

P A R T S L I S T N O. 178

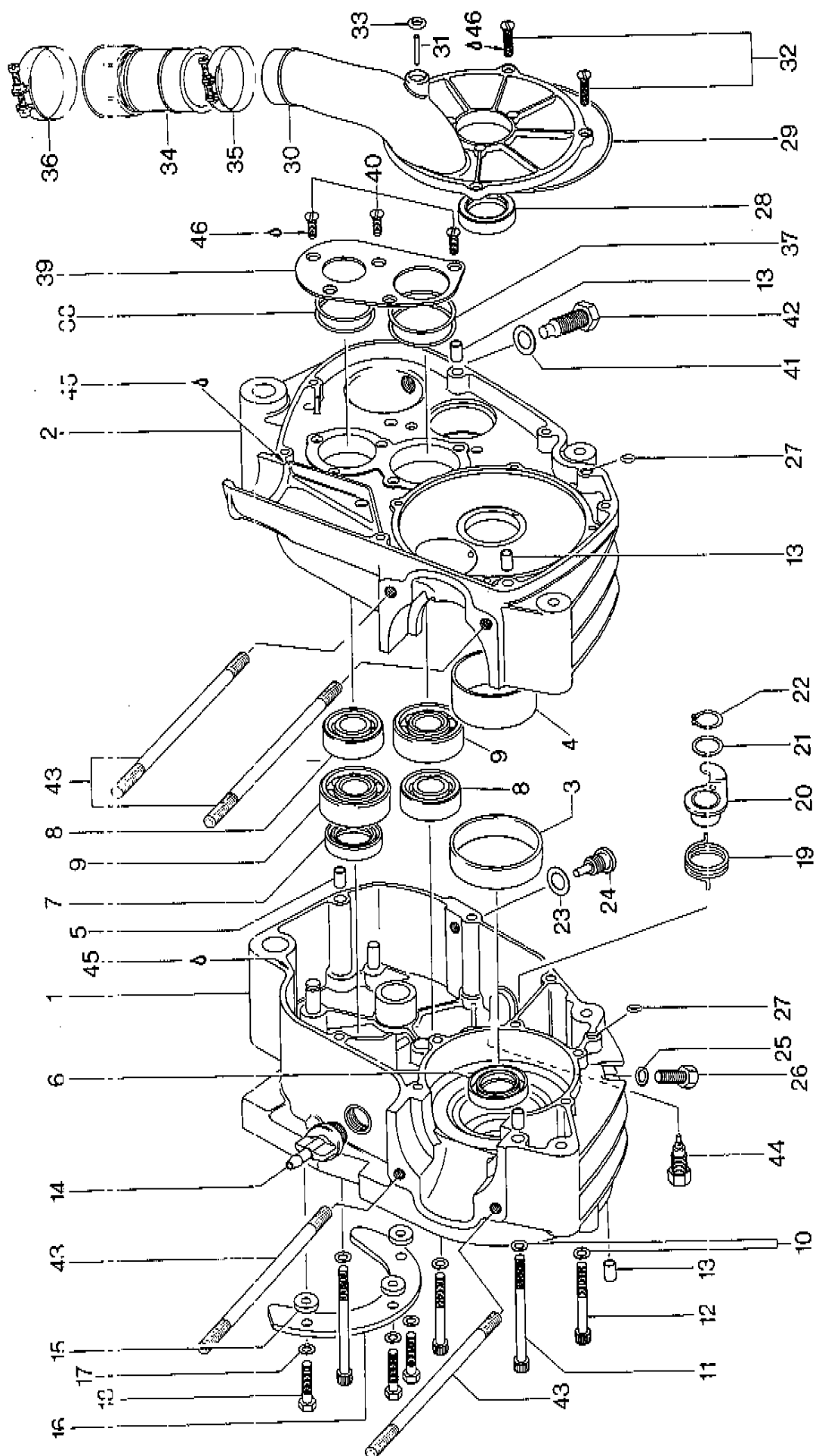
Motor Cycle - Engine

Type 244 MILITARY

Production 1978

BOMBARDIER - ROTAX GMBH
A-4623 Gunskirchen/Austria

Phone: (07246) 271 Telex: 25546a Cables: BOMBROTAX GUNSKIRCHEN



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Crankcase, Disk Valve Cover

Ill. No.	Part No.	Description	Qty.
1 - 5	291 963	crankcase assy.	1
3	260 767	ring, crankcase, magneto side	1
4	260 400	ring, crankcase, clutch side	1
5	249 900	dowel, locating	2
6	230 425	seal, magneto side	1
7	230 421	seal, transmission main shaft	1
8	232 630	ball bearing 6203	2
9	232 640	ball bearing 6204	2
10	245 751	lock washer 6	10
11	241 870	screw, allen head M6 x 70	5
12	241 820	screw, allen head M6 x 45	5
13	249 900	dowel, locating	5
14	241 920	oil filler cap M18 x 1,5	1
15	247 240	spacer, chain guard	3
16	297 330	chain guard for sprocket 13 t.	1
16	297 331	chain guard for sprocket 14 t.	1
16	297 332	chain guard for sprocket 15 t.	1
17	245 751	lock washer 6	3
18	241 185	screw, hex. head M6 x 16	3
19	239 755	spring, index	1
20	248 835	lever assy., index	1
21	227 800	washer, index	1
22	245 840	snapping, index	1
23	250 040	gasket ring	1
24	241 781	plug, magnetic drain	1
25	250 141	gasket ring	1
26	240 580	screw, hex. head M8 x 16, crankcase drain	1
27	230 530	O-ring	2
28	230 425	seal, clutch side	1
29	230 310	O-ring, disk valve cover	1
30,31	212 037	disk valve cover assy.	1
31	224 040	diffuser tube	1
32	240 510	screw, countersunk slot head M5 x 16	4
33	230 260	O-ring, oil injection inlet port	1
34	267 741	adapter, carburetor	1

