SECTION 5

THROTTLE BELLCRANK
CABLE STOP

Bellcrank for dual throttle

Set the Bellcarnk at 16mm from the Top Channel Stiffener 7F7-7SP to the center of the

CHECK: The position of the Bellcrank 7E5-1 is behind the Stop Plate 7L1-5J

Trim the bottom corner of the side flange on the vertical Top Channel 7F7-3 to make room for the Bellcrank 7E5-1
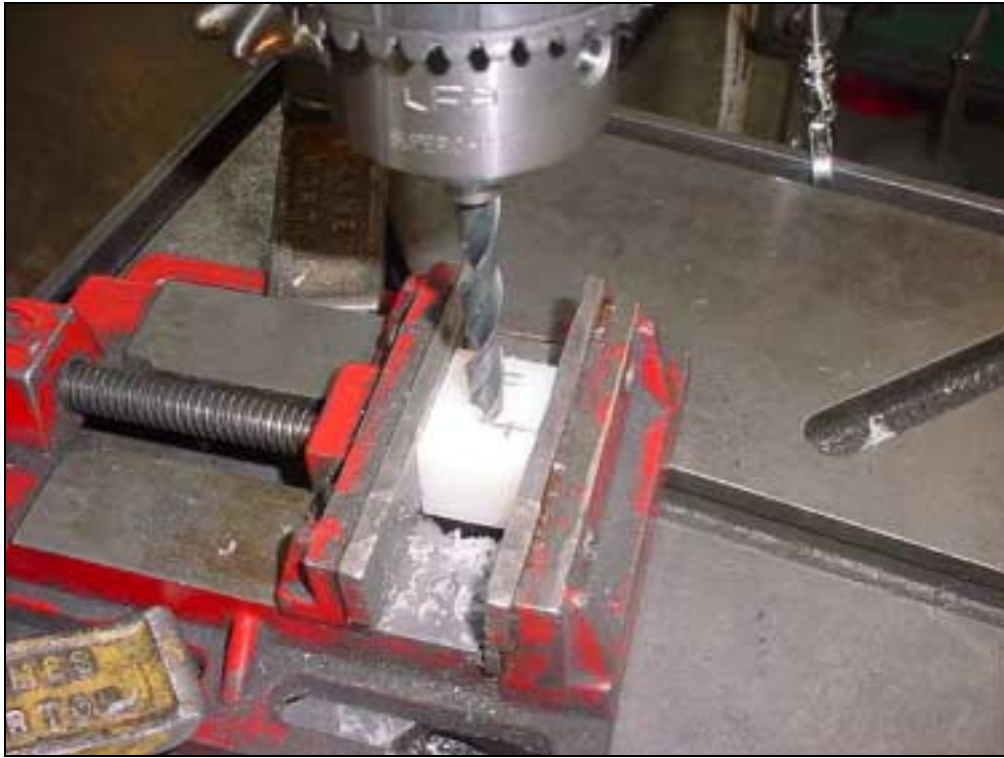

FRICTION BLOCK 7E5-6 Qty=2

Nylon 66 Plastic
35mm x 25mm x ½"

**Note: 3mm between firewall and aft edge plastic block 7E5-6**

TIP: The block is 35mm long, line up the front edge of the plastic block 7E5-6 even with the front edge of the extrusion Clamp 7E5-5

Layout the location of the 3/8" hole in the Friction Block 7E5-6 (referenced from the aft edge) 16mm to the center of the hole

