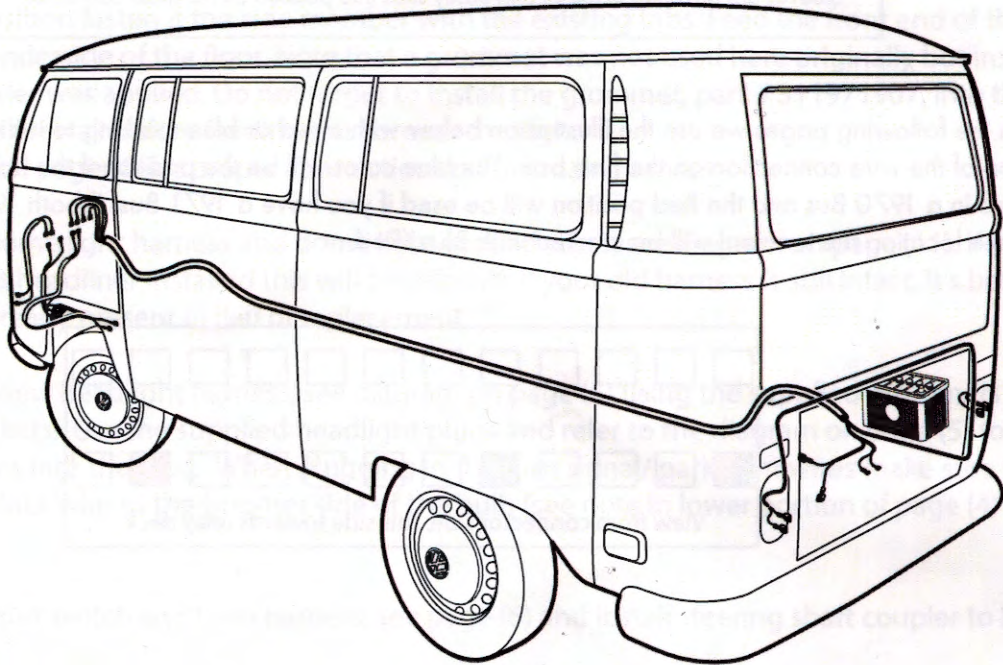


Part # 211 971 028JC
1970-1971 Bus



1970-1971 Bus Export Model Complete Wiring Harness

This wiring harness kit fits 1970-1971 export Bus models. If your Bus is a European model, or some electrical upgrades have been performed (such as an alternator, or additional equipment), some modifications will be required.

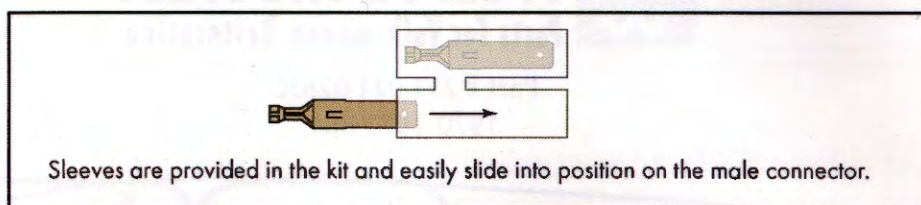
Basic automotive electronic knowledge is essential for proper installation of this wiring harness. Thoroughly read these installation instructions and study the diagrams to familiarize yourself with the basic layout of your vehicle's electrical system.

Document the routing of the old wiring harness prior to removal. A digital camera is a useful tool for this step.

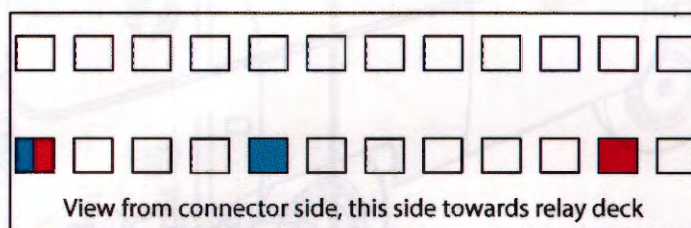
Component List

- Main Harness (1)
- Dome Light Harness (1)
- Headlight Harness (1)
- Brake Light Harness (1)
- Miscellaneous Wires/Sub Harnesses (30)
- Grommets (4)
- Headlight Plugs (2)
- Male push-on connectors (15)
- Main Harness 8 pin plug (1)
- Dash Harness 8 pin plug (1)

Installation of male push-on connector sleeve.



Within the following pages we use the illustration below with a red or blue marking to indicate the exact position of the wire connection on the fuse box. The blue color will be the position if the harness is being installed in a 1970 Bus and the Red position will be used if you have a 1971 Bus. If both 1970 and 1971 use the same location the terminal will be marked with Blue/Red.



Installation

1. Disconnect negative cable from battery. Review the instructions, and identify the various sub-harnesses and supplemental wires.

2. Now the fun begins!

Access to the wires behind the dash panel will be greatly improved by removing the speedometer dash panel. Unfortunately the heat and fresh air vent knobs situated on the right side of the panel are difficult to remove. You will find that they are held in with a plastic pin that is accessed from the radio opening. With the removal of the knobs you can unscrew the four Philips screws in the corners, unscrew the speedo cable and release the remaining wires from fuel gauge and indicator lights. You now have clear and easy access to the dash wiring. Take a few pictures to document your current layout and then disconnect everything less the wiper motor wiring. Unclip the fuse box from its mounting bracket and disconnect all the wires running to it less the wires going to the relay deck. With all the wires disconnected behind the dash move to the engine compartment and disconnect the wires from the voltage regulator, engine and taillights. Attach a dragline onto the rear portion of the wiring harness (fish tape or heavy cord material) that is a minimum of 15 ft long. Overlap the dragline and main harness for about one foot and use duct tape or plastic tape to attach the dragline securely to the main harness. Wrap the tape tightly as to create a strong, streamlined bundle. The main harness travels along the right side frame member. Release the sheet metal tabs holding the harness to the member. With the dragline securely attached to the old main harness, pull the harness from the front as an assistant helps guide the dragline from the rear. Pull the complete main harness through the hole in the floor releasing it completely from the vehicle.

With the old harness removed attach the rear of the new main harness onto the dragline making sure

that the wires are secured properly. Coat the new harness liberally with wire lube (surgical lube works well, KY Jelly, Astroglide, etc.) and pull the new harness into place from the rear while an assistant helps guide the harness from the front. Be sure to keep lubricating the new harness as it is being fed while keeping the harness bundle as straight as possible. If the harness becomes stuck, do not force the issue. Reverse the procedure and observe the path of travel and remedy any obstacle. With the harness pulled into position fasten it the side member with the existing tabs. Feed the front end of the harness through the underside of the floor. Note that a grommet was not used here originally but instead a putty type sealer was applied. Do not forget to install the grommet, part # 311971907, into the passenger side of the firewall before feeding the harness through.

See diagram on page (4) for proper connections on the main harness.

3. Install the dome light harness and dome light ground wires, see diagram on page (11). If your Bus currently has a headliner installed this will be difficult. If your old harness is still intact, it's best to use the harness already present in lieu of replacement.

4. Install new headlight harness, see diagram on page (5) using the supplied grommets for the headlight buckets. Use the supplied headlight plugs and refer to the diagram on page (5) to correctly locate the wires into the plug. When plugging in the turn signal/ park light wires make sure that you connect the black wire to the brighter side of the bulb (see note in lower portion of page (4) for more info).

