

# K-3800

OPERATOR'S  
MANUAL

# Drain Cleaning Machine



## WARNING!

Read this Operator's Manual carefully before using this tool. Failure to understand and follow the contents of this manual may result in electrical shock, fire and/or serious personal injury.

# RIDGID®

## Table of Contents

<b>Recording Form for Machine Serial Number</b> .....	1
<b>General Safety Information</b>	
Work Area Safety .....	2
Electrical Safety .....	2
Personal Safety .....	2
Tool Use and Care .....	3
Service .....	3
<b>Specific Safety Information</b>	
Machine Safety .....	3
<b>Description, Specifications and Standard Equipment</b>	
Description .....	4
Specifications .....	4
Standard Equipment .....	4
Accessories .....	4
<b>Machine Assembly</b>	
Installing Drum .....	5
Instructions For Mounting Autofeed .....	5
<b>Machine Inspection</b> .....	6
<b>Machine Set Up</b> .....	6
<b>Operating Instructions</b>	
Using Manual Feed Machine .....	8
Using Autofeed Machine .....	8
<b>Special Procedures</b>	
Reverse Operating Instructions .....	10
Removing Drum .....	10
Machine Transport .....	10
Draining Water From Drum .....	10
<b>Installing Replacement Cable</b>	
To Remove Damaged or Worn Cables .....	10
To Install Replacement Cables .....	11
<b>Accessories</b>	
Replacement Cables & Tools .....	12
<b>Maintenance Instructions</b>	
Lubrication .....	13
Autofeed Assembly .....	13
Cables .....	13
<b>Machine Storage</b> .....	13
<b>Service and Repair</b> .....	13
<b>Troubleshooting</b> .....	14
<b>Wiring Diagram</b> .....	15
<b>Lifetime Warranty</b> .....	Back Cover

# K-3800 Drain Cleaning Machine



<b>K-3800 Drain Cleaner</b>	
Record Serial Number below and retain product serial number which is located on nameplate.	
Serial No.	

## General Safety Information

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

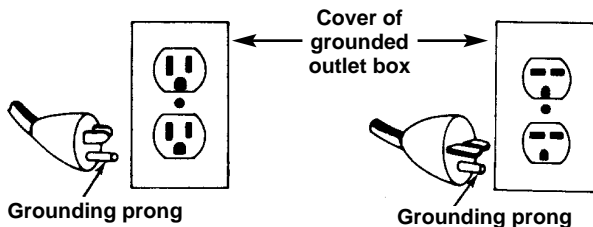
SAVE THESE INSTRUCTIONS!

### Work Area Safety

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

### Electrical Safety

- **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.



- **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electrical shock if your body is grounded.
- **Don't expose electrical tools to rain or wet conditions.** Water entering a tool will increase the risk of electrical shock.
- **Do not abuse 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 electrical shock.
- **When operating a tool outside, use an outdoor extension cord marked "W-A" or "W".** These cords

are rated for outdoor use and reduce the risk of electrical shock.

- **Use only three-wire extension cords which have three-prong grounding plugs and three-pole receptacles which accept the tool's plug.** Use of other extension cords will not ground the tool and increase the risk of electrical shock.
- **Use proper extension cords.** (See chart.) Insufficient conductor size will cause excessive voltage drop, loss of power.

Minimum Wire Gauge for Extension Cord			
Nameplate Amps	Total Length (in feet)		
	0 – 25	26 – 50	51 – 100
0 – 6	18 AWG	16 AWG	16 AWG
6 – 10	18 AWG	16 AWG	14 AWG
10 – 12	16 AWG	16 AWG	14 AWG
12 – 16	14 AWG	12 AWG	NOT RECOMMENDED

- **Before using, test the Ground Fault Circuit Interrupter (GFCI) provided with the power cord to insure it is operating correctly.** GFCI reduces the risk of electrical shock.
- **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 electrical shock from the extension cords.
- **Keep all electric connections dry and off the ground. Do not touch plug with wet hands.** Reduces the risk of electrical shock.

### Personal Safety

- **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 medications.** A moment of inattention while operating power tools may result in serious personal injury.
- **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.
- **Avoid accidental starting. Be sure switch is OFF before plugging in.** Carrying tools with your finger on the switch or plugging tools in that have the switch ON invites accidents.
- **Remove adjusting keys or switches before turning the tool ON.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

- **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.
- **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

- **Use clamp 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.
- **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.
- **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.
- **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
- **Store idle tools out of the reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- **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.
- **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation.** If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- **Use only 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.
- **Keep handles dry and clean; free from oil and grease.** Allows for better control of the tool.

