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 barrell 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) ALTERATOR. 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 installaing 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:

Battery is grounded to the ENGINE BLOCK. Α.

- B. Battery is grounded to the frame.
- Engine block is grounded to the frame. C.

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

p/n 510127 ignition switch lock cylinder and kevs



AMERICAN AUTOWIRE MAKES IT EASY !!

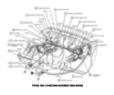
page 1

p/n R0067108 OEM style non-stick harness tape



We carry many accessories for your 1964 - 1966 Mustang

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

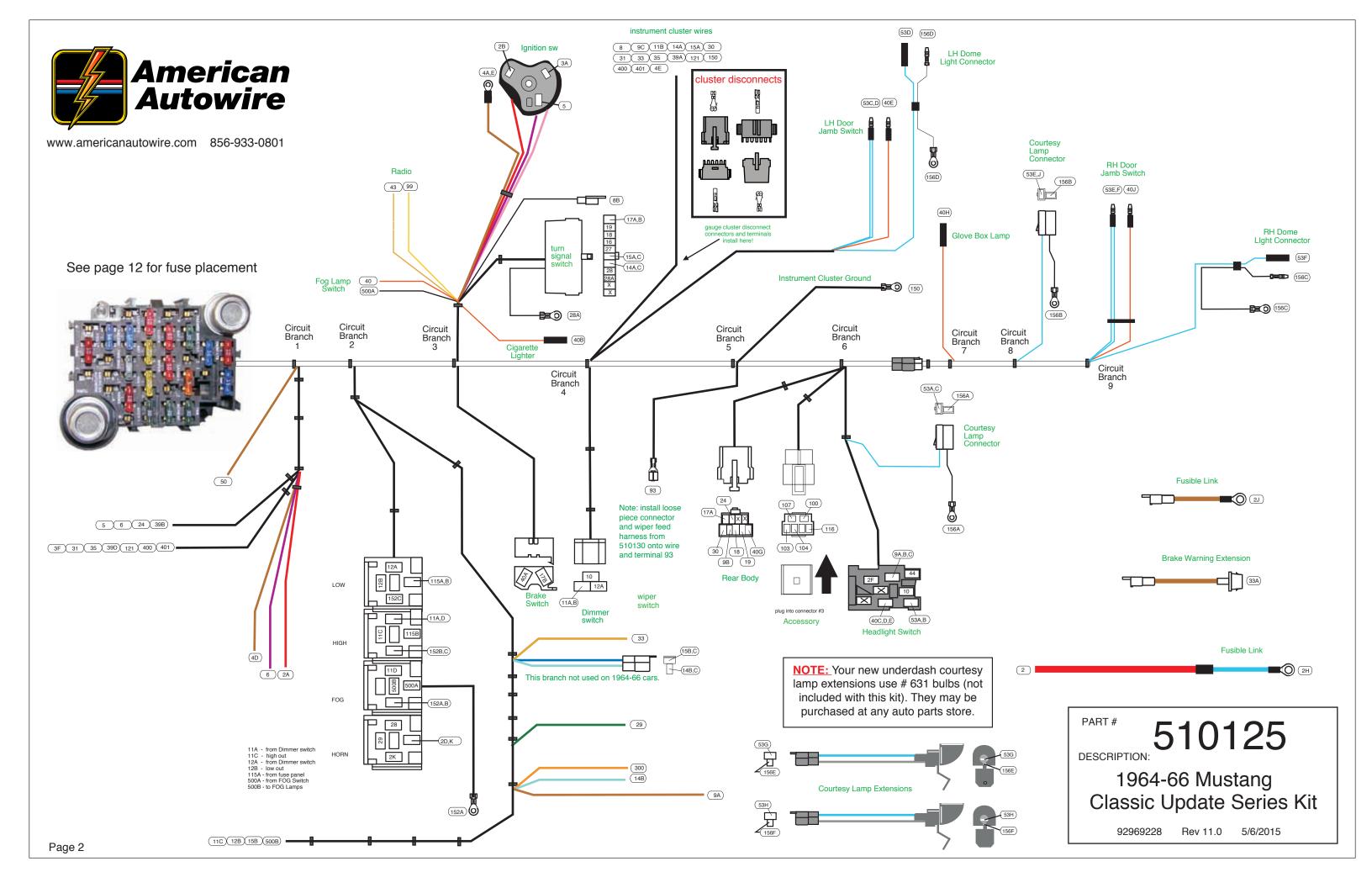


p/n 510586 OEM large terminal crimping tool (12-8 gauge)





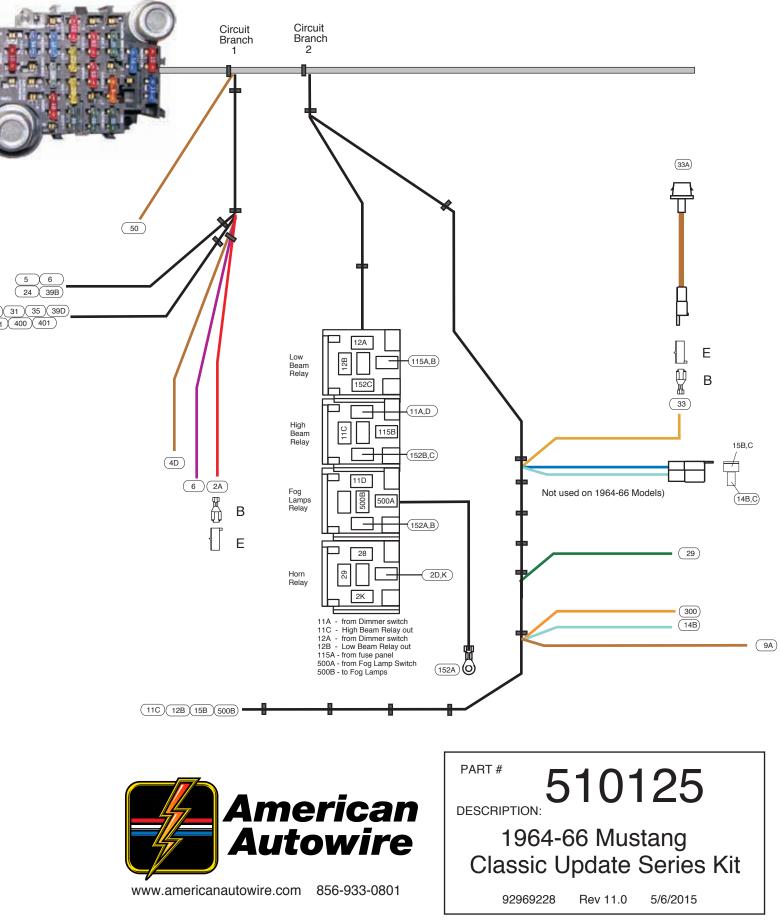
p/n 510175 factory hazard switch wiring kit

