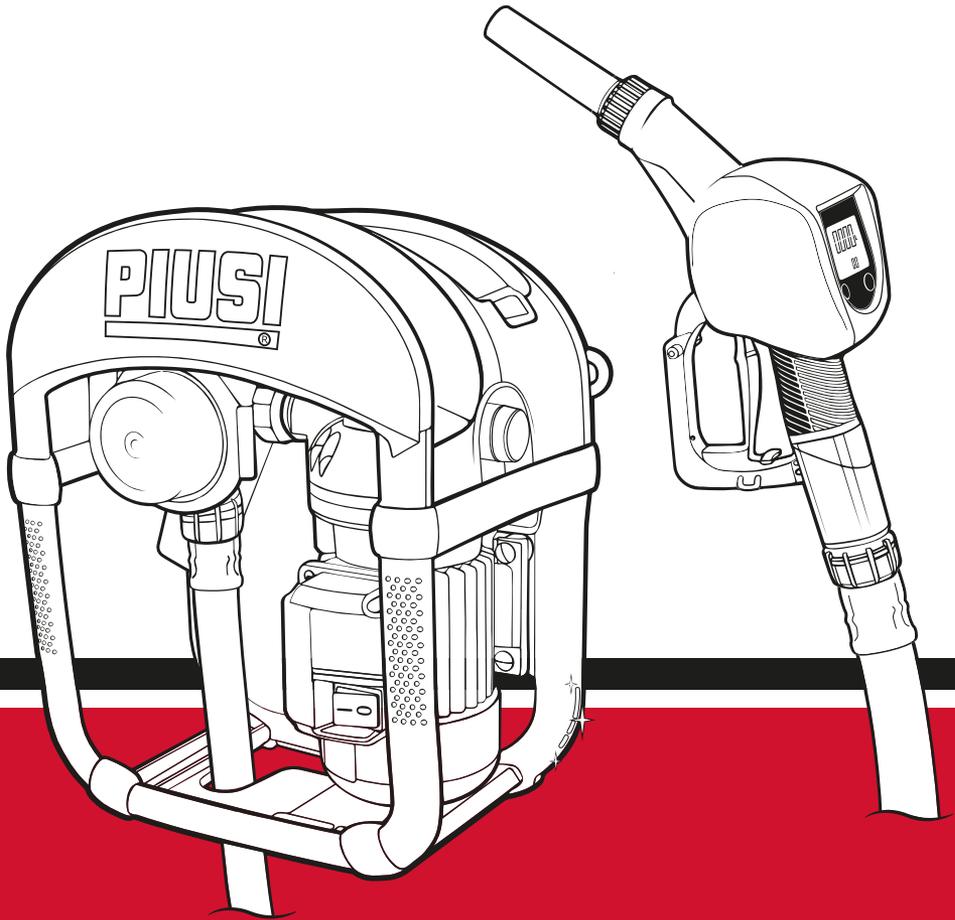


# PIUSI®

*Fluid Handling  
Innovation*

# PIUSI THREE 25



Installation, use and maintenance | **EN**

*Instalación, uso y mantenimiento* | **ES**

Installation, utilisation et entretien | **FR**



**BULLETIN MO289 rev. 01** EN | ES | FR

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# ENGLISH

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**1.**

To the customers

*Congratulations on receiving your **PIUSI THREE25**. We are pleased to provide you with a system designed to give you maximum reliability and efficiency.*

*The pump has been designed, tested, and approved for use with D.E.F. Please take care of all the precautions when handling this liquid. Your safety is important to us.*

*Furthermore to assure the longest possible service life, it is important that you follow the operation and maintenance procedures outlined in this manual. We are proud to provide you with a quality product and dedicated support. Together with your careful use, we are sure that you will have years of safe and dependable use.*

*The President*  
**PIUSI USA, Inc.**



## **2. GENERAL WARNINGS**

**Warnings** To ensure operator safety and to protect the dispensing system from potential damage, workers must be fully acquainted with this instruction manual before attempting to operate the dispensing system.

**Symbols used in the manual** The following symbols will be used throughout the manual to highlight safety information and precautions of particular importance:

 **WARNING**

This symbol indicates safe working practices for operators and/or potentially exposed persons.

 **WARNING**

This symbol indicates that there is risk of damage to the equipment and/or its components.

