

## Specific Safety Information

### ⚠ WARNING

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

Read these precautions carefully before using the POWER SPIN+™™ Drain Cleaner to reduce the risk of electrical shock or other serious personal injury.

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

Keep this manual with machine for use by the operator.

### Drain Cleaner Safety

- **Always use safety glasses and leather work gloves in good condition while handling or using.** Use latex or rubber gloves, face shields, protective clothing, respirators or other appropriate protective equipment when chemicals, bacteria or other toxic or infectious substances are suspected to be present to reduce the risk of infections, burns or other serious personal injury. Wear latex gloves or rubber gloves under leather gloves.
- **Practice good hygiene.** Use hot, soapy water to wash hands and other body parts exposed to drain contents after handling or using drain cleaning equipment. Do not eat or smoke while operating or handling drain cleaning equipment. This will help prevent contamination with toxic or infectious material.
- **Do not use with a corded drill.** Operating with a corded drill increases the risk of electrical shock.
- **Do not allow the end of cable to stop turning while the machine is running.** This can overstress the cable and may cause twisting, kinking or breaking of the cable and may result in serious personal injury.
- **Position machine within 4" (10 cm) of the drain inlet or properly support exposed cable when the distance exceeds 4" (10 cm).** Greater distances can cause control problems leading to twisting, kinking or breaking of the cable. Twisting, kinking or breaking cable may cause striking or crushing injuries.
- **Do not wear loose clothing or jewelry. Keep your hair and clothing away from moving parts.** Loose clothing, jewelry or hair can be caught in moving parts.
- **Do not operate this machine if operator or machine is standing in water.** Operating machine while in water increases the risk of electrical shock.
- **Only use drain cleaner to clean drains of recommended sizes according to these instructions.** Other uses or modifying the drain cleaning machine for other applications may increase the risk of injury.
- **Read and understand these instructions, the battery drill instructions and the instructions for any other equipment used with this tool before operating.** Failure to follow all instructions may result in property damage and/or serious injury.

The EC Declaration of conformity (890-011-320.10) will accompany this manual as a separate booklet when required.

## RIDGID Contact Information

If you have any question concerning this RIDGID® product:

- Contact your local RIDGID distributor.
- Visit [RIDGID.com](http://RIDGID.com) to find your local RIDGID contact point.
- Contact Ridge Tool Technical Service Department at [rtctechservices@emerson.com](mailto:rtctechservices@emerson.com), or in the U.S. and Canada call (800) 519-3456.

## Description

The RIDGID® POWER SPIN+™ Drain Cleaner is used to clean drain lines such as bathroom and kitchen sinks, bathtub and shower drains. It features RIDGID MAXCORE® Cable that is positively retained in the drum to prevent cable pullout. It is equipped with the AUTOFEED® mechanism that advances and retrieves the cable with just the pull of a trigger while the drum is rotating. The POWER SPIN+ Drain Cleaner can be operated either manually or driven with a battery powered drill.

The POWER SPIN+ is not recommended for use with toilets.

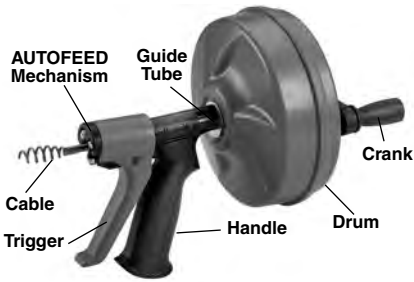


Figure 1 – POWER SPIN+ Drain Cleaner

**Specifications**

- Pipe Capacity.....¾" to 1½" (20 to 40 mm)
- Drum Capacity .....25' (7.6 m) of ¼" (6 mm) Diameter MAXCORE® Cable
- Cable.....¼" x 25' (6 mm x 7.6 m) MAXCORE® Cable
- Drum Speed .....Maximum 500 RPM
- Weight.....4 lbs. (1.8 kg)
- Dimension.....14" x 9" x 7.3" (356 x 229 x 185 mm)

**NOTICE** This machine is made to clean drains. If properly used it will not damage a drain that is in good condition and properly designed, constructed and maintained. If the drain is in poor condition, or has not been properly designed, constructed and maintained, the drain cleaning process may not be effective or could cause damage to the drain. The best way to determine the condition of a drain before cleaning is through visual inspection with a camera. Improper use of this drain cleaner can damage the drain cleaner and the drain. This machine may not clear all blockages.

