

# K-50 Drain Cleaning Machine



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\*Original Instructions - English

# Drain Cleaner

## K-50 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.

#### **K-50 Drain Cleaning Machine**

Record Serial Number below and retain product serial number which is located on nameplate.

Serial  
No.

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## Safety Symbols

In this operator's manual and on the product, safety symbols and signal words are used to communicate important safety information. This section is provided to improve understanding of these signal words and 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 hazardous situation which, if not avoided, will result in death or serious injury.

**⚠ WARNING** WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**⚠ CAUTION** CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

**NOTICE** NOTICE indicates information that relates to the protection of property.



This symbol means read the operator's manual carefully before using the equipment. The operator's manual contains important information on the safe and proper operation of the equipment.



This symbol means always wear safety glasses with side shields or goggles when handling or using this equipment to reduce the risk of eye injury.



This symbol indicates the risk of hands, fingers or other body parts being caught, wrapped or crushed in the drain cleaning cable.



This symbol indicates the risk of electrical shock.



This symbol means always wear RIDGID drain cleaning mitts while operating drain cleaner.



This symbol indicates the risk of entanglement in a belt and pulley.

## General Power Tool Safety Warnings\*

### ⚠ WARNING

**Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.**

### SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE!

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

### Work Area Safety

- **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- **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.
- **Keep children and by-standers away while operating a power tool.** Distractions can cause you to lose control.

## Electrical Safety

- **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electrical shock if your body is earthed or grounded.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electrical shock.
- **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

\* The text used in the General Power Tool Safety Warnings section of this manual is verbatim, as required, from the applicable UL/CSA/EN 62841-1 standard. This section contains general safety practices for many different types of power tools. Not every precaution applies to every tool, and some do not apply to this tool.



- **If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

### Personal Safety

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- **Prevent unintentional starting. Ensure the switch is in the OFF position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing power tools that have the switch ON invites accidents.
- **Remove any adjusting key or wrench before turning the power tool ON.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, and clothing away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
- **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.
- **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

### Power Tool Use and Care

- **Do not force power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it is designed.
- **Do not use power tool if the switch does not turn it**

**ON and OFF.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

- **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the tool.** Power tools are dangerous in the hands of untrained users.
- **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** The use of the power tool for operations different from those intended could result in a hazardous situation.
- **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

### Service

- **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

### Specific Safety Information

#### **WARNING**

**This section contains important safety information that is specific to this tool.**

**Read these precautions carefully before using the K-50 Drain Cleaner to reduce the risk of electrical shock or other serious injury.**

#### **SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE!**

Keep this manual with machine for use by the operator.

