



# HP30 Slab Saw

## PARTS MANUAL



MADE IN USA

|                           |         |
|---------------------------|---------|
| Revision 100              | 04.2022 |
| Manual Part No. 168578-PM |         |

**Caution:** Read all safety and operating instructions before using this equipment. This manual **MUST** accompany the equipment at all times.

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## INTRODUCTION

Thank you for selecting the Barranca Diamond Slab Saw. We are certain that you will be pleased with your purchase. Barranca Diamond takes pride in producing top quality products for hobbyists and commercial lapidary users throughout the world. This product is manufactured in the United States.

This owner's manual contains information necessary to operate and maintain your Slab Saw safely and correctly. Operated correctly, your Slab Saw should provide you with years of service. Please take the time to familiarize yourself with the Slab Saw by reading and reviewing this manual.

If you should have questions concerning your Slab Saw, please call Barranca Diamond at (310) 523-5867 or Toll Free (800) 630-7682.

**NOTE THIS INFORMATION FOR FUTURE USE:**

|                        |  |
|------------------------|--|
| <b>MODEL NUMBER:</b>   |  |
| <b>SERIAL NUMBER:</b>  |  |
| <b>PURCHASE PLACE:</b> |  |
| <b>PURCHASE DATE:</b>  |  |

**WARRANTY:** For your (1) one year warranty to be effective, complete the online Product Registration as soon as possible. Visit [\*\*www.mkdiamond.com/registration/\*\*](http://www.mkdiamond.com/registration/)

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FIGURE 1 - HP30 SLAB SAW P/N 168084

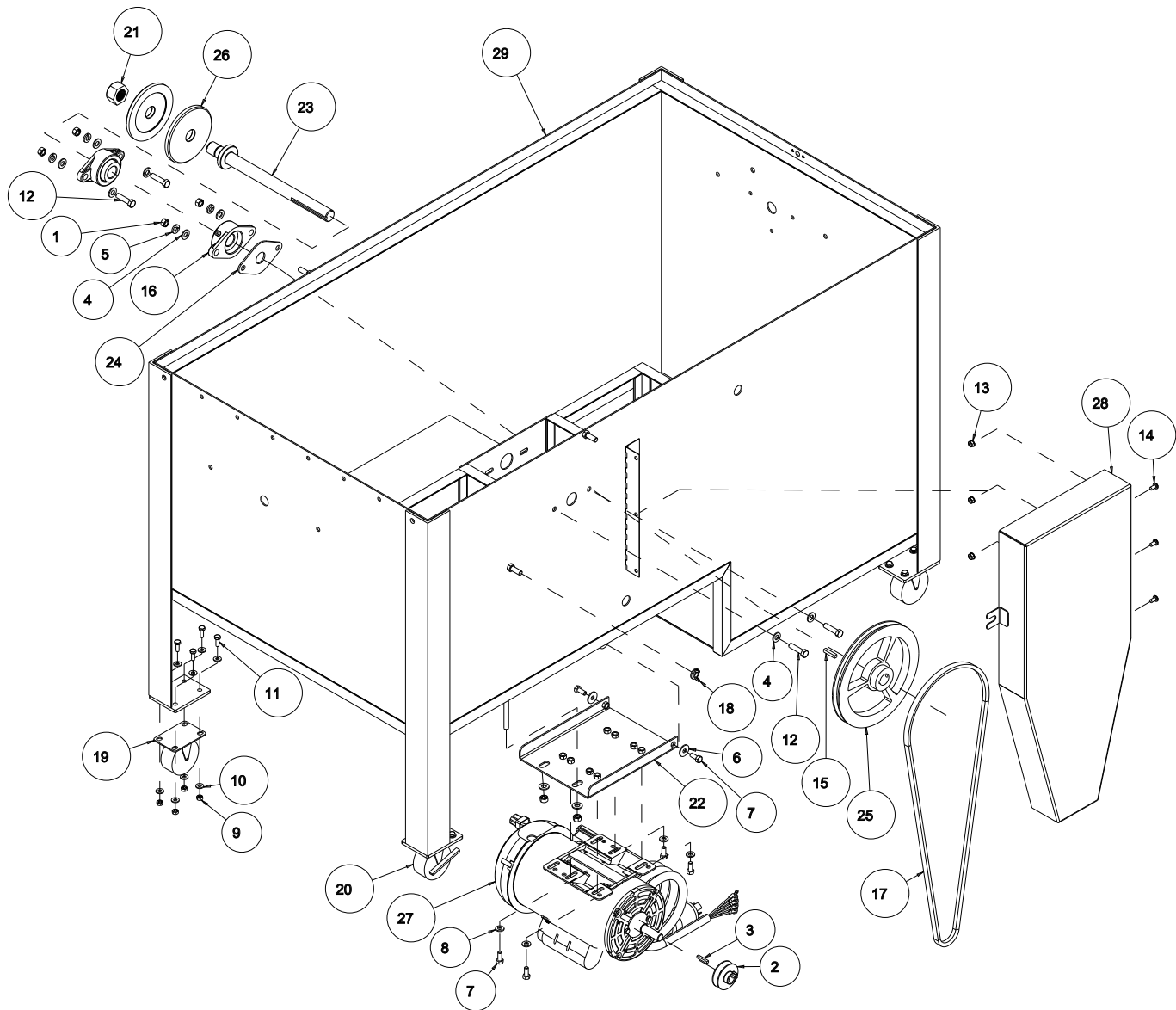


FIGURE 1 - HP30 SLAB SAW P/N 168084

| ITEM | DESCRIPTION                               | PART # | QTY. |
|------|-------------------------------------------|--------|------|
| 1    | NUT, HEX, 3/8-16                          | 101188 | 6    |
| 2    | PULLEY, 1A22 X 5/8"BORE                   | 133157 | 1    |
| 3    | KEY, 3/16 SQ X 1-1/8                      | 150344 | 1    |
| 4    | WASHER, FLAT, SAE, 3/8                    | 150923 | 10   |
| 5    | WASHER, LOCK, SPLIT, 3/8                  | 150925 | 4    |
| 6    | WASHER, FENDER, 5/16 X 1.0                | 151053 | 2    |
| 7    | SCREW, HEX HD, CAP, 5/16-18 X 3/4         | 151369 | 6    |
| 8    | WASHER,FLAT,SAE,5/16                      | 151754 | 4    |
| 9    | NUT,HEX,1/4-20                            | 151893 | 16   |
| 10   | WASHER,FLAT,SAE,1/4                       | 151915 | 32   |
| 11   | SCREW,HEX HD,1/4-20X3/4                   | 152370 | 16   |
| 12   | SCREW, 3/8-16 X 1-1/2 HEX HEAD            | 153528 | 4    |
| 13   | NUT, HEX, TW, 1/4-20                      | 153941 | 3    |
| 14   | SCREW, PAN HD, CAP, 1/4-20 X 1/2          | 155452 | 3    |
| 15   | KEY, 1/4 X 1/4 X 1-1/4 SQUARE             | 159852 | 1    |
| 16   | BEARING, FLANGE, 2-BOLT, 1" SHAFT         | 161363 | 2    |
| 17   | BELT, A58                                 | 161411 | 1    |
| 18   | NUT. WING FLANGE 3/8-16                   | 161718 | 1    |
| 19   | WHEEL, CASTER 3 X 1-1/4                   | 162344 | 2    |
| 20   | WHEEL, CASTER 3 X 1-1/4                   | 162794 | 2    |
| 21   | NUT, HEX 1"-12UNF                         | 165038 | 1    |
| 22   | MOUNT, MOTOR                              | 166299 | 1    |
| 23   | SHAFT, ARBOR, HP-18                       | 166374 | 1    |
| 24   | GASKET, BEARING                           | 167049 | 1    |
| 25   | PULLEY, 9" X 1" BORE                      | 167365 | 1    |
| 26   | FLANGE, BLADE, 5"                         | 168094 | 2    |
| 27   | MTR, 2HP 230V 1PH 1745RPM WEG HP-30 -COMP | 172882 | 1    |
| 28   | GUARD, BELT, HP-24/30                     | 173046 | 1    |
| 29   | WELDMENT, TANK, HP30                      | 173147 | 1    |

