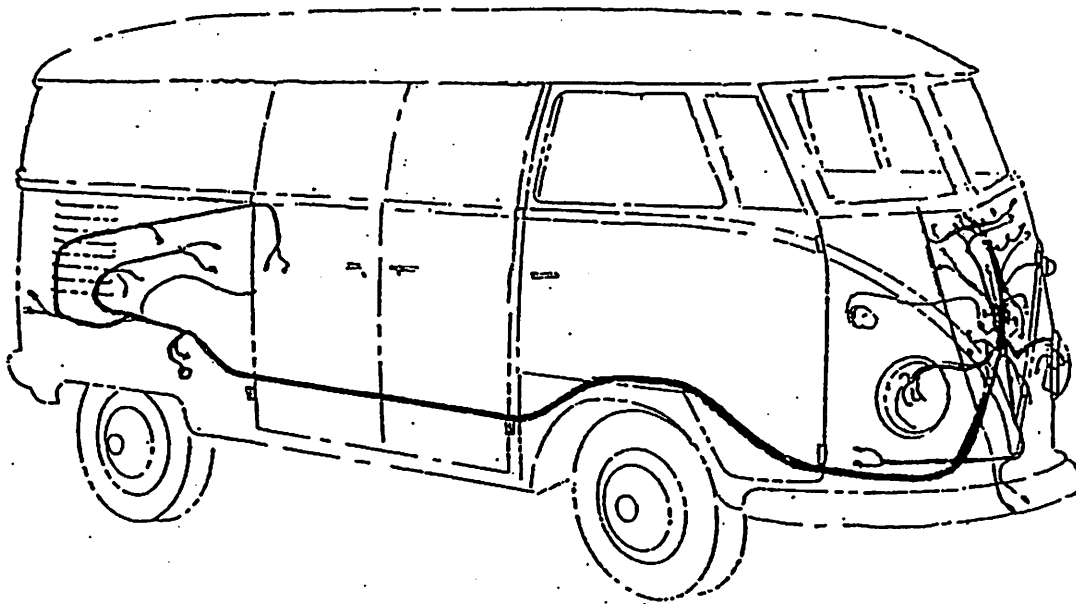
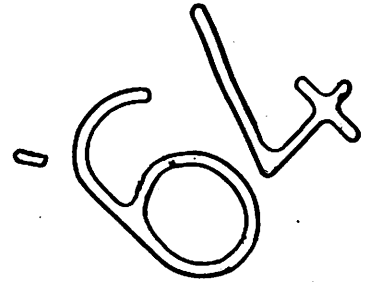


#213-1964

Replacement Wiring Parts
for U.S. Import Version VW Type II

Complete Kit



This harness kit fits 1964 Type II Van.
Original factory design - 6 or 12 volt operation.
Domelight harness is NOT included.
Main Harness is for D.C. Generator with voltage regulator
mounted externally on car body.

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. Wiring Works cannot be held responsible for any
omissions or errors herein. User assumes all risk and liability
whatsoever arising out of the use of this product.

WIRING HARNESS SET

READ DIRECTIONS COMPLETELY BEFORE STARTING

PARTS LIST:

- (1) Main Harness (See page 5)
- (1) Front Harness (See page 6)
- (1) Instrument Harness (See page 7)
- (1) Emergency Flasher Harness (See page 7)
- (19) Misc. Wires or Sub Assemblies (See steps 5-10)
- (2) Headlight Socket Housings
- (1) Grommet
- (3) TEE Connectors
- (3) Connectors
- (1) Spade Connectors

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.

INSTALLATION DIRECTIONS:

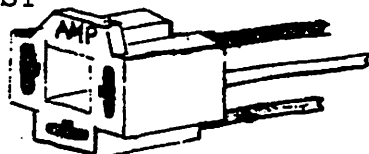
1. !!!!!Disconnect battery ground cable!!!! The front map shelf tray and access plate below speedometer must be removed to expose wiring. Remove clip and push back fusebox out of frame.

