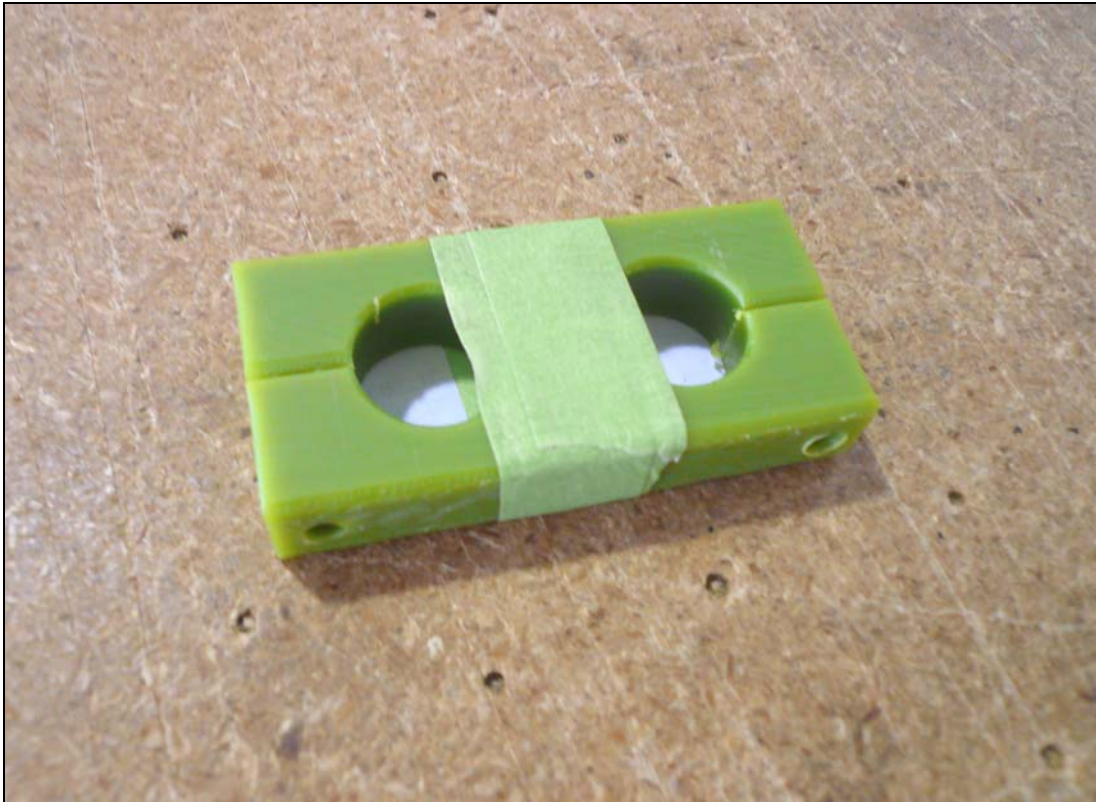


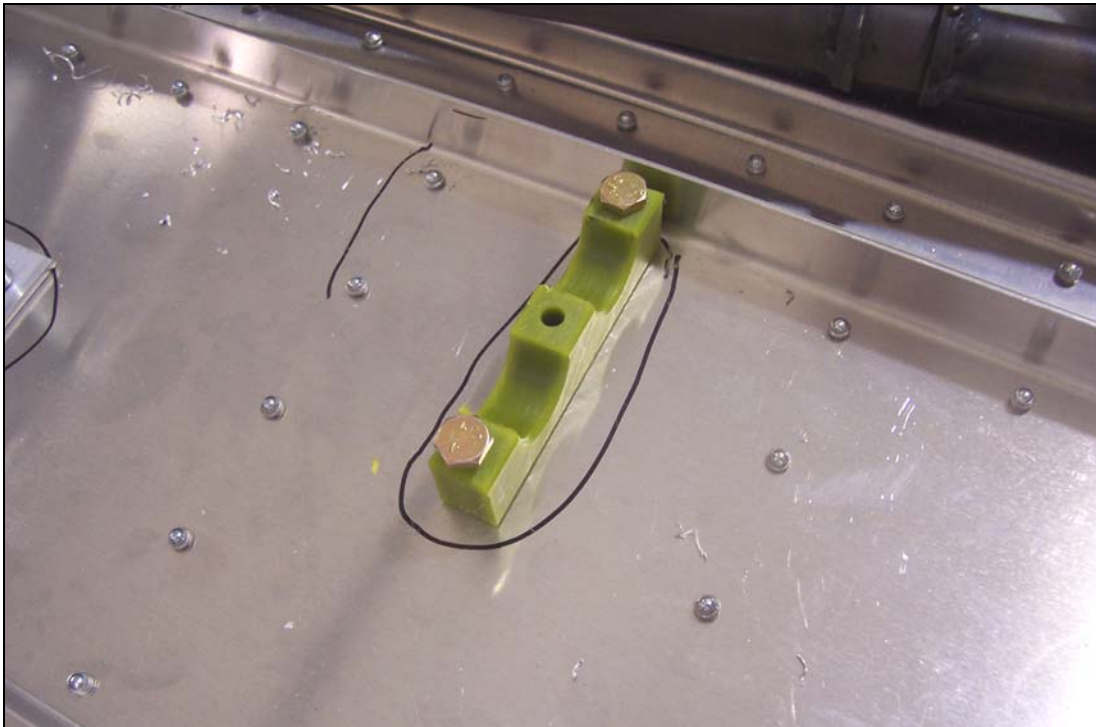
Section 75-CA-3 Rudder Controls



This manual has been prepared for assembly of the Rudder Controls. This photo assembly manual is intended as a supplement to the drawings. If there is any discrepancy between this manual and the drawings, the drawings supersede this manual. For more information