

3 MAJOR SUB-ASSEMBLIES

3.1 Common items - E2M2, E1/E2M5 and 8

Item	Description	Item No.	Qty.
1	Gas ballast tube assembly	A34001002	1
2	Coupling and fan assy.	A34001020	1
5	Motor plate	A37001012	1
6	Adaptor	A34001040	1
8	Hazard warning label	A20001084	1
9	Warning label	E20001063	1
10	Label	A20001187	1
12	Oil pump blade	A20402158	1
13	1/4 inch steel ball	A20414003	1
14	Baseplate	A20499016	1
14	Baseplate (alternative build)	A21035069	1
16	Distributor valve	A36121014	1
17	Distributor weight	A37001041	1
18	Distributor sleeve	A34301036	1
19	Felt pad	A22302013	1
20	Oil filler assy.	A22305003	1
21	Inlet filter assy.	A22305007	1
22	Filter clamp	A22305010	1
23	Clamp	A21042013	1
24	Circlip - type 7000-040	A22426004	1
25	Circlip - type 7000-024	A22426005	1
27	Key - 5 x 5 x 16mm long	A24301010	2
28	Distributor cap	A37001042	1
29	Ballast filter	A25907200	1
30	Handle	A25908025	1
31	Oil filler plug	A25908027	1
32	Isolator rubber (alternative build)	A26501031	4
33	Nozzle	A25908029	1
34	Gas ballast insert	A25908034	1
35	Oil filler insert	A25908035	1
36	Clamp plate	A25908041	1
37	Ballast spring	A27102010	1
38	Spring	A27102032	1
39	Valve spring HV	A27102029	1
40	Distributor rubber †	A27159440	1
41	'O' ring 86mm i/d x 2mm sect.	H02124086	1
42	Oil box gasket	A27159616	1
43	Foot	A26501024	4
44	Sleeve	A27802006	1
46	1/8 inch BSP plug	A00714012	1
47	Filter seal	A00906042	1
49	Inlet adaptor	C10501014	1
50	KF25 protective cover	D32201071	1
53	1/8 inch Dowty seal	H02104001	1
55	Oil seal	H02109066	1
56	Oil seal	H02109067	1
58	'O' ring	H02120041	1
60	'O' ring	H02125013	1
61	'O' ring	H02125026	3
62	'O' ring	H02126116	2
64	2BA large washer CP mild steel	211814057	1
65	M4 washer, form C, large CP	218980607	1
66	M4 x 16 soc hd cap scr.	218091290	1
67	20 x 6mm dia parallel dowel	212181030	2
71	M4 x 10 soc hd cap scr.	218091288	7
72	M4 x 40 soc hd cap scr.	218091295	1
73	M5 x 10 soc set scr.	218121328	4
74	M6 x 16 soc hd cap scr.	218091370	4
75	M6 x 20 soc hd cap scr.	218091371	10
76	M6 x 25 soc hd cap scr.	218091372	4
77	M6 x 35 soc hd cap scr.	218091374	4
79	Waved washer	218990201	1
81	M6 std plain washer Ni pl	218980209	7
83	M6 spring washer, single coil	218982709	7
121	Valve spacer	A27804006	1
124	'O' ring	H02120004	*2 **3
125	'O' ring	H02120077	*1 **2

* denotes one-stage quantity
** denotes two-stage quantity

Reference EHVI General Arrangement drawings A34001000 (issue Z1 - 5 sheets)

