



THE ENSTROM HELICOPTER CORPORATION

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SERVICE INFORMATION LETTER

SERVICE INFORMATION LETTER NO. 0175

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DATE: April 8, 2011

1. SUBJECT: Turbocharger Adapter Assembly
2. MODEL: F28C, 280C, F28F, 280F, and 280FX Helicopters
3. EFFECTIVITY: All serial numbers
4. BACKGROUND:

Enstrom has received several reports of abnormal engine operation. These reports included symptoms of engine stalling after cold starts, high TIT, and rough or high engine idle. Upon investigation, it was discovered that the screws attaching the adapter to the turbocharger were loose, which caused portions of the adapter gasket to be ingested into the engine intake system. Furthermore, the lack of gasket material combined with the loose screws was causing excessive air leakage into the intake system.

This Service Information Letter provides procedures for inspecting the condition and security of the adapter assembly gasket.

5. COMPLIANCE:

If the engine runs very rough at idle or idle speed increases for no apparent reason, inspect the adapter assembly prior to the next flight. Otherwise, inspect the adapter assembly gasket within the next 100 hours or at the next annual inspection.

Follow the procedure in paragraph 5.1 to check the condition and security of the gasket between the adapter assembly and turbocharger.

5.1 INDUCTION SYSTEM CHECK:

NOTE

Perform all maintenance in accordance with the applicable maintenance manual for the aircraft model and engine model.

NOTE

Refer to Figure 1 for the item numbers referenced in the following text.

- 5.1.1 Remove the seat cushions and back access panel in the fiberglass seat deck. Remove the firewall access panels from the cabin firewall.
- 5.1.2 Check the condition of the gasket (Item 19) between the adapter assembly (Item 16) and turbocharger (Item 20) and the security of the three accessible screws (Item 21) attaching the adapter assembly to the turbocharger.
- 5.1.3 If the screws are secure and the gasket shows no sign of deterioration, no additional inspection is needed. Proceed to paragraph 5.1.9.
- 5.1.4 If the screws are loose or the gasket shows signs of deterioration, remove the turbocharger with the adapter to replace the gasket and/or torque the three remaining screws on the far side. Remove the turbocharger in accordance with paragraph 13-5.B (3) through (12) of the F-28F/280F Series Maintenance Manual; or page MM-20-23, (a) through (k) of the F-28C/280C Maintenance Manual. NOTE: When removing the turbocharger, note the placement and number of washers between the turbocharger and the mount brackets.
- 5.1.5 Replace the gasket, if required. NOTE: Identify orientation of adapter to turbocharger for reassembly.
- 5.1.6 Replace the AN503-10-8 screws with NAS1352-3H8P cap screws, if desired.
- 5.1.7 Torque the screws to 35 in-lbs/4.0 Nm. Safety wire the screws.
- 5.1.8 Install the turbocharger with the adapter in accordance with paragraph 13-5.D (2) through (13) of the F-28F/280F Series Maintenance Manual; or page MM-20-24, (b) through (m) of the F-28C/280C Maintenance Manual.
- 5.1.9 Install access panels and seats.

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- 6. PARTS: None
- 7. SPECIAL TOOLS: N/A
- 8. MAN-HOURS: Inspection – 0.5 hour
- 9. WARRANTY: N/A
- 10. WEIGHT CHANGE: N/A
- 11. LOG BOOK ENTRY: As required for maintenance actions
- 12. REPETITIVE ACTION: N/A

