



American Autowire

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SEVERE DUTY



510564

OPTIONAL Add-On Equipment:

The connectors, sockets, wires, terminals and tools, shown on this page, are just a small sample of the many accessories that are available, to help with your installation, from the American Autowire Catalog.

UNSEALED CONNECTORS

500070	
500190	
500071	
500191	
500072	
500192	
500073	
500193	

SEALED WEATHER PACK CONNECTORS

500321	
500320	
500319	
500318	
500317	
500316	
500315	
500314	



500723
Battery Trunk Mount Kit,
Top Post
(pictured)



500665
Battery Crimping
Star Tool
(this tool is included, in the
four Battery Kits shown)

500778
"Lifeline"
Memory Retention
Module



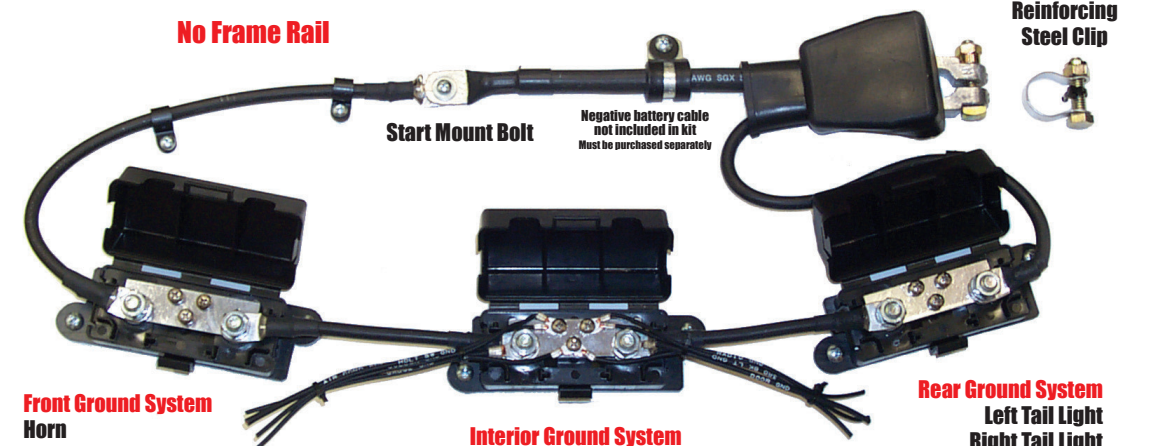
500726
Battery Under Hood
Mount Kit, Side Post
(pictured)

500725
Battery Under Hood
Mount Kit, Top Post



500875
Alternator Connection Kit -
High Amp Output

All Copper Ground System No Frame Rail



Front Ground System
Horn
Left Headlight
Right Headlight
Left Front Parking Light
Right Front Parking Light
Cooling Fan

Interior Ground System
Headlight Switch
Third Brake Light
Radio
Steering Column
Gauges
Air Conditioning
Door Jamb
Wipers

Rear Ground System
Left Tail Light
Right Tail Light
Gas Tank
License Plate Light
Fuel Pump

500717
Full Vehicle Grounding Kit

LAMP SOCKETS - METAL

500157	
36050	



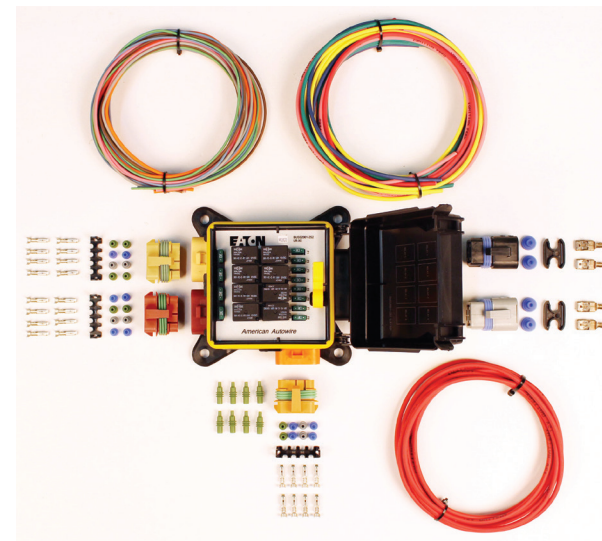
510152 - 510157
Split Braid
Wiring Harness Wrapping

LAMP SOCKETS - PLASTIC

35900	
18995	



510602
60 Amp
Weatherproof Relay



510599
Severe Duty Relay Box



500093
Weatherproof
Universal
Relay Kit



500081
Courtesy Light
Connection Kit



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92971174 Rev 2.0 JDM 03/28/2024

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.



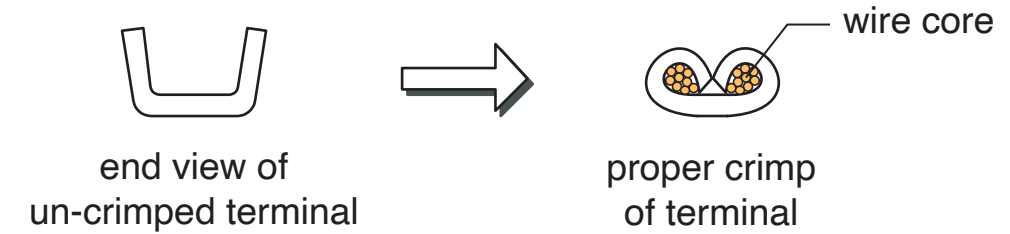
AAW offers a great terminal crimping video entitled "Proper Crimping Video". It can be viewed by visiting YouTube.

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

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



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.



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

AAW p/n 510585
OEM small terminal crimping tool (18-14 gauge)



AAW p/n 510586
OEM large terminal crimping tool (12-8 gauge)



AAW p/n 510609
Weather Pack/Metri Pack crimping tool (18-12 gauge)



STEP 1: DISCONNECT YOUR BATTERY:

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



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

510564

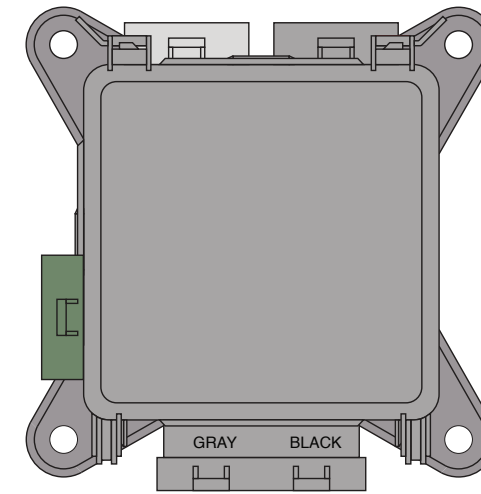
STEP 2: START INSTALLING KIT:

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:

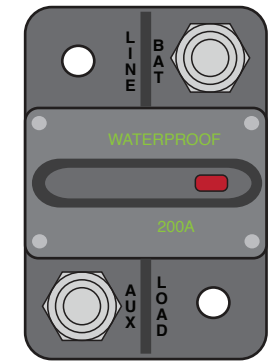
Table of Contents:

Bags: Pages: Sections:

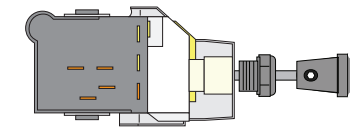
A	5, 6	Power Subkit - This harness contains: <ul style="list-style-type: none">- Starter solenoid connections.- Main Circuit Breaker connections.- Neutral safety switch connections.- Ignition switch connections.- Alternator connections.- Battery connections.
B	7 - 13	Main Subkit - This Harness contains: <ul style="list-style-type: none">- Wiper Feed.- Headlight Switch Feed.- Gauge Feed.- Clock Feed.- Radio Feed.- Miscellaneous Ignition Feeds.- Heater/AC Feed.- Horn Feed.- Reverse Light Switch Feed.- Brake Light Switch Feed.- Turn Signal/Hazard Light Feed.
C	12, 13	Headlight Kit - This Harness contains: <ul style="list-style-type: none">- Headlight Switch.- Headlight connections.- Parking Light connections.- Courtesy Light connections.- Dimmer Switch.
D	10, 11	Turn Signal Kit - This Harness contains: <ul style="list-style-type: none">- Turn Signal connections.- Brake Switch connection.- Third Brake Light connection.- Turn Signal Indicator connections.
E	14	Gauge Kit - This Harness contains: <ul style="list-style-type: none">- Gauge connections for aftermarket gauges.- Electronic Speedometer connections.- Indicator Lights connections.



