## **K-60SP**

# Drain Cleaning Machine

OPERATOR'S MANUAL





#### **▲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.





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## K-60SP Drain Cleaning Machine



## K-60SP Drain Cleaning Machine 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.

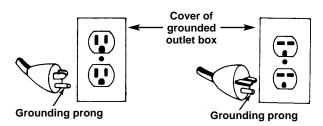
#### **SAVE THESE INSTRUCTIONS!**

#### 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 out**let 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.
- Do not 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 wrenches 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-60SP 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 leather mitt 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.
- Never operate machine with guards or covers removed. Fingers can be caught in rotating parts.
- Do not overstress cables. Keep one hand 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.
- Use Rear Guide Hose. Prevents cable whipping and possible entanglement.
- 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.
- Do not operate machine with clutch handle locked in place. Clutch is a safety device designed to stop the rotation of cable.
- 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-60SP 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-60SP is a portable Drain Cleaning Machine designed to clean  $1^{1}/_{4}^{"}$  to  $4^{"}$  drain lines. Applications include laundry tubs, floor drains, roof vents and stack lines. Rear handle allows for transporting up ladders and cleaning roof-top vent stacks.

The machine is driven by a 1/2 HP motor that has a grounded electrical system. An integral Ground Fault Interrupter (GFCI) is built into the line cord. A toggle switch provides FOR/OFF/REVERSE control of the motor.

The K-60SP is designed to use 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 600 RPM. The rotation of the cable is controlled by a clutch handle. The cable stops instantly when the clutch handle is released. An adjustment knob allows the K-60SP to use both 5/8" and 7/8" sectional cable.

#### **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
5/8" Cable	11/4 - 4	125′
<sup>7</sup> /₃" Cable	2 - 4	150′

Cable Sizes ......<sup>7</sup>/8" and <sup>5</sup>/8" sectional

Cable Speed......600 rpm

Motor

Type ......115V/60 Hz, Reversible

Rating ......<sup>1</sup>/<sub>2</sub> HP

Amps ......7

Weight ......43 lbs. (19,5 kgs.)

Dimensions:

#### Standard Equipment

Model No.	Description
K-60SP	K-60SP Sectional Machine
	115 volts/60 Hz includes:
	A-1 Operator's Mitt
	A-60-12 Rear Guide Hose



Figure 1 - K-60SP Drain Cleaner

K-60SP-SE.....K-60SP as above, plus:

A-61 Tool Kit:

- T-101 Straight Auger
- T-102 Funnel Auger
- T-107 Spade Cutter
- T-125 Retrieving Auger
- T-150-1 Sharktooth Cutter
- A-3 Tool Box
- A-12 Pin Key

A-62 Cable Kit:

- Five Sections C-10,
   7/8"x15' Cable
- A-8 Cable Carrier



Figure 2 - K-60SP-SE Drain Cleaner



#### **Machine Inspection**

#### **▲** WARNING





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

- Make sure the Drain Cleaning Machine is unplugged and the directional switch is set to the **OFF** position (*Figure 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.

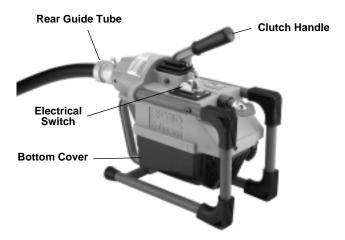


Figure 3 - K-60SP Drain Cleaner

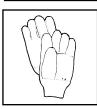
- 3. Check bottom cover to insure it is properly fastened to the frame.
- **A WARNING** Do not operate this machine without the bottom cover attached. Fingers can be caught in rotating parts.
- 4. Inspect the Drain Cleaning Machine for any broken, missing, misaligned or binding parts as well as any other 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.
- 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.
- 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.

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

#### **Machine Set-Up**

#### WARNING







Do 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:

- 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 sewer inlet. Greater distance can result in cable twisting or kinking.
- 3. Remove the pin key from the clutch handle. With

pin key removed, handle should be in its upper-most position.

- NOTE! When not in use, the clutch handle should be in its locked (down) position in order to protect the handle and to allow the operator to carry the unit by the clutch handle if desired.
- Make sure FOR/OFF/REV switch is in the OFF position.



Figure 4 - Rear Guide Hose Attachment

- 5. Attach the rear guide hose by lifting up the lock pin and sliding guide hose onto the jaw housing adjustment knob (*Figure 4*).
- **A WARNING** Do not use machine without rear guide hose attached. Prevents cable whipping and possible entanglement.
  - 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 5).



