

E1M40 ROTARY VACUUM PUMP

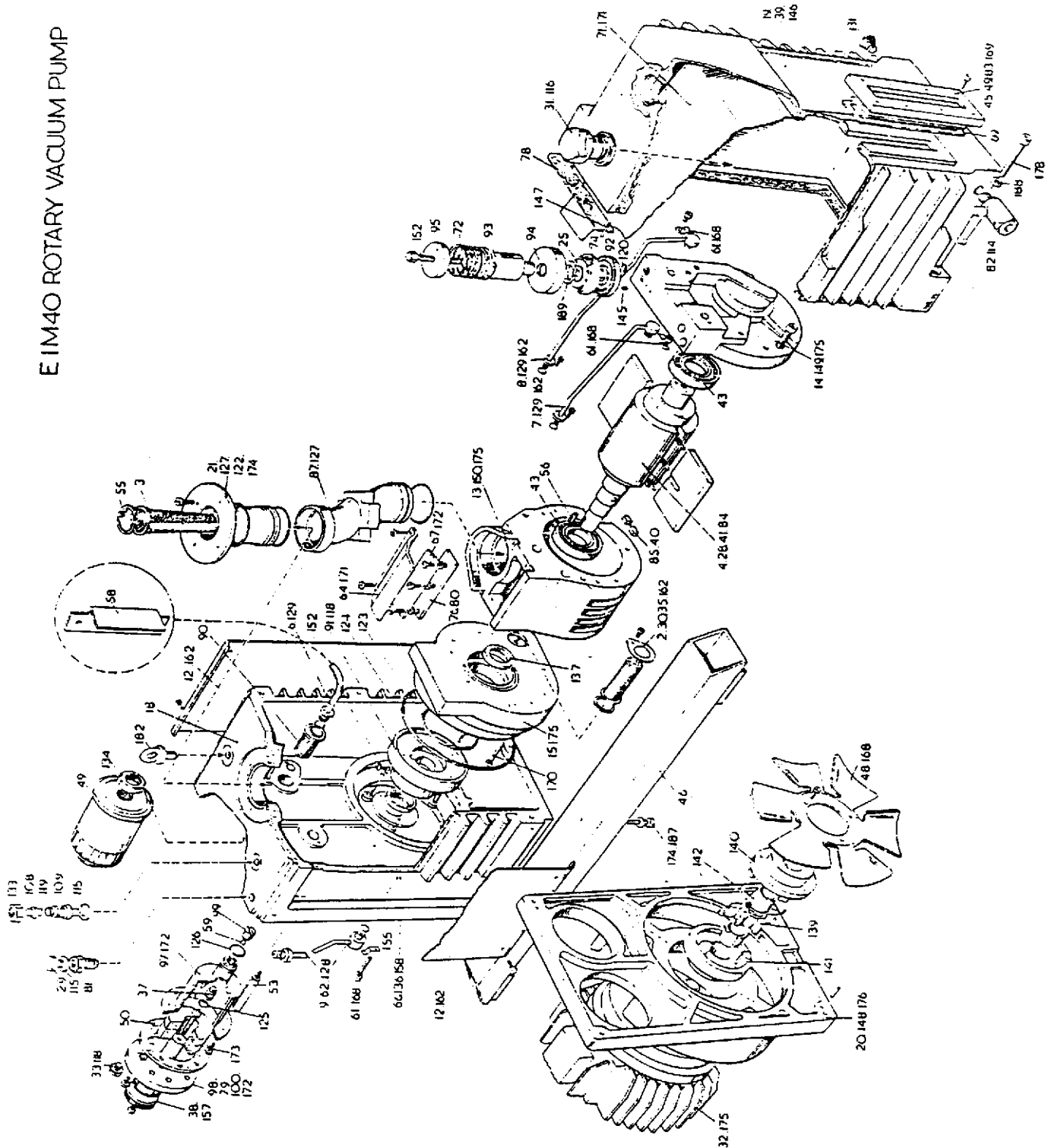


FIG. 1 E1M40 ROTARY VACUUM PUMP

E2M40 ROTARY VACUUM PUMP

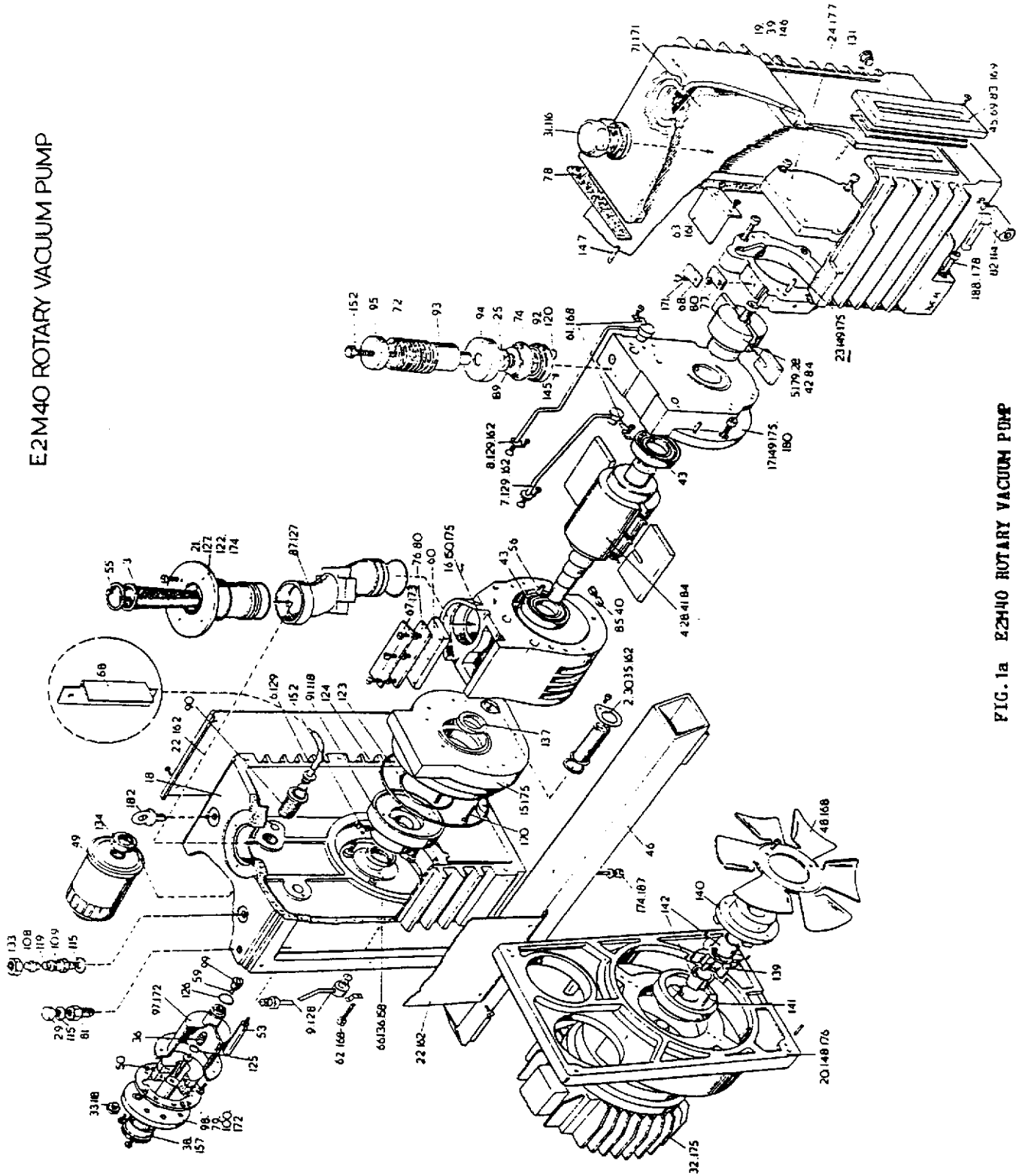


FIG. 1a E2M40 ROTARY VACUUM PUMP

PARTS LIST FOR E1M40 A1 D E2M40 ROTARY PUMPS

Item No.	Code No.	Description	E1M40 Quantity	E2M40 Quantity
1	A22305008	Filter assembly (oil)	1	1
2	A22305035	Filter assembly (inlet)	1	1
3	A26401019	Rotor assembly	1	1
4	A26401040	Rotor assembly LV	1	1
5	A27879001	Tube assembly (oil return)	1	1
6	A34401007	Tube assembly (ballast)	1	1
7	A34401006	Tube assembly (oil delivery)	1	1
8	A27879009	Tube assembly (oil pressure)	1	1
9	A34401004	Side panel	2	2
10	A34401002	Stator HV	1	1
11	A34401005	Rear cover	1	1
12	A36401001	Front bearing	1	1
13	A36401002	Stator HV	1	1
14	A36401030	Interstage	1	1
15	A36401006	Adaptor	1	1
16	A36401027	Oil box	1	1
17	A36401008	Motor mounting	1	1
18	A36401024	Inlet flange	1	1
19	A36401014	Side panel	2	2
20	A36401012	Stator LV	1	1
21	A36401013	End cover	1	1
22	A34301037	Distributor weight	1	1
23	A00307046	Spring	3	3
24	A01403074	Plug - 1/8in BSP	1	1
25	A01403030	Filter seal	1	1
26	A26002022	Filter plug 1in BSP	1	1
27	A26002018	Motor (see label)	1	1
28	A11101054	Plug - 1/4in BSP	1	1
29	A19201007	Clamp plate	1	1
30	A19201008	Ballast piston	1	1
31	A19201011	Ballast piston (less rubber seal)	1	1
32	A20001063	Ballast knob	1	1
33	A20402116	Label	1	1
34	A20402099	Oil pump blade	2	2
35	A20402101	Blade HV	2	2
36	A20402152	Blade LV	2	2
37	A20416002	Roller bearing	1	1
38	A20495019	Blade HV	1	1
39	A22301003	Sight glass bezel	2	2
40	A22304041	Base rubber	2	2
41	A22305041	Fan	1	1
42	A22404006	Filter - AP 63000	1	1
43	A22426004	Ballast filter	2	2
44	A22404006	Support pillar	2	2
45	A22426004	Circlip	1	1

Item No.	Code No.	Description	E1M40 Quantity	E2M40 Quantity
46	A24301008	Key	1	1
47	A25970045	Baffle	2	2
48	A25904601	Ballast valve	1	1
49	A25942008	Exhaust cover plate	1	1
50	A25970035	Clamp (oil delivery line)	2	2
51	A25970036	Clamp (oil pressure line)	1	1
52	A25970038	Exhaust baffle LV	1	1
53	A25970039	Exhaust baffle	1	1
54	A25971002	Seal retainer	1	1
55	A25976006	Exhaust valve plate	1	1
56	A25976007	Exhaust valve plate LV	1	1
57	A26501012	Sight glass seal	1	1
58	A25976033	Spray baffle	1	1
59	A27102013	Spring	1	1
60	A27159415	Rubber seal	1	1
61	A27159514	Exhaust valve rubber	1	1
62	A27159515	Exhaust valve rubber LV	1	1
63	A27159629	Oil box gasket	1	1
64	A27159428	Body gasket	1	1
65	A27804004	Exhaust valve spacer	3	3
66	A27911003	Socket - 1/8in BSP	1	1
67	A28702003	Ball valve - 1/4in BSP	1	1
68	A29201006	Sight glass	1	1
69	A29203002	Pin	3	3
70	A27192924	Spring	1	1
