00-954-3938	C-2	35
5305-00-954-4295	C-3	33
5305-00-958-5473	C-3	14
	C-3	19
5305-00-984-4983	C-2	23
5305-00-984-6196	C-2	22
5305-00-990-6444	C-3	11
5305-00-993-1851	C-2	31
5310-01-064-8787	C-5	9
5310-01-106-1144	C-6	9
5935-01-177-1287	C-3	62
5915-01-189-0133	C-3	5
5935-01-201-9223	C-10	5
	C-11	4
5975-01-230-8385	C-2	34
	C-3	24

SECTION IV. CROSS-REFERENCE INDEXES
PART NUMBER INDEX

FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
88044	AN6270-3D-0056		C-4	3
88044	AN6270-3D-0060		C-4	14
88044	AN6270-3D-0061		C-4	15
88044	AN6270-3D-0062		C-4	12
88044	AN6270-3D-0064		C-4	4
88044	AN6270-3D-0066		C-4	6
88044	AN6270-3D-0070		C-4	17
88044	AN6270-3D-0075		C-4	5
88044	AN6270-3D-0080		C-4	9
88044	AN6270-3D-0081		C-4	8
88044	AN6270-3D-0083		C-4	1
88044	AN6270-3D-0084		C-4	2
88044	AN6270-3D-0085		C-4	7
88044	AN6270-3D-0122		C-4	10
88044	AN6270-3D-0191		C-4	16
88044	AN6270-3D-0192		C-4	13
88044	AN6270-3D-0230		C-4	11
88044	AN6270-4D-0120		C-1	2
88044	AN6270-4D-0600		C-1	3
88044	AN6270-4D-0720		C-1	1
88044	AN737TW34-38	4730-00-555-1352	C-1	9
			C-9	3
88044	AN815-4D	4730-00-925-4752	C-1	10
88044	AN816-3D	4730-00-187-0085	C-2	39
			C-3	36
88044	AN816-4D	4730-00-240-5905	C-3	41
			C-5	11
			C-9	4
88044	AN822-3D		C-2	36
			C-3	37
			C-6	5
88044	AN832-4D	4730-00-277-6445	C-3	40
88044	AN894-4-3D		C-3	38
88044	AN911-1D	4730-00-186-7783	C-2	38
			C-3	35
88044	AN914-1D	4730-00-230-8739	C-3	43
88044	AN916-1D	4730-00-187-1391	C-2	40
			C-5	10
88044	AN917-1D	4730-00-287-3699	C-2	42
88044	AN919-2D	4730-00-812-5036	C-2	41
88044	AN924-4D		C-3	39
88044	AN929-A4	4730-00-585-8770	C-3	42
7S124	ASP-lBV		C-3	21
7S124	ASPlBV		C-2	32
98810	A80AAU8A	6610-00-774-5656	C-2	5
18034	B-2MA4		C-2	9
2R076	B51547F013		C-3	31
2R076	B51567F025		C-3	20
2R076	B51568F029		C-3	23
2R076	B52600F002		C-3	32
7S124	B75-31-50-029		C-5	3

SECTION IV. CROSS-REFERENCE INDEXES
PART NUMBER INDEX

FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
86797	CR-20-WL-H		C-2	20
9G188	FRP-95-069		C-8	3
9G188	FRP-96-235		C-8	4
9G188	FOO-01-000		C-8	1
9G188	GRP-96-506		C-8	2
3F802	JM 2214		C-3	2
56563	MB4A		C-2	33
			C-3	22
81349	MIL-P-5516CLA		C-6	4
81349	MIL-T-27730A		C-2	44
			C-3	46
			C-5	6
			C-6	6
			C-9	5
54966	MODEL 1-1852		C-2	2
54966	MODEL 2-1852		C-2	8
54966	MODEL 3-1852		C-2	7
54966	MODEL 352		C-3	1
96906	MS122026	5310-00-209-0825	C-2	19
96906	MS1222028		C-3	68
96906	MS18012-1	5340-00-141-6548	C-3	69
96906	MS20826	4730-00-277-5039	C-2	37
96906	MS24243/1-A304		C-3	57
96906	MS24243/1-A403		C-3	52
			C-3	55
			C-7	5
96906	MS24243/1-A404		C-7	3
96906	MS25082-2	5310-00-660-2971	C-3	18
96906	MS25237-327	6240-00-155-7836	C-2	16
96906	MS27183-17	5310-00-809-5997	C-5	8
96906	MS27183-4	5310-00-950-1310	C-2	47
96906	MS27183-48		C-5	7
96906	MS27183-7	5310-00-809-8544	C-2	46
			C-3	60
96906	MS27183-8	5310-00-809-8546	C-2	48
			C-3	61
			C-6	10
96906	MS28046T1	6610-00-899-7445	C-2	6
96906	MS28778-4	5330-00-805-2966	C-2	43
			C-3	44
96906	MS3057-12A		C-11	2
			C-12	3
96906	MS3101A-20-4S		C-12	2
96906	MS3106A-20-4P		C-11	1
96906	MS3456W10S2S	5935-01-177-1287	C-3	62
96906	MS3456W18-lS	5935-00-622-2830	C-10	4
			C-11	3
96906	MS35190-251	5305-00-958-5473	C-3	14
			C-3	19
96906	MS35190-287	5305-00-954-4295	C-3	33
96906	MS35206-207	5305-00-954-3938	C-2	35