Figure 5 - Inserting Cable Into Front Of Machine

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

- NOTE! Adjust the jaw set as required. The K-60SP has a jaw set adjustment which allows the machine to accept 5/8" and 7/8" diameter cable. Refer to "Special Procedures" section.
- 7. 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.

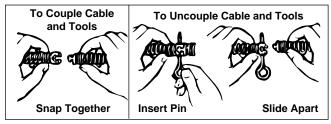


Figure 6 - Coupling and Uncoupling Tools

#### **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.

- 8. 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.
- **A 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 below 50'/14 AWG 50' - 100'). If the wire thickness is too small, the cord may overheat, melting the cord's insulation or causing nearby objects to ignite.

A 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 mitts with rivets provided with machine. Never grasp a rotating cable with a rag or loose fitting cloth 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 with clutch handle locked in place. Clutch is a safety feature designed to stop rotation of cable when released.

**CAUTION** It is very 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.

- 1. Assume the correct operating posture in order to maintain proper balance (*Figure 7*).
- **A 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 7 - Proper Operating Position

- Pull sufficient cable out of the machine to start tool and cable into the sewer inlet. If going through a "P" trap, 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 mitted hand. Put FOR/OFF/RE-VERSE switch in FOR (forward) position.

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

- With mitted 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.
- As soon as excess cable has gone into line, release clutch handle and pull six to ten inches of cable out of machine with mitted 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.

 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.





- 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 8).
     This procedure is especially useful when cleaning a line has a large slope.

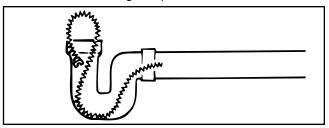


Figure 8 - Looping Cable In Line

- 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 mitted 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, 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.

**A 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.

**A 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 and remove cord from power source.
- 13. Pull remaining cable and tool from sewer.

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

#### **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 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 tool is free of obstruction. Once tool is free, release clutch handle immediately. turn unit OFF. Run unit in FOR (forward) direction and follow normal operating procedure.

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

#### **Jaw Set Adjustment**

#### 7/8" Diameter Cable

- If 7/8'' cable will not slide through the front of the machine, the jaw set is not open wide enough.
- Remove the rear guide hose from the jaw housing adjustment knob.
- Loosen the adjustment knob set screw with 1/4" hex key (Figure 9).
- Turn the Adjustment Knob counter-clockwise when viewed from the rear (approximately 2 turns) until the cable will slide through the machine (Figure 10).
- With cable through the jaw set, press the clutch handle DOWN to make sure the jaw set engages the cable. If not, turn the knob clockwise until there is engagement.
- If necessary, turn the adjustment knob in the direction required so that the clutch handle engages the cable at the position desired by the operator.



Figure 9 - Loosen the Set Screw

- Tighten the set screw.
- · Reattach the rear guide hose.



Figure 10 - Jaw Set Adjustment

#### 5/8" Diameter Cable

- If the jaw set does not engage the cable when the clutch handle is pressed, the jaw set is open too wide.
- Remove the rear guide hose from the jaw housing adjustment knob.
- Loosen the set screw with 1/4" hex key (Figure 9).
- Turn the adjustment knob clockwise until the cable is engaged by the jaw set when the clutch handle is pressed (approximately 2 turns) (Figure 10).
- If necessary, turn the adjustment knob in the direction required so that the clutch handle engages the cable at the position desired by the operator.
- Tighten the set screw.
- Reattach the rear guide hose.

#### **Accessories**

**A WARNING** Only the following RIDGID products have been designed to function with the K-60SP Drain Cleaning Machine. Other accessories suitable for use with other tools may become hazardous when used on the K-60SP. To prevent serious injury, use only the recommended accessories.

#### 7/8" Cable and Leader

Catalog No.	Model No.	Description
62275 30007	C-10 T-127	15' All-Purpose Wind (4.6m) <sup>7</sup> /8" Trap Leader

#### 5/8" Cables

Catalog No.	Model No.	Description
51317	C-9	10' Heavy-Duty (3m)
62270	C-8	7'/2' All-Purpose Wind (2.3m)
62265	C-7	7'/2' Tight-Wind (2.3m)

