

KWIKWAY®

Power

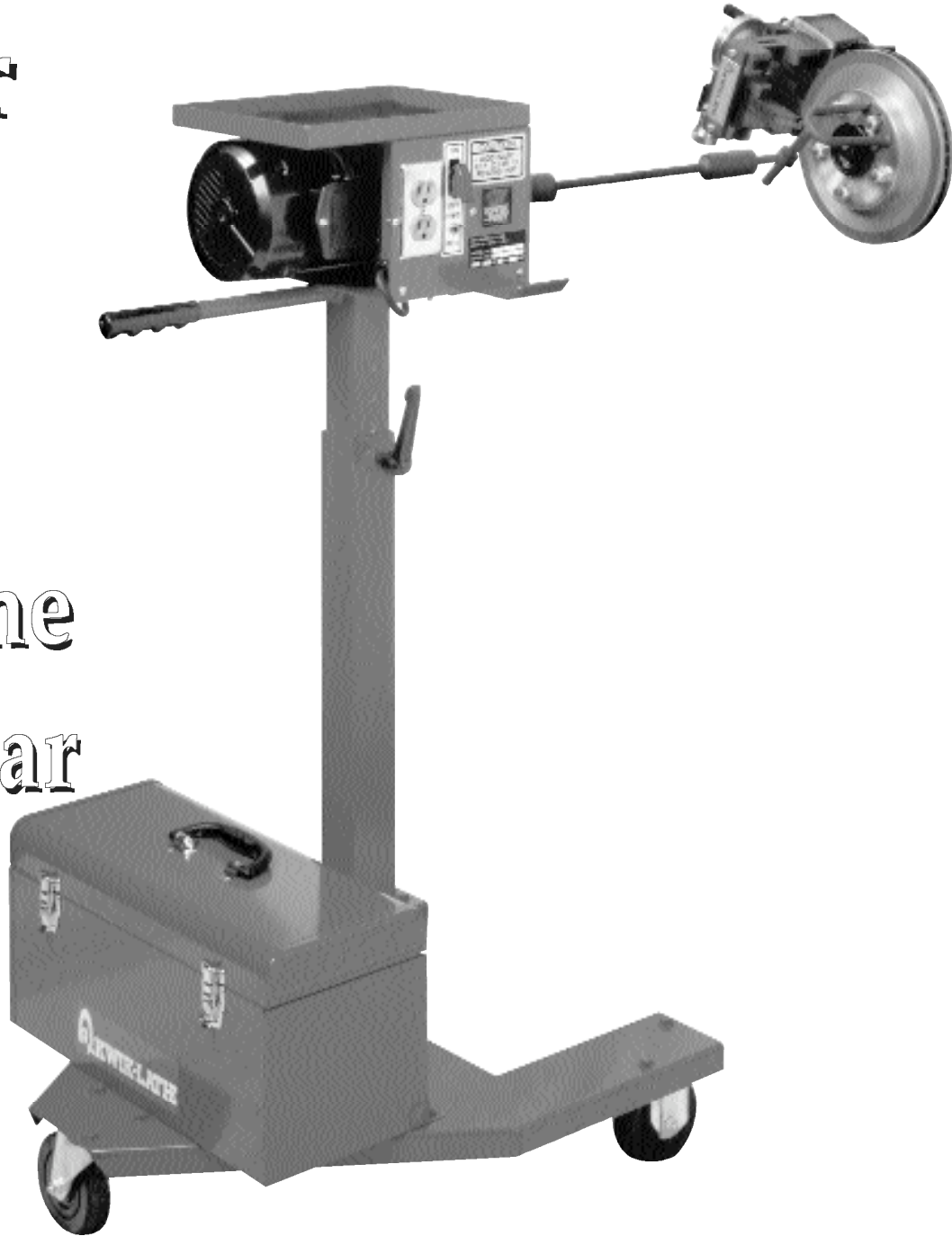
Drive

For the

Kwik-Lathe

On-The-Car

Lathe



Instruction Manual and Parts List

KW Products Inc.
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521 WARRANTY

Brake Lathes • Tire Changers • Wheel Balancers

KW Products Inc. (KWIK-WAY) provides a limited 521 Warranty on products when purchased in a new and unused condition to be free from defective material or workmanship from date of purchase as per the following:

Product Category	BENCH MODEL LATHES	ON-CAR-LATHES	PASSENGER CAR TIRE CHANGERS	WHEEL BALANCERS	TRUCK LATHES AND TIRE CHANGERS
5 Years	Spindle, spindle bearing and housing	Cast iron components, excluding guide rods	Transmission	Frame, welding construction	N/A
2 Years	All other mechanical parts	All other mechanical parts	Pedal controls	Shaft	N/A
1 Year	Electrical motors and labor	Electric motors and labor	Parts, electrics and labor	Parts, electrics and labor	Parts, electrics and labor

This warranty does not apply to a product that has been purchased in used condition, that has failed due to improper installation, repairs, service or that has sustained damage caused by accident, improper use or shipment.

Kwik-Way will repair and/or replace, free of charge (FOB factory) all such defective parts, only when returned to factory with shipping charges prepaid. This warranty does not cover parts and supplies consumed in normal operation of the machine.

Kwik-Way disclaims all other warranties, expressed or implied, as to the quality of any goods, including implied warranties of MERCHANTABILITY and FITNESS FOR PARTICULAR PURPOSES. UNDER NO CIRCUMSTANCES WHATSOEVER, SHALL KWIK-WAY BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER BASED ON LOST GOODWILL, LOST RESALE PROFITS, WORK STOPPAGE, IMPAIRMENT OF OTHER GOODS OR ARISING OUT OF BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, BREACH OF CONTRACT, NEGLIGENCE OR OTHERWISE, EXCEPT ONLY IN THE CASE OF PERSONAL INJURY WHERE APPLICABLE LAW REQUIRES SUCH LIABILITY. This limited warranty gives you specific legal rights and you may also have other rights which vary from state to state. This document contains the complete text of this warranty and may not be modified either orally or in writing.

