



ZEE SYSTEMS, Inc.
AIRCRAFT AIR CONDITIONING and
HEATING SYSTEMS

Z12-601 COMPONENT MAINTENANCE MANUAL

***Component
Maintenance
Manual***

with

Illustrated Parts List

for

Z12-601-SERIES

Power Condenser Assembly



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1.0 INTRODUCTION

1.1 This Component Maintenance Manual provides information on the maintenance, maintenance schedules and repair and replacement of parts.

1.2 Refer to the Illustrated Parts List (IPL) in Section 7 when using this manual or ordering replacement parts. Parts are identified in parenthesis (FIG-ITEM NO.).

1.3 This Power Condenser Assembly is part of a vapor cycle air conditioning system.

1.3.1 It may be necessary to discharge the system to access the Power Condenser Assembly. Refer to applicable maintenance instructions to gain access to this component.

2.0 SPECIAL TOOLS AND MATERIALS

2.1 TOOLS: No special tools are required to perform the maintenance described in this manual.

2.2 MATERIALS: There are no special materials required to perform maintenance described in this manual. Refer to Section 7 for part numbers when ordering replacement parts.

3.0 REPAIR AND REPLACEMENT OF COMPONENTS

CAUTION

BEFORE PERFORMING ANY SERVICE OF ELECTRICAL COMPONENTS MAKE SURE MAIN AIRCRAFT ELECTRICAL POWER IS DISABLED.

NOTE

SERVICE DESCRIBED IN THIS MANUAL SHOULD ONLY BE PERFORMED BY QUALIFIED PERSONNEL.

3.0.1 Refer to applicable installation drawings for instructions to access the Power Condenser Assembly. Remove covers/panels as necessary.

3.0.2 Refer to AC43-13-1B for further guidance when performing maintenance on electrical systems and components.

3.0.4 There is no field repair of components. Defective components must be replaced.

3.1 MOTOR (1-4)

3.1.1 INSPECTION: On condition. Check for slow or noisy operation.

3.1.2 REMOVAL: Disconnect all electrical connections. Loosen and remove hardware (2-11, 2-12, 2-15).



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3.1.3 INSTALLATION: Before attaching the motor (2-4) to the Inlet Duct Assembly (2-5) check the condition of the foam insulation (2-19), replace insulation as necessary.

3.1.3.1 Attach the motor (2-4) to the Inlet Duct Assembly (2-5) with hardware (2-11, 2-12, 2-15).

3.1.4 SERVICE: There is no field repair for this sealed motor. Replace if defective.

3.2 COIL (1-2, 1-3)

3.2.1 REMOVAL: The Power Condenser Assembly may have to be removed from the aircraft to replace the coil. The system must be discharged and the refrigerant must be recovered before the Power Condenser Assembly can be removed from the aircraft. Refer to applicable maintenance instructions to recover refrigerant and discharge the system. Disconnect all electrical connections.

3.2.1.1 After the Power Condenser Assembly is removed from the aircraft. Remove the Inlet Duct (2-5) from the Coil (1-2, 1-3) by removing hardware (1-11, 1-12, 1-14) and (2-9, 2-10, 2-13). It is not necessary to remove the Motor (1-4) from the Inlet Duct Assembly. Next slide cover (1-1) away from the Outlet Duct Assy (1-6, 1-7). Loosen and remove hardware (1-11, 1-12, 1-14) on the Outlet Duct. Remove and save the black Insulating Tape (1-17) from the top of the defective coil.

3.2.2 INSTALLATION: Place the black Insulating Tape (1-17) from the top of the new coil. Align the new coil with the Outlet Duct (1-6, 1-7). It may be necessary to re-drill the holes in the flange for proper alignment. Secure hardware (1-11, 1-12, 1-14). Slide Cover (1-1) onto the Outlet Duct. Attach the Inlet Duct ((1-5) in reverse order of disassembly. If the Motor (1-4) was removed, attach at this time in reverse order of disassembly.

3.2.2.1 Refer to applicable maintenance instructions to install assembly in the aircraft. Reconnect electrical in accordance with applicable wiring diagrams. Service the system in accordance with applicable service instructions.

4.0 SERVICE SCHEDULES

4.1 MAINTENANCE SCHEDULE

ITEM DESCRIPTION	INSPECTION INTERVAL *	R&R/T.B.O. HRS
SZ96-801-1 Motor	ON CONDITION	ON CONDITION

5.0 TOLERANCES

5.1 TORQUE VALUES. Use standard torque values for bolts, nuts and screws.



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6.0 TROUBLE SHOOTING

6.0.1 Only a qualified aircraft electrician should perform trouble shooting duties.

6.0.2 When trouble shooting always check the condition of the wires to and from the relay panel. Check for proper grounds.

6.0.3 Check the Fuses and Current Limiters on the Relay Panel. A blown fuse or current limiter is result of higher than desired current. This may be an indication of another problem. Check for worn or frayed wires, loose connections or other defective components.

