

LIMITED PRODUCT WARRANTY

(Thermosiphon Solar Water Heaters KD160, KD200 and KD300)

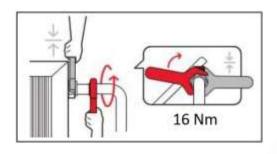
Under conditions of normal use and service, components of above mentioned BURAL SOLAR products are warranted to be free of defects that clearly caused by production faults.

Solar Collector : 10 years limited warranty,Hot Water Tank: 5 years limited warranty.

Hereinafter Bural Solar will be named as "Manufacturer". The warranty period starts with the respective manufacturing date inscribed on the product label. A prerequisite for the application of warranty by Manufacturer is the submission of the paid invoice for the purchase of the equipment for which the warranty claim is being submitted.

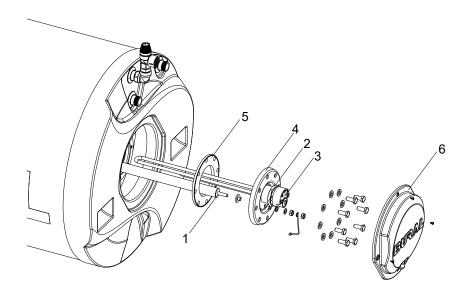
For a valid warranty claim it is important to ensure following points:

- Components should be installed in accordance with the installation manual obtained from Manufacturer. Improper installation or wrong usage voids the warranty. Maintenance of the product must be done in accordance with the manual obtained from Manufacturer.
- Equipments and components not produced by Manufacturer (electrical heater, thermostat, valves, fittings, etc.) are warranted for shorter periods by their manufacturers. For the proper operation of the hot water tank and solar collector and to avoid damages, it is necessary to check the safety valves and in case of maltfunction must be replaced. Excessive concentration of salts or external bodies in the water supply damages safety valves. Defects caused by above mentioned components are not covered by Manufacturer's warranty. Damages, on tank which are caused by a disordered safety valve, joint, gasket, pipe and other parts will put the tank and entire solar water heater out of warranty.
- Primary circuit of the product should be filled up with necessary amount of an eligible heat transfer fluid (e.g. propylene glycol) supplied or recommended by Manufacturer. Heat transfer fluid PH level mustn't exceed 10 and not drop below 8. Heat transfer fluid should be specially designed for solar water heaters, should be non-toxic, corrosion-resistant and resistant at high temperatures.
- During the installation, solar collectors must be covered by a matt covering material on the glass untill filling the heat transfer fluid.
- Operating the water heating system without heat transfer fluid, or operating it before filling the domestic water storage part of the tank completely will cause damages which will void warranty. During the installation of closed loop thermosiphon solar water heaters, consumption circuit of the tank must be filled before filling the primary circuit.
- Damages and defects caused by transport, handling, storage, and lift up operations are out of the warranty.
- Defects caused by third parties voids the warranty.
- Damages caused by the glass breakage are out of the warranty.
- External cover of hot water tanks is made of steel coated by paint and well packed for transport and handling. Nevertheless, scratches during handling and moving up to installation place, should be avoided. Otherwise some corrosion might be happened at the stratched points subsequently which is not a warranty issue.
- Installation of pipes, etc. to the collector outlets must be done by using two spanners. One for fixing, the other one for spinning. (as shown in the figure below)





• Magnesium Anode bar which protects tank against corrossion, must be checked annually and must be replaced if dissolved. Different minerals in the water content can shorten the life of the anode. The general warranty conditions can not predict the water content of the region where the customer is located. With this in mind, customer can determine the appropriate maintenance period. But in every case magnesium anode has to be replaced every year even if not dissolved. As magnesium anode bar is a dissolving, consumable part, it is out of the limited warranty. (to see how to replace magnesium anode bar, please check Drawing A)



(Drawing A)
1-Magnesium anode, 2-Electrical heater, 3-Thermostat, 4-Flange, 5-Gasket, 6-Outer cap.