**Pre-Operation Inspection**

**⚠ WARNING**



**Before each use, inspect your drain cleaner and correct any problems to reduce the risk of serious injury from electric shock, twisted or broken cables, chemical burns, infections and other**

**causes and prevent drain cleaner damage.**

1. Clean any oil, grease or dirt from all equipment, including handles and controls. This aids inspection and helps prevent the machine or control from slipping from your grip. Clean any debris from the cable and drum.
2. Inspect the drain cleaner for the following items:
  - Proper assembly and completeness.
  - Broken, worn, missing, misaligned or binding parts.
  - Smooth and free movement of the trigger and drum.
  - Presence and readability of the warning label (see Figure 2.)
  - Any condition which may prevent safe and normal operation.

If any problems are found, do not use the drain cleaner until the problems have been repaired.
3. Clean any debris from the cable. Inspect cable for wear and damage – Look for:
  - Obvious flats worn into the outside of the cable (cable is made from round wire and profile should be round).
  - Multiple or excessively large kinks (slight kinks up to 15 degrees can be straightened).
  - Space between the cables indicating the cable has been deformed by stretching, kinking or run in REVERSE.
  - Excessive corrosion from storing wet or exposure to drain chemicals.

All of these forms of wear and damage weaken the cable and make cable twisting, kinking or breaking more likely during use. Replace worn and damaged cable before using drain cleaner.
4. If using the POWER SPIN+ Drain Cleaner with a Battery Powered Drill, inspect the drill per its instructions. Make sure that the drill is in good operating condition and the switch controls the drill operation. Confirm that the drill turns at less than 500 rpm.

## Machine and Work Area Set-Up

### ⚠ WARNING



Set up the drain cleaning machine and work area according to these procedures to reduce the risk of injury from electric shock, twisted or broken cables, chemical burns, infections and other causes, and prevent drain cleaner damage.

1. Check for an appropriate work area. Operate in a clear level, stable, dry location free. Do not use the machine while standing in water.
2. Inspect the drain to be cleaned. If possible, determine the access point(s) to the drain, the size(s) and length(s) of the drain, distance to mainlines, the nature of the blockage, presence of drain cleaning chemicals or other chemicals, etc. If chemicals are present in the drain, it is important to understand the specific safety measures required to work around those chemicals. Contact the chemical manufacturer for required information.
3. Confirm POWER SPIN+ Drain Cleaner is appropriate for the job (See *Specifications*). Using incorrect equipment for an application can cause injury or damage the tool.
4. Make sure machine has been properly inspected.
5. If needed, place protective covers in the work area. The drain cleaning process can be messy.
6. If using the POWER SPIN+ by hand, make sure that the crank is present and firmly attached.
7. If using the POWER SPIN+ with a battery powered drill, remove the crank from the back of the drum by pressing the tabs on the either side (See *Figure 2*). Securely attach the chuck of the drill to the drum shaft.

