K9000
Operators Manual

All requests and enquiries regarding the use of, and availability of this manual are to be directed to:

Tru Blu Dog Wash
Factory No. 1
34 Caramut Road
Warrnambool
Victoria 3280
Australia

Tel: +61 (0)3 5562 9088
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Email: info@trubludogwash.com.au
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                    www.findadogwash.com

Explanation of symbols used in this manual

⚠️	**Warning**
💡	**Tip**
Important	**Important - Take note**
CE	**European Conformity**
△	**Regulatory Compliance Mark**

Date	Summary of Changes	Sections Changed/Added	Author/s	Version
02/09/2016	New MSDS's Operator Maintenance	13.1, 13.2, 13.3 13.4 11.1, 11.2, 11.3, 11.4 & 14	Phil Worrell	V2.3
16/11/2016	Updated after Review	Published	Phil Worrell	V3.0
31/01/2017	Update re filter handles (Change Request 006), + video stainless steel cleaning plus other new videos	12 & 13.5, 14.2	Phil Worrell	V4.0
23/05/2017	LED 6 values Control Module section 4.1.1 added	11.00 Item 4 amended and items 14 & 19 added 4.1.1 New Section showing internals of Control Module	Phil Worrell	
28/09/2017	Power for Instant Electric Hot Water 40amp	Section 1.1 System Specifications	Phil Worrell	
13/12/2018	New EJ Pump Exploded View	4.1.4	Phil Worrell	
23/03/2020	12 Month Service Section 14 General Information	14.0 General Information 13.1 Maintenance Yearly	Phil Worrell	V5.0
30/04/2020	New ES pump General Safety Yearly flushing of all pumps etc. Video reference to website	Section 4 various 11 10.1 11.2	Phil Worrell	

Version	5.0
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Date	09/06/2020
Author/s	Phil Worrell
Build Approver	Tim Darmanin
Sales Approver	Dale Beaton

Table of Contents

1 K9000 Inspection and Acceptance on Delivery:

Inspect the K9000 on arrival and prior to unwrapping to ensure there is no travel damage. If there is any damage, please contact Tru Blu Dog Wash before accepting delivery.

Caution should be taken when the K9000 has been delivered and is being unloaded. The K9000 weighs approx. 275kg. Ensure a qualified operator of the unloading equipment is used to lift or move the K9000 Dog Wash.

The K9000 (Within Australia) is first bubble wrapped and then wrapped in black plastic cargo wrap. It is secured to the pallet with a tie down strap over the cabinet and 6 screws. Position the K9000 while on the pallet near its final location. Take caution removing the plastic and bubble wrap avoid using a knife as it may scratch the stainless steel or decals. With a screw gun remove the screws from the feet and the tie down strap.

A second inspection should be undertaken to ensure no damage has occurred during travel.

It is recommended that the front kicker plate be removed prior to installation and handling as this will allow safer lifting and the required access during installation. *Care should be taken not to damage the plumbing fittings during lifting and positioning of the unit*.

It is also recommended that the white film protecting the unit is not removed until after install as this will help prevent any installation damage.

The kicker plate allen key bolt positions (2 at each end)

A 4mm allen key is used to remove the kicker plate.

1.1 K9000 System Specifications

SYSTEM WITHOUT ON BOARD HOT WATER UNIT		
Power	240V	15 AMP (with heated dryer)
Power	240V	10 AMP (without heated dryer)
WATER Inlet Pressure (Min) 40psi / 275kpa	Hot	½" Ball valve
	Cold	½" Ball valve
WATER Inlet Pressure (Max) 72psi / 500kpa	Hot	½" Ball valve
	Cold	½" Ball valve
COLD WATER Inlet temperature	Minimum	5 Degrees Celsius
	Maximum	30 Degrees Celsius
HOT WATER Inlet temperature	Minimum	55 Degrees Celsius
	Maximum	65 Degrees Celsius
Factory Set water temperature	35 Degrees Celsius at wash gun	
WATER Maximum Operating Pressure 50psi / 350kpa	Factory set via water regulator	
FILTRATION	Primary	Stainless steel mesh filter
	Secondary	Vinidex DBA Lic. No. WMKA20071
Back Flow Prevention Device	Connections to be protected by a "high hazard" backflow prevention device. i.e. "RPZ" or Registered "Air-GAP" Recommended Watts 009M3-AUS RP 15 or 20mm AS2845.1 Lic WMKA1335	
WASTE	50mm DIA Outlet as well as, a minor trade waste application to be made to the local water regulator (Contact your local water authority trade waste division)	
SYSTEM WITH ON BOARD HOT WATER UNIT		
Power Hot Water Tank	240V	32 AMP (with hot water storage tank)
Power Instant Hot Water	240V	40 AMP (with instant electric hot water service)
WATER Inlet Pressure (Min) 40psi / 275kpa	Cold	½" Ball valve
WATER Inlet Pressure (Max) 72psi / 500kpa	Cold	½" Ball valve
COLD WATER Inlet temperature	Minimum	5 Degrees Celsius
	Maximum	30 Degrees Celsius
Factory Set water temperature	35 Degrees Celsius at wash gun	
WATER Maximum Operating Pressure 50psi / 350kpa	Factory set via water regulator	
FILTRATION	Primary	Stainless steel mesh filter
	Secondary	Vinidex DBA Lic. No. WMKA20071
Back Flow Prevention Device	Connections to be protected by a "high hazard" backflow prevention device. i.e. "RPZ" or Registered "Air-GAP" Recommended Watts 009M3-AUS RP 15 or 20mm AS2845.1 Lic WMKA1335	
WASTE	50mm DIA Outlet as well as, a minor trade waste application to be made to the local water regulator (Contact your local water authority trade waste division)	
Tundish	Required for hot water relief pipe	
DIMENSIONS / WEIGHT		
Dimensions	Length 2150mm / Height 1850mm / Depth 600mm	
Weight	K9000 - 285kg	K9L & Groom Easy - 225kg
APPROVALS		
Risk assessment performed by IAPMO (NATA accredited laboratory)		
CE conformity with the following European Union Directives: EMC Directive 2004/108/EC & Low Voltage Directive 2006/95/EC		
IEC 61000-6-3:2006 Electromagnetic compatibility (EMC) – Part 6.3: Generic standards – Emission standard for residential, commercial and light-industrial environments		
AS/NZS 60335.2.75:2005 + Admt 2009 in relation to vending machines AS 60204.1:2005 'Safety of machinery – Electrical equipment of machines, General Requirements'		
IEC 61000-6-1: 2005 Electromagnetic compatibility (EMC) Generic standards. Immunity for residential, commercial and light-industrial environments.		
ATS 5200.101:2005 – Strength of Assembly		

2   Installation:

The K9000 Dog Wash can be installed either indoor or outdoor.

