

AGROSAL d.o.o.



Piaggio FOCS LDW 702



AGROSAL d.o.o.

Gregorčičeva ulica 38, 5270 Ajdovščina
telefon: 05 368 90 96, fax: 05 368 90 97
e-mail: info@agrosal.si, www.agrosal.si

**LOMBARDINI**

A KOHLER COMPANY

Group: Piaggio LDW_702

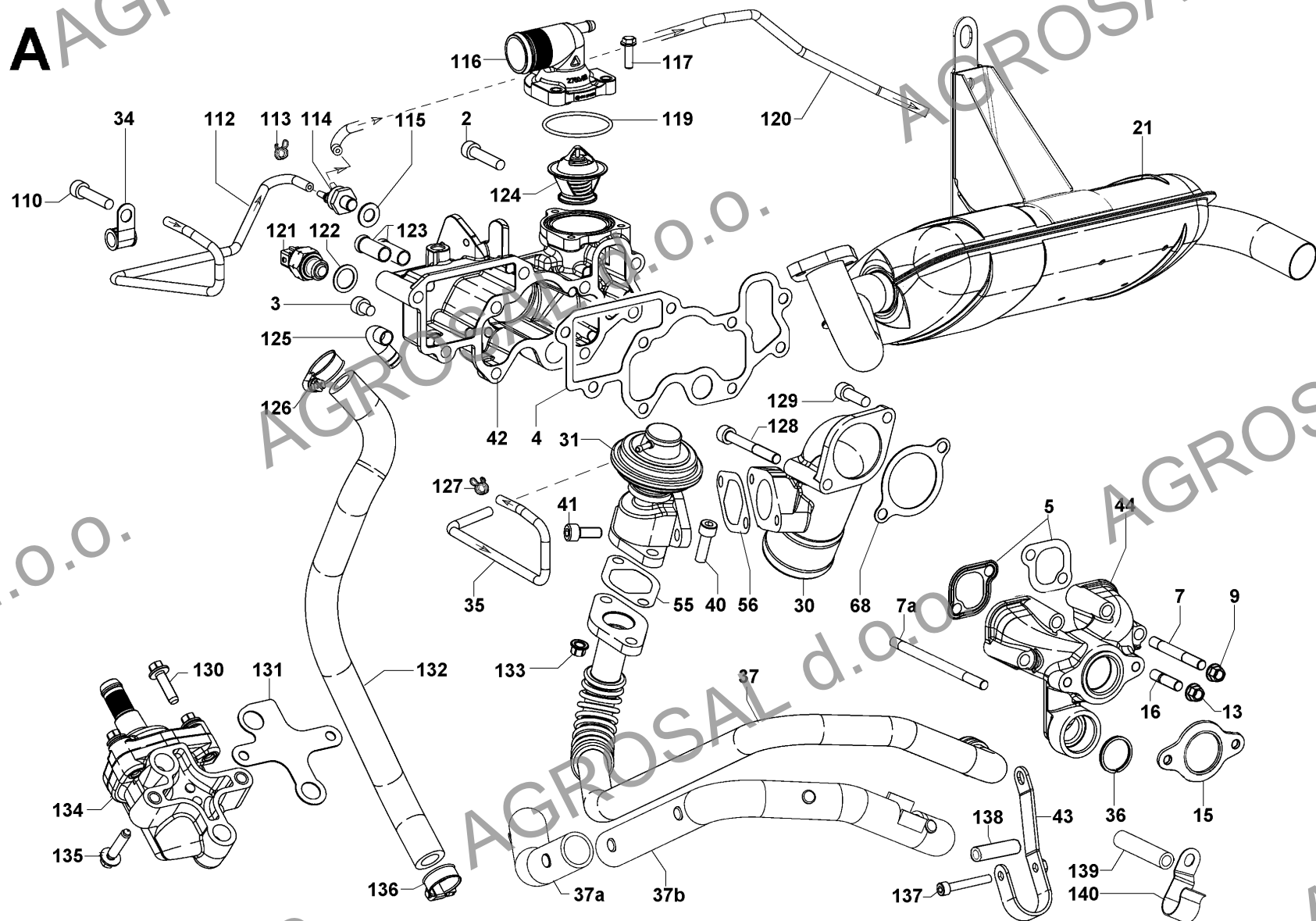
Engine: LDW_702/P Drawing: A

INTAKE AND EXHAUST

POS.	CODE	DESCRIPTION	Qty
2	9730.032	screw M 8 X 45	2
3	9732.064	screw M 8 X 30	4
4	4420.092	inl.manifold gasket	1
5	4420.070	eXh.manifold gasket	2
7	6780.028	stud M 8 X 55 (67)	3
7a	6780.088	stud M 8 X 118	1
9	3240.163	nut M 8	4
15	4420.076	eXhaust gasket	1
16	6780.171	stud M 8 X 22	2
21	9543.116	eXhaust muffler	1
30	3867.006	inlet flange	1
31	9700.118	EGR valve	1
34	3617.088	clamp	1
35	9346.086	union hose	1
36	8026.143	seal ring	1
37	9346.090	eXhaust union pipe	1
37a	6927.562	guard	1
37b	6927.576	guard	1
40	9732.074	screw M 8 X 20	2
41	9730.100	screw M 8 X 25	2
42	2486.474	inlet manifold	1
43	8545.868	bracket	1
44	2486.468	eXh.manifold with front outlet	1
55	4760.040	EGR valve gasket	1
68	4501.081	gasket	1
110	9730.032	screw M 8 X 45	1
112	9346.087	union hose	1
113	3630.069	clamp	2
114	9195.095	temperature sensor	1
115	4670.104	gasket	1
116	2750.413	thermostat cover	1
117	1760.081	screw M 6 X 20	3
119	1200.091	O ring	1
120	9346.085	union hose	1
121	9195.108	thermostat for water warning light/sensor for preheating plug c	1
122	4670.019	copper gasket diam.16	1
123	9599.172	blow-by pipe	2
124	9195.124	thermal eXpans.valve	1
125	9599.200	blow-by pipe	1
126	3630.147	clamp diam.12-22	1
127	3630.069	clamp	1
128	9730.035	screw M 8 X 65	1
129	9732.063	screw M 8 X 35	1
130	1760.131	bolt M 6 X 1 X 20	12
131	4460.040	gasket	1
132	9400.159	blow-by pipe	1
133	3240.163	nut M 8	2
134	2871.273	decanter body	1
135	1760.147	screw	2
136	3630.147	clamp diam.12-22	1
137	9730.016	screw M 6 X 35	1
138	3521.062	spacer	1
139	3521.075	spacer	1

