Installation Instructions

Manual #90573

For Installing:

Part #63040 – Painless Convenience Module

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P/N 90573 Painless Wiring Manual
1st Edition April 2010
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The Painless Convenience Module will not work on factory wired 12v activated courtesy/dome light systems. Modifications can be easily made to the factory interior/courtesy lighting, in order for this module to properly function on these types of vehicles.

Some manufactures applied 12v to the courtesy light circuit through the headlight switch and door switch for activation. Those with a factory wired Ford vehicle have this type of 12v activation. The Convenience Module activates the dome light through ground activation, like GM, Dodge and Chrysler vehicles. It will be up to you, the installer, to determine what kind of activation your vehicle has if it is not one of the 4 manufactures listed above, see page 16 for details.

Instructions on door jamb switches and complete schematics have been provided, starting on page 16, for converting your 12v activation system to the appropriate grounding activation required. Take notice that addition parts may be required for these modifications.

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ABOUT THE PAINLESS CONVENIENCE MODULE

The Painless Convenience Module allows you to retrofit your older vehicle with standard features found on many base model vehicles sold today. Features included with this module are:

- Dome Light Delay and Dimming- The delay feature will delay the dome light from turning off for 20 seconds after a door is closed or until the ignition is turned to the "ON" position. Once the dome light is commanded to turn off, it will slowly dim over a 5 second period of time and then go out. This dimming feature also referred to by many as "theater" lighting, creates a slower progression from light to dark.

- Radio/Accessory Delay- After the ignition is turned off, even with the key removed from the ignition switch, the Radio or Accessory side of the fuse block (depending on how it is wired, see p.9) will remain powered for 15 minutes or until a door is opened.

- Headlight Delay- Headlight delay will keep the headlights turned on for 30 seconds after the vehicle's ignition has been turned off. This will help illuminate dark parking places while the driver exits the vehicle, offering safety and security. This feature will only operate if the headlights were on before the ignition was turned off.

- Headlight Chime- The Chime, supplied with the kit, will sound if the headlight switch is left in the headlights "ON" or park lights "ON" position and a door is opened. This will prevent coming out to your vehicle, trying to start it, only to find a dead battery because the headlight switch was left on.

- Automatic Headlights - Using the included light sensor, this feature will automatically turn your headlights On and Off according to the light conditions the sensor reads. The sensor will read low light levels for 10 seconds before activating the headlights. When the headlights are on, the sensor must see bright enough light levels for 5 minutes before the headlights are turned back off. Your factory headlight switch will still be operational.

- Turn Signal Alert- The Chime, supplied with the kit, will sound if the turn signal has been left on for 90 seconds. This will alert you that the turn signal has been left on by mistake.

The installation of this module requires no cutting of factory wiring in most cases.

The installation process can be broken down into 4 steps: Pre-installation (verifying all parts and information needed for installation are gathered), Mounting, Routing and Connection, and Testing.

PRE-INSTALLATION

Before any actual installation takes place look over the parts contained with your kit to see that you have all parts. The individual usage of these various small parts will be detailed throughout these instructions.

Figure 1 Painless Convenience Module Kit

The parts contained in this kit should include:

(1) Module (case with PCB board and lid pre-installed)
(1) Pre-wired fuse block with fuses installed, also included with the fuse block is the harness for the module
(1) Bag kit containing : Chime speaker and volume control cap, Ambient Light Sensor, sensor mount, o-ring, Velcro strip, zip ties
(1) Box kit containing Posi-Taps*, various ring terminals and bullet terminals, a diode, heat shrink, various splices, self tapping screws, door jamb switches & extra fuses

*The Posi-Taps contained in the parts bag make connection quick and easy without any cutting involved. Unlike traditional “blade” style taps which usually cut through the wire you are tapping onto, the Posi-Tap simply pierces the insulation. Proper installation of the Posi-Tap can be accomplished in 4 easy steps:

1. Slide the slotted end over the wire/power source you are tapping onto. This will be a pre-existing wire, not a wire found in the Painless kit.

2. Thread the main body of the Posi-Tap onto the slotted end, ensuring the needle pierces the wire. Smaller gauge wires tend to move aside as the needle comes down, causing improper connections. Watch closely to ensure this does not happen.

3. Strip a ¼” of insulation away from the wire you are connecting. This will be a wire coming from the module.

4. Insert the stripped wire into the small threaded end, and then thread it into the Posi-Tap main body.

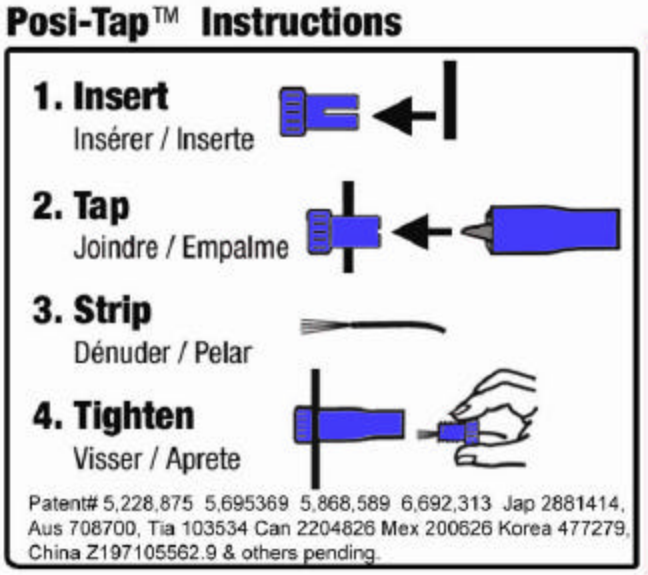


Figure 2 Posi-Tap Instructions

Tools Needed

Outside of basic hand tools and pair of wire strippers, a 7/8" bit/hole saw and an electric drill are needed for installation. Depending on how the chime speaker is mounted, a 1" bit/hole saw may also be necessary.

A set of factory schematics for your particular vehicle, or a voltmeter will be needed in order to identify wires at the Headlight Switch, Turn Signal Switch, Radio, and an IGN Power Source. Locating the factory wiring you will need to tap into before any installation takes place will give you considerable insight into the routing and make the overall installation easier.

The colors used on the Convenience Module harness are GM color coded. Meaning if your vehicle is a GM product or if the chassis harness used in your vehicle is an aftermarket GM color coded harness, the wires of the Convenience Module harness should match the colors of the wires they are to connect, or tap into. Details on which wires you will be tapping into can be found under sections of this manual pertaining to those sources.

Familiarize Yourself with the Harness

It is a good practice to stretch the harness out and become familiar with the wire sections, colors, and the print contained on each wire. Each wire has been printed with it's function and/or which wire it needs to connect to on your factory chassis harness wiring.

The tags found on the harness are printed with the component the group of wires tagged need to be routed to. For example the wires grouped together with a tag labeled "Headlight Switch" will be routed to the Headlight Switch.

Before Going Any Further

DISCONNECT THE BATTERY FROM THE VEHICLE. To avoid shorts, blown fuses, or any other electrical failures, this step must not be skipped. If you are using a voltmeter to identify wires on your existing chassis harness, they should be identified before the battery is disconnected. At no time during the install should the battery be reconnected. Unconnected wires could short and damage the Painless Convenience Module. The battery should not be reconnected until instructed to do so later in the manual.

MODULE & FUSE BLOCK MOUNTING

Mounting the module and fuse block begins by finding a suitable location for the component; this module must be mounted inside the vehicle. Make certain the fuse block is in an accessible location in case a fuse ever needs replacement.

Self tapping screws along with Velcro have been provided to offer mounting solutions. Both have been provided to allow the installer more versatility in mounting locations and positions.

The Velcro offers the most universal and easiest way to mount the module and fuse block. It allows the installer to mount the module just about anywhere. Take note that once the protective backing is removed from the Velcro, and it is pressed onto a surface, it will not be able to be removed and still be reusable.

- Once a suitable location has been found, permanently mount the module and fuse block.
- Make certain the 2 connectors of the harness are securely connected into the module before proceeding with your install.

