





Cable Application Chart (Table 1)

Cable Size	Pipe Size	Typical Applications	Max. Capacity
1/2"	3" to 4"	Roof Stacks and Small Floor Drains (No roots)	75 ft.
3/8"	2" to 3"	Roof Stacks, Laundry Lines & Small Drains	75 ft.
*5/16"	1-1/2" to 2"	Sinks, Basins & Small Drains	50 ft.
*1/4"	1-1/4" to 2"	Small Lines, Tubs & Shower Drains	50 ft.

*The 1/4" and 5/16" diameter cables are for use with the J-Drum and Dual Drum.

Cutter Application Chart (Table 2)

Cutter	Cat. #	Typical Applications
Cutters for 3/8" and 1/2" Cables		
Arrow Head	 AH	Starting tool, ideal for cutting and scraping.
Boring Gimlet	 BG	Starting tool, to remove loose objects.
1-1/2" U-Cutter	 1-1/2UC	Finishing tool, works well in grease stoppages.
2" Side Cutter Blade	 2SCB	Finishing tool, for scraping inside edges of pipe.

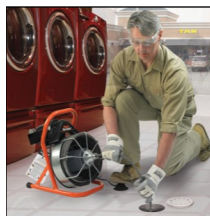
Note: There are no fixed rules for what cutter to use. If one tool does not take care of a stoppage, simply try another.

OPERATING INSTRUCTIONS

Set-Up



- Place machine within approximately two feet (.6m) of drain opening. If you can't place the machine this close to the drain opening, run the cable through a metal guide tube to prevent cable whipping.
- Position the foot pedal for easy accessibility. The machine is designed for one-person operation. Be sure you can quickly remove your foot from the pedal in an emergency.
- Be sure the motor switch is in the **off** position.
- Select the proper cutting tool (See Cutter Application Chart—Table 2). A good tool to start with is the Arrow Head or Boring Gimlet. After the line is opened, follow with larger blades, which scrape the inside edges of the pipe, assuring a real cleaning job.
- Insert the cutter into the female connector at the end of the 3/8" or 1/2" cable and tighten the connecting screw and lock washer *firmly* in place.

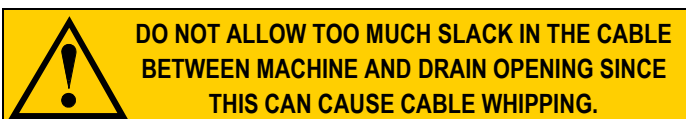


Operation

- Begin by pulling the cable from the drum/cage and sliding it into the drain as far as it will go.
- Move the motor switch to the **forward** position.
- With both hands (wearing *leather* gloves) on the cable, depress the air foot pedal to start machine.
- Feed the cable into the line and against the obstruction with a firm, even pressure. Adjust the feeding rate to the resistance met. Do not force the cable – let the cutter do the work. The job won't get done any faster and you could damage the cable.

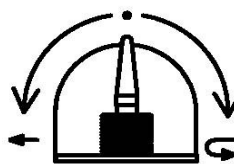
**DO NOT USE TOO MUCH FORCE –
LET THE CUTTER DO THE WORK.**

- Don't leave too much slack in the cable since this will cause whipping. If the cable starts to bend or build up too much twist, release pressure on the foot pedal and rotate the drum in the opposite direction to relieve the twist on the cable. Push any excess cable back into the drum and then continue.



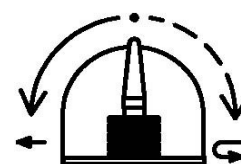
- If you're having trouble getting around tight bends, try putting the machine in reverse while applying steady pressure. (If using Power Cable Feed, putting motor in reverse will cause the feed control lever to operate opposite of normal.) Note: If your machine is equipped with a momentary contact reverse switch, you must hold the switch in position when operating the machine in reverse.

MOTOR SWITCH



FORWARD - OFF - REVERSE

MOMENTARY CONTACT SWITCH



FORWARD - OFF - HOLD to REVERSE

Don't run motor in reverse for more than a few seconds at a time as this could cause tangling in the drum or kinking.

- If you still can't get around the bend, you're probably using too large a cable. Switch to a 3/8" diameter cable, or even a smaller one if necessary. (See Cable Application Chart—Table 1)
- When the cable reaches the stoppage, allow the cable to progress forward slowly, chewing into the stoppage as it goes. This slow forward movement will reduce stress on the cable while doing a more thorough cleaning job. A back and forth action often works best.

Hint: It's often helpful to have a small stream of water running in the line to wash the cuttings away while the machine is in operation and after.

9. Be careful not to let the cutter get caught in the stoppage as you work through it. This can cause kinking and breaking of the cable. When you feel the cable starting to twist in your hands, stop the machine and pull back on the cable. This will free the cutter from the obstruction. Then allow the cable to move forward slowly into the stoppage. Remember, no cutting takes place when the blades stop turning.
10. After the line has been opened, retract the cable. Make sure the motor switch is in the **forward** position. This is important to prevent the cable from tangling in the drum or in the line.



11. When the cutter is near the drain opening, take your foot off the pedal to stop drum rotation. Never retract the cutter from drain while cable is rotating. The cable could whip and cause serious injury.