

1965 Bus Export Model Wiring Harness Kit. This wiring harness kit fits 6-volt and 12-volt U.S. export Bus models. This model has an 8-fuse push-on terminal fuse box.

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 and sub-harnesses prior to removal. A digital camera is a useful tool for this step.

Component List

- Main Harness (1)
- Headlight Harness (1)
- Instrument Harness (1)
- Emergency Light Harness (1)
- Dome Light Harness (1)
- Clock Harness (1)
- Miscellaneous Wires (18)
- Grommets (1)
- Headlight Plug (2)
- Connectors, 1 to 1 (2)
- Connectors, 1 to 2 (3)
- Piggy Back Connector (1)

Installation

1. Remove battery from Bus, or disconnect negative cable. Removal of the battery will allow for greater room in which to work.
2. Remove the three bolts and two screws that secure the upper steering column support, and rotate the bracket 180 degrees.
3. Remove the three Phillips head screws that secure the front package tray to the body, and remove front package tray from Bus.
4. Now the fun begins! Disconnect the main harness connections from their respective locations. Use the main harness diagram on page (5) of this manual for reference. After the front connections are removed, the front portion of the main harness can be removed from the front cab area by pushing the harness downward through the front panel. An assistant may be helpful to pull the harness free from under the Bus. Attach a dragline onto the front portion of the wiring harness (fish tape or heavy cord material). 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. This step is extremely important for Buses equipped with a sub-floor in the center section (belly pans), as access to the main harness conduit is not accessible.

With the dragline attached, loosen the metal bands that secure the harness to the frame rail (for Buses models without a sub-floor in the center section), and pull the harness from the rear as an assistant helps guide the dragline.

Attach the new main harness onto the dragline in the same fashion as prior. 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 front while an assistant helps guide the new harness from the rear. 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.

Once the harness is through, secure the center portion by closing the metal bands (for Bus models without a sub-floor in the center section), then install the supplied rear main harness grommet and feed the harness into the engine compartment. Route the harness to each respective location. The left taillight wires and license light wires route above the engine compartment. Attach the remaining wires as per the diagram on page (5). Install the generator to voltage regulator harness shown on page (8).

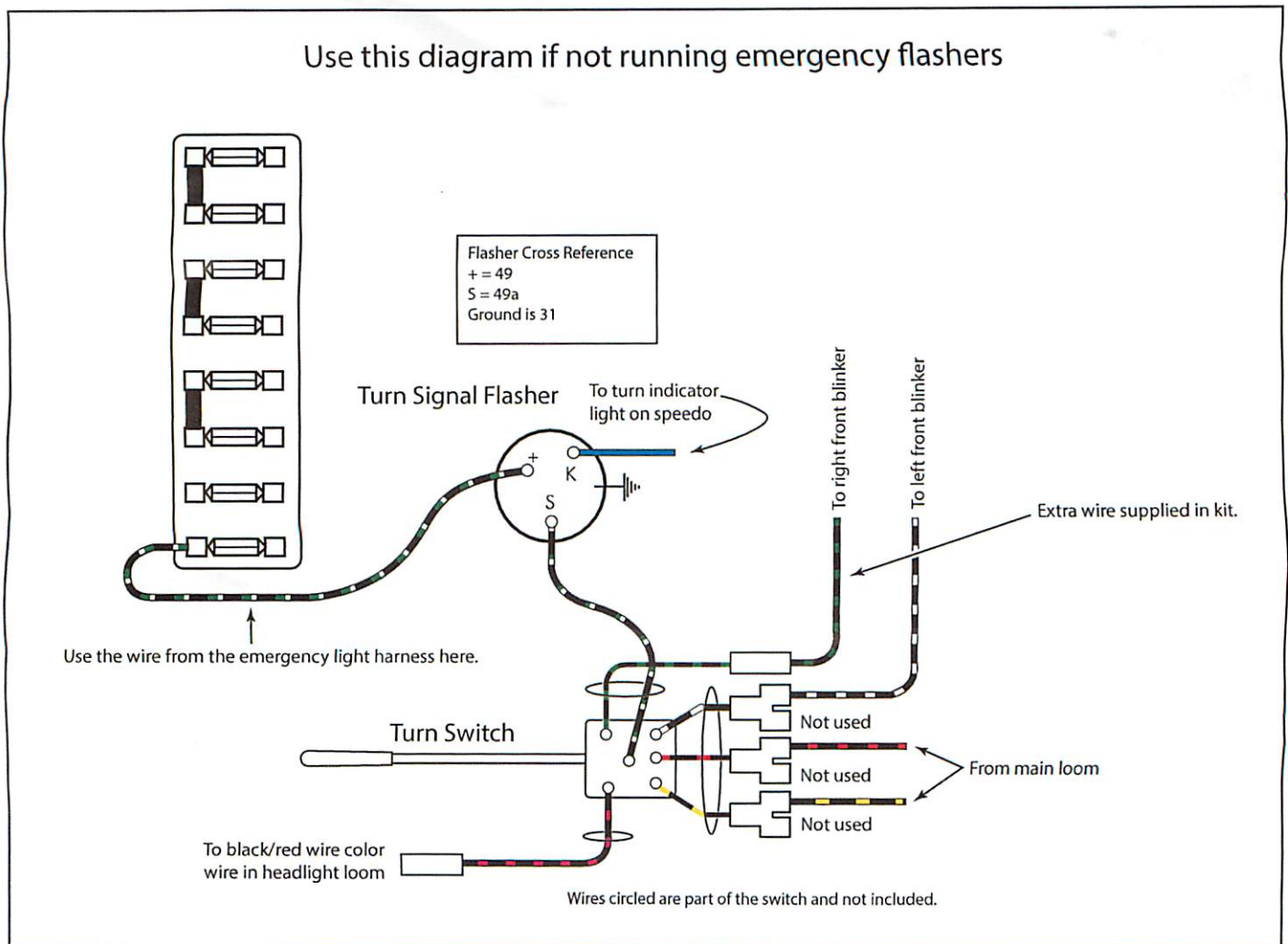
5. Install headlight harness, see diagram on page (6). When removing the old headlight harness, observe the path in which the horn, brake light, and high/low beam wires route. Use the same journals to route these wires through. Pay close attention to the parking lamp connections. The grey wire should connect to the center lug only. The lug located at the end is for ground, which typically is not required as the unit will ground to the assembly via the mounting screw. In the event a clean ground is not achieved (newly painted models, for example), use an 18-gauge wire and attach one end to this lug, and the other to terminal 31 of the headlamp plug. Attach the low and high beam wires onto supplied headlamp plugs.
6. Install instrument harness, see diagram on page (8).
7. Install emergency light harness see diagram on page (7). If you do not wish to wire the emergency flashers see page (4) for the diagram to remove this.

