

# Operating instruction

## 1 .Introductions:

### WARNING

**Read this operator's manual carefully before using Drain Cleaning machine. Failure to understand and follow the contents of this manual may result in electrical shock, fire and/or serious personal injury.**

Drain Cleaning Machine ( also called Pipe Cleaner) serious are applicable to remove various blockages of pipelines, which it suits for households, factory, civil engineering units, etc. This kind of machine is used to clean various debris, creams, chemical deposits, house-hold wastes ,etc .which are blocked in pipelines.

## 2. SAFETY INSTRUCTIONS!

### ● Work Area Safety

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

### ● Electrical Safety

- Grounded tools must be plugged into an outlet, properly installed and grounded in accordance with all codes and ordinances, never remove grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
- 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.
- Don't expose electrical tools to rain or wet conditions. Water entering a power tool will increase the risk of electrical shock.
- Do not abuse cord. Never use the 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.
- 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.
- Use only three-wire extension cords which have three-prong grounding plugs and three-pole receptacles which accept the machine's plug. Use of other extension cords will not ground the tool and increase the risk of electrical shock.
- Keep all electrical connections dry and off the ground. Do not touch plug with wet hands. Reduces the risk of electrical shock

## ● Personal Safety

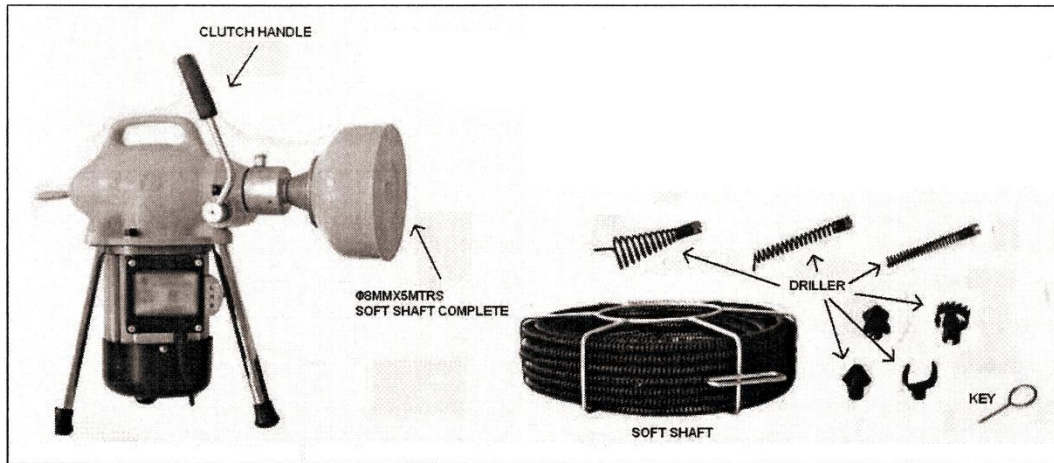
- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use machine while tired or under the influence of n drugs, alcohol, or medications. A moment of inattention while operating power tools may result in serious personal injury.
- Dress properly. Do not wear 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
- Avoid accidental starting. Be sure switch is “O” position (OFF ) before plugging in.
- Removing keys before turning the tool ON. A key that is left attached to rotating part of The tool may result in personal injury.
- Do not over –reach. Keep proper footing and balance at all times. Proper footing and balance Enables better control of the tool in unexpected situations.
- Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

