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2 CONFORMITY

2.1 DECLARATION OF CONFORMITY

The undersigned:
PIUSI S.p.A.
 Via Pacinotti 16/A z.i. Rangavino
 46029 Suzzara - (MN) - Italy

DECLARES
 on its own responsibility, that the machine described below:
 Description: Dispenser AD-Blue® for cars.
 Model: **Delphin PRO**
 Serial number: see the Lot Number on the EC plate stamped on the product.
 Year of construction: see the production year on the EC plate stamped on the product.
 is in compliance with the legislative regulations which transpose directives:
 - Machinery Directive 2006/42/EC
 - Electromagnetic Compatibility Directive 2014/30/EC

Documents are made available to the appropriate authority on request at Piusi S.p.A. Alternatively, it can be requested writing to: e-mail doc_tec@piusi.com
 The person in charge of writing both the technical file and the conformity statement is Otto Varini as the legal representative.

Otto Varini
Otto Varini
 The legal representative

Suzzara 20/04/2016

2.2 DECLARATION OF COMPATIBILITY

The undersigned:
PIUSI S.p.A.
 Via Pacinotti 16/A z.i. Rangavino
 46029 Suzzara - Mantua - Italy

DECLARES
 THAT DELPHIN EVO COMPONENTS IN DIRECT CONTACT WITH THE LIQUIDS HANDLED, HAVE BEEN TESTED IN CONFORMITY WITH THE FOLLOWING DIRECTIVES:

ISO22241-1: 2006 (quality standard)
 Diesel engines – NOx reduction agent AUS 32 – Part 3: Quality requirements

and have been tested with the requirements of the following norm

ISO22241-2: 2006 (quality standard)
 Diesel engines – NOx reduction agent AUS 32 – Part 2: Test methods

The Adblue liquid, both before and after testing, resulted within the specified AUS32 (Ad-Blue) limit in conformance with ISO22241-2:2006 (as per Norm DIN V 70070)

Otto Varini
Otto Varini
 The legal representative

Suzzara 20/04/2016

3 GENERAL PRECAUTIONS

- Important warnings**
 In order to protect workers' safety, to avoid damaging the distribution system and before performing any operation, please read the whole instruction manual.
- Symbols used in the manual**
 In order to signal particularly important instructions or warnings, the following symbols are used:
- This symbol indicates accident prevention regulations addressed to operators and/or other people concerned.
 - This symbol indicates that there is a possibility of damaging the machineries and/or their components.
 - This symbol indicates useful information.

Manual storage
 This manual must be intact and completely readable. The final users, as well as the qualified technicians authorized to installation and maintenance must be able to view it at any time.

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4 SAFETY INSTRUCTIONS

4.1 SAFETY WARNINGS

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

Control and maintenance operations Prohibitions

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

CAUTION

CAUTION
 Lifting or transporting the system by way of the electric cables attached to it is strictly forbidden.
 It is strictly forbidden to support or transport the system using a suction or outlet pipe.

In the event of a suspected contamination of the liquid in the car tank, sanitize the tank.
 Do not use the Delphin PRO Dispenser before recovery

4.2 FIRST AID MEASURES

Contact with the product
 For issues arising from the treated product with EYES, SKIN, INHALATION and INGESTION refer to the DEF SAFETY DATA SHEET.

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

4.3 GENERAL SAFETY NORMS

- Personal protection equipment features**
 Wear personal protection equipment that is:
 • suitable to the operations to be performed,
 • resistant to the various cleaning products used.
- Personal protection equipment to be worn**
 During installation and handling procedures wear the following personal protection equipment:
- safety shoes;
 - close-fitting clothes;
 - protective gloves;
 - safety glasses;
 - instructional manual
- Other equipment**
- Protective gloves**
 Prolonged contact with the product may cause skin irritation during delivery phases, always wear protective gloves.

DANGER

Never touch the plug or the 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.

CAUTION

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).

5 DISTRIBUTION SYSTEM PACKAGING

The dispensing system comes packed in a cardboard box bearing the following markings:
 • an arrow indicating the TOP side;
 • a label containing all the information relating to the equipment (model, weight, etc.).