ROUTING & CONNECTIONS

Specific routing will vary with each install depending on the type of vehicle and module/fuse block mounting location. Wire tags have been installed directing where to route each group of wires. These tags include: Headlight Switch, Turn Switch, Radio, Ignition Switch, Chime, Light Sensor, and Battery.

Extra length has been given to each section to allow specific routing to components, which may or may not lead to the installer cutting the majority of length from most wires. Always remember to double check routing and lengths before any cuts are made.

HEADLIGHT SWITCH

The following section of instructions for Headlight Switch connections will not be the same if your vehicle has a 12v activated dome/courtesy light circuit. See page 16 for instructions on connecting the Black/White wire.

3 wires will need to be routed and connected to existing wires coming from the headlight switch.

- Blue/Yellow 14 gauge wire printed “TO DIMMER SWITCH 12V INPUT” will connect to the wire providing power from the headlight switch to the headlight dimmer switch.

  This Blue/Yellow wire provides power from the module to the headlights, allowing the headlights to be turned on with the automatic headlight function and the headlight delay. It will also be used to activate the chime speaker if the headlight switch is left in the “ON” position when the key is in the off position and a door is opened.

- Brown 16 gauge wire printed “TO TAIL LIGHTS 12V” will connect to the wire providing power from the headlight switch to the tail lights.

  This Brown wire provides power to the tail lights, which also back feeds through the switch to the gauge panel backlighting, from the module when the Automatic headlights are triggered to come on. It will also be used to activate the chime speaker if the headlight switch is left in the “ON” position when the key is in the off position and a door is opened.

- Black/White 16 gauge wire printed “TO DOME LIGHT CONTROL” will connect to the wire providing ground from the headlight switch to the dome light/courtesy light circuit.

  Vehicles with a factory keyless entry system or interior light control module, this Black/White wire will need to connect to the ground side of a courtesy light.

This Black/White wire will provide the ground activation needed by the courtesy light circuit in order for the lights to be delayed and to dim.

TURN SIGNAL SWITCH

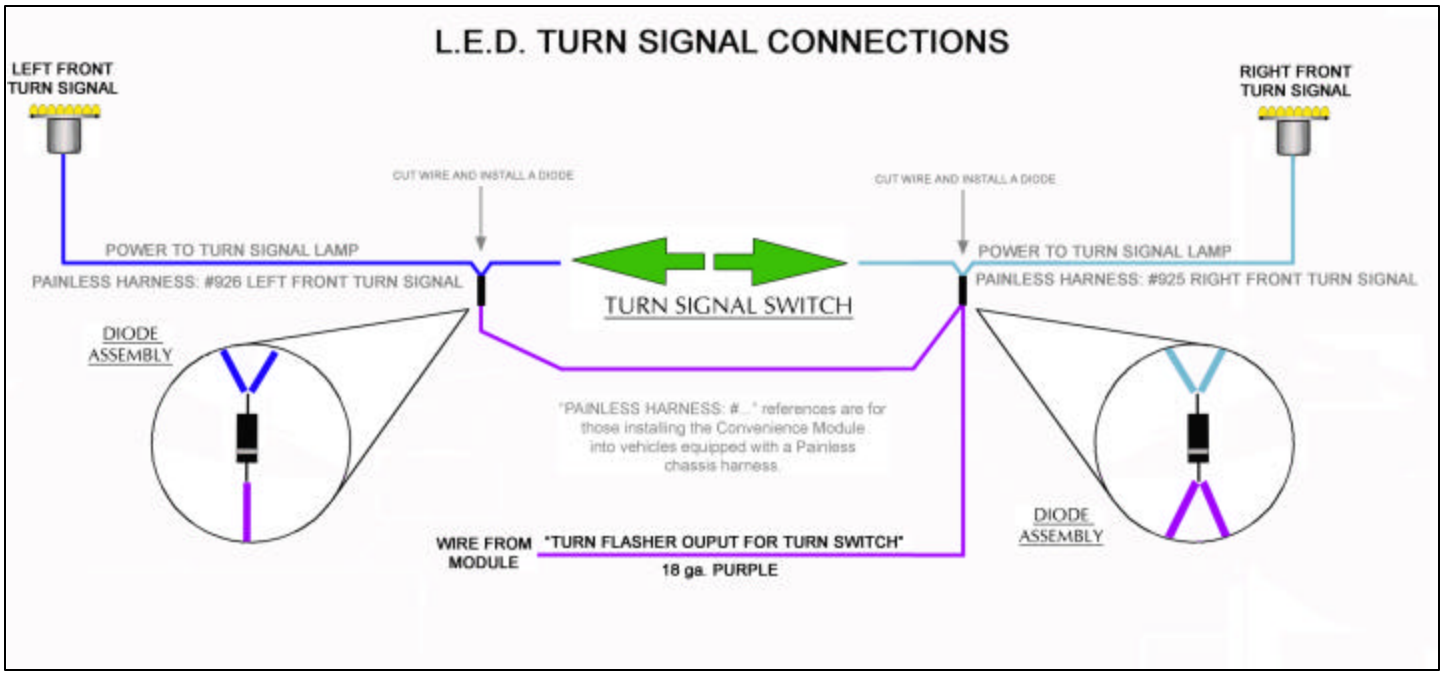
1 wire will need to be routed and connected to an existing wire going to the turn signal switch. This wire will trigger the internal timer found in the Module to activate the turn signal chime after 90 seconds.

- Purple 18 gauge wire printed “TO TURN FLASHER OUTPUT FOR TURN SWITCH” will be connected to the wire providing power into the turn switch from the turn flasher.

If a “no load” flasher is being used because of LED turn signals, connect according to the instructions below.

- Locate the wire at the turn signal switch that provides power to the front right turn signal. You will be using the wire going to the chassis harness, not the wires going into the steering column.
- Cut the wire several inches away from the turn signal connector. Using a butt connector and diode supplied with the kit, install the two ends of the cut wire to the diode. *Position the diode with the stripe away from these wires.
- Install a small and large piece of heat shrink over the diode and onto the two wires crimped to one end of the diode, do NOT apply heat at this time.
- Route the Purple 18 gauge wire printed “TO TURN FLASHER OUTPUT FOR TURN SWITCH” to the diode and cut. Install a small piece of heat shrink over the purple wire, along with the cut off piece of wire, and connect to the diode.
- Cover the exposed splices with the small heat shrink and the diode with the large heat shrink and apply heat.
- Locate the wire at the turn signal switch that provides power to the front left turn signal. Cut and repeat the diode installation process on that wire.
- The extra length of Purple wire connected to the first diode, will route over to and connected to the striped end of the second diode

Figure 3 LED Turn Signal connections



RADIO

1 wire will need to be routed and connected to an existing wire going to the Radio.

- Red 16 gauge wire printed “TO SWITCHED RADIO POWER” will connect to the wire providing power to the radio when the key is in the “ON/RUN” and “ACC” position. There are generally 2 main power wires connected to a radio, a switched power wire and a constant power wire. In most aftermarket radio installs there will be a yellow wire (battery power) and a red wire (switched power) feeding power to the radio. **Be sure you do not connect the Red wire of the Convenience Module harness to the constant power source feeding the radio. Damage to the module could occur.**

  The diode found in the parts kit will need to be installed inline of the factory switched power wire if you do not wish to power up the entire accessory side of the fuse block. This diode will need to be installed with the stripe towards the radio, with the splices included, and then covered with the supplied heat shrink as seen in **Module Power & Ground Outputs** on page 14.

IGNITION SWITCH

1 wire will need to be routed and connected to an existing wire going to the Ignition Switch

- Orange 18 gauge wire printed “TO IGN SWITCH “IGN” will connect to the wire that provides the fuse block a switched 12v power source. There are many power wires going to an ignition switch, ensure you connect this orange wire to a wire that only has power with the ignition in the “On/Run” position.

  This orange wire is a sense wire for the module. It lets the module know the key is in the “ON” or “OFF” position, thus letting the module know what sort of commands to send to components such as the headlights, radio, dome light and chime.

CHIME

Locate the Chime speaker included with the kit. Decide on a mounting location or placement for the chime speaker. This chime is loud enough that it can be stuffed behind the dash and still be audible with the radio volume at a moderate level. The speaker comes with a volume control. The volume of this chime can be changed by installing and turning this screen making more or less of the actual chime speaker visible.

