

Operator's Instruction Manual

Masonry Saws

GMS-14



Shown with Optional Stand

GMS-20



MS-14



Shown with Optional Stand

MS-20



Gasoline and Electric 14" & 20" Masonry Saws



100 Thomas Johnson Drive, Frederick, MD 21702-4600 USA
Phone (301) 663-1600 • 1-800-638-3326
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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.



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 POWERED EQUIPMENT



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

- Do not operate gasoline powered equipment without adequate ventilation. Carbon monoxide is an invisible, odorless gas that can kill.



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

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 source and 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 90db). 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.



Equipment Instruction Manual

EDCO Model

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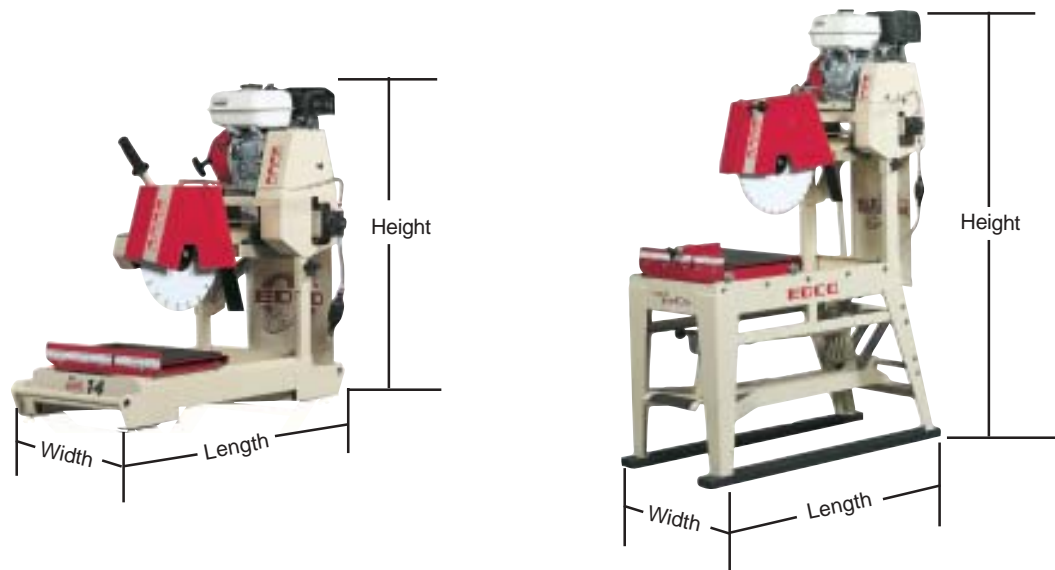


Figure 1

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 in 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: Voice 1-800-638-3326
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Specifications and dimensions are approximate and subject to change.

Model	MS-14	GMS-14	MS-20	GMS-20
Height	31" 78.7cm	43" 109cm	63 1/2" 162cm	77" 195.6cm
Width	18 3/8" 46.6cm	18 1/2" 47cm	26 1/2" 67.3cm	27" 68.6cm
Length	41 3/4" 106cm	41 3/4" 106cm	52" 132cm	58" 147.3cm
Weight	170 lbs 77kg	208 lbs 94.3kg	440 lbs 200kg	480 lbs 218 kg



Operator Controls - GMS Models

GMS-14 (Figure 2) & GMS- 20 (Figure 3)

- A. Air Filter
- B. Fuel Tank
- C. On/Off Switch
- D. Water Pump Belt Guard
- E. Oil Dip Stick
- F. Handle
- G. Blade Guard
- H. Blade Guard Lock
- I. Submersable Water Pump
- J. Water Tray Plug
- K. Rolling Table
- L. Angle Cutting Stop
- M. Welded Steel Frame/Water Tray
- N. Drive Belt Guard
- O. Safety Cable
- P. Cutting Head Lock
- Q. Engine Throttle
- R. Recoil Starter
- S. Cutting Head Height Positioner
- T. Foot Treadle

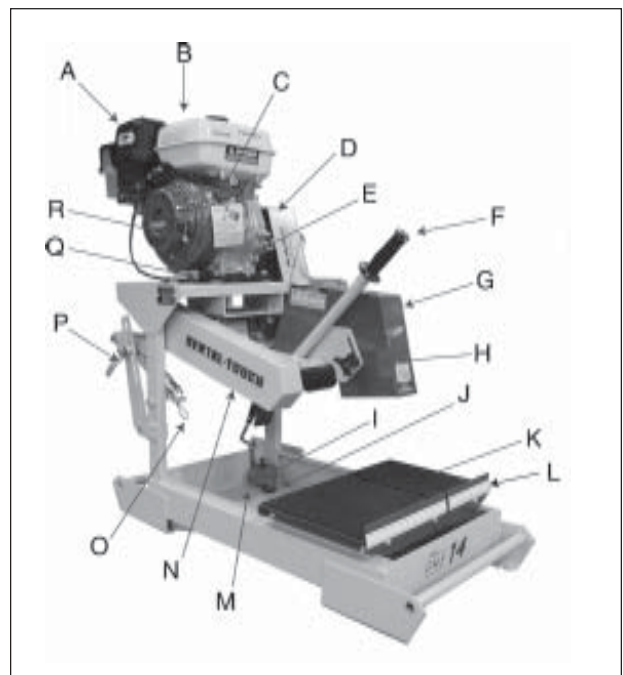


Figure 2 (GMS-14)

