

TTulpe

Outdoor HD-6

Instructions for
use, installation
and maintenance



Table of Contents

1. Introduction
2. Warnings
3. General instructions
4. Operating instructions
5. Faults
6. Maintenance
7. Technical data and characteristics
8. Technical specifications
9. Declaration of conformity
10. Gas conversion instruction
11. Certificate of warranty – TTulpe®
12. Notes

Box contents

1. TTulpe HD-6 water heater
2. Gaspressure regulator with gashose
3. 2 D-Cell (LR 20) Batteries
4. Showerhead with hose
5. 1 gardenhose connector
6. Teflon tape
7. Manual
8. Mounting screws



1. Introduction

Dear Buyer

We wish to congratulate you on the purchase of your TTulpe® Outdoor HD-6 gas water heater. It is safe to say that our gas water heaters will satisfy any of your needs. The use of modern technologies and high-quality materials in the manufacture of these devices brought popularity of and confidence in the TTulpe® trade mark. TTulpe® electric and gas water heaters are designed and manufactured in strict correspondence with international standards that ensure reliability and safety in operation. The models were all subjected to compulsory certification by the EU and fully comply with the requirements of Gas Appliance Directive 2016/426/EC. This Manual covers TTulpe® models (Series Outdoor HD). The model name of the water heater you purchased is shown in Section on "Manufacturer's Warranties" (Subsection on "Sales Mark") and on an identification plate on the device case.

Water heater application

This water heater is designed for the purpose of heating potable water. Its use in an application other than this may shorten its life.

Model type

TTulpe® Outdoor HD-6

The gas water heater model you have chosen can only be used outdoors and is a 6 litres per minute open flue model. The Outdoor HD-6 is a portable tankless water heater. The temperature is controlled manually with the gas- and waterflow knobs. Automatic safety controls are fitted to the water heater to provide safe and efficient operation. A shower head with on/off switch and multiple spray patterns is included. Ignition is automatic and powered by 2 "D" cell (LR 20) batteries (included). Burners come on when water flows, and off when the water is shut off. No pilot light! A hardware pack with screws and fittings is included to make the installation easier. Ideal operating use with water pressure between 1-6 bar.

Mains pressure

The water heater is designed to operate at mains pressure by connecting directly to the mains water supply. The supply pressure should be greater than 1 Bar for true mains pressure operation to be achieved.

How hot should the water be?

The water heater has a minimum temperature setting of 30°C and a maximum thermostat setting of 60°C .

Hotter water increases the risk of scald injury

This water heater can deliver water at temperatures which can cause scalding. Check the water temperature before use, such as when entering a shower or filling a bath or basin, to ensure it is suitable for the application and will not cause scald injury.

2. Warnings

WARNING: If information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death. Use a professional and knowledgeable installer. Installation requirements may vary from country to country. TTulpe or its resellers assume no liability for improper use or installation.

Important safety information read all instructions before using

Be sure to read and understand the entire Instructions for use, installation and maintenance Manual before attempting to install or operate this water heater. It may save you time and money. Pay particular attention to the Safety Instructions. Failure to follow these warnings could result in serious bodily injury or death. Should you have problems understanding the instructions in this manual, or have any questions, STOP, and get help from a qualified service technician, or the local gas utility.

Danger!

Properly install water heater

Failure to properly install the water heater outdoors as outlined in the Installation Instructions in this manual can result in unsafe operation of the water heater. To avoid the risk of fire, explosion, or asphyxiation from carbon monoxide, never operate this water heater unless it is installed properly and has an adequate air supply for proper operation. The water pressure shall not exceed 8 bar.

Warning

Gasoline, as well as other flammable materials and liquids (adhesives, solvents, paint thinners etc.) and the vapors they produce are extremely dangerous. DO NOT handle, use or store gasoline or other flammable or combustible materials anywhere near or in the vicinity of a water heater or any other appliance. Be sure to read and follow the labels on the water heater, as well as the warnings printed in this manual. Failure to do so can result in property damage, bodily injury or death.

Vapors from flammable liquids will explode and catch fire causing death or severe burns.



