

REPLACEMENT ELECTRICAL HARNESS MGB 1964/1967

Complete replacement of the electrical harness is often necessary during a complete restoration or if it has suffered damage, short circuits or various connections leading to electrical faults. Replacement is not complicated. It simply requires basic knowledge of auto electricity and attention to detail. For the necessary hardware, a standard tester is sufficient. It will be used to test the continuity on a connection (ohmmeter) and the power supply (voltmeter).

This tutorial is intended for models up to 1968, with dynamo and negative ground. Don't forget to order single and double insulated connectors, a dozen of each.

Above all, when you dismantle the old harness, keep it carefully, some elements may be useful later.

The harness is delivered in 2 parts: The main harness concerns the engine compartment and the dashboard, with an extension on the Overdrive. The rear harness concerns the rear lights, the fuel gauge and the fuel pump. It connects to the main harness in the engine compartment, above the starter. There is also an independent cable not supplied with the harness which is connected to the battery plus, passes under the car and goes to the manual starter control in the engine compartment. This is the MOST GENERAL part of the electrical circuit. The existing cable can most of the time be retained.

Generally:

The brown wires (n) are the BEFORE contact wires which come directly from the battery without going through the fuse box.

The red wires (r) power the lights which operate BEFORE contact

The white wires (w) are AFTER contact wires, which come from the battery via the dashboard contact. They do not pass through the fuse box but some arrive at the entrance to the fuse box to supply green wires (g)

The green wires (g) are the AFTER contact ones that come from the fuse box.

REAR BEAM

Assembly begins with the rear beam. It starts from the left rear light, passes to the right of the trunk under the car, is connected to the fuel gauge then to the fuel pump then goes to the engine compartment where it will be connected to the main harness on the right side.

For the rear harness, installation is relatively simple, the wires arrive with the correct lengths on the different elements to be connected.

Fuel pump:

- Ground: black – b - Power supply: white – w

Fuel gauge:

- black – b - Green/black - g/b

Rear lights and license plate lighting:

- Red - r

Brake light:

- Green/Purple - g/w

Right Turn Signal:

- Green/white - g/w

Turn signal on the left:

- Green/red - g/r

MAIN BEAM

ENGINE COMPARTMENT

Installation of the main harness begins in the engine compartment. Locate the part that will go towards the front lights in front of the radiator and pass it through the hole provided on the right in the radiator support. This part includes lighting, indicators and horns.

Headlights:

- High beam: blue/white - u/w
- Low beams: -blue/red - u/r

Flashing Block:

- Night lights: red - r
- Right turn signal: Green/white - g/w
- Left turn signal: Green/red - g/r
- Warnings: purple/black - p/b

The beam should arrive approximately in the center of the grille, each headlight having an independent cable long enough to reach there. It is fixed under the crosspiece supporting the closing of the hood.

Note: the horn operates with grounding. It is therefore connected to the positive

Be careful to insulate it from the bodywork.

ENGINE COMPARTMENT

Before connecting the engine compartment elements, pass the harness into the passenger compartment thru the hole located on the right. The first wires to be connected to it will be the flashing unit and the windshield wiper motor. Adjust the harness so that these items are easy to connect. Do not attach the harness to the body until everything is connected in the engine compartment. Connect the rear harness that comes above the starter to the main harness. There are 6 wires to connect depending on their color.

Then connect the independent POSITIVE GENERAL WIRE to the starter manual contactor and its end to the starter itself.

Manual starter switch:

Power:

Connect together positive general wire and brown - n

- Command: red/white – r/w

To starter: positive general wire

Fuse box:

Follow the following diagram: Arrival on the front side of the car <-----> Departure on the rear side.

Upper terminal: This is the “further contact”. Brown - n <-----> Purple - p (Warner).

Second terminal going down: Leave free because it is connected to the upper terminal and is therefore also powered before contact.

Third terminal: white - w <-----> green - g "Positive after contact".

Fourth Terminal: white - w <-----> green - g "Positive after contact".

Regulator: From right to left:

- Plug B: (double plug). Double brown - n and single brown - n
- plug F: brown/green - n/g
- plug WL- D: double plug. Brown/yellow - n/y (2 wires)
- Plug E: black - b (ground)

Dynamo:

- Plug D: brown/yellow – n/y
- Plug F: brown/green – n/g

Coil:

- White – w White/black – b/w

Distributor:

- white/black – w/b

Heating block:

- black - b green/brown - g/n

Once these elements are connected, move on to the passenger compartment.

INTERIOR

Flashing Central:

- Green - g Light green/brown - lg/n

Windshield wiper motor:

- Plug 2: green – g
- Plug 1: black/green - b/g
- Plug E: Ground black - b

Contactor Card reader:

- Red - r

Lamp:

- Red/black – r/b
- Black ground – b

Ground wires: There are several with round terminals, to be fixed to the bodywork, carefully testing the ground continuity each time.

At this time, it is recommended to mark all the wires with bodywork tape, for example. This allows all wires to be checked against the diagram and arranged along the dashboard according to their destination.

Central part of the dashboard:

Contact: 3 Plugs:

- Plug 3: Brown -n
- Plug 2: White triple - w (plus after contact)
- Plug 1: White/red - w/r (Starter)

Lighting :

- Plug 4: brown - n
- Plug 7: double red – r
- Plug 8: blue - u

Wiper

- Plug 1: Black ground - b
- Plug 4: Black/green - b/g

Ventilation:

- green - g - green/brown - g/n

Turn Signal Switch:

Power supply: light green/brown - lg/n -

- Left indicator: green/red - g/r -
- Right indicator: green/white - g/w -
- Horn: purple/black - p/b

Flash to pass (headlight flash) if equipped:

- brown - n - blue/white - u/w

Then connect the low/High beams switch (foot):

- Plug F: blue - u
- Plug 1: blue/white - u/w
- Plug 2: blue/red - u/r

Brake pedal switch:

- green - g - green/purple - g/p

Overdrive contactor (if equipped):

- White - w Yellow - y
- Reverse switch (if equipped):
- green - g - green/brown - g/n

Voltage stabilizer:

- Plug B: triple green – g
- Plug I: Light green/green - lg/g

Dashboard lighting dimmer control:

- Red – r Red/green - r/g

Turn signal indicators:

- Left: light green/yellow – lg/y

- Right: light green/blue – lg/u
- Return wire: light green/purple - lg/p

Fuel gauge:

- Light green/green – lg/g Green/black - g/b

Tachometer:

- White - w

All the other wires are corresponding to the lighting of the different gauges.