FIGURE 2 - HP30 SLAB SAW ASSY. VISE P/N 168084

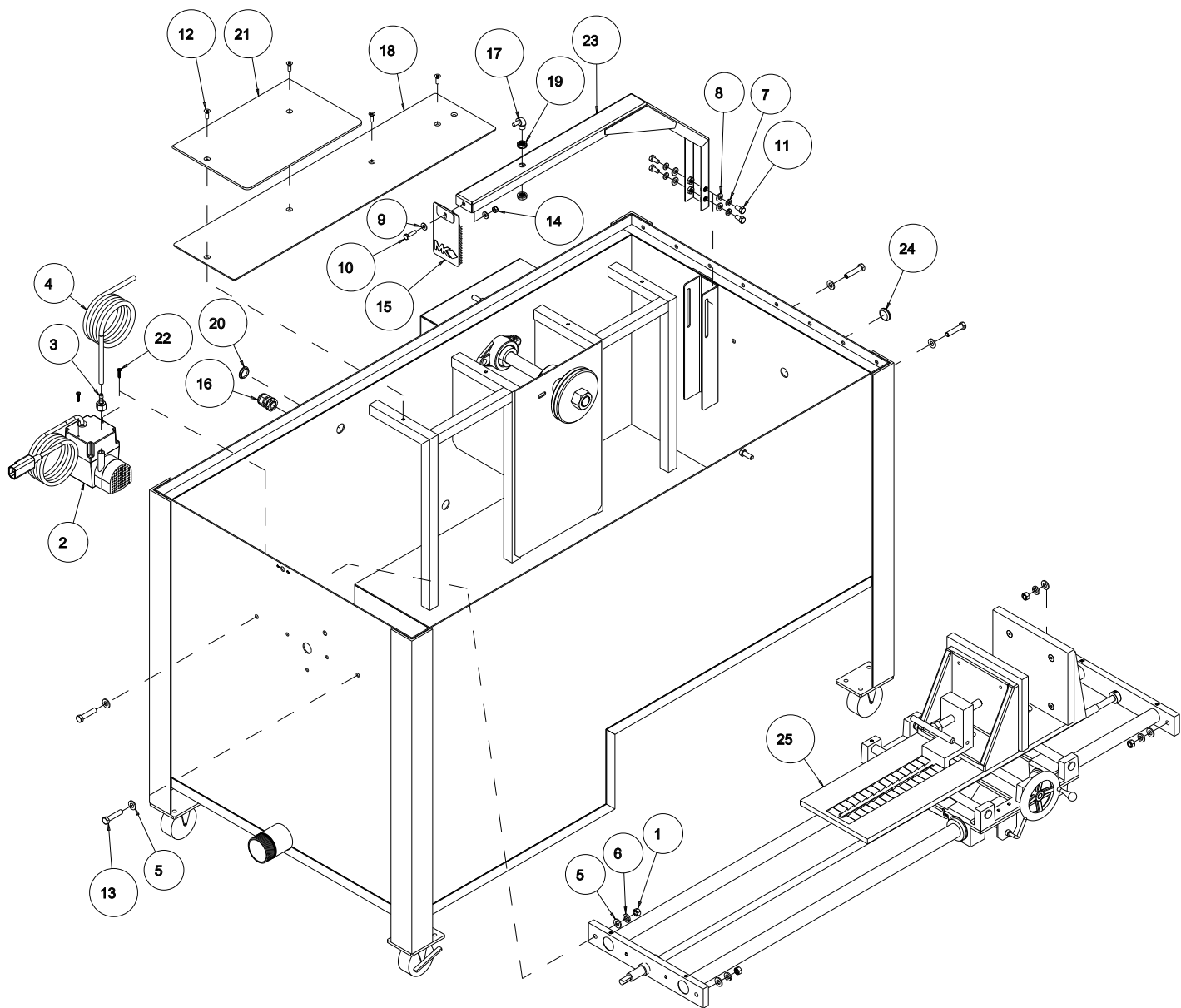


**FIGURE 2 - HP30 SLAB SAW ASSY. VISE P/N 168084**

| ITEM | DESCRIPTION                           | P/N       | QTY. |
|------|---------------------------------------|-----------|------|
| 1    | NUT, HEX, 3/8-16                      | 101188    | 4    |
| 2    | ASSY, PUMP, 300GPH 230V 50HZ/60HZ     | 114769-MK | 1    |
| 3    | ADAPTER, PUMP TPF-22 1/4X1/4          | 128397    | 1    |
| 4    | HOSE, VINYL, 1/4X3/8 (7FT)            | 132951    | 1    |
| 5    | WASHER, FLAT, SAE, 3/8                | 150923    | 8    |
| 6    | WASHER, LOCK, SPLIT, 3/8              | 150925    | 4    |
| 7    | WASHER, LOCK, SPLIT, 5/16             | 151747    | 4    |
| 8    | WASHER, FLAT, SAE, 5/16               | 151754    | 4    |
| 9    | WASHER, FLAT, SAE, 1/4                | 151915    | 2    |
| 10   | SCREW, HEX HD, TAP, 1/4-20X1          | 152676    | 1    |
| 11   | SCREW, 5/16-18 X 5/8 HEX HEAD CAP     | 153949    | 4    |
| 12   | SCREW, FLAT HD, 1/4-20X3/4            | 154657    | 4    |
| 13   | SCREW, 3/8-16 X 1 3/4 HEX HD.         | 158398    | 4    |
| 14   | NUT, HEX, NYLK, 1/4-20                | 159857    | 1    |
| 15   | GUARD, SPLASH                         | 160310    | 1    |
| 16   | CONNECTOR, CORD, LTF1/2               | 161504    | 1    |
| 17   | ELBOW, 1/4MNPTX1/4 BARB, 90 DEG       | 162637    | 1    |
| 18   | TABLE, ARBOR, HP                      | 164953    | 1    |
| 19   | NUT, HEX, 1/4 NPT, NYLON              | 165184    | 2    |
| 20   | CAP, FINISHING                        | 165483    | 1    |
| 21   | TABLE TOP, ACRYLIC                    | 167670    | 1    |
| 22   | SCREW, PAN HEAD PHILLIPS #8-32 X 3/4" | 169946    | 2    |
| 23   | WELDMENT, SPLASH GUARD                | 172792    | 1    |
| 24   | PLUG, PANEL, 7/8                      | 172884    | 1    |
| 25   | ASSY, VISE, HP24&30                   | 173062    | 1    |

