



Operator's Instruction Manual **ELECTRIC POWER TROWELS**

STANDARD, VARIABLE AND REDUCED SPEED



100 Thomas Johnson Drive, Frederick, MD 21702-4600 USA
Phone: 301-638-3326 • 301-663-1600
Fax: 800-447-3326 • 301-663-1607
edcoinc.com • sales@edcoinc.com



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.



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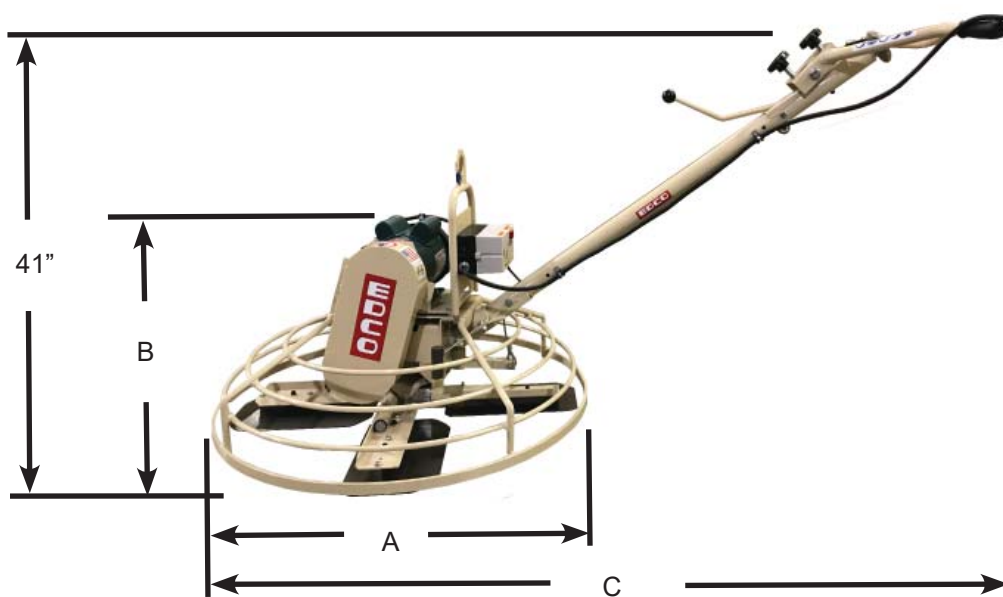


Figure 1

HOW TO ORDER REPAIR PARTS

To ensure 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 NAME-PLATE. 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.

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Specifications & dimensions are approximate and subject to change.

Diameter	24" 61 cm	30" 76 cm	36" 91 cm	46" 116 cm
A	26" 66 cm	31" 79 cm	36 1/2" 93 cm	46" 117 cm
B	24" 61 cm	24" 61 cm	24" 61 cm	26 1/2" 67 cm
C	63 1/2" 140 cm	66" 167 cm	69" 175 cm	74" 188 cm
Weight	175 lbs. 79 kg	193 lbs 88 kg	212 lbs 96 kg	280 lbs 127 kg



Read and understand the *Operator's Manual*,
and the *Engine Manufacturer's Owner's Manual*
before operating this equipment.



Death or serious injury can result if this machine is used improperly.

Safety Guidelines



Keep hands and feet away from moving blades.
Never allow a person to act as a weight for this machine.
Death or serious personal injury can result from the moving parts of the trowel.

Operating Instructions

This manual focuses on the safe operation of various EDCO Power Trowels. It does not detail the techniques, specific uses or applications of each different type, configuration and option package. Consult your EDCO factory representative to discuss your specific needs.

Before Starting:

- Verify the correct blades for the job have been chosen and that they are properly installed. Inspect the blades carefully for damage.
- Be certain the blade path is free of obstructions and the area is clear for operation.
- Visually inspect the trowel. Check that all fasteners are secure and mechanical parts are in proper working order.
- Carefully transport the trowel into position for use according to the instructions on page 7 or page 8, if using the optional Tote-A-Trowel™.
- EDCO Electric Power Trowels are shipped with a twistlock, 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.

Important Electrical Precaution



- Identify the electrical power requirements of the trowel. The voltage requirements of the motor can be found on the motor data plate.

