

This radio-cassette-compact disc player (or audio unit) has :

- a remote control (satellite) located on the right-hand side of the steering wheel which duplicates the main functions of the radio unit,
- a display unit integrated in the dashboard.

There is also provision for a CD player (option) installed in the vehicle luggage compartment.

The sound is distributed via speakers located in the passenger compartment designed to give the best possible sound reproduction throughout the vehicle.

For security reasons, this radio is coded. Each time the + before ignition feed is cut, a code (4 figures) supplied by the manufacturer must be entered in order to operate the set.

The code may be rendered inoperable by an operation described later on in this manual (see page 86-10).

**ATTENTION :** When preparing a new vehicle , radio operation in scrambled mode must be cancelled, (see page 86-9). Check to make sure that the customer has the radio code whenever any work is carried out on the vehicle.

**Note :** To date, this system (audio unit + display) cannot be fitted in After Sales.

The display/audio unit connection is (in part) integrated in the dashboard harness.

## OPERATING SPECIFICATIONS

- A high performance radio tuner with a PLL frequency synthesiser and microprocessors, enabling a wide range of information to be processed and memorised and, in particular, using **Autostore**, the automatic selection of the stations providing best reception of your favourite FM programmes :
  - 5 wavebands L (LW) - M (SW) - U1 (FM1) - U2 (FM2) - U AST (Autostore in FM),
  - **AST (Autostore)** : automatic memorisation of the 6 best received stations in FM,
  - 6 pre-selections per waveband,
  - manual or automatic electronic search for stations in increasing or decreasing frequency,
  - automatic mono/stereo changeover,
  - 3 electronic search stop sensitivity levels (1 automatic and 2 selected using the radio controls),
  - in FM, decoding of the RDS sub-carrier:
    - automatic tracking of stations on the same network,
    - clear display of the name of the station,
  - "Traffic information" (depending on country).
- A cassette-player with **Auto-reverse** providing automatic changeover at the end of the cassette :
  - electric insertion and removal of cassettes,
  - "Hard Permalloy" tape head with automatic chrome/metal changeover when the cassette is inserted,
  - search for pauses during fast forward and rewind,
  - **Dolby B** — noise reduction,
  - playback head disengage at the end of the cassette,
  - radio operation during fast forward.

Depending on option :

- A **Compact Disc** player accepting 12 cm CDs :
  - possibility of sequential access to each disc track,
  - fast forward and reverse within each track, including fast playback,
  - "random track" playback feature.
- 4 low frequency loudspeakers each delivering an effective output of 15 Watts  $\pm$  1 dB (4 x 6 Watts depending on HIFI 45500 standards) :
  - electronic volume, balance and fader adjustment,
  - right and left-hand speaker balance,
  - front and rear speaker balance,
  - **Loudness** key for improved reproduction at low volume,
  - separate control for bass and treble.
- A liquid crystal remote display for radio/cassette/CD\* operation displays.

**ATTENTION** : Never connect a display designed for a 2 x 8 W audio unit to a 4 x 15 W audio unit as this will destroy the internal bus for the display.  
If a display designed for a 4 x 15 W audio unit is connected to a 2 x 8 W audio unit no damage will occur, but the system will not be operational.

\* depending on option.

## RADIO PREPARATION ON NEW VEHICLES

For security reasons when the radio leaves the factory, it operates in the following manner:

When the set is switched on a series of audible "beeps" sound every 3 seconds alternating between radio, cassette or CD\* every 2 minutes. The display alternates every second between the active radio mode display (radio, cassette or CD\*) and the message "CODE".

Whilst the message for radio, cassette or CD\*, is displayed, all functions are operational.

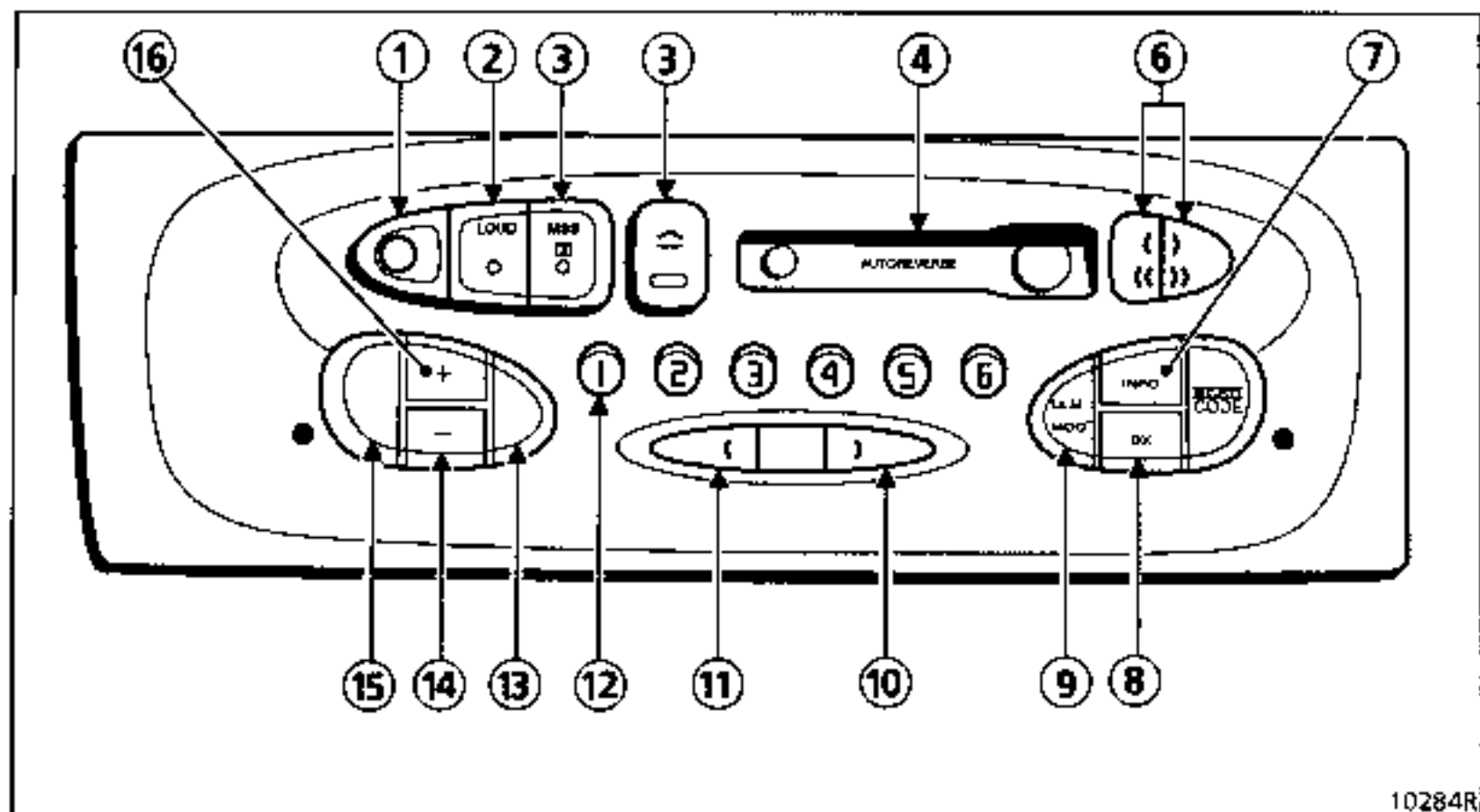
After 2 minutes, the set is quiet and the display is fixed, showing the message "CODE".

This operating mode is known as the scrambled mode.

To cancel the scrambled mode the radio code must be entered when the display shows "CODE" (see page 86-9).

\* depending on option.

# AUDIO UNIT



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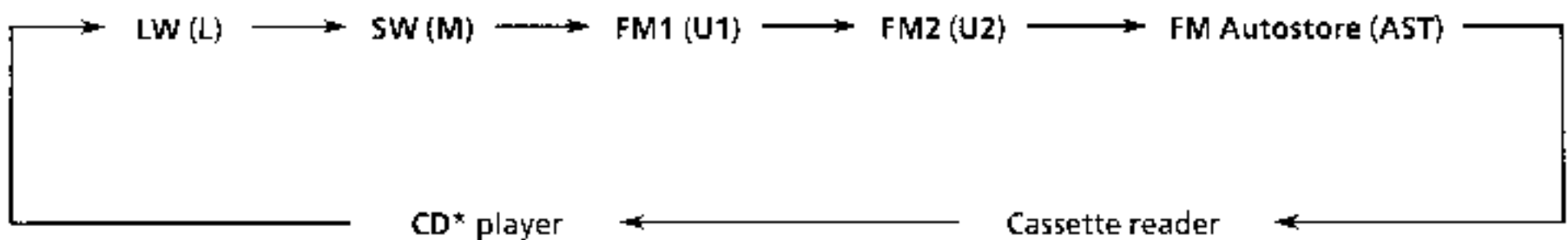
- 1 Radio, cassette, CD\*, satellite and display On/Off key.
- 2 Loudness key for improved sound reproduction at low volume.
- 3 Multifunction key :
  - Search On/Off for next track (or previous track) when forwarding (or rewinding) the cassette, by applying a light touch on the key.
  - Dynamic noise reduction On/Off in cassette mode, by pressing and holding the key.
- 4 Cassette eject.
- 5 Cassette reader compartment.
- 6 Cassette fast forward and rewind keys :
  - Holding both keys down at the same time reverses cassette playback direction during playback.
- 7 Multifunction key :
  - Neutralises/re-activates RDS mode selection for automatically tracking stations by pressing the key (for more than 2 seconds).
  - "Traffic information" mode selection by lightly pressing the key. It selects the transmitters sending the traffic information.

\* depending on option.

**8 Automatic search stop sensitivity level key :**

- **LOC** : Normal search stop sensitivity level.  
The electronic search only stops on stations received at a level suitable for comfortable listening.
- **DX** : Increased search stop sensitivity level.  
The electronic search stops on all stations received, even if the sound quality is not perfect.

**9 Waveband selection key or active source selection key as follows :**



**10 Multifunction key :**

- **Radio mode.**  
Manual or automatic search for a radio station in an upwards direction.
- **CD\* player mode.**  
Forwards to the start of the following track.

**11 Multifunction key :**

- **Radio mode.**  
Manual or automatic search for a radio station in a downwards direction.
- **CD\* player mode.**  
Returns to the start of the track being played then to previous tracks.

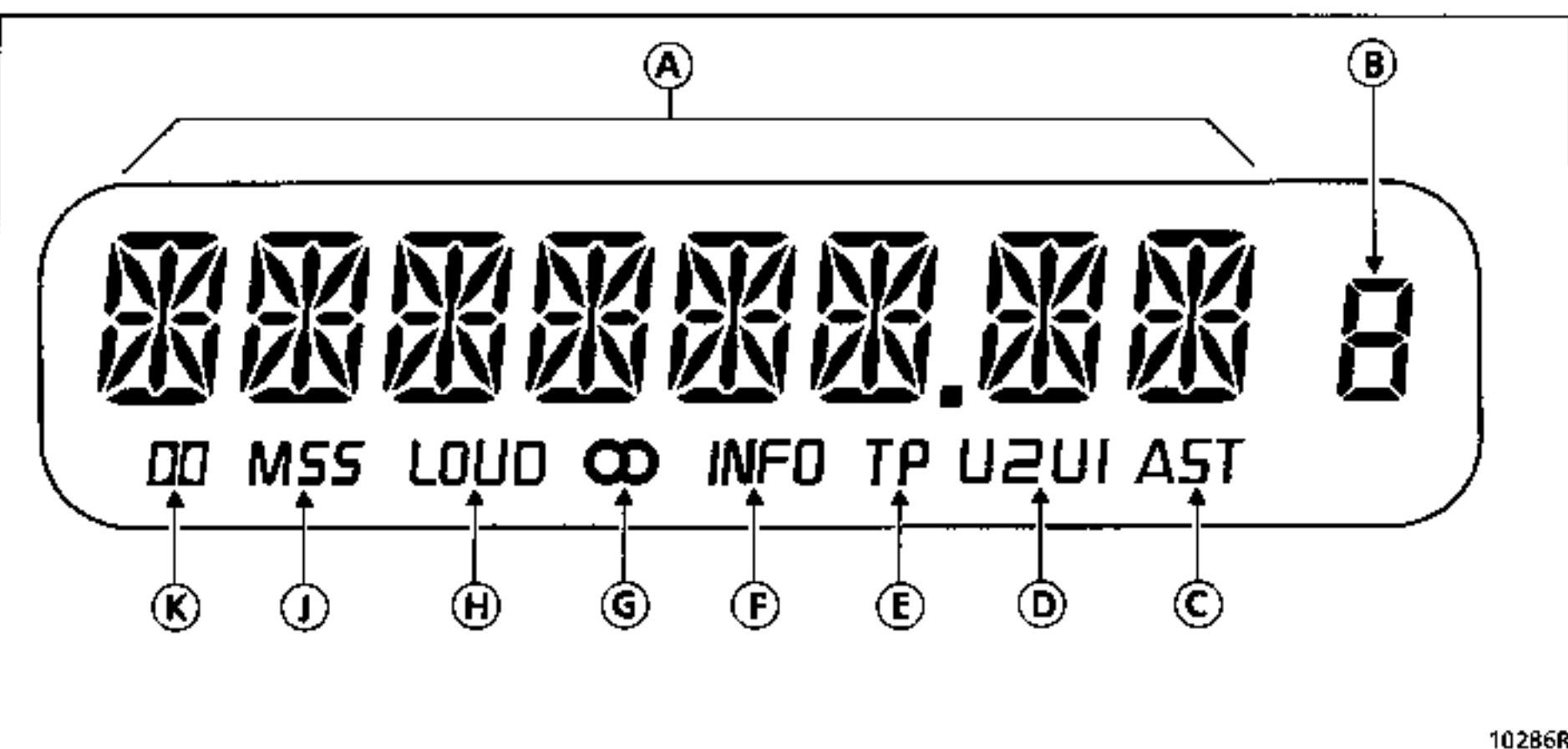
**12 Multifunction key:**

- **Radio mode.**
  - Recalls radio station pre-selections (1 to 6) by lightly pressing the key (less than 2 seconds).
  - Memorises radio stations by pressing the key for longer (longer than 2 seconds).
- **CD\* player mode.**
  - Selection of one of the 6 disks in the CD loader by lightly pressing the corresponding key (1 to 6).
  - Playback of the first 10 seconds of each CD track, by pressing down on the corresponding key (1 to 6).

\* depending on option.

- 13 Selection key for adjusting bass and treble.
- 14 "-" key for :
  - reducing the volume,
  - adjusting the right/left-hand balance to the right,
  - adjusting the front/rear balance (Fader) to the rear,
  - bass and treble reduction.
- 15 Selection key for adjusting right/left-hand balance or front/rear balance (Fader).
- 16 "+" key for :
  - increasing the volume,
  - adjusting the right/left-hand balance to the left,
  - adjusting the front/rear balance (Fader) to the front,
  - increasing bass and treble.

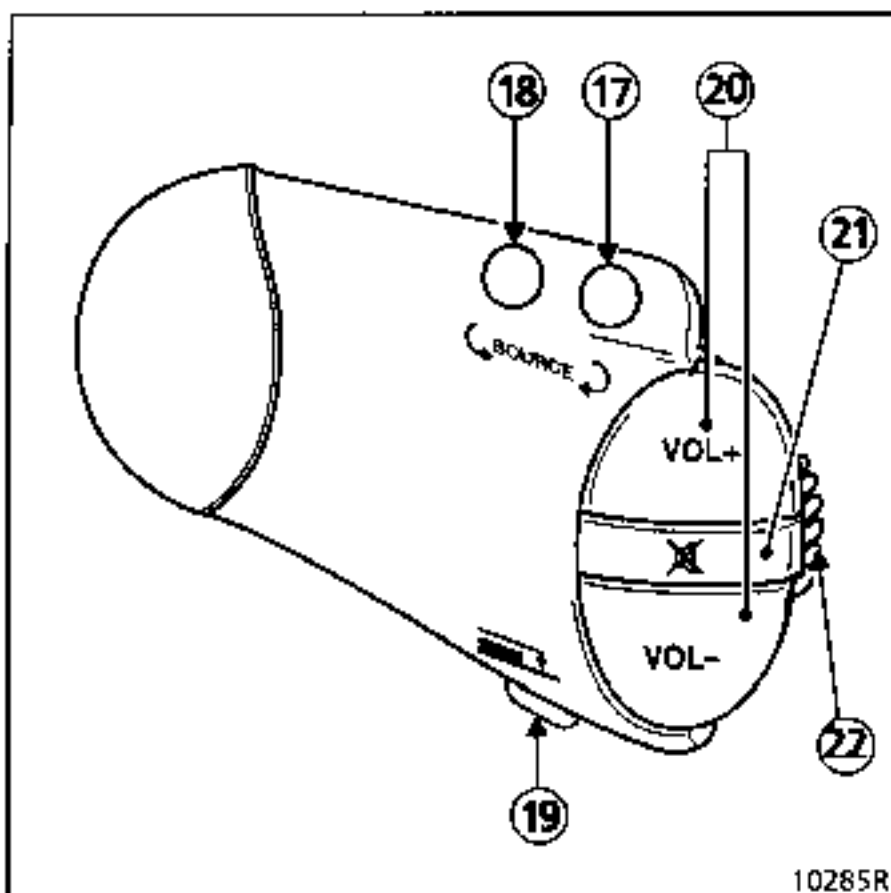
## DISPLAY



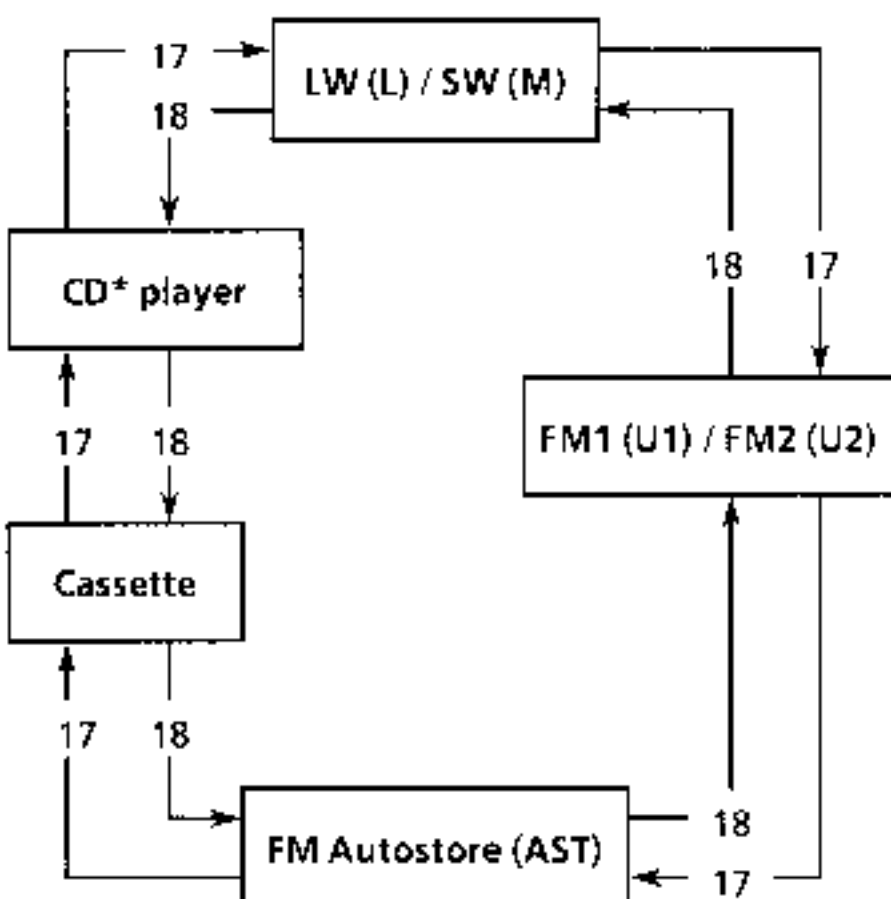
- A** Various messages : the display provides constant information on the status of the active mode (radio, cassette reader, CD\* player, audio adjustments or security code).
- B** Active pre-selection number (1 to 6).
- C** FM Autostore waveband tell-tale (auto-programming in FM).
- D** U1 (FM1), U2 (FM2) waveband tell-tales.
- E** Illuminates when the radio is tuned to a station which can transmit traffic information, whatever the status of key 7.
- F** "INFO" tell-tale.  
Illuminates when "Traffic information" function key 7 is activated.
- G** Stereo reception tell-tale.  
Changes automatically to stereo depending on the selected source (radio).  
In FM waveband when reception is poor, various filters are used to suppress stereo.
- H** Corrector tell-tale (Loudness) activated by pressing key 2.
- J** Tell-tale showing next (or previous) track search function when forwarding (or rewinding) the cassette, activated by lightly pressing key 3.
- K** Indicates operation of the dynamic noise reduction function when listening to a cassette (prolonged pressure on key 3).

