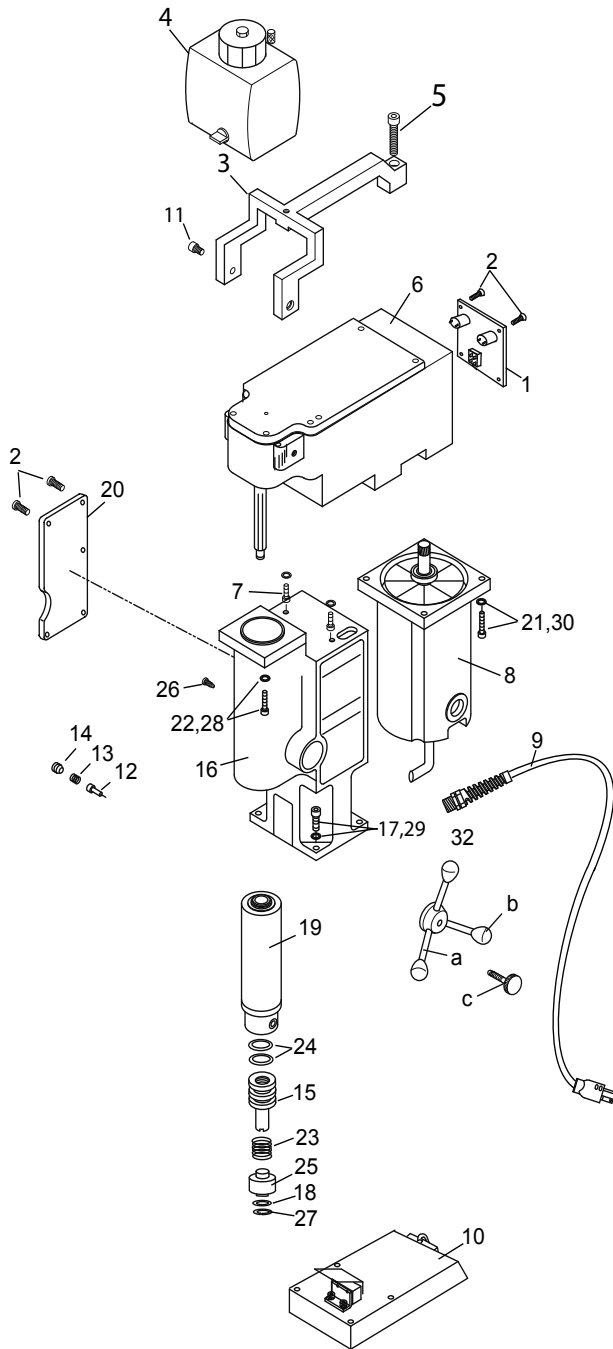


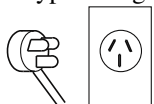
# HOUGEN HMD505 EXPLODED VIEW

0505102, 0505202, 0505302 & 0505402



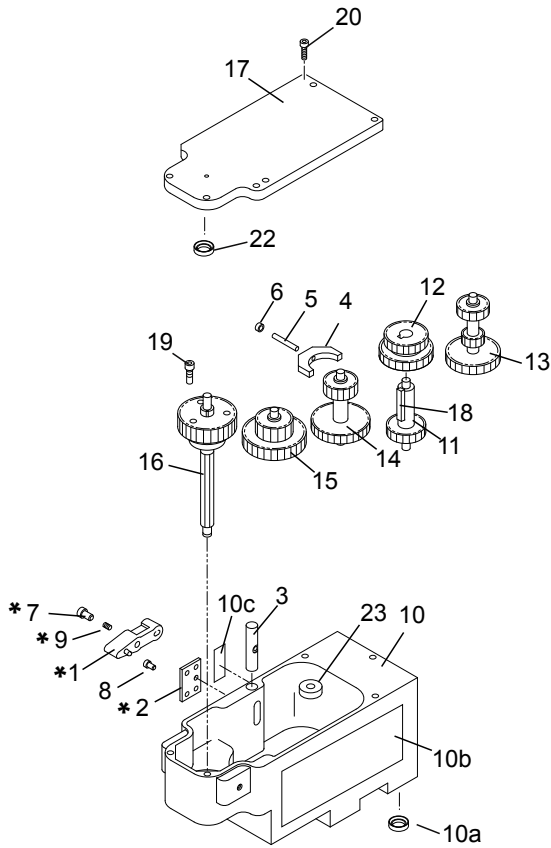
Item	Part #	Description	Qty
1	04613	End Panel Assembly <b>120v</b>	1
	04663	End Panel Assembly <b>240v</b>	1
2	41044	B.H.C Screw #10-32 X 1/2	9
3	24033	Carrying Handle	1
4	24228	Coolant Bottle Assembly	1
5	40108	S.H.C Screw 1/4 X 1-1/4	1
6	04625	Gear Box Assembly	1
7	04159	S.H.C Screw #10-32 X 5/8	2
8	04631	Motor Assembly <b>120v</b>	1
	07177	Motor Assembly <b>240v</b>	1
9	24073	Power Cord Assembly <b>120v</b> (0505102)	1
	24213	Power Cord Assembly <b>240v</b> (0505202)	1
	24214	Power Cord Assembly <b>240v</b> (0505302 type I plug)	1
	24227	Power Cord Assembly <b>240v</b> (0505402 no plug)	1
10	24223	Magnet/Safety Switch Assem. <b>120v</b>	1
	24219	Magnet/Safety Switch Assem. <b>240v</b>	1
11	10971	SHC Screw 1/4-20 X 1/2	2
12	24051	Quill Stop	1
13	24125	Spring	1
14	04207	Set Screw 3/8-16 X 3/8	1
