

Operator's Manual

PROPOLISHER IV



Manual

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 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

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.

SPECIFICATIONS

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

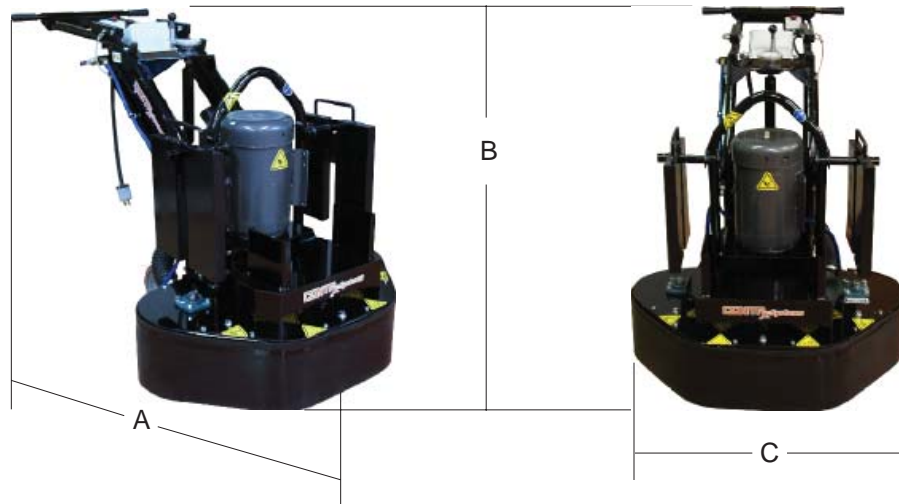


Figure 1

HOW TO ORDER REPAIR PARTS

To insure product safety and reliability, always use genuine CONTRx 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

	CONTRx 4DP
“A”	68” 172.7cm
“B”	44” 111.7cm
“C”	40 1/2” 102.9cm
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--	WEIGHT BLOCKS 80 lbs Each
Weight	NO WEIGHT BLOCKS 582 lbs.

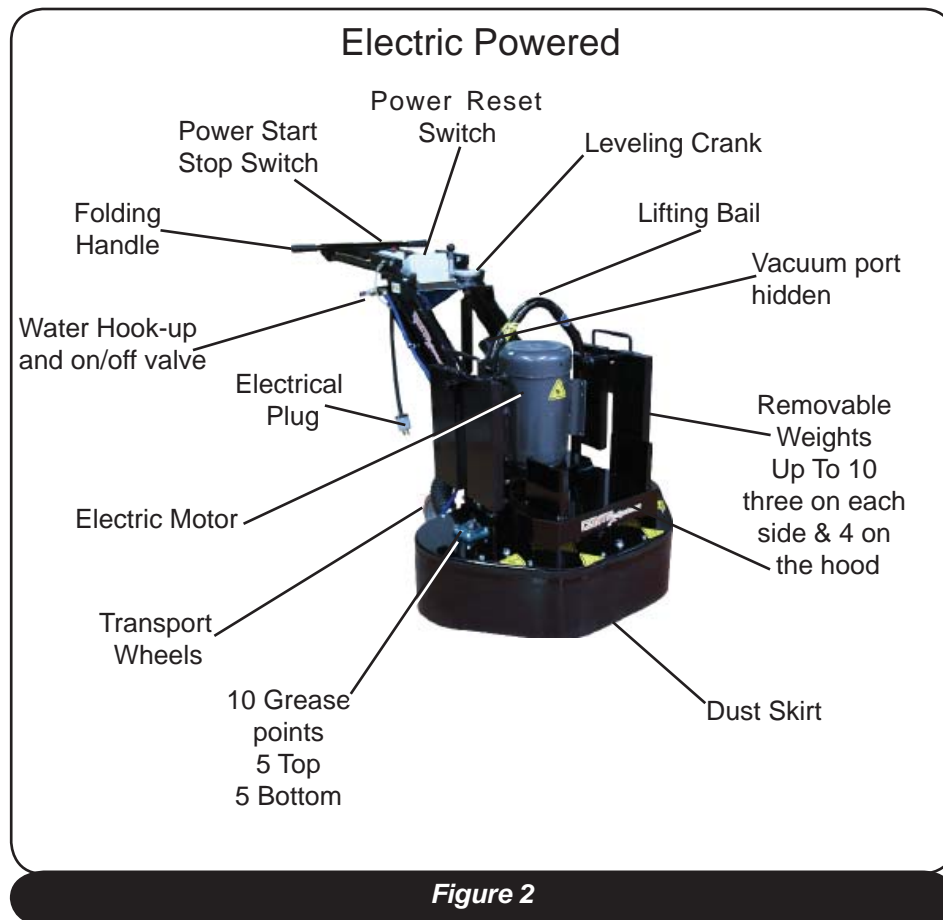
Operating Controls

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 vary from the actual machine.



