



# Electric Drain Cleaner - CE50

## User Manual

[Revision 2.0 February 2018]




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READ THIS MANUAL CAREFULLY BEFORE USE – FAILURE TO DO SO MAY RESULT IN INJURY, PROPERTY DAMAGE AND MAY VOID WARRANTY. • KEEP THIS MANUAL FOR FUTURE REFERENCE. • Products covered by this manual may vary in appearance, assembly, inclusions, specifications, description and packaging.

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# Safety

Safety messages are designed to alert you to possible dangers or hazards that could cause death, injury or equipment or property damage if not understood or followed. Safety messages have the following symbols:

 You <b>WILL</b> be KILLED or SERIOUSLY INJURED if you do not follow instructions.	 You <b>CAN</b> be KILLED or SERIOUSLY INJURED if you do not follow instructions.	 You <b>CAN</b> be INJURED if you do not follow instructions or equipment damage may occur.
<p>It is important that you read and understand the instruction manual before use and keep the manual in a safe place for future reference. Safety information presented here is generic in nature – some advice may not be applicable to every piece of equipment.</p> <p>All safety precautions must be observed to reduce the risk of personal injury when operating the equipment.</p> <p>The term "equipment" refers to your product, be it electrical mains, battery or petrol engine powered.</p> <p><b>IMPORTANT</b> – Handle the equipment safely and carefully.</p> <p><b>BEFORE USE</b> - If you are not familiar with the safe operation/handling of this equipment, or are in any way unsure of any aspect of suitability or correct use it for your application, you should complete training conducted by a person or organization qualified in safe use and operation of this equipment, including fuel/electrical handling and safety.</p> <p><b>WARNINGS</b></p> <ul style="list-style-type: none"> <li>• Read all safety warnings and all instructions. Failure to follow warnings and instructions may result in electric shock, fire and/or serious injury.</li> <li>• Never run a combustion engine in confined areas.</li> <li>• Do not operate the equipment in flammable or explosive environments, such as in the presence of flammable liquids, gases or dust. Engine and equipment may create sparks or heat that may ignite vapours, dust etc.</li> <li>• Keep clear of moving parts.</li> <li>• This equipment may be a potential source of electric shock if misused.</li> <li>• Do not operate the equipment if it is damaged, malfunctioning or is in an excessively worn state.</li> <li>• Do not allow others to use the equipment unless they have read this manual and are adequately trained.</li> <li>• When using the equipment, basic safety precautions detailed here must always be followed to reduce the risk of fire, electric shock, personal injury and material damage.</li> <li>• When wiring electrically powered equipment, follow all electrical and safety codes.</li> <li>• Ensure all power sources conform to equipment voltage requirements and are disconnected before connecting equipment.</li> </ul>	<p><b>General Work Area Safety</b></p> <p>Work areas should be clean and well lit.</p> <p>Do not operate the equipment if bystanders, animals etc. are within operating range of the equipment or the general work area.</p> <p><b>Personal Safety</b></p> <p>Keep packaging away from children - risk of suffocation! Operators must use the equipment correctly. When using the equipment, consider conditions and pay due care to persons and property.</p> <p>Prevent unintentional starting of the equipment - ensure equipment and power source switches are in the OFF position before connecting or moving the equipment. Do not carry equipment with hands/fingers touching any controls. Remove any tools or other items that are not a part of the equipment from it before starting or switching on.</p> <p>Stay alert and use common sense when operating equipment. Do not overreach. Keep proper footing and balance at all times. Do not use equipment when tired or under the influence of drugs, alcohol or medication. This equipment is not intended for use by persons with reduced physical, sensory or mental capabilities.</p> <p>You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. Always wear eye protection. Protective equipment such as respirators, non-skid safety shoes, hard hat, hearing protection etc. should be used for appropriate conditions. Other people nearby should also wear appropriate personal protective equipment. Do not wear loose clothing or jewellery, which can be caught in moving parts. Keep hair and clothing away from the equipment.</p> <p>If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.</p> <p><b>General Equipment Use and Care</b></p> <p>Do not force the equipment. Use the correct equipment for your application. The correct equipment will perform better and be safer within its design parameters. Do not use the equipment if the ON/OFF switch malfunctions – any equipment that cannot be controlled with the ON/OFF switch is dangerous and must be repaired.</p>	<p>Use the equipment and accessories etc. in accordance with these instructions, taking into account working conditions and the work to be performed. Using the equipment for operations different from those intended could result in hazardous situations.</p> <p>Before use, inspect the equipment for misalignment or binding of moving parts, loose components, damage or any other condition that may affect its operation. If damaged, have the equipment repaired by an authorized service centre or technician before use.</p> <p>Always keep the equipment and accessories (cutting tools, nozzles, bits etc.) properly maintained. Keep the equipment, controls and handles dry and free from dirt, oil and grease.</p> <p>Store the equipment out of reach of children or untrained persons. To avoid burns or fire hazards, let the equipment cool completely before transporting or storing. Never place the equipment in places where there are flammable materials, combustible gases or combustible liquids etc.</p> <p>The equipment is not weatherproof, and should not be stored in direct sunlight, at high ambient temperatures or locations that are damp or very humid.</p> <p><b>General Service Information</b></p> <ul style="list-style-type: none"> <li>• Have the equipment serviced or repaired at authorized service centres by qualified personnel only.</li> <li>• Replacement parts must be original equipment manufacturer (OEM) to help ensure that equipment safety is maintained.</li> <li>• Do not attempt any maintenance or repair work not described in this instruction manual.</li> <li>• After use, the equipment and components may still be hot – allow the equipment to cool and disconnect spark plugs and/or electrical power sources and/or batteries from it before making adjustments, changing accessories or performing repair or maintenance.</li> <li>• Do not make adjustments while the equipment is running.</li> <li>• Perform all service related activities under suitable conditions, such as a workshop etc.</li> <li>• Replace any worn, damaged or missing warning labels immediately.</li> <li>• Do not clean equipment with solvents, flammable liquids or harsh abrasives.</li> </ul>