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Ill. No.	Part No.	Description	Qty.
35	251 345	hose clamp, carburetor adapter	1
36	251 320	hose clamp, carburetor	1
37	227 510	shim 0,5 mm, transmission clutch shaft bearing	as requ.
	227 511	shim 0,3 mm, transmission clutch shaft bearing	as requ.
	227 512	shim 0,1 mm, transmission clutch shaft bearing	as requ.
38	227 520	shim 0,5 mm, transmission main shaft bearing	as requ.
	227 521	shim 0,3 mm, transmission main shaft bearing	as requ.
	227 522	shim 0,1 mm, transmission main shaft bearing	as requ.
39	227 550	retaining plate, transmission bearings .	1
40	940 315	screw, countersunk slot head M5 x 12 . .	5
41	650 040	gasket ring	1
42	241 775	screw, kick starter stop	1
43	840 620	stud M8, cylinder	4
44	241 850	contact screw assy., neutral indicator .	1
45	899 682	LOCTITE 572 (white)	as requ.
46	899 783	LOCTITE 59 (violet)	as requ.

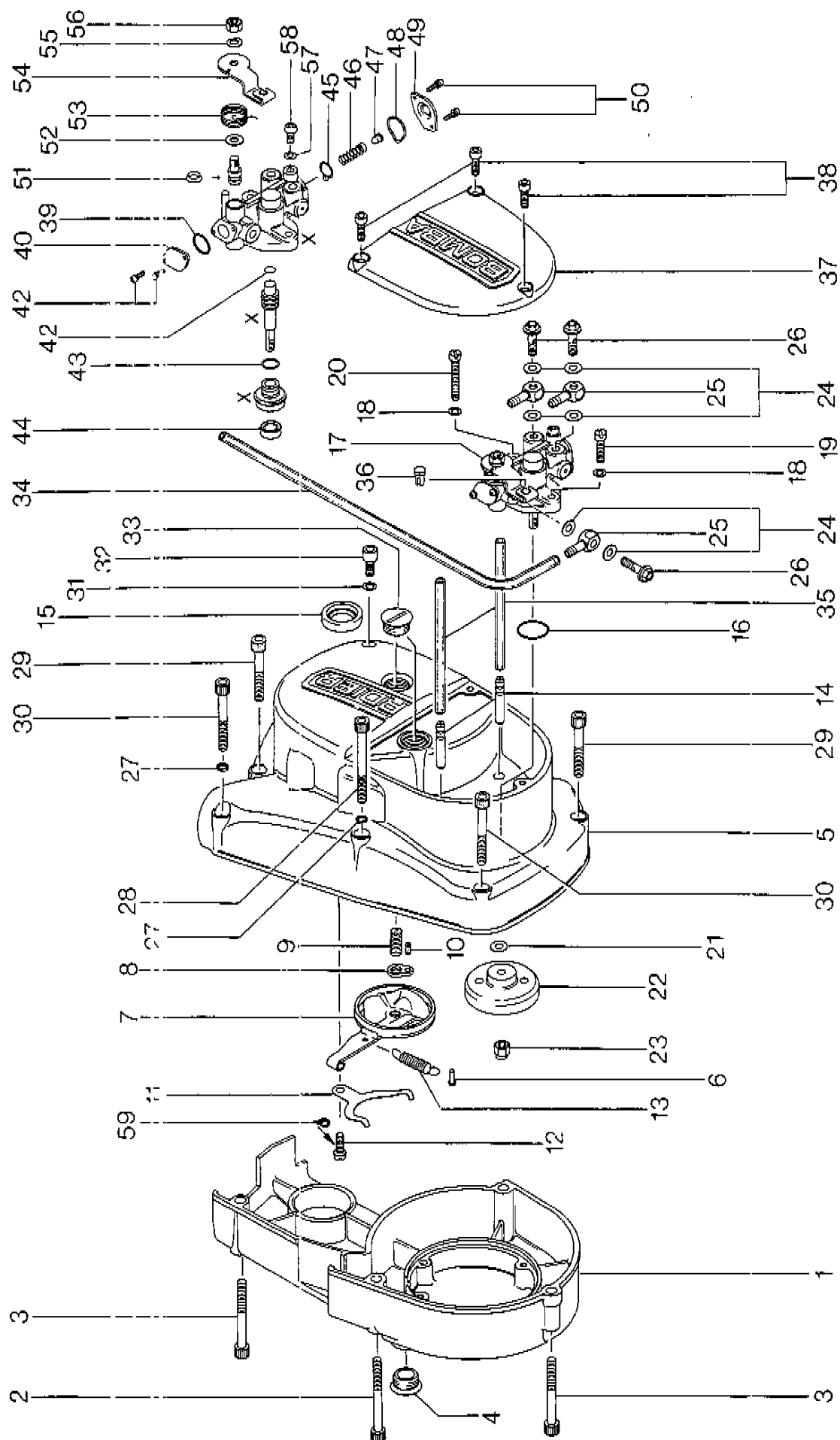
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Crankshaft, Piston, Cylinder, Cylinder Head

