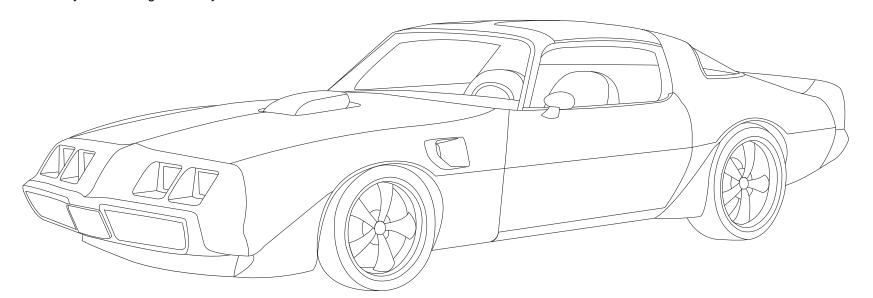


## **WARNING:**

Validate the kit contents with the component list included on this page, before proceeding. This kit is intended to be used in a modified vehicle. Please read this page thoroughly and be sure that you understand everything explained on it prior to opening any of the enclosed packages, or before attempting to install any of the components. Once this kit has been opened or a component installed, the kit is not returnable.

- 1. This new upgraded AAW wiring system should typically be used in a MODIFIED application only.
- 2. This kit includes the wiring to support the use of a factory heater only system and/or aftermarket heater and A/C systems. This kit does not include the wiring for the factory original A/C system. For factory A/C Harnesses, call American Autowire for your application.
- 3. This kit supports the use of a high current self-exciting 1-wire, "SI" series, or other style internally regulated alternator. An adapter may be necessary in some applications. The use of stock, low amperage alternators is seriously discouraged as they cannot handle the higher current requirements of most updated ignition systems, electric fans, aftermarket A/C systems, stereo systems, air ride suspensions, and other power hungry accessories that will ultimately create performance issues within the system.
- 4. For 1979 applications, pulse wipers will require use of the original pulse wiring harness or the addition of part number 510934
- 5. AAW DOES NOT support the use of an ammeter. All AAW kits are engineered to supply the optimum charge to the battery. To achieve this performance, we route our 6ga. charge wire directly from the alternator output charge terminal to the starter battery terminal. Due to the path of the charge being altered from the stock configuration, the gauge can no longer see a charge vs. a discharge, so it may not work properly. Most stock alternator current outputs were rated at a maximum of about 37-60 amps. Modified cars being built today typically utilize a 100 amp or higher output alternator. With these higher current units, ammeters, generally speaking, become a safety hazard. Ammeters are usually wired in parallel to the charging circuit, are typically infused, and can short very easily causing a fire. This wiring system has been designed to work with a voltmeter.
- 6. This kit IS NOT set up with a resistance wire for a standard, points type ignition system. It is wired with a full 12-volt primary ignition feed that is hot in the crank and run positions. Our system will support HEI, MSD, other electronic ignition systems, as well as most all computerized Fuel Injection systems. If you wish to run a points type system, there are illustrations on the engine connection pages to do so. Primary ignition voltage in the cranking position is handled via a full 12 volt bypass wire that is routed from the starter "R" terminals to the positive side on the coil. Extra parts (ballast resistor) that are not included in this kit will be required to complete that type of operation.
- 7. If your car has the GM on-board C4 computer system that was used for California emissions in 1980, you will need to reuse that harness as this new kit does not include any of the wiring for that system.



## 510689 - Classic Update Series Kit 1979-80 Firebird

This kit contains the following components:

	Part		
<u>Bag</u>	<u>Number</u>	<u>Description</u>	<b>Quantity</b>
	500332	Headlight Switch	1
	500707	Fuse, Relay, and Flasher kit	1
	500708	Courtesy Lamp Kit	1
	500919	Practice Terminal Crimping Set	1
G	510684	Dash Harness kit	1
Н	510685	Instrument Cluster wiring kit	1
J	510686	Engine Wiring Kit	1
L	510687	Front Light Wiring kit	1
M	510690	Rear Body Wiring kit	1
Ν	510702	Parts kit	1
Z	510476	Alternator and Main Power Conn kit	1

Validate the kit contents with this component list. If there are any discrepancies with incorrect or missing parts, stop your installation and notify the supplier you purchased the kit from before proceeding.

# 1979-80 Firebird

Classic Update Series

510689



# START HERE!

## PLEASE READ THIS BEFORE STARTING INSTALLATION!

This wiring kit is designed for ease of installation. Please read the guidelines below, BEFORE STARTING your installation, to guarantee a successful job. Use an appropriate crimping tool, which folds the wings of the open barrel terminals down into the wire, as shown on this page. If you use our crimping tools and correctly crimp the included terminals, soldering is not necessary. If you are unsure about a particular crimp, soldering is recommended. Our factory crimped terminations are installed by GM approved five ton presses, and soldering these terminations is not necessary.

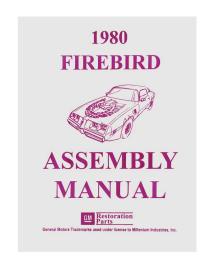


AAW offers a great terminal crimping video entitled "Proper Crimping Video". It can be viewed by visiting YouTube.

Type the following address into your web browser, to go directly to the video: www.youtube.com/watch?v=JAqEDoVI-co

Youtube Channel: www.youtube.com/user/WiringHarness





Factory **Assembly** Manuals 1980 p/n 36357



"CS" series alternator conversion kit p/n 37796



p/n 510701 Heated Rear Glass Kit

wire core

proper crimp of terminal

We carry the following crimping hand tools, to help with your terminal crimping. These hand tools are available, for purchase or rental.

The terminals that we supply in our kits, utilize what is known as an F crimp. The F crimp,

in a cross section, will look like the illustration below, when done correctly.

end view of

un-crimped terminal



## We carry many accessories for your 1979-80 Firebird:



p/n 510704 **Power Window** and Lock Kit

## STEP 1: DISCONNECT YOUR BATTERY:

Disconnect the battery, before installing the wiring kit, to prevent any accidental shorting caused by loose bare wire ends.

1979-80 Firebird

Classic Update Series

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If you have any questions concerning this or any of our products, please feel free to call us at 1-856-933-0801.

#### STEP 2: START INSTALLING KIT:

This kit is broken down into individual sections, that are identified by a letter printed on the enclosed sheets, visible through each bag. The order of installation and the pages with their installation instructions, are shown below:

## **Table of Contents:**

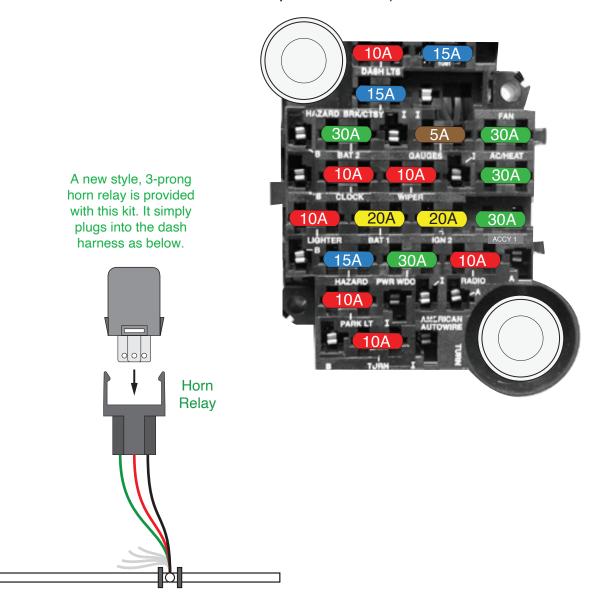
# Bags: Pages: Sections: G Dash Harness - This is the main harness in the kit and contains: - Starter solenoid connections. - Wiper motor connections - Brake light switch connection. - Neutral safety switch connection. 10 - 12 Gauge Cluster Harness - This Harness contains: Н - Gauge connections for aftermarket and factory gauges. 13 - 15 Rear Body Harness - This Harness contains: M - Tail light, turn signal, reverse light, and running light connections. - Fuel pump connections. 16 - 17 Front Light Harness - This Harness contains: - Headlight, turn signal, running light connections. - Windshield washer connection. - Electric fan relay trigger. Engine Harness - This Harness contains: 18 - 20 - Temperature, oil pressure, tachometer wiring. - Ignition system / ECU power.



Alternator connections.Brake fluid level wiring.

# PLEASE READ THIS HELPFUL INSTALLATION TIP, BEFORE GOING ANY FURTHER!

Prior to installing the Dash/Main harness in your dashboard, plug all of the fuses, Hazard Flasher and Turn Flasher into the Fuse Block (see detailed picture below) and the Horn Relay into this harness (see detailed picture below).