Because of *KWIK-WAY*'s constant program of product improvement, specifications are subject to change without notice.



Office Hours: 7:30 to 5:00 Central Time

KW Products Inc.
 500 57th Street
 Marion, Iowa 52302
 Toll Free ***1-800-553-5953***
 Fax 319-377-9101
www.kwik-way.com
service@kwik-way.com

Receiving Shipment

Upon taking delivery of your machine, carefully inspect the assembly before removing the crating and packing materials.

If evidence of damage exists, contact the shipper and *KW Products Inc.* immediately. Although *KW Products Inc.* is not responsible for damage incurred during transit, you will be provided assistance in preparation and filing of any necessary claims.

CAREFULLY READ THIS MANUAL BEFORE ATTEMPTING TO SET-UP OR OPERATE THIS MACHINE.

Important Note:

Always have your serial number ready when communicating with *KW Products Inc.* regarding parts or service.

Keep this manual in a safe place.

Date

Received _____

Serial Number _____

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A Tradition of Automotive Precision Since 1920

800-553-5953

www.kwik-way.com

KW Products Inc.

500 57th Street

Marion, Iowa 52302

319-377-9421

Fax 319-377-9101

SAFETY FIRST

This manual has been prepared for the owner and those responsible for the maintenance of this machine. It's purpose aside from proper maintenance and operations, is to promote safety through the use of accepted practice. **READ THE SAFETY AND OPERATING INSTRUCTIONS THOROUGHLY BEFORE OPERATING THE MACHINE.**

In order to obtain maximum life and efficiency from your machine, follow all the instructions in the operating manuals carefully.

The specifications put forth in this manual were in effect at the time of publication. However, owing to **KW Products'** policy of continuous improvement, changes to these specifications may be made at any time without obligation.

SAFETY INSTRUCTIONS

1. **Read, understand and follow** the safety and operating instructions found in this manual. Know the limitations and hazards associated with operating the machine.

NOTICE	▲ DANGER	▲ DANGER	▲ DANGER	▲ DANGER
Read the manual first Primero lea el Manual Zuerst Bedienungsanleitung lesen Lire le manuel avant	Do not operate without guard No manejar sin guardián Nur mit Schutzvorrichtung bedienen Ne pas faire marcher sans dispositif de sûreté	Electrically ground machine Máquina electricamente de sueld Elektrische Erdleitung Machine terre électrique	Do not wear tie, confine loose clothing/hair No usar corbata, ropa/cabello suelto Vorsicht mit langem Haar/weite, lockere Kleidung Ne pas porter de cravate, vêtements ou cheveux pas restreints	Do not wear watches/jewelry No usar reloj de pulsera/joyería Uhren u. Ringe ablegen Ne pas porter de montres/bijouterie
DANGER	▲ CAUTION	▲ DANGER	▲ DANGER	▲ CAUTION
Wear safety glasses/shield Usar anteojos/protectores de seguridad Schutzbrille benutzen Porter lunettes de sécurité	Keep area dry and clean Mantener el area seca y limpia Arbeitsbereich trocken und sauber halten Maintenir ce zone sec et propre	Turn off before cleaning/adjusting Apagar antes de limpiar/ajustar Ausschalten bei Wartung Fermer avant de nettoyer/ajuster	Do not wear gloves No usar guantes Nicht mit Handschuhen bedienen Ne pas porter de gants	Tighten work piece securely Apretar pieza de trabajo con seguridad Werkstück fest spannen Serrer solidement le pièce de travail

2. **Eye Safety:** Wear an approved safety face shield, goggles or safety glasses to protect eyes when operating the machine.
3. **Grounding the Machine:** Machines equipped with three prong grounding plugs are so equipped for your protection against shock hazards and should be plugged directly into a properly grounded three-prong receptacle in accordance with national electrical codes and local codes and ordinances. A grounding adapter may be used. If one is used, the green lead should be securely connected to a suitable electrical ground such as a ground wire system. Do not cut off the grounding prong or use an adapter with the grounding prong removed.
4. **Work Area:** Keep the floor around the machine clean and free of tools, tooling, stock scrap and other foreign material and oil, grease or coolant to minimize the danger of tripping or slipping. Kwik-Way recommends the use of anti-skid floor strips on the floor area where the operator normally stands and that each machine's work area be marked off. Make certain the work area is well lighted and ventilated. Provide for adequate workspace around the machine.
5. **Guards:** Keep all machine guards in place at all times when machine is in use.
6. **Do Not Overreach:** Maintain a balanced stance and keep your body under control at all times.
7. **Hand Safety:** NEVER wear gloves while operating this machine.
8. **Machine Capacity:** Do not attempt to use the machine beyond its stated capacity or operations. This type of use will reduce the productive life of the machine and could cause the breakage of parts, which could result in personal injury.
9. **Avoid Accidental Starting:** Make certain the main switch is in the **OFF** position before connecting power to the machine.
10. **Careless Acts:** Give the work you are doing your undivided attention. Looking around, carrying on a conversation and horseplay are careless acts that can result in serious injury.
11. **Job Completion:** If the operation is complete, the machine should be emptied and the work area cleaned.
12. **Disconnect All Power and Air to Machine** before performing any service or maintenance.
13. **Replacement Parts:** Use only Kwik-Way replacement parts and accessories; otherwise, warranty will be null and void.
14. **Misuse:** Do not use the machine for other than its intended use. If used for other purposes, **KW Products Inc.** disclaims any real or implied warranty and holds itself harmless for any injury or loss that may result from such use.

