



# Tool Rental Center MANUAL

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# EDCO Single-Disc Grinder



# READ AND UNDERSTAND THE OPERATORS INSTRUCTION MANUAL THOROUGHLY BEFORE ATTEMPTING TO OPERATE THIS EQUIPMENT.

Death or serious injury could occur if this machine is used improperly.



## SAFETY MESSAGES

- Safety Instructions are preceded by a graphic alert symbol of DANGER, WARNING, or CAUTION.



Indicates an imminent hazard which, if not avoided, will result in death or serious injury.



Indicates an imminent hazard which, if not avoided, can result in death or serious injury.



Indicates hazards which, if not avoided, could result in serious injury and or damage to the equipment.

## GASOLINE/PROPANE POWERED EQUIPMENT



- Engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



- Gasoline is extremely flammable and poisonous. It should only be dispensed in well ventilated areas, and with a cool engine.

- Small gasoline engines produce high concentrations of carbon monoxide (CO) example: a 5 HP 4 cycle engine operation in an enclosed 100,000 cu. ft. area with only one change of air per hour is capable of providing deadly concentrations of CO in less than fifteen minutes. Five changes of air in the same area will produce noxious fumes in less than 30 minutes. Gasoline or propane powered equipment should not be used in enclosed or partially enclosed areas. Symptoms of CO poisoning include, headache, nausea, weakness, dizziness, visual problems and loss of consciousness. If symptoms occur - get into fresh air and seek medical attention immediately.

## ELECTRICAL POWERED EQUIPMENT



Extreme care must be taken when operating electric models with water present: Ensure power cord is properly grounded, is attached to a Ground-Fault-Interrupter (GFI) outlet, and is undamaged.

- Check all electrical cables - be sure connections are tight and cable is continuous and in good condition. Be sure cable is correctly rated for both the operating current and voltage of this equipment.
- Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with qualified electrician or service person if there is any doubt as to whether the outlet is properly grounded. Adhere to all local codes and ordinances.
- **NOTE:** In the event of a malfunction or breakdown, grounding provides a path of least resistance for the electric current to dissipate. The motor is equipped with a grounded plug and must be connected to an outlet that is properly installed and properly grounded. DO NOT modify the plug provided on the motor. If the plug does not fit the outlet have a qualified electrician install the proper receptacle.
- Switch motor OFF before disconnecting power.

- Do not disconnect power by pulling cord. To disconnect, grasp the plug, not the cord.
- Unplug power cord at the machine when not in use and before servicing.

## GENERAL INSTRUCTIONS

- Equipment should only be operated by trained personnel in good physical condition and mental health (not fatigued). The operator and maintenance personnel must be physically able to handle the bulk weight and power of this equipment.
- This is a one person tool. Maintain a safe operating distance to other personnel. It is the **operators' responsibility** to keep other people (workers, pedestrians, bystanders, etc.) away during operation. Block off the work area in all directions with roping, safety netting, etc. for a safe distance. Failure to do so may result in others being injured by flying debris or exposing them to harmful dust and noise.
- This equipment is intended for commercial use only.
- For the operator's safety and the safety of others, always keep all guards in place during operation.
- Never let equipment run unattended.



- Personal Protection Equipment and proper safety attire must be worn when operating this machinery. The operator must wear approved safety equipment appropriate for the job such as hard hat and safety shoes when conditions require. Hearing protection **MUST** be used (operational noise levels of this equipment may exceed 85db). Eye protection **MUST** be worn at all times.



Keep body parts and loose clothing away from moving parts. Failure to do so could result in dismemberment or death.

- Do not modify the machine.
- Stop motor/engine when adjusting or servicing this equipment.



Maintain a safe operating distance from flammable materials. Sparks from the cutting-action of this machine can ignite flammable materials or vapors.

## DUST WARNING



Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects, or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints, and
  - Crystalline silica from bricks and concrete and other masonry products.
- Your risk of exposure to these chemicals varies depending on how often you do this type of work. To reduce your risk: work in a well ventilated area, use a dust control system, such as an industrial-style vacuum, and wear approved personal safety equipment, such as a dust/particle respirator designed to filter out microscopic particles.

# TOOL RENTAL CENTER MANUAL



## SINGLE-DISC CONCRETE FLOOR GRINDER

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#### HOW TO ORDER REPLACEMENT PARTS

- To insure product safety and reliability, always use genuine EDCO replacement parts when making repairs to the equipment.
- When calling for parts, specify the MODEL and SERIAL number of the machine, which can be found on the NAME PLATE. Keep that information in the space provided. In addition to this information, give part number, description, and quantity as listed on the parts list to your parts representative.
- Please note: Due to improvements and changes in the equipment, the illustrations shown may be different than the actual machine.

#### FILL IN INFORMATION BELOW

Date of Purchase \_\_\_\_\_

Model # \_\_\_\_\_

Serial # \_\_\_\_\_

SKU # \_\_\_\_\_



# SINGLE DISC GRINDER

## MODEL SEC-HD

Operational Keys to good machine care and long life...

1. Before each use, check and insure all hardware, nuts, bolts and fittings are tight and not worn or damaged. If damaged or missing hardware is noted, it should be replaced before the machine is put back into service.
2. If using attachments such as a vacuum for dust control, insure filters are clean and the vacuum is empty before each use and empty often for best vacuum performance. Check hoses, gaskets, seals and filters for damage. If any damage is found the part or parts should be replaced. Dirty or damaged filters and leaking gaskets or seals will cause poor vacuum performance, penetrate and shorten the life of any motor and cause uncontrollable dust which is hazardous to ones health.
3. Check the maintenance schedule for important information about lubrication intervals. Remember, machines used in a dusty environment have a more frequent lubrication requirement than a machine that is not used in a dusty environment.
4. Machines that have electric motors should be checked for proper voltage settings by checking the name plate on the motor for the different electrical configurations i.e.: single phase, three phase and the voltage settings available. This is not required on single voltage motors i.e.: 120 Volt Single Phase. The power cords and/or extension cords should be checked for proper length and gauge, remember, the longer the cord a heavier gauge wire is *required*. Too small a gauge wire causes a voltage drop which in turn causes motor overheating and damage. Check all wiring for cuts, bare or exposed wire and damaged connectors or plugs. These items can cause fatal shocks under the right conditions. It is current that kills, not voltage.
5. After each days use, the machine should be cleaned. When cleaning electric powered machines, cover any openings to prevent contaminants from entering the motor.