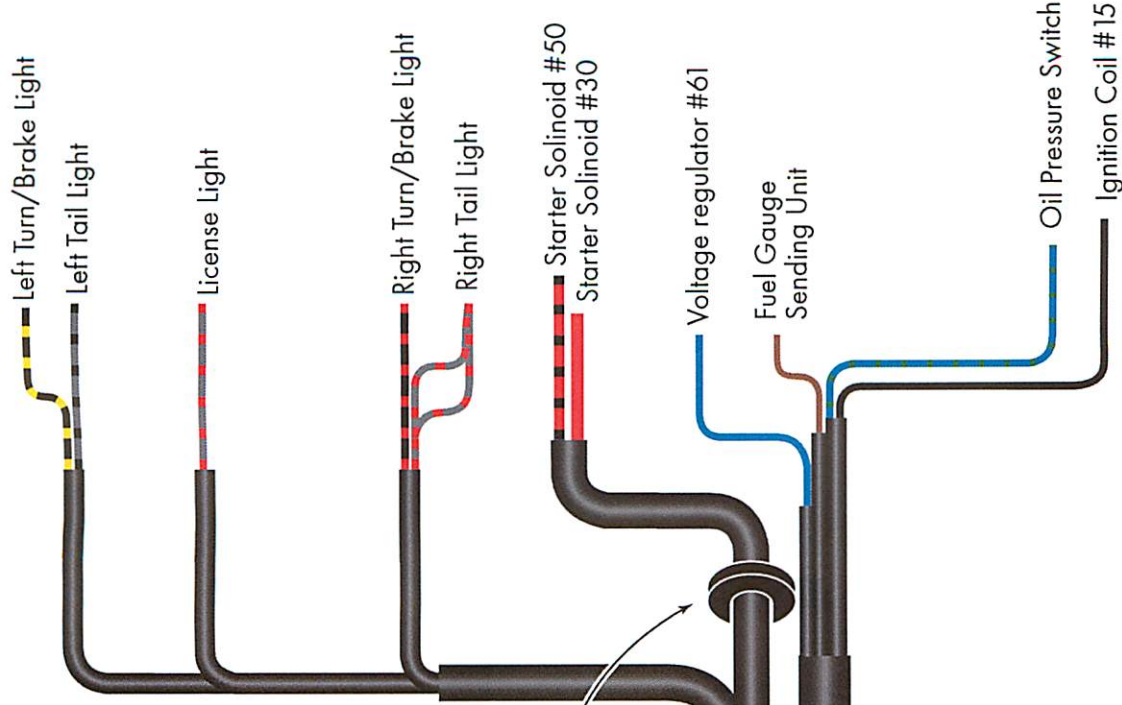
8. Install the wiper switch to wiper motor harness shown on page (8).
9. Install dome light harness, see diagram on page (7). If your Bus currently has a headliner installed, the beading that divides the side and roof panels must be removed. In order to remove this beading, the material is often destroyed due to its fragile nature. If your old harness is still intact, it's best to use the harness already present in lieu of replacement.
10. Install clock harness (for applicable models), see page (7).
11. Install miscellaneous wires, see page (9) for illustrations:
 - Attach taillight ground wires, one per taillight to their respective location (brown, 250mm length one end finished with a 5mm eyelet terminal, and a female quick-disconnect on the opposite end).
 - Attach license light ground wire to its proper location (brown, 120mm length with one end finished with a 5mm eyelet terminal, and a female quick-disconnect on the opposite end).
 - Attach coil (terminal 15) to choke wire (black, 480mm length with double female quick-disconnect terminals).
 - Attach fuel tank sending unit ground wire (light blue, 250mm length with double 5mm eyelet terminal ends).
 - Attach headlight switch (terminal 30) to ignition switch (terminal 30) wire (red, 310mm length with double female quick-disconnect terminals).
 - Attach dome light switch to wiper switch wire (black, 225mm length with double female quick-disconnect terminals).
 - Attach wiper switch to wiper motor wire harness (black/red, black and brown wires with conduit, 680mm length, with double female quick-disconnect terminals).
 - Attach instrument illumination wire from terminal 58b of the headlight switch to speedometer illumination bulbs and fuel gauge (where applicable), (grey/red wire, three wires total joined at two locations, each end finished with female quick-disconnect terminal).
 - Attach flasher relay ground wire from terminal 31 of flasher to ground location (brown, 120mm length, one end finished with a 5mm eyelet terminal, and a female quick-disconnect on the opposite end).
 - Attach black/green/white wire from turn signal switch to terminal 49a (or S) of the turn signal flasher unit. Please note that this wire is not a component of the wire harness, but rather is a component of the turn signal switch.
 - Attach the emergency flasher indicator lamp to the emergency light switch. Use the supplied piggy back connector for connection at the emergency light switch using the same terminal as the red wire. (grey wire, 410mm length, each end finished with a female quick-disconnect terminal).
 - Attach left front blinker assembly wire to black/white wire of turn signal switch with supplied 1 to 2 connector, connect the opposite end to the turn signal bulb holder (black/white, 450mm length, each end finished with female quick-disconnect terminal).

