

## Ducati Designs K1200LT Headlight Upgrade Kit Installation

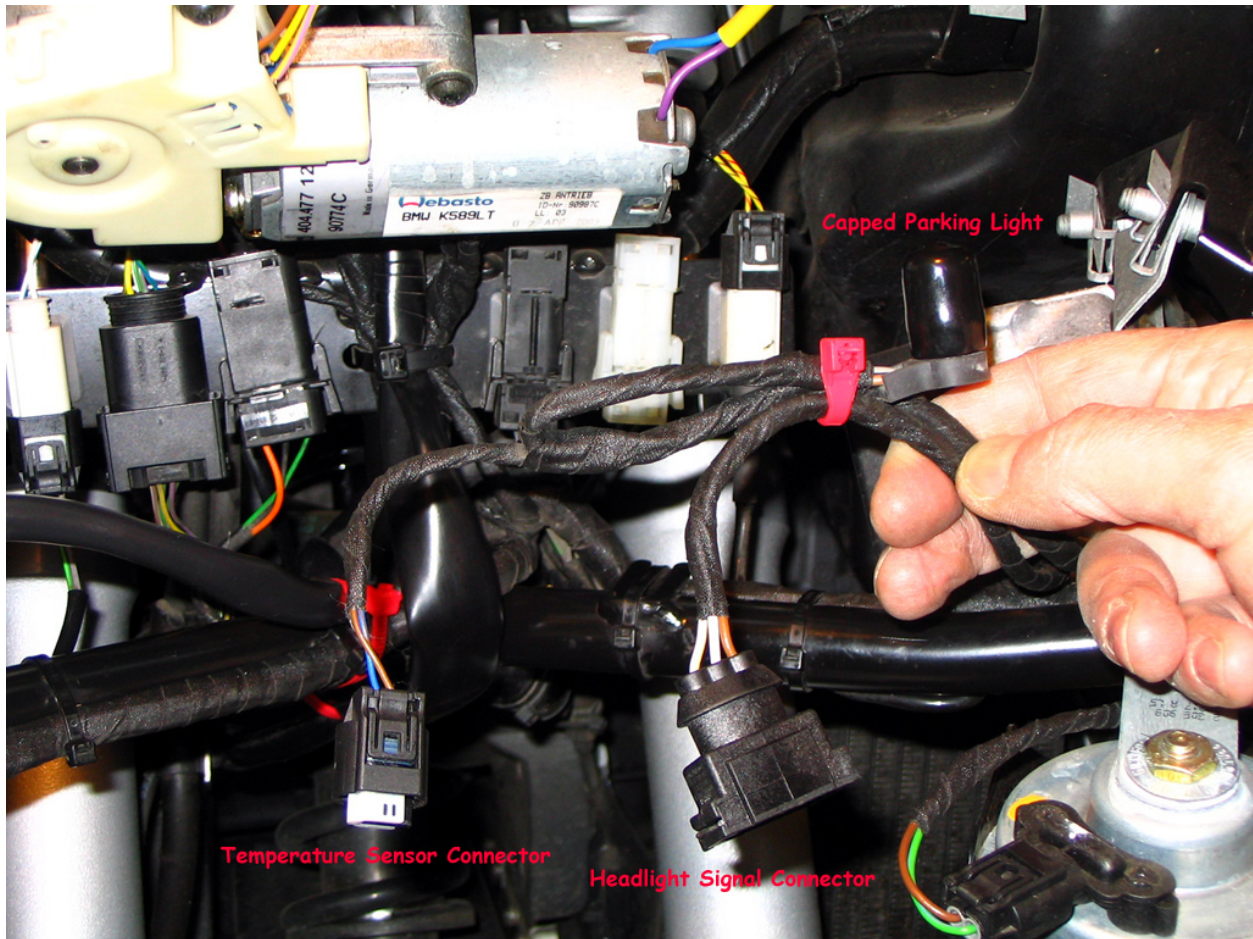
### Preparation and Fairing Removal

The front (nosecone) fairing, center (tank) fairings, windscreen, and dash cover must be removed. Removal of the seat can improve access to the battery area and make the job easier.

