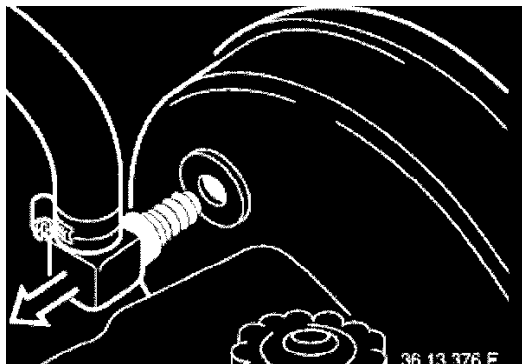


Intake Manifold: Service and Repair

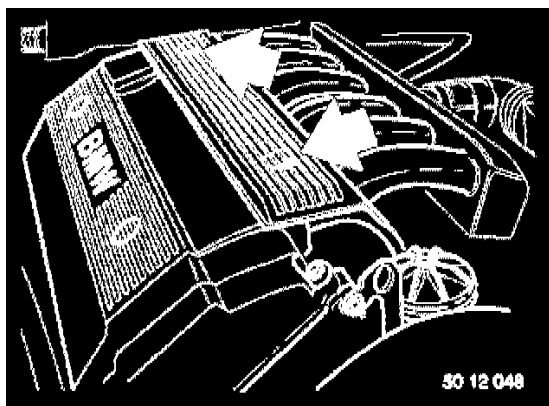
Removing intake air housing with mass air flow sensor, refer to Powertrain Management.

Remove bulkhead heater (air collector). This operation is described in section on removing complete wiper console, refer to Wiper and Washer Systems.

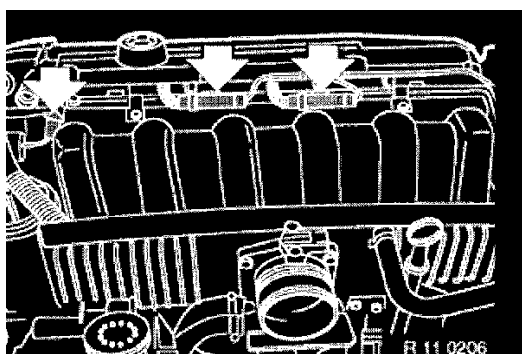
Place cable channel to one side.



Remove adapter from brake force booster.



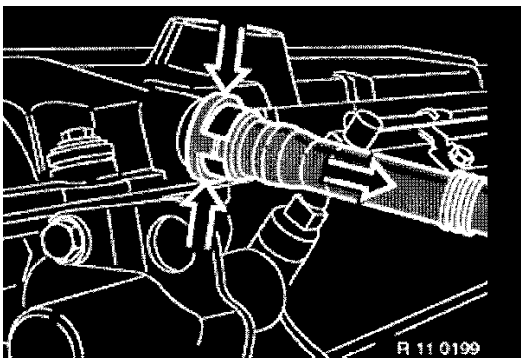
Remove cover from injection valves.



Unclip plug connections from oxygen sensors.

Unfasten plug connection from VANOS solenoid valve.

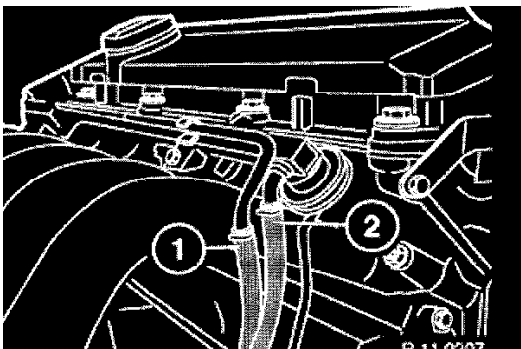
Lift connector strip off injection valves and place to one side.



Unclip connection for ventilation.

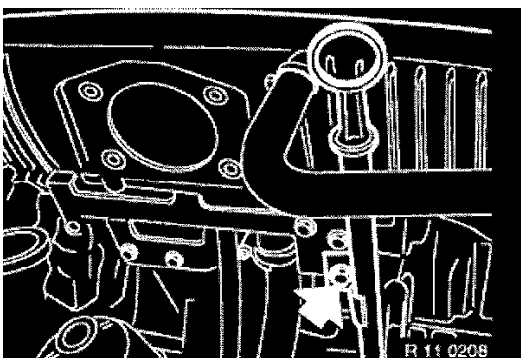
Caution:

- ^ Catch and dispose of fuel as it escapes.
 1. Removing fuel delivery line (from fuel filter).
 2. Removing fuel return line.
- ^ Follow instructions on removal and installation of fuel hoses, refer to Powertrain Management.
- ^ Secure fuel hoses in bracket on intake air manifold.