- Mount the speaker using zip ties or by making a bracket with a 1” hole to through mount the speaker. If using zip-ties it may be easier to connect the wires intended for the speaker before mounting.

2 wires will be routed and connected to the chime.

- Red 18 gauge wire printed “TO CHIME SPEAKER “+” will connect to the power side of the speaker. This will be labeled with a + on the sticker found on the chime, also, the + side has been colored red.
  This red wire will provide a constant battery power to the speaker. Insure that all

connections and any other bare metal found on the speaker are insulated with heat shrink or tape. Not doing so can and will lead to a short.

- Black 18 gauge wire printed “TO CHIME SPEAKER “-“ will connect to the ground side of the speaker. This will be labeled with a - on the sticker found on the chime, also, this ground side of the speaker will be have a natural metal finish.

  This black wire provides the ground activation wire from the Convenience Module. This wire will only apply ground to the speaker if a turn signal has been left on for a length of time, or if the headlight switch has been left in any “ON” position and a door has been opened.

LIGHT SENSOR

Locate the light sensor supplied with the kit and decide on a mounting location. The location should be in such an area the light sensor will be in direct light coming through the windshield or rear glass of the vehicle. It may be mounted in the dash, pillar, or the rear of the vehicle as long as it is able to sense the light according to time of day or weather conditions.

If the sensor is mounted in the rear package tray or hatch area, headlights from vehicles behind you may affect the light sensor causing it to turn the headlights off during low light levels. If the sensor is mounted in the rear of the vehicle, Painless highly recommends testing the sensor location prior to permanently mounting the light sensor.

It may be beneficial to decide on an area to mount the sensor and temporarily mount the sensor and connect the module harness before any real mounting is done. This will allow you test it at different light levels to ensure the sensor is working properly in that mounting position before any holes or permanent mounting is done.

- Once a mounting location has been decided, and hopefully tested, drill a 7/8” hole to allow through mounting of the plastic light sensor mount.

- With the sensor mount inserted into the hole, install the rubber o-ring over the bottom portion of the mount until it reaches the mounting surface. For a more permanent install, epoxy/glue can be used to secure the light sensor mount into its mounting location. Ensure the epoxy/glue has cured before installing the sensor.

2 wires will be routed and connected to the Light Sensor.

- Blue 20 gauge wire printed “TO LIGHT SENSOR PIN A”, as well as green 20 gauge wire printed “TO LIGHT SENSOR PIN B” comes with a connector pre-installed.

  One wire provides a voltage signal to the light sensor. The other wire provides a voltage signal back to the module from light sensor according to the amount of ambient light seen a by the light sensor.

A considerable amount of length as been given to these wires to allow mounting the sensor towards the rear of the vehicle. These wires should not be cut to length or shortened. Simply gather up the extra length and zip-tie or tape together.

- Insert the pre-installed connector up through the light sensor mount.
- Connect the light sensor connector to the light sensor. This connector will only go on in one direction. Do not force the connector onto the sensor as you could bend the pins.
- With the connector installed, pull the light sensor down into the mount.