Table 7 - Common items - E2M2, E1/E2M5 and 8

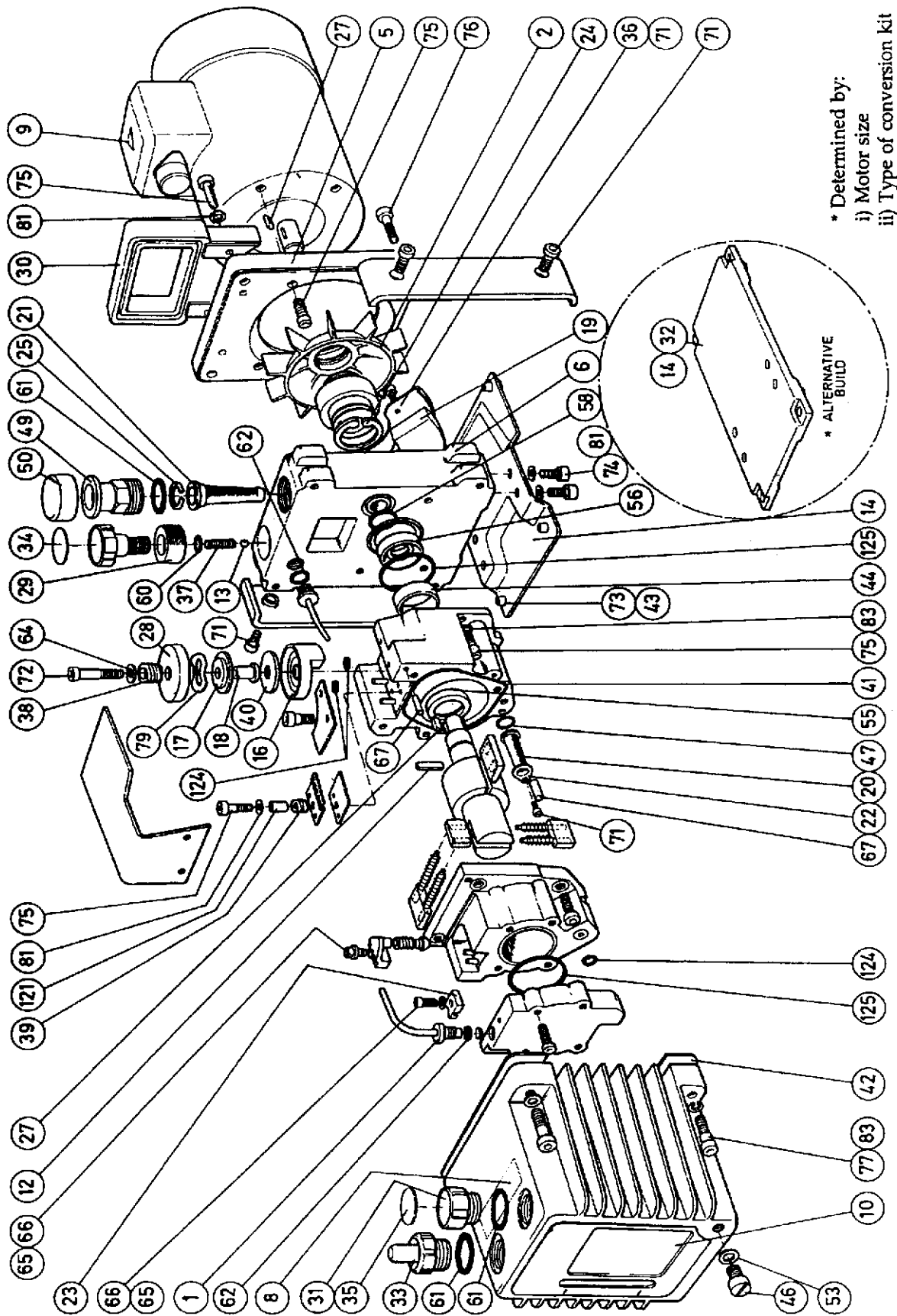


Figure 1 - Common items-E2M2, E1/E2M5 and 8

3.2

E2M2 specific items

Item	Description	Item No.	Qty.
90	Oil box assy.	A34101001	1
92	HV stator	A36001030	1
93	LV stator	A36001014	1
94	Rear cover	A36001015	1
95	Cover	A36001017	2
99	Blade spring	A00906077	3
101	Motor - see item data table	- - - - -	1
106	Spring support	A25908113	1
108	Exhaust baffle	A25970041	1
111	HV valve back plate	A25976013	1
113	Rotor assy.	A26401025	1
115	Button	A26501017	1
116	Ballast knob	A25908037	1
117	LV valve spring	A27102016	1
118	Ballast valve	A25906600	1
119	HV valve rubber	A27159418	1
122	1/8 inch dia. x 1/2 inch lg ss roll pin	211174033	2
123	Blade spring pin	A29203003	3
127	M6 x 20 soc hd cap scr.	218091371	5
128	M6 x 25 soc hd cap scr.	218091372	4
132	LV blade	A20402606	2
133	HV blade	A20402608	2

Reference EHVI General Arrangement drawings A34001000 (issue ZJ - 5 sheets)

Table 8 - E2M2 specific items

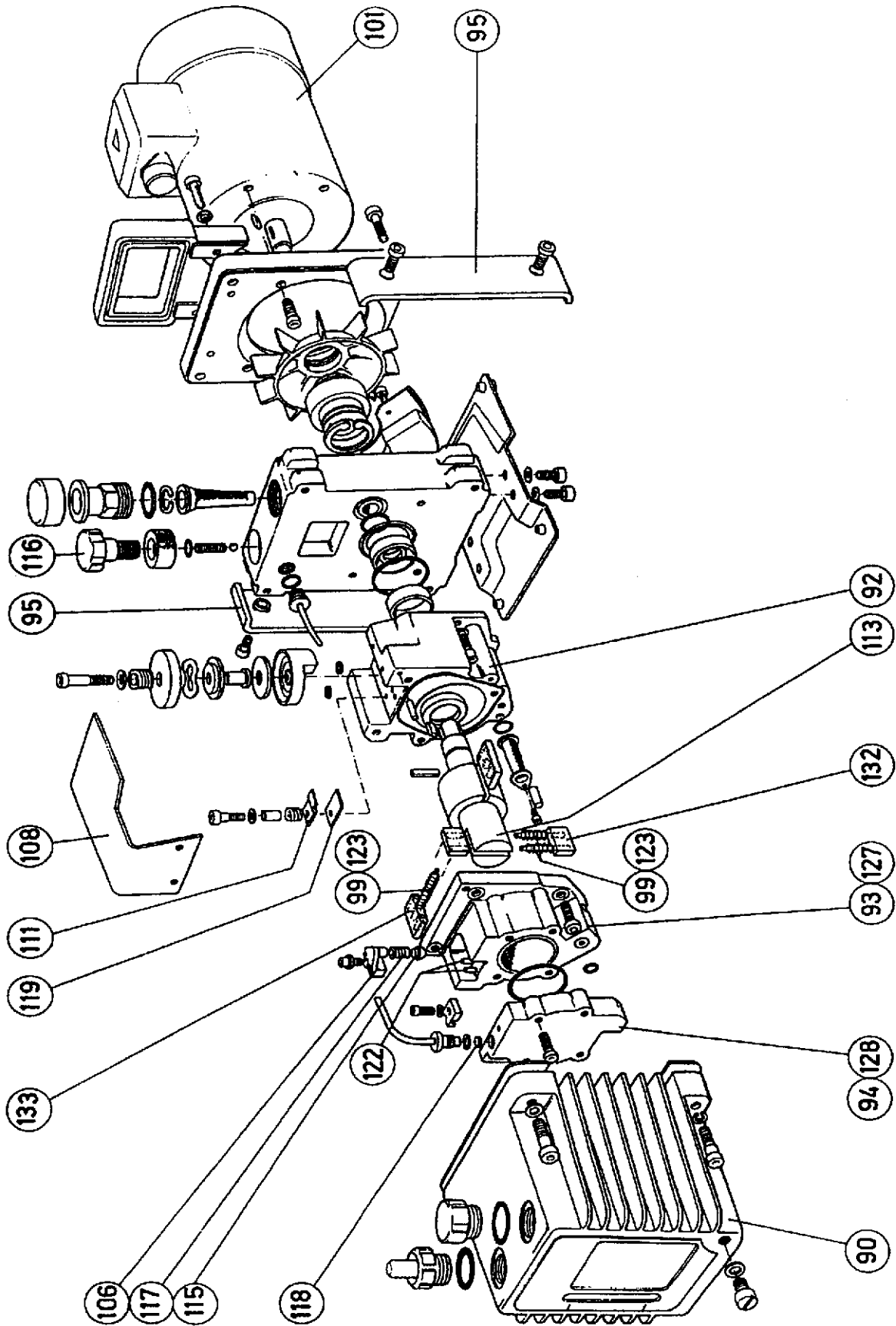


Figure 2 - E2M2 specific items

3.3

E1M5 specific items

Item	Description	Item No.	Qty.
90	Oil box assy.	A34101001	1
92	HV stator	A34101030	1
94	Rear cover	A34001015	1
95	Cover	A34101017	2
97	Core plug	A21078002	1
99	Blade spring	A00906077	2
101	Motor - see item data table	-----	1
108	Exhaust baffle	A25970043	1
109	Valve baffle	A25970044	1
111	HV valve back plate	A25976014	1
113	Rotor assy.	A26401027	1
116	Ballast knob	A25908028	1
118	Ballast valve	A11301045	1
119	HV valve rubber	A27159417	1
122	1/8 inch dia x 1/2 inch lg ss roll pin	211174033	4
123	Blade spring pin	A29203003	2
126	M4 x 10 soc hd cap scr.	218091288	2
129	M6 x 30 soc hd cap scr.	218091373	5
133	HV blade	A20402610	2

