

Before Starting the Machine:

- Perform a visual inspection of the entire machine and all daily maintenance according to the *Maintenance Schedule* on page 19.
- Locate and be familiar with all engine/motor and operating controls .
- For Gasoline models, obtain the *Engine Manufacturer's Owner's Manual*. Read it and understand it before continuing. Follow the engine manual for break-in instructions.
- 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 electrical wiring, damage to fuel lines, check 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.

Starting the Engine/Motor:**For Electric Models:**

- Be sure the "ON/OFF" rotary cam switch is in "OFF" position.
- Hook up the correct voltage/phase electrical power source by plugging into the connector provided. If the cord does not mate with the connector, consult a qualified licensed electrician before continuing.
- Verify that the electrical current being supplied is the proper voltage and phase required to run the equipment.
- Check motor rotation. Cutter drum rotation on the model CPM machines is "down cut." DO NOT use if drum rotation is incorrect - have a qualified electrician make the necessary change in the main control panel or motor connection box.

CAUTION**For Gasoline Models:**

- Consult the *Engine Manufacturer's Owner's Manual* and follow the directions for starting the engine and allow the engine to warm up.

DANGER

DO NOT operate gasoline/propane powered equipment without adequate ventilation. Carbon monoxide is an invisible, odorless gas that can kill.

**Lanyard Kill Switch (CPM-10 Only):**

- The CPM-10 comes equipped with a lanyard kill switch. The operator should attach the snap hook around his wrist or to his belt. If control of the machine is lost the hook will pull free and release from the stop switch, immediately stopping the machine.



CUTTING

Starting the Cut:

- Slowly lower the cutter head to the slab surface with the cutter head lever. (Figure 2, Item 1) & (Figure 4)
- Lift the knob of the Depth Control to unlock and turn the hand wheel slowly until the cutter head contacts the slab (you will hear the sound of the cutter wheels contacting the slab). Continue adjusting the depth of cut until the desired depth is reached; max depth of cut 3/8" (9.5 mm).
- Use an Industrial Vacuum Dust Control System for dry planing operations.
- Optional water hookup also available.

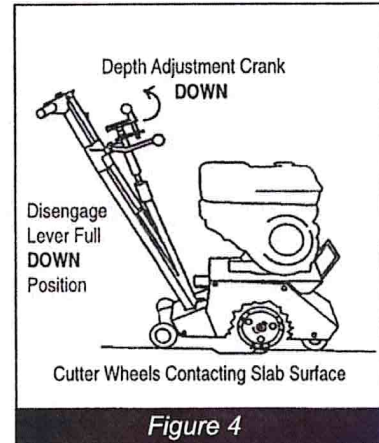


Figure 4

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 page 19 and Instructions on page 17.
- If water was used for dust control - - - clean slurry under machine before it dries.

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 ScariLite-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 and allow the cutter to "rebound" from the surface.
- 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 the 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 cutter wheels for removal of paint build-up or similar surface coatings.