



**18-PIN ADAPT-O-PLUG INSTRUCTION BOOKLET
FITS SELECT GM AND FORD VEHICLES**



GM VEHICLES:

73-87 GM truck
88-91 GM SQUAREBODY (NOT OBS)
78-87 BUICK REGAL
78-81 MALIBU SWEEP DASH
78-81 MONTE CARLO 6-GAUGE CLUSTER
ALL GM 18-PIN CLUSTER PLUGS
78-96 GM VANS

FORD VEHICLES:

70-72 Ford truck
69-70 Mustang (18 pin only)
71-73 Mustang base cluster

INTRODUCTION

This product is designed to help the installer save time and create a professional installation of aftermarket gauges in less time than splicing in the old and new harnesses. Use this instruction manual as a guide. Due to the wide variety of variations over model years we have used the most popular applications as our wiring diagram guides.

The following will help you to an easy, trouble-free installation:

- Use the diagrams to help verify each pin and function as below.
- If you have a variation on a cluster/pinout, please let us know so we can add that to our diagrams for future installs
- Use a test light/multimeter to verify each connection before making a final decision/connection.
- Crimp wires to spade terminals (provided) in the same direction as the spade- this will save space between connections as we have done our best to minimize the size of the adapter plug.
- Commonize connections in the spade terminal crimp to save wiring and time. Power, ground, lights can all be common from all gauges
- LED lighting: All NVU gauges use LED lighting, ***which may or may not operate properly with OE dimmers.*** If your lights will not work on the plug try turning up the dimmer all the way. If that does not work, we recommend connecting directly into the parking lamp circuit for a constant 12v. If you would like to dim the gauges, we have our LED dimmer available, part number 99003-04
- Use care when removing spade terminals, the boards are held in with clips that snap into the housing. Hold the board in place while removing spade terminals (they are tight) so that the housing/snaps are not damaged or pull out.

Plugging into original harness plug:

Most plugs are directional meaning that it can only be plugged in one way. Some are not due to the original design. Note when plugging in, that the same pin count and any spacing is in the same direction as the original.

There are 2 types of connections used:

1. Snap in: Same as original, the plugs will snap in. To remove, depress the tabs just like OE
2. Mechanical: Other plugs did not have a mechanical attachment as part of the original design. While this may have been useful for use at the factory, our application needs to be mechanically held in place. This is done using the included hardware (screws, nuts) or a cable tie. In cable-tie applications, slide the tie through the holes and slot guides. Clamp tightly once you are ready to complete the installation.

TESTING THE TERMINALS BEFORE FINALIZING CONNECTIONS.

As stated earlier in the instruction booklet, the diagrams within are to be used as a guide. With the large variation and options available, we have provided the most popular/common diagrams to start with. If you find something new or better, please let us know so that this booklet can continually be updated with newer material.

HOW TO TEST FOR EACH FUNCTION:

Plug the adapter into the stock plug.

TESTING FOR 12V+ POWER:

Using a test light or multimeter, place one end on a good ground. Turn on the key if needed.

Turn on the function you would like to test, lights, ignition, etc that would be powered by 12v+.

Probe the pins/terminal with the other end of the test lamp/multimeter. When you reach the pin that operates that function, the lamp will illuminate, or the multimeter will read vehicle voltage (12V).

Turn that item on and off to verify that is the correct pin. Make a note of it so you remember.

TESTING FOR A GROUND TRIGGER:

Same procedure as above but swap the power to a good 12V source and probe the terminals with the ground side. The light will illuminate, or multimeter will show vehicle voltage (12V)

TESTING FOR OHMS (TYPICALLY FUEL SENDER)

This one is a little trickier as you will need to know what Ω (ohms) range you are looking for. In a fuel gauge its best to know how much fuel is in the tank before starting, and noting what the original fuel gauge was reading before removal. Give us a call if you need a hand with this.

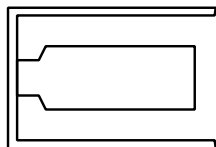
Using a multimeter set to the appropriate ohm scale (usually 200 Ω), place the ground side probe on a good ground.

Start probing the terminals with your multimeter, look for the range that would be appropriate for your fuel gauge at that level.

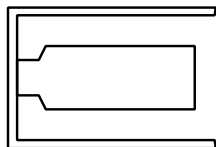
THE LAST RESORT:

Take a look at the back of the cluster, you can often trace the printed circuit to identify which pin does which function.

VIDEO LINK HERE:



**Single wire:
fold over**



**Multiple
wires**

CRIMPING WIRES TO SPADE TERMINALS

We have included BLUE spade terminals for 18-20 ga wire. This is a larger size that can be used for 1 or 2 wires to be attached.