on building standards and allowable tolerances see "Construction Standards for Zenair Light Aircraft" available from Zenith Aircraft Co.



P/N: 75C3-6
Central Pedal
Bearing



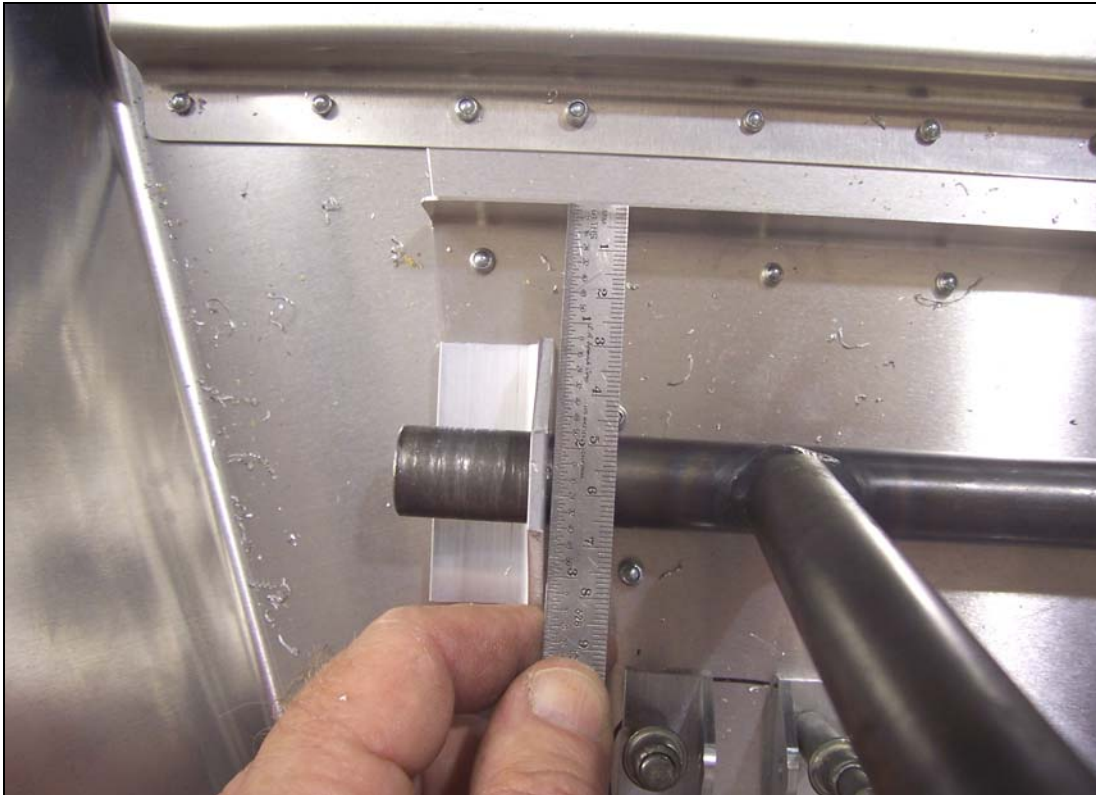
Use a #12 drill bit to open the holes in the Pedal Bearing Channel and Cabin Floor. Set the lower half of the Central Bearing in place on the Bearing Channel.



