

## ***Post-Paint>Firewall forward>Engine control cabling***

### **Objectives of this task:**

To fit all engine control cabling from the instrument panel to the engine.

### **Materials required:**

Cables: Throttle, Carb Heat, Choke, Cabin Heat (optional – see Card #25JT)

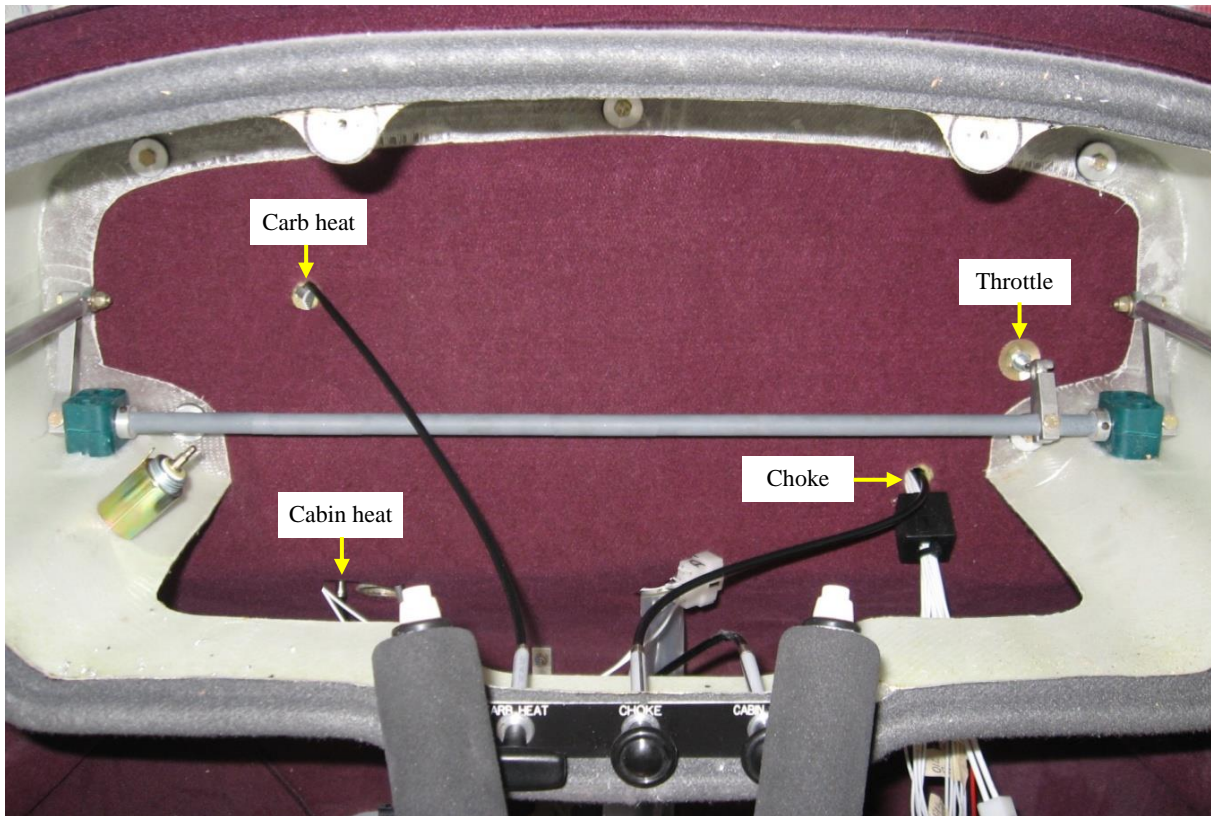


### **Size the outer cables**

The Carb Heat, Choke and the optional Cabin Heat outer cables will need to be cut to length. This is done by removing the inner cables completely and then fitting the outer cables through the panel and routing them through the firewall to the appropriate locations and then trimming each outer cable to length. The Choke and the optional Cabin Heat cables will then need to have allowance made for the threaded end section, which is then crimped onto the cut end (use the crimping tool, shown at right). The throttle cable is supplied ready to use.