INTAKE AND EXHAUST			
POS.	CODE	DESCRIPTION	Qty
140	3617.234	clamp	1

A



**LOMBARDINI**

A KOHLER COMPANY

Group: Piaggio LDW_702

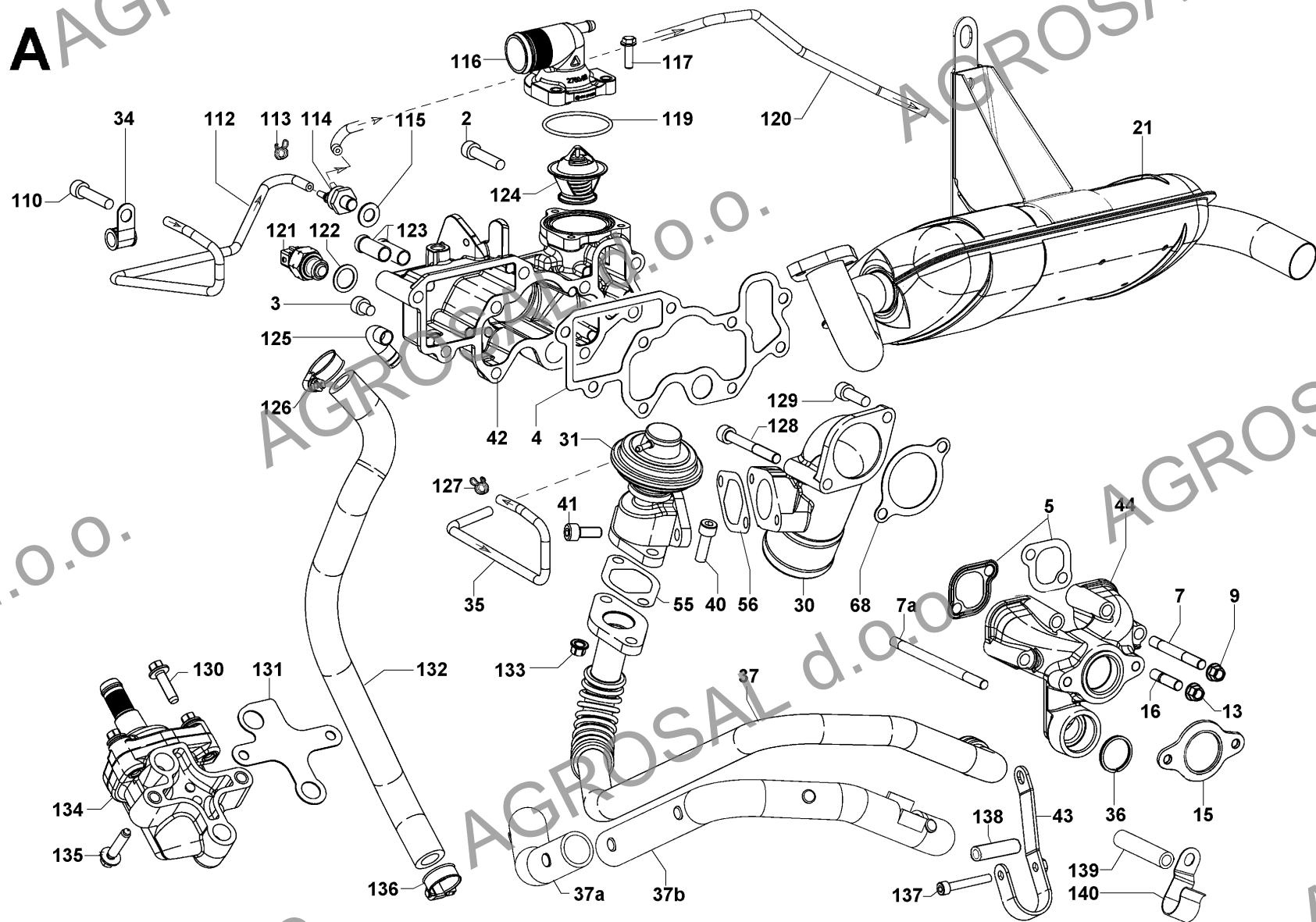
Engine: LDW_702/P Drawing: A

INTAKE AND EXHAUST

POS.	CODE	DESCRIPTION	Qty
2	9730.032	screw M 8 X 45	2
3	9732.064	screw M 8 X 30	4
4	4420.092	inl.manifold gasket	1
5	4420.070	eXh.manifold gasket	2
7	6780.028	stud M 8 X 55 (67)	3
7a	6780.088	stud M 8 X 118	1
9	3240.163	nut M 8	4
15	4420.076	eXhaust gasket	1
16	6780.171	stud M 8 X 22	2
21	9543.116	eXhaust muffler	1
30	3867.006	inlet flange	1
31	9700.118	EGR valve	1
34	3617.088	clamp	1
35	9346.086	union hose	1
36	8026.143	seal ring	1
37	9346.090	eXhaust union pipe	1
37a	6927.562	guard	1
37b	6927.576	guard	1
40	9732.074	screw M 8 X 20	2
41	9730.100	screw M 8 X 25	2
42	2486.474	inlet manifold	1
43	8545.868	bracket	1
44	2486.468	eXh.manifold with front outlet	1
55	4760.040	EGR valve gasket	1
68	4501.081	gasket	1
110	9730.032	screw M 8 X 45	1
112	9346.087	union hose	1
113	3630.069	clamp	2
114	9195.095	temperature sensor	1
115	4670.104	gasket	1
116	2750.413	thermostat cover	1
117	1760.081	screw M 6 X 20	3
119	1200.091	O ring	1
120	9346.085	union hose	1
121	9195.108	thermostat for water warning light/sensor for preheating plug c	1
122	4670.019	copper gasket diam.16	1
123	9599.172	blow-by pipe	2
124	9195.124	thermal eXpans.valve	1
125	9599.200	blow-by pipe	1
126	3630.147	clamp diam.12-22	1
127	3630.069	clamp	1
128	9730.035	screw M 8 X 65	1
129	9732.063	screw M 8 X 35	1
130	1760.131	bolt M 6 X 1 X 20	12
131	4460.040	gasket	1
132	9400.159	blow-by pipe	1
133	3240.163	nut M 8	2
134	2871.273	decanter body	1
135	1760.147	screw	2
136	3630.147	clamp diam.12-22	1
137	9730.016	screw M 6 X 35	1
138	3521.062	spacer	1
139	3521.075	spacer	1

