



815 BROADHOLLOW RD., FARMINGDALE, NY 11735 USA

MD-80/90 SERIES

# SERVICE INFORMATION LETTER & 717

**EQUIPMENT:**

PASSENGER ADDRESS SERVICE INTERPHONE CALL SYSTEM (PASICS),  
HANDSET ASSEMBLY P/N 686-1000-002, used on board the MD-80/90 series and 717  
aircraft

**SUBJECT:**

Handset coil cord replacement and preparation instructions.

**REASON:**

Replacement coil cord for the PASICS Handset come in two varieties;

- 1) P/N C235A457-1 - coil cord, without any connectorization or strain relief, and
- 2) P/N 686-1500-001 - coil cord assembly, with aircraft interface connector installed.

Instructions for the preparation and installation for either variety are provided in this document.

**INSTALLATION USING C235A457-1 COIL CORD:**

**1) PARTS REQUIRED;**

C235A457-1	Coil Cord	Qty 1
C235A442-1	Connector	Qty 1
T235A244-3	Shrink Sleeving	Qty A/R
T235A281-35	Shrink Sleeving	Qty A/R
686-1018-001	Coil Cord Egress	Reuse
C235A459-1	Connector	Qty 1
C235A459-216	Connector Back	Qty 1
C235A459-100	Polarizing Cover	Qty 1

**2) TOOLS REQUIRED;**

M22520/1-01	Crimper
M22520/1-02	Turret
AMP 58074-1	Handle
AMP 58062-1	Head
AMP 49835	Crimper



### 3) ACCOMPLISHMENT

- a) Starting at either end of raw coil cord, cut length of one end to 9.30" long, measured from first coil. Refer to Fig. 1 for this step and steps b thru d below.
- b) Strip outer jacket back from end by 0.75", using a flush wire cutter such as Xuron LX-81 or equivalent, do not use a razor blade.
- c) Strip individual wires to 0.22", use a thermal wire stripper or No-Nik wire strippers with 1/4" diameter cutting blade.
- d) Cut a length of shrink sleeving P/N T235A244-3 to 0.63", slide onto cord to a position as shown in Fig. 1. Apply heat to shrink in place.
- e) Slide rubber grommet, supplied with P2 connector, onto cord and position out of the way for now. Install and crimp pins, supplied with P2 connector P/N C235A442-1, using crimp tool M22520/1-01 and turret M22520/1-02, on 13 wires of cord.
- f) Insert pinned wires into connector receptacle P2 in accordance with Table 1, refer to Fig. 3 for wire locations in cord. Then position rubber grommet at connector and attach strain relief clamping.
- g) At other end of coil cord, cut length to 5.125" long, measured from first coil. Strip outer jacket back by 3.25", taking care not to nick insulated wires.
- h) Install coil cord thru opening in backshell, slide strain relief egress over cord to a position approximately 0.375" from first coil. Cut a piece of shrink sleeving T235A281-35 to 0.5" length, position as shown in Fig. 4 and heat shrink in place.
- i) To install cord wires into the P1 connector, use AMP 58074-1 Handle and AMP 58062-1 Head tools and follow the procedure outlined below for each row of pins:
  - 1) Insert Contact Housing (C235A459-1) into left side of tool head until the desired contact position aligns with the wire slot.
  - 2) Insert an unstripped wire (following the wire chart) into the wire slot until it bottoms on the tool base.
  - 3) Center the wire in the wire slot, Squeeze the tool trigger until ratchet releases.
  - 4) Release the trigger. The wire inserter will retract and the contact housing will advance to the next position.
  - 5) Repeat steps 2, 3 and 4 for each of the pins on one side of P1 (pins 1 thru 7). Once this side is done, remove contact housing from right side of tool.
  - 6) Position contact housing such that pin 14 is aligned at wire slot and repeat steps 2 - 4 for each remaining wire
- j) Release the white wire from the existing P1 pin 6 location by carefully pushing the locking tab with a pick tool. After assuring that locking tab is properly lifted, insert this pin into the new P1 connector housing.
- k) Repeat above step for blue wire at P1 pin 15 location.
- l) Assemble P1 connector back and polarizing cover to contact housing. Refer to Fig. 5



## INSTALLATION USING P/N 686-1500-001 COIL CORD ASSEMBLY

### 1) PARTS REQUIRED;

686-1500-001	Coil Cord	Qty 1
T235A244-2	Shrink Sleeving	Qty A/R
T235A281-35	Shrink Sleeving	Qty A/R
686-1018-001	Coil Cord Egress	Reuse
C235A459-1	Connector	Qty 1
C235A459-216	Connector Back	Qty 1
C235A459-100	Polarizing Cover	Qty 1