Ill. No.	Part No.	Description	Qty.
1,2	291 491	crankshaft assy.	1
2	227 510	filler cap	1
3	224 027	plate, oil guide	1
4	944 582	shim 0,3 mm, crankshaft, magneto side .	as requ.
	944 583	shim 0,1 mm, crankshaft, magneto side .	as requ.
	944 586	shim 0,2 mm, crankshaft, magneto side .	as requ.
5	232 780	ball bearing 6206, crankshaft, magneto side	1
6	245 400	lock washer 18	1
7	942 225	hex. nut M18 x 1,5, crankshaft, magneto side	1
8	234 922	gear 9 t., oil pump pinion	1
9	232 750	ball bearing 3205, double row, crankshaft, clutch side	1
10	247 290	spacer, disk valve	1
11	224 100	disk valve	1
12	292 132	drive gear with clutch drum assy. (replace only drive gear with clutch drum assy., see also page 10, no. 4)	1
13	945 757	lock washer 18	1
14	242 615	nut M18 x 1,5, crankshaft, clutch side .	1
15	230 530	O-ring	1
16	246 011	key, Woodruff, crankshaft, magneto side	1
17	246 570	key, Woodruff, crankshaft, clutch side .	1
18	932 904	needle bearing, piston pin	1
19,20,21	291 815	piston assy., w. rings 74,0 Ø, standard	1
	291 506	piston assy., w. rings 74,25 Ø, 1st oversize	1
	291 507	piston assy., w. rings 74,5 Ø, 2nd oversize	1
	291 508	piston assy., w. rings 74,75 Ø, 3rd oversize	1
20	215 220	SEMI-trapez ring 74,0 Ø, standard . . .	1
	215 146	L-trapez ring 74,25 Ø, 1st oversize . .	1
	215 147	L-trapez ring 74,5 Ø, 2nd oversize . . .	1
	215 148	L-trapez ring 74,75 Ø, 3rd oversize . .	1
21	215 155	rectangular ring 74,0 Ø, standard . . .	1
	215 156	rectangular ring 74,25 Ø, 1st oversize .	1
	215 157	rectangular ring 74,5 Ø, 2nd oversize .	1
	215 158	rectangular ring 74,75 Ø, 3rd oversize .	1

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Ill. No.	Part No.	Description	Qty.
22	916 185	piston pin	1
23	945 735	circlip, piston pin	2
24	230 552	gasket, cylinder base	1
25	213 708	cylinder w. sleeve assy.	1
26	840 510	stud M8 x 49, cylinder head	2
27	230 560	shim, cylinder head	as requ.
28	213 714	cylinder head	1
29	250 311	washer 8,4, cylinder head nut	6
30	842 130	hex. nut M8, cylinder head	6
31	830 270	gasket, exhaust socket	1
32	273 699	exhaust socket assy.	1
33	945 752	lock washer 8	2
34	840 080	cyl. screw M8 x 25, exhaust socket	2
35	213 694	cylinder sleeve	1
36	291 499	crankshaft repair kit	1
37	899 783	LOCTITE 59 (violet)	as requ.
38	899 780	LOCTITE 270 (green)	as requ.
39	291 654	gasket set	1



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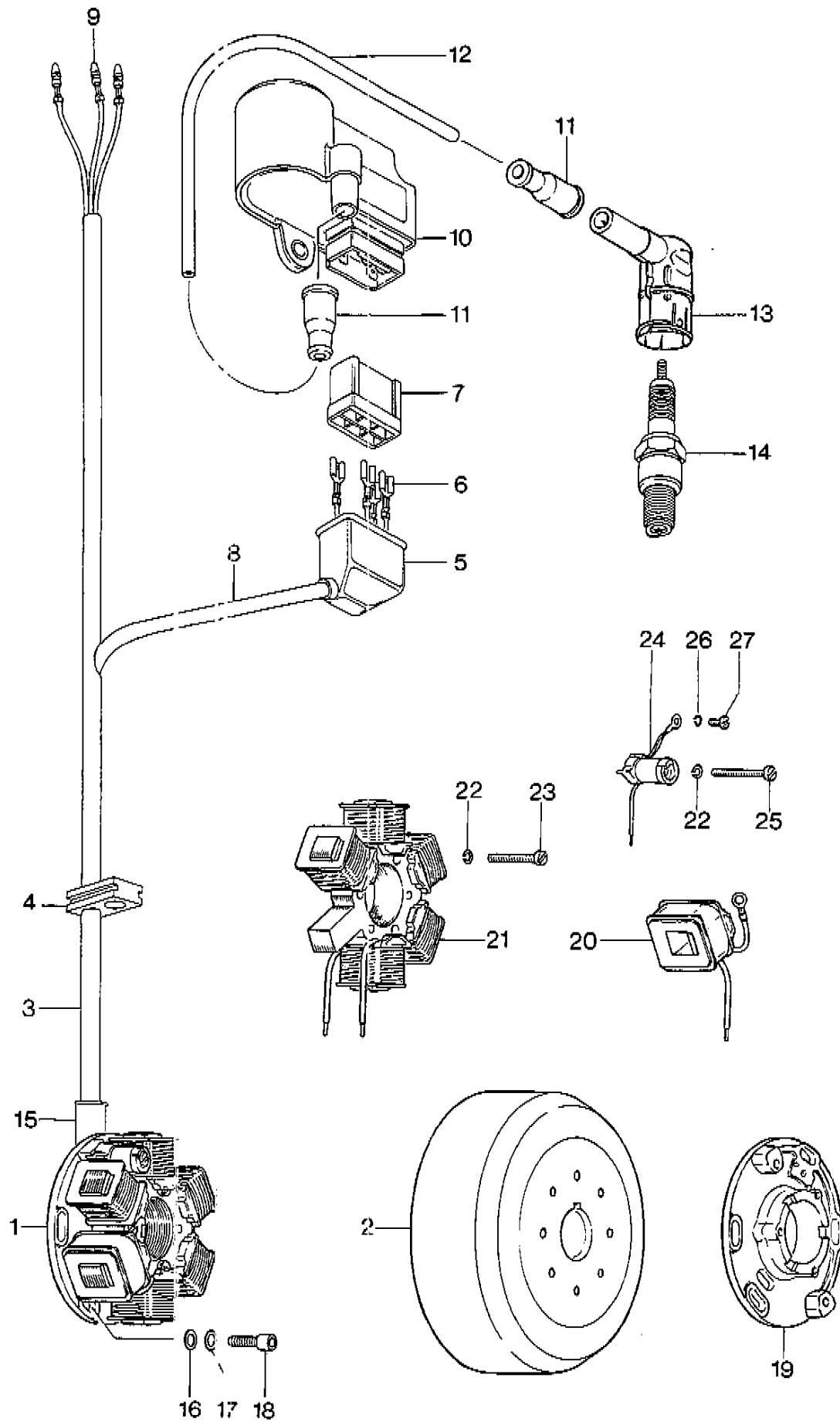
Magneto Cover, Clutch Cover, Oil Pump

