



Application: 1968- 1969 Beetle Sedan Sunroof or Convertible

Replacement Wiring Harness



Tools Needed



Part Includes

- | | |
|-----------------------------------|-----------------------------------|
| 1 - Main Harness | 2- Front Turn Signal Harness |
| 2- Front Harness (right and left) | 1- Ground Link Assembly |
| 1- Brake Master Cylinder Harness | 23- Misc. Wires or Sub Assemblies |
| 1- Dome Light Harness | 2- Headlight Socket Housings |
| 2- Tail Light Harness | 3- Grommets |
| 1- License Light Harness | 12- Spade Connectors |
| 1- Gas Tank Harness | 1- Tee Connector |
| 1- Back Up Light Harness | 2- Bus Connectors |
| | 1- Starter Power Harness |

Due to the multitude of configurations produced, be certain you have the correct parts; PARTS WHICH HAVE BEEN INSTALLED MAY NOT BE RETURNED. Please match original parts to new parts before installation.

Basic electrical knowledge is essential. Refer to official VW Manual for further information. Harness diagrams are for reference only.

NOTES ABOUT WIRING DIAGRAMS:

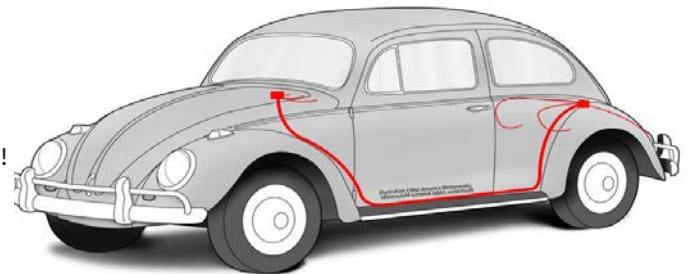
- Wiring diagrams are not drawn to scale. All wires are not shown. Refer to instructions for installation of misc. wires and sub assemblies.
- Numbers # on wiring diagram refer to tab circuit written on switch or device.
- Check off boxes on wiring diagram as each connection is completed
- Grommets must be installed. G(*) refers to grommet and inner hole diameter.
- Note how old wiring was installed before removal.
- Use white 8 AMP fuses only.
- For more information, refer to official VW manual.

STEP 1.

Disconnect battery ground cable!!!!

STEP 2.

This step describes how to replace the main harness traveling along the left floor of the body. Disconnect wires behind dash in front and wiring attached to the voltage regulator beneath rear seat. Use the wiring diagram on PAGE 5 as a guide. Pry away the metal bands hiding the harness to the chassis and untangle the harness so that it may be easily pulled out. Check carefully and remove any insulation that has been tucked into the back of the roof channel above the firewall. Remove the backseat cushion and side left rear door panel to gain access to the rear cavity. Carefully lift up the carpet along the bottom left door rail. Carefully secure a 1/4" diameter rope or heavy wire at least 12 feet long to the front of the old main harness so that the harness path through the body is not lost when the harness is pulled out. Remove the old main harness by pulling it out the back of the car. The guide rope will feed in from the front and into place. Tie the guide rope pulled through to the front of the new main harness. The guide rope should be tied securely to the harness, but in such a way as not to damage the harness or impede its travel through the roof channel. THIS IS VERY IMPORTANT! Use Mylar packing tape to carefully wrap the loose wires and guide rope into a compact streamlined bundle to pull through. Also wrap the center section where voltage regulator connections are. Apply a small amount of wiring pulling lubricant or bar soap to the harness. Carefully pull the new harness in by pulling the guide rope from the front and feeding it through the rear cavity. DO NOT FORCE IT!! If it is not going through easily, check to see where it is hanging up and correct the problem. Reconnect the wires as shown on PAGE 5. Bend the metal tangs back to secure the harness.



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Description (cont.)

STEP 3.

Attach a dragline to the old dome light at the light slot. Pull the old harness out the front of the roof channel while feeding in the dragline through the light slot. Attach the dragline to the new domelight harness and pull into position by feeding harness through the front. Connect the dome light wiring as shown on PAGE 9 and bend metal tangs back. Make certain that the door buttons and dome light assembly are in working order and are grounded properly.

STEP 4.

Install the two tail light harnesses traveling to the rear fenders. Connect from main harness to the tail light socket assembly as shown on PAGE 7.

STEP 5.

Install the license light harness to the rear deck lid. Connect as shown on PAGE 7 to the white-red tee connector block. Be certain light is grounded. Keep wire clamped away from fan.