SECTION IV. CROSS-REFERENCE INDEXES
PART NUMBER INDEX

FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
96906	MS35206-226	5305-00-984-4983	C-2	23
96906	MS35206-248	5305-00-984-6196	C-2	22
96906	MS35207-261	5305-00-990-6444	C-3	11
96906	MS35207-267	5305-00-993-1851	C-2	31
96906	MS35338-42	5310-00-045-3299	C-2	29
			C-3	16
96906	MS35338-43	5310-00-045-3296	C-2	28
			C-3	15
			C-6	8
96906	MS35425-68	5310-01-106-1144	C-6	9
96906	MS35425-70	5310-01-064-8787	C-5	9
96906	MS35649-202	5310-00-934-9758	C-2	18
96906	MS35649-222	5310-00-934-9738	C-2	10
96906	MS35649-262	5310-00-934-9747	C-3	67
96906	MS35649-282	5310-00-934-9757	C-2	30
			C-3	17
81349	M85049/41-10A	5935-01-201-9223	C-10	5
			C-11	4
81349	M85049/41-3A	5935-01-175-8421	C-3	63
94222	PS10-032-40		C-2	27
13440	PYREX7740		C-6	3
92270	P345		C-3	
98810	RC60MS	6610-00-111-3159	C-2	4
98003	SC-D-206482E		C-7	2
1EK10	SK-ED-0017		C-1	7
1EK10	SK-ED-0018		C-1	8
56563	SR-5		C-3	51
56563	SS-12		C-3	45
SA178	SS-2-HLN-200		C-3	28
06383	SST2SM	5975-01-230-8385	C-2	34
			C-3	24
2R076	1N1186A		C-3	30
56563	10-24-4.5		C-6	7
97852	10-24X5-8	5305-00-242-4732	C-3	
05245	10K6	5915-01-189-0133	C-3	5
1EK10	10005045		C-2	45
1EK10	10005072		C-2	
1EK10	10005073		C-2	1
1EKIO	10005074		C-7	1
1EK10	10005098		C-3	4
1EK10	10005114		C-5	1
1EK10	10005115		C-5	2
1EK10	10005125		C-9	2
1EK10	10005127		C-9	1
1EK10	10005132		C-2	21
1EK10	10005140		C-3	53
1EK10	10005149		C-8	5
1EK10	10005153		C-3	10
1EK10	10005154		C-3	27
1EK10	10005165		C-3	13
1EK10	10005170		C-2	24

SECTION IV. CROSS-REFERENCE INDEXES
PART NUMBER INDEX

FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
1EK10	10005176-47		C-3	47
1EK10	10005177-48		C-3	48
1EKO1	10005178-49		C-3	49
1EK10	10005179-50		C-3	50
1EK10	10005185		C-1	4
1EK1O	10005186		C-1	5
1EK10	10005187		C-1	6
1EK10	10005188		C-2	25
1EK10	10005189		C-2	26
1EK10	10005237		C-3	25
1EK10	10005242		C-3	26
1EK10	10005263		C-6	1
1EK10	10005264		C-6	2
1EK10	10005265		C-3	
EK10	10005266		C-3	6
1EK10	10005267		C-3	34
1EK1O	10005271		C-3	58
25140	10127		C-3	
12204	144030	4730-00-350-9619	C-5	5
02929	23F210		C-2	13
94494	27A		C-10	1
1JS85	27F697		C-2	11
1JS85	27F752		C-2	12
62676	270-739		C-2	15
94494	29B		C-10	2
94494	29R		C-10	3
75543	312-MS		C-5	4
49815	3186BC492U050AM		C-3	29
72619	359-8430-0931-502	6210-00-717-2900	C-2	14
20982	411N-1/4X3/8		C-7	6
5F964	477C		C-12	1
7S124	481-1/8-D1-2		C-3	7
70903	5053 18/3		C-10	6
			C-11	5
			C-12	4
54966	559A-1M-20		C-2	3
62676	64-2344		C-2	17
1A768	710-13-1/8D		C-3	8
03007	7781-14-LH		C-3	12
03007	7781-14-RH		C-3	9
94222	82-16-260-16		C-3	59
94222	82-32-101-20	5310-00-949-6139	C-3	65
94222	82-35-302-15		C-3	66
03007	8201-02		C-3	54
03007	8207-02		C-7	4
2R076	8418 SCBA 2F		C-3	3
02660	9760-18		C-3	64

