

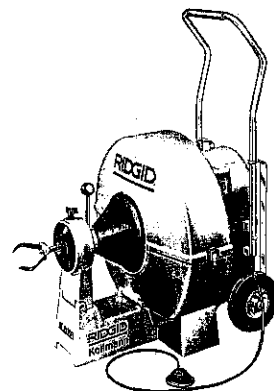
**Important**  
 For Your Own Safety  
 Before Assembling and Operating  
 This Unit, Read This Operator's  
 Manual Carefully and Completely.  
 Learn The Operation, Applications  
 and Potential Hazards Peculiar To  
 This Unit.

**RIDGID**  
**Kollmann**

**K-5800**  
**K-6800**

**Drain Cleaning  
 Machines**

Operator's Manual



**RIDGID**  
**Kollmann**

Pipe and Drain  
 Cleaning Equipment

The Ridge Tool Company

400 Clark St., Elyria, Ohio 44036, U.S.A.

Form No. K-586800-M-189  
 278-068-831

FOR YOUR FILE  
**PUBLICATIONS NOTICE**

The attached literature has just been printed and sent to you for the express purpose of providing the latest information for your file. This supersedes all previous editions.

Date 1/26/89

No. K-5800/6800  
 Drain Cleaning Machine  
 Operator's Manual

Reason For Distribution

New  
 Revision  
 Type:  Parts  Pictorial  Copy  
 Pages Affected  Cover, table of contents,  
 pp. 3, 4, 5 and 9. (Safety revisions and  
~~Machine Maintenance updates~~).

PRODUCT SERVICE

MAR 7 1989

Signed *Nan Dingler* 25-1-89

Additional copies of attached literature can be ordered by writing to:  
 The Ridge Tool Co. c/o Print Shop, 400 Clark St., Elyria, Ohio 44035.  
 All requests must include literature form number, product name, quantity desired and return address.

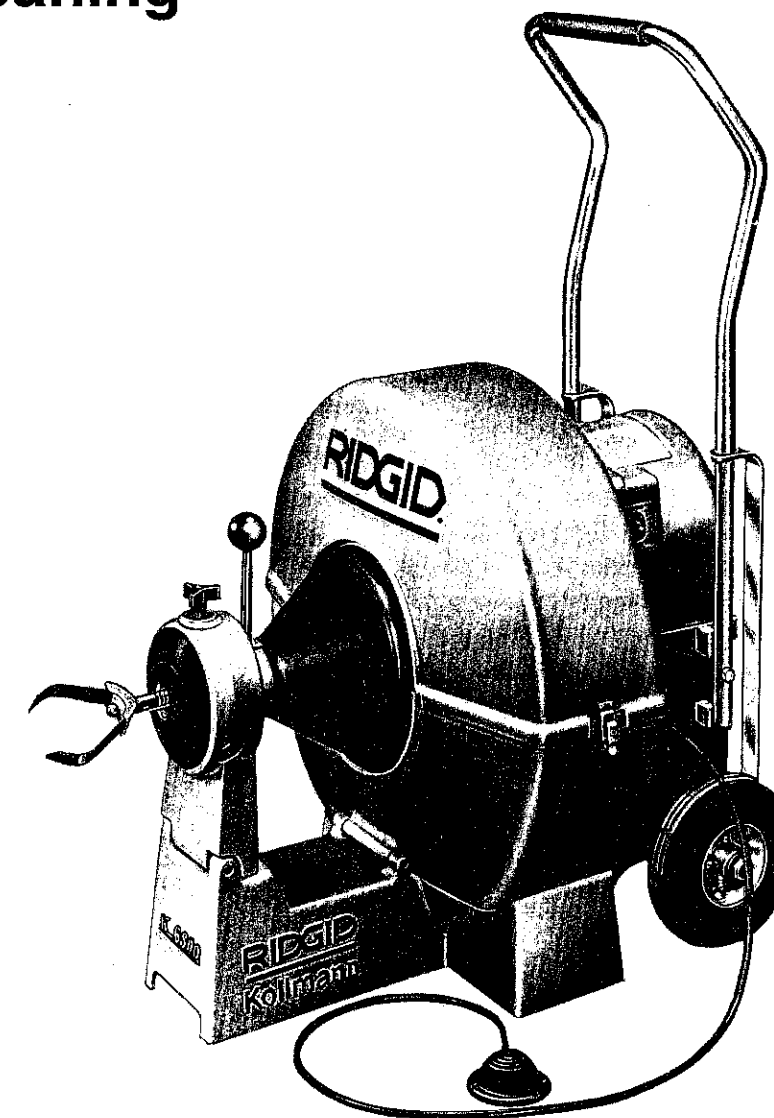
Table of Contents	Page
Recording Form for Machine Model and Serial Numbers .....	1
Description, Specifications and Equipment .....	2 and 3
Safety Instructions .....	3 and 4
Machine Set-up .....	5
<b>Operating Instructions:</b>	
Automatic Feed Operating Procedure .....	5 and 6
Manual Feed Operating Procedure .....	6 and 7
<b>Special Applications Procedure:</b>	
Proper Tool Selection .....	7
Main Sewer or Septic Tank Overrun .....	7
Reverse Operation .....	7
Loading Machine on Vehicle .....	7 and 8
Clutch Adjustment .....	8
Removing/Installing Cable Drum .....	8
Disconnecting/Connecting Cable or Tool .....	8
Draining Water from Drum .....	9
<b>*Machine Maintenance:</b>	
Feed Mechanism Assembly .....	9
Lubrication .....	9
Machine Storage .....	9
Cables .....	9
Wiring Diagram .....	9
<b>RIDGID Lifetime Warranty</b> .....	Rear Cover