6.0.4 These trouble shooting steps are for the Blower Motor Assembly only.

TROUBLE	POSSIBLE CAUSE	REMEDY
Blower does not operate.	Fuse Blown	REPLACE FUSE
	Defective Motor Slow or noisy operation	REPLACE MOTOR REPLACE MOTOR



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7.0 ILLUSTRATED PARTS LIST

7.1 EXPLANATION OF SYMBOLS:

ALT - The Part Number shown is an approved alternate, either part number may be used.

MOD "X" Refers to modification information of this part as applicable to this assembly.

NP - Not Procurable individually, see next higher assembly.

NS - Not Shown

OBS - Obsolete

USAGE/QTY - This identifies parts used on specific applications (not common to all units). If no code is noted the item is used on all units.

. - Part of higher assembly.

*/# - See explanation at end of parts list.

FIG-ITEM	PART NUMBER	NOMENCLATURE	QTY	USAGE
	Z12-601-1	BLOWER MOTOR ASSEMBLY		A
	Z12-601-2	BLOWER MOTOR ASSEMBLY		B
1	-1	SZ96-305-1	1	
1	-2	SZ96-600-1	1	A
1	-3	SZ96-600-2	1	B
2	-4	SZ96-801-1	1	
2	-5	Z12-330-1	1	
1	-6	Z12-331-1	1	A
1	-7	Z12-331-2	1	B
1	-8	Z12-332-1	1	
2	-9	AN364-1032A	12	
2	-10	AN507-10R6	12	
1	-11	AN935-8	12	
1	-12	AN960-8L	12	
2	-13	AN960-10L	12	
1	-14	MS35206-245	8	
2	-15	MS35206-246	4	
NS	-16	02150800	2	NP
1	-17	18-2710	AR	
2	-18	264281-1	1	NP
NS	-19	6442	AR	



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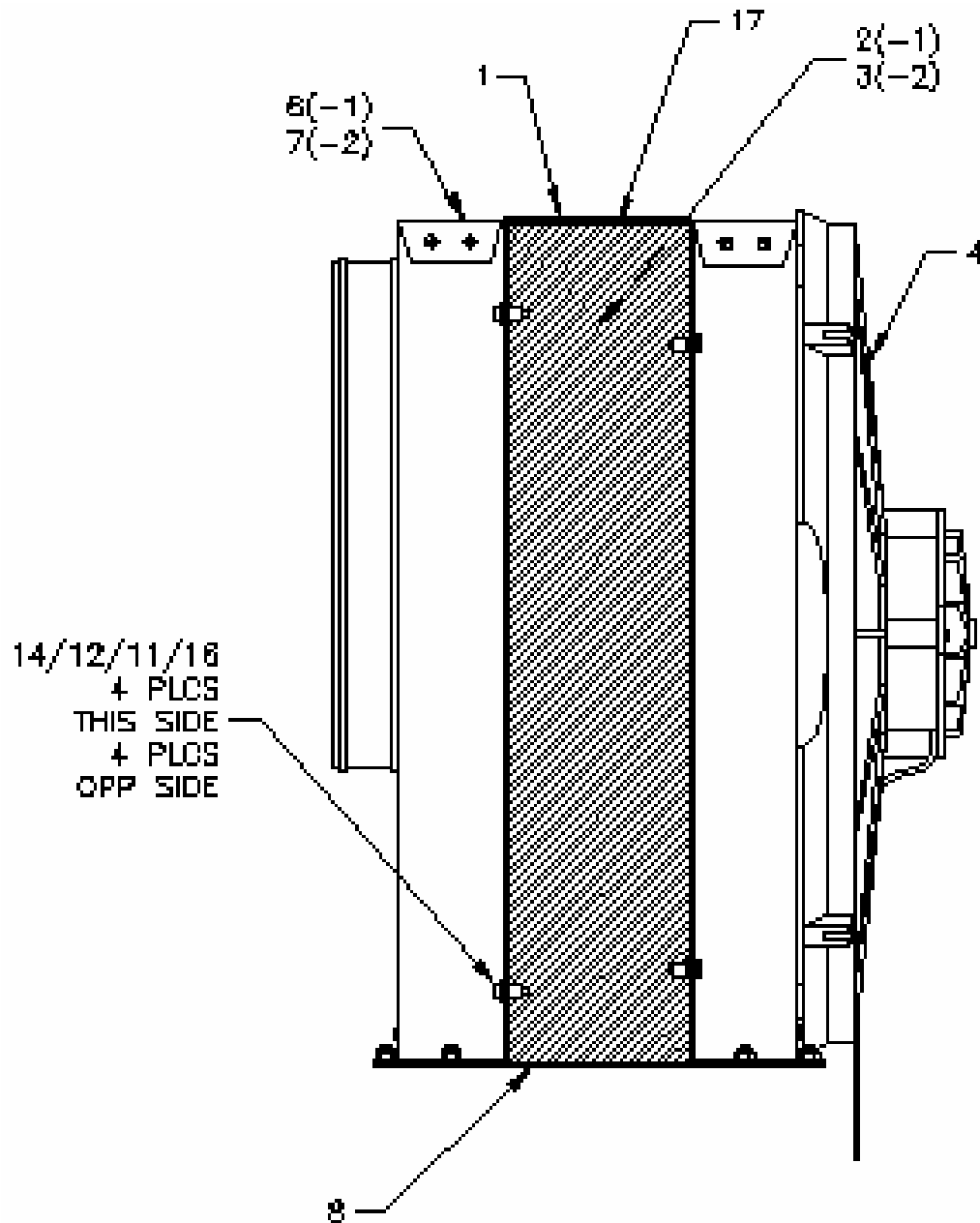


