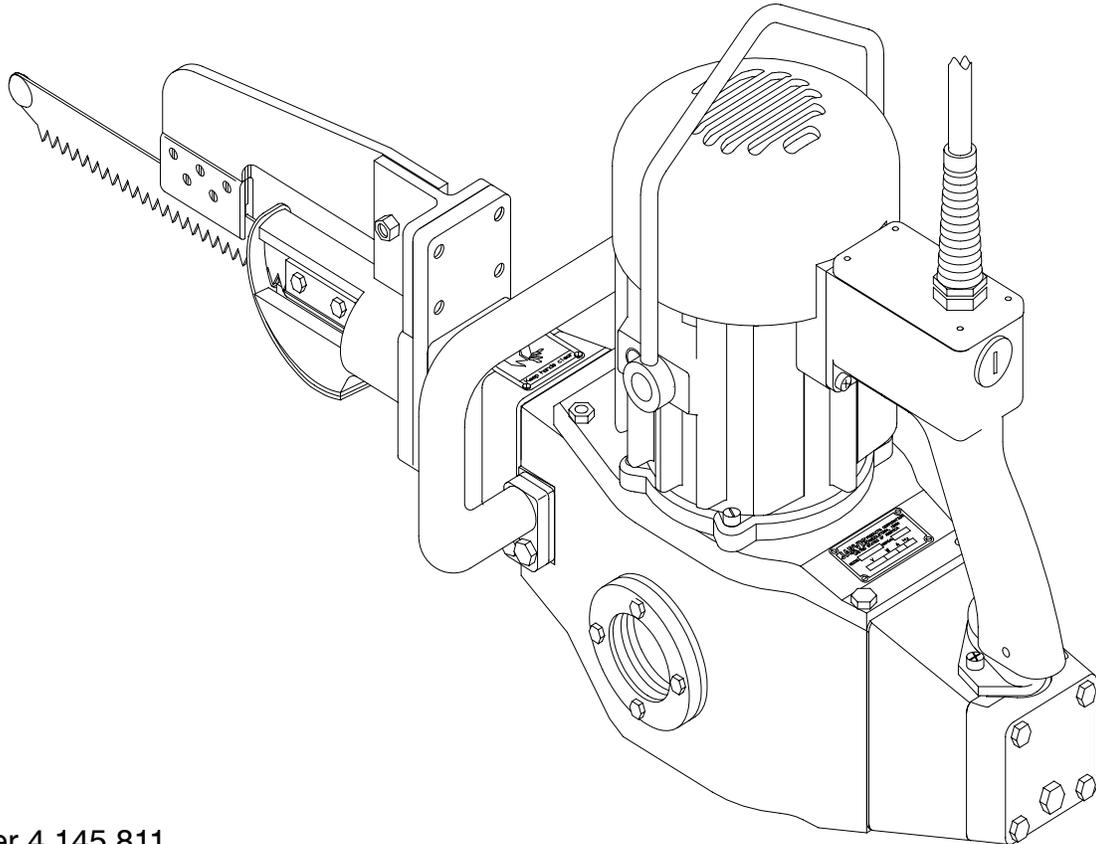




Model MG-1E, 1E-FQ, 1E-HS Electric Brisket & Splitting Saw



Patent Number 4,145,811

EQUIPMENT SELECTION .. Ordering No.

MG-1E Brisket Saw			
42V,	3ph,	50Hz	4005059
50V,	3ph,	60Hz	4005080
115V,	3ph,	50Hz	4005057
200V,	3ph,	50Hz	4005066
208V,	3ph,	60Hz	4005065
220V,	3ph,	50Hz	4005061
230V,	3ph,	60Hz	4005060
380V,	3ph,	50Hz	4005055
380V,	3ph,	60Hz	4005062
415V,	3ph,	50Hz	4005067
460V,	3ph,	60Hz	4005056
575V,	3ph,	60Hz	4005069
MG-1E-FQ Forequarter Saw			
380V,	3ph,	60Hz	4005075
MG-1E-FQ Forequarter Saw with Pivoting Hanger			
208V,	3ph,	60Hz	4005128
230V,	3ph,	60Hz	4005118
460V,	3ph,	60Hz	4005119
MG -1E-HS Hog Splitting Saw			
42V,	3ph,	50Hz	4005083
230V,	3ph,	60Hz	4005073
460V,	3ph,	60Hz	4005074
MG -1E-HS Hog Splitting Saw with Shower Head			
380V,	3ph,	50Hz	4005082
Balancer (for all models)			
			4042047

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• Parts Diagram and List	4
• Specifications	13
• Installation Instructions	13
• Operation Instructions	13
• Maintenance Instructions	14

JARVIS®

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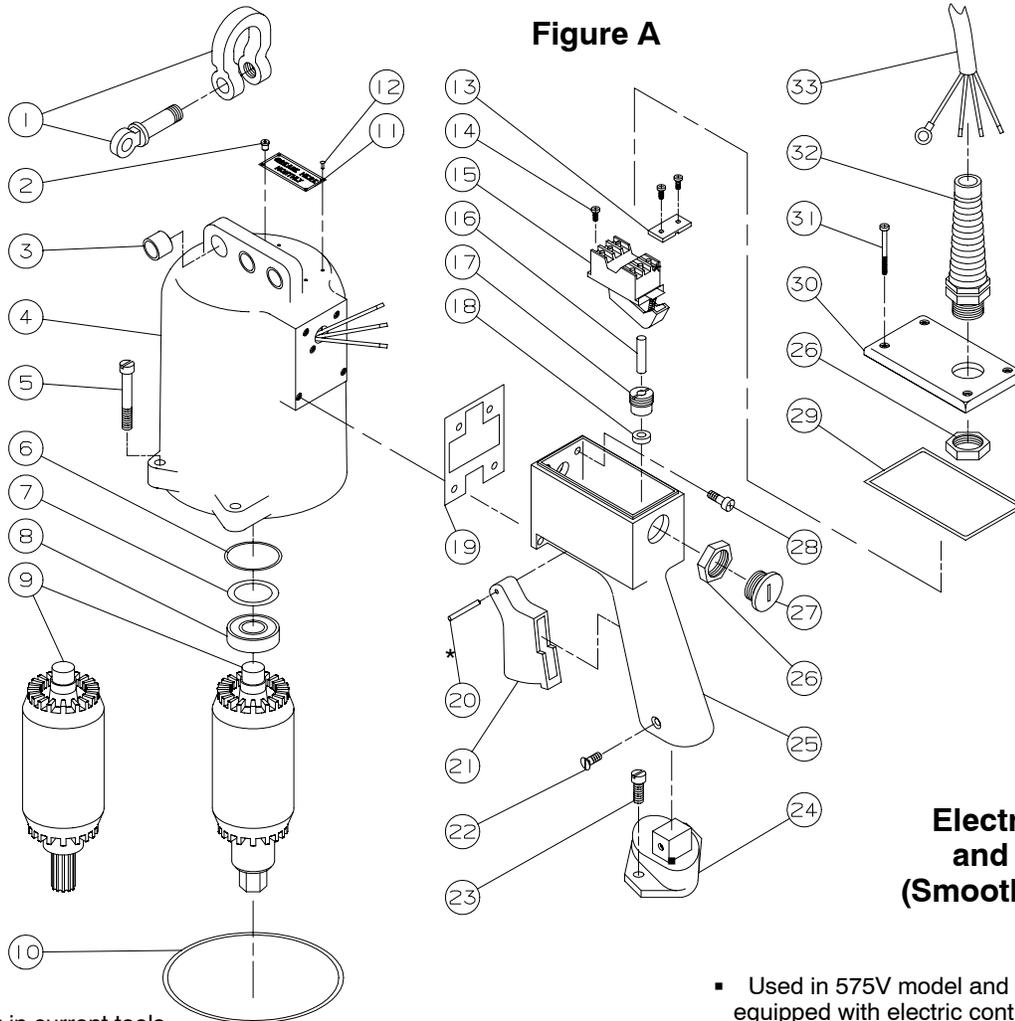
NOTICE TO EMPLOYER AND SAFETY DIRECTOR
AVOID INJURY

