

Hot-RodderTM **Operating Instructions**

**For 3" through 10"
(75mm—250mm)**



Your Hot-Rodder is designed to give you years of trouble-free, profitable service. However, no machine is better than its operator.

Read, understand and follow all safety warnings and instructions provided with the product. Failure to follow the warnings and instructions may result in electric shock and/or serious injury. Save all warnings and instructions for future reference.

SAVE THESE INSTRUCTIONS!

General
PIPE CLEANERS



WARNING

Read and understand operator's manual before using this machine. Failure to follow operating instructions could result in death or serious injury.

WARNING! Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury. Replacement manuals are available upon request at no charge, or may be downloaded from our website, www.drainbrain.com. Instructional videos are available for download on our website, and may be ordered. If you have any questions or problems, please call General's customer service department at 412-771-6300.

SAVE THESE INSTRUCTIONS!

These instructions are intended to familiarize all personnel with the safe operation and maintenance procedures for the Hot-Rodder.

SAFETY SYMBOLS



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a hazard with a low level of risk which, if not avoided, will result in minor or moderate injury.

WARNING



Electric shock resulting in death can occur if you plug this machine into an improperly wired outlet. If the ground wire is electrified, you can be electrocuted by just touching the machine, even when the power switch is off. A ground fault circuit interrupter will not protect you in this situation. Use a UL approved tester to determine if the outlet is safe.



Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust of fumes.



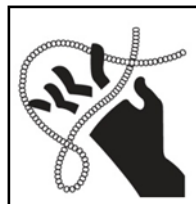
Only wear leather gloves. Never use any other type of glove, such as cloth, rubber, or coated gloves. Never grasp a rotating cable with a rag. These items could become wrapped around the cable and cause serious injury.



Always wear safety glasses and rubber soled, non-slip shoes. Use of this safety equipment may prevent serious injury.



Never operate machine with belt guard removed. Fingers can get caught between belt and pulley.



Do not overstress cables. Overstressing cables may cause twisting, kinking, or breaking of the cable and may result in serious injury.

GENERAL SAFETY RULES



WARNING

Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.

SAVE THESE INSTRUCTIONS!

Work Area

1. **Keep work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

Electrical Safety

1. **Grounded tools must be plugged into an outlet, properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.** If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
2. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is grounded.
3. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
4. **Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately.** Damaged cords increase the risk of electric shock.
5. **When operating a power tool outside use an outdoor extension cord marked "W-A" or "W".** These cords are rated for outdoor use and reduce the risk of electric shock.
6. **Test the Ground Fault Circuit Interrupter (GFCI) provided with the power cord to insure it is operating correctly before operating machine.** Machine must have a properly functioning ground fault circuit interrupter on the power cord. GFCI reduces the risk of electric shock.
7. **Extension cords are not recommended unless they are plugged into a Ground Fault Circuit Interrupter (GFCI) found in circuit boxes or outlet receptacles.** The GFCI on the machine power cord will not prevent electric shock from the extension cords.
8. **Only use proper three-wire extension cords in good condition which have three-prong grounding plugs and three-pole receptacles which accept the tool's plug.** Use of damaged, inferior, or other extension cords will not ground the tool. Increases the risk of electric shock and bodily injury or death.
9. **Keep all electric connections dry and off the ground.** Reduces the risk of electric shock.
10. **DO NOT touch plugs or tools with wet hands.** Reduces the risk of electric shock.

Personal Safety

1. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
2. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
3. **Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
4. **Remove adjusting keys or switches before turning the tool on.** A wrench or key that is left attached to a rotating part of the tool may result in personal injury.
5. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.
6. **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

Tool Use and Care

1. **Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
2. **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
3. **Do not use tool if switch does not turn it on or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
4. **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventative safety measures reduce the risk of starting the tool accidentally.
5. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
6. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.
7. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
8. **Only use accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.

Service

1. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified repair personnel could result in a risk of injury.
2. **When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual.** Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES



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Electric shock resulting in death can occur if you plug this machine into an improperly wired outlet. If the ground wire is electrified, you can be electrocuted by just touching the machine, even when the power switch is off. A ground fault circuit interrupter will not protect you in this situation. Use a UL approved tester to determine if the outlet is safe.



Do not overstress cables. Overstressing cables may cause twisting, kinking, or breaking of the cable and may result in serious injury.

