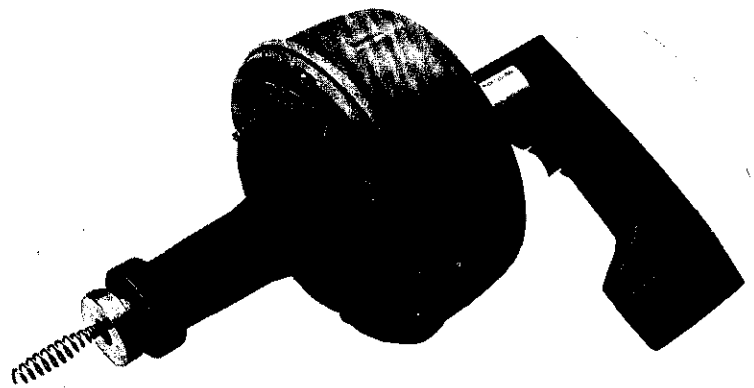
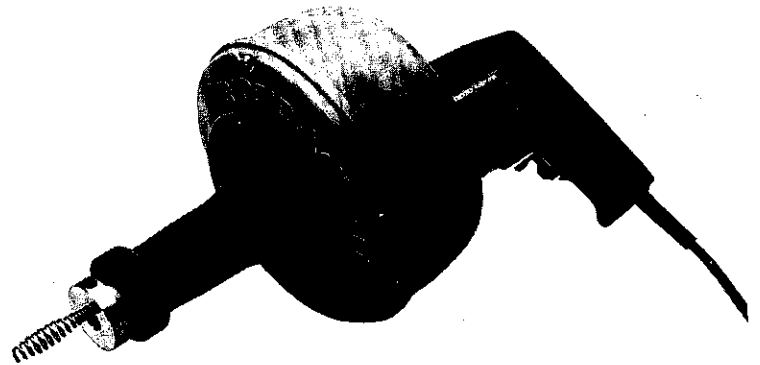


K-38 K-38B

OPERATOR'S
MANUAL

REVISED
8-25-94

Drain Cleaner



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

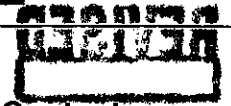


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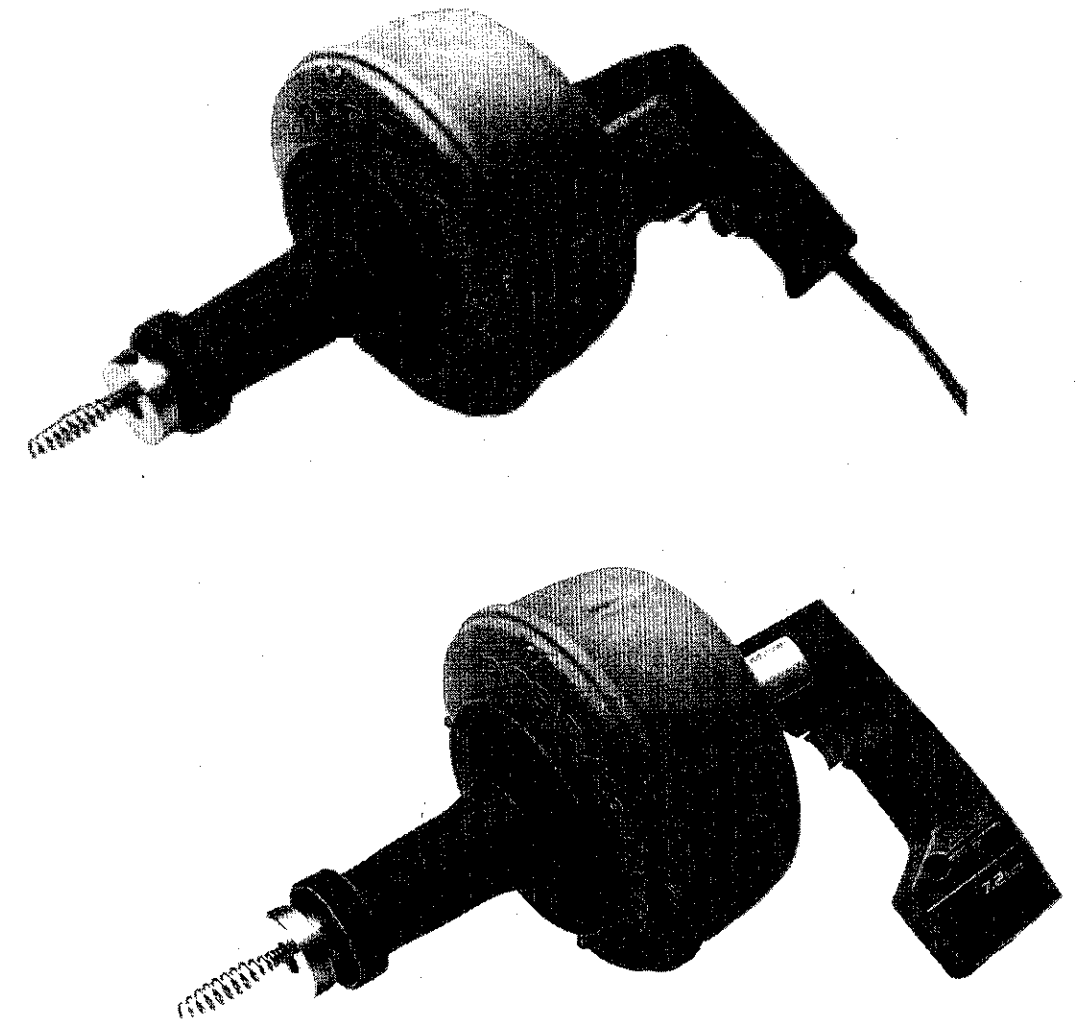
K-38 and K-38B Cordless

