

PROCEDURE 6.040 RUDDER CABLE INSTALLATION

In this procedure...

The rudder cables will be routed from the front of the fuselage to the empennage. The end brackets will be installed and the cables will be attached to the rudder torque tube assembly and the aft rudder bellcrank. The push / tube will be connected to the rudder horn and the aft rudder bellcrank.

For this procedure the following parts will be required:

<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
112-24-035	1	Cable Long
112-24-036	1	Cable Short
112-24-024	1	Bracket Rudder Cable Fwd Right
112-24-025	1	Bracket Rudder Cable Fwd Left
MW-3	4	Bearing
AN310-428	4	Nuts, Check
111-24-001-01	1	Aft Rudder Bellcrank Spacer
213-12-021	1	Bellcrank, Rudder
SCE168	2	Bearing
213-12-040	1	Push / Pull Rod, Rudder
AN3-15A	8	Bolt, Front Cable Brackets
AN960-10	20	Washer,
AN365-1032,	12,	Nut
AN970-4	3	Washer,
AN4-52A	1	Bolt, Aft Rudder Bellcrank
AN3-10A	2	Bolt, Cable Attach Forward
AN3-7A	1	Bolt, Cable Attach Aft
AN3-12A	1	Bolt, Cable/Push Rod Attach

Step 1. Position Rudder Cable.

Route the rudder cable through the center cutout hole in the carry through, aft along the center of the fuselage through bulkhead 162 and through the conduit tubes install in the tail of the aircraft.



Step 2. Install front Brackets.

Measure down 2" from the top of the center firewall support and drill two 1" holes in the aft side of the center firewall support. Position the rudder cable brackets on the aft face of the firewall support as shown in the picture on the right. Drill the eight 3/16" holes and bolt the brackets in place. Slip the rudder cables through the bracket and the hole in the support and secure using the clamps provided with the cable. (Note: The longer cable is attached to the right cable bracket.)

**Recommended Rudder Cable Placement.****Step 3. Install aft Rudder Bellcrank.**

Install the Aft Rudder Bellcrank in position. The pivot bolt is installed through the horizontal stabilizers access area. A large area washer is placed on the head of the bolt and between the fiberglass ribs and the top and bottom of the rudder bellcrank. Torque the bolt to 20-in/lbs torque. Attach the rudder cable to the bellcrank using the MW3 bearings. The bearings attached to the cables go on the topside of the bellcrank and the rudder push pull rod is attached to the left horn on the bottom side and to the rudder horn.

