

**REPUBLIC AVIATION CORPORATION
FARMINGDALE, LONG ISLAND, NEW YORK
SERVICE DEPARTMENT**

JANUARY 29, 1947

SERVICE BULLETIN NO. 8

INSTALLATION TAIL WHEEL SIGNAL LIGHT SWITCH

REASON FOR CHANGE: This change is not imperative but is recommended in order to provide a switch on the tailwheel so that landing gear green light will not be on unless both main gear and tailwheel are down and locked.

AIRPLANES AFFECTED: Republic Serial Nos. 5 through 150 inclusive. Serial Nos. 151 and up have already had this change accomplished in production.

DESCRIPTION OF CHANGE: This change involves removing existing ground jumper from the main gear down switch; installing wires from this switch to tailwheel mechanism; installing new switch at tailwheel shall be accomplished as follows:

1. Remove cushions from rear seats.
2. Remove access hole cover plate from right hand side of floor under back seat for access to the landing gear down signal switch.
3. Remove wide tunnel section from center of floor at aft end of cabin for access to wires.
4. Remove landing gear down switch located just beneath the cabin floor to left of access hole.
5. Referring to Fig. 1, remove ground strap #143 from the main landing gear down switch (17F82013-1) and attach wire #75 to the switch in place of the grounding strap just removed. Install switch.
6. Install wires #75, #77 and #78 following the routing of existing wiring to aft end of airplane (refer to Fig. 5). Use 17F82041-2 sleeves to cover wire terminals (where one wire joins the next). Existing clamps in the region of wire #78 which pass through the compartment just forward of the tail wheel bulkhead from Tinnerman A2981-S-2 to A2981-S-3 if necessary. The existing clamps may be too small.
7. Increase cut-out in frame assembly at hull station 221.31 to provide necessary clearance for tailwheel signal switch as shown in Figure 2.

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8. Remove the lower tail wheel actuating link assembly 17F42101 and drill out two upper 3/16" rivets, saving the spacers between the links. Use extreme care not to elongate holes. Locate the new tail wheel signal switch bracket 17F82078 on the forward side of the link assembly with the offset to the right and attach with two AN3-11A steel bolts, original bushings between links, AN960-10 washers and AN365-1032 nuts. Refer to figure 3 for bracket installation.

NOTE: Some of the earlier airplanes had a .260 spacer between the links instead of a .322 spacer. In this case use an extra AN960-10 washer between the nut and the link.

9. Install new Switch Assembly 17F82013-3 to bracket just installed, remove paint under nuts for electric ground. Reinstall link assembly and connect wire #78 to upper terminal screw. With links in down locked position, adjust switch to "make" contact with .005" feeler between upper link and stop on lower link. Refer to Figure 4.

NOTE: Master switch and battery switch must be "ON" (closed) to check tail wheel signal switch adjustment.

10. Check the installation for proper operation and reinstall parts removed to gain necessary access. Make suitable entry in log book.

PARTS REQUIRED:

Kit Spares Item No. 1489 consists of the following:

<u>QUANTITY</u>	<u>PART NUMBER</u>	<u>PART NAME</u>
1	17F82001	Wire #75
1	17F82001	Wire #77
1	17F82001	Wire #78
1	17F82013-3	Switch Assembly
2	17F82041-2	Sleeve
1	17F82078-1	Bracket
2	AN3-11A	Bolt
2	AN365-1032	Nut
4	AN960-10	Washer
4	A2081-S-3	Clamp (Tinnerman)

TIME REQUIRED:

4 man-hours are required to accomplish this change.