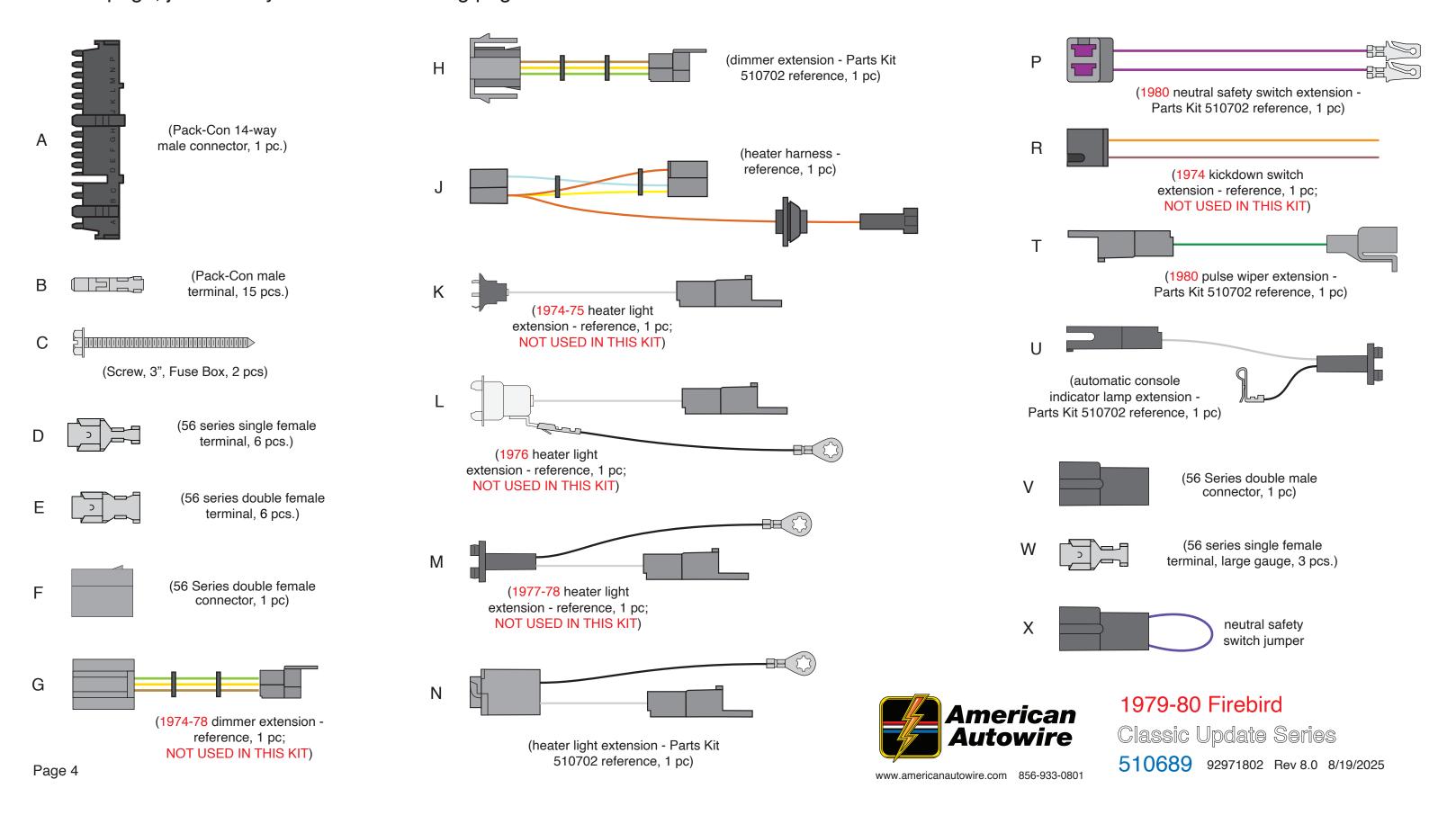
1979-80 Firebird

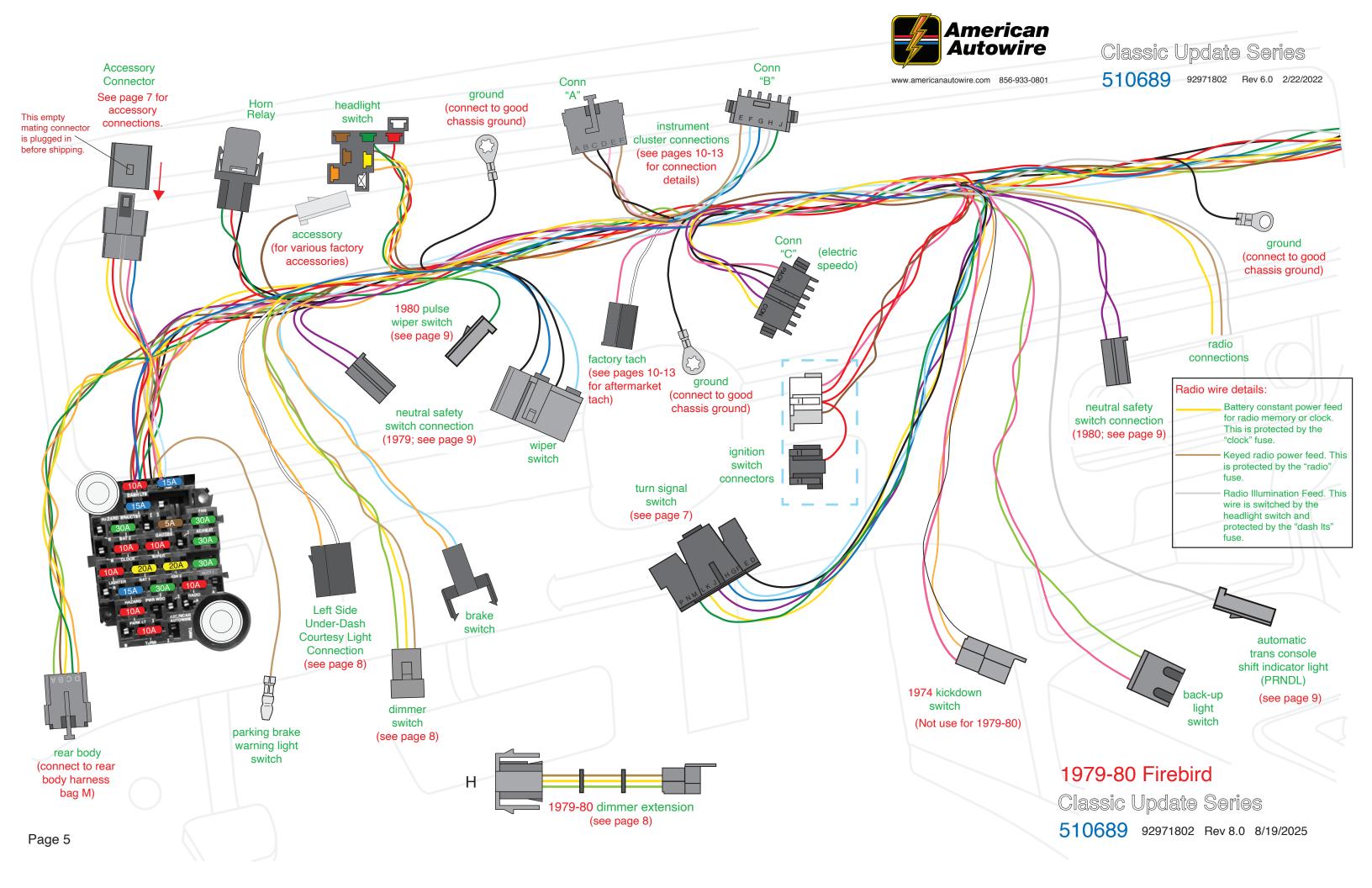
Classic Update Series

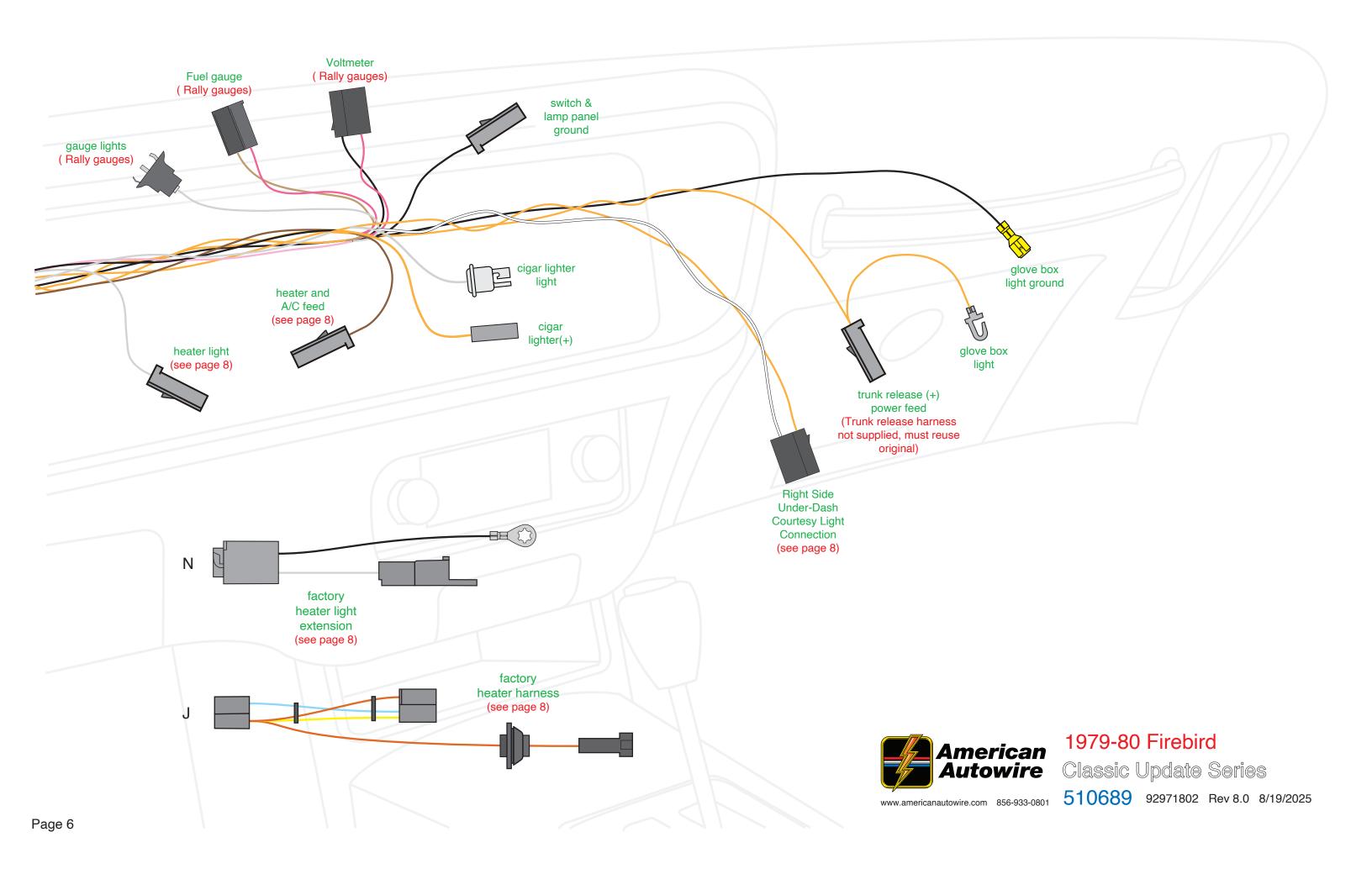
510689 92971802 Rev 8.0 8/19/2025

# Dash/Main harness installation instructions:

Shown below, are the supplied misc. terminals, plastic connector bodies, hardware, jumpers and extensions, included in the Dash/Main Harness, Parts Kit (510702) and Loose Piece bags, that will be used to complete your Dash/Main harness connections. They are itemized and referred to on this page, just as they are on the following pages of this Dash/Main instruction set.



