

# RENSSI®

## DRAIN CLEANING EQUIPMENT

## INSTRUCTIONS

### RCM-36

Jobsite Health & Safety is a first priority matter here at Renssi®. To extend this priority to our customers and end-users, we have created this extensive Manual for you to rely on when working with our products.



**IMPORTANT**  
**READ BEFORE USE OF TOOL**

**01/2018**

**KEEP FOR THE FUTURE USE!**

### **WARNING!**

These instructions are for your own, personal safety. Always make sure that you have read and understood these instructions carefully before using Renssi® Tools.



# RENSSI®

DRAIN CLEANING EQUIPMENT



# CONTROL UNIT

RCM-36



## CONTROLS

**A.** Emergency STOP button

**B.** Main switch

**C.** Direction switch

**D.** Main voltage indicator

**E.** Speed controller

**F.** Emergency STOP reset button

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To watch practical demonstration videos,  
or to download a digital copy of this manual,  
please visit <http://renssi.com/#safety-manuals>

Please note that demonstration videos, where available,  
are not intended as a replacement or alternative  
to this Safety Manual.

# 1. INTRODUCTION

## MODEL

### RCM-36

## MODEL INFORMATION

RCM-36 unit is intended to be used in cleaning sewer pipes and reinstating after relining process. Before a successful relining process, the pipe needs to be well cleaned. RCM-36 unit is designed to rotate a cable with a cleaning or cutting tool at the end of the cable.

**This manual must be available to the operators/maintenance personnel at all times.**

## SPECIFICATIONS

Size:	560 mm x 870 mm x 1190 mm
Weight:	118 kg + control unit 12 kg
Cable size:	10 mm, 12 mm
Cable length:	36 meters
Max. RPM:	2800/min*
Output:	1500 W

# 2. GENERAL POWER TOOL SAFETY WARNINGS



### WARNING!

Read all safety warnings and instructions.

If the warnings and instructions are not followed, there are possibility of an electric shock, fire / or serious injury.



### ATTENTION!

Save all warnings and all instructions for future reference.

The term “power tool” in the warnings refers to your mains-operated (corded) power tool.

## **2.1.0 WORK AREA SAFETY**

### **1. Keep work area clean and well lit.**

Cluttered or 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 children and bystanders away while operating a power tool.**

Distractions can cause you to lose control.

## **2.2.0 ELECTRICAL SAFETY**

### **1. Power tool plugs must match the outlet. Never modify the plug in any way.**

**Do not use any adapter plugs with earthed (grounded) power tools.**

Unmodified plugs and matching outlets will reduce risk of electric shock.

### **2. Avoid body contact with earthed or grounded surfaces, such as pipes, radiators or refrigerators.**

There is an increased risk of an electric shock if your body is earthed or grounded.

### **3. Do not expose power tools to rain or moisture.**

Risk of electric shock increases, if the water enters into power tool.

### **4. Do not abuse the cord. Do not carry or pull the power tool, or pull the plug by pulling the cord.**

**Keep the cord away from heat, oil, sharp edges and moving parts.**

Damaged or entangled cords increase the risk of electric shock.

### **5. When operating a power tool outdoors, use proper extension of cord for outdoors.**

Suitable cord for outdoor use reduces the risk of an electric shock.

### **6. If the use of a power tool in a damp location is necessary, use a residual current device (RCD) protected power source.**

Use of an RCD reduces the risk of electric shock.

## 2.3.0 PERSONAL SAFETY

### 1. Stay alert, be careful and use the power tool with caution.

Do not use the power tool when you are tired or under the influence of alcohol or drugs. Losing concentration for a moment can cause serious personal injury.

### 2. Use personal protective equipment.

Always wear a safety glasses. Protective equipment such as a respirator, safety shoes, helmet and hearing protection used for appropriate conditions will reduce personal injuries.

### 3. Prevent unintentional starting.

Make sure that the power switch is off position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents. Remove any adjusting key or wrench before turning the power tool on.

