

37 Integrated Suspension Systems

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ELECTRONIC ABSORBER CONTROL EDC III

Program versions "Sport" (S) or "Comfort" (K) can be selected with the program button.

Suspension is adjusted automatically between medium and hard for (S) or soft, medium and hard for (K) depending on driving conditions. The system tests itself after switching on the ignition.

If the system is okay, a control lamp corresponding with the selected program will light up in the program button.

Solenoid valves on the shock absorbers are activated by the control unit and adapt the absorbing force to the driving conditions. For this purpose the control unit processes electronic speed signals and signals from the following components.

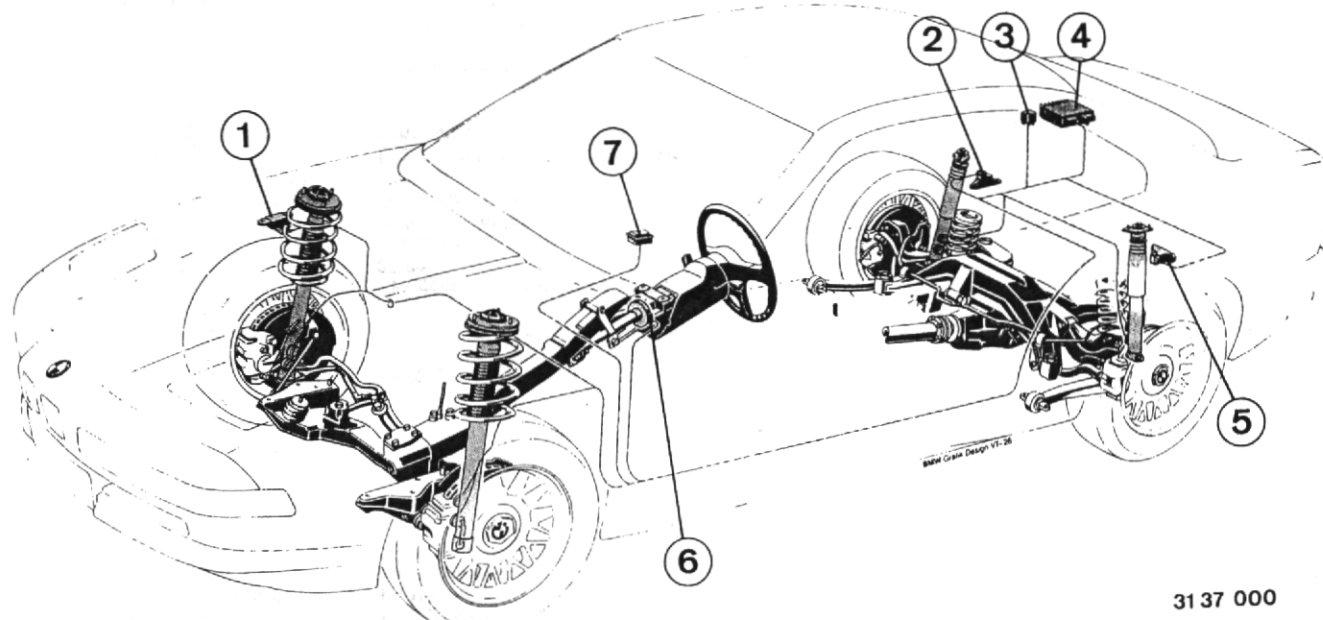
Front body acceleration sensor, rear body acceleration sensor, axial acceleration sensor, steering angle sensor and road speed signal.

GENERAL INFORMATION ON EDC

- EDC III is protected with fuse no. 32.
- Covers on the solenoid valves must not be opened.
- Shock absorbers must not be placed on solenoid valves or their connections.
- Shock absorbers may only be stored standing upright.
- Recommendation: only replace both shock absorbers of one axle.
- Fault memory must be cancelled with the BMW diagnosing system after elimination of faults and disconnection of electric connections with the ignition switched on.
- Steering angle offset must be performed with the BMW diagnosing system according to instructions in the EDC III diagnosis test program after working on the steering.
- Troubleshooting - see Car Electric/Electronic Test Plan of Gr. 37.