71	A36501009	Inlet connexion	1	1
72	A36501013	Filter outlet	1	1
73	A36501014	Oil pump housing	1	1
74	A36501015	Distributor body	1	1
75	A36401019	Distributor sleeve	1	1
76	A36401028	Cap	1	1
77	A36401029	Spacer	1	1
78	A36601032	Ballast valve body	1	1
79	A36601033	Ballast valve bearing	1	1
80	A36601034	Ballast plug	1	1
81	A36601036	Ballast spindle	1	1
82	B21023019	Protective cover	1	1
83	B21024001	Dust cover	1	1
84	C11001062	Blind flange	1	1
85	C11001180	Adaptor - SC5 x 1/8in BSP	1	1
86	M01503006	Cap	1	1
87	M01503333	Cap - 1/4in BSP	1	1
88	M02104001	Seal - 1/8in BSP	2	2

PARIS ST FOR E1M40 AND E2M40 ROTARY PUMPS

Item No.	Code No.	Description	E1M40 Quantity	E2M40 Quantity
116	H02104008	Seal - 1/16 BSP	1	1
117				
118	H02104002	Seal - 1/16 BSP	1	1
119	H02120027	O-ring	1	1
120	H02120031	O-ring	1	1
121				
122	H02120057	O-ring	1	1
123	H02120082	O-ring	1	1
124	H02120097	O-ring	1	1
125	H02125011	O-ring	1	1
126	H02125020	O-ring	1	1
127	H02125044	O-ring	2	2
128	H02125115	O-ring	2	2
129	H02125116	O-ring	5	5
130				
131	H03517002	Plug - 1/16	2	2
132				
133	H03400008	Union nut - 3/8 in BSP	1	1
134	216814314	Locknut - 1/2 in x 16 UNF	1	1
135				
136	H02109094	Seal -	1	1
137	H02109064	Oil seal	1	1
138				
139	A21071033	Flexible component	1	1
140	A21071037	Coupling flange	1	1
141	A21071038	Coupling flange	1	1
142	A21071039	Taper lock bush	2	2
143				
145	211174099	Spring pin	1	1
146	211430301	Rivet	4	4
147	212170186	Spring pin	2	2
148	212181041	Dowel	2	2
149	212192021	Taper pin	2	2
150	212192026	Taper pin	2	2
151				
152	218002339	Screw M5	1	1
153				
157	218032290	Screw M4	1	1
158	218032328	Screw M5	3	3
159				
161	218042287	Screw M4	16	2
162	218042328	Screw M5	16	16
163				
165	218072409	Screw M6	2	2
166	218091128	Screw M5	5	5
169	218091130	Screw M5	8	8
170	218091132	Screw M5	4	4
171	2180911369	Screw M6	5	5
172	218091170	Screw M6	11	4
173	218091171	Screw M6	1	1
174	218091411	Screw M8	8	5
175	218091412	Screw M8	19	8
176				
177				
178				
179				
180				
181				
182				
187				
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189				
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**205				
**206				

176	218091415	Screw M8	4	4
177	218091417	Screw M8	4	4
178	218091421	Screw M8	6	6
179	218091453	Screw M10	1	1
180	218121449	Screw	1	1
181				
182	218790005	Eyebolt M12	2	2
187	218980210	Washer	4	4
188	218985810	Washer M8	6	6
189	218990201	Washer	1	1
190				
191	A20001084	Label	1	1
192	E20001063	Label	1	1
193	A20001085	Label	1	1
198	K11002013	No. 15 oil - 5 litres	1	1
199	C10520004	MW25/tube pack (exhaust)	1	1
200	A36401025	Inlet pack	1	1
**205	H02109065	Spiroseal	1	1
**206	H02109075	Seal	1	1