2.1   Levelling and Positioning the K9000

The K9000 needs to be placed in a level horizontal position to operate correctly.
There are 4 adjustable feet and 2 mounting feet, place a level along the back of the K9000 and adjust the feet according to get the K9000 Level, place the level along the top of the cabinet running back to front to make sure it is not tilting forward or backwards.

Verify all door margins and open and close each door to ensure they open and close freely

ENSURE all doors open and close freely before securing the K9000!
Once the K9000 is level, use the supplied spacer washes and anchor screws to secure the K9000 to the ground.

2.2 Connecting the Water Supply and Waste connection to the K9000.

Before connecting the K9000L to water and waste ensure local regulations are considered. Some sites may require an additional back flow prevention device. Local regulations may also require sites to use copper pipes for waste.

2.2.1 Connecting the Water Supply

Flush the pipes prior to connecting to the K9000. Maximum allowable water pressure is 0.5Mpa. (72 psi / 500Kpa).

The picture at left shows the hot and cold-water entry points for a K9000 without an on-board hot water unit. While the picture on the right shows the water entry point for a K9000 with an on-board hot water unit.
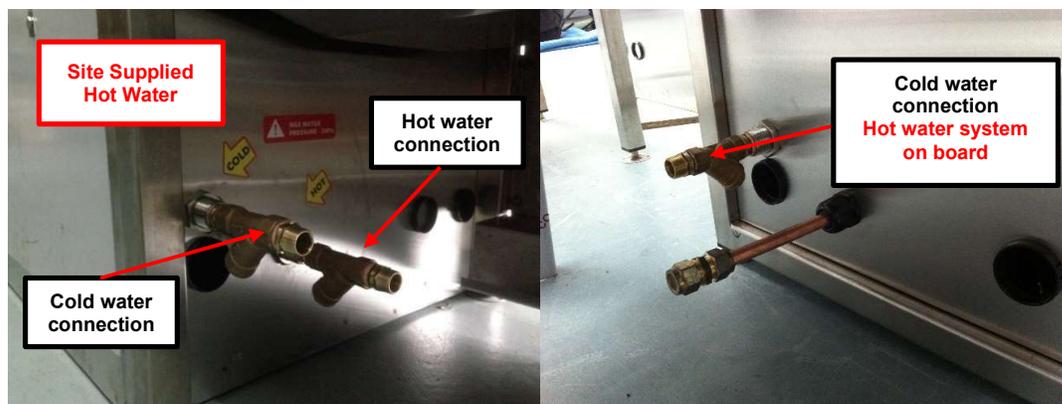
Once connected the regulator can be adjusted to ensure the K9000 has water pressure of between 20 & 30 psi when the pressure gun is in use and between 40 & 50 psi when pressure gun is not being utilised.

To verify the pressure when the gun is not being utilised you need to view the gauge at the moment the pressure gun is turned off as it will give a true indication of the psi prior to resetting to the hold psi of approximately 40psi.

- The psi verification can be done with the override key and a wash setting of stop or with money/token and the rinse setting selected.

If adjustment required, you will need adjust the regulator. The regulator is adjusted using a screw driver, where pressure needs to be increased turn the screw anticlockwise and to decrease pressure turn in a clockwise direction.

2.2.2 Hot Water

Hot water can be sourced from the site or the dog wash can include an on-board hot water service. The on-board hot water service can be either an instantaneous or 50 litre storage unit.

2.2.2.1 Site Supplied Hot Water

Shown below is a K9000 that was installed at a site that supplied HOT water, and as such the unit did not require to have an on-board hot water service.

Please consult with Tru Blu Dog Wash to ensure your existing hot water supply is adequate.
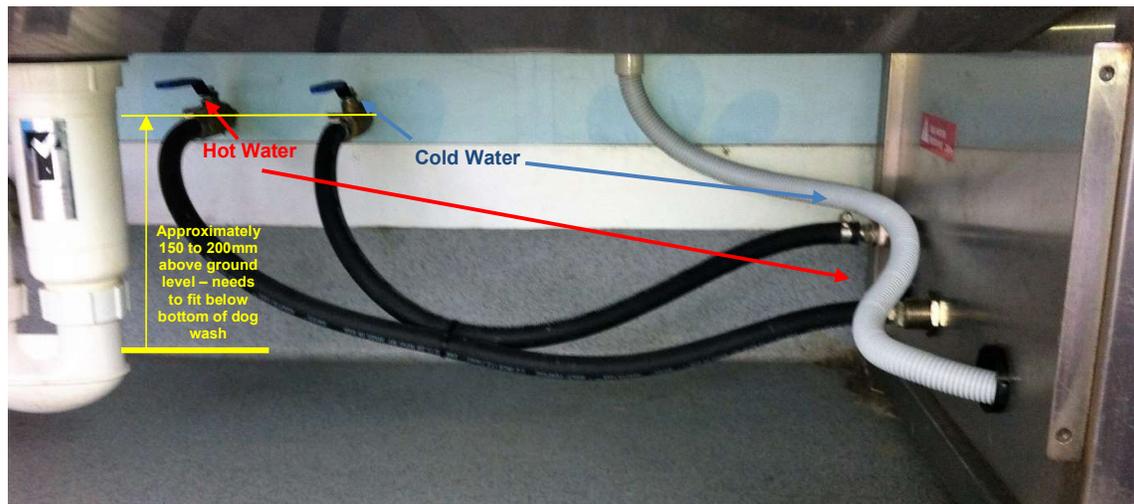
2.2.2.2 On Board Instantaneous Hot Water Unit