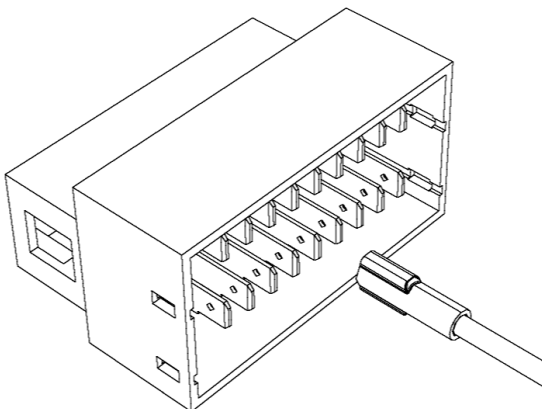
- When using one wire in the terminal, we find its best to strip off extra wire and fold it over to create a thicker piece for the crimp to attach to.
- 2 wires should fit in there nicely, be sure to strip off enough wire to extend full into the end of the terminal.



Use a quality crimper to ensure a good connection.

Connection should be tight and not be able to pull out. Make sure the crimp is in the same direction as the spade (red arrows) so that there is enough room between terminals.

The spade terminals will bottom out on the male side in the plug making a good connection. Remember to hold the board in if you need to remove the spades afterward to not damage the housing or pull the board(s) out.



GAUGE SIGNALS AND WIRING TIPS

NVU adapter plugs are designed to minimize your searching for the right wires as much as possible. Your new gauges probably have features your original vehicle was never designed to have, so some additional wiring may be required. Here are some helpful tips for a successful gauge installation.

ELECTRONIC SPEEDOMETER: this signal may or may not be in your wiring harness, LS swaps, new PCMs, cableless senders in older vehicles will require some additional wires to be run. If in doubt, just run new wires down to the new speed sender or PCM, that 15-20 minutes now can save you hours of troubleshooting later. If you are using a new “conversion” or “update” harness from a trusted harness manufacturer, these are already in place and you can use those designated wires.

TACHOMETER: Similar to above, old wires can also deteriorate, if you are unsure, just run a new wire to the appropriate tachometer signal source. Check page 12 in the NVU BIG BOOK or give us a call to help you through.

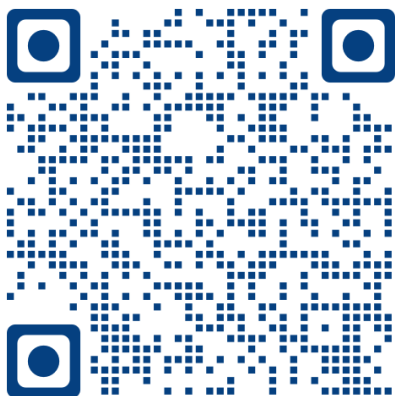
OIL PRESSURE SENDER: NVU recommends installing a new wire to the pressure sender to ensure you have the correct connection established. If you are using a new “conversion” or “update” harness from a trusted harness manufacturer, these are already in place and you can use those designated wires.

TEMPERATURE SENDER: NVU recommends installing a new wire to the temperature sender to ensure you have the correct connection established. If you are using a new “conversion” or “update” harness from a trusted harness manufacturer, these are already in place and you can use those designated wires.

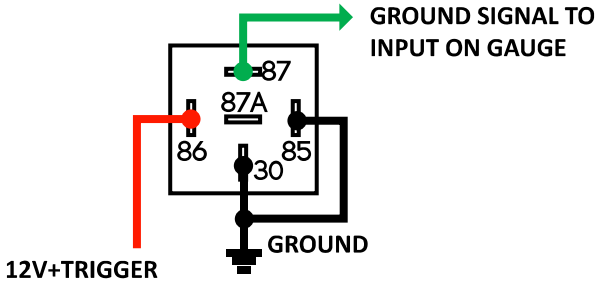
FUEL SENDER: This one is a pain usually to run a new wire all the way to the tank. Its best to try to re-use the original wire unless there is an issue with the vehicle wiring.

LED lighting: All NVU gauges use LED lighting, ***which may or may not operate properly with OE dimmers.*** If your lights will not work on the plug try turning up the dimmer all the way. If that does not work, we recommend tying directly into the parking lamp circuit for a constant 12v. If you would like to dim the gauges, we have our LED dimmer available, part number 99003-04

**SCAN THE QR CODE AT RIGHT TO SEE
THE INSTRUCTIONAL VIDEO >>>**



HOW TO SET UP A RELAY TO CONVERT A 12V+ OUTPUT TO A GROUND TRIGGER FOR THE GAUGE.



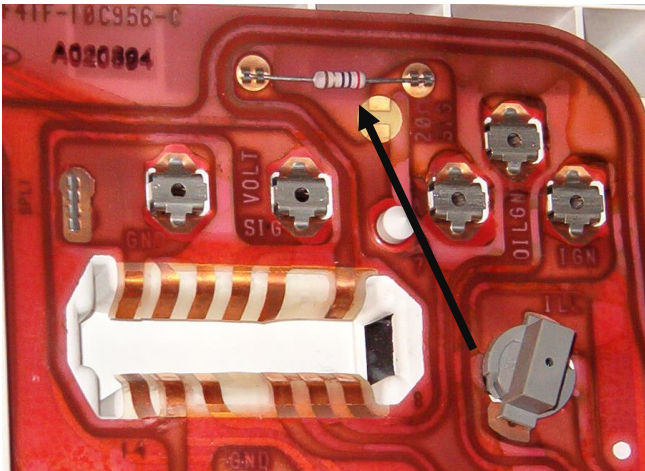
To trigger NVU indicator lights (in the gauge) will require 12V+ to illuminate the LEDs. If your signal is a ground trigger (brake light for example) there are 2 methods:

1. Use a relay as shown above, most any relay will do, LEDs draw less than 1 amp.
2. The NVU ground trigger controller can “flip” up to 3 ground triggers to power for use on almost any light or low amp circuit.

