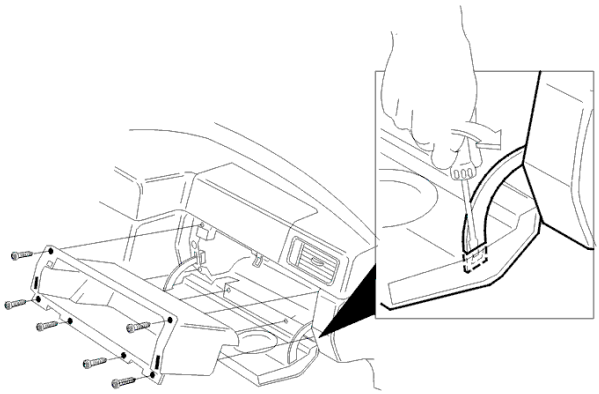
Combined instrument panel

Expose combined instrument panel

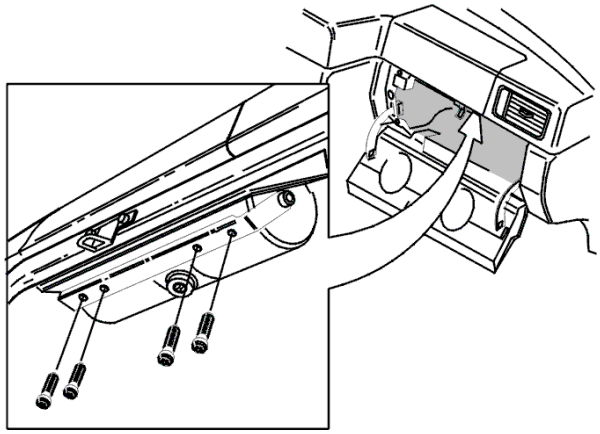
Warning! The car has SRS (Supplemental Restraint System) on both driver's and passenger sides and must be handled carefully when carrying out repairs. This is to help prevent: 1. Personal injury when carrying out repairs. 2. Damage to the SRS-system or malfunction. Work on the SRS system or components related to the SRS-system must be carried out by an authorized Volvo workshop. Read Section 88 SRS if in doubt.

- Disconnect battery negative lead.

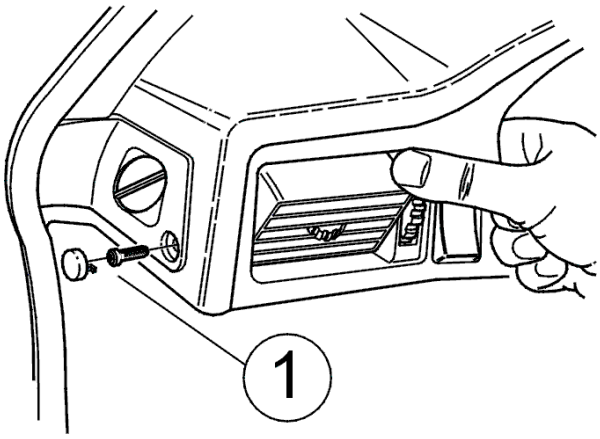
Removing panel



- Disconnect glove compartment lid arms.
- Remove 6 glove compartment screws and pull out glove compartment.

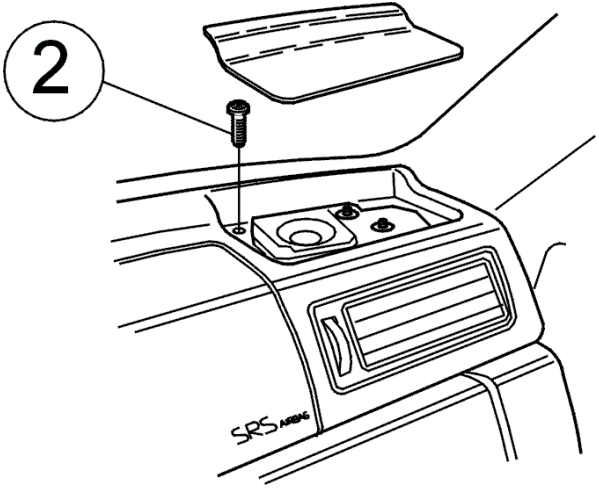


- If there is a passenger airbag module, remove the 4 airbag module mounting screws.
- Disconnect airbag module connector.



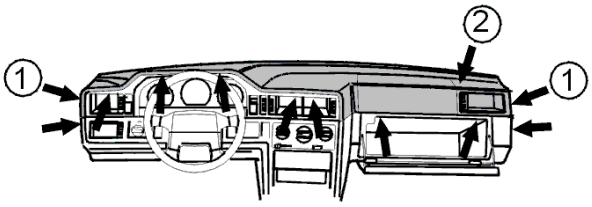
- Remove side defroster vent blind cover plugs and screws.
- Remove dashboard vents as follows: turn down and pull out or carefully pry them out at the side with a screwdriver and pull out. On the right the vent and air duct must be removed.

- Remove loudspeaker grilles on both sides.
- Remove loudspeakers. Press down plastic plugs in the middle.
- Disconnect connectors.

