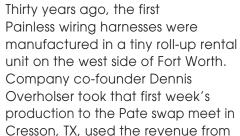


From Humble Beginnings









those sales to purchase more raw materials and a new company called Perfect Performance Products was born. As word began to spread about these easy to install chassis harnesses, the legendary Tex Smith got word and, writing a positive review in his Hot Rod Mechanix magazine, ended it by saying, "Folks, this is really painless wiring!" The name caught on and soon Perfect Performance became Painless Wiring. As the company grew and more products were developed, the name was changed to Painless Performance in 1998 to better reflect the growing divergence of the product line. Today, Painless is headquartered in a modern 45,000 square foot facility in Fort Worth. All research and development, engineering and manufacturing is done in house. At Painless, we are and always will be American made and American proud.









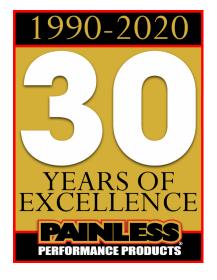


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Factory Tour

PAINLESS PERFORMANCE PRODUCTS









Painless maintains strict quality requirements for all raw material suppliers to ensure the highest quality finished product. Only American vendors are approved. Quality is the key ingredient in every Painless product. Rigorous QC inspection follows all products every step of the way in production to verify the integrity of every crimp, every splice, every application of terminals and connectors. When you open any Painless box,

you will know without question that you have in your hands the highest quality product available anywhere. It's why our customers keep coming back over and over. They know they can trust Painless.









Factory Tour





In addition to the rigorous inspection of all chassis harnesses, each fuel injection harness is mounted on a test board which simulates installation on an actual engine.

A computerized test verifies that every pinout is in the correct location and there is continuity in all the wires. You will know with absolute certainty when you install a Painless fuel injection harness that it will function correctly the first time and every time.

















Engineered To Be The Best



Number One Selling Harnesses

Our customers know that installing one of our harnesses is truly a painless experience. Install just one Painless chassis harness and you'll be a customer for life. Yes, you can buy a cheaper harness, but why would you? The time and effort that goes into building a project vehicle should not be jeopardized by using an inferior electrical system. All wires are not created equal.

When it comes to the safety of your vehicle's electrical system, cutting corners with the wiring system is just not a good idea. With over a quarter century of experience near one million harnesses on the road, Painless is the sensible solution to all your automotive wiring needs.

Two important features make Painless the easiest wiring harnesses anywhere to install. First, we take the time during final assembly to group the wires by where they go in the vehicle. Depending on the application the average harness will have 15 to 18 different groups of wires – headlight section, taillight section, instrument section, ignition section, etc. – all wire-tied together. So instead of routing over 100 individual wires, you're just routing 15 or so sections. We put in the extra labor so you don't have to.

Painless only uses the highest quality TXL (Thermal Cross-Linked) wire. Why is this important to you? Well, TXL features an extra-thin walled insulation, making it the smallest and most lightweight wiring option. This also makes it the easiest wire to route; it won't kink and bind up on you in those hard to fit places like the inferior GPT wire is prone to do.

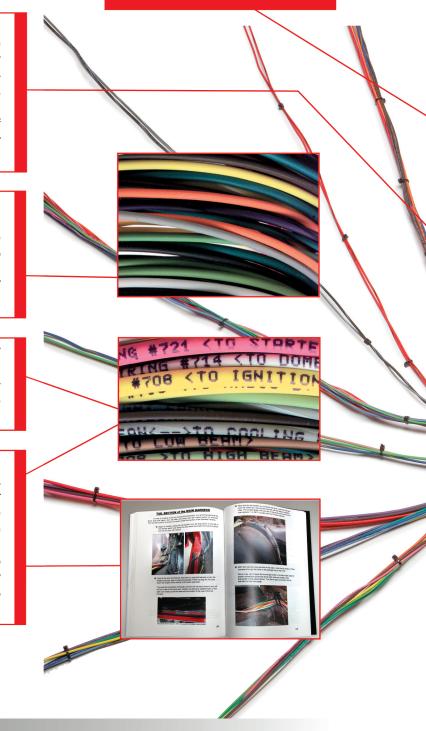
You also can't get a higher temperature rating with any other wire. TXL has a temperature range of -51C to 125C (-60F to 257F), enabling it to resist high engine compartment heat. The less costly, harder to route GPT wire is only rated at -40C to 80C (-40F to 176F).

Every wire in a Painless chassis harness has its function printed on it every few inches the entire length of the wire. We even go to the extent of using white ink on the darker colored wires and black ink on the lighter ones to ensure ease of reading. This makes installation and, should the need ever arise, troubleshooting a snap. Second, you don't need to have a degree in electrical engineering to install a Painless harness, nor do you have to know how to read a confusing wiring schematic. You just need to know how to read our straightforward instructions.





The nerve center of every Painless chassis harness are our premium quality, OEM-style fuse blocks. Featuring easy-to-find, blade-type fuses and clearly labeled circuits, these blocks will deliver years of trouble free service. Corrosion resistant terminals, solid mounting points, superior construction and compact design assure years of trouble free performance.



Engineered To Be The Best

For The Best Reason: Quality!

Half the job is already done for you. Just mount the block and route the wires. This is the most important feature of a Painless chassis harness. How well the wiring is connected to the fuse block, how secure and permanent the connection, determines how well the entire system will perform. Every Painless chassis harness comes out of the box with the wiring already hand terminated to the fuse block. This assures you of a trouble-free performance that do-it-yourself screw connections cannot match.

You know you'll be completing your installation with quality components because the fuses, flashers, relays, wire ties and mounting brackets you need to do the job right are in the Painless chassis harness kit. (Components vary by application).

Even seasoned wiring pros have a question now and then and, if the answer is not in the comprehensive, step-by-step instruction manual that comes in each kit, it's nice to know that you're just a toll free call away from the most professional technical assistance help line in the industry.



Choosing The Right Harness



We created our "Circuit-Match System" in this catalog to guide you to the perfect harness for your specific application. In many cases we offer harness kits engineered for a specific make and model application and that's all you'll need to complete the job. In other cases, such as a modified vintage car or classic truck application, you'll want a harness that allows some customization or future expansion of capabilities. There are even more simple applications such as T-Buckets, rock crawlers or race cars where all you need is a simple 18 circuit system for basic electrical functions.



As you look through this catalog you will see yellow check-off boxes on each harness page that list all the components and systems which are serviced by each harness application. If you're re-wiring a stock vehicle or are not changing the electrical components on your vehicle, just check off the list to confirm you have the right harness to service all the electrical components you have. If you are upgrading your vehicle with new systems or components such as air conditioning, power windows or a custom sound system, then find the harness which includes circuits for these additional components. It's a simple concept but it takes the guesswork out of choosing the right harness the first time!

If you've used our kits before, you already know how "Painless" we make wiring your vehicle. We want to make choosing the parts you need painless as well. If you find yourself with any questions please call our highly knowledgeable technical support staff to discuss which Painless Performance Products you need to do a professional wiring job on your project vehicle. We genuinely want to hear from you to help you choose the right products for your projects.

Next we are going to discuss some of our key product terminologies you will come across throughout this catalog. To learn about all of the benefits and technology that goes into our chassis harnesses please reference pages 6 & 7.

Customizable Kits: These harnesses are available as either Classic or Classic-Plus giving the expandability and flexibility you may need to be creative with your project. The major difference between these are the "Classic-Plus" kits include provisions for you to add extra accessories you may want. Examples of these additional accessories might be: power windows, power door locks, a power antenna or maybe a 12 volt accessory port to charge your cell phone. Customizable Kits are very adaptable to most any vehicle. Also offered are more vehicle specific options that still allow you the expandability to wire your vehicle how you want to for more accessories.

Classic Kits: This is the term we use to describe our 21 and fewer circuit kits. These kits feature everything needed to get you on the road and provide extra circuits for some accessories, however, not as many as our Classic-Plus Kits.

Classic-Plus Kits: This is the term we use to describe our 28 circuit kits. These harnesses include everything the Classic series provides with additional circuits for more power accessories like power windows & locks.

Pro-Series Kits: These harnesses are catered to 60s, 70s, and 80s GM vehicles and allow for customization of the harness by providing ample length wiring, giving you the freedom to route and cut the harness to fit your exact setup. With over 25 GM connectors, you can turn your custom routed wiring into a Direct Fit for your build! Just a few of the other upgrades include a 6 gauge charge wire for modern high amperage alternators, LED smart fuses, ground straps, light sockets, heat shrink, and much MORE! **Ford specific Pro-Series harnesses are COMING SOON!**

Direct Fit Kits: These harnesses are custom-tailored to be vehicle specific, plug and play kits with all the circuits and connectors necessary to completely and painlessly wire your vehicle. They are not, however, simply factory replacements. We understand that many of you want to add some creature comforts such as air conditioning, high amperage alternators or other accessories that were not available as a factory option in your vehicle, so our engineers have designed these elements into our Direct Fit harnesses. For complete information on our additional circuits we have provided, look up the Direct Fit harness specific to your vehicle!

Whenever you see this logo, that means the harness includes an integrated ground circuit. This means that all the wiring has necessary grounding built into the harness, saving you install time!



Customizable



MATCH



This 18 Circuit Customizable Harness may be just what you need. Wiring harnesses just don't come any simpler than this. This compact harness has all the basic circuits to get you rolling in no time.

10308 - 18 Circuit Customizable Chassis Harness With Extra Length Wires



Includes Circuits For:

CIRCUIT

- Accessory
- Brake Lights
- Charging
- Electric Choke
- Emergency Flashers
- Fan Relay Activation Power
- **Fused Power Source**
- Headlights
- Horn (Relay)
- Ignition Coil
- Instrument Panel Lighting & Gauges*
- Park Lights
- Radio/Clock (Constant & Switched)
- Starting
- Tail Lights
- Third Brake Light
- Turn Signals
- Wipers
 - *Includes wires for:
 - Fuel Gauge
 - Tachometer
 - Temperature Gauge
 - Voltmeter

Accessories

Painless offers everything you need to wire your ride right the first time. From the main chassis wiring, to fuel injection wiring harnesses, relay kits, grounding solutions, battery and charging accessories, and much more!

Battery Cable Kits - Page 90

Whether remote mounting your battery in the trunk or keeping it under the hood, Painless has high quality battery cables to suite your needs. Painless cables are high quality flexible 1 gauge cable. All kits include side post adapters and high Amp crimp ring terminals with heat-shrink.



One of the most common items overlooked in automotive wiring is having insufficient chassis and body grounds. Painless has multiple solutions to make sure your chassis is properly grounded.

Relay Kits - Pages 80-84

Relays allow you to run high amperage circuits directly off your battery, keeping your switches safe. Painless offers many relay kits from headlights to fuel pumps and everything in between. Weatherproof options are also available.







Classic Customizable



Includes Circuits For:

CIRCUIT

Get The Right

Harness

MATCH

A/C and Heat

Accessory / Cigarette Lighter

Backup Lights

Brake Lights

Charging

Dome Light

Electric Choke

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Radio/Clock (Constant & Switched)

Starting

Tail Lights

Third Brake Light

Turn Signals

Wipers

*Includes wires for:

Fuel Gauge Oil Gauge

Oil Gauge

Temperature Gauge

Voltmeter

This 21 circuit kit is our most widely used customizable chassis harness. You'll find that it's easily adaptable to almost any vehicle. We offer two versions, one with a pre-terminated GM column mounted ignition switch connector and one without. Included with this harness are the following parts; a GM engineered fuse block & Painless mounting bracket; GM turn signal connectors; pre wired plugs for the headlights & dimmer switch; and each wire is printed with the circuit identification as well as using GM color codes for easy installation.

10101 - 21 Circuit Classic Customizable Chassis Harness - GM Keyed Column



10102 - 21 Circuit Classic Customizable Chassis Harness - Non GM Keyed Column





Painless Pro Solutions

ClassicBraid & PowerBraid Wire Loom

Don't leave your wires unprotected! The easy to install split loom design is the perfect solution to clean up and protect the wiring in your vehicle. The ClassicBraid has a classic show car look similar to cloth. While the PowerBraid gives you a high performance nylon look.

Classic-Plus Customizable







Includes Circuits For:

CIRCUIT

Harness

MATCH

A/C and Heat

Accessory

Accessory / Cigarette Lighter

Accessory / Trunk Light

Backup Lights

Brake Lights

Charging

Cruise Control

Dome Light

Electric Choke

Electric Fuel Pump

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Power Antenna

Power Door Locks

Power Windows

Radio/Clock (Constant & Switched)*

Starting

Tail Lights

Third Brake Light

Turn Signals

Wipers

Includes wires for: Fuel Gauge Oil Gauge

Speakers Tachometer

Temperature Gauge Voltmeter

This 28 circuit kit includes most all the power accessory circuits you have been looking to add to your vehicle. The versatility of this harness will allow it to be easily adapted to almost any vehicle. It is available with or without the GM column mounted ignition switch connectors. Included with this harness are the following parts; a GM engineered fuse block & Painless mounting bracket; GM turn signal connectors; pre wired plugs for the headlights & dimmer switch; and each wire is custom printed with the circuit identification as well as using GM color codes for easy installation.

10201 - 28 Circuit Classic-Plus Customizable Chassis Harness -GM Keyed Column



GM Column Ignition Switch Connection

10202 - 28 Circuit Classic-Plus Customizable Chassis Harness - Non GM Keyed Column



In-Dash Ignition
Switch Connection



Painless Pro Solutions

Ground Strap Kits

No matter the application, you're not going anywhere unless you've got good grounds! Bad grounds are the number one problem in automotive electrical issues. Eliminate those electrical gremlins with a new set of Painless ground straps today!

Classic Remote Mount



Includes Circuits For:

CIRCUIT

Get The Right

MATCH

A/C and Heat

Accessory

Backup Lights

Brake Lights

Charging Dome Light

Telectric Choke

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Radio/Clock (Constant & Switched)

Starting

Tail Lights

Third Brake Light

Turn Signals

Wipers

*Includes wires for:

Fuel Gauge

Tachometer

Temperature Gauge

Voltmeter

This 21 circuit kit has extra long wires allowing you to mount the fuse block in a remote location such as in the trunk or behind the rear seat. This harness is highly adaptable to almost any vehicle. Included with this harness are the following parts; GM turn signal & column mounted ignition switch connectors; pre wired plugs for the headlights & dimmer switch; and each wire is custom printed with the circuit identification as well as using GM color codes for easy installation.

10120 - 21 Circuit Classic Customizable **Trunk Mount Chassis Harness**



AMERICAN PROUD







Painless Pro Solutions

Relay Kits

Are you blowing fuses and melting switches? Using relays could be your answer. High amperage circuits are best utilized with one See Page 80-84 For Info of our simple relay kits!

Classic-Plus Remote Mount



Are you looking to remote mount your fuse block and you want full power options? Then this 28 circuit kit will provide you with all those power accessory circuits, as well as extra long wires allowing you to mount the fuse block in a remote location such as in the trunk or behind the rear seat. Included with this harness are the following parts; GM turn signal & column mounted ignition switch connectors; pre wired plugs for the headlights & dimmer switch; and each wire is custom printed with the circuit identification as well as using GM color codes for easy installation.

10220 - 28 Circuit Classic-Plus **Customizable Trunk Mount Chassis Harness**



GM Column Ignition Switch Connection



In-Dash Ignition Switch Connection



Painless Pro Solutions

ClassicBraid & PowerBraid Wire Loom

Don't leave your wires unprotected! The easy to install split loom design is the perfect solution to clean up and protect the wiring in your vehicle. The ClassicBraid has a classic show car look similar to cloth. While the PowerBraid gives you a high performance nylon look.



Pro's Tip from Stacey David

"When remote mounting your battery, don't forget to upgrade your alternator and battery cables too"

See page 90 for remote cable kits

Includes Circuits For:

1A/C and Heat

Accessory

Accessory / Cigarette Lighter

CIRCUIT

Get The Right

Accessory / Trunk Light

Backup Lights

Brake Lights

Charging

Cruise Control

Dome Light

Electric Choke

Electric Fuel Pump

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Power Antenna

Power Door Locks

Power Windows

Radio/Clock (Constant & Switched)*

Starting

Tail Lights

Third Brake Light

Turn Signals

Wipers

*Includes wires for: Fuel Gauge

Oil Gauge Speakers

Tachometer

Temperature Gauge

Voltmeter

Classic Customizable Bulkhead



Includes Circuits For:

CIRCUIT

Get The Right

Harness

MATCH

A/C and Heat

Accessory

Backup Lights

Brake Lights

Charging
Dome Light

TElectric Choke

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Radio/Clock (Constant & Switched)

Starting

Tail Lights

Third Brake Light

Turn Signals

Wipers

*Includes wires for:

Fuel Gauge

Oil Gauge Tachometer

Temperature Gauge

Voltmeter

This 21 circuit universal kit is great for hot rod or street rod builds, but you'll find that it's easily adaptable to almost any vehicle and has enough length to handle full size and muscle cars. To pass through the firewall, a bulkhead connector is utilized, giving you the ability to disconnect the engine/headlight section wiring at the firewall. The provided to-scale peel and stick template makes firewall trimming easy. This harness comes with open ended ignition switch wires that can easily be adapted to any ignition switch out there. Included with this harness are the following parts; a GM engineered fuse block & bulkhead connector; GM turn signal connectors; pre wired plugs for the headlights & dimmer switch; and each wire is printed with the circuit identification as well as using GM color codes for easy installation.

20103 - 21 Circuit Classic Customizable Bulkhead Harness









See Page 90 For Info

Painless Pro Solutions

Ground Strap Kits

No matter the application, you're not going anywhere unless you've got good grounds! Bad grounds are the number one problem in automotive electrical issues. Eliminate those electrical gremlins with a new set of Painless ground straps today!

Classic-Plus Customizable Bulkhead



This 28 circuit universal kit is great for hot rod or street rod builds, but you'll find that it's easily adaptable to almost any vehicle and has enough length to handle full size and muscle cars. To pass through the firewall, a bulkhead connector is utilized, giving you the ability to disconnect the engine/headlight section wiring at the firewall. The provided to-scale peel and stick template makes firewall trimming easy. This harness comes with open ended ignition switch wires that can easily be adapted to any ignition switch out there. Included with this harness are the following parts; a GM engineered fuse block & bulkhead connector; GM turn signal connectors; pre wired plugs for the headlights & dimmer switch; and each wire is printed with the circuit identification as well as using GM color codes for easy installation.

20104 - 28 Circuit Classic-Plus Customizable Bulkhead Harness







Painless Pro Solutions

Relay Kits

Are you blowing fuses and melting switches?
Using relays could be your answer. High amperage circuits are best utilized with one of our simple relay kits!

Includes Circuits For:

A/C and Heat

Accessory

Accessory / Cigarette Lighter

CIRCUIT

MATCH

Accessory / Trunk Light

Backup Lights

Brake Lights

Charging

Cruise Control

Dome Light

Electric Choke

Telectric Fuel Pump

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Liahts

Power Antenna

Power Door Locks

Power Windows

Radio/Clock (Constant & Switched)*

Starting

Tail Lights

Third Brake Light

Turn Signals

Wipers

*Includes wires for: Fuel Gauge Oil Gauge Speakers Tachometer

Temperature Gauge Voltmeter

Pro-Series Introduction



Professional Grade Wiring - Do-It-Yourself Ease

The Pro-Series allows for customization of the harness by providing ample length wiring, giving you the freedom to route and cut the harness to fit your exact setup. With over 25 GM connectors, you can turn your custom routed wiring into a Direct Fit for your build! Just a few of the other upgrades include a 6 gauge charge wire for modern high amperage alternators, LED Smart Fuses, ground straps, light sockets, heat shrink, and much MORE!

Included with the GM Pro Series harnesses is:

- •(4) H4 Headlight connectors- to support single (high/low) or dual headlights (separate high beams)
- •(2) Front Turn signal connectors- fits connectors found on factory GM hard wired turn signals
- (4) Molded ¼ sockets for front & rear marker lights
- •(2) HEI distributor connectors (+ and Tach)
- •(2) Connectors for factory GM wiper motor
- •GM washer pump connector
- Courtesy light sockets
- •GM headlight switch connector
- •GM dimmer switch connector
- •GM brake switch connector
- •GM turn signal switch flat connectors (early & late)
- GM ignition switch connectors*
- Neutral Safety Switch connector (column mounted or factory floor shifter mounted)
- Reverse Switch connector (column mounted or factory floor shifter mounted)
- Braided ground straps (for body
- and core support to frame grounding, also includes (6) self-tapping ¼" screws for mounting)
- Alternator bag kit with terminals, splices, resistor, diode to connect the alternator. (1) Connector for GM 10si alternator
- Assortment of insulated and non-insulated splices, ring terminals, heat shrink, grommets, cable ties, and cable tie clips.
- * Only on GM keyed column harnesses



Pro-Series Ford Wiring Options Coming Soon!

Pro-Series Options



25 Circuit

FUSE BLOCK SIZING

The Pro-Series is offered in two fuse block sizes:

23 Circuit: Smaller 12 Fuse Block Controlling 23 Circuits - No Power Windows or Power Door Locks

25 Circuit: Larger 18 Fuse Block Controlling 25 Circuits - Dedicated Power Window and Lock circuits included

FIREWALL PASS-THROUGH

Once you have picked your fuse block, it is time to decide how the wires will pass through the firewall; Grommet, Bulkhead, or Pickup.



Bulkhead - The bulkhead option utilizes the GM Bulkhead firewall pass-through used in most GM vehicles from 1968 and up. The GM A-Bodies, F-Bodies, X-Bodies, etc. all used this bulkhead. Those with other vehicles wanting to utilize the bulkhead can trim their firewall to fit the GM bulkhead using the provided to-scale peel and stick template.



Grommet - The grommet application allows you to route your under hood and headlight section wiring through a provided grommet, allowing freedom to pass through the firewall where you choose. Those running a completely smoothed firewall will likely prefer the grommet Pro-Series.



Pickup - The pickup option utilizes the same GM Bulkhead as the regular bulkhead application, but the tail section wires pass through the bulkhead, allowing them to be routed along the frame like factory setups. The bulkhead is a direct fit for `73+GM trucks, and the firewall can be trimmed on earlier C10s or other brands and applications using the provided to-scale peel and stick template.

GM Keyed Column and In-Dash Options Offered



Pro-Series 23 Circuit



Includes Circuits For:

A/C and Heat

Accessory (Fan Relay Activation, Etc.)

Backup Lights

Brake Lights

Charging

Cigarette Lighter

Dome Light & Courtesy Lights

Electric Choke

Emergency Flashers

Fused Power Source

Grounds - Front and Rear Lights

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park / Marker Lights

Radio/Clock (Constant & Switched)** Relay Activation (Electric Fuel Pump,

Etc.)

Starting

Tail Lights & License Plate Light

Third Brake Light

Turn Signals

Wipers & Washer Pump

*Includes wires for: Fuel Gauge

Oil Gauge

Tachometer

Temperature Gauge

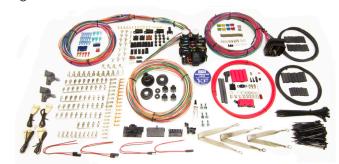
**Includes Amp Activation Wire



23 Circuit Grommet Pass-Through (Pictured Above)

10401 - Pro Series - GM Keyed Column - Grommet Firewall Pass-Through

10402 - Pro Series - Key In Dash - Grommet Firewall Pass-Through



23 Circuit Bulkhead Pass-Through (Pictured Above)

10403 - Pro Series - GM Keyed Column - Bulkhead Firewall Pass-Through

10404 - Pro Series - Key In Dash - Bulkhead Firewall Pass-Through

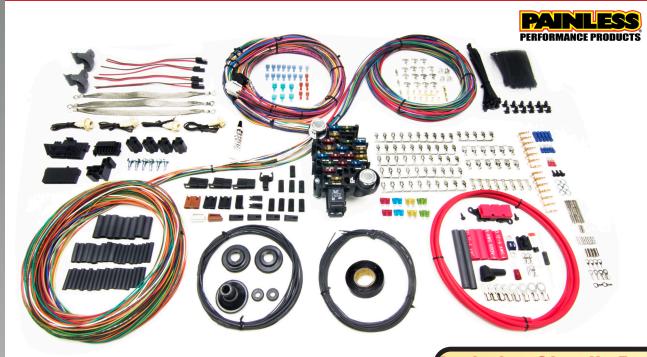


23 Circuit Pickup Bulkhead Pass-Through (Pictured Above)

10405 - Pro Series - GM Keyed Column - Pickup Firewall Pass-Through

10406 - Pro Series - Key In Dash - Pickup Firewall Pass-Through

Pro-Series 25 Circuit



25 Circuit Grommet Pass-Through (Pictured Above)

10411 - Pro Series - GM Keyed Column - Grommet Firewall Pass-Through

10412 - Pro Series - Key In Dash - Grommet Firewall Pass-Through



25 Circuit Bulkhead Pass-Through (Pictured Above)

10413 - Pro Series - GM Keyed Column - Bulkhead Firewall Pass-Through

10414 - Pro Series - Key In Dash - Bulkhead Firewall Pass-Through



25 Circuit Pickup Bulkhead Pass-Through (Pictured Above)

10415 - Pro Series - GM Keyed Column - Pickup Firewall Pass-Through

10416 - Pro Series - Key In Dash - Pickup Firewall Pass-Through

Includes Circuits For:

A/C and Heat

Accessory (Fan Relay Activation,

Etc.)

