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The Professionals Choice

SW Series

Barista Pro Counter Top Steam & Water Boiler

INSTANTA LIMITED

S E R V I C E M A N U A L

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"SW" SERIES

AUTOMATIC FILL, COUNTER-TOP PRESSURISED STEAM & WATER BOILERS

CONTENTS

INTRODUCTION:

The "Barista Pro" series of pressurised cafe boilers were introduced in March 1996 and won the CEDA award for Best Commercial Catering Equipment the same year. They are designed to be stylish in appearance but simple to service. This manual has been designed to be a guide for service engineers. It includes descriptions of all serviceable parts and an exploded drawing of a complete machine, sub-assemblies and wiring diagrams.

The "Barista Pro" series are inspected and tested in accordance with the company's ISO9001 Quality Management System and ISO14001 Environmental Management System and conform with the protection requirements of the following standards and specifications:

EMC	*W89/336/EEC Electro-Magnetic Compatibility (EMC)* *EN 50-081-2 Generic Emission* *EN 50-082-2 Generic Immunity*
ROHS	*Manufactured in compliance with the requirements of the RoHS Directive*
WRAS	*Manufactured in compliance with the requirements of the UK Water Regulations/Bylaws*

The two models in this range are the same construction, but vary in electrical power rating.

INSTALLATION:

IMPORTANT

To ensure that the unit works to its full potential, you will require water pressure of at least 30psi (2 Bar). If this is not possible, a pump should be fitted.

Having ensured that the incoming water pressure is adequate, follow these simple instructions:

1. Provide a suitable stop-cock to isolate the machine for maintenance when needed
2. Connect the water between the stop-cock and the boiler using the food quality hose provided. (do not use red or blue washing machine hoses as these will contaminate the water)

ELECTRICAL SUPPLY

3. The 3kW model is fitted with a 13amp plug and should be plugged into a suitable socket. The 6kW model should be wired into a 30amp switched supply with an ELCB. (Only a suitable electrician should undertake this work)

COMMISSIONING

4. Open the steam tap on the left hand side of the unit
5. Switch on using the switch on the front panel. The power light will illuminate and water will start to enter the boiler. Once the bottom level sensor is reached. the unit will then start to heat. When the water boils, steam will start to come from the steam nozzle. The steam tap can then be closed.
6. The pressure in the boiler will start to rise and the needle in the gauge will respond. When the needle reaches the pre-set pressure, the ready light will illuminate and the boiler will start to fill and heat until it reached the high level sensor. The boiler is then ready to use.

7. If the red service light flashes four times, then pauses and repeats, the incoming water pressure to the unit is too high. This can be adjusted using the internal pressure reduction valve. Ring Instanta's technical help line for advice – 01704 502911
8. If the red service light flashes five times, pauses and repeats, the incoming water pressure is too low. This can be adjusted using the internal pressure reduction valve or an external pump may have to be fitted. Ring Instanta's technical help line for advice – 01704 502911

PRINCIPLE OF OPERATION:

Both models are automatic fill. From switch on (initial commissioning), the machine is programmed to check for the presence of water via a system of three level sensors. With no water present, an inlet valve is energised to prime the boiler. Once primed, power is transferred to the heating element(s) thus heating the water until it boils and begins to pressurise. When the pressure, controlled via a factory-set pressure switch, reaches its normal operating limit (14 psi), a signal is sent to a microprocessor, which in-turn, opens an inlet valve. Water enters the boiler in short bursts until the pressure inside the vessel reduces to approximately 10p.s.i. The heating element(s) remain on while the inlet valve is energised maximising the products efficiency and performance characteristics. The heat/fill cycle continues until the level in the pressure vessel reaches a top operating sensor. Thereafter the machine goes into "idle" mode, pulsing the heating element periodically to maintain the pressure. Boiling Water or Steam can be manually dispensed via the taps on the front of the unit. When the volume of stored water in the vessel reduces, this is picked up via the top operating sensor and the unit reverts back to "heat/fill" mode thus maintaining a constant supply of boiling water and steam.

DAILY USE

Follow instruction 4 to 6 above. Venting the boiler using the steam tap should be done every time the unit is switched on from cold.

1.0 - TECHNICAL SPECIFICATION:

SW13 (WB-2)

Voltage:	230V single-phase 50/60Hz
Supply:	AC
Rated Input:	3.0kW
Avg. Power Consumption:	0.20 (kw/hour - standby)
Fill Type:	Automatic Fill
Mains Water Pressure:	2.0 – 7.0 bar
Normal Working Pressure:	14psi (0.96bar)
Over-ride Safety Cut-out:	18psi (1.24bar)
Safety Valve Set Pressure:	25psi (1.8bar)
Max Design Pressure:	2.0bar
Hydraulic Test Pressure:	3.0bar
Recovery per Minute:	0.45 Litres
Rapid Draw-off:	13.0 litres (23 pints)
Heat-up time:	51 minutes (from cold to full capacity)
Height:	565 mm
Width:	345 mm
Depth:	420 mm (plus 165mm for drip-tray)

SW13/6 (WB-2/6KW)

Voltage:	230V single-phase 50/60Hz
Supply:	AC
Rated Input:	6.0kW
Avg. Power Consumption:	0.20 (kw/hour - standby)
Fill Type:	Automatic Fill
Mains Water Pressure:	2.0 – 7.0 bar
Normal Working Pressure:	14psi (0.96bar)
Over-ride Safety Cut-out:	18psi (1.24bar)
Safety Valve Set Pressure:	25psi (1.8bar)
Max Design Pressure:	2.0bar
Hydraulic Test Pressure:	3.0bar
Recovery per Minute:	1.0 Litre
Rapid Draw-off:	13.0 litres (23 pints)
Heat-up time:	27 minutes (from cold to full capacity)
Height:	565 mm
Width:	345 mm
Depth:	640 mm (220mm for drip-tray)

2.0 - THE BOILER:

The boiler is made from Duplex Stainless Steel and has a design pressure of 2 bar (28 p.s.i.), and is tested to withstand a maximum pressure of 3 bar (42 p.s.i.). The working pressure is 1 bar (14 p.s.i.).

The boiler top-lid plate is made from stainless steel and secured using M8 high-grade 316 stainless steel bolts. It is sealed with a WRAS approved fibre-gasket.

The boiler should be examined annually for any irregularities by a qualified person.

3.0 - SAFETY VALVE:

The boiler is fitted with a safety valve which has a set blow-off pressure of 1.8 bar (25 p.s.i.). The safety valve is the final safety device should there be a machine-fault and the over-ride safety switch fail.

This valve is sealed and must not be tampered with. In the case of leaks it should be replaced. The valve should be checked annually by a qualified person.

4.0 - ANTI-VACUUM & AIR RELEASE VALVE:

An anti-vacuum valve is fitted into the boiler-top cover plate. This has a spindle or a ball (dependant on age of boiler) which opens when the pressure drops to zero. This lets air out of the boiler during initial heat up, and air into the boiler when it has cooled down to prevent a vacuum forming. A vacuum can lead to back-syphoning and subsequent contamination of the boiler.

