

Lights

The types of headlights have changed over the years. The earlier models used a pop up style headlight where the later years have gone to a fixed light that uses the 300ZX headlights. We will cover both styles in this documentation.

Pop-Up Lights

Installation of the headlights involves cutting out the openings from the body large enough to be able to accommodate the headlight buckets. The buckets need to have two metal brackets bonded to the inside that will support the headlights. These brackets are connected to a bar that will be bonded to the underside of the fender and allow the lights to pop up and close.

This will involve the use of bondo and fiberglass. The best way to set up the lights to ensure consistency is to build a small jig to hold the pieces. The white bar that connects to the curved light hinges is fixed 3/8" above the surface of the lights and 1/2" back from the light. By using a piece of 3/8" plywood and securing the bracket with a two screws, you can then turn the light bucket upside down and position it 1/2" away from the bracket.

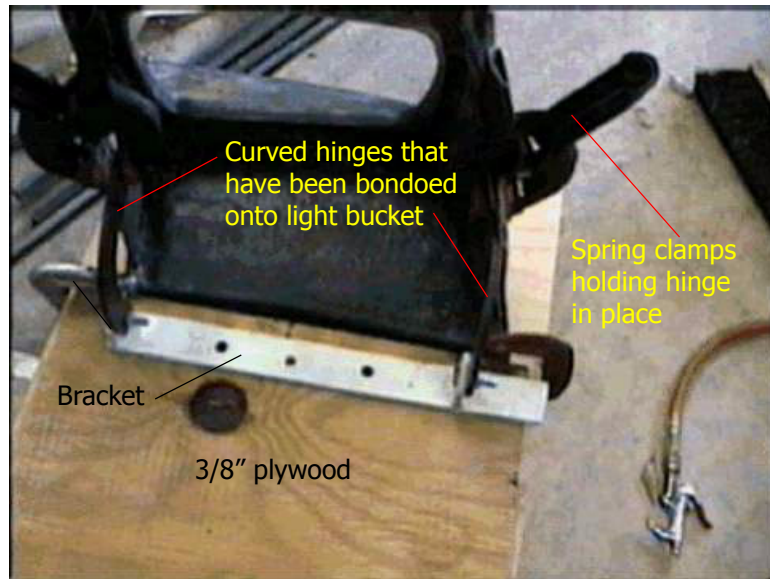


FIGURE 69. Headlight shell on jig

You can use C clamps to hold the headlight bucket in place while aligning the curved brackets. Do not use too much pressure on the clamp or you may break off the lip of the headlight bucket. It is important that you grind the surface of the headlight bucket where you will be using bondo to ensure that the waxy surface has been removed so that the bondo will adhere properly. You will need to drill a 1/4" hole in the end of the curved hinge to accommodate the bolts through the bracket. You may wish to drill several holes through the straight part of the bracket to allow the bondo to come through for a more secure bond. You will also have to bend the brackets slightly to align them properly with the bracket and the bucket. Once the proper alignment is done, apply the bondo and then use a spring clamp to hold the hinge in place until it dries.

When installing the bracket, make sure that the long tab is positioned to the outside of the car.

