

# MUSTANG PROJECT

**INSTALLING THE MUSTANG PROJECT SHELBY SEQUENTIAL CONVERSION KIT  
ON YOUR 64.5 - 66 MUSTANG**



“Read these instructions carefully before installing our Taillights!!!

## Components included in your kit:

Included in your Shelby LED Taillight Conversion kit are two Shelby taillight panels, a flasher module, connectors and gasket material.

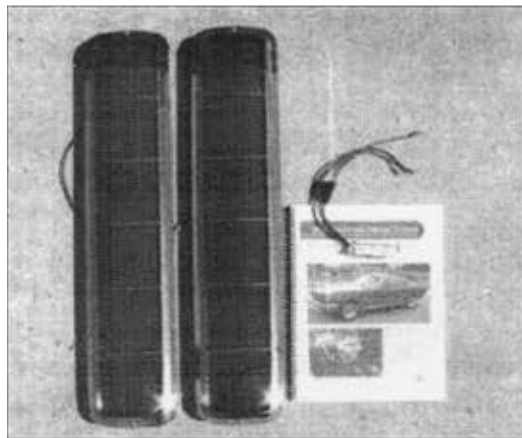
The taillight mod-

ules can be installed on either side of the car so there is no concern about which side which panel is on which side.

Ensure that the key is out of the car or

that the battery ground cable is removed to avoid short circuits during installation which can damage wiring or fuses.

First we will install the flasher module.



## Installing the flasher module:

Locate the existing flasher can by turning the key to the accessory position and activating the turn signals. Listen for the click of the flasher can.

The turn signal flasher can is usually located on the drivers side of the car near the firewall under the dash on the emergency brake side. This position may change from car to car so listening for the click of the flasher can is critical. Some cars also have emer-

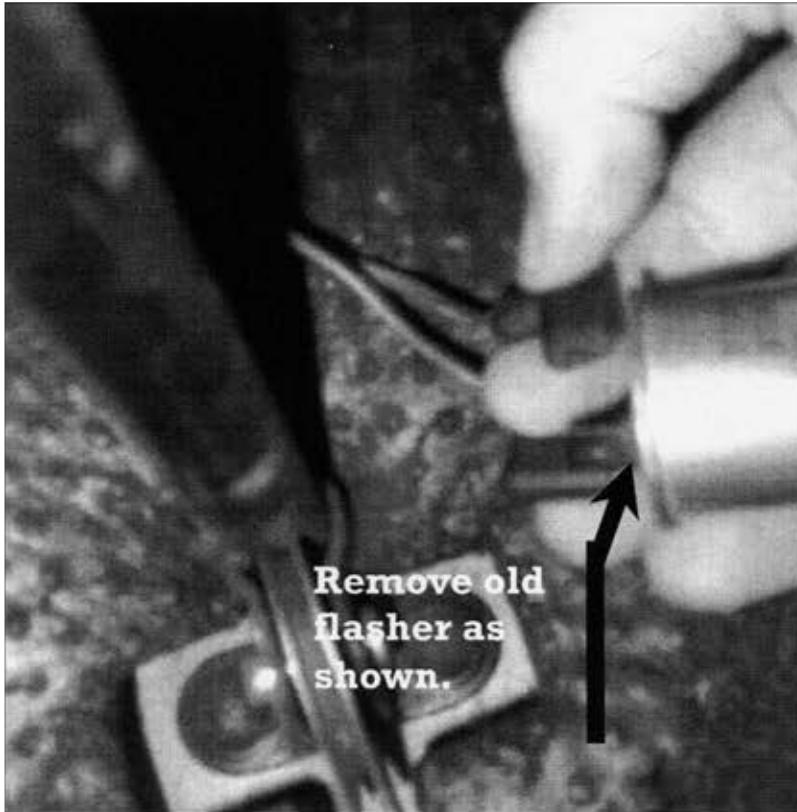
gency flasher systems which utilize a similar flasher can.

Once you locate the correct flasher can turn off the key or removed the battery ground cable.

Replace the can by connecting the car's orange or red wire to the RED wire of the flasher modules. Also connect the cars green wire to the flashers modules GREEN wire.

Connect the black wire from the flasher module to a convenient metal grounding point under the dash. Usually a mounting screw is best. Make sure that this screw is attached to the metal part of the dash board.