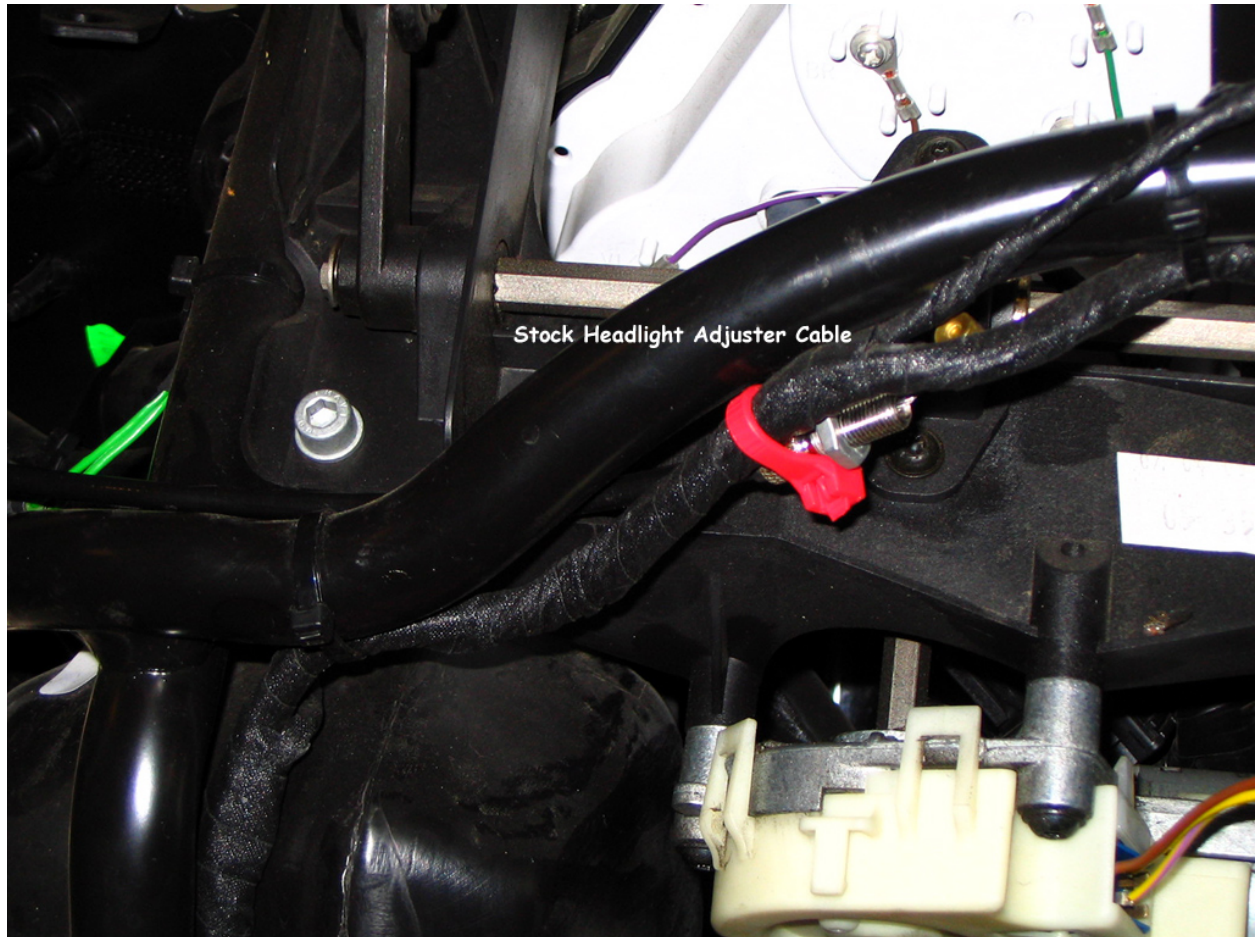
Supporting the nosecone at the front of the bike, do the following:

Carefully disconnect the temperature sensor connector at the lower-center headlight mounting screw, as well as the headlight signal connector on the back of the headlight.

The parking light needs to be removed from the headlight. Grasp the wires and pull the parking light socket (it will take some wiggling) out of the headlight housing. Remove the parking light bulb from the socket. Install the provided vinyl cap onto the parking light socket to protect the contacts, and dress the harness containing the parking light socket, headlight signal connector and temperature sensor connector as shown in the picture.



Disconnect the headlight height adjustment cable from the headlight housing by fully unscrewing the adjuster bail. Route the cable as shown and secure it to the front sub-frame dash frame using one of the supplied nylon cable ties.