## Drain Cleaner Safety

- **Before using the tool, test the ground fault circuit interrupter (GFCI) provided with the power supply cord to insure it is operating correctly.** A properly operating GFCI reduces the risk of electrical shock.
- **Only use extension cords that are protected by a GFCI.** The GFCI on the machine power cord will not prevent electrical shock from extension cords.
- **Only grasp the rotating cable with gloves recommended by the manufacturer.** Latex or loose fitting gloves or rags can become wrapped around the cable and may result in serious personal injury.
- **Do not allow the cutter to stop turning while the cable is turning.** This can overstress the cable and may cause twisting, kinking or breaking of the cable and may result in serious personal injury.
- **One person must control both the cable and switch.** If the cutter stops rotating, the operator must be able to turn the tool OFF to prevent the cable from twisting, kinking and breaking.
- **Use latex or rubber gloves inside the gloves recommended by the manufacturer, goggles, face shields, protective clothing, and respirator when chemicals, bacteria or other toxic or infectious substances are suspected to be in a drain line.** Drains may contain chemicals, bacteria and other substances that may cause burns, be toxic or infectious or may result in other serious personal injury.
- **Practice good hygiene. Do not eat or smoke while handling or operating the tool. After handling or operating drain cleaning equipment, use hot, soapy water to wash hands and other body parts exposed to drain contents.** This will help reduce the risk of health hazards due to exposure to toxic or infectious material.
- **Only use the drain cleaner for the recommended drain sizes.** Using the wrong size drain cleaner can lead to twisting, kinking or breaking of the cable and may result in personal injury.
- **Always use the rear guide hose while operating the tool and ensure the cable does not extend beyond the rear guide hose.** This prevents the cable from whipping which may result in entanglement and personal injury.
- **Keep mitt-covered hand on the cable whenever the machine is running.** This provides better control of the cable and helps prevent twisting, kinking and breaking of the cable and may result in serious personal injury.
- **Position machine cable outlet within 2' (0.6 m) of the drain inlet or properly support exposed cable when the distance exceeds 2' (0.6 m).** Greater distances can cause control problems leading to twisting, kinking or breaking of the cable. Twisting, kinking or breaking cable may cause striking or crushing injuries.
- **One person must control both the cable and the clutch. Do not lock clutch handle during operation.** If the cutter stops rotating, the operator must be able to release the clutch to prevent twisting, kinking and breaking of the cable and reduce the risk of injury.
- **Do not operate the machine in REV (reverse) rotation except as described in this manual.** Operating in reverse can result in cable damage and is used to back the cable end out of blockages.
- **Do not wear loose clothing or jewelry. Keep your hair and clothing away from moving parts.** Loose clothing, jewelry or hair can be caught in moving parts.
- **Do not operate this machine if operator or machine is standing in water.** Operating machine while in water increases the risk of electrical shock.
- **Do not engage drain cleaner clutch (rotate cable) while any part of the cable is in the cable carrier.** This may cause striking or crushing injuries.
- **Do not use if there is the risk of contact with other utilities (such as natural gas or electric) during operation.** Visual inspection of the drain with a camera is a good practice. Crossbores, improperly placed utilities and damaged drains could allow the cutter to contact and damage the utility. This could cause electrical shock, gas leaks, fire, explosion or other serious damage or injury.
- **Read and understand these instructions and the instructions and warnings for all equipment and materials being used before operating this tool to reduce the risk of serious personal injury.**

## Description, Specifications and Standard Equipment

### Description

The RIDGID K-50 is a portable Drain Cleaning Machine designed to clean 1 1/4" to 4" drain "lines. Applications include sink, shower and floor drains. Capable of running three different size cables: 5/16", 3/8" and 5/8".

The machine is driven by a 1/6 HP motor that has a grounded electrical system. An integral Ground Fault Interrupter (GFCI) is built into the line cord. A toggle switch provides FORWARD/OFF/REVERSE control of the motor.

The K-50 is designed to use 5/8" diameter sectional-type cable that has a quick change coupling system for disconnecting tools. The cable is manually fed in and out of the drain and rotates at a speed of 400 RPM. The rotation of the cable is controlled by a clutch handle. The cable stops instantly when the clutch handle is released.

The K-50 is also designed to use with the A-17 Adapters. Adapters will hold 5/16" or 3/8" continuous length cables. Rotation of the adapters is controlled by the clutch handle. The cable adapter is equipped with a quick-acting brake which immediately stops rotation of the drum when the clutch handle is pulled upward.

### Specifications

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

#### Recommended Line Size and Reach

Cable Size	Line Size	Reach
5/16" Cable	3/4" - 1"	25' - 50'
3/8" Cable	1 1/4" - 2"	25' - 35'
5/8" (C-8)	1 1/4" - 3"	100'
5/8" (C-9)	2" - 4"	100'

**Cable Sizes** ..... 5/16", 3/8" and 5/8"

#### Motor

Type .....115V/50-60 Hz, Reversible,  
230V Available Upon Request

Rating .....1/6 HP

Amps .....4

**Weight** .....37.5 lbs. (17 kgs.)

#### Dimensions

Length .....12" (305mm)

Height .....17.5" (445mm)

Width .....13" (330mm)

Sound Pressure (L<sub>PA</sub>)\* .....69.2 dB(A), K=3

Sound Power (L<sub>WA</sub>)\* .....74.5 dB(A), K=3

\* Sound measurements are measured in accordance with a standardized test per Standard EN 62841-1.

- Sound emissions may vary due to your location and specific use of these tools.
- Daily exposure levels for sound need to be evaluated for each application and appropriate safety measures taken when needed. Evaluation of exposure levels should consider the time a tool is switched off and not in use. This may significantly reduce the exposure level over the total working period.

