

One of the unique features of the Roadster is that it has a removable roof. As we saw in the Deck Lid chapter, it can be stored on top of the deck lid when it is not in the normal position. The roof is held in place by two pins that are inserted into the windshield frame and two pins that are snapped into holders on the top of the body.



FIGURE 169. Roof in place on body



FIGURE 170. Roof in stored location

Mounting Pins in Roof

The roof comes with the threaded studs for the front bullet pins. There are threaded catches that have to be installed into the roof structure itself.

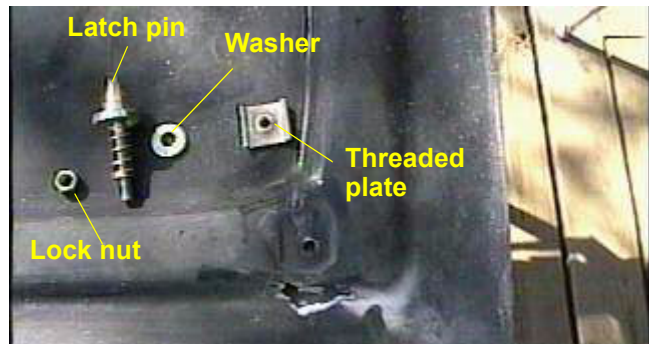
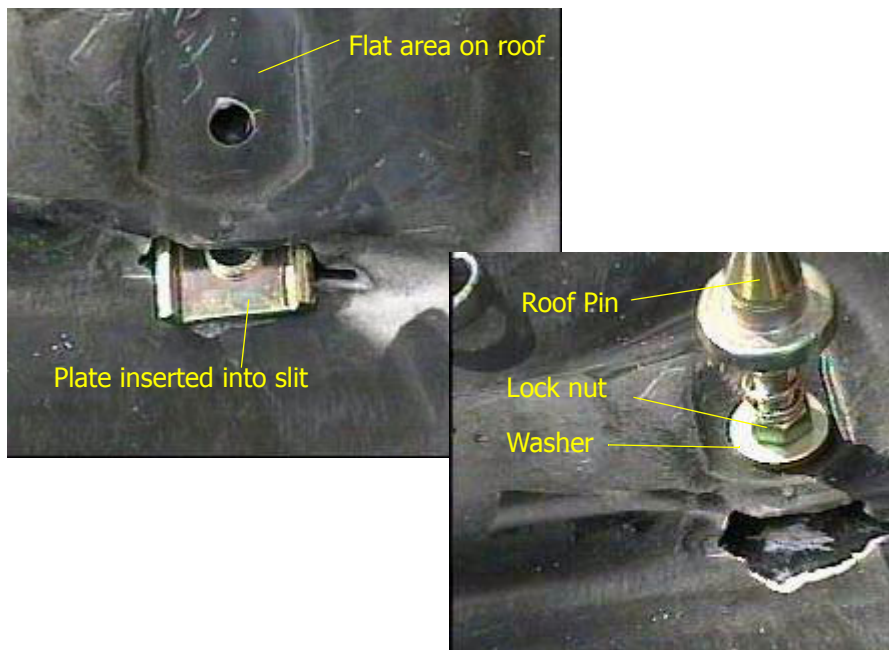


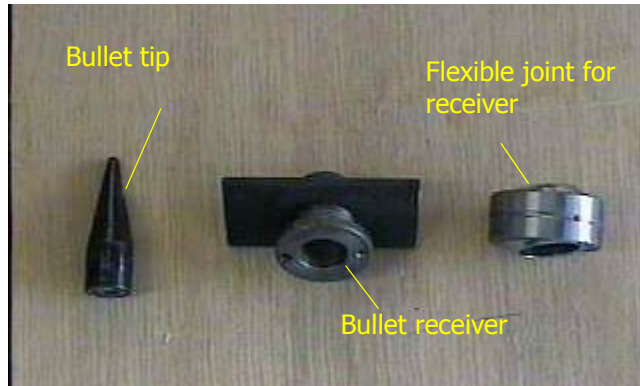
FIGURE 171. Threaded latch pin pieces

Mounting Pins in Roof

These pins are located in the two flat areas that are in the roof. It is necessary to cut a small slit in the roof itself to be able to slide in the plate. Once this plate is in place, the lock nut and washer are threaded onto the pin and then the pin is threaded into the plate. The plate can be bonded in and the slit closed.



