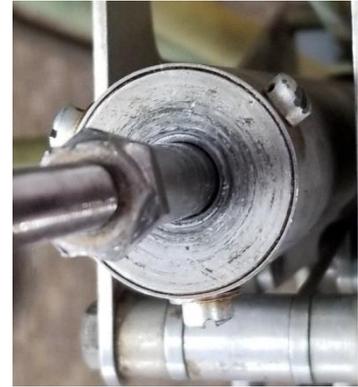




Aircraft Series: All piston helicopters

Customer Support Work aid Document

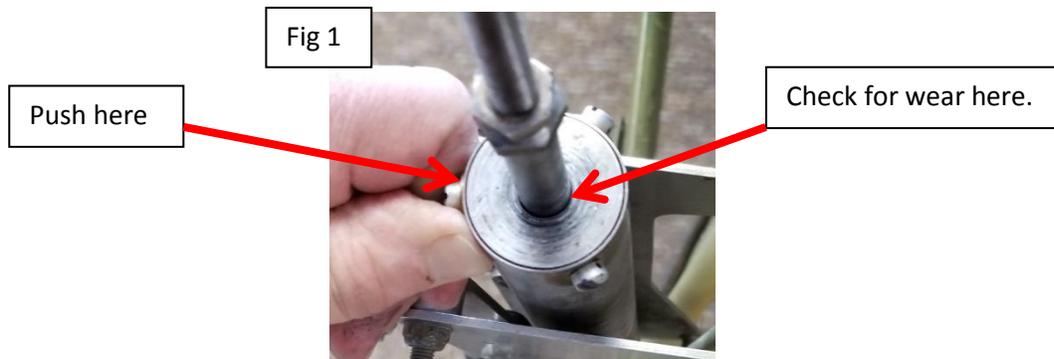
BACKGROUND: The bushing in the top of the belt clutch capsule is a normal wear item and inspecting it for condition should be part of the 100 hr inspection procedure. If the bushing (item 5, figure 2) is allowed to wear through the Teflon coating it will damage the spring capsule adapter (item 4) requiring replacement of both the bushing and adapter.



PROCEDURE: This tech tip outlines the inspection procedure and describes how to replace the bushing in the top end cap of the clutch capsule.

A. Inspect the bushing in the top of the clutch capsule during the normal 100hr inspection intervals.

1. Gain access to the clutch capsule by removing necessary side cowlings.
2. Engage the belt clutch mechanism.
3. Carefully inspect for wear between the clutch spring capsule adapter and the bushing. (Fig 1) It may help to push the top of the capsule inboard while watching for movement between the adapter and the bushing. (Wear limit .020 MM page 62 Table of Limits).



4. If there is excessive movement between the adapter and the bushing in the top of the clutch capsule, the bushing should be replaced.



