

## **WARNING**

### **GAS and ELECTRIC 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!!!**

1. Electrically operated equipment must be grounded at all times. Check outlet box or point of entry to be sure grounded service is available.
2. Do not use frayed, taped, or undersized extension cords.
3. Motor is equipped with thermal protection. This device will stop the motor when temperature becomes too high, **DO NOT** attempt to re-set until motor cools. Locate reason for over-heating and correct before continuing to use equipment.
4. Do not use more than 50ft of extension cord with this machine.
5. Do not use gas-powered machine indoors.
6. Do not refuel the machine while the engine is running or hot.
7. When installing grinding stones or diamond inserts, turn off switch or engine and disconnect electrical cord from the grinder. Be sure accessories are installed securely.
8. 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.
9. Avoid deck inserts, pipes, columns, openings, electrical outlets, and any object protruding from the slab surface.
10. Operate only in a well-ventilated area.

### **GASOLINE POWERED UNITS**

**⚠️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](http://www.P65warnings.ca.gov)

### **ALL UNITS**

**⚠️WARNING:** Operating, servicing and maintaining this equipment can expose you to chemicals including Chromium (Hexavalent Compounds) & Chromium 6 (Chromium VI) from concrete which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize your exposure, avoid breathing dust. For more information go to [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov)

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 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.

# Operating Controls

## Please Note:

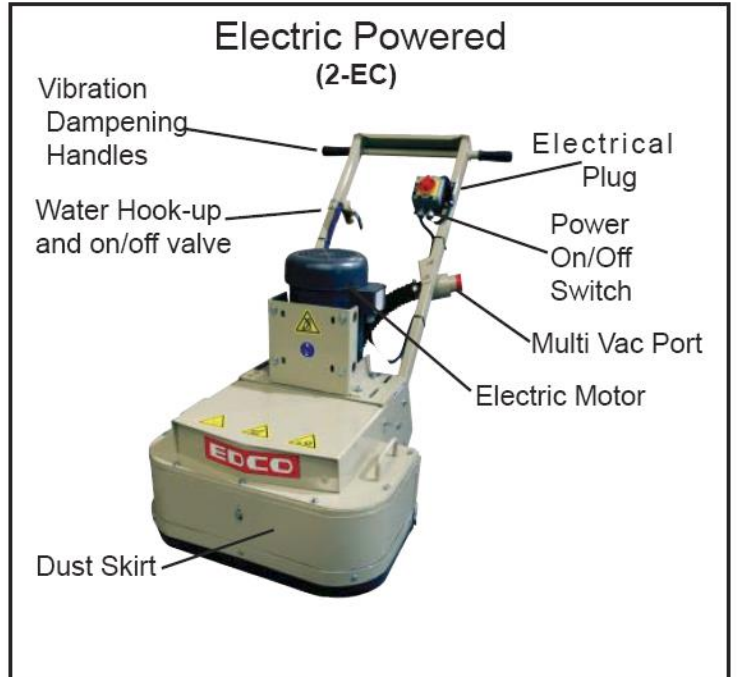
Controls shown are for the model indicated.

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.