# **TROUBLESHOOTING AND SERVICING AN SEC SINGLE DISC GRINDER**

## **The Grinder and Other System Components:**

On any concrete surface preparation equipment there are numerous components that could be the root cause of any type of problem. Therefore take time to analyze any problem that might arise, a little thought and patience can save many hours of down time and frustration.

It is simply a mechanical device designed to efficiently remove trowel marks, rain spots, excess concrete, rough finishes or high spots. Remove 1/32" (1mm) of material per pass.

If the machine is forced into the work surface it can cause unnecessary vibration and noise. The expected results will not be attained.

As with any mechanical equipment, an ounce of prevention is worth a pound of cure. You can prevent most problems and need for repair with routine preventative maintenance. Much like maintaining your automobile, many preventative measures are simple visual checks of oil, filters, lubrication points, loose hardware and leaks.

Seals around the skirt assembly are provided for dust control, worn, broken or maladjusted seals will not provide this control.

Guards are provided for personal as well as machine safety and protection. They are intended to be in place at all times during storage, turn around, operation and only removed for servicing. Foreign objects could fall into the works of the machine unnoticed and cause personal injury and damage when the machine is turned on.

Most parts of the machine cannot be seen from the outside. For a complete breakdown of the machine, any single component or troubleshooting refer to the following pages for detailed information.

## **System Checklist:**

Begin with this simple checklist:

1. Is the source power what it should be or is the voltage too high, too low or nonexistent?
2. Is the drive system loose or worn?
3. Are the insert mounted firmly on the disc?
4. Are any of the insert missing or damaged and all of the same type.
5. Are the lubrication points lubricated properly?
6. Is all the hardware tight?
7. Are the inserts wearing evenly?

## **Common Problems:**

If you have checked these items and a problem still exists, you should analyze the nature of the problem and the possible causes. While we will not cover all of the possibilities, these are the most common problems and their probable causes.

### **Excessive Noise:**

Excessive noise is most often caused by loose components of the machine to include bolts or any adjustable function that is not tightened after adjustment is made.

### **Excessive Vibration:**

Vibration can be caused by a loose motor mount, out of balance grinding disc or missing and worn inserts. Motor and drive shaft sheaves out of alignment.

### **Leaking Lubricants:**

Leaking lubricants can be caused by over heating, worn or bad bearings and over lubrication.

### **Loss of Power:**

A loss of power can be caused by over tightened belts, low voltage, defective wiring or pushing the machine into the work to forcefully and/or adding too much weight to the machine.

### **Poor Grinding or Cutting:**

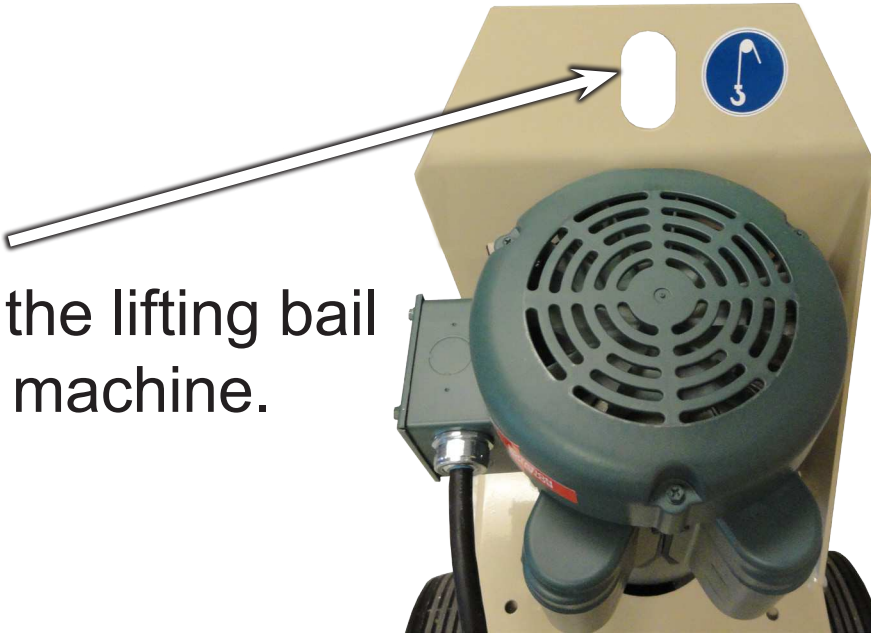
Worn or missing inserts. Mixed inserts on the same disc. Wrong insert for the type of surface you are working on or the type of material you are trying to remove. Is the right machine being used for the job?



## IMPORTANT NOTES

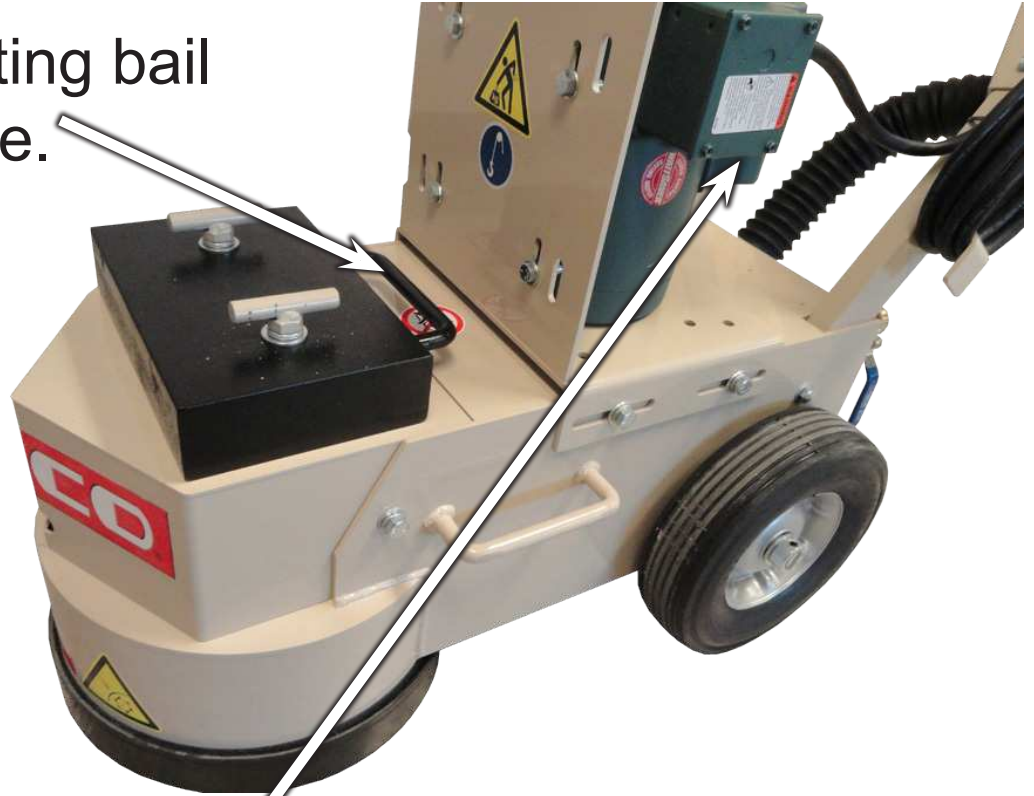
NOTE:

This is the lifting bail  
for this machine.



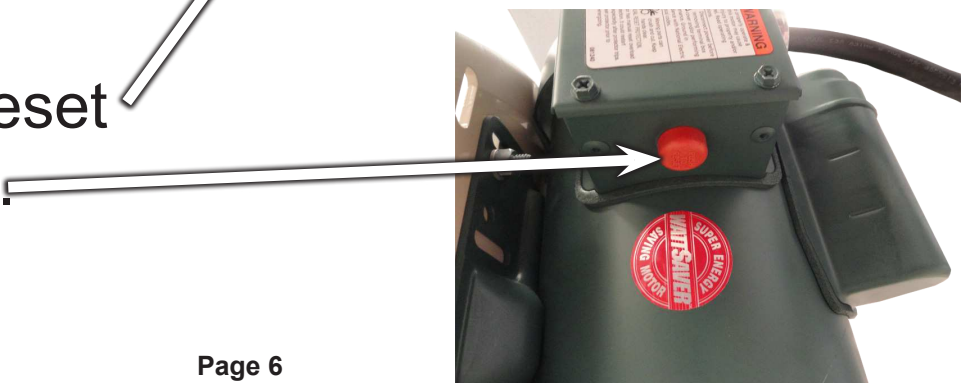
NOTE:

This is not a lifting bail  
for this machine.

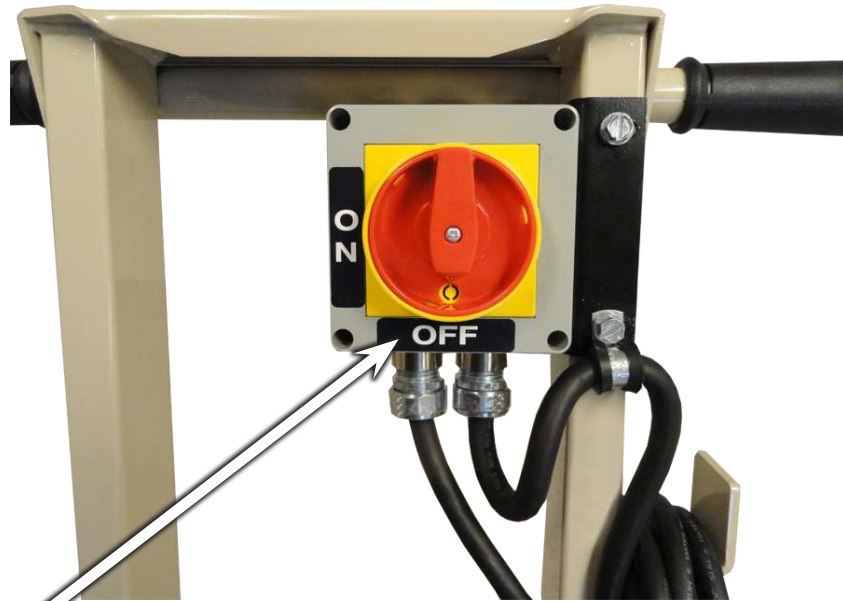


NOTE:

Motor overload reset  
on bottom of box.



## IMPORTANT NOTES



### NOTE:

If overload protection on motor trips make sure this switch is in the off position and power cord is disconnected from power source before resetting.

### NOTE:

Adjust dust skirt so there is contact with work surface before use.



## PROCEDURE FOR LUBRICATING FLANGE BEARINGS



To grease the flange bearings attach the grease gun to the grease fittings as shown in the above photos and give only two (2) pumps on the grease gun weekly. If excessive over lubrication is done grease will leak onto the work surface causing possible damage and wasted cleanup time.

## PROCEDURE FOR ATTACHING A VACUUM

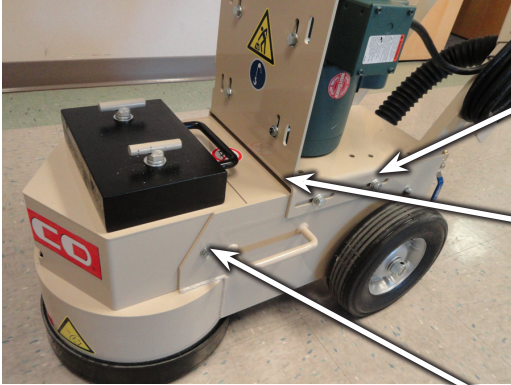


If using a vacuum for dust control attach it to the vacuum port located on the rear of the handle securing it as shown in photo above.





## PROCEDURE FOR ADJUSTING OR REPLACING DRIVE BELT



To adjust the drive belt loosen four (4) bolts securing the motor mount to the frame.

Slide the motor mount to the rear of the machine to increase belt tension.

Tighten the four (4) bolts loosened earlier maintaining pressure on the motor mount to prevent loosening.

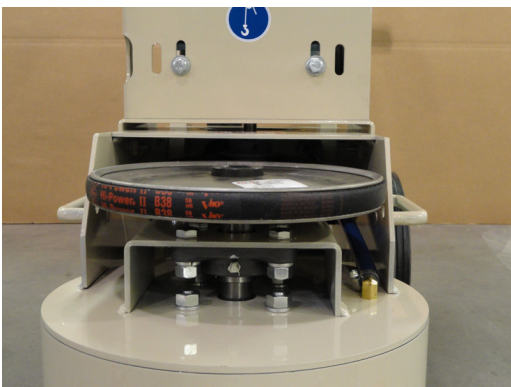


To replace the belt, remove the hood by removing two (2) bolts, one on each side of the machine.