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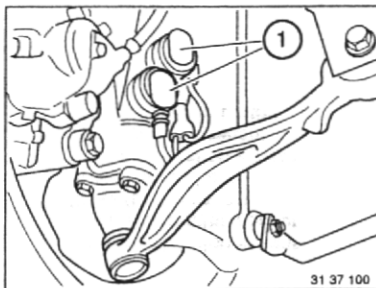
EDC III LAYOUT IN 850 I MODEL



31 37 000

- 1 Body acceleration sensor
- 2 Body acceleration sensor
- 3 Relay (power saver)
- 4 EDC III control unit
- 5 Axial acceleration sensor
- 6 Steering angle sensor
- 7 EDC III program button

37-15/1



31 31 ... REMOVING AND INSTALLING OR REPLACING FRONT SHOCK ABSORBER (EDC)

See general information on EDC, page 37-00/1.

1 = Solenoid valves

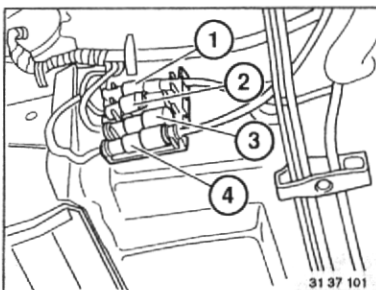
Switch off Ignition.

Disconnect plugs.

Location:

Firewall left/right front outside behind a cover.

Other steps – see Group 31.



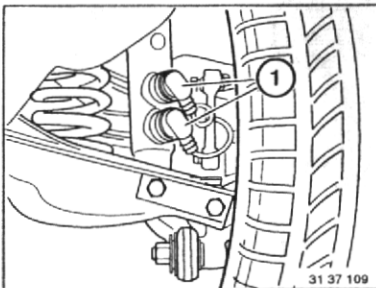
Remove cover – see Group 51.

1 = ABS plug (white)

2 = Not used

3 = Not used

4 = EDC plug



33 52 ... REMOVING AND INSTALLING OR REPLACING REAR SHOCK ABSORBER (EDC)

See general information on EDC, page 37-00/1.

1 = Solenoid valves

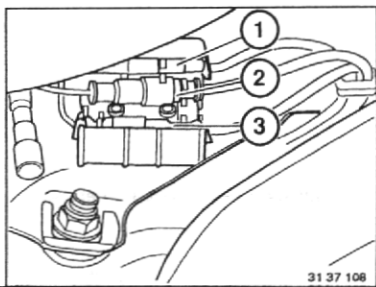
Switch off Ignition.

Disconnect plugs.

Location:

Protection box on rear axle carrier.

Other steps – see Group 33.



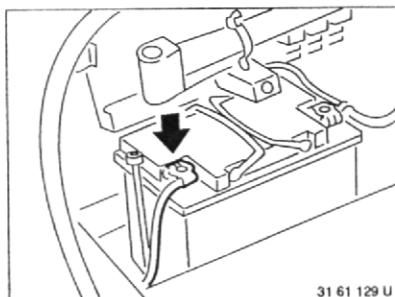
Open protection box.

1 = Brake pad wear Indicator

2 = EDC plug

3 = ABS plug

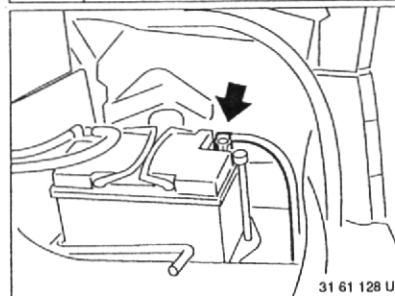
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32 31 ... REMOVING AND INSTALLING OR REPLACING STEERING ANGLE SENSOR

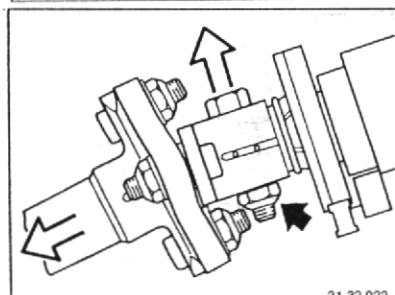
Disconnect battery ground leads.

Location:
Left rear in trunk.



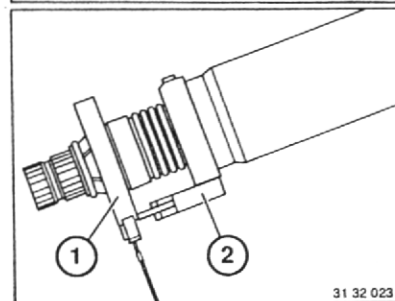
Location:
Right rear in trunk.

Remove dashboard trim panel at bot-
tom – see Group 51.



Remove bolt.
Press down on steering spindle.

Installation:
Bolt must be located in locking groove
of the steering spindle.
Replace self-locking nut.
Tightening torque*.