 **NOTE**

This symbol indicates *useful information*.

**Manual preservation** This manual should be complete and legible throughout. It should remain available to end users and specialist installation and maintenance technicians for consultation at any time.

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### 3. SAFETY INSTRUCTIONS AND WARNINGS

**Mains - preliminary checks before installation**

Before installation, make sure that the electric power supply network is fitted with a suitable earth-line and complies with the regulations in force.



**WARNING**

You must avoid any contact between the electrical power supply and the fluid that needs to be pumped.

The device is NOT anti-explosive type.  
The device must be installed outside areas at risk of explosion.  
Do not install in areas where inflammable vapors may be present.

**Maintenance control**

Before any checks or maintenance work are carried out, switch the system's power off by disconnecting the plug from the socket.

**Prohibitions**



**WARNING**

It is strictly forbidden to support or transport the system using a power supply cable. It is strictly forbidden to support or transport the system using a suction or outlet pipe.

### 4. FIRST AID RULES

**Contact with the product**

In the event of problems developing following EYE/SKIN CONTACT, INHALATION or INGESTION of the treated product, please refer to the SAFETY DATA SHEET D.E.F./AdBlue®/AUS32.

**Persons who have suffered electric shock**

Disconnect the power source, or use a dry insulator to protect yourself while you move the injured person away from any electrical conductor. Avoid touching the injured person with your bare hands until he is far away from any conductor. Immediately call for help from qualified and trained personnel. Do not operate switches with wet hands.



**NOTE**

Please refer to the safety data sheet for the product.

**5. GENERAL SAFETY RULES**

**Essential protective equipment characteristics**

Wear protective equipment according to the info below:

- suited to the operations that need to be performed;
- resistant to cleaning products.

**Personal protective equipment that must be worn**

Wear the following personal protective equipment during handling and installation:



safety shoes



protective gloves



close-fitting clothing



safety goggles



*Use Instruction Manual*

**Protective Gloves**

Prolonged contact with the treated product may cause skin irritation; always wear protective gloves during dispensing.

**Overheating**

For the proper functioning of the system, allow a 20-minute stop for every 20 minutes of dispensing.



**WARNING**

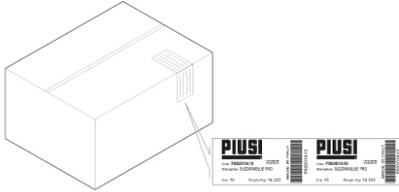
Never touch the electric plug or socket with wet hands.  
Do not switch the dispensing system on if the network connection cable or important parts of the apparatus are damaged, such as the inlet/outlet pipe, nozzle or safety devices. Replace the damaged pipe immediately.  
Before each use, check that the network connection cable and power plug are not damaged. Have the network connection cable replaced immediately by a qualified electrician.



**WARNING**

The electrical connection between the plug and socket must be kept well away from water.  
Unsuitable extension leads can be dangerous. In accordance with current regulations, only extension cords that are labelled for outdoor use and have a sufficient conduction path should be used outdoors.  
For safety reasons, we recommend that, in principle, the equipment be used only with a earth-leakage circuit breaker (max 30 mA).

## 6. DISPENSING SYSTEM PACKAGING

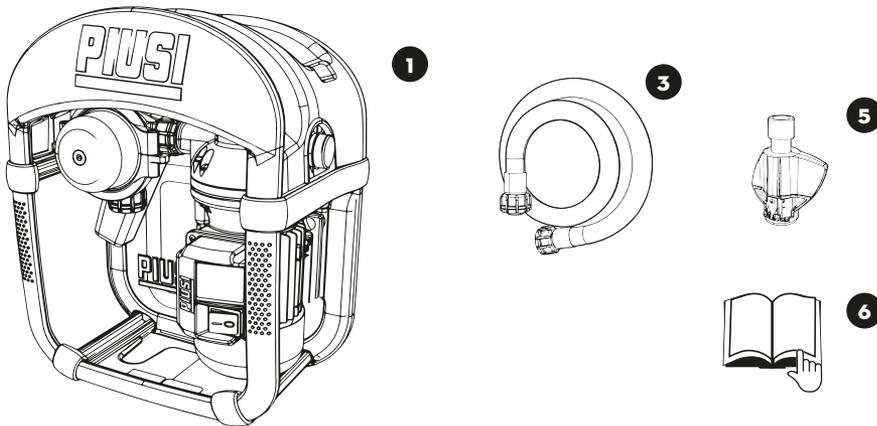
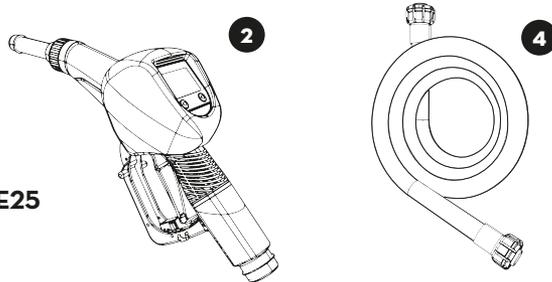


