WARNING GAS CONCRETE FLOOR GRINDERS

Any piece of equipment can be dangerous if not operated properly. **YOU** are responsible for the safe operation of this equipment. The operator must carefully read and follow any warnings, safety signs and instructions provided with or located on the equipment. Do not remove, defeat, deface or render inoperable any of the safety devices or warnings on this equipment. If any safety devices or warnings have been removed, defeated, defaced or rendered inoperable, **DO NOT USE THIS EQUIPMENT!!!**

⚠**WARNING:** Operating, servicing and maintaining this equipment can expose you to chemicals including engine exhaust, carbon monoxide and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize your exposure, avoid breathing exhaust, do not idle the engine except as necessary, operate and service your equipment in a well-ventilated area and wear gloves or wash your hands frequently when servicing your equipment**.** For more information go to **www.P65warnings.ca.gov**

Weight 220 Pounds

Use extreme caution whenever operating, moving, loading or unloading this equipment. During and after operation the Muffler and other components are Extremely Hot and will cause Serious Burns.

Never operate power equipment of any kind if you are tired or if you are under the influence of alcohol, drugs, medication or any substance that could affect your ability or judgment. Be alert! If you get tired while operating this equipment, take a break. Tiredness may result in loss of control.

Provide adequate ventilation when operating this equipment. Internal combustion engines consume oxygen and give off deadly carbon monoxide gas.

DANGER: This equipment has multiple pinch points that can cause dismemberment or death. Keep hands, feet and all other body parts clear at all times.

1. Do not use gas-powered machine indoors.
2. Do not refuel the machine while the engine is running or hot.
3. When installing new grinding wheel, turn off switch and let engine cool engine. NEVER tip machine over or on its side! Be sure wheel is installed securely.
4. Use a respirator or dust mask (carefully read and follow the **SMI Dust and Silica Warning** contained in these instructions) Wear safety glasses and ear protection.
5. Avoid deck inserts, pipes, columns, openings, electrical outlets, and any object protruding from the slab surface.
6. Operate only in a well-ventilated area.

If the person receiving this handout will not be the user of the equipment, forward these instructions to the operator. **If** there is any doubt as to the operation or safety of the equipment. **DO NOT USE!!! CALL A TOOL SHED IMMEDIATELY!!! FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN INJURY OR DEATH**

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.

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.

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

DANGER WARNING

Eye and ear protection must be worn at all times when this machine is in use. During normal use, sound levels exceed 92dB. Use only ANSI approved safety glasses to help prevent eye injury.

Operator must wear appropriate clothing and footwear. Do not wear loose clothing or jewelry that can get tangled in moving parts.

Grinding creates a large volume of airborne dust. The operator must wear an applicable respirator and use a heavy duty vacuum, such as the EDCO VAC-290. The dust may contain chemicals known to cause serious illnesses. The vacuum unit should be capable of filtering particles to less than 1 micron and have the capability to be equipped with a HEPA filter. Check the chemical properties of the material to be removed and follow all EPA/OSHA regulations. **FAILURE TO COMPLY COULD LEAD TO SERIOUS ILLNESS.**

- Keep a safe operating distance from other personnel and never leave the machine running unattended.
- Maintain the machine in safe operating condition with all guards in place and secure, all mechanical fasteners tight, all controls in working order and the grinder configured for the job application.
- The TG-10 Turbo Grinder is to be operated by a properly trained and qualified operator from a position at the rear of the machine.
- Inspect the disc carefully before installing. Do not use **any** damaged disc since serious personal injury and/or damage to the equipment can result.
- Never operate the TG-10 Turbo Grinder if under the influence of drugs, alcohol or when taking medications that impair the senses or reactions, or when excessively tired or under stress.
- Be sure all safety decals on the machine can be clearly read and understood. Replace damaged or missing decals immediately.

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.

DANGER

Exhaust from this engine contains Carbon Monoxide, an invisible, odorless gas that can kill. In addition, it contains chemicals known, in certain quantities, to cause cancer, birth defects or other reproductive harm.

Operating Instructions

Before Operating:

- **Visually inspect machine:**

  - Verify all guards are in place and fasteners are tight.

  - Check engine oil level (gasoline/propane models).

  - Inspect power cord for damage and check for proper grounding (electric models).

- **Inspect disc assembly:**

  - Check discs for damage or wear.

  - Check mounting hardware.

  - Check belt tension after first 4 hours of use with factory new equipment or after installing new belts.

- **Inspect the work area:**

  Inspect work area carefully before starting to grind. EDCO will not be held responsible for damage to the discs caused by striking protruding slab inserts, nails, screws, pipe extensions, machinery bases, or other objects that transmit sudden shocks.

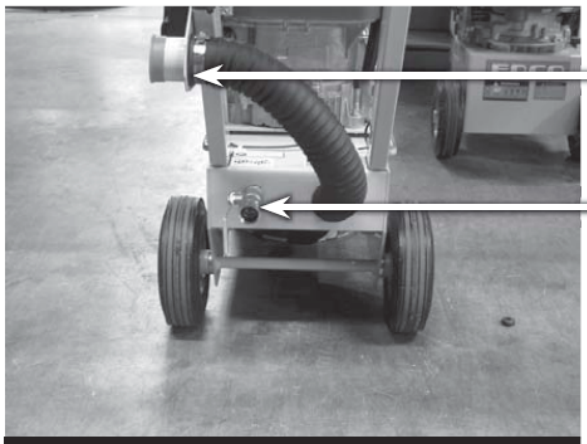

Figure 2

- **If dry grinding:**

  - Hook up heavy-duty vacuum.

