

USER'S MANUAL RIONED URBANJET



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Rioned

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RIONED has the right to change parts at any time without any prior or direct warning to the client. Also, the contents of this manual can be changed without any prior warning.

This manual is to be used only for this machine.

For extra information on adjustments, maintenance and repair, please contact the technical department of your dealer.

Foreword

This user's manual is a manual for the professional user.

This user's manual has the purpose to control the machine in a safety manner and must be saved with the machine.

The photos and drawings help you understand the text easier.

First the user's manual gives you an overview of the most important safety aspects. Then we explain how the machine is built up and the global working of the machine. Chapter "Technical specifications" gives you information about the working characteristics, performance under normal use and construction specifications.

"Control" is the next chapter. This chapter explains how to use the machine systematically.

In the chapter "Maintenance", the user can do small maintenance on the machine.

Chapter "Trouble shooting" has the purpose to solve simple defects.

With the "Exploded views" you can order original spare parts, are also useful for mounting, and disassemble the machine.

Finally gives the chapter "Appendix" information about electrical and/or hydraulic connections.

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1 INTRODUCTION

RIONED wishes to thank you for your purchase of the RIONED drain and sewer-clearing machine. We recommend that you read this manual thoroughly and see that the machine is handled and maintained in the proper manner. If your machine should give trouble and need servicing, when you want to order parts, or if you have any questions, contact your RIONED dealer.

The machine is built by:

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The Rioned high-pressure device has been especially designed and manufactured for cleaning drains, walls, floors and terraces with cold or hot water. For cleaning drains, special nozzles are included in the delivery; for all other purposes, the spray gun, which is also included, can be used.

This manual contains all the necessary information concerning control and maintenance. If the device is positioned correctly, properly controlled, and regularly maintained, a warranty will be given according to the general conditions of delivery. However, should it arise that the control and maintenance procedures are not diligently followed, the warranty will become invalid.

The machine may only be used by authorized personnel.

The machine cannot be used in an explosive environment.

In this manual you will find all necessary information concerning operations and maintaining your machine. If handled properly, your machine is guaranteed according to the general delivery conditions.

1.1

Use

The integrated engine drives the high-pressure pump via a V-belt. This pump receives water from the water tank via the water filter and pressurizes it. The pressure can be continuously adjusted. The pressurized water leaves the machine via the high-pressure hose on the reel.

2 SECURITY

Be responsible for other people when you are working with this machine.

This manual contains instructions for fundamental conditions that must be followed by use and maintenance of this machine.

That is why it is necessary that authorised and qualified personnel must read the user's manual and the user's manual must always be available with the machine. Near the general regulations in this chapter, you must also follow the security regulations in the other chapters.

2.1 Instruction indications in this manual

The in this manual containing security instructions, which are dangerous if they are not obeyed, are marked with general security signs.



Security sign DIN 4844-W9.

2.2 Descriptions security measures

- Emergency stop

This machine is equipped with an emergency stop. By operating the emergency stop, the machine will stop immediately. Do not use this button for normal stopping. Only use it when dangerous situations occur. After use, remove the danger and pull the emergency stop in order to be able to start up again. Make sure the emergency stop can always be reached.

- Pressure regulator

The pressure regulator looks to it that the working pressure never gets to high. It functions like a security valve.

- Security covers

This machine is equipped with several security covers over parts that are rotating. It is forbidden to remove these security covers during operating this machine. You can only remove them if there is maintenance on the machine. Stop the machine.

2.3 Personnel protection outfit

- Ear protector
- Protection looking glasses
- Gloves (Recommended)
- Waterproof work clothing (Recommended)
- Spray boots by use of spray gun (Recommended)

2.4 Work area

- Mark the work area clearly.
- Minimum distance "work area - demarcation": 6 meters.
- Remove all loose parts inside the demarcation.
- Never spray from an unstable place (ladder, boat, scaffold,...)
- Working with artificial light: Adjust lighting armatures (waterproof)

2.5 Use in closed room

Look to it that the combustion gas is adequate carried away.

The room must be ventilated properly. Prevent CO-poisoning!

2.6 Water outlet

Look to it that the water is adequate carried away.

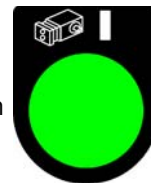
If you clean with harmful chemicals, or when the cleared object is polluted, the water must be cleaned before it is drained away into the sewer.

2.7 Spray pause (leave the area for a short time)

Stop the machine

Depressurize the system:

A Open the HP valve and press button



B If the spray lance gun is attached you must also pull the trigger.

2.8 Warnings

Do not let the machine operate without supervision.

Keep children and animals away from the machine.

It is strongly forbidden to spray on humans and animals. When the skin is penetrated: inform immediately a doctor.

Prevent damage by spattered or flying parts.

Look out for electric connections and other electric components if you are cleaning with a spray gun!

Never block the control levers in any way, otherwise mentioned.

Put the personnel protection outfit on BEFORE you start the machine.

Ensure that the spraying nozzle does not leave the drain.

Before using a spray gun, you must always set the pressure below the maxi-

mum (\pm the half of the maximum pressure). You must do this before you start the machine.

Never exceed the maximum pressure that is marked on the manometer when using the spray gun.

After use of the high-pressure circuit depressurise it.

Never let the high-pressure hose spray outside a sewer, drain, or pipe.

Rewind hose onto reel under pressure to avoid crushing.

2.9 Personnel qualification and education

Personnel that use, maintain and inspect the machine must have the right qualifications for this job.

Responsibility and authorisation of the personnel and the supervision on the personnel must be embedded. If the knowledge is not present, the user must provide for the necessarily education.

2.10 Danger that can occur if the security regulations are not observed

If the security regulations are not observed, danger can occur for personnel and for the environment.

No amends are given if the regulations are not observed.

If the regulations are not observed, this can results in:

- Failure of important functions of the machine.
- Failure of prescribes methods for maintenance.
- Exposure of persons to dangers of electrical or mechanical failures

2.11 Working safely

The in this manual named security prescriptions, the national prescriptions to prevent accidents and the internal labour, company and security prescriptions must be followed by the user.

2.12 Security regulations for the user and technical service

- Protections of moving parts (for example couplings) may not be removed if the machine is working.
- Leakage of dangerous mediums must dispose in a manner that there is no danger for the personnel and environment. Statutory regulations must be followed.
- Danger caused by electricity must be excluded.

2.13 Security regulations for maintenance, inspection and mounting activities

- The user sees to it that qualified technicians do all maintenance, inspection and mounting activities. They must study the manual thoroughly.

- Maintenance may only be done when the machine is not functioning.
- The in the user's manual mentioned handling to stop the machine must be notified.
- Directly after maintenance of the machine, all the security and protection facilities must be functionally.
- Before starting the machine again, you must follow the instructions correctly.

2.14 Making changes and fabricate spare parts

Changes to the machine are only permitted if Rioned has given written authorisation. The use of original spare parts and accessories are for the safety necessary. Rioned is not responsible for injuries or damages if other spare parts are used.

2.15 Improper use


The security during working with the machine is only guaranteed if the use of the machine is conforming the user's manual. The limits that are written in chapter "Technical Specifications" and "Appendix" may never be overstepped.

If the machine does not work or give troubles, it is forbidden to work further with the machine. Telephone your dealer or the technical department of your dealer.

This manual contains all the necessary information concerning control and maintenance. If the device is positioned correctly, properly controlled, and regularly maintained, a warranty will be given according to the general conditions of delivery. However, should it arise that the control and maintenance procedures are not diligently followed, the warranty will become invalid.

3 TECHNICAL SPECIFICATIONS

3.1 General

Description (<i>symbol</i>)	Unit
Dimensions	: see chapter 15.3 Dimensions page: 79
Weight	: >440 kg
Quantity water tank	: 300 l (2x standard)
Fill medium	: Water (H_2O)
Maximum temperature medium	: 55 °C (333,15 K)
Total length high-pressure hose	: 60 m
Total length supply hose	: 35 m
Diameter supply hose	: ¾" (NW19)
Quantity oil tank	: 5,5 l
Oil hydraulic	: Hestia 46 (order number: 71003500046)
 Important!	: Replace once a year!
Max. temperature	: 80 °C
Position chassis number	: On typeplate
Year of construction	: See type plate on frame

3.2 Pump

Description (<i>symbol</i>)	Technical unit
Type	: Speck P45
Number of cylinders	: 3
Number of valves	: 6
Maximum pressure (<i>p</i>)	: See type plate on frame
Maximum output	: See type plate on frame
Oil	: GX 80W90
Quantity oil	: 3,5 l
Weight	: 50 kg

Type	: Speck P52
Number of cylinders	: 3
Number of valves	: 6
Maximum pressure (<i>p</i>)	: See type plate on frame
Maximum output	: See type plate on frame
Oil	: GX 80W90
Quantity oil	: 3,5 l
Weight	: 54 kg

For more information concerning the pump, you can find it in the pump appendix delivered with this machine.

3.3 Motor

Description (<i>symbol</i>)	Technical unit
Type	: Kubota V1505 Turbo
Number of cylinder	: 4
Bore x stroke (d x l)	: 78 x 78,4 mm (3.07 x 3.09 in.)
Power (P)	: 32,7 kW at 3000 min ⁻¹ DIN 70020
Fuel	: Diesel
Cooling	: Water cooled
Weight (m)	: 114 kg 251 lb
Battery (U,I)	: 12 V, 63 A
Starter	: 12 V x 1,2 kW
Oil	: 10W30 API/SF-CC or better
Quantity	: 4 l 8.5 pt (UK), 7 pt (UK)

Normal coolant engine is protected to -28 °C

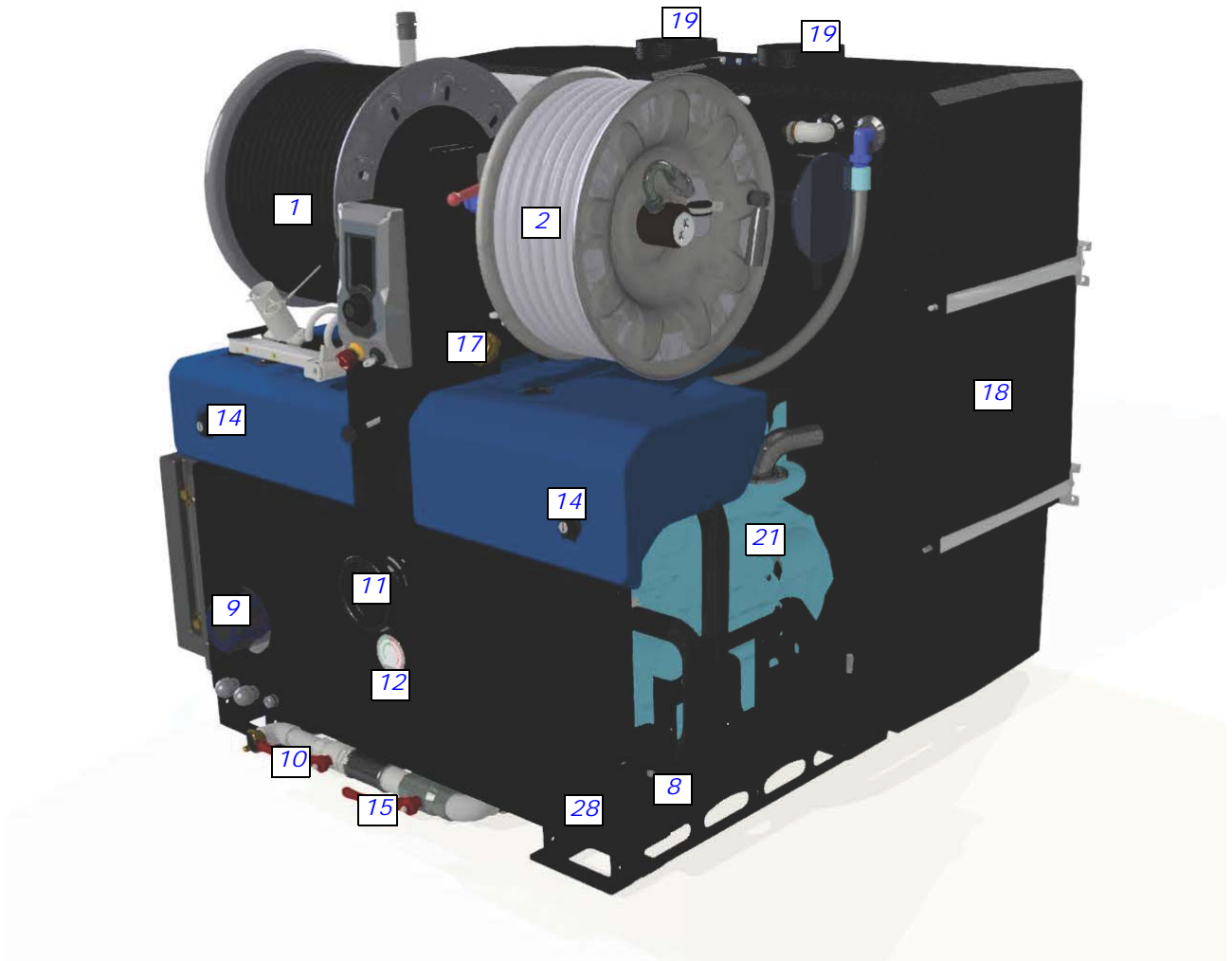
Special coolant engine is protected to -38 °C

