



## 1968-1969 Bug Wiring Harness Kit

This wiring harness kit fits 12-volt Bug sedan and convertible models.

If your Bug has electrical upgrades, 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.

If your car was recently painted, you will need to address certain areas of the body/chassis in order to achieve proper electrical continuity. Use a file, sandpaper or emery cloth to remove paint from the mounting locations of the headlights, taillights, front directional indicator bulb holder, negative battery strap, transmission to chassis strap, etc. Use touch-up paint or nail polish to seal the surrounding areas of the connection to prevent corrosion.

### Component List

- Main Harness (1)
- Dome Light Harness (1)
- Left Headlight Harness (1)
- Right Headlight Harness (1)
- Brake Light Harness (1)
- Miscellaneous Wires/Sub Harnesses (39)
- Grommets (3)
- Headlight Plugs (2)
- 1-1 Connectors (12)
- 1-2 Connectors (1)
- 2-2 Connectors (2)

## Installation

1. Disconnect negative cable from battery. Review the instructions, and identify the various sub-harnesses and supplemental wires.
2. Now the fun begins! Disconnect the main harness connections from their respective locations. Note that the main harness travels along the heater channel and the dome light harness travels through the roof member at the left-hand side of the Bug. With all the wires disconnected behind the dash push the main harness through the grommet in the trunk floor towards the interior of the car. Next, remove the rear seat bottom and left side rear door panel. Along the left heater channel on the interior of the car lift up the carpet where it meets the floor. Along this path you will find 2 clips holding the harness snug to the heater channel. Remove these with a screw driver releasing the harness. Disconnect the wires from the voltage regulator. Next open the engine lid and remove any insulation material that may be present within the cavity located at the upper left corner of the compartment (where main harness exits). The main harness runs under the firewall sound deadener so you may want to remove the engine to gain better access to remove the sound deadener. Disconnect all the wires from the corresponding components. Attach a dragline onto the rear 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. With the dragline securely attached to the old main harness, pull the harness from the rear as an assistant helps guide the dragline under the rear seat. With the old harness removed slide the large 50mm grommet onto the tail end of the new main harness and up towards the middle of the loom making sure that the grommet is positioned with the open cup facing forward. Attach the rear of the new main harness onto the dragline under the rear seat 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 rear while an assistant helps guide the harness from under the rear seat. 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 use 2 clips to attach the new harness to the side of the heater channel. Feed the front end of the harness through the underside of dash into the trunk area by using a grommet, See diagram on page (5) for proper connections on the main harness.  
3. Remove the dome light from the roof, and disconnect the wires. Remove the wires from each dome light switch located behind each door jamb, and remove the red wire from the fuse box. Attach a dragline onto the wires at the roof opening and carefully feed the dragline though the slot, while an assistant pulls the dome light harness from the front. Attach the dragline onto the new dome light harness and feed through the front, while an assistant gently pulls the dragline at the roof opening. Connect harness per diagram on page (7)
4. Install new left and right headlight harness, see diagram on page (6). When routing the wires through the rubber headlight wiring conduit, use lubricant to ease the wires through. Include the 560mm long brown ground wire on each bundle as you feed the wires into the conduit. If your wiring conduits are not in satisfactory condition, these are available separately (Partnumber 764). Use the supplied headlight plugs and refer to the diagram on page (6) to correctly locate the wires into the plug. Route the horn wire bundle through journal in trunk (left side of the trunk, next to brake tubes). Place a 1-1 connector on the brown wire of the left headlight harness and connect to thick brown wire coming

from ignition switch/turn switch bundle.

5. Install brake light switch harness . Please note: if using updated 3 position switches refer to diagram on page (8). To gain easier access you may want to lift out the fuel tank for this step. Route the harness through the slot in the body on the drivers side of the fuel tank . Place the supplied 1-1 connector onto the single black/red wire (fuse box side of the harness), and connect this wire to the black/red wire of the main harness. Place another 1-1 connector on the red wire connecting the open end to the supplied red wire 500mm long. The opposite end connecting to terminal #K on the brake warning light.

