

## **WARNING CONCRETE PLANER**

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!!!**

**DANGER ELECTROCUTION & EXPLOSION HAZARD: Never use with water or in Wet Locations. Never use in Hazardous (Explosive) Locations. Electrical Requirements: Single Phase 30-Amps 230-Volts 60-Hertz Cord & Plug: 50-Amp Temporary Power Style Plug with 6 Gauge Wire Cord**

### **IMPORTANT SAFETY RULES TO FOLLOW**

**⚠ 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)

### **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.

Before Starting the Machine:

- Perform a visual inspection of the entire machine.
- Locate and be familiar with all motor and operating controls.
- Use the correct cutters for the job. Be sure cutter drum is balanced, the number, size and type of cutter wheels are correct and the cutter drum shaft is locked and secured.
- Be sure all fasteners are tight and secure, check for signs of metal cracking or fatigue, inspect for damage to bearings, etc.
- Be sure all guards are in place. Do not operate unless cutter drum guard is in place and secure.
- 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 operation.

**DO NOT GRIND MORE THAN 1/8" AT A TIME.**

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 operating 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

**WARNING** 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.

#### GENERAL INSTRUCTIONS

• 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.

• 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/Motor Manufacturer's Owner's Manual before operating this equipment.

Death or serious injury can result if this machine is used improperly.



**DANGER** **WARNING**

#### Safety Guidelines



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. Everyday eyeglasses have only impact resistant lenses; they are NOT safety glasses.



Operator must wear appropriate clothing and footwear. Do not wear loose clothing or jewelry that can get tangled or caught in moving parts. Steel toe safety shoes should be worn.

• 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 machine configured for the job application. Be sure all safety decals can be clearly read and understood. Replace damaged or missing decals immediately.

• The CPM-4-8-10 and Scanline-8 Planers are designed to plane flat, horizontal concrete or asphalt slabs. They may be called Planers, Mills, Grinders or Scarifiers and may be equipped with gasoline, propane engines or electric motors. They are designed to be operated by a single operator from a position at the rear of the equipment.

• Keep a safe operating distance to other personnel in the area and never leave the machine running unattended.

• Avoid deck inserts, pipes, columns, openings, electrical outlets, or any objects protruding from slab surface.

• Never operate this machine while under the influence of drugs, alcohol or when taking medications that impair the senses or reactions, or when excessively tired or under stress.

#### For Electric Models:

**DANGER** Electric motors must be properly grounded at all times. Check the outlet box to be sure the electrical service is properly grounded. Be sure adequate power is available. Insufficient power will cause a motor to overheat and burn out. Use only grounded extension cords correctly sized for the current draw and voltage drop (amp rating and length). Never use frayed, damaged, taped or under-rated extension cords. Electrical shock could result in death or serious injury to the operator and damage to the equipment.

#### For Gasoline Models:

Poisonous exhaust gas. Do not operate gasoline or propane powered equipment without adequate ventilation. Carbon monoxide is an invisible, odorless gas that can kill. NEVER REFUEL A HOT ENGINE OR A RUNNING ENGINE WHILE IT IS RUNNING. Only refuel a cool "stopped" engine in a well ventilated area. Properly clean any spilled fuel before starting the engine.

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

## Operating Instructions

- |   |   |
|---|---|
| 1. Cutter Head Lever                      | 7. Water Hook Up  |
| 2. Depth Control Knob                     | 8. Fuel Tank *  |
| 3. Emergency Stop Tether (CPM-10)         | 9. Emergency Stop Switch Lanyard (CPM-10) *                               |
| 4. Cushioned Handles                      | 10. Easy Lift Handle  |
| 5. Ignition Switch (Position will vary) * | 11. Fuel Lockoff Solenoid Toggle (For Propane Models Only. (Not Shown) *) |
| 6. Throttle Control *                     |   |

\* Not on Electric models

NOTE: Controls are similar on all models.