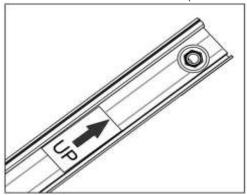
- Warranty doesn't cover conditions or damages caused by misuse, neglect, abuse, alternation or accident, normal wear and tear, the use of force of any kind, mechanical damage, damage due to frost, exceeding of the operating pressure, infestation by foreign bodies, electrochemical influences (e.g. mixed installations), non-observance of the layout documents, lack of or unprofessional cleaning and operation. The hydraulic connections to the tank must be such as to exlude case of electrolysis.
- In the event of a repair on the product, even if such work is performed by an authorised installer, any warranty claims shall be invalidated.
- Excessive flow rate and temperature than Manufacturer's recommendation, overheating and stagnation more than 15 days which will cause important damages voids the warranty. The user must take all appropriate measures to avoid the overheating case
- The water quality (compositions of chemicals) is very important. If the water in the solar water heater is more than following
 values, it can damage the product, which will put the product out of warranty.

Parameter	Reference value
рН	7-9
Hardness (TDS)	<120 mg/lt
Total Iron	<0,3 mg/lt
Chlorine ions (including chloride)	<50 mg/lt
Conductance	<650 mS/cm 25°C
Magnesium	<50 mg/lt
Sulfate	<250 mg/lt
Nitric acid ions (including Nitrate)	<50 mg/lt
Alkalinity M	<50 mg/lt



- Tank should be grounded otherwise tank will be out of warranty.
- The product must be fixed to the floor or roof on which it is installed, using mounting and connection elements supplied or approved by Manufacturer.
- The water supply pressure should not exceed 10 bars, otherwise a pressure reducer should be installed.
- Tank should not be remain empty after commissioning. This may cause corrosion inside the tank especially on joint areas and connection threads.
- The electrical heater is not part of the product but an additional heating element. The electrical heater should be used only in case the hot water temperature is under 45°C. The constant and unreasonable use of the electrical heater may damages the tank and is out of warranty. Excessive concentration of salts or external bodies in the water supply damages the electrical heater. Replacing the electrical heater and thermostat when their warranty period finishes is recommended. (please check drawing A)
- Manufacturer shall not be liable for damages to equipments, caused by operating system, acts of God, abnormal weather conditions, damages caused by third parties, abrasives, corrosives and/or other material which shall cause damage.

• IMPORTANT: There are tiny ventilation holes in the lower parts of the solar collector. If the solar collector is placed with these holes facing upwards direction, there is a possibility of rain water penetration inside the solar collector. While installing the solar collector, pay attention to the direction of the arrow indicated on the UP label (shown below) on the sides of the solar collector.



Warranty claim procedure:

- Customer should start warranty claim procedure by sending filled Warranty Claim Document which is annex to the General
 Warranty Conditions. Filled Warranty Claim Document should contain detailed explanation of the claim, serial number of the
 product and photos. Photos should show product label, general view of the product installed (in operation) and claimed part of
 the product.
- Customer should dismantle components and assemblies only after proper consultation with Manufacturer and it's consent.
- Manufacturer starts the internal warranty claim procedure and answers the customer latest within 30 workdays. Manufacturer
 may ask for additional information and/or documents. 30 working days of answering period starts after the last infomation sent by
 customer.

Compensation method:

 Manufacturer reserves the right to decide whether a faulty part should be replaced or repaired or whether a faulty appliance should be exchanged with a correctly operating appliance of a similar value. If possible Manufacturer repairs the defect or describe how to repair to the customer depending on it's technical assessment.

If not possible to repair the defect;

- Solar collector; In case of a warranty claim within the first 5 years of the warranty period, Manufacturer undertakes 100% of a product or product's value according to Manufacturer's EXW price. In case of a warranty claim within the second 5 years of the warranty period, Manufacturer undertakes a 50% of product or product's value according to manufacturer's EXW price.
- Hot water tank; In case of a warranty claim within the first 3 years of the warranty period, Manufacturer undertakes 100% of a
 product or product's value according to Manufacturer's EXW price. In case of a warranty claim after the first 3 years of the
 warranty period, Manufacturer undertakes a 50% of product or product's value according to Manufacturer's EXW price.
- Replacement deliveries and/or payments do not include; labor cost, service cost, travel or transport expenses, etc.
- In any condition, liability of Manufacturer shall not exceed product's EXW price indicated on Manufacturer's invoice of related product.

Annex:

Warranty Claim Document

Notes:

- The figures and data are not binding and may be amended/changed without any prior notice in the interest of technical improvement.
- Misprints and technical changes reserved.

Kayseri, 01.07.2019

BURAL SOLAR INDUSTRY LTD.

Address: Serbest Bölge 12. Cadde No:24-A, Melikgazi 38070, KAYSERI / TURKEY

www.bural.com.tr