Power Drive

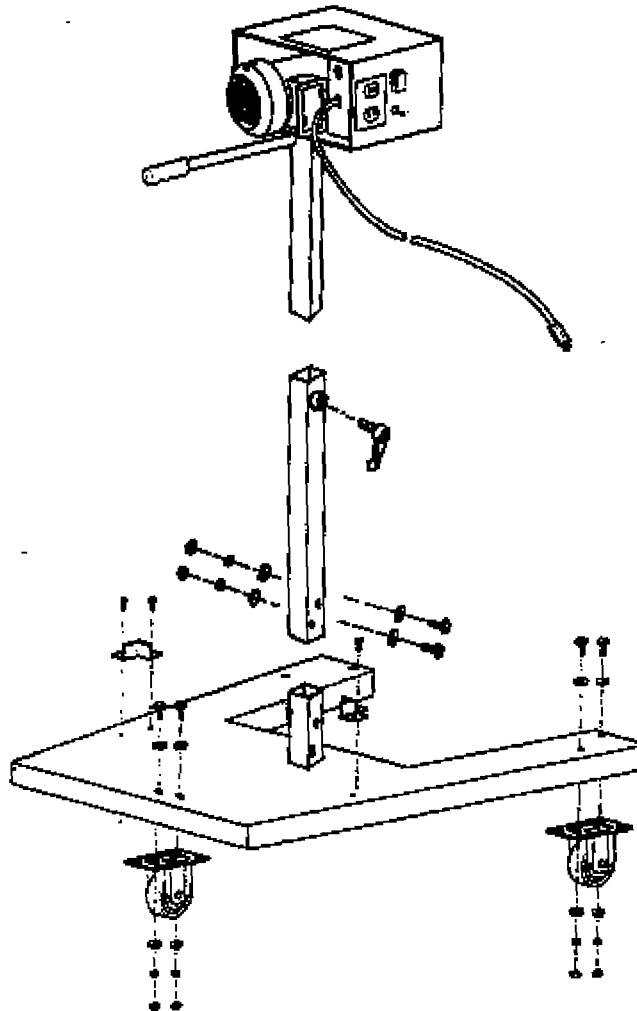
SPECIFICATIONS

Upper Height	36-1/4"	Overall Width	5-3/4"
Lower Height	31-1/4"	Overall Length	25-3/4"
Optional Height	24-1/4"	Weight	124 lb.
Max. Load	N/A	Shipping Weight	140 lb.

Electrical Requirement: 115V-60hz-1 PH or 230V-60hz-1 PH

CAUTIONS:

Read owners manual thoroughly before attempting to use this equipment.



ASSEMBLY, SET-UP AND OPERATION

After removing your Power Drive from the carton, check for hidden damage. If any damage is found, contact the shipper immediately.

Drive Stand Assembly

Study the assembly drawings carefully and familiarize yourself with the component parts and hardware.

Attach the three casters using two 5/16-18 x 3/4 bolts, two lock washers, two 5/16-18 nuts, and four flat washers on each.

Thread the handle into the collar on the column.

With the collar end up, place the column over the peg on the base. Align the holes in the column with the holes in the peg. Install the 5/16-18 x 3 bolts. Secure with lockwashers and nuts provided.

With the clamp handle loose, insert the shaft of the motor/drive assembly into the column. Clips are provided in the accessory package that may be used to retain the Kwik-Way tool box to the top of the Power Drive base. Install the clips with 10-32 self-tapping machine screws provided.

Install the drive shaft onto the shaft of the drive motor aligning the key-way on the motor shaft with the dog point set screw, then tighten the dog point set screw. Tighten the cup point set screw.

Set-up of Hub Driver

Install the hub driver over one of the rotor studs, with drive stud up.

Attach a lug nut to hold the hub driver onto the rotor. See figure 2.

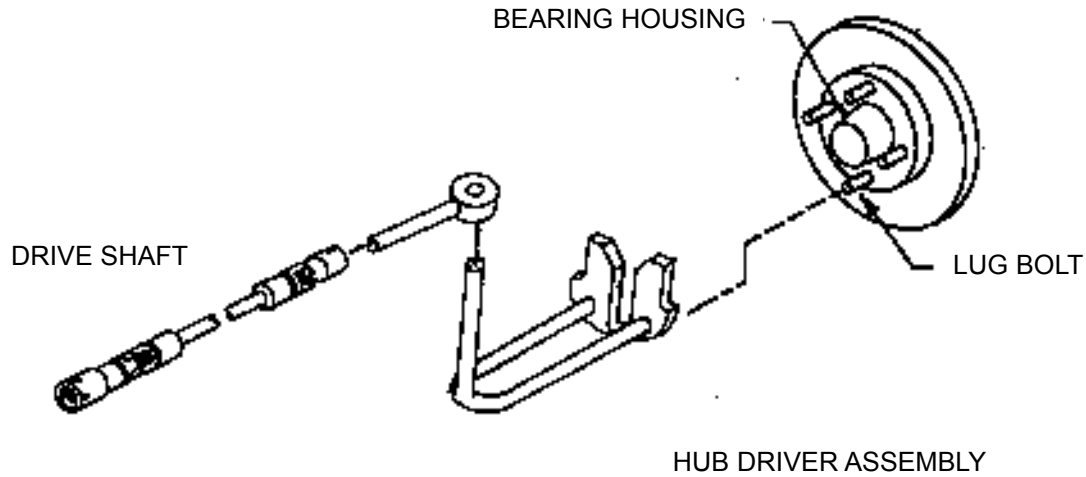
Rotate the rotor by hand 180°. Position the hub driver upside down, allowing the radius of the hub driver to locate correctly with respect to the bearing housing hub.

Tighten lug nut to hold hub driver securely to the rotor.

Loosen set screw holding drive stud and offset until stud runs on spindle centerline. Retighten set screw.

Power Drive

Move the Power Drive into the approximate operating location. Raise or lower the drive assembly until the shaft of the drive motor and the shaft of the drive hub are at the same level. Tighten the locking handle.



For Honda Application -- See Page 9

FIGURE 2

Insert the shaft of the drive hub into the remaining end of the drive shaft and tighten both set screws in the drive shaft.

Operating Instructions

Set up the Kwik-Lathe Lathe as per directions in the manual.

Set up the Power Drive as per directions in this manual.

If Power Feed unit is being used, plug it into the receptacle on the switch side of the drive motor assembly.