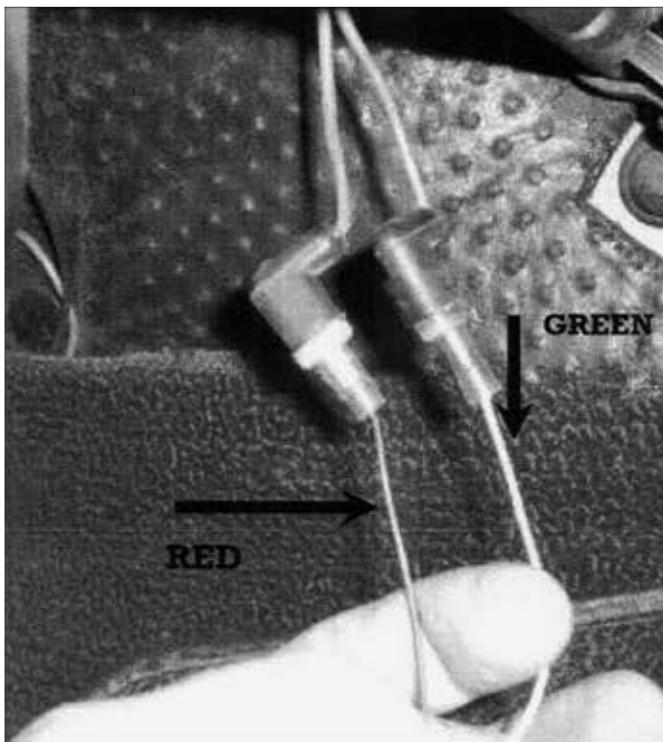
Be sure and wrap some electrical tape around the connections to ensure that there are no shorts once the flasher module is hidden under the dash .



“Simply unsnap the old flasher module which is located near the firewall on the driver side of the car...”

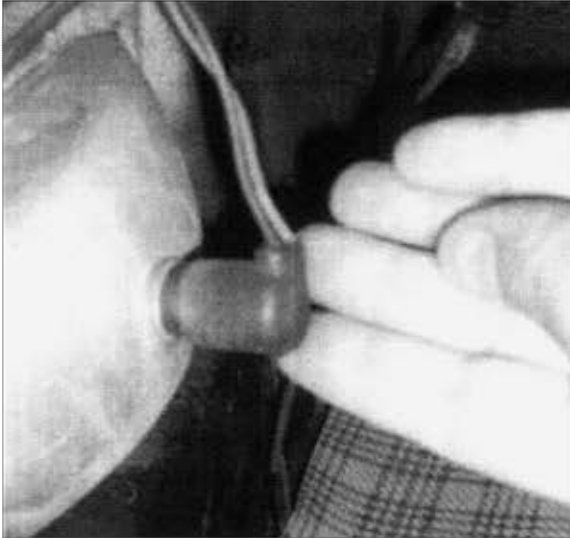
**“Secure the black wire to any convenient grounding screw which is attached to the cars chassis...”**

“Tuck the LED flasher module under the dash in any convenient place or inside of the driver’s side kick panel...”



Be sure and wrap each connector in electrical tape before final installation of the flasher module.

## Checking for proper fit:



The double sided tape is only intended as an aid in proper alignment it does not actually hold the panel in place.

Check for proper alignment. If the panel cannot be adjusted perfectly horizontally then the mounting holes will need to be filed open slightly.

In many cars these holes were not properly punched at the factory or have become clogged with paint or other materials. Make sure that the panel sits flat and can be adjusted to align correctly.

Start by removing the connector boots or by cutting the wires close to the housing if your car does not utilize boots.

Remove the existing taillight housings by removing the 4 nuts which retain the housing from the inside of the trunk.

Retain the nuts. These will be used during the installation of the light panels. If you are missing some of the nuts you can easily obtain these at any hardware store. They are #10 X 32 nuts.

Next we will test fit the light panels. Without removing the backing tape of the double stick alignment pad insert the 4 mounting studs through the existing mounting holes.



## Apply Panel Gasket:

Apply the provided gasket material to each metal panel as shown in the photos below.