Ill. No.	Part No.	Description	Qty.
1	212 107	magneto cover	1
2	241 761	cyl. screw M6 x 50	2
3	241 821	cyl. screw M6 x 45	2
4	241 800	plug, adjustment	1
5,6,14	212 102	clutch cover assy.	1
6	949 030	drive pin 3 x 8	1
7	259 619	cam assy., clutch release	1
8	259 630	plate, clutch adjustment locking . . .	1
9	241 791	screw M8 x 15, clutch adjustment . . .	1
10	241 795	screw M4 x 6, clutch adjustment . . .	1
11	239 560	spring, clutch cam retaining	1
12	240 560	screw, slot head M5 x 12	1
13	239 530	spring, clutch cam return	1
14	256 040	valve assy., oil pump check	2
15	230 355	seal, kick start shaft	1
16	230 370	O-ring, oil pump mounting flange . . .	1
17	291 433	oil pump assy.	1
18	945 750	lock washer 5	2
19	240 760	screw, slot head M5 x 16	1
20	240 975	screw, slot head M5 x 28	1
21	927 945	washer 6,2	1
22	234 932	gear, oil pump, 34 t.	1
23	342 040	hex. nut M6, oil pump gear	1
24	227 500	gasket, oil banjo	6
25	256 020	banjo	3
26	241 830	bolt, banjo	3
27	330 890	gasket, clutch cover	2
28	241 761	screw, allen head M6 x 50	1
29	241 811	screw, allen head M6 x 35	4
30	241 816	screw, allen head M6 x 40	3
31	330 890	gasket, oil level plug	1
32	340 370	plug, oil level	1
33	241 800	plug, adjustment	2
34	256 032	oil line 560 mm	1
35	256 031	oil line 90 mm	2
36	297 340	nipple	1

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Ill.No.	Part No.	Description	Qty.
37	212 065	oil pump cover	1
38	241 841	screw, allen head M5 x 12	3
39	230 451	O-ring, oil pump	1
40	256 060	plate, cam casing, oil pump	1
41	241 970	screw w. locking ring, oil pump	2
42	227 640	washer, thrust, oil pump	1
43	230 461	O-ring, oil pump	1
44	230 480	oil seal, oil pump	1
45	227 650	washer, wave, oil pump	1
46	239 720	spring, oil pump	1
47	256 080	retainer, oil pump	1
48	230 470	O-ring, oil pump	1
49	256 070	cap, sleeve, oil pump	1
50	241 970	screw w. locking ring, oil pump	2
51	230 490	X-ring, oil pump	1
52	227 660	collar, cam shaft, oil pump	1
53	239 670	spring, return, oil pump	1
54	256 010	lever, control, oil pump	1
55	945 751	lock washer 6	1
56	242 621	hex. nut M6, oil pump	1
57	250 250	washer, oil pump	1
58	241 980	screw, air vent, oil pump	1
59	899 783	LOCTITE 59 (violet)	as requ.

Parts marked with "X" are not available as spare parts!