3/8" drill bit

Clamp the two blocks in a drill vise, drill the 3/8" hole through both pieces.
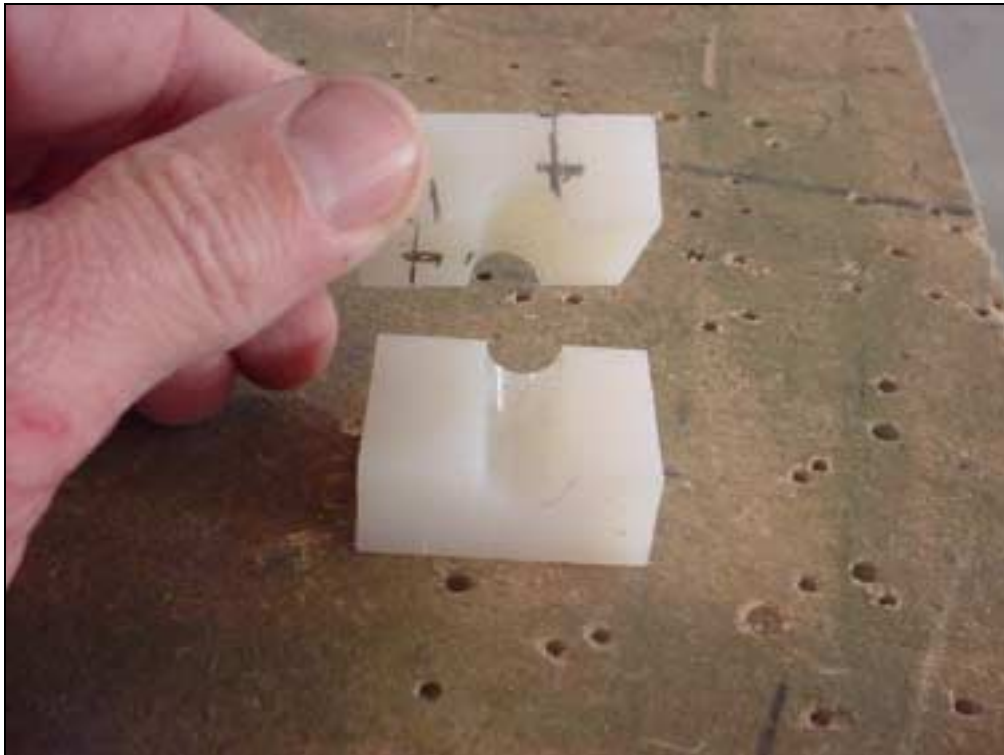
3/8" hole through both blocks

Note: The hole is not in the middle of the block to make room for the AN3 bolt

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Location of the 3/16" hole
Edge distance = 8mm

Clamp the two blocks on the Bellcrank to drill the 3/16" bolt for the AN3 bolt.

**FRICTION CLAMP
7E5-5**

File a radius along the the bottom aft corner of the bottom Block 7E5-6 to fit inside the radius of the Top Channel Stiffener 7F7-7SP.
Position the Block on the Stiffener, hold the Friction Clamp 7E5-5 on the firewall, mark the aft edge of the Block on the Clamp 7E5-5. Remove assembly to back drill the 3/16" hole through the Clamp.

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THROTTLE BELLCRANK 7E5-1

Welded assembly. ORIENTATION: Vertical rods are installed on the right side

The Throttle friction clamp is installed 120 mm. to the right of the aircraft centerline. If necessary adjust the position of the friction clamp in between the existing rivets in the Stiffener – do not install the Clamp on top of a rivet. Back drill the 3/16" through the Block 7E5-6 into the Upper Channel 7F7-1SP

AN3-15A BOLT QTY: 1
(self locking nut and washer underneath Channel)

2 RIVETS A5
7E5-5 into firewall

NOTE: Add a washer (AN960-10) under the lower block, between block 7E5-6 and Channel 7F7-1SP

THROTTLE BEARING 7E5-2

1L + 1R required.

ORIENTATION: drill the 3/8" hole in the 1-1/2" flange, then chamfer the top edge.

Drill the 3/8" hole 16mm from the aft edge and 12mm up from the bottom edge.

With a file, radius the bottom edge to make room for the bend radius of the Top Channel Stiffener 7F7-7SP

Detail of left side

2 RIVETS A5
7E5-2 into firewall

LOCATION: Line up the mid-point of the 600mm long Bellcrank 7E5-1 with the aircraft centerline.