A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

### 4. Do not overreach.

Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

### 5. Dress properly.

Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.

### 6. If device is provided with a connection for dust extraction and collection facilities, ensure that these are connected and properly used.

Use of dust collection system can reduce dust-related hazards.

## PERSONAL PROTECTIVE EQUIPMENT



**Risk of crushing**  
**Risk of corrosion**  
**High noise levels**  
**Serious hearing damage**

**Use protective gloves and clothing**  
**Use sealed protective goggles**  
**Use face/breathing protection**  
**Use ear protection**

## 2.4.0 POWER TOOL AND USE

**1. Do not force the power tool. Use the correct power tool for your application.**

The correct power tool will do the job better and safer at the rate for which it was designed.

**2. Do not use the power tool if the switch does not turn it on and off.**

Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

**3. Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.**

Such preventive safety measures reduce the risk of starting the power tool accidentally.

**4. Store idle power tools out of reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.**

Power tools are dangerous in the hands of untrained users.

**5. Maintain power tools.**

Check for misalignments or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before the use. Many accidents are caused by poorly maintained power tools.

**6. Keep cutting tools sharp and clean.**

Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

**7. Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.**

Use the power tool for operations different from those intended could result in hazardous situation.



**ATTENTION!**

**Have your power tool serviced by a qualified repair person using only identical replacement parts.**

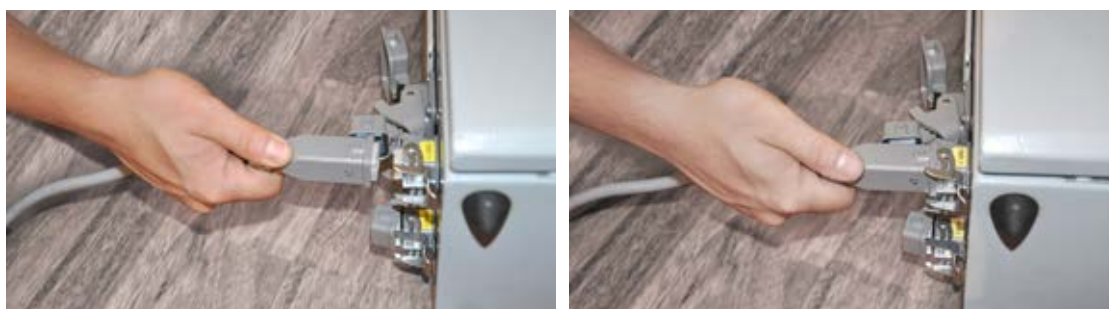


### 3. INSTALLING THE RCM-36

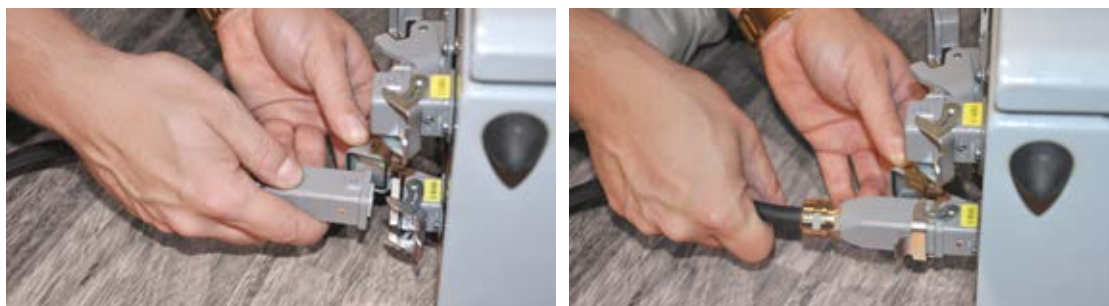
1. Connect the control unit to the motor with the orange 6 pin cable.



2. Connect the foot pedal to the control unit.



3. Connect the power cord to the control unit.



4. Make sure that the power cord plug matches the power outlet.

5. Plug the RCM-36 unit to the power outlet.

## 4. OPERATING THE RCM-36



### **WARNING!**

Improper use of the machine can cause serious damage.