2. This step describes how to replace the Main harness loom traveling from the motor area to the fuse box: Disconnect main harness at front and back - use diagram on page 5 as a guide. Attach a dragline (use heavy cord or wire) at the front of the old loom so the path through the frame is not lost when it is pulled out. Remove old harness by pulling out back of car, allowing the dragline to snake in and take its place. Carefully attach dragline to new harness. Wrap joint with plastic tape to form a COMPACT STREAMLINED bundle to pull through. Special attention should be given to the dragline guiderope to ensure that it doesn't hang up on the frame or pull off the loom. Ready? Install harness by pulling on the dragline from the front while someone feeds the harness in through the back. Using wire lube or bar soap to help get the harness along through the frame is helpful. DON'T force anything if it gets stuck. Check to see where it is hanging up and correct the problem. Once the loom is in position, install the rubber grommets and bend the metal tangs

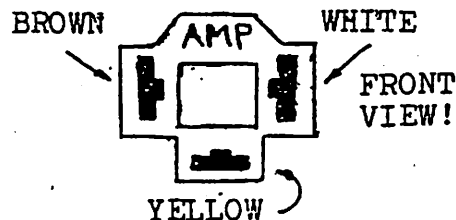
back to secure everything. Reconnect the wires as shown on page 5. Be certain license plate and TAILLIGHTS are GROUNDED to frame. (pg 8)

3. Install the Front Light harness. Connect as shown on page 6. Screw brown ground wires into headlight buckets and install light socket housings as shown below:

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



SOCKET HOUSING



NOTE ABOUT FRONT RUNNING LIGHTS: Be certain grey wire going to parking light socket is attached to the POSITIVE lug (Center of bulb). It may be necessary to connect the ground lug to the chassis if the ground is poor. The brown ground wire is attached to the NEGATIVE lug (Outside frame). DON'T get positive lug and ground lug connections backwards - this circuit has no fuse!

4. Install Instrument harness. Connect as shown on page 7. Connect dome light harness (not included in kit) to the domelight switch on the left side the steering column pod. To replace the domelight harness it is necessary to remove the headliner cloth and feed the new one through with a coat hanger - not an easy task.

5. Install misc. wires for Front lights:

- 11" Red wire: #30 Lightswitch to #30 Keyswitch.
- White-Red triple wire: #58b Lightswitch to Speedo gauge lights to Gas Gauge light.

6. Install Emergency Flasher harness. Connect as shown on page 7.

NOTE ABOUT TURNSIGNALS - ORIGINALLY, most 1962 and 1963 models were equipped with emergency flashers. (Refer to VW factory service manual for details.) The Emergency switch connects all four of its circuits together when pulled out. This activates the flasher relay and remote relay located on far right side of kick panel. The remote relay must be grounded to work properly. A defroster relay from a late model VW can be used as a remote relay if a 12 volt unit is needed. If your car does NOT have emergency flashers, simply ignore the Emergency Flasher harness. Connect the Bk-Wt + Bk-Grn T/S wires directly to the front T/S lights and connect the Bk-Yel + Bk-Red wires directly to the Main harness rear lights. Connect Bk-Wt-Grn T/S wire and Blue-Grn wire to #49a (or L) flasher relay. Connect Bk-Wt-Grn wire from fuse to #49 (or X) flasher relay. Also be certain that the Turnsignal switch is working properly and is mounted securely to the steering column. The Blk-Wt-Grn (T/S) and Blk-Violet (Brake) are INPUTS. The Blk-Wt + Blk-Grn (Front T/S) and Blk-Yel + Blk-Red (Rear T/S/Brake) are OUTPUTS.

7. Install misc. Turnsignal T/S wires:

(The following wires are from the Turnsignal switch and are not included in the kit.)

- Black-Violet wire: T/S to Bk-Red Front Harness.
- Black-Wt-Grn wire: T/S to #49a Flasher relay.
- Black-Wt wire: T/S to TEE (See page 7)
- Black-Grn wire: T/S to TEE (See page 7)
- Extra Blk-Wt and Blk-Grn wires are included in kit if they are not already attached to T/S switch.
- Black-Yel and Black-Red wires: T/S to Emergency flasher harness (See page 7).

Be certain Flasher relay is properly grounded or it will not operate. (Brown wire #31 or frame)

8. Install Windshield Wiper wiring:

- 20" covered Blk-Violet: Wiper switch to Wiper Motor.
- 4" Brown wire with lug: Wiper Motor ground. ~~#31~~
- 8" Black wire: Domelight switch (+) to Wiper switch (+).
(See page 7)

Wiper Motor must be grounded to frame to operate.

