

We recommend replacing these products – at best order them immediately.

When replacing these products, we recommend that the products listed below be also replaced.*

► It is generally recommended to replace the motor oil and the oil filter.



camshaft



tappets *required*
shaft seals *required*
valve cover gasket *required*
timing belt drive/
chain drive *recommended*
water pump *recommended*

cylinder head



air filter *recommended*
thermostat *recommended*
timing belt drive/
chain drive *recommended*
cylinder head gasket set *required*
cylinder head bolts *required*

camshaft kit



tappets *required*
shaft seals *required*
valve cover gasket *required*

gasket set (cylinder head)



cylinder head gasket *required*
(diesel: partly different thicknesses)
cylinder head bolts *required*
thermostat *recommended*

valves



tappets *recommended at 100.000km*
valve-springs *if worn out*
valve guides *if worn out*
valve collets *required*
cylinder head gasket set *required*
cylinder head bolts *required*

cylinder liners



pistons *recommended*

conrod bearings



oil pan gasket *required*
connecting rod bolts *required*

pistons and piston rings



full gasket set *recommended*
conrod bearings *recommended*
connecting rod bolts *required*
cylinder head bolts *required*
cylinder liners *recommended*
(engine-dependent: engine with liners)

connecting rod



full gasket set *recommended*
conrod bearings *required*
cylinder head bolts *required*

turbocharger



charger gasket set *required*
air filter *required*
oil lines *recommended*
oil cooler *recommended*
charge air cooler *recommended*
adjacent parts of turbocharger *see SI0089*

crankshaft



full gasket set *recommended*
crankcase gasket set *required*
main bearings *required*
main bearing bolts *recommended*
conrod bearings *required*
connecting rod bolts *required*
cylinder head bolts *required*

oil pump



oil pump drive *recommended*
oil pan gasket *required*

*The repair instructions issued by the engine manufacturer must be observed.
This list is not intended to be exhaustive.

For further information see:
www.ms-motorservice.de/downloads