

# PARTS MANUAL

## 2001 / 2002

### PLEASE OBSERVE !

- Always use original Husaberg parts.
- Use the special Husaberg tools when required.
- Install new gaskets, o-rings, circlips etc whenever possible.
- Always clean all parts thoroughly before assembly.
- All screws, nuts, bolts etc. are in the metric system.
- Always use the adequate tools, liquids, lubricants, fuel and oil qualities.

This Parts Manual 2001 / 2002 is subject to correction without prior notice.

The material and information included in this Parts Manual 2001 / 2002 are all of the latest editions available at the time of the printing.

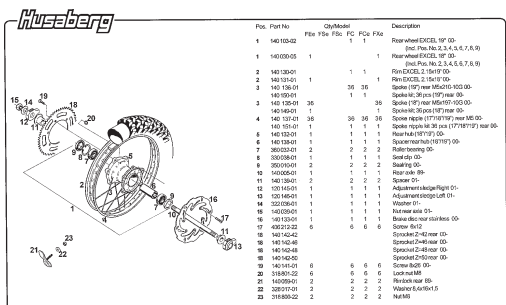
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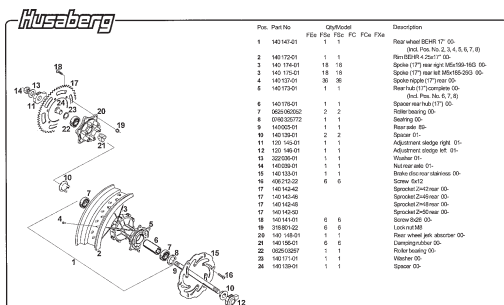
# HUSABERG

## 4 STROKE FORCE



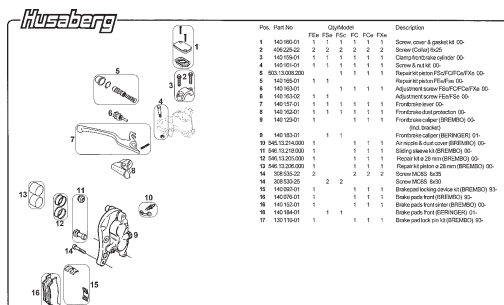
REAR WHEEL (18"/19")

19



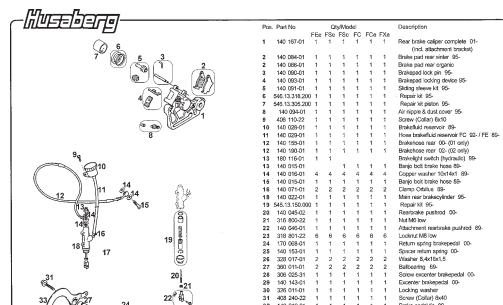
REAR WHEEL (17")

20



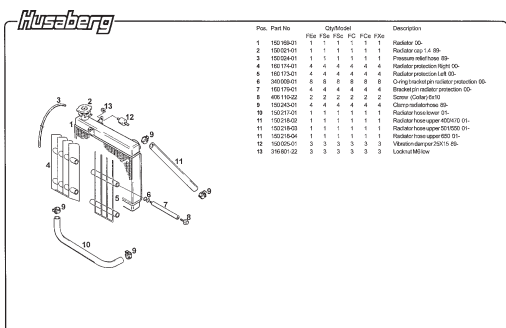
FRONT BRAKE

21



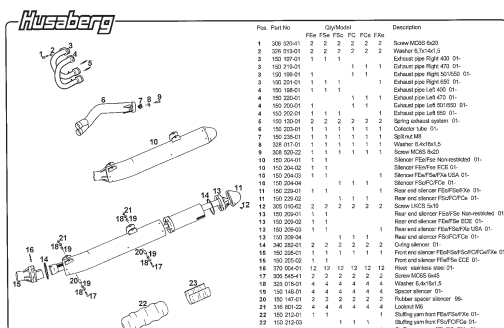
REAR BRAKE

22



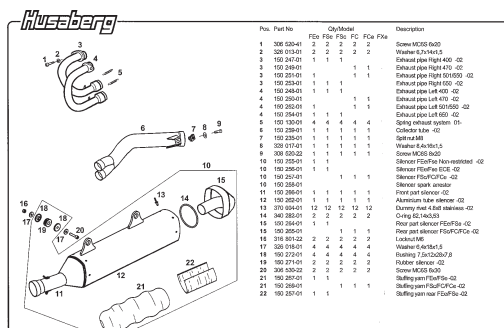
COOLING SYSTEM

23



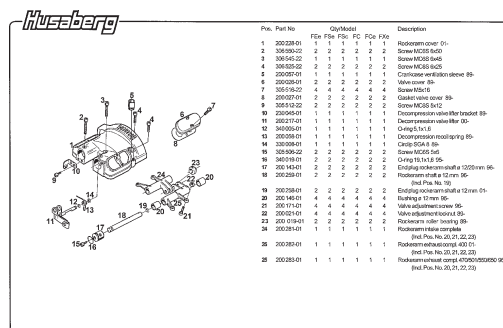
EXHAUST SYSTEM (400)

24



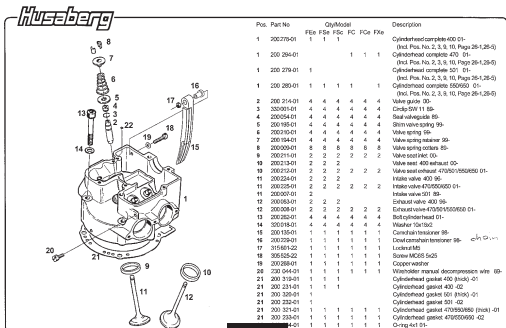
EXHAUST SYSTEM (425)

25



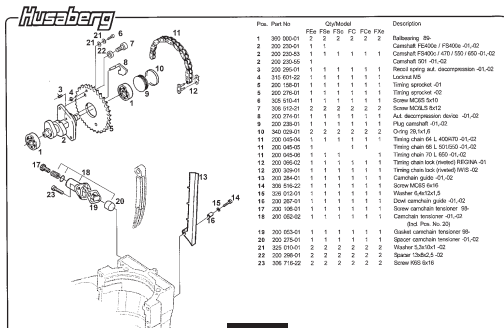
CYLINDER HEAD UPPER PART

26



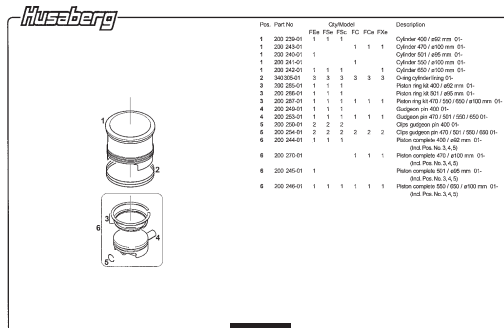
CYLINDER HEAD LOWER PART

27



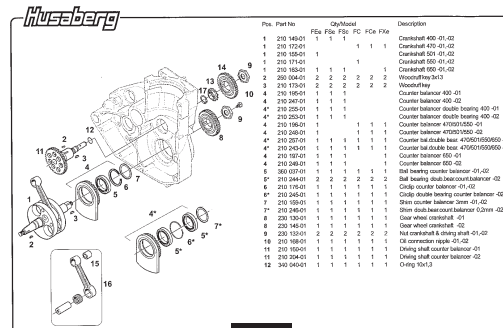
CAMSHAFT

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CYLINDER & PISTON

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CRANKSHAFT PART 1

30

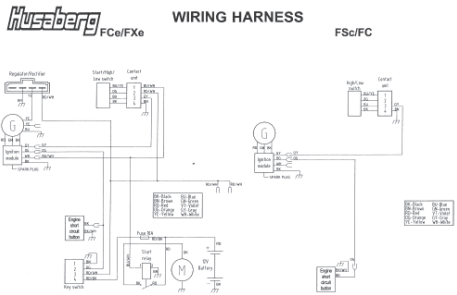






# HUSABERG

**4 STROKE FORCE**



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## Husaberg

### SPECIFICATIONS

SUBJECT/MODEL	FE 400 e	FE 501 e	FE 550 e	FE 600 e	FE 650 e	FE 690 e	FE 700 e	FE 716 e	FE 728 e	FE 800 e	FE 816 e	FE 830 e	FE 845 e
Displacement	390cc	497cc	544cc	596cc	644cc	670cc	670cc	700cc	700cc	770cc	800cc	800cc	800cc
Bore (Stroke) (mm)	52 x 61	62 x 67	65 x 65	66 x 61	68 x 61	70 x 62	70 x 62	70 x 62	70 x 62	75 x 61	75 x 62	75 x 62	75 x 62
Compression ratio	12.5:1	13.5:1	13.5:1	13.5:1	13.5:1	13.5:1	13.5:1	13.5:1	13.5:1	13.5:1	13.5:1	13.5:1	13.5:1
Over-rev system	Electronically controlled												
Over-rev protection system	These separate ones are activated by the rider's foot, and controlled by the controller and are activated by a lever on the handlebar.												
Clutch cable disconnect	100% (100% = 1.00)												
Engine	Liquid cooling, single cylinder, 4-stroke, SOHC-2 valves, counter balance.												
Valve clearance	Intake and Exhaust 0.15 mm (0.006 in)												
Lubrication system	Oil jet pump and wet sump construction, high pressure oil pump, pressure lubricator of connecting rod bearing and rocker arms. Oil return and main line. Engine oil.												
Ignition system	12V Coilless Force Control (FCFC), Dual Inverter Control (DIC), Low Line, dual inverter single system with sensors												
Spark plug - Search plug gap	NGK CORMEX J9.095 1.00/0.8 mm												
Alternator	12 V/21 A 36 W * Non-rotatable												
Air intake system	Single filter												
Exhaust system	4-into-2												
Water pump	12V/21 A 36 W * Non-rotatable												
Water pump (20/25/30°C)	12V/21 A 36 W * Non-rotatable												
Exhaust system	Free stream pipes (2 into 1) collector, stainless steel silencer, USA version, swept 17" and 17.5" models, equipped with spark arrestor.												
Cooling	Liquid cooling, water pump, 12V/21 A 36 W * Non-rotatable												
Crankshaft	Hydraulic: 1.75 mm (0.069 in) at 0.10 mm												
Water seal O-ring	12V/21 A 36 W * Non-rotatable												
Pressure	12V/21 A 36 W * Non-rotatable												
Weight	12V/21 A 36 W * Non-rotatable												

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## Husaberg

### SPECIFICATIONS

SUBJECT/MODEL	FE 400 e	FE 501 e	FE 550 e	FE 600 e	FE 650 e	FE 690 e	FE 700 e	FE 716 e	FE 728 e	FE 800 e	FE 816 e	FE 830 e	FE 845 e
Ride	EXCEL 1.80 x 21"												
Front	EXCEL 1.80 x 21"												
Wheel	EXCEL 2.15 x 18"												
Swingarm	EXCEL 2.15 x 18"												
Front fork	EXCEL 2.15 x 18"												
Rear shock absorber	EXCEL 2.15 x 18"												
Transmission	EXCEL 2.15 x 18"												
Overhaul	EXCEL 2.15 x 18"												
Oil	EXCEL 2.15 x 18"												
Frame	EXCEL 2.15 x 18"												
Weight	EXCEL 2.15 x 18"												

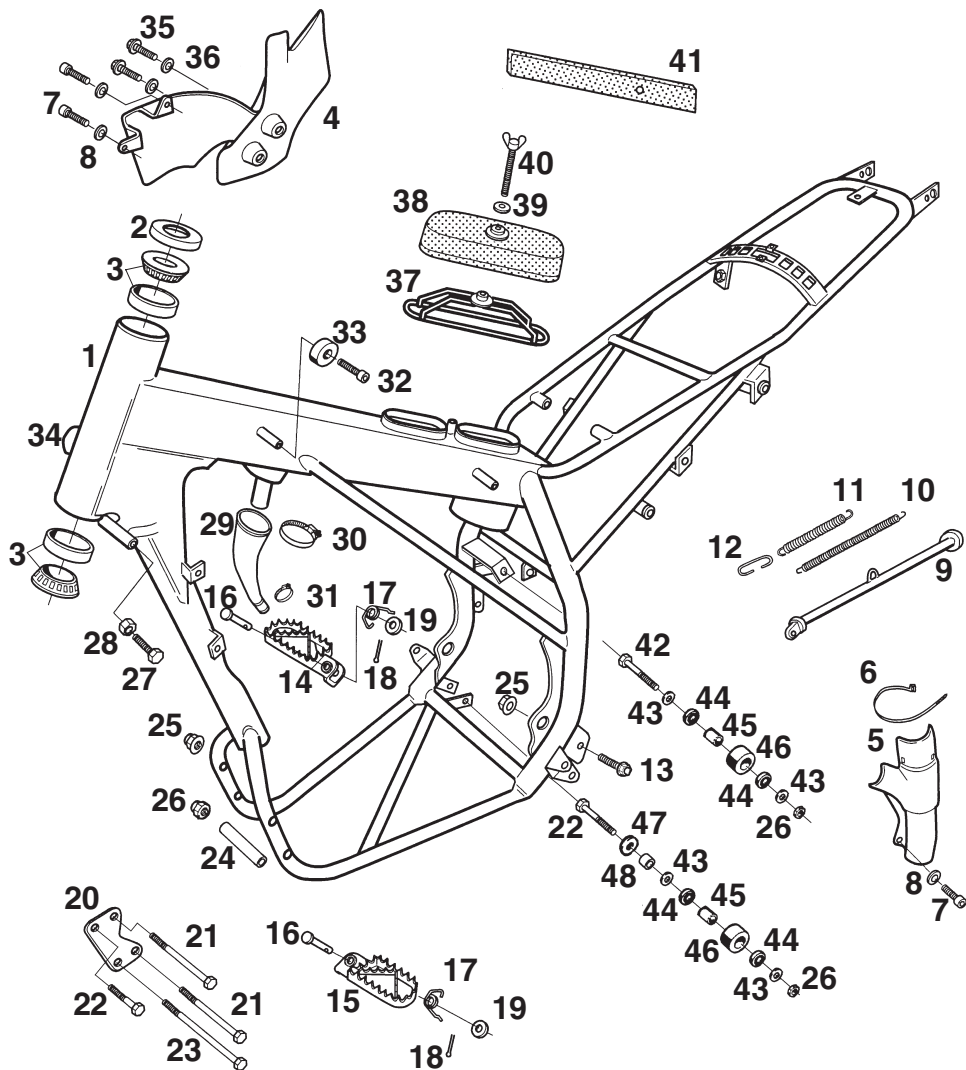
**57**

# HUSABERG

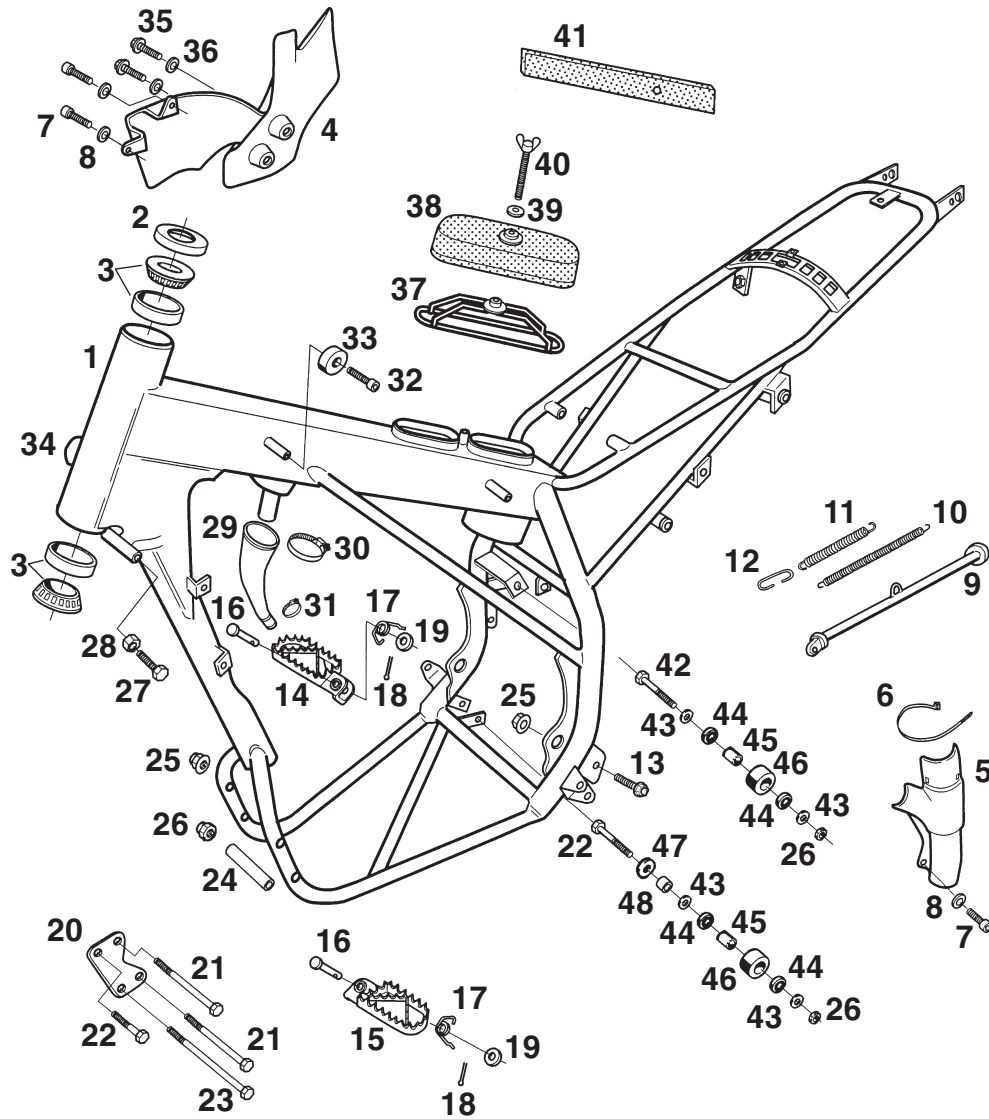
**4 STROKE FORCE**

recommends



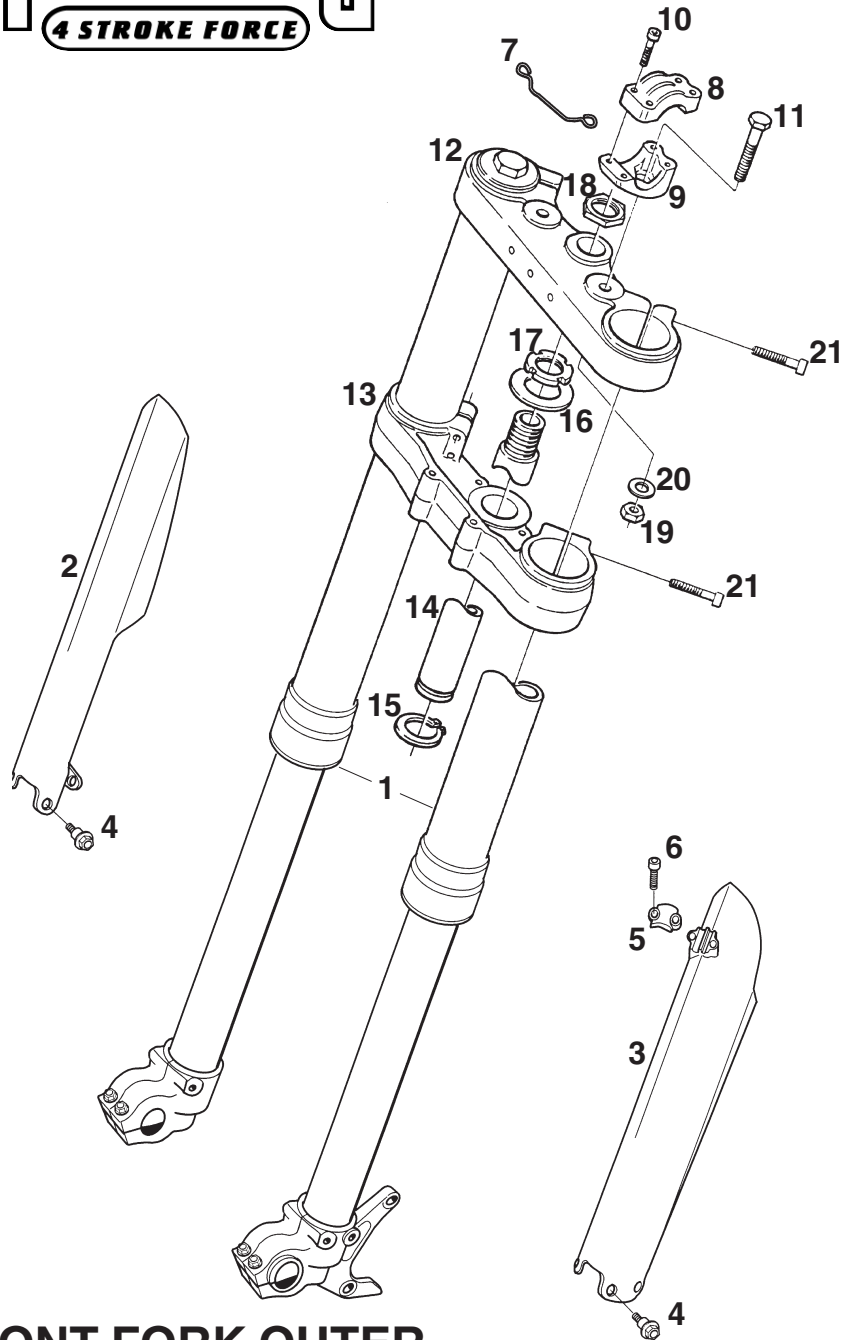


Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	110 229-01	1	1					Frame blue FEe/FSe 01'
1	110 229-02			1	1	1		Frame blue FSc/FC/FCe 01'
1	110 229-03						1	Frame blue FXe 01'
1	110 242-01	1	1					Frame blue FEe/FSe 02'
1	110 242-02			1	1	1		Frame blue FSc/FC/FCe 02'
1	110 242-03						1	Frame blue FXe 02'
2	130 150-01	1	1	1	1	1	1	Steering head cover
3	130 019-01	2	2	2	2	2	2	Taper roller bearing 89-
4	160 171-01	1	1	1	1	1	1	Frame protector RH 00-
5	160 172-01	1	1	1	1	1	1	Frame protector LH 00-
6	190 017-01	2	2	2	2	2	2	Straps frame protector 01-
7	305 510-22	3	3	3	3	3	3	Screw 5x10
8	325 010-01	3	3	3	3	3	3	Washer 5,3x10x1
9	120 091-04	1						Sidestand compl.blue FEe/FXe 99-
9	120 091-05		1					Sidestand compl. blue FSe 01-
10	120 138-01	1	1					Spring inner side stand 00-
11	120 044-01	1	1					Spring sidestand 89-
12	120 097-01	1	1					Holder spring sidestand 95/2-
13	408 230-22	1	1					Screw (Collar) 8x30 98-
14	170 069-01	1	1	1	1	1	1	Footrest right 00-
15	170 070-01	1	1	1	1	1	1	Footrest left 00-
16	170 071-01	2	2	2	2	2	2	Bolt footrest 00-
17	170 072-01	2	2	2	2	2	2	Spring footrest RH,LH 00-
18	170 025-01	2	2	2	2	2	2	Pin, bolt footrest 00-
19	320 018-01	2	2	2	2	2	2	Washer bolt footrest 00-
20	190 051-01	2	2	2	2	2	2	Engine support plate 94-
21	308 611-22	2	2	2	2	2	2	Screw M6S 8x110
22	308 655-22	3	3	3	3	3	3	Screw M6S 8x55
23	190 067-01	1	1	1	1	1	1	Screw M6S 8x180
24	110 128-01	1	1	1	1	1	1	Spacer engine support plate 01-
25	318 810-22	5	5	5	5	5	5	Locknut M8 89-
26	318 801-22	3	3	3	3	3	3	Locknut low M8 89-
27	308 625-22	2	2	2	2	2	2	Screw 8x25
28	318 800-22	2	2	2	2	2	2	Nut steering stop M8
29	150 152-01	1	1	1	1	1	1	Oil trap 00-
30	150 003-01	1	1	1	1	1	1	Clamp 00-
31	150 028-01	1	1	1	1	1	1	Clamp 00-
32	306 512-22	4	4	4	4	4	4	Screw 5x12
33	160 176-01	4	4	4	4	4	4	Rubber attachment fuel tank 00-
34	110 172-01	1	1					Steering head lock 98-



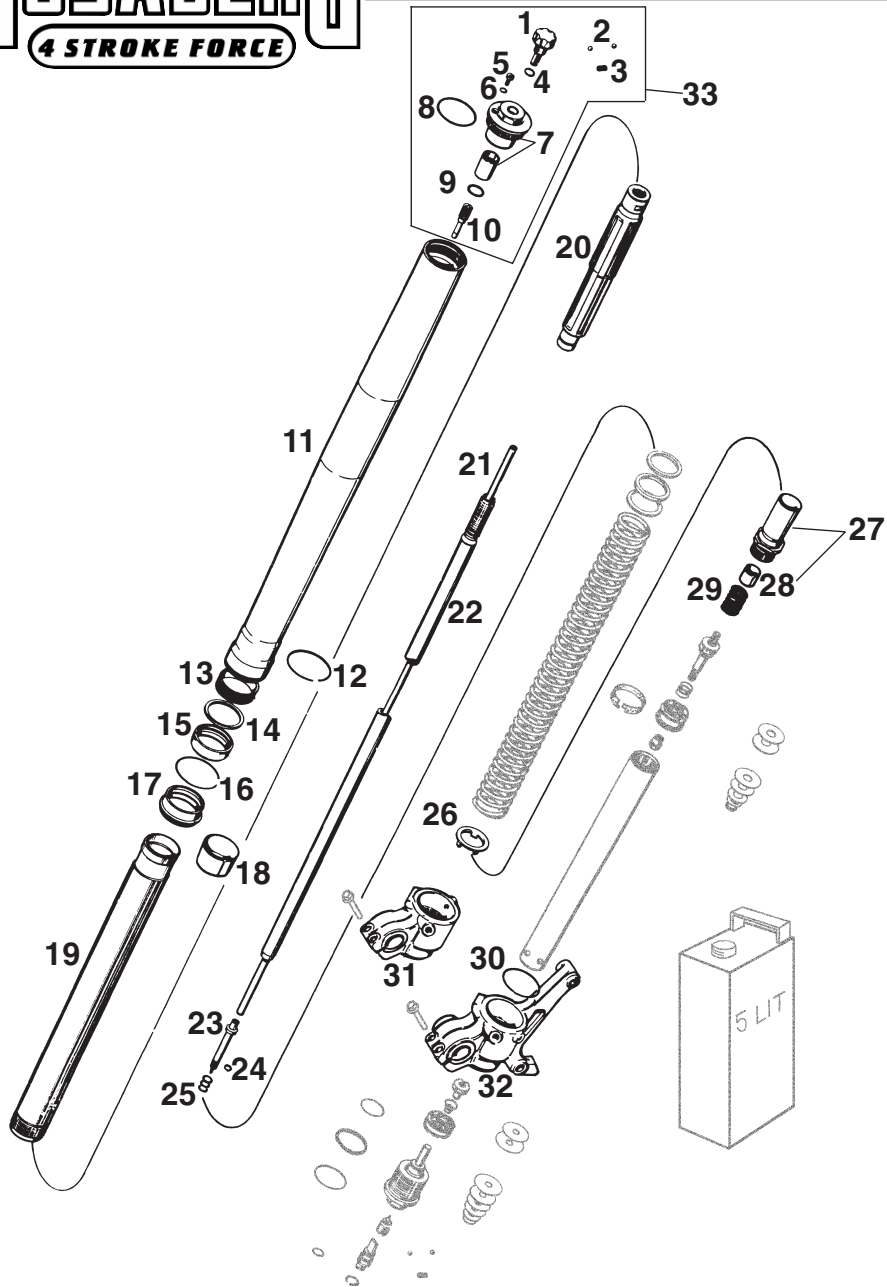
Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
35	406 120-22	2	2	2	2	2	2	Screw (collar) 6x20 98-
36	140 051-01	2	2	2	2	2	2	Spacer 00-
37	150 167-01	1	1	1	1	1	1	Air filter basket 00-
38	150 166-01	1	1	1	1	1	1	Air filter 00-
39	326 022-01	1	1	1	1	1	1	Washer 6x22x1,5
40	150 196-01	1	1	1	1	1	1	Screw air filter 00-
41	150 187-01	2	2	2	2	2	2	Air filter protection 00-
42	308 650-22	1	1	1	1	1	1	Screw M6S 8x50
43	328 017-01	4	4	4	4	4	4	Washer 8,4x16x1,5
44	360 011-01	4	4	4	4	4	4	Ball bearing chain roller 89-
45	120 057-01	2	2	2	2	2	2	Spacer chain roller 89-
46	120 056-01	2	2	2	2	2	2	Chain roller 89-
47	328 022-01	1	1	1	1	1	1	Washer 8x22x1,5
48	170 009-01	1	1	1	1	1	1	Spacer 00-



