



SERVICE DIRECTIVE BULLETIN

SERVICE DIRECTIVE BULLETIN NO. T-040

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DATE: September 26, 2011

1. SUBJECT: Cyclic Trim Actuator Switch Assembly Inspection
2. MODEL: TH-28, 480, 480B
3. EFFECTIVITY: S/N 5142 and prior
4. BACKGROUND:

Enstrom has received a report of an incorrectly assembled trim actuator switch assembly used in the cyclic trim system. The screws that assemble the switches to the bracket were inadvertently installed in the opposite direction. This is a concern for the screws adjacent to the bracket slot, as the protruding shanks could interfere with the spring capsule travel and possibly compromise the performance of the cyclic trim system.

This Service Directive Bulletin (SDB) requires a one-time inspection of the both the lateral and longitudinal cyclic trim actuator switch assemblies.

5. COMPLIANCE:

Inspect the lateral and longitudinal trim assemblies for the correct screw orientation at the next 50-hour service.

6. INSPECTION:

NOTE: Perform all maintenance in accordance with the TH-28/480 Series Maintenance Manual.

- 6.1 Locate the lateral trim actuator assembly through the left engine access panel. Locate the longitudinal trim actuator assembly through the right engine access panel.
- 6.2 Inspect the lateral and longitudinal trim switch assemblies for the proper screw orientation. The screw shanks and nuts should be visible on the wiring side of the switch assembly (*Figure 1 and Figure 2*). The heads of inner screws should be facing the spring capsule. NOTE: On 480-series aircraft, the outer screws may be installed in either orientation.

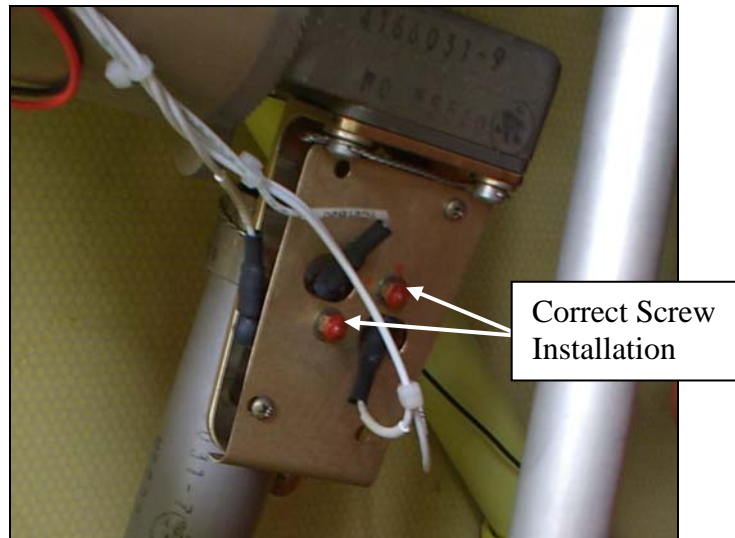


Figure 1. Properly Installed Screws – The heads of the inner screws face the spring capsule.

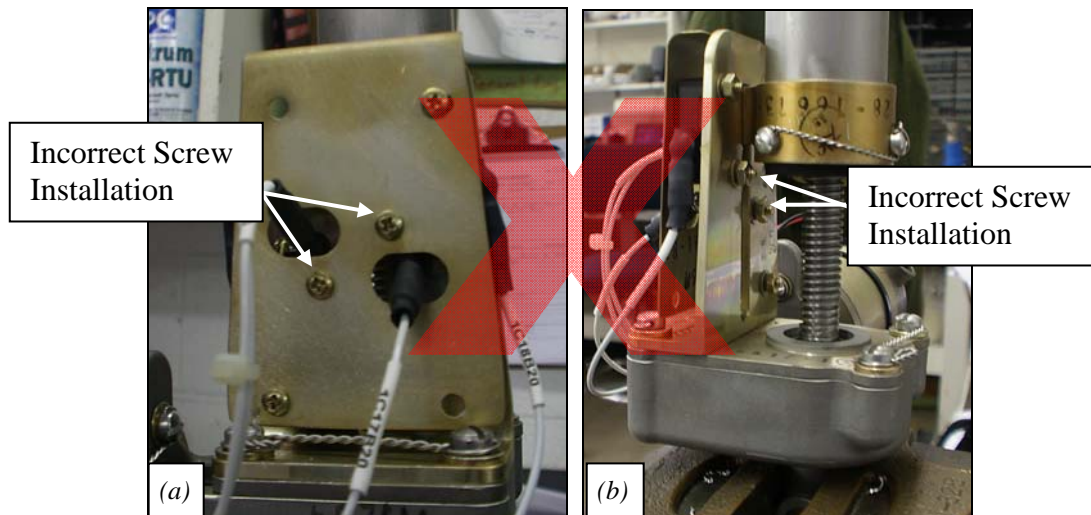


Figure 2. Improperly Installed Screws (a) (b) – The shanks of the inner screws face the spring capsule (b). (The trim actuator is removed from the aircraft.)