Electrical Safety	Product Use and Care	Product Use and Care
<p>When using electric appliances, basic precautions should always be followed, including the following:</p> <ul style="list-style-type: none"> <li>• To disconnect, switch OFF all controls ("O"), then disconnect from the electrical supply.</li> <li>• Do not unplug by pulling on cord – to unplug, grasp the plug and pull.</li> <li>• Disconnect the equipment from the electrical supply when not in use and before servicing or cleaning.</li> <li>• Do not operate any appliance with a damaged cord or plug, or if it malfunctions, dropped or damaged in any way.</li> <li>• To reduce the risk of electrical shock, do not submerge the equipment or electrical cord in water or other liquid. Do not place or store appliance where it can fall or be pulled into water.</li> <li>• Connect to properly grounded mains electrical outlets only.</li> <li>• Risk of electric shock. Keep all electrical cables cord connection dry and off the ground.</li> </ul>	<ul style="list-style-type: none"> <li>• This product is for domestic use only.</li> <li>• Only use attachments recommended or sold by the manufacturer.</li> <li>• Do not operate the equipment if it is sitting in standing water, or if the operator is in standing water.</li> <li>• Locate the equipment on flat, level, and solid surfaces that are capable of supporting its weight.</li> <li>• Do not over-stress the cable. Release tension if it starts to build in the cable. Excess tension may cause the cable to twist, kink, or break.</li> <li>• One person must control both the cable and the foot switch. If the cutting tool stops rotating, the operator must stop the equipment immediately.</li> <li>• Reverse the motor direction only when pulling the cable off an obstruction. Trying to push or pull the cable while in reverse may unravel and break the cable. Wait for the cable drum to stop turning completely before changing motor direction.</li> <li>• Use the equipment to clear drains of recommended sizes only according to these instructions. Other uses or modifying the equipment for other applications may increase the risk of injury.</li> <li>• People with pacemakers should consult a physician before using the equipment. Electromagnetic fields in close proximity to a pacemaker may cause interference or failure.</li> <li>• The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.</li> </ul>	<ul style="list-style-type: none"> <li>• Do not wear cloth gloves or loose clothing, or use a rag to grasp the cable to prevent entanglement.</li> <li>• To help prevent cable whip, twisting and kinking, place the equipment as close to the drain as possible (within 0.5m) or use a cable guide (not included).</li> <li>• Do not use in drains containing drain cleaning chemicals.</li> <li>• Do not use in drains obstructed by roots.</li> <li>• Do not operate the equipment with the belt guard or any safety device removed.</li> <li>• Keep a gloved hand on the cable whenever the equipment is running.</li> <li>• Keep hands away from the rotating cable drum and distributor tube. Do not reach into cable drum unless the equipment is off and disconnected from the electrical supply.</li> <li>• Use appropriate personal protective equipment while handling and using the equipment. Drains may contain chemicals, bacteria and other substances that may be toxic, infectious, cause burns or other injury. Appropriate personal protective equipment includes ANSI-approved safety glasses and heavy-duty LEATHER work gloves, and may include equipment such as latex or rubber gloves, face shields, goggles, protective clothing, respirators and steel cap non-slip footwear.</li> <li>• Wash hands and other exposed body parts exposed to drain contents after handling or using the equipment. Do not eat or smoke while operating or handling the equipment. This will help prevent contamination with toxic or infectious material.</li> <li>• Stay alert, watch what you are doing and use common sense when operating the Drain Cleaner. Do not use Drain Cleaner while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating may result in serious personal injury.</li> <li>• Prevent unintentional starting. Turn switch to the off-position before plugging in.</li> </ul>

