



Equipment Delivery Contract

Contact No. of Contractor: 3-01/2023/Contact No. of Client: Z/BTS/DTPR/4/2023

AERO-GSE Sp. z o.o., having its principal place of business at Krakow 100 Balicka str, Poland 30-149, VAT Nr. PL6772419908, Registered Company No.: 0000930428, represented by the proxy Przemysław Jabłoński, acting under the Company Statute, hereinafter referred to as "Contractor" and Letisko M.R.Štefánika - Airport Bratislava, a.s. (BTS), having its principal place of business at Letisko M.R.Štefánika, 823 11 Bratislava, Slovak republic, Correspondence address: Letisko M.R. Štefánika, P.O.BOX 160, 823 11 Bratislava 216, Slovak republic, Registered Company No.: 35 884 916, hereafter referred to as "Client", represented by Chairman of the Board Ing. Dušan Keketi and Member of the Board Ing. Gabriel Domšitz, hereinafter jointly referred to as "Parties", have concluded the present Equipment Delivery Contract about the following:

1. Subject of the Contract

- 1.1. Parties have entered into this Equipment Delivery Contract, hereinafter referred to as "Equipment Delivery Contract" or "Contract".
- 1.2. The Contractor sells and the Client buys on delivery conditions DAP Bratislava, per INCOTERMS ® 2010, the equipment specified in annex 1 (hereinafter referred to as "Equipment"),

2. Price and total amount of the Contract.

- 2.1. The total amount of the Equipment Delivery Contract price for the supply of the Equipment is **22 500,00 EUR NETTO** on delivery conditions DAP Bratislava Incoterms ® 2010

3. Terms of payment

- 3.1. Payments for the Equipment to be delivered under the present Equipment Contract shall be effected in EUR according to Schedule of Contract:

Payment 1 - 22 500,00 EUR not later then 30 calendar days after delivery

- 3.2. Payment for the Equipment shall be deemed fulfilled on the day the outstanding amount is debited from Client's account.

4. Details of the Parties' Banks:

The Contractor:

S: 0000930428
P: 6772419908
GON: 367247450
T: PL6772419908
RI PL677241990800000

ING Bank Slaski S.A. o/Katowice
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SWIFT: INGBPLPW
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EUR: PL 27 1050 1214 1000 0090 3126 7751



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Republic

5. Dates and terms of delivery

- 5.1. The equipment will be delivered no later than 21 calendar days after contract signing.
- 5.2. The Contractor shall at its expense ensure the loading of the shipped Equipment into the transport vehicles. The unloading of the Equipment after delivery to the Client is not the part of the Contractor's responsibility.
- 5.3. The date of signing CMR by the recipients' authorized representative is to be considered as the date of delivery of the Equipment.
- 5.4. The ownership right of the Equipment transfers to the Client from the moment of 100% payment for the delivered Goods.
- 5.5. The Client is responsible for charges resulting from the delay of the Equipment reception.

6. Warranty. Quality

- 6.1. Warranty conditions have been described in offer attached to this contract.

7. Responsibilities of the Parties

7.1. Should any delay are solely attributable to the Contractor in the delivery of the Equipment occur beyond the dates specified in the Clause 5.1 of the present Equipment Delivery Contract, the Contractor shall pay to the Client penalty in the amount of 0,4 % of the value of the non-delivered Equipment for each week of the delay, but not more than 10% of total Equipment delivery Contract Value.

7.2. Should any delay of the Equipment payment by amount or term occur beyond the dates specified in the present Equipment Contract and the delay is solely attributable to the Client, the Client shall pay to the Contractor a penalty in the amount of 0.4 % of the value of the non-paid amount for each week of the delay, with a maximum of 10% of total Equipment delivery Contract Value.

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7.3. When calculating penalties for delays of delivery the number of days comprising less than half a calendar week shall not be taken into consideration and the number of days comprising more than half a calendar week shall be considered as a full week.

8. Release from responsibilities, force majeure

8.1. In particular the Parties shall be released from any responsibility for the partial or complete non-fulfilment of their obligations under the present Equipment delivery Contract if this non-fulfilment results from Force Majeure.

8.2. Force Majeure circumstances are to mean such external and extraordinary events that were not taking place during signing the Equipment Delivery Contract and arose against the will of the Contractor and the Client who were not able to prevent their commencement and action with the use of such measures and means the application of which is to be rightly required from the Party exposed to the action of force majeure circumstances.

8.3. The following events shall be recognised to be Force Majeure circumstances: earthquake, flood, fire, epidemics (but except the COVID-19 pandemic), war and hostilities, strikes or governmental restrictions or any other actions which are beyond the direct control of the Contractor and the Client. The authority which is to confirm officially the commencement (cessation) of action of force majeure circumstances shall be a corresponding Chamber of Commerce and Industry or any other official governmental institutions.

8.4. The Party exposed to the action of Force Majeure circumstances or confronted by obstacles beyond its control shall immediately notify by E-mail the other Party of the commencement, type and possible duration of the said circumstances and obstacles. Should this notification not be submitted within 30 days of the commencement of force majeure circumstances, the Party exposed to their action or confronted by obstacles beyond its control shall be deprived of the right to refer to these circumstances in its excuse unless the circumstances or obstacles themselves have prevented this Party from sending such notification.

8.5. Provided that the requirements of Clause 8.4 are observed, the occurrence of Force Majeure circumstances and obstacles preventing the fulfilment of the Contract as specified in 8.2, 8.3 shall extend the time of performing obligations under the present Equipment delivery Contract for a period which reasonably corresponds to the time of action of Force Majeure circumstances or obstacles and a reasonable time for compensating the consequences.

8.6. If Force Majeure circumstances or obstacles beyond the control of the Parties last for more than one month, the Contractor and the Client shall take a decision on the future of the present Equipment Delivery Contract. Should the Parties not come to an agreement, then the Party which is not affected by the said circumstances and obstacles shall have the right to terminate this Equipment Delivery Contract. This Party shall notify the other party within 48 hours in writing about its decision.

9. Procedure of settlement of possible disputes

9.1. All disputes or differences, which may arise out of or in connection with the present Contract, Parties resolve through negotiations. If an agreement is not reached, the disputes are resolved in accordance with the regulations of the European Union at the competent European Union Court.

9.2. The Parties shall undertake to execute the award within the time specified in the award. The award of the Court shall be final and binding every from the Parties.



10. Alterations and amendments to the Contract

10.1. Any alterations and amendments to the present Equipment delivery Contract shall be made only in writing, signed by Parties authorized persons.

11. Miscellaneous

11.1. The Contractor shall not be entitled to transfer the rights or obligations under this Equipment delivery Contract to third parties without a prior written consent of the Client.

11.2. Either Party shall undertake not to disclose to third parties any terms and conditions of the present Equipment delivery Contract as well as any other information, materials and documents submitted to each other in accordance with the present Equipment delivery Contract, except of the legal publication of Contract made by Client as is set in the clause 12.1 of this Contract, and be responsible for the infringement of this obligation in the form of compensation for losses inflicted on other Party.

11.3. Ownership retention clause: the Equipment remains full property of the Contractor until its price due Clause 2.1 of the present Contract has been 100% paid by the Client. The Equipment ownership should transfer from the Contractor to the Client after 100% Equipment price payment done by the Client to the Contractor.

12. Effective Date of the Contract

12.1. This Contract has been concluded and its legal effects shall become effective in line with the Act No. 546/2010 Coll. supplementing the Act No. 40/1964 Coll. Civil Code, as amended, amending and supplementing certain acts, and with the Act No. 211/2000 Coll. on Free Access to Information and on the Amendment and Supplements to Certain Acts, on the day following after the day of its publication in the Central Register of Contracts, administered by the Government Office of the Slovak Republic.

12.2. Upon signing of this present Equipment delivery Contract all previous negotiations, preliminary documents and correspondence related to this Contract should be considered null and void.

12.3. The present Contract is made up and signed in 2 (two) copies in English language. Each Party shall have 1 original copy.

13. Final Provisions and Delivery rules

13.1. In the case that some of the provisions hereto, or some of the supplementary provisions hereto are or shall become invalid or ineffective for any and all reasons, then the validity of other provisions hereto shall remain in effect. Instead of an invalid or ineffective provision, a reasonable amendment shall come into effect, which, in accordance with a valid system of law, shall be considered to be the closest to the intent hereto.

13.2. The Parties hereto declare that the information about each of them is true, in accordance with their actual condition and undertake to mutually inform each other about any and all changes of data mentioned hereto without undue delay following the change. The Parties undertake to inform the other Party about all details and information necessary to enforce any and all law associated herewith.

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13.3. The Parties hereto agree that written documents, which contain legally significant facts in accordance hereto, shall be delivered to each other by mail, in the form of registered letters, unless otherwise agreed hereto. For the purpose hereto, a written document containing legally significant facts is understood to be in particular the termination of Contract, withdrawal from Contract, written notice demanding payment and any other notices for payment (i.e. invoices included).

13.4. The Parties hereto agree that the address to deliver the written documents pursuant hereto shall be the address of the company and correspondence address set forth in the heading hereto, unless one party shall inform the other party about a change of address. In such case, the address deemed as delivery address shall be the said address about which one Party notified the other Party. The notifying Party shall not be liable for any potential consequences associated with failing on its obligation to inform the recipient pursuant to this provision hereto.

13.5. The Parties are obliged to ensure receipt of any letters at the said address. In case of a failure to receive the letter, the declaration of will of one of the Parties, which was addressed to the other Party, shall be deemed to be the third (3rd) day of depositing the unreceived letter with the deliverer. This shall apply also in the case whereby the other Party did not acquaint itself with the letter or is not present at the point of delivery, unless the case is that the Party could not acquaint itself with the delivery as a consequence of an error on the deliverer's part.

13.6. In the case of an undelivered undeposited letter, the letter shall be deemed delivered on the day the deliverer returns it to the sender. The withdrawal or termination hereto (if permitted by this Contract or the law), may be communicated to the other Party only in the form of a delivery with an advice of delivery. The previous provisions shall apply equally in this case.

13.7. With other manners of delivery (delivery by fax or e-mail), these shall be deemed delivered with the printing of the confirmation of the fax notice being sent from the technical equipment of the sender or with the displaying of a confirmation of the e-mail being sent on the technical equipment of the sender. This manner exempts addressing and delivering of: written documents containing the legally significant facts and other written documents, which are intended to produce legal effects in relation to the recipient (i.e. to establish, change or terminate rights or obligations).

13.8. Any notification or communication to be given hereunder shall be addressed to the respective Party as follows:

s. (BTS)

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IN WITNESS WHEREOF, the parties hereto have caused this Contract to be executed on their behalf by their duly authorized officers or agents as of the day and year set forth below.

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Na
Tit
Dat

AERO-GSE Sp. z o. o.

Signe

Nam

Title

Date

AERO-GSE Sp. z o. o.

- ANNEX I: Technical specification**
- ANNEX II: Declaration of conformity**
- ANNEX III: Electric scheme part 1 and part 2**
- ANNEX IV: User and maintenance manual**
- ANNEX V: Spare parts handbook**
- ANNEX VI: Water diagram**
- ANNEX VII: Offer**

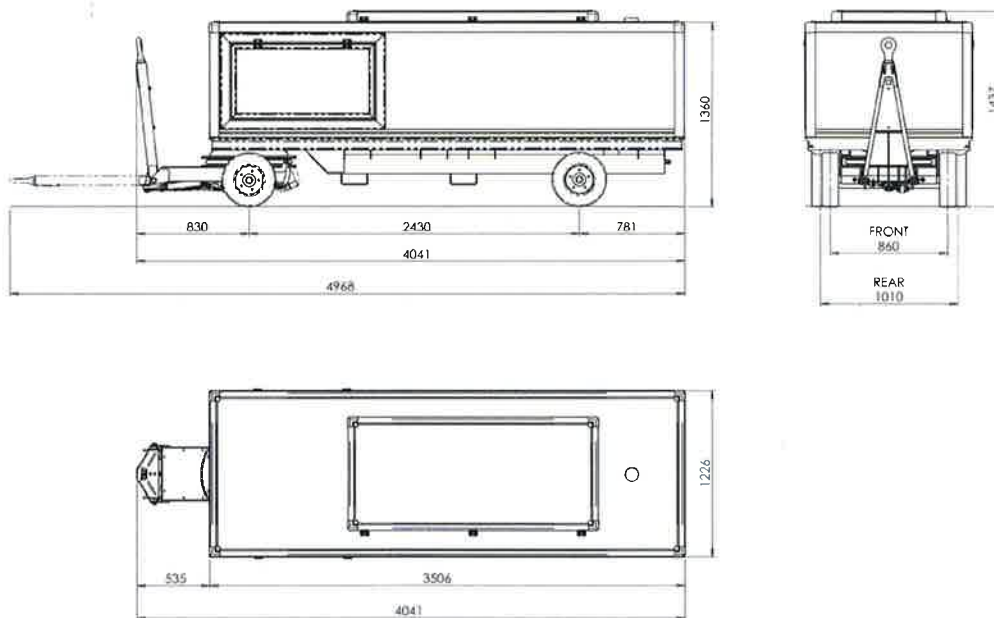
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Towable lavatory service unit TLSU - 1000. Technical specification.