CROSS-REFERENCE INDEXES

FIGURE AND ITEM NUMBER INDEX

FIG.	ITEM	STOCK NUMBER	FSCM	PART NUMBER
C-1	1		88044	AN6270-4D-0720
C-1	2		88044	AN6270-4D-0120
C-I	3		88044	AN6270-4D-0600
C-1	4		1EK10	10005185
C-1	5		1EK10	10005186
C-1	6		1EK10	10005187
C-1	7		1EK10	SK-ED-0017
C-1	8		1EK10	SK-ED-0018
C-1	9	4730-00-555-1352	88044	AN737TW34-38
C-1	10	4730-00-925-4752	88044	AN815-4D
C-2			1EK10	10005072
C-2	1		1EK10	10005073
C-2	2		54966	MODEL 1-1852
C-2	3		54966	559A-iM-20
C-2	4	6610-00-111-3159	98810	RC60MS
C-2	5	6610-00-774-5656	98810	A80AAU8A
C-2	6	6610-00-899-7445	96906	MS28046T1
C-2	7		54966	MODEL 3-1852
C-2	8		54966	MODEL 2-1852
C-2	9		18034	B-2MA4
C-2	10	5310-00-934-9738	96906	MS35649-222
C-2	11		1JS85	27F697
C-2	12		1JS85	27F752
C-2	13		02929	23F210
C-2	14	6210-00-717-2900	72619	359-8430-0931-50 2
C-2	15		62676	270-739
C-2	16	6240-00-155-7836	96906	MS25237-327
C-2	17		62676	64-2344
C-2	18	5310-00-934-9758	96906	MS35649-202
C-2	19	5310-00-209-0825	96906	MS122026
C-2	20		86797	CR-20-WL-H
C-2	21		1EK10	10005132
C-2	22	5305-00-984-6196	96906	MS35206-248
C-2	23	5305-00-984-4983	96906	MS35206-226
C-2	24		1EK10	10005170
C-2	25		1EK10	10005188
C-2	26		1EK10	10005189
C-2	27		94222	PS10-032-40
C-2	28	5310-00-045-3296	96906	MS35338-43
C-2	29	5310-00-045-3299	96906	MS35338-42
C-2	30	5310-00-934-9757	96906	MS35649-282
C-2	31	5305-00-993-1851	96906	MS35207-267
C-2	32		75124	ASPIBV
C-2	33		56563	MB4A
C-2	34	5975-01-230-8385	06383	SST2SM
C-2	35	5305-00-954-3938	96906	MS35206-207
C-2	36		88044	AN822-3D
C-2	37	4730-00-277-5039	96906	MS20826
C-2	38	4730-00-186-7783	88044	AN911-1D
C-2	39	4730-00-187-0085	88044	AN816-3D

CROSS-REFERENCE INDEXES

FIGURE AND ITEM NUMBER INDEX

FIG.	ITEM	STOCK NUMBER	FSCM	PART NUMBER
C-2	40	4730-00-187-1391	88044	AN916-1D
C-2	41	4730-00-812-5036	88044	AN919-2D
C-2	42	4730-00-287-3699	88044	AN917-1D
C-2	43	5330-00-805-2966	96906	MS28778-4
C-2	44		81349	MIL-T-27730A
C-2	45		1EK10	10005045
C-2	46	5310-00-809-8544	96906	MS27183-7
C-2	47	5310-00-950-1310	96906	MS27183-4
C-2	48	5310-00-809-8546	96906	MS27183-8
C-3			1EK10	10005265
C-3			25140	10127
C-3			92270	P345
C-3		5305-00-242-4732	97852	10-24X5-8
C-3	1		54966	MODEL 352
C-3	2		3F802	JM 2214
C-3	3		2R076	8418 SCBA 2F
C-3	4		1EK10	10005098
C-3	5	5915-01-189-0133	05245	10K6
C-3	6		1EK10	10005266
C-3	7		75124	481-1/8-D1-2
C-3	8		1A768	710-13-1/8D
C-3	9		03007	7781-14-RH
C-3	10		1EK10	10005153
C-3	11	5305-00-990-6444	96906	MS35207-261
C-3	12		03007	7781-14-LH
C-3	13		1EK10	10005165
C-3	14	5305-00-958-5473	96906	MS35190-251
C-3	15	5310-00-045-3296	96906	MS35338-43
C-3	16	5310-00-045-3299	96906	MS35338-42
C-3	17	5310-00-934-9757	96906	MS35649-282
C-3	18	5310-00-660-2971	96906	MS25082-2
C-3	19	5305-00-958-5473	96906	MS35190-251
C-3	20		2R076	B51567F025
C-3	21		75124	ASP-1BV
C-3	22		56563	MB4A
C-3	23		2R076	B51568F029
C-3	24	5975-01-230-8385	06383	SST2SM
C-3	25		1EK10	10005237
C-3	26		1EK10	10005242
C-3	27		1EK10	10005154
C-3	28		SA178	SS-2-HLN-200
C-3	29		49815	3186BC492U050AM
C-3	30		2R076	1N1186A
C-3	31		2R076	B51547F013
C-3	32		2R076	B52600F002
C-3	33	5305-00-954-4295	96906	MS35190-287
C-3	34		1EK10	10005267
C-3	35	4730-00-186-7783	88044	AN911-1D
C-3	36	4730-00-187-0085	88044	AN816-3D
C-3	37		88044	AN822-3D
C-3	38		88044	AN894-4-3D

