

# Service Letter

NUMBER 20-112

DATE: 6-21-63

(This Service Letter is FAA Approved)

This Service Letter reidentified  
Service Bulletin M 20-112  
per Service Instruction M20-15.

**SUBJECT:** Removal of Starter Relay Cut-out Switch

**MODELS AFFECTED:** M20C, Serials 2343-2466; M20D, Serials 1, 101-160

**TIME OF COMPLIANCE:** At Owner's Discretion

## INTRODUCTION

Recent production M20C and M20D models have been rewired to eliminate the necessity of the starter solenoid cut-out switch for dead battery starts. After compliance with this service letter, dead battery starting will be accomplished as follows:

1. As the engine is "propped," hold the magneto switch in the start position but do not push the magneto switch. This operates the starter vibrator and furnishes retarded spark to the engine.
2. When the engine starts, release the switch to the "both" position.

## INSTRUCTIONS

1. Remove wires 80007-125 and 80007-165 from the aircraft and remove the starter solenoid cut-out switch and bracket from its position at the starter vibrator.
2. Remove the end of wire No. 80007-124 from the ignition switch terminal "S" and connect it to the "BAT" terminal on the ignition switch with wire No. 80007-134 (ref). See Note at bottom of Page 2 of this service letter.
3. Connect wire No. 80007-188 as shown in Figure 3 on Page 2. Routing for this wire should be accomplished as shown in Figure 1 and as follows:  
Route new wire No. 80007-188 from "S" terminal of ignition switch with existing cables through existing clamps at locations "A" "B" and "C," through the grommet at "D" and with existing cables to starter solenoid.

NOTE: Figure 2 shows original wiring diagram and Figure 3 shows new wiring diagram after compliance with this service letter.

4. Add revision sheet to Flight Manual and revised Page 6 to M20C Flight Manual or revised Page 5 to M20D Flight Manual.

## PARTS LIST - KIT S.L. 20-112-1 for M20C

1. 80007-188 wire - #18 AWG 40" length MIL-W-5086A with AN659-1 and AN659-2 insulated terminals (1)
2. Revised Page of the M20C Flight Manual (1)
3. Flight Manual revision sheet (1)

## PARTS LIST - KIT S.L. 20-112-2 for M20D

1. 80007-188 wire - #18 AWG 40" length MIL-W-5086A with AN659-1 and AN659-2 insulated terminals (1)
2. Revised Page 5 of M20D Flight Manual (1)
3. Flight Manual revision sheet (1)

This kit may be purchased from Mooney Aircraft, Inc., Spare Parts Department, Kerrville, Texas, at a cost of \$1.00.