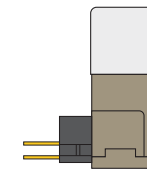
Severe Duty Fuse Box



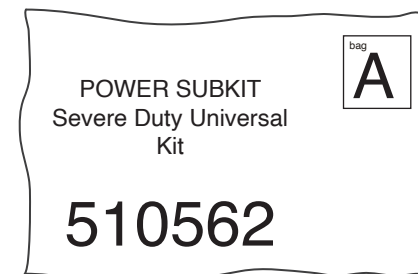
Circuit Breaker



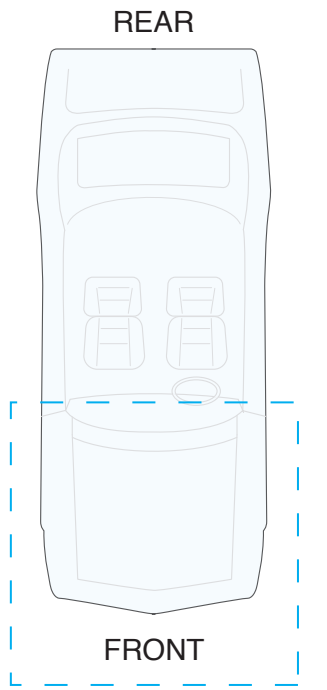
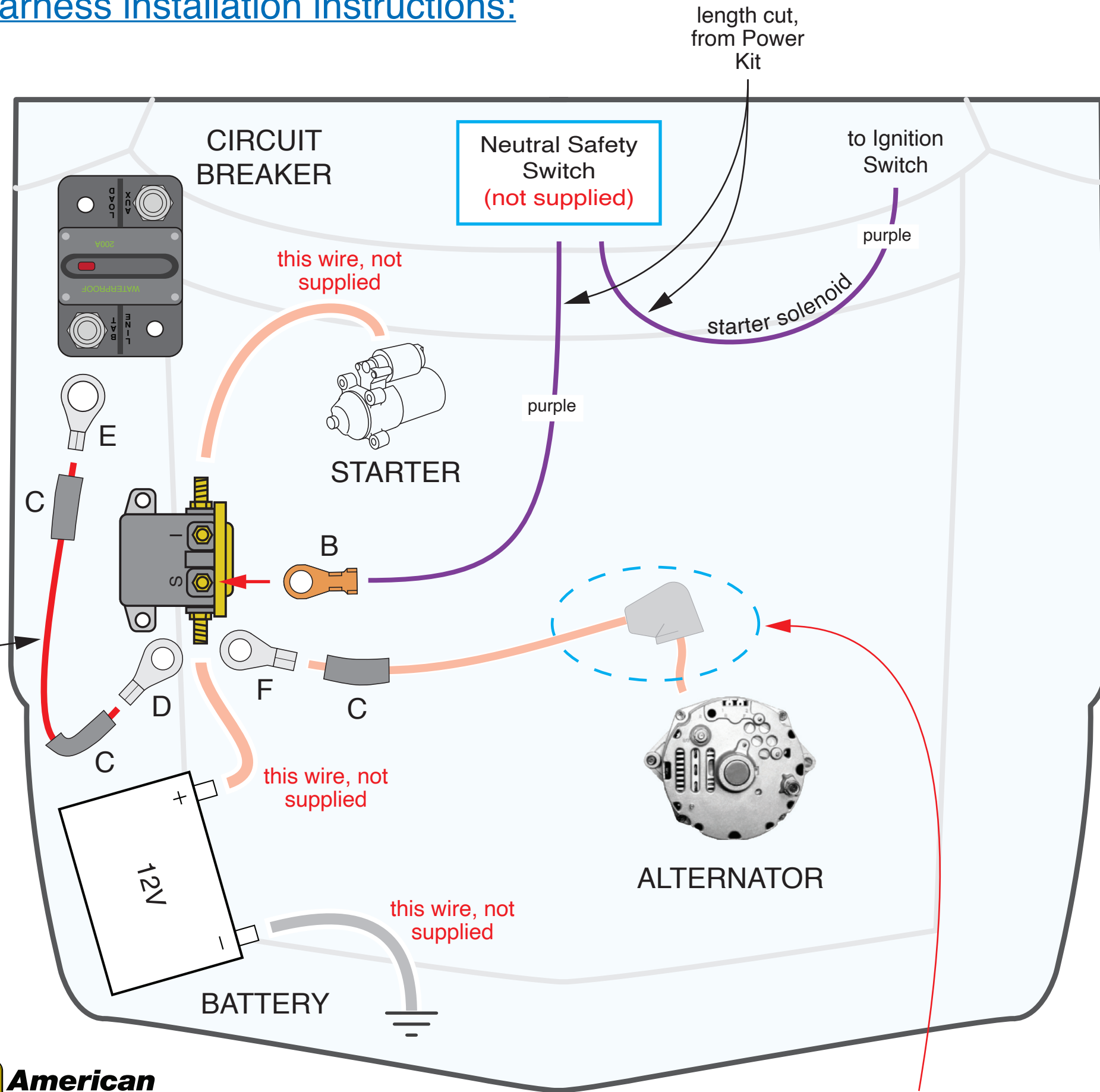
Headlight Switch



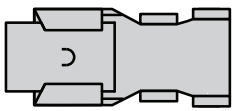


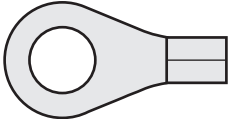
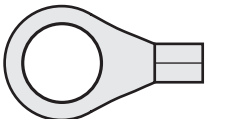
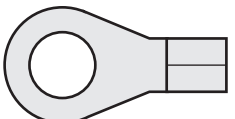

Dimmer Switch



Power Harness installation instructions:



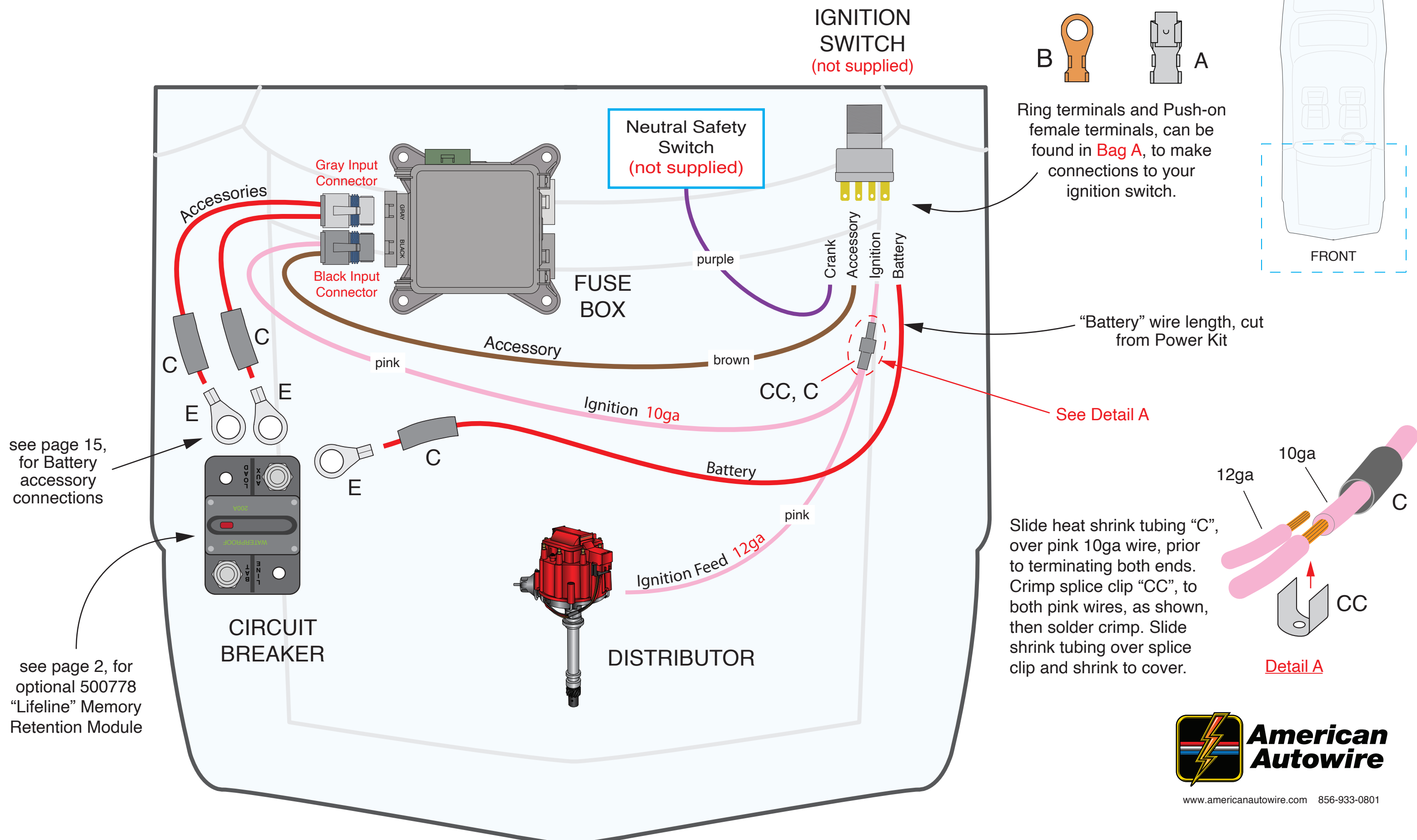
FIND THESE PARTS, IN BAG A.