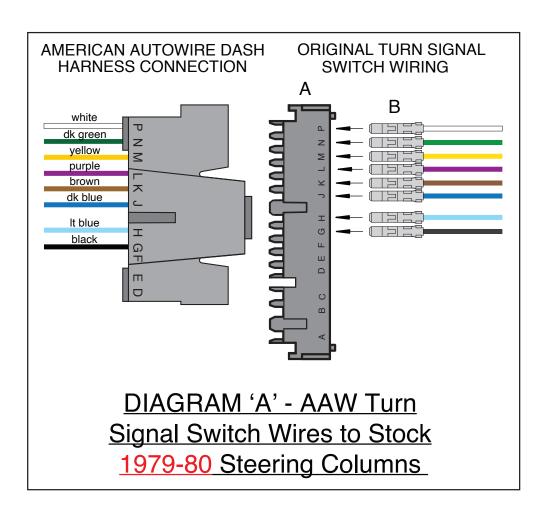




# Dash/Main harness installation instructions:



AAW Turn Signal Switch wires to stock 1979-80
Pontiac Firebird Turn Signal Switch



AAW <u>Wire Color</u>	AAW Wire <u>Printing</u>	Connector Cavity AAW
Wire Color  White Dark Green Yellow Purple Brown Dark Blue Light Blue Black None	Printing  Brake SW Right Rear Turn Left Rear Turn Turn Switch Feed Turn SW – Hazard Right Front Turn Left Front Turn Horn Relay Ground None	Cavity AAW P N M L K J H G
		-
None	None	Е
None	None	D

Note: Remove the original Turn Signal Switch Connector and replace it with the AAW 14-way connector "A". Crimp on terminal "B" to each of the original wires and plug them into connector "A" (see Parts Kit 92971783).

Use "Table B" above to align the wires. Also, for all of the vehicles, the Steering Column Horn Button switches ground for the Horn Relay, which then switches power to the Horns, similar to the AAW design.

## **Accessory Connector**

Use the provided 6-way empty connector, which is attached to the 6-way Accessory connector on the Dash Harness, and terminals "D" and "E" to add power wires (not provided) for the following optional systems:

Wire Color	Fuse Block Marking	Fuse rating	<u>Description</u>
Tan	ACCY1	30A	Fused 12 volt ACCESSORY feed which (may also be used to feed power to another accessory circuit).
Dark Blue	FUEL	15A	Fused 12 volt IGNITION feed for fuel pump (may also be used to feed power to another ignition circuit).
Orange	BAT1	20A	Fused 12 volt BATTERY feed for power seats (may also be used to feed power to another battery circuit).
Pink	IGN1	20A	Fused 12 volt IGNITION feed which may be used to feed power to another ignition circuit.
Red	BAT	30A	Fused 12 volt BATTERY feed (may also be used to feed power to a battery circuit).
Yellow	PWO WDO	30A	Fused 12 volt ACCESSORY feed for power windows (may also be used to feed power to another accessory circuit).

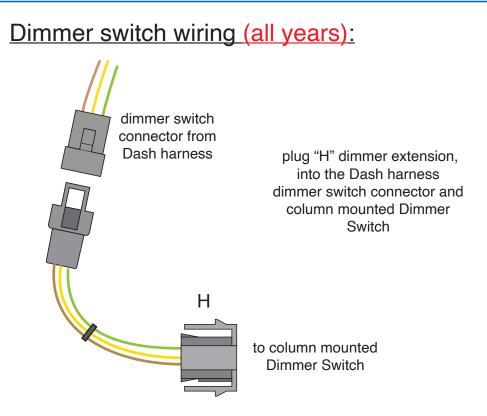


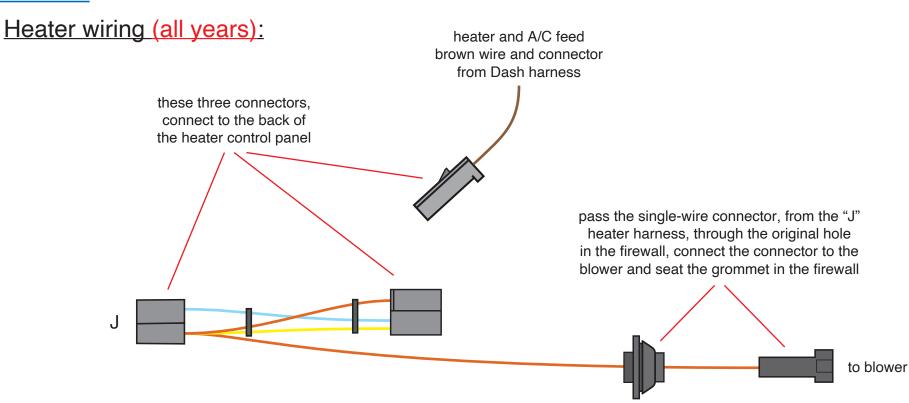
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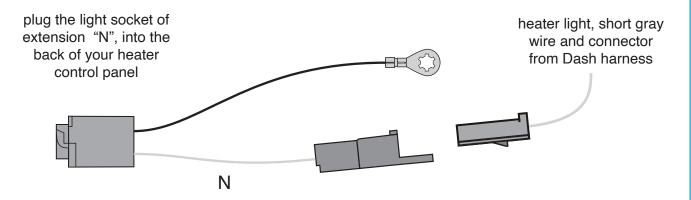
# Dash/Main harness installation instructions:





## Heater light wiring (all years):

plug the connector on the short gray wire, from the Dash harness, into the connector of the "N" heater light extension



1979-80 Firebird

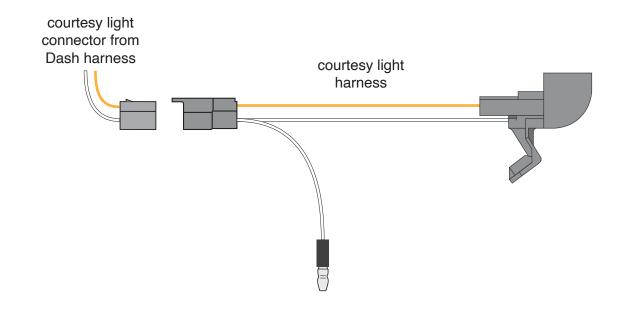
Classic Update Series

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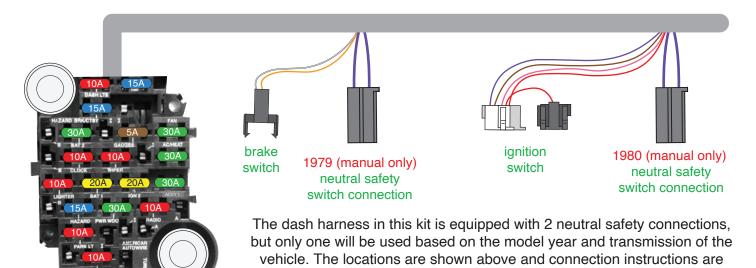
## Courtesy light wiring (all years):

Connect the (2) courtesy light harnesses to the courtesy light connectors from the Dash harness: the left-hand harness at the same branch as the Brake switch and Horn relay connector and the right-hand harness at the same branch as the Cigar lighter and trunk release (See 500708 Courtesy Light Connection Kit, for (2) Courtesy Light harnesses and 92966085 instruction sheet)



# <u>Dash/Main harness installation instructions:</u>

## Neutral Safety switch wiring:



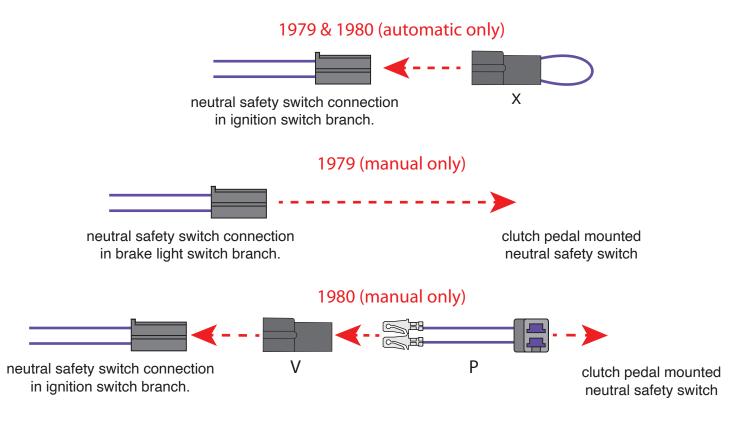
Automatic Cars: The 1979 & 1980 factory neutral safety switch was a mechanical lock-out inside the steering column.

Because there is no electrical connection in the neutral safety mechanism, you must install the included NSS Jumper "X" (found in the 510702 parts kit) into one of the neutral safety switch connections on the dash harness. If this jumper is not installed, the vehicle WILL NOT start.

#### **Manual Cars:**

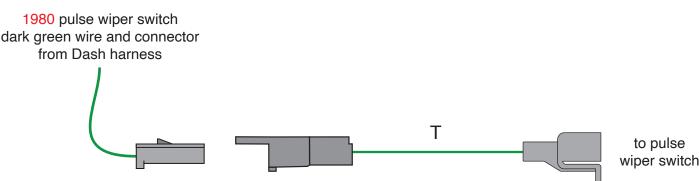
For 1979, route the 1979 (manual only) neutral safety switch connection located in the brake light switch branch of the dash harness to the pedal mounted clutch switch and plug the connector onto the terminals on the switch. For 1980, find the 1980 NSS extension "P" in the 510702 parts kit, and insert the loose ends into connector "V" from the 510684 dash harness loose piece kit. Plug the connector "V" end of extension "P" into the neutral safety switch connection located in the ignition switch branch of the dash harness. Plug the other end of extension "P" on to the clutch pedal mounted switch.

listed below

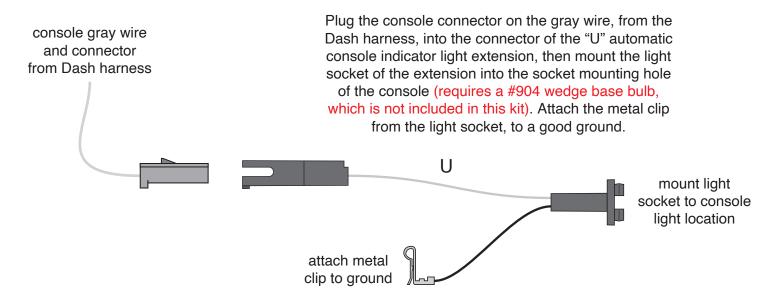


## 1980 Pulse Wiper wiring:

Plug the pulse wiper connector on the dark green wire, from the Dash harness, into the proper connector of the "T" pulse wiper extension, then plug the other connector of the extension into the pulse wiper switch, mounted on the steering column.