The dispensing system comes packed in a cardboard box bearing a **label** containing all the information relating to the equipment (model, weight, etc.).

## 7. PACKAGE CONTENTS/PRE-INSPECTION

To open the cardboard packaging, use a pair of scissors or a cutter, being careful not to damage the dispensing system or its components. Open the packaging and check that the following components provided as part of the equipment are available:

- 1 · Pump assembly
- 2 · Nozzle
- 3 · Suction hose (short)
- 4 · Delivery hose (long)
- 5 · Connector
- 6 · Use and maintenance handbook for **PIUSI THREE25** dosing system.





**WARNING**

Check that the data on the plate correspond to the desired specifications. In the event of any anomaly, contact the supplier immediately, indicating the nature of the defects. Do not use equipment which you suspect might not be safe.



**NOTE**

In the event that one or more of the components described below are missing from inside the package, please contact PIUSI USA, Inc. technical support.



**8. PLATES POSITION**

The dispensing system is equipped with decals and/or plates to provide operators with the necessary important information. Make sure that these do not deteriorate or become detached over time. The decals present are as follows:



**NOTE**

Should this situation arise, please contact our support department and arrange to have the damaged or missing plates sent back and replaced where necessary.



safety shoes



close-fitting clothing



protective gloves



safety goggles



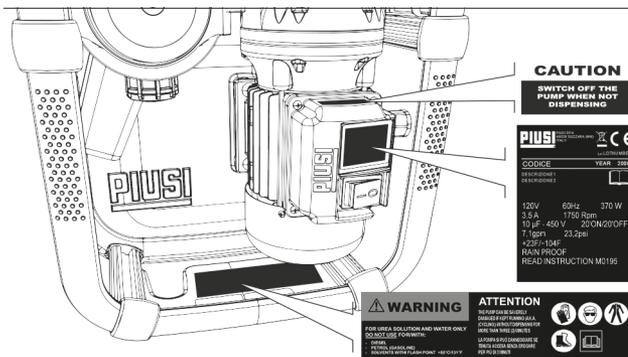
Consult the “user and maintenance manual”

**WARNING**

FOR UREA SOLUTION AND WATER ONLY  
DO NOT USE FOR/WITH:

- DIESEL
- PETROL (GASOLINE)
- SOLVENTS WITH FLASH POINT <55°C/131°F

Product for dispensing



**9. MACHINE AND MANUFACTURER IDENTIFICATION**

The dispensing system comes with an identification plate; this is attached to the pump and contains the following information:

- type;
- lot number / production year;
- technical data;
- use and maintenance handbook code.



**WARNING**

Before installing, always make sure the type of dispensing system is correct and suitable for the available power supply (Voltage/Frequency.)

**10. TECHNICAL SPECIFICATIONS**

Length	14,01" / 356 mm
Depth	10,11" / 257 mm
Height	17,32" / 440 mm
Weight	33,5 lb / 15,2 kg
Operating temperature	+23°F / +104°F -5°C/+40°C

**11. INTENDED USE**

**Intended use**

The dispensing system "PIUSI THREE25" was designed and built for the distribution of the product called D.E.F. (Diesel Exhaust Fluid)/AdBlue®/AUS32 or water.