INTAKE AND EXHAUST			
POS.	CODE	DESCRIPTION	Qty
140	3617.234	clamp	1

A



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A KOHLER COMPANY

Group: Piaggio LDW_702

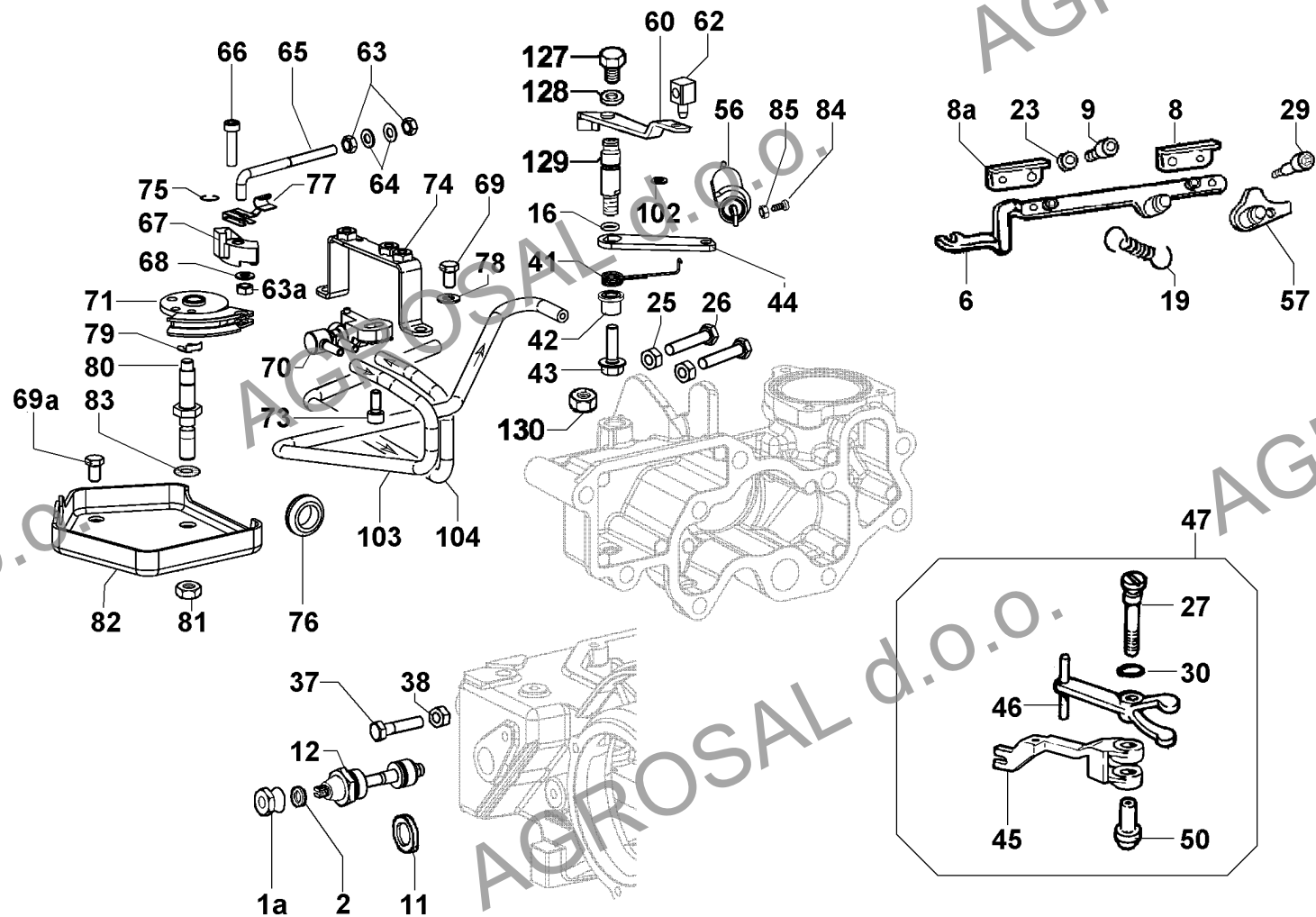
Engine: LDW_702/P Drawing: I

CONTROLS

POS.	CODE	DESCRIPTION	Qty
1a	3300.237	nut (EPA type)	1
2	4670.062	copper gasket diam. 6,2 X 10 X 1,5	1
6	1380.103	injection pump control rod	1
8	6320.073	plate	1
8a	«-----»	plate	0
9	9732.096	screw M 3 X 6	2
11	4480.046	gasket 16X20	1
12	8576.144	locked torque device	1
16	1200.052	O ring	1
19	5655.256	eXtra-fuel spring	1
23	7626.037	washer	2
25	3240.008	nut M 6	2
26	1760.029	adjusting bolt M 6X30	2
27	6110.101	control lever pin	1
29	9865.202	screw M 3 X 10	2
30	1200.037	rubber oil seal	1
37	1760.001	bolt M 6 X 1 X 10	1
38	3240.008	nut M 6	1
41	5660.065	recovery spring	1
42	1957.014	sleeve	1
43	1760.081	screw M 6 X 20	1
44	5200.674	internal lever	1
45	«-----»	see Pos. 47+...	0
46	6140.420	journal	1
47	4896.360	governor lever ass.y	1
50	1954.020	sleeve	1
56	4896.625	min-max device	1
57	6370.331	locking plate	1
60	5271.266	throttle lever	1
62	6205.029	pin	1
63	3240.004	nut M 5	2
64	771R.001	washer diam. 5,3	2
65	9245.170	tie rod	1
66	9730.095	screw M 5 X 20	1
67	2015.095	sensor cam	1
68	771R.001	washer diam. 5,3	1
69	1760.001	bolt M 6 X 1 X 10	2
70	9700.121	vacuum valve	1
71	5271.218	accelerator control lever	1
73	1755.002	bolt M 5 X 0,8 X 12	1
74	6360.155	plate	1
75	1241.053	circlip	1
76	5997.066	wire sleeve	1
77	3675.022	locking	1
78	7625.007	washer diam. 6	2
79	1241.056	circlip	1
80	6140.484	pin	1
81	3240.164	nut M 8	1
82	8545.844	bracket	1
83	1200.051	rubber oil seal	1
84	9800.136	screw M 3 X 14	1
85	3203.076	nut M 3	1
102	1241.053	circlip	1

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1
1
1



**LOMBARDINI**

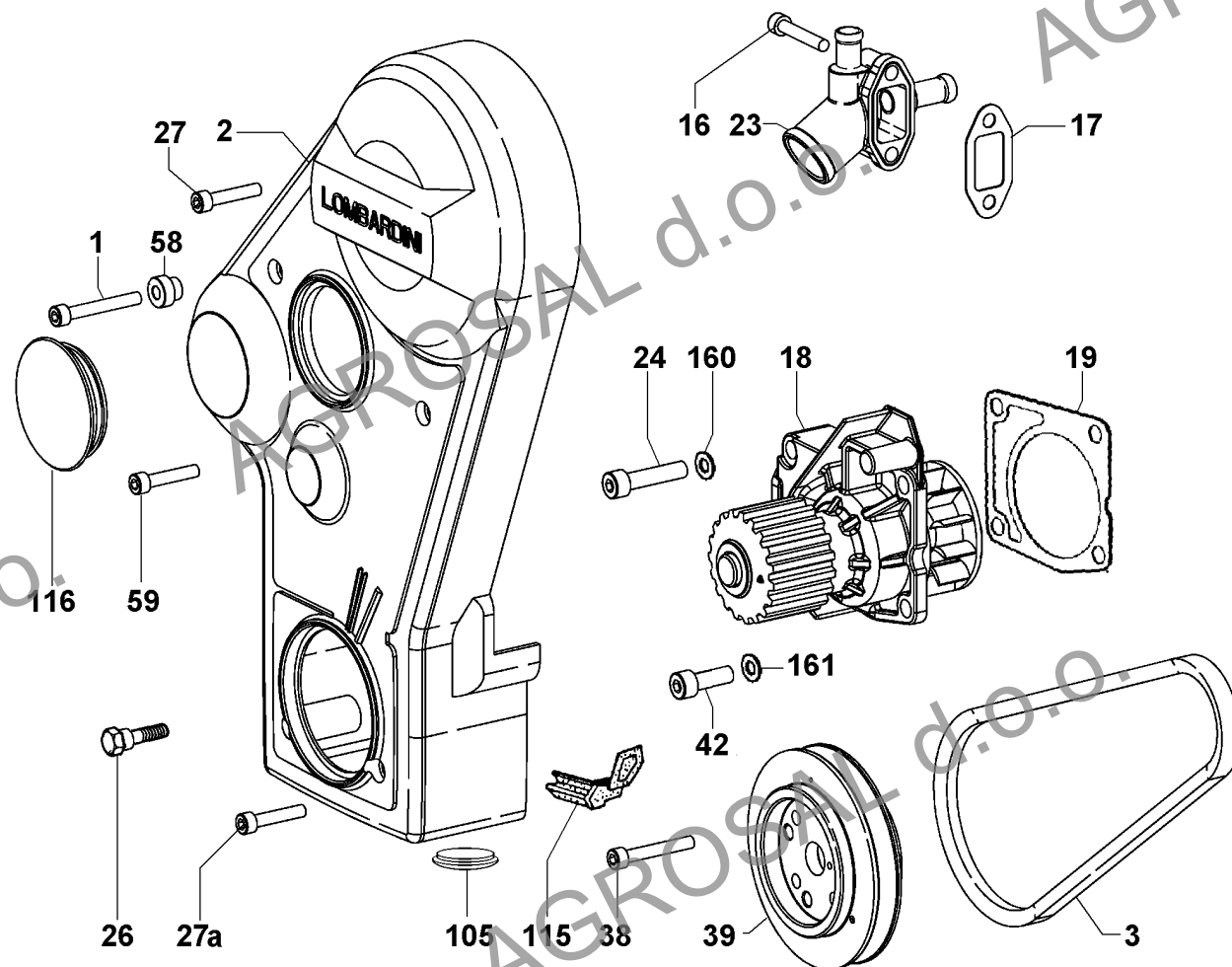
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Group: Piaggio LDW_702

Engine: LDW_702/P Drawing: G

COOLING SYSTEM

POS.	CODE	DESCRIPTION	Qty
1	9730.020	screw M 6 X 55	1
2	6927.706	belt guard (1 antidusty ring)	1
3	2440.405	belt mm 628	1
16	9730.016	screw M 6 X 35	2
17	4501.158	gasket	1
18	6584.439	cooling water pump	1
19	4580.215	pump body gasket	1
23	3867.004	flange	1
24	1770.178	screw M 8 X 1,25 X 35	2
26	«-----»	see Pos. H 49	0
27	9732.016	screw M 6 X 40	1
39	7051.143	pulley 1 groove d.=105 h 38,4	1
42	1770.160	screw M 8 X 1,25 X 16	2
58	3527.415	spacer	1
59	9730.015	screw M 6 X 30	1
105	9000.078	plug	1
115	4580.168	gasket	1
116	9000.134	cap diam. 60	1
160	«-----»	washer diam. 8 - no more fitted	0