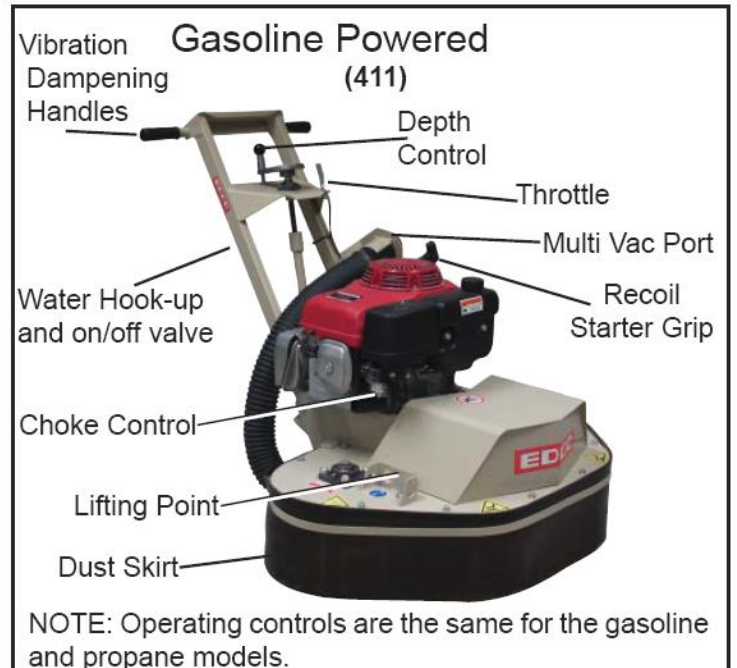
**Figure 2**



**Figure 3**



**Figure 4**



**Figure 5**



## 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 grind flat horizontal concrete slabs using EDCO approved accessories.
- The machines are equipped with gasoline engines and 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.
- Check to be sure water tubes are functioning properly if performing wet-grinding operations.
- Inspect accessories - Be sure the correct accessory is installed properly on the machine mounting arrangement and its intended use.
- Check accessories for damage (see figure 6, below), the type of wear or damage will vary with the type if 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.
- **BEFORE STARTING THE ENGINE:** Raise the front of the machine clear of the working surface.
- **START ENGINE AND ALLOW IT TO REACH OPERATING SPEED.** Position the grinder at the starting point. Bring the engine to full speed. Lower the machine onto the slab surface. Use a slow sweeping motion from left to right and back continuously, and do not force the machine into the work, the engine or motor should not strain when grinding.
- **WHEN WET GRINDING:** 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.
- **FOR GASOLINE MODELS:** Put the engine stop switch in the “**RUN**” position. Consult the engine manufacturers operating instructions and follow the directions for starting and breaking in the engine.
- **TO STOP THE MACHINE:** Stop forward motion. On gasoline models push the throttle to idle. Turn ignition or power switch off and let the engine come to a complete stop. Turn off the water supply.
- **WHEN MANEUVERING THE GRINDER:** Tilt grinder back enough so it does not strike the slab surface. Damage to accessories may occur with inadvertent contact with the slab.
- **DO NOT FORCE GRINDER WHILE GRINDING.**
- **IF THE POWER SOURCE FAILS:** Raise the grinder off of the floor. Disconnect the power source (i.e. the spark plug wire on a gasoline engine). Inspect the accessories for damage. Replace damaged (or questionable) accessories immediately.
- **WHEN TRANSPORTING THE GRINDER:** Disconnect the power source before lifting or removing any guard.
- **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.

## SMI DUST AND SILICA WARNING

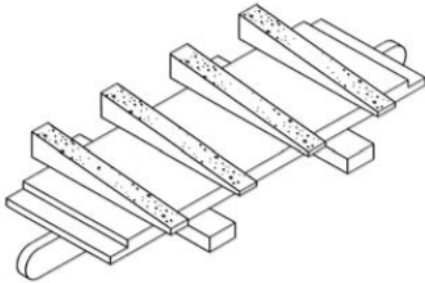
Grinding/cutting/drilling of masonry, concrete, metal and other materials can generate dust, mists and fumes containing chemicals known to cause serious or fatal injury or illness, such as respiratory disease, cancer, birth defects or other reproductive harm. If you are unfamiliar with the risks associated 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.

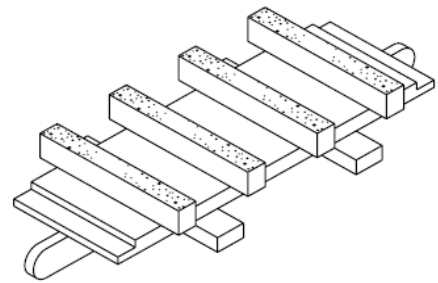
Grinding/cutting/drilling of masonry, concrete and other materials with silica in their composition may give off dust or mists containing crystalline silica. Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Repeated and/or substantial inhalation 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.

### EXAMPLE OF SEVERELY WORN DYMA-SERT



The above is an example of a DYMA-SERT that has not been rotated after every four hours of use. To get maximum life out of a DYMA-SERT they should be rotated 180° every four hours of use.