Loosen the four (4) bolts as in the first step and slide the motor mount all the way forward.



Remove the belt from the motor and driven shaft sheaves as shown in the photo on the left.

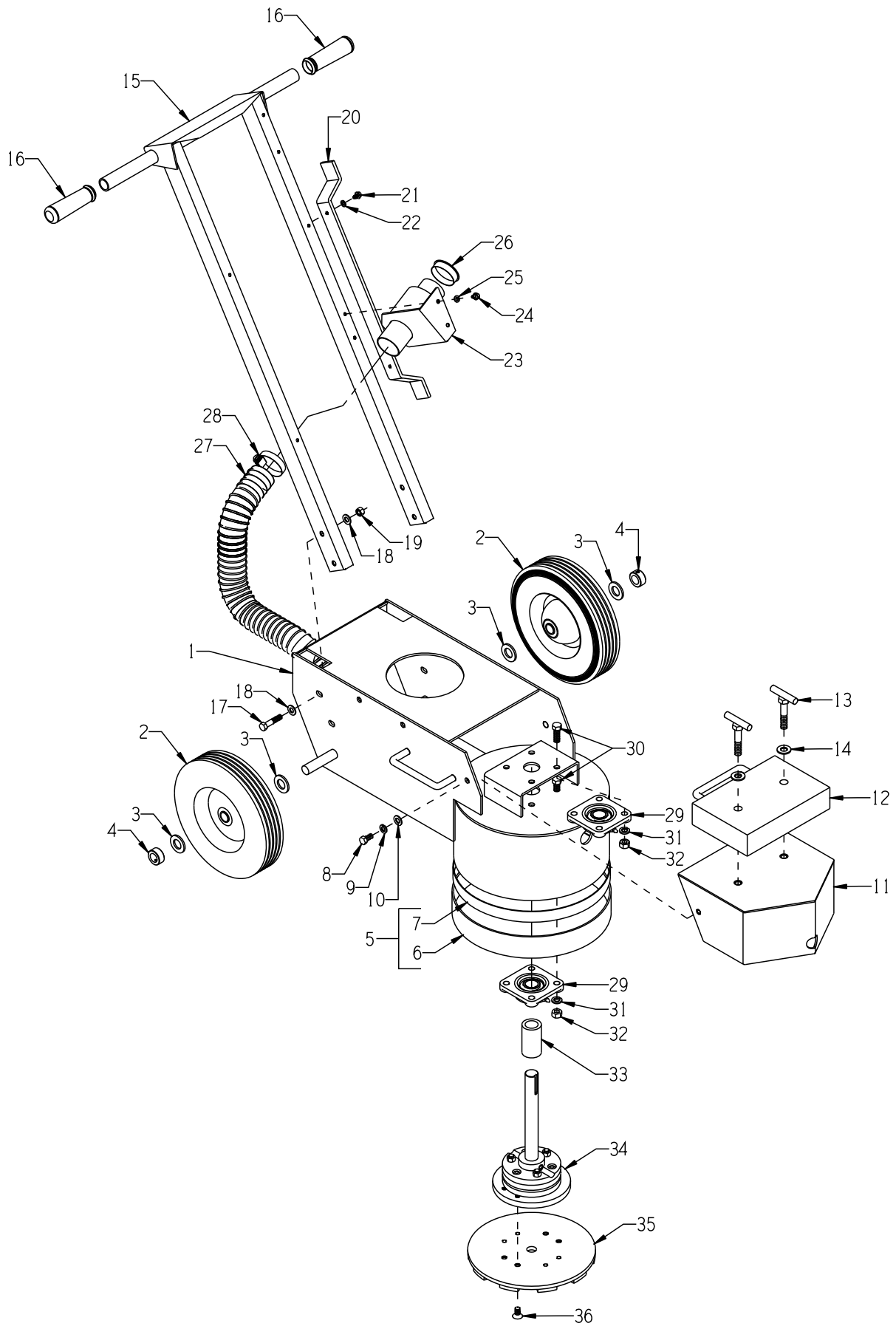


Reverse the previous step to install new belt. Slide motor mount towards the rear of the machine and adjust belt tension, tighten all four (4) bolts as explained above. Replace hood and tighten bolts.

### NOTE:

While cover is removed check to see if there are any remnants of grease from servicing on any of the surfaces, remove and dispose of properly.