There are two toggle switches on the drive motor assembly:

1. The upper switch applies power to the motor and to the receptacle.
2. The lower switch controls the direction of rotation as viewed from the shaft end of the motor.
 - a. Switch in up position, motor shaft turns counterclockwise.
 - b. Switch in the down position, motor shaft turns clockwise.

CAUTION: Rotor must always turn into cutting edge of the tool bits.

Once direction of rotation is determined, turn the Power Drive on, adjust the tool bits to cut the desired amount and engage the power feed.

After tool bits clear outside edge of rotor, turn off the Power Feed and Power Drive by turning off (down) the upper switch.

CAUTION: Misalignment between shaft and hub must be kept to 3" or less.

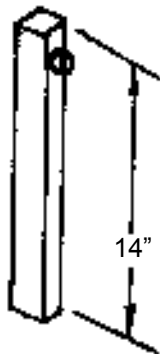
Special Height Application

For applications where low rise vehicle lifts are used, the Kwik-Lathe Power Drive system needs to be modified. This modification changes the working height range to 21"-35". These dimensions include a maximum misalignment of 3", from center of drive hub to shaft.

This modification requires the optional upright weldment be installed, and the motor mount weldment be cut to lengths shown below.

CAUTION: Misalignment between shaft and hub must be kept to 3" or less.