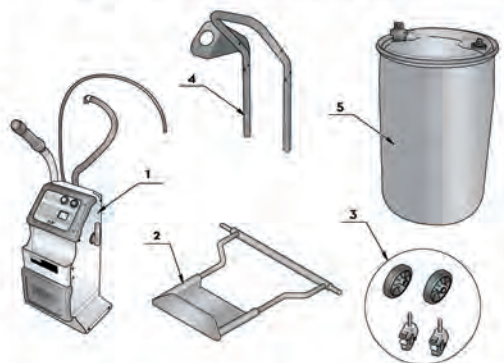
5.1 CONTENTS OF THE PACKAGING

Foreword
 In order to open the cardboard box, use scissors or a cutter, paying attention not to damage the distribution system or its components. Open the packaging and make sure it contains the following components provided:

NOTE
 In case one or more herewith described components should not be in the box, contact Manufacturer's technical assistance service.

CAUTION
 Make sure the plate data correspond to the desired ones. In case of anomalies, promptly contact the supplier, signalling the nature of the problems and, in case you should doubt the device safety, do not use it.

5.2 DELPHIN PRO COMPOSITION



- 1 DRUM TROLLEY
- 2 TROLLEY WHEELS
- 3 WHEELS KIT
- 4 HANDLE
- 5 DRUM (SUPPLIED SEPARATELY)

6 MACHINE AND MANUFACTURER IDENTIFICATION

The distribution system is provided with an identification marking located directly on the pump. This indicates the following information:
 • model;
 • lot number / Production year;
 • technical data;
 • use and maintenance handbook code.

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

6.1 PLATES POSITIONS

On the distribution system there is an adhesive label that shows the operator the most important information. Make sure it stays on and that it does not deteriorate over time.
 Should this situation arise, please contact our support department and arrange to have the damaged or missing plates sent back and replaced where necessary.

Decals are the following ones:



- 1 - protective gloves
- safety glasses
- close-fitting clothes
- see user and maintenance manual
- safety shoes
- 2 - label use with water/urea solutions only



- 3 - CE plate with technical data

7 TECHNICAL CHARACTERISTICS

Max. dimensions	
Length (A)	800 mm
Depth (B)	860 mm
Height (C)	1200 mm
Weight	
Delphin PRO	56 kg
Technical data	
Voltage	220 / 230 V
Frequency	50 / 60 Hz
Power rating	400 W
Absorption	1.35 A
Operating temperature	+ 5 °C / + 40 °C

8 DIRECTED USE

- Intended use**
 The dispensing system "Delphin PRO" was designed and built for the distribution of the product called AdBlue®, D.E.F. (Diesel Exhaust Fluid) or water.
- Conditions of use**
 The distribution system "Delphin PRO" must be used respecting the following conditions:
 Max. temperature of dispensed product: +35 °C.
 Min. temperature of dispensed product: -11 °C.
 Max. temperature of dispensed product permitted by materials: +40 °C.
 Voltage variation permitted: +/- 5%
 Equivalent continuous sound pressure level at the workstation: 75 dB(A)
 Make sure the pump is working in its nominal operating range.
 The system "Delphin PRO" has not been designed to distribute diesel, gasoline, inflammable fluids having an explosion limit of $55^{\circ}\text{C}/131^{\circ}\text{F}$. For to operate in places with potentially explosive atmosphere. Such use is therefore forbidden.
- CAUTION**
 It is strictly forbidden to use the system for purposes other than the ones indicated in point "Intended use".
 Any other use different from the one for which the system has been conceived and described in this manual is considered "MISUSE". Therefore, the Manufacturer shall not be held responsible for any damage caused to people, animals or to the system itself.
- Inflammable liquids and explosive atmosphere CAUTION**
- Unenvisaged use**

9 CHARACTERISTICS OF THE PRODUCTS HANDLED

Products permitted
 The "Delphin PRO" dispensing system was designed and built to dispense a special liquid, made from an aqueous urea solution, known as AdBlue®/D.E.F., based on the ISO 22241 standard. Delphin PRO can also be used with water.


CAUTION
 All products not listed in the "Intended Use" and "Treated Product Characteristics" paragraphs are to be considered not permitted, improper and therefore prohibited.
 The Manufacturer shall not be held responsible for damages caused to people or things deriving from failure to meet such instructions.