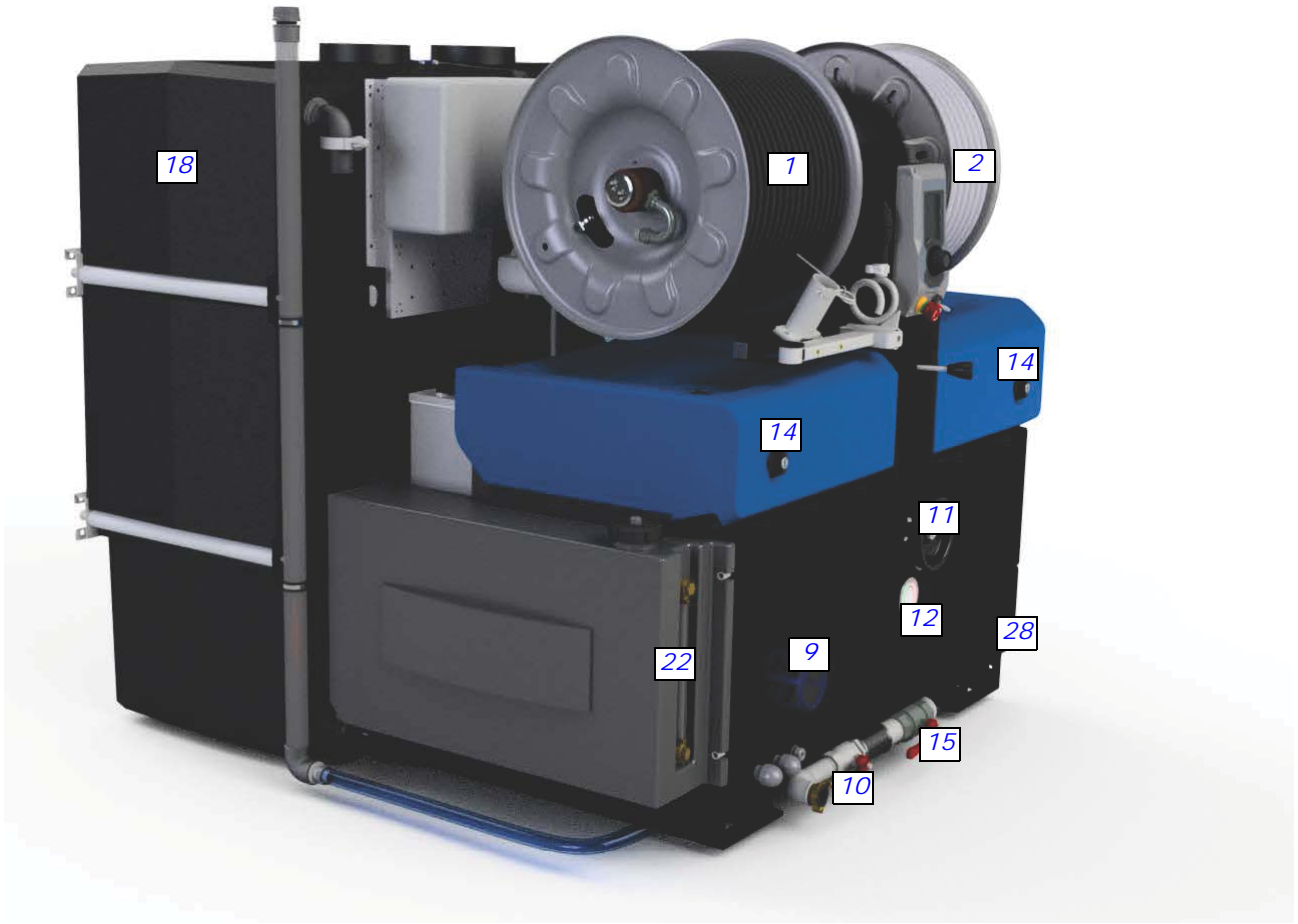
For more information concerning the engine you can find it in the book delivered with this machine.

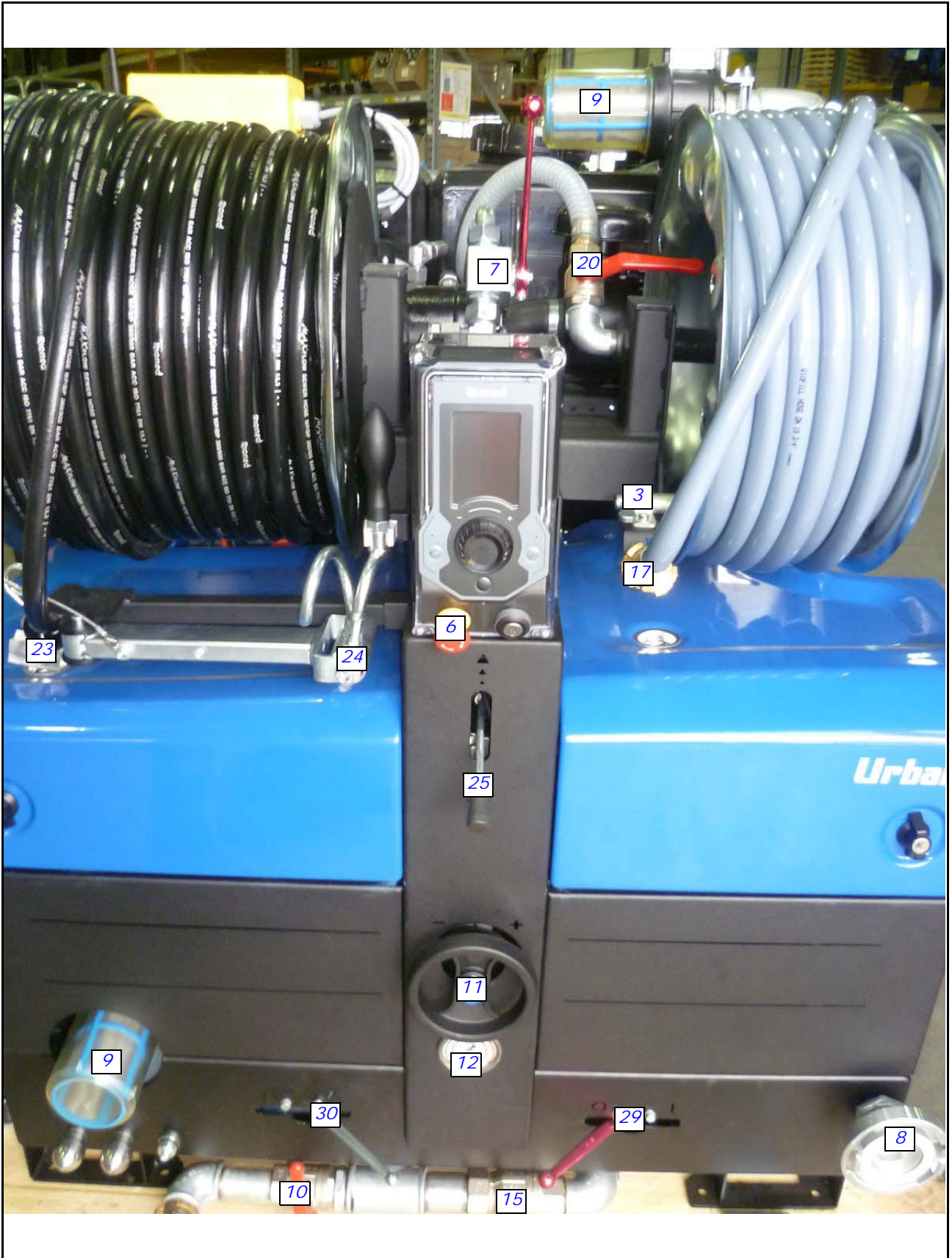
4 CONSTRUCTION

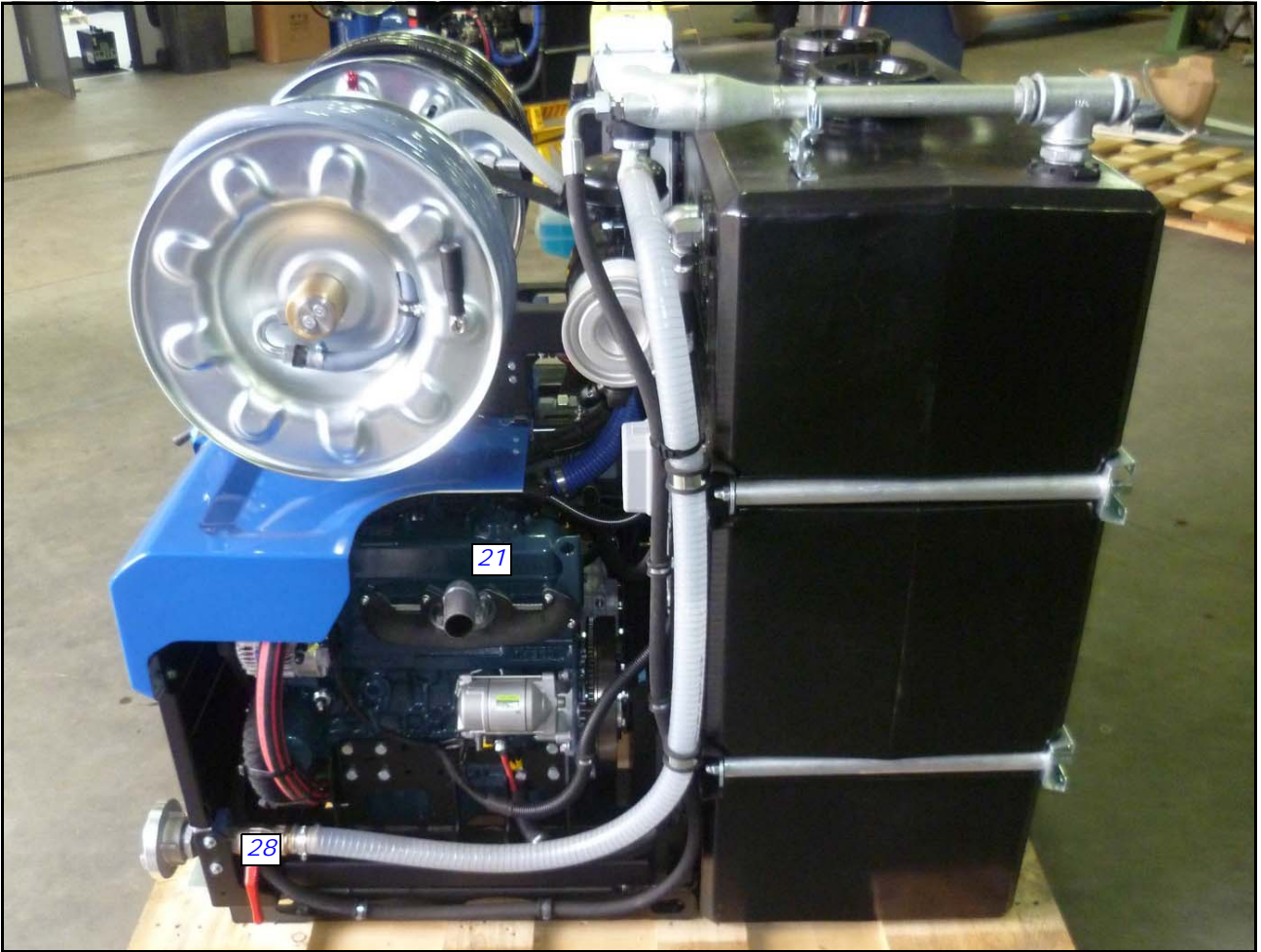
The high-pressure machine contains the following main parts:

1. High-pressure hose on reel
2. Supply hose on reel
3. Reel locking device
4. Control box
5. Switch box
6. Emergency stop
7. High-pressure (HP) valve
8. Supply pipe
9. Water filter
10. Drain valve/draw-off tap
11. Pressure regulator
12. Pressure gauge
13. Swivel locking device
14. Cap fix nipple
15. Supply valve water filter
16. Pump
17. Connection supply hose
18. Water tank
19. Manhole
20. Valve supply hose
21. Engine
22. Fuel tank
23. Hose holder
24. Hose guide
25. Hydraulic reel control
26. Oil reservoir
27. Battery
28. Connection supply pipe
29. Valve suction ventury
30. Pulsator valve open/close





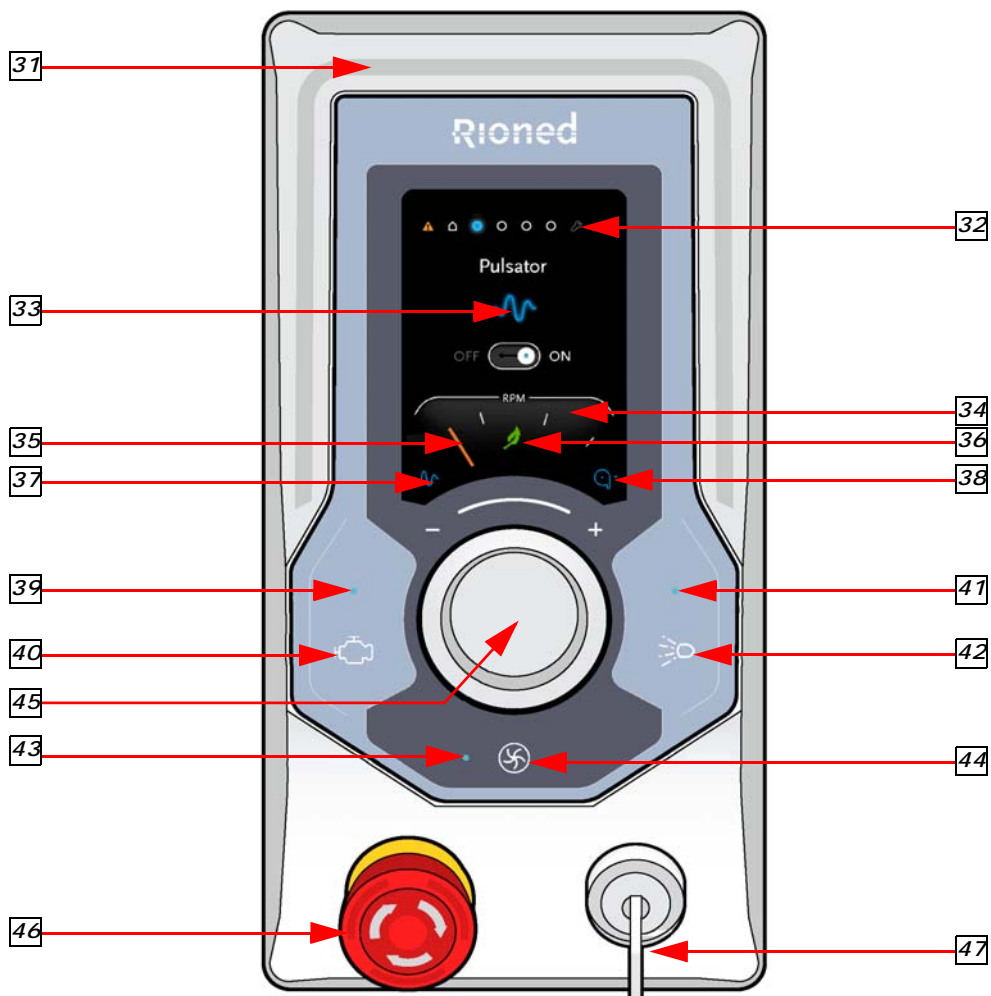




5 eControlPlus

5.1 Control box:

- 31. Corona
- 32. Navigation bullets
- 33. Function
- 34. Tachometer
- 35. Pointer
- 36. ECO Mode
- 37. Icons Left
- 38. Icons Right
- 39. Engine LED
- 40. Engine symbol
- 41. High Pressure LED
- 42. High Pressure symbol
- 43. Vacuum LED
- 44. Vacuum symbol
- 45. Navigator
- 46. Emergency Stop
- 47. Key (Off-Manual-Riomote)



6 Explanation Graphics (only eControlPlus)

6.1 Corona

The Corona is OFF (grey)  unless:

- The Control Unit is:



Set to Riomote Control



Error applicable






Switched OFF by the Eco Start/
Stop-system




Diesel engine: Pre Heat,
Petrol engine: no function
Run dry
or
error Oil level

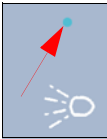


6.2 Push buttons

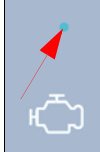
When system is switched ON with the key (47),  and  are lighted.

 is lighted on machines featuring a vacuum functionality.

   are lighted when the corresponding functionality is active, regardless Manual Control or Riomote Control.