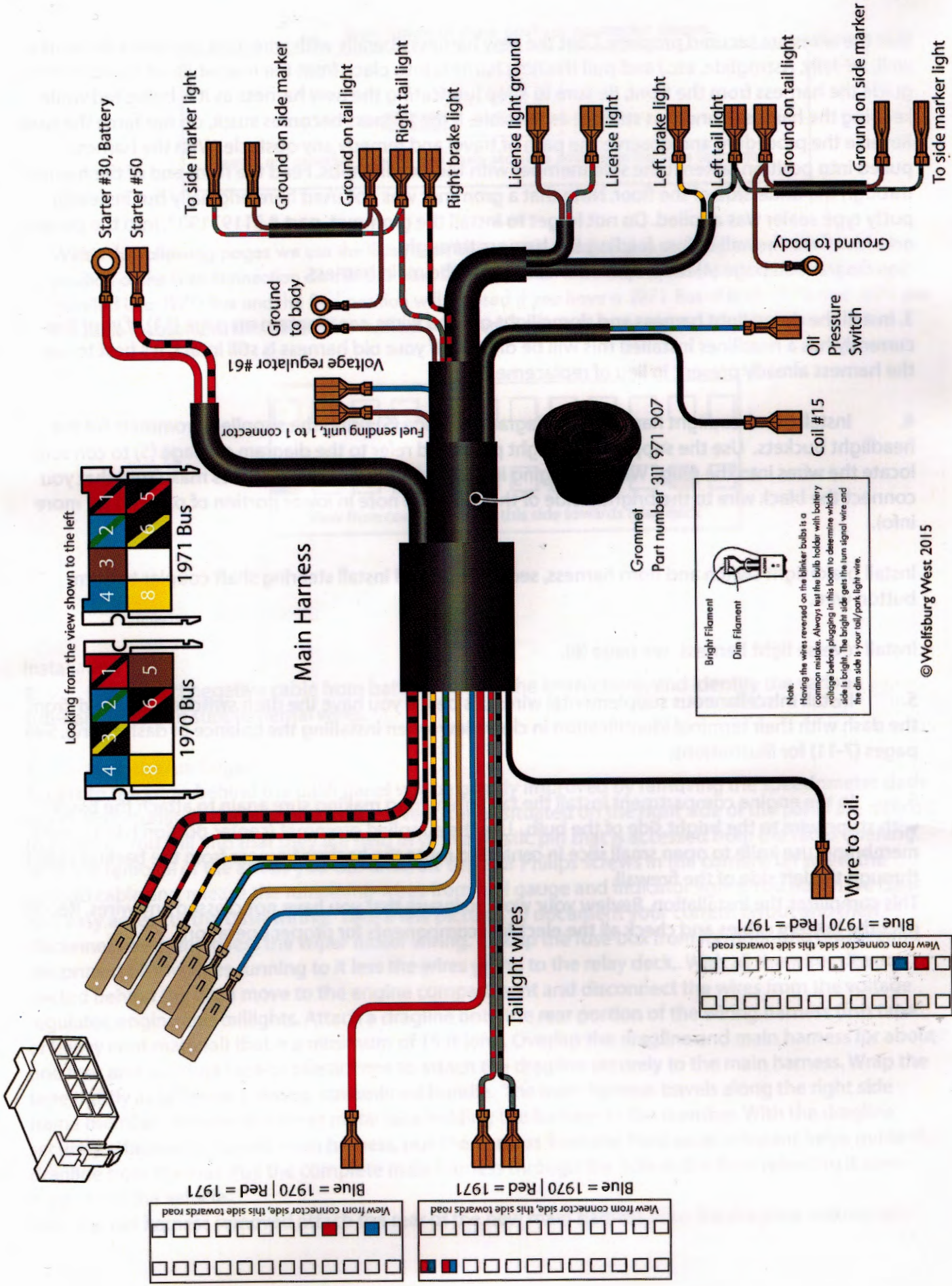
Install brake light switch and horn harness, see page (6) and install steering shaft coupler to horn button wire.

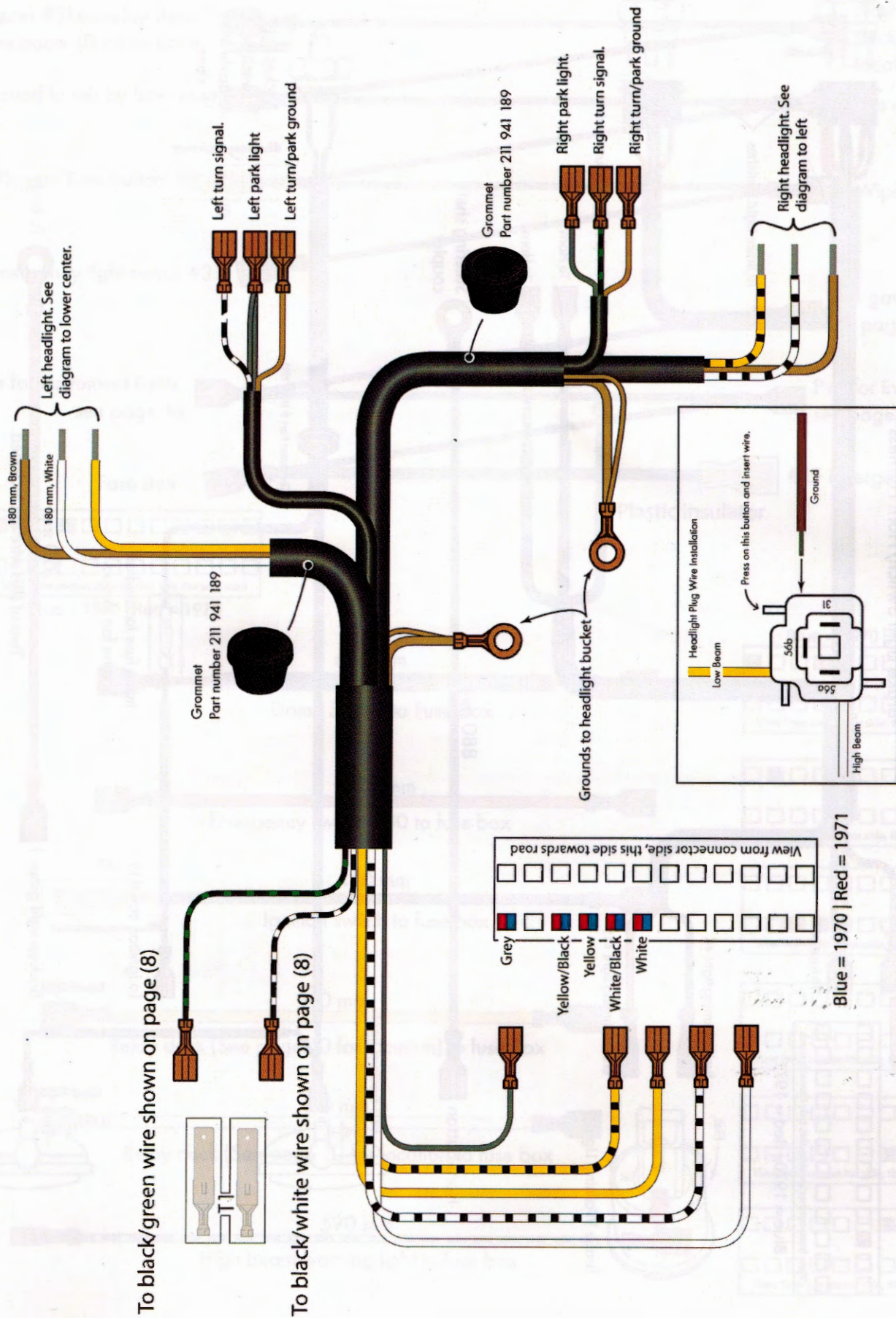
Install reverse light harness, see page (6).