It is normal for very small, occasional wisps of steam to be omitted from the valve during normal operation. If however, the valve is leaking steam continually and/or causing internal panels or other components to become wet, then it requires attention.

Leaks on the anti-vacuum valves are usually caused by lime-scale on the ball/spindle or a deterioration of "O" ring-seal (later models supplied from: Jan 2005 onwards). Replace "O" ring or complete valve as necessary.

5.0 - SYPHON PIPES (Water & Steam):

a. Steam:

The steam syphon pipe is connected to the steam draw-off tap via a flexible braided hose assembly. It is welded inside the boiler. This pipe should never scale up.

b. Water:

The water syphon pipe is connected to the water draw-off tap via a flexible braided hose assembly. It is a straight pipe made from brass tube which points vertically down inside the boiler. The length of the water syphon tube is important as it governs the amount of water that can be drawn-off from inside the boiler.

Because the water syphon pipe is in contact with the boiling water, it can become coated in lime-scale and consequently may need to be cleaned or de-scaled periodically.

6.0 – PRESSURE-SWITCHES:

There are two pressure-switches on these machines, situated on a bracket behind the tap bodies. They are factory set and normally will not need adjustment. If replacing the switches they must be adjusted to the correct working pressure by the adjusting screw on the switch. Before adjustment, release the pressure too below the required set pressure.

1. The pressure-switch on the left, marked "M" or Mains (orange wires), is the normal operating pressure-switch and is set at 1-bar (14 p.s.i.)
2. The pressure-stat on the right, marked "O" or Override, (purple wires) is the override pressure-switch and is set to 1.28 bar (18 p.s.i.).

The Over-ride pressure-switch only comes into operation if one of the following happens:

a. The "Main" pressure-switch fails or drifts out of calibration.
b. The Triac has failed in the closed position (causing heater(s) to remain on).
c. The in-coming mains-water pressure is too low or has been restricted/blocked or accidentally turned-off.
d. A wire has shorted.
e. The Main pressure-switch capillary tube is blocked.

If any of the above conditions occur, pressure within the boiler will rise above the normal operating set-point (14 p.s.i.) and activate the over-ride pressure-switch (set @ 18 p.s.i.). The over-ride would then switch power to the machine off via the safety-trip P.C.B. If this happens all the indicator-lights will go out.

NOTE: Machines supplied before May 2000 also had a high-water pressure-stat situated in the top-rear of the machine. This p/stat was there to switch off power to the machine if the incoming mains-water pressure exceeded 7 bar (100 p.s.i.). Models supplied from May 2000 do not have this feature.

7.0 - THE HEATING ELEMENT(S):

The heating elements are made from copper and are tin plated. The old type screw into the boiler and are sealed by a WRAS-approved fibre gasket. The new type is sealed by an 'O' ring and P.T.F.E. tape. The old element has a 2.27/64" hexagon head and the new type has a 75mm hexagon head.

The elements have a long life-expectancy but if they do need replacing, the front-panel and draw-off taps need removing to gain access.

ELEMENT RATING: **3KW, 230V**

RESISTENCE: **Between 19 and 20 Ohms**

AMPS: **The elements will draw between 10 and 11 amps.**

If the element has blown it will have an open circuit. To test use a simple PAT test.

8.0 – TRIAC:

The triac is a device used to switch the heating element on via a control signal (pink wire) from the P.C.B. The triac generates heat, which has to be dissipated. This is done by bolting it to an aluminium bracket using heat-sink compound between the surface of the triac and the aluminium bracket.

There are 2 types of triac used on the "WB-2 Supreme" series:

XE851 - SW13 (3kw)
XE854 - SW13/6 (6kw)

NOTE: From Jan 2014 all 6kW units have 2 x XE851 triacs on. One for each element

If the triac fails, in 90% of cases it will fail in the closed position. This causes the heating element(s) to remain on. If this happens, the machine will overheat and the pressure will rise and activate the over-ride pressure-switch, which in-turn switches the machine off.

If the triac has failed in the closed position there will be continuity between the live element terminal and the live into the triac (Grey wire 3kw & red wire 6kw).

To test if the triac has failed (closed circuit), leave machine plugged in and turn off at the ON/OFF switch (front panel). If the machine continues to heat when switched off, the triac is faulty. If not, refer to faultfinding "over-boiling".

9.0 – PRINTED CIRCUIT BOARDS:

The Safety-Trip P.C.B. (FF851):

This P.C.B. (FF851) comes into operation when the over-ride pressure-stat activates. This will switch the power to the machine off (all lights out). If this happens the machine can only be re-set by switching the mains power supply to the machine off and back-on again - this clears the P.C.B.'s memory.

The Main P.C.B. (FF850):

Operating Voltage:	190V – 265V AC @ 50Hz
Frequency Range:	47-65 Hz
Fuse Rating:	315mA 250V AC
Operating temp:	0–70^C

This P.C.B. (FF850) controls all the main functions of the machine, monitoring the water level, pressure, water supply etc. If a fault is detected the user is warned via the service or ready L.E.D. Some faults render the machine inoperative whilst others will only give warning flashes

10.0 THE SENSING PROBES:

Sensing probes are used to detect the presence of water within the boiler, using a small electrical current to make a circuit via the water.

They are made-up from a PTFE insulator with a chrome-plated brass rod through the centre.

There are three level sensing probes inside the boiler:

1. Low-level Sensor - Yellow wire
2. Normal Operating Sensor - Black wire
3. Overfill detection Sensor - Orange wire

Common problem: Hard-water in some parts of the UK causes a build-up of lime-scale on the sensing probes, which acts as an insulator (e.g. the sensor is no-longer able to detect the presence of water). When the Normal operating sensor (black wire) becomes insulated, the water level will switch to the Overfill detection sensor (orange wire) and the Red “service” light will flash 3 times.

11.0 - WATER INLET ASSEMBLY:

See Drawing of Water Inlet Line

The water inlet assembly is made up of many different parts. All pieces are sealed together with NUTLOCK thread sealant. There are three main components in this line. These are described below.

1. - Solenoid Valve:

The cold-water inlet valve can operate between 2 bar and 7 bar (28-96psi) mains pressure. It has a 2-litre per minute restrictor in to control the incoming water flow. If a valve without this restrictor is used, it could cause the temperature to be lower than expected. The only serviceable part on the valve is the coil. The coil is susceptible to water damage from steam or water leaks. The coil has a small constant voltage to it which is normal. When energized, they should be 230V.

Disconnect boiler from electrical supply before replacing the solenoid valve.

1a. - Mains Water Pressure:

MAINS WATER PRESSURE RANGE: Between 2.0 and 7.0 bar (28 and 96psi)

Incoming mains water pressure can vary wildly from site to site and can also fluctuate dependent on the time of day (water pressure often increases at night). In extreme cases, this can take the mains water pressure outside that at which the boiler can operate. In-coming mains water pressure of more than 100psi (7.0bar) can bypass the solenoid valve and cause an overflow situation. In such circumstances, the Pressure Reduction Valve should be adjusted (see No: 2 below) to reduce the in-coming water pressure to a level that the machine can cope with.