## ● Specific Safety Information

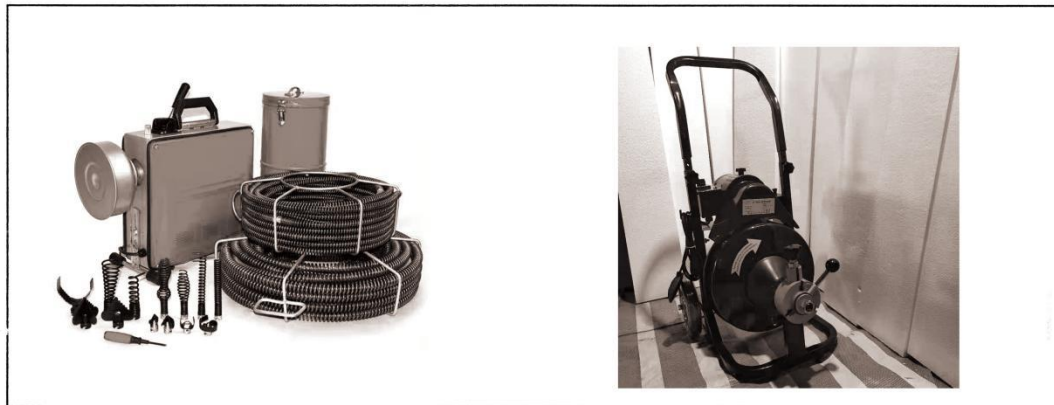
### **Drain Cleaner Safety**

- Wear leather gloves (mitt) provided with machine. Never grasp a rotating soft shaft with a rag or loose fitting cloth glove.** It could get wrapped around the cable and cause serious injury.
- Do not overstress cables. Keep one hand on the cable for control when the machine is running.** Overstressing cables because of obstruction may cause twisting or kinking or breaking of cable and result in serious injury.
- Position machine within two feet of inlet. Use Front End Guide Hose when it is difficult to locate The machine near the access or clean out.** Greater distances can result in cable twisting or kinking.
- Do not operate machine in ( L ) reverses. Operating machine in reverse can result in cable damaged and is used tool out of an obstruction.
- Operate machine from the side with the R/O/L (FOR/OFF/REV) SWITCH.** Allows for better control of the machine
- Never operate machine with belt guard removed.** Fingers can be caught between the belt and pulley.
- Be Careful when cleaning drains where cleaning compounds have been used.** Avoid direct contact with skin and eyes. Serious burns can result from some drain cleaning compounds.
- Do not operate machine if operator or machine is standing in water.** This will increase the risk of electrical shock.
- Wear safety glasses and rubber soled non-slip shoes.** Use of this safety equipment may prevent serious injury.
- Follow instructions on the use of the machine.** Other uses or modifying the drain cleaner for other Applications may increase the risk of injury.

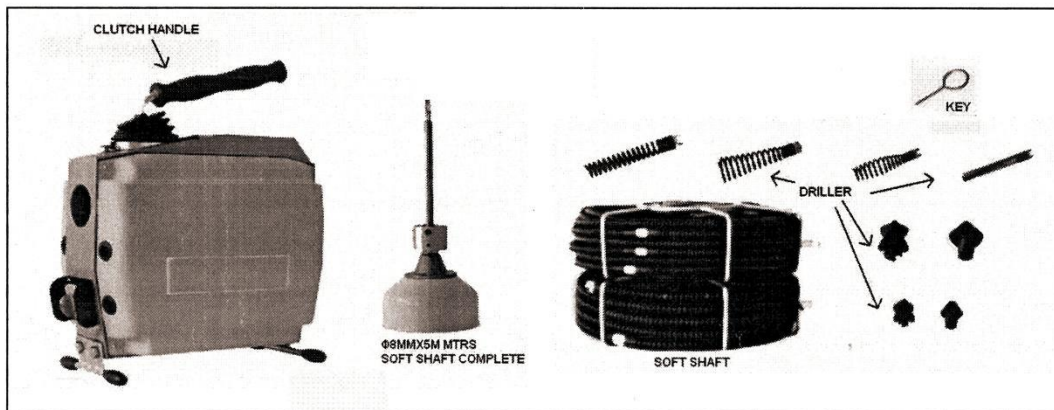
### 3. Brief Introduction:



Picture 1



Picture 2



Picture 3

## 4. Operation

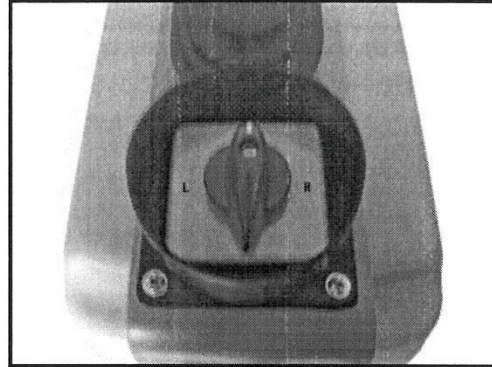
● Control Knob--- For Switch with R/O/L FOR/OFF/REV),controlling rotation direction of soft shaft. (To see picture 4)

“O”---Stop

“R”---Forward rotation

“L”---Revised rotation.

