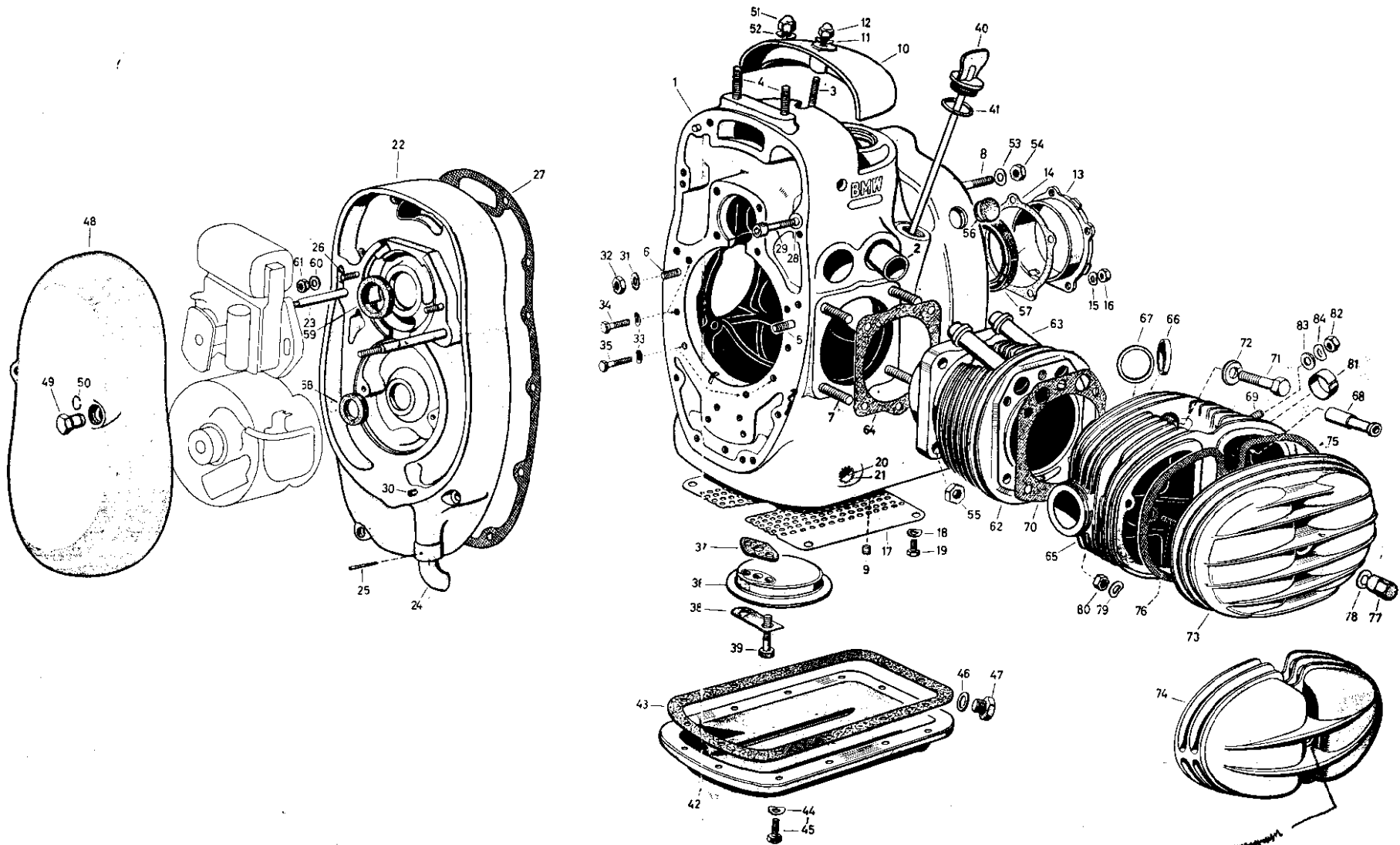


00 = Engine

Table 1

Engine Housing
Cylinder
Cylinderhead



HEAD STUD
 99-03-354 R50-60
 99-03-372 R69-69S

Ordering No.	Call-out No.	Description of Part	Qty.				
			R 50 60	R 50/2 60/2	R 50 S	R 69	R 69 S
Engine Housing							
00 01 031	1	Engine housing with studs, cover, bearing bush and screen	1	—	—	—	—
00 01 032	1	Engine housing with studs, cover, bearing bush and screen	—	1	1	—	1
00 01 033	1	Engine housing with studs, cover, bearing bush and screen	—	—	—	1	—
00 01 188	2	Tappet guide bushing	4	—	—	—	—
00 01 189	2	Tappet guide bushing	—	4	4	—	4
00 01 190	2	Tappet guide bushing	—	—	—	4	—
00 01 180	3	Stud (E) for cover, top	1	1	1	1	1
00 01 182	4	Stud (E) for engine support, top	2	2	2	2	2
00 01 186	5	Stud (E) for bearing housing, left	1	1	1	1	1
99 03 306	6	Stud M 8×18 Sn 4—8 G pho.black. (E) for bearing housing, right	1	1	1	1	1
99 03 416	7	Stud M 10×22 Sn 4—8 G pho.black. (E) for cylinder	8	8	8	8	8
99 03 325	8	Stud M 8×25 Sn 4—5 cad. (E) for transmission	3	3	3	3	3
00 01 184	—	Stud (E) for rear bearing housing	5	5	5	5	5
00 01 110	9	Plug for oil hole	1	1	1	1	1
Upper Cover on Engine Housing							
00 02 152	10	Upper cover	1	1	1	1	1
99 32 071	11	Lock washer B 6	1	1	1	1	1
00 02 193	12	Cap nut	1	1	1	1	1
Rear Bearing Bush on Engine Housing							
00 01 162	13	Rear bearing bush for crankshaft	1	—	—	—	—
00 01 163	13	Rear bearing bush for crankshaft	—	1	1	1	1
00 01 164	14	Gasket	1	1	1	1	1
00 32 071	15	Lock washer B 6	5	5	5	5	5
99 22 054	16	Hex. nut M 6—6 S pho.black.	5	5	5	5	5