Backup Lights

Brake Lights

Charging

Cigarette Lighter

Dome Light & Courtesy Lights

Electric Choke

Electric Fuel Pump

Emergency Flashers

Fused Power Source

Grounds - Front and Rear Lights

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park / Marker Lights

Power Door Locks

Power Windows

Radio/Clock (Constant & Switched)**

Starting

Tail Lights & License Plate Light

Third Brake Light

Turn Signals

Wipers & Washer Pump

*Includes wires for: Fuel Gauge

Oil Gauge Tachometer

Temperature Gauge

**Includes

Amp Activation Wire



Customizable 1967-68 Camaro/Firebird



Includes Circuits For:

A/C and Heat

Accessory / Cigarette Lighter

Accessory / Trunk Light

Backup Lights

Brake Lights

Charging

Dome Light & Courtesy Lights

Electric Choke

Electric Fuel Pump

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Power Door Locks

Power Windows

Radio / Clock (Constant & Switched)*

Starting

Tail Lights & License Plate Light

Third Brake Light

Turn Signals

Wipers & Washer Pump

*Includes wires for: Cigarette Lighter Light Brake Warning Light Fuel Gauge Generator Light Oil Gauge Speakers Tachometer Temperature Gauge Voltmeter



This 24 circuit harness is designed for the 1967 and 1968 Camaro & Firebird. It uses a '69 and newer style bulkhead connector design along with blade fuses and enough circuits to wire up just about any installed upgrade to your 1st generation F-body. Some minor firewall/bulkhead modification required. Factory original quick connect terminals are included for the in dash printed circuit board. Pre-terminated plugs for a dimmer switch, headlights & headlight switch, blower motor, wiper motor, and turn signal switch. Included with this harness you'll also find a detailed manual and each wire is custom printed with the circuit identification as well as using GM color codes for easy installation.

20101 - 24 Circuit Classic-Plus Customizable 1967-68 Camaro/Firebird Harness



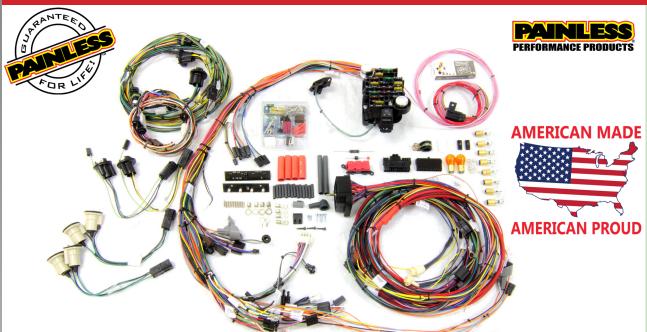


Headlight Door Harness

1967 Camaro headlight door harness. Designed specifically for the 1967 RS. Required when installing a 20101 in your '67 RS Camaro. **30818**



Direct Fit 1969 Camaro



Your most complete '69 Camaro Harness! Featuring 26 circuits with virtually every connector installed on the harness out of the box. This harness covers all common options and even features a fully integrated ground circuit. Included are provisions for the RS headlights and taillights, cowl hood, and even a complete console harness! Installing the harness is made clear with an included 120+ page manual full of color schematics, photos, and step-by-step instructions!

- Numerous components have the connectors and terminals pre-installed to make connections plug-n-play
- All exterior lights have the correct sockets and bulbs pre-installed
- 6 gauge charge wire and 150 amp MIDI fuse (replaces fusible link)
- Fully integrated ground circuit
- 120+ page manual full of color schematics, photos, and step-by-step instructions

NOTE: Factory A/C wiring is not included. These harnesses do include the power wire for the A/C switch to make it as easy as plugging in your original A/C harness, an aftermarket reproduction harness, or an aftermarket A/C system. These harnesses do include a new blower motor harness for those with heat only systems.

20202- 26 Circuit Direct Fit
1969 Chevrolet Camaro Harness



GM Column Ignition Switch Connection





Includes Circuits For:

Accessory

Accessory / Cigarette Lighter

Accessory / RS/SS Headlight Covers

Backup Lights

Blower Motor

Brake Lights

Charging

Dome Light & Courtesy Lights

Electric Choke

Telectric Fuel Pump

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Glove Box Light Get The Right

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

CIRCUIT

Harness

Park Lights

Power Door Locks

Power Windows

Radio / Clock (Constant & Switched)*

Starting

Tail Lights & License Plate Light

Turn Signals

Wipers & Washer Pump

*Includes wires for: Aftermarket Gauge Power Ammeter Brake Warning Light Fuel Gauge Gear Indicator Light Oil Gauge Tachometer Temperature Gauge Voltmeter

Direct Fit 1970-81 Camaro



Includes Circuits For:

Accessory

Accessory / Cigarette Lighter

Backup Liahts

Blower Motor

Brake Lights

Charging

Dome Light & Courtesy Lights

Telectric Choke

Electric Fuel Pump

Emergency Flashers

Trused Power Source

Glove Box Light

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

CIRCUIT

Harness

Park Lights

Power Door Locks

1 Power Windows

Radio / Clock (Constant & Switched)*

Seat Belt Lights

Starting

Tail Lights & License Plate Light

Turn Signals

Under Hood Light

Wipers & Washer Pump

*Includes wires for:

Aftermarket Gauge Power Brake Warning Light

Fuel Gauge

Gear Indicator Light Key Buzzer

Oil Gauge

Tachometer Temperature Gauge

Voltmeter

These 26 circuit Direct Fit 2nd Gen Camaro harnesses have virtually every connector installed on the harness out of the box. These harnesses are split into three sections (engine, interior, & rear) and features a fully integrated ground circuit. You'll find many upgrades in these harnesses such as a 4 gauge charge wire and a 150 amp midi fuse (replaces fusible link). Included is a 150+ page full color step by step manual that also covers many alternative wiring options and each wire is custom printed with the circuit identification as well as using GM color codes for easy installation.

NOTE: Factory A/C wiring is not included, as this option seemed to almost change year to year. These harnesses do include the power wire for the A/C switch to make it as easy as plugging in your original A/C harness, an aftermarket reproduction harness, or an aftermarket A/C system. These harnesses do include a new blower motor harness for those with heat only systems.

20112 - 26 Circuit Direct Fit 1970-73 Camaro Harness

20113 - 26 Circuit Direct Fit 1974-77 Camaro Harness

20114 - 26 Circuit Direct Fit 1978-81 Camaro Harness



GM Column Ignition

Switch Connection





1970-81 Camaro Accessories



Gen II Camaro Power Window & Door Lock Harness

Second Gen Camaros can have major window and door lock issues from inferior original wiring. We've included additional relays to save your switches, all new premium connectors and hi-temp wiring for maximum reliability. GM color coded, direct plug-in.

30715 - 1970-81 Camaro Power Window and Door Lock Sub-Harness



PowerBraid & ClassicBraid Wire Loom Kits

Finish the installation job right with our complete PowerBraid or ClassicBraid kit for use with any of the following 2nd gen Camaro harnesses: 20112, 20113, or 20114. Contains all the appropriate diameter wire wrap, ties, and tape.

See page 75 for our full line of PowerBraid and ClassicBraid.

70923 - PowerBraid 2nd GEN Camaro Kit Includes: 41' of 1/8", 70' of ¼", 33' of ½", 2' of ¾", 2' of 1" (for harness part #'s 20112/20113/20114)

70973 - ClassicBraid 2nd GEN Camaro Kit Includes: 41' of 1/8", 70' of ¼", 33' of ½", 2' of ¾", 2' of 1" (for harness part #'s 20112/20113/20114)



Universal ground strap kits:

4 Piece kit includes (1) 14" 1/0 heavy duty ground strap, (3) 11" 10 gauge ground straps and self tapping screws. **40140**

Single 1/0 heavy duty 14" ground strap.

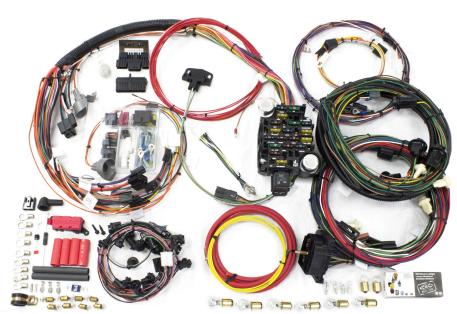
40141

Single 10 gauge heavy duty 11" ground strap and (2) 1/4 self tapping screws for mounting.

40142



Direct Fit 1968-1972 Chevelle









Includes Circuits For:

- 1A/C and Heat
- Accessory / Cigarette Lighter
- Backup Lights
- Brake Lights
- Charging
- Courtesy & Dome Light
- Cowl Hood Solenoid
- Electric Choke
- Electric Fuel Pump
- Emergency Flashers
- Fused Power Source
- Glove Box Light Get The Right
- Headlights
- Horn (Relay)
- Ignition Coil
- Instrument Panel Lighting & Gauges*

CIRCUIT

Harness

MATCH

- Park Lights
- Power Door Locks
- Power Windows
- Radio/Clock (Constant & Switched)*
- Starting
- Tail Lights & License Plate Light
- Trunk Light
- Turn Signals
- Under Hood Light
- Wipers & Washer Pump
 - *Includes wires for:
 - Aftermarket Gauge Power Brake Warning Light
 - Fuel Gauge
 - Gear Indicator Light
 - Oil Gauge
 - Tachometer Temperature Gauge Voltmeter

This harness gives you everything you need and more! Not only are there provisions for connecting standard factory components, we also provide what you will need for aftermarket components. Including options like a console sub-harness, a gauge cluster pigtail for the SS and base model, and even a fully integrated ground circuit. These harnesses follow all of the same routing found on the factory harness which allows you to utilize the factory harness attachment points. Extra length has even been added to even allow the headlight section to be routed behind the driver side inner fender for a cleaner look. Also included is a 130+ page manual full of color schematics, photos, and step-bystep instructions!

- Numerous components have the connectors and terminals pre-installed to make connections plug-n-play
- All exterior lights have the correct sockets and bulbs pre-installed
- 6 gauge charge wire and 150 amp MIDI fuse (replaces fusible
- Fully integrated ground circuit
- 130+ page manual full of color schematics, photos, and step-by-step instructions

Note: Options not supported in these harnesses are: wiring for the TCS relay for turbo 400 transmissions, wiring for the factory power window/locks, and factory A/C wiring. These harnesses do include the switch power wire for the factory power window/locks and A/C. These harnesses do include a new blower motor harness for those with heat only systems.

- 20128 26 Circuit Direct Fit
- 1968 Chevrolet Chevelle / Malibu Harness
- 20129 26 Circuit Direct Fit
 - 1969 Chevrolet Chevelle / Malibu Harness
- 20130 26 Circuit Direct Fit
 - 1970-72 Chevrolet Chevelle / Malibu Harness





Tri-Five Chevy



This 28 circuit kit is designed to fit the 1955-1957 "Tri-Five Chevy" and includes additional circuits for power options and accessories. This harness features a factory location Painless mounting plate for the fuse block, front and rear lighting pigtails, factory instrument cluster harness, and dash & turn signal connectors. Included with this harness you will also find pre wired plugs for the headlights and each wire is custom printed with the circuit identification as well as using GM color codes for easy installation.

20105 - 28 Circuit Classic-Plus **Tri-Five Chevy Chassis Harness**







Pro's Tip from Stacey David

"One of the most common items overlooked in automotive wiring is having insufficient chassis and body grounds."

See page 90 for ground strap kits

Includes Circuits For:

CIRCUIT

MATCH

TAC & Heat

Accessory - Ign. Switched 12V

Accessory / Cigarette Lighter

Amp Turn On

Backup Lights

Brake Lights

Charging Cruise Control

Dome Light

Electric Choke

Electric Fuel Pump

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Power Door Locks

Power Windows

Radio / Clock (Constant & Switched)*

Starting

Tail Lights

Third Brake Light

Turn Signals

Wipers

*Includes wires for:

Aftermarket Gauge Power

Ammeter

Brake Warning Light

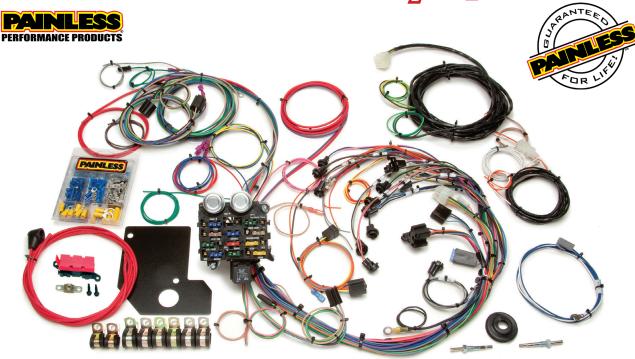
Fuel Gauge Gear Indicator Light

Oil Gauge Tachometer

Temperature Gauge

Voltmeter

Direct Fit 1966-67 Chevy II/Nova



Includes Circuits For:

CIRCUIT MATCH

A/C and Heat

Accessory / Cigarette Lighter

Backup Lights

Brake Lights

Charging

Dome Light

Electric Choke

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Glove Box Light

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Radio / Clock (Constant & Switched)*

Starting

Tail Lights & License Plate Light

Turn Signals

Wipers

*Includes wires for: Brake Warning Light Charge Light Fuel Gauge Oil Gauge Tachometer Temperature Gauge This 21 circuit Direct Fit Chevy II/Nova harness has many of the factory connectors already installed on the harness out of the box. Including: the headlight connectors & switch, fuel gauge connector, dimmer switch, brake switch, heater switch, blower resistor, wiper switch, backup switch, horn, dash light sockets, and warning light sockets. This harness is split into three sections (engine, interior, & rear) for easy installation and troubleshooting. You'll also find in this kit a harness for the factory air, a high output alternator pigtail with the connector installed, two door jam switches, 12 instrument panel light bulbs, eight harness mounting clamps, a custom Painless mounting plate for the fuse block, and each wire is custom printed with the circuit identification as well as using GM color codes for easy installation.

20110 - 21 Circuit Direct Fit
1966-67 Chevy II / Nova Chassis Harness





30806 - GM Coluimn Installation Kit

Painless Pro Solutions

GM Column Installation Kit

Are you looking to put an aftermarket column in your vehicle? This kit has all the plugs and terminals for using a GM keyed aftermarket steering column. It contains two ignition switch connectors, two turn signal connectors and one dimmer switch connector and terminals for each. See page 86 for more information.

Customizable Mopar Color Coded



This customizable 21 circuit harness can be used in almost any application where you want Mopar color coded wires. This harness eliminates the troublesome bulkhead connector, and uses our unique covered micro-fuse block. Also featured is an auxiliary circuit with a 20 amp relay for accessories such as fog lights, or an electric fuel pump. Each wire is custom printed with the circuit identification as well as using Mopar color codes for easy installation.

10127 - 21 Circuit Customizable Mopar Color Coded Chassis Harness





Pro's Tip from Stacey David

"When remote mounting your battery, don't forget to upgrade your alternator and battery cables too"

See page 90 for remote cable kits

Includes Circuits For:

CIRCUIT

AC & Heat

Accessory (Relay)

Backup Lights

Brake Lights

Charging

Dome Light

Electric Choke

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Radio / Clock (Constant & Switched)*

Starting

Tail Lights & License Plate Light

Third Brake Light

Turn Signals

Wipers

*Includes wires for:

Fuel Gauge Gear Indicator Light

Oil Gauge

Tachometer Temperature Gauge

Temperature Gauge Voltmeter

Customizable Ford Color Coded



Includes Circuits For:

CIRCUIT

Harness

MATCH

AC & Heat

Accessory (Relay)

Backup Lights

Brake Lights

Charging

Dome Light & Courtesy Lights

Electric Choke

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Radio / Clock (Constant & Switched)*

Starting

Tail Lights & License Plate Light

Third Brake Light

Turn Signals

Wipers

*Includes wires for: Brake Warning Light Fuel Gauge Gear Indicator Light Oil Gauge Tachometer

Temperature Gauge Voltmeter



This customizable 21 circuit harness can be used in almost any application where you want Ford color coded wires. This harness uses our unique covered micro-fuse block. Also featured is an auxiliary circuit with 20 amp relay for accessories such as fog lights, or an electric fuel pump. Each wire is custom printed with the circuit identification as well as using Ford color codes for easy installation.

10123 - 21 Circuit Customizable Ford Color Coded Chassis Harness



Ford 3G Alternator Wiring Kit

Contains everything needed to connect to a 3G alternator: 8' of 6 gauge charge wire, pre-terminated harness with the correct connectors, 150 amp inline fuse, an assortment of weather proof splices, and detailed color instructions.

30831



Painless Pro Solutions

ClassicBraid & PowerBraid Wire Loom

Don't leave your wires unprotected! The easy to install split loom design is the perfect solution to clean up and protect the wiring in your vehicle. The ClassicBraid has a classic show car look similar to cloth. While the PowerBraid gives you a high performance nylon look.

Direct Fit 1965-70 Mustang



These 22 circuit direct fit 1965-1970 Mustang harnesses have many of the factory connectors already installed on the harness out of the box. These harnesses use our unique covered micro-fuse block. Also featured is an auxiliary circuit with 20 amp relay for accessories such as fog lights, or an electric fuel pump. Each wire is custom printed with the circuit identification as well as using Ford color codes for easy installation.

20120 - 22 Circuit Direct Fit 1965-66 Mustang Chassis Harness

20121 - 22 Circuit Direct Fit 1967-68 Mustang Chassis Harness

20122 - 22 Circuit Direct Fit 1969-70 Mustang Chassis Harness



Duraspark II Harness

Upgrade from your old points type ignition to a Duraspark II electronic ignition system with this plug-in harness. 30812

Includes Circuits For:

CIRCUIT

MATCH

IAC & Heat

Accessory / Cigarette Lighter

Accessory (Relay)

Backup Lights

Brake Lights

Charging

Courtesy & Dome Lights

Electric Choke

Emergency Flashers

Fan Relay Activation Power *1

Fused Power Source

Glove Box Light

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Radio / Clock (Constant & Switched)

Starting

Tail Lights & License Plate Light

Trunk Lights *2

Turn Signals

Wipers & Washer Pump

*Includes wires for:

Aftermarket Tachometer *2 Ammeter

Brake Warning Light *2

Fuel Gauge

Gear Indicator Light *3 Oil Gauge

Tachometer

Temperature Gauge

Voltmeter

- 1. Only available on 20120
- 2. Only available on 20121 & 20122
- 3. Only available on 20122

Classic Customizable Pickup



Includes Circuits For:

Get The Right

Harness

MATCH

CIRCUIT

A/C and Heat

Accessory / Cigarette Lighter

Backup Lights

Brake Lights

Charging

Dome Light
Electric Choke

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Radio/Clock (Constant & Switched)

Starting

Tail Lights

Third Brake Light

Turn Signals

Wipers

*Includes wires for:

Fuel Gauge

Oil Gauge

Temperature Gauge

Voltmeter

This is our customizable 21 circuit pickup chassis harness. You'll find that the ample wire lengths make this kit especially suited for trucks with long beds and extended cabs. We offer two versions, one with the GM column mounted ignition switch connector and one without. Included with this harness are the following parts; a GM engineered fuse block & Painless mounting bracket; GM turn signal connectors; pre wired plugs for the headlights & dimmer switch; and each wire is custom printed with the circuit identification as well as using GM color codes for easy installation.

10103 - 21 Circuit Classic Customizable
Pickup Chassis Harness - GM Keyed Column



GM Column Ignition Switch Connection

10104 - 21 Circuit Classic Customizable
Pickup Chassis Harness - Non GM Keyed Column







Pro's Tip from Stacey David

"Don't just upgrade a fuse when adding more accessories to a circuit. You'll want to use one of the Painless auxiliary circuit blocks."

See page 92 for more information

Classic-Plus Customizable Pickup







This 28 circuit kit will provide you with all those power accessory circuits you have been looking to add to your pickup chassis. You'll find that the ample wire lengths make this kit especially suited for trucks with long beds and extended cabs. It is available with or without the GM column mounted ignition switch connector. Included with this harness are the following parts; a GM engineered fuse block & Painless mounting bracket; GM turn signal connectors; pre wired plugs for the headlights & dimmer switch; and each wire is custom printed with the circuit identification as well as using GM color codes for easy installation.

10203 - 28 Circuit Classic-Plus Customizable
Pickup Chassis Harness -GM Keyed Column



GM Column Ignition Switch Connection

10204 - 28 Circuit Classic-Plus Customizable
Pickup Chassis Harness - Non GM Keyed Column



Includes Circuits For:

CIRCUIT

Harness

MATCH

A/C and Heat

Accessory

Accessory / Cigarette Lighter

Accessory / Trunk Light

Backup Lights

Brake Lights

Charging

Cruise Control

Dome Light

Electric Choke

Electric Fuel Pump

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Power Antenna

Power Door Locks

Power Windows

Radio/Clock (Constant & Switched)*

Starting

Tail Lights

Third Brake Light

Turn Signals

Wipers

*Includes wires for: Fuel Gauge Oil Gauge Speakers Tachometer Temperature Gauge Voltmeter



Painless Pro Solutions

Ground Strap Kits

No matter the application, you're not going anywhere unless you've got good grounds! Bad grounds are the number one problem in automotive electrical issues. Eliminate those electrical gremlins with a new set of Painless ground straps today!

Customizable 1963-66 Chevy/GMC Pickup



Includes Circuits For:

A/C and Heat

Accessory / Four Wheel Drive Switch

CIRCUIT MATCH

Brake Lights

Charging

Dome Light

Electric Choke

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Janition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Radio / Clock (Constant & Switched)*

Starting

Tail Lights & License Plate Light

Turn Signals

Wipers

*Includes wires for: Fuel Gauge Cab and Tank Generator Light Oil Gauge Temperature Gauge This 19 circuit 1963-1966 GMC/Chevy Pickup harness has many of the factory connectors already installed on the harness out of the box. Including: the headlight connectors & switch, dimmer switch, brake switch, wiper motor & switch, horn, dash light sockets & bulbs, and warning light sockets. This harness will work with single and dual dash turn signal indicators. Each wire is custom printed with the circuit identification as well as using GM color codes for easy installation.

10112 - 19 Circuit Classic Customizable 1963-66 GMC/Chevy Pickup Harness







Customizable 1967-72 Chevy Pickup



This 28 circuit 1967-1972 GMC/Chevy harness was designed to fit trucks, Blazers, and Suburbans. It features a factory style bulkhead connector and has many of the factory connectors already installed on the harness out of the box. Including: the headlight connectors & switch, dimmer switch, wiper motor, ignition switch, blower motor & switch, blower resistor, and instrument cluster. Each wire is custom printed with the circuit identification as well as using GM color codes for easy installation. Note: Formally part number 10206.

20206 - 28 Circuit Classic-Plus Customizable 1967-72 GM Pickup Truck Chassis Harness



Chevy A/C Harness

For 1967-72 designed to replace factory harness for the A/C/Heat system.