\* depending on option.

**SATELLITE (remote control)**



17 and 18: Changes waveband or sources as shown in the following cycle :



- 19 ● Brief pressure (less than 2 seconds) :
  - Automatic radio station search in an up-wards direction (in radio mode).
  - Random CD track playback in progress in (in CD\* player mode).
  - Validation of code (in confidential security code entry mode).
- Prolonged pressure on the key (longer than 2 seconds) :
  - Commences auto-programming in FM or Autostore (in radio mode).
  - Validation of code (in confidential security code entry mode).
- 20 ● +/- keys for adjusting the volume, bass and treble, right-left-hand balance and front/rear balance (Fader).
- 21 ● Confidential security code entry mode :
  - Brief pressure : validation of the figures which make up the code.
  - Prolonged pressure : validation of the code.
- Other modes :
  - Sound cut-out/restore.
- 22 ● Tumblewheel :
  - Radio mode : changes radio station pre-selection in the active wavebands (1 to 6).

**Note :** For grouped radio wavebands (L and M or FM1 and FM2), the 6 pre-selections of each group.

- CD\* player mode :
  - Track selection on CD currently playing.
- Confidential security code entry mode :
  - Composition of the four figures in the code.



The code is a four figure number between 0000 and 9999.  
It is shown on the removable part of the radio warranty card, or on the vehicle invoice if the vehicle has been exported.

This code is programmed during manufacture and can never be altered by the user.

The customer may however make the code operable or inoperable (see pages 86-10 ).

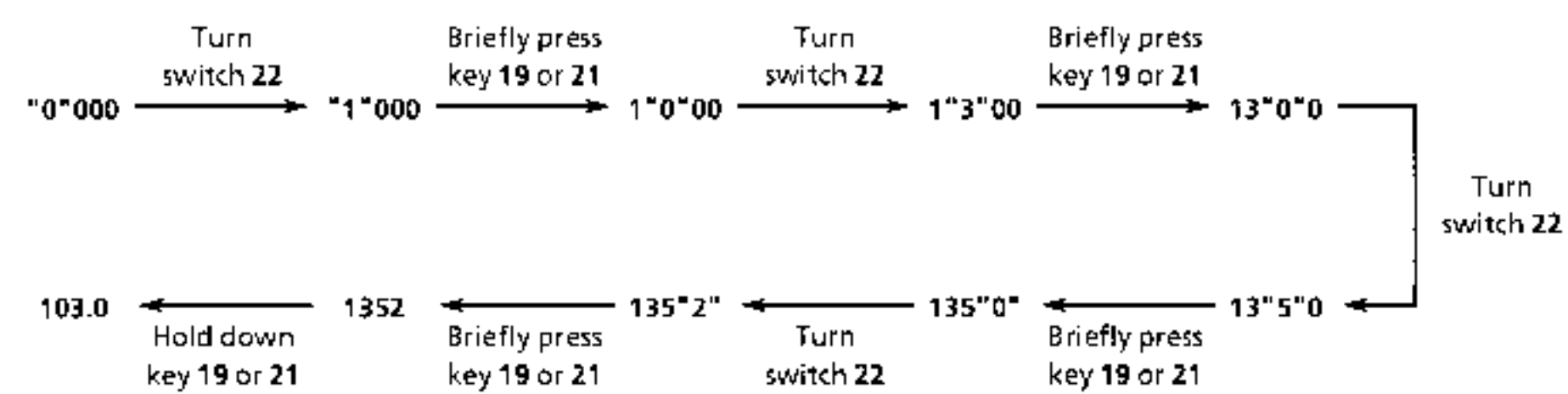
**PROCEDURE FOR ENTERING THE CODE**

- After the power supply has been cut
- To cancel the scrambled mode :
  - a) Press key 1 to turn the power on. The message "CODE" appears briefly on the display (after 2 minutes operation in scrambled mode) before being replaced by "0000".
  - b) To enter the 4 figure code :
    - change the figure which is flashing by using switch 22 on the satellite remote control,
    - briefly press one of the keys 19 or 21 on the satellite control to validate this figure and to make the next flashing figure appear,
    - carry out these two operations again until all 4 figures of the code are displayed.
  - c) Hold down one of the two keys 19 or 21 on the satellite remote control to validate the code.

Validation of the code is indicated by a "bleep" and the display shows the frequency of the last radio station listened to.

The volume returns to a preset average level. The tone and balance settings return to a "mid range" setting.

**Example :**  
A flashing figure is indicated in brackets ("0").  
You wish to enter code 1352 :



**IMPORTANT :**  
If the code entered is incorrect, a "bleep" will be emitted and the message "CODE" will appear on the display.

You may then re-enter the code following the method described above but to do so, you must leave the set switched on and wait one minute before recommencing the operation.

If the renewed attempt is unsuccessful, you may repeat the operation keeping the set switched on but the delay between attempts (if you make an error) will increase progressively to 2, 4, 8, 16 and 32 minutes.

### CHANGING FROM ONE OPERATING MODE TO ANOTHER (CODED TO NON-CODED AND VICE VERSA)

You can change the operating mode of the set at any time. To do so, the entry code must be entered as follows :

- **Set switched off**, press the fifth pre-selection key 10 and keeping it depressed, press key 1 "On/Off" until 4 zeros appear on the display. When changing from coded to non-coded mode the message "CODE" appears briefly on the display when the set is switched on, before being replaced by 4 zeros.
- You can then enter the code by following the procedures described on page 86-9.

When the code is validated, the set will indicate its current status :

- **code deactivation** : two "beeps" sound and the last frequency listened to reappears on the display A,
- **code activation** : one "bleep" sounds and the last frequency listened to reappears on the display A.

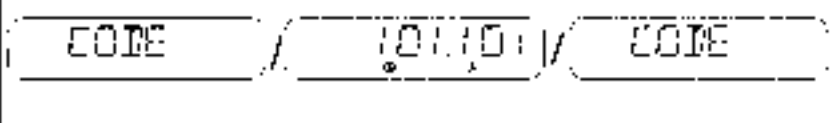
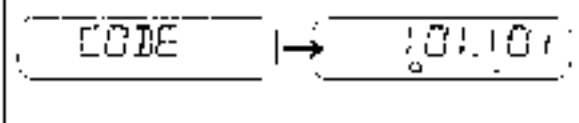
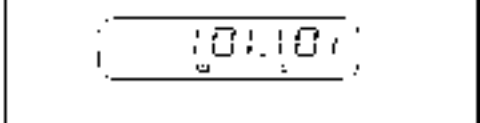
**Note** : If there has been no general supply failure, when the set is switched on the display will show the status of the set.

If it is coded, the message "CODE" will appear briefly before being replaced by the last frequency listened to.

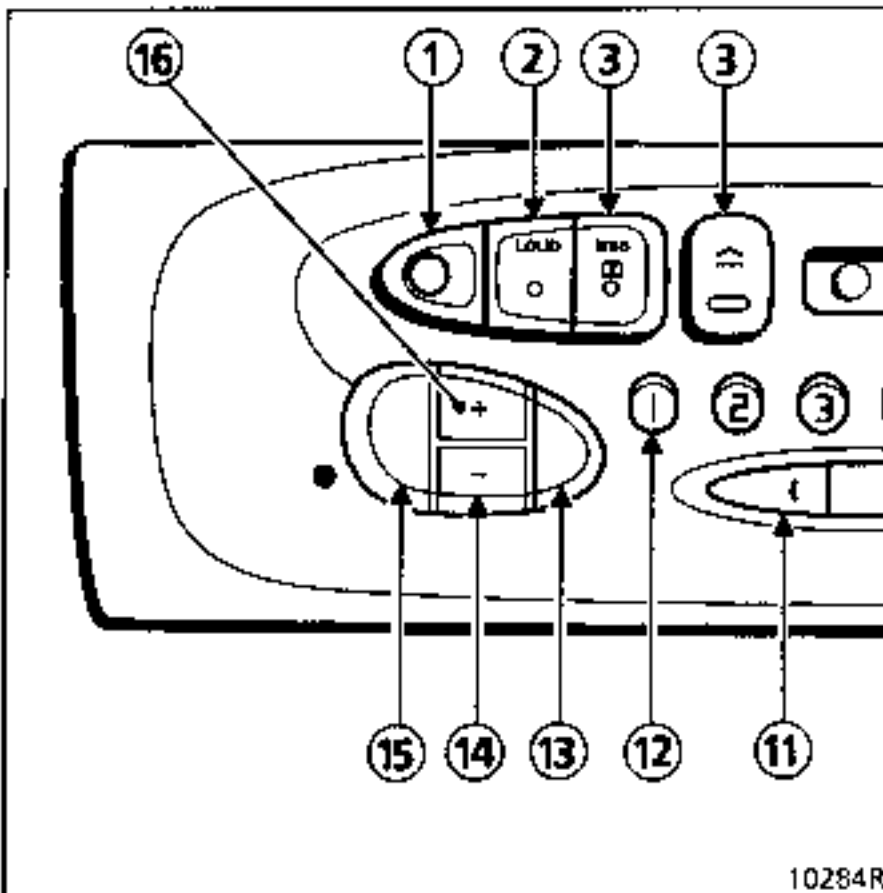
If it is not coded, the frequency will be displayed immediately.

### DISPLAYS

When the set is switched on, several messages may be displayed :

		
<p><b>The set is in scrambled mode</b></p> <p>The scrambled mode is only seen when no code has been entered.</p> <p>The set operates in scrambled mode for 2 minutes and is then quiet.</p> <p>When the code is entered (see page 86-9) the scrambled mode is cancelled.</p>	<p><b>The set is coded</b></p> <p>The user may operate the set normally (turn the ignition off) and when the ignition is turned on again, the set displays "CODE" briefly before returning to the last frequency displayed.</p> <p>If there is a general power failure (battery disconnected), the code must be re-entered (see page 86-9).</p>	<p><b>The set is not coded</b></p> <p>The user may turn the ignition off and on again, the set will return to the last frequency listened to (in radio, cassette or CD* mode).</p> <p>If there is a general power failure (battery disconnected), the set will return to the last frequency listened to without the need for the code to be re-entered.</p>
	<p>See above for how to change from coded to non-coded mode.</p>	<p>See above for how to change from non-coded to coded mode.</p>

\* depending on option.



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## ON/OFF

Press key 1.

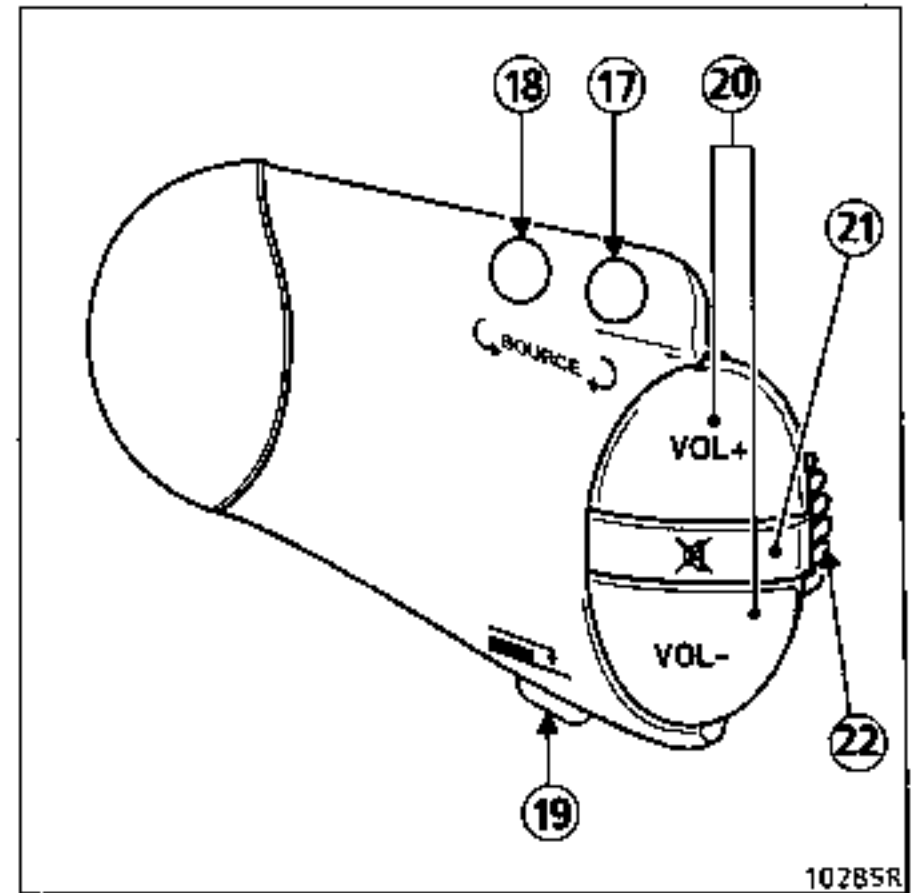
When the set is switched on (radio, cassette or CD) the last station listened to will be broadcast even if there has been a general power failure.

**Note :** There is a system which allows the set to be used without switching on the ignition (in + before ignition).

This function is limited to a period of **10 minutes**. After this time the set will be switched off automatically to avoid discharging the battery.

**5 seconds** before the end of the 10 minute period a "bleep" will sound and the display will flash.

When operation in + before ignition is interrupted by pressing key 1, pressing the key again (key 1) sets off the time delay for another **10 minutes**.



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## VOLUME ADJUSTMENT

**Volume :** keys 14 and 16 on the radio or key 20 on the satellite remote control.

It is possible to completely cut the sound by pressing key 21 on the satellite remote control. The message "PAUSE" is displayed at A. Pressing this key again restores the volume to its previous level.

The sound may also be cut automatically during a telephone conversation (if the vehicle is equipped with a car telephone).

## Spatial sound distribution

- **Right/Left-hand Balance :** Select this function by pressing key 15 then adjust by using keys 14 and 16 on the fascia panel or key 20 on the satellite remote control.
- **Front/Rear Balance :** When adjustment of the right/left-hand balance is active, pressing key 15 again changes the adjustment mode to front/rear balance; adjustment is made by using the same keys.

As soon as key 15 is pressed, the display indicates the function that has been selected and its adjustment value.

After **4 seconds** if the keys have not been pressed, the display returns to the previous message displayed.

### Adjustment scales

Right/left-hand Balance	
▷ 9 0 0 ◁	far left
▷ 9 0 9 ◁	centre
▷ 0 0 9 ◁	far right

Front/rear Balance	
▽ 9 F 0 △	all front
▽ 9 F 9 △	centre
▽ 0 F 9 △	all rear

### Tone

- **Bass** : Select this function by pressing key 13 then adjust using keys 14 and 16 on the radio or key 20 on the satellite remote control.
- **Treble** : When bass adjustment mode is active, pressing key 13 again changes the adjustment mode to treble. Adjustment is still made by using the same keys (14 and 16 or 20).

As soon as key 13 is pressed, the display indicates the function that has been selected and its adjustment value.

After 4 seconds if the keys have not been pressed, the display returns to the previous message displayed.

### Adjustment scales

Bass	Treble	
BASS-9	TREB-9	min
BASS 0	TREB 0	average
BASS+9	TREB+9	max

- **Loudness** : Activate/De-activate this function by pressing key 2. Tell-tale H on the display indicates the function status.

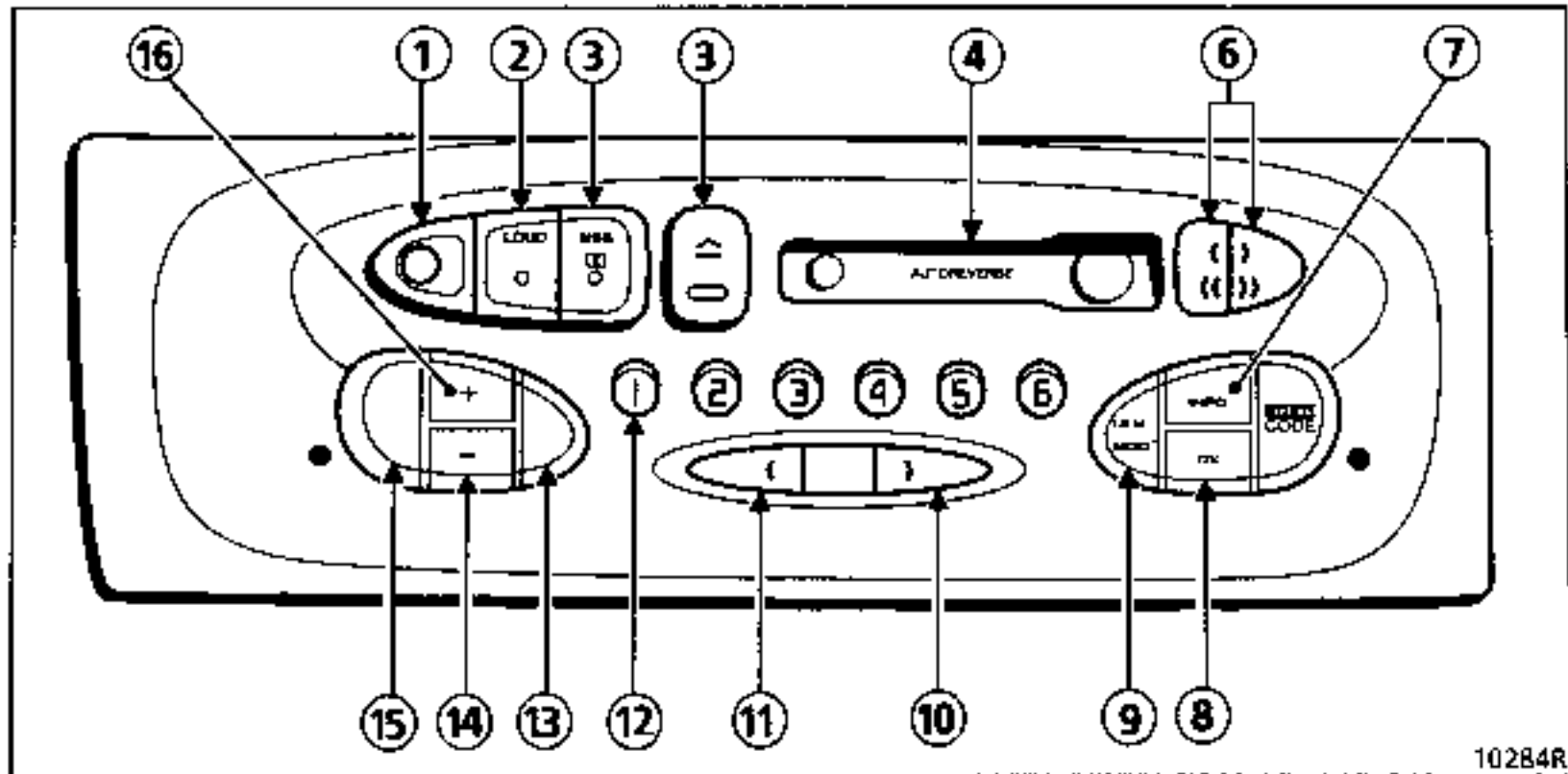
Volume, right/left-hand balance and front/rear balance (Fader) adjustments are independent.