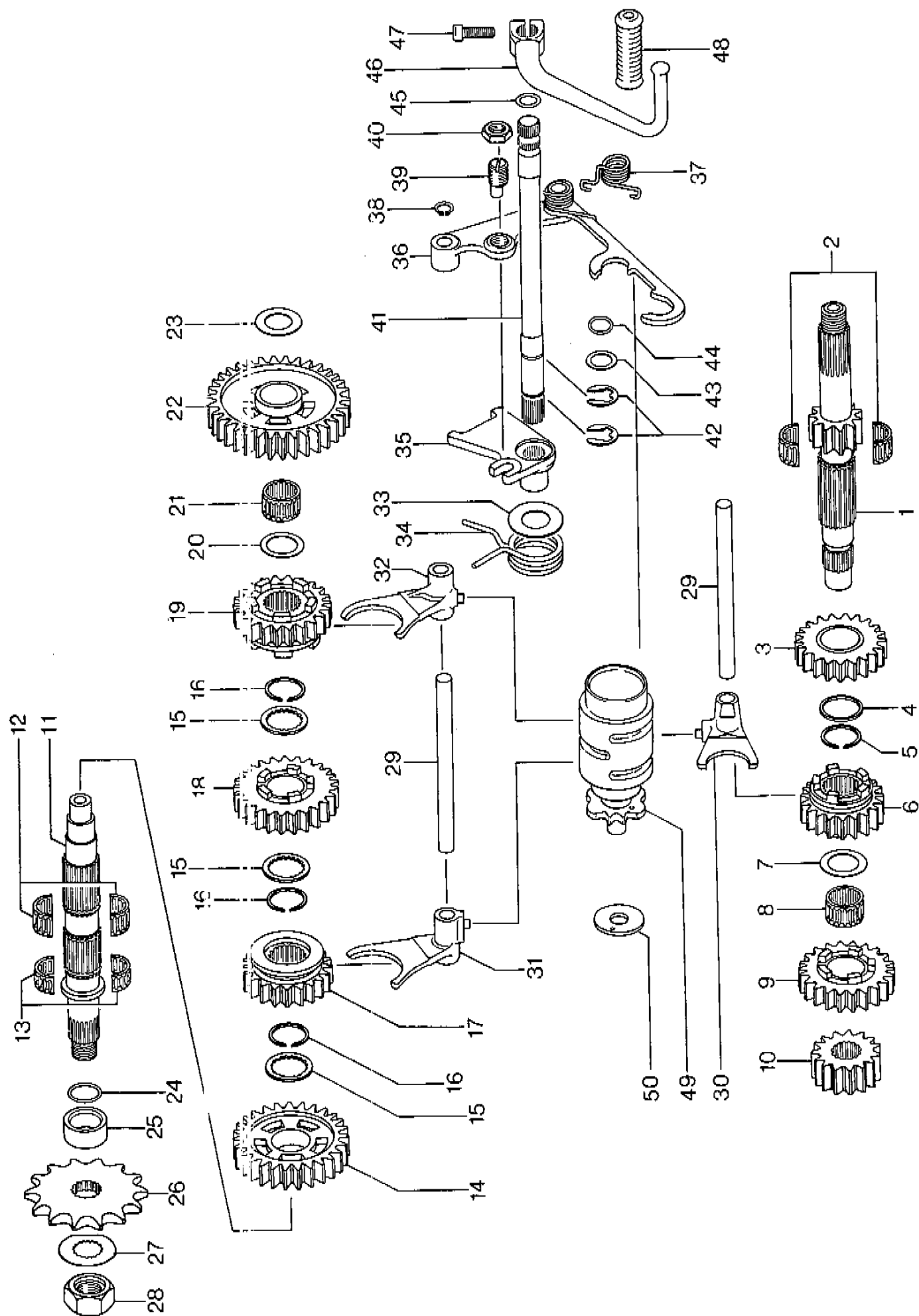


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Magneto Generator 12V 130W

Ill. No.	Part No.	Description	Qty.
1 - 13	292 201	magneto generator assy.	1
1,3 - 9	292 221	stator plate assy.	1
2	292 265	flywheel assy.	1
3	260 453	protection hose 400 mm	1
4	260 345	cable grommet	1
5	960 791	protection cap	1
6	864 011	Faston connector	3
7	865 453	connector housing	1
8	260 462	protection hose 185 mm	1
9	964 062	contact pin	3
10	994 370	electronic box	1
11	960 550	protection cap	2
12	864 697	ignition cable 375 mm	1
13	983 409	spark plug protector	1
14		spark plug	1
15	224 050	holder, cables	1
16	927 570	washer 5,3	4
17	945 750	lock washer 5	4
18	840 510	screw M5 x 16, allen head	4
19	865 245	stator plate alone	1
20	865 250	charging coil	1
* 20,21	264 670	coil set with iron core assy.	1
22	945 758	lock washer 4	4
23	941 281	cyl. screw M4 x 25	3
24	264 660	trigger coil	1
25	241 325	cyl. screw M4 x 28	1
26	245 090	lock washer 3	1
27	941 205	cyl. screw M3 x 6	1

