# TWINGO

## 8 Electrical equipment

## **A08**

#### **BATTERY**

Battery – Initialisation	80A - 2
Battery - Specifications	80A - 3
Battery – Advice	80A - 4
Battery - Check	80A - 5

**V4** 

**Edition Anglaise** 

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

The procedures 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." All rights reserved by Renault s.a.s.

Copying or translating, in part or in full, of this document or use of the service part reference numbering system is forbidden without the prior written authority of Renault s.a.s.

© Renault s.a.s. 2008

## **Battery – Initialisation**



When removing or disconnecting the battery, check that the battery is working correctly by performing a number of initialisations on different vehicle functions. These initialisations do not require a tool of any kind.

#### Anti-theft code:

- Entering a 4-digit radio or radionavigation code (see 86A, Radio, Radio: Protection code). Setting the time on the radio or the radio navigation system:
- To set the radio navigation system time, enter the four digit code. Insert the navigation CD-ROM then drive the vehicle to pick up the satellite signals. It is now possible to set the time (see 86A, Radio, Radio: Setting the time).

#### Initialisation of the window winders:

 Check that the electric windows are still initialised. The windows should open and close when the switch is pressed. If this does not happen, re-initialise (see 87D, Electric windows - sunroof, Electric windows: Initialisation).

#### Initialising the sunroof:

Check that the sunroof is still initialised. The sunroof should open or close to the requested position without stopping. If this does not happen, re-initialise (see 87D, Electric windows - Sunroof, Electric sunroof: Initialisation).

#### Initialising the electric power assisted steering:

In order that the electric power-assisted steering recognises the "steering wheel angle" signal, move the steering wheel from lock to lock with the engine running (see 36B, Power-assisted steering, Fault finding - Replacement of components).

#### Initialising the computers:

The other computers are automatically initialised when the vehicle is being driven. Drive the vehicle for at least
 1 minute at a speed greater than 18 mph (30 km/h) so that the tyre pressures are displayed again.

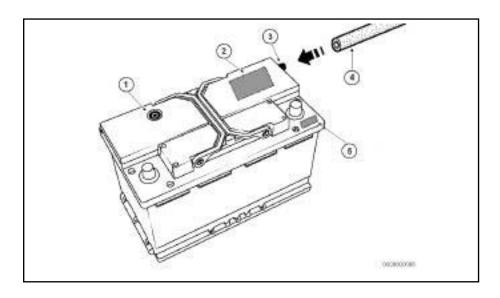
V4

## **Battery – Specifications**



#### **Battery specifications:**

Always replace a battery with one that has the same electrical and dimensional specifications.



1	Hydrometer (magic eye)
2	Battery label example L5 12V 95AH Test 850A EN 82 00 000 000
	L5: dimensions Letter L = height 190 mm Letters LB = height 175 mm Figure 5 = length 352 mm (if 4 = 314 mm, etc.) The width is always 175 mm 12V: nominal voltage 95Ah: nominal capacity 850A: starting current EN: complies with European standards
3	Degassing vent
4	Degassing pipe
5	Date of manufacture format: DD/MM/YYYY

#### Visual inspection of the battery

Make sure there are no cracks or breakages, traces of acid, or creepage (sulphation) on the terminals. If any of the above are present, replace the battery and clean the surrounding area. Check that the degassing pipe is properly connected to the battery vent

Check that the degassing pipe (4) is correctly positioned.

## Battery - Advice



#### **IMPORTANT**

- All vehicles are equipped with low water consumption batteries. Opening the battery and topping up the electrolyte are FORBIDDEN.
- Batteries contain sulphuric acid, which is a hazardous chemical.
- Battery charging produces hydrogen and oxygen, which are very flammable gases and thus there is a risk of explosion.
- Any batteries with filling plugs must not be opened under any circumstances but replaced immediately with Renault approved batteries.

#### **Battery recharging:**

When parked, vehicles consume power through their permanent consumers and through any accessories fitted as After-Sales options. To keep battery discharging to a minimum, limit the number of times the vehicle is started, periods with the ignition on, doors open, etc., as much as possible.

A discharged battery must be recharged using a Renault-approved battery charger (see Technical Note 6512A)

#### **IMPORTANT**

- Simultaneous recharging of several batteries in series or in parallel is forbidden.
- A battery charger used on a battery connected to a vehicle can irreparably damage the vehicle computers due
  to the high voltages created when charging.
- The location of the charger must take this into account (ventilation).
- A battery charger or a booster not approved by Renault can damage the electrical components.

