

Only wear RIDGID drain cleaning gloves. Never grasp the rotating cable with anything else, including a glove or a rag. They can become wrapped around the cable, causing serious injury.

When cleaning drains that might contain hazardous chemicals or bacteria, wear appropriate protective equipment, such as goggles, face shields or respirators, to prevent burns and infections. For extra protection from chemicals and bacteria on the machine and in the work area, wear latex, rubber or other liquid barrier gloves *under* the RIDGID drain cleaning gloves. Rubber soled, non-slip shoes can help prevent slipping and electric shock, especially on wet surfaces.

Follow operating instructions to reduce the risk of injury from twisted or broken cables, cable ends whipping around, machine tipping, chemical burns, infections and other causes.

1. Make sure that machine and work area is properly set up and that the work area is free of bystanders and other distractions.
2. Assume a proper operating position that will allow:
 - Control of the drain cleaner, including the ON/OFF action of the switch. Do not press ON/OFF switch yet.
 - Good balance. Be sure that you do not have to over reach, and cannot fall on the cable.
 - Ability to maintain the cable outlet of the machine 6" (15cm) or less from the drain.

This will help maintain control of the cable and machine. See Figure 10.

3. Wearing RIDGID Drain Cleaning gloves, pull the handgrip forward to release the chuck. Pull cable out of machine and feed into drain. Push cable as far into drain as it will go. At least one foot of cable must be in drain so that the end of the cable will not come out of the drain and whip around when you start the machine.
4. Move the FOR/REV switch to the FOR (FORWARD) position (drum should rotate clockwise when viewed from motor end). See Figure 6. **Do not depress the ON/OFF switch yet.** FOR/REV refers to the cable rotation and not to the direction of cable movement. Do not rotate the cable in reverse except as specifically described in these instructions. Running the drain cleaner in REV can damage the cable.

Operation

The K-45 Drain Cleaning Machine is available in two different feed configurations, either manual feed or AUTOFEED. A K-45 supplied with the AUTOFEED can either feed the cable with the AUTOFEED (by depressing a feed lever) or by manually pulling the cable from the drum and feeding it into the drain. A K-45 without the AUTOFEED can only be used manually.

Feeding The Cable Into The Drain

Manual Operation

Confirm that at least 12" (30cm) of cable is in the drain and that the cable outlet of the drain cleaner is within 12" (30cm) of the drain opening. Move the handgrip away from the drum to release chuck from the cable. With your gloved hand, grip the cable close to the drain cleaner and feed the cable into the drain opening. This can be done either with the cable rotating (ON/OFF switch ON) or not. Rotating the cable while feeding into the drain does a better job of cleaning the drain and makes advancing the cable easier. Do not expose more than 12" (30cm) of cable.

As feeding the cable becomes more difficult, the chuck can be used to better grip and feed the cable. Move the handgrip towards the drum to grip the cable with the chuck. With the cable rotating (ON/OFF switch ON) move the drain cleaner towards the drain opening to push the cable down the drain. Release the ON/OFF switch. Move the handgrip away from the drum to release the chuck from the cable. Grip the cable with your gloved hand to prevent it from pulling out of the drain and pull the drain cleaner back so that no more than 12" (30cm) of cable is exposed. Repeat the above steps to continue advancing the cable in this manner. (See Figures 8-9.)



Figure 8 – Move Hand Grip Toward Drum To Grip Cable With Chuck



Figure 9 – Push Cable Down Drain Line

AUTOFEED Operation

Confirm that at least 12" (30cm) of cable is in the drain and that the cable outlet of the drain cleaner is no more than 6" (15cm) from the drain opening. Move the handgrip away from drum to disengage the chuck from the cable. Do not engage the chuck while using the AUTOFEED. Press the ON/OFF switch to start the machine. To advance the cable into the drain, depress the advance feed lever. The rotating cable will work its way into the drain. Do not allow the cable to build up outside the drain, bow or curve. This can allow the cable to twist, kink or break.



Figure 10 – Feeding Cable With AUTOFEED

If it is difficult to get the cable through a trap or other fitting, the following methods or combinations of methods can be used.

- First, sharp thrusts of the cable, both with and without the cable rotating, can help the cable through a trap.
- A second method is to run the drain cleaner in REV (REVERSE) rotation for several seconds while pushing on the cable. Only do this long enough to get the cable started through the trap. Running the cable in reverse can damage the cable.
- If these options don't work, consider using a smaller diameter or more flexible cable, or a different drain cleaner.