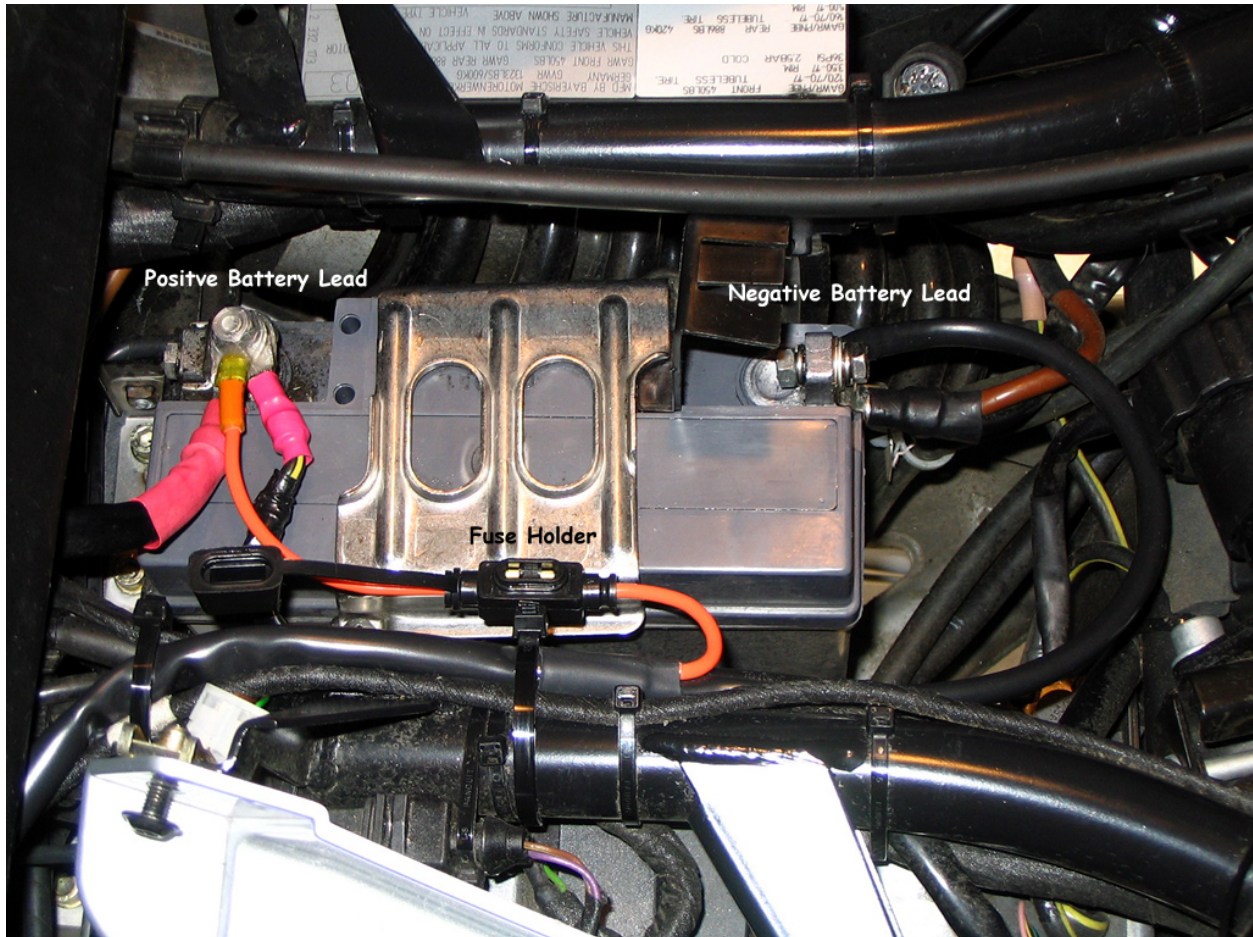




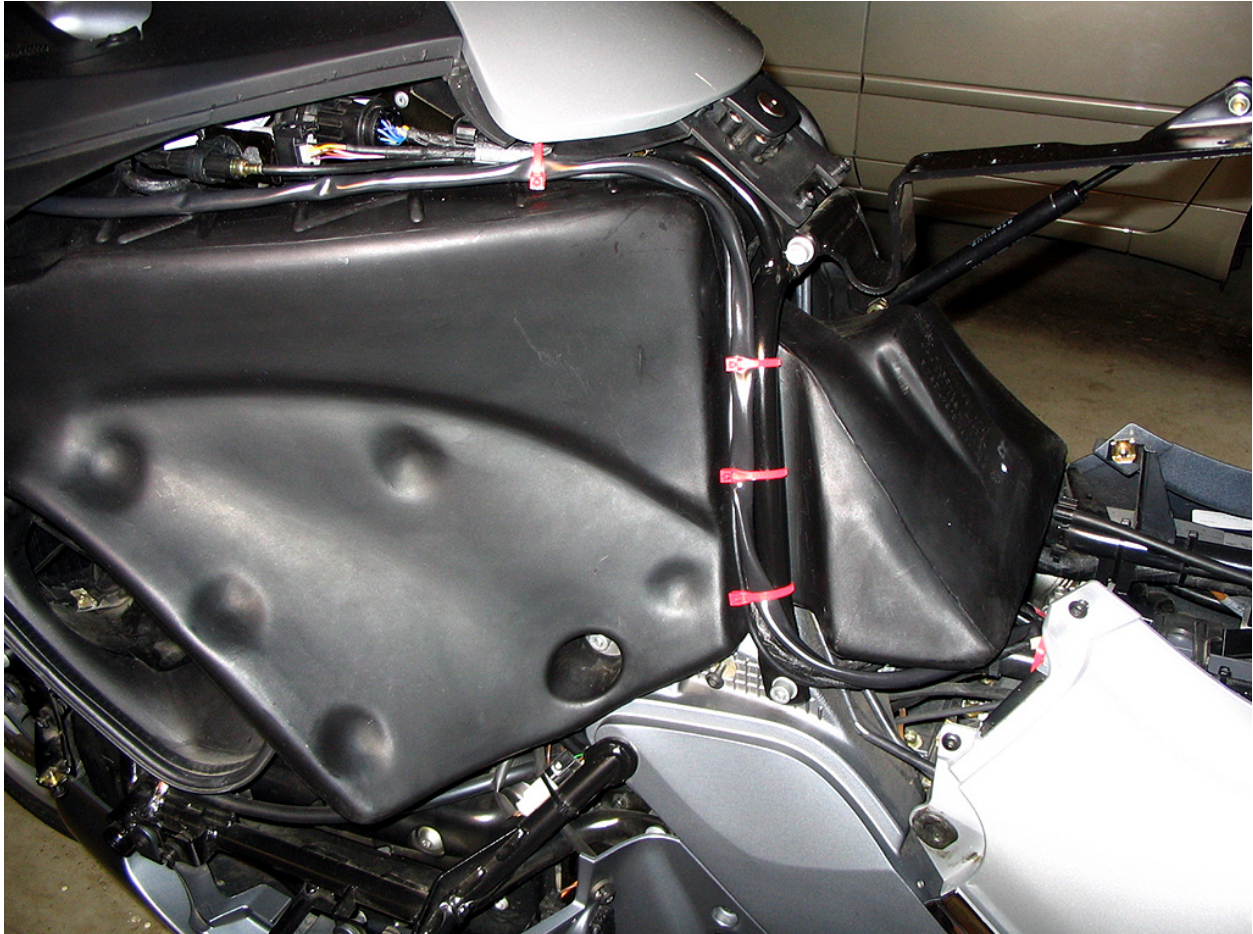
## Battery Harness Installation

The battery wiring harness routes from the battery area along the left-side seat-frame rail with the original harness, then up along the left rear quarter of the gas tank. Apply nylon cable ties as shown in the battery-area picture to secure the harness in the battery area. Connect the battery harness