6. Install miscellaneous supplemental wires, see page (9-11) for illustrations:

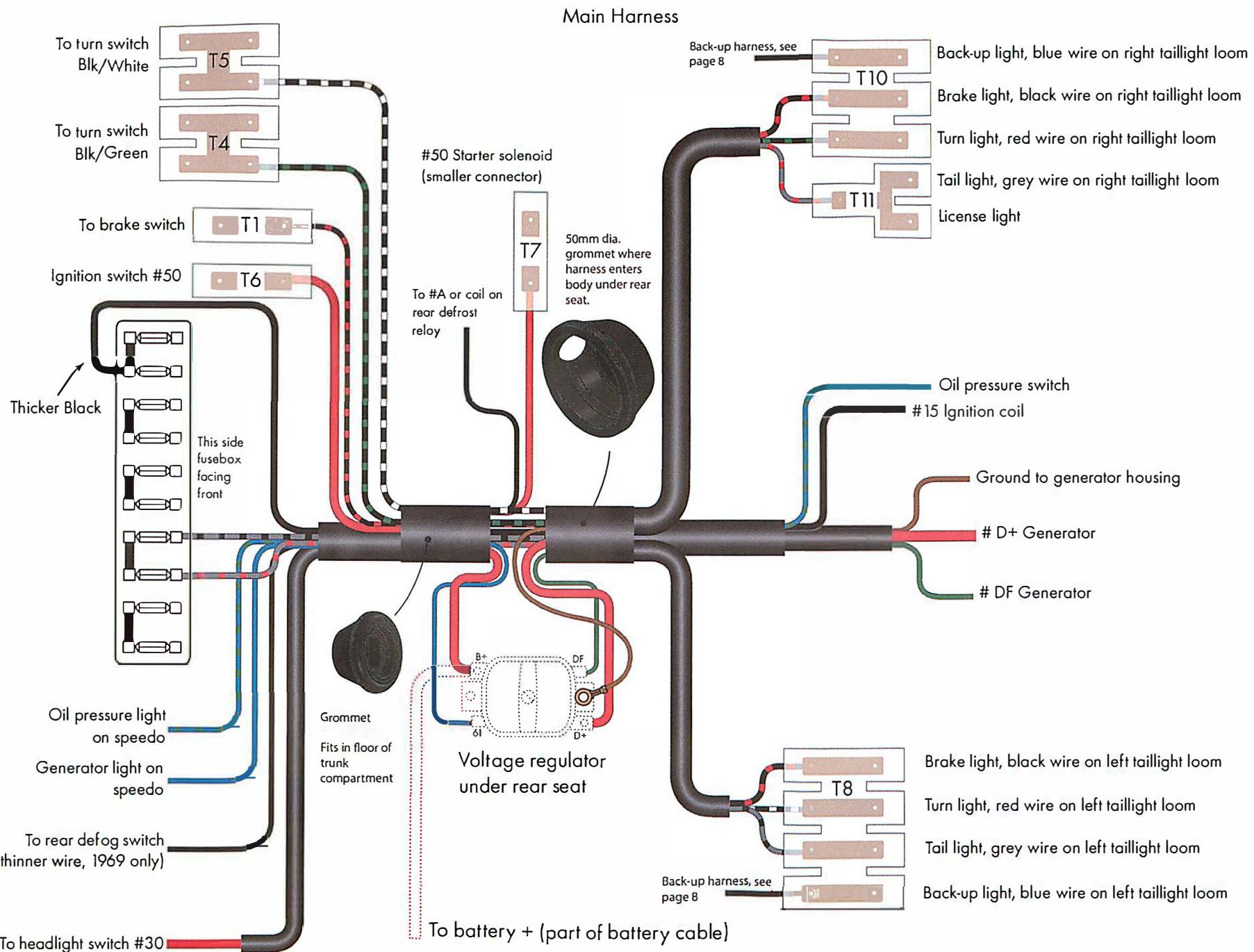
- Install left and right front turn signal/park light harnesses. Use the illustration on page 7 for correct installation. The left side harness has the black/white wire and the right turn signal wire is a black/green wire. You want to make sure that you connect the black striped wire to the brighter side of the bulb (see note on page 7 for more info).
- Install taillight harnesses (5 wires bundled in white conduit, 525mm length), see diagram on page (5). Install the 1-1 connectors and the 1-2 connector as outlined in the diagram onto the corresponding wires of the main harness. Connect each taillight harness to their respective positions as outlined within the diagram. Use the supplied grommets (center portion has a closed membrane, use knife to open small slice in center) to route each harness through the quarter panel.
- For the back-up lights follow the diagram on page (8) to install the necessary wires.
- Install license light harness (grey/red wire with black conduit, 1390mm length, each end finished with female quick-disconnect terminal) , see diagram on page (5). The license light wire connects onto the 1-2 connector of the right taillight harness. Route the wire to the license light assembly while observing its proximity to the fan. Keep the slack of the wire as far away from the fan as possible.
- Attach turn signal indicator wire (blue/green, 200mm length, both ends finished with female quick disconnect terminals) from the proper bulb socket within the speedometer, to the flasher relay. If using the 8 pin box the terminal will be Bl. If you have a 4 pin flasher the terminal will be KBL. Please note that some modern and/or post production flashers refer to this terminal as L, or 49a. If using a 4-prong flasher relay, you will need to ground the flasher at terminal 31.

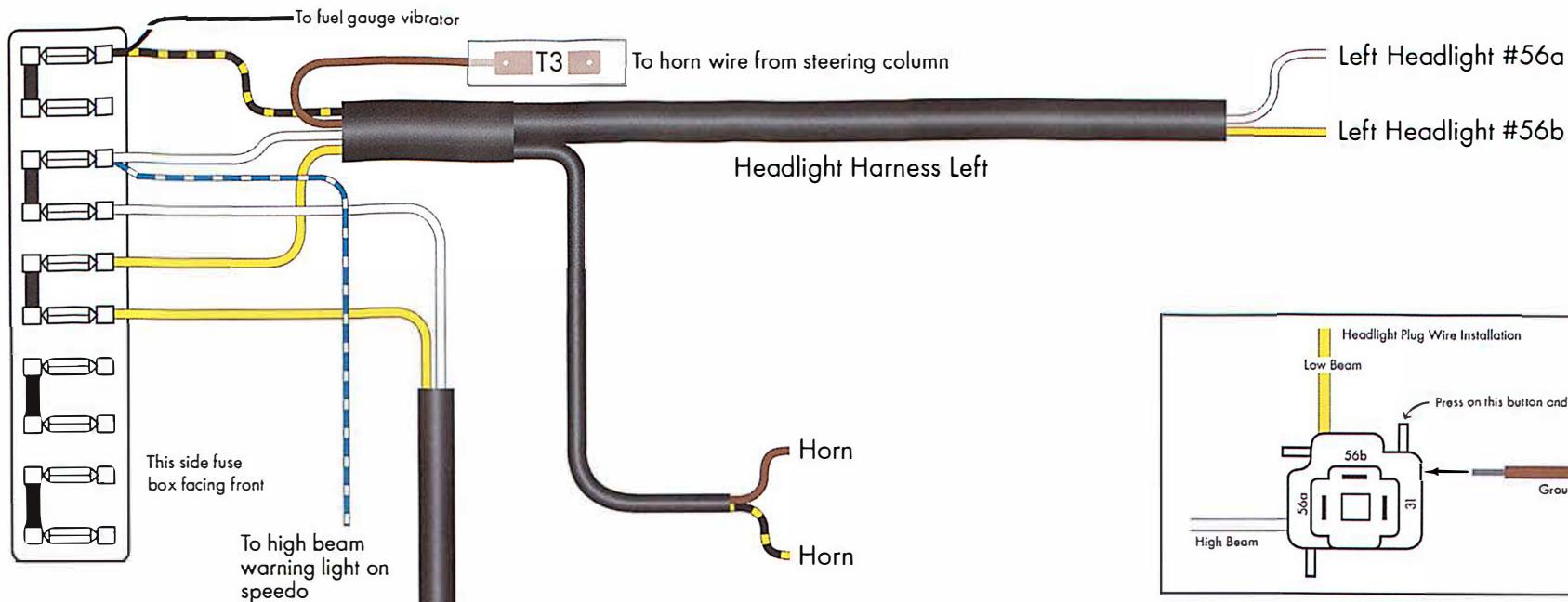
**Its best if you have the dash switches removed from the dash with the terminal identification in clear view for the following steps.**