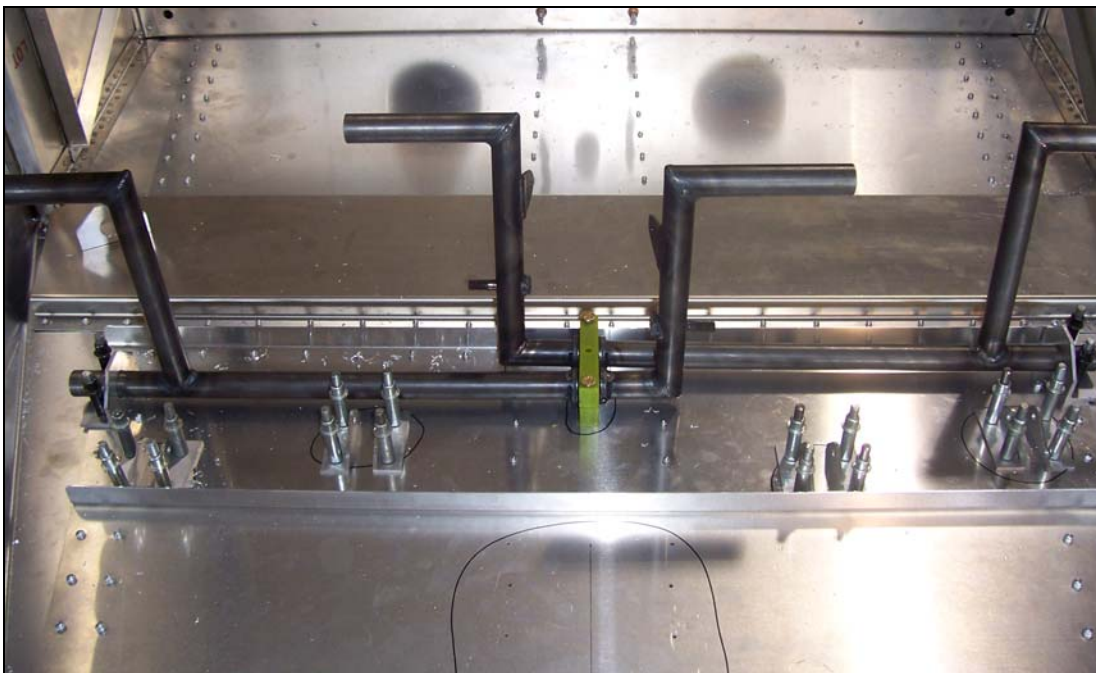
P/N: 75C3-4
Rudder Pedal



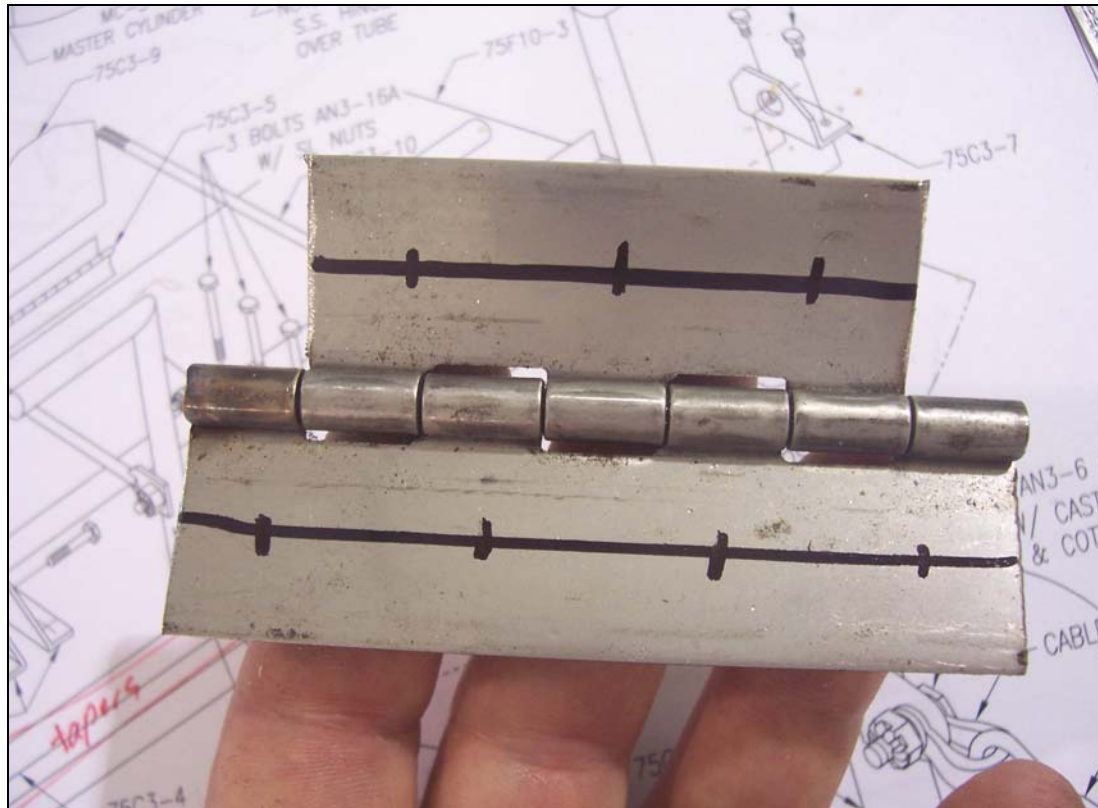
P/N: 75C3-7
Lateral Pedal Bearing



Slide the Lateral Pedal Bearing on the end of the Rudder Pedal. Set the Pedal on the Central Bearing. See drawing 75-CA-3 for proper orientation. Measure the distance from the flange of the Bearing Channel to the center of the Pedal at the Central Bearing. Set the outboard