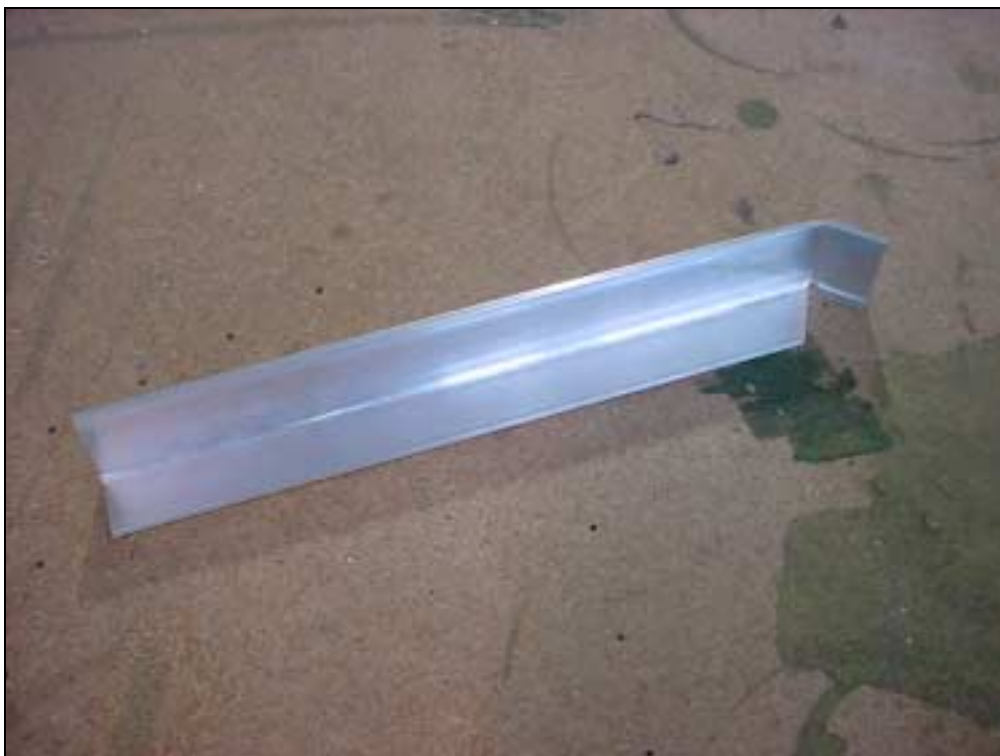IMPORTANT: Do not install the Throttle Bearing 7E5-2 on top of a rivet.

THROTTLE CABLE STOP (QTY=1) 7E5-3

Length = 120mm

Drill a ¼" corner relief hole tangent with the 1-1/2" flange approximately 25mm from the top edge.

Saw the side flange to the corner relief hole. Chamfer the 1" flange.
With a square, mark bend line across the 1-1/2" flange 25mm from the top edge.

IMPORTANT: Bend the extrusion over a piece of wood with a ¼" radius if a vice with aluminum grips (and radius) is NOT available.

CHECK: That there are no visible crack along the bend.

ORIENTATION: The bend is at the top with the 1" flange installed on the I/B side

Note: If using a vise (as in photo above), only use aluminum grips with the appropriate radius. Bend approximately 45 degrees along the bend line.

SUGGESTION: Wait to Chamfer the bottom edges until after the diagonal L angle is drilled and Clecoed