- Attach turn signal switch wires (part of turn signal switch, not included with this harness kit) as follows. Black/green/white wire, to terminal 49a of the turn signal flasher relay. The attached blue wire will connect to terminal K or 49a on the emergency flasher switch. Attach turn signal switch brown/white wire to terminal S on high/low headlight relay. Connect thin brown wire to ground. Black/white and black/green wires attach to 2-2 connectors from front turn signals shown on page (5).
- Install the blue wire, 600mm long, with blk/white/grn wire attached. See top of page (10) for location.
- Attach instrument illumination wire from terminal 58b of the headlight switch to both speedometer illumination bulbs, (grey/red wire, 320mm length, two wires total joined at one location, each end finished with female quick-disconnect terminal).

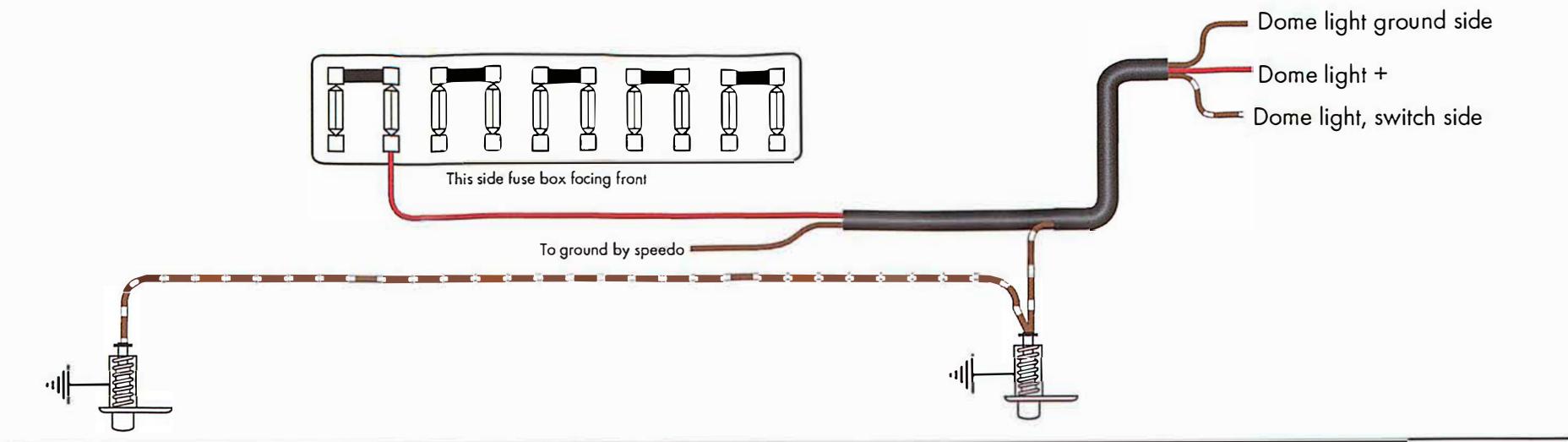
- Attach parking light power wire from terminal 58 of the headlight switch, to the fuse box as noted in the diagram (grey wire, 400mm length, each end finished with female quick-disconnect terminal).
- Attach headlight switch power wire from terminal 30 of the headlight switch, to the fuse box location as noted in the diagram (red wire, 420mm length, each end finished with female quick-disconnect terminal).
- Attach white/black wire, 400mm in length to headlight relay terminal 56. Connect opposite end of black/white wire to headlight switch terminal 56.
- Attach ignition switch wires (part of ignition switch and not included). See wire diagram on page 12 for exact locations of the following wires. Red wire to headlight switch terminal #30. Black ignition wire to fuse box. Connect small attached black wire to power terminal at bottom of speedo (this wire is also part of the ignition switch).
- Attach headlight high/low beam relay wires to fuse box. Terminal 56b of headlight relay to fuse box using the 170mm long yellow wire and terminal 56a of the headlight relay to fuse box using the 140mm white wire.
- Attach windshield wiper motor wires from wiper motor, to wiper switch: Terminal 31b of wiper motor to terminal 31b of wiper switch (brown wire). Terminal 53 of wiper motor to terminal 53 of wiper switch (black wire). Terminal 53a wiper motor to terminal 53a of wiper switch (black/purple wire). Terminal 53b wiper motor to terminal 53b of wiper switch (black/yellow wire). All wires are 255mm length, each end finished with female quick-disconnect terminals.
- Attach wiper switch power wire to fuse box. Terminal 30 on the wiper switch to fuse box using the 400mm long green wire. Attach connected black wire with .110 terminal to #15 on the brake warning light.
- Attach the dash ground wire harness using the diagram shown on page (11).
- If this is a 1969 vehicle with the rear window defogger install the two 230mm black wires per the instructions at the bottom of page (11).
- Turn signal flasher wiring. We have supplied the wires needed to install either the 3 or 4 pin later flasher or the early 8 pin flasher. See page (10) for installation instructions for either unit.
- Attach brown wire in PVC sleeve, 930mm long, to fuel gauge vibrator. Connect opposite end to fuel tank sending unit
- Attach choke power wire from terminal 15 of the coil, to choke element located on the side of the carburetor and to idle shut off valve. (black wire, 425mm length, one end finished with female quick-disconnect terminal and opposite end finished with short black wire with quick disconnect ends).
- Install the heavy red wire in the PVC sleeve, 920mm long between the starter, terminal 50 through the rear of the floor pan on the drivers side using the supplied grommet and using a 1-1 connector connector to the remaining thick red wire out of main harness at the voltage regulator.

7. With installation now complete, double check all connections. Connect red wire from battery cable to voltage regulator terminal #30. Carefully connect battery and test each system for proper operation.