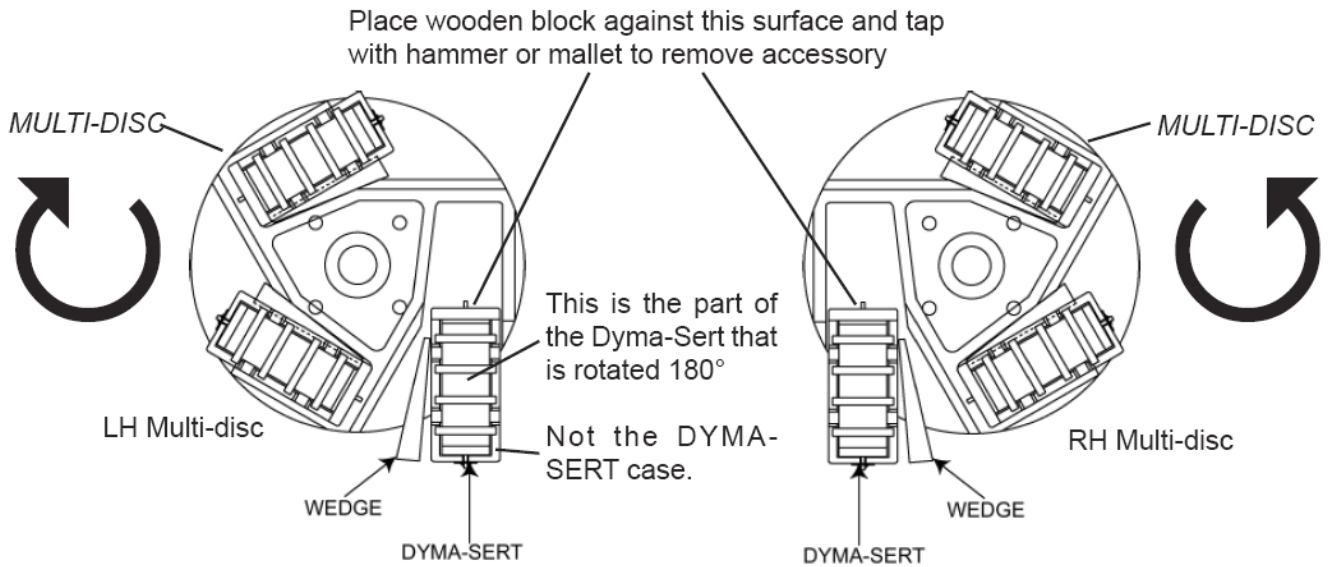
### EXAMPLE OF AN EVENLY WORN DYMA-SERT



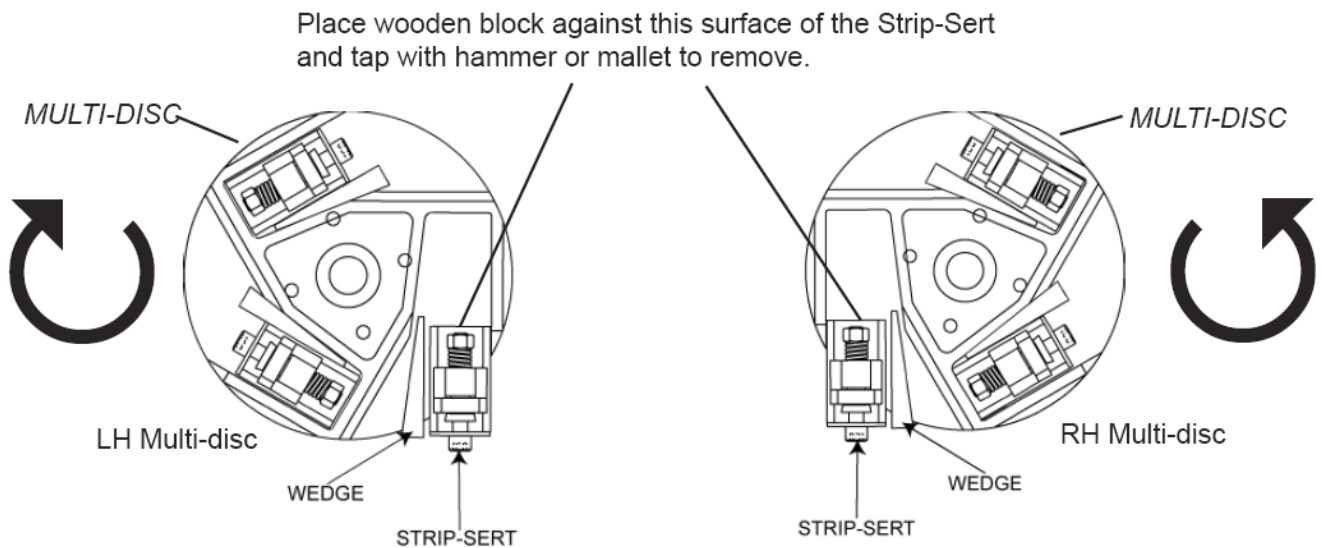
The above is an example of a DYMA-SERT that has been rotated after every four hours of use as you can see the wear is even across all segments.

**Figure 6**

# PROCEDURE FOR INSTALLING AND REMOVING ACCESSORIES



To install an accessory, there are several different types but all install in the same manner, use a brass rod or similar malleable material to drive the wooden wedge into place as shown in the above and below illustrations, note on which side of the accessory the wooden wedge is positioned (near center of disc). Never mix worn or used accessories with new ones. It will cause vibration and an uneven work surface. Replace accessories in complete sets, never mix sets.



To remove an accessory, there are several different types, all are removed in the same manner, use a wooden block as explained in the above illustration. Never hammer directly on any accessory, damage to the self adjusting system will result and the accessory will have to be replaced.

**NOTE: THE ABOVE ILLUSTRATIONS ARE VIEWING THE MACHINE FROM THE FRONT BOTTOM. NOTE THE DIRECTION OF ROTATION AND *MULTI-DISC* STYLE. IF DISCS ARE REPLACED AND INSERTS FALL OUT WHEN BEING USED THE DISCS HAVE BEEN INSTALLED INCORRECTLY.**