FIGURE 3 - HP30 SLAB SAW P/N 168084

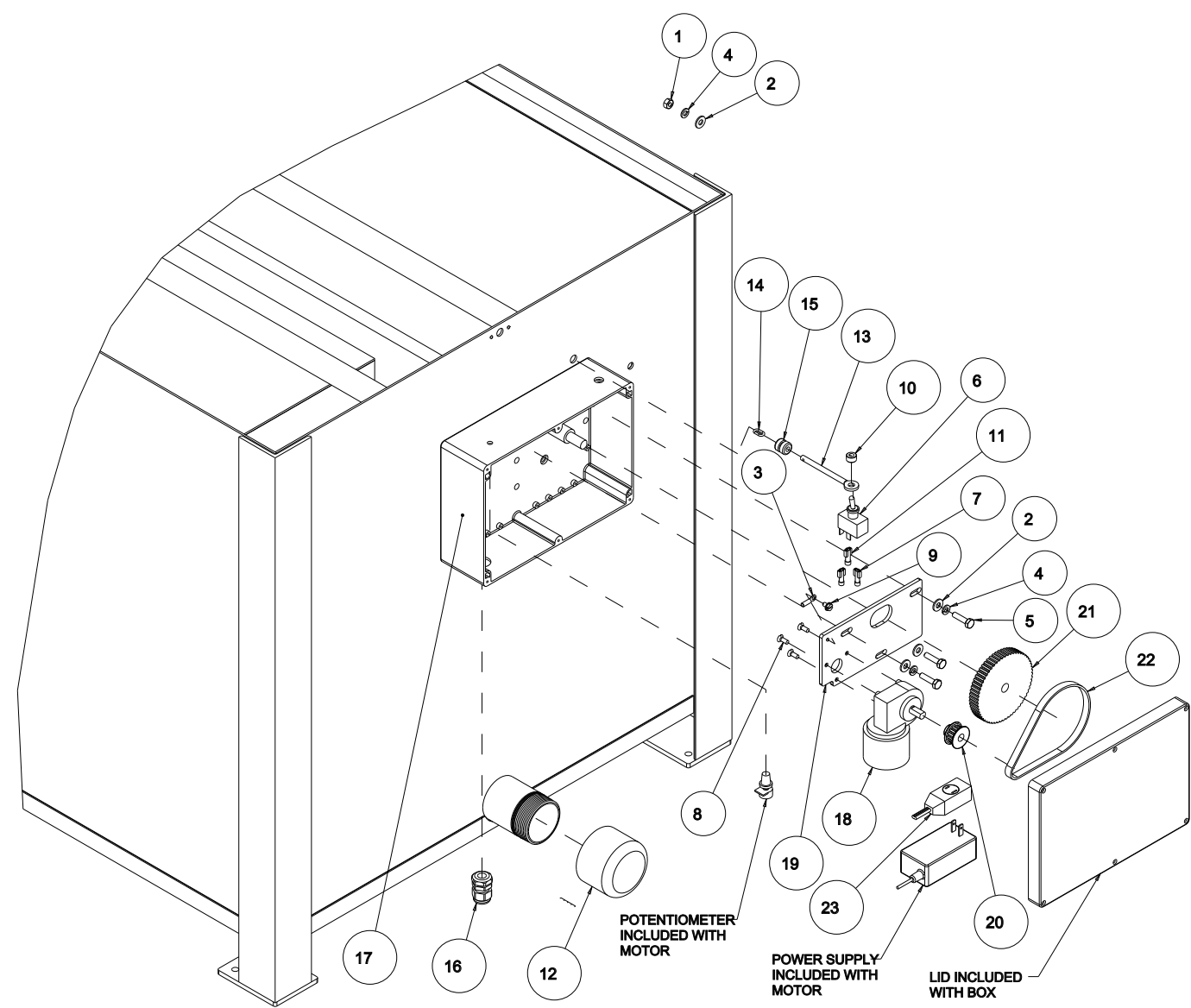


**FIGURE 3 - HP30 SLAB SAW P/N 168084**

| ITEM | DESCRIPTION                         | P/N    | QTY. |
|------|-------------------------------------|--------|------|
| 1    | NUT,HEX,1/4-20                      | 151893 | 1    |
| 2    | WASHER,FLAT,SAE,1/4                 | 151915 | 4    |
| 3    | TERMINAL, 16-14 X #10 RING PI       | 152465 | 1    |
| 4    | WASHER,LOCK,SPLIT,1/4               | 152591 | 3    |
| 5    | SCREW,HEX HD,TAP,1/4-20X1           | 152676 | 3    |
| 6    | SWITCH, TOGGLE 125V 20A             | 154310 | 1    |
| 7    | TERMINAL, 16-14 X .25 QD F FI       | 154539 | 2    |
| 8    | SCREW,FLAT HD,#10-32X1/2            | 154541 | 3    |
| 9    | SCREW,HEX HD FL 10-24X 5/16         | 159597 | 1    |
| 10   | COLLAR, SHAFT 1/4 X 1/2             | 161066 | 1    |
| 11   | TERMINAL, 12-10 X .25 QD F FI       | 161297 | 1    |
| 12   | PIPE CAP, 2"NPT                     | 161468 | 1    |
| 13   | LEVER, ON/OFF SWITCH                | 166511 | 1    |
| 14   | CHAIN, ON/OFF SWITCH, 3'            | 166512 | 1    |
| 15   | GROMMET, ON/OFF LEVER               | 166513 | 1    |
| 16   | CORD CONNECTOR LTF16 (HEYCO LTF 16) | 170541 | 1    |
| 17   | BOX, LIDDED, 10.4 X 7.2 X 3.7, COMP | 173071 | 1    |
| 18   | MTR, BRUSHLESS, 24V 25RPM, COMP     | 173073 | 1    |
| 19   | PLATE, MOTOR, VISE DRIVE            | 173074 | 1    |
| 20   | PULLEY, XL TIMING, 15T X 10MM BORE  | 173120 | 1    |
| 21   | PULLEY, XL TIMING, 60T X 12MM BORE  | 173121 | 1    |
| 22   | BELT, XL TIMING, 140XL037           | 173122 | 1    |
| 23   | CORD, POWER SUPPLY, NEMA 1-15 X 1FT | 173138 | 1    |