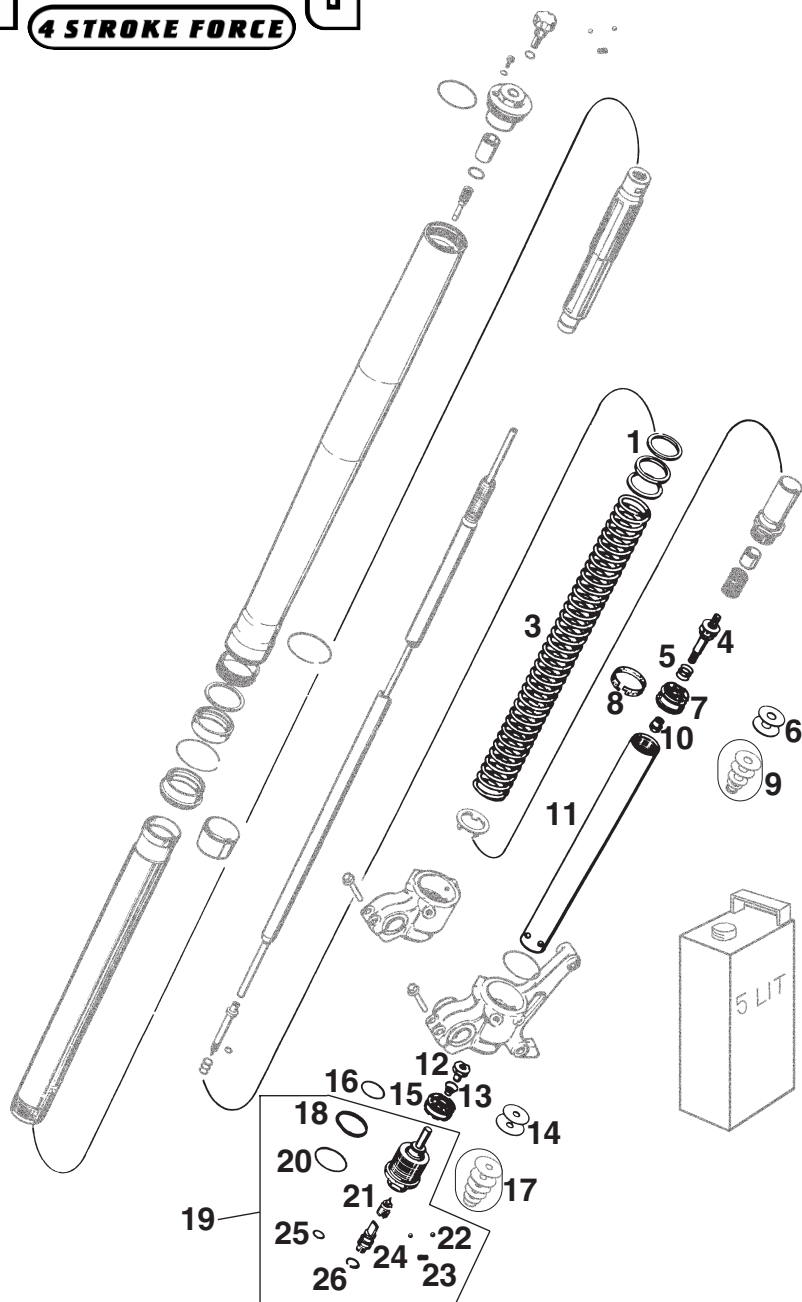


Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	130 183-01	1						Front fork WP (right + left leg) FE 01-
1	130 190-01		1	1				Front fork WP (right + left leg) FSe/FSc 01-
1	130 184-01				1	1	1	Front fork WP (right + left leg) FC/FCe/FXe 01-
1	130 195-01	1						Front fork WP (right + left leg) FE 02-
1	130 197-01		1	1				Front fork WP (right + left leg) FSe/FSc 02-
1	130 196-01				1	1	1	Front fork WP (right + left leg) FC/FCe/FXe 02-
2	130 169-01	1	1	1	1	1	1	Front fork protector blue right 00-
3	130 170-01	1	1	1	1	1	1	Front fork protector blue left 00-
4	160 184-01	6	6	6	6	6	6	Screw front fork protector 00-
5	130 171-01	1	1	1	1	1	1	Holder brake hose 00-
6	160 037-01	2	2	2	2	2	2	Screw holder brake hose 00-
7	170 066-01	1	1	1	1	1	1	Wire holder 00-
8	130 123-01	2	2	2	2	2	2	Clamp, upper, handlebar 98-
9	130 122-01	2	2	2	2	2	2	Clamp, lower, handlebar 98-
10	306 535-22	8	8	8	8	8	8	Screw 6x35 98-
11	300 645-22	2	2	2	2	2	2	Screw M6S 10x45 00-
12	130 152-01	1	1	1	1	1	1	Triple clamp, upper, 01-
13	130 192-01	1	1					Triple clamp lower cpl. FE/FSe 01- (Incl. Pos. No. 14, 15)
13	130 193-01			1	1	1	1	Triple clamp lower cpl. FSc/FC/FCe/FXe 01- (Incl. Pos. No. 14, 15)
14	130 124-01	1	1					Fork stem FE/FSe 98-
14	130 089-02			1	1	1	1	Fork stem FSc/FC/FCe/FXe 97-
15	330 025-01	1	1	1	1			Circlip SGA 25 89-
16	130 016-01	1	1	1	1	1	1	Spacer ring 97-
17	130 149-01	1	1	1	1	1	1	Nut steering head bearing 00-
18	130 018-01	1	1	1	1	1	1	Nut steering head top 89-
19	310 801-22	2	2	2	2	2	2	Lock nut M10 low 89-
20	320 018-01	2	2	2	2	2	2	Washer 10,5x22x2
21	308 530-22	8	8	8	8	8	8	Screw 8x30 00-

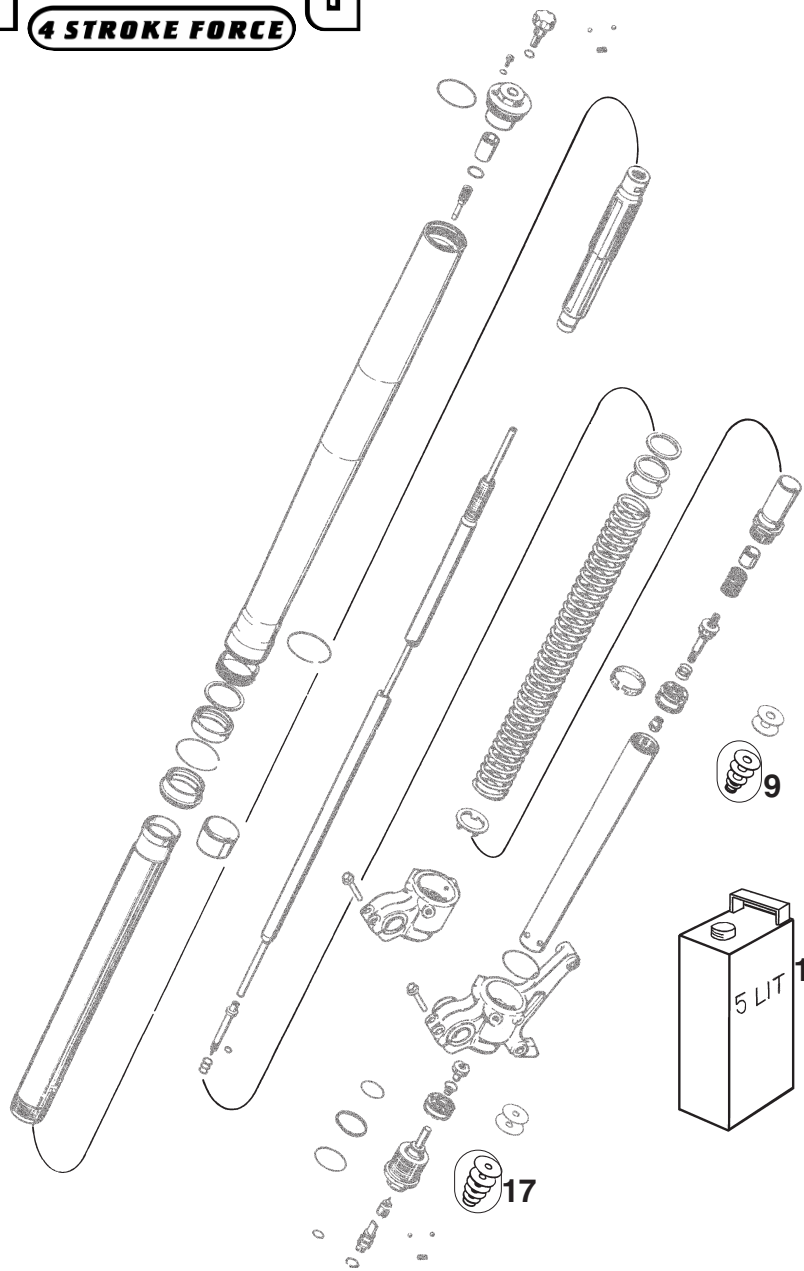
## FRONT FORK OUTER



Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	4860.0018	2	2	2	2	2	2	Adjustment knob
2	4054.0603	4	4	4	4	4	4	Ball steel ø 3
3	4860.0028	2	2	2	2	2	2	Spring
4	4860.0044	2	2	2	2	2	2	O-ring
5	4860.076	2	2	2	2	2	2	Screw
6	4860.0046	2	2	2	2	2	2	O-ring
7	4860.0020S	2	2	2	2	2	2	Screw cap M51x1,5 with bushing
8	4681.0340	2	2	2	2	2	2	O-ring
9	4860.0043	2	2	2	2	2	2	O-ring
10	4860.0019	2	2	2	2	2	2	Needle
11	4860.0147	2	2	2	2	2	2	Outer tube L: 577
12	4860.0016	2	2	2	2	2	2	Guide ring ø 50
13	4860.0007	2	2	2	2	2	2	Du-bushing ø 48
14	4860.0013	2	2	2	2	2	2	Support ring ø 50
15	4860.0057	2	2	2	2	2	2	Oil seal ø 48x57,7x9,5
16	4860.0070	2	2	2	2	2	2	Circlip SB50
17	4860.0159	2	2	2	2	2	2	Dust wiper ø 48
18	4860.0008	2	2	2	2	2	2	Du-bushing ø 47
19	4860.0002	2	2	2	2	2	2	Inner tube ø 48 L: 590
20	4860.0011S	2	2	2	2	2	2	Hydraulic stop ø 32,4 L: 200 complete
21	4860.0014	2			2	2	2	Adjustment tube L: 512
21	4860.0158	2	2					Adjustment tube L: 477
22	4860.0023	2			2	2	2	Piston rod ø 14 M11x1 L: 546
22	4860.0157	2	2					Piston rod ø 14 M11x1 L: 511
23	4860.0003	2			2	2	2	Rebound needle -01
23	4860.0150	2	2					Rebound needle -01
23	4860.0150	2	2	2	2	2	2	Rebound needle -02
24	4860.0046	2	2	2	2	2	2	O-ring 3x1,5
25	4860.0033	2	2	2	2	2	2	Spring rebound needle C=4N/mm
26	4860.0021	2	2	2	2	2	2	Spring seat ø26,2x43x3
27	4357.0132S	2	2	2	2	2	2	Screw sleeve M29,3x1 L: 65 with bushing
28	4681.0651	2	2	2	2	2	2	Bushing 14x16x12
29	4860.0015	2	2	2	2	2	2	Rebound spring ø 14,6 L: 22
30	4860.0048	2	2	2	2	2	2	O-ring ø 46
31	4860.0005	1	1	1	1	1	1	Axle clamp R
32	4860.0006	1	1	1	1	1	1	Axle clamp L
33	4860.0020S1	2	2	2	2	2	2	Screw cap M51x1,5 complete

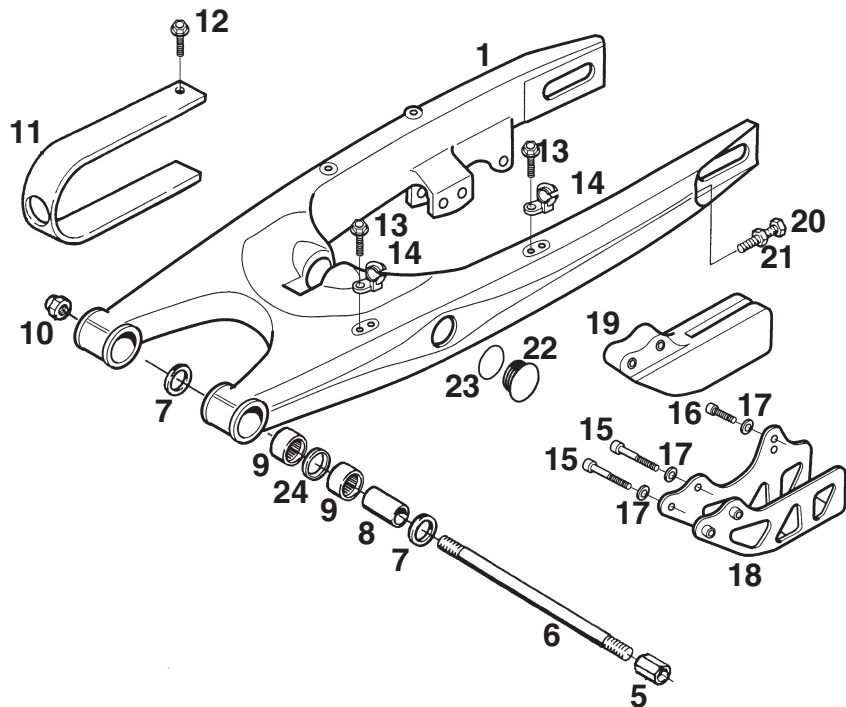
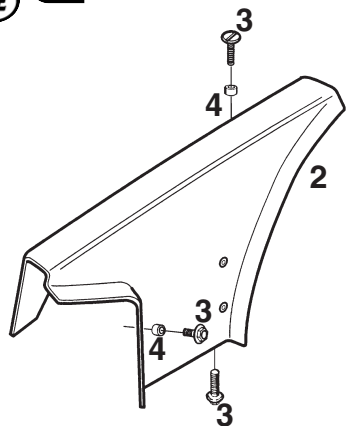


Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	4860.0036	2	2	2	2	2	2	Spacer 42x26,5x2,5 -01,-02
1	4860.0037	2	2	2	2	2	2	Spacer 42x26,5x5 -01,-02
1	4860.0053	2			2	2	2	Spacer 42x26,5x1,5 -02
3	9141.0002	2						Spring 432.510.00.040W ø 5,00 -01
3	9141.0014	2						Spring 432.505.00.042W ø 5,00 -02
3	9141.0010		2	2				Spring 432.485.00.052W ø 5,25 -01,-02
3	9141.0003				2	2	2	Spring 432.510.00.042W ø 5,00 -01
3	9141.0015				2	2	2	Spring 432.505.00.044W ø 5,10 -02
4	4860.0025	2			2	2	2	Tap rebound -01
4	4860.0151	2			2	2	2	Tap rebound -02
4	4860.0151		2	2				Tap rebound -01,-02
5	4860.0059	2			2	2	2	Spring check valve C0,25 -01
5	3548.0377	2			2	2	2	Spring check valve C1,5 -02
5	3548.0377		2	2				Spring check valve C1,5 -01,-02
6	4860.0062	2	2	2	2	2	2	Check valve ø 8x24x0,1 -01,-02
6	4054.1414	2	2	2	2	2	2	Backpl. 6x8x0,10 -01,-02
6	4054.1416	2	2	2	2	2	2	Backpl. 6x8x0,30 -02
7	4860.0042	2	2	2	2	2	2	Piston rebound
8	4860.0060	2	2	2	2	2	2	Piston ring 5x1x84,3
9								Shims rebound (see next page)
10	4054.0486	2	2	2	2	2	2	Nut M6x0,5 rebound
11	4860.0140	2	2	2				Tube ø 28 M29,3x1 L: 385
11	4860.0081				2	2	2	Tube ø 28 M29,3x1 L: 390
12	4054.1241	2	2	2	2	2	2	Check valve nut M6x0,5
13	4054.1278	2	2	2	2	2	2	Spring check valve ø 8
14	4860.0061	2	2	2	2	2	2	Check valve ø 8x24x0,4
15	4860.0047	2	2	2	2	2	2	Piston compression
16	4681.1499	2	2	2	2	2	2	O-ring 21x2
17								Shims compression (see next page)
18	4860.0004	2	2	2	2	2	2	Copper ring
19	4860.0027S	2			2	2	2	Tap compression complete -01
19	4860.0152S	2			2	2	2	Tap compression complete -02
19	4860.0152S		2	2				Tap compression complete -01,-02
20	3548.0320	2	2	2	2	2	2	O-ring 24x2
21	4860.0153	2	2	2	2	2	2	Needle compression
22	4054.0603	4	4	4	4	4	4	Ball steel ø 3
23	4860.0028	2	2	2	2	2	2	Spring ø 2,9 L: 79
24	4860.0034	2	2	2	2	2	2	Adjustment screw complete
25	4860.0049	2	2	2	2	2	2	O-ring 8x2
26	4860.0051	2	2	2	2	2	2	Clip

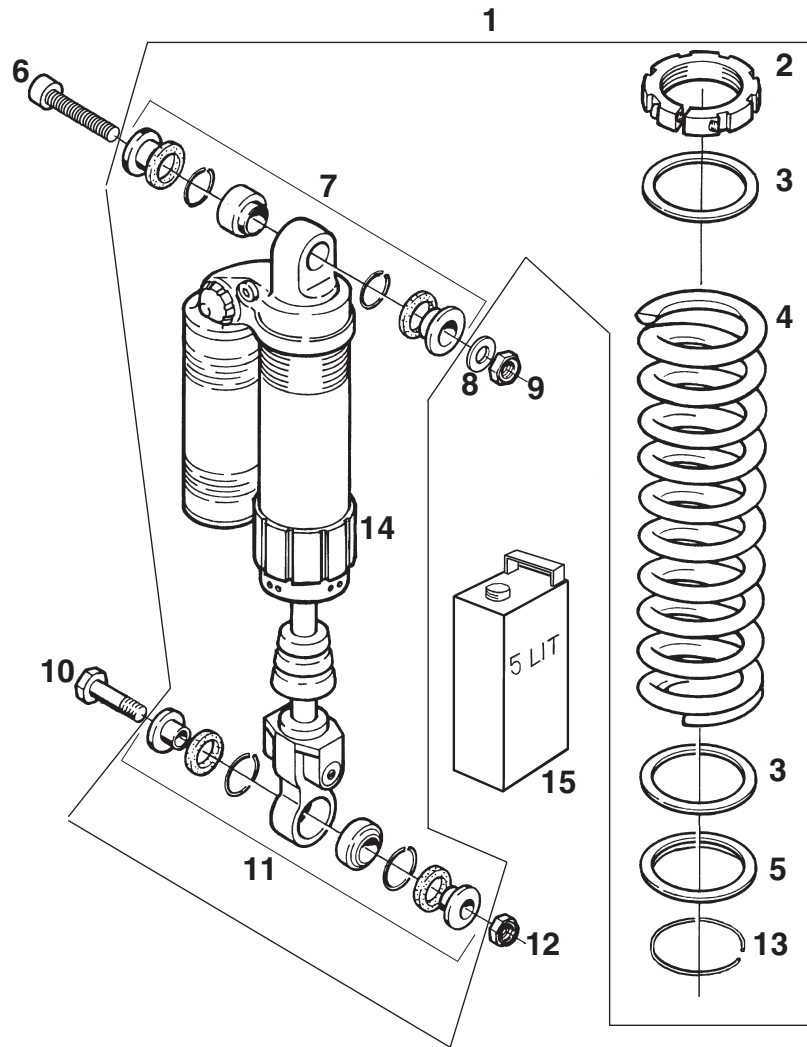


Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	4054.0882							Fork oil SAE5 5 litre
9	4054.0414	2	2	2	2	2	2	Shim 6x16x0,25 -01,-02
9	4054.0447	2			2	2	2	Backpl. 6x10x0,30 -01,-02
9	4054.1391		2	2				Shim 6x11x0,30 -01,-02
9	4054.0405	2	2	2				Shim 6x14x0,15 -01
9	4054.0401				2	2	2	Shim 6x14x0,10 -01
9	4054.0405		2	2				Shim 6x14x0,15 -02
9	4054.0401	2			4	4	4	Shim 6x14x0,10 -02
9	4054.0402	2			2	2	2	Shim 6x16x0,10 -01,-02
9	4054.0406		2	2				Shim 6x16x0,15 -01,-02
9	4054.0403	2			2	2	2	Shim 6x18x0,10 -01,-02
9	4054.0407		2	2				Shim 6x18x0,15 -01,-02
9	4860.0065	2			2	2	2	Shim 6x20x0,10 -01,-02
9	4860.0069		2	2				Shim 6x20x0,15 -01,-02
9	4860.0139	2						Shim 6x22x0,10 -01,-02
9	4054.0400				2	2	2	Shim 6x12x0,10 -01
9	4860.0401	2						Shim 6x20x0,10 -01
9	4860.0401	2			2	2	2	Shim 6x20x0,10 -02
9	4860.0116	4	8	8	8	8	8	Shim triangular 6x24x0,10 L: 9 -01,-02
17	4054.0411	2						Shim 6x18x0,20 -01,-02
17	4054.0415		2	2	2	2	2	Shim 6x18x0,25 -01,-02
17	4054.0447	2						Backpl. 6x10x0,30 -01
17	4054.1402	2						Backpl. 6x11x0,20 -02
17	4054.1417		2	2	2	2	2	Shim 6x11x0,25 -01,-02
17	4054.0401	2			2	2	2	Shim 6x14x0,10 -01,-02
17	4054.0405		2	2				Shim 6x14x0,15 -01,-02
17	4054.0402	2			2	2	2	Shim 6x16x0,10 -01,-02
17	4054.0406		2	2				Shim 6x16x0,15 -01,-02
17	4054.0403	2	2	2	2	2	2	Shim 6x18x0,10 -01,-02
17	4860.0065	2	2	2	2	2	2	Shim 6x20x0,10 -01,-02
17	4860.0064	2	4	4	4	4	4	Shim 6x22x0,10 -01,-02
17	4054.0404	2						Shim 6x12x0,15 -01
17	4860.0064	2						Shim 6x22x0,10 -01
17	4860.0063	2	12	12	12	12	12	Shim 6x24x0,10 -01
17	4860.0063	2	12	12	14	14	14	Shim 6x24x0,10 -02

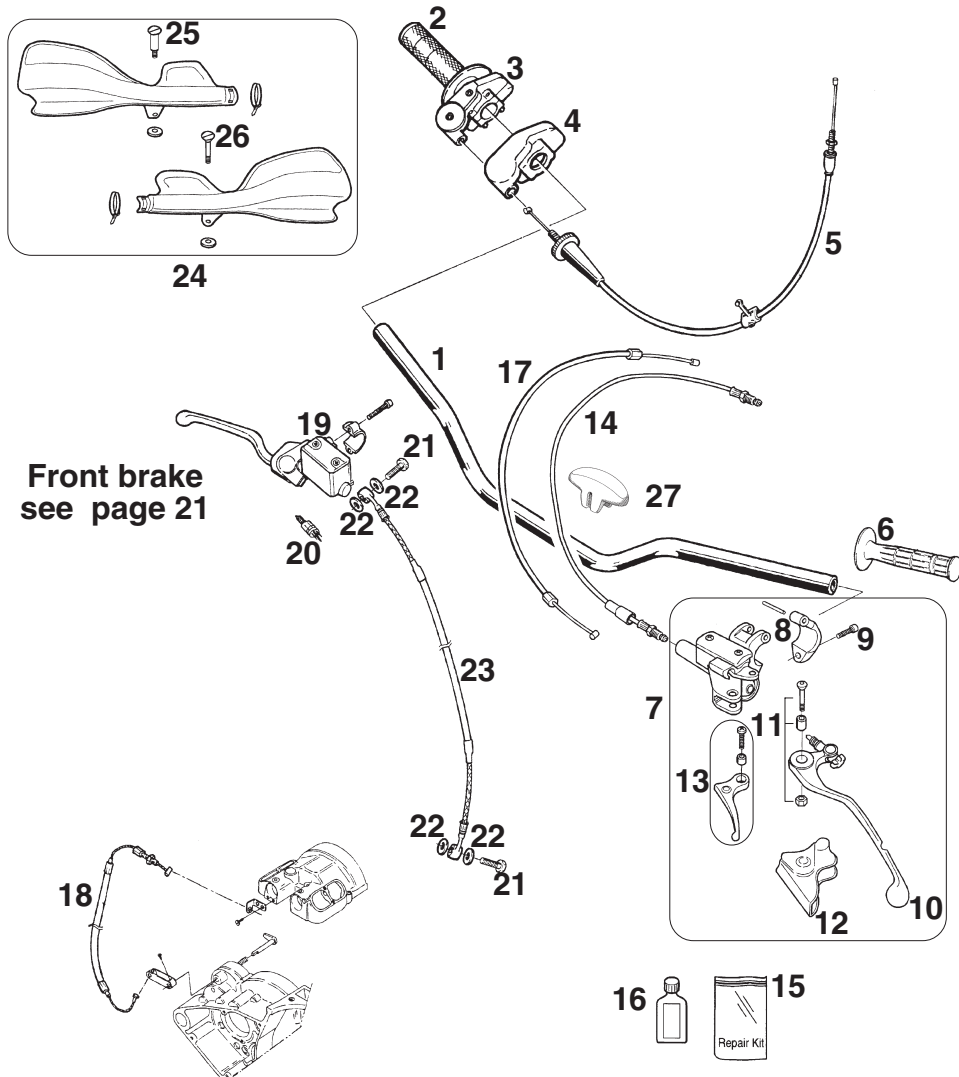




Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	120 157-01	1	1	1	1	1	1	Swingarm compl. PDS 01-
2	120 155-01	1	1					Chain protection 01-
3	406 110-22	3	3					Screw (Collar) 6x10
4	140 051-01	2	2					Spacer
5	120 055-01	1	1	1	1	1	1	Nut swingshaft 89-
6	120 016-01	1	1	1	1	1	1	Swingarm shaft 89-
7	120 022-01	4	4	4	4	4	4	Sealing swingarm 00-
8	120 013-01	2	2	2	2	2	2	Spacer swingarm shaft 89-
9	120 021-01	4	4	4	4	4	4	Needlebearing swingarm 89-
10	120 045-01	1	1	1	1	1	1	Locknut M16x1.5
11	120 052-03	1	1	1	1	1	1	Swingarm protection 01-
12	406 110-22	2	2	2	2	2	2	Screw (Collar) 6x10
13	405 216-22	2	2	2	2	2	2	Screw (Collar) clamp brake hose 5x16
14	120 132-01	2	2	2	2	2	2	Retain.clamp for brake hose 00-
15	306 550-22	2	2	2	2	2	2	Screw chain guide 6x50
16	306 516-22	1	1	1	1	1	1	Screw chain guide 5x16
17	326 012-01	3	3	3	3	3	3	Washer 6,4x14x1,5
18	120 127-01	1	1	1	1	1	1	Chain guide holder 00-
19	120 128-01	1	1	1	1	1	1	Chain guide 00-
20	120 011-01	2	2	2	2	2	2	Adjustment screw drivechain
21	318 800-22	2	2	2	2	2	2	Nut M8
22	120 153-01	4	4	4	4	4	4	Plug swingarm 01-
23	340 119-01	4	4	4	4	4	4	O-ring swingarm plug 01-
24	120 156-01	2	2	2	2	2	2	Spacer swingarm bearing 01-

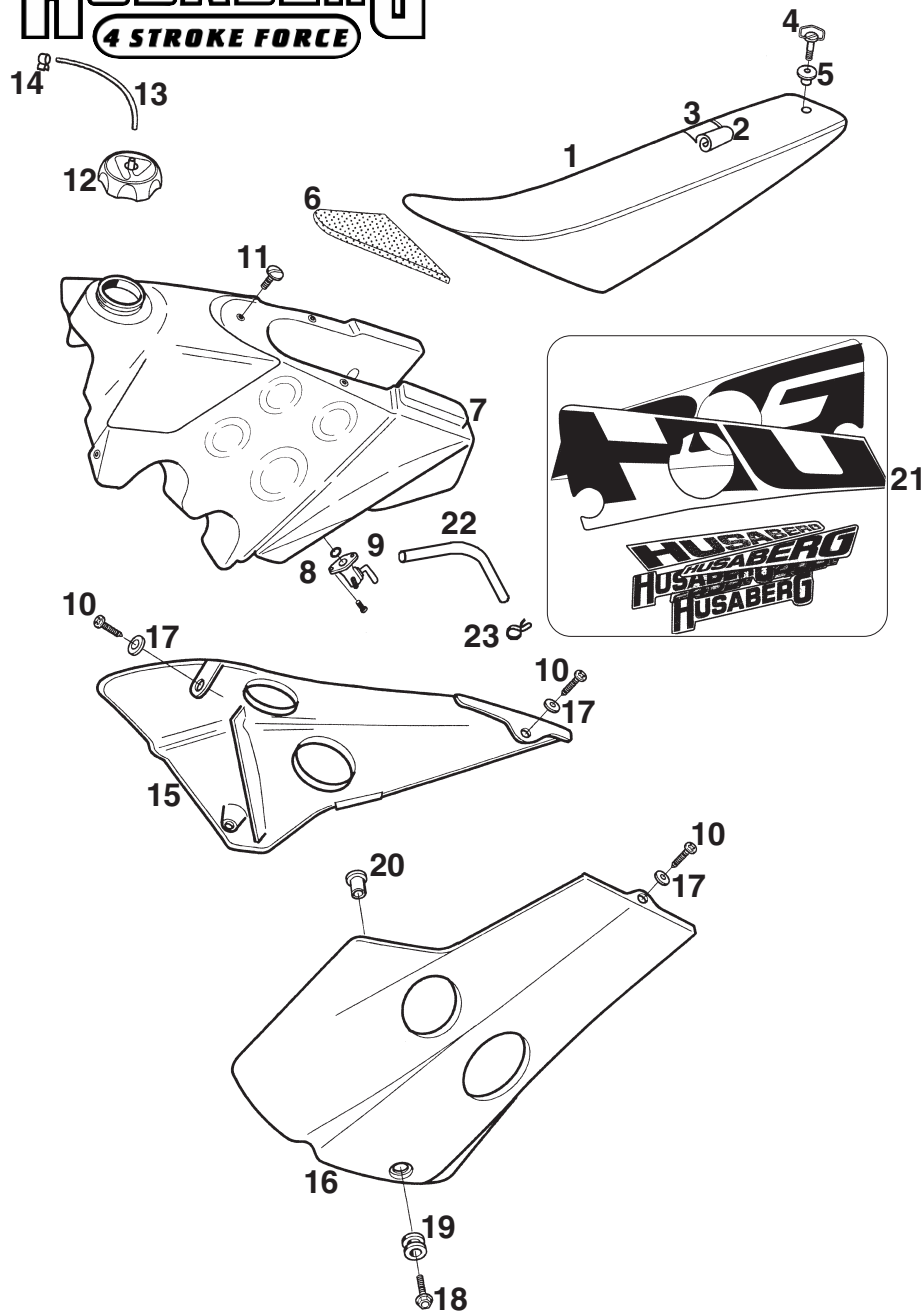


Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	120 143-01	1						Shockabsorber (WP) PDS -01
1	120 158-01	1						Shockabsorber (WP) PDS -02
1	120 144-01				1	1	1	Shockabsorber (WP) PDS -01
1	120 159-01				1	1	1	Shockabsorber (WP) PDS -02
1	120 152-01		1	1				Shockabsorber (WP) PDS -01
1	120 160-01		1	1				Shockabsorber (WP) PDS -02
2	5018.0186	1	1	1	1	1	1	Spring retainer PDS 99-
3	5018.0114	2	2	2	2	2	2	Washer spring PDS 99-
4	9121.0010	1						Spring PDS2-250 75-96 N/mm -01
4	9121.0015	1						Spring PDS6-260 71-90 N/mm -02
4	9121.0016				1	1	1	Spring PDS7-260 76-95 N/mm -01,-02
4	9121.0005		1	1				Spring 250 84 N/mm -01,-02
4	9121.0009							Spring PDS1-250 70-90 N/mm
4	9121.0011							Spring PDS3-250 80-103 N/mm
4	9121.0012							Spring PDS4-250 82-111 N/mm
4	9121.0017							Spring PDS8-260 81-99 N/mm
5	5018.0272	1	1	1	1	1	1	Spring retainer closed PDS -01,-02
6	120 140-01	1	1	1	1	1	1	Screw upper MC6S 12.9 12x50
7	120 120-02	1	1	1	1	1	1	Balljoint kit PDS upper 00-
8	322 022-01	1	1	1	1	1	1	Washer upper 12x22x2
9	312 801-22	1	1	1	1	1	1	Nut upper M12
10	120 119-01	1	1	1	1	1	1	Screw lower MC6S 12.9 10x48
11	120 121-01	1	1	1	1	1	1	Balljoint kit PDS (WP) lower 99-
12	310 801-22	1	1	1	1	1	1	Locknut M10 low
13	5018.0273	1	1	1	1	1	1	Circlip 58,2x2 -01,-02
14	5018.0081	1	1	1	1	1	1	Spring guide -01,-02
15	4681.020851							Shock absorber fluid 5 lit