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



Starting the Trowel

Reduced Speed and Standard Electric Power Trowels (Figure 3):

- Verify power switch is in the OFF position before plugging machine into power source.
- After checking that blades are free from obstructions and machine is in position, firmly hold the trowel handle with one hand and switch on the power with the other.
- Slowly squeeze the On/Off Lever to allow machine to reach full operating speed.

Variable Speed Electric Power Trowels (Figure 4):

- Verify power switch is in the OFF position before plugging machine into the power source.
- While firmly holding the trowel handle with one hand, depress the ON button on the starter box located near the top of the handle.
- If the blades do not turn, while continuing to firmly hold the handle with one hand, check the speed control knob. The speed control knob can be adjusted to zero speed. To adjust, turn the knob clockwise to increase the speed and counterclockwise to decrease the speed.
- If the blades still do not turn, depress the OFF button and unplug the power cord at the machine before investigating the problem.
- To shut off the trowel, depress the OFF button on the starter box.

CAUTION Do not use the speed control knob to shut off the trowel because the trowel will still be energized and may be inadvertently activated causing serious bodily injury and damage to the equipment.

Hint: Start the epoxy trowel with the speed control knob in the center position, then adjust according to job conditions. It is recommended that the blades be rotating before moving onto the epoxy surface.

Reduced Speed and Standard Electric Power Trowel.

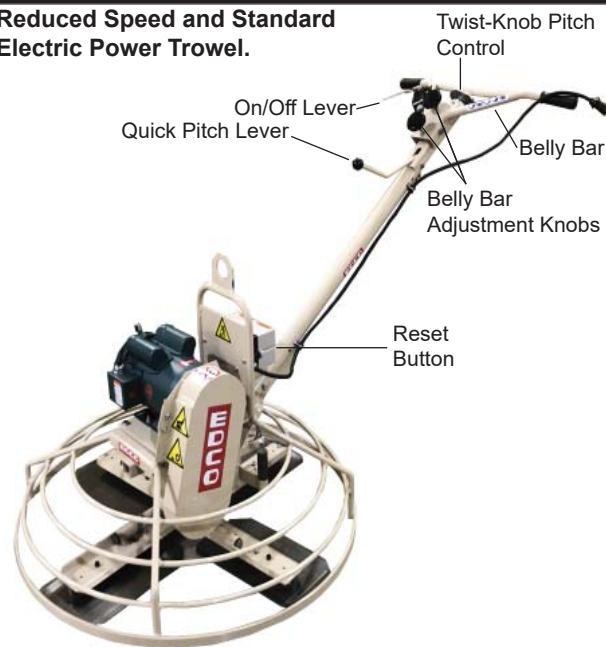


Figure 3

Variable Speed Electric Power Trowel

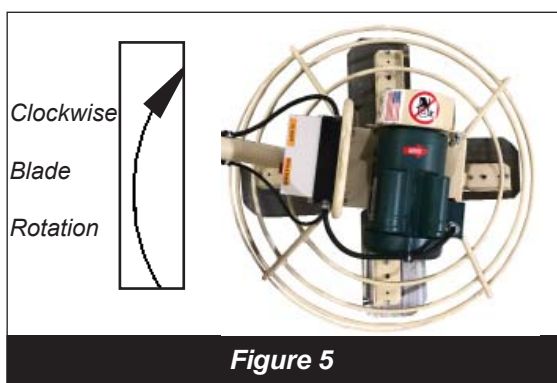


Figure 4



Operating the Trowel:

- The blades of the Trowel spin in a clockwise direction (Figure 5).
- All EDCO Power trowels are directed left or right by applying a slight upward (lifting) or downward (lowering) pressure on the handle (respectively). or combination of both (to move front to back).
- Example, An upward pressure on the handle will put more pressure on the blade furthest from you and that blade will push the trowel to the left.
- Example, A downward pressure on the handle will put more pressure on the blade closest to you and that blade will push the trowel to the right.
- Example, Slightly up with right hand and down with the left hand will put more pressure on the left side blade and will move the trowel backwards.



