



Gulfstream American  
Gulfstream American Corporation  
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# SERVICE

SERVICE LETTER NO. 71-4

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DATE: June 4, 1971

- SUBJECTS:
- Item 1. Seat Track Improvements
  - Item 2. Canopy Track Improvements
  - Item 3. Windshield/Canopy Hardware Improvements
  - Item 4. Exhaust Joint Sealing
  - Item 5. Nose Gear Inspection and Precautions
  - Item 6. Nose Gear Strut Sealing
  - Item 7. Static System Improvements
  - Item 8. Air Vent Improvements
  - Item 9. Fuel Selector Valve Lubrication
  - Item 10. Lycoming Service Instructions 1070C and 1237

SERIALS AFFECTED: As indicated on each subject.

Item 1. Seat Track Improvements (AA1-0001 thru AA1-0457, AA1A-0001 thru AA1A-0125)

Reports from the field indicate that, in some instances, seat track binding has occurred on aircraft subjected to excessive aft loads on the seat backs. Binding is caused by twisting and eventual bending of the outer track which allows the seat track bearings to drop out.

Improved seat track assemblies have been developed which incorporate retainers (3 per seat), riveted to the ends of the inner track and enclosing the outer track. The retainers prevent the outer track from springing and twisting when excessive aft loads are exerted against the seat back (see figure 1).

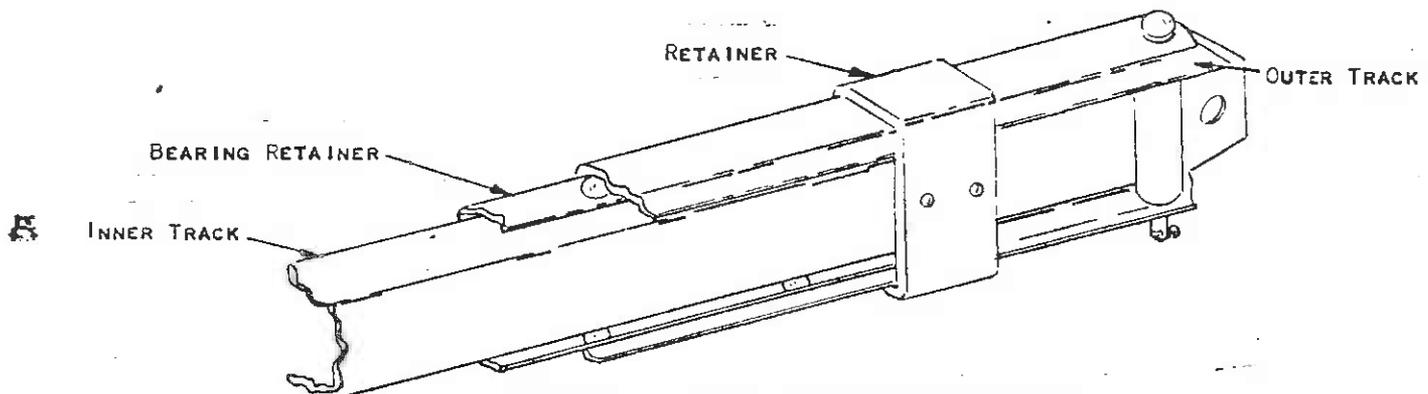


Figure 1. Seat Track Modification

### NOTE

When installing 102323-505 inboard track assembly on aircraft serials AA1-0001 thru AA1-0457 and AA1A-0001 thru AA1A-0125, a slight interference will be noted between the forward retainer on the co-pilot inboard seat track and the flap motor cover area of the console. Modify the console interference area using a hot iron (225°F), as shown below. (Place a piece of cloth between iron and console to prevent sticking.)