5. Install miscellaneous supplemental wires. It's best if you have the dash switches removed from the dash with their terminal identification in clear view when installing the balance of dash wiring. See pages (7-11) for illustrations:

6. In the engine compartment install the tail light wiring making sure again to attach the black with stripe wire to the bright side of the bulb. Use the supplied grommet (center portion has a closed membrane, use knife to open small slice in center) to route the backup harness from the backup switch through the left side of the firewall.

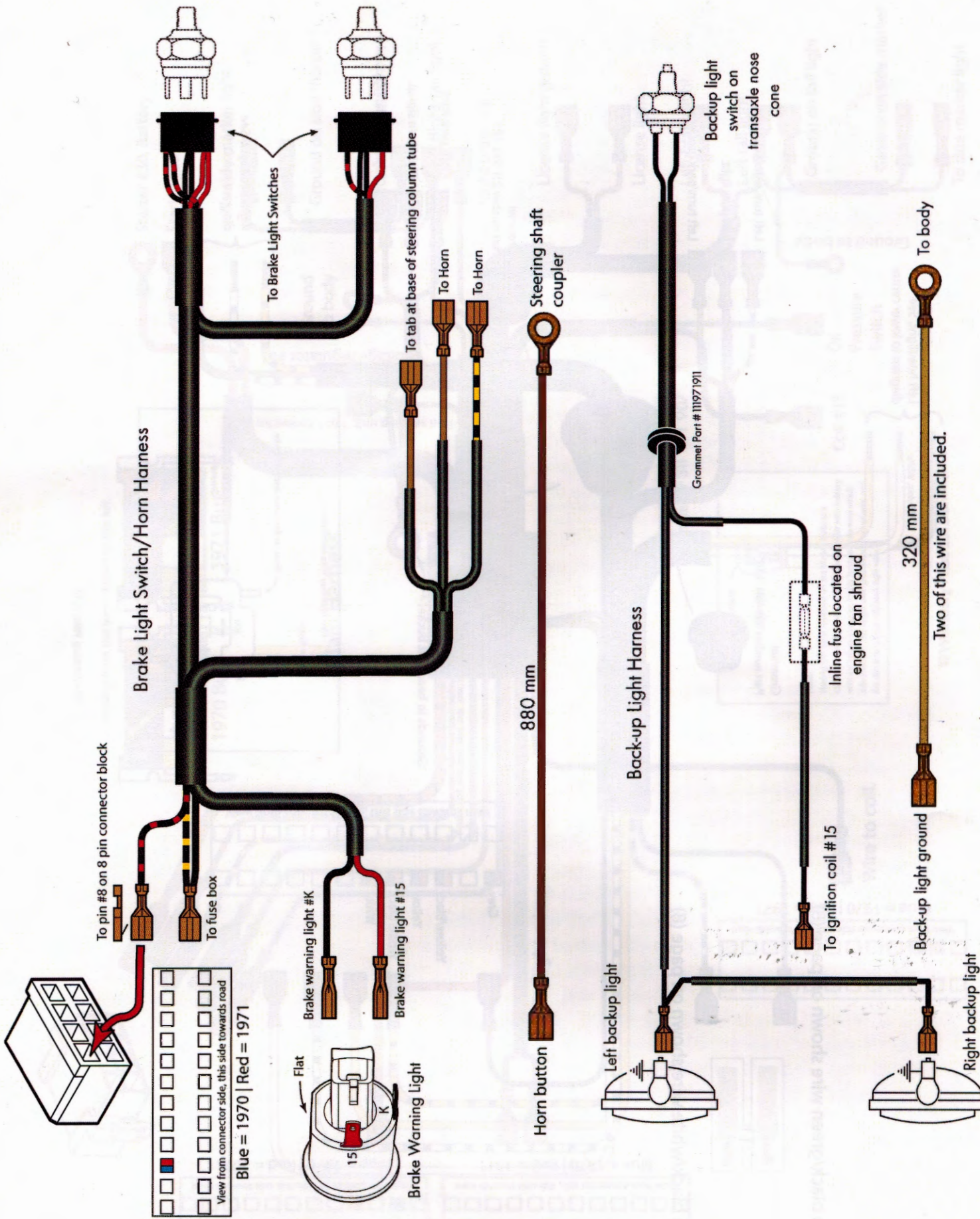
This completes the installation. Review your work to insure that you have not crossed any wires. Reconnect the battery cables and check all the electrical components for proper operation.



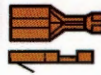


To black/green wire shown on page (8)

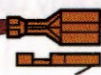
To black/white wire shown on page (8)



Buzzer #31 on relay deck.
See page 10 for location



Flasher unit on relay deck. See page 10 for location



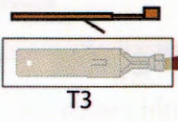
Ground to tab by 8pin plug



Tab on instrument panel



Plug on Turn Switch



T3

Wiper switch #31



Emergency light switch #31



Gas gauge + see page 16



Pwr for instrument lights, see page 16



Pwr for instrument lights, see page 16



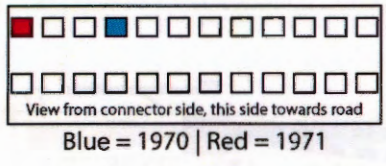
Fuse Box



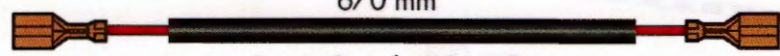
#15 Emergency flasher switch



Plastic insulator

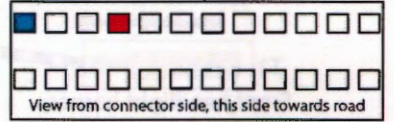


670 mm

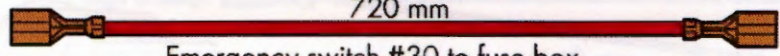


Dome Switch to Fuse Box

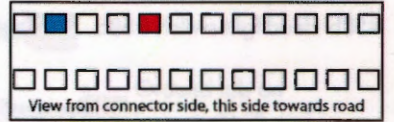
Blue = 1970 | Red = 1971



720 mm

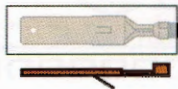


Emergency switch #30 to fuse box

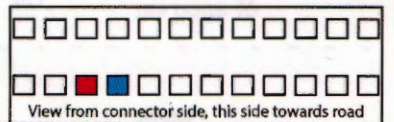


T4

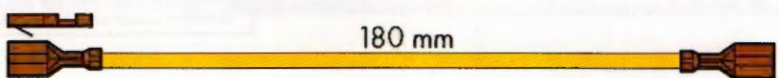
420 mm



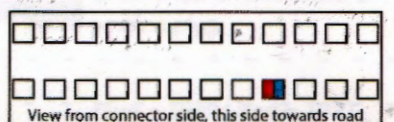
Ignition switch to fuse box



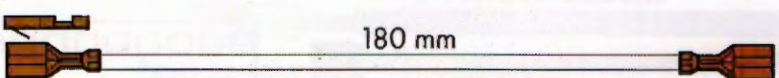
180 mm



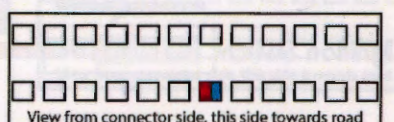
Relay deck (See page 10 for location) to fuse box



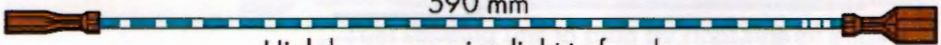
180 mm



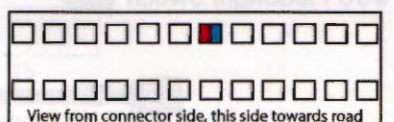
Relay deck (See page 10 for location) to fuse box