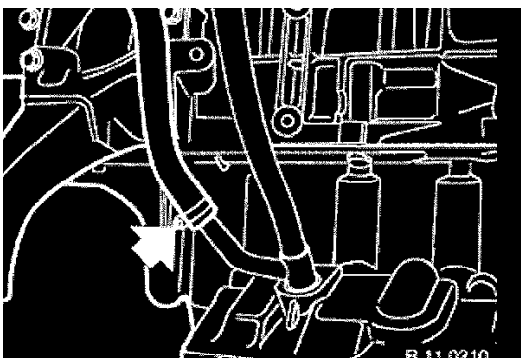


Remove throttle valve.

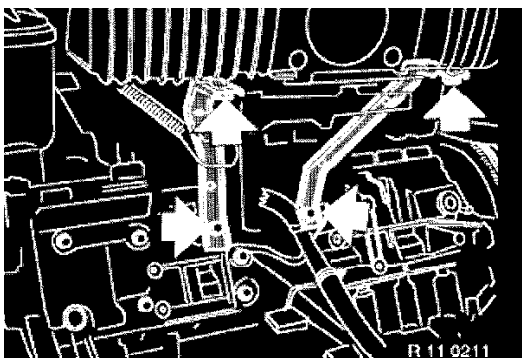
Note: Bowden cables and throttle valve preheating unit remain connected.



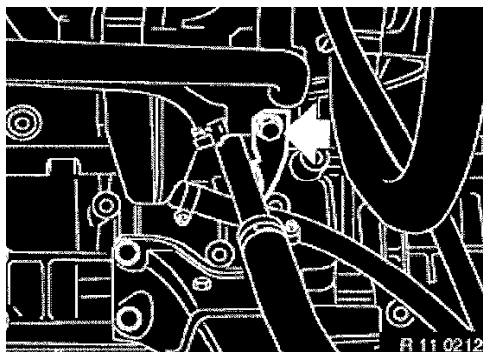
Unfasten guide tube from dipstick on manifold.



Remove oil return hose from cyclone oil separator.



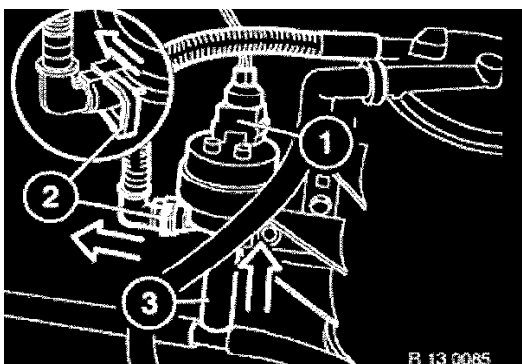
Remove support from front and rear manifold.



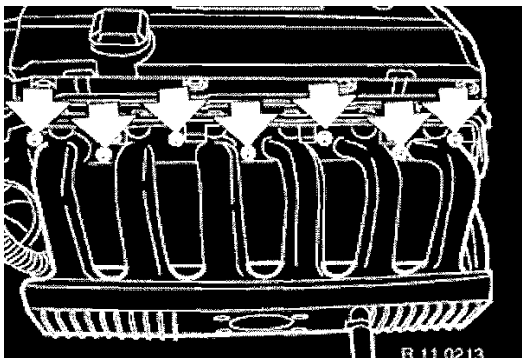
Unfasten retaining bracket from coolant line.

Unfasten following plug connections:

- Temperature sensor for intake air
- Idle speed control valve

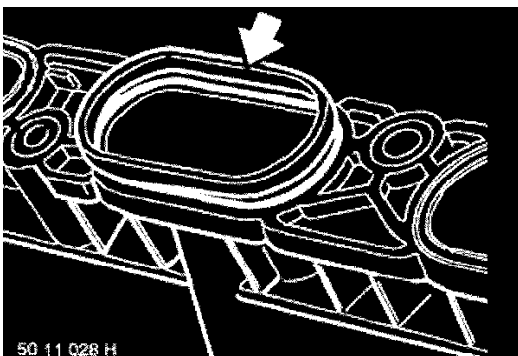


Disconnect plug connections (1) on tank vent valve
Pull tank vent valve upwards to remove from bracket.
Press down locking bracket (2), remove hose.



Unfasten intake air manifold.

Remove intake air manifold and tank vent valve.



Installation: Check gaskets and replace if necessary.