- Attach headlight ground wire, one per headlight assembly, from terminal 31 of the headlight plug to their respective location (brown, 330mm, 5mm eyelet terminal end).
- Attach horn wire (brown, 1530mm, partially shielded with black conduit, *one end female quick-disconnect terminal*) by feeding this wire bare side up through the steering column tube. Loosen wire bracket from steering box housing and attach the terminal end within the steering box.
- Ensure that your positive battery cable includes the additional red cable connecting the positive battery post to B+ on regulator. We have supplied this wire if yours is missing (red, 400mm in length with 8.0mm ring connector and .375 push-on terminals).

12. With installation now complete, double check all connections. Carefully connect battery and test each system for proper operation. Check all the lights to insure correct operation. Problems can usually be traced to an incorrect connection or poor ground.

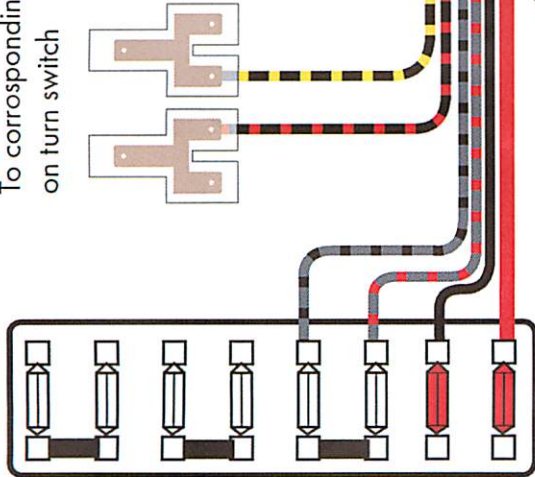
If not wiring the vehicle with emergency flashers follow the diagram below. The emergency flasher harness will not be used.