### Service

- **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified repair personnel could result in injury.
- **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 electrical shock or injury.

## Specific Safety Information

### ▲ WARNING

Read this operator's manual carefully before using the K-3800 Drain Cleaner. Failure to understand and follow the contents of this manual may result in electrical shock, fire and/or serious personal injury.

### Drain Cleaner Safety

- **Wear gloves provided with the machine. Never grasp a rotating cable with a rag or loose fitting cloth glove.** Could become wrapped around the cable and cause serious injury.
- **Do not overstress cables. Keep two hands on the cable for control when machine is running.** Overstressing cables because of obstruction may cause twisting, kinking or breaking of the cable and result in serious injury.
- **Position machine within two feet of inlet.** Greater distances can result in cable twisting or kinking.
- **Machine is designed for one person operation.** Operator must control foot switch and cable.
- **Use foot switch to operate machine while maintaining good footing and balance. Do not operate machine in (REV) reverse.** Operating machine in reverse can result in cable damage and is used only to back tool out of an obstruction.
- **Keep hands away from rotating drum and guide tube. Do not reach into drum unless machine is unplugged.** Hand may be caught in the moving parts resulting in serious injury.
- **Be careful when cleaning drains where cleaning compounds have been used. Avoid direct contact with skin and eyes.** Serious burns can result from some drain cleaning compounds.
- **Do not operate machine if operator or machine is standing in water.** Will increase the risk of electrical shock.
- **Wear safety glasses and rubber soled, non-slip shoes.** Use of this safety equipment may prevent serious injury.
- **Only use the K-3800 to clean drain lines up to 4" in diameter. Follow instructions on the use of the machine.** Other uses or modifying the drain cleaner for other applications may increase the risk of injury.

## Description, Specifications And Standard Equipment

### Description

The RIDGID K-3800 Drain Cleaning Machine will clean drain lines up to 4" in diameter and 100 feet in length. Drum provided with the machine holds up to 100 feet of 3/8" cable or 90 feet of 1/2" cable. An optional sink drum holds 50 feet of 5/16" cable. Both drums include an inner-drum to guard against cable flip-over. Designed to clean sink lines, floor drains and roof vents.

The drum is driven by a 1/10 HP universal series motor that has a grounded electrical system. An integral Ground Fault Interrupter (GFCI) is built into the line cord and a pneumatic foot actuator provides ON/OFF control of the motor. When the cable hits a blockage, the motor gears down automatically to provide more power and greater operator control.

The cable is manually fed in and out of the drain. An optional autofeed is available that will advance or retract the cable. Drum tilt-adjusts to provide proper cable feed angle. The cable has a quick change coupling system for connecting tools. The drum separates from the motor frame for two-hand transport.

### Specifications

**Line Capacity** .....Depends on choice of cable. Refer to the following chart for recommendations.

#### Recommended Line Size and Distance

Cable Size	Line Size		Distance	
	in.	mm	ft.	M
1/4" Cable	3/4 - 1 1/4	19 - 32	35	10.6
5/16" Cable	3/4 - 1 1/2	19 - 38	50	15.2
3/8" Cable	1 1/2 - 3	38 - 75	100	30.0
1/2" Cable	2 - 4	50 - 100	90	27.0

#### Drum Capacity

Standard Cable Drum....100' of 3/8" Cable  
90' of 1/2" Cable

Sink Drum.....50' of 5/16" Cable

#### Motor

Type .....115V/50-60 Hz, Reversible, Universal AC Motor. 220-240V Available Upon Request

Rating .....1/10 HP

Amps .....2

Weight (machine only) ...35 lbs. (15.9 kgs)

Length .....19" (48 cm)

Height .....17" (43 cm)

Width .....14" (36 cm)

### Standard Equipment

**K-3800 w/C-31 Cable, Cat. No. 53112 includes:**

- K-3800 Machine
- C-31, 3/8" x 50' Inner Core Cable
- T-202 Bulb Auger
- T-205 "C" Cutter 1 3/8"
- T-211 Spade Cutter
- A-13 Pin Key
- Pair Gloves