Drain Cleaner

K-38/K-38B Drain Cleaner

Record below and retain product model and serial numbers which are located on nameplate.

Model No.	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

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

Electrical Safety

1. **Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation eliminates the need for the three wire grounded power cord and grounded supply system.
2. **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.
3. **Don't expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electrical shock.
4. **Do not abuse cord. Never use 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.
5. **When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W".** These cords are rated for outdoor use and reduce the risk of electrical shock.
6. **Connect the tool to an AC power supply that matches the name plate specifications.** Incorrect voltage supply can cause electrical shock or burns.

7. **Inspect extension cord periodically and replace if damaged. Do not let visitors contact tool or extension cord.** Damaged cords increase risk of electrical shock.
8. **Use proper extension cords (see chart).** Insufficient conductor size will cause excessive voltage drop and loss of power.

Minimum Wire Gauge for Cord Set			
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

Personal Safety

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

Tool Use and Care

1. **Use 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.
2. **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
3. **Do not use tool if switch does not turn it on or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
4. **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
5. **Store idle tools out of the reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
6. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.
7. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation.** If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
8. **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.

Service

1. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified repair personnel could result in injury.
2. **When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance Section of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electrical shock or injury.
3. **Follow instructions for lubricating and changing accessories.** Accidents are caused by poorly maintained tools.

Specific Safety Information

The Operator's Manual contains specific safety information and instructions for your protection against serious injuries including:

- Finger, hand, arm or other body injuries if clothing

gets caught in the cable or other moving parts.

- Eye injuries, including being blinded by the cable or thrown debris.
- Electrical shock or burns from contact with wires, motor or other power drive parts.

Read and follow the safety information and instructions in the operator's manual. This manual covers the use of either the corded or cordless version of the K-38 Drain Cleaner.

Know the location and functions of all controls before using either tool.

This manual also contains important safety and operating instructions for battery charger No. 72-BC. Do not substitute any other charger. Use only the charger which accompanies your RIDGID/Kollmann Drain Cleaner.

Before using battery charger, read all instructions and cautionary markings on (1) battery charger, (2) battery pack, and (3) product using battery.

If battery liquid comes in contact with skin, wash quickly with soap and water, then with lemon juice or vinegar. If it gets into your eyes, flush them with clean water for a minimum of ten minutes and seek immediate medical attention.

Cordless Drain Cleaner Safety

1. **Charge only RIDGID No. 72-BP rechargeable batteries.** Other types of batteries may burst causing personal injury and damage.
2. **Do not probe battery charger with conductive objects.** Shorting of battery terminals may cause sparks, burns or electrical shock.
3. **Do not insert battery with cracked case into charger. Do not operate charger if it has been dropped or damaged in any way.** Damaged tool increases the risk of electrical shock.
4. **Do not burn batteries for any reason.** Batteries explode in fire.
5. **Charge battery pack in temperatures above 40°F (4°C) and below +150°F (41°C). Store tool and battery pack in locations where temperatures will not exceed +120°F (49°C).** Will prevent serious damage to batteries which may result in battery leakage, electrical shock or burns.
6. **Do not charge battery pack in damp or wet environment.** Increases the risk of electrical shock.
7. **Keep handles dry and clean; free from oil and grease.** Allows for better control of the tool.

Drain Cleaner Safety

1. **Do not operate tool in (REV) reverse.** Operating tool in reverse can result in cable damage and is used only to back tool out of an obstruction.
2. **Do not overstress cables.** Overstressing cables because of obstruction may cause twisting or kinking.
3. **Position machine within one foot of inlet.** Greater distances can result in cable twisting or kinking.
4. **Do not use tool if switch is broken.** Any tool that cannot be controlled by the switch is dangerous and must be repaired.
5. **Keep handles dry and clean; free from oil and grease.** Allows for better control of the tool.

NOTE: SAVE THESE INSTRUCTIONS!

Description and Specifications

Description

The RIDGID/Kollmann Model K-38 (Fig. 1) is a hand held, compact, convenient drain cleaning machine. Double Insulation provides equivalent protection of a properly grounded tool; therefore, a three wire extension cord and grounding supply system is not required.