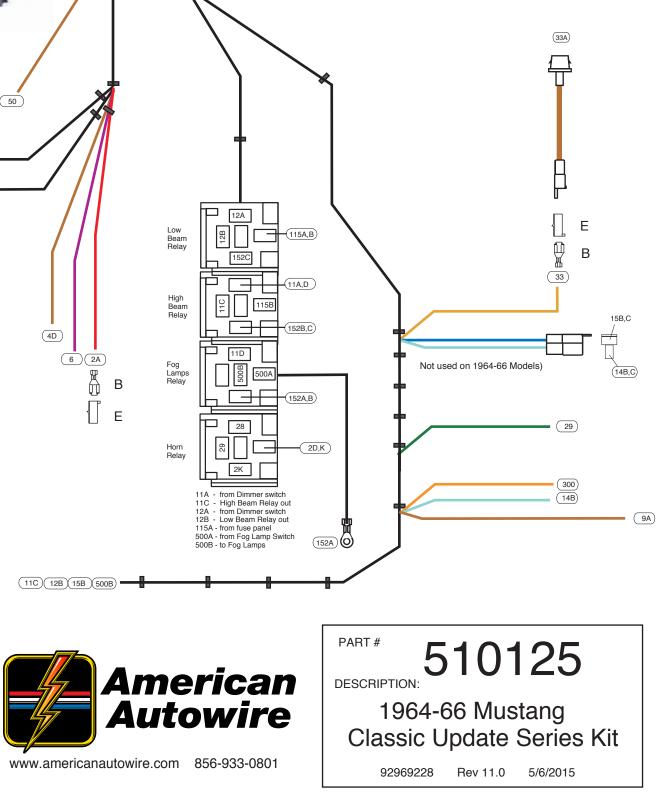


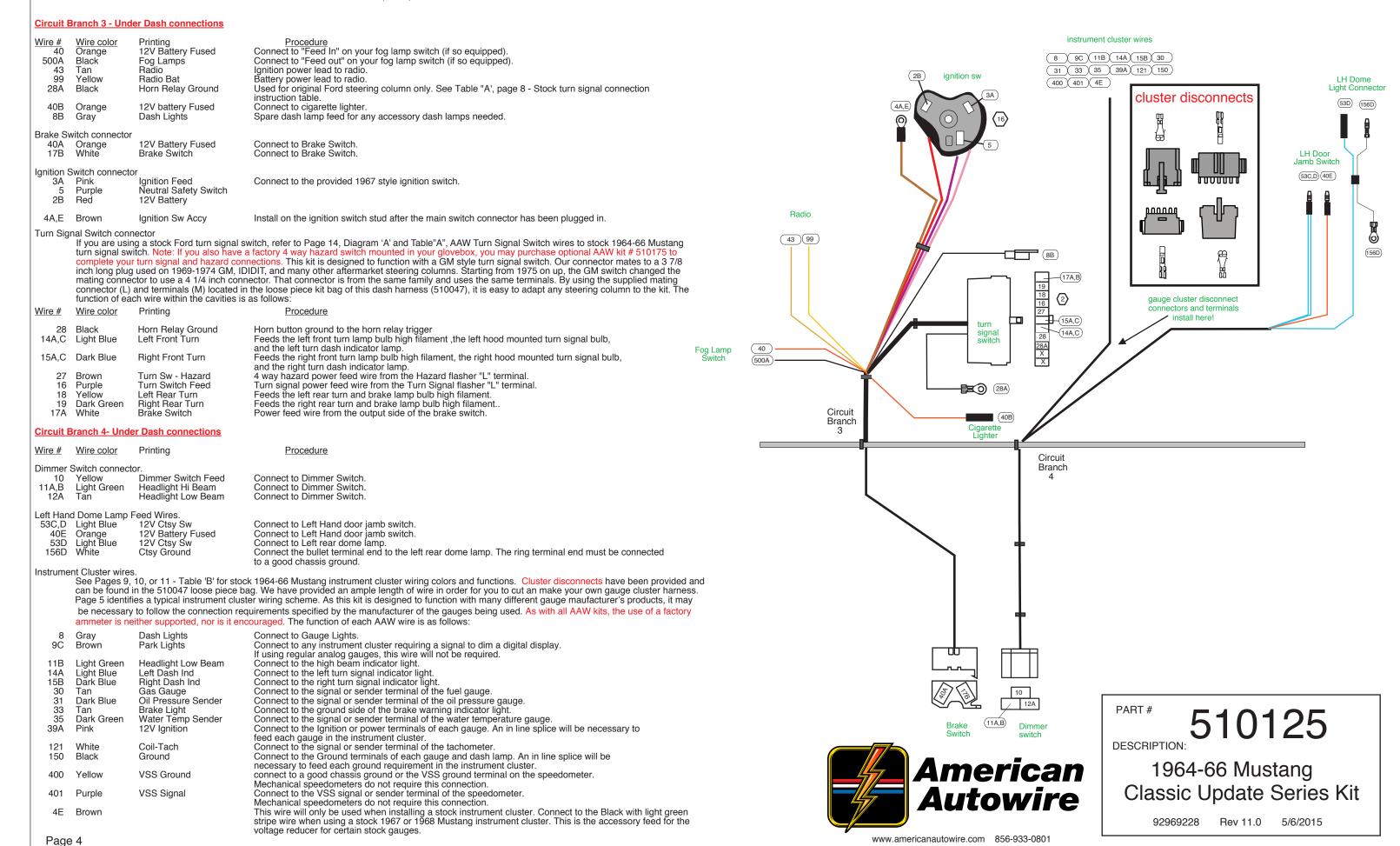
Main Fuse Panel Installation Instructions