## Automatic Trans Console wiring (all years):

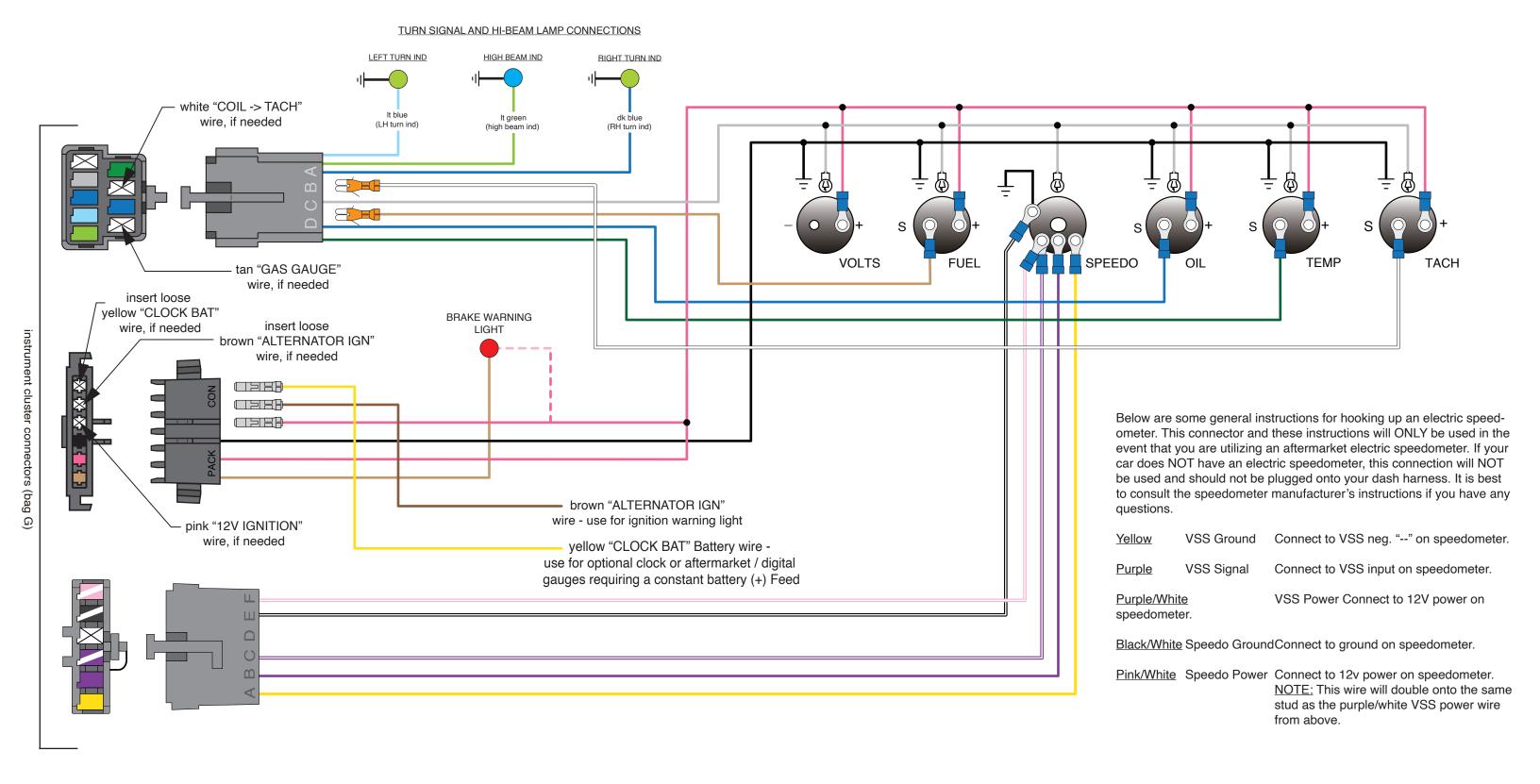


## 1979-80 Firebird





# Gauge Cluster harness (aftermarket gauges) installation instructions:





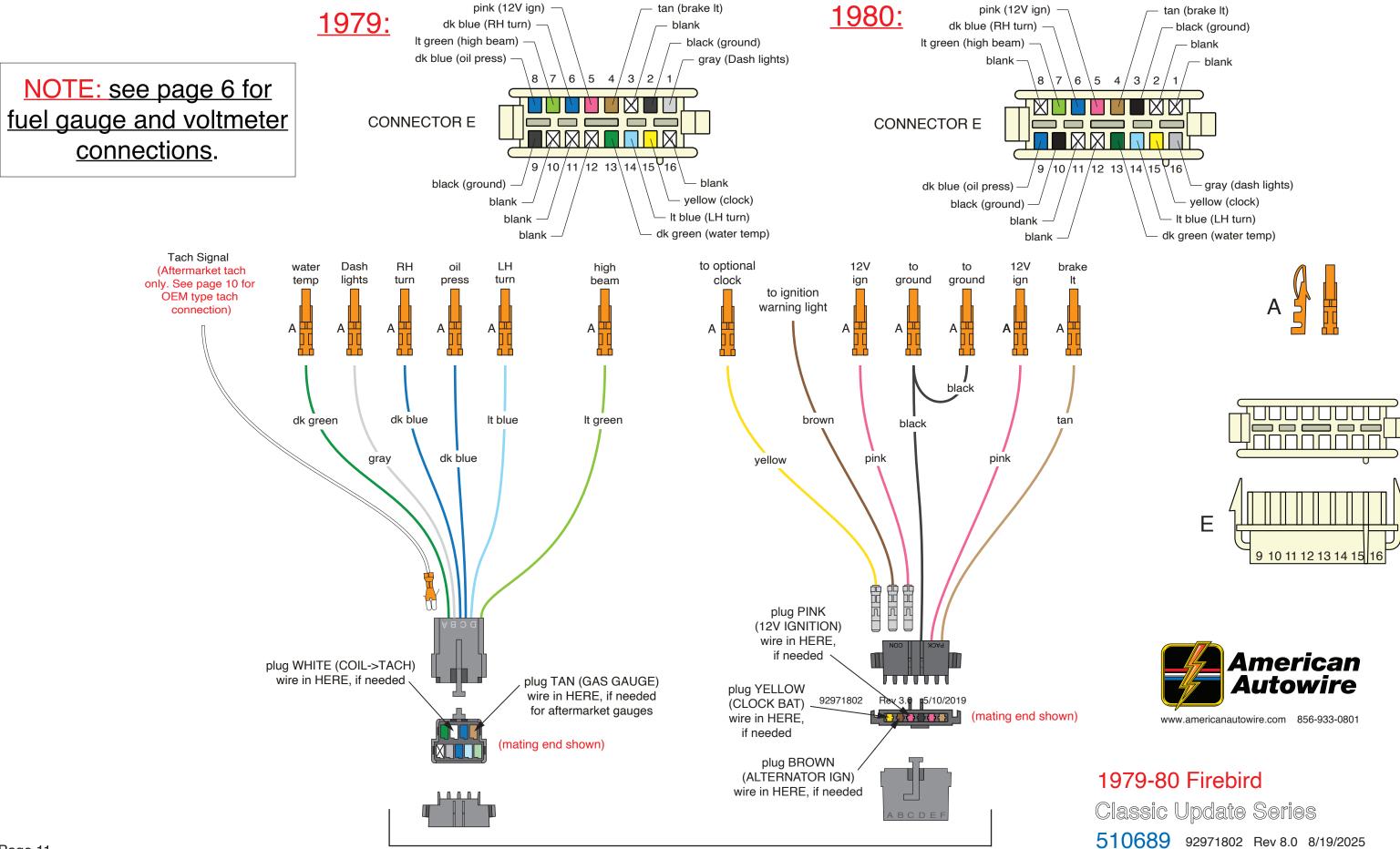
See pages 10-12

1979-80 Firebird

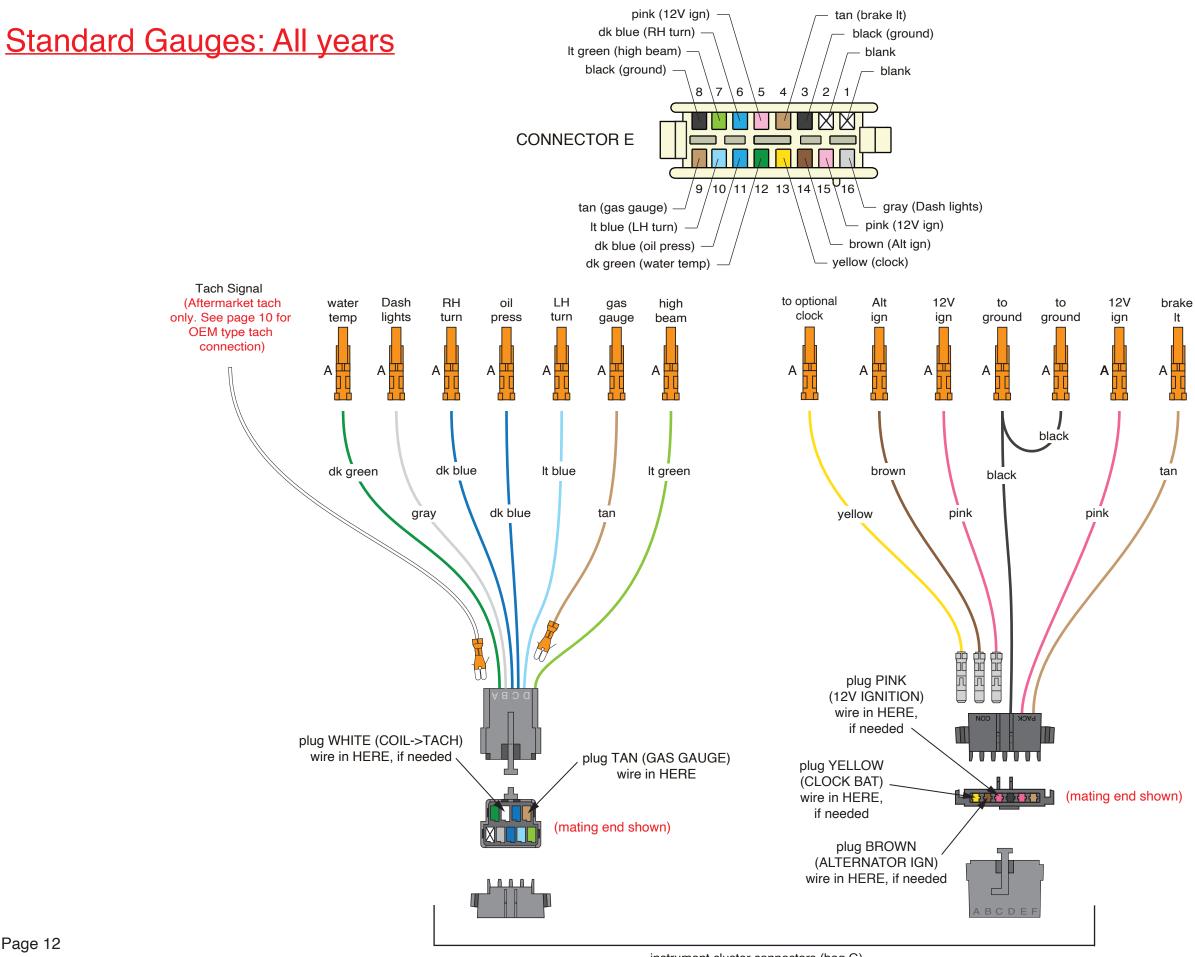
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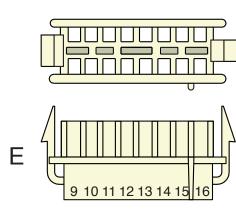
# Gauge Cluster harness installation instructions: Rally Sport Gauges: All year