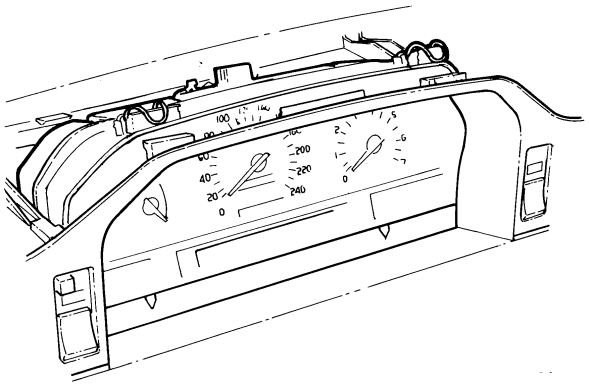


- Remove the 12 cover retaining screws. If the car has a passenger airbag module one of the screws on top of the glove compartment is missing. If the car does not have a passenger airbag module there is a screw missing by the right loudspeaker, 2 on the illustration.
- Carefully lift off the cover.

When the panel has been removed connect the breakout box used to fault-trace the combined instrument panel.

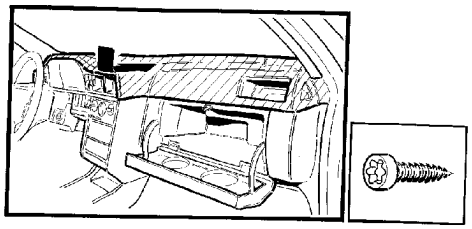


Removing/replacing combined instrument panel



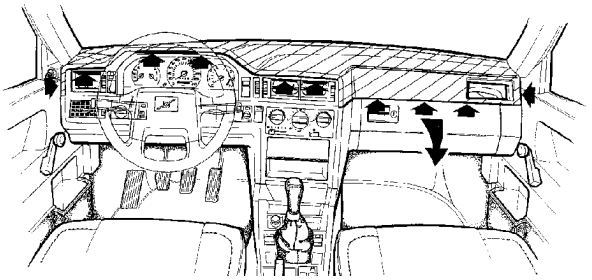
- Remove two combined instrument panel connectors and trip computer connector if necessary.
- Unhook the two catches at the top and lift out the instrument.

Installing combined instrument panel



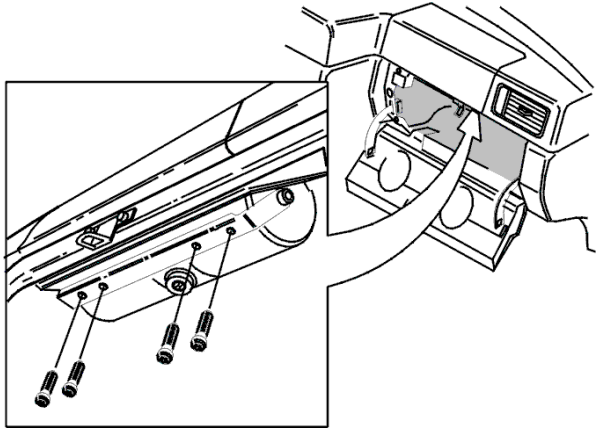
- Combined instrument panel.
- panel with airbag module.

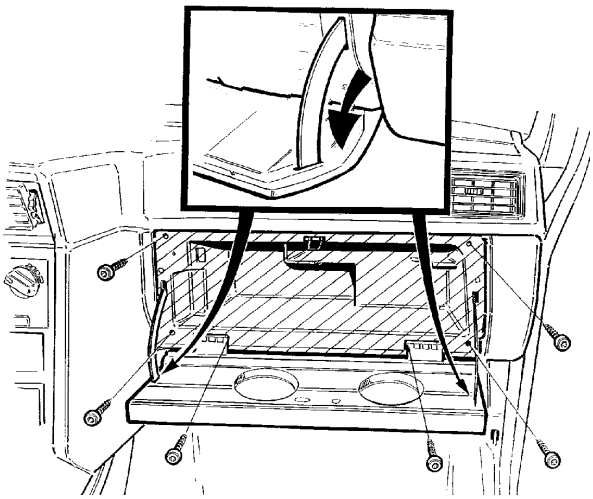
Note! Check that catch (1) on the right of the panel engages in the top of the frame.



- Connect connector to airbag module.

Ensure that the airbag module is correctly positioned. Screw the airbag module into place on the frame. Use new self tapping hex screws.
Tighten to **7 Nm**.





Installing glove compartment

- Screw glove compartment into place.
- Install arms in glove compartment cover.

Connect battery negative lead.

When replacing combined instrument panel:

- **VDO:** Enter the correct market code, program the mileage and select service interval according to Diagnostic test mode (DTM) 5 - Reading off data and Diagnostic test mode (DTM) 6 - Data entry .

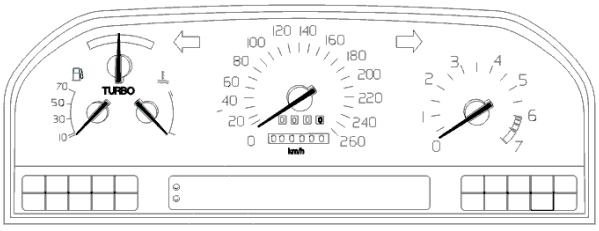
Note! It is important to carry this out in the correct order as described for diagnostic test mode (DTM) 6.

Caution! Hold the data link connector (DLC) button down for at least 5 seconds to save the code.

- Read and erase diagnostic trouble codes (DTCs).