SMI Dust and Silica 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.



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.

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 polish flat horizontal concrete slabs using CONTRx approved accessories.
- The machine is equipped with an electric motor.
- The machine is 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 skirts are in place and functioning properly. Do not operate unless all skirts are in place and secure.
- Perform all daily maintenance.
- Check to be sure water tubes are functioning properly if performing wet-polishing operations.
- Inspect accessories - Be sure the correct accessory is installed properly on the machine, mounting arrangement and its intended use.
- Check accessories for damage, 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 polishing operation.
- **FOR WET POLISHING:** Use just enough water to create a slurry and contain the slurry with an external stand alone wet vac and wand or equivalent method.

PROCEDURE FOR ATTACHING A VACUUM



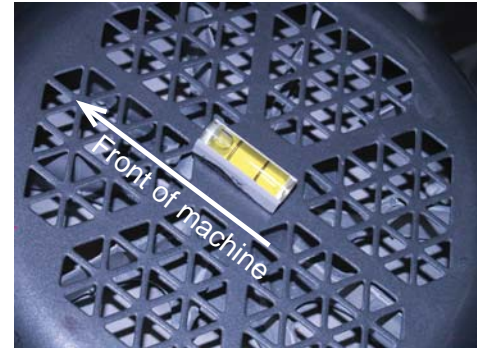
If using a vacuum for dust control attach it to the vacuum port at the rear of the machine. The multi-vac port is circled in the photo above.

Operating Instructions

- **WHEN HOISTING OR LIFTING THE POLISHER :** ***DO NOT*** lift polisher by the operating handle as shown in the photo on the left at the bottom of this page, damage to machine will result, use the lifting bail located over the top of the motor as shown and circled in the photo on the right at the bottom of this page.
- **BEFORE STARTING THE MOTOR:** Turn the hand crank shown (circled) in the photo below counter clockwise to lower the front of the machine and clockwise to raise the front of the machine machine. Adjust the machine so it is on the same plane as the surface being worked on.



Always maintain machine level with surface. When on a level surface this is easily adjusted by using a level indicator located on motor as shown in photo on right.



- **START MOTOR AND ALLOW IT TO REACH OPERATING SPEED.** Position the polisher at the starting point. Use a slow sweeping motion from left to right and back continuously, do not force the machine into the work, the machine should glide on the surface and the motor should not strain when polishing.
- **WHEN WET POLISHING:** 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 such as the Contrx Bernoulli Dry Vacuum.
- **TO STOP THE MACHINE:** Turn the On/Off switch to the Off position. Turn off the water supply if used.
- **WHEN MOVING THE POLISHER AROUND THE WORK AREA:** Tilt polisher back on it's wheels by turning the level control clockwise to lift the front of the machine so the accessories do not make contact or strike the slab surface during movement. Damage to accessories may occur with inadvertent contact with the slab.
- **IF THE POWER SOURCE FAILS:** Turn the power switch to the off position. Disconnect the the electrical power source. Raise the polisher off of the floor. Then inspect the accessories for damage. Replace all damaged (or questionable) accessories immediately.
- **BEFORE TRANSPORTING THE POLISHER:** Disconnect the power source before removing any accessory. See the directions for changing accessories on **page 9**.



PROCEDURE FOR INSTALLING AND REMOVING ACCESSORIES



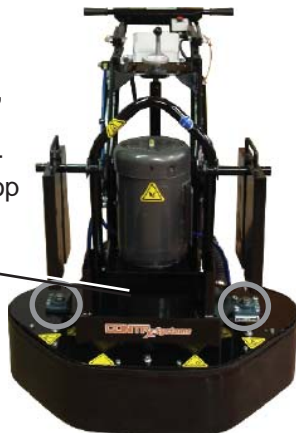
To install an accessory, there are several different types but all install in the same manner. On each of the discs you will see three (3) spring accessory keepers on each disc. As can be clearly seen on the right disc, circled. To install an accessory push down on the spring keeper(s) and slide accessory into holder in direction of white arrows. Repeat for the other positions on this disc and then repeat for the other discs.

