

RENSSI®

DRAIN CLEANING EQUIPMENT

INSTRUCTION MANUAL
READ BEFORE USE OF TOOL

6/2025



RID-SERIES MANUAL

KEEP FOR THE FUTURE USE!

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 Safety Manual for you to rely on when working with our products.

ATTENTION!

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



RID-300



RID-400-S



RID-600-S



RID-800-S



RID-800-XL

RENSSI®
DRAIN CLEANING EQUIPMENT

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To watch practical demonstration videos or to download a digital copy of this manual, please visit

<http://renssi.com/en/downloads>

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

1. INTRODUCTION

MODELS:

RID-300 · RID-400-S · RID-600-S · RID-800-S · RID-800-XL

MODEL INFORMATION

Inversion Drums are used in the pipe relining. Pneumatic features of the inversion drum shoot the liner smoothly into a pipe which is important in achieving a successful result.

These instructions, operating and maintenance manuals for the machines and devices used must be available to the operators/maintenance personnel at all times. They contain important information about safety and maintenance:

Your attention safeguards:

- A. The safety of the operating personnel
- B. The avoidance of risk states (industrial accidents)
- C. Faultless operation of the inversion equipment

We accept no liability for damage and/or breakdowns which occur, due to failure to follow these instructions.

2. SAFETY INSTRUCTIONS

2.1 WARNING NOTES AND SPECIAL INFORMATION

The following designations are used in the instruction manual for safety notes and information:



WARNING!

Describes a potentially dangerous situation. Not observing this note may result in serious injury.



CAUTION!

Describes a potentially dangerous situation. Not observing this note may result in minor injury.



ATTENTION!

Specific instructions and restrictions for damage prevention.



NOTE!

Specific information regarding sustainable use or other important information.

2.2 RECOMMENDED USAGE

The inversion drum is designed exclusively for inverting a liner with a nominal diameter of 50mm (2") up to 200mm (8").

USAGE OUT OF THIS SPECIFIED OPERATION AREA IS NOT RECOMMENDED!

- The manufacturer/supplier accepts no liability for damages caused as a result of failure to follow these instructions.
- Usage also includes inspection and maintenance, as well as observation of the safety notes in this manual.
- This equipment may only be operated and maintained by persons trained and authorized for this purpose.
- Always replace faulty parts with original spare parts from Renssi®. This is the only way to guarantee faultless operation of the machine.



ATTENTION!

Faulty operation or misuse may risk:

- life and limb
- material assets
- efficient operation of the machine



WARNING!

Do not block or cover the drum outlet!

Even though the inversion drum has been pressure tested, it is not a pressure tank.

2.3 ACCIDENT PREVENTION

2.3.1 MISCELLANEOUS HAZARDS

The machines and devices used in the inversion process are built in accordance with the state of technology and recognised occupational safety guidelines. Appropriate labour protection and accident prevention provisions are presumed to be followed. Nonetheless, there are the following miscellaneous hazards:

INVERSION DRUM



CAUTION!

Risk of crushing in hand wheel area. Use protective gloves.

WHEN HANDLING EPOXY RESIN



WARNING!

- Epoxy resin. Irritates eyes and skin. Skin contact may cause irritation. Always wear protective goggles and gloves.
- Do not eat, drink or smoke when working.
- Do not inhale fumes! Ensure good ventilation when mixing.

2.3.2 PERSONAL PROTECTIVE EQUIPMENT

INVERSION DRUM



ATTENTION!

Risk of crushing. Use protective gloves.

WHEN HANDLING EPOXY RESIN



ATTENTION!

Risk of corrosion

- Use sealed protective goggles
- Always use butyl or nitrile gloves
- Wear face protection
- Wear protective clothing.



COMPRESSOR



ATTENTION!

High noise levels. Serious hearing damage possible. Use ear protection.

2.3.3 PERSONAL SAFETY INSTRUCTIONS

1. Stay alert, be careful and use the equipment with caution.

Do not use the equipment 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. Do not overreach.

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

4. 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.

2.3.4 SAFETY INSTALLATIONS



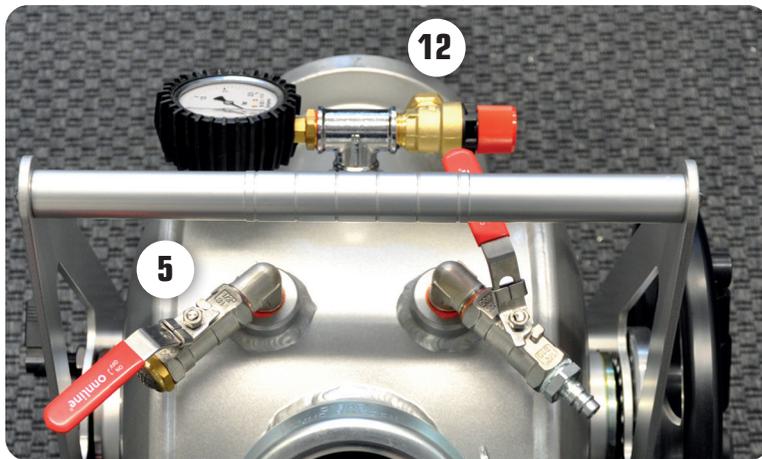
ATTENTION!