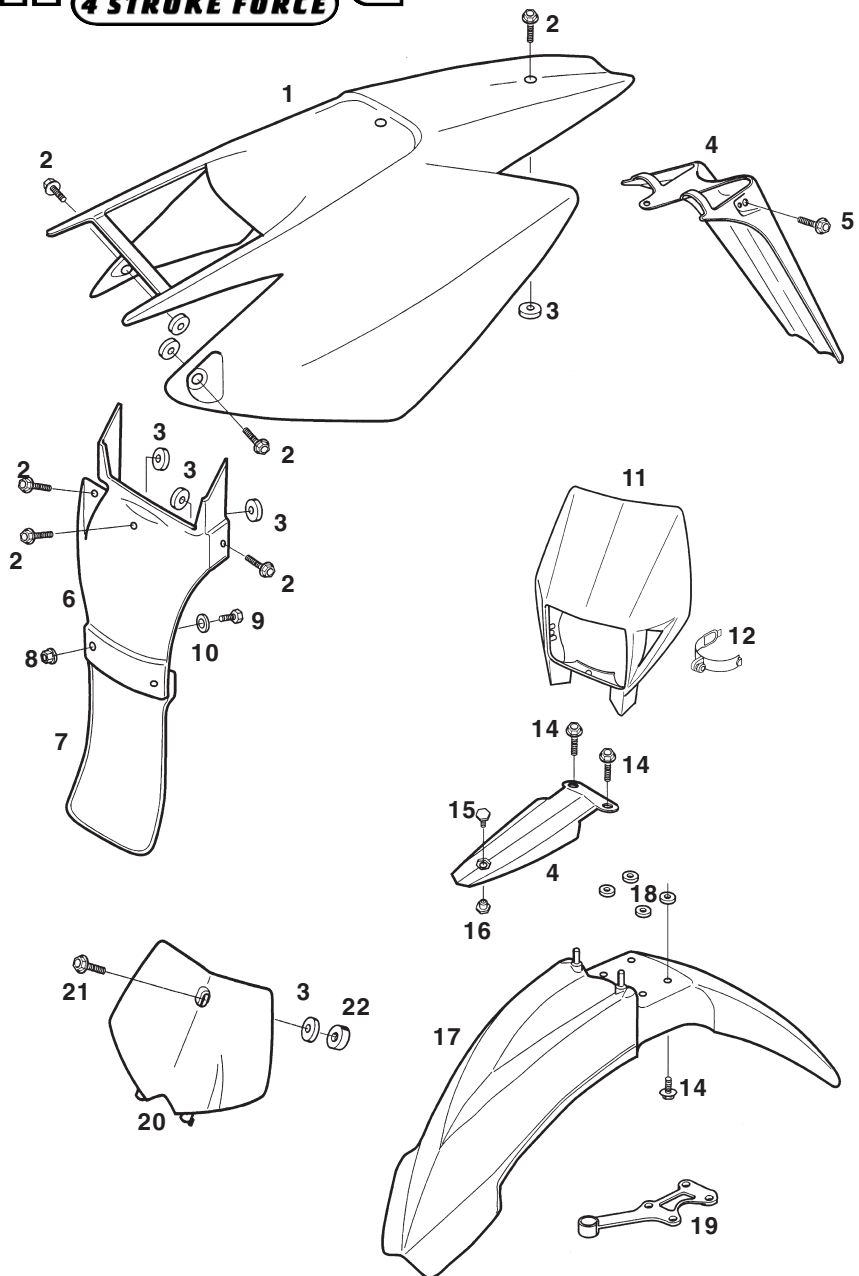
Front brake  
see page 21

Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	170 050-01	1	1	1	1	1	1	Handlebar (Magura) "titanium" anodized 98-
2	170 015-02	1	1	1	1	1	1	Rubber handle right 89-
3	170 059-01	1	1	1	1	1	1	Twistgrip 99-
4	170 053-01	1	1	1	1	1	1	Rubber protection twist grip 99-
5	170 060-01	1	1	1	1	1	1	Throttle wire 99-
6	170 016-02	1	1	1	1	1	1	Rubber handle left 89-
7	170 067-01	1	1	1	1	1	1	Mastercylinder compl 00- (Incl. Pos. No. 8, 9, 10, 11, 12, 13)
8	170 085-01	1	1	1	1	1	1	Clamp with pin 00-
9	406 216-22	1	1	1	1	1	1	Screw 6x16
10	170 082-01	1	1	1	1	1	1	Clutch lever 00-
11	170 088-01	1	1	1	1	1	1	Screw, bushing & nut clutch lever 00-
12	170 084-01	1	1	1	1	1	1	Protection clutch lever 00-
13	170 083-01	1	1	1	1	1	1	Decompression lever incl. bush.&screw 00-
14	230 135-01	1	1	1	1	1	1	Hydraulic clutch hose incl. connections 00-
15	170 086-01	1	1	1	1	1	1	Repair kit piston hydraulic clutch 00-
16	170 089-01	1	1	1	1	1	1	Oil hydraulic clutch 50ml 00-
17	170 078-01	1	1	1	1	1	1	Decompression wire; manually operated 00-
18	230 043-01	1	1	1	1	1	1	Decompression wire; kickstart operated 89-
19	140 144-01			1	1	1	1	Frontbrake cylinder cpl. FSc/FC/FCe/FXe 00-
19	140 144-02	1	1					Frontbrake cylinder cpl. FEe/FSe 00-
20	140 166-01	1	1					Frontbrake light switch FEe/FSe 00-
21	140 015-01	2	2	2	2	2	2	Connecting screw brake hose front 89-
22	140 016-01	4	4	4	4	4	4	Copper washer 10x14x1 89-
23	140 145-01	1	1	1				Hose frontbrake 1300mm 00-
23	140 188-01				1	1	1	Hose frontbrake 1235mm 00-
24	170 087-01	1	1	1	1	1	1	Handguard kit 00- (Incl. screws, nuts, washers & straps)
25	170 080-01	1	1	1	1	1	1	Screw M6 special handguard version 00-
26	170 079-01	1	1	1	1	1	1	Screw M5 special handguard version 00-
27	170 096-01	1	1	1	1	1	1	Clamp cushion 02- (Non standard -01)

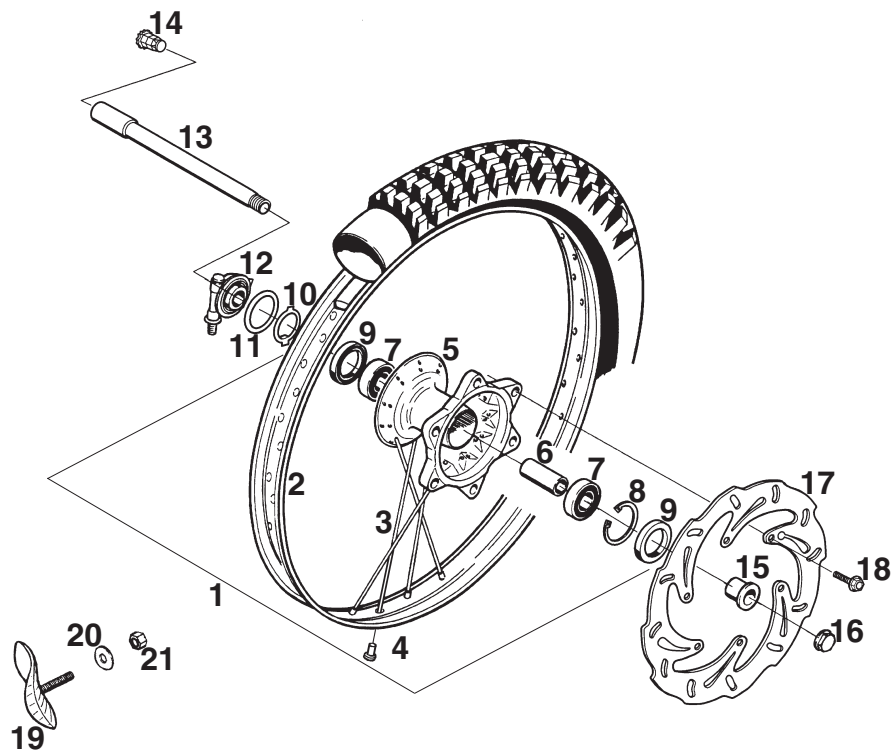


Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	160 158-01	1	1	1	1	1	1	Seat 00-
1	160 192-01	1	1	1	1	1	1	Seat 02-
2	160 161-01	1	1	1	1	1	1	Seat cover 00-
2	160 191-01	1	1	1	1	1	1	Seat cover 02-
3	160 160-01	1	1	1	1	1	1	Foam cushion 00-
4	160 186-01	1	1	1	1	1	1	Screw seat rear 00-
5	160 183-01	1	1	1	1	1	1	Bushing seat 00-
6	150 188-01	1	1	1	1	1	1	Airfilter protection 00-
7	160 166-02	1	1	1	1	1	1	Fuel tank yellow 01-
8	340 010-01	2	2	2	2	2	2	O-ring 10.3x2.4
9	160 004-01	2	2	2	2	2	2	Fuel tap 89-
10	160 010-01	8	8	8	8	8	8	Screw RXS 4.8x19
11	160 180-01	1	1	1	1	1	1	Screw, seat attachment front 00-
12	160 175-01	1	1	1	1	1	1	Filler cap 00-
13	160 190-01	1	1	1	1	1	1	Ventilation hose fuel tank 01-
14	160 013-01	1	1	1	1	1	1	Nipple fuel tank ventilation hose 01-
15	160 168-02	1	1	1	1	1	1	Spoiler RH 01-
16	160 169-02	1	1	1	1	1	1	Spoiler LH 01-
17	326 016-01	4	4	4	4	4	4	Washer 6x16x1
18	406 120-22	2	2	2	2	2	2	Screw (Collar) 6x20
19	160 177-01	2	2	2	2	2	2	Rubber bushing spoiler 00-
20	160 178-01	2	2	2	2	2	2	Bushing (metal) spoiler 00-
21	190 142-01	1	1	1	1	1	1	Decal kit:Spoiler 01-
21	190 143-01	1						Decal kit: FEe 01- (Incl. Pos. no 21. Please state model size)
21	190 143-02				1	1		Decal kit: FC FCe 01- (Incl. Pos. no 21. Please state model size)
21	190 143-03						1	Decal kit: FXe 01- (Incl. Pos. no 21. Please state model size)
21	190 143-04		1	1				Decal kit: FSe FSc 01- (Incl. Pos. no 21. Please state model size)
21	190 189-01	1	1	1	1	1	1	Decal kit: All models and variants 02-
22	160 012-02	1	1	1	1	1	1	Fuel hose right 150x7,5x12,5 00-
22	160 012-03	1	1	1	1	1	1	Fuel hose left 220x7,5x12,5 00-
23	160 038-01	4	4	4	4	4	4	Fuel hose clamp 12,6

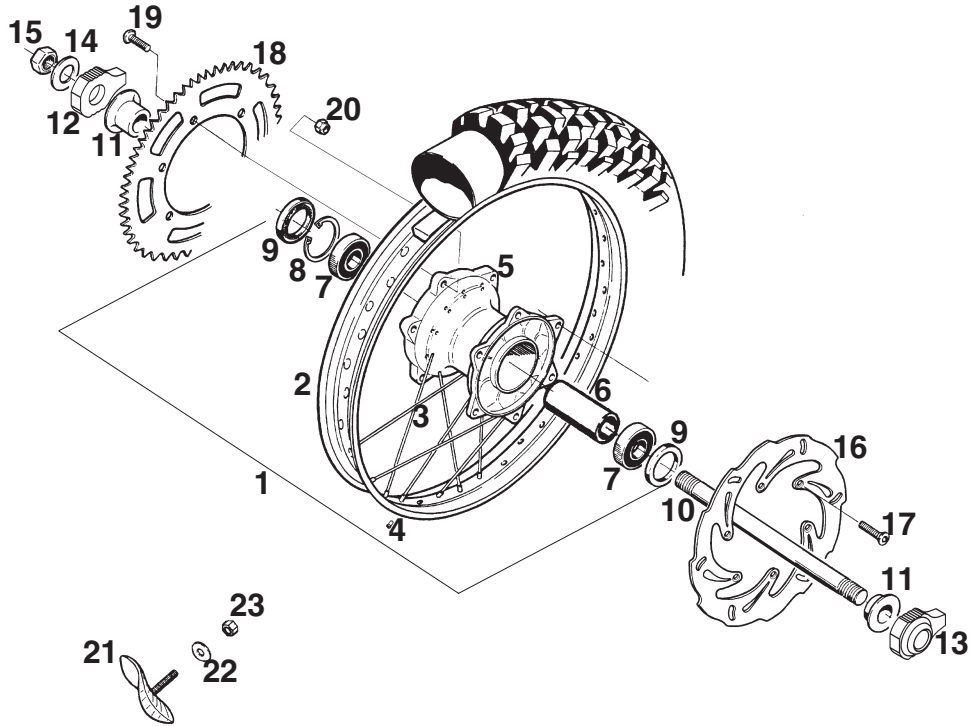




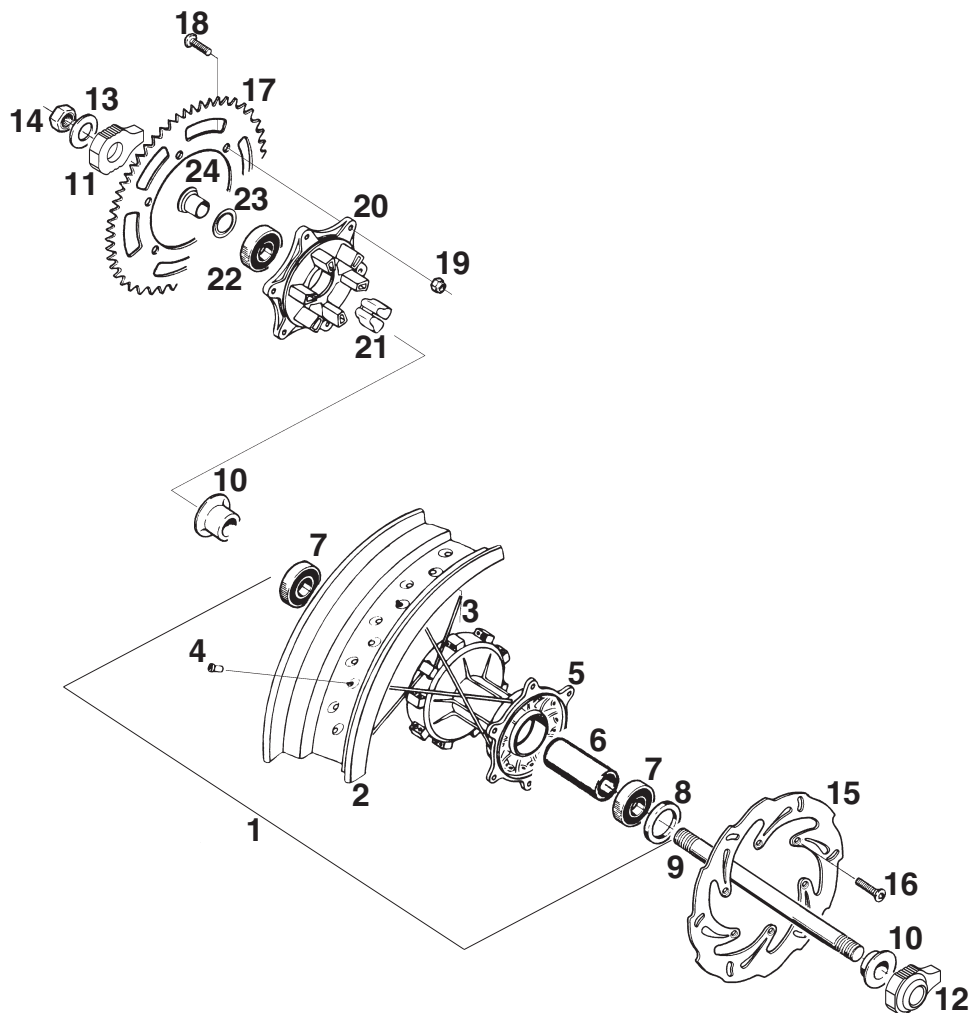
Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	160 167-01	1	1	1	1	1	1	Rear fender/side panels 00-
2	406 115-22	7	7	7	7	7	7	Screw (collar) 6x15
3	160 050-01	7	7	9	9	9	9	Rubber washer 6,5x22x3
4	160 170-01	1	1					Number plate holder 00-
5	405 216-22	2	2					Screw (collar) 5x16
6	160 181-01	1	1	1	1	1	1	Splash shield (Upper) 00-
7	160 125-01	1	1	1	1	1	1	Splash shield (Lower) 96-
8	316 811-22	2	2	2	2	2	2	Locknut M6
9	406 216-22	2	2	2	2	2	2	Screw (collar) 6x16
10	160 139-01	2	2	2	2	2	2	Washer
11	160 162-01	1	1					Headlight mask (Blue) 00-
12	180 062-01	2	2					Rubber strap headlight mask 00-
13	160 164-01	1	1					Fender brace (Yellow) 00-
14	406 120-22	6	6	4	4	4	4	Screw (collar) 6x20
15	160 156-01	1	1					Screw fender brace 00-
16	160 157-01	1	1					Nut fender brace 00-
17	160 165-01	1	1	1	1	1	1	Front fender (Blue) 00-
18	160 182-01	4	4	4	4	4	4	Spacer front fender 00-
19	130 172-01	1	1	1	1	1	1	Cable guide 00-
20	160 163-01			1	1	1	1	Number plate 00-
21	406 230-22			1	1	1	1	Screw (collar) 6x30
22	160 198-02					1	1	Spacer number plate 02-



Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	130 000-07	1						Front wheel EXCEL 21" FEe 00- (Incl. Pos. No. 2, 3, 4, 5, 6, 7, 8, 9)
1	130 000-08				1	1	1	Front wheel EXCEL 21" FC/FCe/FXe 00- (Incl. Pos. No. 2, 3, 4, 5, 6, 7, 8, 9)
1	130 173-01	1						Front wheel BEHR 17" FSe 00- (Incl. Pos. No. 2, 3, 4, 5, 6, 7, 8, 9)
1	130 173-02		1					Front wheel BEHR 17" FSc 00- (Incl. Pos. No. 2, 3, 4, 5, 6, 7, 8, 9)
2	130 155-01	1			1	1	1	Rim EXCEL 1.60x21" front 00-
2	130 181-01		1	1				Rim BEHR 3.50x17" front 00-
3	130 160-01	36			36	36	36	Spoke 21" front M4,5x231-15G 00-
	130 177-01	1			1	1	1	Spoke kit 36 pcs (21") front 00-
3	130 182-01		36	36				Spoke 17" front M4,5x177-15G 00-
4	130 161-01	36	36	36	36	36	36	Spoke nipple (21"/17") front M4,5 00-
	130 178-01	1			1	1	1	Spoke nipple kit (21"/17") front 00-
5	130 158-01	1	1					Front hub (speedometer/odometer) 00-
5	130 158-02			1	1	1	1	Front hub (no speedometer) 00-
6	130 165-01	1	1					Spacer fronthub (speedometer/odometer) 00-
6	130 165-02			1	1	1	1	Spacer fronthub (no speedometer) 00-
7	360 031-01	2	2	2	2	2	2	Ballbearing fronthub 00-
8	330 037-01	1	1	1	1	1	1	Circlip 00-
9	350 011-01	1	1	2	2	2	2	Sealing front hub 00-
9	350 009-01	1	1					Sealing front hub (speedometer/odometer) 00-
10	180 158-01	1	1					Driveplate gearlever 00-
11	180 146-01	1	1					Shim gearlever 00-
12	180 147-01	1						Gearlever speedometer/odometer (21") 00-
12	180 166-01		1					Gearlever speedometer (17") 00-
13	130 164-01	1	1	1	1	1	1	Front axle 00-
14	130 167-01	1	1	1	1	1	1	Plug frontaxle 00-
15	130 166-01	1	1	2	2	2	2	Spacer front axle 00-
16	130 168-01	1	1	1	1	1	1	Nut frontaxle 00-
17	130 159-01	1			1	1	1	Brake disc front ø 260 mm stainless steel 00-
17	140 182-01		1	1				Brake disc front ø 320 mm (BERINGER) 01-
18	406 212-22	6			6	6	6	Screw (Collar) 6x12
18	406 115-22		6	6				Screw (Collar) 6x15
19	130 049-01	1			1	1	1	Rimlock 21" 89-
20	328 017-01	1			1	1	1	Washer 8,4x16x1,5
21	318 800-22	1			1	1	1	Nut M8

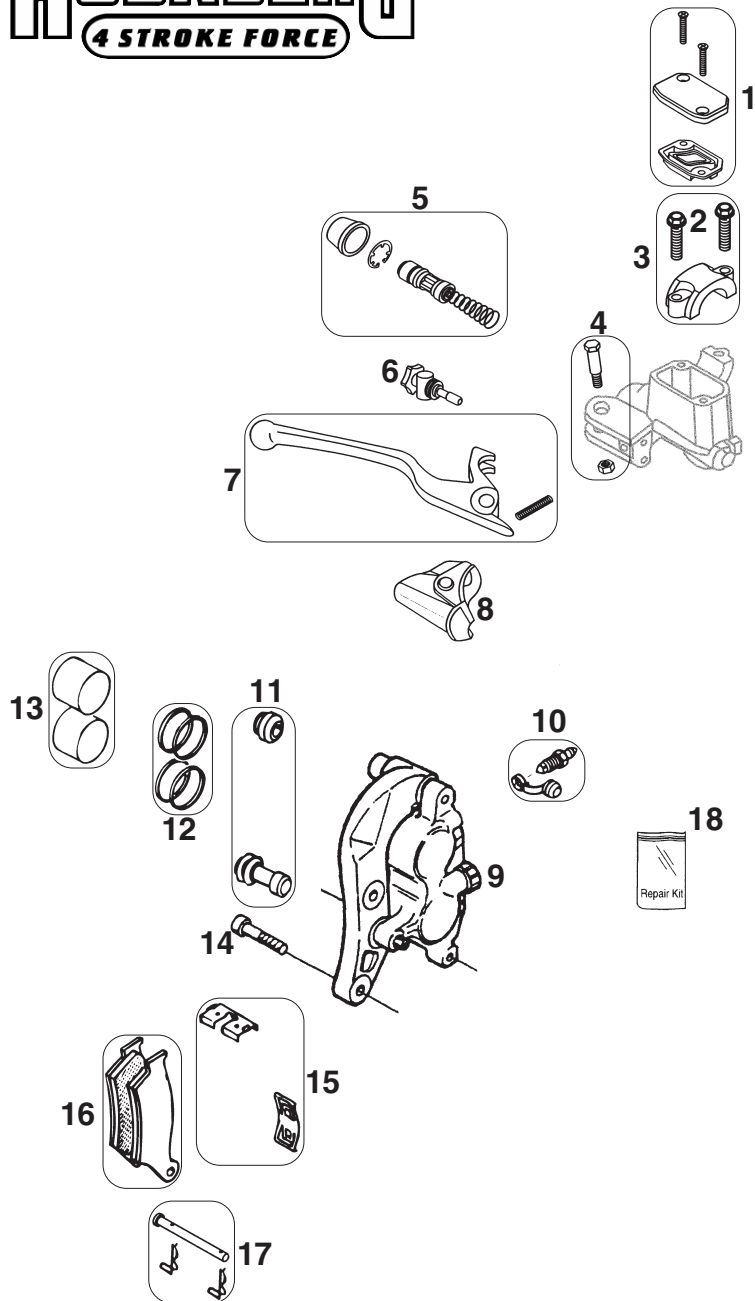


Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	140 103-02				1	1		Rear wheel EXCEL 19" 00- (Incl. Pos. No. 2, 3, 4, 5, 6, 7, 8, 9)
1	140 030-05	1					1	Rear wheel EXCEL 18" 00- (Incl. Pos. No. 2, 3, 4, 5, 6, 7, 8, 9)
2	140 130-01				1	1		Rim EXCEL 2.15x19" 00-
2	140 131-01	1					1	Rim EXCEL 2.15x18" 00-
3	140 136-01				36	36		Spoke (19") rear M5x210-10G 00-
	140 150-01				1	1		Spoke kit; 36 pcs (19") rear 00-
3	140 135-01	36					36	Spoke (18") rear M5x197-10G 00-
	140 149-01	1					1	Spoke kit; 36 pcs (18") rear 00-
4	140 137-01	36			36	36	36	Spoke nipple (17"/18"/19") rear M5 00-
	140 151-01	1			1	1	1	Spoke nipple kit 36 pcs (17"/18"/19") rear 00-
5	140 132-01	1			1	1	1	Rear hub (18"/19") 00-
6	140 138-01	1			1	1	1	Spacer rear hub (18"/19") 00-
7	360 032-01	2			2	2	2	Roller bearing 00-
8	330 038-01	1			1	1	1	Seal clip 00-
9	350 010-01	2			2	2	2	Sealring 00-
10	140 005-01	1			1	1	1	Rear axle 89-
11	140 139-01	2			2	2	2	Spacer 01-
12	120 145-01	1			1	1	1	Adjustment sledge Right 01-
13	120 146-01	1			1	1	1	Adjustment sledge Left 01-
14	322 036-01	1			1	1	1	Washer 01-
15	140 039-01	1			1	1	1	Nut rear axle 01-
16	140 133-01	1			1	1	1	Brake disc rear stainless 00-
17	406 212-22	6			6	6	6	Screw 6x12
18	140 142-42							Sprocket Z=42 rear 00-
18	140 142-46							Sprocket Z=46 rear 00-
18	140 142-48							Sprocket Z=48 rear 00-
18	140 142-50							Sprocket Z=50 rear 00-
19	140 141-01	6			6	6	6	Screw 8x26 00-
20	318 801-22	6			6	6	6	Lock nut M8
21	140 059-01	2			2	2	2	Rimlock rear 89-
22	328 017-01	2			2	2	2	Washer 8,4x16x1,5
23	318 800-22	2			2	2	2	Nut M8

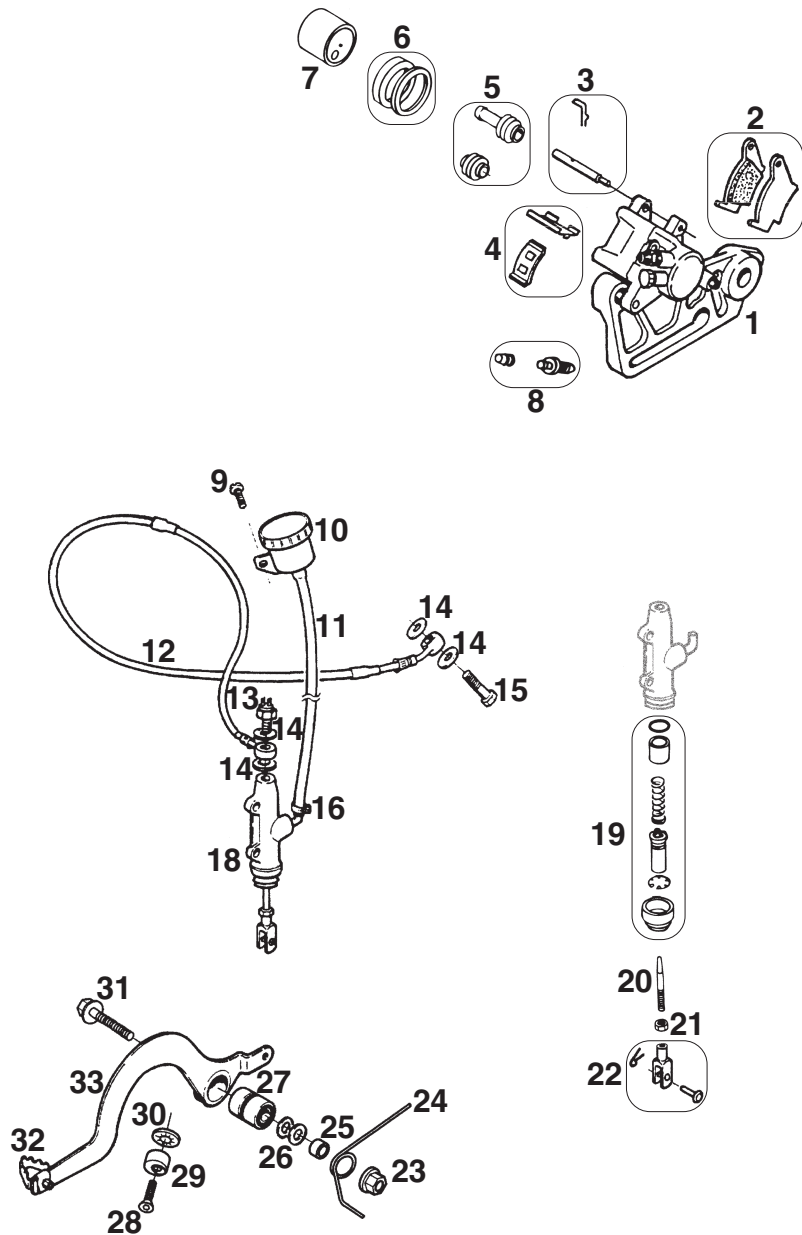


Pos.	Part No	Qty/Model					Description
		FEe	FSe	FSc	FC	FCe	
1	140 147-01		1	1			Rear wheel BEHR 17" 00- (Incl. Pos. No. 2, 3, 4, 5, 6, 7, 8)
2	140 172-01		1	1			Rim BEHR 4.25x17" 00-
3	140 174-01		18	18			Spoke (17") rear right M5x199-16G 00-
3	140 175-01		18	18			Spoke (17") rear left M5x185-26G 00-
4	140 137-01		36	36			Spoke nipple (17") rear 00-
5	140 173-01		1	1			Rear hub (17") complete 00- (Incl. Pos. No. 6, 7, 8)
6	140 176-01		1	1			Spacer rear hub (17") 00-
7	0625 062052		2	2			Roller bearing 00-
8	0760 325772		1	1			Sealring 00-
9	140 005-01		1	1			Rear axle 89-
10	140 139-01		2	2			Spacer 01-
11	120 145-01		1	1			Adjustment sledge right 01-
12	120 146-01		1	1			Adjustment sledge left 01-
13	322 036-01		1	1			Washer 01-
14	140 039-01		1	1			Nut rear axle 01-
15	140 133-01		1	1			Brake disc rear stainless 00-
16	406 212-22		6	6			Screw 6x12
17	140 142-42						Sprocket Z=42 rear 00-
17	140 142-46						Sprocket Z=46 rear 00-
17	140 142-48						Sprocket Z=48 rear 00-
17	140 142-50						Sprocket Z=50 rear 00-
18	140 141-01		6	6			Screw 8x26 00-
19	318 801-22		6	6			Lock nut M8
20	140 148-01		1	1			Rear wheel jerk absorber 00-
21	140 156-01		6	6			Damping rubber 00-
22	0625 03257		1	1			Roller bearing 00-
23	140 171-01		1	1			Washer 00-
24	140 139-01		1	1			Spacer 00-

