

Our associates will ensure the tool works properly before you leave the store. If you experience issues with the tool while completing your project, simply bring it back to the Tool Rental Center to get a replacement. If you purchase Damage Protection at the time of your rental, you are not responsible for repair costs for tools that break due to normal use.





Operator's Instruction Manual

MAGNA-TRAP® DUAL-DISC FLOOR GRINDER



2EC-NG-1.5
ELECTRIC MODEL



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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.

DANGER

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

WARNING

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

CAUTION

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

GASOLINE/PROPANE POWERED EQUIPMENT

WARNING

- 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.

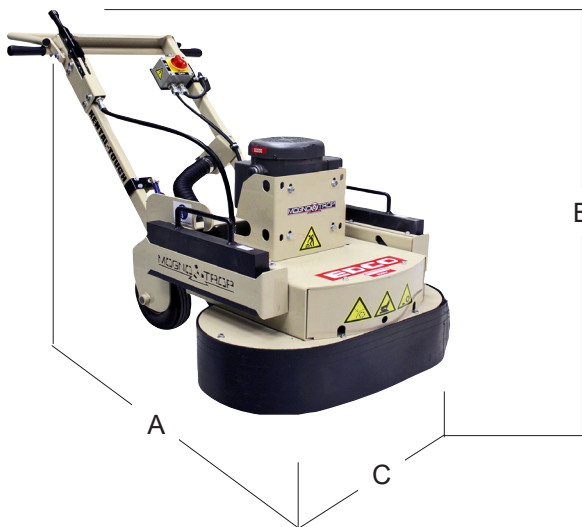
Your risk of exposure to these chemicals varies depending on how often you do this type of work. To reduce your risk: work in a well ventilated area, use a dust control system, such as an industrial-style vacuum, and wear approved personal safety equipment, such as a dust/particle respirator designed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

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SPECIFICATIONS

Note:
All dimensions and weights are for **reference only** and subject to change at any time.



2EC-NG-1.5 Shown

Figure 1

HOW TO ORDER REPAIR PARTS

To insure product safety and reliability, always use genuine EDCO replacement parts when making repairs to the equipment.

When ordering parts, please specify the MODEL and SERIAL NUMBER of the machine as given on the NAMEPLATE. In addition, give part number, description and quantity as listed on the parts list.

Please note: Due to improvements and changes in the equipment the illustrations shown may be different from the actual machine.

Toll Free: Phone 1-800-638-3326 • Fax 1-800-447-3326

	2EC-NG-1.5	2GC-NG-11H
"A"	45" 114cm	45" 114 cm
"B"	39" 99cm	39" 99cm
"C"	27" 69cm	27" 69cm
--	--	--
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Weight	269 lbs. 122kg	282 lbs. 128kg

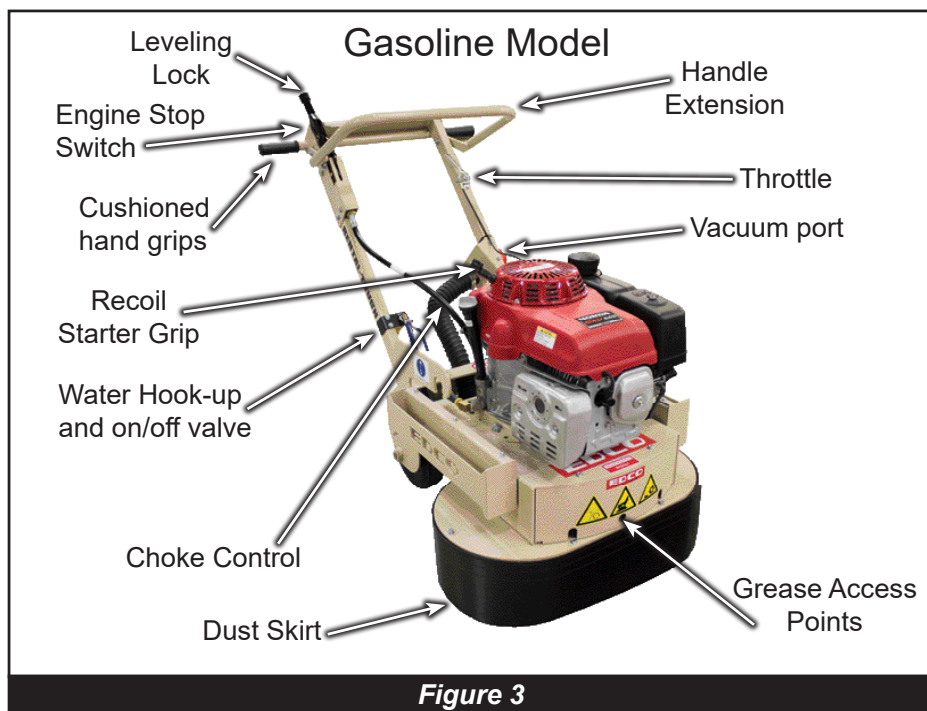
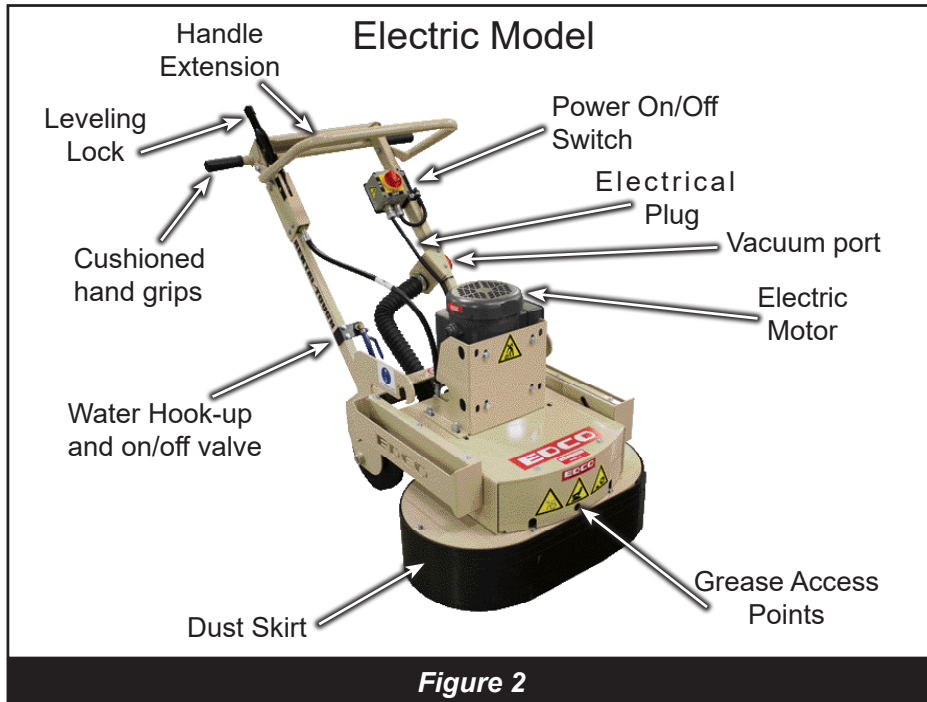
Operating Controls