Cleaning The Drain

As you feed the cable into the drain, you may see the cable slow down or build up outside the drain. You may feel the cable start to wind or load up (the drain cleaner may want to twist or move sideways). This may be a transition in the drain (trap, elbow, etc.), build up in the drain (grease, etc.) or the actual blockage. Feed the cable slowly and carefully. Do not let cable build up

outside the drain. This can cause the cable to twist, kink or break.

Pay attention to the amount of cable that has been fed into the drain. Feeding cable into a larger drain or similar transition may cause the cable to kink or knot and prevent removal from the drain. Minimize the amount of cable fed into the transition to prevent problems.

The cables are not attached to the inner drum. Use care when feeding out the last 5 to 7 feet (1.5m to 2.13m) of the cable, to insure that it does not come out of the machine.

If using a cable with the "Speed Bump" feature (See Figure 11) this indicates that there is only about five more feet (1.5m) of usable cable.



Figure 11 – C-13-IC SB Cable With Cable End Indicator Speedbump Is Approx. 84" (2.1m) From Back End Of Cable

Working The Blockage

If the end of the cable stops turning, it is no longer cleaning the drain. If the end of the cable becomes lodged in the blockage and power is maintained to the drain cleaner, the cable will start to wind up (the drain cleaner or cable may want to twist, squirm or move sideways). If the cable end stops turning or if the cable starts to wind up, pull the cable back from the obstruction:

- **Manual Operation** – with the chuck gripping the cable, pull back on the drain cleaner to free the cable end from the blockage.
- **AUTOFEED Operation** – depress the retrieve feed lever to free the cable end from the blockage.

Don't keep the cable rotating if the cable is stuck in a blockage. If the cable end stops turning and the drum keeps rotating, the cable can twist kink or break.

Once the cable end is free of the blockage and turning again, you can slowly feed the cable end back into the blockage. Do not try to force the cable end through the blockage. Let the spinning end "dwell" in the blockage to completely break it up. Work the tool in this manner until you have moved completely past the blockage (or blockages) and the drain is flowing. If needed, the AUTOFEED feed levers do not need to be used, and the K-45 can be used manually. If using an AUTOFEED machine manually, pulling rearward on the handgrip will cause the chuck to grip the cable.

While working the blockage, the cable and tool may become clogged with debris and cuttings from the blockage. This can prevent further progress. The cable and tool need to be retrieved from the drain and the debris removed. See section on "Retrieving the Cable".

Handling A Stuck Tool/Cable End

If the cable end stops turning and cannot be pulled back from the blockage, release the ON/OFF switch while firmly holding the drain cleaner. The motor will stop and the cable and drum may turn backwards until energy stored in the cable is relieved. Do not pull the drain cleaner further than 12" (30cm) from the drain - the cable may twist, kink or break. Keep your finger off of the ON/OFF switch.

Freeing A Stuck Tool

If the cable end is stuck in the blockage, release the ON/OFF switch, pull the handgrip toward the drum to grip the cable and try pulling the cable loose from the blockage. Be careful not to damage the cable or tool while pulling on the cable. If the cable will not come free from the blockage, place the FOR/REV switch in the REV position, and with the handgrip toward the drum to grip the cable, press the ON/OFF switch for several seconds and pull on the cable until it is free of the blockage. Do not operate the machine in the REV position any longer than required to free the cable end from the blockage or cable damage can occur (with FOR/REV switch in REV position the AUTOFEED Advance feed lever will retrieve cable). Place the FOR/REV switch in the FOR position and continue cleaning the drain.

Retrieving The Cable

Once the drain is open, start a flow of water down the drain to flush the debris out of the line. This can be done by running a hose down the drain opening, turning on a faucet in the system or other methods. Pay attention to the water level, as the drain could plug again.

With water flowing through the drain, retrieve the cable from the line. The flow of water will help to clean the cable as it is retrieved. The FOR/REV switch should be in the FOR position – do not retrieve the cable with the switch in the REV position, this can damage the cable.

- **Manual Operation** – Pull the handgrip forward to release the chuck from the cable. With your gloved hand, grip the cable close to the drain opening and retrieve the cable back into the drum. This can be done either with the cable rotating or not. Rotating the cable while retrieving does a better job of cleaning the drain and makes retrieving the cable easier. Do not expose more than 12" (30cm) of cable.

The chuck can be used to better grip the cable during

retrieval. Move the handgrip towards the drum to grip the cable with the chuck. With the cable rotating (ON/OFF switch ON) move the drain cleaner away from the drain opening (but do not expose more than 12" (30cm) of cable). Release the ON/OFF switch. Move the handgrip away from the drum to release the chuck from the cable. Grip the cable with your gloved hand close to the drain opening (to prevent it from pushing back into the drain) and push the drain cleaner over the cable back into the drum. Repeat the above steps to continue retrieving the cable in this manner.