FIGURE 4 - HP30 SLAB SAW ASSY. HOOD P/N 168084

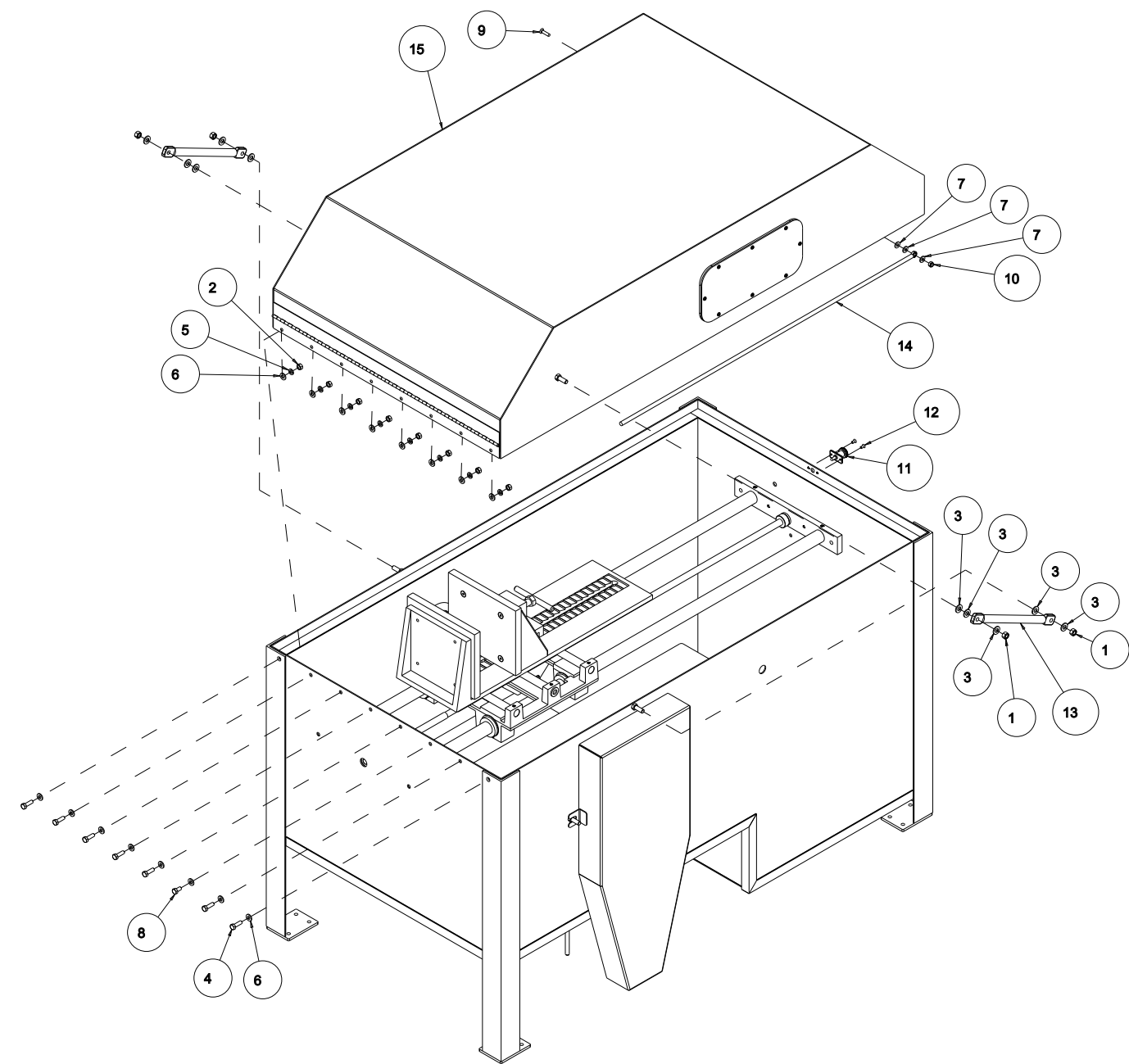
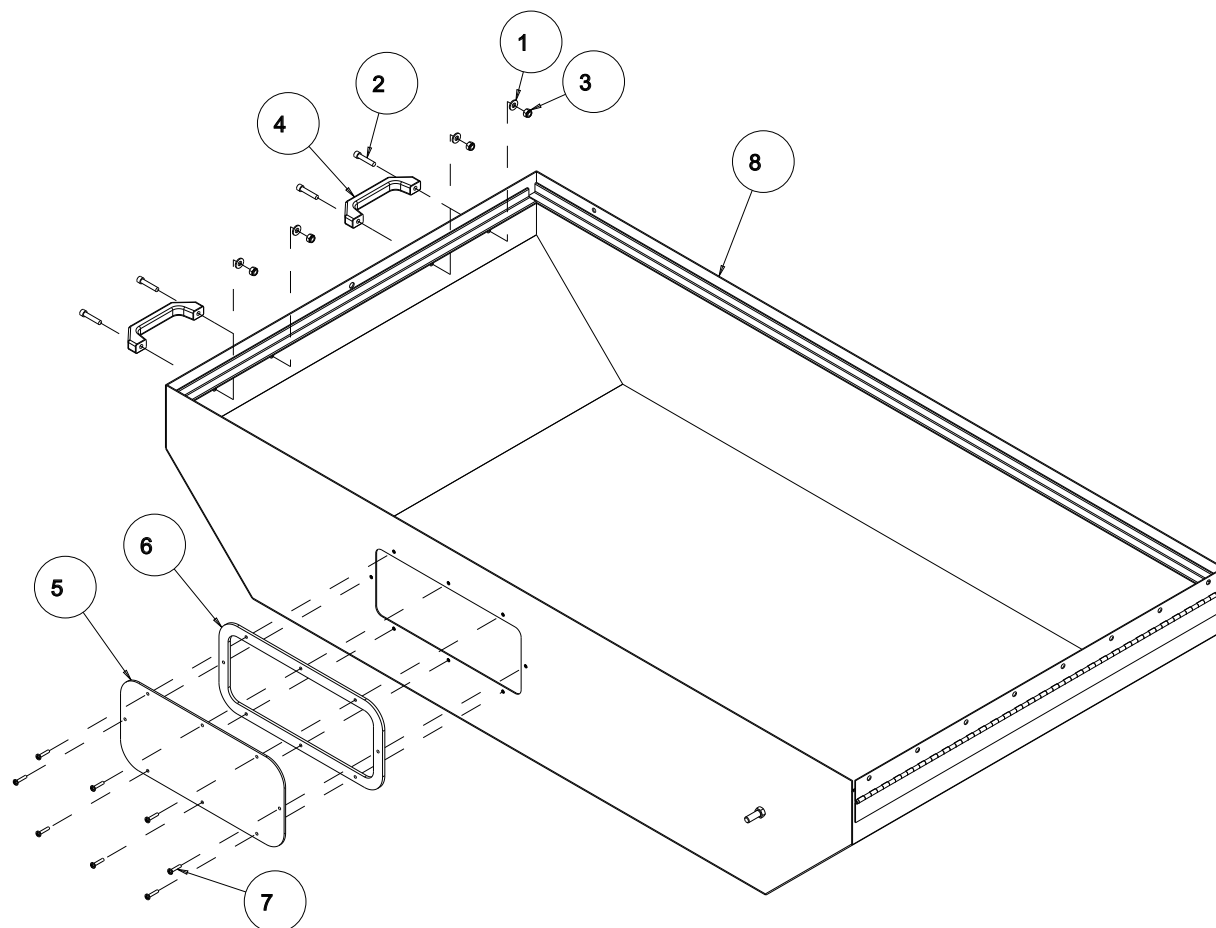