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This diagram illustrates the exploded view of a microscope, showing the following components and their assembly relationships:

- Base and Stage (1-10):** The base (1) supports the stage (2). The stage has a stage plate (3) and a stage clip (4). The stage is mounted on a stage tube (5) which is secured with a stage cap (6). The stage is connected to the base via a stage arm (7) and a stage support (8).
- Objective and Eyepiece (9-14):** The objective lens (9) is mounted on the objective turret (10). The eyepiece (11) is inserted into the eyepiece holder (12). The eyepiece holder is secured with an eyepiece cap (13). The eyepiece is connected to the base via an eyepiece arm (14).
- Microscope Body (15-20):** The microscope body (15) is mounted on the base (16). The body is connected to the base via a body arm (17) and a body support (18). The body is secured with a body cap (19).
- Light Source and Illumination (21-30):** The light source (21) is connected to the base (22) via a power cord (23). The light source is secured with a light cap (24). The light source is connected to the base via a light arm (25) and a light support (26). The light source is secured with a light cap (27).
- Accessories (31-40):** The accessories include a carrying case (31), a cleaning cloth (32), a lens cap (33), a stage cap (34), a stage clip (35), a stage plate (36), a stage arm (37), a stage support (38), a stage tube (39), and a stage clip (40).

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# Set-Up

## Ground Fault Circuit Interrupter (GFCI)



The machine **MUST** be connected to a properly earthed 240VAC mains electrical socket. Do NOT use the machine with a non-earthed electrical supply. Do NOT use the machine with an extension cord that is not properly earthed. If there is any doubt regards proper earthing of the electrical supply, have a qualified electrician inspect and verify it. • If the GFCI green indicator light does not switch off when **TEST** is pushed, do not use the machine until it is properly tested and repaired. • If the appliance does not start, or stops while running, or if you experience an electric shock, switch the machine OFF and disconnect it from the electrical supply immediately. Do NOT use the machine until it is properly tested and repaired. • The electrical cable is not protected by the GFCI device from the GFCI device to the electrical cable plug.

The appliance is equipped with a ground fault circuit interrupter (GFCI), which reduces the risk of electric shock. Check that the electrical mains socket that the machine is connected to is properly grounded and test the GFCI before each use. To test:

- Connect the machine into a grounded 240VAC electrical outlet and switch the power ON.
- Press the **TEST** button on the GFCI – the green indicator light should switch off and power to the appliance should cut off.
- To restore power after testing, push the RESET button.

If the GFCI is tripped due to an earth leakage situation, the power is cut to the machine, the green indicator lamp switches off and the red warning lamp illuminates. Switch the machine OFF and disconnect it from the electrical supply immediately. Do NOT use the machine until it is properly tested and repaired.



