Tudor

Single point open outlet (vented) water heaters

21051NZ Tudor 5 Litre over-sink water heater
21052NZ Tudor 5 Litre under-sink water heater
21101NZ Tudor 10 Litre over-sink water heater
21102NZ Tudor 10 Litre under-sink water heater

99006NZ Telescopic swivel arm only
99032NZ Telescopic Spout accessory for 21051NZ / 21052NZ
99079NZ Mono vented mixer tap for 21101NZ / 21102NZ
99080NZ Solo vented mixer tap for 21101NZ / 21102NZ
99081NZ Hero vented mixer tap for 21101NZ / 21102NZ
Read These Warnings First

Please read all installation requirements, installation procedures and precautions before installing any Tudor water heater.

Never attempt to install any Tudor water heater without reading all of the applicable instructions.

Tudor water heaters are open outlet (vented) water heaters and must not be installed in the same way as mains pressure type water heaters.

The outlet from any Tudor water heater must be connected directly to an outlet spout on the sink and must not be obstructed by a tap or valve or in any other way.

The water flow is controlled by a cold water tap connected before the water heater. Cold water pushes hot water out of the tank when the cold water tap is turned ON. Any such cold water tap should be labelled HOT.

This water heater must not be connected to more than one outlet.

All plumbing connections must be made in accordance with AS3500.

The heater is intended only for indoor use and should never be installed outdoors or be exposed to the elements of nature.

Over-sink and under-sink models are NOT interchangeable.

Children should be supervised to ensure they do not play with the heater.

The heater is unsuited for use by children or infirm people without supervision.

If the power supply cord is damaged it must be replaced by a Service Provider or a qualified electrician.

Do not remove the cover of the heater under any circumstances without first isolating the heater from the power supply.

Outlet temperature should never be set to less than 60°C without due regard to regulations governing the storage temperature of hot water.

This unit must not be cleaned by a water jet.

Installation Requirements

Before installing, ensure that the following are available:

a) sufficient space to position the heater so there is 270 mm clear access under the heater (over-sink models) or 270mm above (under-sink).

b) standard 10 amp 240 volt power outlet within 1500 mm of the heater

c) cold water supply with a minimum working pressure of 50 kPa and a maximum working pressure of 350 kPa.

d) Isolating valve (not supplied)

If the pressure may exceed 350 kPa, a 350kPa pressure limiting valve (not supplied) must be installed in the cold water supply line.

A double check valve (not supplied) is required to comply with the backflow requirements of AS/NZS3500.1

Under-sink models must be installed beneath approved vented mixer taps requiring a single mounting point on a sink, basin or tub.

Water pressure under 100 kPa may be sufficient for over-sink heaters but may not operate under-sink mixer taps satisfactorily.
NOTE: Failure to correctly fit the Restrictaflow valve (provided) will void the warranty

Step One - Tapware

Note: Instructions for correct assembly and installation of Tudor tapware is included in the tapware box. Pay close attention to these instructions.

Over-sink models must be installed with an inlet valve to control the flow from the water supply to the heater. No valve is supplied with the heater. The water supply and valve should be connected after fastening the heater to the wall.

Over-sink models are supplied with a 300 mm swivel spout. A 300 mm to 600 mm telescopic swivel spout (99006NZ) is available as an optional extra.

Under-sink models must be installed with approved vented tapware. It is advisable to fit the tap to the sink before mounting the heater to the wall beneath the sink.

1. Install the Restrictaflow valve provided, with the isolating valve (not supplied), into the main cold water supply line. The Restrictaflow is adjustable and must be set to deliver no more than 6Ltr/min (Max.) NOTE: Do not fit the Restrictaflow valve to the tank (See P.5 diag)

2. Flush water supply pipes thoroughly to remove any silt or fines.

3. Fasten the tap body to the sink using the bolt & plate system provided.

4. The hose with a WHITE band on it connects to the tap hole with NO marking.

5. The hose with a RED band on it connects to the tap hole with a RED marking.

6. The hose with a BLUE band on it connects to the tap hole with a BLUE marking.

7. Ensure that the flexible tubes are firmly attached to the base of the tap body and in the correct sequence. Refer tapware installation sheet.

Do not dismantle the assembled tap body during installation. Mixer taps are factory tested and sealed to provide optimum performance.

To adjust water temperature delivered by Solo and Hero mixer taps, see instructions on page 7. Such adjustments should be made only by a qualified technician.

Step Two - Positioning

Over-sink heaters should be installed so that the outlet spout drains to a sink or tub, and with a clearance of 270 mm beneath the heater to allow for service access.

Under-sink heaters should be installed as closely as possible to directly below the outlet tap with a clearance of 270 mm above the heater.