W. H. Ehmann
Service Manager

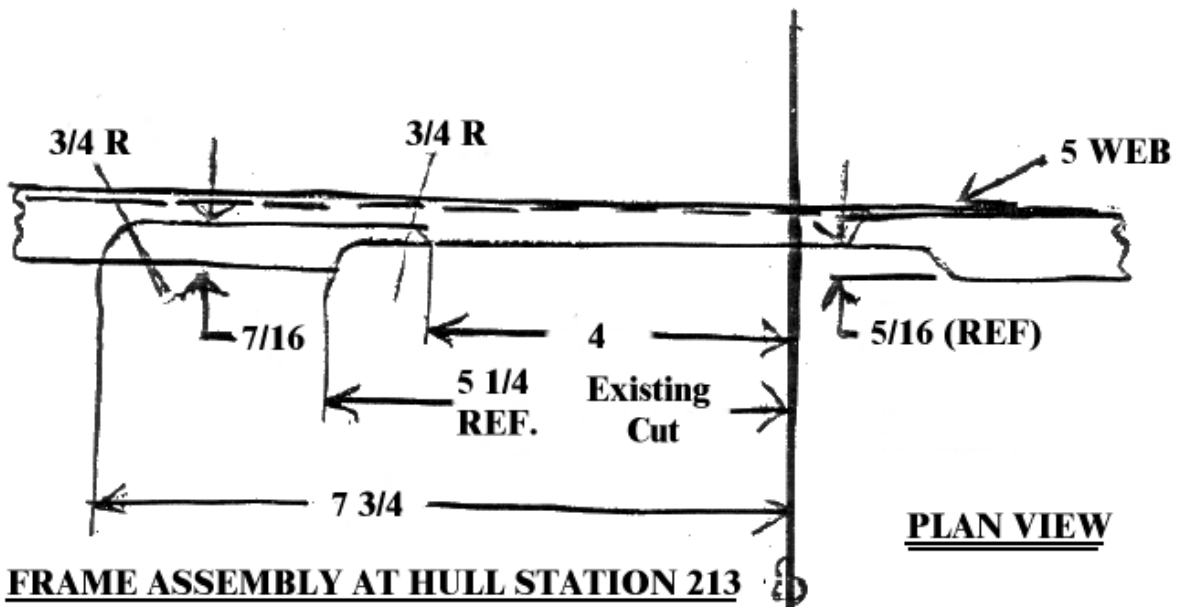
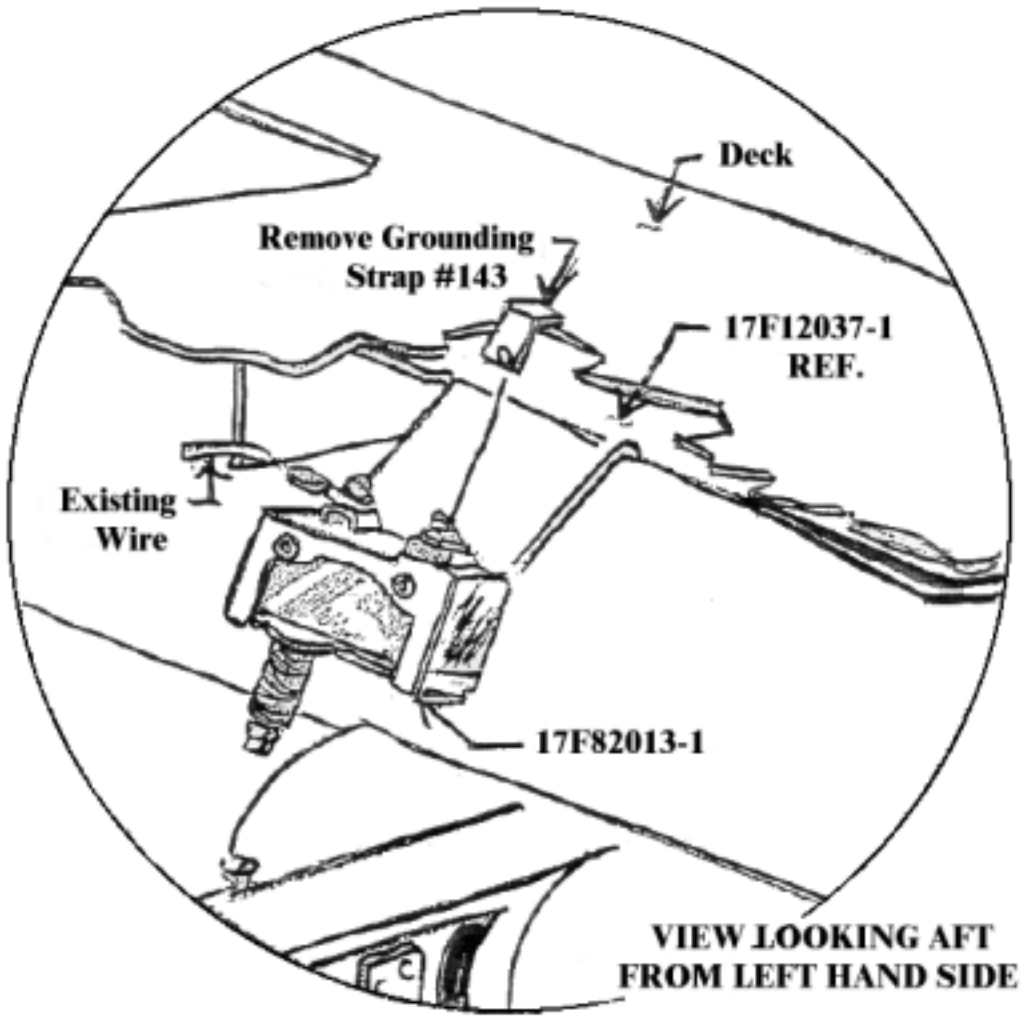