**Warning: Prior to connecting electric power supply and check switch is in “O” position**



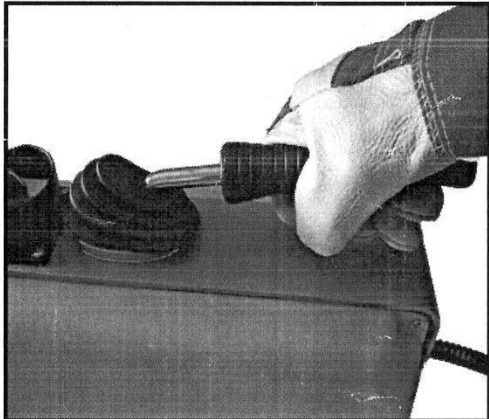
Picture 4

● Operate Clutch Handle (To see Picture 5 and 6 )

Press the clutch handle to make the soft shaft to rotate.

Releasing the clutch handle to stop the soft shaft rotation immediately.

**Warning: The pressing force shall not exceed 20kgs, preferably to the extent of locking the the soft shaft.**



Picture 5

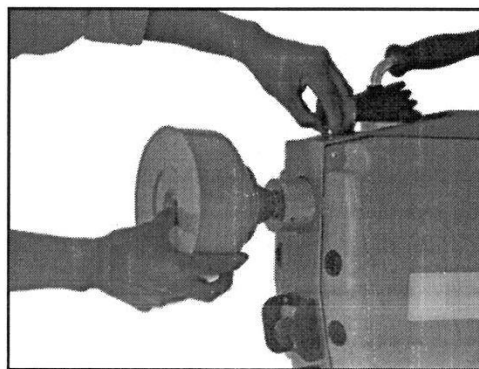


Picture 6

● Locking screw (To see Picture 7)

For connecting the machine with  $\Phi 8\text{mm} \times 5\text{M}$  Soft Shaft Complete.

Raise the screw up and  $\Phi 8\text{mm} \times 5\text{M}$  Soft Shaft Complete is inserted in position, then put down the screw until locking well.

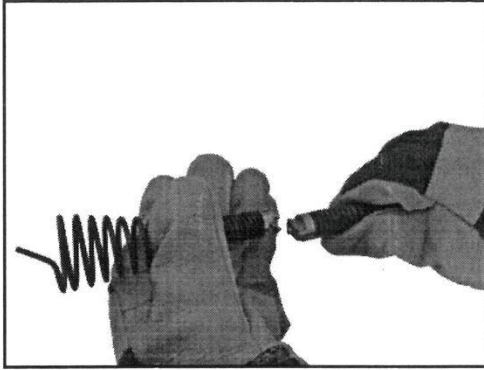


Picture 7

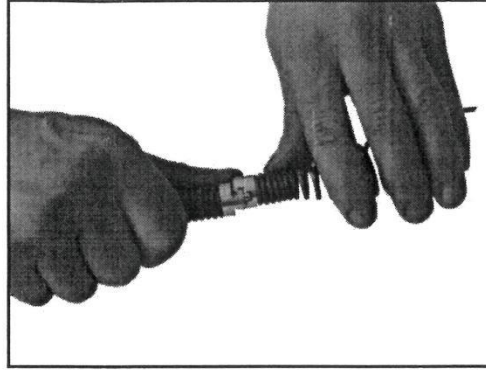
- Connect the soft shaft with drillers (To see Picture 8 and 9 )

Push the driller along 67° slider slot of the soft shaft to engage. This makes connection more reliable, easy and fast.

Caution: Observe through the hole of the driller to see the top- out of the soft shaft pin. It is only safe when the pin is out.



