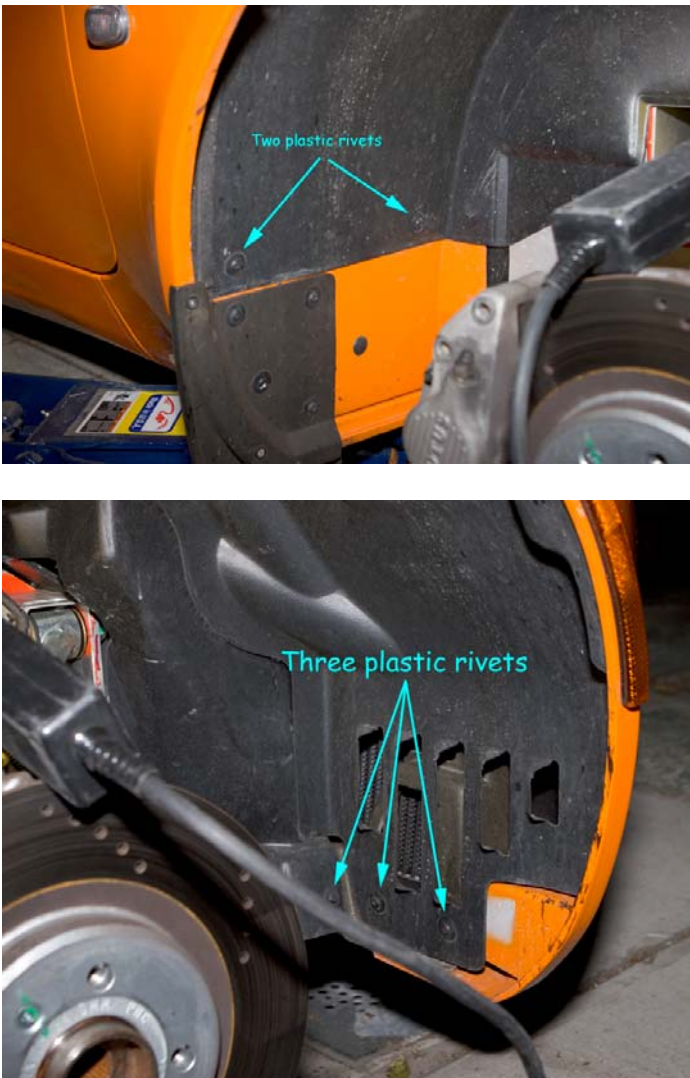


0:00	Start project with all tools at hand, no distractions and with a good work environment.
0:05	Position floor jack and break loose the lug bolts securing the wheel to the hub. Once lug bolts are loose, lift car and safely support with jack stands. Installation on the driver side is easier so it might be best to tackle this side first.
0:10	<p>With the wheel removed, you can now clearly see the fender liner. The fender liner comes in two pieces secured by two plastic expanding rivets in the back, three expanding rivets in the front on the bottom and one metal screw with large washer.</p>  <p>The top photograph shows the rear portion of the fender liner being attached to the car's body. Two blue arrows point to two small, circular plastic rivets. The bottom photograph shows the front portion of the fender liner being attached. Three blue arrows point to three plastic rivets. The car's body is orange, and the fender liner is black. A wheel hub and brake assembly are visible in both photos.</p>



To remove the plastic expanding rivets, use a Phillips screwdriver to extract the screw, but not all the way and then use the exposed screw as a handle to pull the base of the rivet out.

The front part (covering the oil cooler) is removed first. It helps to push the edge near the side reflector inwards in order to help the liner clear the clam. With the front piece removed, push the large liner towards the center of the car while, at the same time, dropping the edge that's closest to you to help remove it.

0:15

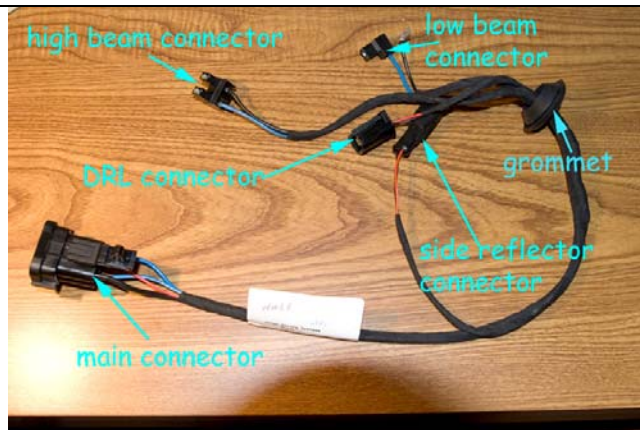
With the fender liner removed, you can see the three 5mm allen bolts securing the headlight cover to the clam. These are not extremely tight and can be loosened with finger force holding a 5mm allen socket. The top allen bolt has a large silver washer while the two lower allen bolts have two smaller black washers. Be careful with the black washers as they have a tendency to stick to rubber gasket and you might not even know that it's there and might lose it.



Once the three allen bolts are removed, you can remove the headlight cover. To do this, you pry against the rubber gasket on the headlight cover on the outside of the car towards the front of the car. Once the cover slides forward an inch or two, you can guide it past the low beam projector and the high beam reflector.