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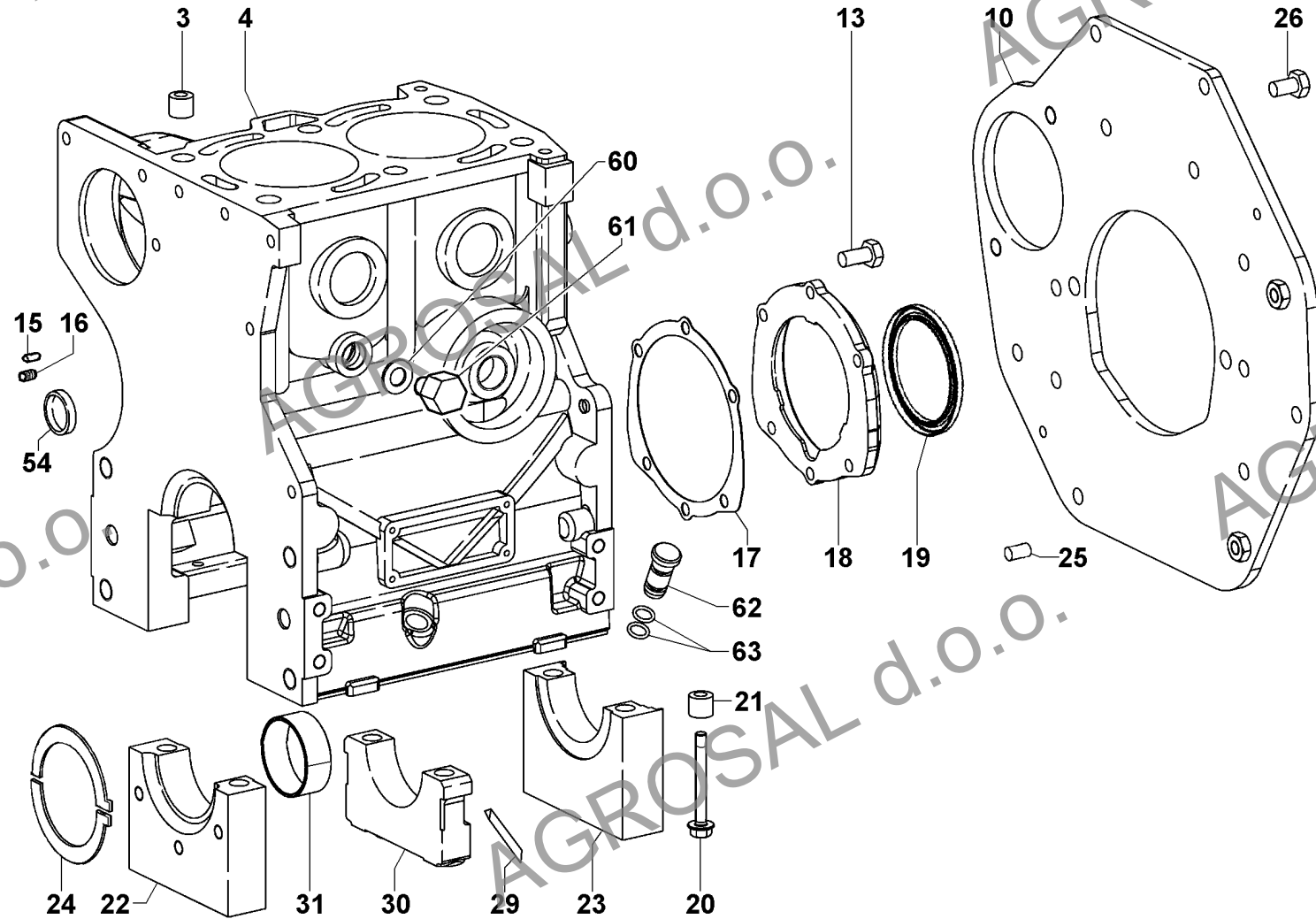
Group: Piaggio LDW_702

Engine: LDW_702/P Drawing: E

CRANKCASE/FLYWHEEL SIDE CRANKSHAFT FLANGE/MOUNTS

POS.	CODE	DESCRIPTION	Qty
3	1970.140	sleeve	2
4	1510.914	crankcase	1
10	«-----»	starting motor support	0
13	9730.010	screw M 6 X 16	6
15	9080.240	plug d.12	1
16	8990.022	eXpansion plug diam.30	4
17	4501.156	gasket	1
18	3790.078	flange for engine with eXternal altern.or without alternator	1
19	1213.347	seal ring 70X88X8	1
20	9820.120	fix. screw	6
21	1970.140	sleeve	2
22	«-----»	see Pos. 4	0
24	1257.158	thrust washer std	2
24	1257.159	thrust washer +0,10	2
24	1257.160	thrust washer +0,20	2
25	8400.108	lockpin 10 X 20	2
26	1770.197	bolt M 8 X 1,25 X 18	7
29	4400.054	gasket	4
30	«-----»	see Pos. 4	0
31	1611.193	supp.bearing std.	3
31	1611.194	supp.bearing -0,25	3
31	1611.195	supp.bearing -0,50	3
54	8430.105	taper pin 8X16	1
60	4670.019	copper gasket diam.16	1
61	9040.031	plug M 16 X 15	1
62	9080.285	plug	1
63	1200.034	rubber oil seal	2

E



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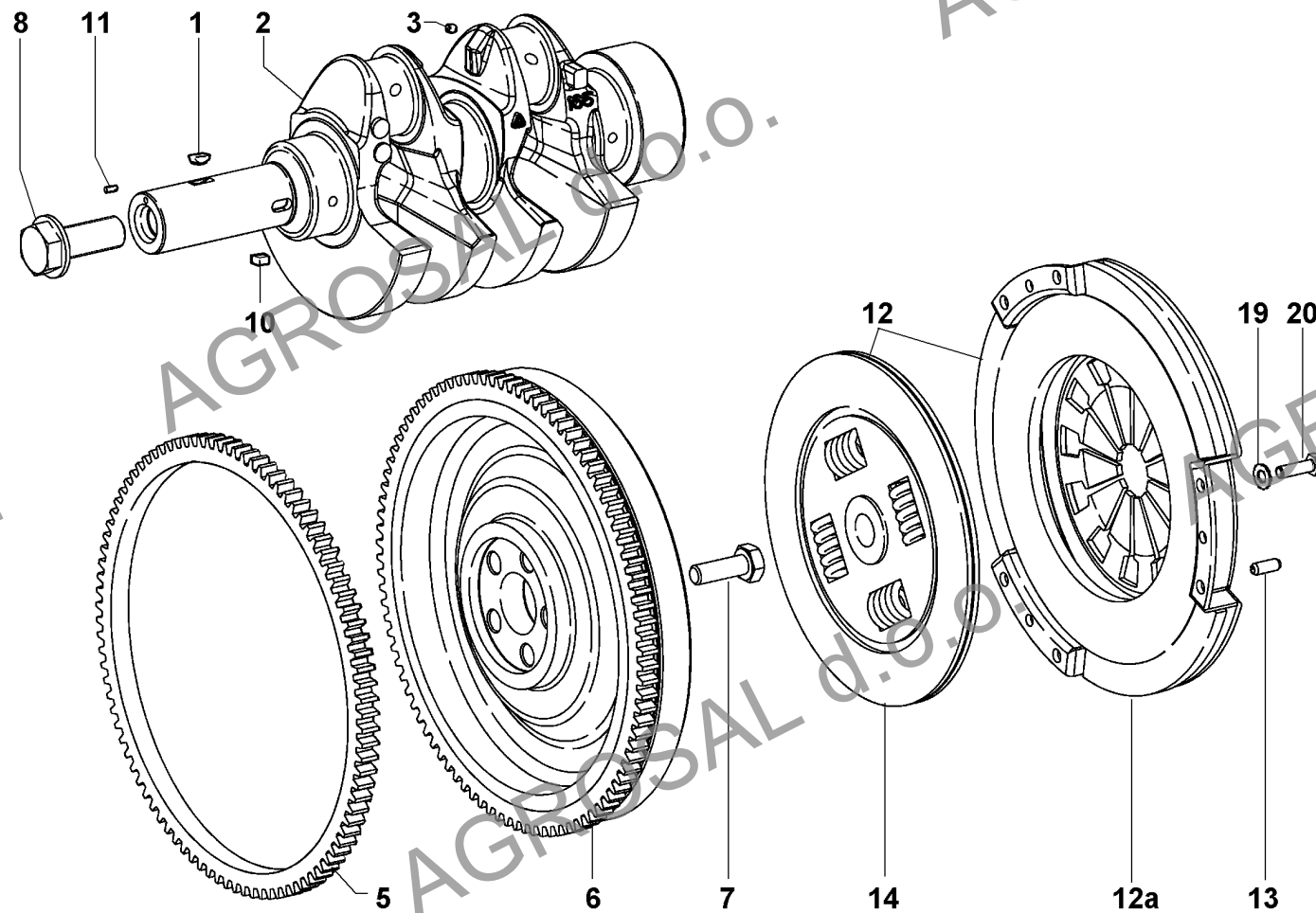
A KOHLER COMPANY