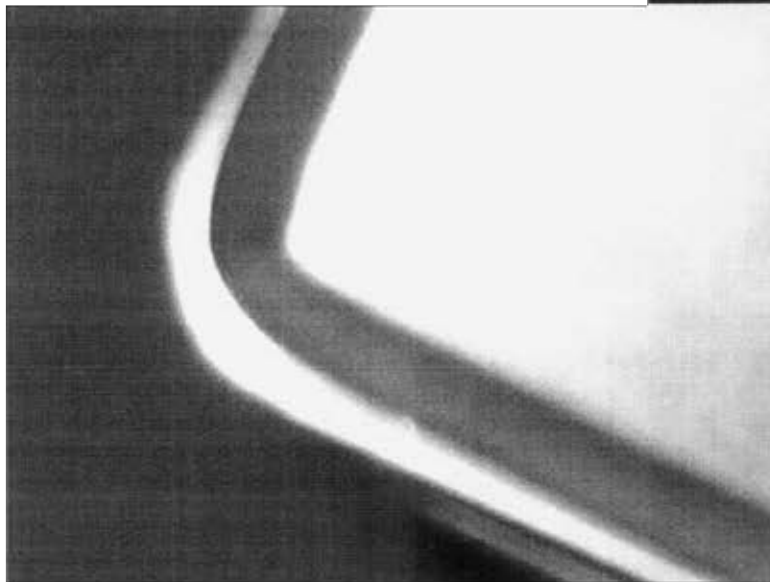
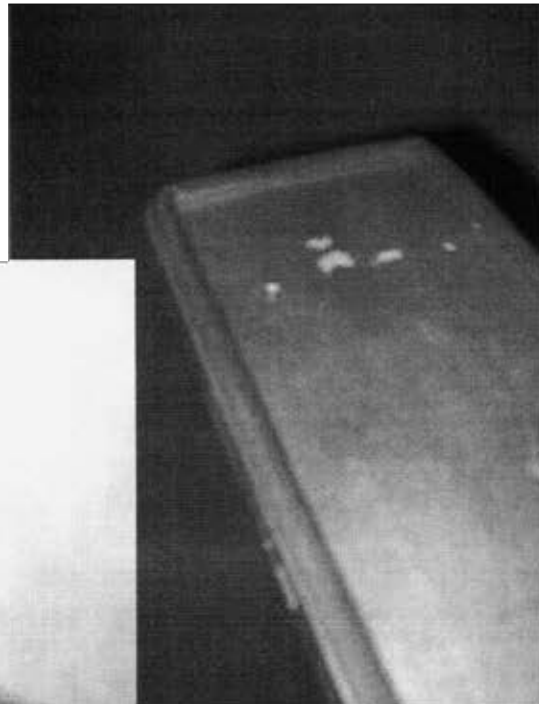
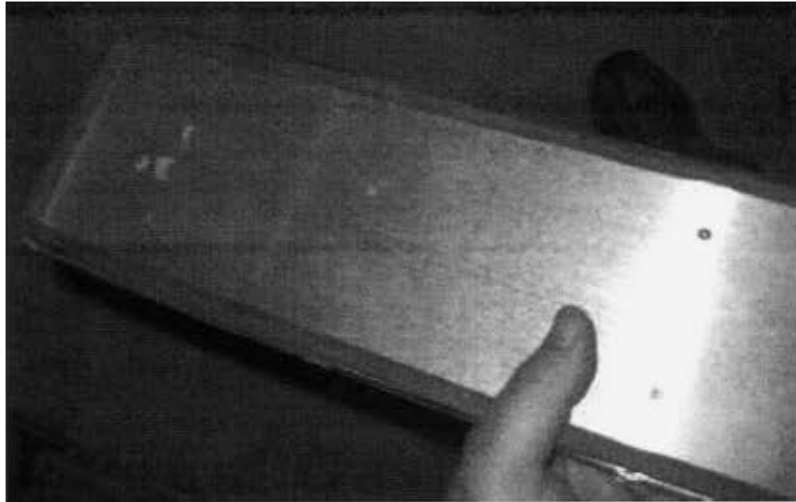
For best adhesion clean the metal surface with a moist towel wetted with Windex or similar degreaser. Let dry completely before applying the gasket material to the metal panel