# Gauge Cluster harness installation instructions:

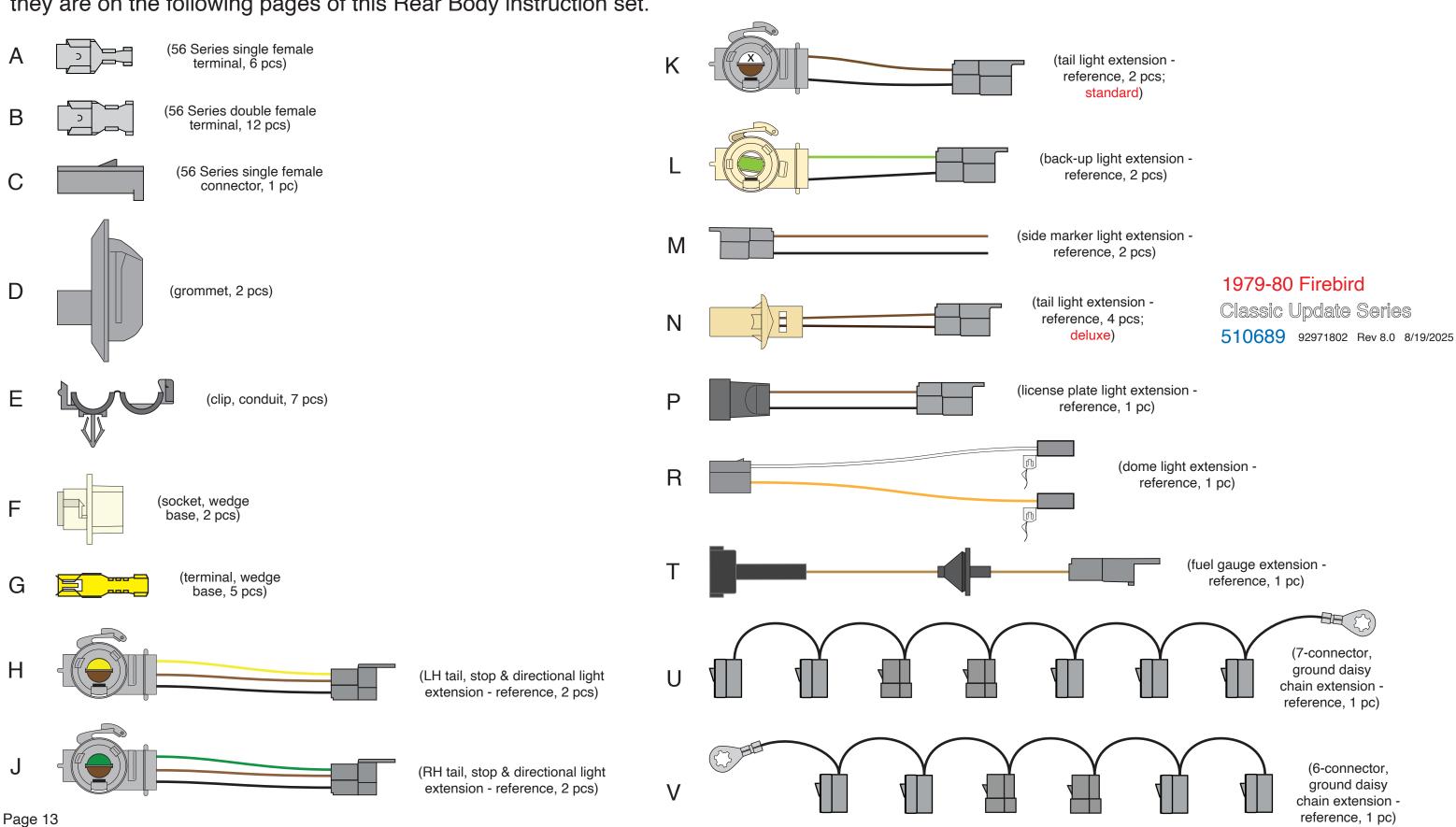


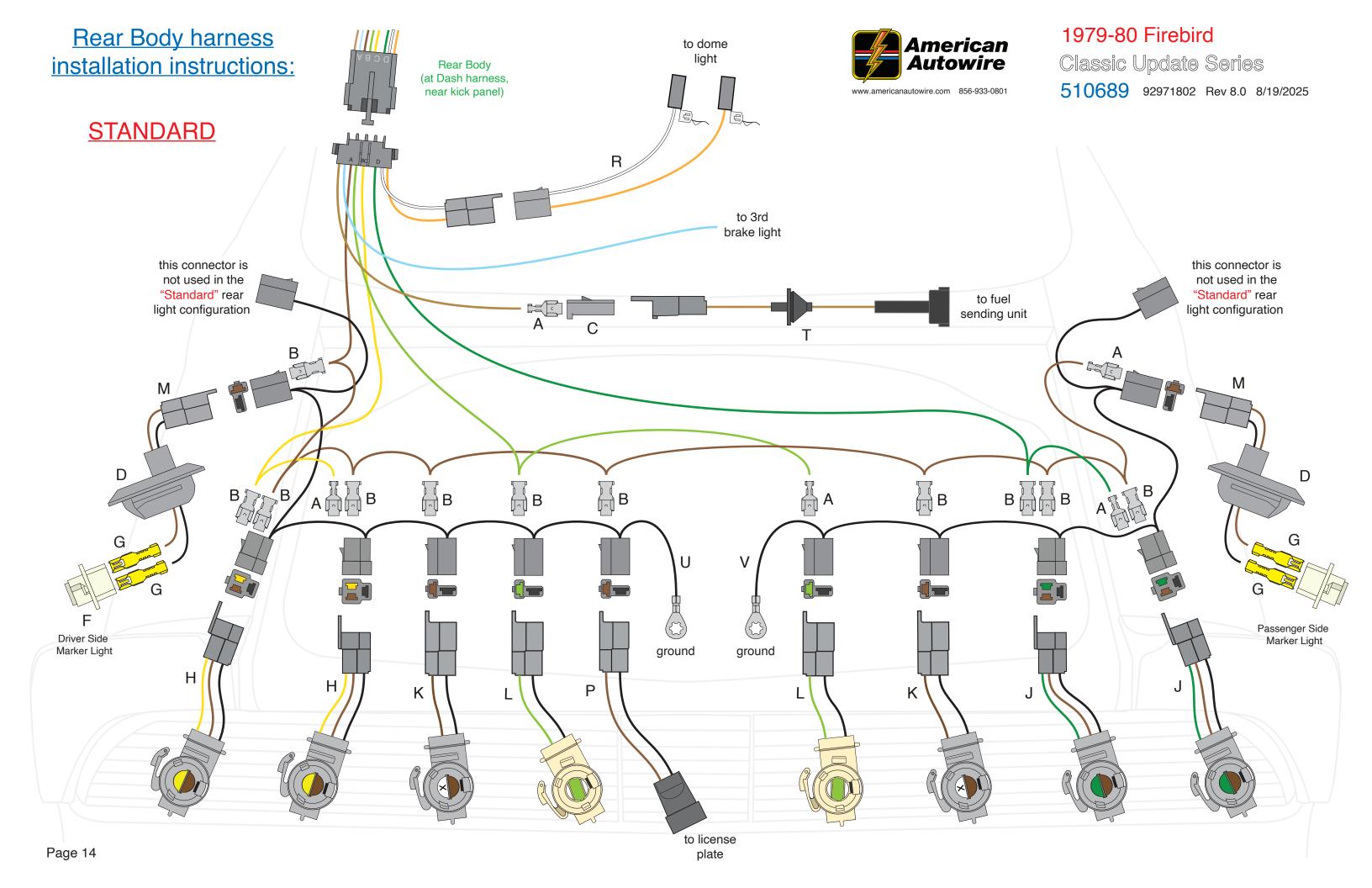


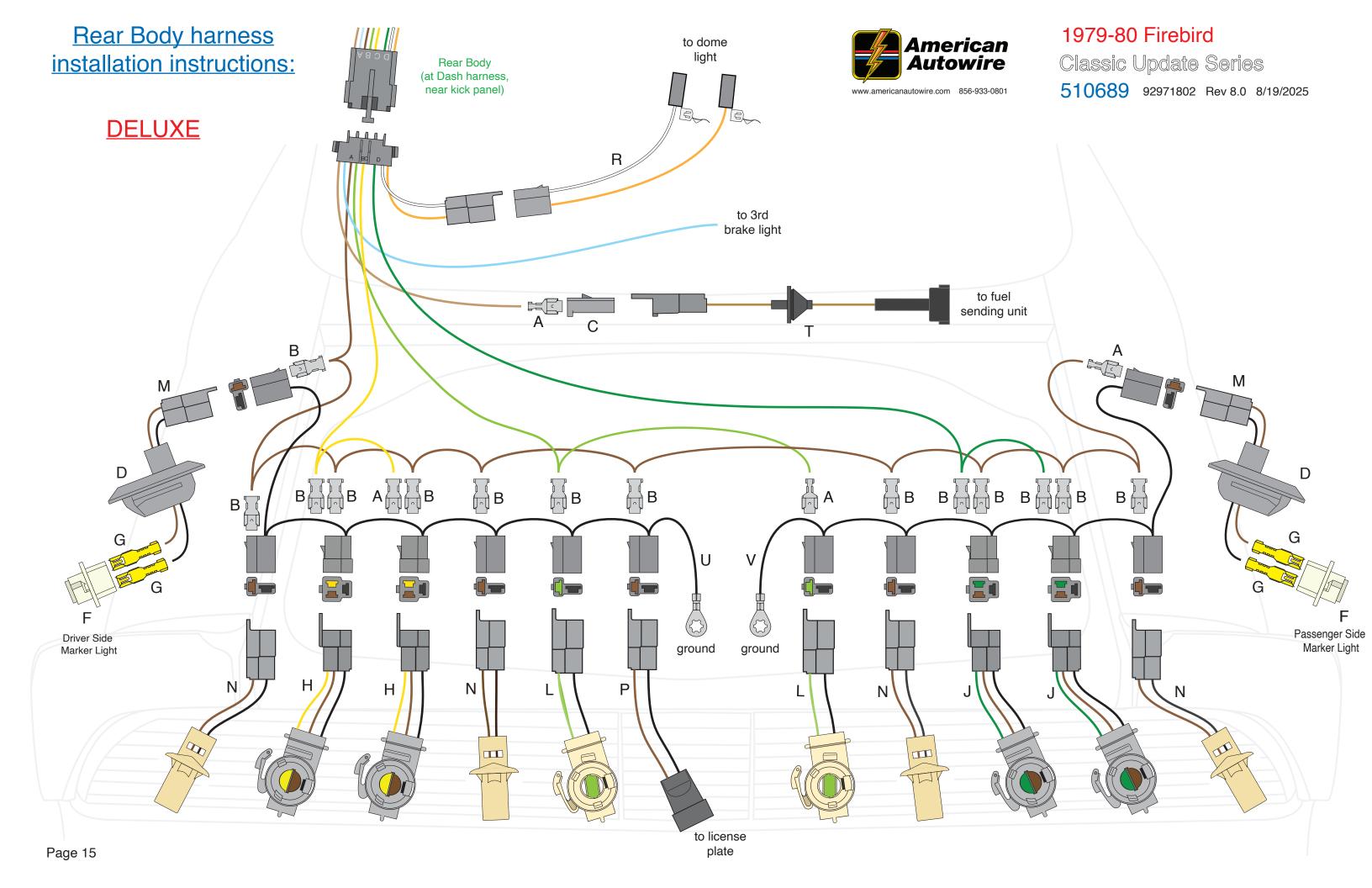


# Rear Body harness installation instructions:

Shown below, are the supplied misc. terminals, plastic connector bodies, clamps and wire extensions, included in the Rear Body Harness and Loose Piece bags, that will be used to complete your Rear Body harness connections. They are itemized and referred to on this page, just as they are on the following pages of this Rear Body instruction set.