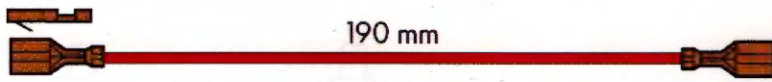
590 mm



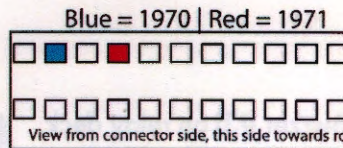
High beam warning light to fuse box



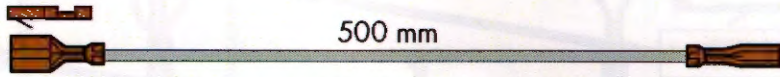
.110



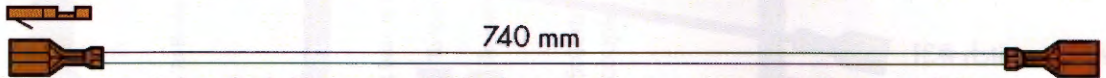
190 mm
Relay deck (See page 10 for location) to fuse box



460 mm
Relay deck (See page 10 for location) to Headlight switch #5



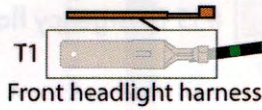
500 mm
Relay deck (See page 10 for location) to left dome light switch



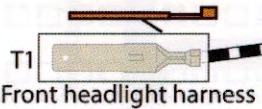
740 mm
Relay deck (See page 10 for location) to emergency flasher switch #+



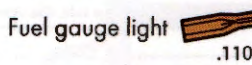
Emergency flasher switch #R
Turn signal switch



Emergency flasher switch #L
Turn signal switch

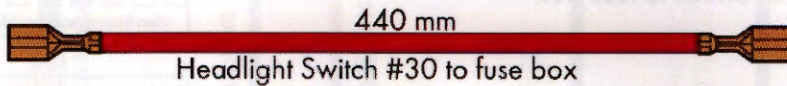


#58b Headlight switch #58b
Speedo light

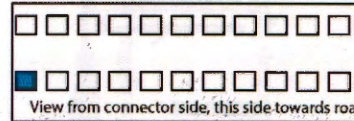


Fuel gauge light
.110

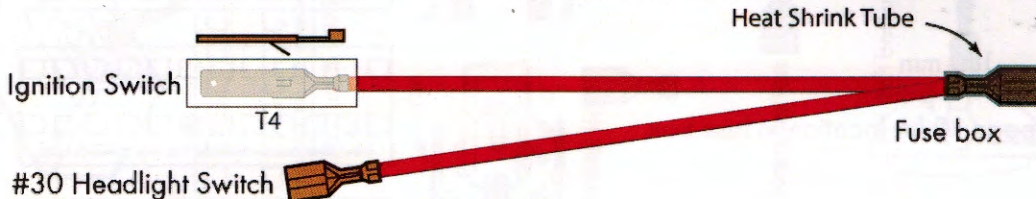
1970 Only



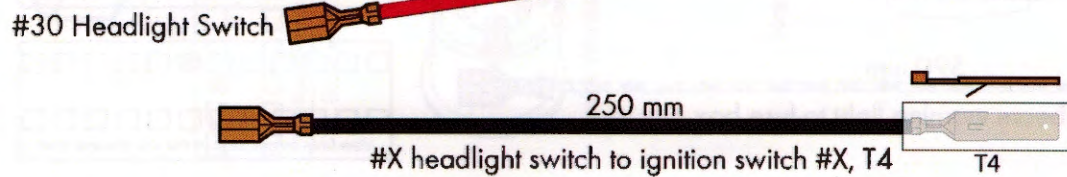
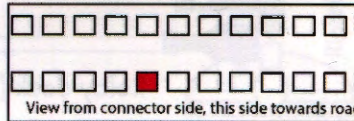
440 mm
Headlight Switch #30 to fuse box



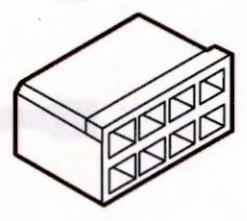
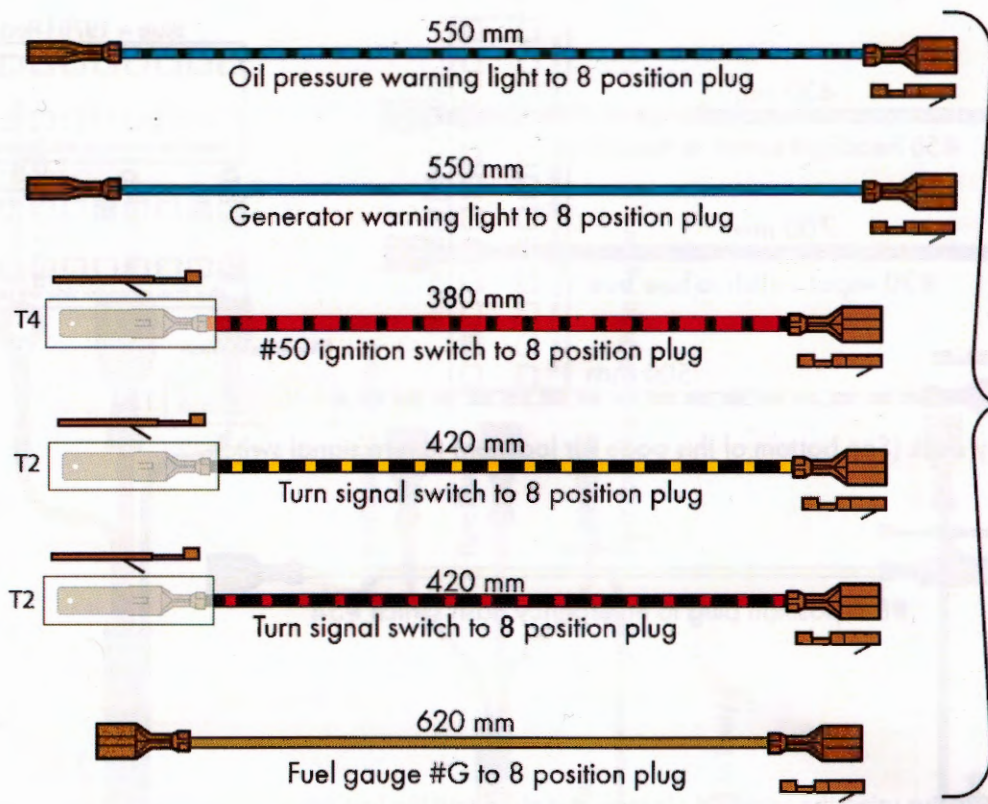
1971 Only