- Operation without intact safety installations is not permissible.
- Safety installations may not be decommissioned or altered.
- Operation of the inversion drum with technical faults is forbidden.
- Discharge pressure and separate all additional devices from the inversion drum prior to maintenance or repair.

The following safety installations are mounted on the inversion drum:

- Safety valve position 12 (below)

2.3.5 EMERGENCY BEHAVIOUR



Discharge pressure:

Open ball valve "Discharge pressure" position 5 - system pressure will discharge.

2.4 OPERATOR SUITABILITY

The operator is responsible for deployment of personnel, who will be made familiar with RID-series. Only specially trained personnel should be operating this equipment.

2.5 NOISE EMISSIONS

The A-assessed equivalent continuous sound pressure level of the inversion drum, the impregnation device, vacuum pump, hotbox and circulation pump are below 70 dB(A).

Using a reciprocating compressor can increase values up to 91 dB(A). Set the reciprocating compressor up outside. If, due to the installation area the reciprocating compressor must be set up near the personnel, then the operators must wear ear protection.



ATTENTION!

High noise level. Serious hearing damage possible. Use ear protection.

3. BEFORE EACH USE

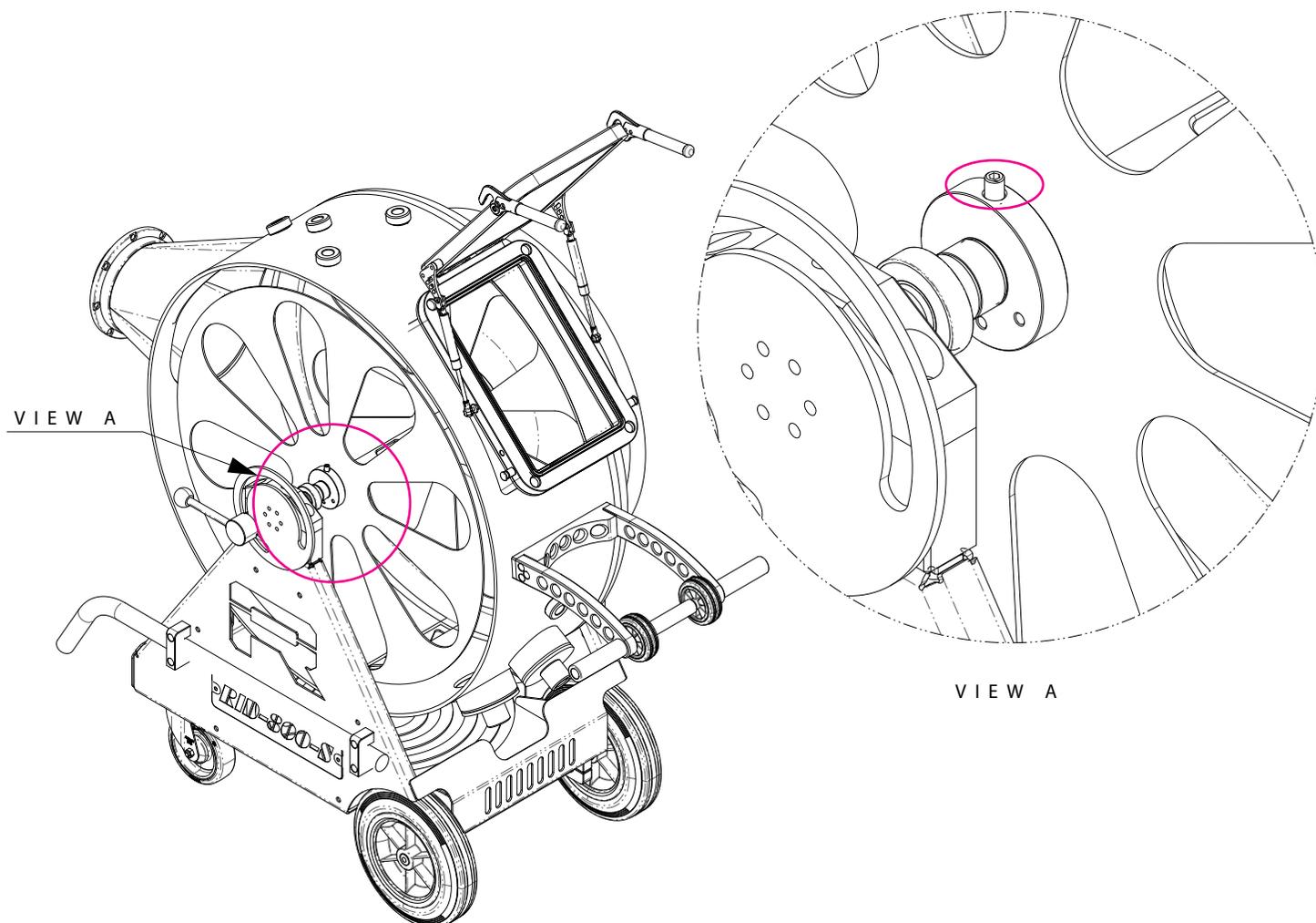
3.1

Make sure the inner plates are tight and secured, and not rotating freely. (except in the sideport versions, where the port side plate rotates freely)

Use a 3mm allen wrench to tighten both plates with the set screws shown in the picture. Both side plates have a similar clamp that will need to be tightened regularly.

3.2

Make sure the wheel is spinning freely and not rubbing against anything



4. TECHNICAL DATA

4.1 INVERSION DRUM

DIMENSIONS

External Dimensions (LxWxH):

| | |
|------------|-------------------------|
| RID-300 | 450mm x 450mm x 500mm |
| RID-400-S | 620mm x 440mm x 520mm |
| RID-600-S | 830mm x 590mm x 980mm |
| RID-800-S | 1300mm x 630mm x 1170mm |
| RID-800-XL | 930mm x 1220mm x 900mm |

DRUM DIAMETER:

| | |