In case of "Run Dry",  is blinking with 1 ON/OFF cycle per second.

(see chapter 13.10 "Run Dry" page.: 72)

Engine LED symbol  starts blinking when engine stops in ECO mode.

6.3 Navigation bullets







The navigation bullet (32) has two general states:


- Passive (Grey)
- Active (Blue)



Depending on the user's location in the menu, one of them is on display or, in case of a pop-up, all navigation bullets disappear.


Features in navigation bullets are in specified order, if applicable:

-  Error
-  Home
-  Pulsator
-  Hose Reel
-  Eco Mode
-  Management

The Error-navigation-icon  is only visible and can only be navigated to when an error is applicable, otherwise the icon is hidden.

- Error passive (Grey)
- Error active (Blue)



The first icon, representing Home , is always visible and can always be navigated to.

The next four bullets, representing:

- Pulsator
- Hose Reel
- Eco Mode

are only visible when the corresponding feature is available on the machine.

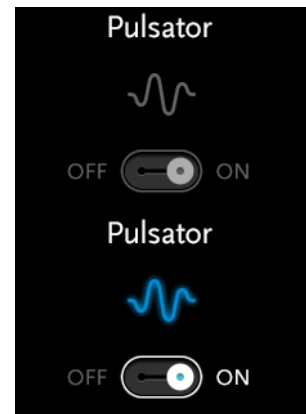
When a feature is not available on the machine, its bullet does not show, and the user navigates to the next item in line.

The last item, the Management-navigation-icon, is always visible and can always be navigated to.

6.4 Function

A function (**33**) has two general states:

- Passive (Grey)
- Active (Blue)



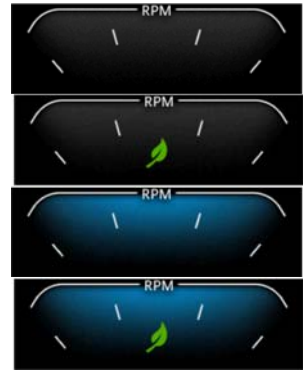
Depending on the user's location in the menu, one of them is on display or, in case of a pop-up, all navigation bullets disappear.

Regardless if a function is active, possible settings on display should always indicate its current status. (**37**, **38**).

6.5 Tachometer


The tachometer (34) has two general states:


- Passive (default)
- Passive (eco)
- Active (default)
- Active (eco)



Depending on the user's location in the menu, one of them is on display.

The pointer which indicates the engine's RPM should always display the current RPM.

If the machine features Eco Mode the current status is always visible by having the Eco-icon  on display.

Push button  shortly to go back to Tachometer from all menu's.

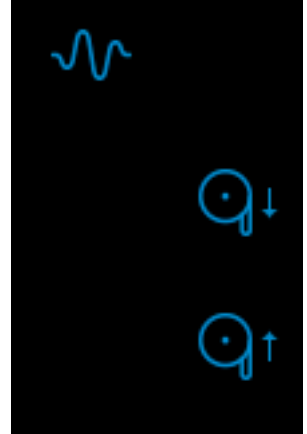
Throttle control is also accessible via the home button.

6.6 Icons

The icons always display the current status of the corresponding feature, regardless “Manual Control” or “Riomote Control”.

Since the “Hose Reel” and “Spray Bar” are never used simultaneously, they share the same designated area on screen.

- Pulsator on
- Reel down
- Reel up
-



7 CONTROL



If you control, maintain or inspect the machine, you must have the right qualifications for this job. If you do not have the necessary knowledge, you may not use the machine. Further, you must convince yourself that you understand this manual thoroughly.

7.1 Check before departure

Before you drive away with the vehicle, check the following:

1. Is the high-pressure hose been inserted into the hose holder and secured with the securing pin?
2. Is the high-pressure hose reel locked by means of the reel lock or is the hydraulic reel control handle been put into position "B" (fixed) (see [chapter 7.5 Hydraulic reel control page: 32](#))?
3. Is the supply hose been connected to the GK coupling?
4. Is the supply hose reel locked by means of the reel lock?
5. Are the tyre tensions of the vehicle enough?
6. At temperatures below the freezing point: has the water tank been emptied and the piping system drained and flushed with antifreeze (see [chapter 7.13 Using the device during periods of frost page: 38](#))?

The vehicle is now ready for departure.

7.2 Place

1. Put the vehicle at the desired place and pull the hand brake.
2. Block, by use on a hill, the wheels of the vehicle with a wedge.
3. Mark the working area according to the local concerning rules.

7.3 Dismantle/mount covers

For inspection and maintenance you have to remove the covers.

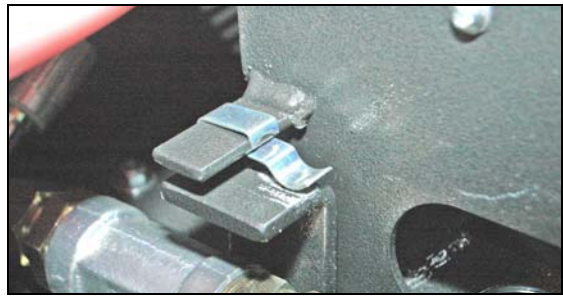
Working:

Dismantle:

1. Turn knob a quarter and remove.
2. Lift the cover a small distance.
3. Remove the cover.

Mount:

1. Stick in the cover lips into the openings.
2. Lower the front side.
3. Fasten the cover with the knob.



7.4

Before starting

1. Check the oil level in the engine, the oil reservoir and high-pressure pump using the dipsticks. Add oil, if necessary.
2. Check the level of the fuel in the fuel tank. Add fuel if necessary.



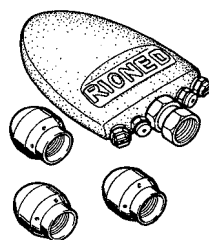
Attention!

It is possible that the engine use the fuel of the vehicle (option). The fuel tank can get empty during working with the machine. You cannot work further! You also cannot drive with the vehicle. Look to it that you always take with you a jerry can with fuel.

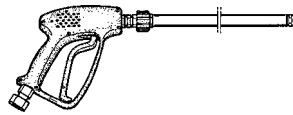
3. Check whether the water filter is clean. Clean the filter, if necessary.
4. Check whether the high-pressure valve on the reel is closed.
5. Check whether the supply valve to the water filter has been opened.
6. Check whether the drain valve is closed.
7. Fill the water tank.
This can be done in several ways:
 - a Manually:
The water tank can be filled with water trough the manhole on the water tank.
 - b By the supply hose.
Couple the supply hose onto a water tap an open the water tap an the supply valve.
 - c Through the supply pipe.
Connect a supply hose to the supply pipe. Open the water tap and supply valve.
 - d Through a suction ventury (option) ([see chapter 9.6 Suction Ventury page: 44](#)).

The maximum water temperature is 55 °C (131 °F).




8. Turn the control wheel of the pressure regulator counter clockwise.
9. Screw the appropriate attachment onto the high-pressure hose.
 - a Unclogging of a drain: jet nozzle



b Cleaning a wall, a terrace or floor: spray lance gun



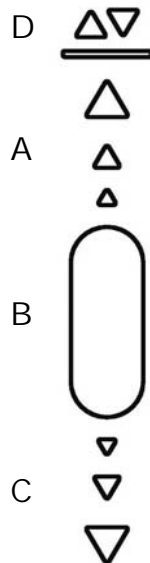
7.5 Hydraulic reel control

By means of pushing the control lever upwards  or downwards  the high-pressure hose can be unrolled or rolled up. Due to the proportional functioning of this valve you can also control the speed of the reel. By putting the lever into the position  you can unroll the hose manually.



Attention!

Never block the lever and always control it with one hand while guiding the high-pressure hose by means of the hose guide (24) with the other hand to the required place.



- A Wind the hose
- B Reel locked
- C Unwind the hose
- D Reel "out of gear"

7.6 Hour counter

This machine is equipped with an hour counter. The charge of the machine is shown by means of an hour counter. The hour counter indicates the number of working hours that the machine has worked.

7.7

Hose guide

Purpose:

To guide the HP hose into the sewer.

To wind the HP hose on the reel drum.

To keep the hose clean.

Use:

- Put the end of the hose through the opening of the hose guide.
- By moving the hose guide to the right and left, you can wind the HP hose fluently on the reel drum.
- After use, put the hose guide to the left and vertical in the clip.

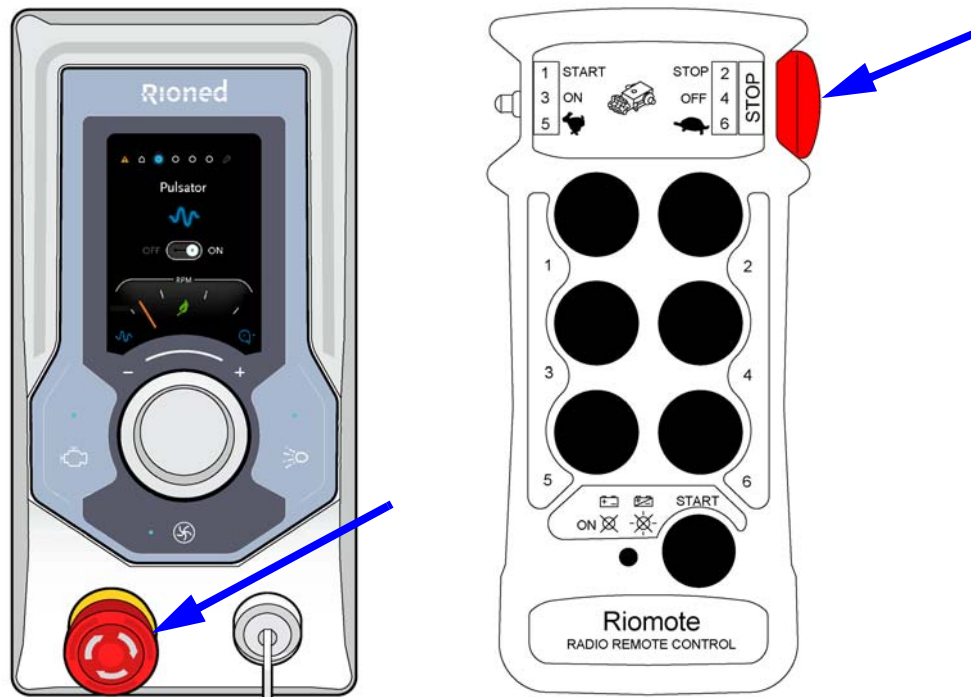
7.8

Starting the engine



Emergency stop:

The machine is equipped with an emergency stop (6). By operating this stop the machine will stop immediately. Do not use the button for normal stopping. Only use it when dangerous situations occur or during maintenance. After use, turn the emergency stop in order to be able to start up again. Make sure the emergency stop can always be reached.





Put on protection looking glasses and ear protectors before starting the machine.



Start the machine.

Proceed as follows:

7.9 Starting the engine at the back of the unit:

Position key control box:

- Insert key:
- Position 1 (manual control):
- Position 2 (remote control):

7.9.1 Start diesel engine manually:

1. Put the key into the keyhole.
2. Turn the key to position 1 "Manual Control ON".



- "Work safe" is displayed for 2 seconds.



- Icon “Manual control ON” is displayed for 2 seconds.
- Then the main menu is displayed
- ECO mode is standard always active if option “ECO Start/ Stop” or “ECO Stop” is available.

3. Check the error icon.
If the error icon is visible, then go to [See “Errors eControl” on page 68.](#)
Go further if the error icon is not visible.
4. Push the engine button 2 seconds.

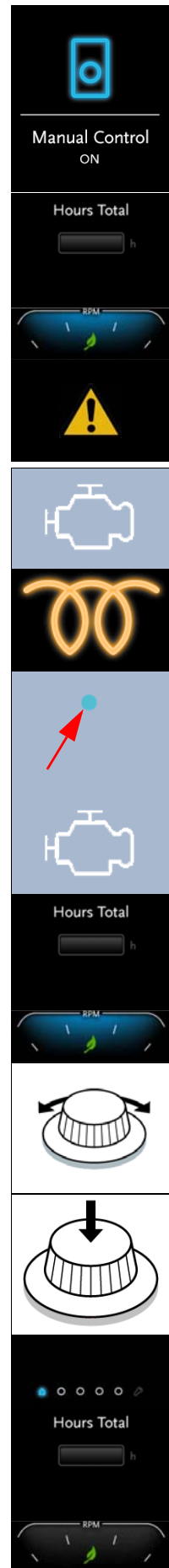
- “Pre Heat” and “Corona-orange” lightens for 5 seconds
- Engine starts
- When the engine runs the “Engine LED” lightens blue
- “Engine ON” is displayed for 2 seconds.

- Then the main menu is displayed

5. Increase (+ clockwise) or decrease (- counterclockwise) RPM by turning the Navigator.

6. Push the Navigator for “Navigation bullet” menu.

Let the engine warm up. After 3 minutes the machine is ready for use.



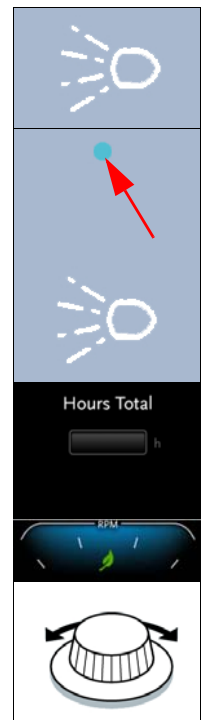
7.10 Unclogging a drain

1. Screw a suitable nozzle onto the high-pressure hose.
2. Put the hose through the hose guide for safety manners (option).
3. Unwind the hose a little.
4. Put the nozzle into the drain that is to be cleaned.
5. Screw the pressure regulator fully open (right).
6. Open the high-pressure valve.