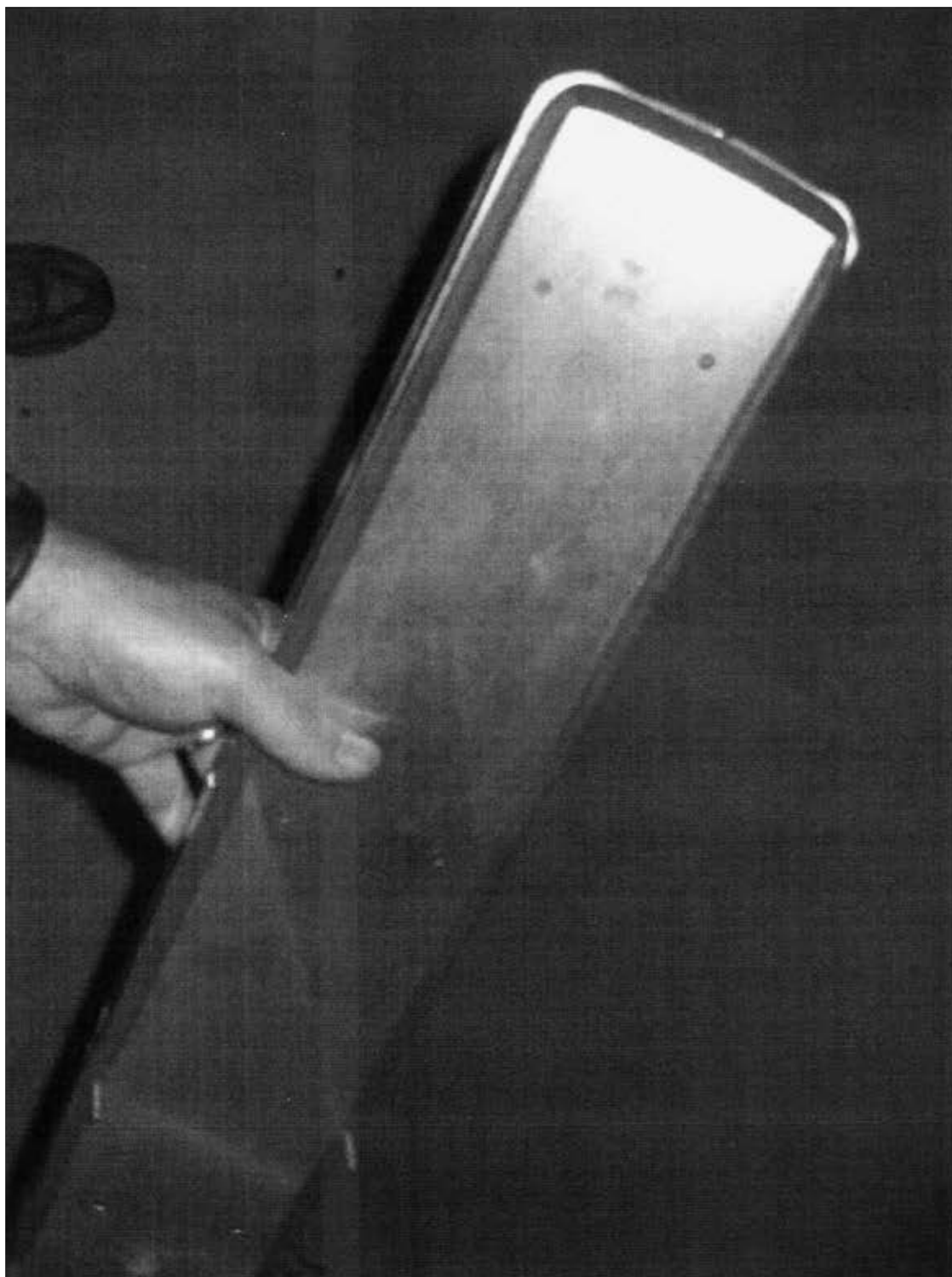
Remove the wax paper backing from a small section of the gasket material and apply to the metal base plate along the outer edge. Place the gasket about 1/8 inch from the edge of the panel.