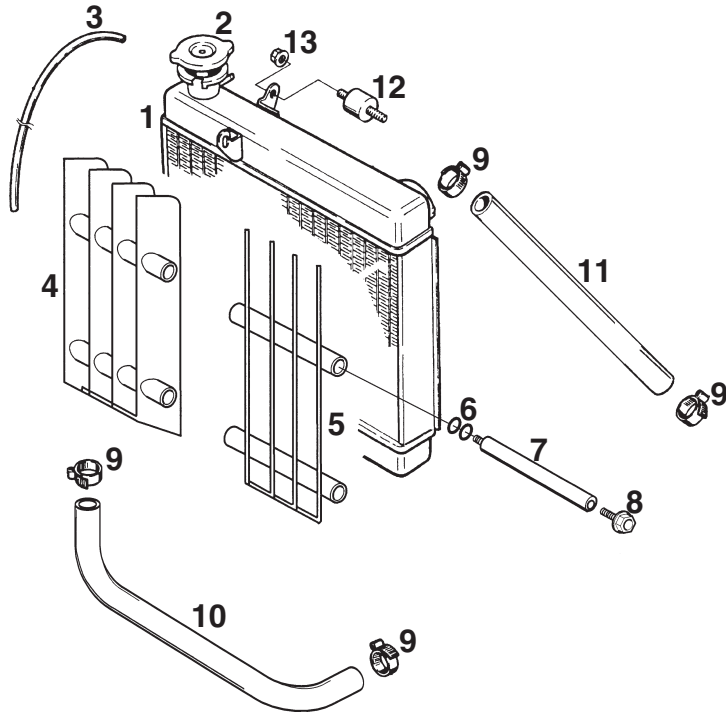




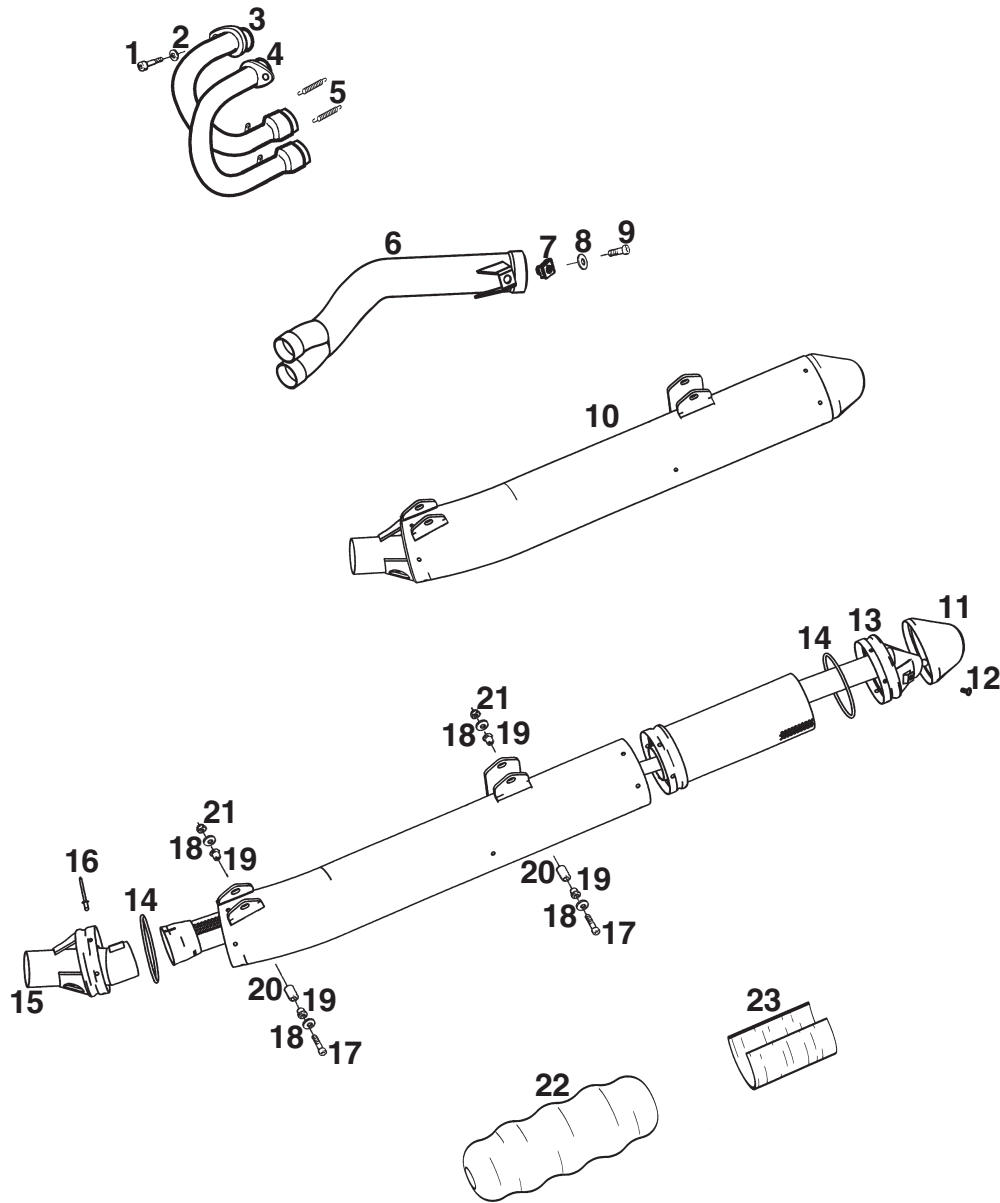
Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	140 160-01	1	1	1	1	1	1	Screw, cover & gasket kit 00-
2	406 225-22	2	2	2	2	2	2	Screw (Collar) 6x25
3	140 159-01	1	1	1	1	1	1	Clamp frontbrake cylinder 00-
4	140 161-01	1	1	1	1	1	1	Screw & nut kit 00-
5	503.13.008.200			1	1	1	1	Repair kit piston FSc/FC/FCe/FXe 00-
5	140 165-01	1	1					Repair kit piston FEe/Fse 00-
6	140 163-01			1	1	1	1	Adjustment screw FSc/FC/FCe/FXe 00-
6	140 163-02	1	1					Adjustment screw FEe/FSe 00-
7	140 157-01	1	1	1	1	1	1	Frontbrake lever 00-
8	140 162-01	1	1	1	1	1	1	Frontbrake dust protection 00-
9	140 129-01	1			1	1	1	Frontbrake caliper (BREMBO) 00- (Incl. bracket)
9	140 183-01		1	1				Frontbrake caliper (BERINGER) 01-
10	545.13.214.000	1			1	1	1	Air nipple & dust cover (BREMBO) 00-
11	546.13.218.000	1			1	1	1	Sliding sleeve kit (BREMBO) 00-
12	546.13.205.000	1			1	1	1	Repair kit ø 28 mm (BREMBO) 00-
13	546.13.206.000	1			1	1	1	Repair kit piston ø 28 mm (BREMBO) 00-
14	308 535-22	2			2	2	2	Screw MC6S 8x35
14	308 530-25		2	2				Screw MC6S 8x30
15	140 092-01	1			1	1	1	Brakepad locking device kit (BREMBO) 93-
16	140 076-01	1			1	1	1	Brake pads front (BREMBO) 93-
16	140 152-01	1			1	1	1	Brake pads front sinter (BREMBO) 00-
16	140 184-01		1	1				Brake pads front (BERINGER) 01-
17	130 110-01	1			1	1	1	Brake pad lock pin kit (BREMBO) 93-
18	140 191-01							Repair kit caliper (BERINGER) 01-
18	140 192-01							Repair kit brake disc (BERINGER) 01-



Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	140 167-01	1	1	1	1	1	1	Rear brake caliper complete 01- (Incl. attachment bracket)
2	140 084-01	1	1	1	1	1	1	Brake pad rear sinter 95-
2	140 086-01	1	1	1	1	1	1	Brake pad rear organic
3	140 090-01	1	1	1	1	1	1	Brakepad lock pin 95-
4	140 093-01	1	1	1	1	1	1	Brakepad locking device 95-
5	140 091-01	1	1	1	1	1	1	Sliding sleeve kit 95-
6	546.13.318.200	1	1	1	1	1	1	Repair kit 95-
7	546.13.305.200	1	1	1	1	1	1	Repair kit piston 95-
8	140 094-01	1	1	1	1	1	1	Air nipple & dust cover 95-
9	406 110-22	1	1	1	1	1	1	Screw (Collar) 6x10
10	140 028-01	1	1	1	1	1	1	Brakefluid reservoir 89-
11	140 029-01	1	1	1	1	1	1	Hose brakefluid reservoir FC 92- / FE 89-
12	140 155-01	1	1	1	1	1	1	Brakehose rear 00- (01 only)
12	140 190-01	1	1	1	1	1	1	Brakehose rear 02- (02 only)
13	180 116-01	1	1					Brakelight switch (hydraulic) 99-
13	140 015-01			1	1	1	1	Banjo bolt brake hose 89-
14	140 016-01	4	4	4	4	4	4	Copper washer 10x14x1 89-
15	140 015-01	1	1	1	1	1	1	Banjo bolt brake hose 89-
16	140 071-01	2	2	2	2	2	2	Clamp Orbitus 89-
18	140 022-01	1	1	1	1	1	1	Main rear brakecylinder 95-
19	545.13.150.000	1	1	1	1	1	1	Repair kit 95-
20	140 045-02	1	1	1	1	1	1	Rearbrake pushrod 00-
21	316 800-22	1	1	1	1	1	1	Nut M6 low
22	140 046-01	1	1	1	1	1	1	Attachment rearbrake pushrod 89-
23	318 801-22	6	6	6	6	6	6	Locknut M8 low
24	170 068-01	1	1	1	1	1	1	Return spring brakepedal 00-
25	140 153-01	1	1	1	1	1	1	Spacer return spring 00-
26	328 017-01	2	2	2	2	2	2	Washer 8,4x16x1,5
27	360 011-01	2	2	2	2	2	2	Ballbearing 89-
28	306 025-31	1	1	1	1	1	1	Screw excenter brakepedal 00-
29	140 143-01	1	1	1	1	1	1	Excenter brakepedal 00-
30	326 011-01	1	1	1	1	1	1	Locking washer
31	408 240-22	1	1	1	1	1	1	Screw (Collar) 8x40
32	140 019-01	1	1	1	1	1	1	Brake pedal tip 89-
33	140 017-02	1	1	1	1	1	1	Brake pedal complete 00- (Incl. Pos. No. 27, 32)

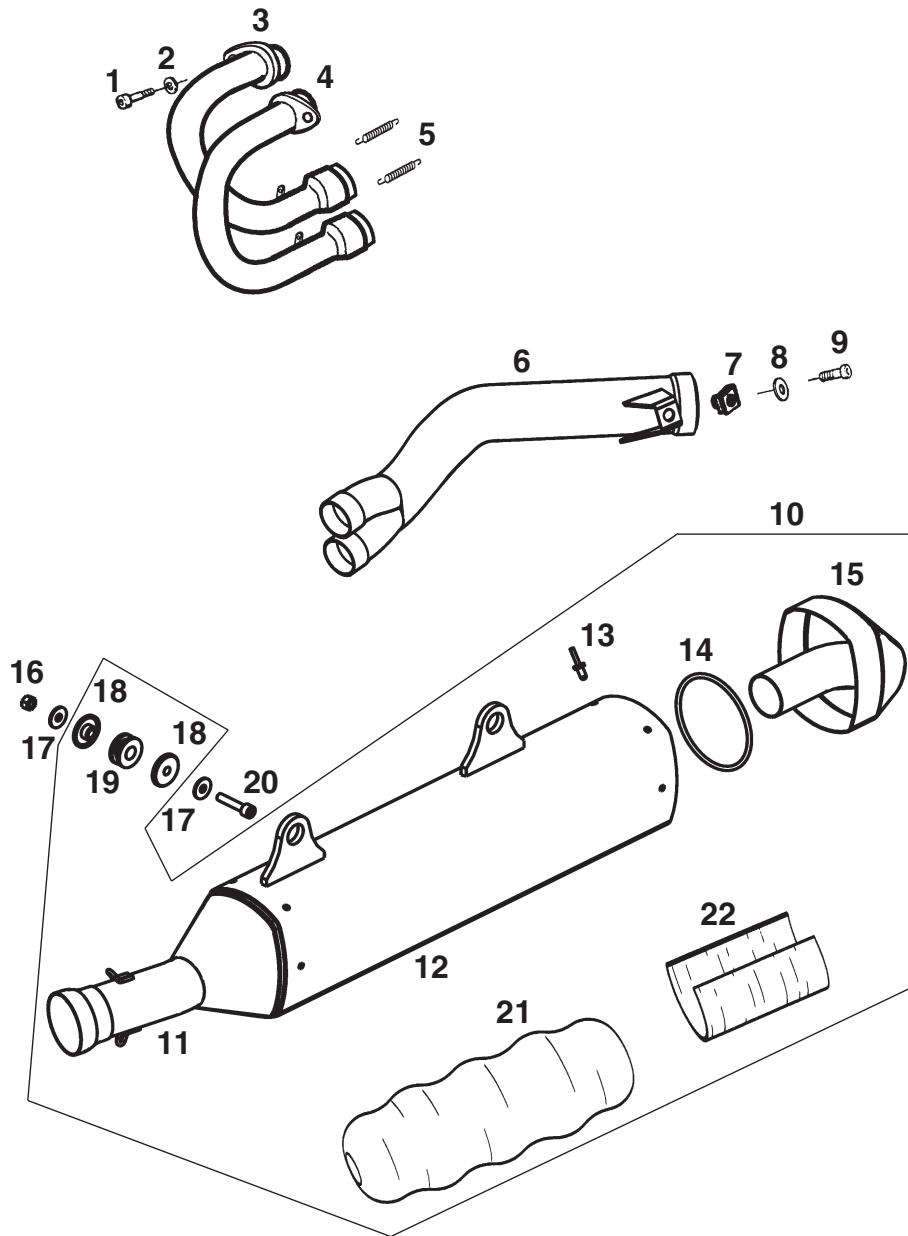


Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	150 169-01	1	1	1	1	1	1	Radiator 00-
2	150 021-01	1	1	1	1	1	1	Radiator cap 1.4 89-
3	150 024-01	1	1	1	1	1	1	Pressure relief hose 89-
4	160 174-01	4	4	4	4	4	4	Radiator protection Right 00-
5	160 173-01	4	4	4	4	4	4	Radiator protection Left 00-
6	340 009-01	8	8	8	8	8	8	O-ring bracket pin radiator protection 00-
7	160 179-01	4	4	4	4	4	4	Bracket pin radiator protection 00-
8	406 110-22	2	2	2	2	2	2	Screw (Collar) 6x10
9	150 243-01	4	4	4	4	4	4	Clamp radiatorhose 89-
10	150 217-01	1	1	1	1	1	1	Radiator hose lower 01-
11	150 218-02	1	1	1	1	1	1	Radiator hose upper 400/470 01-
11	150 218-03	1	1	1	1	1	1	Radiator hose upper 501/550 01-
11	150 218-04	1	1	1	1	1	1	Radiator hose upper 650 01-
12	150 025-01	3	3	3	3	3	3	Vibration damper 25X15 89-
13	316 801-22	3	3	3	3	3	3	Locknut M6 low

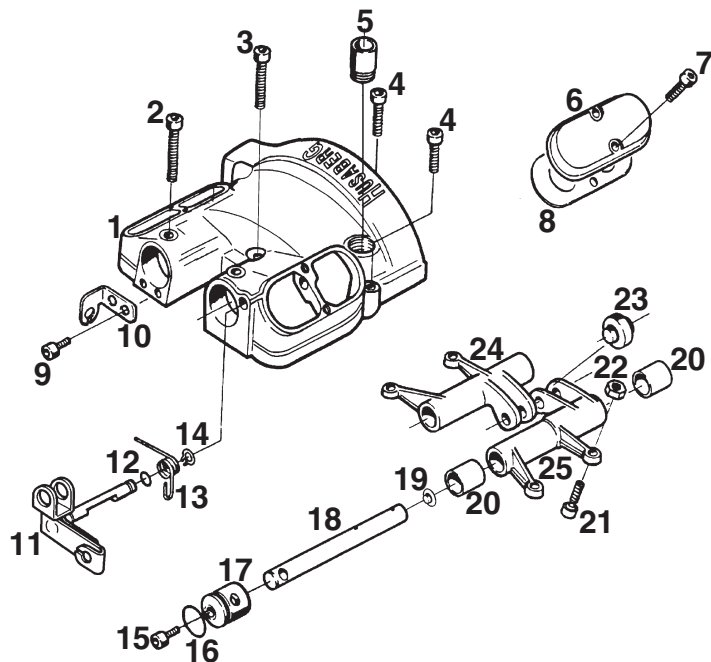


Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	306 520-41	2	2	2	2	2	2	Screw MC6S 6x20
2	326 013-01	2	2	2	2	2	2	Washer 6,7x14x1,5
3	150 197-01	1	1	1				Exhaust pipe Right 400 01-
3	150 219-01				1	1	1	Exhaust pipe Right 470 01-
3	150 199-01	1			1	1		Exhaust pipe Right 501/550 01-
3	150 201-01	1	1	1			1	Exhaust pipe Right 650 01-
4	150 198-01	1	1	1				Exhaust pipe Left 400 01-
4	150 220-01				1	1	1	Exhaust pipe Left 470 01-
4	150 200-01	1			1	1		Exhaust pipe Left 501/550 01-
4	150 202-01	1	1	1			1	Exhaust pipe Left 650 01-
5	150 130-01	4	4	4	4	4	4	Spring exhaust system 01-
6	150 203-01	1	1	1	1	1	1	Collector tube 01-
7	150 235-01	1	1	1	1	1	1	Split nut M8
8	328 017-01	1	1	1	1	1	1	Washer 8,4x16x1,5
9	308 520-22	1	1	1	1	1	1	Screw MC6S 8x20
10	150 204-01	1	1					Silencer FEe/Fse Non-restricted 01-
10	150 204-02	1	1					Silencer FEe/Fse ECE 01-
10	150 204-03	1	1				1	Silencer FEe/FSe/FXe USA 01-
10	150 204-04			1	1	1		Silencer FSc/FC/FCe 01-
11	150 229-01	1	1				1	Rear end silencer FEe/FSe/FXe 01-
11	150 229-02			1	1	1		Rear end silencer FSc/FC/FCe 01-
12	305 010-62	2	2	2	2	2	2	Screw LKCS 5x10
13	150 209-01	1	1					Rear end silencer FEe/FSe Non-restricted 01-
13	150 209-02	1	1					Rear end silencer FEe/FSe ECE 01-
13	150 209-03	1	1				1	Rear end silencer FEe/FSe/FXe USA 01-
13	150 209-04			1	1	1		Rear end silencer FSc/FC/FCe 01-
14	340 282-01	2	2	2	2	2	2	O-ring silencer 01-
15	150 205-01	1	1	1	1	1	1	Front end silencer FEe/FSe/FSc/FC/FCe/FXe 01-
15	150 205-02	1	1					Front end silencer FEe/FSe ECE 01-
16	370 004-01	12	12	12	12	12	12	Rivet stainless steel 01-
17	306 545-41	2	2	2	2	2	2	Screw MC6S 6x45
18	326 018-01	4	4	4	4	4	4	Washer 6,4x18x1,5
19	150 146-01	4	4	4	4	4	4	Spacer silencer 01-
20	150 147-01	2	2	2	2	2	2	Rubber spacer silencer 99-
21	316 801-22	4	4	4	4	4	4	Locknut M6
22	150 212-01	1	1				1	Stuffing yarn front FEe/FSe/FXe 01-
22	150 212-03			1	1	1		Stuffing yarn front FSc/FC/FCe 01-
23	150 212-02	1	1				1	Stuffing yarn rear FEe/FSe/FXe 01-

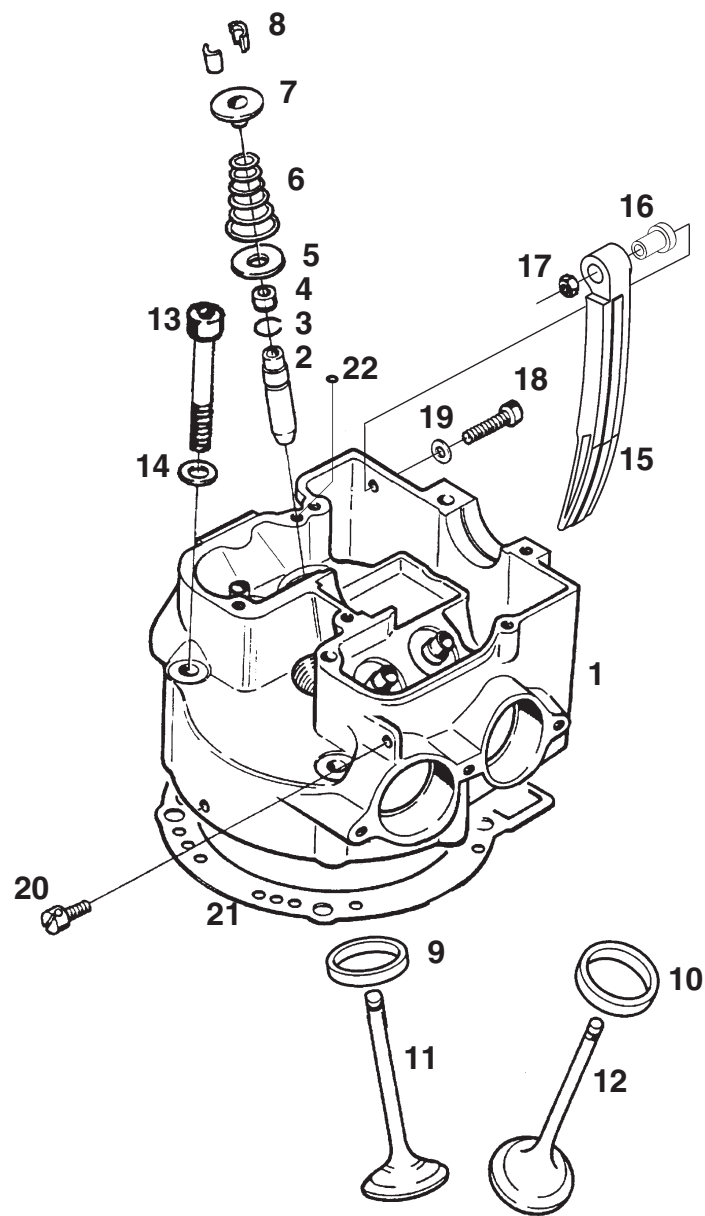




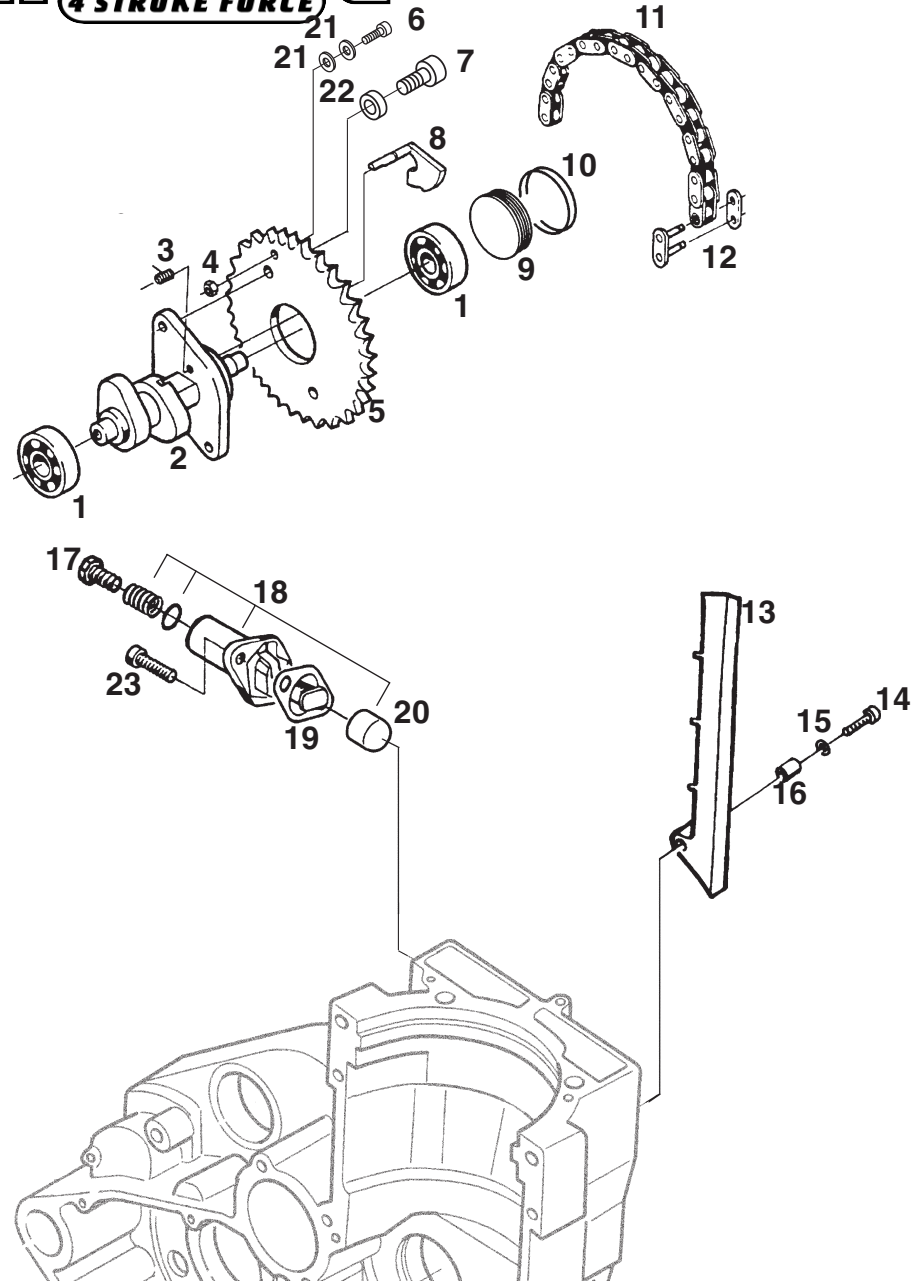
Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	306 520-41	2	2	2	2	2	2	Screw MC6S 6x20
2	326 013-01	2	2	2	2	2	2	Washer 6,7x14x1,5
3	150 247-01	1	1	1				Exhaust pipe Right 400 -02
3	150 249-01				1	1	1	Exhaust pipe Right 470 -02
3	150 251-01	1			1	1		Exhaust pipe Right 501/550 -02
3	150 253-01	1	1	1			1	Exhaust pipe Right 650 -02
4	150 248-01	1	1	1				Exhaust pipe Left 400 -02
4	150 250-01				1	1	1	Exhaust pipe Left 470 -02
4	150 252-01	1			1	1		Exhaust pipe Left 501/550 -02
4	150 254-01	1	1	1			1	Exhaust pipe Left 650 -02
5	150 130-01	4	4	4	4	4	4	Spring exhaust system 01-
6	150 259-01	1	1	1	1	1	1	Collector tube -02
7	150 235-01	1	1	1	1	1	1	Split nut M8
8	328 017-01	1	1	1	1	1	1	Washer 8,4x16x1,5
9	308 520-22	1	1	1	1	1	1	Screw MC6S 8x20
10	150 255-01	1	1				1	Silencer FEe/Fse Non-restricted -02
10	150 256-01	1	1					Silencer FEe/Fse ECE -02
10	150 257-01			1	1	1		Silencer FSc/FC/FCe -02
10	150 258-01							Silencer spark arrestor
11	150 266-01	1	1	1	1	1	1	Front part silencer -02
12	150 262-01	1	1	1	1	1	1	Aluminium tube silencer -02
13	370 004-01	12	12	12	12	12	12	Dummy rivet 4.8x8 stainless -02
14	340 282-01	2	2	2	2	2	2	O-ring 82,14x3,53
15	150 264-01	1	1				1	Rear part silencer FEe/FSe -02
15	150 265-01			1	1	1		Rear part silencer FSc/FC/FCe -02
16	316 801-22	2	2	2	2	2	2	Locknut M6
17	326 018-01	4	4	4	4	4	4	Washer 6,4x18x1,5
18	150 272-01	4	4	4	4	4	4	Bushing 7,5x12x28x7,8
19	150 271-01	2	2	2	2	2	2	Rubber silencer -02
20	306 530-22	2	2	2	2	2	2	Screw MC6S 6x30
21	150 267-01	1	1				1	Stuffing yarn FEe/FSe -02
21	150 269-01			1	1	1		Stuffing yarn FSc/FC/FCe -02
22	150 257-01	1	1				1	Stuffing yarn rear FEe/FSe -02



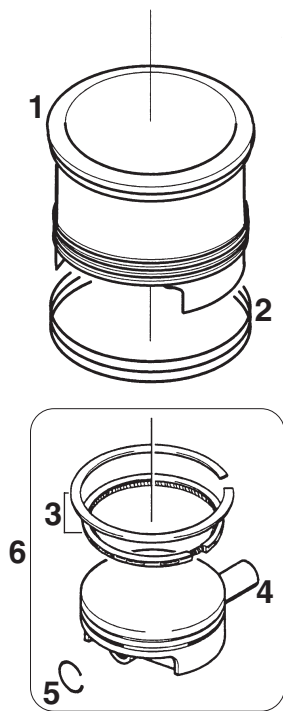
Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	200 228-01	1	1	1	1	1	1	Rockerarm cover 01-
2	306 550-22	2	2	2	2	2	2	Screw MC6S 6x50
3	306 545-22	1	1	1	1	1	1	Screw MC6S 6x45
4	306 525-22	2	2	2	2	2	2	Screw MC6S 6x25
5	200 057-01	1	1	1	1	1	1	Crankcase ventilation sleeve 89-
6	200 026-01	2	2	2	2	2	2	Valve cover 89-
7	305 516-22	4	4	4	4	4	4	Screw M5x16
8	200 027-01	2	2	2	2	2	2	Gasket valve cover 89-
9	305 512-22	2	2	2	2	2	2	Screw MC6S 5x12
10	230 045-01	1	1	1	1	1	1	Decompression valve lifter bracket 89-
11	200 217-01	1	1	1	1	1	1	Decompression valve lifter 00-
12	340 005-01	1	1	1	1	1	1	O-ring 5,1x1,6
13	200 058-01	1	1	1	1	1	1	Decompression recoil spring 89-
14	330 008-01	1	1	1	1	1	1	Circlip SGA 8 89-
15	305 506-22	2	2	2	2	2	2	Screw MC6S 5x6
16	340 019-01	2	2	2	2	2	2	O-ring 19,1x1,6 95-
17	200 143-01	2	2	2	2	2	2	End plug rockerarm shaft $\varnothing$ 12/20 mm 96-
18	200 259-01	2	2	2	2	2	2	Rockerarm shaft $\varnothing$ 12 mm 96- (Incl. Pos. No. 19)
19	200 258-01	2	2	2	2	2	2	End plug rockerarm shaft $\varnothing$ 12 mm 01-
20	200 146-01	4	4	4	4	4	4	Bushing $\varnothing$ 12 mm 96-
21	200 171-01	4	4	4	4	4	4	Valve adjustment screw 96-
22	200 021-01	4	4	4	4	4	4	Valve adjustment locknut 89-
23	200 019-01	2	2	2	2	2	2	Rockerarm roller bearing 89-
24	200 281-01	1	1	1	1	1	1	Rockerarm intake complete (Incl. Pos. No. 20, 21, 22, 23)
25	200 282-01	1	1	1	1	1	1	Rockerarm exhaust compl. 400 01- (Incl. Pos. No. 20, 21, 22, 23)
25	200 283-01	1	1	1	1	1	1	Rockerarm exhaust compl. 470/501/550/650 96- (Incl. Pos. No. 20, 21, 22, 23)