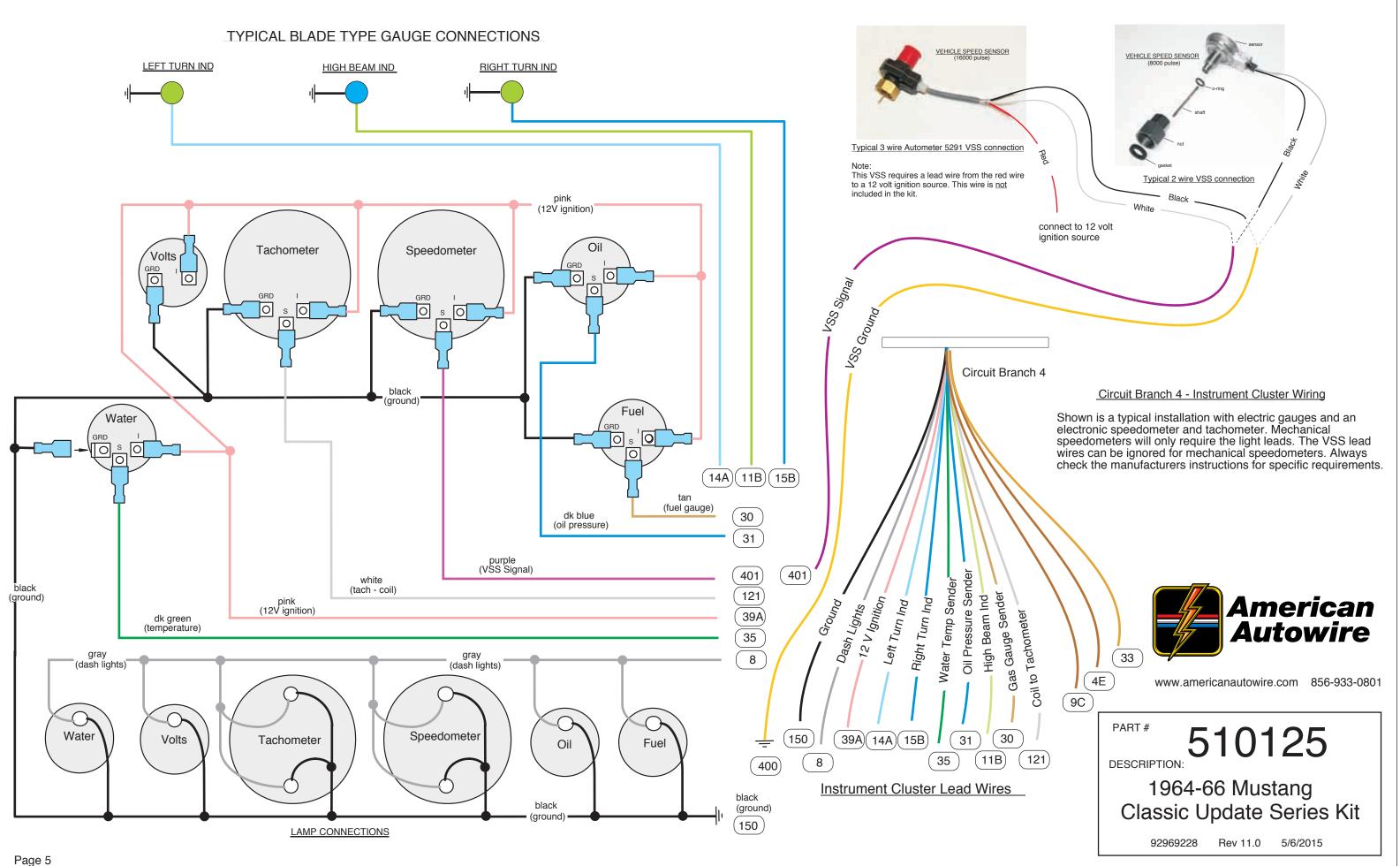
The Main Fuse Panel harness is designed to be mounted under the dash at the firewall in an area close to the steering column. The enclosed representation of the main dash harness shows each circuit branch and identifies each connection by its color and function. Follow this drawing and detail drawings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

<u>Circuit</u>	Branch 1 - El	ngine 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	Procedure	
50	Brown	Heater/AC feed	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	1
6	Purple	Starter Solenoid-S	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)	3
2	Red	12 V Battery	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	1
011	Linkt Dlug	Evelle Link	terminal "D" and attach this completed assembly to the battery terminal of the alternator. (See Figure B)	11
2H 2A	Light Blue Red	Fusible Link 12 V Battery	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)	
2J	Brown	Fusible Link	See the connection instructions under wire 2A.	
24	Purple Lt. Green Pink	Neutral Safety Switch Backup Lt Sw-Lights	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)	
39B 4D	Brown	12 V Ignition Alterrnator Ign	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	
3F	Pink	Ignition Feed - coil	alternator / regulator that is being 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).	(3F) (121
31	Dark Blue	Oil Pressure Sender	Connect to the oil pressure sender.	
35	Dark Green	Water Temp Sender	Connect to the temperature sender.	
39D	Tan	Electric Choke	On carbureted cars, connect to the electric choke terminal.	
121	White	Coil - Tach	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.	
400	Yellow	VSS Ground	Connect to the Vehicle Speed Sensor ground lead (see page 4 for typical connection).	
401	Purple	VSS Signal	Connect to the Vehicle Speed Sensor signal lead (see page 4 for typical connection).	
<u>Circuit</u>	Branch 2- Fre	ont Lighting connections	See page 12, "Figure A" for typical connections. Loose piece terminals and connectors are located in kit 510133.	
Wire #_	Wire color	Printing	Procedure	
		Relay Pack	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.	
152A 33	Black Tan	Ground Brake Switch	This is the relay pack ground. Connect to a good chassis ground. This is the brake warning light switch wire for braking systems using a brake warning light. An extension to the switch, wire "33A" with a late model mold-on connector, has also been provided. Route wire 33 to the brake warning switch, cut to length, install terminal "E", plug into connector "B" (Parts in 510047 kit), plug the completed lead into the brake warning extension wire 33A. The other end of the brake warning extension can then be plugged onto the brake warning switch.	
,	Light Blue Dark Blue	Left Front Turn Right Front Turn	These are the connections for the hood mounted directional lights. (Not used on 1964-66 models)	
29	Dark Green	Horn	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.	
	Light Blue	Left Front Turn	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.	
	Dark Blue	Right Front Turn	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.	
	Orange	Electric Fan	This is the 12 volt ignition feed to be connected to the trigger wire on your electric fan relay.	
9A	Brown	Park Lights	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	
11C 12B	Light Green Tan	Headlight-Hi Beam Headlight-Low Beam	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	
500B	Black	Fog Lamps	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.	