Aircraft Series: All piston helicopters

Customer Support Work aid Document

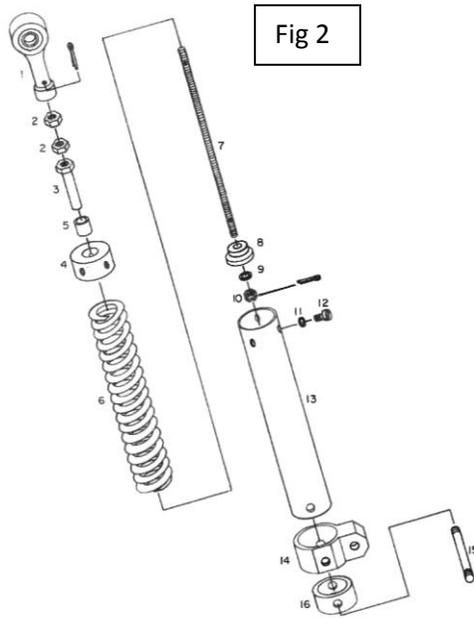


Fig 2

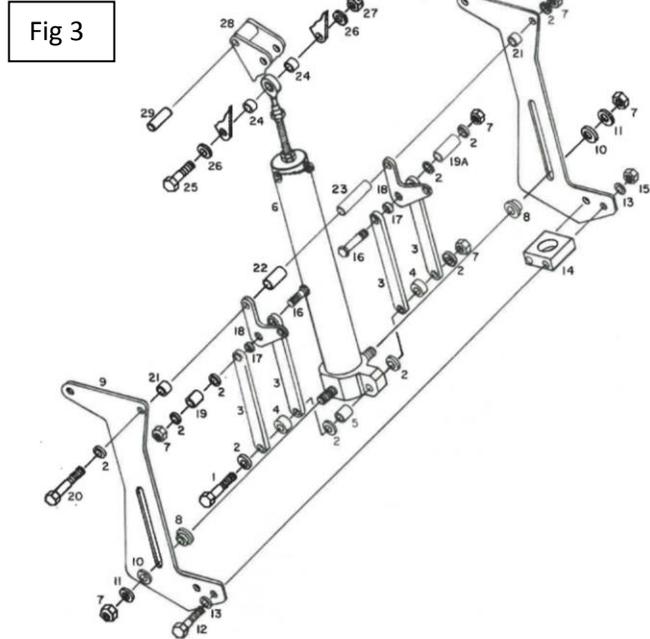


Fig 3

- | | | | | |
|---------------------------|--------------|-------------------|---------------------------|------------------------|
| 1. Rod End | 9. Washer | 1. Bolt | 12. Bolt | 20. Bolt |
| 2. Jam Nut | 10. Nut | 2. Washer | 13. Washer | 21. Spacer |
| 3. Spring Capsule Adapter | 11. Washer | 3. Strap | 14. Fitting, Cable Anchor | 22. Spacer |
| 4. End Cap | 12. Screw | 4. Spacer | (Mount Block) | 23. Spacer |
| 5. Bushing | 13. Housing | 5. Spacer | 15. Nut | 24. Spacer |
| 6. Spring | 14. Anchor | 6. Spring Housing | 16. Bolt | 25. Bolt |
| 7. Shaft | 15. Shaft | 7. Nut | 17. Spacer | 26. Washer |
| 8. Cap | 16. Retainer | 8. Nylon Guide | 18. Bellcrank Side | 27. Nut |
| | | 9. Bracket | 19. Spacer | 28. Bellcrank Assembly |
| | | 10. Nylon Washer | 19A. Spacer | 29. Spacer |
| | | 11. Washer | | |

B. Procedure to change the clutch capsule top bushing. (Item 5, Fig 3)

1. Remove hardware (24, 25, 26, and 27) (Fig 3) connecting the rod end (1) (Fig 2) to the bellcrank (28) (fig 3).
2. Remove three screws and washers (11 & 12) from the capsule (13) (Fig 2).
3. Withdraw spring assembly (1-10) from capsule.
4. Remove the cotter pin through the rod end bearing, item (1) (Fig 2) and loosen the two check nuts (2).
5. Insert a flat screwdriver blade into the bottom end cap (8) to prevent the nut (10) from turning and remove the rod end (1) and the two check nuts (1) from the shaft (7).
6. Measure the length of the exposed threads on rod (7) for reassembly.
7. Remove the spring capsule adapter (3).



ENSTROM
HELICOPTER CORPORATION

2209 22nd Street EnstromHelicopter.com
Menominee, Michigan P 906-863-1200
49858 USA f 906-863-6821

Aircraft Series: All piston helicopters

Customer Support Work aid Document

8. Press the bushing (5) from the top end cap (4).
9. Insert a new 07-DU-08 bushing (5) into the top end cap.
10. Measure the adapter (3) to verify that it is within limits. (.4360 to .4370, -.020)
11. Install the adapter (3) and set it back to the same measurement obtained in step 6.
12. Insert the two check nuts (2).
13. Install the rod end (1). Line up the cotter pin hole and install the cotter pin.
14. Apply grease liberally to the spring assembly (6).
15. Insert the spring assembly (1 – 10) back into the housing (13)(Fig 2).
16. Install the screws and washers (11 & 12).
17. Torque screws to 20 to 25 in-lb.
18. Safety wire the screws as a set of three around the outboard edge of the capsule. Do not run the safety wire around the inboard side of the capsule as the safety wire will contact the pylon when the clutch is engaged.
19. Connect and secure the rod end attach hardware, (24 – 27) (Fig 3).
20. Torque nut (27) to 50 to 70 1n-lb and install the cotter pin.
21. Verify that the clutch adjustment is correct in accordance with section 11 of the MM.
22. Torque the two check nuts (2) (Fig 2) to 30 to 40 in-lb.
23. Install cowlings.