CROSS-REFERENCE INDEXES

FIGURE AND ITEM NUMBER INDEX

FIG.	ITEM	STOCK NUMBER	FSCM	PART NUMBER
C-3	39		88044	AN924-4D
C-3	40	4730-00-277-6445	88044	AN832-4D
C-3	41	4730-00-240-5905	88044	AN816-4D
C-3	42	4730-00-585-8770	88044	AN929-A4
C-3	43	4730-00-230-8739	88044	AN914-1D
C-3	44	5330-00-805-2966	96906	MS28778-4
C-3	45		56563	SS-12
C-3	46		81349	MIL-T-27730A
C-3	47		1EK10	10005176-47
C-3	48		1EK10	10005177-48
C-3	49		1EK10	10005178-49
C-3	50		1EK10	10005179-50
C-3	51		56563	SR-5
C-3	52		96906	MS24243/1-A403
C-3	53		1EK10	10005140
C-3	54		03007	8201-02
C-3	55		96906	MS24243/1-A403
C-3	57		96906	MS24243/1-A304
C-3	58		iEK1O	10005271
C-3	59		94222	82-16-260-16
C-3	60	5310-00-809-8544	96906	MS27183-7
C-3	61	5310-00-809-8546	96906	MS27183-8
C-3	62	5935-01-177-1287	96906	MS3456WlOS25
C-3	63	5935-01-175-8421	81349	M85049/41-3A
C-3	64		02660	9760-18
C-3	65	5310-00-949-6139	94222	82-32-101-20
C-3	66		94222	82-35-302-15
C-3	67	5310-00-934-9747	96906	MS35649-262
C-3	68		96906	MS1222028
C-3	69	5340-00-141-6548	96906	MS18012-1
C-4	1		88044	AN6270-3D-0083
C-4	2		88044	AN6270-3D-0084
C-4	3		88044	AN6270-3D-0056
C-4	4		88044	AN6270-3D-0064
C-4	5		88044	AN6270-3D-0075
C-4	6		88044	AN6270-3D-0066
C-4	7		88044	AN6270-3D-0085
C-4	8		88044	AN6270-3D-0081
C-4	9		88044	AN6270-3D-0080
C-4	10		88044	AN6270-3D-0122
C-4	11		88044	AN6270-3D-0230
C-4	12		88044	AN6270-3D-0062
C-4	13		88044	AN6270-3D-0192
C-4	14		88044	AN6270-3D-0060
C-4	15		88044	AN6270-3D-0061
C-4	16		88044	AN6270-3D-0191
C-4	17		88044	AN6270-3D-0070
C-5	1		IEK10	10005114
C-5	2		1EK10	10005115
C-5	3		75124	B75-31-50-029
C-5	4		75543	312-MS

