



SERVICE DIRECTIVE BULLETIN

SERVICE DIRECTIVE BULLETIN NO. T-043

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DATE: January 9, 2013

1. SUBJECT: Trim Relay Replacement

2. MODEL: TH-28, 480, 480B

3. EFFECTIVITY: S/N 5163 and prior, not including S/N 5157

4. REFERENCE: Enstrom TH-28/480 Series Maintenance Manual, Latest Revision

5. BACKGROUND:

The cyclic trim system utilizes a P/N M83536/10-024M relay to control the trim actuator. This relay is manufactured by various companies under various manufacturers' part numbers. Enstrom has determined that the trim relay, P/N ES2100402BGM, manufactured by DRI Relays Inc. (DRI) has an unacceptably high failure rate. Trim relay P/N J-D4N-300M, manufactured by Leach Corporation (Leach), has performed more reliably.

DRI and Leach manufactured relays are installed in aircraft equipped with M83536/10-024M trim relays (Figure 1).

This Service Directive Bulletin (SDB) does not apply to aircraft equipped with P/N 4199059-1, 4192102-4 or 4192102-903 Trim Switch Module Assembly containing a solid state relay.

This SDB requires a one-time inspection of the trim system for DRI relays and if necessary, replacement of the DRI relays with Leach manufactured relays.

6. COMPLIANCE:

Within the next 25 hours, inspect the trim system for trim relays manufactured by DRI. If the trim relays are manufactured by DRI, replace with Leach manufactured relays.

Operators should also review the emergency procedures attached to SDB T-039.

NOTE

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

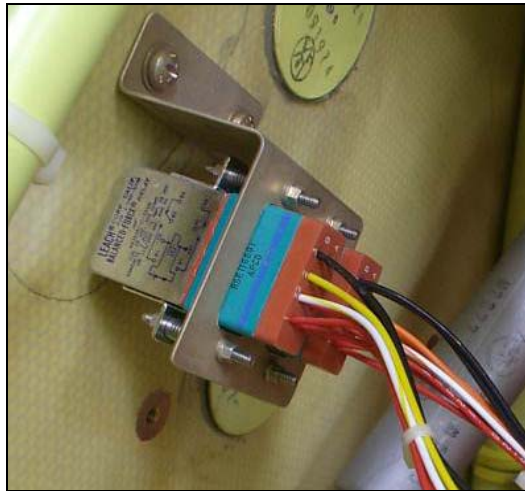


Figure 1: Trim Relay (M83536/10-024M Relay Shown)

6.1 INSPECTION:

- A. Locate the trim relay assemblies via the left and right side engine access panels.
- B. Inspect the trim relays (4 total) for the manufacturer information printed on the unit (Figure 2).
 1. If the trim relay is P/N ES2100402BGM, replace the relay with P/N J-D4N-300M.
 2. If the trim relay is P/N J-D4N-300M, no replacement is necessary.

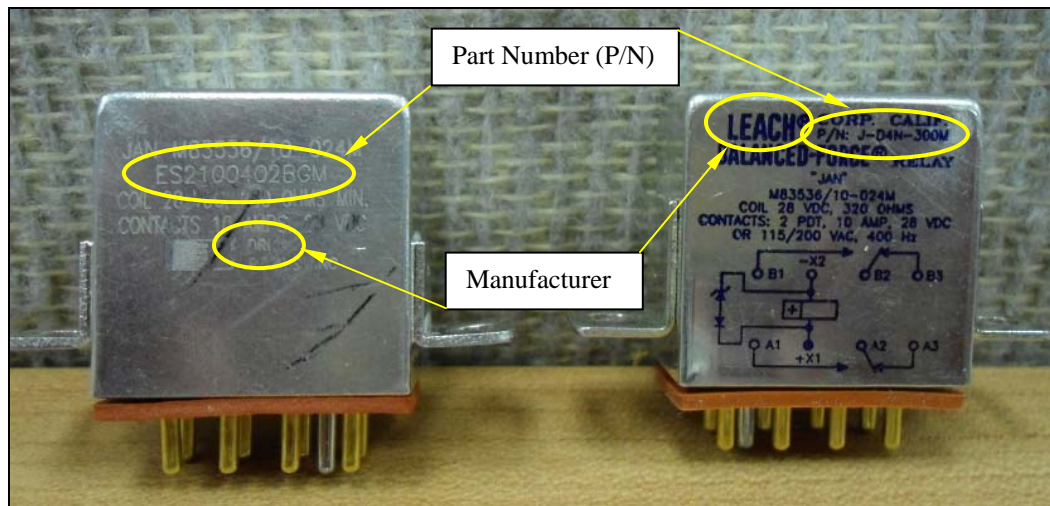


Figure 2. Trim Relays (DRI relay shown on left; Leach relay shown on right)

6.2 REPLACEMENT:

- A. Remove the trim relay bracket.
- B. Remove the relay post nuts.
- C. Pull the relay from the socket.
- D. Install the replacement relay.
- E. Reinstall the nuts.
- F. Reinstall the bracket.

6.3 FUNCTIONAL TEST

- A. Perform a ground test to verify trim authority.
 - 1. Fully trim the cyclic in each direction to verify operation of trim relays and limit switches.
 - 2. Center the cyclic trim when complete.

6.4 PARTS:

- A. Replacement trim relay:

Part Number	Description	Quantity
J-D4N-300M	Trim Relay (Leach)	4

7. SPECIAL TOOLS: N/A

8. MAN-HOURS: 10 minutes (Inspection); 30 minutes (Replacement of four relays)

9. WARRANTY: Per Enstrom Warranty Policy

10. WEIGHT CHANGE: None

11. LOG BOOK ENTRY:

Record this modification in detail as required for maintenance actions.

12. REPETITIVE ACTION: None