Ignition Switch
Heat Shrink Tube
Fuse box



#30 Headlight Switch
250 mm
#X headlight switch to ignition switch #X, T4



8 Position Plug

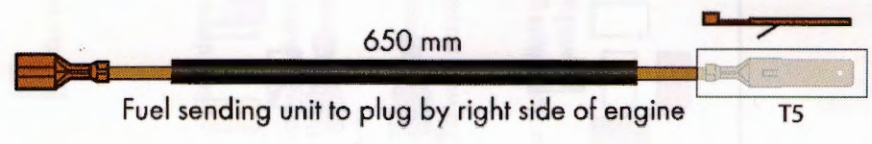
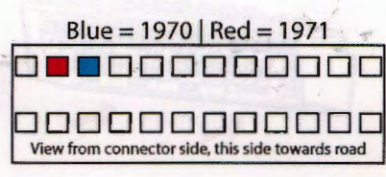
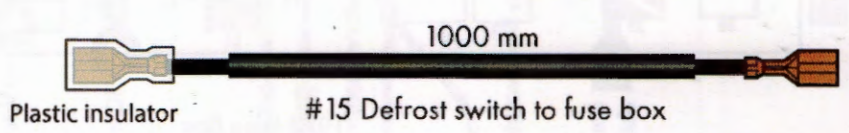
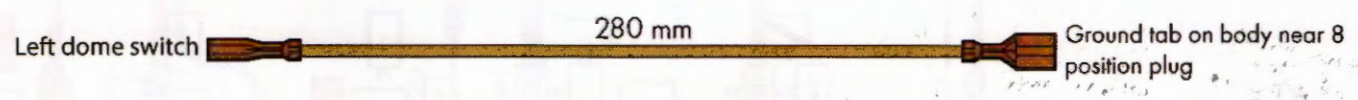
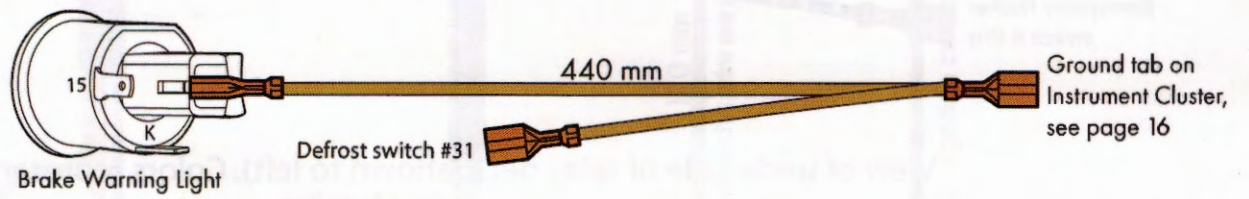
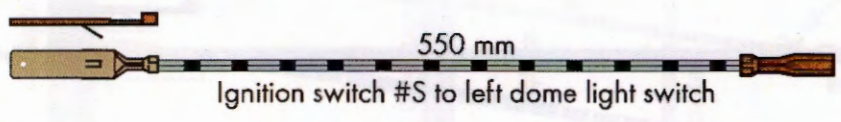
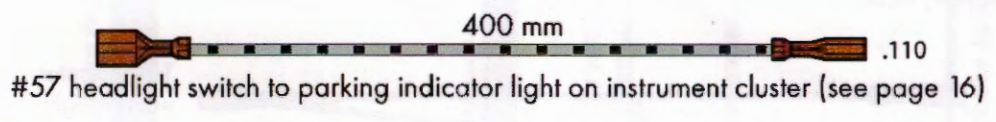
Looking from the view shown below



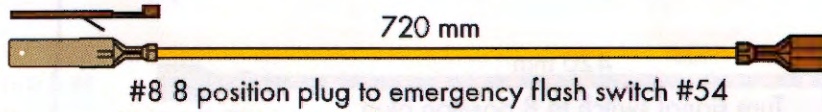
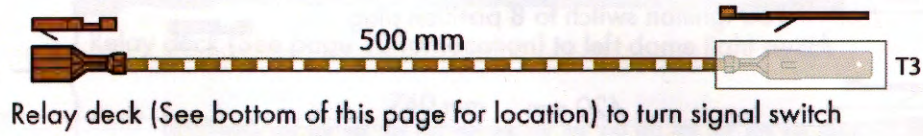
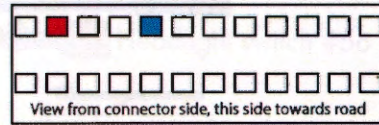
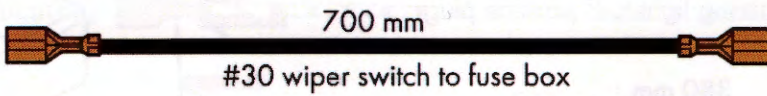
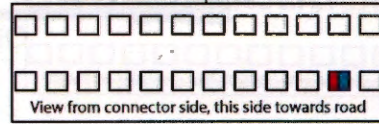
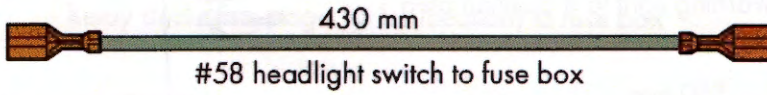
1970 Bus



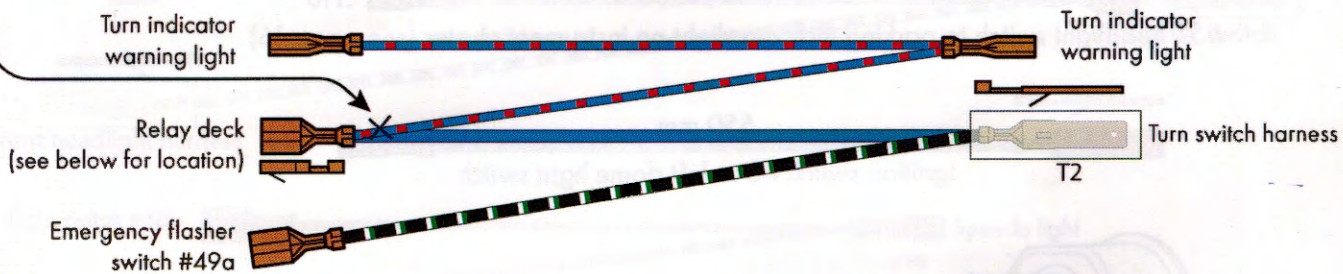
1971 Bus



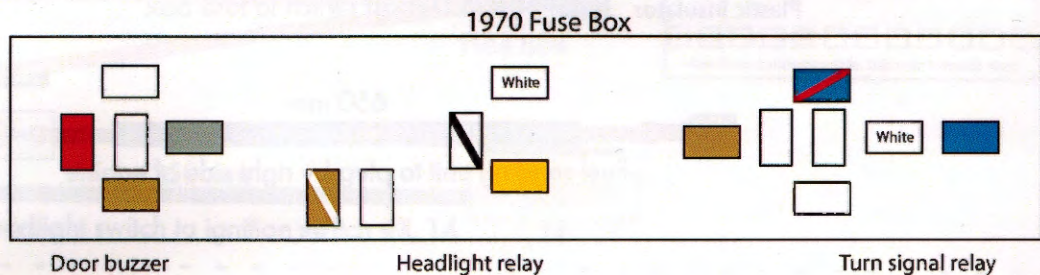
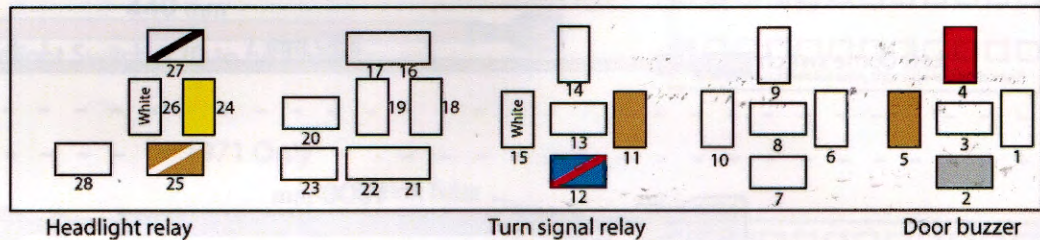
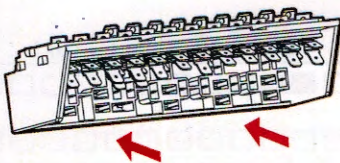
Blue = 1970 | Red = 1971

