

wilson

CUSTOMISED HOT WATER

Getting the job done

Wilson Industries Pty Ltd

Freecall 1800 30 20 50

ABN 56 154 374 240

www.wilsonhotwater.com.au

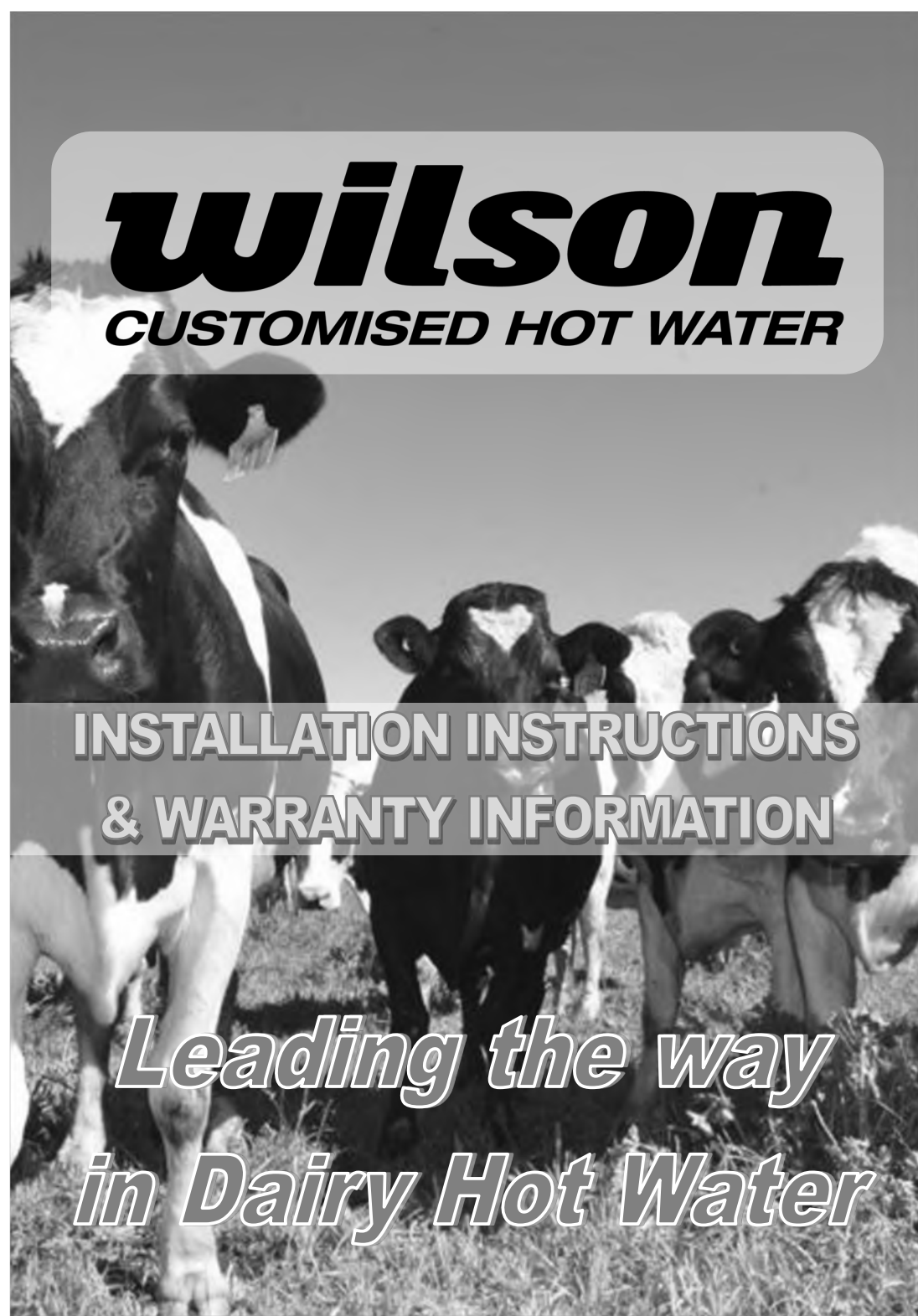


wilson

CUSTOMISED HOT WATER

**INSTALLATION INSTRUCTIONS
& WARRANTY INFORMATION**

***Leading the way
in Dairy Hot Water***



NOTES

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Wilson Industries Pty. Ltd. has adopted the policy of assuring that all of the company's products and services are of a standard that warrants complete customer satisfaction. To ensure continual improvement, Wilson Industries Pty. Ltd. reserves the right to make changes, without notification, to manufactured product.