### Standard Equipment

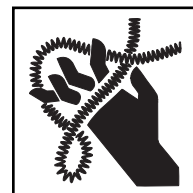
Catalog No.	Model No.	Description
115V	230V	
58920	76455	K-50 Machine Only
58960	76475	K-50-4 Machine with: - A-30 Cable Kit
58980	76485	K-50-6 Machine with: - A-17-A Adapter - A-30 Cable Kit
59000	76495	K-50-8 Machine with: - A-17-A Adapter - A-18-B Adapter - A-30 Cable Kit
52972	—	K-50-9 Machine with: - A-40 Cable Kit

Model No.	Cable	Tools & Accessories
A-30	Six Sections: C-8, 5/8" x 7 1/2' (45', 13.7m)	T-201 Straight Auger T-202 Bulb Auger T-205 "C" Cutter T-211 Spade Cutter A-13 Coupling Pin Key A-10 Cable Carrier A-14-6 Rear Guide Hose A-1 Left-Hand Mitt
A-40	Six Sections: C-9, 5/8" x 10' (60', 18.3m)	T-206 Funnel Auger T-215 4-Blade Cutter T-231 "C" Cutter A-13 Coupling Pin Key A-10 Cable Carrier A-14-610 Rear Guide Hose A-1 Left-Hand Mitt

Model No.	Description
A-17-A	Adapter with 25' x 5/16" Cable w/Bulb Auger
A-17-B	Adapter with 35' x 3/8" Cable w/Bulb Auger

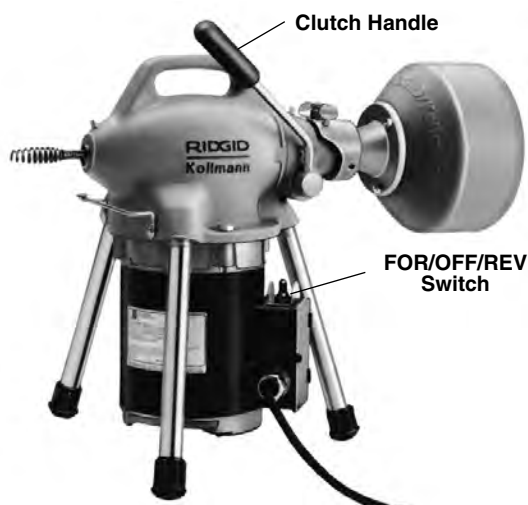
### Machine Inspection

#### ⚠ 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 1).
2. 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.
3. 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.



**Figure 1 – K-50 Drain Cleaner**

4. Lubricate the Drain Cleaning Machine, if necessary, according to the Maintenance Instructions.
5. 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.
6. 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.
7. 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.
8. 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



**Do not not place machine in water. Water entering the motor can result in electrical shock.**

**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:**

### Set-Up For 5/8" Sectional Cable

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 use the machine while standing in water.
  - Flammable liquids, vapors or dust that may ignite.
2. Position the Drain Cleaning Machine within 2' of drain inlet. Greater distance can result in cable twisting or kinking.
3. Make sure FOR/OFF/REV switch is in the **OFF** position.



**Figure 2 – Rear Guide Hose Attachment**



4. Attach the rear guide hose by lifting up the lock pin and sliding guide hose adapter onto the housing until it locks into place (*Figure 2*).

**⚠ WARNING** Do not use machine without rear guide hose attached. Prevents cable whipping and possible entanglement.

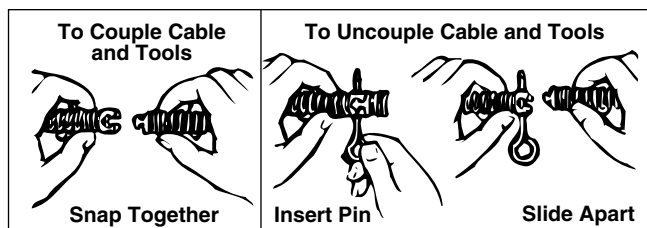
5. Insert first cable into front of machine (female end first) and push through guide hose until approximately one foot remains out the front of the machine (*Figure 3*).