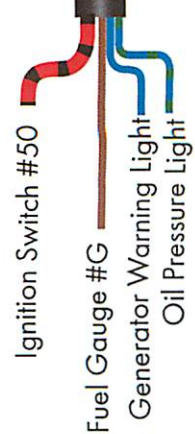
Grommet # 311 971 907

To corresponding wires on turn switch

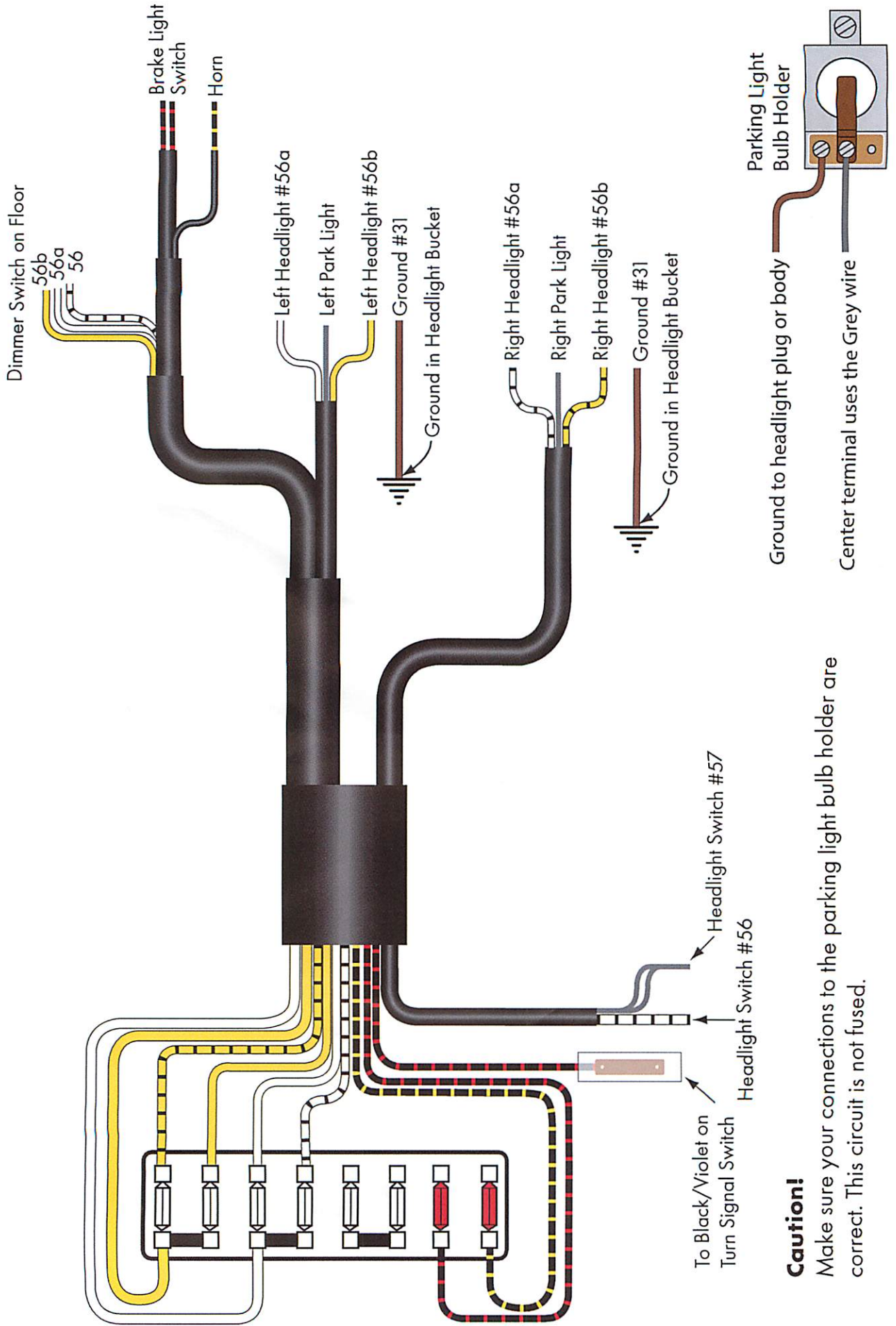


Bright Filament
Dim Filament

Note:
Having the wires reversed on the taillight bulbs is a common mistake. Always test the taillight with battery voltage before plugging in this loom to determine which side is bright. The bright side gets the turn signal wire and the dim side is your taillight wire.