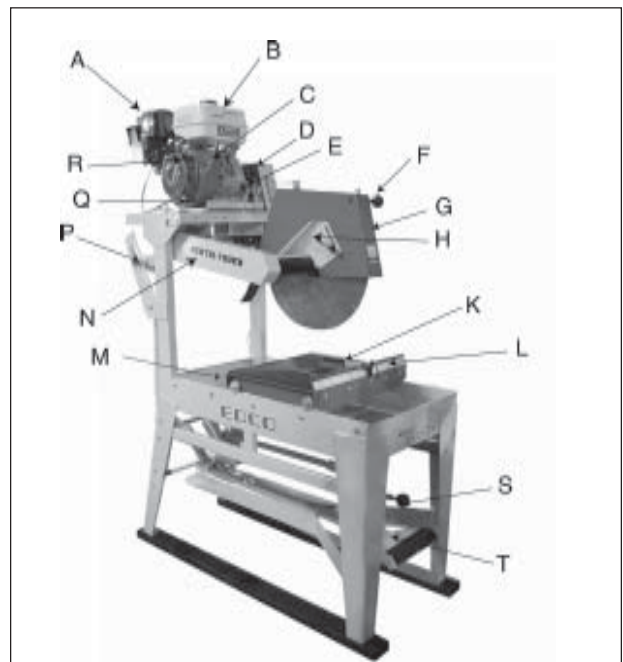


Figure 3 (GMS-20)

DANGER

Do not operate gasoline powered equipment without adequate ventilation.

Carbon monoxide is an invisible, odorless gas that can kill.



Operator Controls- MS Models

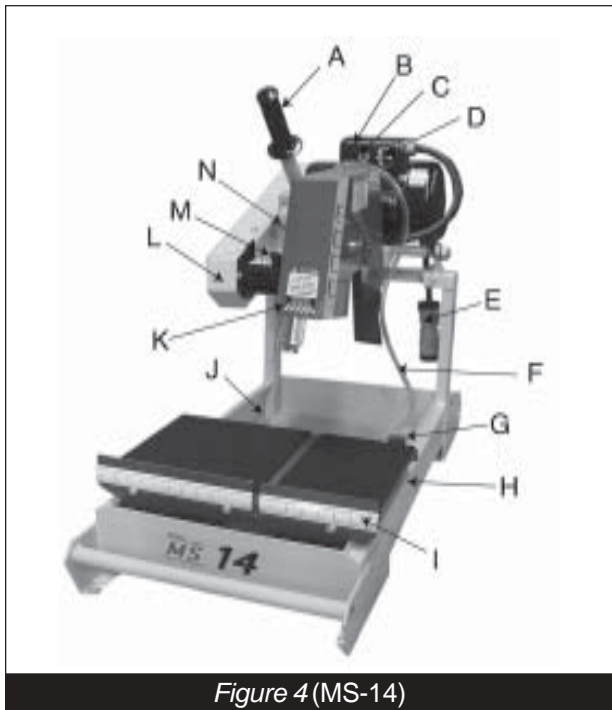


Figure 4 (MS-14)

MS-14 (Figure 4) & MS-20 (Figure 5)

- A. Handle
- B. Motor
- C. Reset Button
- D. Voltage Selector Switch
- E. Power Cord
- F. Water Pick Up Hose
- G. Water Tray Plug
- H. Rolling Table
- I. Angle Cutting Stop
- J. Welded Steel Frame/Water Tray
- K. Blade Guard
- L. Drive Belt Guard
- M. Blade Guard Lock
- N. Motor Starter Box
- O. Cutting Angle Lock
- P. Cutting Head Height Positioner
- Q. Foot Treadle