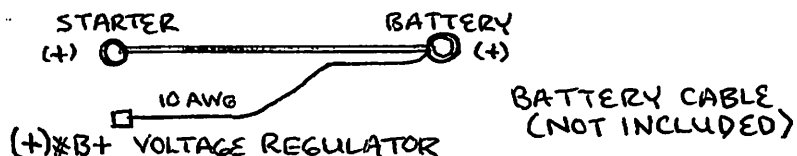
- Connect RED front domelight wire (not included in kit) to Wiper switch (+).

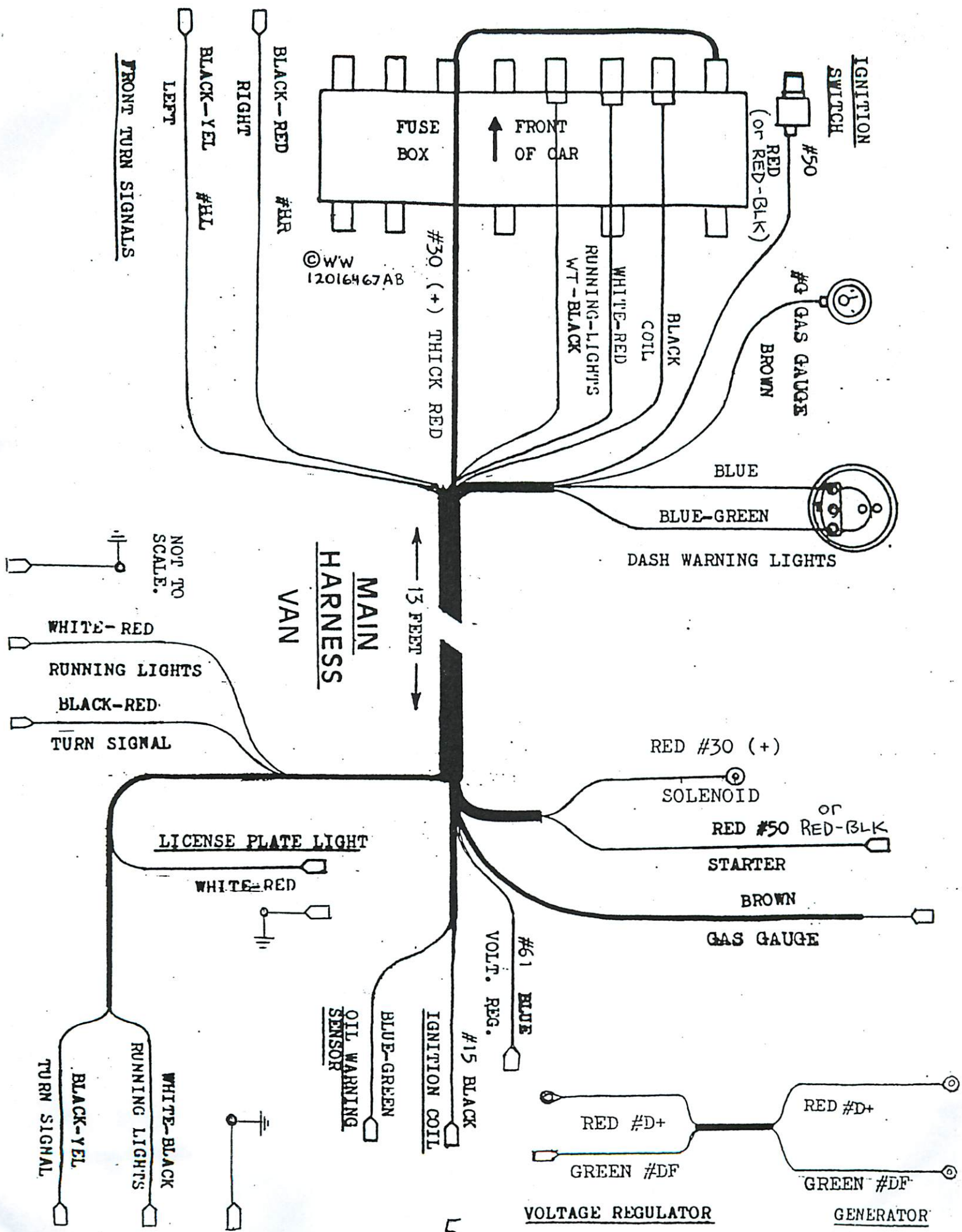
9. Install Horn wire in steering column: Push long Brown wire up through bottom of steering box. Connect from horn to horn button on steering wheel.