15	24193	Spline Shaft Extension	1
16	05400	Housing Assembly	1
17	40077	SHC Screw 1/4-20 X 1"	4
18	24198	Seal 1/2 ID X 11/16 OD	1
19	24199	Quill / Arbor Assembly	1
20	04620	Front Panel Assembly <b>120v</b>	1
	04665	Front Panel Assembly <b>240v</b>	1
21	01116	SHC Screw #10-32 X 1	4
22	24077	SHC Screw #10-32 X 7/8	4
23	24195	Spring	1
24	24126	O-Ring	2
25	24194	Spring Plunger	1
26	04158	SCR Self-Tap 10-24 X 3/8	1
27	10517	Retaining Ring	1
28	50038	#10 Lock Washer	4
29	90028	1/4" Lock washer	4
30	04307	#10 Flat washer	4
31	05372	Grease, Lubrplate	.01oz
32	24011	Feed Hub Assembly (includes a-c)	1
a	04558	Feed Handle	3
b	04532	Handle Knob	3
c	24007	Feed Hub Knob	1

The **0505302** is assembled with a Type I Plug.



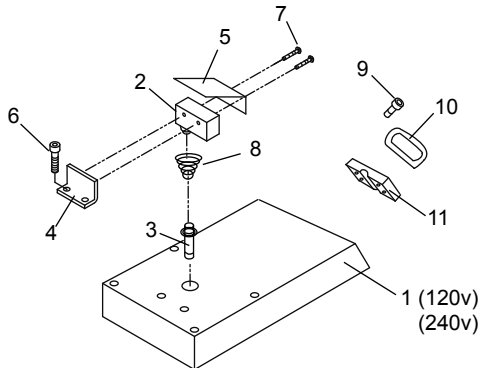
The **0505402** is assembled without an electrical plug at the end of the power cord.

\* See Following Pages For Assembly Breakdowns.

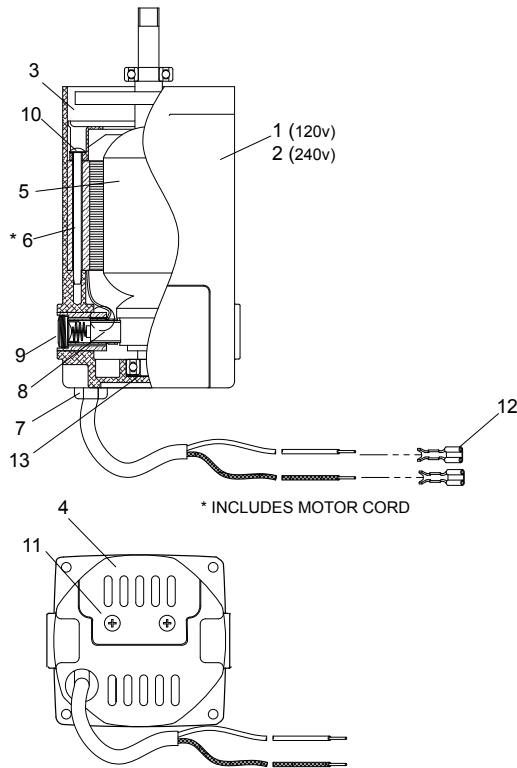


\*These Parts Are Included In Kit 24230.