Similarly very low mains water pressure (below 20psi) can also result in the solenoid valve being bypassed - insufficient water pressure prevents the valve from seating correctly, although this is much less common.

2. - Pressure Reduction Valve:

This valve is used to control the in-coming mains water pressure. It is factory-set but may need on-site adjustment, dependant on the particular mains water pressure.

There have been two types of reduction valves used on this range of machines. These valves must be fitted the correct way round - See arrow on valve body which shows direction of water flow.

Adjustment of in-coming mains water pressure:

Both the self-coloured brass valve and the silver valve can be adjusted by turning the slotted adjustment screw or pulling up the black knob as follows:

Anti-clockwise:	To decrease incoming water pressure.
Clock-wise:	To Increase incoming water pressure

3. Non-Return Valve:

This valve lets water pass into the boiler, whilst not allowing back-pressure to escape from the boiler. It must be fitted the correct way round - See arrow on valve body.

12.0 – WATER DRAW-OFF TAPS:

See Drawing OF Draw-off Tap

The tap washer and/or spring will occasionally require replacement.

To replace the tap washer (Part No.TP703):

- Switch machine off.
- Open steam tap to evacuate pressure from boiler
- Unscrew tap bonnet and remove the upper tap assembly from the tap body.
- Remove the old tap washer from the spindle and firmly push the new washer onto the spindle.
- Screw the upper assembly back onto the tap body.

To replace the tap spring (Part No.TP1007/N):

- Switch machine off.
- Open steam tap to evacuate pressure from boiler.
- Push the pin out of the tap handle.(the pin has a bend in the middle)
- Unscrew the tap bonnet and remove the tap assembly from the tap body.
- Replace broken tap spring(small diameter down)
- Replace tap bonnet and handle.

13.0 – STEAM DISPENSE WAND and WATER DISPENSE ARM:

See Drawing of Draw-off Tap

Steam Dispense Wand:

The steam dispense wand is made from stainless steel and has a chromed-brass steam nozzle attached to the end. It can be swivelled into different positions due to a ball-fitting, held within the steam-wand coupling. The coupling screws onto the underside of the tap body using a thin PTFE washer to form a seal. The ball-fitting rotates within the coupling and is held in position by an "O" ring, a spring and brass retainer.

The most common problem is ware & tare on the "O" ring which if excessive, can allow steam to escape through the coupling. Also, the spring can eventually ware or break causing the steam wand to become "floppy".

The "O" ring and/or the spring can be replaced by unscrewing the steam wand from the tap body and stripping apart. Remove all traces of the worn "O" ring and clean the ball fitting before putting back together with the new "O" ring.
IMPORTANT: To allow the ball-fitting to rotate smoothly, it is essential that both the ball-fitting and the "O" ring and smeared with food-grade silicone grease (Pt No: LKT5), before re-connecting the wand to the draw-off tap.

Water Dispense Arm:

See Drawing of Draw-off Tap

The water dispense arm is made from stainless steel and connects to the underside of the water draw-off tap. It can be swivelled into different positions by unlocking the dispense-arm nut, moving to the desired position and re-tightening the nut.

There is a white PTFE dispense arm washer which forms a water-tight seal, where the dispense arm attaches to the tap body. Over time, the washer may ware and require replacement (see drawing of Dispense Arm).

Aerator

A water spray assembly known as an "aerator" is attached to the end of the water arm. Its purpose is to allow the user to dispense boiling water without excessive "splash-back", which can result from the force of pressurised boiling water entering the vessel – particularly a problem if small containers/vessels are being used.

The main problems with the aerator are:

a. Symptom - The speed and force of the water has become severely restricted.
Problem: Lime-scale blocking the plastic strainer (inside the aerator-body).

b. Symptom - (*Following removal of the aerator for cleaning*) the machine is on-pressure and full, but water does not dispense when tap is operated.
Problem: Plastic strainer (inside aerator-body) has been replaced the wrong way up. The holes in the plastic strainer should point upwards not down.

14.0 - De-scaling (Including cleaning the level sensing probes):

- Disconnect the machine from the power supply.
- Remove the outer lid
- Unscrew M8 bolts and remove boiler-top plate
- Remove as much loose scale as possible by hand.
- Use a good de-scaler such as "Renegite" (Part No. ACC303) to remove hard scale deposits. Mix 2-3 packets in hot water and pour into boiler. Leave for approximately 20 minutes.
- There is a drain plug on the base of the boiler.
- Flush boiler out with water, ensuring that all traces of de-scaler are removed before re-assembly.
- To de-scale the level sensing probes, disconnect probe wires and unscrew using a probe key. Any hard scale coating on the probes should be cleaned off using a non-metallic scouring pad. Rinse under cold water and replace.

15.0 - Fault Finding:

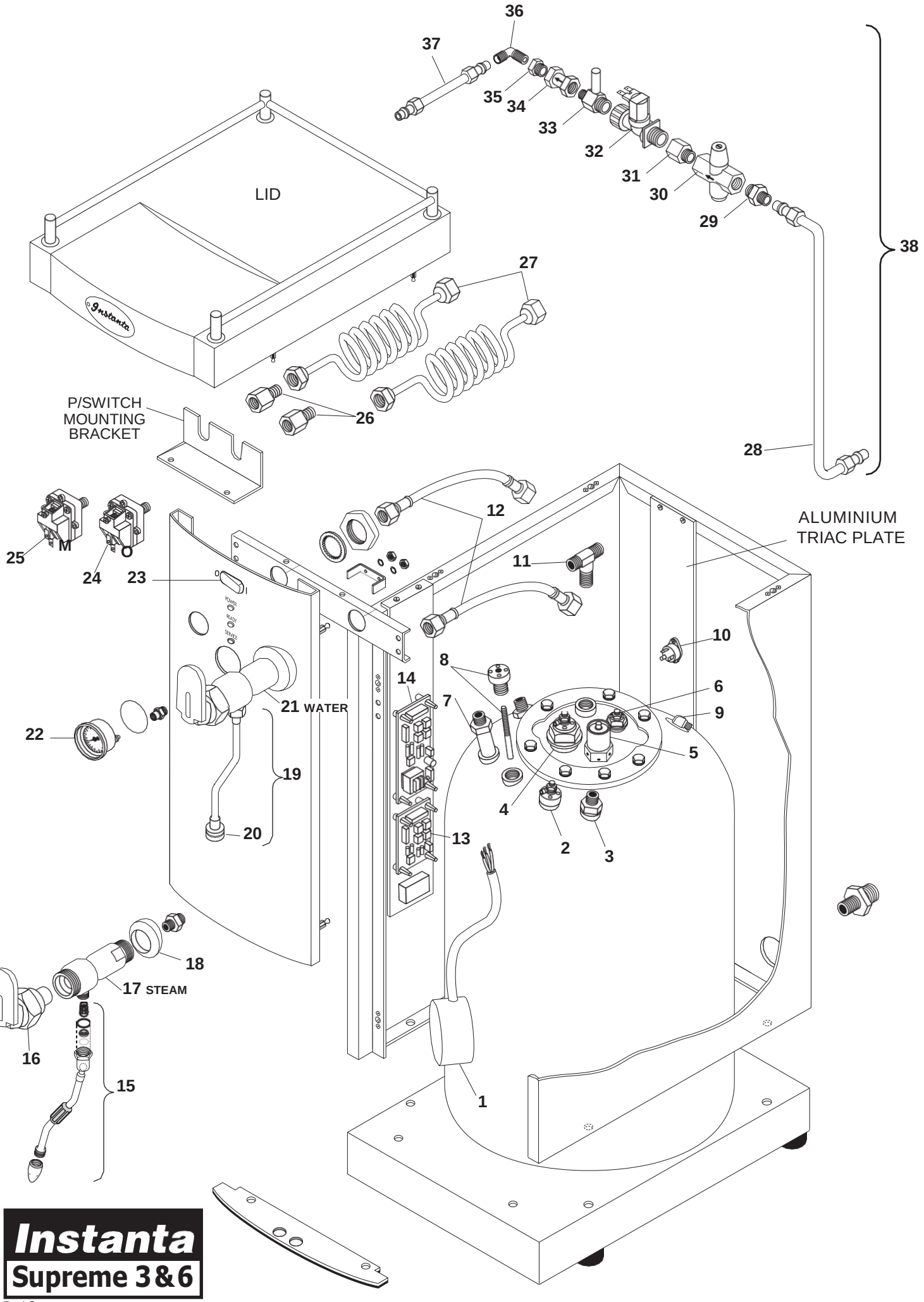
This section contains a list of faults and causes that the machine may encounter.

