

**Haynes**
shows you how

BMW 3-Series and Z4 (99-05) Includes 2006 325ci/330ci Coupe and Convertible models Haynes Online Manual.

10 Engine overhaul - reassembly sequence

1 Before beginning engine reassembly, make sure you have all the necessary new parts, gaskets and seals as well as the following items on hand:

Common hand tools

A 1/2-inch drive torque wrench

New engine oil

Gasket sealant

hread locking compound

2 If you obtained a short block it will be necessary to install the cylinder head, the oil pump and pick-up tube, the oil pan, the water pump, the timing chain and timing chain cover, and the valve cover (see [Chapter 2A](#)). In order to save time and avoid problems, the external components must be installed in the following general order:

Thermostat and housing cover

Water pump

Intake and exhaust manifolds

Fuel injection components

Emission control components

Spark plugs

Ignition coils

Oil filter

Engine mounts and mount brackets

Flywheel/driveplate