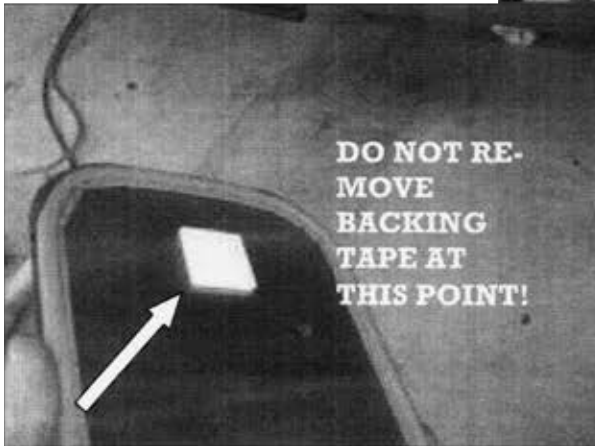
It is best to use one continuous piece of gasket material so do not cut the material until you have applied it to the entire circumference of the metal panel.

17 feet of gasket material are provided. The material is flexible and can be bent around the corners as shown below.

Press firmly on the gasket material to ensure good adhesion. The material will lie between the car tail panel and will be compressed when the panels are attached to the car to ensure no water can enter the trunk area of the car.



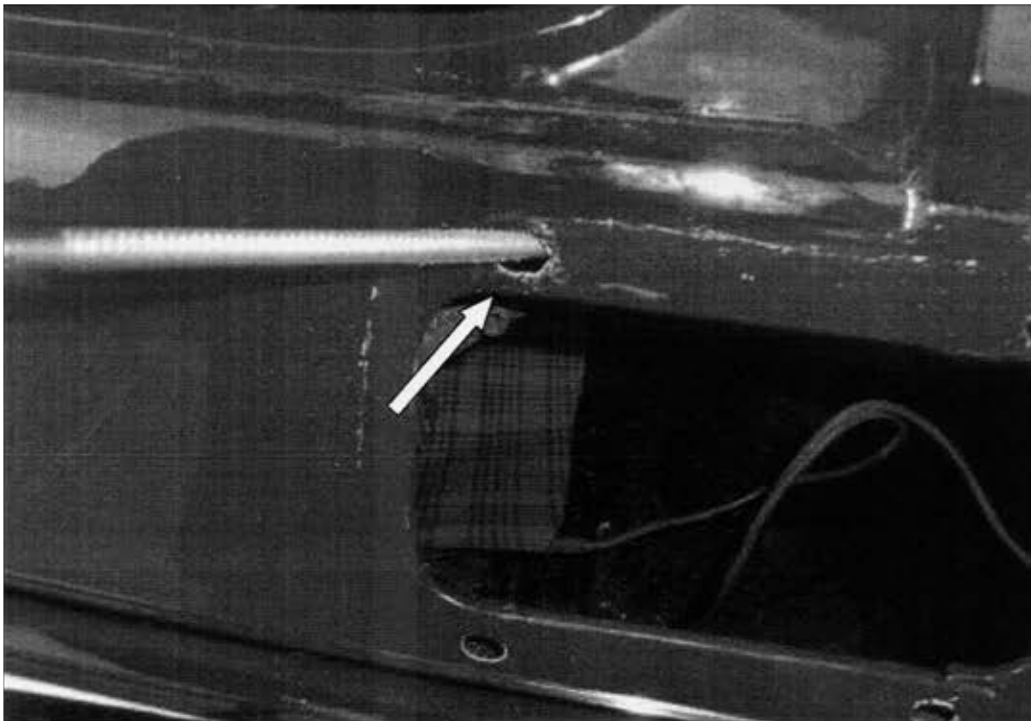




DO NOT REMOVE  
BACKING  
TAPE AT  
THIS POINT!

A round file will work in most cases. A DREMEL tool with a cutting bit can open more deformed holes in seconds.

Do not over enlarge the holes but test by trial an error if necessary to ensure that once the panel is installed it can be aligned correctly.



