

FAULT FINDING INTRODUCTION

Noise diagnostic tool – Use

01E

Introduction:

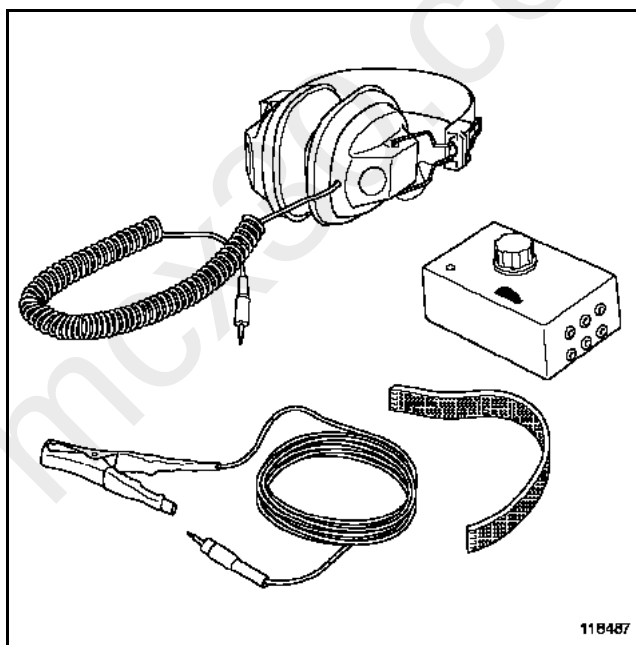
Before using the diagnostic tool (**Part no. 77 11 421 103**), it is essential to identify that the noise heard by the customer comes from the vehicle (and not from various objects in the vehicle or from the surrounding environment, etc.).

Note: Whenever possible, empty the contents of the vehicle's various storage compartments.

The **ChassisEar** is an electronic, versatile diagnostic tool designed to enable the user, during a road test, to amplify the sounds produced by different areas of the vehicle:

- Suspension
- Rotating components
- Front panel
- Engine
- Engine sub-frame
- Steering column
- Under body
- Rear face

Diagram of the tool:



The tool case is composed of the following:

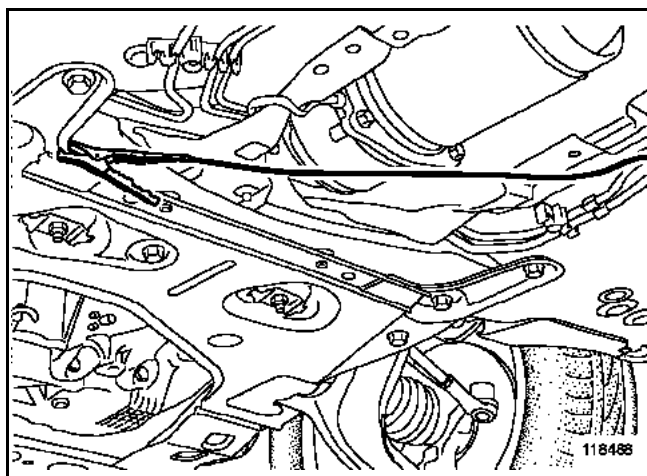
- Control unit (1)
- Clamp - Cable assembly (2)
- Headset (3)
- Velcro strip (4)

1) Fitting the tool:

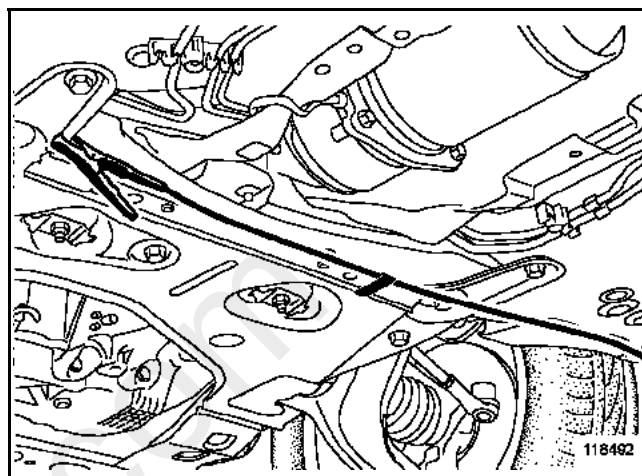
1.1) Precautions to observe when fitting the tool:

1.1.1) Assembly (wire – clamp):

- Ensure that the clamps are not:
 - In contact with or near to sources of heat (exhaust, etc.)

