



Remove the baggage floor to install the flap controls.

NOTE: The control tube can also be installed by access through the bottom fuselage access door 6B3-8

Rear view.



Electric flap actuator bolted behind left seat.

Front view.



**6B19-9
FLAP MOUNT GUSSET**

Layout and pre-drill 12 rivets in 2 lines.



Top corner even with the top flange of the seat panel 6B5-1

Installed on left side.
First drill the O/B flange to the fuselage side.



6 RIVETS A5
(6B19-9 into 6B16-3)

5 RIVETS A5
(6B19-9 into 6B5-1 & 6B16-5)

3 RIVETS A5
(6B19-9 into 6B5-1 & 6B16-5
& 6B16-3)



Clamp the flap actuator mount 6B19-6 on the back side of the seat panel angle 6B16-5. Back drill the front holes through the gusset 6B19-9
Remove the seat back side channel 6B16-3 to drill the top flange.

8 RIVETS A5
IN EACH FLANGE of 6B19-6



6B19-6
FLAP ACTUATOR MOUNT

Rear view
Remember to rust paint all steel part.

“RUSTOLEUM” aerosol spray paint is adequate protection.



On the finished aircraft the piano hinge is in line with the center of the flap control tube 6B19-1 and 6B19-2.

Left flap.



CHECK: Ref top right diagram on drawing 6-S-3, 325mm from the top edge of the forward side skins 6B11-2 to the top of the rear channel 6W7-1

Bolt and clamp the wing jig 6-B-13 to the spar and attach plate 6B5-4. With a level, check that the fuselage reference line is level. Adjust the back of the jib until the top of the jib is level.



Clamp a piece of piano hinge to the bottom flange of the rear channel 6W7-1



Trace the position of the hinge on the side of the fuselage.



Locate the center of the hinge.



Drill a pilot hole.



Outside view of right side.

Drill the 1" hole in the fuselage side skin for the flap control tube.
Cut and cleco the diagonal L angle, Ref bottom left diagram 6-B-5



**6B19-5
FLAP CONTROL BEARING**

**AN3-5A BOLTS
QTY=2**

Locate and drill the 1" hole to line up with the center of the piano hinge
6W1-4 (pin). Bolt the bearing to the channel.



**6B19-2
LEFT FLAP CONTROL TUBE**

Welded flap assembly with 1/4" rod for flap control plate 6W1-3



**8B19-3
FLAP CONTROL ARM**
Welded assembly 1" inside diameter



STEEL SHIM P/N 4088A-416 inside diameter = 1" fits between welded stop ring and bearing 6B19-5

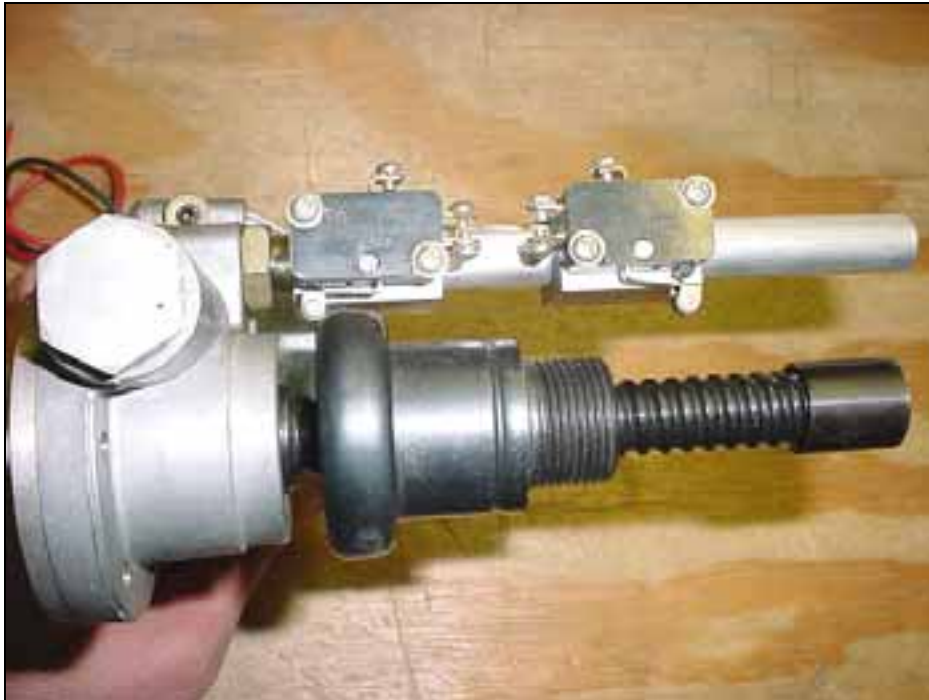


AN3-14A BOLTS
QTY=2



Detail of the right O/B side 6B19-1





D145-00-36-3
FLAP ACTUATOR
Electric 12V

Flaps up position: forward micro switch activated



Electrical circuit diagram,
see
Drawing 6-B-20

Flap down position: Rear micro switch activated.



CAUTION: The black plastic material of the micro switch is very brittle, to not attempt to bend the connectors; this could cause the casing to crack.

Detail of rear micro switch.

Note: The front micro switch is mirror image: the writing in against the aluminum block (it is not recommended to remove and reinstall the switch).



**FLAP ACTUATOR ROD
6B19-7**

Detail of set screw. Open the set screw to screw the Rod to the actuator. Tighten the set screw upon final installation.



6B19-7
FLAP ACTUATOR ROD

AN6-16A BOLT
QTY=1
(6B19-6 through 6B19-8)

Insert the **FLAP ACTUATOR BUSHING 6B19-8** through the 3/8" hole at the front of the actuator.



The builder of the aircraft in this photo installed a panel mount flap indicator; notice the remote servo on the front side of the channel.



Detail of the flap control arm 6B19-3 in the flap up position.
CHECK: There is some clearance between the front of the arm and the aft edge of the rear frame channel 6B5-2



Photo of the flaps down:

CHECK: There is some clearance between the rod and the top of the channel.



Flaps down, approximately 27 degrees (flap actuator fully extended on the worm gear).



Neutral