



SERVICE INFORMATION LETTER

SERVICE INFORMATION LETTER NO. 0184

Revision 3

DATE: May 16, 2023

1. SUBJECT: Collective Trim Adjustment Rod Assembly, P/N 28-16242
2. MODEL: F-28C, F-28C-2, F-28C-2R, F-28F, F-28F-R, 280C, 280F, and 280FX
3. EFFECTIVITY: All S/N; excluding F-28F S/N 833 and subsequent and 280FX S/N 2164 and subsequent (see compliance note pertaining to other serial numbers)
4. BACKGROUND:

This SIL provides information regarding the installation of collective trim adjustment rod assembly P/N 28-16242-1 or collective trim adjustment rod assembly P/N 28-16242-7. Updates to this assembly allow greater adjustment of the collective trim capsule phasing which will simplify collective balance adjustment.

Revision 2 updates collective trim adjustment rod assembly P/N 28-16242-5 to P/N 28-16242-7 and kit P/N 28-16242-903 to P/N 28-16242-907.

5. COMPLIANCE:

Installation of the collective trim adjustment rod assembly shall be in accordance with paragraph 6.

NOTES

The adjustment rod assembly kit P/N 28-16242-901 or 28-16242-907 is available for Enstrom helicopter models equipped with lamiflex retention assemblies. This kit may be installed if the operator has difficulty adjusting the collective balance.

The adjustment rod assembly kit P/N 28-16242-907 is recommended for F-28C, F-28C-2, F-28C-2R, 280C, F-28F, F-28F-R, 280F, and 280FX helicopters modified with the P/N AA-ECD-084-280 T-T strap assemblies.

When installed, kit P/N 28-16242-901 becomes P/N 28-16242-1 assembly; kit P/N 28-16242-907 becomes P/N 28-16242-7 assembly.

Perform all other related system maintenance IAW the applicable Enstrom F-28/280 Maintenance Manual (MM).

F-28F S/N 831 and S/N 832 and 280FX S/N 2148-2163 aircraft may already have collective trim adjustment rod assembly P/N 28-16242-5 installed. Owners/operators are eligible to upgrade to the P/N 28-16242-7 assembly if desired.

6. INSTALLATION:

NOTE

Mark all fittings, washers and spacers so they can be properly indexed on reassembly.

- 6.1 Remove upholstery, fiberglass seat deck, and applicable interior components and trim, as necessary, to access the collective trim adjustment rod assembly.

CAUTION

Set friction on the collective controls to avoid injury if the spring capsule inadvertently releases.

- 6.2 Set friction on the collective controls.

CAUTION

Failure to secure the spring capsule with special tool, T-0022, may cause serious injury or damage. Ensure the spring capsule is secure when disconnecting the collective bellcrank.

WARNING

With the capsule in compressed position, there is approximately 180 lbs of force exerted by the springs. Handle with extreme care.

- 6.3 Cage the collective spring capsule (Figure 1 and para. 12-5, step (2) and (3), MM).

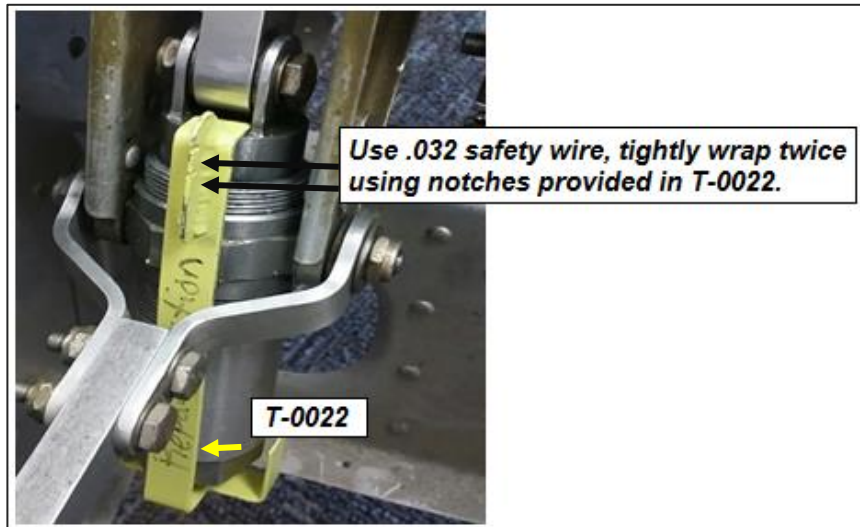


Figure 1. Spring Capsule Caged with T-0022

NOTES

For item numbers in parentheses in step 6.4 and 6.5, refer to Figure 3.

