Operating Instructions



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Tool Set Up

AWARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Rotation Switch of the tool to its "OFF" position and unplug the tool from its electrical outlet before assembling or making any adjustments to the tool.

TO PREVENT SERIOUS INJURY:

DO NOT OPERATE WITH ANY GUARD DISABLED, DAMAGED, OR REMOVED.



Wear ANSI-approved safety goggles, heavy-duty LEATHER workgloves, and other appropriate protective equipment when setting up your Drain Cleaner. For extra protection from chemicals and bacteria on the machine and in the work area, we recommend wearing latex, rubber or other liquid barrier gloves under the heavy-duty work gloves. Before use, inspect gloves to be sure they are free

of defects or loose sections that could be caught in the Drain Cleaner. Rubber soled, non-slip shoes can help prevent slipping and electric shock, especially on wet surfaces.

TO PREVENT SERIOUS INJURY FROM ELECTRIC SHOCK, TWISTED/BROKEN CABLES, CHEMICAL BURNS, INFECTIONS AND OTHER CAUSES AND PREVENT DRAIN CLEANER DAMAGE:
Before each use, inspect Drain Cleaner and correct any problems.

- Once the Drain Cleaner is assembled, check the device and cutters for any signs of wear and damage. If necessary, replace worn or damaged parts prior to using the drain cleaning machine. Dull or damaged cutting tools can lead to binding, cable breakage, and slow the drain cleaning.
- 2. Verify Drain Cleaner is unplugged and inspect the power cord, Ground Fault Circuit Interrupter (GFCI) and plug for damage. If the plug has been modified, is missing the grounding prong or if the cord is damaged, to avoid electrical shock, do not use the machine until the cord has been replaced by a qualified electrician.
- 3. Clean any oil, grease or dirt from all equipment handles and controls. This helps prevent the machine or control from slipping during use.
- 4. Verify Foot Switch is attached to Drain Cleaner.
- Verify Drain Cleaner is properly assembled.
 Inspect the machine for broken, worn, missing, misaligned or binding parts or any other condition which may prevent safe and normal operation.
- 6. Make sure that switches and handles move smoothly between positions and lock in place, and that the bumpers at the bottom of the handle are present and firmly attached.

- 7. Rotate the drum and make sure that it turns freely without binding.
- 8. Check that all warning labels are present, firmly attached and readable.
- 9. Make sure Belt Guard is securely fastened to the Drain Cleaner.
- Check the cable for any wear and damage.
 If any section of the cable is worn or flattened, replace cable before use.
- 11. Verify cable does not have multiple or excessive kinks (greater than 15°). Kinks weaken the cable and can cause cable failure. Replace any cables that have multiple or excessively large kinks.
- 12. Look for spaces between the cable coils. Kinking, stretching (pulling cable by hand) or running the cable in reverse can deform the cable. Cables with spaces between the coils should be replaced.
- 13. Check for signs of excessive corrosion. Corrosion weakens the cable, making it brittle. This can be caused by storing the cable wet or using the cable with corrosive chemicals (often found in chemical clog removers). Excessively corroded cable should be replaced.

- 14. Before use, fully retract the cable with no more than 2" of cable outside of the machine. This will the keep the cable from "whipping" when the machine is turned on.
- 15. Set the Rotation Switch to the OFF position.
- 16. With dry hands, plug cord into properly grounded outlet and move the Rotation Switch into the Forward position.
- 17. Move Feed Lever to exactly between F and R settings, otherwise cable will start moving in or out during this test.
- 18. Press the Foot Switch and note the direction of rotation of the drum. If the Foot Switch does not control the Drain Cleaner's operation, do not use the machine until the Foot Switch has been repaired.
- 19. The drum should rotate clockwise when seen from the front of the drum. It will match the drum direction shown on the warning label and the arrow on the drum. If the rotation is not correct, do not use the machine until it has been repaired.
- 20. After inspection, set the Rotation Switch to OFF, dry off your hands, and unplug the Drain Cleaner.
- 21. Once you've verified that the Drain Cleaner is in good working order, inspect the work area where you will be using the machine.