The Model K-38B's (Fig. 2) battery powered operation eliminates the need of a power outlet or extension cord at the point of application.

Both the K-38 and K-38B are recommended for 3/4 inch to 2-1/2" drain lines in kitchens, bathrooms and utility rooms.

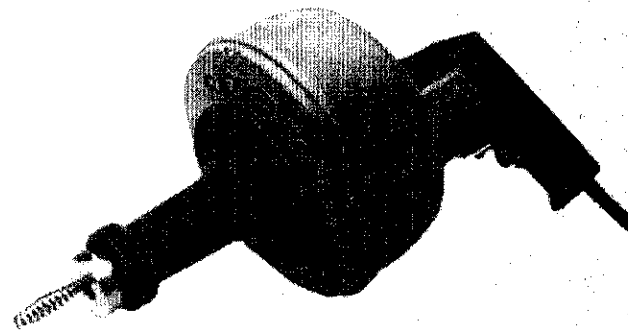


Figure 1. K-38 Drain Cleaner with C-1 Cable.

K-38 Specifications/Standard Equipment

Motor:
 TypeUniversal
 Rating115V, single phase, AC, 3.2 amp, 50-60 Hz. (230V available on request)
 Trigger SwitchVariable Speed, Reversing
Operating Speed0-550 RPM
Drain Line Capacity3/4" thru 2 1/2"
Weight w/C-1 Cable11.5 lb

K-38B Specifications/Standard Equipment

Motor:
 TypeUniversal
 Rating7.2V, DC
 Trigger SwitchVariable Speed, Reversing
Operating Speed0-600 RPM
Drain Line Capacity3/4" thru 2 1/2"
Weight w/C-1 Cable9.5 lbs.

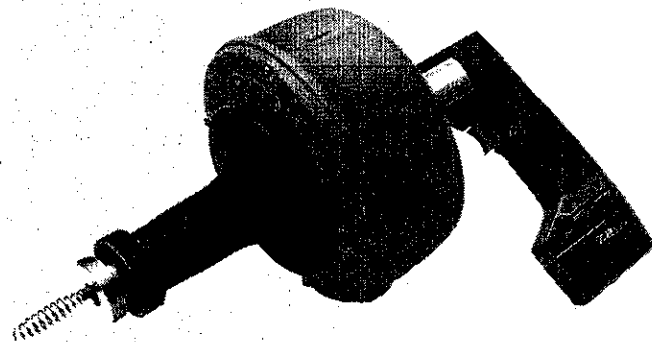


Figure 2. K-38B Drain Cleaner

Note: Figure 3 lists 8 combinations of standard equipment that are available with the basic K-38 Drain Cleaner.

Model No.	Description
K-38	K-38 Drain Cleaner C-1IC Cable w/Bulb Auger (5/16" x 25')
K-38B	K-38B Cordless Drain Cleaner, 72-BP Battery Pack, 72-BC Charger, C-1 Cable w/Bulb Auger (5/16" x 25')
K-38-1	Same as Model No. K-38 plus: C-6429 Carrying Case
K-38B-1	Same as Model No. K-38B plus: (1) additional 72-BP Battery Pack C-6429 Carrying Case
K-38-2	K-38 Drain Cleaner C-1 Cable w/Bulb Auger (5/16" x 25') C-5 Cable w/Bulb Auger (3/8" x 35')
K-38-3	Same as Model No. K-38-2 plus: C-6429 Carrying Case
K-38-5	K-38 Drain Cleaner C-1IC Cable w/Bulb Auger (5/16" x 25') C-6 Cable w/5/8" Coupling (3/8" x 35') A-13 Pin Key T-201 Straight Auger T-203 Bulb Auger T-205 "C" Cutter T-210 Grease Cutter T-217 Drop Head Auger C-6429 Carrying Case
K-38-7	K-38 Drain Cleaner C-1IC Cable w/Bulb Auger (5/16" x 25') C-6 Cable w/5/8" Coupling (3/8" x 35') C-21 Cable w/Bulb Auger (5/16" x 50') A-13 Pin Key T-201 Straight Auger T-203 Bulb Auger T-205 "C" Cutter T-210 Grease Cutter T-217 Drop Head Auger C-6429 Carrying Case

Figure 3. Equipment Available with Standard Models

Operating Instructions

- Warning:**
1. Operator should be thoroughly familiar with preceding Safety Precautions and Controls before attempting to operate this equipment.
 2. Be very careful when cleaning drains where cleaning compounds have been used. Avoid direct contact of the skin and especially the eyes and facial area as serious burns can result. Rinse hands thoroughly after contact with cleaning compounds.