*NOT SHOWN
**HYDROCARBON PUMPS ONLY IN PLACE OF ITEM 136

E1M80 Rotary pump

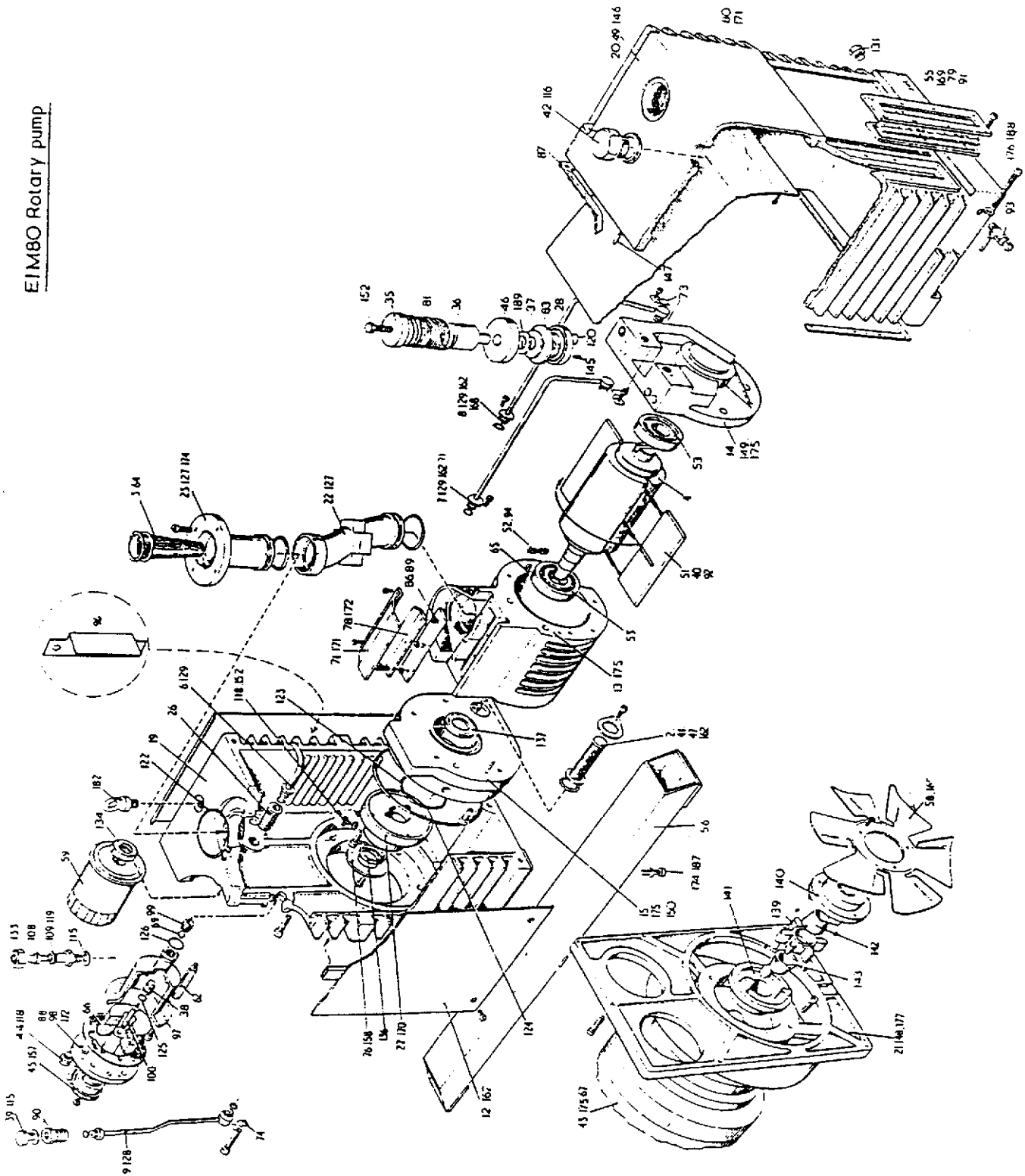


FIG.2 E1M80 ROTARY VACUUM PUMP

03-A344-02-882

E2M80 Rotary pump

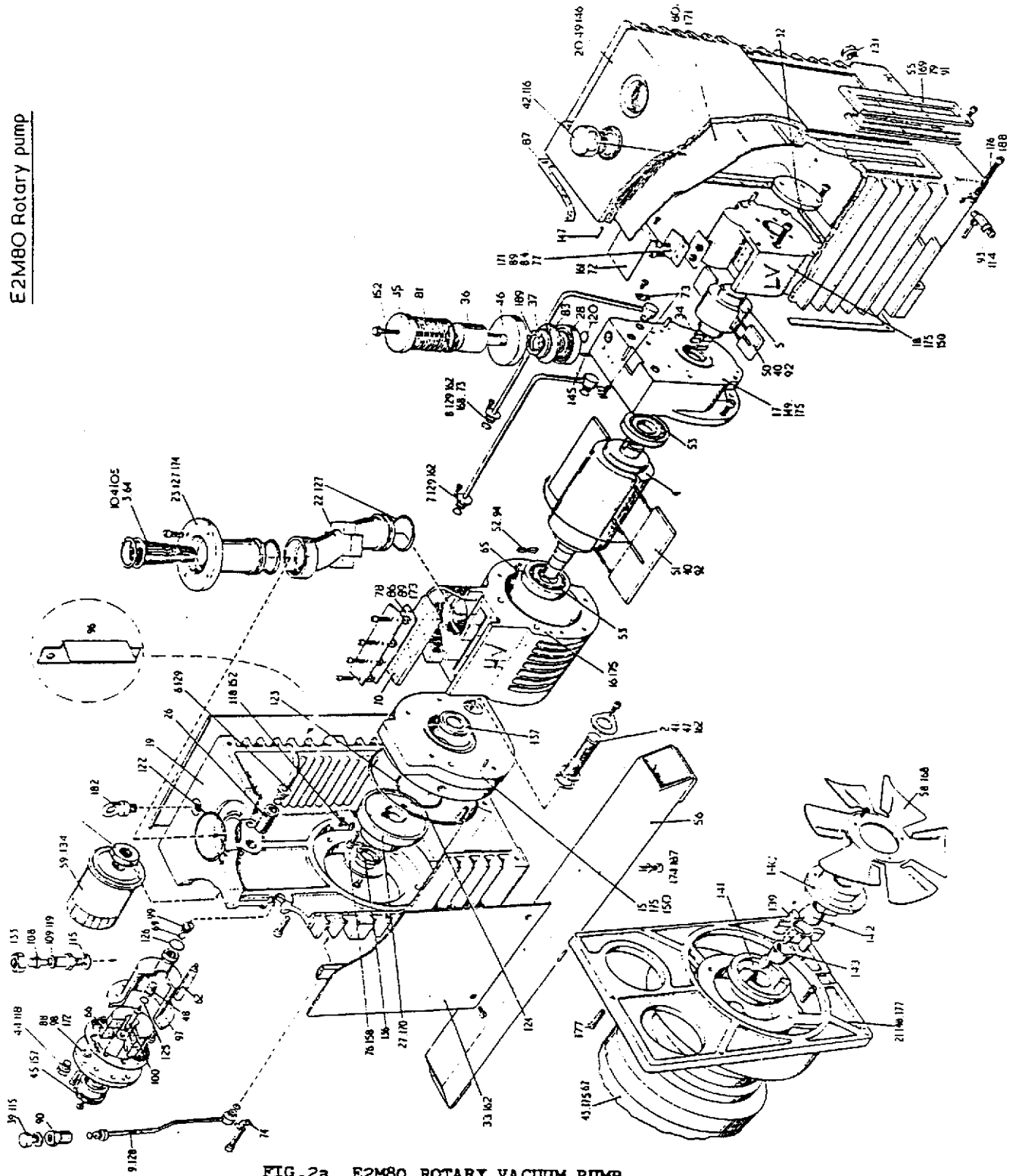


FIG.2a E2M80 ROTARY VACUUM PUMP

PARTS LIST FOR E1M80 AND E2M80 ROTARY PUMPS

PARTS LIST FOR E1M80 AND E2M80 ROTARY PUMPS

Item No.	Code No.	Description	E1M80	E2M80	Quantity
1					
2	A22305008	Filter assembly (oil)	1	1	1
3	A22305015	Filter assembly (inlet)	1	1	1
4	A26401038	Rotor assembly	1	1	1
5	A26401042	Rotor assembly LV	1	1	1
6	A27879001	Tube assembly (oil return)	1	1	1
7	A36501038	Tube assembly (ballast)	1	1	1
8	A36501036	Tube assembly (oil delivery)	1	1	1
9	A27879007	Tube assembly (oil pressure)	1	1	1
12	A34501005	Slide panel			
13	A34501002	Stator HV	2		2
14	A34501008	Rear cover	1		1
15	A36501001	Front bearing	1		1
16	A36501002	Stator HV	1		1
17	A36501035	Interstage	1		1
18	A36501005	Stator LV	1		1
19	A36501026	Adaptor	1		1
20	A36501034	Oil box	1		1
21	A36501027	Motor mounting	1		1
22	A36501009	Inlet connection	1		1
23	A36501032	Inlet flange	1		1
26	A36501013	Filter outlet	1		1
27	A36501014	Oil pump housing	1		1
28	A36501015	Distributor body	1		1
32	A36501021	Cover plate			
33	A36501028	Slide panel	1		1
34	A36501024	Drive member	2		2
35	A36401029	Spacer	2		2
36	A36401019	Distributor sleeve	1		1
37	A34301037	Distributor weight	1		1
38	A19201008	Ballast piston (less rubber seal)	1		1
39	A01403074	Plug - 1/8in BSP	1		1
40	A00307046	Spring	1		1
41	A01403030	Filter seal	3	5	2
42	A26002022	Filter plug - 1/16in BSP	1		1
43		Motor (see label)	1		1
44	A26002018	Plug - 1/16in BSP	1		1
45	A19201013	Ballast knob	1		1
46	A36401028	Cap	1		1
47	A11101054	Clamp ring	1		1
48	A19201007	Ballast piston	1		1
49	A20001063	Label	1		1
50	A20402087	Blade LV	2		2
51	A20402089	Blade HV	2		2
52	A20402116	Oil pump blade	2		2
53	A20404012	Roller bearing	2		2
54		Sight glass bezel	1		1
55	A20416002	Base runner	1		1
56	A20449015		2		2