## Tool Set-Up



Place the motor switch in the "OFF" position and disconnect the machine from the electrical supply before assembling or making any adjustments to the tool. • Do NOT operate the equipment with the belt guard or any safety device removed. • Use appropriate personal protective equipment while handling and using the equipment. Drains may contain chemicals, bacteria and other substances that may be toxic, infectious, cause burns or other injury. Appropriate personal protective equipment includes ANSI-approved safety glasses and heavy-duty LEATHER work gloves, and may include equipment such as latex or rubber gloves, face shields, goggles, protective clothing, respirators and steel cap non-slip footwear. • Before use, check for broken, worn, missing, misaligned or binding parts, cable wear or damage, or any other condition which may prevent safe and normal operation and remedy them before operating the machine..

- Check the appliance and cutting tools for wear or damage. If necessary, replace worn or damaged parts before using the machine. Dull or damaged cutting tools can lead to binding, cable breakage, and slow the drain cleaning.
- Test the GFCI.
- Clean any oil, grease or dirt from all equipment handles and controls. This helps prevent the appliance or control from slipping during use.
- Verify that the foot switch is attached to machine and that all controls are functional.
- Rotate the cable drum by hand and make sure that it turns freely without binding.
- Check that all warning labels are present, firmly attached and readable.
- Verify that the cable does not have multiple or excessive kinks (greater than 15°). Kinks can cause cable failure. Replace cables that have multiple or excessively large kinks.

- Look for spaces between the cable coils. Kinking, stretching (pulling cable by hand) or running the cable in reverse can deform the it. Cables with spaces between the coils should be replaced.
- Check for signs of excessive corrosion of the cable, which weakens it. This can be caused by storing the cable wet or corrosive chemicals (often found in drain cleaners). replace corroded cables.
- Before use, fully retract the cable so that no more than 50mm (2") of cable is protruding from the front hub assembly. This will help prevent cable "whip" when the machine is turned on.

Perform a machine test:

1. Place the motor switch in the "OFF" position.
2. With dry hands, connect the machine to a grounded electrical supply, then place the motor switch in the "FOR" position.
3. Press the foot switch and note the direction of rotation of the cable drum. If the foot switch does not properly control machine operation, do not use the machine until the foot switch has been repaired. The cable drum should rotate clockwise when viewed from the front of the machine and will match the direction arrow on the drum. If the rotation is not correct, do not use the appliance until it has been repaired.
4. After inspection, set the motor switch to the "OFF" position, then disconnect the machine from the electrical supply.

Once you have verified that the machine is in good working order, inspect the work area.

### Work Area Set-Up

- Verify that work area has adequate lighting.
- Make sure work area is free of flammable liquids, vapours or dust that may ignite. Sparks can be generated during machine 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 appliance while standing in water. If needed, remove water from the work area.
- Verify the electrical outlet is properly grounded. If there is any doubt regards proper earthing of the electrical supply, have a qualified electrician inspect and verify it.
- Make sure there is a clear, unobstructed path from the machine to the electrical outlet.
- 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 fixtures (toilet, sink, etc.) to allow access to the drain. Do not feed the cable through a fixture. This could damage the machine and fixture.
- Determine the correct cable size for the drain, as per:

Cable Size	Pipe Size	Typical Applications
12mm ½" (included)	50mm (2") to 100mm (4")	Roof stacks and small floor drains (no roots)
10mm 3/8" (not included)	38mm (1-1/2") to 75mm (3")	Roof stacks, laundry lines and small drains (no roots)

- If needed, place protective covers over the work area floor.
- Make sure that the machine handle is locked into the upright position for transport. If the machine 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.