|------------|-------|
| RID-300 | 300mm |
| RID-400-S | 400mm |
| RID-600-S | 600mm |
| RID-800-S | 800mm |
| RID-800-XL | 800mm |

APPROXIMATE INTAKE

| | |
|------------|--|
| RID-300 | 8 meters of 100mm liner |
| RID-400-S | 20 meters of 100mm liner |
| RID-600-S | 50 meters of 100mm liner 25 meters of 150mm liner |
| RID-800-S | 100 meters of 100mm liner 50 meters of 150mm liner |
| RID-800-XL | 30 meters of 250mm liner 50 meters of 200mm liner 75 meters of 150mm liner |

STORZ SIZE Ø

| | |
|------------|--|
| RID-300 | 100mm |
| RID-400-S | 150mm (also available with 6" camlock) |
| RID-600-S | 150mm (also available with 6" camlock) |
| RID-800-S | 150mm (also available with 6" camlock) |
| RID-800-XL | 200mm |

STAND TYPE

| | |
|------------|-------|
| RID-300 | stand |
| RID-400-S | stand |
| RID-600-S | cart |
| RID-800-S | cart |
| RID-800-XL | cart |

INFORMATION

Operating pressure, max.: 1.5 bar

Safety relief valve: 1.5 bar ½" Base Thread

Pneumatic connectors: size ½", max temp. + 100°C,
material tempered zinc coated steel,
suitable models: RECTUS 25+26,
CEJN 310, JWL 520+530

Max. temperature: + 100°C

WEIGHT

Total weight:

| | |
|------------|--------|
| RID-300 | 14,5kg |
| RID-400-S | 18,5kg |
| RID-600-S | 49,5kg |
| RID-800-S | 74,5kg |
| RID-800-XL | 93 kg |

4.2 DRUM HEADS

DH-4S SERIES

with 4" thread attachment.

Includes 100mm Storz adapter

| | |
|-----------|-------------------|
| DH-4S-50 | for Ø 50mm liner |
| DH-4S-70 | for Ø 70mm liner |
| DH-4S-100 | for Ø 100mm liner |

DH-6S SERIES

with 6" thread attachment.

Includes 150mm Storz adapter

| | |
|-----------|-------------------|
| DH-6S-50 | for Ø 50mm liner |
| DH-6S-70 | for Ø 70mm liner |
| DH-6S-100 | for Ø 100mm liner |
| DH-6S-150 | for Ø 150mm liner |

DH-8S SERIES

Includes 200mm Storz adapter

| | |
|-----------|-------------------|
| DH-8S-200 | for Ø 200mm liner |
|-----------|-------------------|

STORZ ADAPTERS

| | |
|-------|---------------------------|
| DH-4S | 4" Storz adapter / thread |
| DH-6S | 6" Storz adapter / thread |

Camlock drum heads also available!