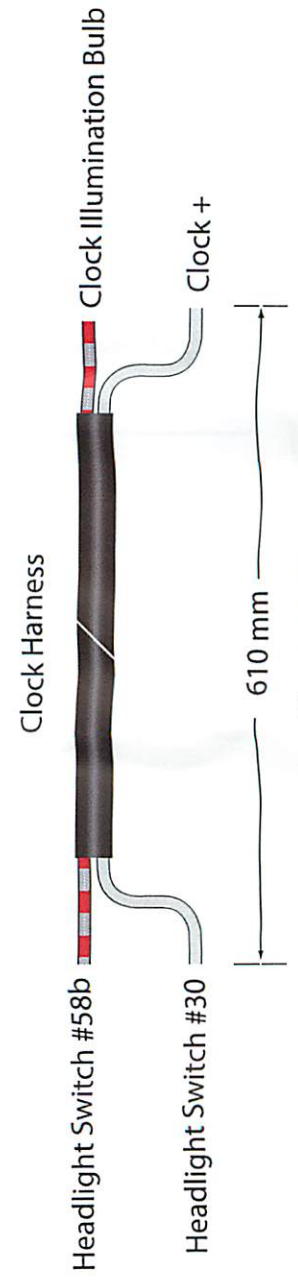
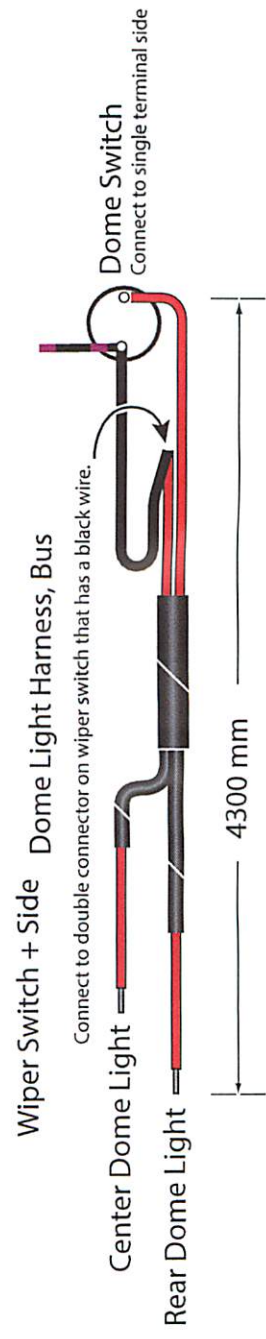
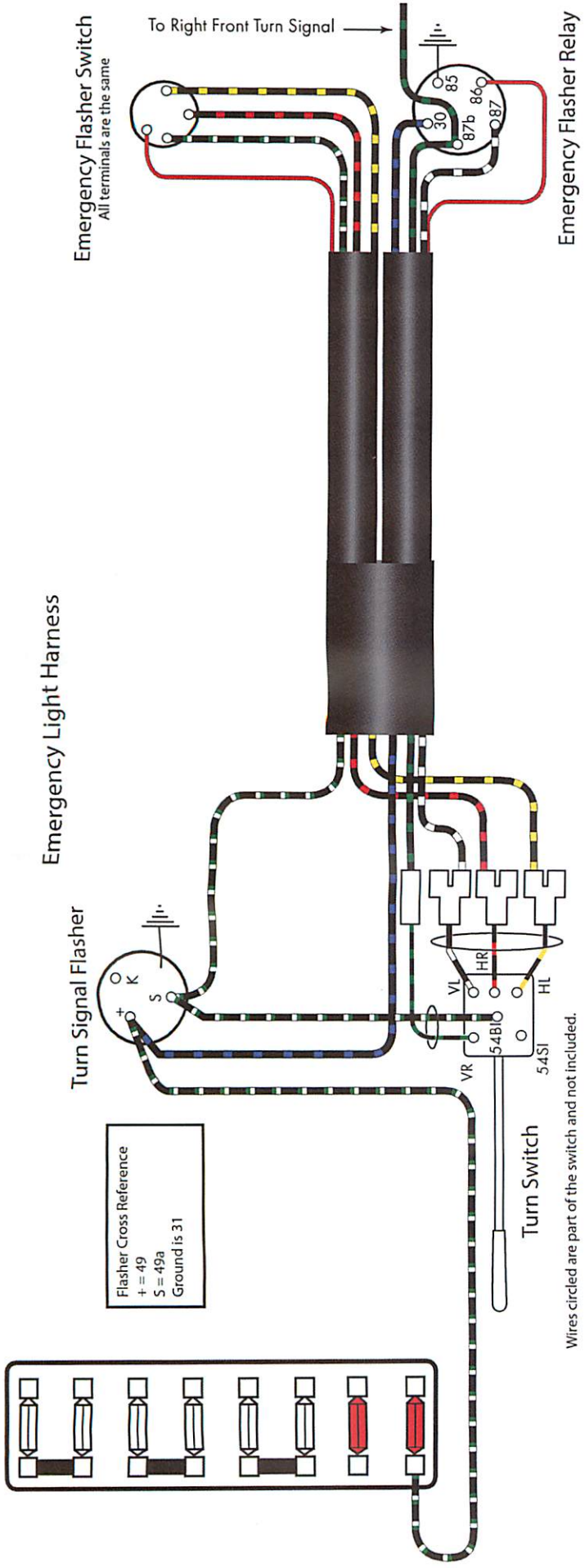