to the battery posts, tightening securely and using dielectric grease to prevent corrosion.

***Do not install the fuse until the installation of the headlight is completed.***



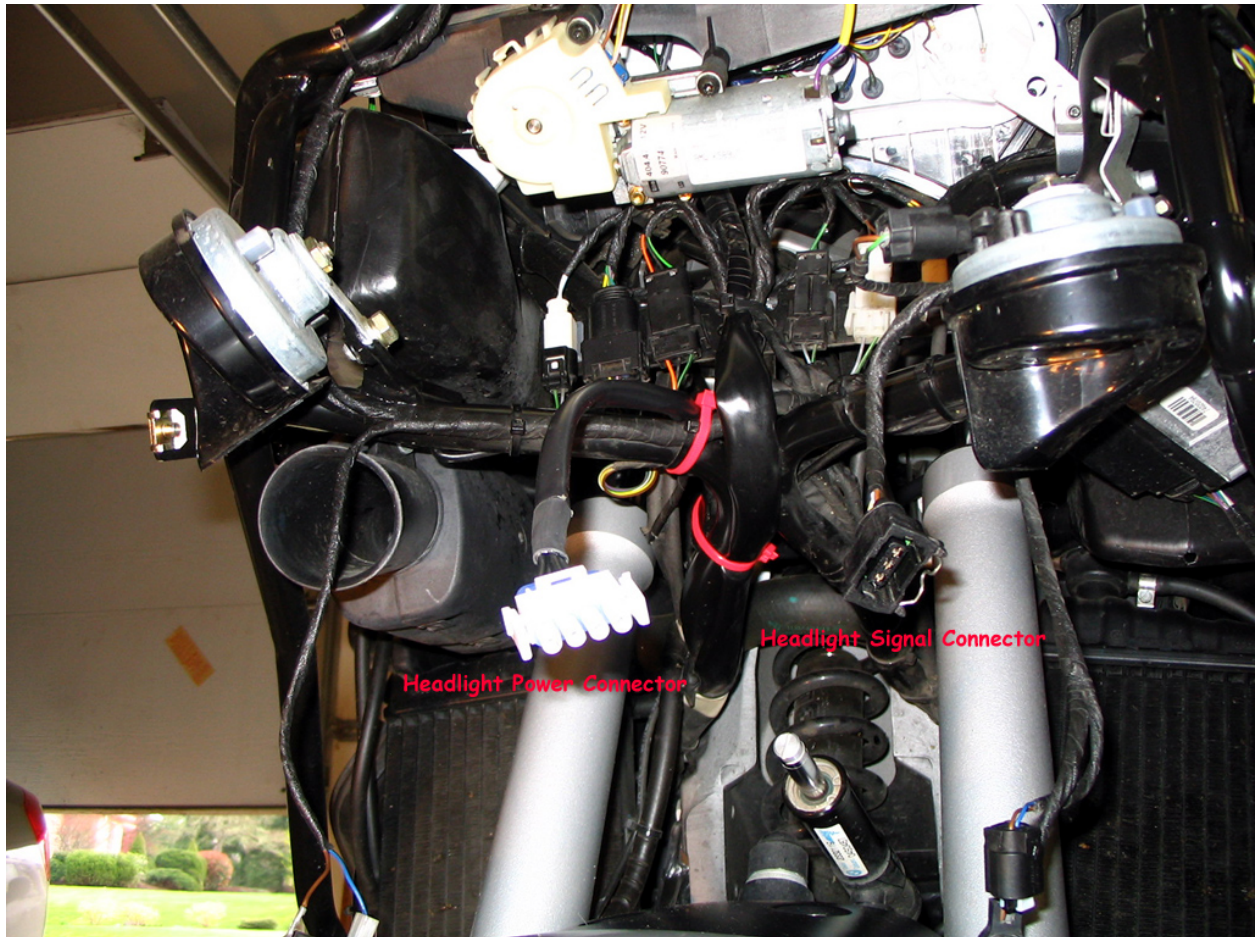
Secure the harness alongside the existing harness above the left gas tank using the supplied cable ties. Be careful not to foul the cruise-control cable junction at the top of the tank area.