**FIGURE 4 - HP30 SLAB SAW ASSY. HOOD P/N 168084**

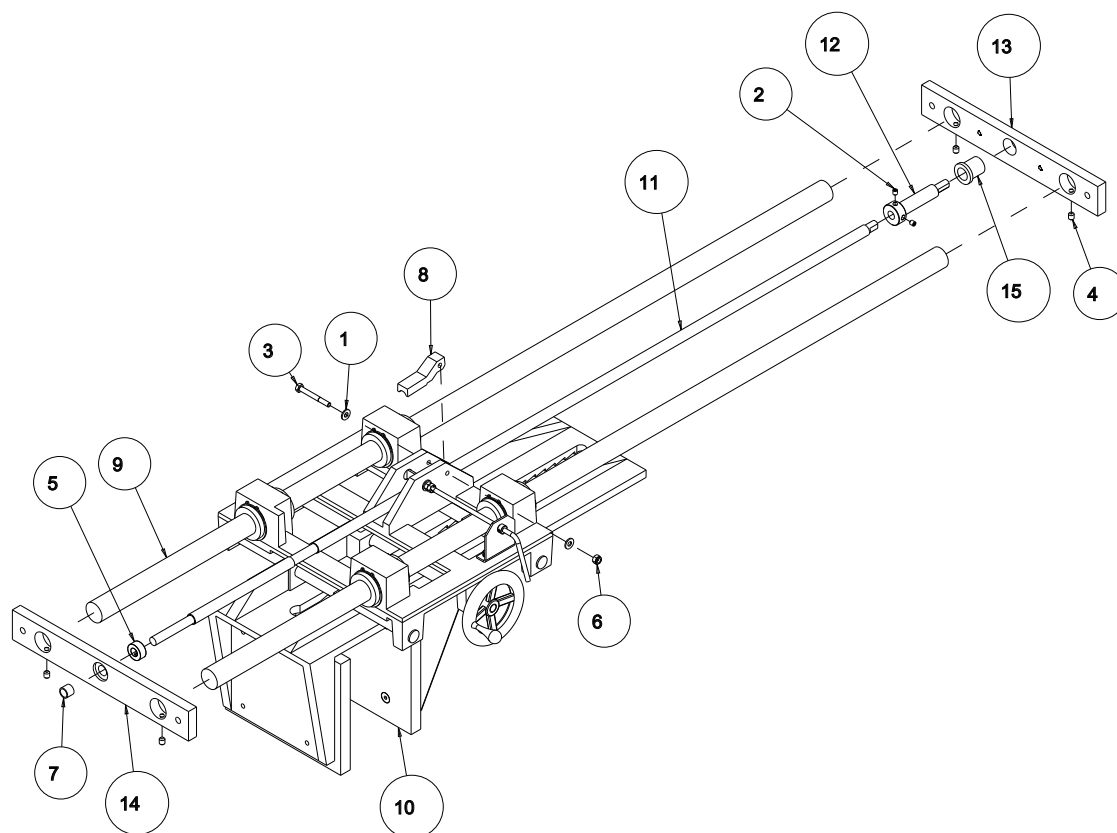
| ITEM | DESCRIPTION                           | P/N    | QTY. |
|------|---------------------------------------|--------|------|
| 1    | NUT, HEX, 3/8-16                      | 101188 | 4    |
| 2    | NUT, HEX, 5/16-18                     | 101196 | 8    |
| 3    | WASHER, FLAT, SAE, 3/8                | 150923 | 10   |
| 4    | SCREW, HEX HD, 5/16-18X1              | 151743 | 7    |
| 5    | WASHER, LOCK, SPLIT, 5/16             | 151747 | 8    |
| 6    | WASHER, FLAT, SAE, 5/16               | 151754 | 16   |
| 7    | WASHER, FLAT, SAE, 1/4                | 151915 | 3    |
| 8    | SCREW, 5/16-18 X 5/8 HEX HEAD CAP     | 153949 | 1    |
| 9    | SCREW, FLAT HD, 1/4-20X1              | 157527 | 1    |
| 10   | NUT, HEX, NYLK, 1/4-20                | 159857 | 1    |
| 11   | LATCH, HOOD                           | 166985 | 1    |
| 12   | SCREW, FLAT HD. PHILLIPS 10-32 X 3/8" | 166986 | 2    |
| 13   | ASSEMBLY, SPRING GAS LIFTING          | 168115 | 2    |
| 14   | PROP, HOOD                            | 168165 | 1    |
| 15   | ASSY, HOOD, HP-24 & 30                | 172309 | 1    |

FIGURE 5 - HP30 ASSY, HOOD P/N 172309



| ITEM | DESCRIPTION                            | P/N    | QTY. |
|------|----------------------------------------|--------|------|
| 1    | WASHER,FLAT,SAE,1/4                    | 151915 | 4    |
| 2    | SCREW, SOC HD CAP, 1/4-20 X 1-1/4      | 159336 | 4    |
| 3    | NUT, HEX, NYLK, 1/4-20                 | 159857 | 4    |
| 4    | HANDLE, PULL                           | 165923 | 2    |
| 5    | WINDOW                                 | 166151 | 1    |
| 6    | GASKET, WINDOW                         | 166213 | 1    |
| 7    | SCREW, PAN HD PHIL 8-32 X 3/4" SEALING | 166257 | 8    |
| 8    | HOOD WELDMENT                          | 172845 | 1    |

FIGURE 6 - HP30 ASSY. VISE P/N 173062



| ITEM | DESCRIPTION                              | P/N    | QTY. |
|------|------------------------------------------|--------|------|
| 1    | WASHER,FLAT,SAE,1/4                      | 151915 | 2    |
| 2    | SCREW,SET,CUP PT,1/4-20X5/16             | 154226 | 2    |
| 3    | SCREW,HEX HD,CAP,1/4-20X2-1/4            | 156607 | 1    |
| 4    | SCREW,SET,KNR CUP,5/16-18X3/8            | 157083 | 4    |
| 5    | COLLAR, MANTA 3, 1/2 X 1 X 7/16          | 157518 | 1    |
| 6    | NUT, HEX, NYLK, 1/4-20                   | 159857 | 1    |
| 7    | BUSHING, 1/2 X 5/8 X 1/2 BRONZE          | 161241 | 1    |
| 8    | SHOE, CLUTCH COMPLETE                    | 166415 | 1    |
| 9    | ROD, VISE TRAVEL                         | 167369 | 2    |
| 10   | ASSY, VISE, HP-24/30                     | 171244 | 1    |
| 11   | SCREW, VISE FEED, 5/8-18                 | 173061 | 1    |
| 12   | SHAFT, VICE DRIVE, HP                    | 173063 | 1    |
| 13   | BAR,VISE SUPPORT, FRONT, HP              | 173064 | 1    |
| 14   | BAR, VISE SUPPORT, REAR                  | 173065 | 1    |
| 15   | BUSHING, BRONZE, FLANGE, 3/4 X 1 X 1-1/4 | 173131 | 1    |