Year of Production: 2019
Condition: New
Serial Number: TLSU 1000TO1/04

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Technical specification

CHASSIS	<ul style="list-style-type: none"> • Made on structural rectangular profile, treated with antirust epoxy and polyurethane • Paint (RAL on choice, white 9010 standard). • Weight 1200 kg. • Tow hitch.
AXLE	<ul style="list-style-type: none"> • Fixed rear axle. • Front axle is rigid and fixed to a turnable drawbar and hook, with 90° total angle of steering.
BRAKING SYSTEM	<ul style="list-style-type: none"> • The front axle is equipped with a brake pad, that is activated by upright raising the towbar, and it automatically activates if it accidentally unhooked during towing.
LIGHTING	<ul style="list-style-type: none"> • Reflective stripes rear and sides white / red • LED working lights LM 1400
CONTROLLER	<ul style="list-style-type: none"> • The unit is equipped with a logo siemens control module, controlling all the operations and safety functions • Allows special customization for any operating sequences and interlocks.
ENGINE	<ul style="list-style-type: none"> • Single-cylinder diesel engine • Small-size • High standards of efficiency and reliability • Air cooling.
OPERATING AREA	<ul style="list-style-type: none"> • Above the engine compartment, covered by anti-slip aluminum Surface • Steps for operator • Operational height up to 320 cm
DETERGENT CIRCUIT	<ul style="list-style-type: none"> • 350 L tank made in AISI 304 stainless steel with an optical level, manhole Ø 400 mm; • Centrifugal transfer pump, flow rate 90 l/min • Manual Three-way shut-off valve on the outlet • Digital liter counter • 4m Flexible hose Ø 25 for low pressure with a aircraft standard connection • Spherical valve 1" 1/5 for the total dump of the tank; • Manual emergency pump (optional).



WASTE WATER CIRCUIT	<ul style="list-style-type: none"> • 650 L tank made in AISI 304 stainless steel, , manhole Ø 400 mm • Vacuum Pump with hydraulic control, - 0.60 bar flow 666 l/min with overflow valve double ball • Manual dumping gate Ø 4". Alternatively the equipment can be provided with automatic opening and closing of tank dumping gate • Baffles inside water tank • 3,75 m flexible spiral hose Ø 4" equipped with aircraft standard connector
COMMANDS	<ul style="list-style-type: none"> • All commands available from controll panel fitted in the engine compartment
EQUIPMENT FOR LOW TEMPERATURES	<ul style="list-style-type: none"> • Completely closed insulated cabinet made of 40 mm insulated sandwich panel over the tanks and equipment • Warm-up winter kit 220V good for -40° (battery charger, engine/equipments compartment heated) • Connectors heaters • Water tank with internal heating • 4" dumping valve heaters • Control panel heater.
LADDER	<ul style="list-style-type: none"> • 1,8 m height
OPTIONS	<ul style="list-style-type: none"> • Lifting platform, fitted on the front right side of the chassis, with hydraulic lifting system, equipped with a device for emergency lowering in case of power failure



Fig.1 Rear view of the unit with lavatory hose and heated socket for aircraft connector



Fig.2 Front view with towing hook, ladder and lamp

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Fig.3 Control panel and water/disinfectant hose inside of thermo-insulated body

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Supplier : AERATUS Sp. z o.o. Sp. K.		Certificate N° 0105		
1/21 Lindego str, Krakow, 30-148, Poland NIP 6772423979 REGON 368038990		Number of sheets 1		
Order or contract No: 84.19 z 12.01.2019		DECLARATION OF CONFORMITY AND QUALITY		
Delivery date: 02.05.19				
Product Designation	Reference or type	Quantity	Serial number	Further information
Towed Aircraft Lavatory Service Unit	TLSU 1000	1	TLSU 1000TO1/04	Winterized
We certify that, subject to exceptions or concessions listed hereafter, the supplies detailed here were manufactured in accordance with the technical specifications, order or sub-order and that, all inspection operations and tests having been completed, the supplies comply IN EVERY RESPECT with the relevant particular specifications, drawings, and relevant standards and regulations in force, including Directive 2004/108/EC, EN 12312-13, ISO 9666, ISO 17775, EN 1915, IATA AHM 904, 910, 915 978 Functional specification for a towable lavatory service vehicle.				
Date:	01.05.2019			
Name and Function	Adam Nowak – Head of Technical Department			

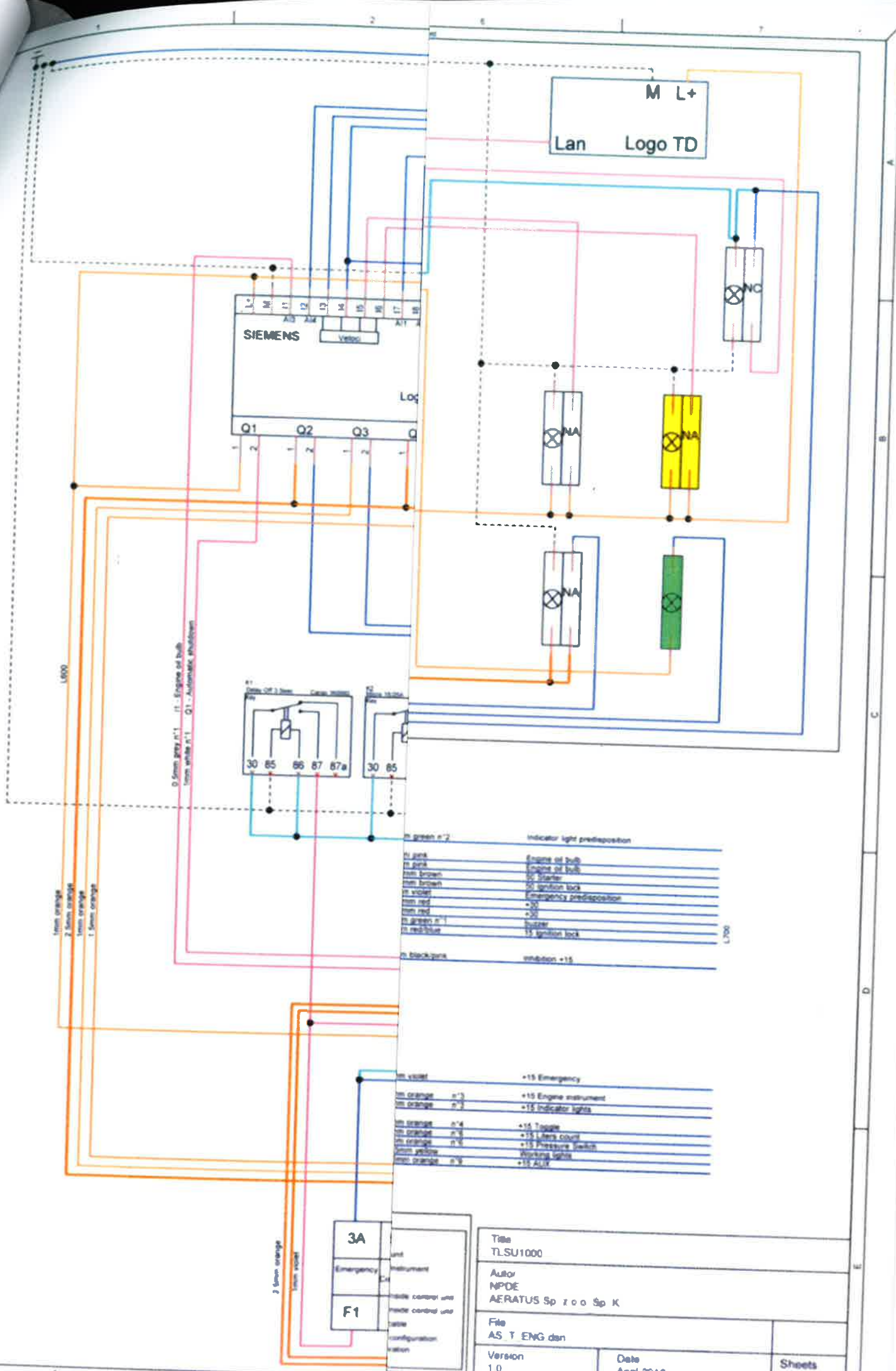
Signature



REGON 368038990 | EORI: 677242397900000
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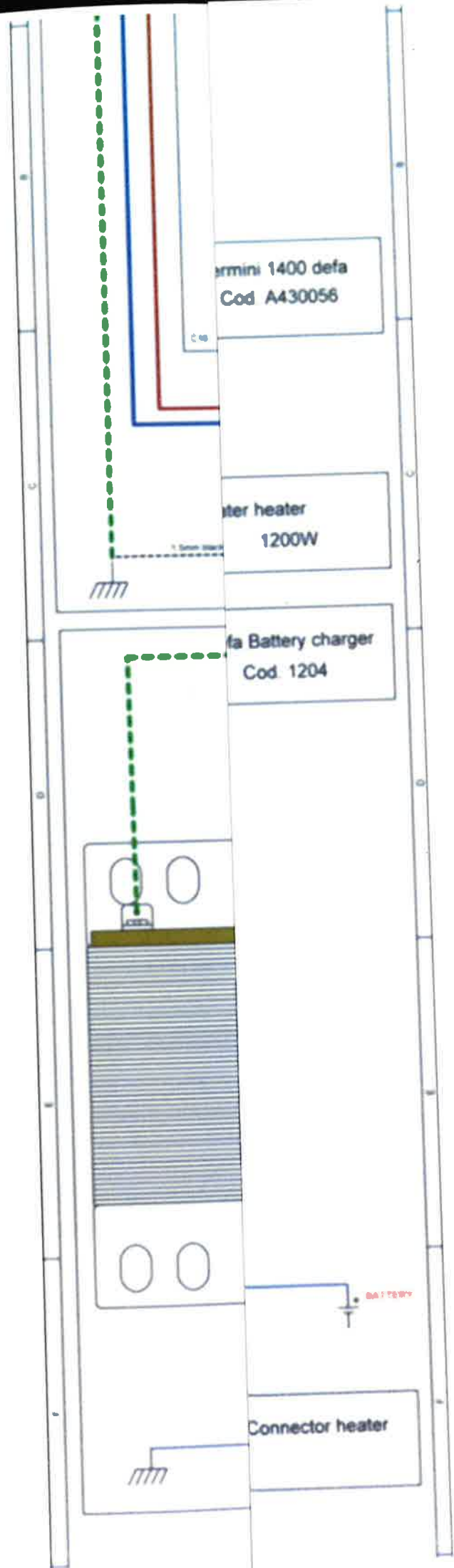
1.5mm orange
 2.5mm orange
 1.5mm orange
 1.5mm orange

0.5mm grey n°1 I1 - Engine oil bulb
 from white n°1 Q1 - Automatic shutdown

- Indicator light predisposition
- n° pink Engine oil bulb
 - n° pink Engine oil bulb
 - n° brown 50 Starter
 - n° brown 50 Ignition lock
 - n° violet Emergency predisposition
 - n° red +30
 - n° red +30
 - n° green n°1 buzzer
 - n° red/blue 15 Ignition lock
 - n° black/pink inhibition +15
- n° violet +15 Emergency
 n° orange n°3 +15 Engine instrument
 n° orange n°2 +15 Indicator lights
 n° orange n°4 +15 Trough
 n° orange n°5 +15 Lamps coil
 n° orange n°6 +15 Pressure Switch
 n° yellow Working lights
 n° orange n°9 +15 AUX



Title T.LSU1000		Version 1.0	Date April 2019	Sheets 1
Autor NPDE AERATUS Sp z o o Sp K				
File AS_T_ENG.dsn				



termini 1400 defa
Cod A430056

Water heater
1200W

Battery charger
Cod. 1204

Connector heater

BATTERY



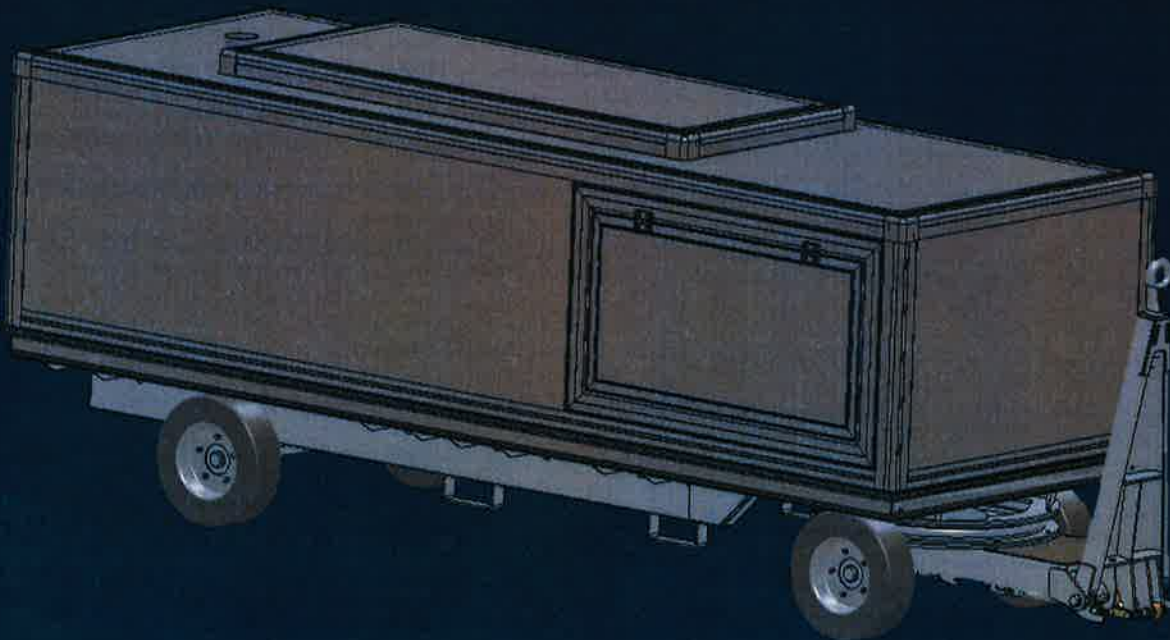
AERATUS

USER AND MAINTENANCE HANDBOOK

TLSU 1000

LAVATORY SERVICE UNIT

Diesel Towed




AERATUS

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ISO 9001:2015



AC 014
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TLSU 1000 - TOWED AIRCRAFT LAVATORY SERVICE UNIT

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TLSU 1000 - TOWED AIRCRAFT LAVATORY SERVICE UNIT

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1. INTRODUCTION

It is recommended to carefully read this User and Maintenance Manual before starting operating with the equipment, always paying full attention to the safety rules.