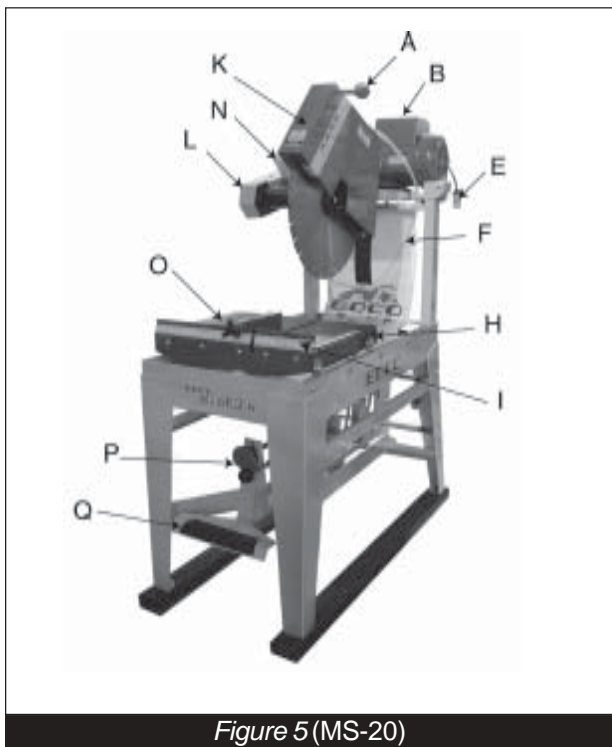


Figure 5 (MS-20)

WARNING

**Electric motor must be properly grounded
at all times.**





Read and understand this *Operator's Instruction Manual*,
and the *Engine Manufacturer's Owner's Manual*
before operating this equipment.
Death of serious injury can result if this machine is used improperly.



Safety Guidelines



Eye and ear protection must be worn at all times while the saw is in use. During normal operation, sound pressure levels exceed 92dBA. Use only ANSI approved safety glasses to help prevent eye injury. Standard eyeglasses have only impact resistant lenses; they are NOT safety glasses.



Operator must wear appropriate clothing and footwear. Do not wear loose clothing or jewelry that can get tangled in moving parts. Footwear should provide sure footing and protection from debris that may be dropped. Take steps to insure hair will not be caught in moving parts. If necessary, tie it back.

- When loading or unloading the saw, use caution. Make sure rolling table is locked so that the blade will not be damaged. Do not move the saw while the engine is running.
- Never exceed the maximum operating speed of the blade. Match the blade speed rating with the arbor shaft speed. (See page 11)
- Never leave the saw running unattended.
- Never operate this saw under the influence of drugs, alcohol or when taking medications that impair the senses or reactions, or when excessively tired or under stress.
- Do not lend or rent this equipment without including the Operator's Instruction Manual and the Engine Manufacturer's Manual.
- Make sure all safety decals can be clearly read and understood. Replace damaged or missing decals immediately.

For Electric Models:

- Electric motor must be properly grounded at all times. Check the outlet box to be sure the electrical service is properly grounded and that adequate power is available. Insufficient power will cause motor to overheat and burn out. Use only grounded extension cords correctly sized for the current draw and voltage drop (amp rating and length). Never use frayed, damaged, taped or underrated extension cords. Electrical shock could result in death or serious injury and damage to the equipment.

For Gasoline Models:

- Poisonous exhaust gas. Do not operate gasoline powered equipment without adequate ventilation. Carbon monoxide is an invisible, odorless gas that can kill. NEVER REFUEL AN ENGINE WHILE IT IS HOT OR AN ENGINE WHILE IT IS RUNNING. Only refuel in a well-ventilated area and only refuel after the engine has cooled completely. Thoroughly cleanup any spilled fuel before starting the engine.



Dry cutting creates a large volume of airborne dust. For health reasons, the operator should wear an applicable respirator. The dust may contain chemicals known to cause serious illnesses, including Silicosis - a fatal disease of the lungs. Check the chemical properties of the material to be cut and follow all EPA/OSHA regulations.

Safety warnings and guidelines do not by themselves eliminate danger.
They are not substitutes for proper accident prevention procedures and good judgement.

Operating Instructions

Before Starting:

- **Read and understand the instructions supplied by the engine manufacturer.**
- Familiarize yourself with all engine and saw controls. (*Figures 2-5*)
- Visually inspect the entire machine for damage or wear. Look for signs of oil or fuel leaks. Remove excess dirt or debris. Check that all nuts, bolts and screws are tight. Check for proper alignment of moving parts, possible binding of moving parts, breakage of parts, loose mounting brackets, and any other condition that might affect operation.
- Inspect diamond blade and arbor shaft. Check blades for cracks, loose segments, worn or out-of-round arbor holes. Do not use warped, twisted, out-of-balance blades or any blade of questionable condition. Refer to *Rx for Diamond Blades*.
- Install back splash shield (*Figure 6 and 7*).



Figure 6



Figure 7

On Gasoline Models:

- Gasoline models are shipped from the factory dry, meaning without oil or gasoline. Both will need to be added before the unit is used. Check the *Engine Manufacturer's Owner's Manual* for instructions on break-in, servicing and proper use of engine.
- Check engine oil. Make sure that it is at the proper level and that it is clean.
Note: Some engines have an Oil Alert System that will automatically stop the engine before the oil level falls below the safe limit. To avoid an unexpected shut down, check the oil level regularly during operation.
- Check the fuel level. Do not over fill fuel tank and **never refuel a hot engine**. If refueling is necessary during operation, allow engine to cool down first.

