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ACGD CABINET FAN REPLACEMENT

1- REPLACEMENT PROCEDURE

Manpower Requirements

2 (two) people are needed to lift fan

- Total Fan Assembly Weight: 114 lbs.
- Total Fan Motor/Blower Weight: 48 lbs.

1-1 Tools and Instruments Required

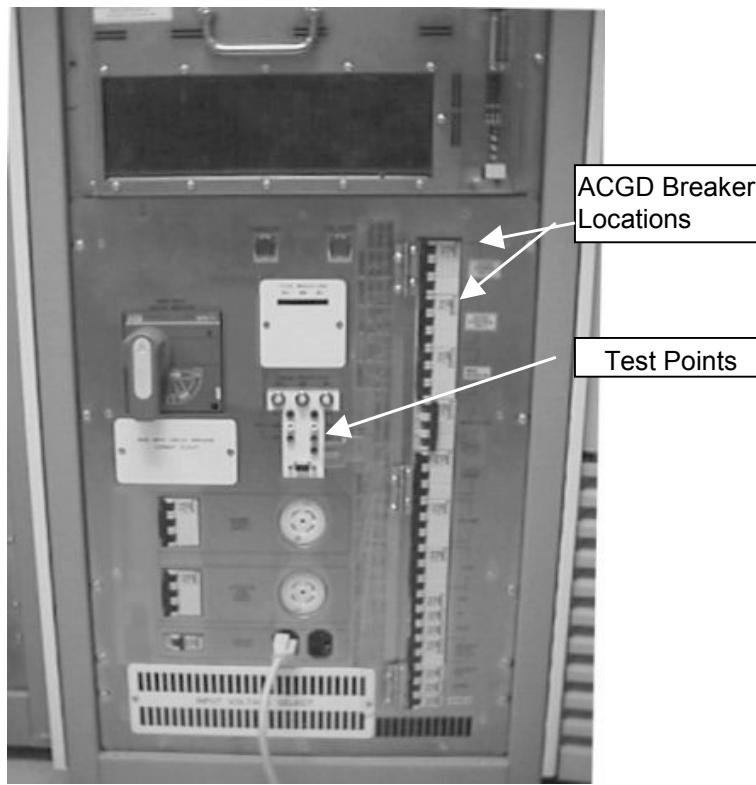
Item	Description	Part Number
1.	Fan Assembly (Motor & Tubine Only)	FRU # 2181131
2.	Ladder	
3.	2- Phillips-head screwdriver (Standard & small sizes)	
4.	11/32" or 9mm socket wrench	
5.	1 pair of Gloves	
6.	Ty-wrap cutters	
7.	1 Ty-wrap	

1-2 Preliminary Set Up Procedure



FATAL ELECTRIC SHOCK HAZARD!! TO PREVENT FATAL ELECTRIC SHOCK, DISCONNECT POWER FROM THE PDU BEFORE YOU PERFORM THE FOLLOWING PROCEDURES. PERFORM LOCKOUT / TAGOUT PROCEDURE PER GE OSHA LOCKOUT / TAGOUT REQUIREMENTS LISTED IN THE *FIELD SERVICE EHS MANUAL & TRAINING 2000 P/N 2135387-200.*

1. Power down the ACGD Cabinet by turning off the ACGD 208V Control Power and the ACGD 420 V Power on the Front Panel of the PDU. See Illustration 1-1.



ACGD CABINET—PDU (FRONT COVER REMOVED)
ILLUSTRATION 1-1

2. Lock out the Breaker panel and tag it.
3. After power to the ACGD Cabinet has been removed, take a Digital Multimeter and set it to its highest AC voltage range.
4. Verify that all energy has been dissipated. Measure power at the 420 and 208 test points on the front of the PDU.