The User and Maintenance Manual is an integral part of the machinery. Therefore it must be kept in its proper pocket for the whole life span of the equipment, so that it can always be at the disposal of the personnel that is in charge of the machine's use and maintenance.

2. RESPONSIBILITY OF MANUFACTURER / USER

The **Manufacturer** is responsible of all defects deriving from project and/or performance errors of the baggage conveyor belt and of its chassis.

The **user** is responsible of all the unexpected difficulties that may occur to the machinery and/or to third parties by the use of the equipment in a different way from the use and maintenance rules contained in this document.

Especially, it must be reminded that the calibration of the maximum valves of the hydraulic system performed in the factory by the manufacturer, does not have to be modified for any reason, otherwise both the guarantee and the possible civil and penal responsibilities of the manufacturer and of the designer, with regards to anyone, will decay.

3. IDENTIFICATION OF THE EQUIPMENT



The equipment is identified by the label (Picture 1) that is riveted on the machine's chassis.

On the vehicle Identification Plate are indicated the following: Manufacturer postal address, machine model, equipment name, dry weight, production year, capacity load, serial number and power in Kw.



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TLSU 1000 - TOWED AIRCRAFT LAVATORY SERVICE UNIT

 		Aeratus sp. z o.o. sp. k.		CE	
www.aeratus.eu		sale3@aeratus.eu		service2@aeratus.eu	
TYPE		TOWED AIRCRAFT LAVATORY SERVICE UNIT			
Model		TLSU 1000			
Year of manufacturing	2019			Serial Number	TLSU 1000T01/04
GWV (kg)	1200			Payload	650Lt + 350Lt
Power (kW)	8				

Picture 1: Equipment's identification label

4. SAFETY RULES

ATTENTION: CAREFULLY READ THIS PARAGRAPH BEFORE STARTING OPERATING.

General rules

The instructions manual is addressed both to the personnel who uses the machinery and to that who operates in its range.

Read also the labels that are on the machinery and always keep them readable. The use of the machinery with no regulation labels, or with unreadable labels, is forbidden.

Make sure that the personnel to whom the equipment is committed is enough qualified to completely perform the foreseen safety procedures. The use of the machinery is reserved only to specialized personnel that has previously read and understood the use instructions.

Do not use the machinery if, after a preliminary inspection, it does not satisfy the requirements that are foreseen for the operative safety.

Never apply to the platform loads that are heavier than those foreseen.



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Do not use the machinery in an improper way, that is to say for different operations than those for which it was planned.

Always check that the machinery's area of use is clear from people and objects whose presence may impair its safety.

Make sure you have a complete visibility of the load's movement area. Stop the machinery in case of a lack of visibility. To perform the operations in case of a lack of visibility, the operator must be driven from the ground by properly trained personnel.

It is forbidden to lift the personnel who is not the operator of the equipment.

It is dangerous to stop under the platform.

It is forbidden to exclude the acoustic alarm devices (buzzer).

The manufacturer disclaims all responsibilities for any consequence deriving from modifications made without his approval.

Note on equipment: not all elements and systems described in this manual may be present on the equipment in your possession.

Safety rules for using of the lifting platform (Optional)

When using the platform must be observed following safety rules .

	The platform must never lean to other structures whether static or mobile
	Never apply bigger loads from the maximum foreseen to the platform (200 kg)
	when on the platform, the operator should wear protective helmet and the safety belt secured to the platform. Always make sure the door for access to the platform is fully closed and that the safety lock is engaged. The helmet must be worn even by the operator that work at the base of the equipment.
	The equipment is built for operations for vertical loads only, so it is forbidden to use for horizontal pull or push.
	It is forbidden to throw tools from bottom to top and vice versa, they must be passed employing a service cable.
	It is forbidden to stand on the chassis of the vehicle during operation of the platform.



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5. GENERAL CHARACTERISTICS

5.1 Description of the equipment:

The lavatory service unit AS 1000TD is mainly produced to supply water and dump waste water from the aircraft. As aircrafts' connector a placed on different heights, so the equipment is able to serve various airplanes. Especially in presence of hydraulic platform, Here below is a list of aircrafts that can be served.

Fixed platform height above ground 600 mm

- AIRBUS A300 B2/B4/C4
- A300 - 600/600C4
- AIRBUS A310 - 200/200C/300
- A318 / A319 / A320 / A321
- A380-800
- ATR42 100/200
- AVRO RJ70/RJ85/RJ100
- B727 - 100/100C/200
- B737 - 100/200/200C/300/400/500/600/700/800/900
- B747 - 100/200/300/100SF/200C/200F/400/400C/SP
- B767 - 200/200 ER/300/300 ER/400 ER
- DC9 - 15/21/32/41/51
- IL-62M / IL-86 / IL-96 / IL-114
- L1011 - 1/100/200/250/500
- MD-80
- TU-154B

Platform maximum height from ground 1800 mm

- A330-200/300
- A340-200/300/500/600
- BOEING B707 - 320B/320C
- B757 - 200/300
- B777 - 200/200 ER/300/300 ER
- MD-11
- TU-204

Platform maximum height from ground 3000 mm

- DC8 - 40/50 F/61/61 F/62/62 F/63/63 F
- DC10 - 10/10 CF/30/40/40 CF



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The machinery can be easily manoeuvred by only one operator, during the two phases of the machinery operating: towing and the positioning the equipment near to the aircraft.

The device consists essentially in:

1. **Main chassis** in electro-welded metallic profiles. Fixed rear axle. Front rigid axle, fixed at a and a towbar to allow handling and steering maneuvers. The front axle is equipped with a parking brake which fits raising the up the towbar, turning 90° in the vertical position. Tyres are on full super elastic.
2. **Vacuum and transport** waste systems consists in a 650 Lt capacity stainless steel tank, and a vacuum pump driven by hydraulic motor; The tank draining hydraulically operated (optional) by a 4" drain valve gate.
3. **Blue water transport** and racking service system by 350 Lt stainless steel tank capacity and a centrifugal pump driven by a hydraulic motor; the circuit is equipped with a pressure gauge, a pressure regulation valve and a three way manual shut-off valve.
4. **Washing system** with connection between the blue water tank and waste tank (optional).
5. **Fixed platform** with floor in antiskid aluminium, control panel fitted on the front left side of the equipment (optional).
6. **Lifting platform** (optional) consist in: an hydraulic elevator frame with locking valve, platform with railing and door, antiskid floor, control panel fitted on the rail and an emergency valve.

5.2 Controls

Controls of thermal engine are fitted inside compartment on the equipment left side. While commands for equipment's operations, such as: water supply, fuel level light, emergency stop button, hand accelerator and working light switch all are placed on the equipment compartment on the right side.

The controls for the water supply and the vacuum pump are placed on the control panel on the front side of the equipment or in the service platform.

5.3 Hydraulic system (only with elevating platform)

The vehicle's hydraulic system allows the movement of all devices. The gear pump is fitted on the diesel-type engine.

The services pump allows the activation of the service platform cylinder (if present), as well the orbital motor of the vacuum pump and water pump;



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The hydraulic oil tank capacity is 30 Lt. In order to keep the hydraulic fluid at a enough cleaning level, the system is equipped with a filter on the return.

The lifting cylinder/s of the service platform is simple unthreading and double effect, equipped with locking valve.

Hydraulic distributors are controlled by solenoids.

5.4 Electrical system

The vehicle's electric system works at the voltage of 12 V for the command's feeding and for the lighting and signalling.

On the equipment there is a logic module able to control all the security functions of the machine and the functioning sequences, reducing the electric wiring and making the clocking of certain functions possible, that are directly programmable by the user.

The system integrates its functions:

- controller
- command unit and visualization back-enlightened feed
- interface for expansion modules
- interface for programme (card) and PC cable module
- base functions for common use, for ex. delayed ignition, delayed power off, current pulse relais and software switch
- timer
- digital and analogical markers
- input and output according to the kind of device.

The module is located in the box placed in the engine compartment. the electrical system of the vehicle includes two major subsystems:

A. Engine

The system consists mainly in the engine starting system and in the generation, grounded by the battery. The alternator with rectifier and voltage regulator provides power even with the heat engine at idle. The protection of the secondary circuits is made by fuses placed in the electric box.

B. Servo controls and hydraulic circuit

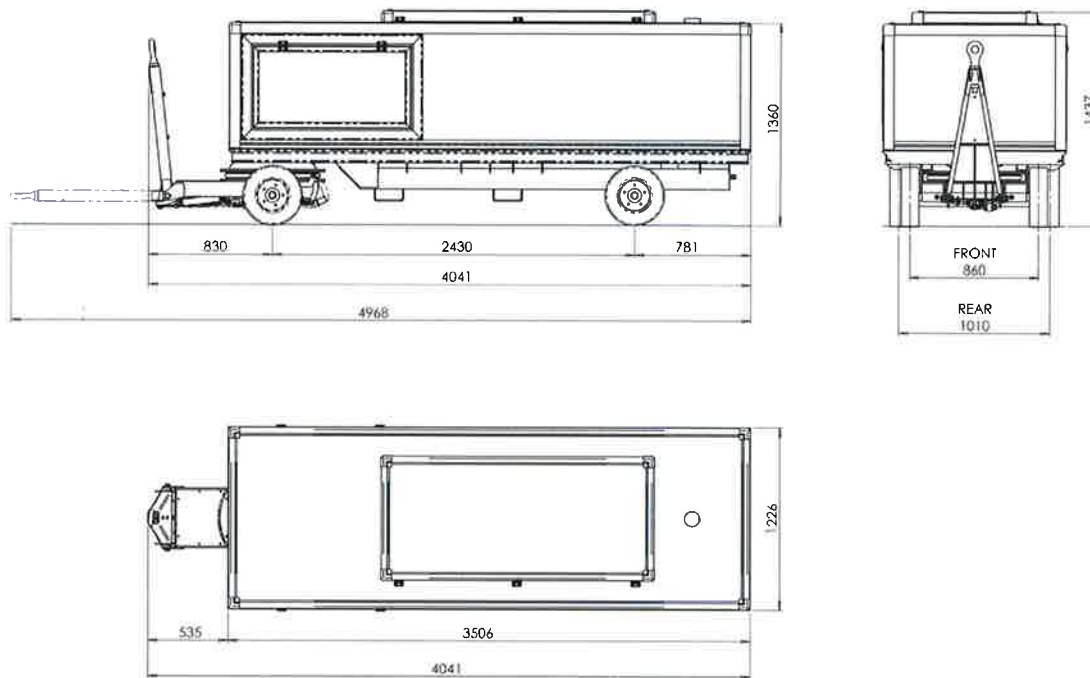
The distributors of the hydraulic circuit are operated by solenoids bidirectional (with platform only).