CROSS-REFERENCE INDEXES

FIGURE AND ITEM NUMBER INDEX

FIG.	ITEM	STOCK NUMBER	FSCM	PART NUMBER
C-5	5	4730-00-350-9619	12204	144030
C-5	6		81349	MIL-T-27730A
C-5	7		96906	MS27183-48
C-5	8	5310-00-809-5997	96906	MS27183-17
C-5	9	5310-01-064-8787	96906	MS35425-70
C-5	10	4730-00-187-1391	88044	AN916-1D
C-5	11	4730-00-240-5905	88044	AN816-4D
C-6	1		1EK10	10005263
C-6	2		1EK10	10005264
C-6	3		13440	PYREX7740
C-6	4		81349	MIL-P-5516CLA
C-6	5		88044	AN822-3D
C-6	6		81349	MIL-T-27730A
C-6	7		56563	10-24-4.5
C-6	8	5310-00-045-3296	96906	MS35338-43
C-6	9	5310-01-106-1144	96906	MS35425-68
C-6	10	5310-00-809-8546	96906	MS27183-8
C-7	1		1EK10	10005074
C-7	2		98003	SC-D-206482E
C-7	3		96906	MS24243/1-A404
C-7	4		03007	8207-02
C-7	5		96906	MS24243/1-A403
C-7	6		20982	411N-1/4X3/8
C-8	1		9G188	F00-01-000
C-8	2		9G188	GRP-96-506
C-8	3		9G188	FRP-95-069
C-8	4		9G188	FRP-96-235
C-8	5		1EK10	10005149
C-9	1		1EK10	10005127
C-9	2		1EK10	10005125
C-9	3	4730-00-555-1352	88044	AN737TW34-38
C-9	4	4730-00-240-5905	88044	AN816-4D
C-9	5		81349	MIL-T-27730A
C-10	1		94494	27A
C-10	2		94494	29B
C-10	3		94494	29R
C-10	4	5935-00-622-2830	96906	MS3456W18-1S
C-10	5	5935-01-201-9223	81349	M85049/41-10A
C-10	6		70903	5053 18/3
C-11	1		96906	MS3106A-20-4P
C-11	2		96906	MS3057-12A
C-11	3	5935-00-622-2830	96906	MS3456W18-1S
C-11	4	5935-01-201-9223	81349	M85049/41-10A
C-11	5		70903	5053 18/3
C-12	1		5F964	477C
C-12	2		96906	MS3101A-20-4S
C-12	3		96906	MS3057-12A
C-12	4		70903	5053 18/3

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APPENDIX D

EXPENDABLE/DURABLE SUPPLIES AND MATERIALS LIST

SECTION I. INTRODUCTION

D-1. SCOPE

This appendix list expendable supplies and materials you will need to operate and maintain the Pitot & Static Systems Tester. These items are authorized to you by CTA 50-970, Expendable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).

D-2. EXPLANATION OF COLUMNS

a. Column (1). Item Number. This number is assigned to the entry in the listing.

b. Column (2). Level. This column identifies the lowest level of maintenance that requires the listed item.

(enter as applicable)

C	-Operator/Crew
O	-Organizational Maintenance
F	-Direct Support Maintenance
H	-General Support Maintenance

c. Column (3). National Stock Number. This is the National stock number assigned to the item; use it to request or requisition the item.

d. Column (4). Description. Indicates the Federal item name and, if required, a description to identify the item. The last line for each item indicates the Federal Supply Code for Manufacturer (FSCM) in parentheses followed by the part number.

e. Column (5). Unit of Measure (U/M). Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviations (e.g., ea. in pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

EXPENDABLE/DURABLE SUPPLIES AND MATERIALS LIST

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) DESCRIPTION	(5) U/M
1	F		**ADHESIVE BACK FOAM** 411N-1/4-3/8 (20982)	
2	F	5975-01-118 6879	**BASE MOUNTS** (53421) MBHA	EA
3		5975-01-230-8385	**CABLE TIES** (06383) SST2SM	EA
4	F		**CARD HOLDERS** (1 EK10) 1000 5170	
5	F		**HEAT SHRINK INSULATION SLEEVE** M2305317-103-0, 104-0, 105-0	
6	1	9150-00-252-6383	**HYDRAULIC OIL (MIL-H-5606)**	QT
7	F	6810-00-983-8551	ISOPROPYL ALCOHOL TT-I-735	OZ
8	F	13439-01-132-6137	**SOLDER QQ-S-571, SN63**, **ROSIN TYPE RMA**	LB
9	F	18030-00-889-3535	**TEFLON TAPE** 1 MIL-T-27730 SIZE II	EA
10	F		**THERMAL COMPOUND**	

APPENDIX E

MANUFACTURED ITEMS LIST

E-1. GENERAL E-1

This appendix contains the procedures for fabricating the manufactured items you are authorized to make.

E-2. WIRING-MANUFACTURE E-2

This task covers:
Fabrication

INITIAL SETUP

Personnel Required

MOS 68F Aircraft Electrician

FABRICATION:

(1) Cut a suitable length of wire from a spool of bulk wire.

NOTE

Be sure the wire you cut is the same gage as the wire you are replacing. Identify wire by using color coded tape, the same color as the wire you are replacing.

(2) Note what type and size of connector the old wire had and match them for the new wire.

(3) Measure the length of the old wire. When cutting the new wire, add 6 in. to this length.

NOTE

If splicing a wire, use heat shrink tubing over spliced area.

(4) Fasten the first connector splice to one end of the wire.

NOTE
Check new wire for continuity before installation.

(5) Install the wire, following the path of the old wire as much as possible.

(6) Fasten the wire in place with tape, nylon ties or shrink wrap.

(7) If wire is spliced and heat shrink tubing is used, shrink tubing using a suitable heat source.