- 6.4 Remove and disassemble the existing collective trim adjustment rod assembly.
 - 6.4.1 Measure the length (A) from the strap retainer attachment point to the seat structure attachment point (Figure 2). Record the value for step 6.5.5.
 - 6.4.2 Remove nuts (10) and washers (20). Retain the washers for reinstallation; discard the nuts.
 - 6.4.3 Remove nuts (70), washers (55), and bolts (50) used to attach the brackets (40) to the link (230). Retain the nuts, washers, and bolts for reassembly.
 - 6.4.4 Remove bolt (130), washers (140, 160), spacer (200), and nut (150) that attaches the tie rod assembly to the seat structure. Retain for reinstallation.
 - 6.4.5 Remove the tie rod assembly.
 - 6.4.6 Disassemble the tie rod (220) from the links (230 and 290). Remove nuts (210 and 210A) from the tie rod (220). Retain the nuts for reassembly.
 - 6.4.7 Discard brackets (40), links (230 and 290), and tie rod (220).

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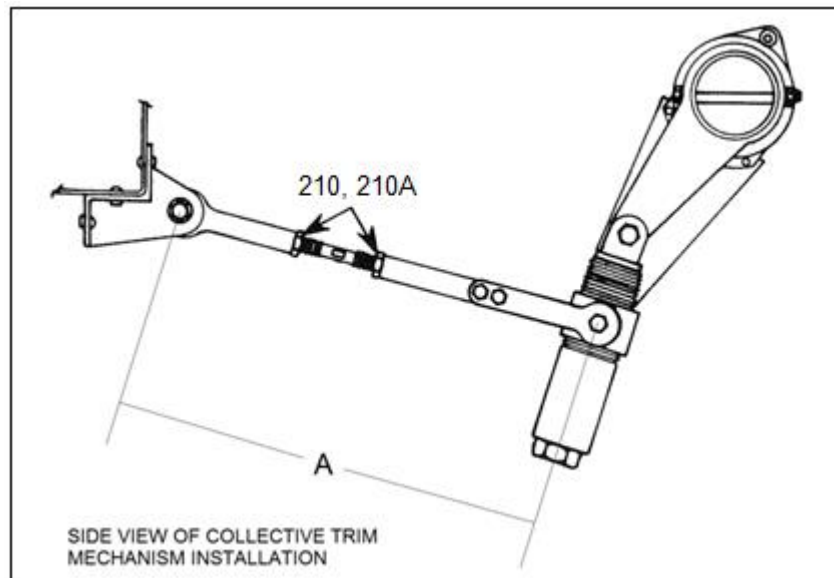


Figure 2. Collective Trim Adjustment Rod Assembly Length

- 6.5 Install P/N 28-16242-901 or P/N 28-16242-907, as required (ref. paragraph 7).

CAUTION

Use new AN364-428A self-locking nuts (10) when attaching the brackets (40) to the pivot housing (30).

The self-locking feature of the AN364 nuts (70 and 150) used to attach the brackets (40) to the link (230) and the link (290) to the seat structure should have a minimum of 8 in-lbs/0.9 Nm tear torque evident.

- 6.5.1 Thread nuts (210 and 210A) on the tie rod (220). Note: Install appropriate left- or right-hand nut on the applicable left- or right-hand thread end of the tie rod.
- 6.5.2 Assemble links (230 and 290) and tie rod (220). Note: Link (290) is installed on left-hand thread end of the tie rod.
- 6.5.3 Install the tie rod assembly to the seat structure with bolt (130), washers (140, 160), spacer (200), and nut (150).
- 6.5.4 Install the brackets (40) to the pivot housing (30) with washers (20) and nuts (10) (torque 12-15 in-lb/1.4-1.7 Nm).
- 6.5.5 Attach the brackets (40) to the tie rod assembly with bolts (50), washers (55), and nuts (70) (torque 12-15 in-lb/1.4-1.7 Nm).

