



RENAULT Twingo

C05 X

88

88 CHANGE IN POSITION OF THE BATTERY

- Engine: XXX
- Gear box: XXX

Basic manual: Workshop Repair Manual 305

Following various developments on Twingo, the position of the battery has been altered (rotation through 90° with a new mounting).

For reasons of uniformity, only the new type of battery mounting will be available from the Parts Department.

Vehicles with the old type of mounting will find that the battery connection leads are now too short.

When repairing vehicles fitted with the old type of mounting (replacement of the battery mounting or a component in the mounting), the passenger compartment wiring and engine wiring must be modified, to permit connection to the battery and the earth wiring must be replaced using an adaptor kit (Part Number 77 01 468 577).

For information on repair of the bodywork, refer to Technical Note n° 346.

"The repair methods given by the manufacturer in this document are based on the technical specifications current when it was prepared."

The methods may be modified as a result of changes introduced by the manufacturer in the production of the various component units and accessories from which his vehicles are constructed."

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Modification of battery wiring

COMPOSITION OF THE KIT

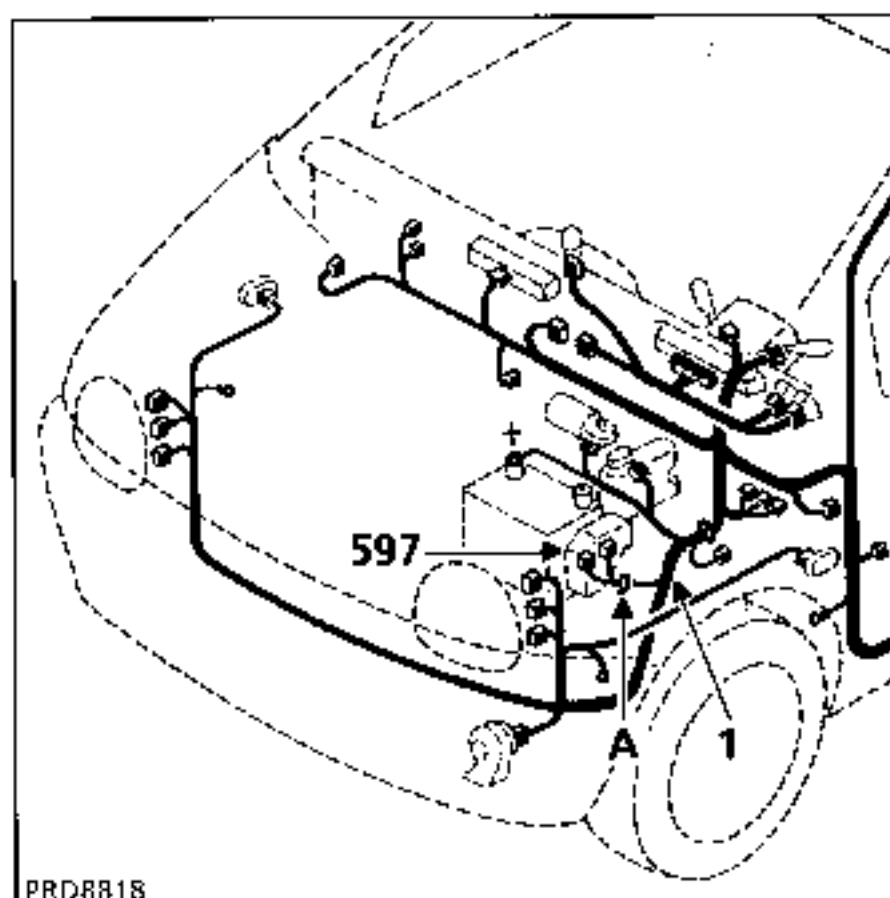
- new negative wiring,
- new wiring sub-assembly for the passenger compartment comprising the battery and fuse holder connections,
- new wiring sub-assembly for the engine compartment comprising the battery / starter and alternator connections,
- a roll of high temperature adhesive tape,
- heat shrink sleeving for insulation of wires which are not used,
- a heat shrink, crimpable sleeve for connection to connector R212 (passenger compartment wiring) for vehicles fitted with air conditioning and ABS or air conditioning and the automatic clutch.

NOTE : the wiring in the kit is suitable for all types. For the passenger compartment the wiring must be adapted to the vehicle, depending on the equipment level.

IMPORTANT :

All these operations must be carried out with the battery disconnected.

MODIFICATION OF THE PASSENGER COMPARTMENT WIRING AT THE ENGINE END (1)



PRD8818

VEHICLE WITHOUT ABS AND WITHOUT AUTOMATIC CLUTCH (WITH OR WITHOUT AIR CONDITIONING)

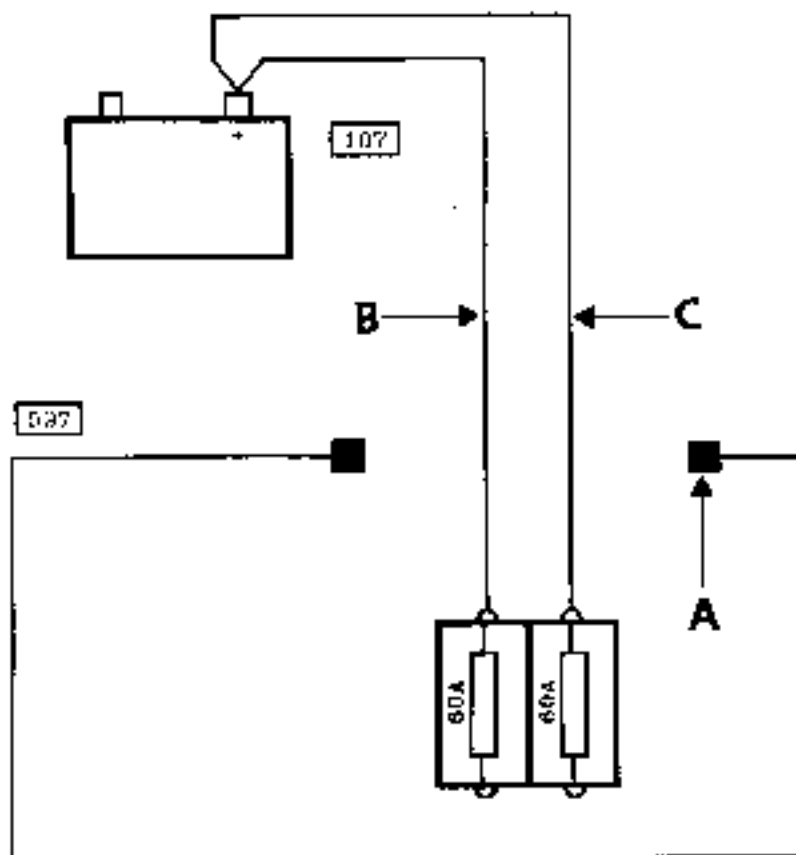
ORIGINAL WIRING (1)