- A  (female terminal, 5 pcs.)
- B  (ring terminal, 7 pcs.)
- C  (shrink tubing, 5 pcs.)
- D  (ring terminal, medium stud, smaller wire, 2 pcs.)
- E  (ring terminal, large stud, smaller wire, 3 pcs.)
- F  (ring terminal, medium stud, large wire, 2 pcs.)
- CC  (splice clip, 2 pcs.)

these parts are not supplied; see available Alternator Connection Kit 500875, on page 2



Power Harness Gray Input Connector and Black Input Connector installation instructions:

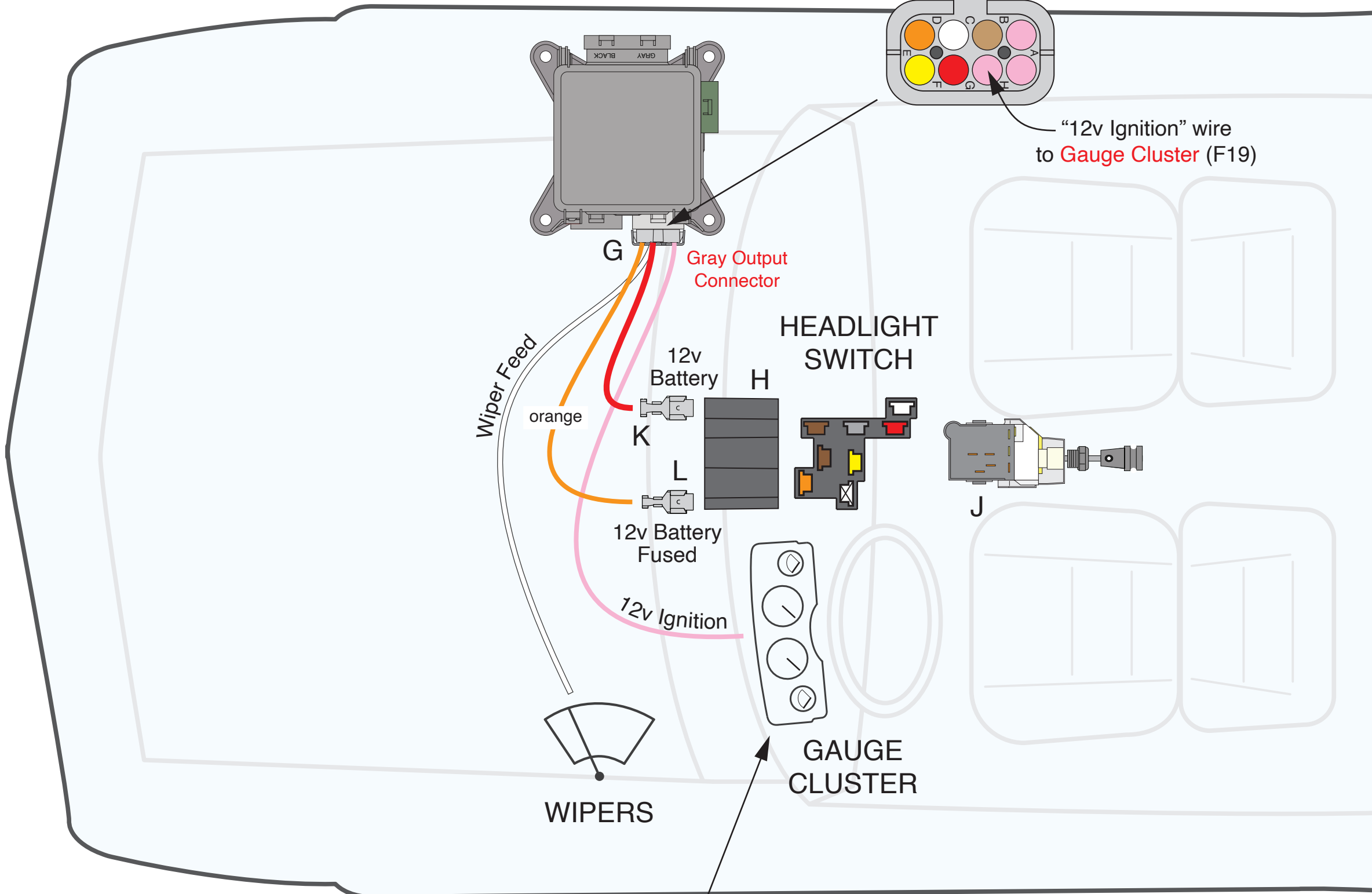
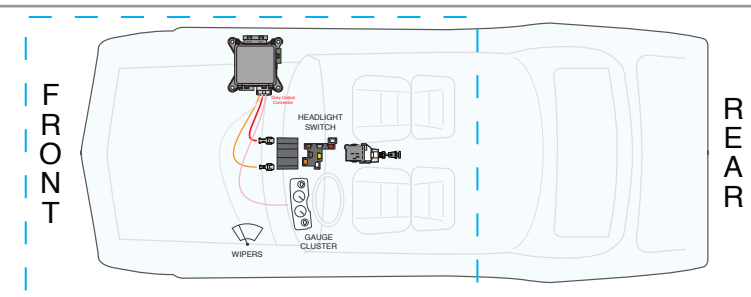


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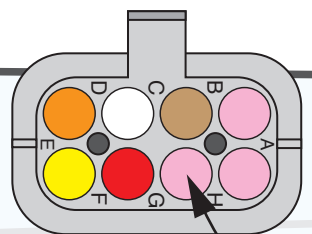
Main Harness - Gray Output Connector installation instructions:



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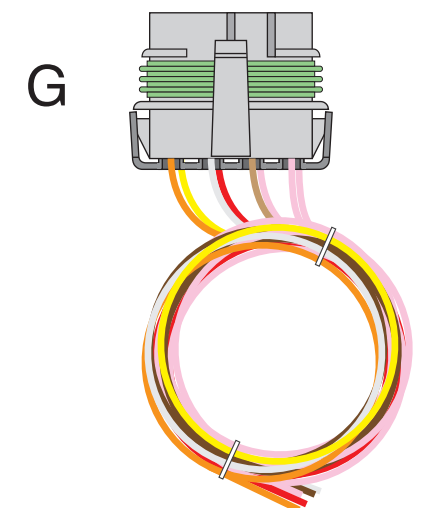


Wiring-end view of Gray Output Connector



"12v Ignition" wire to Gauge Cluster (F19)

FIND THIS PART, IN BAG B.

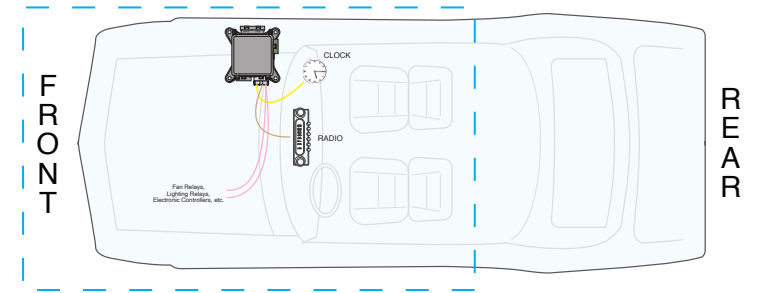


FIND THESE PARTS, IN BAG C.

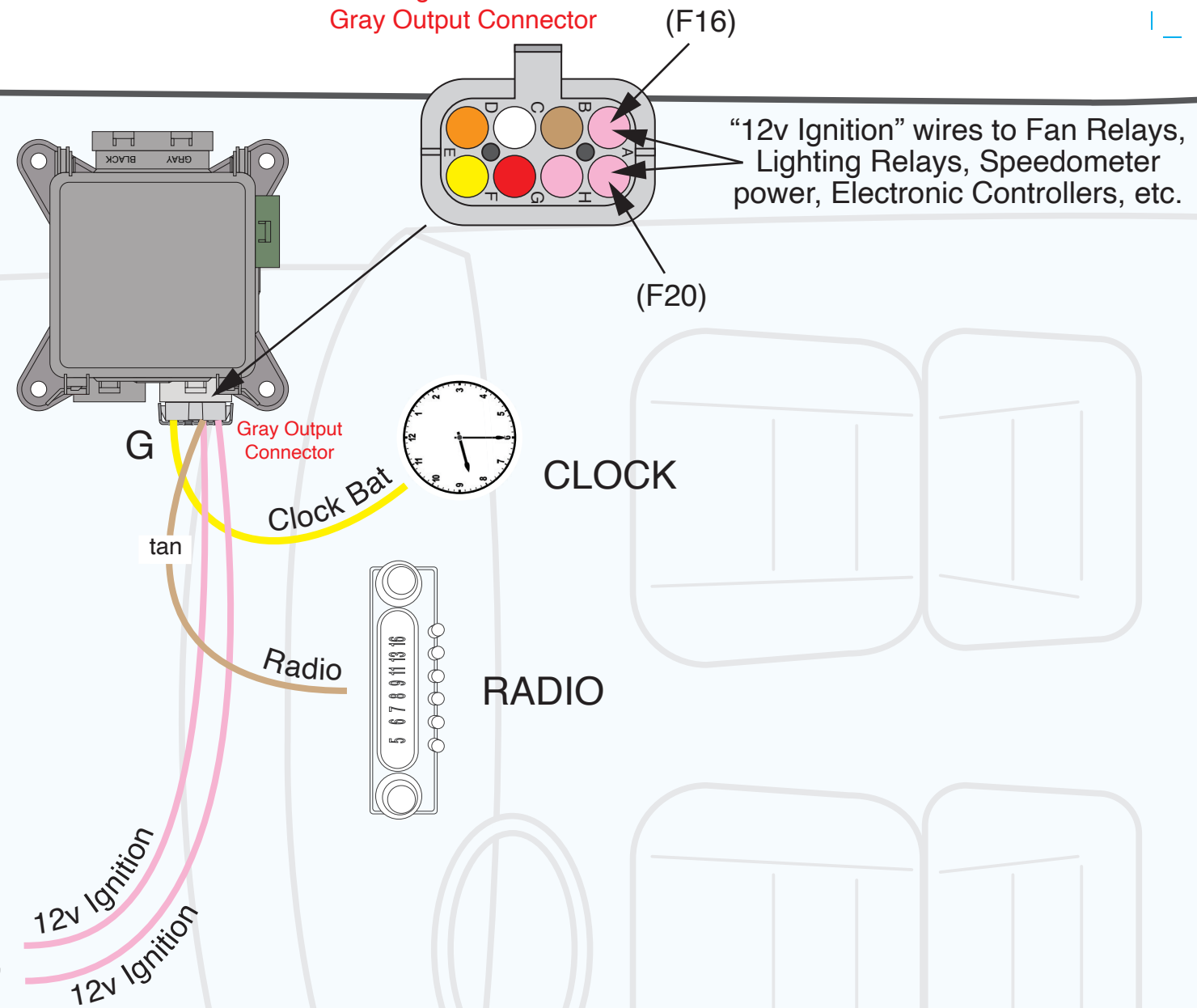
- H (Headlight, Parking Light Harness; Reference)
- J (headlight switch, 1 pc.)
- K (female terminal, large 3, pc.)
- L (female terminal, small, 3 pc.)