Work Area Set-Up

- 1. Verify that work area has adequate lighting for the job.
- Make sure work area is free of flammable liquids, vapors or dust that may ignite. Sparks can be generated during Drain Cleaner operation.
 Do not work in area until these sources of ignition have been identified and corrected.
- Choose a firm, stable location for the machine and operator that will remain relatively dry.
 Do not use the machine while standing in water.
 If needed, remove the water from the work area.
- Verify the electrical outlet is properly grounded.
 A three-prong or GFCl outlet may not be properly grounded. If in doubt, have outlet inspected by a licensed electrician.
- Make sure there is a clear, unobstructed path from the Drain Cleaner to the electrical outlet.
- 6. Inspect the drain to be cleaned. If possible, determine the best access point(s) to the drain, the size(s) and length(s) of the drain, distance to tanks or mainlines, the nature of the blockage, presence of drain cleaning chemicals or other chemicals, etc.
- If there are chemicals present in the drain, read and adhere to the specific safety measures required to work around those chemicals.
 Contact the chemical manufacturer for required safety instructions and information.
- If necessary, remove fixture (toilet, sink, etc.) to allow access to the drain. Do not feed the cable through a fixture. This could damage the Drain Cleaner and the fixture.
- Determine the correct drain cleaning cable size for the drain cleaning job.
 See Cable/Pipe Size chart below.

Cable Size	Pipe Size	Typical Applications
1/2" (included)	2" to 4"	Roof stacks and small floor drains (no roots)
3/8"	1-1/2" to 3"	Roof stacks, laundry lines and small drains (no roots)

- If needed, place protective covers over the work area floor. Cleaning the clogged drain can be a messy operation.
- 11. Make sure that the Drain Cleaner handle is locked into the upright position for transport. If the Drain Cleaner needs to be lifted, use proper lifting techniques or seek assistance if needed. Use caution when moving equipment up and down stairs. Wear appropriate footwear to help prevent slipping on floor.

- Set the Drain Cleaner so that the drum opening is within 2 feet of the drain access.
 The greater the distance from the drain access, the higher the risk of the cable twisting or kinking.
- 13. If the machine cannot be placed with the drum opening within 2' of the drain access, use appropriate-sized pipes and fittings to extend the drain access back to within 2' of the drum opening. Improper cable support can allow the cable to kink and twist and can damage the cable or injure the operator.
- If needed, set up barriers to keep bystanders away from the Drain Cleaner and work area during operation.
- Select proper cutting tool.
 (See Cutting Tool Accessories on page 9).
- 16. Install the tool to the end of the cable. Slide the base of the Cutter Tool into the slot at the end of the cable. Fasten together using a screwdriver.
- Position the Foot Switch for easy accessibility. You must be able to hold and control the cable, control the Foot Switch, and reach the Rotation Switch.
- 18. Confirm that the Rotation Switch is in the OFF position.
- Run the cord along the clear path. With dry hands, plug the Drain Cleaner into a properly grounded outlet. Keep all connections dry and off the ground.
- 20. If the power cord is not long enough, use an extension cord that is in good condition and has a three prong plug similar to the one supplied on the Drain Cleaner. Keep the connection off the ground to prevent it from accidentally getting wet.
- 21. Also verify that the extension cord is rated for outdoor use and contains a W or W-A in the cord designation (i.e. SOW).
- 22. Verify the extension cord has sufficient wire size (16 AWG for 50' or less, 14 AWG for 50' – 100' long). Undersized wires can overheat, melting the insulation or causing a fire or other damage.
- 23. When using an extension cord, the GFCI on the Drain Cleaner does not protect the extension cord. If the outlet is not GFCI protected, use a plug-in type GFCI between the outlet and the extension cord. This will reduce the risk of shock if there is a fault in the extension cord.

OPERATION

Manual Feed Operation

AWARNING

TO PREVENT SERIOUS INJURY FROM TWISTED OR BROKEN CABLES, CABLE ENDS WHIPPING AROUND, MACHINE TIPPING, CHEMICAL BURNS, INFECTIONS, ELECTRIC SHOCK AND OTHER CAUSES:

Follow operating instructions for your model explicitly.

Since drains likely contain hazardous chemicals or bacteria, wear appropriate protective equipment, such as:

- · ANSI-approved splash-resistant safety goggles and respirator under face shield.
- Latex, rubber or other liquid barrier gloves under heavy-duty LEATHER work gloves.
 <u>Do not use a glove you are not currently wearing or a rag to hold the rotating cable.</u> Cloth materials can tangle in the rotating cable, leading to serious personal injury. Before use, inspect gloves to be sure they are free of defects or loose sections that could get caught in Drain Cleaner.
- · Rubber soled, non-slip shoes to help prevent slipping and electric shock.
- 1. Position the Drain Cleaner two feet from the drain.
- Position the Drain Cleaner so that you can operate Foot Switch while having one hand on cable at all times. This will keep cable from hazardously "whipping" when activating the Drain Cleaner. Also, make sure Rotation Switch on top of Drain Cleaner is within reach.