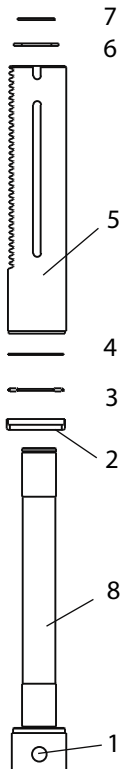
04625 Gear Box Assembly			
Item	Part #	Description	Qty
1	24229	Gear Shift Handle	1
2	24046	Gear Switch Plate	1
3	24038	Gear Shift Pin	1
4	24039	Gear Shift Yoke	1
5	24037	Dowel Pin 3/16 X 1-1/4	1
6	24036	Gear Shift Spacer	2
7	24101	SHSLD Screw 1/4 X 3/8	1
8	04157	FHSC Screw #10-32 X 3/8	4
9	05740	Spring	1
10	04640	Gear Box Assembly (includes a-c)	1
10a	24096	Lip Seal	1
10b	05181	Hougren Label	1
10c	24060	Drill Speed Label	1
11	24027	Gear & Shaft Assembly	1
12	24026	Gear 32/39 Tooth	1
13	24105	Gear & Shaft Assembly 15/20 Tooth	1
14	24104	Gear & Shaft Assembly 14 Tooth	1
15	24103	Gear & Shaft Assembly 15 Tooth	1
16	24102	Spline Shaft Assembly	1
17	04623	Cover & Bearing Assembly	1
18	24030	Key 3/16 sq. X 1.70	1
19	24082	SHC Screw 6-32 X 3/8	3
20	40038	SHC Screw 10-32 X 5/8	6
21	24152	Grease Lubriplate GR132	
22	24095	Lip Seal	1
23	24100	Ball Bearing	4



24223 120v Magnet Assembly 24219 240v Magnet Assembly			
Item	Part #	Description	Qty
1	24222	Magnet Assembly 120v	1
	24220	Magnet Assembly 230v	1
2	10990	Safety Switch Assy.	1
3	24221	Plunger Assembly	1
4	04909	Safety Switch Bracket	1
5	10983	Shield	1
6	10971	Screw SHC 1/4-20 X 1/2	2
7	10972	Screw BHC 6-32 X 7/8	2
8	17271	Spring	1
9	41046	Screw SHC 10-32 X 1/2	2
10	24144	"D" Ring 1" Wide	1
11	04698	Plate - Chain Hold down	1



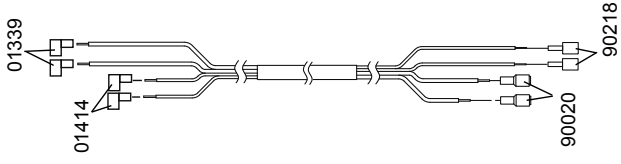
04631 120v Motor Assembly 07177 240v Motor Assembly			
Item	Part #	Description	Qty
1	04633	Motor Housing Assy. <b>120v</b>	1
1a	04632	HMD505 Label	1
1b	04634	Motor Specs Label <b>120v</b>	1
2	07178	Motor Housing Assy. <b>240v</b>	1
2a	04632	HMD505 Label	1
2b	07154	Motor Specs Label <b>240v</b>	1
3	24114	Motor Baffle	1
4	24066	Access Door	1
5	24041	Armature <b>120v</b>	1
	24207	Armature <b>240v</b>	1
6	24042	Field Assembly <b>120v</b>	1
	24206	Field Assembly <b>240v</b>	1
7	40373	Strain Relief	2
8	24045	Carbon Brushes <b>120v/240v</b>	2
9	24044	Brush Cap	2
10	24080	Screw #10 X 3-1/4 Self Tapping	2
11	24153	Screw #10 X 1/2 Self Tapping	2
12	90019	16-14 Connector	2
13	24093	Spring Washer	1