Loading Cable into Cable Canister

Your K-38 is supplied with an Inner Drum that fits snugly inside the Cable Canister and allows easy changeout of Cable. Models that include extra cable as standard equipment come with an Inner Drum for each cable. To utilize the Inner Drum feature:

1. Pull Handgrip forward to the disengaged position.
2. Loosen the four captive fasteners that hold the Canister Front Half to the Back Half. (Fig. 3)

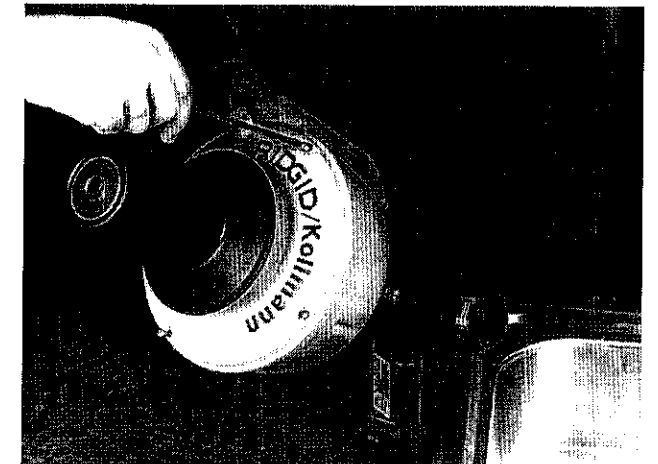


Figure 3. Loosen four fasteners from back half of canister

3. Separate the Canister Front Half from the Back Half and lift the Inner Drum, with cable, out of its cradled fit.
4. Fit the new Inner Drum into the Canister's Back Half and draw about a foot of cable out of the Inner Drum. (Fig. 4)

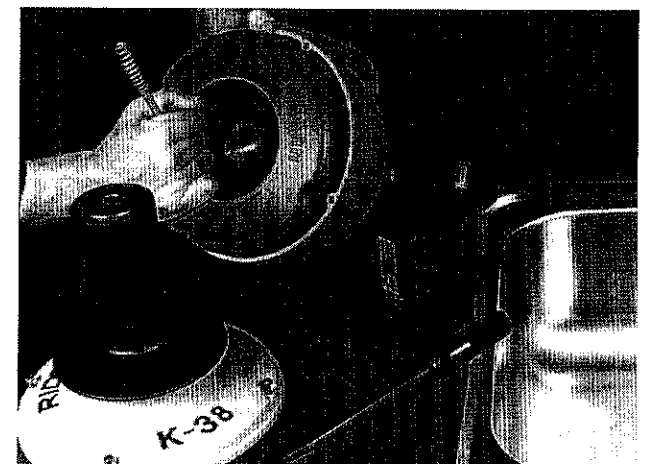


Figure 4. Load inner drum into back half of canister.

5. Pass the exposed Cable through the Front Half Assembly, align the Front Half with the Back Half of the Canister, and tighten the captive fasteners into the Back Half of the Canister. (Fig. 5)

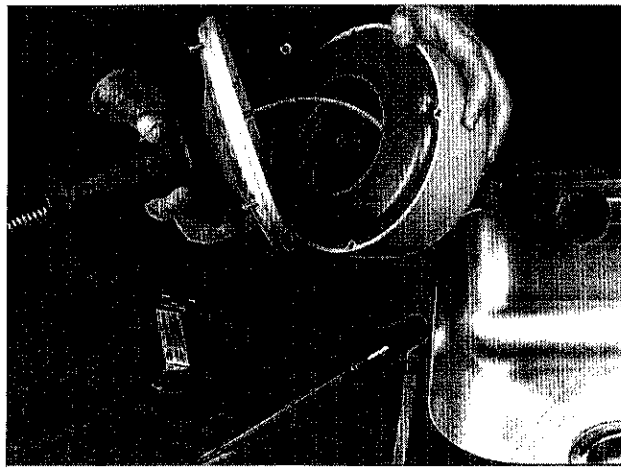


Figure 5. Pass exposed cable through front half and reassemble to back half of canister.

If you choose to load cable without changing the Inner Drum:

1. Pull Handgrip forward to the disengaged position.
2. Insert small end of cable into opening in the front end of the Canister's Front Half and continue feeding entire Cable into Canister. (Fig. 6)

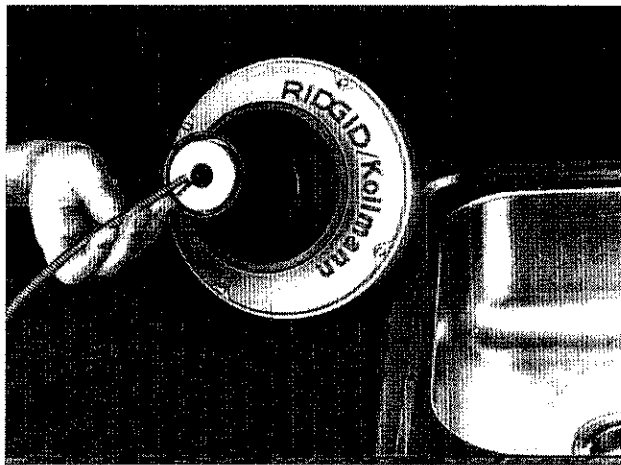


Figure 6. Loading loose cable into canister

Note: For easier Cable installation, bend small end of Cable one inch from end 15 to 30 degrees. Refer to (Fig. 7).

