

05-341 Removal and installation of guide rail

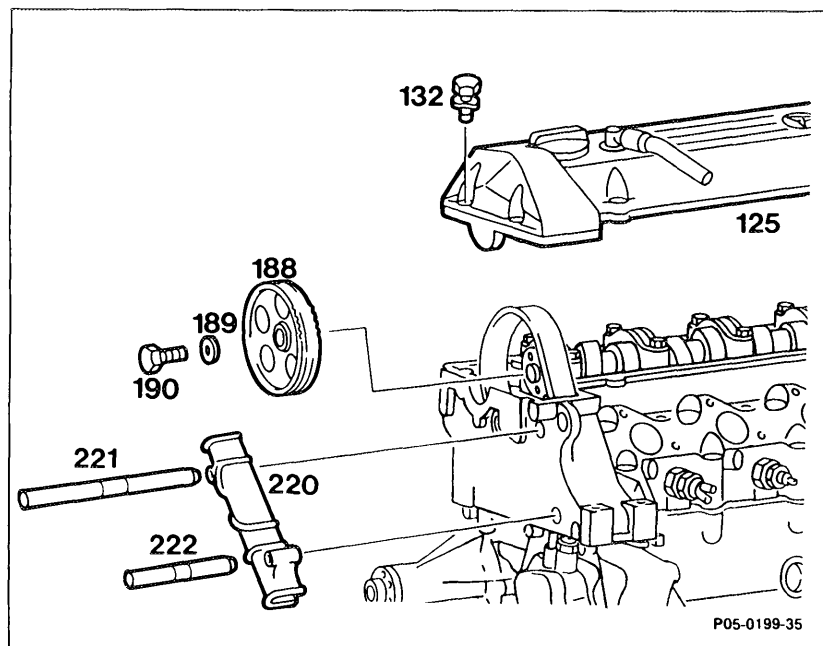
Preceding work:

Poly-V belt removed (13-345).

Chain tensioner removed (05-310).

Charge air pipe removed (turbo engines).

A. Removal and installation of guide rail in cylinder head



Cylinder head cover (125) remove, install, bolt (132) 10 Nm.

With self-levelling suspension:

Pressure oil pump drive remove, install (05-437).

Camshaft timing gear (188) mark at timing chain. Remove, install camshaft timing gear. Different bolts (190) and washers (189) with different tightening torques. Hexagon bolt 65 Nm. Bihexagonal head bolt 25 Nm/90° (05-220) (Numbers 3 - 5).

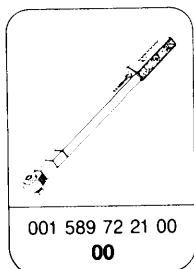
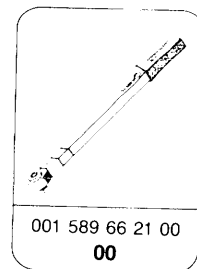
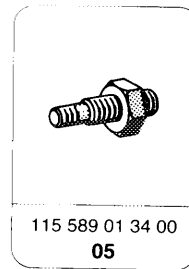
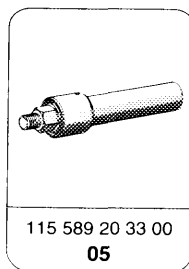
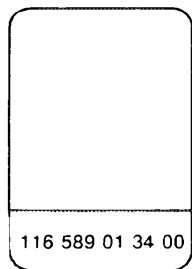
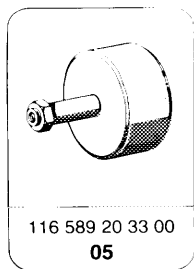
Bearing pins (221, 222) remove, install.
 Special tools 116 589 20 33 00 and
 116 589 01 34 00.
 Check guide blade (220), replace if necessary.
 (Number 6).

Caution!

The extractor 115 589 20 33 00 can be used
 together with stud 115 589 01 34 00 if the
 bearing pins have seized.

