Challenger II - LSS inventory continued:

L: Top former assy.

( )	2	LSS-TFFT former tube (15" x .50 x .035)
( )	1	LSS-TFFA former angle (1" x 1" x .063 x 10.5")
( )	25	SSD42SSBS 1/8" S.S. Rivets
( )	1	NPN Pattern for LSS-TFFF (gusset)
( )	1	Instruction sheet

M: Rudder stop assy.

( )	4	AN525-10R14 screw bolt
( )	5	AN365-1032 Nyloc nut 3/16"
( )	5	AN960-10 washer 3/16"
( )	1	AN3-24A bolt, 3/16"
( )	2	LSS-PVC-1 Gray spacer (pvc) (1" x 1/2")
( )	2	LSS-RS Rudder stop, white pvc (3" x 1/2" x 3/4")

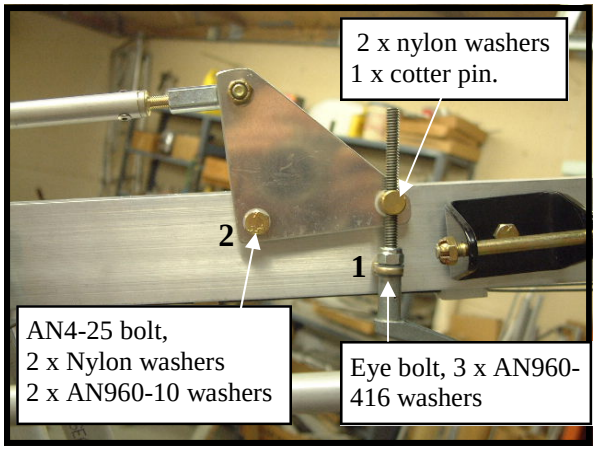
N: Fiberglass gear leg fairing:

( )	2	LSS-GLF fiberglass gear leg fairing
( )	4	LSS-GLF-1 Material for foam inserts (fairings) - see instructions

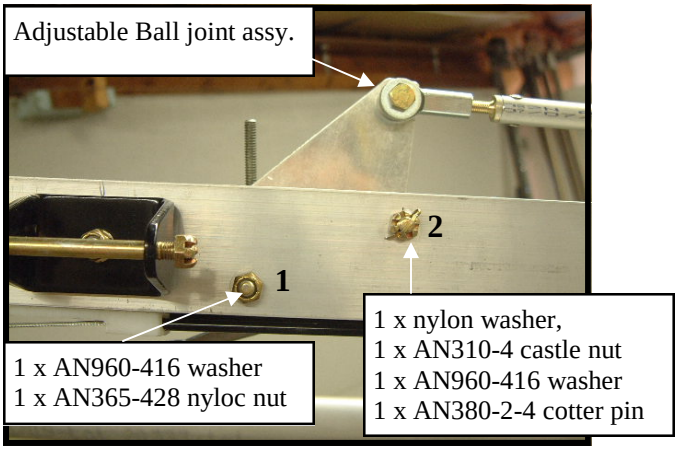
O: Flaperon kit:

( )	1	FLP-001 Flaperon slide bracket, installed at factory
( )	1	FLP-002 Flaperon crank assy. Pre-assembled (1 AN4-25 bolt, 5 WNW-25 white plastic washers, 2 AN380-2-4 cotter pins, 1 AN310-4 castle nut 1/4", 1 AN365-428 nyloc 1/4"
( )	1	FLP-004 Flaperon push rod, outer sleeve (28")
( )	2	FLP-005 Flaperon push rod, inner sleeve (11 7/8")
( )	1	CS-84 Bell crank, aileron/flaperon, installed at factory
( )	1	AN365-428 nyloc nut 1/4"
( )	1	AN310-4 castle nut 1/4"
( )	1	NF-400 ball joint assy. (1 NF-4 ball joint, 1 AN4-7A bolt, 1 FW-25 zinc washer 2 AN960-416 washer 1/4", 1 AN364-428 thin nyloc 1/4"
( )	1	AN490-HT8P rod end, threaded
( )	1	3246 clevis fork, aluminum
( )	5	AN380-2-4 cotter pin
( )	8	SSD42SSBS rivet, 1/8" short
( )	1	AN3-5 bolt 3/16"
( )	1	AN310-3 Castle nut, 3/16"
( )	1	NPN Instruction sheet

