

# Classic Update Series

1964 - 1966 Ford Mustang

## 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 below. ALL TERMINALS THAT YOU INSTALL SHOULD BE PROPERLY SOLDERED. Our factory crimped terminations are installed by GM approved five ton presses, and soldering these terminations is not necessary.



AS THIS HARNESS IS DESIGNED FOR USE IN A MODIFIED CAR REQUIRING A HIGHER RATE OF CHARGE, IT DOES NOT SUPPORT THE USE OF A STOCK (ORIGINAL) ALTERNATOR. IT IS DESIGNED FOR USE WITH AN INTERNALLY REGULATED OR SINGLE WIRE STYLE ALTERNATOR. ADAPTERS (WHICH ARE NOT INCLUDED WITH THIS KIT) ARE AVAILABLE FROM SEVERAL SOURCES WILL BE NECESSARY TO USE ANY ALTERNATOR OTHER THAN A 1 WIRE UNIT.

### STEP 1: DISCONNECT YOUR BATTERY:

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

### STEP 2: START INSTALLING KIT:

This kit is broken down into individual steps that are identified by a letter printed on the instruction sheets visible through each bag. These letters are the order of operation for installing your kit. Start with bag letter G, then M, etc. The order of installation is shown below.

G - 510047 Main Harness Kit  
M - 510129 Rear Body Kit  
N - 510130 Wiper Switch Power Jumper

### 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.

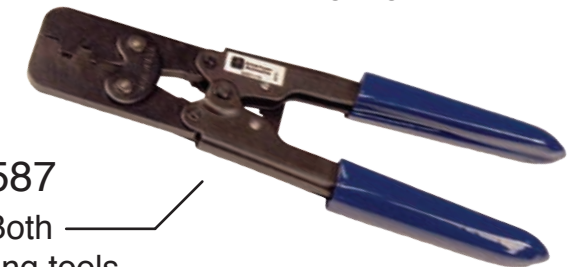
AMERICAN AUTOWIRE MAKES IT EASY !!

We carry many accessories for your 1964 - 1966 Mustang

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



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



p/n 510587  
Includes Both  
terminal crimping tools



p/n 510127  
ignition switch lock cylinder  
and keys



p/n R0067108  
OEM style non-stick harness tape



p/n 510175  
factory hazard switch  
wiring kit

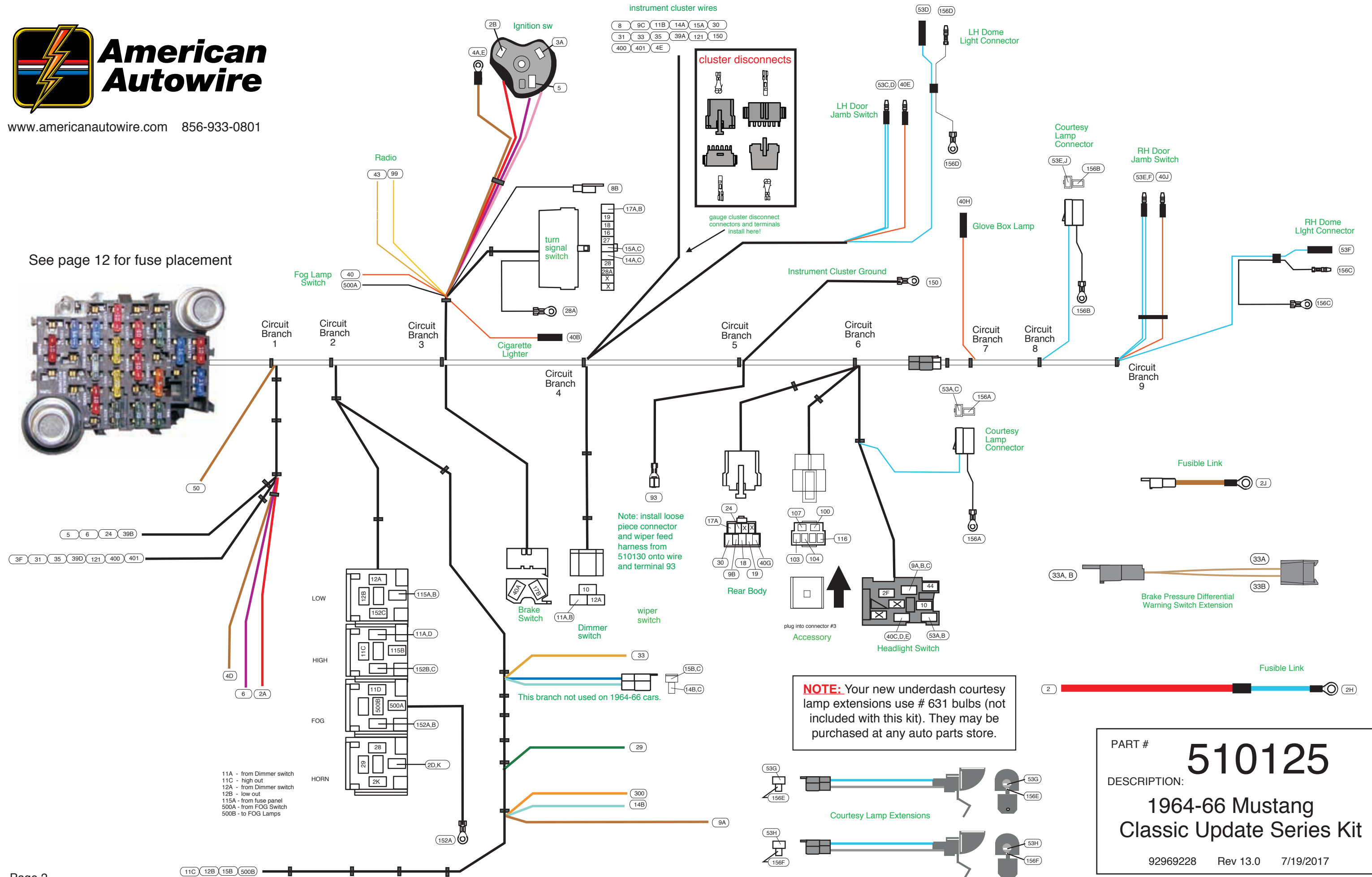
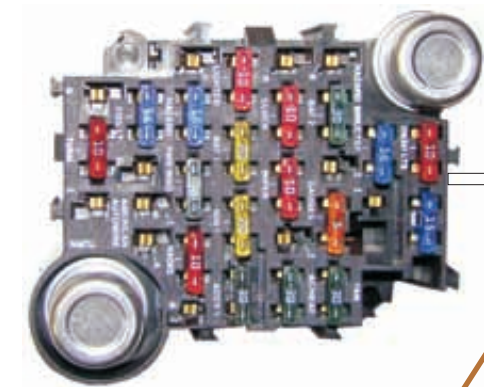


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PART # **510125**  
DESCRIPTION:  
**1964-66 Mustang  
Classic Update Series Kit**  
92969228 Rev 13.0 7/19/2017

See page 12 for fuse placement



PART # **510125**

DESCRIPTION:  
**1964-66 Mustang Classic Update Series Kit**

92969228 Rev 13.0 7/19/2017

The Main Fuse Panel harness is designed to be mounted under the dash at the firewall in an area close to the steering column. The enclosed representation of the main dash harness shows each circuit branch and identifies each connection by its color and function. Follow this drawing and detail drawings on pages 10 and 11 for the individual circuit connections.

**Circuit Branch 1 - Engine and Alt. connections**

See pages 12 and 13, "Figures B, C, and D" for typical connections. Loose piece terminals and connectors are located in kit # 510133.

| Wire # | Wire color | Printing              |
|--------|------------|-----------------------|
| 50     | Brown      | Heater/AC feed        |
| 6      | Purple     | Starter Solenoid-S    |
| 2      | Red        | 12 V Battery          |
| 2H     | Light Blue | Fusible Link          |
| 2A     | Red        | 12 V Battery          |
| 2J     | Brown      | Fusible Link          |
| 5      | Purple     | Neutral Safety Switch |
| 24     | Lt. Green  | Backup Lt Sw-Lights   |
| 39B    | Pink       | 12 V Ignition         |
| 4D     | Brown      | Alternator Ign        |
| 3F     | Pink       | Ignition Feed - coil  |
| 31     | Dark Blue  | Oil Pressure Sender   |
| 35     | Dark Green | Water Temp Sender     |
| 39D    | Tan        | Electric Choke        |
| 121    | White      | Coil - Tach           |
| 400    | Yellow     | VSS Ground            |
| 401    | Purple     | VSS Signal            |

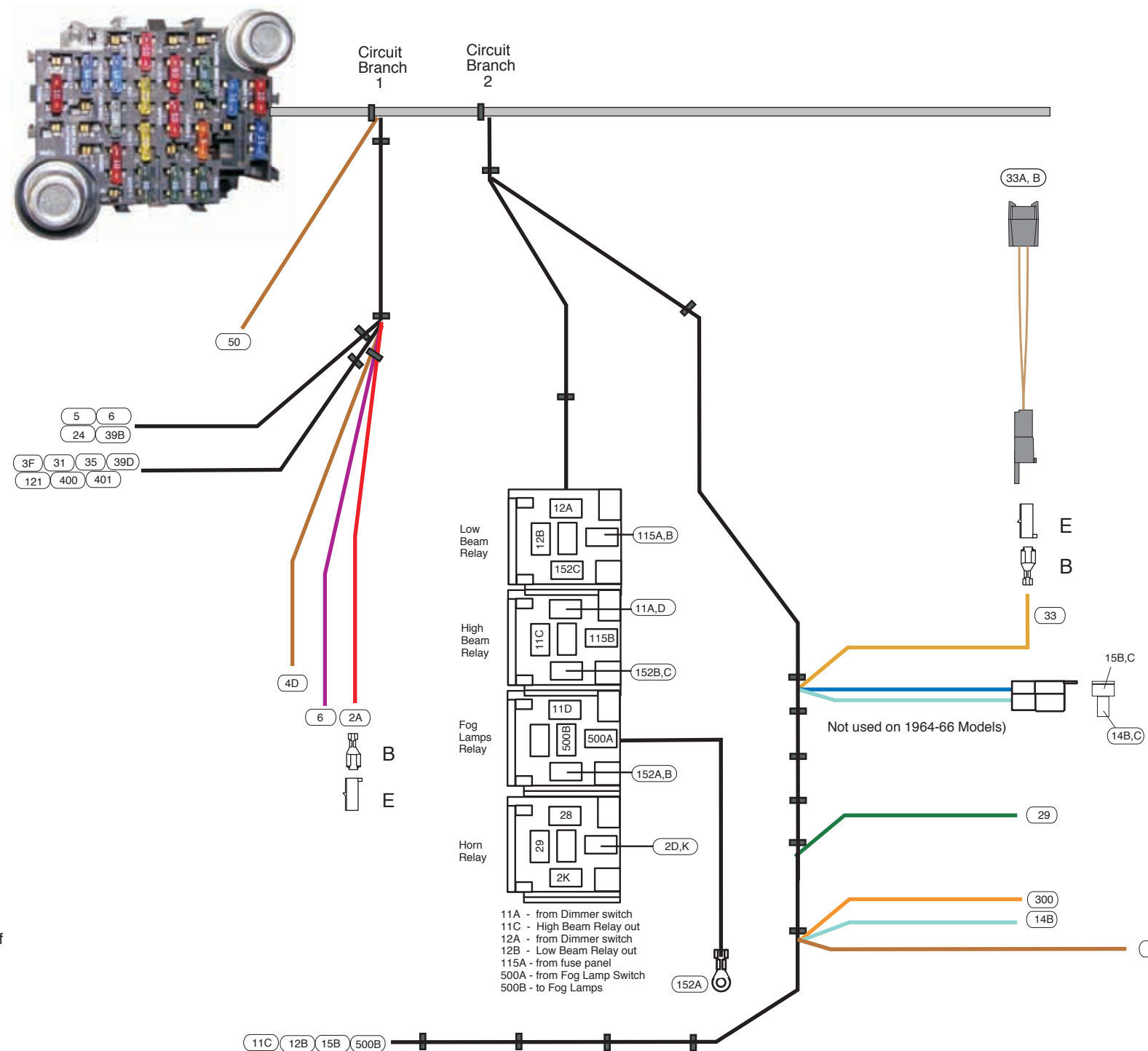
**Procedure**  
 This is the fused Ignition power lead for the heater or AC control panel. Connect according to the instructions supplied with your aftermarket Heater / AC unit. This can also be used as the 12 volt feed wire to the stock heater switch or blower motor depending on whether the car has a 2 or 3 speed motor. See page 13, figures E and F. Connect the end that comes out with the 5, 24, and 39B wires to 1 terminal on the neutral safety switch. Connect the end that comes out with the heavy red power wire to the "S" terminal on your starter solenoid. (See Figure B) Route this wire to your starter solenoid and connect the ring terminal end with the blue fusible link to the battery terminal on the starter solenoid. Route the other end to the alternator battery stud, install sleeve "C" followed by terminal "D" and attach this completed assembly to the battery terminal of the alternator. (See Figure B)  
 See the connection instructions under wire 2.  
 Route this wire to your starter solenoid. Cut to length, install terminal "B", plug into connector "E" as shown on this page. As shown on sheet 12, Figure B, plug connector "E" into the connector on the loose piece fusible link wire 2J, then attach the ring terminal on this assembly to the battery terminal on your starter solenoid. (Parts in 510047 kit)  
 See the connection instructions under wire 2A.  
 Connect to the opposite terminal from wire 6 above to a terminal on the neutral safety switch. (See figure C)  
 Connect to the backup light terminal on the neutral safety / back up switch. (See figure C)  
 Connect to the backup light power terminal on the neutral safety / back up switch. (See figure C)  
 This wire is the exciter wire for your alternator / voltage regulator. If you are using a one wire alternator, this wire will not be used and should be capped off as it is "hot" in the ignition "on" position. If you are using an alternator that requires an internal or external voltage regulator, this exciter wire must be connected to the "switched or 12v ignition" terminal on your regulator or alternator according to the manufacturer's specifications for the type of alternator / regulator that is being used. (AAW recommends a GEN 3 Internally Regulated or 1 wire unit)  
 This is your 12 volt switched power source for the distributor. This can be connected directly to the "bat" terminal on a typical HEI distributor, to a ballast resistor as in a points type distributor, or be used as the ignition power source for an aftermarket ignition module such as an MSD or "Duraspark" module. See the installation instructions for the type of distributor you are using for specific connection requirements (See page 13 for some examples).  
 Connect to the oil pressure sender.  
 Connect to the temperature sender.  
 On carbureted cars, connect to the electric choke terminal.  
 This can be connected directly to the tach terminal on a typical HEI distributor, to the negative side of the coil, or a tach connection in an aftermarket ignition module such as an MSD module. See the installation instructions for the type of ignition system you are using for specific connection requirements.  
 Connect to the Vehicle Speed Sensor ground lead (see page 4 for typical connection).  
 Connect to the Vehicle Speed Sensor signal lead (see page 4 for typical connection).

