

Operators Instruction Manual

2D-HD









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 proceeded 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.

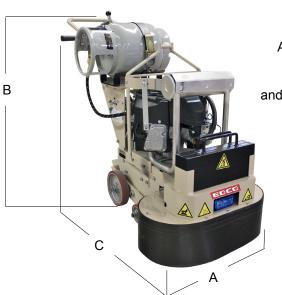


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SPECIFICATIONS

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



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

	Propane	Electric	
"A"	26" 66cm	26" 66cm	
"B"	44" 122cm	40 1/2" 102cm	
"C"	58 1/2" 149cm	47 1/2" 121cm	
	WEIGHT BLOCKS 40 lbs Each 18kg		
Weight	370 lbs. 168kg	330 lbs. 150kg	

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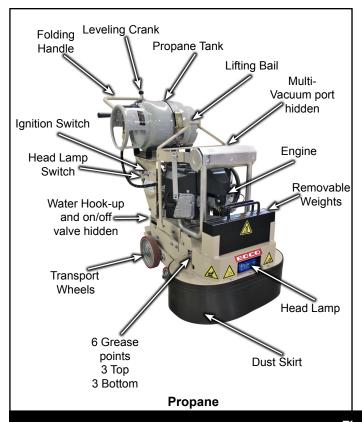


Operating Controls Please Note:

Controls shown are for the model indicated.

The location of these controls may vary on different models.

Due to improvements and changes the illustration shown may vary from your machine.



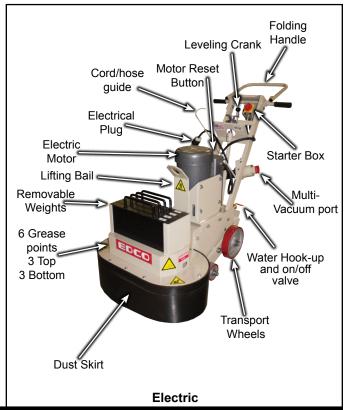


Figure 2

SMI Dust and Silica Warning

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.

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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 grinders and polishers are designed to be used to grind and polish flat horizontal concrete slabs using EDCO approved accessories.
- The machine is equipped with a propane engine or 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 maintenance according to schedule on page 10 of this manual.
- 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 for it's 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 MACHINE: <u>DO NOT</u> lift machine by the operating handle as shown in the
photo below on the left, damage to machine will result, use the lifting bail located above the engine or in front of the
motor mount as shown and circled in the photos below.







• **BEFORE STARTING THE MACHINE:** Turn the hand crank shown (circled) in the photo below counter clockwise to lower the machine and clockwise to raise the machine. Adjust the machine so it is on the same plane (level) as the surface being worked on. Make sure electric clutch switch is in the off position.



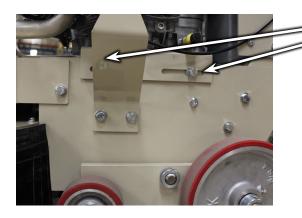
Always maintain machine level with surface. When on a level surface this is easily adjusted by using a bullet level placed on the machine as shown in photo on right.



- START ENGINE: Allow it to warm up. Position the machine at the starting point (see above). Engage electric clutch. 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 engine or motor should not strain. Do not allow machine to sit in one place too long. Damage to the surface or accessories can result.
- START MOTOR: Press green button to start. Raise machine slightly from surface until motor comes up to speed. Return machine
 to level. Press red button to stop.
- 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.
- TO STOP THE MACHINE: (PROPANE) Turn off the water supply when used. Turn off light (if on). Disengage clutch. Turn off
 propane tank. Let propane purge from system. Turn ignition switch off. (ELECTRIC) Turn power switch off.
- WHEN MOVING THE POLISHER AROUND THE WORK AREA: Tilt polisher back on it's wheels 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 ENGINE STOPS:** Turn the ignition switch to the off position. Raise the polisher off of the floor. Then inspect the accessories for damage. Replace all damaged (or questionable) accessories immediately. Level machine, start engine, engage electric clutch and continue polishing.
- **BEFORE TRANSPORTING THE MACHINE:** Stop machine by turning off before lifting or removing any accessory. See the directions for changing accessories on **page 8**.



