

MULTI-INFORMATION DISPLAY (MID)

Several different versions of the Multi-Information Display, have been installed in E36 cars. The top-of-the-line model is called the On-Board Computer. See Fig. 8.

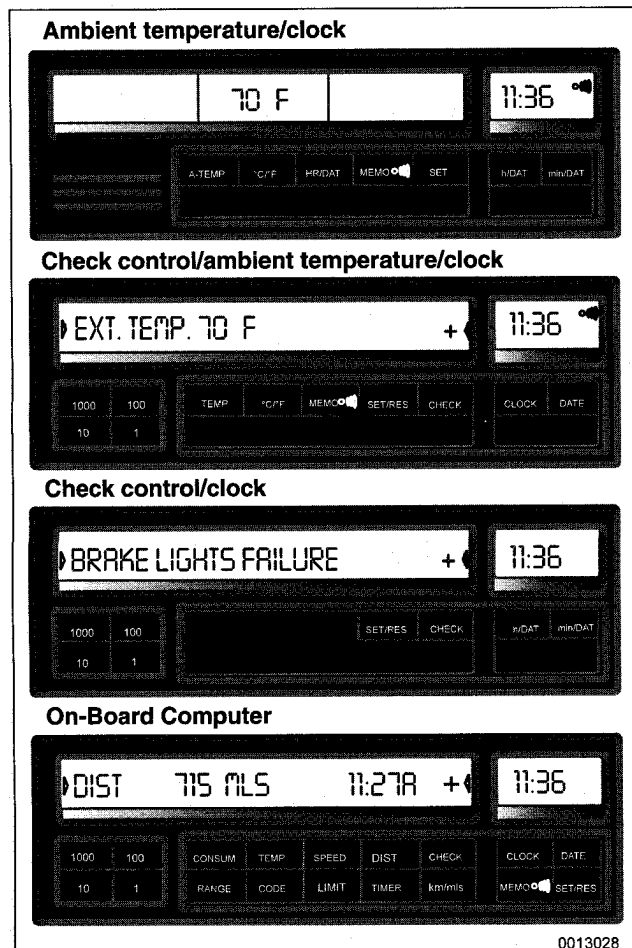


Fig. 8. Different versions of Multi-Information Display (MID) installed in E36 cars.

Multi-Information Display, removing and installing

The Multi-Information Display (MID) is illuminated by bulbs. It must be removed to replace the bulbs. Bulb replacement is included in this procedure.

1. Remove dashboard parcel shelf. Reach under MID module and push outward. See Fig. 9.
2. Slide harness retaining lever forward to release MID from wiring harness. See Fig. 10.
3. To remove a faulty bulb, use a narrow screwdriver to turn bulb base 45° counter clockwise. See Fig. 11.

MULTI-INFORMATION DISPLAY (MID)

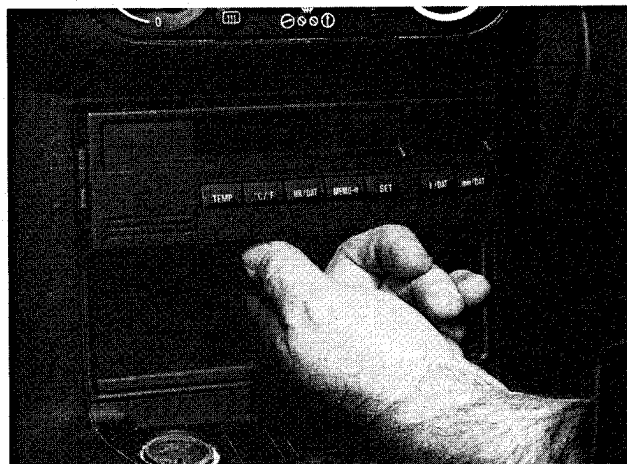


Fig. 9. Removing the Multi-Information Display (MID) module.

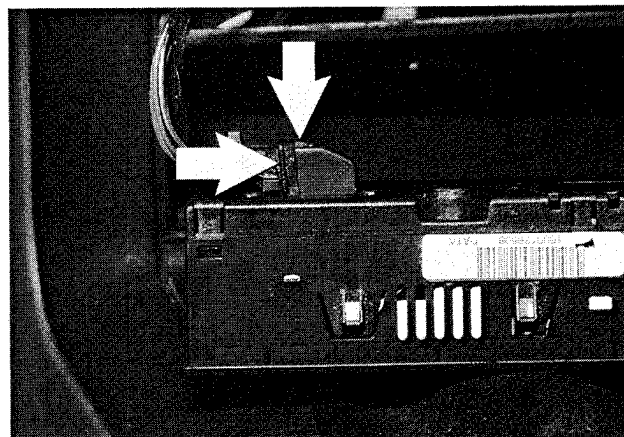


Fig. 10. MID wiring harness release lever (arrows).