**RIDGID**

**K-5800**  
**K-6800**

**Drain Cleaning  
Machine**

Drain Cleaning Machine	
Record below and retain product model and serial numbers which are located on nameplate.	
Model No.	Serial No.



## Description, Specifications and Equipment

### Description

The RIDGID/Kollmann K-5800 and K-6800 Drain Cleaning Machines represent the very latest in professional-quality sewer and drain cleaning equipment. Both models are equipped with a powerful, reversible electric motor and are capable of cleaning lines through 200 feet. The K-5800 and K-6800 are available with either automatic or manual cable feeding capability.

### Standard Features

- **Drum Shroud** - Prevents direct contact with rotating Drum.
- **Motor and Clutch** - The adjustable clutch is factory set to provide optimum performance under normal conditions. When torque build up is excessive, the motor will automatically shut-off.
- **Pneumatic Foot Actuator** - Made from durable PVC for long life in damp environments.
- **Quick and Easy Drum Change-out** - takes less than one minute.
- **Quick Coupling of Cables and Tools** - these speed couplers (patent pending) eliminate the necessity for using hammers, drive pins and special fixtures to connect or disconnect cables and tools.
- **Unique Firm-Grip Handle** - offset design allows for better balance and maneuverability.
- **Compact, Lightweight Design** - low profile, cast aluminum base and semi-pneumatic wheels provide excellent stability and easy maneuverability over most terrain.
- **Skid Rails** - Takes less time and effort than conventional belt-type climbers for navigating stairs.
- **Cable** - all RIDGID/Kollmann cables are made from high quality, spring steel. Manufactured to precise specifications for better performance and longer life.

### K-5800 Specifications

**Line Capacity:** ..... Recommended for 3" and 4" lines through 200 feet.

**Drum Capacity:** ..... 75 feet of 5/8" inner-core cable.

**Motor:** ..... - 1/3 h.p. at 1725 RPM - 115V, reversible, single phase, AC (60 Hz.)

**Clutch:** ..... Adjustable. Factory set for normal operating conditions.

**Weight (machine only):** ..... 110 lbs.

**Length:** ..... 26 1/2 inches

**Width:** ..... 22 inches

**Height:** ..... 42 3/4 inches

### K-6800 Specifications

**Line Capacity:** ..... Recommended for 3" through 10" lines through 200 feet

**Drum Capacity:** ..... 100 feet of 3/4" inner-core cable.\*

**Motor:** ..... - 1/3 h.p. at 1725 RPM - 115V, reversible, single phase, AC (60 Hz.)

**Clutch:** ..... Adjustable. Factory set for normal operating conditions.

**Weight (machine only):** ..... 150 lbs.

**Length:** ..... 30 inches

**Width:** ..... 28 inches

**Height:** ..... 46 inches

### Standard Equipment

CATALOG ITEM NO.	DESCRIPTION	K-5800	K-6800
59205	A-1 Glove (Left Hand)	x	x
59295	A-2 Glove (Right Hand)	x	x
46015	E-453 Hex Wrench	x	x
92485	T-403 3" P-Trap Cutter	x	x
92495	T-406 Spear Blade Cutter	x	x
92505	T-408 Sawtooth Cutter	x	x
92510	T-411 2" Cutter	x	x
92525	T-414 4" Cutter	x	x
92550	T-436 6" 3-Blade Cutter	x	x
92470	C-27 Cable 5/8" x 75' w/l.C.	x	
92480	C-29 Cable 3/4" x 50' w/l.C. (2)		x
96270	C-7481 Support Stand		x

\*Not for use in 4" or smaller P-traps.