Figure 2

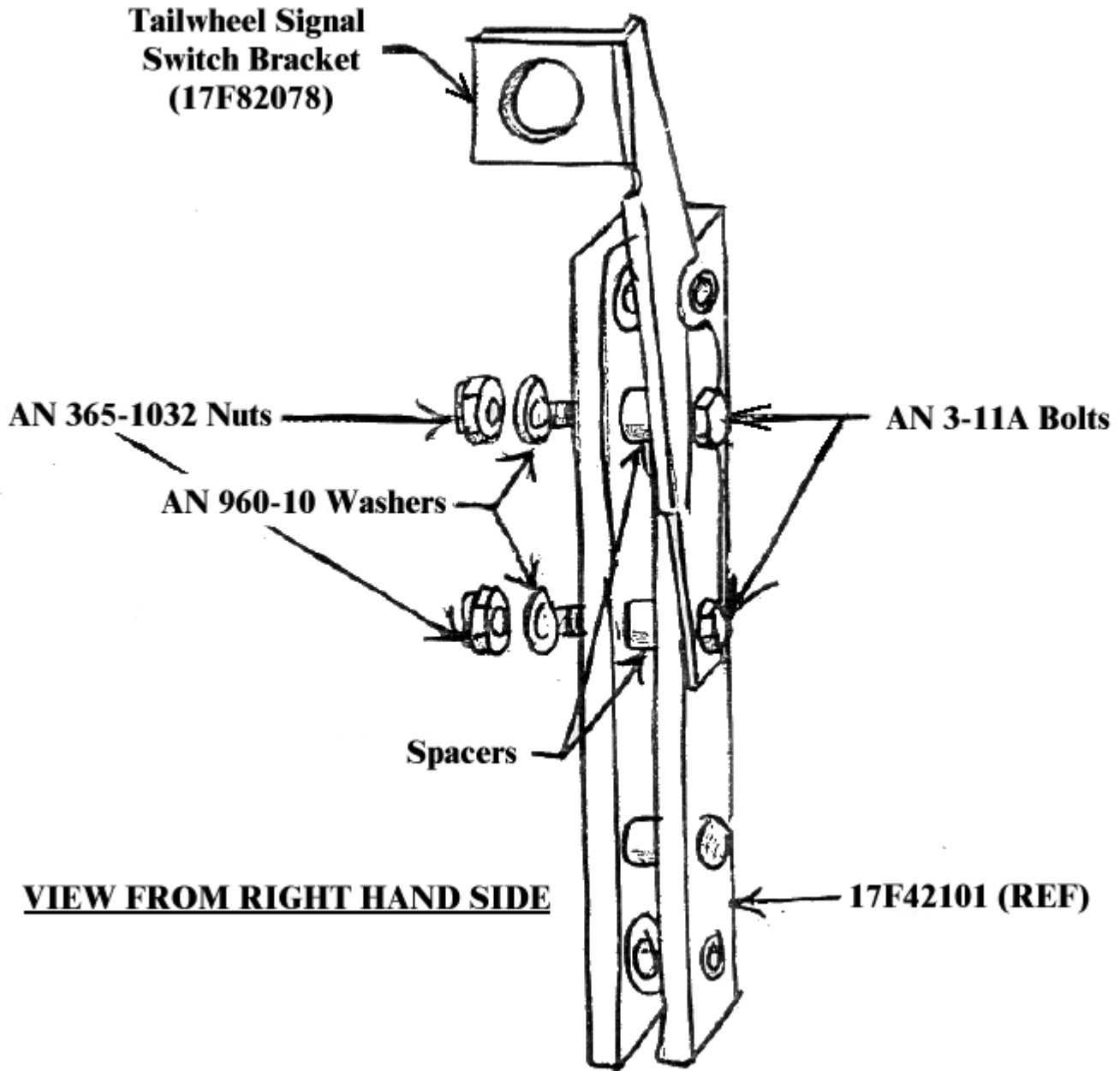


Figure 3

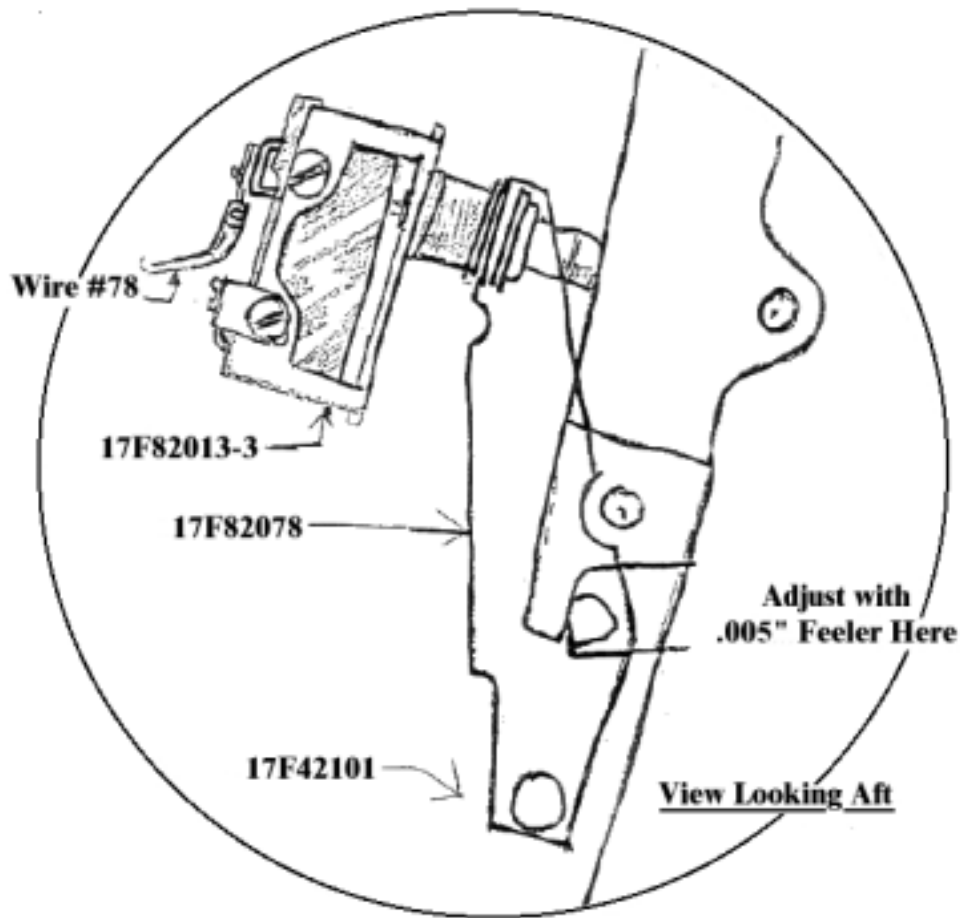
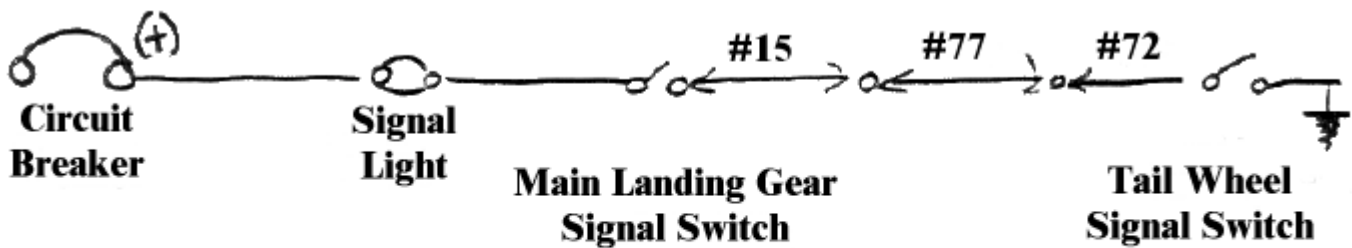


Figure 4



Tail Wheel Signal Switch Wiring Diagram

Figure 5