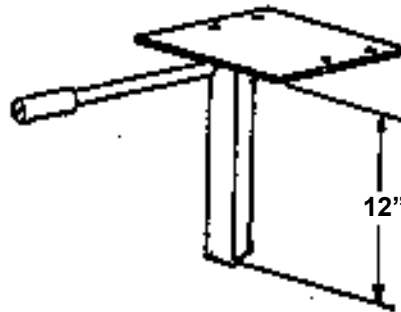
UPRIGHT WELDMENT



OPTIONAL
UPRIGHT

DEBURR ENDS OF TUBES AFTER CUTTING

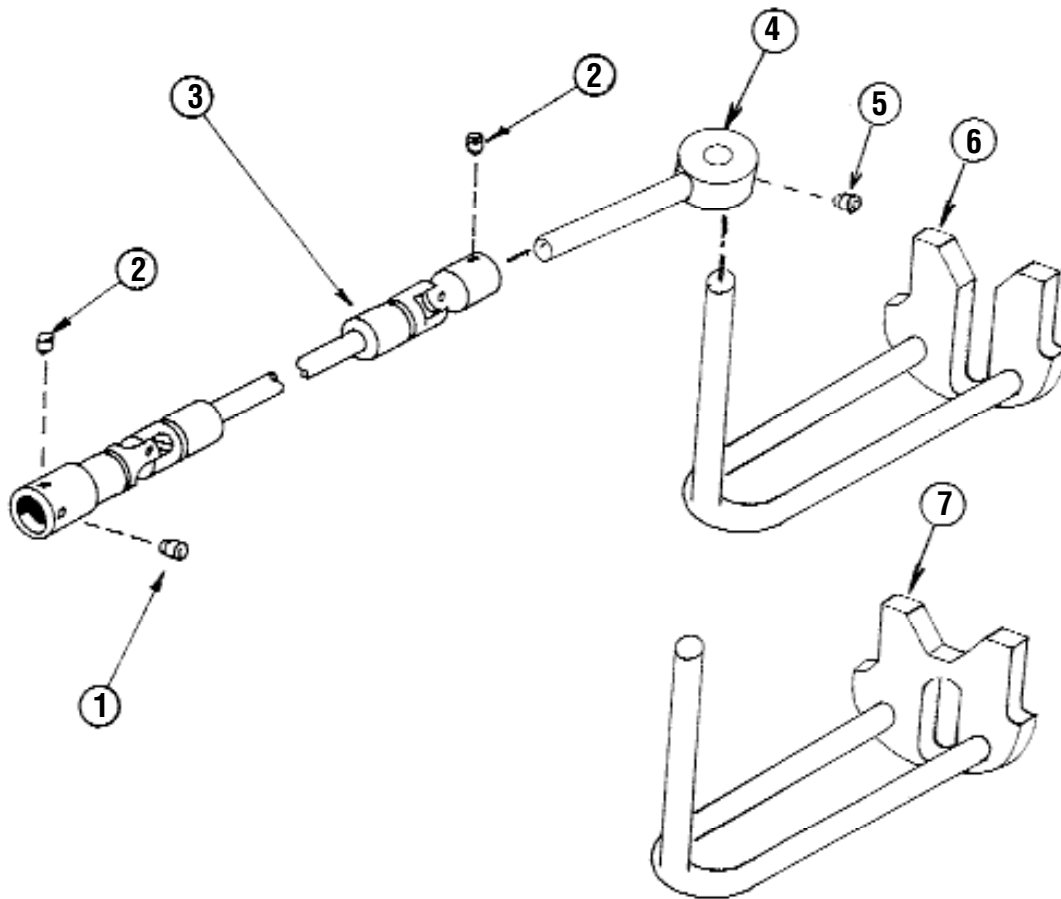
MOTOR MOUNT WELDMENT



12"
FROM
UNDERSIDE OF
PLAN

Driver and Shaft Assembly

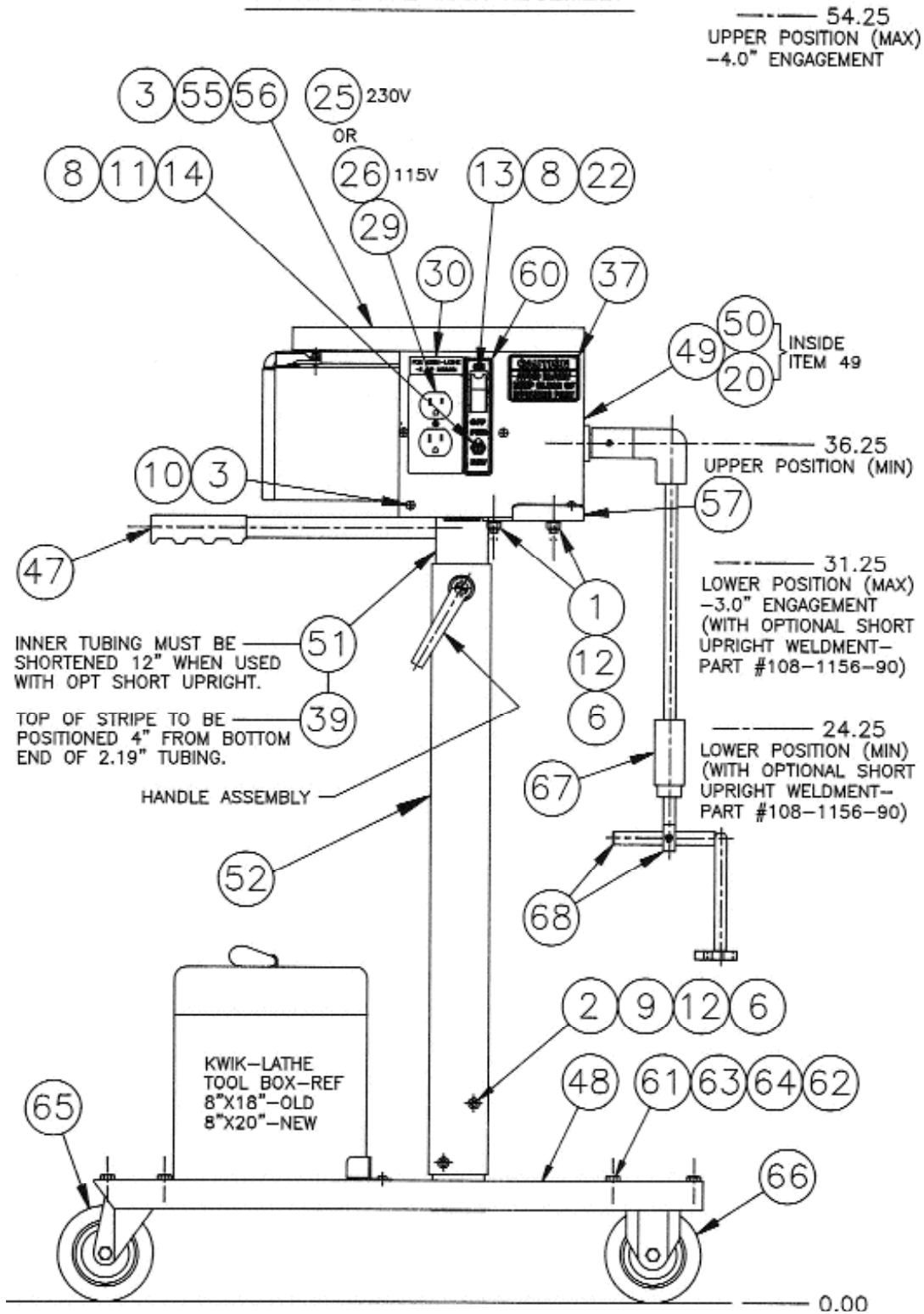
Ref#	Part Number	Description	Req'd
1	000-0520-27	1/4-20 X 3/8 Full Dog Point Set Screw	1
2	000-0485-18	1/4-20 X 1/4 Cup Point Set Screw	2
3	108-1040-02	Drive Shaft	1
4	108-1125-00	Drive Pin	1
5	000-0500-16	1/4-20 X 1/4 Flat Point Set Screw	1
6	108-0061-00	Hub Driver	1
7	108-0063-00	Hub Driver (Honda Only)	1
8	108-1120-00	Hub Kit (includes items 4, 5, 6 and 1/8" Hex Wrench)	
9	108-1121-00	Hub Kit-Honda (includes items 4, 5, 6 and 1/8" Hex Wrench)	