Ordering No.	Call-out No.	Description of Part	Qty.					
			R 50 60	R 50/2 60/2	R 50 S	R 69	R 69 S	
		Screen on Engine Housing						
00 07 153	17	Screen	1	1	1	1	1	
99 32 071	18	Lock washer B 6	4	4	4	4	4	
99 13 425	19	Hex.-head screw M 6×10—8 G pho.black.	4	4	4	4	4	
		Sealing for Engine Mounting						
00 01 158	20	Sealing tube as required	1	1	1	1	1	
00 02 112	21	Seal ring as required	1	1	1	1	1	
		Gear Case Cover on Engine Housing						
00 02 027	22	Gear case cover with studs and breather pipe	1	—	—	—	—	
00 02 028	22	Gear case cover with studs and breather pipe	—	1	1	—	1	
00 02 031	22	Gear case cover with studs and breather pipe	—	—	—	1	—	
00 01 177	23	Stud (E) for front end cover	2	2	2	2	2	
00 02 166	24	Breather pipe	1	1	1	1	1	
99 43 024	25	Notched pin 2×24 for breather pipe	1	1	1	1	1	
99 03 190	26	Stud M 6×16 Sn 4—5 S cad. (E) for battery breaker and ignition magneto	2	2	2	—	2	
99 03 196	26	Stud M 6×18 Sn 4—5 S cad. (E) for ignition magneto	—	—	—	2	—	
00 02 172	27	Gasket between gear case cover and engine housing	1	1	1	1	1	
99 31 650	28	Washer 6.4 cad. for attachment of gear case cover	12	12	12	12	12	
99 19 937	29	Allen head screw M 6×40—8 G cad.	12	12	12	12	12	
99 41 375	30	Mounting pin 5×16 for front end cover	1	1	1	1	1	
		Bearing cover attachment on engine housing (for bearing cover see Table 2)						
99 32 090	31	Lock washer B 8 cad.	2	2	2	2	2	
99 22 082	32	Hex. nut M 8—6 S pho.black.	2	2	2	2	2	
99 32 071	33	Lock washer B 6	7	7	7	7	7	
99 12 249	34	Hex.-head screw M 6×22—G pho.black. ..	4	4	4	4	4	
99 12 270	35	Hex.-head screw M 6×28—8 G pho.black. ..	3	3	3	3	3	

