

Operator's Instruction Manual

Concrete/Asphalt Saw

MODEL CS-18



Manual - Portable



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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/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 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 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.

Operators Instruction Manual

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

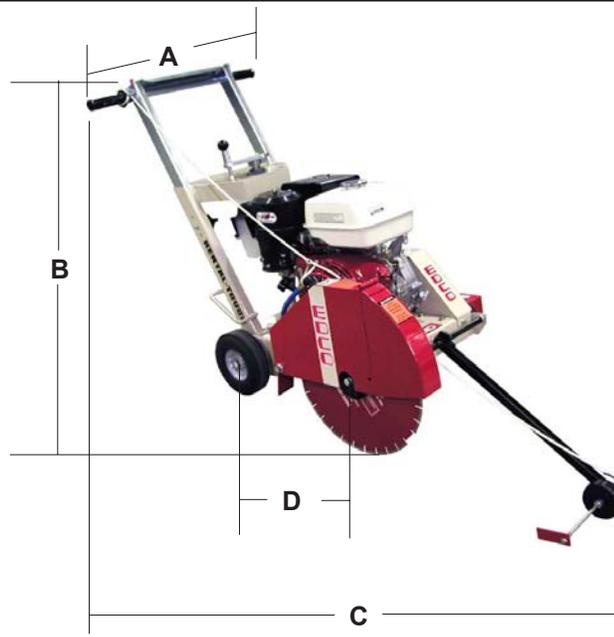


Figure 1

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

	DS-16
"A"	27" (68.58mm)
"B"	38 1/2" (97.79mm)
"C"	43" (109.22mm)
"D"	18 1/2" (46.99mm)
-	-
Weight	238 lbs. (108kg)
-	-



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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 illustration shown may be different from the actual machine.



Operating Instructions



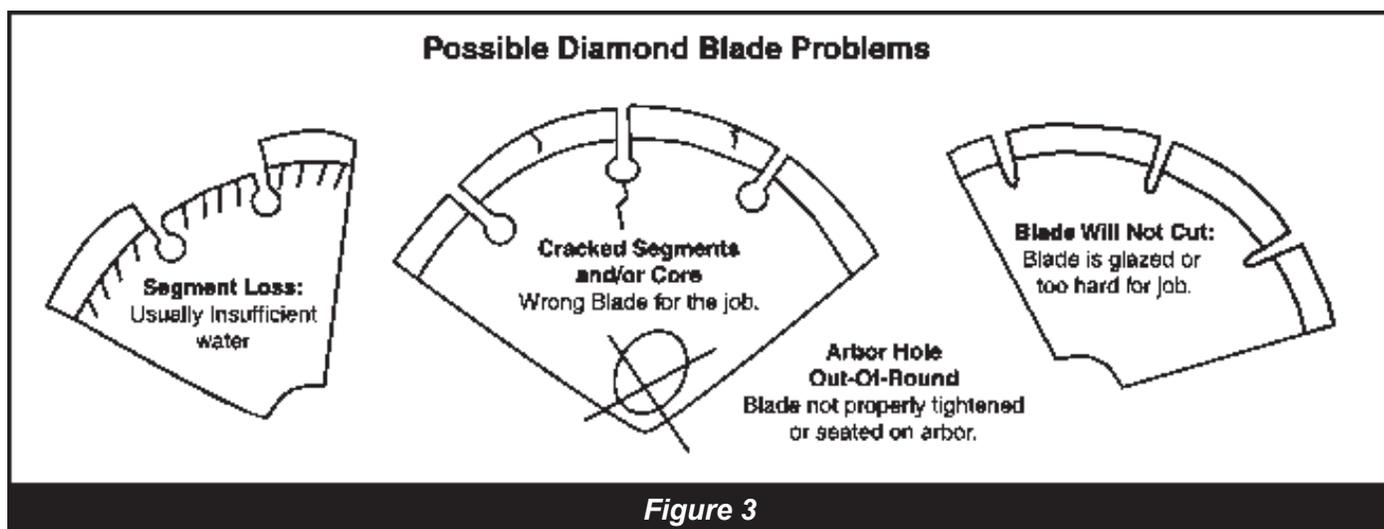
- Read and understand all operating instructions before operating this equipment. Death or serious injury can result if this machine is used improperly.