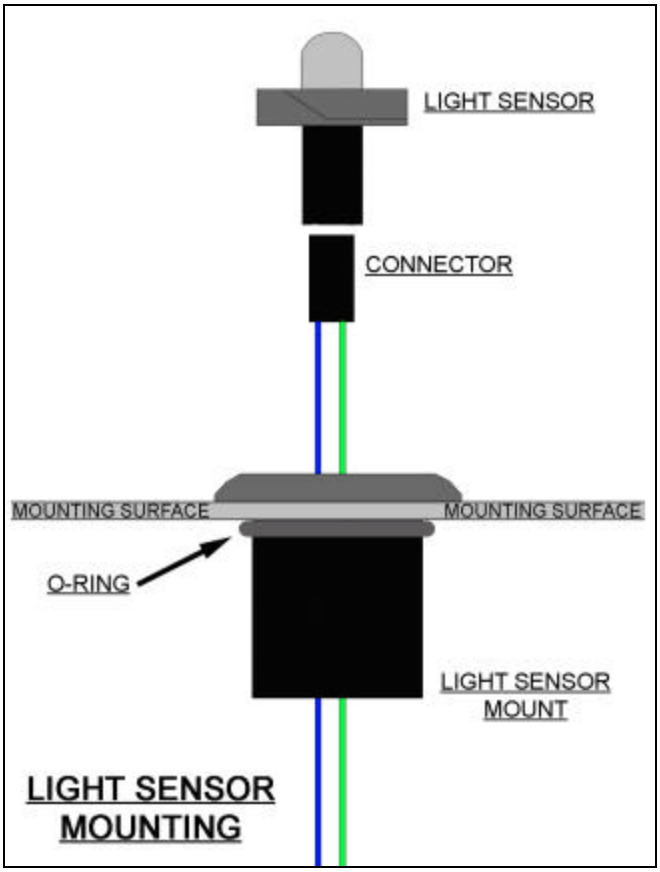


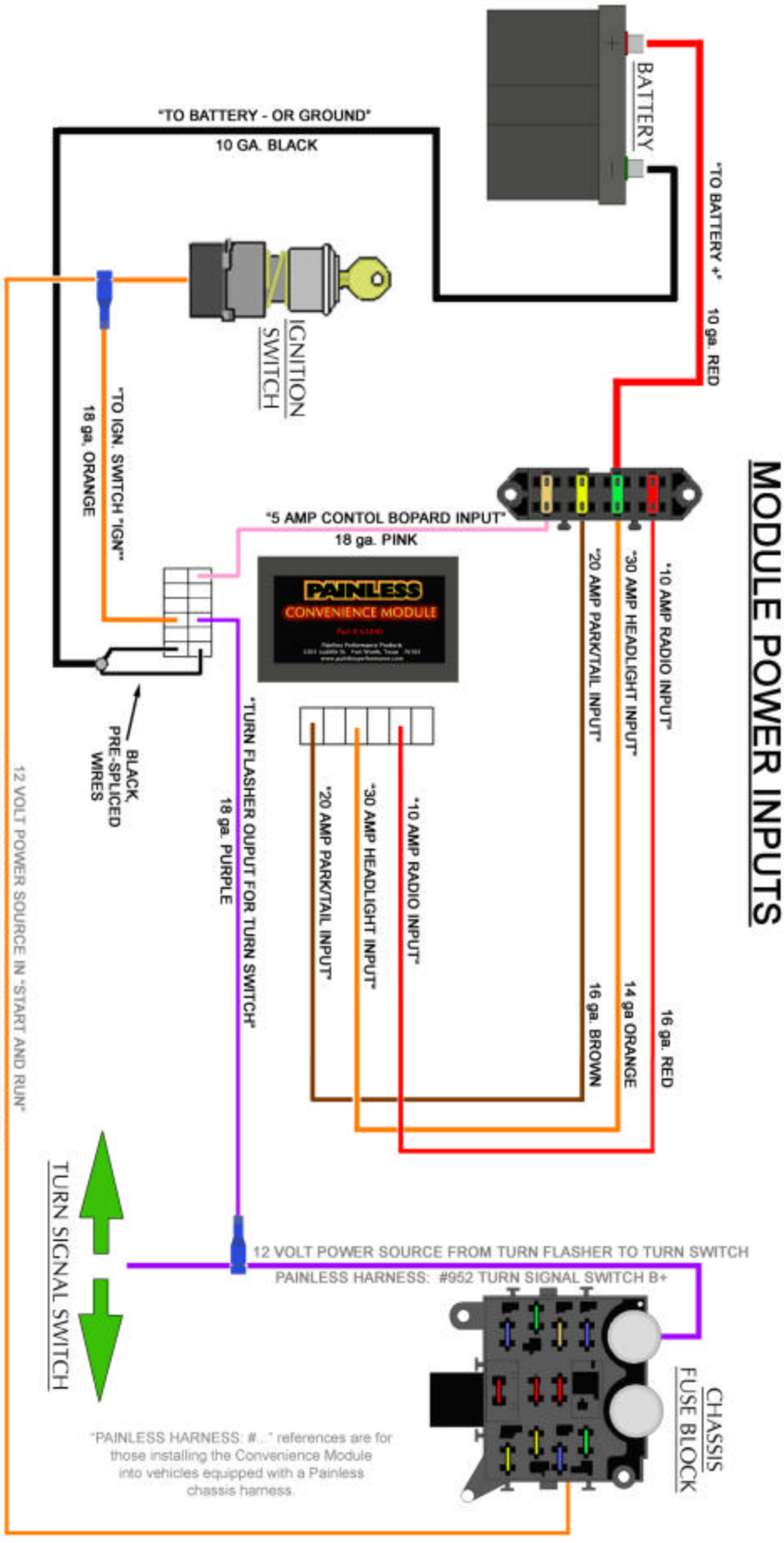
Figure 4 Light Sensor Mounting

BATTERY

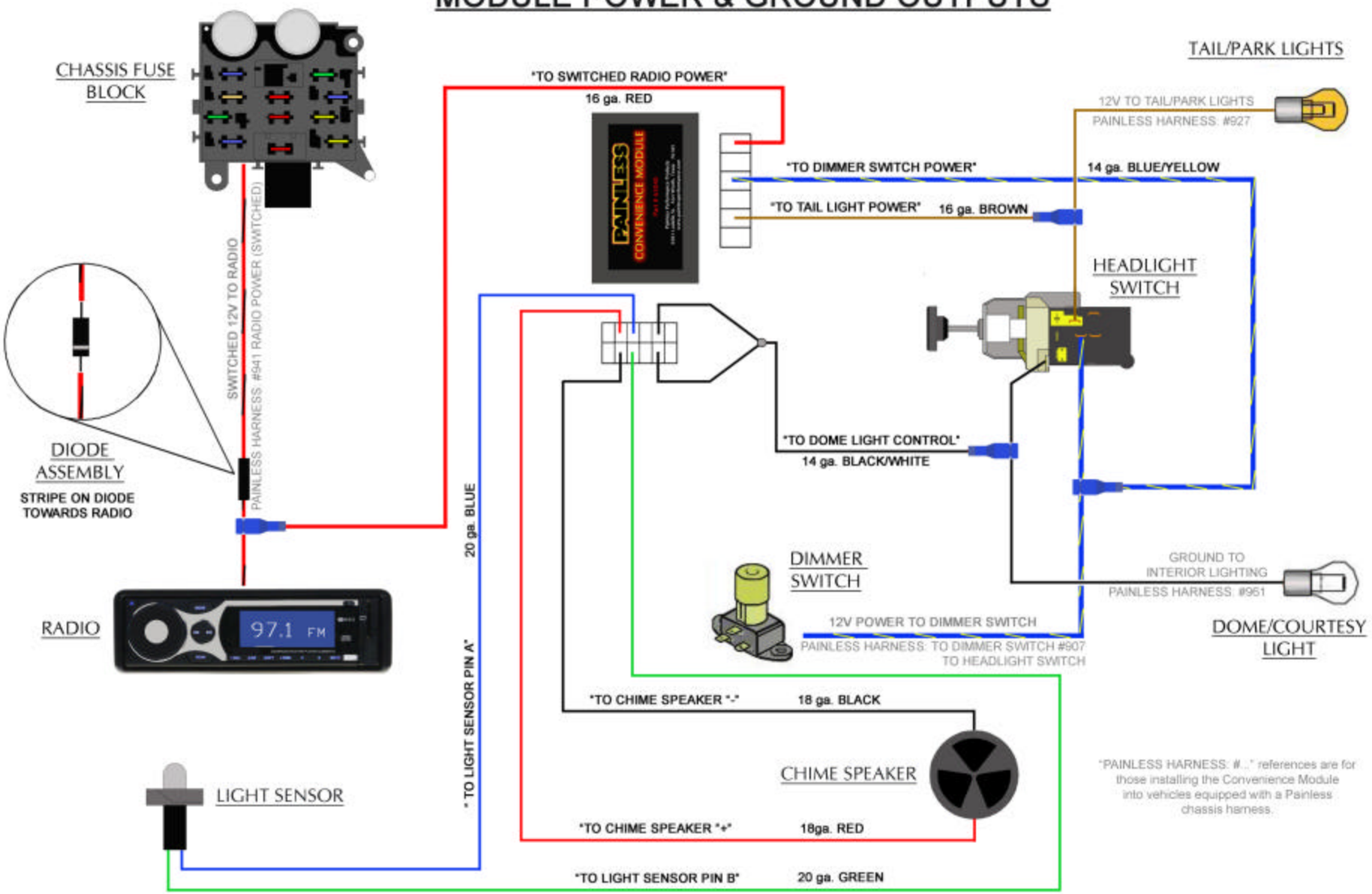
Locate and route the 2 wires labeled “Battery” towards the battery. These 2 wires will provide power to the fuse block that is pre-wired with the Convenience Module harness, as well as providing ground to the Convenience Module itself.

- Using ring terminals provided with the kit, connect the red 10 gauge wire labeled to “Battery “+” to the positive battery. At this time the positive side of the battery can be connected.
- Using ring terminals provided with the kit, connect the black 14 gauge wire labeled to “Battery “-” to the negative battery. This wire should not be connected to the battery at this time, only to the disconnected battery lug or bolt (if using a side post battery). “Noise” found on a common chassis ground will disrupt the way the module functions, so **this wire must be routed and connected to the negative side of the battery and not to a common chassis ground**

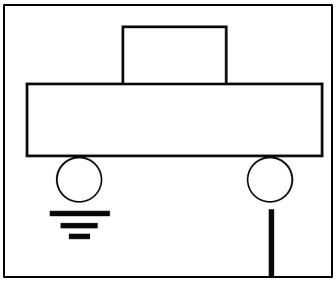
If your vehicle came with grounded door switches continue on to “Testing the System” p.22, otherwise continue on to p. 16 for instructions on modifying your factory wiring.


MODULE POWER INPUTS
BATTERY
"TO BATTERY - OR GROUND"
10 GA. BLACK
"TO BATTERY +"
10 ga. RED
IGNITION SWITCH
"TO IGN. SWITCH "IGN""
18 ga. ORANGE
"5 AMP CONTOL BOPARD INPUT"
18 ga. PINK
PAINLESS
CONVENIENCE MODULE
"10 AMP RADIO INPUT"
"30 AMP HEADLIGHT INPUT"
"20 AMP PARK/TAIL INPUT"
16 ga. BROWN
14 ga ORANGE
16 ga. RED
BLACK, PRE-SPLICED WIRES
"TURN FLASHER OUPUT FOR TURN SWITCH"
18 ga. PURPLE
"20 AMP PARK/TAIL INPUT"
"30 AMP HEADLIGHT INPUT"
"10 AMP RADIO INPUT"
12 VOLT POWER SOURCE IN "START AND RUN"
PAINLESS HARNESS : #933 TO IGNITION SWITCH "IGN"
TURN SIGNAL SWITCH
12 VOLT POWER SOURCE FROM TURN FLASHER TO TURN SWITCH
PAINLESS HARNESS: #952 TURN SIGNAL SWITCH B+
CHASSIS FUSE BLOCK
"PAINLESS HARNESS: #..." references are for those installing the Convenience Module into vehicles equipped with a Painless chassis harness.

MODULE POWER & GROUND OUTPUTS



GROUND ACTIVATED DOOR SWITCHES



The easiest way to determine the activation method of your dome/courtesy light circuit is to reference a factory diagram. If the door switch looks anything like the diagram to the left, your circuit is ground activated. Notice how the left side of the switch in the illustration is connected to ground. The wire coming off the right side of the switch in the illustration is the activation wire going to the dome light/courtesy light circuit.

Figure 5 Ground Activated Door Switch

Another easy method is to check the connections on the back of your door switch(s). If there is only one wire connecting to your door switch, or several wires going to one connection point, it is a ground activated circuit. If there are 2 connection points, or pins, test both pins to see if one has battery power. Testing should be done with the door switch disconnected or with the door closed.

ADDING DOOR SWITCHES

If you find that your circuit is 12v activated, there are some changes that need to be made in order for the Painless Convenience Module to work properly. Changes need to be made so that the radio delay and the dome light dimming & delay work correctly.