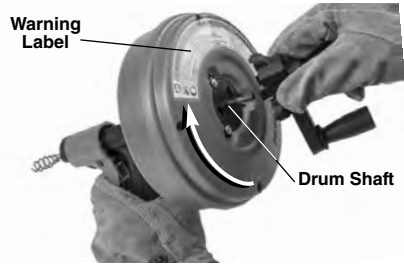


Figure 2 – Removing Crank Handle From POWER SPIN+

8. If needed, take appropriate steps to access the drain to be cleaned.
  - For many drains, the cable can be threaded through the cross hairs in the drain (See *Figure 3*).
  - For a sink with a pop up drain plug: Remove lift rod and drain plug (See *Figure 4*). Be sure to place a container under the clean out or trap to catch any water that may come out.
  - For other sinks a clean out plug or trap may need to be removed (See *Figure 5*). Be sure to place a container under the clean out or trap to catch any water that may come out.
  - For bathtubs, never try to go through the drain, this will damage the cable. Remove the overflow plate and any mechanism to access the drain (See *Figure 6*).



Figure 3

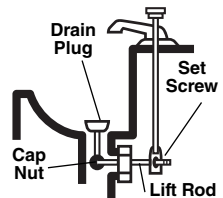


Figure 4

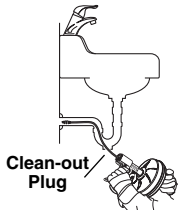


Figure 5

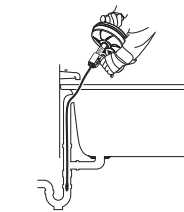


Figure 6

9. Determine if the drain cleaner can be held within 4" of the drain opening. Great-

er distance from the drain access increases the risk of the cable twisting or kinking. If not, the drain opening will need to be extended using similar size pipe and fittings so that the drain cleaner can be placed within 4" of the drain opening (see *Figure 7*). Improper cable support can allow the cable to kink and twist and damage the cable/fixture or injure the operator.



**Figure 7 – Example of Extending Drain to Within 4" (100 mm) of Drain Opening**

- Control of the drain cleaner (and battery powered drill if used).
- Ability to maintain the unit 4" (100 mm) or less from the drain opening.

This will help maintain control of the cable and machine.

3. Pull cable out of the drum and push into drain as far as it will go. At least one foot of cable must be in the drain so that the cable will not come out and whip around when the cable starts turning.
4. If using a battery powered drill, confirm set to low speed (less than 500 rpm) and with dry hands insert the battery, but do not place you finger on the drill switch yet.
5. Make sure that the drain cleaner is within 4" (100 mm) of the drain opening, and maintain that distance throughout the cleaning process. This helps to prevent twisting and kinking of the cable.
6. Place one hand on the drain cleaner handle/trigger and other hand on the drill grip or the crank handle.
7. Turn the drum clockwise (as marked with an arrow on the back of the drum, see *Figure 2*) and squeeze the drain cleaner trigger. Squeezing the trigger advances the cable into the drain.

Cable can also be rapidly advanced/retracted by feeding in and out of the drum by hand.

## Operating Instructions

### ⚠ WARNING



**Always use safety glasses and leather work gloves in good condition while handling or using. Use latex or rubber gloves, face shields, protective clothing, respirators or other appropriate protective equipment when chemicals, bacteria or other toxic or infectious substances are suspected to be present to reduce the risk of infections, burns or other serious personal injury. Wear latex gloves or rubber gloves under leather gloves.**

**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
  - Good balance and not require any over-reaching.



**Figure 8 – In Operating Position**

8. Continue to advance the cable until the resistance is encountered. Carefully work the cable through the blockage. Do not force the cable – if the cable stops turning, it is not cleaning the drain. It may be necessary to spin the cable without advancing it, or advancing the cable very slowly. This will help to break up the blockage.
9. If the cable becomes stuck in the blockage, do not continue turning the drum.

Continuing to turn the drum may cause the cable to twist and kink. It may be necessary to back the cable out of the blockage by turning the drum in reverse. In some cases, it may be possible to pull the cable and the blockage out of the drain by hand. If this is done, be careful to not damage the cable. Remove the blockage from the cable, feed cable back into the drum, and continue cleaning the drain as detailed above.