- Concrete saws are designed to be used to cut flat horizontal concrete or asphalt slabs using diamond saw blades.
- This machine is equipped with a gasoline engine.
- It is designed to be controlled by a single operator from a position at the rear of the saw.
- Maintain a safe distance from other personnel in the area.

Be sure to read the Rx for Concrete Saws 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 blade guard is in place and secure.
- Perform all daily maintenance, refer to page 11.
- Check to be sure water tubes are functioning properly if performing wet-cutting operations.
- Inspect blade - Be sure the correct blade is installed properly on the machine, including RPM, size, mounting arrangement and its intended use.
- Check blade for damage (see figure 3, below).
- 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 cutting operation. Scribe a line to help guide the saw.



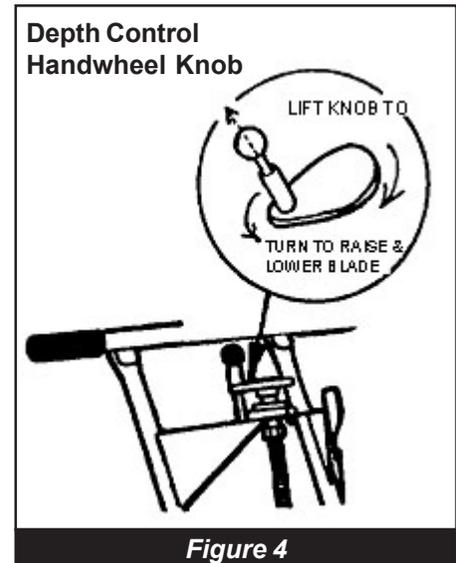
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Operating Instructions

- **BEFORE STARTING THE ENGINE:** Raise the saw blade clear of the working surface. The blade is raised using the depth control hand wheel knob mounted on the lower handle assembly (**Figure 4**) Lift the knob to unlock and turn the hand wheel until the blade is clearly off the ground.
- **START ENGINE AND ALLOW IT TO REACH OPERATING SPEED.** Position the saw over the cutting line. Bring the engine to full speed. Lower the blade into the slab surface by slowly turning the depth control hand wheel knob counter clockwise. NOTE - the 18 inch blade has a maximum cutting depth of 6 5/8". Do not allow the arbor flanges to contact slab surface.

When the selected cutting depth is reached, lock the depth control hand wheel knob and proceed to push the saw forward. The saw blade must remain straight, do not twist, and do not force blade, the engine should not strain when cutting.



- **TO STOP THE MACHINE:** Stop forward motion. Turn the depth control hand wheel knob clockwise to raise the blade clear of the cut, push the throttle to idle. Turn ignition switch off and let the engine come to a complete stop. Turn off the water supply.
- **WHEN MANEUVERING THE SAW:** Make sure the blade is raised high enough so it does not strike the slab surface. Damage to blade may occur with inadvertent contact with the slab. The safest way would be to stop the saw, move it to the new location and start it again.
- **DO NOT FORCE BLADE WHILE CUTTING.**
- **IF THE ENGINE STALLS IN THE CUT:** Raise the blade completely out of the cut. Disconnect the power source (i.e. the spark plug wire on a gasoline engine). Inspect the blade cap, backing plate and bolt to verify that they are still tight, and inspect the blade for damage. Replace damaged (or questionable) blades immediately.
- **WHEN TRANSPORTING THE SAW:** Be sure to remove the blade. Before removing the blade, disconnect the power source before lifting or removing any guard. See the directions for Changing Blades on **page 9**.
- **WHEN HOISTING A CONCRETE SAW :** Always inspect frame and attaching hardware for damage **before** lifting. Use proper safe hoisting techniques and hardware.

Maintenance Instructions



Remove the spark plug lead on gasoline engine models, before performing any maintenance. All maintenance to be performed regularly by qualified personnel.