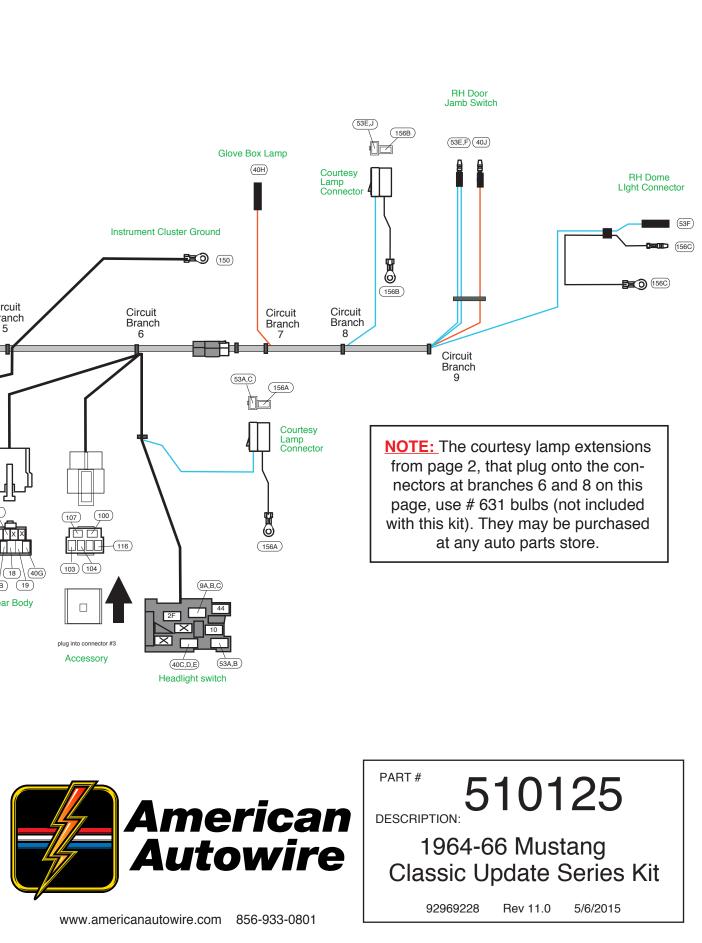


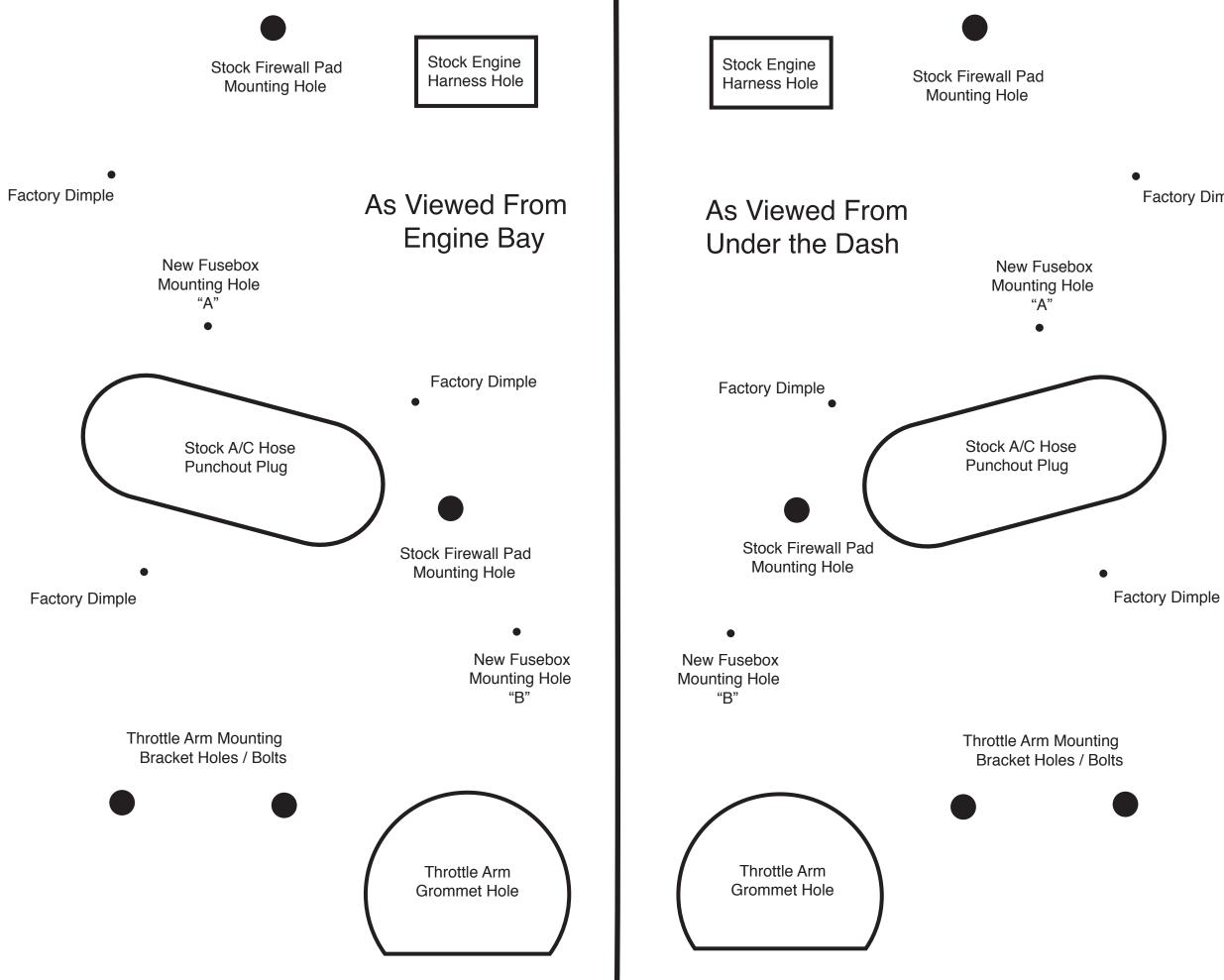




Installation instructions (cont'd)

Wire #	Wire color	Printing	Procedure	
Winer Swi	itch 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 ot 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 Bra	anch 6- Under Da	sh connections		
Wire #	Wire color	Printing	Procedure	
Rear Body	Wire connections			
Accessorv	This plugs into the Feed Wire connect	te Rear Body Kit 510129. S	See that sub-kit for specific installation instructions and circuit functions.	Instrument Cluste
100	Tan	Accessory Fused	Accessory Fused power source.	
103 104	Tan Red	Fuel pump Power Locks	Connect to the power input terminal of a fuel pump relay. Connect to the power input of the power locks switch or any other battery	
104			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.	Circuit Branch Branch
Headlight s	switch connector.			5 Branch
0	The function of e	each wire is as follows:		
2F 9A,B,C	Red Brown	12V Battery Park Lights	12 volt battery power to the switch. Power lead wires to the running light circuits.	
44	Dark Green	Ũ	Power lead wire to the dash lights.	
10	Yellow	Dimmer Sw feed	Headlight power output to the Dimmer Switch.	
40C,D,E 53A,B	Orange Lt Blue	12V Battery Fused 12V Ctsy Sw	Courtesy Light battery power Courtesy Light switched battery power	
	ight connector.	, -		
Courtesy II		Hand under dash courtesv	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 Bra	anch 7- Under Da	sh connections		
Wire #	Wire color	Printing	Procedure	
40H	Orange	12V Battery Fused	Connect to the glove box lamp assembly.	
Circuit Bra	anch 8- Under Da	sh connections		
Wire #	Wire color	Printing	Procedure	wiper $(30)/(18)/(40G)$ $(103)/(104)$
Courtesy li	ight connector.			switch (9B) (19)
- 	Plug in your Righ	nt Hand under dash courtes	y lamp assembly from page 1 here. The function of each wire is as follows:	Rear Body
53E,J 156B	Lt Blue White	12V Ctsy Sw Crtsy ground	Courtesy Light power. Courtesy Light ground	
Circuit Bra	anch 9- Under Da	sh connections		plug into connector #3
Wire #	Wire color	Printing	Procedure	Head
Right Hand	d Dome Lamp Fee	d Wires		neau
	Light Blue	12V Ctsy Sw	Connect to the Right Hand door jamb switch.	
		12V Battery Fused	Connect to the Right Hand door jamb switch.	
40J	Orange			
	Light Blue White	12V Ctsy Sw Ctsy Ground	Connect to the Right rear dome lamp. Connect the bullet terminal end to the right rear dome lamp.	