The levels of bass and treble are dependent on the active source (radio, cassette or CD\*).

These values are retained each time the set is switched on.

In the event of a general power failure the volume level returns to an average preset value. Adjustments for tone and spatial sound distribution retain their "mid-range" setting and the "Loudness" function is deactivated.

\* depending on option.



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## WAVEBAND SELECTION

### Using the radio

Press key 9 to select one of the following wavebands L (LW), M (SW), FM1 (U1), FM2 (U2) or FM Autostore (AST).

### Using the satellite control keys

Press one of the keys 17 or 18 to select one of the following wavebands L (LW)/M (SW), FM1 (U1)/FM2 (U2) or FM Autostore (AST).

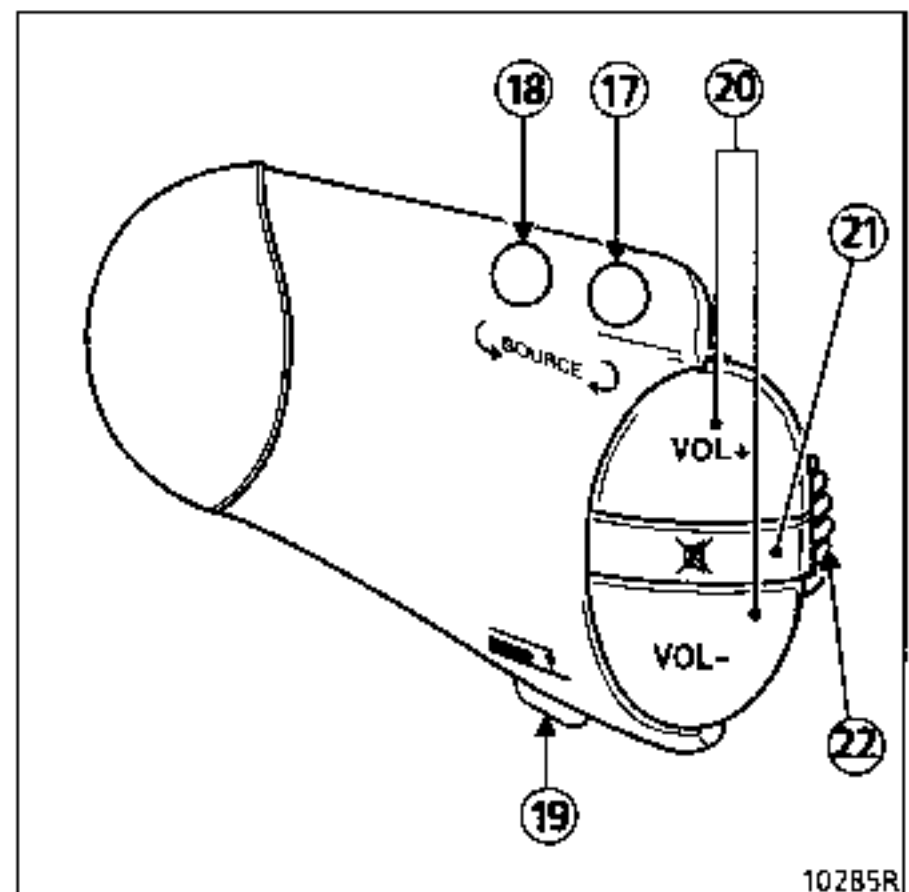
The two wavebands LW and SW are grouped together, as are FM1 and FM2.

Changeover from one to the other is carried out by rotating switch 22.

## MANUAL FREQUENCY SEARCH

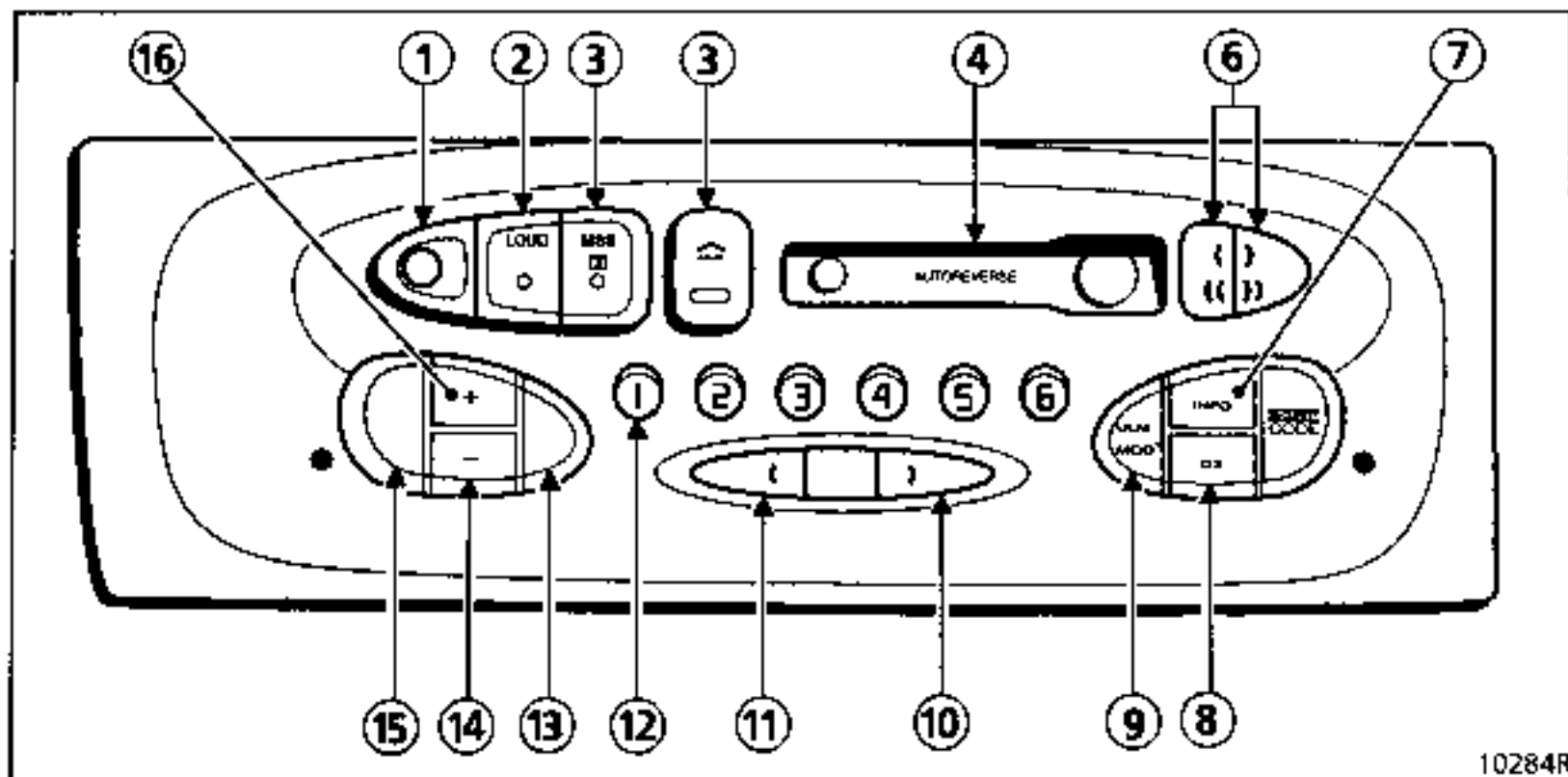
This is done by scrolling through the frequencies in an upwards or downwards direction.

Select the waveband (see above).

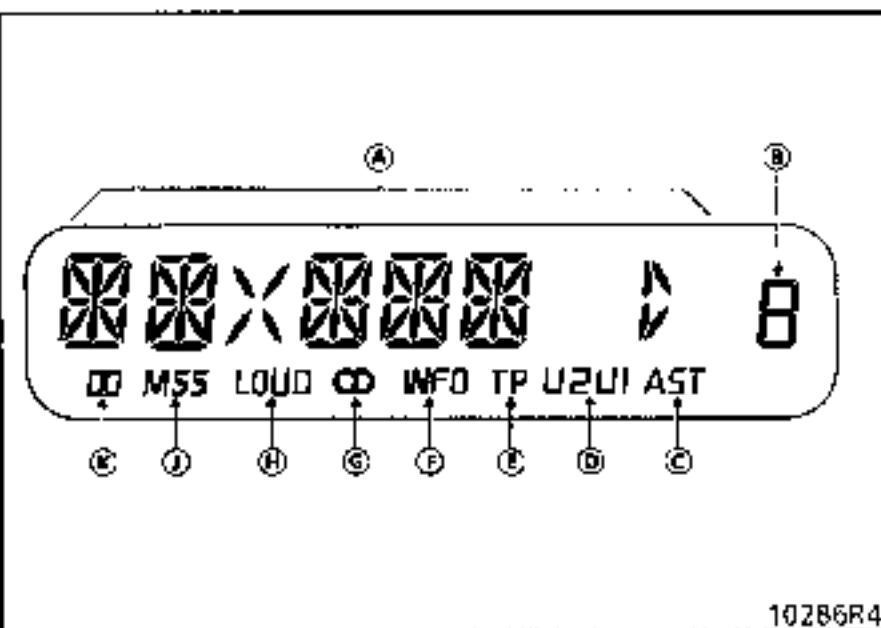


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- Brief pressure on key 10 or 11 : the frequency changes by one step at a time (100 kHz in FM, 1 kHz in SW, 1 kHz in LW).
- Prolonged pressure on one of the keys 10 or 11 : rapid scrolling through frequencies for as long as the key is depressed.



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## AUTOMATIC FREQUENCY SEARCH

Select a waveband as shown on the previous page.

Brief pressure on key 19 of the satellite control activates automatic search of frequencies scrolling in an upwards direction only.

In AM (SW or LW), the message "SEARCH ▶" is displayed at A.

In FM, the search sensitivity level "LOC ▶" or "DX ▶" is displayed.

## Search sensitivity level

For the first automatic search started since the set was switched on, the display ( LOC ▶ ) appears and remains all the time the search is continuing, which happens in the following manner :

- The search is carried out initially on the first of the 3 sensitivity levels (LOCAL1 = very good reception only).
- If no station is found after a search of the entire FM waveband, the search continues at the second level of sensitivity (LOCAL2 = good reception) which is stored for 1 minute. The radio will then start the next automatic search from this level onwards if it is activated within the following minute.

- If still no station is selected, the search is continued at the highest sensitivity level (DX = average reception) which will only be stored for one minute. If the next automatic search is not started within the following minute, it will restart from LOCAL1 level.

In FM, the DX sensitivity level can be intentionally selected by pressing key 8.

The message DX should then appear briefly on the display at A. Subsequent automatic searches started will be carried out only at this level with the message DX 1 shown on the display.

The DX level will be stored until sensitivity level LOCAL1 is selected once again by pressing key 8 and is indicated by a brief display of the message

LOC

## PRESELECTIONS

### Programming

Select a waveband as described previously.

Manually or automatically search for a radio station.

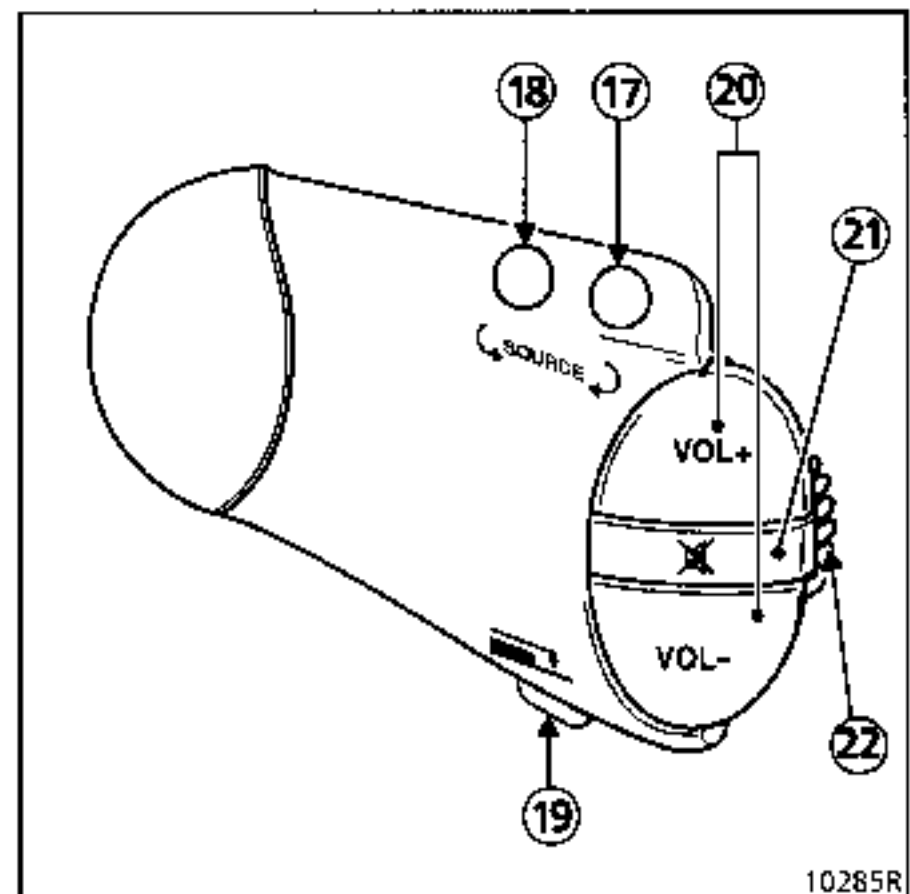
Press the desired pre-selection key 12. The sound is cut.

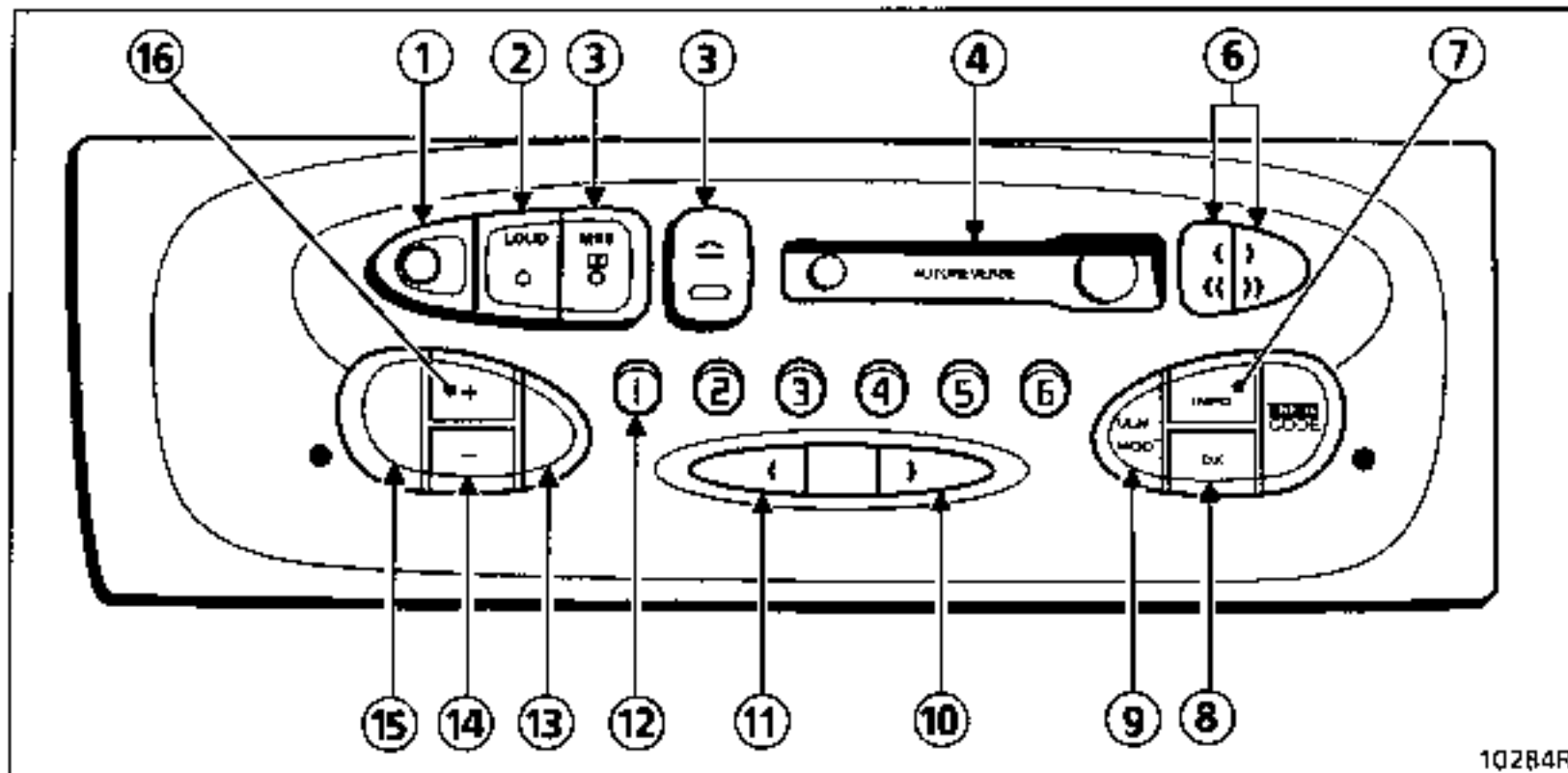
Keep the key held down until the sound returns and a "bleep" is heard.

The frequency displayed is stored.

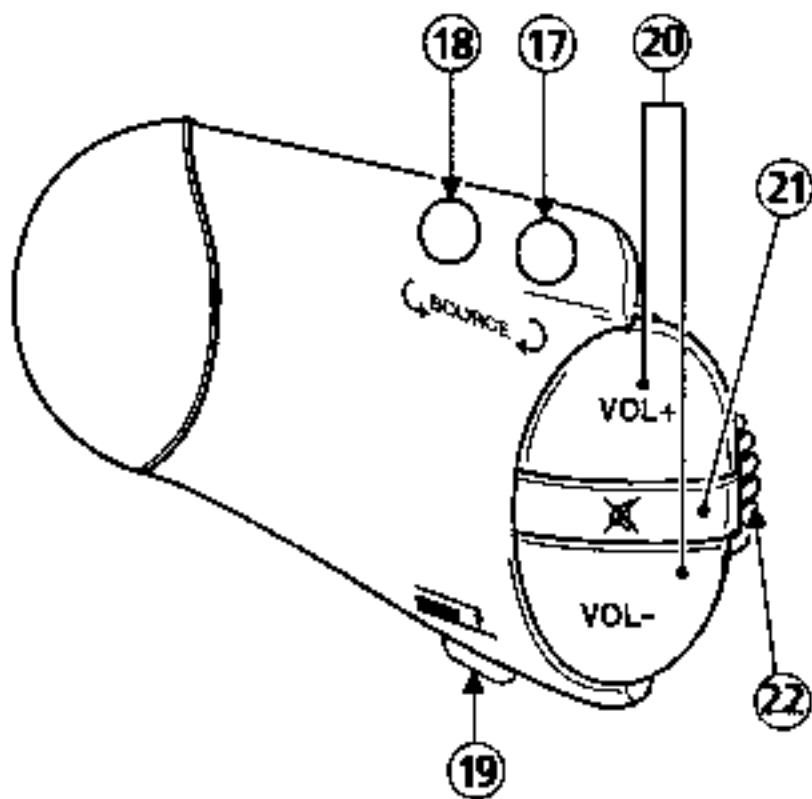
### Recalling the radio station

Briefly press the desired key 12 or turn switch 22 on the satellite control after selecting a waveband.