57	A22301002	Fan	1		1
58	A22304016	Filter - AP 63000	1		1
59		Support pillar	2		2
62	A22404006	Circclip	1		1
63	A22426004	Key	1		1
64	A24301008	Ballast filter	2		2
65	A22305041	Key	1		1
66	A24301013	Ballast valve	1		1
67	A25904601	Exhaust cover plate	1		1
68	A25942005	Exhaust baffle	1		1
69	A25970033	Exhaust baffle LV	1		1
70	A25970035	Clamp (oil delivery line)	2		2
71	A25970036	Clamp (oil pressure line)	1		1
72	A25971002	Seal retainer	1		1
73	A25976002	Exhaust valve plate LV	1		1
74	A25976005	Exhaust valve plate	1		1
75	A26501012	Sight glass seal	1		1
76	A25976034	Spray baffle	1		1
77	A27102013	Spring	1		1
78	A27159415	Rubber seal	1		1
79	A27159504	Exhaust valve rubber LV	1		1
80	A27159509	Exhaust valve rubber	1		1
81	A27159618	Oil box gasket	1		1
82	A27159428	Body gasket	1		1
83	A27804004	Exhaust valve spacer	4		4
84	A27911003	Socket - 1/8in BSP	1		1
85	A29201006	Sight glass	1		1
86	A29203002	Pin	3		3
87	A28702003	Ball valve - 1/16in BSP	1		1
88	A27102024	Spring	1		1
89	A25970046	Baffle	2		2
90	A36601032	Ballast valve body	1		1
91	A36601033	Ballast valve bearing	1		1
92	A36601034	Ballast plug	1		1
93	A36601036	Ballast spring	1		1
94	B21023019	Protective cover	1		1
95	B21024001	Dust cover	1		1
96	C11001062	Blind tailpiece	1		1
97	C11001180	Adaptor - 5/16 x 1/8in BSP	1		1
98	H01503333	Cap - 1/16in BSP	1		1
99	H02104001	Seal - 1/16in BSP	1		1
100	H02104008	Seal - 1/16in BSP	2		2
104					
105					
108					
109					
114					
115					
116					
117					

PARTS LIST FOR E1M80 AND E2M80 ROTARY PUMPS

Item No.	Code No.	Description	E1M80 Quantity	E2M80 Quantity
118	H02104002	Seal - 1/4 in BSP	1	1
119	H02120027	O-ring	1	1
120	H02120031	O-ring	1	1
121				
122	H02120057	O-ring	1	1
123	H02120082	O-ring	1	1
124	H02120101	O-ring	1	1
125	H02125011	O-ring	1	1
126	H02125020	O-ring	1	1
127	H02125044	O-ring	2	2
128	H02125115	O-ring	2	2
129	H02125116	O-ring	5	5
130				
131	H03517003	Plug - 1/4 in BSP	2	2
132				
133	H03400008	Union nut - 3/8 in BSP	1	1
134	216814314	Locknut - 3/8 in x 16 UNF	1	1
135				
136	H02109094	Seal	1	1
137	H02109064	Oil seal	1	1
138				
139	A21071033	Flexible component	1	1
140	A21071037	Coupling flange	1	1
141	A21071038	Coupling flange	1	1
142	A21071039	Taper lock bush	1	1
143	A21071040	Taper lock bush	1	1
144				
145	211174099	Spring pin	1	1
146	211430301	Rivet	4	4
147	212170186	Spring pin	2	2
148	212181041	Dowel	2	2
149	212192021	Taper pin	2	2
150	212192026	Taper pin	2	2
151				
152	218002339	Screw M5	1	1
157	218032290	Screw M4	1	1
158	218032328	Screw M5	3	3
161	218042287	Screw M4	15	2
162	218042328	Screw M5	15	15
165	218072409	Screw M8	2	2
168	218091328	Screw M5	5	5
169	218091330	Screw M5	5	5
170	218091332	Screw M5	4	4
171	218091369	Screw M6	2	2
172	218091370	Screw M6	4	4
173	218091371	Screw M6	8	8
174	218091411	Screw M8	8	8
175	218091412	Screw M8	19	23
176	218091421	Screw M8	6	6

PUMPS

177	218091415	Screw M8	7	7
178	218121449	Screw M10	1	1
182	218790005	Eye bolt M12	2	2
187	218980210	Washer M8	4	4
188	218982710	Washer M8	6	6
189	218990201	Washer	1	1
190				
191	A20001084	Label	1	1
192	E20001063	Label	1	1
193	A20001085	Label	1	1
197	H11002014	No. 15 oil - 2 litres	1	1
198	H11002013	No. 15 oil - 5 litres	1	1
199	C10520004	MH25/tube pack (exhaust)	1	1
200	A36401025	Inlet pack	1	1
**215	H02109065	Spiroseal	1	1
**216	H02109075	Seal	1	1

**NOT SHOWN

**HYDROCARBON PUMPS ONLY IN PLACE OF ITEM 136

ADDENDUM
03-A344-02-882
MARCH 1987

E1M80, E2M80, E2M80 SUPERPUMP

The cooling fan code number A22301002 has now been replaced with a new fan code number A22301003. In addition the two side baffles A25970046 have now been deleted from the pumps.

AMENDMENT
03-A344-02-882
MAY 1987

E1M40, E2M40, E1M40HS, E2M40HS AND E2M40S
ROTARY PUMPS

When servicing existing rotary pumps as detailed above it is not necessary to fit springs and pins to the high and low vacuum blades (as applicable) whether or not they have holes for the purpose.

LIST OF COMMON COMPONENTS FOR E1M40 AND E2M40 AZIDE PUMPS

ITEM NO. E2M40	CODE NO.	DESCRIPTION	E1M40	
6	A27876003	Tube assembly (oil return)	1	1
7	A34421007	Tube assembly (ballast)	1	1
8	A34421006	Tube assembly (oil delivery)	1	1
9	A36451009	Tube assembly (oil pressure)	1	1
29	A26002010	1/8in BSP plug	1	1
31	A26002022	1in BSP plug oil filler	1	1
36	A36621001	Ballast piston		1
37	A36621003	Ballast piston (no rubber seal)	1	
44				
49		See note below	1	1
82	A28702007	Ball valve 1in	1	1
99	A36621004	Ballast plug	1	1
102	H03503023	Hex nipple 1/2in BSP male. Crane 144 M.1	1	1
108	C11001064	Blind tailpiece	1	1
110	A20001086	Azide warning label	1	1
300	A34405003	Filter nut	1	1
301	A25202001	Cap nut	1	1
302	H02104014	Rubber bonded seal	1	1
303	H02120082	O-ring	1	1

NOTE: Remove item 49 (Filter) from pump - see Figs. 1 and 1A - and replace with the following items, 300, 301, 302 and 303.

LIST OF COMPONENTS FOR E1M80 AND E2M80 AZIDE PUMPS

ITEM NO.	CODE NO.	DESCRIPTION	E1M80	E2M80
6	A27876003	Tube assembly (oil return)	1	1
7	A36501039	Tube assembly (ballast)	1	1
8	A36501037	Tube assembly (oil delivery)	1	1
9	A27876006	Tube assembly (oil pressure)	1	1
38	A36621003	Ballast piston (no rubber seal)	1	
39	A26002010	1/8in BSP plug	1	1
42				
48	A36621001	Ballast piston		1
54				
59		See note below	1	1
93	A28702007	1/2in ball valve	1	1
99	A36621004	Ballast plug	1	1
101	H03503023	Hex. nipple 1/2in BSP male. Crane 144 M.1	1	1
108	C11001064	Blind tailpiece	1	1
110	A20001086	Azide warning label	1	1
300	A34405003	Filter nut	1	1
301	A25202001	Cap nut	1	1
302	H02104014	Rubber bonded seal	1	1
303	H02120082	O-ring	1	1

NOTE: Remove item 59 (Filter) from pump - see Figs. 2 and 2A - and replace with the following items 300, 301, 302 and 303.