see page 14, for Gauge connections

Main Harness - Gray Output Connector installation instructions:



Wiring-end view of Gray Output Connector

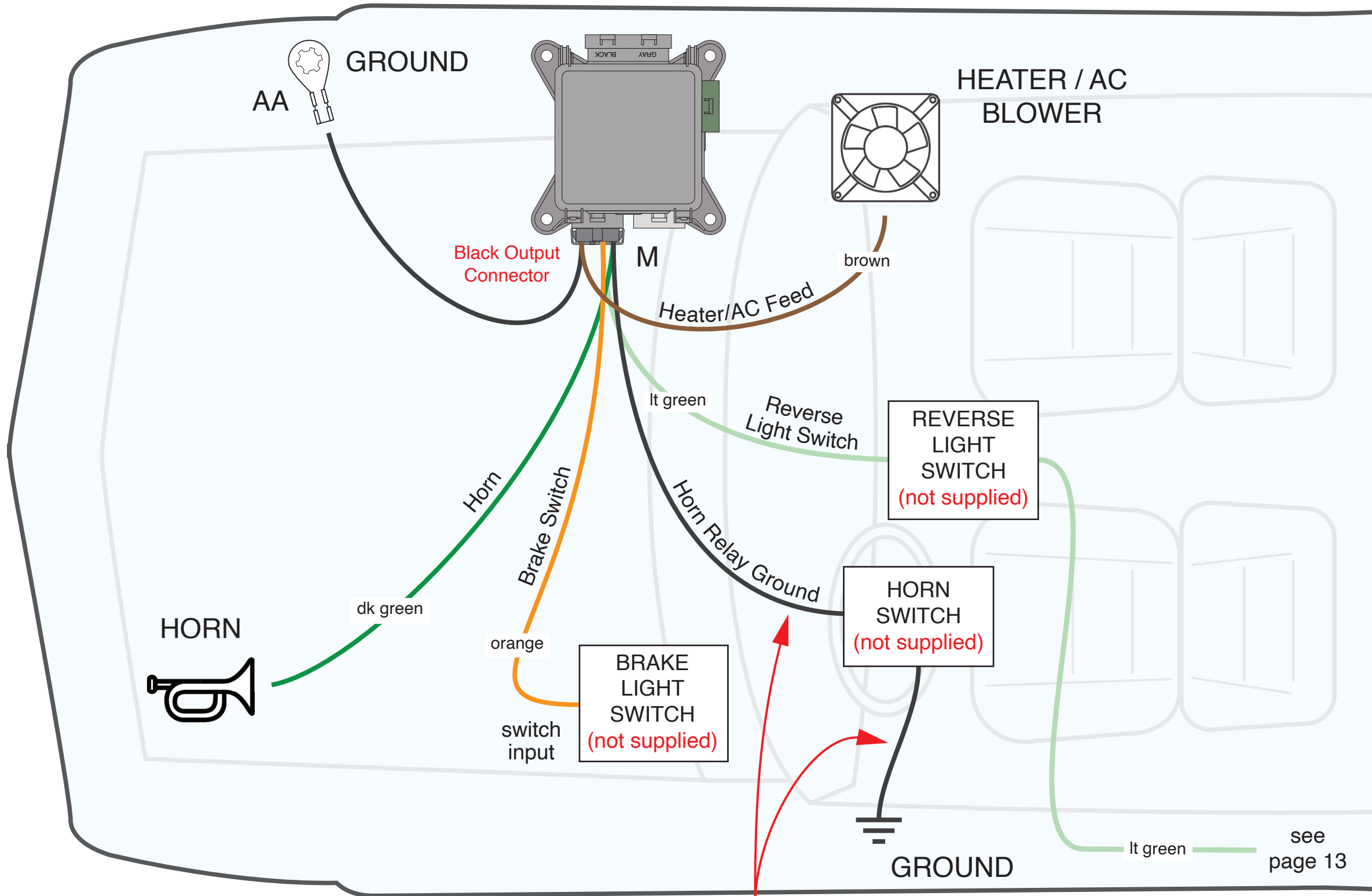
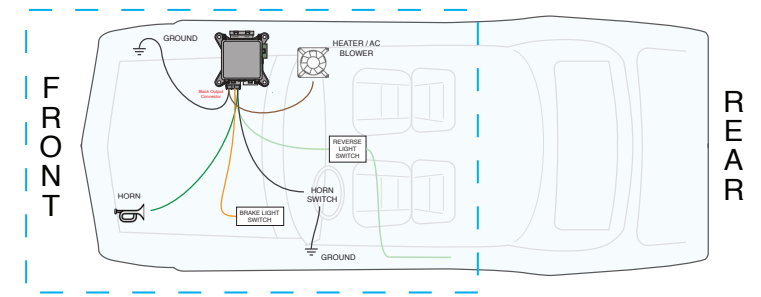


Fan Relays, Lighting Relays, Speedometer power (see page 15), Electronic Controllers, etc.

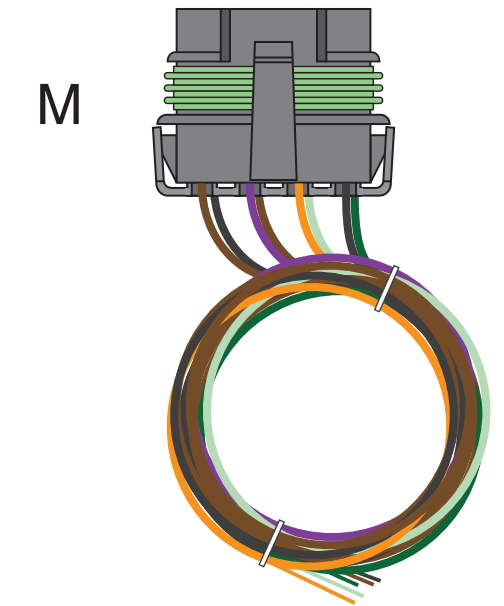


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Main Harness - Black Output Connector installation instructions:



FIND THESE PARTS, IN BAG B.



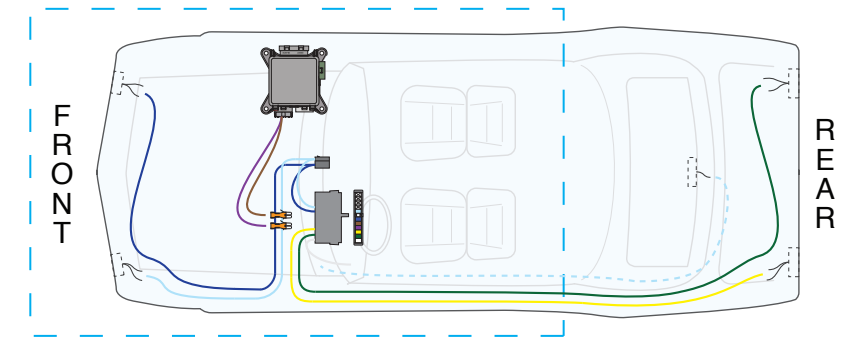
AA (ring terminal, internal tooth, 2 pcs.)



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You can pass these wires, through connectors "N" and "P", on page 10.