30901







Includes Circuits For:

AC & Heat

Accessory / Camper Cover Light

Accessory / Cigarette Lighter
Accessory / Four Wheel Drive Switch

CIRCUIT

Get The Right

MATCH

Backup Lights

Brake Lights

Charging

Cruise Control

Dome Light

Telectric Choke

Electric Fuel Pump

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Power Antenna

Power Door Locks

Power Windows

Radio / Clock (Constant & Switched)

Starting

Tail Lights

Third Brake Light

Turn Signals

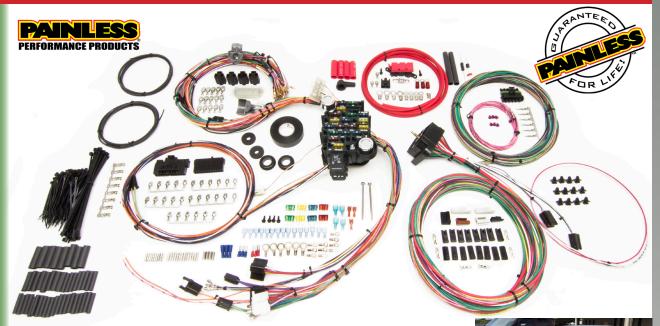
Wipers & Washer Pump

*Includes wires for: Ammeter Brake Warning Light Four Wheel Drive Light Fuel Gauge Generator Light Oil Gauge

Temperature Gauge

CHASSIS HARNESSES

Customizable 1973-87 GM Truck



Includes Circuits For:

A/C and Heat

Accessory / Camper Cover Light

Accessory / Cigarette Lighter

Accessory / Four Wheel Drive Switch

Backup Lights

Brake Lights

Charging

Cruise Control

Dome Light & Courtesy Lights

Electric Choke

Electric Fuel Pump

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Power Door Locks

Power Windows

Radio / Clock (Constant & Switched)*

Starting

Tail Lights

Third Brake Light

Turn Signals

Wipers & Washer Pump

*Includes wires for: Brake Warning Light Four Wheel Drive Light Fuel Gauge Oil Gauge Speakers Tachometer Temperature Gauge



This 27 circuit 1973-1987 GMC/Chevy Painless wiring harness was designed to fit the trucks, Blazers, and Suburbans*, whether C10, C20, or

C30. It features a factory style bulkhead connector, allowing for easy mounting of the fuse block in the factory location, and has many of the factory connectors already installed on the harness out of the box. Including connectors for: the headlight switch, dimmer switch, wiper motor, ignition switch, blower motor & switch, blower resistor, and instrument cluster. Each wire is custom printed with the circuit identification as well as using GM color codes for easy installation. Wire your Squarebody once and wire it right with Painless!

* Doesn't support rear power glass, rear defrost, or rear A/C/Heat - many of these items are separate from the OE chassis harness **GM Column Ignition**

20205 - 27 Circuit Classic-Plus Customizable 1973-87 GM Pickup Truck Chassis Harness

GM Pickup Headlight Socket Pigtail Kits

Easily paired with our p/n 20205 Direct Fit Square Body Harness, these socket kits give you all the terminals and connectors you need to wire you exterior lighting on your 1973-1987 GM Pickup

30350 - GM Pickup Socket Pigtail Kit (Single Round Headlights) (73-80)

30351 - GM Pickup Socket Pigtail Kit

(Single Square Headlights) (80-87) 30352 - GM Pickup Socket Pigtail Kit (Dual Square Headlights) (80-87)

30353 - GM Suburban Socket Pigtail Kit (Dual Square Headlights) (88-91) P/N 30353



Switch Connection

'73-'87 Factory A/C Harness

Designed to replace factory harness of the A/C Heat for 1973-1987 Chevy/GMC Trucks. 30902



Direct Fit 1967-77 Ford F-Series Truck



These 21 circuit direct fit 1967 - 1977 Ford F-Series Ford truck harness are the perfect upgrade. They use many of the factory connections that are already pre-terminated. Also featured is our unique covered micro-fuse block with a 20 amp auxiliary relay circuit for accessories such as fog lights, or an electric fuel pump. Included in the 10118 kit are brand new headlight, ignition, dimmer, wiper and brake switches. Each wire is custom printed with the circuit identification as well as using Ford color codes for easy installation.

10117 - 21 Circuit Direct Fit 1967-77 F-Series Ford Truck Harness without Switches

10118 - 21 Circuit Direct Fit 1967-77 F-Series Ford Truck Harness with Switches





Duraspark II Harness

Upgrade from your old points type ignition to a Duraspark II electronic ignition system with this plug-in harness.

30812



Ford 3G Alternator Wiring Kit

Contains everything needed to connect to a 3G alternator: 8' of 6 gauge charge wire, pre-terminated harness with the correct connectors, 150 amp inline fuse, an assortment of weather proof splices, and detailed color instructions.

30831

Includes Circuits For:

CIRCUIT

Get The Right

MATCH

A/C & Heat

Accessory (Relay)

Accessory / Cigarette Lighter

Backup Lights

Brake Lights

Cargo Lamp

Charging

Dome Light
Electric Choke

Emergency Flashers

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Radio / Clock (Constant & Switched)*

Starting

Tail Lights & License Plate Light

Turn Signals

Wipers & Washer Pump

*Includes wires for:

Ammeter

Brake Warning Light Four Wheel Drive Light

Fuel Gauge

Oil Gauge

Tachometer Temperature Gauge

Direct Fit 1966-77 Bronco



Includes Circuits For:

A/C and Heat

Accessory #1 B+

Accessory #2 B+

Accessory #3 B+

Accessory #4 B+

Accessory #5 Switched B+

Accessory #6 Switched B+

Accessory #7 Switched B+

Accessory #8 Switched B+

Accessory #9 Switched B+ in ACC. Pos.

Backup Lights

Brake Lights

Charging

Cigarette Lighter

Dome Light & Courtesy Lights

Electric Choke

Emergency Flashers

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Radio / Clock (Constant & Switched)

Starting

Tail Lights & License Plate Light

Turn Signals

Wipers & Washer Pump

*Includes wires for: Aftermarket Tachometer Ammeter Brake Warning Light Fuel Gauge Fuel Tank Switch Gear Indicator Light Oil Gauge Tachometer

Temperature Gauge

Designed with input from Bronco owners everywhere, this 28 circuit direct fit 1966-1977 Bronco harness sets a new standard in wiring. This harness includes a molded plastic glove box that not only replaces the factory cardboard one, it also mounts our weatherproof fuse block. You'll also find factory-style molded exterior light connectors, as well as connectors for the headlight switch, wiper switch, and ignition switch. This harness has most of the factory connections already pre-terminated. The kit includes new wiper, headlight and ignition switches. Also included is an 80+ page full color step by step install manual with over 80 photos, drawings and harness schematics. Each wire is custom printed with the circuit identification as well as using Ford color codes for easy installation.

10113 - 28 Circuit Direct Fit
1966-77 Bronco Harness with switches



10114 - 28 Circuit Direct Fit
1966-77 Bronco Harness without switches



1966-77 Bronco Accessories



Duraspark II Harness

Upgrade from your old points type ignition to a Duraspark II electronic ignition system with this plug-in harness. **30812**

Ford 3G Alternator Wiring Kit

Contains everything needed to connect to a 3G alternator: 8' of 6 gauge charge wire, pre-terminated harness with the correct connectors, 150 amp inline fuse, an assortment of weather proof splices, and detailed color instructions.

30831

PowerBraid Bronco Kit

Wire loom set to cover our Bronco chassis harness part numbers 10113 & 10114 **70922**

Halogen Headlight Harness

Safely and simply add halogen lights to your classic Bronco! Our headlight harnesses draw power directly from the battery, through a relay, to the headlights, providing full power to your H4 conversion headlights or Halogen sealed beams. They are made with TXL high temp wire, weather resistant 30-Amp fuse, and two 40-Amp weather resistant relays capable of handling up to 150 watts.

30815 - For H-4 halogen bulbs









Customizable 1974 & Earlier Jeep CJ



Includes Circuits For:

CIRCUIT

MATCH

A/C & Heat

Accessory / Cigarette Lighter

Backup Lights

Brake Lights

Charging

Dome Light

Electric Choke

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Radio / Clock (Constant & Switched)*

Starting

Tail Lights

Third Brake Light

Turn Signals

Underhood Light

Wipers

*Includes wires for: Brake Warning Light Emergency Brake Light Four Wheel Drive Light Fuel Gauge Oil Gauge

Temperature Gauge

Voltmeter

This 22 circuit factory upgrade harness for 1974 & earlier CJ Jeeps uses the OEM style fuse block. Open ended wire leads allow for custom routing of wires. This harness routes the wires through a grommet in the bulkhead and the ignition switch is in the dash. Also included are prewired plugs for headlights. Each wire is custom printed with the circuit identification as well as using factory color codes for easy installation.

10105 - 22 Circuit Classic Customizable 1975 & Earlier Jeep CJ Harness





Painless Pro Solutions

Ground Strap Kits

No matter the application, you're not going anywhere unless you've got good grounds! Bad grounds are the number one problem in automotive electrical issues. Eliminate those electrical gremlins with a new set of Painless ground straps today!

Customizable 1975-86 Jeep CJ



This 22 circuit factory upgrade for 1975-86 CJ Jeeps uses the OEM style fuse block. Open ended wire leads allow for custom routing of wires. This harness is designed to be a customizable kit. This harness routes the wires through a bulkhead connector and the ignition switch is in the column. This kit includes GM column mounted ignition switch connectors and a GM column mounted turn signal switch connector pre-terminated and ready to install. Also included are pre-wired plugs for headlights and the dimmer switch. Each wire is custom printed with the circuit identification as well as using factory color codes for easy installation.

If you are looking for a more direct fit please see Painless kit #10150.

10106 - 22 Circuit Classic Customizable 1976-86 Jeep CJ Harness



| Includes Circuits For: |
|----------------------------------------------|
| A/C & Heat |
| Accessory / Cigarette Lighter |
| Backup Lights |
| Brake Lights |
| Charging |
| Dome Light Ger Ine Right |
| Electric Choke CIRCUIT MATCH |
| Emergency Flashers Harness |
| Fan Relay Activation Power |
| Fused Power Source |
| Headlights |
| Horn (Relay) |
| Ignition Coil |
| Instrument Panel Lighting & Gauges* |
| Park Lights |
| Radio / Clock (Constant & Switched)* |
| Starting |
| Tail Lights |
| Third Brake Light |
| Turn Signals |
| Underhood Light |
| Wipers |
| *Includes wires for: |
| Brake Warning Light |
| Emergency Brake Light Four Wheel Drive Light |
| Fuel Gauge Oil Gauge |
| Tachometer Temperature Gauge |
| Voltmeter |

Direct Fit Jeep 1976-86 CJ





Includes Circuits For:

A/C & Heat

Accessory / Cigarette Lighter

Backup Lights

Brake Lights

Charging

Dome Light

Electric Choke CIRCUIT

Emergency Flashers

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

MATCH

Harness

Park Lights

Radio / Clock (Constant & Switched)

Relay Activation / Accessory Power

Starting

Tail Lights and Trailer Lights

Turn Signals

Underhood Light

Wipers & Washer Pump

*Includes wires for:
Brake Warning Light
Clock
Dash Label Lighting
Four Wheel Drive Light/Indicator
Fuel Gauge
Gear Indicator Light
Oil Gauge
Tachometer - 16 & V8
Temperature Gauge



This is our complete 21 circuit direct fit harness for 1976 to 1986 CJ Series Jeeps. Included in this chassis harness is a fully integrated ground circuit for every electrical component on these Jeeps. This is a critical addition for those of you with fiberglass bodies or those who might mistake mud as a good conductor. We've also added numerous connections and connectors to the harness including a pre-molded trailer connector, a charging system capable of handling up to 100 amp alternators and custom factory style molded taillight housing connectors. One of the biggest improvement to this harness kit is our all new full color instruction manual. This manual provides 140+ pages of color schematics, photos and step-by-step instructions to wiring your CJ from headlight to taillight and covers most popular aftermarket add-ons as well. The blade-type fuse block wiring are machine crimped with factory style terminals. Each wire is printed with its circuit identification as well as using factory color codes for easy installation. NOTE: Harness #10150 is not equipped for computer controls nor is it engine specific.

10150 - 21 Circuit Direct Fit Jeep CJ Harness

Jeep CJ Duraspark II Ignition Harness

Perfect replacement for your Jeep Duraspark II ignition system. It allows for the factory location of your module and coil. This part is recommended if you are also replacing the chassis harness.

30819 Fits 6 & 8 Cylinders 30812 Fits 4 Cylinders



Jeep CJ Manifold Heater Relay Kit

This simple plug-n-play kit allows a manifold heater to be used if you are rewiring your Jeep using a Painless chassis harness, using a later style manifold on an older Jeep, or if the factory relay was cut from your Jeep at some point in time. **30717**



Direct Fit Jeep 1987-91 YJ



This 23 circuit direct fit harness for 1987 to 1991 YJ Jeeps features a factory-style bulkhead connector that mounts the fuse block in the OEM location. This harness includes all the connectors and terminals needed. Included in this kit you will find a detailed manual and all of the wires are factory color coded and labeled for an easy install. NOTE: Factory EFI and emissions ICM are not supported.

10111 - 23 Circuit Direct Fit Jeep YJ Harness





Painless Pro Solutions

ClassicBraid & PowerBraid Wire Loom

Don't leave your wires unprotected! The easy to install split loom design is the perfect solution to clean up and protect the wiring in your vehicle. The ClassicBraid has a classic show car look similar to cloth. While the PowerBraid gives you a high performance nylon look.

Includes Circuits For:

A/C & Heat

Accessory / Cigarette Lighter

Backup Lights

Brake Lights

Charging

Dome & Courtesy Lights

Electric Choke

Electric Fuel Pump

Emergency Flashers

Fan Relay Activation Power

Fuel Injection Power

Fused Power Source Get The Right

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

CIRCUIT

MATCH

Park Lights

Radio / Clock (Constant & Switched)

Starting

Tail Lights & License Plate Light

Third Brake Light

Turn Signals

Wipers

*Includes wires for: Brake Warning Light Four Wheel Drive Light Fuel Gauge HVAC Panel Lighting Oil Gauge Tachometer Temperature Gauge

Customizable Weatherproof



Includes Circuits For:

A/C and Heat

Accessory #1 Switched B+

Accessory #2 Switched B+

Accessory #3 Switched B+

Accessory #4 B+

Accessory #5 B+

Accessory #6 Switched B+

Accessory / Cigarette Lighter

Brake Lights

Charging

Dome Light

Electric Choke

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges*

Park Lights

Radio / Clock (Constant & Switched)

Starting

Tail Lights & License Plate Light

Third Brake Light

Turn Signals

Wipers

*Includes wires for:

Fuel Gauge

Oil Gauge

Tachometer Temperature Gauge

Voltmeter

This 26 circuit weatherproof harness can be used to update the wiring in just about any on road or off road vehicle. This tough kit features: a weatherproof fuse block with an o-ring sealed cover, weatherproof heat sealed crimp-on terminals, weatherproof horn relay and machined crimped splices with weatherproof shrink tubing. This Harness is adaptable to many of the original connector plugs in your vehicle and includes; pre-wired plugs for the headlights; GM turn signal & column mounted ignition switch connectors.

10140 - 26 Circuit Customizable Weatherproof Chassis Harness



Waterproof Bulkhead Connector Kit

22-pin bulkhead connector kit allows for custom wiring at the firewall. Includes all necessary terminals and connectors. Uses 18-16 gauge wire.

40130



Pro's Tip from Randy Clark

"Understanding relays and where to use them will save you some headaches"

See page 80 to learn about relays

Extreme Off-Road Weatherproof



Wire a rock crawler, or even a basic off road vehicle with this 15 circuit extreme off road harness. Designed around our custom 10 fuse/4 relay weatherproof fuse block this harness provides all the wiring and amperage handling any off road vehicle could need. This completely customizable harness provides 10 fuses, two 40 Amp relays perfect for operating an electric cooling fan or fuel injection harness; and two 20 Amp relays perfect for operating lights, electric fuel pump or water pump. Parts kit includes heat-shrinkable crimp terminals, maxi-fuse, circuit breakers, zip ties, junction block and fuse block mounting bracket.

Note: This harness is not street legal. It has no provisions for lights, horn or wipers

10144 - 15 Circuit Customizable Extreme Off-Road Harness



Weatherpack Connector Kit

Use where rain, dust or other elements may affect electrical connections. Each kit includes a male and a female connector and the appropriate number of terminals. NOTE: Accepts only 14-16 gauge wire - 20 amp max per terminal.

70401 - 1 Wire Kit (2pack) **70404** - 4 Wire Kit **70402** - 2 Wire Kit **70406** - 6 Wire Kit **70403** - 3 Wire Kit

Includes Circuits For: Accessory Relay #1 Accessory Relay #2 Accessory Relay #3 Accessory Relay #4 Fuse 1 Fuse 2 CIRCUIT **MATCH** Fuse 3 Fuse 4 Fuse 5 Fuse 6 Fuse 7 Fuse 8 Fuse 9 Fuse 10 **Fused Power Source** Two 30 Amp ATC Fuses Four 20 Amp ATC Fuses Four 15 Amp ATC Fuses Four 10 Amp ATC Fuses Two 5 Amp ATC Fuses Two 40 Amp Relays Two 20 Amp Relays 70 Amp Maxi Fuse



Pro Street Chassis Harness



Includes Circuits For:

CIRCUIT MATCH

Accessory #1

Accessory #2 (Relay)

Brake Lights

Charging

Dome Light

Electric Fuel Pump #1

Electric Fuel Pump #2

Electric Water Pump

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Park Lights

Radio and Gauges B+*

Starting

Tail Lights

Third Brake Light

Turn Signals

Wipers

*Includes wires for:

Fuel Gauge Oil Gauge

Tachometer

Temperature Gauge

If you want to keep your race car streetable and want to use all of your factory switches instead of a switch panel, this 21 circuit harness is for you. As with all of our chassis harnesses this kit has all the wires labeled and is pre terminated at the fuse block for easy installation. This harness includes an optional connector if you want to use a GM column mounted ignition switch. Also Included is a terminal assortment kit, with the necessary connectors for your turn signal switch, headlights, and alternator. Each wire is custom printed with the circuit identification as well as using GM color codes for easy installation.

50002 - 21 Circuit Pro Street Chassis Harness



GM Column Ignition Switch Connection

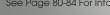


In-Dash Ignition Switch Connection



Painless Pro Solutions

Are you blowing fuses and melting switches? Using relays could be your answer. High amperage circuits are best utilized with one See Page 80-84 For Info of our simple relay kits!





Pro's Tip from Stacey David

"Dielectric grease on your light bulb connections will prevent corrosion of the connections and should be used any place you have connections exposed to moisture"

Pro Street Chassis Harness



If you are looking for a switch panel and harness to keep your racecar streetable, this 21 circuit harness and switch panel combo is for you. As with all of our chassis harnesses this kit has all the wires labeled and is pre terminated at the fuse block for easy installation. This harness includes an optional connector if you want to use a GM column mounted ignition switch. The included switch panel is a roll bar/dash mount 8 switch rocker panel. This panel is prewired and is a direct plug and play into this harness. Also Included is a painless mounting plate, grommets, terminal assortment kit, and the necessary connectors for your turn signal switch, headlights, and alternator. Each wire is custom printed with the circuit identification as well as using GM color codes for easy installation.

50003 - 21 Circuit Pro Street Chassis Harness w/Switch Panel

Switch Panel:

Start
Ignition
Electric Cooling Fan
Fuel Pump #1
Fuel Pump #2 / Accessory
Water Pump
Lights
Accessory



GM Column Ignition Switch Connection



(In-Dash Ignition Switch Connection





Painless Pro Solutions

Ground Strap Kits

No matter the application, you're not going anywhere unless you've got good grounds! Bad grounds are the number one problem in automotive electrical issues. Eliminate those electrical gremlins with a new set of Painless ground straps today!

Includes Circuits For:

CIRCUIT

Accessory #1

Accessory #2 (Relay)

Brake Lights
Charging

Dome Light

Electric Fuel Pump #1

Electric Fuel Pump #2

Electric Water Pump

Emergency Flashers

Fan Relay Activation Power

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Park Lights

Radio and Gauges B+*

Starting

Tail Lights

Third Brake Light

Turn Signals

Wipers

*Includes wires for: Fuel Gauge Oil Gauge Tachometer Temperature Gauge

AMERICAN MADI



AMERICAN PROUD

Track Only







Includes Circuits For:

Accessory (Relay)

Electric Fuel Pump #1 (Relay)

Electric Fuel Pump #2 (Relay)

Electric Water Pump (Relay)

Electric Fan (Relay)

Fused Power Source

Headlights (Relay)
Ignition Coil (Relay)

Starting (Relay)

Tail Lights



This 10 circuit Race only harness features a relay for each fused circuit. The wires are pneumatically terminated and pre-inserted into the fuse block and relay blocks. The fuse block is labeled for the circuits at left but can be used to power any 12 volt electrical component. If you are also looking for a switch panel, we offer the two switch panels below that are designed to be plug and play and will plug directly into this harness. Each wire is oversized and custom printed with the circuit identification as well as using GM color codes for easy installation.

50001 - 10 Circuit Race Only Chassis Harness

Switch Panel:

Start
Ignition
Electric Cooling Fan
Fuel Pump #1
Fuel Pump #2
Electric Water Pump

Lights Accessory



This dash mounted switch panel is only for use with Painless harness number 50001 (above). It features a plug and play harness that will plug directly into the 50001.

50201 - 8-Switch Panel - Dash Mount



Ignition
Electric Cooling Fan
Fuel Pump #1
Fuel Pump #2
Electric Water Pump
Lights

Accessory



This roll bar mounted switch panel is only for use with Painless harness number 50001 (above). It features a plug and play harness that will plug directly into the 50001.

50202 - 8-Switch Panel - Roll Bar or Dash Mount

Track Only



This 10 circuit Race only harness features a relay for each fused circuit and 6 switch contour rocker panel to control it. The wires are pneumatically terminated and pre-inserted into the fuse block and relay blocks. The fuse block is labeled for the circuits but can be used to power any 12 volt electrical component. The Switch panel measures 8 inches wide X 3 inches tall. The panel is painted black and silkscreened for easy identification of switch functions. This panel can be roll bar or dash mounted. Each wire is oversized and custom printed with the circuit identification as well as using GM color codes for easy installation.

50005 - 10 Circuit Race Only Chassis Harness w/Switch Panel

Includes Circuits For:

Accessory (Relay)

Electric Fuel Pump #1 (Relay)

Electric Fuel Pump #2 (Relay)

Electric Water Pump (Relay)

Electric Fan (Relay)

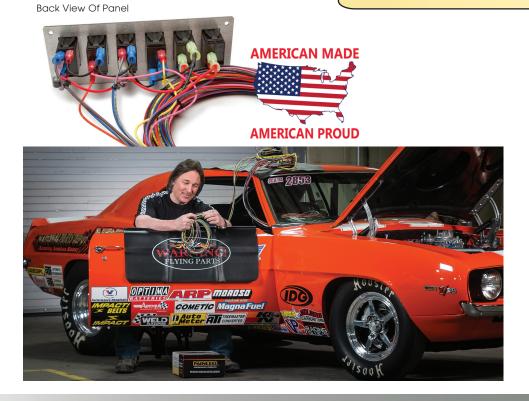
Fused Power Source

Headlights (Relay)

Ignition Coil (Relay) Starting (Relay)

Tail Lights





Race Accessories



Hot Shot Engine Bump Switch

Allows you to turn over the engine from the engine compartment for adjusting valves. It also overcomes starting problems due to an overheated starter or worn out electrical system by boosting amperage to the starter solenoid every time the vehicle is started.

30201



Hot Shot Amperage Booster

Designed to overcome starting problems due to an overheated GM style starter or worn out electrical system. Works by boosting amperage to the starter solenoid.

30202



Remote Start Solenoid

This switch allows you to position the starter solenoid any place you need to in order to make maintenance easier. Comes with wire and connectors to do the job right.