Pull steering angle sensor (1) off of the
steering spindle.

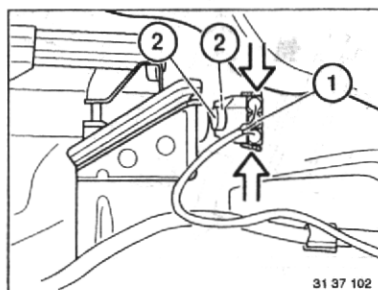
Installation:
Pin of steering angle sensor (1) must
fit in turning lock (2).

* See Specifications

37 15 ... REMOVING AND INSTALLING
AXIAL ACCELERATION
SENSOR

See general information on EDC, page
37-00/1.

Location:
Inside of left rear wheel house, in front
of car jack mounting point.



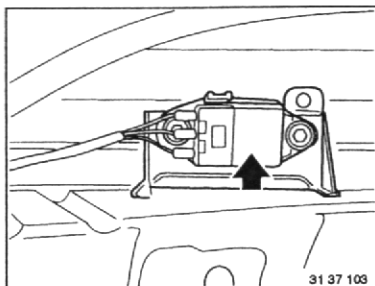
Switch off ignition.
Disconnect plug.
Unscrew screws.

Installation:
Tightening torque = 6.5 Nm (4.7 ft. lbs.).

Pin Connections:
31 = Ground
15 = + 11.8 V
A = Signal

Note:
Remove road speed sensor – see
Group 62.

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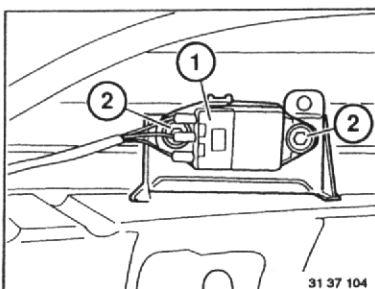


37 15 ... REMOVING AND INSTALLING FRONT BODY ACCELERATION SENSOR

See general information on EDC, page 37-00/1.

Location:
In right wheel house.

Remove cover – see Group 51.



Switch off ignition.
Disconnect plug (1).
Unscrew screws (2).

Installation:
Tightening torque = 6.5 Nm (4.7 ft. lbs.).

Pin Connections:
31 = Ground
15 = > 11.8 V
A = Signal

37 15 ... REMOVING AND INSTALLING
REAR BODY ACCELERATION SENSOR

See general information on EDC, page 37-00/1.

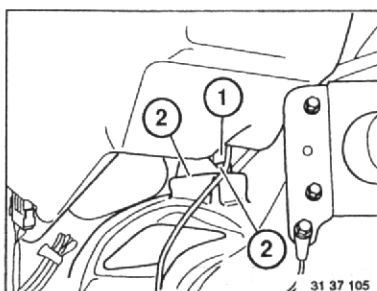
Location:
Inside of right wheel house, in front of spring strut shell.

Remove cover – see Group 51.
Remove loudspeaker – see Group 65.

Switch off ignition.
Disconnect plug (1).
Unscrew screws (2).

Installation:
Tightening torque = 6.5 Nm (4.7 ft. lbs.).

Pin Connections:
31 = Ground
15 = > 11.8 V
A = Signal

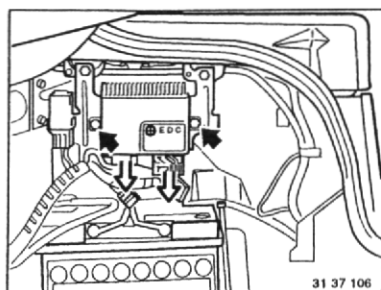


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37 15 ... REMOVING AND INSTALLING CONTROL UNIT

See general information on EDC, page
37-00/1.

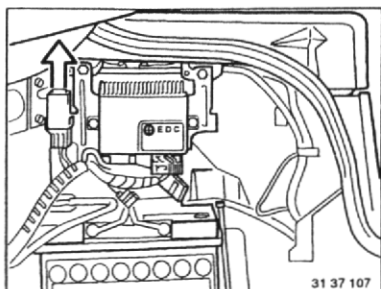
Location:
In trunk at right rear, behind trim panel.



Switch off Ignition.
Pull off plug.
Unscrew nuts.

1 = Power saving relay
2 = EDC III control unit

Note:
Troubleshoot – see Car Electric/Elec-
tronic Test Plan, Group 37.



Pull off power saving relay.