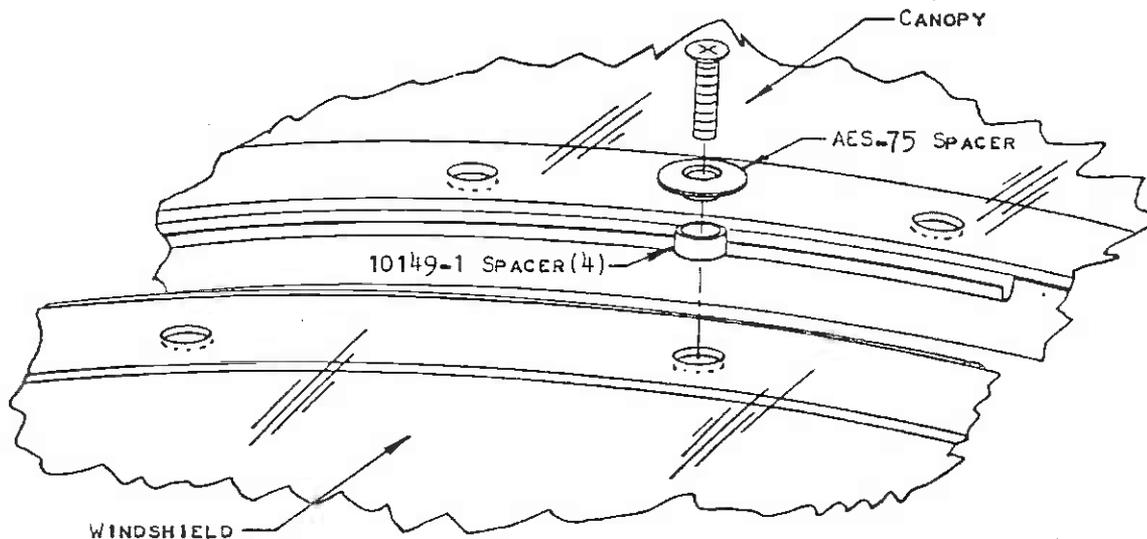


Figure 2. Canopy & Windshield Hardware Improvement

Spacers, part no. 10149-1 can be ordered (no charge), from your American Aviation Corp. dealer, four (4) required per aircraft. Aircraft not shown on the above serial no. list, do not require the installation of the spacers.

Item 4. Exhaust Joint Sealing (All AA-1 and AA-1A)

At each inspection, check for visible exhaust stains at exhaust riser pipe/muffler pipe clamps. If leaks are indicated, remove clamps and inspect riser/muffler pipe joints (muffler assembly). If looseness is noted between the riser pipes and muffler pipes, swage out the lower ends of the riser pipes to provide close fit or apply "Walke Acousti-Seal 5160" or equivalent, at the riser and muffler pipe connections and under the clamps.

Item 5. Nose Gear Inspection and Precautions (All AA-1 and AA-1A) (Figure 3)

At each 100 hour inspection, it is recommended that the following be accomplished, unless otherwise noted:

- a. Loosen nose gear boot and inspect strut for evidence of overload damage in the area shown:
- b. Check strut for looseness in torque tube yoke. If loose, replace bolts (NAS464P6A28). If new bolts do not eliminate looseness, ream to next larger size NAS bolt (NAS464P7 maximum).
- c. Check drain hole at lower end of strut to insure it is open. One method is by running a .125" drill bit through the hole to clean out any foreign