10 INSTALLATION

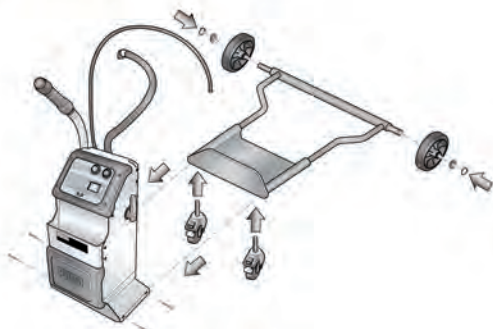
- Foreword**
 The "Delphin PRO" dispensing system has been designed and arranged on a trolley for ease of use and delivery.
 Installation must be performed exclusively by qualified and authorized staff. They must:
 • properly install all the components necessary for the pump to function properly;
 • only use accessories that have been supplied with the system.
- CAUTION**
 The use of accessories that are unsuitable and were not provided with the system is strictly prohibited. The Manufacturer shall not be held responsible for damages caused to people, things or to the environment deriving from failure to meet such instructions.
- CAUTION**
 The distribution system Delphin PRO is for professional use only.
- CAUTION**
 The distribution system Delphin PRO must be installed in a well lit place, in compliance with the norms in force.
- CAUTION**
 The Delphin PRO dispensing system has been specifically designed for use in a dry place. I

11 ASSEMBLING

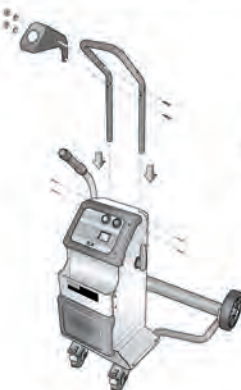
Assemble as shown in the illustrations. See components numbering.

CAUTION  The wheels can be installed on the inside or outside of the trolley, depending on the drum type.

1 - Installation of wheels on the trolley



2 - Installation of bracket and handle




3 - Installation of drum on the trolley




4 - Connection of pipes to the drum




12 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 ADBlue®.

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


CAUTION  During operation the motor may be hot: be careful.


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

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


CAUTION  If ever the voltage is lagging, push the switch to the OFF position and return the switch to the ON position.

CAUTION  FLUID LEAKS CAN DAMAGE OBJECTS AND INJURE PERSONS.

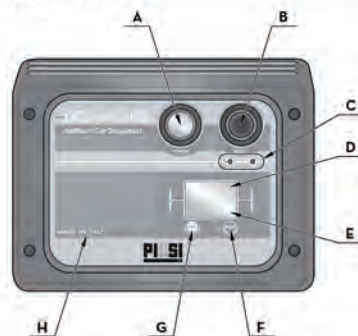
CAUTION  Strictly observe the maximum capacity limits indicated on the dataplate.

WARNING  Under no circumstances must the data on the dataplate, the closure and authentication seals be modified or removed. Any tampering or removal will result in immediate nullification of the warranty and the manufacturer will not be held liable for any material or economic damage resulting therefrom.

CAUTION  DO NOT drag the machine by pulling on the cable or pipe.

CAUTION  Once the filling operation has been completed, replace the filler hose in its seat.

12.1 DISPLAY



- A POWER button: used to power the system.
- B REFILL button: press for at least 5 seconds to start product delivery.
- C red/green LED
- D Quantity of liquid
- E Flow rate
- F MODE button
- G RESET button
- H Machine data plate

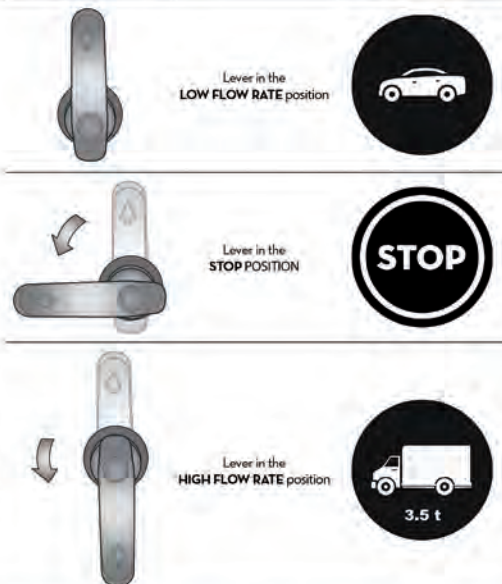
CAUTION  If the (H) label is damaged, DO NOT use the machine and replace the label immediately.


12.1.1 LED INDICATOR TABLE

White lamp	Red LED	Green LED	
Off	X	X	System OFF
On	Off	Off	Stand By Awaiting commands
On	Off	Fast Blink	Start-up sequence underway
On	Off	On	Dispensing
On	Off	Slow Blink	Filling completed Full level
On	Fast Blink	Off	Filling completed Time out
On	Slow Blink	Off	Selected flow rate too high

12.2 FLOW RATE ADJUSTMENT LEVER


NOTE  The adjustment lever is located on the side of the trolley.