APPENDIX F

TORQUE LIMITS

Table F-1 gives the standard torque values for studs, nuts, bolts, and screws. Exceptions to the following values are given in the maintenance task where appropriate.

TABLE F-1 Standard Torque Limits

THREAD DIAMETER		STANDARD TORQUE
SCREW SIZE NO	THREADS PER INCH	1 lb ft.
Use these torques for bolts and nuts with standard threads.		
8		17 Max
2	56	
10	24	
Use these torques for bolts and nuts on hydraulic valve bodies with standard threads.		
6	32	
10	32	2.0

NOTE

To determine breakaway torque, thread nut onto screw or bolt until at least two threads stick out. Nut shall not make contact with a mating part. Stop the nut. Torque necessary to begin turning nut again is the breakaway torque. Do not reuse self-locking nuts that do not meet minimum breakaway torque.

ALPHABETICAL INDEX

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By Order of the Secretary of the Army:

CARL E. VUONO
General, United States Army
Chief of Staff

Official:

WILLIAM J. MEEHAN II
Brigadier General, United States Army
The Adjutant General

DISTRIBUTION:

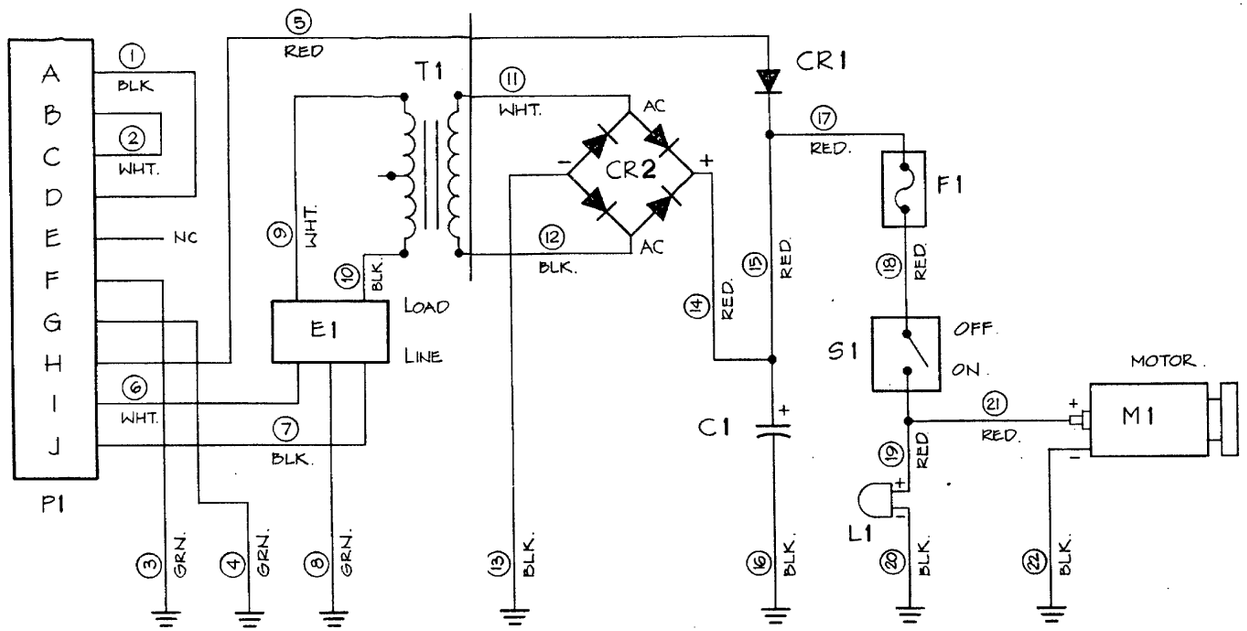
To be distributed in accordance with DA Form 12-31, -10 & CL, AVUM and AVIM Maintenance requirements for All Fixed and Rotary Wing Aircraft.