1-3 Replacement Procedure Steps

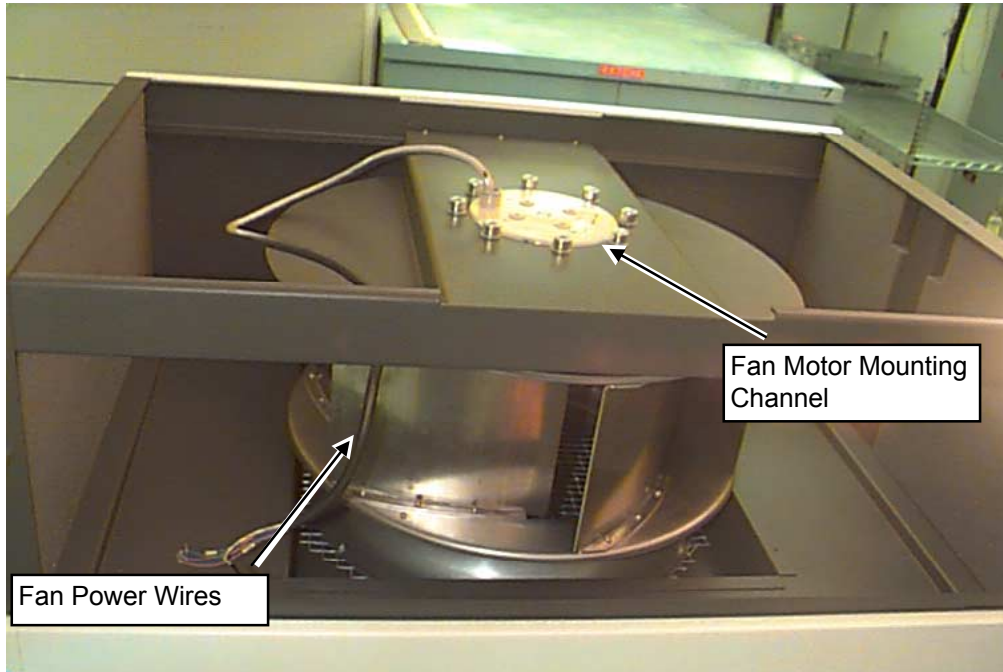
Note

The Fan Motor/Blower weighs 48 lbs. The procedure requires two people to remove the fan motor/blower from the cabinet.

1. Locate the Fan Enclosure at the top of the Advanced Control Gradient Driver (ACGD) cabinet. If working in the mobile environment, see Van manufacturer specific procedure to remove fan motor/blower.
2. Remove two (2) phillips-head screws from each fan assembly side panel.
3. Either tilt or remove the side covers to provide access to the top grill for removal.
4. Remove the Fan Enclosure Top Grill.

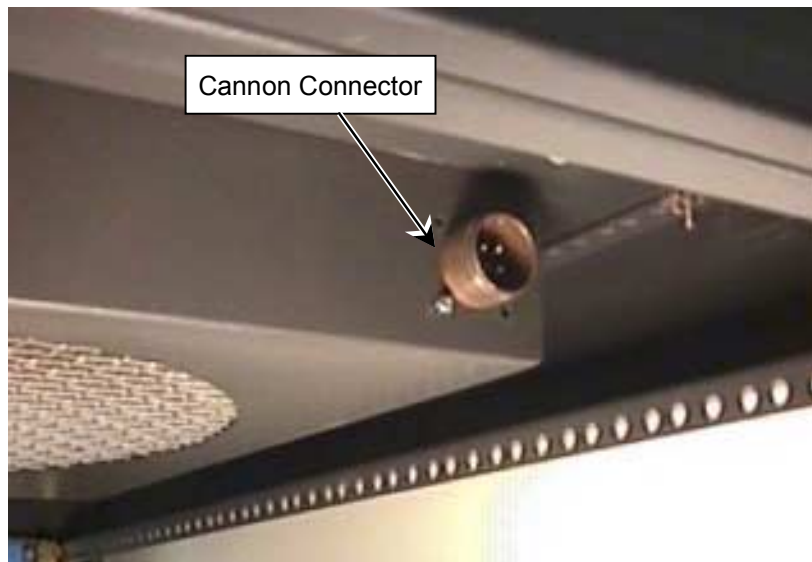
1-3 Replacement Procedure (continued)

5. Locate the cable that contains the power wires leading directly to the Fan Motor. This cable is terminated with a cannon connector. See Illustration 1-4