The picture below is the actual Stiebel Eltron DHCE 8/60 hot water unit which is fitted inside the dog wash cabinet.
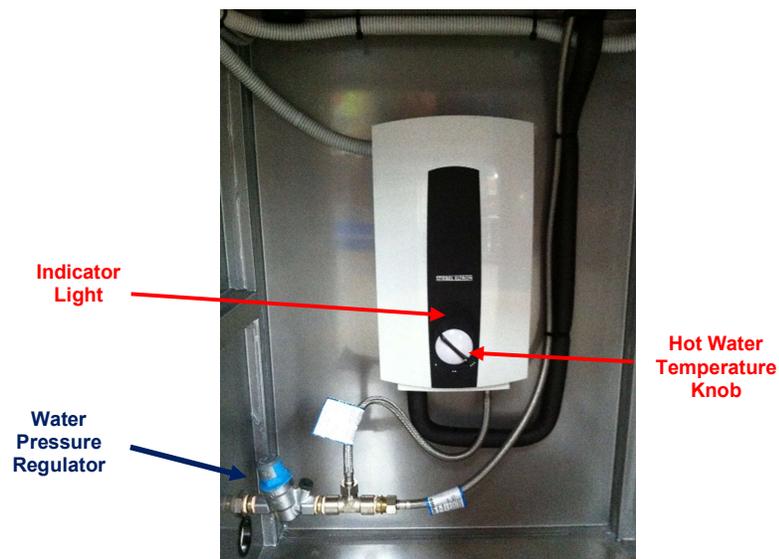
The DHCE 8/60 fully electronic instantaneous water heater heats the water while it is flowing through the unit. The indicator light will show when the heater is operation.

The heating level is set at Tru Blu to a level of 3, do not adjust the temperature level on the instantaneous water heater. To adjust the water temperature, use the tempering valve, refer to section 7.1 Temperature Valve Adjustment.

2.2.2.2.1 Initial Start Up of the Stiebel Eltron DHCE 8/60 AU Hot Water Unit

The initial start-up of the Stiebel Eltron should be conducted by an electrician referencing the Stiebel AU Operation and Installation guide.

2.2.3   On Board Hot Water Storage Unit - Breaker

After the water is connected the hot water tap is to be turned on and the hot water system filled and bled.

Hot water tap to be turned on

Bleeding the hot water system by pulling the pressure valve until water runs. (Top valve only)
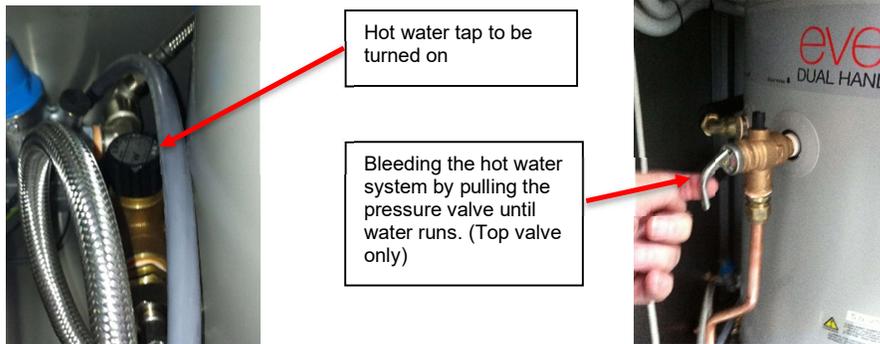
Once the hot water system is filled the hot water circuit breaker located in the control box is to be turned on. The *power must be isolated* prior to removing the cover from the Control Module refer to section 4 Main Board Components.

2.2.4 Hot Water Breaker

After the water is connected the hot water tap is to be turned on and the hot water system filled and bled.

Hot water tap to be turned on

Bleeding the hot water system by pulling the pressure valve until water runs. (Top valve only)
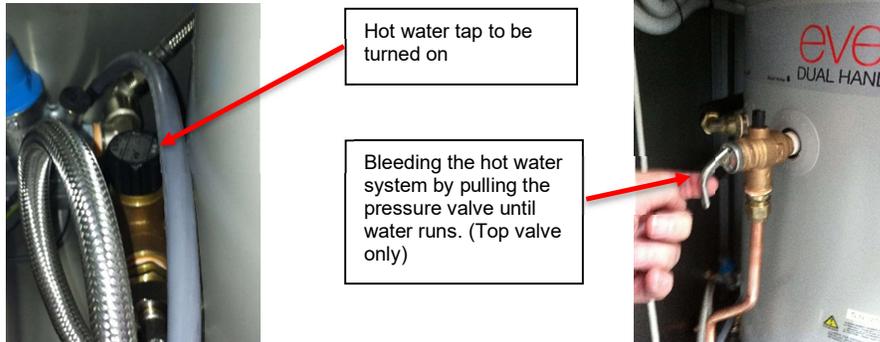
2.2.5 Connecting the Waste

Connect the 50mm waste using the P-trap (supplied in the install kit)

Waste plumbed directly into ground

Waste plumbed away to waste point

50mm Waste Connection

1/2" Ball Tap Cold
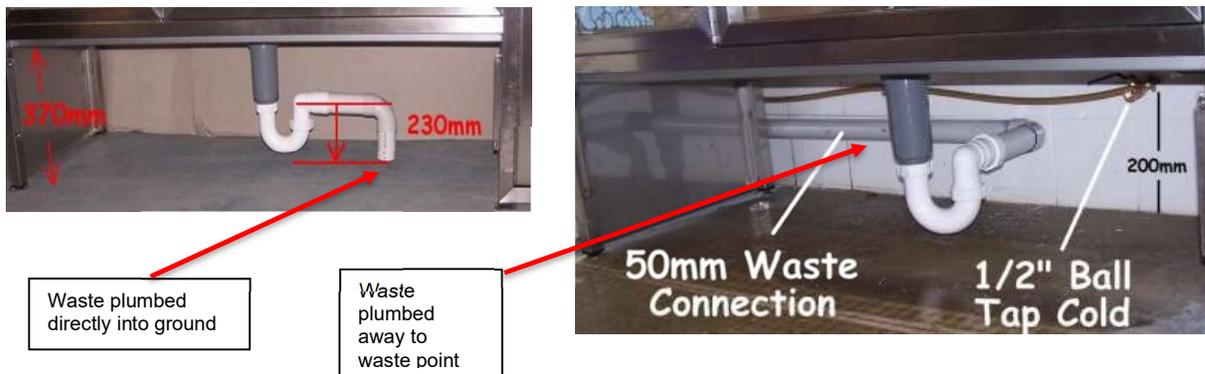
The copper waste pipe connected to the hot water unit relief valves needs to be run into a waste point or tundish (not supplied). The same waste point as the P-trap can be utilised.

⚠️ Before connecting to the waste point or tundish ensure local regulations are considered as some sites may require copper pipe.

Waste point

If unsure with any of the above steps please phone (03) 5562 9088 for assistance.