Reference EHV1 General Arrangement drawings A34001000 (issue ZJ - 5 sheets)

Table 9 - E1M5 specific items

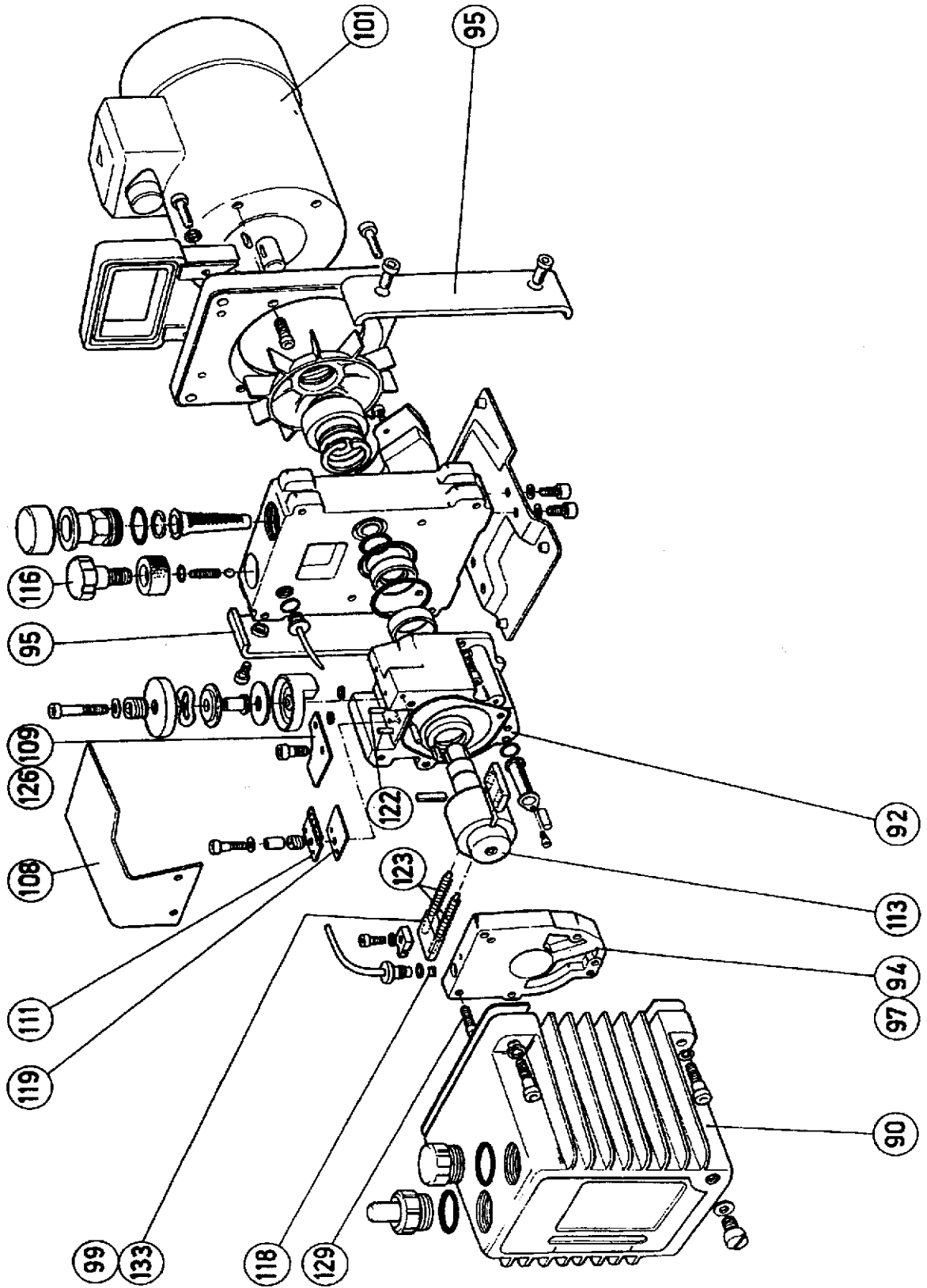


Figure 3 - E1M5 specific items

3.4

E2M5 specific items

Item	Description	Item No.	Qty.
90	Oil box assy.	A34201001	1
92	HV stator	A36101030	1
93	LV stator	A36001014	1
94	Rear cover	A36001015	1
95	Cover	A36101017	2
99	Blade spring	A00906077	4
101	Motor - see item data table	- - - - -	1
106	Spring support	A25908113	1
108	Exhaust baffle	A25970042	1
109	Valve baffle	A25970044	1
111	HV valve back plate	A25976014	1
113	Rotor assy.	A26401028	1
115	Button	A26501017	1
116	Ballast knob	A25908028	1
117	LV valve spring	A27102016	1
118	Ballast valve	A11301045	1
119	HV valve rubber	A27159417	1
122	1/8 inch dia. x 1/2 inch lg ss roll pin	211174033	4
123	Blade spring pin	A29203003	4
126	M4 x 10 soc hd cap scr.	218091288	2
127	M6 x 20 soc hd cap scr.	218091371	5
128	M6 x 25 soc hd cap scr.	218091372	4
132	LV blade	A20402606	2
133	HV blade	A20402610	2

Reference EHVI General Arrangement drawings A34001000 (issue ZJ - 5 sheets)