On Electric Models:

- Electric masonry saws are shipped with a twist lock, grounded, male plug attached to the machine and a female mating connector which a qualified licensed electrician should attach to a user-supplied extension cord. Verify that the extension cord is sized appropriately for the electrical load and that it is properly grounded.



Use only 3 wire (single phase), 4 wire (three phase) grounded electrical cables that are marked U.L. and/or C.S.A. approved.

- Inspect the power and extension cords for damage. Do not use if either cord is frayed or showing signs of wear.
- Identify the electrical power requirements of the saw. The voltage requirements of the motor can be found on the motor data plate. For dual voltage models, be sure the voltage selector switch position correctly matches the incoming power source and that it is locked into the selected voltage position with the locking bolt. (*Figure 8*)
- Verify that the power switch is in the off position before plugging machine into the power source.

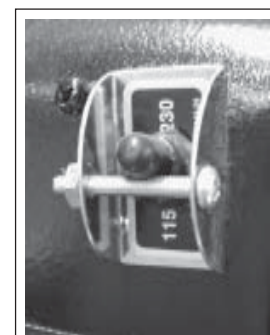


Figure 8



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Page 7

When Wet Cutting:

- Secure the drain plug and fill the tray with clean water.

On Gasoline Models:

GMS-20

- Engage the water pump by loosening the pump position lock, lower the water pump slide bracket and retighten the pump position lock. (Figure 9)
- Prime the pump using the priming bulb. Pump the bulb until water fills the clear plastic coolant hose from the tray to the pump.

On Electric Models:

MS-14

- Plug submersible pump into the special outlet on the motor. (Figure 10)

CAUTION This outlet is intended for the water pump only. Do not use it for any other purpose.

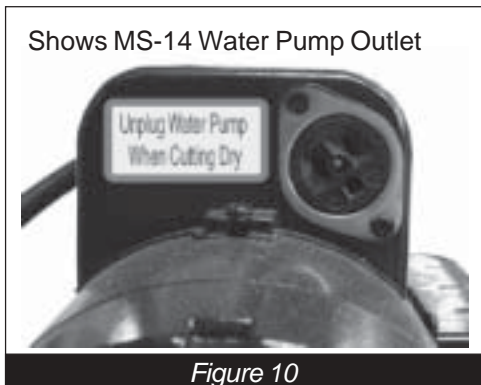


Figure 10

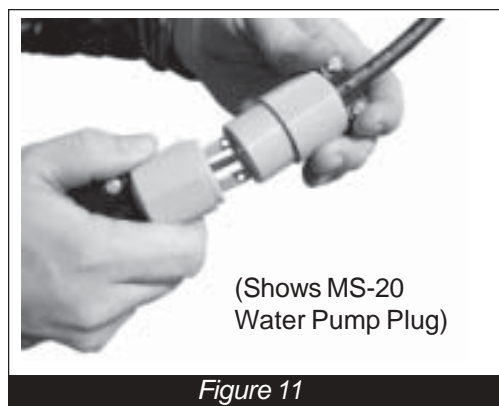


Figure 11

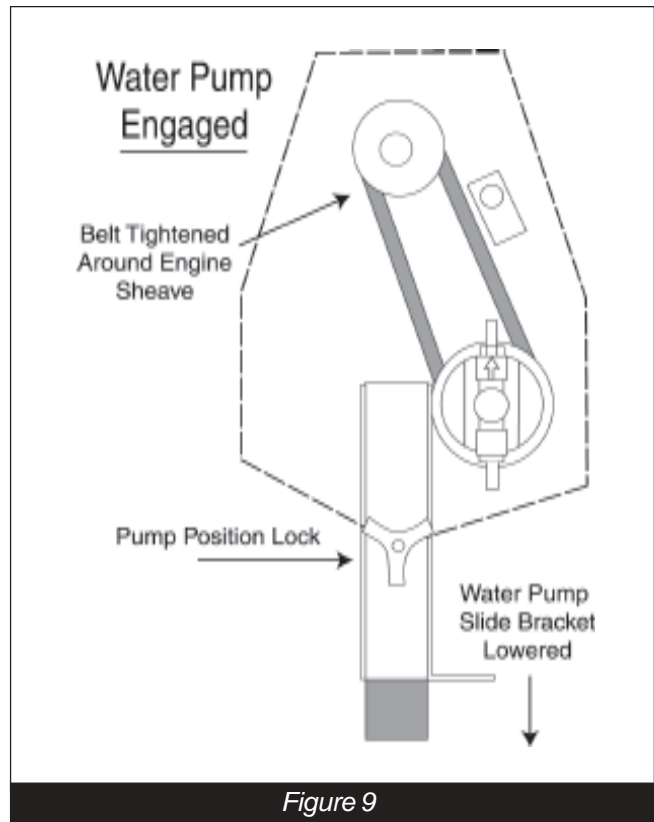


Figure 9

CAUTION DO NOT LET THE WATER PUMP RUN DRY.