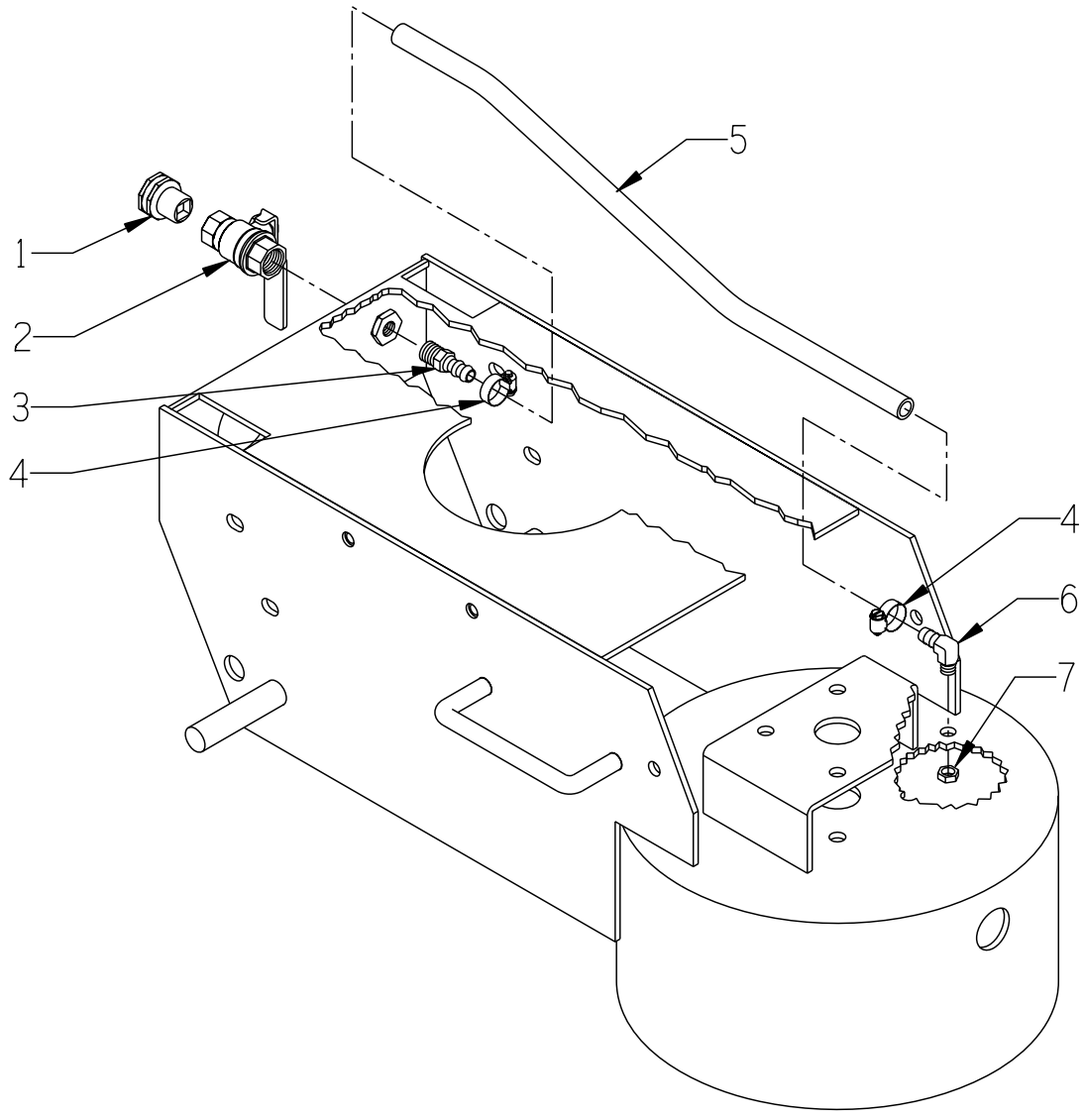
# ILLUSTRATION 1: MAIN GROUPING



**PARTS LISTING - ILLUSTRATION 1 : MAIN GROUPING**

ITEM #	PART #	DESCRIPTION	QTY.
1	86401	MAIN FRAME	1
2	28003	WHEEL 10 X 2-1/4 X 3/4"BRG	2
3	10009	WASHER, FLAT 3/4 SAE ZINC	4
4	10428	COLLAR, LOCKING 3/4"ID	2
5	86426K	RUBBER SKIRT W/ VELCRO LOOP & HOOK (INCLUDES ITEMS 6 & 7 TOGETHER)	1
6	86426	RUBBER SKIRT W/ VELCRO-LOOP ONLY, 2 X 39-1/8 (THESE 2 PIECES ARE SEWN TOGETHER)	1
7	86427	VELCRO-HOOK ONLY, 1" X 37-1/2", SEC (THIS PIECE IS PLACED AROUND THE BOTTOM EDGE OF THE SHROUD)	1
8	10907	SCREW, CAP 3/8-16 X 3/4	2
9	10811	WASHER, LOCK 3/8 ZINC	2
10	10025	WASHER, FLAT 3/8 SAE ZINC	2
11	86402	HOOD, SEC	1
12	86345H	WEIGHT BLOCK W/ HANDLE, 30 LB.	1
13	10323T	T-SCREW 1/2-13 X 2-1/2	2
14	10312	WASHER, FLAT 1/2 SAE ZINC	2
15	86304S	HANDLE BAR, SEC	1
16	10608	GRIP, HAND 1" MODEL AT	2
17	10029	SCREW, CAP 3/8-24 X 1-3/4	4
18	10025	WASHER, FLAT 3/8 SAE ZINC	8
19	10004	NUT, HEX LOCK 3/8-24 ZINC	4
20	86419	HOLDER, POWER CORD	1
21	10846	SCREW, CAP STSHW 1/4-20 X 1/2	2
22	10038	WASHER, LOCK 1/4 ZINC	2
23	86347	BRACKET, MULTI-VAC PORT 2-3"	1
24	10846	SCREW, CAP STSHW 1/4-20 X 1/2	2
25	10038	WASHER, LOCK 1/4 ZINC	2
26	65021	CAP/PLUG 2" RED PLASTIC, FLANGED	1
27	77113	HOSE, FLEX 2"ID X 32"L	1
28	10766	CLAMP, HOSE, SAE #32, ADJ. TO 2-1/2	2
29	77008	BEARING, BALL 1" 4-HOLE FLANGE, ND	2
30	10003	SCREW, CAP 7/16-20 X 1-1/4 ZINC	8
31	10450	WASHER, LOCK 7/16 ZINC	8
32	10481	NUT, HEX 7/16-20 ZINC	8
33	86432	SPACER, SEC-HD 1"ID X 1-1/2"OD X 2-1/8"L	1
34	86433	HEAD ASSEMBLY, SEC-HD (REFER TO ILLUS. 3 FOR BREAKDOWN)	1
35	19166	DIAMOND DISC, ECONOMY 10" - 20 SEG.	1
36	86108	SCREW, FLAT HD SKT 3/8-24 X 3/4	4