Table 10 - E2M5 specific items

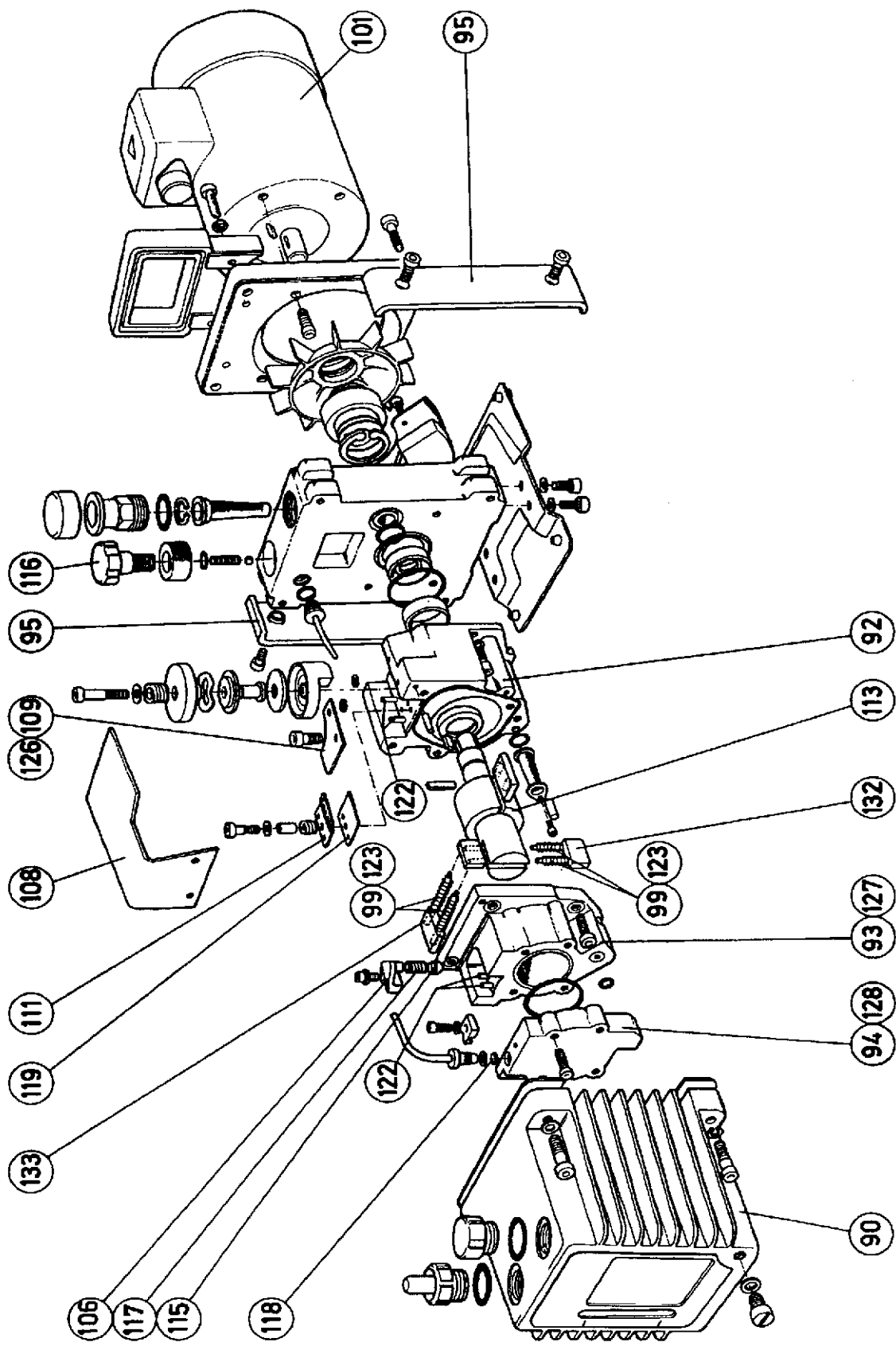


Figure 4 - E2M5 specific items

3.5

E1M8 specific items

Item	Description	Item No.	Qty.
90	Oil box assy.	A34101001	1
92	HV stator	A34201030	1
94	Rear cover	A34001015	1
95	Cover	A34201017	2
97	Core plug	A21078002	1
99	Blade spring	A00906077	2
101	Motor - see item data table	- - - - -	1
108	Exhaust baffle	A25970043	1
109	Valve baffle	A25970044	1
111	HV valve back plate	A25976014	1
113	Rotor assy.	A26401030	1
116	Ballast knob	A25908028	1
118	Ballast valve	A11301045	1
119	HV valve rubber	A27159417	1
122	1/8 inch dia x 1/2 inch lg ss roll pin	211174033	4
123	Blade spring pin	A29203003	2
126	M4 x 10 soc hd cap scr.	218091288	2
129	M6 x 30 soc hd cap scr.	218091373	5
133	HV blade	A20402612	2

Reference EHVI General Arrangement drawings A34001000 (issue ZJ - 5 sheets)