1. **Remove** and **repair** any tool that malfunctions. **All** personnel must be instructed to remove any malfunctioning equipment.
2. **Ensure** that all employees who use this tool are trained in the proper use of this tool and are aware of the dangers that may arise if they do not follow procedures outlined in this brochure.
3. **Enclosed** are four (4) copies of “**NOTICE TO OPERATORS, MAINTENANCE AND CLEANUP PERSONNEL.**” Post one copy on the employees’ bulletin board; give one copy to the operator(s); give one copy to the maintenance foreman; and give one copy to the sub-contract cleanup / internal cleanup foreman. *Additional copies will be provided upon request.*
4. The tool is designed and intended to be powerful. This fact should be obvious to your employees, but you must emphasize it to them.
5. **Never** make modifications or alterations to the tool. *Replace any missing or illegible labels.*
6. **Ensure** that proper procedures are established in accordance with OSHA’s lockout/tagout procedures (29 CFR 1910.147) to prevent accidental startup or release of stored energy.
7. **Ensure** that employees wear eye protection in accordance with OSHA’s eye and face protection requirements (29 CFR 1910.133) when operating the tool.
8. **Hand/Wrist/Arm** injury and other Cumulative Trauma Disorders may result from repetitive work, motion or vibration. You must make your employee’s aware of hazards, symptoms of injury and appropriate prevention. See OSHA’s “Ergonomic Program Management Guidelines for Meatpacking Plants.”
9. **Follow** our installation and maintenance instructions for proper installation and care of the tool.
10. **Avoid** injury. Do not permit the tool to be misused.
11. **If you resell or distribute** a Jarvis product, you must provide the purchaser with the appropriate safety sheets and tool brochure. *Additional copies of safety sheets and tool brochures will be provided upon request.*



NOTICE TO OPERATORS, MAINTENANCE AND CLEANUP PERSONNEL
REMOVE ANY MALFUNCTIONING TOOL FROM SERVICE
REPORT ANY PROBLEMS TO YOUR SUPERVISOR

1. **Disconnect** the power supply in accordance with OSHA's lockout/tagout procedures (29 CFR 1910.147) before making any blade changes.
2. **Disconnect** the power supply in accordance with OSHA's lockout/tagout procedures (29 CFR 1910.147) before performing any repair or maintenance.
3. **Disconnect** the power supply - or have the power shut off - in accordance with OSHA's lockout/tagout procedures (29 CFR 1910.147) before performing any cleanup.
4. **Disconnect** the power supply when the tool is not in use.
5. **Never** put fingers, hands or other parts of the body on the blade or within the cutting path of the tool when it is connected to the power supply.
6. **Always** wear eye protection in accordance with OSHA's eye and face protection requirements (29 CFR 1910.133) when operating the tool.
7. **Always** wear cut protective gloves when handling the blade.
8. **Test** the tool prior to use or daily. **Depress** the trigger and the tool should start. **Release** the trigger and the tool should stop. *If the tool malfunctions, remove it from service and report or repair it immediately.*
9. **Never** depress the trigger unless you want to use or test the tool.
10. **Never** make modifications or alterations to the tool. *Replace any missing or illegible labels.*
11. **Always** use both hands when starting and operating the tool to avoid the risk of possible "kick back" or "recoil". Continue holding the tool with both hands until the saw blade comes to a complete stop.



Electric Motor and Handle (Smooth Housing)

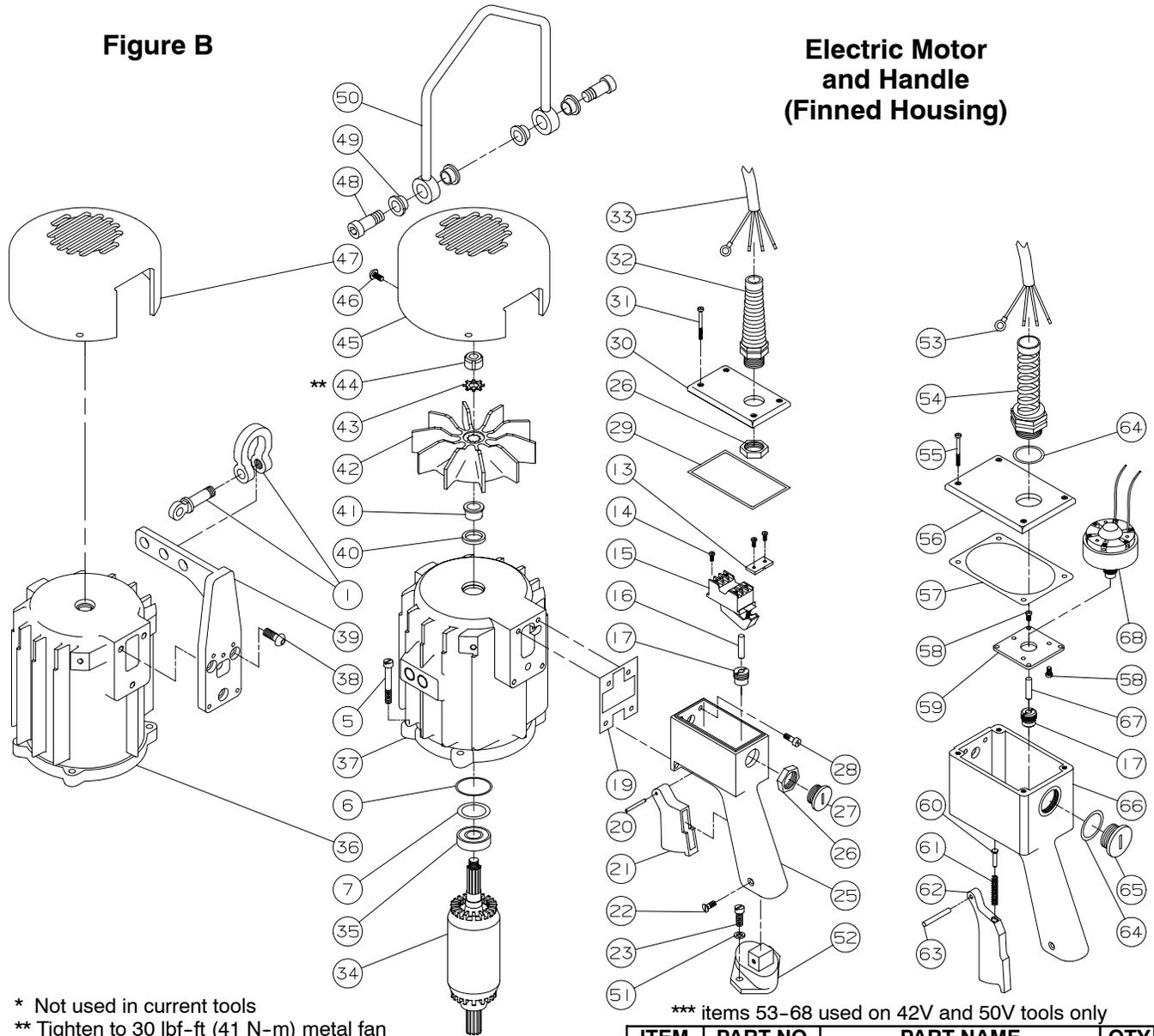
▪ Used in 575V model and older 42V models equipped with electric control box (3063105).

* Not in current tools

ITEM	PART NO.	PART NAME	QTY
1	1028040*	Shackle and Pin	1
2	1038022*	Grease Fitting	1
3	1036206*	Hanger Bushing (with item 4)	3
4	page 6*	Motor Housing with Stator	1
5	1055842	Fillister Head Screw	4
6	1035218	O-ring	1
7	1014139	Wave Spring	1
8	1021412*	Ball Bearing	1
9	1064037*	Rotor, Splined End	1
	1064032*	Rotor, Hex End	
10	1035451*	O-ring	1
11	1017312*	Lubrication Label	1
12	1055875*	Drive Screw	4
13	1012072	Switch Holding Clamp	1
14	1055779	Cheese Head Screw	3
15	1005098	Switch 115V-575V	1
	1005136	Switch 42V	
16	1039055	Plunger	1
17	1036184	Trigger Bushing	1
18	1035395*	U-cup Seal	1
19	1035396	Gasket	1
20	1010343	Dowel Pin	1

ITEM	PART NO.	PART NAME	QTY
21	1018118	Trigger Lever	1
22	1055781	Oval Head Screw	2
23	1055843	Slotted Head Screw	2
24	1042307*	Rear Handle Bracket	1
25	1019136	Rear Handle, 42V-460V	1
	1019147▪	Rear Handle, 42V and 575V	
26	1007262	Locking Nut, 42V-460V	2
	1007282▪	Locking Nut, 42V and 575V	
27	1061530	Plug, 42V-460V	1
	1061606▪	Plug, 42V and 575V	
28	1055758	Cheese Head Screw	5
29	1035361	Electrical Box Gasket	1
30	1002311	Elec. Box Cover, 42V-460V	1
	1002345▪	Elec. Box Cover, 42V, 575V	
31	1055778	Pan Head Screw	4
32	1011260	Cord Connector, 42V-460V	1
	1011280▪	Cord Connector, 42V, 575V	
33	1001143	Electric Cord, 575V, 15 ft	1
	1001104	Electric Cord, 230-460V	15 ft
	1001101	Electric Cord, 115V, 15 ft	1
	1001105*	Electric Cord, 42V Dual, 15 ft	1
	1001125*	Electric Cord, 42V Single	15 ft