end of the Pedal the same distance. Position the Lateral Bearing so there is sufficient edge distance for the rivets. With a #40 drill, back drill through the Cabin Floor and Bearing Channel into the Lateral Bearing and Cleco. Expand the holes with a #12 drill bit.

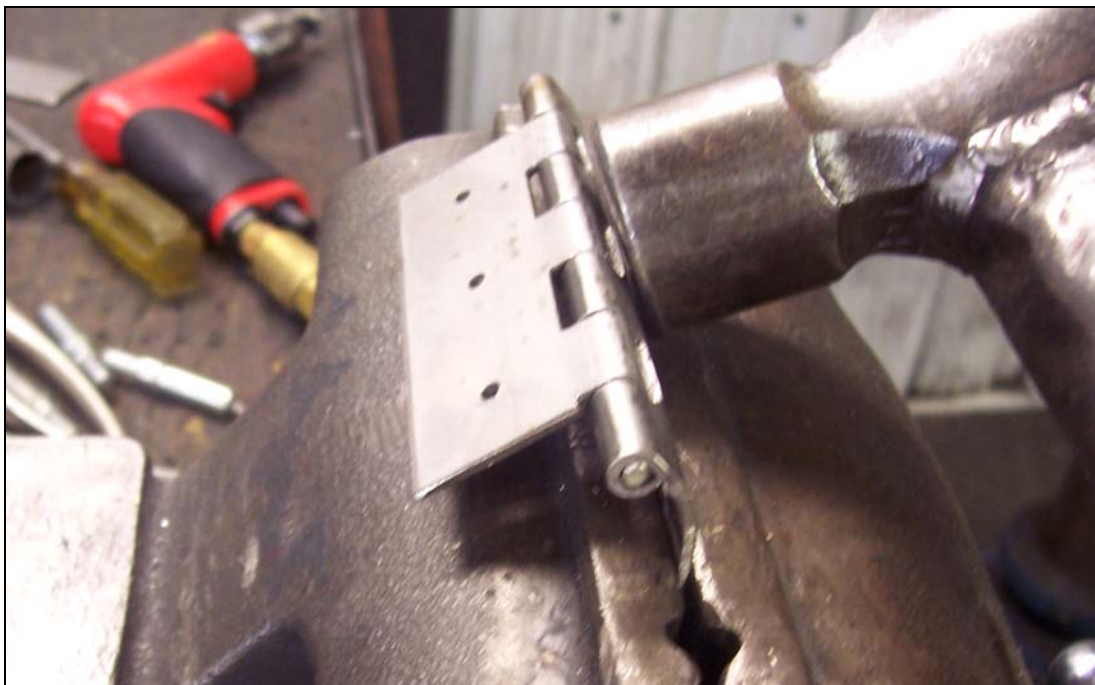


Install the opposite side Pedal and Bearings the same way. Install the top half of the Central Bearing.