Please Note:

Controls shown are for the model indicated.

The location of these controls may vary on the different models.

Due to improvements and changes in the equipment, the illustrations shown may vary from the actual machine.

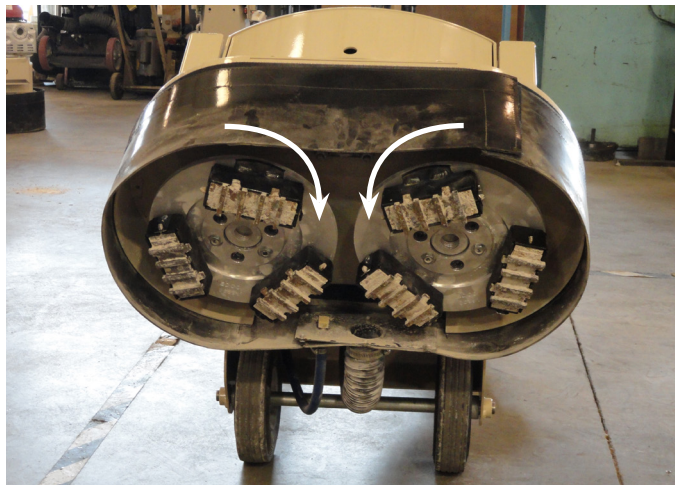


Getting started with your new grinder



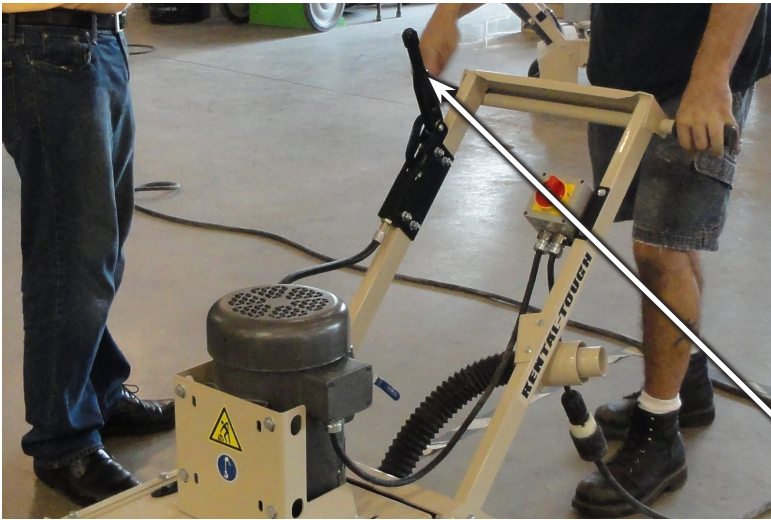
1. Loading tools -

Lean the machine back on the handle to expose the work area and load the proper tools for your job. Electric machines should be unplugged, gas machines should have the spark plug wire removed.



Once all tools are in the proper position return the machine to upright. Remember if you are using tools with PCD's on Stripserts they have a leading edge and must be loaded as such. Also, remember both of the discs turn in direction of arrows.

