SERVICE BULLETIN

DATE: 18 JUNE 1981
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MANDATORY MANDATORY MANDATORY

INSPECTION/MODIFICATION OF BREEZE CORPORATION INC HOIST, PN BL–16600–12

1. PLANNING INFORMATION

A. MODELS AFFECTED:

500 Model 369H Series Helicopter equipped with rotorcraft hoist system.

B. PREFACE:

The information given in this Service Information Notice lists procedures for inspection and modification of Breeze Corporation Inc. hoist, PN BL–16600–12, which is a component of the rotorcraft hoist system. This inspection/ modification is to be accomplished in accordance with the, instructions given in the attached Breeze Corporation Inc. Engineering Bulletin BEB–162–8.

C. TIME OF COMPLIANCE:

Shall be accomplished before next operation of rotorcraft hoist system.

D. FAA APPROVAL:

FAA/DER APPROVED 18 June 1981

E. WEIGHT AND BALANCE:

Weight and balance not affected

F. REFERENCE:

Breeze Corporation Inc. Engineering Bulletin BEB–162–8.

2. PROCEDURE

a. Perform inspection/modification of Breeze Corporation Inc. hoist, PN BL–16600–12, in accordance with instructions given in attached Breeze Engineering Bulletin BEB–162–8.

b. Record compliance with this Service Information Notice in Compliance Record of helicopter Log Book.

The purpose of this bulletin is to instruct users of the BL-16600-12 Rescue Hoist in inspection procedures and modifications intended to minimize the possibility of malfunction in certain hoist components.

CABLE

1. Reel Cable completely out.

CAUTION

Handle cable carefully. Do not allow cable to kink. Cable must be kept clean during handling. Do not allow cable to drag over dirty or abrasive surfaces.

2. Remove four nuts securing top cover to hoist. Remove cover.

3. Hold full out limit switch actuating roller up and slightly away from cable drum. Actuate hoist until inactive turns are unwound from drum.

4. Disconnect all power to hoist.

5. Remove socket head screw recuring cable end to cable drum flange.

6. Carefully pull cable through cable guide assembly and full in limit switch.

7. Vapor degrease approximately the last 15 feet of cable measured from the drum anchor end.

8. Paint this area red using Dykim Lacquer (color No. DNC) obtainable from Dykim Co., St. Louis, MO.

NOTE: This area of red cable is to alert the operator that maximum cable extension is approaching.

9. Apply power to hoist.

10. Reel in until the cable guide assembly moves to the extreme right position (motor end) and then reverses and moves left one indexing position of the shaft (This operation is not required if the hoist has not been operated with the cable removed).

11. Disconnect power to hoist.

12. Thread cable end through full-in limit switch, bellmouth and cable guide assy.

13. Insert cable end into cable drum anchor hole. Replace socket head set screw and torque to 9 in. lb.

14. Connect electrical power to hoist.

15. Carefully wind approximately 3 complete wraps onto the cable drum.

16. Disconnect power to hoist.

FULL-OUT LIMIT SWITCH
(Hoist Serial Numbers up to 117)

Readjust and modify the full-out limit switch as follows:

1. Switch assembly must be positioned on cross bar so as to allow switch roller to contact grooved surface of drum immediately adjacent to inactive cable wraps (2 1/2 to 3 1/2 wraps). This may be accomplished by loosening both sets of socket head screws (A and B, Fig. 1) in both collar assemblies. The switch assembly may then be slid across the bar to the desired position. Tighten the socket head screws to 4 in. lb. End clearance in the assembly must be maintained at .002 to .005 to allow proper movement of roller arm. (C, Fig. 1)

2. With roller resting on grooved portion of drum adjacent to the proper number of inactive turns (2 1/2 to 3 1/2) loosen socket head screws (A, Fig. 1) and rotate switch until it can be heard to actuate. Tighten socket head screws to 4 in. lb. Again, end clearance must be .002 to .005 for proper operation.

3. Bend end of spring per Fig. 1.

4. Check hoist for satisfactory operation.

CAUTION

If after replacing top cover the two 1/2" locknuts securing the front of the cover are tightened excessively, the full-out limit switch adjustment may be affected. Check switch operation after cover is replaced.

FULL-OUT LIMIT SWITCH
(Hoist Serial Numbers 118 and up)

Re-adjust and modify the full-out limit switch as follows:

1. Switch assembly must be positioned on cross bar so as to allow switch roller to contact grooved surface of drum immediately adjacent to inactive cable wraps (2 1/2 to 3 1/2 wraps). This may be accomplished by loosening both socket head screws (A and B, Fig. 2) in the switch bracket and collar assemblies. The switch assembly may then be slid across the bar to the desired position. Tighten socket head screw in switch bracket (A, Fig. 2) to 9 in. lb. Torsion spring must be wound 90° to 120° from the free position and then tightening the socket head screw (B, Fig. 2) to 9 in.lb. The spring is wound by rotating the collar (C, Fig. 2) in a clockwise direction when viewed from the motor end of the hoist. .002 to .005 end clearance must be maintained to permit proper movement for actuator arm.