## Tools, Cables & Accessories

CATALOG ITEM NO.	DESCRIPTION	K-5800	K-6800
92490	T-404 3-1/2" P-Trap Cutter	x	x
92500	T-407 Retrieving Auger	x	x
92505	T-408 Sawtooth Cutter	x	x
92515	T-412 2-1/2" Cutter	x	x
92520	T-413 3" Cutter	x	x
92530	T-416 6" Cutter	x	x
92535	T-432 2" 3-Blade Cutter	x	x
92540	T-433 3" 3-Blade Cutter	x	x
92545	T-434 4" 3-Blade Cutter	x	x
92555	T-458 5/8" Flexible Leader	x	
92560	T-468 3/4" Flexible Leader	x	x
59360	A-3 Tool Box	x	x
59440	A-4 Trapspoon	x	x
59240	A-17 Telescoping Manhole Guide Pipe	x	x
92775	A-37 Transport Wheel Assembly	x	x
92780	A-38 Drum Handle Assembly	x	x
92785	A-58 K-5800 Drum w/Pigtail	x	
92790	A-68 K-6800 Drum w/Pigtail		x
92795	A-5800 Auto Feed Assembly	x	
92800	A-6800 Auto Feed Assembly		x
92805	A-6582 5/8" Male Coupling	x	
92810	A-6583 5/8" Female Coupling	x	
92880	B-6840 3/4" Male Coupling		x
92885	A-6841 3/4" Female Coupling		x
92845	B-6747 Foot Actuator Assembly	x	x
92460	C-25 Cable 5/8" x 25' w/l.C.	x	
92465	C-26 Cable 5/8" x 50' w/l.C.	x	
92470	C-27 Cable 5/8" x 75' w/l.C.	x	
92475	C-28 Cable 3/4" x 25' w/l.C.		x
92480	C-29 Cable 3/4" x 50' w/l.C.		x

## Safety Information

The operator's manual contains safety information and instructions for your protection against serious injuries including:

Loss of fingers, hands, arms or other body parts if clothing or gloves get caught in the cable or other moving parts;

Shock, electrocution or burns from contact with wires, motor or other power drive parts;

Eye injuries, including being blinded by the cable or thrown debris.

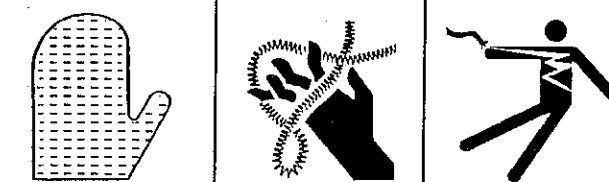
### General Safety

Read and follow the safety information and instructions in the operator's manual.

Read and follow the safety labels on the machine.

Know the location and functions of all controls before using machine.

## WARNING



**Warning:** Cables may twist or kink. Fingers, hands or other body parts can be crushed or broken.

- Use footswitch
- Wear mittens with rivets
- Keep sleeves and jackets buttoned
- Keep guards in place
- Place machine close to inlet
- Plug cord into grounded three-prong receptacle
- Wear Safety glasses
- Keep footswitch in working order

Fig. 1 General Safety

### Personal Safety

1. Wear snug fitting clothes, safety shoes, and safety glasses. Cover up or tie up long hair. Do not wear loose clothing, unbuttoned jackets loose sleeve cuffs, neckties, rings, watches or jewelry.
2. Operate machine from the side with REV/OFF/FOR switch.
3. Keep good footing and balance. Do not overreach.
4. Do not operate machine when you are tired.
5. **Be very careful when cleaning drains** where cleaning compounds have been used. Wear gloves when handling cable, and avoid direct contact of skin and especially eyes and facial area, as serious burns can result from some drain cleaning compounds.

### Electrical Safety

1. Ground machine. Use approved three-conductor cord and three-prong grounding type plug in a grounded receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Do not connect the green (or green and yellow) wire to a live terminal. If your unit is for use on less than 150 volts, it has a 120V plug. If it is for use on 150 to 250 volts, it has a 230V plug.

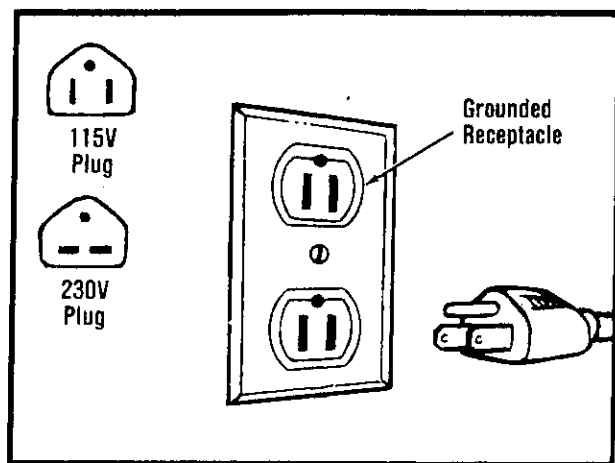


Fig. 2: Machine Grounding Instructions

2. Connect machine to an AC power supply that matches the nameplate specifications. Do not use D.C. power.
3. Use only three-wire extension cords which have three-prong grounding plugs and three-pole receptacles which accept the machine's plug. Replace or repair damaged, frayed, broken or worn cords.
4. Refer to the following chart of recommended extension cord sizes. When using an extension cord, be certain that the conductor size is large enough to prevent excessive voltage drop which will cause loss of power.

