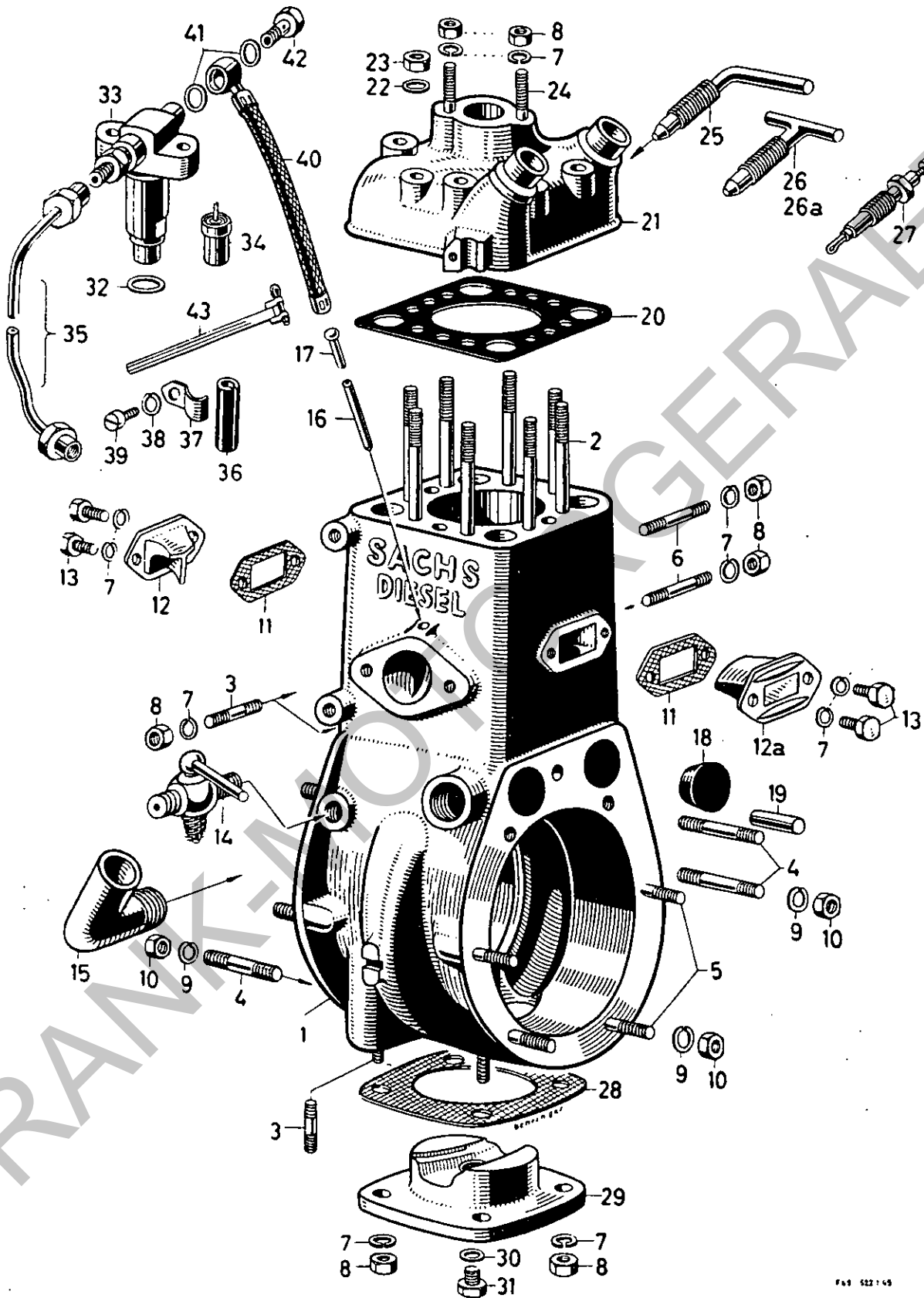
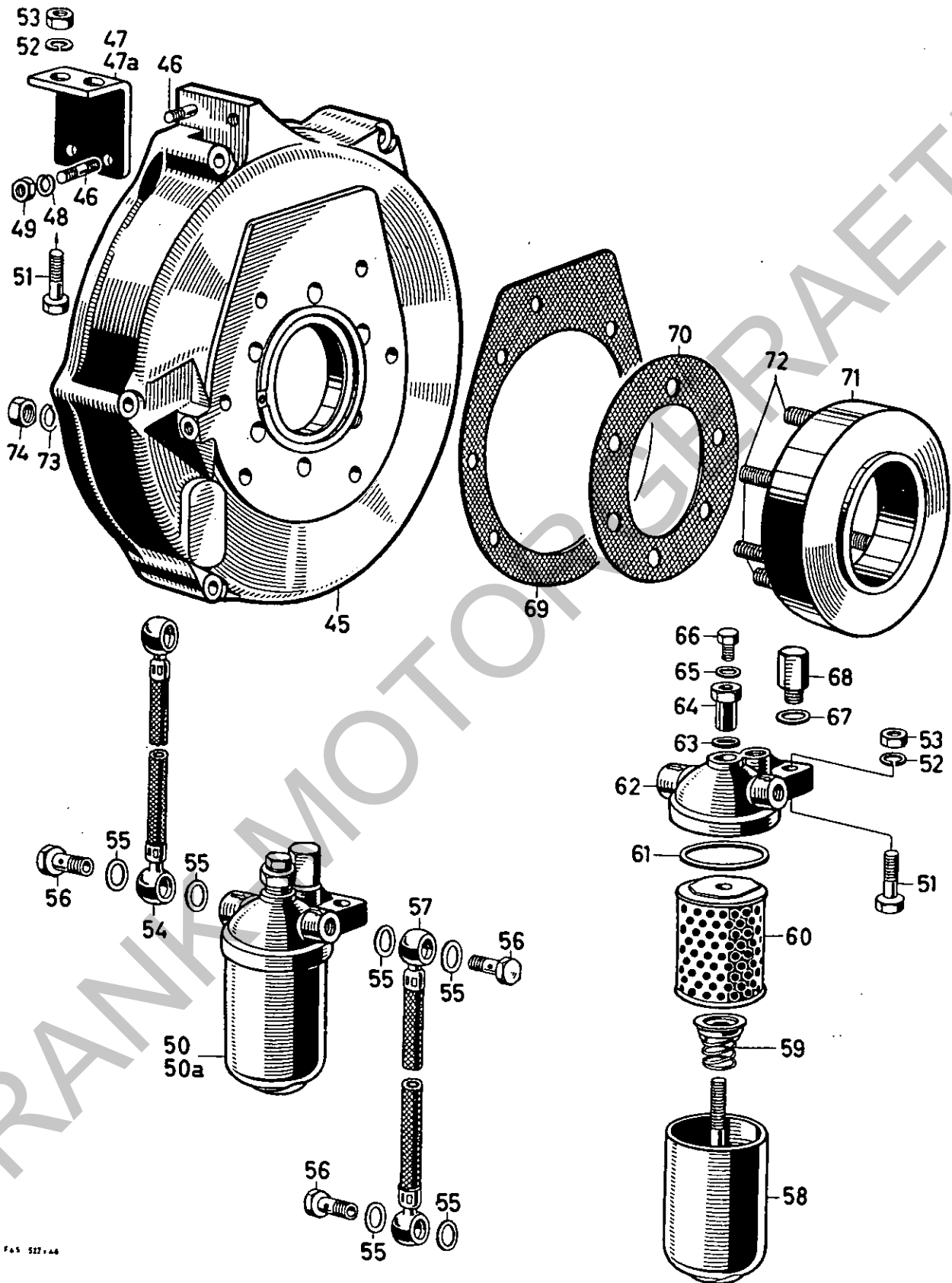


Cylinder and Crankcase, Injection Nozzle



End Shield, Bearing Flange, Fuel Filter



F&S 527-44

PLATE 2

Crankshaft, Piston, Flywheel

FAS 512:47/2

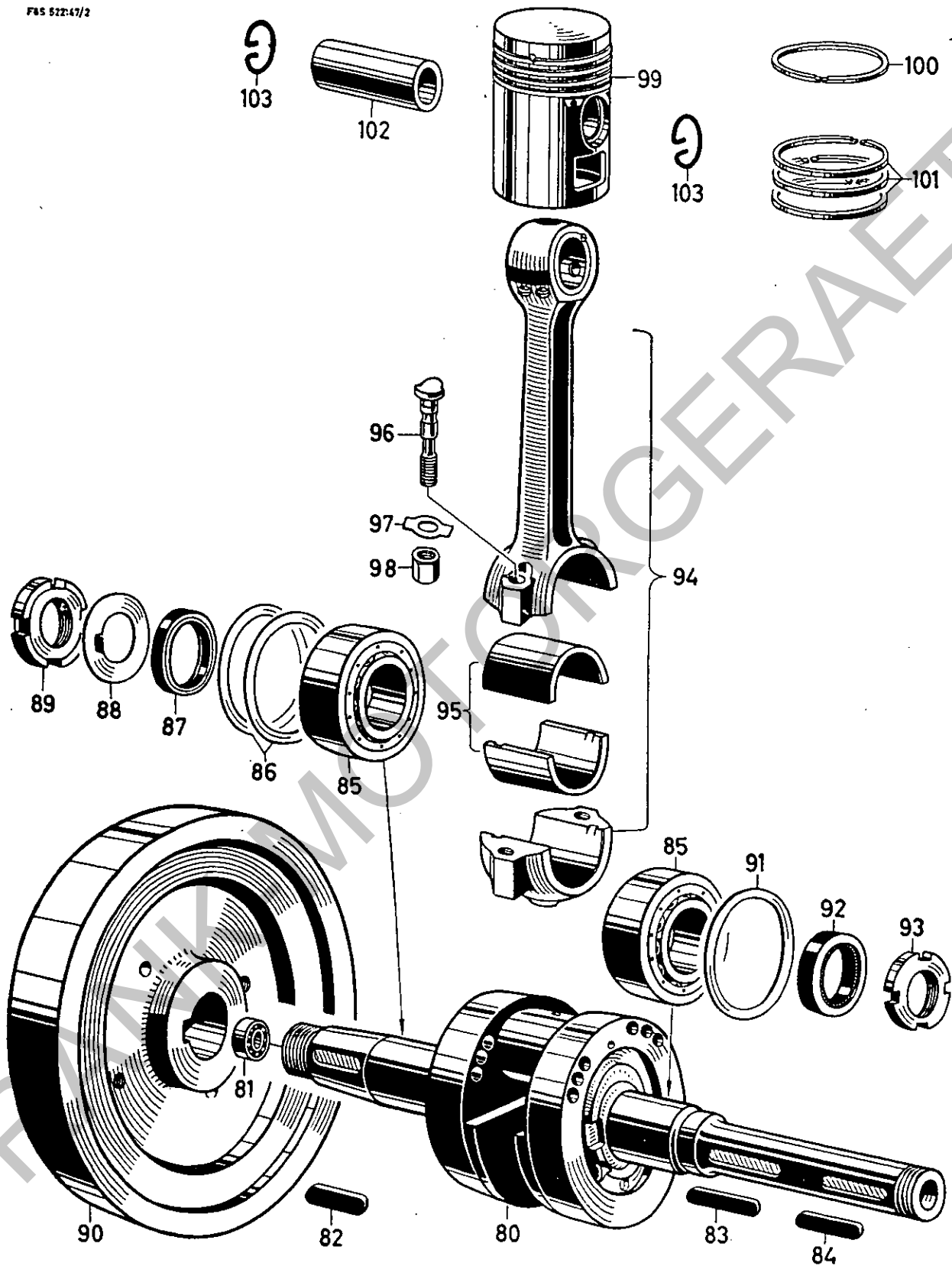
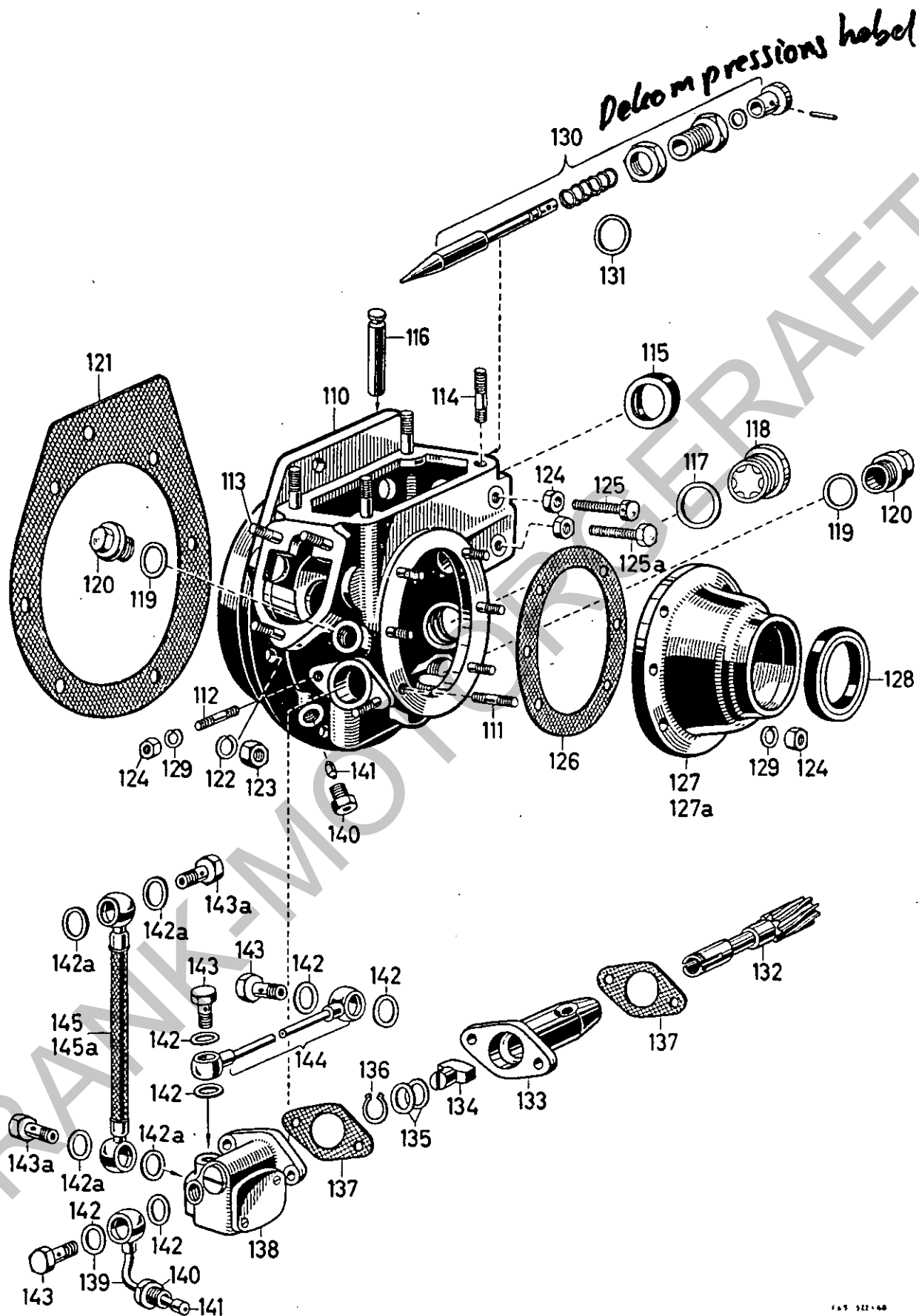
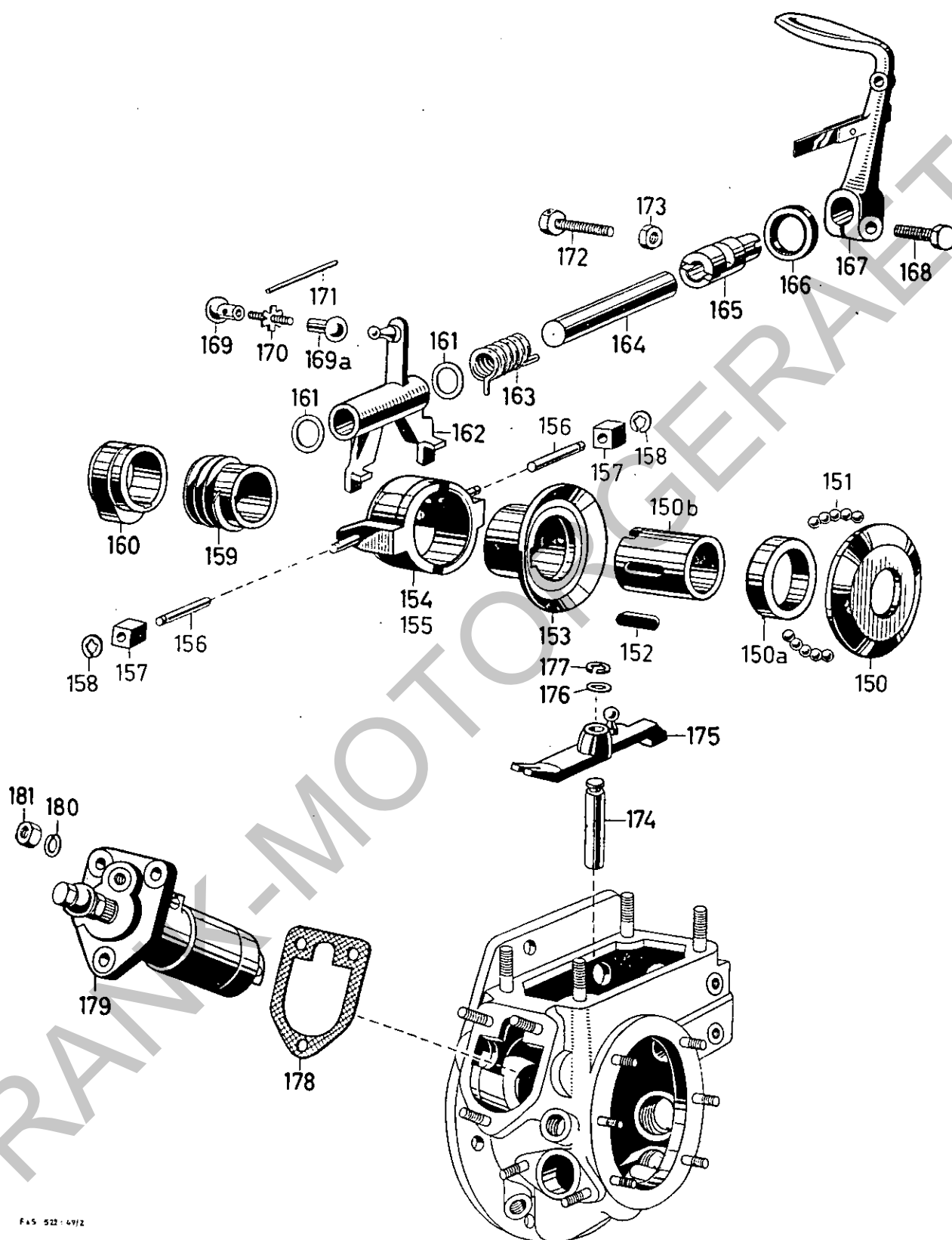