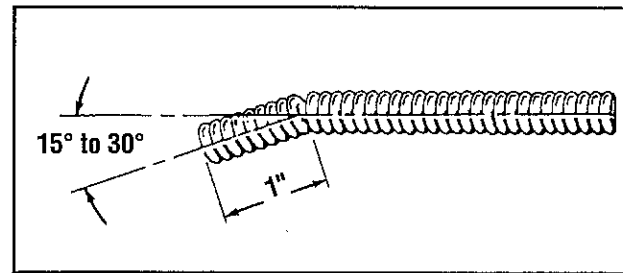


Figure 7. Bending Cable for Easier Installation

Battery Charger

Charging Procedure:

With your thumb, lift up latch and, withdraw battery pack unit from tool handle (Fig. 8). Plug charger cord into appropriate outlet (check nameplate for correct voltage supply), then insert battery pack into charger. (Fig. 9)

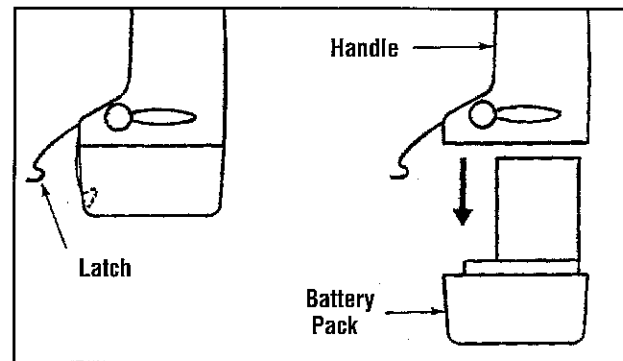


Figure 8. Removing Battery Pack

After plugging cord into outlet and inserting battery pack into charger, the charger's red light (Fig. 9) will turn "ON". This indicates the battery pack is receiving a fast charge. When light turns off the battery pack is fully charged and in a trickle charge mode.

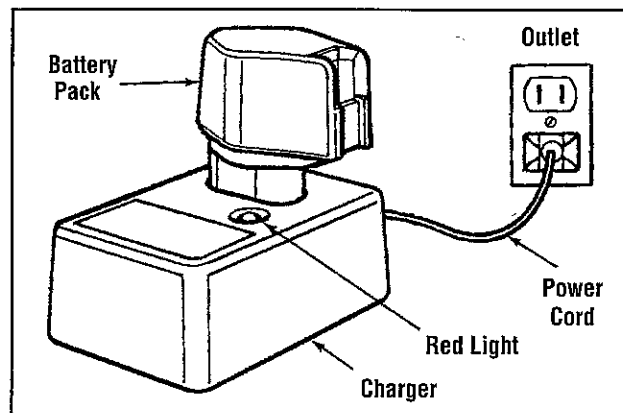


Figure 9. Charging Battery Pack

After one hour the charging is complete and the battery pack may be used even though the light may still be ON. The light may require more than one hour to turn off depending on the temperature. The purpose of the light is to indicate fast charge. It does not indicate the exact point of full charge. The light will turn OFF in less than one hour if the battery pack was not completely discharged.

Note: If the battery pack has become warm in use and placed in charger while still warm, the light may not immediately turn "ON". If so, remove battery pack from charger and let the battery pack cool down for a while. Re-insert the battery pack after it has cooled to start the quick charge. **DO NOT QUICK CHARGE AT TEMPERATURES BELOW +40°F (4°C).**

Don't worry about overcharging the battery pack as it can be left "ON" charge for extended periods of time. The trickle charge feature enables you to have a full charge whenever it is needed. Or, remember to put the battery pack on charge 1 hour before and it will be ready to "GO" at full charge.

When the battery pack is fully charged, unplug the charger (unless you're charging another battery pack) and slip the battery pack back into the tool handle.

Important Charging Notes

The battery pack accepts only about 80% of its maximum charge capacity with its first charge; or, after prolonged storage it will also require additional time on the first charge. However, after several charge and discharge cycles, the batteries should be up to full charge capacity and delivering maximum performance.

If Batteries Do Not Charge Properly:

1. Check battery pack terminals for dirt. Clean with cotton swab and alcohol if necessary.
- DANGER: Line Voltage (120/230V) present at charger terminals. Do not touch charger terminals due to risk of electrical shock.**
2. Place charger and battery pack in room temperature. In extremely warm environment, the battery pack may be too hot to permit quick charging. The battery pack can also get too warm from a very fast discharge, brought about by overloading the tool.
3. If you still do not get proper charging, take or send both tool and charger to your local RIDGID Authorized Service Center.

Note: Use of chargers or batteries not sold by RIDGID may void the warranty.