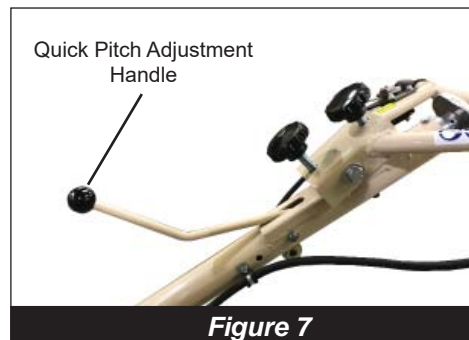
Adjusting the Blade Angle:

- Rotate the blade adjustment knob (located on the top end of the trowel handle) clockwise to tilt the blades and counterclockwise to flatten the angle of the blade. (Figure 6)
- Adjustment is based on the desired performance for the specific job application.



Quick Pitch Adjustment:

- Once the desired blade angle is determined the blades can be tilted aggressively by pulling up and back on the Quick Pitch Lever (Figure 7). This will allow the operator to gather more material to fill depressions. When complete, release the lever the blades will return to the previously set angle.



and



Transporting the Trowel:



- Unplug the motor before transporting the trowel.
- Only lift trowels that are equipped with a lifting bail (Figure 8). When lifting the trowel, use proper lifting equipment and techniques.

Clear the immediate area of co-workers and bystanders before lifting the trowel. Never lift the trowel over areas where people are standing or working. Should any parts of the trowel fall off or should the trowel itself fall while being lifted, serious injury or death could occur.

- Do not drop the trowel onto the blades. Damage to the equipment can result.



Figure 8

Manual Lifting:

- When lifting the trowel by hand, practice proper lifting techniques. The weight of the trowel is listed on page 3.
- Insert square end of Lifting Handle into the socket on front of the deck.

