

Operator's Instruction Manual

TL-9 TURBO-LITE



DIRECT DRIVE Grinder



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EQUIPMENT DEVELOPMENT COMPANY



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 <u>all</u> 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 <u>operators' responsibility</u> 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.



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 associates. 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/OSHA for the material being used.



Grinding/cutting/drilling of masonry, concrete and other materials with silica in their composition may give off dusts 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 repairable 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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SPECIFICATIONS



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

	TL-9
Length	41" 60cm
Width	16 1/2" 24cm
Height	41" 60cm
Head RPM	1690
Weight	81 lbs/37kg
Noise Level	Lwa - 100 dB(A)
Noise Level	Leq - 90 dB(A)
HAV	9.6 M/S ²



OPERATING CONTROLS

PLEASE NOTE:

Due to improvements and changes in the equipment, the illustrations shown may vary from the actual machine.

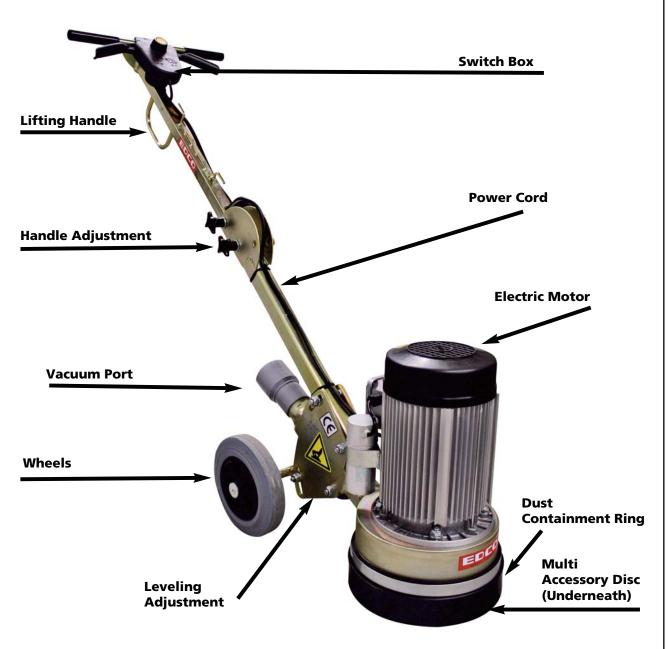


Figure 2



GETTING STARTED WITH YOUR NEW GRINDER

This unit is intended for grinding horizonal, dry floors such as concrete, asphalt or steel surfaces.





LOADING TOOLS:

- 1. Move handle to transport position.
- 2. Lean the machine back on the handle to expose the work area and load the proper tools for your job. Electric machines should be unplugged.

LOADING TOOLS:

Once all tools are in the proper position return the machine to the upright position. Return handle to the operator position and install dust containment ring around head. The machine should only be operated without the dust containment ring when edge grinding near a wall. Remember if you are using tools with PCD's or Strip-serts they have a leading edge and must be loaded as such. Also, remember the disc turns in the direction of arrow decal.

NOTE: The above illustrations are viewing the Machine from the front bottom. **NOTE** the direction of rotation.



GETTING STARTED WITH YOUR NEW GRINDER



LOADING TOOLS:

Return level lock to the operator position.



LOADING TOOLS:

Lean back slightly on the handle to get the tools off the surface and start the machine. Lower the machine to the surface and do a short touch pass on the concrete.



SWING AXLE:

Loosen nut at rear wheel and raise or lower until a complete circle is achieved in a test area on the floor.

Also machine should move freely across the floor and not pull left or right.

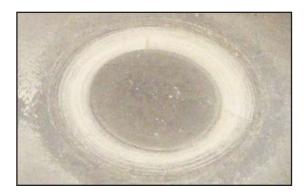


DUST CONTAINMENT RING:

The Dust Containment Ring floats along with the grinder during normal use. Only remove this ring to grind next to walls.



GETTING STARTED WITH YOUR NEW GRINDER



LEVELING:

You are looking for a complete circle.



LEVELING:

If you see a partial circle repeat the process until complete circle is achieved.



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 are designed to be used to grind flat horizontal concrete slabs using EDCO approved accessories.
- The machines are equipped with electric motors.
- They are 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

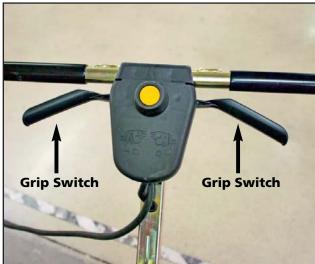
IMPORTANT: Perform Pre-Start Check

- Visually inspect the equipment for wear or damage.
- Be sure all guards are in place and functioning properly. Do not operate unless all guards are in place and secure.
- Perform all daily maintenance.
- 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 grinding operation.
- FOR WET GRINDING: Attach the water supply. A flow rate of approximately 1/2 gallon per minute is recommended.