From the gas tank top, route the connector-end of the harness inboard of the steering head and between the fork tubes along the front sub frame center spine, again following the path of the existing wiring harness.

Note the two nylon cable ties (shown in red) securing the connector-end of the harness to the front sub frame member. At this point, do not tighten these ties, but just leave about 8-10 inches of harness (with power connector) protruding beyond the last nylon tie. The final harness length will be adjusted and the cable ties secured after fitting the headlight in a later step.



## Headlight Removal and Nosecone Preparation

**TIP:** place the nosecone face-down in a carton to support it without limiting access to the headlight area.

Remove the original headlight from the nosecone fairing by removing the three Phillips screws and washers. Preserve these fastener sets as they will be re-used.

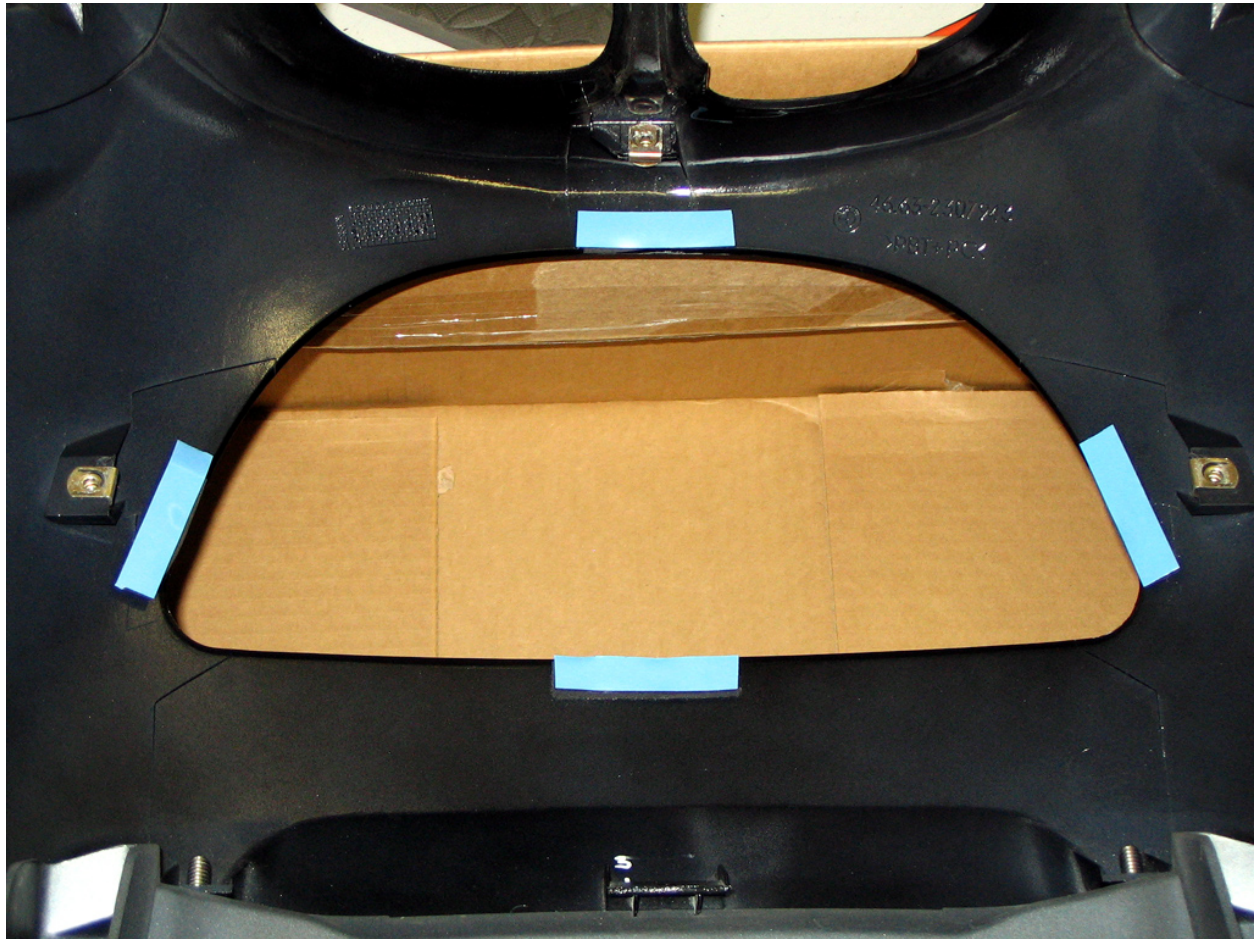
Using a small power sander, utility knife or other tools, remove the plastic mold-flash that protrudes from the back side of the nosecone. The surface should be fairly smooth and level when completed.