1. **Only wear leather gloves.** Never use any other type of glove, such as cloth, rubber, or coated gloves. Never grasp a rotating cable with a rag. These items could become wrapped around the cable and cause serious injury.
2. **Never operate machine with belt guard removed.** Fingers can get caught between belt and pulley.
3. **Do not overstress cables.** Keep leather-gloved hand on the cable for control when machine is running. Overstressing cables because of an obstruction may cause twisting, kinking, or breaking of the cable and may result in serious injury.
4. **Place the machine at a distance not greater than two feet from the opening.** Greater distances can result in cable twisting or kinking.
5. **Machine is designed for ONE-PERSON operation.** Operator must control foot switch and cable.
6. **Be careful when cleaning drains where cleaning chemicals have been used.** Avoid direct contact with skin and eyes. Drain cleaning chemicals can cause serious burns as well as damage the cable.
7. **Do not operate machine if operator or machine is standing in water.** Will increase risk of electrical shock.
8. **Wear safety glasses and rubber soled, non-slip shoes.** Use of this safety equipment may prevent serious injury.
9. **Before starting each job, check that the cable is not broken or kinked, by checking for wear or breakage.** Always replace worn out (kinked or broken) cables with genuine GENERAL replacement cables.
10. **Only use this tool in the application for which it was designed. Follow the instructions on the proper use of the machine.** Other uses or modifying the drain cleaner for other applications may increase risk of injury.

Ground Fault Circuit Interrupter (GFCI)

Your machine is equipped with a ground fault circuit interrupter, which protects you against shock if a short circuit should occur. Check that receptacle is properly grounded. Test the GFCI before each use.

1. Plug into 120-volt receptacle.
2. Push test button. Indicator light will go out and power to machine should cut off.
3. If light does not go out when test button is pushed, equipment should not be used until proper repairs can be made.
4. To restore power after test, push reset button. With the reset button depressed, if the machine doesn't start, stops while running, or if the operator experiences a mild shock, **do not use the machine!** Tag the machine out of service and take it to a motor repair center or return it to the factory for repairs.



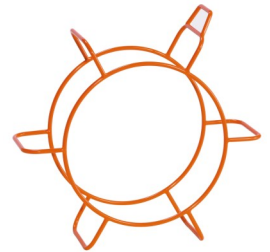
THE SECTION OF CORD BETWEEN THE WALL PLUG AND THE GFCI IS NOT IN THE PROTECTED CIRCUIT.

FEATURES



NOTE: Do not operate machine if warning labels on the switch box and power cord are missing or illegible.

Optional Cable Carrier (Cat. # CC)
Holds five 10-foot sections.

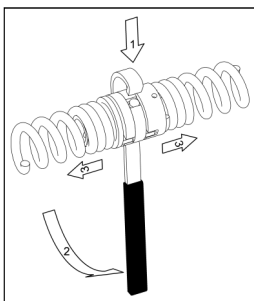
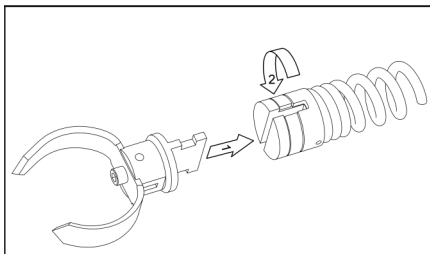


Optional Wheeled Cable Carrier
(Cat. # WCC)
Holds five 10-foot sections.

Cables and Connectors

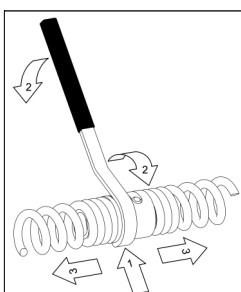
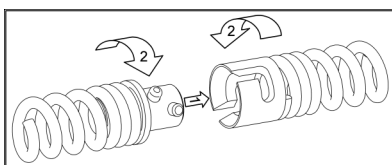
Your machine comes with one of three cable connectors; “G” connectors for General® cables, “L” connectors to match Electric Eel®-type cables, and “R” connectors to match Ridgid®-type cables.

To couple the “G” cables, slide the tab on the male connector into the slot in the female connector, then turn the ring until the button pops up.



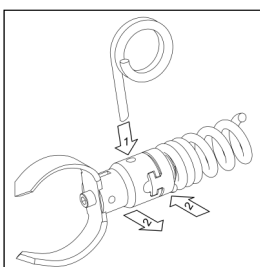
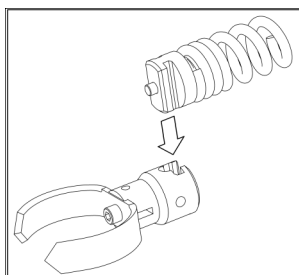
To disconnect, push the button in with the coupling wrench. Then turn the ring until it lines up with the slot in the connector and slide cables apart.