Power Drive

POWER DRIVE ASSEMBLY

POWER DRIVE MAIN ASSEMBLY



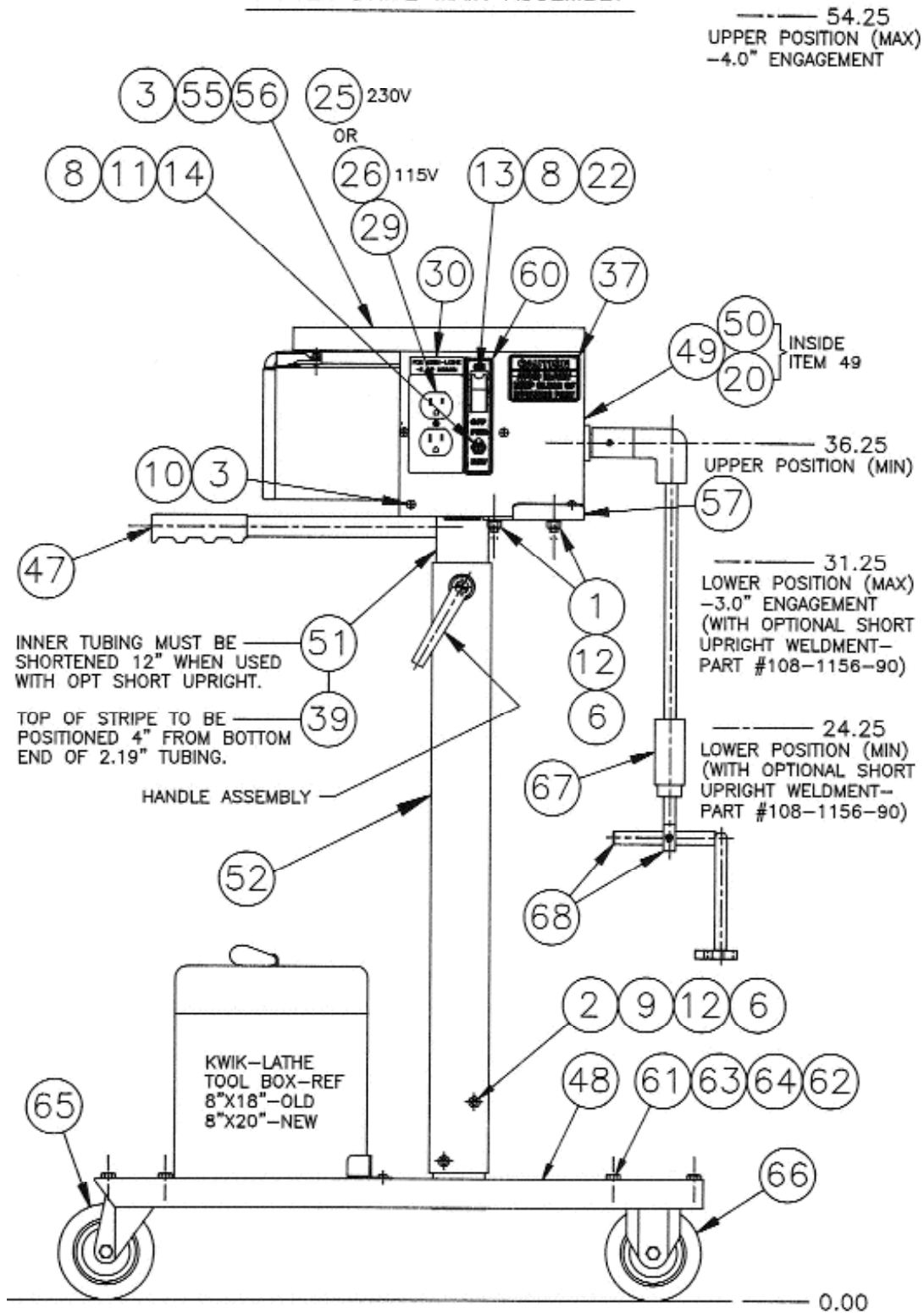
PARTS LISTS

ITEM	PART NUMBER	DESCRIPTION	QTY REQ'D
1	000-0104-21	5/16-18XI.25HEX HD CS-GR5	4
2	000-0168-88	5/16-18X3 SOC HD C.S.	2
3	000-0391-10	0-32XI/2 SELF TAPPING M.S.	14
4	000-0496-46	1/2-13XI-3/4 SOC CUP S.S.	1
5			
6	000-1034-89	5/16-18 HEX FULL NUT-ZP	6
7			
8	000-1100-30	SWITCH HEX NUT-ZP	2
9	000-1160-17	5/16 SAE WASHER-ZP	6
10	000-1170-21	#10 EXT LOCKWASHER-Z.P.	4
11	000-1170-65	1/2 INT SWITCH LWASHER-Z.P.	2
12	000-1180-28	5/16 SPLIT LWASHER-Z.P.	6
13	000-1200-73	SWITCH, ON-OFF	1
14	000-1201-46	SWITCH, FORWARD-REVERSE	1
15	000-1240-95	TERM, QDISC(12-10)1/4 TAB	1
16	000-1241-41	WIRE NUT-BLUE	4
17	000-1242-57	TERMINAL, HOOK-#8	6
18	000-1242-65	TERM, QDISC(16-14)1/4 TAB	1
19	000-1243-11	CONNECTOR-1/2 (2-SCREW)	1
20	000-1243-11	CONNECTOR-3/4 (2-SCREW)	1
21	000-1243-89	CONNECTOR-90' (2-SCREW)	1
22	000-1248-77	GUARD, SWITCH	1
23	000-1261-01	16-3 CORD SET-115V	1
24	000-1261-28	16-3 CORD SET-230V	1
25	000-1279-90	RECEPTACLE, DUPLEX-230V	1
26	000-1280-15	RECEPTACLE, DUPLEX-115V	1
27			1
28			1
29	000-1282-10	COVER, RECEPTACLE	1
30	000-2410-24	WIRE, 16GA BLACK (6.0")	1
31	000-2410-75	WIRE, 16GA-WHITE (6.0")	1
32	000-2602-15	STRAIN RELIEF	1
33			
34	000-6601-05	DECAL, KWIK-WAY (1.75 SO)	1