**Figure 3 – Inserting Cable Into Front Of Machine**

**⚠ WARNING** Never couple more than one cable at a time. Cable will extend behind rear guide tube.

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 4*). To remove tool, use the pin key to depress the plunger and slide the coupling apart.



**Figure 4 – 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.

#### **Set-Up For $\frac{5}{16}$ " or $\frac{3}{8}$ " Cable Adapters**

1. Make sure FOR/OFF/REV switch is in the OFF position.
2. Pull ten inches of cable from cable adapter and slide into back of K-50.
3. Lift plunger pin on cable adapter and depress clutch handle on machine to allow cable adapter to slip into drilled hole (*Figure 5*). Be sure plunger has locked into machine.

**NOTE!** By pulling down hard on clutch handle, the adapter will spin. With an upward snap of clutch handle, the adapter will stop instantly, preventing overrun or kinking. The built-in brake increases life of cable.



**Figure 5 – Cable Adapter Attachment**

4. Position machine as close to line opening as possible and follow same set-up procedure as described for use with  $\frac{5}{8}$ " sectional cable.
5. Check that the adapter stops instantly when clutch handle is pulled upward. If adapter coasts, see Special Procedures section to adjust brake.

## Operating Instructions

### ⚠ WARNING



**Wear mitts with rivets provided with machine. Never grasp a rotating cable with a rag, loose fitting cloth or leather 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.**

**Do not operate if clutch handle is damaged or does not function properly. Clutch is a safety feature designed to stop rotation of cable or adapters when released.**

**⚠ CAUTION** It is important to know approximate distance from inlet to main sewer or septic tank. Over-running cable too far into main sewer or septic tank can cause cables to knot up and prevent their return through small line.

### Cleaning Drain using $\frac{5}{8}$ " Sectional Cable

1. Assume the correct operating posture in order to maintain proper balance (*Figure 6*).

**⚠ WARNING** 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 release the clutch handle.
- Hand must be on the cable to control its twisting action when it hits an obstruction.
- Must have access to FOR/OFF/REVERSE switch.

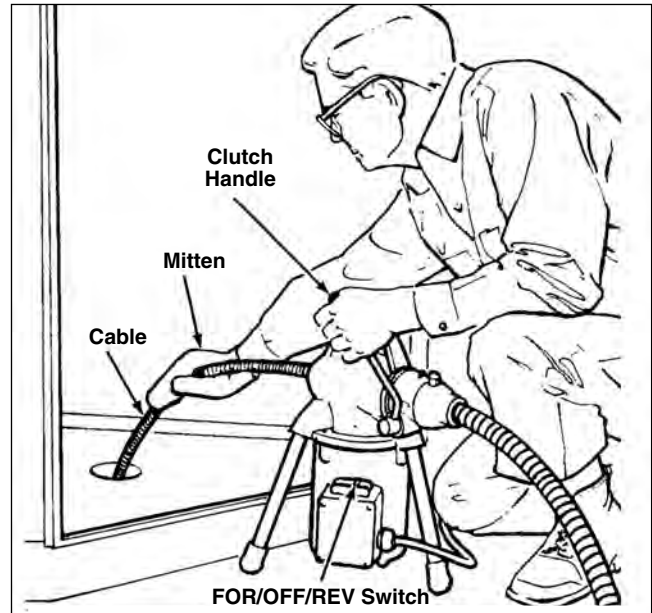


Figure 6 – Proper Operating Position

2. Without turning the machine on, pull sufficient cable out of the machine to start tool and cable into the drain inlet. Push cable into inlet as far as it will go.
3. Pull enough extra cable through machine to form almost a half circle between machine and line opening.
4. Hold cable loosely in mittened hand. Put FOR/OFF/REVERSE switch in FOR (forward) position.

NOTE! The motor will start but cable will not rotate.

5. With mittened hand on cable, push down on clutch handle with opposite hand to engage cable. Push down on top of the cable loop with a definite snap to advance the cable.

NOTE! A slow or gradual engaging of the clutch handle causes excessive wear of the jaw set. The clutch is instant-acting and returning clutch handle to its original position frees cable instantly.