Figure B



**Electric Motor
and Handle
(Finned Housing)**

- * Not used in current tools
- ** Tighten to 30 lbf-ft (41 N-m) metal fan
Tighten to 10 lbf-ft (14 N-m) plastic fan
Use Jarvis torque wrench adapter 8039181

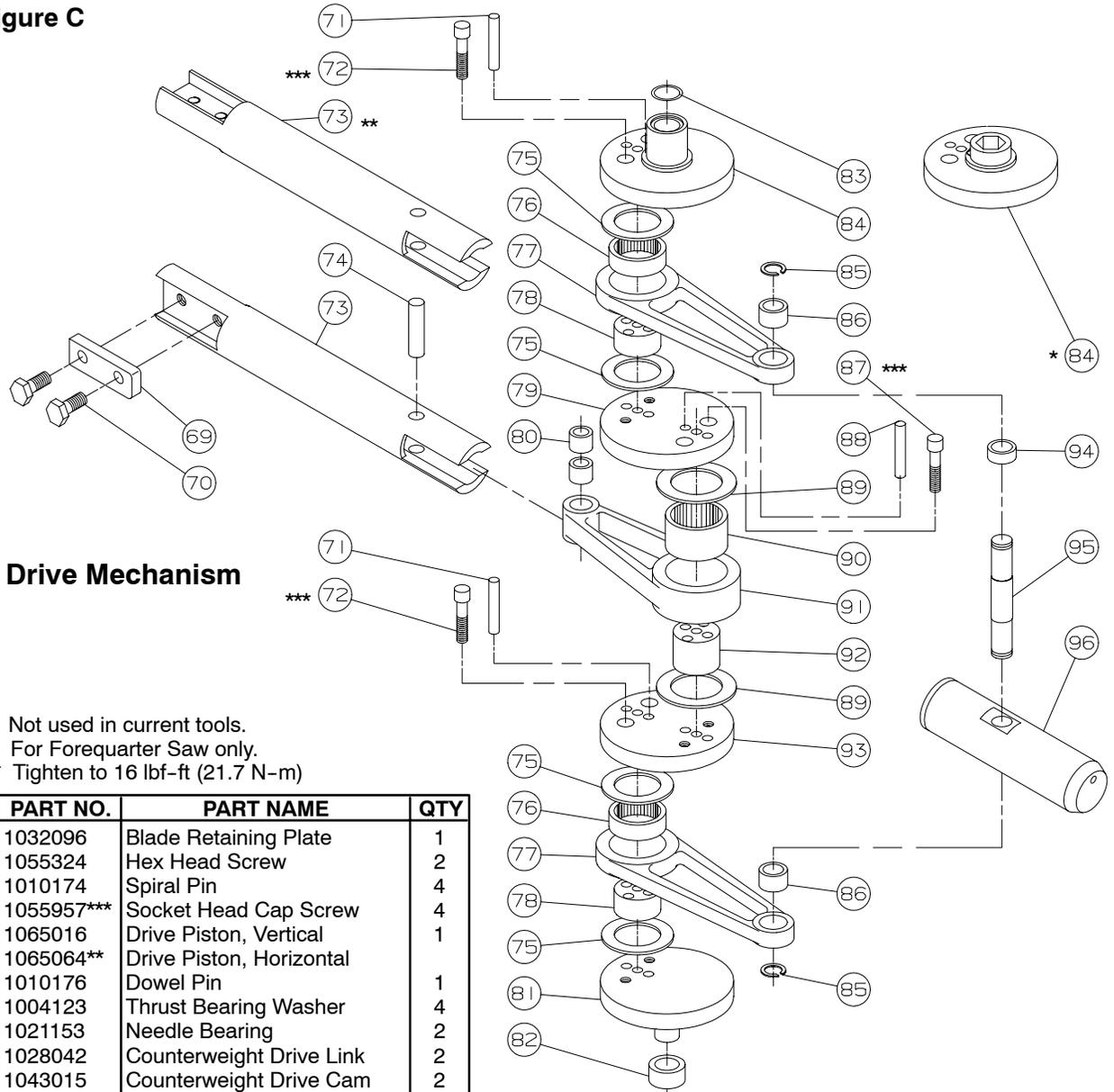
*** items 53-68 used on 42V and 50V tools only

ITEM	PART NO.	PART NAME	QTY
34	1064049	Rotor	1
35	1021382	Ball Bearing	1
36	page 6*	Motor Hsg & Stator (Fixed)	1
37	page 6	Motor Hsg & Stator (Swivel)	1
38	1055959*	Button Head Cap Screw	3
39	1042504*	Hanger Bracket	1
40	1035612	Shaft Seal	1
41	1029396	Spacer	1
42	1061902	Fan	1
43	1004397	Lock Nut Washer	1
44	1007366**	Lock Nut	1
45	1002527	Fan Cover (Swivel Hanger)	1
46	1055501	Button Head Cap Screw	3
47	1002463*	Fan Cover (Fixed Hanger)	1
48	1055273	Socket Hd Shoulder Screw	2
49	1036317	Flanged Bushing	4

ITEM	PART NO.	PART NAME	QTY
50	1042540	Swivel Hanger	1
51	1004049	Washer	2
52	1042503	Handle Bracket	1
53	1001157***	Electric Cord, 42V	1
54	1011328***	Cord Connector, 42V	1
55	1055108***	Cheese Head Screw	4
56	1002465***	Cover	1
57	1035614***	Gasket	1
58	1055915***	Cheese Head Screw	7
59	1032529***	Switch Mounting Plate	1
60	1039077***	Spring Plunger	1
61	1014208***	Spring	1
62	1018153***	Trigger Lever	1
63	1010456***	Dowel Pin	1
64	1004394***	Sealing Washer	2
65	1061954***	Hole Plug	1
66	1019220***	Rear Handle, Metal	1
67	1010457***	Dowel Pin	1
68	1005143***	Push Button Switch	1

Motor Housing Assemblies with Stator			
Item	Part Number	Voltage/Hertz	Quantity
4	3016298	575 V / 60 Hz	1
4	3016263	460 V / 60 Hz	1
4	3016293	415 V / 50 Hz	1
4	3016268	380 V / 60 Hz	1
4	3016263	380 V / 50 Hz	1
4	3016266	230 V / 60 Hz	1
4	3016267	220 V / 50 Hz	1
4	3016282	208 V / 60 Hz	1
4	3016266	200 V / 50 Hz	1
4	3016264	115 V / 50 Hz	1
4	3016265	50 V / 60 Hz	1
4	3016265	42 V / 50 Hz	1
36	3016450	575 V / 60 Hz	1
36	3016449	460 V / 60 Hz	1
36	3016448	415 V / 50 Hz	1
36	3016447	380 V / 60 Hz	1
36	3016446	380 V / 50 Hz	1
36	3016445	230 V / 60 Hz	1
36	3016444	220 V / 50 Hz	1
36	3016443	208 V / 60 Hz	1
36	3016445	200 V / 50 Hz	1
36	3016442	115 V / 50 Hz	1
36	3016441	50 V / 60 Hz	1
36	3016441	42 V / 50 Hz	1
37	3016467	575 V / 60 Hz	1
37	3016468	460 V / 60 Hz	1
37	3016469	415 V / 50 Hz	1
37	3016470	380 V / 60 Hz	1
37	3016471	380 V / 50 Hz	1
37	3016472	230 V / 60 Hz	1
37	3016473	220 V / 50 Hz	1
37	3016474	208 V / 60 Hz	1
37	3016472	200 V / 50 Hz	1
37	3016475	115 V / 50 Hz	1
37	3016476	50 V / 60 Hz	1
37	3016476	42 V / 50 Hz	1