**Circuit Branch 2- Front Lighting connections**

See page 12, "Figure A" for typical connections. Loose piece terminals and connectors are located in kit 510133.

| Wire #                             | Wire color  | Printing           |
|------------------------------------|-------------|--------------------|
|                                    |             | Relay Pack         |
| 152A                               | Black       | Ground             |
| Brake Pressure Differential Switch |             |                    |
| 33                                 | Tan         | Brake Switch       |
| 14B,C                              | Light Blue  | Left Front Turn    |
| 15B,C                              | Dark Blue   | Right Front Turn   |
| 29                                 | Dark Green  | Horn               |
| 14B                                | Light Blue  | Left Front Turn    |
| 15B                                | Dark Blue   | Right Front Turn   |
| 300                                | Orange      | Electric Fan       |
| 9A                                 | Brown       | Park Lights        |
| 11C                                | Light Green | Headlight-Hi Beam  |
| 12B                                | Tan         | Headlight-Low Beam |
| 500B                               | Black       | Fog Lamps          |

**Procedure**  
 The 4 gang relay panel is directly wired and requires no internal wiring. The relays control the headlight low beams, headlight high beams, fog lamps, and the horn.  
 This is the relay pack ground. Connect to a good chassis ground.  
 (NOTE:) We have provided you with the connection to the original Ford brake warning switch in the form of a wire extension assembly (wires 33A, B on page 2 of this instruction sheet). You will plug this extension onto wire 33, below.  
 Route this wire to the brake warning switch area near the master cylinder, cut to length, install terminal B, plug into connector E as shown on page 12, figure A, then plug this wire into wire extension assembly 33A, B (from page 2 of this instruction sheet) to complete your brake warning circuit.  
 These are the connections for the hood mounted directional lights. (Not used on 1964-66 models)  
 Connect to the horn power terminal. NOTE: If your horn has a separate ground terminal, you must supply the wire for this ground terminal as it is not included in the kit.  
 Connect to the left front directional lamp socket. If you are using a single front directional light with an 1157 or dual filament bulb, this wire would be connected to the high intensity filament of the LH front running light.  
 Connect to the right front directional lamp socket. If you are using a single front directional light with an 1157 or dual filament bulb, this wire would be connected to the high intensity filament of the RH front running light.  
 This is the 12 volt ignition feed to be connected to the trigger wire on your electric fan relay.  
 Connect to both the front park / running light sockets. If you are using a single front directional light with an 1157 or dual filament bulb, this wire would be connected to the low intensity filament of each of the front running lights. An in-line splice of this wire or a double up of this wire at the left front parking lamp will be necessary to accommodate the wiring of both of the front park / running lights  
 Select the light green Headlight Hi Beam wire (11C) and tan Headlight Low Beam wire (12B). Route and connect these wires to the headlights. An in-line splice of these wires or a double up of these wires at the left front headlight will be necessary to accommodate wiring of both of the headlights. Using the supplied terminals and connectors, connect these wires along with the headlight ground wires to the headlight connectors according to the orientation in the diagram on page 12, Figure A.  
 Connect this wire to your fog lamp power wires. An in-line splice or double up of the wire at the left fog lamp before routing to the right fog lamp will be necessary. If the fog lamps have a separate ground wire, you must supply those wires as they are not included in the kit.



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|              |  |
|--------------|--|
| PART #       | <b>510125</b>                                    |
| DESCRIPTION: | <b>1964-66 Mustang Classic Update Series Kit</b> |
| 92969228     | Rev 13.0 7/19/2017                               |



**Circuit Branch 3 - Under Dash connections**

| Wire # | Wire color | Printing          | Procedure  |
|--------|------------|-------------------|--|
| 40     | Orange     | 12V Battery Fused | Connect to "Feed In" on your fog lamp switch (if so equipped).   |
| 500A   | Black      | Fog Lamps         | Connect to "Feed out" on your fog lamp switch (if so equipped).  |
| 43     | Tan        | Radio             | Ignition power lead to radio.  |
| 99     | Yellow     | Radio Bat         | Battery power lead to radio.   |
| 28A    | Black      | Horn Relay Ground | Used for original Ford steering column only. See Table "A", page 8 - Stock turn signal connection instruction table. |
| 40B    | Orange     | 12V battery Fused | Connect to cigarette lighter.  |
| 8B     | Gray       | Dash Lights       | Spare dash lamp feed for any accessory dash lamps needed.  |

Brake Switch connector

|     |        |                   |                          |
|-----|--------|-------------------|--------------------------|
| 40A | Orange | 12V Battery Fused | Connect to Brake Switch. |
| 17B | White  | Brake Switch      | Connect to Brake Switch. |

Ignition Switch connector

|    |        |                       |   |
|----|--------|-----------------------|---|
| 3A | Pink   | Ignition Feed         | Connect to the provided 1967 style ignition switch. |
| 5  | Purple | Neutral Safety Switch |   |
| 2B | Red    | 12V Battery           |   |

4A,E Brown Ignition Sw Accy Install on the ignition switch stud after the main switch connector has been plugged in.

Turn Signal Switch connector  
 If you are using a stock Ford turn signal switch, refer to Page 14, Diagram 'A' and Table "A", AAW Turn Signal Switch wires to stock 1964-66 Mustang turn signal switch. **Note: If you also have a factory 4 way hazard switch mounted in your glovebox, you may purchase optional AAW kit # 510175 to complete your turn signal and hazard connections.** This kit is designed to function with a GM style turn signal switch. Our connector mates to a 3 7/8 inch long plug used on 1969-1974 GM, IDIDIT, and many other aftermarket steering columns. Starting from 1975 on up, the GM switch changed the mating connector to use a 4 1/4 inch connector. That connector is from the same family and uses the same terminals. By using the supplied mating connector (L) and terminals (M) located in the loose piece kit bag of this dash harness (510047), it is easy to adapt any steering column to the kit. The function of each wire within the cavities is as follows:

| Wire # | Wire color | Printing          | Procedure  |
|--------|------------|-------------------|--|
| 28     | Black      | Horn Relay Ground | Horn button ground to the horn relay trigger   |
| 14A,C  | Light Blue | Left Front Turn   | Feeds the left front turn lamp bulb high filament, the left hood mounted turn signal bulb, and the left turn dash indicator lamp.    |
| 15A,C  | Dark Blue  | Right Front Turn  | Feeds the right front turn lamp bulb high filament, the right hood mounted turn signal bulb, and the right turn dash indicator lamp. |
| 27     | Brown      | Turn Sw - Hazard  | 4 way hazard power feed wire from the Hazard flasher "L" terminal.   |
| 16     | Purple     | Turn Switch Feed  | Turn signal power feed wire from the Turn Signal flasher "L" terminal.   |
| 18     | Yellow     | Left Rear Turn    | Feeds the left rear turn and brake lamp bulb high filament.  |
| 19     | Dark Green | Right Rear Turn   | Feeds the right rear turn and brake lamp bulb high filament.   |
| 17A    | White      | Brake Switch      | Power feed wire from the output side of the brake switch.  |

**Circuit Branch 4 - Under Dash connections**

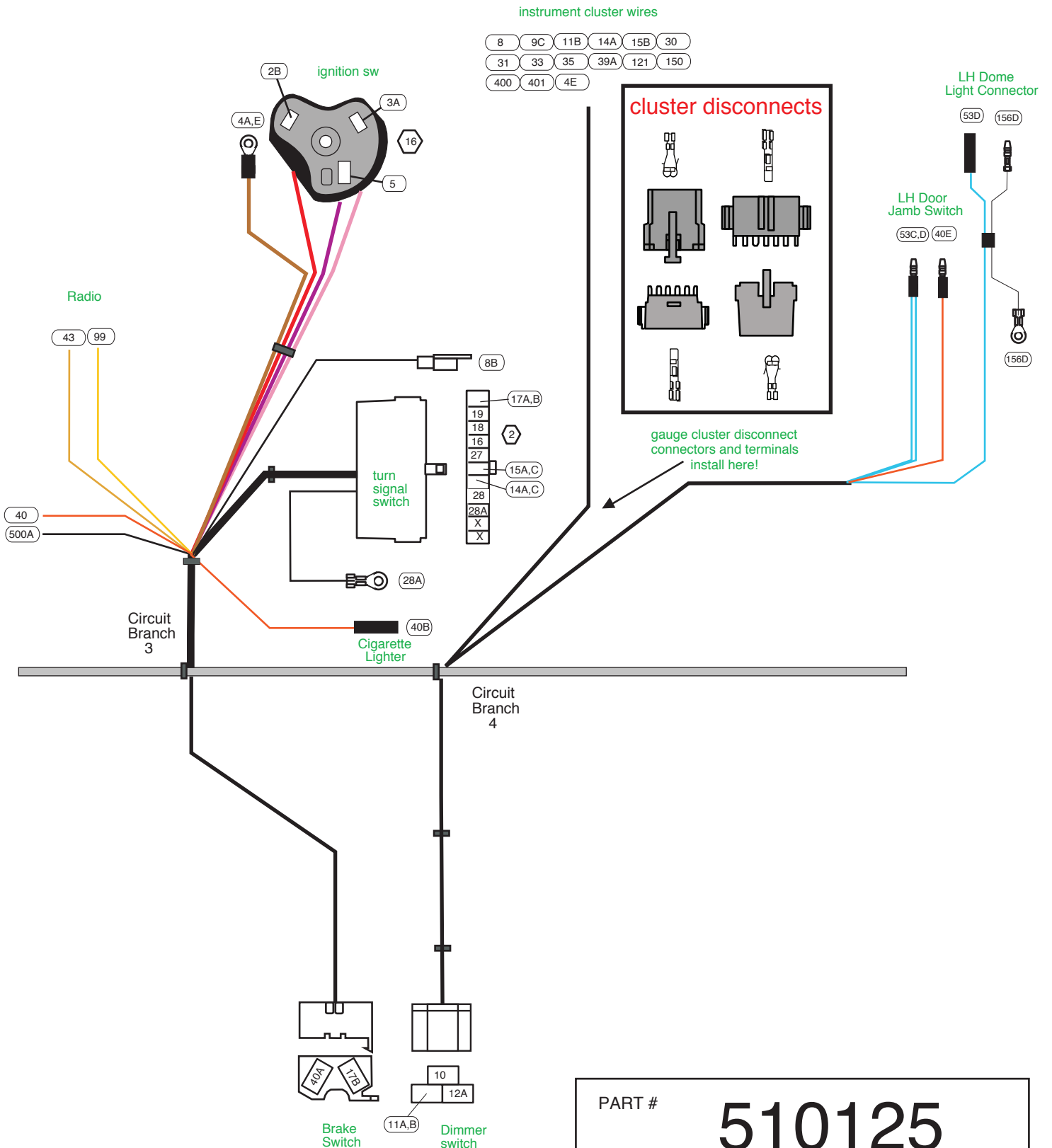
| Wire # | Wire color  | Printing           | Procedure                 |
|--------|-------------|--------------------|---------------------------|
| 10     | Yellow      | Dimmer Switch Feed | Connect to Dimmer Switch. |
| 11A,B  | Light Green | Headlight Hi Beam  | Connect to Dimmer Switch. |
| 12A    | Tan         | Headlight Low Beam | Connect to Dimmer Switch. |