Drill two ¼" holes 13mm part (center to center) on the bent 25mm end of the Throttle Cable Stop 7E5-3
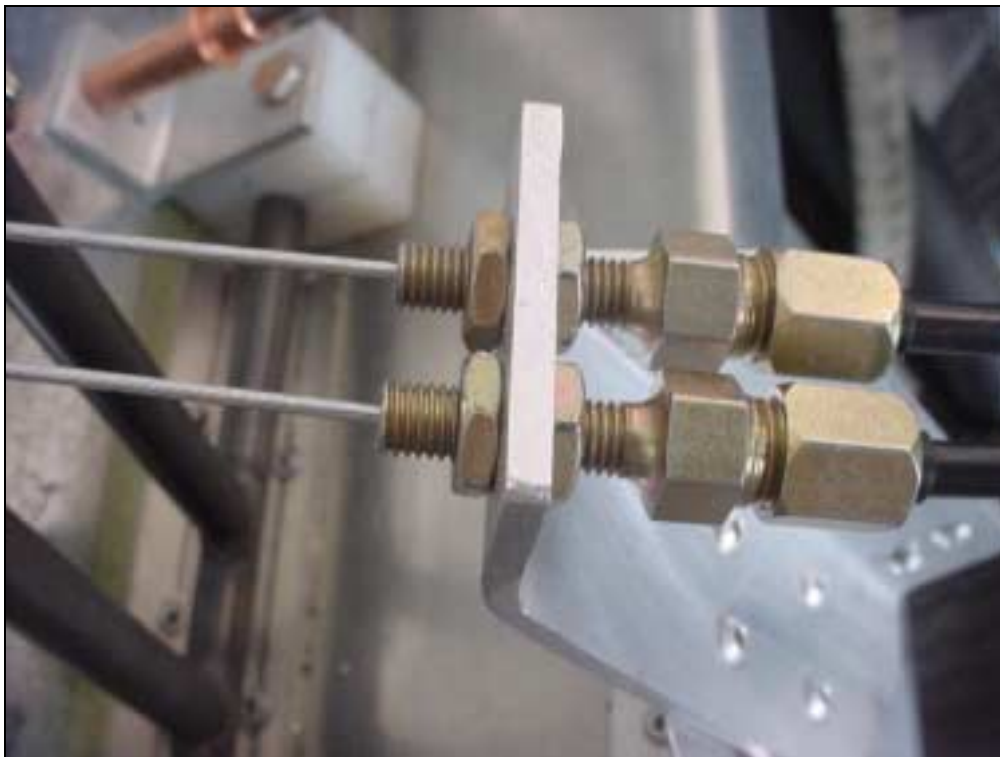
**25-0700
CABLE STOP
ADJUSTER ASSEMBLY**
QTY: 4

Install the Cable Stop Adjuster assemblies 25-0700 to the Throttle Cable stop 7E5-3.
Jam nuts on each side of 7E5-3.

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Set the Bellcrank 6E5-1 in the full throttle position.

105mm = horizontal distance from the firewall to the top of the Bellrank

VERTICAL HEIGHT:

The ends of the Cable Stop Adjuster Assemblies should be in line with the center of the AN3-20 bolt on the Bellcrank.

CHECK: That the sides of the Throttle Stop are vertical.

2 RIVETS A5
7E5-1 into 7F7-1SP

Clamp the Throttle Cable Stop 7E5-1 to the front flange of the Upper Channel 7E7-1SP; Drill & Cleco
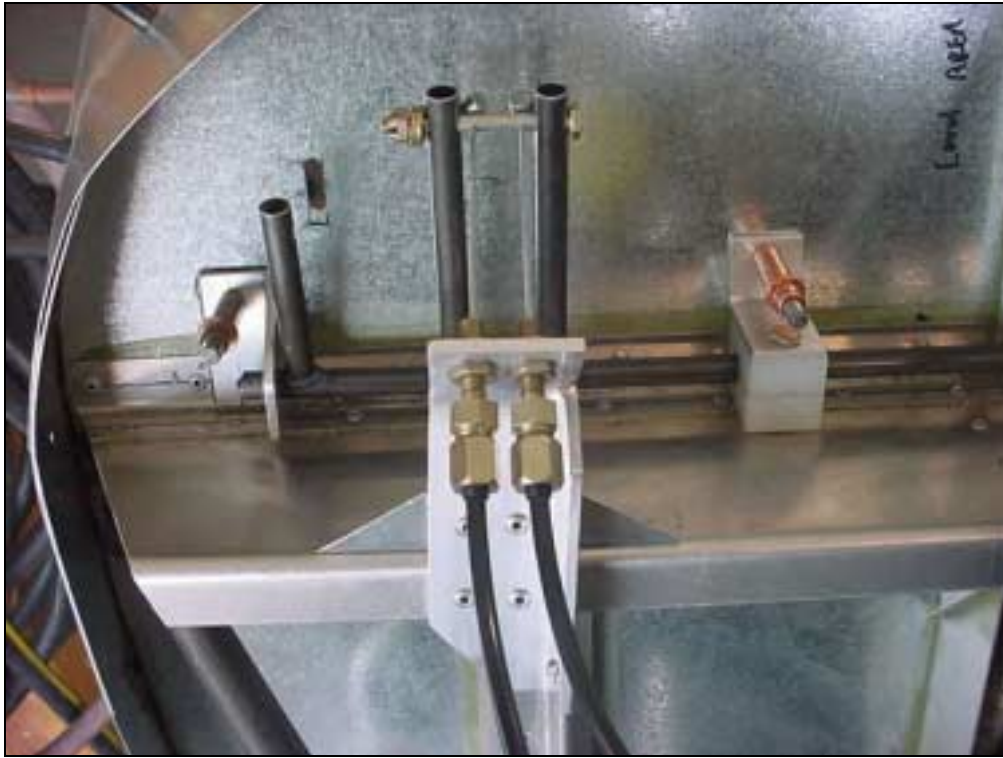
2 RIVETS A5
7E5-3 into L angle