Four adhesive-backed foam strips are included with the parts kit. They are used to cushion the headlight nacelle and allow the nacelle to seat itself easily. The strips should be applied to the back surface of the nosecone fairing at the left, right, bottom-center and top-center of the headlight opening (shown blue for clarity). The strips should not extend beyond the edge of the opening so as to be invisible from the front.

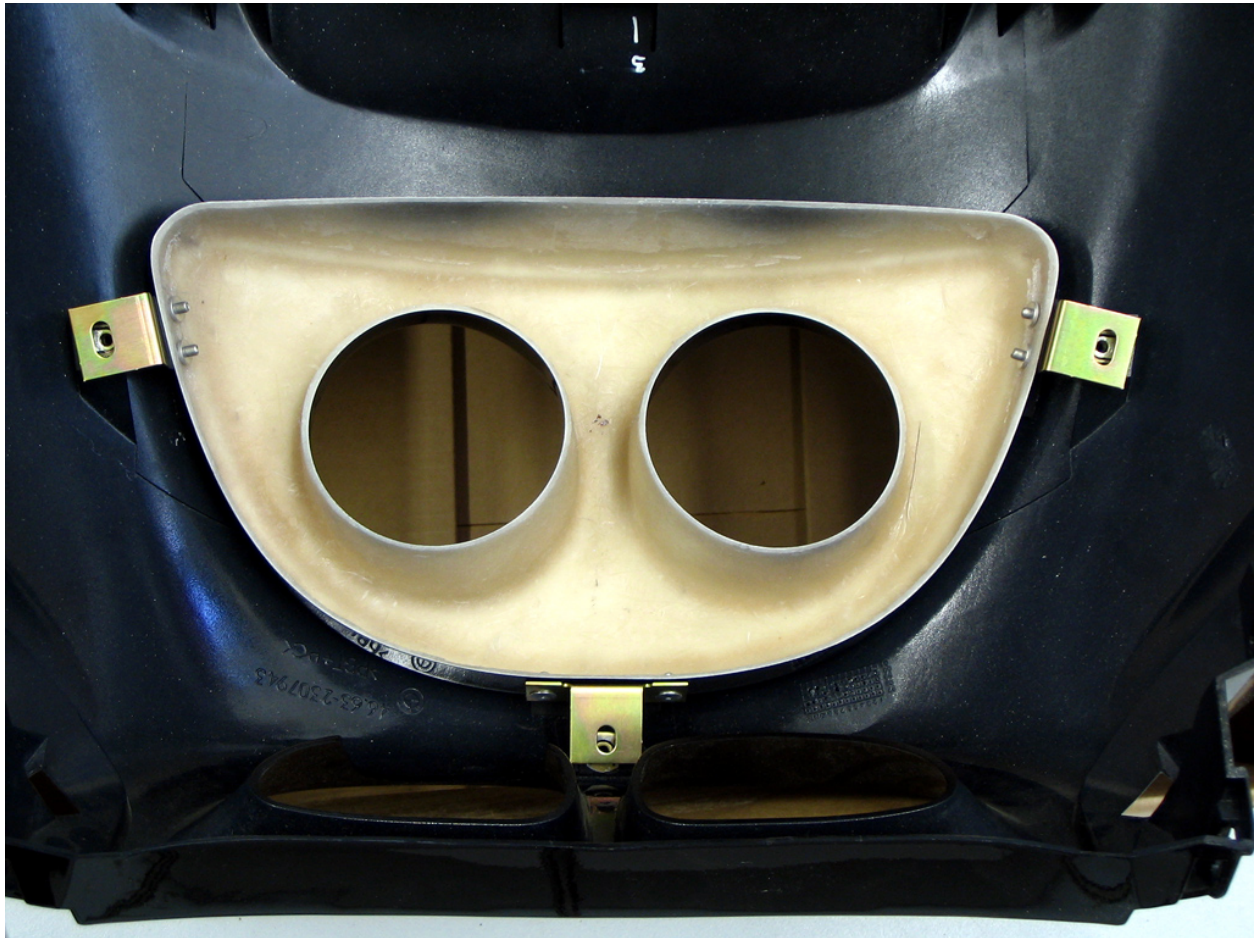
**Note:** Be careful placing the strips, as the adhesive is very aggressive and removal will be impossible without damaging the strip.