Do not use or store flammable products



Keep flammable products:

1. Far away from heater
2. In approved containers
3. Tightly closed
4. Out of children's reach

Water heater has a main burner flame.

The main burner flame:

1. Can come on at any time and
2. Will ignite flammable vapors.

Vapors:

1. Cannot be seen
2. Are heavier than air
3. Go a long way on the floor
4. Can be carried from other rooms to the main burner flame by air currents.
5. Installation: Read and follow water heater warnings and Instructions. If owners manual is missing, contact the retailer or manufacturer.

Danger!

Propane/butane gas models

LP has an odorant added to aid in the detecting a gas leak. Some people may not physically be able to smell or recognize this odorant. If you are unsure or unfamiliar with the smell of LP, ask the gas supplier. Other conditions such as "odorant fade", which causes

- Water heaters utilizing LP gas are different from natural gas models. A Natural gas water heater will not function safely on LP gas and vice versa
- No attempt should ever be made to convert the water heater from LP gas to NG and vice versa. To avoid possible equipment damage, personal injury, or fire, do not connect the water heater to a fuel type not in accordance with the data plate.
- LP gas must be used with great caution. It is heavier than air and will collect first in lower areas making it hard to detect at nose level.
- Before attempting to light the water heater, make sure to look and smell for gas leaks. Use a soapy solution to check all gas fittings and connections. Bubbling at a connection indicates a leak that must be corrected. When smelling to detect a gas leak, be sure to sniff near the floor also.
- Gas detectors are recommended in LP applications and their installation should be in accordance with the detector manufacturer's recommendations and/or local laws, rules, regulations or customs.

If the smell of gas is detected, turn off the gas valve at the tank or the main valve in your gas supply immediately! Do not use flame for leak detection.
For Outdoor use only.

Additional warnings:

1. Never leave the water heater unattended.
2. The exhaust gas and top of the portable tankless water heater is HOT! Do not place hands or any foreign object near the top of the heater.
3. Do not use in high wind conditions.
4. Use only Liquid Propane or butane.
5. Do not over tighten the gas regulator connection to the portable tankless water heater with a wrench. This may cause a crack in the gas regulator. Always use two wrenches.
6. Appliance fitted with an atmosphere sensing device.
7. This appliance shall only be used for short delivery periods.

Environmental impact

NOx identifies the group of the two most important nitrogen oxides:

- NO Nitrogen monoxide (not harmful to humans)
- NO₂ Nitrogen dioxide (very harmful to humans and the environment).

NOx is formed during combustion processes at high temperatures.

To reduce NOx emissions it is necessary to cool the flame. The water inside the water heater, after have been heated by heat exchanger, gets in the burner, cools the flame and gets out to the final user.

The special burner cools the flame and check the airflow necessary for the combustion, set up "cooled flames" avoiding the loss of thermal efficiency, generating an optimal combustion with low emissions.

Ttulpe cares about the environment, our water heaters do not contain any hazardous materials and comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