Left Hand Dome Lamp Feed Wires.

|       |            |                   |   |
|-------|------------|-------------------|---|
| 53C,D | Light Blue | 12V Ctsy Sw       | Connect to Left Hand door jamb switch.  |
| 40E   | Orange     | 12V Battery Fused | Connect to Left Hand door jamb switch.  |
| 53D   | Light Blue | 12V Ctsy Sw       | Connect to Left rear dome lamp.   |
| 156D  | White      | Ctsy Ground       | Connect the bullet terminal end to the left rear dome lamp. The ring terminal end must be connected to a good chassis ground. |

Instrument Cluster wires.  
 See Pages 9, 10, or 11 - Table 'B' for stock 1964-66 Mustang instrument cluster wiring colors and functions. **Cluster disconnects** have been provided and can be found in the 510047 loose piece bag. We have provided an ample length of wire in order for you to cut and make your own gauge cluster harness. Page 5 identifies a typical instrument cluster wiring scheme. As this kit is designed to function with many different gauge manufacturer's products, it may be necessary to follow the connection requirements specified by the manufacturer of the gauges being used. **As with all AAW kits, the use of a factory ammeter is neither supported, nor is it encouraged.** The function of each AAW wire is as follows:

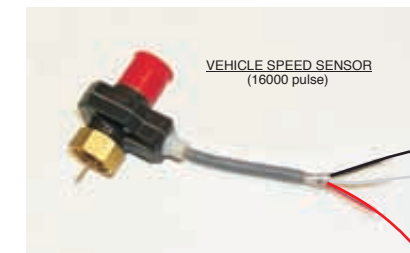
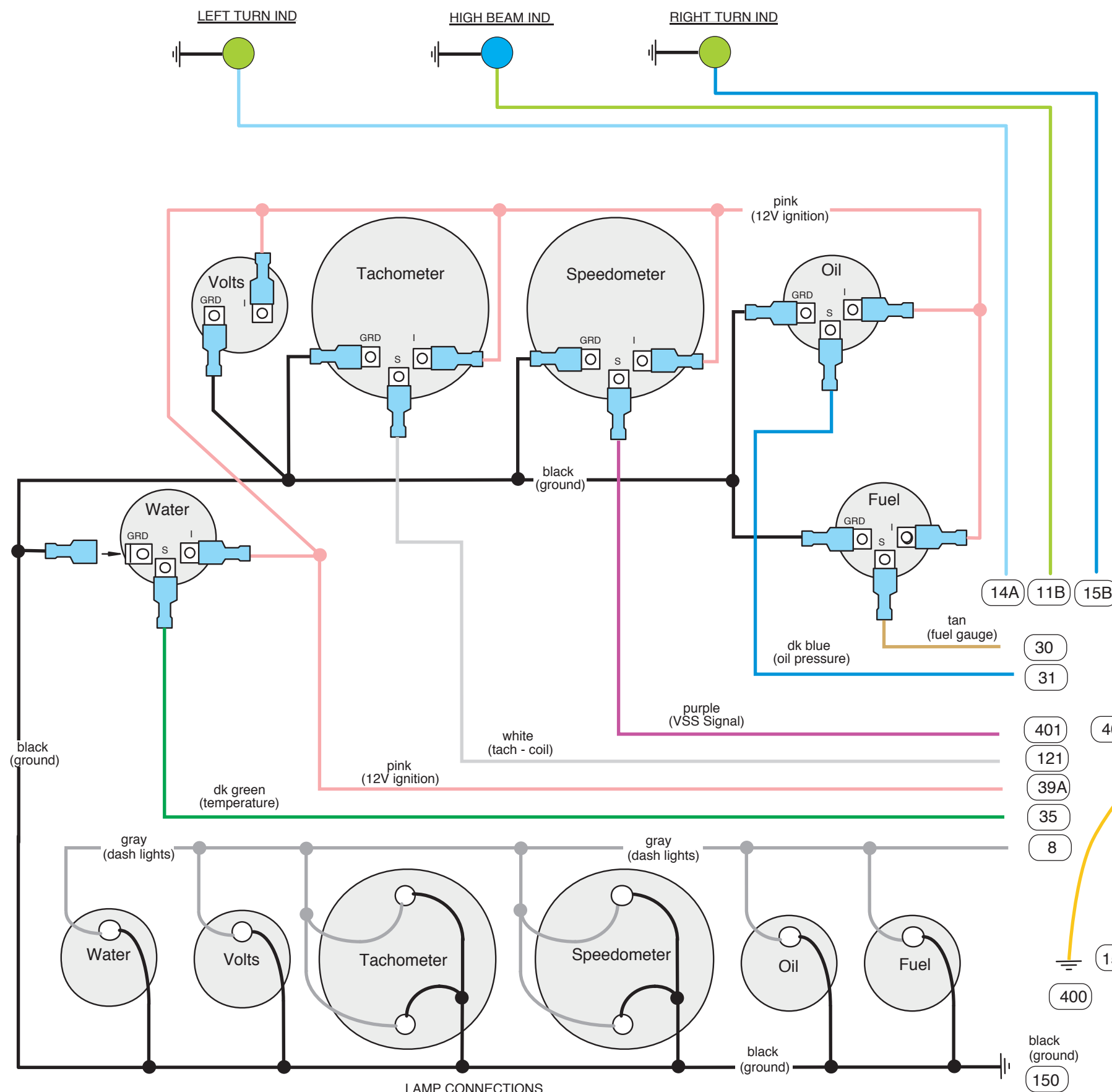
|     |             |                     |  |
|-----|-------------|---------------------|--|
| 8   | Gray        | Dash Lights         | Connect to Gauge Lights.   |
| 9C  | Brown       | Park Lights         | Connect to any instrument cluster requiring a signal to dim a digital display. If using regular analog gauges, this wire will not be required.   |
| 11B | Light Green | Headlight Low Beam  | Connect to the high beam indicator light.  |
| 14A | Light Blue  | Left Dash Ind       | Connect to the left turn signal indicator light.   |
| 15B | Dark Blue   | Right Dash Ind      | Connect to the right turn signal indicator light.  |
| 30  | Tan         | Gas Gauge           | Connect to the signal or sender terminal of the fuel gauge.  |
| 31  | Dark Blue   | Oil Pressure Sender | Connect to the signal or sender terminal of the oil pressure gauge.  |
| 33  | Tan         | Brake Light         | Connect to the ground side of the brake warning indicator light.   |
| 35  | Dark Green  | Water Temp Sender   | Connect to the signal or sender terminal of the water temperature gauge.   |
| 39A | Pink        | 12V Ignition        | Connect to the Ignition or power terminals of each gauge. An in line splice will be necessary to feed each gauge in the instrument cluster.  |
| 121 | White       | Coil-Tach           | Connect to the signal or sender terminal of the tachometer.  |
| 150 | Black       | Ground              | Connect to the Ground terminals of each gauge and dash lamp. An in line splice will be necessary to feed each ground requirement in the instrument cluster.  |
| 400 | Yellow      | VSS Ground          | connect to a good chassis ground or the VSS ground terminal on the speedometer. Mechanical speedometers do not require this connection.  |
| 401 | Purple      | VSS Signal          | Connect to the VSS signal or sender terminal of the speedometer. Mechanical speedometers do not require this connection.   |
| 4E  | Brown       |                     | This wire will only be used when installing a stock instrument cluster. Connect to the Black with light green stripe wire when using a stock 1967 or 1968 Mustang instrument cluster. This is the accessory feed for the voltage reducer for certain stock gauges. |



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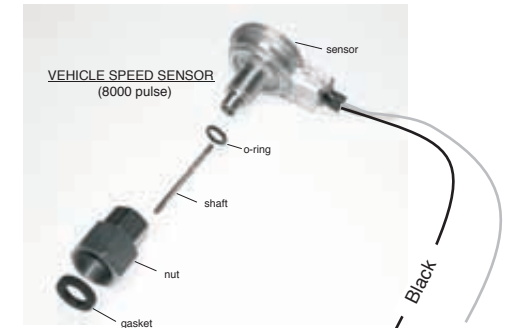
PART # **510125**  
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 Classic Update Series Kit**  
 92969228 Rev 13.0 7/19/2017

TYPICAL BLADE TYPE GAUGE CONNECTIONS



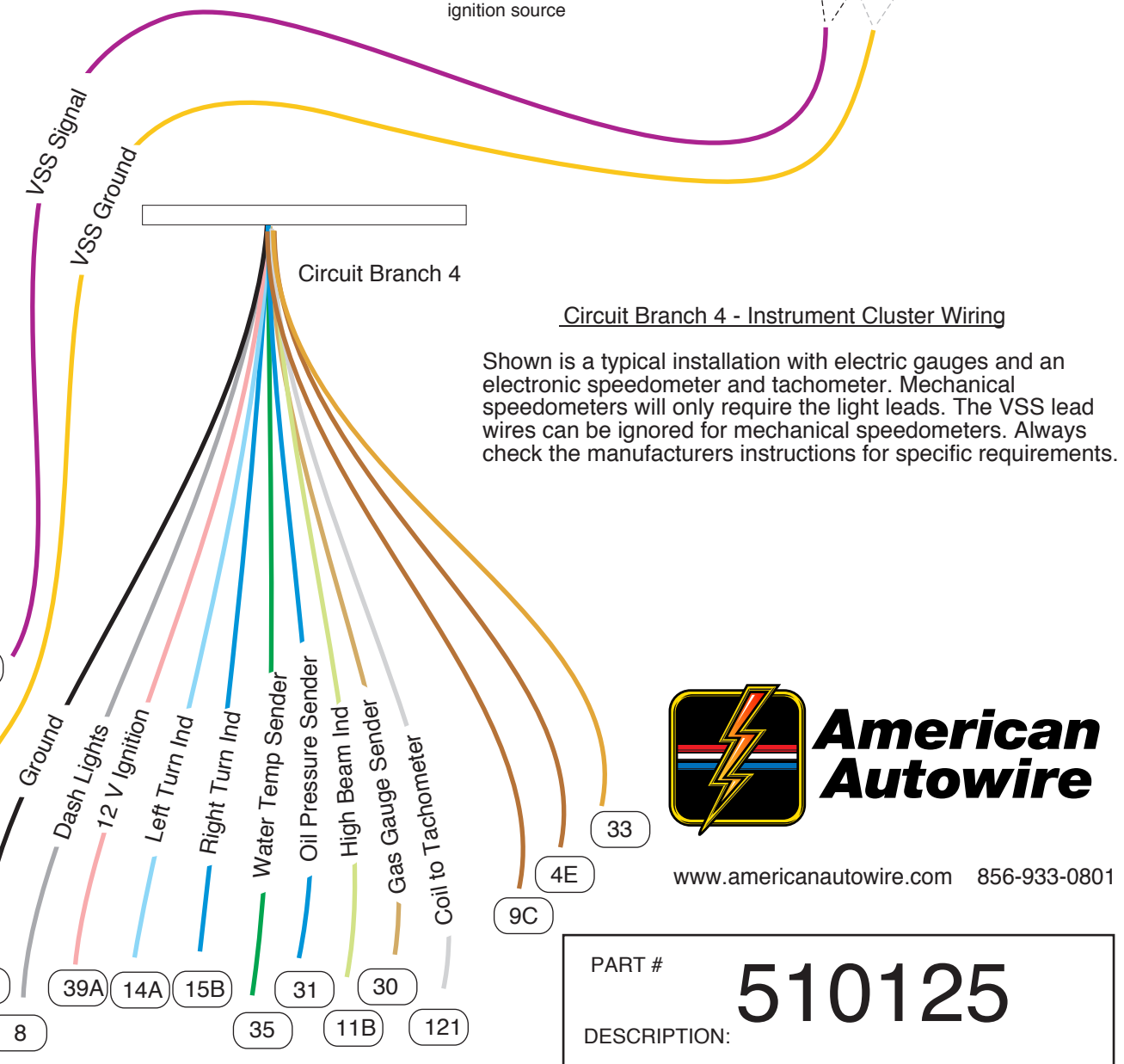
Typical 3 wire Autometer 5291 VSS connection

Note: This VSS requires a lead wire from the red wire to a 12 volt ignition source. This wire is not included in the kit.