After removing the wire guide (A) (cut it cleanly so it may be glued back when refitting), remove the binding from around the wiring (1) between the battery and the large fuses in the fuse box (597).

Disconnect the clips from wires (B) and (C) from the large fuse holder.

Disconnect the positive wiring (wires (B) and (C)) from the rest of the harness.

NOTE : removal and refitting of the various clips is explained in the following pages.



98540R

107 = battery
597 = engine fuse box

ADAPTED WIRING

Position the new positive passenger compartment wiring (supplied in the kit) over the part of the harness remaining on the vehicle.

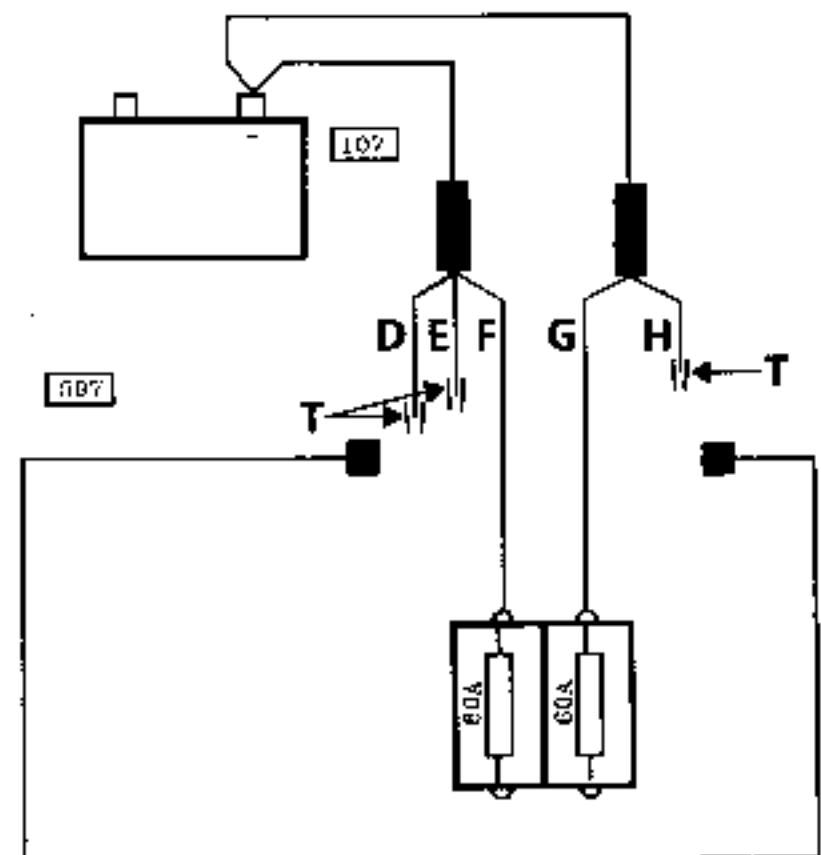
Connect 2 of the large clips (F, G) (5 mm² wire) of the new wiring to the large fuse holder.

Cut the wires which are not used (D, E, H) at different lengths and insulate them using the heat shrink sleeving (T) provided in the kit.

Bind the new wiring to the rest of the harness using the adhesive tape in the kit.

Refit the wire guide (A), gluing it back into position.

Secure the wiring assembly to the vehicle.



98540R1

107 = battery
597 = engine fuse box

Modification of battery wiring

VEHICLE WITH AUTOMATIC CLUTCH OR ABS WITHOUT AIR CONDITIONING

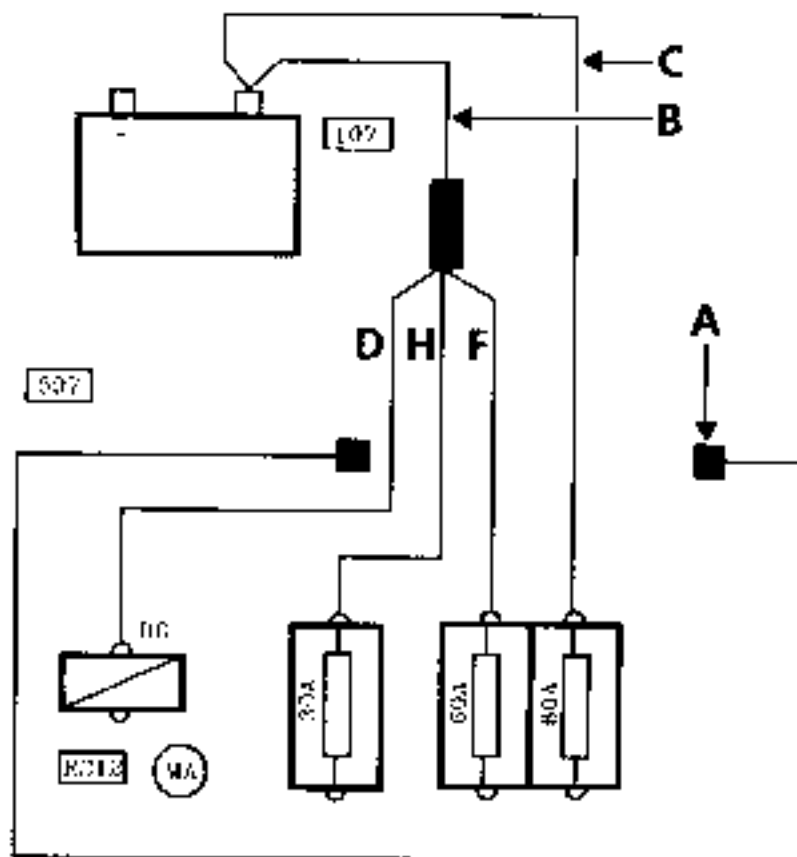
ORIGINAL WIRING

After removing the wire guide (A) (cut it cleanly so it may be glued back when refitting), remove the binding from around the wiring (1) between the battery and the large fuses in the fuse box (597).

