



SUBJECT: RADIO MASTER RELAY DIODE REPLACEMENT

MODELS/
SERIAL NUMBERS
AFFECTED:

M20C, S/N 20-1250 through 20-1258
M20J, S/N 24-0449 through 24-0785
M20K, S/N's 25-0001 through 25-0093 and
25-0094, 25-0095, 25-0097,
25-0098, 25-0099, 25-0100

TIME OF
COMPLIANCE:

Next scheduled maintenance.

INTRODUCTION:

The possibility exists, in the affected aircraft, of a diode failure. This diode automatically removes the radio buss from its power source when cranking the engine. Should this diode fail, the starter relay would be energized any time the "radio master" switch is turned off while the "master" switch is on.

INSTRUCTIONS:

The radio master relay is located forward of the circuit breaker panel as shown in Figure 1. Disable ship's electrical power before starting modifications. Remove glareshield to gain access to the area forward of the circuit breaker panel. Then proceed as follows:

- 1) Cut wires 21PB12C20, (or 21PB12D20) and 21PB27D18 as shown in Figure 2 [approximately 3" from terminal #1 of the radio master relay.]
- 2) Remove the diode and wires from terminal #1 of the relay.
- 3) Strip remaining wire ends (approx. 0.2") in preparation for attaching furnished window splices.
- 4) Crimp wire 21PB27D18 to window splice on diode and wire 21PB12C20 (or 21PB12D20) to window splice on wire 21PB12E20.
- 5) Attach assy to terminal #1 of radio master relay.
- 6) Check as per Figure 3.

Instructions cont...

- 7) Remove starter wire from solenoid and supply electrical power to ship's systems. Check by applying power to the radio master relay and ascertain that the starter solenoid is not actuated. Next apply power to the starter solenoid (with radio master relay on) and ascertain that the radio master relay turns off while the solenoid is actuated. Attach starter wire.
- 8) Reinstall parts as removed.
- 9) Fill out and return Compliance Card.
- 10) Make entry into Aircraft Log Book when Service Bulletin action has been complied with.

REFERENCE

DATA:

1. N/A

PARTS LIST:

S. B. Kit M20-215-1

1. SB20-215-501 Diode Assy 1 ea.

This kit is available through your local Mooney Aircraft Marketing or Service Center.

FIGURES/

TABLES:

(See attached figures.)