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- 6.5.5.1 To align the link (230) and bracket (40) attachment holes, turn the tie rod left- and right-hand nuts (210 and 210A) in or out as required. (It may be helpful to use the length measured in step 6.4.1 to assist with a starting point for finishing the assembly.)

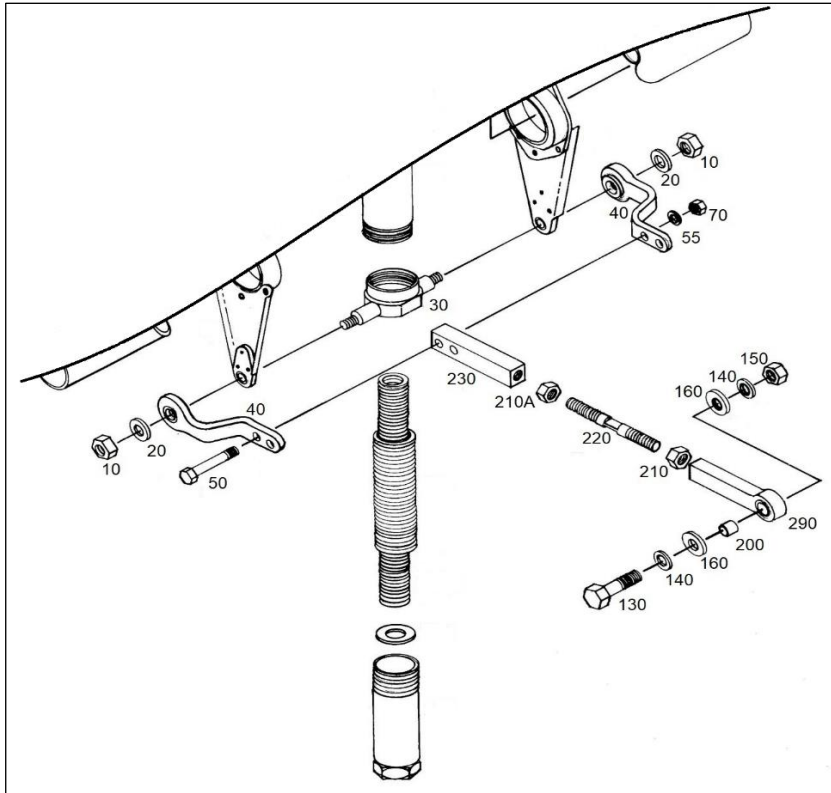


Figure 3. Collective Trim Adjustment Rod Assembly

- 6.6 Remove tool T-0022.
- 6.7 Proceed with collective trim rigging (F-28/C/280/C, page MM-11-6 of F-28A/C/280/C Maintenance Manual; F-28F/280F/FX, paragraph 12-5, E of F-28F/280F Series Maintenance Manual).
- 6.8 Reinstall interior components and trim, fiberglass seat deck, and upholstery.
- 6.9 Perform a maintenance check.

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7. PARTS

Description	Quantity	
	Lamiflex Retention Assembly	T-T Strap Retention Assembly
Adjustable Rod Assembly Kit P/N 28-16242-901	1	N/A
Adjustable Rod Assembly Kit P/N 28-16242-907	N/A	1
P/N AN364-428A Nut (Item 10)	2	2
P/N AN364-1032A Nut (Item 70)	2, As required	2, As required
P/N AN364-428A Nut (Item 150)	1, As required	1, As required

8. SPECIAL TOOLS OR EQUIPMENT: T-0022 (Collective Capsule Retainer)

9. MAN-HOURS: 2 hours

10. WARRANTY: Per Enstrom policy

11. WEIGHT CHANGE: N/A

12. LOG BOOK ENTRY: As required for maintenance actions

13. REPETITIVE INSPECTIONS: None