Group: Piaggio LDW_702

Engine: LDW_702/P Drawing: C

CRANKSHAFT/FLYWHEEL

POS.	CODE	DESCRIPTION	Qty
1	2280.119	key	1
2	1051.219	crankshaft	1
3	9080.132	plug diam. 6	2
5	2816.088	crown gear Ø 238 z=94	1
6	9881.449	flywheel with crown	1
7	1780.097	bolt M 10 X 30	5
8	9865.258	screw M 16 X 1,5 left rotation	1
10	2280.149	key (mm 8)	1
11	8430.004	tapper pin	1
12	4032.122	clutch ass.y	1
12a	5499.026	clutch device	1
13	8430.014	lockpin 6 X 16	3
14	3380.151	clutch plate	1
19	7565.004	washer diam. 6	6
20	1760.005	bolt M 6 X 1 X 16	6



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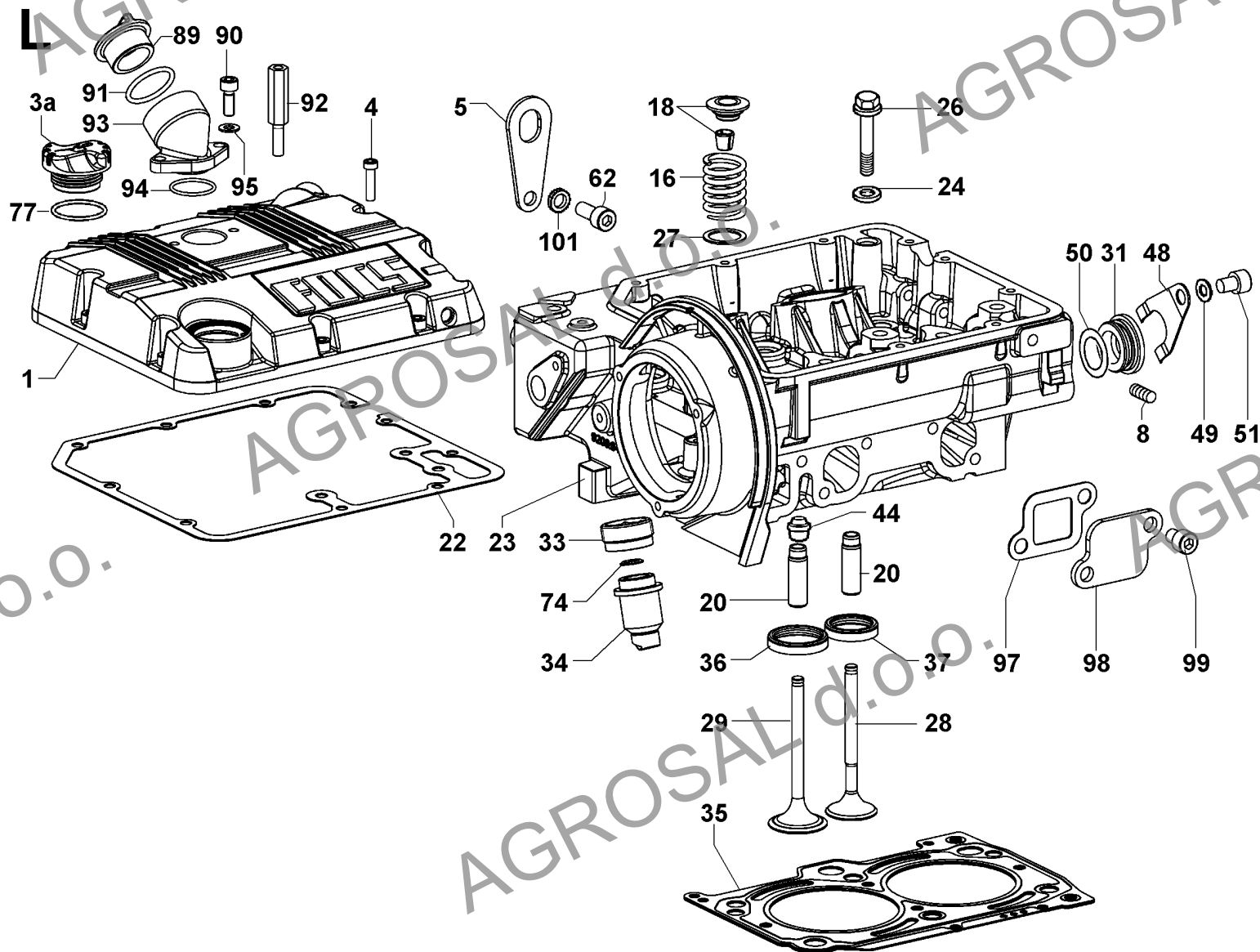
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Group: Piaggio LDW_702

Engine: LDW_702/P Drawing: L

CYLINDER HEAD/ROCKER ARM BOX

POS.	CODE	DESCRIPTION	Qty
1	2125.662	rocker arm cover ass.y	1
3a	9032.093	filler oil cap	1
4	9730.416	screw M 6 X 20	9
5	8545.190	lifting brace	2
8	9080.133	cap diam. 8	1
16	5755.168	valve spring	4
18	6410.017	retainer with half-collets	4
20	4845.200	valve guide std.	4
20	4845.220	valve guide +0,50	4
22	4400.103	gasket	1
23	9200.857	cylinder head with seats and guides (without valves)	1
24	7625.130	washer diam. 10,2	6
26	9820.222	special screw mm 90+10	6
27	7625.185	washer	4
28	9685.150	eXhaust valve	2
29	9652.157	intake valve	2
31	9065.007	plug	1
33	4130.096	precombustion chamber locking nut	2
34	6725.070	precombustion chamber	2
35	4730.826	head gasket 1,56 - 1,64 (1 small hole)	1
35	4730.827	head gasket 1,66 - 1,74 (2 small holes)	1
35	4730.828	head gasket 1,76 - 1,84 (3 small holes)	1
36	8000.228	inlet v.seat	2
37	8000.229	eXhaust v.seat	2
44	4535.015	valve retainer	4
48	5570.019	retainer	1
49	7625.010	washer diam. 8	1
50	1200.081	O ring	1
51	1770.127	bolt M 8 X 14	1
62	1770.002	bolt M 8 X 1,25 X 16	1
74	3527.517	spacer to restore the correct projection in the pre-chamber	2
77	1200.082	O ring 3106	1
89	9032.086	filler oil cap	1
90	9730.010	screw M 6 X 16	2
91	1200.082	O ring 3106	1
92	2501.201	hollowstud	1
93	1570.059	oil filler	1
94	1201.084	O ring 2093	1
95	7625.007	washer diam. 6	2
97	4460.037	gasket	1
98	3800.057	flange	1
99	9732.092	screw M 8 X 20	2
101	7625.010	washer diam. 8	1



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Group: Piaggio LDW_702

Engine: LDW_702/P Drawing: F

FUEL SYSTEM

POS.	CODE	DESCRIPTION	Qty
1	9375.993	delivery pipe	1
2	9730.313	fix screw	4
3	4750.014	delivery pipe seal	1
4	3240.164	nut M 8	2
5	7555.029	washer diam. 8	2
6	6780.049	intake stud M 8 X 20 (36)	2
7	6585.084	feed pump in-out parallel	1
8	1200.087	O ring 3150	1
8a	<----->	gasket	0
9	7200.721	drive rod	1
10	1200.286	seal ring 9,25X1,78	4
11	3240.164	nut M 8	4
12	6780.135	stud	4
14	1410.112	tapped	2
16	9680.041	bleeding valve	2
17	5801.274	delivery valve spring	2
18	9672.107	delivery valve	2
20	<----->	injection plunger - see Pos. F 25	0
23	5755.113	tappet spring	2
24	<----->	push rod - see Pos. F 25	0
25	6590.290	nozzle injection pump	2
27	8335.142	adj.spacer 2,00	2
27	8335.143	adj.spacer 1,90	2
27	8335.144	adj.spacer 1,80	2
27	8335.145	adj.spacer 1,70	2
27	8335.146	adj.spacer 1,60	2
27	8335.147	adj.spacer 1,50	2
27	8335.148	adj.spacer 1,40	2
27	8335.149	adj.spacer 1,30	2
27	8335.150	adj.spacer 1,20	2
27	8335.151	adj.spacer 1,10	2
27	8335.152	adj.spacer 1,00	2
28	<----->	pressure spring - no longer avail.	0
29	1420.048	drive rod	2
30	3527.220	spacer	2
31	<----->	filler - no longer available	0
32	4760.015	valve gasket	2
35	1200.277	seal ring 20,35X1,78	2
36	5375.017	governor sleeve	2
37	9730.206	screw TCEI M 4 X 12	8
39	<----->	circlip diam. 19 - see Pos. F 25	0
40	5989.007	spark arrestor	2
41	1200.213	O ring 26,70X1,78	2
43	6531.436	nozzle	2
44	1901.030	union bolt M 10	2
45	4670.059	copper gasket diam.10	2
47	1901.030	union bolt M 10	1
48	1570.045	filler cap M 14	1
49	3587.185	electro-valve	1
51	3730.169	fuel filter cartridge	1
52	4670.059	copper gasket diam.10	2
53	4670.061	copper gasket diam.14	2
54	9376.118	hose to inj.pump	1