1. Use the Renssi® equipment always on a solid surface to prevent equipment from falling.
2. Press the Emergency STOP-button. **A**
3. Turn the Main switch to power ON the unit. **B** (*Main voltage light will illuminate*)
4. Choose the desired rotation direction with Direction Rev./For-switch. **C**
5. Choose the desired rotation speed. **E** (*Can be adjusted while used*)
6. Release the Emergency STOP-button. **A**
7. Press the Emergency STOP Reset-button. **F** (*Blue light will illuminate*)
8. Keep a firm grip on the cable and set your body so that working position is as natural as possible. Always make sure that you do not need to change your grip during operation.
9. Never place the rotating equipment near your arm.  
Equipment can cause the cable to swing around which can lead to serious injuries.
10. Start the machine by pressing the foot pedal.
11. The machine stops when you take your foot off the pedal.

# CONTROL UNIT

## RCM-36



## 5. TURNING OFF THE RCM-36

1. Press the Emergency STOP-button. **A** (*Blue light will turn off*)
2. Turn the Main switch to power OFF the unit. **B**
3. Unplug the RCM-36 unit from the power outlet.
4. Disconnect all the cables.

## 6. MAINTENANCE

### **BEFORE ANY WORK ON THE MACHINE ITSELF, PULL THE MAINS PLUG.**

Inspect the machine regularly for any loose or damaged components.

Inspect the cable and it's cover for any damages. Replace when required. (TS-3036)

For safe and proper working, always keep the machine and ventilation slots clean.

Ensure that all the bolts are tight and that no bolts are missing.

### **CLEANING AND LUBRICATING THE CABLE**

1. Ensure there are **NO TOOLS ATTACHED** to the cable
2. Roll out of the cable from the reel
3. Start rotating the cable forward
4. Spray WD-40 or similar lubricant into the cover from the machine end
5. Lubricant will push all the dirt out of the cover from the open end of the cable
6. Clean the cable cover with a damp cloth or a wipper
7. If needed, the cable can be pulled out of it's cover for better lubrication.
8. Maintaining the cable extends it's life and improves the motor performance and life.

### **CHANGING THE CABLE**

1. Roll out the cable from the reel
2. Detach the aluminium case from the bevel gear by opening four nuts
3. Open the set screws holding the cable from the machine end
4. Pull out the cable
5. Insert the new (TS-2025) cable
6. Tighten the set screws
7. Roll in the new cable
8. Attach the aluminium case back to the bevel gear



# 5. ATTACHMENTS

## SAFETY REGULATIONS FOR ELECTRICAL EQUIPMENTS IN LOW-VOLTAGE POWER INSTALLATIONS

### 1. General endangerings

These safety regulations are valid in connection with the operating and maintenance instructions of the product and they are to be observed strictly. Electrical machines are equipped with hazardous live parts and rotating parts. Therefore, severest personal and physical damages can be caused through non-intended use, because of faulty operation, through imperfect maintenance and because of non-permissible disassembly of protective devices. It is to be guaranteed that only qualified persons (definition for skilled persons see DIN VDE 0105 or IEC 364) will be engaged to realize any work at the equipments (such as design, transport, assembly, installation, commissioning, maintenance, repair, disassembly), though it should be noted that the documents for the mounting, the commissioning, the operation, the maintenance and the repair of the equipment are available and that they are to be observed.

### 2. Intended use

The machines are intended for industrial power installations. The conditions on the site have to coincide with all data given on the rating plate. In particular the indicated degree of protection is to be realized by the driven machine. Corresponding details are part of the DIN VDE 0530 T. 1.



### 3. Transport, Storage

The ring bolts or shackles of the equipments are exclusively intended for transporting the equipments. Additional parts or loads must never be attached. Before the commissioning, existing transport lockings are to be removed. Electrical equipments with recognizable damages must never be put into operation.