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5.5 General characteristics



Picture 2: TOWED LAVATORY SERVICE UNIT AS 1000TD

General

Length.....	4968 mm
Width	1226 mm
Rear roadway	1010 mm
Front roadway	860 mm

Clearance from the ground

Front axle	85 mm
Rear axle	165 mm

Elevating service platform (optional)



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Minimum height from ground 600 mm
Maximum elevation height 1800/3000 mm
Width 820 mm
Length 800 mm
Max payload: 200 Kg

5.5.1 Weight

Empty mass: 1100 kg

5.5.2 Engine

Type: LOMBARDINI, diesel, single cylinder, model 15LD440
Power output: 8,1 kW at 3600 giri/min

5.5.3 Speed

Max towing speed: 30 km/h

5.5.4 Brake system

Parking brakes: mechanical on front axle, driven by towbar

5.5.5 Axles

Rear axle rigid
Front axle rigid, fitted on slewing ring $\pm 90^\circ$ rotation

5.5.6 Wheels

Type: full (super elastic)
Size: 4.00 x 8
Hubs junction: 5 holes

5.5.7 Electric system

12 V System

Battery: 12 V, 50 Ah



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5.5.8 Hydraulic system (with platform only)

Services Pump:

Type: gears pump
command: in line with the engine
capacity: 11 cm³/rev

Water pump hydraulic motor:

type: gears pump
command services pump
capacity: 14 cm³/rev

5.5.9 Water supply system

Water pump

Type: centrifugal
Prevalence : 35 m
Nominal flow rate: 120 l/min

Equipped with

- Manual shut-off valve on the delivery
- Pressure regulator (Logo! TDE)
- Pressure gauge (Logo! TDE)
- Liters counter
- Flexible pipe for low pressure with standard connector

Tank

Capacity: 350 Lt
Material: stainless steel AISI 304 manhole D. 500 mm
Supports with strips and elements in NR-SBR elastomer density 510 kg/m³

5.5.10 Sewage drain system

Vacuum pump (optional)

Command: hydraulic
Max vacuum: - 0.60 bar
Flow rate: 680 l/min



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Equipped with

- 4" drain gate valve (hydraulic driven optional)
- Ball overfill valve
- Washing circuit valve
- Level sight glass
- Flexible pipe for drain with standard connector
- Rigid pipes for internal tank washing

Tank

Capacity: 650 Lt

Material: stainless steel AISI 304 manhole D. 500 mm

Supports with strips and elements in NR-SBR elastomer density 510 kg/m³

5.5.11 Tanks

Diesel 5 Lt



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6. INSTRUMENTS AND CONTROLS



Picture 3: Instrumentations

6.1 Engine panel

- A. **IGNITION KEY:** The key, allows the ignition of the engine; the first position (1) switch the instruments panel on, while the second (2), with auto-return, allows the ignition motor.
- B. **ENGINE-CHECK LIGHT:** this light is normally on when the engine is running correctly without any malfunction.
- C. **INSUFFICIENT ENGINE OIL PRESSURE LIGHT:** this light is on when pressure oil necessary for engine lubrication is low or nothing, normally the light remains on for some seconds; should it remains on, immediately switch off the engine and look for the cause of the warning light on.
- D. **ALTERNATOR WARNING LIGHT.** The warning light turns on when the alternator does not charge the battery, with the engine at the minimum it is possible that the warning light remain on, even that doesn't indicate a real malfunctions, accelerating the engine from the minimum, the warning light should automatically switch off immediately; if this does not happen, check the status of the voltage regulator, the rectifier assembly and the brushes.



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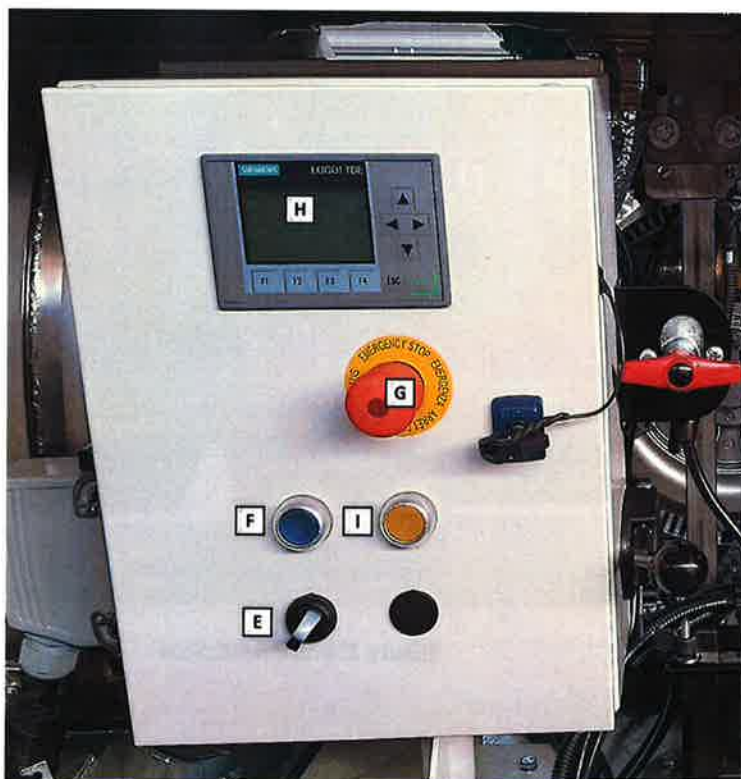


Figura 4: Comandi

- E. WORKING LIGHT SWITCH
- F. START / STOP TRANSFER PUMP: when the thermal engine is running, the water pump will be activated by pressing the button; to turn off the pump, press the same button again
- G. THERMAL MOTOR EMERGENCY STOP SWITCH: turns off the thermal engine and disconnects the battery; to reactivate, turn the button in the direction indicated through the arrows. The engine must be restarted from the main panel.
- H. LOGO TDE!
- I. START / STOP VACUUM PUMP: with engine on, the vacuum pump is driven by pushing the button, to turn off the pump push the button again.



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Picture 5: Hand accelerator

- J. Hand accelerator: engine is equipped with a manual accelerator located inside the right side of the vehicle, which accelerates the engine when the water pump is activated by adjusting the delivery pressure.

6.2 Brake

The front axle is equipped with a brake system that will be engaged when the towbar is raised by turning it 90 ° in a vertical position. The system is automatic when the towbar hook is not engaged on tractor.

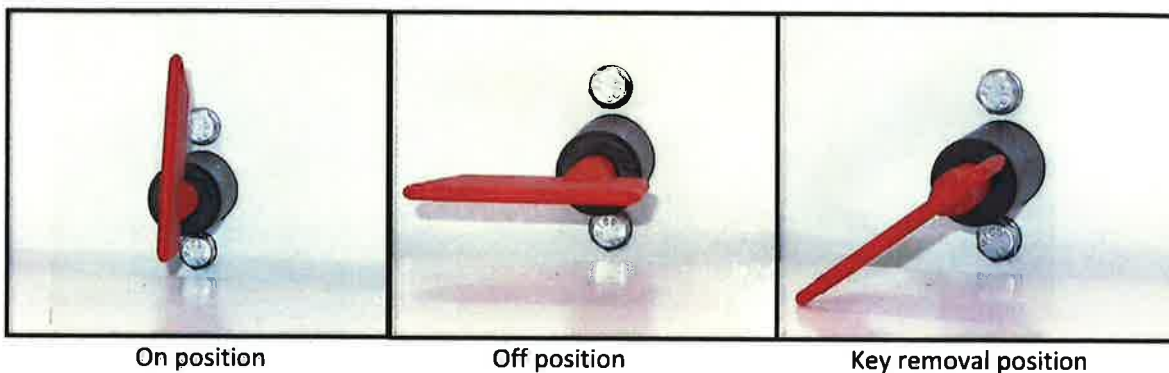


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6.3 Battery master switch

On the engine bonnet side, there is a battery master-switch that enables the removal of the electric feed from the battery, avoiding battery energy wastes.



6.4 Platform control panel (OPTIONAL)



Picture 6: Platform control panel

On the platform there are the controls for the following functions:

- A. EMERGENCY PUSHBUTTON: The emergency stop cut off the batteries and the engine. To restore the system, taking the button in the start position after rotating it.
- B. PLATFORM LIFTING: with engine on, allows the platform lifting.
- C. PLATFORM LOWERING: with engine on, allows the platform lowering.
- D. START / STOP WATER PUMP: with engine on, the water pump is driven by pushing the button, to turn off the pump push the button again.



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- E. **START / STOP REVERSE WATER PUMP** (optional): with engine on, the water pump is driven in reverse by keeping pushed the button, to turn off the pump just leave the button.

Note: buttons are enlightened for better night visibility.

6.4 220V Heaters

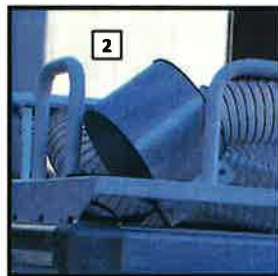
On the equipment are installed different kind of heaters that will work during stationary period, so when the vehicle is switched OFF is possible to connect the equipment to the 220V by the cable reel in the right side of the equipment, when the cable is connected to the electricity a red light (pic.7) will be ON.



Picture 7: Hose storage



Picture 8



Picture 9



Picture 10



Picture 11

1. Battery charger 220V - 65W (Pic. 8)
2. 4" Connector heaters n° 1 - 12V x 40W (pic. 9)
3. Insulated box heater 220V - 1400W (Pic. 10)
4. Electrical heating for blue water tank (Pic. 11)



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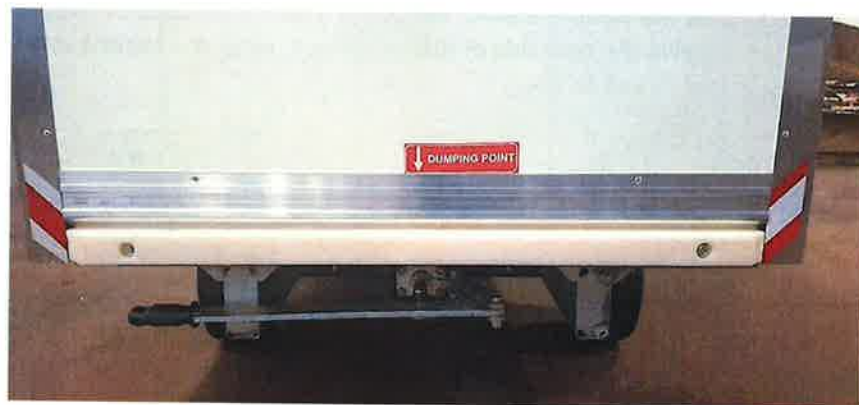
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ATTENTION: NO MAINTENANCE IS ALLOWED WHEN THE VEHICLE IS CONNECTED TO THE 220V ELECTRICITY.

6.5 Total discharging lever

To proceed with discharging the waste water from the waste tank, pull the lever shown in picture 12



Picture 12

6.6 Automatic water reabsorption

The unit is equipped with automatic water reabsorption of the remained water in water supply hose, this automatic system comes activated immediately once water pump has concluded to supply water. The activation of this system is accompanied by an acoustic signal. In order to increase the reabsorption operation, open the ball valve indicated in picture 13.



Picture 13



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7. INSTRUCTIONS FOR USE AND OPERATION

7.1 General characteristics

The toilet service unit AS 1000TD is designed to perform the discharge of waste water and to supply water to aircraft WC.

For easier operations of connection to the aircraft tanks, the vehicle is equipped with a fixed platform service (liftable in option), located at the front side of the equipment.

The lifting and filling operations are performed by the operator directly from the platform.

Is however possible operate from the ground as the panel is visible and accessible without stepping on the platform.

7.2 Inspections before starting

Check the machine before its use and every eight hours or daily, according to what explained in the maintenance chapter included in this Use and Maintenance handbook.



Before starting the machine, perform the following controls:

- Oleo-dynamic circuit, or fuel leaks.
- Fuel level
- Engine oil level
- Tyres condition

7.3 Engine start

Before start the engine, the user must be at his driving place.

- a. Turn the ignition key, (pic. 3 – A) situated on the control panel in the 1 position, the engine control panel will be ON.
- b. Rotate it until the START position in order to activate the ignition engine. When the engine is on, let the key, which automatically goes back to the 1 position and the engine will be ON.

Do not keep the ignition engine on for more than 30 seconds each time. If the engine does not start, take the key back to the OFF position, wait for 60 seconds and then try again.



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7.4 Automatic shutdown

In order to preserve the engine, the vehicle is equipped with an automatic power shut-off operated by the engine oil pressure; shutdown happens when there is no oil pressure in the engine. To reactivate the engine, first check the engine oil level then proceed as described in paragraph 7.3

7.5 Automatic engine shutdown (optional)

The vehicle is equipped with an automatic engine shutdown operated by LOGO!; shutdown happens when you leave the engine switched on and is not performed any operation (movement of the platform, vacuum pump, water pump) after 10 minutes, to reactivate the half proceed as described in paragraph 7.3

7.6 Towing of the equipment

To tow the equipment, act as explained following:

1. move the towbar in the horizontal position
2. approach with tractor and engage the towbar's hook to pull the equipment.

7.7 Security

- The maximum liftable load on service platform is 200 kg (one operator and equipment).
- Lifting the platform is only possible with the access door closed.
- The emergency stop buttons, cut off the power supply of the system and turn off the engine. After reactivation of the switch must restart the engine.

7.8 Under-board operations

7.8.1 Approaching and lifting up

Approach to the aircraft by positioning the machine ready for its lifting up.



ATTENTION: ALWAYS DRAW CLOSE TO THE AIRCRAFT AT SLOW SPEED ; AVOID HITTING THE AIRCRAFT'S SURFACES WITH THE PLATFORM



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Normally, the procedure is as follows:

- positioning the machine at a proper distance from the aircraft's connections and stop it;
- access to the service platform by opening and then closing the entry gate;
- raising the platform to the required height by controlling the movement by pushing the button (B pic. 4). The engine automatically accelerate in the lifting phase to provide power to the hydraulic system.

7.8.2 Potable water supply

Reached the correct position must:

- plug the connector to the aircraft tank;



- Set the quantity of water to supply pressing on **F1** o **F2** to increase and **F3** e **F4** to decrease.



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- After setting determining the water liters needed to supply, start the water pump by pressing on the button **F**, automatically on the monitor **H** the determined liters will decrease and the delivered liters will be shown;
- The pump will automatically stop once the value of liters already delivered reaches 0, it's possible to stop water pump pressing on **F**
- It's possible to supply water without setting the predetermined value, simply by pressing the **F** button, in this case the liters transferring and those already delivered will be displayed on the monitor.
- After each supply, the water meter comes automatically set at 0
- It's possible to adjust the water supply pressure through of the manual accelerator.
- The water level in the tank is visible from the front transparent indicator.
- In case of emergency, push the emergency stop button **1** to stop the engine.