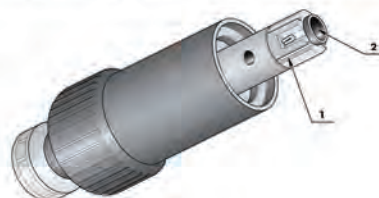
CAUTION  Use the flow rate adjustment lever as indicated. Use in "Van" mode when filling a car could result in damage to the vehicle.

12.3 PHASES OF DELIVERY


1. Connect the delivery hose to the car.
2. Press POWER button (A).
3. Press the REFILL button (B) for 5 seconds.
4. Wait for the filling end.
5. Disconnect the filler hose.
6. Place the connector in the relative housing.

CAUTION  DON NOT MANOEUVRE IF:
- THE CONNECTOR IS NOT COMPLETELY CONNECTED TO THE CAR TANK
- THE CONNECTOR IS NOT CONNECTED TO THE SAFETY HOOK.

12.4 END OF FILLING SENSORS



- 1 END OF FILLING sensors: these are used to stop product delivery.
- 2 DRIP-STOP VALVE: prevents spills and dripping.


WARNING  The suction body and the liquid air return must be installed on the drum (supplied by the client).

13 LEAVING THE SYSTEM UNUSED FOR LONG PERIODS OF TIME

Operations to be carried out 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.


14 WASHING THE DISPENSING SYSTEM

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

CAUTION  Wear personal protective equipment (PPE) when performing the wash cycle.

CAUTION  Use only demineralised water to wash the system.

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

CAUTION  By following the same modes of delivery described above, 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.

15 MAINTENANCE

Safety warnings The distribution system has been designed and built to require minimum maintenance. Before carrying out any maintenance work, disconnect the dispensing system from any electrical and hydraulic power source. During maintenance procedures, using personal protection equipment (PPE) is mandatory. Always consider the following recommendations to use the pump correctly.

Personnel authorised to perform maintenance procedures Interventions to be performed Maintenance procedures must be performed exclusively by qualified personnel. Any misuse may lead to a decline in performance, danger for people and/or things, besides voiding the warranty.

Interventions to be performed 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 0°C/32°F. 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.
- 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.

16 TROUBLESHOOTING

TROUBLE	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.
THE MOTOR TURNS SLOWLY WHEN STARTING	Motor problems	Contact the Service Department
	Low power supply voltage	Bring the voltage back within the preset limits
LOW OR NO FLOW RATE	Low level in the suction tank	Refill the tank
	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
INCREASED PUMP NOISE	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
LEAKAGE FROM THE PUMP BODY	Low rotation speed	Check the voltage at the pump; adjust the voltage and/or use cables of greater cross-section
	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
THE PUMP DOES NOT PRIME THE LIQUID	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
THE DISPLAY IS NOT WORKING	Cavitation occurring	Reduce suction pressure
	Irregular functioning of the by-pass	Dispense until the air is purged from the by-pass system
THE PUMP DOES NOT PRIME THE LIQUID	Presence of air in the liquid to be pumped	Verify the suction connections
	Pump damage	Contact the Service Department
THE PUMP DOES NOT PRIME THE LIQUID	Suction circuit blocked	Remove the blockage from the suction circuit
	The suction chambers are dry	Add liquid from pump delivery side
THE DISPLAY IS NOT WORKING	The pump chambers are dirty or blocked	Remove the blockages from the suction and delivery valves
	Lack of electric power	Check the plug
		Contact the manufacturer

PIUSI[®]