Table 11 - E1M8 specific items

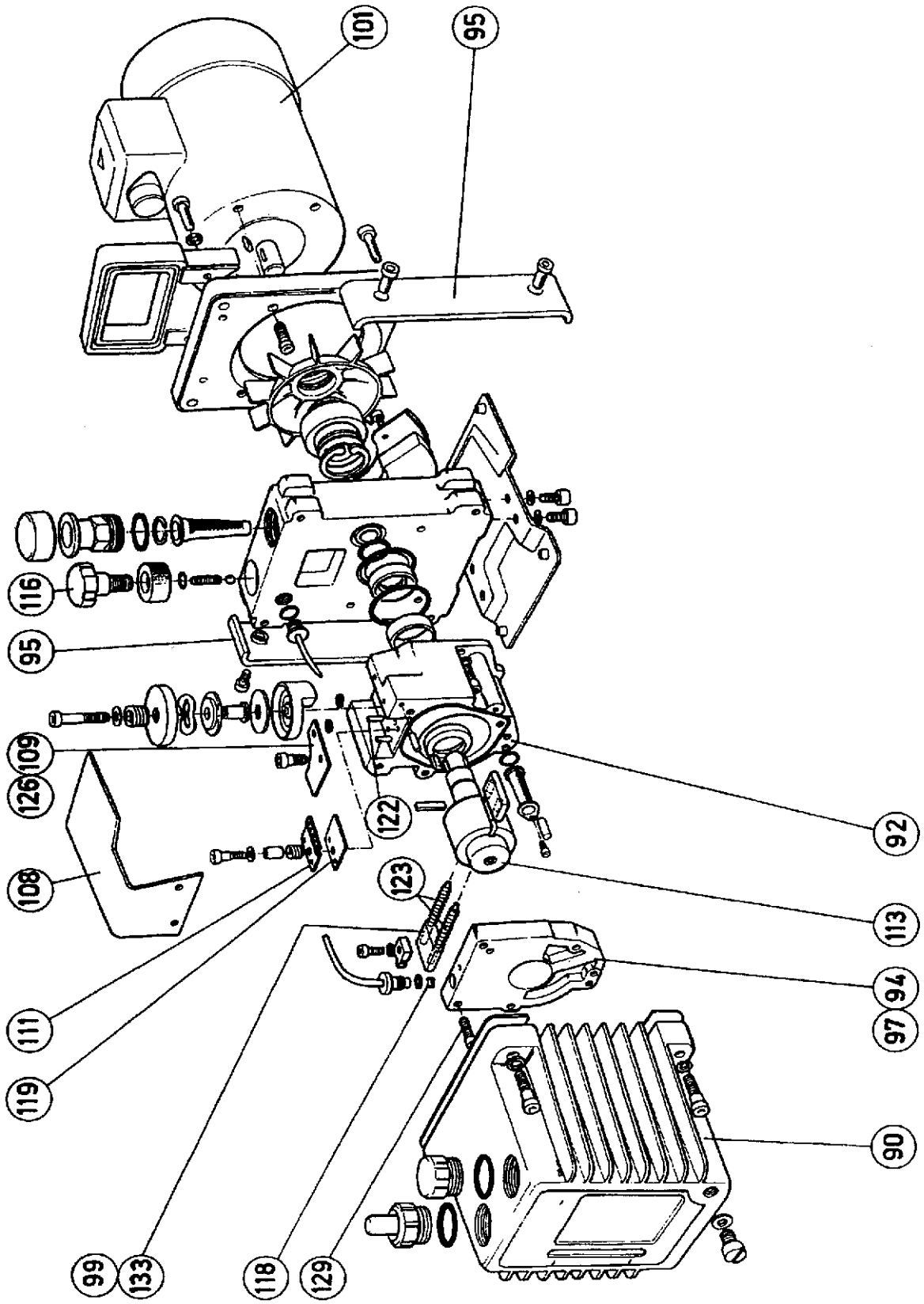


Figure 5 - E1M8 specific items

3.6

E2M8 specific items

Item	Description	Item No.	Qty.
90	Oil box assy.	A34201001	1
92	HV stator	A36201030	1
93	LV stator	A36001014	1
94	Rear cover	A36001015	1
95	Cover	A36201017	2
99	Blade spring	A00906077	4
101	Motor - see item data table	- - - - -	1
106	Spring support	A25908113	1
108	Exhaust baffle	A25970042	1
109	Valve baffle	A25970044	1
111	HV valve back plate	A25976014	1
113	Rotor assy.	A26401031	1
115	Button	A26501017	1
116	Ballast knob	A25908028	1
117	LV valve spring	A27102016	1
118	Ballast valve	A11301045	1
119	HV valve rubber	A27159417	1
122	1/8 inch dia. x 1/2 inch lg ss roll pin	211174033	4
123	Blade spring pin	A29203003	4
126	M4 x 10 soc hd cap scr.	218091288	2
127	M6 x 20 soc hd cap scr.	218091371	5
128	M6 x 25 soc hd cap scr.	218091372	4
132	LV blade	A20402606	2
133	HV blade	A20402612	2

Reference EHV1 General Arrangement drawings A34001000 (issue ZJ) - 5 sheets)

Table 12 - E2M8 specific items

CLEAN AND OVERHAUL KIT FOR E2M2, E1/2M -5, 8

A341-01-131

PUMP ITEM NUMBER	DESCRIPTION	QUANTITY	PART NUMBER	SIZE/mm AND FEATURE (IF APPLICABLE) L x DIAM (x WIDTH) * = INSIDE DIAM (X)=NO. OF COILS
20	OIL FILTER ASSEMBLY	1	A223-05-003	
29	GAS BALLAST FILTER	1	A259-07-200	
37	GAS BALLAST SPRING	1	A271-02-010	50 x 7 (25)
38	DISTRIBUTOR SPRING	1	A271-02-032	14 x 10.3 * (5)
39	VALVE SPRING H.V.	1	A271-02-029	15.9 x 11.9 (5.3)
40	DISTRIBUTOR RUBBER	1	A271-15-414	LARGER CENTRAL HOLE (PRE-AUG. '91 PUMPS)
		1	A271-15-440	SMALLER CENTRAL HOLE (POST-AUG. '91 PUMPS)
41	SEAL	1	HO21-24-086	86 x 2 * (NITRILE)
42	GASKET	1	A271-59-616	
46	OIL PLUG	1	A007-14-012	1/8" BSP
47	FILTER SEAL	1	A009-06-042	17.1 x 2.4
53	OIL PLUG DOWTY SEAL	1	HO21-04-001	1/8" BSP
55	INNER SHAFT WESTON SEAL	1	HO21-09-066	25 x 35 x 7 (VITON)
56	OUTER SHAFT SPIRO SEAL	1	HO21-09-067	18 x 40 x 7 (VITON)
58	O-RING	1	HO21-20-041	19.6 x 2.4
60	GAS BALLAST O-RING	1	HO21-25-013	13.9 x 2.6 (NITRILE)
61	O-RING	3	HO21-25-026	28.2 x 3.5 (NITRILE)
62	O-RING	2	HO21-26-116	7.9 x 2.6 (VITON)
79	WAVED WASHER	1	2189-90-201	
99	BLADE SPRINGS	4	A009-06-077	34.9 x 2.4
115	BUTTON	1	A265-01-017	FOR TWO STAGE ONLY
117	VALVE SPRING L.V.	1	A271-02-016	17.0 x 8.4 (10)
118	BALLAST VALVE	1	A259-06-600	FOR TWO STAGE ONLY E2M2 ONLY
		1	A113-01-045	ALL PUMPS, EXCEPT E2M2
119	VALVE RUBBER H.V.	1	A271-59-418	E2M2 ONLY
		1	A271-59-417	ALL PUMPS EXCEPT E2M2
124	O-RING	3	HO21-20-004	6.1 x 1.6
				QTY. 2 ON SINGLE STAGE
125	O-RING	2	HO21-20-077	42.5 x 3.0
				QTY. 1 ON SINGLE STAGE

BLADE KIT FOR E2M2

A360-01-130

PUMP ITEM NUMBER	DESCRIPTION	QUANTITY	PART NUMBER
12	OIL PUMP BLADE	1	A204-02-158
99	BLADE SPRINGS	3	A009-06-077
103	BLADE L.V.	2	A204-02-079
104	BLADE H.V.	2	A204-02-081
123	BLADE PINS	3	A292-03-003