New Mounting Hole **Template For Fusebox**

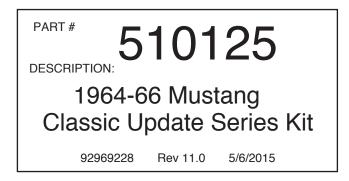
Two new 1/8" holes "A" and "B" will need to be drilled in the firewall to mount your new fusebox assembly.

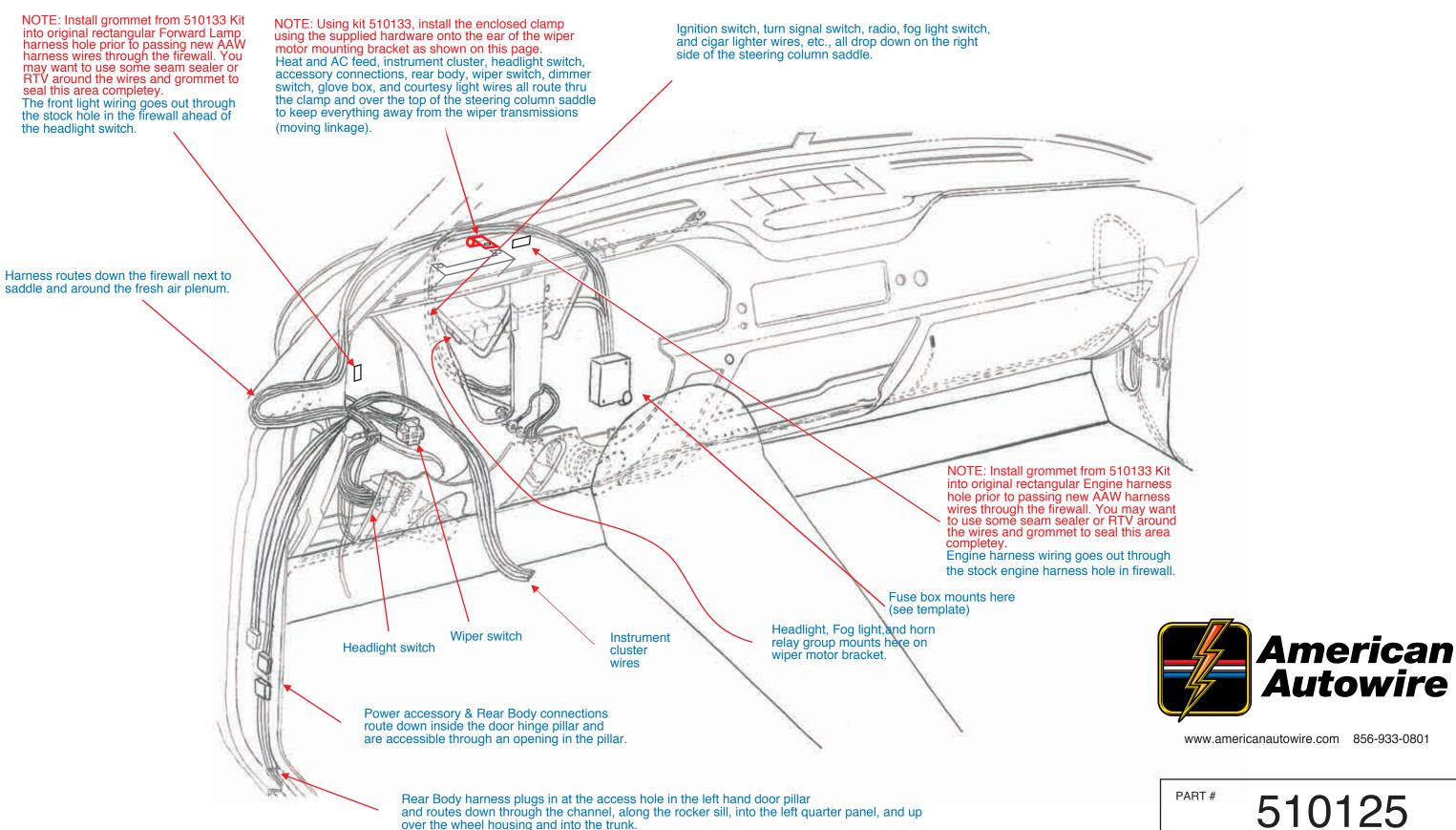
Factory Dimple You may choose to position the AAW template from either the engine bay side or the under dash side of the firewall, whichever is easier for you.

> Locate this template to the firewall using the existing A/C hose punchout plug, firewall pad mountiung 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.

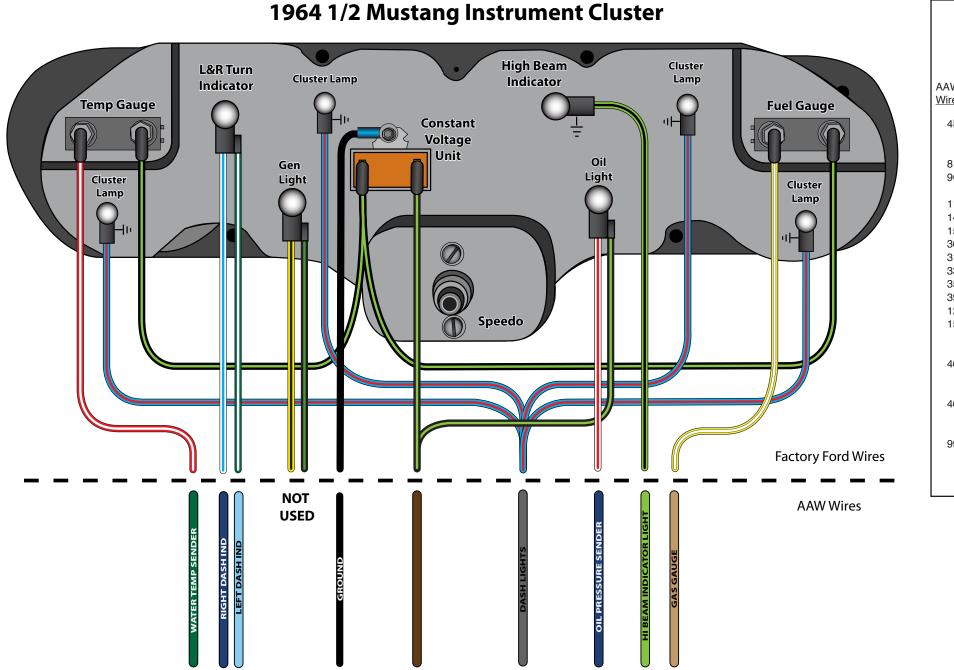


www.americanautowire.com 856-933-0801









AAW <u>Nire #</u>	AAW <u>Wire color</u>	AAW Wire Printing
4E	Brown	
8 9C	Gray Brown	Dash Lights Park Lights
11B 14A 15B 30 31 33 35 39A 121 150	Light Green Light Blue Dark Blue Tan Dark Blue Tan Dark Green Pink White Black	Headlight Low Beam Left Dash Ind Right Dash Ind Gas Gauge Oil Pressure Sender Brake Light Water Temp Sender 12V Ignition Coil-Tach Ground
400	Yellow	VSS Ground
401	Purple	VSS Signal
99	Yellow	Radio Bat



