

1300
365
115-

Model:
250F2-36

OWNER'S MANUAL

WARRANTY INFORMATION AND INSTALLATION INSTRUCTIONS

ELECTRIC STORAGE WATER HEATER

MODELS:

- 25V1, 25P1, 50V1, 50P1, 50H1, 80F1, 80H1,
- 125F1, 125F2, 125H1, 160F1, 160F2, 160H1,
- 250F1, 250F2, 250T1, 250T2, 250H1, 250H2,
- 315F1, 315F2, 315T1, 315T2, 315H1, 315H2,
- 400F1, 400F2, 400T1, 400T2, 400H1, 400H2

**FOR ADVICE, REPAIRS AND
FAST SERVICE:**

**1300 365 115 (AUSTRALIA)
0800 686 666 (NZ)**

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WELCOME TO DUX HOT WATER

Your decision to purchase a Dux water heater will reward you for many years to come.

Since 1915, the Dux range has seen continuous research and development, resulting in many breakthroughs in the efficiency, reliability and longevity of hot water systems.

Dux water heaters are manufactured in Australia in a state-of-the-art facility, using a Quality Endorsed Company production system.

This is your assurance that you have purchased the highest quality water heater available, one that will provide continuous hot water for all your needs - safely, economically, and for many years to come.

FEATURES OF YOUR DUX ELECTRIC WATER HEATER

- Unique Positive Dorned, butt welded tank provides superior corrosion resistance, resulting in longer life.
- Advanced heating design for better reliability.
- High efficiency design.
- Adjustable Thermostat - allows you to adjust water temperature, saving energy costs during warmer months of the year (single element models only).

WARRANTY CARD

Enclosed you will find a warranty card - please fill in the details and return immediately. This will ensure prompt service under warranty, if required. See page 10 for terms of warranty.

APPLIANCE DETAILS

For future convenience, would you kindly fill in the following details and retain with your original invoice for your own records.

OWNER'S DETAILS:

Surname:..... Given Name(s):.....
Address:.....
Town/Suburb:.....
State/Territory:..... Postcode:.....

Date of Purchase:..... Purchased From:.....

Model:..... Serial Number:.....

Date of Manufacture:.....
(Details on Data Plate on water heater)

INSTALLER'S DETAILS:

Date of Installation:..... Installer's Name:.....

Address:.....

Installer's Signature:.....

SERVICE DETAILS

Date of Service:..... Serviced By:.....

Work Carried Out:.....

.....

Signature of Service Agent:.....

INSTALLATION DETAILS

This water heater must be installed by a licenced tradesperson, and in accordance with

- AS/NZS3500.4.2 "National Plumbing and Drainage Code Hot Water Supply Systems – Acceptable Solutions"
- Local authority regulations.
- Outside Australia and New Zealand, please refer to local plumbing and building codes and regulations.

Note: This water heater is not suitable for pool heating.

This water heater is designed for direct connection to water supply pressures of:

- 25 to 160 Litre Models - 1100kPa
- 250 to 400 Litre Models - 800kPa

Where the mains pressure can exceed or fluctuate beyond the pressure shown above, a pressure limiting device (complying with AS1357) must be fitted in the cold water inlet supply. This device must be installed after the isolating valve and set at or below the pressure shown above.

LOCATION

The water heater should be located as close as possible to the most frequently used hot water outlet. Adequate access must be made for service to the element, thermostat, relief valve and anode. Ensure that the data plate is clearly visible.

Note: All models are equipped with a sacrificial anode, accessible through the top cover. Allow 50% of the height of the water heater for clearance above to replace the anode.

The water heater has a plastic base which is resistant to water damage. Slats or a plinth under the water heater are not required. A properly drained overflow tray should be used where property damage could occur from water spillage. (See AS/NZS3500.4.2 for further details.)

Do not install this heater in a roof area as a mains pressure unit.

Note: The warranty does not cover damage due to leakage of the water heater.