Typical 2 wire VSS connection

connect to 12 volt ignition source



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**Circuit Branch 5 - Under Dash connections**

| Wire #                    | Wire color | Printing   | Procedure   |
|---------------------------|------------|------------|---|
| Wiper Switch connections. |            |            |   |
| 93                        | White      | Wiper Feed | Power input to wiper and washer switch connection. (This wire will attach to harness number 510130 using a supplied loose piece connector and will complete the feed to your stock wiper washer harness. There were several different configurations used on the 1964-1966 Mustang models including single and dual speed, and with or without washer. The connection from kit 510130 allows for any combination of these connections.) |
| 150                       | Black      | Ground     | Instrument Cluster ground. Connect to a good chassis ground.  |

**Circuit Branch 6 - Under Dash connections**

| Wire #  | Wire color | Printing          | Procedure   |
|---|------------|-------------------|---|
| Rear Body Wire connections.<br>This plugs into the Rear Body Kit 510129. See that sub-kit for specific installation instructions and circuit functions. |            |                   |   |
| Accessory Feed Wire connections.  |            |                   |   |
| 100   | Tan        | Accessory Fused   | Accessory Fused power source.   |
| 103   | Tan        | Fuel pump         | Connect to the power input terminal of a fuel pump relay.                                       |
| 104   | Red        | Power Locks       | Connect to the power input of the power locks switch or any other battery powered accessory.    |
| 107   | Pink       | Ignition Fused    | Ignition Fused power source.  |
| 116   | Pink       | Power Windows     | Connect to the power input of the power windows switch or any other ignition powered accessory. |
| Headlight switch connector.<br>The function of each wire is as follows:   |            |                   |   |
| 2F  | Red        | 12V Battery       | 12 volt battery power to the switch.  |
| 9A,B,C  | Brown      | Park Lights       | Power lead wires to the running light circuits.   |
| 44  | Dark Green |                   | Power lead wire to the dash lights.   |
| 10  | Yellow     | Dimmer Sw feed    | Headlight power output to the Dimmer Switch.  |
| 40C,D,E   | Orange     | 12V Battery Fused | Courtesy Light battery power  |
| 53A,B   | Lt Blue    | 12V Ctsy Sw       | Courtesy Light switched battery power   |

| Courtesy light connector.<br>Plug in your Left Hand under dash courtesy lamp assembly from page 1 here. The function of each wire is as follows: |         |              |                       |
|--|---------|--------------|-----------------------|
| 53A,C  | Lt Blue | 12V Ctsy Sw  | Courtesy Light power. |
| 156A   | White   | Crtsy ground | Courtesy Light ground |

**Circuit Branch 7- Under Dash connections**

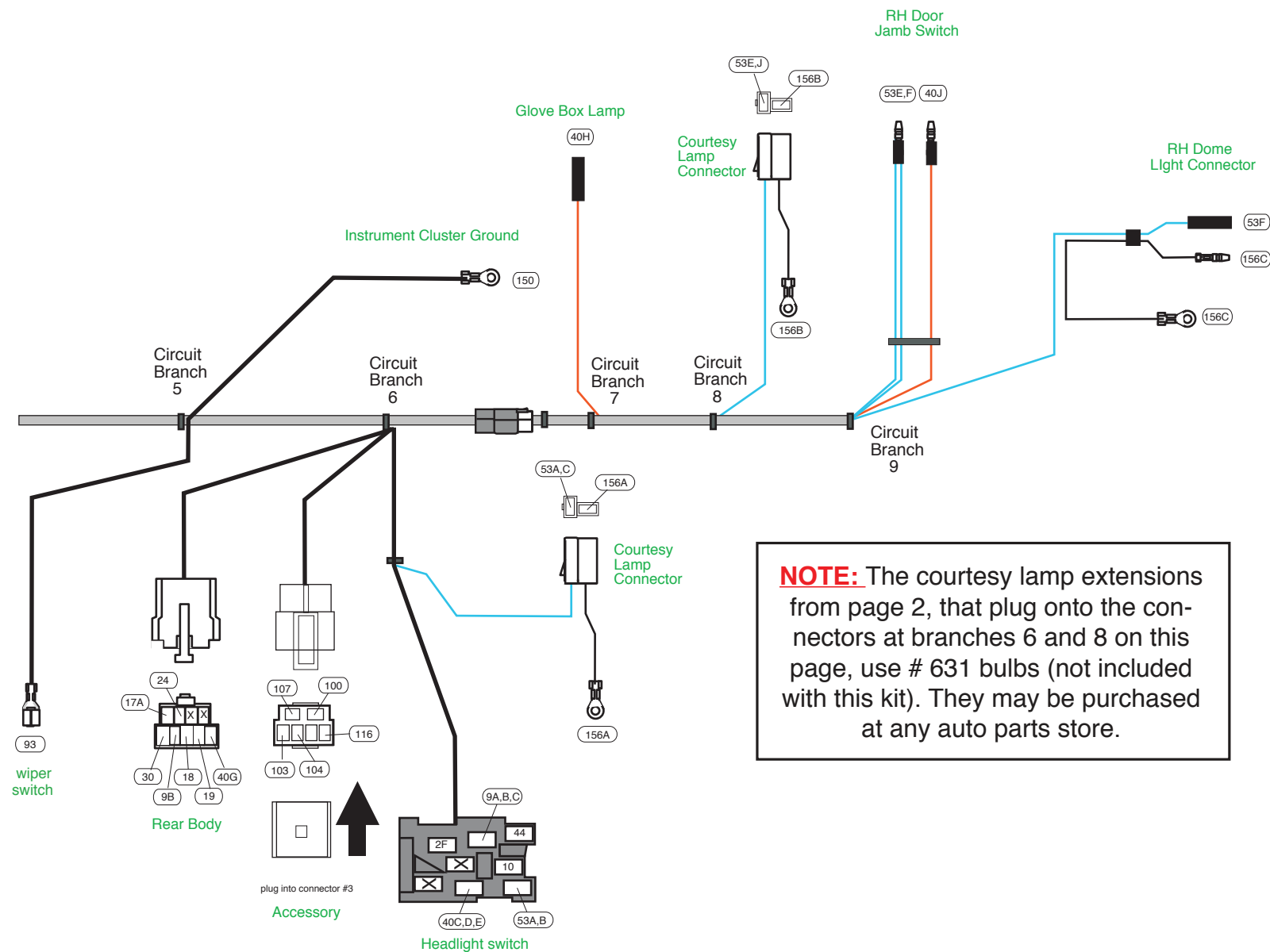
| Wire # | Wire color | Printing          | Procedure                               |
|--------|------------|-------------------|---|
| 40H    | Orange     | 12V Battery Fused | Connect to the glove box lamp assembly. |

**Circuit Branch 8- Under Dash connections**

| Wire #  | Wire color | Printing     | Procedure             |
|---|------------|--------------|-----------------------|
| Courtesy light connector.<br>Plug in your Right Hand under dash courtesy lamp assembly from page 1 here. The function of each wire is as follows: |            |              |                       |
| 53E,J   | Lt Blue    | 12V Ctsy Sw  | Courtesy Light power. |
| 156B  | White      | Crtsy ground | Courtesy Light ground |

**Circuit Branch 9- Under Dash connections**

| Wire #                           | Wire color | Printing          | Procedure  |
|----------------------------------|------------|-------------------|--|
| Right Hand Dome Lamp Feed Wires. |            |                   |  |
| 53E,F                            | Light Blue | 12V Ctsy Sw       | Connect to the Right Hand door jamb switch.  |
| 40J                              | Orange     | 12V Battery Fused | Connect to the Right Hand door jamb switch.  |
| 53F                              | Light Blue | 12V Ctsy Sw       | Connect to the Right rear dome lamp.   |
| 156C                             | White      | Ctsy Ground       | Connect the bullet terminal end to the right rear dome lamp. The ring terminal end must be connected to a good chassis ground. |



**NOTE:** The courtesy lamp extensions from page 2, that plug onto the connectors at branches 6 and 8 on this page, use # 631 bulbs (not included with this kit). They may be purchased at any auto parts store.



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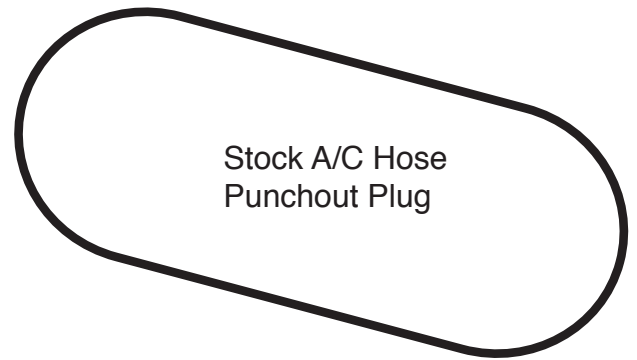
Stock Firewall Pad  
Mounting Hole

Stock Engine  
Harness Hole

Factory Dimple

### As Viewed From Engine Bay

New Fusebox  
Mounting Hole  
"A"



Factory Dimple

Stock Firewall Pad  
Mounting Hole

Factory Dimple

New Fusebox  
Mounting Hole  
"B"

Throttle Arm Mounting  
Bracket Holes / Bolts



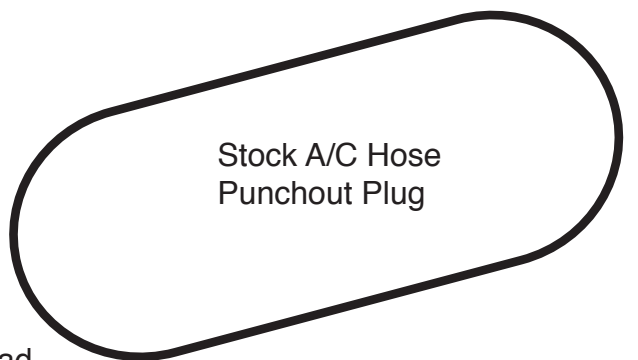
Stock Engine  
Harness Hole

Stock Firewall Pad  
Mounting Hole

Factory Dimple

### As Viewed From Under the Dash

New Fusebox  
Mounting Hole  
"A"



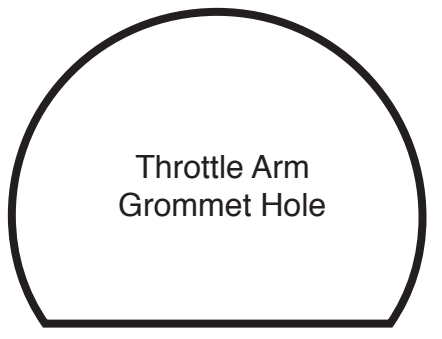
Factory Dimple

Stock Firewall Pad  
Mounting Hole

Factory Dimple

New Fusebox  
Mounting Hole  
"B"

Throttle Arm Mounting  
Bracket Holes / Bolts

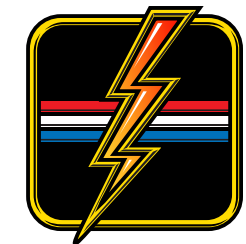


## New Mounting Hole Template For Fusebox

Two new 1/8" holes "A" and "B" will need to be drilled in the firewall to mount your new fusebox assembly.

You may choose to position the AAW template from either the engine bay side or the under dash side of the firewall, whichever is easier for you.

Locate this template to the firewall using the existing A/C hose punchout plug, firewall pad mounting holes, throttle arm grommet hole, and throttle arm bracket mounting holes to set the proper location in which to drill new holes "A" and "B". Once the holes have been drilled, use the supplied screws to attach the new AAW fusebox assembly to the firewall as shown on sheet 7.



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NOTE: Install grommet from 510133 Kit into original rectangular Forward Lamp harness hole prior to passing new AAW harness wires through the firewall. You may want to use some seam sealer or RTV around the wires and grommet to seal this area completely.