### 4. Mounting of the equipment

When mounting the electrical equipment there is to be observed that the informations about the technical data and operating conditions (such as determined in the documents being part of the equipment), the general safety and mounting regulations and the specific regulations of the installation and of the operation are followed. In case of types of construction with the shaft end upwards, there must be taken measures preventing that foreign matters can fall into the ventilation system. For ensuring the unhindered ventilation of the machine, there are to be followed the informations given by part of the manufacturer.

### 5. Electric connection

 The connection is to be realized only by qualified skilled persons and in released state being protected against re-starting. All the data being necessary for that are to be taken from the operating and maintenance instructions delivered with the equipment. Before re-starting the installation for the first time, there is to be checked if the electrical equipment is running in the required direction of the rotation. When exceeding the tolerances according to DIN VDE 0530 part 1 / DIN EN 60034-1 (for voltage  $\pm 5\%$ , for frequency  $\pm 2\%$ ) and when deviating from the waveform and the symmetry, the temperature can possibly rise and the electromagnetic compatibility can be impaired. 

### 6. Operation

The maintenance measures specified in the operating and maintenance instructions are to be carried out by a qualified personnel in regular periods. The reasons for every variation in view of the normal operation, in particular the reasons for modified noise, for modified temperatures and for the reaction of protective devices are to be determined and eliminated by qualified personnel. If there's any doubt, the equipment is to be switched-off immediately.

### 7. Important information

Because of the great variety of the operating conditions and for the clear understanding of the operating and maintenance instructions, it is only the general case of application which can be considered in this operating and maintenance manual. For special cases (such as exceptional environmental conditions or special safety instructions) it is necessary to come to an agreement with the manufacturer or with the selling company.

### 8. Warranty

The warranty requires the observance of the safety regulations and of the operating and maintenance instructions as well as the intended use.



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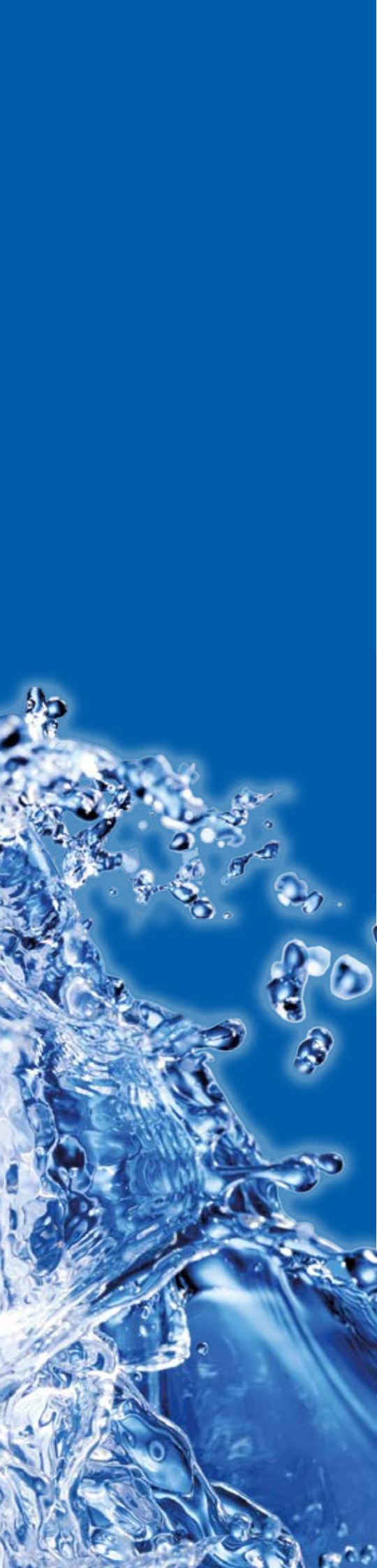
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**RENSSI**<sup>®</sup>  
DRAIN CLEANING EQUIPMENT

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