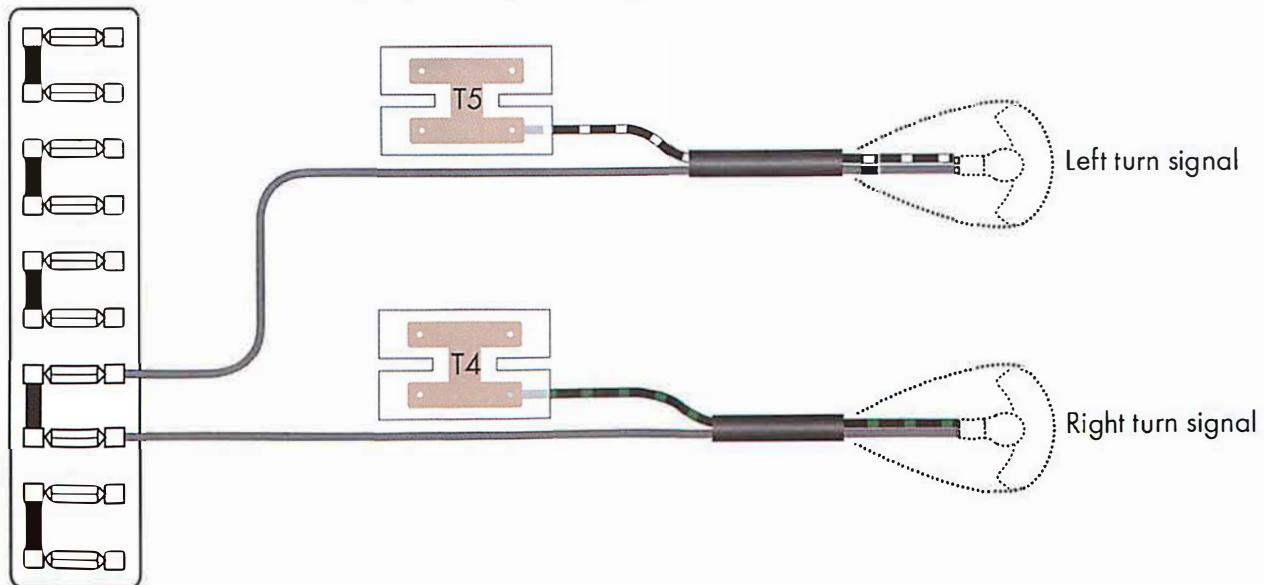
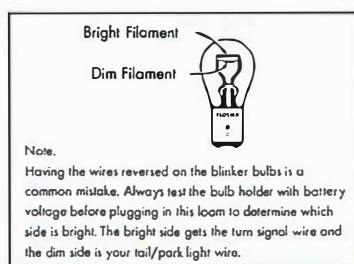