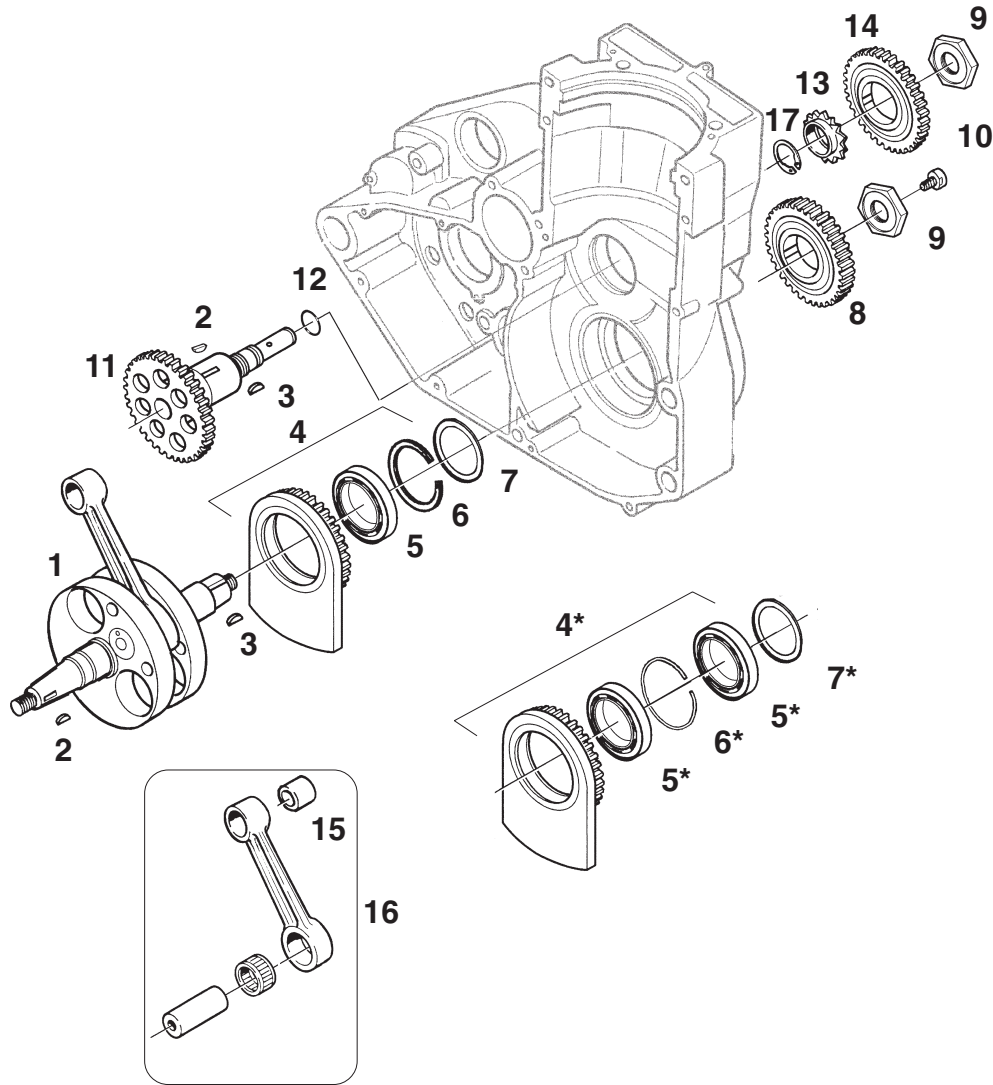
Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	200 278-01	1	1	1				Cylinderhead complete 400 01- (Incl. Pos. No. 2, 3, 9, 10, Page 26-1,26-5)
1	200 294-01				1	1	1	Cylinderhead complete 470 01- (Incl. Pos. No. 2, 3, 9, 10, Page 26-1,26-5)
1	200 279-01	1						Cylinderhead complete 501 01- (Incl. Pos. No. 2, 3, 9, 10, Page 26-1,26-5)
1	200 280-01	1	1	1	1		1	Cylinderhead complete 550/650 01- (Incl. Pos. No. 2, 3, 9, 10, Page 26-1,26-5)
2	200 214-01	4	4	4	4	4	4	Valve guide 00-
3	330 001-01	4	4	4	4	4	4	Circlip SW 11 89-
4	200 054-01	4	4	4	4	4	4	Seal valveguide 89-
5	200 195-01	4	4	4	4	4	4	Shim valve spring 99-
6	200 210-01	4	4	4	4	4	4	Valve spring 99-
7	200 194-01	4	4	4	4	4	4	Valve spring retainer 99-
8	200 009-01	8	8	8	8	8	8	Valve spring cotters 89-
9	200 211-01	2	2	2	2	2	2	Valve seat inlet 00-
10	200 213-01	2	2	2				Valve seat 400 exhaust 00-
10	200 212-01	2	2	2	2	2	2	Valve seat exhaust 470/501/550/650 01-
11	200 224-01	2	2	2				Intake valve 400 96-
11	200 225-01	2	2	2	2	2	2	Intake valve 470/550/650 01-
11	200 007-01	2						Intake valve 501 89-
12	200 083-01	2	2	2				Exhaust valve 400 96-
12	200 008-01	2	2	2	2	2	2	Exhaust valve 470/501/550/650 01-
13	200 262-01	4	4	4	4	4	4	Bolt cylinder head 01-
14	320 018-01	4	4	4	4	4	4	Washer 10x18x2
15	200 135-01	1	1	1	1	1	1	Camchain tensioner 98-
16	200 229-01	1	1	1	1	1	1	Dowl camshain tensioner 98-
17	315 601-22	1	1	1	1	1	1	Locknut M5
18	305 525-22	1	1	1	1	1	1	Screw MC6S 5x25
19	200 268-01	1	1	1	1	1	1	Copper washer
20	230 044-01	1	1	1	1	1	1	Wireholder manual decompression wire 89-
21	200 319-01	1	1	1				Cylinderhead gasket 400 (thick) -01
21	200 231-01	1	1	1				Cylinderhead gasket 400 -02
21	200 320-01	1						Cylinderhead gasket 501 (thick) -01
21	200 232-01	1						Cylinderhead gasket 501 -02
21	200 321-01	1	1	1	1	1	1	Cylinderhead gasket 470/550/650 (thick) -01
21	200 233-01	1	1	1	1	1	1	Cylinderhead gasket 470/550/650 -02
22	340 004-01	1	1	1	1	1	1	O-ring 4x1 01-



Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	360 000-01	2	2	2	2	2	2	Ballbearing 89-
2	200 230-01	1	1					Camshaft FE400e / FS400e -01,-02
2	200 230-53	1	1	1	1	1	1	Camshaft FS400c / 470 / 550 / 650 -01,-02
2	200 230-55	1						Camshaft 501 -01,-02
3	200 295-01	1	1	1	1	1	1	Recoil spring aut. decompression -01,-02
4	315 601-22	1	1	1	1	1	1	Locknut M5
5	200 158-01	1	1	1	1	1	1	Timing sprocket -01
5	200 276-01	1	1	1	1	1	1	Timing sprocket -02
6	305 510-41	1	1	1	1	1	1	Screw MC6S 5x10
7	308 512-21	2	2	2	2	2	2	Screw MC6LS 8x12
8	200 274-01	1	1	1	1	1	1	Aut. decompression device -01,-02
9	200 238-01	1	1	1	1	1	1	Plug camshaft -01,-02
10	340 029-01	2	2	2	2	2	2	O-ring 29,1x1,6
11	200 045-04	1	1	1	1	1	1	Timing chain 64 L 400/470 -01,-02
11	200 045-05	1			1	1		Timing chain 66 L 501/550 -01,-02
11	200 045-06	1	1	1			1	Timing chain 70 L 650 -01,-02
12	200 066-02	1	1	1	1	1	1	Timing chain lock (riveted) REGINA -01
12	200 309-01	1	1	1	1	1	1	Timing chain lock (riveted) IWIS -02
13	200 284-01	1	1	1	1	1	1	Camchain guide -01,-02
14	306 516-22	1	1	1	1	1	1	Screw MC6S 6x16
15	326 012-01	1	1	1	1	1	1	Washer 6,4x12x1,5
16	200 267-01	1	1	1	1	1	1	Dowl camchain guide -01,-02
17	200 106-01	1	1	1	1	1	1	Screw camchain tensioner 98-
18	200 052-02	1	1	1	1	1	1	Camchain tensioner -01,-02 (Incl. Pos. No. 20)
19	200 053-01	1	1	1	1	1	1	Gasket camchain tensioner 98-
20	200 275-01	1	1	1	1	1	1	Spacer camchain tensioner -01,-02
21	325 010-01	2	2	2	2	2	2	Washer 5,3x10x1 -02
22	200 298-01	2	2	2	2	2	2	Spacer 13x8x2,5 -02
23	306 716-22	2	2	2	2	2	2	Screw K6S 6x16



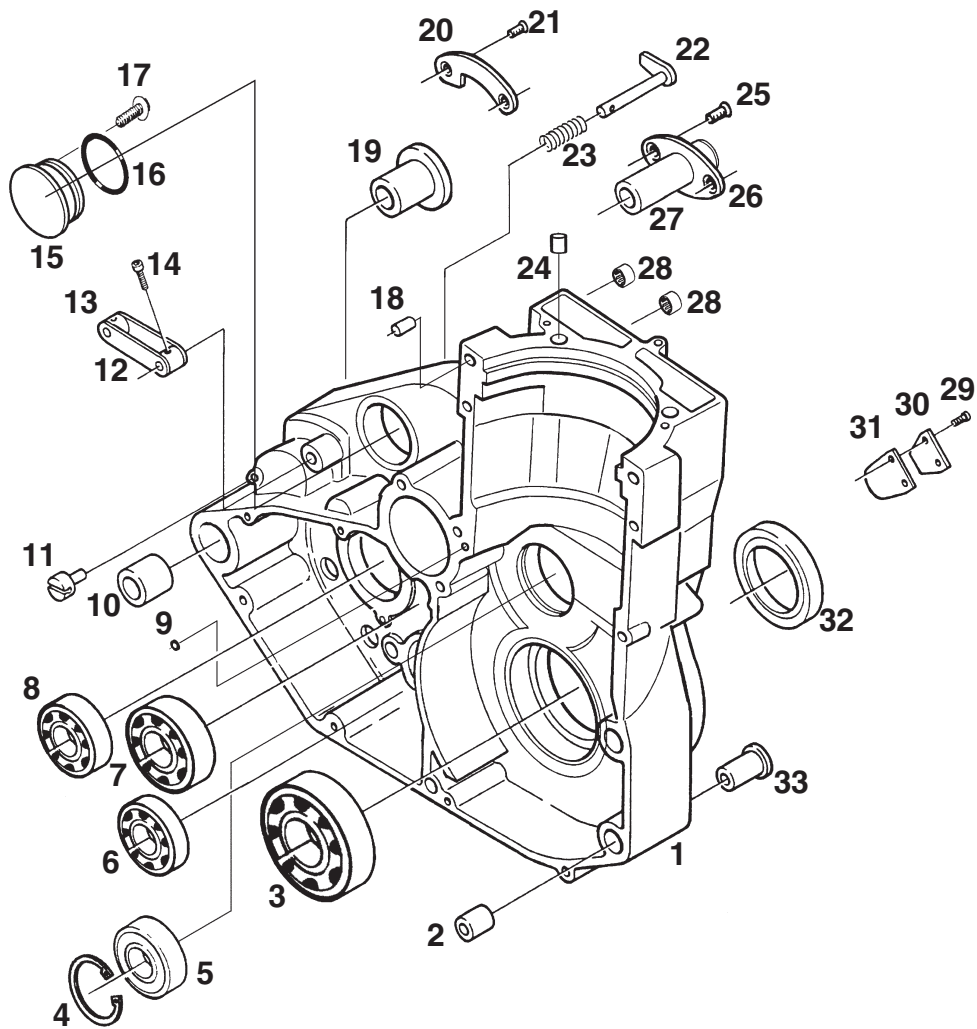
Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	200 239-01	1	1	1				Cylinder 400 / ø92 mm 01-
1	200 243-01				1	1	1	Cylinder 470 / ø100 mm 01-
1	200 240-01	1						Cylinder 501 / ø95 mm 01-
1	200 241-01				1			Cylinder 550 / ø100 mm 01-
1	200 242-01	1	1	1			1	Cylinder 650 / ø100 mm 01-
2	340 305-01	3	3	3	3	3	3	O-ring cylinder lining 01-
3	200 285-01	1	1	1				Piston ring kit 400 / ø92 mm 01-
3	200 286-01	1	1	1				Piston ring kit 501 / ø95 mm 01-
3	200 287-01	1	1	1	1	1	1	Piston ring kit 470 / 550 / 650 / ø100 mm 01-
4	200 249-01	1	1	1				Gudgeon pin 400 01-
4	200 253-01	1	1	1	1	1	1	Gudgeon pin 470 / 501 / 550 / 650 01-
5	200 250-01	2	2	2				Clips gudgeon pin 400 01-
5	200 254-01	2	2	2	2	2	2	Clips gudgeon pin 470 / 501 / 550 / 650 01-
6	200 244-01	1	1	1				Piston complete 400 / ø92 mm 01- (Incl. Pos. No. 3, 4, 5)
6	200 270-01				1	1	1	Piston complete 470 / ø100 mm 01- (Incl. Pos. No. 3, 4, 5)
6	200 245-01	1						Piston complete 501 / ø95 mm 01- (Incl. Pos. No. 3, 4, 5)
6	200 246-01	1	1	1	1	1	1	Piston complete 550 / 650 / ø100 mm 01- (Incl. Pos. No. 3, 4, 5)



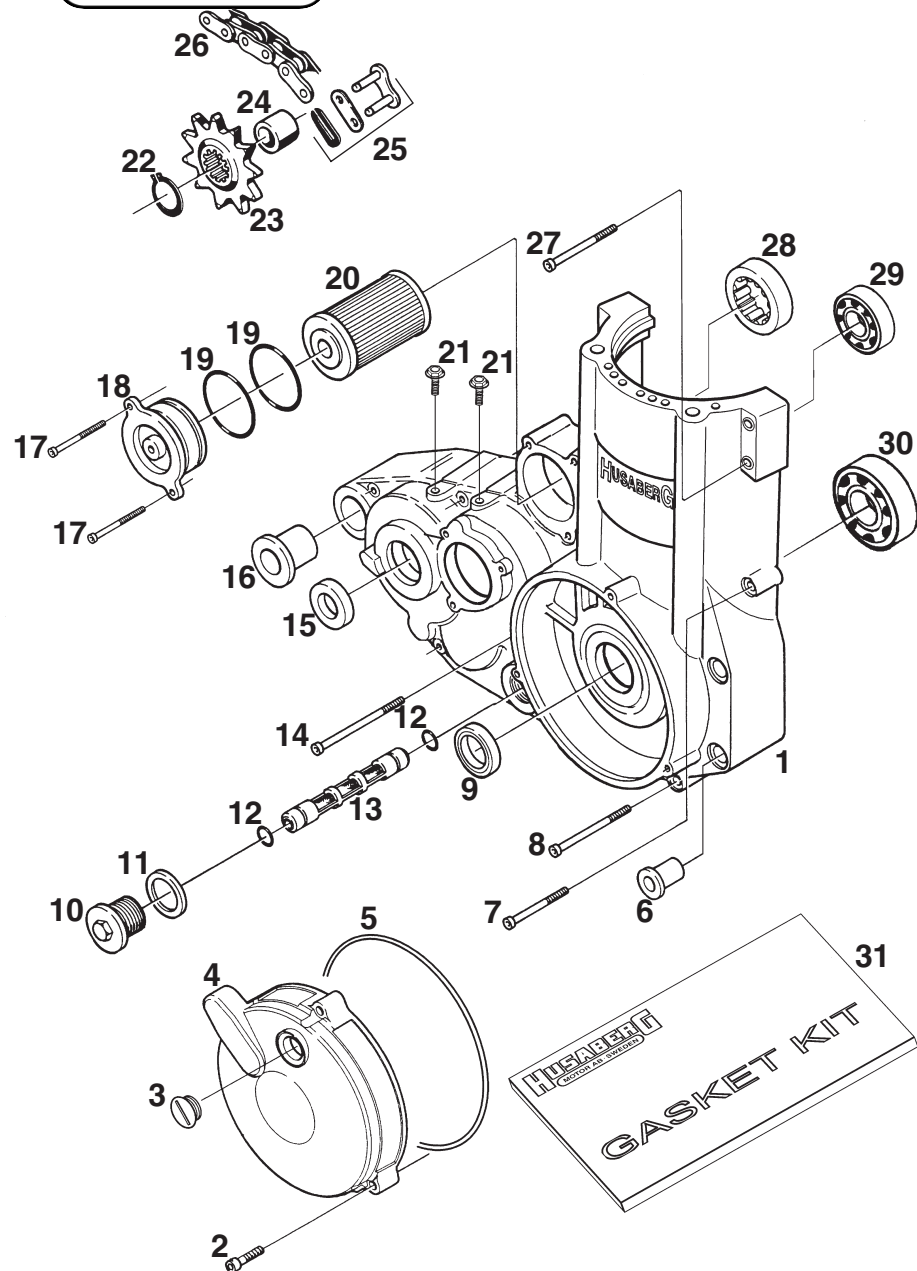
Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	210 149-01	1	1	1				Crankshaft 400 -01,-02
1	210 172-01				1	1	1	Crankshaft 470 -01,-02
1	210 155-01	1						Crankshaft 501 -01,-02
1	210 171-01				1			Crankshaft 550 -01,-02
1	210 163-01	1	1	1			1	Crankshaft 650 -01,-02
2	250 004-01	2	2	2	2	2	2	Woodruff key 3x13
3	210 173-01	2	2	2	2	2	2	Woodruff key
4	210 195-01	1	1	1				Counter balancer 400 -01
4	210 247-01	1	1	1				Counter balancer 400 -02
4*	210 255-01	1	1	1				Counter balancer double bearing 400 -01
4*	210 253-01	1	1	1				Counter balancer double bearing 400 -02
4	210 196-01	1			1	1	1	Counter balancer 470/501/550 -01
4	210 248-01	1			1	1	1	Counter balancer 470/501/550 -02
4*	210 257-01	1	1	1	1	1	1	Counter bal.double bear. 470/501/550/650 -01
4*	210 243-01	1	1	1	1	1	1	Counter bal.double bear. 470/501/550/650 -02
4	210 197-01	1	1	1			1	Counter balancer 650 -01
4	210 249-01	1	1	1			1	Counter balancer 650 -02
5	360 037-01	1	1	1	1	1	1	Ball bearing counter balancer -01,-02
5*	210 244-01	2	2	2	2	2	2	Ball bearing doub.bear.count.balancer -02
6	210 176-01	1	1	1	1	1	1	Circlip counter balancer -01,-02
6*	210 245-01	1	1	1	1	1	1	Circlip double bearing counter balancer -02
7	210 159-01	1	1	1	1	1	1	Shim counter balancer 3mm -01,-02
7*	210 246-01	1	1	1	1	1	1	Shim doub.bear.count.balancer 0,2mm -02
8	230 130-01	1	1	1	1	1	1	Gear wheel crankshaft -01
8	230 145-01	1	1	1	1	1	1	Gear wheel crankshaft -02
9	230 132-01	2	2	2	2	2	2	Nut crankshaft & driving shaft -01,-02
10	210 168-01	1	1	1	1	1	1	Oil connection nipple -01,-02
11	210 160-01	1	1	1	1	1	1	Driving shaft counter balancer -01
11	210 204-01	1	1	1	1	1	1	Driving shaft counter balancer -02
12	340 040-01	1	1	1	1	1	1	O-ring 10x1,3







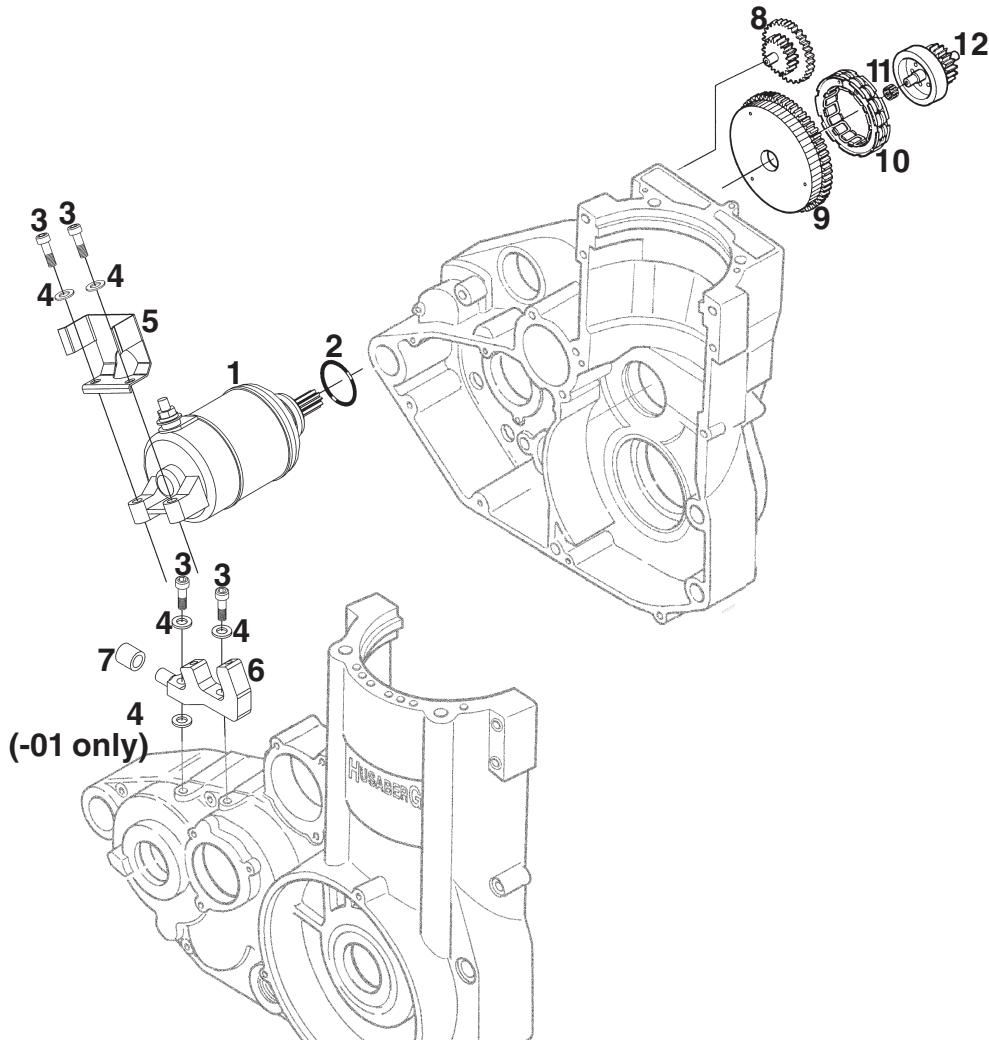
Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	220 080-01	1	1	1	1	1	1	Crankcase complete 400/470 01- (complete set right + left halves incl.pos.no. 2, 3, 4, 5, 8, 10, 19, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35)
1	220 081-01	1			1			Crankcase complete 501/550 01-
1	220 082-01	1	1	1			1	Crankcase complete 650 01-
2	220 011-01	1	1	1	1	1	1	Dowl crankcase front 89-
3	360 001-01	1	1	1	1	1	1	Ball bearing crankshaft
4	330 042-01	1	1	1	1	1	1	Circlip 42x1,8
5	360 036-01	1	1	1	1	1	1	Ball bearing counter balancer driving shaft
6	360 026-01	1	1	1	1	1	1	Ball bearing shift drum
7	360 004-01	1	1	1	1	1	1	Ball bearing main gearshaft
8	360 002-01	1	1	1	1	1	1	Ball bearing secondary shaft
9	340 004-01	1	1	1	1	1	1	O-ring 4x1
10	220 012-01	1	1	1	1	1	1	Dowl crankcase rear 89-
11	230 044-01	1	1	1	1	1	1	Holder decompression wire lower 89-
12	230 054-01	1	1	1	1	1	1	Decompression lever 89-
13	230 065-01	1	1	1	1	1	1	Nipple decompression wire 89-
14	305 510-22	1	1	1	1	1	1	Screw MC6S 5x10
15	220 078-01			1	1			Plug electrical starter engine
16	340 024-01			1	1			O-ring 24,2x3
17	406 110-22			1	1			Screw (Collar) 6x10
18	220 022-01	2	2	2	2	2	2	Dowl crankcase cylinder lining 01-
19	220 007-01	2	2	2	2	2	2	Flange bushing rear 89-
20	230 039-01	1	1	1	1	1	1	Engagement sledge 89-
21	305 410-12	2	2	2	2	2	2	Screw MFX 5x10
22	230 050-01	1	1	1	1	1	1	Decompression lever kickstarter 89-
23	230 037-01	1	1	1	1	1	1	Recoil spring decomp. lever kickstarter 89-
24	200 263-01	2	2	2	2	2	2	Dowl crankcase cylinder head 01-
25	306 416-12	2	2	2	2	2	2	Screw MFX 6x16
26	220 010-01	1	1	1	1	1	1	Flange shaft support 89-
27	220 009-01	1	1	1	1	1	1	Shaft intermediate gear wheel 89-
28	360 034-01	2	2	2	2	2	2	Needle bearing 01-
29	304 306-12	2	2	2	2	2	2	Screw MSCS 4x6
30	220 020-01	1	1	1	1	1	1	Reed valve support 89-
31	220 013-01	1	1	1	1	1	1	Reed valve 89-
32	350 003-01	1	1	1	1	1	1	Seal ring
33	220 006-01	2	2	2	2	2	2	Flange bushing front 89-

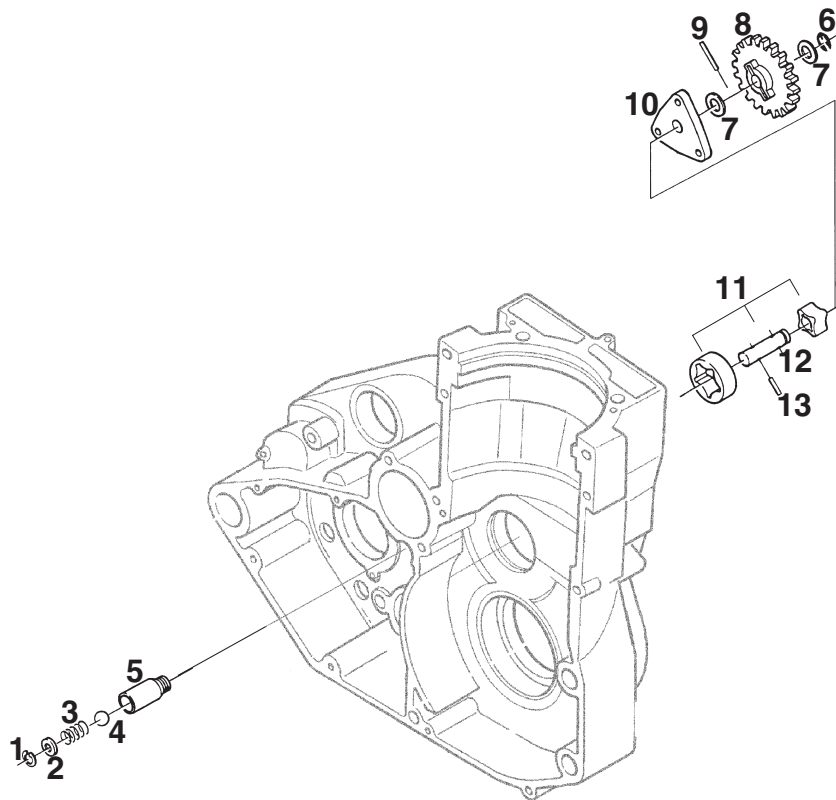


## CRANKCASE RIGHT

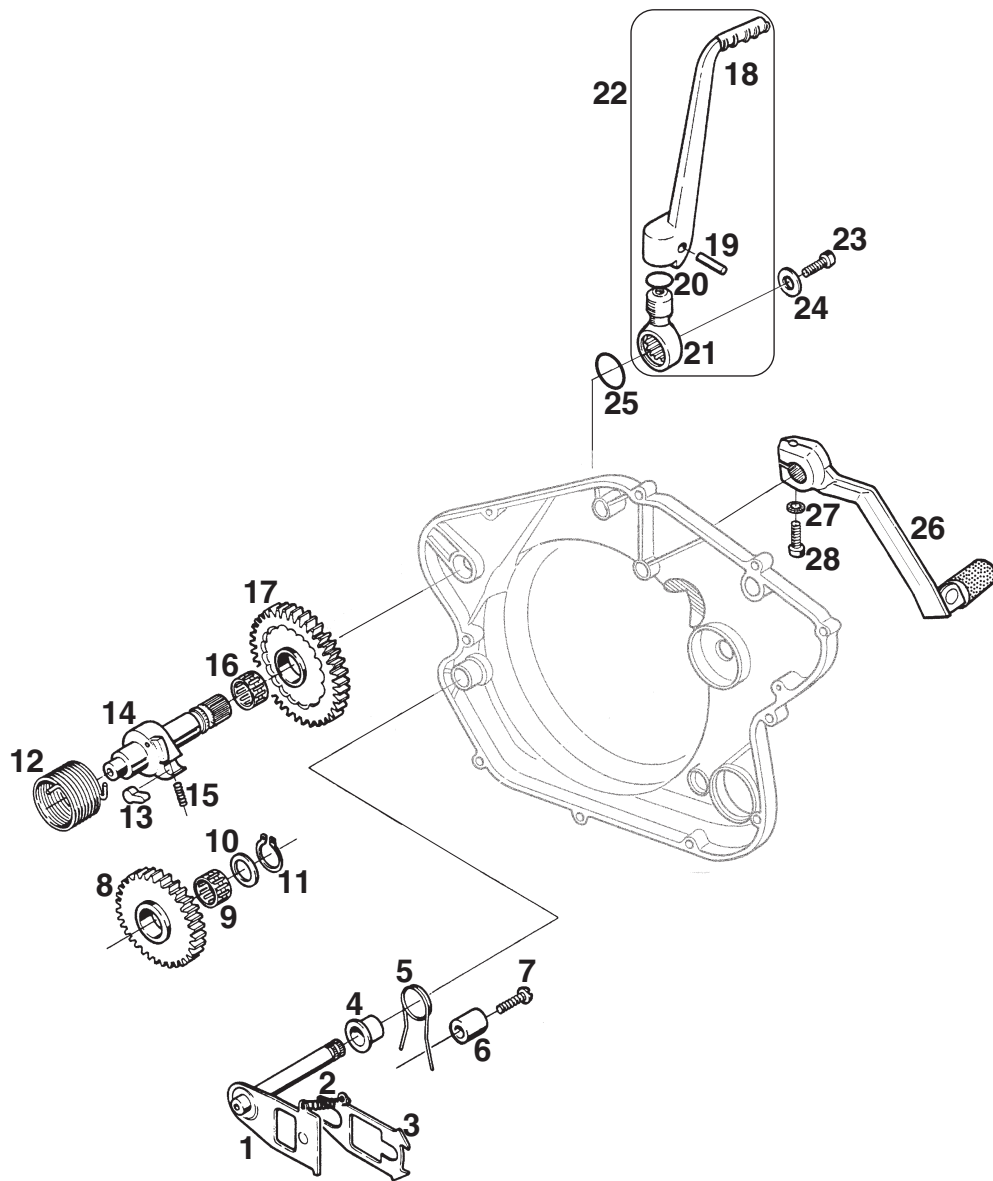
Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1								Crankcase complete set Right + Left halves (See previous page)
2	306 625-22	3	3	3	3	3	3	Screw MC6S 6x25
3	250 204-01	1	1	1	1	1	1	Inspection plug ignition cover 99-
4	220 060-01	1	1	1	1	1	1	Ignition cover 99-
5	340 060-01	1	1	1	1	1	1	O-ring ignition cover 00-
6	220 006-01	2	2	2	2	2	2	Flange bushing front 89-
7	306 540-22	1	1	1	1	1	1	Screw MC6S 6x40
8	306 550-22	7	7	7	7	7	7	Screw MC6S 6x50
9	350 008-01	1	1	1	1	1	1	Seal ring 25x40x7 99-
10	220 051-01	1	1	1	1	1	1	Oil drain plug 97-
11	324 034-01	1	1	1	1	1	1	Washer oil drain plug 97-
12	340 040-01	2	2	2	2	2	2	O-ring oil screen 97-
13	260 052-01	1	1	1	1	1	1	Oil screen 97-
14	306 565-22	1	1	1	1	1	1	Screw MC6S 6x65
15	350 006-01	1	1	1	1	1	1	Seal ring 30x42x7 94-
16	220 007-01	1	1	1	1	1	1	Flange bushing rear 89-
17	305 550-22	2	2	2	2	2	2	Screw MC6S 5x50
18	220 050-01	1	1	1	1	1	1	Cover oil filter 97-
19	340 073-01	2	2	2	2	2	2	O-ring oil filter cover 97-
20	260 060-01	1	1	1	1	1	1	Oil filter (outlet part) 97-
21	406 212-22	2	2	2	2	2	2	Screw (Collar) 6x12
22	330 025-01	1	1	1	1	1	1	Circlip SGA 25 94-
23	260 001-03							Sprocket Z=13 89-
23	260 001-04							Sprocket Z=14 89-
23	260 001-05							Sprocket Z=15 89-
23	260 001-06							Sprocket Z=16 89-
24	240 046-01	1	1	1	1	1	1	Spacer sprocket 94-
25	190 001-01	1	1	1	1	1	1	Master link 89-
26	190 002-02							Drive chain 112 L 89-
26	190 002-03							Drive chain 114 L 89-
26	190 002-04							Drive chain 116 L 89-
27	306 545-22	4	4	4	4	4	4	Screw MC6S 6x45
28	360 017-01	1	1	1	1	1	1	Roller bearing secondary shaft
29	360 002-01	1	1	1	1	1	1	Ball bearing main gearshaft
30	360 001-01	1	1	1	1	1	1	Ball bearing crankshaft
31	260 079-01	1	1	1				Gasket kit complete 400 01-
31	260 081-01	1	1	1	1	1	1	Gasket kit complete 470/550/650 01-
31	260 080-01	1						Gasket kit complete 501 01-

Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	250 249-01	1	1			1	1	Electrical starter engine -01,-02
2	340 024-01	1	1			1	1	O-ring 24,2x3
3	306 525-22	4	4			4	4	Screw MC6S 6x25
4	326 012-01	5	5			5	5	Washer 6,4x12,1,5 -01
4	326 012-01	4	4			4	4	Washer 6,4x12,1,5 -02
5	250 260-01	1	1			1	1	Bracket electrical starter relay -01,-02
6	250 271-01	1	1			1	1	Bracket electrical starter engine -01
6	250 292-01	1	1			1	1	Bracket electrical starter engine -02
7	150 147-02	1	1			1	1	Rubber damper battery box -01,-02
8	250 283-01	1	1			1	1	Gear wheel slip clutch electric start -01,-02
9	250 247-01	1	1			1	1	Free wheel outer part -01,-02
10	250 245-01	1	1			1	1	Clutch mechanism free wheel -01,-02
11	360 035-01	1	1			1	1	Needle bearing free wheel -01,-02
12	250 248-01	1	1			1	1	Free wheel inner part -01
12	250 273-01	1	1			1	1	Free wheel inner part -02



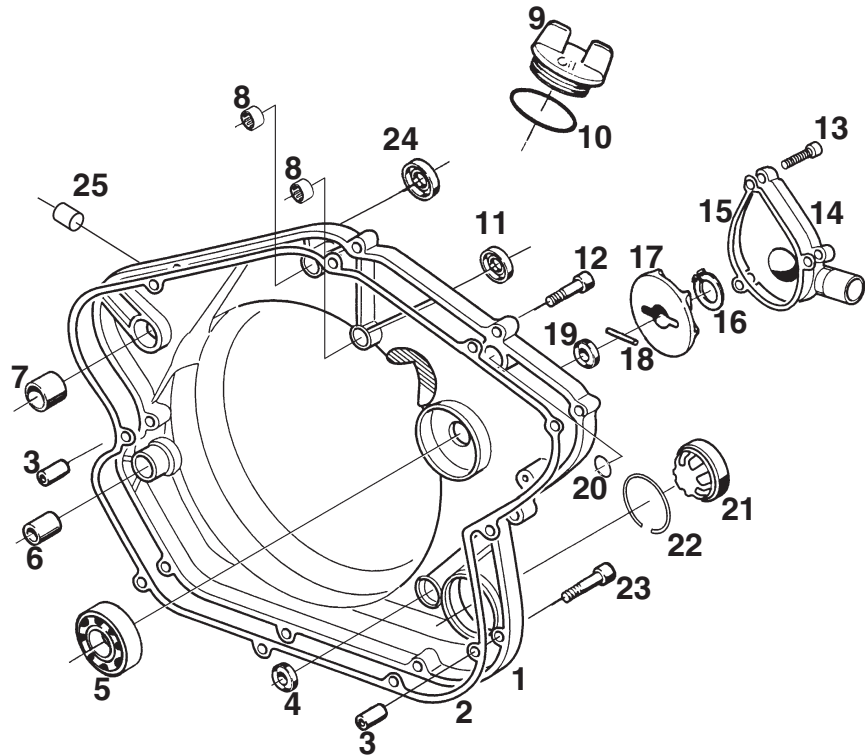


Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	330015-01	1	1	1	1	1	1	Circlip sgH15
2	260 037-01	1	1	1	1	1	1	Washer oil pressure relief 95-
3	260 038-01	1	1	1	1	1	1	Spring oil pressure relief 95-
4	360 024-01	1	1	1	1	1	1	Ball oil pressure relief 95-
5	260 036-01	1	1	1	1	1	1	Body oil pressure relief valve 95-
6	260 057-01	1	1	1	1	1	1	Circlip oil pump 97-
7	260 056-01	2	2	2	2	2	2	Washer 97-
8	260 055-01	1	1	1	1	1	1	Intermediate gear wheel oil pump 97-
9	370006-01	1	1	1	1	1	1	Pin oil pump (long) 97-
10	260 053-01	1	1	1	1	1	1	Cover oil pump 97-
11	260061-01	1	1	1	1	1	1	Rotor kit oil pump 97-
12	260 054-01	1	1	1	1	1	1	Shaft oil pump 97-
13	370005-01	1	1	1	1	1	1	Pin oil pump (short) 97-

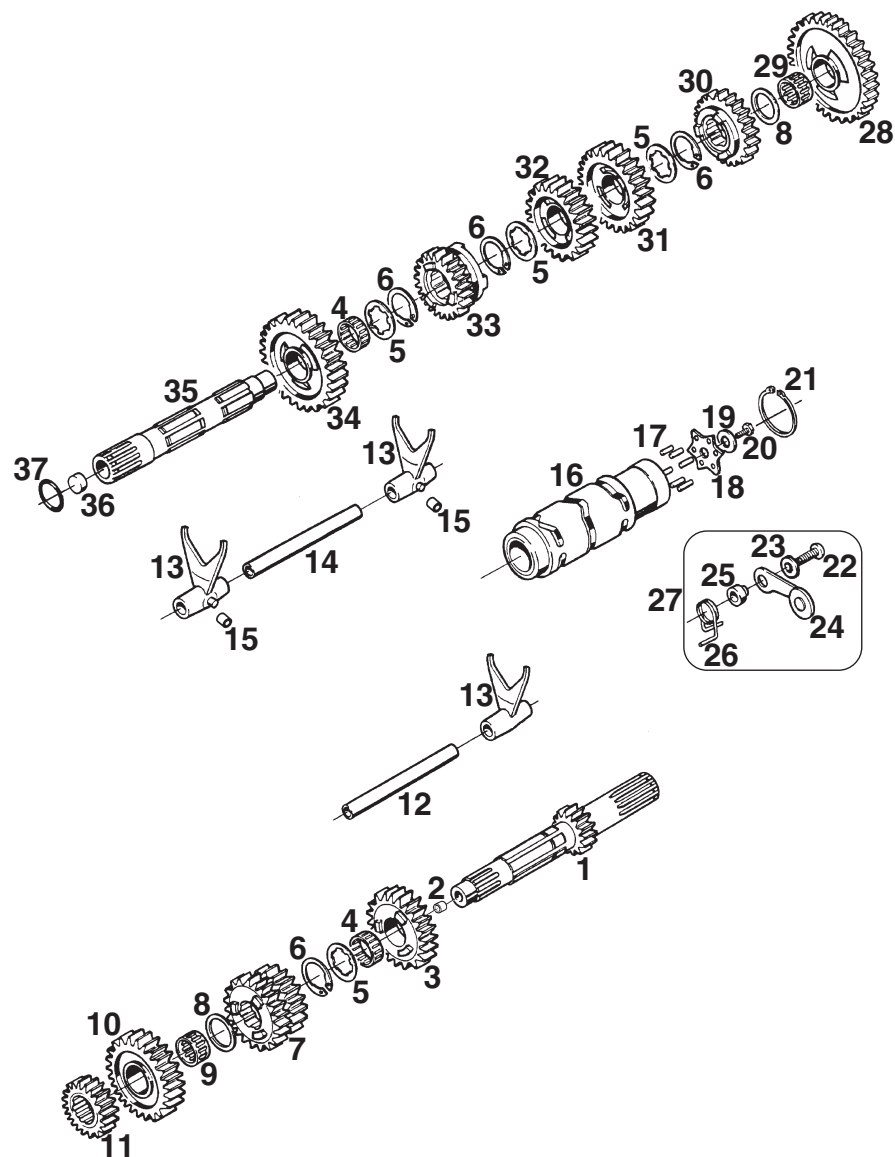


Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	230 140-01	1	1	1	1	1	1	Gearshift linkage shaft 01-
2	230 031-01	1	1	1	1	1	1	Spring gearshift mechanism 89-
3	230 081-01	1	1	1	1	1	1	Gearshift selector 89-
4	230 059-01	1	1	1	1	1	1	Spacer gearshift shaft 89-
5	230 032-01	1	1	1	1	1	1	Recoil spring gearshift mechanism 89-
6	220 022-01	1	1	1	1	1	1	Dowl 89-
7	306 020-62	1	1	1	1	1	1	Screw K6S 6x20
8	230 015-01	1	1	1	1	1	1	Intermediate gear wheel 89-
9	360 006-01	1	1	1	1	1	1	Needle roller bearing 17x21x10 89-
10	230 042-01	1	1	1	1	1	1	Support washer intermediate gear wheel 89-
11	330 017-01	1	1	1	1	1	1	Circlip SGA 17
12	230 019-01	1	1	1	1	1	1	Kickstart spring 89-
13	230 018-01	1	1	1	1	1	1	Engagement key kickstart 89-
14	230 097-01	1	1	1	1	1	1	Kickstart shaft 89-
15	230 056-01	1	1	1	1	1	1	Spring kickstart engagement key 89-
16	360 018-01	1	1	1	1	1	1	Needle roller bearing 18x22x10 89-
17	230 096-01	1	1	1	1	1	1	Gear wheel kickstart 89-
18	230 093-01	1	1	1	1	1	1	Kickstart lever 89-
19	370 000-01	1	1	1	1	1	1	Pin kickstart lever 89-
20	340 015-01	1	1	1	1	1	1	O-ring 15,1x1,6
21	230 020-02	1	1	1	1	1	1	Shaft pivot kickstart lever 89-
22	230 082-02	1	1	1	1	1	1	Kickstart lever complete 89- (Incl. Pos. No. 18, 19, 20, 21)
23	306 520-22	1	1	1	1	1	1	Screw MC6S 6x20
24	326 023-01	1	1	1	1	1	1	Washer 6,4x22x4
25	340 117-01	1	1	1	1	1	1	O-ring 17,3x2,4 (-01 only)
26	230 034-02	1	1	1	1	1	1	Gearshift lever 89-
27	326 011-01	1	1	1	1	1	1	Washer 6,4x11x0,7
28	406 225-22	1	1	1	1	1	1	Screw (Collar) 6x25

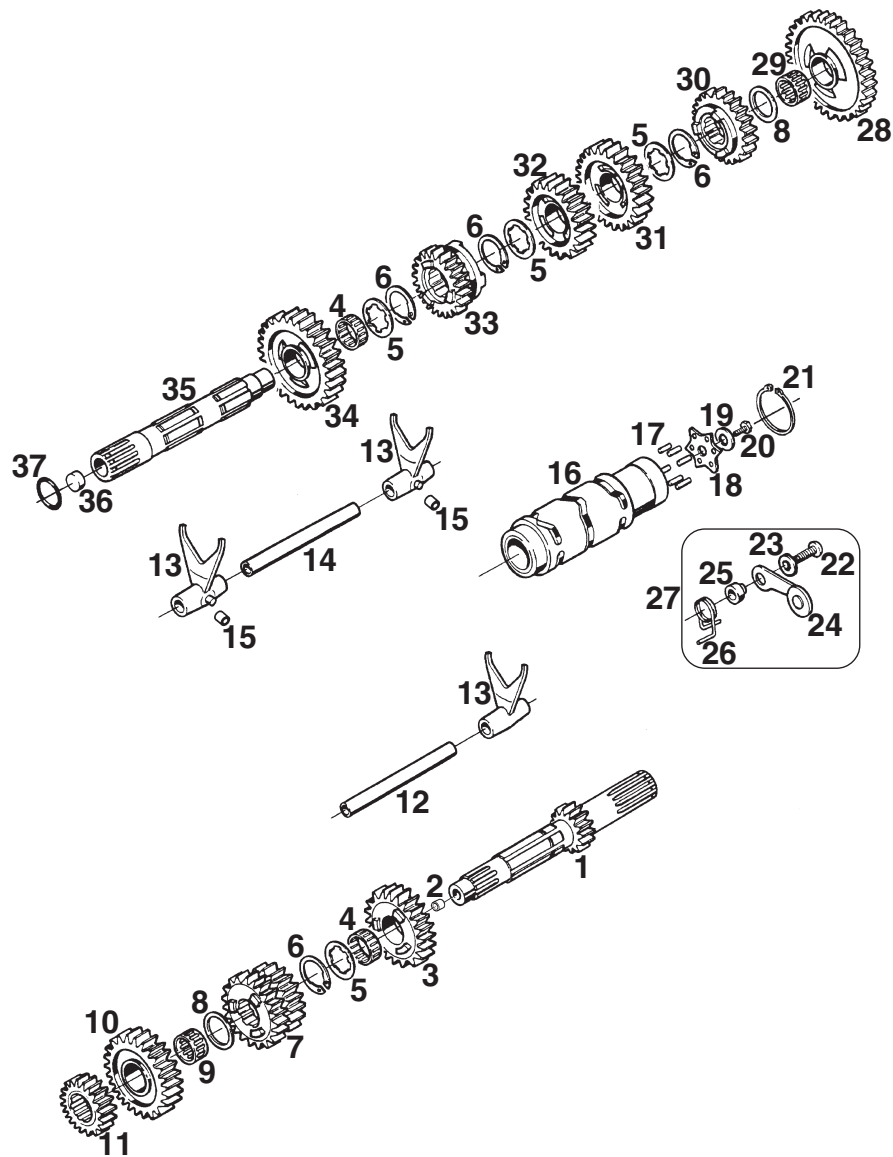




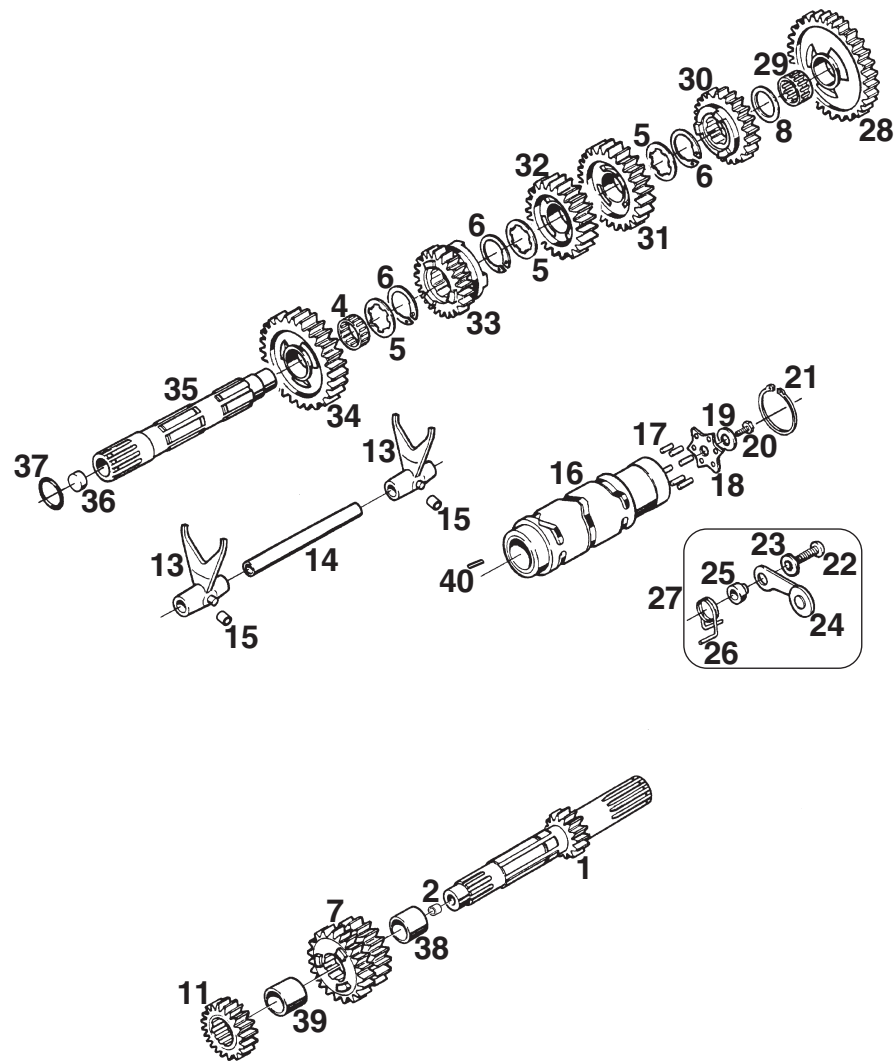
Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	230 142-01	1	1	1	1	1	1	Transmission cover -01 (Incl. Pos. No. 4, 5, 6, 7, 8, 11, 19, 20, 21)
1	220 083-01	1	1	1	1	1	1	Transmission cover -02 (Incl. Pos. No. 4, 5, 6, 7, 8, 11, 19, 20, 21)
2	220 073-01	1	1	1	1	1	1	Gasket transmission cover -01,-02
3	220 022-01	2	2	2	2	2	2	Dowl transmission cover 89-
4	350 014-01	1	1	1	1	1	1	Seal ring 18x10x6 -01,-02
5	350 013-01	1	1	1	1	1	1	Ball bearing water pump -01,-02
6	230 058-01	1	1	1	1	1	1	Bushing gearshift shaft 89-
7	220 043-01	1	1	1	1	1	1	Bushing kickstarter shaft -01
7	220 085-01	1	1	1	1	1	1	Bushing kickstarter shaft -02
8	360 034-01	2	2	2	2	2	2	Needle roller bearing -01,-02
9	220 021-01	1	1	1	1	1	1	Oilfill cap 89-
10	340 024-01	1	1	1	1	1	1	O-ring 24.2x3
11	350 004-01	1	1	1	1	1	1	Seal ring gear shift shaft 12x22x6x76.5
12	306 525-22	8	8	8	8	8	8	Screw MC6S 6x25
13	305 516-22	3	3	3	3	3	3	Screw MC6S 5x16
14	220 071-01	1	1	1	1	1	1	Water pump cover -01,-02
15	220 072-01	1	1	1	1	1	1	Gasket water pump cover -01,-02
16	330 010-01	1	1	1	1	1	1	Circlip SGA 10
17	210 166-01	1	1	1	1	1	1	Impeller water pump -01,-02
18	370 006-01	1	1	1	1	1	1	Pin water pump impeller -01,-02
19	350 000-01	1	1	1	1	1	1	Seal ring kick shaft 10x18x4x4,8
20	340 117-01	1	1	1	1	1	1	O-ring 17,3x2,4
21	220 074-01	1	1	1	1	1	1	Oil inspection window -01,-02
22	330 031-01	1	1	1	1	1	1	Lock ring oil inspection window -01,-02
23	306 530-22	2	2	2	2	2	2	Screw MC6S 6x30
24	350 015-01	1	1	1	1	1	1	Seal ring 18x24x4 -02
25	220 024-01	1	1	1	1	1	1	Kick stop plastic



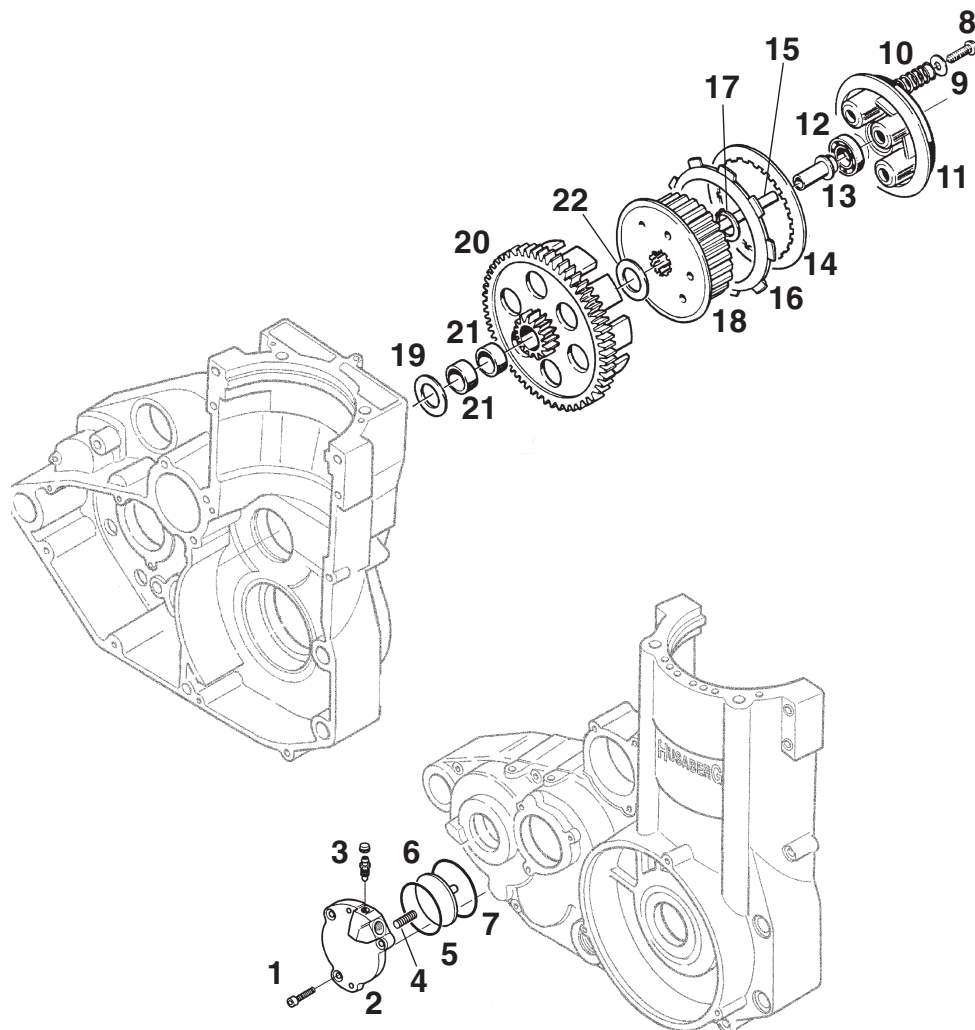
Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	240 101-01	1	1				1	Main gearshaft (Z=14) 01-
2	240 094-01	1	1				1	Bushing 00-
3	240 075-01	1	1				1	5th gear wheel main shaft (Z=24) 01-
4	360 007-01	2	2				2	Needle bearing 22x26x13 94-
5	240 017-01	4	4				4	Support washer 89-
6	330 036-01	4	4				4	Circlip SW 25 89-
7	240 103-01	1	1				1	3rd/4th gear wheel main shaft (Z=19/23) 01-
8	240 018-01	2	2				2	Support washer 89-
9	360 009-01	1	1				1	Needle bearing 20x24x13 94-
10	240 006-01	1	1				1	6th gear wheel main shaft (Z=27) 94-
11	240 002-01	1	1				1	2nd gear wheel main shaft (Z=17) 89-
12	240 008-01	1	1				1	Shift fork shaft front 89-
13	240 004-01	3	3				3	Shift fork 89-
14	240 007-01	1	1				1	Shift fork shaft rear 89-
15	240 093-01	3	3				3	Roller shift fork 00-
16	240 092-01	1	1				1	Shift drum 00-
17	370 018-01	6	6				6	Pin 4x18 89-
18	240 027-01	1	1				1	Positioning star 89-
19	326 025-01	1	1				1	Washer 6x25x1,5
20	306 612-22	1	1				1	Screw M6S 6x12
21	330 030-01	1	1				1	Circlip SW 30 97-
22	306 625-22	1	1				1	Screw M6S 6x25
23	326 016-01	1	1				1	Washer 6x16x1
24	230 075-01	1	1				1	Shift locating lever 89-
25	230 076-01	1	1				1	Sleeve 89-
26	230 077-01	1	1				1	Spring shift locating lever 89-
27	230 078-01	1	1				1	Shift locating lever kit 89-
								(Incl.Pos. No.22, 23, 24, 25, 26)
28	240 111-01	1	1				1	1st gear wheel secondary shaft (Z=33) 01-
29	360 010-01	1	1				1	Needle bearing 20x24x10 89-
30	240 065-01	1	1				1	5th gear wheel secondary shaft (Z=22) 94-
31	240 113-01	1	1				1	3rd gear wheel secondary shaft (Z=26) 01-
32	240 114-01	1	1				1	4th gear wheel secondary shaft (Z=25) 01-
33	240 066-01	1	1				1	6th gear wheel secondary shaft (Z=20) 94-
34	240 062-01	1	1				1	2nd gear wheel secondary shaft (Z=30) 94-
35	240 042-01	1	1				1	Secondary shaft 01-
36	210 167-01	1	1				1	Plug 12x7 01-
37	340 022-01	1	1				1	O-ring 22.1x1.6 94-



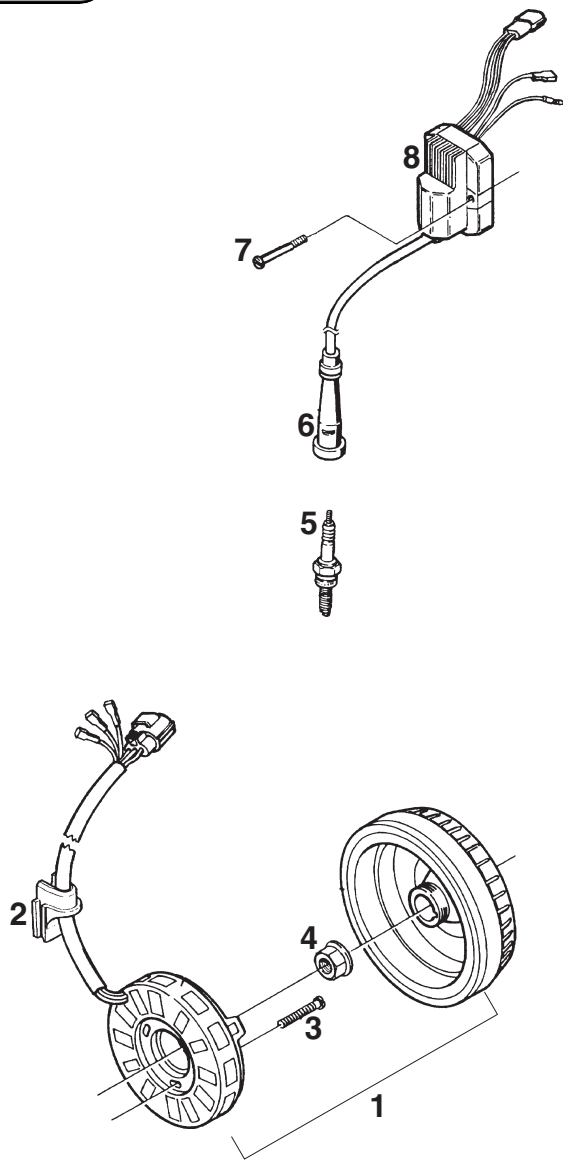
Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	240 101-01			1	1	1		Main gearshaft (Z=14) 01-
2	240 094-01			1	1	1		Bushing 00-
3	240 075-01			1	1	1		5th gear wheel main shaft (Z=24) 94-
4	360 007-01			2	2	2		Needle bearing 22x26x13 94-
5	240 017-01			4	4	4		Support washer 89-
6	330 036-01			4	4	4		Circlip SW 25 89-
7	240 103-01			1	1	1		3rd/4th gear wheel main shaft (Z=19/23) 01-
8	240 018-01			2	2	2		Support washer 89-
9	360 009-01			1	1	1		Needle bearing 20x24x13 94-
10	240 076-01			1	1	1		6th gear wheel main shaft (Z=25) 94-
11	240 002-01			1	1	1		2nd gear wheel main shaft (Z=17) 01-
12	240 008-01			1	1	1		Shift fork shaft front 89-
13	240 004-01			3	3	3		Shift fork 89-
14	240 007-01			1	1	1		Shift fork shaft rear 89-
15	240 093-01			3	3	3		Roller shift fork 00-
16	240 092-01			1	1	1		Shift drum 00-
17	370 018-01			6	6	6		Pin 4x18 89-
18	240 027-01			1	1	1		Positioning star 89-
19	326 025-01			1	1	1		Washer 6x25x1,5
20	306 612-22			1	1	1		Screw M6S 6x12
21	330 030-01			1	1	1		Circlip SW 30 97-
22	306 625-22			1	1	1		Screw M6S 6x25
23	326 016-01			1	1	1		Washer 6x16x1
24	230 075-01			1	1	1		Shift locating lever 89-
25	230 076-01			1	1	1		Sleeve 89-
26	230 077-01			1	1	1		Spring shift locating lever 89-
27	230 078-01			1	1	1		Shift locating lever kit 89- (Incl.Pos.No.22, 23, 24, 25, 26)
28	240 111-01			1	1	1		1st gear wheel secondary shaft (Z=33) 01-
29	360 010-01			1	1	1		Needle bearing 20x24x10 89-
30	240 065-01			1	1	1		5th gear wheel secondary shaft (Z=22) 94-
31	240 113-01			1	1	1		3rd gear wheel secondary shaft (Z=26) 01-
32	240 114-01			1	1	1		4th gear wheel secondary shaft (Z=25) 01-
33	240 086-01			1	1	1		6th gear wheel secondary shaft (Z=21) 94-
34	240 062-01			1	1	1		2nd gear wheel secondary shaft (Z=30) 01-
35	240 042-01			1	1	1		Secondary shaft 01-
36	210 167-01			1	1	1		Plug 12x7 01-
37	340 022-01			1	1	1		O-ring 22.1x1.6 94-



Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	240 101-01				1			Main gearshaft (Z=14) 01-
2	240 094-01				1			Bushing 00-
3	240 075-01				1			5th gear wheel main shaft (Z=24) 94-
4	360 007-01				1			Needle bearing 22x26x13 94-
5	240 017-01				3			Support washer 89-
6	330 036-01				3			Circlip SW 25 89-
7	240 103-01				1			3rd/4th gear wheel main shaft (Z=19/23) 01-
8	240 018-01				1			Support washer 89-
11	240 002-01				1			2nd gear wheel main shaft (Z=17) 01-
13	240 004-01				2			Shift fork 89-
14	240 007-01				1			Shift fork shaft rear 89-
15	240 093-01				2			Roller shift fork 00-
16	240 092-01				1			Shift drum 00-
17	370 018-01				6			Pin 4x18 89-
18	240 027-01				1			Positioning star 89-
19	326 025-01				1			Washer 6x25x1,5
20	306 612-22				1			Screw M6S 6x12
21	330 030-01				1			Circlip SW 30 97-
22	306 625-22				1			Screw M6S 6x25
23	326 016-01				1			Washer 6x16x1
24	230 075-01				1			Shift locating lever 89-
25	230 076-01				1			Sleeve 89-
26	230 077-01				1			Spring shift locating lever 89-
27	230 078-01				1			Shift locating lever kit 89- (Incl.Pos.No.22, 23, 24, 25, 26)
28	240 111-01				1			1st gear wheel secondary shaft (Z=33) 01-
29	360 010-01				1			Needle bearing 20x24x10 89-
30	240 065-01				1			5th gear wheel secondary shaft (Z=22) 94-
31	240 113-01				1			3rd gear wheel secondary shaft (Z=26) 01-
32	240 114-01				1			4th gear wheel secondary shaft (Z=25) 01-
33	240 086-01				1			6th gear wheel secondary shaft (Z=21) 94-
34	240 062-01				1			2nd gear wheel secondary shaft (Z=30) 01-
35	240 042-01				1			Secondary shaft 01-
36	210 167-01				1			Plug 12x7 01-
37	340 022-01				1			O-ring 22.1x1.6 94-
38	240 036-01				1			Spacer 4-speed gearbox 94- (Instead of 5th gear wheel)
39	240 037-01				1			Spacer 4-speed gearbox 94- (Instead of 6th gear wheel)
40	370 002-01				1			Pin 5th & 6th gear position

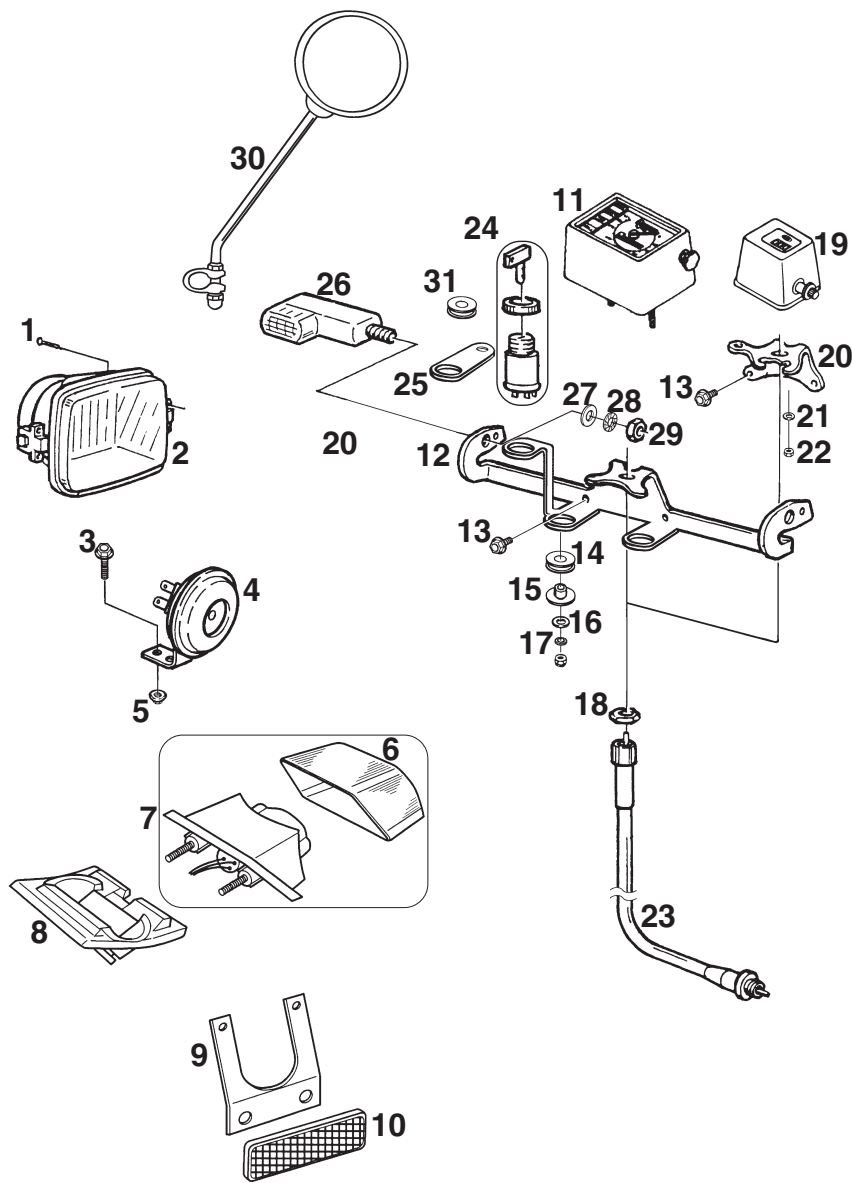


Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	305 516-22	3	3	3	3	3	3	Screw MC6S 5x16
2	230 133-01	1	1	1	1	1	1	Cover clutch cylinder 00-
3	170 074-01	1	1	1	1	1	1	Air nipple 00-
4	230 129-01	1	1	1	1	1	1	Return spring 00-
5	340 029-01	1	1	1	1	1	1	O-ring piston 00-
6	230 134-01	1	1	1	1	1	1	Clutch piston 00-
7	340 053-01	1	1	1	1	1	1	O-ring cover 00-
8	306 625-22	6	6	6	6	6	6	Screw M6S 6x25
9	230 074-01	6	6	6	6	6	6	Clutchspring retainer 89-
10	230 118-01	6	6	6	6	6	6	Clutch spring 400/501 00-
10	230 007-01	6	6	6	6	6	6	Clutch spring 470/550/650 00-
11	230 011-01	1	1	1	1	1	1	Pressure plate clutch hub 89-
12	360 025-01	1	1	1	1	1	1	Rollerbearing
13	230 117-01	1	1	1	1	1	1	Pressure sleeve disengaging pushrod 97-
14	230 094-01	8	8	8	8	8	8	Mating plate, steel 89-
15	230 067-02	1	1	1	1	1	1	Disengaging pushrod 00-
16	230 073-01	7	7	7	7	7	7	Friction plate 89-
17	330 025-01	1	1	1	1	1	1	Circlip SGA 25 89-
18	230 006-01	1	1	1	1	1	1	Clutchhub inner 89-
19	230 040-01	1	1	1	1	1	1	Inner washer clutch hub 35x25x1 89-
20	230 002-01	1	1	1	1	1	1	Clutch hub outer -01
20	230 147-01	1	1	1	1	1	1	Clutch hub outer -02
21	230 004-01	1	1	1	1	1	1	Bushing clutch hub bronze -01
21	360 038-01	2	2	2	2	2	2	Bearing clutch hub -02
22	230 040-01	1	1	1	1	1	1	Outer washer clutch hub -01
22	230 148-01	1	1	1	1	1	1	Outer washer clutch hub -02

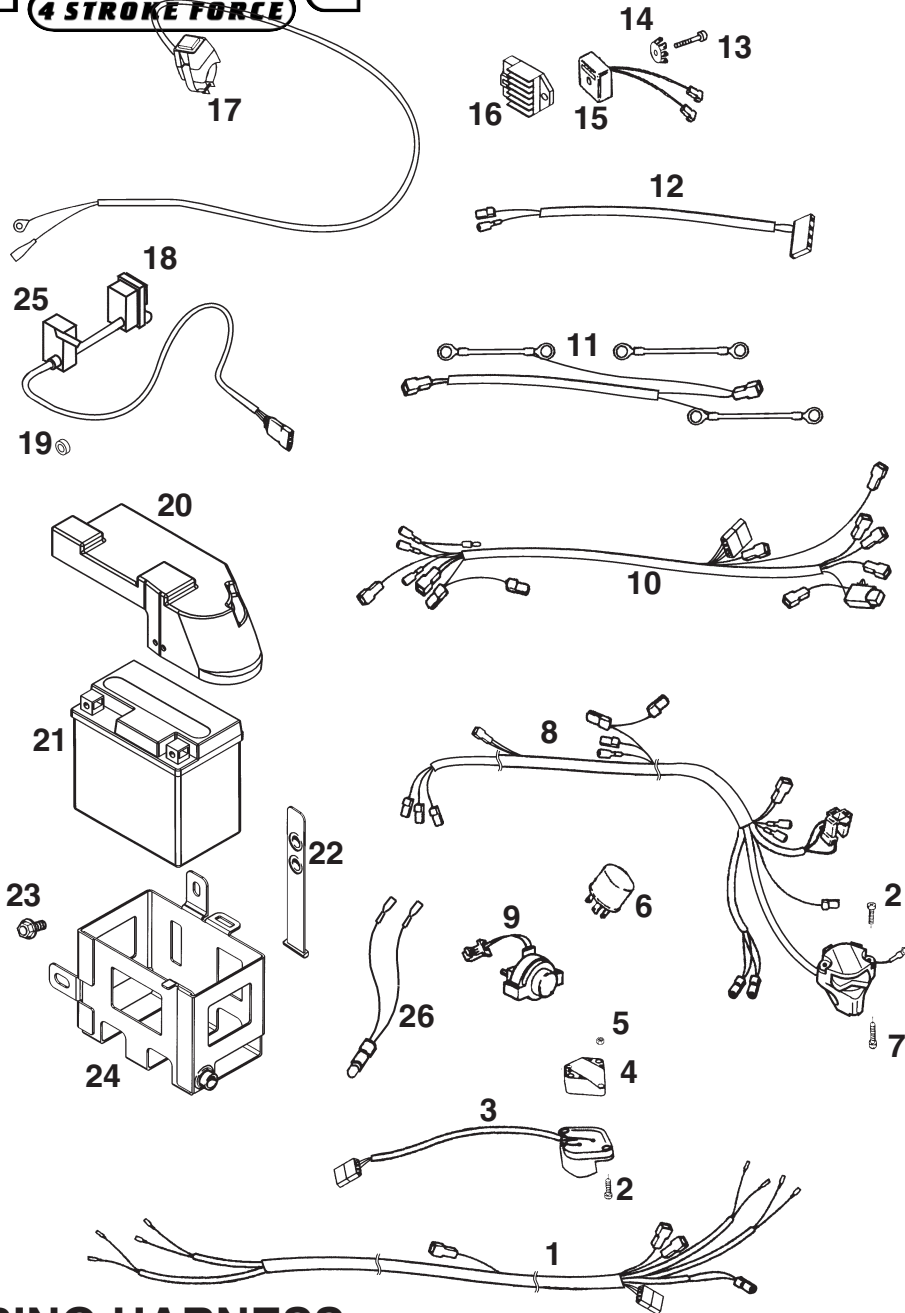


Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	250 272-01	1	1		1	1	1	Ignition complete -01 (flywheel, stator and cable rubber)
1	250 285-01	1	1		1	1	1	Ignition complete -02 (flywheel, stator and cable rubber)
1	250 272-02			1				Ignition complete -01 (flywheel, stator and cable rubber)
1	250 286-01			1				Ignition complete -02 (flywheel, stator and cable rubber)
2	250 199-01	1	1	1	1	1	1	Cable rubber 99-
3	305 530-22	3	3	3	3	3	3	Screw MC6S 5x30
4	250 203-01	1	1	1	1	1	1	Flywheel nut 99-
5	250 239-01	1	1	1	1	1	1	Sparkplug NGK DCPR8E 00-
6	250 237-01	1	1	1	1	1	1	Sparkplug cap 00-
7	305 525-22	2	2	2	2	2	2	Screw MC6S 5x25
8	250 251-01	1	1					Ignition coil 400e / 501e -01
8	250 295-01	1	1					Ignition coil 400e -02
8	250 293-01	1						Ignition coil 501e -02
8	250 269-01			1	1	1	1	Ignition coil 400c / 470 / 470e -01
8	250 288-01			1	1	1	1	Ignition coil 400c / 470 / 470e -02
8	250 253-01				1			Ignition coil 550 -01
8	250 289-01				1			Ignition coil 550 -02
8	250 254-01	1	1	1			1	Ignition coil 650 -01
8	250 290-01	1	1	1			1	Ignition coil 650 -02

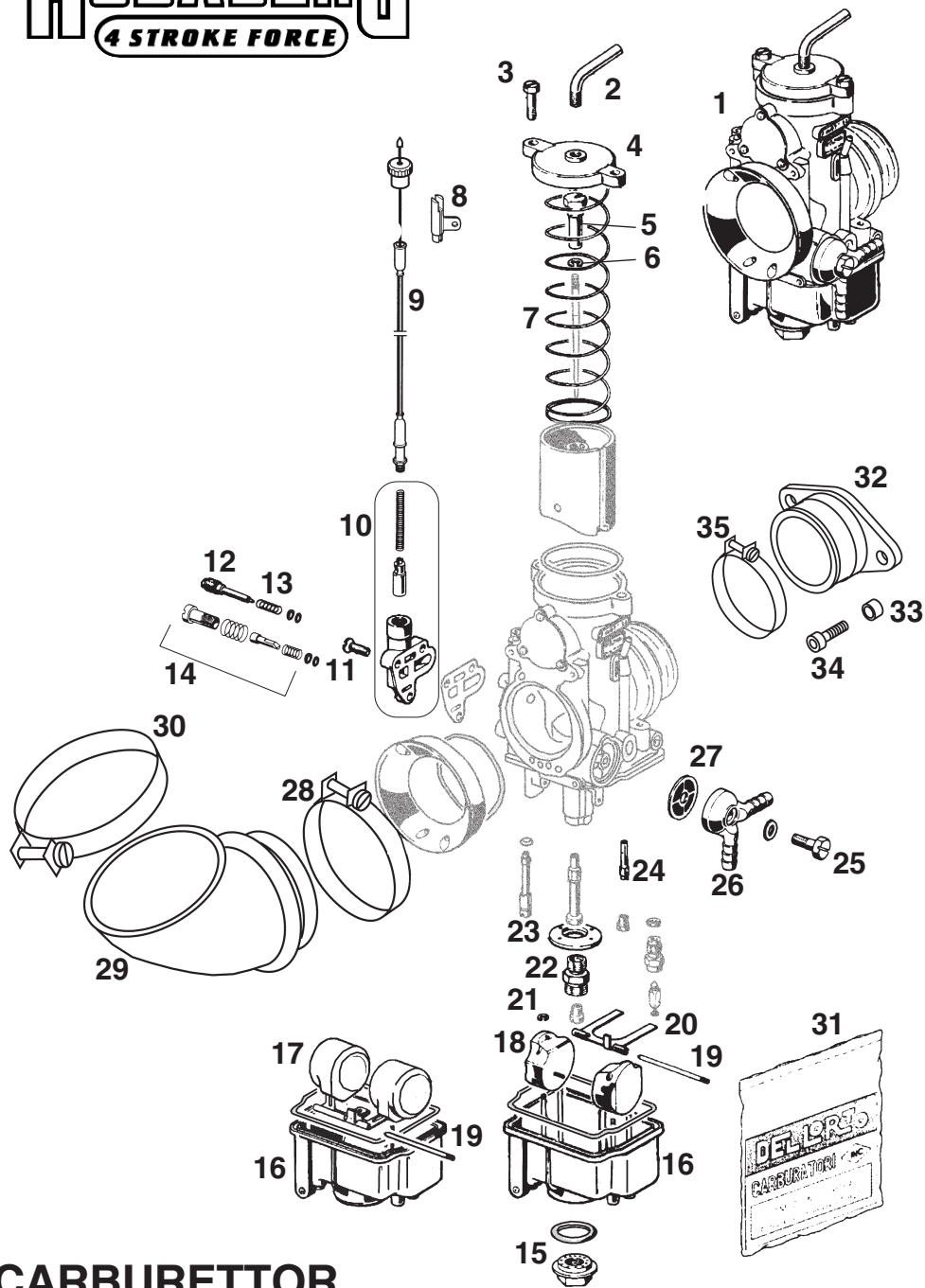




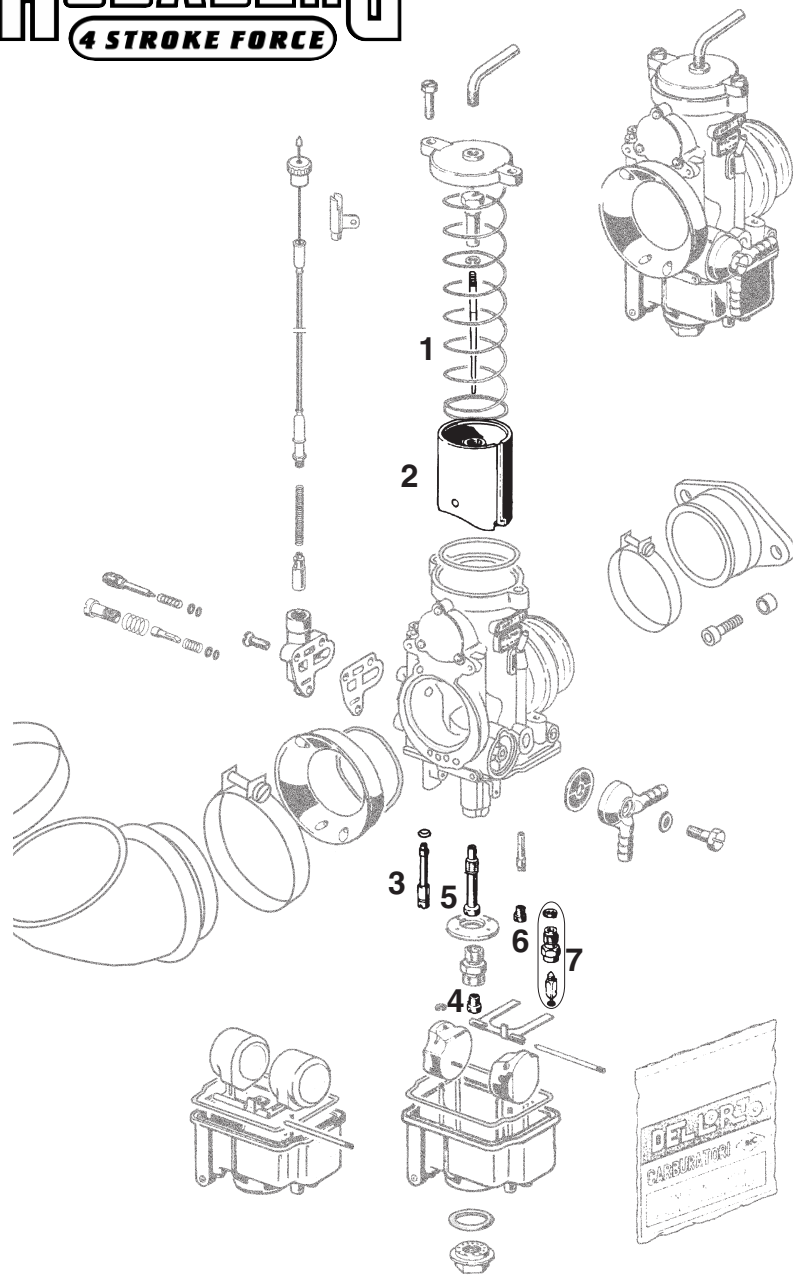
Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	306 616-22	2	2					Screw M6S 6x16
2	180 060-01	1	1					Headlight reflector 96- ECE-approved
2	180 061-01	1	1					Headlight reflector 96- Plastic lens
2	180 100-01	1	1					Headlight reflector 96- Left hand traffic
3	406 115-22	1	1					Screw (Collar) 6x15
4	180 104-01	1	1					Horn 98-
5	316 811-22	1	1					Lock nut M6
6	180 149-01	1	1					Lens tail light 00-
7	180 148-01	1	1					Tail light 00- (Incl. Pos. No. 6)
8	180 160-01	1	1					Rubber rear fender /rear light 00-
9	180 159-01	1	1					Bracket reflex 00-
10	180 155-01	1	1					Reflex 00-
11	180120-01	1	1					Speedometer 99-
12	180 133-01	1	1					Bracket speedometer 99-
13	406 110-22	2	2					Screw (Collar) 6x10
14	180 138-01	2	2					Rubber bushing 99-
15	180 137-01	2	2					Plastic spacer 99-
16	326 013-01	2	2					Washer 6,7x14x1,5
17	326 011-01	2	2					Washer 6,4x11x0,7
18	180 076-01	1	1					Attachment nut speedometer 89-
19	180 089-01	1	1					Odometer 97- (US-versions only)
20	180 077-01	1	1					Bracket odometer 89-
21	324 012-01	2	2					Washer 4,3x12x1
22	304 801-01	2	2					Lock nut M4
23	180 139-01	1	1					Speedometer wire 99-
23	180 091-01	1	1					Odometer wire 97-
24	180 169-01	1	1			1	1	Ignition lock 95-
25	180 188-01	1	1			1	1	Bracket ignition lock 00-
26	180 065-01	2	2					Turn signal R rear, L front 89-
26	180 065-02	2	2					Turn signal L rear, R front 89-
27	320 017-01	4	4					Washer 10,5x18x0,9
28	320 018-01	4	4					Washer 10,5x18x2
29	310 800-22	4	4					Nut M10
30	190 020-01	1/2	1/2					Rear view mirror 99-
31	320 022-01					1	1	Washer 10,5x22x2



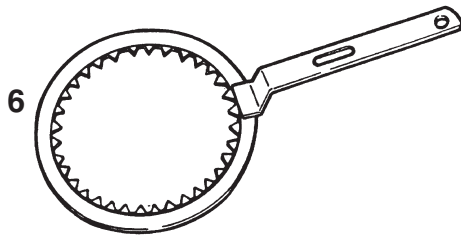
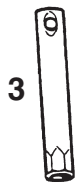
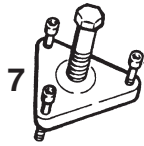
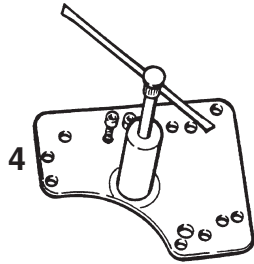
Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	180 177-01	1	1					Wiring harness turn signals 01-
2	304 414-62	4	4					Screw 4x14 MRX (No turn signals - 2 pcs)
3	180 175-01	1	1					Turn signal switch incl. wire 01-
4	180 176-01	1	1					Turn signal switch bracket 01-
5	314 002-22	2	2					Nut M4
6	180 026-01	1	1					Turn signal relay 89-
7	304 420-62	2	2					Screw 4x20 MRX
8	180 181-01	1	1					Wiring harness 01-
9	180 095-01	1	1			1	1	Starter relay 95-
10	180 180-01	1	1			1	1	Wiring harness electrical starter main part 01-
11	180 179-01	1	1			1	1	Wiring harness electrical starter battery part 01-
12	180 178-01			1	1			Wiring harness 01-
13	306 535-22	1	1			1	1	Screw MC6S 6x35
14	180 184-01	1	1			1	1	Ground contact star ring 01-
15	180 019-01	1	1			1	1	Voltage regulator 89-
16	180 172-01	1	1			1	1	Rectifier 01-
17	190 009-01			1	1	1	1	Engine short circuit button incl. wire 01-
18	170 094-01	1	1	1	1	1	1	High/Low ignition switch with cable 01-
19	140 051-01	1	1	1	1	1	1	Spacer High/Low switch 01-
20	180 173-01	1	1			1	1	Cover battery 01-
21	180 168-01	1	1			1	1	Battery 01-
22	180 174-01	1	1			1	1	Strap battery 01-
23	406 110-22	1	1			1	1	Screw (Collar) 6x10
24	180 167-01	1	1			1	1	Battery box 01-
25	170 093-01	1	1	1	1	1	1	Holder ignition switch 01-
26	180 107-01	1	1					Parking light lamp 01-



Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	250 151-01	1	1					Carburettor ø 38 mm (Only FE 400 e/FS 400 e)
1	250 152-01	1	1	1	1	1	1	Carburettor ø 40 mm
2	250 045-02	1	1	1	1	1	1	Tube bend
3	250 046-01	2	2	2	2	2	2	Screw throttle cover
4	250 169-01	1	1	1	1	1	1	Throttle cover
5	250 101-01	1	1	1	1	1	1	Needle holder
6	250 102-01	1	1	1	1	1	1	Clips needle
7	250 170-01	1	1	1	1	1	1	Spring throttle
8	250 228-01	1	1	1	1	1	1	Choke bracket 00-
9	250 227-01	1	1	1	1	1	1	Choke wire 00-
10	250 052-02	1	1	1	1	1	1	Choke complete 00-
11	250 053-01	3	3	3	3	3	3	Screw choke 00-
12	250 171-01	1	1	1	1	1	1	Mixture screw
13	250 063-01	1	1	1	1	1	1	Spring mixture screw
14	250 276-01	1	1	1	1	1	1	Idling screw complete
15	250 043-01	1	1	1	1	1	1	Drain plug
16	250 182-01	1	1	1	1	1	1	Float chamber
17	250 167-01	1	1	1	1	1	1	Float (double type)
18	250 168-01	2	2	2	2	2	2	Float (single type)
19	250 179-01	1	1	1	1	1	1	Cotter float
20	250 181-01	1	1	1	1	1	1	Fork float
21	250 180-01	1	1	1	1	1	1	Clips float
22	250 176-01	1	1	1	1	1	1	Main jet support
23	250 175-01	1	1	1	1	1	1	Stabilizer washer
24	250 194-01	1	1	1	1	1	1	Mixture jet tube
25	250 178-01	1	1	1	1	1	1	Screw fuel line inlet
26	250 177-02	1	1	1	1	1	1	Fuel line inlet
27	250 070-01	1	1	1	1	1	1	Fuel filter
28	150 003-01	1	1	1	1	1	1	Clamp airfilter tube/carburettor
29	150 064-01	1	1	1	1	1	1	Airfilter tube
30	150 077-01	1	1	1	1	1	1	Clamp airfilter tube/frame
31	250 076-01	1	1	1	1	1	1	Gasket kit
32	250 244-01	1	1	1	1	1	1	Intake manifold 01- (Incl. Pos. No. 33)
33	250 230-01	2	2	2	2	2	2	Spacer inlet rubber 00-
34	306 520-22	2	2	2	2	2	2	Screw MC6S 6x20
35	150 246-01	1	1	1	1	1	1	Clamp 40-60



Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	250 024-01							Needle K 32
1	250 144-01							Needle K 35
1	250 163-01							Needle K 51
2	250 160-01							Throttle 40
2	250 161-01							Throttle 45
2	250 162-01							Throttle 50
3	250 095-01							Start jet 40
3	250 096-01							Start jet 45
3	250 097-01							Start jet 50
4	250 267-01							Main jet 100
4	250 242-01							Main jet 110
4	250 183-01							Main jet 172
4	250 015-01							Main jet 175
4	250 016-01							Main jet 180
4	250 017-01							Main jet 185
4	250 018-01							Main jet 190
4	250 019-01							Main jet 195
4	250 020-01							Main jet 200
4	250 221-01							Main jet 210
5	250 241-01							Needle jet DR 264
5	250 196-01							Needle jet DR 266
5	250 219-01							Needle jet DR 268
5	250 165-01							Needle jet DR 270
5	250 164-01							Needle jet DR 272
5	250 166-01							Needle jet DR 274
6	250 089-01							Pilot jet 33
6	250 092-01							Pilot jet 35
6	250 093-01							Pilot jet 40
6	250 029-01							Pilot jet 45
6	250 030-01							Pilot jet 48
6	250 031-01							Pilot jet 50
6	250 032-01							Pilot jet 52
6	250 033-01							Pilot jet 55
7	250 034-01							Float needlejet 300
7	250 098-01							Float needlejet 350



Pos.	Part No	Qty/Model						Description
		FEe	FSe	FSc	FC	FCe	FXe	
1	270 030-01							Holding tool flywheel 99-
2	270 012-01							Drift removing valve guide
3	270 001-01							Sparkplug wrench
4	270 011-01							Puller crankcase
5	270 028-01							Puller flywheel 99-
6	270 007-01							Holding tool
7	270 005-01							Puller clutch
8	270 032-01							Air bleed syringe clutch

# MAINTENANCE SCHEDULE

**Please observe:**  
**Riding under hard conditions demands more frequent maintenance**

## FSc/FC/FCe/FXe

SUBJECT / HOURS	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
<b>CHASSIS</b>																					
Front fork oil *		R		R		R		R		R		R		R		R		R		R	
Brake fluid *		R		R		R		R		R		R		R		R		R		R	
Swingarm bearings/bushings					I					I				I				I			
Shockabsorber bushings		I		I		I		I		I		I		I		I		I		I	
Steering head bearings					I					I				I				I			
Wheel bearings		I		I		I		I		I		I		I		I		I		I	

## FEE/FSe

SUBJECT / HOURS	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
<b>CHASSIS</b>																					
Front fork oil *		R		R		R		R		R		R		R		R		R		R	
Brake fluid *		R		R		R		R		R		R		R		R		R		R	
Swingarm bearings/bushings					I					I				I				I			
Shockabsorber bushings		I		I		I		I		I		I		I		I		I		I	
Steering head bearings					I					I				I				I			
Wheel bearings		I		I		I		I		I		I		I		I		I		I	

C: Clean - I: Inspect - R: Replace - \*Maximum 12 months interval

## Please read and observe the following:

### Warning

If the engine has to be running during any maintenance, make sure that the area is properly ventilated. Never run the engine in a closed area though the exhaust fumes are poisonous and thus hazardous to your health and life.

Although the battery is of a sealed construction, please take care. The electrolyte contains sulfuric acid and you must protect your eyes, skin and clothing if such fluid is assumed to be leaking or likewise exposed. In case of contact, wash and flush thoroughly with water and contact medical help if needed, especially if your eyes have been exposed to the fluid.

Fuel is extremely flammable and explosive under certain conditions. Do not smoke or expose the fuel to open fire or sparks.