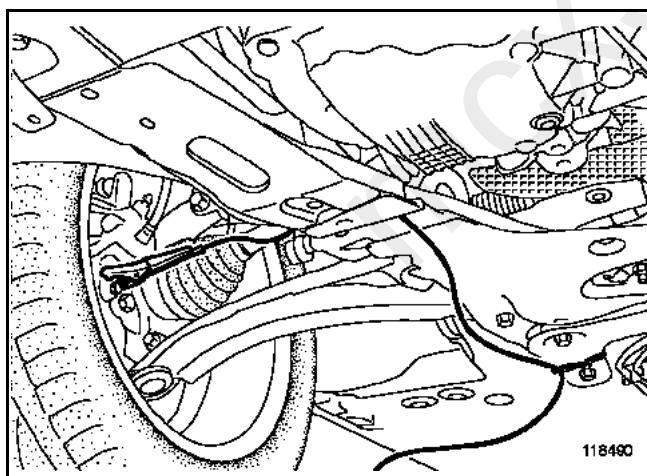


Incorrect fitting

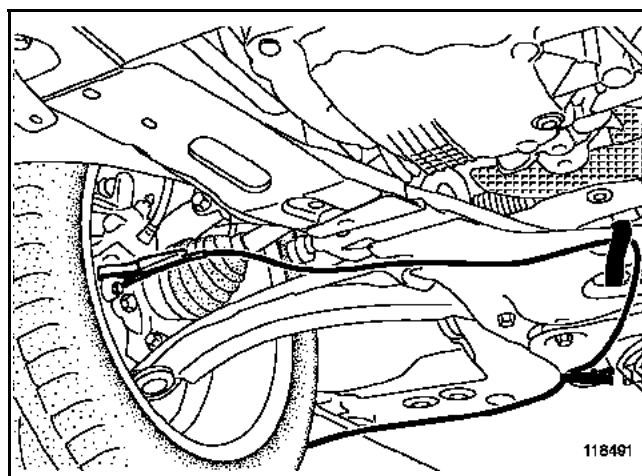


Correct fitting

- In contact with highly corrosive liquids (brake fluid, etc.).
- Ensure that the clamps are not:
 - In contact with rotating components.



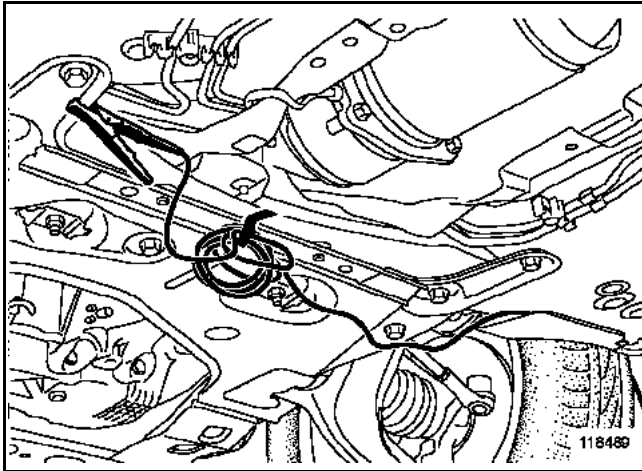
Incorrect fitting



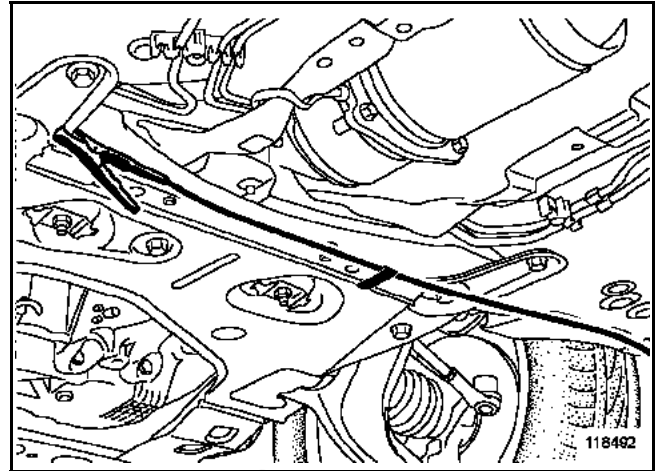
Correct fitting

- Make provision for parts to move whilst driving (wheels turned to full lock, movement) to prevent the clamp from becoming unclipped and the wire being severed.

- Do not twist the wires.



Incorrect fitting



Correct fitting

- Only attach the wires using the velcro strips supplied in the tool case.

1.1.1) Connection (Clamps-Control unit):

The control unit has 6 inputs which correspond to clamps of the following colours:

- 1: Red
- 2: Green
- 3: White
- 4: Pink
- 5: Blue
- 6: Orange

1.1.2) *Fitting the tool:*

- Place the vehicle on a lift.
- Fit the clamps to the components which may be causing the noise.
 - Attach the wires using velcro strips.
 - A coloured ring on the wire aids their identification.
- Remember the area or the component studied, according to the position of the clamps.
- Connect the clamps to the control unit.
- Connect the headset.

2) Stages of the test:

WARNING

When driving, **2 people are required**. Someone other than the driver must wear the headpiece.

Do not move the clamps during the driving test.

If the position of the clamps has to be adjusted, the vehicle must be in the workshop.

Perform the vehicle test according to the information collected and shown on the **Fault finding log**, when the customer complaint was registered (conditions under which noise appears).

Confirm the components in question during the test phase by a performing a check in the workshop:

- Special tooling.
- Visual or tactile inspection.