The easiest modification is to simply add a GM style ground activated door switch(s), like those supplied with the kit. This will require the use of a 5/16" drill bit. This will allow the radio delay to turn off when the door is opened. However the dome light functions of the Convenience Module will **not** be operational. This switch will not replace your factory switch.

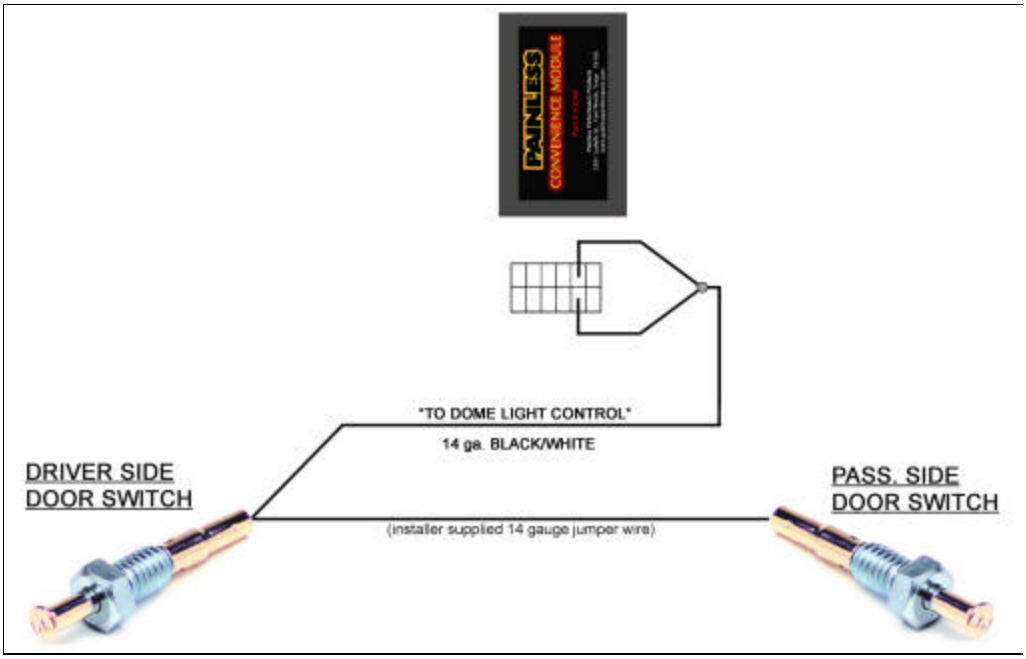


Figure 6 GM Style Door Switch Connection

- Drill a 5/16" hole into the door jamb, close to the factory switch to ensure the inside of the door will make contact with the switch.
- Install the GM style door jamb switch into the door jamb
- Using Bullet connectors found in the kit, connect the black/white wire from the Convenience Module, printed "TO DOME LIGHT CONTROL" to the door jamb switch. This wire will need to be spliced, or a jumper installed, to connect to the passenger side door, if necessary.

DOOR SWITCH(S) MODIFICATION

In order to get the dome/courtesy light features of the Convenience Module to work properly, the factory door switches and wiring will need to be modified. The switches supplied with the kit can be used; however it may be easier to re-use the factory switches since the mounting holes are already there.

- Cut or remove the 2 wires going into the door jamb switch. If you are re-using the factory door switch and connector cut the wire but be sure to leave enough wire on the connectors to splice to later. This will leave you with 2 wires going to the chassis harness, and a pigtail with the factory door switch connector on one end.
- Connect the 2 wires going to the chassis harness together, splices have been provided to make this connection. This will now send direct battery power to the dome/courtesy light circuit, as seen in the illustration below.

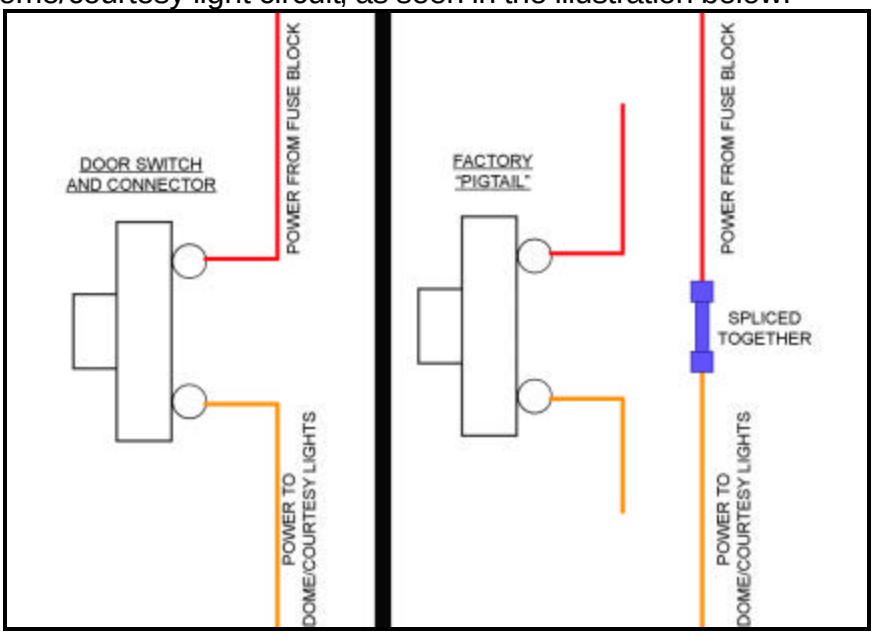


Figure 7 Door Switch Wiring Modification

- The following step will only be done by those re-using the factory door switch and connector.

  On the factory pigtail you are left with; connect one side of the switch to chassis ground, as seen in **Figure 8** on the next page. This will be done by splicing a wire onto the pigtail and connecting it to a clean chassis ground source.

- The other wire on the pigtail, or the connection to the back of the switch provided, will be used to provide ground to all dome/courtesy lights as well as connecting to the output side of other door switches. It will be up to you, the installer, to supply the ground wires as well as the splicing to the dome/courtesy lights. The black/white wire from the Convenience Module, printed “TO DOME LIGHT CONTROL”, will also connect to this side of one of the door switches. Figures 8 & 9 show these connections depending on which door switch you are using.
- The ground wire coming from the output side of the door jamb switch will need to connect to the ground wire of all dome/courtesy lights. In applications where a ground wire isn’t present (self grounding applications) connect the ground wire

to the metal body of the bezel/socket.