Front Pin piece



Front Connectors on body

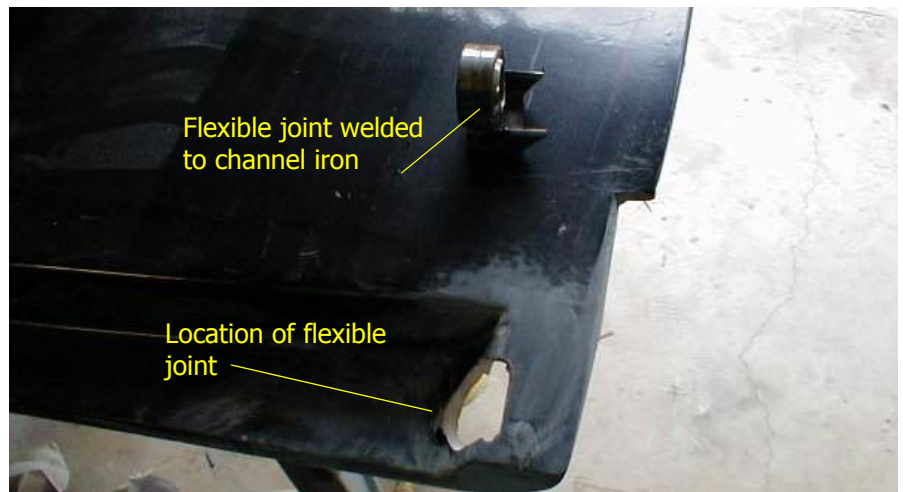
The front connectors that are in the windshield frame actually operate like a ball joint. They will move up and down to allow the roof pins to be inserted with the rear of the roof elevated slightly to allow the rear pins to clear the body. There should be some space between the top of the window edge and the bottom of the roof. This will allow a rubber gasket to be installed.



Front connectors on Deck Lid

The bullet connectors need to be installed on the deck lid in order to accommodate the roof in the stored location. You have two choices. You can install the receiver in the back of the body instead of the deck lid but this will not allow you to raise the engine cover with the roof in the storage location. You may install the receivers in the deck lid in such a fashion that the deck lid could be raised with the roof in the stored location.

The example we are showing is with the receivers in the deck lid. You may have to modify the location in order for the roof to clear the rear window when it is being raised.



To make sure that the receivers line up properly, insert the assembly onto the pins and then position the roof on the deck lid.

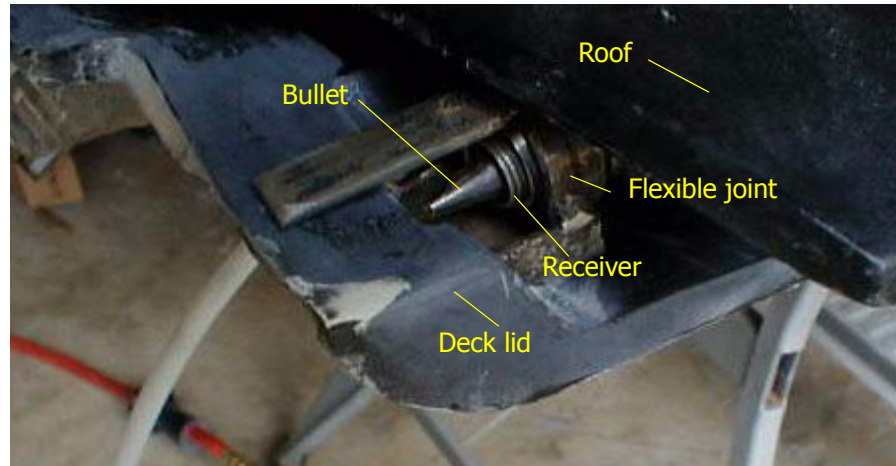
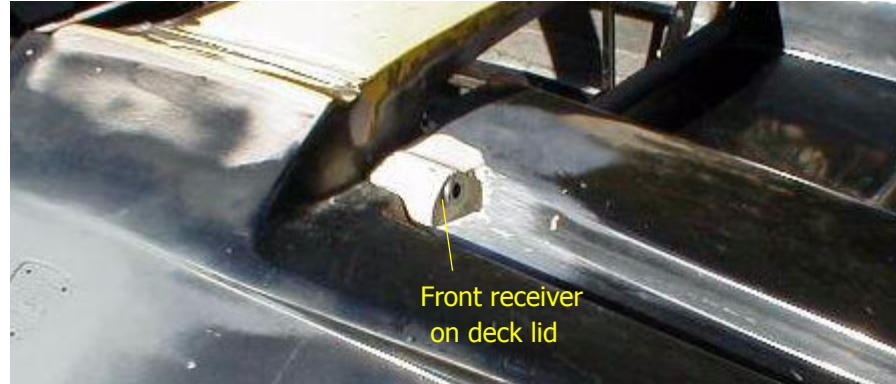


FIGURE 172. Determine location of deck lid front receiver

Now you can secure the receiver in place.