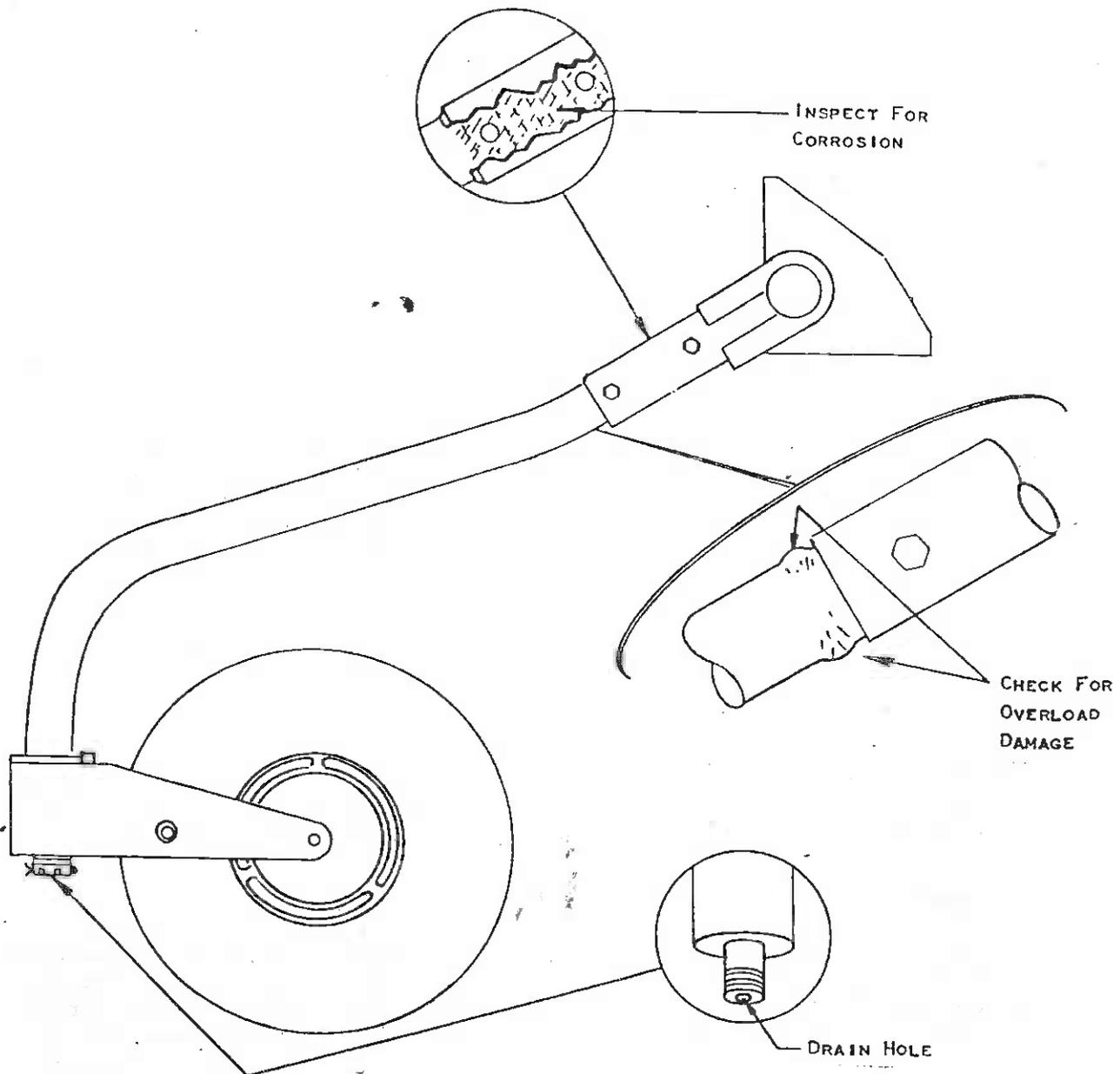


Figure 3. Nose Gear Inspection

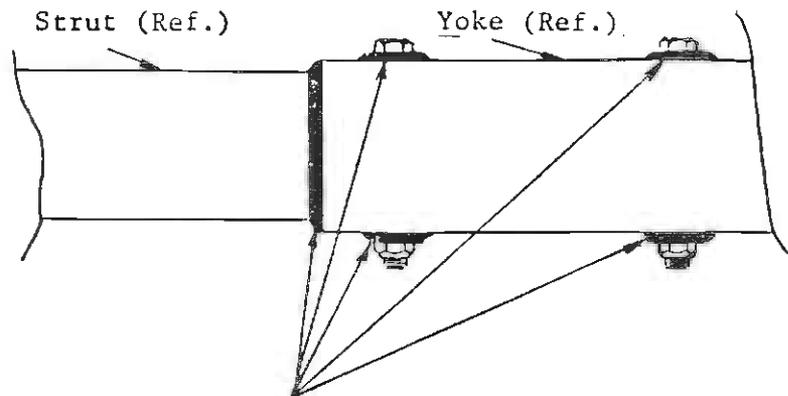
Item 6. Nose Gear Strut Sealing (AA1-0001 thru AA1-0456, AA1A-0001 thru AA1A-0067)

At next inspection and any time strut is removed, it is recommended that the nose gear strut be sealed at the strut/torque tube yoke joint to prevent water from entering the strut from inside the cabin. Clean the area thoroughly and apply sealant\* to the joint and around bolt heads as shown on figure 4.

\* Approved Sealants:

RTV102 by General Electric

732KTV by Dow Corning



Apply sealant (RTV 102 by General Electric or 732 RTV by Dow-Corning) on bolts and strut to torque tube connection. At next inspection and any time strut is removed.

Figure 4. Nose Gear Strut Sealing

Item 7. Static System Improvements (AAL-0001 thru AAL-0326)

Production aircraft, AAL-0327 and up, and AAL-0001 and up, have a redesigned static system. The static lines in the turtle back area have been rerouted and a moisture trap, located behind the left baggage compartment side panel, has been added between the static ports and the instrument panel. This design change minimizes the accumulation of moisture in the instruments vented to the static system.