Length of Cord	Wire Size Required	
	120V	230V
24 feet	14	16
50 feet	12	14
100 feet	10	12
150 feet	8	10
200 feet	6	8
300 feet	—	8
400 feet	—	6

Fig. 3 Extension Cord Chart

5. When using an extension cord outdoors, use cords marked with the suffix "W-A" following the cord type designation. For example, SJTW-A indicates that the cord is acceptable for outdoor use.
6. Unplug power cord when adjusting, servicing or changing accessories.

### Work Area Safety

1. Keep children and visitors out of work area. If visitors must be in area, keep them far away from the machine and extension cords.
2. Keep work area clean, uncluttered and well lighted.
3. Keep floors dry and free of slippery materials.
4. Clear machine of all objects such as wrenches or keys before turning machine on.

### Machine Safety

1. **Wear standard equipment Mitten.** Never grasp a rotating cable with a cloth or loose fitting glove which could get wrapped around cable. Replace mitten if rivets start to pull out.
2. **Keep shroud covers in place.** Never operate machine with shroud covers removed.
3. **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.
4. **Do not overstress cables.** Overstressing cables because of obstruction may cause twisting or kinking. **Keep one hand on cable when machine is running.**
5. **Position machine within three feet of inlet.** Greater distances can result in cable twisting or kinking.
6. **Do not use machine if switches are broken.**
7. **Use recommended accessories.** Use of improper equipment may increase the risk of injury. Refer to operator's manual for recommended accessories.

### Machine Set-up

(Refer to Illustrated Parts List)

**Feed Lever** - Screw Feed Lever into Feed Mechanism Housing (Refers to Machines with Automatic Cable feeding capability only)

**Handle & Skid Rails** - Assemble Skid Rails onto Handle and secure to Machine with 2 Handle Screws and 4 Skid Rail Screws.

**Foot Actuator** - Screw Foot Actuator onto fitting located below FOR/OFF/REV Switch on Machine Base.

**Note: Disconnect before transporting or housing Machine.**

**Cable** - DO NOT remove bands or staples from cable shipping carton. Retrieve end of cable through the center hole of carton and remove enough cable to connect with Drum Pigtail. Manually load cable from shipping carton directly into drum.

### Operating Instructions

#### Automatic Feed Operating Procedure (Refer to Figure 4)

**Warning: Operator should be thoroughly familiar with the Safety Instructions Section before attempting to operate this equipment.**

1. Position the Drum Machine within 3' of sewer inlet.
2. Position the Foot Actuator for easy operator accessibility.
3. Select and install the proper Tool to end of Cable.
4. Loosen Feed Knob and manually pull sufficient Cable out of Drum to start Tool and Cable into the sewer inlet; retighten Feed Knob. Turn Feed Knob down until Front Bearing makes contact with Cable - turn one full additional turn - **do not overtighten.**
5. Make sure FOR/OFF/REV Switch is in OFF position.
6. Plug the Power Cord into a properly grounded receptacle.
7. Move FOR/OFF/REV Switch into FOR position.
8. Grasp Cable with mittened left hand. With right hand, position Feed Lever in neutral position (vertical or 12 o'clock).

**Warning: Before starting machine, operator's mittened hand must be on Cable.**

9. Exert sufficient downward pressure on Cable to keep Cable in sewer line while depressing Foot Actuator to start Cable rotating.
10. To power feed Cable into line, move Feed Lever in same direction as Rotating Drum and Cable. Rate at which Cable is fed (0' - 30' per minute) into sewer is controlled by position of Feed Lever away from neutral (vertical position).

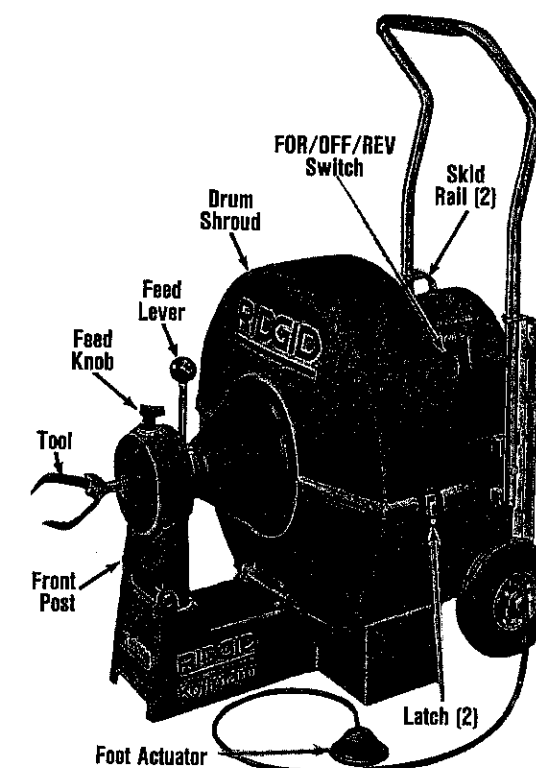


Figure 4. K-6800 Drain Cleaning Machine (Automatic Feed) K-5800 Similar.