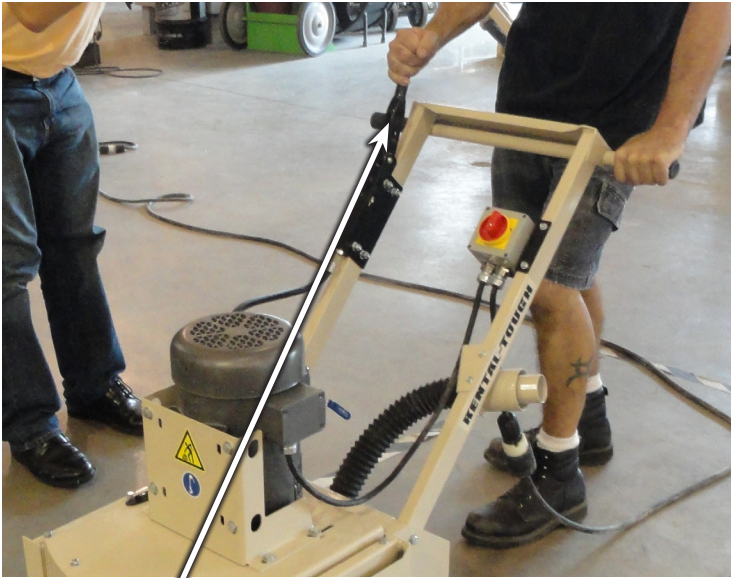
NOTE: THE ABOVE ILLUSTRATIONS ARE VIEWING THE MACHINE FROM THE FRONT BOTTOM. NOTE THE DIRECTION OF ROTATION AND *MULTI-DISC* STYLE. IF DISCS ARE REPLACED AND INSERTS FALL OUT WHEN BEING USED THE DISCS HAVE BEEN INSTALLED INCORRECTLY.



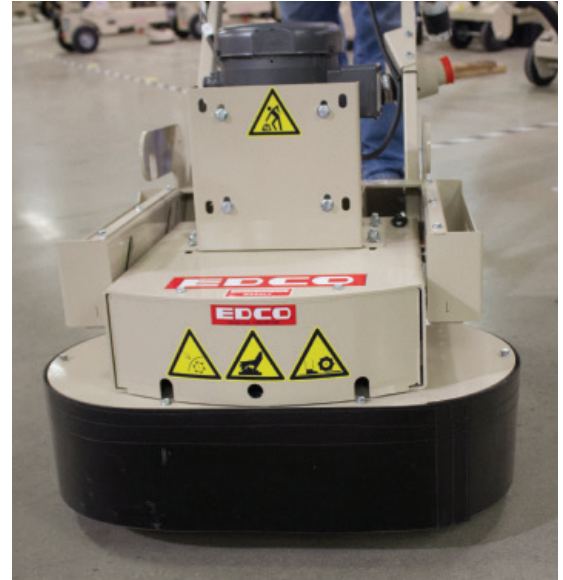
2. Begin the leveling process -
With the machine in the upright position release the level lock locking lever.



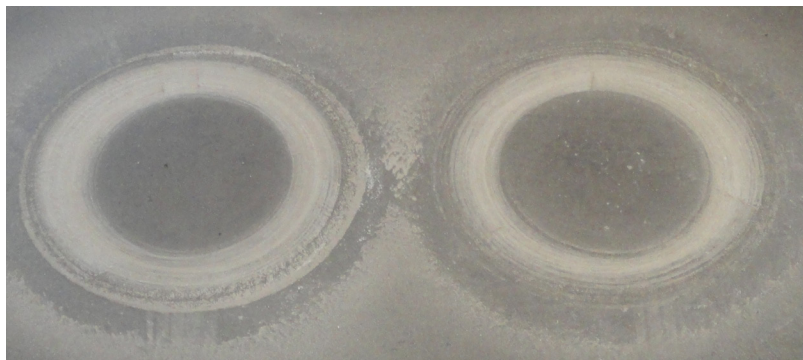
Rock the machine back and forth until the bubble level is centered.
This gets the machine close to the proper operating position.



Return level lock to the locked position.



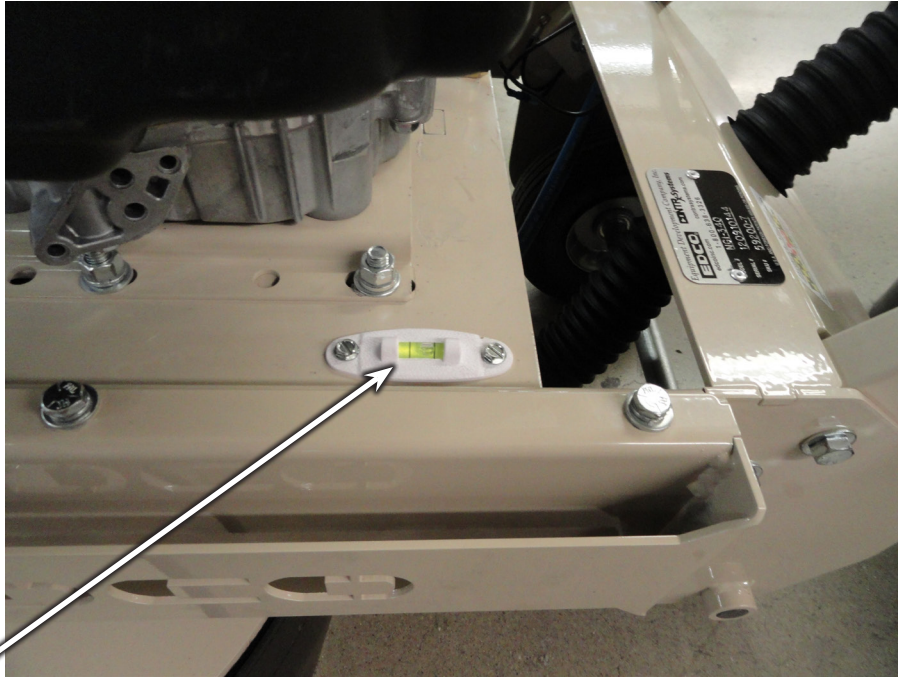
Lean back slightly on the handle to get the tools off of the surface and start the machine. Lower the machine to the surface and do a short touch pass on the concrete.