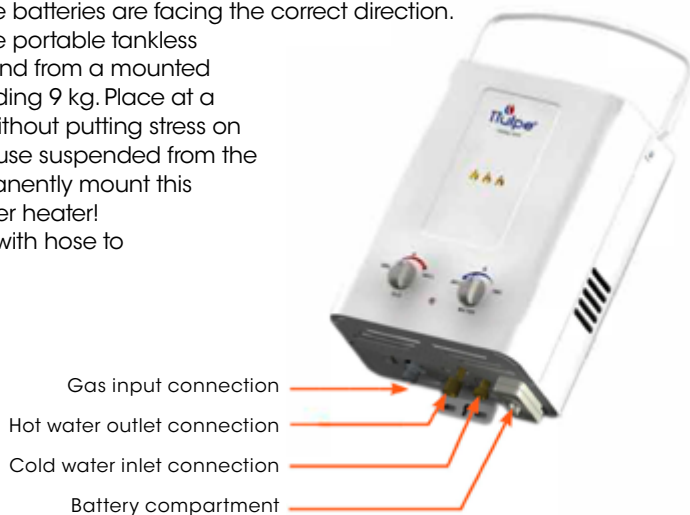
3. General instructions

The purpose of this manual is twofold; one, to provide the installer with the basic directions and recommendations for the proper installation and adjustment of the water heater, and two, to the owner operator, to explain the features, operation, safety precautions, maintenance and troubleshooting of the water heater. It is imperative that all persons who are expected to install, operate, or adjust this water heater read the instructions carefully so they may understand how to perform these functions. If you do not understand these instructions or any terms within, seek professional advice. Any questions regarding the operation, maintenance service or warranty of this water heater should be directed to TTulpe B.V. or one of its International Distributors directly. Netherlands/France/Germany /UK/Belgium: TTulpe B.V., +49(0)39292678219, info@ttulpe.com. Do not destroy this

- Carefully read and follow the instructions contained in this booklet.
- After installing the unit, inform the user about its operation and give him this manual, which is an integral and essential part of the product and must be kept for future reference.
- Maintenance must be carried out by professionally qualified personnel, in compliance with the current regulations and according to the manufacturer's instructions. Do not carry out any operation on sealed adjustment parts.
- Incorrect installation or inadequate maintenance can result in damage or injury. The Manufacturer declines any liability for damage due to errors in installation and use, or failure to follow the instructions.
- Before carrying out any cleaning or maintenance operation, turn off the gas by means of the special shutoff devices.
- In case of a fault and/or poor operation, deactivate the unit and do not try to repair it or directly intervene.
- Contact professionally qualified personnel. Any repair/replacement of the products must only be carried out by qualified personnel using original replacement parts. Failure to comply with the above could affect the safety of the unit.
- This unit must only be used for its intended purpose. Any other use is deemed improper and therefore hazardous.
- The packing materials are potentially hazardous and must not be left within the reach of children.
- The unit must not be used by people (including children) with limited physical, sensory or mental abilities or without experience and knowledge of it, unless instructed or supervised in its use by someone responsible for their safety.
- The unit and its accessories must be appropriately disposed of, in compliance with the current regulations.
- The images given in this manual are a simplified representation of the product. In this representation there may be slight and insignificant differences with respect to the product supplied.
- For periods of inactivity during the winter months, to avoid frost damage it is needed to drain all the water from the water heater.
Proceed as follows: Remove the drain valve located at the incoming water connector (release valve, page 17). Empty the appliance of all water.

4. Operating instructions

1. If using a standard garden hose, attach your water supply to the fitting marked 'Water Input' using adapters as appropriate. Use Sealant tape or other approved sealing method on the threads for a secure, water tight fit. Check to make sure the screen inside the water inlet is in place and clean. Then attach your water input.
2. If your portable water heater was supplied with gas hoses, connect and secure your regulator to the appropriate size hose for your region, otherwise use the included gas regulator and hose assembly. Next, install the gas supply line and regulator to the portable tankless water heater.
3. Attach the shower nozzle hose to the water output to the fitting marked 'Water Outlet.' Do not over tighten.
4. Install two "D" Cell batteries (LR 20) in the compartment on the bottom left of the heater. Check that the batteries are facing the correct direction.
5. Use the top tab on the portable tankless water heater to suspend from a mounted screw capable of holding 9 kg. Place at a comfortable height without putting stress on the gas hose. Do not use suspended from the handle! Do not permanently mount this portable tankless water heater!
6. Attach gas regulator with hose to the LP tank.



LEAVE GAS TANK VALVE IN THE "OFF" POSITION

GAS CONNECTION

THE GAS CONNECTION MUST BE INSTALLED WITH SEALANT TAPE.

MULTIPLE WRAPS OF SEALANT TAPE MAY BE NECESSARY TO ASSURE COMPLETE SEAL.

ALWAYS CHECK FOR GAS LEAKS BEFORE USING HEATER.

Warning:

This model is intended for recreational & portable outdoor use only.

This model CANNOT be permanently mounted or plumbed in any way.