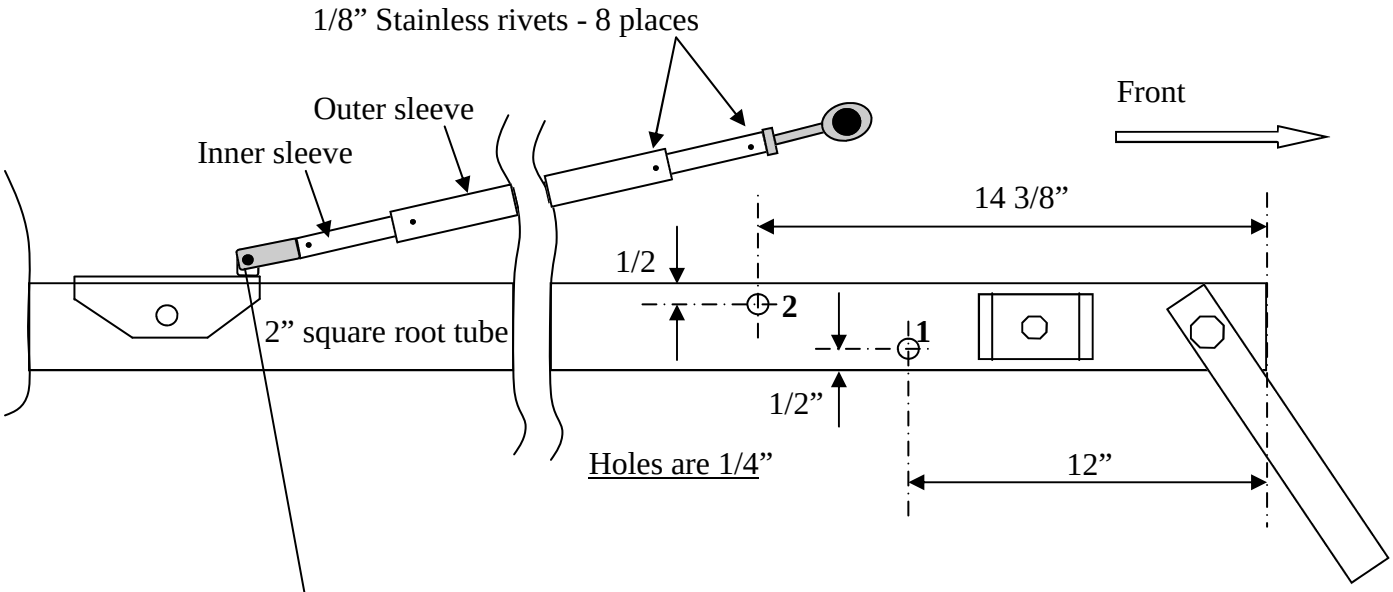
How to assemble the flaperon system

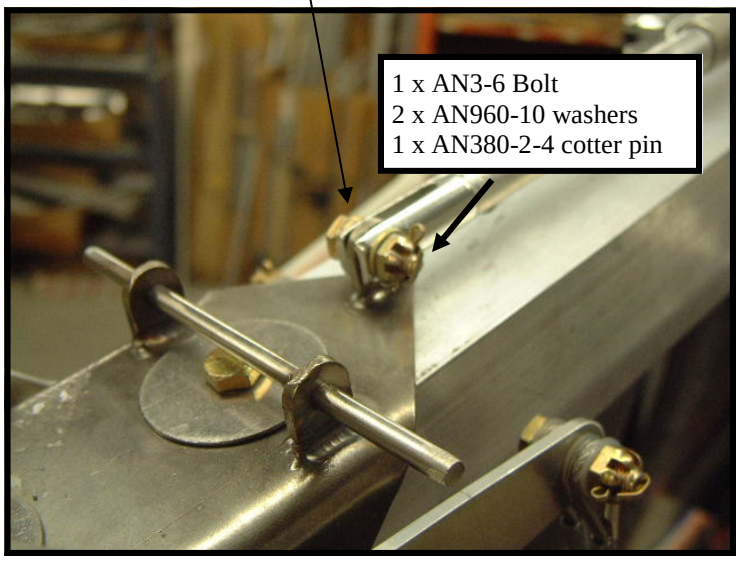


Flaperon crank assembly
RIGHT view



Flaperon crank assembly
LEFT view





How to install the Flaperon system

Before you can assemble the Flaperon push rod, you must place the slide bracket assembly half-way between its forward and rearmost limits.
Turn the Flaperon crank handle until it reaches its limit. Then turn it in the opposite direction and count how many revolutions until it reaches the opposite limit. Half that number and crank the Flaperon to that point. This is usually about 10 revolutions.
The slider and crank assembly are now set in the middle position and ready for installation of the push rod.

Assemble the push rod by inserting the two inner tubes into the outer sleeve. The ball joint end must be attached to the triangular bracket on the crank assembly and the clevis fork must be attached to the tab on the slider bracket. Some trimming of the inner tubes may be required in order to fit correctly in the outer sleeve.

Once you are happy with the location of inner and outer sleeve, mark and rivet. Use 1/8" stainless steel rivets (shorts).

Oil mechanism wherever it slides, pivots or screws.

Mark airspeed indicator upto 55mph. This is the maximum speed at which the flaperons can be used in the DOWN position. This applies to all Challenger models. Up (reflex) position can be used at any speed. If properly set up the flaperons should go up 10 Deg and down by about 15 to 20 Deg. You may have to re-adjust your aileron push rods to get optimum results.

You can increase the amount of flaperon and aileron by drilling a new 1/4" hole in the aileron horn as in the sketch below. This new hole should be 3/4" below the factory drilled hole. Be sure you still have full aileron movement with flaperons set in their full up and full down positions.