7.8.3 Aircraft waste dumping

- After the approaching phases, reached height required must:
- plug the connector to the aircraft tank
- Put the manual accelerator at the minimum



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- switch on the vacuum pump button I; accelerate through the manual accelerator
- It is possible to check the maximum level in the tank through the sight glass on the waste tank. The circuit is protected from the maximum exceeding level, by an overflow ball valve, which prevents the suction when the tank is full.
- to partially fill is possible stop the pump by pushing again the button I.

7.8.4 Disconnecting and leaving the aircraft

When service phases completed is necessary to:

- disconnect the connectors;
- lower the platform completely
- once you reach the minimum height, exit from the service platform by opening and then closing the entry gate
- do the necessary operations to get away from the aircraft.

7.9 Emergency Procedures

7.9.1 Platform lowering (if present)

In case of service pump or engine failure, the platform is equipped with an auxiliary system for platform lowering, manually actuatable through a valve located at the platform side (pic. 14).



Picture 14: Platform

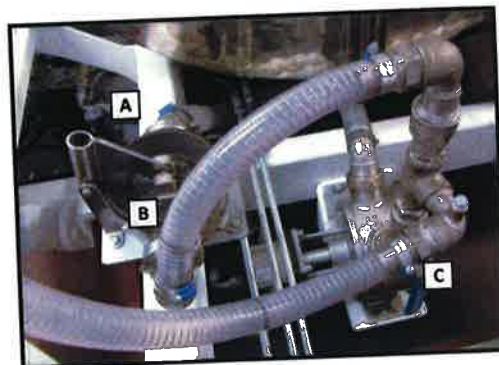


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7.9.2 Water supply (optional)

The vehicle is equipped with a water supply auxiliary system to the aircraft (in case of service pump or engine failure); consists in a single membrane manual pump, single-acting and self-priming (pic. 15) located near the lifting platform, and is able to supply 60 Lt / min. To perform the manually supply, you must close the shutoff valve C (Fig. 15) then hooking the lever A (Fig. 15) to the pump B (Fig. 15) and operate it manually.



Picture 15: Manual filling water pump

7.9.1 Vehicle lifting

in the lower part of the equipment frame, there are lifting housing in order to facilitate the lifting by forklift



Figura 16: Housing for lifting using forklift



7.10 Control unit LOGO! - programming (optional)

It is possible to programme the logic control unit according to the follows procedure.



Picture 17: Logic unit

“Parameterization” modality:

to pass from the normal “RUN” functioning modality to the “Parameterization” modality necessary for the modification of the values, press the **ESC** button:

Mo 09:00	... Press ESC
2003-01-27	

The operating system passes to the “Parameterization” modality and displays the respective menu:

>Stop	
Set Param	
Set Clock	
Prg Name	

The menu allows the following operations:

a) Display of the command program’s name

To **display** the name of the command’s program, perform the following operations:

1. Shift through the buttons ▲ or ▼ and choose the item “**Prg Name**”

Stop	
Set Param	
Set Clock	
>Prg Name	



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2. Press OK

On the display the name of the program appears. In the "Parameterization" way of functioning it is not allowed to make modifications.

b) Choice of parameters

1. In the menu choose the option "Set Param" through the buttons ▲ or ▼

Stop	
>Set Param	
Set Clock	
Prg Name	

2. press OK button.

The system displays the first parameter. If any parameter can't be set, through the ESC button it is possible to go back to the main "Parameterization" menu.

Every parameter is marked through the block number (Bx) and the parameter's initials.

To enter the modification page:

B1	Block number
T =60:00s	Value set for the T parameter (time)
Ta =00:00s	Current time

1. Select the desired parameter through the buttons ▲ or ▼.
2. If you wish to modify the selected parameter, press the OK button.

c) Parameters' modification

1. Shift the pointer to the point where the item to be modified is: buttons ◀ or ▶
2. Modify the value: buttons ▲ or ▼
3. Confirm the value: OK button

B9	Modification: button ▲ or ▼
T =80:00s	Shift: button ◀ or ▶ <i>↖ ↗ ↘ ↙</i>
Ta =06:00s	

Finished operation: OK button



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Attention

If you act on the temporal parameters through the RUN parameter, it is possible to also modify the time measurement unit (s = seconds, m = minutes, h = hours). This is not valid if the temporal parameter is the result of another function. In this case it is not allowed to modify the value nor the time measurement unit.

By modifying the time measurement unit, the current time value is to be reset to 0.

Current value of T time.

If the T time is displayed, it appears as follows:

B9 T =80:00s	Parameterized T time
Ta =06:00s	Ta current time

Only the T time can be modified.

Current value of an exercise hours counter

If the parameters of an exercise hours counter are displayed, they appear as follows:

B16 MI =0100h MN =0017h OT =00083h	Interval Remaining time Passed functioning time
---	---

Only the MI interval can be modified.

d) Set of date and hour

To set the date and the hour, proceed as it follows:

Pass to the Parameterization way of functioning

1. Choose in the menu the item "Set Clock" (buttons ▲ or ▼ and press the OK button.

Set Clock Mo 15:30 YYYY-MM-DD 2003-01-27	The pointer is on the day of the Week
---	---------------------------------------

2. Choose the day of the week: buttons ▲ or ▼
3. Shift the pointer to the subsequent position: buttons ▲ or ▼
4. Modify the value: buttons ▲ or ▼
5. Properly set the hour, repeat points 4 and 5.
6. Properly set the date, repeat points 4 and 5.
7. Confirm the introductions: OK button.



e) Variable parameters

The following parameters can be modified by the operator (on request):

Bx	Descrizione	Note
WORKING	LIFE HOURS AND PLANNED MAINTENANCE	MI : Maintenance interval – Programmable from 0 to 9999 hours MN : Remaining time to maintenance OT : Functioning hours spent

f) Alarms:

Have been included the following alarms:

1. Scheduled maintenance interval reached (set to 150 hours in the factory)

On the described conditions, will hear a buzzer sound from and the LOGO's display shows a descriptive message; In case of alarm in step 1, the message and then the alarm will be reset by pressing the "OK" button situated close the screen on the control unit in electric box;

7.11 Logo! inputs and outputs visualization

It is possible to display the electrical signals input and output (closed relay) of the control unit, refer to the table 8.15.2 for an easier self-check-up.

If on the main screen there is displayed one working screen (ex. platform or pumps) push the arrows button ▼ to see date and time than proceed as follow:

From the main screen that is displayed when the Logo! is running, when displayed date and time, by one-touch the button to the right ► you see the I: (input signals), pressing twice ► ► will display the Q: (output signals).

Following the table 8.15.2 is possible to know the proper function for each input an output:

there are three lines, 0... 1... 2... to on the line 0... is possible to see from I1 to I9 to line 1... from I10 to I19 and to line 2... from I 21 to I24; the same for output so Q1 to Q9 ecx. exc.



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8. MAINTENANCE INTERVENTIONS

8.1 Introduction

The importance of a proper lubrication, of periodical inspections and of the adjustment does not have to be neglected, because from all of this depend very much the reliability and the efficient functioning of the vehicle. It is therefore recommended that the lubrication and the maintenance are performed by the personnel according to the prescribed intervals. Anyway, under really unfavourable weather conditions, it may be necessary to reduce the maintenance intervals.

8.2 General characteristics

This section of the handbook includes a Maintenance Program and the instructions concerning the maintenance and inspection's operations.

The maintenance programme counts to perform inspection, lubrication and maintenance operations at regular intervals of time.



ATTENTION: MAKE SURE THAT AFTER THE MAINTENANCE OPERATIONS ALL THE COVERS AND THE SECURITY ITEMS WERE PROPERLY RE-ASSEMBLED BEFORE USING THE MACHINE AGAIN.

8.3 Engine



WARNING: For the LOMBARDINI engine maintenance always refer to the original service manual attached.

1. Kind of lubricating oil

To refilling or replacement of the engine lubricating oil, use oil type:
see the engine manual.

2. Check of engine oil's level

- Make sure that the vehicle is on a flat surface and that the engine is off.
- Take back the bar, clean it with a cloth and introduce it in its seat until the bottom of it.
- Take back the bar once again and check that the level is comprised between the "MAX" and "MIN" gauge; if the level is lower, top up with a proper lubricant.
- Introduce again the bar in its seat



ATTENTION: AVOID LETTING THE OIL LEVEL FALL UNDER THE MINIMUM SO TO PREVENT PERMANENT DAMAGES.



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8.4 Battery



ATTENTION: DISCONNECT BOTH THE ALTERNATOR AND THE BATTERY, IN CASE YOU NEED TO PERFORM ARC WELDINGS ON THE VEHICLE; THE NON-RESPECT OF SUCH INDICATION CAN CAUSE SERIOUS DAMAGES.

Check that the negative pole is earthed.

The battery is placed on the vehicle's left side, in front of the thermal engine; periodically check the electrolyte's level and, in case, top it up until the level indicated by the notches.



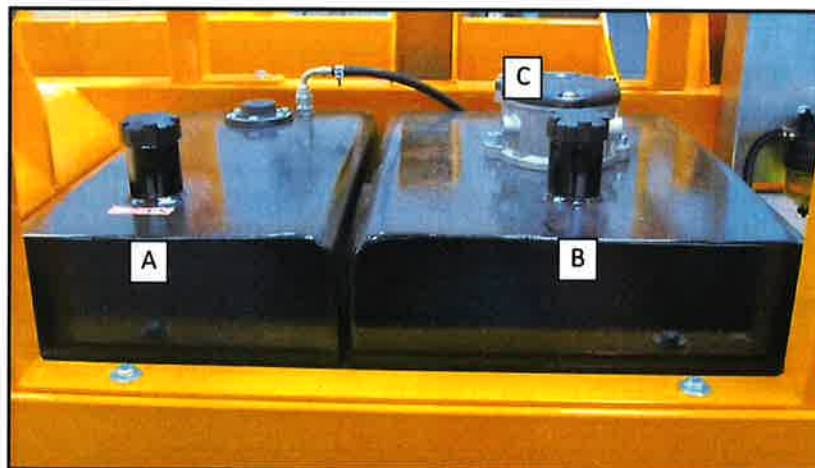
ATTENTION: FOR THE TOPPING UP USE ONLY DISTILLED WATER; DO NOT EXCEED THE MAXIMUM LEVEL

After filling in, clean the battery and check the condition of the terminals and make sure the connections are well fastened. For the charging, use an external battery charger.

8.5 Tyres

Remove little stones and other objects that were possibly blocked into the tyres. Replace the tyres if they show damages on the treads or on their sides.

8.6 Hydraulic system (if present)



Picture 18: Hydraulic oil tank (A) Fuel tank (B), hydraulic oil filter (C)

Daily check the level of the hydraulic oil in the tank, when stabilizers and main cylinder are completely retracted.



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It is recommended to empty, clean and fill again the circuit every 2000 hours and every time it is believed necessary, particularly in the following events:

- presence of debris on the bottom of the tank;
- high temperature or improper functioning of the system;
- rancid smell
- a component's overheating signs;
- presence of water or emulsions

Follow the procedure:

- remove the exhaust plug from the tank and empty the oil in a proper container;
- empty all cylinders and distributors;
- replace the filter and close the exhaust plug again;
- fill the circuit with a kind of oil that is approved and perform the air purge where necessary;
- try the system's functioning

The hydraulic system must be kept carefully clean so to ensure a functioning without troubles.

8.7 Hydraulic plant's oil (if present)

Suggested oil:

make:.....ESSO

type:NUTO H

The NUTO H 32, NUTO H 46, NUTO 68 oils are the most used in the hydraulic commands and in the hydrostatic transmissions.

The following table shows the choice parameters of the ISO viscosity's gradation according to the working temperature.

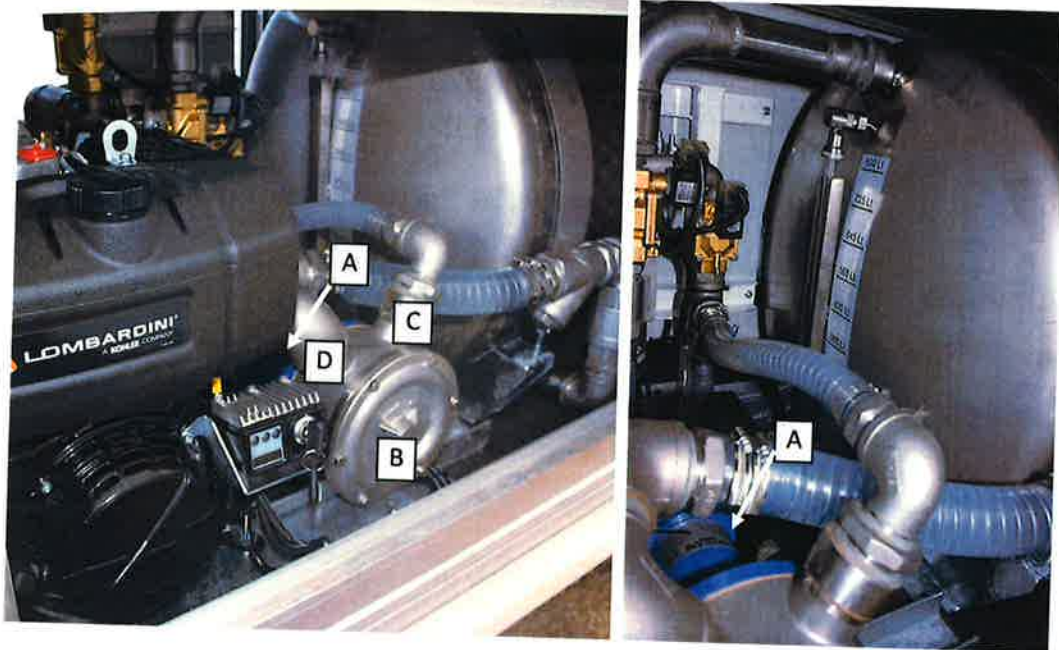
<u>°C temperature's interval</u>	NUTO H	<u>°C temperature's interval</u>	NUTO H
-57 : +7	5	-8 : +88	68
-29 : +41	15	+7 : +91	100
-15 : +62	32	+16 : +121	150
-7 : +74	46		



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8.8 Water Circuit



Picture 19: A- Electromagnetic clutch or hydraulic motor; B- Water pump; C- Water supply; D- Water tank connection.