10. Once the blockage is broken up and drain is flowing, if possible, turn the water on to flush any debris down the drain.
11. Continue to clean the rest of the drain. Pay attention to how far the cable has gone. Do not overrun the cable into a larger drain. This can cause the cable to knot up or cause other damage. The cable includes an increase in diameter that will not feed through the AUTOFEED mechanism – this can be identified by openings in the cable wind just outside the drain cleaner (see Figure 9).



**Figure 9 – Openings in Cable Wind at the End of Cable**

12. Once the drain has been cleaned, turn the drum counterclockwise while squeezing the drain cleaner trigger to retract the cable. Pay close attention, as the cable may lodge in a blockage while being retracted.
13. Release the trigger and stop turning the drum when end of the cable nears drain opening. Do not pull the cable end from drain while it is rotating. The cable can whip around and could cause serious injury.
14. Several passes through a line are recommended for complete cleaning. If needed, repeat the above procedure.

15. Pull any remaining cable from the line by hand and push the cable into the drum.

## Storage

**⚠ WARNING** The drain cleaner must be kept dry and indoors or well covered if kept outdoors. 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.

## Maintenance Instructions

### ⚠ WARNING

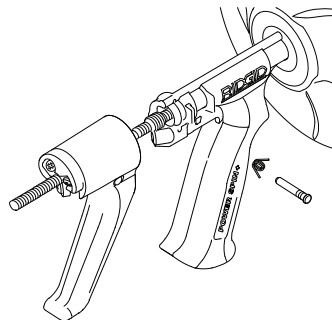
**Drill should be removed from drain cleaner before any maintenance is performed.**

## Cleaning

Cable, drum and AUTOFEED mechanism should be thoroughly flushed with water after every use to prevent the damaging effects of chemicals and sediment. Clean exterior as needed with hot soapy water and/or disinfectants. Drain drum by tipping forward after every use and cleaning

## Installing Replacement Cable

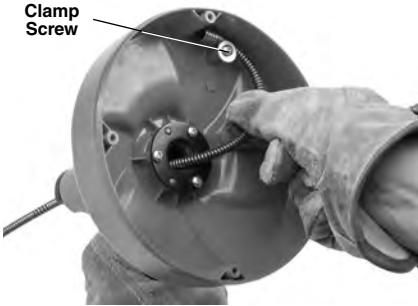
1. Press non-headed end of pivot pin through the trigger and remove trigger from handle (Figure 10). Do not lose the spring.



**Figure 10 – Trigger Assembly**

2. Pull cable out of drain cleaner until increase in cable diameter is visible (Figure 9).

3. Remove 4 screws from drum back and remove drum back.
4. Remove cable clamp screw. Remove existing cable (Figure 11).
5. Replacement cable catalog #42163. To make cable installation easier, completely uncoil new cable. Use caution when removing cable from the package. The cable is under tension and could strike the user.
6. Insert about 12 inches of cable through the guide tube into the drum.
7. Place cable end as shown inside drum (see Figure 11), and secure with cable clamp screw.
8. Securely install drum back.
9. Feed cable into drum.
10. Install spring and trigger, securing with the pivot pin (Figure 10).



**Figure 11 – Securing Cable End**

## Troubleshooting

PROBLEM	POSSIBLE REASONS	SOLUTION
<b>Cable kinking or breaking.</b>	Cable is being forced. <hr/> Cable used in incorrect pipe diameter. Drill motor switched to reverse. <hr/> Cable exposed to acid. Cable worn out or damaged. Cable not properly supported.	Do Not Force Cable! Let the drain cleaner do the work. <hr/> Do not use in lines over 1½" (40 mm). Use reverse only if cable gets caught in pipe or to retract cable. <hr/> Clean cables routinely. If cable is worn or damaged, replace it. Support cable properly, see <i>instructions</i> .
<b>Cable not advancing/retracting.</b>	AUTOFEED mechanism/trigger clogged or jammed.	Clean AUTOFEED mechanism.