Tightening torques and angle of rotation	Nm	
Hexagon bolts on cylinder head cover	10	
Hexagon bolt on camshaft timing gear	65	
Bihexagonal head bolt on camshaft timing gear	25	90°

Special tools



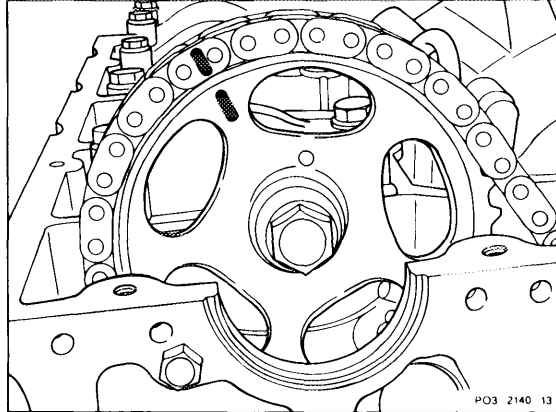
Removal

1 Remove cylinder head cover.

With self-levelling suspension:

2 Remove pressure oil pump drive (05-437).

3 Align timing chain and camshaft timing gear.

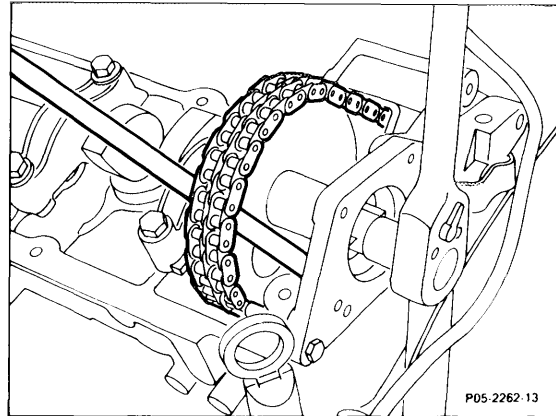


4 Remove hexagon bolt or bihexagonal head bolt on camshaft timing gear, while holding camshaft with a mandrel.

5 Remove camshaft timing gear and allow timing chain to sag.

Caution!

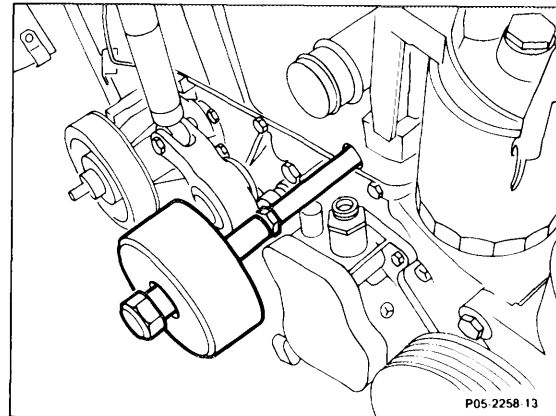
Note different bolt and washer (05-220).



6 Drive out both bearing bolts with the impact puller 116 589 20 33 00, and 116 589 01 34 00 and remove guide rail. Check guide rail and replace if necessary.

Caution!

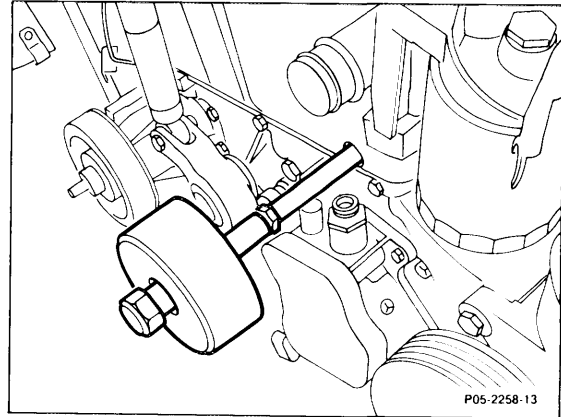
Seized bearing bolts can also be pulled out with puller 115 589 20 33 00 and stud 115 589 01 34 00.