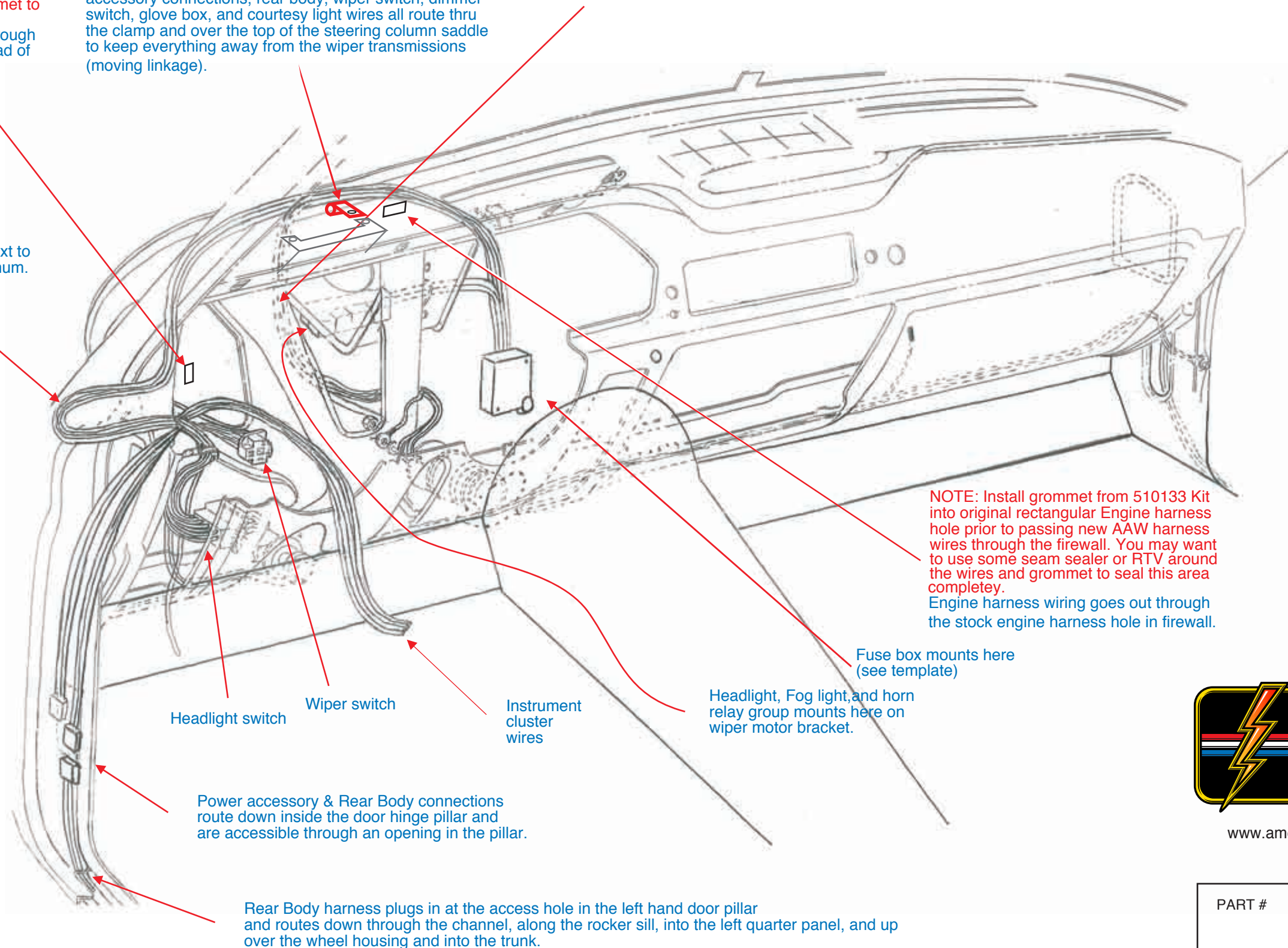
The front light wiring goes out through the stock hole in the firewall ahead of the headlight switch.

NOTE: Using kit 510133, install the enclosed clamp using the supplied hardware onto the ear of the wiper motor mounting bracket as shown on this page.

Heat and AC feed, instrument cluster, headlight switch, accessory connections, rear body, wiper switch, dimmer switch, glove box, and courtesy light wires all route thru the clamp and over the top of the steering column saddle to keep everything away from the wiper transmissions (moving linkage).

Ignition switch, turn signal switch, radio, fog light switch, and cigar lighter wires, etc., all drop down on the right side of the steering column saddle.

Harness routes down the firewall next to saddle and around the fresh air plenum.



NOTE: Install grommet from 510133 Kit into original rectangular Engine harness hole prior to passing new AAW harness wires through the firewall. You may want to use some seam sealer or RTV around the wires and grommet to seal this area completely. Engine harness wiring goes out through the stock engine harness hole in firewall.

Fuse box mounts here (see template)

Headlight, Fog light, and horn relay group mounts here on wiper motor bracket.

Headlight switch

Wiper switch

Instrument cluster wires

Power accessory & Rear Body connections route down inside the door hinge pillar and are accessible through an opening in the pillar.

Rear Body harness plugs in at the access hole in the left hand door pillar and routes down through the channel, along the rocker sill, into the left quarter panel, and up over the wheel housing and into the trunk.



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PART #

**510125**

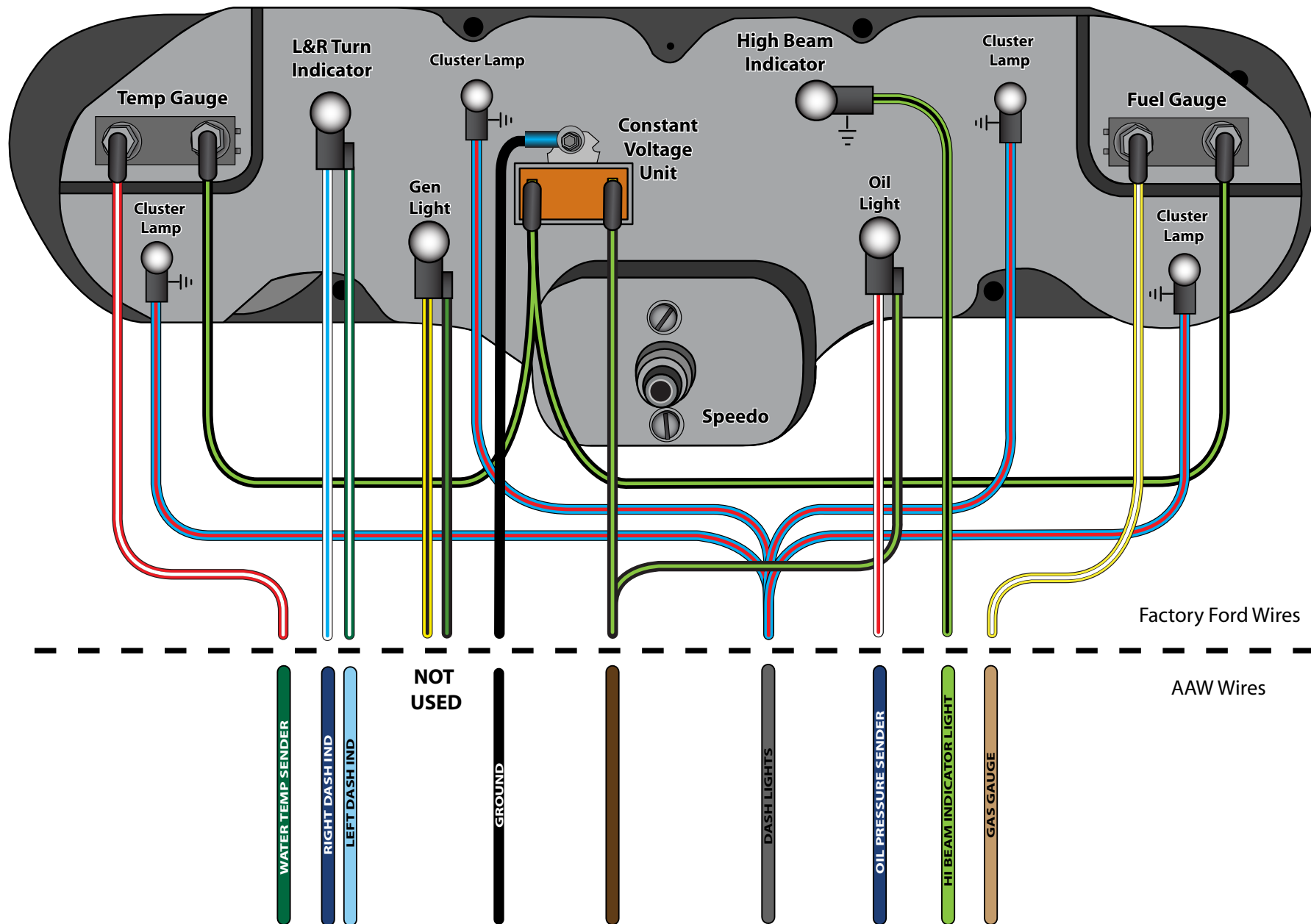
DESCRIPTION:

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## 1964 1/2 Mustang Instrument Cluster



**Table 'B' -  
AAW Instrument Cluster Kit wires to  
stock 1964 - 66 Mustang instrument cluster wires.**

| AAW Wire # | AAW Wire color | AAW Wire Printing   | Ford Wire Color  |
|------------|----------------|---------------------|--|
| 4E         | Brown          |                     | Black with light green stripe<br>This is the accessory feed for the voltage reducer for certain stock gauges.  |
| 8          | Gray           | Dash Lights         | Blue with red stripe.  |
| 9C         | Brown          | Park Lights         | Connect to any instrument cluster requiring a signal to dim a digital display. When using analog gauges, this wire will not be required.   |
| 11B        | Light Green    | Headlight Low Beam  | Green with black stripe.   |
| 14A        | Light Blue     | Left Dash Ind       | Green with white stripe.   |
| 15B        | Dark Blue      | Right Dash Ind      | White with blue stripe.  |
| 30         | Tan            | Gas Gauge           | Yellow with white stripe.  |
| 31         | Dark Blue      | Oil Pressure Sender | White with red stripe.   |
| 33         | Tan            | Brake Light         | Purple with white stripe.  |
| 35         | Dark Green     | Water Temp Sender   | Red with white stripe.   |
| 39A        | Pink           | 12V Ignition        | <b>For use only with after market gauges needing a "key on" full 12 volt feed.</b>   |
| 121        | White          | Coil-Tach           | Sender terminal of the tachometer.   |
| 150        | Black          | Ground              | Connect to the Ground terminals of each gauge and dash lamp.<br>An in line splice is necessary to feed each ground requirement in the instrument cluster.  |
| 400        | Yellow         | VSS Ground          | Connect to a good chassis ground or the VSS ground terminal on an electronic speedometer. Mechanical speedometers do not require this connection.  |
| 401        | Purple         | VSS Signal          | Connect to the VSS pulse signal or sender terminal of the electronic speedometer. Mechanical speedometers do not require this connection.  |
| 99         | Yellow         | Radio Bat           | Light blue with white stripe or light blue with black stripe.<br>This is the 12 volt feed for the dash clock. If you are using a radio with a digital clock, it will be necessary to splice into this wire to create 2 leads. One to the dash clock, and one to the radio. |