To remove an accessory, there are several different types, all are removed in the same manner. To remove an accessory press the spring keeper towards the disc and slide the accessory out. If binding is encountered use a rubber mallet or similar tool to tap it out of the holder.

NOTE: THE ABOVE ILLUSTRATION IS VIEWING THE MACHINE FROM THE FRONT BOTTOM. NOTE THE DIRECTION OF ROTATION AND DISC STYLE. IF DISCS ARE REPLACED AND ACCESSORIES FALL OUT WHEN BEING USED THE DISCS HAVE BEEN INSTALLED INCORRECTLY.

PROCEDURE FOR LUBRICATING FLANGE BEARINGS

Remove two bolts, one on each side of belt cover to access other three top grease fittings not visible.



Five 45° grease fittings facing front of machine behind discs bottom side of machine.



The black hood has grease points for the flange bearings as shown in the photo above left, The grease points are circled in the photo. There are duplicate grease fittings on the underside of the machine in the photo on the right. There are a total of ten (10) grease points, five (5) on top and five (5) on the bottom.

To grease the flange bearings attach the grease gun to the grease fittings 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.

Concrete Polishing with the CONTRx 4 Disc Polisher

Before you start your polisher be sure to check the levelness of the surface you will be working on. First use a level, not the one on the polisher, to check the surface to be worked on. It should be level. If it is not level then adjust the machine so that the level attached to the polisher shown in the upper right photo on page 7 aligns with the level used to check the surface to be worked on. Do not depend on the level on the polisher alone unless the surface you are working on is level. Remember, the polisher has to be on the same plane as the surface being worked on. If the polisher is not on the same plane as the surface being worked on, damage to the diamonds and cutting into the surface will result.

Once you turn on your new polisher, you'll find that the machine practically glides over the floor by itself. Your job is merely to control this glide by slowly swinging it from side to side. Each swing will move your polisher forwards or backwards by about 6", so you're always overlapping your sweeps. The sweep should be about 5 feet wide, and will be determined by what feels comfortable to you.

The key to your motion is consistency and overlapping. Keep the machine in motion at all times so you don't "dig in" by stopping the movement of the polisher while the diamond pads are turning. Your sweeping motion must be slow and steady. You are creating "tooling marks" in the floor that look a lot like old time record albums. If your motion is consistent, the marks will be equally spaced. The correct speed creates marks about 1/8" to 1/4" apart. If the marks open up wider than 1/4", you're swinging the polisher too fast. The finished floor will not have quite the clarity that it should. If the marks are even closer than 1/8", your floor will look good, but you'll spend too much time (and therefore labor expense) to accomplish a floor that is only minimally better.

When polishing a floor, you will create a series of columns by working forwards towards the far wall, then moving over and working backwards towards the front of the room and repeating until the floor is done. You must overlap each column by about 1 foot to blend each new polished column into the preceding one.

Each time you complete a pass of the entire floor, quickly sweep or vacuum the floor and analyze the tooling marks. If they are too wide apart in any areas, just polish these spots again a little slower before changing your diamonds for the next level.

Spend the most time on your first pass. This is when your diamonds are the coarsest, so you are removing the most material. If you don't get imperfections out of the floor with these diamonds, you won't get them out at all. The last passes are usually made with 800 and 1800 grit diamonds and can be done a little quicker than preceding steps.



MAINTENANCE INSTRUCTIONS



1. Disconnect the machine from the power source. All maintenance to be performed by qualified personnel.

2. Never work under equipment without first properly securing the equipment to prevent it from moving, slipping or falling. Always work on a flat and level surface.

3. Grease bearings after every 50 hours of use. Refer to **page 9** for lubrication points.

4. Perform a visual inspection of the entire machine before each operation. Be sure all fasteners are tight and secure, check for signs of metal cracking or fatigue, inspect for damage to electrical wiring, check bearings and inspect to be sure proper guards are in place and secure.

5. Inspect belts before each 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 new belts as a set for maximum power transfer.