**K-3800 w/C-32, Cat. No. 53117 includes:**

- K-3800 Machine
- C-32, 3/8" x 75' Inner-Core Cable
- T-202 Bulb Auger
- T-205 "C" Cutter
- T-211 Spade Cutter
- A-13 Pin Key
- Pair Gloves

**K-3800 w/C-45, Cat. No. 53122 includes:**

- K-3800 Machine
- C-45, 1/2" x 75' Inner-Core Cable
- T-102 Funnel Auger
- T-142 Blade Cutter
- T-107 Spade Cutter
- A-12 Pin Key
- Pair Gloves

**K-3800 w/C-46, Cat. No. 53127 includes:**

- K-3800 Machine
- C-46, 1/2" x 90' Inner-Core Cable
- T-102 Funnel Auger
- T-142 Blade Cutter
- T-107 Spade Cutter
- A-12 Pin Key
- Pair Gloves

### Accessories

Catalog No.	Model No.	Description
55002	A-380	Std Drum for 3/8", 1/2" Cable
55007	A-381	Sink Drum for 5/16", 1/4" Cable
41937	—	Pair of Gloves
59230	A-13	Pin Key for 3/8" Cable
59225	A-12	Pin Key for 1/2" Cable
55017	—	Transport Cart
55012	A-381-A	Sink Drum w/25' x 5/16" Inner Core Cable
60087	—	K3800 Power Feed

## Machine Assembly

**▲ WARNING**

To prevent serious injury, proper assembly of the Drain Cleaner is required. The following procedures should be followed:

### To Install Drum

1. Loosen adjusting knob and pivot yoke assembly to a slight angle (15 degrees) above horizontal, then retighten knob (*Figure 1*).
2. Pull locking pin to release nose bracket and swing bracket open.
3. Grasp drum at hand-hold and steady it with your free hand. Align drum drive shaft with mounting bore on gearbox. Then slide shaft home. Bearing assembly (on front of drum) should rest flat on its mount on yoke (*Figure 2*).
4. Slowly rotate drum until drive shaft engages with drive lug on gearbox. Drum should drop back slightly as drive engages.



Figure 1 – Pivoting Yoke Assembly



Figure 2 – Aligning Drum and Gearbox Bore

5. Close bracket over bearing assembly, push down on bracket until push pin *clicks* into locked position in yoke (*Figure 3*).

**NOTE!** If bracket does not align with groove in bearing assembly, drive bracket is not engaged. Rotate drum for proper engagement.



Figure 3 – Locking Front Bracket

### Instructions For Mounting Autofeed (Optional Accessory)

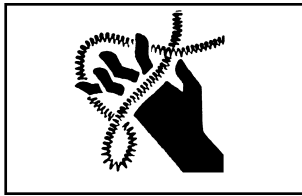
1. Screw handle into the autofeed.
- NOTE!** The autofeed comes from the factory set-up to run both 1/2" and 3/8" cable. No addition or removal of spacers is necessary.
2. Turn feed knob up to allow cable to pass through the autofeed.
  3. Attach the autofeed onto the front frame of the K-3800 using the two T-shaped mounting knobs (*Figure 4*).



Figure 4 – Mounting the Autofeed Onto the Frame

## Machine Inspection

**▲ WARNING**



To prevent serious injury, inspect your Drain Cleaning Machine. The following inspection procedures should be performed before each use.

1. Make sure the Drain Cleaning Machine is unplugged and the directional switch is set to the **OFF** position (Figure 5).
2. Make sure the foot switch is present and attached to the Drain Cleaning Machine (Figure 5). Do not operate the machine without a foot switch.



**Figure 5 – K-3800 Drum Machine**

3. 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, do not use the Drain Cleaning Machine until the cord has been replaced.
4. Inspect the Drain Cleaning Machine for any broken, missing, misaligned or binding parts as well as any other conditions which may affect the safe and normal operation of the machine. If any of these conditions are present, do not use the Drain Cleaning Machine until any problem has been repaired.
5. Lubricate the Drain Cleaning Machine, if necessary, according to the Maintenance Instructions.
6. Use tools and accessories that are designed for your drain cleaner and meet the needs of your application. The correct tools and accessories allow you to do the job successfully and safely. Accessories suitable for

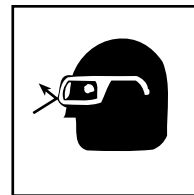
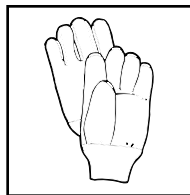
use with other equipment may be hazardous when used with this drain cleaner.