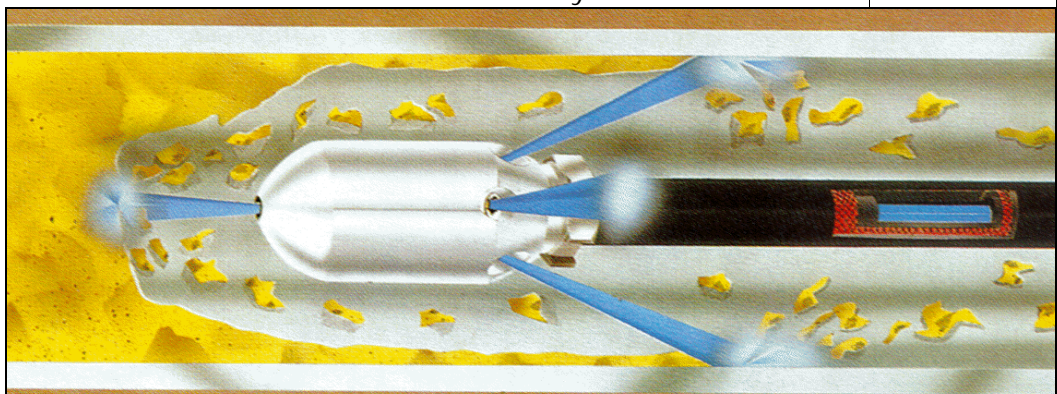
7.10.1 Start spraying:

By eControl:

1. Press button "*High Pressure ON*".
 - Water sprays out of the nozzle at the end of the hose.
 - "*High Pressure LED*" lightens blue.
 - "*High Pressure*" on display for 2 seconds.
- Then the main menu is displayed after 5 seconds.
2. Increase or decrease RPM by turning the Navigator.



The hose will now unwind and work its way into the drain.



3. Check that the water drains away. When the blockage has been cleared, continue to flush for a while. At the same time wind the hose up slowly.



Important!

Rewind hose onto reel under pressure to avoid crushing.
If machine has run out of water, ensure hose is unwound before pressurizing.

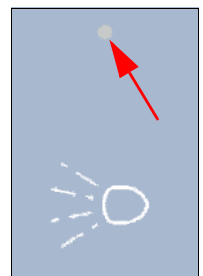
7.10.2 Stop spraying:

By eControl:

1. Press button "*High Pressure OFF*".



- "*High Pressure LED*" extinguishes.
- "*High Pressure OFF*" on display for 2 seconds.
- Water stops spraying out of the nozzle at the end of the hose.
- Engine RPM decreases.



Treat the high-pressure hose carefully:

- Always clean it after use.
- Ensure that no sharp objects are near the hose.
- Ensure that no traffic crosses the hose.
- If the hose has to be repaired, use only the special repair couplings.



Attention!

Ensure that the spraying nozzle does not leave the drain! Water under high-pressure may cause severe injuries!



7.11 Cleaning a wall, terrace or floor.

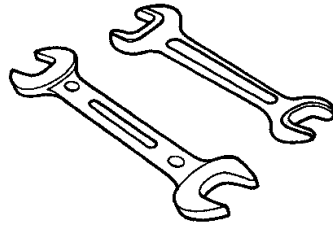


Caution!

Before using a spray gun, you must always set the pressure below the maximum (\pm the half of the maximum pressure). You must do this before you start the machine. If the machine is running, the pressure can be increased by turning the control wheel to his

working pressure. Never exceed the maximum pressure that is marked on the manometer when using the spray gun.

1. Screw the spray gun including in the delivery onto the high-pressure hose. Fasten it by using the two spanners provided.



2. COMPLETELY unroll the high-pressure hose.
3. Attach the spray lance gun. Secure the quick coupling tightly.
4. Open the HP valve.

Start spraying by eControl:

1. Press button "*High Pressure ON*".



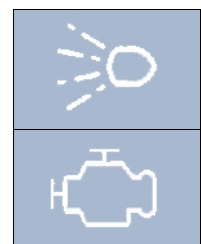
2. Throttle up via turning the Navigator clockwise.
3. Screw the high-pressure regulator wheel upward on the high-pressure regulator until the required working pressure is reached. The adjusted pressure can be read from the pressure gauge on the machine when the spray gun is open.
4. Pull the trigger of the spray gun.

Stop spraying

Release the trigger of the spray gun.

7.12 Stop working

1. HP pump off and throttle down:
Press button "*Stop spraying*"
2. Close the HP valve near the HP reel.
3. Stop the engine:
Push button "*Engine ON*" for more than 1 second
4. Check that the water drains away. When the blockage has been cleared, continue to flush for a while. At the same time wind the hose up slowly.



7.13 Using the device during periods of frost

Your machine may freeze up during a period of frost. A number of safety precautions must be taken.

Additional preparations before departure:

1. Drain the water tank and the water filter.
2. Close the drain valve and mount the filter again.
3. Put 25 l. antifreeze into the water tank.
4. Open the supply valve to the water filter.
5. Start the machine and let it idle.

Note: it is not necessary to attach a gun to the high-pressure control.

6. Open the high-pressure valve.
7. Let the high-pressure pump remove all the water, which is still in the high-pressure hose.
8. Close the high-pressure valve when the antifreeze comes out of the hose.
9. Leave the engine running for some time: to allow all pipes to fill up with antifreeze.
10. Switch off the machine.

Now the machine is ready for departure!

7.14 Additional preparations when preparing for use:

1. Turn on the machine and let the high-pressure pump drain all anti-freeze into the anti-freeze tank. The antifreeze can be reused.

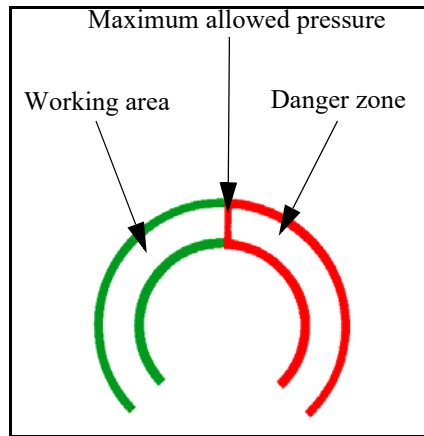


Ensure that no water is mixed with the antifreeze. If too much water gets into the antifreeze, it is not suitable for re-use. Dispose the used antifreeze properly, hand it into a local depot for disposal of industrial waste.

2. Stop the machine and prepare it for use.

8 SYMBOLS

8.1 Pressure gauge



8.2

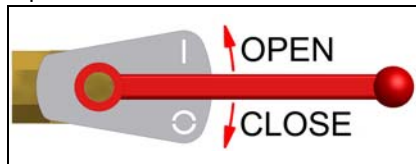
Security sticker

1.	Gehör- Kopf- und Augen Schutz tragen verpflichtet.
2.	Sicherheitsschuhe mit extra Schutz verpflichtet.
3.	Betriebsanleitung studieren verpflichtet.
4.	Sicherheitshandschuhe mit Pulsschutz verpflichtet.
5.	Schutzkleidung verpflichtet.
6.	Kein Trinkwasser.
7.	Gefahr für rutschen.
8.	Pas auf für Handverletzung.
9.	Drehende Maschine.
10.	Achtung für automatische anlassende Maschine.
1.	You must wear ear- head- and eye protection.
2.	You must wear security shoes with extra protection.
3.	Read the user's manual.
4.	You must wear safety gloves with wrist protection.
5.	You must wear protection cloth.
6.	No drinking water.
7.	Slip danger.
8.	Look out for hand damage.
9.	Turning machine.
10.	Warning for automatically starting machine.
1.	Gehoor- hoofd- en oogbescherming dragen verplicht.
2.	Veiligheidsschoenen met extra bescherming verplicht.
3.	Handleiding lezen verplicht.
4.	Veiligheidshandschoenen met polsbescherming verplicht.
5.	Beschermende werkkleding verplicht.
6.	Geen drinkwater.
7.	Gevaar voor uitglijden.
8.	Pas op voor handletsel.
9.	Draaiende machine.
10.	Waarschuwing voor automatisch startende machine.
1.	Protection obligatoire des yeux, de l'ouïe et de la tête.
2.	Protection obligatoire des pieds.
3.	Obligation de lire le manuel d'utilisation.
4.	Protection obligatoire des mains.
5.	Protection obligatoire du corps.
6.	Eau non potable.
7.	Attention Risque de sol glissant.
8.	Attention Risque d'écrasement.
9.	Attention Risque de dangers divers.
10.	Attention Risque de démarrage automatique a tous moments.

8.3

High-pressure valve

Open and close the HP valve as follows:



9 OPTIONS

9.1 Second HP- hose reel

Purpose:

Most used in smaller sewers/pipes or with spray-gun.

Position:

The second hose reel can be mounted at the machine instead of the supply reel hose.

Total length 2° high-pressure hose can differ from, 50 m and higher.

9.2 Pulsator system

Purpose: With less water use, quicker to the stoppage.

Construction:

The high-pressure pump has three cylinders. By normal use the three cylinders follows each other continuously. This gives a fluent volume stream. To stop one stroke, you get a pulsating water stream.

Control:

To close or open the 3-way valve, you start or stop the pulsator.

Handle to the left - Pulsator on (**Full throttle !!!**)

Handle to the right - Pulsator off

Use:

Use the pulsator system only to get quicker to the stoppage. Stop the pulsator when you are to the stoppage.

Reel out with the hydraulic control and not touch the HP hose while the Riopulse is on!

Use the machine mentioned earlier in this user's manual.

9.3 Water level control

Purpose: Continuously working with the machine

Functioning:

A floating switch is built in the water tank. This switch controls the solenoid at the supply pipe. Is the water level too high, the solenoid closes. Is the water level

el to low, the solenoid opens. You are always sure of water during working with the machine.

Installation:

- Couple a supply hose on to the coupling of the supply pipe or use the supply hose.
- Open the water tap.

- Switch on the level control



Now the water tank gets filled with water.

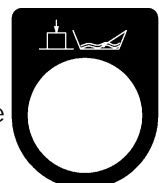
Stop filling the water tank:

- Close the water tap.

- Switch off the level control



- Depressurize the supply pipe. Press the



- Uncouple the supply hose.

9.4 Working lamp

Control:

By means of switch



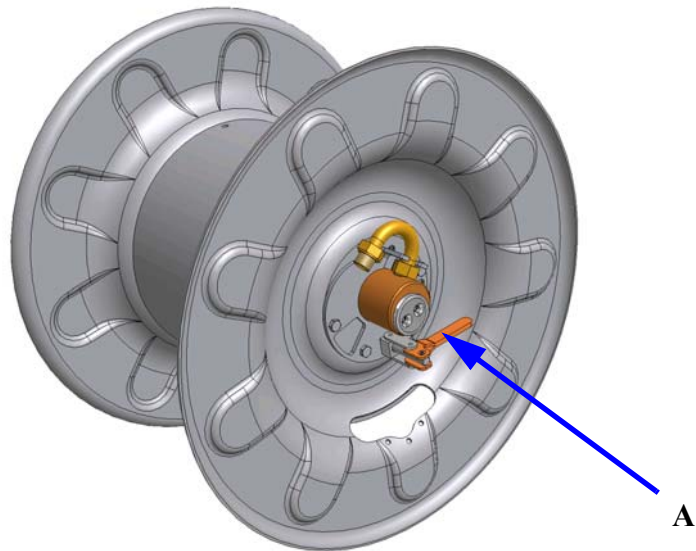
you can turn the working lamp ON and OFF.

9.5 Unwinding by hand of the hydraulic driven hose reel

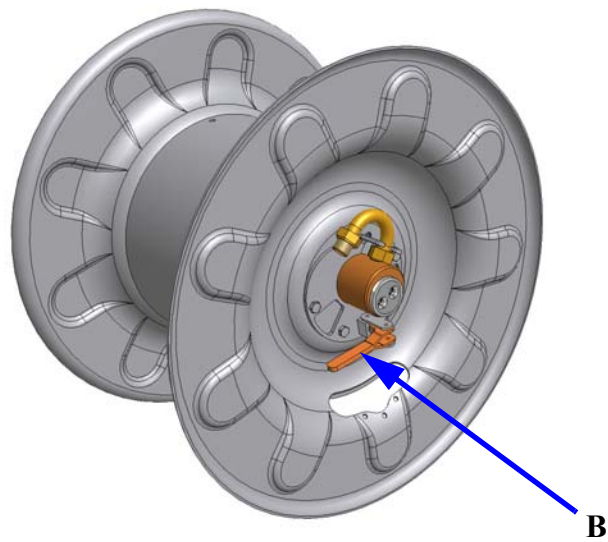
Your machine is fitted with a mechanical freewheel locking device. With this device you can put the HP hose reel in "complete freewheel position" or in "hydraulic".

If you want to unwind by hand you put the device in position "A".

The locking pin is released and the HP reel can turn freely without resistance.



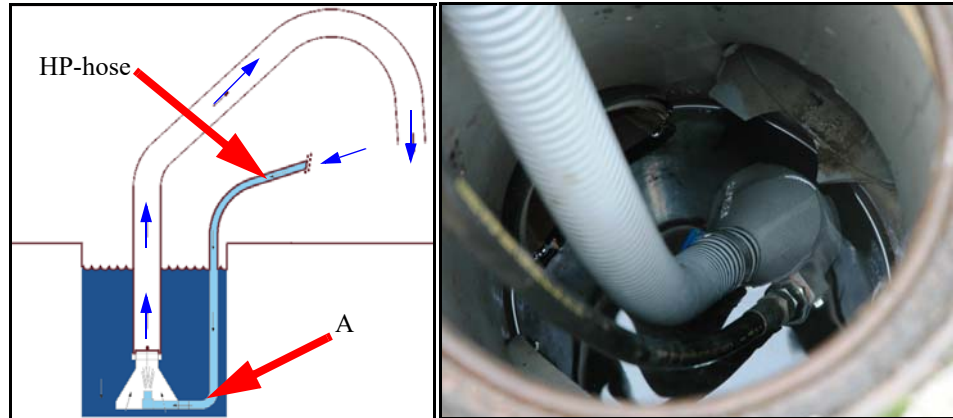
To get the HP reel in hydraulics you put the device in position "B". The pin gets back in locking position and you can use the hydraulics again.



9.6 Suction Ventury

Purpose:
The suction ventury takes care that you can pump dirt and/or liquid out of res-

ervoirs.



Preparations:

You must always check if there is enough water in the water tank.

Use:

- Connect the HP hose onto the coupling of the suction venturi (see illustration A).
- Place the suction venturi in a reservoir.
- Place the transparent hose there where the dirt must come.
- Check if the HP valve to the HP hose is closed.
- Start the machine.
- Switch on the high-pressure pump, if necessary.
- Open the HP valve.

Stop suction:

- Close the handle of the high-pressure valve.
- Stop the machine.

Uncouple the HP hose.

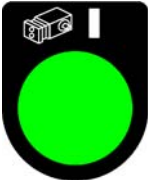
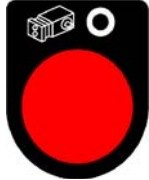
9.7

Anti-freeze with anti freeze tank

Your high-pressure device may freeze up during a period of frost. A number of safety precautions must be taken.

Additional preparations before departure:

1. Drain the water tank by opening the drain valve.
2. When all water has been removed/drained, you remove the water filter.
3. Clean the filter and mount it in opposite order.
4. Close the drain valve.
5. Fill the anti-freeze tank with antifreeze.
6. Remove the nozzle/gun from the HP hose.
7. Open the antifreeze valve.
8. Press the overrun button and start the engine.
9. Check if the HP-valve on the machine is open.