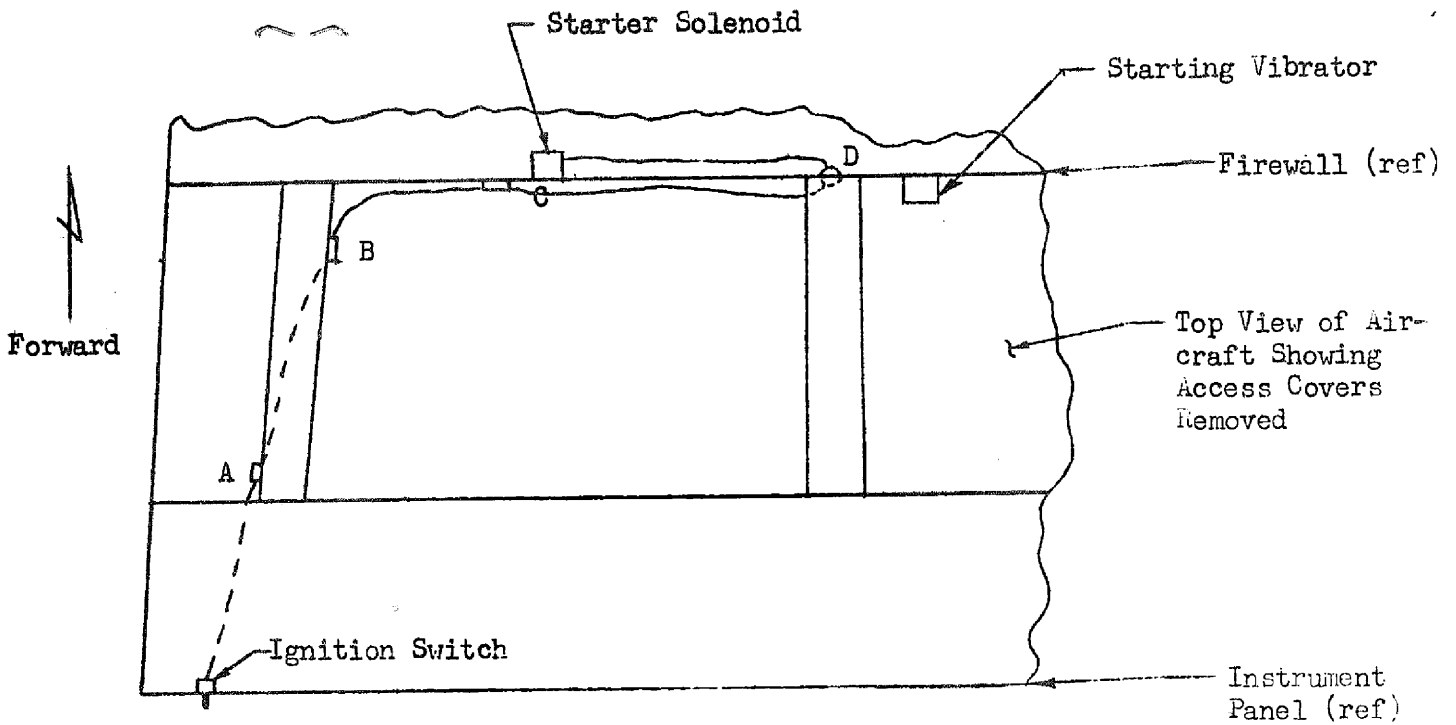


Figure 1

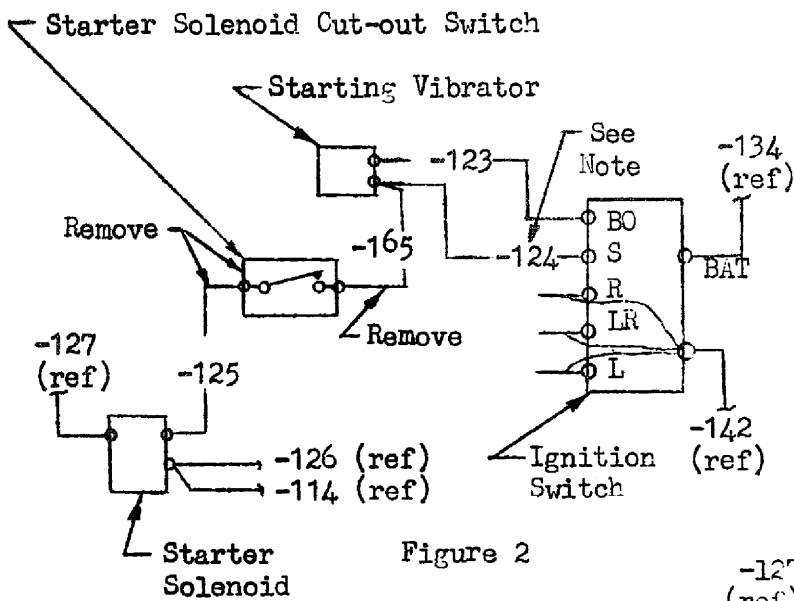


Figure 2

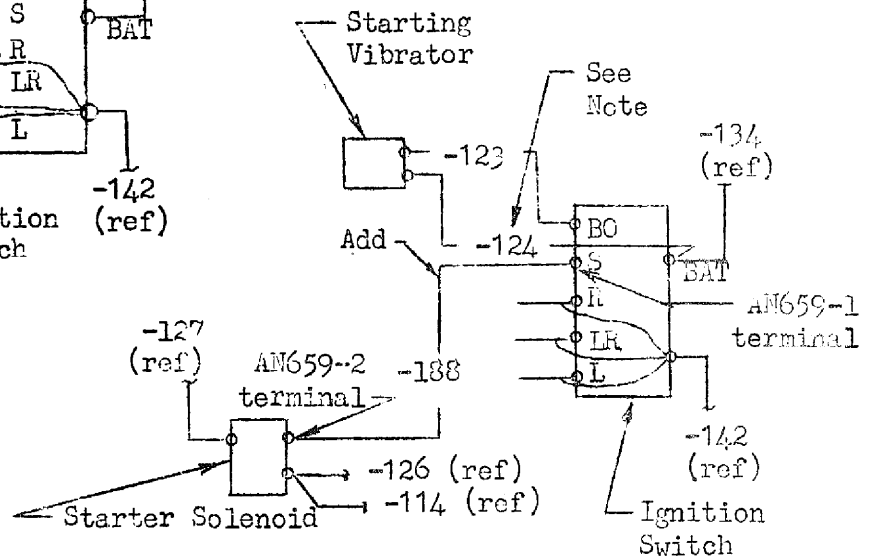


Figure 3

NOTE: Remove ignition switch end of -124 wire from "S" terminal and replace on "BAT" terminal. The starter vibrator end remains intact.