Periodically check for leaks in the circuit.



Picture 20: Tank total drain shut-off valve.



Picture 21: Tank filling valve

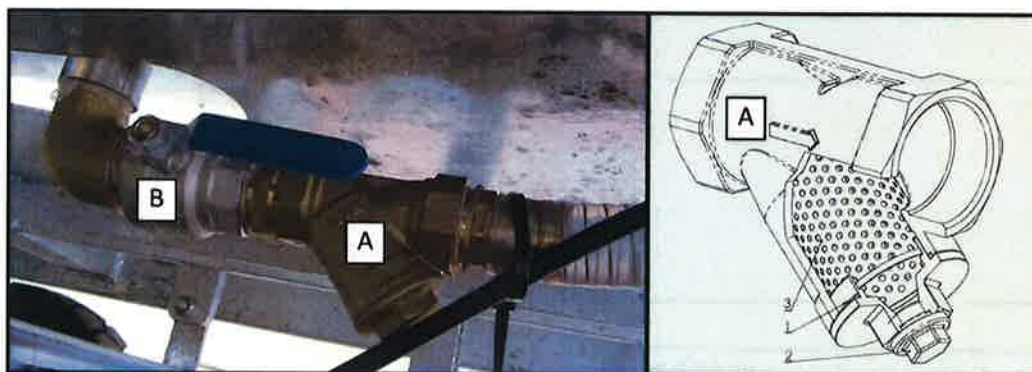
For the tank emptying, use the valve located in the rear lower part of the tank (pic. 20), taking care to partially open the manhole (pic. 21) for easy emptying; While for the load use the the manhole (pic. 21), placed in the tank upper part.



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8.9 Water filters



Picture 22: Primary filter

Under the tank, at the pump inlet, there is a Y filter threaded, stainless steel housing for clear water and bronze for detergent, to protect the pump from impurities in the system (stones, rust, welding residues external parts).

Maintenance

Be sure to keep cleaned the filter cartridge; lack of cleaning compromises the functionality of the filter up to provoke deformation or breakage.

The drain plugs, guarantee complete discharge of impurities in both installation positions.

To clean the filter (A-fig. 22) close the valve (B-fig. 22) located on the front bottom of the tank and unscrew the cap (2-Fig. 22) remove the filter (3-Fig. 22) and clean it under running water for several minutes.



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8.10 Lubrication points

Main lubrication points are indicated in picture 23.



Picture 23: Lubrication points



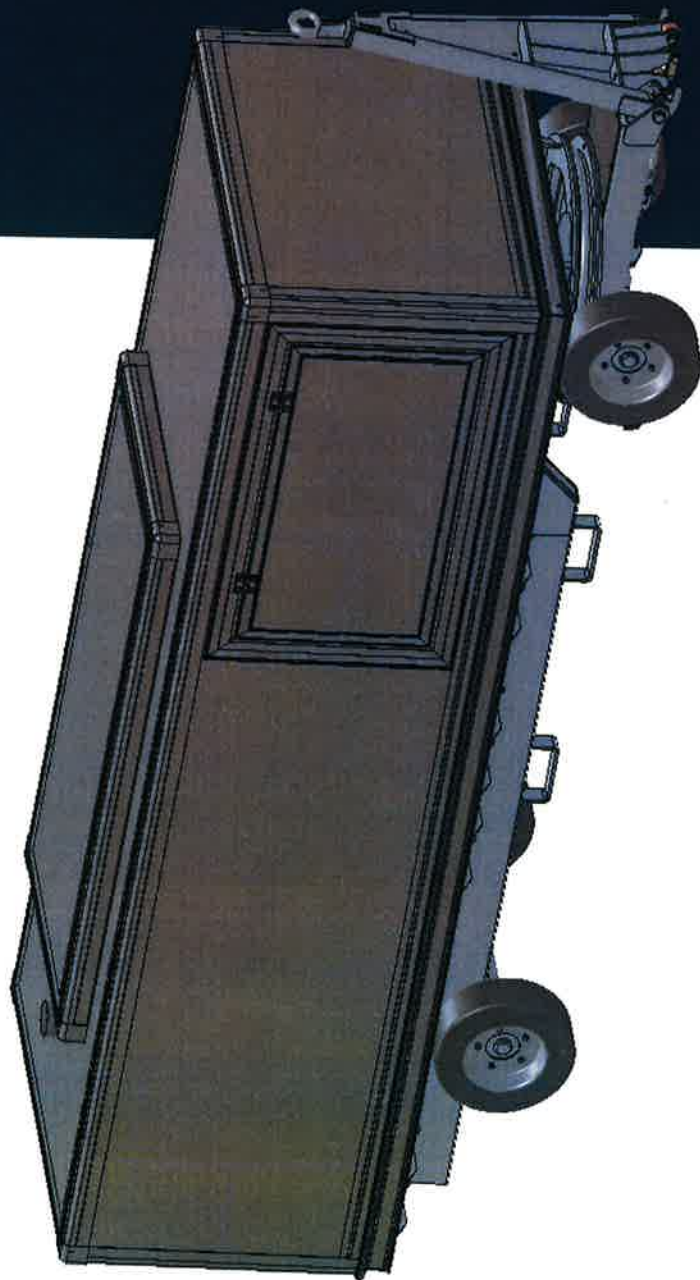
8.11 Maintenance intervals

10 h	50 h	100 h	200 h	2000 h	
					Hydraulic circuit check: <ul style="list-style-type: none"> • Oil level • filter clogging • leaks
					Battery liquid and charge check
					Verify proper operation of lighting devices
					verify proper operation of controls devices
					Tyres condition
					Fill all grease fittings
					Replace hydraulic filter
					Charge batteries when not using the vehicle for more than 6 months
					Hydraulic oil replacement
					Hydraulic oil replacement every 9 months
					Check every 6 months for the proper operation of platform bearings

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SPARE PARTS HANDBOOK

TLSU 1000



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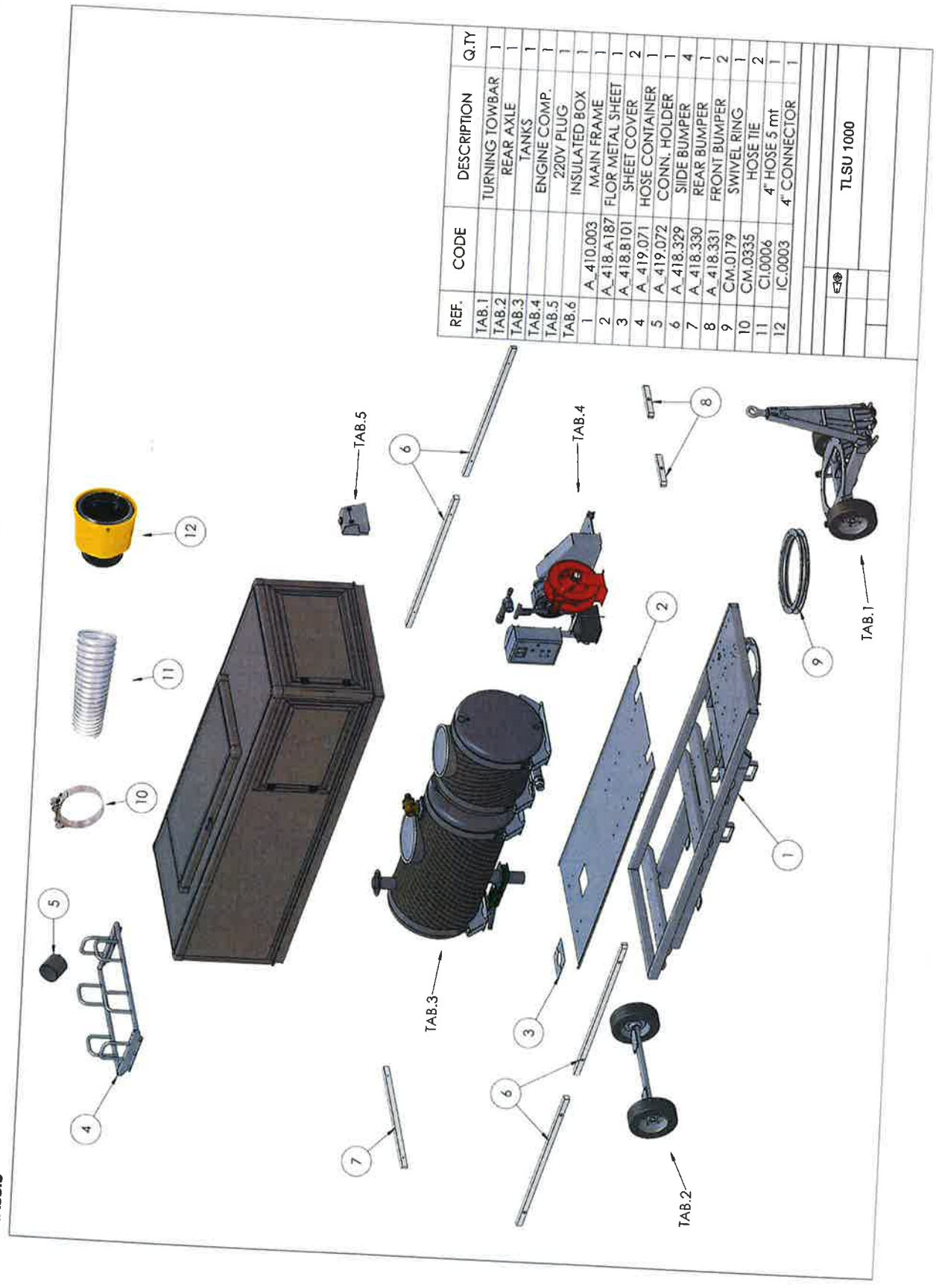
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1/21 Lindego str., Krakow, Poland 30-148

phone: +48 605 657 388

e-mail: admin1@aeratus.eu

web: www.aeratus.eu

1. TAB.0 CHASSIS



REF.	CODE	DESCRIPTION	Q.TY
TAB.1		TURNING TOWBAR	1
TAB.2		REAR AXLE	1
TAB.3		TANKS	1
TAB.4		ENGINE COMP.	1
TAB.5		220V PLUG	1
TAB.6		INSULATED BOX	1
1	A.410.003	MAIN FRAME	1
2	A.418.A187	FLOOR METAL SHEET	1
3	A.418.B101	SHEET COVER	2
4	A.419.071	HOSE CONTAINER	1
5	A.419.072	CONN. HOLDER	1
6	A.418.329	SLIDE BUMPER	4
7	A.418.330	REAR BUMPER	1
8	A.418.331	FRONT BUMPER	2
9	CM.0179	SWIVEL RING	1
10	CM.0335	HOSE TIE	2
11	CI.0006	4" HOSE 5 mt	1
12	IC.0003	4" CONNECTOR	1
TLSU 1000			

2. TAB. 1

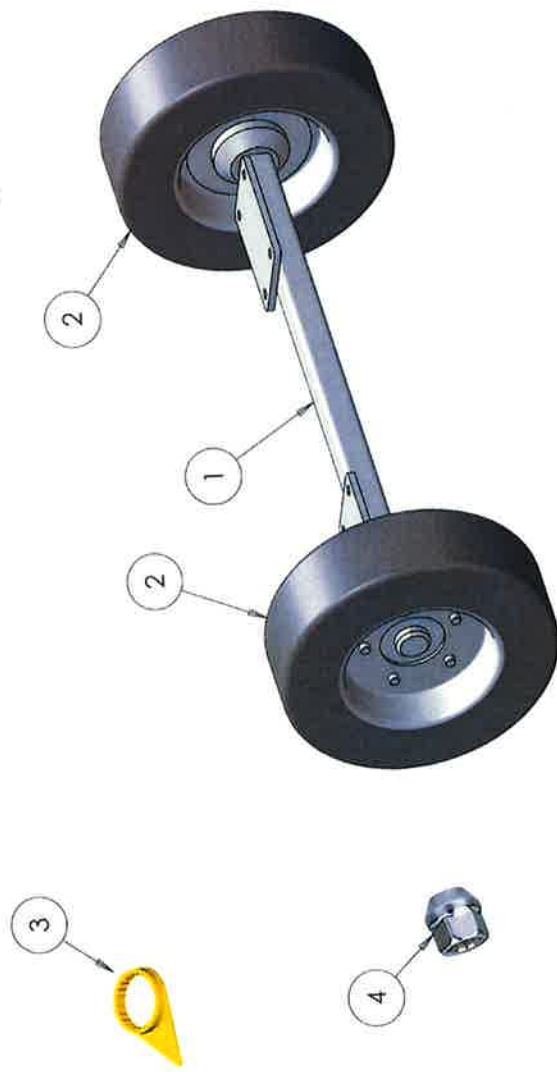


REF.	CODE	DESCRIPTION	Q.TY
1	A.420.001B	FRAME	1
2	A.429.001B	TOWBAR	1
3	CM.0177	TOWING EYE	1
4	A.429.002A	BRAKING BAR	1
5	CM.0234	SEMI AXLE	2
6	CM.0233	WHEEL 4.00-8	2
7	A.429.003	BRAKING ROD	1
8	A.428.218	BRAKING ROD	1
9	A.429.004	BRAKING ROD	1
10	CM.0225	SPRING	4
11	B.0064	TENSIONING RING	4
12	CM.0331	FORK CONNECTOR	2
13	A.426.001	CYLINDER	1
14	OC.0013	FLOW CONTROLLER	1
15	CM.0332	WHEEL NUT	5x2
16	CM.0264	NUT ALIGNERS	5x2