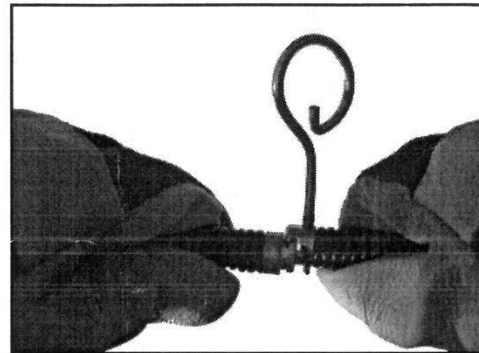
Picture 8



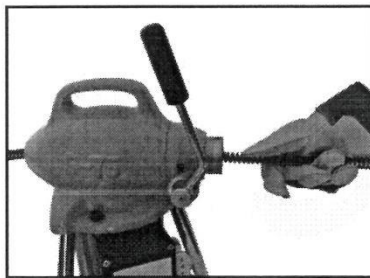
Picture 9

- Remove the soft shaft ( To see Picture 10 )

Insert the key and push the soft shaft with both hands in direction opposite to the T slot of the terminal to remove the shaft. It saves time and manpower.

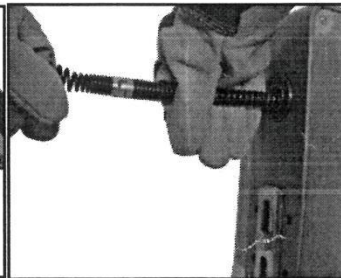


Picture 10



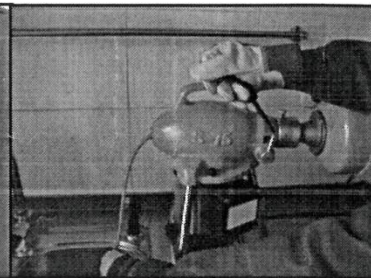
Picture 11

▶ Insert the soft shaft into the machine.



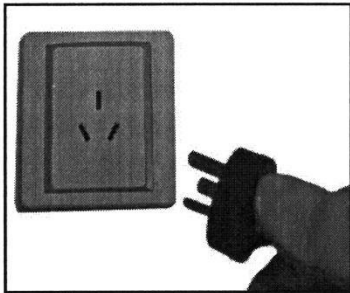
Picture 12

▶ Choosing suitable driller to connect.



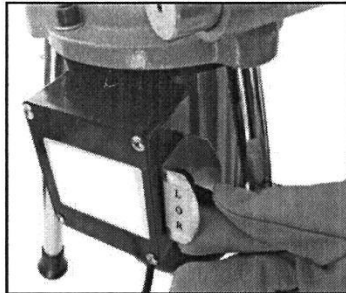
Picture 13

▶ Put the machine equipped with the driller and soft shaft and insert soft shaft with driller into pipeline as longer as you can.



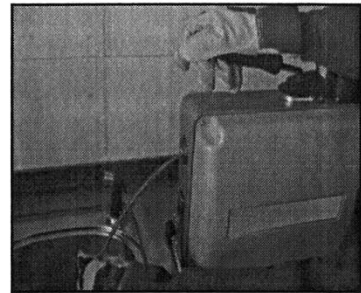
Picture 14

▶ Insert the plug into a well grounded socket.



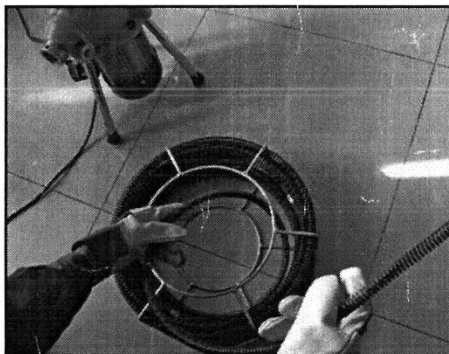
Picture 15

▶ Turn on the control knob and let the machine shaft rotate Clockwise.



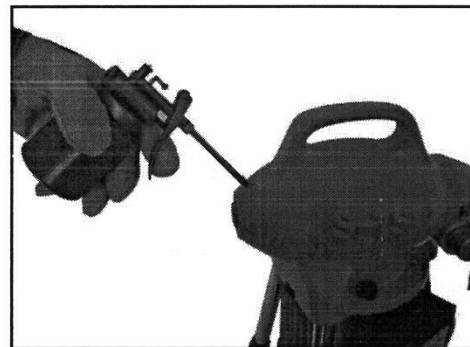
Picture 16

▶ Keep one segment(200-300mm) of the soft shaft between machine and pipeline opening. Turn switch on in position "R" and push it into the pipeline. Repeat the above actions until the obstruction in pipeline is cleaned out.