MACHINE SYMPTOM	CAUSE
Dead	P.C.B. faulty (315mA fuse or transformer) No mains input (installation problem or outside interference) ON/OFF switch faulty Unsound terminal connection Blown fuses in plug (3kw) Bad connection in plug (mains lead fault) Over-ride pressure-switch has switched power off to the machine via the safety-trip P.C.B. (Symptom: No lights on but boiler is pressurised)
L.E.D.'s Flashing	See chart:
Overfilling	Water pressure too low or high Contaminant sticking solenoid valve open
Not Filling	Blocked inlet assembly Blocked filter in chromed water connector Water turned off Kinked inlet hose Water pressure too low or high Solenoid coil failed Scaled up top probe Top probe wire shorted out Faulty element
No Draw Off	Tap spring broken Tap washer broken Aerator (water spray) has been fitted upside down or requires cleaning/de-scaling If no pressure (See not heating) Syphon pipe blocked
Over Boiling (over pressure)	Pressure-switch set too high Pressure-switch faulty Triac faulty Machine not filling Machine scaled up Faulty element
Not Heating	Pressure-switch faulty Element faulty Triac faulty P.C.B. faulty Unsound connection on element or triac
P.C.B. Blown	Steam (see over-boiling) or water damage Element blown (315mA fuse on board) Triac blown Solenoid coil blown

16.0 - SERVICE WARNING CODES:

If the amber “Ready” light is flickering – either: mains-water pressure on the premises is low, the water supply has been turned off or there is a scale build up. The light will stop when the water has returned to normal.

NUMBER OF FLASHES BETWEEN PAUSES	MEANING
1	Water level sensor has scaled up at normal level and machine has filled to higher level
2	Operating level sensor has been detected but other sensor has not
3	Overfill level sensor has been detected but other sensor has not
6	The boiler has failed to fill in the allotted time. Possible causes:- 1. The water supply is turned off 2. The inlet valve has failed 3. the water inlet hose is kinked, blocked or detached
7	The element(s) have been on for too long with lower sensor exposed. Possible leak, lime scale or broken probe wire
8	Pressure switch wire has shorted (wire A)
9	Pressure switch wire has shorted (wire B)
10	The element(s) have been trying to heat the water but have failed to do so. The element(s) or control system have failed
11	Water supply is turned off and the low probe has become exposed. Probable lime-scale build up or water supply problem



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Supreme 3&6

WB-2 Supreme Exploded Drawing Key		
Drawing No	**Description**	**Part No**
1	Heating element (3.0kw, 230V)	E280
2	Normal Operating Probe (Black wire)	PRB8/A
3	¼" to 3/8" Brass Adaptor	FV305
4	Brass probe holder c/w "Overfill" level sensor (orange wire)	PRB4/A
5	Safety valve (set to blow @ 25p.s.i.)	SV202
6	Anti-vacuum & air release valve	V600/B
7	Water syphon pipe	H/TUBE3
8	Low-level sensing probe (yellow wire)	PRB3/A
9	Brass Elbow	H/FF113
10	Triac (used to switch power to heater(s) via a signal from PCB)	XE851 (3Kw) XE854 (6Kw)
11	Brass "T" piece	H/FF122
12	Braided Water and Steam Pipes	H/FF387
13	Safety "Trip" P.C.B.	FF851
14	Main P.C.B.	FF850
15	Steam dispense wand	DA105/A
16	Upper tap handle assembly	TP801
17	Draw-off tap body - Steam	TP800/S
18	Grey plastic tap collar	XEN303/HT
19	Water dispense arm complete	DA104/A
20	Water "aerator" spray & adaptor	H/FF102 & H/FF101
21	Draw-off tap body - Water	TP800
22	Pressure gauge	PG11
23	ON/OFF switch	XEN400
24	Over-ride pressure-switch (purple wires)	EN266N
25	Mains pressure-switch (orange wires)	EN264N
26	Brass flare fitting for pressure switch	H/FF132N
27	Capillary tube(s) to pressure switches	E270B
28	Lower water inlet pipe (5/16" copper)	Ring Spares
29	½" to ¼" brass reducer	BV20
30	Pressure reduction valve	PR5
31	Solenoid inlet adapter	SA14/IN
32	Solenoid valve	SOL14
33	Solenoid outlet adapter	SA14/M
34	Non-return valve	NR52
35	½" to ¼" female adapter	B507
36	Brass Elbow	H/FF113
37	Upper water inlet pipe (5/16" copper)	Ring Spares
38	Complete Inlet Assembly	Ring Spares
Not shown	6-hole tank gasket 8-hole tank gasket 13-hole tank gasket	B225 H/FF127 H/FF128