- **If wet grinding:**

  - Attach hose to water supply.
  - NOTE: Do not use dry vacuum when wet grinding.

Important Reminder!

A water mist system or an industrial vacuum ***must*** be used while operating this equipment and the operator must wear a respirator. Failure to comply could lead to serious illness and possible death.

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

Gasoline Models: (11 HP Honda Engine)

To Start the Engine:

- Tilt the machine back slightly to allow the disc to clear the slab surface.
- Start the engine according to the directions in the engine manufacturer's Owner's Manual.

NOTE: If during operation refueling becomes necessary, allow the engine to cool down. NEVER refuel a hot engine.

To Stop the Gasoline Model:

- Tilt the machine back slightly to allow the disc to clear the slab surface.
- Turn the engine off.

To shut off the engine -
Press and hold the Emergency Stop Button
(Figure 3)

Figure 3

Wet Grinding:

- In the wet grinding stage - water is fed from a standard garden hose into a ball valve cut off, then into a nozzle that sprays over the disc assembly. *(Figure 4)* Use the ball valve to regulate the flow of water to the disc.


Figure 4

CAUTION

Only use enough water flow to reduce dust. Excess water flow will create clean up problems and could cause a hazardous walking area.

WARNING

Always use dust control when using this product, vacuum or water mist.

Dry Grinding:

Dry Grinding creates a large volume of airborne dust. For health reasons, the operator should wear an applicable respirator. The dust may contain chemicals known to cause serious illnesses, including Silicosis - a fatal disease of the lungs. Check the chemical properties of the material to be removed and follow all EPA/OSHA regulations.

- An Industrial vacuum, capable of handling high volume of fine dust,such as the VAC - 290 *(Figure 5)*, should be used when dry grinding with this machine. If the material being used is hazardous or contains Silica - the vacuum unit should be capable of removing Respirable Silica and hazardous particles of less than 1 micron and if necessary, have the capability to be equipped with a HEPA filter.

  Most standard vacuum drum type units use a paper bag filter. The dust created during grinding is extremely fine and will clog the filter bag of these units and eventually damage the vacuums motor. In addition, damage to the TG-10 engine could occur.


Figure 5

- The collected debris and filters should be disposed of according to procedures that comply with current EPA/OSHA standards.

Controlling the Grind:

- Grinding discs are **extremely** aggressive. It is important to **KEEP THE GRINDER MOVING IN A SIDE-TO-SIDE MOTION,** do not let the grinder stay in one spot, even for a few seconds, or the surface will be damaged. When grinding is completed, tilt the machine back and shut off the power.

- To achieve a smooth "polished" surface, complete the grinding operation with an EDCO dual disc unit using grinding stones or dyma serts.

- To remove a light coating, move the grinder quickly. For heavier removal, move the grinder more slowly.

- Keep the grinding disc flat - do not attempt to grind against vertical surfaces. Be sure the machine is in the correct operating position. (See *Figure 6* below..)

Figure 6

Discs:

- Inspect the disc (*Figure 8*) periodically to determine it's wear characteristics, if signs of uneven wear appear the cause should be determined and corrected. If repairs are needed contact EDCO or your EDCO representative.

- ***Rigid Head*** can be used on uneven expansion joints, high spots, joint curls and bridge decks, removing coatings and grinding rough concrete surfaces. Use with a vacuum or water for dust control but not the same time.

- ***Flex Head*** can be used preparing a smooth, flat floor to receive a new coating, removing coatings, grind rough concrete surfaces. Can be used with a vacuum or water for dust control but not the same time.

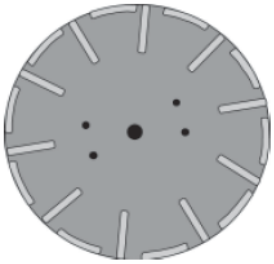

Figure 8

Disc shown is for reference only.

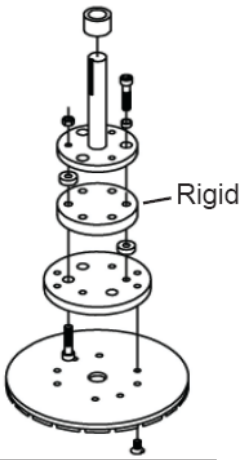

Figure 9

Standard RIGID HEAD

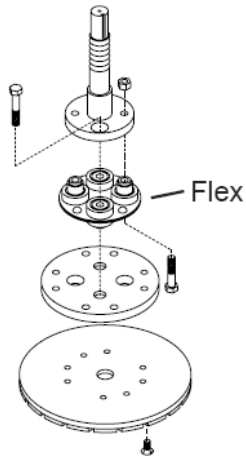

Figure 9A

Optional FLEX HEAD

- Each new machine is shipped with a RIGID HEAD (FLEX HEAD OPTIONAL) 10"/255 mm factory balanced disk. It is important to maintain the coupling to which the disk is attached. A worn coupling, damaged bearings or a bent shaft will cause the grinding discs to wear unevenly. (*Figure 9 rigid head assembly & 9A* flex head assembly.) It is important to note FLEX HEAD for smooth flat surfaces, RIGID HEAD for buckled, bumpy or rough surfaces.