#### Cable Kits and Tool Kit

Cable Kits and Tool Kit		
Catalog No.	Model No.	Description
61630	A-62	Standard Equipment Cable Kit for K-60SP-SE, includes:  – Five Sections C-10, <sup>7</sup> / <sub>8</sub> " x15' Cable (75',23m)  – A-8 Cable Carrier
61625	A-61	Standard Equipment Tool Kit for K-60SP-SE includes:  — T-101 Straight Auger  — T-102 Funnel Auger  — T-107 Spade Cutter  — T-125 Retrieving Auger  — T-150-1 Sharktooth Cutter  — A-3 Tool Box  — A-12 Pin Key
48472	A-35	5/s" Cable Kit, includes:  - Six Sections C-8, 5/s" x 71/2" Cable (45',14m)  - A-10 Cable Carrier  - T-201 Straight Auger  - T-202 Bulb Auger  - T-205 "C" Cutter  - T-211 Spade Cutter  - A-13 Coupling Pin Key
48477	A-35TW	5/8" Tight-Wind Cable Kit, substitutes C-7 for C-8 in above package

#### **Cable Selection Chart**

Model	Length	Size/Type	Typical Application	Characteristics
C-7	71/2'	5/8" (16mm)	2" & 3" Floor drains	Tight wind cable providing good rigidity in a hollow core cable. Not recommended for tree roots.
C-8	71/2'	<sup>5</sup> /8" (16mm)	Drain Lines 11/4" – 2". Ideal for proper cleaning of small lines	Open wind cable that is more flexible than C-7. Open wind acts as an auger to thoroughly remove blockages in small lines.
C-9	10′	<sup>5</sup> /8" (16mm)	Drain Lines 2" – 4". Ideal for drains and stacks	Heavy-duty open wind cable ideal for long runs in indoor lines.
C-10	15′	<sup>7</sup> / <sub>8</sub> " (22mm)	Drain Lines 2" – 4". Roof-top vent stacks	Standard all-purpose open wind. Excellent flexibility.



#### **Tools for C-10 Cable**

Catalog No.	Model No.	Description
62850 62855	T-101 T-102	Straight Auger Funnel Auger
27642	T-125	Retrieving Auger
62860	T-103	Sawtooth Cutter, 21/2"
62865	T-104	"H" Cutter, 21/2"
62870	T-105	Grease Cutter, 21/2"
62875	T-106	Grease Cutter, 31/2"
62880	T-107	Spade Cutter, 1 <sup>3</sup> / <sub>4</sub> "
62915	T-109	Spiral Sawtooth Cutter, 13/4"
62920	T-110	Spiral Sawtooth Cutter, 21/4"
62925	T-111	Spiral Sawtooth Cutter, 3"
62930	T-112	4-Blade Cutter, 13/4"
62935	T-113	4-Blade Cutter, 3"
98050	T-150	Sharktooth Cutter, 3" and 4"
98055	T-150-1	Sharktooth Cutter, 3" Blade
98060	T-150-2	Sharktooth Cutter, 4" Blade
62940	T-114	Chain Knocker

#### Tools for C-7, C-8, and C-9 Cables

Catalog No.	Model No.	Description
62990 62995 63000 55457	T-201 T-202 T-203 T-225	Straight Auger Bulb Auger, 11/8" O.D. Bulb Auger, 7/8", O.D. Retrieving Auger
63065	T-217	Drop Head
54837 63005	T-204 T-205	"C" Cutter, 1″ "C" Cutter, 1³/₅″
63010	T-206	Funnel Auger
63015 63020 63025	T-207 T-208 T-209	Spiral Cutter, 1 <sup>1</sup> / <sub>4</sub> " Spiral Cutter, 1 <sup>1</sup> / <sub>2</sub> " Spiral Cutter, 2"
63030 63035 63040	T-210 T-211 T-212	Spade Cutter, 1" Spade Cutter, 13/8" Spade Cutter, 13/4"
63045 63050 63055	T-213 T-214 T-215	4-Blade Cutter, 1" 4-Blade Cutter, 1 <sup>3</sup> / <sub>8</sub> " 4-Blade Cutter, 1 <sup>3</sup> / <sub>4</sub> "
63060	T-216	Chain Knocker, 2"
63280 63070 63080 63220	T-218 T-219 T-220 T-221	Flue Brush, 3" Flue Brush, 21/2" Flue Brush, 2" Flue Brush, 11/2"
52812 52817 52822	T-230 T-231 T-232	H-D "C" Cutter, 2" H-D "C" Cutter, 2'/2" H-D "C" Cutter, 3"
48482	T-250	Tool Set includes: - T-203 - T-217 - T-205 - A-13 - T-210