2. With roller resting on grooved portion of drum adjacent to the proper number of inactive turns (2 1/2 to 3 1/2) loosen socket head screw (A, Fig. 2) and rotate switch bracket until switch can be heard to actuate. Tighten socket head screw to a torque of 9 in. lb. End clearance must be .002 to .005 for proper operation.

3. Bend end of spring per Fig. 2.

4. Check hoist for satisfactory operation.

CAUTION

If after replacing top cover the two 1/2" locknuts securing the front of the cover are tightened excessively, the full-out limit switch adjustment may be affected. Check switch operation after cover is replaced.

CABLE CUTTER

1. Inspect cable cutter to be sure that the shunt wire across the terminals is cut before the hoist is placed in service. Failure to cut this wire will prevent the operation of the cutter.

HOIST BUMPER

1. Measure thickness of the hoist bumper. If measurement is less than that shown in Fig. 3, replace bumper.

POST FLIGHT INSPECTION

Perform post flight inspection after each hoist use. If hoist has not been used, perform at least every 15 days. (30 days if hoist is removed from aircraft for storage).

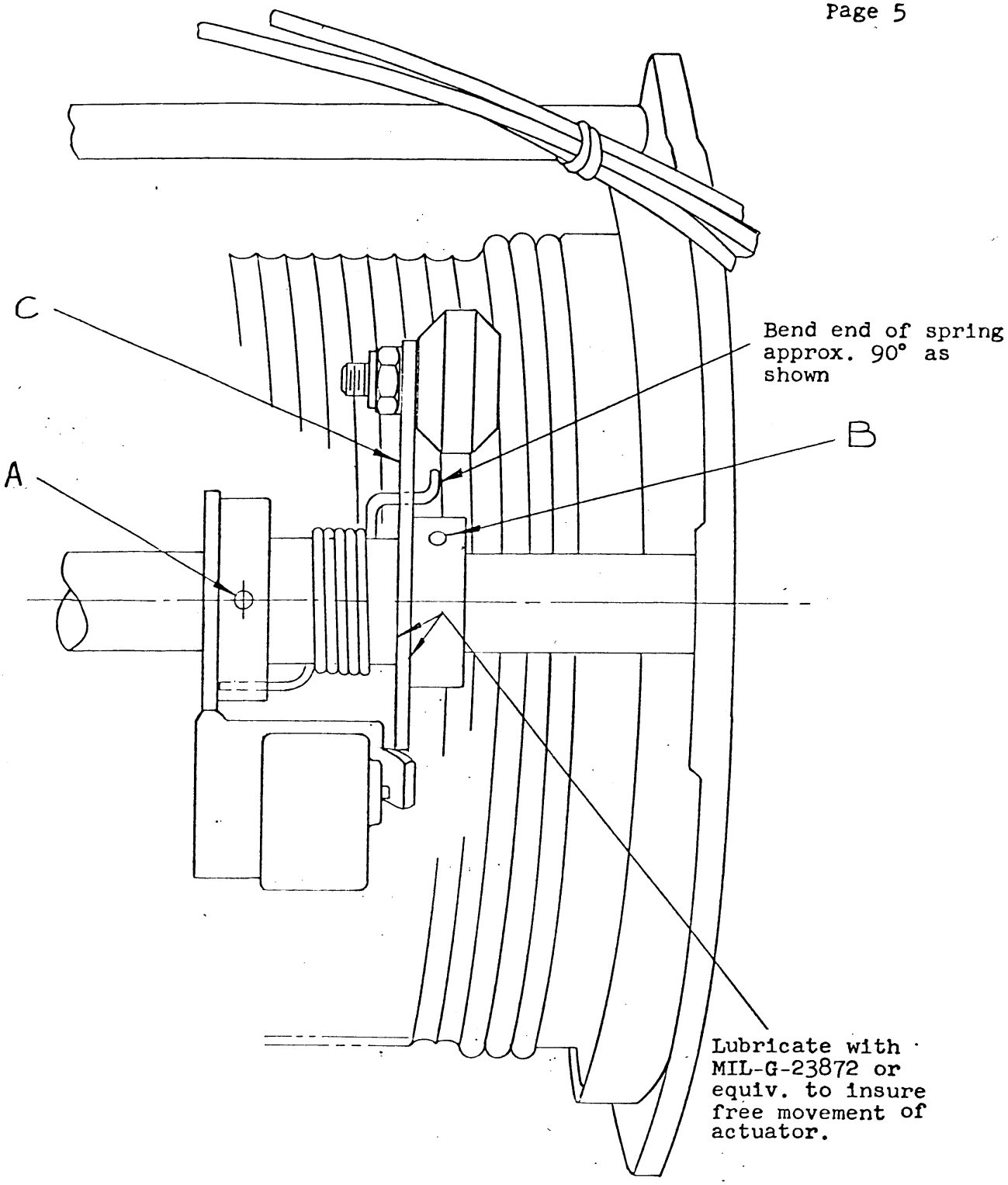

FIGURE 1

Equivalent:
ESSO-BEACON 325
AMOCO - SUPER-MIL

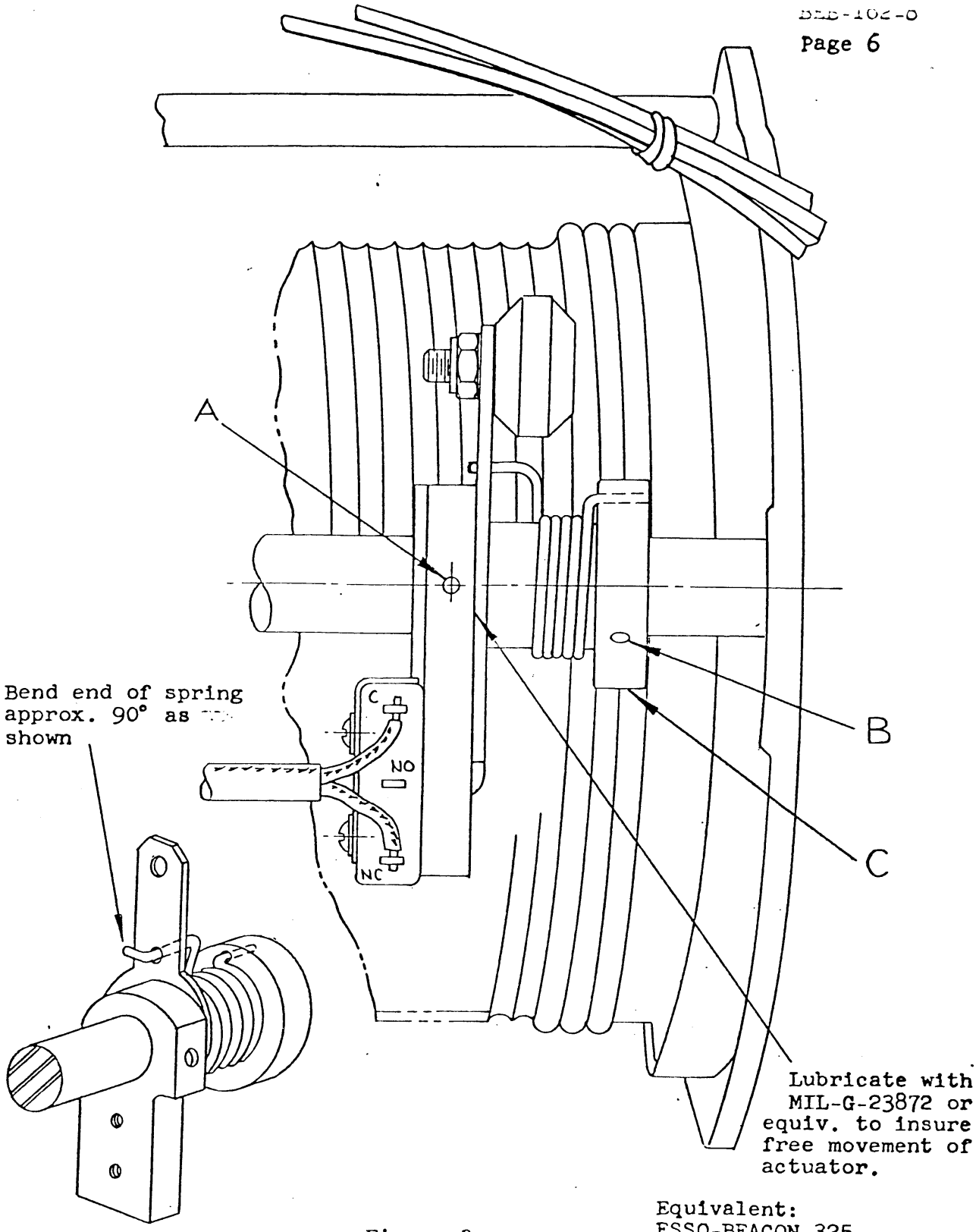

Figure 2

Equivalent:
ESSO-BEACON 325
AMOCO - SUPER-MIL

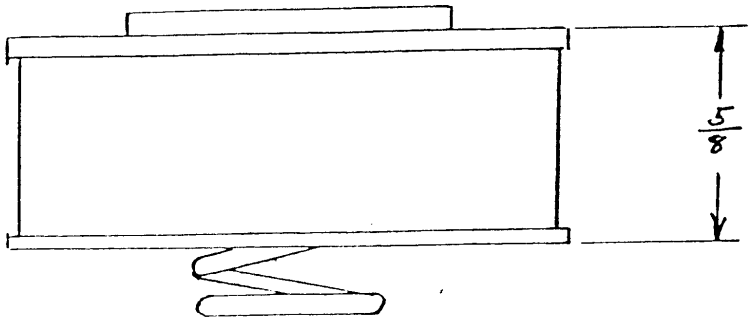

Fig. 3