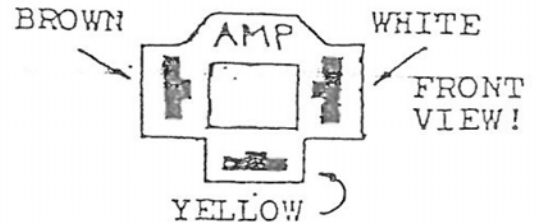
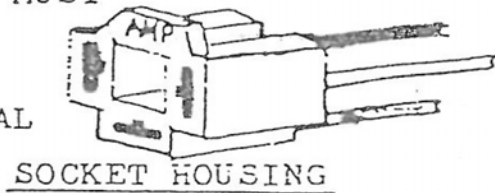
STEP 6.

Install the front right and front left turnsignal harnesses. Refer to harness diagram on PAGE 8. Black-white goes to the left side, black-green goes to the right side. Connect as shown on PAGE 8 to the turn switch wires (not included, attached to switch) and main harness wires using the two bus connectors. Connect gray wires from fusebox to #58 terminal for parking lights in front turnsignal assemblies.

STEP 7.

Disconnect and remove the front left harness. Install new one and connect as shown on PAGE 8. See note step 8 below. Install the Brown ground wires for the headlights at this time. Use a little wire lube to help the headlight wires get through the rubber tube that connects the body to the headlight bucket (rubber tube is not included in kit.) Install headlight wires into socket housings as shown below.

TERMINALS MUST
CLIP INTO
HOUSING.
OPEN SIDE
OF TERMINAL
MUST FACE
OUT.



STEP 8.

Install Brake Master Cylinder Harnes and connect as shown on PAGE 6.

NOTE: The horn wire from the front left harness, the master cylinder resevoir tubes, and the brake harness all travel through the same cavity hole. Care should be taken when installing these wires as it is a tight fit. Re-seal with putty.

-18" Red wire with .110 clip: Connect from #K Brake warning light to red wire on harness using connector.

STEP 9.

Install misc. Turnsignal / Emergency Flasher wires:

NOTE ABOUT TURN SIGNALS- ORIGINALLY, the early 1968 cares came with the 9- prong "Black Box" Flasher relay. This relay controls the turnsignal and emergency light circuits. Many problems with the above circuits can be attributed to a malfunctioning flasher relay. In this kit, the 1969/ 1970 Emergency flasher system is used. This utilizes the seven prong flasher switch which is available from your local VW parts dealer. REFER TO A 1970 WIRING DIAGRAM. For more on this and other updated circuits. it is possible to use either a 2, 3, or 4 prong flasher relay. The 2 prong flasher relay (#552) has no ground. The 3 prong Flasher has a ground terminal. The 4 prong Flasher has a ground terminal and a #KBL terminal for the dash light. Originally a 4 prong flasher was used. The 2 or 3 prong flasher can be used if the dash light is connected to 49a or L instead of #KBL terminal.



Description (cont.)

Turnsignal/ Emergency Flasher wires:

- Blue-Green (or blue) wire: #KBL (or L,49a) Flasher relay to green arrow turnsignal light in Speedo.
- Blue wire/ Blck-Grn-Wt wire: Blue: #49a Flasher relay to #49a Emergency Flasher switch. B-W-G: #49a (or L) Flasher relay to #54 Blk-Wt-Grn wire from turnsignal switch (not included in kit- attached to switch). Use connector.

NOTE: it is best to install all wiring to Emergency Flasher switch first and then install switch into dash.

- White wire: #+ Flasher relay to Emergency Flasher switch #+
- Black Wire: #15 Emergency Flasher switch to fusebox terminal marked "U" on harness diagrams.
- 19" Red wire: #30 Emergency flasher switch to fusebox terminal marked "E" on harness diagrams.
- Black-Green wire: #R Emergency flasher switch to Blk-Grn bus connector. (see PAGE 8)
- Black-White wire: #L Emergency Flasher switch to Blk-Wt bus connector.

Emergency Flasher Switch must be grounded to frame for circuit to work properly

STEP 10.

Install Misc. Wires for Front Lights:

- Yellow wire: Fusebox terminal labeled "Y" on harness diagram to #F (or #56b) highbeam relay.
- White wire: Fusebox terminal labeled "W" on harness diagrams to #56a highbeam relay.
- White-Black wire: #56 light switch to #56 highbeam relay.
- Grey wire: #58 Headlight switch to fusebox terminal labeled "G" on harness diagram.
- White-red double wire: #58b Light switch to Gas guage light to Speedometer Light

(The following wires are attached to Turnsignal T/S switch and are not included in the kit.)