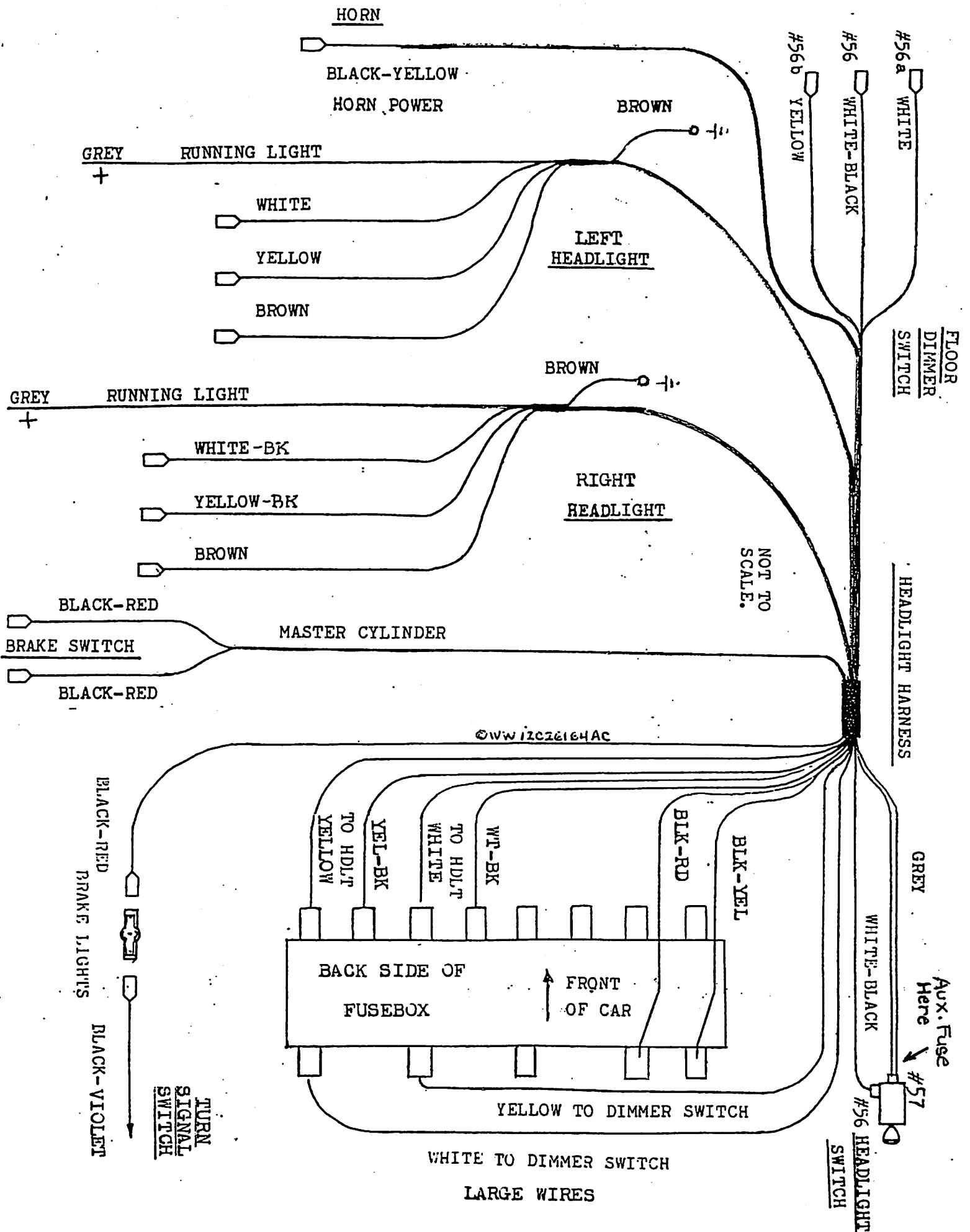
10. Install 18" Black wire: #15 Coil to Carb Choke. Be certain that this wire is safe and the secure as the coil circuit has no fuse!