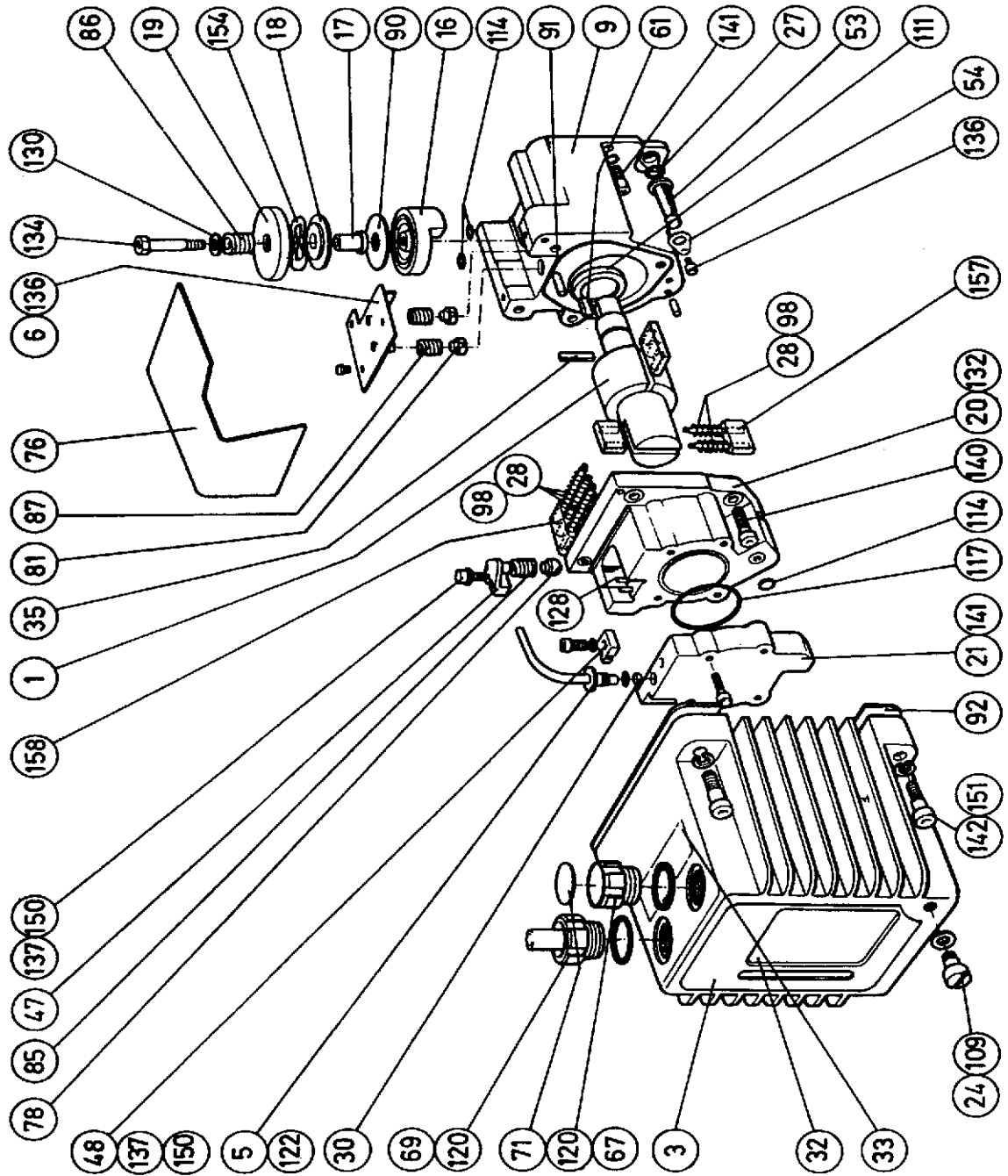


Figure 6 - E2M8 specific items

Item	Description	Item No.	Qty.
1	Rotor	A26401125	1
3	Oil box assy.	A34201001	1
5	Gas ballast tube assy.	A37001001	1
6	HV exhaust baffle assy.	A37001002	1
9	HV stator	A37001030	1
16	Distributor valve	A36121014	1
17	Distributor sleeve	A34301036	1
18	Distributor weight	A37001041	1
19	Cap	A37001042	1
20	LV stator	A37001014	1
21	Rear cover	A36001015	1
24	Plug 1/8 inch BSP	A00714012	1
27	Filter seal	A0906042	1
28	Blade spring	A00906077	5
30	Ballast valve	A11301045	1
32	Label	A20001187	1
33	Hazard warning label	A20001084	1
35	OH pump blade	A20402158	1
47	Spring support	A25908113	1
48	Clamp	A21042013	1
53	Oil filter assy.	A22305003	1
54	Filter clamp	A22305010	1
61	Key 5 x 5 x 16mm lg	A24301010	1
67	Oil filler plug	A25908027	1
69	Nozzle	A25908029	1
71	Oil filler insert	A25908035	1
76	Oil box baffle	A25970049	1
78	Button	A26501017	1

Item	Description	Item No.	Qty.
81	Valve pad	A26501029	2
85	LV valve spring	A27102016	1
86	Distributor spring	A27102032	1
87	HV valve spring	A27102033	2
90	Distributor rubber	A27159440	1
91	'O' ring	H02124086	1
92	Oil box gasket	A27159616	1
98	Blade spring pin	A29203003	5
109	Dowty seal 1/8 inch BSP	H02104001	1
111	Oil seal - Viton	H02109066	1
114	'O' ring	H02120004	3
117	'O' ring	H02120077	1
120	'O' ring	H02125026	2
122	'O' ring - Viton	H02126116	1
128	1/8 inch dia x 1/2 inch lg ss roll pin	211174033	2
130	2 BA cad pl large plain washer	211814057	1
132	Ø 6 x 20 parallel dowel	212181030	2
134	M4 x 40 hex hd ms ni pl scr	218071295	1
136	M4 x 10 soc hd cap scr	218091288	4
137	M4 x 16 soc hd cap scr	218091290	2
140	M6 x 20 soc hd cap scr	218091371	5
141	M6 x 25 soc hd cap scr	218091372	7
142	M6 x 35 soc hd cap scr	218091374	4
150	M4 cad pl large plain washer	218980607	1
151	M6 single coil spring washer	218982709	4
154	Waved washer	218990201	1
157	LV blade	A20402606	2
158	HV blade	A20402614	2

Reference EHVI General Arrangement drawings A37001000 (issue S - 5 sheets)