### **Fit the cables to the instrument panel**

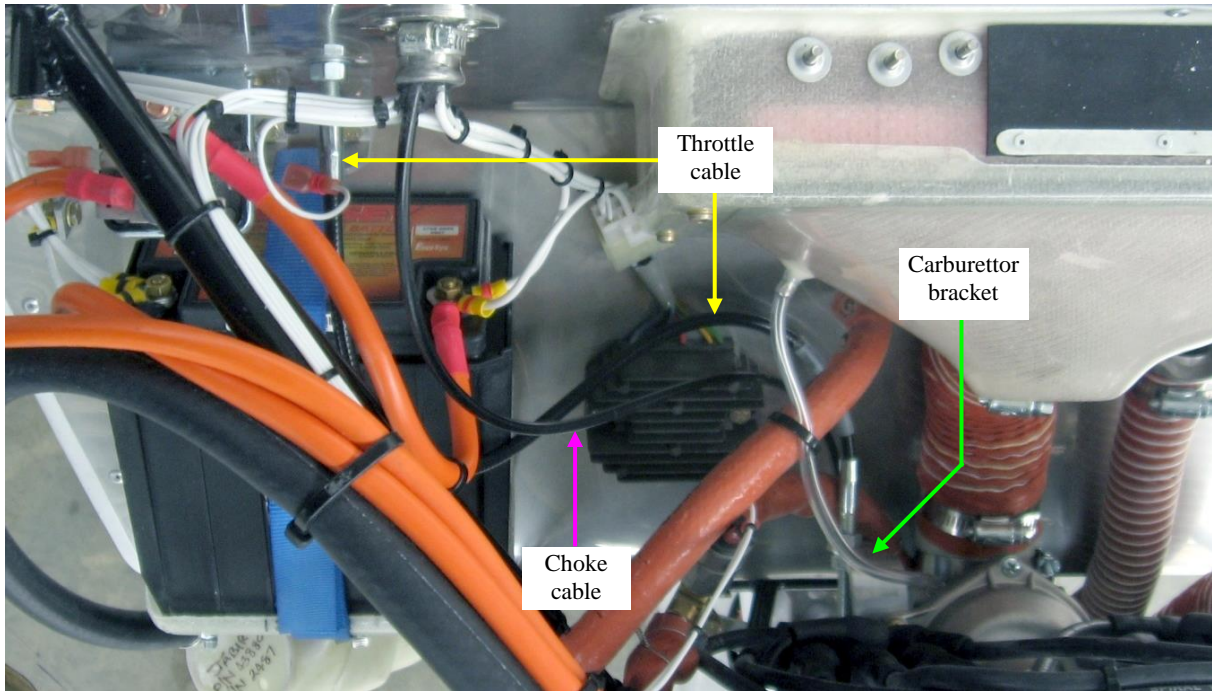


Fit the Carb Heat, Choke and the optional Cabin Heat cables to the lower centre of the instrument panel through the nameplate and secure each to the panel with a serrated washer and lock nut and then route the cables through the firewall as shown above.

Fit the throttle cable through the firewall from the engine side with the ball end inside the cabin and secure with a slotted flat washer and nut on each side of the firewall as shown.

Fit the ball end of the throttle cable into the drive arm on the throttle shaft.

## Throttle and choke



Note the cable routing shown above – this photo was taken looking straight down.

Fit the throttle cable first: undo the front nut completely until it is resting on the inner cable and then fit the inner cable through the slotted top hole in the bracket and fit the threaded cable end into the bracket. Fit the lock nut onto the threaded cable end and tighten so that the lock nuts are in the centre of the threaded cable end.

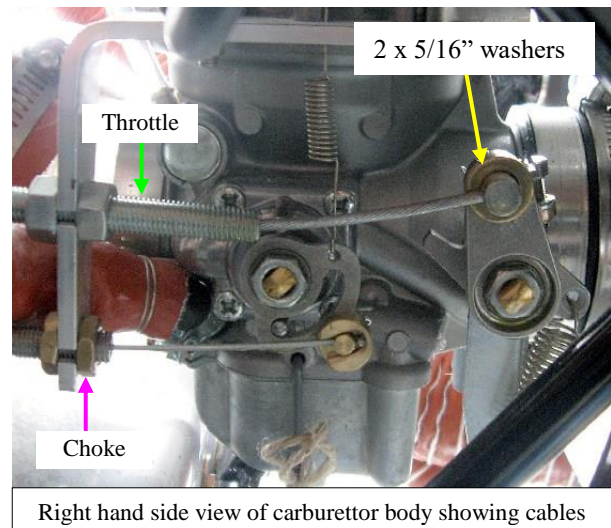
Fit the barrel end of the cable into the throttle linkage on the carburettor with two 5/16" washers on the outer side and a split pin through the hole in the barrel end of the cable.

Adjust the throttle cable until at full throttle (with the panel mounted throttle shafts fully forward) the throttle linkage is just touching the front stop on the carburettor. Tighten all 4 lock nuts firmly for the moment – fine adjustments will be made later.

Put 1 lock nut on the threaded end of the choke cable and fit it through the bottom hole in the bracket. Fit the other lock nut, centering the threaded end in the bracket.

Make sure that the choke drive arm is fully forward and slip the brass ferrule over the inner cable then fit the ferrule into the hole in the drive arm. Bend the inner cable at right angles in front of the ferrule. Cut the excess inner cable off. Slip the ferrule through the retaining collar and fit to the to the drive arm with a washer and split pin fitted to the brass ferrule on the underside of the drive arm. Refer the photos and drawing on the next page for detail.

Adjust the choke cable until with the choke all the way in the choke arm just touches the stop on the carburettor body. Tighten the lock nuts firmly.