30203



Alternator Shutdown Relay Kit

This kit, complete with 250 amp solenoid, will effectively handle alternator feedback of the highest amperage alternators. Eliminates engine run-on when the master disconnect is turned off.

50105



Oxygen Sensor Fitting

Weld-in for all fuel injection systems.

60406



Connects alternator charge wire to battery side of remote disconnect to prevent alternator run-on when shutoff is engaged. Contains 25' of 8-gauge wire and connectors.



Master Disconnect Switch - 80140
Master Disconnect Switch With Mount Plate - 50710

Universal ground strap kits:

4 Piece kit includes (1) 14" 1/0 heavy duty ground strap, (3) 11" 10 gauge ground straps and self tapping screws.

Single 1/0 heavy duty 14" ground strap.

40141

Single 10 gauge heavy duty 11" ground strap and (2) 1/4 self tapping screws for mounting.

40142



The C.S.I. harness is a universal engine harness providing wiring to accommodate the Charging, Starting, and Ignition of just about any non fuel injected engine. The C.S.I. harness is the Painless solution to repairing damaged wiring on your carbureted engine or for cleaning up the clutter and taking the guess work away from those swapping from fuel injection to a carb. Accessory circuits aide in re-connecting a factory fuse block, electric fuel pump, electric water pump, electric cooling fans, light switch, etc. Each wire is custom printed with the circuit identification as well as using GM color codes for easy installation.

30830 - CSI Universal Engine Harness



Universal Ignition Switch w/Keys

Dash mounted ignition switch w/ two keys, Fits a 3/4" hole 80153



Pro's Tip from Randy Clark

"If your shop has an engine dyno or 'run stand', keep the wiring simple by using this Painless C.S.I. harness."

Includes Circuits For:

- Accessory #1 Switched B+
- Accessory #2 Constant B+
- Accessory #3 Unfused Constant
- B+ Charging
- Electric Choke
- Ignition
- Oil Gauge
- Starting
- Tachometer
- Temperature Gauge
- Voltmeter



Track Rocker Race Wiring



Track Rocker Relay Center - 8 Relay Race Wiring

The Track Rocker Relay Center provides the cleanest and most robust method to control your large, essential electrical components on your Race Car. It provides you with 8 relay controlled circuits with 21 feet of wire to reach each of the 8 outputs. Todays race cars require control of components without the danger of flyback or voltage spikes that commonly cause aftermarket electronics to fail.

All lightweight TXL wiring is included, and the system is protected with an in-line 200 amp MIDI fuse. All 8 individual output circuits are protected with 30 amp LED Smart Fuses that light up in the event when a fuse is blown, simplifying diagnostics.

The Track Rocker Relay Center exclusively uses Diode Suppressed Relays to eliminate those dangerous, voltage spikes and will give you the peace of mind that your race car will perform exactly as you designed it to. The relays are **ground activated**; This makes integrating the Track Rocker system very simple with aftermarket or factory style engine control modules. The ECM's simply sink the relay to ground to turn on the desired output wire.

The Track Rocker Relay Center is easily paired with our line of Track Rocker PLUG-AND-PLAY 4, 6, or 8 Switch Panels.

58100 - Track Rocker Relay Center



Track Rocker Switch Panels

Track Rocker - 4, 6, and 8 Switch Panels

The Painless Track Rocker Switch Panels are as tough as any race you'll encounter. The weatherproof LED On/Off switches are enclosed in a powder-coated steel housing. Available in a 4, 6, or 8 switch option, with mounting options available for dash mount, roll bar mount (1%" and 1%"), or flanged under dash mount. Designed to be plug-n-play with the Painless Track Rocker system and includes everything required to install and mount.

*Please note that these are designed to only work with the Track Rocker System. Using these panels to power circuits without diode suppressed relays can cause switch failure and void the warranty.







4 Switch Panels - Dimensions: 6" x 31/2" x 2" (width, height, depth).

58107 - Track Rocker - 4 Switch Panel - In Dash Mount **58108** - Track Rocker - 4 Switch Panel - Roll Bar Mount

58109 - Track Rocker - 4 Switch Panel - Flange / Under Dash Mount

P/N 58104







6 Switch Panels - Dimensions: 83/8" x 31/2" x 2" (width, height, depth).

58104 - Track Rocker - 6 Switch Panel - In Dash Mount **58105** - Track Rocker - 6 Switch Panel - Roll Bar Mount

58106 - Track Rocker - 6 Switch Panel - Flange / Under Dash Mount

P/N 58101









8 Switch Panels - Dimensions: 11" x 3½" x 2" (width, height, depth).

58101 - Track Rocker - 8 Switch Panel - In Dash Mount **58102** - Track Rocker - 8 Switch Panel - Roll Bar Mount

58103 - Track Rocker - 8 Switch Panel - Flange / Under Dash Mount

Track Rocker Replacement Switches

57051 - LED Weatherproof On/Off Switch **57052** - LED Weatherproof On/Off/On Switch

57053 - Weatherproof Momentary On/Off Switch







P/N 57052



P/N 57053









Roll Bar Mount Fused Rocker Switch Panels

Designed with input from some of the best drag racers in the country, Painless switch panels feature: Heavy-duty lightweight non-reflective housing designed to mount to a roll bar using standard metal hose clamps. Lighted rocker switches are color coded for quick visual reference. All circuits individually fused and easily accessible for quick testing and replacement. All units come complete with 18' of high temp TXL wire using machine applied, vibration resistant, fully insulated terminals.

- **50301** 4 Switch Panel Controls: Start, Ignition, 2 accessories. (3 x 5.75 x 3.125)
- **50302** 6 Switch Panel Controls: Start, Ignition, Fuel Pump, Electric Fan/Water Pump, and 2 Accessories. (3 x 8.75 x 3.125)
- **50303** 8 Switch Panel Controls: Start, Ignition, Electric Fan, Fuel Pump #1, Fuel Pump #2, Water Pump, Lights and 1 Accessory. (3 x 10.75 x 3.125)
- 50506 6 Switch In-Line Panel Controls Start, Ignition, Fuel Pump, Water Pump/Fan*, and 2 Accessories. - Shown below Use in vertical or horizontal position. (15 x 1.5 x 2.5) (*Three position switch for Water Pump/off/Water Pump and Fan)







Dash Mount Non-Fused Rocker Switch Panels

Looking to mount your switches in the dash rather than on a roll bar? Then these non-fused panels are your answer. Available in four, six or eight switch versions, these heavy-duty, light-weight panels are preassembled with vibration-resistant terminals and 18 feet of the best high temperature wire available.

- **50404** 4 Switch Controls: Start, Ignition, 2 accessories. (3 x 5.75 x 2.5)
- **50406** 6 Switch Controls: Start, Ignition, Fuel Pump, Water Pump/Fan and 2 accessories. (3 x 8.75 x 2.5) Shown left



Circuit Breaker Protected Rocker Switch Panels

The most popular switch panels in drag racing today are now even better. These switch panels feature circuit breakers in place of standard fuses, so if you're on the line and circuit blows, it can be reset with just a touch. Features also include color-coded lighted rocker switches for easy identification, 18 ft. of the highest grade TXL wire, vibration resistant terminals and a black finish for reduced glare.

- **50305** 6 Switch rocker panel. Start, ignition, fuel pump, electric fan/water pump and 2 accessories.(3 x 8.75 x 3.125) Shown left
- **50306** 8 Switch rocker panel. Start, ignition, electric fan, fuel pump #1 and #2, water pump, lights and one accessory.
 (3 x 10.75 x 3.125)



Race Harness Switch Panels (For use with our 50001 race harness)

50201 - 8-Switch flat plate style for in-dash mounting. Start, Ignition, Electric Cooling Fan, Fuel Pump #1, Fuel Pump #2, Electric Water Pump, Lights, Accessory (3 x 10.75 x 3.125) Shown below left

50202 - 8-Switch self contained style for roll bar mounting. Start, Ignition, Electric Cooling Fan, Fuel Pump #1, Fuel Pump #2, Electric Water Pump, Lights, Accessory (3 x 10.75 x 3.125) Shown below right





Pro Street / Stock Panels

50410 - 8-switch Pro Street panel which includes: Push Button Start, Toggle-Ignition, Fuel Pump, Fan, Park/Head Lights, Turn Signals and Horn. $(3 \times 10.75 \times 2.5)$ Shown below left

50412 - 6-switch Pro Stock panel which includes: Push Button Start, Toggle-Ignition, Fuel Pump, Water Pump/Fan and Two Accessories. (3 x 10.75 x 2.5) Shown below right





Mustang Radio Replacement Switch Panels

Rocker Switch Panel mounts in radio/stereo location of Mustangs. Kit includes five heavy duty on/off toggle switches, one each of momentary and on/off/on switches color-coded TXL wire.

50210 - fits 1979-86 Mustangs. (2.875 x 8 x 3.125) Shown below left

Toggle Switch Panel mounts in radio/stereo location of Mustangs. Kit includes six colored LEDs, five heavy duty on/off toggle switches, one each of momentary and on/off/on switches color-coded TXL wire.

50421 - Fits 1987-93 Mustangs. (5 x 8.5 x 3.125) Shown below right





Carbon Fiber Mustang Power Panel

Race quality carbon fiber switch panel adds styling and functionality to your Mustangs as well as provide a convenient way to mount six switches. Mounts in the radio/stereo location of 1987-93 Mustangs. Includes 18 feet of high temp TXL wiring.

50430 - Rocker Switch Mustang Power Panel







Weatherproof Off-Road Switch Panels

These rugged switch panels are the only panels to consider if your vehicle will be subject to harsh outdoor conditions. They feature a formed polyethylene liner to seal the face plate to the dash or chassis, creating a water-resistant seal. The panel includes a keyed ignition switch for added security. All switches and circuit breakers are protected by weather resistant boots and all circuits are protected with circuit breakers. All units come complete with 18' of high temp TXL wire using machine applied, vibration resistant, fully insulated terminals. These kits are shipped unassembled with peel and stick labels for custom applications.

50330 - 4 Toggle Off-Road Switch Panel, Dash Mount (3 x 6.25 x 2.5)

50332 - 6 Toggle Off-Road Switch Panel, Dash Mount (3 x10.75 x 2.5)



Roll Bar Mount 50337 Shown

Roll Bar Mount 50335 Shown With Waterproof Switch Covers In Place



Push Button Start Off-Road Switch Panels

Following the successful introduction of our Off-Road Switch Panels in 2005, we had many requests for a similar panel but with a push button rather than a keyed start. So here you are, available as dash or roll bar mount and with four or six toggle switches. These kits are shipped unassembled with peel and stick labels for custom applications.

50334 - 4 Switch, Dash Mount (3 x 8.625 x 2.5)

50335 - 4 Switch, Roll Bar Mount (3 x 8.625 x 2.5)

50336 - 6 Switch, Dash Mount (3 x10.75 x 2.5)

50337 - 6 Switch, Roll Bar Mount (3 x10.75 x 2.5)



Extreme Off-Road Switch Panels

These waterproof switch panel kits contain extra switches to customize the panel for any use. Includes momentary, on/off and on/off/on toggle switches with boots, choice of keyed or push button start and colored LED lights. These panels contain no wire but work great with our Extreme Offroad Harness #10144 (See page 40)

50340 - 6 Switch Off Road Panel with Key (3 x10.75 x 2.5)

50341 - 6 Switch Off Road Panel with Push Button (3 x10.75 x 2.5)





Replacement Rocker Switches

Fits cut-out dimensions of 13/16" x 17/16"

80400 - Momentary On (non-lighted)

80401 - On/Off - Red Light

80402 - On/Off/Momentary On - Green Lights

80403 - On/Off/On - Red Lights

80404 - On/Off - Amber Light

80405 - On/Off - Blue Light

80111 - Replacement Diode



Mini Rocker Switches

Fits cut-out dimensions of $1-\frac{1}{2}$ x $\frac{1}{2}$ These are the switches used in our Mustang Hide-a-Panels. Red, blue, green, amber and momentary (no light).

80411 - Momentary - (non-lighted)

80412 - On/Off Single Pole - Blue Light

80413 - On/Off Single Pole - Green Light

80414 - On/Off Single Pole - Amber Light

80415 - On/Off Single Pole - Red Light



MIL Spec Toggles

By far the most reliable switches you can find. Internally sealed, this switch is used extensively in military aircraft. Switch design allows terminals to be screwed directly to the switch housing eliminating the tab mount that can sometimes break loose.

80510 - Off/momentary on SPST

80511 - Off/on SPST



80501- Off/Momentary on, single pole/single throw

80502 - Off/on, single pole/single throw

80512 - On/off/on, single pole/double throw

80513 - Off/on, double pole/single throw

80514 - On/off/on, double pole/double throw



Waterproof Toggles - All 20 amp (All include boot 80520 shown below)

80530 - On/off, single pole/single throw

80531 - Off/momentary on, single pole/single throw

80532 - On/off/on, single pole/double throw

80533 - Off/on, double pole/single throw

80534 - On/off/on, double pole/double throw

Waterproof Switch Boot

Use shaft mounted toggles with 15/32" threads. **80520**

Aircraft Switch Cover

Shields all shaft mounted toggles for extra safety. **80521**

Waterproof Universal Keyed Ignition Switch

Fits 3/4" hole. Replacement part for our switch panels. **80529**

Extreme Conditions Push Button Momentary Start

Fits 5/8 " hole. Replacement part for our switch panels. **80528**















Fuel Injection Harness Introduction



Fuel Injection Made Painless

Those who choose to run the factory computer will appreciate the simplicity of a Painless Fuel Injection Wiring Harness. Yes, you can whittle away at the stock harness and eventually make it work, but why complicate your life? When all of our fuel injection harnesses come with a lifetime warranty. On this page you will find some important details you should know when picking the right harness for your project.

Our engineers have worked out all the potential problems ahead of time so all you have to do is follow the straightforward instructions and you're on your way. All of the wiring is TXL, 600 volt, 250°F rated with cross-link insulation. Every wire is also factory color-coded and labeled for easy installation.

All Painless fuel injection harnesses are standalone. In the automotive aftermarket this term has been commonly used to describe fuel injection harnesses. To put it simply, "standalone" means the harness has its own fuse block and works independently, and for the most part, needs no integration with the vehicle's existing wiring outside of an ignition switched power source.

A wire found on the fuel injection harness will need to connect to an ignition switched power source on the vehicle that will be "hot" in the Start and Run positions. This will activate the pre-wired ignition relays found on the fuel injection harness which will provide all the necessary power to the ECM, injectors, oxygen sensors, etc. Since you are simply activating relays, there is no chance of overloading any existing circuits on the vehicles chassis harness. Furthermore, since the fuel injection harness contains its own fuse block, no modifications to your vehicles existing chassis harness is needed.

How do you pick the right harness? To further explain this let's look at examples of some typical questions we commonly get at shows and on the tech lines:

Customer: "Do you make a harness for a 2001 Camaro LS1 in a 1968 Chevy truck?"

Painless: "Yes, Painless part number 60508"

Customer: "Do you make a harness for a 2001 Camaro LS1 in a 1989 Mustang fox body?"

Painless: "Yes, Painless part number 60508"

Customer: "Do you make a harness for a 2001 Camaro LS1 in a heavily modified sandrail

that I plan to turbo charge?"

Painless: "Yes, Painless part number 60508"

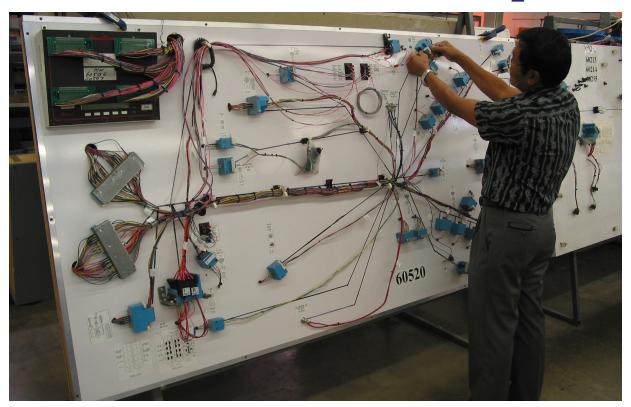
As you can see, the application or vehicle the engine will be going into is not a factor in the fuel injection harness used. The only thing that will determine what fuel injection harness you require is the year and model of the engine or vehicle the engine was originally in. As seen in the examples above, a 5.7 liter LS1 from a 2001 Camaro will require the use of part number 60508 and work in old work trucks, street/strip cars, offroad vehicles, and we've even had customers who used them in boats and air planes.

Many of our more popular harnesses have two separate length options to allow for ECM placement. Our standard length harness will have about 4 feet of wire from the back of the engine to the ECM connector(s). These harnesses are perfect for those mounting the ECM in the engine compartment or under the dash. Our extra long versions will have about 8 feet of wire from the back of the engine to the ECM connector(s) to allow the ECM to be mounted under a seat or in a center console. Take notice to the length you may need as this will affect which part number you require.





EFI Harness Quality Testing



Painless EFI Harness Testing

On top of using all new TXL wire, connectors, and machine crimping each terminal, every single Painless EFI harness is quality tested before leaving our facility.

The test process checks resistance and continuity, allowing us to verify that every connector is properly pinned, as well as properly seated in the connector - saving you the second guessing and making for a simple plug and play install.

Each EFI harness comes with an ALDL or OBD-2 plug and check engine light, allowing you diagnose and troubleshoot just like a newer OE vehicle.

Note: Every Painless EFI harness is standalone and is not intended to replace the OEM engine wiring. Standalone harnesses are intended to run the designated engine & transmission only, generally when swapped into another vehicle.

Painless VATS Removed ECMs

These ECMs have the Vehicle Anti-Theft System removed and are calibrated to the listed specs. All factory emissions items will still be activated. You will have check engine lights until further tuning is completed. This tune is designed to allow you to start your vehicle and allow you to get it to a local tuner for further work to be completed.

 $\mathbf{60711}$ - GM 12200411 ECM with 2002 LS1 Camaro/4L60e Tune / VATS Removed

 $\bf 60712$ - GM 12200411 ECM with 2002 GEN 3 GM Truck (5.3-4L60e) Tune / VATS Removed

60717 - GM 12200411 ECM with 2002 LS1 Camaro/Manual Trans Tune / VATS Removed

60718 - GM 12200411 ECM with 2002 GEN 3 GM Truck (6.0-4L80e) Tune / VATS Removed

GEN III Benchtop Flash Pigtail.

Used to bench-top (out of vehicle) flash LS series ECMs with service numbers 12200411 & 9354896. This pigtail connects to any 12 volt source and includes ECM and OBDII connections.



Integrated EFI/Chassis Harnesses



Our integrated EFI/Chassis harnesses are the perfect solution for anyone doing a complete rewire of a vehicle as well as transplanting a GM Gen III fuel injected engine. This kit is designed for use on 1997-2004 LS1 engines with a 4L60E, or a manual transmission. The chassis wiring and fuel injection wiring are fully integrated into a single 26 circuit/7 relay fuse block, eliminating the need to have separate fuses and relays for the fuel injection. The chassis harness connections are the same GM color coded connections as our 10201 kit. The fuel injection connections include the same labels connections as our 60508 harnesses. These harnesses do not support flex fuel engines and require the use of a mechanical throttle body. Included in this kit you will also find a detailed step-by-step manual and all the required terminals & connectors for easy installation.

Includes Circuits For:

AC & Heat

Accessory / Cigarette Lighter

Backup Lights

Brake Lights

Charging

Cooling Fan Relay #1

Cooling Fan Relay #2

Courtesy & Dome Light

Cruise Control

Electric Fuel Pump

Emergency Flashers

Fused Power Source

Headlights

Horn (Relay)

Ignition Coil

Instrument Panel Lighting & Gauges

Park Lights

Power Antenna

Power Door Locks

Power Windows

Radio / Clock (Constant & Switched)

Starting

Tail Lights

Third Brake Light

Turn Signals

Wipers

This harness also requires the following GM mating parts;

ECM #12200411 (Painless # 60711 or 60717)

60608 - 1997-2004 GM LS1 Integrated
EFI / Chassis Harness (Manual Throttle)



GM Column Ignition
Switch Connection



Includes Component Connections For:

- A/C Compressor
- Alternator
- Cam Position Sensor
- Coolant Temperature Gauge
- Crank Position Sensor
- Data Link Connector
- Driver/Pass Front O2 Sensors
- Engine Coolant Temperature
- Fuel Pump Relay
- Grounds
- Idle Air Control
- Ignition Coils
- Ignition Switch Signal
- Injectors-EV1/Bosch Style

- Intake Air Temperature Sensor
- Knock Sensors
- Malfunction Indicator Lamp
- MAP Sensor
- Mass Airflow Sensor
- Oil Pressure Gauge
- ECM
- PRNDL Switch
- Starter
- Tachometer
- Throttle Position Sensor
- Transmission
- Vehicle Speed Sensor
- VSS Output for Speedometer

Integrated EFI/Chassis Harnesses







Complete Chassis Harness PLUS GM Vortec Engine Harness

Our integrated EFI/Chassis harnesses are the perfect solution for anyone doing a complete rewire of a vehicle as well as transplanting a GM Gen III fuel injected engine. This kit is designed for use on 1999-2006 4.8L, 5.3L, & 6.0L Vortec truck engines with a 4L60E, 4L80E, or a manual transmission. The chassis wiring and fuel injection wiring are fully integrated into a single 26 circuit/7 relay fuse block, eliminating the need to have separate fuses and relays for the fuel injection. The chassis harness connections are the same GM color coded connections as our 10201 kit. The fuel injection connections include the same labels connections as our 60217 harnesses. These harnesses do not support flex fuel engines and require the use of a mechanical throttle body. Included in this kit you will also find a detailed step-by-step manual and all the required terminals & connectors for easy installation.

This harness also requires the following GM mating parts;

ECM #12200411 (Painless # 60712 or 60718)

60617 - 1999-2006 GM Gen III 4.8L, 5.3L & 6.0L EFI / Chassis Harness (Manual Throttle)





Includes Component Connections For:

- A/C Compressor
- Alternator
- Cam Position Sensor
- Coolant Temperature Gauge
- Crank Position Sensor
- Data Link Connector
- Driver/Pass Front O2 Sensors
- Engine Coolant Temperature
- Fuel Pump Relay
- Grounds
- Idle Air Control
- Ignition Coils
- Ignition Switch Signal
- Injectors-Delphi Multec 2 Style

- Intake Air Temperature Sensor
- Knock Sensors
- Malfunction Indicator Lamp
- MAP Sensor
- Mass Airflow Sensor
- Oil Pressure Gauge
- ECM
- PRNDL Switch
- Starter
- Tachometer
- Throttle Position Sensor
- Transmission
- Vehicle Speed Sensor
- VSS Output for Speedometer

Includes Circuits For:

- AC & Heat
- Accessory / Cigarette Lighter
- Backup Lights
- Brake Lights
- Charging
- Cooling Fan Relay #1
- Cooling Fan Relay #2
- Courtesy & Dome Light
- Cruise Control
- Electric Fuel Pump
- **Emergency Flashers**
- **Fused Power Source**
- **Headlights**
- Horn (Relay)
- Ignition Coil
- Instrument Panel Lighting & Gauges
- Park Lights
- Power Antenna
- Power Door Locks
- Power Windows
- Radio / Clock (Constant & Switched)
- Starting
- Tail Lights
- Third Brake Light
- Turn Signals
- Wipers



This harness is designed for use on any 2007 and up LS3 with throttle by wire. It uses the factory ECM & TCM and will operate engines with or without variable valve timing (VVT) and active fuel management (displacement on demand or DOD). You can however, use any GM 4 speed electronic or manual transmission with this harness, with the proper tuning from your tuner, except for the 4L60E as it is missing the Input Speed Sensor required by the Transmission Control Module. If running a 4L80E, you will need to contact a tuner with access to GM MDI/GDS Software to flash the TCM properly in most cases. This harness does not support flex fuel operation. Included with this harness is a 10 circuit weatherproof fuse block & mounting bracket, detailed step-by-step manual, GM color coded wires with labels, and all the required terminals and connectors for easy installation.