<u>WARNING!</u> Only one person should feed cable and operate Foot Switch. Do not operate Drain Cleaner with one person controlling cable and another person controlling Foot Switch. This can cause cable to kink, twist, or break, which can also lead to serious personal injury.

- 3. Make sure Rotation Switch is in Forward position.
- With the Drain Cleaner off, pull the cable out of drum and feed into the drain. Gradually work the cable as far into the drain as it will go.
- 5. Step on the Foot Switch and continue feeding cable into the drain.

6. As you feed cable, you may feel and see cable slow down and/or start to wind or load up (a "twisting" or "squirming" motion). This may indicate a change in drain line (such as a drain trap, elbow, etc.), a build up in the drain (mud or grease), or the actual blockage. Continue to slowly feed the cable until the cable reaches the blockage.

<u>WARNING!</u> Do not allow cable to build up outside drain. This can cause cable to twist, kink or break. When working with larger sewers or septic tanks, minimize the amount of cable fed to prevent kinking and knotting of cable.

7. If the cable becomes lodged in a narrow part of the drain or in a drain trap, allow the cable to try and work itself past the obstruction. If cable still won't pass obstruction, release pressure from the Foot Switch and use sharp downward thrusts to try and pass obstruction. Once cable is past, press the Foot Switch and continue feeding.



NOTICE

Rotation Switch controls rotation of drum only. DO NOT USE ROTATION SWITCH REVERSE POSITION WHILE REMOVING CABLE FROM PIPE. Use reverse direction only <u>momentarily</u> for relieving pressure or untangling cable from a blockage.

Warranty void if cable damaged from allowing motor to twist excessively against blockage, or if drum is run in reverse long enough to unwind cable.

Working Through a Blockage

 If cutting tool becomes lodged in blockage and Drain Cleaner is still operating, the cable will start to wind up or twist. If so, immediately turn off, let tension release, and then pull back on cable to free cutting tool from the drain blockage. If cable cannot be freed by pulling back, <u>briefly</u> turn the motor on in REV setting to free the tool.

<u>WARNING!</u> Do not keep cable rotating if tool is lodged in a blockage.

If tool stops turning and drum keeps rotating, cable can twist, kink, break, or tangle in the drain.

- Once tool is free of blockage and is turning again, slowly feed rotating cutting tool back into blockage.Do not force tool through blockage.
- Allow the spinning and cutting to break up and work its way through the blockage.

<u>CAUTION:</u> While working through the blockage, the tool and cable can get clogged with debris and cuttings from blockage, preventing further cleaning. The cable and tool will then need to be retrieved from drain and the debris removed. See "Retrieving the Cable" section.

If Cutting Tool Lodges in Drain:

 If cutting tool stops turning and cable cannot be pulled from blockage, release Foot Switch while holding cable with both hands.

<u>WARNING!</u> Do not remove hands from cable or cable may kink, twist and break.

The Drain Cleaner motor will stop and cable and drum will turn backwards until tension in cable is released.

<u>WARNING!</u> Do not remove hands from cable until all the tension is released.

3. Place Rotation Switch in OFF position.

Freeing Lodged Cutting Tool

- Release Foot Switch and turn the Rotation Switch to OFF position.
- Pull back on the cable to free it from the blockage. If the tool will not come free, place the Rotation Switch in Reverse position.

3.

<u>WARNING!</u> Do not operate Drain Cleaner in Reverse for any longer than is needed to free the cutting tool from blockage (for no more than several seconds at a time).

- Hold the cable with both gloved hands, press the Foot Switch for several seconds, then release, and pull on the cable until it is free of the blockage.
- 5. Place the Rotation Switch in the Forward position and continue cleaning the drain.

Retrieving Drain Cleaner Cable

 Once the drain is clear, turn on the faucet or use a hose to flush the debris out.

NOTE: Pay attention to the water level. There could be blockages farther down in the drain.

<u>WARNING!</u> Do not pull cable from drain while cable is still rotating. Cable end can whip around, causing serious injury.

- Pull the cable from the drain by hand and feed into the Drain Cleaner until the cable is a couple of feet from the drain opening.
 A flow of water down the line will help to clean the cable as it is retrieved. (If necessary, change the cutting tool and continue cleaning.)
- Set the Rotation Switch to the OFF position, dry your hands, and unplug the machine before removing end of cable from drain and returning it to the drum.



NOTICE

Rotation Switch controls rotation of drum only. DO NOT USE ROTATION SWITCH REVERSE POSITION WHILE REMOVING CABLE FROM PIPE. Use reverse direction only momentarily for relieving pressure or untangling cable from a blockage.

Warranty void if cable damaged from allowing motor to twist excessively against blockage, or if drum is run in reverse long enough to unwind cable.