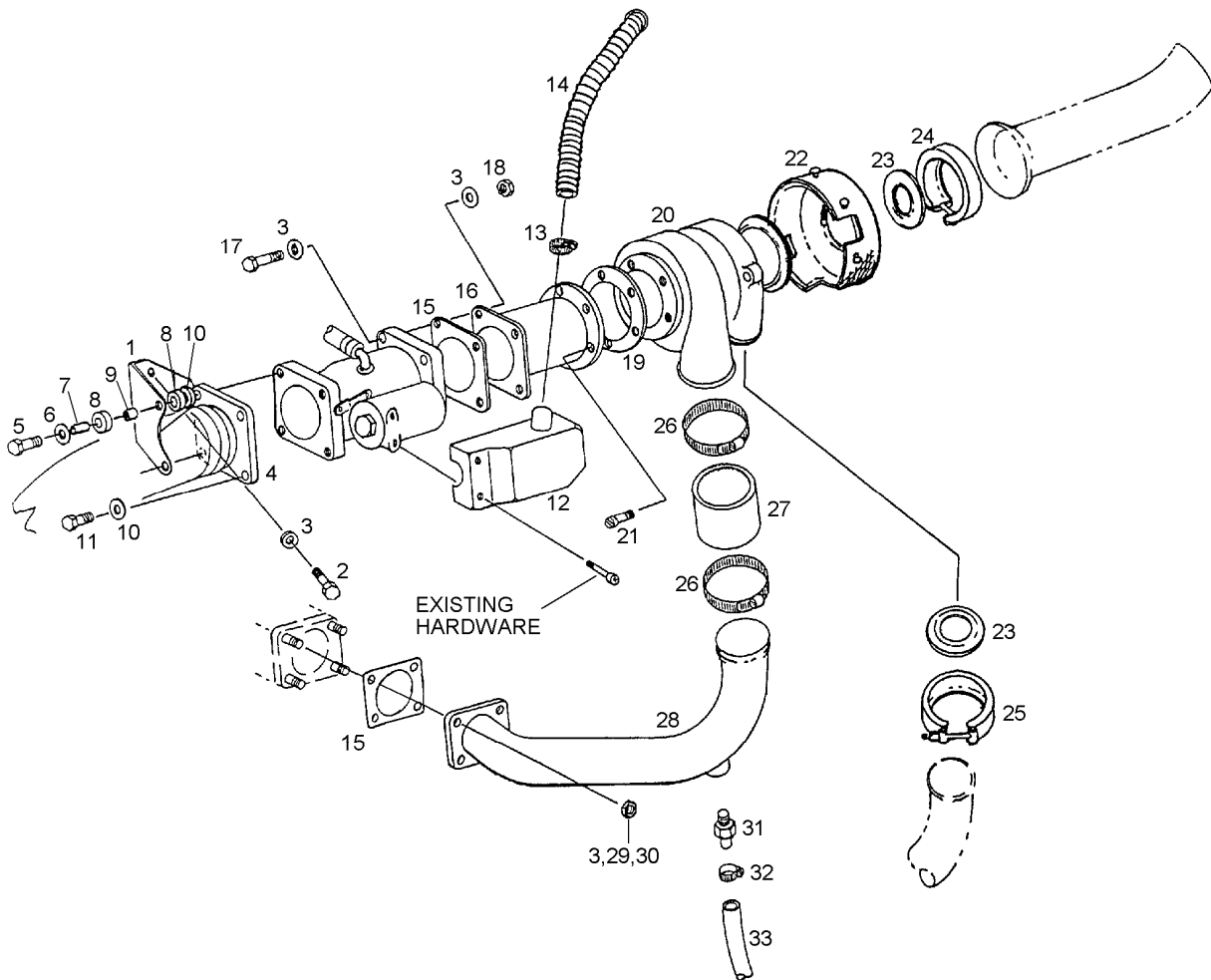


FIGURE 1. TURBOCHARGER INDUCTION SYSTEM

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| ITEM NUMBER | PART NUMBER | DESCRIPTION | QTY PER ASSY | MODELS AFFECTED | | | | | | |
|-------------|-----------------|--------------------------|--------------|-----------------|-----|------|------|------|------|-------|
| | | | | F28A | 280 | F28C | 280C | F28F | 280F | 280FX |
| 1 | 28-123022-11 | . Mount Bracket | 1 | | | X | X | X | X | X |
| 2 | AN75A5 | . Bolt | 2 | | | X | X | X | X | X |
| 3 | AN960-516 | . Washer | 14 | | | X | X | X | X | X |
| 4 | 28-123019-1 | . Elbow Adapter Assembly | 1 | | | X | X | X | X | X |
| 5 | AN74A11 | . Bolt | 2 | | | X | X | X | X | X |
| 6 | ¼ Harper Washer | . ¼ Harper Washer | 2 | | | X | X | X | X | X |
| 7 | 28-123007-11 | . Spacer | 2 | | | X | X | X | X | X |
| 8 | 28-123009-17 | . Washer | 4 | | | X | X | X | X | X |
| 9 | 28-123009-15 | . Shock Mount Tube | 2 | | | X | X | X | X | X |
| 10 | AN960-416L | . Washer | 4 | | | X | X | X | X | X |
| 11 | AN74A5 | . Bolt | 2 | | | X | X | X | X | X |
| 12 | 28-181007-3 | . Blast Tube Assembly | 1 | | | X | X | X | X | X |
| 13 | QS100-M12S | . Clamp | 2 | | | X | X | X | X | X |
| 13 | AN737TW34-38 | . Clamp (Alternate) | 2 | | | X | X | X | X | X |
| 14 | 28-181006-11 | . Hose | 1 | | | X | X | X | X | X |
| 15 | 66224 | . Gasket | 2 | | | X | X | X | X | X |
| 16 | 037360-115 | . Adapter | 1 | | | X | X | X | X | X |
| 17 | AN5-11A | . Bolt | 4 | | | X | X | X | X | X |
| 18 | MS21045L5 | . Nut | 4 | | | X | X | X | X | X |
| 19 | LW-13476 | . Gasket | 1 | | | X | X | X | X | X |
| 19 | 28-12360-1 | . Gasket (Alternate) | 1 | | | X | X | X | X | X |
| 20 | 3BT5EE10J2 | . Turbocharger | 1 | | | X | X | X | X | X |
| 21 | NAS1352-3H8P | . Screw | 6 | | | X | X | X | X | X |
| 22 | RJ9700 | . Turbo Blanket | 1 | | | X | X | X | X | X |
| 23 | LW-14485 | . Gasket | 2 | | | X | X | X | X | X |
| 24 | LW-13464 | . Clamp | 1 | | | X | X | X | X | X |
| 25 | NH1004420-10 | . Coupling | 1 | | | X | X | X | X | X |
| 26 | QS200-M40S | . Clamp | 2 | | | X | X | X | X | X |
| 26 | MS35842-13 | . Clamp (Alternate) | 2 | | | X | X | X | X | X |