P/N: 75C3-5
S.S. Piano Hinge

Draw center lines on both flanges of the S.S. Piano Hinge. Layout four rivet locations on the longer flange and three on the shorter flange. The end rivets should be 10mm from each end. Use a #40 drill bit to drill the rivet holes.

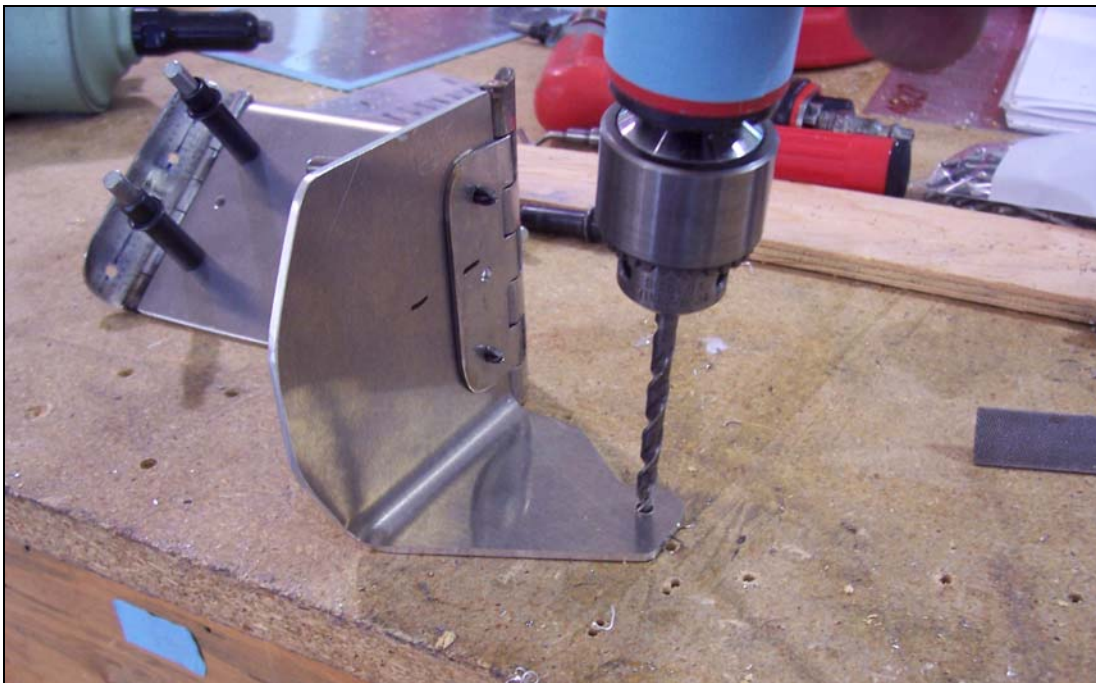


Use a vise and hammer to curve the longer flange to match the curve of the Pedals. Make small bends in several locations to form a smooth curve. The flange should be curved on the side with the barrel.

