

SUBJECT: Inspection and modification of grounding cable connection for batteries.

MODELS/ S/N'S

AFFECTED: MOONEY M20M, S/N 27-0001 THRU 27- 0143, 27-0145, 27-0146

TIME OF

COMPLIANCE: Modify within next 25 operational hours and inspect every 100 hours of operation.

INTRODUCTION:

The grounding attachment point for the M20M batteries may require addition of an internal tooth, lock washer to assure a positive ground. There has been one report of an intermittent electrical malfunction that may have been attributed to this ground connection becoming loosened and interrupting the positive ground.

INSTRUCTIONS:

1. Remove the avionics access panel located on the left hand side of the tailcone just aft of wing.
2. Locate ground cables attach point for both batteries on LH, lower longeron, below Aux. Power Plug.
3. Remove nut, washers and bolt from ground cable terminals. Lift ground cables up and away from airframe structure.
4. Inspect area around attachment hole and verify that it is cleaned so bare metal is visible around hole for an area twice the size of washer OD. If area is not cleaned to above size, proceed to clean it off.
5. When area is clean, reinstall both ground cables using an internal tooth, lock washer, P/N AN936-A416 or MS35333-40, between bolt head and top AN960-416 washer at the ground cable connection.
6. Install 1 each AN4-6A bolt, with AN936-A416 lock washer (or alternate), AN960-416 washer, the two cable terminals and another AN960-416 washer, through the cleaned hole in the longeron (See Figure SIM20-97-1). Install an AN960-416 washer and an AN363-428 nut onto bolt, tighten and check for cable security. The terminal ends of the ground cables must be in full contact with each other and the AN960-416 washer, under terminals, must be in full contact with the bare metal on the longeron.
7. Proceed with an electrical checkout by turning Master Switch ON and the Landing or Taxi Light switch ON. If desired, the aircraft may be moved to a run up area and engine started as a check.
8. If electrical check is OK, install avionics access panel on the left hand side of the tailcone.
9. Enter compliance note into Aircraft Logbook and return aircraft to operational service.

REFERENCE DATA: N/A

PARTS LIST: Kit P/N, SIM20-97-1

ITEM	P/N	DESCRIPTION	QTY
1.	AN936-A416	WASHER, LOCK, INTERNAL TOOTH	1
or	MS35333-40	WASHER, LOCK, INTERNAL TOOTH (ALT)	1

FIGURES/  
TABLES: SEE FIGURE SIM20-97-1 BELOW

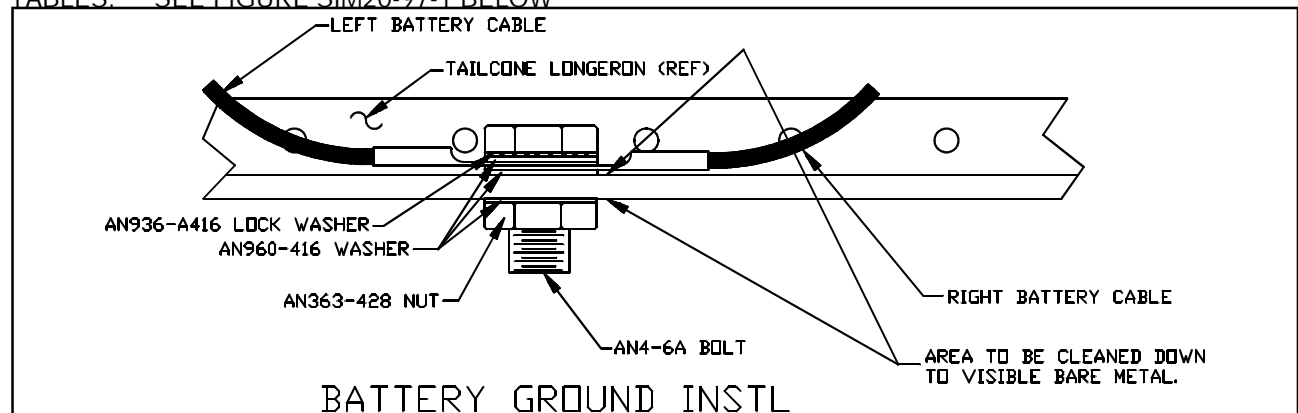


FIGURE SIM20-97-1