Fuse Block Circuits For:

ECM & Data Link Connector B+

ECM & Malfunction Indicator Lamp

Fuel Pump

Heated O2 Sensors

Ignition Coils

Injectors

Mass Airflow & Valve Lifter Oil

Manifold (DOD)

TCM

TCM B+

Transmission

40 Amp Cooling Fan Relay & Circuit

Breaker (ECM Activated)

20 Amp Fuel Pump Relay

40 Amp & 20 Amp Ignition Relays

GM Gen IV Tach Driver

The ECM used in GM Gen IV applications does not have a tach output wire to provide a tach signal to a tachometer. This small device converts the 5 Volt 58X crank sensor signal from any Gen IV GM V8 engine

into a 12 Volt signal useable by most aftermarket and OEM tachometers.

60150



60524 - 2007 Up GM LS3
(Throttle by Wire) Harness Std. Length

Includes Component Connections For:

- Accelerator Pedal Position Sensor
- Alternator (Including a 4 gauge power wire)
- Brake Switch
- Cam Position/Cam Phazer Sensor
- Cooling Fan
- Crank Position Sensor
- Data Link Connector
- Driver/Pass Front O2 Sensors
- Driver/Pass Knock Sensors
- ECM
- Engine Coolant Temperature
- Fuel Pump
- Grounds
- Ignition Coils
- Ignition Switch Signal

- Injectors-EV6/US Car Style
- Input Speed Sensor 4L80E/4L85E
- Malfunction Indicator Lamp
- MAP Sensor
- Mass Airflow / Intake Air Temperature Sensor
- Oil Pressure Sensor
- PRNDL Switch
- Reverse Lights
- Starter
- TCM
- Throttle Body
- Transmission
- Valve Lifter Oil Manifold (DOD)
- Vehicle Speed Sensor
 - VSS Output for Speedometer

2007-2012 4.8L, 5.3L, 6.0L, 6.2L



This harness is designed for use on any 2007-2012 4.8L, 5.3L, 6.0L, & 6.2L Vortec truck engines with throttle by wire. It uses the factory ECM & TCM and will operate engines with or without variable valve timing (VVT) and active fuel management (displacement on demand or DOD) with a 4L65E, 4L70E, 4L80E, or 4L85E transmission. You cannot use a 4L60E transmission with this harness as it is missing the Input Speed Sensor required by the Transmission Control Module. This harness does not support flex fuel operation. Included with this harness is a 10 circuit weatherproof fuse block & mounting bracket, detailed step-by-step manual, GM color coded wires with labels, and all the required terminals and connectors for easy installation.

This harness also requires the following GM mating parts; ECM #12597121, #12612384 or #19210738; TCM #24234503 or #24252114; Accelerator pedal #25832864 or #25835421.

60526 - 2007-2012 GM Gen IV 4.8-6.2L (Throttle by Wire) Harness Std. Length

Includes Component Connections For:

- Accelerator Pedal Position Sensor
- Alternator (Including a 4 gauge power wire)
- Brake Switch
- Cam Position/Cam Phazer Sensor
- Cooling Fan
- Crank Position Sensor
- Data Link Connector
- Driver/Pass Front O2 Sensors
- Driver/Pass Knock Sensors
- **Engine Coolant Temperature**
- Fuel Pump Grounds
- Ignition Coils
- Ignition Switch Signal

- Injectors EV6/US Car Style
- Input Speed Sensor 4L80E/4L85E
- Malfunction Indicator Lamp
- MAP Sensor
- Mass Airflow / Intake Air Temperature Sensor
- Oil Pressure Sensor
- PRNDL Switch
- Reverse Lights
- Starter
- **TCM**
- Throttle Body
- Transmission
- Valve Lifter Oil Manifold (DOD)
- Vehicle Speed Sensor
- VSS Output for Speedometer

Fuse Block Circuits For: ECM & Data Link Connector B+

- ECM & Malfunction Indicator Lamp
- **Fuel Pump**
- Heated O2 Sensors
- Ignition Coils
- Injectors
- Mass Airflow & Valve Lifter Oil
 - Manifold (DOD)
- TCM
- TCM B+
- Transmission
- 40 Amp Cooling Fan Relay & Circuit
 - Breaker (ECM Activated)
- 20 Amp Fuel Pump Relay
- 40 Amp & 20 Amp Ignition Relays

GM Gen IV Tach Driver

The ECM used in GM Gen IV applications does not have a tach output wire to provide a tach signal to a tachometer. This small device converts the 5 Volt 58X crank sensor signal from any Gen IV GM V8 engine into a 12 Volt

signal useable by most aftermarket and OEM tachometers.

60150



2005-2006 GM LS2



This harness is designed for the 2005 - 2006 throttle by wire LS2 engines using an LS1 / LS6 ECM and a 4L60E, or a manual transmission. The engine must have a 24x crank reluctor (black). This harness will not work with a factory GTO ECM. This harness will only operate these LS2 engine codes: ZJA, ZJB, 5MC, YTA and 6MC. These engines were factory equipped in 2005 Corvette, 2005-2006 GTO and 2006 SSR and also available as a crate engine from GMPP. Harnesses do not include any emissions related connections. Included with this harness is an 8 circuit modular fuse block, detailed step-by-step manual, and GM color coded wires with labels for easy installation.

Fuse Block Circuits For:

DLC B+

Driver Side Injectors and Coils

Dual 40 amp Ignition Relays

ECM & Malfunction Indicator Lamp

ECM B+

Fuel Pump

Heated O2 Sensors, Mass Airflow

Sensor, & Brake Switch

Pass Side Injectors & Coils

Transmission & TAC Module

This harness also requires the following GM mating parts;

ECM #12200411; TAC Module #12578953 or #19245405; Accelerator Pedal #12565643.

60520 - 2005-2006 GM LS2 (Throttle by Wire) Harness Std. Length

Includes Component Connections For:

- Accelerator Pedal Position Sensor
- Alternator
- Brake Switch
- Cam Position Sensor
- Clutch Pedal Position
- Crapt Position Consor
- Crank Position Sensor
- Cruise Control
- Data Link Connector
- Driver/Pass Front O2 Sensors
- Driver/Pass Knock Sensors
- ECM
- Engine Coolant Temperature
- Fan #1 Relay Ground ECM Activation
- Fan #2 Relay Ground ECM Activation
- Fuel Pump
- Fuel Pump Relay
- Fuel Pump Test
- Gear Indicator Switch
- Grounds
- Ignition Coils

- Ignition Switch Signal
- Injectors EV6/US Car Style
- Malfunction Indicator Lamp
- MAP Sensor
- Mass Airflow / Intake Air Temperature Sensor
- Oil Pressure Sensor
- Reverse Lockout Soleniod
- Skip Shift Light
- Skip Shift Solenoid
- Starter
- Throttle Actuator Control Module
- Throttle Actuator Control Module to Accelerator Pedal Pigtail
- Tachometer
- Throttle Body
- Transmission
- Vehicle Speed Sensor
- VSS Output for Speedometer



1997-2004 GM LS1/LS6 Corvette



This harness is designed for the 1997-2004 throttle by wire LS1/LS6 engines with a 4L60E, or a manual transmission. These engines were factory equipped in 1997-2004 Corvette. Harnesses do not include any emissions related connections. Included with this harness is an 8 circuit modular fuse block, detailed step-by-step manual, and GM color coded wires with labels for easy installation.

This harness also requires the following GM mating parts; ECM #12200411; TAC Module #12578953 or #19245405; Accelerator Pedal #12565643.

60522 - 1997-2004 GM LS1 (Throttle by Wire) Harness Std. length 60523 - 1997-2004 GM LS1

(Throttle by Wire) Harness Extra length

Includes Component Connections For:

- Accelerator Pedal Position Sensor
- Alternator
- Brake Switch
- Cam Position Sensor
- Clutch Pedal Position
- Crank Position Sensor
- Cruise Control
- Data Link Connector
- Driver/Pass Front O2 Sensors
- Driver/Pass Knock Sensors
- Engine Coolant Temperature
- Fan #2 Relay Ground ECM Activation
- Fuel Pump
- Fuel Pump Relay
- Fuel Pump Test
- Gear Indicator Switch
- Grounds
- Ignition Coils

- Ignition Switch Signal
- Injectors-EV1/Bosch Style
- Malfunction Indicator Lamp
- MAP Sensor
- Mass Airflow / Intake Air Temperature Sensor
- Oil Pressure Sensor
- Reverse Lockout Soleniod
- Skip Shift Light
- Skip Shift Solenoid
- Starter
- Throttle Actuator Control Module
- Fan #1 Relay Ground ECM Activation Throttle Actuator Control Module to Accelerator Pedal Pigtail
 - **Tachometer**
 - Throttle Position Sensor
 - Transmission
 - Vehicle Speed Sensor
 - VSS Output for Speedometer

Fuse Block Circuits For: DLC B+ Driver Side Injectors and Coils Dual 40 amp Ignition Relays ECM & Malfunction Indicator Lamp ECM B+ Fuel Pump Heated O2 Sensors, Mass Airflow Sensor, & Brake Switch Pass Side Injectors & Coils Transmission & TAC Module



1998-2002 GM LS1, LS6



This harness is designed for the 1998-2002 LS1 mechanical throttle body engines using an LS1 / LS6 ECM with a 4L60E, or a manual transmission. These engines were found in 1998-2002 Camaro/Firebird. This harness will also work on 1997-2004 Throttle By Wire (TBW) LS1/LS6 engines which has been changed to mechanical throttle body or any 1999-2006 (4.8, 5.3, & 6.0) Vortec truck engine which has been changed to a factory of aftermarket LS1 intake manifold, mechanical throttle body, and injectors. Harnesses do not include any emissions related connections but are available separate, see below for more details. Included with this harness is an 8 circuit modular fuse block, detailed step-by-step manual, and GM color coded wires with labels for easy installation.

Fuse Block Circuits For:

DLC B+

Driver Side Injectors and Coils

Dual 40 amp Ignition Relays

ECM & Malfunction Indicator Lamp

ECM B+

Fuel Pump

Heated O2 Sensors, Mass Airflow

Sensor, & Brake Switch

Pass Side Injectors & Coils

Transmission

This harness also requires the following GM mating parts;

ECM #12200411 (Painless # 60711 or 60717) or #9354896.

60508 - 1998-2002 GM LS1, LS6 (Manual Throttle) Harness Std. Length 60509 - 1998-2002 GM LS1, LS6 (Manual Throttle) Harness Extra Length

*60713 - This kit will have a #60508 harness as well as a VATS removed 2002 LS1 Camaro/4L60E Trans Tune #12200411 ECM.

***60715** - This kit will have a #60508 harness as well as a VATS removed 2002 LS1 Camaro/Manual Trans Tune #12200411 ECM.

Includes Component Connections For:

- Alternator
- Brake Switch
- Cam Position Sensor
- Crank Position Sensor
- Data Link Connector
- Driver/Pass Front O2 Sensors
- Engine Coolant Temperature
- Fan #1 Relay Ground ECM Activation
- Fan #2 Relay Ground ECM Activation
- Fuel Pump
- Fuel Pump Relay
- Fuel Pump Test
- Gear Indicator Switch
- Grounds
- Idle Air Control
- Ignition Coils
- Ignition Switch Signal

- Injectors EV1/Bosch Style
- Intake Air Temperature Sensor
- Knock Sensors
- Malfunction Indicator Lamp
- MAP Sensor
- Mass Airflow Sensor
- ECM
- Reverse Lockout Soleniod
- Skip Shift Light
- Skip Shiff Solenoid
- Starter
- Tachometer
- Throttle Position Sensor
- VATS
- Transmission
- Vehicle Speed Sensor
- VSS Output for Speedometer

60324 - In states/counties which require all the original emission equipment to be installed, Painless offers this emission harness for the 60508 harness. This harness provides connections to the Rear Oxygen Sensors, Fuel Tank Pressure Sensor, Secondary Air Pump, Secondary Air Bleed Valve, EGR Valve, Canister Purge Solenoid and Canister Vent Solenoid.

60325 - In states/counties which require all the original emission equipment to be installed, Painless offers this emission harness for the 60509 harness. This harness provides connections to the Rear Oxygen Sensors, Fuel Tank Pressure Sensor, Secondary Air Pump, Secondary Air Bleed Valve, EGR Valve, Canister Purge Solenoid and Canister Vent Solenoid.

<u>1999-2006 4.8L, 5.3L, 6.0L Drive By Wire</u>



This harness is designed for use on the 1999-2006 4.8L, 5.3L, 6.0L throttle by wire engines with a 4L60E, 4L80E, or a manual transmission. These engines were found in factory 2003-2006 Vortec Trucks. 1999-2002 engines will require installing a 2003-2006 TBW throttle body. Engine codes supported are LR4, LM7, LM4, LQ4 and LQ9. This harness will support flex fuel and non flex fuel engines. Flex fuel engines will require an inline fuel composition sensor in order to run E85 fuel. Included with this harness is a 10 circuit weatherproof fuse block & mounting bracket, detailed step-by-step manual, and GM color coded wires with labels for easy installation.

Fuse Block Circuits For: Brake and Cruise Switch Dual 40 amp Ignition Relays ECM (IGN) ECM B+ Fuel Injectors Fuel Pump Heated O2 Sensors Ignition Coils Mass Airflow and Fuel Compensation Sensor Throttle Actuator Control Module Transmission and Park Neutral Position Switch 20 Amp Cooling Fan Relay 20 Amp Fuel Pump Relay



This harness also requires the following GM mating parts; ECM #89017733, #12576106, #12583560, or #12602802; TAC Module #12578953 or #19245405; Accelerator Pedal #12565643; Flex Fuel Sensor #12570260.

60221 - 1999-2006 GM Gen III 4.8, 5.3 & 6.0L (Throttle by Wire) Harness Std. Length

Includes Component Connections For:

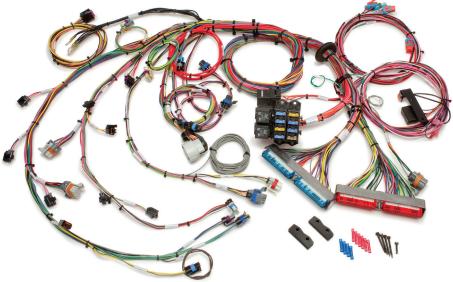
- A/C Request
- Accelerator Pedal Position Sensor
- Alternator
- Brake Switch
- Cam Position Sensor
- Cooling Fans
- Crank Position Sensor
- Cruise Control
- Data Link Connector
- Driver/Pass Front O2 Sensors
- ECN
- Engine Coolant Temperature
- Fuel Compensation Sensor
- Fuel Pump
- Fuel Pump Test
- Grounds
- Ianition Coils
- Ignition Switch Signal
- Injectors EV6/US Car Style or Delphi Multec 2 Style

- Input Speed Sensor
- Knock Sensors
- Knock Sensor Pigtail
- Malfunction Indicator Lamp
- MAP Sensor
- Mass Airflow / Intake Air Temperature Sensor
- Output Speed Sensor
- Park/Neutral Switch
- Reverse Lights
- Starter
- Starter Relay Activation
- Tachometer
- Throttle Actuator Control Module
- Throttle Actuator Control Module
 To Accelerator Pedal Pigtail
- Throttle Body
- Transmission
- VSS Output for Speedometer

1999-2006 4.8L, 5.3L, 6.0L Mech. Throttle







This harness is designed for the 1999-2006 4.8L, 5.3L, 6.0L mechanical throttle body engines using an LS1 / LS6 PCM with a 4L65E, 4L70E, 4L80E, 4L85E, or a manual transmission. 2003-2006 Engines will require a mechanical throttle body to be installed. 2003-2006 engines which were originally flex fuel will also require Delphi Multec 2 (factory truck style) injectors to be installed. Harnesses do not include connections for the rear O2 sensors or fuel tank pressure sensor but are available separate, see below for more details. Included with this harness is a 10 circuit weatherproof fuse block, detailed step-by-step manual, and GM color coded wires with labels for easy installation.

Fuse Block Circuits For:

Air Pump & Air Pump Solenoid

Canister Purge, Canister Vent, Transmission, & Park Neutral Position Switch

Driver Side Injectors & Coils

Dual 40 amp Ignition Relays

Fuel Pump

Heated O2 Sensors, Mass Airflow

Sensor, & Brake Switch

Pass Side Injectors & Coils

ECM B+ & DLC B+

ECM IGN & Malfunction Indicator Lamp

This harness also requires the following GM mating parts;

PCM #12200411 (Painless # 60712 or 60718).

60217 - 1999 - 2006 GM Gen III 4.8, 5.3 & 6.0L (Manual Throttle) Harness Std. Length

60218 - 1999 - 2006 GM Gen III 4.8, 5.3 & 6.0L (Manual Throttle) Harness Extra Length

*60714 - This kit will have a #60217 harness as well as a VATS removed 2002 GEN 3 GM Truck (5.3-4L60e) Tune #12200411 ECM.

***60716** - This kit will have a #60217 harness as well as a VATS removed 2002 GEN 3 GM Truck (6.0-4L80e) Tune #12200411 ECM.

Includes Component Connections For:

- A/C Request
- Air Pump
- Air Pump Relay
- · Air Pump Solenoid
- Alternator
- Brake Switch
- Cam Position Sensor
- Canister Purge
- Canister Vent
- Crank Position Sensor
- Data Link Connector
- Driver/Pass Front O2 Sensors
- EGR Valve
- Engine Coolant Temperature
- Fan #1 Relay Ground ECM Activation
- Fan #2 Relay Ground ECM Activation
- Fuel Pump
- Fuel Pump Relay
- Fuel Pump Test
- Grounds

- Idle Air Control
- Ignition Coils
- Ignition Switch Signal
- Injectors Delphi Multec 2 Style
- Input Speed Sensor
- Knock Sensors
- Malfunction Indicator Lamp
- MAP Sensor
- Mass Airflow Sensor & Intake
- Air Temperature Sensor
- Output Speed Sensor
- Park/Neutral Switch
- ECM
- Reverse Lights
- Starter
- Starter Relay
- Tachometer
- Throttle Position Sensor
- Transmission
- VSS Output for Speedometer

60322 - In states/counties which require all the original emission equipment to be installed, Painless offers this emission harness for the 60217 harness. This harness provides connections to the Rear Oxygen Sensors, and the Fuel Tank Pressure Sensor.

60323 - In states/counties which require all the original emission equipment to be installed, Painless offers this emission harness for the 60218 harness. This harness provides connections to the Rear Oxygen Sensors, and the Fuel Tank Pressure Sensor.



Accessories - Gen III & Gen IV LS

GM Gen IV Tach Driver

The ECM used in GM Gen IV applications does not have a tach output wire to provide a tach signal to a tachometer. This small device converts the 5 Volt 58X crank sensor signal from any Gen IV GM V8 engine into a 12 Volt signal useable by most aftermarket and OEM tachometers.

60150



If you need to repair crushed or broken connectors on your factory harness or are converting your injectors found on modern multi-port fuel injection systems, Painless now offers this repair/change over kit. Contains terminals, seals, terminal locks, and connectors for 8 injectors.

60130 - EV1/Bosch Fuel Injector Pigtail Kit 60131 - EV6/US Car Fuel Injector Pigtail Kit

Single Injector Connector with Terminals

Need to replace an injector connector and don't need a complete set of 8? These kits allow you to replace one single injector connector on either Painless or OE harnesses. Included are needed terminals, connector, and seal.

60133 - EV1 Injector Connector and Terminals

60134 - EV6 Injector Connector and Terminals

60135 - Multec 2 Injector Connector and Terminals

Fan Relay Kit.

With 205° On/ 190° Off thermostat for GM Gen-III engine. M10x1.5 thermostat thread size.

30106

Weatherproof Fan Relay Kit

With 205° On $/190^{\circ}$ Off thermostat for GM Gen-III. M10 x1.5 thermostat thread size. **30127**

GEN III, IV Truck Dual Activation/Dual Fan Relay Kit

Includes: (3) 40 Amp relays with mounting bases, (1) fuse holder w/ 70 amp fuse,

Pre-terminated and printed wire harness, Thermostatic switch 205°F on/190°F off (thread size: 12x 1.5MM), mounting hardware, insulated terminals, instruction sheet.

30118

GEN III, IV Thermostat Only. (205° On $/190^{\circ}$ Off). **30113**

PCM Controlled Fan Relay Kits.

Contains the necessary length wire and pinouts for those wishing to control their fan

operation using the vehicle's power control module rather than thermostatically. **30109**

Waterproof version of the above PCM Controlled Fan Relay Kit. 30133

LS Engine Coil Extension Harness.

Includes two pigtails to allow relocating coils off the valve covers. Factory color coded wires and weatherproof connectors. One drivers side, one passenger side pigtail.

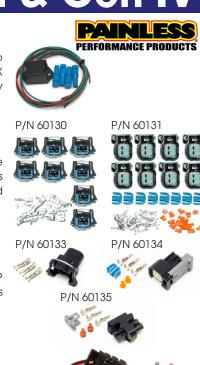
60127 - 24" 60128 - 36" 60129 - 48"

4L80E ISS Pigtail

This pigtail allows you to add an input speed sensor input for a 4L80E to your Gen 3 4L60E setup. Works with Painless EFI or OE harnesses

60555

ClassicBraid & PowerBraid EFI Kits. Includes wire covering for most fuel injection installations. See page 75.















1992-1997 5.7L LT1





This harness is designed for 1992-1997 5.7L LT1/LT4 & 4.3L (V8) L99 engines with a 4L60E transmission, using a '94-'97 ECM. This harness will not work with '92-'93 ECMs. These engines and transmissions were factory equipped in Camaro, Firebird, Corvette, Roadmaster, Impala and Caprice. These harnesses also include a VATS bypass module, Painless part #64024. The 4L60E transmission used must be a 1994+ which utilizes a 13th pin on the transmission connector. When using either of these harnesses on a '96 or '97 engine you must replace the coil, coil output wire and knock sensor with the parts from a '92-'95 engine. Included with this harness is an 8 circuit modular fuse block, detailed step-by-step manual, and GM color coded wires with labels for easy installation.

Fuse Block Circuits For:

Air Pump

Driver Side Injectors

Dual 40 amp Ignition Relays

IECM & Data Link Connector

Fuel Pump, ECM, & Mass Airflow Sensor

Heated O2 Sensors, EGR, & Canister Purge

Solenoid

Malfunction Indicator Lamp & Brake Switch

Pass Side Injectors

Transmission

60113 - LT-1 Distributor Adapter (1994-96) Factory style replacement pigtail for the 1994 - 1996 LT1 Distributor.

60114 - LT-1 Distributor Adapter (1992-93) Factory style replacement pigtail for the 1992 - 1993 LT1 Distributors.

64024 - VATS Anti-theft bypass for 1992-97 GM LT1 engines.

This harness also requires the following GM mating parts;

ECM #16188051 or #88961150.

60502 - 1992-97 GM LT-1 Harness Std. Length

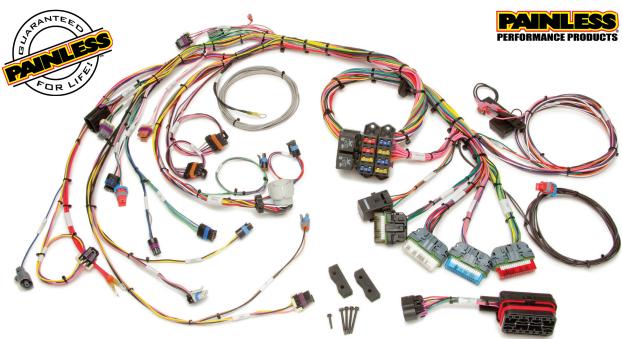
60505 - 1992-97 GM LT-1 Harness Extra Length

Includes Component Connections For:

- Air Pump
- Air Pump Relay
- Alternator
- Brake Switch
- Canister Purge Solenoid
- Data Link Connector
- Distributor
- Driver/Pass Front O2 Sensors
- ECM
- EGR Valve
- **Engine Coolant Temperature**
- Fan #1 Relay Ground ECM Ac-
- tivation
- Fan #2 Relay Ground ECM Activation
- Fuel Pump
- Fuel Pump Relay
- Fuel Pump Test
- Gear Indicator Switch
- Grounds

- Idle Air Control
- · Ignition Coil
- Ignition Module
- Ignition Switch Signal
- Injectors
- Intake Air Temperature Sensor
- Knock Sensors
- Malfunction Indicator Lamp
- MAP Sensor
- Mass Airflow Sensor
- Starter
- Tachometer
- Throttle Position Sensor
- Transmission
- VATS
- Vehicle Speed Sensor
- VSS Output For Speedometer

1996-1999 5.0L, 5.7L, 7.4L Vortec



These harness is designed for 1996-1999 5.0L & 5.7L Vortec CMFI engines with a 4L60E or 4L80E transmission (60212 and 60213) and the 1996-2000 GM Vortec 7.4L Big Block V8 with a 4L80E (60211). These engines were found in 1996-2000 GM full-size trucks, vans, and SUVs. Harnesses do not include connections for the rear O2 sensors or fuel tank pressure sensor but are available separate, see below for more details. Included with this harness is an 8 circuit modular fuse block, detailed step-by-step manual, and GM color coded wires with labels for easy installation.