**Conditions of use**

The dispensing system “**PIUSI THREE25**” should be used by observing the following conditions:

- *max. temperature of dispensed product: 95 °F (+35 °C);*
- *min. temperature of dispensed product: 12,2 °F (-11°C);*
- *max. temperature of dispensed product permitted by materials: 104 °F (+40°C);*
- *voltage variation permitted: +/- 5%;*
- *equivalent continuous sound pressure level at the workstation: 75 dB (A);*
- *make sure that the pump operates within its nominal operating parameters.*

**Flammable liquids and explosive atmosphere**

 **WARNING**

The system “**PIUSI THREE25**” was not designed for dispensing of diesel, petrol, flammable liquids with flash point < 131°F (55°C), or for operation in environments with potentially explosive atmosphere. The use in the above mentioned conditions is forbidden.

**Unintended use**

Do not operate the system for any purpose other than the purpose described within this manual; all other use is considered “**IMPROPER**” and will result in PIUSI USA, Inc. disclaiming any responsibility for damage to property, people, animals or to the system itself.

 **WARNING**

Do not keep the pump in motion with the nozzle in the closed position for more than 3 minutes.

**12. TREATED PRODUCT CHARACTERISTICS****Products permitted**

The “**PIUSI THREE25**” dispensing system was designed and built to dispense a special liquid, made from an aqueous urea solution, known as D.E.F./AdBlue®/AUS32, based on the ISO 22241. Standard **PIUSI THREE25** can also be used with water.

**Products not permitted****WARNING**

All products not listed in the “Intended Use” and “Treated Product Characteristics” paragraphs are to be considered not permitted, improper and therefore prohibited.

PIUSI USA, Inc. accepts no responsibility for damage to persons or property caused by failure to comply with this requirement.

## 13. INSTALLATION

EN

### Foreword

The “**PIUSI THREE25**” dispensing system has been designed and equipped for IBC tank installation. Any different form of installation must guarantee secure fastening.

### Authorised installation personnel

All installations must be carried out by authorised and competent personnel only. Authorised persons must:

- install the system in dry and well-ventilated place;
- ensure the correct installation of equipment required for the correct functioning of the pump;
- only use accessories that have been supplied with the system.

### Accessories not permitted



#### WARNING

The use of accessories that are unsuitable and were not provided with the system is strictly prohibited. PIUSI USA, Inc. accepts no responsibility for damage to persons, property or the environment caused by failure to comply with this requirement.