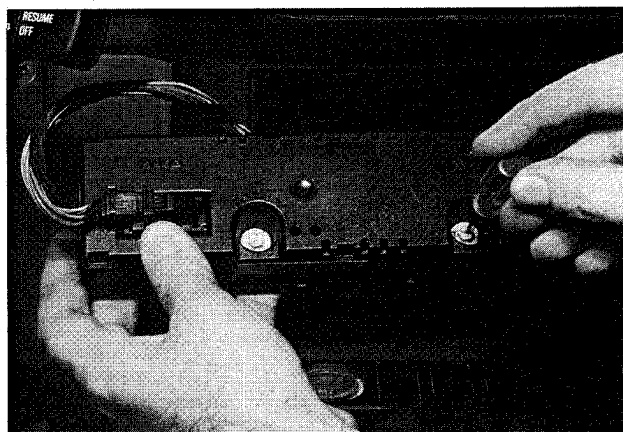


Fig. 11. Turn bulb base 45° counterclockwise.

4. Installation is reverse of removal.



3. Break open plastic retainer in back of instrument cluster and remove coding plug. See Fig. 5.

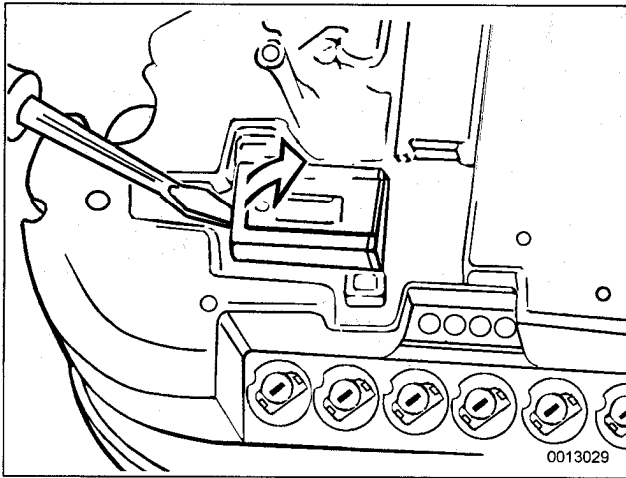


Fig. 5. Remove coding plug retainer with a screwdriver (arrow).

4. Install coding plug and new retainer. Reinstall instrument cluster.
5. Reset vehicle mileage.

NOTE —

Consult an authorized BMW dealer service department about resetting vehicle mileage using the special BMW Service tester.

Vehicle speed sender, replacing

The vehicle speed sender supplies an electronic pulsed speed signal to the speedometer. The sender is mounted beneath the rear of the car, on the differential cover plate.

NOTE —

If the speedometer is malfunctioning, check the vehicle speed sensor harness connector on the rear differential. Water damage, frayed wires and corrosion of the connector contacts are often the cause of speedometer malfunction.

1. Locate vehicle speed sender electrical connector at back of differential. Depress retaining levers on connector and remove. See Fig. 6.

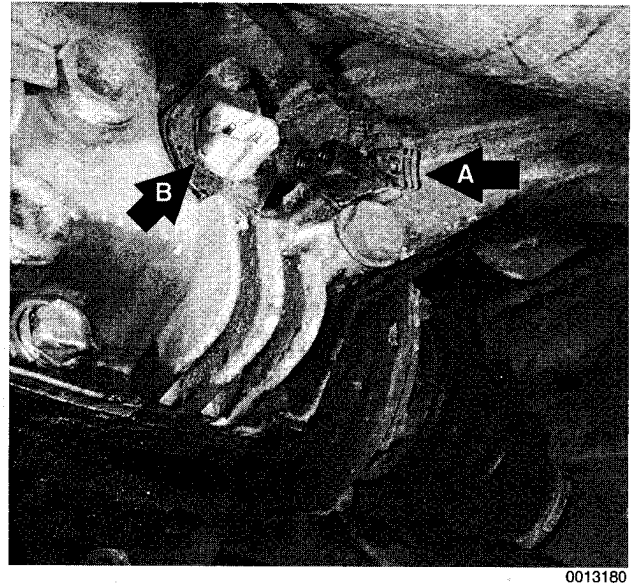


Fig. 6. Vehicle speed sender harness connector (A) and sender (B).

2. Remove vehicle speed sender retaining screws and remove sender from differential cover.
3. On installation, replace O-ring and coat with oil (90W). See Fig. 7.