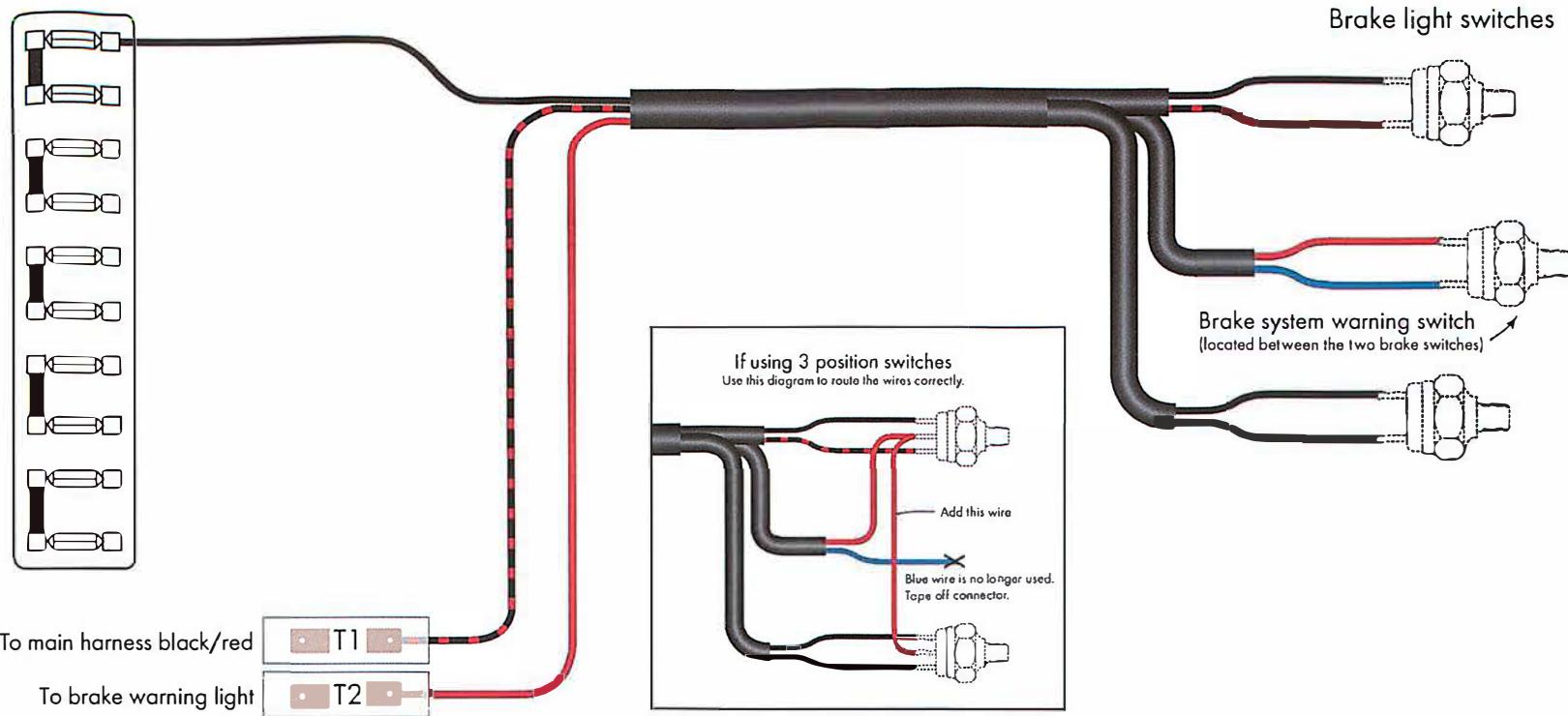
## Dome Light Harness



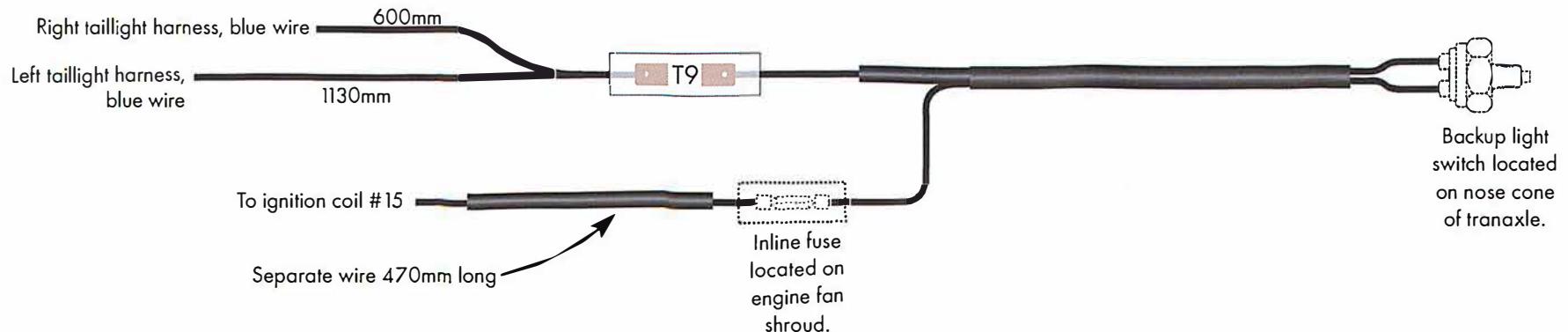
## Front turn signal/park light harnesses



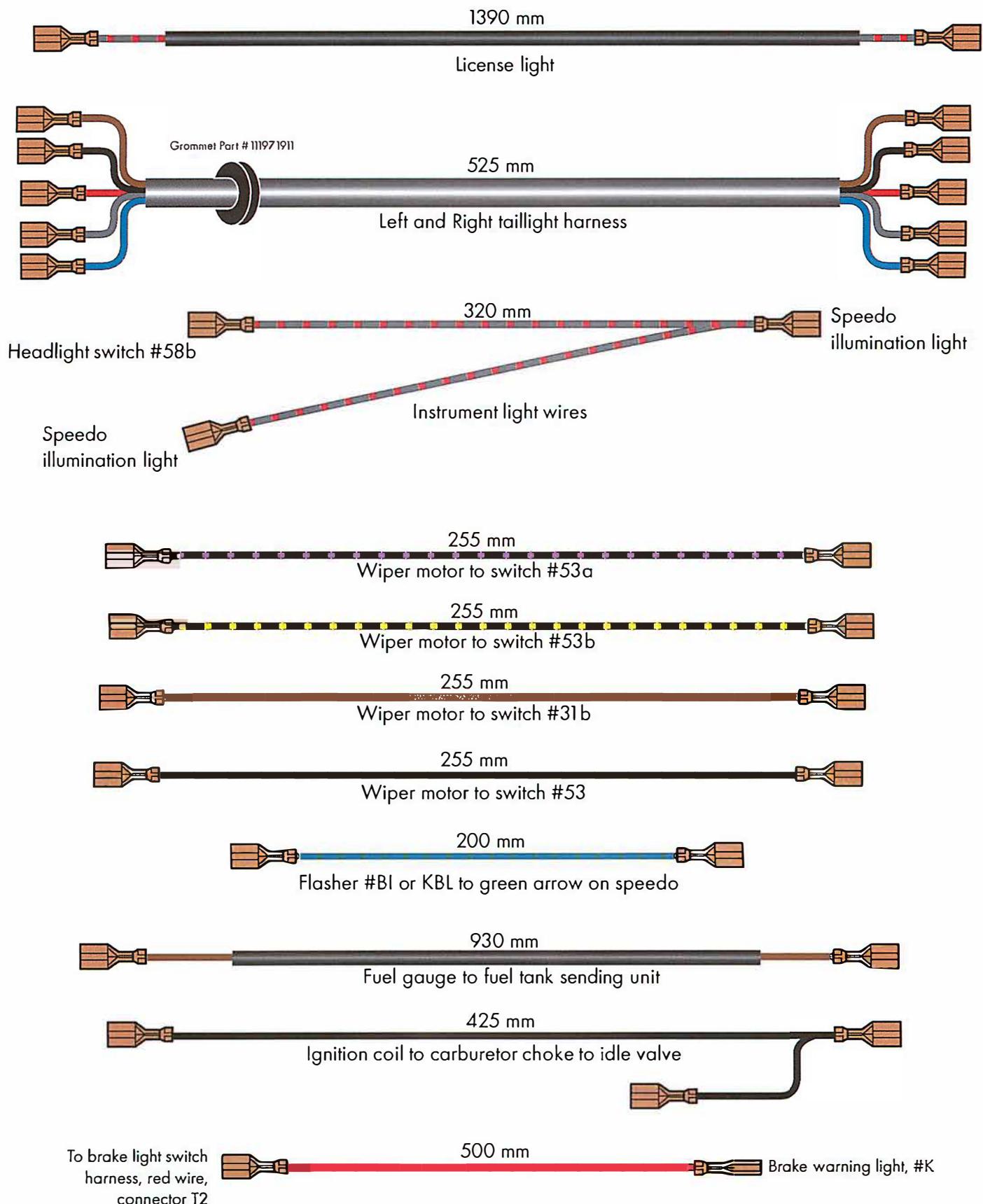
## Brake Light Switch Harness



## Back-up Light Harness



## Miscellaneous Wires



## Miscellaneous Wires, continued

Emergency flasher switch #49a  600 mm  Flasher #49a

Turn signal switch, black/green/white using 1-1 connector

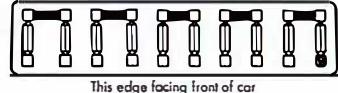
Note: These wires will not be used if running a early style 9 pin flasher