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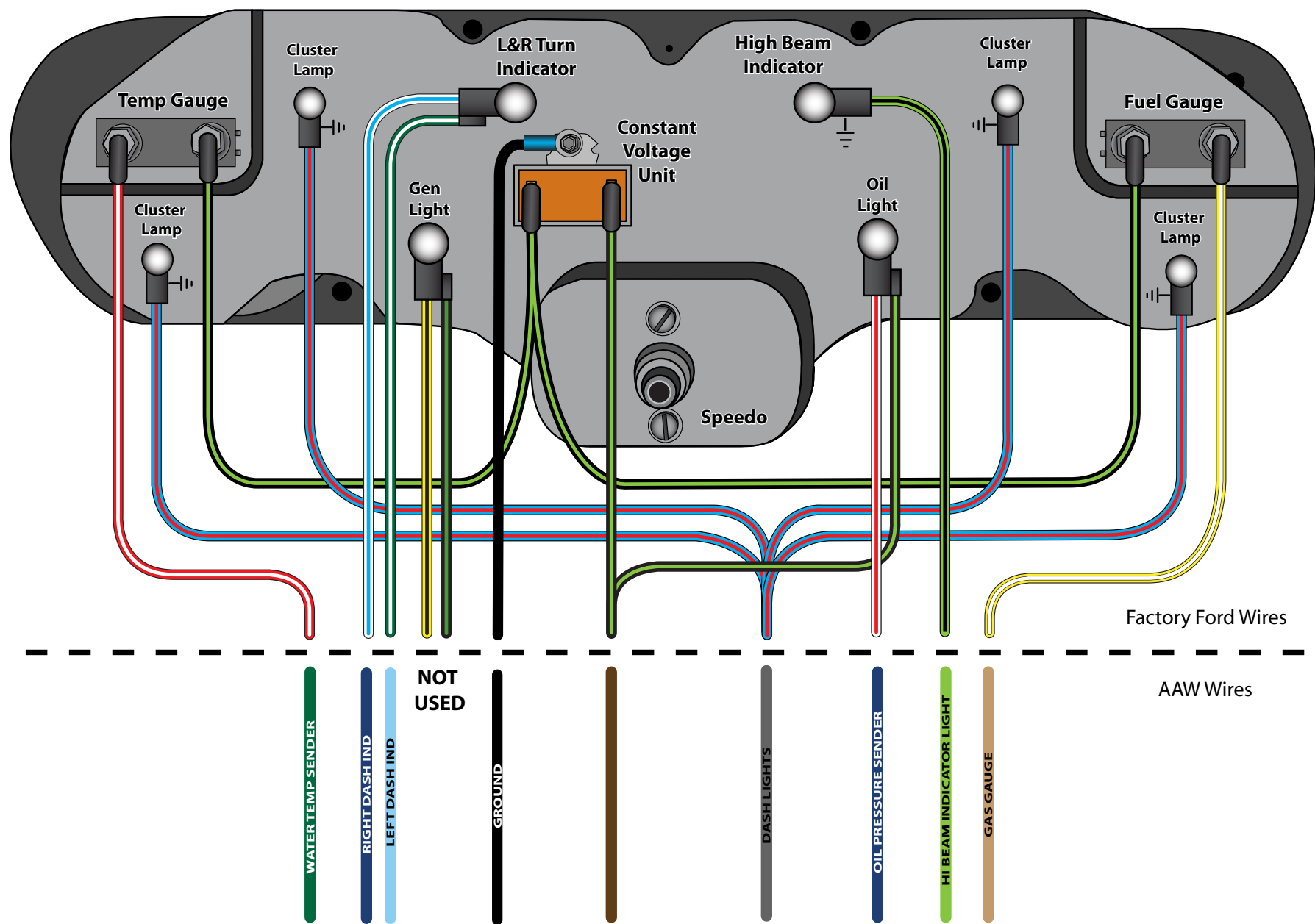
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Route this wire to the brake warning switch area near the master cylinder, cut to length, install terminal B, plug into connector E as shown on page 10, figure A, then plug this wire into wire extension assembly 33A, B (from page 2 of this instruction sheet) to complete your brake warning circuit.

### 1965 Mustang with fuel and temp gauge, oil and gen lamps



**Table 'B' -  
AAW Instrument Cluster Kit wires to  
stock 1964 - 66 Mustang instrument cluster wires.**

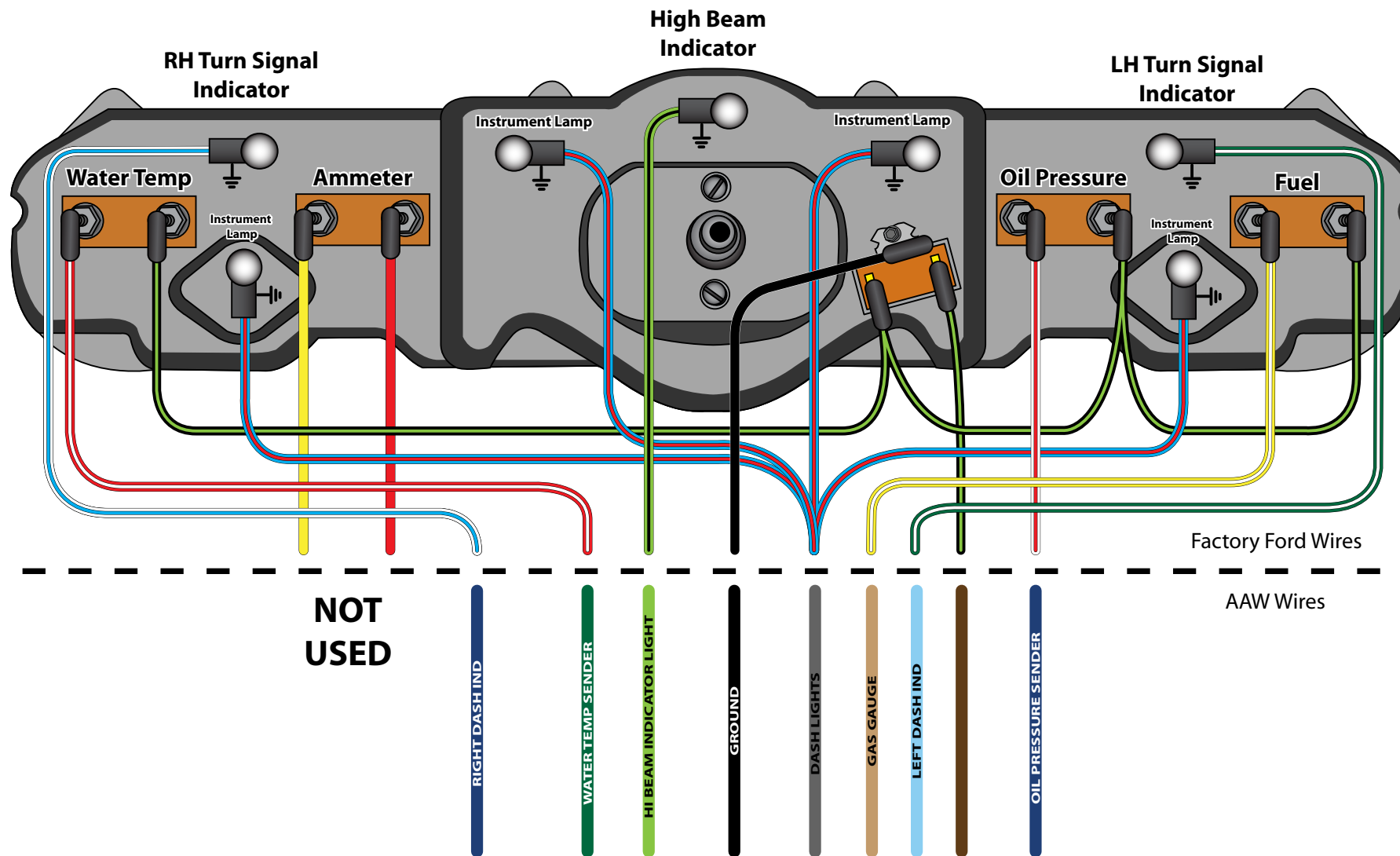
| AAW Wire # | AAW Wire color | AAW Wire Printing   | Ford Wire Color   |
|------------|----------------|---------------------|---|
| 4E         | Brown          |                     | Black with light green stripe<br>This is the accessory feed for the voltage reducer for certain stock gauges.   |
| 8          | Gray           | Dash Lights         | Blue with red stripe.   |
| 9C         | Brown          | Park Lights         | Connect to any instrument cluster requiring a signal to dim a digital display. When using analog gauges, this wire will not be required.  |
| 11B        | Light Green    | Headlight Low Beam  | Green with black stripe.  |
| 14A        | Light Blue     | Left Dash Ind       | Green with white stripe.  |
| 15B        | Dark Blue      | Right Dash Ind      | White with blue stripe.   |
| 30         | Tan            | Gas Gauge           | Yellow with white stripe.   |
| 31         | Dark Blue      | Oil Pressure Sender | White with red stripe.  |
| 33         | Tan            | Brake Light         | Purple with white stripe.   |
| 35         | Dark Green     | Water Temp Sender   | Red with white stripe.  |
| 39A        | Pink           | 12V Ignition        | <b>For use only with after market gauges needing a "key on" full 12 volt feed.</b>  |
| 121        | White          | Coil-Tach           | Sender terminal of the tachometer.  |
| 150        | Black          | Ground              | Connect to the Ground terminals of each gauge and dash lamp. An in line splice is necessary to feed each ground requirement in the instrument cluster.  |
| 400        | Yellow         | VSS Ground          | Connect to a good chassis ground or the VSS ground terminal on an electronic speedometer. Mechanical speedometers do not require this connection.   |
| 401        | Purple         | VSS Signal          | Connect to the VSS pulse signal or sender terminal of the electronic speedometer. Mechanical speedometers do not require this connection.   |
| 99         | Yellow         | Radio Bat           | Light blue with white stripe or light blue with black stripe. This is the 12 volt feed for the dash clock. If you are using a radio with a digital clock, it will be necessary to splice into this wire to create 2 leads. One to the dash clock, and one to the radio. |



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## 1965 Mustang with factory gauges; 1966 Mustang all



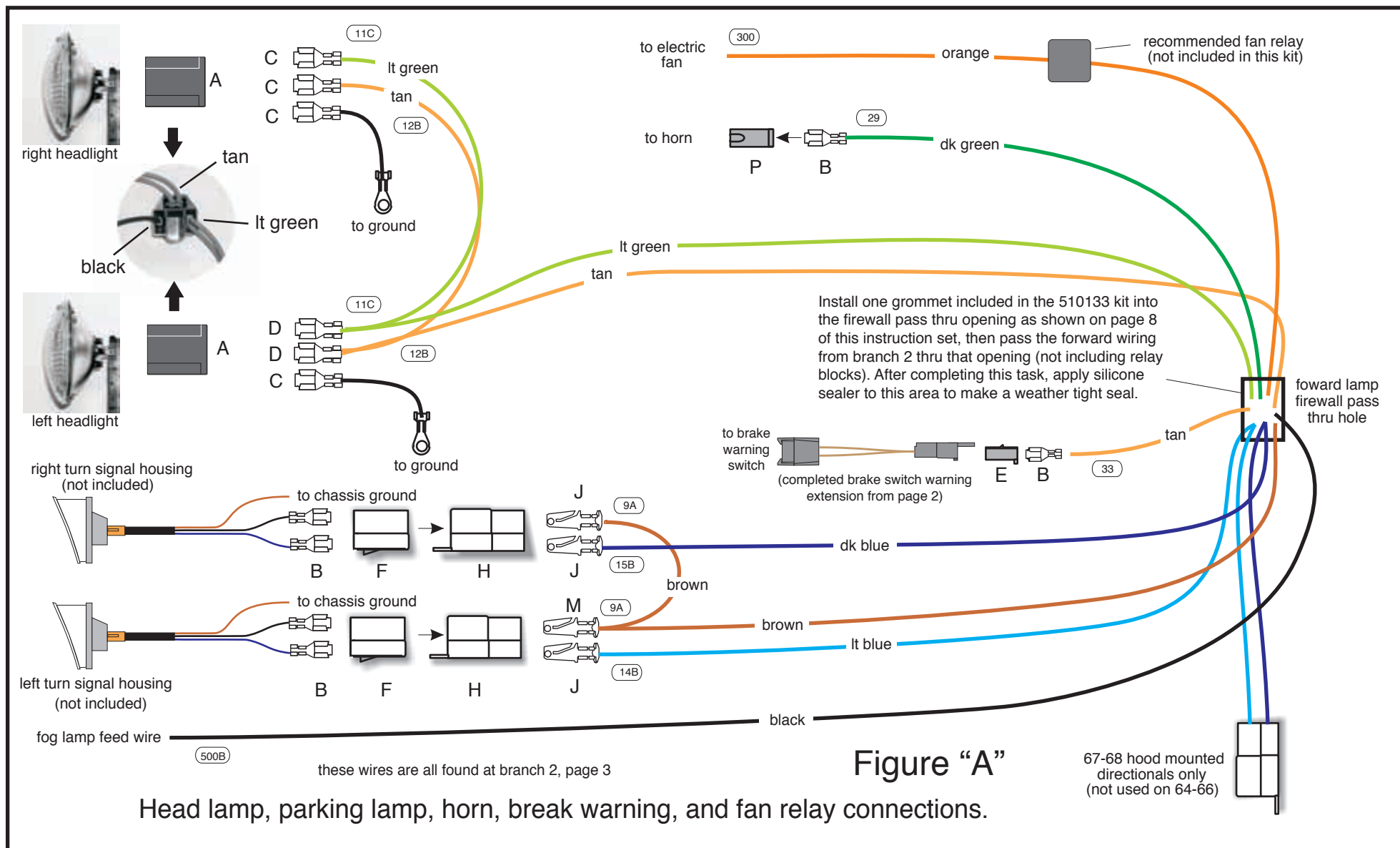
**Table 'B' -  
AAW Instrument Cluster Kit wires to  
stock 1964 - 66 Mustang instrument cluster wires.**

| AAW Wire # | AAW Wire color | AAW Wire Printing   | Ford Wire Color  |
|------------|----------------|---------------------|--|
| 4E         | Brown          |                     | Black with light green stripe<br>This is the accessory feed for the voltage reducer for certain stock gauges.  |
| 8          | Gray           | Dash Lights         | Blue with red stripe.  |
| 9C         | Brown          | Park Lights         | Connect to any instrument cluster requiring a signal to dim a digital display. When using analog gauges, this wire will not be required.   |
| 11B        | Light Green    | Headlight Low Beam  | Green with black stripe.   |
| 14A        | Light Blue     | Left Dash Ind       | Green with white stripe.   |
| 15B        | Dark Blue      | Right Dash Ind      | White with blue stripe.  |
| 30         | Tan            | Gas Gauge           | Yellow with white stripe.  |
| 31         | Dark Blue      | Oil Pressure Sender | White with red stripe.   |
| 33         | Tan            | Brake Light         | Purple with white stripe.  |
| 35         | Dark Green     | Water Temp Sender   | Red with white stripe.   |
| 39A        | Pink           | 12V Ignition        | <b>For use only with after market gauges needing a "key on" full 12 volt feed.</b>   |
| 121        | White          | Coil-Tach           | Sender terminal of the tachometer.   |
| 150        | Black          | Ground              | Connect to the Ground terminals of each gauge and dash lamp.<br>An in line splice is necessary to feed each ground requirement in the instrument cluster.  |
| 400        | Yellow         | VSS Ground          | Connect to a good chassis ground or the VSS ground terminal on an electronic speedometer. Mechanical speedometers do not require this connection.  |
| 401        | Purple         | VSS Signal          | Connect to the VSS pulse signal or sender terminal of the electronic speedometer. Mechanical speedometers do not require this connection.  |
| 99         | Yellow         | Radio Bat           | Light blue with white stripe or light blue with black stripe.<br>This is the 12 volt feed for the dash clock. If you are using a radio with a digital clock, it will be necessary to splice into this wire to create 2 leads. One to the dash clock, and one to the radio. |