Power Drive

POWER DRIVE ASSEMBLY

POWER DRIVE MAIN ASSEMBLY

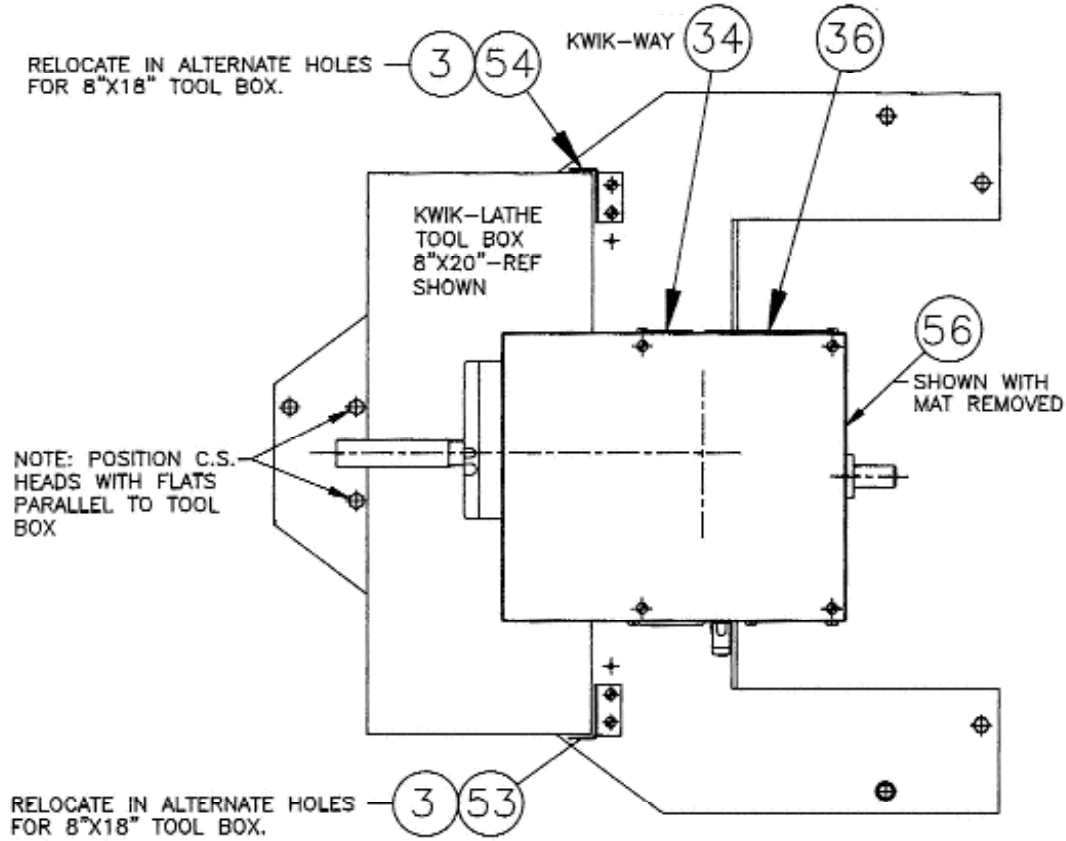


PARTS LISTS

ITEM	PART NUMBER	DESCRIPTION	QTY REQ'D
35	000-6608-90	DECAL, KWIK-LATHE-3AMP MAX	1
36	000-6609-06	DECAL, GENERAL CAUTION	1
37	000-6609-35	DECAL, ROTATING PART	1
38			
39	000-6620-03	STRIPE, WARNING-10.0" LONG	1
40			
41	001-1971-30	MOTOR, 115/230V-50/60HZ-IPH	1
42	001-1972-12	GEARBOX, 92 RPM@1725 MTR	1
43	001-1972-16	GEARBOX, 112 RPM@1425 MTR	1
44	001-1972-28	GEARMOTOR, 115V-60HZ-IPH	1
45	003-0003-38	TIE, CABLE-3.65 LONG	1
46	003-0049-40	HANDLE, ADJUSTABLE	1
47	003-0050-08	GRIP, HANDLE	1
48	108-0051-96	WLDMT, POWER DRIVE BASE	1
49	108-1151-96	ENCLOSURE, MOTOR	1
50	108-1152-96	BOX, ELECTRICAL	1
51	108-1153-96	WELDMENT, MOTOR MOUNT	1
52	108-1156-96	WELDMENT, UPRIGHT-LONG	1
53	108-1157-00	CLIP, CORNER-RH	1
54	108-1157-06	CLIP, CORNER-LH	1
55	108-1158-52	MAT, TRAY-10.12X12.00	1
56	108-1158-96	TRAY, TOOL	1
57	108-1159-96	HANGER, KWIK-LATHE	1
58	108-1190-00	HARNESS, WIRING-PDA	1
59	108-1191-00	HARNESS, MOTOR	1
60	108-2121-00	DECAL, ON-OFF & F-R	1
61	000-0116-65	5/16-18X3/4 HEX HD C.S.-ZP	7
62	000-1034-89	5/16-18 HEX FULL NUT-ZP	7
63	000-1160-17	5/16 SAE WASHER-ZP	7
64	000-1180-28	5/16 SPLIT LWASHER-ZP	7
65	002-0150-05	CASTER, SWIVEL-4" DIA	1
66	002-0150-13	CASTER, RIGID-4" DIA	2
67	000-4500-78	ASSY, DRIVESHAFT W/GUARD	1
68	108-1120-00	ASSY, HUB DRIVER-5-41 LG (See Page 9)	1
If Honda:	108-1121-00	ASSY, HUB DRIVER-5-41 LG	1
69	003-0003*35	Cable Tie (Not shown)	2