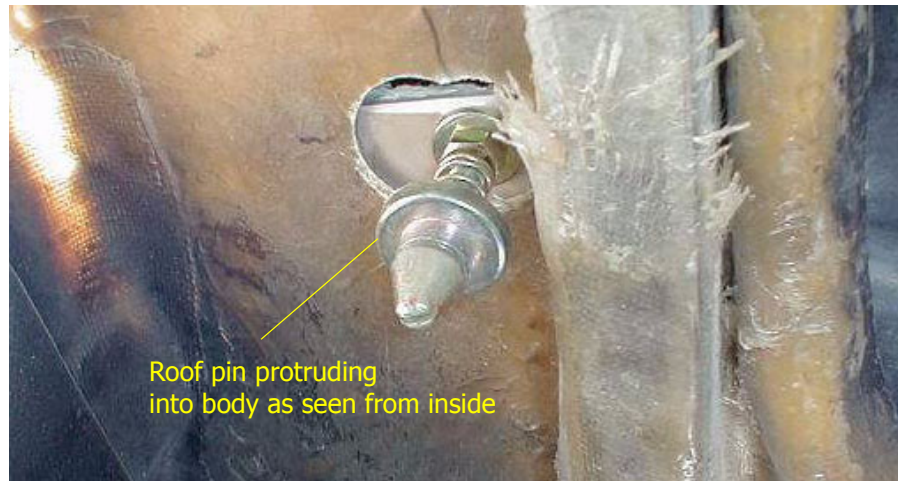
With the front location set, place the roof on the deck lid. The pins in the rear of the roof will now mark the location where the rear receivers are to be installed. See the section on the Deck Lids for the installation of the rear receivers.

Rear Connectors on Main Body

It is important make sure that the receivers on the body and the deck lid are positioned such that roof will fasten properly in either location. The location on the main body requires that the receivers are actually recessed about 1". This requires you to build a framework that will allow the proper location of the receiver.

Start by inserting the front roof bullets into the receivers on the windshield. This will determine where the holes need to be located on the body section.

Drill a hole through the body to allow the pins to protrude into the body.



Next you will need to construct a frame to accept the receiver. You can construct a "T" structure out of rectangular tubing that will go on either side of the pin. This will be bonded and glassed in place. The receiver will then be secured to this "T" structure for the pin to lock into,

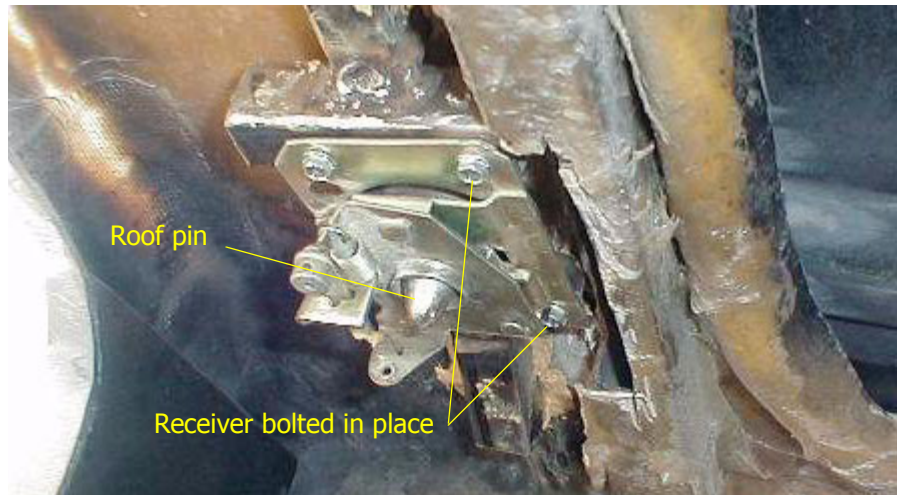
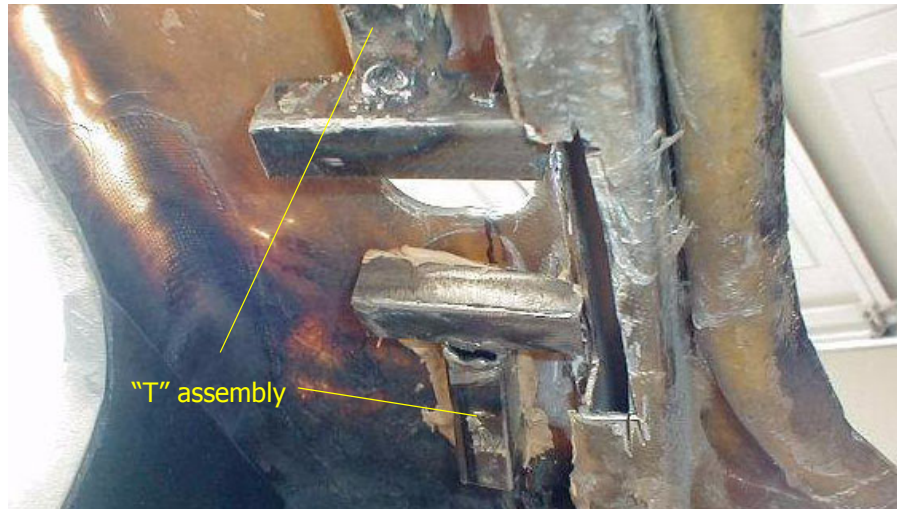