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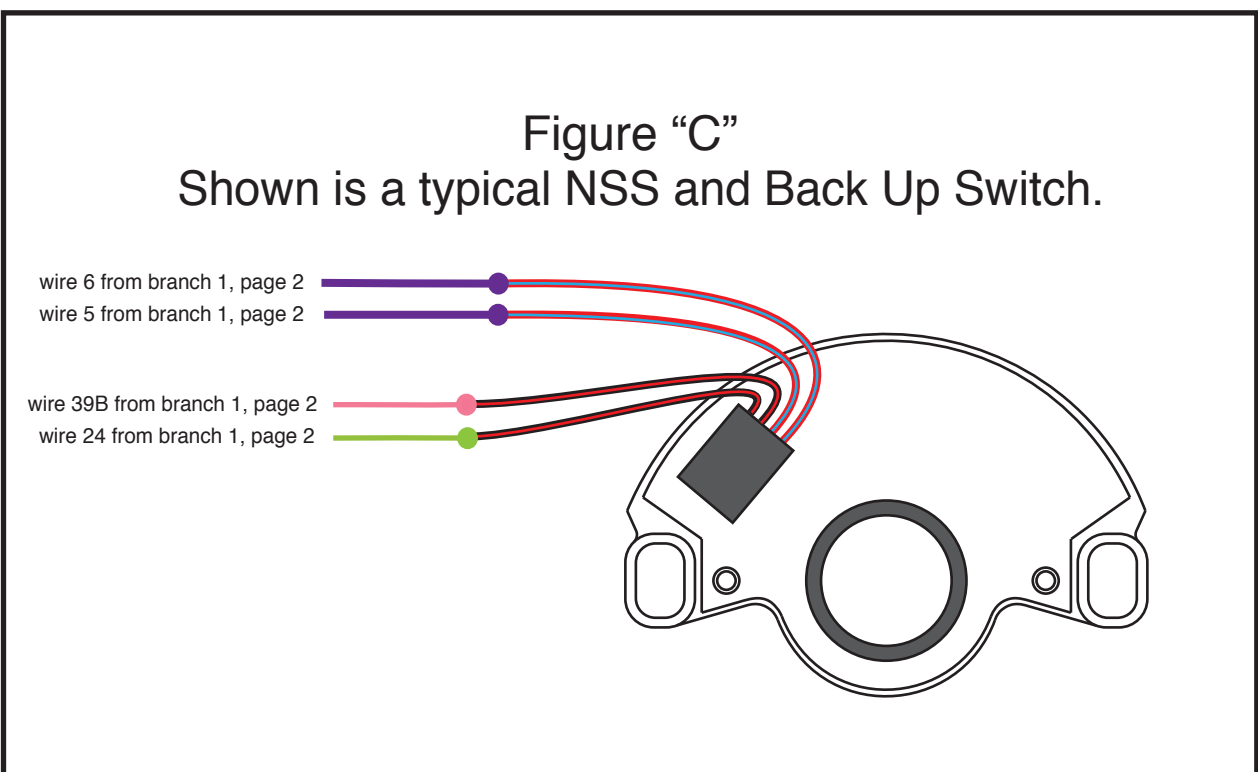
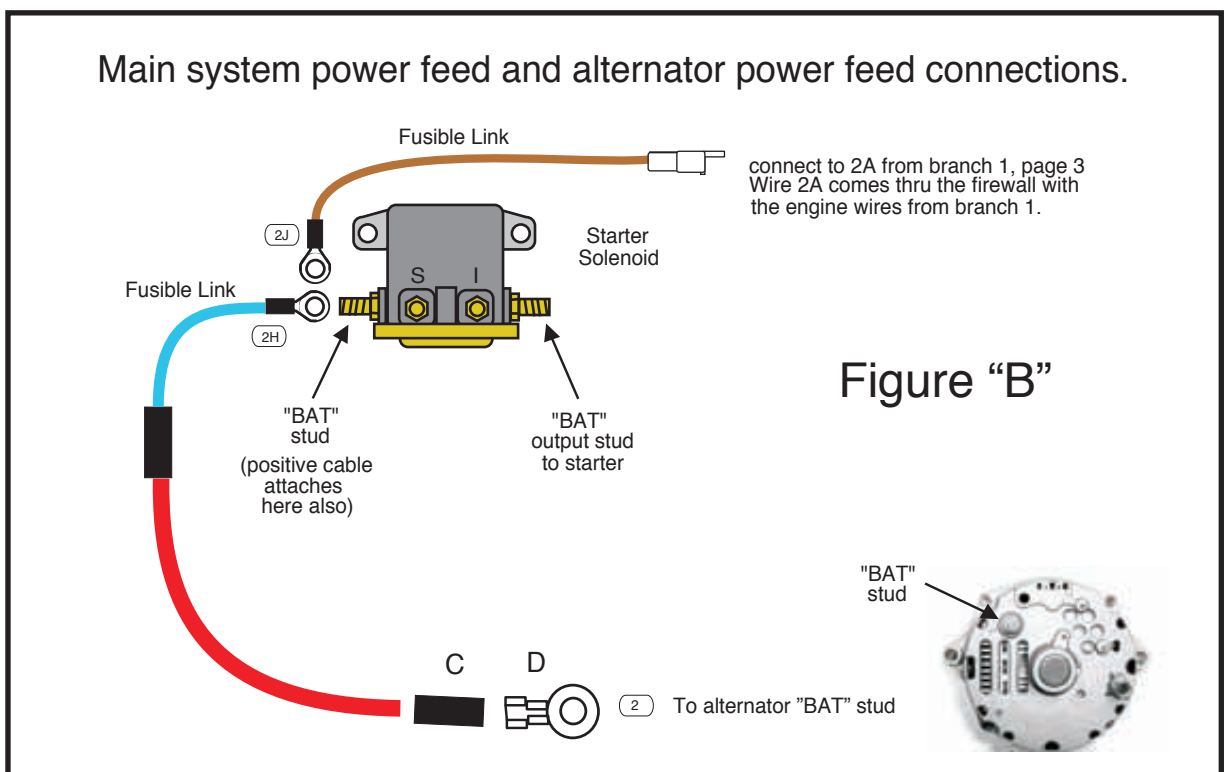




**NOTE:** The terminals and connectors listed on this page and denoted with UPPER CASE LETTERS to help you complete the various connections to your lamps, horns, switches, etc. can be found in your loose piece clamp, grommet, and parts kit, P/N 510133.

The identifications, colors, and functions for all of the wires listed in "Figures A, B, and C" on this page can be found on page 3, branches 1 and 2 of this instruction set. AAW suggests and recommends using both pages 3 and 12 to complete the installation of the forward lamp, main power, alternator power, and neutral safety connections.

AAW kits are all engineered to be used in conjunction with a high output, later model internally regulated, or one wire alternator. We do not suggest or support the use of a stock low amperage generator or alternator as they do not supply sufficient current to recharge the battery in a highly modified car such as this kit was designed for. AAW suggests a Ford Gen III type alternator as a good choice of an alternator to use. An adapter to complete the connection to this style alternator, our P/N 500802, may be purchased separately if needed. Contact our Sales Group or your favorite retailer to purchase this alternator adapter if needed.

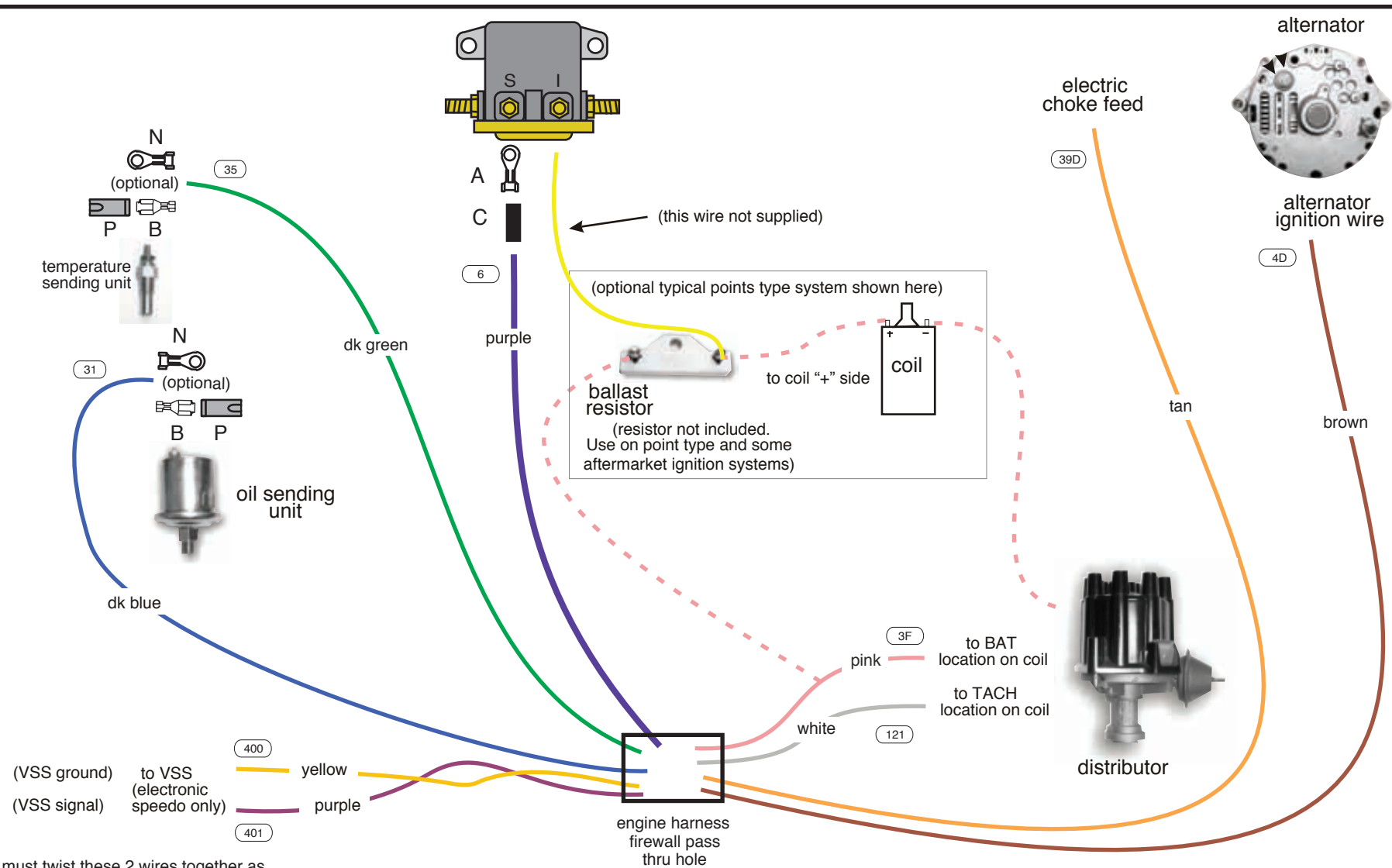


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You must twist these 2 wires as shown above to create a co-ax that will filter out any outside interference to the signal on your electronic speedometer.