## Headlight Module Installation

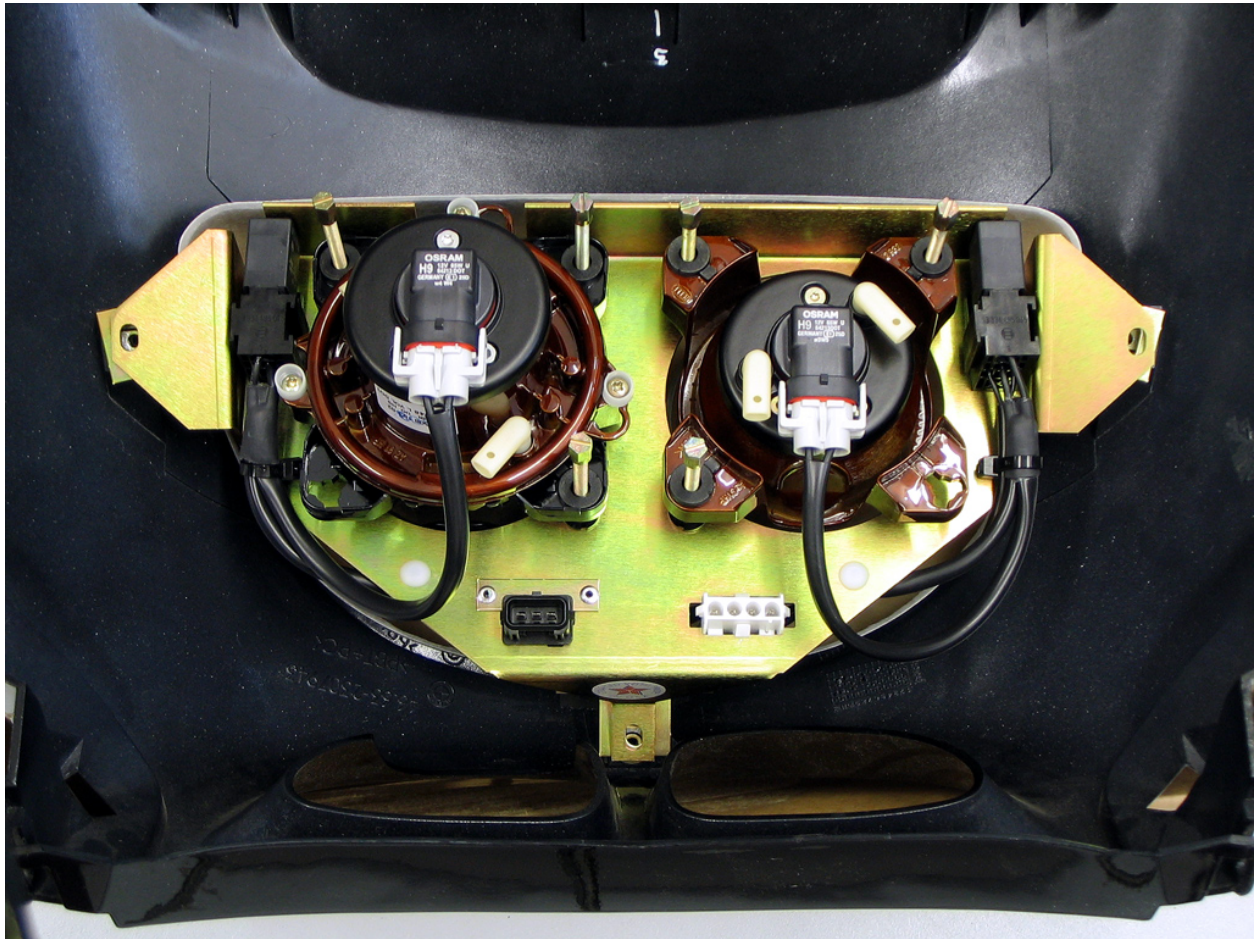
**Note:** The upgrade headlight module and painted nacelle come assembled temporarily using (3) nylon screws and nuts. Remove these and discard, as they are not used.

Install the painted nacelle in the nosecone, and approximately center it in the headlight opening. It will not sit down fully until the headlight module is installed.