To couple “L” cables, line up the solid pin in the male connector with the L-shaped notch in the female connector. Depress the spring pin and push the male connector into the female connector.



To disconnect, push down the spring pin with the coupling wrench. Turn the male connector a quarter turn, then pull the cables apart.

To couple “R” cables, put the T-shaped slot in the female connector next to the T-shaped male connector. Slide the two together and the spring pin will snap into place.



To disconnect, push the coupling key into the hole just below the slot in the female connector, then slide connectors apart.

Cable Application Chart (Table 1)

Cable Size	Pipe Size	Typical Applications	Maximum Distance
*1-1/4" Sections	3" - 10"	Large Drains, Long Runs, Roots	300 ft. (91m)
**7/8" Sections	2" - 4"	Medium Lines and Floor Drains	125 ft. (38m)

* 1-1/4" sections available in 4 ft., 8 ft. or 10 ft. lengths with Proflex™ or Flexichain™ inner core and “G” or “L” connectors, or 15 ft. hollow core sections with “R” connectors.

** 7/8" sections available with “R” connectors in 15 ft. lengths with hollow or Proflex™ inner core. To use 7/8" cables, R-R10AD adapter (optional) must be installed. See “To Clean or Replace Chuck Jaws.”

Sectional Cables

With General® Connectors

4GHDS	1-1/4" x 4 ft. 5/8" Proflex/Extra Space
8GF	1-1/4" x 8 ft. Flexichain
8GP	1-1/4" x 8 ft. Proflex
8GPS	1-1/4" x 8 ft. 1/2" Proflex/Extra Space
10GF	1-1/4" x 10 ft. Flexichain
10GP	1-1/4" x 10 ft. Proflex

Sectional Cables

Compatible with Electric Eel® Connectors

4LPS	1-1/4" x 4 ft. 1/2" Proflex/Extra Space
4LHDS	1-1/4" x 4 ft. 5/8" Proflex/Extra Space
8LF	1-1/4" x 8 ft. Flexichain
8LP	1-1/4" x 8 ft. 1/2" Proflex
8LPS	1-1/4" x 8 ft. 1/2" Proflex/Extra Space
8LHD	1-1/4" x 8 ft. 5/8" Proflex
8LHDS	1-1/4" x 8 ft. 5/8" Proflex/Extra Space
10LF	1-1/4" x 10 ft. Flexichain
10LP	1-1/4" x 10 ft. 1/2" Proflex
10LPS	1-1/4" x 10 ft. 1/2" Proflex/Extra Space
10LHD	1-1/4" x 10 ft. 5/8" Proflex
10LHDS	1-1/4" x 10 ft. 5/8" Proflex/Extra Space

Sectional Cables

Compatible with Ridgid® Cables

15R-10	7/8" x 15 ft. Open-Wound
15R-10-P	7/8" x 15 ft. Proflex
15R-11	1-1/4" x 15 ft. Standard Duty
15R-14	1-1/4" x 15 ft. Heavy Duty

General makes cables and cutters to fit equipment manufactured by others. We have no affiliation with these companies.

Cutter Application Chart (Table 2)

Cutter	Catalog #			Typical Applications
	"G" Conn.	"L" Conn.	"R" Conn.	
Spear Head	G-SHD	L-SHD	R-SHD	Starting tool, gets the water flowing
Hook Auger	G-HA	L-HA	R-HA	Starting tool, to remove loose objects.
2" U-Cutter	G-2UC	L-2UC	R-2UC	Starting tool, for cutting and scraping.
3" Heavy Duty Side Cutter	G-3HDSC	L-3HDSC	R-3HDSC	Finishing tool, for scraping inside edges of pipe.
3" Heavy Duty Saw Blade	G-3HDB	L-3HDB	R-3HDB	Heavy duty tool for cutting roots.
4" Rotary Saw Blade	G-4RSB	L-4RSB	R-4RSB	For cutting roots.
Retrieving Tool	G-RTR-2	L-RTR-2	R-RTR-2	For removing loose objects and broken cables.