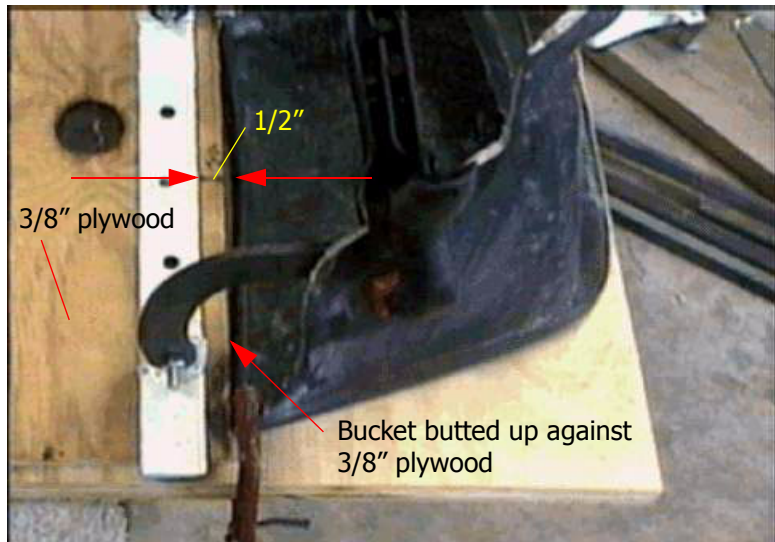


FIGURE 70. Close-up of jig



FIGURE 71. Hinge fibreglassed into place

It will be necessary to mount the bracket to the underneath side of the fender using the bondo and fiberglass procedure. Once the brackets have been attached to the bucket the headlight buckets must be mounted from the bottom. This requires the headlight openings to be large enough for the units to open up through the fender. Try to make this opening as close to the size of the bucket as possible.



FIGURE 72. Headlight test fitted on roughed up area

Once you are comfortable that the light is properly aligned, mark the location of the bracket in the roughed area of the body. Remove the headlight from the bracket and then use bondo to apply the bracket to the marked location. Once the bondo has cured, use fiberglass mat and resin to permanently secure the bracket in place. You will need multiple clamps to secure the matting in place while the fiberglass cures.



FIGURE 73. Bracket installed - view from under fender well

Once the bar has been fastened reattach the headlight bracket. It will be necessary to use a clamp to keep the headlight temporarily in the proper position while mounting the body on the frame.



FIGURE 74. Headlight installed as seen from the front

Mounting Headlights in Brackets

Utilize the existing headlight units from the Fiero to fasten the headlights into the bracket. This will require trimming off some of the existing areas on the bracket to make it fit. If the headlights in the Fiero are old, then you may wish to replace the existing headlights with new lights at this time.

FIGURE 75. Fastening headlights to brackets

Headlight Motors

Utilize the existing headlight motors from the Fiero and the brackets supplied with the kit. Remove the existing mechanical components from the headlight motors in preparation for mounting them to the IFG brackets.