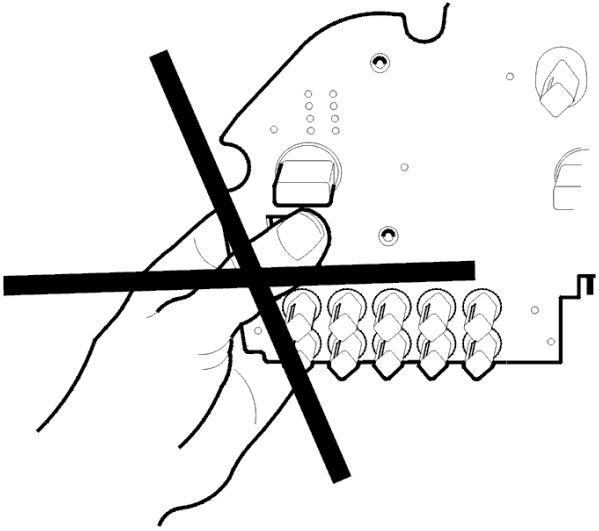
- **Yazaki:** Write that the combined instrument panel has been replaced in the Service and Warranty Book. Make a note of the mileage and the date that it was replaced.

Replacing combined instrument panel components



VDO

Note! When working on the combined instrument panel observe the following:
Cleanliness: the workplace must be free of dust, dirt, oil



and solvent.

Always wash your hands before disassembling the combined instrument panel. Do not use handcream or lotion after washing. Use protective gloves of thin cotton. Synthetic materials can cause static electricity.

Do not expose the printed circuit board to static electricity.

Do not touch connection plate or dial surfaces.

Do not change the position of needles. They are factory calibrated. If the needles are moved the instrument may display the wrong reading.

Replacing individual components

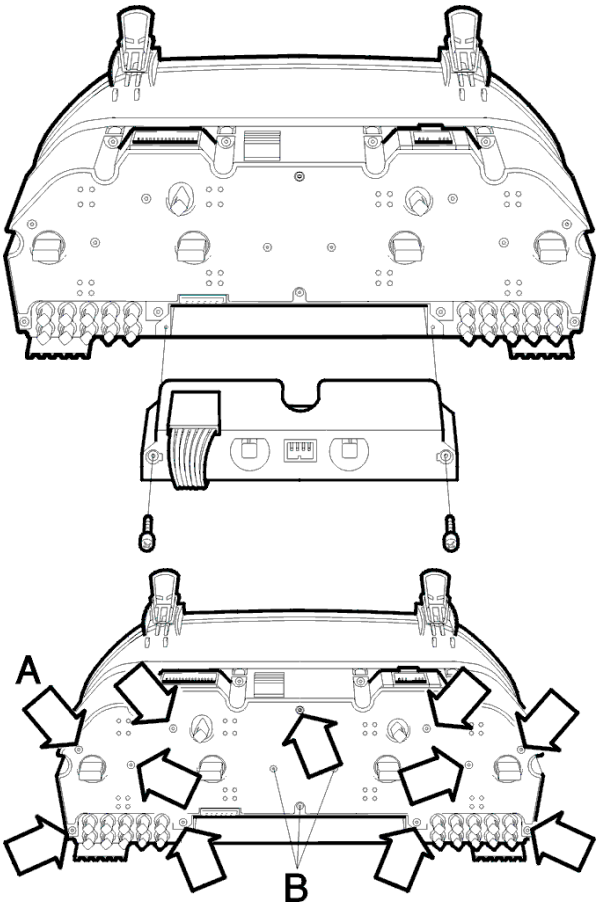
If the combined instrument panel does not work a fuse may have blown.

- Remove printed circuit board and check fuse on the inside of the printed circuit board. Replacing the fuse, see **Replacing fuse** .

Electrical faults are generally due to faults in the printed circuit board.

- Replace the printed circuit board first.
- Assemble and connect the combined instrument panel.
- Test the combined instrument panel using diagnostic test mode (DTM), see **DTM 1 - Self-test**
- If fault is still present, replace the instrument panel.

Disassembling the instrument



- Remove time/temperature/trip computer module located at the bottom in the middle. Remove the two screws and connector.

Note! Do not pull the ribbon cable, grip the connector and carefully pull straight out.

- Remove cover. Undo the 11 screws marked A and three screws marked B.

The screws marked B secure the odometer to the base plate.

- Lift the printed circuit board away from the base plate. The printed circuit board is pressed into the base