Disconnect the clips from wires (C, F, H) from the large fuse holders and the clip from wire (D) on track B6 of connector R212.

Disconnect the positive wiring (wires B, C, D, H, F) from the rest of the harness.

NOTE : removal and refitting of the various clips is explained in the following pages.



98541R

107 = battery
597 = engine fuse box
R212 = engine/passenger compartment connection

ADAPTED WIRING

Position the new positive passenger compartment wiring (supplied in the kit) over the part of the harness remaining on the vehicle.

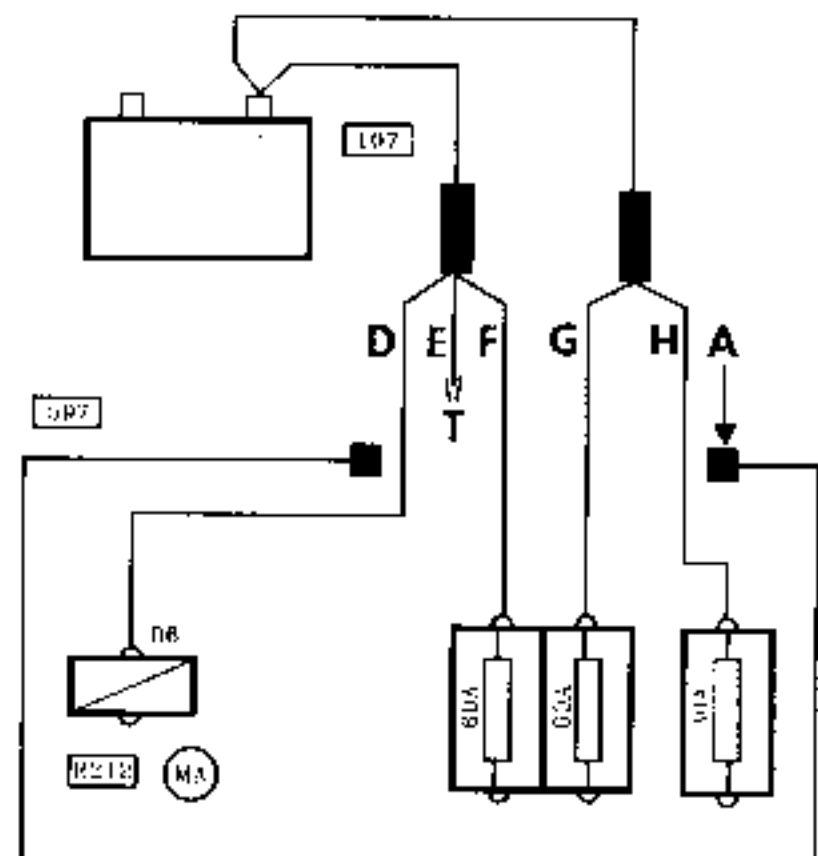
Connect 3 of the large clips (F, G, H) (5 mm² wire) of the new wiring to the large fuse holders and the small clip (D) (2 mm² wire) to connector R212 track B6.

Cut the wire which is not used (E) and insulate it using the heat shrink sleeving (T) provided in the kit.

Bind the new wiring to the rest of the harness using the adhesive tape in the kit.

Refit the wire guide (A), gluing it back into position.

Secure the wiring assembly to the vehicle.



98541R1

107 = battery
597 = engine fuse box
R212 = engine/passenger compartment connection

Modification of battery wiring

VEHICLE WITH AUTOMATIC CLUTCH AND ABS WITHOUT AIR CONDITIONING

ORIGINAL WIRING AND ADAPTED WIRING ARE IDENTICAL

After removing the wire guide (A) (cut it cleanly so it may be glued back when refitting), remove the binding from around the wiring (1) between the battery and the large fuses in the fuse box (597).

Disconnect the clips from wires (E, F, G, H) from the large fuse holders and the clip from wire (D) on track B6 of connector R212.

Disconnect the positive wiring (wires B, C, D, E, F, G, H) from the rest of the harness.

NOTE : removal and refitting of the various clips is explained in the following pages.