WIRE LIST

WIRE NO.	PART NO.	COLOR	SIZE (AWG)	LENGTH (IN.)	FROM (T1)			TO (T2)		
					LOCATION	TERMINATION	HEAT SHRINK (IN)	LOCATION	TERMINATION	HEAT SHRINK (IN)
1	8919-95890	BLACK	20	1.75	P1-A	TIN	1/8 DIA x .50 LG. M23053/7-103-0	P1-D	TIN	1/8 DIA x .50 LG. M23053/7-103-0
2	8919-95883	WHITE	↑	1.75	P1-B	↑	↑	P1-C	TIN	1/8 DIA. x .50 LG. M23053/7-103-0
3	8919-95884	GREEN		5.00	P1-F			GND STUD.	2-34160-1	N/A.
4	8919-95884	GREEN		5.00	P1-G			GND STUD.	2-34160-1	N/A.
5	8919-95895	RED		11.50	P1-H			CR1-ANODE	TIN	3/16 DIA. x .75 LG. M23053/7-104-0
6	8919-95883	WHITE		6.00	P1-I			E1 LINE-TOP.	2-31889-3	N/A.
7	8919-95890	BLACK		6.00	P1-J	TIN	1/8 DIA x .50 LG. M23053/7-103-0	E1 LINE-BOT.	2-31889-3	N/A.
8	8919-95884	GREEN		.00	E1 LINE-MID.	2-31889-3	N/A	GND STUD BLUE TERM.	2-34160-1	N/A
9	8919-95883	WHITE		23.00	E1 LOAD-TOP.	2-31889-3	N/A	T1 PRIM-LEFT	TIN	1/4 DIA. x .50 LG. M23053/7-105-0
10	8919-95890	BLACK	↓	23.00	E1 LOAD-BOT.	2-31889-3	N/A	T1 PRIM-RGHT.	TIN	1/4 DIA. x .50 LG. M23053/7-105-0
11	8919-95883	WHITE	20	18.50	T1 SEC-LEFT.	TIN	1/4 DIA. x .50 LG. M23053/7-105-0	CR2-AC BOT-RGHT.	2-520183-2	N/A.
12	8919-95890	BLACK	20	18.50	T1 SEC. RGHT.	TIN	1/4 DIA. x .50 LG. M23053/-105-0	CR2-AC TOP-LEFT	2-520183-2	N/A.
13	8919-95890	BLACK	↑	4.00	CR2 (-)	2-520183-2	N/A	GND STUD	2-34160-1	N/A
14	8919-95895	RED		21.50	CR2 (+)	2-520183-2	N/A	C1 (+)	2-31889-3	N/A
15	8919-95895	RED		20.00	CR1 CATH (THD)	2-31893-4	N/A	C1 (+)	2-31889-3	N/A.
16	8919-95890	BLACK		17.00	C1 (-)	2-31889-3	N/A	GND STUD	2-34160-1	N/A.
17	8919-95895	RED		26.00	CR1 CATH (THD)	2-31893-4	N/A	F1 SIDE PIN	TIN	3/16 DIA. x .50 LG. M23053/7-104-0
18	8919-95895	RED		3.00	S1 TOP-LEFT	TIN	3/16 DIA. x .50 LG. M23053/7-104-0	F1 BOT. PIN.	TIN	3/16 DIA. x .50 LG. M23053/7-104-0
19	8919-95895	RED		4.00	L1 (+)	TIN	1/8 DIA. x .50 LG. M23053/7-103-0	S1 BOT./LEFT.	TIN	3/16 DIA. x .50 LG. M23053/7-104-0
20	8919-95890	BLACK		20.00	L1 (-)	TIN	1/8 DIA. x .50 LG. M23053/7-103-0	GND STUD.	2-34160-1	N/A.
21	8919-95895	RED	↓	36.00	M1 (+)	TIN	N/A	S1 BOT./LEFT	TIN	3/16 DIA. x .50 LG. M23053/7-104-0
22	8919-95890	BLACK	20	36.00	M1 (-)	2-34160-1	N/A	GND STUD.	2-34160-1	N/A.