10. Push button  on the control box.
11. Let the high-pressure pump remove all the water, which is still in the high-pressure hose and pump.
12. Close the high-pressure valve or push button , when anti freeze flows out of the HP hose (watch the colour of the water).
13. Connect the HP-hose (with special connection) to the supply hose.
14. Open the supply valve.
15. Close the HP valve, when anti freeze flows out of the supply hose (watch the colour of the water).
16. Next you connect the hose onto the anti-freeze tank (top).
17. Open the HP-valve again and let the pump sends all anti freeze to the anti-freeze tank.
18. Close the high-pressure valve.
19. Switch off the machine.
20. Disconnect the hose and the special coupling and clean up.

Make sure that the HP and the supply hose are locked and tightened. Now the machine is ready for departure!

Antifreeze can be recycled.

Ensure that not too much water is mixed with the antifreeze. If too much water gets into the antifreeze, it is not suitable for re-use. Dispose the used antifreeze properly, hand it into a local depot for disposal of industrial waste.

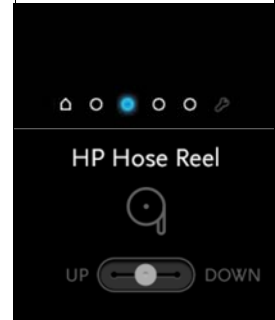
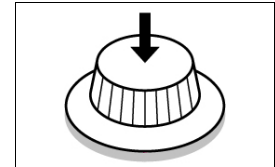
10 Options eControl

10.1 Winding the HP Hose Reel

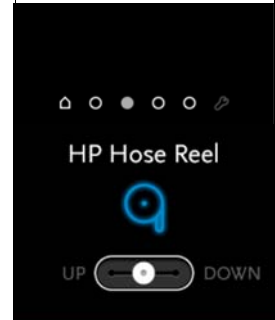
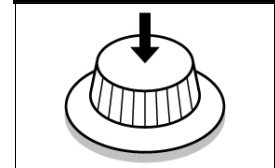
10.1.1 Via eControlPlus

The engine must run to use this function!

1. Push the Navigator (45) to activate the navigation menu.
2. Turn the Navigator clockwise and set the navigation bullet to position "HP Hose Reel".

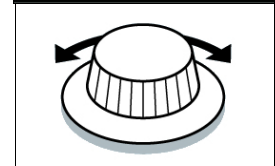


3. Push the Navigator to activate the function.

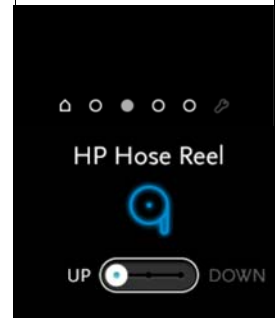


- Navigation bullet extinguishes
- HP Hose reel icon lightens blue

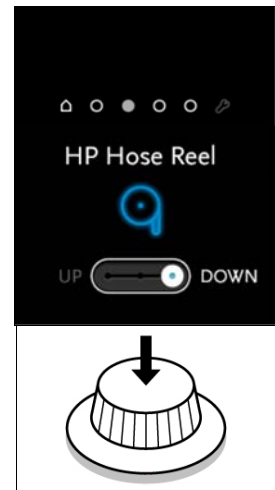
4. Turn the Navigator:




- Counter-clockwise for wind the HP hose



- Clockwise for unwind the HP hose



5. Push the Navigator to rotate the reel.

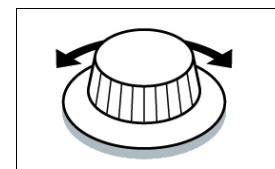
- Symbol  (38) lightens when pushing the Navigator.

6. Release the Navigator to stop the rotation.

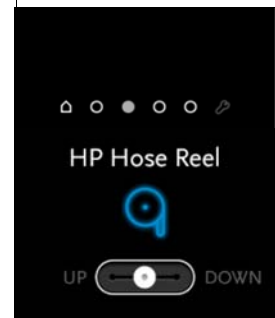
- Symbol  (38) disappears when releasing the Navigator.

Ending function HP hose Reel

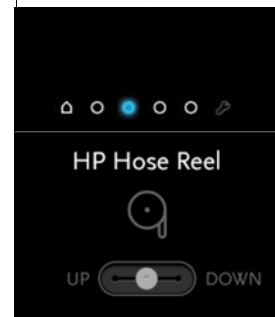
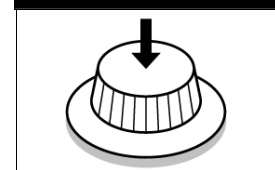
1. Turn the Navigator and set the switch to position "neutral".



2. Push the Navigator to deactivate the function.
- HP Hose Reel icon extinguishes



- Navigation bullet lightens blue



10.1.2 Unwind via Riomote

1. Start the engine via Riomote.
2. Push the button or set handle to position "Unwind" on the Riomote.

10.1.3 Wind via Riomote


1. See to it that the engine runs.
2. Push the button or set handle to position "*Wind*" on the Riomote.

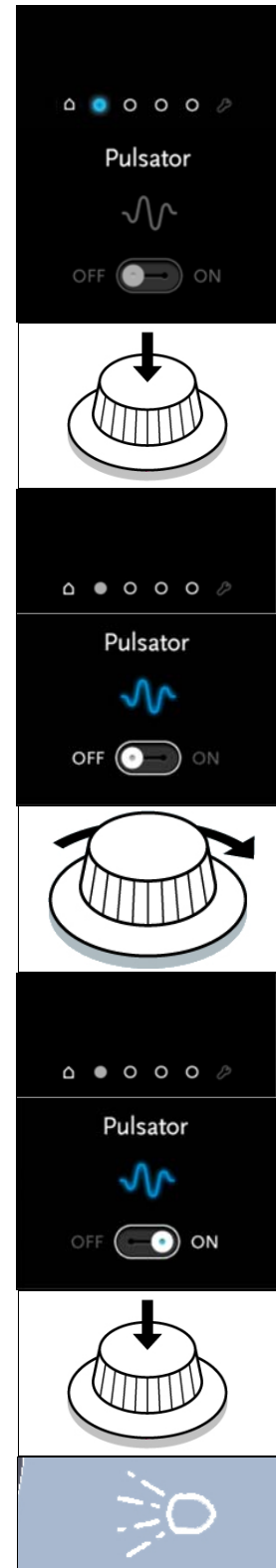
10.2 Pulsator system

Not possible on ProfiJet T4


10.2.1 Pulsator On via eControl

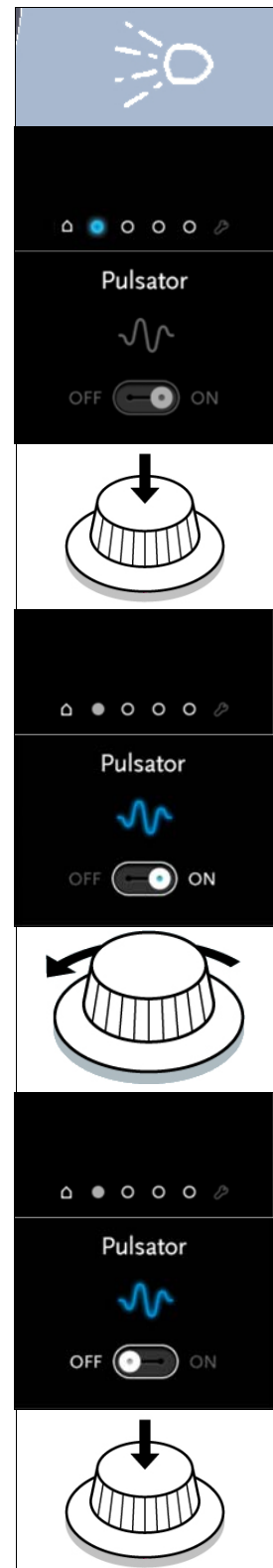
The engine must run to use this function!

1. Turn the Navigator (45) clockwise and set the navigation bullet to position 2 "Pulsator".
 - Navigation bullet extinguishes
 - Pulsator icon lightens blue
2. Push the Navigator to activate the option.
 - Pulsator ON is displayed
3. Turn the Navigator clockwise:
 - Pulsator ON is displayed
4. Push the Navigator to activate the pulsator.
 - Symbol  (37) lightens.
5. Press button "High Pressure ON" (42)
(see chapter 4.3.1 "Start spraying:" page.: 22)

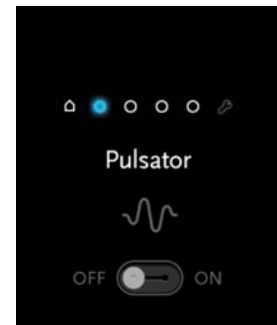


10.2.2 Pulsator OFF via eControl

1. Press button "High Pressure OFF" (42)
(see chapter 4.3.2 "Stop spraying:" page.: 23)
2. Turn the Navigator clockwise and set the navigation bullet to position 2 "Pulsator".
3. Push the Navigator to activate the option.
 - Navigation bullet extinguishes
 - Pulsator icon lightens blue
4. Turn the Navigator counter-clockwise and set the switch to position "Pulsator OFF".
5. Push the Navigator to deactivate the function.
 - Pulsator icon  (37) extinguishes

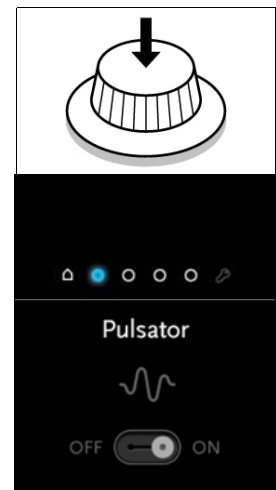




- Navigation bullet lightens blue

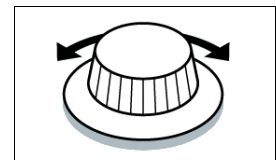


10.2.3 Pulsator ON and RPM Control

1. Push the Navigator (45) to deactivate the function.
 - Pulsator icon extinguishes
 - Navigation bullet lightens blue



2. Go to "Home"  or press the "Engine symbol" .
 - Tachometer lightens (see chapter 6.5 "Tachometer" page.: 28)
3. Control throttle by turning the Navigator clockwise (RPM+) or counter-clockwise (RPM-).



10.2.4 Pulsator On via Riomote

1. Start the engine via Riomote.
(see chapter 4.2 "Starting the engine:" page.: 17).
2. Push the handle to position "Pulsator ON" on the Riomote.

10.2.5 Pulsator OFF via Riomote

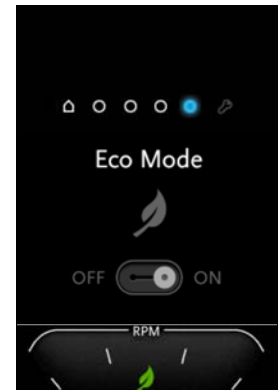
1. Push the handle to position "Pulsator OFF" on the Riomote.

10.3 ECO mode OFF

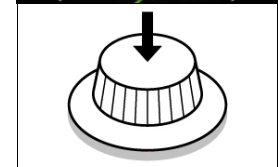
To change the ECO mode, the engine must run!

ECO mode is standard always ON if function is available on machine.

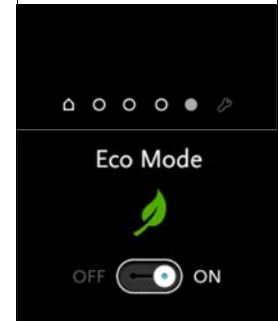
1. Turn the Navigator (45) clockwise and set the navigation bullet to position 5 "Eco Mode".



2. Push the Navigator to activate the function.



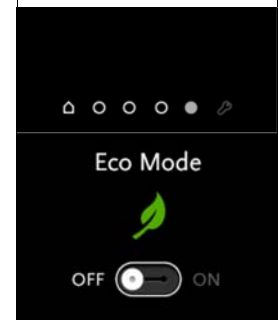
- Navigation bullet extinguishes.
- Eco Mode icon lightens green.



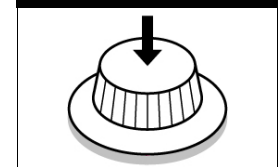
3. Turn the Navigator counter-clockwise.



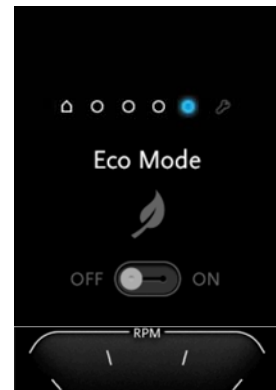
- Eco Mode is "OFF".




4. Push the Navigator to deactivate the function.

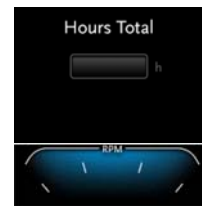


- "Eco Mode" icon extinguishes
- Navigation bullet lightens blue



- "Eco Mode" icon  disappears

5. Wait 2 seconds!
- "Hours Total" is displayed.



10.4 ECO versions

The ECO mode has two versions:

1. ECO Start/Stop
2. ECO Stop

10.4.1 ECO Start/Stop behaviour:

Stop:

- Press "High pressure OFF":
 - a Water stops spraying
 - b RPM engine decreases.
 - c Engine stops after 30 seconds if no activity takes place.

Start:

- Press "High pressure ON":
 - a Engine starts, if necessary.
 - b Water comes out of the HP hose.
- Increase RPM for more pressure and water.

or

- Press "Engine Start".
- Press "High pressure ON"
 - a Water comes out of the HP hose.
- Increase RPM for more pressure and water.

10.4.2 ECO Stop behaviour:

Stop:

- Press "High pressure OFF":
 - a Water stops spraying
 - b RPM engine decreases.
 - c Engine stops after 30 seconds if no activity takes place.

Start:

- Press "Engine Start".
- Press "High pressure ON"
 - a Water comes out of the HP hose.
- Increase RPM for more pressure and water.

10.5 Riomote Control

Purpose: To operate the high-pressure machine from a distance.

10.5.1 Emergency stop test

Check before working with the Riomote Control if the emergency stop works well. Proceed as follows:

1. Put the key into the keyhole.
2. Turn the key to position 2 "Radio Control ON".



- "Work safe" is displayed for 2 seconds.
- Icon "Riomote control ON" displayed continuously.
- Corona is coloured blue and is blinking.
(see chapter 6.1 "Corona" page.: 23)
- Switch on the Riomote Control.
- Press until corona stops blinking.
- Corona is coloured blue continuously when the Riomote control has contact with the receiver.



- Start the engine by means of button "START"



- Push the "STOP" button




The machine has to cut off now.



