

Keep the instructions for further use.

## Assembly and Service Instructions

for Buderus Storage Water Tanks TT 150 and TT 200  
for Installation underneath Boilers of 105 (all models)  
and 224 (up to model 35) Series

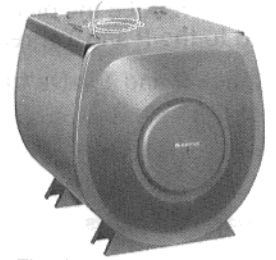


Fig. 1

### 1. General

The domestic water tanks of the TT-series are installed underneath a boiler.

They are supplied completely assembled.

Its components are: the tank with hard foam insulation and aluminum jacket, tank supports, boiler support metal sheet on top of the tank, and plastic hand hole cover (Fig. 1).

Refer to page 4 for transport and removal packing material.

The internal surfaces of the tanks are protected against corrosion by the Buderus Thermoglaze. Additionally the tanks are supplied with a factory-assembled magnesium anode which offers double security.

Plastic cover and insulation of handhole are to be assembled after mounting the sensor.

The Repair Instructions show how to check or replace the magnesium anode. They are supplied with the replacement anode.

### 2. Dimensions and Connections

Legend (Fig. 3 and 5):

- VS = Tank - boiler supply R 1" } interchangeable
- RS = Tank - boiler return R 1" }
- AB = Domestic hot water supply R 1"
- EZ = Recirculation inlet R 3/4"
- EK/EL = Cold water inlet / outlet (drain) R 1 1/4"

### 3. Set-up

Note:

For transportation and disassembly of the packing material please revert to the rear of these instructions.

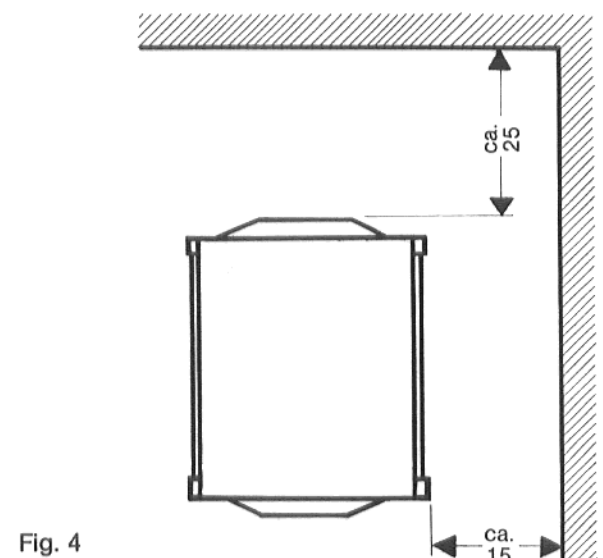
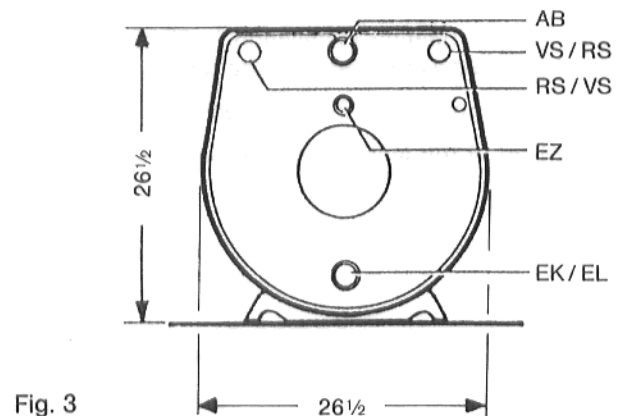
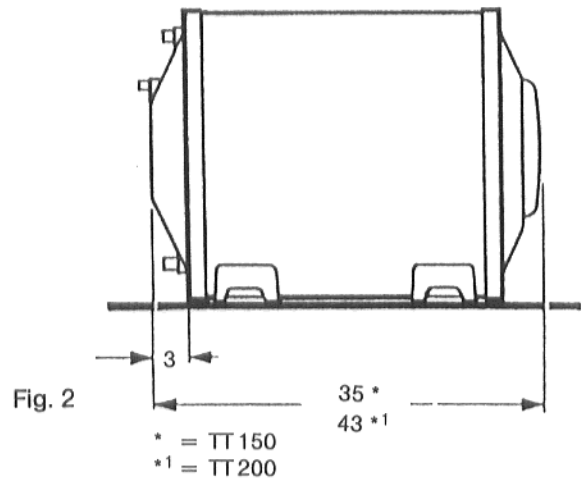
A freeze-proof room must be chosen for the location of the tank. The tank must be protected against freezing.