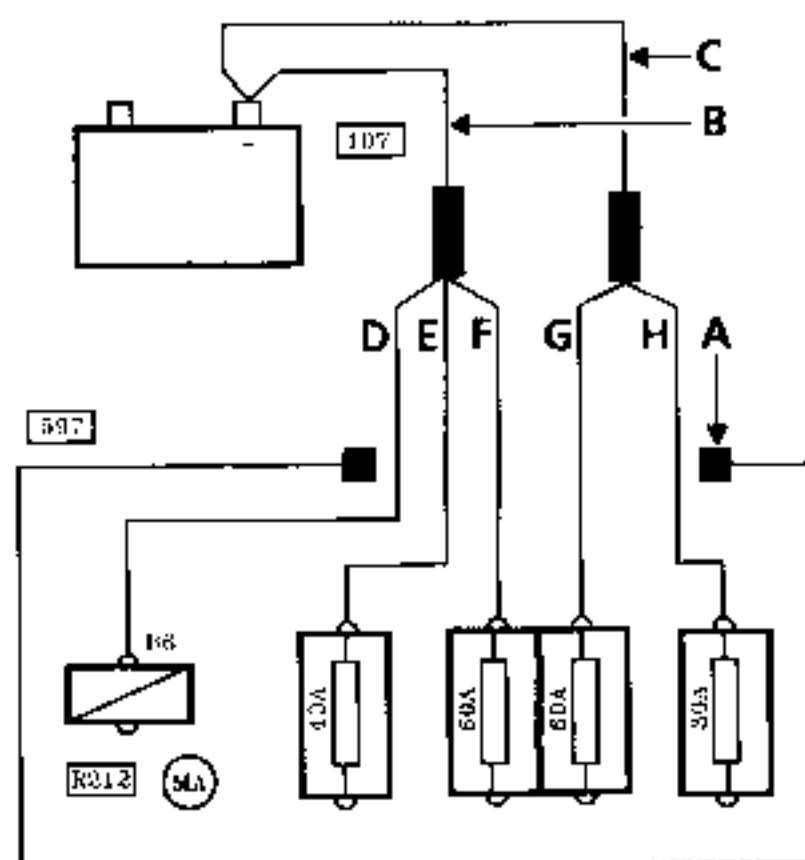
Position the new positive passenger compartment wiring (supplied in the kit) over the part of the harness remaining on the vehicle.

Connect the 4 large clips (5 mm² wire for (E, F, G) and 3 mm² wire for wire (H)) of the new wiring to the large fuse holders and the small clip (D) (2 mm² wire) to connector R212 track B6.

Bind the new wiring to the rest of the harness using the adhesive tape in the kit.

Refit the wire guide (A), gluing it back into position.

Secure the wiring assembly to the vehicle.



98542R

107 = battery
 597 = engine fuse box
 R212 = engine/passenger compartment connection

VEHICLE WITH AIR CONDITIONING AND ABS WITHOUT AUTOMATIC CLUTCH

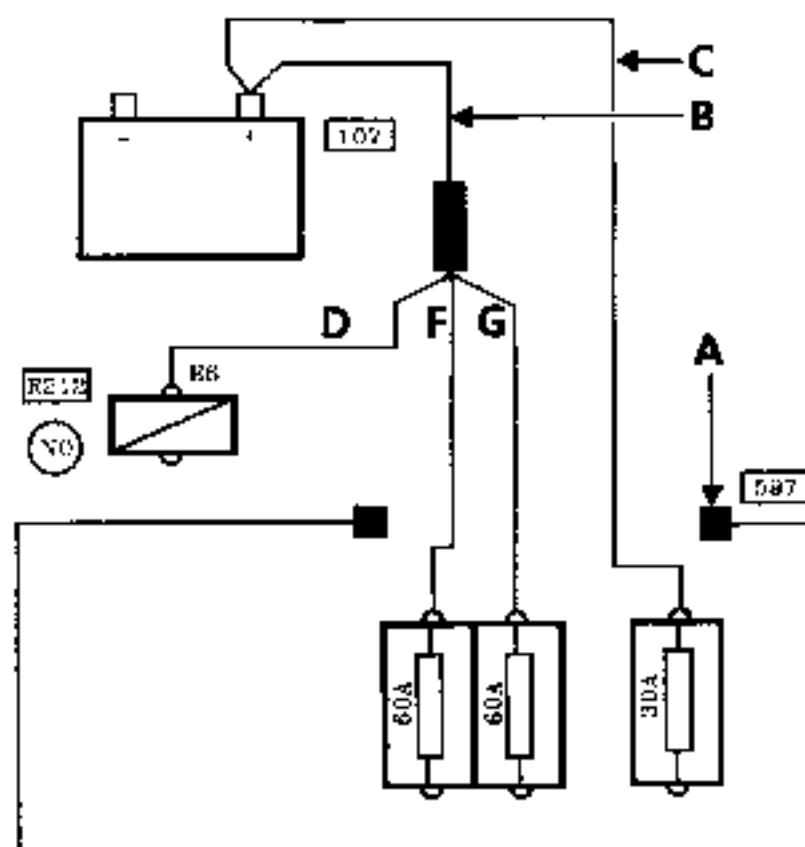
ORIGINAL WIRING

After removing the wire guide (A) (cut it cleanly so it may be glued back when refitting), remove the binding from around the wiring (1) between the battery and the large fuses in the fuse box (597), then to the black 42 track connector R212, located behind the battery.

Disconnect the clips from wires (C, F, G) from the large fuse holders and cut wire (D) on track E6 of connector R212 (retain a few centimetres of wire on the connector end to allow connection to the new wiring).

Disconnect the positive wiring (wires B, C, D, F, G) from the rest of the harness.

NOTE : removal and refitting of the various clips is explained in the following pages.



98543R

107 = battery
597 = engine fuse box
R212 = engine/passenger compartment connection

ADAPTED WIRING

Position the new positive passenger compartment wiring (supplied in the kit) over the part of the harness remaining on the vehicle.