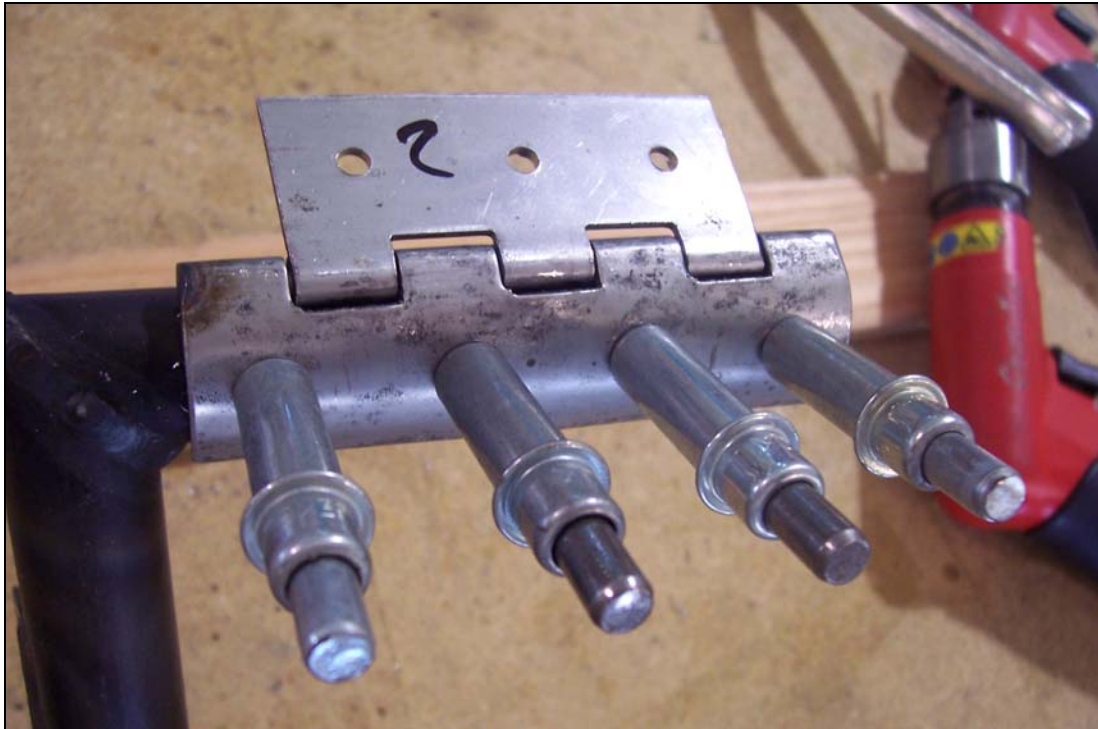


P/N: 75C3-9
Toe Brake Pedal

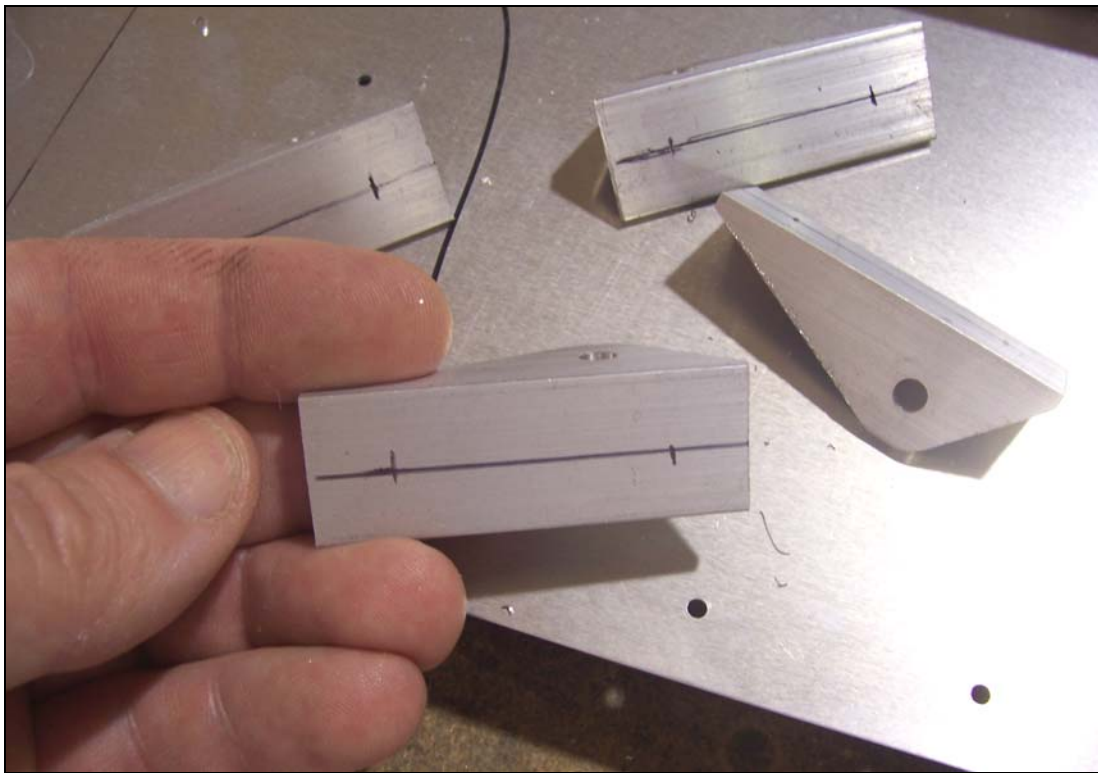
Position the Hinge on the Toe Brake Pedal. Center the Hinge on the Toe Brake and the barrel of the Hinge against the bottom of the Toe Brake. Make sure the curved flange is towards the front of the Toe Brake. With a #40 drill bit, back drill through the Hinge into the Toe Brake and cleco. Expand the holes with a #20 drill bit.