ALTERNATOR EXCITER JUMPER IF REQUIRED

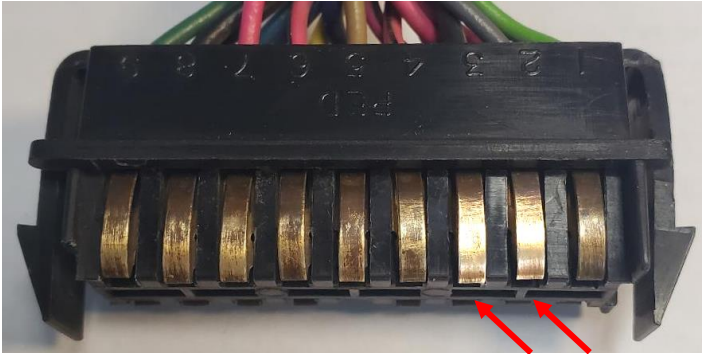
Some alternators may require a jumper to excite the unit to charge the battery. Often times the lamp in the cluster itself is “in charge” of that function. To simulate the bulb there are a few options:

- Use a 510 Ω resistor between the terminals. Most of the time there is already one on the back of the cluster itself.
- Convert to a 1 wire alternator
- Jump the excite wire on a 3-wire alternator basically converting it to one wire
- Use a bulb in that jumper location.



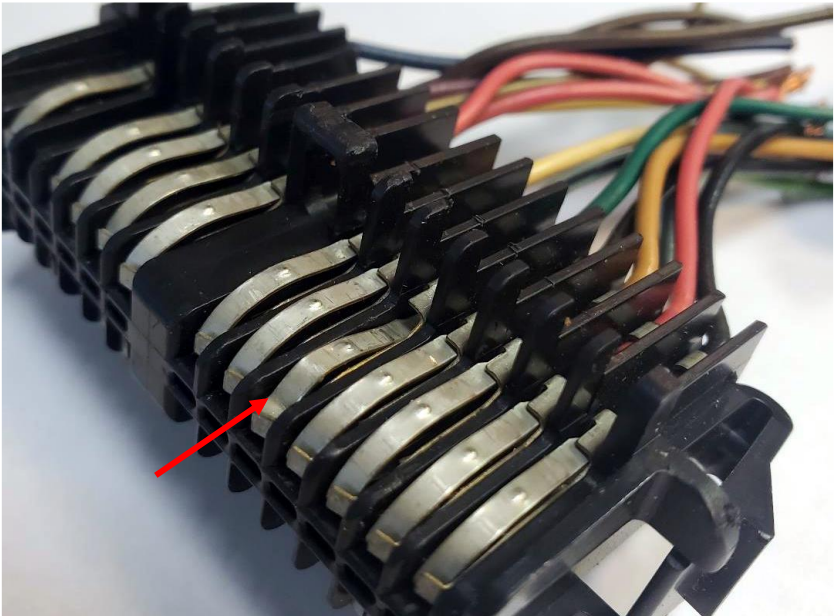
CLEANING PINS

The original plugs have been in the vehicle for a long time, for best results the pins should be gently cleaned. Use a Scotchbrite or similar pad or an eraser. Gently clean the contact area. **DO NOT USE SANDPAPER OR STEEL WOOL OR A SHORT/FIRE MAY RESULT.** Cleaned pins shown below (arrows)



BENT PINS

Before plugging together, inspect the original plug pins for any bent or pushed down pins that may not have good contact with the adapter. **CAREFULLY** adjust as needed.



CHECKING CONNECTIONS

Its always a good idea to make sure you have a good connection, bent or dirty pins can lead to frustration. A multimeter set to OPEN/CLOSED can be a fast way to double-check before you button things up.



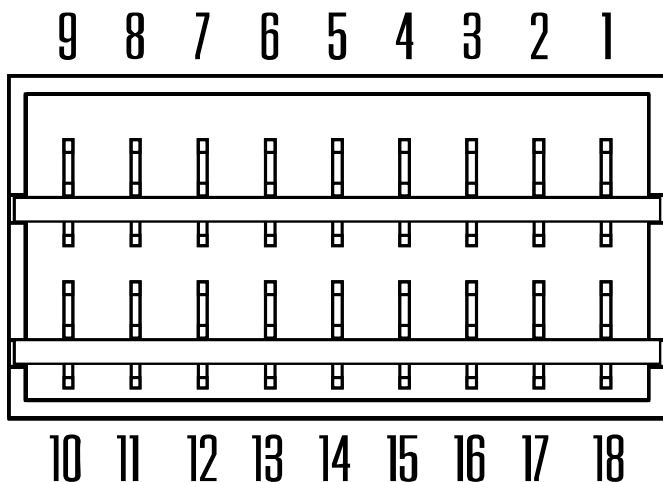
LABELS ON BOARD

The boards have labels that match the pin layout on your drawings, use those as you install the wires onto the spade terminals.