**Note: Inner-core Cable is not recommended for use through P-Traps and severe bends in lines smaller than 4".**

11. Continue to feed Cable into line until resistance or obstruction is encountered. This condition will generally become apparent to operator by an increase in size of Cable loop between machine and sewer line inlet and/or tendency of Cable to twist sideways in operator's hand.

**Warning: OPERATOR SHOULD IMMEDIATELY respond to this condition by moving Feed Lever into full reverse (opposite direction of Drum rotation) and release Foot Actuator. This should release the twist in Cable and reduce size of Cable loop. DO NOT allow Tool to get hung up in an obstruction. If Tool does get hung up, refer to Special Applications Procedure, Reverse Operation.**

12. Once the obstruction is encountered and Cable load is released through full reverse of Feed Lever, the operator should loosen Feed Knob. This will disengage feed mechanism and permit operator to break up obstruction using the manual feed procedure.

**Warning:** At this point, progress depends upon the sharpness of the Tool and the nature of the obstruction. Continued operation should be in manual feed mode until the obstruction has been cleared.

13. To clear obstruction, the operator should "pump" the Cable. "Pumping" is accomplished by depressing Foot Actuator while applying downward pressure on Cable loop with both mittened hands until Cable shows a tendency of loading down and/or starting to twist sideways in operator's hands. The operator should then lift up on Cable loop to allow Cable and Tool to back away from obstruction which should reduce twist or load on Cable. This "pumping" action should be continued until Tool has been given an opportunity to eat its way through obstruction.

14. Once obstruction is cleared, it is recommended that operator flush debris through line with running water. Operator may choose to repeat step 13 for thorough cleaning of obstruction area. He may then return to the power feed mode and proceed onto additional stoppages as required.

**Note:** Additional Cable may be added, if required. Refer to Machine Set-up procedure.

15. To retrieve Cable from sewer line, move the Feed Lever in opposite direction of Drum rotation. The Cable should now feed itself back into Machine.

**Note:** It is recommended that a continuous flush of water be used to clean Cable and Tool as they are retrieved.

16. When it is apparent that Tool is just inside sewer inlet, release Foot Actuator and allow Machine to come to a complete stop.

**Warning:** Never retract Tool from sewer inlet while Cable is rotating.

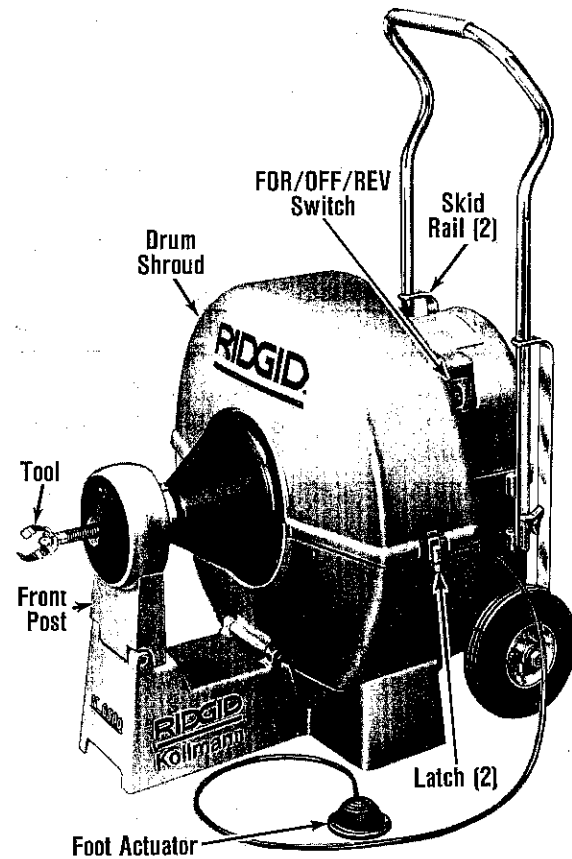
17. Turn FOR/OFF/REV Switch to OFF position and remove Cord from power source.

18. Loosen Feed Knob and pull remaining Cable and Tool from sewer and hand-feed Cable back into Machine.

**Manual Feed Operating Procedure (Refer to Figure 5)**

**Warning:** Operator should be thoroughly familiar with the Safety Instructions section before attempting to operate this equipment.

1. Position Drum Machine within 3' of sewer inlet.
2. Position Foot Actuator for easy operator accessibility.
3. Select and install proper Tool to end of Cable.