- Never work under saw without first placing chocks on the wheels and support device under the saw to prevent it from moving or falling. Always work on a flat and level surface.
- Refer to the engine owners manual for maintenance information specific to the engine used. Be sure to check oil level before operation. Clean air filter element daily.
- Grease arbor shaft bearings after every 4 hours of use. Refer to **page 10** for lubrication points.
- Perform a visual inspection of the entire machine before operation. Be sure all fasteners are tight and secure, check for signs of metal cracking or fatigue, inspect for damage to electrical wiring, damage to fuel lines, check bearings and inspect to be sure proper guards are in place and secure, etc...
- Inspect belts before operation. Check belt tension. On new equipment, belts should be re-tensioned after the first four hours of use. Damaged, stretched or excessively worn belts should be replaced with a new ***matched set***.
- To tension belts, refer to **page 8**.
- Proper belt tension must be maintained to transmit maximum engine power to the cutting blade. Slipping belts will overheat, the blade life will be shortened and the cutting speed limited. Over tensioned belts will shorten belt and bearing life.
- Check diamond blades for cracks, loose segments and oversize, worn, or out-of-round arbor holes (**See Figure 3 on page 5**). Do not use **any** questionable blade since serious injury and/or damage to property can result. Do not use warped, twisted, or out-of-balance blades. Unbalanced blades will wear excessively, vibrate and damage both arbor shaft and bearings. Do not use a blade without a drive pinhole (**Figure 5**).
- For safety reasons, EDCO **does not** recommend the use of any abrasive blades. Abrasive blades can break and cause serious personal injury to operator and/or bystanders. If abrasive blades are used by choice, use only reinforced abrasive blades. Inspect abrasive blades carefully.
- Be sure arbor shaft, backing plate and blade cap are clean and in good condition. Flanges should be free of nicks and burrs. Replace if out-of-round or worn.

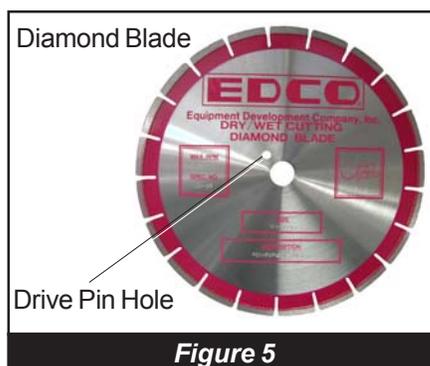


Figure 5



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Maintenance Instructions

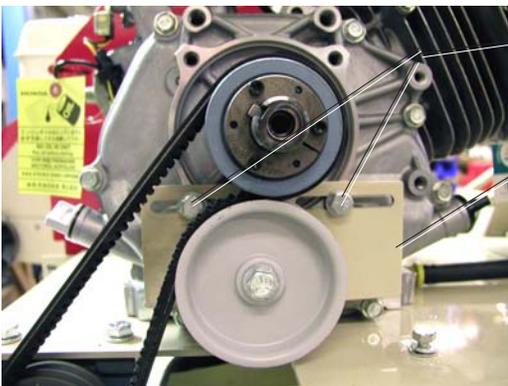
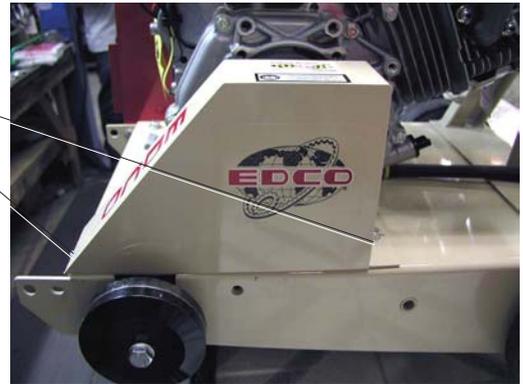


NOTE water hook-up

The handles can be adjusted up or down by removing the two (2) star knobs, removing the two (2) cap screws, adjusting the handle height and replacing the cap screws and star knobs.

Belt Tensioning

To tension the belts remove the two belt guard cap screws and guard and sit aside.



Loosen the two (2) idler pulley bracket cap screws.

Slide the idler pulley into the belt until belt is tight.

Tighten the two (2) idler pulley bracket cap screws.

Changing Blades (On EDCO CS-18)

DANGER

To disconnect the power source on gasoline engine models, remove the spark plug lead.

- Make sure you have the proper blade for the job. Determine the hardness and composition of the slab. Give your dealer complete information including whether re-bar is present, the desired depth of the cut, and the length of the cut. If in doubt, contact the blade manufacturer.

WARNING

Inspect the blades before installing. Check diamond blades for cracks, loose segments and oversize, worn, or out-of-round arbor holes (**Figure 3 on page 5**). Do not use any questionable blade since serious personal injury and/or damage to property can result. Do not use warped, twisted, or out-of-balance blades. Unbalanced blades will wear excessively, vibrate and damage both arbor shaft and bearings. Do not use a blade without a drive pinhole (**Figure 5**).