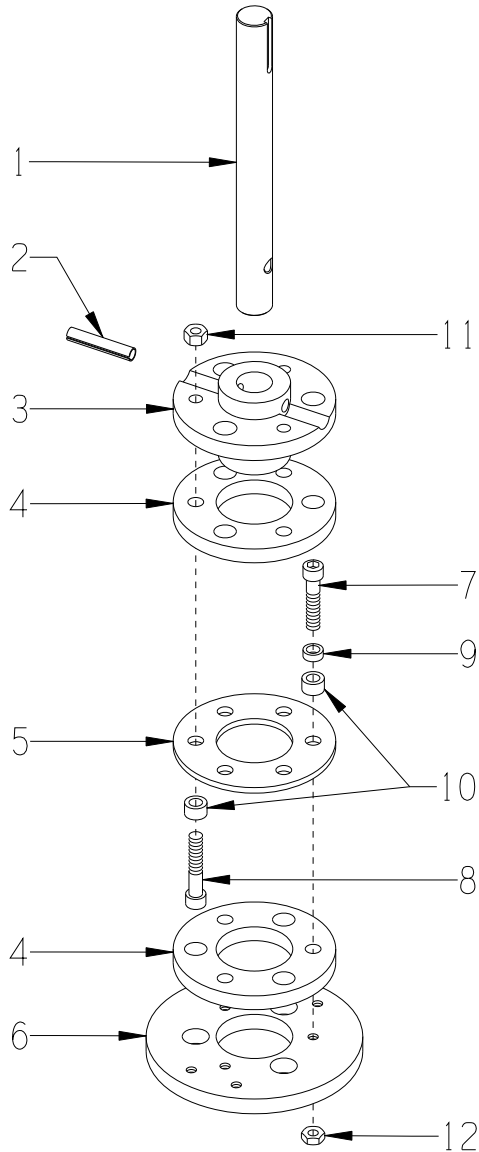
## ILLUSTRATION 2: WATER VALVE GROUPING



ITEM #	PART #	DESCRIPTION	QTY.
1	80021	CONN., SWIVEL FEM. 3/4HOSE X 1/2MPT (INCLUDES HOSE WASHER)	1
2	10711	VALVE, BALL 1/2 FPT	1
3	50075	BARB, 3/8 HOSE X 1/4MPT (BRASS)	1
4	50069	CLAMP, HOSE, SAE #6, ADJ. TO 13/16	2
5	86424	HOSE 3/8"ID X 20"L	1
6	11562	BARB ELBOW 90, 3/8HOSE X 1/8MPT (BRASS)	1
7	10864	NUT 1/8-27 PIPE THREAD (BRASS)	1

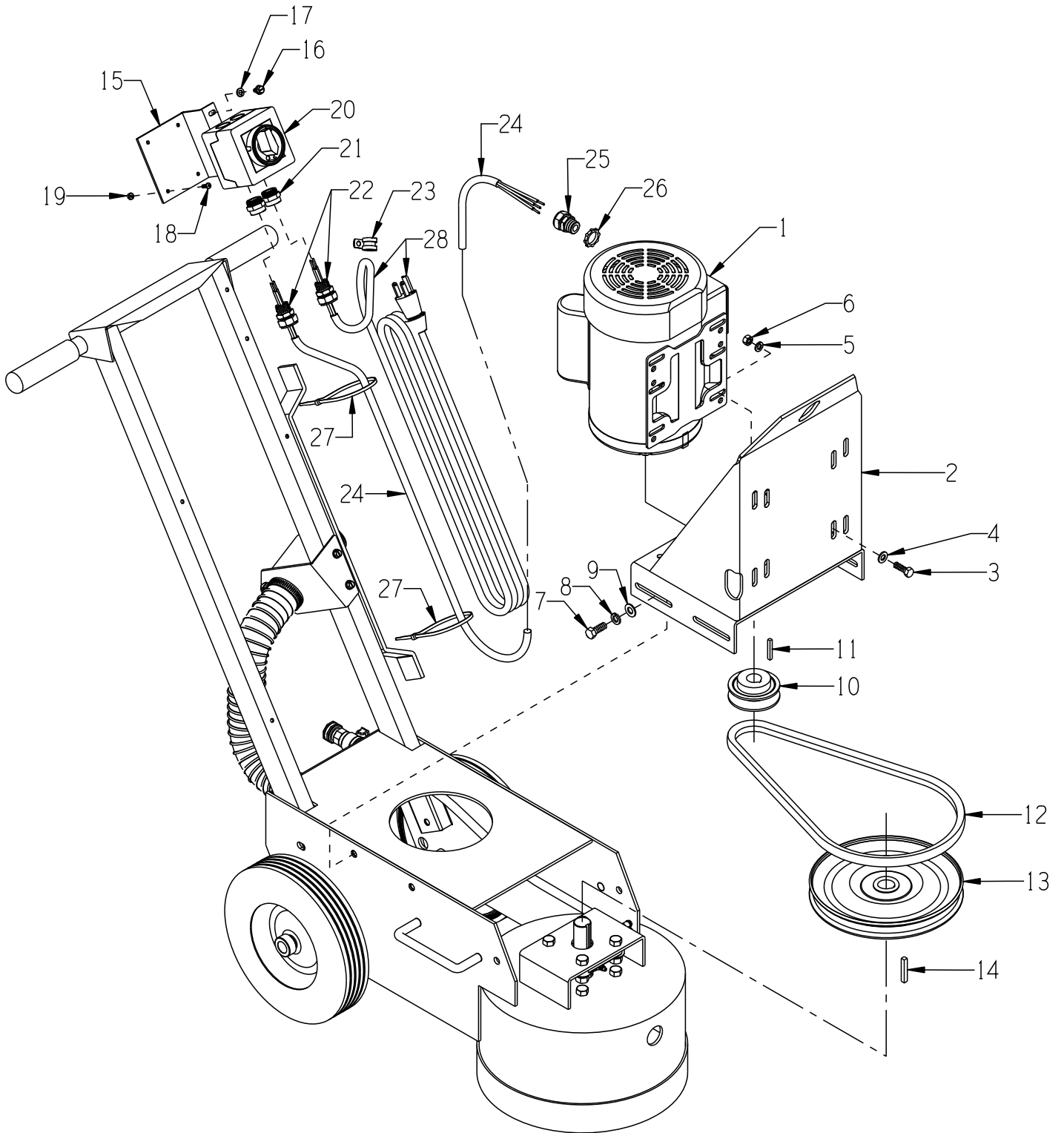


### ILLUSTRATION 3: HEAD ASSEMBLY



ITEM #	PART #	DESCRIPTION	QTY.
1-12	86433	HEAD ASSEMBLY (INCLUDES ITEMS 1 THRU 12)	1
1	86393	SHAFT, SEC-HD 1"DIA. X 9-11/16"L	1
2	10063	PIN, ROLL 3/8 X 2	1
3	77020	RING, HUB CARRIER, 6-HOLE	1
4	10112	RING, RUBBER, 4-1/2"OD X 1/2"THK	2
5	77010	HUB, ALUMINUM 6-HOLE (GRINDER)	1
6	86431	MOUNTING DISC, DIAMOND HEAD, SEC-HD	1
7	10354	SCREW, SKT. HD. CAP 3/8-24 X 1-3/4	3
8	10012	SCREW, SKT. HD. CAP 3/8-24 X 2	3
9	10113	SPACER, STEEL 9/16OD X 3/8ID X 7/32	3
10	10011	SPACER, STEEL 5/8OD X 3/8ID X 3/8T	6
11	10014	NUT, HEX 3/8-24 ZINC (USE RED LOCTITE)	3
12	11725	NUT, HEX JAM 3/8-24 ZINC (USE RED LOCTITE)	3