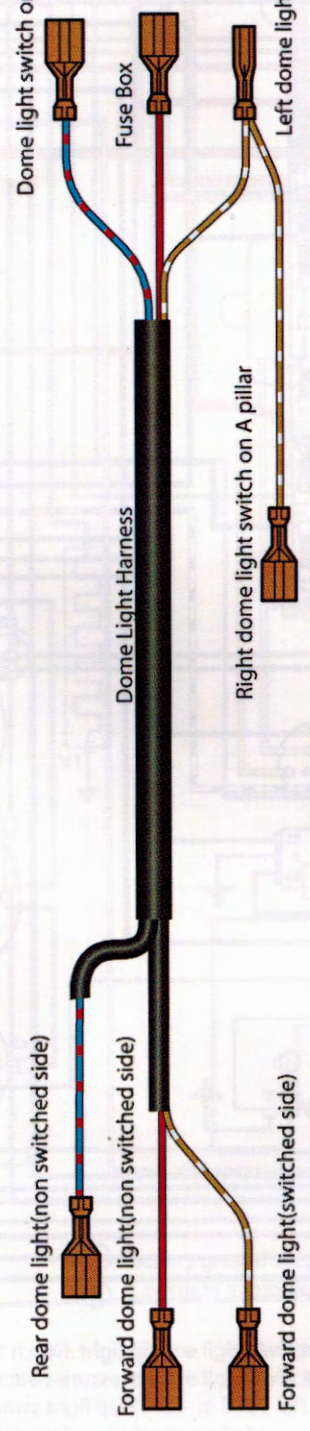
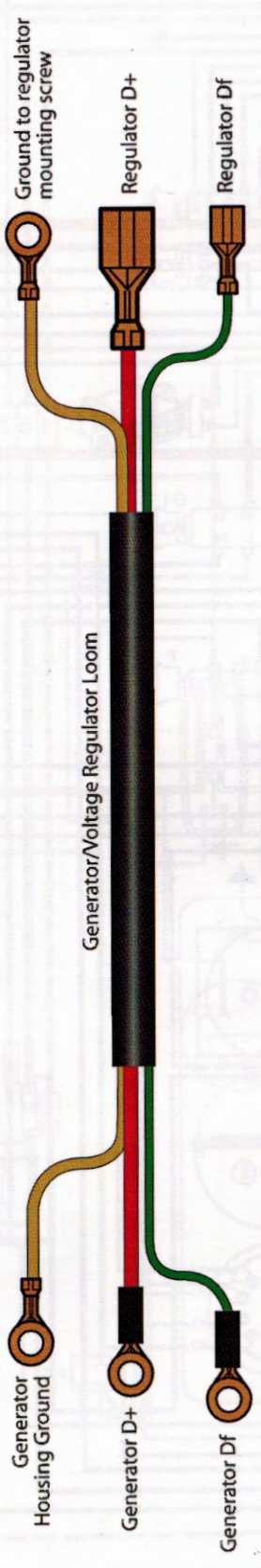


If installing on a 1970 Bus using the original 4 pin relay that plugs into the fuse panel you will need to cut the wire here. Install a .250 terminal with locking tab to the cut end. This wire (blue/red) will now go to the KBL position on the relay deck.



View of underside of relay deck (shown to left). Colors represent wire color
1971 Fuse Box

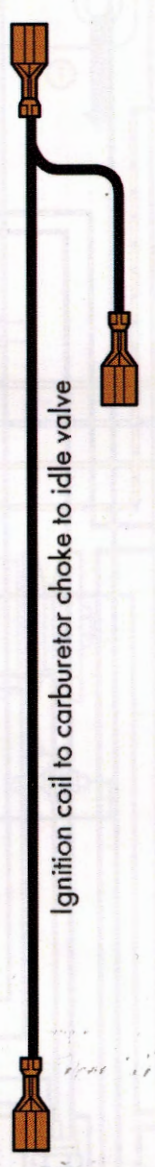
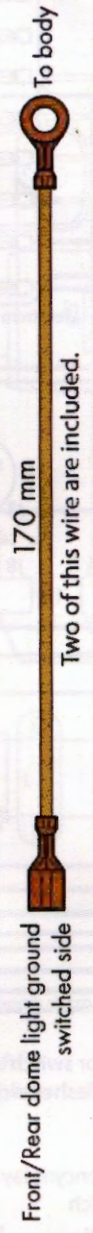