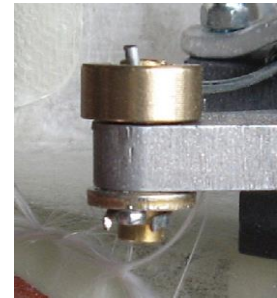


## Carburettor heat

Run the outer cable through the clamp and secure by tightening the clamp, then slip the brass ferrule over the inner cable.

Make sure that the air valve drive arm is fully forward and then fit the ferrule into the hole in the drive arm. Bend the inner cable at right angles in front of the ferrule. Cut the excess inner cable off. Slip the ferrule through the retaining collar and fit to the drive arm with a washer and split pin fitted to the brass ferrule on the underside of the drive arm.

Adjust the Carb Heat cable with the clamp until with the Carb Heat "T" handle all the way in the air valve drive arm is fully forward as shown above. Tighten the clamp bolts firmly.

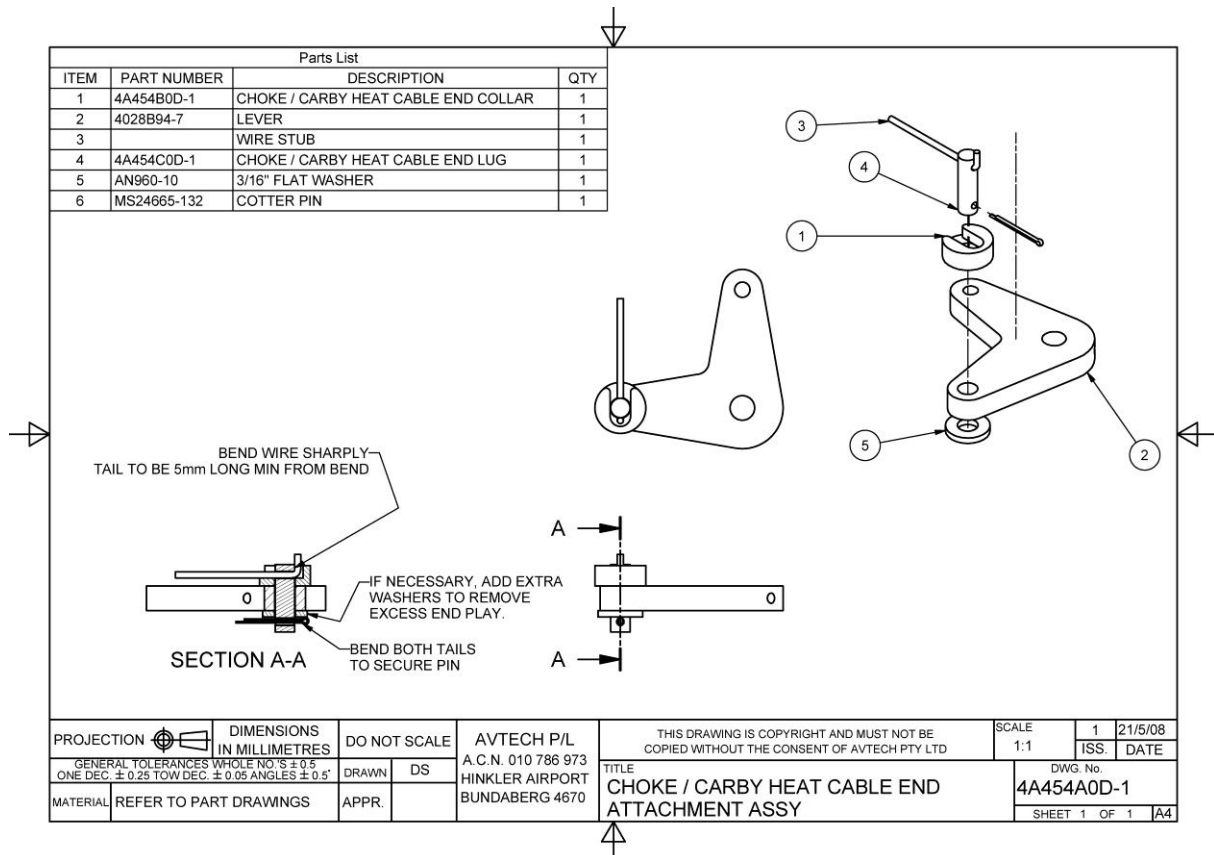


## Cabin heat

Put 1 lock nut on the threaded end of the Cabin Heat cable and fit it up through the hole in the firewall beside the Cabin Heat valve. Fit the other lock nut, fixing the threaded cable end through the firewall.

Make sure that the Cabin Heat valve drive arm is fully forward and then fit the ferrule into the hole in the drive arm. Bend the inner cable at right angles in front of the ferrule. Cut the excess inner cable off. Slip the ferrule through the retaining collar and fit to the drive arm with a washer and split pin fitted to the brass ferrule on the underside of the drive arm.

Adjust the Cabin Heat cable until with the Cabin Heat knob all the way in the Cabin Heat valve is fully closed. Tighten the lock nuts firmly.



This completes the *Post-Paint > Firewall forward > Cabling* task.