## Connecting the Wiring:



**Remember to check our web board for new installation tips!**

[www.mustangproject.com](http://www.mustangproject.com)

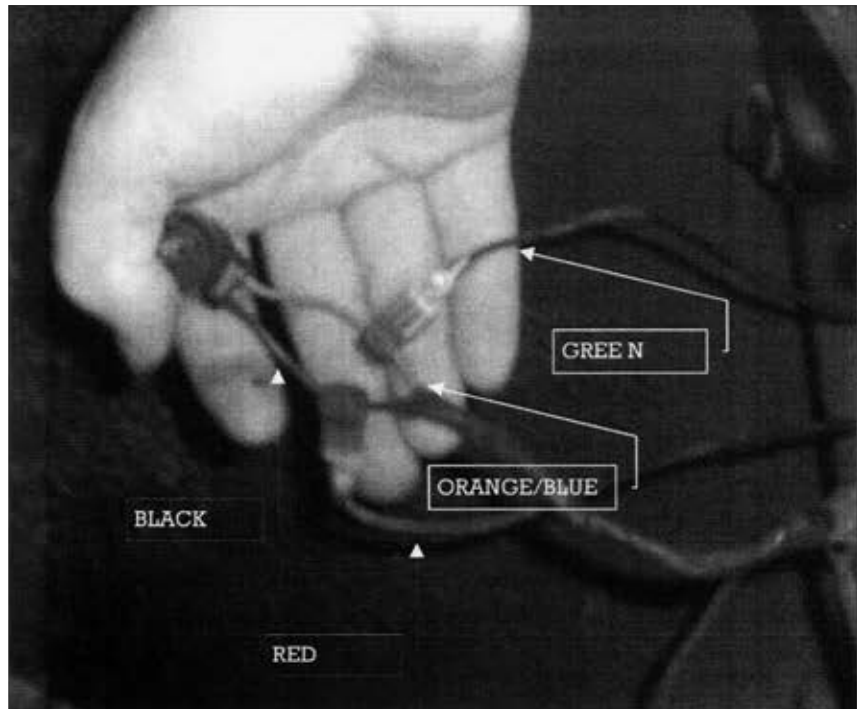


**Before securing the panel to the car be sure and connect all wiring and test your new taillights!**

Remove the existing taillight housings and test the LED light panels in your car before installing the fiberglass panel.

**Connect the taillight wiring as shown. On each side of the car will be two wires formerly entering the housing connector boot or the housing socket directly.**

Clamp on the provided connectors using pliers to harmlessly tap into the ex-



isting wiring.

Ensure that the Red wiring exiting each light panel connects to the black wire on that side of the car. The colored wire from the car's wiring harness will con-

## Connecting the Wiring:

nect to the GREEN wire exiting from the light panel.

Now rest the panel with its mounting studs in the holes but do not tighten and do not remove the backing paper from the double stick tape.

The 64-66 Mustangs have ground wires on each side of the

tail light panel. These ground wires have round lugs which should be placed over one of the studs on each side of the car and secured with one of the mounting nuts.

Test the turn signals to ensure proper operation.

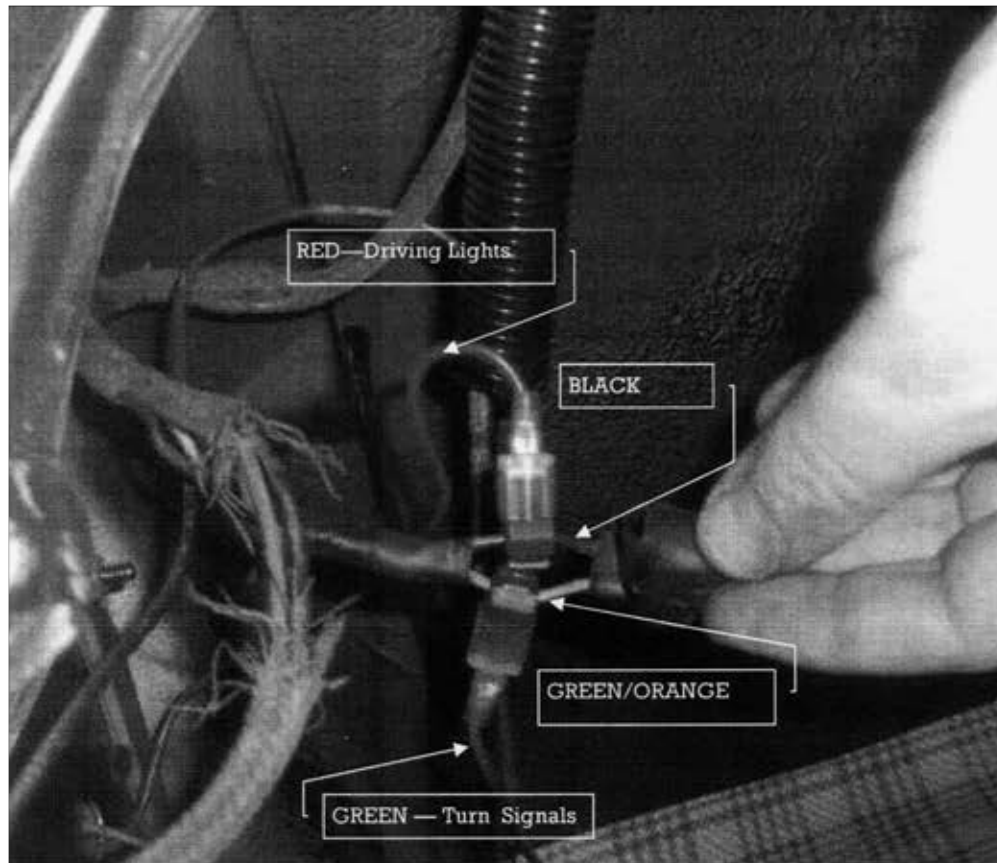
Test the turn signals to ensure proper operation.

