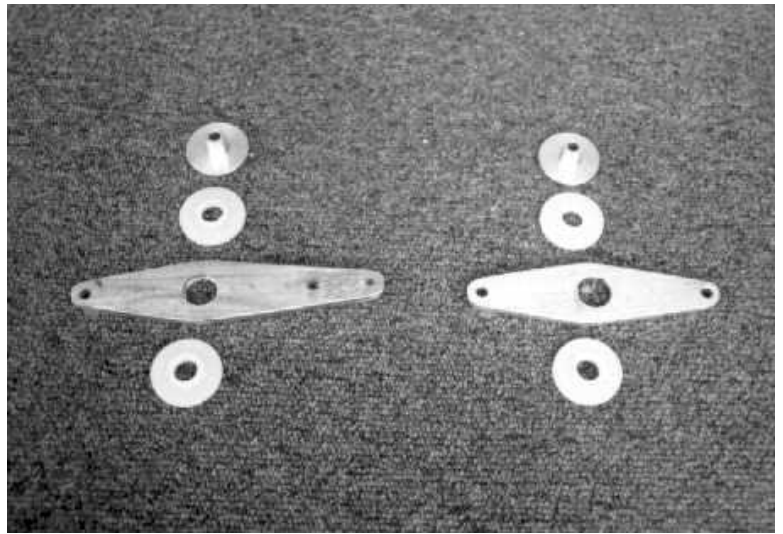


## DIRECTIONAL CONTROL

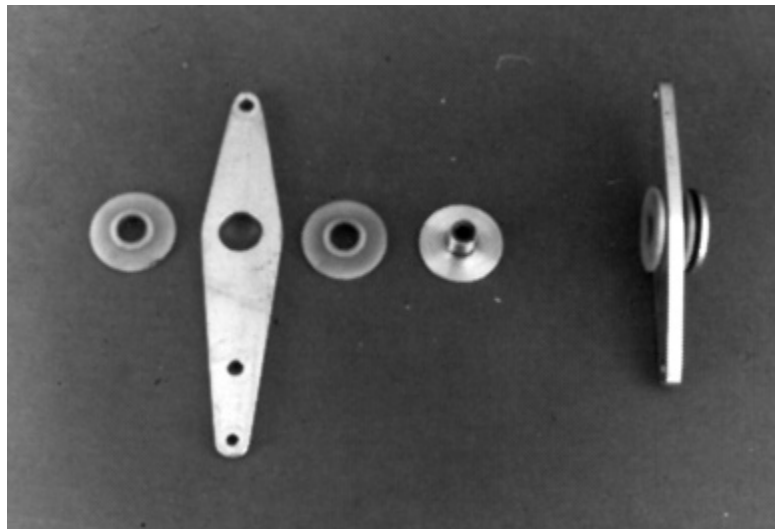
**Photo #37**

Place the templates on the scissor beams. Cut and drill as outlined.



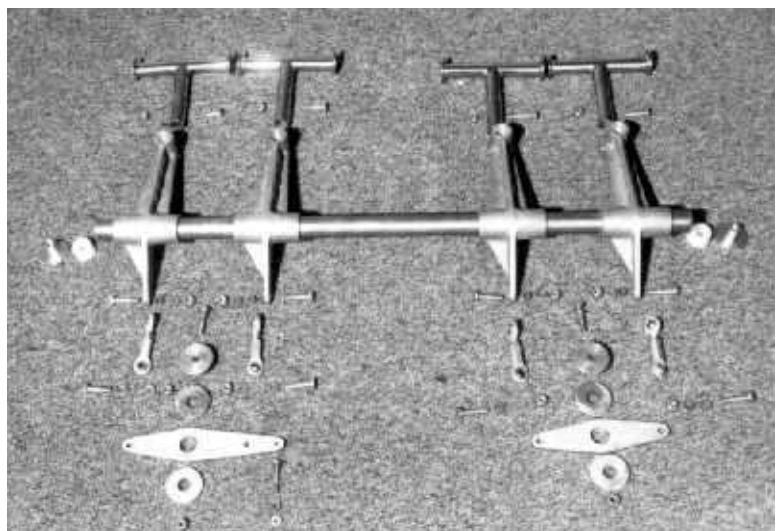
**Photo #38**

The two nylon scissor beam pivot bushings, the aluminum scissor beam pivot plug, and the scissor beams are shown here both exploded and assembled. The aluminum pivot plug must extend approximately .010" through both nylon pivot bushings so that the beam will pivot on the bushings and not on the bolt.