WATER INLET ASSEMBLY

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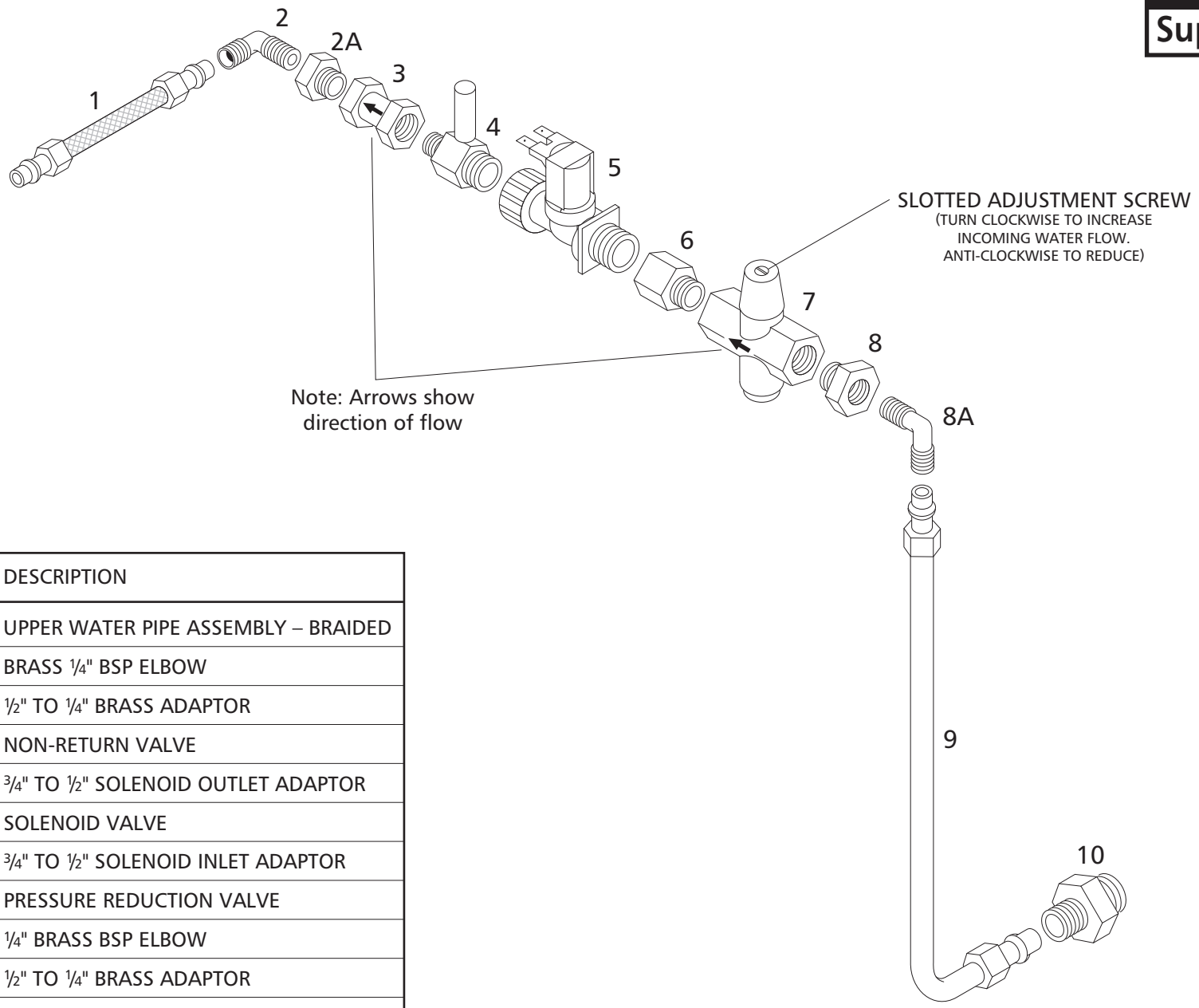
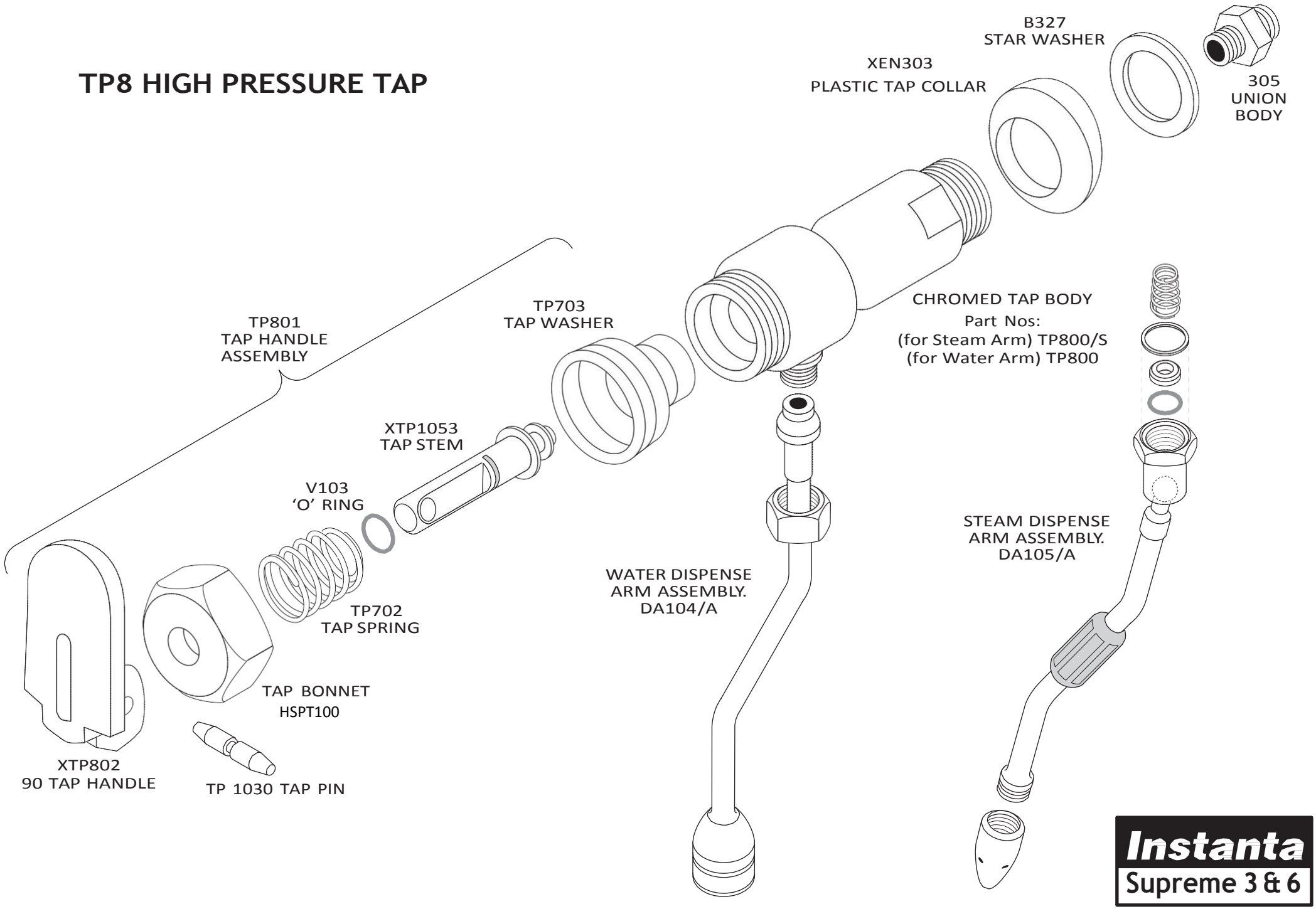
Supreme 3 & 6
D.13/A – issue 4