On All Models:

- The water in the tray must be kept clean. Running dirty water through the system will cause damage.
- To change the water, turn off the saw, remove the plug in the bottom of the tray to drain water and dispose of properly. Do not drain onto the surface being worked on or other maintained surface because staining will occur. Flush any loose grit and dirt out of the tray. Replace drain plug and refill with clean water. If water flow to the blade seems to be low, check that strainer is clean and the water pump pulley is properly engaged.

When Dry Cutting:

- Drain and flush any water or debris in the tray and dispose of properly.

On Gasoline models:

- Disengage water pump by loosening the pump position lock. (Figure 12)
- Raise the water pump slide bracket to loosen belt around the sheave. Loosen only enough to disengage the unit, do not allow belt to slip off sheave.
- Retighten the pump position lock.

On Electric Models:

- Unplug the submersible pump from the motor.



Be careful when draining water from tray and dispose of waste away from work area.

Draining the water directly to the ground will cause a potentially serious working hazard including, but not limited to, risk from electric shock if using an electric motor.

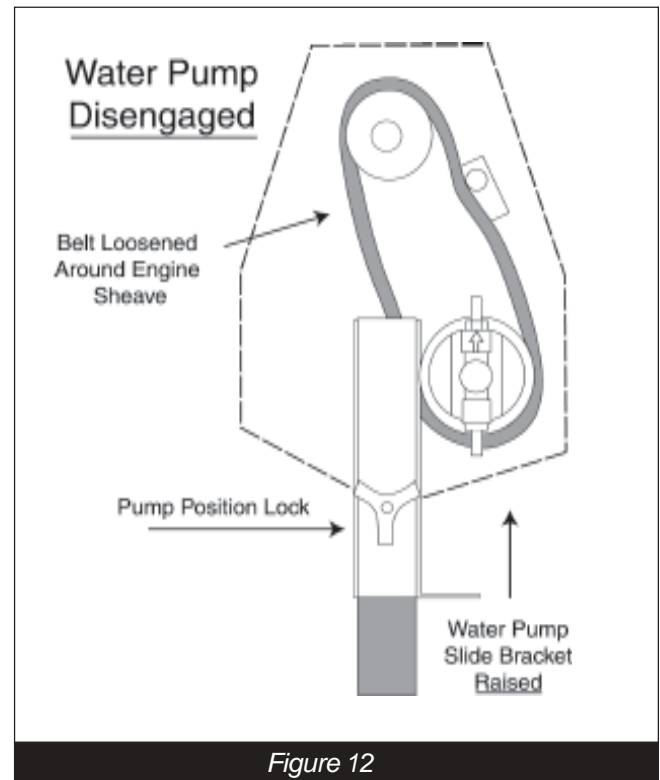


Figure 12

Pre-Set the Cut:

- When making a series of cuts at the same depth, set the cutting blade to the required depth by adjusting the cutting head positioner. The cutting head will stay at the depth selected. (Figure 13)
- Use the blade lock to prevent changes in the depth setting caused by vibration.

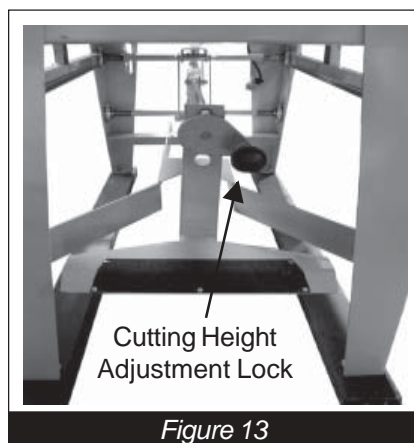


Figure 13



Figure 14

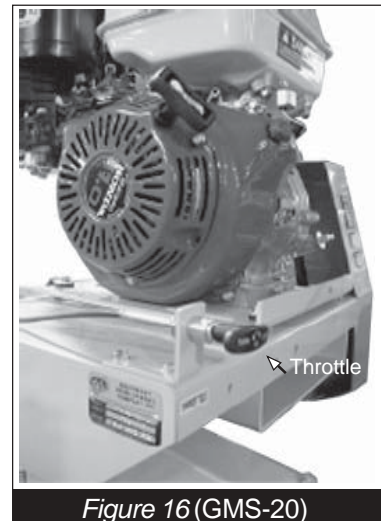
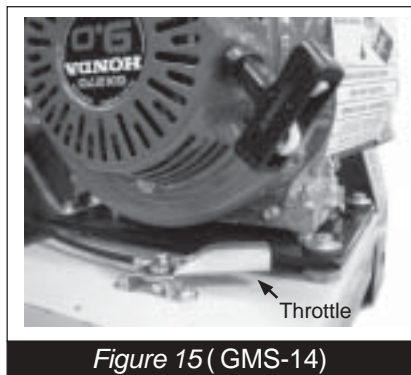