Headlight Harness 1965 Bus



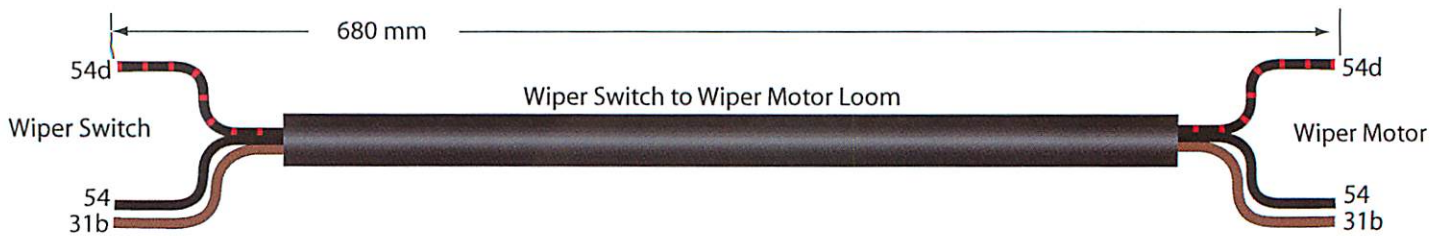
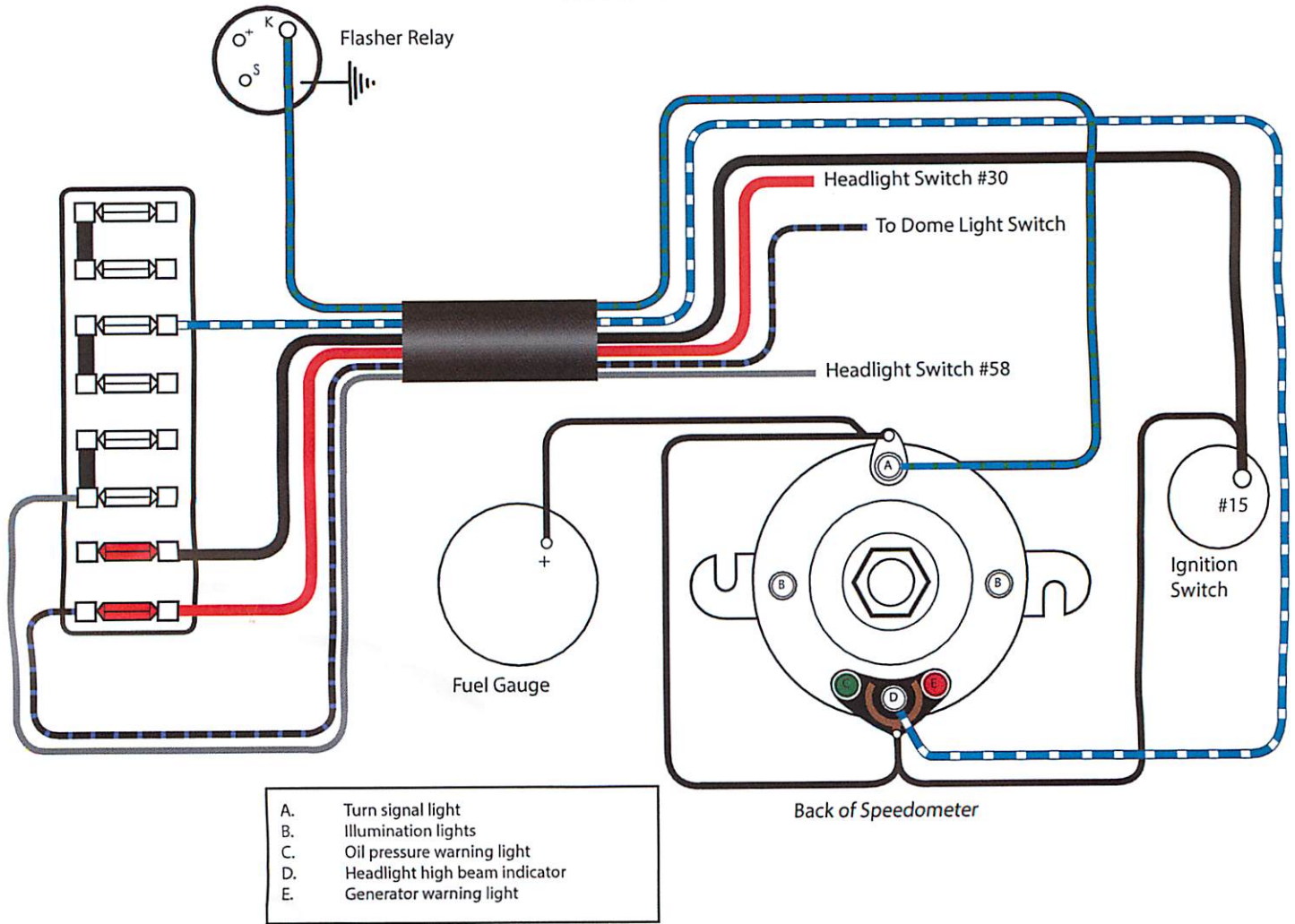
Caution!