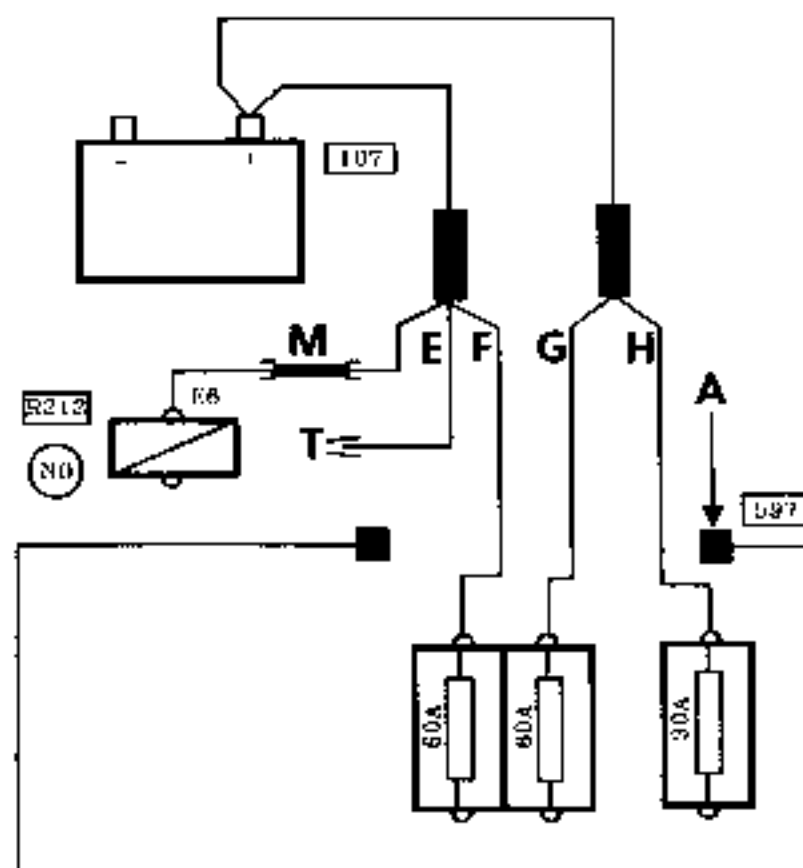
Connect 3 of the large clips (F, G, H) (5 mm² wire) of the new wiring to the large fuse holders and cut the wire with the small clip (D) (2 mm² wire) leaving sufficient length to connect it to the wire on track E6 of connector R212 (connect using the heat shrink, crimpable sleeve (M) in the kit).

Cut the wire which is not used (E) and insulate it using the heat shrink sleeving (T) provided in the kit.

Bind the new wiring to the rest of the harness using the adhesive tape in the kit.

Refit the wire guide (A), gluing it back into position.

Secure the wiring assembly to the vehicle.



98543R1

107 = battery
597 = engine fuse box
R212 = engine/passenger compartment connection

VEHICLE WITH AIR CONDITIONING AND AUTOMATIC CLUTCH WITH OR WITHOUT ABS

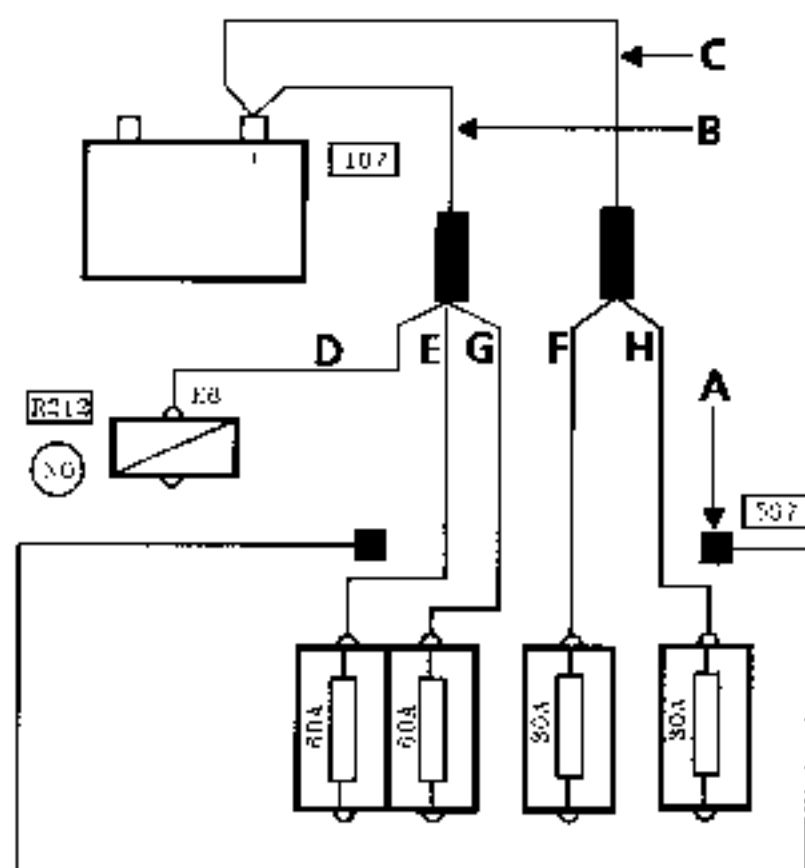
ORIGINAL WIRING

After removing the wire guide (A) (cut it cleanly so it may be glued back when refitting), remove the binding from around the wiring (1) between the battery and the large fuses in the fuse box (597), then to the black 42 track connector R212, located behind the battery.

Disconnect the clips from wires (E, F, G, H) from the large fuse holders and cut wire (D) on track E6 of connector R212 (retain a few centimetres of wire on the connector end to allow connection to the new wiring).

Disconnect the positive wiring (wires B, C, D, E, F, G, H) from the rest of the harness.

NOTE : removal and refitting of the various clips is explained in the following pages.



98544R

107 = battery
597 = engine fuse box
R212 = engine/passenger compartment connection