## MAINTENANCE SCHEDULE

Please observe:

Riding under hard conditions demands more frequent maintenance

FSc/FC/FCe/FXe

SUBJECT / HOURS	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
<b>REGULAR</b>																					
Engine oil	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Oil screen	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Oil microfilter		R		R		R		R		R		R		R		R		R		R	
Oil pump incl. reed valve										I/C											I/C
Coolant liquid *																					
Spark plug (incl. cap)					I					R					I						R
Alternator/Ignition **										I											I
Valve clearance		I		I		I		I		I		I		I		I		I		I	I
Valves incl. guides & sealings																					I
Timing chain										R											R
Piston incl. rings & pin															R						
Cylinder lining										I											I
Connecting rod & crankshaft pin															R						
Clutch mechanism incl. discs					I					I					I						I
Clutch center					I					R					I						R
Carburettor ** / ***					I/C					I/C					I/C						I/C
Kickstart mechanism										I											I
Gearshift mechanism										I											I
EL: Freewheel mechanism										I											I
<b>BEARINGS</b>																					
Connecting rod															R						
Crankshaft										R											R
Gearbox main shaft										I											R
Gearbox secondary shaft										I											R
Shift drum										I											R
Camshaft										I											R
Clutch pressure plate										I											R
Kickstart gear wheel										I											R
Intermediate gear wheel										I											R
Rockerarms					R					R					R						R
Intermediate shaft counter bal.					R					R					R						R
Counter balancer					R					R					R						R
<b>BUSHINGS</b>																					
Connecting rod															R						
Rockerarms										I											I
Kickstart shaft										I											I
Clutch shaft										R					I						R

C: Clean - I: Inspect - R: Replace

\* Maximum 12 months interval - \*\* Clean whenever the engine has been washed - \*\*\* I(R): Especially needle and needle jet

## MAINTENANCE SCHEDULE

Please observe:

Riding under hard conditions demands more frequent maintenance

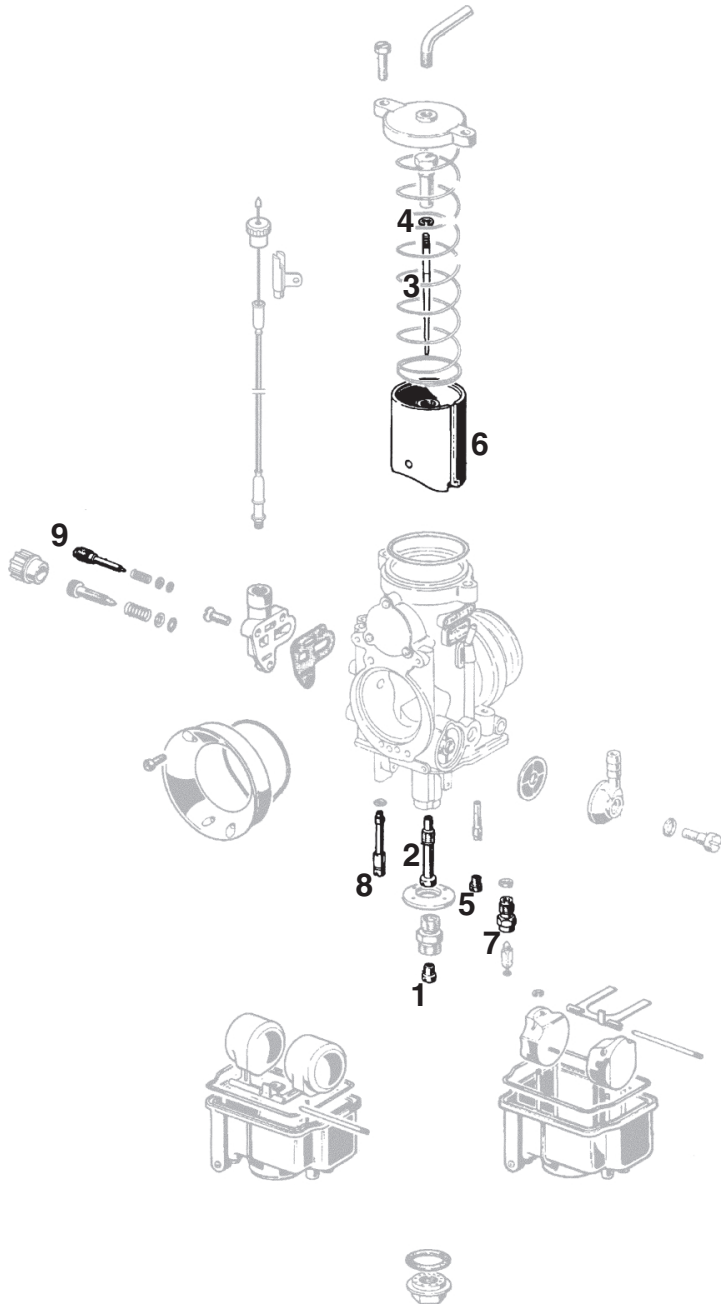
FEE/FSe

SUBJECT / HOURS	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
<b>REGULAR</b>																					
Engine oil	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Oil screen	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Oil microfilter	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Oil pump incl. reed valve										I/C											I/C
Coolant liquid *																					
Spark plug (incl. cap)					I					R					I						R
Alternator/Ignition **										I											I
Valve clearance		I		I		I		I		I		I		I		I		I		I	I
Valves incl. guides & sealings																					I
Timing chain										R											R
Piston incl. rings & pin										I											R
Cylinder lining										I											R
Connecting rod & crankshaft pin										R											R
Clutch mechanism incl. discs					I					I											R
Clutch center					I					R						I					R
Carburettor ** / ***					I/C					I/C						I/C					I/C
Kickstart mechanism										I											I
Gearshift mechanism										I											I
EL: Freewheel mechanism										I											I
<b>BEARINGS</b>																					
Connecting rod										R											R
Crankshaft										R											R
Gearbox main shaft										I											R
Gearbox secondary shaft										I											R
Shift drum										I											R
Camshaft										I											R
Clutch pressure plate										I											R
Kickstart gear wheel										I											R
Intermediate gear wheel										I											R
Rockerarms					R					R						R					R
Intermediate shaft counter bal.					R					R						R					R
Counter balancer					R					R						R					R
<b>BUSHINGS</b>																					
Connecting rod										R											R
Rockerarms										I											I
Kickstart shaft										I											I
Clutch shaft					R					R						R					R

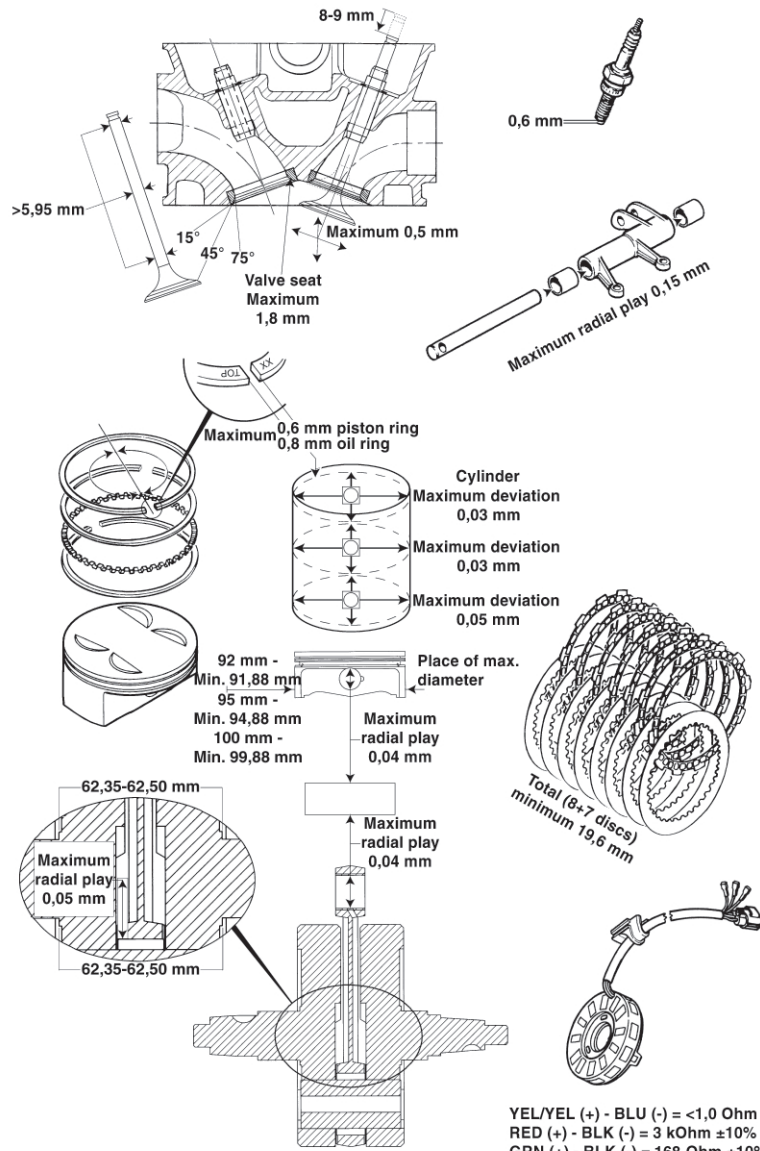
C: Clean - I: Inspect - R: Replace

\* Maximum 12 months interval - \*\* Clean whenever the engine has been washed - \*\*\* I(R): Especially needle and needle jet

## CARBURETTOR STD. JETTING



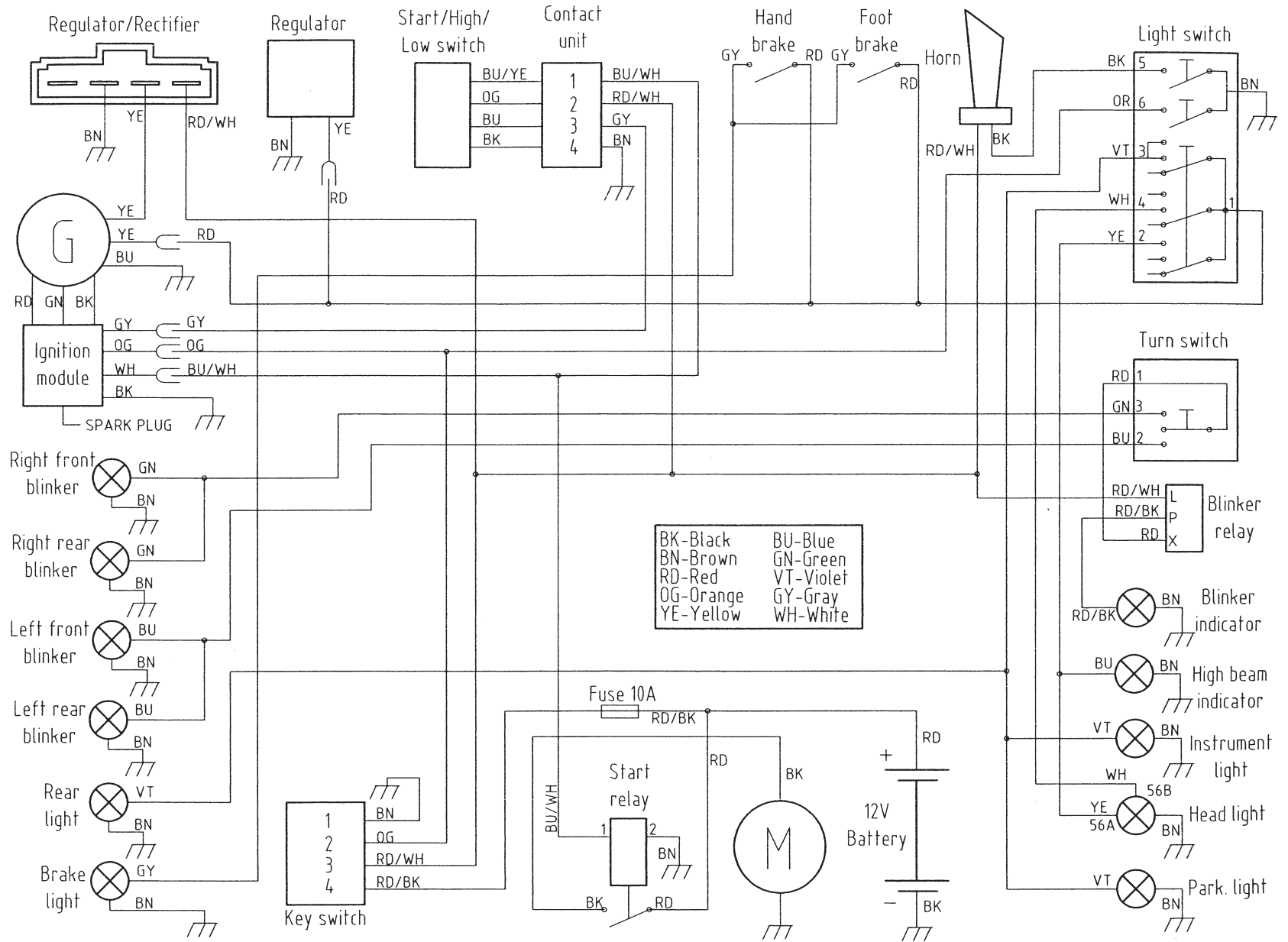
MODEL/SUBJECT		Main jet	Needle jet	Needle	Needle clippos.	Pilot jet	Throttle	Float valve	Start jet	Mixture screw
Exploded view number		# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9
Enduro	FE 400 e	185	DR 270	K 51	#3	33	40	300	45	2 turns
	FE 501 e	185	DR 272	K 51	#3	35	40	300	45	1½ turns
	FE 650 e	190	DR 272	K 51	#3	40	40	300	45	1½ turns
Enduro ECE	FE 400 e	110	DR 266	K 51	#2	48	40	300	45	½ turn
	FE 501 e	110	DR 264	K 35	#4	33	40	300	45	½ turn
	FE 650 e	100	DR 266	K 51	#3	33	40	300	45	½ turn
Enduro USA	FE 400 e	190	DR 270	K 51	#3	38	40	300	45	2 turns
	FE 501 e	195	DR 268	K 35	#3	33	40	300	45	1½ turns
	FE 650 e	195	DR 270	K 35	#3	33	40	300	45	1½ turns
Super Motard Street	FS 400 e	185	DR 270	K 51	#3	33	40	300	45	2 turns
	FS 650 e	190	DR 272	K 51	#3	40	40	300	45	1½ turns
Super Motard Street ECE	FS 400 e	110	DR 266	K 51	#2	48	40	300	45	½ turn
	FS 650 e	100	DR 266	K 51	#3	33	40	300	45	½ turn
Super Motard Street USA	FS 400 e	190	DR 270	K 51	#3	38	40	300	45	2 turns
	FS 650 e	195	DR 270	K 35	#3	33	40	300	45	1½ turns
Super Motard Competition	FS 400 c	180	DR 272	K 35	#3	33	40	300	45	1½ turns
	FS 650 c	190	DR 272	K 51	#3	40	40		45	1½ turns
Cross Country	FX 470 e	185	DR 266	K 35	#3	33	30	300	45	1½ turns
	FX 650 e	190	DR 270	K 51	#3	33	40	300	45	1½ turns
Motocross	FC 470	185	DR 266	K 35	#3	33	30	300	45	1½ turns
	FC 550	190	DR 272	K 51	#3	33	40	300	45	1½ turns
	FC 470 e	185	DR 266	K 35	#3	33	30	300	45	1½ turns



SUBJECT	TORQUE		NOTE				
Intake manifold screws	5 Nm						
Oil filter cover screws	5 Nm						
Reed valve screws	5 Nm		Apply a threadlock liquid				
Valve inspection cover screws	5 Nm						
Waterpump cover screws	5 Nm						
Stator screws	8 Nm						
Crankcase screws	10 Nm						
Exhaust pipe screws	10 Nm						
Gearshift lever screw	10 Nm						
Kick start lever screw	10 Nm		Apply a threadlock liquid				
Valve cover screws	10 Nm						
Oil drain plug	12 Nm						
Spark plug	12 Nm						
Valve adjustment lock nuts	12 Nm						
Front fork triple clamp screws lower (M8)	15 Nm						
Front fork triple clamp screws upper (M8)	20 Nm						
Upper timing sprocket screws	25 Nm		Apply a threadlock liquid				
Cylinderstud nuts	44 Nm						
Flywheel nut	50 Nm		Left-hand thread				
Intermediate gear wheel nut	80 Nm		Apply a threadlock liquid				
Primary gear wheel nut	110 Nm		Apply a threadlock liquid				
Swingarm shaft nuts	125 Nm						
Standard torque values	M4	M5	M6	M8	M10	M12	M16
	6 Nm	8 Nm	10 Nm	25 Nm	40 Nm	40 Nm	125 Nm

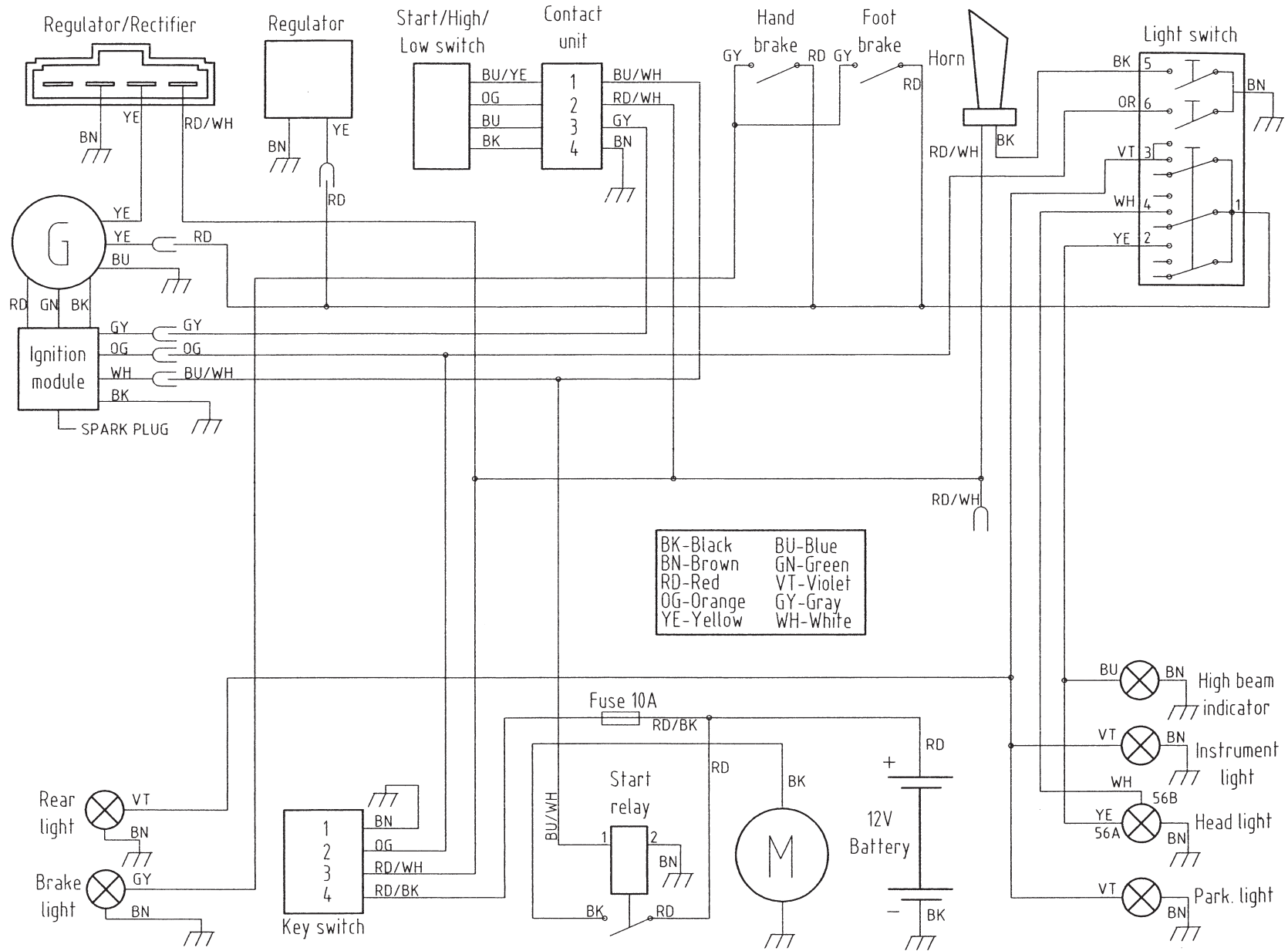
## WIRING HARNESS

### FEE/FSe - with turn signals

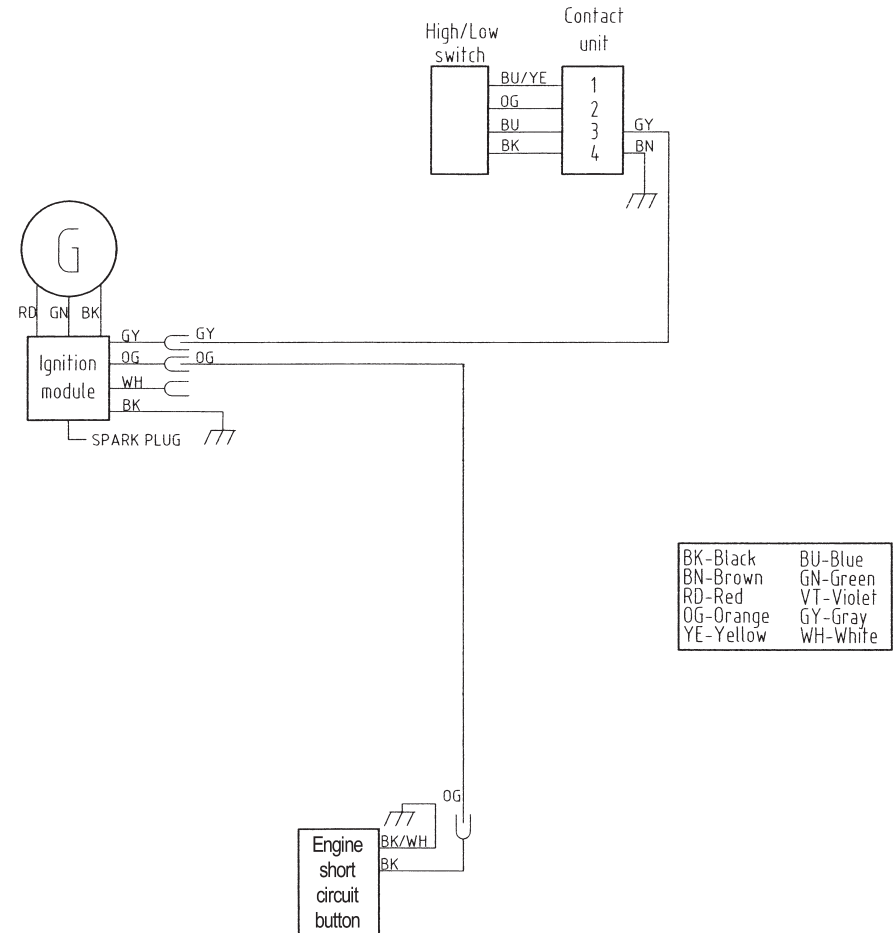
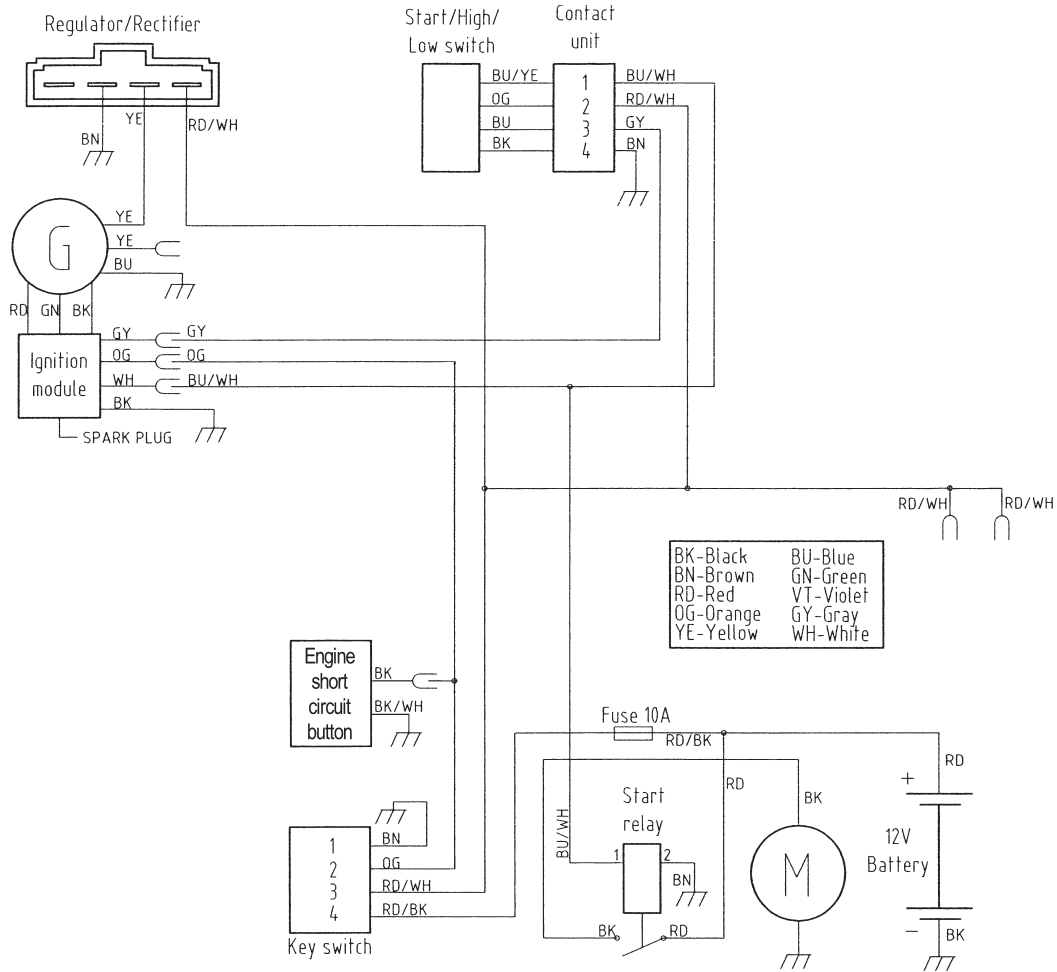


## WIRING HARNESS

### FEE/FSe - without turn signals









# SPECIFICATIONS

SUBJECT/MODEL	FE 400 e	FE 501 e	FE 650 e	FS 400 e	FS 650 e	FS 400 c	FS 650 c	FC 470/6	FC 550/4	FC 550/6	FC 470 e	FX 470 e	FX 650 e	
Displacement	399cc	501cc	644cc	399cc	644cc	399cc	644cc	472cc	550cc	550cc	472cc	472cc	644cc	
Bore x Stroke (mm)	92 x 60,1	95 x 70,7	100 x 82,0	92 x 60,1	100 x 82,0	92 x 60,1	100 x 82,0	100 x 60,1	100 x 70,0	100 x 70,7	100 x 60,1	100 x 60,1	100 x 82,0	
Compression ratio	12,5:1	11,8:1	11,0:1	12,5:1	11,0:1	12,5:1	11,0:1	12,4:1	12,7:1	12,7:1	12,4:1	12,4:1	11,0:1	
Start system	Electrical and kick-starter						Kick-starter				Electrical and kick-starter			
Decompression system	Three separate ones; one activated by the kickstart lever, one activated by the camshaft and one activated by a lever on the handlebar													
Decomp. cable clearance	2mm ± 1mm / 0,08 in ± 0,04 in.													
Engine	Liquid cooled single cylinder 4-stroke, SOHC-4 valves, counter balancer													
Valve clearance	Intake and Exhaust: 0,10mm / 0,004 in.													
Lubrication system	Orbit oil pump and reed valve controlled. High pressure jet spray of piston and connecting rod, pressure lubrication of connecting rod bearing and rocker arms. Oil screen and micro filter													
Engine oil	1,0 Litre Synthetic SAE 5W-50 API SG/CF (minimum SAE 10W-50)													
Ignition system	SEM Dynamic Force Control, DFC™, Dual Ignition Curves; High & Low. A load sensitive digital system with six sensors													
Spark plug - Spark plug gap	NGK DCPR8E - 0,6 mm / 0,025 in.													
Alternator	12 V 70 + 70 W						Not available				12 V 70 + 70 W			
Air intake system	Single foam filter													
Carburettor (DELLORTO)	PHM 38	PHM 40	PHM 40	PHM 38	PHM 40	PHM 40	PHM 40	PHM 40	PHM 40	PHM 40	PHM 40	PHM 40	PHM 40	
Fuel	RON 98 (octane), unleaded													
Exhaust system	Inox steel pipes, 2 into 1 collector, Aluminium/Inox steel silencer. USA versions, except FC and FSc models, equipped with spark arresters													
Coolant	1,3 Litre of 50% Anti-freeze, with corrosion inhibitor, and 50% water													
Clutch	Hydraulic, 7 friction- and 8 mating plates in oil bath													
Clutch hydraulic oil	Mineral oil SAE 2-7W													
Wear limit clutch discs	19,6 mm / 0,772 in.													
Primary transmission	Spur gears, ratio 29/78 - 2,690													
Gearbox	6-speed	6-speed	6-speed	6-speed	6-speed	6-speed	6-speed	6-speed CR	4-speed	6-speed CR	6-speed CR	6-speed	6-speed	
Ratios	1st: 14/33 - 2,357 2nd: 17/30 - 1,765 3rd: 19/26 - 1,368 4th: 23/25 - 1,087 5th: 24/22 - 0,917 6th: 27/20 - 0,741 (6th CR: 25/21-0,840)													
Secondary transmission	D.I.D. 520 O-ring chain													
Sprockets front/rear	13/48	15/48	15/42	15/42	15/42	15/42	15/42	13/48	15/42	15/48	13/48	13/48	15/42	
Wear limit drive chain	272 mm - 18 chain reels (tensioned, center distance between reels)													
Frame	Heat treated BTR / 25CrMo4 steel													
Caster	28,5°													
Weight (dry)	109,8 kg	110,1 kg	110,9 kg	111,9 kg	113,1 kg	105,7 kg	106,8 kg	103,5 kg	103,5 kg	103,9 kg	109,6 kg	109,6 kg	110,4 kg	
	242 lb.	243 lb.	244 lb.	247 lb.	249 lb.	233 lb.	235 lb.	228 lb.	228 lb.	229 lb.	242 lb.	242 lb.	243 lb.	

# SPECIFICATIONS

SUBJECT/MODEL	FE 400 e	FE 501 e	FE 650 e	FS 400 e	FS 650 e	FS 400 c	FS 650 c	FC 470/6	FC 550/4	FC 550/6	FC 470 e	FX 470 e	FX 650 e	
Rims	Front	EXCEL 1.60 x 21"			BEHR 3.50 x 17"			EXCEL 1.60 x 21"			EXCEL 1.60 x 21"			
	Rear	EXCEL 2.15 x 18"			BEHR 4.25 x 17"			EXCEL 2.15 x 19"			EXCEL 2.15 x 18"			
Tyres (MICHELIN)	Front	90/90-21"			120/60-17"			80/100-21"			90/90-21"			
	Rear	140/80-18"			150/60-17"			110/100-19"			130/80-18"			
Tyre pressure (cold)														
Offroad	Front	0,8 bar / 12,0 psi									0,8 bar / 12,0 psi			
	Rear	0,8 bar / 12,0 psi									0,8 bar / 12,0 psi			
Tarmac	Front	1,0 bar / 14,5 psi			2,2 bar / 31,9 psi									
	Rear	1,0 bar / 14,5 psi			2,0 bar / 29,0 psi									
Suspension (WP)	Front	MXMA 4860-HBG E ø 48 mm			MXMA 4860-HBG S ø 48 mm						MXMA 4860-HBG MX ø 48 mm			
	Rear	PDS 5018-HBG E			PDS 5018-HBG S						PDS 5018-HBG MX			
Wheel travel	Front	295 mm / 11,6 in.			260 mm / 10,2 in.						295 mm / 11,6 in.			
	Rear	320 mm / 12,6 in.			287 mm / 11,3 in.						320 mm / 12,6 in.			
Front fork oil	WP SAE 5													
Brakes	Front	BREMBO			BERINGER						BREMBO			
		Hydraulic twin piston floating caliper			Hydraulic four piston floating caliper						Hydraulic twin piston floating caliper			
	ø 260 mm Inox steel disc			ø 320 mm Inox steel disc						ø 260 mm Inox steel disc				
Rear	BREMBO hydraulic single piston floating caliper, ø 220 mm Inox steel disc													
Brake fluid	DOT 4													
Wear limit brake pads	1,5 mm / 0,06 in.													
Head light	Alt. A	12 V 65/50 W - P43t										Not applicable		
	Alt. B	12 V 45/40 W - BA20d										Not applicable		
Tail / Stop light	12 V 21/5 W - BAY 15d										Not applicable			
Parking light	12 V 4 W - BA9s										Not applicable			
Turn signal lights	12 V 10 W - BA15s										Not applicable			
Speedometer light	12 V 2 W - BA7s										Not applicable			
Battery / Main fuse	12 V 8 Ah / 15 A										Not applicable			
Wheel base - Width	1490 mm / 58,66 in. - 810 mm / 31,89 in.													
Seat height	930 mm / 36,61 in.			870 mm / 34,25 in.						930 mm / 36,61 in.				
Ground clearance	380 mm / 14,96 in.			320 mm / 12,60 in.						380 mm / 14,96 in.				
Overall length	2200 mm / 86,61 in.			2150 mm / 84,65 in.						2200 mm / 86,61 in.				