1. Turn on incoming water supply. Ensure that you have adequate water pressure between 1.0-5.5 bar.
2. Turn your showerhead to its "off" position.
3. Turn the gas valve on the cylinder all the way open.
4. IF THE SMELL OF GAS IS DETECTED, TURN OFF THE GAS VALVE IMMEDIATELY!!
5. Set the water regulator knob on the face of the portable tankless water heater to its highest setting.
6. Set the gas regulator knob on the face of the portable tankless water heater to its minimum setting.
(Switch on the "on-off-button on the bottom of the device")
7. Turn on your showerhead to the "on" position and adjust to the desired water flow.
8. There will be a series of audible clicks and the burner will ignite. Should the burner not ignite after 5 seconds, shut off and go to the "Trouble Shooting" section.
9. The temperature of the outgoing water is dependent on the temperature of the incoming water balanced with the amount of heat applied. Use extreme caution in setting the outlet water temperature.

Adjustment

Warning: THE PORTABLE TANKLESS WATER HEATER IS CAPABLE OF PRODUCING SCALDING WATER TEMPERATURES!

10. With the water regulator set to high, and the gas regulator set to low, feel the outgoing water. This is the lowest setting available.
11. To initially raise the outgoing temperature, slowly turn the gas valve towards maximum. Adjust slowly and check the temperature often. There will be a slight delay between increasing the gas supply and the increase in water temperature.
12. Should the outlet water temperature need to be higher, slowly reduce the water flow regulator until desired temperature is reached.
(Warning: Do not alter or change this water heater's original temperature sensor)
13. Upon completion of use or storage, open the drain valve (ribbed cylindrical stem next to the water input valve) to ensure draining of water.
14. Turn off your gas supply.

If the water heater is stored for a longer period, please remove the batteries from the battery compartment and drain the water heater from all its water.

Warning:

If the outside temperature is around or below freezing, ensure that the drain valve is opened and water drained from the portable tankless water heater after each use to avoid internal damage to the water regulator. You will also need to unhook the outgoing water line to ensure that any water in the heat exchanger is drained. Failure to properly drain your portable tankless water heater will cause frost damage which may or may not be repairable and is not covered by warranty.

5. Faults

Portable tankless water heater will not start – there are no audible clicks at startup:

- a. The first thing to check is to ensure that the incoming water on the “right” side of the portable tankless water heater. If the incoming and outgoing are reversed, the portable tankless water heater will not work. The incoming is on the far right and the outgoing is in the middle.
- b. The “On/Off” switch should be with the “-” sign pushed down.
- c. Check to make sure you have fresh batteries and they are installed in the correct position.
- d. Number one reason that the portable tankless water heater does not ignite is that there is not enough water pressure. You need to make sure that you have a minimum of 1.0 bar of sustained water pressure.
- e. A wire has become disconnected inside the portable tankless water heater during shipping. Make sure the gas is OFF and the switch is in the OFF position. The front cover is held by four screws, two top, two bottom. The knobs pull off. All the wiring is done with push together plastic connectors. They are all visible without further dismantling of the portable tankless water heater. It should be obvious when a wire has become disconnected.
- f. It is possible that some debris or epoxy might have entered the water regulator. Check to see if the filter screen on the water inlet is clear of debris. You can also reverse the hook-up by taking your water source and hooking it up to the water outlet side and back flushing the system. Propane gas cylinders sometimes are contaminated with air, especially new tanks upon their first filling. Cycle the portable tankless water heater on and off by using the shower head switch several times (5) to purge the air from the gas.
- g. The build in tilt switch is engaged. Make sure you mount the water heater vertical with the black switch on top.

Portable tankless water heater will not start - but there are audible clicks at startup:

- a. The portable tankless water heater requires a minimum of about 2 litres per minute and a minimum of about 1.0 bar. Note: water pressure is at the lower end of operating parameters. You will need a sustained water pressure of approximately 1.8 - 4.1 bar for adequate use if you are using a 12/24 volt pump. See adjustment in previous section.
- b. High Wind. For safety reasons the heater will not start in sustained wind, find an alternate location for the water heater.
- c. Out of, or low on gas. Propane gas cylinders sometimes are contaminated with air, especially new tanks upon their first filling. Cycle the portable tankless water heater on and off by using the shower head switch several times (5) to purge the air from the gas.
- d. The ignition sensor is bent and/or too close to the burner. Look to ensure that the ignition pins and the heat sensor are completely vertical and they do a 90 degree to the back of the box. If they are not straight (i.e. a 45 degree angle) then you can straighten them carefully with pliers.