FO-1. INNER CONNECTION HARNESS WIRE LIST

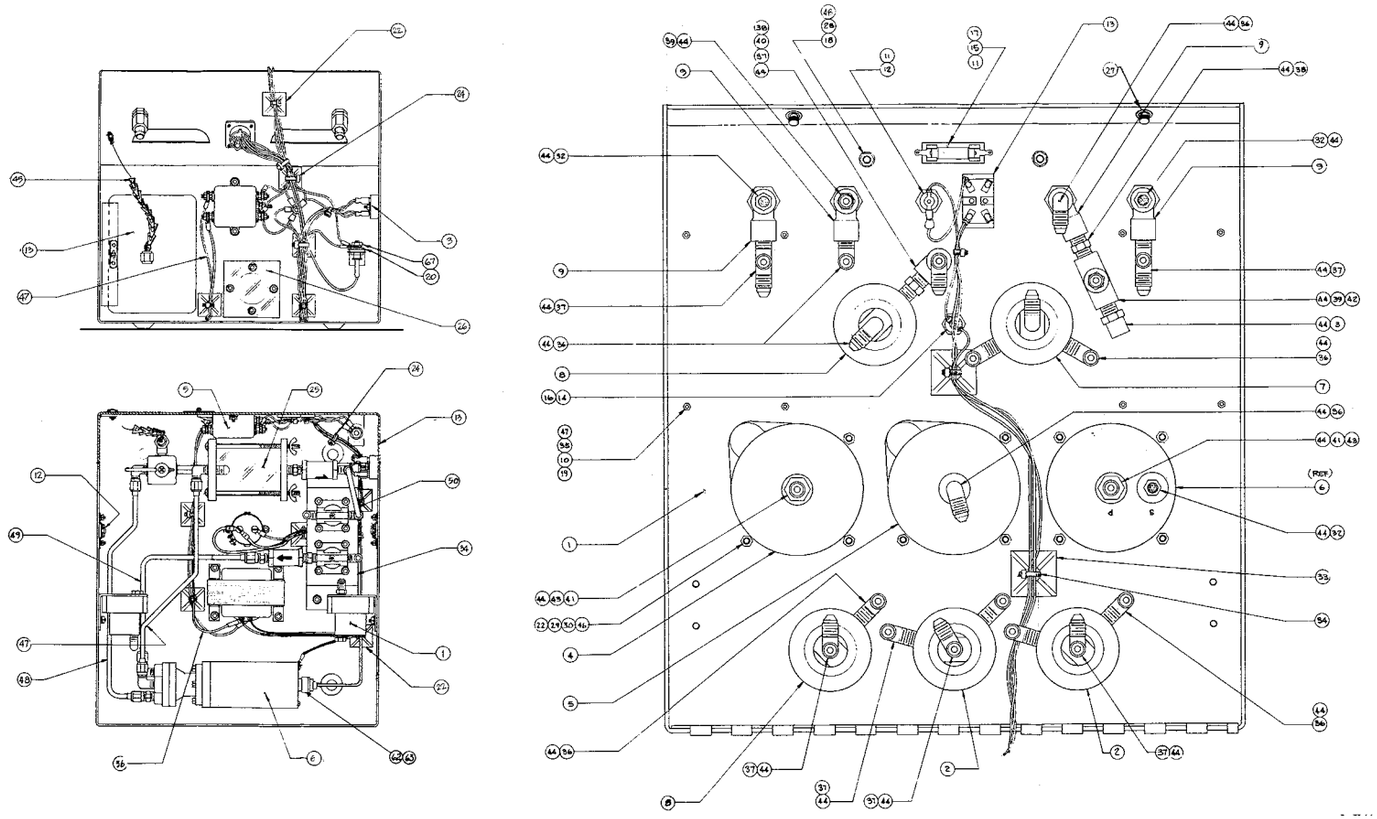
(FP-2 BLANK)/FP-1



COMPONENT LISTS.

REF. DES.	PART NUMBER	DESCRIPTION	LOCATION
P1	10005098	CONNECTOR, PLUG, MS3102A18-P	10005265 BASE ASSY.
E1	10K6	EMI AC FILTER, 250 VAC, 10A	〃 〃
T1	JM2214	TRANSFORMER, STEPDOWN 115-22V, 6.5 AMP.	〃 〃
CR2	8418 SCBA 2F	RECTIFIER BRIDGE, 200V-25A.	〃 〃
CR1	1N1186A	DIODE.	〃 〃
C1	BC492U050A1A2	CAPACITOR, ELECTROLITIC 50V-4900 Mf	10005265 BASE ASSY.
F1	27F752	FUSE HOLDER	10005072 FRONT PANEL ASSY.
S1	23F210	SWITCH, 6PDT	〃 〃
L1	25F1205	LAMP SOCKET, 28V	10005072 FRONT PANEL ASSY.
M1	10005266	MOTOR-PUMP ASSY	10005265 BASE ASSY.

FO-2. INNER CONNECTION HARNESS SCHEMATIC



REFER TO APPENDIX C FOR IDENTIFICATION OF NUMBERS CALL OUT.

FO-3. INNER HARNESS LAYOUT

☆U.S. GOVERNMENT PRINTING OFFICE: 1989 654-031/55047

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IN THIS SPACE, TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT.

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P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = .39 inch
1 decimeter = 10 centimeters = 3.94 inches
1 meter = 10 decimeters = 39.37 inches
1 dekameter = 10 meters = 32.8 feet
1 hectometer = 10 dekameters = 328.08 feet
1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
1 decigram = 10 centigrams = 1.54 grains
1 gram = 10 decigram = .035 ounce
1 dekagram = 10 grams = .35 ounce
1 hectogram = 10 dekagrams = 3.52 ounces
1 kilogram = 10 hectograms = 2.2 pounds
1 quintal = 100 kilograms = 220.46 pounds
1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce
1 deciliter = 10 centiliters = 3.38 fl. ounces
1 liter = 10 deciliters = 33.81 fl. ounces
1 dekaliter = 10 liters = 2.64 gallons
1 hectoliter = 10 dekaliters = 26.42 gallons
1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

To change	*To*	*Multiply by*	*To change*	*To*	*Multiply by*
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29,573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

Temperature (Exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

PIN: 065999-000