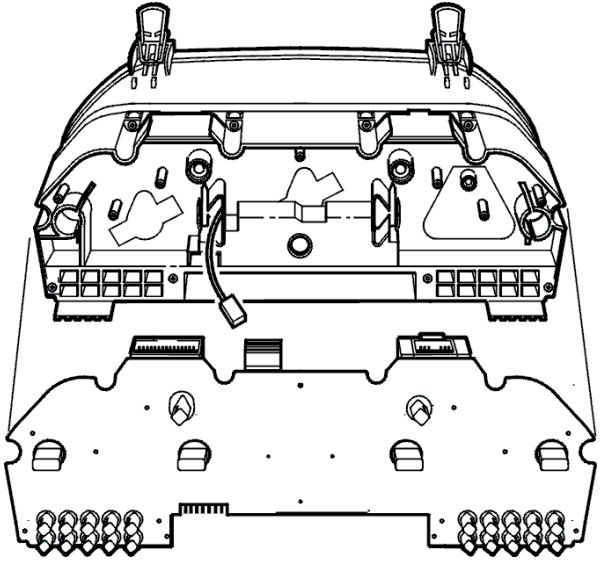
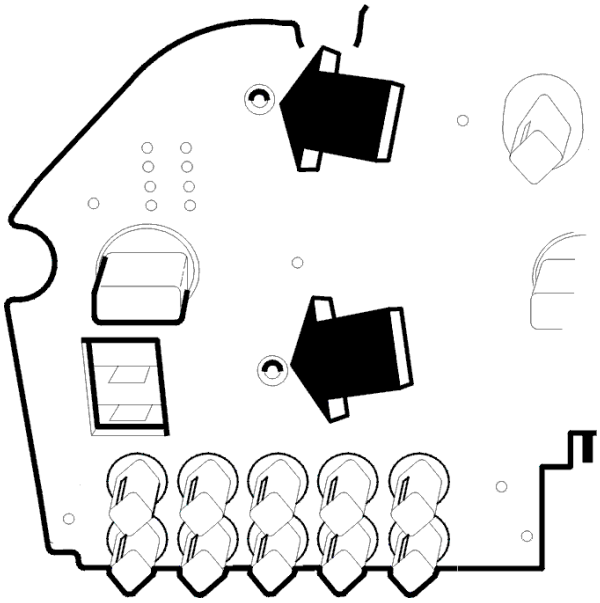


plate and must be removed carefully.

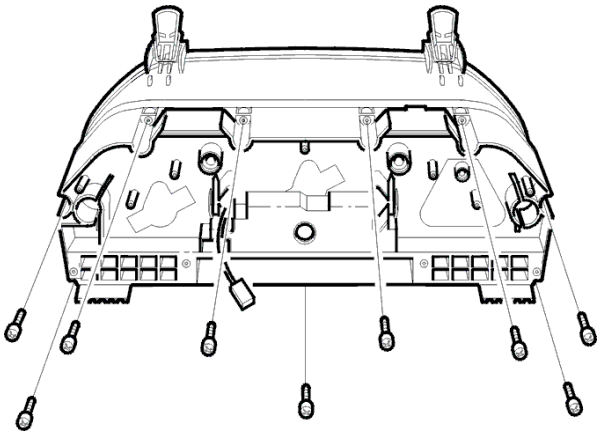
- Disconnect the odometer connector.

Replacing fuse



- The fuse should be installed on the outside of the printed circuit board. The arrows in the illustration point to two screw holes for the new fuse.

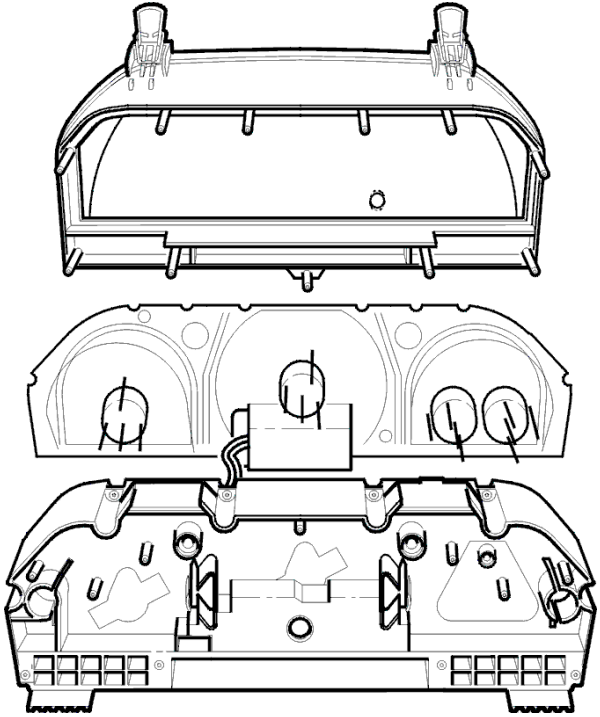
Use the fuse set available as a replacement part P/N: 9128110.
The fuse may have blown because of an external short-circuit.
Fault-trace

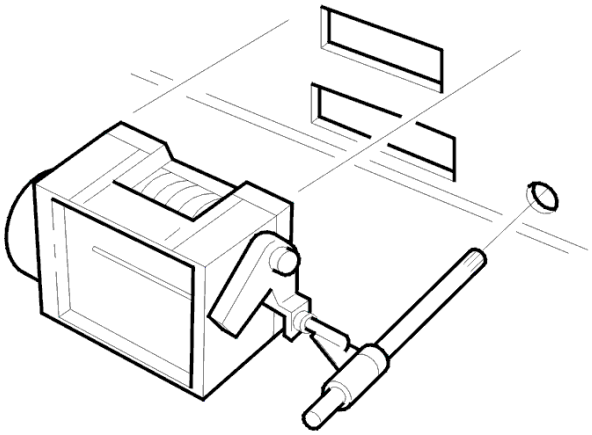


- Disconnect the base plate from the instrument housing. Remove the 9 screws as illustrated.

- Lift out instrument panel

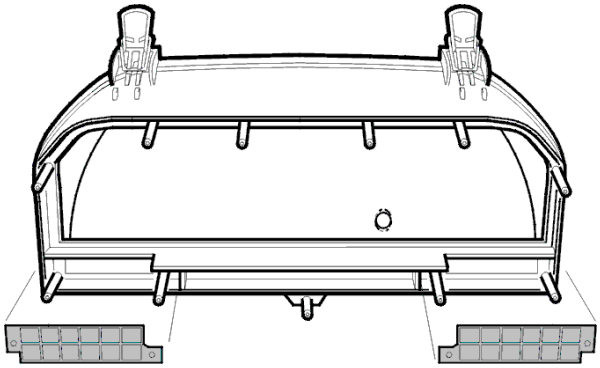
Note! Do not touch the instrument panel or needles.