**Photo #39**

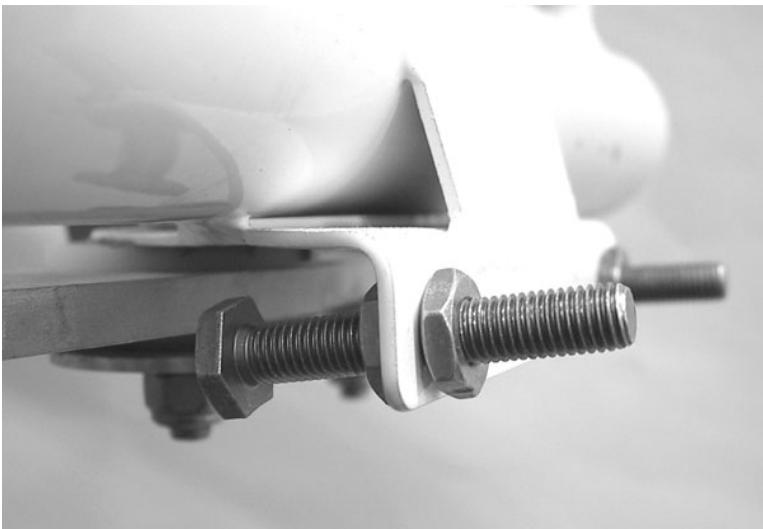
Exploded view of the assembly. The foot pedal castings must pivot freely on the cross shaft. If necessary, open the hole with a reamer, a file, or sandpaper. Drill the pedal weldments and install them in the castings, as shown on Print E16-2000.





**Photo #40**

Apply grease on all mating parts in this assembly.  
Install the scissor beams on the bracket.



**Photo #41**

Install the stop bolts on the bracket as shown.



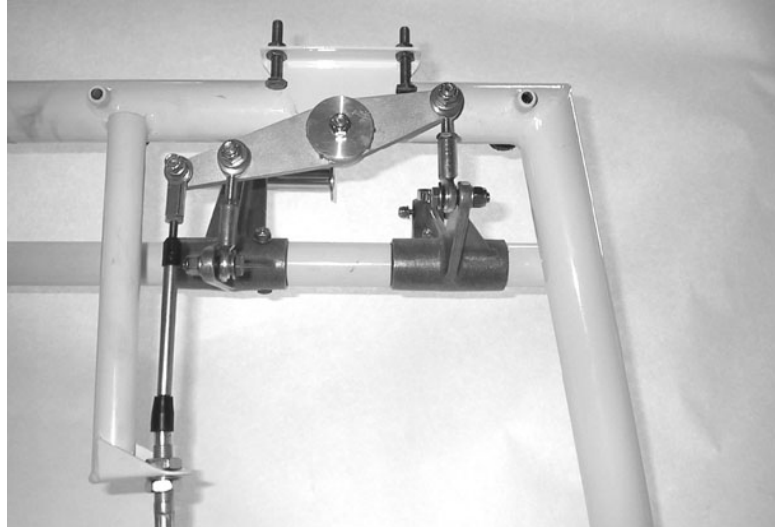
**Photo #42**

Fit the pedal shaft to the airframe brackets. Include the thickness of the aluminum and nylon bushings when determining the fit. Place the pedal castings on the pedal shaft and install the shaft on the airframe.

Note: It may be necessary to trim or grind off part of the aluminum bushing to fit the pedal shaft into position.

**Photo #43**

Install the directional control cable in the bracket and attach the rod end to the scissor beam. Move the scissor beam to the end of travel in the cable. Set the stop bolt so it makes contact with the scissor beam.

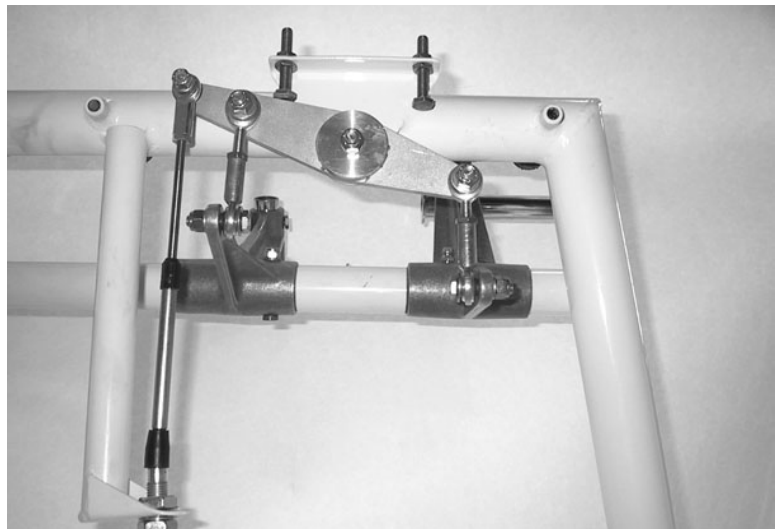


**Photo #44**

Move the scissor beam to the other end of travel and set the other stop bolt. Check the following:

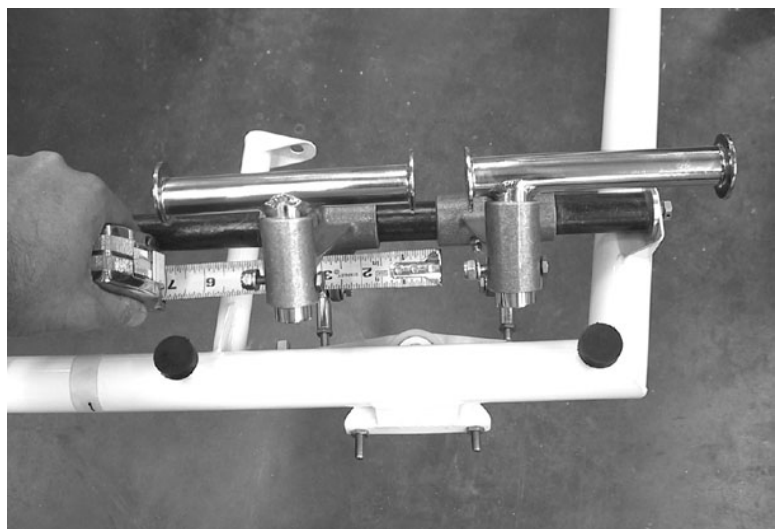
When the scissor beam travels from stop to stop, the rod end on the directional cable must move a total of 2-7/8".

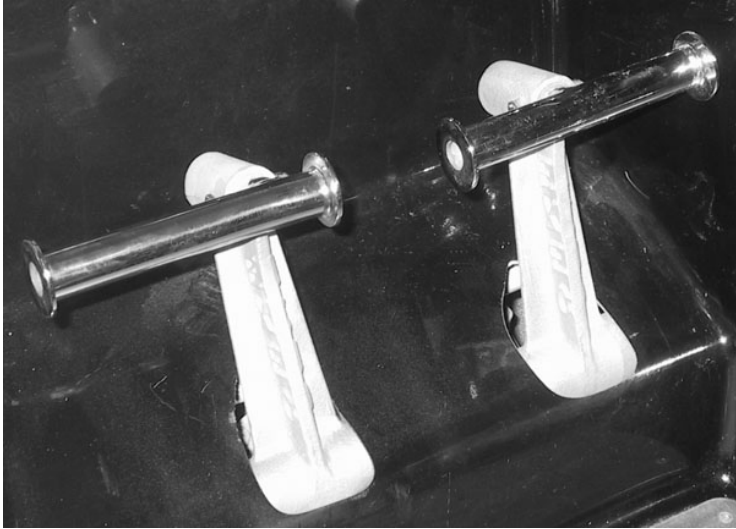
When the scissor beam is at the mid-point of travel, it should be parallel with the front cross tube of the airframe.



**Photo #45**

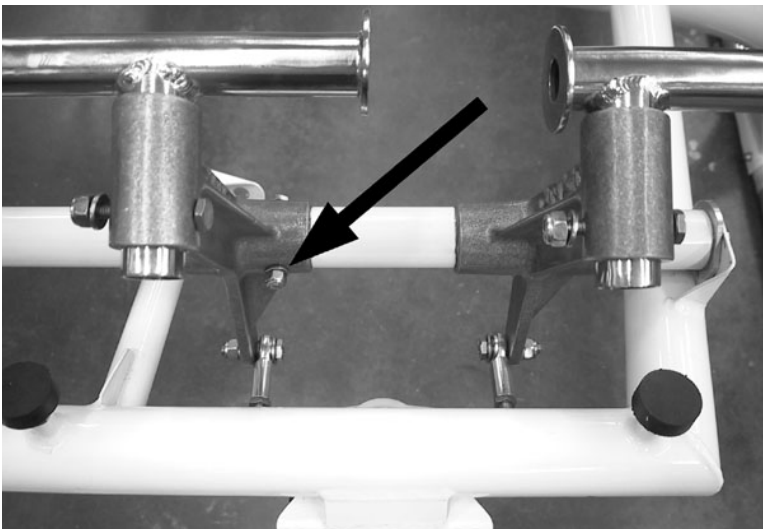
Position the pedal castings on the shaft for best alignment of the rod ends between the castings and the scissor beams (see print E16-2000). The distance between the pedal castings should be about 2-3/8". Fit the floor pan around the pedal castings for proper positioning.





**Photo #46**

The right pedal is the one that will be bolted to the shaft. Do not drill this hole or place the spacer between the two pedal castings until after the holes in the floor pan are cut out as shown in the photo. When the floor pan is in place over the pedals, they may need to be slid from side to side for better positioning.



**Photo #47**

Once the proper position has been found, drill a 3/16" hole through the pedal and shaft and install the bolt. It should just be visible through the hole cut in the floor pan for the pedal. The spacers can then be cut to length and fitted on the pedal shaft.



**Photo #48**

On final assembly, apply Loctite to the threads of the end bolts and tighten them. Safety wire the bolts and pop rivet the aluminum bushings to the brackets.