7. Clean any oil, grease or dirt from all equipment handles and controls. This reduces the risk of injury due to a tool or control slipping from your grip.
8. Inspect the cutting edges of your tools. If necessary, have them sharpened or replaced prior to using the Drain Cleaning Machine. Dull or damaged cutting tools can lead to binding and cable breakage.
9. Inspect cables and couplings for wear and damage. Cables should be replaced when they become severely worn or corroded. A worn cable can be identified when the outside coils become flat.

**▲ WARNING** Worn or damaged cables can break causing serious injury.

## Machine Set-Up

**▲ WARNING**

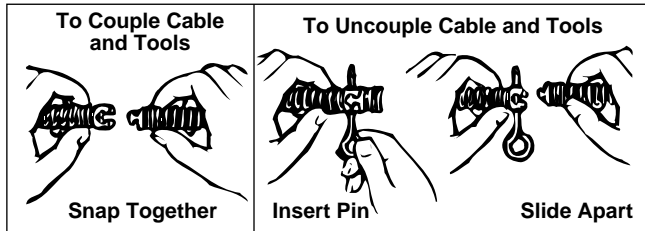


To prevent serious injury, proper set-up of the machine and work area is required. The following procedures should be followed to set-up the machine:

1. Check work area for:
  - Adequate lighting
  - Grounded electrical outlet
  - Clear path to the electrical outlet that does not contain any sources of heat or oil, sharp edges or moving parts that may damage electrical cord.
  - Dry place for machine and operator. Do not place the machine in water.
  - Flammable liquids, vapors or dust that may ignite.
2. Position the Drain Cleaning Machine within 2' of sewer inlet. Greater distance can result in cable twisting or kinking.
3. Position the air foot switch pedal for easy operator accessibility. Machine is designed for one person operation.
4. Make sure FOR/OFF/REV switch is in the **OFF** position.
5. Adjust drum and pivot yoke assembly to a convenient position above the sewer inlet.



6. Select and install the proper tool to the end of the cable. The T-Slot Coupler allows the tool to be snapped into the cable coupler (Figure 6). To remove tool, use the pin key to depress the plunger and slide the coupling apart.



**Figure 6 – Coupling and Uncoupling Tools**

**NOTE! Proper Tool Selection**

A good rule of thumb is to use a tool at least 1” smaller than the line to be cleaned. The style of the tool is determined by the nature of the job and is left up to the operator.

7. Plug the Drain Cleaning Machine into the electrical outlet, making sure to position the power cord along the clear path selected earlier. If the power cord does not reach the outlet, use an extension cord in good condition.

**▲ WARNING** To avoid electric shock and electrical fires, never use an extension cord that is damaged or does not meet the following requirements:

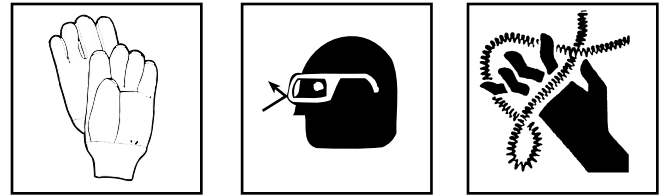
- The cord has a three-prong plug similar to shown in Electrical Safety section.
- The cord is rated as “W” or “W-A” if being used outdoors.
- The cord has sufficient wire thickness (16 AWG - 100’). If the wire thickness is too small, the cord may overheat, melting the cord’s insulation or causing nearby objects to ignite.

**▲ WARNING** To reduce risk of electrical shock, keep all electrical connections dry and off the ground. Do not touch plug with wet hands. Test the Ground Fault Circuit Interrupter (GFCI) provided with the electric cord to insure it is operating correctly. When test button is pushed in, the indicator light should go off. Reactivate by pushing the reset button in. If indicator light goes on, the machine is ready to use. If the GFCI does not function correctly, do not use the machine.



**Operating Instructions**

**▲ WARNING**



Wear gloves provided with machine. Never grasp a rotating cable with a rag or loose fitting cloth glove that may become wrapped around the cable, causing serious injury.

Always wear eye protection to protect your eyes against dirt and other foreign objects. Wear rubber soled, non-slip shoes.