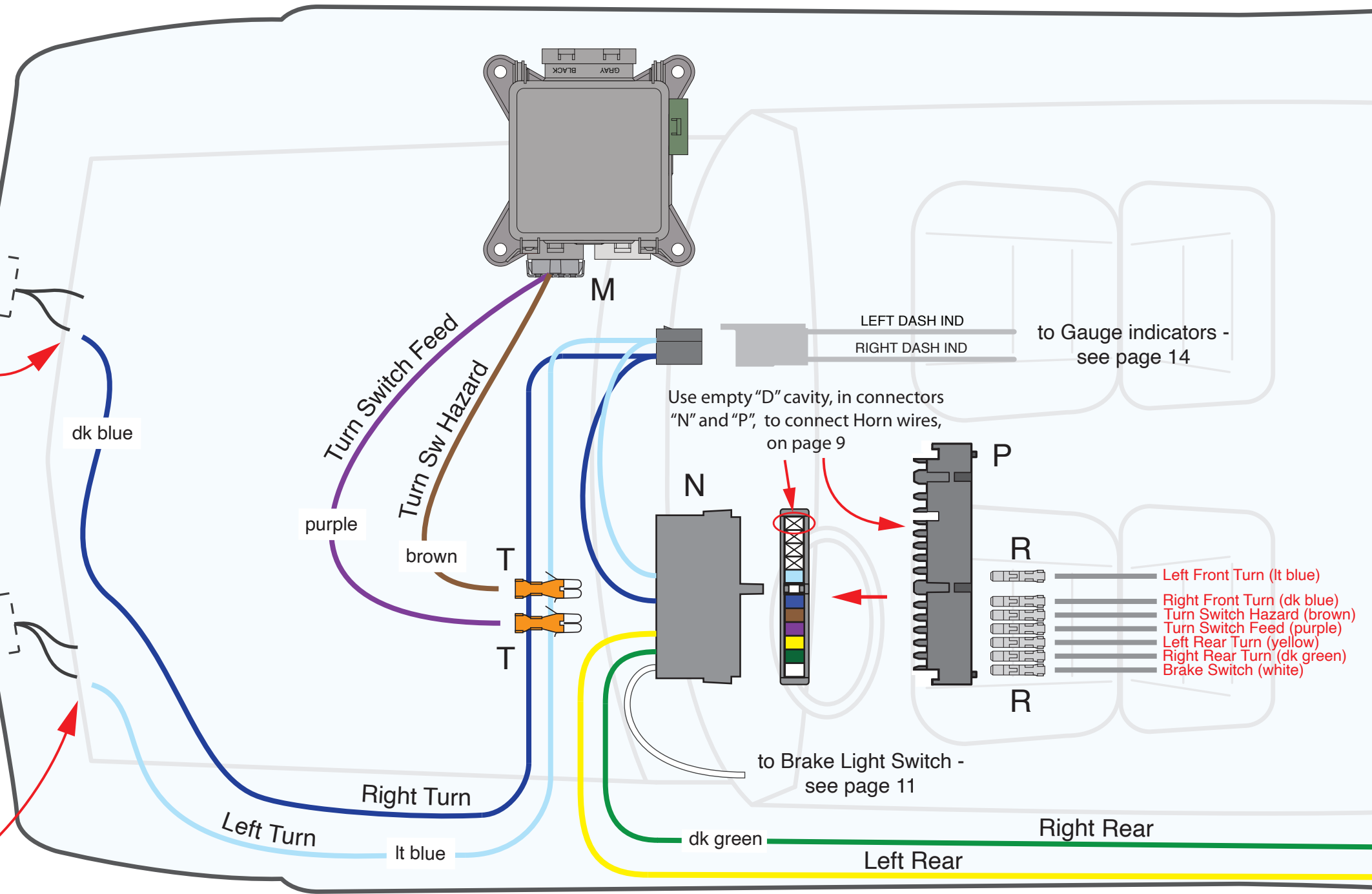
Turn Signal Harness installation instructions:



FRONT
TURN
SIGNALS

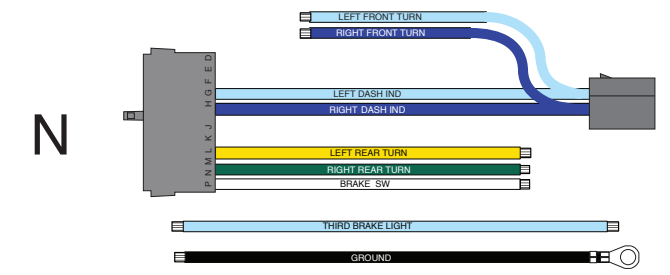
Connect turn signal light wire, to turn signal light filament.

Connect turn signal light wire, to turn signal light filament.

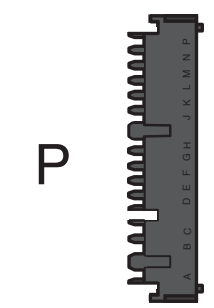


STEERING COLUMN
and DASH

FIND THESE PARTS,
IN BAG D.



(Turn Signal
Harness; Reference)



(Pack-con 14-way
male connector, 1 pc.)



(Pack-con male
terminal, 10 pcs.)



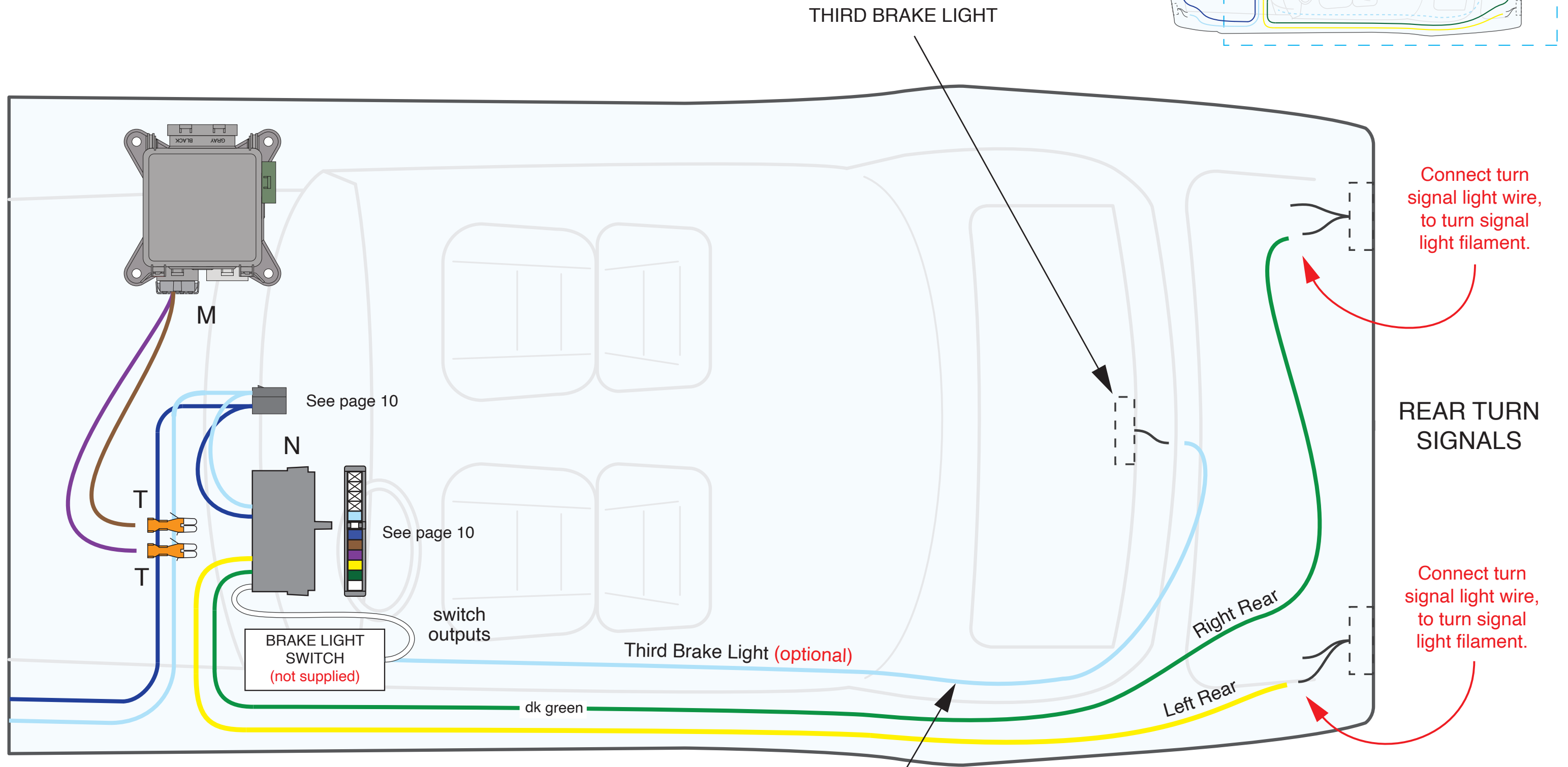
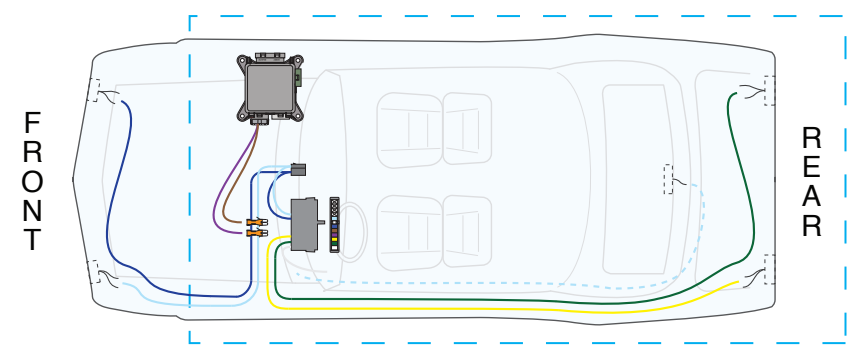
(Pack-con female
terminal, 6 pcs.)