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ATTENTION

All reference and information contained within these instructions up to PAGE 30 inclusive apply only to E1M40/E2M40 - E1M80/E2M80 and HERMETICALLY sealed rotary vacuum pumps. Further references, information, parts lists, data and illustrations contained in PAGES 31 to 43 inclusive apply to E2M40S - E2M80S SUPERPUMPS

EIM40 ROTARY VACUUM PUMP

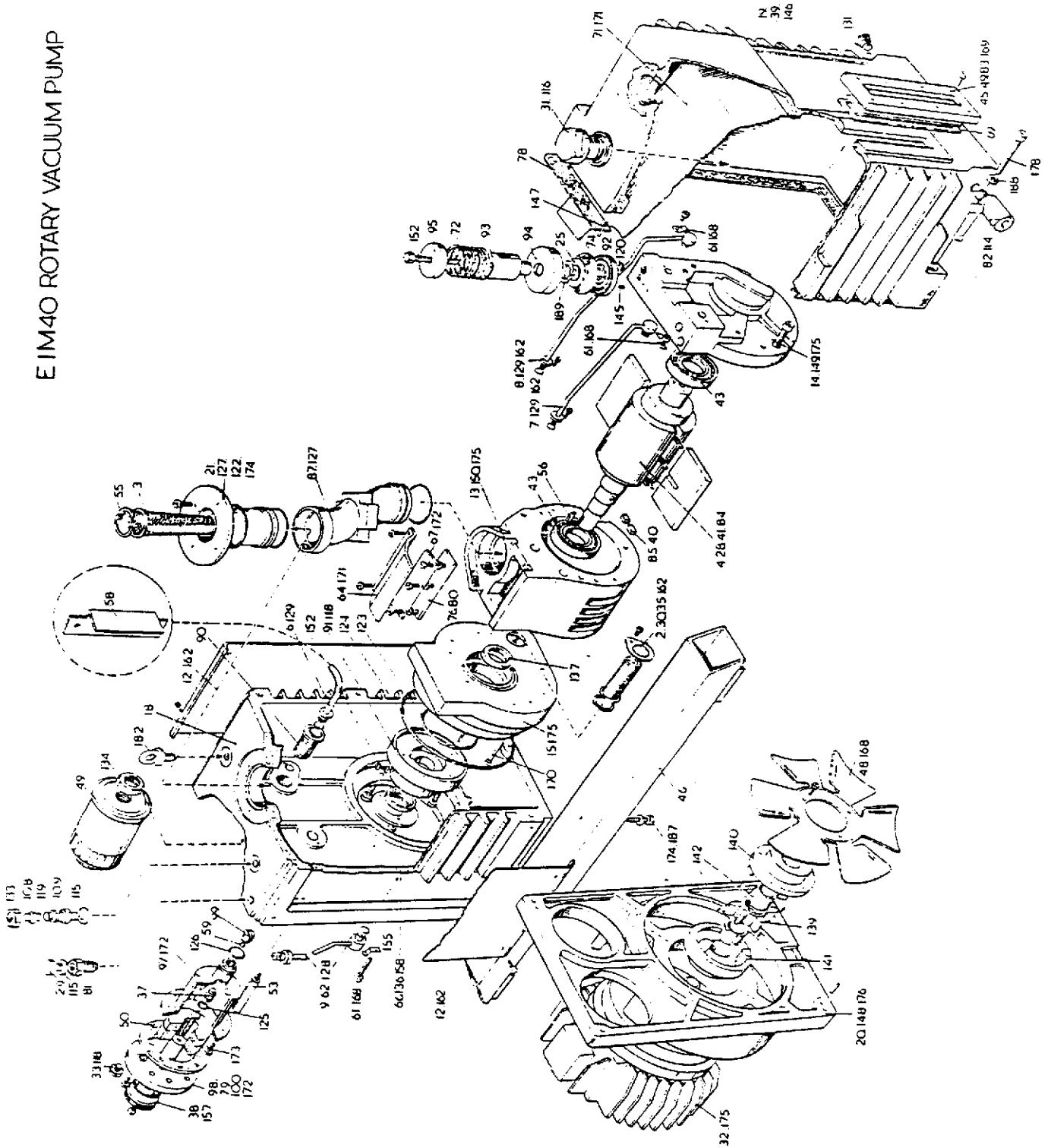


FIG. 1 EIM40 ROTARY VACUUM PUMP

E2M40 ROTARY VACUUM PUMP

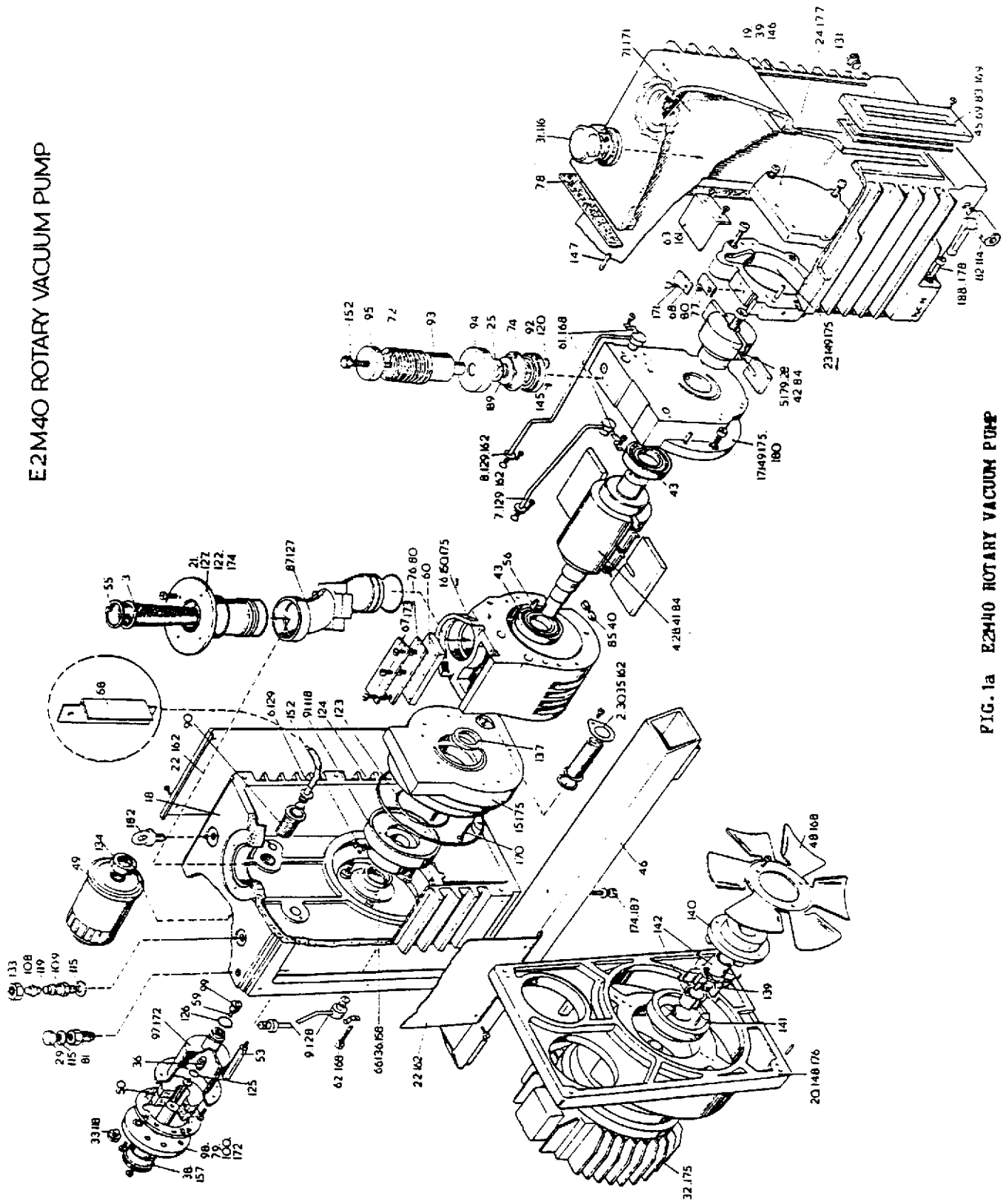


FIG. 1a E2M40 ROTARY VACUUM PUMP

PARTS LIST FOR E1M40 A1 D E2M40 ROTARY PUMPS

Item No.	Code No.	Description	E1M40 Quantity	E2M40 Quantity
1				
2	A22305008	Filter assembly (oil)	1	1
3	A22305015	Filter assembly (inlet)	1	1
4	A26401039	Rotor assembly	1	1
5	A26401040	Rotor assembly LV	1	1
6	A27879001	Tube assembly (oil return)	1	1
7	A34401007	Tube assembly (ballast)	1	1
8	A34401006	Tube assembly (oil delivery)	1	1
9	A27879009	Tube assembly (oil pressure)	1	1
12	A34401004	Side panel	2	
13	A34401002	Stator HV	1	
14	A34401005	Rear cover	1	
15	A36401001	Front bearing	1	1
16	A36401002	Stator HV	1	1
17	A36401030	Interstage	1	1
18	A36401006	Adaptor	1	1
19	A36401027	Oil box	1	1
20	A36401008	Motor mounting	1	1
21	A36401024	Inlet flange	1	1
22	A36401014	Side panel	2	
23	A36401012	Stator LV	1	1
24	A36401013	End cover	1	1
25	A34301037	Distributor weight	1	1
26	A00307046	Spring	3	4
29	A01403074	Plug - 1/8in BSP	1	1
30	A01403030	Filter seal	1	1
31	A26002022	Filter plug 1in BSP	1	1
32		Motor (see label)	1	1
33	A26002018	Plug - 1in BSP	1	1
34				
35	A11101054	Clamp plate	1	1
36	A19201007	Ballast piston	1	1
37	A19201008	Ballast piston (less rubber seal)	1	1
38	A19201013	Ballast knob	1	1
39	A20001063	Label	1	1
40	A20402116	Oil pump blade	2	2
41	A20402099	Blade HV	2	2
42	A20402101	Blade LV	2	2
43	A20404011	Roller bearing	2	2
44	A20402152	Blade HV	1	1
45	A20416002	Sight glass bezel	1	1
46	A20495019	Base rubber	2	2
47				
48	A22301003	Fan	1	1
49	A22304041	Filter - AP 6J000	1	1
50	A22305041	Ballast filter	2	2
51	A22404006	Support pillar	2	2
54				
55	A22426004	Cirelip	1	1