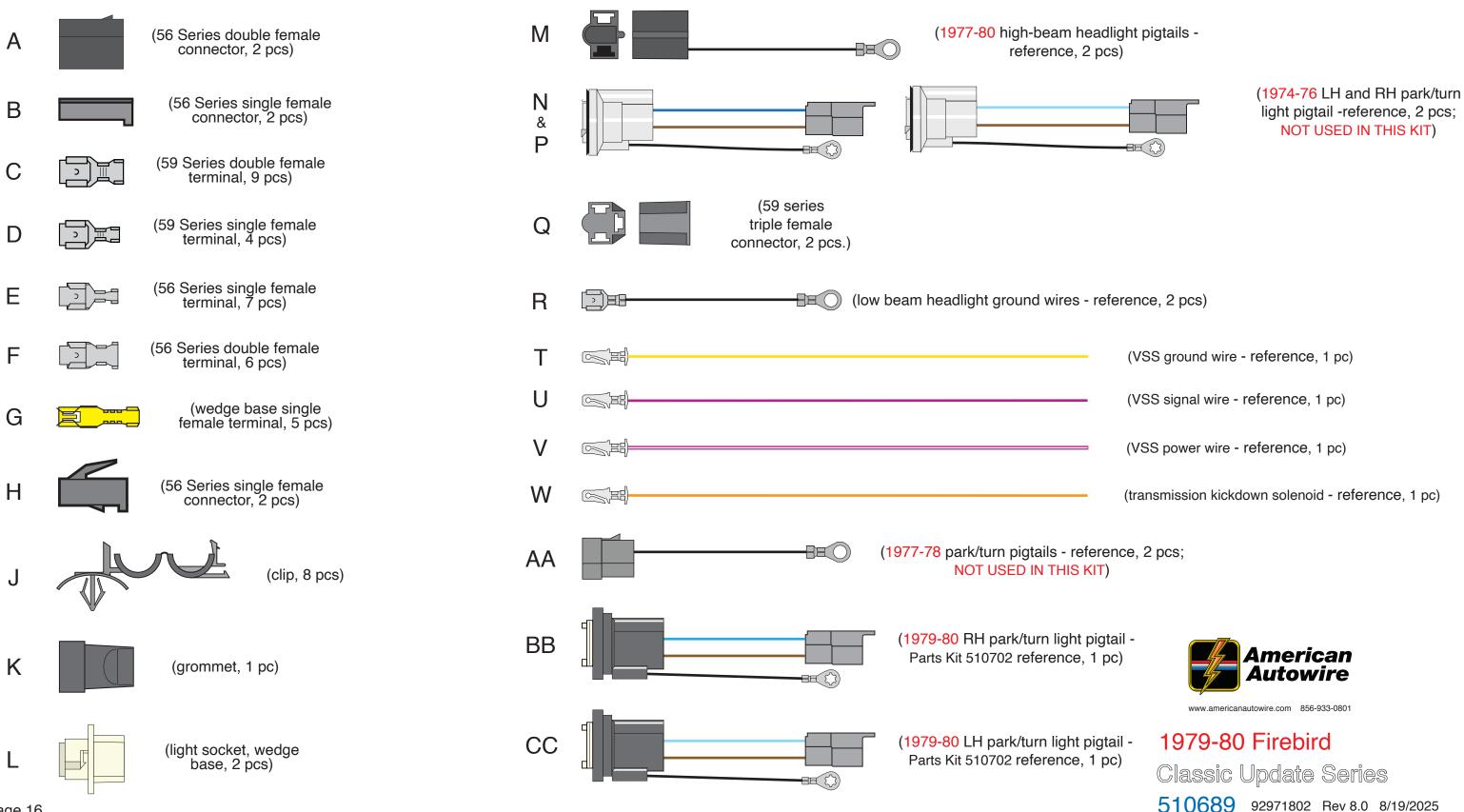




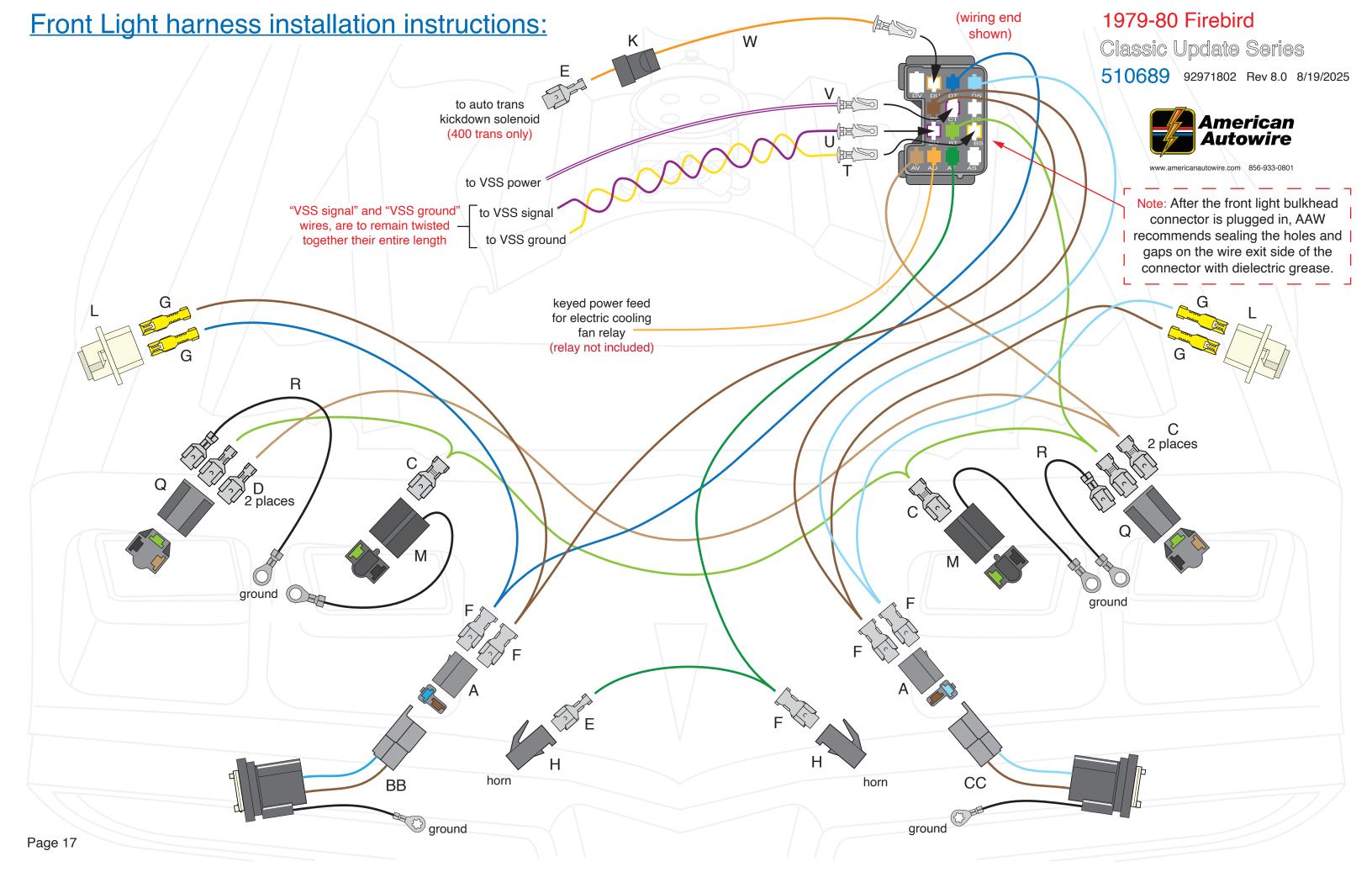


# Front Light harness installation instructions:

Shown below, are the supplied misc. terminals, plastic connector bodies, clips, grommets, pigtails and wires, included in the Front Light Harness and Loose Piece bags, that will be used to complete your Front Light harness connections. They are itemized and referred to on this page, just as they are on the following pages of this Front Light instruction set.