This unit must not be positioned in an area that may be cleaned by a water jet.

Step Three - Fastening

It is not necessary to remove the case of the heater during installation.

The heater must be wall mounted with two fixing screws as shown in the diagram on page 5. Fixing screws must have the strength to support the filled heater.

The fixing screws are to protrude 4 mm from the wall as shown in the diagram on page 5 so as to fit into keyhole slots provided on the rear of the heater.

NOTE: Do not fit the Restrictaflow valve to the tank (See P.5 diag)
Installation Procedure continued

Step Four - Connecting

On over-sink models, the inlet and outlet are located on the base of the heater.

On under-sink models, the inlet and outlet are located on the top of the heater.

All Tudor water connections are via 15 mm compression fittings and must be made strictly as shown in the diagrams.

Over-sink models are supplied with a 300 mm open outlet spout, and must also be fitted with an isolation valve on the cold water side. A valve is not supplied with the heater and must be supplied and fitted by the installer.

Under-sink models must be installed with approved vented tapware regulating the incoming water supply which displaces the hot water from the heater so it discharges through the open vented spout incorporated into the tap mounted on the basin or sink.

The use of tapware other than approved vented tapware is dangerous.

Each heater is equipped with a 1600 mm power cord and plug and should be connected to a standard 10 amp power outlet located adjacent to the heater. When correctly installed the plug must be accessible.

Do not turn the power ON until the heater is filled with water and air is purged from the heater.

Step Five - Commissioning

Fill the heater tank and purge air from the heater by turning the water supply ON and running water through the heater until it flows smoothly. Turn the water supply OFF and turn the power supply ON. The heater will then run through its heating cycle.

During the heating cycle, drips fall from the delivery spout or tap.

Dripping will cease when the heating cycle is completed and the stored water temperature has reached the level set by the user.

<table>
<thead>
<tr>
<th>Model</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Empty</td>
</tr>
<tr>
<td>Five Litre</td>
<td></td>
</tr>
<tr>
<td>over-sink</td>
<td>3.5</td>
</tr>
<tr>
<td>Five Litre</td>
<td></td>
</tr>
<tr>
<td>under-sink</td>
<td>3.5</td>
</tr>
<tr>
<td>Ten Litre</td>
<td></td>
</tr>
<tr>
<td>over-sink</td>
<td>4.0</td>
</tr>
<tr>
<td>Ten Litre</td>
<td></td>
</tr>
<tr>
<td>under-sink</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Retrofit instructions for open vented heaters

NOTE: Failure to fit the recommended Restrictaflow valve will void the warranty

Flow restrictor

If replacing an existing open vented water heater, an isolating valve must be fitted to the incoming water supply. A restrictaflow valve set at 6ltr/min (Max.), must be fitted to the outlet side of the isolating tap. (See diag on Page 5).

NOTE

It is essential that the tapware is the “Open Vented” type.

If the aerator on the end of the tap is too restrictive. It must be removed.

The installation requirements from page 2 are also applicable.
**Installation Procedure Continued**

**Quick Installation Guide**

**Step One**
Install approved vented tapware see page 3

**Step Two**
Position heater < 1 Metre from tap see page 3

**Step Three**
Fasten heater to wall see page 3

**Step Four**
Connecting see Page 4.

**Step Five**
Commissioning. see page 4 before turning power on

**Cold Water Supply**

**Isolation Valve** (not supplied)

**Restrictaflow** see page 4
Operating Procedures

Water Temperature

Tudor water heaters are fully automatic, and may be left switched ON under the control of the variable thermostat.

Nominal operating temperature can be varied from about 30°C to about 80°C.

Temperature should not be set to less than 60°C without due regard to regulations governing the storage temperature of hot water.

Economy Setting

The economy setting “E” will maintain stored water temperature at approximately 60°C. At the “E” setting, the temperature control locates into a set position and a slight resistance will be felt when rotating the temperature control beyond that setting. This measure is to help ensure that higher temperatures are only selected deliberately.

Frost Protection

If the heater is located where ambient air temperature could fall below 5°C when the heater is not in use, the “anti freeze” setting on the temperature control will maintain stored water temperature over 5°C to prevent freezing and damage to the water heater.

The same protection does not extend to connecting pipework or fittings.

Safety Cutout

Should the heater over-heat, a manually resettable safety cutout will automatically turn the heating element OFF. The cutout must be reset by a Service Provider or a licensed electrician. Users should never reset the cutout without qualified assistance.

Cleaning

Never use strong, corrosive or abrasive cleaning materials. Wipe clean the outer surfaces with a sponge or soft cloth using a mild soap and water. Domestic dish washing liquid detergent is most suitable.