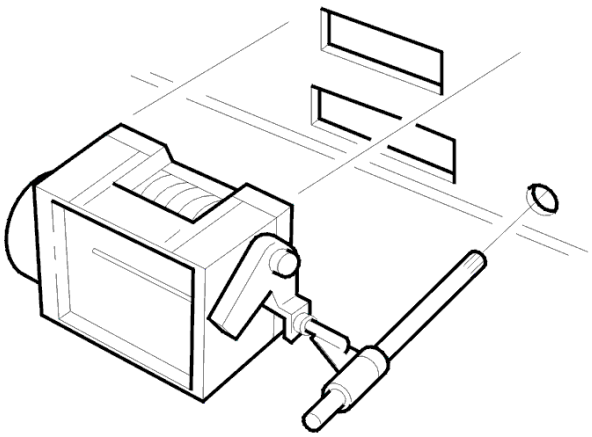
- Remove the odometer and reset button.
- To replace the reset button pull it straight out of the odometer.

Replacing dial faces



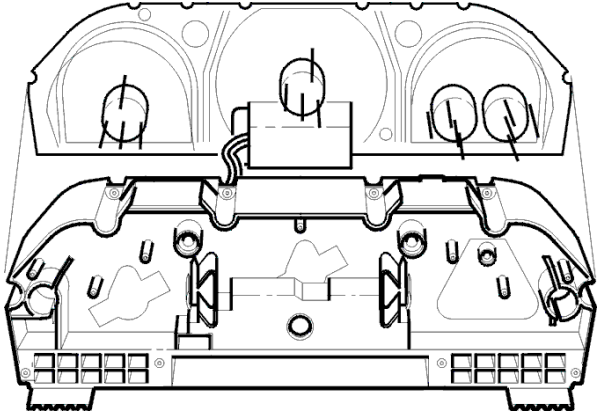
- Carefully remove the dial faces which are located on two plastic pins in the instrument housing.
- Replace and install the new dial faces.

Assembling



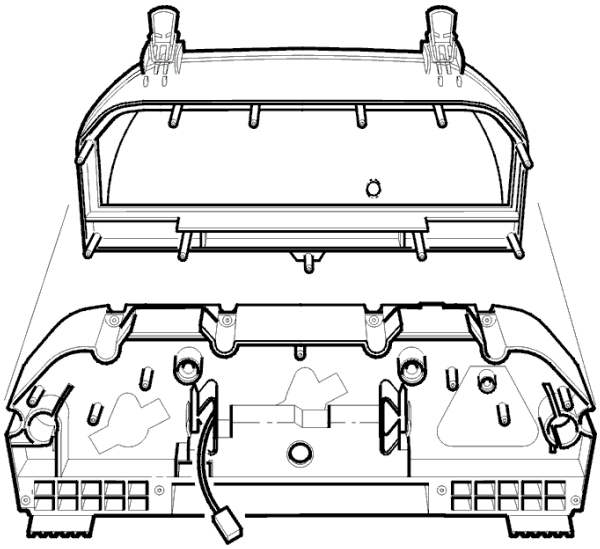
- Place the odometer on the base plate.

- Assemble instrument panel and base plate.
- Ensure that the reset button is properly located in the

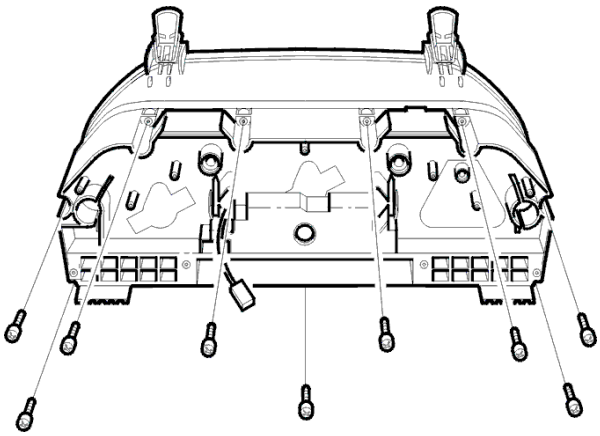


instrument panel and that the instrument panel is correctly positioned on the base plate. Press together.

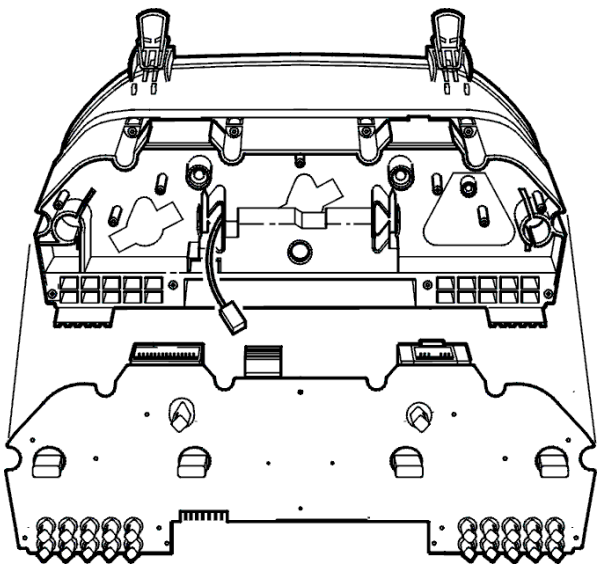
- Ensure that the odometer cable and its connector are routed out though the square hole.