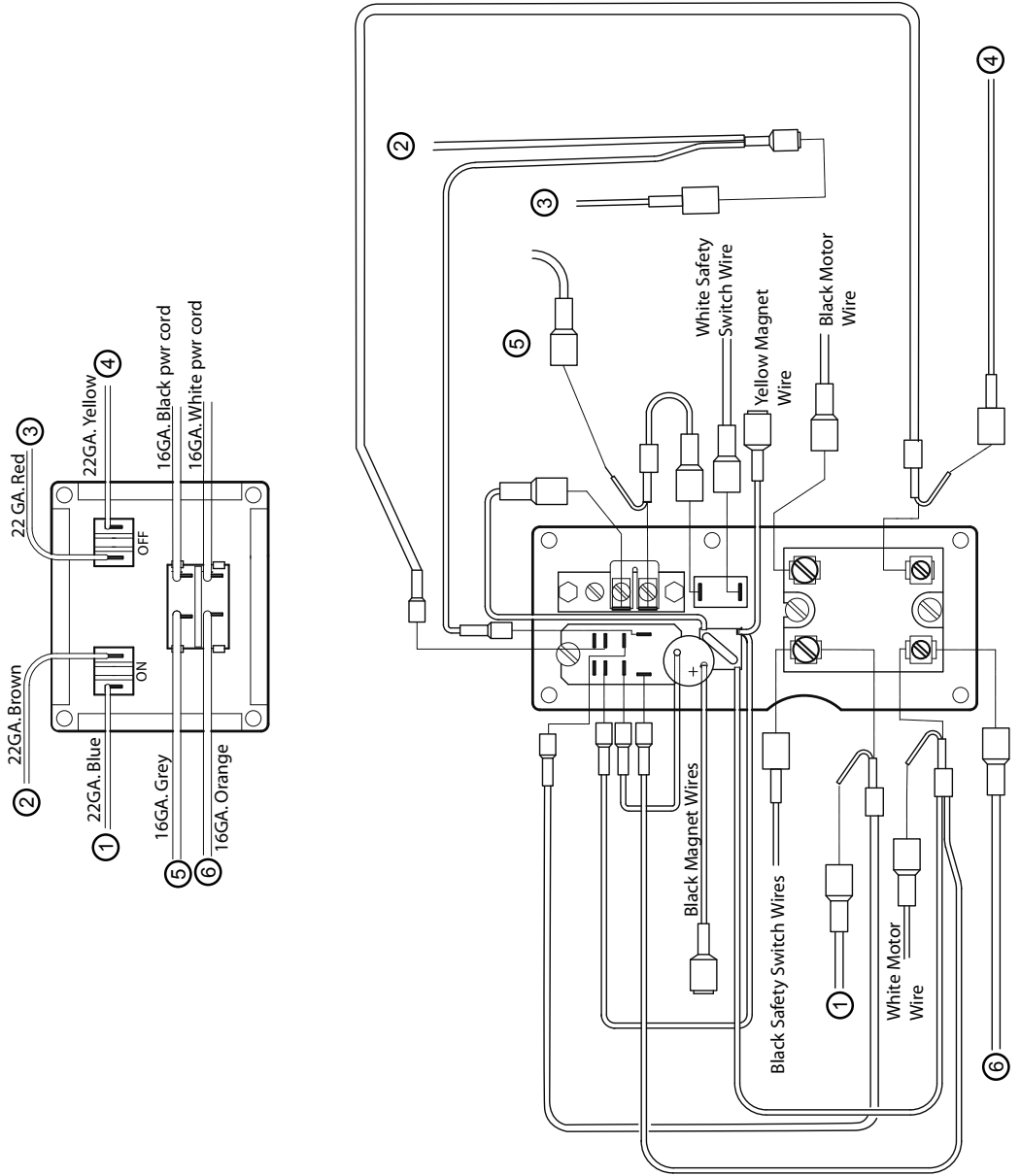
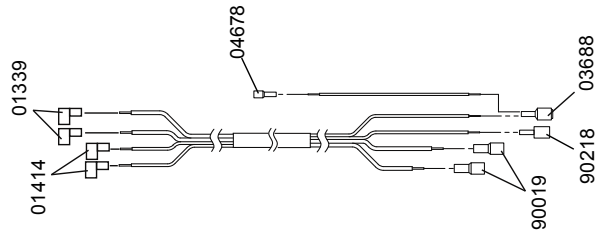
24199 Arbor / Quill Assembly			
Item	Part #	Description	Qty
1	40222	Set Screw 7/16-14 X .305	2
2	24013	Thrust Bearing Seal	1
3	24094	Thrust Bearing	1
4	24091	Thrust Washer	1
5	24016	Quill	1
6	24165	Washer	1
7	24164	Retaining Ring	1