Spare Parts

<table>
<thead>
<tr>
<th>PART NO</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>90401NZ</td>
<td>element neck ring kit Tudor</td>
</tr>
<tr>
<td>90407NZ</td>
<td>fascia kit Tudor undersink</td>
</tr>
<tr>
<td>90408NZ</td>
<td>fascia kit Tudor oversink</td>
</tr>
<tr>
<td>90836NZ</td>
<td>element kit</td>
</tr>
<tr>
<td>90420NZ</td>
<td>pilot light kit Tudor</td>
</tr>
<tr>
<td>90421NZ</td>
<td>thermostat kit Tudor</td>
</tr>
<tr>
<td>90423NZ</td>
<td>overload kit Tudor</td>
</tr>
</tbody>
</table>
Service Procedures

This appliance may only be serviced by a suitably qualified technician. Disconnect from power and turn water supply OFF before attempting any kind of service work.

Removing the case
1. Remove temperature control knob by gripping it and pulling towards you.
2. Remove the single retaining screw located beneath the temperature control knob.
3. Remove the four case screws two at top, two at bottom.
4. The case can now be lifted off carefully.

Replacing the case
Reverse of the above procedure.

Replacing a thermostat
1. Remove the front cover.
2. Disconnect the two electrical terminals from the thermostat. These are spade connectors and can be easily pulled off.
3. Remove the two screws attaching the thermostat to the plastic upright.
4. Pull the capillary out of the thermostat pocket located on the element assembly.
5. Take the new thermostat (90421NZ) and uncoil about half of the capillary tube.
6. Push the new capillary into the pocket ensuring that:
   a) if it is an over sink model, the cutout bulb goes in first then the thermostat bulb behind it.
   b) if it is a under sink model, then the reverse is applicable.

Attach the thermostat to the plastic upright.
Reconnect the two electrical terminals. It does not matter which way around the connections occur.
Ensure the remaining capillary coil is out of the way of any live terminals.
Ensure the plastic upright is located securely in the position provided.
Refit the cover assembly.

End of life disposal

In order to help preserve our environment we ask that you dispose of this product correctly. Please contact your local city council for collection centre details.
# Problem Solving

<table>
<thead>
<tr>
<th>Fault</th>
<th>Possible cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No heat</td>
<td>No power</td>
<td>Check power supply</td>
</tr>
<tr>
<td></td>
<td>Faulty element</td>
<td>Contact The HydroTap Co. Ltd.</td>
</tr>
<tr>
<td></td>
<td>Faulty thermostat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Faulty cutout</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tripped overload</td>
<td></td>
</tr>
<tr>
<td>No water</td>
<td>No supply</td>
<td>Check water supply</td>
</tr>
<tr>
<td></td>
<td>Blockage</td>
<td>Contact The HydroTap Co. Ltd.</td>
</tr>
<tr>
<td></td>
<td>Faulty thermostat</td>
<td></td>
</tr>
<tr>
<td>No indicator</td>
<td>Faulty LED</td>
<td>Contact The HydroTap Co. Ltd.</td>
</tr>
<tr>
<td></td>
<td>Faulty connection</td>
<td></td>
</tr>
<tr>
<td>Slow flow</td>
<td>Restricted aerator</td>
<td>Remove aerator</td>
</tr>
</tbody>
</table>

## Contact Details

Warranty effective from January 2009

<table>
<thead>
<tr>
<th></th>
<th>Normal Warranty</th>
<th>Extended warranty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 Months</td>
<td>24 Months</td>
</tr>
<tr>
<td>Domestic HydroTap</td>
<td>Parts &amp; Labour</td>
<td>Parts &amp; Labour</td>
</tr>
<tr>
<td>HydroBoil</td>
<td>Parts &amp; Labour</td>
<td>Parts &amp; Labour</td>
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<tr>
<td>AutoBoil</td>
<td>Parts &amp; Labour</td>
<td>Parts Only</td>
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<tr>
<td>Commercial HydroTap</td>
<td>Parts &amp; Labour</td>
<td>Parts &amp; Labour</td>
</tr>
<tr>
<td>All Other</td>
<td>Parts &amp; Labour</td>
<td>Parts &amp; Labour</td>
</tr>
</tbody>
</table>

Full warranty details may be found on the website.

### Registering Your Purchase

Registering your Zenith installation on the website may help to establish date of installation should it become necessary to service the appliance under terms of the Zenith warranty. To register your installation go to www.zenithheaters.co.nz and look under the heading “Warranty”, or forward the completed product registration form (enclosed) to your nearest Zenith head office.

**NOTE:** Extended warranty and Pro-Rata warranty will only be available on products which have been registered with Zenith Heaters Ltd., head office

### Head Office

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