Controls

Handgrip

Pull Handgrip rearward and it locks into engaged position to retain Cable when feeding Cable into line. Pull Handgrip forward to disengage and draw Cable out of or into Cable Canister.

Variable Speed Switch

Operate at any speed from 0 to maximum 550 RPM, 600 RPM for the Cordless version. The speed is controlled by the pressure you apply to the trigger. Apply more pressure to increase speed and release pressure to decrease speed.

Forward/Reverse Lever

The FORWARD/REVERSE Lever, located over the Variable Speed Trigger Switch, changes rotation of Cable. For clockwise rotation (normal), push Lever to right (FORWARD) position. For counterclockwise rotation, push Lever to left (REVERSE) position.

Caution: Power Unit must be completely stopped before moving FORWARD/REVERSE Lever. REVERSE position is used only when removing Cable from an obstruction.

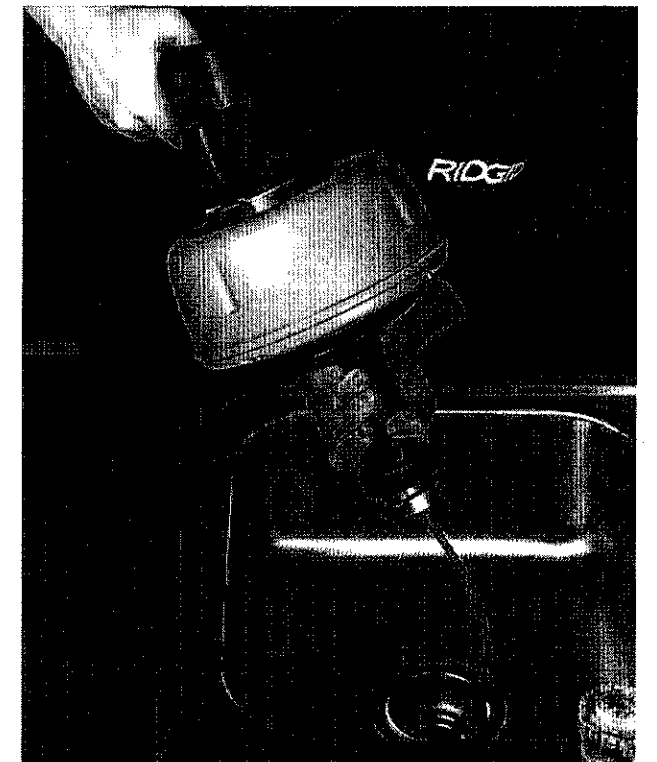


Figure 10. Pull handgrip rearward (see arrow) to engage clutch.

Cleaning Drain Line

1. Place FORWARD/REVERSE Lever in FORWARD position.
2. Pull Handgrip forward to disengage clutch. Pull 10 to 12 inches of Cable out of canister and insert into line to be cleaned.
3. Pull Handgrip Rearward until it "snap locks" into the engaged position. (Fig. 10) Squeeze Variable Speed Trigger Switch gently and carefully push the cable down the line. (Fig. 11) Do not force, as Cable will tend to kink.
4. Pull handgrip forward to disengaged position. Draw an additional 10 to 12 inches of cable from the canister. (Fig. 12)
5. Repeat steps 3 and 4 until you reach the drain blockage.

Caution: When you reach the blockage, pull Handgrip Rearward to engaged position to retain the Cable. At this point progress depends on type of tool being used and nature of the blockage. Advance cable slowly.

6. If tool gets "hung up" in obstruction, release Trigger Switch and let motor come to a complete stop before reversing.
7. Place FORWARD/REVERSE Lever in REVERSE position.

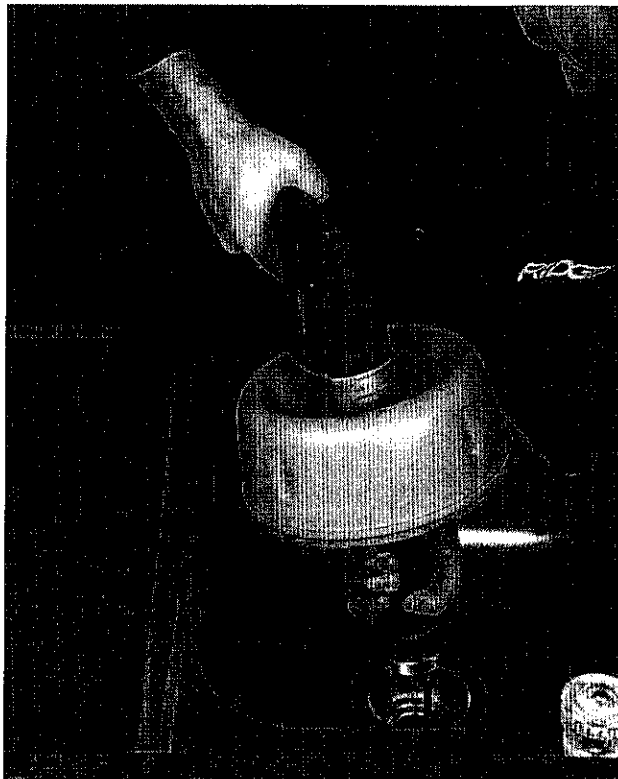


Figure 11. Push cable down drain line.