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Item No.	Code No.	Description	E1M40 Quantity	E2M40 Quantity
56	A24301008	Key	1	1
57				
58	A25970045	Baffle	2	2
59	A25904601	Ballast valve	1	1
60	A25942008	Exhaust cover plate	1	1
61	A25970035	Clamp (oil delivery line)	2	2
62	A25970036	Clamp (oil pressure line)	1	1
63	A25970038	Exhaust baffle LV	1	1
64	A25970039	Exhaust baffle	1	1
65				
66	A25971002	Seal retainer	1	1
67	A25976006	Exhaust valve plate	1	1
68	A25976007	Exhaust valve plate LV	1	1
69	A26501012	Sight glass seal	1	1
70				
71	A25976033	Spray baffle	1	1
72	A27102013	Spring	1	1
73				
74	A27159415	Rubber seal	1	1
75				
76	A27159514	Exhaust valve rubber	1	1
77	A27159515	Exhaust valve rubber LV	1	1
78	A27159629	Oil box gasket	1	1
79	A27159428	Body gasket	1	1
80	A27004004	Exhaust valve spacer	3	4
81	A27911003	Socket - 1/8in BSP	1	1
82	A28702003	Ball valve - 1in BSP	1	1
83	A29201006	Sight glass	1	1
84	A29203002	Pin	3	4
85	A27192924	Spring	1	1
86				
87	A36501009	Inlet connexion	1	1
90	A36501013	Filter outlet	1	1
91	A36501014	Oil pump housing	1	1
92	A36501015	Distributor body	1	1
93	A36401019	Distributor sleeve	1	1
94	A36401028	Cap	1	1
95	A36401029	Spacer	1	1
96				
97	A36601032	Ballast valve body	1	1
98	A36601033	Ballast valve bearing	1	1
99	A36601034	Ballast plug	1	1
100	A36601036	Ballast spindle	1	1
104	B21023019	Protective cover	1	1
105	B21024001	Dust cover	1	1
108	C:1001062	Blind tailpiece	1	1
109	C:1001180	Adaptor - 5C5 x 1/8in BSP	1	1
113	H01503006	Cap	1	1
114	H01503333	Cap - 1in BSP	1	1
115	H02104001	Seal - 1/8in BSP	2	2

PARIS ST FOR E1M40 AND E2M40 ROTARY PUMPS

Item No.	Code No.	Description	E1M40 Quantity	E2M40 Quantity
116	H02104008	Seal - 1 1/2 in BSP	1	1
117				
118	H02104002	Seal - 1 1/2 in BSP	1	1
119	H02120027	O-ring	1	1
120	H02120031	O-ring	1	1
121				
122	H02120057	O-ring	1	1
123	H02120082	O-ring	1	1
124	H02120097	O-ring	1	1
125	H02125011	O-ring	1	1
126	H02125020	O-ring	1	1
127	H02125044	O-ring	2	2
128	H02125115	O-ring	2	2
129	H02125116	O-ring	5	5
130				
131	H03517002	Plug - 1/2 in	2	2
132				
133	H03400008	Union nut - 3/8 in BSP	1	1
134	216814314	Locknut - 1/2 in x 16 UNF	1	1
135				
136	H02109094	Seal -	1	1
137	H02109064	Oil seal	1	1
138				
139	A21071033	Flexible component	1	1
140	A21071037	Coupling flange	1	1
141	A21071038	Coupling flange	1	1
142	A21071039	Taper lock bush	2	2
-				
145	2111174099	Spring pin	1	1
146	211430301	Rivet	4	4
147	212170186	Spring pin	2	2
148	212181041	Dowel	2	2
149	212192021	Taper pin	2	4
150	212192026	Taper pin	2	2
151				
152	218002339	Screw M5	1	1
-				
157	218032290	Screw M4	1	1
158	218032328	Screw M5	3	3
-				
161	218042287	Screw M4	16	2
162	218042328	Screw M5	16	16
-				
165	218072409	Screw M6	2	2
-				
168	218091428	Screw M5	5	5
169	218091330	Screw M5	8	8
170	218091332	Screw M5	4	4
171	218091369	Screw M6	5	8
172	218091370	Screw M6	11	4
173	218091371	Screw M6	8	5
174	218091411	Screw M8	8	8
175	218091412	Screw M8	19	21

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176	218091415	Screw M8	4	4
177	218091417	Screw M8	4	4
178	218091421	Screw M8	6	6
179	218091453	Screw M10	1	1
180	218121449	Screw	1	1
181				
182	218790005	Eyebolt M12	2	2
-				
187	218980210	Washer	4	4
188	218985810	Washer M8	6	6
189	218990201	Washer	1	1
190				
191	A20001084	Label	1	1
192	E20001063	Label	1	1
193	A20001085	Label	1	1
-				
*198	H11002013	No.15 oil - 5 litres	1	1
*199	C10520004	M25/tube pack (exhaust)	1	1
*200	A36401025	Inlet pack	1	1
**205	H02109065	Spiralseal	1	1
**206	H02109075	Seal	1	1