The water does not get hot enough:

- You are operating the portable tankless water heater above 1200m. While it has been field tested up to 1600m, we only recommend using it below elevations of 1200-1600m.
- Look into the viewer panes (3 flame shaped windows on the front cover) to see if there is a blue flame. If the flame is yellow there could be a cracked gas regulator. Do Not Attempt to use the portable tankless water heater.
- You are using not more than 6 liters of water per minute.

Water is flowing, but there is no hot water coming out:

- Ensure that you have the incoming water supply and the outgoing water supply hooked up properly. Your water supply should be attached to your incoming connection (located on the far right) and the shower head should be attached to the outgoing water (located as the center connection).
- Ensure that you have adequate water pressure of at least 20 PSI / 1.4 bar, sustained.
- Ensure that you have adequate gas in your propane bottle and that the LP regulator is threaded all of the way on to the portable tankless water heater.
- Fresh batteries are required for ignition spark. Make sure batteries are aligned in the proper polarity (+/-) Flat negative of battery towards spring side of battery compartment.

The portable tankless water heater does nothing:

- Ensure that you have your water source hooked up to the water inlet side (far right connection) and the shower handle is hooked up on the water outlet side (middle connection).
- Ensure that you have an adequate supply of propane.
- Ensure that you have fresh batteries.

PLEASE NOTE: THIS MODEL IS NOT RECOMMENDED NOR HAS IT BEEN TESTED FOR ANY PERMANENT INSTALLATIONS. THIS MODEL IS PART OF OUR PORTABLE SERIES AND NEEDS TO BE TAKEN DOWN AND STORED IN A WARM DRY PLACE AFTER EVERY USE.

THIS MANUAL AND ALL Ttulpe® CONTENT IS SUBJECT TO CHANGE WITHOUT NOTICE.

For technical support, please contact:

Ttulpe B.V. | Web: www.ttulpe.com, E-mail: info@ttulpe.com

Phone: 0031226 428877

Address: Wester Boekelweg 21a 1 1718 MJ I Hoogwoud, The Netherlands.

6. Maintenance

Opening the casing

To open the water heater casing:

1. Undo the screws at the top and bottom
2. Take the casing off carefully.
3. Disconnect the on/off switch connector.

Close the gas cock upstream before carrying out any operation inside the water heater.

Periodical inspection

To ensure proper operation of the unit over time, have qualified personnel carry out a yearly inspection, providing for the following checks:

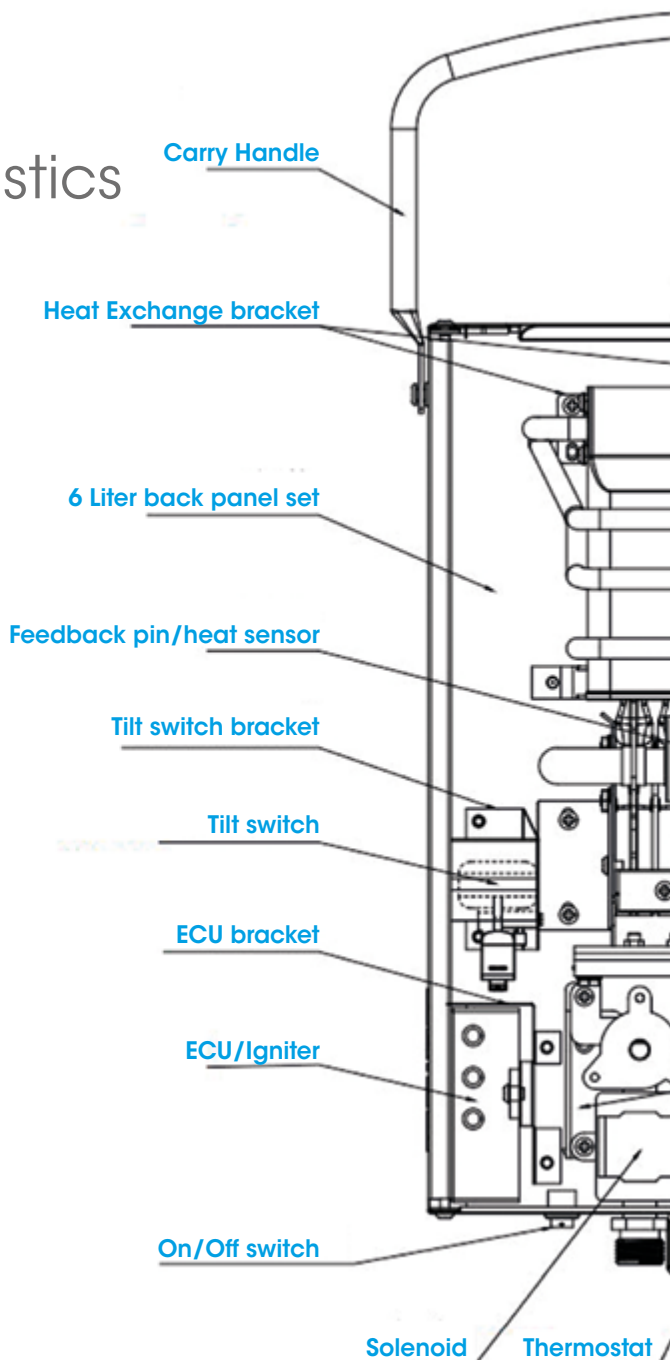
- The control and safety devices must work properly.
- The burner and exchanger must be clean and free of deposits. For possible cleaning, do not use chemical products or wire brushes.
- The electrodes must be free of deposits and correctly positioned.
- The gas and water systems must be tight.
- The gas flow and pressure must match that given in the respective tables.
- Check the batteries on proper function and leakage. Replace if any doubt.
- For periods of inactivity during the winter months, to avoid frost damage it is needed to drain all the water from the water heater.