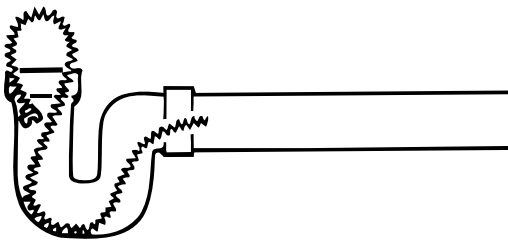
6. As soon as excess cable has gone into line, release clutch handle and pull six to ten inches of cable out of machine with mittened hand.
7. Continue to feed the cable into the line until resistance or obstruction is encountered. This will become apparent to operator as it will be difficult to feed additional cable into line and/or the cable will have a tendency to twist sideways in operator's hands.
8. If cable loads down in the obstruction, relieve load by pulling back on cable with short, quick jerks to free cutter. 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. At this point, progress depends upon the sharpness of the tool and nature of 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 cable 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. Releasing clutch handle will stop the cable rotating and releases the torque. If tool gets hung up in an obstruction, refer to Reverse Operating Instructions in the "Special Procedures" section.**

9. Once obstruction is cleared, it is recommended that operator flush debris from line with running water. Repeat Step 8 several times if necessary for thorough cleaning job and then work cable through additional stoppages as required.
10. To add cable, the following procedure should be followed:
  - After reaching the end of each cable section, turn the machine OFF.
  - Secure the cable by looping it in the line (*Figure 7*). This procedure is especially useful when cleaning a line that has rapid fall, such as working from a stack line.




**Figure 7 – Looping Cable In Line**


- With line secured, insert another section of cable in through the front of the machine (female end first) until approximately one foot remains out the front of the machine.
  - Attach cable to cable in line and resume operation.
11. To retrieve cable from drain line, the following procedure should be followed:
    - Leave FOR/OFF/REV switch in FOR (forward) position.
    - Push down on clutch handle to engage cable. With mittened hand pull cable out of line (if possible) or hold cable against edge of inlet to thread the cable out until loop forms in front of the machine.

**NOTE!** By holding the cable against the edge of the inlet, in the FOR (FORWARD) position, the rotation will rapidly "thread" the cable out of the line.

- When loop forms, release clutch handle and push excess cable back through machine. Disconnect one section at a time.


** WARNING** When disconnecting sections, remember to turn unit off and secure cable in line.

- Once section of cable is removed, insert the secured cable in through the front of the machine and continue removing sections until tool on last section of cable is just inside sewer inlet.

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


12. Turn FOR/OFF/REV Switch to OFF position.

13. Pull remaining cable and tool from sewer.

** WARNING** After using, thoroughly flush and drain cables, couplings and tools with water due to damaging effects of some drain cleaning compounds.

### **Cleaning Drain Using $\frac{5}{16}$ " or $\frac{3}{8}$ " Cable Adapter**

1. Assume the correct operating posture in order to maintain proper balance (*Figure 6*).


** WARNING** 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 release the clutch handle.
- Hand must be on the cable to control its twisting action when it hits an obstruction.
- Must have access to FOR/OFF/REVERSE switch.

2. Pull out enough cable by hand to insert into the drain opening and hand-feed the cable into drain until it stops feeding easily. Push cable down drain line keeping your control hand close to the drain opening.
3. Hold cable loosely in mittened hand, put FOR/OFF/REV SWITCH in FOR (forward) position.

**NOTE!** The motor will start but cable will not rotate.

4. With mittened hand on cable, push down on clutch handle with opposite hand to engage adapter.
5. Continue hand-feeding the cable slowly until the drain is opened or blockage is encountered.

** WARNING** Keep your cable hand close to the drain opening to keep control of the cable and help prevent cable flip-over.

6. When you reach the blockage, work the cable back



and forth to clear the obstruction. At this point, progress depends on the type of tool being used and nature of the blockage. Advance cable slowly.

7. If cable gets hung up in the obstruction, release the clutch handle to stop the rotation of the cable. Refer to "Reverse Operation" in the "Special Procedures" section.
8. Once obstruction is cleared, it is recommended that operator flush debris from line with running water. Repeat *Step 6* several times if necessary for thorough cleaning job and then work cable through additional stoppages as required.