This harness also requires the following GM mating parts; ECM #16244210 or 16229684 with V8 programing.

- **60212** 1996-99 GM Vortec 5.0 & 5.7L V8 (CMFI) Harness Std. Length
- **60213** 1996-99 GM Vortec 5.0 & 5.7L V8 (CMFI) Harness Extra Length
- **60211** 1996-00 GM Vortec 7.4L V8 Big Block Harness

Includes Component Connections For:

- Brake Switch
- Cam Position Sensor
- Canister Purge Solenoid*
- Canister Vent
- Data Link Connector
- Distributor
- Driver/Pass Front O2 Sensors
- ECM
- EGR Valve*
- Engine Coolant Temperature
- Fuel Pump
- Fuel Pump Relay
- Fuel Pump Test
- Grounds
- Idle Air Control
- Ignition Coil
- *Not included in p/n 60211

- Ignition Switch Signal
- Ignition Coil Driver
- Injectors
- Intake Air Temperature Sensor
- Knock Sensors
- Malfunction Indicator Lamp
- MAP Sensor
- Mass Airflow Sensor
- Oil Pressure
- Starter
- Tachometer
- Throttle Position Sensor
- Transmission
- VSS Input
- VSS Output
- VSS Output For Speedometer

| Fuse | BI- | A : | | F |
|-------------|-----|----------------|--------|------|
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| ruse | | | TUIL D | TUI. |

Canister Purge, EGR Valve, & Mass

Airflow Sensor

Crank Position Sensor, Coil Module,

& Ignition Coil

Data Link Connector

Dual 40 amp Ignition Relays

ECM (C4), ECM (C1), & Malfunction

Indicator Lamp

Fuel Injectors

Fuel Pump, Oil/Fuel Pressure, & ECM

Heated O2 Sensors, Cam Position Sensor

Transmission, Brake Switch, & ECM (C3)

60320 - In states/counties which require all the original emission equipment to be installed, Painless offers this emission harness for the 60212 harness. This harness provides connections to the Rear Oxygen Sensors and Fuel Tank Pressure Sensor.

60321 - In states/counties which require all the original emission equipment to be installed, Painless offers this emission harness for the 60213 harness. This harness provides connections to the Rear Oxygen Sensors and Fuel Tank Pressure Sensor.



UEL INJECTION HARNESSES

1996-1999 4.3L Vortec



This harness is designed for 1996-1999 4.3L Vortec CMFI engines with a 4L60E or 4L80E transmission. These engines were found in 1996-1999 GM full-size trucks and vans, S-10/S-15 trucks and SUVs, Chevy Astro Vans and Oldsmobile Bravadas. Harnesses do not include connections for the rear O2 sensors or fuel tank pressure sensor but are available separate, see below for more details. Included with this harness is an 8 circuit modular fuse block, detailed step-by-step manual, and GM color coded wires with labels for easy installation.

Fuse Block Circuits For:

Canister Purge, EGR Valve, & Mass Airflow Sensor

Crank Position Sensor, Coil Module,

& Ignition Coil

Data Link Connector

Dual 40 amp Ignition Relays

ECM (C4), ECM (C1), & Malfunction

Indicator Lamp

Fuel Injectors

Fuel Pump, Oil/Fuel Pressure, & ECM (C3) Heated O2 Sensors, Cam Position Sensor

Transmission, Brake Switch, & ECM (C4)

60320 - In states/counties which require all the original emission equipment to be installed, Painless offers this emission harness for the 60214 harness. This harness provides connections to the Rear Oxygen Sensors and Fuel Tank Pressure Sensor.

60321 - In states/counties which require all the original emission equipment to be installed, Painless offers this emission harness for the 60215 harness. This harness provides connections to the Rear Oxygen Sensors and Fuel Tank Pressure Sensor.

This harness also requires the following GM mating parts; ECM #16244210 or 16229684 with V6 programing.

60214 - 1996-99 GM Vortec 4.3L V6 (CMFI) Harness Std. Length

60215 - 1996-99 GM Vortec 4.3L V6 (CMFI) Harness Extra. Length



Includes Component Connections For:

- Alternator
- Brake Switch
- Cam Position Sensor
- Canister Purge Solenoid
- Canister Vent
- Data Link Connector
- Distributor
- Driver/Pass Front O2 Sensors
- **ECM**
- **EGR Valve**
- **Engine Coolant Temperature**
- Fuel Pump
- Fuel Pump Relay
- **Fuel Pump Test**
- Grounds
- Idle Air Control
- Ignition Coil

- Ignition Switch Signal
- **Ignition Coil Driver**
- Injectors
- Intake Air Temperature Sensor
- **Knock Sensors**
- Malfunction Indicator Lamp
- MAP Sensor
- Mass Airflow Sensor
- Oil Pressure
- Starter
- **Tachometer**
- Throttle Position Sensor
- Transmission
- **VSS Input**
- **VSS Output**
- VSS Output For Speedometer

1986-1993 GM TBI



This harness is designed for 1986 - 1993 4.3L, 5.0L, 5.7L, 7.4L Throttle Body Injection engines. These harnesses will not work with a '94 or '95 ECM and will not operate a 4L60E transmission. These engines were factory equipped in GM full-size trucks, vans, and SUVs, S-10/S-15 trucks & suvs, Oldsmobile Bravadas, Chevy Astro vans, and Camaro/Firebird platforms. Harnesses do not include all the original connections for the original emissions but are available separate, see below for more details. Included with this harness is a detailed step-by-step manual, and GM color coded wires with labels for easy installation.

This harness also requires the following GM mating parts;

ECM #1227747, #16121154, or #88999146. Calpack #16060836, and a prom to match your engine: (4.3L) #16082087, (5.0L) #16139492, (5.7L) #16139566, (7.4L) #16128359. This Prom does not control any transmission or torque converter functions.

- **60101** 1986-93 GM 4.3L V6; 5.0,5.7 & 7.4L V8 TBI Harness Std. Length
- **60201** 1986-93 GM 4.3L V6, 5.0, 5.7 & 7.4L V8 TBI Harness Extra Length
- Note Installs which have an external coil distributor require:
- 60124 This pigtail will be required in order to connect the coil to the distributor.
- **60125** This pigtail will be required in order to connect the power to the coil and will provide a tach signal from the coil.

60119 - 454 EGR Adapter

Includes Component Connections For:

- A/C Power
- Brake Switch
- Data Link Connector
- Distributor
- ECM
- EGR Valve
- Electronic Spark Control Module
- Engine Coolant Temperature
- Fuel Pump
- Fuel Pump Relay
- Fused System Power
- Grounds
- Idle Air Control
- Ignition Switch Signal (Fused)

- Ignition Timing Setting
- Injectors
- Knock Sensor
- Malfunction Indicator Lamp
- MAP Sensor
- O2 Sensor
- Oil Pressure
- Park/Neutral Indicator

Switch

- Starter
- Throttle Position Sensor
- Torque Converter Clutch
- VSS

60311 - In states/counties which require all the original emission equipment to be installed, Painless offers this emission harness for the 60201 harness. This harness activates the Air Port solenoid Control, Air Diverter Solenoid and Canister Purge Solenoid.

AMERICAN PROUD

<u>1985-1989 GM V8 TPI (MAF)</u>



Thisharnessis designed for 1985-1989 Tuned Port Injected TPI5.0L & 5.7 LV8 engines using the Mass Air Flow system. These engines were factory equipped in Chevrolet Camaro and Corvette and were mated to either a 200-4R or 700R4 transmission. Harnesses do not include all the original connections for the original emissions but are available separate, see below for more details. Included with this harness is a detailed step-by-step manual, and GM color coded wires with labels for easy installation.

This harness also requires the following GM mating parts;

ECM #1227165, #16198259, or #88999194. 1985-1988 engines will require the use of prom #16082183, #16068654, or #1228109. 1989 engines will require prom #16133467 or #16150500.

60102 - 1985-89 GM V8 TPI Harness (MAF) Std. Length

60202 - 1985-89 GM V8 TPI Harness (MAF) Extra Length

Note - Installs which have an external coil distributor require:

60124 - This pigtail will be required in order to connect the coil to the distributor.



60312 - In states/counties which require all the original emission equipment to be installed, Painless offers this emission harness for the 60102 harness. This harness activates the Air Port solenoid Control, Air Diverter Solenoid and Canister Purge Solenoid.

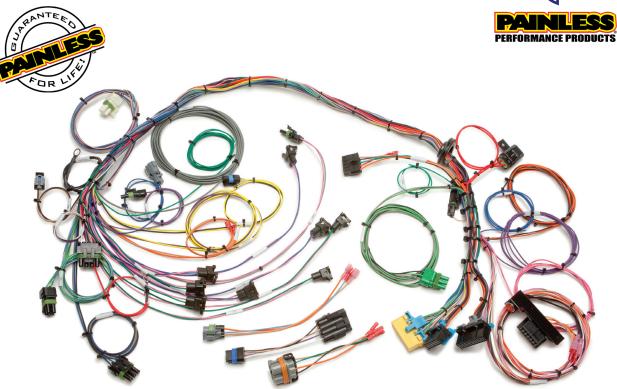
60313 - In states/counties which require all the original emission equipment to be installed, Painless offers this emission harness for the 60202 harness. This harness activates the Air Port solenoid Control, Air Diverter Solenoid and Canister Purge Solenoid.

Includes Component Connections For:

- A/C Power
- Alternator
- Brake Switch
- Cold Start Injector
- Cold Start Switch
- Data Link Connector
- Distributor
- ECM
- EGR Valve
- Electronic Spark Control Module
- Engine Coolant Temperature
- Fan Relay Ground
- Fuel Pump
- Fuel Pump Relay
- Fused System Power
- Grounds
- Idle Air Control

- Ignition Switch Signal (Fused)
- Ignition Timing Setting
- Injectors
- Knock Sensor
- Malfunction Indicator Lamp
- Manifold Air Temperature
- Mass Airflow Burn off Relay
- Mass Airflow Power Relay
- Mass Airflow Sensor
- O2 Sensor
- Oil Pressure
- Park/Neutral Indicator Switch
- Starter
- Throttle Position Sensor
- Torque Converter Clutch
- VATS
- VSS

1990-1992 GM V8 TPI (MAP)



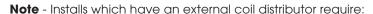
This harness is designed for 1990 - 1992 Tuned Port Injected TPI 5.0L /5.7L V8 engines using the MAP speed density system. These engines were factory equipped in Chevrolet Camaro and Corvette and were mated to either a 200-4R or 700R4 transmission. Harnesses do not include all the original connections for the original emissions but are available separate, see below for more details. Included with this harness is a detailed step-by-step manual, and GM color coded wires with labels for easy installation.

This harness also requires the following GM mating parts;

ECM #1227730, #16198262, or #88999196. The EPROM broadcast code must match tire diameter, gear ratio, engine size, and transmission.

60103 - 1990-92 GM V8 TPI Harness (MAP) Std. Length

60203 - 1990-92 GM V8 TPI Harness (MAP) Extra Length



60124 - This pigtail will be required in order to connect the coil to the distributor.

60125 - This pigtail will be required in order to connect the power to the coil and will provide a tach signal from the coil.



Includes Component Connections For:

- A/C Power
- **Alternator**
- Brake Switch
- **Data Link Connector**
- Distributor
- ECM
- EGR Valve
- **Engine Coolant Temperature**
- Fan Relay Ground
- Fuel Pump
- Fuel Pump Relay
- Fused System Power
- Grounds
- Idle Air Control
- Ignition Switch Signal (Fused)

- Ignition Timing Setting
- Injectors
- Knock Sensor
- Malfunction Indicator Lamp
- Manifold Air Temperature
- MAP Sensor
- O2 Sensor
- Oil Pressure
- Park/Neutral Indicator
- Switch
- Starter
- Throttle Position Sensor
- Torque Converter Clutch
- VATS
- VSS

60314 - In states/counties which require all the original emission equipment to be installed, Painless offers this emission harness for the 60103 harness. This harness activates the Air Port solenoid Control, Air Diverter Solenoid and Canister Purge Solenoid.

60315 - In states/counties which require all the original emission equipment to be installed, Painless offers this emission harness for the 60203 harness. This harness activates the Air Port solenoid Control, Air Diverter Solenoid and Canister Purge Solenoid.

<u> Accessories - TPI, TBI, Vortec</u>

PANLESS PERFORMANCE PRODUCTS

Park/Neutral Relay Kit

This kit uses the stock neutral safety switch to also provide for ECM park/ neutral ground signal needed when installing factory-style fuel injection into older vehicles. For use with any aftermarket shifter or column mounted neutral safety switch.

60122



This kit is engineered to perform as a neutral safety switch or a backup-light switch by using one of two trigger levers included. Fits GM Turbo 350, 400 and 700R4 transmissions.

80175

HEI Replacement Power PigtailFor GM HEI distributor.

30809



For the GM HEI distributor. Includes OEM distributor connector and 6 feet of wire.

30813

GM Coil to Distributor Harness

Connects coil to distributor on TBI & TPI engines.

60124

GM Coil Power/Tach Pigtail

Connects power and tach to coil on TBI & TPI engines.

60125

Throttle Body Manifold Adapter

To convert from carburetion to TBI without having to replace your manifold.

For square or spread bore base and accepts any 43 mm bore throttle body

from 4.3L, 5.0L and 5.7L GM engines.

60118

VATS Anti-theft bypass

For 1990-92 GM Tuned Port engines.

64023

ClassicBraid EFI Kit.

Includes wire covering for most fuel injection installations. See page 75.

PowerBraid Fuel EFI Kit.

Includes wire covering for most fuel injection installations. See page 75.

700R4/200-4R transmission related items:

Vehicle Speed Sensor (MAP TPI).

4 pulse VSS for Late TPI and Early LT1 EFI systems. **60116**

Torque Converter Lockup Kits

These kits for the 700R4 and 200-4R transmissions will control the lock up function of the torque converter without the need of a VSS or any interaction with an ECM. The vacuum controlled switch and a 4th gear pressure switch supplied with this kit controls the torque converter lock up solenoid.

60109 - 700R4 Transmission Torque Converter Lock-Up Kit

60110 - 200-4R Transmission Torque Converter Lock-Up Kit

















1986-1995 Ford 5.0L



This harness is designed for the 1986-1995 Ford 5.0 HO Mass Air Flow EFI engines. You must use the 1986-1993 MAF and Distributor. 1986-1989 1/2 must add MAF (mass air flow) sensor. 1994-1995 must modify TPS wiring and change distributor, Included with this harness is an 8 circuit modular fuse block, detailed step-by-step manual, and Ford color coded wires with labels for easy installation.

Fuse Block Circuits For:

Check Engine Light

Driver Side Injectors

Dual 40 amp Ignition Relays

EEC-IV

Fuel Pump Relay (B+)

Fuel Pump Relay (IGN)

Heated O2 Sensors

Mass Airflow, EVR, ISC

Pass Side Injectors

This harness also requires the following Ford mating

ECM #E9ZF-12A650-AA or NAPA part # XTP220.

60510 - 1986-95 Ford 5.0L Harness Std. Length 60511 - 1986-95 Ford 5.0L Harness Extra Length

Note: See page 51 for Mustang Switch Panels

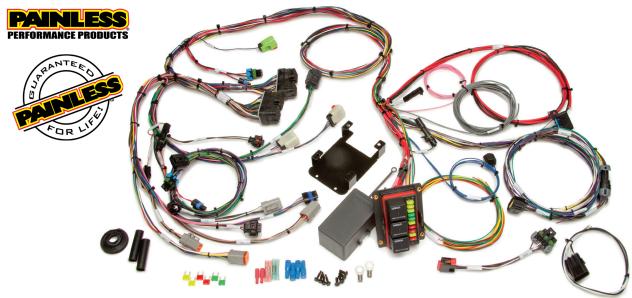
Includes Component Connections For:

- Alternator
- Barometric Pressure Sensor
- Data Link Connector
- **ECM**
- **EEC Ground**
- **EEC Power Relay**
- **EEC Test**
- EGR Vacuum Regulator
- **EGR Valve**
- **Engine Coolant Temperature**
- Fuel Pump Fuel Pump Relay
- Grounds
- Idle Air Control
- **Ianition Coil**

- Ignition Switch Signal
- Ignition Timing Setting
- Injectors
- Intake Air Temperature
- Malfunction Indicator Lamp
- Mass Airflow Sensor
- Neutral Safety Switch
- O2 Sensor
- Starter Relay
- **Tachometer**
- TFI Ground
- TFI Pigtail
- Throttle Position Sensor
- **VSS**



2003-2005 Cummins Diesel



This harness is designed to fit 2003 - 2005 5.9L common rail diesel Cummins engines using a standard transmission. Included with this harness is a 20 circuit weatherproof fuse block, detailed step-by-step manual, and factory color coded wires with labels for easy installation.

Fuse Block Circuits For:

Accessory

DLC B+

ECM B+

ECM B+

ECM Key-On

Fuel Heater

Fuel Pump

Ignition Key-On

Wastegate & Fan

40 Amp Fuel Pump Relay

40 Amp Fuel Heater Relay

40 Amp Ignition Relays

60250 - 2003-05 Cummins Diesel Engine Harness 5.9L Manual Transmission Only

This harness also requires the following Dodge mating parts to complete;

- **1. ECM** This must be a factory ECM flashed for a manual transmission. This harness only fits ECMs from 2003-2005 Dodge trucks with the 5.9L Cummins engine.
- **2. IAT heater relays** This harness provides ECM output wires in order to turn on factory style IAT heater relays. You must purchase these relays or get them from a salvaged vehicle.
- **3. APPS** This harness supports the 2003 early Accelerator Pedal Position Sensor that was mounted on the front of the engine to the intake, the 2004 APPS mounted under the battery box and the 2005 late model Accelerator Pedal Position Sensor that was mounted on the accelerator pedal. You must use which ever APPS your ECM is programmed for. All APPS units are available from your local Chrysler dealer.

Includes Component Connections For:

- 20 Amp Output
- 2003 2004 Fuel Pressure Drive
- 2005 Fuel Pressure Drive
- Accelerator Pedal Position Sensor
- Alternator Regulator
- APPS 2004
- APPS Early
- APPS Late
- Batterv
- Battery Temperature
- Brake Switch #1
- Brake Switch #2
- Camshaft Position Sensor
- Coolant Temperature Sensor
- Crankshaft Position Sensor
- Cruise Control
- CTS Early Signal
- CTS Late Signal
- CTS Signal

- Data Link Connector
- ECM
- Fuel Control Acutator
- Fuel Heater
- Fuel Pressure Relay
- Fuel Pump
- Fuel Rail Pressure
- Harness 12v Activation
- IAT Heater Relay Activation #1
- IAT Heater Relay Activation #2
- Injectors
- MAP / Intake Air Temperature
- Oil Pressure
- Park/Neutral Safety Switch
- Pre-Turbo IAT/Pressure
- Radiator Fan Drive
- VSS Signal
- Wastegate Control Solenoid
- Water-In-Fuel Sensor

- **4. CTS** This harness only supports the late model style coolant temperature sensor.
- **5. LIFT PUMP** There are several options when choosing a lift pump. This harness provides a 30 amp power wire. It is relayed and ECM controlled. **A.** Use a factory style lift pump; this may be a good budget minded option if this Cummins motor is transplanted into a vehicle that already had a diesel engine. Be sure to check volume and pressure from your factory lift pump if going with this option.
- **B.** 2003-2004.5 Cummins engines had lift pumps mounted to the back of the fuel filter /water separator.
- C. Use an aftermarket lift pump.
- **6. RADIATOR FAN DRIVE** This is factory mounted to the fan shroud and controls the speed of the mechanical radiator cooling fan. This part can be taken from the donor vehicle or purchased new. If you may also choose to use aftermarket radiator fans.
- **7. VSS SIGNAL WIRE** This wire needs to receive a 5 Volt square wave signal from an ABS module or VSS signal modification module.

ClassicBraid & PowerBraid





The perfect solution to clean up and protect the wiring in your vehicle. The laterally split design allows for easy installation over splices and inline connectors without exposing wires and cables. Resistant to the majority of chemicals and automotive fluids.

Available options in sizes from 1/8" to 2" in various lengths. They are also available in chassis and fuel injection kits containing everything you will need to cover your harness.

70956 - 1/8" ClassicBraid (20 ft.) 70957 - 1/4" Classic Braid (20 ft.) **70958** - 1/2" Classic Braid (10 ft.) **70959** - 3/4" ClassicBraid (6 ft.) 70960 - 1" ClassicBraid (12 ft.)

70970 - Classic Braid Chassis Kit

Includes: 15' of 1/8", 60' of ¼", 30' of ½", 10' of ¾", 6' o

70971 - ClassicBraid EFI Kit

Includes: 23' of 1/8", 50' of ¼", 12' of ½", 3' of ¾", 8' of 1'

70973 - ClassicBraid 2nd GEN Camaro Kit Includes: 41' of 1/8", 70' of ¼", 33' of ½", 2' of ¾", 2' of 1" (for harness part #'s 20112/20113/20114)

 - 1/8" PowerBraid (20 ft.) - 1/4" PowerBraid (20 ft.) - 1/2" PowerBraid (10 ft.) - 3/4" PowerBraid (6 ft.) - 1" PowerBraid (12 ft.) - 2" PowerBraid (4 ft.)

70920 - PowerBraid Chassis Kit

Includes: 15' of 1/8", 60' of ¼", 30' of ½", 10' of ¾", 6' of 1"

70921 - PowerBraid Fuel Injection Kit

70922 - PowerBraid Bronco Kit (for Part #10113) Includes: 38' of 1/8", 40' of 1/4", 23' of 1/2", 6' of 3/4"

70923 - PowerBraid 2nd GEN Camaro Kit Includes: 41' of 1/8", 70' of ¼", 33' of ½", 2' of ¾", 2' of 1" (for harness part #'s 20112/20113/20114)

70940 - PowerBraid / ClassicBraid Tool 1 Inch (shown below)

70941 - PowerBraid / ClassicBraid Tool Asst. Kit (includes 1-3/8", 1-1/2", and 1-3/4" tools)





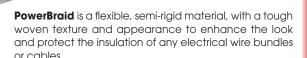
ClassicBraid & PowerBraid Kits Include Several Sizes And Lengths To Complete Most Applications.



ClassicBraid is a self-wrapping split braided wiring loom for that classic show car look! Its smooth texture and appearance will transform your engine bay, giving you that factory installed look.

The tightly woven construction provides excellent blockage against mud and dirt, while maintaining adequate drainage. The lateral split design has a Includes: 23' of 1/8", 50' of ¼", 12' of ½", 3' of ¾", 8' of 1" minimum 25% overlap to allow for easy installation and optimum wiring protection.

- Continuous Temperature Rating -94° to 257°F
- Melting Point 482°F



The woven construction provides good drainage while maintaining superior abrasion resistance. Laterally split with a 25% continuous overlap design allows for easy installation and optimum wiring protection.

- Continuous Temperature Rating -94° to 257 °F
- Melting Point 482°F

Jeep JK Accessory Control Panels

Completely weatherproof and machine terminated, the Trail Rocker Power Center will keep you going out on the trails. The 8 diode suppressed relays keep your accessories and switches safe, and the included 12 gauge TXL output wiring ensures you have the best quality output wiring, allowing you to avoid the sometimes cheap and inferior wiring included with some accessories.

