SERVICE DIRECTIVE BULLETIN

SERVICE DIRECTIVE BULLETIN NO. 0132

Revision 1 Page 1 of 5

DATE: November 21, 2023

SUBJECT: Clutch Handle Rigging 1.

MODEL: 2. F-28A, F-28C, F-28C-2, F-28C-2R, F-28F, F-28F-R, 280, 280C, 280F, 280FX

EFFECTIVITY: All Serial Numbers 3.

4. **BACKGROUND:**

Enstrom received a report of a main belt drive tensioning system ("clutch") inadvertently disengaging in flight. Investigation concluded the disengagement occurred because the handle was able to contact the roll pin in the handle bellcrank when the handle was in the disengaged and stowed position.

This Service Directive Bulletin clarifies the rigging requirements for the clutch handle and provides procedures for ensuring the rigging can be obtained. Revision 1 corrects typographical errors in paragraphs 5.2.1.3 and 5.2.1.5 and Figure 2.

5. **COMPLIANCE:**

Inspect in accordance with paragraph 5.1 within the next 5 flight hours. The inspection steps in 5.1.1 through 5.1.3 (including the logbook entry of 5.1.3.1) can be done by the pilot. Any re-rigging required by step 5.1.4 and all work required by paragraph 5.2 must be done by an appropriately licensed mechanic.

Check the rigging in accordance with paragraph 5.2 at the next 100-hour or annual inspection or if the clutch rigging is checked, whichever occurs first.

NOTE: Perform all maintenance in accordance with the applicable F-28A/C/F/ 280/C/F/FX Maintenance Manual (MM) unless noted otherwise.

5.1 **Preliminary Inspection:**

- With the engine not running, engage the clutch and stow the handle. 5.1.1
- 5.1.2 Verify the clutch handle is firmly on the floor as shown in Figure 1(a). Movement of the handle should have no effect on the P/N 28-16515-1 bellcrank.

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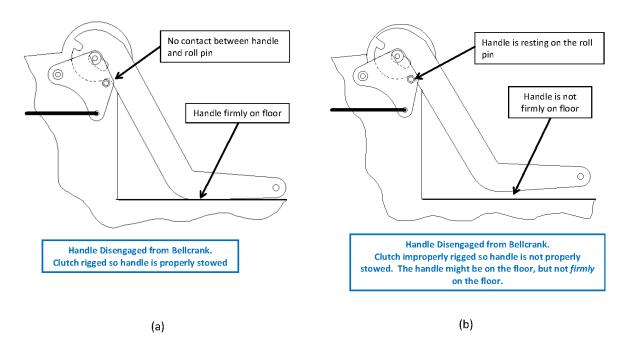


Figure 1 – Clutch Handle Stowed when Rigged Properly and Improperly

- 5.1.3 If the handle rests firmly on the floor and movement of the handle does not affect the bellcrank, the aircraft may be returned to service until the next 100-hour or annual inspection.
 - 5.1.3.1 Disengage the clutch and make a logbook entry.
- 5.1.4 If the handle rests on the floor, but not firmly, or if movement of the handle affects the bellcrank, the handle must be re-rigged in accordance with paragraph 5.2 before returning the aircraft to service.
 - 5.1.4.1 Ferry flight to a maintenance or repair facility is authorized with the following restrictions:
 - 5.1.4.1.1 The ferry pilot must be instructed to not kick the handle when the clutch is engaged.
 - 5.1.4.1.2 No passengers are allowed in the middle seat and the floor near and around the clutch handle must be kept clear.

5.2 Handle Rigging Check

- 5.2.1 At the next 100-hour or Annual Inspection, or if the clutch rigging is checked or adjusted, rig the clutch handle as follows:
 - 5.2.1.1 Verify the clutch is rigged in accordance with the latest revision of Service Information Letter (SIL) 0080.

5.2.1.2 When making the Final Clutch Lever Adjustment (Step E, page 4), verify the clutch lever (handle) is firmly on the floor when the clutch is engaged and the handle is in the stowed position (Figure 1).

