

### 03 Crank assembly

Designation	Nature and reason for modification	Production breakpoints	Op. no.
Increment gear	Starter ring gear and driven plate firmly connected. 60-2 segments for position sensor provided on ring gear.	9.95	03-4100
Pistons	Pistons for M119.980/982 lighter weight and shape optimized.	09.95	03-3160
Crankshaft	Modified crankshaft webs (in shape of ship's bow).	09.95	03-3200
Vibration damper	Damper vulcanized on and weight-optimized.	08.94	03.3420

### 05 Engine timing, valves

Designation	Nature and reason for modification	Production breakpoints	Op. no.
Dowel sleeves of camshaft bearing caps	Elimination of dowel sleeves and holes in camshaft bearing caps and cylinder head.		05-2200
Camshaft adjuster	Modified version, weight-optimized and with segment for detecting cylinder 1.	09/95	05-2170
Securing bolts of camshaft adjuster to camshaft	Attached with stretch shank bolt. Modified tightening torque.		01-2170
Valve conical spring	Weight-optimized and modified characteristic.		05-2500
Valve guides	Sintered metal valve guides.	phased-in 1993	
Exhaust camshaft	Without journal for distributor rotor.	04.95	
Bucket tappets	Weight-reduced, must be fitted only with conical-shaped valve springs.	04.95	