If this is **not** the case it is **not** allowed to work with the Riomote Control. Contact your supplier.

10.5.2 Battery

If the indication  on the Riomote Control starts burning it's indicates that the battery must be changed with a new fully loaded battery.

If the battery isn't changed the Riomote Control switches off in a short time.

Reload empty batteries.

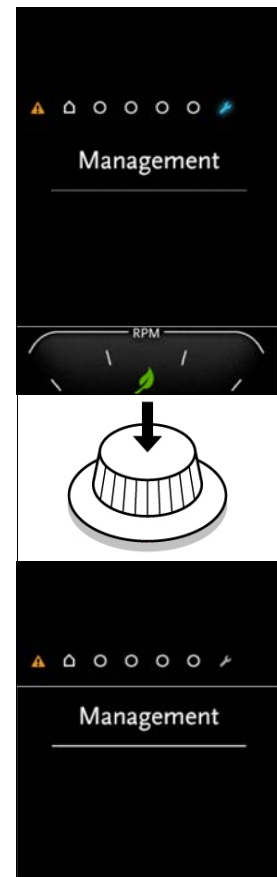


The function buttons on the transmitter can be different as shown in the next paragraphs!
Look at the symbols on the transmitter for the actual functions!

3.

10.6 Management

1. Turn the Navigator (45) clockwise and set the navigation bullet to position 6 "Management".
2. Push the Navigator to activate the function.
 - Navigation bullet extinguishes.
 - Management underline lightens.
 1. Software version.
 - Press Navigator shows actual software settings
 - Press again Navigator to leave this menu. (Scroll down)
 2. Service interval
 - Press Navigator shows actual:
 - a days till service.
 - b hours till service.
 - Press Navigator again to leave this menu.

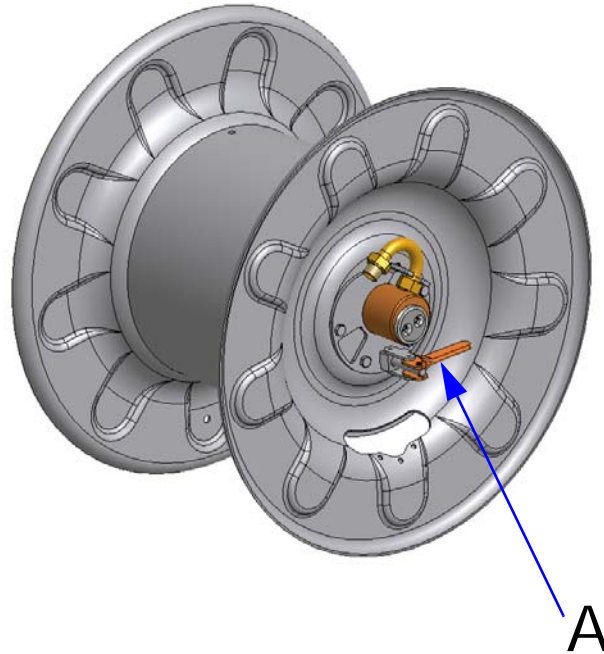


Scroll to "Back" and press on Navigator to go back to the navigation bullets.

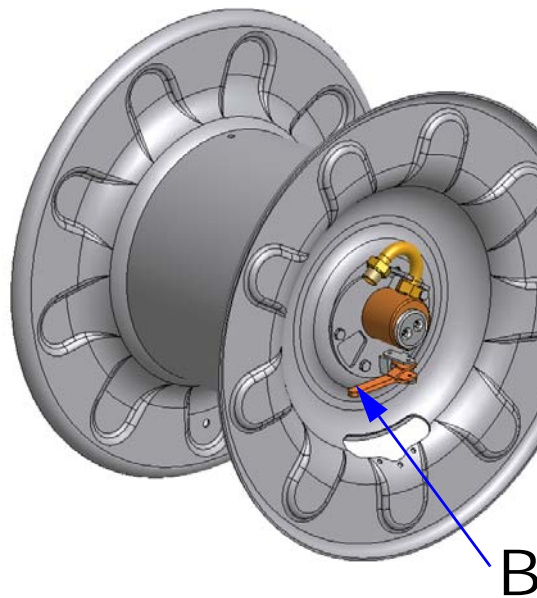
10.7 Unwinding manually of the eControl driven hose reel

Your machine could be fitted with a mechanical free-wheel locking device. With this device you can put the HP hose reel in "*complete free-wheel position*" or in "*eControl*".

If you want to unwind manually you put the device in position "A". The locking pin is released and the HP reel can turn freely without resistance.



To get the HP reel in eControl you put the device in position "B". The pin gets back in locking position and you can use the eControl again.



11 MAINTENANCE



Attention!

Always stop the engine first and depressurize the system before serving or repairing the machine.

To depressurize the system, you open the HP valve. If the spray lance gun is attached you must also pull the trigger.

11.1 Daily maintenance

1. Oil level

Check all oil levels once a week. Add oil, if necessary.

If an oil level has dropped, this implies a leak in the system. In which case, check all gaskets, couplings, and (hydraulic) pipes in the system. Immediately repair damage and fill the system with the correct oil.

Mark!

During the settling-in period, the oil consumption can be more than usually.

2. Cleaning water filter:

- a Close the supply valve in the suction pipe.
- b Unscrew cap from the filter piece.
- c Clean the filter and concerning parts.
- d After cleaning, assemble the parts in opposite order.
- e Open supply valve.
- f Check for leakage.

11.2 Weekly maintenance

1. Cleaning:
Clean the carriage weekly.

11.3 Minor servicing

Minor servicing must be carried out EVERY 250 WORKING HOURS (or at least once every 6 months) and includes the following parts of the machine:

1. Drive
 - Servicing the engine
 - a Change the oil in the engine.
 - b Renew the oil filter, if fitted.
 - c Clean the air filter.
 - d Renew the fuel filter.
 - e Check the tension of the V-belt; increase tension, if necessary.
 - f Check the condition of the battery.

- g Check the torque of the attachment bolts for the engine; tighten them, if necessary.

For more information concerning the engine, you can find it in the book delivered with this machine.

2. Carriage:
Lubricate all mechanical moving parts in the system. Check that all nuts and bolts have been correctly tightened.
3. Pump system
 - Cleaning the high-pressure control:
When the high-pressure valve has been closed, the pressure gauge should not indicate any pressure. Similarly, if the spray gun is connected and closed, the pressure gauge should not indicate any pressure. If the pressure gauge does indicate a pressure, this implies a leakage in the system or that the one-way valve may be dirty or damaged. In which case stop the machine, unscrew the hose coupling and clean or replace the one-way valve. Also, check the condition of the O-ring and gasket.
Regularly clean the high-pressure control. Carefully remove all dirt!
Proper maintenance will increase the service life of this part.
 - Changing the pump oil:
Change the pump oil in the high-pressure pump after every 1000 working hours (or at least once a year).

For more information concerning the pump, you can find it in the enclosure delivered with this machine.

11.4 Hydraulic system

Renew oil hydraulic reel steering



Important!
You have to renew the hydraulic oil at least ones a year!

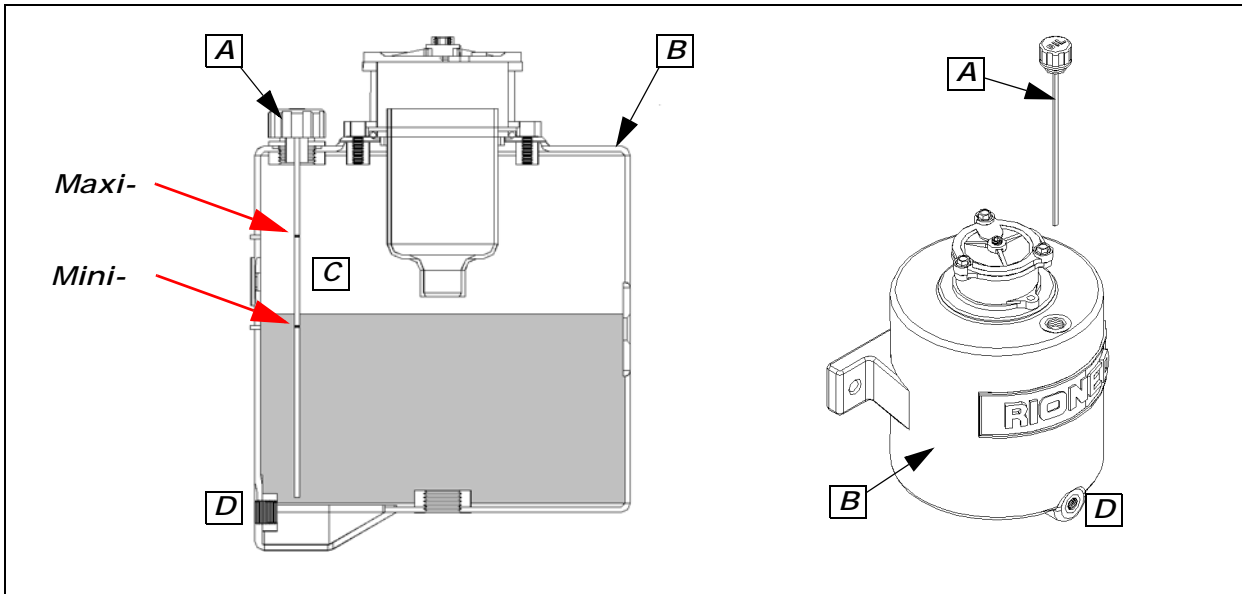
Only use: *see chapter 3.1 General page: 13*

Check, every time before use, if the level of the oil is sufficient.

Proceed as follows:

1. Stop the machine.
2. Be aware that the machine is standing horizontal.
3. Take the dipstick (A) out of the oil tank (B).
4. Clean the dipstick with a tissue.
5. Put the dipstick into the oil tank.
6. Take the dipstick back and watch at the dipstick if the oil is between maximum a minimum (C).
7. Fill oil, if necessary.
8. Fasten the dipstick onto the oil tank.
9. Start the engine and let it turn for about 5 minutes.

10. Stop the machine and repeat point 2 until 8.



To let the oil out of the reservoir you unscrew plug D. Catch the oil in a bucket.

11.5 Extensive periodical maintenance

Have the high-pressure machine checked and maintained from time to time by the technical service of Rioned. In this way, long life and quality will be guaranteed.

11.6 Maintenance scheme

Interval

Valve actuator	:	Replace every 250 working hours
Check oil levels	:	Every time before use
Cleaning water filter	:	Every time before use and with strong pollution.
Cleaning carriage	:	weekly or with strong pollution.
Service engine	:	Every 250 working hours or at least once every six month
Lubricate moving parts	:	Every 250 working hours or at least once every six month
Cleaning pressure regulator	:	Every 250 working hours or at least once every six month
Renew pump oil	:	Every 1000 working hours or once a year
Renew oil hydraulic system	:	Once a year
Decalcify suction valves	:	Once a year
Decalcify pressure valves	:	Once a year

Puncture nozzle holes : Every 50 working hours

Replace all parts immediately if there is wastage or defect.

12 TROUBLESHOOTING

Failure	Reason	Solution
Engine does not start or stops abruptly.	Machine has run out of fuel	Add fuel
	Main or secondary fuse blown	Replace the defect fuse and restart engine. If problem repeats, contact your dealer
	Battery voltage too low.	Load or replace.
	Emergency stop activated	Turn the emergency stop in order to be able to start up again
	Too less water in water tank (for cooling system)	Fill the water tank and let the machine cool down. After that one can start the machine again.
	Cooling water-level too low	Fill the cooling system at the expansion tank until the right level.
	Temperature of cooling water too high	Let the machine cool down
The high-pressure pump does not produce the required pressure.	Water tank empty	Fill the water tank
	Supply valve to water filter closed.	Open the supply valve
	Water filter clogged.	Stop the machine and clean the water filter
	Air in high-pressure pump	Allow the machine to run a few minutes. The failure will normally disappear. If not, contact the service department of your dealer
	Suction valves blocked	Carefully loosen the valves and descale them, if necessary
	V-belt not sufficiently tightened	Tighten the V-belt; replace if necessary
	Suction valves worn out.	Contact the service department of your dealer.

Failure	Reason	Solution
Pressure varies.	Water level in tank too low	Stop the engine, refill the tank and restart engine
	Water supply valve not sufficiently opened	Open the supply valve completely
	Water filter clogged.	Stop the machine and clean the filter
	Pump sucks air	Stop the machine and check all hoses and couplings for leakage
	Nozzle clogged	Stop the machine and clean the nozzle (clean the nozzle holes)
	Pressure valves dirty or worn	Stop the machine. Check the condition of the pressure valves. Clean or replace them
	Pump gasket worn out	Stop the machine and replace gasket
	V-belts for the pump slip	Stop the machine and tighten the belts
	Ceramic plungers in the pump damaged	Contact your dealer
	Pressure control clogged or internally damaged.	Contact your dealer.
Hydraulic reel does not wind the hose	Handle not on right position	Put the handle into the right position
	Hydraulic tank almost empty	Refill the tank. Check the system on leakage
	Attachment bolt for control lever of hydraulic system loosened	fasten the bolt and put the lever into the correct position
	Working pressure set too low	Increase the working pressure, if possible
	Return filter hydraulic tank dirty	Switch off the machine and clean the return filter
	Hydraulic system damaged	Contact your dealer
No reaction by switching in transmitter	No current	Load battery
		Use new battery
		Control contact points on dirt and dust
		Check fuses
		Contact your supplier by repeating disturbances
	Transmitter is not on	Put the transmitter on (sign in)
	Transmitter out of reach from receiver	Put the machines closer on. Put transmitter closer
Warning signal after short working time	Battery empty / defect	Load or replace
	Battery not loaded or defect	Change battery complete
		Check if the charging works well
		Check battery points / clean it
		Use other battery
Transmitter indications are good but functions are not executed	Emergency stop pushed in	Unlock emergency stop
	Receiver has no current	Check / replace fuses
	No radio connection	Check functions of control lights

Failure	Reason	Solution
Certain functions are not executed	Receiver is faulty	Contact your supplier
	Interruption in electric circuit	Check all plugs. Plug in and push. Check control lights if functions are indicated

13 Errors eControl

13.1 Emergency stop

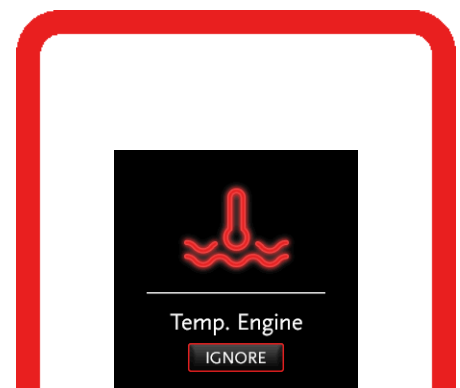


A pop-up notifies the user that Emergency Stop is pushed.