Be very careful when cleaning drains where cleaning compounds have been used. Wear gloves when handling cable and avoid direct contact to the skin and especially the eyes and facial area as serious burns can result.

**▲ WARNING** Always assume the correct operating posture in order to maintain proper balance (Figure 7). Should an unexpected situation arise, this posture provides you with the opportunity to safely keep control of the machine and cable.

- Be sure you can quickly remove your foot from the foot switch.
- Hand must be on the cable to control its twisting action when it hits an obstruction.
- Keep hands away from rotating drum. Do not reach into drum unless machine is unplugged.



**Figure 7 – Proper Operating Position**

**Using Manual Feed Machines**

1. Pull sufficient cable out of the drum to start tool and cable into the sewer inlet. Push cable into inlet as far as it will go.
2. Move FOR/OFF/REV switch into FOR (forward) position. Grasp cable with two gloved hands and pull approximately 1 foot of additional cable out of machine, building a slight loop of cable between machine and sewer inlet (*Figure 7*).

**▲ WARNING** Before starting machine, both operator's gloved hands must be on the cable.

3. While depressing foot switch to start machine, use both gloved hands to grasp and push cable into sewer inlet. Rotating cable will slowly work its way into line as operator applies downward pressure with gloved hands on cable loop.
4. Continue to feed the cable into the line until resistance or obstruction is encountered. This will become apparent to operator as the motor will "lug" down and/or the cable will have a tendency to twist sideways in operator's hands.
5. If cable loads down in the obstruction, relieve load by pulling back on cable with short, quick jerks to free cutter (the drum speed will increase). Slowly advance cable back into the obstruction. Repeat this process until the obstruction is clear. Remember, make sure the cutter is rotating at all times and never force the cable.

**▲ WARNING**

**Do not allow tension to build up in the cable. This will happen if the cutting tool hits a snag and stops turning, but the motor and its drum continue to rotate. Torque builds until the cable suddenly twists, potentially wrapping around your hand or arm. This can happen quickly and without warning, so proceed slowly and carefully as you feed the cable into the drain. If tool gets hung up in an obstruction, refer to Reverse Operating Instructions in the "Special Procedures" section.**

6. Once obstruction is cleared, it is recommended to flush debris from line with running water. Repeat *Step 5* several times if necessary for a thorough cleaning job and then work cable through additional stoppages as required.
7. To retrieve cable from sewer line, pull one to two feet of cable from sewer while continuing to run machine in forward rotation. This excess cable should then be manually pushed back into machine. This pull and push procedure should be continued until it is apparent that tool is just inside sewer inlet.

**▲ WARNING** Never retract tool from sewer inlet while cable is rotating. Tool can whip causing serious injury.

8. Release foot actuator and allow machine to come to a complete stop.
- NOTE!** It is recommended that a continuous flush of water be used to clean the cable and tool as they are retrieved.
9. Turn FOR/OFF/REV Switch to **OFF** position and remove cord from power source.
  10. Pull remaining cable and tool from sewer and hand feed cable back into machine.

**Using Autofeed Machines**

1. Manually pull sufficient cable out of the drum to start tool and cable into the sewer inlet. Push cable into inlet as far as it will go.
2. Turn feed knob down until front bearing makes contact with the cable.
3. Move FOR/OFF/REV switch into FOR (forward) position. Do not step on the air foot switch pedal at this time.
4. Loosely grasp cable with gloved hand and place right hand on the feed lever. Feed lever should be in the neutral position (vertical or 12 o'clock). Exert sufficient downward pressure on cable to maintain control while depressing foot actuator to start drum rotation. Do not force the cable. Allow it to feed itself into the drain.
5. Move the feeder lever in the opposite direction of the rotating drum to advance the cable (*Figure 8*). The rate at which the cable is fed (0-20 feet per minute) into the sewer is controlled by the position of the feed lever away from neutral (vertical) position. The farther from vertical, the faster the feed rate. Always keep one hand on the cable to feel tension.

**▲ WARNING** Before starting machine, operator's gloved hands must be on the cable.

**▲ WARNING** Always keep hand on the cable to feel tension.



**Figure 8 – Autofeed**

6. Continue to feed the cable into the line until resistance or obstruction is encountered. The condition will generally become apparent to the operator as the cable will have a tendency to twist sideways in the operator's hands.