If fluctuations in instruments are evident or if moisture is noted inside the cover glass of the airspeed indicator or if it is desirable to modify early aircraft to present production configuration, the necessary parts can be obtained from your authorized American Aviation Corp. dealer to update the system on aircraft serials AAL-thru AAL-0326. Installation of the improved system is recommended for aircraft operate in high humidity areas. (Allow thirty (30) days for preparation of kit).

Item 8. Air Vent Control Shaft Improvement (AAL-0001 thru AAL-0057, AAL-0059 thru AAL-0063. Air Vent Adjustments (AAL-0001 and up)

To provide more control rod travel toward the closed position, a spacer, part no. 10165-1, has been added on current production aircraft, between the shaft shoulder and the control knob. This provides 1/4 inch more rod travel and assures the valve fully closing when properly adjusted. Spacer, part no. 10165-1 can be ordered (no charge), from your authorized American Aviation Corporation dealer.



If required, adjustments of the air vent control are accomplished by removing the air vent assembly and reforming the actuator as shown on figure 6. To remove the airbox, take out the two plug buttons located under the box, (figure 6) near the front, and using a long Phillips screwdriver, remove the screws attaching the airbox to the instrument panel. On installation, reseal the airbox to the fuselage with sealant (RTV102 by General Electric or 732 RTV by Dow Corning).