- Assemble instrument housing.
- Insert the base plate with instrument panel and screws the 9 screws into place.

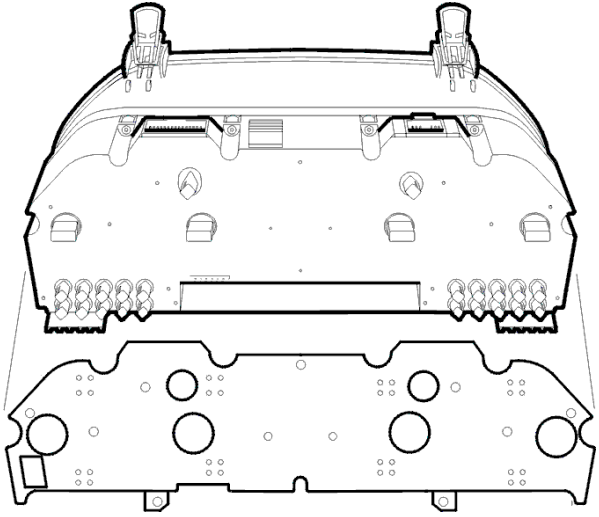


Install printed circuit board

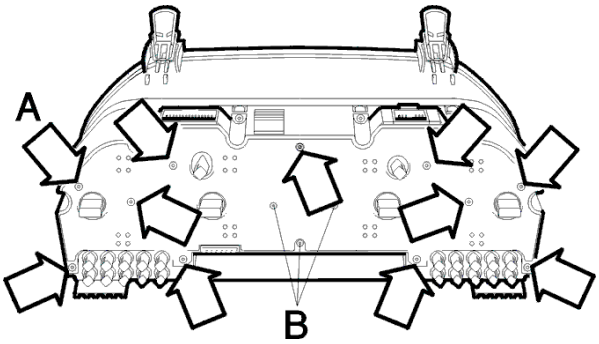


- Connect odometer wiring. The connector can only be connected one way.

- Install the printed circuit board by pressing the bulb holders and pressing in the terminal pins.
- When installing a new printed circuit board transfer the old bulbs.

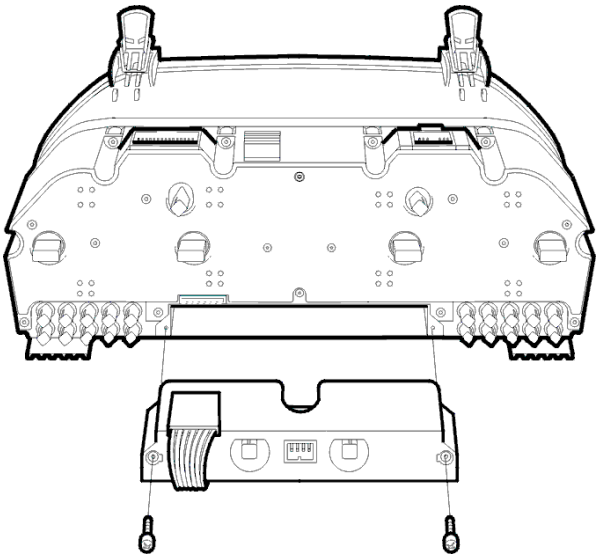


Install cover



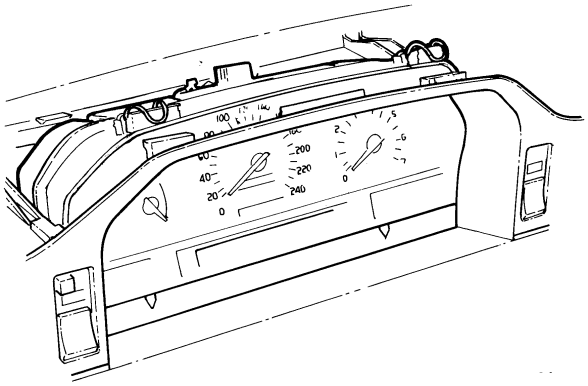
- Position cover and screw together combined instrument panel with screws A and B as illustrated (11 + 3).

Install passenger module



- Position time/temperature/trip computer module, screw into place with the two screws and connect connector.

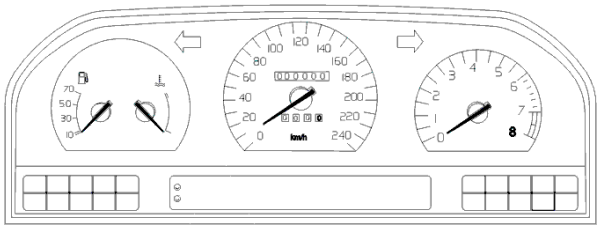
Reinstall combined instrument panel in car



- Install a new protective cover on the 30-pin connector, P/N: 912 8111.
- Reinstall panel and other components in reverse order according to Expose combined instrument panel .

When replacing printed circuit board

- On-board diagnostic system: read off and erase diagnostic trouble codes (DTCs) and market code, program mileage and service interval according to Diagnostic test mode (DTM) 6 - Data entry .