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### Procedure

Autoprogramming is activated by pressing and holding down (for longer than 2 seconds) key 19 on the satellite control whichever FM waveband is active in cassette or CD\* mode, if the last frequency listened to was in FM.

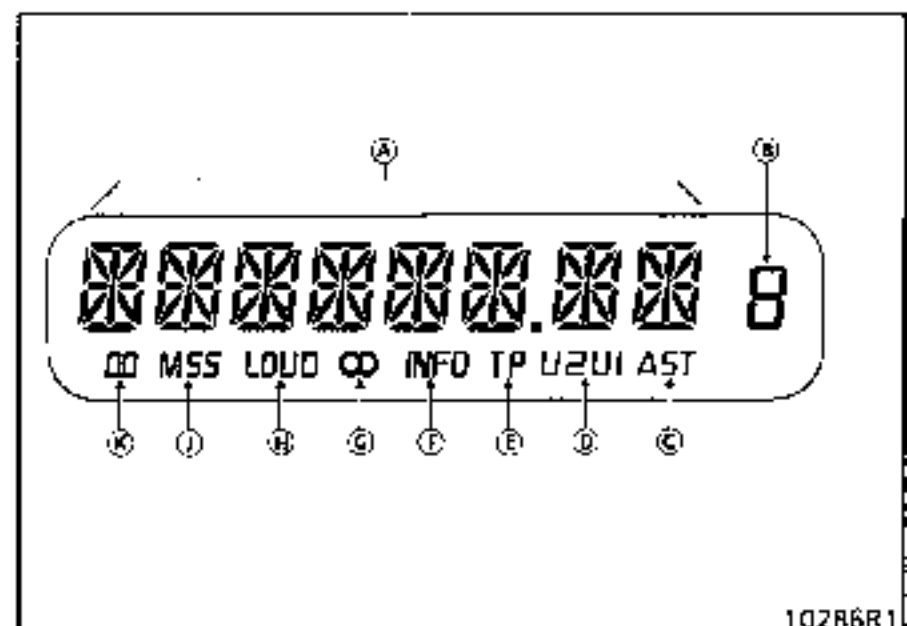
A "bleep" is heard. In radio listening mode the sound is cut, tell-tale C illuminates and the message "AST" flashes on the display at A.

In cassette or CD\* mode, the message on the display remains unchanged and only tell-tale C is flashing.

At the end of autoprogramming the system emits another "bleep".

In radio mode, the sound returns and the first pre-selection in "AST" can be heard.

**Note :** The user is able to change the active source during autoprogramming without interrupting its operation.



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### AUTOPROGRAMMING IN FM (Autostore)

Automatic storing (Autostore) is an extension of the automatic search function.

This involves initiating the selection and storage of the 6 most powerful stations in your region without having to know their frequencies.

If less than 6 stations are stored, the preselections which were not taken are allocated "0000" or will keep the previous frequencies.

\* depending on option.



## USING THE RADIO IN RDS MODE (Radio Data System)

RDS is a system which enables some FM transmitters to broadcast inaudible information at the same time as the radio signal.

This set uses RDS data which provides the following :

- Clear display of the name of the active radio station being broadcast in place of the frequency (when it is an RDS transmitter),
- Automatic tracking the of frequencies most adapted to the chosen programme (code "AF"); for example, throughout a journey,
- Selection of radio stations broadcasting road traffic information (code "TP"),
- Broadcasting of messages coming from other radio stations within the same network (group of stations),
- Broadcasting of emergency messages ("RDS PTY Alarm").

### Displaying the name of a station

When the set is tuned to an RDS transmitter during automatic or manual search, or recall of a pre-selected station, the frequency appears briefly on the display and is then replaced by the name of the programme. This occurs after a few seconds, which corresponds to the time the radio takes to decode the name transmitted by the RDS transmitter.

When the pre-selected station is changed the name of the transmitter is displayed.

### Operating principle of the automatic tracking (mode "AF")

An RDS transmitter transmits a coded list of all the transmitters broadcasting the same station as it is broadcasting (alternative frequencies = AF).

During a journey, these transmitters are automatically scanned by the set which tunes itself to the strongest signal.

This will be "transparent" on the display as the name of the programme is not altered.

If the station can no longer be received at a sufficient level to broadcast RDS traffic information for a period of 5 seconds, the system emits an error "bleep" and begins an automatic search to find another station with the same PI code (programme identifier). The display alternates between the name of the station and the message "SEARCH".

If the system retrieves the station, it remains on the frequency and the programme is broadcast. If not, it returns to the original starting frequency without displaying the RDS road traffic information.

### • Starting or stopping the RDS system function

RDS mode is activated by default.

It can be stopped or restarted by prolonged pressure (longer than 2 seconds) on key 7. The set then emits a "bleep" and the status message "RDS OFF" in the case of deactivation or "RDS" in the case of reactivation appears briefly on the display.

When RDS is deactivated, "INFO" mode is also deactivated (see text on following pages). The frequency reappears on the display and automatic tracking is no longer in operation.

## ● Automatic search and memorising RDS stations

During automatic search RDS stations are not available.

If a station is memorised using a pre-selection 12 when the RDS function is deactivated, when recalling this pre-selection the set will not search for any other frequencies.

## Using the radio in "road traffic information" mode

This function concerns those countries who have a road traffic information system (depending on the RDS standard). In this mode, the system uses TP information (Traffic Programme) and TA (Traffic Announcement) information being broadcast by the RDS transmitters.

If the set is tuned to a traffic information transmitter, tell-tale E is illuminated on the display, whether "INFO" mode is selected or not (tell-tale F illuminated or extinguished).

### \* Switching on the receiver's "INFO" mode

Switch on "INFO" mode by briefly pressing key 7, tell-tale B illuminates on the display. There are two possibilities :

- the set is already tuned to a traffic information transmitter (tell-tale E illuminated) and the station continues to be received,
- the set is not tuned to a traffic information transmitter (tell-tale E extinguished). Tell-tale F flashes on the display and an error "bleep" sounds after 30 seconds. It is then possible to carry out an automatic search by briefly pressing key 19 on the satellite control to select an "INFO" transmitter. The display then indicates "LOC INFO" while the search is being carried out.

### \* Programming

The "INFO" station is programmed in the same way as for conventional "NON INFO" stations using the pre-selection keys 1 to 6 in FM waveband and this replaces the pre-selected FM stations in the normal FM mode.

### \* Changing the "INFO" station

- In automatic search mode :

You are unhappy with the "INFO" station currently being listened to or the signal being received is becoming weak, in this latter situation a "bleep" sounds and tell-tale F begins to flash.

It is then possible to start an automatic search by briefly pressing key 19 on the satellite control. The display will indicate "LOC INFO" and the receiver will tune itself to the next "INFO" station in the area.

If another "INFO" station cannot be found, it will select a "NON INFO" station.

- In manual search mode :

When the "INFO" station frequency is known (for example, as indicated on roadside traffic signs), it is possible to tune into them directly. Refer to the paragraph on "Manual station search". Once the station has been selected, activate "INFO" mode by pressing key 7.

\* Message broadcasting while listening to a cassette or CD\*

If you wish to hear road traffic messages when listening to a cassette or CD\* playback, you must first select the frequency of an "INFO" transmitter.

The message will override the cassette or CD\*. At the end of the message, the cassette or CD\* will take over once more.

\* Volume of the message being broadcast

Messages broadcasting road traffic information are heard at a minimal level at least equal to the average volume or sound level of the last message broadcast.

\* Switching off the "INFO" mode

To quit "INFO" mode, briefly press key 7. Tell-tale F is extinguished.

**Note :** Starting autoprogramming in FM (Autostore), manual station search (key 10 or 11) or recalling a memorised pre-selection without the "INFO" configuration switched on, deactivates "INFO" mode.

**Messages being broadcast from other transmitters**

The **EON** system (Enhanced Other Networks) is an RDS service which links stations within a common network (grouping transmitters).

If the set is tuned to a transmitter linked to others by the **EON** system it will broadcast road traffic information coming from the station selected as well as information being broadcast by the other transmitters.

In the latter case, the display will indicate the name of the station currently being listened to.

Another facility of the **EON** system is the automatic tracking of memorised **EON** stations in the pre-selection 12 (for example, throughout a journey).

The pre-selections are therefore being constantly updated.

The **EON** system is always active.

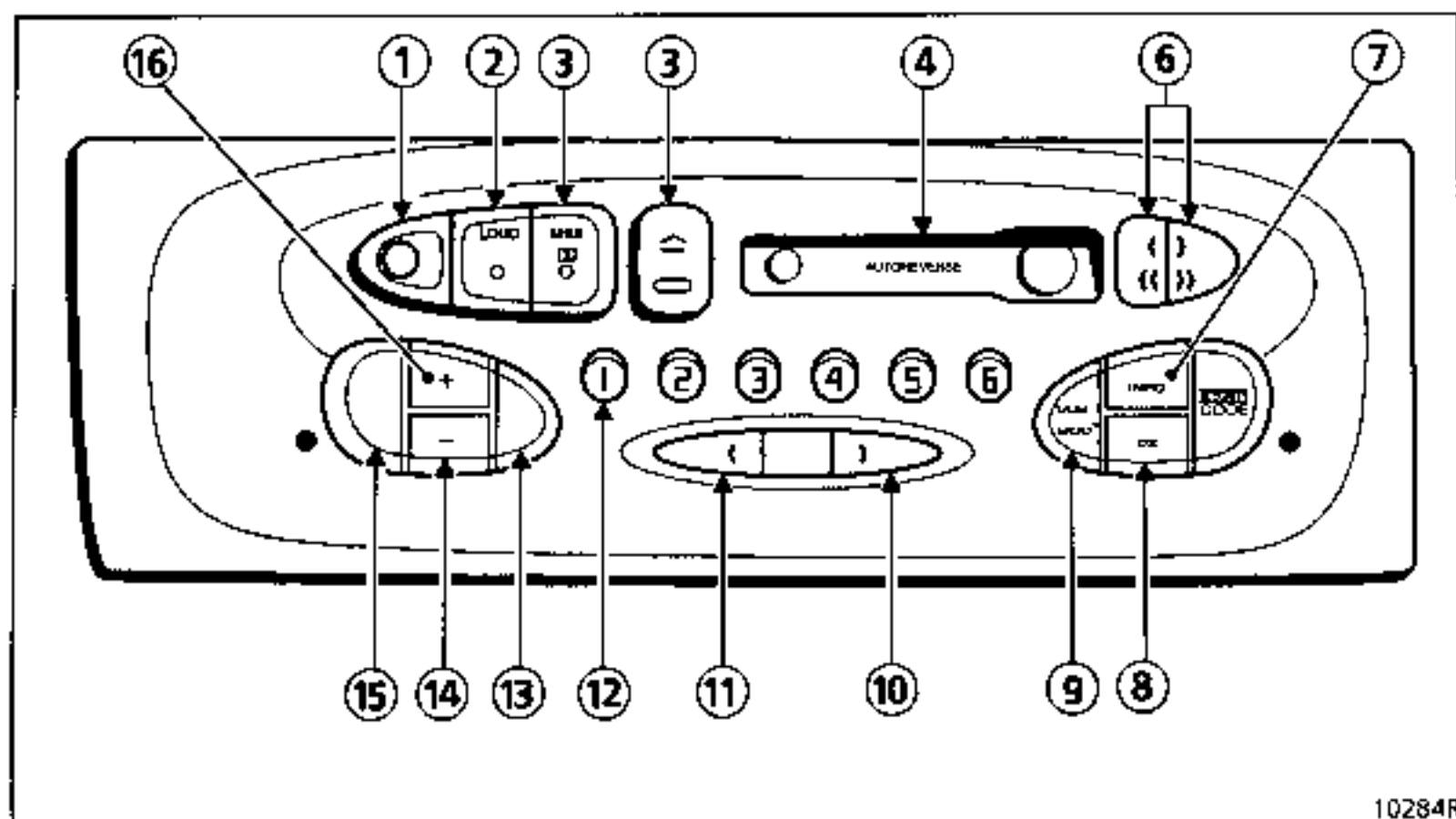
**Broadcasting emergency messages**

When the set receives an emergency message, it will interrupt the cassette or CD\* playback.

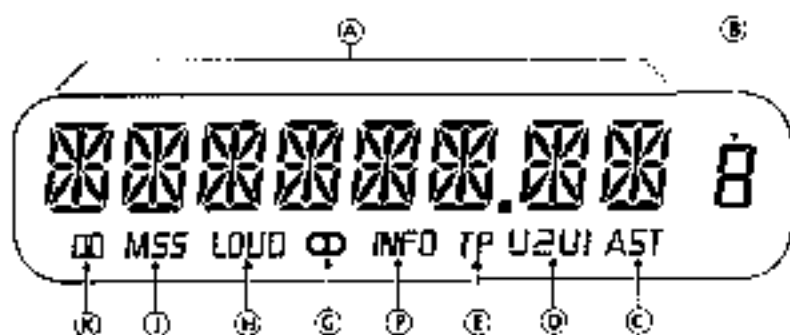
While the message is being broadcast, the message "ALERT" appears on the display and then returns to the previous message.

The "RDS PTY Alarm" system is always active in the FM waveband.

\* depending on option.



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When a cassette is inserted into the cassette compartment 5 :

- the radio or CD\* player will cut out, depending on which source is active,
- the message "CASS FER" or "CASS CR" is displayed at A indicating the quality of cassette used (chrome or metal),
- the cassette will be played in the last direction of play and playback is visualised on the display by the messages " CASS " or " CASS ".

#### Access to cassette mode

If a cassette is already in cassette compartment 5, key 9 selects cassette playing mode and restarts playback in the last active direction of play.

This selection can also be activated using keys 17 and 18 on the satellite control.

If cassette compartment 5 is empty during the changeover mode, cassette play is inaccessible and a "bleep" is heard.

**Note :** If the audio system has a CD\* player, a "bleep" will be heard if compartment 5 and the CD loader are empty.

#### Playing a cassette

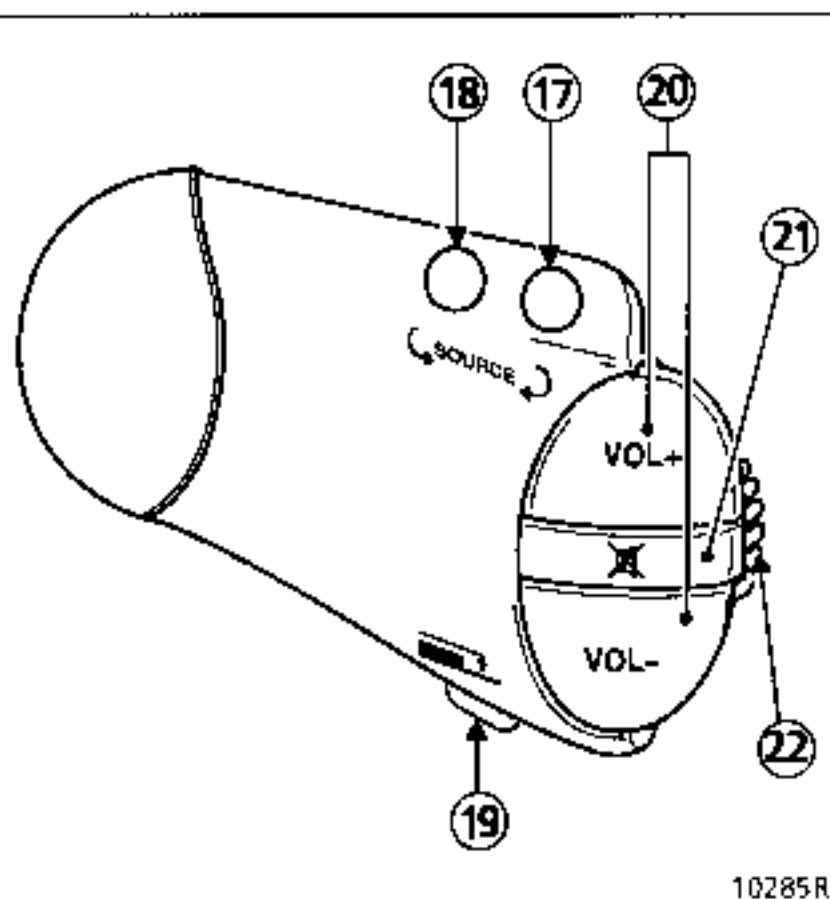
The volume adjustments are identical to those described in the section on "Radio operation".

If a cassette has been recorded using a noise reduction system (Dolby B), prolonged pressure on key 3 will provide the best reproduction. A "bleep" is heard and tell-tale K illuminates on the display. Pressing this key again will deactivate the function and a "bleep" will be heard and tell-tale K will be extinguished.

#### Changing the direction of play


The system changes the direction of play at the end of the tape or by pressing keys 6 at the same time. The direction of play is shown on the display.


\* depending on option.



### Fast winding

Press one of keys 6 depending on direction required :

- forward track : CASS 
  - » fast forward
  - « fast rewind

- previous track : CASS 
  - » fast forward
  - « fast rewind

When key 6 is pressed the radio is heard until fast winding stops.

Radio mode is then fully operational with the corresponding radio display (see "Radio operation").

**Note :** Keys 6 are not active when cassette the cassette is playing.

### Stopping fast winding

Fast winding stops and playback resumes :

- at the end of the tape,
- by briefly pressing key 6 ,
- by pressing key 21 (in this situation playback resumes only after deactivating the function by pressing the key again).

### Searching for next track (or previous track)

MSS mode (Music Search System) enables the beginning of the next or a previous track to be played.



The playback head searches for silent intervals between tracks.

MSS mode is activated by briefly pressing key 3 while a cassette is playing.

Tell-tale J illuminates on the display.

In this mode, pressing one of keys 6 fast winds the tape onto the start of the next track or the track currently being played (depending on which key 6 is pressed); that is, until the next "blank space" is detected. Playback is then resumed.

during the search, the set is silent (it does not changeover to radio mode) and the display indicates the active mode as well as the direction of play

"MSS  " or "MSS  "

Briefly pressing key 3 again deactivates MSS mode and tell-tale J is extinguished.

### Notes :

- Use cassettes which have a very low level of noise during the "silent intervals" between tracks.
- the "silent intervals" between tracks must last for at least 3 seconds.
- Recordings containing very soft tracks or intermittent pauses (conversation, information, etc..) may cause the tape to keep stopping when searching in MSS mode.

## Stopping playback

- **Road traffic information broadcasts**

If you are in "INFO" mode (tell-tale F illuminated) and depending on the transmitter, the playback head will be disengaged while road traffic information is broadcast, before cassette playback is resumed.

- **Sound cut out**

Pressing key 21 on the satellite control will cause the playback head to disengage and the message "PAUSE" is displayed at A.

- **Broadcasting emergency messages**

Cassette playback is interrupted when the set receives an emergency message ("RDS PTY Alarm" system).

During the broadcast, the message "ALERT" is displayed at A.

- **Changing active source**

Pressing one of the keys 9, 17 or 18 activates the radio or CD\* player without ejecting the cassette.