**⚠ WARNING** Cable is not attached inside drum. When approaching end of cable, keep hand securely on cable to avoid losing it down the drain.

9. To withdraw cable from line with machine running, leave FOR/OFF/REV lever in FORWARD position and slowly pull cable from drain.
  10. As excess cable is retrieved from line, hand-feed cable back into K-50.
  11. Release clutch handle just prior to cable or tool emerging from drain opening. Cable or tool may contain debris and splash work area.
- ⚠ WARNING** Never retract tool from sewer inlet while cable is rotating. Tool can whip causing serious injury.
12. Turn FOR/OFF/REV Switch to OFF position.
  13. Pull remaining cable and tool from sewer.

## Special Procedures

### Reverse Operation

Running machine in reverse will cause premature failure of cable. Use reverse only to free a tool or cable caught in an obstruction. If this should occur, immediately release clutch handle and place FOR/OFF/REV switch to OFF position. After motor comes to a complete stop, place FOR/OFF/REV switch in the REV (reverse) direction. Engage clutch handle only until cable or tool is free of obstruction. Once it is free, release clutch handle immediately. Turn unit OFF. Run unit in FOR (forward) direction 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.

### Brake Adjustment

The cable adapter is equipped with a quick-acting brake which will immediately stop rotation of the drum when the clutch handle is pulled upwards.

After attaching cable adapter to your K-50 Machine, test for proper braking action as follows:

1. Put switch in FORWARD position to start motor.
2. Push clutch handle forward to engage clutch driver jaws. Drum will rotate.
3. Pull up on clutch handle to release jaws and activate brake. Drum should stop turning immediately.

If drum does not stop immediately, readjust brake mechanism as follows:

#### **⚠ WARNING**

**Make sure machine is unplugged from power source before making any adjustment.**

4. Slightly loosen two set screws "A" using a  $\frac{5}{32}$ " hex wrench (*Figure 9*).
5. Turn set screw "B" clockwise  $\frac{1}{4}$  turn (*Figure 9*).
6. Operate machine to check for proper braking action.
7. If drum does not stop immediately, repeat *Steps 2 and 3* until brake functions properly.
8. Tighten set screws "A" and recheck tension on set screw "B".

Due to normal wear, future adjustment will become necessary for effective braking.

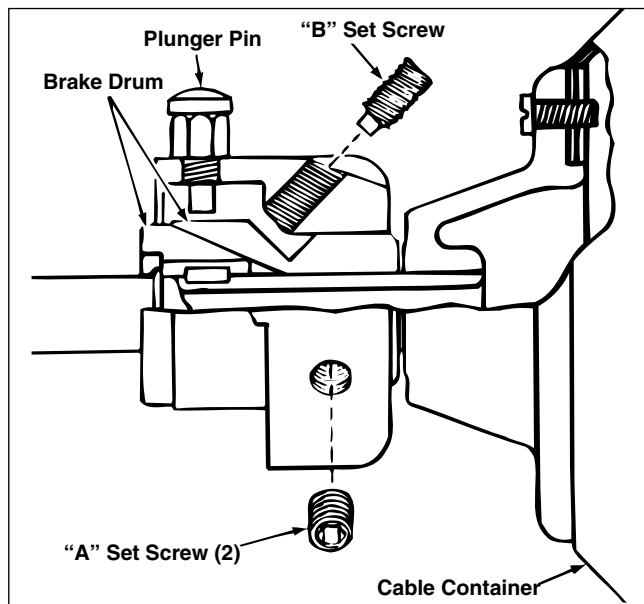


Figure 9 – Cable Adapter

## Accessories

**⚠ WARNING** Only the following RIDGID products have been designed to function with the K-50 Drain Cleaning Machine. Other accessories suitable for use with other tools may become hazardous when used on the K-50. To prevent serious injury, use only the recommended accessories.