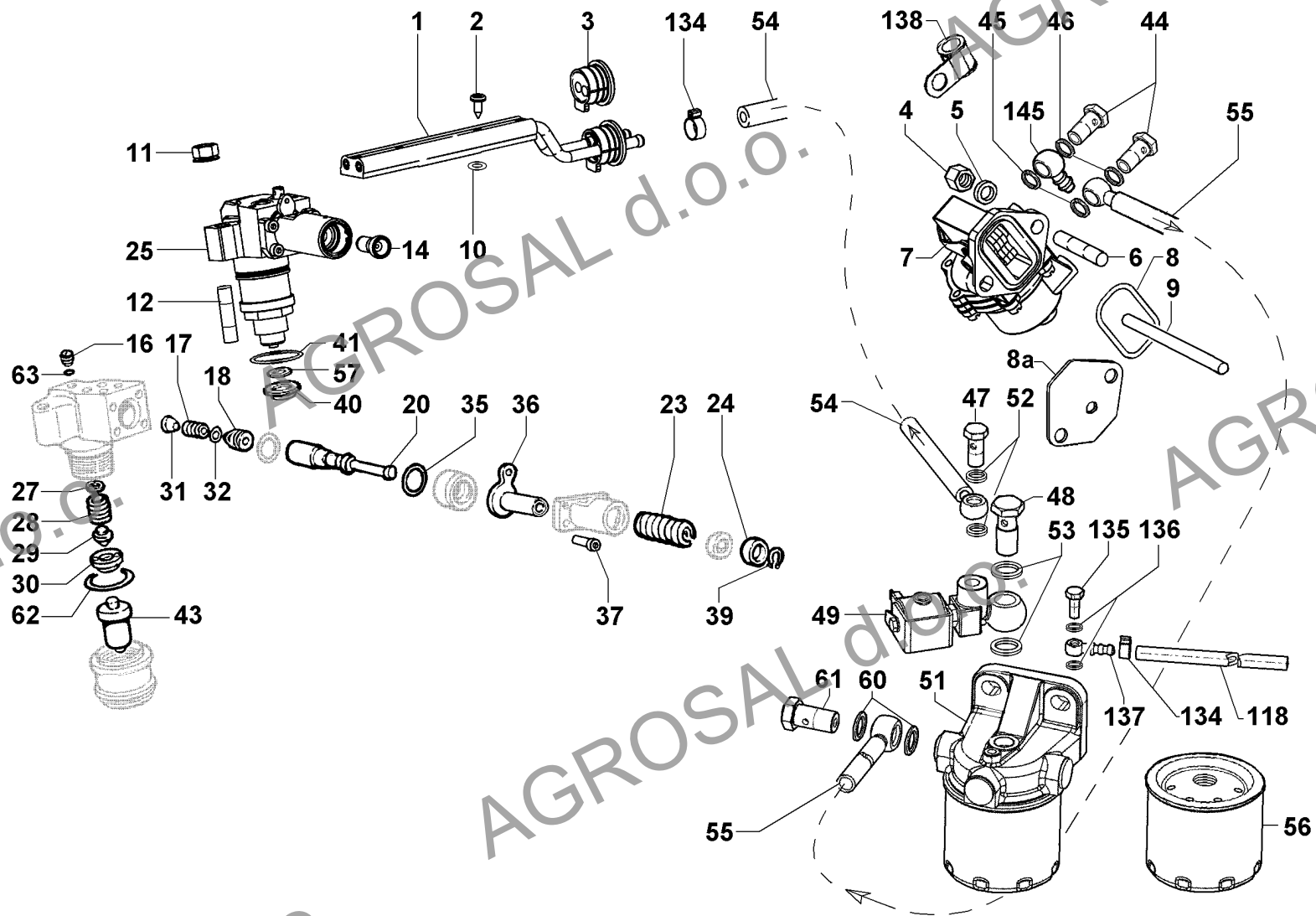
Group: Piaggio LDW_702

Engine: LDW_702/P Drawing: F

FUEL SYSTEM

POS.	CODE	DESCRIPTION	Qty
55	9374.036	fuel hose mm 360	1
56	2175.256	fuel filter cartridge	1
57	4670.082	copper gasket diam.14 X 1	2
60	4670.061	copper gasket diam.14	2
61	1901.032	union bolt M 14	1
62	1200.287	O ring 25,12X1,78	2
63	4760.038	gasket	2
118	9376.107	bleeding pipe mm 715	1
134	3630.004	clamp	1
134a	3630.217	clamp dia 11,5-13,5	1
135	1901.033	union bolt M 6	1
136	4670.062	copper gasket diam. 6,2 X 10 X 1,5	2
137	7270.108	banjo union diam. 6	1
138	3617.088	clamp	1
145	7270.138	banjo union diam.10	1

F

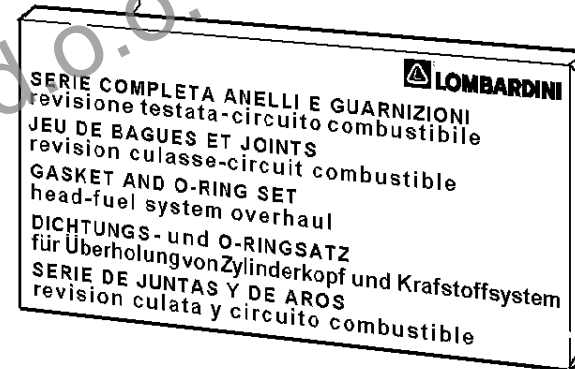


GASKET/RING SET

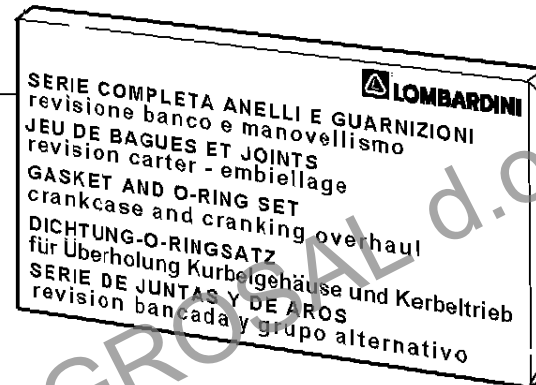
POS.	CODE	DESCRIPTION	Qty
1a	8205.126	ring and gasket complete set - head and fuel system overhaul (w	1
1b	8205.127	ring and gasket complete set - crankcase and cranking overhaul	1