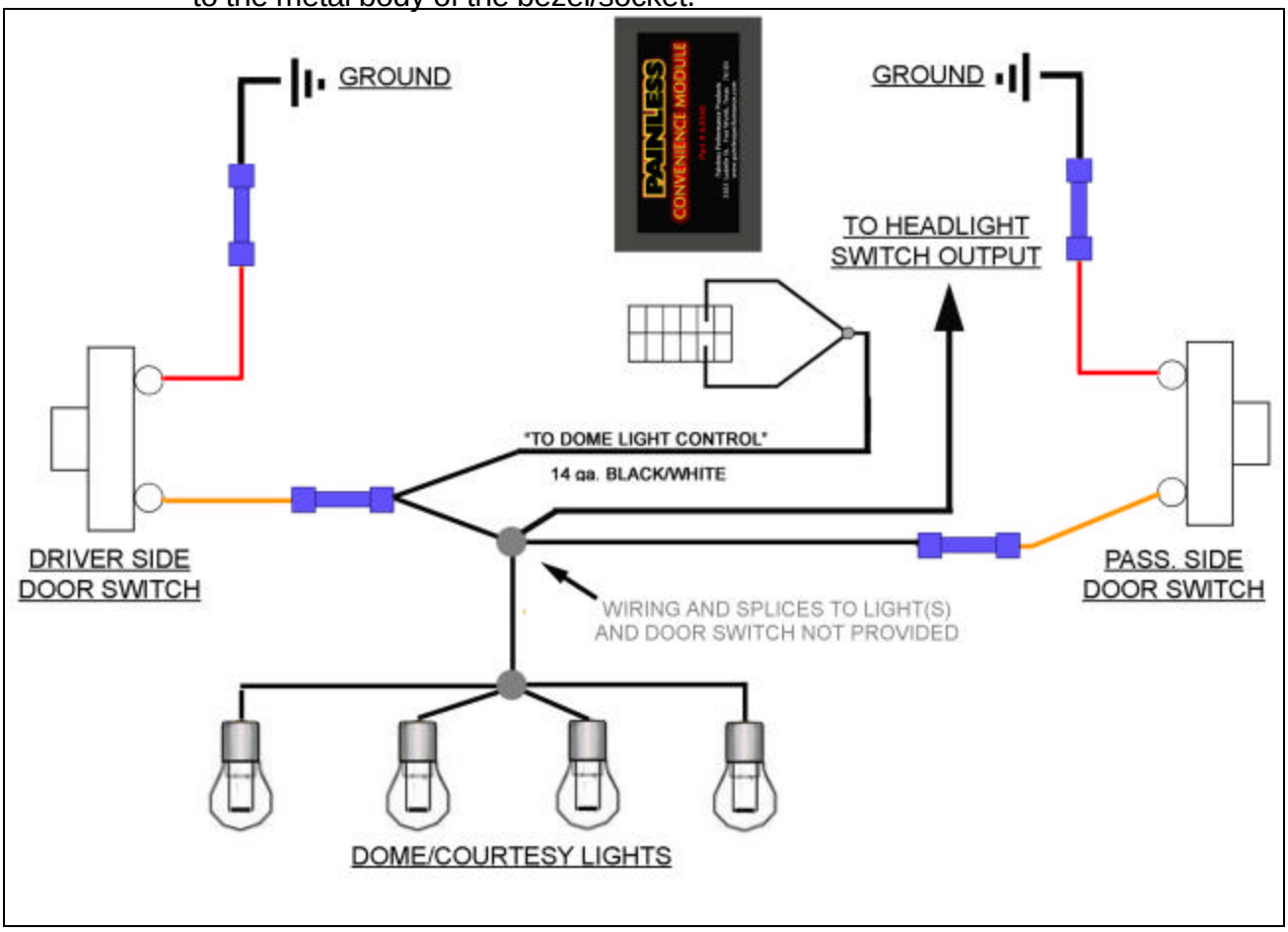


Figure 8 Factory Door Switch Ground Output Connections

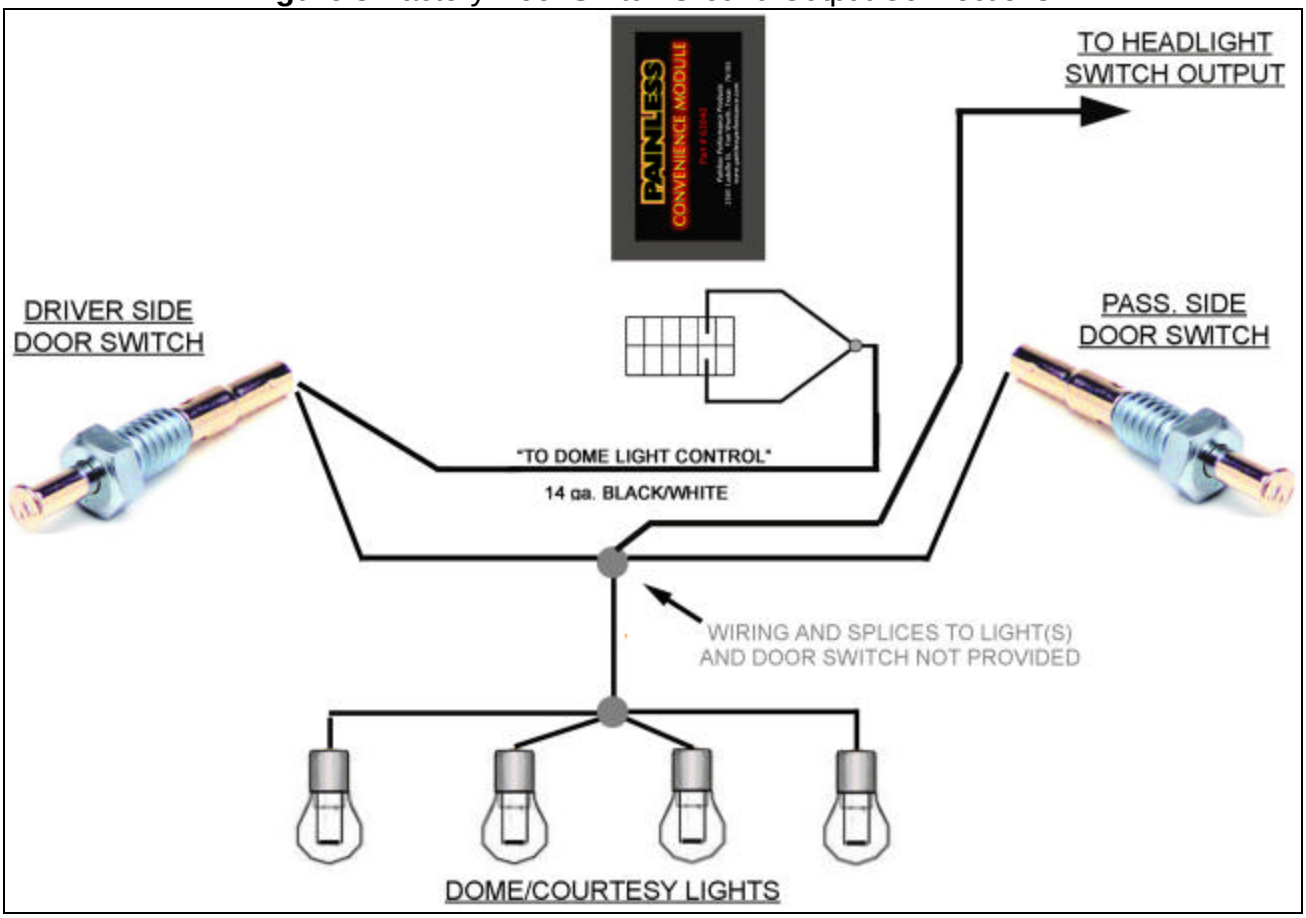


Figure 9 Supplied Switch Ground Output Connections

LIGHT MODIFICATIONS

Changes will also need to be made to the factory dome/courtesy lights. Some may find it easier to swap to a 2 wire GM style courtesy lights, like Painless part # 30710, as well as swapping to a 2 wire GM style dome light. Doing so will avoid having to insulate the grounding points of the factory bezel/socket, as described below. Changing to GM style dome/courtesy lights will also allow easier ground connection of the ground as these will be 2 wire sockets.

In most vehicles with power activated dome/courtesy lights, there is usually only one wire going to the light, a power wire. This is because the lights are grounded through the mounting of the bezel or lamp socket. These mounting/grounding points will need to be insulated from the metal of the dash, roof bracing, or wherever the light is mounted.

- Insulating can be done in various ways. Below you will find some ideas on how to insulate your light bezels/sockets.

  Nylon Screws: Can be used if the mounting base/socket is metal. Metal screws will ground the metal base/socket to the mounting location.

  Small Rubber Washers: These can be used to keep metal screws from contacting the bezel/socket, can also be used to keep the bezel/socket from making contact with metal contact points on the dash (courtesy light applications) or roof bracing (dome light applications)

  Electrical Tape: Can be used to keep the bezel/socket from making contact with metal contact points on the dash (courtesy light applications) or roof bracing (dome light applications)

Upon completion of insulating the factory bezel/sockets, Painless recommends using a voltmeter to continuity test the bezel/socket to a known ground source. The bezel/socket should have absolutely NO continuity to ground. If the bezel/socket still has continuity to ground, and the factory 12v door switch wires have been attached, as shown in **Figure 7**, the light will illuminate until the ground is disrupted.

HEADLIGHT SWITCH MODIFICATION

The factory headlight switch will need to be modified in order to still be able to manually operate the dome light without opening a door.

- Using a factory diagram, locate the input and output wires for the dome/courtesy light circuit. Older Ford vehicles will find this to be a light green wire(s) with a yellow stripe in pin D1 and black wire(s) with a blue stripe coming from pin D2. If you find that you do not have an Input wire, skip to page21.