INSTALLATION DIAGRAM

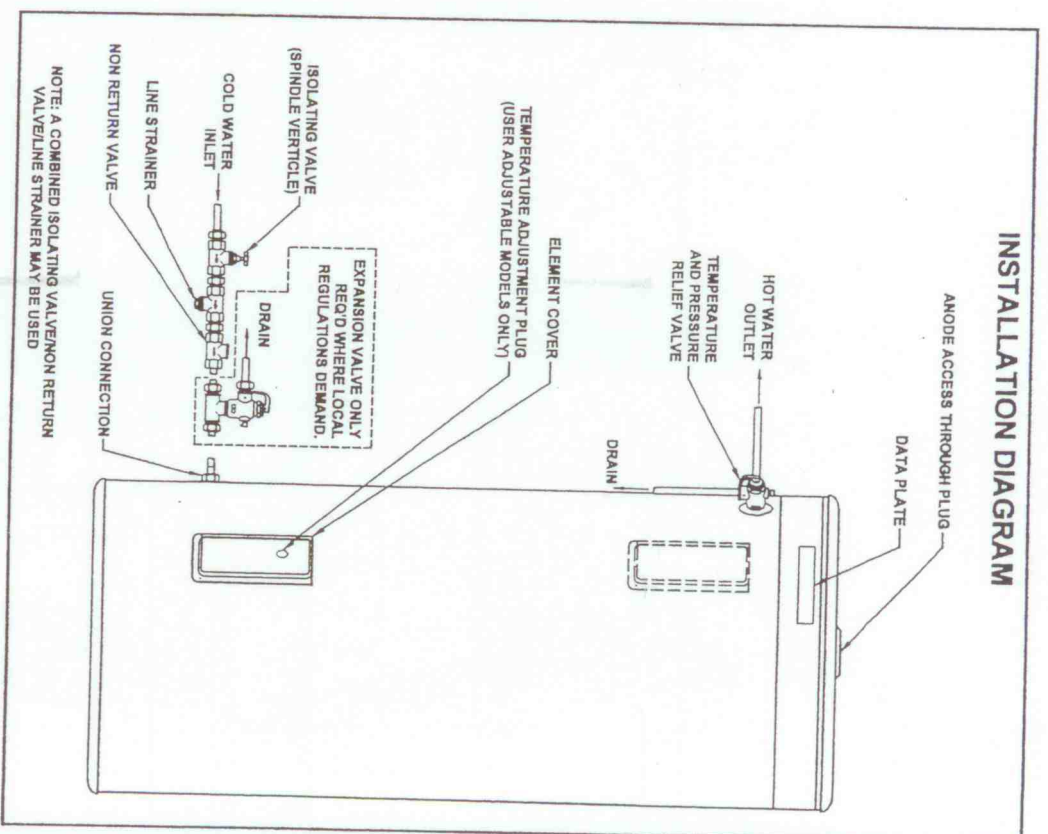


Figure 1: Installation Diagram

PRESSURE & TEMPERATURE RELIEF VALVE

The Pressure & Temperature relief valve is supplied loose with the water heater. The valve rating is:

- 25 to 160L Models - 1400kPa
- 250 to 400L Models - 1000kPa

The relief valve must be installed directly into the top socket marked "RELIEF VALVE".

Note: Plugs are supplied with the water heater to plug off the fittings that are not required. Ensure that adequate sealing tape is applied to the plugs for a leak tight fit.

COLD WATER CONNECTION

An approved isolating valve, approved non return valve, line strainer (optional but recommended), and union must be fitted between the supply main and the RP^{3/4}/20 socket in the water heater. All fittings must be approved by the relevant Authority. See the Installation Diagram for details.

Note for S.A. and W.A.: It is a state requirement that a pressure relief valve be fitted on the cold water supply line between the non return valve and the water heater (refer to Installation Diagram).

Warning: A separate drain line must be run for this relief valve. It is not permitted to couple drain lines from relief valves into a single common drain line.

HOT WATER CONNECTION

The hot water pipe should be connected to the RP^{3/4}/20 socket as shown on the Installation Diagram. For the most economical operation of the water heater, it is recommended that all hot water lines are insulated.

ELECTRICAL CONNECTION

This water heater is designed for single phase 240V A.C. supply only. The electrical connection must comply with Local Supply Authority Regulations and AS3000.

For models not pre-wired with a flexible lead, connections are made at the terminal block inside the water heater. Entry to the connection area is through the hole beneath the element cover, designed to accept a 20mm conduit. The element cover may be removed by undoing the two screws on the cover and sliding the cover downwards to disengage the top edge. Ensure that the conduit entry is well sealed to achieve correct weatherproofing.

Note: This water heater is fitted with a thermostat and over-temperature energy cut-out. Under no circumstances should the water heater be operated without both these devices being in the circuit. Replacement must be carried out only by a qualified electrician or the manufacturer.