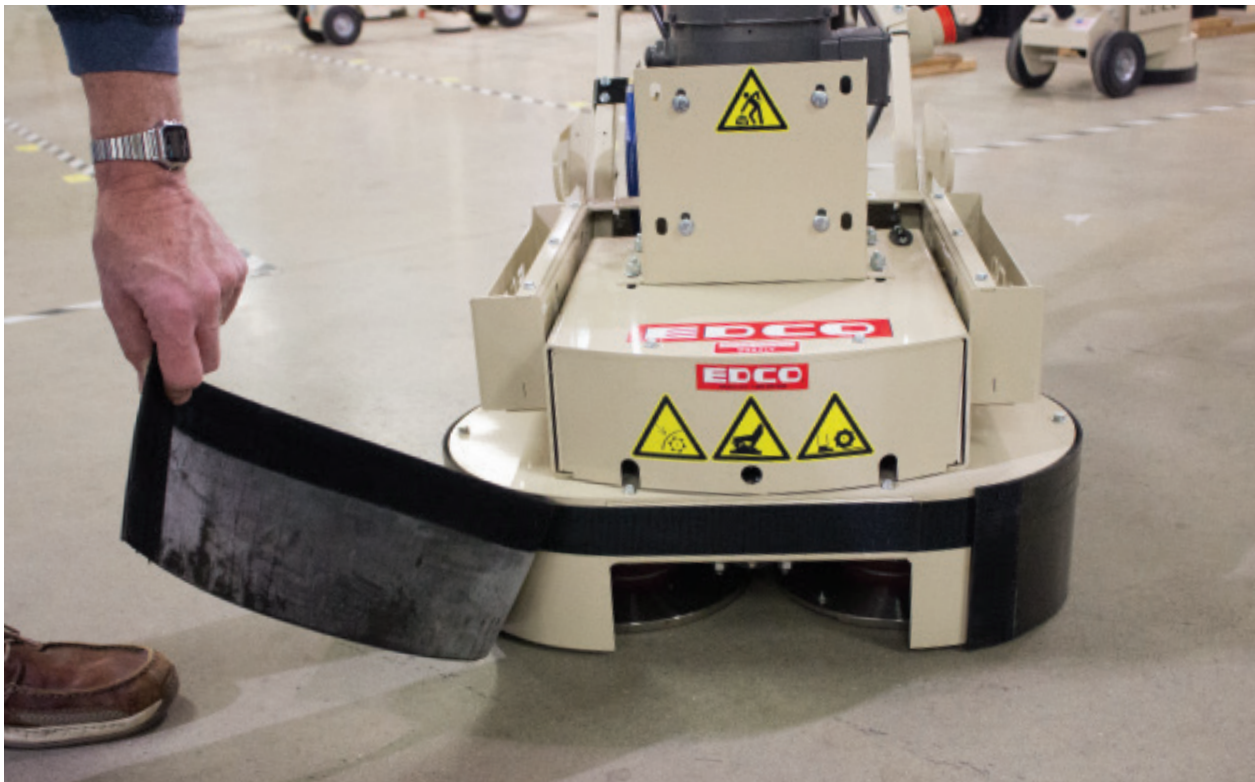
You are looking for two complete circles.