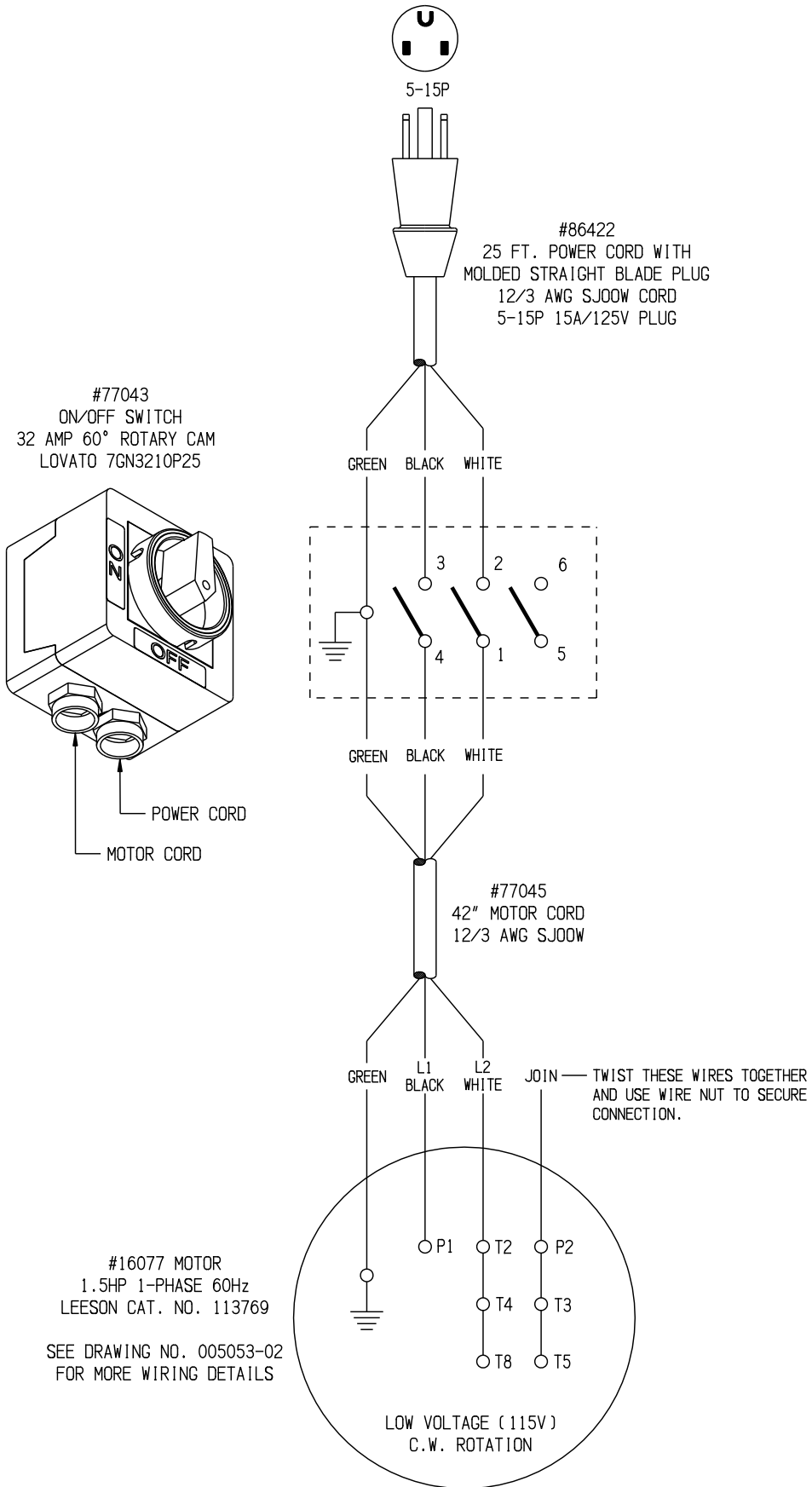
**ILLUSTRATION 4: MOTOR & BELT DRIVE GROUPING**



**PARTS LISTING - ILLUSTRATION 4: MOTOR & BELT DRIVE GROUPING**

ITEM #	PART #	DESCRIPTION	QTY.
1	<b>16077</b>	<b>MOTOR, 1.5HP-1PH-60HZ-1725RPM-115/230V-13/6.5A</b> <b>LEESON CAT. NO. 113769.00</b> <i>REPLACEMENT PARTS:</i>	1
	16178.....	.....CAPACITOR, START, LEESON 003025.15 (500MFD 125V)	1
	16174.....	.....CAPACITOR, RUN, LEESON 003014.02 (50MFD 240V)	1
	16179.....	.....RESET BUTTON, LEESON 300033.02 (CED2705)	1
2	86404	MOUNT, MOTOR	1
3	10806	SCREW, CAP 5/16-18 X 1	4
4	10213	WASHER, FLAT 5/16 SAE ZINC	4
5	10801	WASHER, LOCK 5/16 ZINC	4
6	10054	NUT, HEX 5/16-18 ZINC	4
7	10055	SCREW, CAP 3/8-16 X 1	4
8	10811	WASHER, LOCK 3/8 ZINC	4
9	10025	WASHER, FLAT 3/8 SAE ZINC	4
10	3613	SHEAVE 3"OD X 1GR.B X 5/8"BORE	1
11	-----	KEY 3/16"SQ. X 1-3/8 (INCLUDED W/ MOTOR)	1
12	10277	BELT B-38	1
13	86009	SHEAVE 9" OD X 1GR.B X 1" BORE	1
14	40317	KEY 1/4SQ X 1-5/8	1
15	77042	BRACKET, LOVATO ROTARY CAM SWITCH	1
16	10846	SCREW, CAP STSHW 1/4-20 X 1/2	2
17	10038	WASHER, LOCK 1/4 ZINC	2
18	11663	SCREW, MACHINE 8-32 X 1/2 RHCD ZINC	4
19	10462	NUT, KEPS LOCK 8-32 ZINC	4
20	<b>77043</b>	<b>SWITCH, ROTARY CAM ON/OFF, LOVATO</b> <i>REPLACEMENT PARTS:</i>	1
	77043-2.....	.....SWITCH HANDLE, PADLOCKABLE, LOVATO	1
	77043-4.....	.....GASKET RING, OPERATOR, LOVATO	1
21	77043-1	SWITCH ADAPTER, PG16 TO 1/2"NPT (INCLUDED W/ SWITCH)	2
22	40066	STRAIN RELIEF 1/2NPT X .350-.450"	2
23	11690	CLAMP, LOOM, 3/8"	1
24	77045	WIRE HARNESS 12/3 X 42"LOA	1
25	16176	STRAIN RELIEF 3/4NPT X .350-.450"	1
26	10740	CONDUIT LOCK NUT 3/4 NP (LOCATED INSIDE JUNCTION BOX)	1
27	10982	TIE, CABLE, BLACK NYLON 11-1/4"	2
28	86422	CORD W/ PLUG, 25FT. POWER, STRAIGHT STYLE PLUG	1