FIGURE 7 - HP 30 SLAB SAW ASSY, VISE P/N 171244

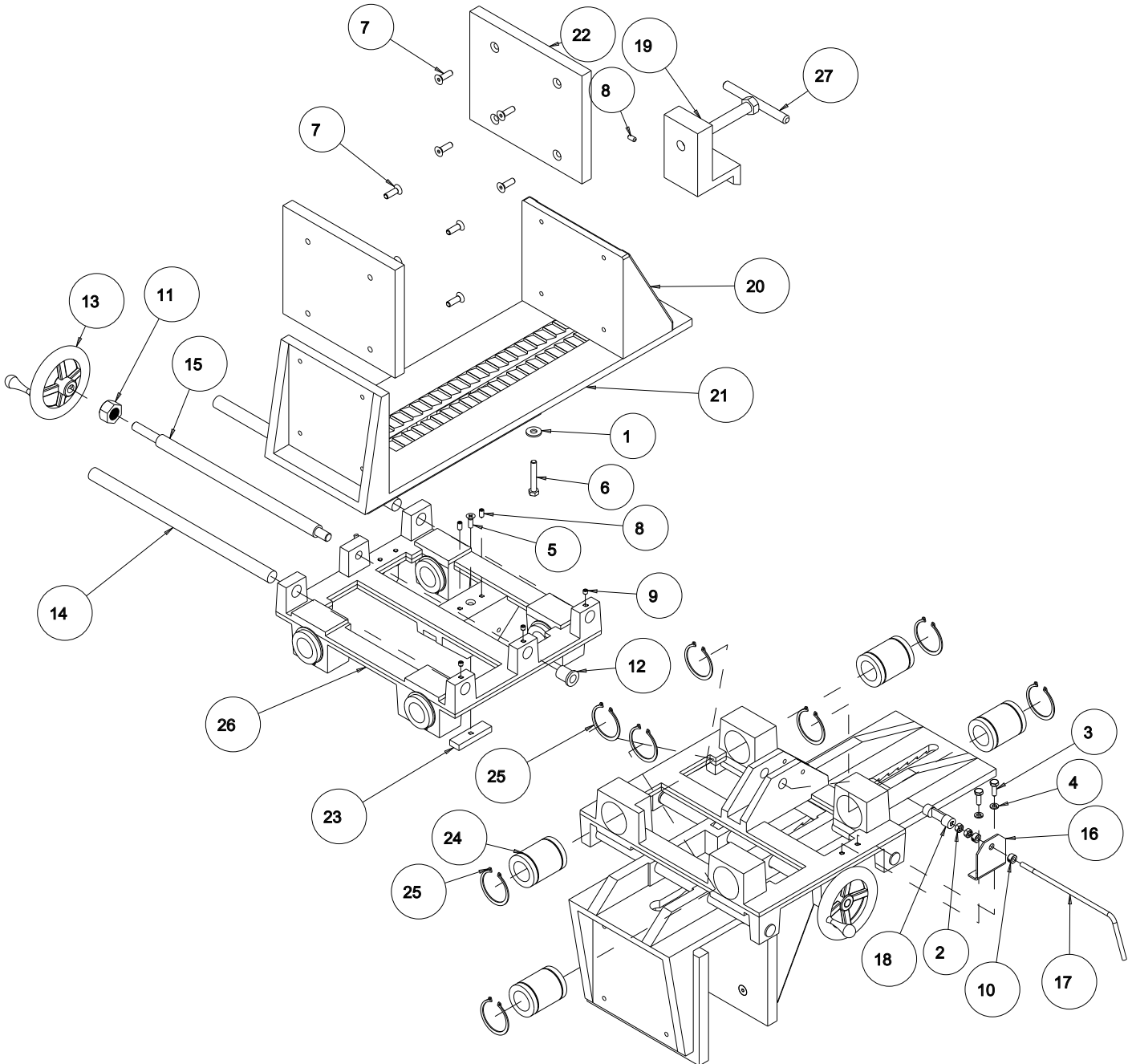
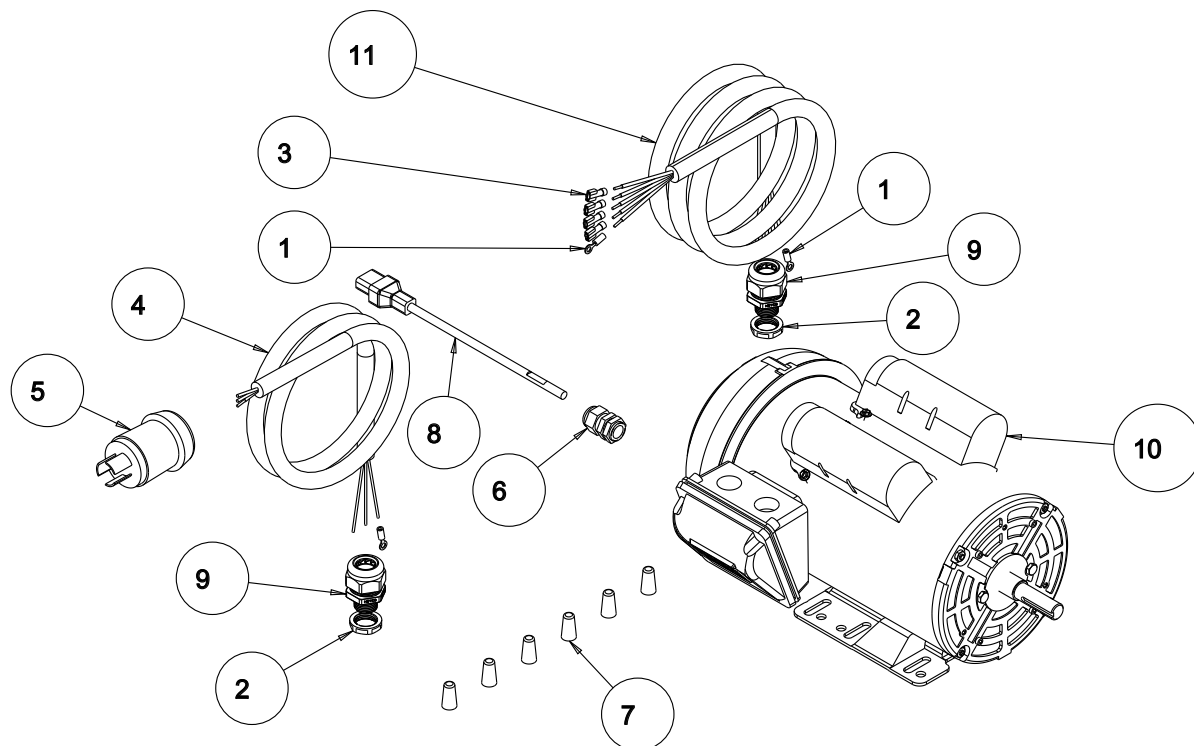