Figure C



Drive Mechanism

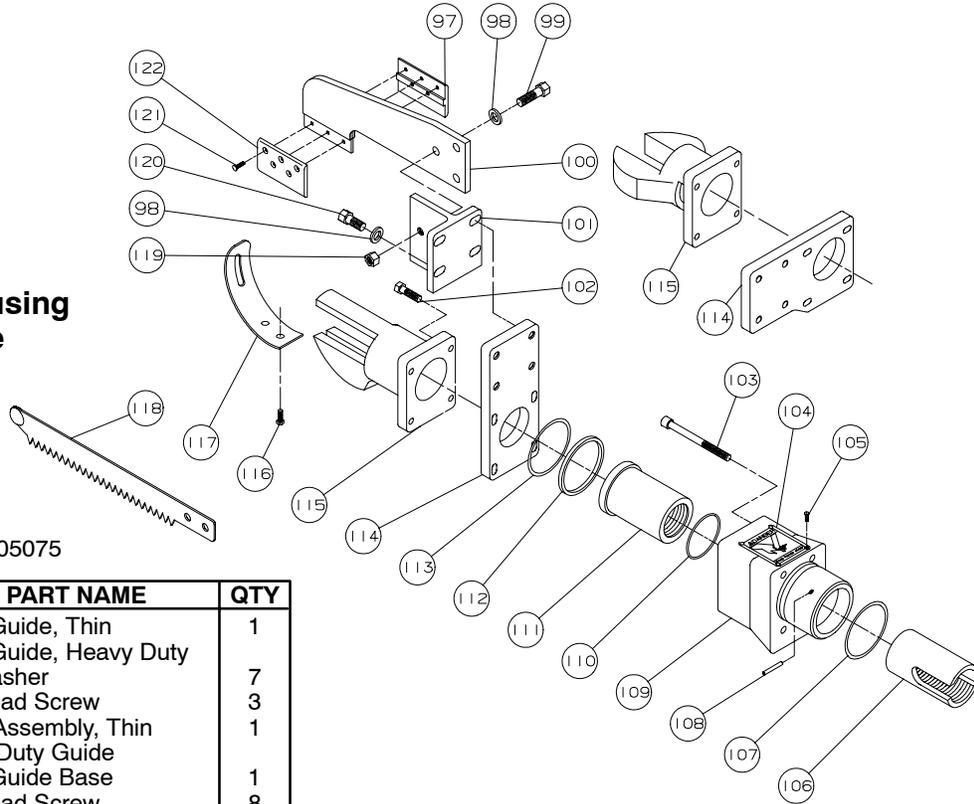
- * Not used in current tools.
- ** For Forequarter Saw only.
- *** Tighten to 16 lbf-ft (21.7 N-m)

ITEM	PART NO.	PART NAME	QTY
69	1032096	Blade Retaining Plate	1
70	1055324	Hex Head Screw	2
71	1010174	Spiral Pin	4
72	1055957***	Socket Head Cap Screw	4
73	1065016	Drive Piston, Vertical	1
	1065064**	Drive Piston, Horizontal	
74	1010176	Dowel Pin	1
75	1004123	Thrust Bearing Washer	4
76	1021153	Needle Bearing	2
77	1028042	Counterweight Drive Link	2
78	1043015	Counterweight Drive Cam	2
79	1032093	Top Intermediate Drive Plate	1
80	1021152	Needle Bearing	2
81	1032095	Drive Plate and Stem	1
82	1029134	Spacer	1
83	1035308	O-ring	1
84	1032385*	Hex Drive Plate	1
	1032423	Splined Dr. Pl. with item 83	
85	1013010	External Retaining Ring	2
86	1021156	Needle Bearing	2
87	1055958***	Socket Head Cap Screw	2
88	1010175	Spiral Pin	2
89	1004124	Thrust Bearing Washer	2
90	1021154	Needle Bearing	1
91	1028041	Saw Blade Drive Link	1
92	1043016	Saw Blade Drive Cam	1
93	1032094	Bottom Intermediate Dr Plate	1
94	1029142	Bearing Spacer	1

ITEM	PART NO.	PART NAME	QTY
95	1027033	Counterweight Drive Stud	1
96	1065014	Counterweight Drive Piston	1
	3028015	Counterweight Drive Assy. (incl. items 76, 77 and 86)	
	3028016	Blade Drive Assembly (includes items 80, 90 and 91)	
	3065005	Counterweight Ram Assy. (includes items 95 and 96)	
	see below	Drive Mechanism Assy	
	3061176	Hex Drive (items 69-81 and 84-96)	
	3061186	Spline Drive (items 69-81 and 83-96)	

Figure D

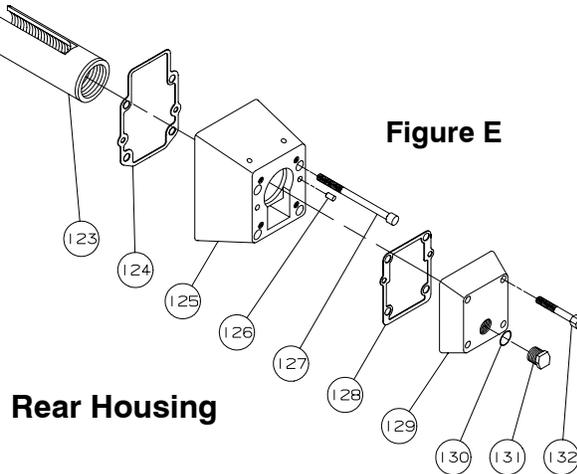
Front Housing and Blade



* Not in current tools
 ** For Forequarter Saw 4005075

ITEM	PART NO.	PART NAME	QTY
97	1058105*	Blade Guide, Thin	1
	1058147	Blade Guide, Heavy Duty	
98	1004032	Flat Washer	7
99	1055065	Hex Head Screw	3
100	1058107*	Guide Assembly, Thin	1
	1058148	Heavy Duty Guide	
101	1041020	Blade Guide Base	1
102	1055328	Hex Head Screw	8
103	1055352	Socket Head Cap Screw	4
104	1017081	Danger Label	1
105	1055975	Pan Head Slotted Screw	4
106	1036096	Front Piston Bushing	1
107	1035134	O-ring	1
108	1010535	Dowel Pin	1
109	3016061	Front Bearing Housing (includes items 104-109)	1
110	1035048	O-ring	1
111	1036097*	Seal Bushing	1
	1036303	Seal Bushing, Heavy Duty	
112	1035130*	Rod Seal	1
	1035634	Rod Seal, Heavy Duty	
113	1035143	Wiper Ring	1
114	1042137	Blade Support Bracket	1
	1042365**	Blade Support Bracket	
115	1016320	Front Housing	1
	1016515**	Front Housing	
116	1055296	Hex Head Screw	2
117	1024040	Saw Blade Guard	1
118	1023083	Blade, 9 1/2 inch	1
	1023084	Blade, 10 1/2 inch	
	1023215	Blade, 11 1/2 inch	
	1023230	Blade, 13 inch	
	1023088**	Blade, 18 inch	
119	1007183	Hex Lock Nut	3
120	1055284	Hex Head Screw	4
121	1055548*	Flat Head Slotted Screw	5
	1055001	Flat Head Cap Screw	
122	1058104*	Blade Guide, Thin	1
	1058146	Blade Guide, Heavy Duty	
123	1036092	Rear Piston Bushing	1
124	1035408	Rear Housing Gasket	1
125	1016415	Rear Bearing Housing	1