2.3 Connecting the Power – For Your Electrician

For CE countries there will be an isolator switch supplied with the K9000, it needs to be mounted within 1.7m from the cabinet at a height between 600mm and 1900mm from the ground. The photo below is an example. The K9000 needs to be hardwired to the switch board on its own circuit the size of the circuit depends on the specification of the K9000 Refer to the rating plate located inside the cabinet to see your max load. This circuit needs to have a standard circuit breaker on the switch board as the K9000 is protected with an RCD.

Shown on the right is the main electrical cable inside the dog wash. It enters through the gland at the bottom of the dogwash close to the ground. Run the power cable in 25mm flexible conduit as there is a socket already installed into the bottom of the main circuit breaker box shown. Leave 1m in length after you have reached the bottom gland.

1m

25mm Flex Conduit →

25mm Flex Conduit →

370mm

Electrical Cable Entry Point Of The Dog Wash

Shown on the left is a photo of the main electrical cable entry point to the dog wash. Once you have run the cable and conduit to this point, THEN leave another 900mm for the termination inside the dog wash.

2.4   Completing the Installation

Now that the K9000 has been installed you can now refit the front kicker plate removed earlier to allow the installation to proceed and peel the protective white film from the unit. You are now ready to commission the K9000.

Please ensure that the hot water breaker has been turned on refer section 2.2.2.

3   Commissioning the Unit

The K9000 is delivered with sufficient product for approximately 100 washes and it is recommended that commissioning the unit occurs after installation.

Commissioning the unit requires the following tests to be undertaken;

- Override key wash (refer section 9)
- Insert Coins
- Insert Notes (if applicable)

During the tests check the following;

- water pressure gauge: when pressure gun is being utilised the pressure range should be between 20 & 30 psi and when gun is off the psi should be in the range 40 to 50 psi. Refer section 2.2.1 re regulation of water pressure.
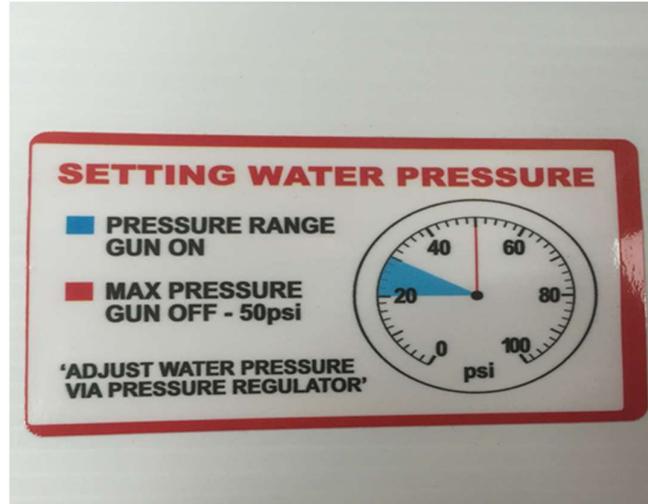
- water temperature, should be cool at a 40cm distance from the wash gun, refer section 7.1 for water temperature adjustment.

4   Main Board Components

4.1   K9000 Main Board with Iwaki EJ Series Pumps
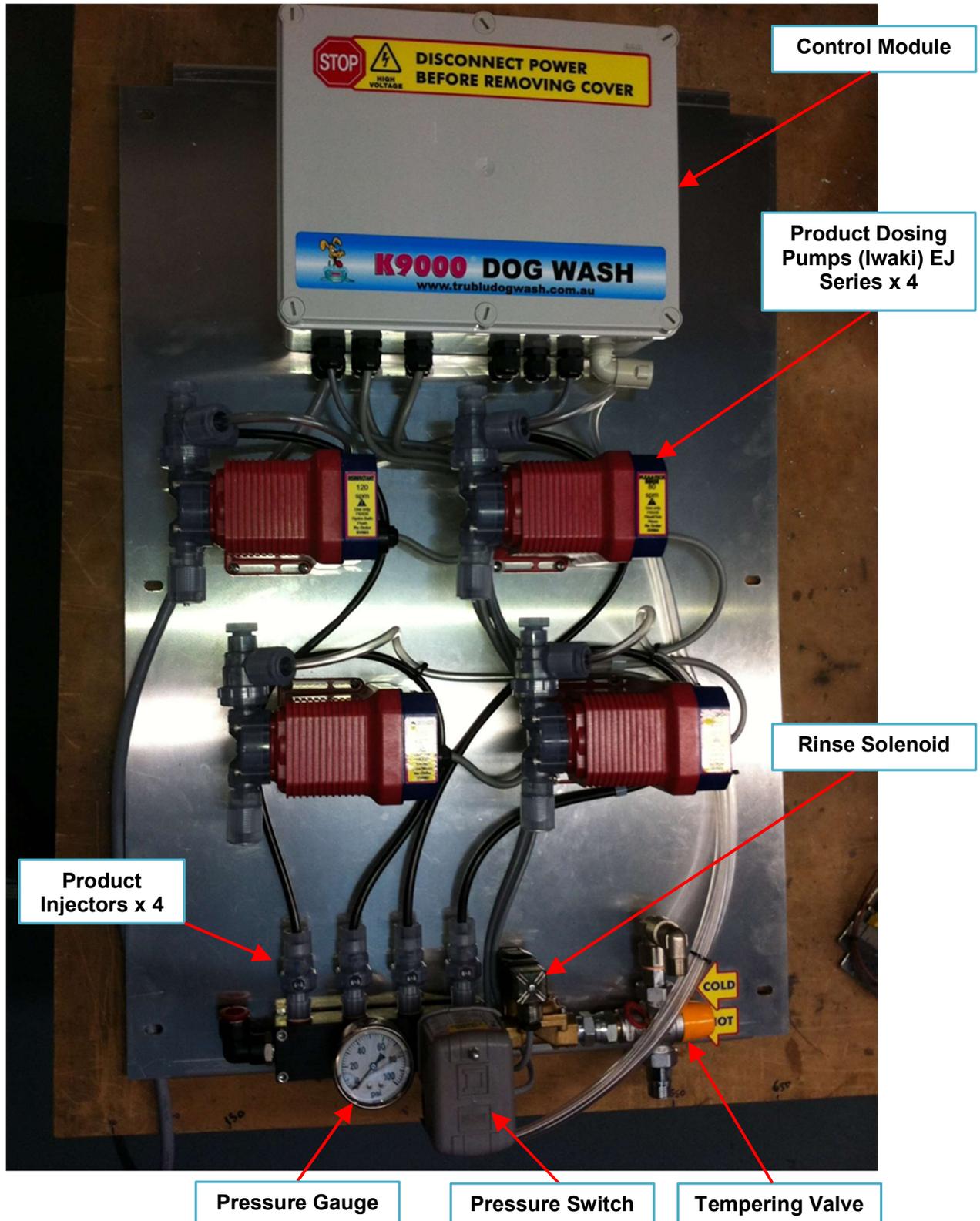
4.1.1 Control Module

The Control Module contains the fuses, transformer, relays etc.