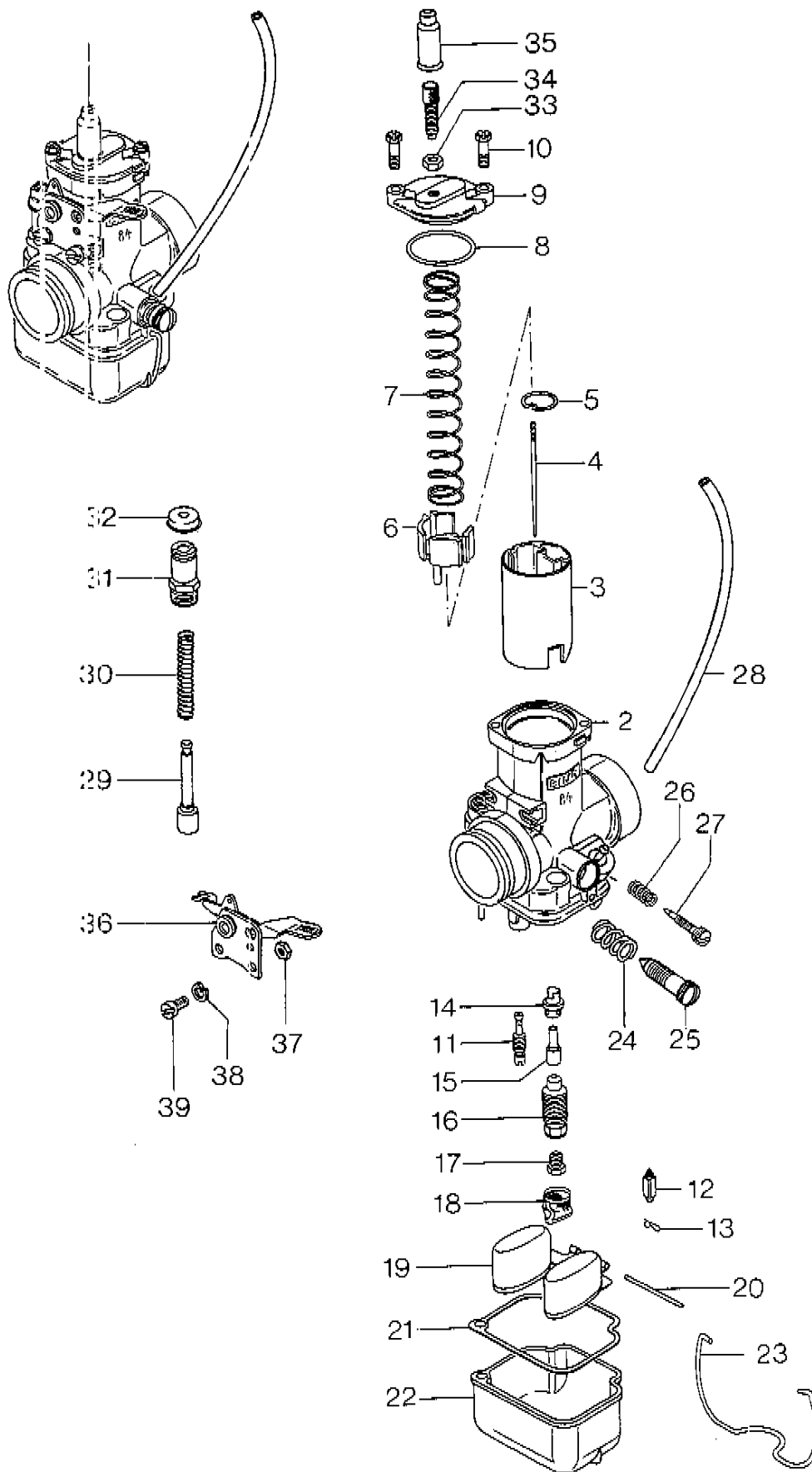
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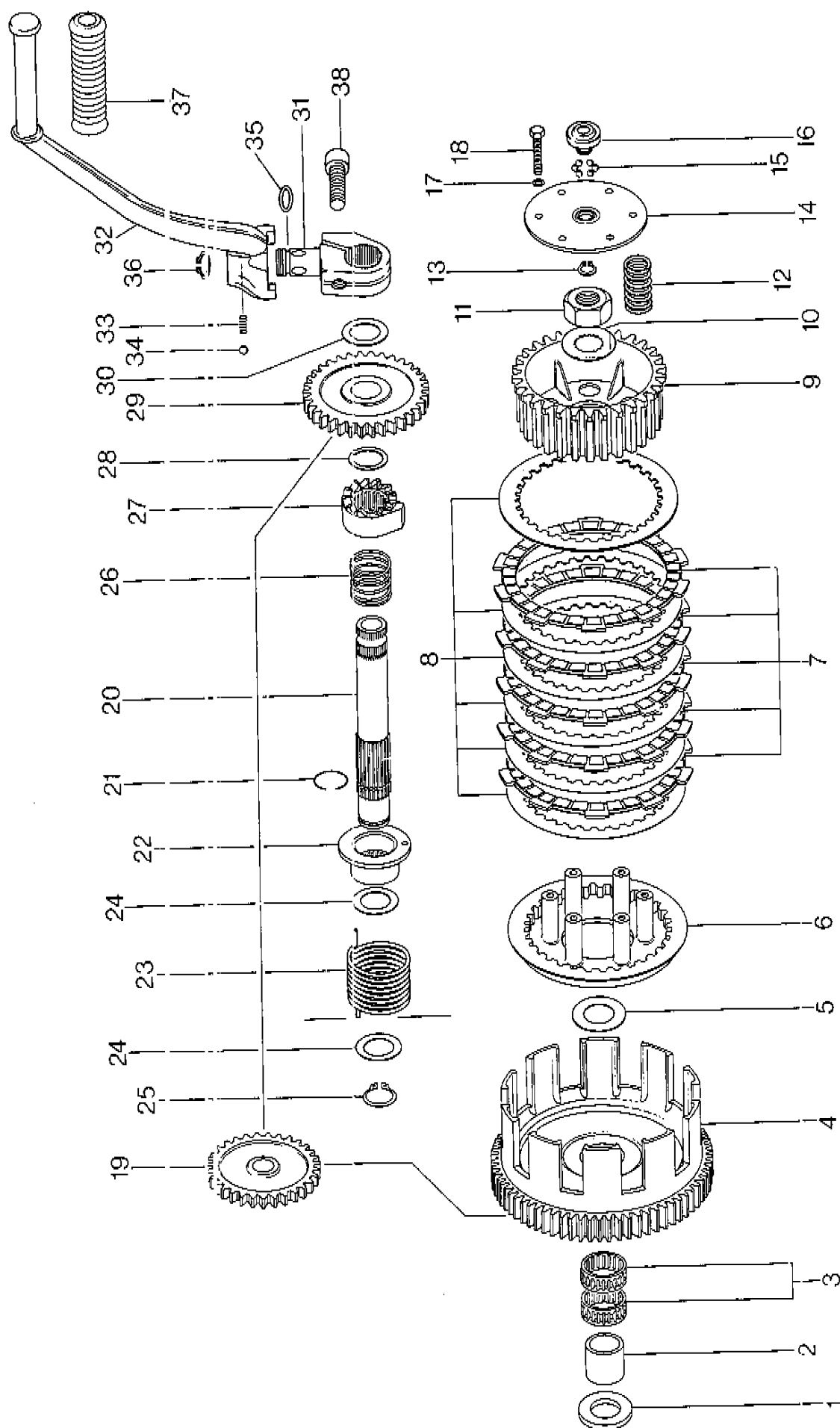
Transmission