PROCEDURE FOR ADJUSTING OR REPLACING DRIVE BELTS



NOTE: The following applies to both sides of the machine.

To adjust the drive belt tension loosen two (2) cap screws securing the engine/motor mount to the frame on both sides of the machine.

Slide the engine/motor mount to the rear of the machine to increase belt tension.

Re-tighten the four (4) cap screws loosened earlier maintaining pressure on the engine/motor mount to prevent belt from loosening.

To replace the belts, remove the hood by removing two (2) cap screws, one on each side of the machine. Remove the cover and sit aside.

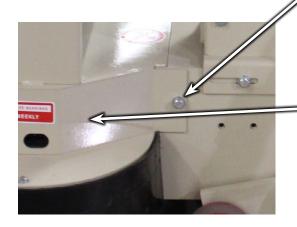
Loosen the four (4) cap screws as in the above step to adjust belt(s) tension and slide the engine/motor mount forward as far as it will go, this will allow enough belt slack for easy belt removal.

Hood covers pinion sheave, belt and flange bearings.

Remove the belt from the <u>engine/motor</u> and <u>pinion shaft</u> sheaves.

Reverse the previous steps to install new belt(s). Slide engine/motor mount towards the rear of the machine and adjust belt tension, re-tighten all four (4) cap screws as explained above. Replace hood and tighten cap screws.

NOTE: New belt(s) should be retensioned after machine has been used for 4 hours.



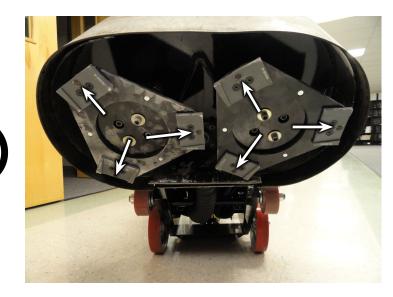


Direction

of

rotation

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 accessory holders there are (3) positions for accessories. To install an accessory slide accessory into holder in direction of white arrows. Repeat for the other positions on this holder and then repeat for the other accessory holder.

To remove an accessory, there are several different types, all are removed in the same manner. To remove an accessory slide towards the center of the accessory holder and out. If binding is encountered use a rubber mallet, not a hammer, to tap it out of the holder.

NOTE: THE ABOVE ILLUSTRATION IS VIEWING THE MACHINE FROM THE FRONT BOTTOM.

PROCEDURE FOR LUBRICATING FLANGE BEARINGS





Three grease fittings circled in photo on left.

Direction

of

rotation

The hood has grease point access for the flange bearings as shown in the photo above left, two holes are located on this side of the machine and one on the opposite. The grease points are circled in the photos above. There are duplicate grease fittings on the underside of the machine in the photo on the right. The skirt will have to be removed to access these grease points. There are a total of six (6) grease points, three (3) on top and three (3) 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.

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MAINTENANCE INSTRUCTIONS



- 1. Disconnect the spark plug wire(s) from the spark plug(s). All maintenance to be performed by qualified personnel. Never service machine while it is running.
- 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 8 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 <u>belts</u> for maximum power transfer.

To tension the belt, loosen engine mounting hardware slightly. Adjust the engine position towards the back of the machine until the belts are tight. Re-tighten the engine mounting hardware, refer to **page 7**.

Proper belt tension must be maintained to transmit the engine 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

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

Each machine has an inspection hole in the gear case top plate to enable you to check the amount of grease in the case. Remove this 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, add or change.

Each machine 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.





Repairs are to be performed by authorized EDCO DEALERS only.



Read and follow all instructions in the Engine/Motor 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 of 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 there of 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, 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. Sellers 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.



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SURFACE PREPARATION, RESTORATION, PROFESSIONAL SAWING EQUIPMENT & HAND HELD TOOLS

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Patents Pending & Issued



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