**The mounting studs from**

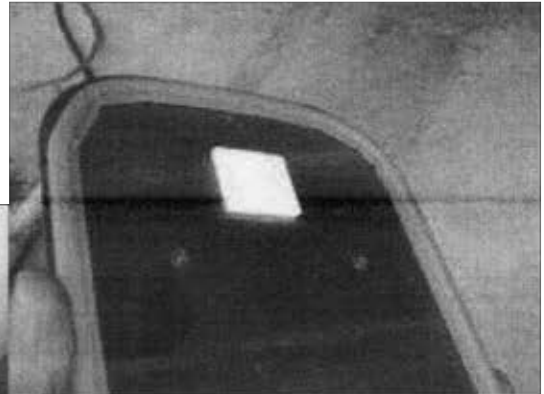
**the light panel must be contacting the bare metal of the chassis in order for the panels to work.**

Check for proper brake, turn and taillight operation for each panel.

“Test the taillights **BEFORE** securing the light panels to your car!”



## Installing the Light Panels:



After the taillight panels have been tested and you are sure the wiring is properly connected it is time to complete the mounting of each panel.

Clean the car' taillight mounting area

with a mild degreaser like alcohol to make sure that the taillight mounting surface is clean and free of oils or dirt which would prevent the double stick tape from sticking.

Now remove the

backing paper from the double stick tape and carefully align the panel with the back of the car. But do not press the tape against the car surface.

When you have aligned the panel properly press the panel towards the car so that the double stick tape will adhere.

Screw finger tight one of the #10 nuts to the mounting studs and verify that the alignment is proper.

It is possible to realign the panel by pulling gently away from the car on the panel to detach the tape. Only do this if the alignment is off for some reason.

You can now attach and tighten the 4 nuts on the light panels mounting studs.

**DO NOT over tighten the nuts!.**

Only tighten until the seal on the back of the taillight panel is compressed to about half of its original height.

The panel should mount evenly so that the seal is compressed over the entire length of the panel

Over tightening the panel may warp it. The panel will be very secure once all 4 nuts are in place and tightened evenly.



## Final Installation

The following pictures show a proper installation. Note that if there are any grounding wires under some of the existing taillight housing nuts you should re attach these under any of the mounting stud nuts

on the taillight panel.