### Cables

Catalog No.	Model No.	Description
62225	C-1	25' (7.6m) w/Bulb Auger
56782	C-11C	$\frac{5}{16}$ " x 25' (7.6m) Inner Core w/Bulb Auger
89400	C-21	50' (15.2m) w/Bulb Auger
62235	C-2	25' (7.6m) w/Drop Head Auger
56787	C-21C	$\frac{5}{16}$ " x 25' (7.6m) Inner Core w/Drop Head Auger
89405	C-22	50' (15.2m) w/Drop Head Auger
62245	C-4	25' (7.6m) w/Male Coupling
62250	C-5	35' (10.7m) w/Bulb Auger
62260	C-6	35' (10.7m) w/Male Coupling
96037	C-61C	35' (10.7m) w/Male Coupling
62265	C-7	7 $\frac{1}{2}$ ' (2.3m) Tight-Wind
62270	C-8	7 $\frac{1}{2}$ ' (2.3m) All-Purpose Wind
51317	C-9	10' (3.0m) Heavy-Duty Wind

### Accessories

Catalog No.	Model No.	Description
59235	A-14-6	6' Rear Guide Hose
84325	A-14-10	10' Rear Guide Hose
59270	A-18	Front Guide Hose Assembly
59210	A-10	Cable Carrier (Holds 90' C-8, C-9)
59205	A-1	Left-Hand Mitt
59295	A-2	Right-Hand Mitt
59230	A-13	Pin Key, $\frac{5}{8}$ " Cable

### Adapters with Cable

Catalog No.	Model No.	Description
59250	A-17-A	Adapter with 25' x $\frac{5}{16}$ " Cable w/Bulb Auger
59255	A-17-B	Adapter with 35' x $\frac{3}{8}$ " Cable w/Bulb Auger
59265	A-17-C	Adapter with 35' x $\frac{3}{8}$ " Cable w/Male Coupling
92095	A-17-D	Adapter with 250' x $\frac{5}{16}$ " Cable w/Bulb Auger
92100	A-17-E	Adapter with 250' x $\frac{5}{16}$ " Cable w/Drop Head

### Tools for C-4, C-6, C-7, C-8, and C-9

Catalog No.	Model No.	Description
62990	T-201	Straight Auger, 5" Long
62995	T-202	Bulb Auger, 1 $\frac{1}{8}$ " O.D.
63000	T-203	Bulb Auger, $\frac{7}{8}$ ", O.D.
55457	T-225	Retrieving Auger
62067	T-201A	Straight Flex Auger
63065	T-217	Drop Head, 4" Long
54837	T-204	"C" Cutter, 1"
63005	T-205	"C" Cutter, 1 $\frac{3}{8}$ "
63010	T-206	Funnel Auger, 3" Long
63015	T-207	Spiral Cutter, 1 $\frac{1}{4}$ "
63020	T-208	Spiral Cutter, 1 $\frac{1}{2}$ "
63025	T-209	Spiral Cutter, 2"
63030	T-210	Grease Cutter, 1"
63035	T-211	Grease Cutter, 1 $\frac{3}{8}$ "
63040	T-212	Grease Cutter, 1 $\frac{3}{4}$ "
63045	T-213	4-Blade Cutter, 1"
63050	T-214	4-Blade Cutter, 1 $\frac{3}{8}$ "
63055	T-215	4-Blade Cutter, 1 $\frac{3}{4}$ "
63060	T-216	Chain Knocker, 2"
63280	T-218	Flue Brush, 3"
63070	T-219	Flue Brush, 2 $\frac{1}{2}$ "
63080	T-220	Flue Brush, 2"
63220	T-221	Flue Brush, 1 $\frac{1}{2}$ "
52812	T-230	H-D "C" Cutter, 2"
52817	T-231	H-D "C" Cutter, 2 $\frac{1}{2}$ "
52822	T-232	H-D "C" Cutter, 3"
48482	T-250	Tool Set includes: – T-203                      – T-217 – T-205                      – A-13 – T-210

NOTE! See Ridge Tool Catalog for complete list of tools and accessories.

## Maintenance Instructions

### ⚠ WARNING

**Make sure machine is unplugged from power source before performing maintenance or making any adjustment.**

### Lubrication

Lubricate machine with grease at grease fitting (located on jaw housing) once a week if used every day; once a month if used less. Place a drop of oil on each of the bearing points, thrust bearing, clutch jaws, etc., at least once a year.

### 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 of coils become flat.

### Clutch Jaw Assembly (Jaw Set)

The clutch jaw assembly should be periodically cleaned.