 600 mm  Flasher #49 or + to emergency flasher switch #+

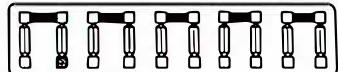
 550 mm 2-2 connector #T4, to emergency flasher switch #R

 550 mm 2-2 connector # T5 to emergency flasher switch #L

 510 mm Emergency Flasher switch #15 to fuse box (marked in red)



 520 mm Emergency Flasher switch #30 to fuse box (marked in red)



## Installation Pack, Early Flasher Relay

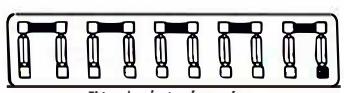
Not used if running 3 or 4 pin flasher

 600 mm Flasher #S to emergency flasher switch #S

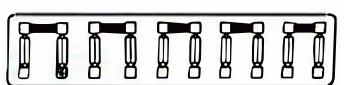
 150 mm Flasher #VR to turn switch, black/green (4 pos. connector)

 150 mm Flasher #VL to turn switch, black/white (4 pos. connector)

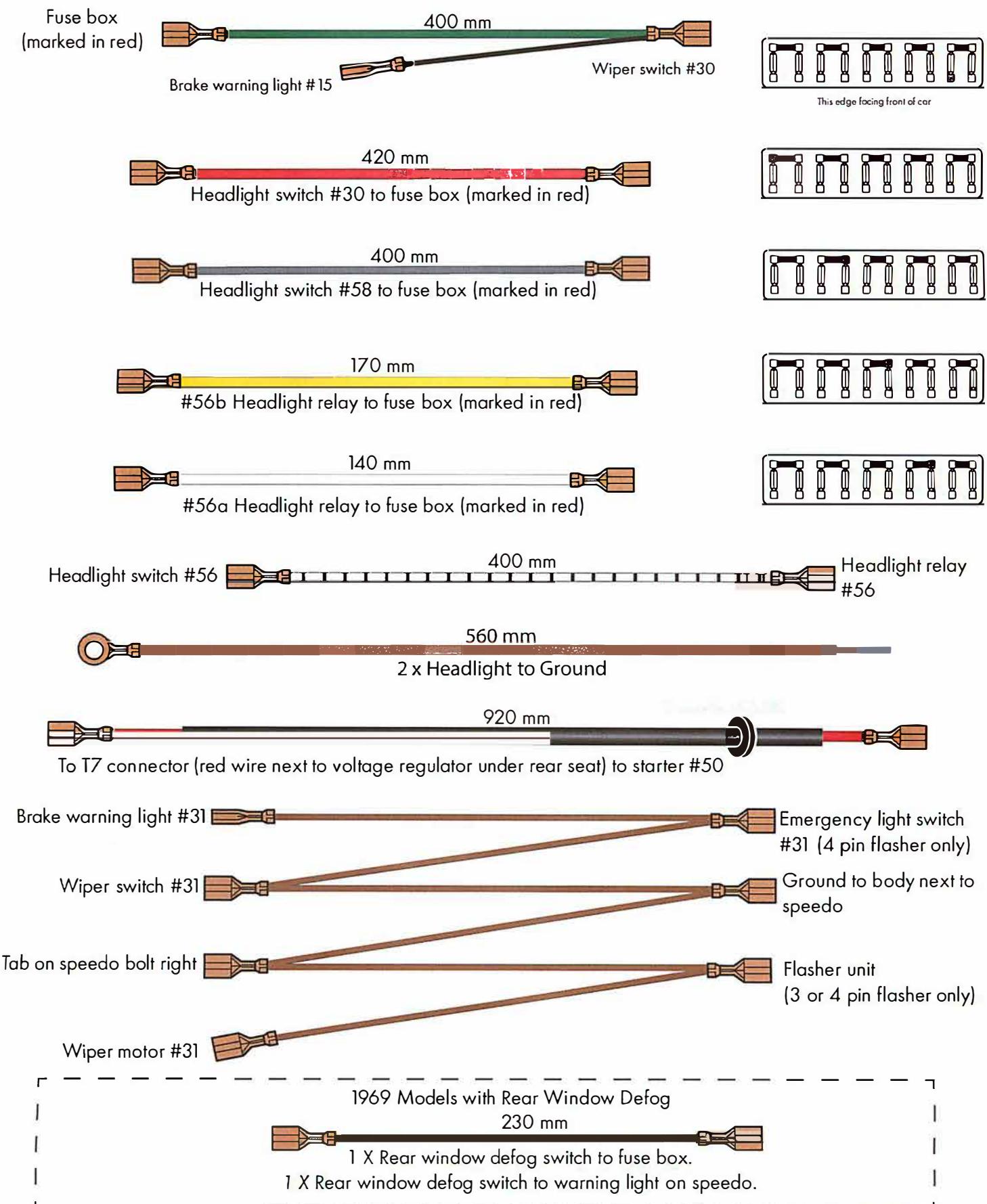
 190 mm Flasher #15 to fuse box (marked in red)