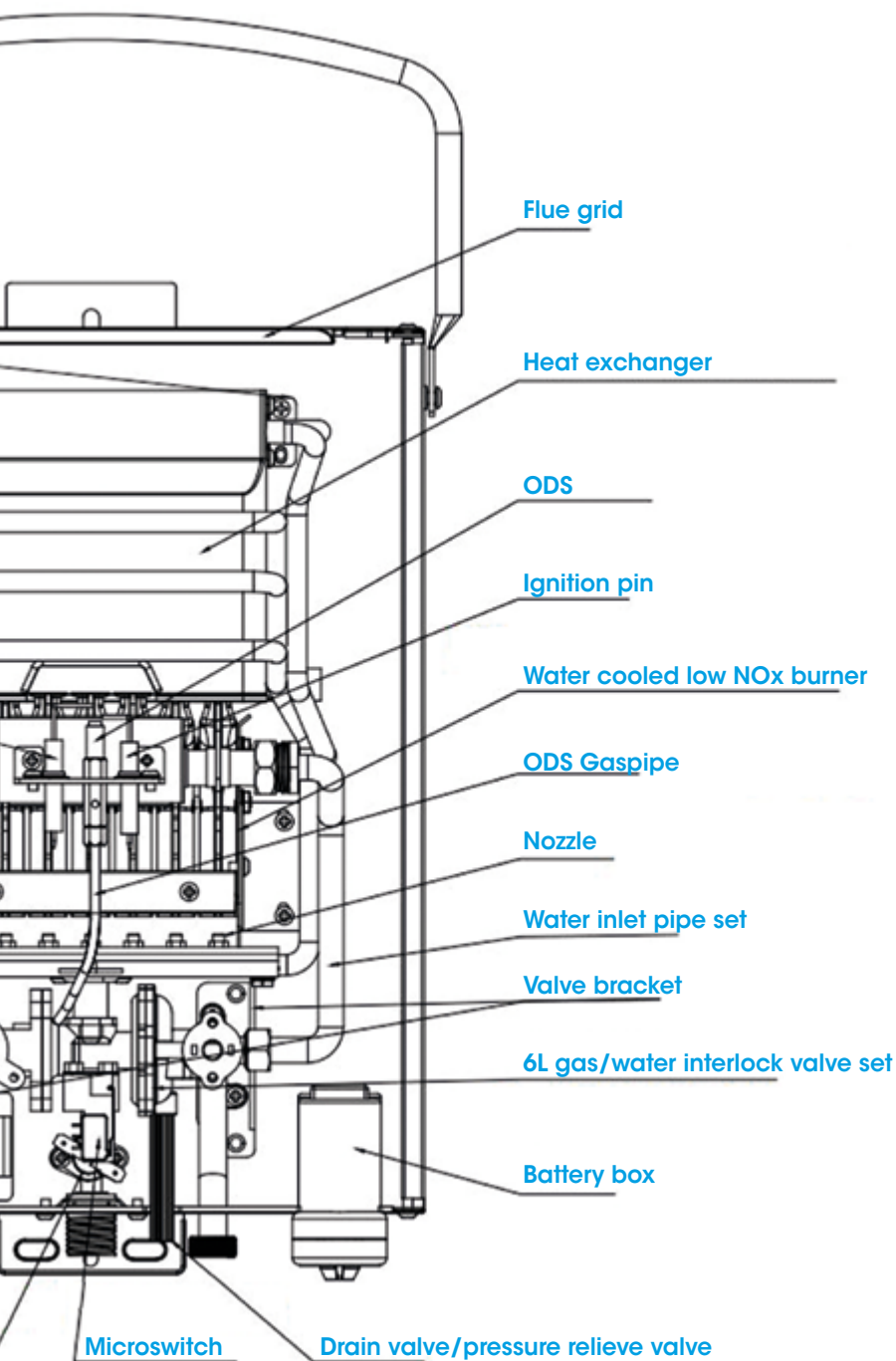
Proceed as follows: Remove the drain valve located at the incoming water connector (release valve, page 17). Empty the appliance of all water.

Please remove the batteries for periods of inactivity.

- We advise to replace the gas pressure regulator once a year.

7. Technical data and characteristics





8. Technical specifications

Model/No.	Unit	TTulpe Outdoor HD-6
Pincode		2531DM-0022
Type		A11AS
Heatinput Q _n (Hi)	kW	12
Min. Heatinput Q _{min} (Hi)	kW	5,3
Nomina/ usefu/ output P _n (Hi)	kW	10,3
Min useful output P _{min}	kW	4,1
Nomina/ heat efficiency	%	>84



Gas data

Gas Category	I3P(37)		I3P(50)
Model	Outdoor HD-6 P37		Outdoor HD-6 P50
Gas Type	Propane		Propane
Gas Pressure	37 mbar		50 mbar
Countries of Destination	BE, CH, GZ, ES, FR, GB, GR, HR, IE, IT, LT, NL, PL, PT, SI, SK, TR, SE		AT, BE, CH, CZ, DE, ES, FR, GB, NL, SK

Gas consumption

LPG (G30)	kg/h	0,76
Flue gas average temperature		170

Hot water data

Nominal water flow rate		6
Cold inlet water is 15 °C, water temperature of maximum flame can reach 	°C	67
Cold inlet water is 15 °C, water temperature of minimum flame can reach 	°C	27
Minimum water pressure P _w	bar	0,25
Maximum water pressure P _w	bar	8

Electricity data

Electricity source		3 V DC
--------------------	--	--------

Connectors' data

Water pipe connector	inch	G1/2
Gas pipe connector	inch	G1/2

Dimension / Weight

Width x Height x Depth	mm	290 x 385 x 180
Weight	kg	6,3

Nozzle specification

Nozzles quantity	-	14
Liquefied Petroleum Gas G30/G3150 mbar		
Nozzle diameter	mm	0,45
Nozzle rated pressure	mbar	50

Liquefied Petroleum Gas G30/G31 30 mbar

Nozzle diameter	mm	0,47
Nozzle rated pressure	mbar	37

9. Declaration of conformity

EU DECLARATION OF CONFORMITY

We

Manufacturer's Name: TTulpe B.V.