Playback, fast forward and rewind are interrupted and the playback head is disengaged.

- **Ejection**

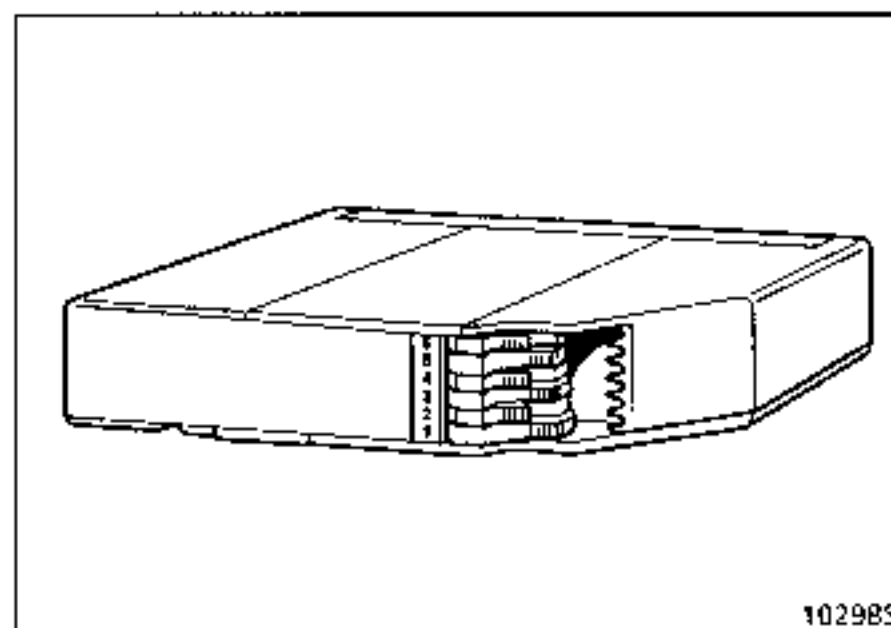
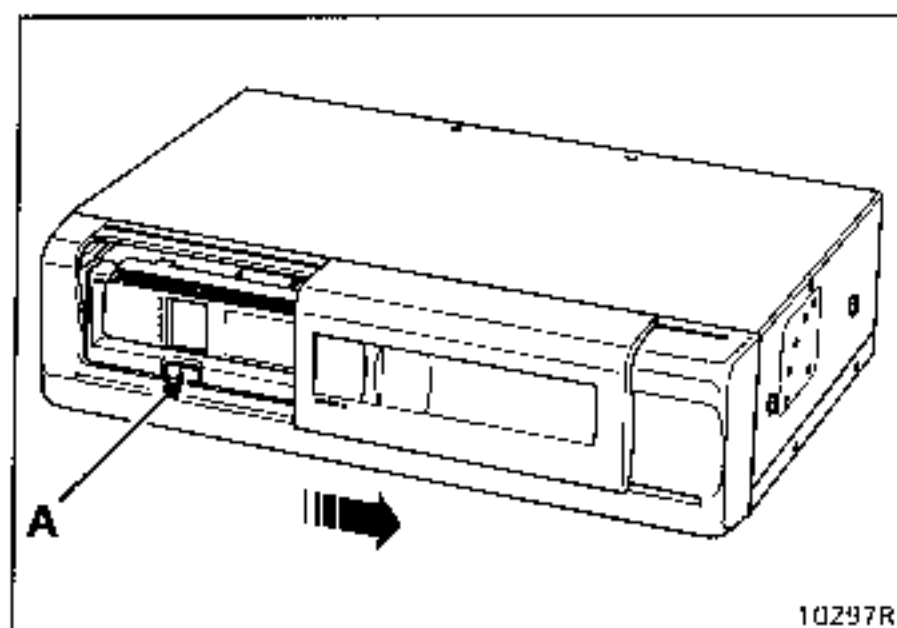
The cassette is ejected by pressing key 4.

The set returns to radio mode, to the last station listened to for longer than 2 seconds.

### **Note :**

The tape playback head is automatically disengaged if the power supply is cut or a CD\* disc is inserted.

\* depending on option.



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### OPERATING THE CD PLAYER\*

- Open the CD player loader "door" located in the luggage compartment.  
Press button (A) to eject the loader (or CD holder).
- Slide the CD (six maximum) into the holder, with the printed face facing upwards. To change the CD(s) already in the holder, take them out by pressing on the corresponding white levers.
- Re-insert the holder into the CD loader and close the "door".

### ACCESS TO CD MODE\*

Select the CD player by pressing keys 9, 17 or 18.

When it is activated by key 1 or by switching on the ignition, the system checks :

- the presence of the CD player,
- the CD loader (or holder) in the CD player ,
- each of the six discs if the loader has been taken out and then re-inserted into the CD player.

If CD\* player mode is selected whilst these checks are being made the systems remains silent and the message "CD CHECK" is displayed at A.

If CD\* player modes is selected when there is no disc in the loader or if the loader is has not been inserted into the CD\* player, the message "NO CD" is displayed briefly and then the systems changes over to radio mode.

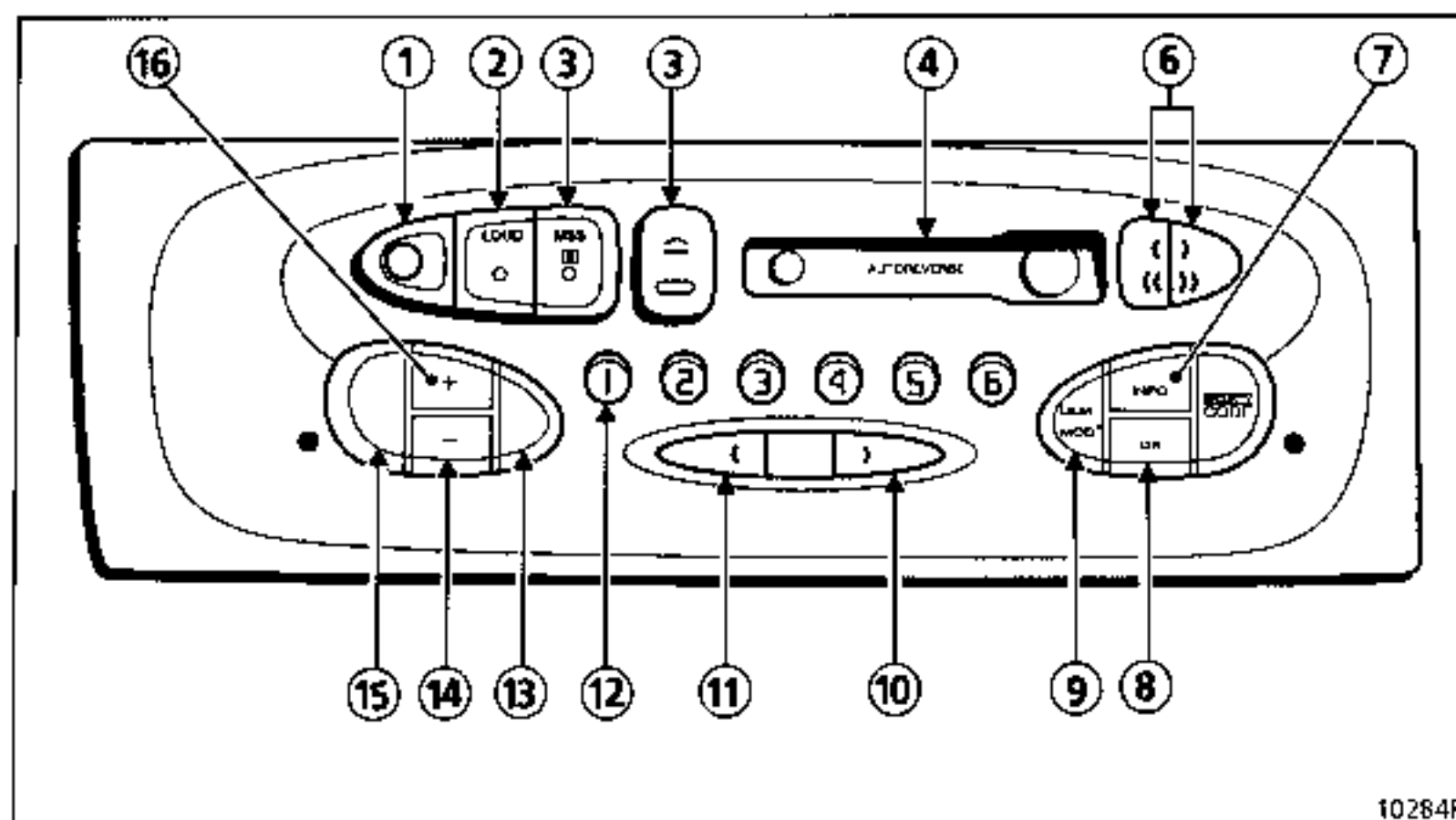
### SELECTING A CD

When CD\* player modes is selected, playback of the last disc listened to starts again, unless the loader has been taken out and then re-inserted into the CD player; in which case, the first CD is selected

But, it is still possible to select another CD by pressing one of the six pre-selection keys 12; each key corresponding to the disc in the CD loader (1 to 6).

If the disc selected is not present, the message "NO CD disc n° " is briefly displayed and playback continues on the disc currently being listened to.

\* depending on option.



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Detection of an error relating to the disc is made at the moment the disc is loaded (disc upside down, several discs...). If an error is detected, the message "CD ERROR" is displayed briefly at A and the next disc is loaded.

The defective CD can no longer be selected.

### PLAYING A CD

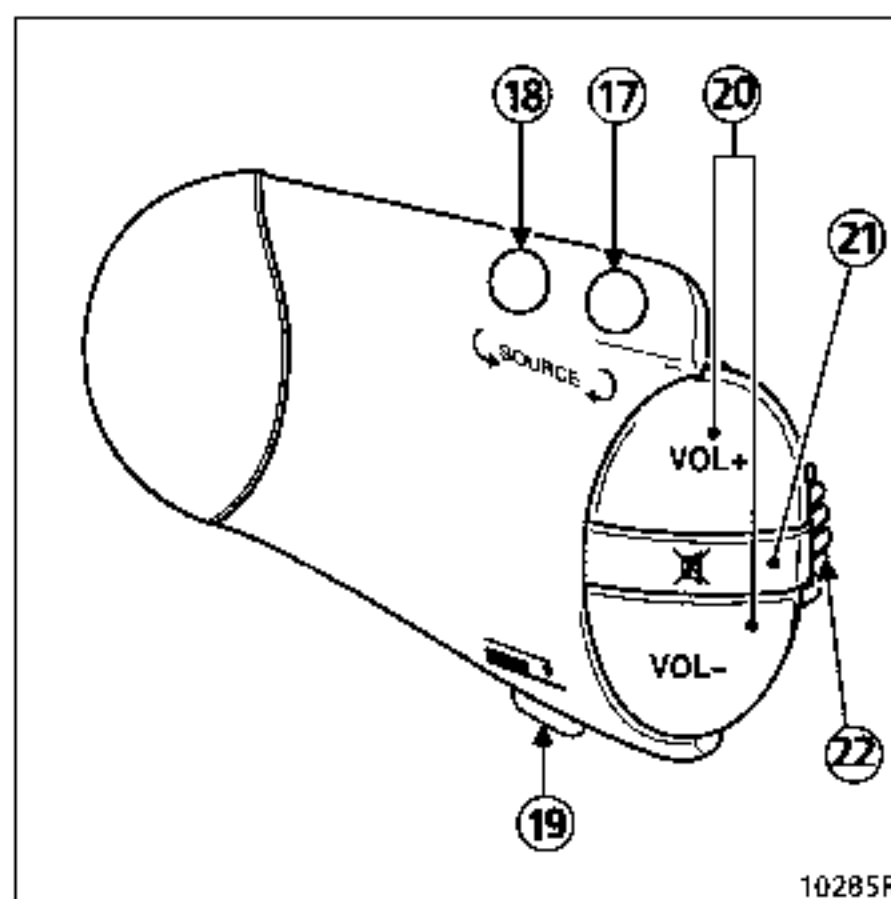
- After selecting the CD you wish to play, playback begins at the first track. The message "TR1 CD1" is displayed. The number of the pre-selection B indicates the number of the CD being played (1 to 6).

#### • Selecting a track

This is done by using switch 22 on the satellite control by briefly pressing keys 10 or 11.

Playback resumes for the selected track.

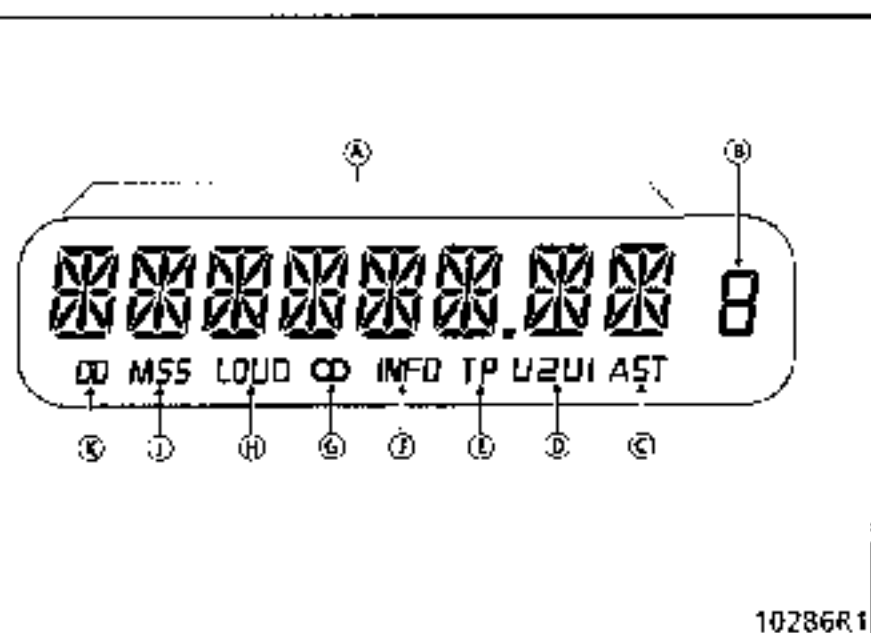
To quickly return to the first track on the disc being played, press pre-selection key 12 corresponding to the disc being played.



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\* depending on option.





● Disc track search ( SCAN function)

This function allows you to scan the contents of the selected CD by listening to the first 10 seconds of each track.

Press the corresponding pre-selection key 12 for the selected CD for longer than 2 seconds.

The message "SCAN" followed by the number of the track being played and the number of the CD being played is displayed at A and B.

After "scanning" the last track of the disc the function starts again from the first track of the same disc.

To deactivate the function and to listen to the required track, press one of keys 10 or 11 or turn switch 22 a notch until you hear the required track.

Normal playback is resumed.

● Random playback

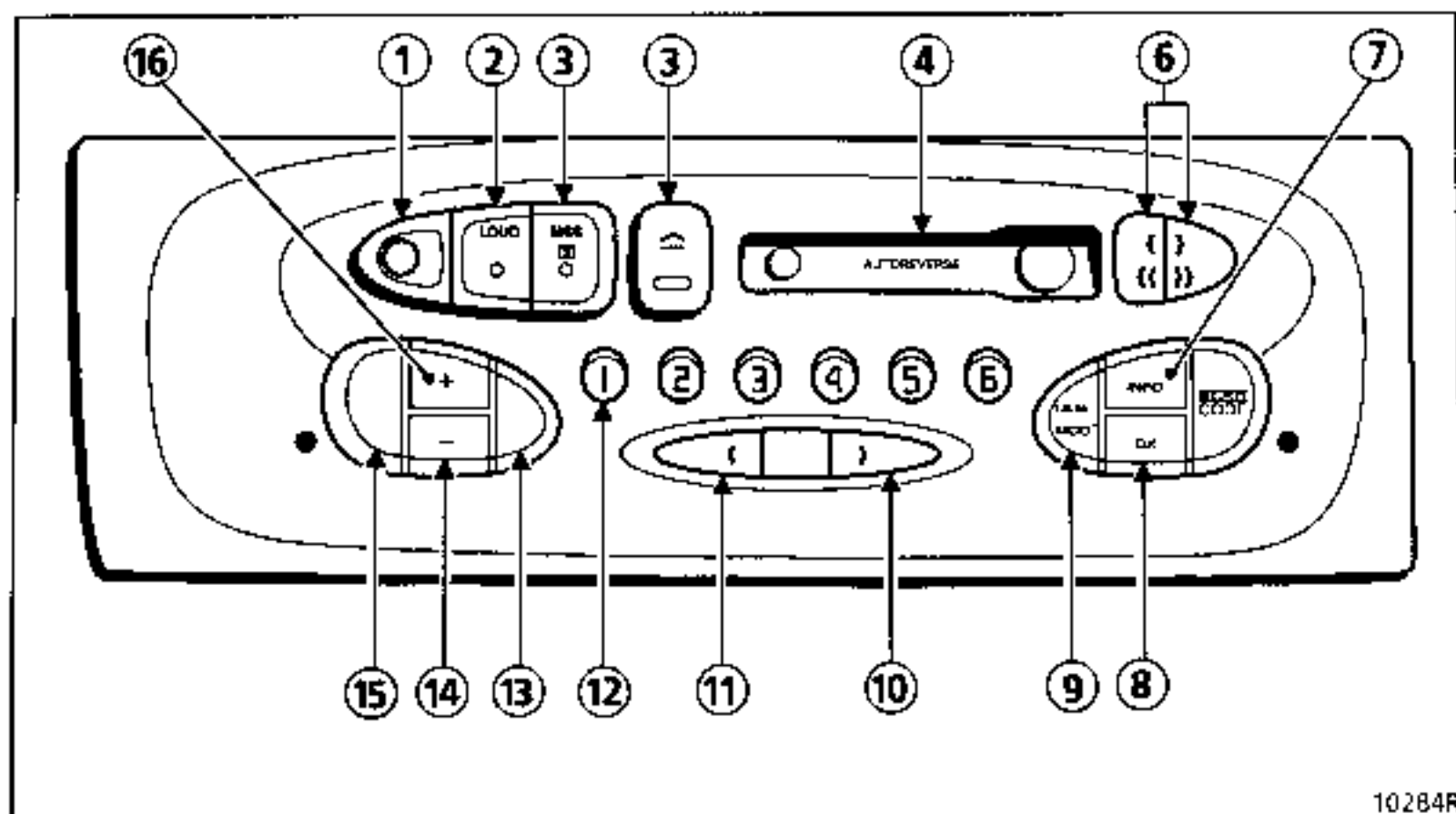
Brief pressure on key 19 on the satellite control plays the tracks on the CD in no apparent order.

The message "RD" followed by the number of the track being played and the number of the CD being played is displayed.