⚠️ *The cover from the Control Module should never be removed unless the power is disconnected.*

The below picture has the main components of the Control Module labelled. It should be noted that there is a red LED light on each of the 3 fuses and if this is lit then the fuse has blown.
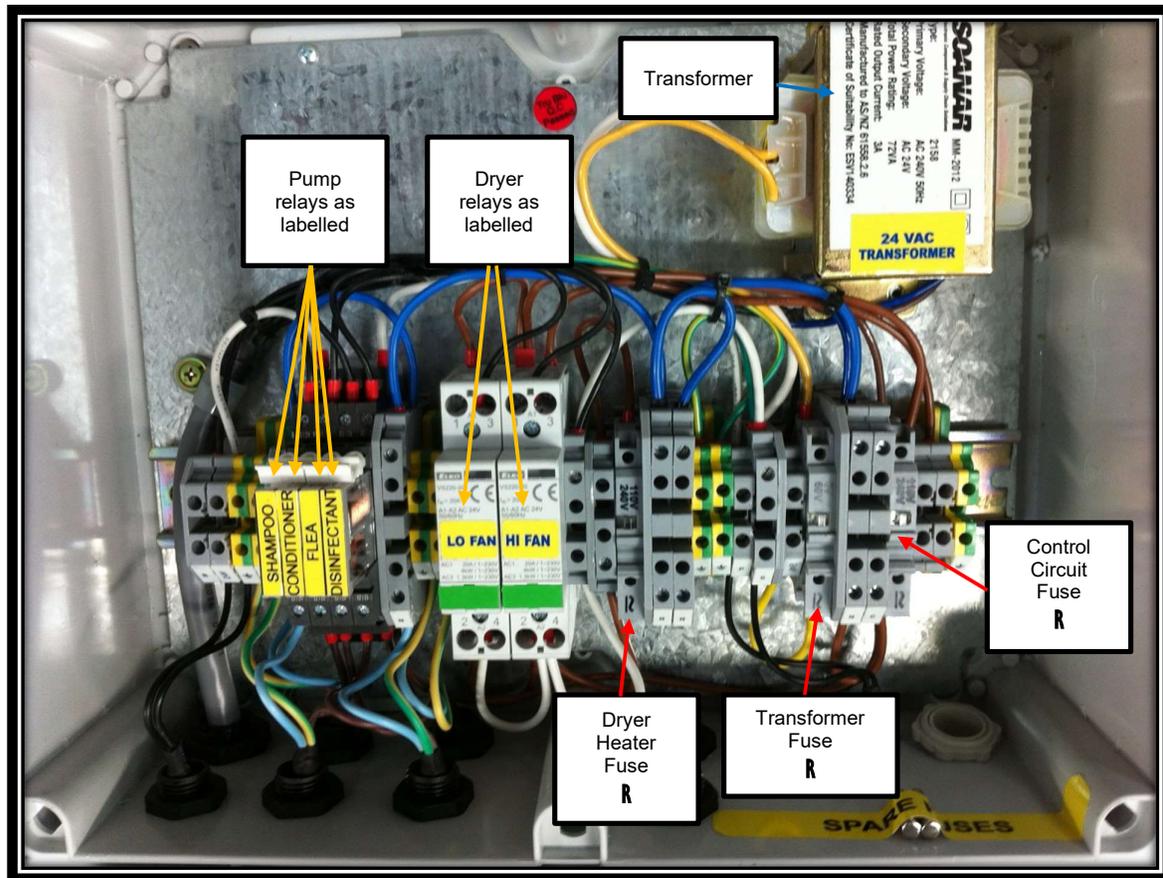
4.1.2   Product Dosing Pump Factory Settings (Iwaki EJ & ES Series Pumps)

Settings are guidelines/recommendations for Fido's products:

- Shampoo: 200 SPM*
- Condition rinse: 180 SPM*
- Flea & Tick rinse: 80 SPM*
- Tub disinfectant: 120 SPM*
- Flea shampoo (export only):   180 SPM*

Note: Strokes Per Minute

4.1.2.1   Iwaki EJ Series Pump

To adjust settings, depress the up arrow* to the recommended SPM rate, as detailed above.

Should you be using another approved product please contact Tru Blu on 03 5562 9088 for settings.

*Note: The pump must be in operation when making an adjustment. The arrow will only increase the SPM, so to reduce the rate you must fully increase the rate to 360, release the Stroke Rate button and repress it. This will reset the SPM to 1, you can then increase to the required SPM rate. Once the required rate is reached press the start/stop button **twice** to save the required rate.*