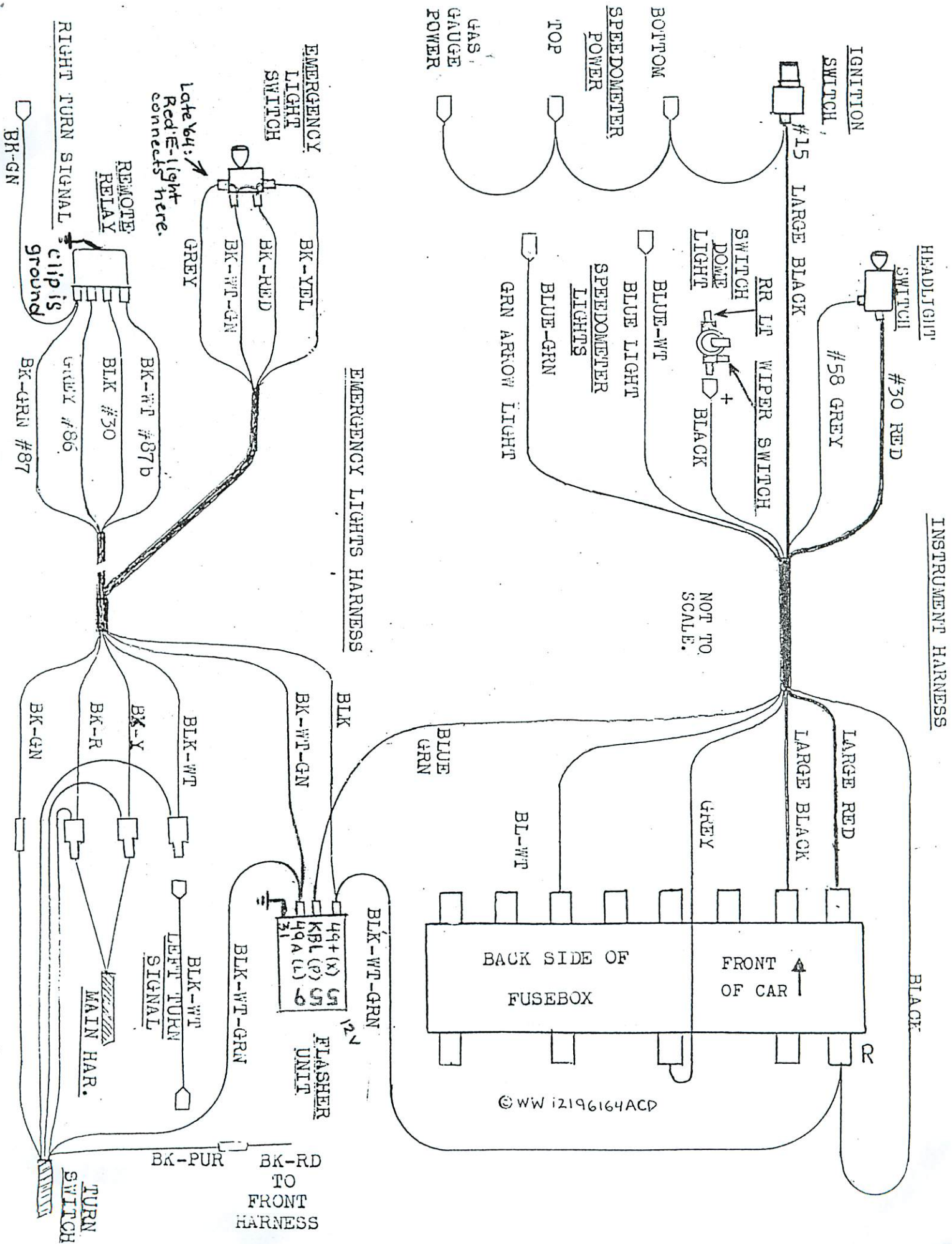
NOTE ABOUT FUSEBOX: Be certain fusebox is in good condition. The fusebox is held into its frame by a plastic tab on the right side and a metal clip on the left side. If the tab is broken off or the clip is missing the fuse box will slip out and short circuit against the bottom of the frame causing extensive damage. The fusebox MUST be securely mounted in the frame with the clip.