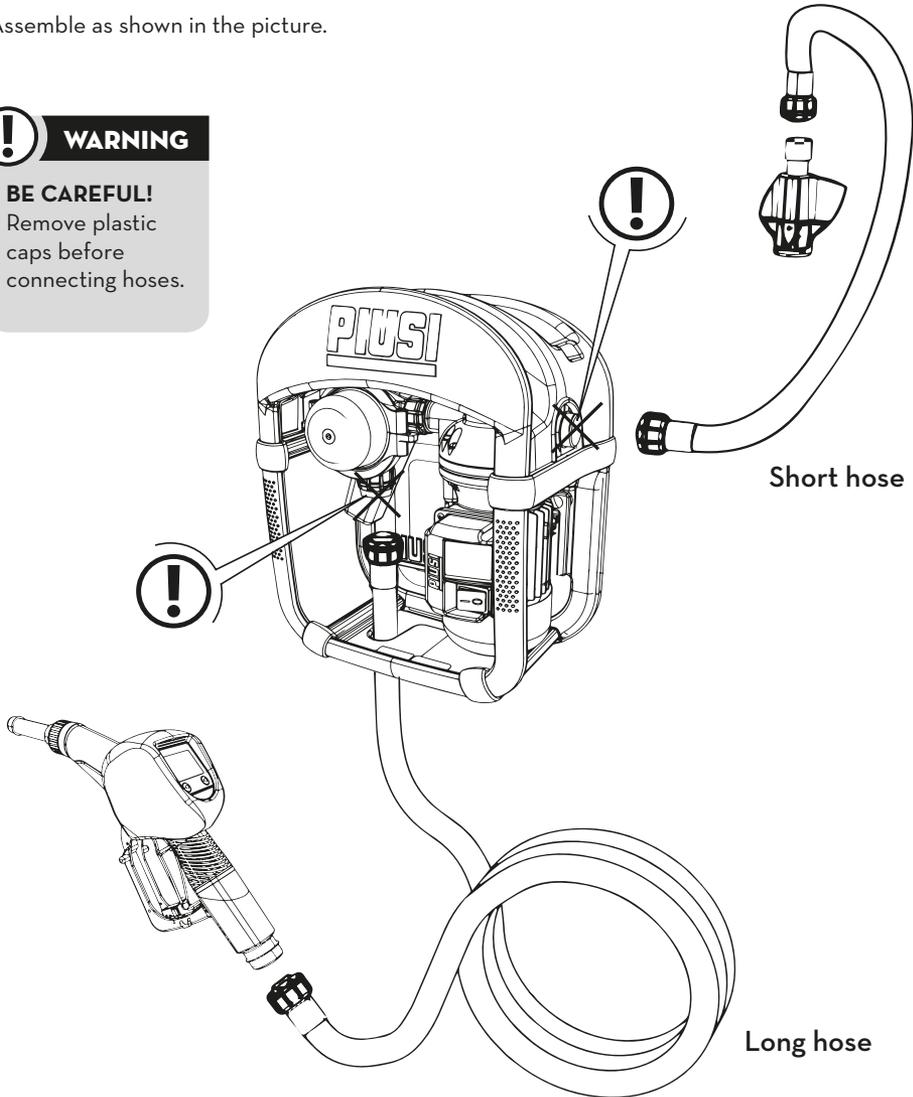
#### WARNING

- The “**PIUSI THREE25**” dispensing system is for professional use only.
- According to the current legislation, the “**PIUSI THREE25**” dispensing system must be installed in premises that are sufficiently well-lit.
- The “**PIUSI THREE25**” dispensing system has been specifically designed for use in a dry place. If installed outside, an adequate protective covering must be provided.

**14. ASSEMBLY**

Assemble as shown in the picture.

**!** **WARNING**  
**BE CAREFUL!**  
Remove plastic caps before connecting hoses.

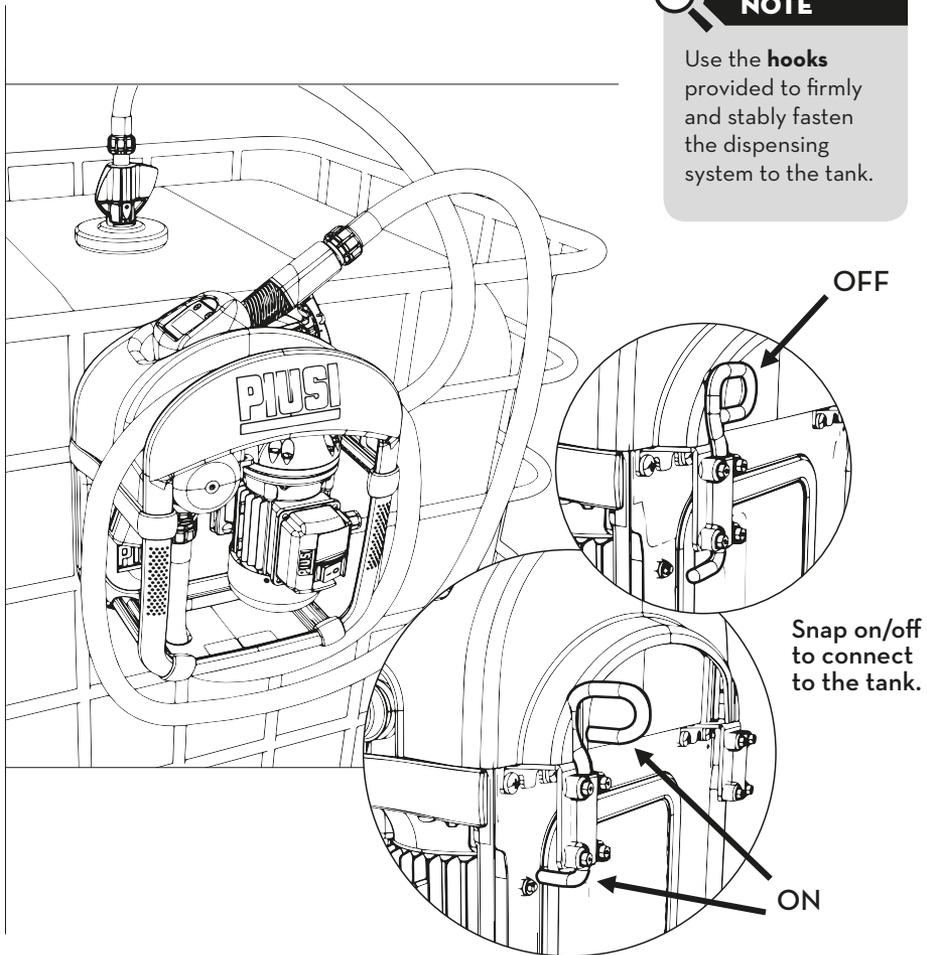


**15. INSTALLATION ONTO IBC TANKS**

Different forms of installation, i.e. without the indicated tanks, are only permitted if they are capable of guaranteeing that the dispensing system will be firmly and stably fastened.