OPERATING INSTRUCTIONS



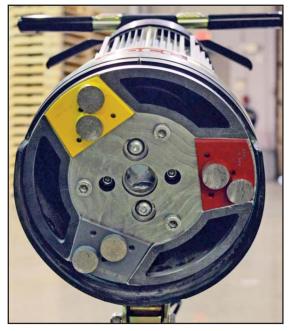


- BEFORE STARTING THE MOTOR: Raise the front of the machine clear of the working surface.
- **STARTING MACHINE**: Depress and hold center button and squeeze either handle grip switch. Hold both until motor comes up to full rpms and then release center button. Squeezing either or both handle grip switchs will keep machine running. Once released, machine will automatically stop.
- START MOTOR AND ALLOW IT TO REACH OPERATING SPEED: Position the grinder at the starting point. Bring the motor to full speed. Lower the machine onto the slab surface. Use a slow sweeping motion from left to right and back continously, and do not force the machine to work, the motor should not strain when grinding.
- FOR DRY GRINDING: Provide a respirator and dust control system.
- TO STOP THE MACHINE: Stop forward motion, tilt machine to raise off of floor. Power release handle grip switch off and let the motor come to a complete stop.
- WHEN MANEUVERING THE GRINDER: Tilt grinder back enough so it dose not strike the slab surface. Damage to accessories may occur with inadvertent contact with slab.
- DO NOT FORCE GRINDER WHILE GRINDING
- **IF THE POWER SOURCE FAILS:** Raise the grinder off of the floor. Disconnect the power source. Inspect the accessories for damage. Replace damaged (or questionable) accessories immediately.
- WHEN TRANSPORTING THE GRINDER: Disconnect the power source before lifting or removing any guards. Remove accessories when transporting.
- WHEN HOISTING OR LIFTING A GRINDER: Always inspect frame and attaching hardware for damage before lifting. Use proper safe hoisting and lifting techniques and hardware. With handle in transport position machine can be lifted like a suitcase if you are physically capable.



ATTACHING A VACUUM / SERVICING HEAD ASSEMBLY







PROCEDURE FOR ATTACHING A VACUUM:

When using a vacuum for dust control attach it to the vacuum port at the rear of the machine as pictured above, securing it with a clamp if necessary.

SERVICING HEAD ASSEMBLY:

To repair or replace morflex bushing remove multi accessory disc to gain access.



FOR USE WITH DYMA-SLIDER SYSTEM



DOUBLE DIAMOND DOTS: General Purpose Grind - Removes general purpose epoxy, mastics, thinsets, water-proofing coatings and more.



SINGLE DIAMOND DOTS: Aggressive Grind - Grinds and removes thick epoxies, weather-proofing membrane and other coatings.



PCD ACCESSORY: Extremely Aggressive Removal - Digs through industrial strength coverings, water-proofing membranes, thick epoxies and much more - Leaves a textured concrete surface.



EDCO ARROW: Hard glue removal, fast coating removal, create smooth surfaces and more.



PEAKS: General Purpose Grind - Smoothes surfaces with fewer scratchs - Ideal for concrete preparation and polishing. Removes thinsets, concrete coatings and more.

Visit edcoinc.com to see all of our Quick-Change Accessories. Accessories are subject to change.



MAINTENANCE INSTRUCTIONS



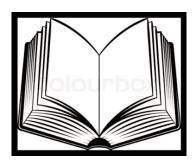
- 1. Disconnect the machine from the power source. Disconnect the supply voltage connector at the machine on electric models before performing any maintenance. All maintenance to be preformed by qualified personnel.
- 2. Never work under equipment without first properly securing the equipment to prevent it from moving or falling. Always work on a flat and level surface.
- 3. 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, and inspect to be sure proper guards are in place and secure.
- 4. Before operation, check grinding discs to be sure it is tight. Grinding discs loosen with use. Tighten bolts as required.

An occasional drop ot two of oil on the wheel bearings will help prevent binding.

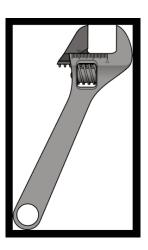


MAINTENANCE SCHEDULE

	Before Operation	Every 4 Hours	Daily	Every 50 Hours of Op- eration	As Required
Visual Inspection of Entire Machine			X		
Inspect Grinding Disc	X				
Clean Dust & Dirt Off Machine					Х



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



Repairs are to be performed by approved EDCO repair technicians



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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, 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 filled 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 safty of others and the life or your machine.



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

100 Thomas Johnson Drive, Frederick, MD 21702

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Patents Pending & Issued