PLATE 3

Unit Head, Oil Pump



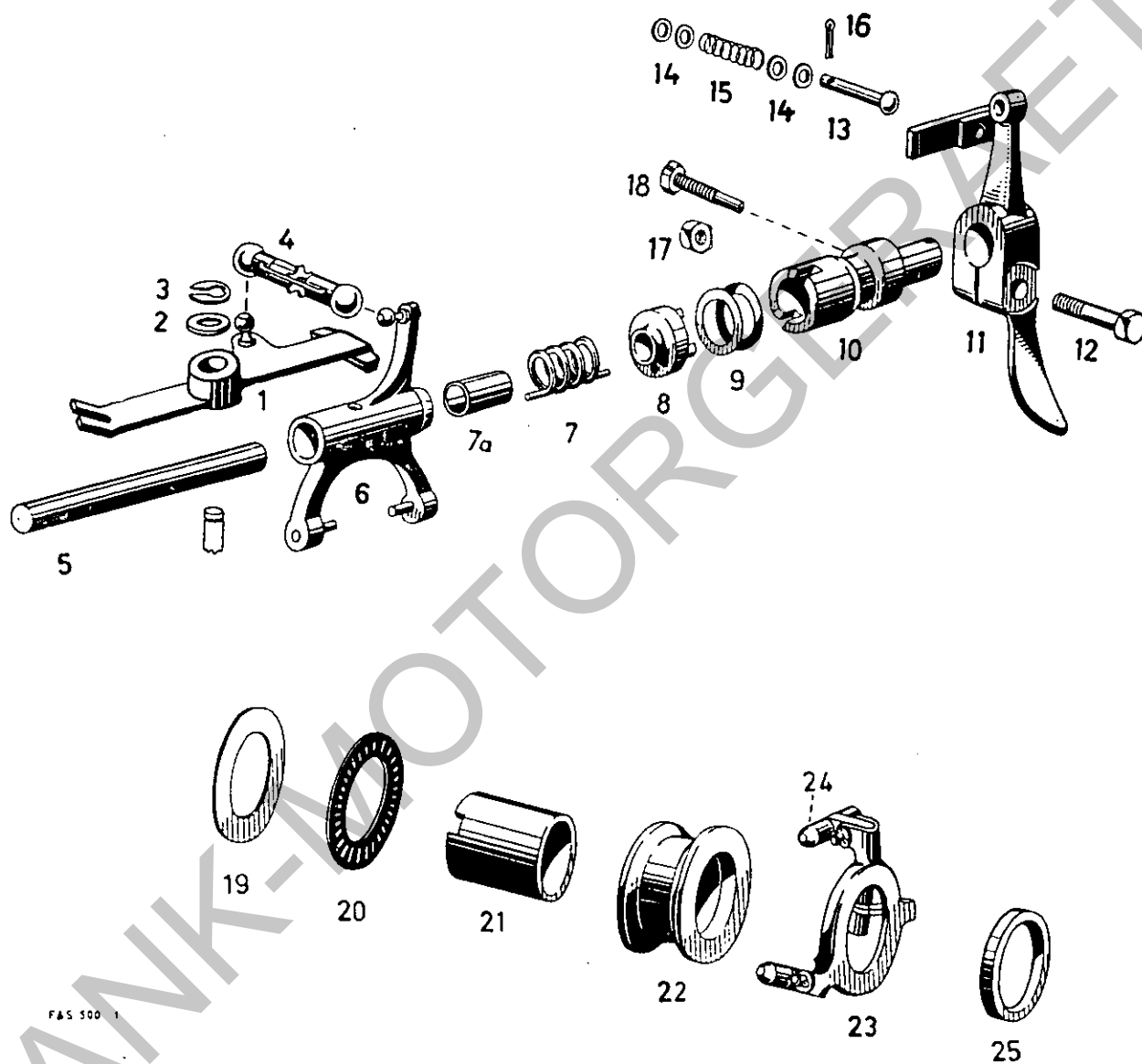
Governor 1st version, Injection Pump



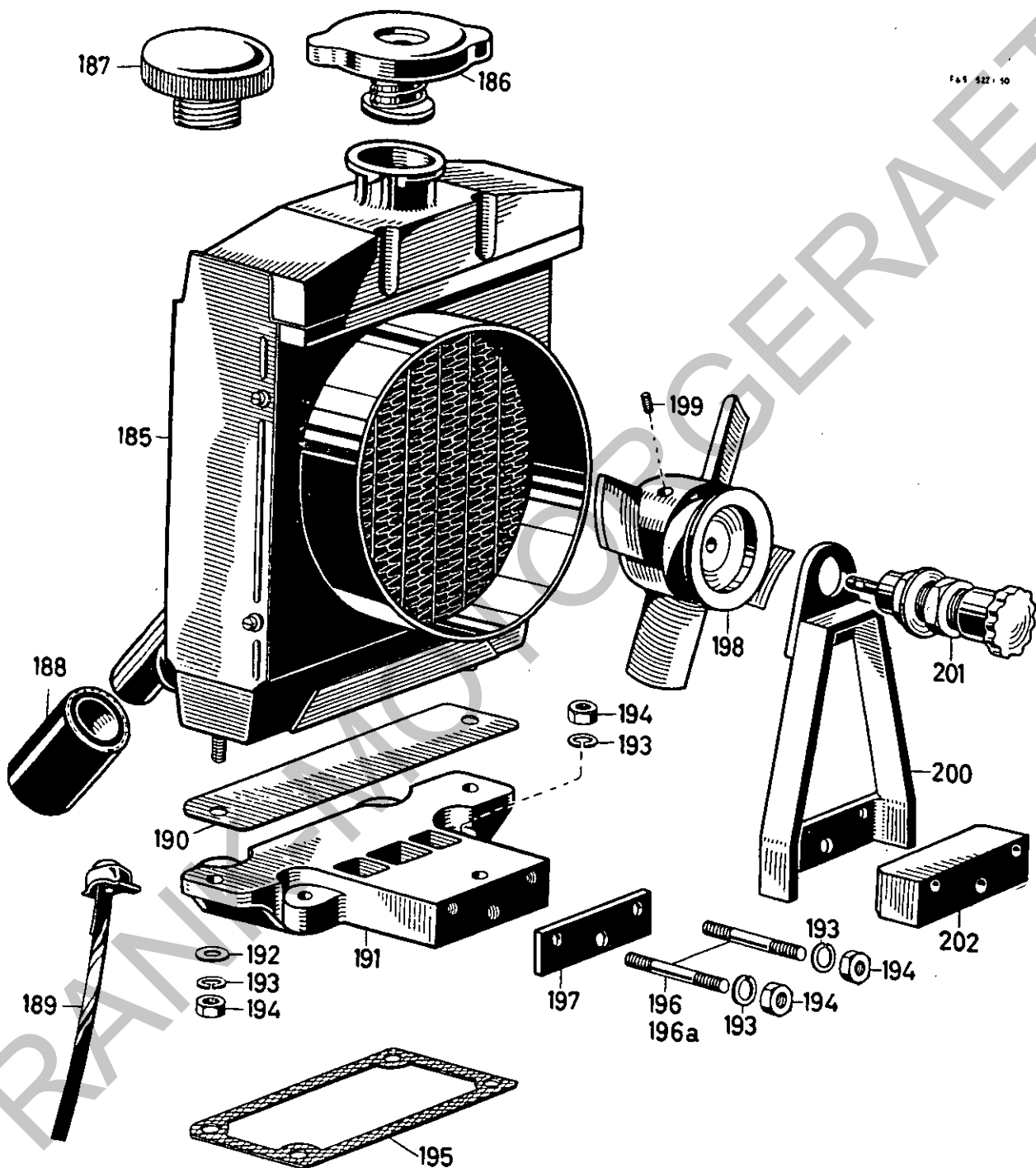
F45 522-49/2

PLATE 5

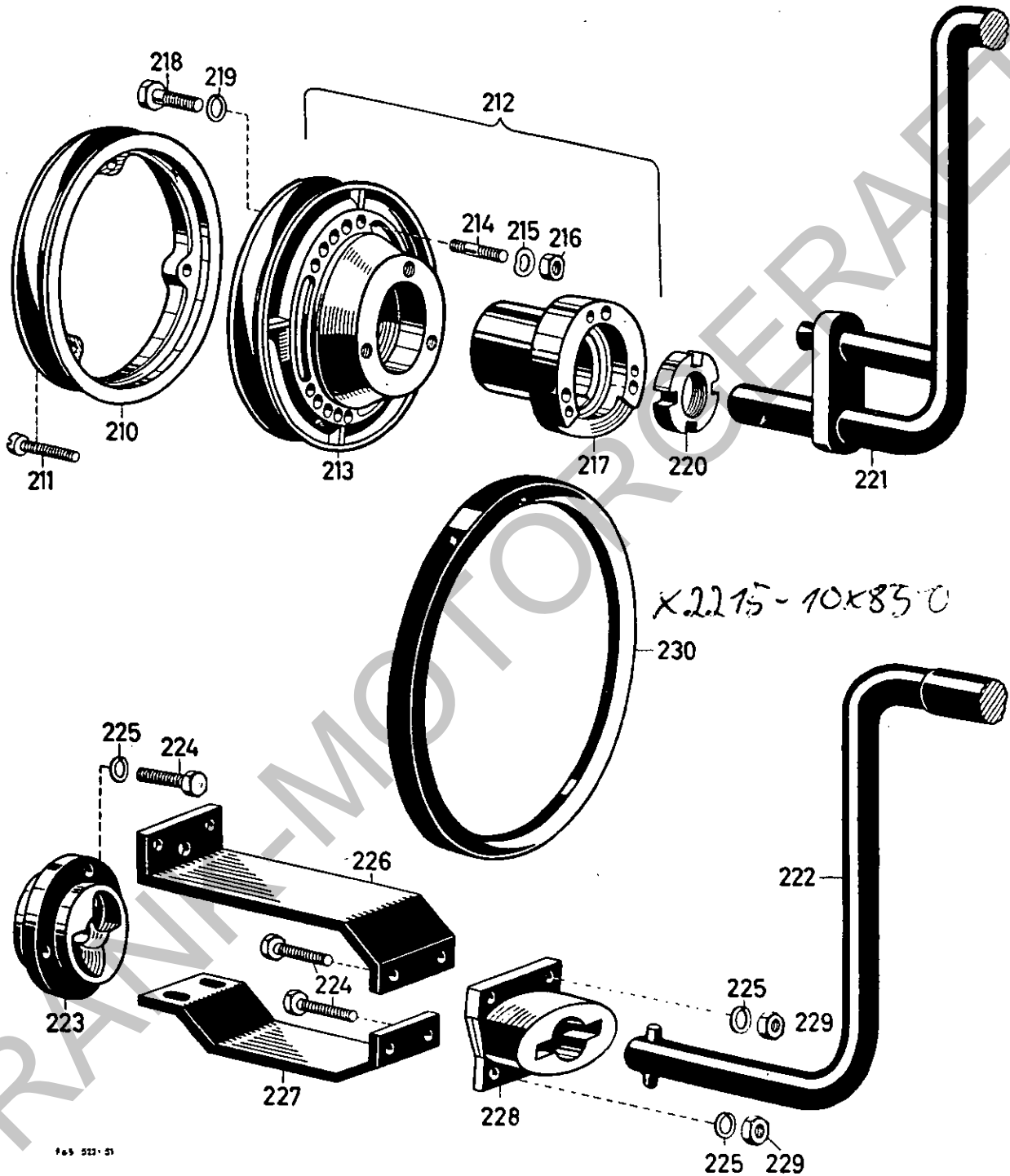
Governor 2nd version (Standard Governor) from engine No. 4164 428 onwards