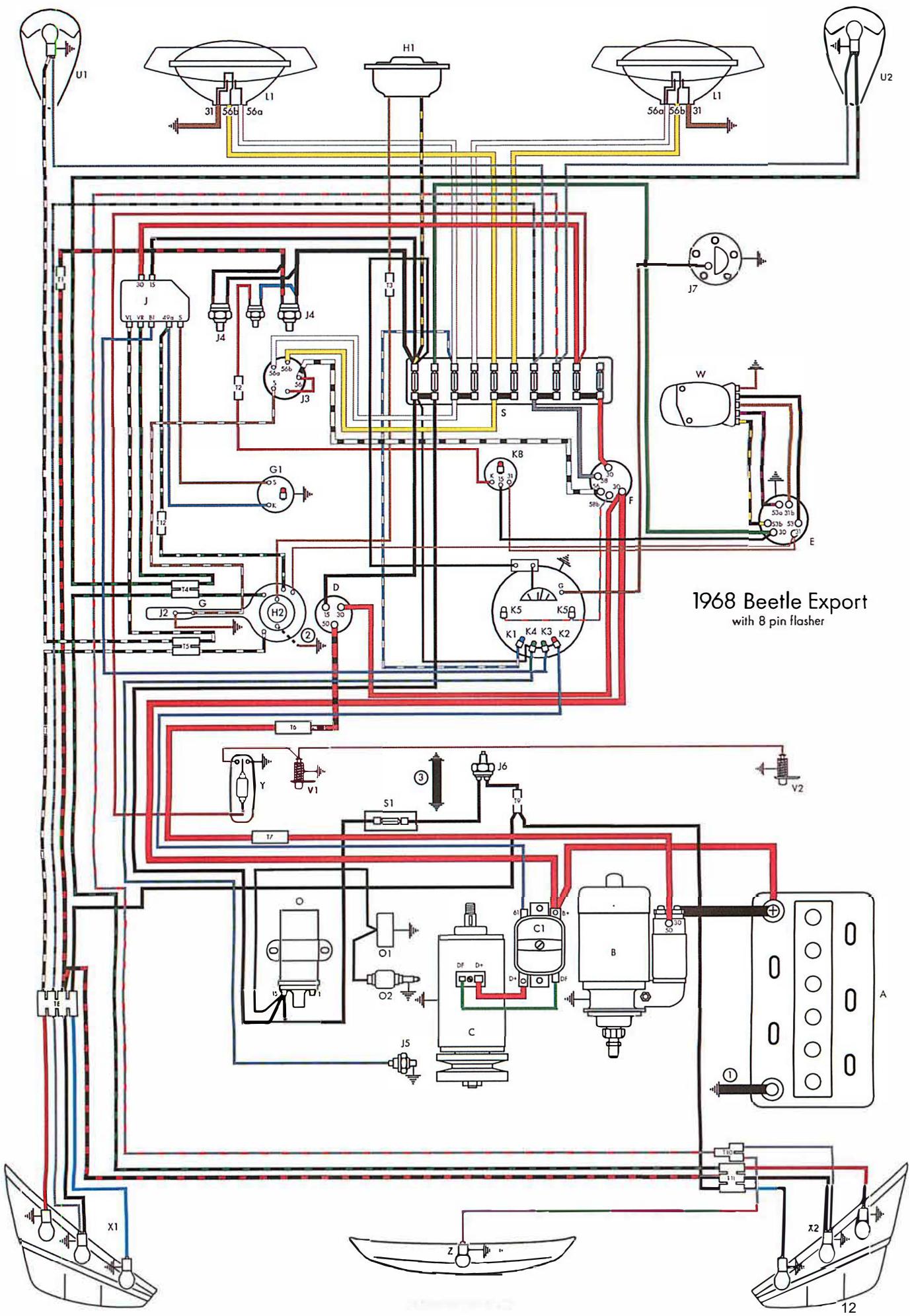


 330 mm Flasher #30 to fuse box (marked in red)



