Relay panel indicated by grey area.

WIRING COLOR CODE
ws = white
sw = black
ro = red
br = brown
gn = green
bl = blue
gr = grey
li = lilac
ge = yellow

Consumer circuit with wire routing
All switches and contacts are shown in the "off" position.

Vehicle ground
Numbers in circle indicate location on vehicle (see legend).

Current track number
Makes it easier to find the connections.

Legend
In all wiring diagrams the same component designation (code) is used for a particular component; for example, always A for battery.

A - Battery
B - Starter
C - Generator (GEN)
C1 - Voltage Regulator (VR)
D - Ignition/Starter Switch
S162 - Fuse -1- (30) in fuse bracket / battery
S163 - Fuse -2- (30) in fuse bracket / battery
T4e - 4-Pin Connector, on transmission
T10a - 10-Pin Connector, on protective housing for control module, in engine compartment, left
  1 - Ground strap, battery to body
  2 - Ground strap, transmission to body
  500 - Screw connection -1- (30), on relay panel
1 - **Relay location number**
Indicates location on relay panel.

2 - **Arrow**
Indicates wiring circuit is continued on the previous and/or next page.

3 - **Connection designation - relay control module on relay panel**
Shows the individual terminals in a multi-point connector.
For example: contact 24 on terminal 4 on relay panel.

4 - **Diagram of threaded pin on relay panel**
White circle shows a detachable connection.

5 - **Fuse designation**
For example: S228 = Fuse number 28, 15 amps, in fuse holder

6 - **Reference of wire continuation (current track number)**
Number in frame indicates current track where wire is continued.

7 - **Wire connection designation in wiring harness**
Location of wire connections are indicated in the legend.

8 - **Terminal designation**
Designation which appears on actual component and/or terminal number of a multi-point connector.

9 - **Ground connection designation in wire harness**
Locations of ground connections are indicated in legend.

10 - **Component designation**
Use legend at bottom of page to identify the component code.

11 - **Component symbols (see page IV - VI)**

12 - **Wire cross-section size (in mm²) and wire colors**
Abbreviations are explaining in color chart beside the wiring diagram.

13 - **Component symbol with open drawing side**
Indicated component is continued on another wiring diagram. The number of corresponding wiring diagram can taken from list of contents.

14 - **Internal connections (thin lines)**
These connections are **not** wires. Internal connections are current carrying and are listed to allow tracing of current flow inside components and wiring harness.

15 - **Reference of continuation of wire to component**
For example: Control module for anti-theft immobilizer J 362 on 6-Pin Connector, terminal 2

16 - **Relay panel connectors**
Shows wiring of multi-point or single connectors on relay panel
For example: S3/3 - Multi-point connector S3, terminal 3

17 - **Reference of internal connection continuation**
Letters indicate where connection continues on the previous and/or next page.
Symbols used in wiring diagrams

- **Fuse**
- **Thermo-fuse** (Circuit Breaker)
- **Battery**
- **Starter**
- **Generator (GEN)**
- **Ignition Coil**
- **Distributor (electronic)**
- **Spark plug connector and plug**
- **Glow plug**
- **Heater element**
- **Switch (manually operated)**
- **Switch (thermally operated)**
- **Push button switch (manually operated)**
- **Switch (mechanically operated)**
- **Switch (pressure operated)**
- **Multiple switch (manually operated)**
- **Variable resistor (Rheostat)**
- **Resistor temperature dependent**
- **Relay temperature dependent**
- **Relay**

97-12201
Symbols used in wiring diagrams

- **Diode**
- **Zener diode**
- **Diode, light sensitiv**
- **Light bulb**
- **Light bulb, (dual filament)**
- **LED**
- **Interior light**
- **Instrument (Gauge)**
- **Electronic control module**
- **Rear window defogger heat element**
- **Cigarette lighter**
- **Solenoid valve**
- **Magnetic clutch**
- **Wire connector**
- **Pin connector**
- **Multi-point connector at component**
- **Internal connections in component**
- **Wire connection detachable**
- **Wire connection fixed**
- **Wire connection in wiring harness**
- **Resistance wire**
- **Shield wire**

97-08153
Symbols used in wiring diagrams

- Control motor, headlight range adjustment
- Motor
- Wiper motor 2-speed
- Crankshaft position sensor (CKP)
- Knock sensor (KS)
- Analog clock
- Digital clock
- Multi-function indicator
- Airbag spiral spring
- Speed sensor
- Horn
- Speaker
- Antenna with electronic antenna amplifier
- Radio
- Heated oxygen sensor
Starting with the reported problem, troubleshooting procedures show step-by-step what is checked and how it is checked in order to find the problem in the quickest and most reliable way. If several causes (of a problem) are possible in one system, a test procedure is used for diagnosis.

**Structure of a Test step:**

<table>
<thead>
<tr>
<th>What is checked (assumed problem)</th>
<th>How is it checked</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cause of problem/repair instructions  

To next test

**Example of a troubleshooting procedure:**

Open circuit in relay panel between connector terminals A4 and D2  
- Connect terminal D2 of multi-point connector to ground using Connector Test Kit VW 1594

<table>
<thead>
<tr>
<th>Test results</th>
<th>Cause of problem/repair instructions</th>
<th>To next test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warning lamp lights</td>
<td>Replace relay panel</td>
<td></td>
</tr>
<tr>
<td>Warning lamp does not light</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To next test