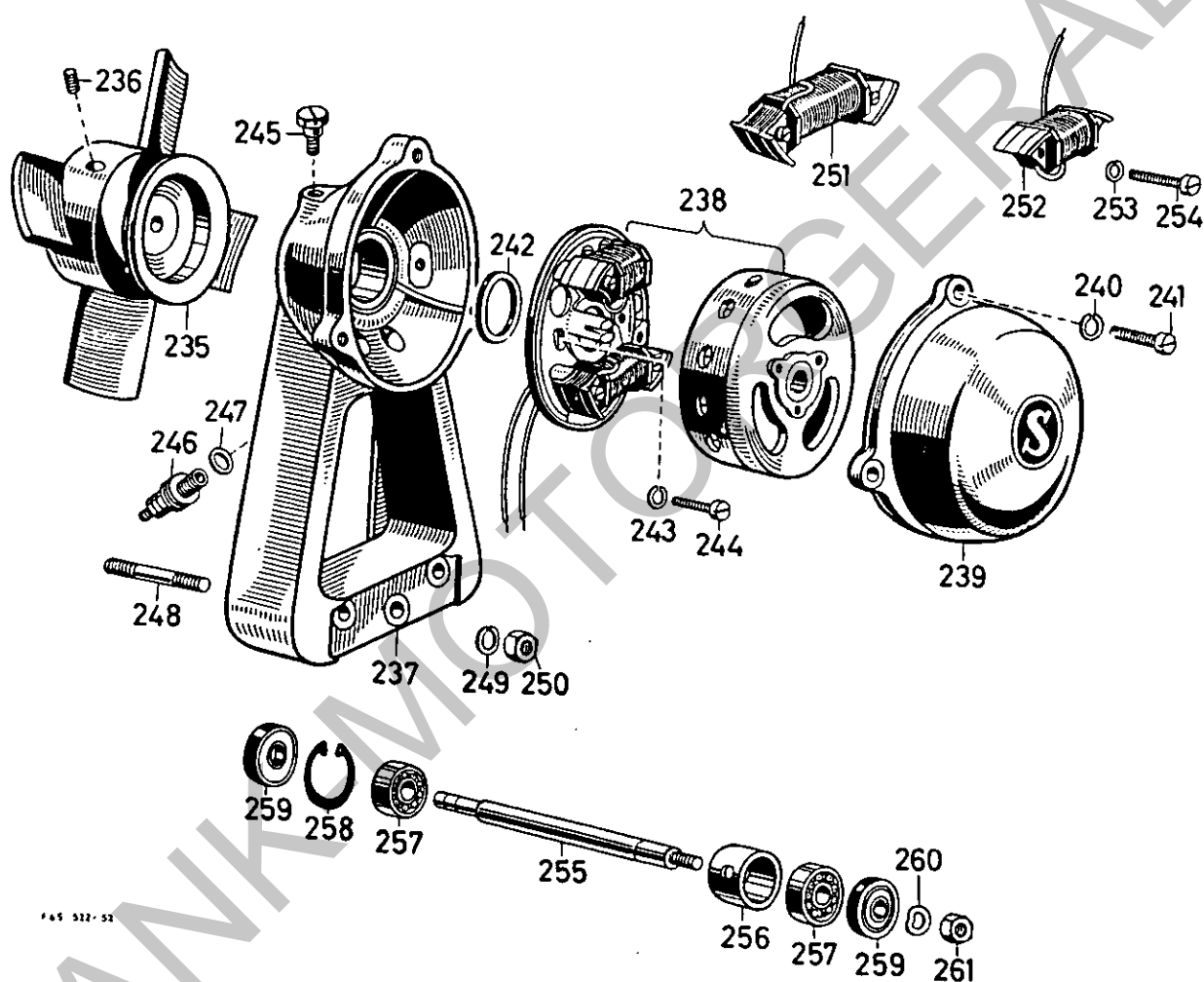
Radiator, Fan, Bearing Bracket



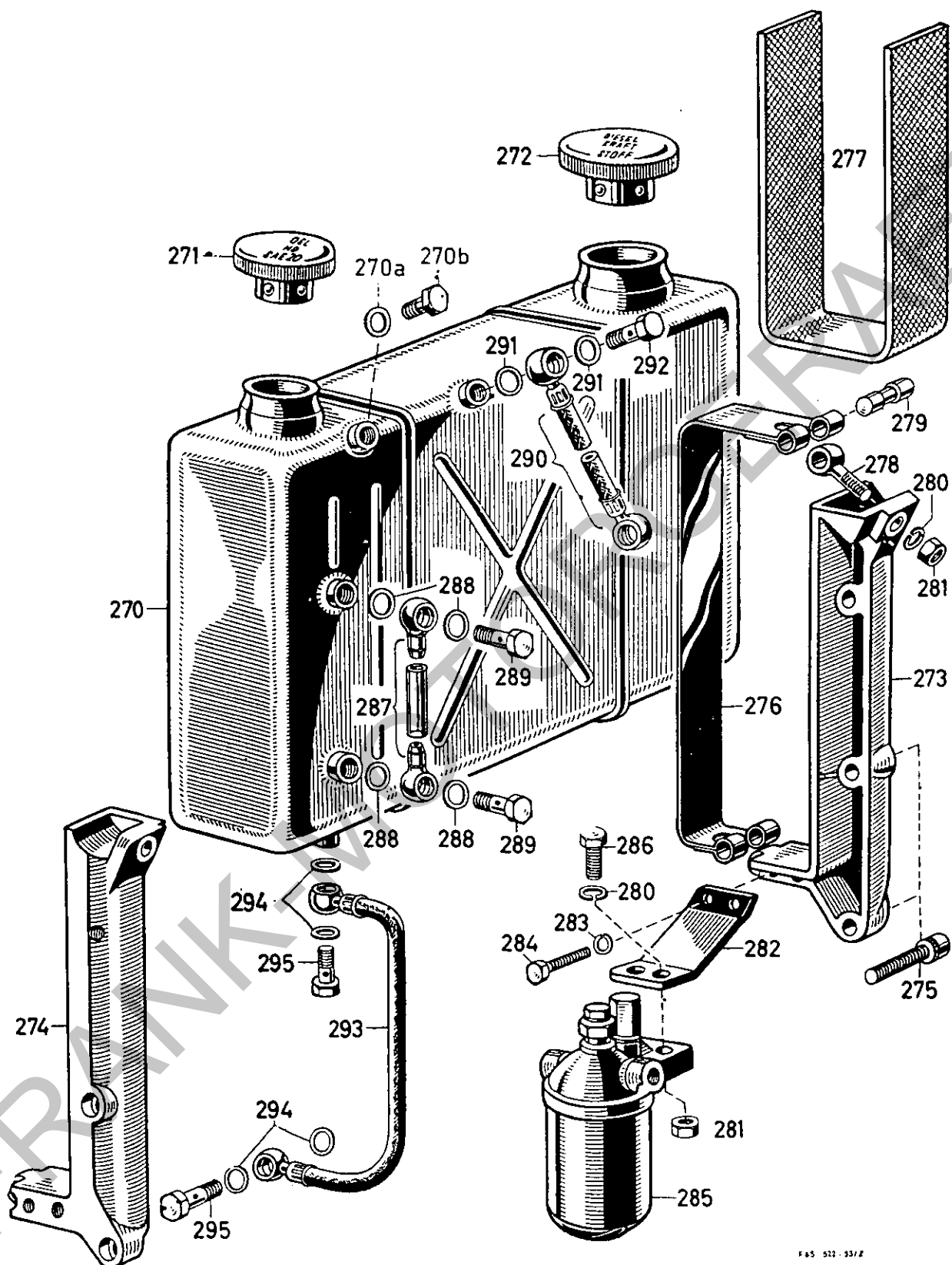
V-Belt Pulley, Starting Device



Dynamo, 16 Watt

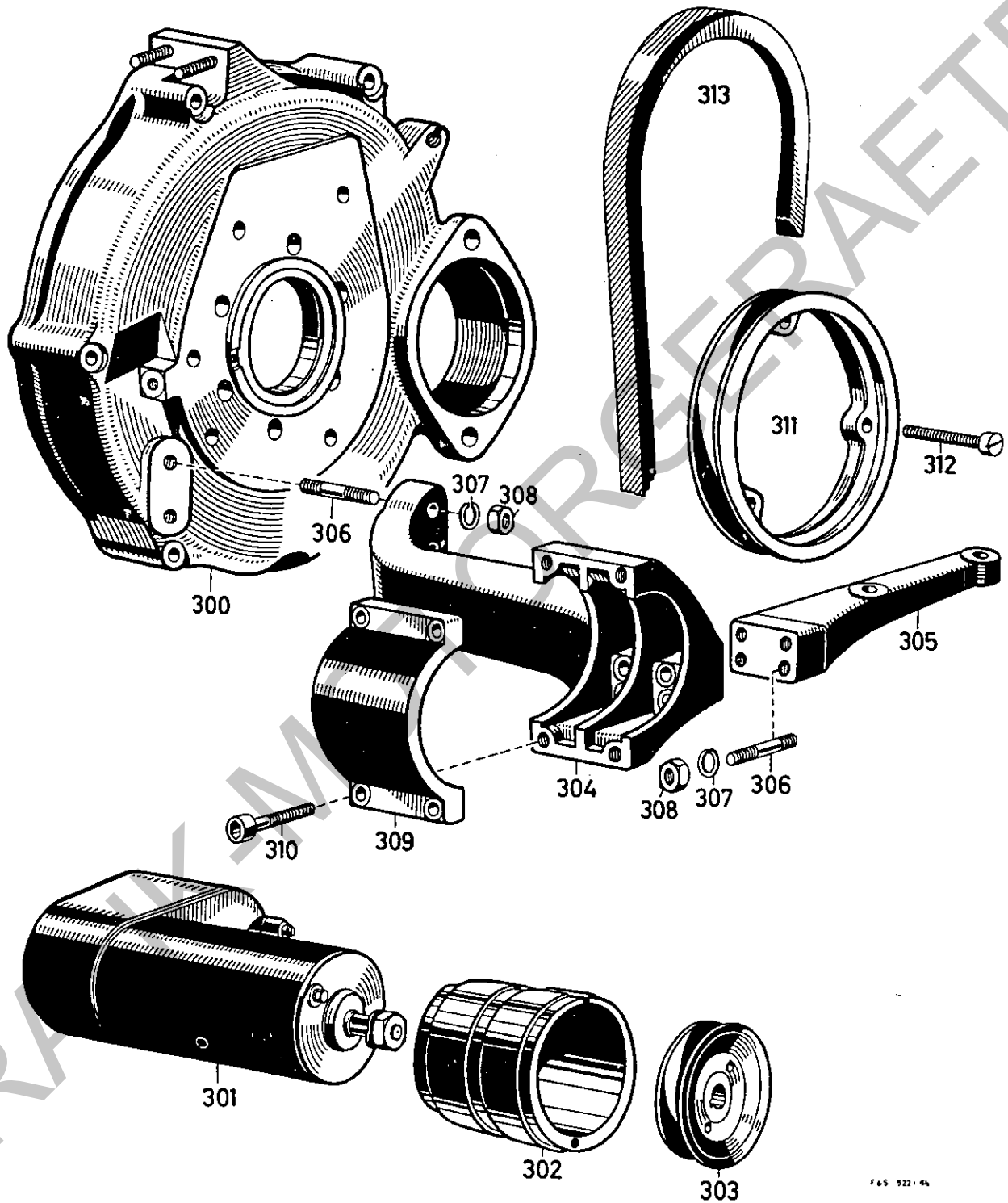


Fuel Tank

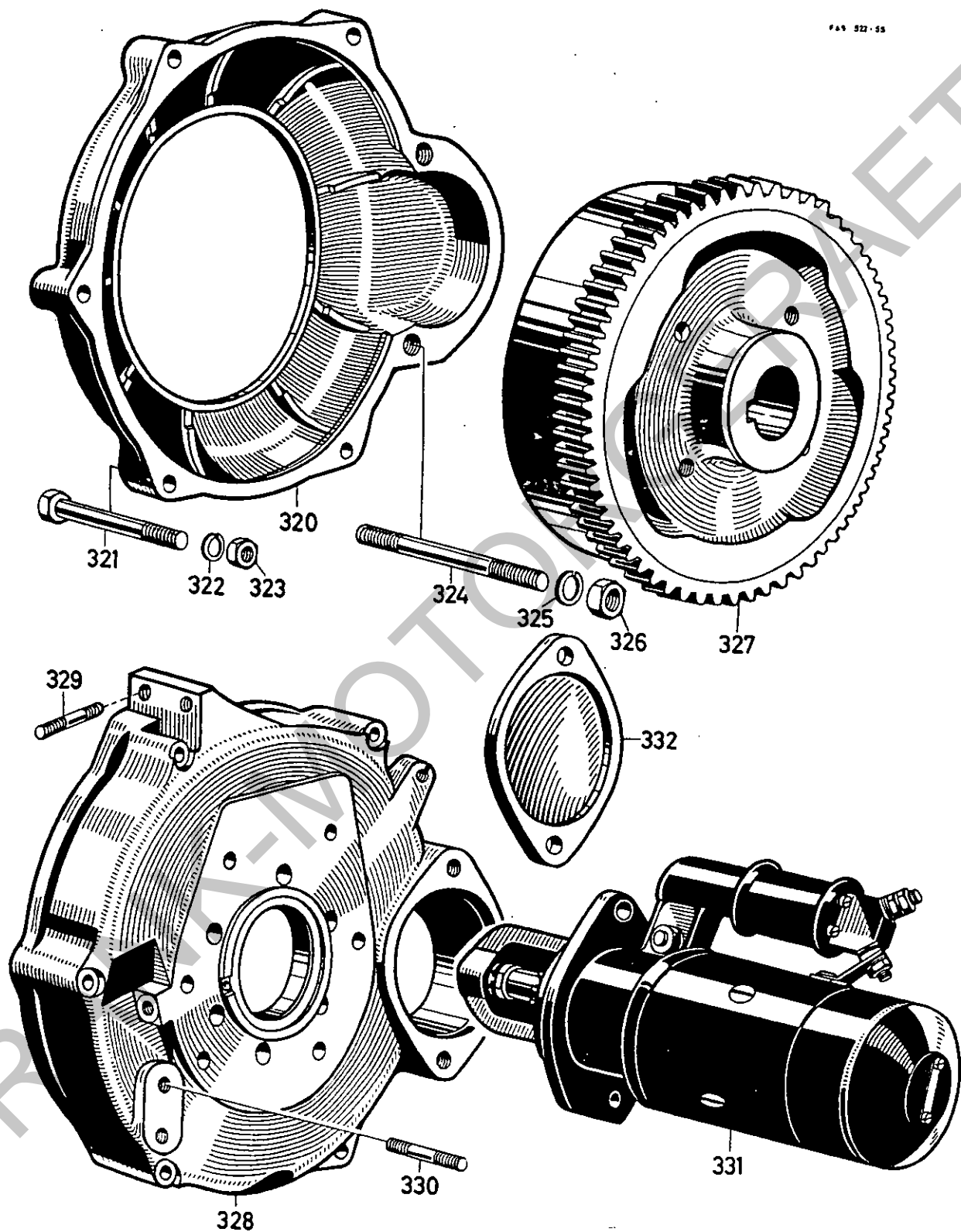