FIGURE 7 - HP 30 SLAB SAW ASSY, VISE P/N 171244

| ITEM | DESCRIPTION                             | P/N    | QTY. |
|------|-----------------------------------------|--------|------|
| 1    | WASHER, 5/16 FLAT CUT                   | 101352 | 1    |
| 2    | NUT,HEX,1/4-20                          | 151893 | 2    |
| 3    | SCREW,HEX HD,1/4-20X3/4                 | 152370 | 2    |
| 4    | WASHER,LOCK,SPLIT,1/4                   | 152591 | 2    |
| 5    | SCREW,FLAT HD,1/4-20X3/4                | 154657 | 1    |
| 6    | SCREW, 5/16-18 X 2 HEX HEAD             | 155494 | 1    |
| 7    | SCREW, 5/16-18 X 1.0 FLAT HEAD SOCKET   | 155552 | 8    |
| 8    | SCREW, 1/4-20 X 1/2 SOCKET HEAD SET     | 155804 | 3    |
| 9    | SCREW,SET,1/4-20X1/4                    | 157528 | 3    |
| 10   | COLLAR, SHAFT 1/4 X 1/2                 | 161066 | 2    |
| 11   | NUT, HEX 3/4-16 BRASS                   | 161706 | 1    |
| 12   | BUSHING, BRONZE FLANGED 3/4 X 1/2 X 7/8 | 162306 | 1    |
| 13   | WHEEL, HAND 4-1/2"                      | 164915 | 1    |
| 14   | ROD, 3/4 DIA. X 14-3/8"LG.              | 166388 | 2    |
| 15   | ROD, THREADED SIDE TO SIDE              | 166389 | 1    |
| 16   | BRACKET, CLUTCH LEVER                   | 166397 | 1    |
| 17   | LEVER, CLUTCH                           | 166432 | 1    |
| 18   | CAM, CLUTCH                             | 166486 | 1    |
| 19   | DOG (COMP)                              | 166984 | 1    |
| 20   | JAW (COMP)                              | 167139 | 1    |
| 21   | WISE (COMP)                             | 167141 | 1    |
| 22   | WOOD, BLOCK WISE (COMP)                 | 167555 | 2    |
| 23   | CLUTCH, BLOCK                           | 168547 | 1    |
| 24   | BEARING, LINEAR, 1.25X2.00X2.63         | 170722 | 4    |
| 25   | RING, RETAINING, LIN BRG                | 170723 | 8    |
| 26   | CARRIAGE, WISE-COMP                     | 170731 | 1    |
| 27   | T-HANDLE, THREADED, 5/8-11              | 172182 | 1    |