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This warranty applies to the original purchaser only.

Wilson Industries Pty. Ltd. conditionally warrants the cylinder for a period of 5 years from the date of purchase (refer below for conditions) and that the dairy water heater shall be free from faulty workmanship or material. Warranty is not covered due to:

- faulty installation,
- aggressive or corrosive water supply
- water quality exceeding the following parameters, pH6.5-9.5, chloride 200mg/l, TDS 600mg/l, magnesium 10mg/l, total hardness 220mg/l.
- use of pre heated water with standard header tank, float valve and solenoid.
- accident, abuse, misuse, flood, fire, act of God or as a result of transportation or storage.
- Implosion of cylinder due to vacuum.

The Wilson Industries Pty. Ltd. water heater must be installed by registered tradespeople to comply with Wilson Industries Pty. Ltd. installation instructions and local statutory authorities regulations. Repairs must not be carried out by any person or persons without the permission of Wilson Industries Pty. Ltd.

Any components such as electrical, ball float or sight glasses are conditionally warranted for up to 12 months. Any claim is subject to inspection and acceptance by the respective manufacturer of the electrical component. Anodes are a consumable item and are not covered.

The outer case is not weatherproof and must be installed out of the weather.

Any consequential loss or damage which may occur as a result of failure of the water heater, is not covered by the warranty.

Where a warranty claim has been made and it is found that the fault is not within the unit, all costs will be charged to the purchaser.

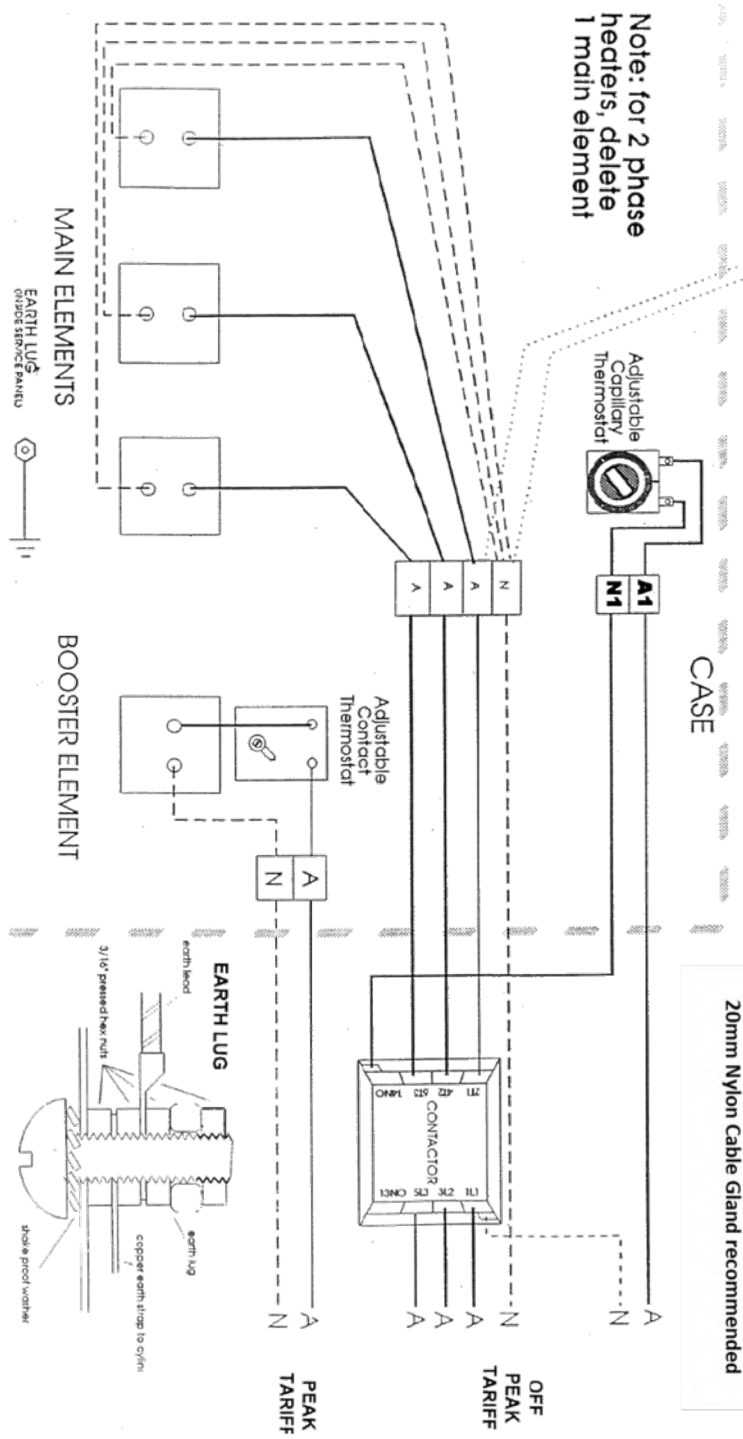
Further to the provisions stated above, Wilson Industries Pty. Ltd. warrants that:

- For a period within 2 years of purchase, Wilson Industries Pty. Ltd. will, at its option, replace or repair the cylinder and /or components which in our opinion are defective, at no charge to the purchaser, with the exception of electrical components which are subject to inspection and acceptance of claim by the relevant manufacturer and float valves which are generally not warranted. The warranty does not extend to the inability of the unit to function due to impurities in the water supply causing a blockage in the float valve or solenoid valve.
- During the third year the same conditions will apply as in (a) except that the purchaser will pay 50% of the current purchase price or cost of repair, plus 50% of all labour costs.
- During the fourth year the same conditions will apply as in (a) except that the purchaser will pay 65% of the current purchase price or cost of repair, plus 65% of all labour costs.
- During the fifth year the same conditions will apply as in (a) except that the purchaser will pay 80% of the current purchase price or cost of repair, plus 80% of all labour costs.

Notwithstanding anything contained herein, the water heater shall continue to be subject to any implied warranty provided by the Australian Consumer Law if and to the extent that the said Act is applicable and prevents the exclusion, restriction or modification of that warranty.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

20mm Nylon Cable Gland recommended



Getting the job done

Version 01/2022

CHECK YOUR WATER HEATER

Dairy water heaters should be capable of heating water to at least 94 degrees Celsius in sufficient quantities for cleaning the milking equipment.

Some dairy farms have installed domestic hot water services that are not designed to heat water to this temperature. Water temperatures from these heaters are generally designed for less than 65 degrees Celsius operation.

To increase the water temperatures in these heaters by changing thermostats and elements may void the warranty and lead to internal damage to the heater in some cases.

For safety, and to ensure effective sterilization temperatures, only hot water heaters designed to heat the water to at least 94 degrees Celsius should be installed.

Wilson Industries Pty. Ltd. has for many years been the leader in the manufacture of water heaters which have been specifically designed for use in the dairy industry.

The water temperature should be as close as practical to boiling to keep the milking machine free from contamination. If high temperature water in sufficient quantity is used there should be no problem in recording regular low counts.

Wilson Industries Pty. Ltd. dairy water heaters are designed to operate at temperatures between 94°C and 96°C as recommended by leading authorities.

For assistance regarding hot water requirements on a dairy farm, contact Wilson Industries Pty. Ltd. or your factory field officer.

Heat is the best sanitiser.

For further information contact



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ANODE MAINTENANCE SCHEDULE

Regular maintenance must be completed

	Anode checked	Anode replaced	Anode checked	Anode replaced
Date				
Date				
Date				
Date				
Date				
Date				
Date				
Date				
Date				
Date				
Date				
Date				
Date				
Date				
Date				
Date				
Date				
Date				

Wilson Code

SU017 3/4" x 11" Anode 280mm(Standard)
SU018 3/4" x 24" Anode 600mm
SU019 3/4" x 36" Anode 900mm
SU020 3/4" x 48" Anode 1200mm (Tip to Toe)
SU021 3/4" x 60" Anode 1500mm (Tip to Toe)
SU021F 3/4" x 60" Flexible Anode 1500mm

To Suit

All units (mounted next to element box)
RF315
RF400
RF500
RF630-RF2000
(replaces SU021 when headroom limited)