FIGURE 173. Inside "T" assembly

Receiver Tube Construction

Now that the locations for the receiver has been fixed, it is necessary to construct a tube from the top of the body to the receiver. Actually a piece of the stainless steel radiator tubing from the Fiero works ideally.

Enlarge the hole to the same diameter of the top of the receiver. Weld small tabs on the tube that will be slightly below the body line.



Now fill in the gaps with body filler. You can also take this opportunity to create a rubber pad that the roof will rest on.

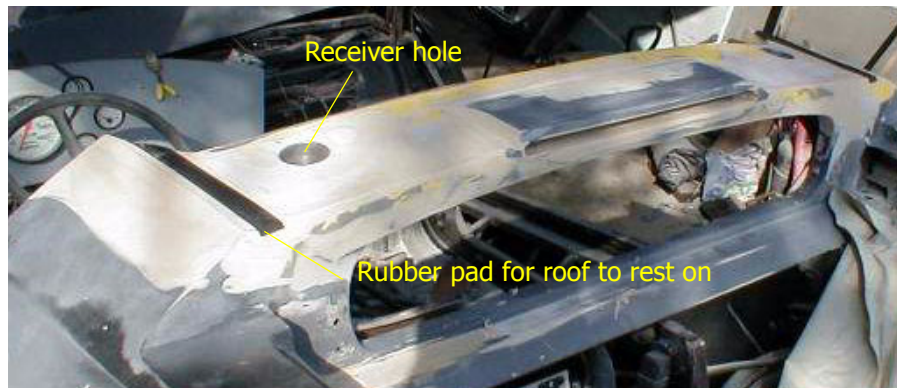




FIGURE 174. Roof on Body



FIGURE 175. Roof on Deck Lid

Roof Release Mechanism

We will use the original Fiero handles to release each side of the roof. The handle will be attached to two cables on each side. One cable will release the mechanism on the motor deck lid at the same time that it releases the mechanism in the roof. We start by cutting down the Fiero handle

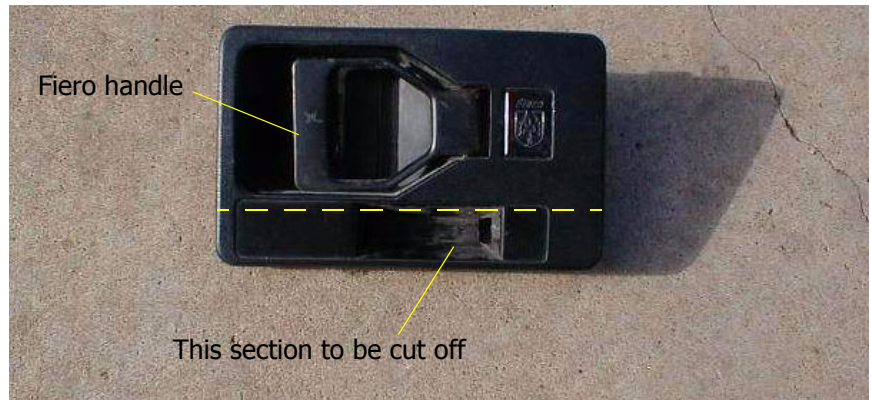


FIGURE 176. Modified door handle plate

Once the base plate is modified, you will need to modify the handle assembly itself to with two brackets. One to fasten the handle to the firewall and one to secure the cable assemblies.