0:20

With the headlight cover removed, disconnect all connectors leading to the wire harness. The high beam connector simply pulls off the bulb; the low beam pulls off as well except that there are two separate terminals. The tiny bulb in the high beam reflector also has a connector where you push in the middle to release the lock as you pull the two halves apart. This is the most difficult connector to get at, imo. Now that all the connectors are removed, squeeze the circumference of the grommet towards the center to push the grommet through from the headlight side to the inside of the car. Disconnect all connections in the fender area: the side reflector light and the wire harness to the car itself. You can get an idea of how to release this connector by examining the custom wire harness included in this kit.



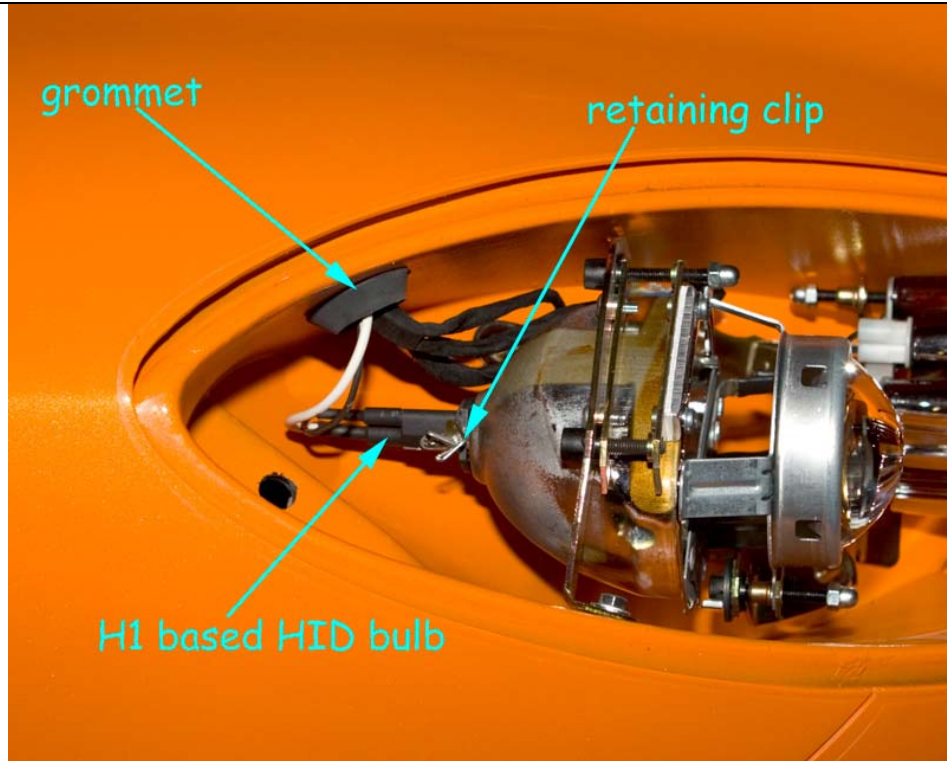
Release the retaining spring holding the stock halogen bulb to the low beam projector and remove the bulb.

0:25

Perhaps the most difficult part of the project, pass the HID bulb connectors through the rubber grommet from the headlight side of the grommet to the under fender side. You can leave the protective housing on the HID bulb to avoid any skin contact with the bulb. For the XTec kit, cut away/remove/discard the rubber grommet (we'll be using the factory one) and remove the plastic wire loom. Having someone assist you will make the job much easier (two people helping will make it cake). I've found a technique using two or three small Phillips screwdrivers (where the shaft is 2 – 3mm in diameter) to push them through the grommet next to the wire harness (don't nick the harness) and then pulling the screwdrivers away to stretch the opening of the grommet to allow you to pass the connector through the opening. It's tough, but manageable. **IMPORTANT:** pay attention to which way you're passing the connector as you want the HID bulb to end up on the headlight side and not the other way around!

0:35

Remove the protection from the HID bulb and pass that through from underneath to the headlight area. **BE CAREFUL NOT TO TOUCH THE BULB** as you pass it through. The HID bulb is quite long and it's a bit tricky to maneuver it into the slot for the low beam projector. Take your time, but it's definitely possible. Once the HID bulb has slipped into the slot, make sure the base is fully seated into the low beam reflector. There is a little nub in the base of the HID bulb and see that fit firmly into the base of the reflector gives me acknowledgement that it's properly installed. The spring retaining clip readily clips to one side of the base, but I found that the other side is too shallow as the plastic base of the HID bulb is rather thick (this is true for all H1 rebased HID bulbs I've seen) and the clip will readily pop loose...not good. Thus, I suggest hooking the readily hooked end and then pulling the other side up and over with the needle nose pliers so that it crosses over the readily clipped one. If you do that, the bulb is going nowhere and the spring clip will not pop out accidentally.



Now pass the remaining connectors through the opening. Reconnect the high beam and the DRL (for lack of a better term) connector. The stock lowbeam connector can be left dangling as it will not be powered (the custom wire harness does not feed power to the old lead). You can, however, attach the grounding spade to keep it out of the way.