*Fluid Handling
Innovation*

**DELPHIN
PRO**



**MADE
IN
ITALY**


**EN
IT**

Installation, use and maintenance

Installazione uso e manutenzione

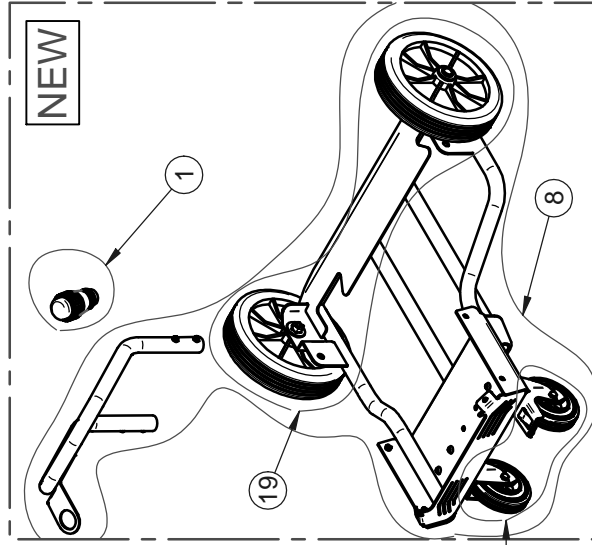
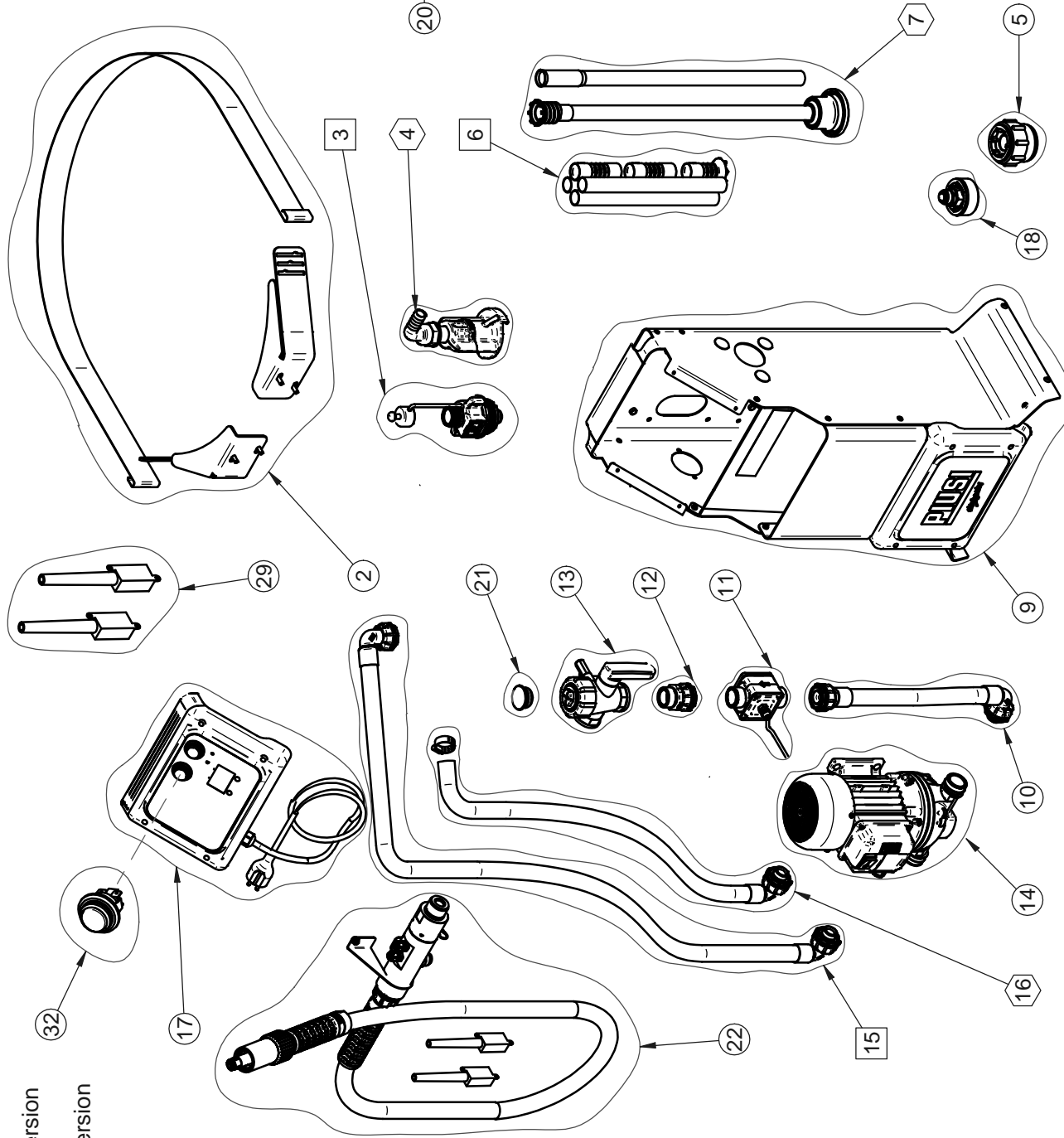
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17 SCRAPPING AND DISPOSAL