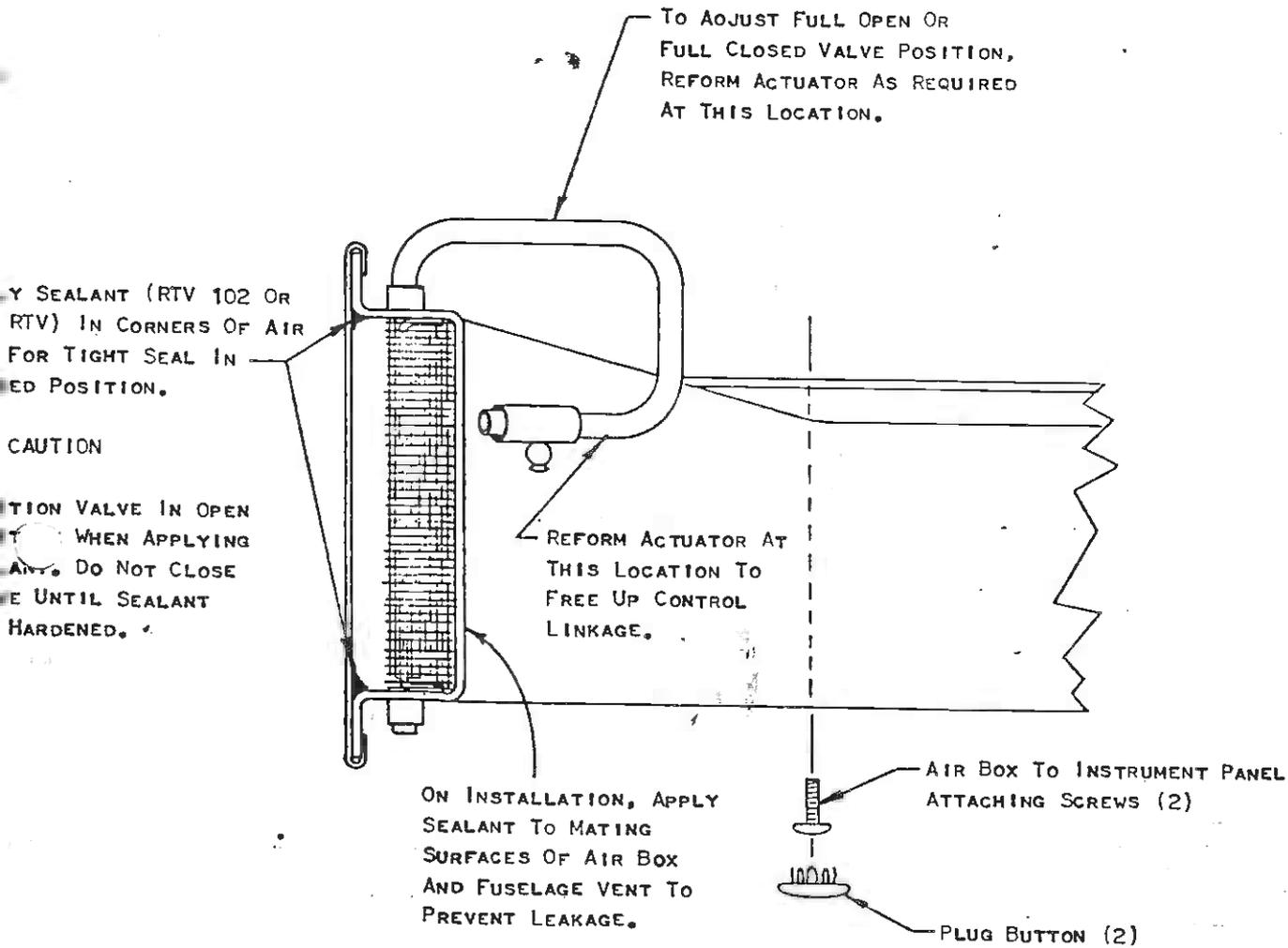


Figure 6. Air Vent Sealing and Adjustments

Item 9. Fuel Selector Valve Lubrication (AA1-0001 and up, AA1A-0001 and up)