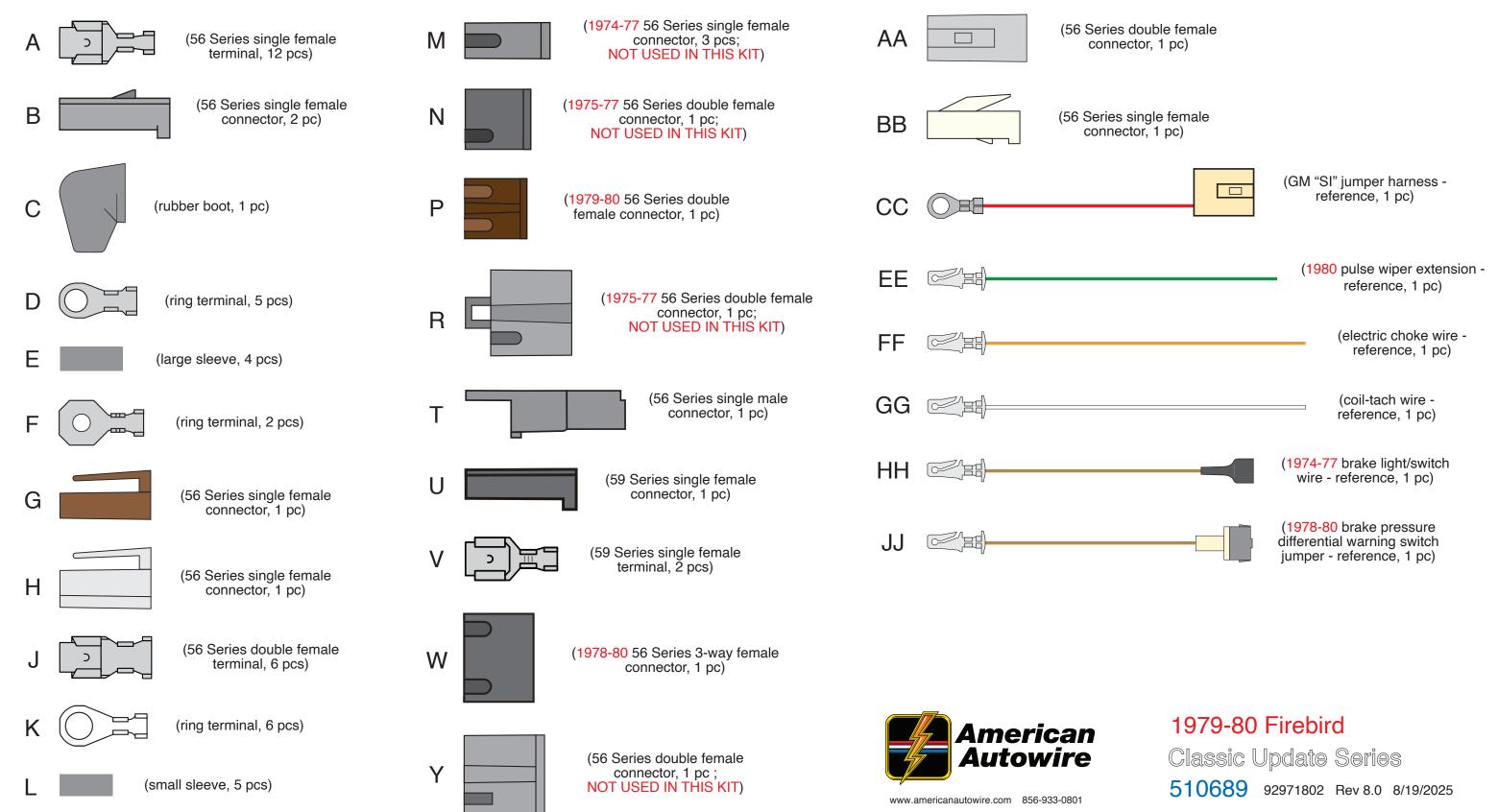


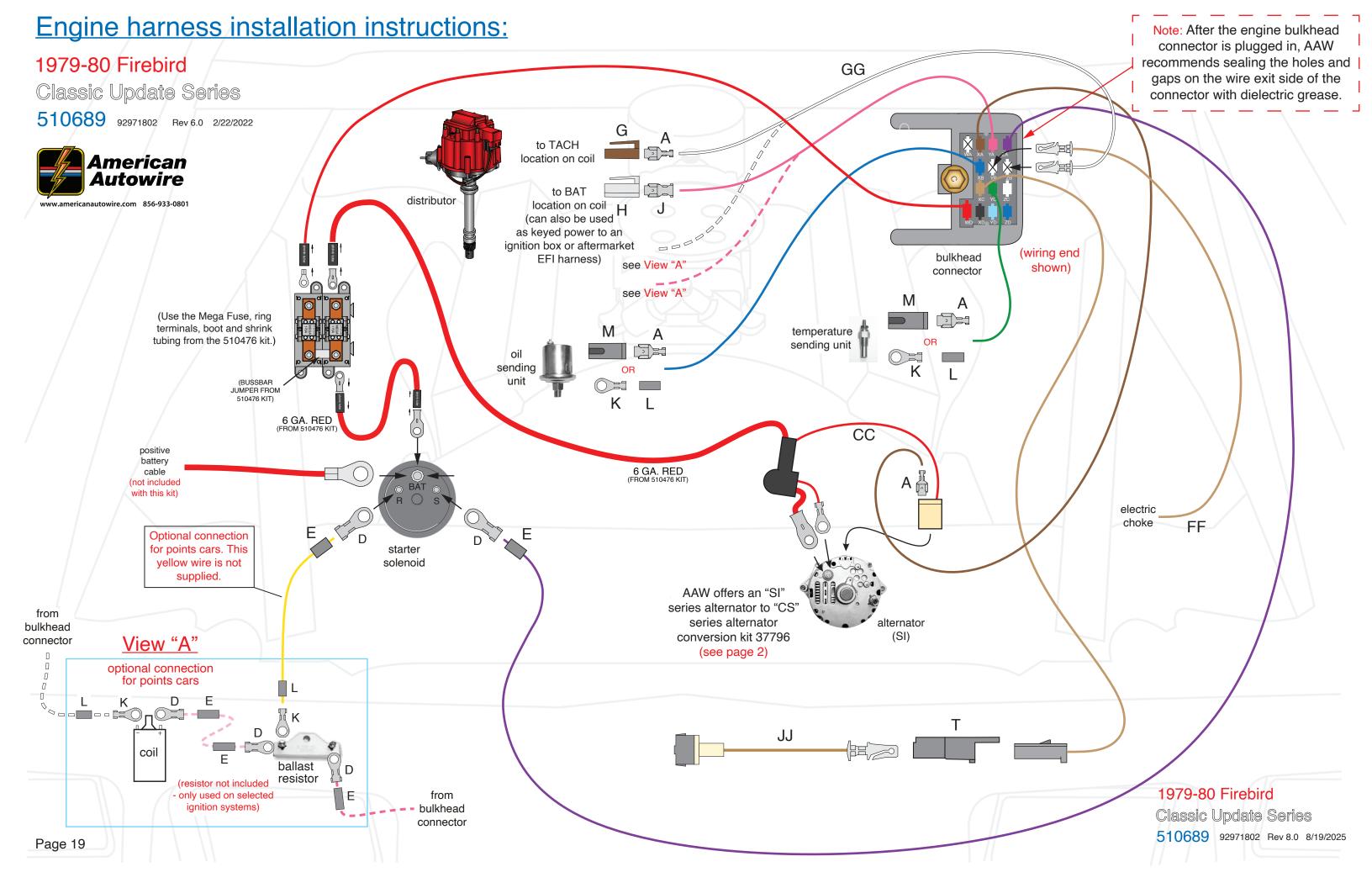
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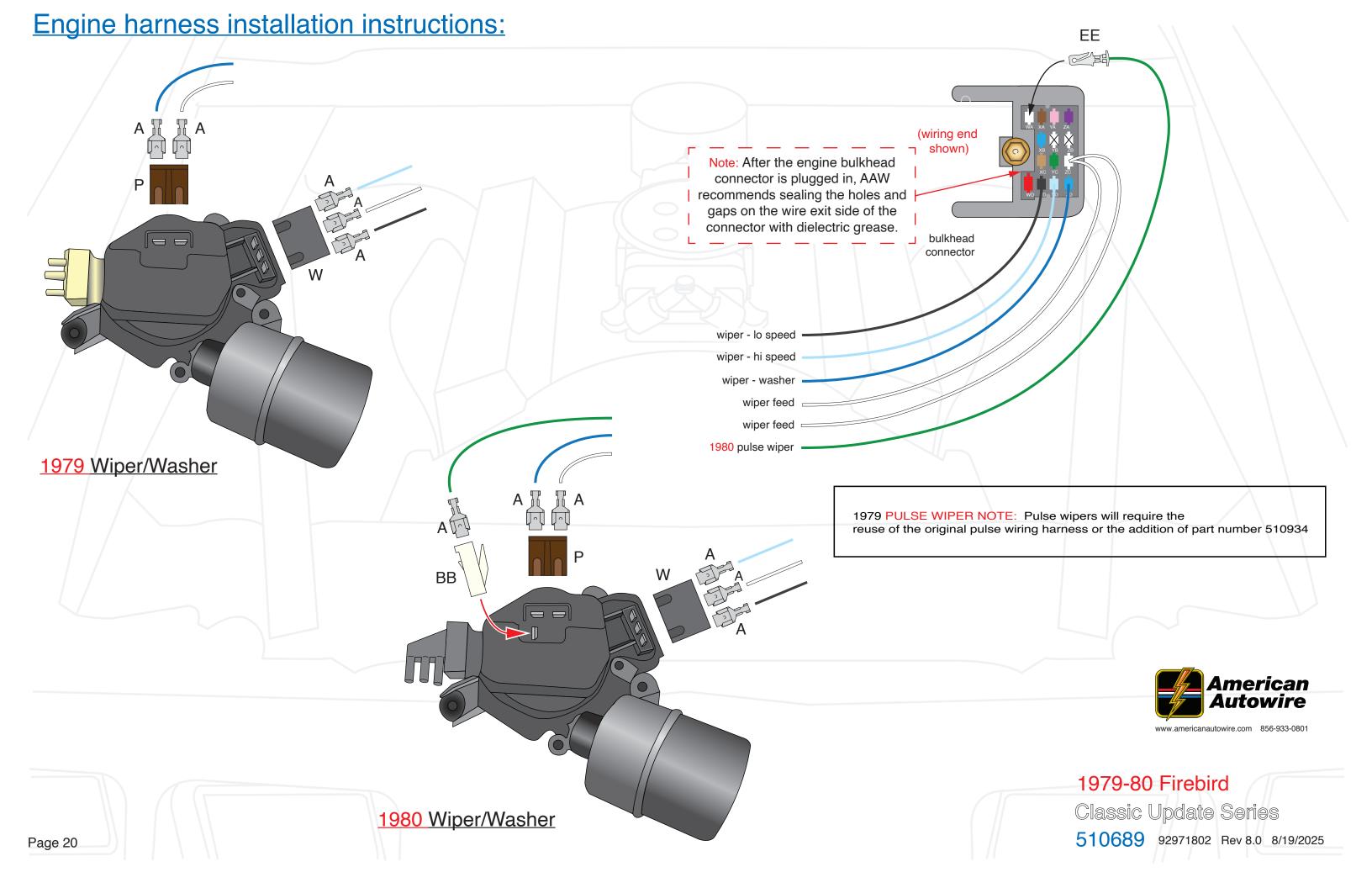


# **Engine harness installation instructions:**

Shown below, are the supplied misc. terminals, sleeves, plastic connector bodies and wires, included in the Engine Harness and Loose Piece bags, that will be used to complete your Engine harness connections. They are itemized and referred to on this page, just as they are on the following pages of this Engine instruction set.







