



Figure 2 - Machine Serial Number

The machine serial number is located on motor table. The last 4 digits indicate the month and year of the manufacture. (08 = month, 15 = year).

#### **Standard Equipment**

All K-400 Drain Cleaning Machines come with one pair of RIDGID Drain Cleaning Gloves.

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.

### **Machine Assembly**

#### **A** WARNING

To reduce the risk of serious injury during use, follow these procedures for proper assembly.

FOR/OFF/REV switch should be OFF and machine unplugged before assembly.

Remove and discard the 5/1/10" x 1" cable lock set screw from the Set Collar Assembly. The cable lock set screw is provided during packaging to keep the cable from coming out of the drum during transport (*Figure 3*).



Figure 3 – Remove and discard the Cable Lock Set Screw

### **Installing Wheels**

- Install retaining clip into groove on one end of axle.
- 2. Slide one wheel onto axle with the boss away from the clip. (See Figure 4.)
- 3. Fully insert axle through hole in bracket.
- 4. Slide second wheel onto axle, boss first.
- 5. Install retaining clip into groove.

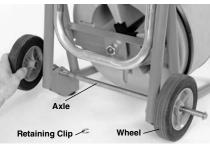


Figure 4 - Assembling Wheel

## Mounting AUTOFEED® (Optional Equipment)

- If needed, remove and discard cable lock set screw from the set collar. (See Figure 3.)
- 2. Pull approximately 6" (150mm) of cable from the machine.
- 3. Insert handle through AUTOFEED® cover and securely screw in place.



- 4. Remove fasteners holding front bearing mount to frame. (See Figure 5.)
- Slide the AUTOFEED assembly over the cable, aligning the AUTOFEED bracket holes with the frame holes. The cable should extend approximately 2" (50mm) from the front of the AUTOFEED.



Figure 5 – Mounting AUTOFEED onto the Frame

Use the supplied fasteners to secure the AUTOFEED to the machine.

## Attaching Front Guide Hose (Optional Equipment)

- Remove the three (3) cover screws from the front of the AUTOFEED. Keep AUTO-FEED cover in place.
- Route the cable through the guide hose adapter. Attach the guide hose adapter to front of AUTOFEED using existing screws, do not include flat washers. DO NOT OVERTIGHTEN.
- Pull approximately 2' (0.6m) of cable from the drum. Feed the cable into the coupling end of the guide hose and through the hose.



Figure 6 - Mounting Guide Hose To AUTOFEED

4. Screw the guide hose coupling onto

adapter. Position hose so that the natural curve of the hose follows the path to the drain. Tighten lock nut to keep hose from rotating. (See Figure 6.)

# Pre-Operation Inspection

### **A** WARNING







Before each use, inspect your drain cleaning machine 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.

Always wear safety glasses, and other appropriate protective equipment when inspecting your drain cleaner.

 Inspect the RIDGID drain cleaning gloves or mitts ("gloves"). Make sure they are in good condition with no holes, tears or loose sections that could be caught in the rotating cable. It is important not to wear improper or damaged gloves. The gloves protect your hands from the rotating cable. If the gloves are not RIDGID drain cleaning gloves or are damaged or worn out, do not use machine until RIDGID drain cleaning gloves are available. See Figure 7.





Figure 7 – RIDGID Drain Cleaning Gloves – Leather, PVC

- Make sure that the drain cleaning machine is unplugged and inspect the power cord, Ground Fault Circuit Interrupter (GFCI) and plug for damage. If the plug has been modified, is missing the grounding prong or if the cord is damaged, to avoid electrical shock, do not use the machine until the cord has been replaced by a qualified repair person.
- 3. Clean the drain cleaner, including han-



dles and controls. This aids inspection and helps prevent the machine or control from slipping from your grip. Clean and maintain the machine per the maintenance instructions.

- Inspect the drain cleaning machine for the following items:
  - · Proper assembly and completeness..
  - Any broken, worn, missing, misaligned or binding parts. Rotate the drum and make sure that it turns freely.
  - Make sure the foot switch is attached to the drain cleaning machine. Do not operate the machine without the foot switch.
  - Check the belt guard to insure that it is securely fastened to the drain cleaner.
    Do not operate without guard in place.
    See Figure 1.
  - Presence and readability of the warning label (see Figure 8).
  - Inspect the AUTOFEED. AUTOFEED handle should move smoothly and freely throughout range. Confirm that handle returns to neutral position when released (Figure 14). Confirm AUTOFEED guard is securely in place.
  - 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.
- 5. Clean any debris from the cable and cutting tools. Inspect cable for wear and damage. Cable coupling plunger pin should move freely and fully extend to securely retain tools. Inspect cable for:
  - Obvious flats worn into the outside of the cable (cable is made from round wire and the profile should be round).
  - Multiple or excessively large kinks (slight kinks up to 15 degrees can be straightened)
  - Uneven spacing between cable coils indicating that the cable has been deformed by stretching, kinking, or running in reverse (REV)
  - 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.

- Make sure the cable is fully retracted with no more than 6" (150mm) of cable outside of the machine. This will prevent whipping of the cable at start up.
- Inspect the tools for wear and damage. If necessary, replace prior to using the drain cleaning machine. Dull or damaged cutting tools can lead to binding, cable breakage, and slow the drain cleaning process..
- Make sure that the FOR/OFF/REV switch is set to the OFF position.
- 8. With dry hands, plug cord into properly grounded outlet. Test the GFCI provided in the electrical cord to insure that it is operating correctly. When the test button is pushed in, the indicator light should go off. Reactivate by pushing the reset button in. If the indicator light goes on, the GFCI is functioning properly. If GFCI is not functioning properly, unplug the cord and do not use the drain cleaning machine until the GFCI has been repaired.
- 9. Move the FOR/OFF/REV switch into the FOR position. Press the foot switch and note the direction of rotation of the drum. If the foot switch does not control the machine operation, do not use the machine until the foot switch has been repaired. The drum should rotate counter-clockwise when viewed from the front of the drum, and will match the drum direction shown on the warning label (Figure 8).
  - Release the foot switch and let the drum come to a complete stop. Place the FOR/OFF/REV switch into the REV position, and repeat above testing to confirm that the drain cleaner operates properly in reverse. If the rotation is not correct, do not use the machine until it has been repaired.
- With the inspection complete, move the FOR/OFF/REV switch into the OFF position and, with dry hands, unplug the machine.