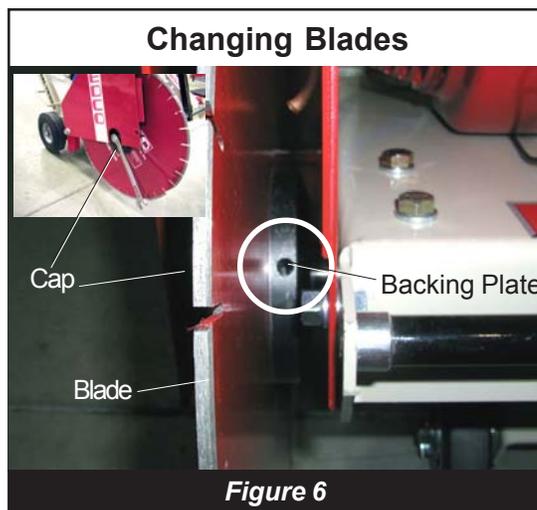
WARNING

For safety reasons, EDCO **does not** recommend the use of any abrasive blades. Abrasive blades can break and cause serious personal injury to operator and/or bystanders. If abrasive blades are used by choice, use only reinforced abrasive blades. Inspect abrasive blades carefully.

DANGER

Never exceed the maximum operating speed of the blade. Be sure to match the blade speed rating with the arbor shaft speed on the machine. The CS-18 has an arbor shaft speed of 3000 RPM.

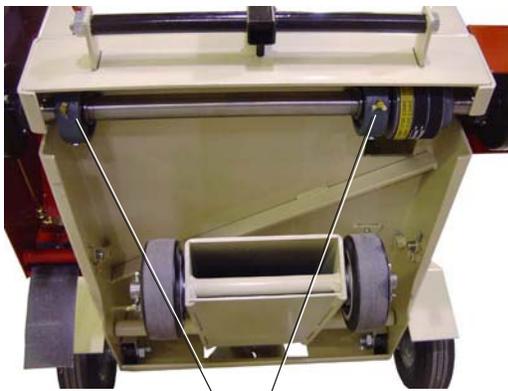
- Do not remove or lift the blade guard unless engine is completely stopped. Be sure to reinstall blade guard before restarting the engine.
- Be sure the arbor shaft, backing plate (**Figure 6**), and blade cap are clean and in good condition. Make sure the blade cap screw threads are clean and undamaged. If any damage is detected, consult your EDCO dealer (or the EDCO factory).
- The backing plate and blade cap (**Figure 6**) should be the same diameter, do not use if they are different diameters. For abrasive blades and for all steel centered diamond blades, the backing plate and blade cap must be at least 1/4 the diameter of the blade.
- The drive pin should be tight in blade cap and long enough to pass through blade and into hole in backing plate.
- Place the blade on the arbor shaft and turn until the drive pinhole lines up with the backing plate.
- Place the blade cap on the arbor shaft so the drive pin goes through the holes in the blade and backing plate.
- Thread cap screw through lock washer and blade cap into arbor shaft and tighten.
- Secure the blade guard in the operating position before starting the engine.
- Use a wrench on the cap screw (inset) and a steel rod inserted into the hole in the backing plate (circled in photo) to assist in blade removal (**Figure 6**).



Lubrication Points

Grease Bearings Every 4 Hours of Use

MODEL CS-18

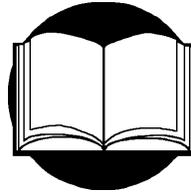


GREASE FITTINGS

NOTE: Over lubrication can cause grease or oil spots on the work surface causing a safety hazard as well as creating unnecessary clean up time if on a surface that is to be refinished or resurfaced. One to two pumps on a grease gun should be sufficient.



Repairs are to be done by authorized EDCO Dealers only.



Read and follow instructions in the engine owners' manual.

Maintenance Schedule

	Before Operation	Every 4 Hours	Daily	Every 50 Hours of Operation	As Required
Visual Inspection of Entire Machine	X				
Check Engine Oil	X				
Change Engine Oil (refer to Engine manual)				X	
Clean Air Filter Element			X		
Grease Bearings		X			
Inspect Drive Belts	X				
Inspect Blade	X				
Belt Tensioning					X
Inspect Arbor Shaft	X				



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