N

1a



1b



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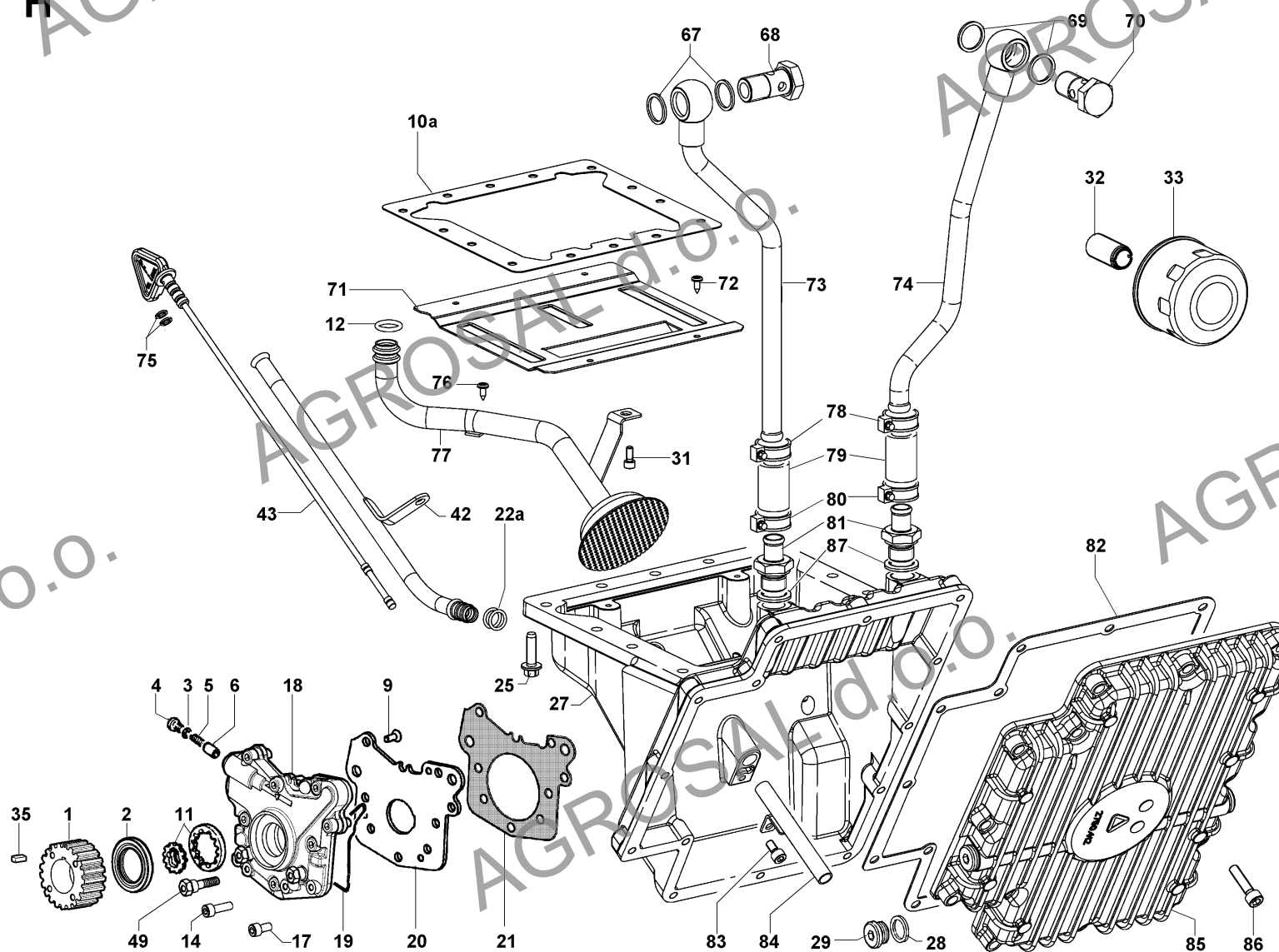
Group: Piaggio LDW_702

Engine: LDW_702/P Drawing: H

LUBRICATING SYSTEM

POS.	CODE	DESCRIPTION	Qty
1	6975.292	driving pulley	1
2	1213.343	seal ring 32X50X6	1
3	4670.060	copper gasket diam.12	1
4	9015.005	plug	1
5	5625.008	pressure valve spring	1
6	6495.045	drive rod	1
9	9800.061	screw M 6 X 16	3
10	4775.552	gasket	1
11	7750.105	oil pump rotors	1
12	1200.030	rubber oil seal	1
14	1770.007	bolt M 8 X 1,25 X 30	1
17	9732.074	screw M 8 X 20	6
18	6605.096	OIL PUMP	1
19	1200.292	O ring	1
20	«-----»	see Pos. 18	0
21	4580.216	gasket	1
22a	1200.034	O ring 105	2
25	1760.131	bolt M 6 X 1 X 20	12
27	6645.774	oil panel	1
28	4670.060	copper gasket diam.12	2
29	8965.091	plug M 12	2
31	1760.130	bolt M 6 X 1 X 12	1
32	7265.021	oil filter connector	1
33	2175.107	oil filter cartridge (mm 59)	1
35	«-----»	see Pos. C 10	0
42	9330.127	dipstick guard	1
43	1400.464	dipstick on cyl.head	1
49	9865.174	screw	2
67	4480.046	gasket 16X20	2
68	1901.177	union bolt M 16	1
69	4480.046	gasket 16X20	2
70	1901.177	union bolt M 16	1
71	5168.091	panel	1
72	9820.217	self-tapping screw 3,9 X 9,5	4
73	9535.141	scavenge oil pipe	1
74	9535.142	scavenge oil pipe	1
75	1200.328	rubber oil seal	2
76	9820.168	self-tapping screw 3,9 X 9,5	1
77	9485.314	suction pipe	1
78	3630.192	clamp diam.20	2
79	9440.059	rubber sheathing	2
80	3630.192	clamp diam.20	2
81	7301.177	banjo union diam. 13	2
82	4775.621	gasket	1
83	9730.003	screw M 5 X 10	1
84	9535.143	scavenge oil pipe	1
85	2750.486	cover for oil pan	1
86	9732.078	screw M 6 X 25	14
87	4670.019	copper gasket diam.16	2

H



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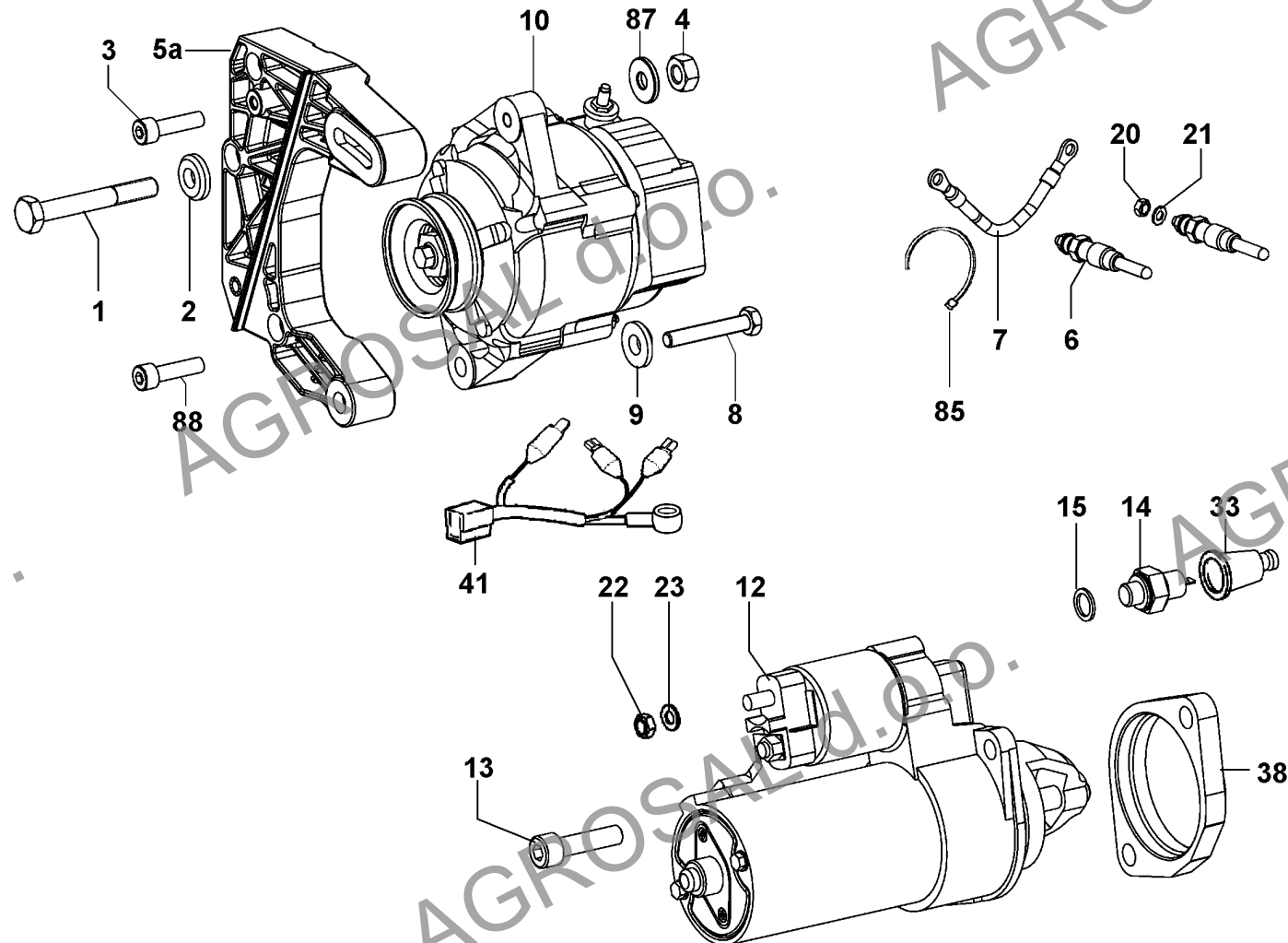
Group: Piaggio LDW_702

