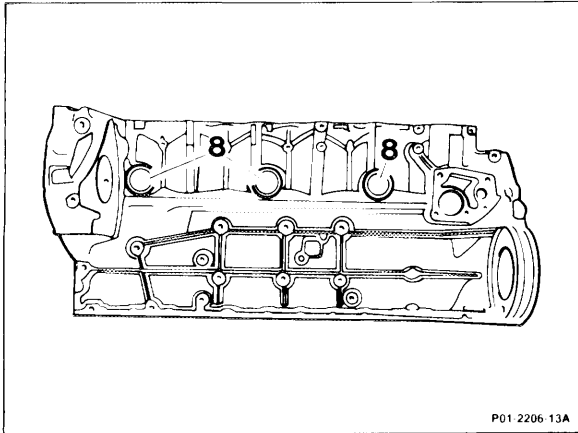


01-140 Replacement of freeze plugs in crankcase

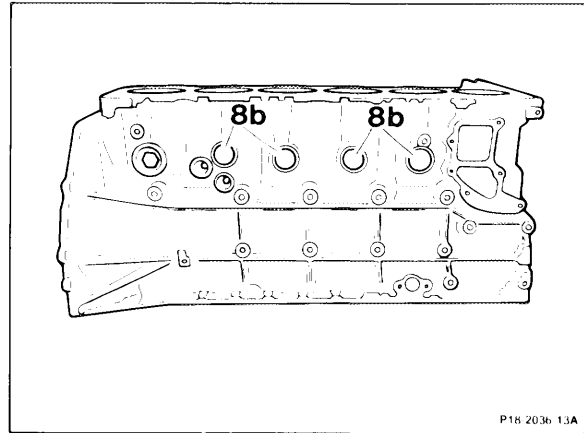
Preliminary operations:

Coolant drained (20-010).

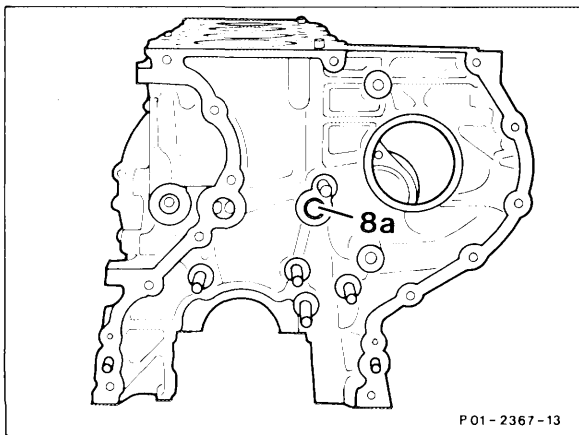
Attachment parts in area of freeze plug removed.



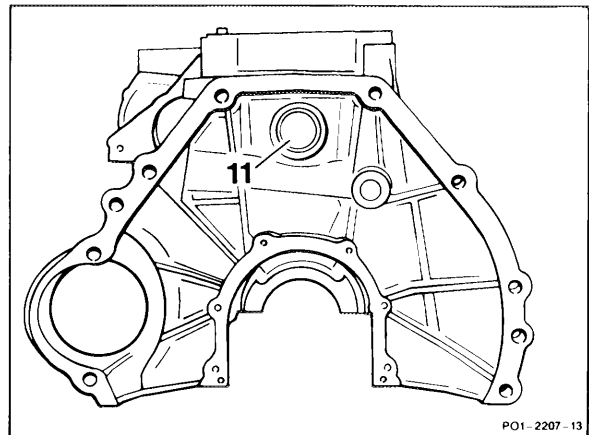
Freeze plug, left, 34 mm dia. (8)



Freeze plug, right, 34 mm dia. (8b)



Freeze plug, front, 17 mm dia. (8a)



Freeze plug, rear, 34 mm dia. (11)

Freeze plugs (8, 8a, 8b, 11)

remove, knock in. Installation punch
102 589 12 15 00, 17 mm dia. or punch
102 589 00 15 00, 34 mm dia. (items 1 – 6).

Note

Seal freeze plugs with sealant
002 989 94 71. Allow sealant to harden
for approx. 45 minutes.

After reassembling engine allow engine to warm up and check for leakage at newly installed freeze plug .

Note

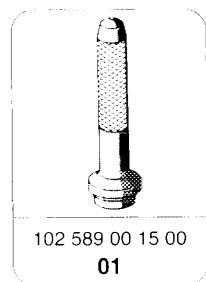
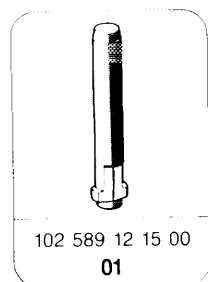
The number of freeze plugs differs on the individual engine models. The figure shows engine model 603 as an example.

Engine	left, 34 mm dia.	right, 34 mm dia.	front, 17 mm dia.	rear, 34 mm dia.
602	3	3	1	1
603	3	4	1	1

Sealant

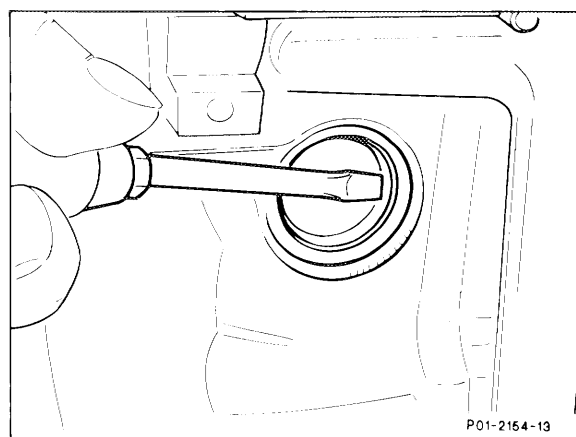
Loctite 241 002 989 94 71

Special tools



Removal

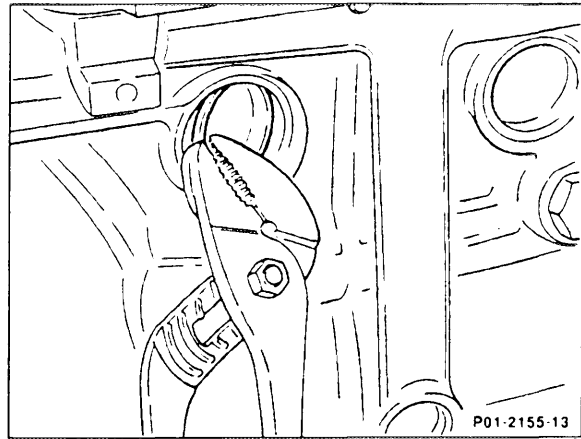
- 1 Position chisel with small blade or screw-driver in deep-drawn edge of freeze plug.



2 Carefully knock in freeze plug at one side until it rotates around its own longitudinal axis and can be gripped with a pair of pliers.

3 Pull out freeze plug.

4 Clean sealing surface; surface must be free of grease.



Installation

5 Coat sealing surface with sealant 002 989 94 71.

6 Knock in new freeze plug with installation punch 102 589 12 15 00 (17 mm dia.) or 102 589 00 15 00 (34 mm dia.).

Caution!

Allow sealant to harden for approx. 45 minutes before filling coolant.

7 After reassembling engine, allow engine to warm up and check for leakage at new freeze plug installed.