Table 13 - E2M12 items

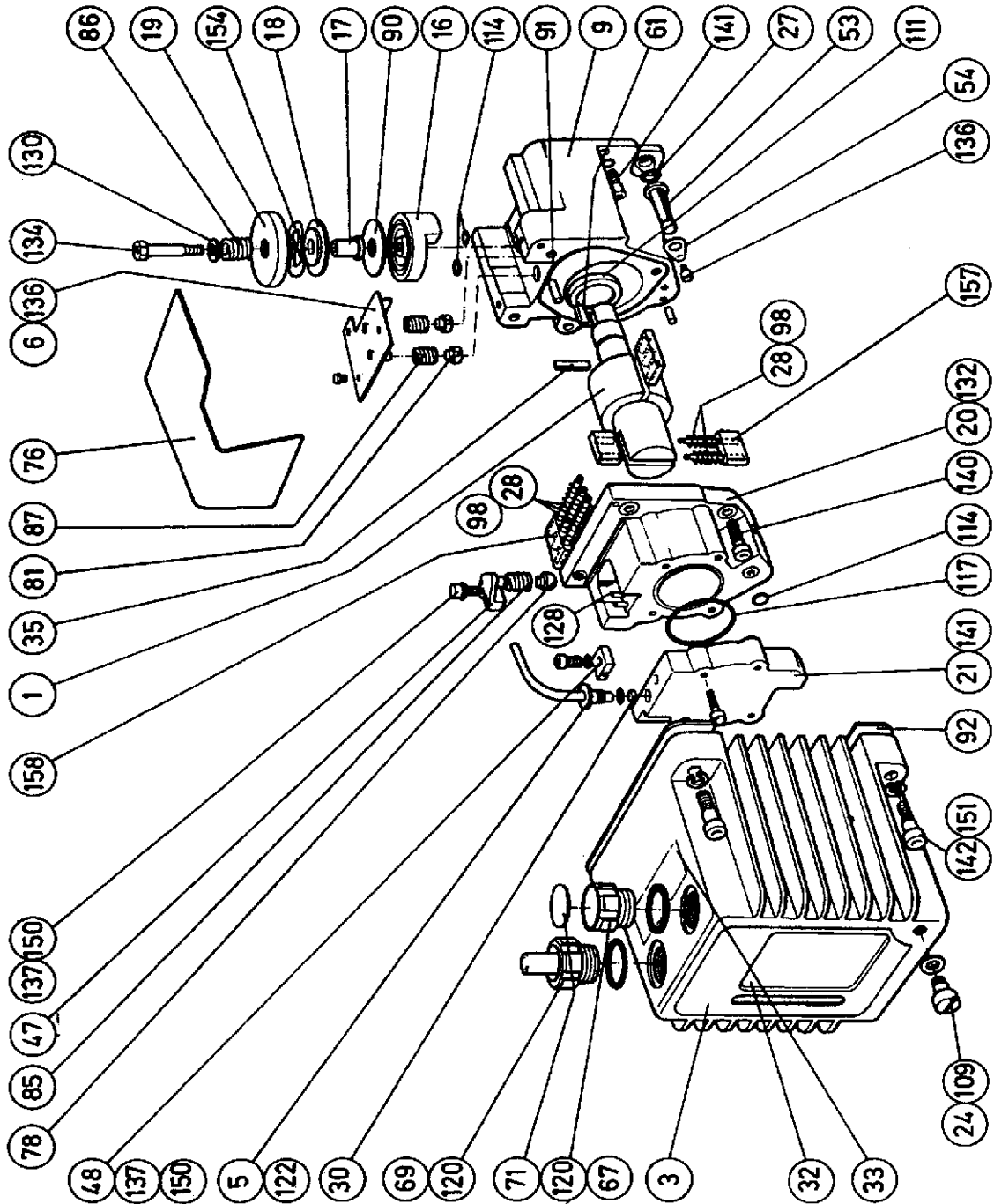


Figure 7 - E2M12 items

Item	Description	Item No.	Qty.
2	Coupling and fan assy	A34001020	1
10	Adaptor	A37001013	1
11	Side panel	A37001017	2
14	Motor plate	A37001012	1
39	1/4 inch dia std steel ball	A20414003	1
41	Baseplate	A21035069	1
51	Felt pad	A22302013	1
55	Inlet filter assy	A22305037	1
58	Circlip type 7000-040 'Salter'	A22426004	1
61	Key 5 x 5 x 16mm lg	A24301010	1
64	Ballast filter	A25907200	1
66	Handle	A25908025	1
68	Ballast knob	A25908028	1
70	Gas ballast insert	A25908034	1
74	Clamp plate	A25908041	1
79	Isolator rubber	A26501031	4
84	Ballast spring	A27102010	1

Reference EHVI General Arrangement drawings A37001000 (issue S - 5 sheets)

Item	Description	Item No.	Qty.
95	Sleeve	A27802006	1
101	KF 25 x 1 inch BSP male adaptor	C10501203	1
104	Protective cover	D32201071	1
106	Electrical warning label	E20001063	1
112	Oil seal - Viton	H02109067	1
115	'O' ring	H02120042	1
116	'O' ring	H02120072	1
117	'O' ring	H02120077	2
119	'O' ring	H02125013	1
122	'O' ring - Viton	H02126116	2
131	Circlip - 'Salter'	212081133	1
136	M4 x 10 soc hd cap scr	218091288	6
140	M6 x 20 soc hd cap scr	218091371	10
141	M6 x 25 soc hd cap scr	218091372	4
149	M6 ni pl plain washer	218980209	2
156	Motor - see item data table	- - - - -	1