# SWITCH WIRING DIAGRAM

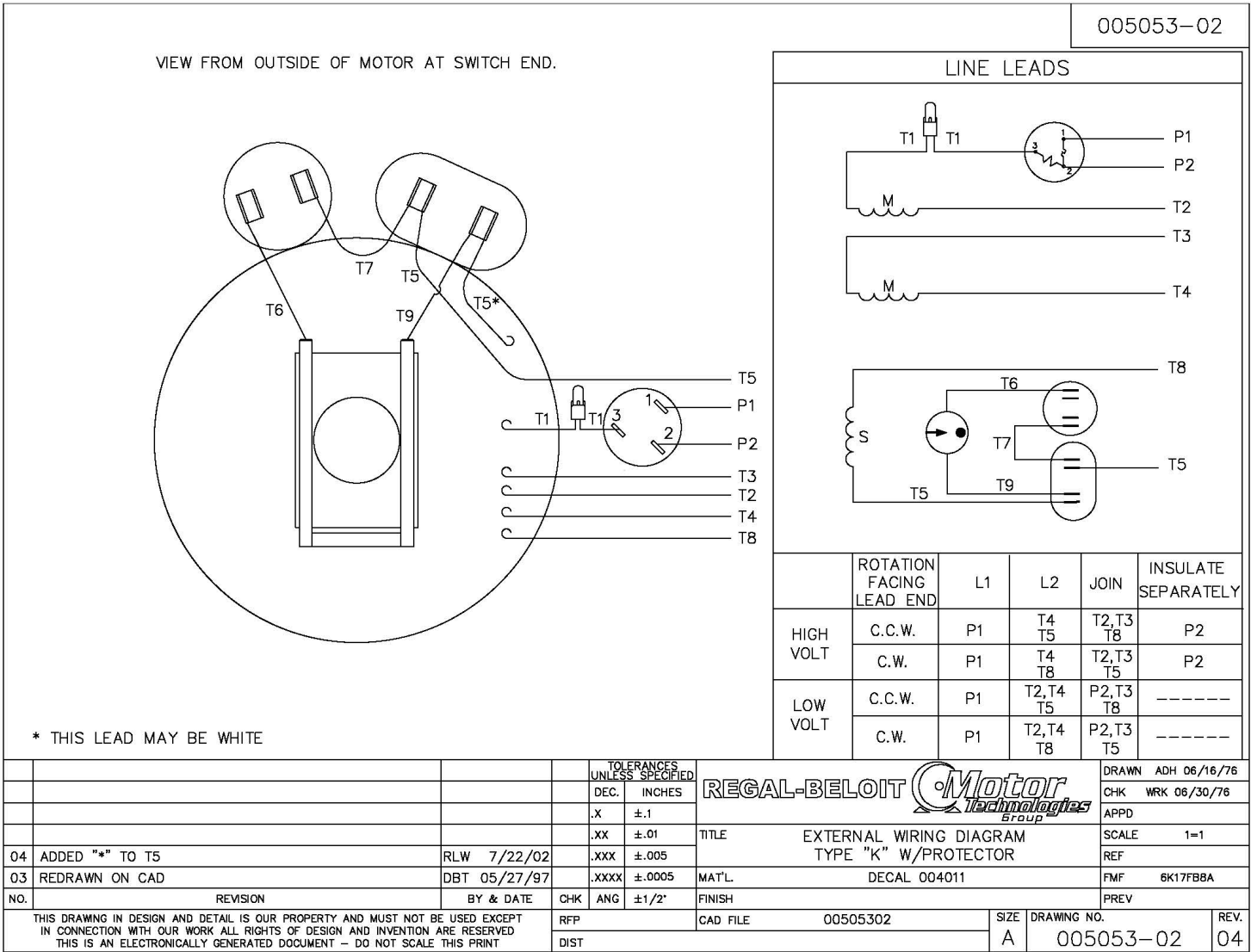




# MOTOR WIRING DIAGRAM

LEESON CAT. NO. 113769.00  
1.5HP 60Hz SINGLE PHASE

USE CONNECTIONS FOR CLOCK-WISE (C.W.) ROTATION SHOWN BELOW IN CHART  
POWER CORD: BLACK WIRE - L1, WHITE WIRE - L2, GREEN WIRE - GROUND  
LOW VOLT (115V) STANDARD, HIGH VOLT (230V) OPTIONAL



**REPLACEMENT PARTS:**

START CAPACITOR: PART # 16178 LEESON 003025.15 500MFD 125V

RUN CAPACITOR: PART # 16174 LEESON 003014.02 50MFD 240V

THERMAL PROTECTOR: PART # 16179 RESET BUTTON CED2705, LEESON 300033.02

# Maintenance Schedule



Repairs are to be done by authorized EDCO Dealers only.



Read and follow instructions in the motor owner's manual.

All maintenance to be performed by qualified personnel.	Before Operation	Daily	Every 50 Hours of Operation	As Required	Every Disc Change
Visual Inspection of Entire Machine	X				
Check accessories for uneven wear	X				
Grease Flange Bearings			X		
Clean Dust & Dirt Off Machine		X			
Belt Tensioning				X	
Check Disc Shaft and bearings					X
Replace Disc				X	