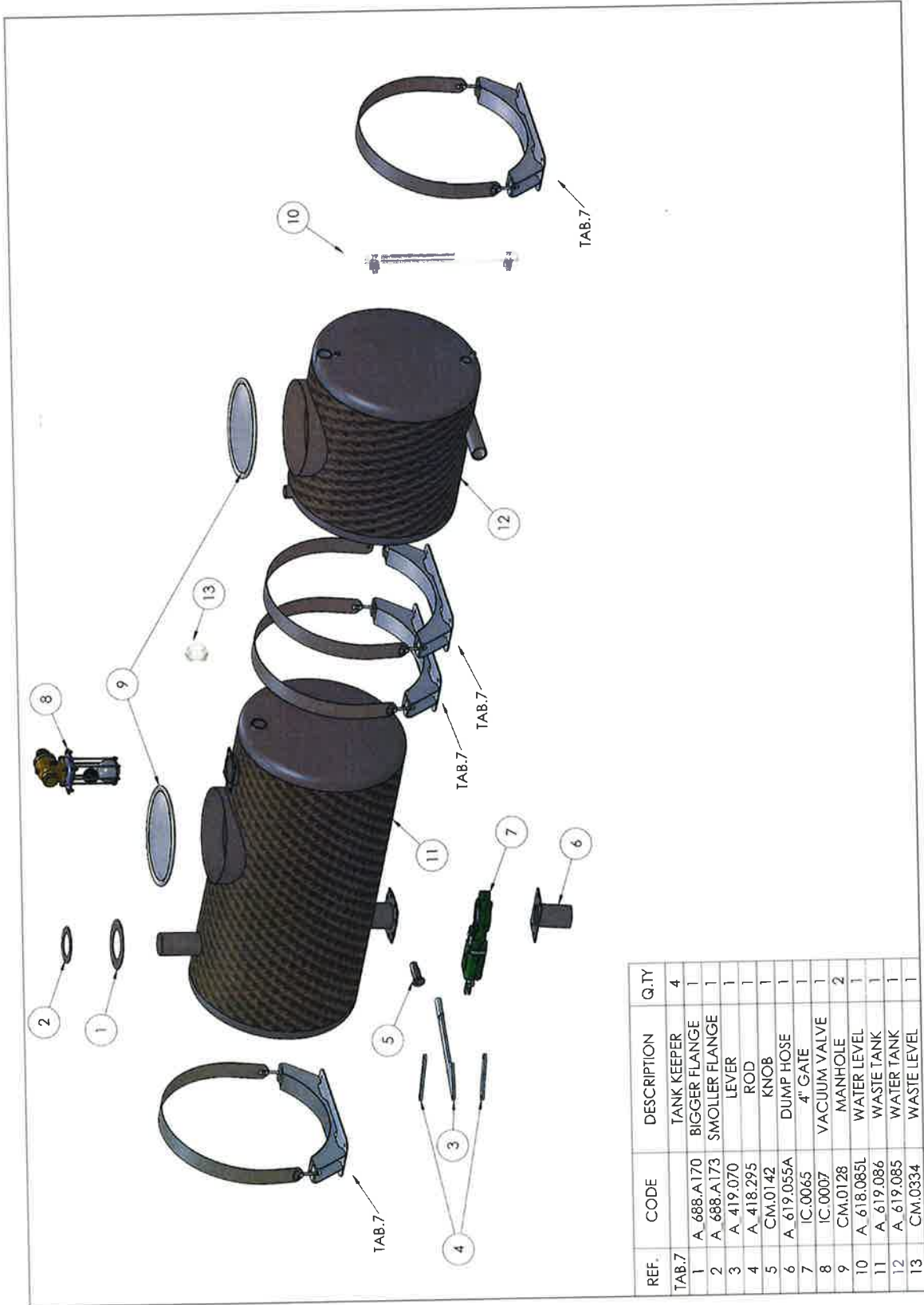


3. TAB.2 REAR AXLE



REF.	CODE	DESCRIPTION	Q.TY
1	A_419.068	REAR AXLE	1
2	CM.0233	WHEEL 4.00-8	2
3	CM.0264	NUT ALIGNERS	5x2
4	CM.0332	WHEEL NUT	5x2

4. TAB.3



REF.	CODE	DESCRIPTION	Q.TY
TAB.7		TANK KEEPER	4
1	A. 688.A170	BIGGER FLANGE	1
2	A. 688.A173	SMOLLER FLANGE	1
3	A. 419.070	LEVER	1
4	A. 418.295	ROD	1
5	CM.0142	KNOB	1
6	A. 619.055A	DUMP HOSE	1
7	IC.0065	4" GATE	1
8	IC.0007	VACUUM VALVE	1
9	CM.0128	MANHOLE	2
10	A. 618.085L	WATER LEVEL	1
11	A. 619.086	WASTE TANK	1
12	A. 619.085	WATER TANK	1
13	CM.0334	WASTE LEVEL	1

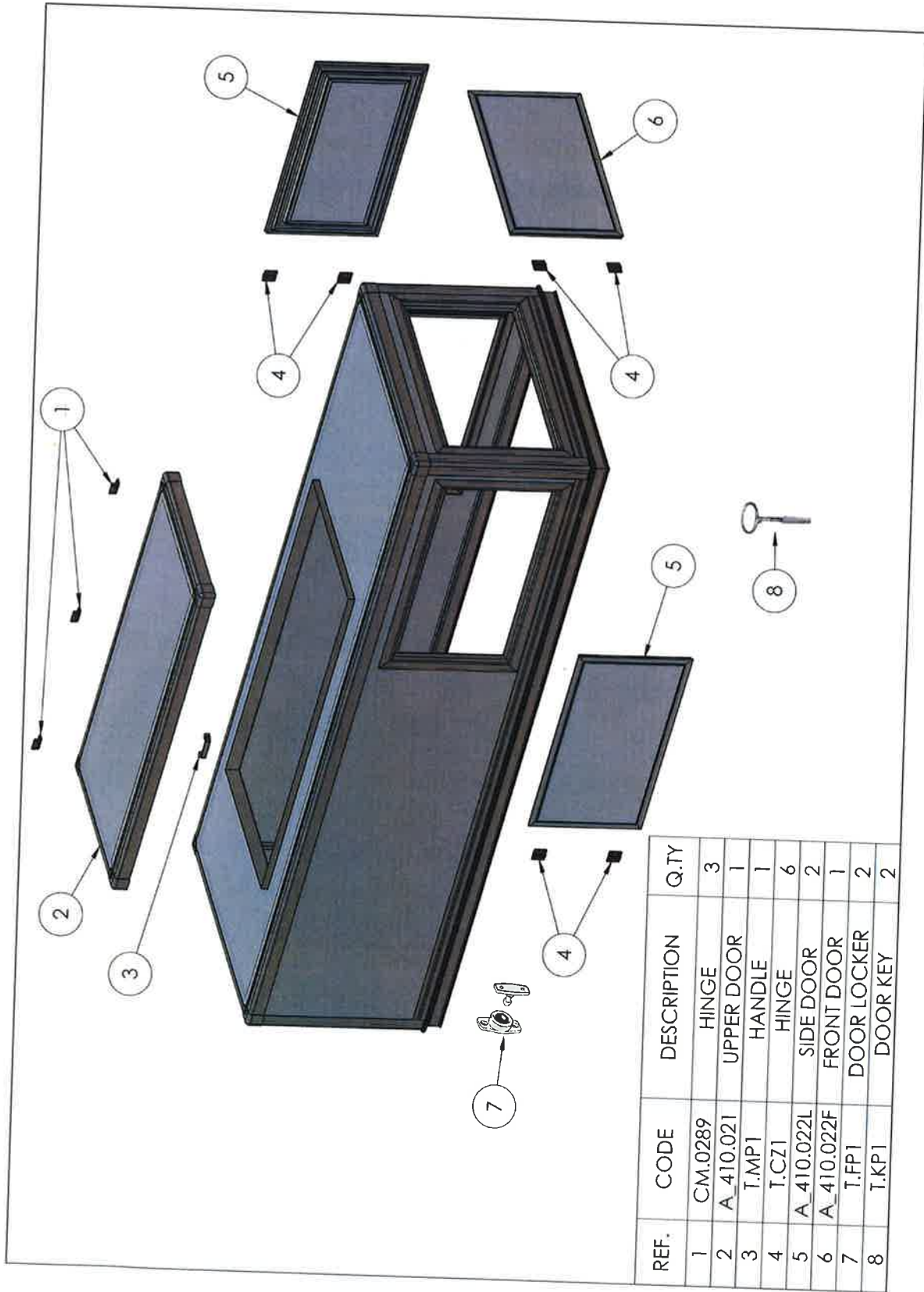




REF.	CODE	DESCRIPTION	Q.TY
1	CM.0038	1SLD440	1
2	CM.0096	WATER PUMP	1
3	CM.0080	VACUUM PUMP	1
4	CM.0339	PUMP DRIVING BELT	2
5	CM.0099	ELECTRO PULLEY	1
6	CM.0338	WATER DRIVING PULLEY	1
7	A.419.065	EXHAUST	1
8	A.419.069	VACUUM HOLDER	1
9	CM.0048	TENSIONER	2
10	A.418.243B	ENGINE HOLDER	1
11	A.418.B103	CARTER	1
12	CM.0070	SHOCK ABSORBER	5
13	CM.0125	HOSEREEL	1
14	IL.0002	WATER HOSE	6mt
15	IC.0002	1" CONNECTOR	1
16	A.419.076	WATER SYSTEM HOL.	1
17	A.419.073	ELECTRIC BOX SUPP.	1
18	EC.0279	ELECTRIC BOX	1
19	CM.0340	HANDWHEEL	2
20	M12x250	THREADED BAR	2
21	A.418.B105	BATTERY HOLDER	1
22	EC.0365	BATTERY	1
23	CM.0337	VACUUM DRIVING PULLEY	1
24	CM.0341	VACUUM DRIVING BELT	2