Starting the Engine:

- Be sure blade is clear of item to be cut.
- Determine that the recoil starter assembly turns freely, starter rope pulls easily, and the rope retracts properly.
- Follow the instructions supplied in the *Engine Manufacturer's Owner's Manual* for starting engine.
- Open the throttle and allow engine to reach operating temperature. Open throttle fully, do not use the throttle as a means to match the arbor shaft speed to the specified blade speed requirements.

Be certain to use the proper blade for the machine.

Note: To ensure that the necessary power is transferred to the blade, all cutting must be done at *full throttle*. The governor is factory set for correct speed - altering this setting may damage the machine. Maintain the engine according to factory specifications.



Starting the Electric Motor:

REMINDER: On models equipped with a voltage selector switch, verify switch is set at the operating voltage available at the job site and the locking bolt is in place. Motor burnout due to use of improper voltage will void the warranty on the motor. (See *Figure 8*)

- Be sure blade is clear of the item to be cut.
- Turn on the motor.
- Listen for motor to reach operating speed. Do not use if motor hums or does not reach operating speed within a few seconds. Motor hum may indicate a malfunction due to:
 - Job site voltage may too low.
 - An Internal motor problem.
 - The blade may be jammed.
 - Voltage selector switch in wrong position.or
 - The belts may be too tight.

Cutting:

- Do not strain the engine/motor while cutting. Do not jam work piece into the blade. Do not twist the work piece while cutting.
- When you have finished cutting:

On gasoline models: To stop engine, return throttle to idle. Stop the engine by turning the engine mounted stop switch to the OFF position. Do not leave the saw running unattended.

On electric models: Depress the stop button on the motor starter box. Wait until saw comes to a complete stop before performing any type maintenance.

- Clean dust and debris from machine.

IMPORTANT:

- When actually cutting masonry products, it is important that the blade is at it's maximum RPM. DO NOT force or jam the blade. Forcing the blade will cause the motor to overheat, tripping the overload device or severe motor damage.

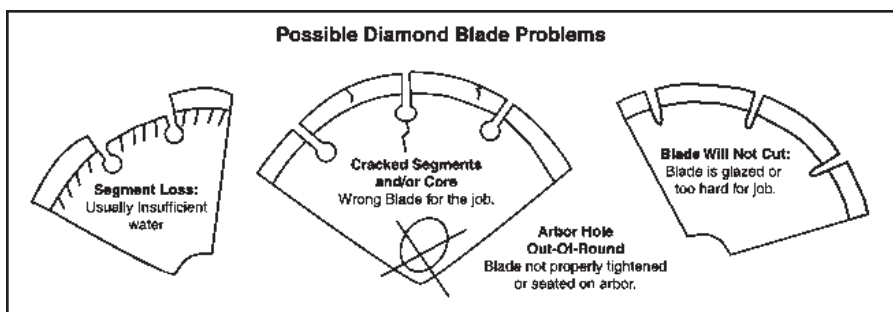


- Do not reach underneath or around work piece while the blade is rotating.
- Keep stable footing at all times while cutting.
- Keep hair, clothing, fingers and all body parts away from the blade and any other moving parts.



Model	Diameter Blade	Arbor Shaft Rating	Max. Cutting Depth
MS-14	14 inches	2600 RPM	5 inches
GMS-14	14 inches	2600 RPM	5 inches
MS-20	20 inches	2400 RPM	8 inches
GMS-20	20 inches	2400 RPM	8 inches

Figure 17





Disconnect spark plug lead before performing any maintenance on this machine.



Maintenance

Consult the *Engine Manufacturer's Owner's Manual* for more detailed engine maintenance instructions.