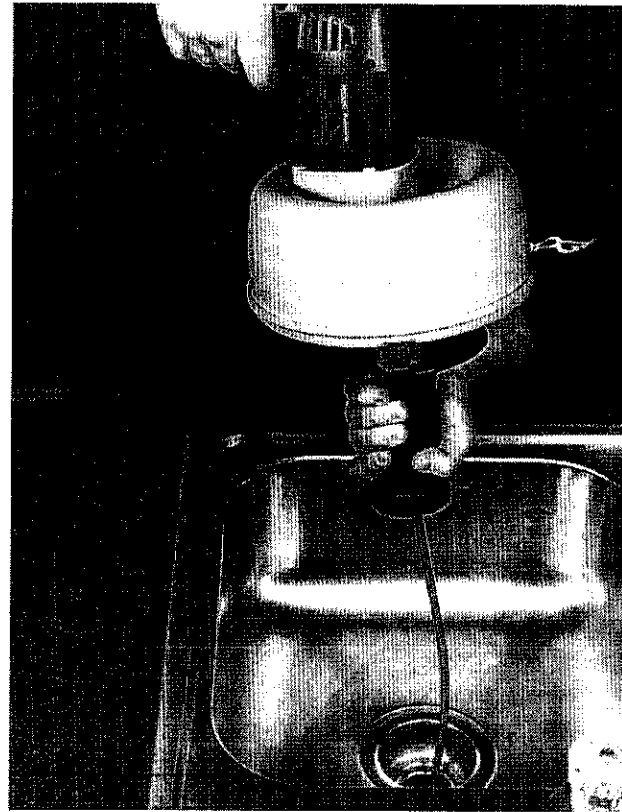


Figure 12. Pull handgrip forward to disengage clutch and draw additional cable from canister.

8. Press Trigger Switch only until tool is free of obstruction. Release Trigger Switch immediately.

Caution: Operating Drain Cleaner in REVERSE position can cause Cable damage and is used only to back tool out of an obstruction.

9. As soon as tool is free and motor has stopped, return FORWARD/REVERSE Lever to FORWARD position.
10. Continue feeding Cable by following steps 3 through 9 until through obstruction.

Withdrawing Cable from Drain Line

1. To withdraw Cable from line, leave FORWARD/REVERSE Lever in FORWARD position, pull Handgrip Rearward to Engaged position and pull back on entire Drain Cleaner.
2. As excess Cable is retracted from line, pull Handgrip Forward to disengaged position and push cable back into Cable Canister.
3. Continue withdrawing cable by following Steps 1 and 2 until cable end emerges.

Maintenance

1. Cables should be thoroughly flushed with water after each use 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 Cables become flat.

2. Use a clean cloth to wipe the tool off. Oil, grease and other substances may cause deterioration. Certain cleaning agents and solvents damage plastic parts. Some of these are: gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia. Avoiding use of these and other types of cleaning agents minimizes the probability of damage.

3. Store the tool where it is cool and dry. Avoid those areas where the temperature will drop to 0°F or exceed +120°F.

About once a year, return your tool, battery pack and charger to the nearest Authorized Service Center for the following:

- Parts cleaned and inspected.
- Relubricated with fresh lubricant.
- Electrical system tested.
- All repairs.

Warning: All repairs, electrical or mechanical, should be attempted only by trained repairmen. Contact the nearest RIDGID factory authorized repair center. Use only RIDGID replacement parts, any other may create a hazard.

Lubrication Instructions

Monthly

Periodic disassembly for cleaning and lubricating will assure long trouble-free service for your RIDGID/Kollman K-38/K-38B Drain Cleaner.