'Start / Stop' Button	**'Stroke Rate' Button**
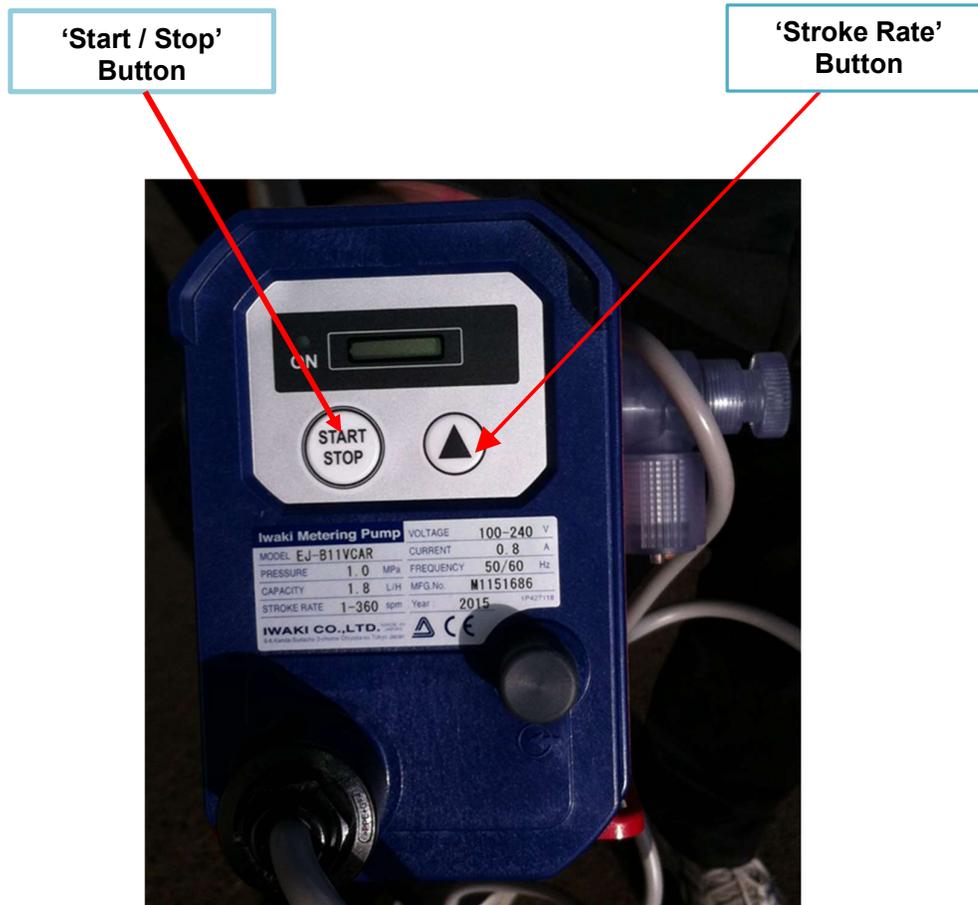
4.1.2.2 Iwaki ES Series Pump

To adjust settings, press either the up or down arrow until the recommended SPM rate is displayed, as detailed in section 4.1.2 above.

Should you be using another approved product please contact Tru Blu on 03 5562 9088 for settings.

Note: The pump must be in operation when making an adjustment. The ES Series pump allows the operator to either increase or decrease the SPM as it has both up and down buttons. Once the rate is displayed it is saved.

'Increase Stroke Rate' Button

'Decrease Stroke Rate' Button

'On / Off Button
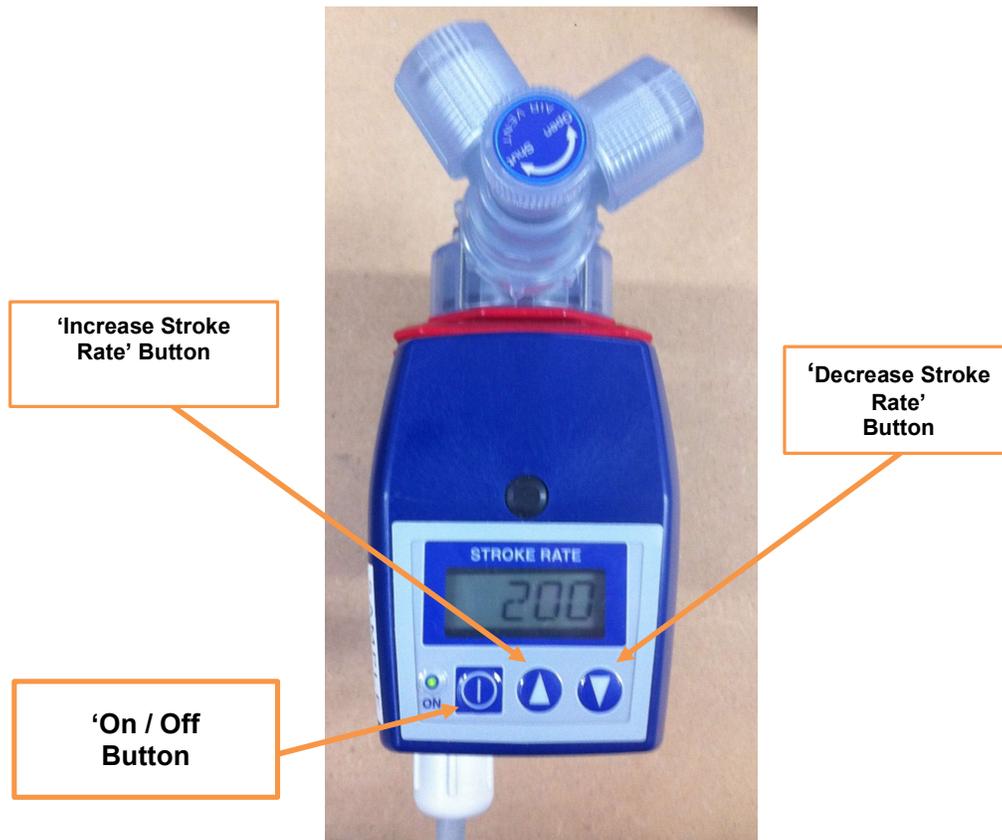
4.1.3   Bleeding Product Dosing Pumps (Iwaki - EJ or ES Series Pumps)

The need to bleed product dosing pump will arise when products have run out or in some case when products have been replaced and air has become trapped in the tube.

Bleeding procedure:

1. Select the product you wish to bleed by turning the rotary switch e.g.: shampoo

2. Release bleeder valve (item A below) by turning <u>anti-clockwise</u> as shown below; *3 turns maximum.*

3. Once product reaches the clear waste tube (item B below) re-tighten the bleeder valve by turning clock-wise;

4. After process is complete visually inspect the suction line for air pockets-if air pockets are present repeat process.

NOTE: After pump has been bled, there will be a distinctive change in the sound of the pump (pump will sound quieter).