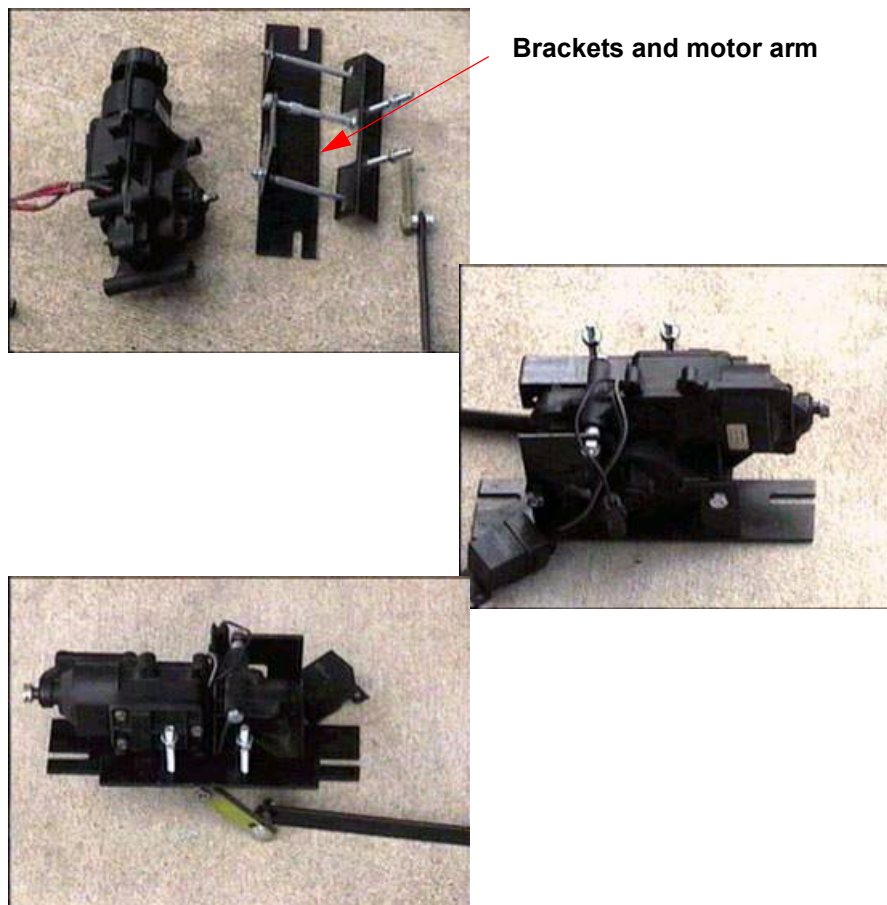


FIGURE 76. Headlight pieces and assembled unit

Fixed Headlights

The newer cars are using the fixed headlights which are actually 300ZX headlights. These can be fastened to the body directly.



FIGURE 77. Fixed lights

The 300ZX headlight has 4 mounting points. The front has two studs and the rear has two bolts. You will need some flexibility in the mounting techniques that will allow out drop the lights out after they body is mounted.

If you do install the fixed lights, please see the chapter on Wiring as there are changes that need to be made to accommodate the Fiero wiring harness.

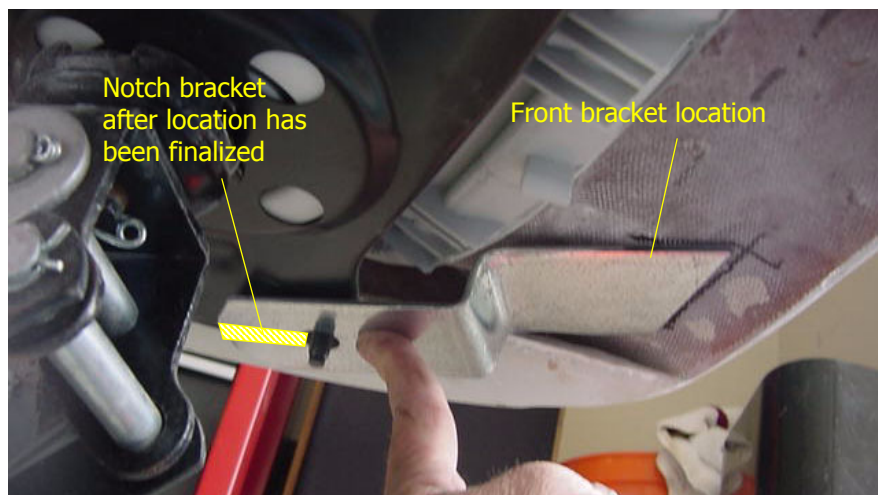
The following photos are compliments of Ron Fletcher and showed how he mounted his lights.

Test Fit

Position the headlights in the opening. A floor jack can be used to hold the light in position while you shape the brackets that will be used to secure the headlights to the body.