The floor must be level and capable of supporting the load.

The maximum supporting capacity of the tank is **550 lbs.**

The tank must sit securely on the floor with a light pitch towards the rear.

Minium clearances as per Fig. 4 must be respected.



## 4. Installation

The installer is responsible for observing applicable local codes.

Do not reduce the diameter of the overflow pipe connected to the P and T (Pressure / Temperature) valve.

Check P and T valve from time to time.

### Operation limits

|   |              |
|---|--------------|
| Heating water (coil) temperature . . . . .    | max. 320 °F  |
| Operating pressure (coil) . . . . .           | max. 360 psi |
| Domestic water temperature . . . . .          | max. 200 °F  |
| Operating pressure (domestic water) . . . . . | max. 145 psi |

### P and T valve

Pressure / Temperature (P and T) valve must be sized to conform to local codes.

## 5. Start-up

Check that the heating installation is filled with water and that the cold water feed into the tank is open.

Check water tightness of the pipework.

First start-up of the installation should be made by the contractor.

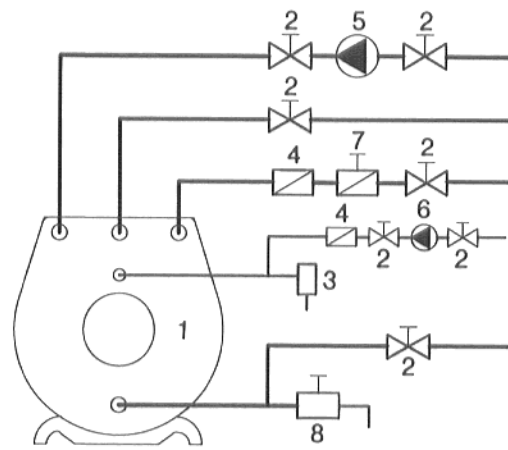


Fig. 5

### Legend:

|                 |                                       |
|-----------------|---------------------------------------|
| 1 Tank          | 5 Circulator                          |
| 2 Service valve | 6 Recirculation circulator (Optional) |
| 3 P and T valve | 7 Air purge valve                     |
| 4 Flow check    | 8 Drain valve                         |

AB = Domestic hot water out  
 EZ = Domestic water recirculation in  
 VS = Boiler water in (from boiler supply)  
 RS = Boiler water out (to boiler return)  
 EK = Domestic cold water in  
 drain

## 6. Service

These domestic water tanks are designed to heat potable water. Do not use for other applications.

It is recommended that the tank, under normal operating conditions, be inspected and cleaned every year.

In the presence of unfavorable water conditions, where hard to very hard water in combination with high temperature operation will result in more frequent fouling of the heat exchanger coil, cleaning should be done more frequently.

### Cleaning

In most cases mechanical cleaning is sufficient. Proceed as follows:

1. Drain domestic tank first.
2. Remove screws from the outer hand hole cover, take off cover and insulation (Fig. 6).
3. Remove bolts from hand hole cover, take off fixing clamp and then remove hand hole cover with anode and O-ring seal (Fig. 7).
4. Spray cold water with a jet all over the inner surface of the tank (pressure 60–70 psi). Heating up the primary water in the heat exchanger to a high temperature level reinforces the cleaning effect.
5. In case you have a big quantity of deposits gathered at the bottom of the tank after cleaning, use an industrial vacuum cleaner with a plastic pipe end to take care of the deposits.  
**Note:** Do not use sharp-edged objects in order to crush deposits. This could damage the thermoglaze coating of the inner surfaces of the tank **and void the warranty.**
6. Check magnesium anode and seal. If the magnesium anode is reduced to **15–10 mm** of diameter, replace same.
7. Refit hand hole cover with magnesium anode and O-ring.
8. Fasten fixing clamp with 2 hexagonal screws by hand as per Fig. 7.
9. Insert loop of the grounding cable and screw in the other hexagonal bolts (Fig. 7).  
**Note:** Fasten all 6 hexagonal screws at first by hand, then tighten  $\frac{3}{4}$  of a turn with a wrench.
10. Check tightness of the hand hole cover seal.
11. Assemble insulation of hand hole cover.
12. Fasten hand hole cover insulation to fixing clamp.