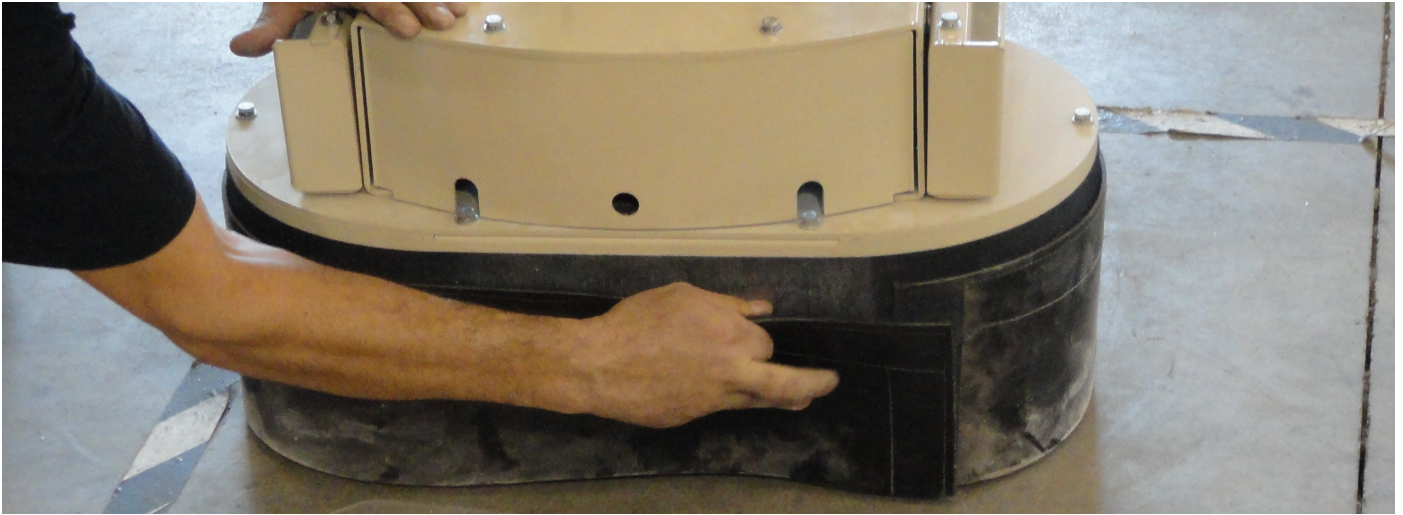
If you see partial circles repeat the process until complete circles are achieved.



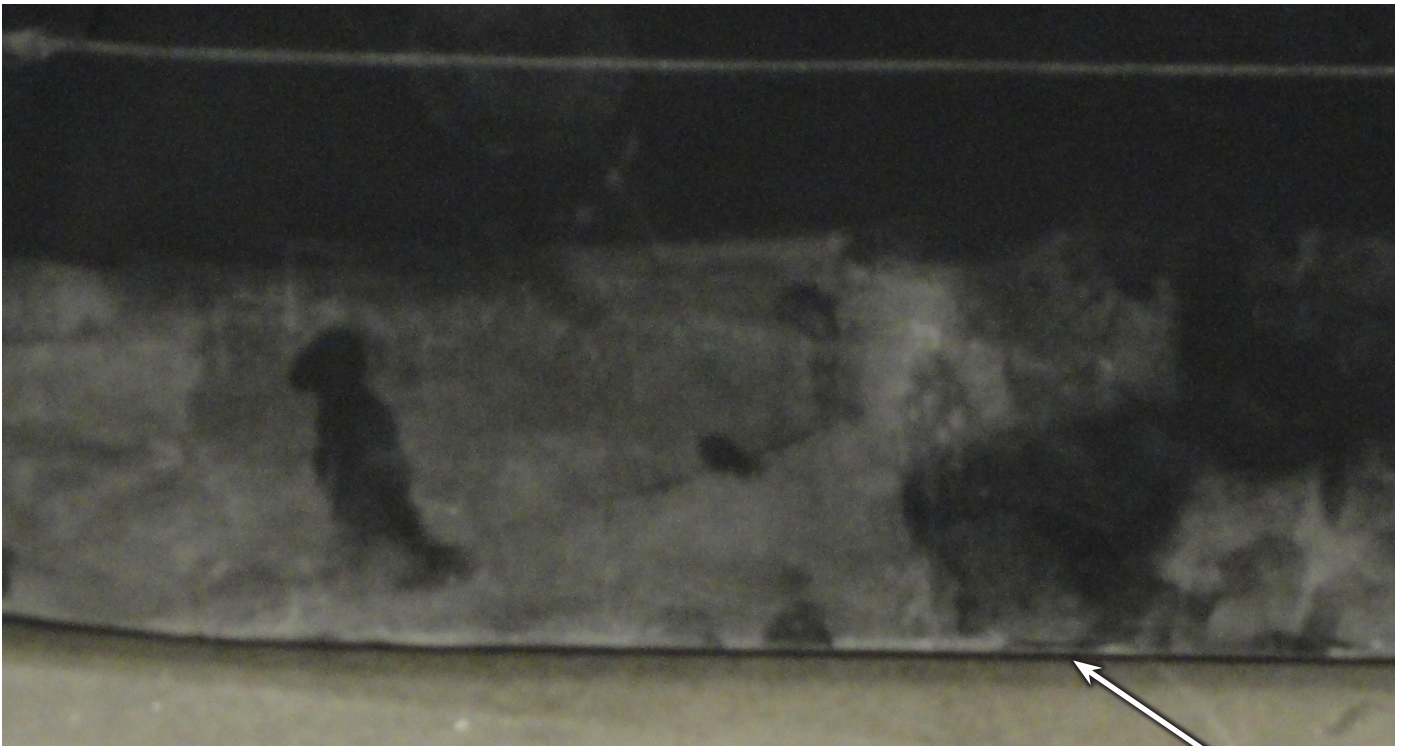
The bubble on the machine will not necessarily be centered once optimum operating position is achieved. It will also float back and forth during grinding. Level on your machine may not be the same as pictured above.



3. Attach the skirt -



Attach the skirt - continued.



Once the machine is leveled to the concrete attach the velcro skirt with approximately 1/4" space underneath all around. You are now ready to grind.