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

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

1. Place machine at a distance of not greater than two feet (.6m) of drain opening. If you can't place the machine this close to the drain opening, run the cable through a pipe or a metal guide tube to prevent cable whipping.
2. Attach the rear guide hose to the spout at the back of the machine.
3. Attach a cutter to the female end of a section of cable. Be sure the plunger pin clicks into place. The Spear Head or 2" U-Cutter are good tools to start with to get the line open. After the line has been opened, follow with larger blades, which scrape the inside edges of the pipe, assuring a real cleaning job.
4. Push the section into the drain opening as far as it will go. Depending upon the location of the clog or bends in the line, you may be able to push several lengths of cable into the drain. Slide the other end of the last cable inserted into the drain into the chuck as far as it will go.
5. Switch the motor into **forward**. Then with gloved hands, put one hand on the cable and one hand on the chuck handle.

6. Pull just enough cable from the machine to make a small arc. Pull the chuck handle down until it grips the cable. The cable will begin to work its way into the drain.
7. Once the slack is gone, stop. Lift the chuck handle and pull more cable from the machine. Pull the chuck handle down and run the cable into the drain again.
8. When you are within a few feet of the end of the section, stop. Pull the end of the cable out of the machine and slide a new cable section in, male end first. Couple the two cables together and continue to run the cable into the drain as before.

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



9. If the cable begins to buckle or twist, stop by lifting the chuck handle. When you reach some resistance in the drain, switch the motor from forward to reverse for several seconds. Then forward again. Allow the cable to stop spinning before going in reverse.
10. After the drain is clear, retract the cable from the line by pulling the chuck handle down as you pull the cable from the drain. When you have small arc of cable, lift the chuck handle and slide the excess cable into the machine. Do not allow too much slack between the drain and machine. Disconnect sections as they emerge from the drain.
11. When the cutter is near the drain opening, lift the chuck handle to stop cable rotation. Never retract the cutter 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

FOLDING HANDLE

To make the Hot-Rodder more compact, it is equipped with a folding handle. By lifting up the sliding collars on each side of the handle, you can fold it forward. When the handle is raised, the collars will drop into position, locking the handle in place.



MAINTENANCE



DISCONNECT MACHINE FROM POWER SOURCE BEFORE PERFORMING MAINTENANCE!

To keep your machine operating smoothly, it is essential that all bearings and 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. Our SNAKE OIL is ideally suited for this purpose, since it not only lubricates the cables, it deodorizes them as well.



TO CLEAN OR REPLACE CHUCK JAWS

1. Loosen the two screws holding the chuck cover and remove the cover.
2. Remove the socket head allen screw from the rim of the chuck cone.
3. Rotate each jaw to the notch in the cone and remove jaw and spring for cleaning or replacement.
4. When complete, be sure to replace the socket head allen screw to prevent accidental removal of a jaw.
5. Replace the chuck cover and tighten screws.

TO ADJUST BELT TENSION

1. Loosen nuts and bolts on the left side (opposite to the switch) of the motor mount.
2. Push down on the motor to the desired belt tension.
3. Retighten nuts and bolts.