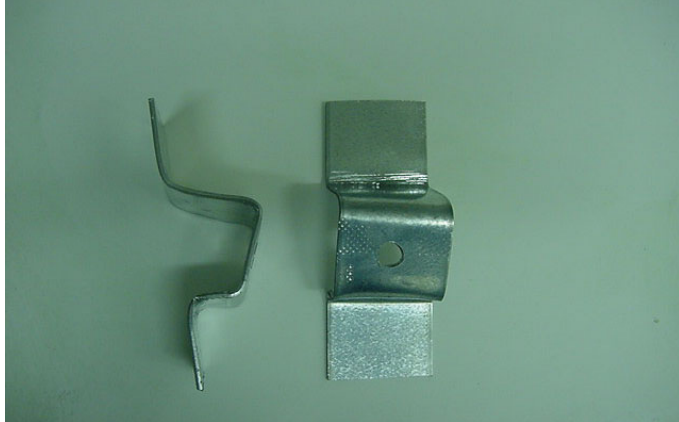


FIGURE 78. Trial fit

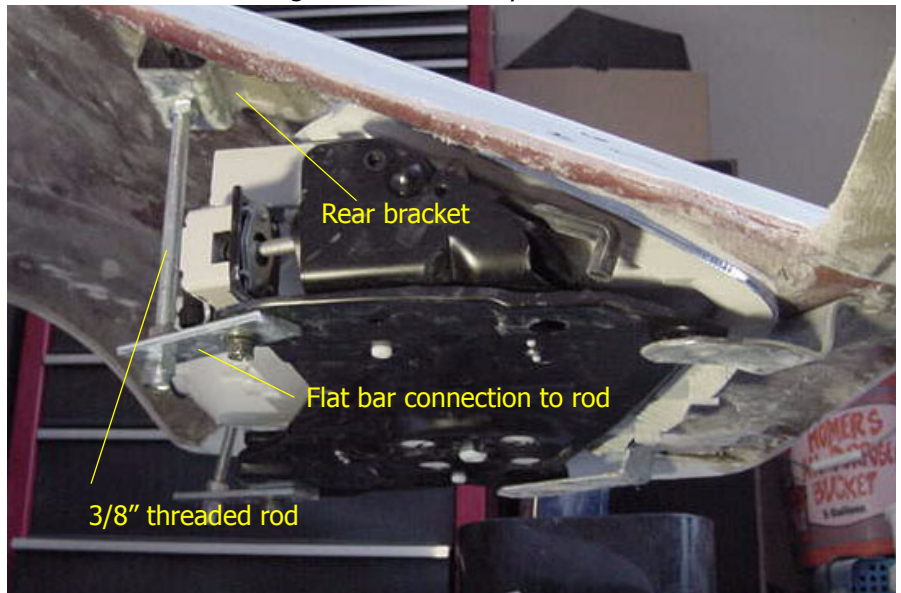


Fabricate a bracket that will be used on the front studs. The hole in the bracket is used initially to assist in the location of the bracket where it will be fastened to the body.

Once the position is set, then a slot will be cut in the bracket just wide enough for the studs to slide out. When the lights are permanently mounted, a large washer will be used on the bottom of the studs.



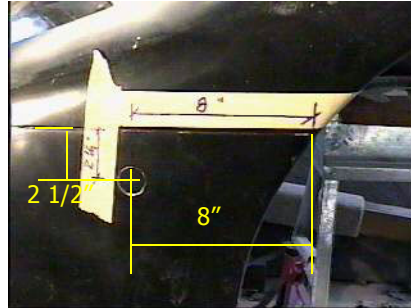
Next you will need to fabricate a bracket to hold a 3/8" threaded rod. This bracket is bondeoed and glassed to the body the same as the front bracket



You will use flat bars to connect the rod to the rear bolts.

Side Marker Lights

The side marker lights consist of a lighted reflector that is mounted through the body. To achieve a more finished look, you may wish to recess the light using the following technique.



use the body seam to measure the location of the 1 1/4" diameter hole 8" in from wheel and 2 1/2" down

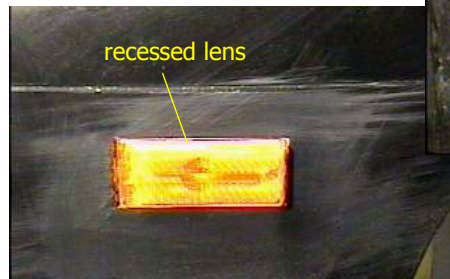
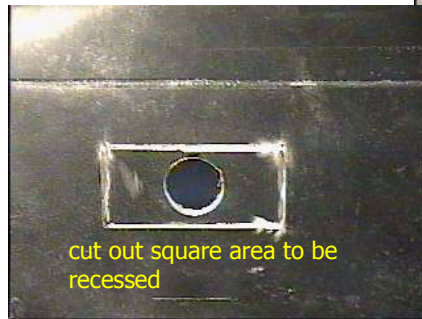
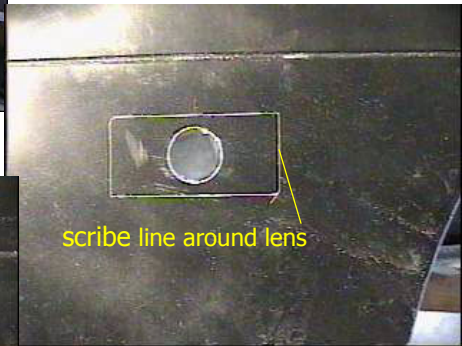


FIGURE 79. Front side marker light

Rear side marker light

The rear side marker lights are installed using the same technique as was used on the front.