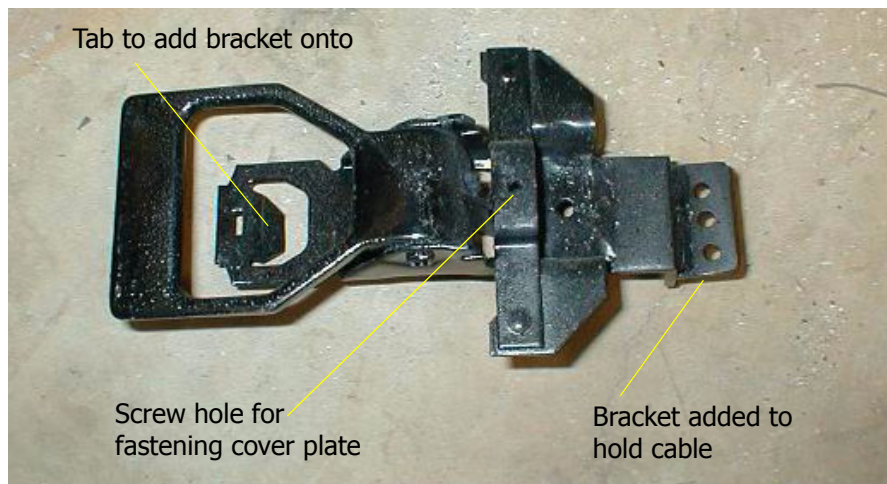


FIGURE 177. Fiero handle - top view



FIGURE 178. Fiero handle - side view



The assembly is now bolted to the firewall and the plate secured to the bracket to complete the installation.

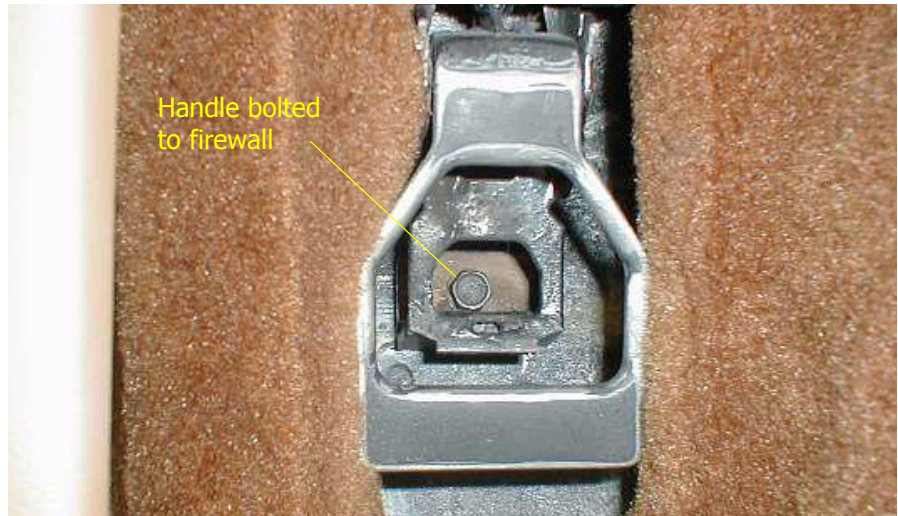
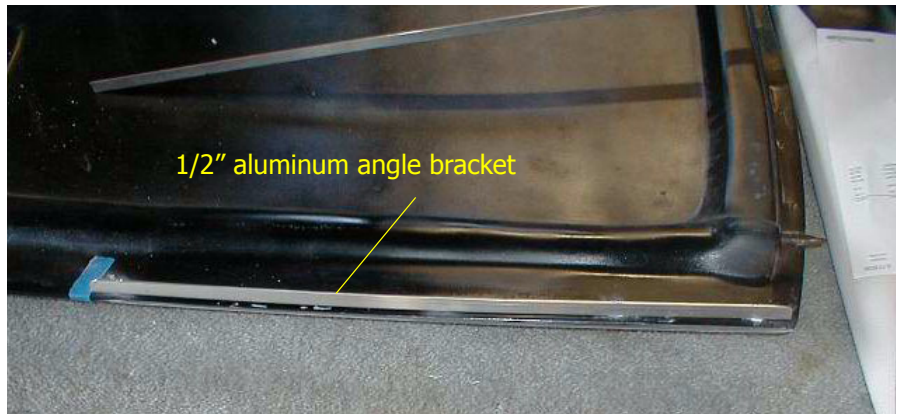


FIGURE 179. Finished roof release mechanism

Roof Seal

You need to fashion a rubber seal that will fit against the window when the roof is installed and the windows are in the up position.

This can be accomplished by fastening a 1/2" aluminum angle bracket to the inside of the roof. You will then fasten a piece of weather stripping to this bracket that will seat against the window.



You may need to adjust the angle to ensure the rubber seal is seated against the glass.