ADAPTED WIRING

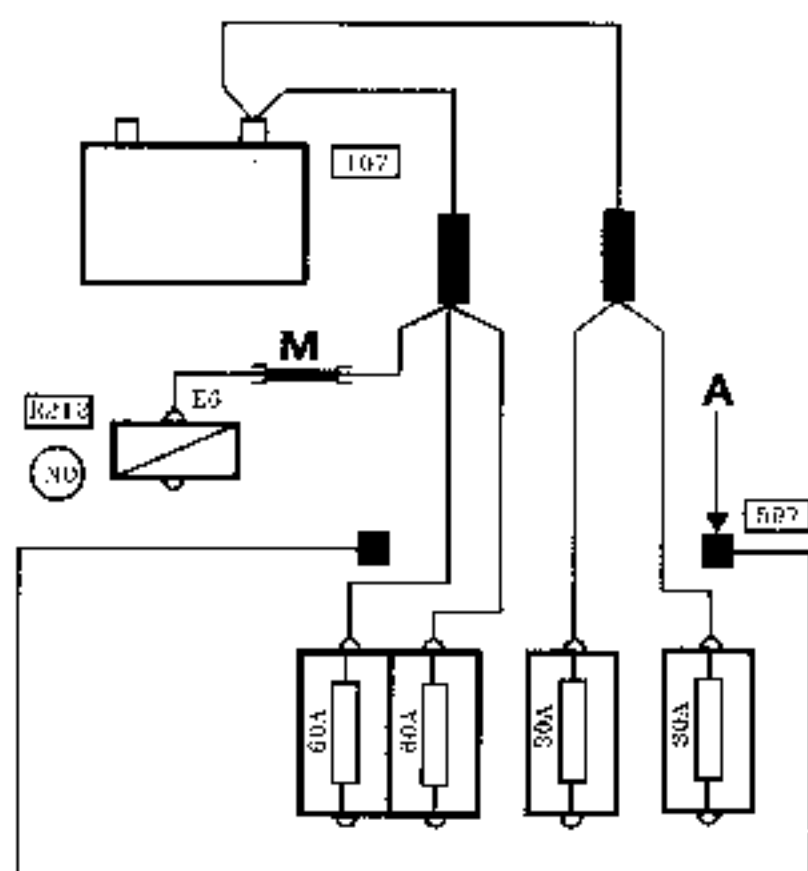
Position the new positive passenger compartment wiring (supplied in the kit) over the part of the harness remaining on the vehicle.

Connect the 4 large clips (5 mm² wire for (E, F, G) and 3 mm² wire for wire (H)) of the new wiring to the large fuse holders and cut the wire with the small clip (2 mm² wire) leaving sufficient length to connect it to the wire on track E6 of connector R212 (connect using the heat shrink, crimpable sleeve (M) in the kit).

Bind the new wiring to the rest of the harness using the adhesive tape in the kit.

Refit the wire guide (A), gluing it back into position.

Secure the wiring assembly to the vehicle.

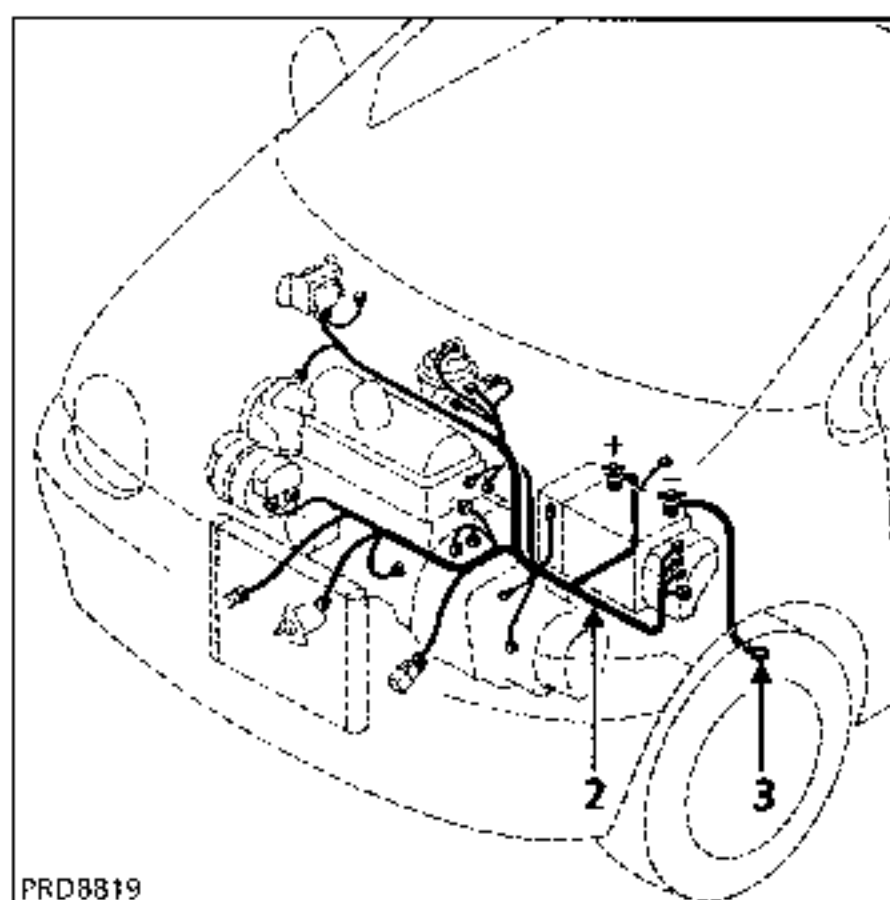


98544R1

107 = battery
597 = engine fuse box
R212 = engine/passenger compartment connection

Modification of battery wiring

MODIFICATION OF THE ENGINE WIRING (2)
REPLACING THE EARTH WIRING (3)