Install one grommet included in the 510133 kit into the firewall pass thru opening as shown on page 8 of this instruction set, then pass the engine, alternator ignition, starter sloenoid, and main feed wiring from branch 1 thru this opening (except for the the heat and A/C Feed 50 wire). The neutral safety and B/U lamp wires are optional to run inside or outside the car depending on your application. For starter and main feed connections, refer to "Figure B" on page 10. After completing this task, apply silicone sealer to this area to make a weather tight seal.

Figure "D"

**NOTE:** The terminals and connectors listed on this page and denoted with UPPER CASE LETTERS to help you complete the various connections to your ignition, temp and oil senders, electric choke, starter solenoid, alternator regulator, etc. can be found in your loose piece clamp, grommet, and parts kit, P/N 510133.

The identifications, colors, and functions for all of the wires listed in "Figures D, E, and F" on this page can be found on page 3, branch 1 of this instruction set. AAW suggests and recommends using pages 3, 12, and 13 to complete the installation of the engine and alternator connections.

This AAW kit is engineered to work with most aftermarket manufacturer's heating and air conditioning systems. As such, we have provided a keyed 12-volt feed to use as the "OFF / ON" (AAW brown 50 wire) power source for whatever system you choose to purchase. The manufacturer will supply you with a harness for their system and instructions on how to connect it. In the event you are utilizing a stock heater system in your car, again we have provided the keyed 12-volt feed only. Figures E and F below depict the typical connections for both the 2 speed and the 3 speed heating systems used in a stock Mustang. AAW DOES NOT provide any of the other wiring from the switches to the resistors, or to the blower motor.

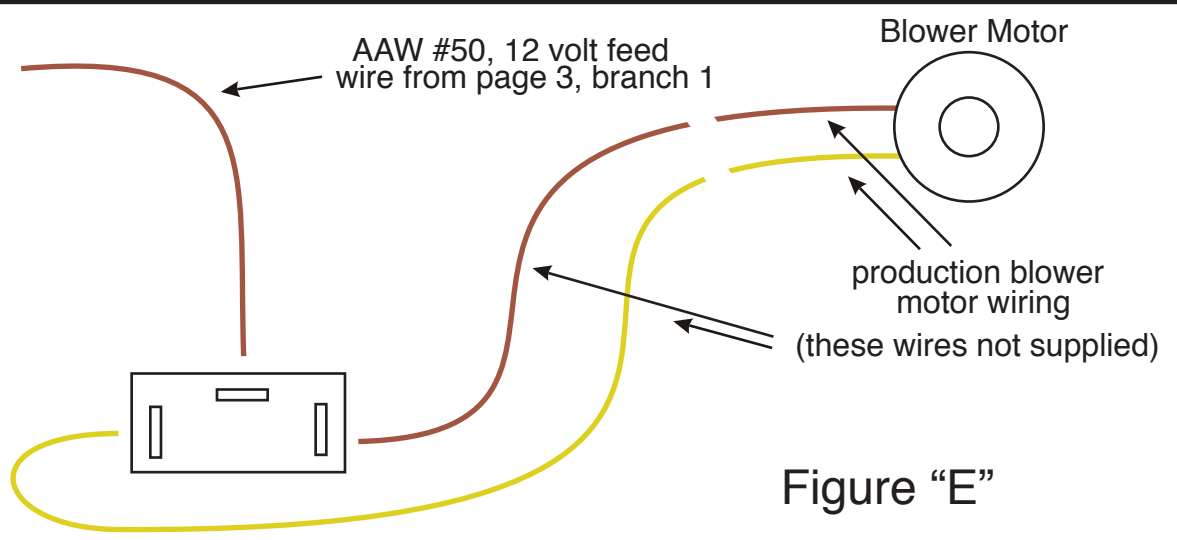


Figure "E"

2 Speed Heater Motor Connections

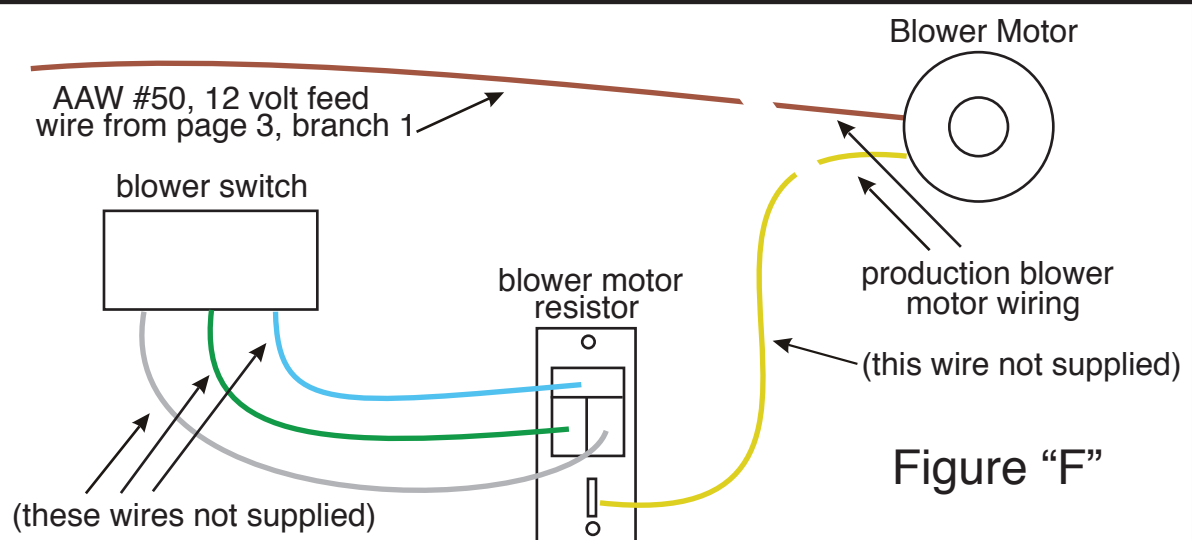


Figure "F"

3 Speed Heater Motor Connections



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## Fuse Placement and circuit values

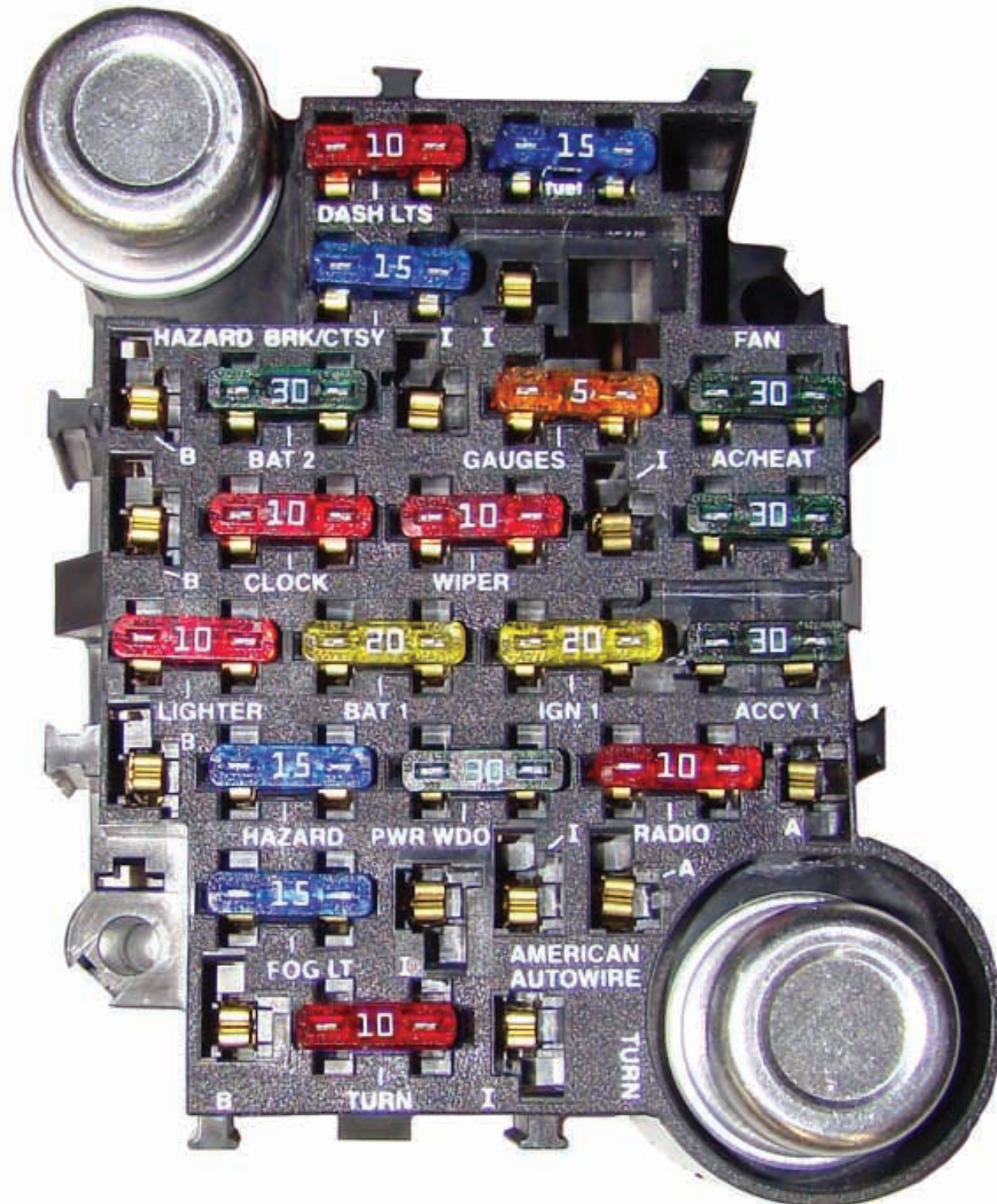
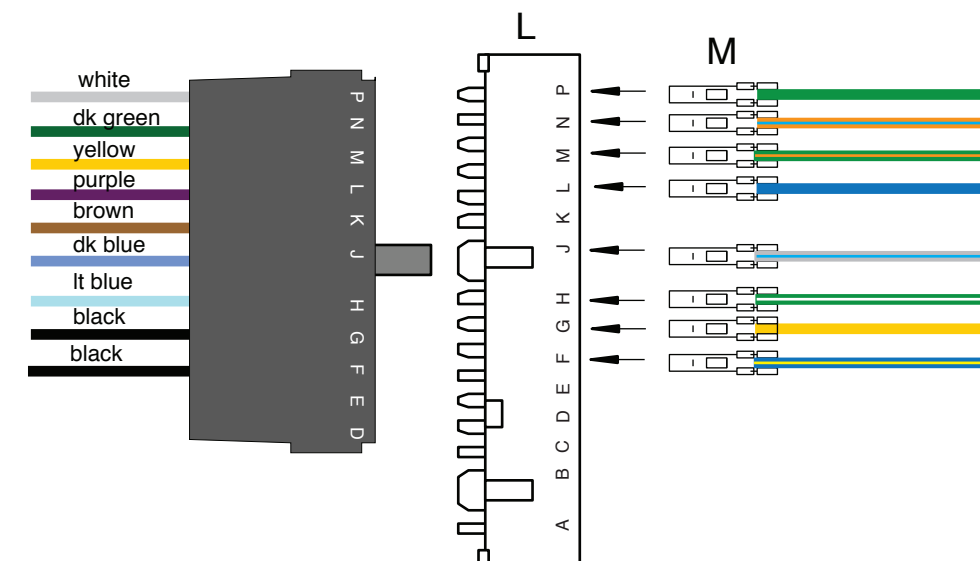


Table 'A' -  
AAW Turn Signal Switch wires to  
stock 1964-66 Mustang turn signal switch.

| AAW Wire# | AAW Wire Color | AAW Wire Printing | Ford Wire Color                |
|-----------|----------------|-------------------|--------------------------------|
| 17A       | White          | Brake Switch      | Green with red stripe or Green |
| 19        | Dark Green     | Right Rear Turn   | Orange with blue stripe        |
| 18        | Yellow         | Left Rear Turn    | Green with orange stripe       |
| 16        | Purple         | Turn Switch feed  | Blue                           |
| 27        | Brown          | Turn SW - Hazard  | Not Used                       |
| 15B       | Dark Blue      | Right Front Turn  | White with blue stripe         |
| 14B       | Light Blue     | Left Front Turn   | Green with white stripe        |
| 28        | Black          | Horn Relay Ground | Yellow                         |
| 28A       | Black          | Horn Relay Ground | Blue with yellow stripe        |

**Note 1:** Ford originally switched power to the horns through the steering column horn button. In this kit, ground is being switched through the original steering column switch to ground a horn relay which switches power to the horns.

AMERICAN AUTOWIRE DASH HARNESS CONNECTION ORIGINAL TURN SIGNAL SWITCH WIRING



**DIAGRAM 'A' - AAW Turn Signal Switch Wires to Stock 1964-66 Steering Columns.**



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