Ill. No.	Part No.	Description	Qty.
1	237 440	clutch shaft, 11 t.	1
2	232 795	needle bearing assy., clutch shaft . .	1
3	235 380	gear 4th, clutch shaft, 21 t.	1
4	227 475	thrust washer, clutch shaft	1
5	245 340	snapping, clutch shaft	1
6	235 060	gear 3rd, clutch shaft, 18 t.	1
7	227 440	thrust washer, clutch shaft	1
8	232 790	needle bearing, clutch shaft	1
9	235 100	gear 5th, clutch shaft, 23 t.	1
10	235 040	gear 2nd, clutch shaft, 15 t.	1
11	237 452	main shaft	1
12	232 800	needle bearing, main shaft	1
13	232 740	needle bearing, main shaft	1
14	235 050	gear 2nd, main shaft, 28 t.	1
15	227 465	thrust washer, main shaft	3
16	245 340	snapping, main shaft	3
17	235 110	gear 5th, main shaft, 21 t.	1
18	235 070	gear 3rd, main shaft, 25 t.	1
19	235 090	gear 4th, main shaft, 23 t.	1
20	944 468	thrust washer, main shaft	1
21	232 790	needle bearing, main shaft	1
22	235 030	gear 1st, main shaft, 32 t.	1
23	227 430	thrust washer, main shaft	1
24	230 400	O-ring, main shaft	1
25	247 225	spacer, sprocket	1
26	236 952	sprocket, 15 t.	1
26	236 951	sprocket, 14 t.	1
26	236 950	sprocket, 13 t.	1
27	245 320	washer, main shaft locking	1
28	242 605	hex. nut M18 x 1,5, main shaft	1
29	258 540	pin, shift fork guide	2
30	258 725	fork, shifting 4 - 5	1
31	258 715	fork, shifting 2	1
32	258 705	fork, shifting 1 - 3	1
33	427 070	thrust washer, transmission actuating lever	1



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Ill. No.	Part No.	Description	Qty.
34	239 640	spring, transmission actuating lever . .	1
35	258 575	lever, transmission actuating	1
36	258 645	pawl assy.	1
37	239 650	spring, pawl	1
38	245 330	snapping 10 x 1	1
39	241 805	screw, pawl positioning	1
40	242 270	hex. nut M12 x 1, pawl positioning locking	1
41	237 436	shift shaft	1
42	945 790	retaining ring, shift shaft	2
43	944 851	thrust washer, shift shaft	1
44	230 451	O-ring, shift shaft	1
45	430 110	O-ring, shift shaft	1
46	248 785	shift lever	1
47	241 930	screw, allen head M6 x 20	1
48	260 200	rubber, shift lever	1
49	258 740	shift drum assy.	1
50	227 560	isclating washer, shift drum	1



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Clutch, Kick Start

Ill. No.	Part No.	Description	Qty.
1	227 600	thrust washer, inner, clutch drum . . .	1
2	232 700	inner race, clutch drum	1
3	232 650	needle bearing, clutch drum	2
4	292 132	drive gear with clutch drum assy. (re- place only drive gear with clutch drum assy., see also page 3, no. 12)	1
5	227 590	thrust washer, outer, clutch drum . . .	1
6	259 570	plate, clutch, inner pressure	1
7	259 560	plate, clutch, friction	5
8	259 555	plate, clutch, outer pressure	6
9	259 542	clutch hub	1
10	245 320	washer, transmission shaft locking . .	1
11	242 600	hex. nut M16 x 1,5 (up to engine serial no. 88.834)	1
	242 605	hex. nut M18 x 1,5 (engine serial no. 88.835 and above)	1
12	239 740	spring, clutch (change springs only setwise)	6
13-16	259 596	plate, clutch spring retaining, with hub assy.	1
13	245 330	snapring 10 x 1	1
15	232 990	ball 5/32"	12
16	259 705	hub, clutch spring retaining	1
17	245 750	lock washer 5	6
18	241 770	screw, hex. head M5 x 25	6
19	235 205	gear, kick start idler, 31 t.	1
20	237 425	kick start shaft	1
21	245 350	circlip, kick start shaft	1
22	228 195	retaining hub, kick start spring . . .	1
23	239 381	spring, kick start return	1
24	244 468	thrust washer	2
25	245 660	snapring, kick start shaft	1
26	239 610	spring, kick start ratchet engagement .	1
27	228 180	ratchet gear, kick start	1
28	227 480	thrust washer, kick gear	1
29	235 215	gear, kick start drive, 34 t.	1
30	244 468	thrust washer, kick start	1
31-37	248 875	lever assy., kick start	1

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Ill. No.	Part No.	Description	Qty.
31	248 802	hub, kick start	1
32	248 792	lever, kick start	1
33	239 535	spring, kick start lever	1
34	232 440	ball 7/32", kick start lever	1
35	230 461	O-ring	1
36	245 845	snapping, kick start lever	1
37	260 210	rubber sleeve, kick start	1
38	240 990	cyl. screw M8 x 30	1