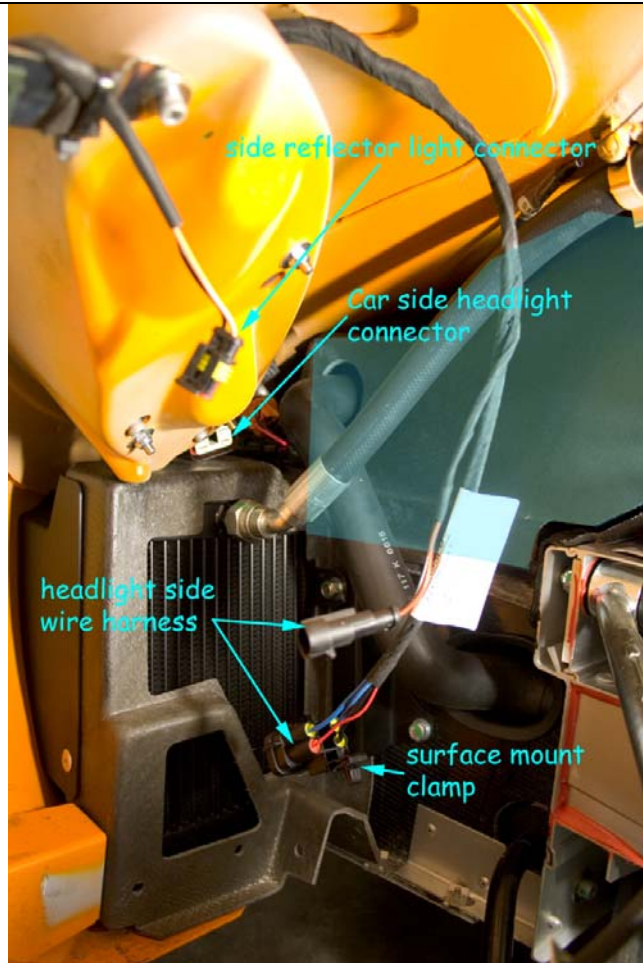
With the HID bulb installed and secured and all the other connectors reconnected, gently push the grommet through until it pops through and seals.

Clean the projector glass if you touched it and if you have access to compressed air, blow out the headlight recess area. Refit the headlight cover and secure with the 5mm allen bolts.

0:50

Place the ballast on the radiator shroud (shaded in blue in the picture below) to determine the final location.

For the driver side, there is a lot of space and you can orient the ballast such that all wires going in or coming out of the ballast will point towards the floor first before turning to go up. I do this out of a force of habit thinking that if water were to accumulate, it would collect at the bottom of the U-bend in the wire rather than in the ballast. There really is no water that gets behind there, but if you're going through the effort...might as well, right?



For the passenger side, I was only able to attach with the wires exiting towards the front of the car.



Use a ¼” drill bit to make a hole. While I don’t believe there’s anything behind there, try to check to make sure and don’t push like a monster on the drill. Just apply enough force to let the drill do the work and you’ll break through rather lightly.

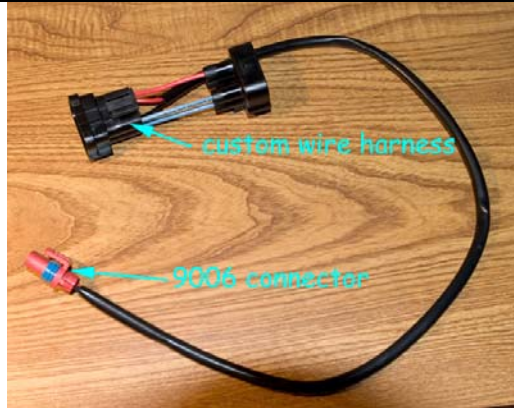
Push the plastic expanding rivet bases in place and then push home the locking pin.

Another view showing the plastic rivet:

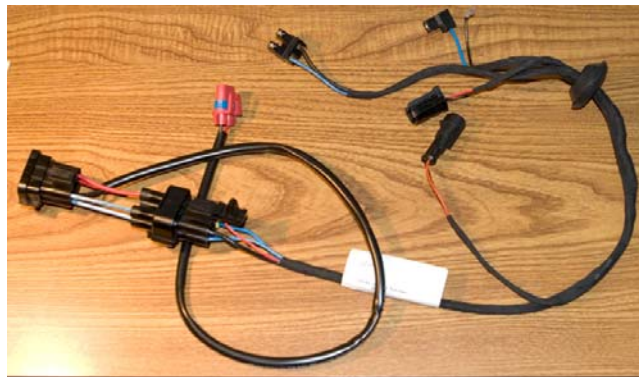


0:55

With the ballast secured, connect the custom wire harness.



You can transfer the anchor point from the factory harness to the custom wire harness because it gets crowded near the turn signal by the connector. Plug the car side connector into the custom harness and the custom harness to the headlight harness.



Test fire the lights and if all went well, zip tie the excess wires to keep things tidy.

1:10 Put that side of the car back together.

2:30 Repeat on the other side of the car.