IMPORTANT

PLEASE READ BEFORE INSTALLING THE WILSON RAPID FLOW DAIRY HEATER

- The Rapid Flow dairy water heater must be installed on a stand that will allow the heated water to flow continuously down to the point of use. Pipework **must not** be raised higher than the outlet.
- The cold tank mounted on the side of the unit **must not** be moved.
- During installation, water must be run into the heater up to the level of the outlet **before** power is connected to the elements. This will ensure the elements are covered during the first heating cycle.
- Ensure that debris is flushed from pipework before connection to the solenoid valve. If water enters the heater when the solenoid valve is de-energised, clean the solenoid valve.
- It is important that a filter or inline strainer be fitted to the cold feed supply prior to the solenoid valve. Water drawn from bores, dams or irrigation channel must be filtered to reduce mineral content. Muddy water can reduce the life of the unit.
- If the electrical tariff allows the elements to operate during the period that water is to be drawn from the heater (eg. all week-end tariff), it may be necessary to connect the solenoid valve to a separate timer. A simple 24hr plug-in timer should be adequate.
- All electrical elements fitted to the Rapid Flow dairy heater must be connected for it to operate efficiently.
- The sacrificial anode/s must be withdrawn and inspected at regular intervals depending on water quality but at no greater interval than 6 months. Replace anode/s when more than a quarter of the centre support rod is exposed.
- If a tap or valve is fitted directly to the outlet/s, it must be independently supported to avoid flexing and fracturing the weld of the fitting to the cylinder.
- Electrical cable access hole is provided. 20mm Nylon Cable Gland recommended
- **Make sure supplied full length anodes are fitted through the top fittings in the tank.**
- **There is a 50mm BSP sludge drain fitting underneath the unit in the middle. A tool is supplied for removal of the factory installed plug.**

The Wilson RF series RAPID FLOW Dairy Water Heater

"RF" units are fitted with at least a 2" (50mm) outlet for rapid delivery of hot water, and as a result an absolute minimum loss of temperature will be experienced. The hot water may be discharged into a separate container or pumped directly from the outlet and may be used for all types of cleaning systems, eg. third line, reverse flow and bucket brigade.

Although the "RF" (and "UD") units are designed primarily for water to be supplied, through the float valve, by a pressure pump or mains pressure, they can be adapted to operate from a raised storage tank provided sufficient head pressure is available.

Cold water should be connected **via an inline strainer or filter**, to the solenoid and float valves.

DO NOT CONNECT ANY PIPE DIRECTLY TO THE AIR VENT. A tundish may be used.

All units are supplied with an 11" (280mm) anode near the electrical elements. Please install supplied full length anodes on site, through the top of the unit.

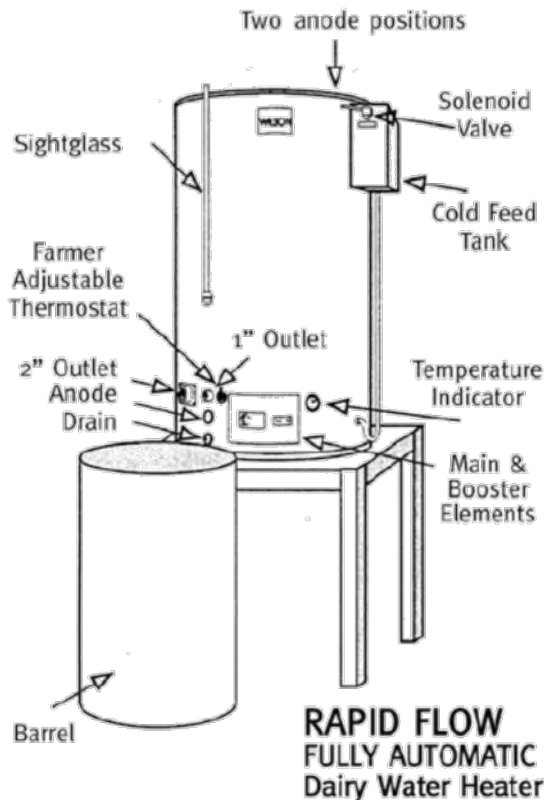
Before turning the power on, till the unit manually until water discharges from the outlet. Connect the electricity supply to the terminal block provided behind the removable service panel. The solenoid valve will allow cold water to enter the unit only when the off-peak elements are operating. The unit will fill with water and will heat to temperature during the night rate period (normally 11pm-7am).

Half the water is drawn from the unit for the morning wash, using the sight glass as a guide, leaving the remaining half for the evening wash. No cold water will enter until the night rate elements switch on again (11pm). If a separate timer has been fitted as described below, it will control when the water enters rather than the night rate time clock.

