

ACCESSORY KIT NO. AK-122A  
Supersedes AK-122

DATE: MARCH 28, 1974

TITLE: AUXILIARY POWER PLUG ACCESSORY KIT

MODELS AFFECTED: AA-1, AA-1A, AA-1B and AA-5 AIRCRAFT

WEIGHT AND BALANCE CHANGE: AA-1, AA-1A, AA-1B and AA-5  
Weight Increase: 1.50  
Arm: 44.5

PARTS LIST

<u>QUANTITY</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
6	AN960-10	Washer
6	MS20365-1032	Nut
2	MS24693-S275	Screw
4	MS27039-1-09	Screw
1	MS25171-3S	Nipple
8	MS20426AD3-4	Rivet
1	804023-503	Door Assembly
1	804023-4	Placard
1	AN2552-3A	Receptacle
1	804023-2	Doubler
1	804023-3	Bracket
1	1 PC 2	Cable
1	1 PC 1	Cable
2	MS35338-45	Lockwasher
3	MS20426AD3-5	Rivet

DESCRIPTION OF INSTALLATION

1. Installation of auxiliary power receptacle and related hardware.
2. Estimated time to accomplish this installation is two (2) man hours.

INSTALLATION INSTRUCTIONS (Refer to Figure 1 and 2)

- A. Auxiliary Power Receptacle (Figure 1)
1. Remove the upper and lower cowl assemblies.
  2. Remove the battery and battery box.
  3. Refer to Figure 1; locate and drill four (4) .193 dia. holes in the battery support bracket. Position in bracket (804023-3) and attach with four (4) screws (MS27029-1-09), four (4) washers (AN960-10) and four (4) nuts (MS20365-1032).
  4. Position the receptacle (AN2552-3A) on the bracket (804023-3) and install two (2) screws (MS24693-S275), two (2) washers (AN960-10) and two (2) nuts (MS20365-1032).
  5. Refer to Figure 1 and remove the nipples, nuts, washers and jumper strip from the battery solenoid and starter solenoid. Remove additional nut and washer from the battery solenoid and attach the end of the power cable, that has the shrink tube installed, to the battery solenoid terminal and secure with a lockwasher and nut. Slide the nipple (MS25171-3S) over the opposite end of power cable (1PC1), and connect it to the positive (+) terminal of the receptacle (AN2552-3A)

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6. Install a lockwasher against the nut on each solenoid terminal, then install the jumper strip (nipples attached), two (2) lockwashers (MS35338-45) and two (2) nuts as shown on Figure 1.
7. Using the engine rear crankcase bolt, attach one end of the ground cable (LPC2) to the engine.

N O T E

SCRAPE THE PAINT FROM AROUND THE BOLT HOLE TO ASSURE GOOD CONTACT.

8. Attach the opposite end of the ground cable (LPC2) to the negative terminal (-) of the receptacle (AN2552-3A).

N O T E

PUT A MINIMUM OF 3.5 INCH DIA. LOOP IN THE GROUND CABLE (LPC2) TO ALLOW FOR ENGINE VIBRATION.

B. RECEPTACLE ACCESS DOOR (Figure 2)

1. Layout and make cowl cutout for access door as shown on Figure 2.

N O T E

THE ACCESS DOOR ASSEMBLY (804023-503) MUST HAVE .03 INCH CLEARANCE CONSTANT. CUTTING THE OPENING SLIGHTLY SMALL AND FINISHING WITH A ROUND FILE WILL RESULT IN A BETTER FIT.

2. Position the doubler (804023-2) behind the opening with .25 inch lip exposed as shown on Figure 2. Use a #40 drill and drill eight (8) .098" diameter holes as shown on Figure 2.

N O T E

COUNTERSINK ALL COWL HOLES 100 DEGREES X .180 IN. DIA. DO NOT DRILL HOLES FOR HINGE AT THIS TIME.

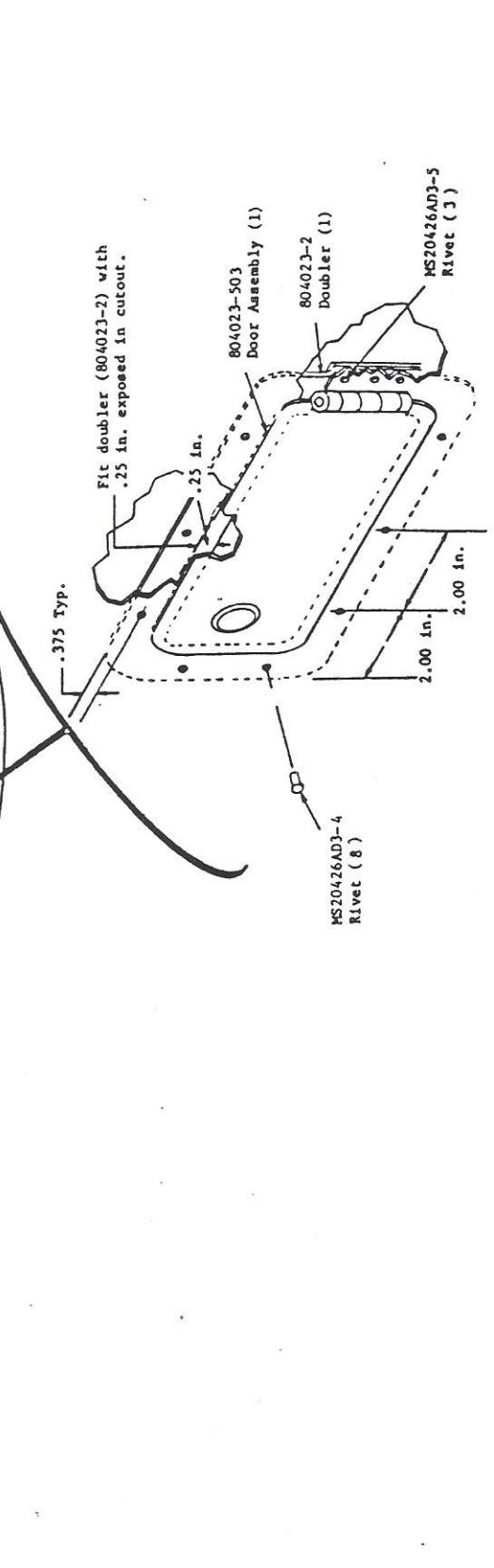
3. Using eight (8) rivets MS20426AD3-4, rivet the doubler (804023-2) to the lower cowl assembly.
4. Locate the access door assembly (804023-503) in the opening. Make sure there is .03 inch clearance constant and mark the hinge holes on back side of doubler (804023-2). Drill three (3) .098 inch dia. holes with #40 drill. Countersink cowl 100 degrees x 180 in. dia. and install three (3) rivets (MS20426AD3-5).
5. Install battery and battery box.
6. Install the lower and upper cowls.
7. Clean inside surface of door with isopropyl alcohol and install the 804023-2 placard on the inside of the 804023-503 access door assembly, so that it is clearly legible when the door is open.