SGD CABINET FAN ENCLOSURE—INSIDE VIEW
ILLUSTRATION 1-4

6. Locate the cannon connector from the inside of the Fan Enclosure. See Illustration 1-5.

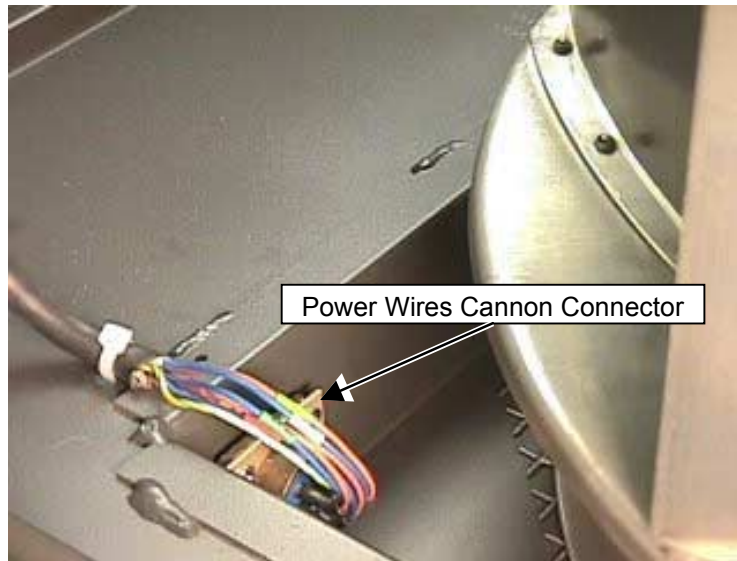


CANNON CONNECTOR LOCATION—REAR INSIDE VIEW OF CABINET
ILLUSTRATION 1-5

7. Remove 4 screws, using small phillips screwdriver, holding the connector in place. See Illustration 1-5.

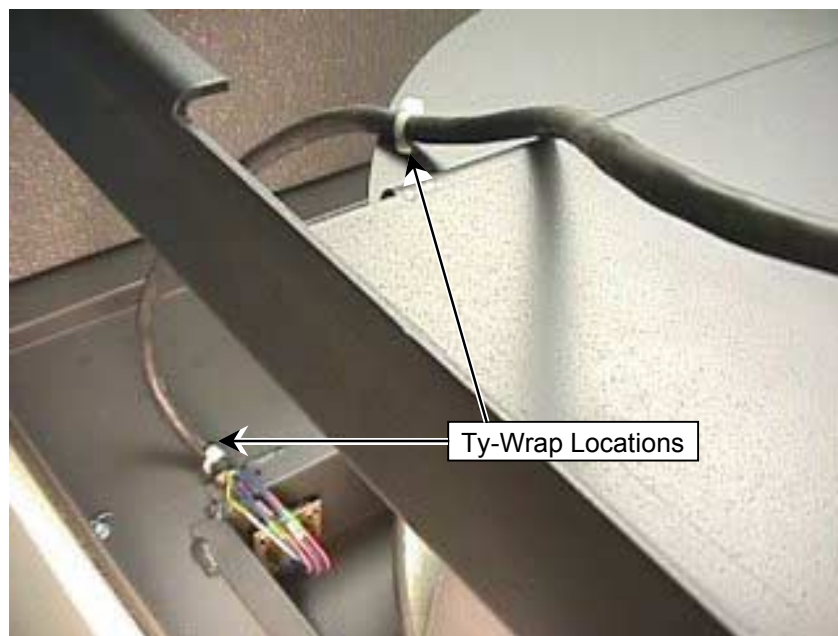
1-3 Replacement Procedure (continued)

8. Remove the fan cannon connector from inside the fan motor/blower assembly. See Illustration 1-6.



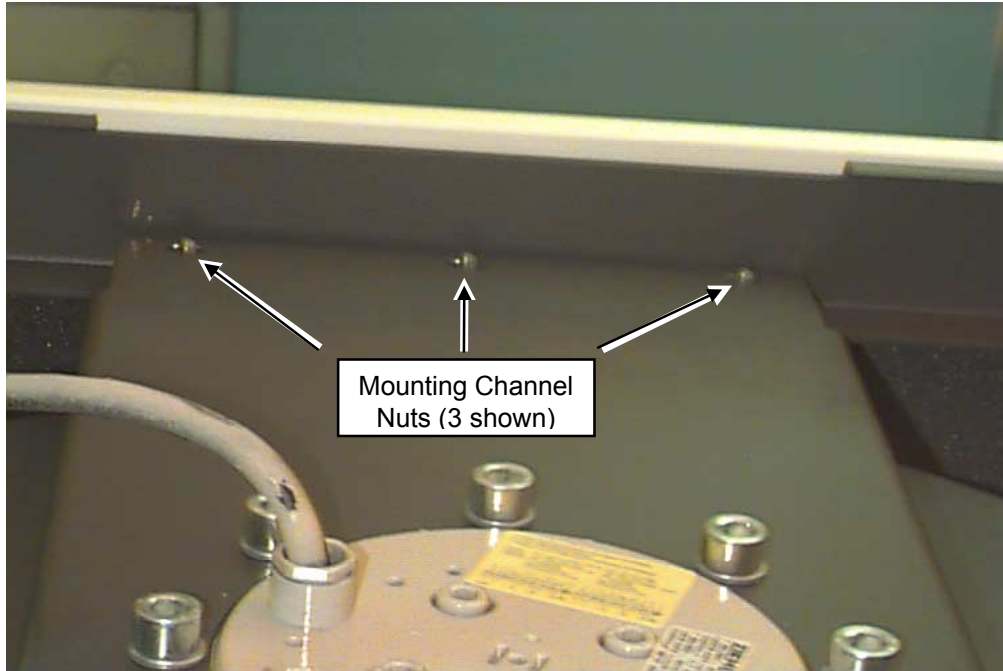
CANNON CONNECTOR LOCATION IN FAN ASSEMBLY
ILLUSTRATION 1-6

9. Cut Ty-wraps, see Illustration 1-7.



TY-WRAP LOCATIONS
ILLUSTRATION 1-7

10. Remove the six (6) 11/32" or 9mm hex nuts that secure the Fan Motor Mounting Channel to the Fan Enclosure. See Illustration 1-8.



SGD CABINET FAN MOTOR MOUNTING CHANNEL
ILLUSTRATION 1-8

CAUTION

Personal injury may occur. The fan motor/blower assembly has sharp edges, wear protective gloves to avoid injury when removing from the fan assembly box.

11. Use two people to grasp the Fan Motor Mounting bracket and lift it up and out of the Fan Enclosure.
12. Reverse the order of the above steps to install the fan replacement.

1-4 Functional Tests Required

1. Power up the ACGD cabinet by placing the ACGD Breakers of the PDU in the ON position.
2. Verify the fan operates. The fan should create enough suction to hold the rear cabinet door closed.

REVISION HISTORY

REV	DATE	AUTHOR	PRIMARY REASONS FOR CHANGE
A	Aug. 9, 2000	K. Keshena	Preliminary procedure for the ACGD Cabinet.
0	Oct. 20, 2000	K. Keshena	Initial release.