- Brown-white wire: T/S switch to #S Highbeam relay.
- Brown wire (horn): T/S switch to front left harness (see PAGE 8.) (thick wire)
- Brown: Ground for #S Switch (thin wire)

STEP 11.

Connect Red 15" wire from #30 on light switch to fusebox terminal marked "R" on harness diagram.

STEP 12.

(The following wires are attached to ignition switch and are not included in kit.)

- Connect Red power wire from ignition switch harness to #30 Light switch.
- Connect Red-Blk starter wire from ignition switch harness to main harness (See PAGE 5) #50
- Connect Black ignition wire from ignition switch harness to fusebox terminal marked "B" on harness diagrams. Connect attached small wire to power terminal #15 at bottom of the speedometer.

STEP. 13

- Connect windsheild wiper wires from wiper motor to wiper switch: Brown #31b, Black #53, Blk-Red (or black-violet) #53a, Blk-Yellow #53b.
- Connect 15" Green wire from #30 (or +) wiper switch to fusebox terminal marked "X" on harness diagrams. Connect small black wire with .110 vlip to #15 Brake Warning Light.

Check motor ground tang. Check mechanism for binding. Wiper switch must be grounded for automatic return to work properly.



Description (cont.)

STEP 14.

Connect Brown Harness wire from tank sending unit to Gas guage #G output.

STEP 15.

Install Ground link assembly as shown on PAGE 8.

NOTE: early 1968 models did not have a separate ground system. Refer to 1970 wiring diagram for updated circuit.

STEP 16.

Connect red starter cable from main harness (under back seat- see PAGE 5) to starter motor terminal #50

STEP 17.

Connect Red power cable (not included in kit) from battery positive (+) terminal post to #30 (#B+) voltage regulator. Be certain this cable is clamped properly BELOW back seat front rail. Back seat frame must not crush it. Be certain that back seat frame does not touch (+) battery post. It is a good idea to install a master fuse or fuse link along this power circuit. Nominal fuse rating is 25-30 Amps.

STEP 18.

Connect double 16" + 4" Black wire from #15 coil to choke to carb cut-out valve. Be certain this circuit is secure- the coil is not fused.

STEP 19.

Install back up light harness and link as shown on PAGE 8. IN-LINE fuse must be installed because the #15 coil circuit is not fused. In-line fuse is not included in the kit. Be certain that the wiring is secure.

STEP 20.