**Figure 5. K-6800 Drain Cleaning Machine (Manual Feed) K-5800 Similar.**

4. Pull sufficient Cable out of Drum to start Tool and Cable into sewer inlet.
5. Make sure FOR/OFF/REV Switch is in OFF position.
6. Plug Power Cord into a properly grounded receptacle.
7. Move FOR/OFF/REV Switch to FOR position.

8. Grasp Cable with two mittened hands and pull approximately 1 ft. of additional Cable out of machine, building a slight loop of Cable between machine and sewer inlet.

**Warning:** Before starting machine, operator must have both mittened hands on Cable.

9. While depressing Foot Actuator to start machine, use both mittened hands to grasp and push Cable into sewer inlet.

**Note:** Rotating Cable will slowly work its way into line as operator applies downward pressure with mittened hands on cable loop.

10. Continue Steps 8 & 9 until resistance or obstruction is met. This will generally 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.

**Warning:** DO NOT allow Tool to get hung up in an obstruction. If Tool gets hung up in an obstruction, refer to Special Applications Procedure, Reverse Operation.

11. To clear obstruction, the operator should "pump" Cable. "Pumping" is accomplished by depressing Foot Actuator while applying downward pressure on cable loop with both mittened hands until Cable shows a tendency of loading down and/or starting to twist sideways in operator's hands. The operator should then lift up on cable loop to allow Cable and Tool to back away from obstruction which should reduce twist or load on Cable. This "pumping" action should be continued until Tool has been given an opportunity to eat its way through obstruction.

12. Once obstruction is cleared, it is recommended that operator flush debris from line with running water. Operator may choose to repeat step 11 for thorough cleaning job and then proceed through additional stoppages as required:

**Note:** Additional Cable may be added, if required. Refer to Machine Set-up Procedure.

13. 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.

**Note:** It is recommended that a continuous flush of water be used to clean Cable and Tool as they are retrieved.

14. Release Foot Actuator and allow machine to come to a complete stop.

15. Turn FOR/OFF/REV Switch to OFF position and remove Cord from power source.

16. Pull remaining Cable and tool from sewer and hand-feed Cable back into machine.

**Special Applications Procedure**

**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 Tool is determined by the nature of job and is left to the discretion of operator.

Flexible Leaders should be used to negotiate bends in line.

**Main Sewer or Septic Tank Overrun**

It is very important to know the approximate distance from inlet to main sewer or septic tank. Overrunning Cable too far into main sewer or septic tank can allow Cables to knot up and prevent their return through small lines.

**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 Actuator and allow machine to come to a full and complete stop. Place FOR/OFF/REV Switch to REV (reverse) position. If machine has automatic feed, loosen feed knob. Grasp Cable with mittened hands and pull while jogging Foot Actuator. When Tool is dislodged place FOR/OFF/REV Switch in FOR (forward) position and follow normal operating procedure.

**Caution:** Never operate this machine in REV (reverse) for any other purpose.

**Loading Machine On Vehicle**

Tip machine backwards and rest offset of Handle on truck bed. Lift up on front of machine and slide onto truck. An optional loading wheel is available to facilitate this procedure.

**Note:** Remove Foot Actuator whenever transporting or moving Machine. Take care not to damage electrical cord.

**Clutch Adjustment (Refer to Figure 6)**

**Warning:** Make sure Machine is unplugged from electrical system before making any adjustment.

The Clutch has been factory set for normal operating conditions. However, the Clutch can be adjusted to control the point at which the Cable will stall. This adjustment is left to the discretion of operator to complement his "cleaning" style.

To make adjustment, loosen Clutch Nut Screw. Insert screwdriver in motor shaft slot. While holding motor shaft with screwdriver, turn Clutch Nut clockwise to increase stall point and counterclockwise to decrease stall point. Securely tighten Clutch Nut Screw.

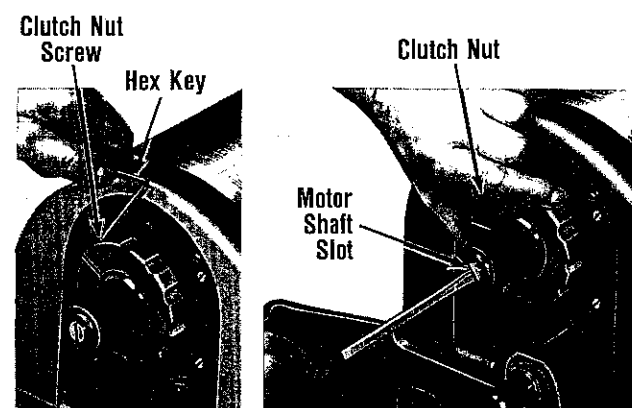


Figure 6. Clutch Adjustment

**Removing/Installing Cable Drum (Figs. 4, 7 & 8)**

1. Disengage 2 Latches and remove Drum Shroud.
2. Rotate Drum Toggle Clamp to the left to disengage Drum.
3. Loosen Knob, if applicable.
4. Loosen Front Post Retaining Knob at Hinge.
5. Grasp top of Drum and pull forward causing the Drum and Front Post Assembly to pivot to a horizontal position.