Final note - If you are using tools that have no directionality they should be rotated occasionally for longer life and the machine should be readjusted as needed.

Operating Instructions

WARNING

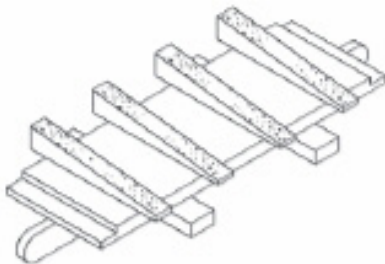
- Read and understand all operating instructions before operating this equipment. Death or serious injury can result if this machine is used improperly.
- Concrete grinders are designed to be used to grind flat horizontal concrete slabs using EDCO approved accessories.
- The machines are equipped with gasoline/propane engines and electric motors.
- They are designed to be controlled by a single operator from a position at the rear of the machine.
- When operating equipment maintain a safe distance from other personnel in the area.

Be sure to read the complete instructions supplied with your machine.

IMPORTANT: Perform Pre-Start Check.

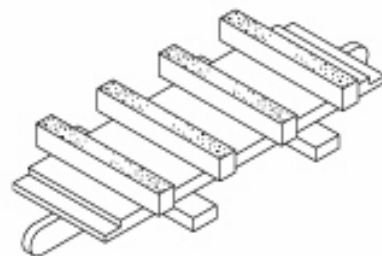
- Visually inspect the equipment for wear or damage.
- Be sure all guards are in place and functioning properly. Do not operate unless all guards are in place and secure.
- Perform all daily maintenance.
- Check to be sure water tubes are functioning properly if performing wet-grinding operations.
- Inspect accessories - Be sure the correct accessory is installed properly on the machine, mounting arrangement and its intended use.
- Check accessories for damage (see figure 6, below), the type of wear or damage will vary with the type of accessory.
- Inspect work area to determine the presence and location of deck inserts, pipes, columns and objects protruding from the slab surface so that they may be avoided during the grinding operation.
- **FOR WET GRINDING:** Attach the water supply. A flow rate of approximately 1/2 gallon per minute is recommended.

EXAMPLE OF SEVERELY WORN DYMA-SERT



The above is an example of a DYMA-SERT that has not been rotated after every four hours of use. To get maximum life out of a DYMA-SERT they should be rotated 180° every four hours of use.

EXAMPLE OF AN EVENLY WORN DYMA-SERT



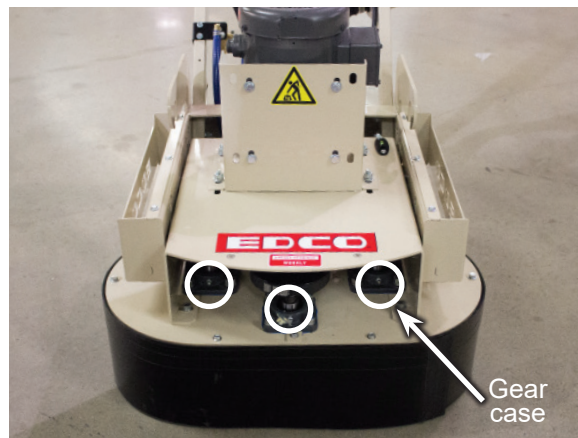
The above is an example of a DYMA-SERT that has been rotated after every four hours of use, as you can see the wear is even across all segments.

Figure 6

Operating Instructions

- **BEFORE STARTING THE ENGINE OR MOTOR:** Raise the front of the machine clear of the working surface.
- **START ENGINE/MOTOR AND ALLOW IT TO REACH OPERATING SPEED.** Position the grinder at the starting point. Bring the engine to full speed. Lower the machine onto the slab surface. Use a slow sweeping motion from left to right and back continuously, and do not force the machine into the work, the engine or motor should not strain when grinding.
- **WHEN WET GRINDING:** Water is required. Attach the water hose to the water hook-up valve. Use the valve to control the flow of water.
- **FOR DRY GRINDING:** Provide a respirator and dust control system.
- **FOR GASOLINE MODELS:** Put the engine stop switch in the “RUN” position. Consult the engine manufacturers operating instructions and follow the directions for starting and breaking in the engine.
- **TO STOP THE MACHINE:** Stop forward motion, tilt machine to raise off of floor. On gasoline models push the throttle to idle. Turn ignition or power switch off and let the engine come to a complete stop. Turn off the water supply.
- **WHEN MANEUVERING THE GRINDER:** Tilt grinder back enough so it does not strike the slab surface. Damage to accessories may occur with inadvertent contact with the slab.
- **DO NOT FORCE GRINDER WHILE GRINDING.**
- **IF THE POWER SOURCE FAILS:** Raise the grinder off of the floor. Disconnect the power source (i.e. the spark plug wire on a gasoline engine). Inspect the accessories for damage. Replace damaged (or questionable) accessories immediately.
- **WHEN TRANSPORTING THE GRINDER:** Disconnect the power source before lifting or removing any guards. Remove accessories when transporting.
- **WHEN HOISTING OR LIFTING A GRINDER :** Always inspect frame and attaching hardware for damage before lifting. Use proper safe hoisting and lifting techniques and hardware. Always lift from both sides. Lifting hooks are to be used with a strap or chain only. These hooks are not meant for manual lifting.