### 2) TOOLS REQUIRED;

AMP 58074-1	Handle
AMP 58062-1	Head
AMP 49835	Crimper

### 3) ACCOMPLISHMENT

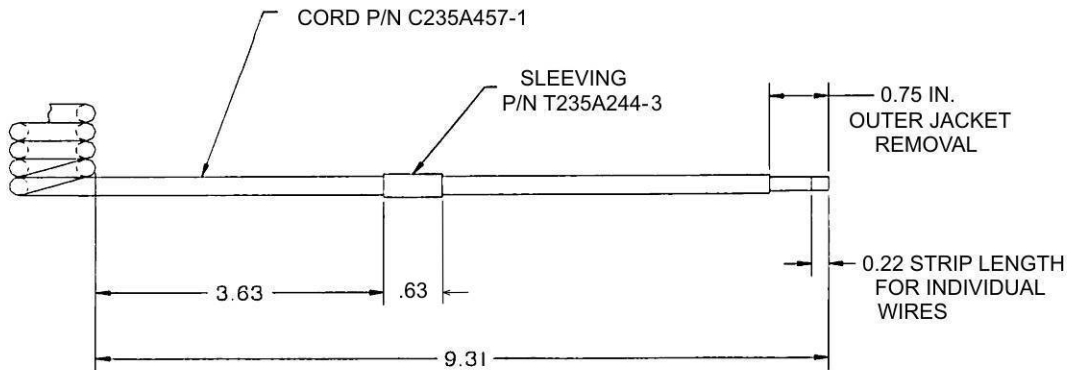
- a) At the open end of coil cord assembly, cut length to 5.125" long, measured from first coil. Strip outer jacket back by 3.25", taking care not to nick insulated wires.
- b) Install coil cord thru opening in backshell, slide strain relief egress over cord to a position approximately 0.375" from first coil. Cut a piece of shrink sleeving T235A281-35 to 0.5" length, position as shown in Fig. 4 and heat shrink in place.
- c) To install cord wires into the P1 connector, use AMP 58074-1 Handle and AMP 58062-1 Head tools and follow the procedure outlined below for each row of pins;
  - 1) Insert Contact Housing (C235A459-1) into left side of tool head until the desired contact position aligns with the wire slot.
  - 2) Insert an unstripped wire (following the wire chart) into the wire slot until it bottoms on the tool base.
  - 3) Center the wire in the wire slot, Squeeze the tool trigger until ratchet releases.
  - 4) Release the trigger. The wire inserter will retract and the contact housing will advance to the next position.
  - 5) Repeat steps 2, 3 and 4 for each of the pins on one side of P1 (pins 1 thru 7). Once this side is done, remove contact housing from right side of tool.
  - 6) Position contact housing such that pin 14 is aligned at wire slot and repeat steps 2 - 4 for each remaining wires
- d) Release the white wire from the existing P1 pin 6 location by carefully pushing the locking tab with a pick tool. After assuring that locking tab is properly lifted, insert this pin into the new P1 connector housing.
- e) Repeat above step for blue wire at P1 pin 15 location.
- f) Assemble P1 connector back and polarizing cover to contact housing. Refer to Fig. 5



P2 Pin#	P1 Pin#	Cord Wire #	Color	Note
F	1	9	Black	
N	2	11	Orange	
G	3	13	Clear	
K	4	3	Clear (Inner)	
J	5	1	Orange (Inner)	
-	6	-	White (*)	E2
C	7	5	White	
D	9	8	Blue	
E	10	10	Grey	
H	11	12	Red	
L	12	7	Yellow	
M	13	2	Grey (Inner)	
A	14	4	Green	
-	15	-	Blue (*)	E3 (Mic +)
B	-	6	Brown	E1