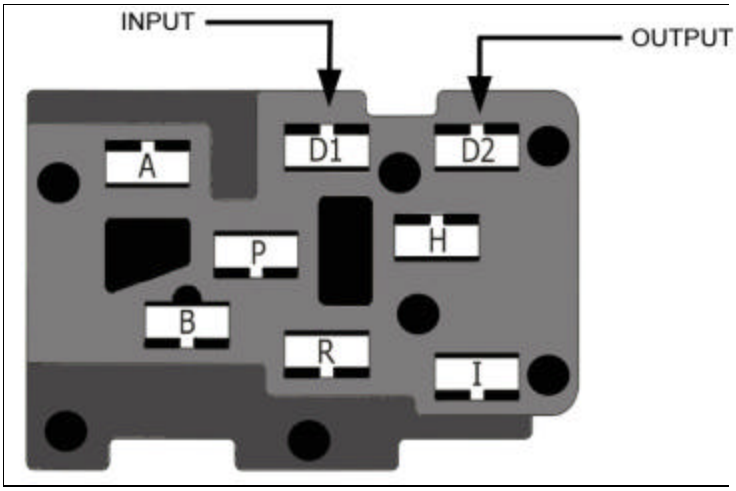
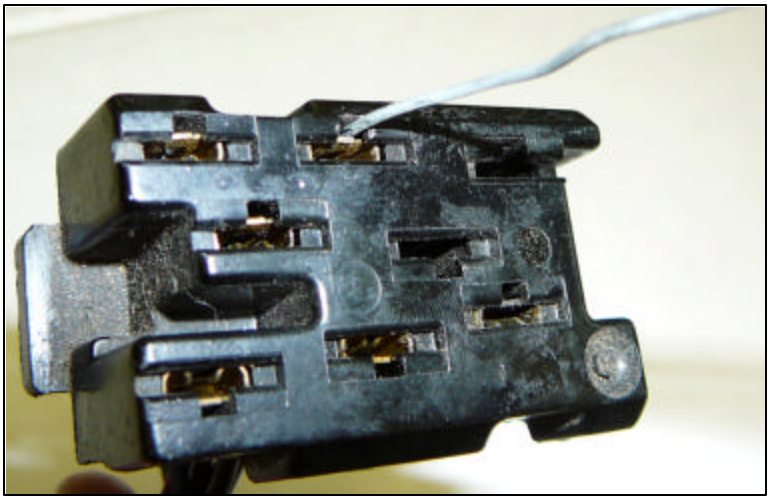


Figure 10 Ford Headlight Switch Pin Out

- The input and output wires will need to be cut or removed. If they are cut be sure to leave enough wire on the connectors to splice to later.

  Those with a Ford headlight switch may opt to remove these wires instead of cutting. Replacement terminals have been provided with the Convenience Module kit. The removal procedure for terminals found on a Ford headlight switch is a followed:

➢ Looking at the switch side of the connector you will notice little openings above or below the terminals. This little opening gives you access to the locking tang on the terminal.



➢ Insert a small pick, a paper clip, or a thin piece of stiff wire into this opening, as seen in **Figure 11**. Apply a slight amount of pressure to make sure you are as far into the connector as you can go.
➢ As the pick or paper clip is being pushed into the opening, pull the wire from the opposite side of the connector to remove the wire from its location.

Figure 11 Ford Terminal Removal

- These wires, now freed from the connector, will have constant battery power being supplied to them when the battery is reconnected. These wires will need to be spliced together or insulated so they do not short. Insulating them can be done by folding the ends of the wires over and heat shrink or tape them, as seen in the illustrations below.

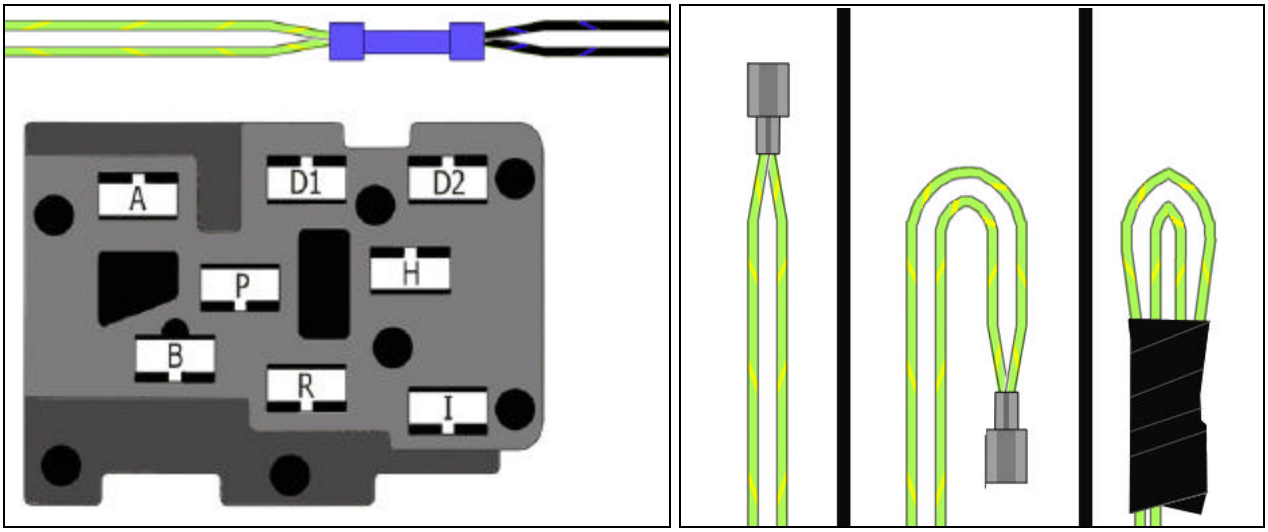


Figure 12 Splicing or Insulating Leftover Factory Wires

- Connect the input side of the headlight switch to a clean chassis ground source. Those with a ford headlight switch, terminals have been provided to allow this connection without splicing.

- Connect the output side of the headlight switch to the output/ light ground side of the door switches. As seen in **Figures 8** & **9** according to the type of door switches used.

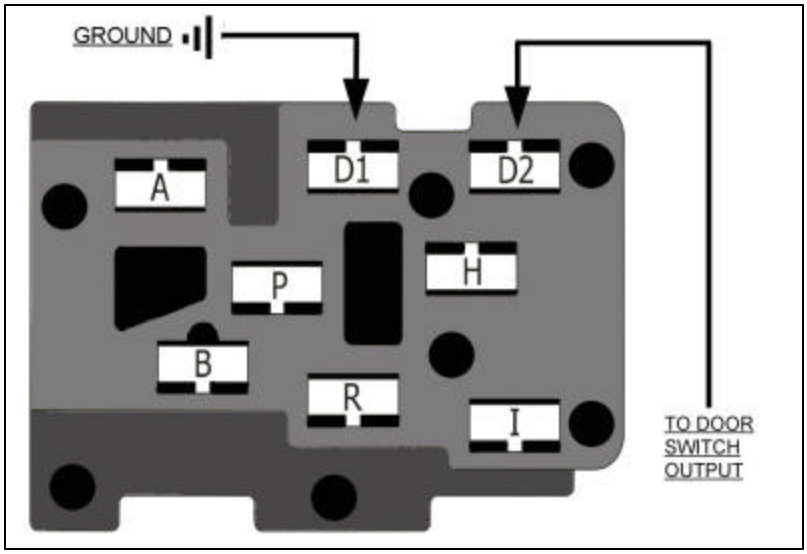


Figure 13 Factory Headlight Switch Modifications

Headlight Switches without a Dome Light Input

Headlight switches without a dome light input have no way of changing the dome light output to the ground required by the Ground Activated circuit. In order for the headlight switch to still operate the dome/courtesy lights, a SPST (single pole, single throw) relay will need to be used. This relay will be activated by the dome light power output coming from the headlight switch, thus routing a ground source to the lights. Connect the relay to the headlight switch dome output wire according to **Figure 14** and the instructions below.