Note: With some electricity tariffs, it may be necessary for the solenoid valve to be wired through a separate timer fitted at the switchboard or plugged into a power point. The timer needs to be set to prevent the solenoid allowing cold water to enter the heater during and between the morning and evening washes. The user should check with the electricity provider before installing the heater.

Rapid Flow heaters are fitted with a **Farmer Adjustable Thermostat** for precise temperature control. **Important:** A contactor must be fitted in combination with the thermostat, preferably at the switchboard. A booster element is fitted to allow the user to "top up" the temperature during the day, if required.

NOTE: Only "Incoloy" elements are to be used where immersion elements are fitted. The anode/s must be withdrawn and inspected at intervals of no more than 6 months. Replace the anode/s when more than a quarter of the centre support rod is exposed. Sludge should not be allowed to build up in the bottom of the cylinder.



REPLACEMENT ELEMENTS FOR YOUR WILSON DAIRY WATER HEATERS

Element Rating	Booster Element			Main Element					
	2.4kw	3.0kw	3.6kw	2.4kw	3.0kw	3.6kw	3.6kw	4.8kw	6.0kw
Re-order Code	EL004	EL005	EL006	EL004	EL005	EL006	EL014	EL008	EL019A
D2	1				1				
D3	1					1			
D5	1							1	
D6		1			2				
D7			1			2			
D8			1					2	

RF315		1			2				
RF400		1			2				
RF500			1			2			
RF630			1					2	
RF800			1			3			
RF1000			1					3	
RF1260			1						3
RF1500			1						3

WILSON MODEL

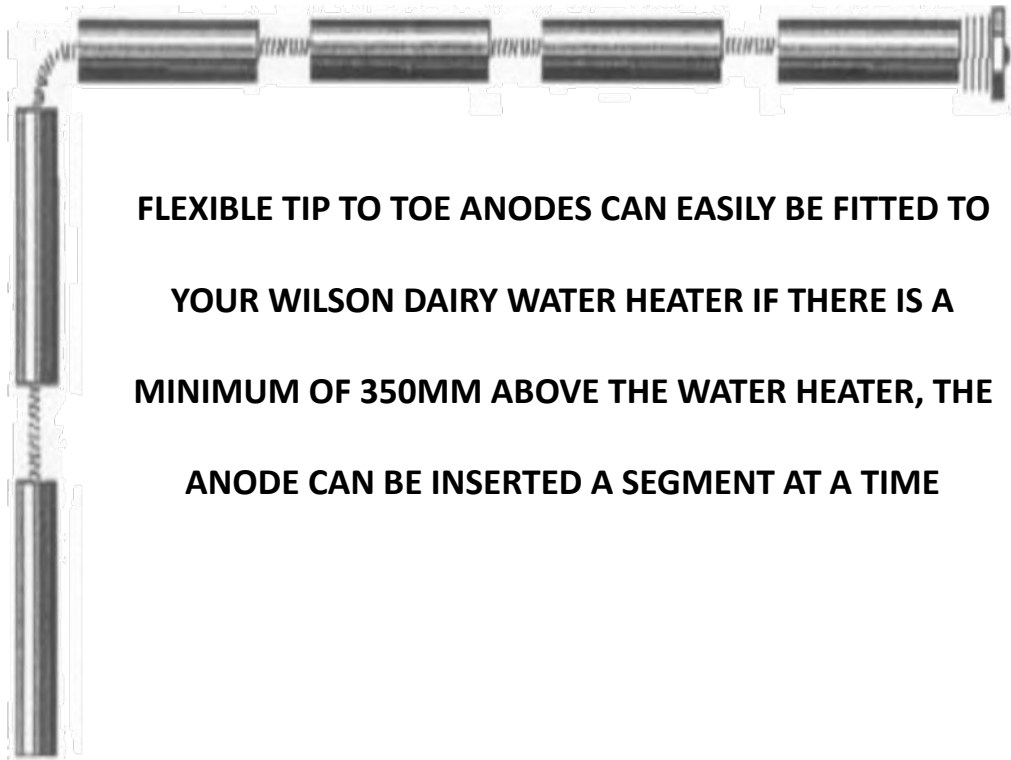
UD315		1			2				
UD400		1			2				
UD500			1			2			
UD630			1					2	
UD800			1			3			
UD1000			1					3	
UD1260			1						3
UD1500			1						3

UW/1				1					
UW/2							1		

*** LONGER LIFE INCOLOY 825 LOW WATT DENSITY ELEMENTS ARE AVAILABLE ON REQUEST.**

FLEXIBLE TIP TO TOE ANODES FOR WILSON DAIRY WATER HEATERS

Flexible Tip to Toe sacrificial anodes are now available. Gone are the days when it was necessary to remove roofing iron to replace your tip to toe anodes. Now it's a simple matter of feeding the **flexible** anode into your dairy water heater a segment at a time. For information, contact Wilson Industries Pty. Ltd.