6.3 If the screws are installed properly, no additional inspection is required.

6.4 If the screws are not installed properly, proceed to paragraph 6.5.

NOTE: Steps 6.5 through 6.13 apply only to trim switch assemblies that have the screws installed backwards.

6.5 Disconnect the battery.

NOTE: Remove the battery, if required, to facilitate removal of the longitudinal trim actuator assembly.

6.6 Remove the applicable trim actuator assembly from the aircraft in accordance with paragraph 12-69 of the maintenance manual.

- 6.7 Remove the safety wire, screws (1) and washers (2) attaching the switch assembly to the trim actuator. Remove the switch assembly (*Figure 3*).

NOTE: Handle the switch assembly with care to avoid altering the position of the micro-switches once the screws are removed.

- 6.8 Remove the inner screws (3), washers (4) (5), and nuts (6) from the switch assembly. Re-install the inner screws (3), washers (4) (5), and nuts (6) such that the screw heads face the spring capsule. Use care to avoid moving the position of the switches when installing the screws.
- 6.9 Re-install the switch assembly to the trim actuator assembly with the hardware removed in step 6.7 and safety wire.
- 6.10 Check the spring housing travel. Refer to SDB T-039 Rev. 3, or latest revision, for instructions on checking the travel and making required adjustments.
- 6.11 Apply VC-3 Vibra-Tite, or equivalent, to the exposed screw threads and nut face.
- 6.12 Re-install the trim actuator assembly in accordance with paragraph 12-74 of the maintenance manual.
- 6.13 Check for proper operation of the trim actuator assembly.

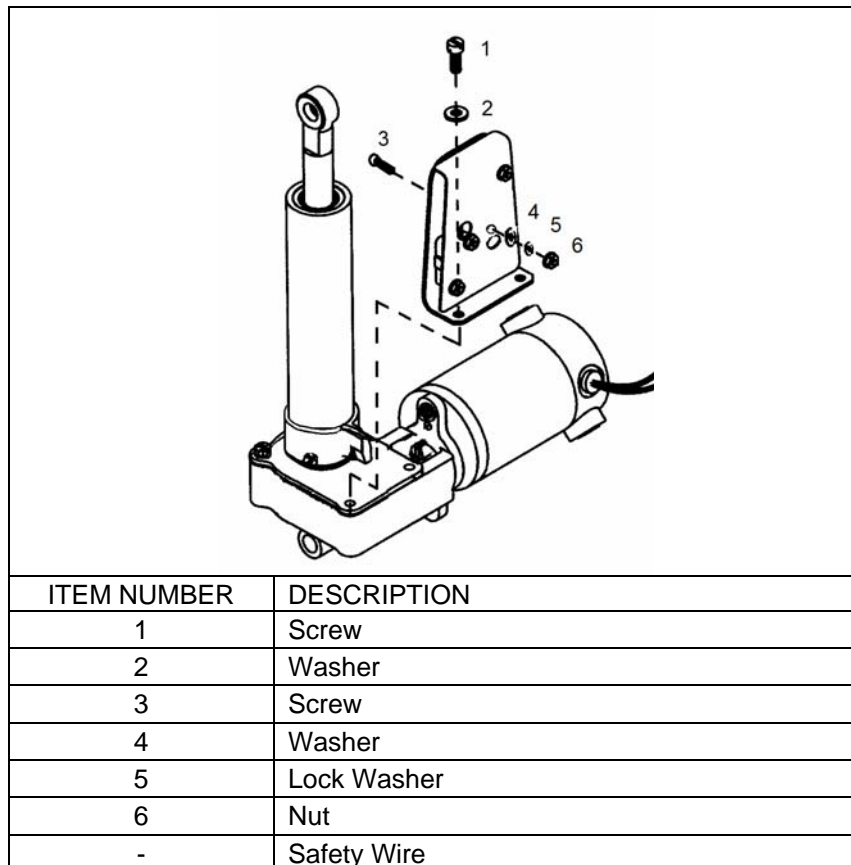


Figure 3. Cyclic Trim Switch Assembly

7. PARTS:
MS20995-C25 safety wire; VC-3 Vibra-Tite Thread Locker, or equivalent
8. SPECIAL TOOLS: None
9. MAN-HOURS: Inspection – 5 minutes
10. WARRANTY: Per Enstrom Warranty Policy
11. WEIGHT CHANGE: None
12. LOG BOOK ENTRY:
Record this inspection or modification in detail as required for maintenance actions.
13. REPETITIVE ACTION: None