#### **Battery storage:**

Even when stored off the vehicle, a battery gradually discharges, and more rapidly if the ambient temperature is high. In order that a battery remains operational for a long time, it must be stored at a temperature of around 15°C and in a dry place. To retain a good level of charge, it is recommended that a battery is completely recharged after it has been stored for 3 months.

A new battery that has been stored for more than one year must not be fitted to a vehicle.

## Battery - Check



#### Test procedure using the MIDTRONICS tool

Special tooling required	
Elé. 1593	Battery tester
	MIDTRONICS R330

#### **Test conditions**

The measurement must be taken when the vehicle is stationary and the ignition is off.

If the engine has been run in the last hour, switch the battery status to test and carry out the following operations:

- engine switched off,
- switch on the main beam headlights for 2 minutes,
- switch off the main beam headlights,
- wait for 2 minutes,
- · switch off the ignition.

#### Equipment to be used:

- Tester approved by the Service Department: MIDTRONICS MICRO R330.
- Tool available as part no.: Elé. 1593.
- Equipment available in France from the Parts Department.
- Tool available in 6 languages.

For other countries, consult your contact in your country.

#### **WARNING**

Failure to observe the procedure or poorly maintained equipment may result in incorrect measurements, which could be:

- detrimental to the customer (the battery is not sound),
- detrimental to RENAULT (unnecessary replacement of a sound or rechargeable battery),
- detrimental to the dealership (if the battery is tested as sound or rechargeable for a part return under warranty, the warranty reimbursement request will be cancelled).

V4

## **Battery - Check**



#### Mode (test on vehicle)

- Connect the tool directly to the battery terminals, without disconnecting the vehicle battery, as close as possible to
  the battery terminal but ensuring it is not after the fuse (on-vehicle test) or carry out the battery test after
  disconnecting the two terminals if necessary,
- check that the vehicle ignition is switched off,
- select the type of test: "battery connected to vehicle" or "battery disconnected" using buttons and . Confirm using the green button .
- The test is carried out to the EN standard by default. Confirm using the green button
- Select the starting power inscribed on the battery label (see page 3) using buttons and .
- Confirm using the green button
- The tool displays **TEST IN PROGRESS**.
- The MIDTRONICS tool carries out the test and gives the results of the fault finding procedure.

To set the tool language, carry out the following operations:

- before connecting the tool, simultaneously press buttons and
- connect the device to the battery,
- release the buttons.
- scroll through the languages using buttons and ,
- confirm using the green button

#### Note:

The battery must always be disconnected in the following order:

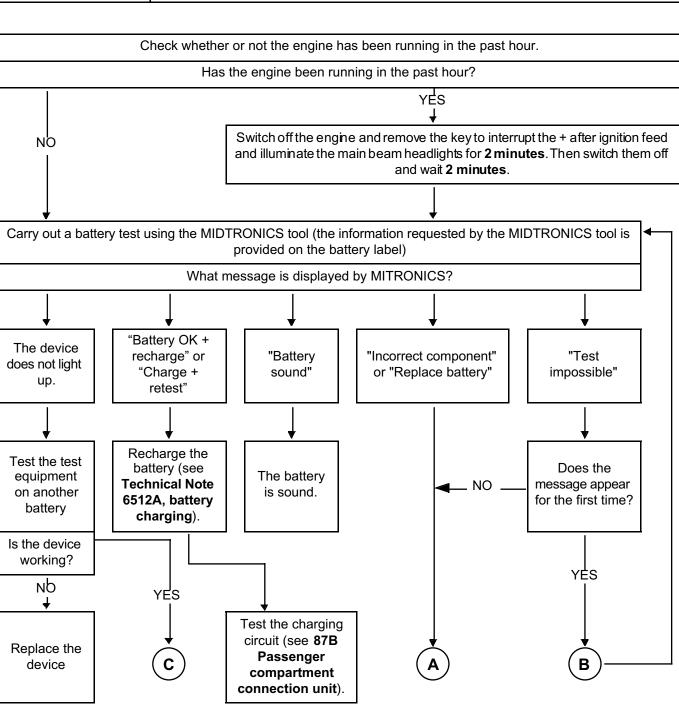
- Wait for at least 1 minute between switching the ignition off and disconnecting the battery, to enable the computer systems to go on standby.
- Wait for the engine cooling fan to stop completely.
- Disconnect the negative terminal first.

80A-6

## Battery - Check







## **Battery – Check**