www.americanautowire.com 856-933-0801

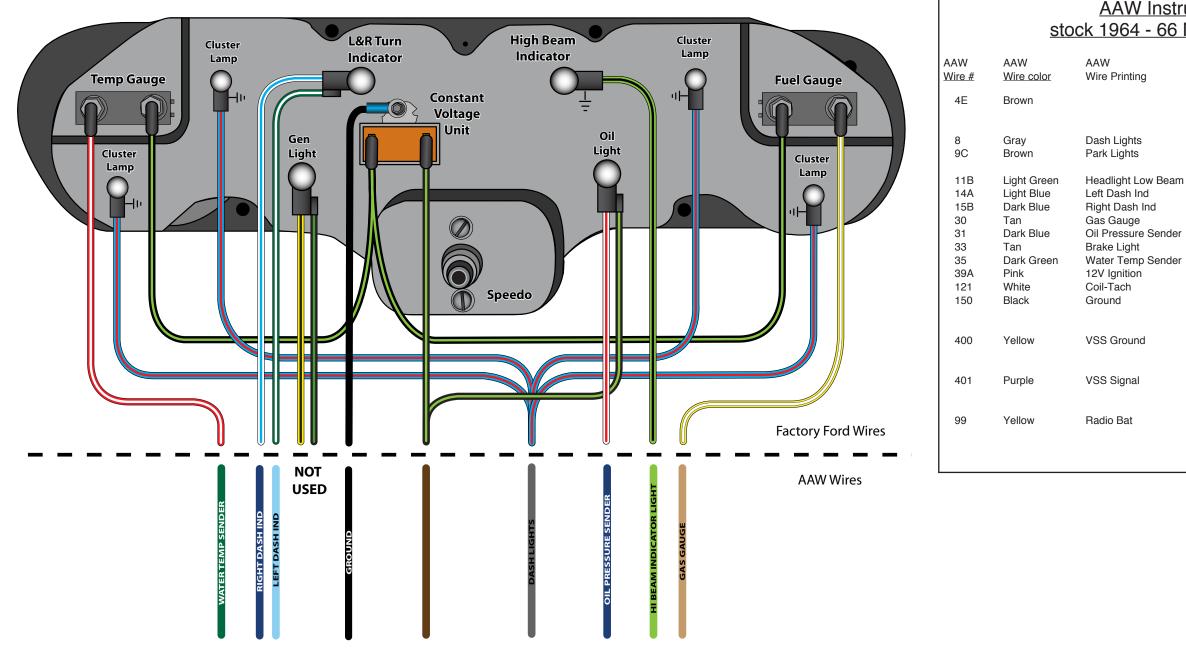
Table 'B' -AAW Instrument Cluster Kit wires to stock 1964 - 66 Mustang instrument cluster wires.

Ford Wire Color

Black with light green stripe This is the accessory feed for the voltage reducer for certain stock gauges. Blue with red stripe. Connect to any instrument cluster requiring a signal to dim a digital display. When using analog gauges, this wire will not be required. Green with black stripe. Green with white stripe. White with blue stripe. Yellow with white stripe White with red stripe. Purple with white stripe Red with white stripe. For use only with after market gauges needing a "key on" full 12 volt feed. Sender terminal of the tachometer. 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. Connect to a good chassis ground or the VSS ground terminal on an electronic speedometer. Mechanical speedometers do not require this connection. Connect to the VSS pulse signal or sender terminal of the electronic speedometer. Mechanical speedometers do not require this connection. 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.



PART # 510125 **DESCRIPTION:** 1964-66 Mustang Classic Update Series Kit 92969228 Rev 11.0 5/6/2015



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



www.americanautowire.com 856-933-0801

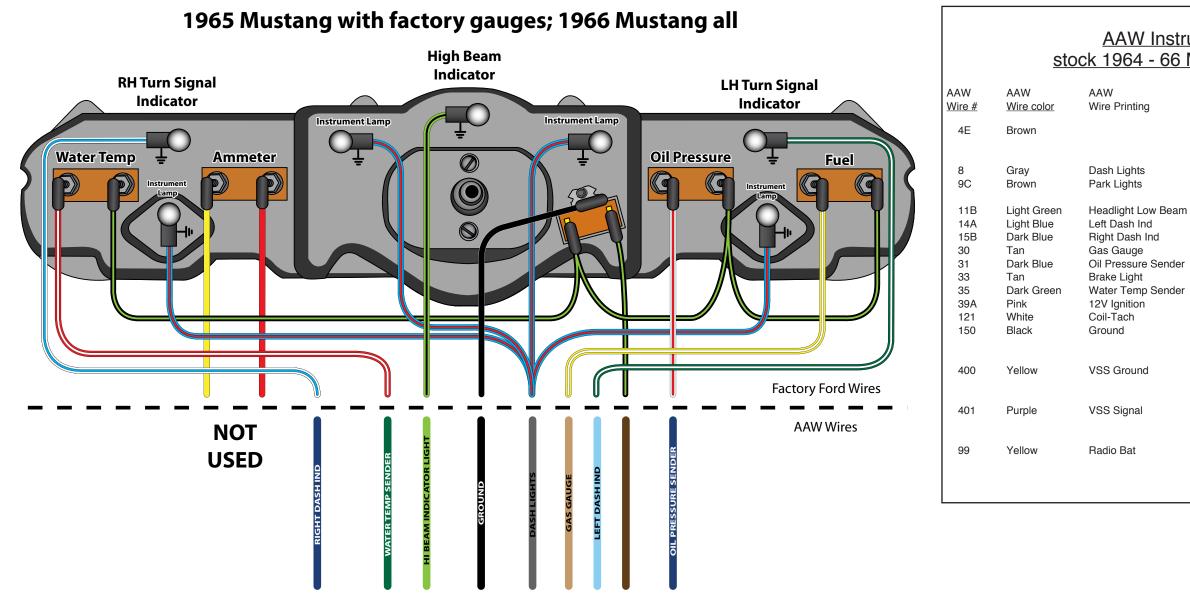
Table 'B' -AAW Instrument Cluster Kit wires to stock 1964 - 66 Mustang instrument cluster wires.

Ford Wire Color

Black with light green stripe This is the accessory feed for the voltage reducer for certain stock gauges. Blue with red stripe. Connect to any instrument cluster requiring a signal to dim a digital display. When using analog gauges, this wire will not be required. Green with black stripe. Green with white stripe. White with blue stripe. Yellow with white stripe. White with red stripe. Purple with white stripe. Red with white stripe. For use only with after market gauges needing a "key on" full 12 volt feed. Sender terminal of the tachometer. 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 Connect to a good chassis ground or the VSS ground terminal on an electronic speedometer. Mechanical speedometers do not require this connection. Connect to the VSS pulse signal or sender terminal of the electronic speedometer. Mechanical speedometers do not require this connection. 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.