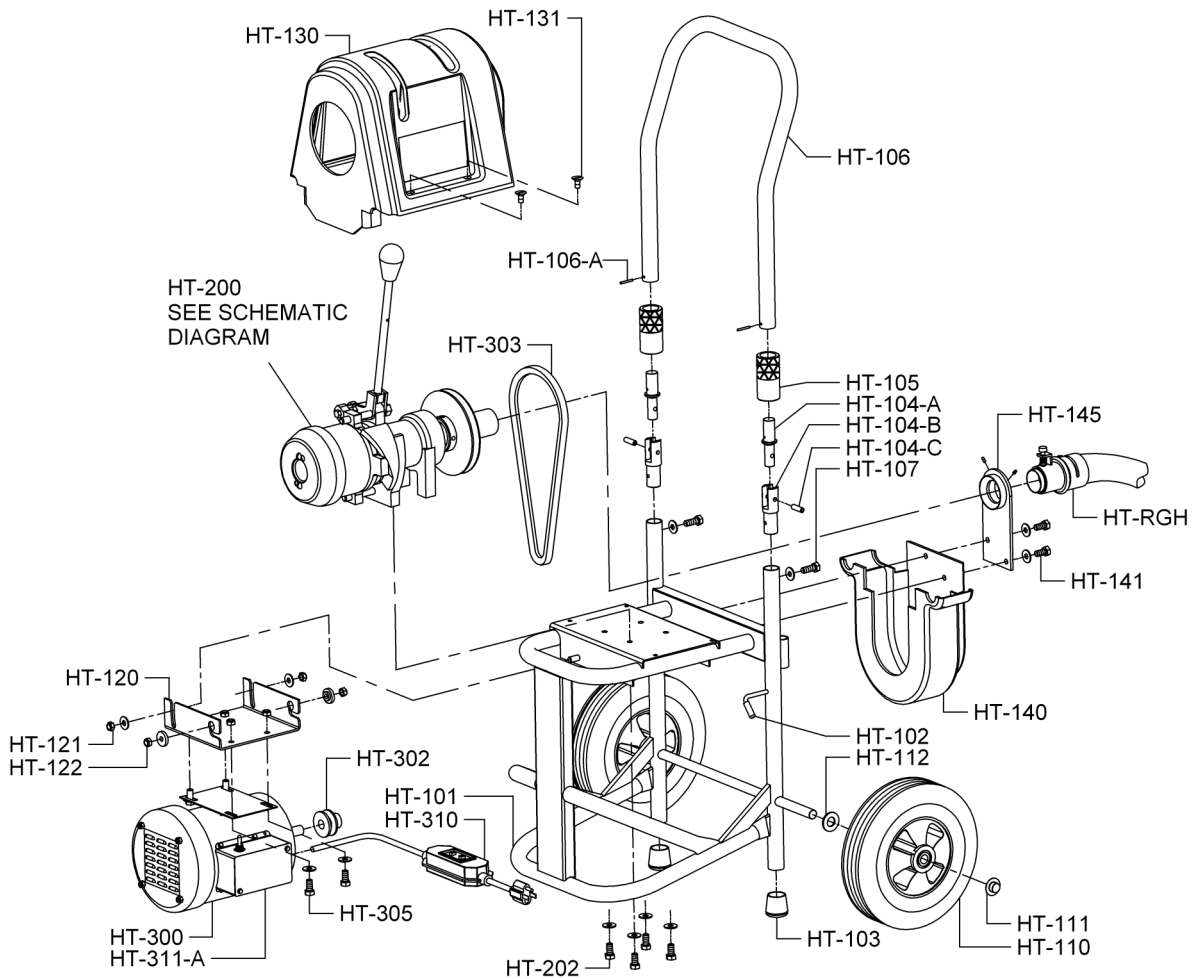
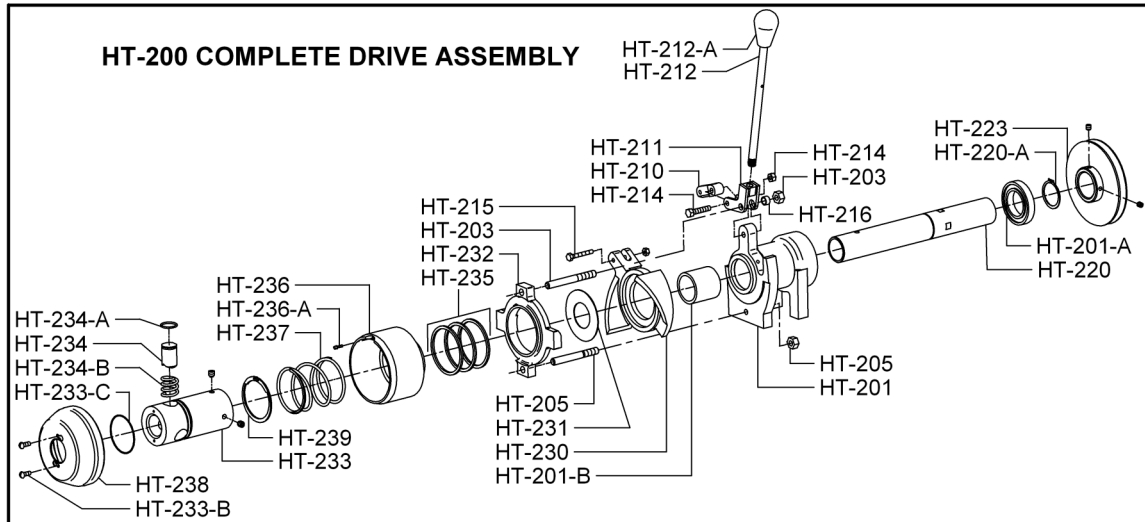
Trouble Shooting Guide (Table 3)