JCP:pjo

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NOTE: REVISION "A" INCORPORATES MODEL AA-5, REDUCES QUANTITY OF MS20426AD3-4 FROM 11 TO 8, AND ADDS MS20426AD3-5 RIVET.





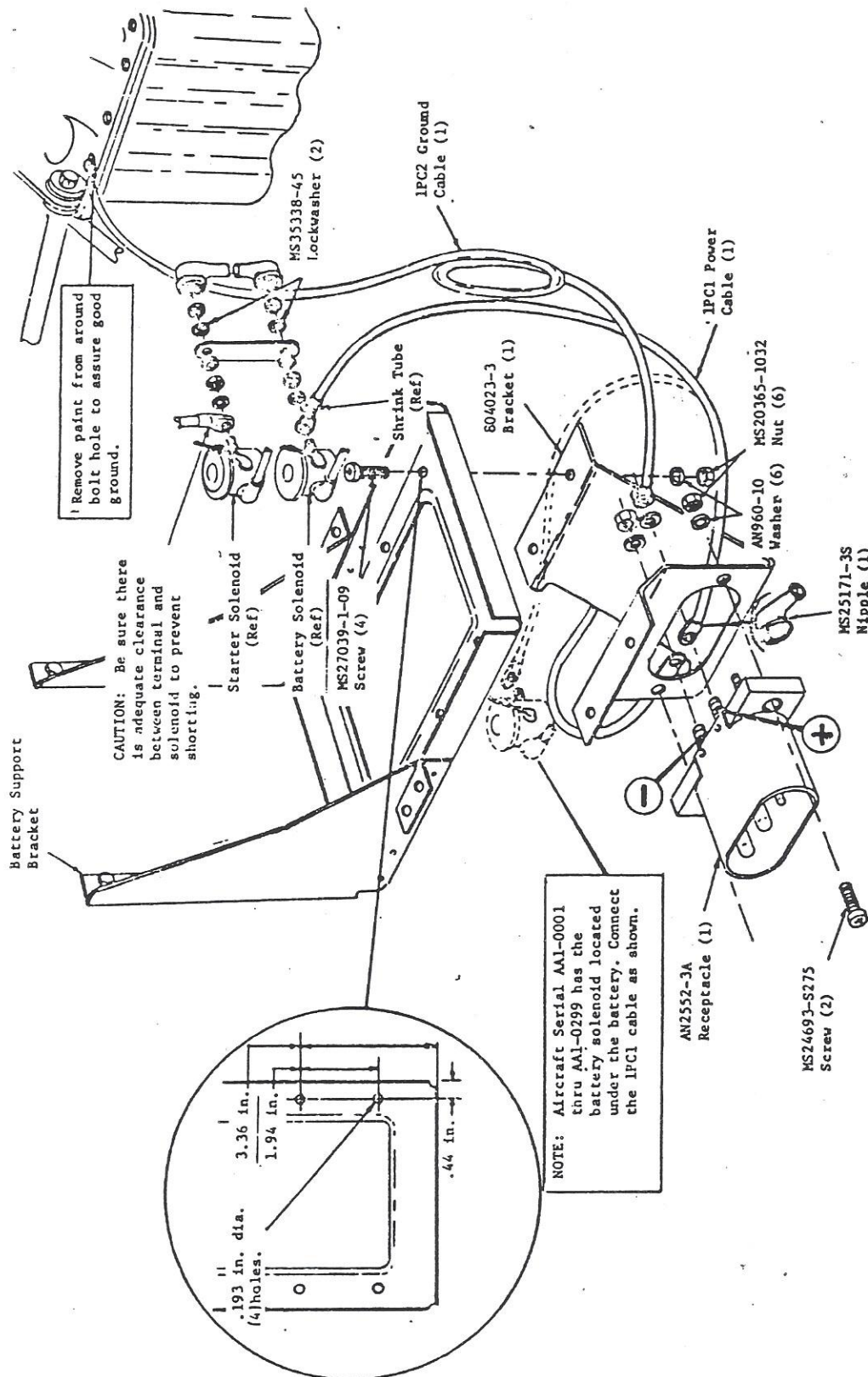


Figure 1. Auxiliary Power Receptacle Installation