F 65 522 33/2

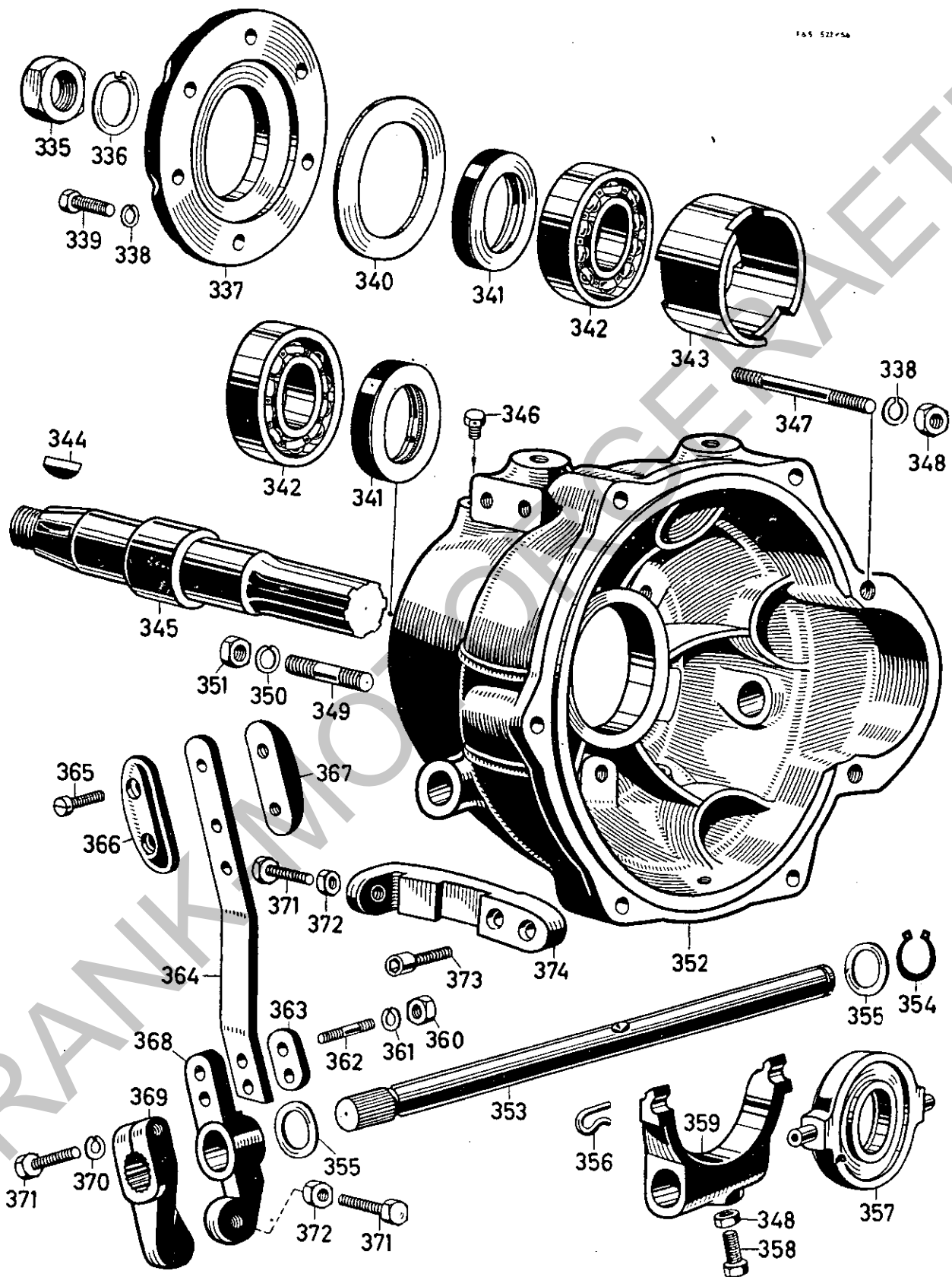
Dynamo, 75 and 90 Watt



Electric Starter

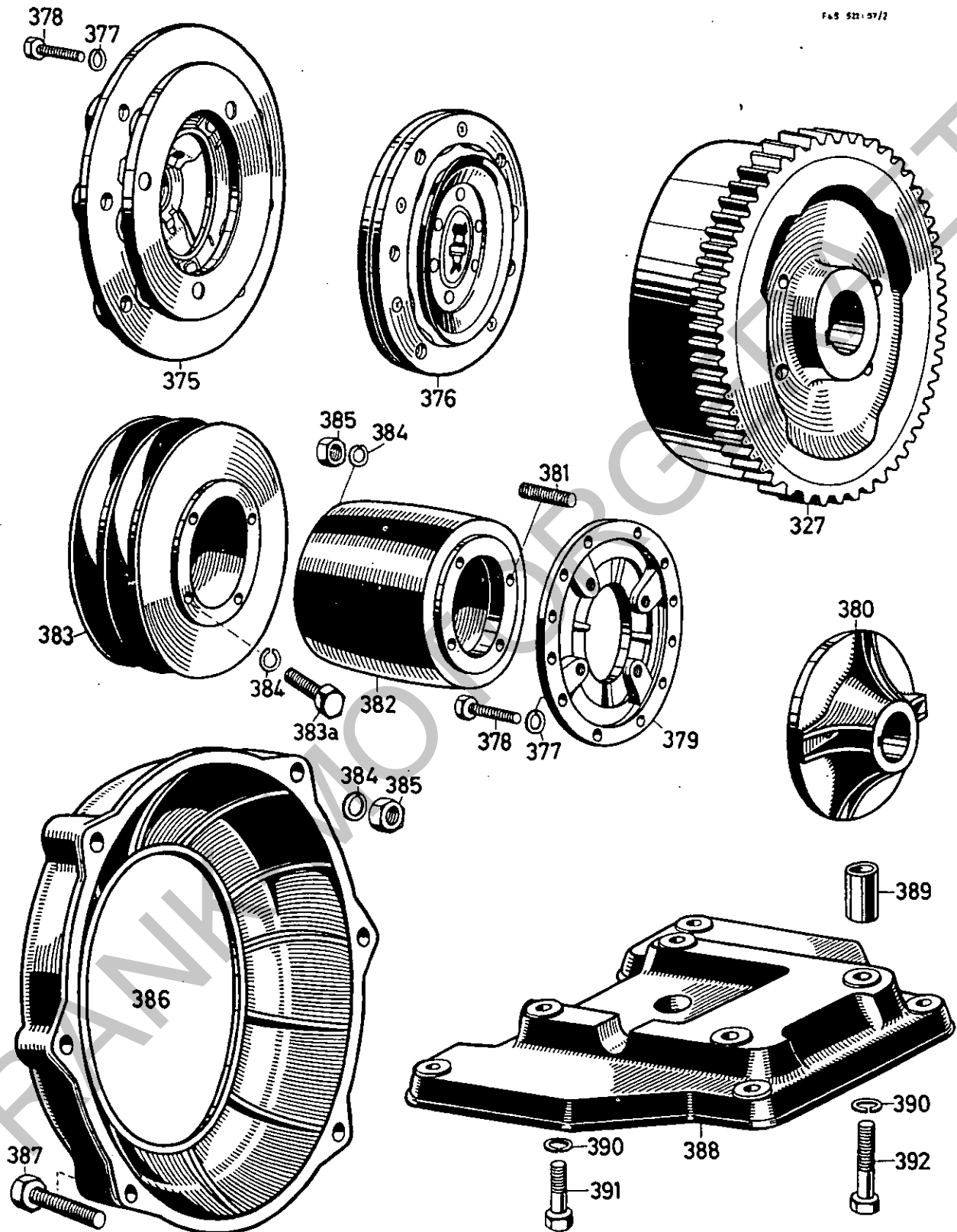


Built-in Disengaging Clutch

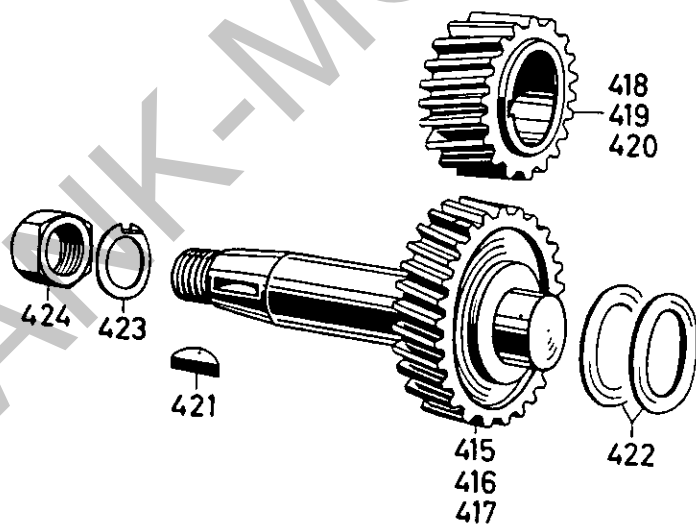
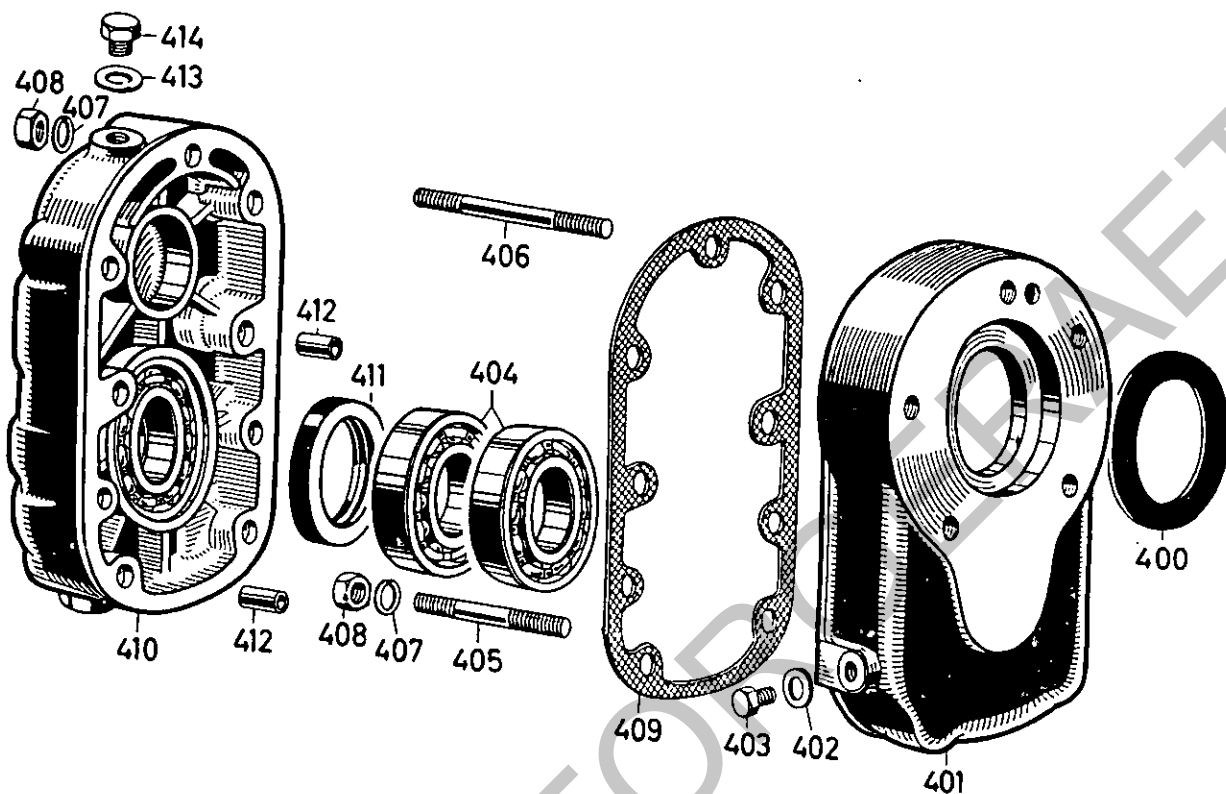