- Left Front Turn (lt blue)
- Right Front Turn (dk blue)
- Turn Switch Hazard (brown)
- Turn Switch Feed (purple)
- Left Rear Turn (yellow)
- Right Rear Turn (dk green)
- Brake Switch (white)



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Turn Signal Harness installation instructions:

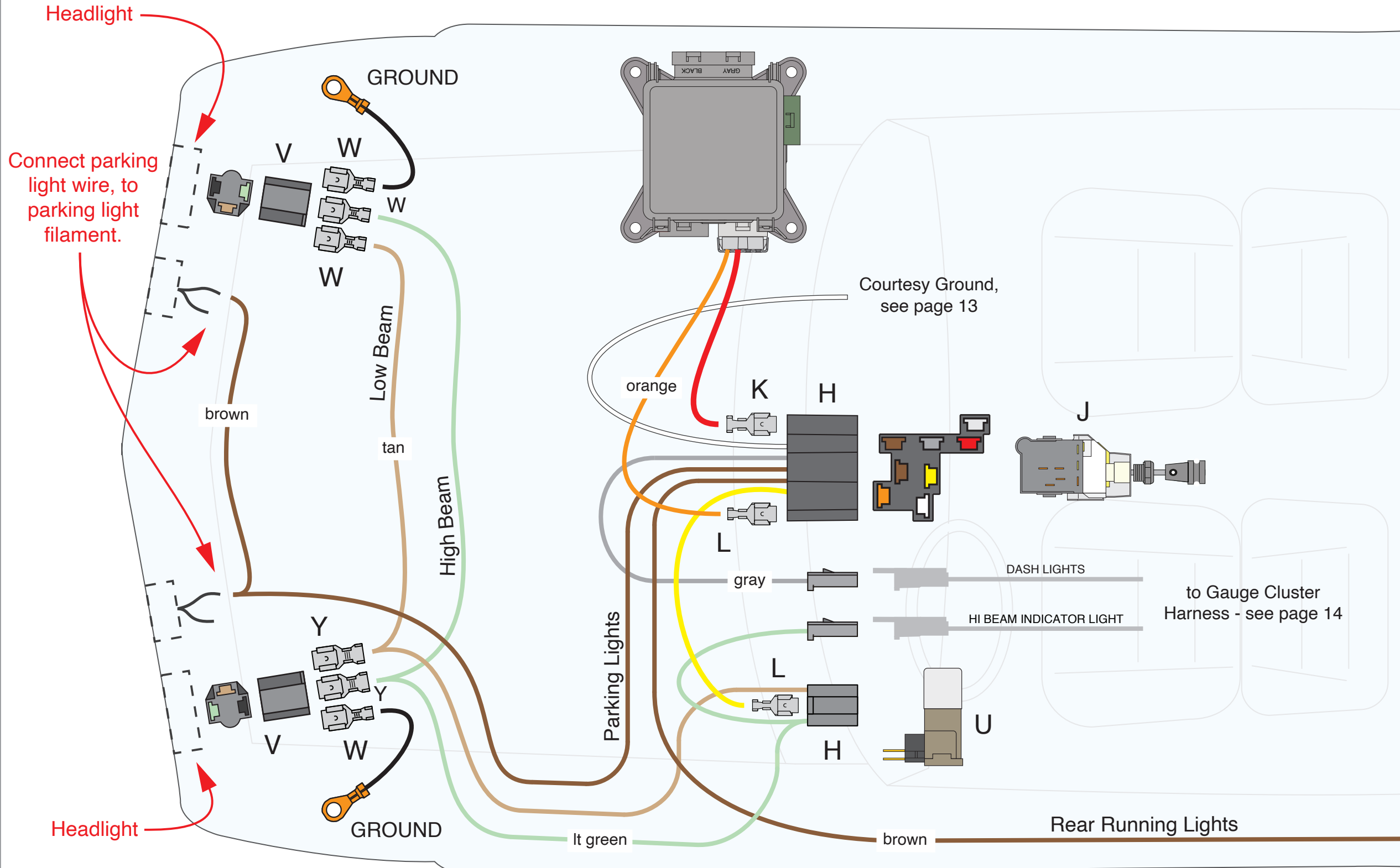
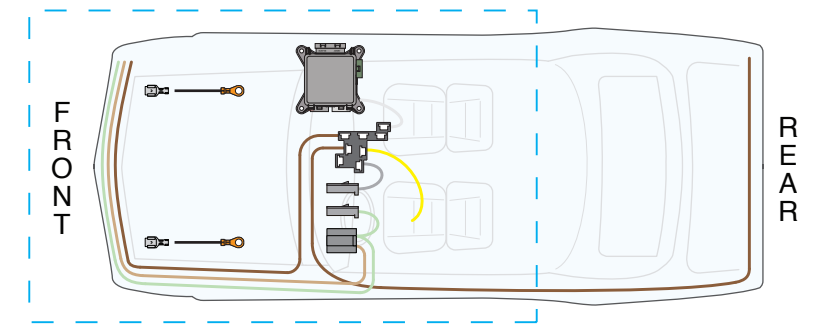


Headlight Harness installation instructions:



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HEADLIGHTS and FRONT PARKING LIGHTS



FIND THESE PARTS, IN BAG C.

- H** (Headlight, Parking Light Harness; Reference)
- J** (headlight switch, 1 pc.)
- K** (single female terminal, large, 2 pc.)
- L** (single female terminal, small, 3 pcs.)
- U** (dimmer switch, 1 pc.)
- V** (3-way female connector, 2 pcs.)
- W** (single female terminal, 6 pcs.)
- Y** (double female terminal, 2 pcs.)

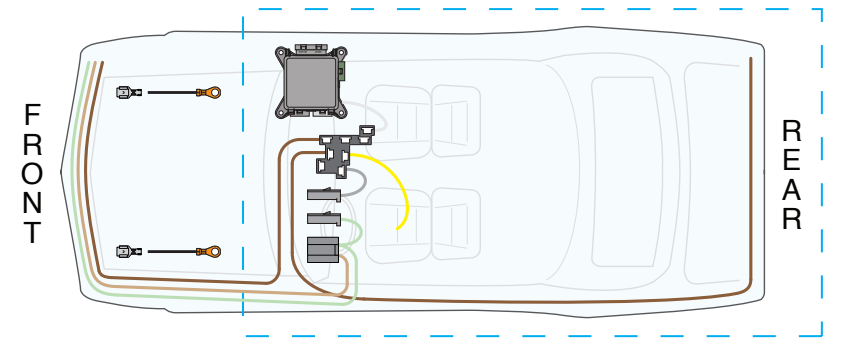
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Headlight Harness installation instructions:

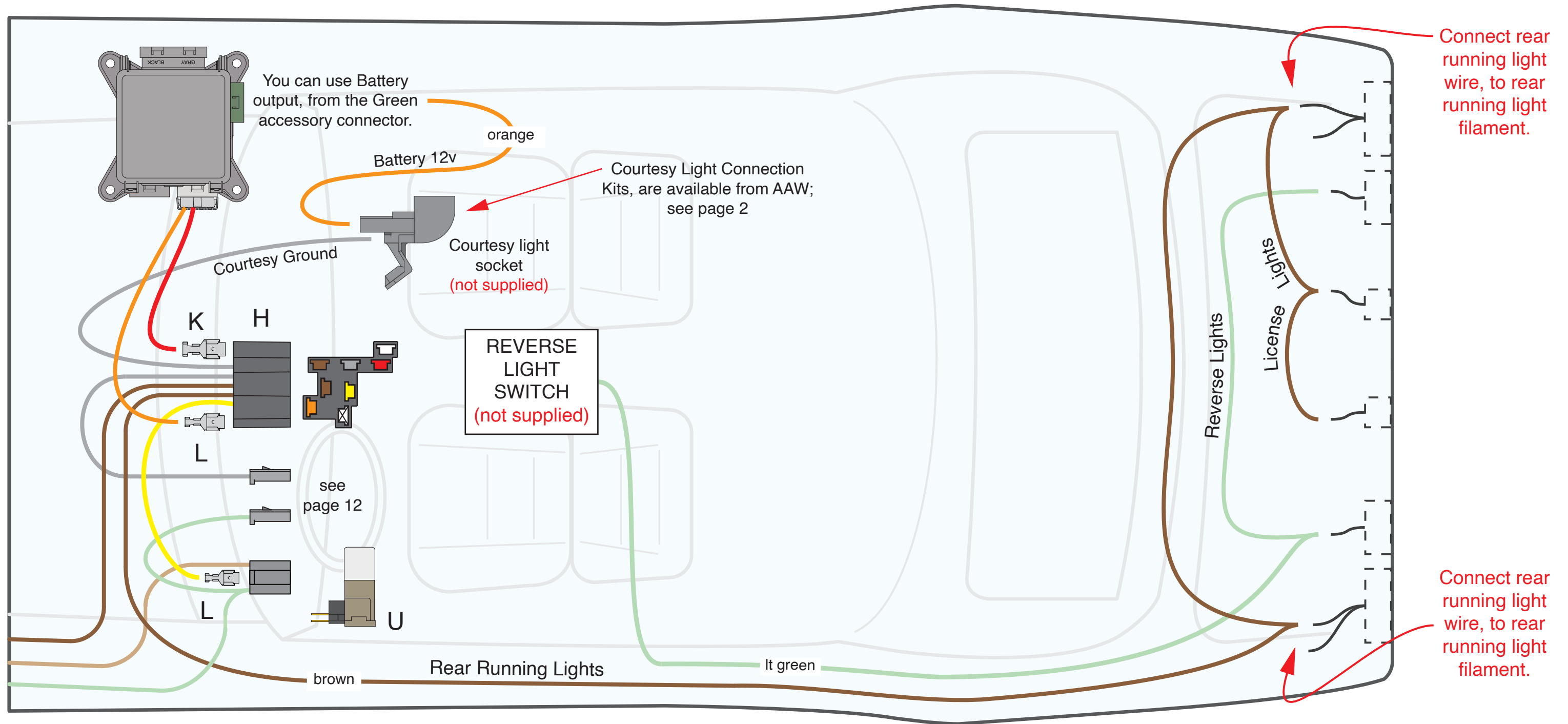


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REAR RUNNING, REVERSE and LICENSE PLATE LIGHTS