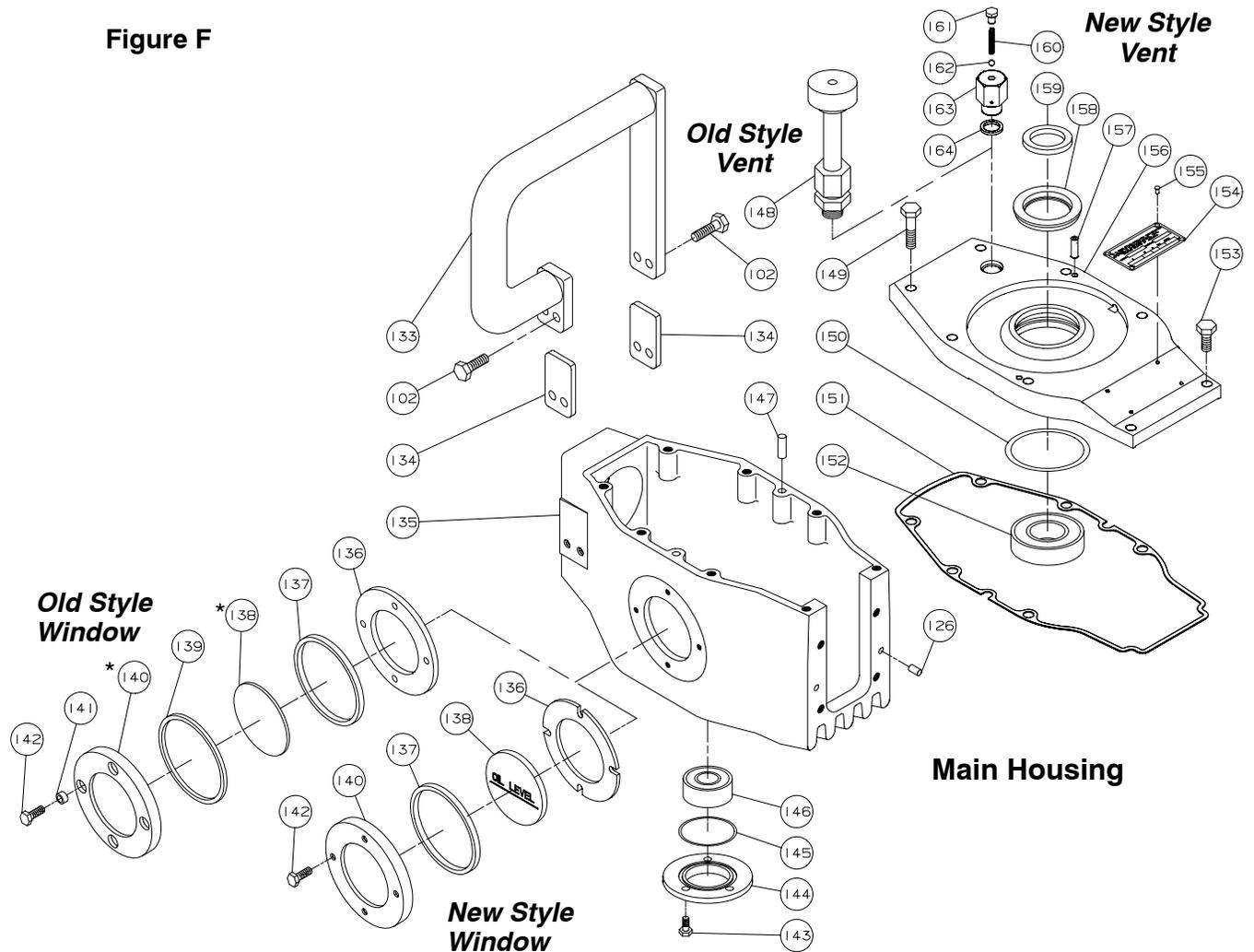
Figure E



Rear Housing

ITEM	PART NO.	PART NAME	QTY
126	1010179	Dowel Pin	4
127	1055329	Socket Head Cap Screw	4
128	1035409	Rear Cover Gasket	1
129	1002344	Rear Cover	1
130	1035135	O-ring	1
131	1050193	Hex Hd Plug with item 130	1
132	1055330	Hex Head Screw	4
	3058091	Blade Guide Support Assy. (includes items 97-102, 114 and 119-122)	
	3061132*	Thin Blade Guide Kit (incl. items 97, 121 and 122)	

Figure F

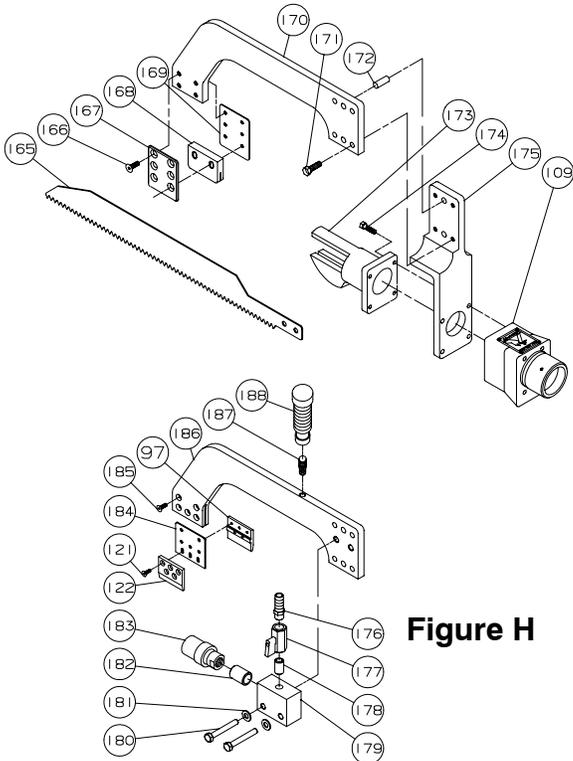


* Not used in current tools.

ITEM	PART NO.	PART NAME	QTY
133	1019060	Auxiliary Handle	1
134	1032097	Insulating Plate	2
135	1016138	Main Housing	1
136	1035137	Gasket	1
137	1035138	Gasket	1
138	1061087	Observation Window	1
139	1035139*	Gasket	2
140	1061086	Window Frame	1
141	1009066*	Window Sleeve	4
142	1055285	Hex Head Screw	4
143	1055325	Hex Head Screw	3
144	1002271	Bearing Seal Cover	1
145	1035283	O-ring	1
146	1021155	Ball Bearing	1
147	1010177	Dowel Pin	2
148	3061353	Vent Plug Assembly	1
149	1055326	Hex Head Screw	2
150	1035467	O-ring	1
151	1035407	Crankcase Gasket	1
152	1021330	Ball Bearing	1

ITEM	PART NO.	PART NAME	QTY
153	1055327	Hex Head Screw	2
154	1017158	Name Plate	1
	1017402	Name Plate "CE" only	
155	1055039	Drive Screw	4
156	1002343	Crankcase Cover	1
157	1055912	Socket Set Screw, Soft Tip	2
158	1013257	Seal Retaining Ring	1
159	1035368	Seal	1
160	1014220	Spring	1
161	1055635	Hex Head Screw	1
162	1071369	Ball	1
163	1022386	Valve Housing	1
164	1035506	O-ring	1
	3035094	Seal and Gasket Kit (items 107, 110, 112, 124, 128, 136, 137, 145, 151 and 164)	
	3061027	Window Assembly (includes items 136-138 and 140)	
	3061480	Air Vent Assy (items 160-164)	

Figure G
Hog Splitter Frame and Blade
MG-1E-HS



Hog Splitter Frame and Blade with Shower Head
MG-1E-HS

ITEM	PART NO.	PART NAME	QTY
165	1023090	Hog Splitting Blade	1
166	1055361	Flat Head Socket Screw	6
167	1032109	LH Blade Guide Plate	1
168	1058054	Blade Guide	1
169	1032110	RH Blade Guide Plate	1
170	1046015	Saw Blade Support Frame	1
171	1055357	Hex Head Screw	4
172	1010384	Dowel Pin	2
173	1016162	Front Housing	1
174	1055326	Hex Head Screw	4
175	1042090	Frame Mounting Bracket	1
	3046015	Hog Splitter Frame Package (includes items 166-175)	
176	1050484	Hose Fitting	1
177	1022212	Ball Valve	1
178	1050489	Pipe Nipple	1
179	1071021	Water Manifold	1
180	1055292	Hex Head Screw	2
181	1004113	Washer	2
182	1050810	Pipe Nipple	1
183	1061239	Shower Head	1
184	1032532	Adapter Plate	1
185	1055052	Flat Head Socket Screw	5
186	1046062	Blade Support Frame	1

Forequarter Saw with Wide Blade & Pivoting Hanger
MG-1E

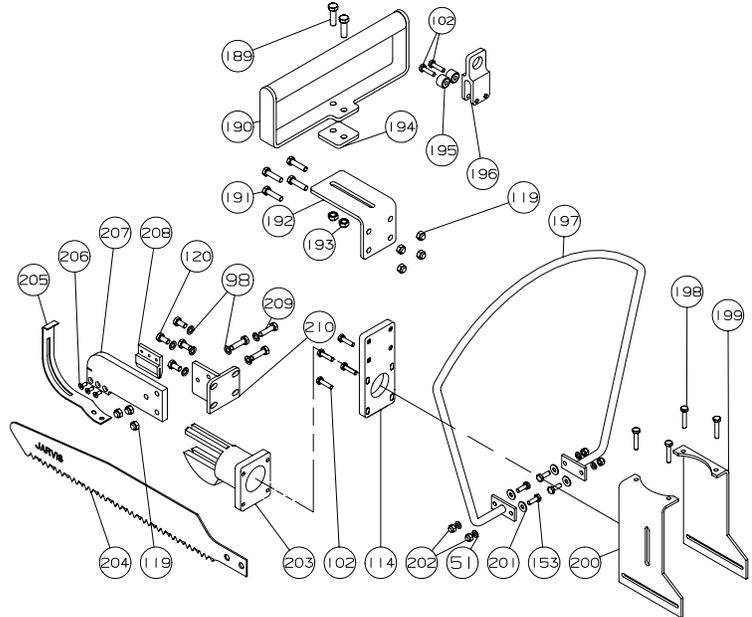
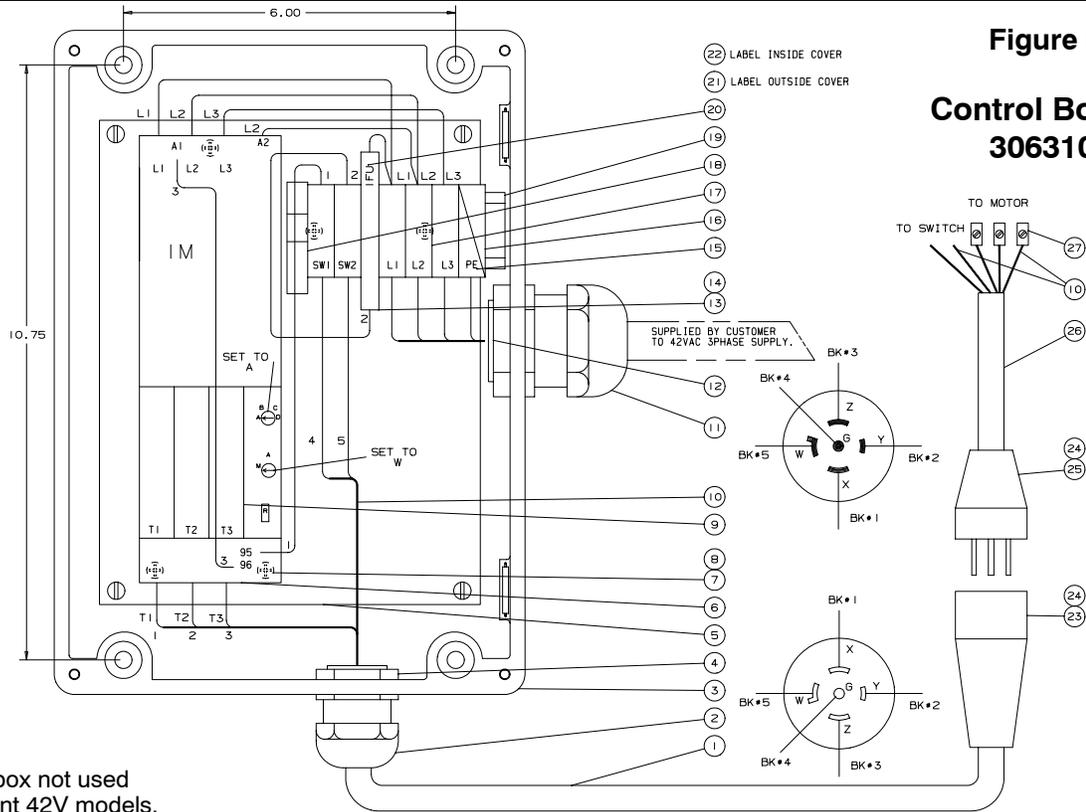