1. Disassemble unit (refer to schematic below):

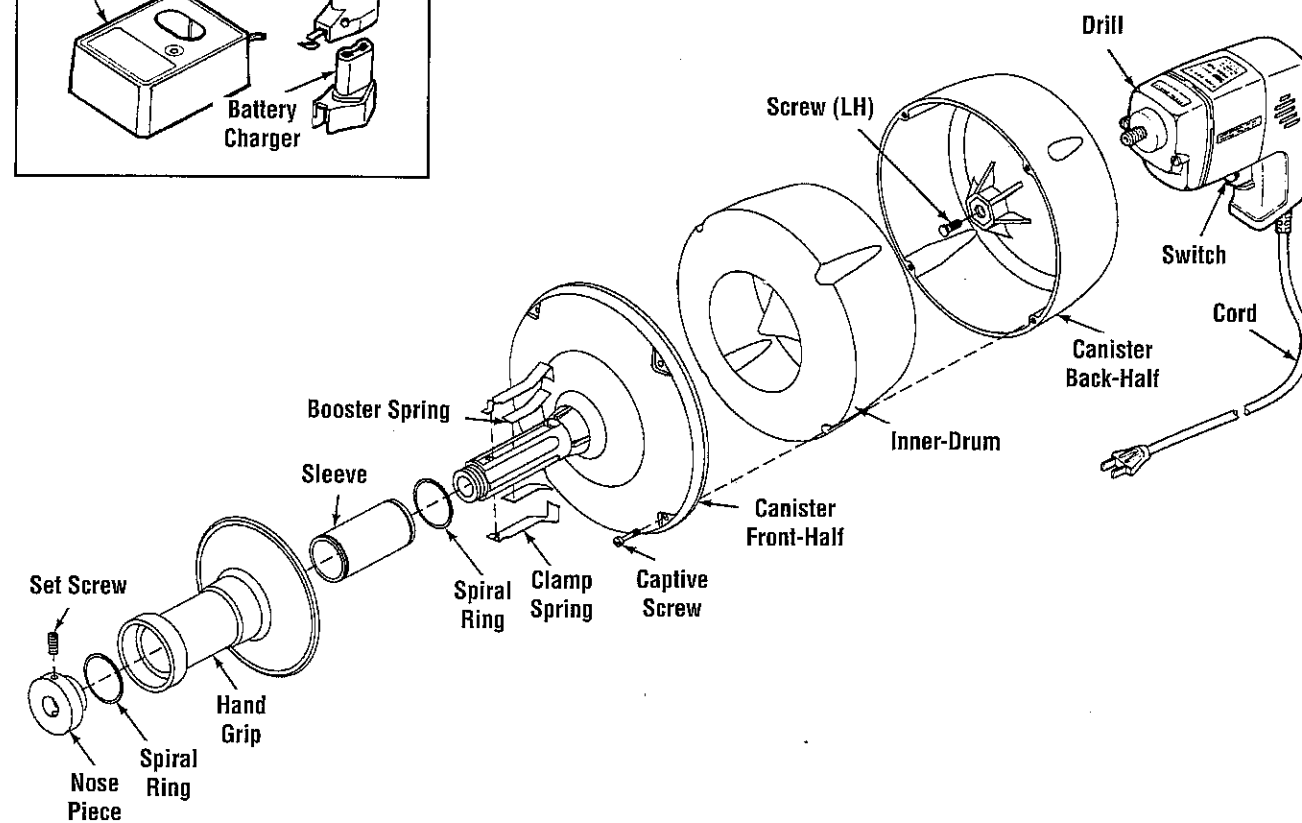
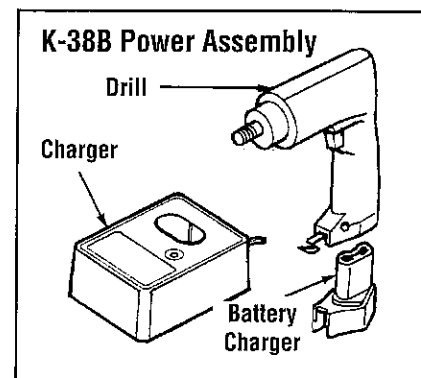
A. Unscrew Nose Piece. Thread is a normal right hand thread. If necessary, insert smooth round rod into hole in O.D. of Nose Piece to "break loose" thread.

B. Pull off Hand Assembly.

C. Remove four Springs. The two Clamp Springs attach to Canister front half in a manner similar to a pegboard hook

2. Thoroughly clean all parts. If required, use emery cloth to remove rust and or scale from inside of Sleeve.

3. Coat Springs and inside Sleeve with good quality bearing grease and reassemble.



Accessories

- C1-IC Cable with Bulb Auger $\frac{5}{16}$ " x 25'
- C2 Cable with Drop Head Auger $\frac{5}{16}$ " x 25'
- C2-IC Cable with Drop Head Auger $\frac{5}{16}$ " x 25'
- C-22 Cable with Drop Head Auger $\frac{5}{16}$ " x 50'
- C-13IC Cable with Bulb Auger $\frac{5}{16}$ " x 35'
- C-23IC Cable with Drop Head $\frac{5}{16}$ " x 35'
- C-4 Cable with Male Coupling $\frac{3}{8}$ " x 25'
- C-5 Cable with Bulb Auger $\frac{3}{8}$ " x 35'
- C-6 Cable with Male Coupling $\frac{3}{8}$ " x 35'
- 72-BP Battery Pack
- 72-BC Charger
- 72-ABC Cordless Automatic Charger
- Inner Drum
- C-6429 Carrying Case
- K-38 Chuck Kit
- Replacement Chuck ($\frac{13}{16}$ " - 20 UNF)



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. Pipe or drain cleaning tools, rods and cable, 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 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 Ridge Tool Company. Warranted products will be repaired or replaced, at our option, at no charge to you and returned to you via pre-paid 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 have other rights which vary from state to state.

Ridge Tool Company

400 Clark Street
Elyria, Ohio 44036-2023



Form No. K-38B-M-0895
278-080-871