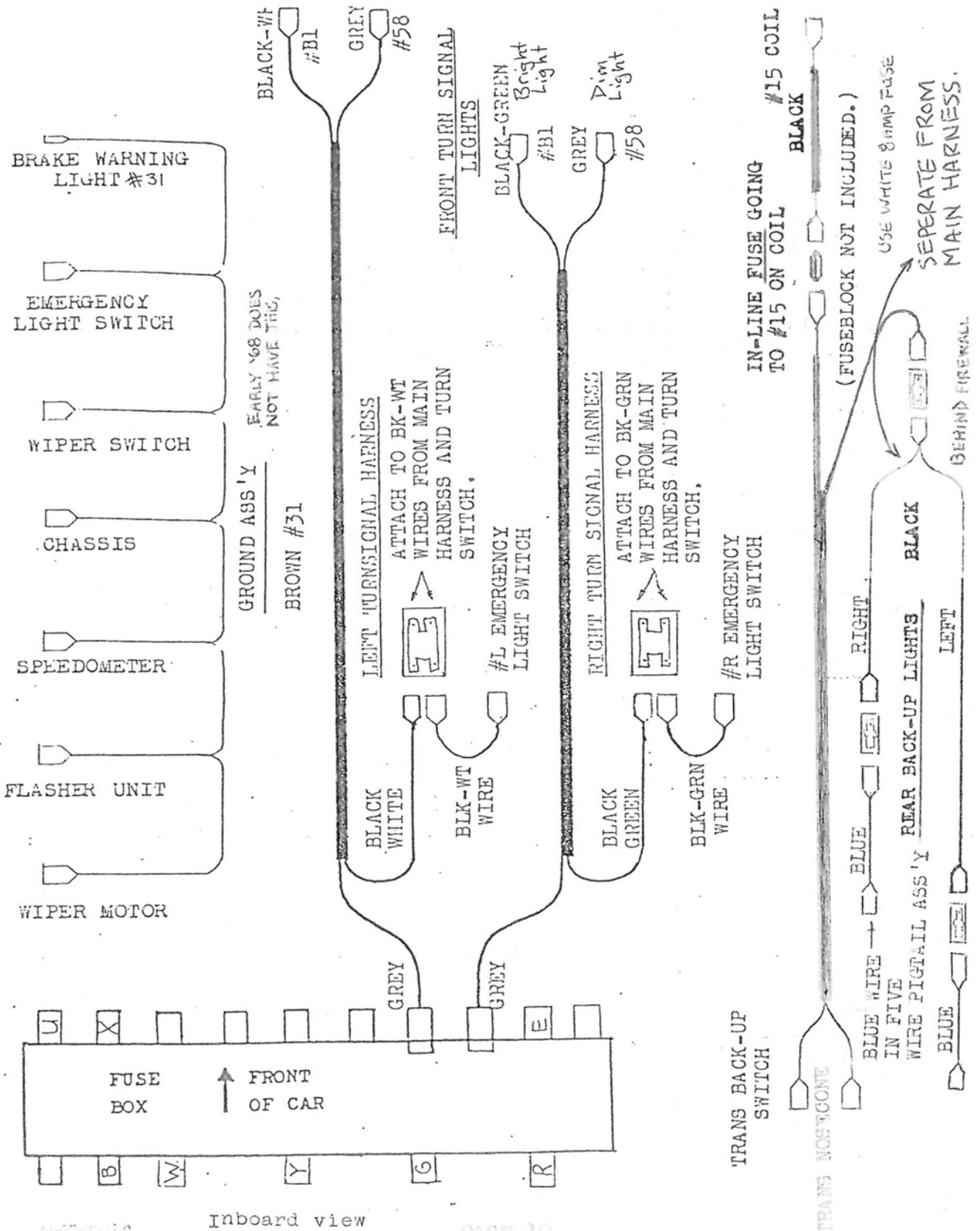
Installation should now be complete. Double check for potential shorts and incorrect installation. When everything has been checked, CAREFULLY reconnect the battery. Test the lights and accessories for proper orintation. If there is a problem, be sure to check all connections, fuses, bulb sockets, switches, relays and especially grounds. Use VOM to check circuits and refer to factory wiring diagram.



Description (cont.)