**NOTE!** When encountering an obstruction or an elbow, the motor/gearbox will audibly “gear down”, indicating the presence of resistance.

7. Operator should immediately respond to this condition by moving feed lever into full reverse (same direction of drum rotation). This should release the twist in cable and reduce size of cable loop.
8. Once free of this obstruction and the load is relieved from the cable, gradually feed cable forward. Remember, when using the feed mechanism the rate of cable advance is controlled by the autofeed handle. Allow cutter to advance slowly and work through the obstruction. If cable shows signs of loading (generally apparent by growing loop between machine and drain), immediately back cutter from obstruction by reversing feed.

**NOTE!** At this point, progress depends upon the sharpness of the tool and the nature of the obstruction. Continued operation may require manual feed mode until the obstruction has been cleared.

9. Manually pull back sharply on the cable to free the cutter and relieve the load on the cable. Slowly advance cable back into the obstruction. Repeat this process until the obstruction is clear. Remember, make sure the cutter is rotating at all times and never force the cable. Occasionally move power feed lever to neutral to allow cutter to work through the obstruction.

**▲ WARNING**

Do not allow tension to build up in the cable. This will happen if the cutting tool hits a snag and stops turning, but the motor and its drum continue to rotate. Torque builds until the cable suddenly twists, potentially wrapping around your hand or arm. This can happen quickly and without warning so proceed slowly and carefully as you feed the cable into the drain. If tool gets hung up in an obstruction, refer to Reverse Operating Instructions in the “Special Procedures” section.

10. Several passes at a thoroughly blocked drain line are recommended. After establishing flow, increase cutter size to thoroughly clean line. Flush with strong flow of water.
11. To retrieve cable from sewer line, move the feed lever in same direction of drum rotation (*Figure 9*). The cable should now feed itself back into machine. The retrieval process is greatly aided by manually pulling the cable from the drain a foot at a time as the autofeed is used.



**Figure 9 – Autofeed in Reverse Position**

**NOTE!** It is recommended that a continuous flush of water be used to clean cable and tool as they are retrieved.

12. When the tool is just inside the sewer inlet, release the air foot switch pedal and allow the machine to come to a complete stop.

**▲ WARNING** Never retract tool from sewer inlet while cable is rotating. Tool can whip causing serious injury.

13. Turn FOR/OFF/REV switch to **OFF** position.
14. Loosen the feed knob and pull remaining cable and tool from the sewer. Hand feed the cable into the machine.
15. Remove cord from power source.

## Special Procedures

### Reverse Operation

Running machine in reverse will cause premature failure of cable. Use reverse only to free a tool caught in an obstruction. If this should occur, immediately remove foot from air foot switch pedal and allow machine to come to a full and complete stop. Place FOR/OFF/REV switch to REV (reverse) position.

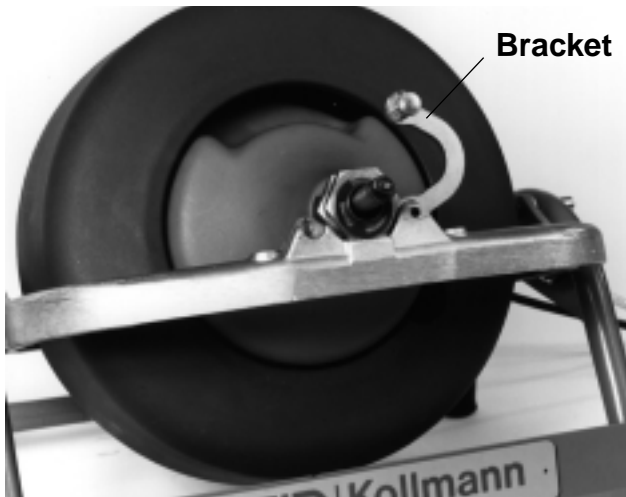
Tighten screw on nose of machine so that it firmly captures cable to avoid kinks occurring inside the drum. If machine has automatic feed, move feed knob to neutral position. Grasp cable with gloved hands and pull while jogging air foot switch pedal. When tool is dislodged and drum has stopped rotating, place FOR/OFF/REV switch in FOR (forward) position, loosen set screw on nose of machine and follow normal operating procedure.

**▲ WARNING** Never operate this machine in REV (reverse) for any other purpose. Operating in reverse can damage a cable and cause serious injury.