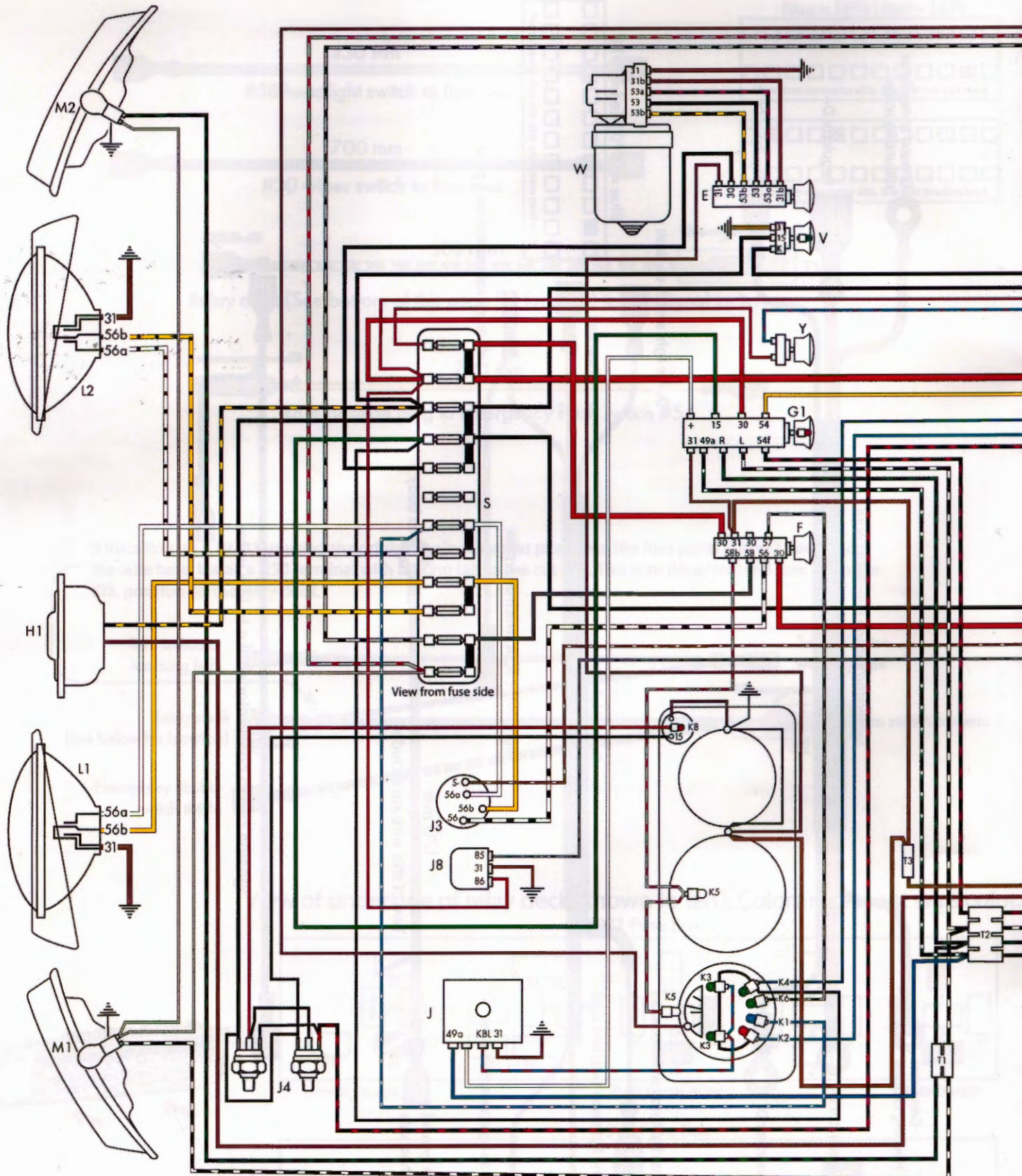


Blue = 1970 | Red = 1971

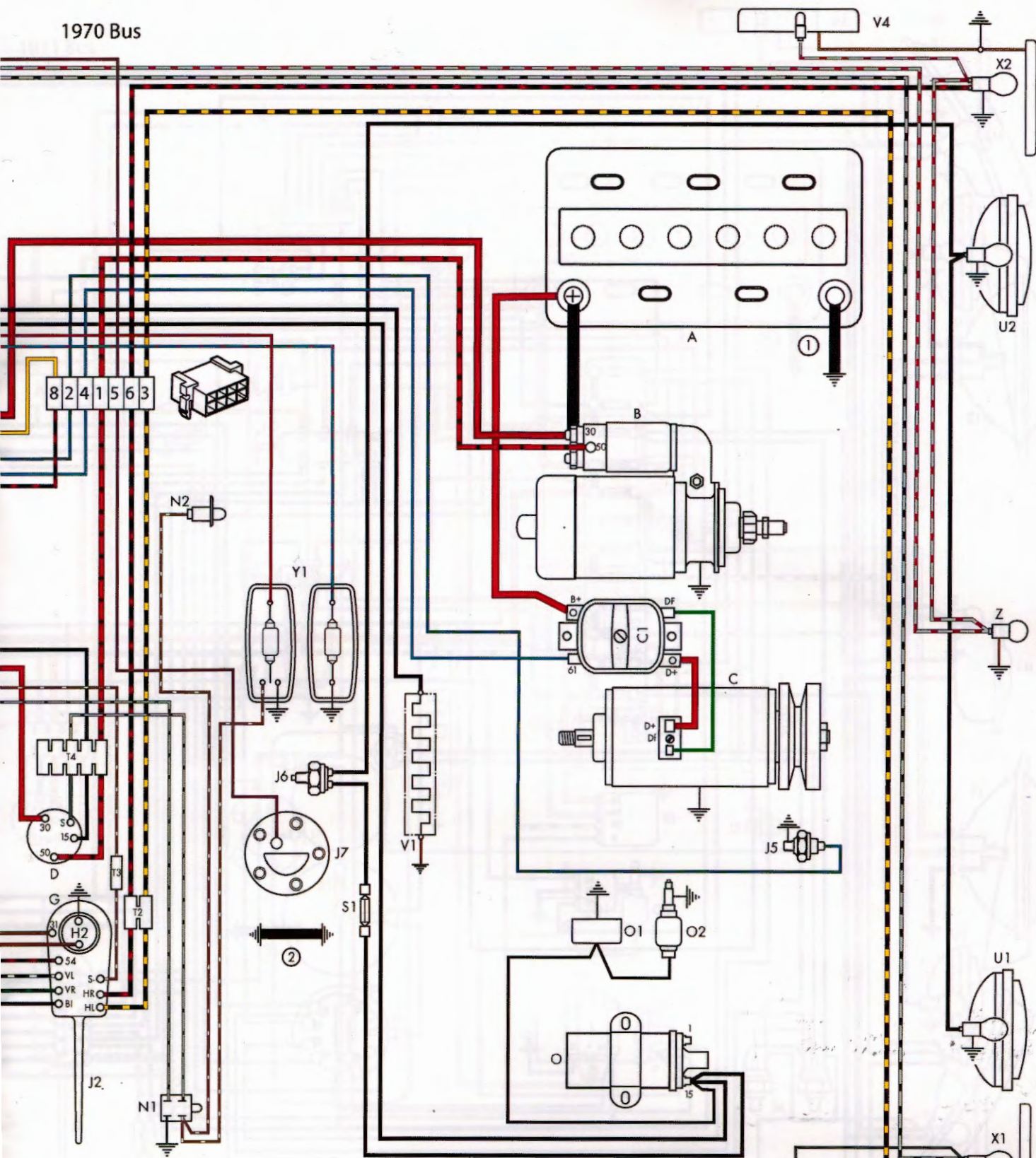
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View from connector side, this side towards road





- | | | | | | | | |
|----|-------------------------|----|--------------------------|----|-------------------------|----|----------------------------|
| A | Battery | G | Turn indicator switch | J4 | Stop light switch | K3 | Turn warning light |
| B | Starter | G1 | Emergency flasher switch | J5 | Oil pressure switch | K4 | Oil pressure warning light |
| C | Generator | H1 | Horn | J6 | Back-up light switch | K5 | Instrument lights |
| C1 | Voltage regulator | H2 | Horn button | J7 | Fuel gauge sending unit | K6 | Parking indicator light |
| D | Starter/ignition switch | J | Turn/Emergency relay | J8 | Door buzzer | K8 | Brake warning light |
| E | Windshield wiper switch | J2 | Dimmer switch | K1 | High beam warning light | L1 | Sealed-beam unit, left |
| F | Light switch | J3 | Dimmer relay | K2 | Generator warning light | L2 | Sealed-beam unit, right |