**Note:** On K-6800 Models, position C-7481 Support Stand under Front Post. Lower Cable Drum, inserting C-7481 Support Stand in Front Post opening. Insure Support Stand and Front Post are secure before proceeding.

6. Lift off Drum. A-38 Drum Handle Assembly is available as an accessory for additional ease and convenience when handling Drums.
7. Before installing new Drum, extract sufficient Cable (approximately 6") from replacement Drum to pass through opening in Feed Housing.
8. Install Drum and secure by reversing above procedure.

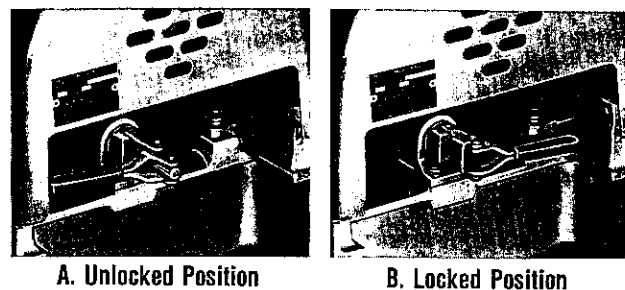


Figure 7. Drum Shroud Removed with Drum Rotated for Removal.

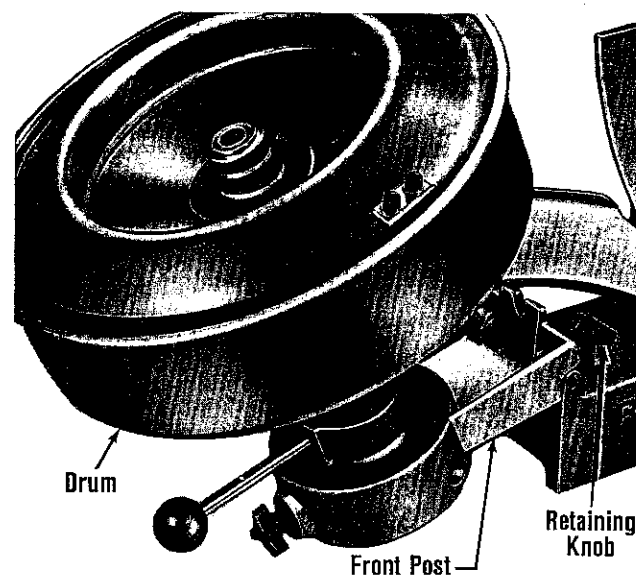


Figure 8. Drum Toggle Clamp.

**Disconnecting/Connecting Cable or Tool (Figure 9)**

Put screwdriver in slot, turn 180 degrees and slide apart. To connect, slide Tool or Cable together, and turn screwdriver slot in coupler 180 degrees.

**Note:** Coupling is in locked position when hash mark is on opposite side of screwdriver slot as shown on following page.

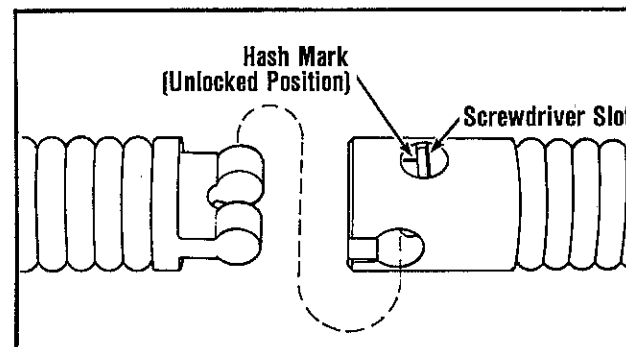


Figure 9. Disconnecting/Connecting Cable or Tool.

**Draining Water From Drum**

By following steps 1 through 5 (Removing/Installing Cable Drum Procedure on preceding page) water will be allowed to Drain from Drum.

**Machine Maintenance**

1. Use sharp cutting tools.
2. Inspect cables. Replace worn or kinked cables.
3. Follow instructions for lubricating and changing accessories.
4. Inspect machine cord. Replace damaged, frayed, broken or worn machine cord.
5. Inspect extension cords. Repair or replace damaged, frayed, broken or worn cords.
6. Keep handles dry and clean. Keep free from oil and grease.
7. When not being used, store machine in a secured, locked area, out of reach of children and people unfamiliar with the machine.
8. Keep footswitch in working order.

**Warning:** Make sure Machine is unplugged from electrical system before making any adjustment.

**Note:** If any maintenance is required other than that listed below, take Drain Cleaning Machine to a RIDGID Authorized Service Center or return it to factory.