### To Remove Drum

**▲ WARNING** FOR/OFF/REV switch should be OFF and machine unplugged before removing or installing drum.

1. Pull locking pin to release bracket – swing bracket open (Figure 10).



**Figure 10 – Open Front Bracket**

2. Grasp drum at hand hold and pull slightly forward to disengage drive, then lift free of yoke.

### Machine Transport

The K-3800 is easier to transport with the drum removed. Separating the drum from the frame creates balanced, easy to carry assemblies.

An optional two-wheel cart is also available (Figure 11) Cat. No. 55017.



**Figure 11 – Optional Transport Cart**

### Draining Water From Drum

Rotate drum so that drain hole is at lowest point – the six o'clock position. Remove plug and drain drum, then replace plug.

## Installing Replacement Cable

**▲ WARNING** FOR/OFF/REV switch should be **OFF** and machine unplugged before removing or installing cable.

### To Remove Damaged or Worn Cable

1. Remove drum from machine as outlined.
2. Pull out loose cable from drum. End of cable is fastened to back wall of drum.
3. To free cable end, loosen two bolts on drum back that clamp the cable's end against the back wall of the drum (Figure 12).
4. Grasp the neck of the inner-drum and rotate it counter-clockwise to pull cable end from under bracket (Figure 13).
5. Pull remaining length of cable from drum and discard.



Figure 12 – Loosen Cable Bracket



Figure 13 – Removing Cable End



Figure 14 – Removing E-Clips

To Install Replacement Cable

1. Remove two E-Clips, front bearing assembly, and inner-drum from guide tube shaft (*Figure 14 and Figure 15*).
2. Insert approximately two feet of cable through the guide tube into drum. Let cable follow natural sweep of guide tube.



Figure 15 – Removing Inner Drum

3. Reach inside drum and grasp cable near end. Position cable end under cable bracket. Allow 2" of cable to protrude past clamp bracket (*Figure 16*).



**Figure 16 – Position New Cable Under Bracket**

**NOTE!** If cable will not fit under bracket, loosen the two bolts at the drum back.

4. With cable end under bracket, retighten bolts to clamp cable firmly against the back wall of the drum.
5. Lay drum on its back and push cable into drum. Guide tube will evenly distribute the cable around the drum.
6. Reassemble inner drum, front bearing and E-clips (Figure 17).
7. Mount drum on machine as outlined previously.



**Figure 17 – Reassemble Inner Drum, Front Bracket and E-Clips**

## Accessories

**▲ WARNING** Only the following RIDGID products have been designed to function with the K-3800 Drain Cleaning Machine. Other accessories suitable for use with other tools may become hazardous when used on the K-3800. To prevent serious injury, use only the accessories listed below.

### Accessories

Catalog No.	Model No.	Description
55002	A-380	Std Drum for 3/8", 1/2" Cable
55007	A-381	Sink Drum for 5/16", 1/4" Cable
41937	—	Pair of Gloves
59230	A-13	Pin Key for 3/8" Cable
59225	A-12	Pin Key for 1/2" Cable
55017	—	Transport Cart
55012	A-381-A	Sink Drum w/25' x 5/16" Inner Core Cable
60087	—	K3800 Power Feed

### Sink Drum Cables

Catalog No.	Model No.	Description
56782	C-1IC	5/16" x 25' (7.6m) Inner Core w/Bulb Auger
56787	C-2IC	5/16" x 25' (7.6m) Inner Core w/Drop Head Auger
56792	C-13IC	5/16" x 35' (10.7m) w/Funnel Auger
50652	S-2	1/4" x 25' (7.6m) w/Funnel Auger
50657	S-3	1/4" x 35' (10.7m) w/Funnel Auger

### 3/8" Cables (10mm)

Catalog No.	Model No.	Description
37842	C-31	50' (15m) I.C. Cable
37847	C-32	75' (23m) I.C. Cable
37852	C-33	100' (30m) I.C. Cable

### 1/2" Cable (12mm)

Catalog No.	Model No.	Description
37857	C-44	50' (15m) I.C. Cable
37862	C-45	75' (23m) I.C. Cable
55467	C-46	90' (27m) I.C. Cable