Ordering No.	Call-out No.	Description of Part	Qty.					
			R 50 60	R 50/2 60/2	R 50 S	R 67	R 69 S	
		Oil Screen for Oil Pump on Engine Housing						
00 52 139	36	Oil screen	1	—	—	1	—	
00 52 140	36	Oil screen	—	1	1	—	1	
00 52 126	37	Gasket between oil screen and engine housing	1	—	—	1	—	
00 52 527	37	Gasket between oil screen and engine housing	—	1	1	—	1	
00 52 130	38	Locking plate for oil screen	1	1	1	1	1	
99 12 266	39	Hex.-head screw M 6×28—8 G pho.black. ...	2	2	2	2	2	
		Oil Level Gauge (Dip Stick)						
00 09 126	40	Dip stick with plug and gasket	1	—	—	1	—	
00 09 127	40	Dip stick with plug and gasket	—	1	1	—	1	
99 63 437	41	Gasket (seal ring) C 26×32 steel-asbestos ...	1	1	1	1	1	
		Oil Pan on Engine Housing						
00 07 029	42	Oil pan with threaded drain hole and mounting plate for prop stand return spring	1	1	1	1	1	
00 07 156	43	Gasket for oil pan	1	1	1	1	1	
99 32 071	44	Lock washer B 6	12	12	12	12	12	
99 12 457	45	Hex.-head screw M 6×15—8 G pho.black. ...	12	12	12	12	12	
99 63 242	46	Gasket (seal ring) C 14×20 steel-asbestos for drain plug	1	1	1	1	1	
00 07 104	47	Oil drain plug	1	1	—	—	—	
00 07 106	47	Oil drain plug, 0.1 mm. oversize thread	1	1	—	—	—	
00 07 161	47	Oil drain plug	—	—	1	1	1	
00 07 160	47	Oil drain plug, 0.1 mm. oversize thread	—	—	1	1	1	
		Front End Cover on Gearcase Cover						
00 02 179	48	Front end cover on gearcase cover casting	1	1	1	1	1	
00 02 194	49	Hex. nut for front end cover	2	2	2	2	2	
40 80 160	50	Snap ring for front end cover	2	2	2	2	2	

Ordering No.	Call-out No.	Description of Part	Qty.					
			R 50 60	R 50/2 60/2	R 50 S	R 69	R 69 S	
		Attachment for engine mounting, top						
50 96 152	51	Acorn nut	2	2	2	2	2	
99 33 088	52	Lock washer A 8	2	—	—	—	—	
99 33 094	52	Lock washer B 8	—	2	2	2	2	
		Transmission and Cylinder Mounting						
99 31 065	53	Washer 8.4 cad. for transmission mounting	3	3	3	3	3	
99 22 081	54	Hex. nut M 8—6 S cad. for transmission mounting	3	3	3	3	3	
00 01 104	55	Hex. nut for cylinder mounting	8	8	8	8	8	
		Seals						
00 01 106	56	Plug for timing hole	1	1	1	1	1	
00 01 120	57	Seal for flywheel side	1	1	—	1	—	
00 01 119	57	Seal for flywheel	—	—	1	—	1	
00 02 196	58	Seal for generator side	1	—	—	1	—	
00 02 197	58	Seal for generator side	—	1	1	—	1	
00 02 199	59	Seal for magneto side of camshaft	—	—	—	1	—	
00 02 198	59	Seal for magneto side of camshaft	1	1	1	—	1	
		Magneto Attachment						
99 31 650	60	Washer 6.4 cad. for magneto attachment on gearcase cover casting	2	2	2	2	2	
99 22 053	61	Hex. nut M 6—6 S cad. for magneto attachment on gearcase cover casting	2	2	2	2	2	
		Cylinder and Cylinderhead						
00 10 046	—	Cylinder with piston, standard, consisting of: Cylinder 00 10 02, Piston 00 12 09	2	—	—	—	—	
00 10 036	—	Cylinder with piston, standard, consisting of: Cylinder 00 10 027, Piston 00 12 090	—	R 50/2 2	—	—	—	
00 10 038	—	Cylinder with piston, standard, consisting of: Cylinder 00 10 031, Piston 00 12 072	—	R 60/2 2	—	—	—	
00 10 037	—	Cylinder with piston, standard, consisting of: Cylinder 00 10 027, Piston 00 12 094	—	—	2	—	—	