Installation

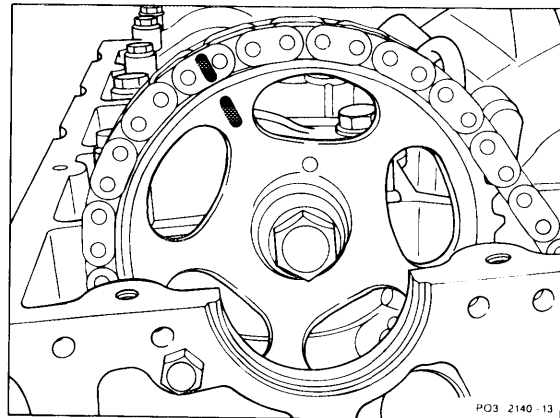
6 Coat bearing pin collar with sealing compound.

7 Insert guide rail and drive home bearing pin with impact puller 116 589 20 33 00 and 116 589 01 34 00.



8 Install camshaft timing gear according to the marking and tighten, noting the color markings.

Tightening torque and angle of rotation
Hexagon bolt 65 Nm,
Bihexagonal head bolt 25 Nm, 90°.



9 Position engine on ignition TDC of No. 1 cylinder and check marking (arrows).

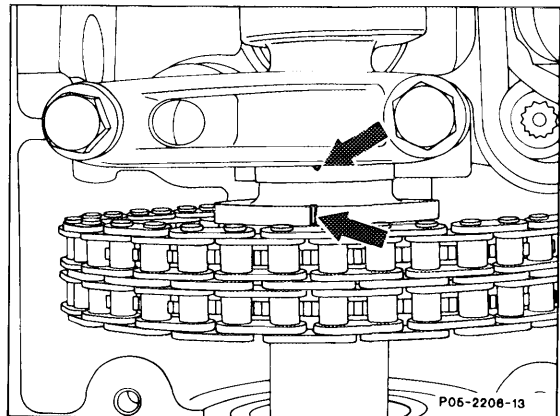
Warning

Do not turn engine by camshaft timing gear bolt.

With self-levelling suspension:

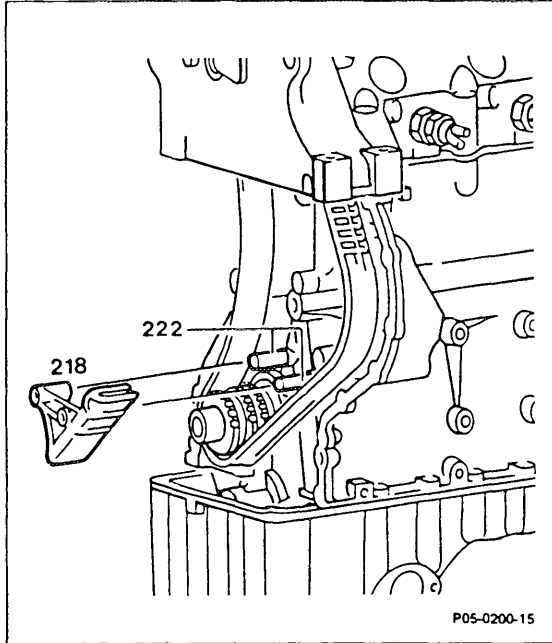
10 Install pressure oil pump drive (05-437).

11 Install cylinder head cover, 10 Nm.



Preceding work:
Timing case cover removed (01-210).
Chain tensioner removed (05-310).

B. Removal and installation of guide rail in timing case



Guiding rail (218) pull off from guiding blade bolt (222), put on.
Check guiding rail, renew if necessary.

Note
Since 09/86 unhardened straight pins have been fitted for the guiding rail bearing.

Production breakpoint: 08/86

Model	Engine	Engine end No.		Vehicle identification end No.	
		Manual transmission	Automatic transmission	A	F
124.133 124.193	603.960	-	003526	313431	019062
126.125	603.961	-	004997	278305	*
201.126	602.911	025293	006190	332559	266086

* not recorded