To tension the belt, loosen motor mounting hardware slightly. Adjust the motor position towards the back of the machine until the belts are tight. Re-torque the motor mounting hardware, refer to **picture at bottom left of this page**.

Proper belt tension must be maintained to transmit the motor power to the polishing discs. A slipping belt will overheat and polishing speed limited. An over tensioned belt will shorten the belt and bearing life.

6. Before operation, check Disc(s) to be sure they are tight. Disc(s) may loosen with use. Tighten bolts (4 on each disc) as required.

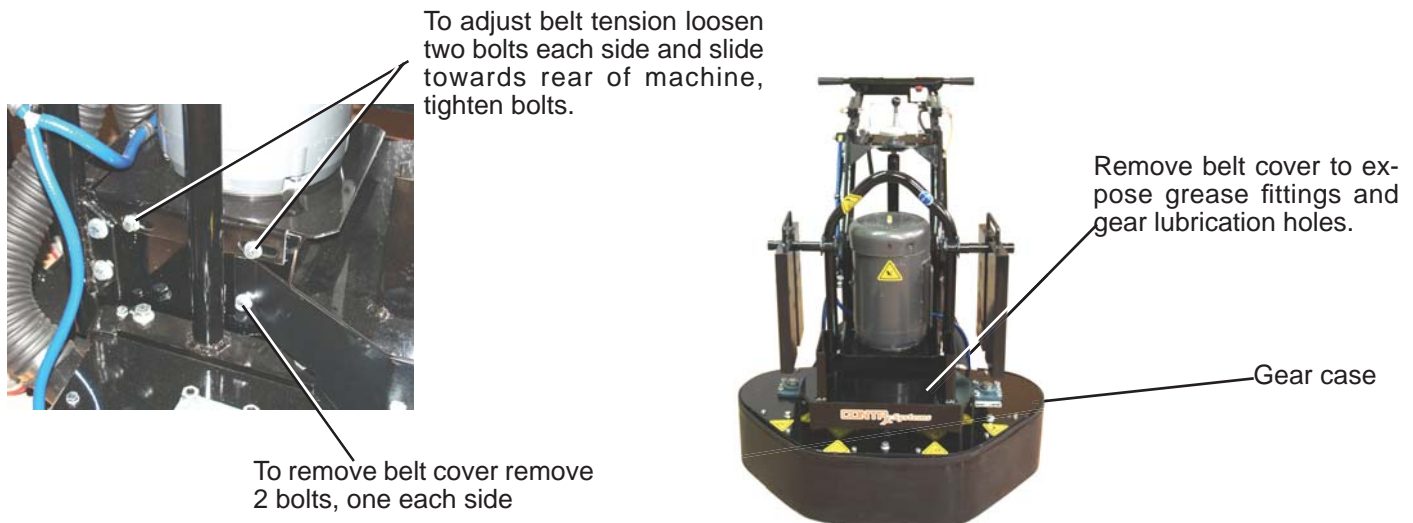
** Gear Case (refer to photo at bottom of this page)

The gear case of your CONTRX polisher has been pre-lubricated at the factory with approximately 3 pounds of lubriplate, No. 630-2 grease. We recommend it's continued use.

Each polisher has inspection holes (see photo below) in the gear case top plate to enable you to check the amount of grease in the case. Remove inspection hole cover with the end of a screwdriver, if grease is visible do not add any. If you cannot see the grease, add a small amount (1 pound is usually more than enough). Do not overfill. The grease in the gear case should last from three to five years before there is any need to refill or add.

Each polisher has flange bearings on top and bottom of the machine. All bearings are self-aligning, sealed units equipped with grease fittings. These bearings should be lubricated every 50 hours of operation with Lubriplate No. 630-2, or other quality bearing grease. DO NOT over lubricate.

An occasional drop or two of oil on the wheel bearings will help prevent binding, this can be accomplished when changing accessories or performing routine maintenance.





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



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

Maintenance Schedule

	Before Operation	Every 4 Hours	Daily	Every 50 Hours of Operation	As Required
Visual Inspection of Entire Machine	X				
Grease Bearings				X	
Inspect Drive Belts	X				
Inspect Polishing Discs	X				
Belt Tensioning					X
Clean Dust & Dirt Off machine					X

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. Sellers 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.

2. PAYMENT TERMS

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% rehandling 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.