PART # 510125 DESCRIPTION: 1964-66 Mustang **Classic Update Series Kit** 92969228 Rev 11.0 5/6/2015



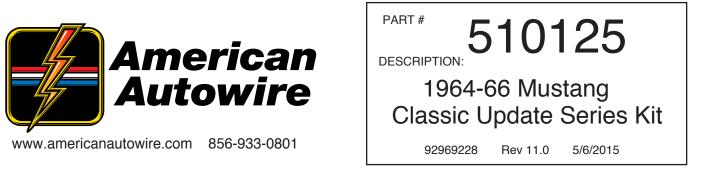
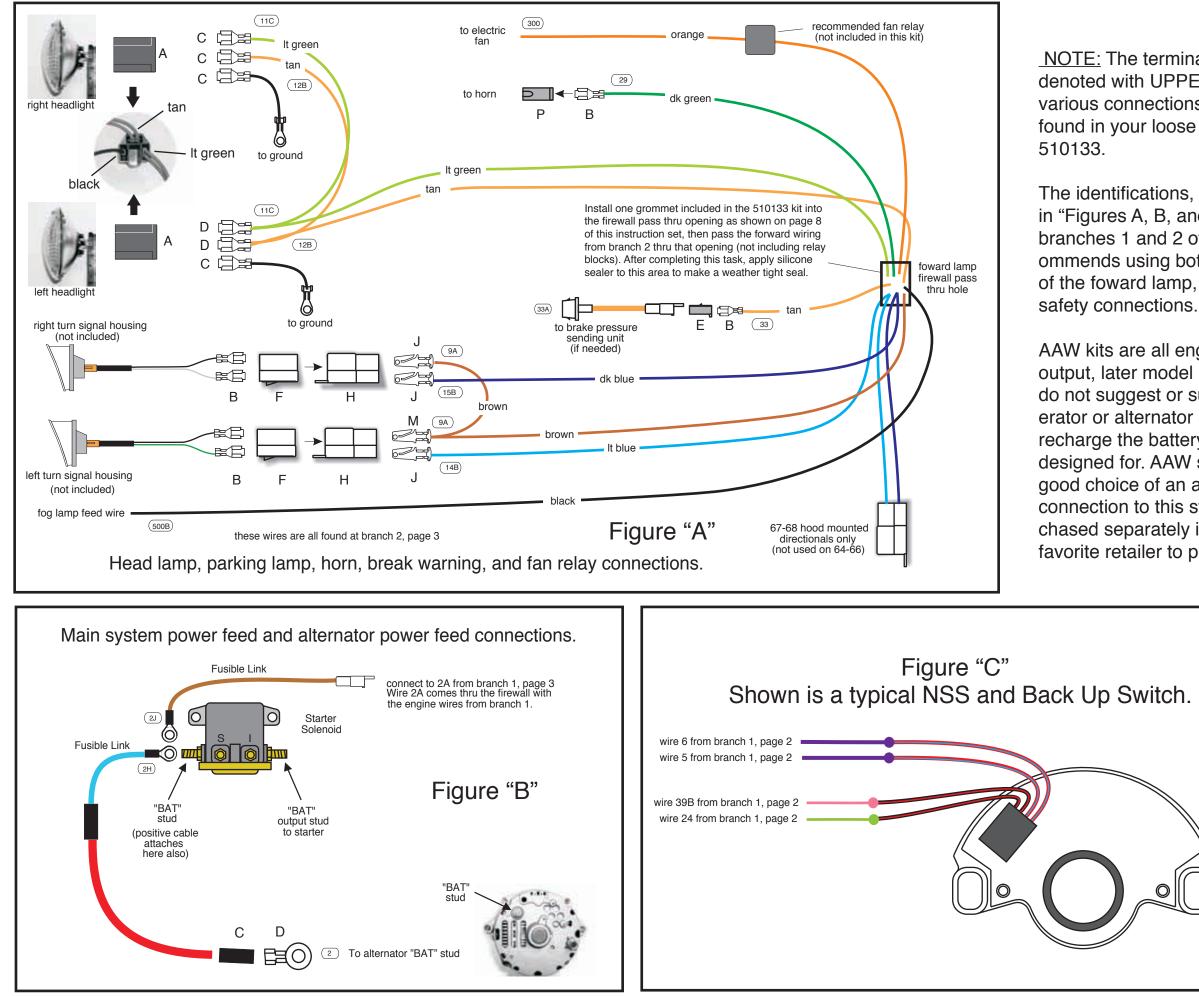


Table 'B' -AAW Instrument Cluster Kit wires to stock 1964 - 66 Mustang instrument cluster wires.

Ford Wire Color

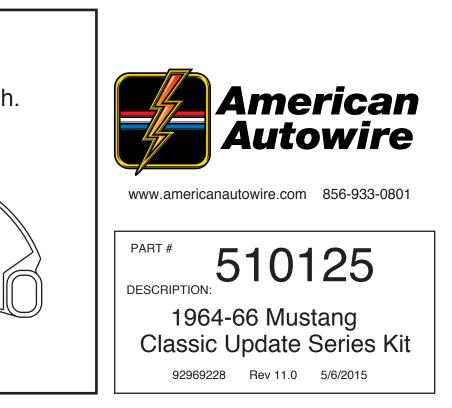
Black with light green stripe This is the accessory feed for the voltage reducer for certain stock gauges. Blue with red stripe. Connect to any instrument cluster requiring a signal to dim a digital display. When using analog gauges, this wire will not be required. Green with black stripe. Green with white stripe. White with blue stripe. Yellow with white stripe. White with red stripe. Purple with white stripe. Red with white stripe. For use only with after market gauges needing a "key on" full 12 volt feed Sender terminal of the tachometer 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. Connect to a good chassis ground or the VSS ground terminal on an electronic speedometer. Mechanical speedometers do not require this connection. Connect to the VSS pulse signal or sender terminal of the electronic speedometer. Mechanical speedometers do not require this connection. 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.