Flexible Lead Models: If the power supply lead is damaged, it should be replaced by a lead assembly available only from Dux Manufacturing service agents.

Caution: The water heater must be filled with water before turning on the electricity supply.

OPERATING INSTRUCTIONS

THERMOSTAT

On models equipped with a user adjustable thermostat the temperature may be adjusted as follows:

- (i) Remove the plastic plug from the element cover.
- (ii) Adjust the temperature using a screwdriver.
- (iii) Ensure that the plastic plug is replaced.

Electrician: Press reset button on thermostat(s) to ensure over-temperature cut-out is set.

FILLING THE WATER HEATER

Open all hot water taps. Open isolating valve at the cold water inlet and allow water heater to fill until water flows through the system. Close each hot water tap after the air is expelled from its line.

WATER QUALITY

Your Dux water heater has been manufactured to suit water conditions of most Australian metropolitan supplies. Please note that harsh water supplies can have a detrimental effect on the water heater and its life expectancy. If you are unsure about your water quality you can obtain information from your local water supply authority.

The water heater is designed for use in areas where the Total Dissolved Solids (TDS) content of the water supply is less than 2500 mg/L. In areas where the TDS exceeds 750mg/L it is possible that the magnesium alloy anode (supplied in the heater) may become over reactive. To alleviate this, the magnesium alloy anode should be replaced with an aluminium alloy anode, available from your local Dux supplier.

- **Hard Water Models :** Water heaters with an "H" in their model designation (eg. 250H136) are factory fitted with an aluminium anode and a special hard water element.

CAUTION!

If the water heater is left in an operating condition and unused for two weeks or more, a quantity of hydrogen (which is highly flammable) may accumulate in the top of the water cylinder. To dissipate this gas safely it is recommended that a hot tap be turned on for several minutes at a sink, basin or bath, but not a dishwasher, clothes washer or other appliance. During this procedure there must be no smoking, open flame or any other electrical appliance operating nearby. If hydrogen is discharged through the tap it will probably make an unusual sound as with air escaping.

SAFETY INFORMATION

WARNING:

For safe performance this water heater is fitted with:

1. Thermostat.
2. Over-temperature energy cut-out.
3. Combination Pressure & Temperature relief valve.

These devices must not be tampered with or removed.

The water heater must not be operated unless each of these devices is fitted and in working order.

The element cover(s) should be removed only by an electrician.

The Pressure & Temperature relief valves should be checked for adequate performance or replaced at intervals not exceeding 5 years, or less in areas where local regulations apply. The lever on the relief valve must be pulled to operate the valve at least once every 6 months.

IMPORTANT

The Pressure & Temperature relief valve and the drain outlet pipe must not be sealed or blocked. It is normal for the valve to overflow during heating cycles.

SERVICE INFORMATION

SIX MONTHLY SERVICE (BY OWNER)

Operate the Pressure & Temperature relief valve for approximately 10 seconds by operating the easing lever on the valve to ensure water is relieved to waste through the relief drain pipe. Check to ensure the valve closes correctly.

FIVE YEAR SERVICE (BY AUTHORISED PERSONNEL ONLY)

The five yearly service should be carried out by a licenced tradesperson. It is recommended that this service be carried out by your local Dux agent. The service should include the following:

- Replace the Pressure & Temperature relief valve.
- Replace the anode.
- Flush the water heater.

RECOGNITION OF ABNORMAL OPERATION

1. PRESSURE & TEMPERATURE RELIEF VALVE RUNNING

It is not unusual for this to allow a small quantity of water to escape during the heating cycle. The amount of discharge will depend on hot water usage. As a guide, if it discharges more than 20 litres of water in 24 hours there may be a problem.

Continuous trickle:

Likely build up of foreign matter. Try gently raising the easing lever on the Pressure & Temperature relief valve for a few seconds. This may dislodge a small particle of foreign matter and rectify the fault. Release lever gently.

Steady flow:

Likely causes are excessive water supply pressure, a faulty Pressure & Temperature relief valve or a faulty thermostat. Turn off the electricity supply and contact your Dux agent.

2. NO HOT WATER

Is the Pressure & Temperature relief valve discharging too much water? See "Pressure & Temperature Relief Valve Running".

Do you have the correct size water heater for your requirements? Sizing details are available from your Dux supplier.

Is one outlet (such as the shower) using more hot water than you think?