VEHICLE MODELS AND USE

This plug was used by many OE vehicle manufacturers over a period of over a decade. The number of clusters and variations on builds vary greatly. The following diagrams are for your guidance only. Please verify each connection prior to final installation of your NVU gauges or damage will result. Follow the pin verification procedure on prior pages in the book to ensure an easy installation.



TERMINAL SIDE OF PLUG– NOTE: OE PLUG CAN ONLY BE PLUGGED IN ONE WAY- THERE ARE LOCATORS ON THE PLUG AND ADAPTER.

Below and next page are the available items on the stock cluster wiring. The above cluster is the only style supported by this diagram. Other options, pinouts and functions may be available based on your cluster, plug , PCM, model and year.

O= Optional: use this for warning lights and such

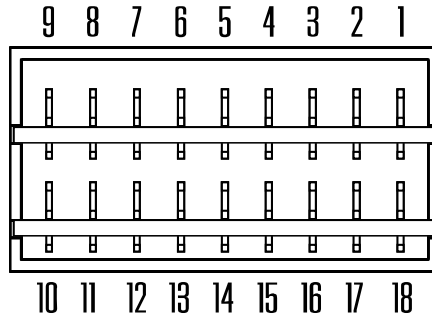
R= Required: the minimum items needed to get your gauges up and running

N/A= Available pin but not used on NVU gauges.

For ground trigger functions please see USING A RELAY in the previous section of this booklet.

73-87 GM TRUCK NOTES:

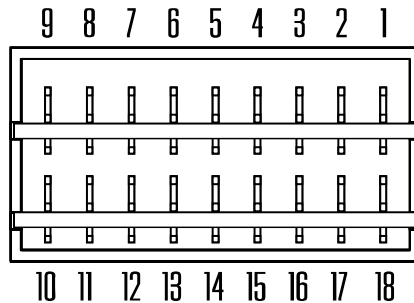
There are 3 model segments and over 15 different cluster variations on this vehicle, please verify all connections prior to installing your gauges. Note that there are several tan wires to deal with for some reason GM thought this would be funny when we were installing the fuel gauge.



73-82 GM TRUCK FACTORY CLUSTER WITH GAUGES			
NVU COLOR	PIN	OE COLOR	FUNCTION
TAN SPEEDO	1	LT GRN	HI BEAM 12v+ TRIGGER
WHITE SPEEDO,TACH	2	GREY	LIGHING 12V+ TRIGGER
BLACK SPEEDO, TACH	3	BLACK	GROUND
	4		MULTIPLE USE
RED SPEEDO,TACH	5	PINK	12V KEY ON
	6	TAN	BRAKE (GROUND TRIGGER)
GREEN SPEEDO	7	TAN	FUEL 0-90Ω (ORIGINAL CLUSTER WITH TACH)
	8	DK GRN	ORIGINAL WATER TEMP- NOT USED
BLACK SPEEDO, TACH	9	BLACK	GROUND- ADDITIONA LEAD
BLUE SPEEDO	10	LT BLUE	LH TURN 12V+ TRIGGER
GREY SPEEDO	11	DK BLUE	RH TURN 12V+ TRIGGER
RED SPEEDO,TACH	12	PINK	12V KEY ON ADDITIONAL LEAD
	13	TAN	BRAKE (GROUND TRIGGER)
	14		RESERVED
	15		RESERVED
	16		RESERVED
	17		RESERVED
GREEN SPEEDO (IF USED)	18	TAN	FUEL 0-90 Ω (ORIGINAL CLUSTER WITHOUT TACH) BLANK ON TACHOMETER MODELS

73-87 GM TRUCK NOTES:

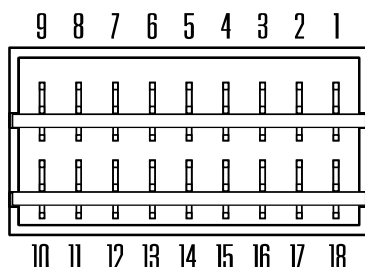
There are 3 model segments and over 15 different cluster variations on this vehicle, please verify all connections prior to installing your gauges. Note that there are several tan wires to deal with for some reason GM thought this would be funny when we were installing the fuel gauge.



78-82 GM TRUCK WITH GAUGES WITHOUT TACHOMETER			
NVU COLOR	PIN	OE COLOR	FUNCTION
TAN SPEEDO	1	LT GREEN	HI BEAM 12V+ TRIGGER
WHITE SPEEDO,TACH	2	GREY	LIGHING 12V+TRIGGER
BLACK SPEEDO, TACH	3	BLACK	GROUND
RED SPEEDO,TACH	4	PINK	12V+ KEY ON
	5	DK BLUE	ORIGINAL OIL SENDER- DO NOT USE
RED SPEEDO,TACH	6	PINK	12V+ KEY ON ADDITIONAL LEAD
GREEN SPEEDO	7	TAN	FUEL 0-90 Ω (WITH ORIG TACHOMETER)
BLACK SPEEDO, TACH	8	BLACK	GROUND
	9	DK GREEN	ORIGINAL TEMP- DO NOT USE
BLACK SPEEDO, TACH	10	BLACK	GROUND- ADDITIONAL LEAD
BLUE SPEEDO	11	LT BLUE	LH TURN 12V+ TRIGGER
GREY SPEEDO	12	DK BLUE	RH TURN 12V+ TRIGGER
	13		RESERVED
	14		RESERVED
	15		RESERVED
RED SPEEDO,TACH	16	PINK	12V+ KEY ON- ADDITIONAL LEAD
	17	TAN	BRAKE (GROUND TRIGGER)
GREEN SPEEDO	18	TAN	FUEL 0-90 Ω (ORIGINAL CLUSTER WITHOUT TACH) BLANK ON TACHOMETER MODELS