- **AUTOFEED Operation** – Confirm that the cable outlet of the drain cleaner is no more than 6" (15cm) from the drain opening. Pull the handgrip away from the drum to disengage the chuck from the cable. Do not engage the chuck while using the AUTOFEED. Press the ON/OFF switch to start the machine. To retrieve the cable, depress the retrieve feed lever. The rotating cable will work its way out of the drain.

Pay attention to the cable during retrieval as the cable end can still become stuck.

Release the ON/OFF switch before the cable end comes out of the drain. Do not pull the end of the cable from the drain while the cable is rotating. The cable can whip around and cause serious injury. Pull the remaining cable from the drain with gloved hands and feed back into the drain cleaner. If needed, change the tool and continue cleaning following the above process. Several passes through a line are recommended for complete cleaning.

With dry hands unplug the machine.

Maintenance Instructions

⚠ WARNING

Maintain drain cleaning machine according to these procedures to reduce risk of injury from electrical shock, chemical burns and other causes.

Machine should be unplugged before performing any maintenance.

Always wear safety glasses and RIDGID drain cleaning gloves when performing any maintenance.

Cleaning

The machine should be cleaned as needed with hot, soapy water and/or disinfectants. Do not allow water to enter motor or other electrical components. Make sure unit is completely dry before plugging in and using. Use a clean cloth to wipe off unit. Do not use any solvents to clean.

Cables

Cables should be thoroughly flushed with water after every use to prevent damaging effects of sediment and drain cleaning compounds. Drain debris from drum by tipping machine forward after every use to remove sediment and chemicals which can corrode cable.

To help prevent corrosion during storage, cables can be coated with RIDGID Cable Rust Inhibitor. Once the cable is clean and dry, pull the cable from the drum. While manually feeding the cable back into the drum, wipe the Cable Rust Inhibitor on the cable with a cloth.

Do not apply the Cable Rust Inhibitor to a rotating cable. The cloth and your hand can become entangled in the cable, and Cable Rust Inhibitor can be slung from rotating cable.

AUTOFEED

Monthly or more often if needed, remove the AUTOFEED mechanism from the AUTOFEED hand grip and clean and lubricate.

1. Lift both AUTOFEED levers and push the cable through the AUTOFEED.
2. Remove screw from AUTOFEED hand grip using $\frac{3}{16}$ " allen wrench (Figure 12A) and remove the AUTOFEED mechanism (Figure 12B).



Figure 12A – Removing AUTOFEED Screw



Figure 12B – Removing AUTOFEED Mechanism From Housing

3. Wipe or wash dirt and debris out of the AUTOFEED mechanism and hand grip.
4. On the AUTOFEED mechanism, apply a small amount of general purpose grease to the Lever arm pivot points and roller bearing surfaces.

Reassemble in reverse order. AUTOFEED mechanism will only fit into hand grip one way.

Changing Cable

Changing Inner Drum

The K-45 is supplied with an inner drum that fits snugly inside a two-piece drum that allows easy change-out of cable. To access the inner drum feature:

1. Make sure handgrip is pulled forward to release the cable from the chuck.
2. Loosen the four screws that hold the drum front to the drum back about 3 full turns (do not remove) (Figure 13).



Figure 13 – Loosen 4 Drum Screws About 3 Full Turns, But Do Not Remove

3. Separate the drum front from the drum back by holding the drum back and twisting the drum front counter clockwise. (Figure 14).



Figure 14 – Twist Drum Apart

4. Remove the inner drum out of the drum back. Pull cable back through drum front. With the AUTOFEED both levers will need to be pulled up to allow the bulb of the auger to pass through.
5. Reverse process to install inner drum. Inspect condition of gasket on drum front and replace if necessary. This prevents liquid leakage from drum.

Loading Cable Into Inner Drum

1. Remove existing cable from drum if required.
2. To make installing the new cable easier, completely uncoil the new cable before proceeding. Use caution when removing the cable from the package. The cable is under tension and could strike the user.
3. Add a 15 - 30 degree bend approximately 1" (25.4mm) from the drum end of the cable as shown in Figure 15.



Figure 15 – Bend At Cable End

4. Coil the cable into the inner drum **CLOCKWISE** (See Figure 16).



Figure 16 – When Loading Cable Into An Inner Drum, Coil The Cable **CLOCKWISE**.