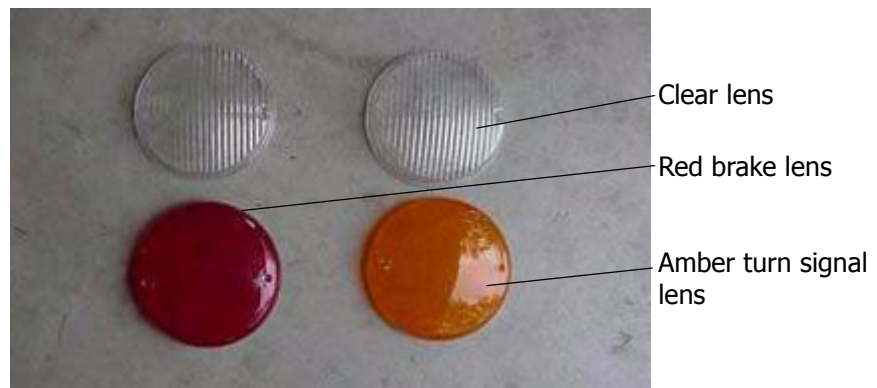
Tail lights

The kit allows you to use the existing Fiero taillights. The taillights consist of a plastic bezel, two clear lens one amber lens and one red lens.



FIGURE 80. Tail light assembly

Begin by drilling two holes through the rear of the bezels. The original Fiero taillight assemblies are glued to the inside of the body so the bulbs are visible through the holes. You may wish to paint the area in back of the bezels with a silver reflective paint.





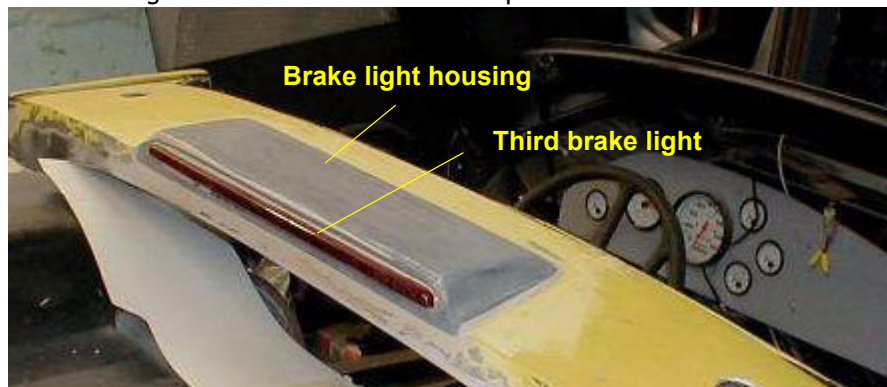
Next you will use small screws to fasten the bezel to the body. After the bezel is fastened to the body, you will then put in the clear lenses in the bezels. Next you will put the colored lenses over the clear lens. Carefully drill the colored lenses with a small bit. Use a slow speed so not to crack the lens. Once the holes are drilled, fasten the lenses with small machine screws. This will require tapping the body to accept the machine screws.

Original Lamborghini Lights

Some builders will purchase OEM lights for their cars. If you do replace the Fiero lights, see the wiring chapter on how to connect OEM lights to the Fiero harness.

Center Brake light

The center brake light consists of a separate light box that fits into a recess in the top of the roof. The actual brake light is inserted into the opening. The brake light wires are fed into the cockpit.



The brake light housing is bonded into the roof for a seamless look.



FIGURE 81. Third brake light