Carefully review the family's hot water usage and if necessary check the shower flow rates with a bucket and a watch. If it is not possible to adjust water usage patterns, an inexpensive flow control valve can easily be fitted to the shower outlet.

3. HIGH ELECTRICITY BILLS

Is the Pressure & Temperature relief valve discharging too much water? See "Pressure & Temperature Relief Valve Running".

Is one outlet (such as the shower) using more hot water than you think? See "No Hot Water".

Is there a leaking hot water pipe or dripping hot water tap? A small leak can waste a large quantity of hot water.

Replace faulty tap washers and have your plumber rectify any leaking pipework.

**DUX HOT WATER UNIT
MANUFACTURED BY DUX MANUFACTURING LIMITED
TERMS OF WARRANTY**

1. Dux Manufacturing Limited warrants for the period of twelve (12) months after the date of installation of the hot water unit ("the Unit") that the Unit is free from all defects in factory materials or workmanship under normal use.

The warranty covers the replacement of any failed component or where necessary replacement of the Unit free of charge including reasonable labour costs incurred in normal working hours. The period of the above warranty is extended, where the Unit's inner cylinder fails up to and including the period of years (if any) set out in clause 10 from the date of expiry of the above warranty. In this case, a new Unit or cylinder will be supplied free of charge (installation, transport and labour costs will be charged to the owner).

Note:

Where the date of completion of installation is not known, then the warranty will commence one (1) month after the date of manufacture (refer details on the Data plate).

2. This warranty only applies to defects which have arisen solely from faulty materials or workmanship and does not apply to other defects including, without limitation, the following:
 - (a) Accidental damage, abuse, misuse, maltreatment, abnormal stress or strain, harsh or adverse water conditions including excessive water pressure or temperature, or neglect of any kind of the Unit.
 - (b) Alteration or repair of the Unit other than by an accredited service agent or technician of a gas or electricity utility agent.
 - (c) Attachment of accessories other than those manufactured or approved by Dux Manufacturing Limited.
3. The Unit must be installed in accordance with information supplied in this Owner's Manual.
4. In addition to this warranty, certain legislation (including the Trade Practices Act 1974) may give you certain rights which cannot be excluded, restricted or modified. The undermentioned clauses must be read subject to such legislation and nothing in this warranty has the effect of excluding, restricting or modifying those rights.
5. Dux Manufacturing Limited's liability for a breach of a condition or warranty implied by Division 2 of Part V of the Trade Practices Act 1974 (other than S69) and any equivalent State or Territory legislation is hereby limited to any one or more of the following as determined by Dux Manufacturing Limited:
 - (i) the replacement of the Unit;
 - (ii) the repair of the unit;
 - (iii) the payment of the cost of replacing the Unit or of acquiring an equivalent Unit;
 - (iv) the payment of the cost of having the Unit repaired.
6. Dux Manufacturing Limited's liability under section 74H of the Trade Practices Act 1974 and any equivalent State or Territory legislation is expressly limited to a liability to pay to you an amount equal to:
 - (a) the cost of replacing the unit;
 - (b) the cost of obtaining an equivalent Unit; or
 - (c) the cost of having the Unit repaired;whichever is the lowest amount.

7. Subject to clause 4 above and to the extent permitted by law, all express and implied warranties, guarantees and conditions under statute or general law as to merchantability, description, quality, suitability or fitness of the goods for any purpose or as to design, assembly, installation, materials or workmanship or otherwise are hereby expressly excluded and Dux Manufacturing Limited shall not be liable for any physical or financial injury, loss or damage or for consequential loss or damage of any kind arising out of the supply, layout, assembly, installation or operation of the Unit or arising out of Dux Manufacturing Limited's negligence or in any way whatsoever.

8. Free repair or replacement is provided within the metropolitan area of Australian capital cities as defined by Dux Manufacturing Limited or within 25km of a Dux branch office or accredited service agent.

In other areas, defective parts of Units must be returned to the point of sale before replacement can be considered under the terms of this warranty. Freight and insurance charges for the transport of a defective and replacement Unit or parts are payable by the owner. Where a failed component or Unit is replaced under warranty, the balance of the original warranty period will remain effective. The replaced part or Unit does not carry a new warranty.

The warranty only applies to the Unit and does not cover any plumbing or electrical parts supplied by the installer such as pressure limiting valve, stop cocks, non-return valve, electrical switches, pumps or fuses.

Warranty claims must include all details and should be made to the point of sale or to Dux Manufacturing Limited within one (1) month of the appearance of the defect.