Use a #12 drill bit to expand the hole for the Brake Cylinder.

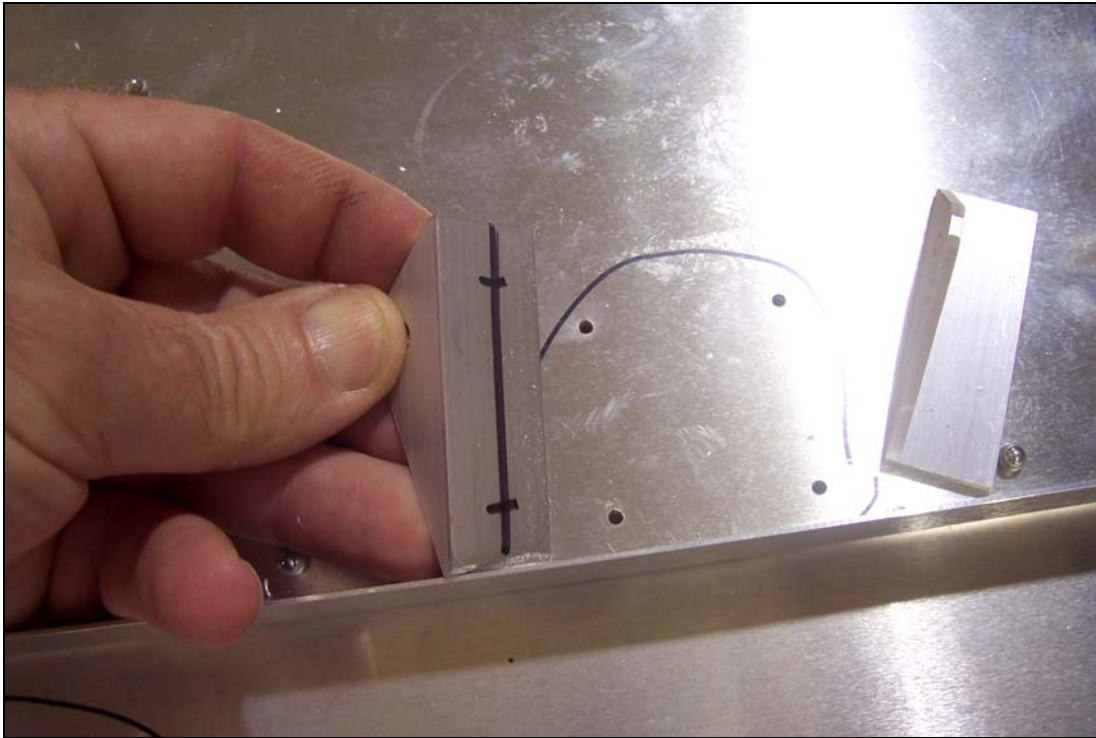


Set the Hinge on the Rudder Pedal. The end of the long flange should be flush with the end of the Pedal. With a #40 drill bit, back drill through the Hinge into the Pedal and cleco. Expand the holes with a #20 drill bit.



P/N: 75C3-8
 Brake Cylinder
 Support

Draw a center line on the bottom flange of the Brake Cylinder Supports. Mark rivet locations 10mm from each end of the Supports.



Position the Supports on the Pedal Bearing Channel. With the lines visible through the predrilled holes back drill through the Pedal Bearing Channel into the Supports with a #40 drill bit and cleco. See drawing 75-CA-3 for position and orientation information.