## STEP 3: RECONNECT YOUR BATTERY:

When you have completed the installation and are ready to reconnect the battery, make sure that the following electrical system grounds are in place:

- A. Battery is grounded to the ENGINE BLOCK.
- B. Battery is grounded to the frame.
- C. Engine block is grounded to the frame.
- D. Body is grounded to the frame.

## STEP 4: CHECK ALL ELECTRICAL FUNCTIONS:

Any non-functioning items should be checked for proper installation. Any problems with your wiring and electrical circuit functions, should be addressed to American Autowire Systems, Inc. as soon as possible, to avoid any warranty problems.

If you have any questions concerning this or any of our products, please feel free to call us at 1-856-933-0801.

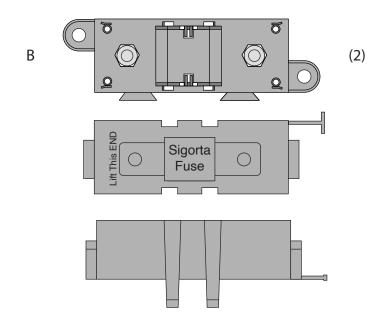


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Α

(144.0" 6 Gauge charge wire)



(Megafuse body, cover and two M8 x 1.25 nuts / lock washers)

C (175 amp Megafuse) G

D (1) (Megafuse jumper) H

E (Alternator boot)

F (cut into six 1.0" pieces)

- 1. One this page, you will find the wire, fuse bodies, fuses, boot, ring terminals, and shrink tubing (items A through K) that are necessary to connect your alternator and main power feed for your new AAW wiring kit. Please be sure that all of the necessary components are present before starting this portion of your installation. If anything is missing, stop what you are doing and contact AAW at the number listed below right away.
- 2. On page 2, you will find directions for building the 2 Megafuse assemblies (items B,C and D) into one unit.
- 3. On page 3, you will find an overall concept of how to connect the Megafuse assemblies to your starter solenoid, alternator and main power feed of your new wiring system.
- 4. On page 4, you will find tips on building your charging circuit wires and assembling them and the main panel power feed wire to the Megafuse assembles.



(6Ga. starter ring terminal)



(6Ga. megafuse terminal)



(6Ga. alternator terminal)



(10Ga. megafuse terminal)



www.americanautowire.com 856-933-0801

PART#

510476

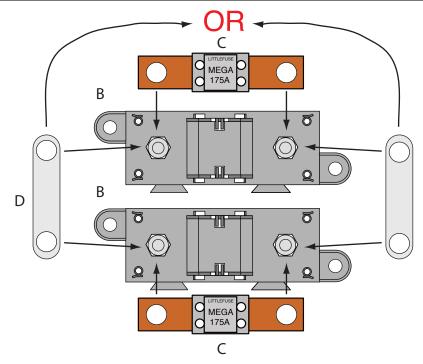


DESCRIPTION:

Alternator and Main Power
Connection Kit
Various Applications

92972153 instruction sheet rev 0.1 6/24/2019

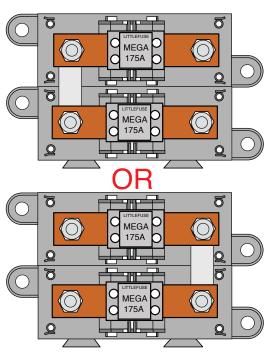
Page 1



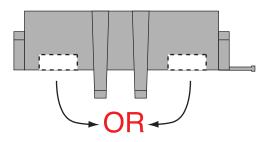
## Assembling the (2) Megafuse assemblies

NOTE: Find a suitable place, as close to the battery power source as possible, under the hood of the your vehicle to mount the completed Megafuse assemblies. Keep in mind that you have 12 feet of 6Ga. charging wire, and that the main power feed coming from your panel or bulkhead connection must also be able to reach the assembly.

- 1.Take the two Megafuse bodies and covers (items B) and snap them together. Remove the 4 nuts and lock washers from the studs on the fuse body assemblies.
- 2. Install the Megafuse jumper (item D above) over two of the studs on the Megafuse bodies. It is very important that the jumper MUST BE assembled on the side that is going to connect to your main power connection (starter solenoid or battery feed).
- 3. Notch top cover to clear jumper D as shown at right.
- 4. Snap one 175amp fuse (items C) onto the studs of each of the two Megafuse bodies (items B), over the jumper, then loosely re-attach the 4 nuts and lock washers back onto the assembled Megafuses. The fuse assemblies are ready to install into your vehicle. Page 2



## **Assembled Megafuses**



**Notched Cover** 

PART#

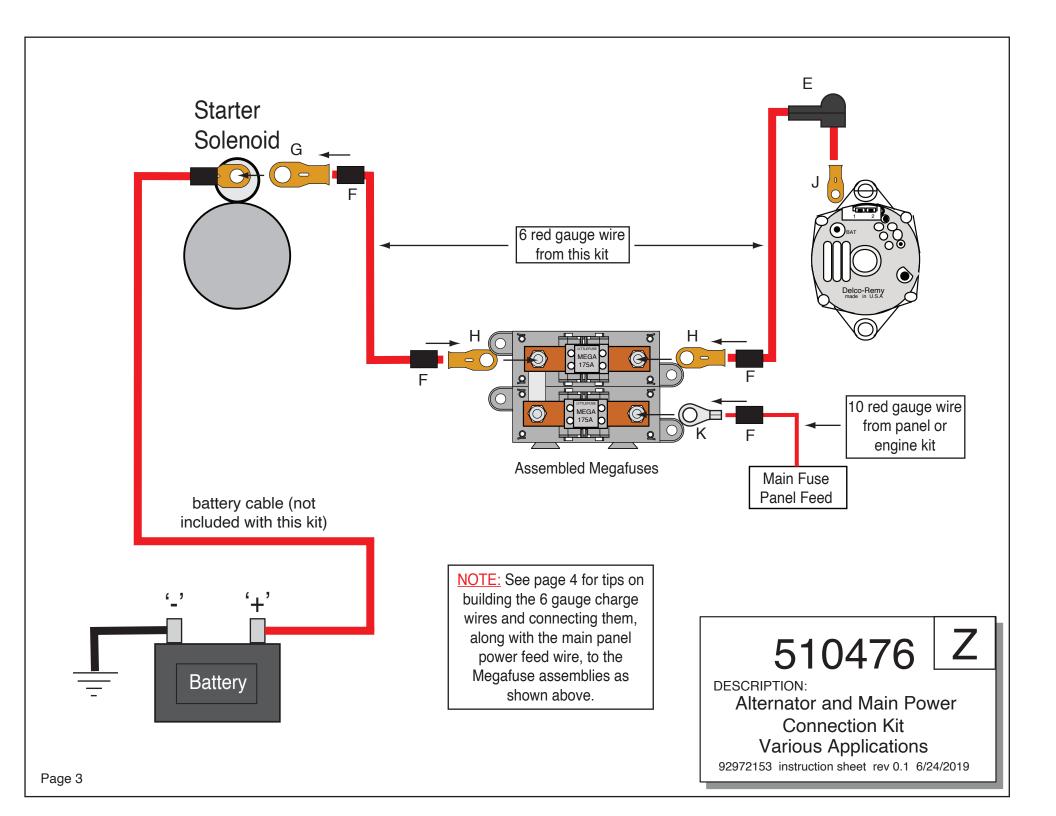
510476

Z

DESCRIPTION:

Alternator and Main Power
Connection Kit
Various Applications

92972153 instruction sheet rev 0.1 6/24/2019



## Building the 6Ga. charge wires and connecting them and the main panel power feed wire to the Megafuse assemblies:

NOTE: Make sure that your battery is disconnected! You will need to install the preassembled Megafuses from page 2 in your vehicle to start this part of the installation.

- 1. Pre-cut item F shrink tubing into (6) 1.00" 1.25" pieces.
- 2. Take the 12-foot piece of 6Ga. red wire from this kit and route it from your starter (or other battery feed) over to the area where you have mounted your Megafuse and cut it to length. Strip the insulation on each end back 1/2". Install 2 pieces of shrink tubing F onto the wire. At the starter end, crimp and solder (1) of terminal G onto the wire. At the Megafuse end, crimp and solder (1) of terminal H onto the wire. Slide the shrink tubing over the terminals and heat it up to shrink it down.
- 3. Take the remaining portion of the 12-foot piece of 6Ga. red wire from this kit and route it from your alternator over to the area where you have mounted your Megafuse and cut it to length. Strip the insulation on each end back 1/2". Install 1 piece of shrink tubing F onto the wire. At the alternator end, slip on boot E as shown on page 3, then crimp and solder (1) of terminal J onto the wire. At the Megafuse end, crimp and solder (1) of terminal H onto the wire. Slide the shrink tubing over terminal H and heat it up to shrink it down.
- 4. Take the 10Ga. red main power feed wire from your engine or panel sub-kit and route it over to the area where you have mounted your Megafuse and cut it to length. Strip the insulation back 3/8". Install 1 piece of shrink tubing F onto the wire, then crimp and solder (1) of terminal K onto the wire.
- 5. Remove the 4 loosely tightened nuts and lock washers from the assembled Megafuses, then using the drawing on page 3 as a guide, install your pre-assembled wires from steps 2-4 above. Re-install the 4 nuts and lock washers onto the assembled Megafuses and tighten them down. This part of your installation is now complete.

510476 Z

**DESCRIPTION:** 

Alternator and Main Power Connection Kit **Various Applications** 

92972153 instruction sheet rev 0.1 6/24/2019