Make sure your connections to the parking light bulb holder are correct. This circuit is not fused.

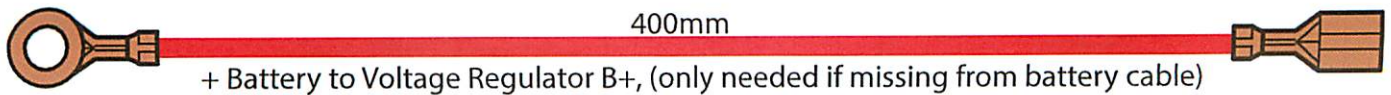
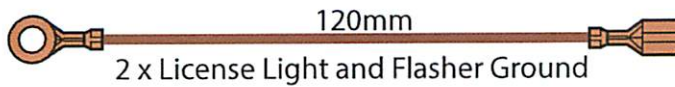
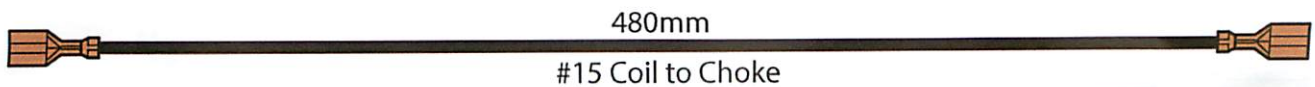
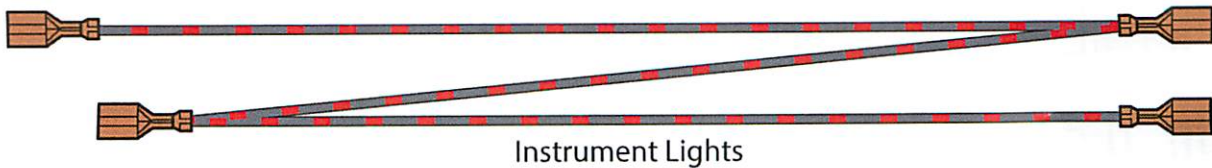
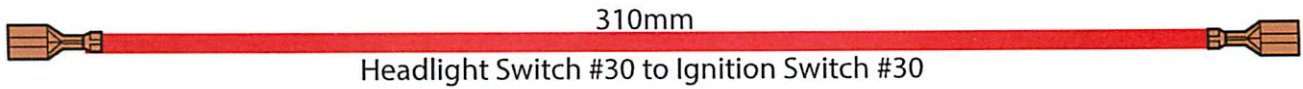


