

PIPER**Customer Services**

SERVICE LETTER

No. 580

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

May 24, 1971

Subject: Fuel Selector Valve Packing Lubrication**Models and Serial Numbers Affected:** The following aircraft with Scott Fuel Selector Valves installed:

| <u>Aircraft Model</u> | <u>Serial Numbers</u> | <u>Fuel Selector Valve Part Numbers</u> | |
|-----------------------|-----------------------|---|-----------------------------|
| | | <u>Piper</u> | <u>Scott</u> |
| PA-23-235 Apache | 27-505 and up. | 30857-00 & -01 | 23640-3 & -1 (respectively) |
| PA-23-250 (6) and | 27-2223 to 27-4621 | 30857-00 & -01 | 23640-3 & -1 (respectively) |
| PA-E23-250 (6) Aztec | incl. | | |
| PA-31 & 31-300 Navajo | 31-2 to 31-705 incl. | 492 109 | 800412-00 |
| PA-31P Navajo | 31P-1 to 31P-36 incl. | 492 109 | 800412-00 |

NOTE

1. Scott Fuel Selector Valves listed below were manufactured to incorporate Krytox - lubricated "O" ring packings and are therefore not affected by this Service Letter:

| <u>Piper Part Number</u> | <u>Nomenclature</u> | <u>Valve Serial Number</u> |
|--------------------------|---|----------------------------|
| 30857-00 (LH) & -01 (RH) | Fuel Selector Valve-Scott # 23640-3 & -1 (respectively) | 6420 and up. |
| 492 109 | Fuel Selector Valve-Scott # 800412-00 | 2285 and up. |

2. Fuel Selector Valves that have been modified prior to sale through the Piper (factory) Customer Service Sales Division and Valves that have been modified in Piper Distributor or Dealer stock prior to retail sale bear the letter "K" on the valve serial number plate on the front face of the valve actuating arm.
3. As indicated above in the Aircraft Model and Serial Numbers columns, new manufacture valves (i.e., valve serial numbers - according to valve model - 6420 and up, and 2285 and up) were factory installed in Aztec Serial Numbers 27-4622 and up, PA-31 Navajo Serial Numbers 31-706 and up, and PA-31P Navajo Serial Numbers 31P-36 and up. However, valves with serial numbers lower than 6420 and 2285 that were not modified as described in No. 2, above, could possibly have been field replaced on these aircraft. Therefore, it is recommended that the valve be inspected for (1) serial number identification, and (2) if the letter "K" appears as described in No. 2, above (denoting modified valves) to positively determine if the valve is subject to modification.

Compliance Time:

- I. Fuel selector valves should be checked prior to each flight (i.e., during pre-flight or prior to take-off).
- II. If the fuel selector valves do not operate smoothly and easily, the cause should be corrected immediately.

(over)

Compliance Time: (Continued)

III. Should the fuel selector valves operate without difficulty, affected fuel selector valves shall be modified in accordance with this service letter at the next 100 hour inspection or annual inspection, whichever occurs first.

Purpose:

Recent product condition reports denote that the main tank Fuel Selector Valves on the above referenced aircraft may be subject to occasional "sticking", thereby impeding smooth and easy operation.

Current production models of the above referenced aircraft incorporate fuel selector valves manufactured with the "O" ring packing lubricated with Krytox 240 A.B. grease. Use of this lubricant in the fuel selector valves has reduced the occurrence of "sticking" during fuel selector valve operation.

Piper now has available as a product improvement, a fuel selector valve "O" ring kit, Piper part number 760 504, which contains four (4) each Scott number 2800C12D "O" ring packings, pre-lubricated with Krytox 250 A.B. grease. This kit replaces Piper part number 755 837 "O" Ring Packing.

Instructions:

Should the fuel selector valves "stick" or otherwise operate with difficulty, remove existing "O" ring packings from the fuel selector valve(s) and install Piper Kit No. 760 504 (Krytox pre-lubed "O" ring packings).

Refer to appropriate aircraft service manual for proper fuel selector valve servicing and rigging procedures.

Material Required:

One (1) each (per aircraft) Fuel Selector Valve "O" Ring Kit, Piper part number 760 504.

Suggested Unit List Price is \$4.10E; one kit contains sufficient material for two fuel selector valves.

Availability of Parts:

Your Piper Dealer.