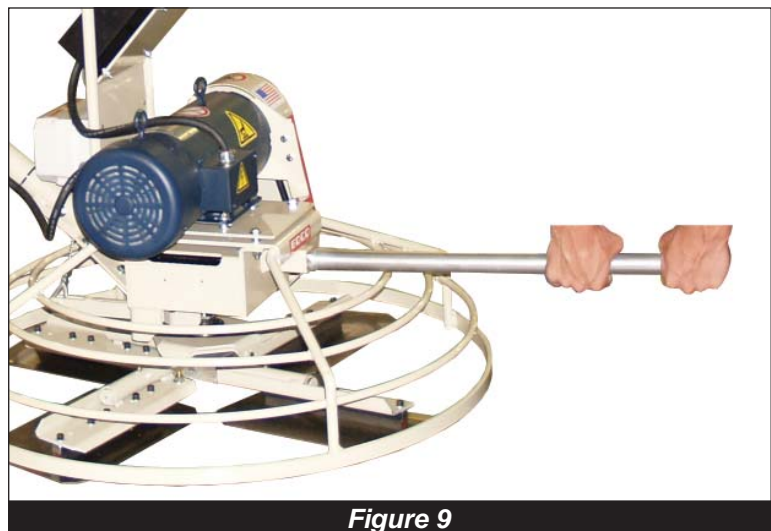


Figure 9

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

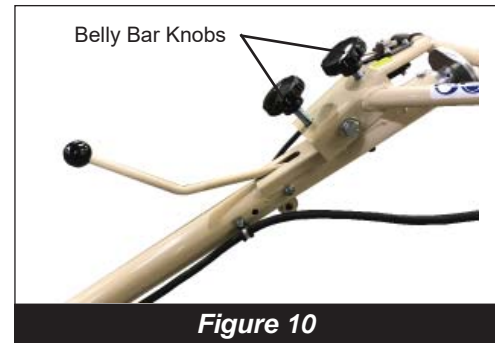
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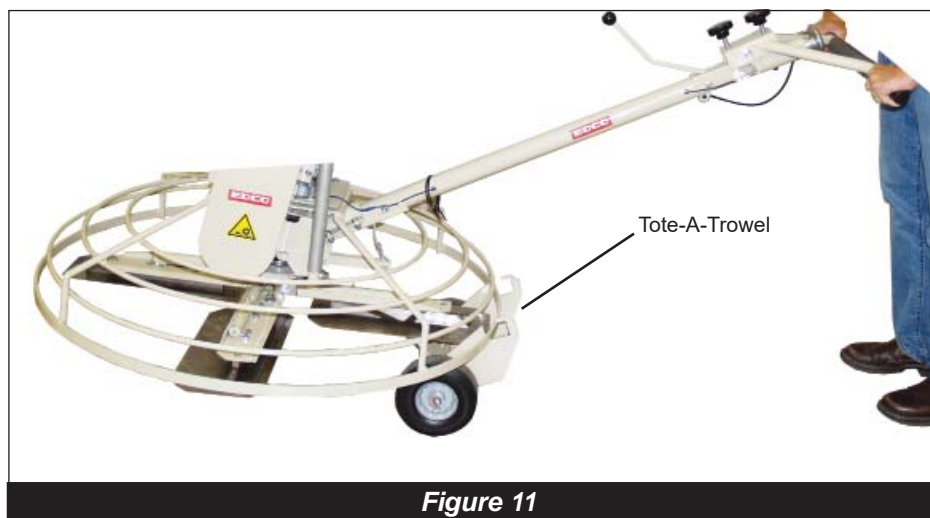
Adjustable Handle/Belly Bar:

- To adjust the Belly Bar higher loosen the bottom handle knob and tighten the top handle knob. When the desired handle height is achieved tighten both knobs(Figure 10).
- To adjust the Belly Bar lower loosen the top handle knob and tighten the bottom handle knob. Again, when the desired height is achieved tighten both knobs.



Tote-A-Trowel Transporting System:

- Rotate the handle until one blade is directly under the handle.(Figure 11)
- Set the Tote-A-Trowel directly behind that blade and hook it to the outside bottom ring of the trowel.
- Lift the handle and allow the Tote-A-Trowel to pivot under the trowel blade.
- Apply downward pressure on the handle until all the weight of the trowel is riding on the wheels of the Tote-A-Trowel.
- Reverse this procedure to release the Tote-A-Trowel.



NOTICE

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

NOTICE

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Maintenance Instructions



Before performing any maintenance be sure to disconnect the machine from the power source by unplugging the supply voltage connector at the machine.



Be sure equipment is supported securely when performing maintenance.
Always work on a flat level surface.

- All maintenance must be performed regularly by qualified personnel.

Installing Bolt-on Blades:

- Align the blade with the holes in the adapter bar and trowel arm.
- Insert 5/16-18 hardware with lock washer through blade arm and adapter bar from above and tighten into blade arm (Figure 12).

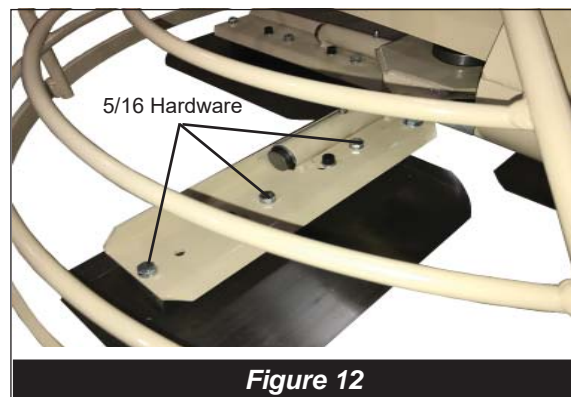


Figure 12

Note: Different blades are available for different applications. Blade types include Combination, Float, and Finishing. Trowel blades are available in high carbon steel, stainless steel and plastic. They are also available with a Quick-Change bracket.

- Consult your EDCO factory representative to discuss your specific needs.

EXTREMELY IMPORTANT!: BLADES MUST BE REPLACED AS A SET!

- Trowels are available in sets of three or four blades. Blades may be used on several jobs until worn away or damaged, but it is extremely important to replace the blades as a complete set - even if only one blade is showing wear or damage. Blades wear differently depending on different jobs and a difference in blade size will damage the finish of the slab surface.

Cleaning the trowel after use:

- Clean the entire trowel, blades and adapter thoroughly after use. The blades can usually be cleaned with a high pressure hose and water while the concrete is still wet.
- Replace decals immediately that are worn, missing, or damaged.