73-87 GM TRUCK NOTES:

There are 3 model segments and over 15 different cluster variations on this vehicle, please verify all connections prior to installing your gauges. Note that there are several tan wires to deal with for some reason GM thought this would be funny when we were installing the fuel gauge.

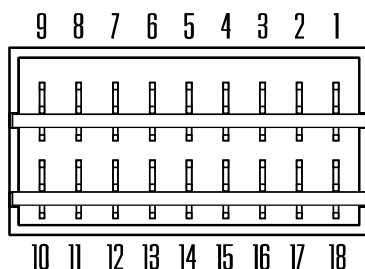


83-87 GM TRUCK WITH GAUGES WITHOUT TACHOMETER

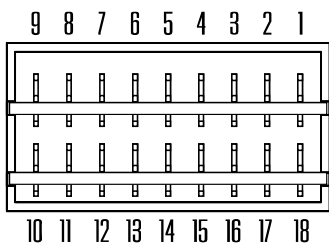
NVU COLOR	PIN	OE COLOR	FUNCTION
TAN SPEEDO	1	LT GRN	HI BEAM 12V+
WHITE SPEEDO,TACH	2	GREY	LIGHING 12V+
	3		VOLTMETER GROUND- NOT USED
RED SPEEDO,TACH	4	PINK	12V+ KEY ON
	5	DK BLUE	ORIGINAL OIL PRESSURE-NOT USED
RED SPEEDO,TACH	6	PINK	12V+ KEY ON ADDITIONAL LEAD
GREEN SPEEDO	7	TAN	FUEL 0-90 Ω (WITH ORIG TACHOMETER)
	8		N/A
	9	DK GREEN	ORIGINAL TEMP SENDER -NOT USED
BLACK SPEEDO, TACH	10	BLACK	GROUND
BLUE SPEEDO	11	LT BLUE	LH TURN 12V+
GREY SPEEDO	12	DK BLUE	RH TURN 12V+
	13		WARNING LAMPS (VAROIOUS)
	14		WARNING LAMPS (VAROIOUS)
	15		WARNING LAMPS (VAROIOUS)
RED SPEEDO,TACH	16	PINK	12V+ KEY ON - ADDITIONAL LEAD
	17	TAN	BRAKE (GROUND TRIGGER)
GREEN SPEEDO	18	TAN	FUEL 0-90 Ω (ORIGINAL CLUSTER WITHOUT TACH) BLANK ON TACHOMETER MODELS

90-91 SQUAREBODY NOT OBS WITH GAUGES

There are 3 model segments and over 15 different cluster variations on this vehicle, please verify all connections prior to installing your gauges. Note that there are several tan wires to deal with for some reason GM thought this would be funny when we were installing the fuel gauge.



90-91 SQUAREBODY NOT OBS WITH GAUGES			
NVU COLOR	PIN	OE COLOR	FUNCTION
TAN SPEEDO	1	LT GRN	HI BEAM 12V+
BLACK SPEEDO,TACH	2	BLACK	GROUND
TACH YELLOW	3	TAN	OIL PRESSURE
RED SPEEDO,TACH	4	PINK	12V+ KEY ON
	5	DK BROWN	LOW VOLTAGE MAY REQUIRE 510 Ω JUMPER
	6		NOT USED
	7		NOT USED
GR/YEL SPEEDO	8	TURQUOISE	TEMP SEND-USE NEW WIRE
WHITE SPEEDO TACH	9	LT GREY	LIGHTING SWITCH SEE NOTES
BLUE SPEEDO	10	LT BLUE	LEFT TURN 12V+
GREY SPEEDO	11	DK BLUE	RIGHT TURN 12V+
	12		4X4 (GND) EMPTY ON 2WD
	13	YELLOW	SEAT BELT
GREEN SPEEDO	14	PINK	FUEL LEVEL 0-90 Ω
	15	TAN/WHT	PARK BRAKE LIGHT (GND))
TAN,TACH	16	BR/WHT	CHK ENG (GND) SEE PG 21 IN BIG BOOK
	17	PINK/NLK	12V IGN
ORANGE SPEEDO	18	LT BLU/BLK	SPEED SIGNAL

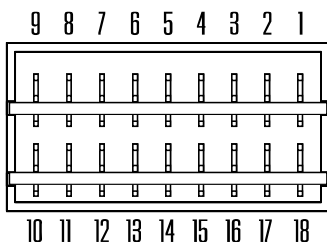


78-88 Monte Carlo 6 gauge

6 gauge wiring only!!

