



## SERVICE DIRECTIVE BULLETIN

SERVICE DIRECTIVE BULLETIN NO. T-038

Revision 1

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DATE: May 5, 2011

1. SUBJECT: Engine Mount Inspection (P/N 4120012-11/-12)
2. MODEL: TH-28, 480, 480B
3. EFFECTIVITY: TH-28, all serial numbers;  
480, all serial numbers; 480B, serial numbers 5039 through 5138
4. REFERENCE: Enstrom TH-28/480 Series Maintenance Manual, Latest Revision
5. BACKGROUND:

Enstrom has received reports of P/N 4120012-11/-12 engine mounts cracking in the field. The engine mounts are located on the sides of the aircraft and are installed with three engine mount bolts (P/N 4120014-11 or NAS6205-2H), each secured with safety wire.

There was evidence of the safety wire chafing on the forward edge of the 90° flange of the first -11 engine mount. Subsequent failures were reported primarily on aircraft used for agricultural operations, after the safety wire was removed in accordance with the initial release of this SDB.

This Service Directive Bulletin (SDB) requires one time and repetitive inspections of the side engine mounts (P/N 4120012-11/-12); replacement of the engine mounts, if required, with P/N 4120012-21/-22; and identifies ECD4080-11 self locking bolts as a replacement to the existing engine mount bolts and safety wire combination.

6. COMPLIANCE:

### NOTE

Perform all maintenance IAW the TH-28/480 Series Maintenance Manual.

Compliance with this SDB must be completed within the next 50 hours time in service.

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**6.1 INSPECTION/REPLACEMENT PROCEDURE – ENGINE MOUNTS****NOTE**

Serial numbers 5139 and subsequent are equipped with P/N 4120012-21/-22 engine mounts at the time of manufacture.

- A. Remove the safety wire from the 4120014-11 or NAS6205-2H engine mount bolts.
- B. Inspect the engine mounts for cracks, corrosion, bends, and wear marks from safety wire in accordance with the Enstrom TH-28/480 Series Maintenance Manual, paragraph 13-135.
- C. If either engine mount is cracked or bent, replace both engine mounts (P/N 4120012-11/-12) with P/N 4120012-21/-22 engine mounts in accordance with paragraph 13-136 of the Enstrom TH-28/480 Series Maintenance Manual. Blend out and polish corrosion and wear marks less than .010 in (.3 mm) deep and touch up with epoxy prime. If more than .010 in (.3 mm) must be removed to blend out defects, replace the mount.
- D. Aircraft used for agricultural spraying or external load: At the next annual or 100-hour inspection, replace P/N 4120012-11/-12 with P/N 4120012-21/-22 engine mounts.
- E. Non-agricultural or non-external load carrying aircraft: Owners may replace P/N 4120012-11/-12 with P/N 4120012-21/-22 engine mounts at their option.

**6.2 REMOVAL/REINSTALLATION – ENGINE MOUNT BOLTS****NOTE**

Serial numbers 5133 and subsequent are equipped with ECD4080-11 self locking engine mount bolts at the time of manufacture.

- A. Individually remove each engine mount bolt (P/N 4120014-11 or NAS6205-2H) and replace with an ECD4080-11 self locking engine mount bolt. Torque the hardware to 110 in-lbs (12.5 Nm).
- B. Apply a thin line of white paint or Torque Seal<sup>®</sup> on the head of the bolt and engine mount to clearly denote a torque stripe. The paint shall be suitable for a maximum operating temperature of 300°F.
- C. Repeat the bolt replacement process for both side engine mounts (6 bolts total).

**NOTE**

Enstrom recommends replacing the ECD4080-11 self locking engine mount bolt with a new ECD4080-11 bolt in the event it is removed from the engine mount.

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## 6.3 PARTS:

<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
4120012-21	Engine Mount	1
4120012-22	Engine Mount (Opp. -21)	1
ECD4080-11	Self Locking Engine Mount Bolt	6

7. SPECIAL TOOLS: None

## 8. MAN-HOURS:

Inspection – Engine Mounts (paragraph 6.1): 5 minutes

Replacement – Engine Mounts (paragraph 6.2): 30 minutes – 1 hour

Removal/Reinstallation – Engine Mount Bolts (paragraph 6.2): 30 minutes

9. WARRANTY: Per Enstrom New Helicopter Warranty policy

10. WEIGHT CHANGE: None

11. LOG BOOK ENTRY: Enter compliance with this SDB in the aircraft maintenance records.

## 12. REPETITIVE ACTION:

A. Inspect the engine mounts in accordance with paragraph 6.1.B and check the condition of the torque stripes (see paragraph 6.2) at each 100 hour/annual inspection or any time the lower drive system is adjusted/realigned.