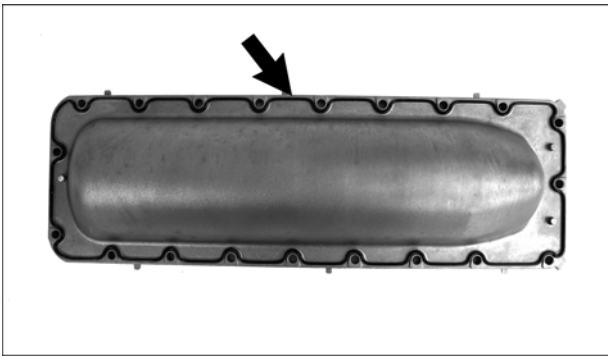
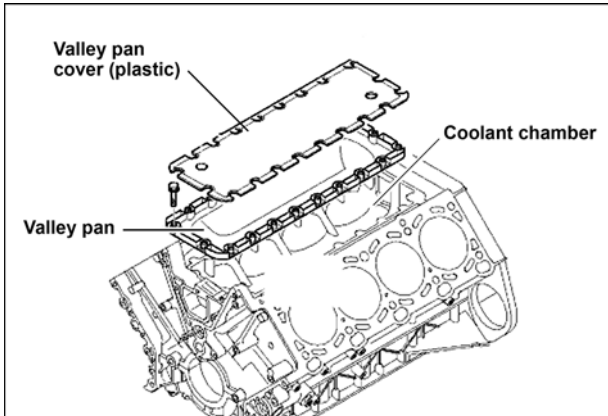


2 Valley Pan Gasket



Valley pan, removing and installing (M62 / M62 TU engines)

- The valley pan is located in the center (valley) area of the engine block and seal off a large coolant chamber in the block.

To access the pan, the intake manifold and the water pump assembly need to be removed.

Prior to valley removal, be sure to read the fuel system warnings in **Warnings and Cautions** in **130 Fuel Injection**.

This job will require new seals and gaskets. A minimum list includes:

- Valley pan with integral seal/gasket.
- Intake manifold gaskets (4)
- Coolant pump gasket
- O-rings for coolant pipes (4, 2 per pipe)
- Recommended: throttle body and rear breather plate profile gaskets.

- New valley pan from BMW comes with sealing gasket (**arrow**).

- Disconnect negative (-) battery cable.

CAUTION—

- Prior to disconnecting the battery, read the battery disconnection cautions in **001 Warnings and Cautions**.

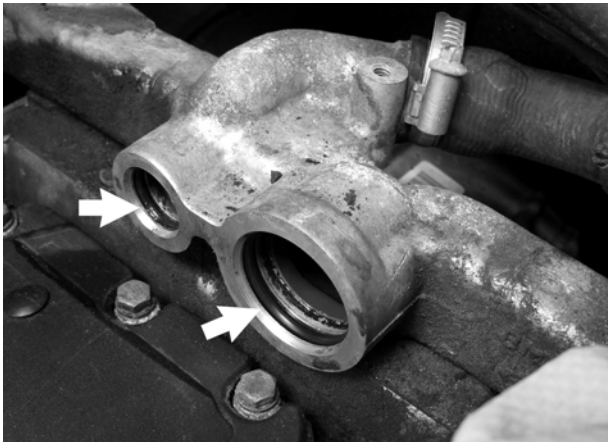
- With engine fully cold, drain engine coolant. Remove engine drive belt and coolant pump. See **170 Radiator and Cooling System**.

- Remove intake manifold. **130 Fuel Injection**.
 - Carefully lift off intake manifold with fuel rail while checking that no hoses or harnesses become snagged. Cap all fuel lines.
 - Note that breather tube (**arrow**) gets unclipped at rear of intake manifold, slid forward, and remains on engine during intake manifold removal.

NOTE—

- Stuff lint free rags into cylinder head port openings to prevent debris from entering engine.

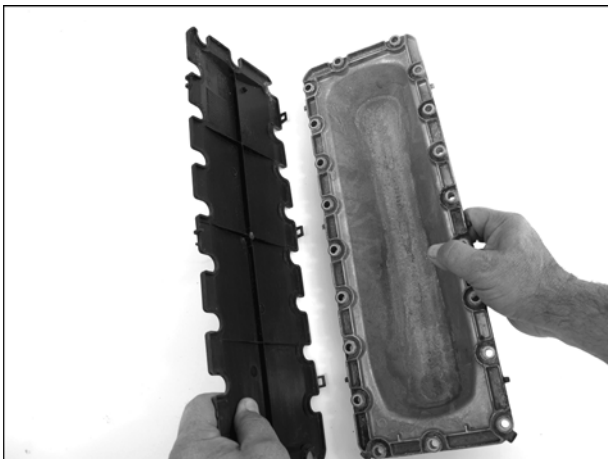
- Pull cooling pipes from rear coolant manifold (**arrows**). Turn pipe while pulling to assist with removal.



➤ Pick out old O-rings at rear coolant manifold and discard (**arrows**).



➤ Remove bolts from valley pan (**arrows**) and remove pan. It may be necessary to pry up on front of pan to loosen.



➤ Unclip plastic cover from old valley pan. The cover is retained by 3 tabs on either side of the cover. Clip cover onto new pan.

- Install cover. Install all bolts finger tight. Tighten bolts in two stages working outward from the center in a diagonal pattern.

Tightening torques	
Valley pan to cylinder block	10 Nm (89 in-lb)

- The remainder of installation is reverse of removal, noting the following:
 - Install new O-rings in coolant pump housing and use a new pump gasket. Install new gaskets on intake manifold.
 - Install knock sensor before installing coolant pipes / coolant pump.

NOTE —

- *It is recommended that new gaskets for the throttle body and rear breather plate be installed while the manifold is removed.*

- Fill and bleed cooling system as described in **170 Radiator and Cooling System**.

- Check that all electrical connectors and hoses have been correctly installed.