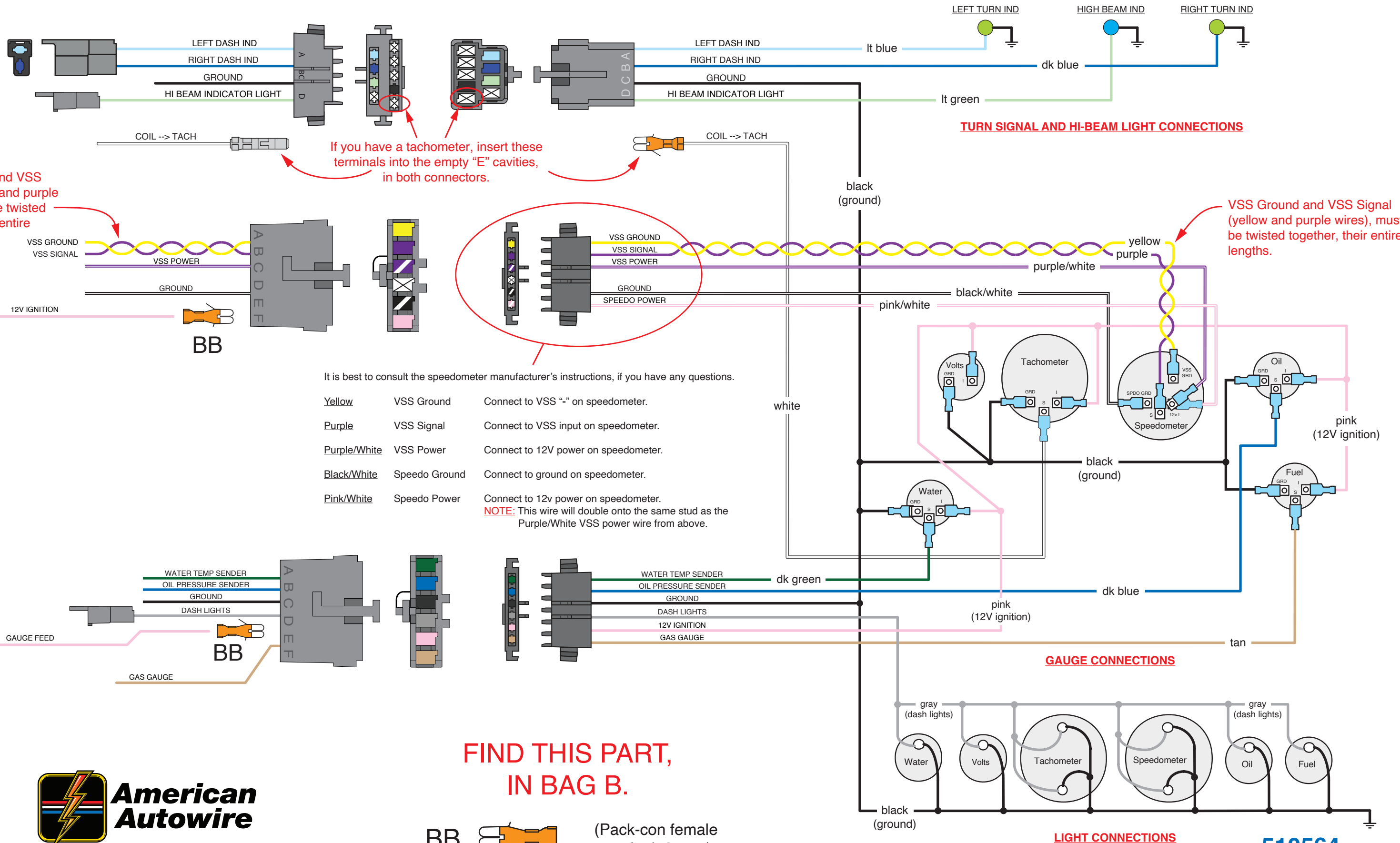


COURTESY LIGHTS



Gauge Cluster Harness (aftermarket gauges) installation instructions:

TYPICAL AFTERMARKET GAUGE CONNECTIONS (BLADE TYPE CONNECTIONS SHOWN)



VSS Ground and VSS Signal (yellow and purple wires), must be twisted together, their entire lengths.

If you have a tachometer, insert these terminals into the empty "E" cavities, in both connectors.

VSS Ground and VSS Signal (yellow and purple wires), must be twisted together, their entire lengths.

see page 8

see page 7

It is best to consult the speedometer manufacturer's instructions, if you have any questions.

- Yellow VSS Ground Connect to VSS "-" on speedometer.
- Purple VSS Signal Connect to VSS input on speedometer.
- Purple/White VSS Power Connect to 12V power on speedometer.
- Black/White Speedo Ground Connect to ground on speedometer.
- Pink/White Speedo Power Connect to 12v power on speedometer.
NOTE: This wire will double onto the same stud as the Purple/White VSS power wire from above.

FIND THIS PART, IN BAG B.

BB  (Pack-con female terminal, 2 pcs.)



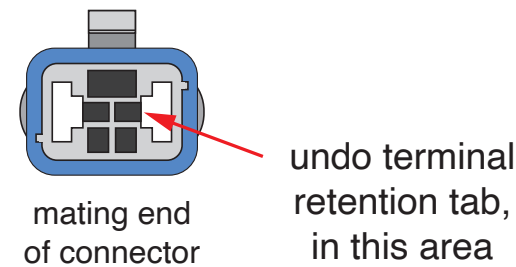
Green Accessory Connector installation instructions:

If you plan on using the Battery Outputs (fuse locations F2-F5), **this** Red Accessory wire **must** be connected; see page 6. If you are not using these outputs, this Red Accessory wire can be removed.

To remove this Accessory wire, first remove the wire retention clip, from the wire side of the connector...



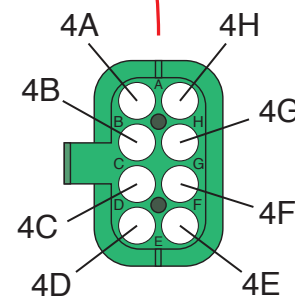
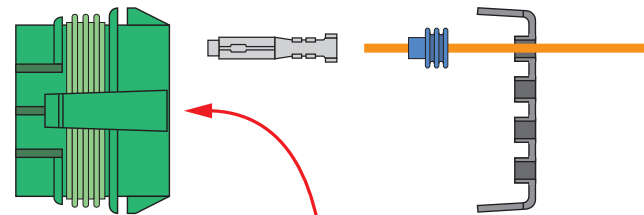
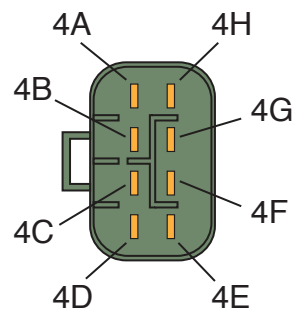
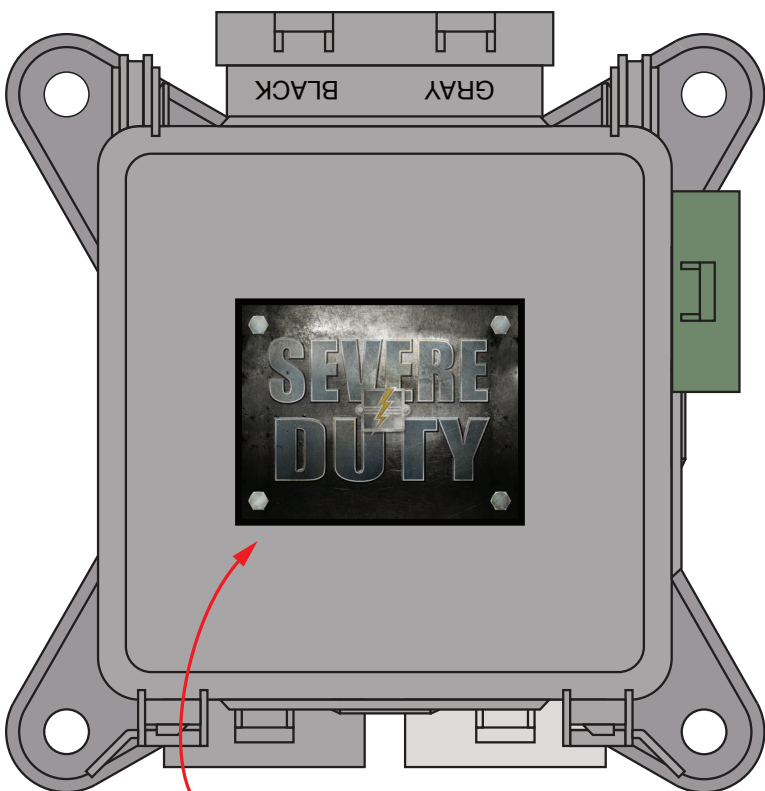
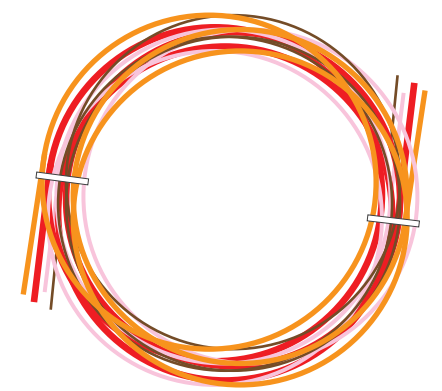
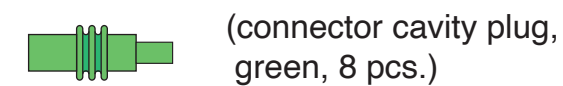
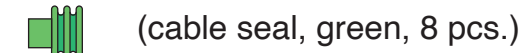
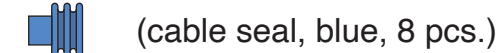
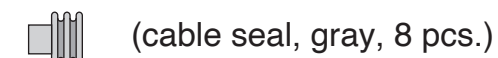
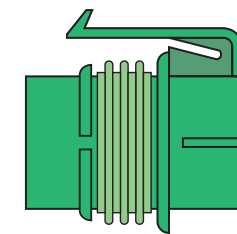
then, facing the mating end of the connector and using a small thin-bladed device, undo the retention tab of the terminal and pull the wire from the connector.