Engine: LDW_702/P Drawing: M

STARTING

POS.	CODE	DESCRIPTION	Qty
1	1780.165	bolt M 10 X 75	1
2	7625.022	washer diam.10,5 (alt.45/65A)	1
3	9732.064	screw M 8 X 30	2
4	3240.033	nut M 10	1
5a	8725.084	alternator support 40A Nippodenso	1
6	2100.089	preheating glow plug 12 V	2
7	2185.548	glow plug wire	1
8	1770.031	bolt M 8 X 1,25 X 50	1
9	7625.348	washer diam. 8,4	1
10	1157.326	eXternal volt.alternator 12V 40A Nippodenso	1
12	5840.224	starting motor 12V 1,7KW	1
13	9730.046	screw M 10 X 35	2
14	6745.050	oil switch 0,3 bar (M 12)	1
15	4670.060	copper gasket diam.12	1
20	3240.004	nut M 5	2
21	7626.066	washer	4
22	3240.020	nut M 8	1
23	7565.007	washer diam. 8	1
33	6491.013	pipe elbow	1
38	3810.024	flange for starting motor 1,6 KW	1
41	2186.142	wire with diode 12V	1
85	2471.019	collar mm 175	1
87	7625.022	washer diam.10,5 (alt.33 A)	1
88	9732.064	screw M 8 X 30	1

M



**LOMBARDINI**

A KOHLER COMPANY

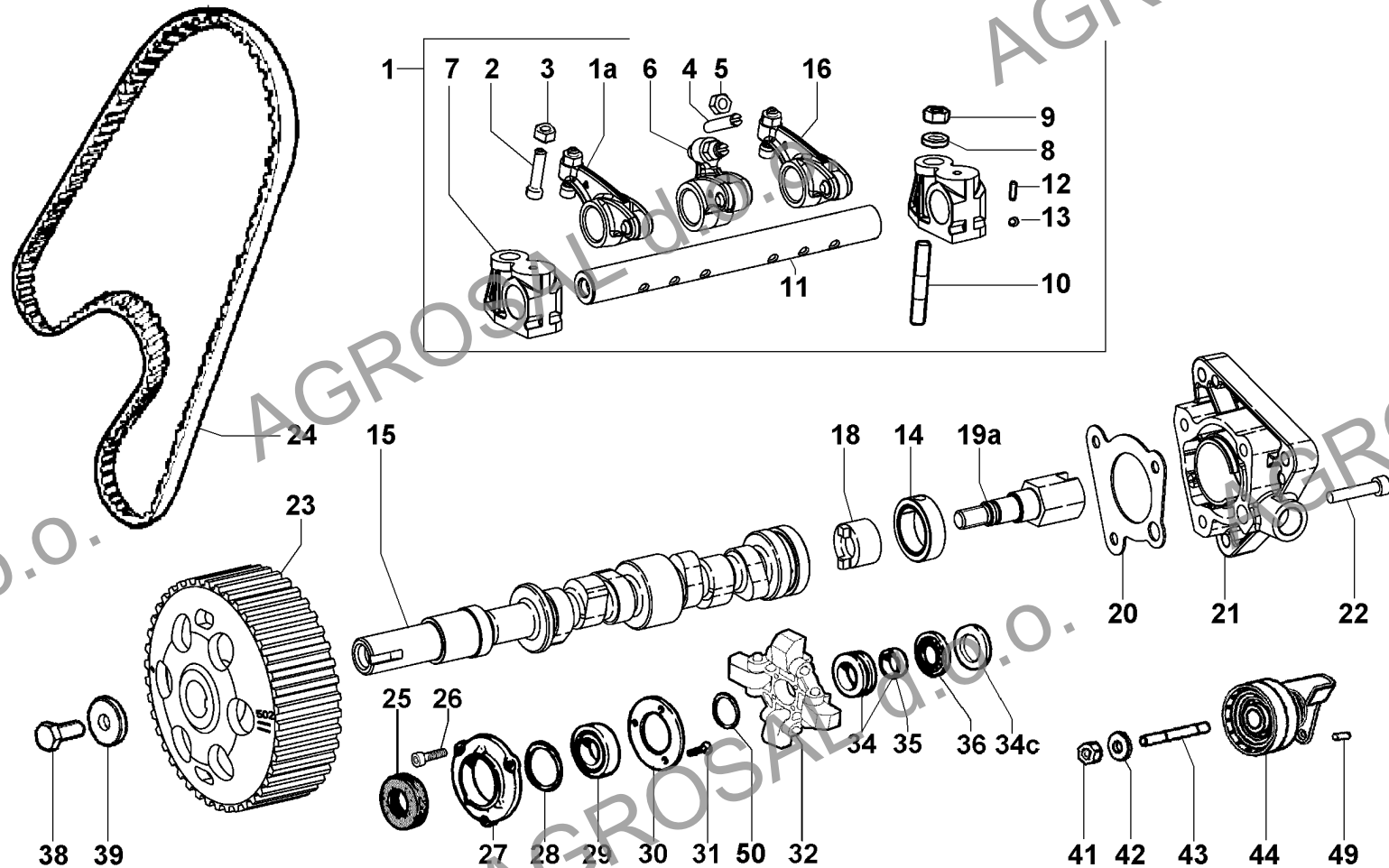
Group: Piaggio LDW_702

Engine: LDW_702/P Drawing: D

TIMING/SPEED GOVERNOR

POS.	CODE	DESCRIPTION	Qty
1	6045.110	rocker arm ass.y	1
1a	1541.193	rocker arm (inlet/eXhaust)	2
2	9850.088	adj.screw	4
3	3240.008	nut M 6	4
4	9850.110	adj.screw	2
5	3240.151	nut	2
6	1541.220	inj.pump rocker arm	2
7	8615.105	rock.arm shaft support	3
8	7625.130	washer diam. 10,2	3
9	3240.033	nut M 10	3
10	6800.088	stud M 10 X 45	3
11	6045.085	rocker arm shaft	1
12	8430.061	lockpin 4 X 14	1
13	9000.148	plug diam.11	2
14	1970.460	sleeve	1
15	1011.759	camshaft	1
16	1541.193	rocker arm (inlet/eXhaust)	2
18	3580.035	cam (4300 > G/1')	1
19a	9730.407	vacuum pump screw (also for vacuum pump adapter)	1
20	4420.096	O ring 40,95 X 2,62	1
21	4896.551	flange	1
22	9730.015	screw M 6 X 30	3
23	7090.012	contr.gear pulley	1
24	2440.338	timing belt z=113	1
25	1213.303	seal ring 35X52X7	1
26	9730.010	screw M 6 X 16	3
27	2690.294	governor cover	1
28	1202.037	rubber oil seal	1
29	3001.066	ball bearing	1
30	6275.166	plate	1
31	9800.061	screw M 6 X 16	3
32	8805.090	weight support (min-max governor)	1
34	5401.250	contro sleeve	1
34c	7352.063	thrust washer	1
35	1585.085	sleeve	1
36	3110.165	thrust roller	1
38	9820.142	screw	1
39	7625.045	washer diam.11	1
41	3240.033	nut M 10	1
42	7495.010	washer	1
43	6800.090	stud	1
44	4110.009	jockey pulley	1
49	8430.105	taper pin 8X16	1
50	1200.219	O ring	1

D



**LOMBARDINI**

A KOHLER COMPANY

Group: Piaggio LDW_702

Engine: LDW_702/P Drawing: P

VACUUM PUMP

POS.	CODE	DESCRIPTION	Qty
2	9346.085	union hose	1
5	4896.551	flange for vaccum pump fitting	1
6	4431.148	gasket	1
7	6601.119	vacuum pump	1
9	9730.015	screw M 6 X 30	3
12	9346.049	union hose	1
13	7270.193	union	1
15	3630.120	clamp	1
17	4340.088	mass cable	1
18	9730.100	screw M 8 X 25	3
19	4420.108	gasket	1

P