Lubricating the Trowel:

- The trowel arms must be lubricated every 50 hours. Pump a small amount of Lubriplate 630-2 or equivalent grease into the fittings.
- After each use, lubricate the spring on the adapter.
- Periodically, grease the threaded rod located inside the handle, for the blade tilt.
- For models equipped with the LEV-L-IT™ system, lubricate the joints with a spray lithium grease.
- The transmission has been pre-lubricated. Occasionally check the level of the lubricant in the transmission especially if signs of leakage appears around the shaft seals.
- After 2500 hours of operation, drain the transmission and refill with 140W gear oil. Fill to the level of the side plug in the transmission with the trowel blades resting on a flat level surface.

Note: Choose an appropriate lubricant carefully. Wipe off excess lubricant from trowel blade arms and trowel parts. Some lubricates should not be used on epoxy mortar trowels because they may drip onto the wet epoxy and affect the finished floor surface.

Belts:

- Inspect the belts before operation: Checking the belt tension must be done with the clutch in the engaged position. The centrifugal clutch models automatically tension the belt. This requires two people. 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 adjust the belt tension, loosen the engine/motor mounting hardware and push the engine/motor until the belts are tight.
- Verify that the sheaves are aligned properly, then tighten the hardware.

Note: Proper belt tension must be maintained to transmit the engine power to the transmission. Slipping (loose) belts will overheat and the belt life will be shortened. Over tensioned belts will shorten the life of the belts and the bearings.



Maintenance Schedule

Operator Check List	Before Operation	Inspect & Clean Before Every Operation	After Use	Every 50 Hrs. of Operation	As Required	Every 2500 Hrs. of Operation
Visual Inspection of Entire Machine	X					
Inspect Belts	X					
Belt Tensioning					X	
Clean Machine			X			
Grease Transmission						X
Lubricate Springs					X	
Grease Arms				X		

WARNING

"DO IT RIGHT" OR RISK SEVERE PERSONAL INJURY.
FOLLOW INSTRUCTIONS CAREFULLY

WARNING



LIMITED EQUIPMENT WARRANTY OF SALE – TERMS & CONDITIONS

Equipment Development Company, Inc. herein referred to as EDCO (Seller) 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 for 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 retail or equipment rental center owner.

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

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.

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.

This warranty is in lieu of and excludes all other warranties, expressed, implied, statutory, or otherwise created under applicable law including, but not limited to the warranty of merchantability and the warranty of fitness for a particular purpose in no event shall seller or the manufacturer of the product be liable for special, incidental, or consequential damages, including loss of profits, whether or not caused by or resulting from the negligence of seller and/or the manufacturer of the product unless specifically provided herein. In addition, this warranty shall not apply to any products or portions thereof which have been subjected to abuse, misuse, improper installation, maintenance, or operation, electrical failure or abnormal conditions and to products which have been tampered with, altered, modified, repaired, reworked by anyone not approved by seller or used in any manner inconsistent with the provisions of the above or any instructions or specifications provided with or for the product

FORCE MAJEURE

Seller's obligation hereunder are subject to, and Seller shall not be held responsible for, any delay or failure to make delivery of all or any part of the Product due to labor difficulties, fires, casualties, accidents, acts of the elements, acts of God, transportation difficulties, delays by a common carrier, inability to obtain Product, materials or components or qualified labor sufficient to timely perform part of or all of the obligations contained in these terms and conditions, governmental regulations or actions, strikes, damage to or destruction in whole or part of manufacturing plant, riots, terrorist attacks or incidents, civil commotions, warlike conditions, flood, tidal waves, typhoon, hurricane, earthquake, lightning, explosion or any other causes, contingencies or circumstances within or without the United States not subject to the Seller's control which prevent or hinder the manufacture or delivery of the Products or make the fulfillment of these terms and conditions impracticable. In the event of the occurrence of any of the foregoing, at the option of Seller, Seller shall be excused from the performance under these Terms and Conditions, or the performance of the Seller shall be correspondingly extended.

This document sets forth the terms and conditions pursuant to which the purchaser ("Purchaser") will purchase and Equipment Development Co. Inc. ("Seller") will sell the products, accessories, attachments (collectively the Products) ordered by the Purchaser. These terms and conditions shall govern and apply to the sale of Seller's Products to Purchaser, regardless of any terms and conditions appearing on any purchase order or other forms submitted by Purchaser to Seller, or the inconsistency of any terms therein and herein.