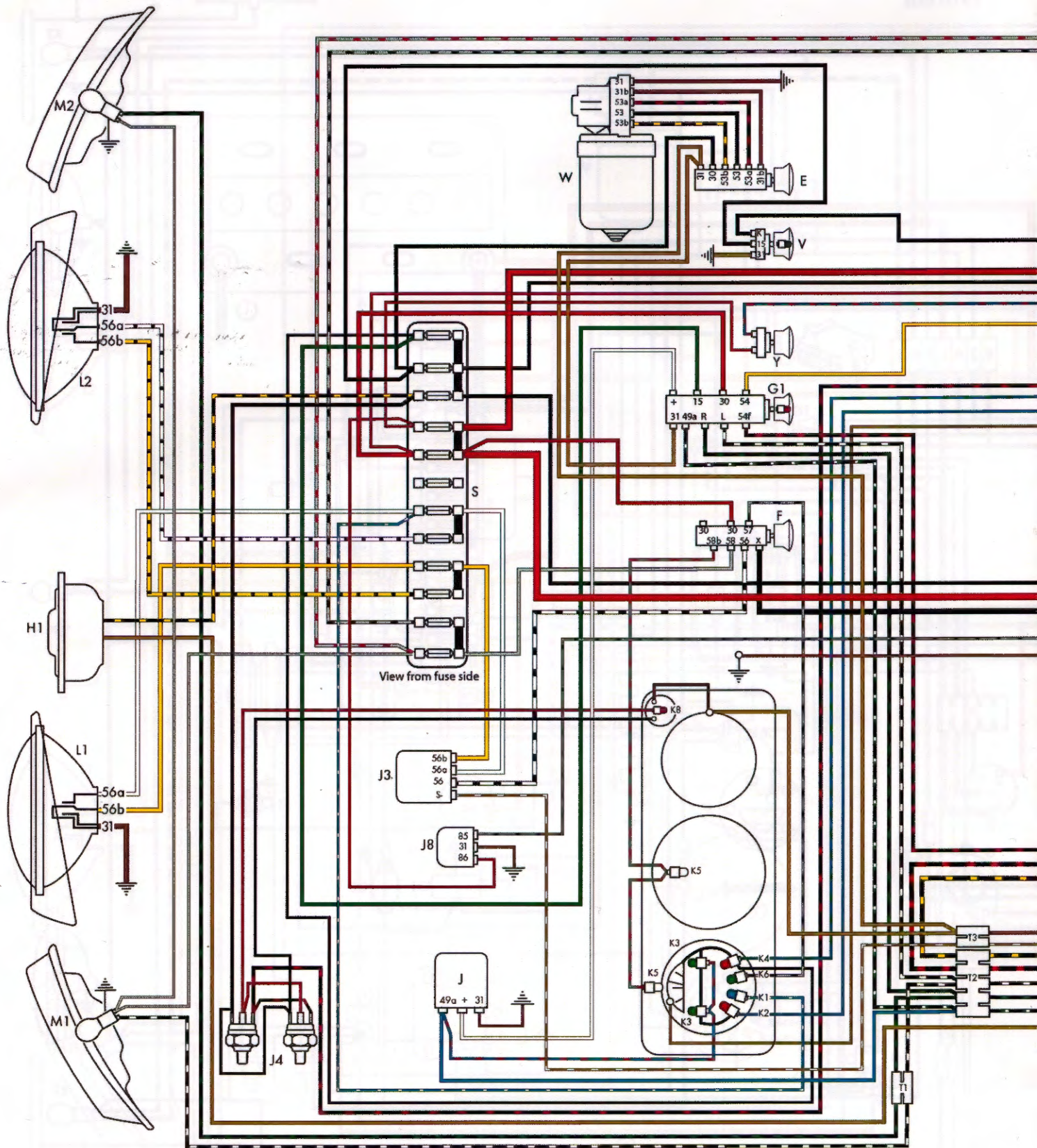


- ① Battery ground strap
- ② Chassis to transaxle ground strap

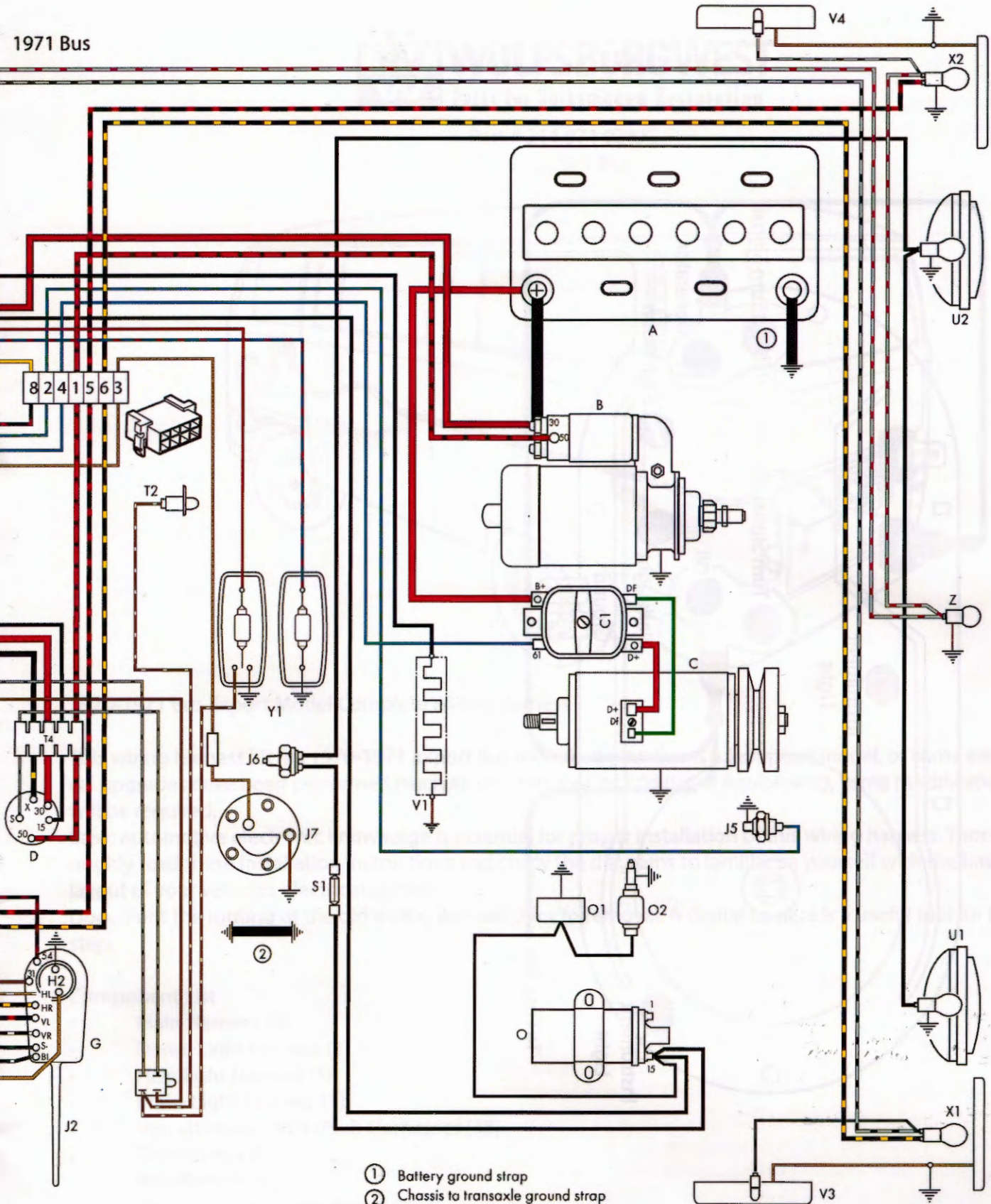
- M1 Parking light/Turn light, left
- M2 Parking /Turn light, right
- O Coil
- O1 Automatic choke
- O2 Electric idle jet
- S Fuse box, 12 fuse
- S1 Back-up light fuse

- N1 Dome light switch, left
- N2 Dome light switch, right
- U1 Back-up light, left
- U2 Back-up light, right
- V Rear window defog switch
- V1 Rear window defog
- V3 Side marker light, left

- V4 Side marker light, right
- W Windshield wiper motor
- X1 Stop/tail/turn light, rear left
- X2 Stop/tail/turn light, rear right
- Y Rear interior light switch
- Y1 Interior light
- Z License plate light



- | | | | | | | | |
|----|-------------------------|----|--------------------------|----|-------------------------|----|----------------------------|
| A | Battery | G | Turn indicator switch | J4 | Stop light switch | K3 | Turn warning light |
| B | Starter | G1 | Emergency flasher switch | J5 | Oil pressure switch | K4 | Oil pressure warning light |
| C | Generator | H1 | Horn | J6 | Back-up light switch | K5 | Instrument lights |
| C1 | Voltage regulator | H2 | Horn button | J7 | Fuel gauge sending unit | K6 | Parking indicator light |
| D | Starter/ignition switch | J | Turn/Emergency relay | J8 | Door buzzer | K8 | Brake warning light |
| E | Windshield wiper switch | J2 | Dimmer switch | K1 | High beam warning light | L1 | Sealed-beam unit, left |
| F | Light switch | J3 | Dimmer relay | K2 | Generator warning light | L2 | Sealed-beam unit, right |



- ① Battery ground strap
- ② Chassis to transaxle ground strap

M1	Parking light/Turn light, left	N1	Dome light switch, left	V4	Side marker light, right
M2	Parking /Turn light, right	N2	Dome light switch, right	W	Windshield wiper motor
O	Coil	U1	Back-up light, left	X1	Stop/tail/turn light, rear left
O1	Automatic choke	U2	Back-up light, right	X2	Stop/tail/turn light, rear right
O2	Electric idle jet	V	Rear window defog switch	Y	Rear interior light switch
S	Fuse box, 12 fuse	V1	Rear window defogger	Y1	Interior light
S1	Back-up light fuse	V3	Side marker light, left	Z	License plate light

Use this back view of the instrument cluster to locate wires correctly.