*NOT SHOWN

**HYDROCARBON PUMPS ONLY IN PLACE OF ITEM 136

E1M80 Rotary pump

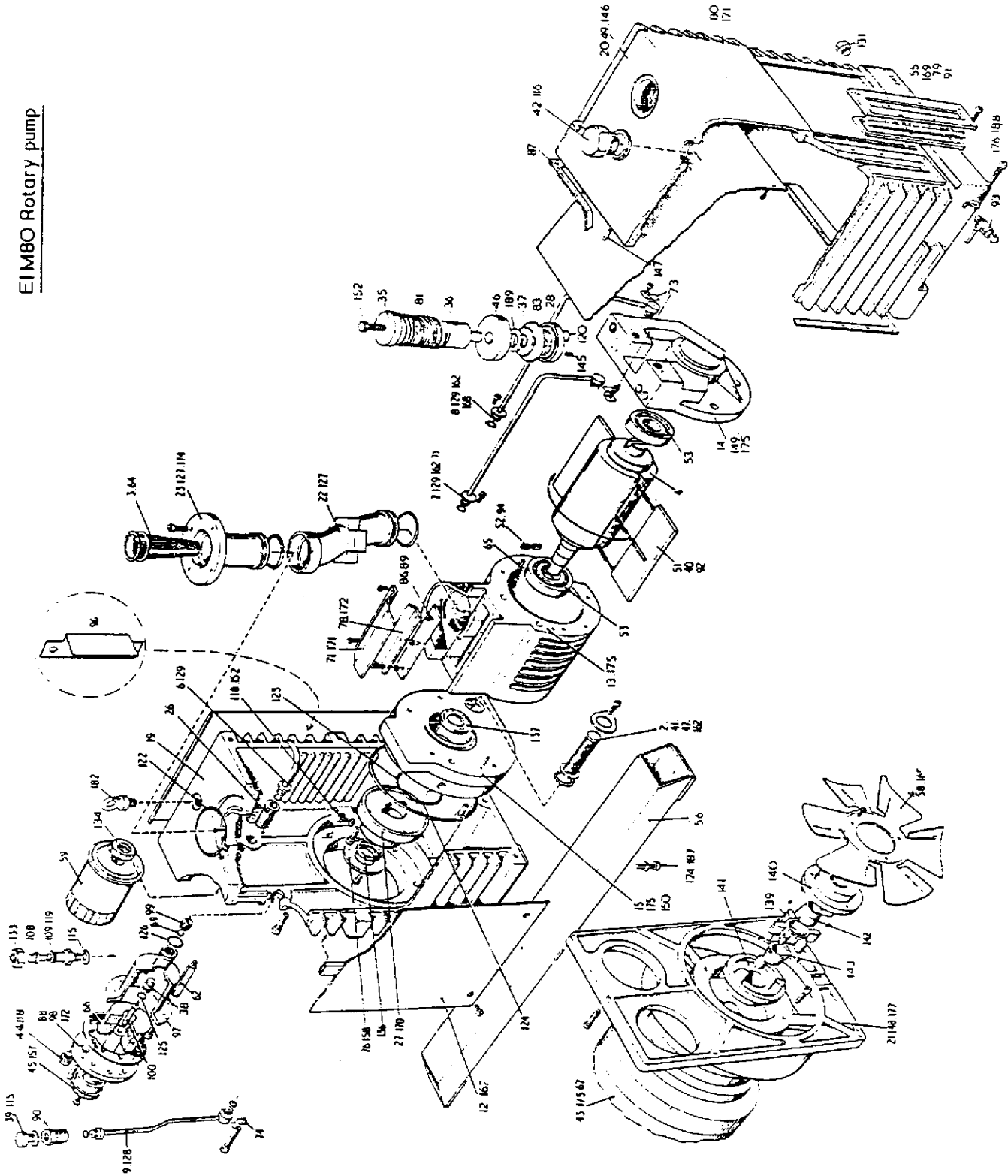


FIG.2 E1M80 ROTARY VACUUM PUMP

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E2M80 Rotary pump

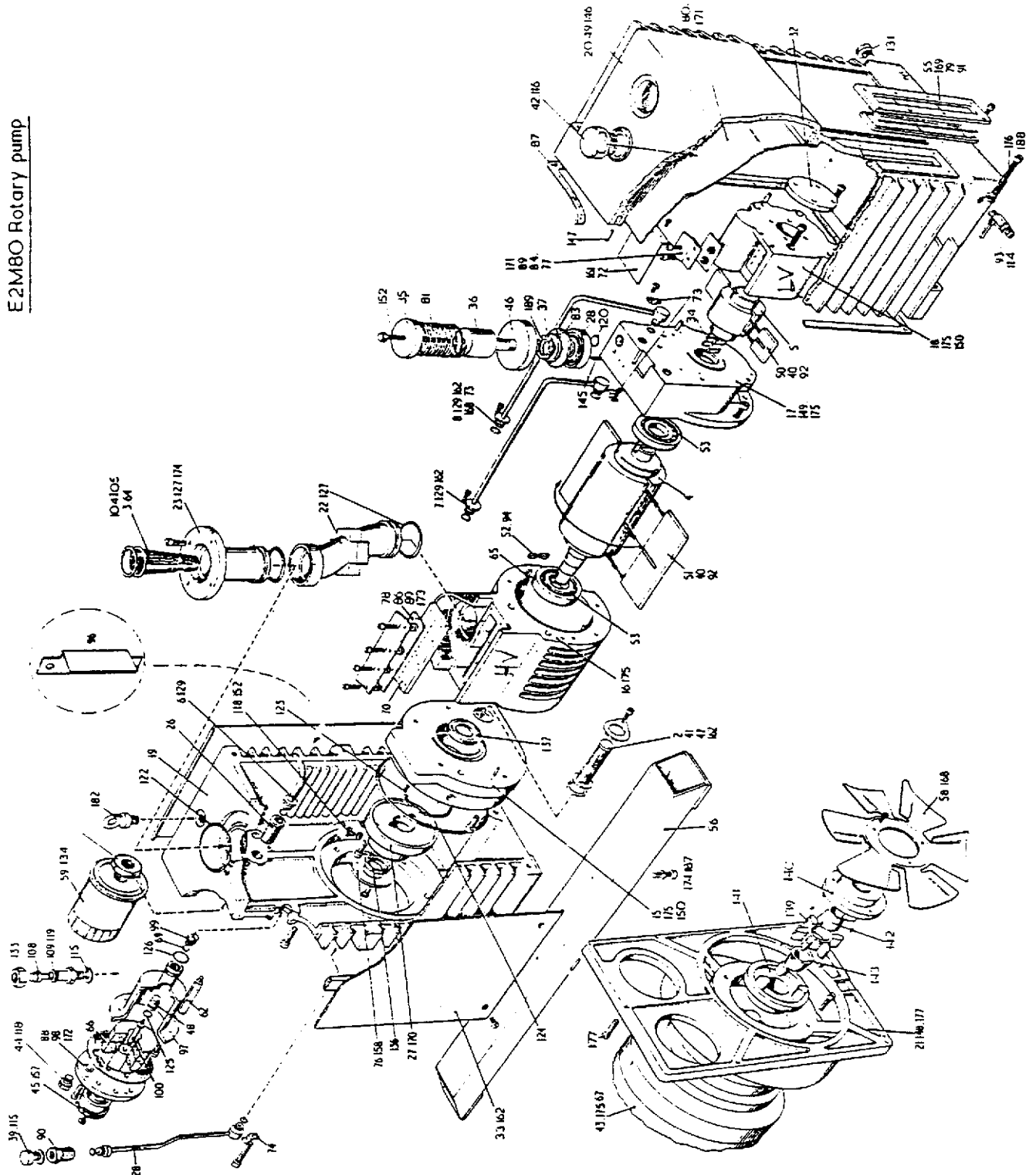


FIG.2a E2M80 ROTARY VACUUM PUMP

PARTS LIST FOR E1M80 AND E2M80 ROTARY PUMPS

PARTS LIST FOR E1M80 AND E2M80 ROTARY PUMPS

Item No.	Code No.	Description	E1M80 Quantity	E2M80 Quantity
1				
2	A22305008	Filter assembly (oil)	1	1
3	A22305035	Filter assembly (inlet)	1	1
4	A26401038	Rotor assembly	1	1
5	A26401042	Rotor assembly LV	1	1
6	A27879001	Tube assembly (oil return)	1	1
7	A36501038	Tube assembly (ballast)	1	1
8	A36501036	Tube assembly (oil delivery)	1	1
9	A27879007	Tube assembly (oil pressure)	1	1
12	A34501005	Slide panel	2	
13	A34501002	Stator HV	1	
14	A34501008	Rear cover	1	
15	A36501001	Front bearing	1	
16	A36501002	Stator HV	1	
17	A36501035	Interstage	1	
18	A36501005	Stator LV	1	
19	A36501026	Adaptor	1	
20	A36501034	Oil box	1	
21	A36501027	Motor mounting	1	
22	A36501009	Inlet connexion	1	
23	A36501032	Inlet flange	1	
26	A36501013	Filter outlet	1	
27	A36501014	Oil pump housing	1	
28	A36501015	Distributor body	1	
32	A36501021	Cover plate	1	
33	A36501028	Slide panel	2	
34	A36501024	Drive member	2	
35	A36601029	Spacer	1	
36	A36401019	Distributor sleeve	1	
37	A34301037	Distributor weight	1	
38	A19201008	Ballast piston (less rubber seal)	1	
39	A01403074	Plug - 1/8in BSP	1	
40	A00307046	Spring	1	
41	A01403030	Filter seal	3	5
42	A26002022	Filler plug - 1in BSP	1	1
43		Motor (see label)	1	1
44	A26002018	Plug - 1in BSP	1	1
45	A19201013	Ballast knob	1	1
46	A36401028	Cap	1	1
47	A11101054	Clamp ring	1	1
48	A19201007	Ballast piston	1	1
49	A20001063	Label	1	1
50	A20402087	Blade LV	2	2
51	A20402089	Blade HV	2	2
52	A20402116	Oil pump blade	2	2
53	A20404012	Roller bearing	2	2
54				
55	A20416002	Sight glass bezel	1	1
56	A20499015	Base runner	2	2