EN

**NOTE**  
 Use the **hooks** provided to firmly and stably fasten the dispensing system to the tank.



**16. OPERATION AND USE**



**WARNING**

To remove any substance residue or foreign matters from the pipes, wash the system before putting it into operation.  
 To wash the system, follow the same dispensing procedures using demineralized or deionized water and eventually rinse with D.E.F./AdBlue®/AUS32.

**Foreword**

Directions on how to start and stop operation of the system are given below:



During operation the motor may be hot: be careful.

For the proper functioning of the system, allow a 20-minute stop for every 20 minutes of dispensing.



Operation of the pump without dispensing is only admitted for periods of no longer than 3 minutes.

We recommend that the pump remains switched off whenever the system is not in use.

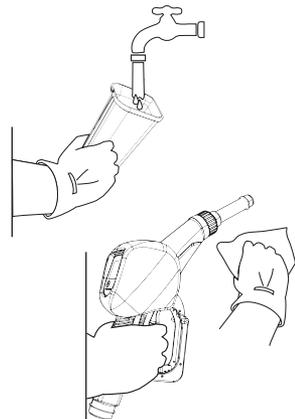
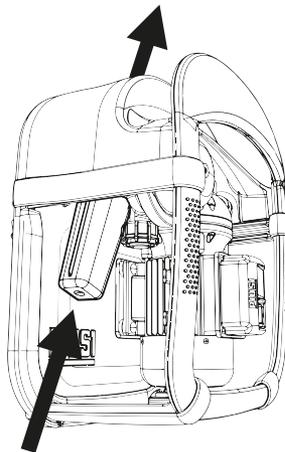


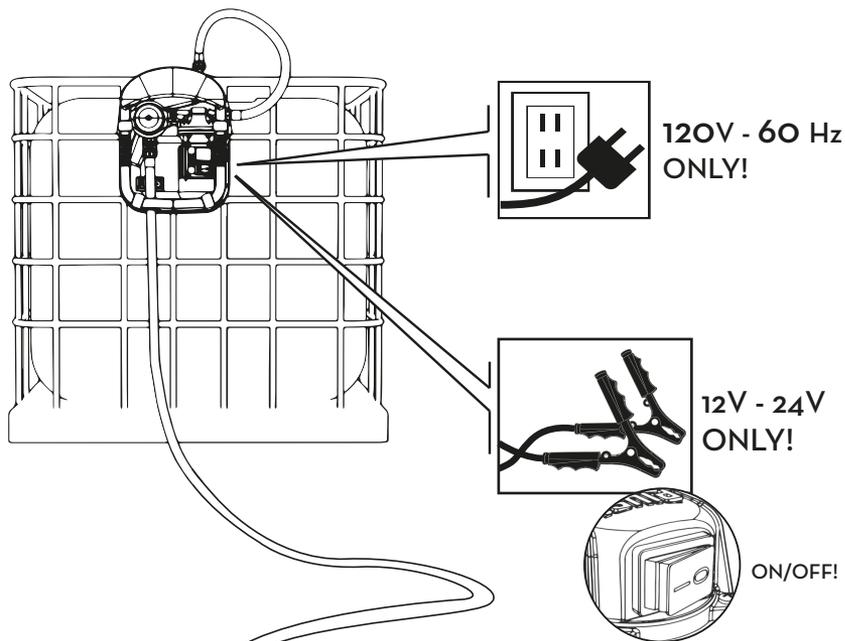
If ever the voltage is lagging, push the switch to the OFF position and return the nozzle to its rest position with its lever not activated.