### **REMOVING YOUR PANELS:**

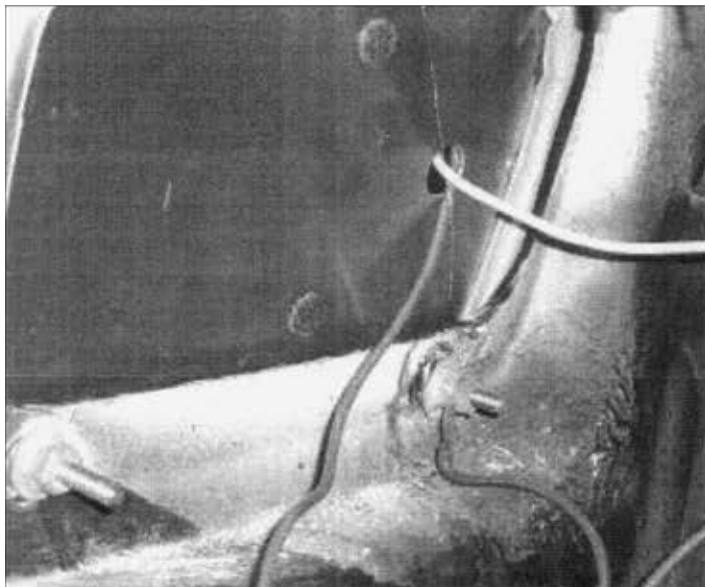
If for any reason you want to remove the panels follow the procedure below:

- 1) Loosen and remove all 4 mounting nuts.
- 2) Pull out the panel at the stud end from the back of the car enough to clear the mounting studs.
- 3) Now move the



## Final Installation

panel up and down a few inches to disengage the mounting tape with a rotating action. This will be easier than pulling perpendicular to the car. Again do not pull the panel directly away from the car to prevent damage to the mounting tape and to make removal easier.



## Trouble Shooting Guide:

If you have any problems with your installation please feel free to give us a call.

You can also check our web page at [www.mustangproject.com](http://www.mustangproject.com) for updated Trouble Shooting Guides for all of our products.

Most Taillight problems are due to faulty wiring or bad socket connections.

Remember unless you have replaced the wiring or taillight sockets in your Mustang you are dealing with electrical components that are over 40 years old!

Corrosion and rust can take their toll. If you have any troubles first re-install the standard incandescent lamps and ensure that the signals, brake, and light functions work properly. If you see any problem with the brake or signal light functionality using the incandescent lights your system will not work with the new Mustang Project LED taillight modules.

Carefully check for bad or rusted sockets. If you see evidence of corrosion carefully clean the contacts and re-test.

Old wiring can also be a source of problems. Look for broken or frayed insulation if you see intermittent functionality.

Below is a list of trouble shooting keys:

**Problem: Lights flicker or function erratically.**

Flickering erratic lights are often caused by failing alternators or bad regulators. The alternator may still function well enough to marginally charge the battery but diode failure in the alternator can cause flickering taillights.

While the engine is running the battery charge voltage (measured at the battery) should be 13.9-14.7 volts at 75F. When the battery is charged and the car is running you should measure approximately 14.4 volts at the battery terminal at all times. If you see voltages lower than 13.9 volts this is a sign that the alternator is failing.

It is also possible that the regulator is failing. The original Mustang electro-mechanical regulators are famous for unusually failures. Always replace your regulator with a Motorcraft direct replacement electronic regulator available at most auto parts stores.

If you suspect a regulator or alternator problem you need to replace these items before you car is stranded! Doing so will also prevent flickering of the LED taillights.

Always replace the alternator and regulator together. In many cases failing regulators have caused alternators to fail. It is also possible a failing alternator can cause a regulator to fail. So always replace both at the same time.

Finally ensure that a NOISE SUPPRESSOR is installed on

your alternator. This is a VERY important which is sometimes removed by inexperienced mechanics. P/N D5AZ-18832-AR is suitable for classic Mustangs.

The noise suppressor is a small metal can (capacitor) installed at the alternator to reduce electrical noise generated by the alternator.

**Problem: Taillights don't sequence but do light if headlights are on.**

Most likely this is due to a bad connection. It can also be caused by incorrect installation of the Mustang Project flasher module or improper connection of the flasher module ground. It is also possible that a defective alternator or regulator can cause improper sequencing or erratic operation.

**Problem: Taillights sequence but taillights do not illuminate when headlights are on.**

Most likely this is due to a bad connection. Carefully clean and check all connections.

**Problem: Taillights function abnormally in the rain.**

This is probably caused by water in the Taillight bucket. Check for evidence of water and repair any gasket leaks. The Mustang Project Taillight modules are coated to protect against water damage but they will not operate if too much water is allowed to cling to the circuit boards.

"Remember... you are dealing with electrical components that are over 40 years old!"