If there are problems bleeding heavier concentrates rattle the suction line (item C below), and/or squeeze it to assist with shifting the product up into the pump head.
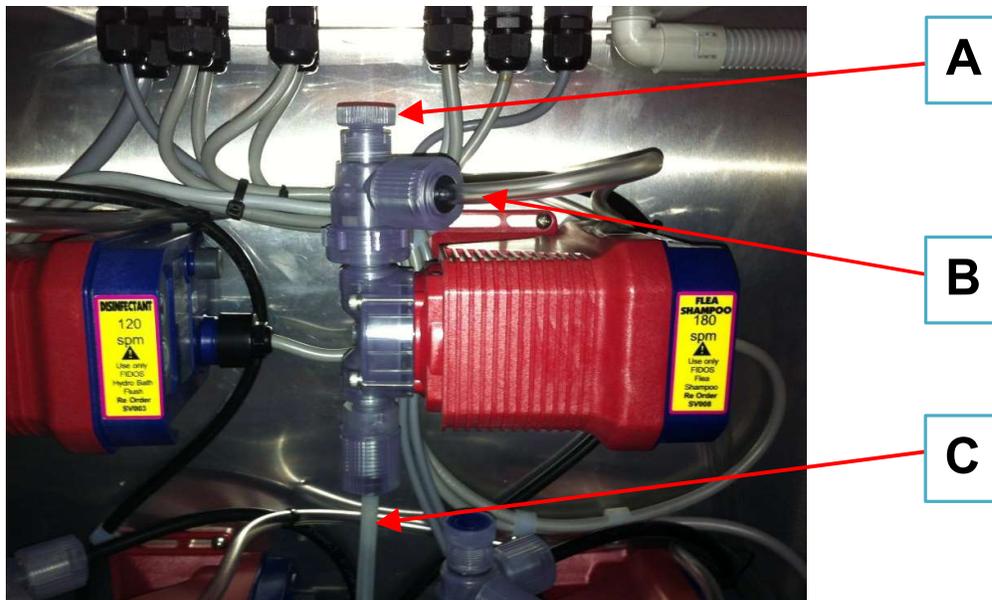
4.1.4 Iwaki Dosing Pump Exploded Views

This section has diagrams of both the EJ & ES Series pumps completely dismantled. Do not dismantle pumps beyond the extent shown in this instruction manual.

4.1.4.1 Iwaki Dosing Pump – EJ Series Exploded View

The EJ Series pump in the diagram below is completely dismantled. Do not dismantle the pump beyond the extent shown in this instruction manual.

NO.	DESCRIPTION	Q'TY
A	Pump head assy	1
B	Air vent assy	1
C	Valve set	2
D	Adjusting screw set	1
E	Connector set	3
1	Pump head	1
2	Fitting	1
3	Fitting nut	3
4	Air vent body B	1
5	Lock nut	1
6	Diaphragm	1
7	Retainer	1
8	Air vent body A	1
9	Valve guide	4
10	Valve seat	4
11	Valve	4
12	Valve gasket	2
13	O-ring	2
14	Diaphragm spacer	*
15	Hex socket cap bolt(w/PW,SW)	4
16	Adjusting screw	1
17	NP Air vent	1
18	O-ring	1
19	O-ring	1
20	O-ring	1
21	Bracket spacer	1
22	O-ring	1
23	Diaphragm seal	1
24	Hose stopper	3
25	Hose adaptor	3
26	O-ring	3
27	Nut spacer	4
28	Bolt cover	4
29	Nut cover	4

* pumps w/own q'ty/thickness

※1 The form of actual parts may differ from this drawing.
※2 We cannot supply each piece of the parts marked"[ ]".

4.1.4.2 Iwaki Dosing Pump – ES Series Exploded View

The ES Series pump in the diagram below is completely dismantled. Do not dismantle the pump beyond the extent shown in this instruction manual.

Exploded view

Pump head, Drive unit & Control unit

Air vent

Valve set*

Diaphragm spacer

Retainer

Valve set*

Diaphragm

Bracket spacer

Control unit

Fixing screw M3×35

Gasket

Cable gasket

Cable nut

Gasket

Case gasket

Controller case

Controller cover

Tapping screw 4×25

Bracket

Tapping screw 3×8

Pump body

Drive unit
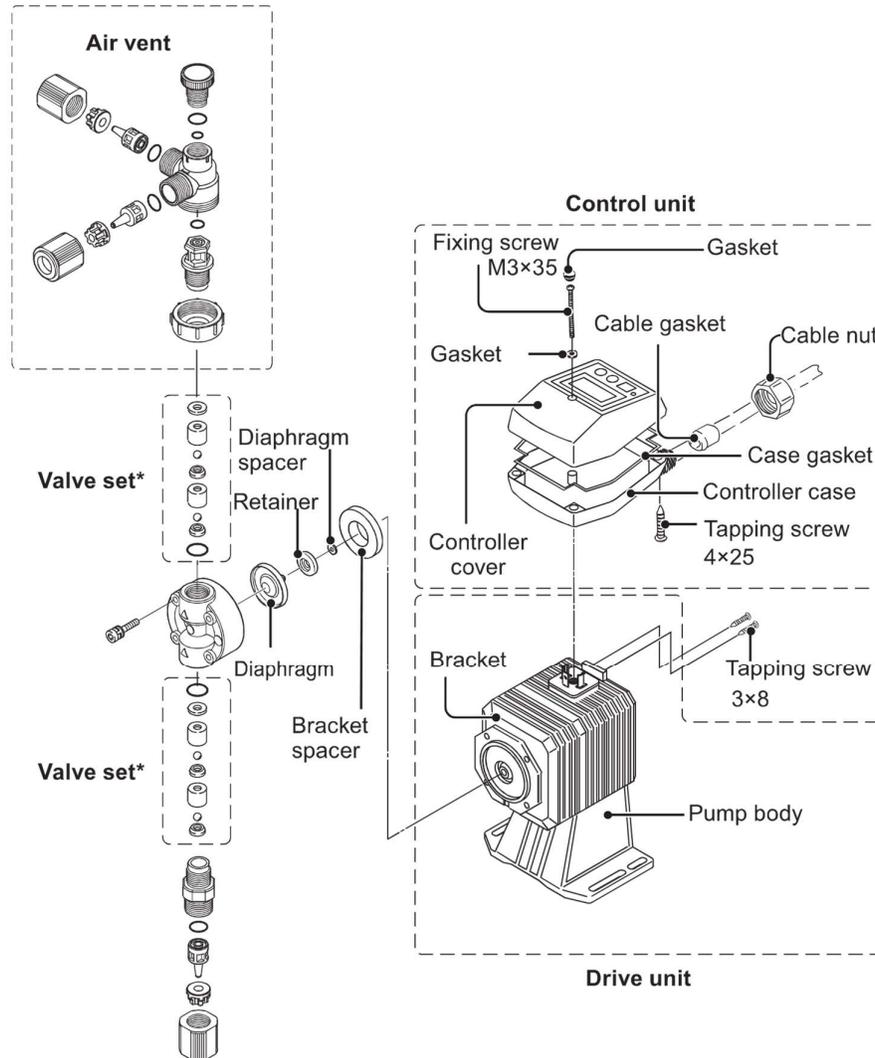
4.2 Approved Products

> ⚠️ **The only products that are approved for use in the Tru Blu K9000® Dog Wash are Fido's products produced in Australia by Mavlab Pty Ltd (www.mavlab.com.au) and those registered as a "veterinary chemical product" by the Australian Pesticides and Veterinary Medicines Authority (APVMA) for use on dogs.**

The Australian Pesticides and Veterinary Medicines Authority (APVMA) contact details are:

Office: 18 Wormald Street, Symonston, ACT, 2609, Australia
Office hours: 9.00am - 5.00pm Mon - Fri EST
Mailing address: APVMA, PO Box 6182, Kingston, ACT, 2604, Australia
Email: contact@apvma.gov.au
Phone: +61 2 6210 4701
Web: www.apvma.gov.au

Q: How do I check the current registration status of a chemical product?

