15.0 AILERON INSTALL 05/12/01

## Aileron Install

- 1) Locate your two aileron push rods.
- 2) Check the rod end center to rod end center is 35".
- 3) Place one of your finished Ailerons on a flat level surface. Locate the rib stations 2 & 3 from your Aileron Section of this manual . This is where the Push Rod is attached.
- 4) Use figure 15.1.2 as a guide and assemble a Push Rod between the two ribs. **NOTE:** Use the ½" hole you drilled at the top of the ribs (chapter 8 step 18) for attaching. Install the two spacers you made from RAWST-26.

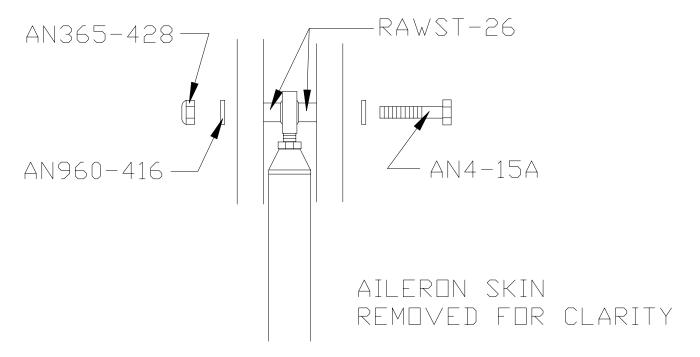


Figure 15.1.2

- 5) Repeat for the other Aileron.
- 6) Slide one Aileron/Push Rod assembly into position on the appropriate Wing.
- 7) Bolt the Aileron to the Wing using AN4-14 bolts on the two outboard hinges and AN4-21 bolts on the two inboard hinges. **NOTE:** On the inboard hinges the head of the bolt should be inside the Aileron.
- 8) Use one AN960-416 washer, one AN310-4 castle nut and one MS24665-132 cotterpin per hinge. **NOTE:** Tighten the bolts so that the AIL-26 bushing doesn't turn. Do not tighten the root hinge nut yet, the bolt is shared with the Flap.

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9) Through the access panel in the bottom of the Wing bolt the pushrod to the Torque Tube using an AN509-416-R-16 countersunk bolt, AN970-4 penny washer and AN365-428 fibernut.

- 10) Find the corresponding Flap and mount it to the Wing using the common bolt in the root of the Aileron (AN4-21) hinge.
- 11) On the root end of the Flap slide the AN4-21 bolt from the inside through the AIL-26 bushing and root Flap hinge. Put on a FLAP-305 Flap Spacer and tighten it down with a AN310-4 castle nut and MS24665-132 cotter pin. **NOTE:** You will have to dis-assemble the Flap Torque Tube from the inside of the Cabin to complete the assembly. Figure 15.1.3.

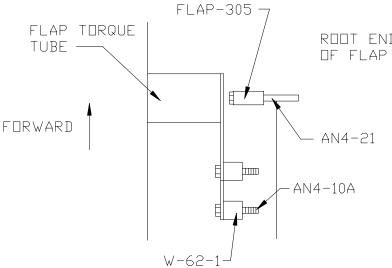


Figure 15.1.3

12) Slide the Torque Tube over the plug you just installed. Bolt the horn to the Flap root rib using two AN4-10A bolts with W-62-1 spacers. One goes into the floating anchor nut you installed when you built your Flap, the other is secured with an AN365-428 nut.