1. Place machine on its nose end. Remove the two (2) socket head cap screws from the rack and pinion housing with a  $\frac{1}{4}$ " hex key (Figure 10).



Figure 10 – Remove Socket Head Cap Screws

2. Remove the rack and pinion housing. The clutch jaw assembly is contained in the K-50 housing.
3. Clean and lubricate clutch jaw assembly with oil.
4. If worn, replace the clutch jaw assembly.
5. Reinstall the jaws into the housing and replace the rack and pinion assembly.
6. Attach rack and pinion housing to machine with socket head cap screws.

### Cable Containers

Cable container on  $\frac{5}{16}$ " and  $\frac{3}{8}$ " cable adapter should be periodically cleaned.

1. Remove cable from the cable adapter. Cable is not attached to inside of drum.
2. Remove three  $\frac{1}{4}$ " screws holding tube and flange to the drum.
3. Clean inside of drum and flange assembly. Certain cleaning agents and solvents damage plastic parts. Some of these are: gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and house-

hold detergents that contain ammonia. Avoiding use of these and other types of cleaning agents minimizes the probability of damage.

4. Reinstall the flange assembly to the drum and replace cable.

### 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.

If machine has been exposed to freezing weather, unit must be run for ten (10) to twenty (20) minutes without load to warm up. Failing to do this will result in frozen bearings. If machine is exposed to weather for a period of time, moisture will form across motor windings causing motor to burn out.

### Service and Repair

#### **⚠ WARNING**

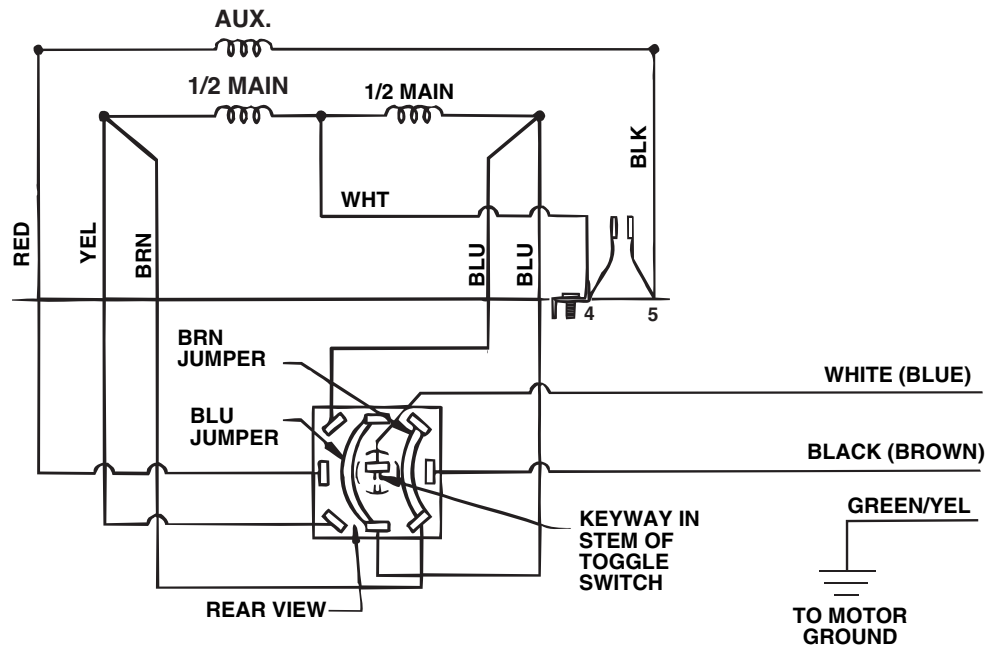


The "Maintenance Instructions" will take care of most of the service needs of this machine. Any problems not addressed by this section should only be handled by a RIDGID Independent Service Center.

Tool should be taken to a RIDGID Independent Service Center or returned to the factory. All repairs made by Ridge service facilities are warranted against defects in material and workmanship.

**⚠ 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.

## K-50 Emerson Motor Wiring 120V 50/60Hz, 230V 50/60Hz



## K-50 Allwin Motor Wiring 120V 60Hz, 230V 50Hz