5.2.1.3 Use the shank of a 1/8-inch drill bit or a #30 drill bit to verify there is approximately .125-inch (3.2 mm) space between the clutch lever and the roll pin in the bellcrank (Figure 2).

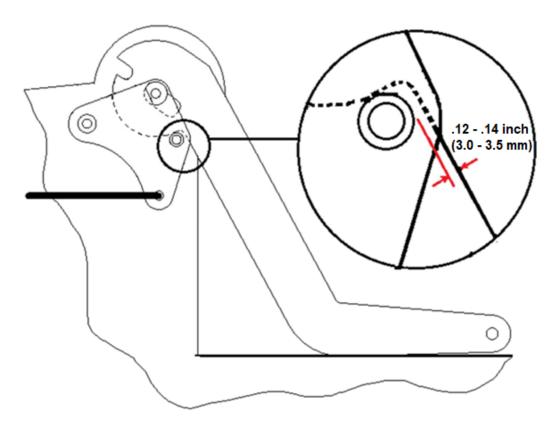


Figure 2. Space Between the Lever and the Roll Pin

5.2.1.4 Adjust the turnbuckle (Item 3 in SIL0080 Figure 2-A) as required to obtain clearance.

NOTE: Turnbuckle adjustment will require removing the seat deck.

- 5.2.1.5 Verify proper operation of the clutch and that the handle stows flat and firmly on the floor with approximately a .125 inch (3.2 mm) space between the lever and the roll pin.
- 5.2.1.6 Secure the jam nuts on the turnbuckle.

- 5.2.2 The lever may be modified as shown in Figure 3 to obtain more clearance if necessary.
 - 5.2.2.1Using a file or Dremel grinder or similar tool, remove material as shown in Figure 3.
 - 5.2.2.2 Use fine sandpaper or similar abrasive to deburr the area and remove any tool marks.
 - 5.2.2.3 Locally apply Alodine, Iridite, or equivalent conversion coating to the bare metal and paint the area black.

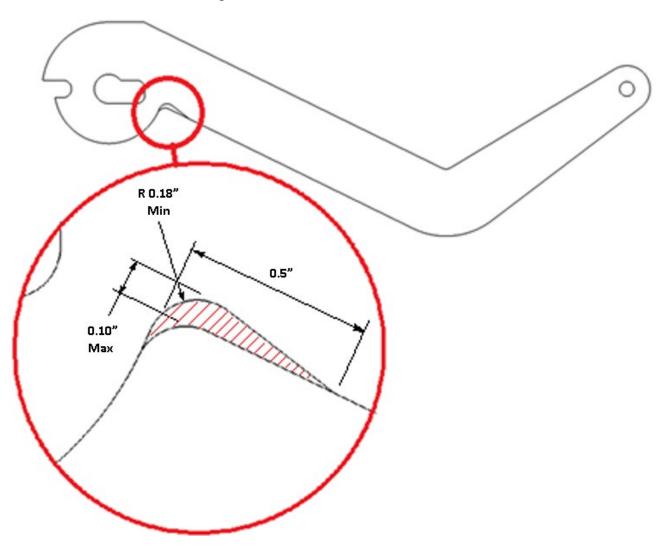


Figure 3 – Handle Modification

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6. PARTS:

Consumable material supplied by the installer:

Aluminum Conversion Coating	MIL-C-5541, MIL-DTL-81706B, or equivalent
Paint, Black	MIL-PRF-85285, or similar

7. SPECIAL TOOLS:

N/A

8. MAN-HOURS:

Preliminary inspection: 15 minutes

Detailed rigging check: 30 minutes

9. WARRANTY:

Per Enstrom Warranty Policy

10. WEIGHT CHANGE:

N/A

11. LOG BOOK ENTRY:

As required for maintenance actions

12. REPETITIVE ACTION:

12.1 At each 100-hour or annual inspection and any time the clutch rigging is checked or adjusted, inspect the handle rigging in accordance with paragraph 5.2.