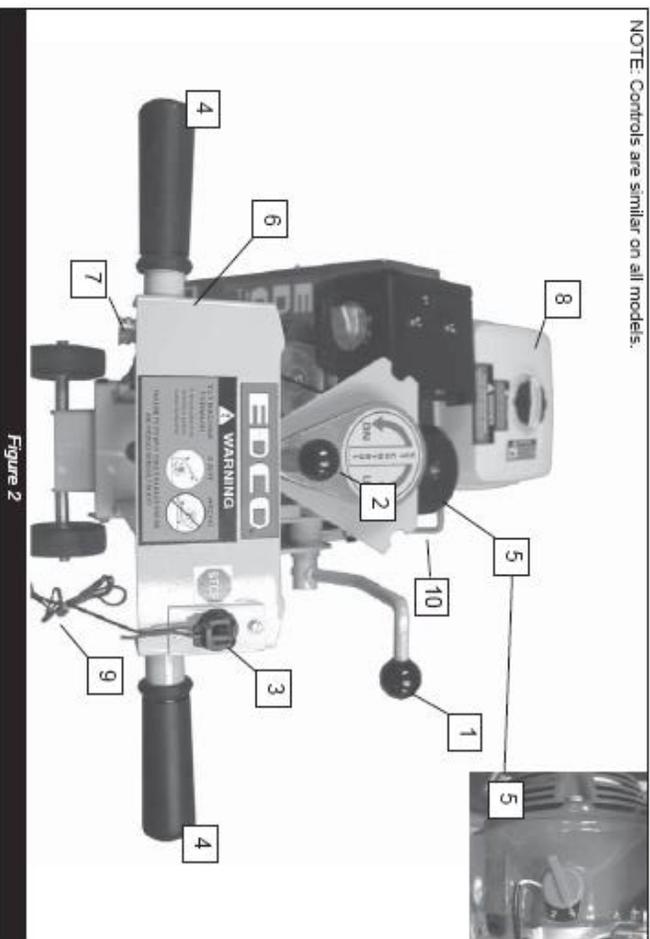


Figure 2

## !!! IMPORTANT CUTTING NOTE !!!

### Starting the Cut:

- Slowly lower the cutter head to the slab surface with the cutter head lever. (Figure 2, Item 1) & (Figure 4)
- Rotate the Depth Control down until you hear the cutters contact the slab. Once contact is made lower the machine an additional 1/8" for the initial pass. Additional passes can be made in 1/8" increments to a maximum depth of 3/8". Cutting more than 1/8 per pass could result in damage to the drum and machine.
- Use an Industrial Vacuum Dust Control System for dry planing operations.
- Optional water hookup also available.

### To Stop Cutting:

- Move cutter head control lever to raise cutter head assembly above slab surface.
- For gasoline and propane models, close throttle and turn the ignition switch to the "OFF" position.
- For electric models, depress the "OFF" button.

### After Cutting:

- At the end of the day, clean the entire machine after it has cooled. Check for worn or damaged cutters and perform any required maintenance. See Maintenance Schedule and Instructions on page 13.
- If water was used for dust control - - - clean slurry under machine before it dries.

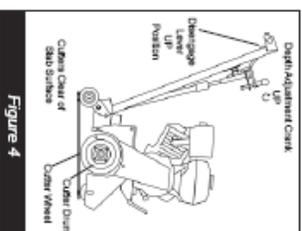


Figure 4

## Cutting Heads / Drums:

- Drum assembly revolves at approximately 1200-1800 R. P. M.; Model CPM-10 is a "down-cut" planer, Model CPM-8 is a "down-cut" planer, and ScariLife-8 is a down-cut planer, Model CPM-4 is an "up-cut" planer. Depth of cut is completely determined by the material to be cut, horsepower of the engine/motor and spacing of the cutter wheels on the cutter head.
- All cuts should be started from a stationary position - when the cutting depth is reached the planer should then move forward.
- The engine/motor should not labor. Run at full speed and adjust forward speed to fit the work being performed. Very hard concrete will have to be cut at a slower pace than asphalt or deteriorated surfaces.
- If it is necessary to make deep cuts - make several shallow cuts to achieve the desired depth. If the cutting depth is set too deep the cutter wheels will not be able to absorb the shock and damage to the equipment will result.
- The cutter wheels have an oversized arbor hole. This "play" is needed to absorb some of the shock of the cutter contacting the concrete.
- Cutting speed is directly proportional to the amount of material to be removed in one pass; an example - cutters spaced on 1" centers will penetrate to a greater depth than those spaced at 1/2" centers, and the planer will move forward faster. Most of the material in the path of the cutting head will be removed either by the cutters themselves or through the natural hammering action and spalling of the material being cut. A later pass with cutters spaced closer together will remove the ridges.

## To Reach Maximum Depth in Concrete:

- It is best to make several passes - increments of 1/32-1/8" or even less if surface is extremely hard.
- Use coarse (wide spacing) for initial passes. Complete job with medium spacing. Never use a fine spaced cutter head to cut deeper than 1/32-1/8".
- Some concrete slabs, especially if they are covered with water a good deal of time or if they have been treated with hardeners, develop an extremely high surface strength.
- Material removal depth should not exceed 1/32-1/8" per pass thus requiring several passes to reach the desired depth of cut.

## To Cut Asphalt:

- This surface can be easier to penetrate than concrete. In some instances depths of 1/4" per pass can be achieved with the larger machines. In general though, 1/8" per pass is still standard and should be maintained until the hardness of the asphalt is determined.

Note: Specific information on asphalt cutting is available upon request.

## Fine Cutting:

- This assembly should be used for very shallow or cleaning operations. Check with dealer for special outter wheels for removal of paint build-up or similar surface coatings.

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 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 3 microns and if necessary, have the capability to be equipped with a HEPA filter. • Most standard 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 machine engine/motor could occur. The collected debris and filters should be disposed of according to procedures that comply with current EPA/OSHA standards.