Loading Cable Without Changing The Inner Drum

1. Pull hand grip forward to the disengaged position. Pull cable out if needed.
2. For easier cable installation, bend drum end of cable approximately one inch from end 15 to 30 degrees. (Refer to Figure 15.)
3. Insert drum end of cable into hand grip opening and continue feeding entire cable into drum (Figure 17).



Figure 17 – Loading Cable Without Changing Inner Drum

Accessories

WARNING

The following RIDGID products have been designed to function with the K-45 Drain Cleaning Machine. Other accessories suitable for use with other tools may become hazardous when used on the K-45. To prevent serious injury, use only the accessories specifically designed and recommended for use with the K-45, such as those listed below.

Cables

	Catalog No.	Model No.	Description
	50647	S-1	15' (4.6m) with Bulb Auger
	50652	S-2	25' (7.6m) with Bulb Auger
	50657	S-3	35' (10.7m) with Bulb Auger
	62225	C-1	25' (7.6m) w/Bulb Auger
	56782	C-11C	25' (7.6m) Inner Core w/Bulb Auger
	89400	C-21	50' (15.2m) w/Bulb Auger
	56792	C-131C	35' (10.7m) w/Bulb Auger
	95847	C-131CSB	35' (10.7m) Inner Core Speed Bump w/Bulb Auger
	62235	C-2	25' (7.6m) w/Drop Head Auger
	56787	C-21C	25' (7.6m) Inner Core w/Drop Head Auger
	89405	C-22	50' (15.2m) w/Drop Head Auger
	56797	C-231C	35' (10.7m) 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

Accessories and Tools That Fit C-4, C-6 and C-61C Cables

	Catalog No.	Model No.	Description
	41937	—	RIDGID Drain Cleaning Gloves, Leather
	70032	—	RIDGID Drain Cleaning Gloves, PVC
	62067	T-201A	Straight Flex Auger
	62990	T-201	Straight Auger, 5" (12.5cm) Long
	62995	T-202	Bulb Auger, 1 1/8" (29mm) O.D.
	63000	T-203	Bulb Auger, 7/8" (22mm) O.D.
	55457	T-225	Retrieving Auger
	63065	T-217	Drop Head, 4" (100mm) Long
	54837	T-204	"C" Cutter 1" (25mm)
	63005	T-205	"C" Cutter 1 3/8" (35mm)
	63010	T-206	Funnel Auger, 3" (75mm) Long
	63030	T-210	Grease Cutter, 1" (25mm)
	63035	T-211	Grease Cutter, 1 3/8" (35mm)
	63040	T-212	Grease Cutter, 1 3/4" (45mm)
	63045	T-213	4-Blade Cutter, 1" (25mm)
	63050	T-214	4-Blade Cutter, 1 3/8" (35mm)
	63055	T-215	4-Blade Cutter, 1 3/4" (45mm)
	52812	T-230	H-D "C" Cutter, 2" (50mm)
	52817	T-231	H-D "C" Cutter, 2 1/2" (64mm)
	48482	T-250	Tool Set includes: T-203, T-205, T-210, T217, A-13

Accessories

Catalog No.	Model No.	Description
68917		K-39/45 Inner Drum
89410	C-6429	Carrying Case
76817		C-6 Cable Kit Includes: – C-6 3/8 x 35 (10mm x 10.7m) Cable w/Inner Drum – Torque Arm – T-250 5 Piece Tool Kit
98072		C-61C Cable Kit Includes: – C-61C 3/8 x 35 (10mm x 10.7m) Cable w/Inner Drum – Torque Arm – T-250 5 Piece Tool Kit
23908	A-39AF	Drum front and AUTOFEED Assembly, Replacement AUTOFEED Cartridge

Machine Storage

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

Service and Repair

WARNING

Improper service or repair can make machine unsafe to operate.

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 an authorized RIDGID service technician.

Tool should be taken to a RIDGID Independent Authorized Service Center or returned to the factory.

For information on your nearest RIDGID Independent Service Center or any service or repair questions:

- Contact your local RIDGID distributor.
- Visit www.RIDGID.com or www.RIDGID.eu to find your local RIDGID contact point.
- Contact RIDGID Technical Services Department at rtctechservices@emerson.com, or in the U.S. and Canada call (800) 519-3456

Disposal

Parts of the K-45 drain cleaner contain valuable materials and can be recycled. There are companies that specialize in recycling that may be found locally. Dispose of the components in compliance with all applicable regulations. Contact your local waste management authority for more information.



For EC Countries: Do not dispose of electrical equipment with household waste!

According to the European Guideline 2002/96/EC for Waste Electrical and Electronic Equipment and its implementation into national legislation, electrical equipment that is no longer usable must be collected separately and disposed of in an environmentally correct manner.