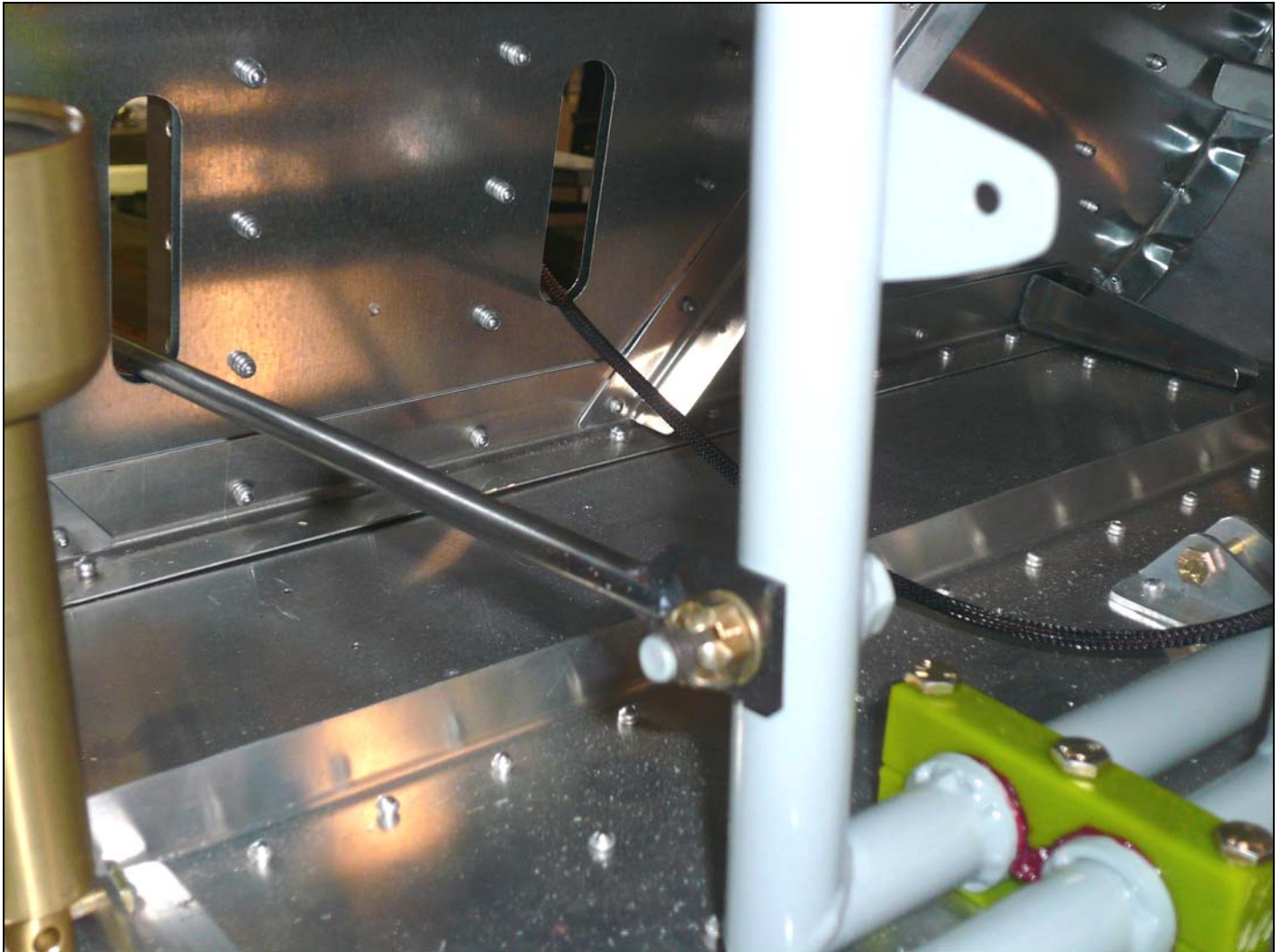
P/N: MC-5
Brake Master
Cylinder



Use a #12 drill bit to expand the mounting holes in the Brake Cylinder Supports. Bolt the Master Cylinder to the Supports and the Toe Brake Pedals. The angle of the Toe Brake Pedal can be adjusted by loosening or tightening the clevis on the Brake Master Cylinder but wait to do this until the Steering Rods are installed.



P/N: 75C3-10
Steering Rod



Install the Steering Rods on the Rudder Pedals using a castle nut and cotter pin. Don't tighten the nut on the Steering Rods; the Steering Rods should rotate freely on the stud.

Note: The pilot side (left) Steering Rod is shorter than the passenger (right) side.