- To prevent cable whip, place the machine within 0.75m (2') of drain line or thread the cable through a guide (not included). The greater the distance from the drain access, the higher the risk of cable whip, twisting or kinking. If the machine cannot be placed close to the drain access, use appropriate-sized pipes and fittings to extend the drain access back to the machine.
- If needed, set up barriers to keep bystanders away from the work area.
- Select the correct cutting tool. Install the cutting tool to the end of the cable. Slide the base of the cutting tool into the slot at the end of the cable, then firmly fasten them with the attachment screw.
- Position the foot switch for easy accessibility. You must be able to hold and control the cable, operate the foot switch, and reach the motor switch.
- Confirm that the motor switch is in the "OFF" position.
- Run the electrical cord along a clear path. With dry hands, connect the machine to a properly grounded electrical outlet. Keep all connections dry and off the ground. If the electrical cord is not long enough, use a grounded extension cord that is in good condition. Keep the connection off the ground to prevent it from getting wet. Also verify that the extension cord is rated for outdoor use and has sufficient wire size (16 AWG for up to 16m (50') length, 14 AWG for up to 30m (100') length. Undersized wires can overheat, melting the insulation or causing an electrical hazard, fire or other damage. When using an extension cord, the GFCI on the machine 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 electric shock if there is a fault in the extension cord.



# Operation

## Controls



## Cutting Tools

There are several cutting tools included. Select the appropriate tool for the cleaning job and attach to Cable. Each is described below.

<p><b>Spade Cutter</b></p> <p>Starting tool</p> <p>For cutting and scraping.</p> 	<p><b>C-Cutter</b></p> <p>Finishing tool</p> <p>For grease stoppages and cleaning pipe walls.</p> 
<p><b>Boring Bulb Cutter</b></p> <p>Starting tool</p> <p>For removing loose objects.</p> 	<p><b>Arrow Cutter (2 pieces)</b></p> <p>Finishing tool</p> <p>For scraping the inside edges of pipes.</p> 



**If the cutting tool becomes lodged and the cable is still rotating, the cable will start to twist – release the foot switch to stop the motor immediately to help prevent**

**damaging the cable** (the cable drum may rotate backwards somewhat as tension in the cable releases).

Ensure that the tool and/or cable is [dislodged](#) before continuing to use the machine. • If the cause of the obstruction is unknown, use the *Boring Bulb* cutter to explore the obstruction and, if possible, retrieve a piece to inspect. Once you can see the cause of the obstruction, select the appropriate tool for the job. Run the smallest available tool through the blockage to allow the backed up water to flow and carry away the debris as the drain clears.

Once the drain is flowing, more appropriate tools can be used on any remaining blockage. **Keep in mind that the largest tool used should be no bigger than the drain inside diameter, minus 25mm (1").**

If properly used, the machine will not damage a drain that is in good condition and properly designed, constructed, and maintained. However, if the drain is in poor condition or has not been properly designed, drain clearing work may damage it. If possible, visually inspect the drain quality before operation.

Once the drain is flowing, more appropriate tools can be used on any remaining blockage. **Keep in mind that the largest tool used should be no bigger than the drain inside diameter, minus 25mm (1").**

If properly used, the machine will not damage a drain that is in good condition and properly designed, constructed, and maintained. However, if the drain is in poor condition or has not been properly designed, drain clearing work may damage it. If possible, visually inspect the drain quality before operation.

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## Feeding the Cable



Only one person should operate the machine. Do not operate the machine with one person controlling the cable and another person controlling the foot switch. This can cause the cable to kink, twist, and break, which can also lead to serious personal injury.

Place the motor switch in the "FOR" position.

Grasp the cable with gloved hands and start feeding the cable into the drain as far as it will go.

Press the foot switch to activate the cable drum, and continue feeding the cable into the drain.

- If the cable becomes lodged (for example: in a narrow part of the drain, in a drain trap, etc.), stop feeding the cable and allow the cable to work past the obstruction.
- If the cable still will not pass the obstruction, release the foot switch, then pulse it to try and clear the obstruction.
- Once the cable is free of the obstruction, press the foot switch and continue feeding.



The motor switch controls rotational direction of the cable drum only. Do NOT use the "REV" position to retract the cable. Use "REV" only momentarily for relieving pressure or [untangling cable from an obstruction](#). • **The warranty may be voided if the cable is damaged through excessive twisting, or if the cable drum is run in reverse long enough to unwind cable.**

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## Working Through Blockages and Preventing Cable Twist



**If the cutting tool becomes lodged and the cable is still rotating, the cable will start to twist – release the foot switch to stop the motor immediately to help prevent**

**damaging the cable** (the cable drum may rotate backwards somewhat as tension in the cable releases).

Ensure that the tool and/or cable is dislodged before continuing to use the machine. • Do not let the cable build up outside drain. • Do not wind in the cable if it is twisted or under tension. • While working through obstructions, the tool and cable can get clogged with debris, preventing further cleaning. If this occurs, retract the cable and tool and clear them before continuing.