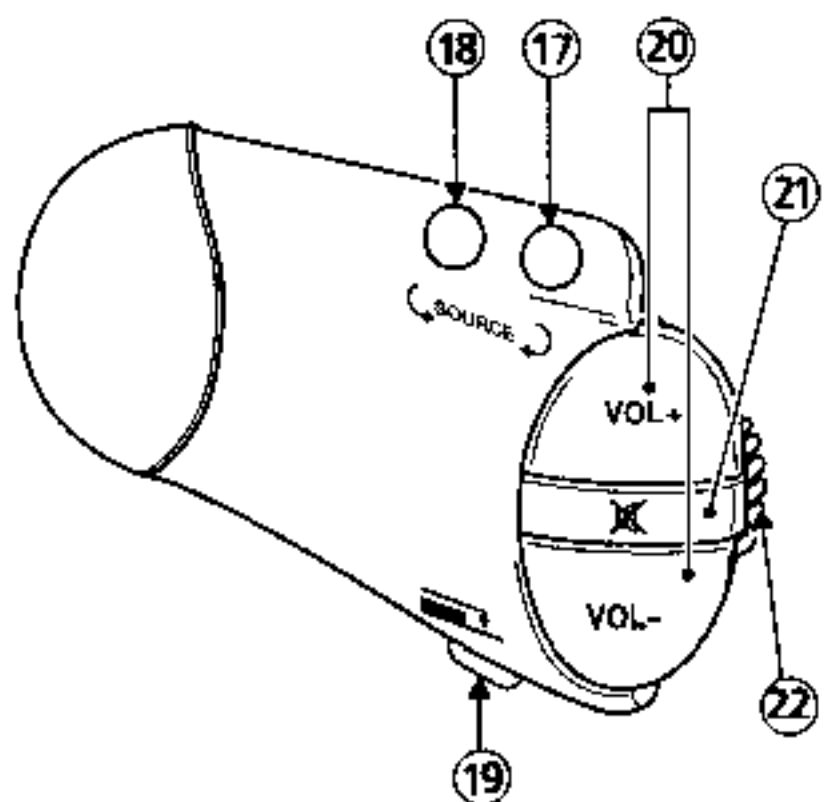
When all of the tracks on the CD currently being played have finished playing, random playback continues on the next disc.

- \* Brief pressure on key 10 beings random playback of another track on the selected CD.
- \* Brief pressure on key 11 recommences playback of the track previously played. The set memorises the last 3 tracks played and is able to recall them depending on whether key 11 is pressed one, two or three times.

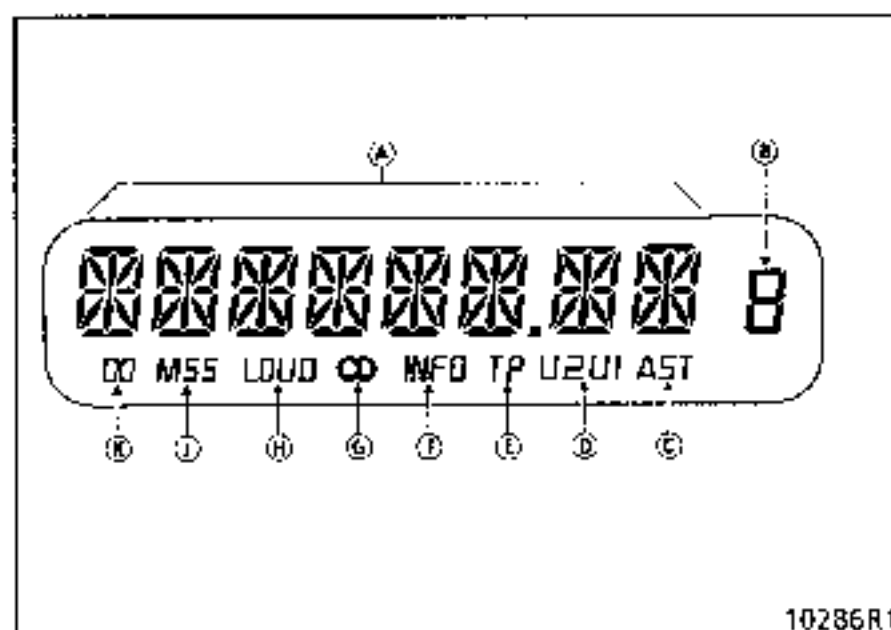
\* depending on option.



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### STOPPING PLAYBACK

- If the "INFO" system is in operation (tell-tale F illuminated) and depending on the last station being listened to before selecting CD\* player mode, CD playback stops automatically during the broadcast of road traffic information.

At the end of the message, CD playback is resumed.

- CD playback is interrupted when the set receives an emergency broadcast message ("RDS PTY Alarm" system).

During the broadcast, the message "ALERT" is displayed at A.

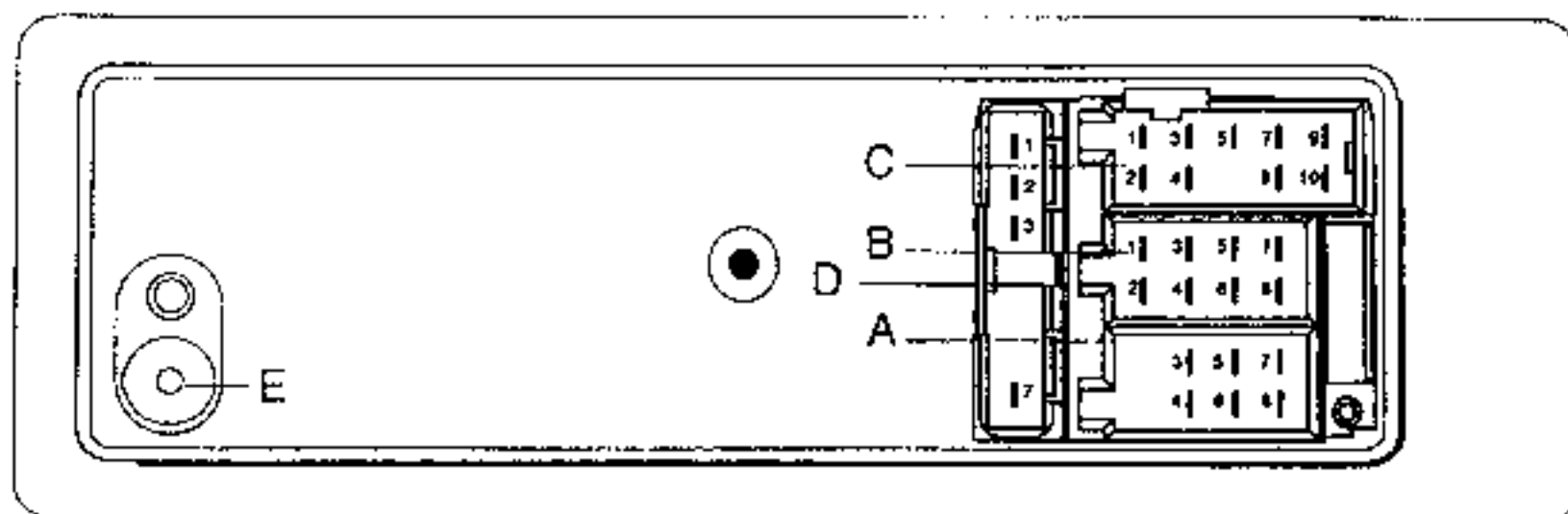
- Changing the active source by pressing one of keys 9, 17 or 18 stops playback of the CD currently being played.

To resume normal playback (CD track playback in chronological order), press key 19 on the satellite control again briefly.

The normal message will reappear on the display.

\* depending on option.

# AUDIO UNIT



PRM8601

## Feed connector (A)

Track	Description
1	Not connected
2	Not connected
3	Radio "mute"
4	+ before ignition
5	+ electric aerial
6	+ lamps (lighting)
7	+ accessories
8	Earth

## CD\* Player connector (C)

Track	Description
1	CD player communication connection earth
2	CD player communication connection
3	CD player communication connection
4	Earth
5	+ before ignition
6	Not connected
7	+ aerial
8	RH audio entry
9	LH audio entry
10	Audio entry earth

## Speaker connectors (B)

Track	Description
1	+ RH rear speaker
2	- RH rear speaker
3	+ RH front speaker
4	- RH front speaker
5	+ LH front speaker
6	- LH front speaker
7	+ LH rear speaker
8	- LH rear speaker

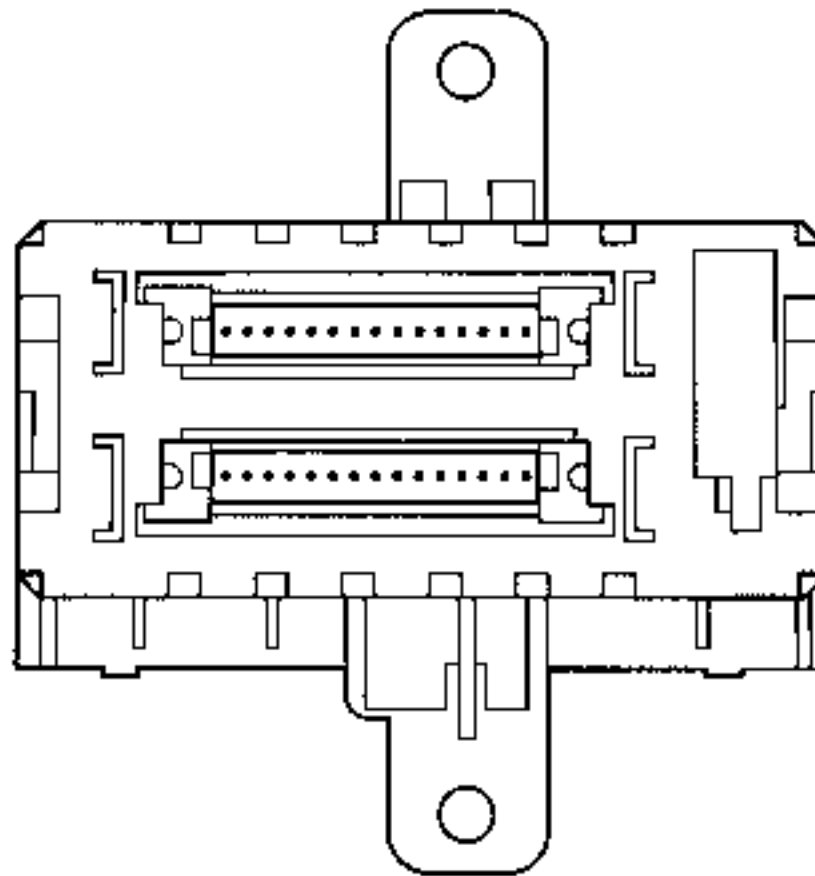
## Display connector (D)

Track	Description
1	+ aerial
2	VAN communication connection data
3	VAN communication connection data
4	} Not connected
5	
6	
7	Earth

## Connector (E) : Aerial

\* depending on option.

# REMOTE DISPLAY



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## Blue 15-track connector

Track	Description
1	Not used
2	Not used
3	VAN communication connection data
4	VAN communication connection data
5	Earth
6	Lamps
7	+ rheostat lighting
8	+ accessories
9	+ before ignition
10	Not used
11	
12	
13	
14	
15	

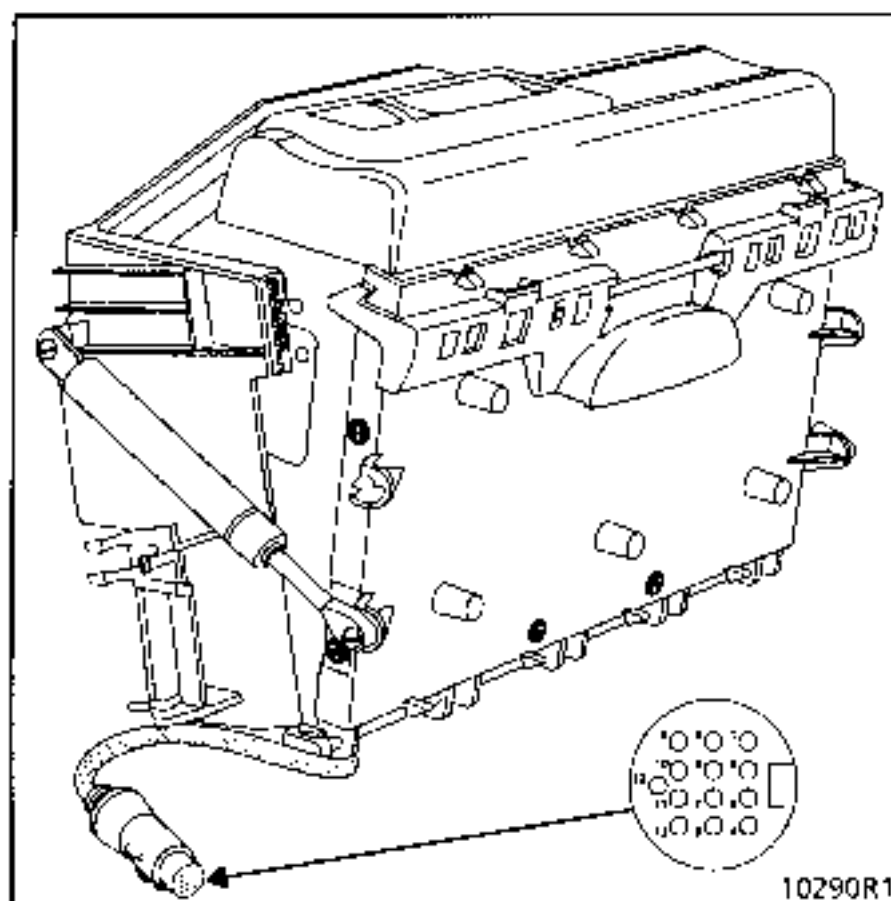
## Red 15-track connector

Track	Description
1	Not connected
2	
3	
4	
5	
6	
7	To satellite
8	
9	
10	
11	
12	
13	Screening
14	
15	

**ATTENTION :** Never connect a display designed for a 2 x 8 W audio unit to a 4 x 15 W audio unit as this will destroy the internal bus for the display.

If a display designed for a 4 x 15 W audio unit is connected to a 2 x 8 W audio unit no damage will occur, but the system will not be operational.

## CD\* PLAYER



Track	Description
1	LH audio earth
2	LH audio track
3	RH audio earth
4	RH audio track
5	Battery earth
6	Not connected
7	+ accessories
8	+ before ignition
9	D2B communication connection earth
10	Not connected
11	D2B ( + ) communication connection
12	D2B ( - ) communication connection
13	Not connected

\* depending on option.

## **REMOVING THE AUDIO UNIT**

### **Special points on removing/refitting**

Remove the audio unit from its location in the vehicle using tool **M.S. 1373**.

Note that a plastic intermediary piece remains clipped in the dashboard.

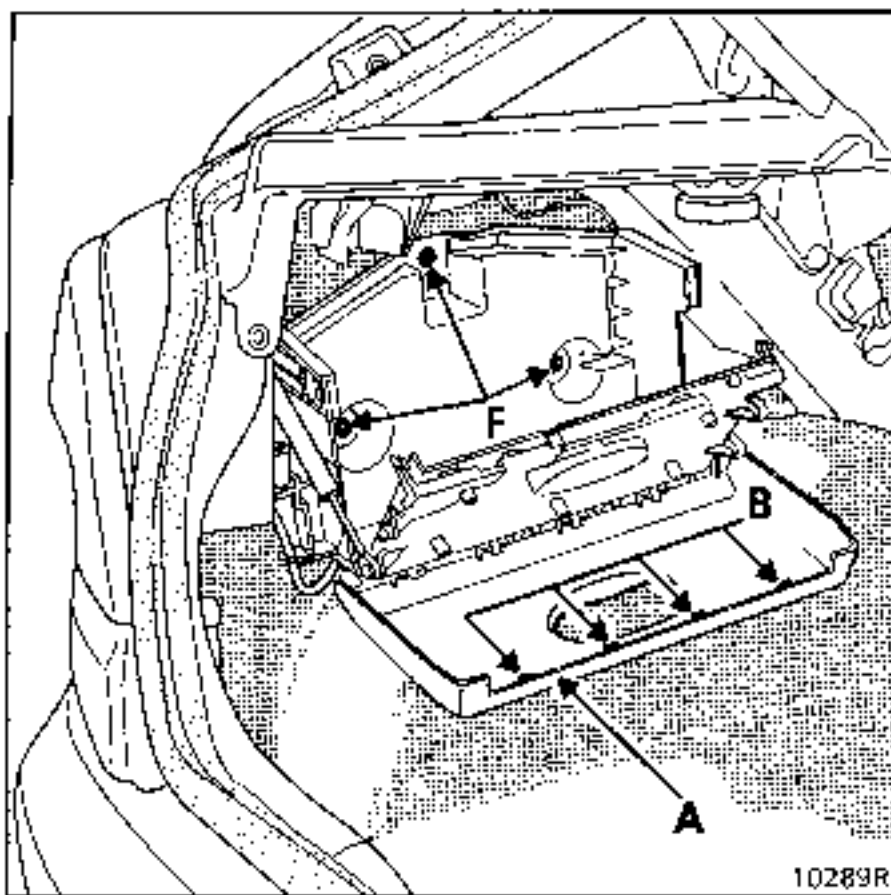
To correctly refit the radio, you must :

- remove the plastic intermediary piece by releasing the 4 clips;
- replace this piece on the audio unit, taking note of the locating slot,
- reconnect the electrical connection at the back of the audio unit,
- refit the audio unit into the dashboard location.

It is only by following this procedure that the radio set clips can be correctly fitted in position.

## REMOVING THE CD\* PLAYER

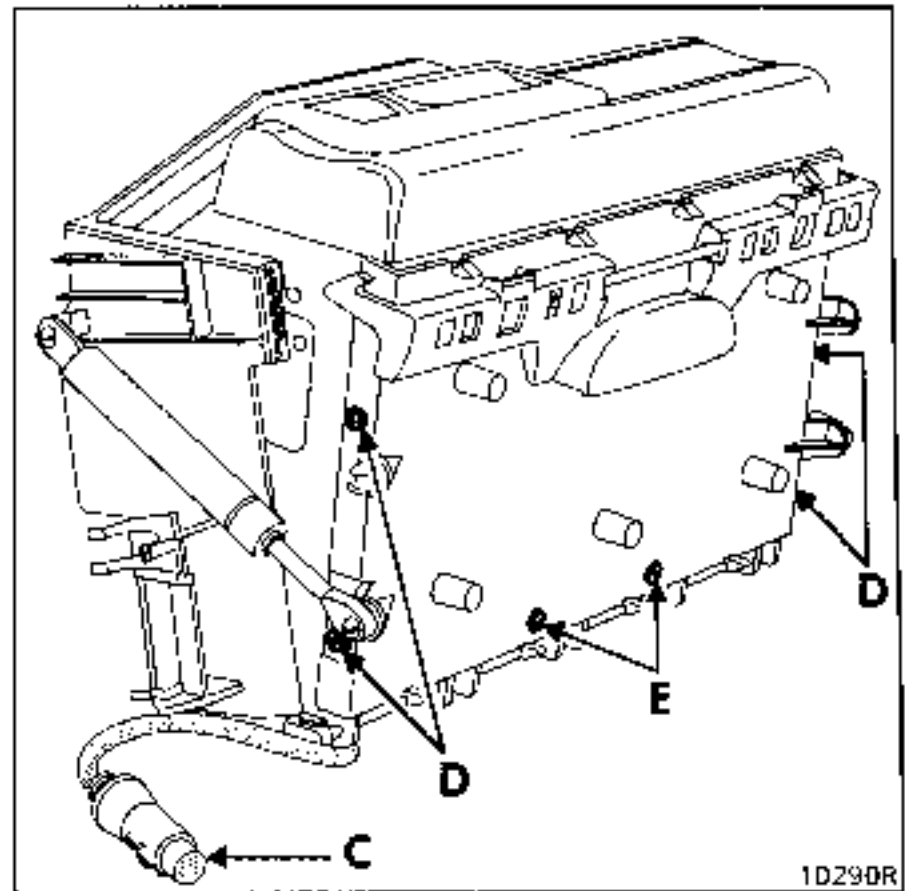
The CD player is located in the vehicle luggage compartment.



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To remove the CD player :

- disconnect the DIN connector (C),
- open the CD player bracket by pulling on the handle,
- Unclip the plastic cover (A) by carefully disengaging the 4 lugs (B),
- The four side fixing screws (D) and the two lower fixing screws (E) securing the CD player to its bracket are then accessible. Remove these screws.
- Remove the CD player from its bracket.