Clutch K 160, Belt Pulley, Pedestal

F&S 521:57/2

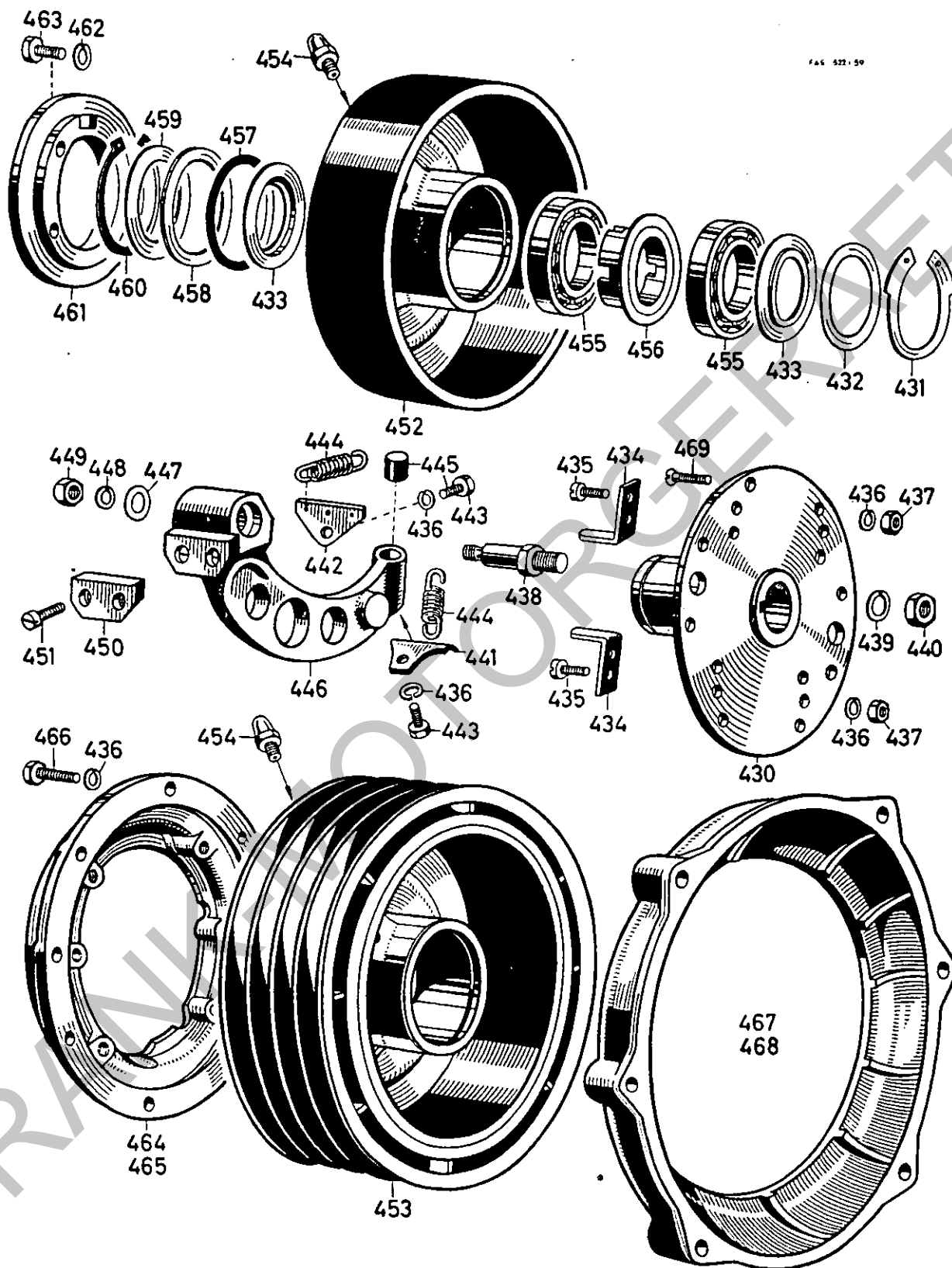


Gear Unit

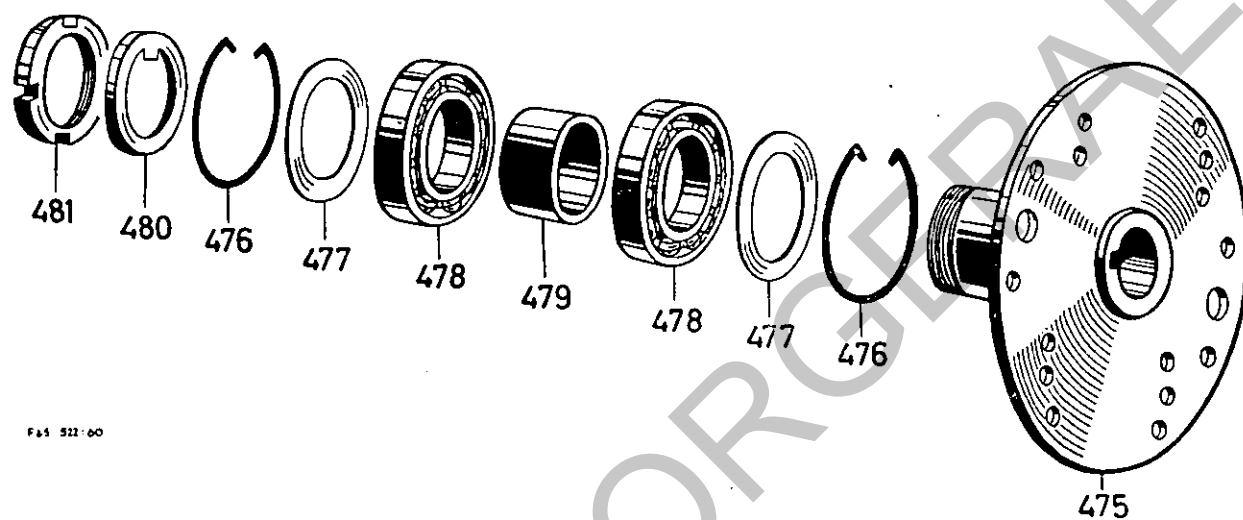


F&S 921-58

Centrifugal Clutch, Version: with Retaining Ring



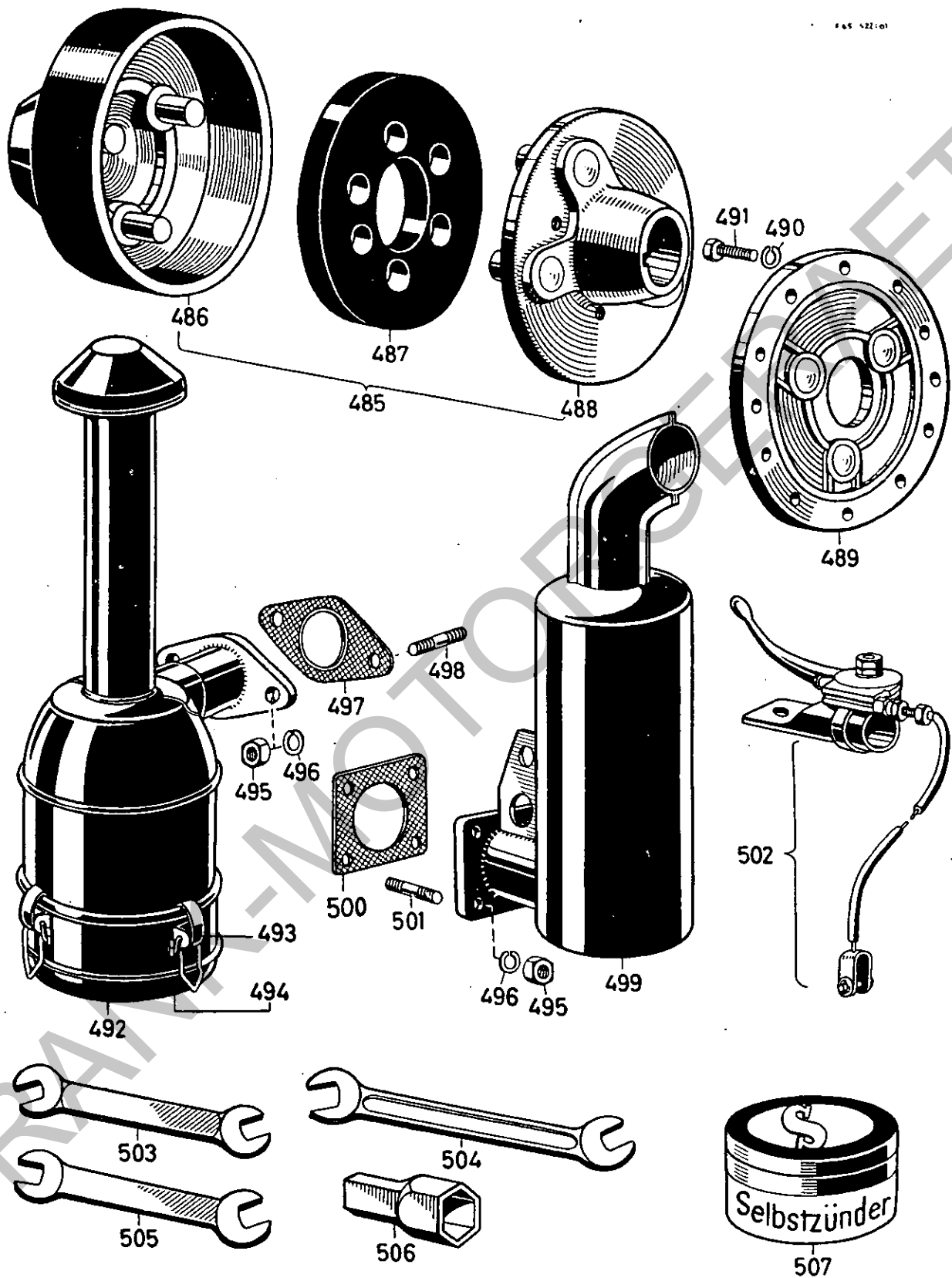
Components for Centrifugal Clutch, Version: with Ring Nut



F&S 522-00

PLATE 14a

Flexible Coupling, Oil-Bath Air Cleaner, Silencer, Tool Kit



Cylinder and Crankcase, Injection Nozzle

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
1	✓ 1986 015 005	Cylinder and crankcase assembly, version: flange-mounted engine	1	19600
	1986 015 006	Cylinder and crankcase assembly, version: stationary engine	1	19600
2	✓ 1940 004 100	Stud M 10x75 for securing cylinder head	8	51
3	1940 127 001	Stud M 8 x 16	6	9.5
		4 x for crankcase cover		
		2 x for securing filter		
4	1940 005 101	Stud M 10 x 32 for unit head and end shield	8	24
5	1940 006 101	Stud M 10 x 25 for securing unit head	4	20
6	✓ 0940 017 111	Stud M 8 x 20 for silencer	4	11.5
7	✓ 0245 023 003	Spring washer for M 8	20	1.2
8	✓ 0242 020 000	Nut M 8 <i>134 118</i>	16	5
9	✓ 0245 023 004	Spring washer for M 10	12	2
10	0242 009 000	Nut M 10 <i>134 118</i>	12	11
11	1950 009 000	Gasket	2	1
12	1911 004 000	Closer, left-hand	1	62
12a	1911 003 000	Closer, right-hand	1	62
13	1940 017 000	Hexagon head screw M 8 x 15 <i>nmL</i>	4	12
14	✓ 1972 000 001	Drain cock	2	93
15	✓ 1973 001 000	Discharge elbow	2	55
16	0972 032 005	Connecting tube (flange-mounted engine)	1	3
17	0249 046 000	Grooved dowel (stationary engine)	1	3
18	1950 017 000	Rubber plug <i>nickonite, 1 1/2 in. dia.</i>	2	10.5
19	1949 003 000	Dowel pin for unit head	1	16
20	✓ 1950 002 000	Gasket	1	20
21	1986 017 001	Cylinder head with two studs <i>nmL</i>	1	4500
22	0944 043 000	Washer	8	2.5
23	1942 008 000	Nut M 10 for cylinder head	8	14.5
24	1940 016 101	Stud M 8 x 40 for nozzle holder	2	18
25	✓ 1972 010 001	Fuse holder (flange-mounted engine)	1	87
26	1972 010 005	Fuse holder (electric starter)	1	92
26a	1986 131 100	Fuse holder (Holder) <i>nmL</i>	1	
27	1999 004 101	Incandescent plug M 14 x 2	1	71
28	✓ 1950 008 000	Gasket (for crankcase cover)	1	3
29	✓ 1911 000 000	Crankcase cover	1	175
30	✓ 0950 014 001	Sealing ring	1	1
31	✓ 0940 025 000	Screw plug M 8 x 9	1	13
32	✓ 1950 022 000	Seal <i>1603 P 16 x 22 CV</i>	1	3
33	✓ 1986 001 005	Nozzle holder with pintle nozzle	1	355
34	✓ 1986 004 000	Pintle nozzle D N 12 S D (for item 33)	1	33
35	1986 009 000	Fuel pipe (from nozzle holder to fuel injection pump) <i>nmL</i>	1	121
36	✓ 1960 003 000	Protective tubing	1	5
37	1951 000 000	Fixing clip	1	3.5
38	✓ 0245 023 002	Spring washer for M 6	1	0.6
39	✓ 0941 057 000	Cheese head screw M 6 x 10	1	4.5
40	✓ 1986 019 000	Leak pipe, length 290 mm (from nozzle holder to induction port)	1	52
41	1950 024 000	Sealing ring <i>nmL</i>	2	1
42	✓ 1940 011 000	Banjo plug M 8 x 1	1	8
43	0990 083 000	Tube fastener	1	3.5