FLEXIBLE TIP TO TOE ANODES CAN EASILY BE FITTED TO YOUR WILSON DAIRY WATER HEATER IF THERE IS A MINIMUM OF 350MM ABOVE THE WATER HEATER, THE ANODE CAN BE INSERTED A SEGMENT AT A TIME

The Wilson Standard dairy water heater is manufactured with an attractive and durable two tone Colorbond case and is available with or without attached cold feed tank.

If installed with a separate cold feed tank, the maximum head pressure, which is measured from the base of the storage unit to the top of the open vent pipe, must not exceed 6 metres.

Both models are available in a variety of sizes and all are fitted with off-peak tariff main element/s and a peak tariff booster element. The booster element is used to restore heat lost between the morning and evening milking and can either be turned on and off manually or controlled by a time switch. (Check with your electrical contractor.)

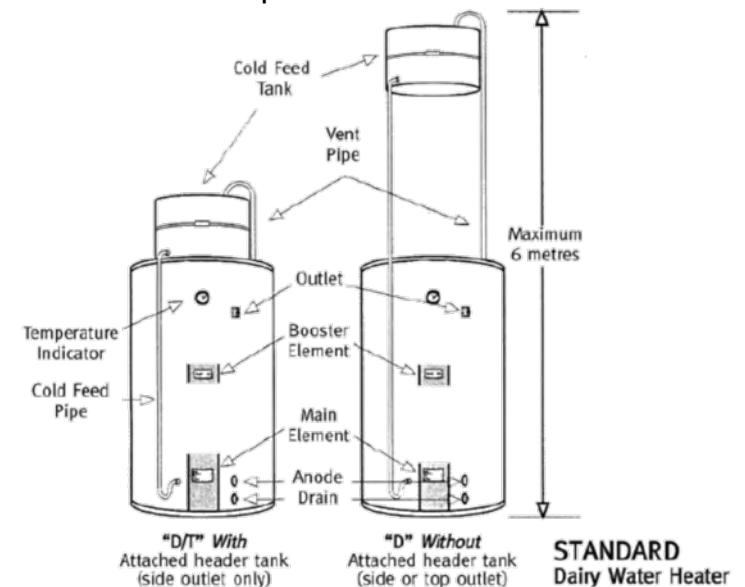
Wilson dairy water heaters are fitted with a standard sacrificial anode to assist in combating the effects of aggressive water supplies around the heating zone and it is important that the anode is regularly checked and replaced BEFORE it has eroded.

All units are supplied with a 11" (280mm) anode fitted near the electrical elements. Tip-to-toe anodes are available upon request where more protection is required. All dairy heaters are fitted with a temperature indicator, designed to allow you to monitor the water temperature and alert you to any minor problems before they affect milk quality.

If a tap or valve is fitted directly to the outlet, it must be independently supported to avoid flexing and fracturing the weld of the fitting to the cylinder.

NOTE: Only "Incoloy" elements are to be used where immersion elements are fitted. Anode/s must be withdrawn and inspected at intervals of no more than 6 months. Replace the anode/s when more than a quarter of the centre support rod is exposed.

Sludge should not be allowed to build up in the bottom of the unit.



The Wilson "UDDER WASHER" Dairy Water Heater ("UW")

The Udder Washer reduces the possibility of bacterial growth in the water used on the cow.

The Udder Washer is based on the heat exchange principle which is simply a copper coil fitted into a tank of rain or soft water thermostatically maintained at approx. 35 degrees Celsius.

The unit is fitted with an adjustable thermostat.

Cold water enters at the bottom of the heat exchange coil and leaves at the top of the coil to go to the udder guns or sprays. The stored water is never used on the udders. A constant supply of fresh water flows through the coil.