Picture 17

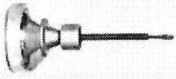


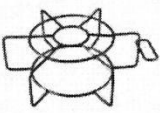

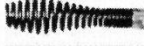






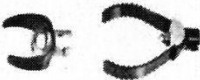
▶ After turning off the machine, pull the soft shaft out of the pipeline. Remove the waste and clean it dry, keeping it for future use.  
**Caution: Prevent the soft shaft from bringing the waste water into the machine.**



Picture 18

▶ After ending to use machine, let it free to run for 2-3 minutes. Add oil into oil hole. Keep the machine at a dry place for future use.

## 5. Accessory List

<b>ACCESSORIES</b>		
<p>NO.V-001</p>  <p>Φ8MMX5M Soft Shaft Complete Used for machines of S-75,S-125 and S-150. It can be used in pipes of 20-50mm in diameter and in pipe elbow.</p>	<p>NO.V-002</p>  <p>Flexible Soft Shaft A complete of soft shaft and drill,with high strength and good flexibility ,suitable for pipe in small diameter and pipe elbow.</p>	
<p>NO.V-003</p>  <p>Sectional Elastic Soft Shaft Made with high quality spring wires, assure sufficient mechanical strength flexibility, as well as bending resistance, twisting resistance and ductility resistance.It can be connected for any length.</p>	<p>NO.V-004</p>  <p>Soft Shaft Holder For keeping and storing soft shafts.</p>	
<p>NO.V-005</p>  <p>Straight Helical Driller For using to clean the obstruction in pipeline,usually used in the first step.</p>	<p>NO.V-006</p>  <p>Olive-Shaped Helical Driller For leading the soft shaft to complicated path and cleaning the obstruction.</p>	<p>NO.V-007</p>  <p>Flexible Olive-Shaped Helical Driller It is used to drill or clean the hard obstruction.</p>
<p>NO.V-008</p>  <p>Funnel-shaped helical driller It is used in the second step to remove to blockage on the pipe wall.</p>	<p>NO.V-009</p>  <p>Collection helical driller For collecting the broken soft shaft or drill in the pipe.</p>	<p>NO.V-010</p>  <p>4-edge saw cutter high strength Used for removing hard materials like chemical deposits.</p>
<p>NO.V-011</p>  <p>Spade-shaped cutter Used to remove the cream on the pipe wall or used in the second step to remove residues on the pipe wall.</p>	<p>NO.V-012</p>  <p>Helical saw cutter For removing blockage like roots, branches debris or creams from pipe.</p>	<p>NO.V-013</p>  <p>C-shaped cutter For removing materials like cream, soap ect which adhere to the pipe wall.</p>

## Maintenance Instructions

**Make sure machine is unplugged from power source before performing maintenance or making any adjustment.**

Grease all exposed moving parts such as main bearing approximately every three months.

Make sure to grease main bearing thru grease fitting inside clutch handle slot.

## Clutch Jaws Lubrication

Clean and lubricate clutch driver jaws with oil after each use.

## Soft Shaft

Soft shafts should be thoroughly flush with water to prevent damaging effects of sediment and Drain cleaning compounds. Periodically lubricate cables and couplings with Rust inhibitor.

When not in use, store soft shaft indoors to prevent deterioration by elements.

Soft shaft should be replaced when they become severely corroded or worn. A worn soft shaft can be identified when outside coils of soft shaft become flat.

## V-Belt Adjustment

Check V-Belt periodically for loosening. V-Belt should be kept tight at all times.

## Machine Storage

Motor-driven machine 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.

If machine has been exposed to freezing weather, unit must be run for ten to twenty minutes without load to warm up. Failing to do this will result in frozen bearings. If machine is exposed to weather for a period of time, moisture will form across motor windings causing motor to burn out.