- Trace the factory dome light power output wire as far as you can in the chassis harness. In most cases it will go to a door switch, which has been removed per the instructions on p.15, or to a major splice. Cut or remove this wire from its connection point. Insulate any portion of the wire still tied to the chassis harness.
- Connect the 12v dome/courtesy light output wire from the headlight switch to pin 86 of the relay. This will be the activation wire going to the relay, meaning this wire will activate the solenoid in the relay to allow the input (pin 30) and output (pin 87) to have continuity.
- Connect pin 85 and 30 to a clean chassis ground source. Pin 85 is the ground side of the solenoid in the relay. The ground going to pin 30 will be the input you will be switching to the output side of the relay.
- Connect pin 30 of the relay to the output side of a door switches or to a dome/courtesy light ground.

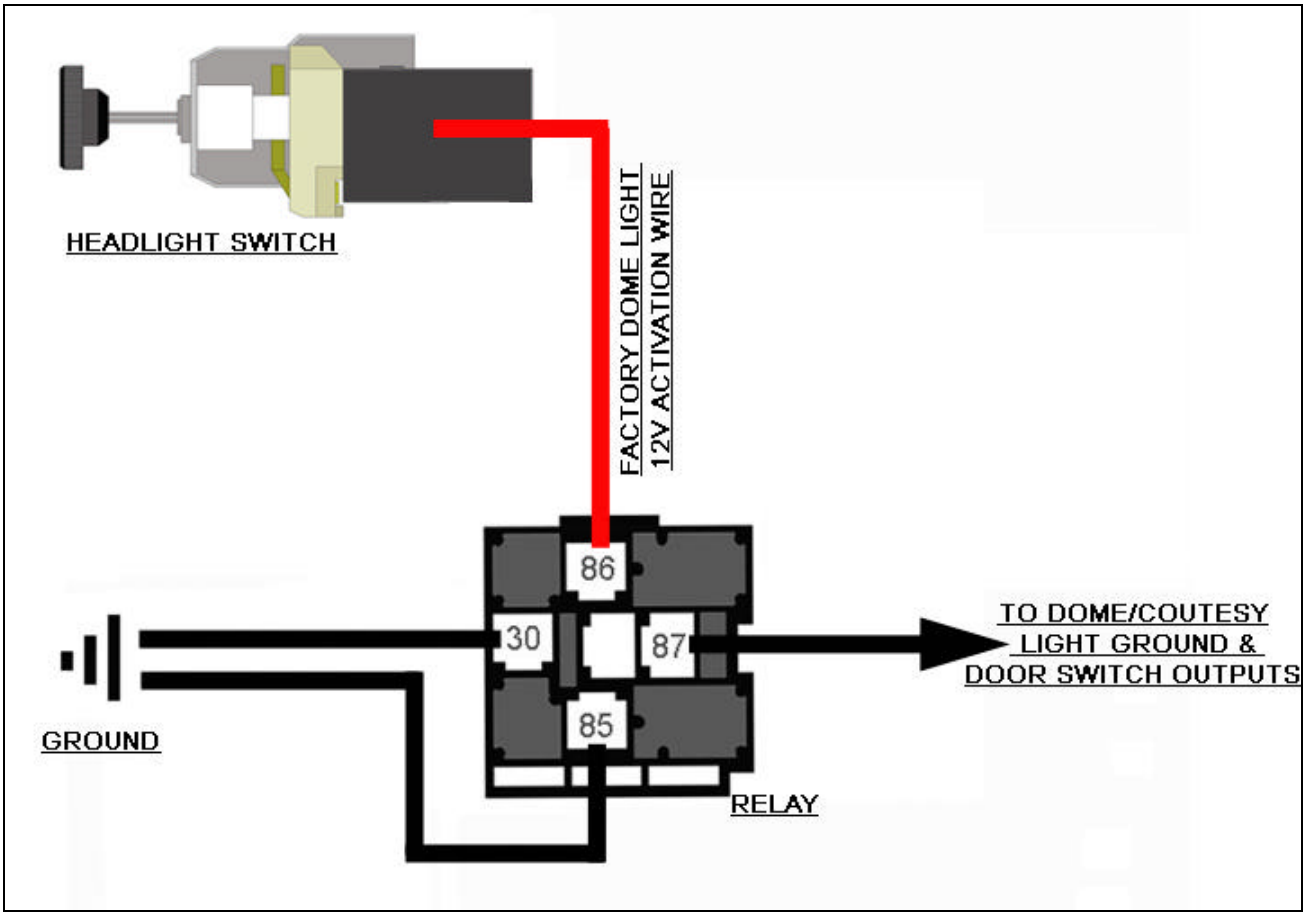
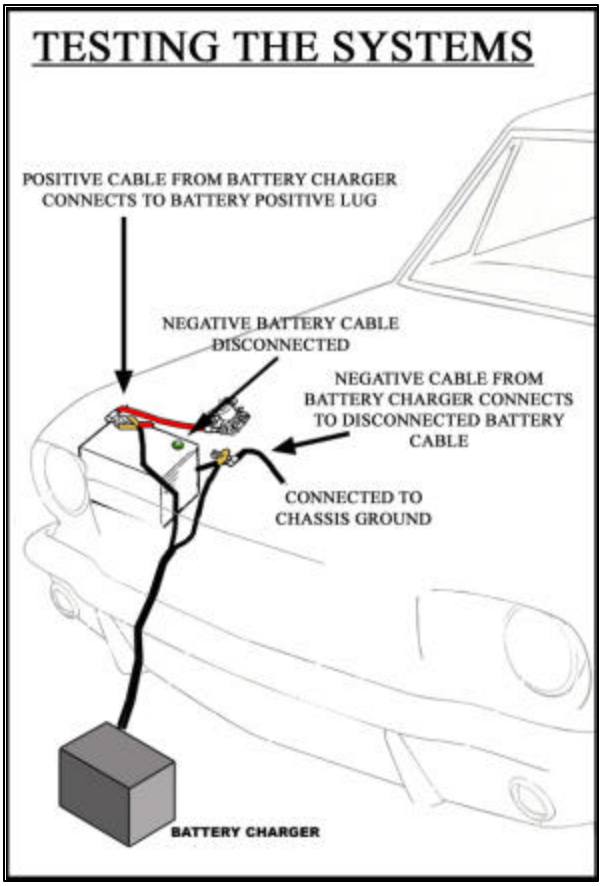


Figure 14 12v Output Activation of a Relay Switching Ground

Figure 15 Testing the System



At this point all necessary changes have been made to allow full function of the Convenience Module. At this point system can be tested.

Testing The Systems

Use a small (10 amp or less) battery charger to power up the vehicle for circuit testing. If there is a problem anywhere, the battery charger's low amperage and internal circuit breaker will provide circuit protection. Only test one function at a time as the power supplied by the battery charger may not allow enough amperage to test multiple functions properly.

- Connect the battery charger's NEGATIVE output to the disconnected negative battery lug.
- Connect the battery charger's POSITIVE output to the automobile's positive battery terminal.

- Open and close the doors and check for proper operation of the dome light dimming.
- Turn the key to the “ON” position and turn the turn signal on for 90+ seconds to activate the turn signal chime. When the chime sounds, turn the turn signal off.
- With the ignition in the “ON” position, cover the light sensor with your hand and wait for the headlights to come on.
- With the headlight now on, turn off the ignition to test the headlight delay, the headlights should go off after about 15 seconds.
- Turn the ignition key to the “ON” position and turn the radio on. With the radio “ON”, turn the ignition “OFF”. The radio should still have power until a door is opened. Now open a door to de-activate the radio delay.
- Turn the key to the “ON” position, and manually turn the headlights or park lights on using your headlight switch. Turn the ignition switch off, the headlight switch should still be a “ON” position. Open a door to activate the headlight switch reminder chime.

When all circuits check out, attach the battery cable to the battery for vehicle operation. Your Convenience Module is now installed.

Painless Performance Limited Warranty And Return Policy

Chassis harnesses, fuel injection harnesses, and Striker Cold Shot units are covered under a lifetime warranty.

All other products manufactured and/or sold by Painless Performance are warranted to the original purchaser to be free from defects in material and workmanship under normal use. Painless Performance will repair or replace defective products without charge during the first 12 months from the purchase date. No products will be considered for warranty without a copy of the purchase receipt showing the sellers name, address and date of purchase. You must return the product to the dealer you purchased it from to initiate warranty procedures.

Notes