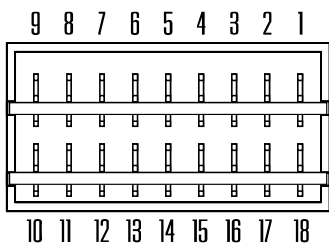
****** CHECK NVU WIRING IF YOU ARE USING THE 3-1 GAUGES AS THE WIRING IS DIFFERENT ******

78-87 MONTE CARLO 6-GAUGE (TYPICAL)			
NVU COLOR	PIN	OE COLOR	FUNCTION
	1	BRN	Alt lamp or Volt gauge may require excite jumper
	2	TAN	Oil Press lamp or Oil Press Gauge
	3	DK GRN	Temp lamp or Temp gauge
	4	PNK	Fuel Gauge 0-90 Ω
	5	GRA	Dash Lights see notes on led bulbs
	6	LT BLU	Left Turn Signal 12v+
	7		open
	8	DK BLU	Right Turn Signal 12v+
	9	BLK	Ground
	10	YEL	SES (Check Engine) lamp GROUND TRIGGER
	11	PNK/BLK	+12 volts key on
	12	LT GRN	Hi beam lamp 12v+
	13	YEL	Seat Belt lamp ground trigger
	14	DK GRN/WHT	Choke lamp ground trigger
	15	TAN/WHT	Brake lamp ground trigger
	16	PNK/BLK	+12 volts key on
	17	WHT	Tach signal set to # cylinders (IF PRESENT)
	18	ORN	Clock supply voltage (always hot)



78-81 MALIBU/MONTE CARLO SWEEP DASH

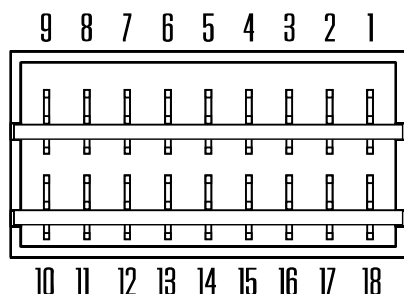
78-81 MALIBU/MONTE CARLO SWEEP DASH ONLY W/ IDIOT LAMPS			
NVU COLOR	PIN	OE COLOR	FUNCTION
	1	ORANGE	CONSTANT 12V+ HOT
	2	YELLOW	SEAT BELT LAMP
	3	DK GREEN	TEMP LAMP
	4	BLANK	
RED SPEEDO,TACH	5	PNK/BLK	12V+ KEY ON
GREEN SPEEDO	6	PINK	FUEL SENDER 0-90 Ω
BLUE SPEEDO	7	LT BLUE	LEFT TURN LAMP 12V+
TAN SPEEDO	8	LT GRN	HI BEAM LAMP 12V+
WHITE SPEEDO,TACH	9	GRAY	LIGHTING - SEE NOTES ON LED BULBS
	10	BLANK	
	11	BLANK	
BLACK SPEEDO, TACH	12	BLK	GROUND
GREY SPEEDO	13	DK BLUE	RT TURN LAMP 12V+
	14	BROWN	ALT LAMP MAY REQUIRE EXCITE JUMPER
	15	PNK/BLK	12V+ KEY ON (EXCITE JUMPER)
	16	TAN/WHT	BRAKE LAMP GROUND TRIGGER
	17	TAN	OIL LAMP
	18	GRAY	LIGHTING - SEE NOTES ON LED BULBS



84-87 REGAL/GRAND NATIONAL

84-87 REGAL/GRAND NATIONAL (TYPICAL) MAY REQUIRE SPLICING FOR SPEED / TACHOMETER

NVU COLOR	PIN	OE COLOR	FUNCTION
RED SPEEDO,TACH	1	PNK/BLK	12V+ KEY ON
	2	TAN	OIL/CHOKE LAMP GROUND TRIGGER
	3	BROWN	VOLTS LAMP MAY REQUIRE EXCITE JUMPER 12V+ TO PIN 15
	4	GRN	TEMP WARNING LAMP GROUND TRIGGER
	5	TAN/WHT	BRAKE LAMP INDICATOR GROUND TRIGGER
	6	YEL/BLK	FASTEN BELTS INDICATOR
BLUE SPEEDO	7	LT BLUE	LEFT TURN INDICATOR 12V+
BLACK SPEEDO, TACH	8	BLK	GROUND
GREEN SPEEDO	9	PINK	FUEL 0-90 Ω
WHITE SPEEDO,TACH	10	GRAY	LIGHTING - SEE NOTES ON LED BULBS
	11	BLK	GROUND
	12		N/A
	13		N/A
	14		N/A
	15	PNK/BLK	12V+ KEY ON
	16	WHT	CRUISE LAMP 12V+
GREY SPEEDO	17	DK BLU	RIGHT TURN LAMP 12V+
TAN SPEEDO	18	LT GRN	HI BEAM LAMP 12V+

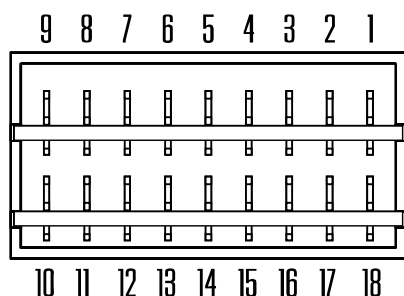


69-70 MUSTANG WITH TACHOMETER

The tach signal is available on the separate tach plug separate from the cluster plug. NVU recommends running a new wire from the tach signal source following the instructions on page 12 of the NVU BIG BOOK included with your gauge kit.

