Cessna
SALES AND SERVICE

TAKE YOUR CESSNA HOME FOR SERVICE AT THE SIGN OF THE CESSNA SHIELD"

single-engine
SERVICE LETTER

MARKETING DIVISION • CESSNA AIRCRAFT COMPANY
WICHITA, KANSAS 67201 • CABLE ADDRESS / CESSCO WICHITA

August 28, 1970

SE70-16
(Supplement #2)

SUBJECT: FLAP ACTUATOR MAINTENANCE

Aircraft Affected:

All single engine aircraft equipped with electric wing flaps.

REASON FOR LETTER:

In response to field inquiries regarding local availability of the grease specified for lubricating flap actuator jack screws, the following brand name designations are provided.

This list calls out a few of the brand names for molybdenum disulfide grease conforming to Military Specification MIL-G-21164.

There may be brands other than these shown which meet the above specification. For additional information, contact the nearest grease manufacturer or distributor.

Manufacturers Designation	Manufacturers Name and Address
AEROSHELL Grease 17	Shell Oil Company 50 West 50th. Street New York, New York, 10020
Castrolease MSA (C)	Royal Lubricants Co. River Road Hanover, N.J. 07936
Chevron Aviation Grease 44	Standard Oil Co. of California 225 Bush Street San Francisco, California, 94120
Electro-Moly/11	Electrofilm, Inc. P. O. Box 3930 7116 Laurel Canyon Blvd. No. Hollywood, California, 91605

Continued.....

Manufacturers Designation	Manufacturers Name and Address
Everlube 211-G Moly Grease	Everlube Corporation 6940 Farmdale Avenue No. Hollywood, California, 91605
ROYCO 64C	Royal Lubricants Co. River Road Hanover, New Jersey, 07936

(Owner Notification System - No. 1)

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THE CESSNA AIRCRAFT COMPANY

"TAKE YOUR CESSNA HOME FOR SERVICE AT THE SIGN OF THE CESSNA SHIELD"

single-engine SERVICE LETTER

MARKETING DIVISION • CESSNA AIRCRAFT COMPANY
WICHITA, KANSAS 67201 • CABLE ADDRESS / CESSCO WICHITA

July 10, 1970

SE70-16
(Supplement #1)

SUBJECT: FLAP ACTUATOR MAINTENANCE

AIRCRAFT AFFECTED:

All single engine aircraft equipped with electric wing flaps.

REASON FOR LETTER:

To expand and clarify the inspection requirements for electric wing flap actuator jack screws.

This information supersedes the inspection procedures called out in SE70-16 dated June 12, 1970.

ACTION REQUIRED:

The following method of inspection is to be used in determining the condition of the lubricant used on flap actuator jack screws at each 100 hour inspection.

1. Gain access to the wing flap actuator by removing appropriate inspection plates on the lower surface of the wing.

2. Expose jack screw by operating flaps to the full down position.

3. Using a clean, dry, white cloth, wipe off the existing lubrication from a 1 to 2 inch section of the jack screw. Examine the cloth for lubrication texture to determine if it is caked or notably changed in color as compared to new grease of the proper specification. The objective is to ascertain that the lubricant has retained its original properties.

4. Scrape inside several grooves of the screw with a pocket knife and examine knife edge for small dark carbon type flakes (lightly coating the edge of the knife with clear petroleum jelly will cause the flakes to adhere to the knife edge for easier detection).

5. Visually examine the cleaned section of the jack screw to see that the base metal is exposed.

Continued.....

NOTE: The normal color of the jack screw is dull grey due to a chemical coating applied during manufacturing process. This should not be confused with the carbon-like deposit described above.

If any of the conditions described in the inspection criteria are noted, remove and clean the jack screw as previously instructed in SE70-16. If no adverse conditions are noted, relubricate the jack screw area that has been wiped clean and cycle the flaps on the ground several times to distribute the grease.

Clean and relubricate the actuator jack screw at least every 12 months (or 1,000 hours, whichever comes first) regardless of the condition of the existing lubricant.

COMPLIANCE TIME:

If flap actuator jack screw has not been cleaned and lubricated within the past 12 months, or 1,000 hours, cleaning and relubrication should be accomplished as soon as possible but no later than the next oil change or 50 hours of operation.

REMARKS:

The above information will be incorporated in all affected Service Manuals at the next revision.

(Owner Notification System - No. 2)

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single-engine
SERVICE LETTER

MARKETING DIVISION • CESSNA AIRCRAFT COMPANY
WICHITA, KANSAS 67201 • CABLE ADDRESS / CESSCO WICHITA

June 12, 1970

SE70-16

SUBJECT: FLAP ACTUATOR MAINTENANCE

AIRCRAFT AFFECTED:

All single engine aircraft equipped with electric wing flaps.

REASON FOR LETTER:

Deteriorated lubrication on the flap actuator jack screw can result in inadvertent retraction of the wing flaps; therefore, it is important that 100 hour inspections plus annual cleaning and lubrication be accomplished as recommended.

Information on this subject has been published previously in aircraft Service Manuals, Service Letters SE68-1 and SE68-33.

ACTION REQUIRED:

1. Inspect actuator jack screw for condition of lubricant at each 100 hour inspection.

2. Clean and relubricate actuator jack screw at least every 12 months or more often if indicated by inspection results.

   Note: Details of inspection, cleaning and lubrication procedures are shown on the reverse side of this Service Letter.

COMPLIANCE TIME:

If flap actuator jack screw has not been cleaned and lubricated within the past 12 months, Item #2 above should be accomplished as soon as possible but no later than the next oil change or 50 hours of operation.

REMARKS:

This above subject was also covered recently in a FAA telex notice to all FAA Field Offices.

(Owner Notification System - No. 2)

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INSPECTION

1. Gain access to the wing flap actuator by removing appropriate inspection plates on the lower surface of the wing.

2. Expose jack screw by operating flaps to the full down position.

3. Wipe a small amount of lubricant from the jack screw with a rag and examine for condition. Lubricant should not be dirty, sticky, gummy or frothy in appearance.

4. Inspect wiped area on jack screw for the presence of any hard scale deposit. Previous wiping action will have exposed bare metal if no deposit is present.

5. If any of the above conditions exist, clean and relubricate jack screw as detailed below.

CLEANING AND LUBRICATION

1. Remove actuator from the aircraft in accordance with Service Manual instructions.

2. Remove all existing lubricant from the jack screw and torque tube:

    a. Run the nut assembly to the end of the jack screw away from the gear box.

    b. Soak the nut assembly and jack screw in a stoddard solvent.

        NOTE: Care must be taken to prevent the solvent from entering the gear box. The gear box lubricant is not affected and should not be disturbed.

    c. After soaking, clean the entire length of the jack screw with a wire brush, rinse with solvent, and dry with compressed air (Do not disassemble the nut and ball retainer assembly).

    d. Run a cloth through the torque tube to remove any excess lubricant.

3. Relubricate the jack screw with MIL-G-21164 (Molybdenum Disulfide Grease) as follows:

    a. Rotate the nut down the screw toward the motor.

    b. Coat the screw and thread end of the nut with the grease and run the nut to full extension.

    c. Repeat the process and pack lubricant in the cavity between the nut and ball retainer at the threaded end of the nut.

    d. Repeat the process and work the nut back and forth several times.

    e. Remove excess grease.

4. Reinstall actuator in aircraft.