## Miscellaneous Wires, continued

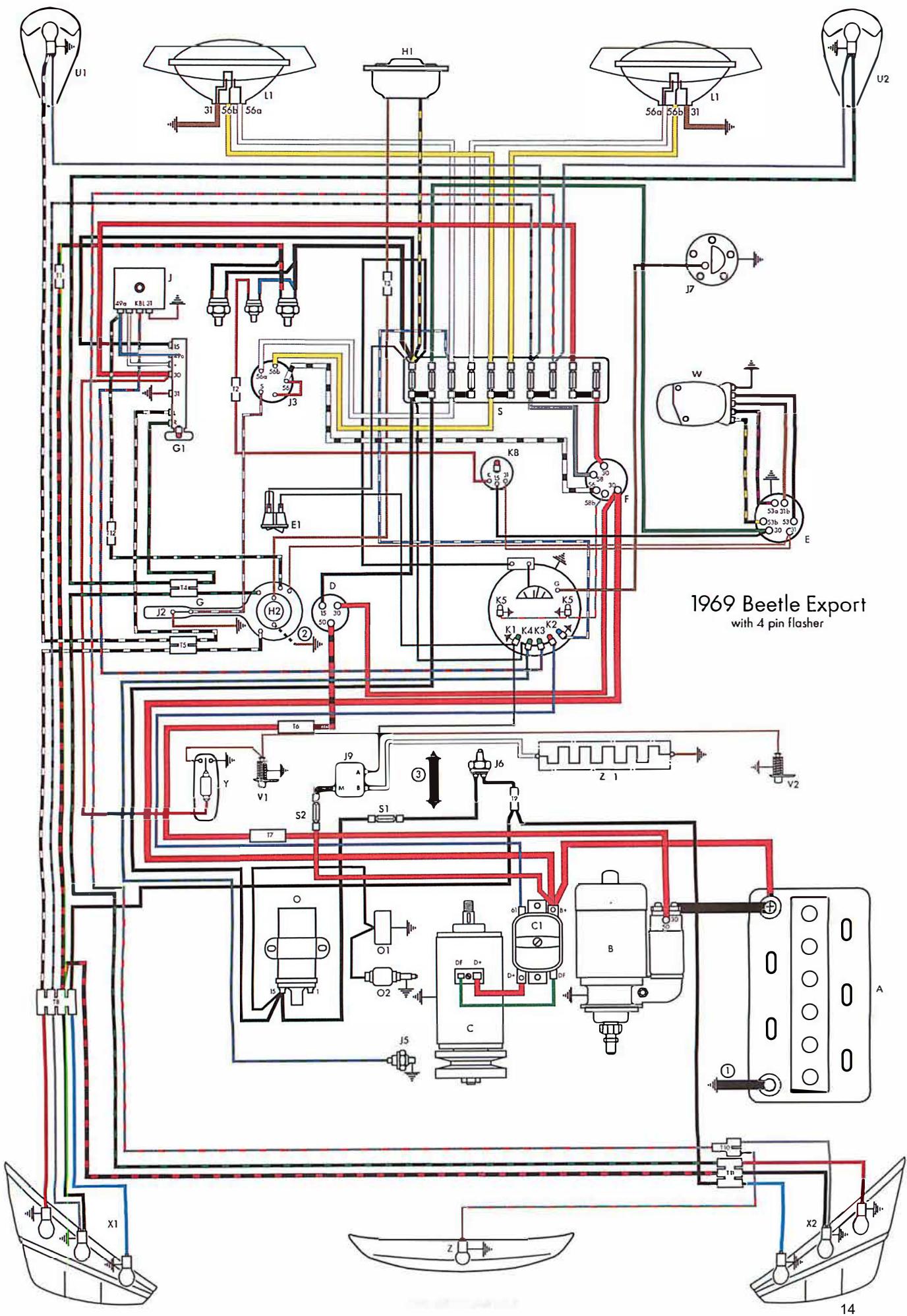




|    |                              |     |  |
|----|------------------------------|-----|--|
| A  | Battery                      | O   | Coil   |
| B  | Starter                      | S   | Fuse box, 8 fuse                                     |
| C  | Generator                    | S1  | Back-up light fuse in engine compartment             |
| C1 | Voltage regulator            | T1  | Single connector, behind speedometer                 |
| D  | Starter/Ignition switch      | T2  | Single connector, behind speedometer                 |
| E  | Windshield wiper switch      | T3  | Single connector, behind speedometer                 |
| F  | Light switch                 | T4  | Double connector, behind speedometer                 |
| G  | Turn indicator switch        | T5  | Double connector, behind speedometer                 |
| G1 | Emergency flasher switch     | T6  | Single connector, behind speedometer                 |
| H1 | Horn                         | T7  | Single connector, under rear seat                    |
| H2 | Horn button                  | T8  | 4 connector, behind engine sound deadner, left       |
| J  | Turn Signal/Emergency relay  | T9  | Single connector, behind engine sound deadner        |
| J2 | Dimmer switch                | T10 | Triple connector, behind engine sound deadner, right |
| J3 | Dimmer relay                 | T11 | Y connector, behind engine sound deadner, right      |
| J4 | Stop light switch            | U1  | Turn indicator, front left                           |
| J5 | Oil pressure switch          | U2  | Turn indicator, front right                          |
| J6 | Back-up light switch         | W   | Windshield wiper motor                               |
| J7 | Fuel gauge sending unit      | X1  | Stop/tail/turn light, rear left                      |
| K1 | High beam warning light      | X2  | Stop/tail/turn light, rear right                     |
| K2 | Generator warning light      | Y   | Interior light                                       |
| K3 | Turn indicator warning light | Y1  | Interior light switch, left                          |
| K4 | Oil pressure warning light   | Y2  | Interior light switch, right                         |
| K5 | Speedometer light            | Z   | License plate light                                  |
| K6 | Fuel gauge vibrator          | (1) | Battery ground strap                                 |
| K7 | Fuel gauge                   | (2) | Steering column to steering box ground jumper        |
| K8 | Brake warning light          | (3) | Chassis to transaxle ground strap                    |
| L1 | Sealed-beam unit, left       |     |  |
| L2 | Sealed-beam unit, right      |     |  |
| M1 | Parking light, left          |     |  |
| M2 | Parking light, right         |     |  |

### Important notes regarding the Turn Signal/Emergency Flasher.

Early 1968 Beetles had continued to use the 8 pin relay for these functions. If the vehicle is using this relay please refer to the wiring diagram to the left and use the wires shown at the bottom of page (10) to complete the installation correctly. If the vehicle has a 2,3 or the correct 4 pin relay refer to the diagram on the next page and use the wires shown at the upper part of page (10) surrounded with a dashed line.



|    |                              |     |  |
|----|------------------------------|-----|--|
| A  | Battery                      | M1  | Parking light, left                                  |
| B  | Starter                      | M2  | Parking light, right                                 |
| C  | Generator                    | O   | Coil   |
| C1 | Voltage regulator            | S   | Fuse box, 8 fuse                                     |
| D  | Starter/Ignition switch      | S1  | Back-up light fuse in engine compartment             |
| E  | Windshield wiper switch      | T1  | Single connector, behind speedometer                 |
| E1 | Rear window defog switch     | T2  | Single connector, behind speedometer                 |
| F  | Light switch                 | T3  | Single connector, behind speedometer                 |
| G  | Turn indicator switch        | T4  | Double connector, behind speedometer                 |
| G1 | Emergency flasher switch     | T5  | Double connector, behind speedometer                 |
| H1 | Horn                         | T6  | Single connector, behind speedometer                 |
| H2 | Horn button                  | T7  | Single connector, under rear seat                    |
| J  | Turn Signal/Emergency relay  | T8  | 4 connector, behind engine sound deadner, left       |
| J2 | Dimmer switch                | T9  | Single connector, behind engine sound deadner        |
| J3 | Dimmer relay                 | T10 | Triple connector, behind engine sound deadner, right |
| J4 | Stop light switch            | T11 | Y connector, behind engine sound deadner, right      |
| J5 | Oil pressure switch          | U1  | Turn indicator, front left                           |
| J6 | Back-up light switch         | U2  | Turn indicator, front right                          |
| J7 | Fuel gauge sending unit      | W   | Windshield wiper motor                               |
| J9 | Rear window defog relay      | X1  | Stop/tail/turn light, rear left                      |
| K1 | High beam warning light      | X2  | Stop/tail/turn light, rear right                     |
| K2 | Generator warning light      | Y   | Interior light                                       |
| K3 | Turn indicator warning light | Y1  | Interior light switch, left                          |
| K4 | Oil pressure warning light   | Y2  | Interior light switch, right                         |
| K5 | Speedometer light            | Z   | License plate light                                  |
| K6 | Fuel gauge vibrator          | Z1  | Rear window defogger                                 |
| K7 | Fuel gauge                   | ①   | Battery ground strap                                 |
| K8 | Brake warning light          | ②   | Steering column to steering box ground jumper        |
| L1 | Sealed-beam unit, left       | ③   | Chassis to transaxle ground strap                    |
| L2 | Sealed-beam unit, right      |     |  |