

Cutter Application Chart (Table 2)

Cutter	Cat. #	Typical Applications
Spearhead 	SHD	Starting tool, ideal for cutting and scraping.
2" U-Cutter 	2UC	Starting tool, to remove loose objects.
3" Heavy Duty Side Cutter 	3HDSC	Finishing tool, for scraping inside edges of pipe.
3" Heavy Duty Saw Blade 	3HDB	Cutting roots and heavy stoppages.
Retrieving Tool 	RTR-2	To remove loose objects and broken cables.

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

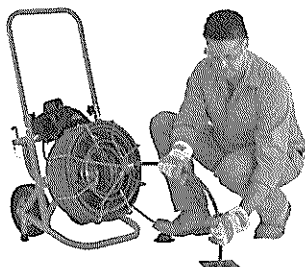
Operating Instructions

Set-Up



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

- Place machine at a distance not greater than two feet (.6m) from the drain opening. If you cannot get the machine this close to the opening, run the cable through a hose or pipe to prevent cable whipping. Always keep a gloved hand on the cable.
- 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 Spear Head or 2" U-Cutter. 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 cable and tighten the connecting screw and lock washer **firmly** in place.



Operation

- Loosen the thumb screw at the front of the cage and pull the cable out of the cage, then put it into the drain until it will not go any farther. Pull another foot of cable out of the cage so that an arc is formed between the machine and drain. Tighten the thumb screw on the front of the cage firmly against the cable.
- Put the motor switch in the **Forward** position. Then, with both leather-gloved hands on the cable, step on the foot pedal. Guide the cable into the line with a firm, even pressure.

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

- Do not leave too much slack in the cable since this will cause whipping. If the cable starts to bend or build up too much twist,

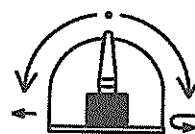
release pressure on the foot pedal and rotate the cage in the opposite direction to relieve the twist on the cable. Push any excess cable back into the cage and then continue.



DO NOT ALLOW TOO MUCH SLACK IN THE CABLE BETWEEN MACHINE AND DRAIN OPENING SINCE THIS CAN CAUSE CABLE WHIPPING.

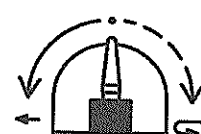
- When the slack cable has been fed into the drain, stop the machine by taking your foot off the pedal. Loosen the thumb screw and pull another foot of cable from the cage. Tighten the thumb screw and continue feeding. Repeat the procedure until the drain line has been cleared.
- If you are having trouble getting around bends, try putting the machine in reverse while applying steady pressure. 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

Do not run motor in reverse for more than a few seconds at a time since this could cause tangling in the cage or kinking.

- If you still cannot get around the bend, you are probably using too large a cable. You may need to switch to a smaller machine (See Cable Application Chart).
- After the line is opened, return the cable to the cage with the motor turning **Forward**. This is important to prevent tangling the cable in the cage or in the line.



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

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

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.

Special Operations

IF CABLE GETS CAUGHT IN LINE

The motor can be reversed to free cable if it gets caught in the line. Use the following procedure:

- Tighten thumb screw at front of cage firmly against cable.
- Move toggle switch on motor to reverse position. 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.
- Wearing leather gloves, pull on cable while the cage is turning in reverse.
- When the cable is freed, loosen thumb screw and slide excess cable back into cage.

5. Move the toggle switch to the forward position again, and continue at Step 3 of the Operating Instructions.



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 CAGE.

IF CABLE TANGLES IN CAGE

This is almost always caused by using too much pressure when feeding the cable or by feeding the cable while running the machine in reverse. To untangle, rotate cage in opposite direction. If cable has become badly tangled, which will not happen when machine is used properly, it may be necessary to pull the entire cable out of the cage and re-install it (See "How to Install Cable").



DISCONNECT MACHINE FROM POWER SOURCE BEFORE INSTALLING CABLES OR CAGES!

HOW TO INSTALL CABLE IN CAGE

1. Connect male end of cable to the cage connecting cable already attached to cage.
2. Remove V-Belt.
3. Turn cage clockwise with one hand while pushing cable into cage with other hand.
4. Be sure cable goes into cage in clockwise direction as you look at the front of the machine or cable will tangle in cage.
5. Replace V-Belt after cable is installed.

NOTE: The cable should lay in the cage in a clockwise direction.



HOW TO EXCHANGE CAGES

1. Unscrew ring bolt in center of cage.
2. Lift belt guard off motor.
3. Push motor down far enough to slip V-Belt off.
4. Tilt Easy Rooter on its back and lift cage off of shaft.
5. Reverse procedure to install cage.

MAINTENANCE



DISCONNECT MACHINE FROM POWER SOURCE BEFORE PERFORMING MAINTENANCE!

To keep your machine operating smoothly, it is essential that all bearings and distributor tube bushings be lubricated. Oiling moving parts is particularly important where machine comes in contact with sand, grit and other abrasive material.

CABLE MAINTENANCE

To get maximum service from your cables, be sure that they are clean and well oiled. This not only provides running lubrication but greatly extends the life of the cables as well. Some users periodically pour oil directly into the cage. Then, as the cage turns, the cables get complete lubrication. Our SNAKE OIL is ideally suited for this purpose, since it not only lubricates the cables, it deodorizes them as well.



TANGLED CABLE: If a cable loops over itself in the cage, it will not feed properly. Remove and reload the cable to restore function. If the cable kinks, it is evidence of abuse and results from the use of too much pressure or use of the wrong size cable for the line. Do not force the cable — let the cutter do the work.

TROUBLE SHOOTING GUIDE (TABLE 3)

Problem	Probable Cause	Solution
Cable kinking, tangling or breaking.	Cable is being forced.	Do not force the cable! Let the cutter do the work.
	Cable used in incorrect pipe diameter.	See Cable Application Chart.
	Motor switched to reverse.	Use reverse only if cable gets caught in pipe — only for a few seconds at a time.
	Cable exposed to acid.	Clean and oil cables regularly.
	Cable worn out.	Cable can be repaired using "Quick Fix" or "Repair Sleeve." If cable has broken several times, replace it.
Cage stops while foot pedal depressed. Restarts when pedal is re-depressed.	Hole in pedal or hose.	Replace damaged component.
	Hole in diaphragm switch.	If no problem found with pedal or hose, replace diaphragm switch.
Cage turns in one direction but not other.	Faulty reverse switch or momentary contact switch.	Replace switch. Note: Momentary contact switch must be held in position when using reverse.
Ground Fault Circuit Interrupter trips when machine is plugged in or when foot pedal is depressed.	Frayed power cord.	Replace cord set.
	Short circuit in motor.	Take motor to authorized service center (Call General for Details).
	Excess moisture in area.	Remove excess moisture from area.
	Faulty Ground Fault Circuit Interrupter.	Replace Ground Fault Circuit Interrupter.
Motor turns but cage does not.	Slip clutch slipping because cable is being forced.	Do not force cable. Do not allow too much slack between cable and machine.
	Slip clutch is worn.	Replace slip clutch.

See pages 22 and 23 for parts list and schematic diagram.