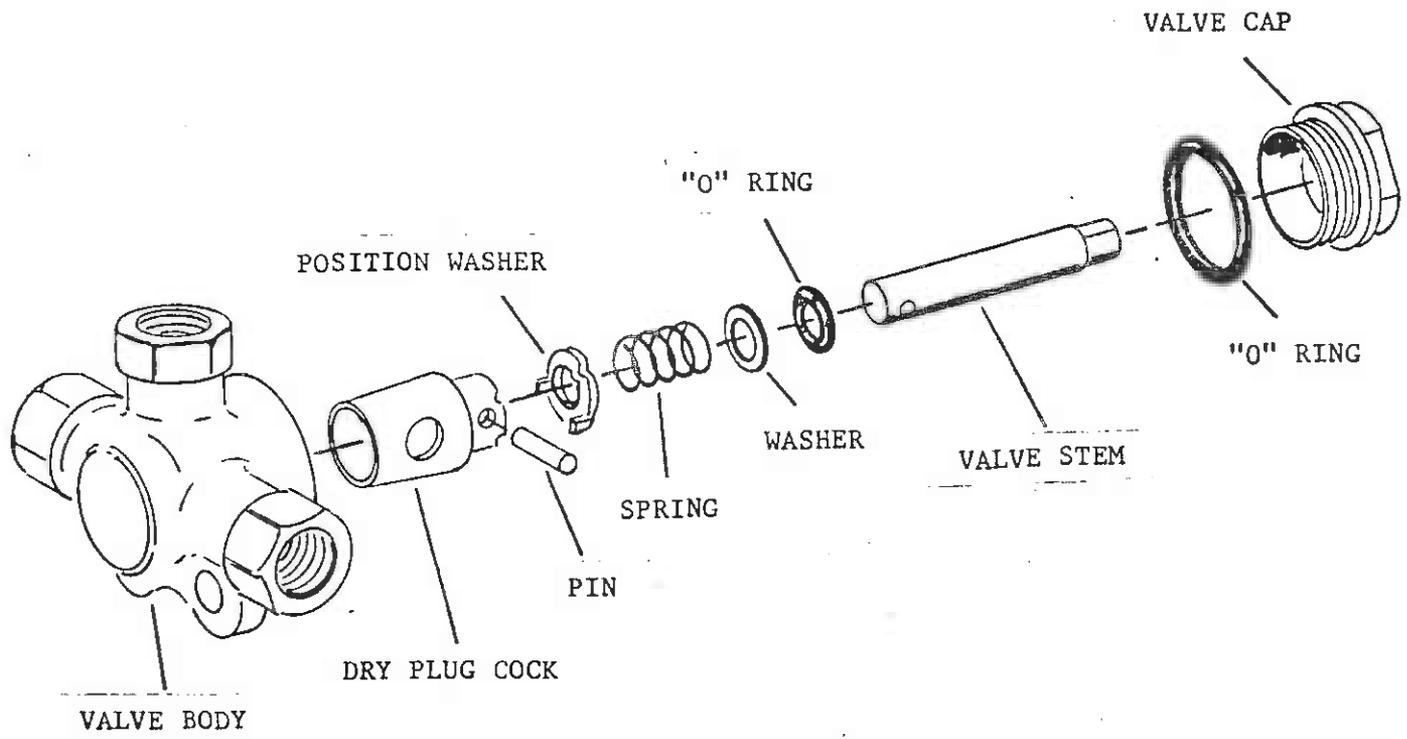


Figure 7. Fuel Selector Valve,  
exploded view

It is recommended that the fuel selector valve be disassembled, cleaned and lubricated each 500 hours of operation or sooner if the valve becomes difficult to operate.

The clean, dry valve plug cock should be lubricated with a very light film of plug cock lubricant conforming to MIL-G-6032\*. The plug should be inserted and turned several times and all surplus lubricant removed from the valve ports prior to reassembly. It is not necessary to drain the fuel system when servicing the fuel selector valve, however, a small container should be placed under the valve to collect residual fuel. See figure 7 for identification of fuel selector valve parts.

\* Approved plug cock lubricant MIL-G-6032

E Z Turn by the United Erie, Inc., 1429 Walnut Street, Erie, Pa. 165

Item 10. Lycoming Service Instructions 1070C and 1237

Included for your information are copies of Lycoming Service Instruction No. 1070C, Specified Fuels, and Lycoming Service Instruction No. 1237, Prestolite Service Bulletin No. ASM-4, Aircraft Charging System Service Precautions.

Very truly yours,