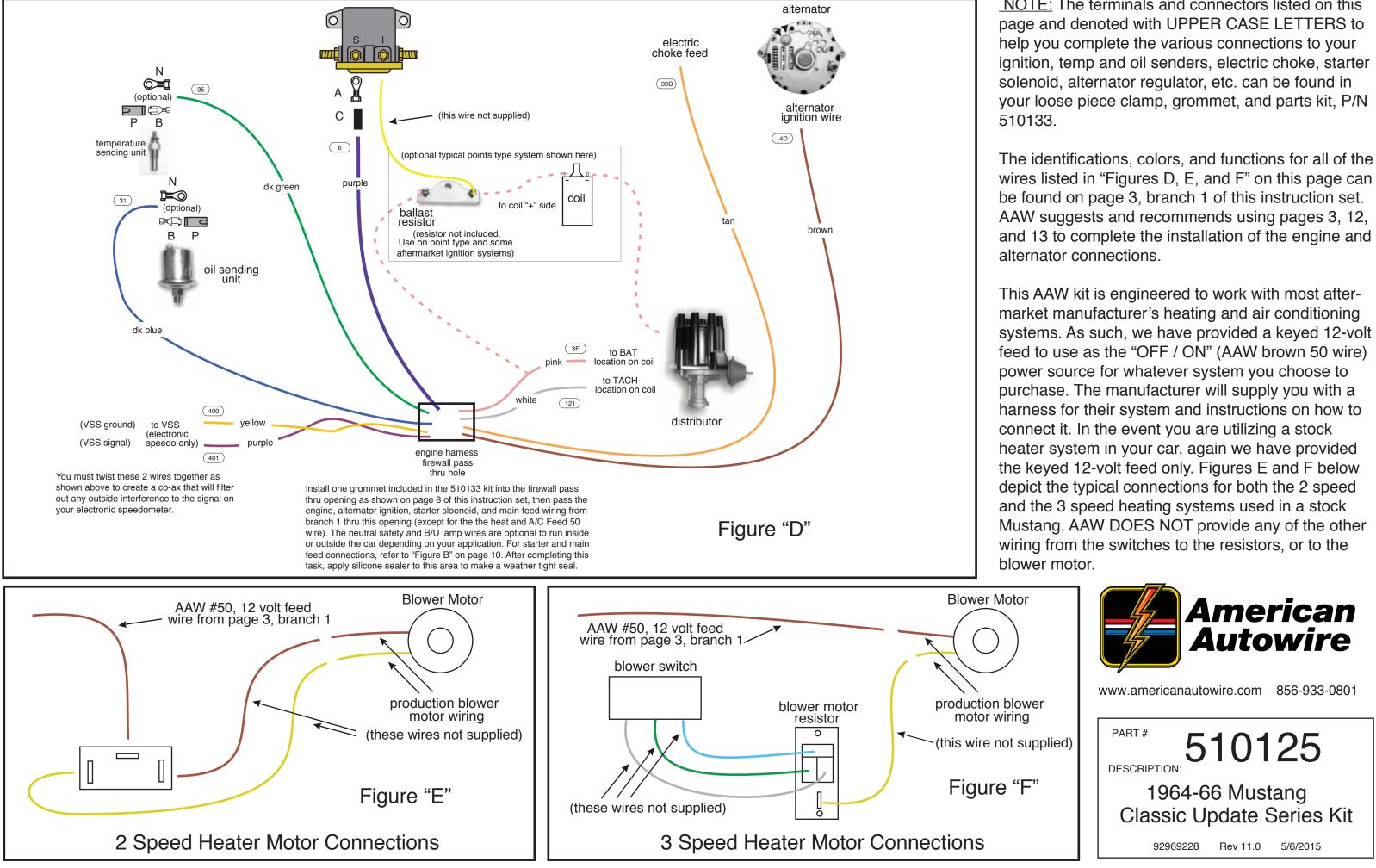


<u>NOTE:</u> The terminals and connectors listed on this page and denoted with UPPER CASE LETTERS to help you complete the various connections to your lamps, horns, switches, etc. can be found in your loose piece clamp, grommet, and parts kit, P/N

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 foward lamp, main power, alternator power, and neutral safety connections.

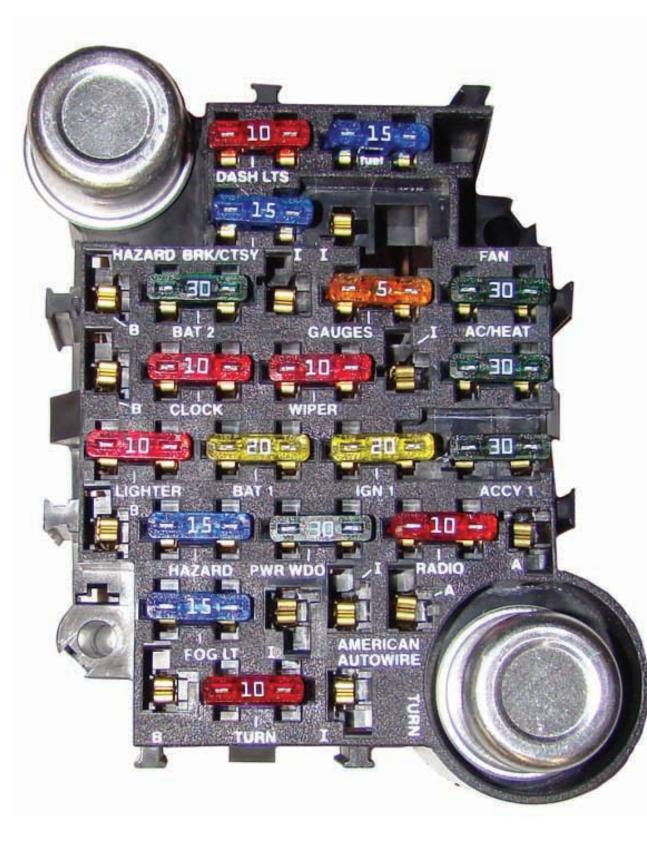
AAW kits are all engineered to be used in conjunction with a high output, later model internally regulated, or one wire alternator. We do not suggest or support the use of a stock low amperage generator or alternator as they do not supply sufficient current to recharge the battery in a highly modified 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 adpater to complete the connection to this style alternator, our P/N 500802, my be purchased separately if needed. Contact our Sales Group or your favorite retailer to purchase this alternator adapter if needed.

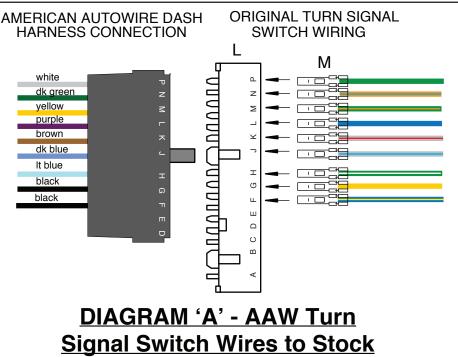




NOTE: The terminals and connectors listed on this

Fuse Placement and circuit values





	<u>AAW</u> stock 190	<u>Tab</u> <u>Turn Sig</u> 64 - 66 M
AAW	AAW	AAW
<u>Wire #</u>	<u>Wire color</u>	<u>Wire Printing</u>
14A	Light Blue	Left Front Tu
15B	Dark Blue	Right Front T
16	Purple	Turn Switch I
17A	White	Brake Switch
18	Yellow	Left Rear Tur
19	Dark Green	Right Rear Tur
27	Brown	Turn Sw - Ha
28	Black	Horn Relay G
28A	Black	Horn Relay G



1964-66 Steering Columns.

ble 'A' gnal Switch wires to lustang turn signal switch.

Ford Wire Color

urn Turn Feed h urn Turn lazard Ground Ground Green with white stripe White with blue stripe. Blue Green

Green with orange stripe. Orange with blue stripe. White with red stripe. Yellow Blue with yellow stripe. Note: Ford originally switched power to the horns through the steerring 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.