



Haynes
shows you how

BMW 3-Series (92-98) & Z3 (96-98) Haynes Online Manual

9 Piston/connecting rod assembly - removal

- 1 On four-cylinder engines, remove the cylinder head and oil pan (see [Chapter 2A](#)).
- 2 On six-cylinder engines, remove the cylinder head, oil pan and oil pump (see [Chapter 2B](#)).
- 3 Where applicable, unbolt the oil baffle from the bottom of the cylinder block (see illustration) .

9.3 Unbolt the oil baffle plate from the cylinder block - six-cylinder engine



4 If there is a pronounced wear ridge at the top of any bore, it may be necessary to remove it with a scraper or ridge reamer, to avoid piston damage during removal. Such a ridge indicates excessive wear of the cylinder bore.

5 Check the connecting rods and bearing caps for identification marks. Both rods and caps should be marked with the cylinder number on the exhaust manifold side of the engine. Note that No. 1 cylinder is at the timing chain end of the engine. If no marks are present, using a hammer and center-punch, paint or similar, mark each connecting rod and connecting rod bearing cap with its respective cylinder number on the flat machined surface provided - ensure that the marks are made on the exhaust manifold side of the connecting rods (see illustration) .

9.5 Connecting rod bearing cap marks



6 Turn the crankshaft to bring pistons 1 and 4 (four-cylinder engine), or 1 and 6 (six-cylinder engine), as applicable, to BDC (bottom dead center).

7 Unscrew the bolts from No. 1 piston connecting rod bearing cap. Take off the cap, and recover the bottom half bearing shell (see illustration) . If the bearing shells are to be re-used, tape the cap and the shell together.

9.7 Removing a connecting rod bearing cap



8 Using a hammer handle, push the piston up through the bore, and remove it from the top of the cylinder block. Recover the bearing shell, and tape it to the connecting rod for safe-keeping.

9 Loosely install the connecting rod cap to the connecting rod, and secure with the bolts - this will help to keep the components in their correct order.

10 Remove No. 4 piston assembly (four-cylinder engine), or No. 6 piston assembly (six-cylinder engine), as applicable, in the same way.

11 Turn the crankshaft as necessary to bring the remaining pistons to BDC, and remove them in the same way.