Changing the Blade:

- Inspect the new blade thoroughly before installing. Check for cracks, loose or missing segments, worn or out-of-round arbor holes. Refer to the *Rx for Diamond Blades* pamphlet provided with your blade for more detailed information on inspecting blades. Be sure the blade is appropriate for the job and matches the arbor speed and mounting configuration on this saw. (Figure 17)



Figure 18

- Push the rolling table all the way to the back of the machine.
- Blade guard should be rotated all the way up and tightened into place.
- Remove blade cap and bolt. Carefully remove old blade.
- Inspect arbor shaft, backing plate and blade guard while blade is off. Clean if dirty or replace if damaged or worn.
- Look for "direction of rotation" markings on the blade. (Usually an arrow stamped on the blade.)
- Place new blade on the arbor shaft verifying that once installed the markings on the blade follow the proper direction of rotation.
- Reinstall and tighten bolt using a SAE 1/2" wrench. Reinstall blade cap.
- Reposition blade guard and tighten. Reconnect spark plug lead. (if applicable)

Belt Adjustment and Replacement:

- Periodically check belts for damage, same type and are at the proper tension. Do not mix belts. Slipping belts will overheat causing the cutting speed to be limited and shorten the life of the belts. Over-tensioned belts will shorten the life of the belts and bearings.
- On new equipment and after installing new belts of the same type, be certain to re-tension the belts after the first 4 hours of use. New belts are stiff and require a break in period. Belts that are loose could slip and/or overheat.
- Damaged, stretched or excessively worn belts should be replaced with a new complete set of belts of the same type. Do not mix belts.

Important!

- Belts must be replaced as a complete set of the same type, do not mix belts even if only one belt is showing wear.
- Blade must be realigned every time the belts are tensioned.

On Gasoline Models:

- Access belts from back of machine.
- Unlock belt guard and lift top portion out of the way. Water pump and drive belts are now accessible.
- To change water pump belt, follow “disengage” instructions on page 9.
- To change drive belts, loosen engine mount bolts and adjust jacking bolt until belts can be removed.



Figure 19

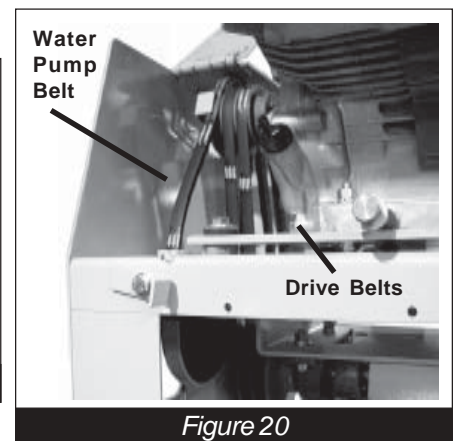


Figure 20

On Electric Models:

- Loosen motor mounts (4) (Figure 21)
- Loosen jacking bolt until belts slide off sheave. (Figure 22)
- Replace with a new complete set of belts of same type. Do not mix belt types.
- Adjust jacking bolt to tension belts.
- Retighten motor mount bolts.

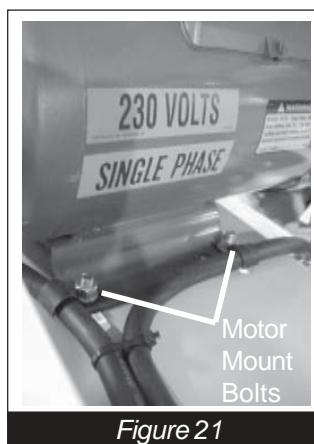


Figure 21

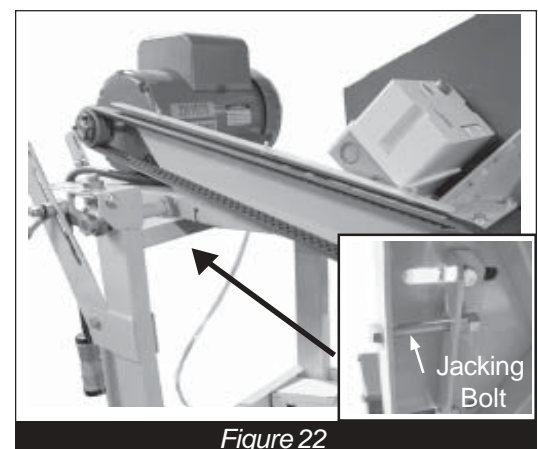
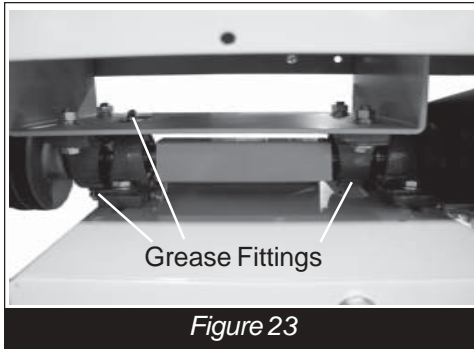
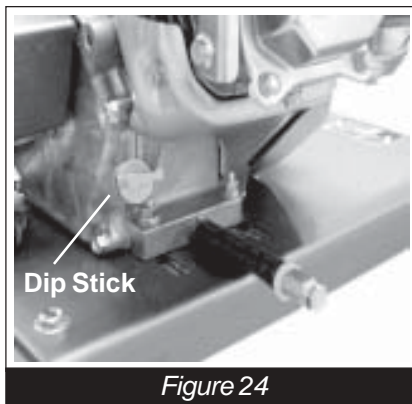


Figure 22



Grease Bearings:

- Drive shaft bearings must be greased every 4 hours. (All are not visible in this photo)



Change Engine Oil:

- Check Engine Oil before each operation. Open the filler cap and look at the dip stick. (Figure 24) Oil should be clearly visible both on the stick and in the cavity and should look fairly clean. Running the machine on dirty oil or when the oil is low will result in damage to the engine.
- Change the Engine Oil after every 50 hours of operation or sooner as conditions require. Refer to the Engine Manufacturer's Owner's Manual for specific viscosity recommendations and changing instructions.