Engine, High Pressure, Vacuum, Pulsator, Hose Reel and/or Spray Bar are switched OFF. Eco Mode is switched ON.

The user can only restart operation by releasing (rotate) the Emergency Stop.

13.2 Temperature engine



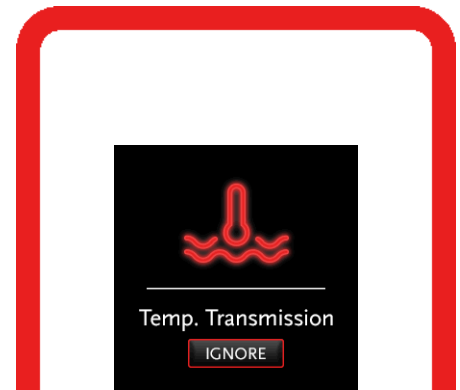
A pop-up notifies the user of the error. Whilst applicable, the error is also listed under "Management" (see [chapter 10.6 "Management" page.: 58](#)).

Engine, High Pressure, Vacuum, Pulsator, Hose Reel and/or Spray Bar are switched OFF. Eco Mode remains unchanged.

The user can dismiss the pop-up by pushing the Navigator in Manual Control.

The user can only restart operation by cooling down the respective element.

13.3 Temperature Transmission



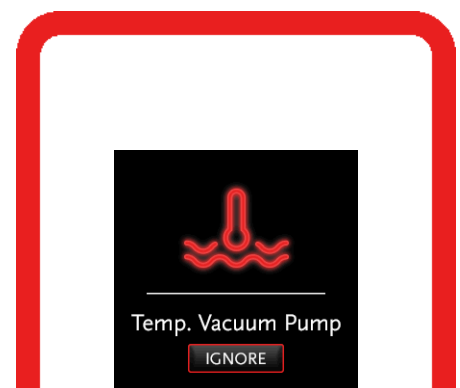
A pop-up notifies the user of the error. Whilst applicable, the error is also listed under "Management" (see chapter 10.6 "Management" page.: 58).

Engine, High Pressure, Vacuum, Pulsator, Hose Reel and/or Spray Bar are switched OFF. Eco Mode remains unchanged.

The user can dismiss the pop-up by pushing the Navigator in Manual Control.

The user can only restart operation by cooling down the respective element.

13.4 Temperature Vacuum Pump



A pop-up notifies the user of the error. Whilst applicable, the error is also listed under "Management" (see chapter 10.6 "Management" page.: 58).

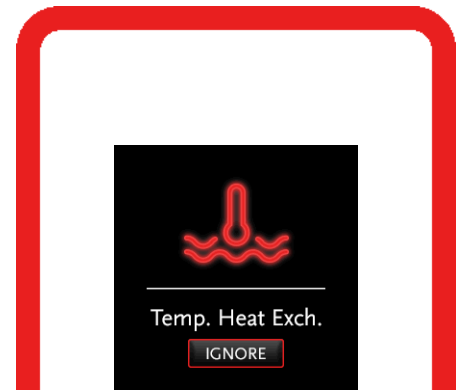
If running, Engine to stationary. High Pressure, Vacuum, Pulsator, Hose Reel are switched OFF.

Eco Mode remains unchanged.

The user can dismiss the pop-up by pushing the Navigator in Manual Control.

The user can only restart operation by cooling down the respective element.

13.5 Temperature Heat Exchange



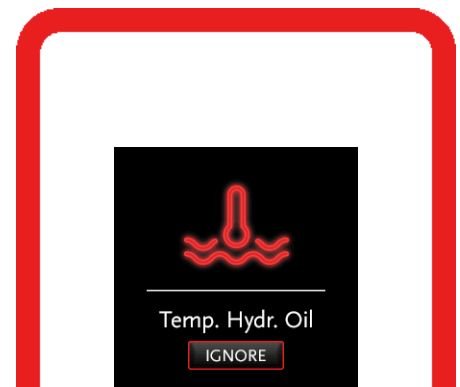
A pop-up notifies the user of the error. Whilst applicable, the error is also listed under "Management" (see chapter 10.6 "Management" page.: 58).

Engine, High Pressure, Vacuum, Pulsator, Hose Reel are switched OFF. Eco Mode remains unchanged.

The user can dismiss the pop-up by pushing the Navigator in Manual Control.

The user can only restart operation by cooling down the respective element.

13.6 Temperature Hydraulic Oil



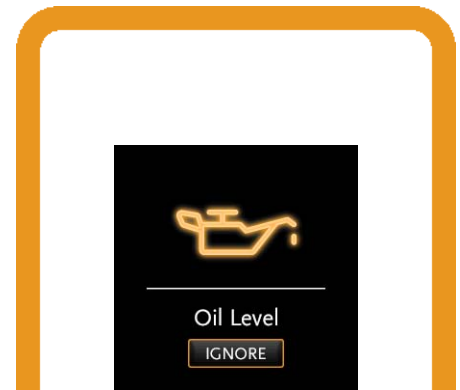
A pop-up notifies the user of the error. Whilst applicable, the error is also listed under "Management" (see chapter 10.6 "Management" page.: 58).

Engine, High Pressure, Vacuum, Pulsator, Hose Reel are switched OFF. Eco Mode remains unchanged.

The user can dismiss the pop-up by pushing the Navigator in Manual Control.

The user can only restart operation by cooling down the respective element.

13.7 Oil level



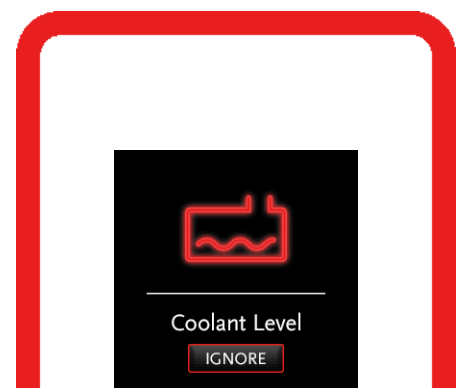
A pop-up notifies the user of the error. Whilst applicable, the error is also listed under "Management" (see [chapter 10.6 "Management" page.: 58](#)).

If running, Engine to stationary. High Pressure, Vacuum, Pulsator, Hose Reel are switched OFF.

Eco Mode remains unchanged.

The user can dismiss the pop-up by pushing the Navigator in Manual Control.

13.8 Coolant level



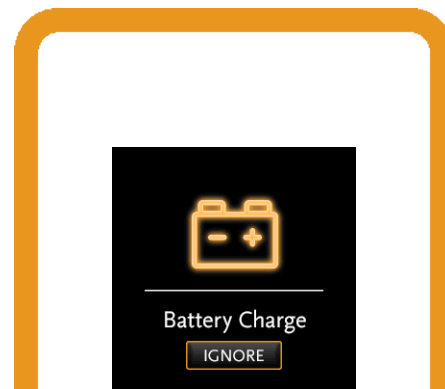
A pop-up notifies the user of the error. Whilst applicable, the error is also listed under "Management" (see [chapter 10.6 "Management" page.: 58](#)).

Engine, High Pressure, Vacuum, Pulsator, Hose Reel are switched OFF. Eco Mode remains unchanged.

The user can dismiss the pop-up by pushing the Navigator in Manual Control.

The user can only restart operation by refilling the coolant.

13.9 Battery Charge

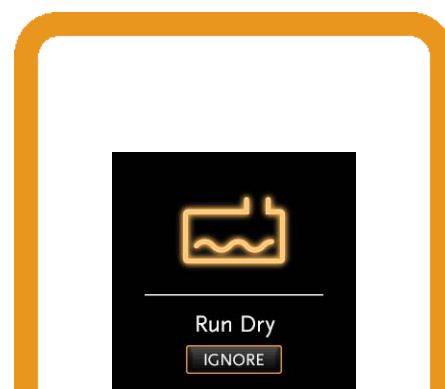


A pop-up notifies the user of the error. Whilst applicable, the error is also listed under "Management" (see chapter 10.6 "Management" page.: 58).

Engine, High Pressure, Vacuum, Pulsator, Hose Reel and/or Eco Mode remain unchanged.

The user can dismiss the pop-up by pushing the Navigator in Manual Control.

13.10 Run Dry




A pop-up notifies the user of the warning. Whilst applicable, the error is also listed under "Management" (see chapter 10.6 "Management" page.: 58).

If running, Engine to stationary. High Pressure, Vacuum, Pulsator, Hose Reel are switched OFF.

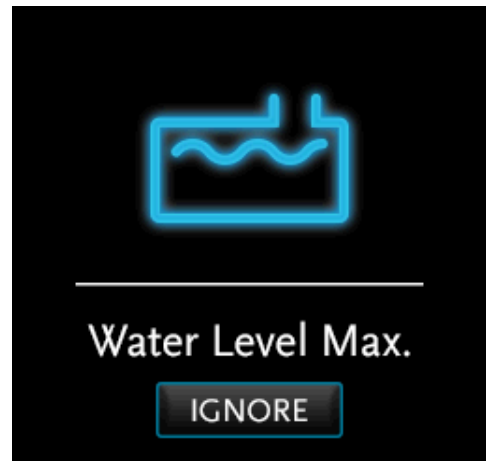
Eco Mode remains unchanged.

The user can only continue operation by pushing the Navigator in Manual Control.



High Pressure LED starts blinking . Pressing and holding the related button in Manual Control allows the user to bypass Run Dry.

13.11 Water Level Maximum



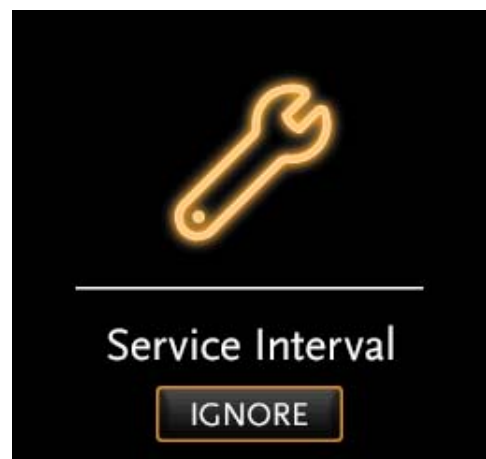
Only available if option "Electronic Water Level control" is mounted.

A pop-up notifies the user of the warning. Whilst applicable, the error is also listed under "Management" (see [chapter 10.6 "Management" page.: 58](#)).

Engine, High Pressure, Vacuum, Pulsator, Hose Reel and/or Eco Mode remain unchanged.

The user can dismiss the pop-up by pushing the Navigator in Manual Control.

13.12 Service Interval



All eControlPlus machines are equipped with a service interval.

(with petrol eControl there is no screen, so no possibility to display it).

A pop-up notifies the user of the warning. Whilst applicable, the error is also listed under "Management" (see [chapter 10.6 "Management" page.: 58](#)).

Engine, High Pressure, Vacuum, Pulsator, Hose Reel and/or Eco Mode remain unchanged.

The machine is standard delivered at 360 days or 250 hours.

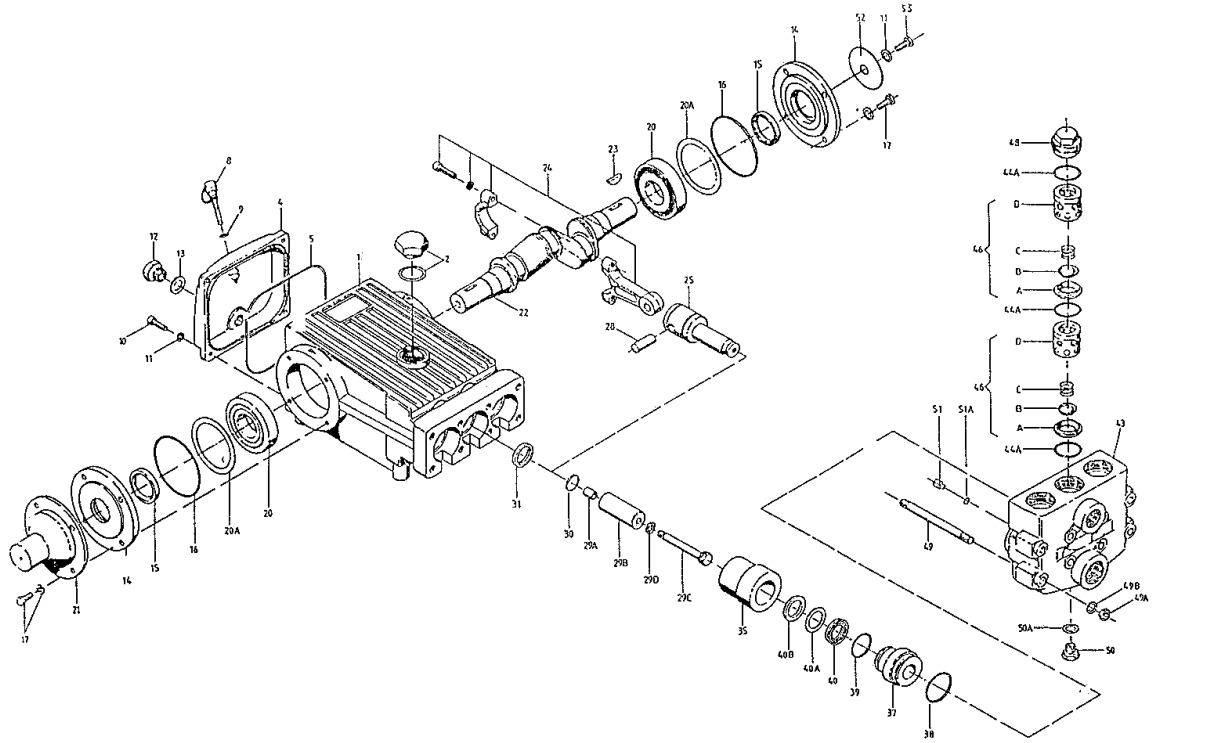
After running 360 days or 250 working hours (whatever comes first), a message comes in that periodic maintenance is required.

The user can dismiss the pop-up by pushing the Navigator in Manual Control.

You can subsequently continue to work with the machine.

When starting the next time, the screen comes back on.