1. PRICE

All prices set forth on any purchase order or other document are F.O.B. Seller's facility or distribution point, as may be determined by Seller (F.O.B. Point). All prices are exclusive of any and all taxes, including, but not limited to, excise, sales, use, property or transportation taxes related to the sale or use of the Products, now or hereafter imposed, together with all penalties and expenses. Purchaser shall be responsible for collecting and/or paying any and all such taxes, whether or not they are stated in any invoice for the Products. Unless otherwise specified herein, all prices are exclusive of inland transportation, freight, insurance and other costs and expenses relating to the shipment of the Products from the F.O.B. point to Purchaser's facility. Any prepayment by Seller of freight insurance and other costs shall be for the account of Purchaser and shall be repaid to Seller.

Payment terms are as follows. 2% 10 days (to approved and qualified accounts). Net 30 days. This is a cash discount for invoices paid within 10 days after the invoice date, regardless of date of receipt of shipment. This is not a trade discount and will not be granted to accounts that do not adhere to stated terms.

*All past due accounts are subject to a late payment fee of 1.5% per month or a maximum allowed by law if different, along with the expenses incidental to collection including reasonable attorney's fees and costs.

*Seller reserves the right to hold shipments against past due accounts.

*Seller reserves the right to alter payment terms.

3. FREIGHT TERMS

All shipments will be made F.O.B. shipping point as designated in these Terms and Conditions, and title shall pass at the F.O.B. point. Delivery to the initial common carrier shall constitute delivery to the Purchaser. Any claims for loss or damage during shipment are to be filed with carrier by the Purchaser. Seller will not assume responsibility for the performance of the carrier.

Back orders will be shipped in the most practical fashion with charges consistent with our freight policy established with the original order. UPS, FED EX, MAIL or shipments by other couriers are subject to the same terms and conditions as outlined in paragraph #3 "Freight Terms".

4. DELIVERY, DAMAGES, SHORTAGES

Seller shall use reasonable efforts to attempt to cause the Products to be delivered as provided for in these Terms & Conditions. Delivery to the initial common carrier shall constitute the delivery to the Purchaser. Seller's responsibility, in so far as transportation risks are concerned ceases upon the delivery of the Products in good condition to such carrier at the F.O.B. point and all the Products shall be shipped at the Purchaser's risk. Seller shall not be responsible or liable for any loss of income and/or profits, or incidental, special, consequential damages resulting from Seller's delayed performance in shipment and delivery.

5. RETURN OF DEFECTIVE PRODUCTS

Defective or failed material shall be held at the Purchaser's premises until authorization has been granted by Seller to return or dispose of Products. Products that are to be returned for final inspection must be returned Freight Prepaid in the most economical way. Credit will be issued for material found to be defective upon Seller's inspection based on prices at time of purchase.

6. PRODUCTS ORDERED IN ERROR

Products may be returned, provided that claim is made and Seller is notified within 7 days of receipt of Products, and the Products are in original buyer's possession not more than 30 days prior to return, subject to Seller's approval. If Products are accepted for return, they must be Freight Prepaid and buyer will be charged a minimum of 15% restocking charge, plus a charge back for outbound freight charges if the original order was shipped prepaid. Returns are not accepted for any Products that are specifically manufactured to meet the buyer's requirement of either specifications or quantity.

AGREEMENTS

These Terms and Conditions constitute the entire agreement between Seller and Purchaser as it relates to terms and conditions of sale, and supersedes any and all prior oral or written agreements, correspondence, quotations or understandings heretofore in force between the parties relating to the subject matter hereof. There are no agreements between Seller and Purchaser with respect to the Product herein except those specifically set forth in and made part of these terms and conditions. Any additional terms, conditions and/or prices are rejected by Seller.

These terms and conditions may be modified, cancelled or rescinded only by a written agreement of both parties executed by their duly authorized agents.

USE ONLY GENUINE EDCO PARTS & ACCESSORIES
For your own safety, the safety of others and the life of your machine.
Equipment Development Company, Inc.