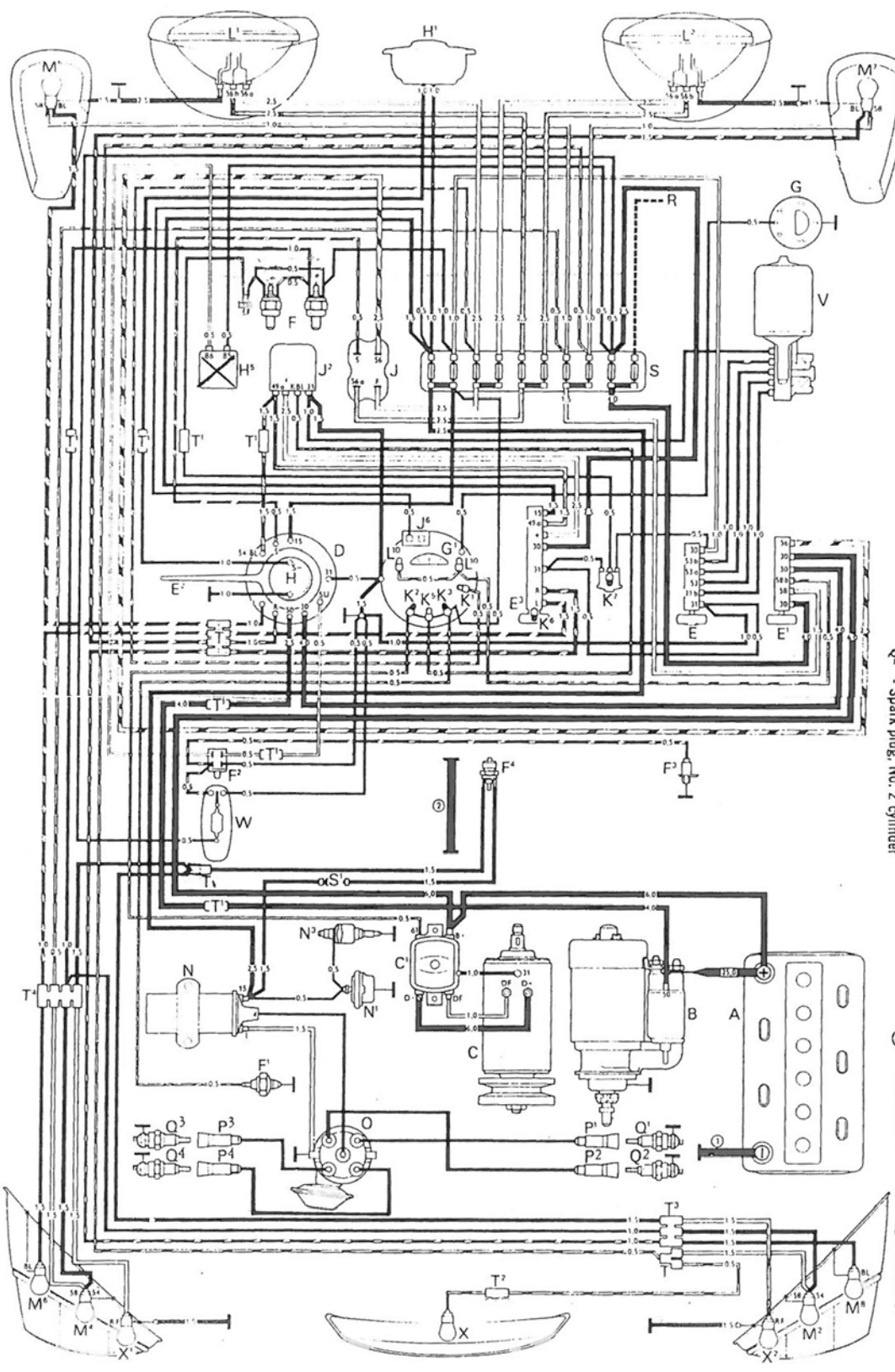
TURN SIGNALS, TRANS ASS'Y, GROUND ASS'Y

PAGE 10





Description (cont.)



- A - Battery
- B - Starter
- C - Generator
- C1 - Regulator
- D - Ignition/starter switch
- E - Windshield wiper switch
- E1 - Light switch
- E2 - Turn signal and headlight dimmer switch
- E3 - Emergency flasher switch
- F - Brake light switch with warning switch
- F1 - Oil pressure switch
- F2 - Door contact switch, left
- F3 - Door contact switch, right
- F4 - Back-up light switch
- G - Fuel gauge sending unit
- G1 - Fuel gauge
- H - Horn button
- H1 - Horn
- H5 - ~~Ignition key warning buzzer~~
- J - Dimmer relay
- J2 - Emergency flasher relay
- J6 - Vibrator for fuel gauge
- K1 - High beam warning light
- K2 - Generator charging warning light
- K3 - Oil pressure warning light
- K5 - Turn signal warning light
- K6 - Emergency flasher warning light
- K7 - Dual circuit brake system warning light
- L1 - Sealed beam unit, left headlight
- L2 - Sealed beam unit, right headlight
- L10 - Instrument panel light
- M2 - Tail and brake light, right
- M4 - Tail and brake light, left
- M5 - Turn signal and parking light, left front
- M6 - Turn signal, left rear
- M7 - Turn signal and parking light, right front
- M8 - Turn signal, right rear
- M11 - Side marker light, front
- N - Ignition coil
- N1 - Automatic choke
- N3 - Electro-magnetic pilot jet
- O - Ignition distributor
- P1 - Spark plug connector, No. 1 cylinder
- P2 - Spark plug connector, No. 2 cylinder
- P3 - Spark plug connector, No. 3 cylinder
- P4 - Spark plug connector, No. 4 cylinder
- Q1 - Spark plug, No. 1 cylinder
- Q2 - Spark plug, No. 2 cylinder
- Q3 - Spark plug, No. 3 cylinder
- Q4 - Spark plug, No. 4 cylinder
- R - Radio connection
- S - Fuse box
- S1 - Back-up light fuse
- T - Cable adapter
- T1 - Cable connector, single
- T2 - Cable connector, double
- T3 - Cable connector, triple
- T4 - Cable connector (four connections)
- V - Windshield wiper motor
- W - Interior light
- X - License plate light
- X1 - Back-up light, left
- X2 - Back-up light, right
- Y - Battery to frame ground strap
- Z - Transmission to frame ground strap