DWG No.	Part No.	DESCRIPTION
1	H/FF124/A	UPPER WATER PIPE ASSEMBLY – BRAIDED
2	H/FF113	BRASS ¼" BSP ELBOW
2A	B507	½" TO ¼" BRASS ADAPTOR
3	NR52	NON-RETURN VALVE
4	SA14/OUT	¾" TO ½" SOLENOID OUTLET ADAPTOR
5	SOL14	SOLENOID VALVE
6	SA14/IN	¾" TO ½" SOLENOID INLET ADAPTOR
7	PR5	PRESSURE REDUCTION VALVE
8	H/FF113	¼" BRASS BSP ELBOW
8A	B507	½" TO ¼" BRASS ADAPTOR
9	—	LOWER WATER PIPE ASSEMBLY – 5/16"
10	BV11/A/C	¾" WATER INLET FITTING

TP8 HIGH PRESSURE TAP

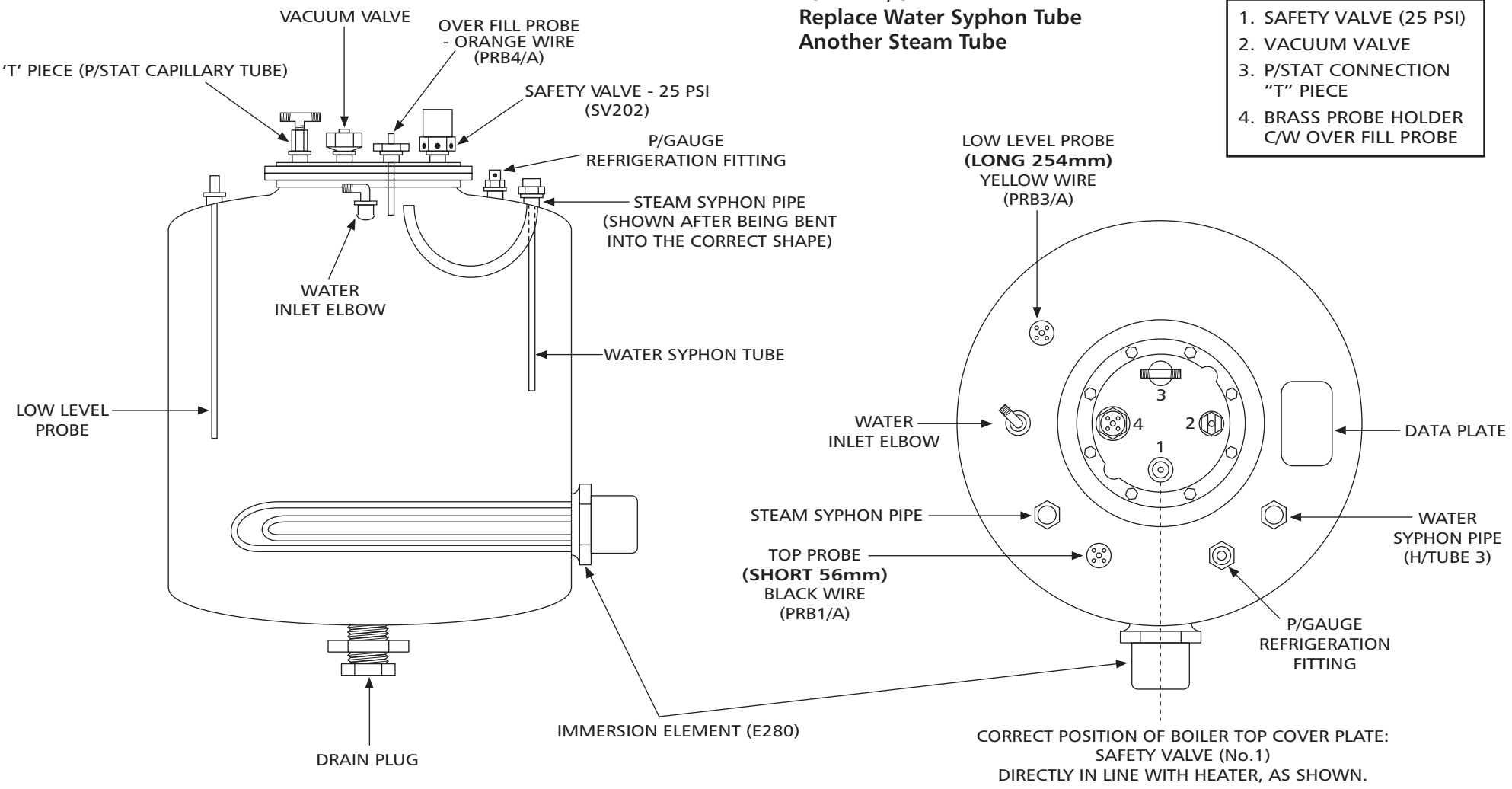


Instanta
Supreme 3 & 6

THE BOILER

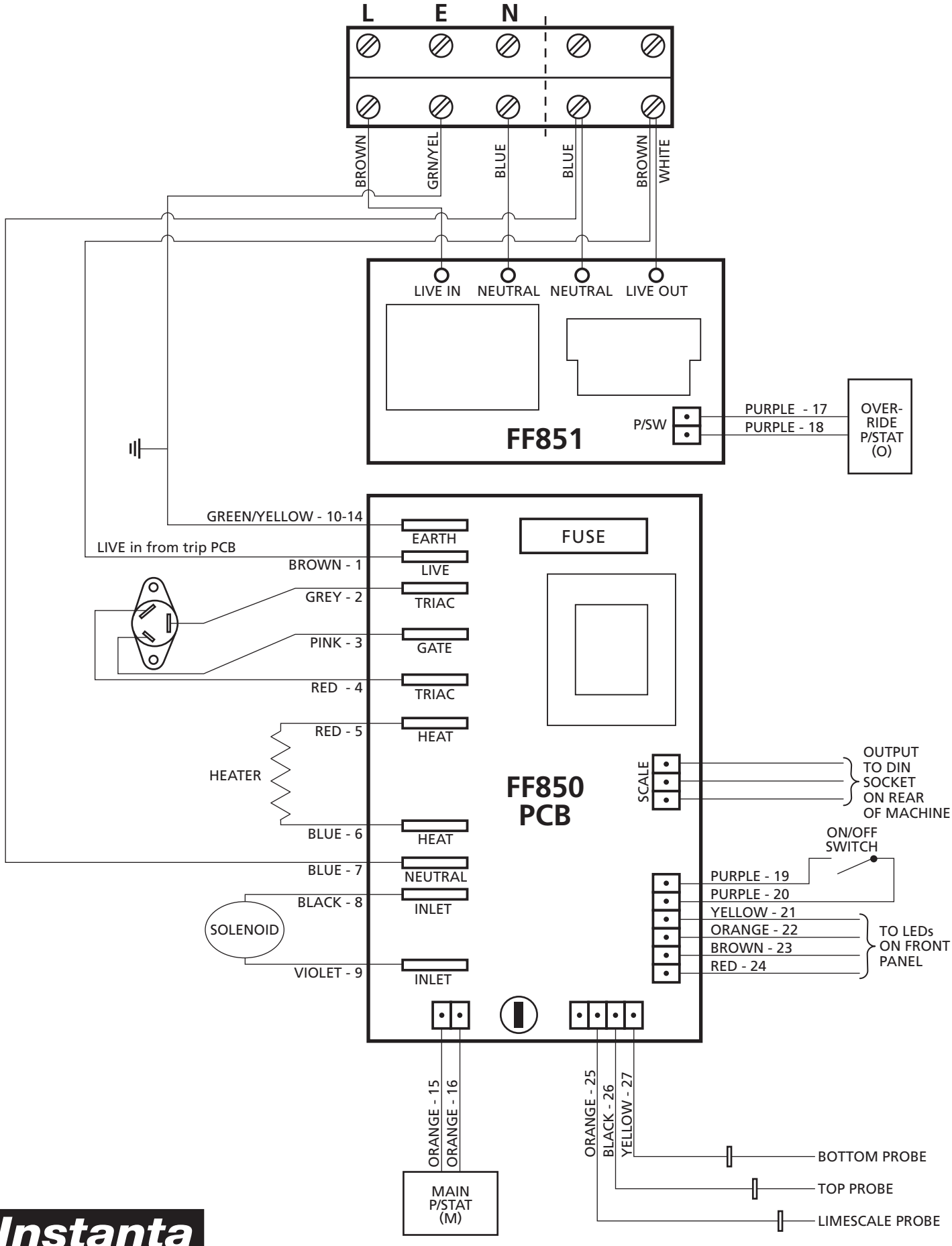
Super Twin
Change Top Probe (Black Wire)
For PRB7/C
Replace Water Syphon Tube
Another Steam Tube