(\*) These wires are not part of coil cord

**Table 1**  
**Wire Chart**



**Fig. 1**  
**Cord P2 End Preparation**

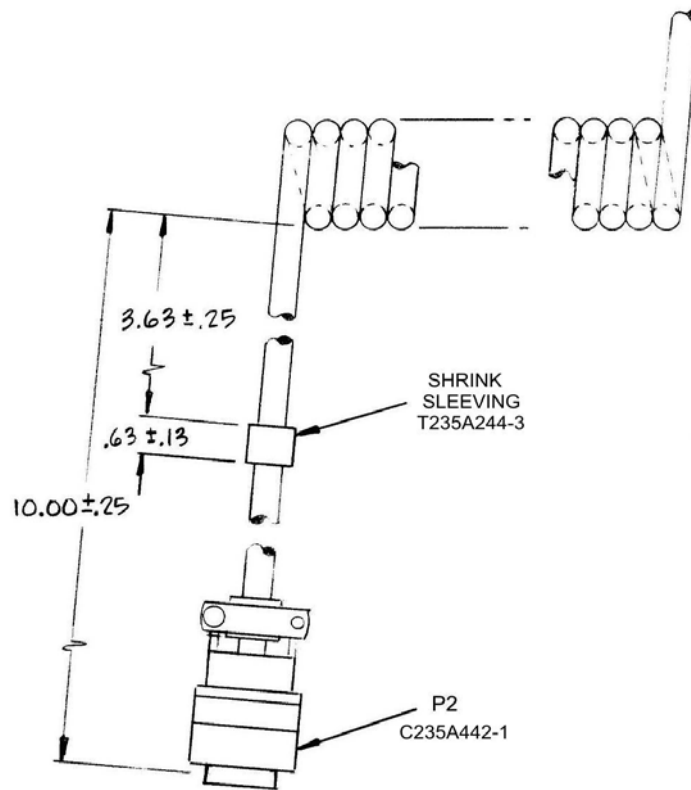


Fig. 2  
Cord P2 End Finish

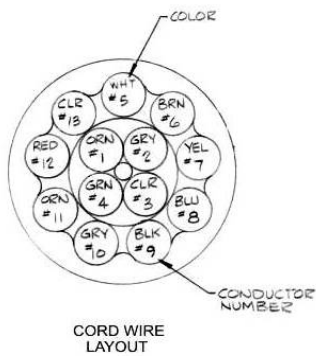


Fig. 3  
Cord Wire Layout

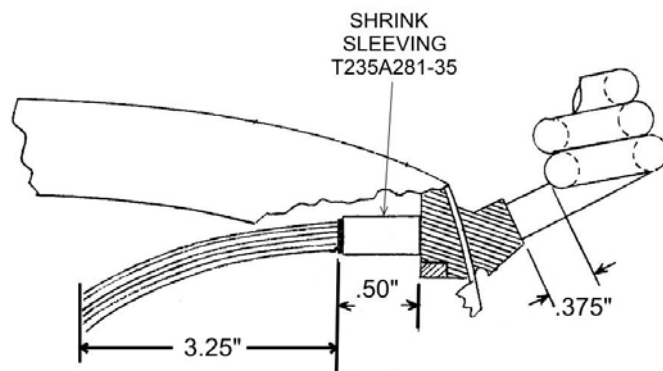


Fig. 4  
Cord P1 End Prep

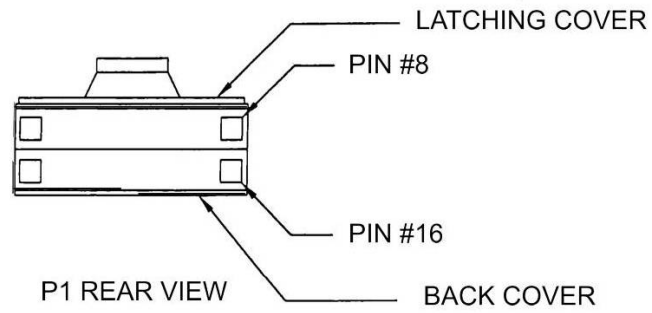


Fig. 5  
P1 Layout

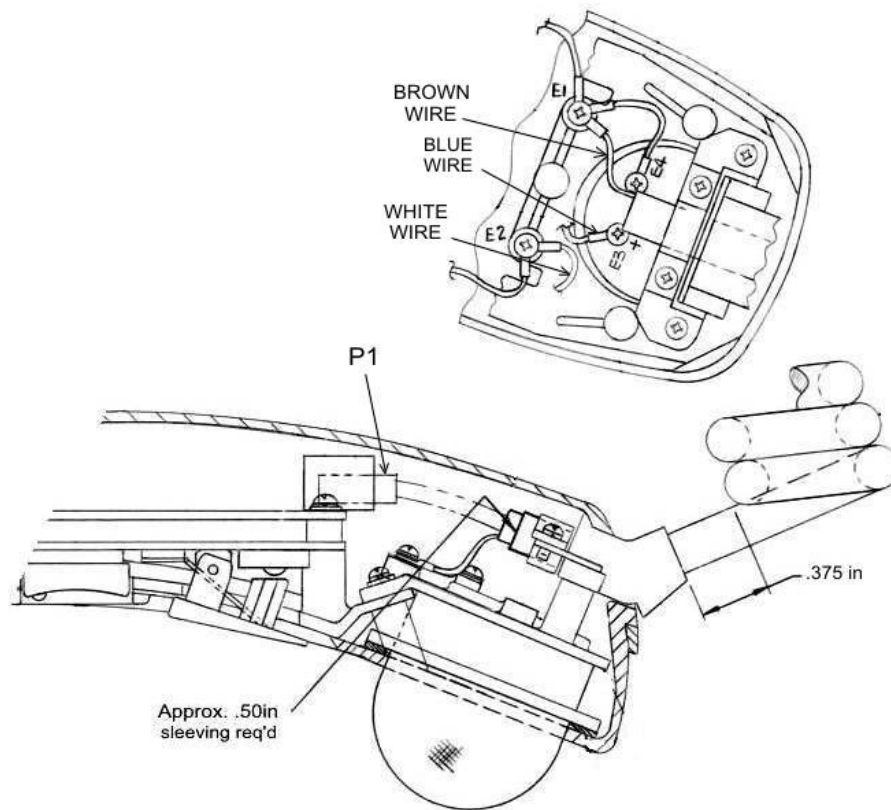


Fig. 6  
P1 End Wiring