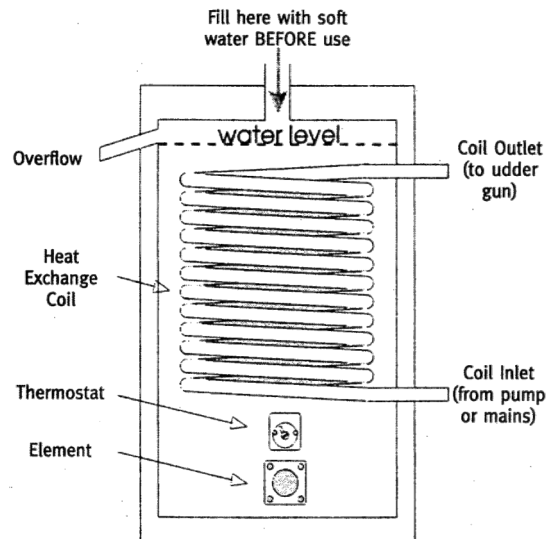
The Udder Washer is fully insulated to minimise running costs and may be fitted with a flex and connected to a standard power point or wired direct to the powerboard (the UW2 would normally be wired direct to the switchboard).

It is capable of withstanding mains pressure in the coil and will raise the temperature of the old water flowing through the coil to a comfortable working temperature at approx. 90 litres per hour (flow rate is critical to maintain temperature). One litre per cow is normally more than adequate.

As the electrical element and thermostat are immersed in rain or soft water, they can be expected to last significantly longer than those in storage type udder washers where they are often immersed in hard or bore water.

INSTALLATION INSTRUCTIONS

1. Fill unit with rain or soft water through the top, until a steady flow of water discharges from the expansion vent on the side of the unit.
2. Connect to the inlet and outlet of the coil.
3. Switch the power on.
4. The water in the storage tank will normally evaporate slowly, exposing the coil and affecting the performance of the unit. To minimise this evaporation, pour in approx 1/4 litre of light grade oil, through the fitting on top, after two to three days of operation.
5. The power to the unit should be left on to provide warm water at anytime.



UDDER WASHER
Heat Exchange Coil Type

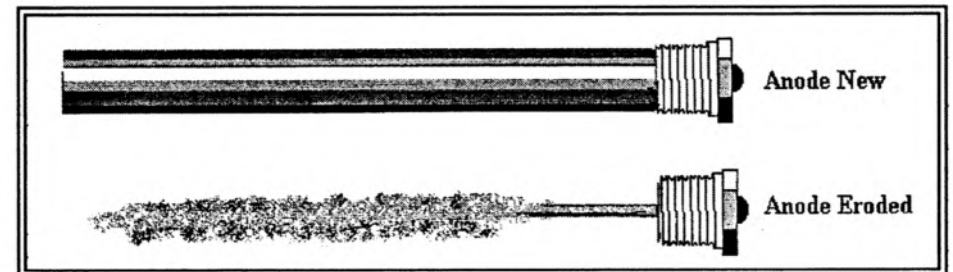
HOW DO ANODES PROTECT YOUR WILSON WATER HEATER?

Most water supplies to the dairy farm are aggressive to hot water cylinders to some extent. Aggressive water becomes even more aggressive at high temperature. The most satisfactory protection for your hot water unit is achieved by improving the quality of your water supply.

Wilson dairy water heaters are constructed from heavy gauge copper and all are fitted with sacrificial magnesium anode/s (except "UW" units). Copper is more resistant to corrosion than magnesium. The magnesium anode will corrode more readily and so reduces the rate of corrosion to the copper cylinder. A protective oxide film eventually forms on the copper cylinder.

The function of the anode is to sacrifice itself to allow sufficient time for the oxide film to form on the copper cylinder. The degree of protection required is governed by the quality of the cold water supply and this can vary throughout the year. It is not uncommon for a water heater to be supplied with less aggressive water from one source for 8 months of the year and from a very aggressive source for 4 months of the same year, during which time damage to the water heater is more likely to occur.

- If your water supply is likely to be aggressive, when ordering your Wilson unit ask for more protection- i.e. Tip to Toe anodes.
- Note: To prevent cylinder damage during transportation, Tip to Toe anodes are packed separately and must be fitted through the top of the unit at the time of installation.
- The anode/s must be withdrawn and inspected at intervals of not more than 6 months.
- Replace the anode/s when more than a quarter of the centre support rod is exposed.
- It is much cheaper to replace the anode/s than to replace the water heater.



KEEP THIS BOOKLET HANDY
TO RECORD THE ANODE CHECK AND REPLACEMENT DATES