Figure H

ITEM	PART NO.	PART NAME	QTY
	3046063	Hog Splitter Frame Package includes items 97, 121, 122, 171-175 and 184-186)	
	3061280	Shower Head Kit (includes items 176-183)	
187	1027069	Threaded Stud	1
188	1019056	Straight Handle	1
	3019225	Hdl. & Stud (item 187 & 188)	
189	1055389	Hex Head Screw	2
190	1019231	Handle	1
191	1055294	Hex Head Screw	4
192	1042524	Handle Bracket	1
193	1007252	Hex Lock Nut	2
194	1032610	Insulation Plate	1
195	1021449	Bearing	2
196	1042309	Bracket	1
197	1042606	Hanger	1
198	1055287	Hex Head Screw	4
199	1042522	Right Side Bracket	1
200	1042523	Left Side Bracket	1
201	1004142	Washer	4
202	1007297	Hex Lock Nut	4
203	1016669	Front housing	1
204	1023577	Forequarter Saw Blade	1
205	1024283	Blade Guard	1
206	1055277	Flat Head Socket Screws	3
207	1058194	Blade Guide Support	1
208	1058196	Blade Guide	1
209	1055153	Hex Head Screw	3
210	1041089	Base Weldment	1
	3058090	Blade Guide Support Pkg (items 98, 102, 114, 119, 120, 205-210)	
	3042045	Pivoting Hanger Kit (items 51, 102, 119, 120, 153 and 189-202)	



* Control box not used
in current 42V models.

ITEM	PART NO.	PART NAME	QTY
1	1001125	Cord	3 ft
2	1011306	Cord Connector	1
3	1007266	Locking Nut	1
4	1016451	Electrical Enclosure	1
5	1032402	Mounting Plate	1
6	1063604	Magnetic Starter	1
7	1055803	Phillips Head Screw	5
8	1004247	External Tooth Washer	5
9	1063660	Heater Pack	1
10	1061545	Ferrule	10
11	1011258	Cord Connector	1
12	1007255	Locking Nut	1
13	1063390	Fuse Terminal Block	1
14	1063537	Fuse	1

ITEM	PART NO.	PART NAME	QTY
15	1017192	Terminal Marker	6
16	1063521	Yellow/Green Term. Block	1
17	1063520	Gray Terminal Block	5
18	1063362	End Clamp Terminal	1
19	1042313	Terminal Rail	1
20	1063363	Terminal Marker	1
21	1017085	Danger Label	1
22	1017226	Connection Diagram Label	1
23	1063747	Outlet	1
24	1063560	Grommet	2
25	1063748	Plug	1
26	1001125	Cord	20 ft
27	1063630	Terminal	3

Wiring Diagrams 42 V without control box

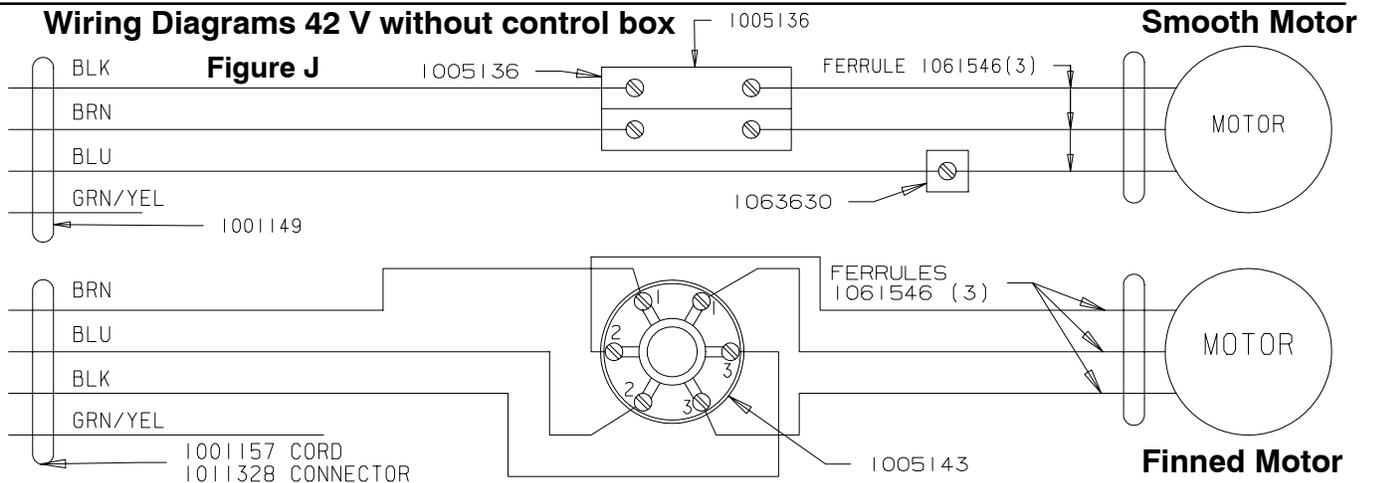
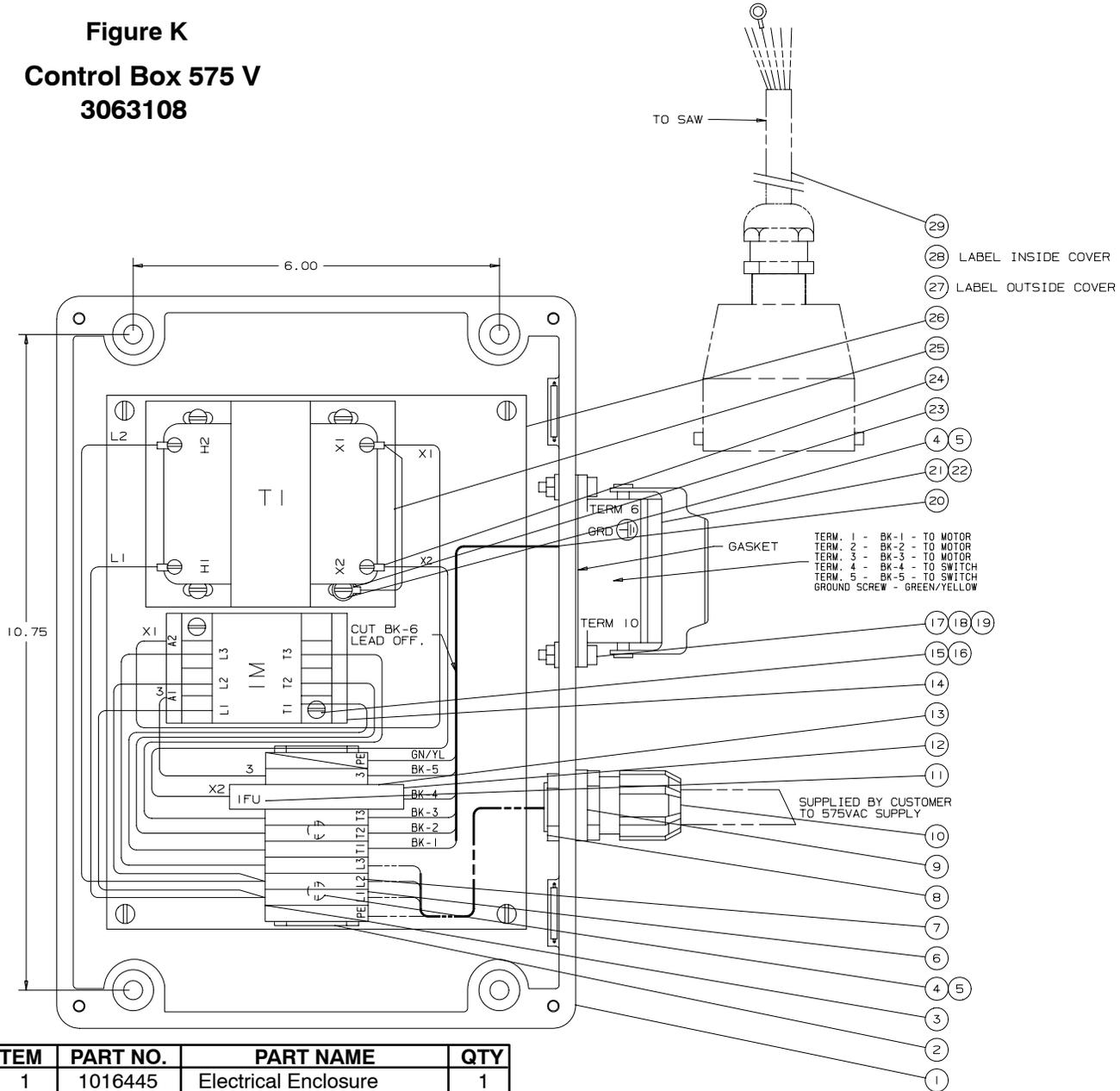