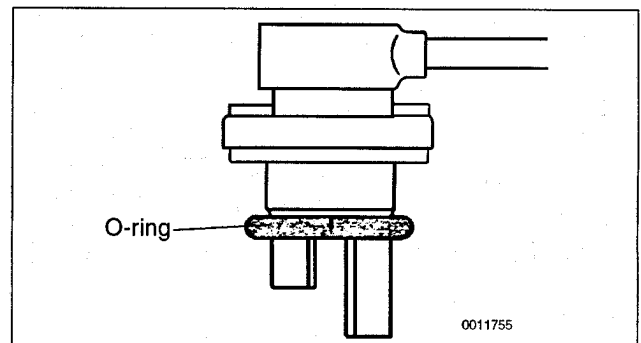


Fig. 7. O-ring correctly installed on vehicle speed sender.

4. Install sender into differential and tighten mounting bolts evenly in stages until the sender is firmly seated.

Tightening Torque

- Vehicle speed sender to differential cover 6.6-8.4 Nm (53-74 in-lb)

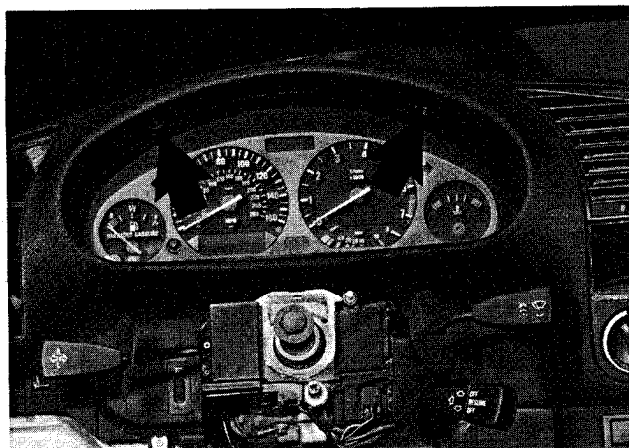


Fig. 1. Instrument cluster retaining screws (arrows).

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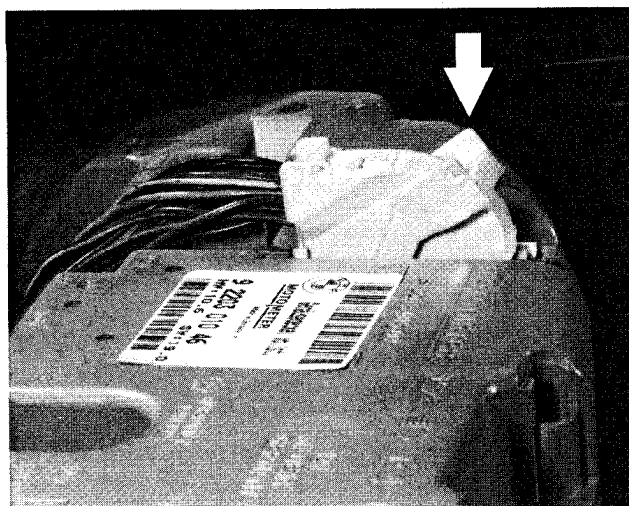


Fig. 2. Instrument cluster connector locking lever (arrow).

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6. Installation is reverse of removal, noting the following:

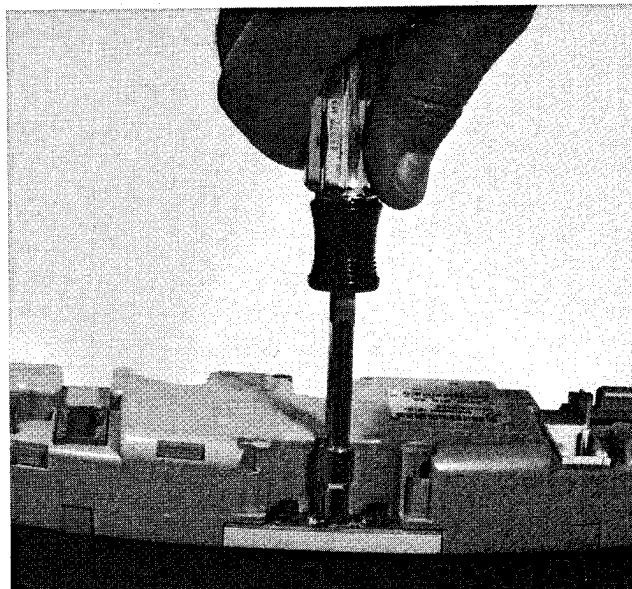
- Instrument cluster harness connector locking levers must be in up position before installing connector.
- Install airbag to steering wheel as described in **721 Airbag System (SRS)**.
- Reconnect negative (–) cable to battery last, once all harness connectors have been reconnected.
- Recode cluster as described in **Instrument cluster, self-testing**.