The Trail Rocker allows you to power lightbars, compressors, refrigerators, winches, and many others!

Jeep JK Dash Mount Accessory Control Systems

Looking to add accessories to your JK Jeep, but want to maintain that factory installed look? The dash mount Trail Rocker systems provide five pre-wired switches mounted in our custom dash panel for a clean factory installed look inside your Jeep!

57000 - Trail Rocker System Jeep Wrangler JK 2011-16 (Black Dash panel) **57001** - Trail Rocker System Jeep Wrangler JK 2011-16 (Tan Dash panel) **57002** - Trail Rocker System Jeep Wrangler JK 2007, 10 (Black Dash panel)

57002 - Trail Rocker System Jeep Wrangler JK 2007-10 (Black Dash panel) (Automatic Transmission Applications Only)





Jeep JK Overhead Panel Accessory Control Systems

The overhead Trail Rocker switch panel gives you six pre-wired switches in a rugged box. The best part? The switch panel is enclosed, keeping your wiring and switches protected from the elements if you get caught with your top down.

57003 - Trail Rocker System Jeep Wrangler JK 07-16 (Auto & Stick) Overhead 6 Switch Panel - Standard Rearview Mirror

57004 - Trail Rocker System Jeep Wrangler JK 07-16 (Auto & Stick) Overhead 6 Switch Panel - Auto-dimming Mirror

Jeep JK Accessory Control System w/o Switches

The Trail Rocker System without switches gives you the customizability to mount your own switches how you choose, allowing for countless switch control options.

57005 - Trail Rocker Accessory Control System Jeep Wrangler JK 07-16 (w/o Switches)





Jeep TJ Accessory Control Panels



Jeep TJ Dash Mount Switch Center Accessory Control Systems

The dash mount Trail Rocker switch panel gives you eight prewired switches in a rugged box that sits top dead center on your TJs dash, all while retaining TJ dash cubby hole and leaving you with a place to toss your cell phone or wallet!







Jeep TJ Accessory Control System w/o Switches

The Trail Rocker System without switches gives you the customizability to mount your own switches how you choose, allowing for countless switch control options.

57042 - Trail Rocker System Jeep Wrangler TJ '97-'06 (Auto & Stick) (w/o switches)

With the Trail Rocker, you get all high quality TXL output wiring included, allowing you to avoid the sometimes inferior wiring included with accessories.

The best part? The output wiring is machine terminated into the Trail Rocker Power Center, giving you a durable and rugged connection that will handle the amperage your accessories require!

Don't rely on Chinese knock-offs and inferior components to carry the burden of powering your accessories.







Jeep CJ, Customizable, and Trail Rocker Accessories

Jeep CJ Underdash Mount Accessory Control Systems

Looking to add accessories to your CJ Jeep while keeping the switches low and inconspicuous? The underdash mount Trail Rocker systems provide four, six, or eight switches in a rugged enclosed box mounted to the bottom of dash for a clean and easily accessible install.

57021 - Trail Rocker System Jeep CJ 1976-1986 w/Underdash 4 Switch Box

57022 - Trail Rocker System Jeep CJ 1976-1986 w/Underdash 6 Switch Box

57023 - Trail Rocker System Jeep CJ 1976-1986 w/Underdash 8 Switch Box



P/N 57020

Jeep CJ Overhead Panel Accessory Control Systems

The overhead Trail Rocker switch panel gives you six pre-wired switches in a rugged box. The best part? The switch panel is enclosed, keeping your wiring and switches protected from the elements if you get caught with your top down.

57020 - Trail Rocker System - Jeep CJ 1976-1986 w/Overhead 4 Switch Box

Jeep CJ Accessory Control System w/o Switches

The Trail Rocker System without switches gives you the customizability to mount your own switches how you choose, allowing for countless switch control options.

57024 - Trail Rocker Accessory Control System CJ 76-86 (w/o Switches)





Customizable Trail Rocker Accessory Control Systems

The Customizable Trail Rocker System gives you the customizability to install the proven Trail Rocker relay center into any vehicle! As with all Trail Rocker systems, the Universal kit utilizes a weatherproof power center and all TXL output wiring is included!

57100 - Customizable Trail Rocker Accessory Control System

Winch Control Add-On Kit

Every Trail Rocker ships winch ready! Simply buy this add-on kit which includes a momentary on-off-on switch and custom winch engraved switch cover to control your winch with your Trail Rocker system!

57150 - Trail Rocker - Winch Control Add-on Kit



Genesis Dual Battery Bracket

Want to run a Trail Rocker but have a Genesis dual battery controller than interferes with mounting the Trail Rocker power center? This simple bracket allows you to mount the Trail Rocker to your Genesis dual battery controller!

57200 - Trail Rocker - Genesis Dual Battery Bracket



Trail Rocker Switch Units

Trail Rocker - 4, 6, and 8 Switch Panels

The Painless Trail Rocker Switch Panels are as rugged as any trail you'll encounter. The weatherproof LED On/Off switches are enclosed in a powder-coated steel housing.

Available in a 4, 6, or 8 switch option, with mounting options available for dash mount, roll bar mount (1 5/8" and 1 3/4"), or flanged under dash mount.

Designed to be plug-n-play with the Painless Trail Rocker systems and includes option winch wiring. Includes everything required to install and mount.

*Please note that these are designed to only work with the Trail Rocker System. Using these panels to power circuits without diode suppressed relays can cause switch failure and void the warranty.



4 Switch Panels - Dimensions: 6" x 31/2" x 2" (width, height, depth).

57107 - Trail Rocker - 4 Switch Panel - In Dash Mount **57108** - Trail Rocker - 4 Switch Panel - Roll Bar Mount

57109 - Trail Rocker - 4 Switch Panel - Flange / Under Dash Mount



6 Switch Panels - Dimensions: 83/8" x 31/2" x 2" (width, height, depth).

57104 - Trail Rocker - 6 Switch Panel - In Dash Mount **57105** - Trail Rocker - 6 Switch Panel - Roll Bar Mount

57106 - Trail Rocker - 6 Switch Panel - Flange / Under Dash Mount



8 Switch Panels - Dimensions: 11" x $3\frac{1}{2}$ " x 2" (width, height, depth).

57101 - Trail Rocker - 8 Switch Panel - In Dash Mount **57102** - Trail Rocker - 8 Switch Panel - Roll Bar Mount

57103 - Trail Rocker - 8 Switch Panel - Flange / Under Dash Mount

Trail Rocker Replacement Switches

57051 - LED Weatherproof On/Off Switch **57052** - LED Weatherproof On/Off/On Switch

57053 - Weatherproof Momentary On/Off Switch



P/N 57053





P/N 57052







<u>Benefits of Using Relays</u>



Why are Relays Important?

Relays have been used extensively in automobiles for many years. The main usage of relays in an automotive application is to control a high amperage component, such as a fuel pump or electric fans, with a low amperage circuit or switch, such as a fuel pump grounding circuit on an ECM. This diagram shows a representation of a simplified relay circuit, where a relay is used to turn on an electric cooling fan (2). When the low current switch (5) is switched to the "on" position the electromagnetic coil (4) is energized causing the armature (3) to move. When the armature is moved by the electromagnetic coil it causes the contacts (1) to close, completing the circuit between the battery and the electric cooling fan (2). When the switch is turned off, power to the electromagnetic coil is interrupted. causing the armature and contact to go back to their open position, turning the fan off.

There are several benefits of using relays in an automotive application. First, as stated earlier, you can turn on a high current component, such as an electric cooling fan that draws 70 amps of DC current, with a switch that has a much lower

Terminal 86

STDP Relay (Bottom view)

Terminal 87

Terminal 86

STDP Relay (Bottom view)

Terminal 87

Terminal 86

STDP Relay (Bottom view)

Terminal 87

Terminal 86

Relay

Relay

amperage rating or even an ECM with a circuit that simply provides a ground to turn the fan on and off. Another benefit of using a relay in your project is that the high amperage component is connected directly to the battery using a larger gauge wire, allowing the high amperage component to operate at full capacity. A good example of this benefit can be seen when using a relay in a halogen headlight circuit. A halogen headlight operated with a relay will be considerably brighter than one that has to rely on its power passing thru a headlight switch and the 14 ga. headlight wires that are used in most chassis harnesses. The final benefit of using a relay that we will discuss is circuit isolation. If you use an ECM to control a relay the relay isolates the ECM from any voltage spikes or feedback issues created by the high amperage component, helping to protect the sensitive semiconductors found inside the ECM.



Universal Relay Kits

Relay Base Port

The same relay base we use on all our products. Made of High Impact ABS thermo plastic. Terminals provided. Use with 80130 and 80132 relays below.

80133



Replacement Relays

80130 - 40 Amp single pole/single throw relay.

80132 - 30 Amp, Single Pole Double Throw

Relay - Diode Suppressed

80135 - Two single pole/double throw micro relays. N/C side 15 Amp N/O side 25 Amp

80136 - Micro relay with base and terminals.





PERFORMANCE PRODUCTS

P/N 80132





P/N 80135

Weatherproof SPDT Relays

Heavy duty 30 Amp single pole/double throw relay. 80129 kit includes relay, base, terminals, and seals.

80128 - 30 Amp SPDT Replacement Relay Only

80129 - 30 Amp SPDT Relay, Base, Terminals, and Seals.





High Amp SPST Relays

Ultra heavy duty 70 Amp single pole/single throw relay. 80138 kit includes relay, base, and terminals.

80137 - 70 Amp SPST Replacement Relay Only

80138 - 70 Amp SPST Relay, Base, and Terminals





Relay Blocks

These relay block kits are ideal for powering accessories such as fuel pumps, water pumps, throttle stops, fan, nitrous solenoids. Choose from either a 3-Pack or 6-Pack of 40 amp relays. 3-Pack kit includes one 40 amp circuit breaker; 6-Pack includes two.

30107 - 3-Pack Relay Bank **30108** - 6-Pack Relay Bank





Universal Relay Kits







Electric Water Pump Relay Kit

This electric water pump relay kit provides maximum battery voltage to maximize cooling efficiency and to protect the main electrical system from damaging amperage overloads.

50106



Weatherproof Electric Water Pump Relay Kit

Perfect for the harsh conditions encountered off-road, this electric water pump relay kit provides complete protection from the elements and ensure reliable and dependable performance. These kits utilize heavy duty waterproof relays, weatherproof circuit breaker covers and extreme condition weatherproof shrinkable crimp-on terminals.

30132



Universal Fuel Pump Relay Kit

A relay will prevent voltage drops at the fuel pump thus maintaining constant fuel pump pressure, and will prevent fuel pump amperage from damaging the electrical system. It's a good idea to relay your fuel pump for the street and a must when you're racing.

50102



Weatherproof Universal Fuel Pump Relay Kit

Perfect for the harsh conditions encountered off-road, this fuel pump relay kit provides complete protection from the elements and ensures reliable and dependable performance. These kits utilize heavy duty waterproof relays, weatherproof circuit breaker covers and extreme condition weatherproof shrinkable crimp-on terminals.

30131



Roll Over Safety Switch Kit

Automatically shuts off power to fuel pump in the event of a vehicle rollover.

Recommended by many racing classes. Not recommended for off-road use. $\bf 80160$



Hot Shot Bump Switch / Amperage Booster

This switch allows you to turn over your engine from the engine compartment for adjusting valves. It also overcomes starting problems due to an overheated starter or worn out electrical system by boosting amperage to the starter solenoid every time the vehicle is started.

30201



Hot Shot Amperage Booster

Designed to overcome starting problems due to an overheated GM style starter or worn out electrical system. Works by boosting amperage to the starter solenoid.

30202

Fan Relay Kits

A/C Activated Fan Relays

Want your cooling fan to kick in automatically when your A/C comes on? This A/C Activated Cooling Fan Relay kit is what you need. Your cooling fan will activate when the engine reaches the preset temperature of the thermostatic switch or when the A/C is turned on.

30114 - A/C activated fan relay with 200°F on /180°F off Thermostat

30115 - A/C activated fan relay with 185°F on /175°F off Thermostat

Dual Fan / Dual Activation Cooling Fan Relay

Only a few minutes for the installation and your cooling fan will come on when the engine reaches the preset temperature of the thermostatic switch mounted in the engine head or when the a/c is turned on. Kit includes: (3) 40 Amp relays with mounting bases, (1) fuse holder w/ 70 amp fuse, Pre-terminated and printed wire harness, Thermostatic switch 195°F on/185°F off (thread size: 3/8"-18NPT), 1/2"NPT to 3/8"NPT adapter, mounting hardware, insulated terminals, detailed instruction sheet.

30116 - Dual Fan / Dual Activation Cooling Fan Relay

30117 - As Above with 185°F on/175°F off Thermostatic Switch.

Fan-Thom Electric Fan Relay

Designed as inexpensive protection for your electric fan. Provides constant voltage, protects from voltage and amperage spikes and keeps fan from feeding back through the system. An absolute necessity if adding an on/off switch to your electric fan circuit.

30101

Fan-Thom Electric Fan Relay

Don't want to probe your radiator? The Fan-Thom II comes with a threaded thermostat that screws into the engine block or manifold for a professional installation. Thermostat thread size: 3/8"-18 NPT fitting.

 $\mathbf{30102}$ - Fan-Thom Electric Fan Relay - $195^{\mathrm{0}}\,\mathrm{On}\,/185^{\mathrm{0}}\,\mathrm{Off}$

30103 - Fan-Thom Electric Fan Relay - 185° On /175° Off

Adjustable Electric Fan Thermostat Kit

Designed to allow a wide range of temperature adjustments for your electric fan. A bulb at the end of the capillary tube is inserted in the fins or attached to the top or hottest portion of the radiator. Use the adjustment knob to set a precise temperature desired for fan activation. The strong brushed stainless steel mounting bracket looks great. Complete kit includes thermostat, bracket, 30 amp relay, 30 amp circuit breaker for overall protection, wiring, terminals and hardware. Note: Temperature refers to the temp of the capillary tube, not the coolant temp. Specs: Temp range - 32 deg to 248 deg F, Accuracy: +/- 7.3 deg F, Differential: 7.3 deg +/- 3.6 deg F

30104 - Adjustable Electric Fan Thermostat Kit

30112 - Adjustable Thermostat Kit Without Relay.

Replacement Thermostats

30110 - 195° On/185° Off

30111 - 185 On /1750 Off

Weatherproof Electric Fan Relay Kits

For the harsh conditions encountered off-road, these relay kits provide complete protection from the elements and ensure reliable and dependable performance. These kits utilize heavy duty waterproof relays, weatherproof circuit breaker covers and extreme condition weatherproof shrinkable crimp-on terminals.

30130 - Weatherproof Electric Fan Relay

30128 - Weatherproof Electric Fan Relay with 195° On /185° Off Thermostat

30129 - Weatherproof Electric Fan Relay with 185° On/175° Off Thermostat

70 Amp Fan Relay

This relay kit is designed for running high amp dual fans or Monster fan set-ups. **30100**

(GEN III & IV LS Engine Cooling Fan Products On Page 65)















Headlight Relay Kits

PERFORMANCE PRODUCTS P/N 30815 P/N 30817 P/N 3082 P/N 30822 P/N 30803

Halogen Headlight Harness

For maximum power from your headlights you must have the shortest possible distance between the power source and the bulbs. Some factory headlight wiring is not designed to handle high power Halogen Head-lights, especially when upgrading to a higher wattage. Running the power through the switch is even worse. Resistance in small gauge wire or in the switch will lower the output at the lamp. Be Safe! Our headlight harnesses draw power directly from the battery, through a relay, to the headlights, providing full power to your H4 conversion headlights or Halogen sealed beams. They can also be used to relocate head-lamps to a remote location (to accommodate a snow plow, for example). They are made with TXL high temp wire, weather resistant 30-Amp fuse, and two 40-Amp weather resistant relays capable of handling up to 150 watts. #30815 and #30816 are for use on vehicles with a 2-headlight system using dual filament sealed beams or H-4 headlight conversions. #30817 is for use on vehicles with a 9005 and 9006 bulb on each side.(Will not work on Toyota vehicles)

*Note:Vehicles using dual filament, halogen sealed beam or H4 conversion type headlights use kit #30815.

30815 - For H-4 halogen bulbs *

30816 - For 9004 and 9007 halogen bulbs

30817 - For 9005 and 9006 halogen bulbs

Halogen Headlight Relay Kit

Designed to upgrade most American cars, from the late 1950's to the mid 1980's that have 4 headlights to H-4 style Halogen Bulbs. This kit eliminates the need to buy 2 kits & install/route redundant wiring.

30814

High Beam Headlight Relay

Why do the low beams on 1988 on GM pickups and Suburbans low beams go off when the high beams are turned on? These kits will increase the intensity and improve the light spread pattern by keeping all four lights on in high beam mode.

30802 - High Beam Relay For 1988-98 GM full size trucks and SUVs *

30821 - High Beam Relay For 1999-2002 GM full size trucks and SUVs**

30822 - High Beam Relay For 2003-2006 GM full size trucks and SUVs

30823 - High Beam Relay For 1998 and later Chevy S10 and GMC T15 (No Kits For Other Brands Are Available)

*Note 1: 1988-98 GM trucks including trucks with low-beam daytime running lights.

**Note 2: 1999-2002 GM trucks including trucks with low beam daytime running lights.

(Some `99 and later trucks wiring did not change. If your head-light wires are tan and green use kit #30802; if purple and yellow use kit #30821). For other GM applications contact our tech line.

- Note 3: Slight modifications may be necessary for some vehicles such as 88-91 Suburbans.

Auxiliary Lighting Relay Kit

Install extra driving or fog lights easily and properly with our Auxiliary Light Relay Kit. Switch can be wired to turn lights on per state law requirements: Low beams & auxiliary lights, Highbeams & auxiliary lights, Auxiliary light operation only. Complete kit includes lighted switch, wiring harness, 30 amp relay and terminals.

30803

Halogen Brake Light Relay Kit

When upgrading tail lights to halogens, always use a relay. This kit gives you everything you need to protect your wiring and switches.

30105

LED Flasher Upgrade

If you've upgraded to LED type lighting, this relay is the correct flasher to handle the job.

80230

H4 Headlight plugs

H4 Headlight plugs. Pre-terminated with butt connectors for easy attachment. Perfect for replacement of worn original connectors.

80300 - 2 per package

P/N 80300

Perfect TORC Transmission Controller



PERFECT TORC Transmission Controller

The PERFECT TORC Transmission Controller System is the most reliable, well designed, vibration resistant, economical and simple to program transmission control system on the market. It was designed for ease of installation, even with little or no electrical or programming experience.

66501 - PERFECT TORC 4L60-5E/4L80-5E Transmission Controller

PERFECT TORC Transmission Controller features:

- User Friendly Software w/ USB Cable Included
- Compatible with all current versions of Windows.
- Simple "Initial Setup Wizard"
- Base Calibrations for each Transmission Type
- Two Separate Shift Tables
- A digital display on the controller to allow for on-board diagnostics and basic tuning.
- Supports paddle shifting or simple push button shifting.
- Ultra simple method to calibrate signal for aftermarket speedometers to be accurate.
- The harness included in this kit is made with our 600 volt, 257°F, TXL abrasion resistant wire and is covered in our Power Braid abrasion and heat resistant wire loom.

This stand-alone electronic transmission controller will run your four speed automatic overdrive GM transmissions. These include the 4L60E, 4L65E, 4L70E, 4L80E and 4L85E GM transmissions. It can be installed with carbureted engines, fuel injected engines and diesel engines. The systems control of the transmissions shift points, shift firmness and shift quality are all based off of two basic inputs: TPS (Throttle Position Sensor) and VSS (Vehicle Speed Sensor). These are two very simple to obtain signals on almost all project vehicles built today.

The included User-Friendly Software has an "Initial Setup Wizard" to walk you through and simplify the most important key elements to achieve a nicely shifting transmission. Once the correct information has been entered into the initial setup wizard and the calibration has been written to the controller your transmission will have a good base calibration to allow you to go for your first drive.

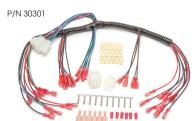
The "Key Elements" are:

- 1. Selecting what transmission type you have.
- 2. Whether you are running the stock gear ratios inside the transmission or not. Most setups run the stock gear ratios.
- 3. What your rear axle gear ratio is.
- 4. What your rear overall tire diameter is.
- 5. Measuring both your Idle and W.O.T.(Wide Open Throttle) throttle position sensor voltages and teaching the software what they are.
- 6. Setting up your Torque Converter Clutch Settings.
- 7. Choosing a 2nd gear to 1st gear downshift mile per hour
- 8. Choosing a maximum 1st gear to 2nd gear upshiff rpm. *This is the RPM in which the controller will FORCE the transmission to upshiff to protect against over revving your engine.
- Setting up the output signal for an electronic speedometer. This system allows the signal to be offset manually to make synchronizing an aftermarket speedometer to read the correct miles per hour.



Interior Accessories





Universal Gauge Harness

If you want to keep your under-dash area organized or you think that you need to remove gauges from time to time then you need to install our universal gauge harness. It will connect all major brand gauges including Auto Meter and VDO and works with most dash layouts and sizes. Harness includes wiring for turn signals and high beam indicator light.

30301 - Universal Gauge Harness for Cable Driven Speedometer.

30302 - Universal Gauge Harness for Electric Speedometer.



GM Column & Dimmer Switch Pigtail

Original factory connectors to replace worn out or damaged connectors for early GM keyed steering columns. GM color-coded wires are ready to connect into your existing harness. Includes: two keyed ignition switch pigtails, one turn signal pigtail with two connectors; one dimmer switch pigtail. Wire length: 12 Inches. 30805



GM Column Installation Kit

All the plugs and terminals for your early GM keyed steering column in one kit. Contains two ignition switch connectors, two turn signal connectors and one dimmer switch connector and terminals for each.

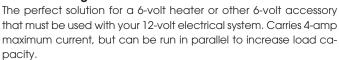




Universal Integrated Turn Signal Kit

A common problem faced by rodders and kit car builders is where to mount the turn signal switch since many aftermarket steering columns are not designed to accommodate the necessary wiring and switches. Problem solved with this new Integrated Turn Signal Kit from Painless. The toggle switches for both turn signals and hazards can be mounted anywhere. Because the kit is designed to be an integrated system, turn signals will work in conjunction with brake lights. 30120





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40027 - Not to be used with electrical gauges.



1/8" Indicator Lights - 80200 - Amber, 80201 - Red, 80202 - Green 5/16" Indicator Lights - 80203 - Amber, 80204 - Red, 80205 - Green, 80206 - Blue

1/2" Indicator Lights - 80208 - Amber, 80209 - Red, 80210 - Green, 80211 - Blue

Check Engine Light - 80207 - Amber with engine logo

Interior Accessories



Headlight Switch with Plastic Knob - A

80154 - Four position; off, park, low beam and high beam.

Headlight Switch with Aluminum Knob - B

80151 - 3 position; dash light dim, no dome light control.

Dimmer Switch - C

80150 - GM type floor mounted dimmer

Universal Ignition Switch - D

80153 - Dash mounted ignition switch w/two keys.

Headlight Switch with GM Style Black Knob - E

80152 - 3 position; dash light dim and dome light control.

Replacement Headlight Switch kit - F

80120 - 3 position headlight switch, a floor mounted dimmer, and two GM style grounding door jam switches.

Replacement Switch Kit - G

80121 - One 3 position headlight switch, one floor mounted dimmer, two GM style grounding door jam switches, and one universal ignition switch with keys.

Push Button Starter Switch - H

80503 - With cover

Universal Windshield Wiper Switch - I

80173 - Three position switch operates 2-speed wiper motor with on-off and washer function.

Hydraulic Brake Light Switch - J

80171 - 1/8" Pipe thread fitting. 60-120 psi 1/8" - 27NPTF

Brake Light Switches - K

80172 - 2 Terminal switch

80176 - 4 Terminal switch

Low Pressure Brake Light Switch - L

80174 - Comes complete w/plug-in pigtail.60 - 120 psi 1/8" - 27NPTF

GM Style Jamb Switch 80170



GM courtesy light kit

Includes: wires, door jamb switches and light sockets to install courtesy lights inside your vehicle.