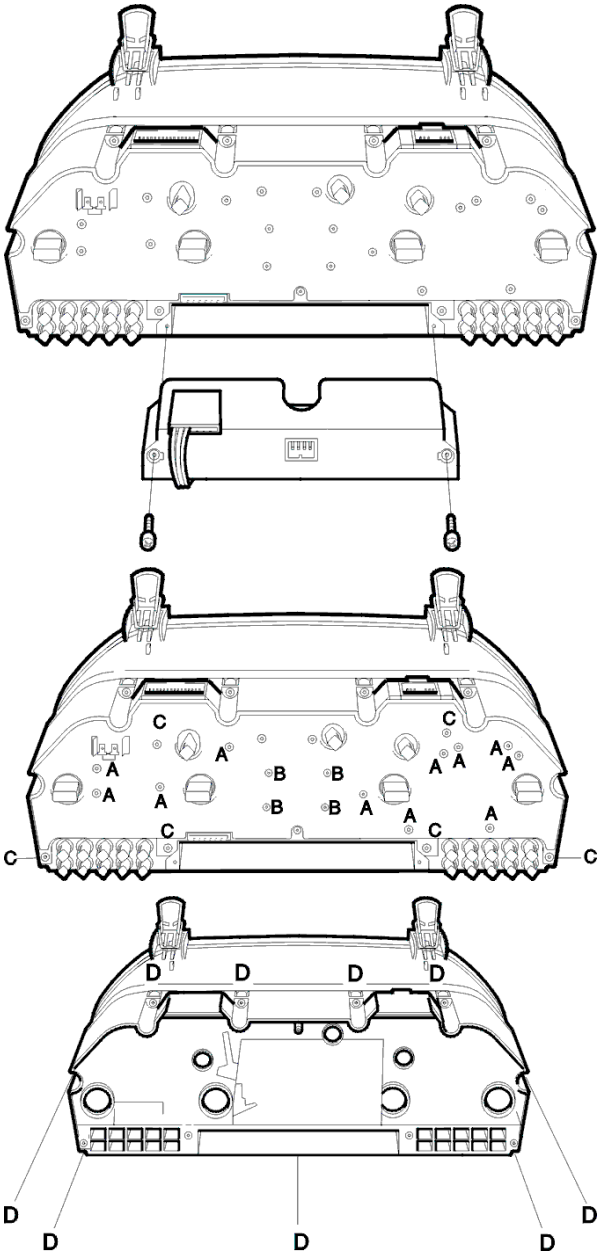


Replacing combined instrument panel instrument module/dial face

Applies to Yazaki.

Note! When working on the combined instrument panel observe the following:
Cleanliness: the workplace must be free of dust, dirt, oil and solvent.
Always wash your hands before disassembling the combined instrument panel. Do not use handcream or lotion after washing. Use protective gloves of thin cotton. Synthetic materials can cause static electricity.
Do not touch connection plate or dial surfaces.
Do not change the position of needles. They are factory calibrated. If the needles are moved the instrument may display the wrong reading.

Disassembling the instrument



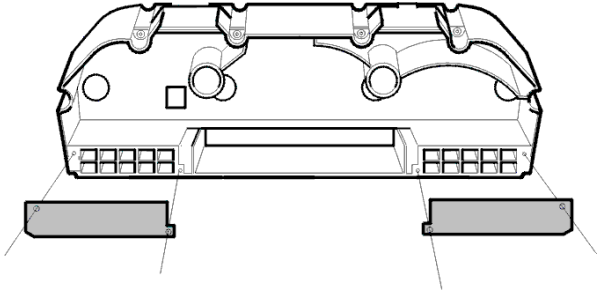
- Remove time/temperature/ module located at the bottom in the middle. Remove the two screws and connector.

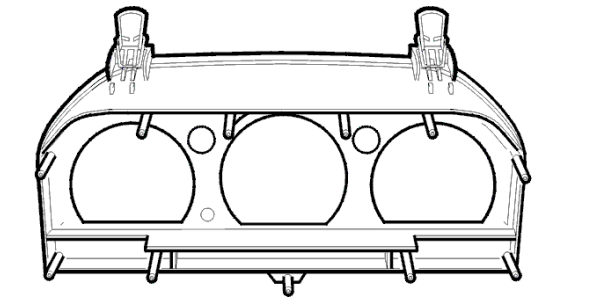
Note! Do not pull the ribbon cable, grip the connector and carefully pull straight out.

- Remove printed circuit board screws and lift out printed circuit board. 11 screws marked A, 4 screws marked B and 6 screws marked C, as illustrated.

- Remove base plate screws and lift out base plate. 9 screws marked D, as illustrated.

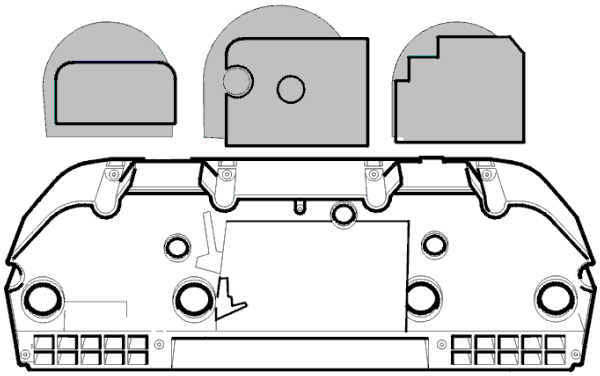
- Remove dial face or faulty instrument module.