End Shield, Bearing Flange, Fuel Filter

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
45	✓ 1986 028 000	End shield with 2 studs	1	3640
	1911 008 005	End shield (Hummel)	1	
	1911 008 006	End shield (Bungartz)	1	
46	1940 127 001	Stud M 8 x 16	2	9.5
47	1951 008 000	Fixing bracket for filter (flange-mounted engine)	1	115
47a	1951 004 000	Fixing bracket for filter (stationary engine)	1	120
48	✓ 0245 023 003	Spring washer for M 8	2	1.2
49	✓ 0242 020 000	Nut M 8	2	6.5
50	1986 012 001	Fuel filter (flange-mounted engine)	1	450
50a	1986 012 000	Fuel filter (stationary engine)	1	450
51	0941 052 000	Hexagon head bolt M 10 x 30	2	29
52	✓ 0245 023 004	Spring washer for M 10	2	2
53	✓ 0242 009 000	Nut M 10 <i>x 934 17-10</i>	2	11
54	✓ 1986 030 001	Fuel pipe from tank to filter, with banjo at one end rotated 90 degrees in relation to banjo at other end (state the length)	1	
55	✓ 0250 073 000	Seal	4	1
56	✓ 1940 012 001	Banjo plug M 14 x 1.5	2	8
57	✓ 1986 030 020	Fuel pipe from filter to pump, with banjo at one end rotated 45 degrees in relation to banjo at other end (state the length).	1	
58	*09 1986 036 000	Filter bowl (Knecht) <i>n.m.c.</i>	1	190
	*09 1986 036 001	Filter bowl (Mann & Hummel)	1	
59	✓ *09 1986 035 005	Mounting for felt ring (Knecht)	1	10
	09 1986 035 006	Mounting for felt ring (Mann & Hummel)	1	
60	09 1986 012 008	Filter element	1	38
61	✓ *09 1950 032 000	Sealing ring (Knecht)	1	3
	✓ *09 1950 032 001	Sealing ring (Mann & Hummel)	1	
62	*09 1986 037 000	Filter cover (Knecht)	1	142
	09 1986 037 001	Filter cover (Mann & Hummel)	1	
63	✓ *09 1950 030 000	Seal	1	2
64	✓ *09 1940 025 000	Screw plug	1	21
65	✓ *09 1950 029 000	Seal (Knecht)	1	1
	✓ *09 1950 029 001	Seal (Mann & Hummel)	1	
66	*09 1940 019 000	Hexagon head screw (Knecht)	1	10
	*09 1940 019 001	Hexagon head screw (Mann & Hummel)	1	
67	09 1950 031 000	Seal <i>x 7603 17-14 V</i>	1	0.5
68	09 1940 026 000	Air vent screw for item 50a	1	48
	09 1940 103 000	Air vent screw M 14 for item 50	1	
69	1950 014 000	Gasket <i>n.m.c.</i>	1	1
70	✓ 1950 038 000	Gasket	1	2.5
71	✓ 1986 018 000	Bearing flange with 6 studs	1	2070
72	1940 007 101	Stud M 12 x 32	6	33
73	✓ 0245 023 005	Spring washer for M 12	6	3
74	0942 025 100	Nut M 12	6	12

* For replacement of items 58, 59, 61, 62, 65 and 66 only the items belonging to the original air cleaner (version Knecht or Mann & Hummel) are to be used.

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Crankshaft, Piston, Flywheel

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
80	✓ 1986 014 006	Crankshaft assembly	1	8850
81	✓ 09-1932 005 001	Radiax bearing 6002 Z (included in crankshaft assembly)	1	32
82	✓ 1946 002 000	Key 12 x 8 x 40 for flywheel	1	28
83	✓ 1946 001 000	Key 8 x 5 x 45 for cam and spiral gear	1	14
84	✓ 1946 000 000	Key 8 x 5 x 35 for starter dog	1	10
85	09-1932 000 006	Annular parallel-roller bearing	22	893
86	✓ 1944 004 000	Shim 0.2 mm	} as requir.	4.5
	✓ 1944 004 001	Shim 0.3 mm		7
87	✓ 1950 006 000	Crankshaft sealing ring 45 x 62 x 12	1	32
88	✓ 1944 000 000	Lock washer	1	13
89	1942 002 000	Slotted nut M 40 x 1.5	11	135
90	✓ 1980 002 000	Flywheel (standard)	1	23900
	1987 013 000	Flywheel, version: centrifugal clutch, with electric starter	1	23750
	1980 005 000	Flywheel, version: with centrifugal clutch, without electric starter	1	23750
91	✓ 1944 004 005	Shim 0.8 mm	1	17.5
92	✓ 1950 005 000	Crankshaft sealing ring (in unit head)	1	44
93	1942 003 000	Slotted nut M 30 x 1.5 for starter side	1	94
94	1986 005 000	Connecting rod assembly with bearing shell	1	1010
	09 1986 005 005	Connecting rod assembly with bearing shell (1st replacement)	1	1010
	09 1986 005 006	Connecting rod assembly with bearing shell (2nd replacement)	1	1010
95	1932 003 101	Big-end bearing shell	1 pair	120
	09-1932 003 110	Big-end bearing shell with 0.25 mm smaller diameter (1st replacement)	1 pair	120
	✓ 09-1932 003 111	Big-end bearing shell with 0.5 mm smaller diameter (2nd replacement)	1 pair	120
96	1940 000 000	Big-end bolt	2	29
97	1944 002 000	Tab washer	2	2
98	1942 001 000	Hexagon nut M 10	2	8
99	1986 013 000	Piston with rings 80.0 mm dia.	1	640
	09-1986 013 005	Piston with rings 80.5 mm dia. (1st replacement)	1	640
	✓ 09-1986 013 006	Piston with rings 81.0 mm dia. (2nd replacement)	1	640
100	✓ 1915 000 000	Trapezoidal-section piston ring for top groove 80.0 mm dia. Set with 4 st.	1	15
	09 1915 000 005	Trapezoidal-section piston ring for top groove 80.5 mm dia. (1st replacement)	1	15
	09 1915 000 006	Trapezoidal-section piston ring for top groove 81.0 mm dia. (2nd replacement)	1	15
101	1915 001 000	Piston ring 80.0 mm dia.	3	16
	09-1915 001 005	Piston ring 80.5 mm dia. (1st replacement)	4	16
	09 1915 001 006	Piston ring 81.0 mm dia. (2nd replacement)	3	16
102	✓ 1916 000 000	Gudgeon pin	1	225
103	✓ 1945 001 000	Circlip	2	2

Refuse to accept non-genuine parts!

Unit Head, Oil Pump

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
110	1986 016 005	Unit head assembly, with annular parallel-roller bearing	1	8720
111	0240 075 201	Stud M 6 x 15	6	4.5
112	1940 013 211	Stud M 6 x 28 for oil pump	2	7
113	✓ 0940 017 111	Stud M 8 x 20 for injection pump	3	11.5
114	1940 008 101	Stud M 8 x 28 for cover plate	4	16.5
115	✓ 2650 005 000	Seal for hand control lever	1	9
116	✓ 1949 005 001	Pivot pin for crank lever	1	24
117	✓ 1950 015 000	Seal for oil level glass 000 997 004 9	1	1.5
118	✓ 1972 007 000	Oil level glass with item 117 000 993 000 36	1	7.5
119	✓ 1950 121 000	Seal	2	0.5
120	✓ 1940 124 001	Screw plug	2	18
121	1950 014 000	Gasket for unit head nml	1	4
122	✓ 0245 023 004	Spring washer for M 10	6	2
123	✓ 0242 009 000	Nut M 10 x 934 1740	6	11
124	✓ 0316 057 002	Nut M 6 x 934 176	10	2
125	0940 085 001	Hexagon head bolt M 6 x 35	1	9
125a	✓ 0940 085 005	Hexagon head bolt-M 6 x 35 (drilled head)	1	9
126	✓ 1950 011 000	Gasket	1	2
127	1987 031 000	Unit head cover, comprising items 127a and 128	1	342
127a	1911 002 000	Unit head cover	1	312
128	1950 100 000	Shaft sealing ring nml	1	30
129	✓ 0245 023 002	Spring washer for M 6	8	0.6
130	1986 027 200	Smoke stop assembly (can be supplied only as a complete unit)	1	115
131	✓ 0250 011 002	Seal	1	1

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Unit Head, Oil Pump

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
132	✓ 1937 000 000	Driving shaft for lubricating oil pump (check also worm gear, item 159, page 13)	1	99
133	✓ 1911 006 000	Bearing guide	1	198
134	1959 000 000	Coupling unit	1	4
135	✓ 0244 006 000	Shim 0.5 mm	as. requ.	0.5
136	✓ 1945 002 000	Circlip A 13	1	1
137	✓ 1950 012 000	Gasket	2	0.3
138	1986 002 100	Lubrication oil pump <i>h.m.L.</i>	1	52
	✓ 09 1950 123 000	Gasket for oil pump cover	1	
139	✓ 1986 011 000	Oil feed pipe from pump to unit head	1	
140	0242 031 003	Nut <i>h.m.L.</i>	1	9.5
141	✓ 0272 014 001	Sealing nipple	1	0.8
142	1950 024 000	Sealing ring for M 8	10	1
142a	✓ 1950 023 000	Sealing ring for M 10 <i>065 013 1000</i>	3	0.9
143	✓ 1940 011 000	Banjo plug M 8 x 1	5	8
	✓ 1940 011 003	Banjo plug M 8 x 1 with inner thread M 5	2	
	✓ 1950 118 000	Seal	2	
	✓ 0241 013 000	Hexagon head bold M 5 x 6	2	
143a	✓ 1940 010 001	Banjo plug M 10 x 1	3	14
		1 plug for item 145		
		2 plugs for item 145a		
144	✓ 1986 010 000	Oil feed pipe from pump to end shield	1	
145	1986 029 001	Oil suction pipe assembly, with two different banjos (state required length)	1	
145a	1987 044 000	Oil suction pipe assembly, with one banjo rotated 90 degrees, stationary version of engine (state required length)	1	

Refuse to accept non-genuine parts!

Governor 1st version, Injection Pump

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
	**09 1986 023 100	Governor assembly, up to engine No. 4164 427 comprising items 150 - 158	1	
150	✓ 1954 004 101	Governor cup	1	170
150a	1947 103 000	Ring	1	67
150b	✓ 1954 106 000	Governor core	1	157
151	1932 001 000	Ball, 12 mm dia. <i>mmL</i>	14	7.5
152	✓ 1946 000 005	Key (for item 150b)	1	8
153	✓ 1954 005 100	Governor collar	1	225
154	✓ 1986 024 005	Thrust collar assembly, comprising items 155 - 158	1	160
155	✓ 1954 000 100	Thrust collar	1	150
156	✓ 1949 012 000	Grooved pin	2	3.2
157	✓ 1959 010 000	Sliding block	2	3.2
158	✓ 1945 011 000	Retainer	2	0.2
159	✓ 1934 000 000	Worm gear (check also driving shaft, item 132, page 11)	1	97
160	✓ 1923 000 101	Cam	1	106
161	✓ 0244 006 000	Shim 0.5 mm	as requ.	0.5
162	✓ 1986 025 000	Governor fork	1	137
163	✓ 1939 000 000	Torsion spring	1	50
164	✓ 1949 004 000	Governor spindle	1	128
165	✓ 1954 006 000	Guide for hand control lever	1	140
166	✓ 0930 015 001	Seal	1	9
167	1986 022 105	Hand control lever assembly <i>mmL</i>	1	175
168	✓ 0940 073 001	Hexagon head bolt M 8 x 20	1	13
169		Ball cup, L/hand thread M5	1	7.5
169a		Ball cup, R/hand thread M5	1	7.5
170	1986 097 000	Adjusting spindle } consisting of items 169-170	1	3
171	1945 005 000	Retaining wire	1	
172	✓ 0940 085 005	Hexagon head bolt M 6 x 35	1	8
173	6316 057 002	Nut M 6 <i>x 934 M6</i>	1	2
174	✓ 1949 005 001	Pivot pin	1	24
175	1986 026 000	Double arm lever <i>mmL</i>	1	79
176	✓ 0244 044 000	Shim	as requ.	0.5
177	✓ 1945 004 005	Circlip	1	7.5
178	1950 013 001	Gasket 0.25 mm <i>mmL</i>	1	0.5
179	1986 003 106	Injection pump PFR 1 LA 65/98/11 <i>mmL</i>	1	1250
180	✓ 0245 023 003	Spring washer for M 8	3	1.2
181	0242 020 000	Nut M 8 <i>x 934 M8</i>	3	6.5
* For replacement of the double arm lever, item 175, or of the governor fork, item 162, or of both, up to engine No. 4164 427 the adjusting screw spindle, item 170, must also be replaced. **Governor ass'y 091986 212 000 2nd version for fitting into engines instead of governor 1st version comprises items 6, 7, 7a, 8, 9, 11, 19, 20, 21, 22, 23, and 25 see Plate 5a).				