Manufacturer's Address: Wester Boekelweg 21 a, 1718 MJ, Hoogwoud, The Netherlands.

Product: TTulpe portable propane gas fired instantaneous outdoor water heater

Model(s) / Type(s): Outdoor HD-6 P37
Outdoor HD-6 P50

Trade name: Ttulpe®

Serial number: ---

is in conformity with the following EU regulation:

- Essential requirement of the regulation of Appliance burning gaseous fuels (EU) 2016/426 Annex III, 1.

and that the following harmonized standards have been applied:

- EN 26:2015

The Notified Body who has performed EU Type Examination:

EU Type Examination Certificate: 2531DM-0022

Notified Body: DBI-C

Notified Body no.: 2531

Hoogwoud

16 March 2021

Place

Date (day, month and year)

Signature

Director

Position

TTulpe

10. Gas conversion instruction

Warning:

It is not possible to convert the water heater to another type of gas or another gas pressure.

11. Certificate of warranty – TTulpe®

TTulpe® guarantees appliances that it supplies in accordance with European directive 1999 / 44/EC guaranteeing the sale of Consumer Goods for a period of two years against a lack of conformity appearing after delivery of the product. Unless proven otherwise, it will be assumed that any lack of conformity that appears in the six months from the delivery did not exist when the goods were delivered. The warranty for spare parts will have a duration of two years from the date of delivery of the equipment. Batteries and accessories are not included in any form of warranty. This guarantee is only and exclusively valid for equipment sold and installed on EU territory.

Scope of the warranty

Unless proven otherwise, it is understood that the goods comply with and are suitable for the purpose for which they were purchased, and are always used under the following conditions:

- The guaranteed equipment must correspond to the equipment that the manufacturer expressly intends for the country of destination, and must be installed in that country.
- The necessary spare parts will be those determined by our OFFICAL Technical Department, and in all cases will be TTulpe original parts.
- The warranty is valid provided that the normal maintenance operations, described in the technical instructions supplied with the equipment, are carried out.
- The consumer must inform TTulpe of a lack of conformity within a period of less than two months after discovering it.

The warranty does not cover incidents caused by:

Freezing, any damage due to frost out of warranty.

- The electrical supply of equipment by generators or any other system that is not a stable electrical network with sufficient capacity.
- Products that have undergone any repair not carried out by TTulpe's OFFICAL Technical Department and/or personnel authorised by TTulpe.
- Corrosion, deformation, etc., caused by inadequate storage or weather influence.
- Handling of the product by anyone outside of TTulpe during the warranty period.
- Assembly not in accordance with the instructions supplied with the equipment.
- Installation of the equipment that does not respect the Laws and Regulations in force (electricity, hydraulics, etc.).
- Defects in the electric or hydraulic facilities, or due to insufficient flow etc.
- Faults caused by the incorrect treatment of supply water to the equipment, by corrosion originating from water hardness, by poorly carried out descaling treatments, chlorized water, etc.

Ttulpe® guarantees appliances that it supplies in accordance with European directive 1999/44/EC guaranteeing the sale of Consumer Goods for a period of two years against a lack of conformity appearing after delivery of the product.

Unless proven otherwise, it will be assumed that any lack of conformity that appears in the six months from the delivery did not exist when the goods were delivered.

The warranty for spare parts will have a duration of two years from the date of delivery of the equipment.

This guarantee is only and exclusively valid for equipment sold and installed on EU territory.

The material replaced under warranty will remain the property of TTulpe®

NOTE: It is essential to complete all of the information requested in the Certificate of Warranty. The validation of the warranty must be done immediately, by filling in the date and sending it immediately to TTulpe B.V. All of our OFFICIAL Technical Departments have the corresponding accreditation from TTulpe®. Request this accreditation for any intervention.

Potential claims must be made to the competent authority in this matter.

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



TTulpe®
Wester Boekelweg 21a
1718 MJ Hoogwoud
Netherlands

Tel: 0031 (0)226 428877
Email: info@ttulpe.com