57	A22301002	Fan	1	1
58	A22304016	Filter - AP 63000	1	1
62	A22404006	Support pillar	2	2
63				
64	A22426004	Circclip	1	1
65	A24301008	Key	1	1
66	A22305041	Ballast filter	2	2
67	A24301013	Key	1	1
68				
69	A25904601	Ballast valve	1	1
70	A25942005	Exhaust cover plate	1	1
71	A25970033	Exhaust baffle	1	1
72	A25970034	Exhaust baffle LV	1	1
73	A25970035	Clamp (oil delivery line)	2	2
74	A25970036	Clamp (oil pressure line)	1	1
75				
76	A25971002	Seal retainer	1	1
77	A25976002	Exhaust valve plate LV	1	1
78	A25976005	Exhaust valve plate	1	1
79	A26501012	Sight glass seal	1	1
80	A25976034	Spray baffle	1	1
81	A27102013	Spring	1	1
82				
83	A27159415	Rubber seal	1	1
84	A27159504	Exhaust valve rubber LV	1	1
85				
86	A27159509	Exhaust valve rubber	1	1
87	A27159618	Oil box gasket	1	1
88	A27159428	Body gasket	1	1
89	A27804004	Exhaust valve spacer	4	6
90	A27911003	Socket - 1/8in BSP	1	1
91	A29201006	Sight glass	1	1
92	A29203002	Pin	3	5
93	A28702003	Ball valve - 1/2in BSP	1	1
94	A27102024	Spring	1	1
95				
96	A25970046	Baffle	2	2
97	A36601032	Ballast valve body	1	1
98	A36601033	Ballast valve bearing	1	1
99	A36601034	Ballast plug	1	1
100	A36601036	Ballast spring	1	1
104	B21023019	Protective cover	1	1
105	B21024001	Dust cover	1	1
108	C11001062	Blind tailpiece	1	1
109	C11001180	Adaptor - SC5 x 1/8in BSP	1	1
114	H01503333	Cap - 1in BSP	1	1
115	H02101011	Seal - 1/8in BSP	2	2
116	H02104008	Seal - 1in BSP	1	1
117				

PARTS LIST FOR E2M40S - SUPERPUMF

ITEM NO.	CODE NO.	DESCRIPTION	QUANTITY
1	A22305050	Filter assembly	1
2	A27876010	Valve pipeline assembly	1
3	A22305035	Filter assembly (inlet)	1
4	A26401039	Rotor assembly LV	1
5	A26401040	Gas ballast tube	1
6	A36413012	Oil feeder adaptor	1
7	A36413013	Gauge adaptor	1
8	A36413014	Valve body	1
9	A36413015	Clamp	1
10	A36413016	Non return valve plug	1
11	A36413017	Spring housing	1
12	A36413018	Jet	1
13	A36413019	Restrictor	1
14	A36413020	Front bearing	1
15	A36401001	Stator HV	1
16	A36401002	Interstage	1
17	A36401030	Side panel	1
18	A36413024	Oil box	1
19	A36401027	Motor mounting	1
20	A36401008	Inlet flange	1
21	A36401024	Sleeve	1
22	A20405009	Stator LV	1
23	A36401012	End cover	1
24	A36401013	Distributor weight	1
25	A34301037	Adaptor	1
26	A36413010	Valve pad	2
27	A26501036	Spring	4
28	A00307046	Blanking plate	1
29	A25980006	Filter seal	1
30	A01403030	Plug 1/8in BSP	1
31	A26002010	Motor (see label)	1
32	A26401064	Rotor H.V.	1
33	A27102016	Spring	2
34	A27229001	Ballast plug	1
35	A36413011	Shaft seal housing	1
36	A27840017	Pipeline	1
37	A27840018	Pipeline	1
38	A20001063	Label	1
39	A20001063	Benjo bolt	1
40	A27911012	Solenoid valve	1
41	A28701007	Blade LV	1
42	A20402101	Roller bearing	2
43	A20404011	Blade HV	2
44	A20402152	Sight glass bezel	2
45	A20416002	Uncle runner	2
46	A20499019	Mounting plate	1
47	A36413021	Fan	1
48	A22301003	Oil seal	1
49	H02109084	Ballast filter	2
50	A22305041	O-ring	1
51	H02120015	O-ring	1
52	H02120082	O-ring	1

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53	A22404006	Support pillar	2
54	H03517003	Hollow taper pressure plug 1/8in BSP	1
55	A22426004	Circclip	1
56	H03524007	Connector 1/8in BSP	1
57	H03524008	Connector 1/8in BSP	1
58	A25970045	Baffle	2
59	H03517004	Hollow taper pressure plug 1/8in BSP	1
60	A25942008	Exhaust cover plate	1
61	182671102	PIPE tube	1
62	A25970036	Clamp (oil pressure line)	1
63	A25970038	Exhaust baffile LV	1
64	A36413022	Side panel	1
65	212402003	O-clip (7-9mm)	2
66	218091288	Screw M4	2
67	A25976006	Exhaust valve plate	1
68	A25976007	Exhaust valve plate LV	1
69	A26501012	Sight glass seal	1
70	A36413023	Oil pump housing	1
71	A25976033	Spray baffile	1
72	A27102013	Spring	1
73	A36413025	Washer	2
74	A27159415	Rubber seal	1
75	A20001082	Label - Fomblin	1
76	A27159514	Exhaust valve rubber	1
77	A27159515	Exhaust valve rubber LV	1
78	A27159629	Oil box gasket	1
79	A20402400	Oil pump blade	2
80	A27801004	Exhaust valve spacer	4
81	A27911003	Socket - 1/8in BSP	1
82	A28702003	Ball valve - 1/8in BSP	1
83	A29201006	Sight glass	1
84	A29203002	Pin	4
85	A27192924	Spring	1
86	A21035072	Ballast block	1
87	A36501009	Inlet connexion	1
88	A21071045	Taper lock bush	1
89	A22404010	Spacer	2
90	A25970060	Clamp	1
91	A24301014	Key	1
92	A36501015	Distributor body	1
93	A36401019	Distributor sleeve	1
94	A36401028	Cap	1
95	A36401029	Spacer	1
96	A27876009	Oil pressure pipeline	1
97	A36401031	Filter clamp	1
98	A34421007	Ballast tube	1
99	C10501100	KF16 x 1/8in BSP adaptor	1
100	C10512001	Clamp KF16/10	1
101	C11001084	Blind tailpiece	1
102	H02109052	Oil seal	1
103	H02144003	O-ring	1
104	H21023019	Protective cover	1
105	H21024001	Dust cover	1
106	H03524006	Elbow - 1/8in BSP	1
+107	H03524009	Adaptor	2

PARTS LIST FOR E2M40S - SUPERPUMP

ITER. NO.	QUNE NO.	DESCRIPTION	QUANTITY
108	H03524010	Elbow - 1/2 in	2
109	C11001180	Adaptor - 1/8 in BSP	1
110	218091329	Screw M5	3
111	218091334	Screw M5	4
112	218091370	Screw M6	2
113	H01503006	Cap	1
114	H01503333	Cap - 1/2 in BSP	1
115	H02104001	Seal - 1/8 in BSP	2
116	H02104008	Seal - 1/2 in BSP	1
119	H02120027	O-ring	1
120	H02120031	O-ring	1
121	-	-	-
122	H02120057	O-ring	1
123	H02120082	O-ring	1
124	H02120097	O-ring	1
125	-	-	-
126	H021250200	O-ring	1
127	H02125044	O-ring	1
128	H02125115	O-ring	1
129	H02125116	O-ring	1
130	-	-	-
131	H03517002	Plug 1/2 in	2
132	-	-	-
133	H03400008	Union nut - 3/8 in BSP	1
137	H02109064011	seal	1
138	-	-	-
139	A21071033	Flexible component	1
140	A21071037	Compling flange	1
141	A21071038	Compling flange	1
142	A21071039	Taper lock bush	1
145	211174099	Spring pin	1
146	2111430301	Rivet	4
147	212170186	Spring pin	2
148	212181041	Dowel	2
149	212192021	Taper pin	4
150	212192026	Taper pin	2
151	-	-	-
152	218002339	Screw M5	1
161	218042287	Screw M4	2
162	218042328	Screw M5	15
165	218072409	Screw M8	2
168	-	-	-
169	218091328	Screw M5	4
170	218091330	Screw M5	8
171	218091369	Screw M6	8
172	218091370	Screw M6	2
173	218091371	Screw M6	3

174	218091411	Screw M8	8
175	218091412	Screw M8	21
176	218091415	Screw M8	4
177	218091417	Screw M8	4
178	218091421	Screw M8	6
179	218091453	Screw M10	1
180	218121449	Screw M10	1
181	-	-	-
182	218790005	Eyebolt M12	2
187	218980210	Washer	4
188	218985810	Washer M8	4
189	218990201	Washer	6
190	-	-	-
191	A20001084	Label	1
192	E20001063	Label	1
193	A20001085	Label	1
198	H11002013	No. 15 oil - 5 litres	1
199	C10520004	M25/Lube pack (exhaust)	1
200	A36401025	Inlet pack	1
**205	H02109065	Spiroscel	1
**206	H02109075	Seal	1

*NOT SHOWN
 **HYDROCARBON KIMHO/E2M40 PUMPS ONLY, IN PLACE OF ITEM 136
 **SUPPLIED IN POLYTHENE BAG