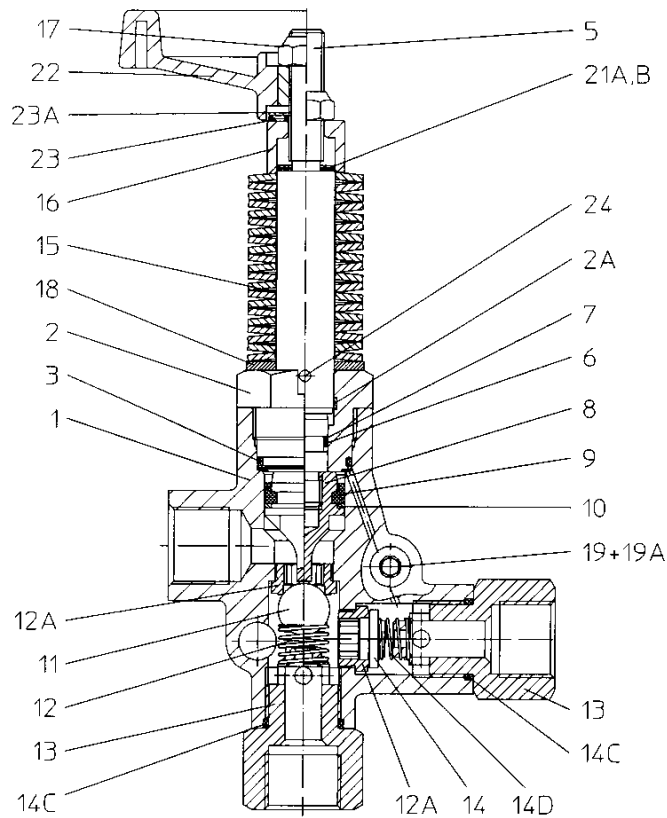
14 EXPLODED VIEWS AND PART LISTS



66.045.142.000 / 01

Pos	Bestelnummer	Fabrieksnummer	Aantal	Omschrijving	Benennung	Description	Designation
1		01-0606	1	Carter	Antriebsgehäuse	Crankcase	Carter Du Mecanisme De Commande
2	66.050.411.002	00-2914	1	Olievlomp	Öltauffüllstopfen Kpl.	Oil Filter Plug Assy	Bouchon De Remplissage D'huile
4		03-0136	1	Cartendeckel	Crankschabe	Crankcase Cover	Chapeau Drengrange
5	66.050.411.005	06-0103	1	O-ring	O-ring	O-ring	Joint
8	66.050.411.008	00-0520	1	Oliefeststok	Ölbleistab Kpl.	Oil Dipstick Assy	Jauge D'huile
9	66.008.411.006	06-0053	1	O-ring Top/Olepeelstok	O-ring	O-ring	Joint
10	32.218.008.020	21-0026	4	Cilinder Kopschroef	Zylinderschraube	Cylinder Screw	Vis 'A' Tete Aplatie
11		07-0294	5	Veering	Federling	Spring Ring	Rondelle Elastique
12	66.041.414.012	07-0705	1	Plug	Stopfen	Plug	Bouchon
13		06-0116	1	Palkringring Tbv Pos 12	Dichtung	Gasket	Garniture
14		03-0137	2	Lagerdekse	Lagerdeckel	Bearing Cover	Chapeau De Palier
15	66.050.411.015	06-0101	2	Oliekeerring	Radialwellendichtung	Radial Shaft Seal	Rondelle De Garniture Pour Arbre Radial
16	66.050.411.016	06-0104	2	O-ring	O-ring	O-ring	Joint
17	32.201.008.020	21-0034	8	Tapbout	Sechskantschraube	Hexagon Screw	Vis Hexagonale
20	66.050.411.020	05-0098	2	Lager	Kegelrollenlager	Taper Roller Bearing	Rouleau Conique De Palier
20A	66.050.411.120	07-0789	1-3	Opwiling	Paßscheibe	Filing Disc	Rondelle D'ajustage
20B		07-2944	1-3	Opwiling	Paßscheibe	Filing Disc	Rondelle D'ajustage
21		07-0790	1	Schermskap Astap	Wellenschutz	Shaft Protector	Dispositif De Protection Pour Arbre
22		11-0632	1	Krukas	Kurbelwelle	Crankshaft	Arbre Coude
23		07-0671	1	Habe Maan Spie	Schnebefeder	Woodruff Key	Ressort En Rondelle
24		00-0280	3	Drijfing Kpl.	Oefligerpleuzel Kpl.	Connection Rod Assy	Billette De Palier-glisser
25		00-0847	3	Krukskop Met Plunjer Kpl.	Krukskop M. Plunjer Kpl.	Crosshead / Plunger Assy	Crosse De Piston
28	66.050.411.028	11-0111	3	Pistonpen	Kreuzkopbolzen	Crosshead Pin	Axe De La Crosse De Piston
29A		07-0862	3	Centreehule	Zentriehölse	Centring Sleeve	Manchon De Centrage
29B		11-0265	3	Plunjerpip	Plungerrohr	Plunger Pipe	Tuyau De Plongeur
29C		21-0331	3	Spannschraube	Spannschraube	Tension Screw	Vis Tendresse
30		06-0275	3	Koperenring Tbv Pos 29	O-dichting	Copper Ring	Anneau En Alliage Cu
31	66.050.411.031	07-3095	3	Oleifstrijker	Ölstreifer	Oil Scraper	Racleur D'huile Joint Torque
32		06-0270	3	Oliekeerring	Radialwellendichtung	Radial Shaft Seal	Rondelle De Garniture Pour Arbre Radial
33		07-3028	3	Afdichtingshuis	Dichtingshölse	Seal Sleeve	Manchon De Garniture
37		07-3028	3	Afdichtingshuis	Dichtingskassette	Seal Case	Cassene De Garniture
38	66.050.411.038	06-0106	3	O-ring	O-ring	O-ring	Joint
39		06-0254	3	O-ring	O-ring	O-ring	Joint
40		06-1220	3	Moening	Nulring	Grooved Seal	Etrou Joint
40A		06-1199	3	Steuringring	Stützring	Support Ring	Anneau-support
40B		07-3080	6	Gaaidering	Führungerring	Guide Ring	Anneau Guide
43		01-0211	1	Klapbus	Ventilgehäuse	Valve Casing	Carter De Soupape
44A	66.050.411.144	06-0107	3	O-ring	O-ring	O-ring	Joint
46	66.050.411.046	00-1868	6	Klep Kpl.	Ventil Kpl.	Soupape	Soupape
46A		07-2456	6	Klepzing	Ventilzitz	Valve Seat	Siège De Soupape
46B		07-2492	6	Klepkaas	Ventilplaat	Valve Plate	Plaque De Soupape
46C		07-2473	6	Klepveer	Ventilveer	Valve Spring	Ressort De Soupape
46D		07-2511	6	Afstandshuls	Socose	Socose Pipe	Tuyau De Distance
48	66.050.411.048	07-0670	3	Plug	Stopfen	Plug	Bouchon
49		21-0329	8	Siltschroef	Siltschraube	Stud Bolt	Boulon Fileté
49A		07-0988	8	Moer	Sechskantmutter	Hexagon Nut	Etrou Hexagonale
49B		07-2707	8	Veering	Schroef	Disc	Rondelle
50	66.050.411.050	07-1422	1	Altapplug	Stopfen	Plug	Bouchon
50A		06-0108	1	Koperenring	Cu-dichting	Copper Ring	Anneau En Alliage Cu
51	66.050.411.051	07-1927	3	Afstandspijp	Stopfen	Plug	Bouchon
51A		06-0306	3	Koperen Ring	Cu-dichting	Copper Ring	Anneau En Alliage Cu
52		07-0796	1	Schijf	Schraibe Für Kurbelwelle	Disc For Crankshaft	Rondelle
53		21-0041	1	Tapbout	Sechskantschraube	Hexagon Screw	Vis Hexagonale
		14-0344	1	Kleppen Reparatieset	Rep. Satz Ventille	Valve Repair Kit	Reparation Jeu Soupape
		14-0450	1	Reparatieset Afsluitingen	Rep. Satz Dichtungen	Seal Repair Kit	Reparation Jeu Garniture
		00-4014	3	Krukskop Met Plunjer Kpl.	Krukskop M. Plunjer Kpl.	Crosshead / Plunger Pipe Assy	Crosse De Piston

Benaming: Speck triplex pomp P45/60-250
 d.d.: 21 sep 1994
 Getek.: R. Kurvers
 Gecont.:
 01 21 sep 1994
 Index: Datum:
 Artikelnummer n°: 66.045.142.000 / 01



Item No.	Qty	Order number	Factory No.	Description
1	1	67-262-101-001	01-0630	Casing
2	1	67-262-101-002	07-2788	Guide Plug
* 2A	1	67-262-101-102	06-1131	Guide ring
* 3	1	67-262-101-003	06-0255	O-Ring
5	1	67-262-101-005	11-0477	Piston Rod
* 6	1	67-262-101-006	06-1129	O-Ring for 5
* 7	1	67-262-101-007	00-6113	Support Ring for 6
8	1	67-262-101-008	07-1064	Piston Body
* 9	1	67-262-101-009	06-0071	Sleeve
* 10	1	67-262-101-010	07-0591	Sleeve Support Ring
* 11	1	67-262-101-011	07-1920	Ball
* 12	1	67-262-101-012	07-0637	Spring for Bypass Valve
* 12A	2	67-262-101-112	07-1061	Valve Body
13	2	67-262-101-013	07-3006	Valve Plug
* 14	1	67-262-101-014	07-3005	Valve Plate
* 14C	2	67-262-101-314	06-0496	O-Ring
* 14D	1	67-262-101-414	07-1941	Spring for Kick-Back Valve
15	21	67-262-101-015	07-1662	Spring Plate 120 bar
15	19	67-262-101-015	07-1523	Spring Plate 280 bar
15	23	67-262-101-015	07-2899	Spring Plate 40 bar
16	1	67-262-101-016	07-2167	Spacer Sleeve
17	1	67-262-101-017	07-2165	Hexagon Nut Self Locking
18	1	67-262-101-018	07-1076	Disc
19	4	67-262-101-019	07-1058	Plug
* 19A	4	67-262-101-119	06-0245	O-Ring for 19
21A		67-262-101-121	07-1792	Spacer Disc 0,5 mm
21 B		67-262-101-221	07-1793	Spacer Disc 1,0 mm
22	1	67-262-101-022	07-2166	Spoked Hand wheel ULH
23	1	67-262-101-023	05-0136	Axial needle Bearing ULH
23A	1	67-262-101-123	07-3432	Disc ULH
24	1	67-262-101-024	07-2164	Serrated Pin
*	1	67-262-101-025	14-0554	Repair Kit

15 APPENDIX

15.1 EC declaration Of Conformity For Machinery

RIOR B.V. / RIONED
Centaurusweg 45, Tilburg, The Netherlands,

Herewith declares that:

High pressure device RIONED UrbanJet,

Machine number:

- is in compliance with the Machinery Directive (2006/42/EC);
- is in conformity with the provisions of the following other EEC directives:
2014/30/EG
- the following harmonized standards have been applied:

NEN-EN-ISO 12100:2010, NEN-EN-ISO 13850:2015,
NEN-EN-ISO 13857, NEN-EN-349, EN 60204-1

Tilburg, The Netherlands, Friday 12 August 2016

A handwritten signature in black ink, appearing to read 'J. Pieters', written over a horizontal line.

J. Pieters
Managing Director

15.2

Sales Managers

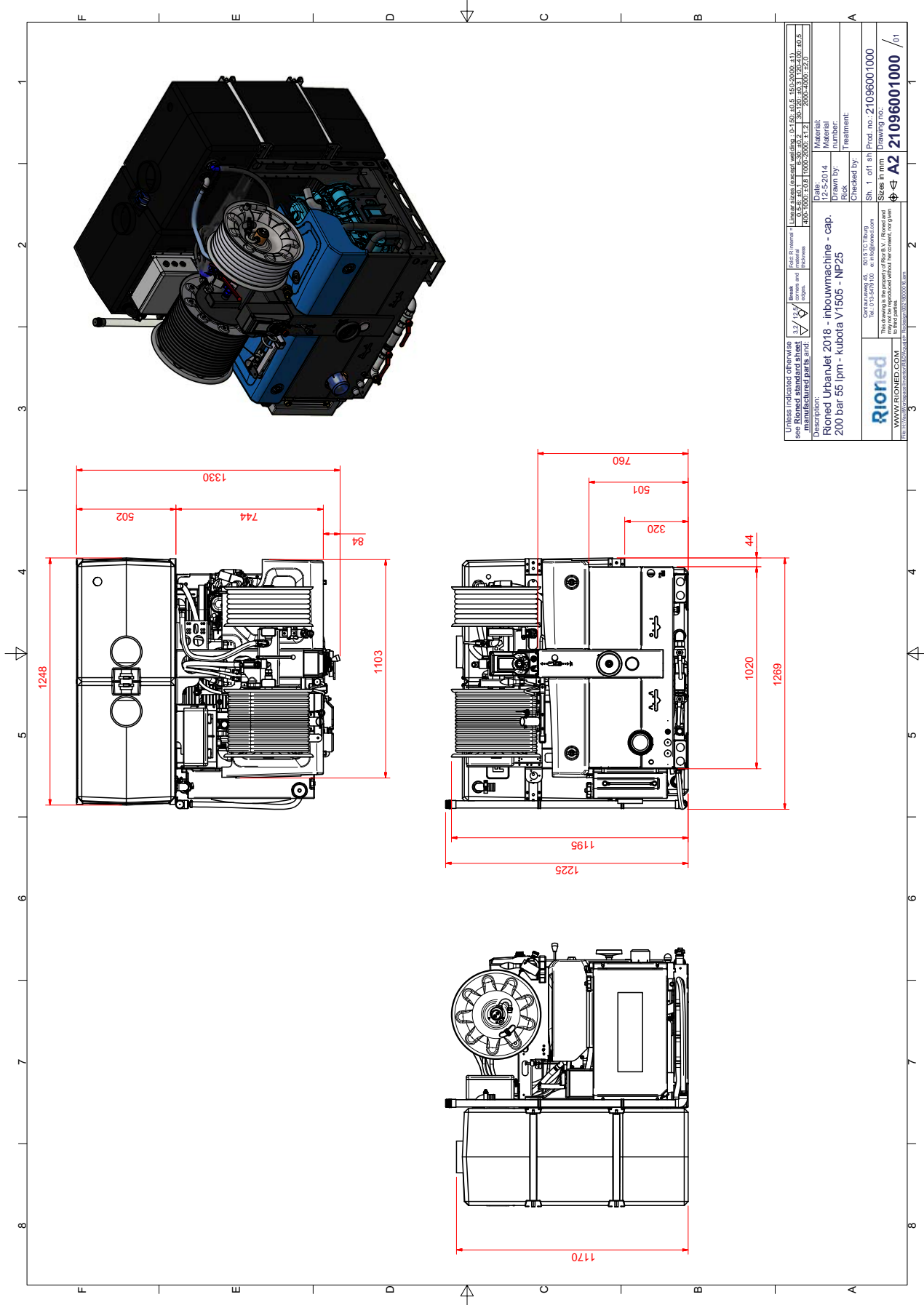
EXPORT

D.Maas
Area Sales Manager
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THE NETHERLANDS

Rioned
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15.3 Dimensions



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