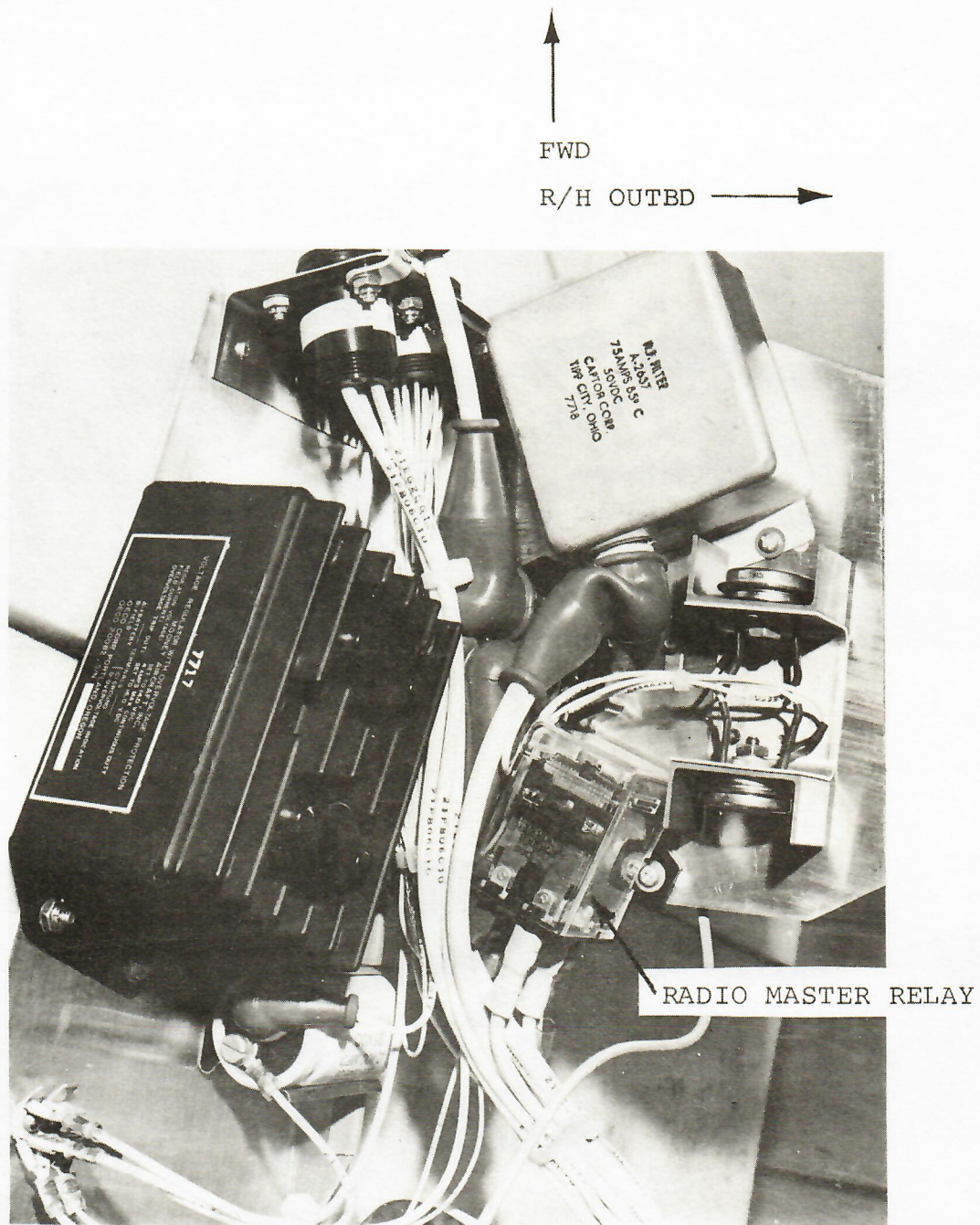


FIGURE 1
CIRCUIT BREAKER PANEL
LOOKING DOWN

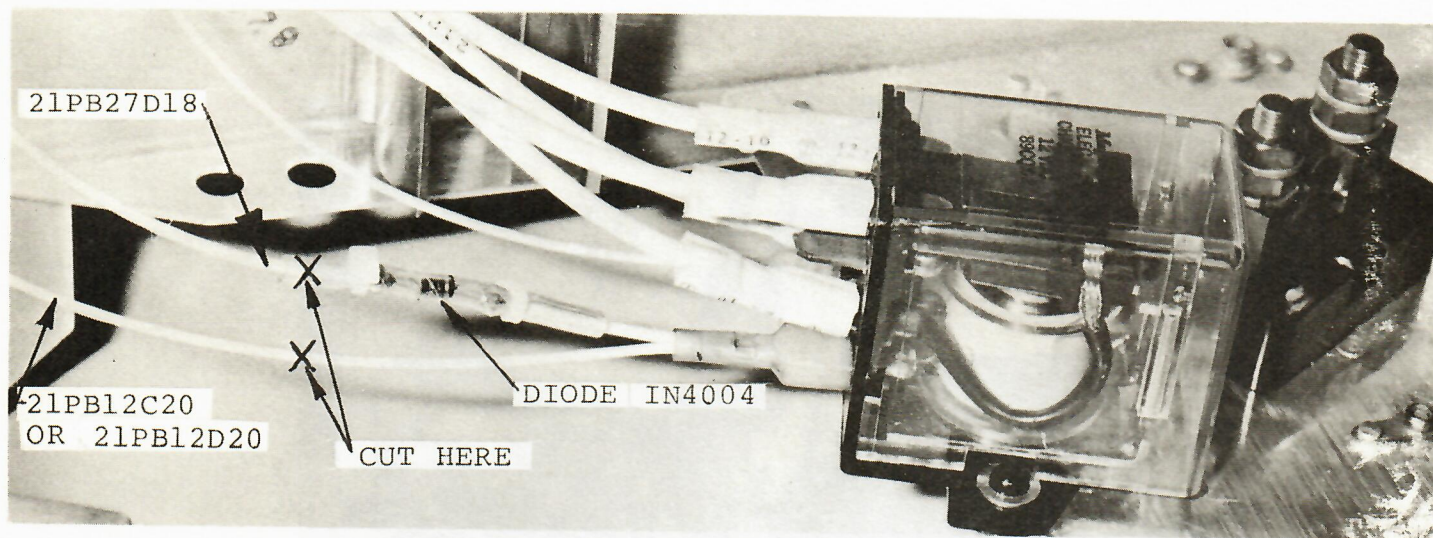


FIGURE 2

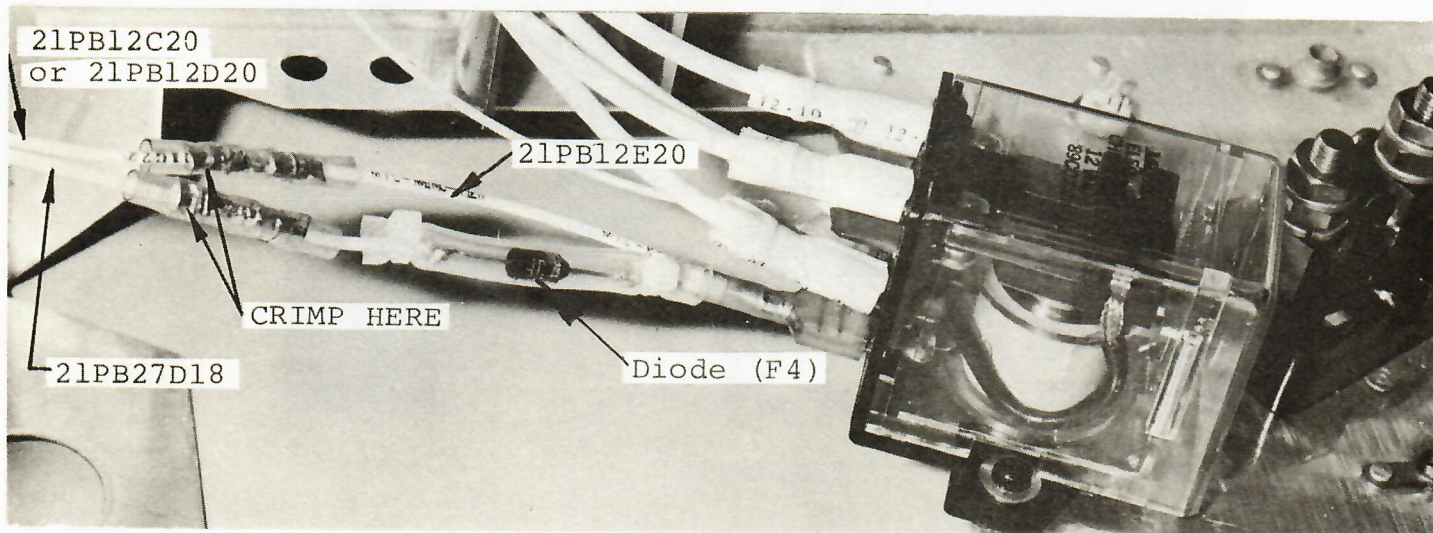


FIGURE 3