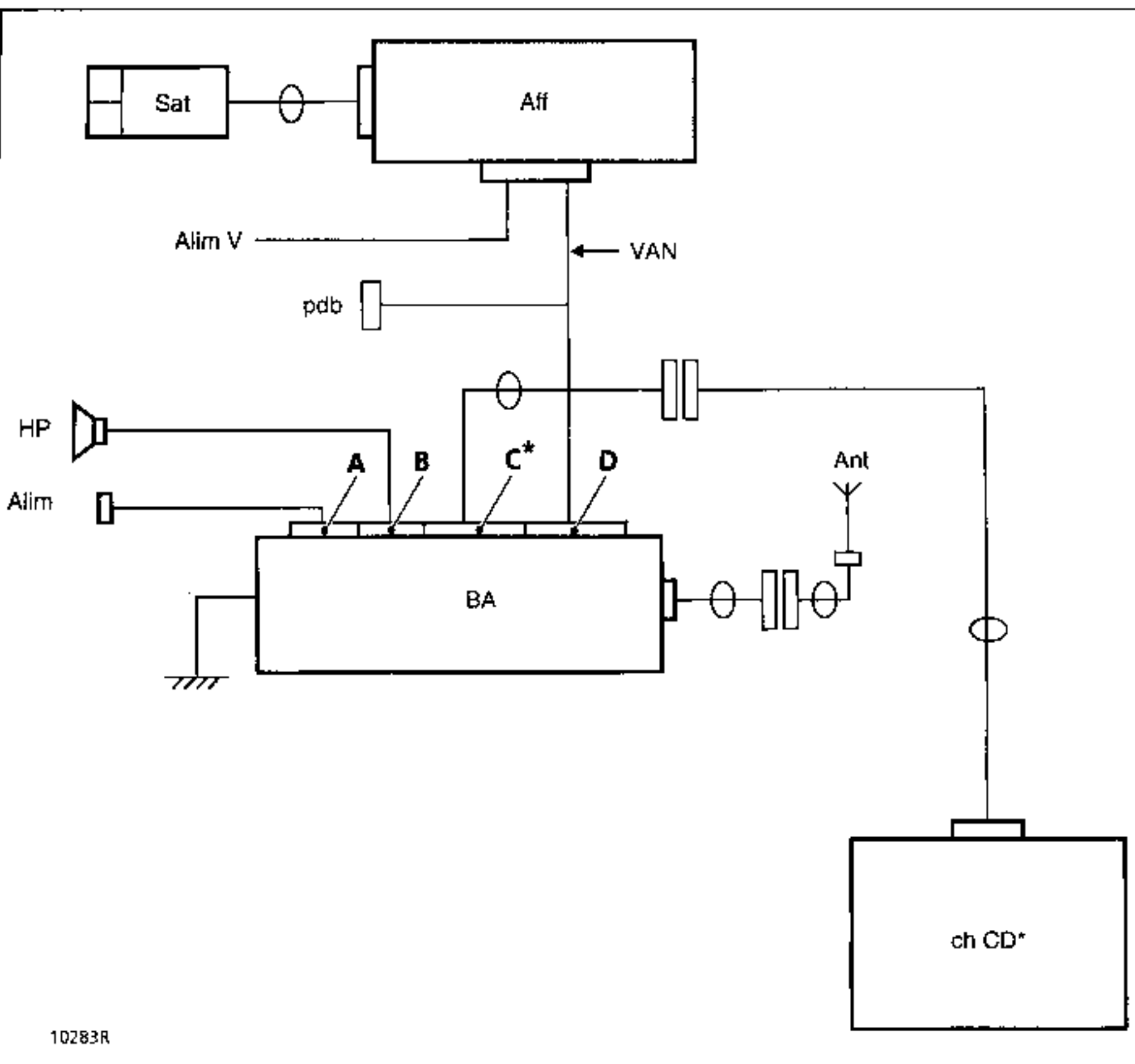
1D290R

### Special points for refitting

To refit the cover (A), start by reclipping the 4 lugs (B) before clipping on the lower section.

**Note :** It is possible to remove the bracket + CD player assembly. To do this, open the CD player bracket in order to gain access to the three fixings F and remove them.

\* depending on option.



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- SAT** : Satellite or remote control.
- AFF** : Remote display.
- BA** : Audio unit with connectors A, B, C\*, D.

- ChCD\*** : CD player.
- AV** : Vehicle feed.
- HP** : Speakers.

\* depending on option.

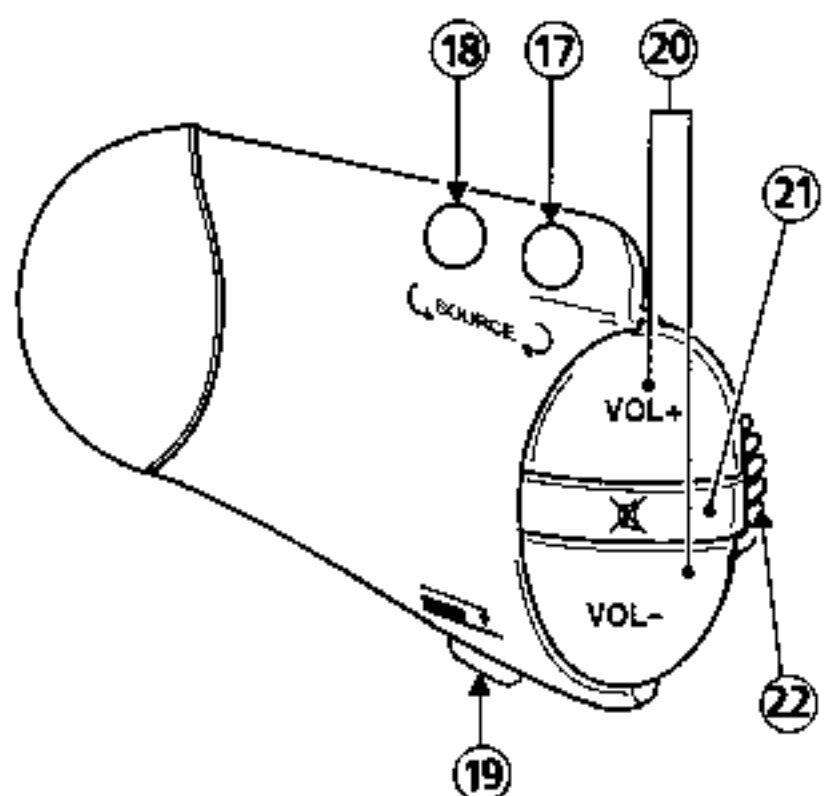


- Should the display no longer be in communication with the audio unit, the audio unit still remains operational.
- If the audio unit is no longer in communication with the display, the display remains illuminated but displays nothing (no segment is illuminated).
- If there is no satellite control, the system remains completely operational but it is impossible to enter the code.

## TESTING THE DISPLAY

To initiate the display "test" mode the system must be in operation ("On").

Press both keys 20 on the satellite control and then while keeping them held down, press key 17.



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### • Display test

For 2 seconds, all of the segments and all of the tell-tales which make up the display should illuminate at the same time.

The following display is shown if all of these areas are in good order.



10286St

At the end of 2 seconds, the display returns to the message displayed before starting the "test" mode.

- Connection between the display and the audio unit is made by a VAN type communication connection. Even if one of the three VAN communication connection wires should become inoperative, the connection will remain perfectly operational.

However, if the connection is damaged, this is shown on the display for 2 seconds at the end of the display test.

Change the display if the message **BUS DEGR** appears at A.

**Note :** These tests may be performed whatever the active status of the set (radio, cassette or CD\* player mode).

## AUDIO UNIT TESTS

To initiate the audio unit "test" mode the system must not be operational ("Off").

Press the third pre-selection key 12, then whilst keeping it depressed, switch on the audio unit using key 1.

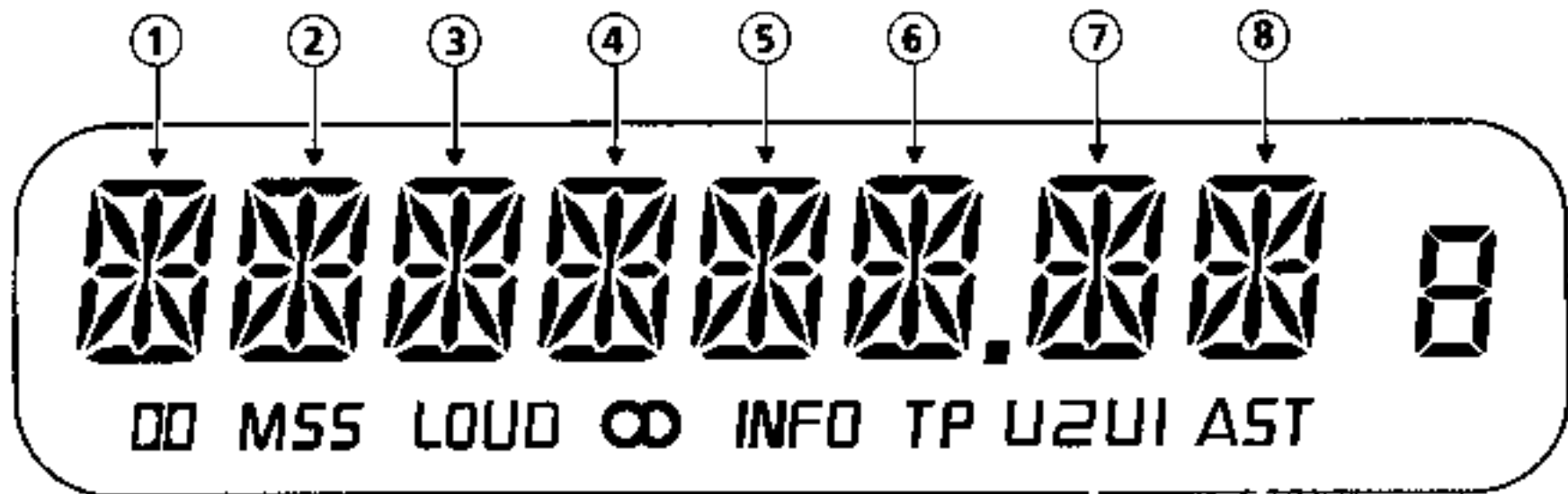
Release key 12.

- First of all a VAN communication connection line test is performed :
  - if a fault is detected on the DATA line, the messages "FALSE" and "T" are displayed alternately,
  - if a fault is detected on the DATA line, the messages "FALSE" and "000" are displayed alternately.

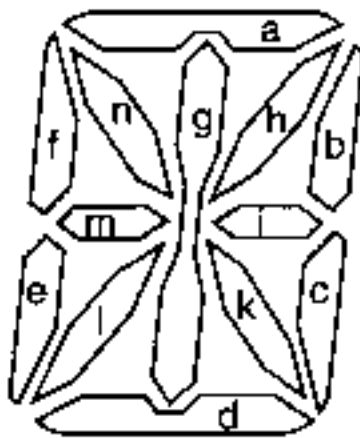
\* depending on option.

- If the VAN communication connection lines are correct, the first test is clear and a test of the audio unit fascia panel then starts.

The message "T - -" is displayed at A to indicate that the system is waiting for one of the keys on the fascia panel to be pressed. For each key pressed, two segments or tell-tales illuminate on the display as shown in the corresponding table of values below.



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#### Table of values

At the end of the test, when all 17 keys on the fascia panel have been pressed, the message "TEST OK" is displayed.

If a fault is detected, the message "FALSE" will be displayed.

To exit "test" mode, switch off the set using the "On/Off" button and then switch it back on again.

Key pressed	Segments and/or tell-tales illuminated
Volume (+)	2a + 6c
Volume (-)	2n + 6h
Search in an upwards direction (>)	2f + 6g
Search in a downwards direction (<)	1b + 6m
Pre-selection 1	1h + 6e
Pre-selection 2	1a + 5c
Pre-selection 3	1n + 8g
Pre-selection 4	1f + 5i
Pre-selection 5	2g + 1P
Pre-selection 6	2m + 6k
ULM/MOD	2e + 6d
INFO	1c + 6l
BASS/TREB	1i + 9e
BAL/FAD	1g + INFO
DX	1m + 8d
LOUD	1e + 5k
MSS/DC I	2d + 7b

## 1. Tuner

- Waveband
  - LW : 531 to 1 602 kHz
  - SW : 144 to 279 kHz
  - FM : 87.5 to 108 MHz
  - AST : 87.5 to 108 MHz
- Intermediate frequency
  - 10.7 MHz in LW - MW and FM
- FM sensitivity
  - 6µV (for S/B 26 dB at 93 MHz)
  - Automatic search at 3 sensitivity levels
  - Autostore search at 3 sensitivity levels (search from the bottom of the waveband)
- I.A.C. system
  - FM interference suppression.
- S.D.S. system
  - Automatic changeover to mono when the signal received by the aerial weakens.
- S.D.R. system
  - Treble frequency cut-off in weak FM ranges.
- M.D.S. system
  - Automatic operation of SDS and SDR circuits if there is multipath distortion.
- M.D.R. system
  - Automatic operation of SDS and SDR circuits if there is multipath distortion.

## 2. "Autoreverse" cassette player

- Soft keys - satellite - Loudness - Autoreverse.
- Tape head
  - "Hard PERMALLOY"
- Tape speed
  - 4.76 cm/s
- Wow and flutter
  - 0.35 % WRMS
- Signal/noise ratio
  - > 43 dB without dolby\*
  - > 51 dB with dolby\* B
- Stereo separation
  - > 24 dB
- MSS system
  - Search for pauses: fast forward/backward search for the beginning of tracks.
- Dolby N.R.\*
  - Type B

## 3. Low frequency amplifier.

- Output (4 Ω : 14,4 V)
  - 4 x 6 W ± 1 dB for D < 10 %
- Frequency response
  - 30 Hz to 15 kHz
- Digital balance
  - Right/Left
- Digital mixer
  - Front/Rear
- Bass correction
  - ⊥ 14 dB at 60 kHz
- Treble correction
  - ⊥ 12 dB at 10 kHz

## 4. CD Player (depending on option)

- 20 bit analogue numerical double converter

\* Registered trademark of Dolby Inc. Laboratories.

## CUSTOMER COMPLAINTS

- 1 - Ignition switched off, the **On/Off** button does not illuminate when the button is pressed or does not illuminate when the ignition key is in the "accessories " position.
- 2 - After pressing the **On/Off** button, the button is illuminated but the display is not ( without the side lights switched on).
- 3 - The display illuminates and continues to show the message "**CODE**".
- 4 - The display illuminates, briefly shows the message "**CODE**" then shows four zeros with the first figure flashing.
- 5 - When switching on the set using the **On/Off** button the display illuminates, displays a frequency, but there is no reception.
- 6 - Everything is operational before the vehicle lights are switched on but as soon as they are switched on the radio remote display is extinguished.
- 7 - The keys on the audio unit do not illuminate when the side lights are switched on (only the **On/Off** button is illuminated).

With the ignition off, the On/Off button does not illuminate when pressed

or

With the ignition key in the "accessories", position the On/Off button does not illuminate.

Check :

- the two 15 Amp fuses located on the passenger compartment fuse board (see M.R. 312) Change the fuses, if necessary.
- the audio unit feed :
  - . earth
  - . + permanent
  - . + after ignition

If the button still does not illuminate, follow the repair procedure shown on the "fault-finding card".

After pressing the **On/Off** button the button illuminates but the display is not illuminated (side lights switched off)

Check that the display is compatible with the audio unit.

Check the condition of the two display bulbs.

incorrect

Change the bulbs.

correct

Check the connection of the connector **D** at the back of the audio unit and the condition of the connections (see section on "**Connections**").

incorrect

Repair.

correct

Check the connection of the blue connector at the back of the display and the condition of the connections.

incorrect

Repair.

correct

Check continuity of the lines :

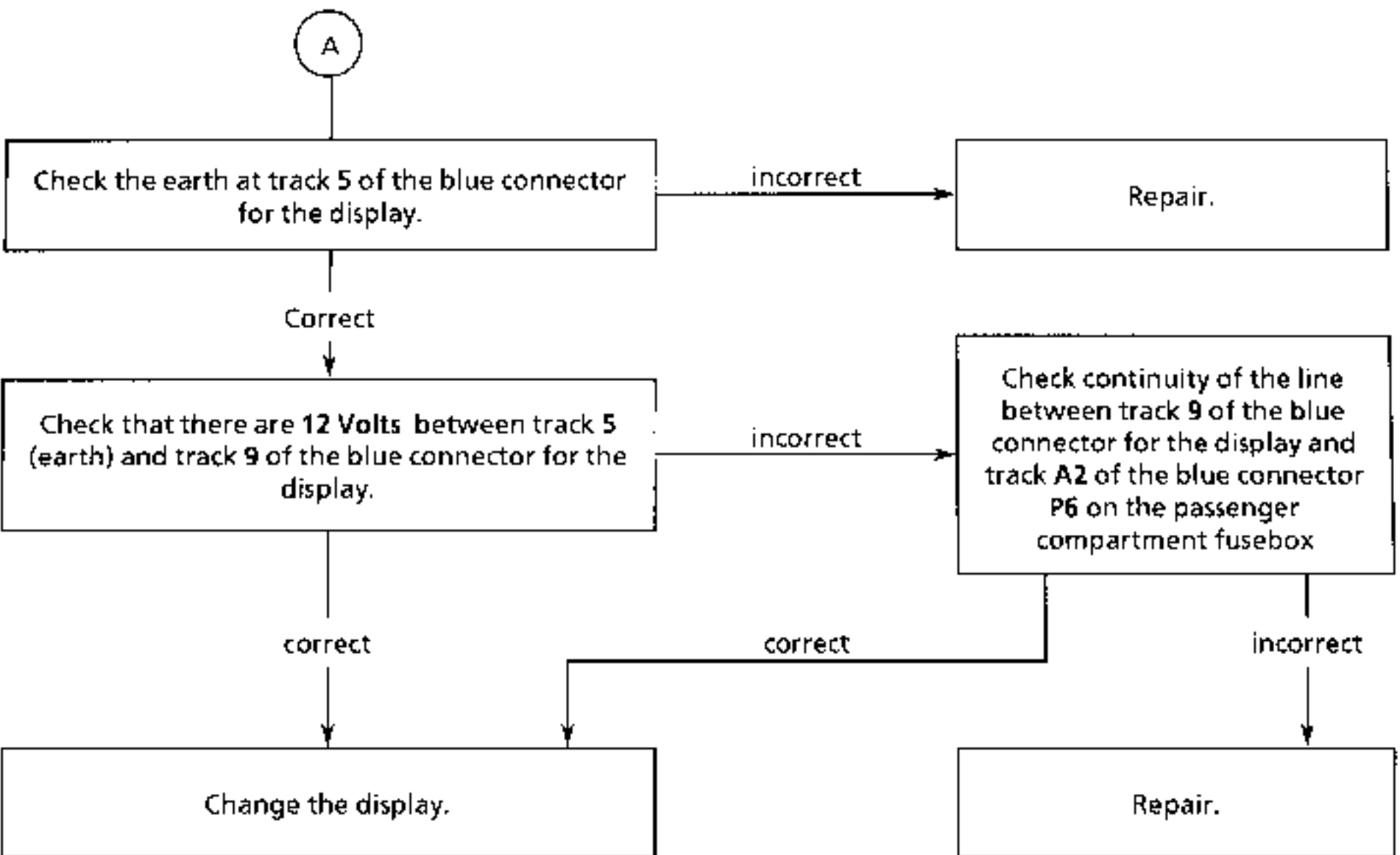
- between track 3 of the blue connector for the display and track 2 of connector **D** at the back of the audio unit,
- and
- between track 4 of the blue connector for the display and track 3 of connector **D** for the audio unit.