11. 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 operation. If there is a problem, be sure to check all connections, fuses, bulbs sockets, switches, relays and especially grounds. Refer to wiring diagram in VW factory service manual and use VOM to check circuits.





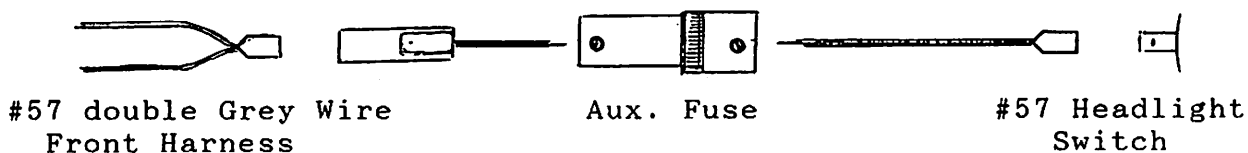




The following supplement contains important information that will make your wiring installation easier and add an element of safety that will ensure trouble free operation of your car's electrical system. Please review the following notes along with the regular instructions before wiring installation.

___ If you have access to the INTERNET, much useful information can be viewed at the web site VINTAGEBUS.COM. COLOR VW wiring diagrams may be downloaded by those that are computer proficient.

___ Included in this up-dated kit is an AUXILIARY SAFETY FUSE for the front parking lights. This extra fuse is to prevent the front grey wires from burning up if there is a fault. Originally, the VW engineers used the headlight switch itself as a fuselink!! Connect to headlight switch as shown:



___ If your Bus is equipped with an EMERGENCY FLASHER system, a four prong (or circuit) Flasher MUST be used. This is because the #49 and #49a circuit has to be isolated from the #31 and #KBL circuit. A 12 volt #559 THERMAL (can) Flasher will work best for this application. X=#49, L=#49a, P=KBL and rivet=#31. If you have a 6 volt system, an NOS four circuit Hella flasher will have to be used. Some Hella units use the mounting stud as a ground, others have separate #31 terminal. The 12 V #559 VW no. is 211 953 215 CCR.

The "REMOTE RELAY" mentioned in the instructions is really just a DOUBLE pole, single throw relay. The 6 volt VW part number is 211 953 191. The 12 volt VW part number is 311 963 141. These are junk yard items. The Bosch equivalent 12 v no. is 0 332 015 001. An equivalent Remote relay can also be made from two standard SPST Bosch relays (6 or 12 volt) wired in parallel.

___ In the kit are numerous Brown GROUND wires. The following chart will help clarify the situation:



A - Battery
 B - Starter
 C - Volt Reg.
 D - Starter/ignition switch
 E - Windshield wiper switch
 F - Lighting switch
 G - Turn indicator switch
 H - Horn
 H¹ - Horn button
 J - Flasher relay

J¹ - Emergency light 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 and cooling warning light
 K³ - Turn indicator warning light

K⁴ - Oil pressure warning light
 K⁵ - Speedometer light
 K⁶ - Fuel gauge light
 K⁷ - Clock light
 L¹ - Sealed beam unit, left
 L² - Sealed beam unit, right
 M¹ - Parking light, left
 M² - Parking light, right
 N - Distributor
 O - Coil

R¹ - Aerial
 R² - Connection for rear loudspeaker
 (Models 241 - 244 and 251 only)
 S - Fuse box
 T - Cable connector
 T¹ - Cable connector
 U¹ - Turn indicator, front left
 U² - Turn indicator, front right
 W - Windshield wiper motor
 X¹ - Stop/tail/indicator light, rear left

X² - Stop/tail/indicator light, rear right
 Y - Front interior light
 Y¹ - Rear interior light
 Z - License plate light
 1. - Ground strap from battery to body
 2. - Ground strap from transmission to body
 3. - Windshield wiper motor ground connection