Ordering No.	Call-out No.	Description of Part	Qty.				
			R 50 60	R 50/2 60/2	R 50 S	R 69	R 69 S
00 10 049	—	Cylinder with piston, standard, consisting of: Cylinder 00 10 035, Piston 00 12 080	—	—	—	2	—
00 10 039	—	Cylinder with piston, standard, consisting of: Cylinder 00 10 035, Piston 00 12 081	—	—	—	—	2
00 10 027	62	Cylinder with oil return pipe and protecting tube for R 50 and R 50/2	R 50 2	R 50/2 2	2	—	—
00 10 031	62	Cylinder with oil return pipe and protecting tube for R 60 and R 60/2	R 60 2	R 60/2 2	—	—	—
00 10 035	62	Cylinder with oil return pipe, protecting tube and ring	—	—	—	2	2
00 10 151	63	Protecting tube for R 50	R 50 4	—	—	—	—
00 10 152	63	Protecting tube for R 60 et R 60/2	R 60 4	R 60/2 4	—	—	—
00 10 165	63	Protecting tube for R 50/2	—	R 50/2 4	4	—	—
00 10 153	63	Protecting tube	—	—	—	4	4
00 10 158	64	Gasket between engine housing and cylinder	2	—	—	—	—
00 10 160	64	Gasket between engine housing and cylinder	—	2	2	—	2
00 10 156	64	Gasket between engine housing and cylinder	—	—	—	2	—
		Cylinder Head					
00 21 030	—	Cylinder head, right, with spark plug bushing, long valve guide bushings, valve seat rings, sleeve and studs (on R 50 starting with vehicle 5 57 706)	1	1	—	—	—
00 21 023	—	Cylinderhead, right, with spark plug bushing, long valve guide bushings, valve seat rings, sleeve and studs	—	—	1	—	—
00 21 031	—	Cylinderhead, right, with spark plug bushing, valve guide bushings, valve seat rings, sleeve and studs	—	—	—	1	1
00 21 029	65	Cylinderhead, left, with spark plug bushing, long valve guide bushings, valve seat rings, sleeve and studs (on R 50 starting with vehicle 557 706)	1	1	—	—	—
00 21 024	65	Cylinderhead, left, with spark plug bushing, valve guide bushings, valve seat rings, sleeve and studs	—	—	1	—	—

Ordering No.	Call-out No.	Description of Part	Qty.				
			R 50 60	R 50/2 60/2	R 50 S	R 69	R 69 S
00 21 032	65	Cylinderhead, left, with spark plug bushing, bushing, valve guide bushings, valve seat rings, sleeve and studs	—	—	—	1	1
00 21 110	66	Valve seat ring, inlet	2	2	2	—	—
00 21 122	66	Valve seat ring, inlet	—	—	—	2	2
00 21 114	67	Valve seat ring, exhaust	2	2	2	—	—
00 21 123	67	Valve seat ring, exhaust	—	—	—	2	2
00 22 112	68	Sleeve	8	8	8	—	—
00 22 114	68	Sleeve	—	—	—	8	8
00 21 100	69	Stud (E) for carburetor	4	4	4	4	4
99 03 354	—	Stud M 8×38—5 S cad. (E) for front end cover	2	2	2	—	—
99 03 372	—	Stud M 8×50 Sn 4—5 S cad. (E) for front end cover	—	—	—	2	2
00 22 118	70	Gasket between cylinder and cylinderhead	2	2	2	—	—
00 22 168	70	Gasket between cylinder and cylinderhead	—	—	—	2	2
00 22 108	71	Hex. head screw for attachment of cylinder-head	—	—	—	4	4
00 22 166	72	Flat washer for attachment of cylinderhead	—	—	—	4	4
00 23 025	73	Protective cover with stud for cylinderhead	2	2	—	—	—
00 23 024	74	Protective cover with stud for cylinderhead	—	—	2	—	—
00 23 027	74	Protective cover with stud for cylinderhead	—	—	—	2	2
00 23 150	75	Gasket between cylinderhead and rocker cover	2	2	2	—	—
00 23 152	75	Gasket between cylinderhead and rocker cover	—	—	—	2	2
		Attachment parts for rocker cover					
99 03 838	76	Stud M 6×22 Sn 4—5 S cad. (E)	4	—	—	—	—
99 03 209	76	Stud M 6×22 Sn 4—5 S cad. (E)	—	—	—	4	—
00 23 160	77	Cap nut	2	2	2	8	2
99 32 090	78	Lock washer B 8 cad.	2	2	2	2	2
99 32 070	79	Lock washer B 8 cad.	8	8	8	4	8
99 22 053	80	Hex. nut M 6—6 S cad.	4	4	4	4	4

Ordering No.	Call-out No.	Description of Part	Qty.					
			R 50 60	R 50/2 60/2	R 50 S	R 69	R 69 S	
		Carburetor attachment on cylinder heads						
00 42 168	81	Centering bush	—	—	2	—	2	
99 22 081	82	Hex. nut M 8—6 S cad.	4	4	4	4	4	
99 31 655	83	Flat washer 8.4 cad.	—	—	4	4	4	
99 32 090	84	Lock washer B 8 cad.	4	4	—	—	—	