If the cutting tool becomes lodged or embedded in an obstruction, it will not cut and must be dislodged before continuing. If the cable continues to rotate when the cutting tool is lodged, the cable will quickly twist and kink, which may create a hazard and/or damage the cable.

### ***What to do if the cutter gets lodged:***

1. Release the foot switch IMMEDIATELY to prevent the cable being further driven and rotated.
2. Place the motor switch in the "REV" position and activate it using the foot switch to dislodge the cable by rotating it in reverse. Pulsing the motor slightly may also assist in dislodging the cutter. When the cutter is dislodged, the cable should be able to rotate freely. If using the motor cannot dislodge the cutter, release the foot switch, switch the machine OFF, then grasp the cable with gloved hands and pull it free.

Once the tool is free of the blockage and the cable is able to rotate freely, attempt to clear the obstruction again. You may have to repeat this several times in order to clear the obstruction.

Once the drain is clear, turn on the tap or use a hose to flush debris through the drain and check for further blockages or obstructions. If the water flow slows or stops, indicating a further obstruction or blockage, resume clearing the drain.

## Retracting the Cable



**Do not retract the cable with the motor switch in the "REV" position. • Do not pull the cable from drain while it is rotating – the cable can whip, causing serious injury.**

- Place the motor switch in the "OFF" position, dry your hands, then disconnect the machine from the electrical supply.
- Grasp the cable with gloved hands and pull it from the drain, and feed into the cable drum.

# Maintenance



Procedures not specifically explained in this manual must be performed by qualified technicians only . • Before performing any inspection, maintenance, or cleaning

procedure, place the motor switch in the "OFF" position and disconnect the machine from the electrical supply. • Do NOT allow water to get into the motor or any other electrical components. • Do NOT use damaged or malfunctioning equipment. If abnormal noise or vibration occurs, have the problem corrected before further use. • Do NOT perform any inspection, maintenance, or cleaning procedure on a moving cable. • Do NOT operate the equipment without the belt guard installed.

## Cleaning and Lubricating the Cable

1. Thoroughly rinse the cable, cable drum etc with clean water after every use. This will help prevent the build-up of sediment, dirt and chemicals in the cable and help prolong cable life. Use hot water, detergent and/or disinfectant as necessary. Clean any other parts of the machine as required with a clean, soft cloth.
2. Carefully tip the machine forward to drain any remaining water from the cable drum.
3. Pull the cable from the drum and dry both the cable, drum and all other components.
4. Lubricate the cable with lightweight machine oil as you feed it back into the drum.
5. If the cable drum is removed or changed, grease the bearings with general purpose grease.

## Belt Removal / Installation

1. Remove the belt guard retaining screw and remove the guard from the machine.
2. Slide the belt off the rear of the cable drum. Unhook the belt from the drive pulley then remove the belt
3. Hang the new belt from the belt pulley.
4. Hook the bottom of the belt around one side of the cable drum. Hold the belt on the drum and slowly rotate the drum so the belt "climbs" onto the drum and is securely in place. Once the belt is in place, rotate the drum several times by hand so the belt straightens.
5. Place the belt guard into position and secure it.

## Cable Removal / Installation

1. Remove the cable by pulling it fully out of the cable drum.
2. Remove the screw securing the cable to the drum-connect cable, then separate the cables.
3. Attach the new cable to the drum-connect cable using the screw and tighten it securely.
4. Feed the cable into the drum.



# Troubleshooting

The following information may assist in identifying a problem and rectifying it.

**NOTE:** Some maintenance activities described may be beyond the scope of some users. For procedures that you are not comfortable with or have the tools or experience for, have the unit serviced by a service centre or qualified technician.

## Motor shuts off during use.

Possible Fault	Action
<i>Internal thermal protection or auto-reset breaker tripped</i>	Turn motor switch to OFF. Allow motor to cool completely before restarting and stay clear of cable when turning motor back on.