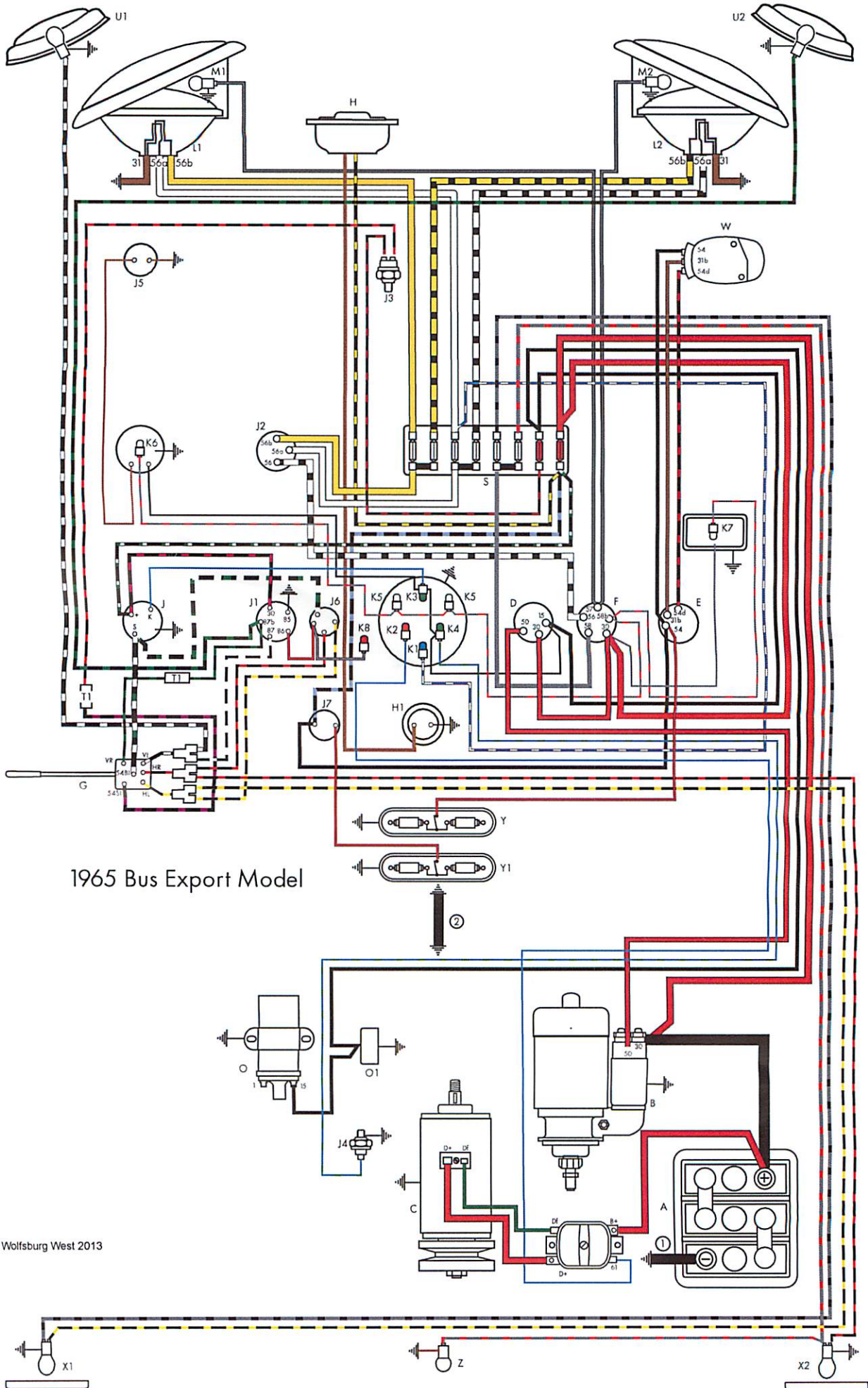
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Instrument Harness



Miscellaneous Wires





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Wiring Diagram Legend

A.	Battery
B.	Starter
C.	Generator
D.	Starter/ignition switch
E.	Windshield wiper switch
F.	Light switch
G.	Turn indicator switch
H.	Horn
H1	Horn button
J	Flasher relay
J1	Emergency flasher relay
J2	Dimmer switch
J3	Stop light switch
J4	Oil pressure switch
J5	Fuel gauge sender unit
J6	Emergency light switch
J7	Interior light switch
K1	High beam warning light
K2	Generator warning light
K3	Turn indicator warning light
K4	Oil pressure warning light
K5	Speedometer light
K6	Fuel gauge light
K7	Clock light
K8	Emergency flasher warning light
L1	Sealed-beam unit, left
L2	Sealed-beam unit, right
M1	Parking light, left
M2	Parking light, right
O	Coil
O1	Automatic choke
S	Fuse box
T	Cable connector
U1	Turn indicator, front left
U2	Turn indicator, front right
W	Windshield wiper motor
X1	Stop/tail light, rear left
X2	Stop/tail light, rear right
Y	Front interior light
Y1	Rear interior light
Z	License plate light