**Getting started:**



**Push the empty nozzle holder**

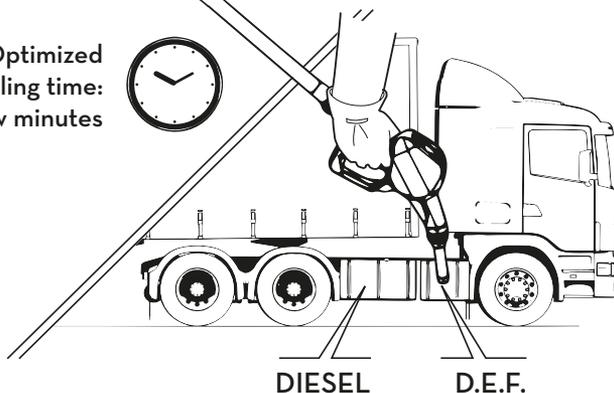




Optimized refueling time:  
few minutes



**!** **WARNING**  
for D.E.F. /  
AdBlue®/AUS32  
and WATER  
ONLY!





**WARNING**

- Should any sealants be used on the suction and delivery circuit of the pump, make sure that these products are not released inside the pump.
- Foreign bodies in the suction and delivery circuit of the pump could cause malfunctioning and breakage of the pump components.
- In case of prolonged dry-running of the pump, the suction circuit may be empty and suction may become difficult. If so, fill the suction circuit with demineralised water.

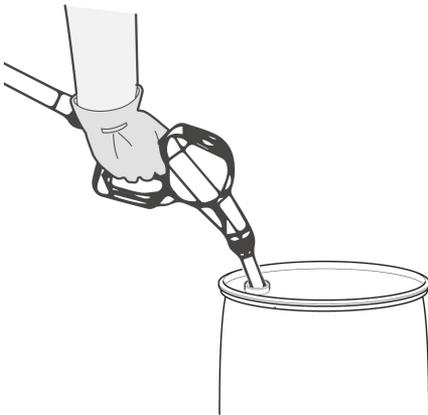
**17. WASHING THE DISPENSING SYSTEM**

**Foreword**

The dispensing system requires washing in order to remove product crystallisation which may damage the plant.

**Disposal**

Liquids resulting from washing must be disposed of in accordance with the laws prevailing in the country of use.



**WARNING**

- Wear personal protective equipment (PPE) when performing the wash cycle.
- Use only demineralised water to wash the system.



**NOTE**

The dispensing system can be washed by sucking up demineralised water from the clean container and collecting the resulting mixture in a different disposable container.

## **18. LEAVING THE SYSTEM UNUSED FOR LONG PERIODS OF TIME**

### **What to do**

Whenever it is thought that the system will remain unused for at least 15 days, it must be emptied in order to prevent the product from crystallising inside. This shall be followed by a washing cycle.

## **19. MAINTENANCE**

### **Safety instructions**

The dispensing system was designed and built to require a minimal amount of maintenance.

Before carrying out any maintenance work, disconnect the dispensing system from any electrical and hydraulic power source.

During maintenance, the use of personal protective equipment (PPE) is compulsory.

In any case always bear in mind the following basic recommendations for a good functioning of the pump.

### **Authorised maintenance personnel**

All maintenance must be performed by qualified personnel.

*Tampering can lead to performance degradation, danger to persons and/or property and may result in the warranty being voided.*

### **Measures to be taken**

Whenever there is risk of frost, empty the circuit and the pump, taking care to place the pump in an environment where the temperature is no lower than 32°F / 0°C.

Check that the labels and plates found on the dispensing system do not deteriorate or become detached over time.

#### **ONCE A WEEK:**

- check that the pipe connections are not loose to prevent any leaks;
- check and keep the filter installed on the suction line clean.

#### **ONCE A MONTH:**

- check the pump body and keep it clean and free of any impurities;
- check that the electrical supply cables are in good condition.

