

Cutter Application Chart (Table 2)

Cutter	Cat. #	Typical Applications
Cutters for 5/8" and 3/4" Cables		
Spear Head 	SHD	Starting Drill—gets water flowing.
2" U-Cutter 	2UC	For Cutting and Scraping
3" & 4" Side Cutter Blades 	3SCB & 4SCB	For Cutting—Scraping walls of pipe.
3" Heavy Duty Saw Blade 	3HDB	For Cutting Roots
4" Rotary Saw Blade 	4RSB	For Cutting Roots
Large Retrieving Tool 	RTR-2	For removing loose objects or broken cables.
26" Flexible Leader 	LE-3	Helps cable get through tight traps and bends.

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

OPERATION

SET-UP



MAKE SURE THE MOTOR SWITCH IS IN THE 'OFF' POSITION!

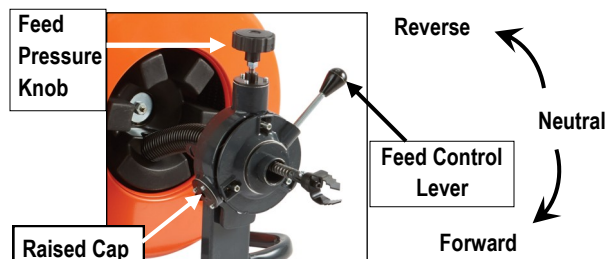
- Be sure the motor switch is in the **off** position.
- Place machine at a distance not greater than two feet (.6 m) from the drain opening. Be sure the Speedrooter Guide Tube (S92-GT) is in place. If you can't get the machine this close to the drain opening, run the cable through the optional Guide Tube Extension (GTE) or a metal guide tube to prevent cable whipping.
- Position the air 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.
- Lock the wheels by lifting the brake handle located next to the left wheel and pressing it into the clip.



- Make sure the Power Cable Feed is set to match the cable size you have selected. If you're using 3/4" or 5/8" cables, the feed should be assembled with the raised side of the lower two caps outward. If you are using 9/16" cables, the feed should be assembled with the raised side of the caps inward.
- Select the proper cutting tool (See Cutter Application Chart—Table 2). A good tool to start with is the Spearhead or 2" U-Cutter. If you are having difficulty getting around a P-Trap or close bend, try the flexible leader. After the line has been 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 cable and tighten the connecting screw and lock washer **firmly** in place.

OPERATION

- Place the Guide Tube, with cable and cutter protruding from the end, securely into the drain opening.
- Tighten the knob at top of the Power Cable Feed so that the feed roller presses against the cable. Be sure not to over tighten since this could cause excess cable wear.
- The feed lever controls the feeding rate and direction of the cable. Move the lever down to feed cable out of drum. The further the lever is moved downward, the faster the cable will feed out. Move lever up to retract cable into drum. When the lever is in the middle (neutral) position, cable will spin in place.



- Move the motor switch to the **forward** position.
- With a gloved hand on the Guide Tube, depress the air foot pedal to start machine. Feed the cable into the line. Adjust the feeding rate to the resistance met. **Do not force the cable** - let the cutter do the work. The job won't go any faster and you could damage the cable.
- If the cable starts to buckle or twist, release pressure on the foot pedal. Move feed lever up and step on the foot pedal to relieve the twist and retract excess cable back into the drum, then continue.
- If you cannot get the cable around a bend, you may be using too large of a cable. Switch to a smaller cable or a smaller machine. (See Cable Application Chart – Table 1)
- When the cable reaches the stoppage, move the feed lever toward neutral to 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 motion 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, stop the machine and retract the cable. This will free the cutter from the obstruction. Then allow the cable to move forward slowly into the stoppage.
10. After the line has been opened, retract the cable by moving the feed lever up. Make sure the motor switch is in the **forward** position.
11. When you hear the end of the cable near the drain opening, take your foot off the pedal to stop drum rotation. Never retract the cutter from the drain while cable is rotating. The cable could whip and cause serious injury. Do not retract cutter into Guide Tube.



DO NOT USE REVERSE TO PULL THE CABLE OUT OF THE DRAIN. RUNNING MACHINE IN REVERSE CAN CAUSE THE CABLE TO TANGLE IN THE DRUM.