Table 14 - E2M12 items

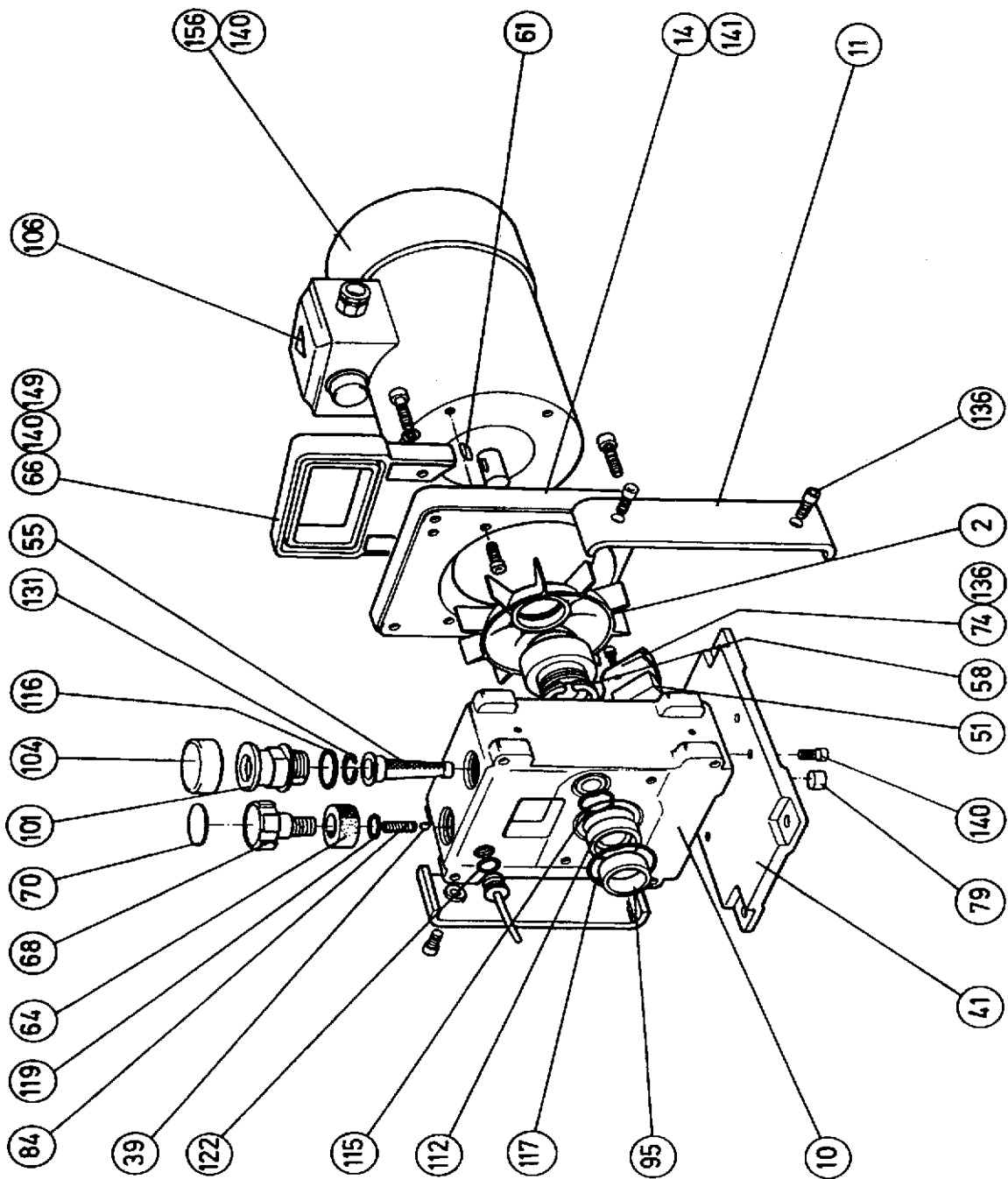


Figure 8 - E2M12 items

4 **BLADE KITS**

The kits are supplied with support Instructions, refer to the contents list.

Item No.	Description	Qty.
A20402158	Oil pump blade	1
A00906077	Blade spring	3
A36001001	2 Blade Pack (L.V.)	1
A36001002	2 Blade Pack (H.V.)	1
A29203003	Blade pins	3

Table 15 - E2M2 Blade Kit A36001129

Item No.	Description	Qty.
A20402158	Oil pump blade	1
A00906077	Blade spring	2
A34101002	1 Blade Pack	1
A29203003	Blade pins	2

Table 16 - E1M5 Blade Kit A34101129

Item No.	Description	Qty.
A20402158	Oil pump blade	1
A00906077	Blade spring	4
A36001001	2 Blade Pack (L.V.)	1
A34101002	2 Blade Pack (H.V.)	1
A29203003	Blade pins	4

Table 17 - E2M5 Blade Kit A36101129

Item No.	Description	Qty.
A20402158	Oil pump blade	1
A00906077	Blade spring	2
A34101002	2 Blade Pack	1
A29203003	Blade pins	2

Table 18 - E1M8 Blade Kit A34201129

Item No.	Description	Qty.
A20402158	Oil pump blade	1
A00906077	Blade spring	4
A36001001	2 Blade Pack (L.V.)	1
A34201002	2 Blade Pack (H.V.)	1
A29203003	Blade pins	4

Table 19 - E2M8 Blade Kit A36201129

Item No.	Description	Qty.
A20402158	Oil pump blade	1
A00906077	Blade spring	5
A36001001	2 Blade Pack (L.V.)	1
A37001003	2 Blade Pack (H.V.)	1
A29203003	Blade pins	5

Table 20 - E2M12 Blade Kit A37001129

CLEAN AND OVERHAUL KITS

The kits are supplied with Support Instructions, refer to the contents list.

Item No.	Description	Qty.
A22305003	Oil filter assembly	1
A25907200	Gas ballast filter	1
A27102010	Gas ballast spring	1
A27102032	Distributor spring	1
A27102029	Valve spring H.V.	1
A27159414	Distributor rubber (pre-Aug. 1991 pumps)	1
A27159440	Distributor rubber (post Aug. 1991 pumps)	1
H02124086	Seal	1
A27159616	Oil box gasket	1
A00714012	Oil plug	1
A00906042	Filter seal	1
H02104001	Oil plug dowty seal	1
H02109066	Inner shaft Weston seal	1
H02109067	Outer shaft Spiro seal	1
H02120041	'O' ring	1
H02125013	Gas ballast 'O' ring	1
H02125026	'O' ring	3
H02126116	'O' ring	2
218990201	Waved washer	1
A00906077	Blade springs	4
A26501017	Button	1
A27102016	Valve spring L.V.	1
A25906600	Ballast valve (E2M2 only)	1
A11301045	Ballast valve (all pumps except E2M2)	1
A27159418	Valve rubber H.V. (E2M2 only)	1
A27159417	Valve rubber (all pumps except E2M2)	1
H02120004	'O' ring (for unmodified HV stators)	3
H02120077	'O' ring	2
218091368	'O' ring (for modified HV stators)	2

Table 21 - E2M2, E1M/E2M5 and 8 Clean and Overhaul Kit A34101131

Item No.	Description	Qty.
A00714012	Oil plug	1
A00906042	Filter seal	1
A00906077	Blade spring	5
A11301045	Gas ballast valve	1
A22305003	Oil filter assembly	1
A25907200	Gas ballast filter	1
A26501017	Button	1
A26501029	Valve pad	2
A27102010	Gas ballast spring	1
A27102016	Valve spring L.V.	1
A27102032	Distributor spring	1
A27102033	Valve spring H.V.	2
A27159414	Distributor rubber (pre-Aug. 1991 pumps)	1
A27159440	Distributor rubber (post-Aug. 1991 pumps)	1
H02124086	'O' ring seal	1
A27159616	Oil box gasket	1
H02104001	Oil plug dowty seal	1
H02109066	Inner shaft Weston seal	1
H02109067	Outer shaft Spiro seal	1
H02120004	'O' ring (for un-modified stator, pre-pump number 18000)	3
H02120042	'O' ring	1
H02120072	Inlet 'O' ring	1
H02120077	'O' ring	2
H02120028	'O' ring (for modified stator, post-pump number 18000)	2
H02125013	Gas ballast 'O' ring	1
H02125026	'O' ring	2
H02126116	'O' ring	2
218990201	Waved washer	1

Table 22 - E2M12 Clean and Overhaul Kit A37001131