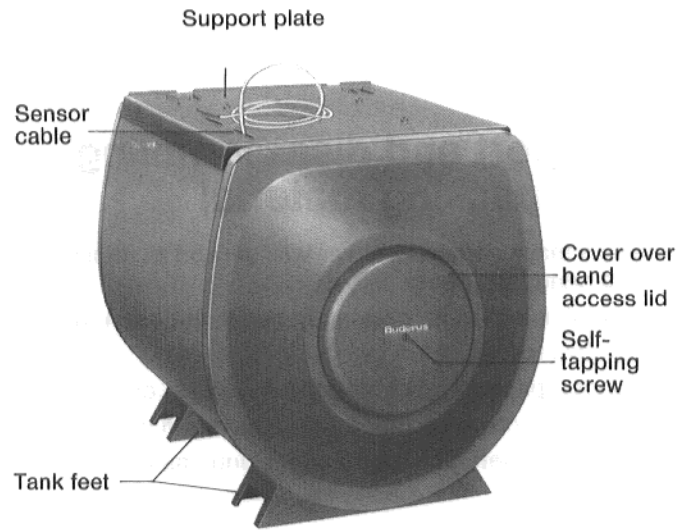


Fig. 6

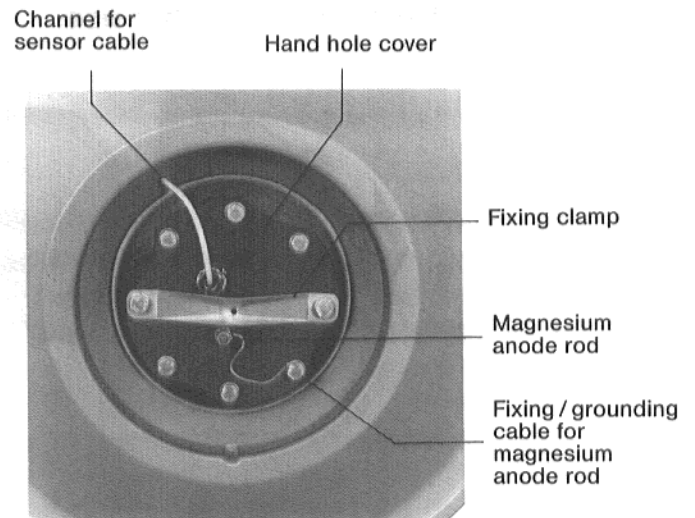


Fig. 7

## Transport and disassembling of the packing material

The tank may be transported as well packed as unpacked, by means of the hook on the hand hole cover (Fig. 8).

If the tank is still in its packing material, cut open the plastic foil on top.

1. Remove foil.
2. Take off packing cover and the 4 wooden corner protection ledges.
3. Glide tank cover the edge of the palett on its feet (Fig. 9).
4. Remove palett and bottom packing material from the rear of the tank (Fig. 10).

The outer hand hole cover, the hand hole cover insulation and sheet metal screws are in the bottom packing (to be assembled after mounting of the sensor).

**Note:** In order not to damage the thermoglaze in the domestic water outlet (AB), cold water inlet (EK) and the cold water outlet (drain), do not insert sharp-edged objects (Fig. 3).

**Keep these instructions for further use.**

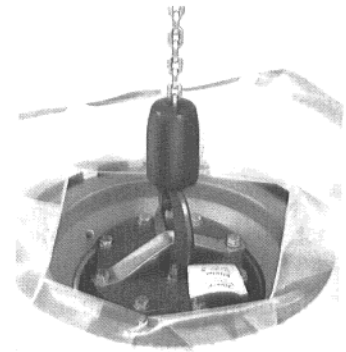


Fig. 8

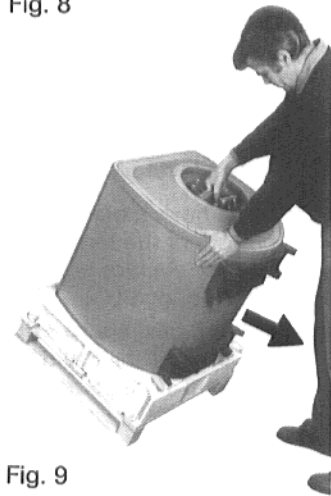


Fig. 9

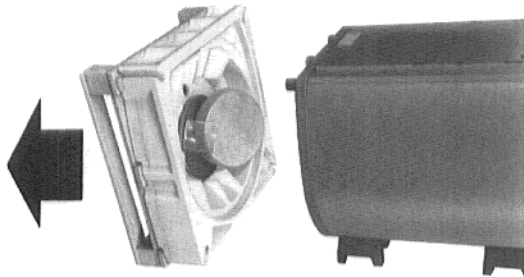


Fig. 10