SPECIAL OPERATIONS

IF CABLE GETS CAUGHT IN LINE

The motor can be reversed for a few seconds at a time to free the cable if it gets caught in line. (Note: if using Power Cable Feed, putting motor in reverse will cause the feed control lever to operate opposite of normal.)

1. Move motor switch to the reverse position.
2. Step on the foot pedal while retracting on the cable.
3. After cable is loose, move motor switch back into forward position.



DO NOT RUN MOTOR IN REVERSE FOR MORE THAN A FEW SECONDS AT A TIME SINCE THIS COULD CAUSE THE CABLE TO KINK OR TANGLE IN THE DRUM.

IF CABLE TANGLES IN DRUM

This can be caused by using too much pressure, running the machine in reverse, or a poorly lubricated or frozen roller in the feed. To untangle the cable, rotate the drum in the opposite direction (See Feed Maintenance). This will usually get the cable to lie in the drum properly.

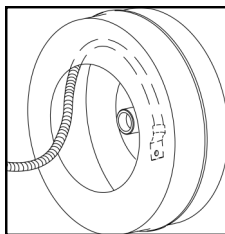
If the cable has become badly tangled, which shouldn't occur if used properly, it may be necessary to pull the entire cable out of the drum and reinstall it. (See "How to Install Cable" section.)

HOW TO INSTALL CABLE IN DRUM



DISCONNECT MACHINE FROM POWER SOURCE BEFORE INSTALLING CABLE IN DRUM!

1. Connect the male end of the cable to the drum connecting cable already attached to the drum.
2. Remove the V-Belt.
3. Be certain that the cable goes into the drum as shown in the illustration, or the cable will tangle in the drum.
4. Replace the V-Belt after cable is installed.



NOTE: The cable must lay in the drum in the correct direction or it will tangle in the drum.

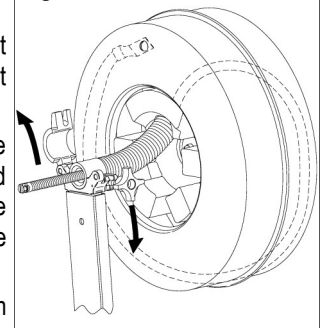
HOW TO REMOVE DRUM



DISCONNECT MACHINE FROM POWER SOURCE BEFORE REMOVING DRUM!

1. Remove belt guard by loosening the knob above the motor and pulling the guard forward.
2. Push the motor down far enough to slide the V-Belt off the drum.
3. Remove the cutter and connecting screw from the cable end.
4. Loosen the knob at the top of the Power Cable Feed.
5. Unscrew the knob behind the front post and pull the Power Cable Feed off the machine.
6. With one hand on the cable, loosen the knob on the front post cap, then open clamp. The Flexitube may spring up out of the clamp. (See Figure 1.)
7. Tip the Speedrooter on its side, opposite to the brake handle.
8. Remove the drum retaining bolt and washers with 3/4" socket with extension.
9. Stand behind the machine, lift the frame slightly off the ground, and slide the frame away from the drum until the drum is off the shaft.
10. Then, roll the drum away from the machine.

Figure 1



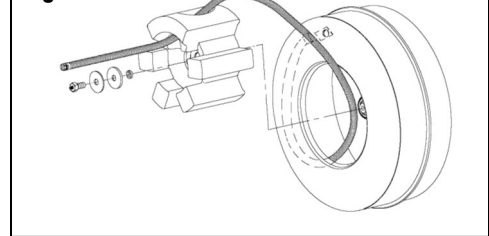
HOW TO INSTALL DRUM



DISCONNECT MACHINE FROM POWER SOURCE BEFORE INSTALLING DRUM!

1. To install the inner drum, pull approximately 12 inches of cable from the drum. Grease the inner drum bushing. Slide the cable through the hole in the inner drum as shown in Figure 2. Slide the inner drum onto the drum hub bushing.

Figure 2



2. Lay the machine frame on its side and roll the drum, with inner drum installed, between the front post and drum shaft. Be sure the front of the drum is facing the front post.
3. While standing behind the frame, line the drum shaft up with the hole in the back of drum, slightly lift the frame, and slide the drum shaft into the back of the drum until the drum contacts the thrust washer on the shaft. Make sure the needle roller bearings inside the hub of the drum stay in place.
4. Make sure that the three washers are still on the drum retaining bolt and thread the bolt into the drum shaft, just finger tight.
5. Stand the machine upright, then tighten the retaining bolt with a 3/4" socket with extension.