Power Drive

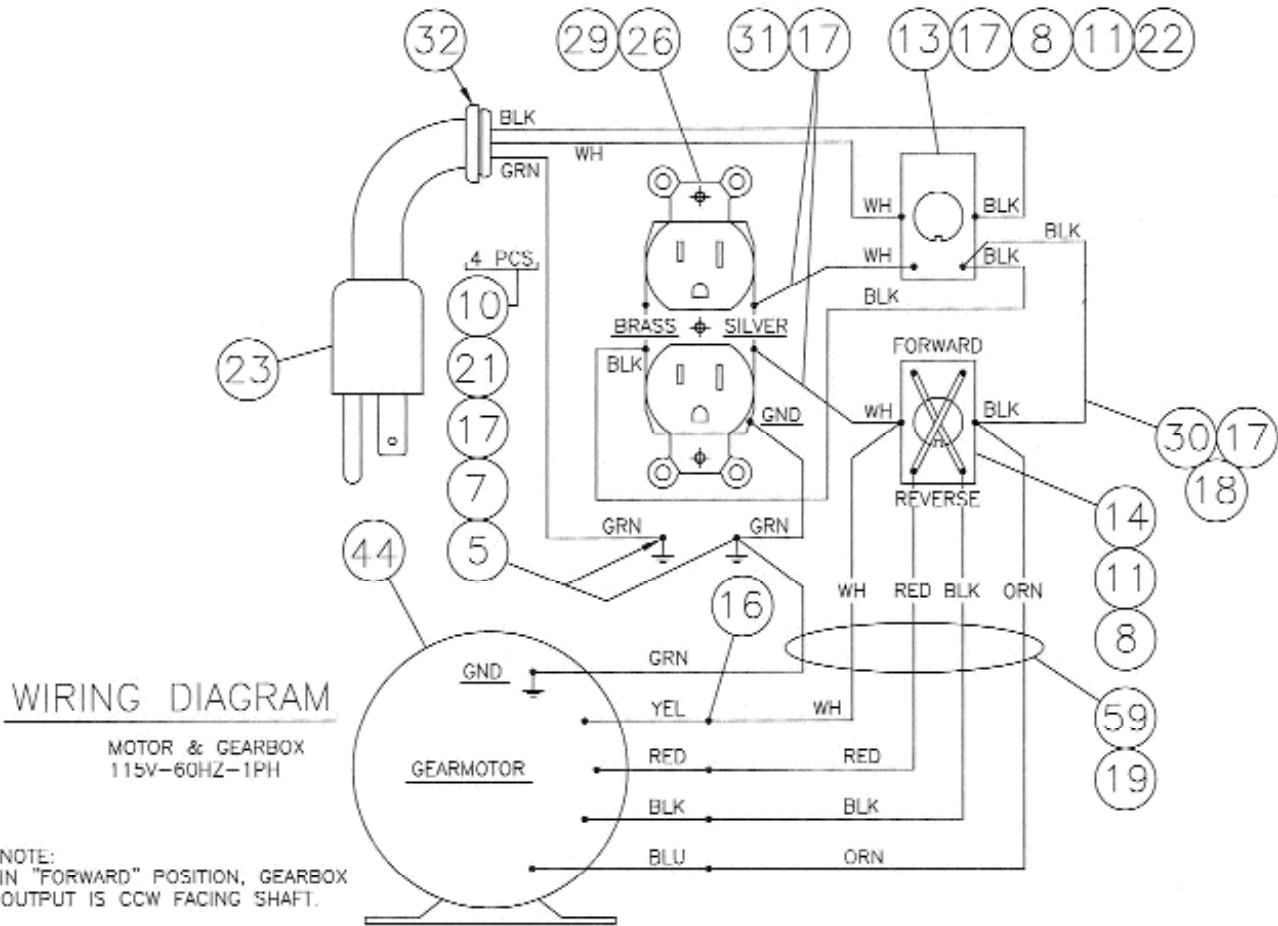
POWER DRIVE ASSEMBLY - TOP VIEW



TOP VIEW OF POWER DRIVE

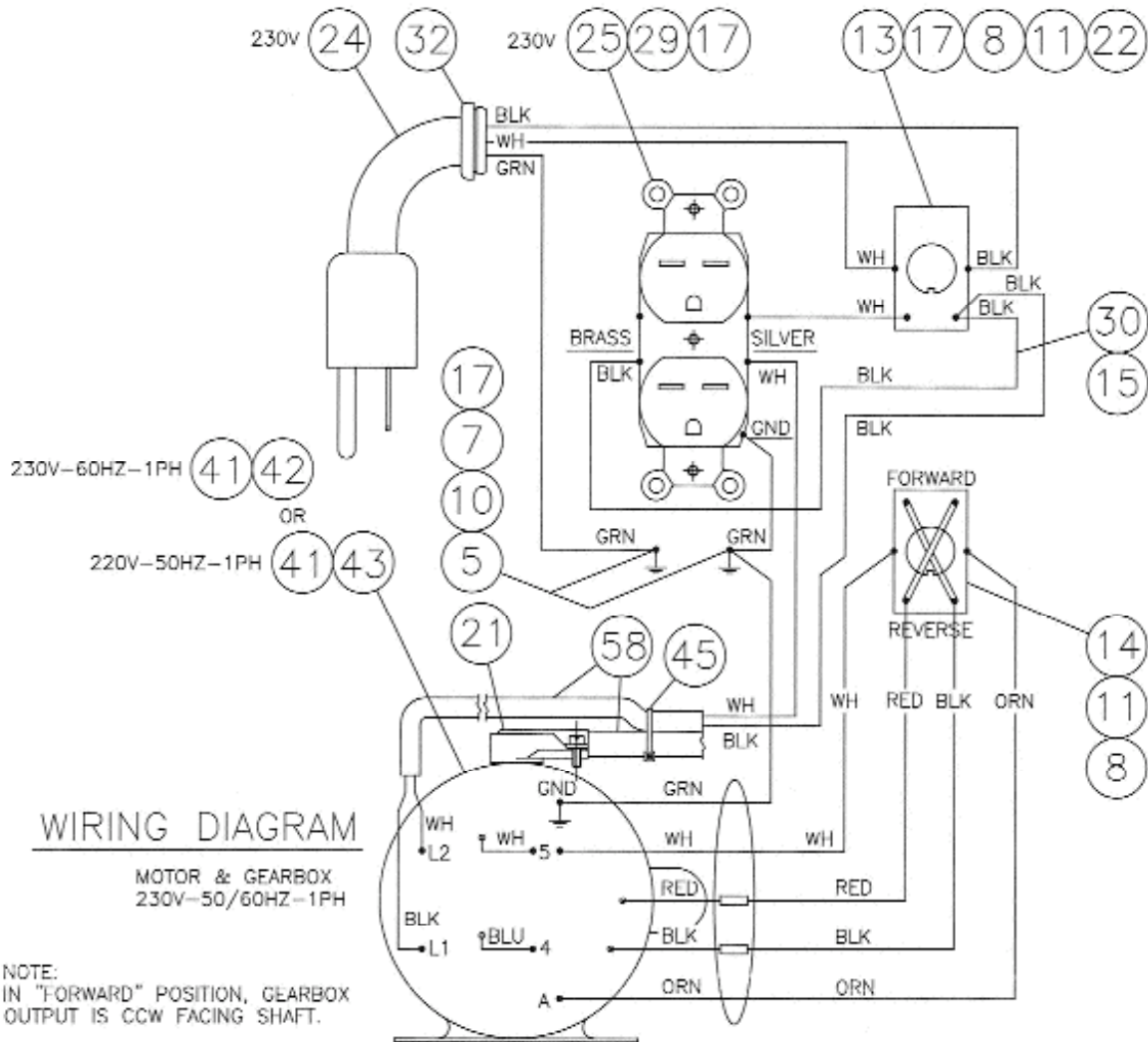


WIRING DIAGRAM - 115V



Power Drive

WIRING DIAGRAM - 230V



KWIK-WAY®

KW Products Inc.

500 57th Street, Marion, IA 52302 USA

319-377-9421

319-377-9101 (FAX)

800-553-5953

www.kwik-way.com

service@kwik-way.com