30702 - GM Courtesy Interior Light Kit with Switches

30710 - Universal Courtesy Light Kit
Universal Kit Includes: Wires and light sockets
to install courtesy lights inside your vehicle.

























<u>Alternator Wiring and Accessories</u>





Ultra High Output Alternator Wire Kit - Up to 190 Amps

In most cases, your factory wiring or even a Painless Performance Chassis Harness is only rated for an alternator with 80 amps or less. Connecting your new high amperage alternator using too small a charge wire will lead to inadequate charging and/or over heating of the charge wire, possibly leading to a fire. The Ultra High Output Alternator Kit will let you safely, reliably, and "Painlessly" install an alternator with up to 190 charging amps. The kit includes a high amp inline fuse with protected fuse holder, all necessary ring terminals, heat shrink, and a detailed set of diagrams and step by step instructions to provide a professional installation.

30700



High Amp Alternator Wire Kit - Up to 100 Amps

For alternators that produce more than 65 amps, this add-on kit provides heavier gauge wiring with connectors to complete the high output alternator installation process quickly, easily and safely.

30709







Ford 3G Style Alternator Harness

Kit contains everything needed to connect to a 3G alternator: 8' of 6 gauge charge wire, pre-terminated harness with the correct connectors, 150 amp inline fuse, an assortment of weather proof splices, and detailed color instructions.

30831





Pigtail for C\$ 130D Internal Fan Alternator

Resistor included.

30705











Delco Alternator Pigtail

A replacement pigtail using the factory original plug for the popular "Delcotron" alternator, pre-terminated with the ignition input wire and voltage sensing wire.

30706





CS Style GM Alternator Pigtail

A replacement pigtail using the factory original plug for the late style or "CS" style GM external fan alternator. Resistor included.

30707



Diode Kit

Used for 10SI & 12SI Alternators.

30720



Electrical System Surge Protector

Voltage spikes can cause damage to various components in your vehicle's electrical system. This easy to install device clips the spikes at 14.5 volts to protect sensitive electrical accessories. Installs between positive and negative battery terminals.

40030

Battery System Accessories

PERFORMANCE PRODUCTS

250 AMP Dual Battery Control System

These two kits come with a 250 amp solenoid, on-off-on toggle switch, red & green indicator lights and a pre-loomed harness. These kits continue to be a great product for those of you out there looking for the simple, manual operation of combining two batteries on a vehicle. Both batteries can be charged at the same time and connected for large loads based on the manually selected position of the included toggle switch. These kits do not monitor voltage or have any decision making circuits to handle the monitoring of voltage and load automatically.



40102 - 250 Amp Dual Battery Controller

40103 - 250 Amp Weatherproof Dual Battery controller



Remote Master Disconnects

Whether complying with sanctioning body requirements, car show rules or simply for your vehicle's security, Painless has the right battery disconnect for you.

We offer two kits with 250 amp continuous duty solenoids for use with high amperage alternators. Kit #30204 uses a toggle switch to activate the solenoid. This switch can be hidden anywhere as a theft deterrent. Kit #30205 with Emergency Push Button is perfect for race applications as it allows installation of a large emergency push button in easy reach if you need to shut down your vehicle's electrical system in a hurry. Our #30206 kit with Mechanical Latching Solenoid is a simple and effective anti-theft deterrent for everyday vehicles. The 110 amp continuous duty solenoid is activated by an easy to hide momentary push button. No risk of accidentally draining your battery with this latching solenoid.



30205 - Remote Master Disconnect with Emergency Push Button

30206 - Remote Master Disconnect with Mechanical Latching Solenoid

(Includes constant-hot wire for computer or radio presets)



Replacement 250 AMP Solenoid

for above remote disconnect kits







50710 - Master Disconnect Switch With 3.5" x 3.5"

Mount Plate



Clean up that mess of power connections on your battery's terminals. These rugged 8-point power distribution blocks allow neat and safe connection points for electrical accessories.



80115 - Distribution Block - Black

80116 - Distribution Block Set - 1 Red, 1 Black

Junction Block

Two isolated 10 gauge posts provide a perfect way to attach two large gauge wire connections.





Battery System Accessories



Remote Battery Junction Blocks

Through-bulkhead terminals with one positive (red) and one negative (black) 3/8" connector stud for battery cables.

40106



Only the highest quality components go into our remote battery cable kit. Comes complete with 16 feet of red #1 gauge positive battery cable and three feet of black #1 gauge battery cable, both with heavy duty battery terminals already installed.133 strand copper cable with lightweight abrasion resistant insulation capable of handling over 250 amps. Kit includes side post adapters and high amp crimp ring terminals.

40100

Remote Battery Cable Kit - 16' Red & 16' Black

Allows both positive and negative cables to be attached to the engine for maximum starting current. These two 16 foot, #1 gauge cables help prevent voltage drop to the engine. Eliminates the need for additional heavy cable connections between the engine and frame.

40105

Battery Cable Kit - 8' Red & 8' Black

Painless wiring battery cable kit provides you with 8 feet of both red positive and black negative high quality flexible 1 gauge cable. Kit includes side post adapters and high Amp crimp ring terminals with heat-shrink.

40107

Universal ground strap kits:

4 Piece kit includes (1) 14" 1/0 heavy duty ground strap, (3) 11" 10 gauge ground straps, and self tapping screws.

40140

Single 1/0 heavy duty 14" ground strap.

40141

Single 10 gauge heavy duty 11" ground strap and (2) 1/4 self tapping screws for mounting.

40142

Fiberglass Body Ground Kit

For proper electrical grounding of any vehicles with fiberglass bodies such as Cobra Kits, Bronco or Jeep reproduction bodies, Sandrails or Crawlers. **40026**

Self-resetting Thermal Circuit Breaker Kits

Self-resetting thermal circuit breaker kit with all necessary hardware included and protective boot.

80040 - 30 Amp

80041 - 40 Amp

80042 - 50 Amp







Universal Fuse Blocks

Universal Style Pre-Wired Fuse Block

Use this 14 Circuit OEM Universal style pre-wired fuse block to replace your existing fuse block or as a starting point for custom wiring. All you have to do is terminate each circuit wire and attach it to the fuse block. Pre-wired and labeled for the following circuits: Starting, Air conditioning /heat, gauges/dash instruments, brake lights, headlights, coil, horn, dome light, radio, electric fan, turn signals, emergency flashers, wipers and alternator. Kit includes: mounting bracket, fuses, flashers, horn relay, terminals, and full instructions. (No wire included) **30001**

Universal Style Pre-Wired Fuse Block

Contains the same 14 circuits as above but also includes 6 additional circuits for power windows, power door locks, electric fuel pump, backup lights, cigarette lighter, and a optional accessories. (No wire included).

30003

Race/Pro Street Pre-Wired Fuse Block

This is a Race/Pro Street version of our #30001 fuse block designed with 16 circuits to make your race car street legal. Just terminate your wiring and attach it to the fuse block. Pre-wired and labeled for the following circuits: electric fuel pump, Gauges/Radio, electric water pump, electric fan, brake lights, wipers, headlights, turn signals, emergency flashers, horn, coil, dome light, alternator, starting, and two optional accessories. Kit includes: 10-gauge alternator lead, mounting bracket, fuses, flashers, horn relay, terminals, fusible link, and step by step instructions. (No wire included)

50101

Weatherproof Universal Style Pre-Wired Fuse Block

This weather proof 20 circuit universal fuse block is perfect when you need to replace an exposed unreliable fuse block with something rugged and dependable. It comes fully assembled with wire leads that you can connect to your existing wiring and is completely sealed from the elements for trouble free performance. Includes mounting bracket.

30004

Add-On Fuse Block

This 4 circuit fuse block is great for any vehicle where additional circuits are needed beyond the main fuse block. Ideal for in-line wiring applications, such as trailer wiring or when adding vehicle accessories. Uses blade type automotive fuses up to 30 amps. (No wire included)

30002

Midi-Fuse Assembly

Includes mounting base with hardware, cover, and two MIDI fuses.

80000 - Painless MIDI Fuse and Holder (100 amp)

80001 - Painless MIDI Fuse and Holder (70 amp)

80002 - Painless MIDI Fuse and Holder (150 amp)

80003 - Painless MIDI Fuse and Holder (200 amp)

Replacement Midi-Fuse

80123 - 70 Amp Midi Fuse

80124 - 100 Amp Midi Fuse

80125 - 150 Amp Midi Fuse

80126 - 200 Amp Midi Fuse

Maxi-Fuse Assembly

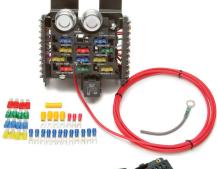
70 amp Maxi-Fuse and fuse cover. **80101**



70 Amp Maxi-Fuse only 80102



PERFORMANCE PRODUCTS









CirKit Boss Add-On Fuse Blocks



Don't go unprotected! Electrical accessories can send voltage spikes through your system, damaging everything from light bulbs to computers. The safe way to add electrical accessories is with CirKit Boss, the first circuit isolating auxiliary fuse blocks that provide both constant and ignition hot circuits. No more tapping into an existing wire or into a spare circuit at the fuse block. Using these add-on, relay activated fuse blocks is the safe way.

Only a small activation wire from any ignition source is needed to turn on the relay that turns on the fuse block. All CirKit Boss models are made using TXL cross link polyethylene wire rated to 125 °C (275F) degrees. All harness wires are 48" long and factory machine terminated. CirKit Boss includes an in-line circuit breaker, relay, mounting hardware, & terminals. Protects your OEM warranty. Easy to install. Safely adds ignition hot and constant hot circuits.

3-Circuit Auxiliary Fuse Block

Perfect For Use Under Normal Conditions.

1 constant-hot and 2 ignition-hot circuits. Uses one 40 amp relay.

70103

3-Circuit Auxiliary Fuse Block

Perfect For Use Under Normal Conditions. 3 ignition-hot circuits. Uses one 40 amp relay.

70113

3-Circuit High Amperage Auxiliary Fuse Block

3 ignition-hot circuits with a maximum total amperage of 70 amps. Uses one 70 amp relay.

70114

3-Circuit Weather Resistant Auxiliary Fuse Block

Mounts under hood in unprotected areas. Extreme use where moisture /dust resistance is important. 1 constant-hot and 2 ignition-hot circuits. Uses one 40 amp relay. (Includes cover for fuses)

70203

3-Circuit Weather Resistant Fuse Block

Mounts under hood in unprotected areas. Extreme use where moisture /dust resistance is important. 3 ignition-hot circuits. Uses one 40 amp relay. (Includes cover for fuses)

70213

7-Circuit Auxiliary Fuse Block

3 constant-hot and 4 ignition-hot circuits. Uses one 40 amp relay. **70107**

7-Circuit Auxiliary Fuse Block

7 ignition-hot circuits. Uses two 40 amp relays. **70117**

7-Circuit Heavy Duty Auxiliary Fuse Block

7 ignition-hot circuits. Uses two 70 amp relays.

70118

7-Circuit Weather Resistant Fuse Block

3 constant-hot and 4 ignition-hot circuits.
Uses one 40 amp relay. (Includes cover for fuses)

70207

7-Circuit Weather Resistant Fuse Block

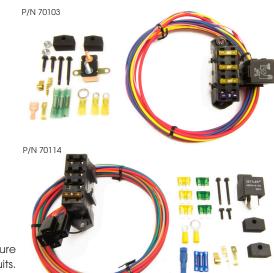
7 ignition-hot circuits. Uses two 40 amp relays. (Includes cover for fuses)

70217

Auxiliary Fuse Block Weather Resistant Covers

70120 - Cover only - 3 circuit

70121 - Cover only - 7 circuit



P/N 70203





Connectors & Tools

Waterproof Bulkhead Connector Kit

This 22-pin bulkhead connector kit allows for custom wiring at the firewall. Includes all necessary terminals and connectors. Uses 18-16 gauge wire.

40130



PERFORMANCE PRODUCTS

Weatherproof Connector Kit

Use this weatherpack connector kit where rain, dust or other elements may affect electrical connections. Each kit includes a male and a female connector and the appropriate number of terminals. NOTE: Accepts only 14-16 gauge wire.

70401 - 1 Wire Kit (2pack) **70404** - 4 Wire Kit **70402** - 2 Wire Kit **70406** - 6 Wire Kit

70403 - 3 Wire Kit



Quick-Connect Terminal Kit

Use this quick-connect terminal kit to make your own locking quick connect plugs easily and quickly. Each kit includes a male and a female connector and the appropriate number of terminals. NOTE: Accepts only 14-20 gauge wire.

 40006 - 2 Wire kit
 40010 - 9 Wire kit

 40007 - 3 Wire kit
 40011 - 12 Wire kit

 40008 - 4 Wire kit
 40012 - 15 Wire kit

40009 - 6 Wire kit



20 Amp Weatherpack Fuse Loop

Just cut it and splice inline with whatever circuit you need to add a fuse on.

70438



Professional Quality Wire Crimpers

Professional grade "Roll Over" wire crimpers. Perfect for crimping uninsulated terminals and Weatherpack terminals. These crimpers "roll over" the terminal end into the wire strands for optimal contact, instead of just flattening the metal.

70900



Cable Tie Clips - 1/4" Hole

These cable tie clips make it easy to tie and secure wiring and hoses under the hood! Simply press into existing holes or drill a 1/4" hole and clip in place.

72010

Bulk TXL Wire & Terminals



When reliability and performance can't be compromised you want this wire - not the inexpensive primary wire you find in most parts stores, this the wire we use on our own harnesses. Stranded real copper core. Cross-linked polyethylene insulation for superior abrasion resistance. Withstands over 125°C (275°F). Exceeds OEM specifications for under hood applications. Thinner polyethylene covering means lighter weight and much easier routing.

8 GAUGE WIRE STOCK COLOR

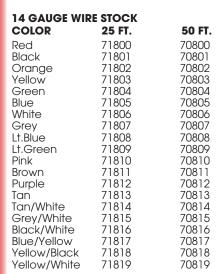
COLOR 25 FT. Red 70690

10 GAUGE WIRE STOCK COLOR

Red 70700 Black 70701

| 12 GAUGE WIRE STOCK | | | | | | | | | |
|---------------------|--------|--------|--|--|--|--|--|--|--|
| COLOR | 25 FT. | 50 FT. | | | | | | | |
| Red/Blk | 71710 | 70710 | | | | | | | |
| Orange | 71711 | 70711 | | | | | | | |
| Purple | 71712 | 70712 | | | | | | | |
| Red | 71714 | 70714 | | | | | | | |
| Brown | 71715 | 70715 | | | | | | | |
| Black | 71716 | 70716 | | | | | | | |

25 FT.



| IO GAUGE WIRE STOCK | | | | | | | | | |
|------------------------------------------------|-------------------------------------------|-------------------------------------------|--|--|--|--|--|--|--|
| COLOR | 25 FT. | 50 FT. | | | | | | | |
| Lt.Blue White Blue Green/Blk Green | 71830 71831 71832 71833 71834 | 70830 70831 70832 70833 70834 | | | | | | | |
| | | | | | | | | | |

T CALLOT WIDE STOCK

| 18 GAUGE WIR | E STOCK | |
|--------------|---------|--------|
| COLOR | 25 FT. | 50 FT. |
| Lt.Blue/Blk | 71850 | 70850 |
| Purple/Blk | 71851 | 70851 |
| Purple/White | 71852 | 70852 |
| Red/White | 71853 | 70853 |
| Orange/Blk | 71854 | 70854 |
| Green/Blk | 71855 | 70855 |
| Red | 71858 | 70858 |
| Blue | 71859 | 70859 |
| Lt. Blue | 71860 | 70860 |
| Brown | 71861 | 70861 |
| Green | 71862 | 70862 |
| Pink | 71863 | 70863 |
| Orange | 71864 | 70864 |
| Black/White | 71865 | 70865 |
| Black | 71866 | 70866 |
| Purple | 71867 | 70867 |
| White | 71868 | 70868 |







84 piece terminal assortment kit

You can trust Painless to give you only the finest American made quality terminals for the best connection possible. These terminals cost a little more, but they are worth every penny.

40060

67 piece weatherproof terminal assortment kit

The finest quality terminals money can buy. High grade copper, covered in special heat shrink that will not crack under high temperatures. Heat activated adhesive waterproofs the connection & relieves wire strain. Impervious to gas, antifreeze, battery acid, diesel fuel and saltwater. Easy crimp-on style. Exceeds all UL and CSA requirements.

40065

Through-wall Grommets

7 piece assortment of through-wall grommets to make wiring installations safer and professional looking.

71901



Resettable ATC Circuit Breaker Kits

Easily swap your ATC bladed fuses with these resettable circuit breakers from Painless. Button guard protects from accidental circuit resets.

80010 - 10 AMP ATC Circuit Breaker Kit (4 pack)
80015 - 15 AMP ATC Circuit Breaker Kit (4 pack)
80020 - 20 AMP ATC Circuit Breaker Kit (4 pack)
80030 - 30 AMP ATC Circuit Breaker Kit (4 pack)

80035 - ATC Circuit Breaker Kit (8 pack) - Assorted Kit - (2) 10 amp, (2) 15 amp, (2) 20 amp, (2) 30 amp



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| 10202 | 9 | 30002 | 91 | 30206 | 89 | 30831 | 88 | 50202 | 44 | 57042 | 77 | 60119 | 69 |
| 10203 | 29 | 30003 | 91 | 30301 | 86 | 30901 | 31 | 50210 | 51 | 57051 | 79 | 60122 | 72 |
| 10204 | 29 | 30004 | 91 | 30302 | 86 | 30902 | 32 | 50301 | 50 | 57052 | 79 | 60124 | 72 |
| 10220 | 11 | 30100 | 83 | 30350 | 32 | 40006 | 93 | 50302 | 50 | 57053 | 79 | 60125 | 72 |
| 10308 | 7 | 30101 | 83 | 30351 | 32 | 40007 | 93 | 50303 | 50 | 57100 | 78 | 60127 | 65 |
| 10401 | 16 | 30102 | 83 | 30352 | 32 | 40008 | 93 | 50305 | 50 | 57101 | 79 | 60128 | 65 |
| 10402 | 16 | 30103 | 83 | 30353 | 32 | 40009 | 93 | 50306 | 50 | 57102 | 79 | 60129 | 65 |
| 10403 | 16 | 30104 | 83 | 30700 | 88 | 40010 | 93 | 50330 | 52 | 57103 | 79 | 60130 | 65 |
| 10404 | 16 | 30105 | 84 | 30702 | 87 | 40011 | 93 | 50332 | 52 | 57104 | 79 | 60131 | 65 |
| 10405 | 16 | 30106 | 65 | 30705 | 88 | 40012 | 93 | 50334 | 52 | 57105 | 79 | 60133 | 65 |
| 10406 | 16 | 30107 | 81 | 30706 | 88 | 40026 | 90 | 50335 | 52 | 57106 | 79 | 60134 | 65 |
| 10411 | 17 | 30108 | 81 | 30707 | 88 | 40027 | 86 | 50336 | 52 | 57107 | 79 | 60135 | 65 |
| 10412 | 17 | 30109 | 65 | 30709 | 88 | 40030 | 88 | 50337 | 52 | 57108 | 79 | 60150 | 58 |
| 10413 | 17 | 30110 | 83 | 30710 | 87 | 40060 | 94 | 50340 | 52 | 57109 | 79 | 60201 | 69 |
| 10414 | 17 | 30111 | 83 | 30711 | 46 | 40065 | 94 | 50341 | 52 | 57150 | 78 | 60202 | 70 |
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| 60212 | 67 | 60711 | 55 | 70714 | 94 | 70859 | 94 | 71715 | 94 | 71860 | 94 | 80132 | 81 |
| 60213 | 67 | 60712 | 55 | 70715 | 94 | 70860 | 94 | 71716 | 94 | 71861 | 94 | 80133 | 81 |
| 60214 | 68 | 60713 | 62 | 70716 | 94 | 70861 | 94 | 71800 | 94 | 71862 | 94 | 80135 | 81 |
| 60215 | 68 | 60714 | 64 | 70800 | 94 | 70862 | 94 | 71801 | 94 | 71863 | 94 | 80136 | 81 |
| 60217 | 64 | 60715 | 62 | 70801 | 94 | 70863 | 94 | 71802 | 94 | 71864 | 94 | 80137 | 81 |
| 60218 | 64 | 60716 | 64 | 70802 | 94 | 70864 | 94 | 71803 | 94 | 71865 | 94 | 80138 | 81 |
| 60221 | 63 | 60717 | 55 | 70803 | 94 | 70865 | 94 | 71804 | 94 | 71866 | 94 | 80140 | 89 |
| 60250 | 74 | 60718 | 55 | 70804 | 94 | 70866 | 94 | 71805 | 94 | 71867 | 94 | 80150 | 87 |
| 60311 | 69 | 64023 | 72 | 70805 | 94 | 70867 | 94 | 71806 | 94 | 71868 | 94 | 80151 | 87 |
| 60312 | 70 | 64024 | 66 | 70806 | 94 | 70868 | 94 | 71807 | 94 | 71901 | 94 | 80152 | 87 |
| 60313 | 70 | 66501 | 85 | 70807 | 94 | 70900 | 93 | 71808 | 94 | 72010 | 93 | 80153 | 87 |
| 60314 | 71 | 70103 | 92 | 70808 | 94 | 70901 | 75 | 71809 | 94 | 80000 | 91 | 80154 | 87 |
| 60315 | 71 | 70107 | 92 | 70809 | 94 | 70902 | 75 | 71810 | 94 | 80001 | 91 | 80160 | 82 |
| 60320 | 67 | 70113 | 92 | 70810 | 94 | 70903 | 75 | 71811 | 94 | 80002 | 91 | 80170 | 87 |
| 60321 | 67 | 70114 | 92 | 70811 | 94 | 70904 | 75 | 71812 | 94 | 80003 | 91 | 80171 | 87 |
| 60322 | 64 | 70117 | 92 | 70812 | 94 | 70910 | 75 | 71813 | 94 | 80004 | 91 | 80172 | 87 |
| 60323 | 64 | 70118 | 92 | 70813 | 94 | 70916 | 75 | 71814 | 94 | 80040 | 90 | 80173 | 87 |
| 60324 | 62 | 70120 | 92 | 70814 | 94 | 70920 | 75 | 71815 | 94 | 80041 | 90 | 80174 | 87 |
| 60325 | 62 | 70121 | 92 | 70815 | 94 | 70921 | 75 | 71816 | 94 | 80042 | 90 | 80175 | 72 |
| 60406 | 46 | 70203 | 92 | 70816 | 94 | 70922 | 75 | 71817 | 94 | 80101 | 91 | 80176 | 87 |
| 60502 | 66 | 70207 | 92 | 70817 | 94 | 70923 | 75 | 71818 | 94 | 80102 | 91 | 80200 | 86 |
| 60505 | 66 | 70213 | 92 | 70818 | 94 | 70940 | 75 | 71819 | 94 | 80111 | 53 | 80201 | 86 |
| 60508 | 62 | 70217 | 92 | 70819 | 94 | 70941 | 75 | 71830 | 94 | 80112 | 89 | 80202 | 86 |
| 60509 | 62 | 70401 | 93 | 70830 | 94 | 70956 | 75 | 71831 | 94 | 80114 | 89 | 80203 | 86 |
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| 60520 | 60 | 70404 | 93 | 70833 | 94 | 70959 | 75 | 71834 | 94 | 80120 | 87 | 80206 | 86 |
| 60522 | 61 | 70406 | 93 | 70834 | 94 | 70960 | 75 | 71850 | 94 | 80121 | 87 | 80207 | 86 |
| 60523 | 61 | 70438 | 93 | 70850 | 94 | 70970 | 75 | 71851 | 94 | 80123 | 91 | 80208 | 86 |
| 60524 | 58 | 70690 | 94 | 70851 | 94 | 70971 | 75 | 71852 | 94 | 80124 | 91 | 80209 | 86 |
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| 60550 | 55 | 70701 | 94 | 70853 | 94 | 71710 | 94 | 71854 | 94 | 80126 | 91 | 80211 | 86 |
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