1. SAFETY VALVE (25 PSI)
2. VACUUM VALVE
3. P/STAT CONNECTION "T" PIECE
4. BRASS PROBE HOLDER C/W OVER FILL PROBE



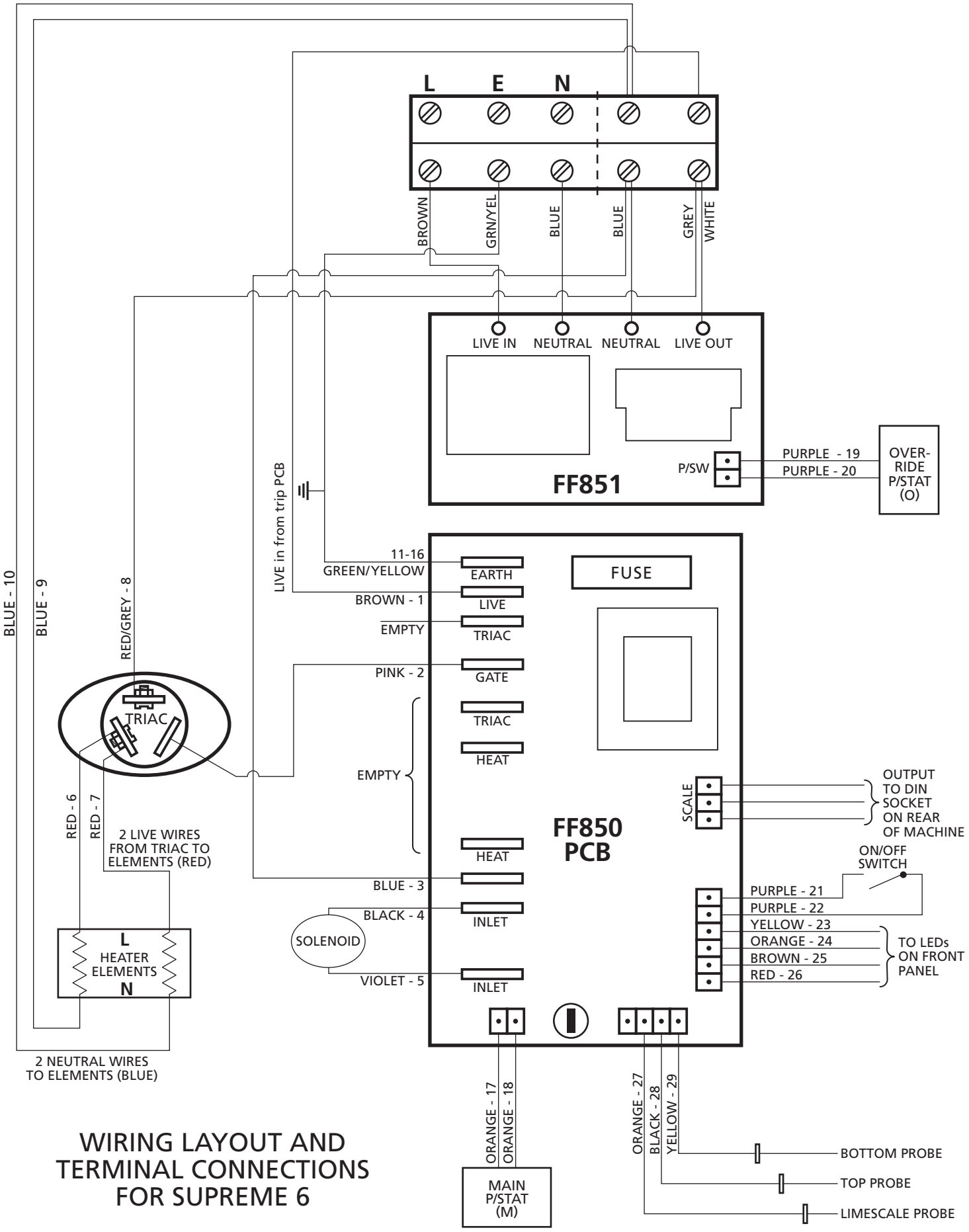
IMPORTANT: ENSURE PROBES ARE IN THE CORRECT PLACE

WIRING LAYOUT AND TERMINAL CONNECTIONS FOR SUPREME 3



Instanta SUPREME

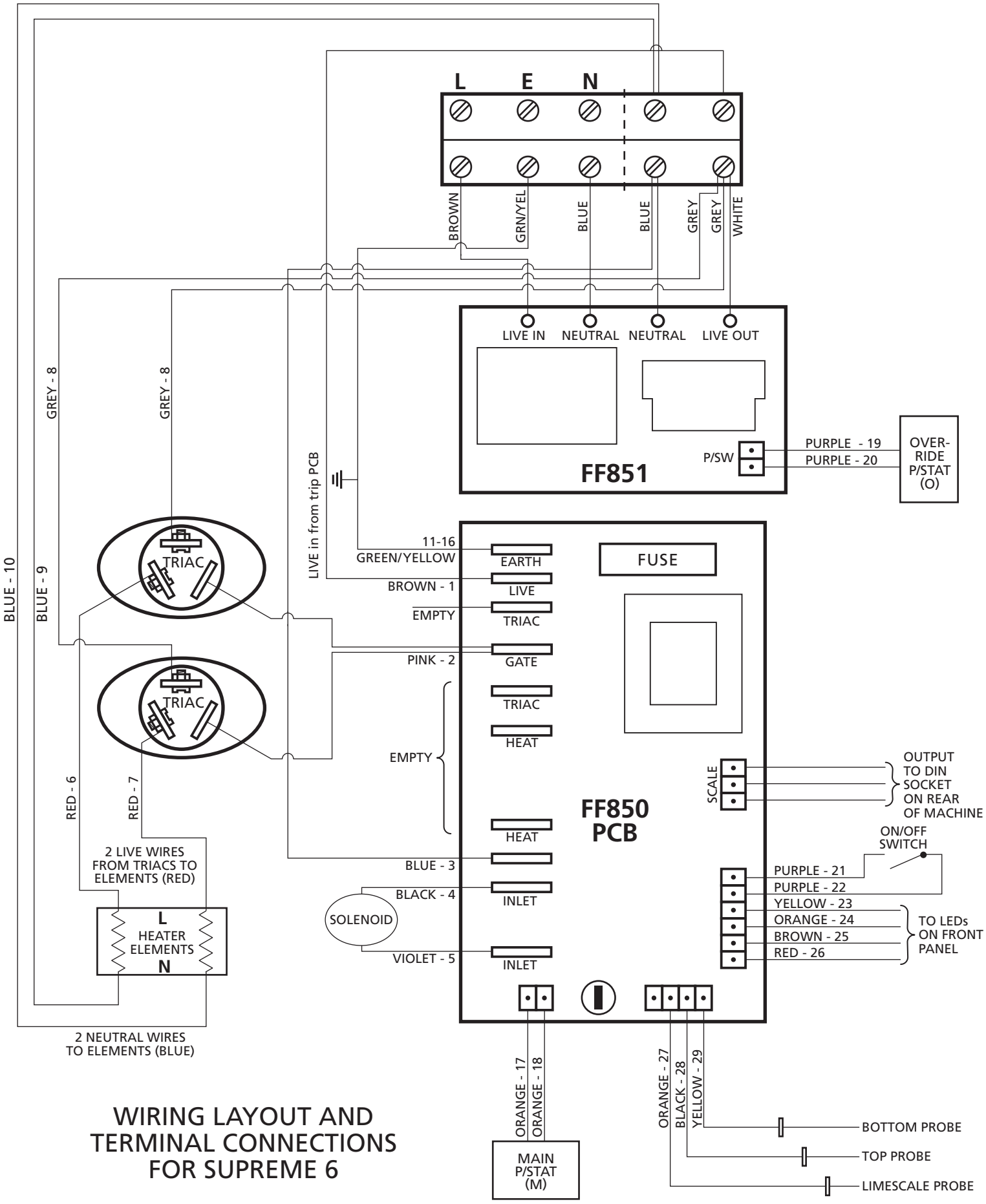
WD111



WIRING LAYOUT AND TERMINAL CONNECTIONS FOR SUPREME 6

Instanta
SUPREME

WD112

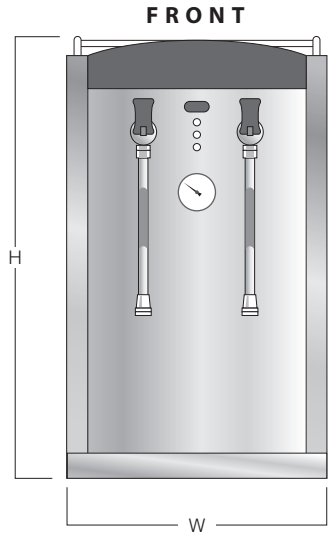


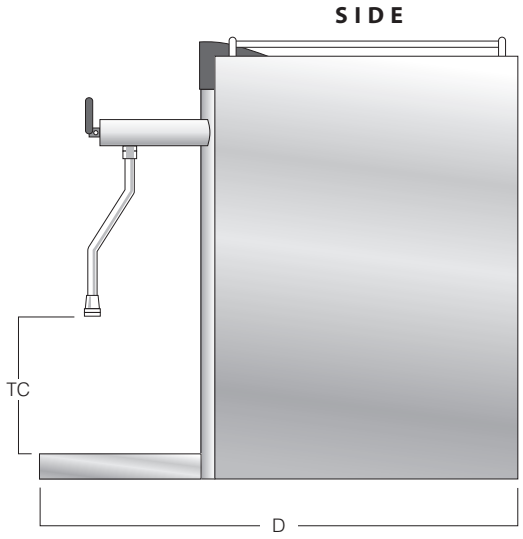
WIRING LAYOUT AND TERMINAL CONNECTIONS FOR SUPREME 6

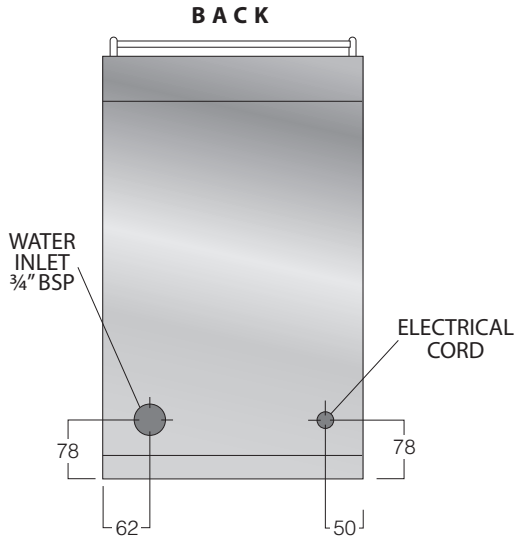
Instanta
SUPREME

WD112/A

Instanta
SW13, SW13/6







BOILER RATING / SPECIFICATION		
MODEL	SW13	SW13/6
	H = 585, W = 345	H = 585, W = 345
	D = 600, TC = 180	D = 600, TC = 180
VOLTAGE	220-240V, 50/60Hz	230V, 50/60Hz
SUPPLY	Single-Phase AC	Single-Phase AC
RATED INPUT	3.0kW	6.0kW
WEIGHT (full)	43kg	43kg
MAINS WATER PRESSURE RANGE	Between: 2.0-7.0 bar (28-96psi)	Between: 2.0-7.0 bar (28-96psi)

INSTALLATION

WATER		¾" BSP male connection on boiler (1.6mtr long, food-grade hose with ¾" BSP fittings supplied).
ELECTRICAL	**SW13:**	Supplied with 3-pin bonded plug and lead with 13amp fuse.
	SW13/6:	Supplied with a 1.5mtr long, electrical cord (3-core @ 4.0mm). **Electrical Installation:** Wire to a least a 30amp single-phase supply via an isolation switch.
DRAIN/OVERFLOW		Not required