NOTE!

The information regarding drum intake is dependent on the materials selected.
The volume is reduced accordingly, when the water and/or calibration hose is used.

5. SERVICE AND MAINTENANCE



ATTENTION!

Replace all components, which are known to be defective or damaged.

Always replace faulty parts with original spare parts from Renssi. This is the only way to guarantee faultless operation of the machine.

Service, repair and maintenance work may only be carried out by specialised staff.

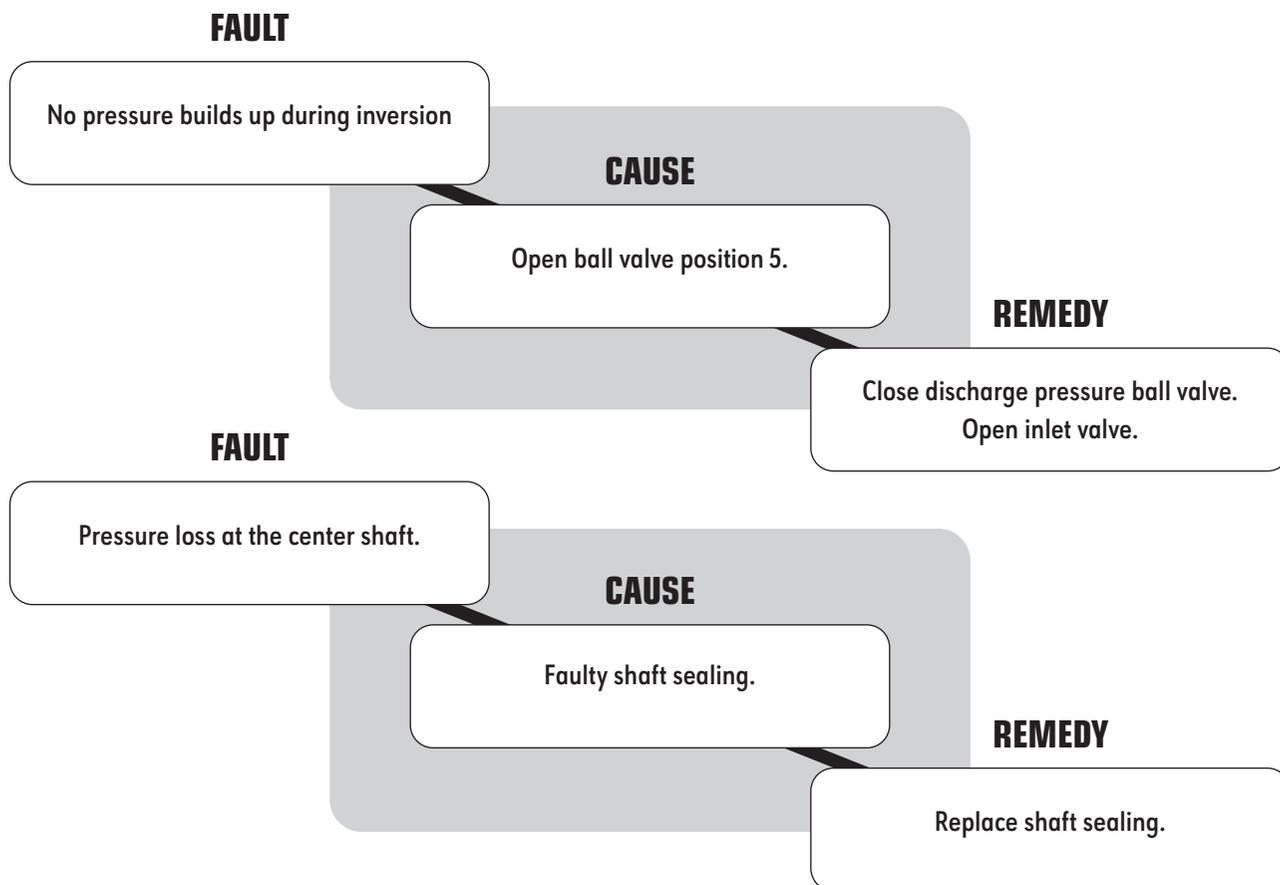
Discharge pressure and separate all additional devices from the inversion drum prior to service, repair or maintenance work.

Observe appropriate labour protection and accident prevention provisions.

Ensure safe and environmentally-friendly disposal of operating and auxiliary materials and used parts.

6. TROUBLESHOOTING

This chapter is not exhaustive. Only the most common sources of problems are listed, based on our experience. Refer to picture on page 7.



RENSSI® TOOLS

High quality drain cleaning tools
for professionals.



RENSSI®
DRAIN CLEANING EQUIPMENT

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