L angle = 100mm
Installed in the corner of the Upper Channel 7F7-1SP and the Throttle Cable Stop 7E5-3. Chamfer (trim) the left and right corners.

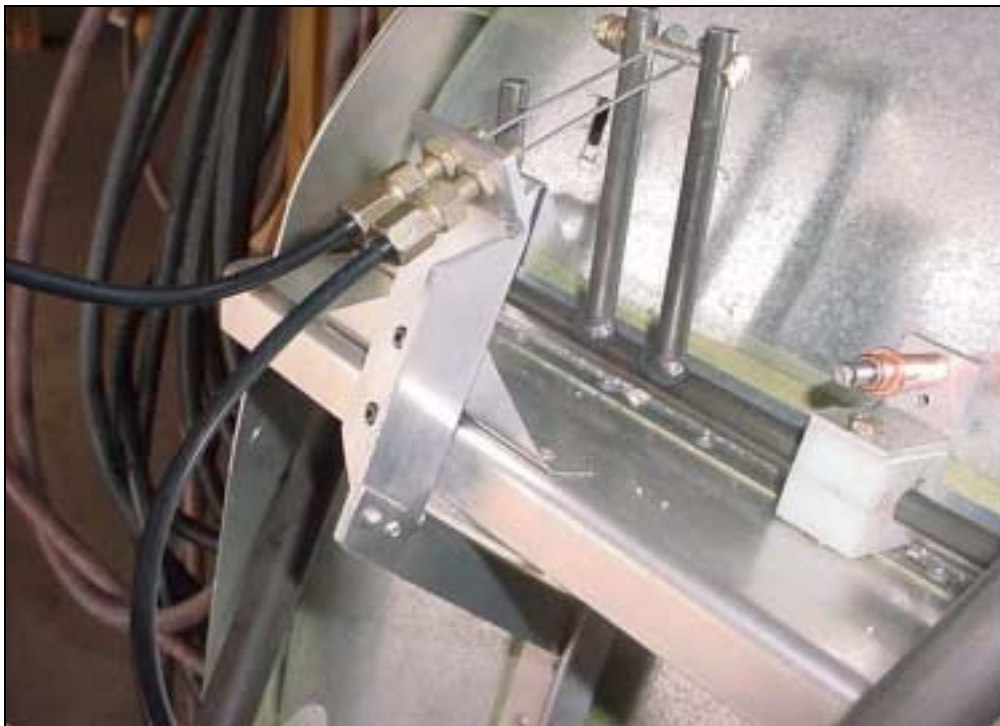Top view (when standing in front of aircraft)

4 RIVETS A4 from L angle into 7F7-1SP

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2 RIVETS A4
L angle into 7F7-5

DIAGONAL L ANGLE
180mm measured along the firewall from the Upper channel to the bottom of the diagonal L angle

2 RIVETS A4
7E5-3 into L angle

Drill a #20 corner relief hole in the diagonal L angle and cut the top flange to make room 7F5-3. Cut the bottom side flange 7E5-3 flush with the bottom edge of the diagonal L angle. Chamfer the front of 7E5-3 even with the bottom of the upper channel

AN3-20
Bolt on bellcrank 7E5-1

Drill the two 1/16" hole in the AN3 bolt for the throttle cables (parallel holes).

CHECK: The holes in the AN3 bolt are in line with the center of the cable stop adjuster assemblies 25-0700

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