Problem	Probable Cause	Solution
Cable kinks or breaks.	Operator forcing the cable.	Do not force the cable. Let the cutter do the work.
	Too much slack between machine and drain.	Do not allow slack between machine and drain.
	Cable used in wrong size drain line.	A cable that is too large or too small in diameter for a line is more likely to kink. (Consult Table 1—Cable Applications.)
	Cable exposed to acid	Clean and oil cables regularly.
Cable tangles or kinks.	Operator forcing the cable.	Do not force the cable. Let the cutter do the work.
Chuck slips.	Dirt build-up or lack of lubrication.	Disassemble chuck, clean and lubricate assembly. Lubricate regularly as per instructions. Badly worn jaws must be replaced.
	Kinked Cables.	Kinked cables will not fit through chuck. Repair or replace damaged sections.
Motor turns in one direction but not other.	Reverse switch failure.	Replace reverse switch.
Ground Fault Circuit Interrupter trips and will not reset.	Damaged power cord or extension cord.	Replace cords.
	Short circuit in motor.	Take motor to authorized repair center.
	Faulty ground fault circuit interrupter.	Replace Ground Fault Circuit Interrupter.

HOT-RODDER PARTS LIST

CAT. NO.	DESCRIPTION	CAT. NO.	DESCRIPTION
HT-100	Complete Frame	HT-215	Bolt & Nut for Cam
HT-101	Base w/Axle	HT-216	Link Bushing
HT-102	Rubber Cord Wrap Tips (2)	HT-220	Chuck Shaft
HT-103	Rubber Leg Tip (2)	HT-220-A	Chuck Shaft Snap Ring
HT-104	Handle Hinge Assembly	HT-223	Chuck Pulley w/Set Screws
HT-104-A	Hinge Top	HT-230	Chuck Cam
HT-104-B	Hinge Bottom	HT-231	Steel Plate Spacer
HT-104-C	Hinge Roll Pin (1)	HT-232	Chuck Cam Follower
HT-105	Handle Locking Sleeve	HT-233	Chuck Body w/Set Screws
HT-106	Handle	HT-233-A	Chuck Body Set Screws (2)
HT-106-A	Handle Roll Pin	HT-233-B	Chuck Cone Round Head Screws (2)
HT-107	Handle Bolts & Washers (2)	HT-233-C	Positioning Ring for Chuck Jaws
HT-110	10" Wheels	HT-234	Chuck Jaws w/Rings (3) - for 1-1/4" Cables
HT-111	Hat-Type Push Nut (2)	R-R10AD	Chuck Jaws w/Rings (3) - for 7/8" Cables
HT-112	Spacer Washers (2)	HT-234-A	Chuck Jaw Rings (3)
HT-120	Motor Mounting Bracket	HT-234-B	Chuck Jaw Springs (3)
HT-121	Motor Mount Nuts & Washers (2)	HT-235	Chuck Bearings & Races
HT-122	Motor Mount Nuts & Bushings (2)	HT-236	Chuck Cone
HT-130	Chuck Cover	HT-236-A	Jaw Retaining Cap Screw & (2) Washers
HT-131	Chuck Cover Screws (4)	HT-237	Chuck Cone Return Spring
HT-140	V-Belt Cover	HT-238	Chuck Cone Cover
HT-141	V-Belt Cover Mounting Screws/Washers (2)	HT-239	Spring Retention Ring
HT-145	Rear Spout Assembly	HT-300	3/4 hp Motor Assembly
HT-200	Chuck Assembly	HT-300-1HP	1 hp Motor Assembly
HT-201	Chuck Housing	HT-302	Motor Pulley
HT-201-A	Rear Ball Bearing	HT-303	V-Belt (32")
HT-201-B	Front Bronze Bushing	HT-305	Motor Mounting Bolts, Nuts, & Washers (4)
HT-202	Hex Head Bolts w/Washers (4)	HT-310	20' Power Cord w/Ground Fault Circuit Interrupter
HT-203	Upper Guide Pin w/Nut	HT-311	Reverse Switch Assembly
HT-205	Lower Guide Pin w/Nut	HT-311-A	Box Only w/Cover & Screws
HT-210	Chuck Handle Link	HT-311-C	Strain Relief Strap
HT-211	Chuck Handle Yoke	HT-311-G	Reverse Switch
HT-212	Chuck Handle Rod w/Knob	HT-RGH	Rear Guide Hose
HT-212-A	Chuck Handle Knob	HT-DECAL	Set of Safety Decals
HT-214	Bolt & Nut for Yoke		

HOT-RODDER SCHEMATIC DIAGRAM



IMPORTANT: When ordering, give Serial Number of Machine.

**General Wire Spring Co,
1101 Thompson Avenue
McKees Rocks, PA 15136**

412-771-6300

www.drainbrain.com