FIG. 1



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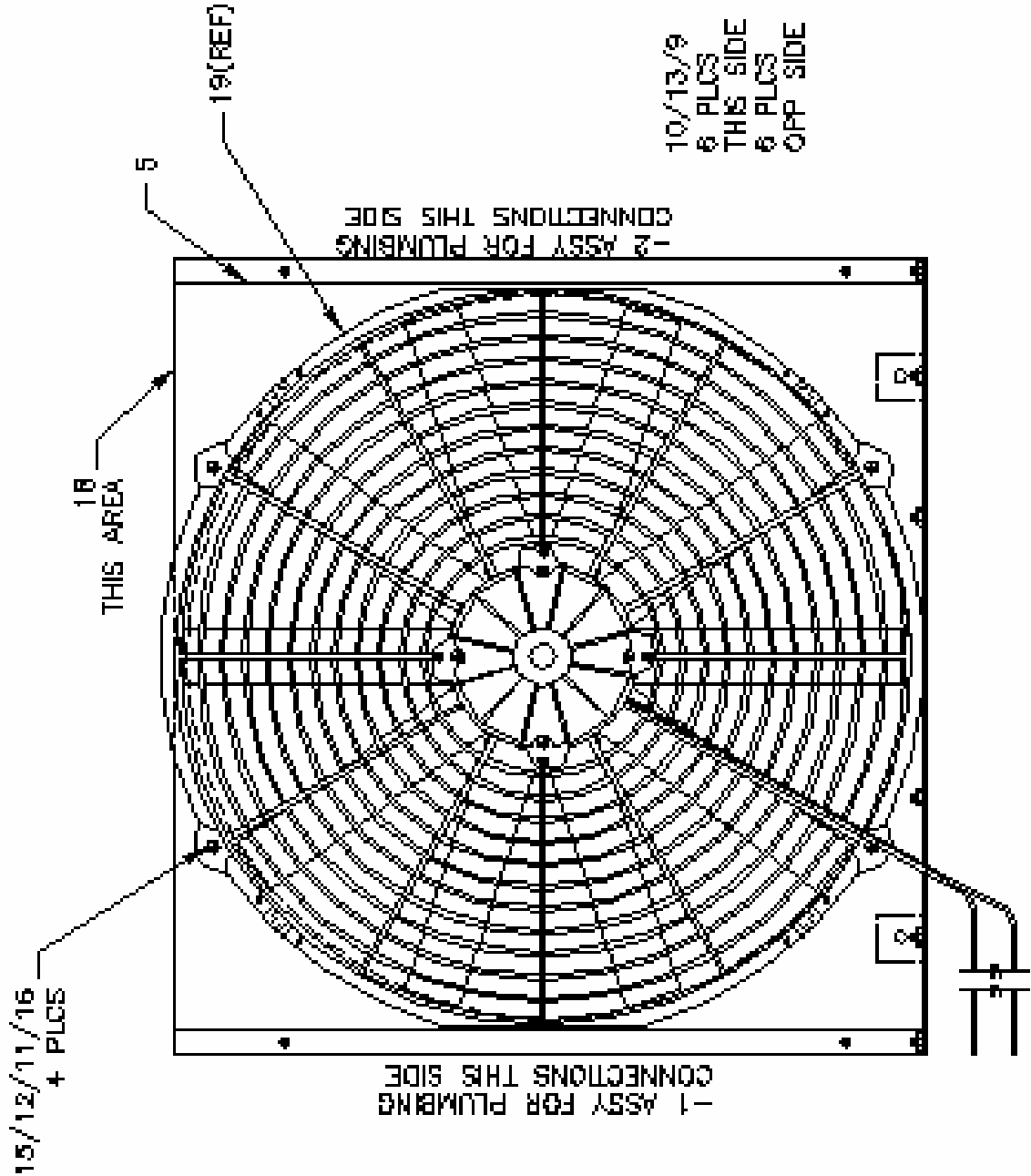


FIG. 2