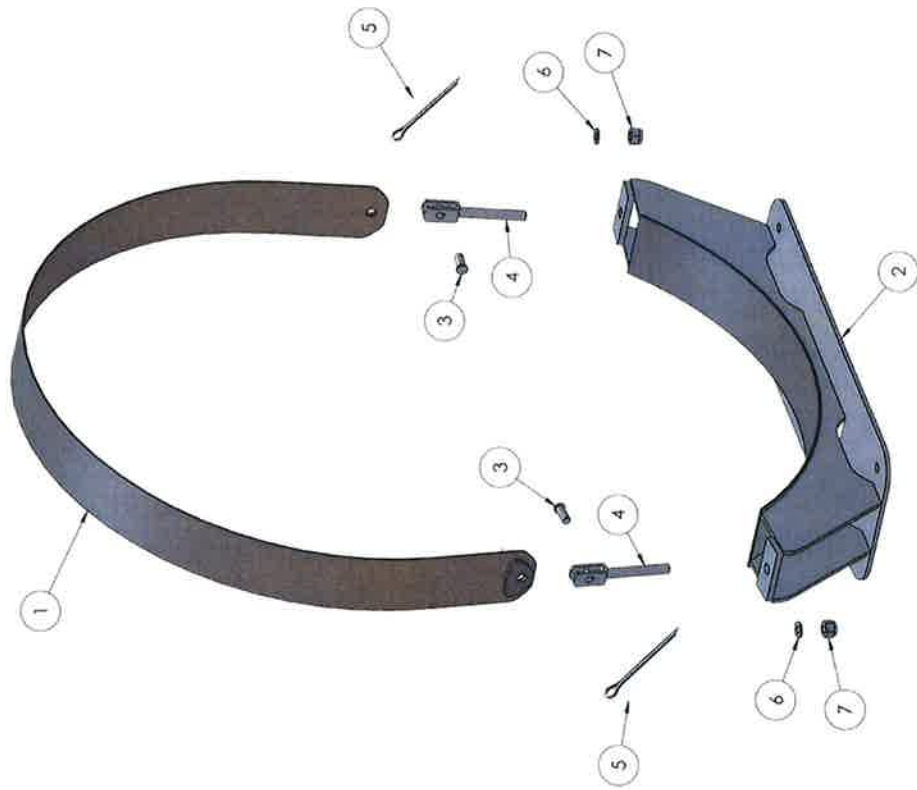
TOWED LAVATORY SERVICE UNIT TLSU1000

6. TAB.6





7. TAB.7 TANK SUPPORTS



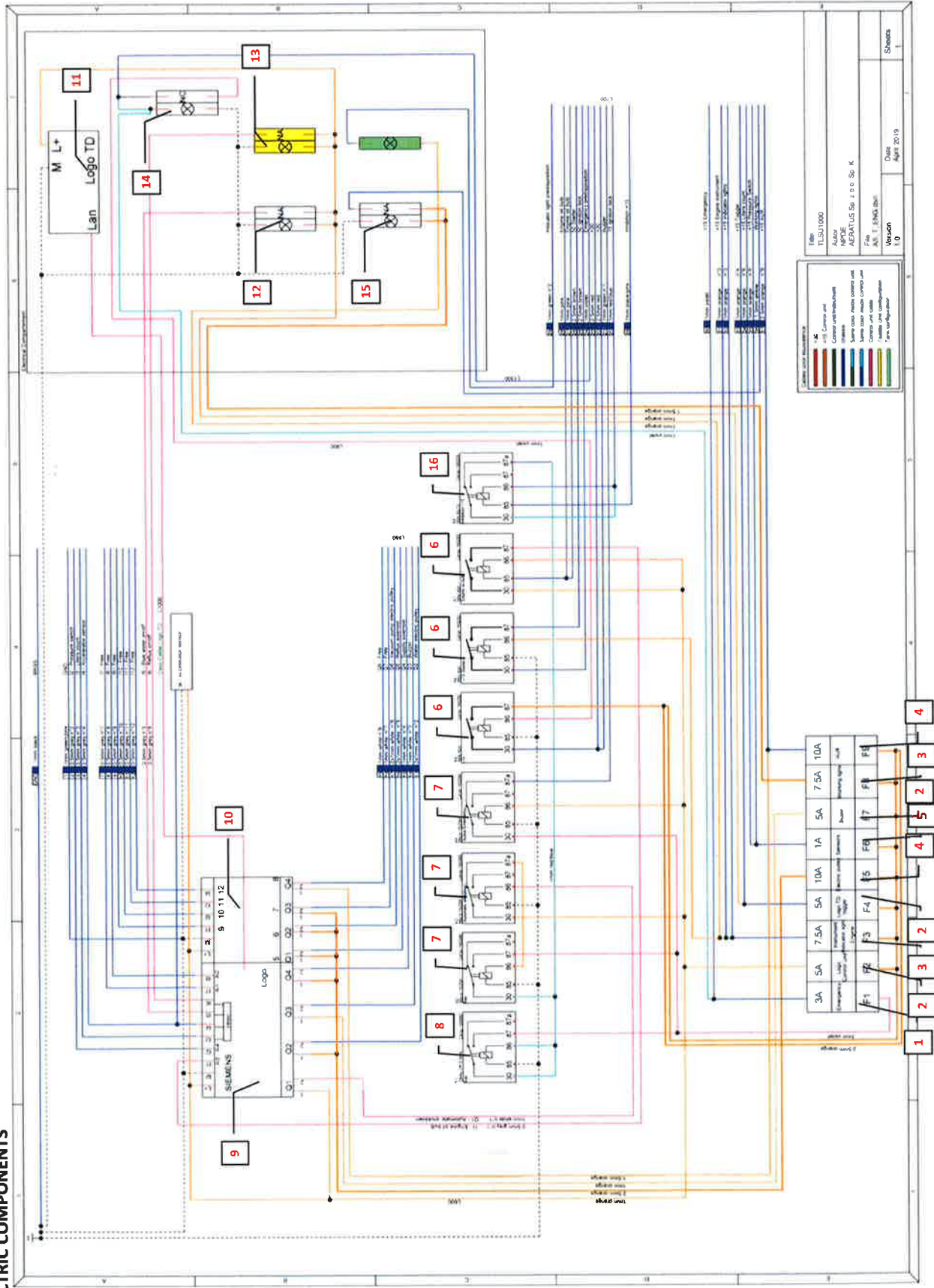
REF.	CODE	DESCRIPTION	Q.TY
1	A.619.A054	TANK BELT	1x4
2	A.619.044A	TANK CRADLE	1x4
3	CM.0336	PIN	2x8
4	CM.0191	FORK CONNECTOR	2x4
5	CM.0333	COTTER PIN	2x4
6	12x24	WASHER	2x4
7	M12	M12 SELF LOCK NUT	2x4

REF.	CODE	DESCRIPTION	PICTURE	REF.	CODE	DESCRIPTION	PICTURE
1	IC.0060	BALL VALVE 1" 1/2 M-F		2	IC.0010	CURVED FITTING 1" 1/2 M - 1" 1/2 F	
3	IC.0061	BALL VALVE 2" M-F		4	IC.0063	PRIMARY FILTER 2"	
5	IC.0037	RUBBER HOLDER FITTING 2" X 50		6	IC.0029	DUBLE FITTING 1" 1/2 M - 2" F	
7	IC.0011	CURVED FITTING 2" M - 2" F		8	IC.0009	CURVED FITTING 1" 1/4 M - 1" 1/4 F	
9	IC.0016	T FITTING F 1" 1/4 X 1" 1/4 X 1" 1/4		11	IC.0080	FITTING MF 1"	
14	IC.0030	RUBBER HOLDER FITTING 3/4" X 25		15	IC.0021	DUBLE FITTING M-M 1" 1/4 X 1	
16	IC.0036	RUBBER HOLDER FITTING 1" 1/2 X 50		17	IC.0033	RUBBER HOLDER FITTING 1" 1/4 X 30	












TOWED LAVATORY SERVICE UNIT TLSU1000

REF.	CODE	DESCRIPTION	PICTURE	REF.	CODE	DESCRIPTION	PICTURE
22	IC.0017	HEXAGONAL REDUCTION 1" 1/4 M - 1" F		24	IC.0022	DUBLE FITTING M-M 1" 1/2	
28	IC.0018	DUBLE FITTING M-M 1" 1/2		31	IC.0035	COUPLING 1"	
32	IC.0032	RUBBER HOLDER FITTING 1" X 3/8"		33	IC.0027	DUBLE FITTING 1" M - 1" 1/4 F	
34	IC. 0133	PIPE FITTING F 1" 1/2 - M 1" 1/4		35	IC.0134	PIPE FITTING F 1" 1/2 - F 1"	
39	IC.0078		CURVED FITTING 2" F - 2" F	58	II.0004	FLEXIBLE TRASPARENT ARMED HOSE Ø 50	
59	II.0005	FLEXIBLE TRASPARENT ARMED HOSE Ø 30		63	CI.0001	FLEXIBLE BLACK HOSE G50	







9. ELECTRIC COMPONENTS

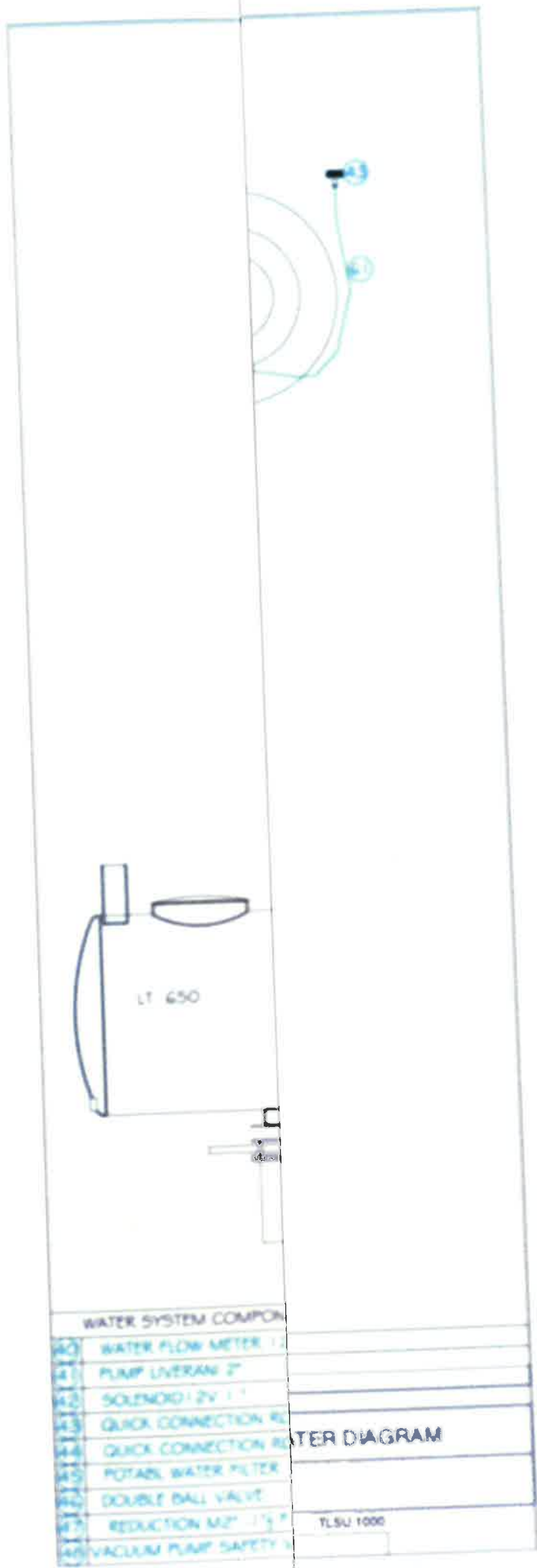


REF.	Photo	CODE	DESCRIPTION	REF.	Photo	CODE	DESCRIPTION
1		EC.0285	Fuse 3A	2		EC.0255	Fuse 5A
3		EC.0256	Fuse 7,5A	4		EC.0287	Fuse 10A
5		EC.0283	Fuse 1A	12		EC.0068	WATER PUMP BUTTON
7		EC.0209	RELE' 15/25			EC.0054	
6		EC.0208	RELE' 40 Ah			EC.0057	
8		EC.0254	RELE' OFF 3 SECOND			EC.0049	
9		EC.0151	LOGO!			EC.0050	

REF	Photo	CODE	DESCRIPTION	REF	Photo	CODE	DESCRIPTION
10		EC.0153	MODULE LOGO!	13		EC.0068	
11		EC.0152	LOGO TDE!			EC.0054	
		EC.0058				EC.0056	
		EC.0070				EC.0049	VACUUM PUMP BUTTON
14		EC.0049	Emergency-stop pushbutton, illuminated, turn-release			EC.0050	
		EC.0051					



REF.	Photo	CODE	DESCRIPTION	REF.	Photo	CODE	DESCRIPTION
17		EC-0171	PLUG 220V	18		EC.0367	220V SIGNAL
19		EC.0035	TERMINI DEFA 1400	20		RESIST_1200W	WATER HEATER 220V
21		EC.0034	DEFA BATTERY CHARGE	22		EC.0368	4" CONNECTOR HEATER
23		TRAS_75VA_12V AC	TRASFORMER				



WATER SYSTEM COMPONENTS

- 440 WATER FLOW METER 1/2"
- 441 PUMP LEVER 2"
- 442 SOLENOID 12V 1"
- 443 QUICK CONNECTION RE...
- 444 QUICK CONNECTION RE...
- 445 POTABLE WATER FILTER
- 446 DOUBLE BALL VALVE
- 447 RESTRICTION 1/2" - 1/2"
- 448 VACUUM PUMP SAFETY

WATER DIAGRAM

TL5U 1000



Price offer/Oferta cenowa No S007/01/23

12.01.2023

Buyer: Kupujący:	Letisko M. R. Stefánika - Airport Bratislava, a.s. (BTS) P. O. Box 160, 823 11 Bratislava 216 Slovak Republic				
Supplier: Dostawca:	AERO-GSE sp. z o.o. 100 Balicka str., Krakow, Poland 30-149 NIP: 6772419908				
Contacts: Osoba kontaktowa:	Dina Twaróg sale8@aero-gse.com Tel : +48 726 726 737				
DESCRIPTION Opis produktu	Q-ty Ilość	Price per pcs, Cena za szt., netto (EUR)	VAT %	VAT	TOTAL Wartość Brutto (EUR)
Towable lavatory service unit TLSU - 1000		22 500	23%	0	22 500
TOTAL / Wartość Brutto (EUR)					22 500

Total/Razem słownie: twenty-two thousand five hundred euros 00/100

Price offer valid through/ 31.01.2023
Oferta ważna do

Delivery terms/ DAP Bratislava
Warunki dostawy:

Payment conditions/ 30 days after delivery
Warunki płatności

Delivery time/ 2 days — equipment is in the stock in Kraków
Termin dostawy

Warranty / 24 months
Gwarancja

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100 Balicka str., Krakow, Poland 30-149
Phone: +48 726 726 018
e-mail: admin1@aero-gse.com
web: www.aero-gse.com

KRS: 0000930428
NIP: 6772419908
REGON: 367247450
VAT: PL6772419908
EORI PL677241990800000

ING Bank Śląski S.A. o/Katowice
34 Sokolska str., Katowice, Poland 40-086
SWIFT: INGBPLPW
PLN: PL 22 1050 1214 1000 0090 3126 7744
EUR: PL 27 1050 1214 1000 0090 3126 7751



bts
BRATISLAVA AIRPORT
Letisko M. Štefánika - Airport Bratislava, a. s. (BTS)
P. O. Box 160, 823 11 Bratislava 216