9. NOTE:

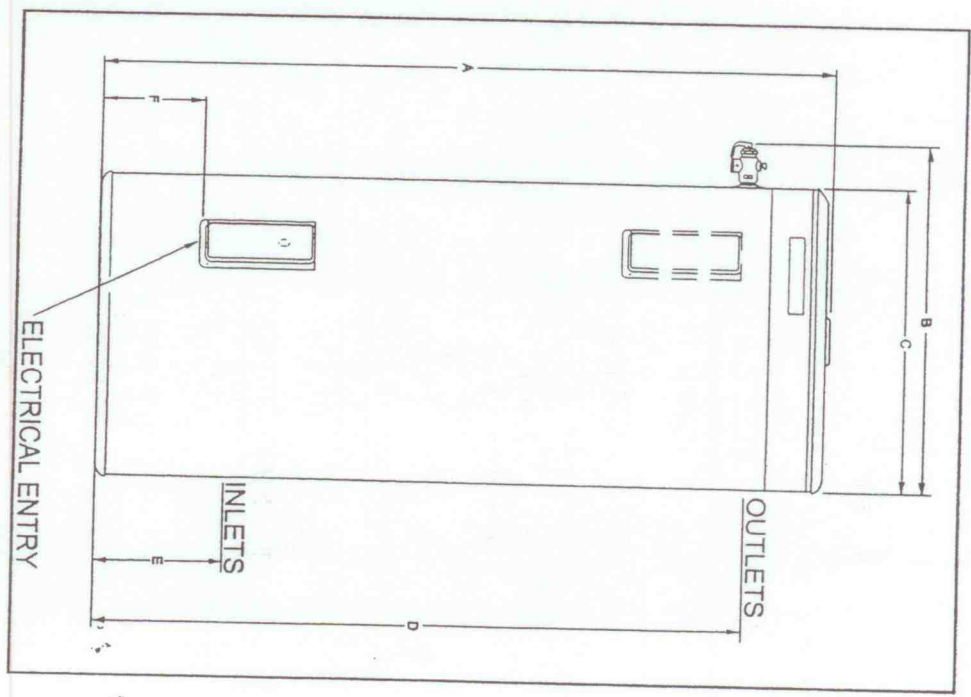
(a) Where the Unit is located in a position that does not comply with the Dux Manufacturing Limited installation instructions or relevant statutory requirements free labour costs do not cover major dismantling or removal of cupboards, doors, walls or special equipment and/or excessive labour time to bring the Unit to floor level.

(b) Subject to any statutory provisions to the contrary, claims for damage to furniture, carpets, walls, foundations or any other consequential loss either directly or indirectly due to defects of any kind in a Unit will not be met by Dux Manufacturing Limited.

10. 4 years on standard models.

9 years on models 250T1, 250T2, 315T1, 315T2, 400T1 & 400T2.

SPECIFICATIONS



Heater Size (L)	Dimensions (mm)					
	A	B	C	D	E	F
25	418	485	404	255	132	75
50	673	485	404	510	132	75
80	1007	524	459	836	170	80
125	1062	597	532	857	206	116
160	1317	597	532	1112	206	116
250	1444	682	617	1231	215	125
315	1754	682	617	1541	215	125
400	1703	770	705	1466	240	150

Warranty Card



Thank you for purchasing a Dux water heater. Ensure that your product is registered for prompt warranty service by completing and returning this card.

Owner's Name:

Address:

Phone No.:

Who installed your Dux water heater?

Plumber Gas or Electric Utility Hot Water Specialist

Other (please specify)

Installer Company Name: CL GOODFREY

Installer Address: 50 DANDENONG ST DANDENONG

Installer Phone No.: 9754 7942 Date of Installation: 1/3/01

Licence No.: 18446 Certificate of Compliance: 5144299

What type of heater have you installed?

Electric Gas

Model No.:

(Details on data plate of heater)

What type of installation?

New Home New Home Extension

Replacement of Existing Water Heater

Where did you purchase your heater?

Gas or Electric Utility Hot Water Specialist

Plumbing Suppliers A Plumber/Builder Purchased it for Me

Other (please specify):

Which of the following was most important when selecting your heater?

Advertising Advice from Plumber

Price Advice from Supplier

Quality Brand Name

Other (please specify):

0450

AFFIX
STAMP
HERE

Dux Manufacturing Limited
P.O. Box 209
Moss Vale
NSW 2577