Inspect and Clean Air Filter:

(Figure 25 shows Honda Cyclone Dual Filter style element).

- Refer to the Engine Manufacturer's Owner's Manual for instructions on specific models.
- Check air filter *at least* once daily.
- Dirt build up on the filter will cause excessive engine wear.



Clean and Lubricate Wheels on Rolling Table and Pivot Points on Front Treadle:

- During daily visual inspection, check to be sure the wheels on the rolling table move smoothly and that there is no debris in the wheel groove. (Figure 26)
- Lubricate the wheels as necessary.
- Replace damaged or worn wheels.



Repairs are to be performed by EDCO or by approved EDCO repair technicians.



Read and follow all instructions in the Engine Manufacturer's Owner's Manual.

Maintenance Schedule

	Before each Operation	Daily	Every 4 Hours	Every 50 Hours of Operation	As Required	Annually
Visually Inspect Entire Machine and Hardware	X					
Check Engine Oil*	X					
Inspect Blade and Arbor Shaft	X					
Inspect Guards		X				
Clean Air Filter Element*		X				
Clean Dust and Dirt Off Machine		X				
Change Engine Oil*				X		
Inspect Belts					X	
Belt Tensioning					X	
Lubricate Wheels on Rolling Table					X	
Replace Spark Plug*						X
Clean Water Strainer		X				
Grease Bearings			X			

*Gasoline Models Only



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LIMITED EQUIPMENT WARRANTY

Equipment Development Company, Inc. herein referred to as EDCO warrants that each new unit manufactured by EDCO to be free from defects in material and workmanship in normal use and service for a period of (1) one year (except in the case of the cutter drum assembly on all model concrete asphalt planes, in which case the warranty period shall be 90 days) from date of shipment to the original buyer or equipment rental center owner.

EDCO will, at its option, repair or replace, at the EDCO factory or at a point designated by EDCO any part, which shall appear to the satisfaction of EDCO inspection to have been defective in material or workmanship.

This warranty, does not apply to failure occurring as a result of abuse, misuse, negligent repairs, corrosion, erosion, normal wear and tear, alterations or modifications made to the product without express written consent of EDCO: or failure to follow the recommended operating practices and maintenance procedures as provided in the products operating and maintenance manuals.

This warranty does not obligate EDCO to bear any transportation charges in connection with the replacement or repair of defective parts. This warranty does not obligate EDCO to bear any expense for travel time or of personnel in connection with any service calls.

Accessories or equipment furnished and installed on the product by EDCO but manufactured by others, including but not limited to engines, motors, electrical equipment, transmissions, etc., shall carry the accessory manufacturers' own warranty.

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

LIABILITY LIMITATIONS

The remedies of the user set forth under provisions of warranty outlined above are the exclusive and total liability of EDCO with the respect to their sale or the equipment and service furnished hereunder, in connection with the performance or breach thereof, or from the sale, delivery, installation, repair or technical direction covered by or furnished under the sale, whether based on contract, warranty, negligence, indemnity, strict liability, or otherwise shall not exceed the purchase price of the unit of equipment upon which such liability is based.

EDCO will not in any event be liable to the user, any successors in interest or any beneficiary or assignee relating to this sale for any consequential, incidental, indirect, special or punitive damages arising out of this sale or any breach thereof, or any defects on, or failure of, or malfunction of the equipment under this sale based upon loss of use, lost profits or revenue, interest, lost goodwill, work stoppage, impairment of other goods, loss by reason of shutdown or non-operation, increased expenses of operation of the equipment, cost of purchase or replacement power of claims of users or customers of the user for service interruption whether or not such loss or damage is based on contract, warranty, negligence, indemnity, strict liability, or otherwise.

EDCO reserves the right to modify, alter and improve any part or parts without incurring any obligation to replace any part or parts previously sold without such modified, altered or improved part or parts.

No person is authorized to give any other warranty or to assume any additional obligation on EDCO's behalf unless made in writing and signed by an officer of EDCO.

Equipment Development Company, Inc.

USE ONLY GENUINE EDCO PARTS AND ACCESSORIES

For your own safety, the safety of others and the life of your machine