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Governor 2nd version (Standard Governor) from engine No. 4164 428 onwards

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
1	1986 026 000	Double arm lever <i>not</i>	1	79
2	✓ 0244 044 000	Spacing washer 1.0 mm	as required	0.4
	✓ 0244 044 001	Spacing washer 0.8 mm		
	✓ 0244 044 002	Spacing washer 0.3 mm		
	✓ 0244 044 003	Spacing washer 0.15 mm		
3	✓ 1945 004 005	Locking washer		3.5
4	1986 097 000	Adjusting screw spindle	1	16
5	✓ 1949 004 000	Governor spindle	1	128
6	✓ 1986 025 100	Governor fork	1	150
7	✓ 1939 000 100	Governor spring	1	29
7a	✓ 1947 107 000	Spacer bush	1	5
8	1954 110 000	Adaptor	1	30
9	✓ 0944 046 000	Spacing washer 0.2 mm	as required	0.2
	✓ 0944 046 001	Spacing washer 0.3 mm		
	✓ 0944 046 002	Spacing washer 0.5 mm		
	✓ 0944 046 003	Spacing washer 0.4 mm		
10	✓ 1954 006 000	Guide for hand-control lever	1	140
11	1986 022 205	Hand-control lever, comprising items 11 - 16	1	185
12		Hexagon head screw M 8 x 25	1	
13		Rivet 5 dia. x 30	1	
14		Washer 1.0 mm	4	
15		Pressure spring	1	
16		Split pin	1	
17	0841 034 001	Nut M 8	1	5
18	✓ 1940 130 001	Special screw M 8	1	12
19	1944 107 000	Washer	1	20
20	1932 115 100	Axial needle cage (only in connection with items 19 and 22)	1	10
21	✓ 1947 109 000	Spacer bush	1	90
22	1954 107 100	Governor sleeve (check also items 19, 20 and 24) <i>not</i>	1	140
23	1986 194 110	Centrifugal governor ass'y <i>H.D. 1010 767</i>	1	115
24	09 1986 195 101	Centrifugal weight with fitting (supplied only in connection with item 22)	1	34
25	✓ 1947 100 105	Spacer ring 40 dia. x 30 dia. x 7.5	1	33

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Radiator, Fan, Bearing Bracket

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
185	1986 008 001	Radiator core with snap-on filler cap <i>n.m.c.</i>	1	3530
186	✓ 09 1972 019 002	Snap-on cap for item 185	1	80
187	09 1972 019 001	Screw-on filler cap <i>n.m.c.</i>	1	65
188	✓ 1960 001 000	Hose	4	36
189	1999 000 001	Hose joint clip <i>n.m.c.</i>	8	15
190	✓ 1960 002 000	Underlay strip for radiator	1	25
191	1986 140 000	Cover plate with connecting tube and 3 studs (version: without support)	1	200
	↗ 1986 140 005	Cover plate with connecting tube and 3 studs (version: with support)	1	200
192	✓ 0244 124 001	Washer	2	2.5
193	✓ 0245 023 003	Spring washer for M 8	9	1.2
194	✓ 0242 020 000	Nut M 8 <i>x 9 34 778</i>	9	5.5
195	✓ 1950 010 000	Gasket for cover plate	1	1
196	✓ 0940 017 101	Stud M 8 x 20 (without support)	3	11.5
196a	0940 149 001	Stud M 8 x 45 (with support)	3	
197	1944 006 000	Spacer plate	as requ.	
198	1986 040 009	Fan with bush and grub screw <i>n.m.c.</i>	1	390
199	✓ 1940 035 000	Grub screw M 6 x 15	1	2
200	✓ 1986 007 000	Bearing bracket	1	465
201	✓ 1932 002 000	Roller journal SR 23 <i>000 9 97 23 66</i>	1	120
202	✓ 1952 010 000	Block	1	125

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V-Belt Pulley, Starting Device

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
210	1980 009 000.8	V-belt pulley rim for dynamo	3	190
211	✓ 1940 028 000	Cheese head screw M 8 x 40	1	17
212	✓ 1986 021 005	V-belt pulley assembly, with starter dog, comprising items 213-219	1	1167
213	1986 021 008	V-belt pulley	1	530
214	✓ 0640 023 101	Stud M 8 x 25	3	11
215	0644 011 000	Spring retainer	3	0.5
216	0942 067 100	Nut M 8	3	3
217	1952 005 001	Starter dog	1	615
218	0240 005 002	Hexagon head screw M 6 x 20	3	6.5
219	0245 023 002	Spring washer for M 6	3	0.6
220	1942 003 000	Slotted nut M 30 x 1.5	1	94
221	nml 1986 006 001	Starting handle for engines without supporting bracket	1	1265
222	1986 006 102	Starting handle for engines with supporting bracket	1	1055
	1986 006 109	Starting handle, version: Fahr, Nauder	1	
	1986 006 210	Starting handle, version: Holder	1	
223	1952 006 100	Starter ring	1	410
224	0240 078 000	Hexagon head screw M 8 x 30	4	
	0941 054 000	Hexagon head screw M 8 x 25	3	18
	1986 065 105	Starting pulley with all accessories comprising: 1 x 1986 065 100 Starting pulley 1 x 0991 019 000 Starting strap 1600 mm long 1 x 1952 013 000 Handle 3 x 0640 032 000 Stud M 8 3 x 0245 023 003 Spring washer 3 x 0242 020 000 Nut	1	
225	0245 023 003	Spring washer for M 8	7	1.2
226	1952 008 000	Supporting bracket, top	1	515
227	1952 009 000	Supporting bracket, bottom	1	295
	1951 013 100	Supporting bracket, bottom (Holder)	1	
228	1952 007 000	Support for starting handle	1	800
229	0242 020 000	Nut M 8	4	5.5
230	1980 001 000	V-belt 10 x 850 mm, DIN 2215	1	54
	1986 065 105	Starting pulley with all accessories comprising: 1986 065 100 Starting pulley 0240 029 101 Stud M 8 x 26 0245 023 003 Spring washer for M 8 0242 020 000 Nut M 8 1952 013 000 Hand starting belt 1986 210 000 Starting strap	1	

Refuse to accept non-genuine parts!

Dynamo, 16 Watt

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
235	✓1986 040 009	Fan	1	290
236	1940 035 000	Grub screw	1	3
237	1911 012 000	Bearing bracket	1	720
238	1986 045 000	Dynamo assembly LJ/MB 16/61	1	1070
239	1970 000 000	Cover for dynamo	1	195
240	0245 023 001	Spring washer for M 5	3	0.3
241	0240 076 000	Cheese head screw M 5 x 15	3	3
242	1950 034 000	Thrust washer (synthetic rubber)	1	3
243	0245 023 002	Spring washer for M 6	2	0.6
244	0640 001 000	Cheese head screw M 6 x 22	2	6
245	0241 023 000	Hexagon head screw M 6 x 5.5	1	3
246	0287 009 000	Lighting plug	2	9
247	0244 045 000	Washer	2	0.2
248	0940 015 101	Stud M 8 x 48	3	20
	1944 006 000	Shim, illustr. 197	as requ.	
249	0245 023 003	Spring washer for M 8	3	1.2
250	0242 020 000	Nut	3	6
251	09 1986 062 000	Lighting armature, bottom	1	145
252	09 1986 062 005	Lighting armature, top	1	135
253	0245 023 000	Spring washer for M 4	4	0.2
254	09 1940 032 000	Cheese head screw M 4 x 25	4	3
255	1937 001 100	Shaft	1	90
256	1947 001 000	Spacer	1	31
257	09 0932 033 001	Annular grooved ball bearing 16 101	2	24
258	1945 006 000	Circlip J 30 x 1.2	1	2
259	1950 033 000	Seal	2	7
260	0644 011 000	Spring retainer	1	1
261	0841 034 000	Nut M 8 x 1	1	4

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Fuel Tank

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
270	1986 039 008	Fuel tank with filler caps and gauge glass	1	3130
270a	1950 024 000	Seal <i>nml</i>	1	
270b	2015 008 000	Plug M 8	1	
271	1972 018 005	Filler cap for oil	1	69
272	1972 017 000	Filler cap for fuel	1	95
273	1951 003 000	Tank bracket, right	1	1095
274	1951 002 000	Tank bracket left	1	1110
275	1940 022 000	Hexagon socket head screw M 10 x 30	4	27
276	1951 001 000	Tank strap	2	127
277	1960 004 000	Fabric underlay, 670 mm long	2	77
278	1940 021 000	Eye-bolt	2	40
279	1949 006 000	Pin for tank bracket	4	25
280	0245 023 004	Spring washer for M 10	4	2
281	0242 009 000	Nut	4	11
282	1951 004 000	Mounting bracket	1	180
283	0245 023 003	Spring washer for M 8	2	1.2
284	0940 073 001	Hexagon head screw M 8 x 20	2	13
285	1986 012 000	Fuel filter	1	455
286	0941 052 000	Hexagon head screw M 10 x 30	2	29
287	1986 031 006	Gauge glass assembly, for oil level, version: for two-wheel tractor	1	45
	1986 031 008	Gauge glass for oil level, version: for stationary engine	1	50
288	0250 042 001	Sealing ring <i>012527</i>	4	0.5
289	1940 010 001	Banjo plug	2	13.5
290	1987 041 000	Leak-off pipe assembly, from nozzle to tank (state required length)	1	
291	1950 024 000	Sealing ring	2	1
292	1940 011 000	Banjo plug	1	27
293	1986 030 001	Fuel pipe assembly, from tank to filter, banjo at one end rotated 90 degrees in relation to banjo at other end (state required length)	1	
294	0250 073 000	Sealing ring	4	1
295	1940 012 001	Banjo plug M 14 x 1.5	1	23

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Dynamo, 75 and 90 Watt

Illustr. No.	Part No.	Designation	Num- ber off	Weight per unit in gr.
300	1986 072 000	End shield with 2 studs	1	3320
301	1986 049 000	Dynamo 75 Watt (REE 75/12/1800/CR/1) will be superseded, after exhaustion of stocks, by:	1	4525
	1986 049 100.8	Dynamo 90 Watt (LJ/GEH 90/12/1800 FR 11)	1	
	1986 207 000.8	Cable set (2 cables, connection between dynamo and voltage regulator		
	1986 209 000.8	Voltage regulator (RS/TBA 75...90/12 A1)	1	
	1986 208 000.8	Bracket for voltage regulator	1	
	0941 051 000	Screw, hexagon socket head M 8x45	2	
	1940 039 000	Screw, hexagon socket head M 8x35	2	
	0250 031 002	Washer	4	
	0941 057 008	Cheese head screw M 6x12	2	
	0245 023 002	Spring washer for M 6	2	
	0316 057 002	Nut M 6	2	
302	1947 002 000.8	Adjusting collar	1	600
303	1980 008 000.8	V-belt pulley	1	310
304	1911 016 000.8	Mounting cradle	1	860
305	1987 032 005.8	Bracket with 2 studs	1	910
306	1940 008 000	Stud M 8x28	4	12.5
307	0245 023 003	Spring washer for M 8	8	1.2
308	0242 020 000	Nut M 8	4	6.5
	0245 023 005	Spring washer for M 12	2	
	1940 023 000	Hexagon head screw M 12x40	2	
309	1911 014 000.8	Mounting cradle cap	1	280
310	1940 039 000	Hexagon socket head screw M 8x35	4	15
311	1980 009 000.8	V-belt pulley rim	1	190
312	1940 028 000.8	Cheese head screw M 8x40	3	17
313	1980 010 000.8	V-belt	1	54
	09 1964 102 100	Carbon brushes (WSK 39 L 3 Z - K 21)	2	

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Electric Starter

Illustr. No.	Part No.	Designation	Num- ber off	Weight per unit in gr.
320	1911 017 000	Cover, 200 mm internal dia.	1	
	1911 017 008	Cover, 232 mm internal dia.	1	1217
	1911 017 005	Cover, 270 mm internal dia.	1	1122
321	1940 020 000	Hexagon head bolt M 10 x 90	5	64
322	0245 023 004	Spring washer for M 10	5	2
323	0242 009 000	Nut M 10	5	11
324	1940 030 101	Stud M 12 x 82	2	83
325	0245 023 005	Spring washer for M 12	2	3
326	0942 025 100	Nut M 12	2	13.5
327	1986 050 005	Flywheel with gear ring	1	23750
		consisting of: 1 x 1980 002 005 flywheel 1 x 1934 001 000 gear ring		
	1987 013 000	Flywheel with gear ring, version for fitting centrifugal plug	1	
328	1986 072 000	End shield with 2 studs, version with starter (flange-mounted engine)	1	3320
329	1940 003 101	Stud M 8 x 18	2	9
330	1940 008 000	Stud M 8 x 28	2	12.5
331	1986 048 100	Starting motor (1.3 H. P.) <i>n m L</i>	1	11300
332	1911 015 000	Cap	1	165

Refuse to accept non-genuine parts!