PROCEDURE FOR LUBRICATING FLANGE BEARINGS



To grease the flange bearings attach the grease gun to the grease fittings through the hood access holes circled in photo above left and give only two (2) pumps on the grease gun every 50 hours of use. If excessive over lubrication is done grease will leak onto the work surface causing possible damage and wasted cleanup time. Inspection hole on gear case is located towards rear center of machine on top of gear case.

PROCEDURE FOR ATTACHING A VACUUM



If using a vacuum for dust control attach it to the vacuum port at the rear of the machine which is on the handle as pictured above, securing it with clamps. The port is circled in the above photo. The vacuum port is in the same location on both the gas and electric models.

PROCEDURE FOR ADJUSTING OR REPLACING DRIVE BELT



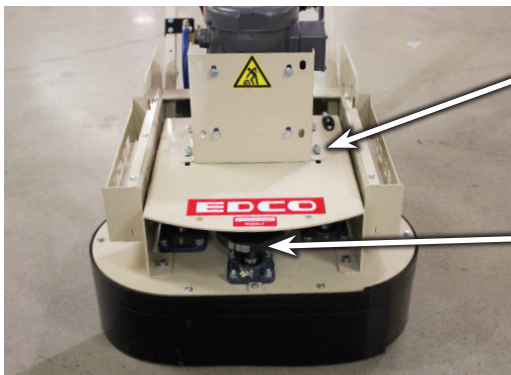
NOTE: The following applies to all machines. They all adjust in the same manner.

To adjust the drive belt loosen four (4) cap screws 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) cap screws loosened earlier maintaining pressure on the motor mount to prevent loosening.

To replace the belt, remove the front cover by removing two (2) cap screws on front top of the machine.



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

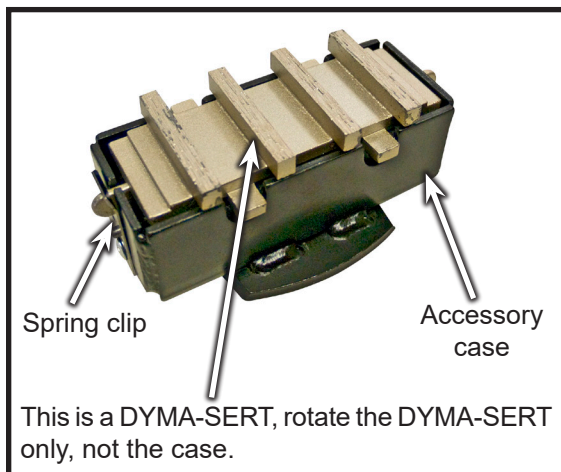
Tilting the machine back so handle rests on the floor and having someone hold it down will help aid in tightening the belts.

Remove the belt from the motor and pinion 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) cap screws as explained above. Replace front cover and tighten bolts.

New belts should be retensioned after grinder has been used for 4 hours.

FOR USE WITH MAGNA-TRAP® DISC



Dyma-Serts™ (Patented)

DYMA-SERTS™ are diamond segments welded to snap-in plates for faster, controlled, dry grinding, and are ideal for removing trowel marks, rough finish, rain spots, large volume projects, paints, thin mastics, epoxy and urethane coatings, or polymer enhanced surfaces. DYMA-SERTS™ can be used wet or dry and will outperform stones by grinding many times faster, removing tough materials, and lasting many times longer - up to 30,000 sq. ft. (2,800 sq. meters) life (at 1/32") dependent on depth of removal, coatings, speed of operation, matrix, etc. Extra weight can be added to the grinder to increase production. Choose the DYMA-SERT™ to fit your job.



MAGNA-BLADE

Magna-Blades use carbide tipped blocks to strip away coatings and clean floors without grinding into the concrete. The replaceable multisided tungsten carbide can be rotated for maximum use.



DOUBLE DIAMOND DOTS General Purpose Grind - Removes General Purpose Epoxy, Mastics, Thinsets, Water-proofing Coatings and more. Use with the 7" and 10" Quick-Change Multi-Accessory Discs.



PCD ACCESSORY Extremely aggressive removal. Digs through Industrial Strength Coverings, Water Proofing Membrane, Thick Epoxies and Much more. Leaves a textured concrete surface.

**DUST AND CRYSTALLINE SILICA WARNING**

REVISED JUNE 1, 2017

WARNING

Grinding/cutting/drilling of masonry, concrete, metal and other materials can generate dust, mists and fumes containing chemicals known to cause serious or fatal injury or illness, such as respiratory disease, cancer, birth defects or other reproductive harm. If you are unfamiliar with the risks associated with the particular process and/or material being cut or the composition of the tool being used, review the material safety data sheets and/or consult your employer, the manufacturers/suppliers, governmental agencies such as OSHA and NIOSH and other sources on hazardous materials. California and some other authorities, for instance, have published lists of substances known to cause cancer, reproductive toxicity, or other harmful effects.