Note: Some tach versions use our 12-pin plug: check before ordering

69-70 MUSTANG WITH TACH (18-PIN PLUG)			
NVU COLOR	PIN	OE COLOR	FUNCTION
	1	N/A	N/A
WHITE SPEEDO, TACH	2	BLUE/RED	LIGHTING- SEE NOTES ON LED BULBS
TAN SPEEDO	3	GR/BLK	HI BEAM 12V+ TRIGGER
BLACK SPEEDO, TACH	4	BLACK	GROUND
WHITE SPEEDO, TACH	5	BLUE/RED	LIGHTING- SEE NOTES ON LED BULBS -ADDDITIONAL FEED
	6	BLK/GREEN	ALT CHARGE LAMP- MAY REQUIRE EXCITE JUMPER
	7	YEL/BLK	ALT CHARGE LAMP- MAY REQUIRE EXCITE JUMPER
RED SPEEDO, TACH	8	RED/YELLOW	12V+ KEY ON
	9	N/A	N/A
	10	N/A	N/A
	11	WHT/RED	OIL SENDER- USE NEW WIRE
	12	VIOLET	BRAKE LAMP GROUND TRIGGER
	13	VIO/BLK	ACCY POWER NOT USED (RESISTOR WIRE)
GREY SPEEDO	14	WHT/BLUE	RIGHT TURN LAMP 12V+ TRIGGER
GREEN SPEEDO	15	YEL/WHT	FUEL SENDER 73-10
	16	RED/WHT	TEMP SENDER - USE NEW WIRE
BLUE SPEEDO	17	GR/WHT	LEFT TURN LAMP 12V+ TRIGGER
	18	N/A	N/A

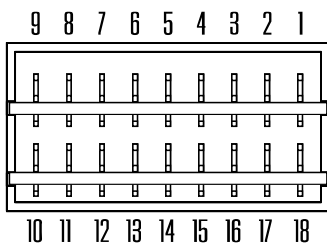


69-70 MUSTANG WITHOUT TACHOMETER

NVU recommends running a new wire from the tach signal source following the instructions on page 12 of the NVU BIG BOOK included with your gauge kit.

Note: Some tach versions use our 12-pin plug: check before ordering

69-70 MUSTANG WITHOUT TACH (18-PIN PLUG)			
NVU COLOR	PIN	OE COLOR	FUNCTION
	1	N/A	N/A
BLUE SPEEDO	2	GR/WHT	LEFT TURN LAMP 12V+ TRIGGER
	3	N/A	N/A
	4	GR/WHT	TEMP SENDER USE NEW WIRE
GREEN SPEEDO	5	YEL/WHT	FUEL SENDER 73-10
	6	VIOLET	BRAKE LAMP GROUND TRIGGER
RED SPEEDO,TACH	7	RED/YEL	KEY ON 12V+
BLACK SPEEDO, TACH	8	BLACK	GROUND
	9	N/A	N/A
	10	N/A	N/A
	11	VIOLET	ACCY POWER NOT USED (RESISTOR WIRE)
GREY SPEEDO	12	BLUE/RED	RIGHT TURN LAMP 12V+ TRIGGER
WHITE SPEEDO,TACH	13	WHT/BLUE	LIGHTING- SEE NOTES ON LED BULBS
	14	WHT/RED	OIL SENDER - USE NEW WIRE
TAN SPEEDO	15	GR/BLK	HI BEAM 12V+ TRIGGER
	16	YELLOW	ALT CHARGE LAMP- MAY REQUIRE EXCITE JUMPER
	17	RED	ALT CHARGE LAMP- MAY REQUIRE EXCITE JUMPER
	18	N/A	N/A



71-73 MUSTANG STANDARD GAUGES

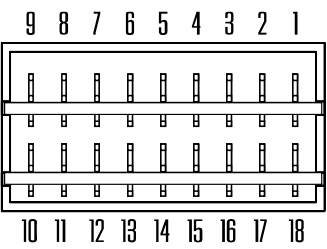
NVU recommends running a new wire from the tach signal source following the instructions on page 12 of the NVU BIG BOOK included with your gauge kit.