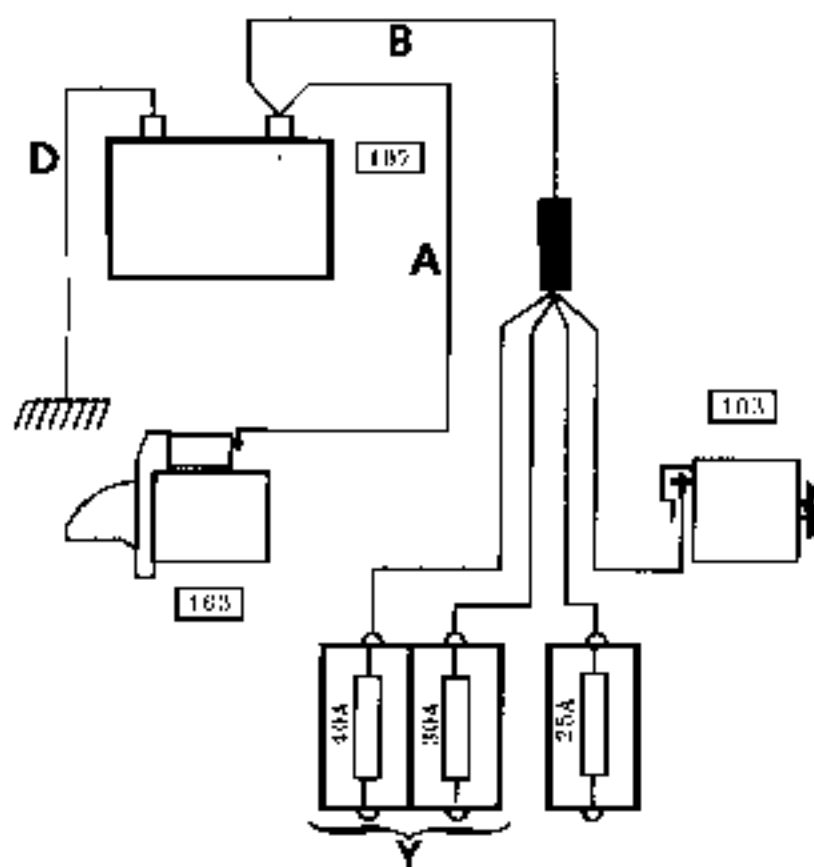
ALL VEHICLES

ORIGINAL WIRING

After disconnecting the starter wire (A) (1 before ignition), cut the two ends so that they may be integrated into the harness sleeve.

This wire is now not used.

Cut the end of wire (B) (battery end), carefully insulate it using the heat shrink sleeving (T) (provided in the kit) and integrate it into the harness sleeve.



98545R

- 103 = Alternator
- 107 = Battery
- 163 = Starter
- Y = Depending on equipment

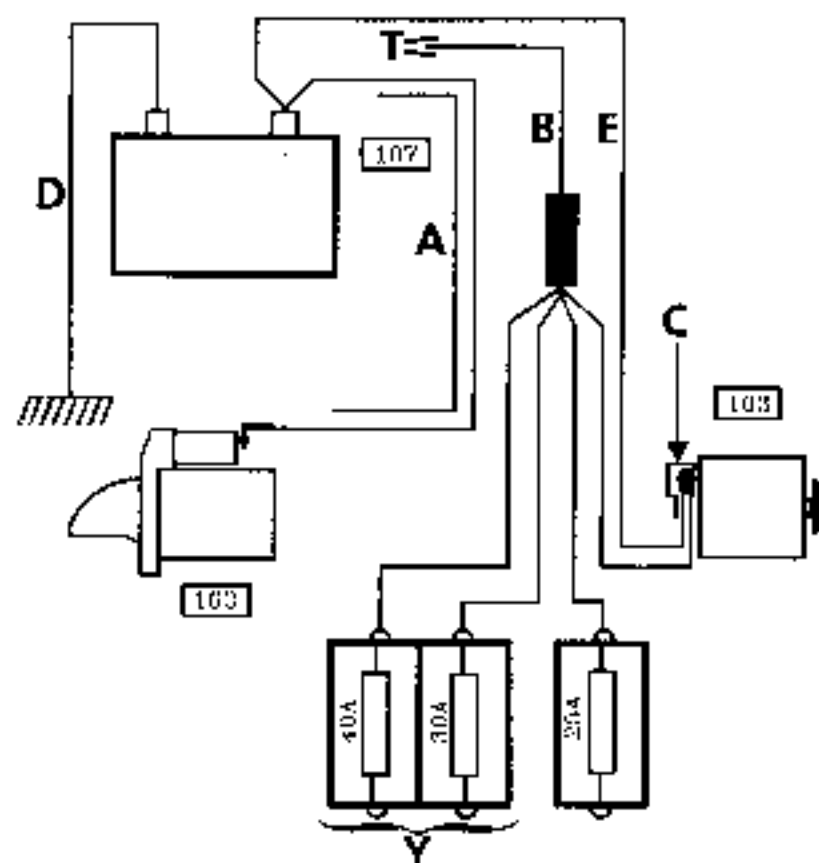
ADAPTED WIRING

Position the new engine positive wiring (E) on the vehicle (two wires).

Connect the black wire (16 mm²) to the starter and the red wire (7 mm²) to the alternator (after trimming the protector (C) slightly to fit the terminal).

Secure the wiring alongside the original wiring.

Replace the original earth wiring (D) (too short) with the wiring provided in the kit.



98545R1

- 103 = Alternator
- 107 = Battery
- 163 = Starter
- Y = Depending on equipment

Modification of battery wiring

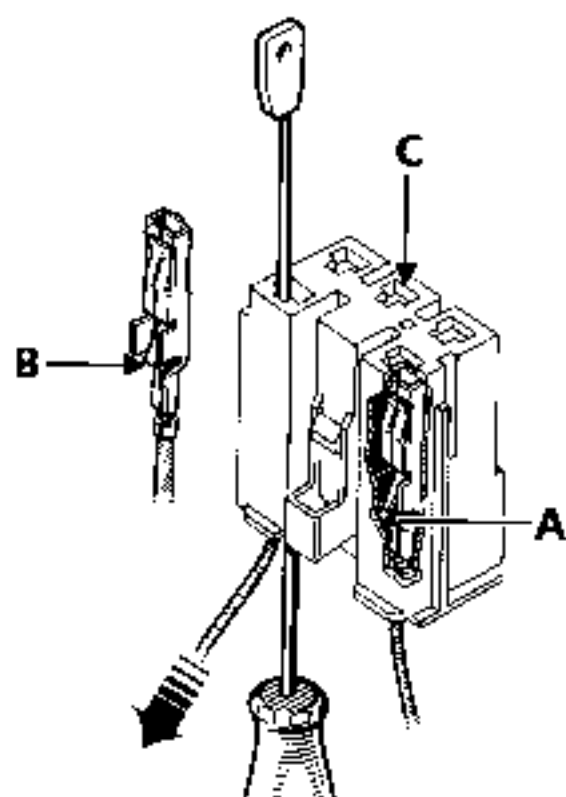
REMOVAL - REFITTING OF CLIP ON BROWN "MIC" CONNECTOR R212

The connector is locked by the tab (B) on the clip and the tab (A) on the connector.