Built-in Disengaging Clutch

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
	1986 058 000	Clutch K 160 assembly, version without starter	1	14600
	1986 058 003	Clutch K 160 assembly, version with starter	1	
	1986 058 051	Clutch K 160 assembly, version without starter (Güldner)	1	
335	1942 011 000	Hexagon nut M 22 x 1.5	1	70
336	1944 012 000	Lock washer 23 mm dia.	1	13
337	1911 019 000	Bearing cap	1	830
338	0245 023 004	Spring washer for M 10	11	2
339	0941 052 000	Hexagon head screw M 10 x 30	6	29
340	1950 035 000	Gasket (synthetic rubber)	1	9
341	1950 036 000	Seal for bearing	2	54
342	1932 007 000	Radix bearing	2	287
343	1947 004 000	Spacer collar	1	148
344	1946 003 000	Woodruff key	1	10
345	1937 002 100	Driving shaft	1	1430
346	0240 129 000	Air vent screw	1	3.5
347	1940 030 101	Stud M 12 x 82 (for starter)	2	85
348	0242 009 000	Nut M 10	6	10.5
349	1940 029 101	Stud M 10 x 58	5	61
350	0245 023 005	Spring washer for M 12	2	3
351	0942 025 100	Nut M 12	2	13
352	1911 018 000	Clutch housing	1	5130
353	1937 003 000	Shaft for clutch lever	1	640
354	1945 008 000	Circlip A 17	1	1
355	0244 058 000	Shim	as requ.	0.2
356	1805 041 100	Spring	2	2
357	1859 012 010	Disconnecter assembly	1	250
	1859 013 000	Disconnecter (Bungartz)	1	
	1825 072 000	Spring (Bungartz)	2	
358	1940 042 000	Hexagon head screw M 10 x 30	1	26
359	1948 004 001	Clutch release fork	1	300
360	0316 057 002	Nut M 6	2	2
361	0245 023 002	Spring washer for M 6	2	0.6
362	0240 001 101	Stud M 6 x 15	2	2.5
363	1944 009 000	Spacer plate	1	15
364	1948 010 000	Lever, spring steel	1	250
365	0240 059 101	Cheese head screw M 6 x 12	2	4
366	1948 008 000	Cheek of clutch lever handle	1	37
367	1948 009 000	Cheek of clutch lever handle	1	40
368	1948 005 000	Clutch lever	1	220
369	1948 006 005	Clutch adjusting lever assembly with screw 0240 078 000	1	147
370	0245 023 003	Spring washer for M 8	1	1.2
371	0240 078 000	Hexagon head bolt M 8 x 30	3	17
372	0242 020 000	Hexagon nut M 8	2	6
373	0941 018 000	Hexagon socket head screw M 8 x 30	2	14
374	1948 007 000	Stop for clutch lever	1	400

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Clutch K 160, Belt Pulley, Pedestal

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
375	1881 088 007	Clutch K 160	1	1595
376	1864 008 202	Driving plate K 160	1	415
377	0245 023 002	Spring washer for M 6	18	0.6
378	1815 008 000	Hexagon head screw M 6	18	5
327		Flywheel (see Plate 3 and 11)	1	
379	1911 011 000	Centering plate for flywheel	1	1295
380	1959 009 000	Centering plate for driving shaft	1	1585
381	1940 006 101	Stud M 10 x 25	4	24
382	1980 006 000	Belt pulley	1	2950
383	1980 007 000	V-belt pulley	1	3015
383 ^a	0941 052 000	Hexagon head screw M 10 x 30	4	
384	0245 023 004	Spring washer for M 10	10	2
385	0242 009 000	Nut M 10	10	11
386	1911 010 000	Cover	1	1107
387	1940 020 000	Hexagon head bolt M 10 x 90	6	64
388	1987 026 000	Pedestal with spacer bushes and bolts	1	9470
	1908 000 001	Pedestal	1	
389	1947 000 000	Spacer bush	2	67
390	0245 023 005	Spring washer for M 12	4	3
391	1940 043 000	Hexagon head bolt M 12 x 55	2	68
392	1940 044 000	Hexagon head bolt M 12 x 75	2	80
	1881 090 001	Clutch K 180	1	
	0940 073 001	Screw M 8 x 10	6	
	0245 023 003	Spring washer for M 8	6	
	1864 015 102	Driving plate 180/68, profil 18 x 23 x 3	1	
		Bungartz Rossi		

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Gear Unit

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
	1986 054 100	Gear unit $i = 2$	1	
	1986 054 103	Gear unit $i = 0.67$	1	
	1986 054 105	Gear unit $i = 0.56$	1	
400	1950 035 000	Gasket	1	40
401	1987 039 100	Gearcase with 2 studs and grooved ball bearing 6207	1	1975
402	0250 004 001	Seal	1	0.2
403	0940 105 100	Screw plug	1	10
404	1932 007 000	Grooved ball bearing 6207	2	285
405	1940 029 001	Stud M 10 x 50	2	35
406	1940 031 200	Stud M 10 x 93	5	65
407	0245 023 004	Spring washer for M 10	7	2
408	0242 009 000	Hexagon nut M 10	7	11
409	1950 037 000	Gasket	1	2
410	1987 040 100	Gearcase cover with Radiax bearing and shaft sealing ring	1	1835
411	1950 036 000	Shaft sealing ring 35 x 62 x 10	1	70
412	1949 011 000	Dowel tube 12 mm dia.	2	4
413	0950 014 001	Seal	1	0.4
414	0940 025 000	Screw plug M 8 x 9	1	10
415	1986 059 000	Layshaft with layshaft wheel (30 teeth, ratio 0.56)	1	1540
416	1986 059 003	Layshaft with layshaft wheel (34 teeth, ratio 0.67)	1	1714
417	1986 059 005	Layshaft with layshaft wheel (56 teeth, ratio $i = 2$)	1	2505
418	1934 003 000	Driving gear 54 teeth	1	1480
419	1934 007 000	Driving gear 51 teeth	1	1240
420	1934 005 000	Driving gear 28 teeth	1	453
421	1946 003 000	Woodruff key	1	10
422	1944 010 000	Shim	as requ.	
423	1944 012 000	Lock washer	1	11
424	1942 011 000	Hexagon nut M 22 x 1.5	1	68

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Centrifugal Clutch, Version: with Retaining Ring

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
	1987 025 103	Centrifugal clutch assembly, version: flat-belt pulley	1	7400
	1987 025 108	Centrifugal clutch assembly, version: V-belt pulley	1	13800
430	1959 006 100	Clutch hub	1	1280
431	0945 101 000	Circlip	1	17
432	0944 071 010	Shim 0.8 mm	as requ.	6
433	0950 106 000	Nilos ring	2	5
434	0959 087 001	Stop bracket	2	18.5
435	0240 059 101	Cheese head screw M 6 x 18	4	5
436	0245 023 002	Spring washer for M 6	8	0.6
437	0316 057 002	Hexagon nut M 6	4	2.5
438	0949 044 001	Pivot for friction shoe	2	68
439	0245 023 005	Spring washer for M 12	2	3
440	0942 025 100	Hexagon nut M 12	2	14.5
441	0959 085 001	Inset plate, bent	2	19.5
442	0959 086 001	Inset plate, straight	2	12.5
443	0240 038 002	Hexagon head screw M 6 x 15	4	5
444	0939 038 000	Spring for friction shoe	4	6
445	0949 063 000	Stop	2	3
446	1959 007 005	Friction shoe with lining	2	504
447	0644 002 001	Shim 0.5 mm for friction shoe	} as requ.	
	0644 002 002	Shim 0.3 mm for friction shoe		
448	0944 072 000	Washer for friction shoe	2	2
449	0242 020 000	Hexagon nut M 8	2	6
450	0958 022 000	Clutch lining	2	22
451	0240 076 000	Cheese head screw M 5 x 15	4	3
452	0959 070 100	Clutch case, version with flat-belt pulley	1	3765
453	1986 067 100	Clutch case, version with V-belt pulley	1	6695
454	0999 127 000	Grease nipple	1	3
455	09 0932 021 001	Ball bearing 16 008 DIN 625	2	128
456	0947 101 000	Spacer	1	
457	0950 094 000	Sealing ring	1	3.5
458	0947 102 000	Spacer ring	1	7.5
459	1944 010 010	Shim 0.3 mm	} as requ.	
	1944 010 011	Shim 0.8 mm		
460	0945 102 000	Circlip	1	5
461	0959 103 000	Retaining ring	1	85
462	0245 023 003	Spring washer for M 8	3	1.2
463	1815 007 000	Hexagon head screw M 8 x 20	3	12
464	1959 005 000	Centering flange, 262 mm external dia.	1	2840
465	1959 011 000	Centering flange, 220 mm external dia.	1	2000
466	1815 008 000	Hexagon head screw M 6 x 18	8	5
	0241 036 101	Stud M 8 x 22	6	
467	1911 010 005	Cover for item 464 (265 mm internal dia.)	1	820
468	1911 010 008	Cover for item 465 (228 mm internal dia.)	1	940
469	1940 033 000	Countersunk screw M 6 x 30	8	5

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Components for Centrifugal Clutch, Version: with Ring Nut

Illustr. No.	Part No.	Designation	Num- ber off	Weight per unit in gr.
	0959 070 000	Clutch case, version: with flat-belt pulley	1	3765
	1986 067 000	Clutch case, version: with V-belt pulley	1	6670
475	1959 006 000	Clutch hub	1	1305
476	0945 022 000	Circlip	2	8.5
477	0944 071 000	Cover ring 0.8 mm	} as requ.	9
	0944 071 001	Cover ring 1.0 mm		11
	0944 071 002	Cover ring 0.3 mm		4.5
478	09 0932 021 001	Ball bearing 16 008 DIN 625	2	128
479	0947 013 000	Spacer	1	330
480	0945 018 000	Lock washer		12.5
481	0942 036 001	Ring nut		35

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Flexible Coupling, Oil-Bath Air Cleaner, Silencer, Tool Kit

Illustr. No.	Part No.	Designation	Number off	Weight per unit in gr.
485	1986 052 000	Socket-type flexible coupling assembly (on driving shaft)	1	5870
	1986 052 005	Socket-type flexible coupling assembly (for attachment to flywheel), comprising items 489, 490, 491, 486, 487	1	6150
486	1986 056 008	Coupling flange, not drilled	1	3200
487	1959 004 000	Flexible plate	1	400
488	1986 056 005	Coupling flange, drilled	1	2265
489	1986 056 000	Centering flange	1	2440
490	0245 023 002	Spring washer for M 6	12	0.6
491	0240 003 000	Hexagon head screw M 6 x 25	12	8
492	1986 000 000 1967 000 000	Oil-bath air cleaner (LOZ 1.6-16) Intermediate section for oil-bath air cleaner, version: Hummel	1 1	1675 134
493	09 1986 033 000	Quick-release fastening	3	11
494	1986 032 000	Oil container	1	285
495	0242 020 000	Hexagon nut M 8	6	6.5
496	0245 023 003	Spring washer for M 8	6	1.2
497	1950 001 000	Gasket for air cleaner	1	8.5
498	1940 003 101	Stud M 8 x 18	2	9.5
499	1973 002 000	Silencer assembly	1	2435
	1973 002 001	Silencer assembly, with fishtail	1	
	1973 002 005	Silencer assembly, version: with electric starter	1	
	1973 003 000	Silencer assembly, version: Fahr	1	
500	1950 000 000	Gasket for silencer	1	16.5
501	0940 017 111	Stud M 8 x 20	4	11.5
502	1986 053 000	Control cable assembly, with throttle control lever comprising: 1 x 0289 035 000 adjusting screw assembly 1 x 0299 041 000 control cable, 1100 mm long, with soldering tag 1 x 0299 042 000 Bowden spiral assembly 1 x 0988 040 000 throttle control lever 1 x 1951 006 000 fixing sleeve 1 x 0244 054 002 washer 1 x 0945 030 000 split pin 1 x 1943 000 001 round-headed rivet 1 x 1951 007 001 mounting clip	1	366
	1976 000 100	Tool kit, comprising items 503-506	1	415
503	1976 001 000	Spanner, 11 mm and 12 mm width	1	69
504	1976 013 000	Spanner, 17 mm and 19 mm width	1	100
505	1976 015 000	Spanner, 10 mm and 14 mm width	1	63
506	0976 009 001	Box spanner	1	80
507	09 1999 002 006	Box containing self-igniting fuses	1	105
	09 1986 057 100	Set of gaskets	1	

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ANZUGSMOMENTE DER SCHRAUBEN UND MUTTERN

D500

Schrauben

F & S-Nr.	Stückzahl	verwendet für Teil	Maß	Anzugs- moment
0941 054 000	3	Anwerfring	M 8 x 25	2,5 kpm
1940 028 000	3	Keilriemenscheibe	M 8 x 40	2,5 kpm
1815 008 000	12	Zentrierflansch für Riemenscheibe	M 6 x 25	1,2 kpm
0240 003 000	12	Zentrierflansch für elastische Steckkupplung	M 6 x 25	1,5 kpm
1815 008 000	6	Kupplung K 160	M 6 x 18	1,2 kpm
1940 043 000	2	Sockel bei stat. Ausführung	M 12 x 55	4,2 kpm
1940 044 000	2		M 12 x 75	4,2 kpm

Muttern

F & S-Nr.	Stückzahl	verwendet für Teil	Maß	Anzugs- moment
0942 025 100	6	Lagerflansch	M 12	7,5 kpm
0242 009 000	6	Lagerdeckel	M 10	5,0 kpm
0242 009 000	6	Geräeträger	M 10	5,0 kpm
1942 001 000	2	Pleueldeckel	M 10	4,5 kpm
1942 008 000	8	Zylinderkopf	M 10	6,2 kpm
0242 020 000	2	Düsenhalter	M 8	2,5 kpm
0242 020 000	3	Einspritzpumpe	M 8	2,5 kpm
0316 057 002	2	Ölpumpe	M 6	1,4 kpm
1942 003 000	1	Kurbelwelle (Anwerfseite)	M 30 x 1,5	16,0 kpm
1942 002 000	1	Kurbelwelle (Antriebsseite)	M 40 x 1,5	30,0 kpm
0942 067 100	3	Keilriemenscheibe	M 8	2,3 kpm
0242 020 000	3	Anwerfscheibe	M 8	2,5 kpm
0942 025 100	2	Anlasser	M 12	7,5 kpm
0242 020 000	4	Kurbelkastendeckel	M 8	2,5 kpm
0242 009 000	4	Flachriemenscheibe	M 10	5,0 kpm
0242 009 000	4	Keilriemenscheibe	M 10	5,0 kpm
1942 011 000	1	Antriebsrad (ausrückb. Kupplg.)	M 22 x 1,5	10,0 kpm
0242 020 000	8	Fliehkraftkupplung	M 8	2,5 kpm
1942 011 000	1	Zentrierflansch für Wellen- anschluß (Riemenscheibe)	M 22 x 1,5	10,0 kpm
1942 011 000	1	Kupplungsflansch für Wellen- anschluß (elastische Steckkupplg.)	M 22 x 1,5	10,0 kpm