incorrect

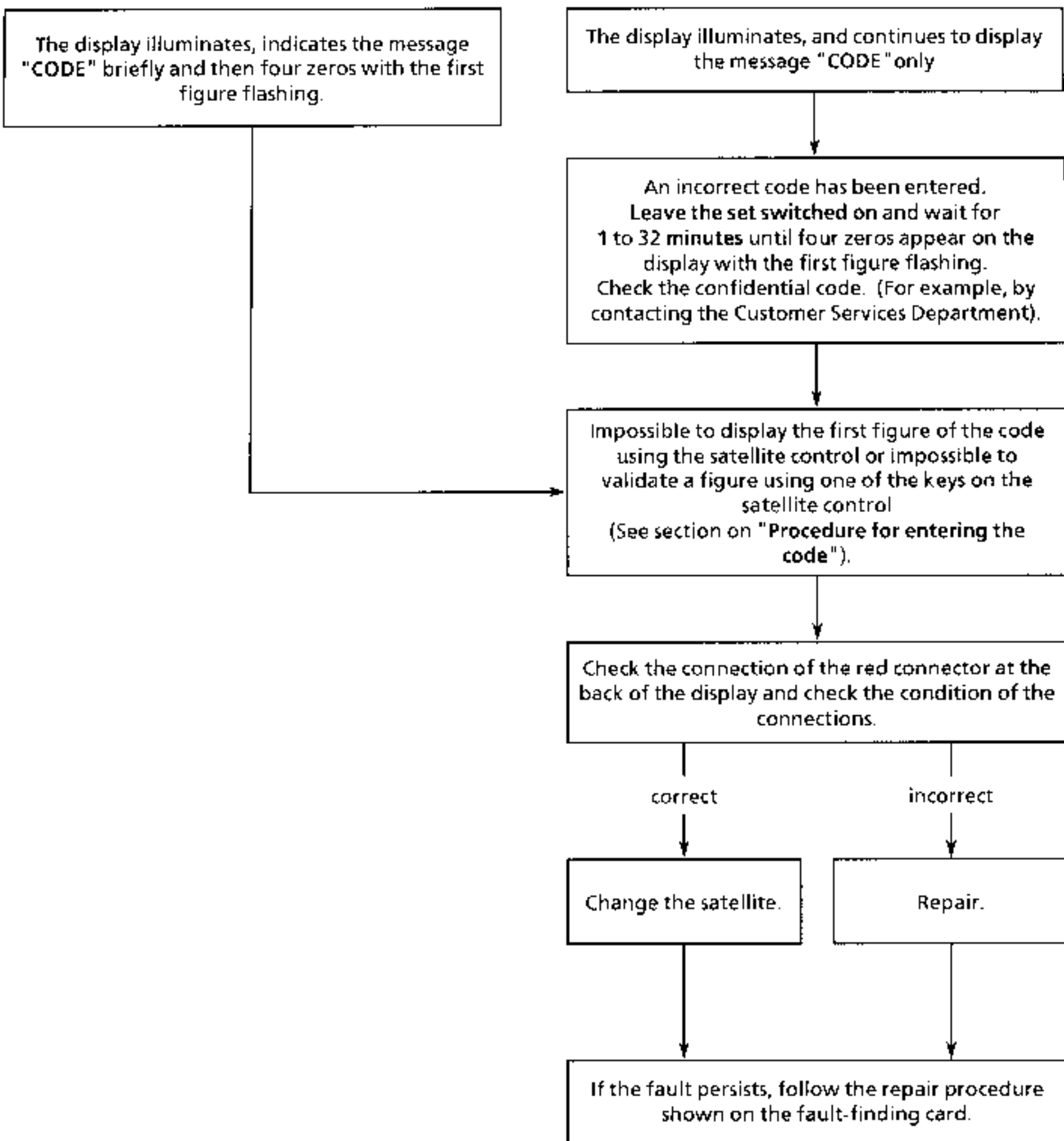
Repair.

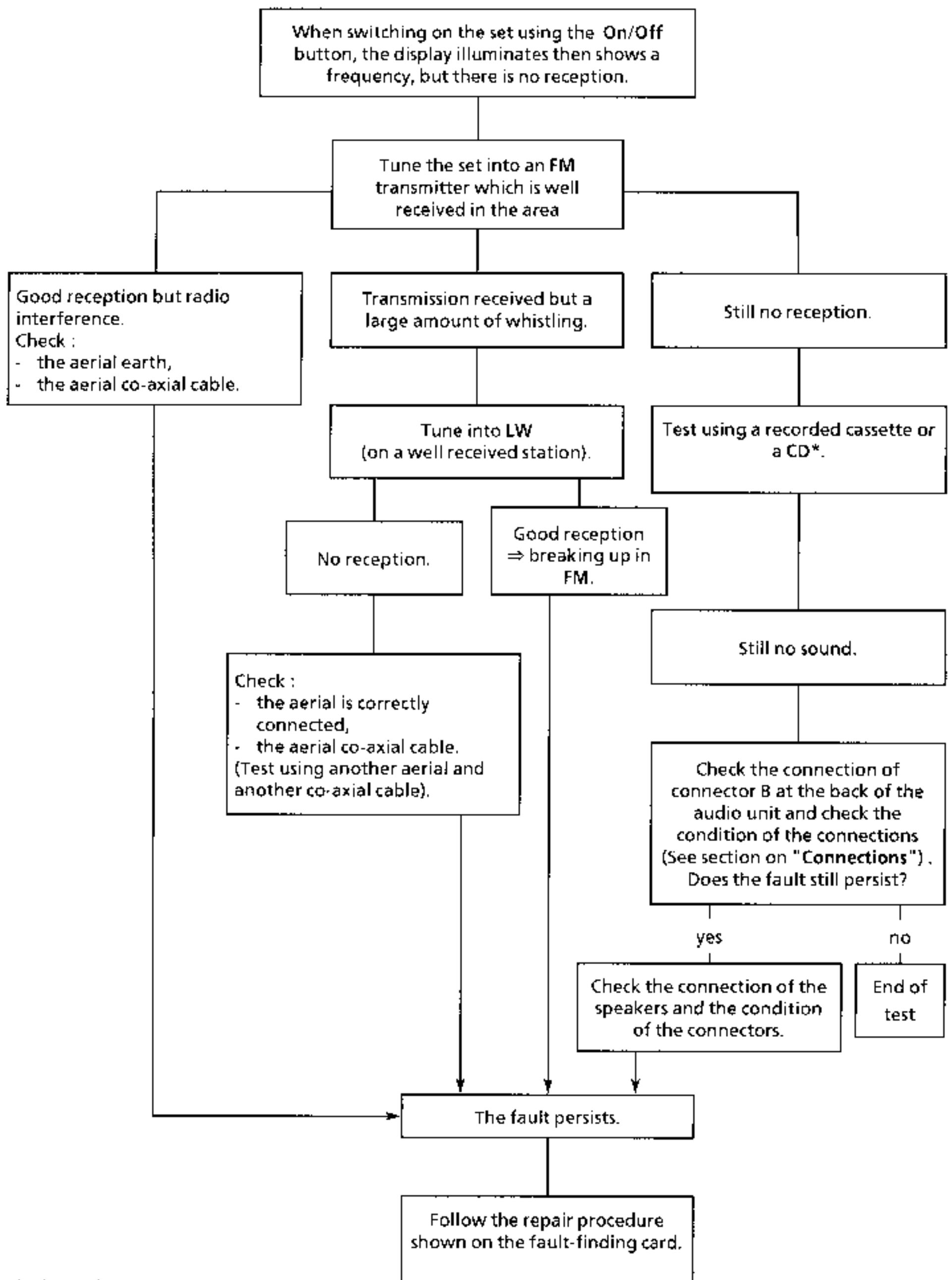
correct

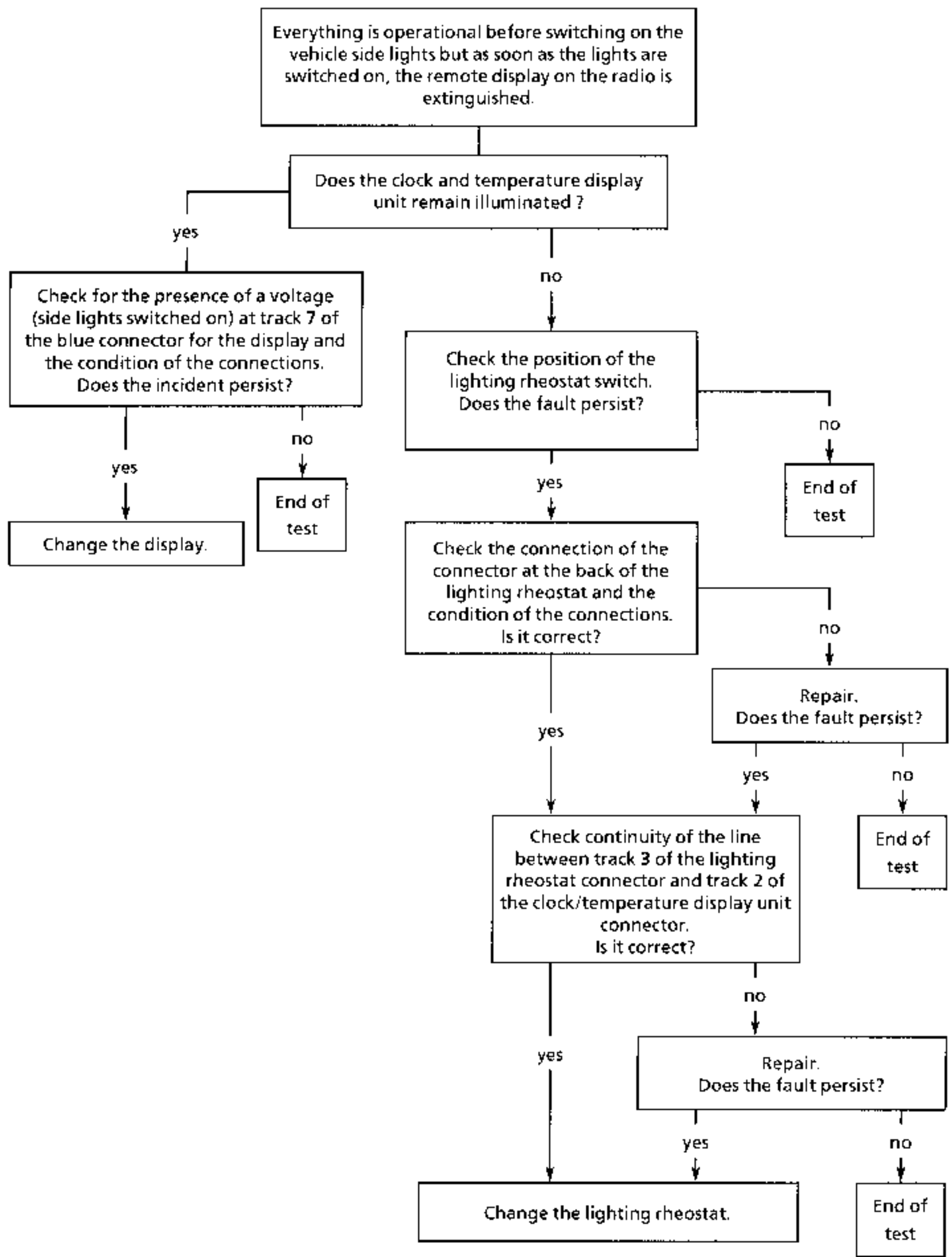
A

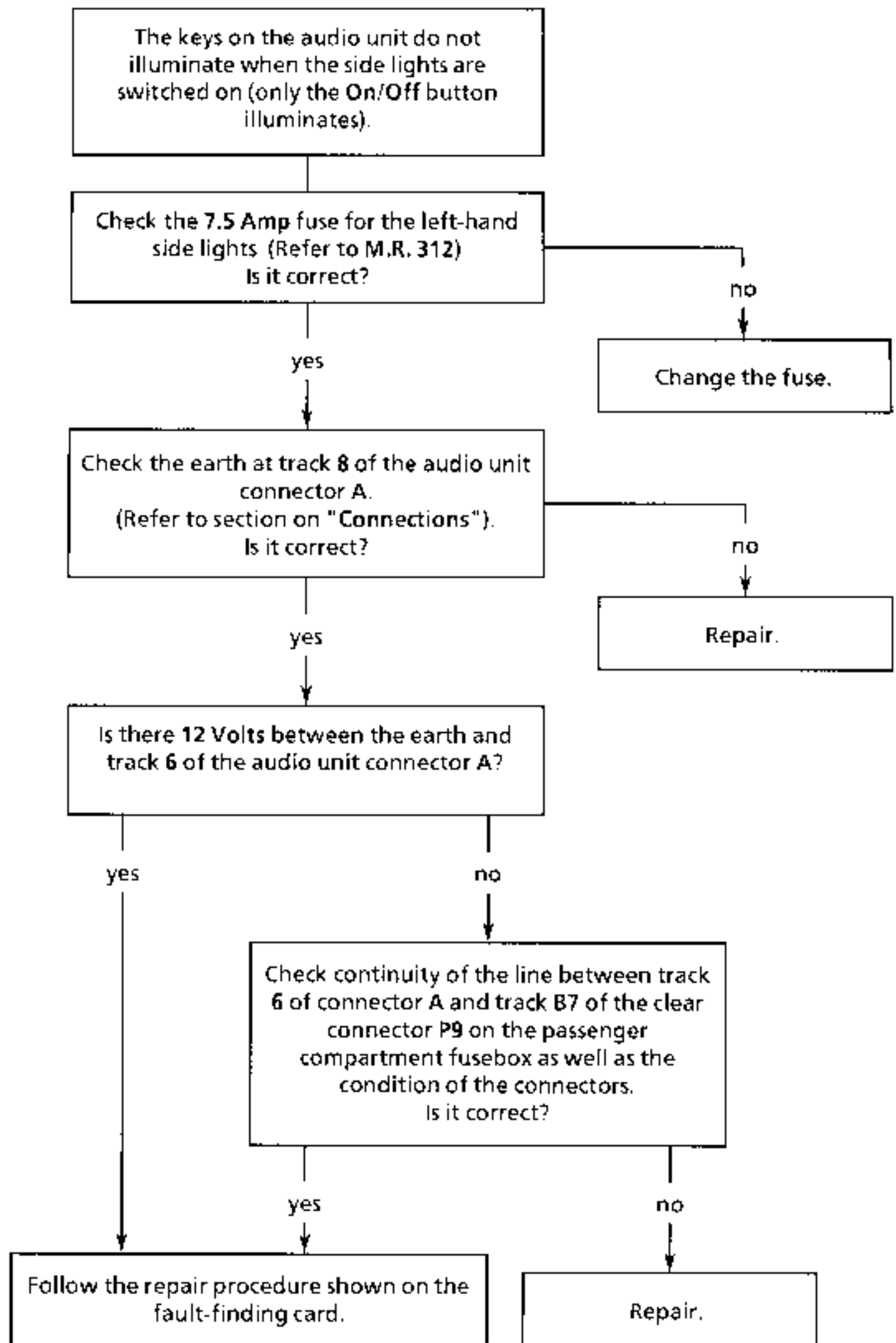












**THIS SHEET MUST BE ATTACHED TO THE RADIO SET  
MANDATORY FOR APPLICATION OF THE WARRANTY**


**FAULT-FINDING SHEET : RADIO - DISPLAY - CD PLAYER**

DEALER : ..... TEL : ..... FAX : .....

ADDRESS : .....

CONTACT NAME : .....

FULL PARTS DESTINATION CODE N° : ..... Date : ... / ... / ...

VEHICLE : Type ..... Fabrication N° (  ) Delivery date : ... / ... / ...

RADIO : Make : ..... Manufacturer Code (\*) or Type (\*) : .....

CODE : ..... Serial N° (\*) : .....

WARRANTY : YES/ NO (Only answer YES if it is contractual warranty)

CUSTOMER COMPLAINT : .....

**WORKSHOP DIAGNOSIS**

GENERAL ☐ Does not switch on ☐ No sound or weak sound  
☐ Security code rejected (have you checked the code through Customer Services Department?)

**MEGANE :** The security code can only be entered by using the satellite control

RADIO ☐ Poor reception in : ☐ FM ☐ FM RDS ☐ LW ☐ MW  
☐ Interference : ☐ FM ☐ FM RDS ☐ LW ☐ SW ☐ Engine ☐ Running ☐ Stopped

Specify circumstances : .....

☐ Key : ..... not working

CASSETTE ☐ Insertion ☐ Ejection difficult or impossible

☐ Poor sound

☐ Damages the tape

☐ Auto-reverse broken

☐ Poor tape winding (wow)

☐ Key : ..... not working

C.D. ☐ Insertion ☐ Ejection difficult or impossible

☐ No sound

☐ Key : ..... not working

AMPLI. ☐ Balance not working ☐ Front/Rear ☐ Left/Right  
☐ Speaker not working ☐ Front Left ☐ Front Right  
☐ Rear Left ☐ Rear Right  
☐ Equaliser not working ☐ Loudness ☐ Bass ☐ Treble  
(Check socket switch)

DISPLAY ☐ Does not illuminate ☐ Display fault ☐ Clock / Temperature

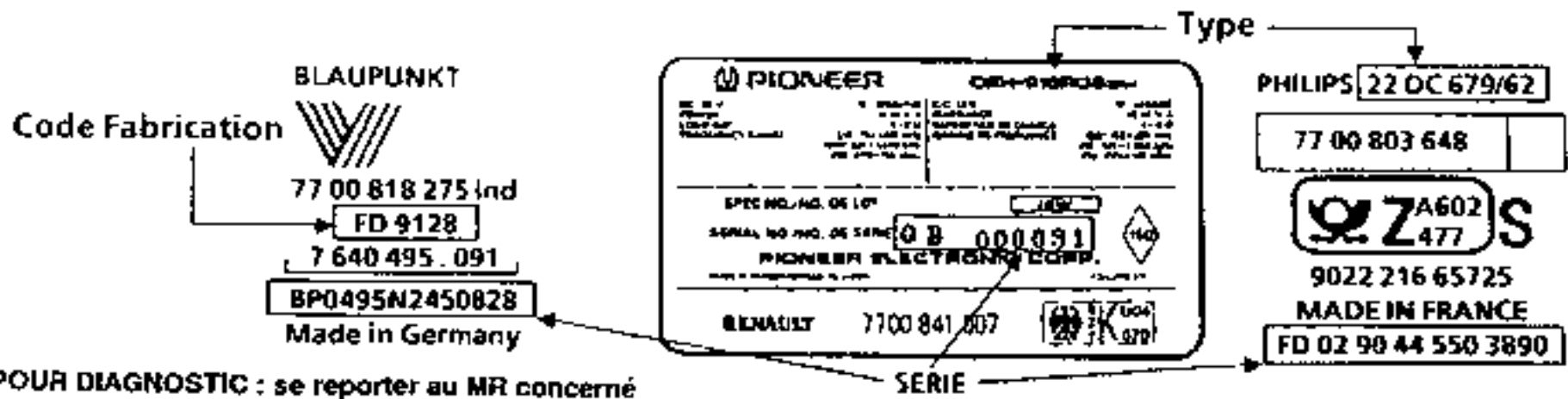
SATELLITE ☐ No satellite operation. Does the set work with satellite disconnected? ☐ Yes ☐ No

DETAIL ANY OTHER FAULTS : .....

(\*) Look for type and serial n°

STAMP

# IDENTIFICATION



POUR DIAGNOSTIC : se reporter au MR concerné  
PROCEDURE GARANTIE VOIR : DTG - 8/3 - 8/4 - 8/5 - 8/6.

PRM8602