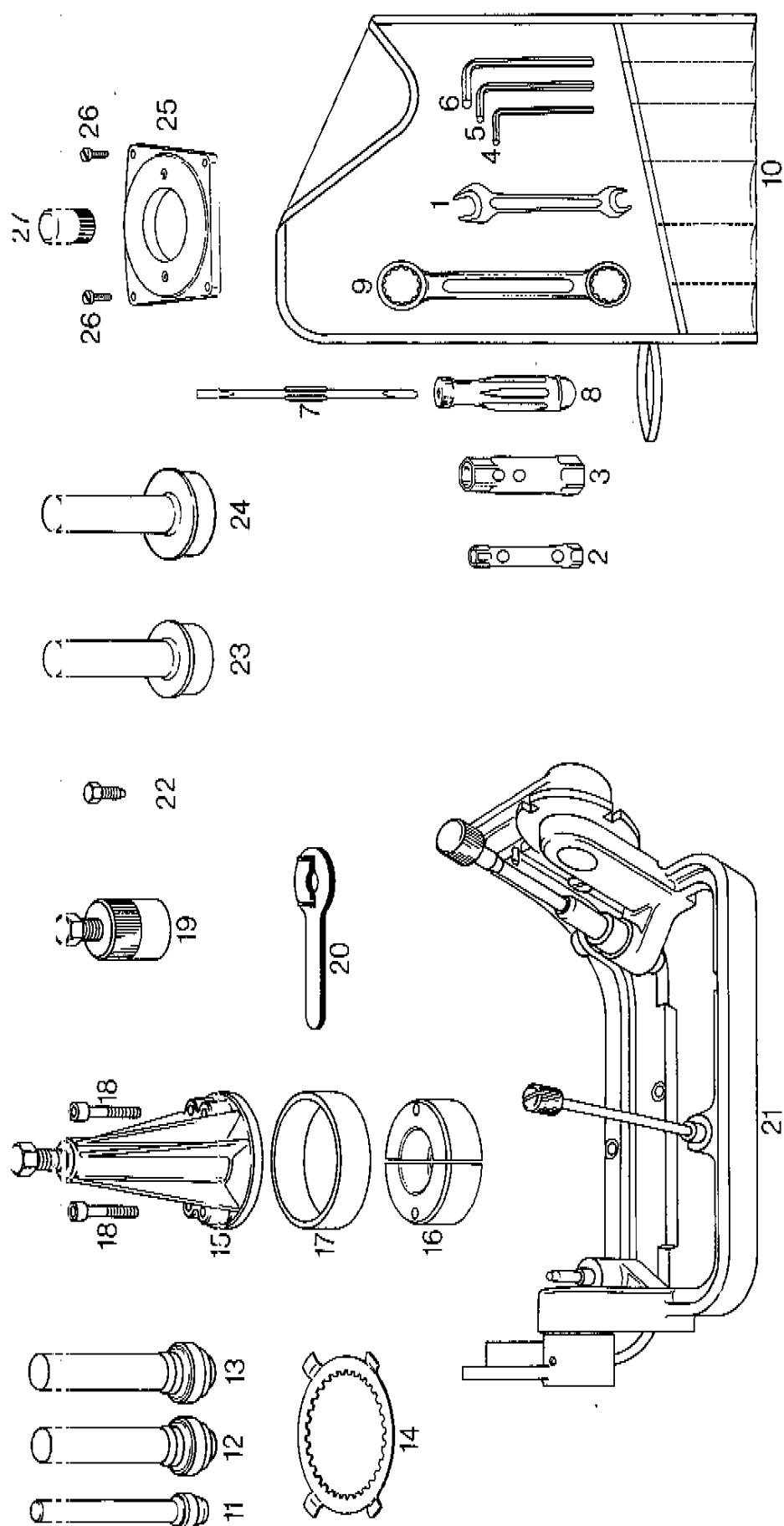
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Carburetor

Ill. No.	Part No.	Description	Qty.
1	291 764	Bing double float carburetor 84/32/3427	1
2		carburetor housing (not available as spare parts, use carburetor assy.) . . .	1
3	261 635	carburetor piston	1
4	261 641	jet needle	1
5	261 650	holding plate	1
6	227 635	plastic spring cup	1
7	239 700	spring, carburetor piston	1
8	261 670	rubber ring	1
9	261 660	cover plate	1
10	241 430	hex. screw M5 x 12	2
11	263 142	idler jet 40	1
12	261 705	float needle with VITON tip	1
13	261 710	clip, float needle	1
14	261 692	diffuser	1
15	261 608	jet needle 2,70	1
16	263 130	mixing tube	1
17	268 979	main jet 130	1
18	261 625	sieve sleeve	1
19	263 192	float	1
20	229 700	pin	1
21	230 720	gasket, float chamber	1
22	263 170	float chamber	1
23	263 180	spring clip	1
24	238 640	spring, adjustment screw	1
25	263 160	adjustment screw	1
26	239 880	spring, air regulating screw	1
27	263 150	air regulating screw	1
28	256 033	vent line 160 mm	1
29	268 847	starting piston w. gasket	1
30	239 730	spring, starting piston	1
31	261 770	closure screw	1
32	260 490	rubber cap	1
33	242 540	hex. nut M6 x 0,75	1
34	241 440	adjustment screw M6 x 0,75	1
35	260 370	rubber grommet	1

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Ill. No.	Part No.	D e s c r i p t i o n	Qty.
36	251 750	choke lever assy.	1
37	251 200	hex. nut M5	2
38	945 750	lock washer 5	2
39	240 791	cyl. screw M5 x 10	2



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Tools

Ill. No.	Part No.	Description	Qty.
1 - 10	277 780	tool kit, owners	1
1	276 065	fork wrench 10/13 mm	1
2	276 220	socket wrench 11/13 mm	1
3	277 411	socket wrench 17/21 mm	1
4	277 790	wrench 4, int. hex. screw	1
5	276 360	wrench 5, int. hex. screw	1
6	277 810	wrench 6, int. hex. screw	1
7	277 830	insert for screw driver	1
8	277 840	grip for screw driver	1
9	277 825	ring wrench	1
10	276 195	tool bag	1
11	277 850	oil seal insertion jig, to mount oil seal 230 355	1
12	277 870	oil seal insertion jig, to mount oil seal 230 421	1
13	277 875	oil seal insertion jig, to mount oil seal 230 425	1
14	277 885	clutch hub locking tool	1
15	276 296	puller assy. for bearing on crankshaft	1
16	277 890	ringhalf for puller, bearing on crank- shaft, clutch side	2
16	276 020	ringhalf for puller, bearing on crank- shaft, magneto side	2
17	277 480	ring for puller	1
18	240 680	cyl. screw w. int. hex. M8 x 40	2
19	277 307	puller assy. for flywheel	1
20	277 900	pump gear wrench	1
21	277 915	assembly trestle	1
22	241 965	locating bolt for crankshaft	1
23	276 190	plastic ring insertion jig, clutch side	1
24	276 930	plastic ring insertion jig, magneto side	1
25	276 910	plate for puller, crankcase half	1
26	240 351	cyl. screw M5 x 20	4
27	276 920	protection cap	1