Foreword	In case the system should be demolished, its parts must be given to companies specialised in industrial waste disposal and recycling; in particular:
Disposal of Packaging	Packaging consists of biodegradable cardboard that can be given to firms charged with cellulose recovery.
Metal parts disposal	The metal components, both painted and in stainless steel, are usually recycled by companies that are specialised in the metal-scraping industry.
Disposal of electrical and electronic components	These have to be disposed by companies that are specialised in the disposal of electronic components, in accordance with the instructions of 2012/19/UE (see text of Directive below).
	European Directive 2012/19/UE requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities.
Environmental information for customers in the European Community	
Disposal of Other parts	The disposal of other parts such as pipes, rubber seals, plastic components and cables should be entrusted to companies specialized in the disposal of industrial wastes.

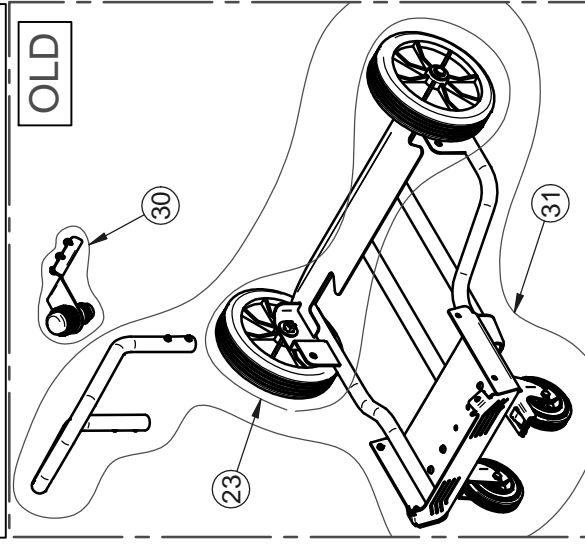


- at2 version
- sec version



NEW

To double-check if NEW or OLD, please forward the lot number of the Delphin unit



OLD

Pos.	Material Code	Description	QT	UM
		Info Documents of Material		
1	R21216000	CAP PLASTIC PIPE CLAMP	1	PC
2	R21140000	DRUM SUPPORT "D.PRO"	1	PC
3	R20189000	REPAIR KIT STG AF2 56x4 Butt. - 1"BSP	1	PC
4	F15452000	SEC + HOSETAIL 90°	1	PC
5	R21421000	ADAPTER 3/4" 70x6 DELPHIN	1	PC
6	R19389000	KIT SUCTION PIUSI HAND PUMP	1	PC
7	F15606000	KIT RIGID SUCTION HOSE SUZZARA BLUE DRUM	1	PC
8	R2050300C	TROLLEY "D.PRO"	1	PC
9	R21141000	FRAME COMPLETE "D.PRO"	1	PC
10	R2062200A	INTERMEDIATE HOSE 0.35m "D.PRO"	1	PC
11	R2067300A	K24 "DELPHIN PRO"	1	PC
12	F15776000	SWIVEL M-F 1in GAS PLASTIC MANUAL NOZZLE	1	PC
13	R21142000	VALVE "D.PRO"	1	PC
14	F00203090	SUZZARABLU PUMP N 230V w/CABLE LR_P00063.pdf	1	PC
15	R2062900A	SUCTION HOSE 1.5m "D.PRO"	1	PC
16	R21138000	SUCTION HOSE + CLAMP "D.PRO"	1	PC
17	R2118200A	ELECTRONIC BOARD DELPHIN PRO	1	PC
18	R20679000	PLASTIC PLUG "DELPHIN PRO"	1	PC
19	R2113700A	FIXED WHEEL + HUB + SCREWS "DELPHIN PRO"	1	PC
20	R20409000	KIT REVOLVING WHEEL TROLLEY "DELPHIN"	1	PC
21	R20624000	PLASTIC PLUG 1 "BSP	1	PC
22	R21143000	DELIVERY HOSE COMPLETE AC "D.PRO"	1	PC
23	R21137000	ZZFIXED WHEEL+HUB+SCREWS "DELPHIN PRO"	1	PC
29	R21022000	DELPHIN PRO SENSOR CONNECTION KIT	1	PC
30	R21139000	ZZNOZZLE HOLDER "D.PRO"	1	PC
31	R2050300A	ZZTROLLEY "D.PRO"	1	PC
32	R20693000	SWICHTH TRASP. DELPHIN PRO AC	1	PC