Figure K

**Control Box 575 V
3063108**



ITEM	PART NO.	PART NAME	QTY
1	1016445	Electrical Enclosure	1
2	1063393	Terminal Rail	1
3	1063496	Yellow/Green Term. Block	2
4	1055010	Pan Head Screw	6
5	1004022	Internal Lock Washer	6
6	1063494	Gray Terminal Block	7
7	1063363	Terminal Marker	9
8	1007278	Locking Nut	1
9	1004211	Sealing Washer	1
10	1011268	Cord Connector	1
11	1063456	Terminal Marker	1
12	1063455	Fuse Terminal Block	1
13	1063473	Fuse	2
14	1063552	Contactora	1
15	1055499	Pan Head Screw	2
16	1004199	Split Lock Washer	2

ITEM	PART NO.	PART NAME	QTY
17	1055484	Pan Head Screw	4
18	1004006	Internal Lock Washer	4
19	1007192	Hex Nut	4
20	1001226	Cord, 1 ft	1
21	1063908	Conn. w/Hood, Latch, Gskt	1
22	1063905	Connector Insert, Female	1
23	1063079	Wire Ring Terminal	1
24	1063089	Wire Ring Terminal	5
25	1063500	Transformer	1
26	1032320	Mounting Plate	1
27	1017085	Danger Label	1
28	1017231	Connection Diagram Label	1
29	3001095	Cord Assembly, 15 ft	1

SPECIFICATIONS

Model MG-1E, 1E-FQ, 1E-HS

Motor Power	1.9 hp	1400 W
Operating Voltages	42, 115, 200, 220, 380, 415 V, 3 phase, 50 Hz 50, 208, 230, 380, 460, 575 V, 3 phase, 60 Hz	
Blade Lengths	9.5 in	241 mm
	10.5 in	267 mm
	11.5 in	292 mm
	13.0 in	330 mm
(for wide blade fqtr. saw)	16.3 in	415 mm
(for forequarter saw)	18.0 in	457 mm
(for hog splitting saw)	21.9 in	556 mm
Control Handle	Single / Electric	
Cutting Cycle Time	3 sec	
Overall Length (9.5 in blade)	31 in	787 mm
Weight	59 lbs	26.8 kg
Vibration	less than (<) 132 dB	< 4 m/sec ²
Noise (one meter from tool)	85 dB	

INSTALLATION INSTRUCTIONS

IMPORTANT: ALWAYS DISCONNECT THE ELECTRIC POWER SUPPLY IN ACCORDANCE WITH OSHA'S LOCKOUT/TAGOUT PROCEDURES (29 CFR 1910.147) BEFORE PERFORMING ANY MAINTENANCE OR REPAIRS.

ALL WIRING MUST BE DONE IN ACCORDANCE WITH NATIONAL, STATE AND LOCAL ELECTRICAL CODES.

Refer to Figure B on page 5 for referenced items.

- 1 Install the MG-1E above the work station from a balancer. **Jarvis** part number 4042047 is available.
 - 1.1 The MG-1E should have sufficient travel to allow the operator to reach the entire work area.
- 2 Position power cord for either top exit or rear exit as desired.
 - 2.1 Unplug the tool.
 - 2.2 Remove (4) screws (item 31 or 55), electrical box cover (item 30 or 56) and gasket (item 29 or 57).

- 2.3 Disconnect power cord (item 33 or 53) from switch (item 15 or 68).
 - 2.4 Remove (2) locking nuts (item 26), cord connector (item 32 or 54) and plug (item 27 or 65).
 - 2.5 Swap positions of cord connector and plug. Retighten nuts or plug.
 - 2.6 Reconnect power cord to switch.
 - 2.7 Reinstall gasket, cover and (4) pan head screws.
- 3 Connect the tool to the appropriately fused electric outlet.

OPERATION INSTRUCTIONS

- 1 Prior to use or daily, perform the following tests:
 - 1.1 Make sure that the MG-1E moves freely on the balancer.
 - 1.2 Make sure the control trigger is working correctly. **Depress** the trigger and the tool should start. **Release** the trigger and the tool should stop. **If the tool malfunctions, remove it from service and report the problem to your supervisor immediately. Always use two hands when starting and stopping the tool.**
- 2 Make the cut:
 - 2.1 Insert the MG-1E blade into the cut made in a previous operation.
 - 2.1.1 The front end of the saw should be tipped up at approximately a 30 degree angle.
 - 2.2 Depress the trigger to start the MG-1E. **Always use two hands when starting the tool and making the cut.**
 - 2.3 Guide the MG-1E down through the brisket applying a steady, even pressure to both handles.
 - 2.3.1 The blade end of the MG-1E should be pointing upwards during the first part of the cut.
 - 2.3.2 As the brisket starts to open, rotate the MG-1E to a horizontal position to finish the cut.
 - 2.4 Release the trigger to stop the MG-1E. **Continue holding the tool with two hands until the saw blade comes to a complete stop.**
 - 2.5 Remove the MG-1E from the carcass.
 - 2.6 Sanitize the MG-1E blade.

MAINTENANCE INSTRUCTIONS

IMPORTANT: ALWAYS DISCONNECT THE ELECTRIC POWER SUPPLY IN ACCORDANCE WITH OSHA'S LOCKOUT/TAGOUT PROCEDURES (29 CFR 1910.147) BEFORE INSTALLING OR REMOVING A BLADE. ALWAYS DISCONNECT THE ELECTRIC POWER SUPPLY IN ACCORDANCE WITH OSHA'S LOCKOUT/TAGOUT PROCEDURES (29 CFR 1910.147) BEFORE PERFORMING ANY MAINTENANCE OR REPAIRS.

Refer to Figures A-H on pages 4-10 for referenced items unless otherwise noted.

1 PRIOR TO USE OR DAILY:

- 1.1 Check level of oil through window (item 138) and fill if necessary with a USDA approved premium grade lubricating oil (viscosity: 150-200 S.U.S. at 100° F or ISO 32-46 at 40° C). Capacity is approximately 18 oz. (0.532 L).
- 1.2 Make sure the control trigger is working correctly. **Depress** the trigger and the tool should start. **Release** the trigger and the tool should stop. *If the tool malfunctions, repair or remove it from service immediately.*

Note: The electric power supply must be connected to perform the above operation only. Always use two hands when starting and stopping the tool.

- 1.3 Check all electrical plugs and cords (over their entire lengths) for cuts and abrasions and replace if necessary.

2 MONTHLY:

- 2.1 Apply **Jarvis 1315 White Grease** to grease fitting (item 2) located on smooth motor housing (item 4) only.

3 BLADE REMOVAL:

- 3.1 Remove (2) hex head screws (item 70).
- 3.2 Remove blade retaining plate (item 69).
- 3.3 Remove blade (item 118, 165 or 204).