Examples of possible user circuits	Pin Location	Output Type	Fuse	Circuits are "live", in these ignition switch positions
- Lights: Courtesy, Underhood, etc. - Electronic Modules/ECU's - Cigarette Lighters - USB charging outputs	4A	Optional Battery Feed*	F4	All
	4B	Optional Battery Feed*	F5	
	4G	Optional Battery Feed*	F3	
	4H	Optional Battery Feed*	F2	
- Radios/CBs - GPS units - Spot Lights	4C	Optional Accessory Feed	F7	"ACC" (Accessory)
	4F	Optional Accessory Feed	F6	
- Fuel Pumps/Fuel Pump Relays - Electronic Modules - Fan Relays	4D	Optional Ignition Feed	F8	"ON" / "IGN" / "RUN"
	4E	Optional Ignition Feed	F9	

* The Red Accessory wire, in the Gray Input Connector, must be connected, in order to use these circuits.

FIND THESE PARTS, IN BAG B.



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.

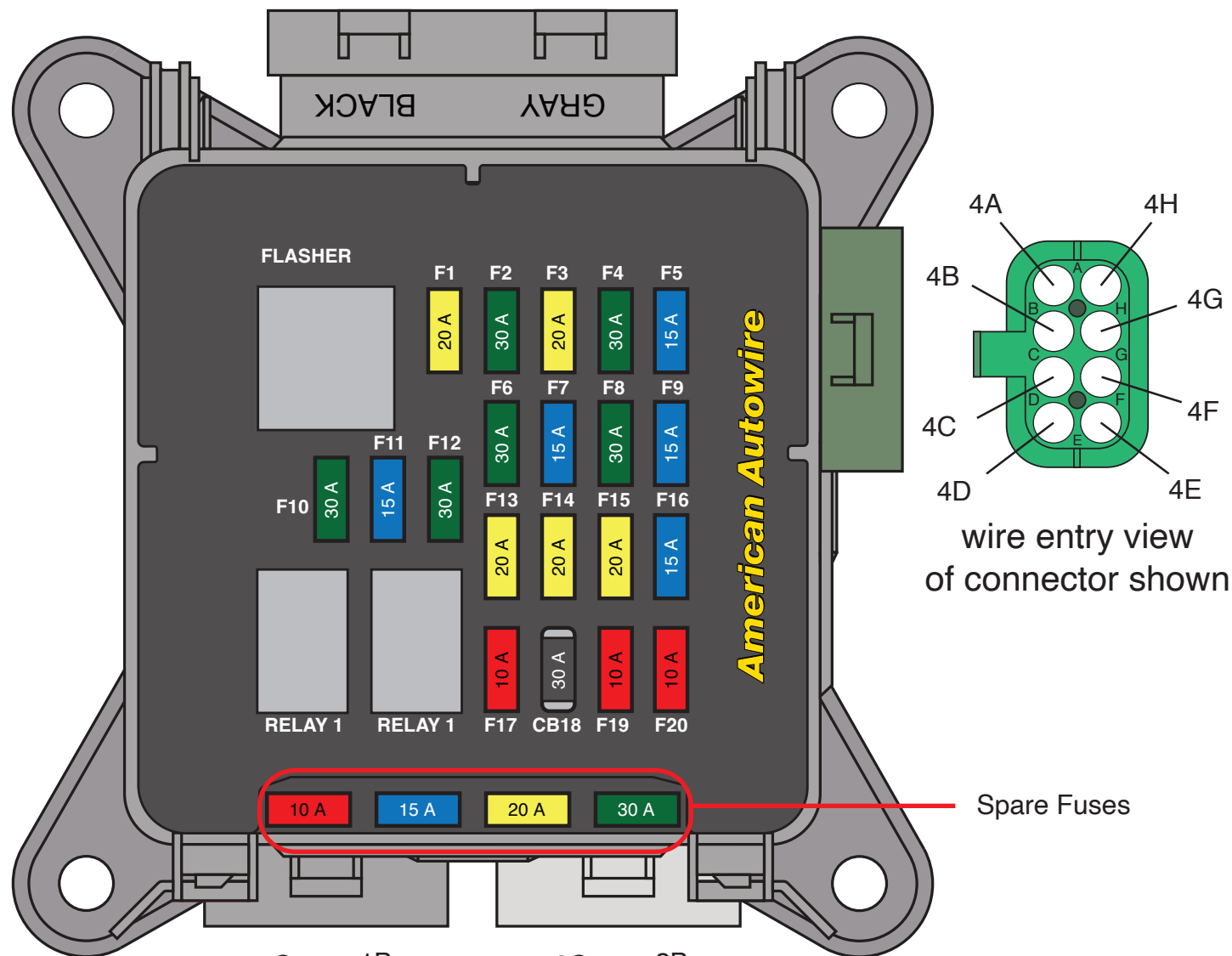
STEP 4: CHECK ALL ELECTRICAL FUNCTIONS:

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.

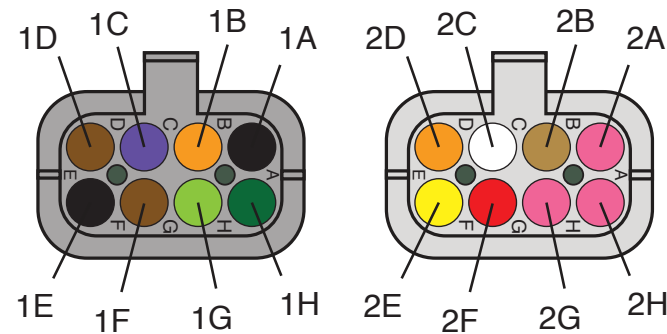
If you have any questions concerning this or any of our products, please feel free to call us at 1-856-933-0801.



Fuse Block Fuse/Circuit Listings:



Fuse #	Fuse Block Lid Printing	Fuse Rating	Output Pin	System Wiring Protected
F1	FLASHER	20A	1C (Turn Signals) 1F (Hazard)	(1C - Turn); (1F - Hazard) Output Feeds to Turn Signal Switch See page 10
F2	OPTIONAL BATTERY	30A	4H	Option Battery Feed - See page 15
F3	OPTIONAL BATTERY	20A	4G	Option Battery Feed - See page 15
F4	OPTIONAL BATTERY	30A	4A	Option Battery Feed - See page 15
F5	OPTIONAL BATTERY	15A	4B	Option Battery Feed - See page 15
F6	OPTIONAL ACCESSORY	30A	4F	Optional Switched Accessory Feed - See page 15
F7	OPTIONAL ACCESSORY	15A	4C	Optional Switched Accessory Feed - See page 15
F8	OPTIONAL IGNITION	30A	4D	Optional Switched Ignition Feed - See page 15
F9	OPTIONAL IGNITION	15A	4E	Optional Switched Ignition Feed - See page 15
F10	HEAT/AC	30A	1D	Switched Ignition Feed for Heater/AC - See page 9
F11	REVERSE LIGHTS	15A	1G	Switched Ignition Feed to Reverse Light Switch - See page 9
F12	BRAKE LIGHTS	30A	1B	Battery Feed to Brake Light Switch - See Page 9
F13	PARK LIGHTS	20A	2D	Battery Feed to Headlight Switch for Park Lights - See page 7
F14	WIPER	20A	2C	Switched Accessory Feed for Wipers - See page 7
F15	RADIO	20A	2B	Switched Accessory Feed for Radio - See page 9
F16	MISC IGNITION	15A	2A	Switched Ignition Feed for Fan/Lighting Relays - See page 8
F17	CLOCK/ECU	10A	2E	Battery Feed for Clock/ECU Memory - See page 8
CB18	HEADLIGHTS	30A CB	2F	Battery Feed to Headlight Switch for Headlights - See page 7
F19	GAUGES	10A	2G	Switched Ignition Feed to Gauges - See page 7
F20	MISC IGNITION	10A	2H	Switched Ignition Feed for Fan/Lighting Relays - See page 8



wire entry view of connectors shown



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