**Feed Mechanism Assembly**

If your model is equipped with an Automatic Cable Feed Mechanism, proper cleaning and lubrication is advised for long trouble-free operation. After each use, hose out Feed Mechanism Assembly with water and lubricate with lightweight machine oil.

**Lubrication**

Grease all exposed moving parts such as Drum Toggle Clamp, Wheels, and Hinge Pins as required.

**Caution:** No lubrication of the Motor Shaft is required.

**Machine Storage**

Motor driven equipment must be kept indoors or well covered in rainy weather.

**Cables**

Cables should be thoroughly flushed with water to prevent damaging effects of drain cleaning compounds. Periodically, lubricate Cables and couplings with oil.

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.

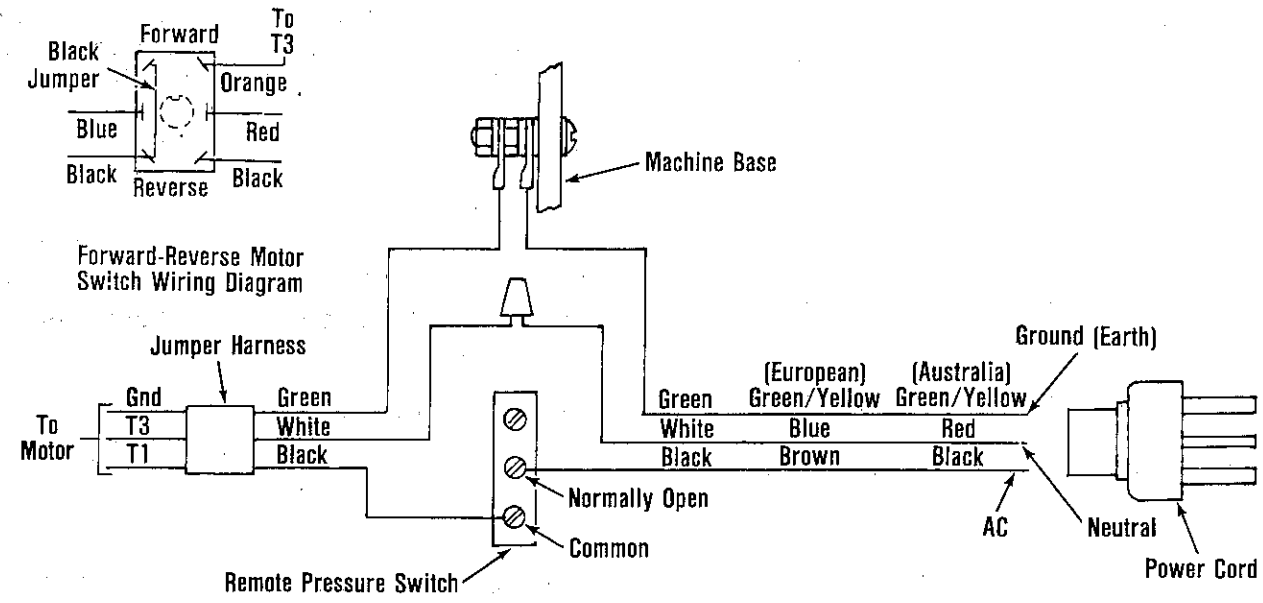


Figure 10. Drum Machine Wiring Diagram.

# **RIDGID**

---

# **Kollmann**

**Pipe and  
Drain Cleaning  
Equipment**

## **RIDGID Lifetime Warranty**

The RIDGID REPUTATION is the result of consistent product quality and years of pride in workmanship. Rigorous checks and controls from raw materials to packaged products insure product confidence widely accepted as the mark of the professional trades. Therefore, RIDGID covers its products with a LIFETIME WARRANTY against defects in material or workmanship; excluding electric motors which are warranted for a period of one year from date of sale. Pipe or drain cleaning tools, rods and cables, are not covered by this warranty and are considered expendable material. To take advantage of this warranty, the complete product must be delivered prepaid to THE RIDGE TOOL COMPANY or any RIDGID AUTHORIZED SERVICE CENTER. Pipe wrenches and other hand tools should be returned to place of purchase. Obviously, failures due to misuse, abuse, or normal wear and tear are not covered by this warranty. NO OTHER WARRANTY, WRITTEN, OR ORAL, APPLIES. No employee, agent, dealer, or other person is authorized to give any warranty on behalf of The Ridge Tool Company. Warranted products will be repaired or replaced, at our option, at no charge to you and returned to you via prepaid transportation. Such replacement or repair is the exclusive remedy available from Ridge. Ridge is not liable for damage of any sort, including incidental and consequential damages. Some U.S.A. states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

# **RIDGID**®



 Ridge Tool Subsidiary  
Emerson Electric Co.  
**EMERSON**®