#### Miscellaneous

Catalog No.	Model No.	Description
59360	A-3	Tool Box
59205 59295	A-1 A-2	Left-Hand Mitt Right-Hand Mitt
59225 59230	A-12 A-13	Pin Key, <sup>7</sup> / <sub>8</sub> " Cable Pin Key, <sup>5</sup> / <sub>8</sub> " Cable
61615	A-60-12	12' Rear Guide Hose for 7/8" Cable/C-10
59235	A-14-6	6' Rear Guide Hose for 5/8" Cable/C-7, C-8, C-9
84325	A-14-10	10' Rear Guide Hose for 5/8" Cable/C-7, C-8, C-9
59470 59210	A-8 A-10	Cable Carrier (Holds 75' 7/8" Cable/C-10) Cable Carrier (Holds 45' 7/8" Cable/C-10)
39210	A-10	Cable Carrier (Holds 90' 5/8" Cable/C-8, C-9)
59425	A-36	Cable Caddy
65687		K-60SP Jaw Set

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.

NOTE! No lubrication of the Motor Shaft is required.

#### **Cables**

Cables should be thoroughly flushed with water to prevent damaging effects of 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. Stand the machine up on the front of the frame. Make sure clutch handle is in its uppermost position. Remove the two (2) socket head cap screws from the jaw housing with a 1/4" hex key (Figure 11).



Figure 11 - Remove Socket Head Cap Screws

- 2. Remove the jaw housing. The clutch jaw assembly is contained in the jaw housing.
- 3. Remove the jaw set cover by rotating counter-clockwise (Figure 12).
- 4. Clean the clutch jaw assembly, jaw cover, and the inside of the jaw housing.
- 5. If worn, replace the clutch jaw assembly.
- 6. Reinstall the jaws into the jaw housing and replace the jaw set cover.
- Rotate the adjustment knob clockwise until the jaw set touches the jaw set cover. This will insure that the jaw set is properly aligned.
- Attach jaw housing to machine with socket head cap screws.

NOTE! Make sure flanges on plastic shroud are contained inside the jaw housing.



Figure 12 - Remove Jaw Set Cover

#### **Drive Belt Replacement**

- 1. Stand the machine up on the front of the frame. Make sure clutch handle is in its uppermost position. Remove the two (2) socket head cap screws from the jaw housing with a 1/4" hex key. (Figure 11)
- 2. Remove the jaw housing.
- 3. Loosen the jam nut on the side of the machine (Figure 13).
- Rotate motor adjustment set screw counter-clockwise with <sup>3</sup>/<sub>16</sub>" hex key until belt is loose enough to be removed.

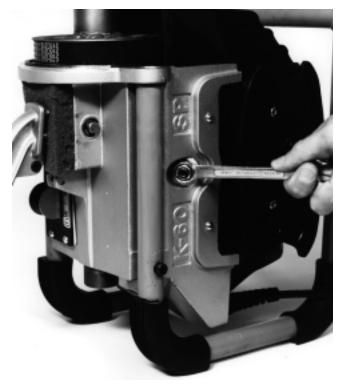


Figure 13 - Loosen Jam Nut

- 5. Install new belt and set unit down on bottom of frame (operating position), so belt will become tensioned by the weight of the motor.
- 6. Rotate the motor adjustment set screw until it just touches the motor. Once the set screw touches motor, rotate set screw ½ turn clockwise.

NOTE! Do not tighten this set screw by driving it into the motor.

7. While holding the set screw in place with the <sup>3</sup>/<sub>16</sub>" hex key, tighten the jam nut (*Figure 14*).



Figure 14 - Tighten Jam Nut

8. Attach jaw housing to machine with socket head cap screws.

#### **Machine Storage**

**A 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**



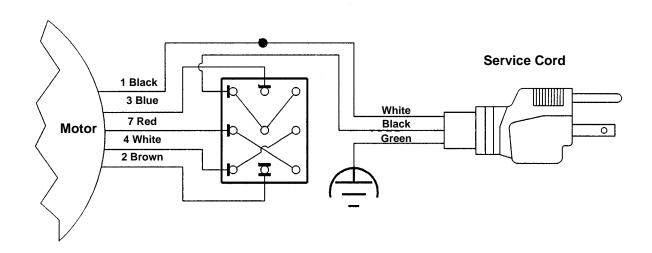
The "Maintenance Instructions" will take care of most of the service needs of this machine.

**A 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.



### Wiring Diagram 115V/60 Hz





#### 230V/50 Hz