## 20. TROUBLESHOOTING

Problem	Possible cause	Corrective action	
The motor is not turning	Lack of electric power	Check the electrical connections and the safety systems	
	Rotor jammed	Check for possible damage or obstruction of the rotating components	
	Motor problems	Contact the Service Department	
The motor turns slowly when starting	Low voltage in the electric power line	Bring the voltage back within the anticipated limits	
	Low level in the suction tank	Refill the tank	
	Foot valve blocked	Clean and/or replace the valve	
	Filter clogged	Clean the filter or replace the cartridge	
	Excessive suction pressure	Lower the pump with respect to the level of the tank or increase the cross-section of the tubing	
	High loss of head in the delivery circuit (working with the by-pass open)	Use shorter tubing or of greater diameter	
	By-pass valve blocked	Contact the Service Department	
	Low or no flow rate	Air entering the pump or the suction tubing	Check the seals of the connections
		A narrowing in the suction tubing	Use tubing suitable for working under suction pressure
		Low rotation speed	Check the voltage at the pump. Adjust the voltage and/or use cables of greater cross-section
		The suction tubing is resting on the bottom of the tank	Modify tubing properly
		Freezing of the pump or motor	Thaw the pump and check for damage. Starting a frozen pump can cause damage to the motor and to the pump itself
		Leaks in the pump outlet pipe	Check the seal at the pipe's connections and inspect the pipe for possible damage
Failure to prime		Fill the suction hose with demineralised water	
Increased pump noise		Cavitation occurring	Reduce suction pressure
		Irregular functioning of the by-pass	Dispense until the air is purged from the by-pass system
		Presence of air in the liquid to be pumped	Verify the suction connections
Leakage from the pump body	Pump damage	Contact the Service Department	

**21. DEMOLITION AND DISPOSAL**

**Foreword**

If the system needs to be disposed, the parts which make it up must be delivered to companies that are specialized in the recycling and disposal of industrial waste and, in particular: **DISPOSAL OF OTHER PARTS:** other components, such as pipes, rubber gaskets, plastic parts and wires, must be disposed of by companies specialising in the disposal of industrial waste.

**Disposing of packing materials**

The packaging consists of biodegradable cardboard which can be delivered to companies for normal recycling of cellulose.

**Metal parts disposal**

Metal parts, whether paint-finished or in stainless steel, can be consigned to scrap metal collectors.

**Disposal of electric and electronic components**

These must be disposed of by companies that specialize in the disposal of electronic components, in accordance with the indications of directive **2002/96/EC** (see text of directive below).

**Information regarding the environment for clients residing within the European Union**

European Directive **2002/96/EC** requires that all equipment marked with this symbol on the product and/or packaging not be disposed of together with non-differentiated urban waste. The symbol indicates that this product must not be disposed of together with normal household waste. It is the responsibility of the owner to dispose of these products as well as other electric or electronic equipment by means of the specific refuse collection structures indicated by the government or the local governing authorities.



**Miscellaneous parts disposal**

Other components, such as pipes, rubber gaskets, plastic parts and wires, must be disposed of by companies specialising in the disposal of industrial waste.

**22. WARRANTY****Limited Warranty Policy**

**PIUSI USA, Inc.** 2365 SW 34th St. FORT LAUDERDALE, FL 33312 (USA) hereby provides a limited warranty against defects in material and workmanship on products manufactured by **PIUSI USA, Inc.**

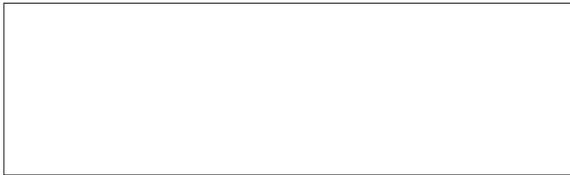
This product includes a 2 year warranty from date of purchase as evidenced by the original sales receipt. A 30 month warranty from product date of manufacturer will apply in cases where the original sales receipt is not available. Reference product labeling for the date of manufacturer is applied on the product.

Manufacturer's sole obligation under the foregoing warranties will be limited to either, at Manufacturer's option, replacing or repairing defective Goods (subject to limitations hereinafter provided) or refunding the purchase price for such Goods theretofore paid by the Buyer, and Buyer's exclusive remedy for breach of any such warranties will be enforcement of such obligations of Manufacturer: The warranty shall extend to the purchaser of this product and to any person to whom such product is transferred during the warranty period.

**This warranty shall not apply if:**

- a. the product has been altered or modified outside the warrantor's duly appointed representative;*
- b. the product has been subjected to neglect, misuse abuse or damage or has been installed or operated other than in accordance with the manufacturer's operating instructions.*

To make a claim against this warranty, contact the dealer where you purchased the product:



The company herewith expressly disclaims any warranty of merchantability or fitness for any particular purpose other than for which it was designed.

This warranty gives you specific rights and you may also have other rights which vary from U.S. state to U.S. state.





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