REMOVAL

Ensure the clip is pushed back inside the connector (use the wire or a screwdriver).

Insert a 1.20 mm pin (or 1.00 mm depending on the connector), into groove (C) to release tab (B) and remove the clip.



90878-2R1

REFITTING

Check that tab (B) is correctly positioned.

Insert the clip fully (the clip will be heard to lock into position).

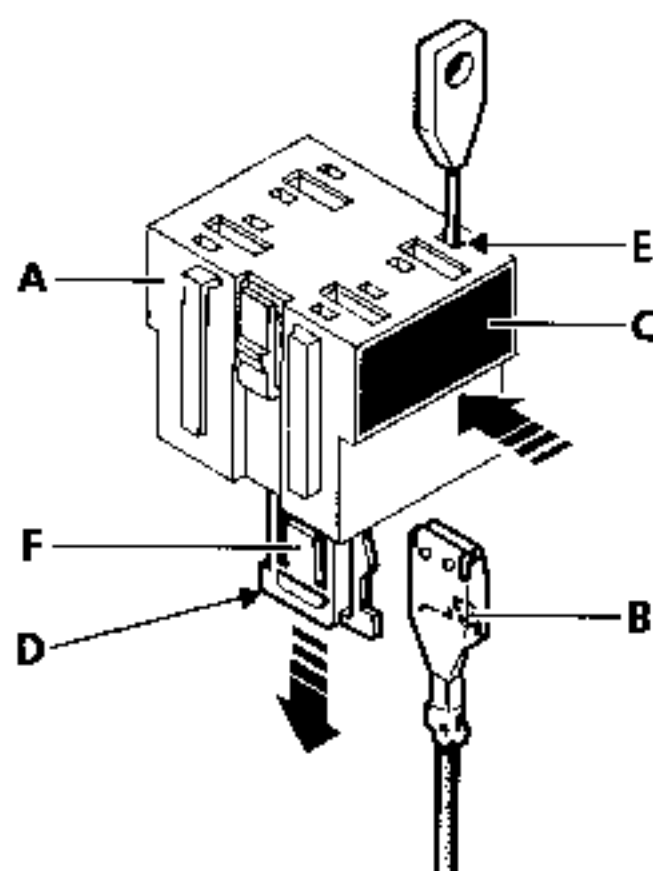
REMOVAL - REFITTING OF CLIP ON DOUBLE LARGE FUSE HOLDER

The connector is locked by the tab (B) on the clip and a tab in the holder (A). The clip is also locked at the side by the grey section (C).

REMOVAL

Pull on section (D), to unlock section (C).

Insert a 1.7 mm pin into hole (E) to release the tab (B) and remove the clip.



98506R

REFITTING

Check that tab (B) is correctly positioned.

Insert the clip fully and lock the section (C) by pushing section (D) (unlock it by pressing tab (F)).

Modification of battery wiring

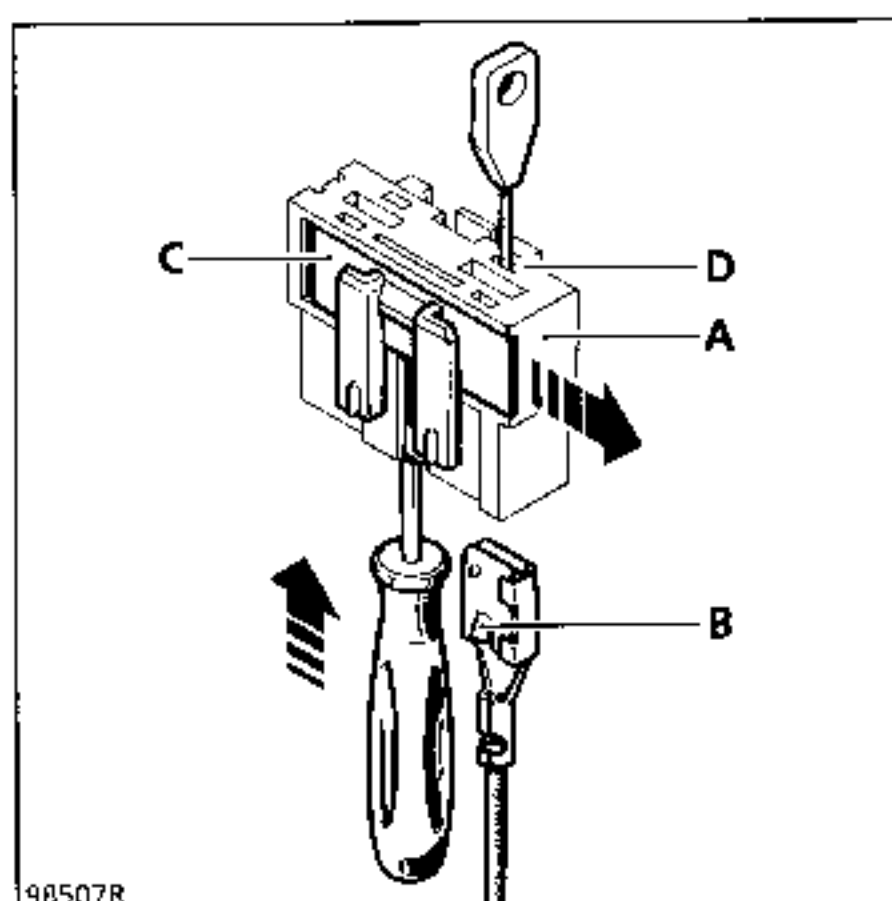
REMOVAL - REFITTING OF CLIP ON SINGLE LARGE FUSE HOLDER

The connector is locked by the tab (B) on the clip and a tab in the holder (A). The clip is also locked at the side by the grey section (C).

REMOVAL

Unlock section (C) by pressing in the centre of the holder (from below, with a small screwdriver and pushing to the right).

Insert a 1.7 mm pin into hole (D) to release tab (B) and remove the clip.



REFITTING

Check that tab (B) is correctly positioned.

Insert the clip fully and push section (C) to the left to lock.