# HMD505 HOOK UP DIAGRAM

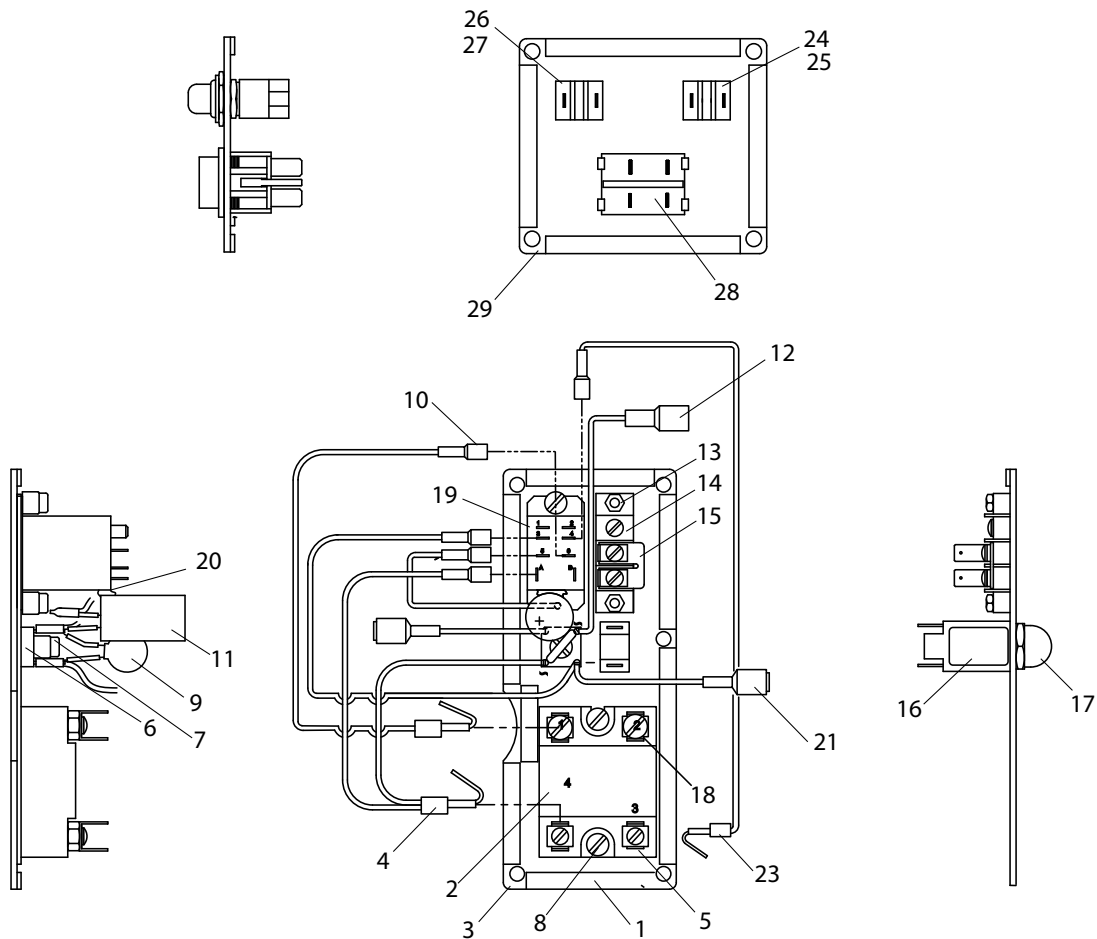
04647 WIRE HARNESS



04689 WIRE HARNESS



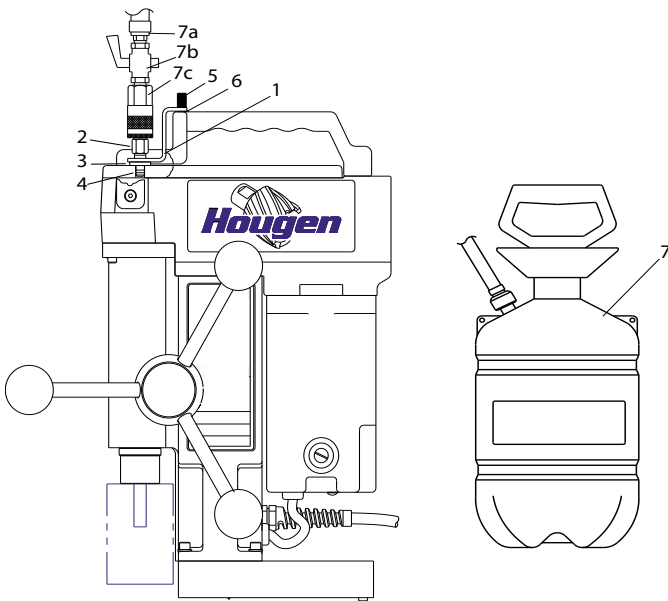
# HMD505 PANEL PARTS



Item	Part #	Description	Qty	Item	Part #	Description	Qty
1	40296	Sponge Seal	1	16	24141	Circuit Breaker 14A (120v)	1
2	04387	Relay	1		24216	Circuit Breaker 7A (240v)	1
3	04621	Faceplate Front	1	17	24142	Cover	1
4	90020	Terminal Piggy Back	2	18	04622	Double Terminal	3
5	01945	Terminal Spade	5	19	04690	Relay 15A (120v)	1
6	10705	Rectifier	1		07119	Relay 15A (240v)	1
7	01835	Nylon Nut	3	20	90036	Adhesive	1
8	40374	Nut #6-32 Jam	2	21	03688	Terminal Male Insulator	2
9	10718	Surge Suppressor (120v)	1	22	90019	Female terminal 16/14 GA.	1
	10760	Surge Suppressor (240v)	1	23	01310	Terminal Piggy Back	2
10	04678	Female Terminal 22/18 GA	5	24	04646	Switch Off	1
11	02916	Capacitor (120v)	1	25	04643	Red Seal	1
	07210	Capacitor (240v)	1	26	04645	Switch On	1
12	90218	Terminal Female	1	27	04644	Green Seal	1
13	01496	Spacer	2	28	04614	Rocker Switch (120v)	1
14	01547	Terminal Strip	1		04664	Rocker Switch (240v)	1
15	01944	Terminal Jumper	1	29	04615	Faceplate End	1

# NOTES

# OPTIONAL PRESSURIZED COOLANT BOTTLE



24140 Coolant Bottle Assembly			
Item	Part #	Description	Qty
1	24133	Bracket	1
2	05622	Quick Fitting 1/4" Body	1
3	24132	Adapter	1
4	24123	O-Ring	1
5	24110	Thumb Screw	1
6	24168	Flat Nylon Washer	1
7	05630	Coolant Bottle Assembly includes 7a-7c	1
7a	05556	Fitting 1/8 NPT 3/8 Hose	1
7b	01569	Shut Off Valve	1
7c	05621	Quick Connector	1

## Commercial / Industrial Limited Warranty

Hougen  
 1 year and 30 days  
 or replace (at its option) without charge any items returned. This warranty is void if the item has been damaged by accident or unreasonable use.  
 is given or authorized. Hougen Manufacturing, Inc. disclaims any implied warranty of MERCHANTABILITY or FITNESS for any period beyond 90 days of incident.  
 purchase, the above exclusion and limitation may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

To obtain warranty service, return the item(s), transportation prepaid, to your nearest Factory Authorized Warranty Repair Center or to Hougen Manufacturing, Inc., 3001 Hougen Drive, Swartz Creek, Michigan 48473.

Hougen Drills are warranted against manufacturing defects only. Subject to Hougen Manufacturing inspection.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

© 2010 Hougen Manufacturing, Inc.

This product is covered under the following U.S. patent: 5902076

Photographs and Specifications shown are accurate in detail at time of printing. Manufacturer reserves the right to make improvements and modifications without prior notice.

Hougen and the Hougen logo are proprietary trademarks of Hougen Manufacturing Inc.