Note: Some tach versions use our 12-pin plug: check before ordering



71-73 MUSTANG STANDARD CLUSTER (NO TACH) 18 PIN

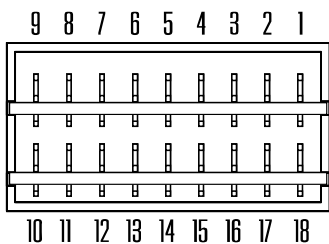
NVU COLOR	PIN	OE COLOR	FUNCTION
	1	N/A	N/A
	2	N/A	N/A
GREY SPEEDO	3		RIGHT TURN LAMP 12V+ TRIGGER
BLUE SPEEDO	4		LEFT TURN LAMP 12V+ TRIGGER
	5		12V+ KEY ON ACCY
GREEN SPEEDO	6		FUEL SENDER 73-10 Ω
	7		5V (NOT USED)
	8	N/A	N/A
	9		OIL SENDER - USE NEW WIRE
	10		CLOCK CONSTANT 12V+ NOT USED
	11		BRAKE LAMP GROUND TRIGGER
	12		TEMP USE NEW WIRE
RED SPEEDO,TACH	13		12V+ KEY ON GAUGES
BLACK SPEEDO, TACH	14		GROUND
	15	N/A	N/A
	16	N/A	N/A
TAN SPEEDO	17		HI BEAM LAMP 12V+ TRIGGER
WHITE SPEEDO,TACH	18		LIGHTING- SEE NOTES ON LED BULBS -ADDDITIONAL FEED



1970 FORD TRUCK WITH GAUGES ONLY

With gauges (arrows) only, non gauge cluster used 12-pin

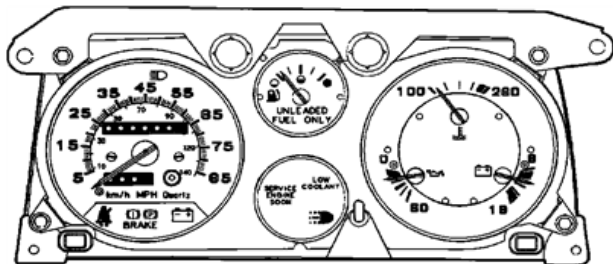
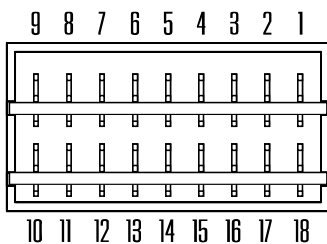
1970 FORD TRUCK WITH GAUGES (NO IDIOT LAMPS)			
NVU COLOR	PIN	OE COLOR	FUNCTION
	1	N/A	BLANK
	2	N/A	BLANK
	3	N/A	BLANK
BLUE SPEEDO	4		LEFT TUEN LAMP 12V+ TRIGGER
WHITE SPEEDO,TACH	5		LIGHTING- SEE NOTES ON LED BULBS
BLACK SPEEDO, TACH	6		GROUND
GREY SPEEDO	7		RIGHT TURN LAMP 12V+ TRIGGER
TAN SPEEDO	8		HI BEAM LAMP 12V+ TRIGGER
	9	N/A	BLANK
	10	N/A	BLANK
	11		OIL NOT USED
	12	N/A	BLANK
	13	N/A	BLANK
	14	N/A	BLANK
GREEN SPEEDO	15		FUEL 73-10 Ω
RED SPEEDO,TACH	16		12V+ ACCY VOLTAGE
	17		TEMP NOT USED
	18	N/A	BLANK



1971-72 FORD TRUCK WITH GAUGES ONLY

With gauges (arrows) only, non gauge cluster used 12-pin

1971-72 FORD TRUCK WITH GAUGES (NO IDIOT LAMPS)			
NVU COLOR	PIN	OE COLOR	FUNCTION
	1	N/A	BLANK
BLUE SPEEDO	2		LEFT TURN 12V+ TRIGGER
TAN SPEEDO	3		HI BEAM 12V + TRIGGER
BLACK SPEEDO, TACH	4		GROUND
	5	N/A	BLANK
	6	N/A	BLANK
	7	N/A	BLANK
	8		RIGHT TURN LAMP 12V+ TRIGGER
	9	N/A	BLANK
	10	N/A	BLANK
WHITE SPEEDO,TACH	11		LIGHTING- SEE NOTES ON LED BULBS
	12		OIL NOT USED
	13	N/A	BLANK
	14	N/A	BLANK
GREEN SPEEDO	15		FUEL 73-10 Ω
	16		TEMP NOT USED
	17	N/A	BLANK
RED SPEEDO,TACH	18		12V+ ACC VOLTAGE



78-96 GM VAN

This is a general guide; there were many variations please check before making final connections

NVU COLOR	PIN	OE COLOR	FUNCTION
GREY SPEEDO	1	BLUE	RT TURN 12V+
BLUE SPEEDO	2	LT BLUE	LT TURN 12V+
TAN SPEEDO	3	GREEN	HI BEAM
GREEN SPEEDO	4	VIOLET	FUEL 0-90
BLACK SPEEDO, TACH	5	BLACK	GROUND
	6	BROWN	AIR BAG
	7	GREEN	TEMP SENDER -USE NEW WIRE
	8	TAN	OIL PRESS -USE NEW WIRE
RED SPEEDO,TACH	9	PINK/BLK	12V + SWITCHED
	10		LOW COOLANT
	11	BR/WHT	SERV ENG SOON
	12		FOG LAMPS 12V+
	13	WHT	ABS
	14	TAN/WHT	BRAKE
	15		
	16	YELLOW	SRS
BLACK SPEEDO, TACH	17	BLK	GROUND
WHITE SPEEDO,TACH	18	GREY	LIGHTS (SEE NOTES ON LED LIGHTING)