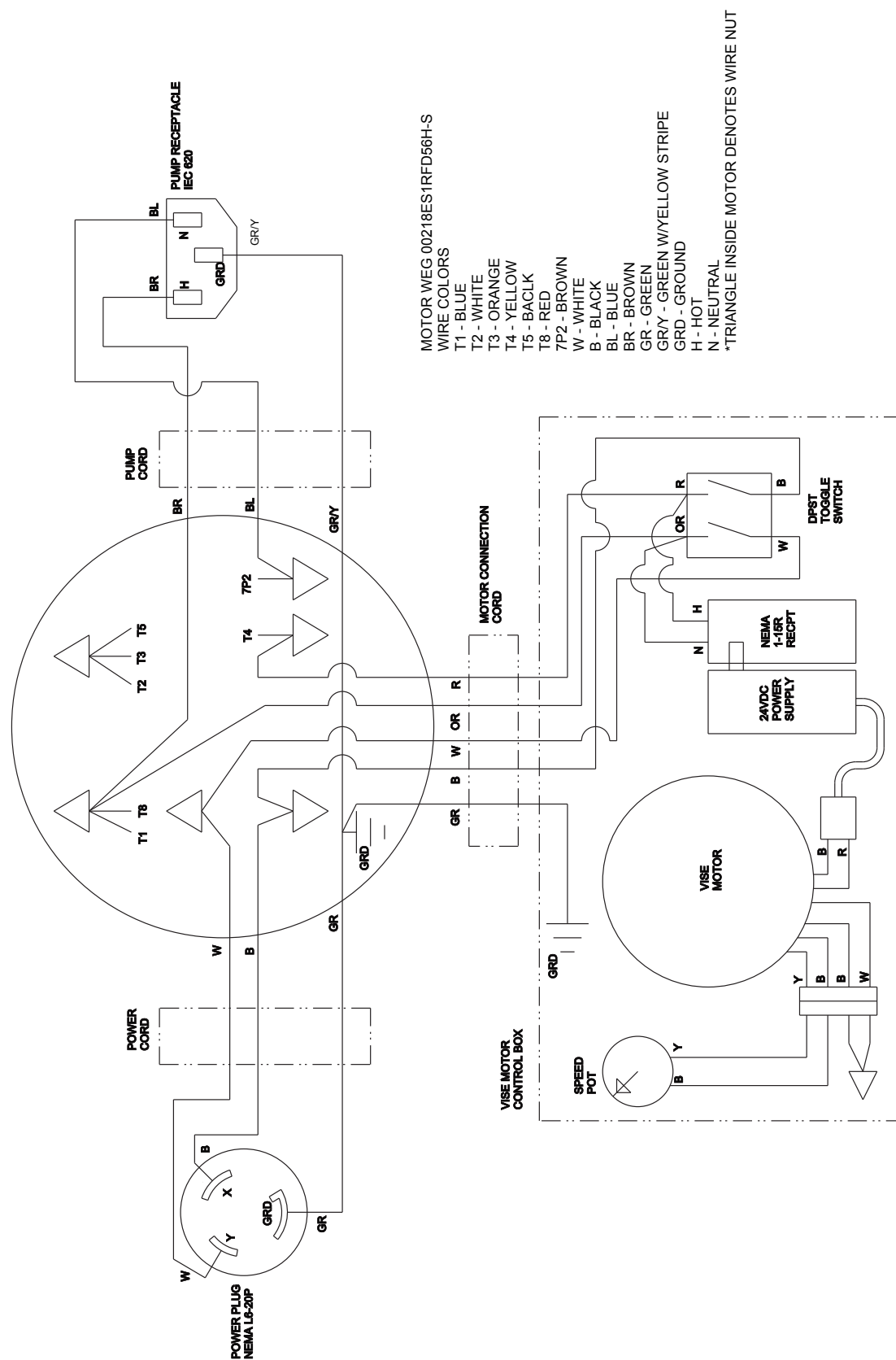
FIGURE 8 - HP30 ASSY, MTR, 2HP 230V 1PH 1745RPM WEG P/N 172882



| ITEM | DESCRIPTION                                        | P/N    | QTY. |
|------|----------------------------------------------------|--------|------|
| 1    | TERMINAL, 16-14 X #10 RING PI                      | 152465 | 3    |
| 2    | NUT, STRN RLF, PLAS, 1/2NPT                        | 153829 | 2    |
| 3    | TERMINAL, 16-14 X .25 QD F FI                      | 154539 | 4    |
| 4    | CORD, ELEC, 12/3 SOOW, BLACK (10FT.)               | 155493 | 1    |
| 5    | PLUG, 240V, L6-20P                                 | 157538 | 1    |
| 6    | CONNECTOR, CORD, LTF11                             | 159582 | 1    |
| 7    | WIRE NUT 4#16 (YELLOW)                             | 159968 | 6    |
| 8    | CORD, 9', W/IEC60320 FEM                           | 166279 | 1    |
| 9    | CONNECTOR, CORD, MLTF1/2                           | 172832 | 2    |
| 10   | MTR, 2HP 115/230V 1PH 1745RPM WEG 00218ES1RFD56H-S | 172881 | 1    |
| 11   | CORD, ELEC, 14/5 SOOW (65")                        | 172883 | 1    |

**FIGURE 9 - HP30 SLAB SAW WIRING DIAGRAM P/N 168084**

WIRING DIAGRAM FOR HP30 WITH WEG 00218ES1RFD56H-S MOTOR



**BARRANCA DIAMOND LIMITED WARRANTY**

Barranca Diamond warrants to the original retail purchaser for a period of 90 days except as noted, from the date of purchase all products covered by this Warranty to be free of defects in materials and workmanship.

This Warranty shall not apply to any parts that have been subjected to misuse or improper service, that had been damaged in transit or handling, or that have been altered or repaired by unauthorized representatives. This Warranty does not cover defects caused by or resulting from misuse, abuse, neglect or damage caused by accident or the failure to provide reasonable maintenance. This Warranty is void if the product or any of its individual components is altered or modified by the purchaser or if the product is used in a manner or with a blade not recommended by the manufacturer.

Any claim arising under this Warranty must be submitted by the original purchaser within the warranty period specified above, and shall include proof of purchase. During said warranty period Barranca Diamond shall, at its option, either replace or repair, at no charge to the original purchaser, any parts or components that are found to be defective by Barranca Diamond. Barranca Diamond shall not be responsible for or obligated to pay for freight or other transportation related costs or expenses in connection with any defective products or components that are either returned to Barranca Diamond's facility or any authorized repair station and/or any replacement products or components that are shipped from Barranca Diamond pursuant to this Warranty.

Parts and labor needed to maintain products and the replacement of components due to normal wear and tear are the purchaser's responsibility and are not covered by this Warranty. All products or components replaced under warranty become the property of the manufacturer. All replacement parts will be considered to be part of the original product and any warranty on such parts will expire coincidentally with the original Warranty. Barranca Diamond will pay for parts and labor in connection with warranty repairs conducted by Barranca Diamond or its authorized repair centers. Replacement part(s) installed by anyone else will be provided without a charge for such replacement part(s), but this Warranty will not apply to labor charges in connection therewith.

IN NO EVENT SHALL ANY LIABILITY UNDER THIS WARRANTY EXCEED THE REPLACEMENT COST OF ANY DEFECTIVE PRODUCT OR COMPONENT THEREOF, AND BARRANCA DIAMOND SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR ANY OTHER DAMAGE OR LOSS NOT EXPRESSLY ASSUMED AS SET FORTH HEREIN.

The foregoing constitutes an expressed warranty on the terms set forth above and is the only warranty or warranties applicable to the products it covers. All other warranties, including, without limitation, the implied warranty of merchantability and/or fitness for a particular purpose or use being denied. This limited warranty is expressly in lieu of all other warranties, whether expressed or implied.

**WARRANTY:** For your (1) one year warranty to be effective, complete the online Product Registration as soon as possible. Visit [www.mkdiamond.com/registration/](http://www.mkdiamond.com/registration/)

**SPECIFICS APPLICABLE TO LIMITED WARRANTY OF DIAMOND BLADES AND CORE BITS****Laser Welded Blade and Bit Warranty**

If the laser weld between the segment and the steel core or barrel fails during normal use, the blade or bit will be replaced free of charge. Blades and bits damaged due to careless or improper use are not covered under this warranty.

**Brazed Blade, Bit, and Cup Wheel Warranty**

If the brazed bond between the segment and the core, barrel, or cup fails within the first .050 of segment wear, the blade, bit, or cup will be replaced free of charge. Blades, bits, and cup wheels damaged due to careless or improper use are not covered under this warranty.

**Continuous Rim Blade Warranty**

If the bond between the rim and the core fails during normal use, the blade will be replaced free of charge. Blades and bits damaged due to careless or improper use are not covered under this warranty.

**Exclusions**

Barranca Diamond does not warrant the following components, which carry their own manufacturer's warranty for the indicated periods:

***Electric Motors Manufacturer's Warranty***

ABB (Baldor): 1 year

Ryobi: 1 Year

Soga: 1 Year

***Gas Engines Manufacturer's Warranty***

Honda: 2 years

**Engine Power Information**

Engine power ratings are calculated by the individual engine manufacturer and the rating method may vary among engine manufacturers. Barranca Diamond Products makes no claim, representation or Warranty as to the power rating of the engine on this equipment and disclaims any responsibility or liability of any kind whatsoever with respect to the accuracy or the engine power rating. Users are advised to consult the engine manufacturer's owner's manual and website for specific information regarding the engine power rating.

**REPLACEMENT PARTS**

Replacement parts for this tool may be ordered from your Barranca Diamond distributor or directly from Barranca Diamond. Please have the following information ready before calling:

- Model and serial number of the machine
- Date of purchase
- Description of parts being ordered (see attached parts list)

**RETURN MATERIALS PROCEDURE**

To expedite the service relative to the return of a product purchased through Barranca Diamond, please have the following information available:

- Model and serial number of the machine
- Date of purchase
- Distributor's name

Then please call Barranca Diamond at (310) 523-5867 or toll free at 800-630-7682 to obtain a Return Goods Authorization number (RGA) authorizing the return.

Please Note:

- Ensure your item(s) are prepaid to the destination
- Return items must have been purchased within the previous twelve (12) months
- Follow the packaging instructions in the following section
- Be sure to include the RGA number, return address and your phone number on or within the return shipping box.

**PACKAGING INSTRUCTIONS**

Ship the saw using its plywood shipping crate. Use wood screws to fasten the baseboard to the 1/2" plywood crate bottom so as to secure it inside the shipping crate.

## NOTES

## NOTES

## NOTES

**HP30 Slab Saw**  
**PARTS MANUAL**



**BARRANCA DIAMOND**

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