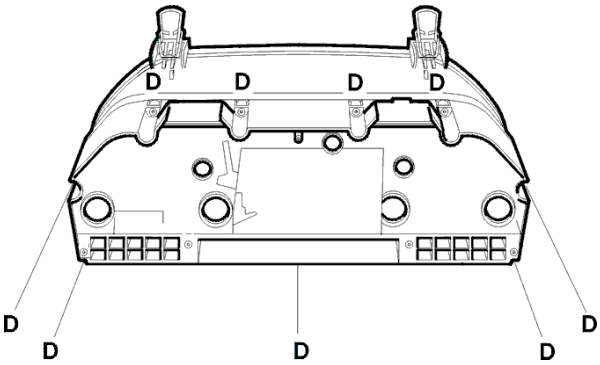




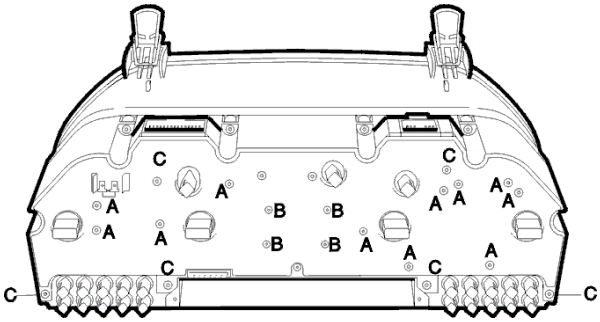
- Install new dial face or instrument module.

Note! Do not touch the instrument panel or needles.

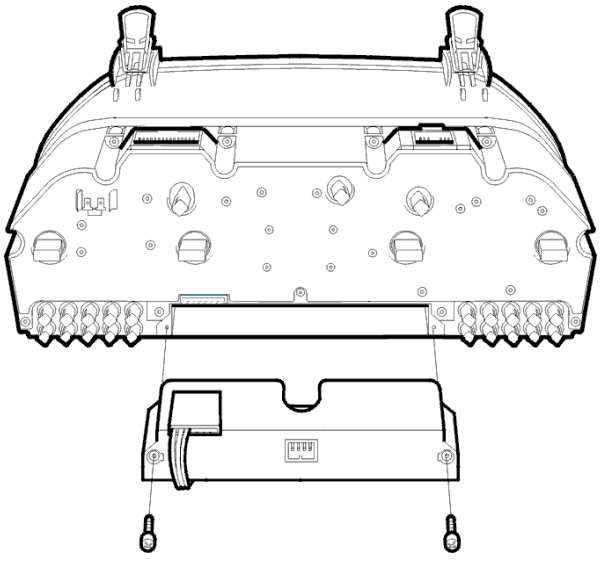




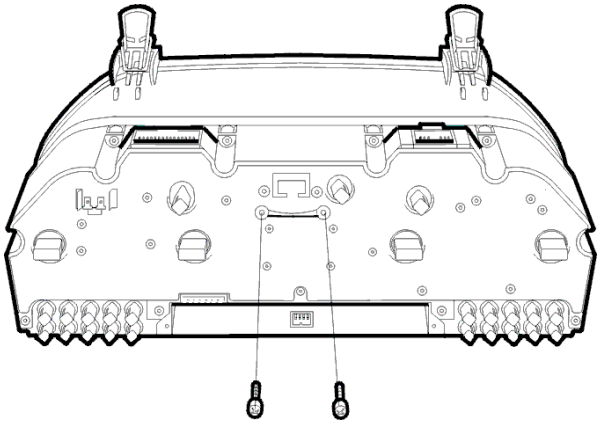
- Install and screw base plate into place. 9 screws for plastic marked D, as illustrated.



- Install and screw printed circuit board into place. Install the correct type of screw in the right place. 11 screws type A with metric thread. 4 screws type B with plastic threads and pointed ends. 6 screws type C with plastic threads and blunt ends. Do not tighten screws too hard.

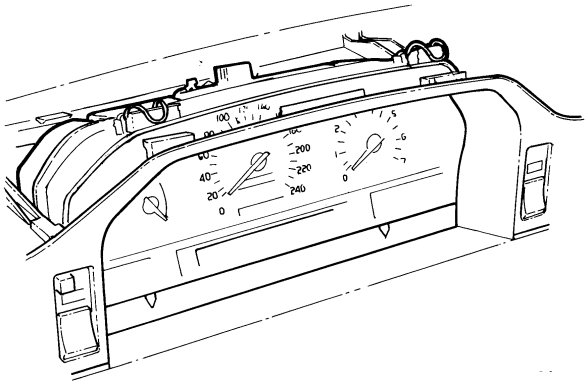


Install and screw time/temperature module into place and connect the connector.



Replacing fuse

- Install the fuse on the outside of the printed circuit board as illustrated. Use the fuse set available as a replacement part.
- Check for an open-circuit in the fuse with an ohmmeter. The ohmmeter should read infinite resistance. The fuse may have blown because of an external short-circuit. Fault-trace



Reinstall combined instrument panel in car

- Function test combined instrument panel.
- Install a new protective cover on the 30-pin connector, P/N: 9128111).
- Reinstall panel and other components in reverse order according to **Expose combined instrument panel** .