Tools – Fit C-31, C-32 and C-33 Cables

Catalog No.	Model No.	Description
62990	T-201	Straight Auger, 5" Long
62995	T-202	Bulb Auger, 1 1/8" O.D.
63000	T-203	Bulb Auger, 7/8" O.D.
63065	T-217	Drop Head, 4" Long
54837	T-204	"C" Cutter - 1"
63005	T-205	"C" Cutter - 1 3/8"
63010	T-206	Funnel Auger, 3" Long
63015	T-207	Spiral Cutter, 1 1/4"
63020	T-208	Spiral Cutter, 1 1/2"
63025	T-209	Spiral Cutter, 2"
63030	T-210	Spade Cutter, 1"
63035	T-211	Spade Cutter, 1 3/8"
63040	T-212	Spade Cutter, 1 3/4"
63045	T-213	4-Blade Cutter, 1"
63050	T-214	4-Blade Cutter, 1 3/8"
63055	T-215	4-Blade Cutter, 1 3/4"
63060	T-216	Chain Knocker, 2"
49002	T-260	Tool Set: - T-202 Bulb Auger - T-205 "C" Cutter - T-211 Spade Cutter - A-13 Pin Key

Tools – Fits C-44, C-45, and C-46 Cables

Catalog No.	Model No.	Description
62850	T-101	Straight Auger
62855	T-102	Funnel Auger
27642	T-125	Retrieving Auger
62865	T-104	"H" Cutter, 2 1/2"
62870	T-105	Grease Cutter, 2 1/2"
62875	T-106	Grease Cutter, 3 1/2"
62880	T-107	Spade Cutter, 1 3/4"
62930	T-112	4-Blade Cutter, 1 3/4"
62935	T-113	4-Blade Cutter, 3"
62940	T-114	Chain Knocker
54842	T-141	Knife Blade Cutter, 1 1/2"
54852	T-142	Knife Blade Cutter, 2 1/2"
54992	T-270	Tool Set: - T-102 Funnel Auger - T-142 Knife Blade Cutter - T-107 Grease Cutter - A-12 Pin Key

Refer to Ridge Tool catalog for complete listing of tools and accessories.

Maintenance Instructions

**▲ WARNING**

Make sure machine is unplugged from electrical system before making any adjustment.

Lubrication

Grease all exposed moving and rotating parts such as guide tube assembly as required.

Autofeed Assembly

Proper cleaning and lubrication of the autofeed assembly is advised for long, trouble-free operation. After each use, hose out autofeed assembly with water and lubricate with lightweight machine oil.

Cables

Cables should be thoroughly flushed with water to prevent damaging effects of sediment and drain cleaning compounds. Periodically lubricate cables and couplings with RIDGID Cable Rust Inhibitor.

When not in use, store cables indoors to prevent deterioration by the elements.

Cables should be replaced when they become severely corroded or worn. A worn cable can be identified when outside coils of cable become flat.

Machine Storage

**▲ WARNING** Motor-driven equipment must be kept indoors or well covered in rainy weather. Store the machine in a locked area that is out of reach of children and people unfamiliar with drain cleaners. This machine can cause serious injury in the hands of untrained users.

Service and Repair

**▲ WARNING**



The "Maintenance Instructions" will take care of most of the service needs of this machine.

**▲ WARNING** When servicing this machine, only identical replacement parts should be used. Failure to follow these instructions may create a risk of electrical shock or other serious injury.

Chart 1. Troubleshooting

PROBLEM	CAUSE	CORRECTION
<b>Cable kinking or breaking.</b>	Cable is being forced. Cable used is incorrect pipe diameter. Motor switched to reverse. Cable exposed to acid. Cable worn out.	Do Not Force Cable! Let the cutter do the work. Use 1/2" cables in 3" to 4" lines. Use REVERSE only if cable gets caught in pipe. Clean and oil cables routinely. If cable is worn, replace it.
<b>Drum stops while pedal is depressed. Restarts when pedal is re-pressed.</b>	Hole in pedal or hose. Hole in diaphragm switch.	Replace damaged component. If no problem found with pedal or hose, replace diaphragm switch.
<b>Drum turns in one direction but not the other.</b>	Faulty reverse switch.	Replace switch.
<b>Ground fault Interrupter trips when machine is plugged in or when foot pedal is depressed.</b>	Damaged power cord. Short circuit in motor. Faulty Ground Fault Circuit Interrupter.	Replace cord set. Take motor to authorized service center. Replace cord set that includes a Ground Fault Circuit Interrupter.

Wiring Diagram - K-3800 Drain Cleaner

115V 60Hz