<i>GFCI breaker tripped</i>	Make sure all electrical components are dry and all insulation is in good condition. Press GFCI RESET button. If GFCI trips again, have appliance inspected before further use.
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## Cable kinks, twists, or breaks

Possible Fault	Action
Too much tension in the cable	Do not force cable – allow the cutting tool do the work.



Distance between machine and drain pipe inlet too great	Move machine to within 0.75m (2') of drain pipe inlet.
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<i>Cable size unsuitable for drain pipe size</i>	Use cable diameter suitable for drain pipe inner diameter.
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<i>Cable dirty and / or dry</i>	Clean and oil cable regularly.
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<i>Cable no longer serviceable</i>	Replace cable.
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## Cable tangles in drum

Possible Fault	Action
<i>Too much cable tension</i>	Do not force cable. Let Cutting Tool do the work.



<i>Motor running in reverse</i>	Retract Cable with the Rotation Switch in the FOR position.
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Distributor sleeve bearing sticking	Lubricate distributor tube bearings.
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**GFCI device trips when unit is plugged in or when foot switch is pressed.**

Possible Fault	Action
Motor direction switch fault	Repair or replace the switch.
↓	
Damaged electrical cable	Have power cord replaced.
↓	
Motor fault	Have motor repaired or replaced.
↓	
Electrical cable or machine wet.	Disconnect machine from power supply, then thoroughly dry cable and machine.
↓	
GFCI device fault	Have GFCI device replaced.

**Motor does not operate or the foot switch sticks**

Possible Fault	Action
Foot switch may be leaking	Check for leaks in air line leading to foot switch and for tears or holes in the foot switch bladder. Replace if necessary.

**The rotation switch does not work**

Possible Fault	Action
Motor not stopped before switching direction	Move the motor rotation switch to the OFF position and allow the motor to stop completely before changing motor direction.

## Specifications

Electrical Requirements	240VAC / 50Hz
Drive Belt	A-1118Li
Cable Rotation Speed	Approximately 200RPM
Cable Diameter	12mm (½")
Maximum Cable Length	22m (75') for 12mm (½") or 30m (100') for 10mm (3/8")
Pipe Inner Diameter	50mm (2") to 100mm (4")



**Some experts believe that the incorrect or prolonged use of almost any product may cause serious injury or death. To help reduce your risk of serious injury or death, refer to the information below. For more information, see [www.datastreamserver.com/safety](http://www.datastreamserver.com/safety)**

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| <ul style="list-style-type: none"> <li>▪ Consult all documentation, packaging and product labelling before use. Note that some products feature documentation available online. It is recommended to print and retain the documentation.</li> <li>▪ Before each use, check the product for loose/broken/damaged/missing parts, wear or leaks (if applicable). Never use a product with loose/broken/damaged/missing parts, wear or leaks.</li> <li>▪ Products must be inspected and serviced (if applicable) by a qualified technician every 6 months. This is based on average residential use by persons of average size and strength, and on a property of average metropolitan size. Use beyond these recommendations may require more frequent inspections/servicing.</li> <li>▪ Ensure that all users of the product have completed a suitable industry recognised training course before being allowed access to the product.</li> </ul> | <ul style="list-style-type: none"> <li>▪ The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or description of application. Be sure to attain third-party approval from a qualified specialist for your application before use, regardless of any assurances from the retailer or its representatives.</li> <li>▪ This product is not intended for use where fail-safe operation is required. As with any product (for example, automobile, computer, toaster), there is the possibility of technical issues that may require the repair or replacement of parts, or the product itself. If the possibility of such failure and the associated time it may take to rectify could in any way inconvenience the user, business or employee, or financially affect the user, business or employee, then the product is not suitable for your requirements. This product is not intended for use where incorrect operation or a failure of any kind, including but not limited to, a condition requiring product return, replacement, parts replacement or service by a technician may cause financial loss, loss of employee time or an inconvenience requiring compensation.</li> <li>▪ If this product has been purchased in error when considering the information presented here, contact the retailer directly for details of their returns policy, if required.</li> </ul> |
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