Control dust, mist and fumes at the source where possible. In this regard use good work practices and follow the recommendations of the manufacturers/suppliers, OSHA/NIOSH, and occupational and trade associations. Water should be used for dust suppression when wet grinding/cutting/drilling is feasible. When the hazards from inhalation of dust, mists and fumes cannot be eliminated, the operator and any bystanders should always wear a respirator approved by NIOSH/MSHA for the material being used.

WARNING

Grinding/cutting/drilling of masonry, concrete and other materials with silica in their composition may give off dust or mists containing crystalline silica. Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Repeated and/or substantial inhalation of airborne crystalline silica can cause serious or fatal respiratory diseases, including silicosis. In addition, California and some other authorities have listed respirable crystalline silica as a substance known to cause cancer. When grinding/cutting/drilling such materials, always follow the respiratory precautions mentioned above.

See more on the importance of dust prevention and silica warnings at osha.gov/silica.

See more concrete and silica dust suppression training and educational materials at edcoinc.com/silica-standards or scan the QR code at right.



MACHINE SAFETY SYMBOL LABEL REFERENCE



This symbol means that the Operator's, owners, instruction and/or manufacturer(s) manuals must be read and understood before operating or attempting to operate this electrical, gasoline, diesel or propane powered equipment, failure to do so can result in personal injury and possible death.



This symbol means that proper eye protection must be worn/used during the operation of this equipment. There is a potential risk of operator eye damage, injury or loss of sight. This also applies to any personnel standing nearby observing the operation of this equipment.



This symbol means that proper ear protection should be worn/used during the operation of this equipment. There is a potential risk of operator hearing damage, injury or loss of hearing which will increase based on the length of exposure. This also applies to any personnel standing nearby observing the operation of this equipment.



This symbol means that proper head protection should be worn/used during the operation of this equipment there is a potential risk of operator head injury from foreign or loose objects the equipment might come in contact with during operation. This also applies to any personnel standing nearby or observing the operation of this equipment.



This symbol means that proper breathing protection or engineering controls must be worn/used during the operation of this equipment there is a potential risk of operator lung damage. Repeated and/or substantial inhalation of airborne crystalline silica can cause serious or fatal respiratory diseases, including silicosis. In addition, to California and some other authorities have listed respirable crystalline silica as a substance known to cause cancer. When grinding/cutting/drilling such materials, always follow local respiratory precautions. This also applies to any personnel standing nearby or observing the operation of this equipment.



This symbol denotes the lifting point and means that if lifting of this equipment is necessary use a lifting device that is designed to accommodate or exceed the weight of this machine. Check the Operator's manual for specifications. Using a device that is not designed to accommodate or exceed the weight of this machine could result in damage to the machine and personal injury. Do not lift equipment over people because death or serious injury could result.



This symbol means do not insert fingers/digits under any edge of the belt cover while the engine/motor on the machine is running because personal injury and loss of fingers/digits may result.



This GHS pictogram identifies that the chemicals contained present serious health hazards.

MSSLR-0117

MACHINE SAFETY SYMBOL LABEL REFERENCE



This symbol means that the guards must remain in place while the engine/motor on the machine is running because death or personal injury may result.



This symbol means that there are moving parts and if feet/fingers/digits are inserted under any edge of the cutter/grinder/saw cover while the engine/motor on the machine is running that personal injury and loss of foot/fingers/digits may result.



This symbol means the surface is HOT and that if fingers/digits/hands or any bare or unprotected skin comes in contact with this surface or hot accessory, possible serious burns and personal injury may result.



This symbol means that potential hazardous voltages are present and the equipment must be properly grounded and extreme caution should be taken. If for any reason maintenance or repair is needed, insure that voltage(s) are disconnected at the machine and the source unless (be cautious) voltage needs to be present to troubleshoot the problem, then only qualified personal should work on "live" systems.



This symbol means that the machine is heavy if the machine needs to be lifted onto or off of a truck, loading dock etc. that proper technique or heavy duty lifting device should be used, personal injury could result.



This symbol means that dangerous chemicals, gases, dust particles and/or fumes are present including carbon monoxide. Proper ventilation must be maintained. Do not use gasoline/diesel/propane powered equipment indoors.



This symbol means that there are sharp components and if feet/fingers/digits come in contact personal injury or death could result.



This symbol means hazardous pressures are present. Caution should be exercised to prevent personal injury or damage to equipment. Face, eye and head protection should be used.



This symbol means explosive and hazardous vapors are present. Caution should be exercised to prevent personal injury to face and eyes. Breathing and personal protection should be used when servicing.

Printed in USA



BEFORE USING THIS PRODUCT

Have You Used EDCO's Online Customer Support??



Scan This QRC or Visit
www.edcoinc.com/customer-support



READ: **EDCO Owner's Manuals and Parts Listings** share basic information and parts of each product. Download and print them whenever needed.



WATCH: **EDCO Product Training Videos** show how to use products, install tooling, and perform basic maintenance.



Example Only

FIND: Somewhere on this product is an **EDCO QRC Training Decal**. Scanning this code provides owner's information, videos, and other training content anywhere/anytime on your mobile device.



JOIN: **EDCOed.com** is a free, 24-hour training space. Each certification track focuses on a specific EDCO product group. The information in these tracks help businesses be successful with those products.

EDCO is always updating online training / information so you always have the most recent content.

Also see Operator's Safety & Limited Warranty Manual

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