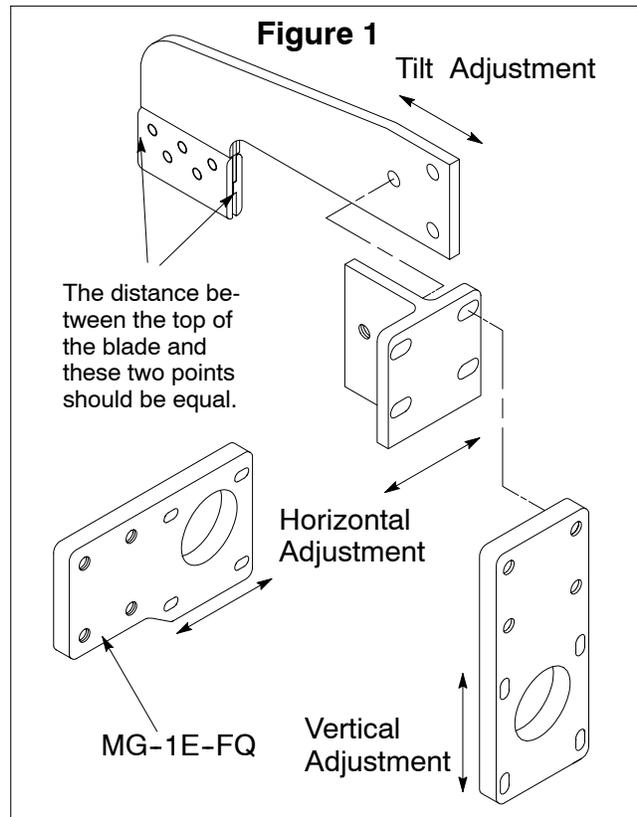
4 BLADE INSTALLATION:

- 4.1 Install blade (item 118, 165 or 204).
- 4.2 Install blade retaining plate (item 69).
- 4.3 Install (2) hex head screws (item 70).

- 4.4 Blade should move freely through the support bracket. There are three possible adjustments to make sure that the blade moves freely through the support bracket. *These adjustments are factory preset. The MG-1E support bracket will only require adjustment if parts are worn or if parts are being replaced. Refer to Figure 1.*

5 HOUSING DISASSEMBLY:

- 5.1 Remove blade (item 118, 165 or 204). *Refer to steps and procedures outlined in section 3.*
- 5.2 Turn MG-1E upright and remove screws (items 5 and 22).
- 5.3 Remove motor housing (item 36 or 37) and the rear handle assembly.
- 5.4 Lift out rotor (item 34).
- 5.5 Remove hex head plug (item 131) and o-ring (item 130) and drain all hydraulic fluid from main housing.
- 5.6 Remove (4) hex head screws (item 132).



- 5.7 Remove rear cover (item 129).

- 5.8 Remove (4) socket head cap screws (item 127).
 - 5.9 Remove rear housing (item 125) and gasket (item 124).
 - 5.10 Remove (4) hex head screws (items 149 and 153).
 - 5.11 Remove crankcase cover (item 156) and gasket (item 151).
 - 5.11.1 Use two soft tipped set screws (item 157) to pry cover off bearing (item 152).
 - 5.12 Remove (4) hex head screws (items 102 or 174).
 - 5.13 Remove front housing (item 115 or 173) and the whole blade support assembly.
 - 5.14 Remove (4) socket head cap screws (item 103).
 - 5.15 Remove front bearing housing (item 109).
 - 5.16 Remove rod seal (item 112) and wiper ring (item 113) from seal bushing (item 111).
 - 5.17 Remove seal bushing (item 111) and o-ring (item 110) from front bearing housing.
 - 5.18 Grasp drive plate (item 84) and lift the drive mechanism assembly out of the main housing.
 - 5.18.1 Tap on the main housing with a rubber mallet to aid removal of the drive mechanism.
 - 5.19 Inspect all parts for wear and replace them if necessary.
 - 5.20 Disassemble drive mechanism. *Refer to steps and procedures outlined in section 7.*
- 6 HOUSING ASSEMBLY:
- 6.1 Place main drive spacer (items 82) on drive mechanism.
 - 6.2 Reverse steps and procedures outlined in section 5. *See note below.*
 - 6.2.1 Make sure to retract soft tipped set screws (item 157) to enable cover to sit flush on main housing (item 135).
 - 6.2.2 After completing step 5.5, make sure that drive mechanism turns freely.
- 7 DRIVE MECHANISM DISASSEMBLY:
- 7.1 Remove housing assembly. *Refer to steps and procedures outlined in section 5.*
 - 7.2 Remove (2) socket head cap screws (item 72) from drive plate (item 84).
 - 7.3 Using a $\frac{3}{16}$ inch punch, tap (2) spiral pins (item 71) down about $\frac{3}{8}$ inch.
 - 7.4 Remove drive plate (item 84).
 - 7.5 Remove top retaining ring (item 85) from counterweight drive stud (item 95).
 - 7.6 Remove top two thrust bearing washers (item 75), needle bearings (items 76 and 86), bearing spacer (item 94) and counterweight drive link (item 77).
 - 7.7 Remove (2) socket head cap screws (item 87) from top intermediate drive plate (item 79).
 - 7.8 Using a $\frac{3}{16}$ inch punch, tap (2) spiral pins (item 88) down about $\frac{3}{8}$ inch.
 - 7.9 Remove top intermediate drive plate (item 79).
 - 7.10 Remove thrust bearing washers (item 89), needle bearings (items 80 and 90) and drive link (item 91).
 - 7.11 Remove bottom retaining ring (item 85) from counterweight drive stud (item 95).
 - 7.12 Remove both counterweight drive stud (item 95) and counterweight drive piston (item 96).
 - 7.13 Remove (2) socket head cap screws (item 72) from bottom intermediate drive plate (item 93).
 - 7.14 Using a $\frac{3}{16}$ inch punch, tap (2) spiral pins (item 71) down about $\frac{3}{8}$ inch.
 - 7.15 Remove bottom intermediate drive plate (item 93).
 - 7.16 Remove lower thrust bearing washers (item 75), needle bearings (items 76 and 86) and drive link (item 77).
 - 7.17 Press all spiral pins (items 71 and 88) in drive plates (items 79, 84 and 93) back to their original position.
 - 7.17.1 Spiral pins should stick up $\frac{3}{8}$ inch above the cams (items 78 and 92).
 - 7.18 Press dowel pin (item 74) from drive piston (item 73) and remove drive link (item 91).
 - 7.19 Inspect all parts for wear and replace them if necessary.
- 8 DRIVE MECHANISM ASSEMBLY:
- 8.1 Reverse steps and procedures outlined in section 7. *See notes below.*

- 8.1.1 After completing step 7.18 check to see that drive piston (item 73) slides easily back and forth through front and rear piston bushings (items 106 and 123). *If it does not slide easily, tap the drive piston on all sides in the area of dowel pin (item 74) with a rubber mallet until it does slides easily.*
- 8.1.2 Assemble counterweight drive piston (item 96) in place before (the top) counterweight drive link (item 77) is assembled.
- 8.1.3 Make sure that all thrust bearing washers (items 75 and 89) are assembled back in place.
- 8.1.4 Apply *Loctite 271* on threads of all socket head cap screws (items 72 and 87).
- 8.1.5 Tighten socket head cap screws (items 72 and 87) to 16 lbf-ft (21.7 N-m).
- 8.1.6 After completing steps 7.13, 7.7 and 7.2, tap spiral pins (items 71 and 88) flush with the top surface of drive plates (item 79, 84 and 93).

9 ELECTRIC MOTOR DISASSEMBLY:

- 9.1 Remove screws (items 5 and 22) and lift off motor and rear handle together.
- 9.2 Remove (3) button head screws (item 46) and fan cover (item 45).
- 9.3 Remove lock nut (item 44), lock nut washer (item 43) and fan (item 42).
- 9.4 Slip rotor (item 34) out of the motor housing (item 37). Be careful not to misplace wave washer (item 7).

- 9.5 Remove spacer (item 41) and shaft seal (item 40).
- 9.6 Remove (4) screws (item 31 or 55), cover (item 30 or 56) and gasket (item 29 or 57).
- 9.7 Disconnect power cord (item 33 or 53) and motor lead wires.
- 9.8 Remove (4) cheese head screws (item 28) and pull away rear handle (item 25 or 66) enough to remove ground screw (item 28) that fastens ground lug to motor housing (item 36 or 37).
- 9.9 Remove (3) cheese head screws (item 14 or 58) and lift switch (item 15 or 68) from rear handle (item 25 or 66).
- 9.10 Inspect all parts for wear and replace them if necessary.

10 ELECTRIC MOTOR ASSEMBLY:

- 10.1 Reverse steps and procedures outlined in section 9. *See notes below.*
- 10.2 Make sure to put gasket (item 19) in place before connecting grounding screw (item 28) to motor housing.
- 10.3 Make sure to install gasket (item 29 or 57) before connecting power cord wires to switch.
- 10.4 Make sure to install o-ring (item 10), smooth motor only, and wave spring (item 7) before placing motor housing onto crankcase. A very small amount of adhesive between the wave spring and bearing (item 35) can be used to hold the wave spring in place during assembly.
- 10.5 Tighten locknut (item 44) to 10 lbf-ft (14 N-m) if fan is plastic. Tighten to 30 lbf-ft (41 N-m) if fan is metallic. **Jarvis** torque wrench adapter 8039181 is available.