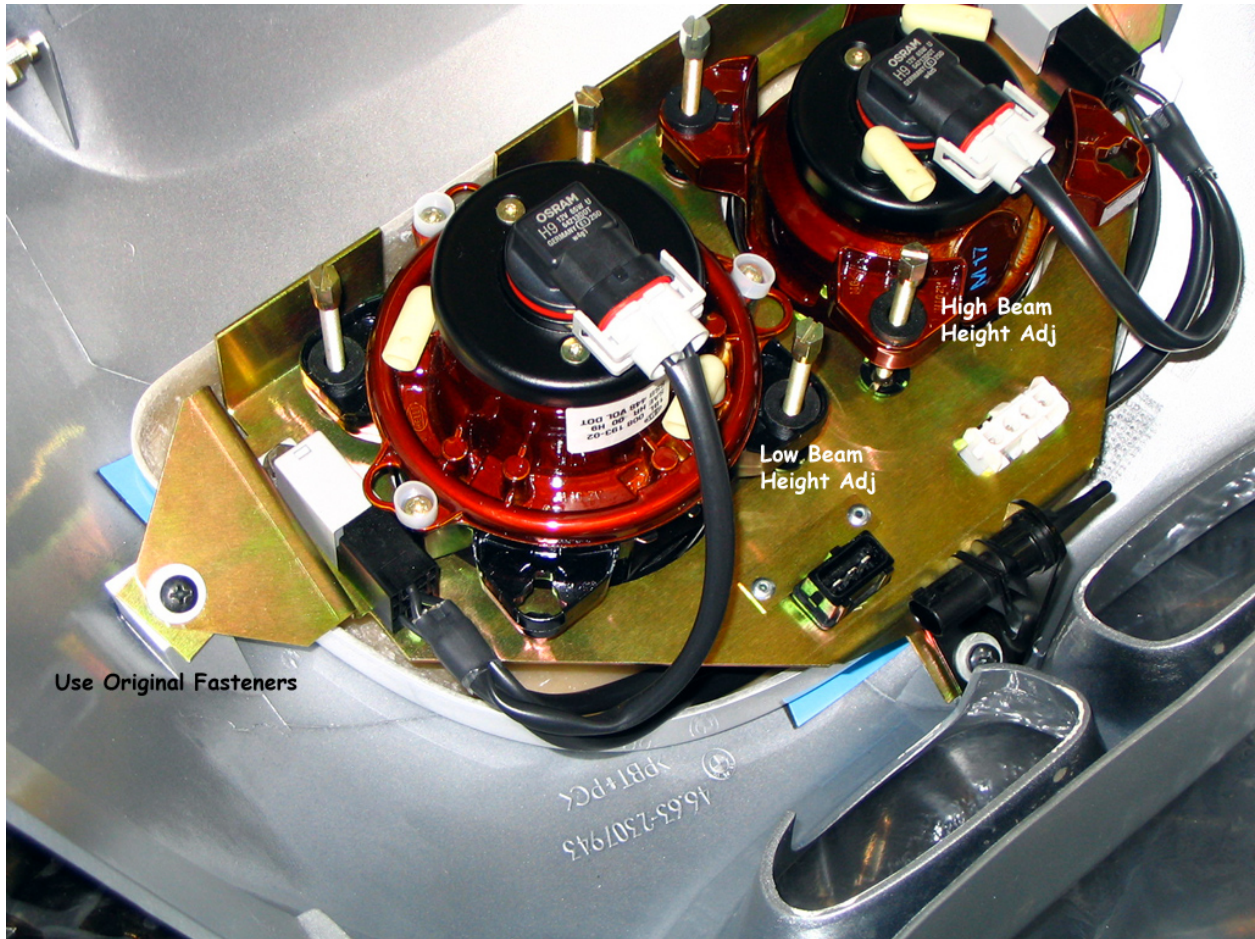


Install the headlight module in the nosecone behind the nacelle. It should fit loosely in the nacelle, with plenty of adjustment range in the mounting tab holes.



While centering the module in the nacelle, install the three fastener sets removed with the original headlight, being sure to install the temperature sensor on the bottom fastener as shown. Tighten the screws in a round-robin fashion, keeping the module centered in the nacelle and the nacelle centered in the nosecone. When it is installed correctly, the nacelle will fill the opening evenly, protrude about 1/8" all around, and the headlight modules will be roughly centered in the nacelle openings.

**Note:** Don't worry if the nacelle looks slightly askew in the nosecone opening or does not protrude perfectly evenly from the front, as this will settle in a few hours after assembly, especially after the plastic warms up a bit.





## **Bike Reassembly**

Place the nosecone fairing in place on the bike, and loosely install a few of the mounting screws to hold it in place. Adjust the routing and length of the battery and signal harnesses so they reach the headlight connectors without binding, kinking or stretching. Adjust the battery harness length and tighten/trim the cable ties.

Connect the battery harness to the headlight using the white connector. There is dielectric grease in the connectors as shipped. Be sure to seat the connector firmly so the blue interface seal is compressed and the latches are secure.

Connect the signal harness to the headlight using the black connector. Be sure it is fully inserted so the latch bail engages.

Connect the temperature sensor cable to the sensor.

## **Test the Headlight**

Install the supplied 20A fuse in the fuse holder and close the fuse weather-cap. Turn on the ignition and verify that the headlights function correctly. Low beam will light the left module alone, whereas high beam will light both modules.

Reassemble the bike reversing the order of disassembly. Double-check cable routings to avoid kinked or pinched cables.

## **Headlight Aiming**

Position the bike on a level surface about 25 feet from a wall or other surface. A rider should sit atop the bike, holding it level with one foot on the peg and his/her weight centered in the saddle. Turn on the ignition key to light the low-beam module.

Use a tape measure to measure the distance from a point on the ground directly below the low-beam module to the center of the hot-spot formed by the low-beam. Note this first measurement. Move to the vertical surface and measure the beam height from the center of the hot-spot to a point on the ground below. Note this second measurement. The low-beam module should be aimed so that this second point measures approximately two inches (1.5 to 2.5 inches is acceptable) below the first.

To adjust the low-beam module, turn only the lower-right adjusting screw on the low beam (left) module using a 7mm socket.

Adjust the high beam in a similar fashion, adjusting only the lower-left adjusting screw on the high-beam (right) module. The high beam image should be slightly higher (0.5 to 1 inch) than that of the low-beam.