Instrument cluster bulbs, replacing

1. Remove instrument cluster as described above.
2. Remove faulty bulb by turning bulb base 45° in its mount and remove from housing. See Fig. 3.

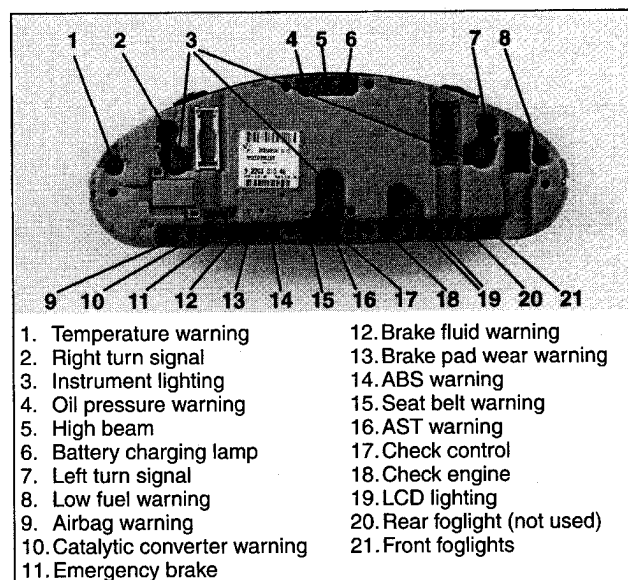
The back of the instrument cluster and its bulb locations are shown in Fig. 4.

INSTRUMENT CLUSTER



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Fig. 3. Turn bulb base 45° in direction shown (arrow).



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Fig. 4. Bulb designation chart.

CAUTION —

Note wattage of bulb. Excessive wattage could melt cluster housing. Replace defective bulbs with replacement bulbs of the same wattage.

Odometer coding plug, replacing

The coding plug maintains a record of the vehicle mileage.

1. Record vehicle mileage.
2. Remove instrument cluster as described earlier.

620 Instruments

GENERAL	620-1	Odometer coding plug, replacing	620-2
INSTRUMENT CLUSTER	620-1	Vehicle speed sender, replacing	620-3
Instrument cluster, self-testing	620-1	MULTI-INFORMATION DISPLAY (MID) ...	620-4
Instrument cluster, removing and installing. . .	620-1	Multi-Information Display,	
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GENERAL

This repair group covers removal and installation of the instrument cluster and the Multi-information Display (MID) module. Bulb replacement information for these units is also included here.

NOTE —

A quick check of the temperature gauge and its electrical circuit is given in **170 Radiator and Cooling System**. Use this procedure to diagnose a faulty temperature gauge

INSTRUMENT CLUSTER

When servicing the instrument cluster, always disconnect the negative (–) cable from the battery and insulate the cable end to prevent accidental re-connection.

Instrument cluster, self-testing

Several different versions of the basic instrument cluster have been fitted in E36 cars. It is possible to perform an instrument cluster test and display system test information.

Some of the information displayed by the instrument cluster during self-testing is used for internal BMW organization purposes, such as matching the correct instrument cluster components during parts replacement. Other functions test the various instrument modules. Self-test is also used to recode the instrument cluster after removal.

In later production vehicles (1996 and later) the test results can be downloaded, via the diagnostic plug, by an authorized BMW dealer technician.

1. Turn ignition to "radio" position.
2. Press and hold reset button on trip-odometer until trip-odometer display shows numerical codes.

3. With each subsequent press of the button, a different function is tested. Some functions will activate needle gauges.

4. Turn off ignition.

Instrument cluster, removing and installing

1. Disconnect negative (–) cable from battery and cover terminal with insulating material.

CAUTION —

Prior to disconnecting the battery, read the battery disconnection cautions given at the front of this manual on page viii.

2. Remove airbag unit from steering wheel. See **721 Airbag System (SRS)**. Store unit in a safe place.

WARNING —

The airbag is an explosive device and should be treated with extreme caution. Improper handling of the airbag could cause serious injury or death. Store the airbag with the horn pad facing up. If stored facing down, accidental deployment could propel it violently into the air, causing injury.

3. With front wheels pointed straight ahead, remove steering wheel. See **320 Steering and Wheel Alignment**.
4. Remove instrument cluster retaining screws. See Fig. 1.
5. Place a towel over steering column. Carefully tilt top of cluster out of dash panel. Unlock and disconnect harness connectors from back of cluster. See Fig. 2.

INSTRUMENT CLUSTER