A: Your supplier can check the registration status of chemicals, or you can access the information on the database of all registered agricultural and veterinary products in Australia from the Public Chemical Registration Information System – PUBCRIS, accessed through the APVMA website.

Q: How do I know if a product has been registered?

A: The APVMA (known before March 2003 as the NRA) allocates a unique registration number which is printed on the bottom of the product label. The APVMA uses this approval number to verify the registration status of products. The words "*NRA Approval No.*" always appears in front of the number. The last four digits tell you when the product was last assessed by the APVMA. However, some older chemical products may not have an NRA number. In this case, ask your supplier to check that the product you want is registered.

Approved Fido's products

1.   K9000 Shampoo (Registration not req'd)
      FIDOS K9000 Clear Bottled Every Day Shampoo
      MSDS (see MSDS attached)

2. Conditioner (Registration not req'd)
   FIDOS K9000 CLEAR Bottled Crème Conditioner
   MSDS (see MSDS attached)

3.   Flea & Tick (APVMA No. 37433)
      FIDO F Rinse Concentrate
      MSDS (see MSDS attached)

4. Disinfectant (APVMA No. 57855)
   Fido Hydro Bath Flush
   MSDS (see MSDS attached)

Important

The use of non-approved products may be harmful to the dog. Damage may also be caused to the Tru Blu dog wash equipment and possible voiding of the units warranty.

5   Cash Box Components

Coin Acceptor

LED 6 Timer/Display

Override Key

Warning Beeper

Rotary Switch

Interface Board

Note Acceptor
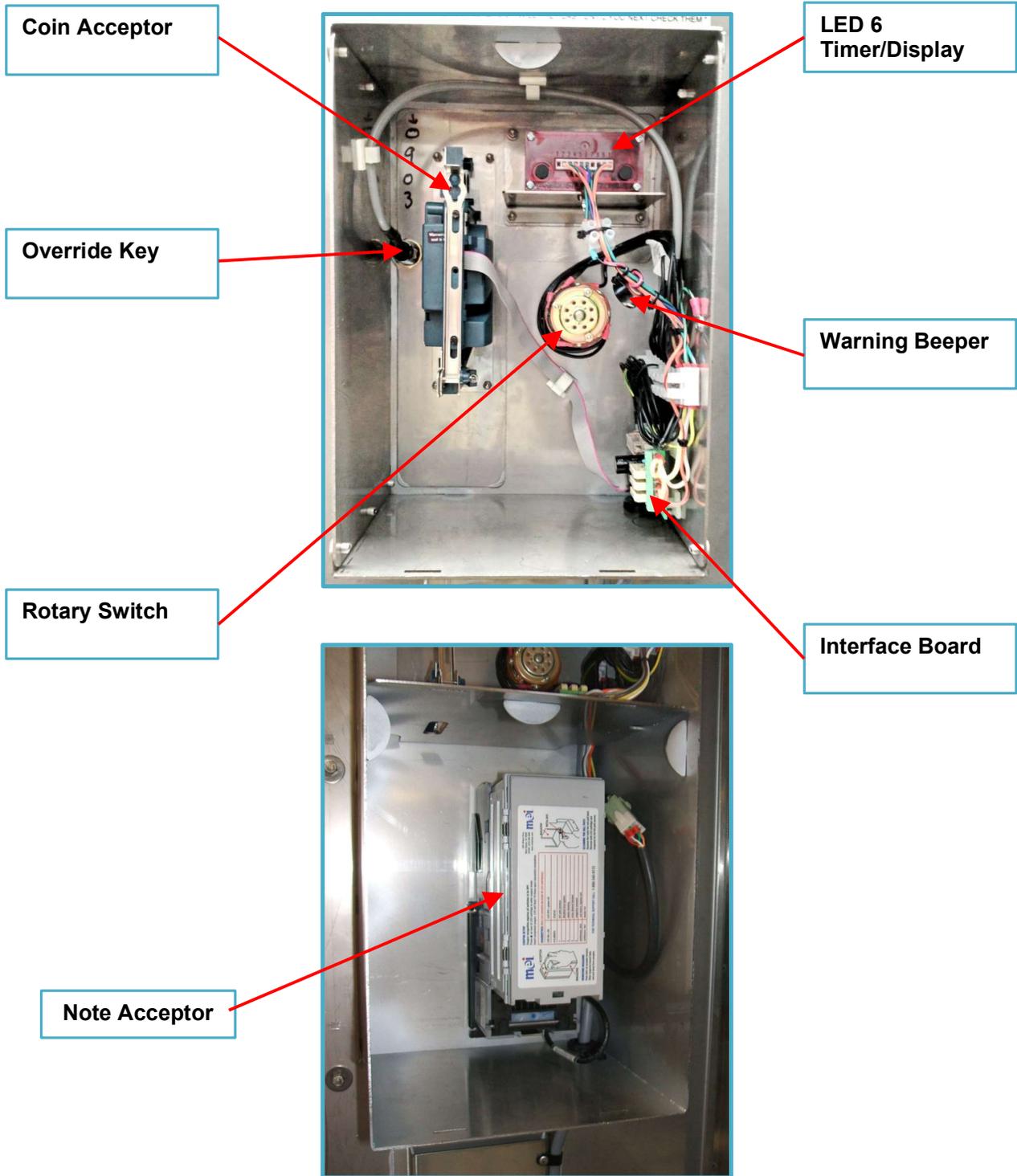
5.1 Coin Acceptor – coin activation

If the coin acceptor does not accept a coin, then it may be because the line for that particular coin is switched OFF. I.e. coin is disabled. To turn a line ON and to enable a coin, press the button once, (light will flash green) then drop the coin in. Coin should now work. To disable a coin, press the button twice, (light will flash red) then drop the coin in, coin will now not work.

Operating Instructions

Button

Light
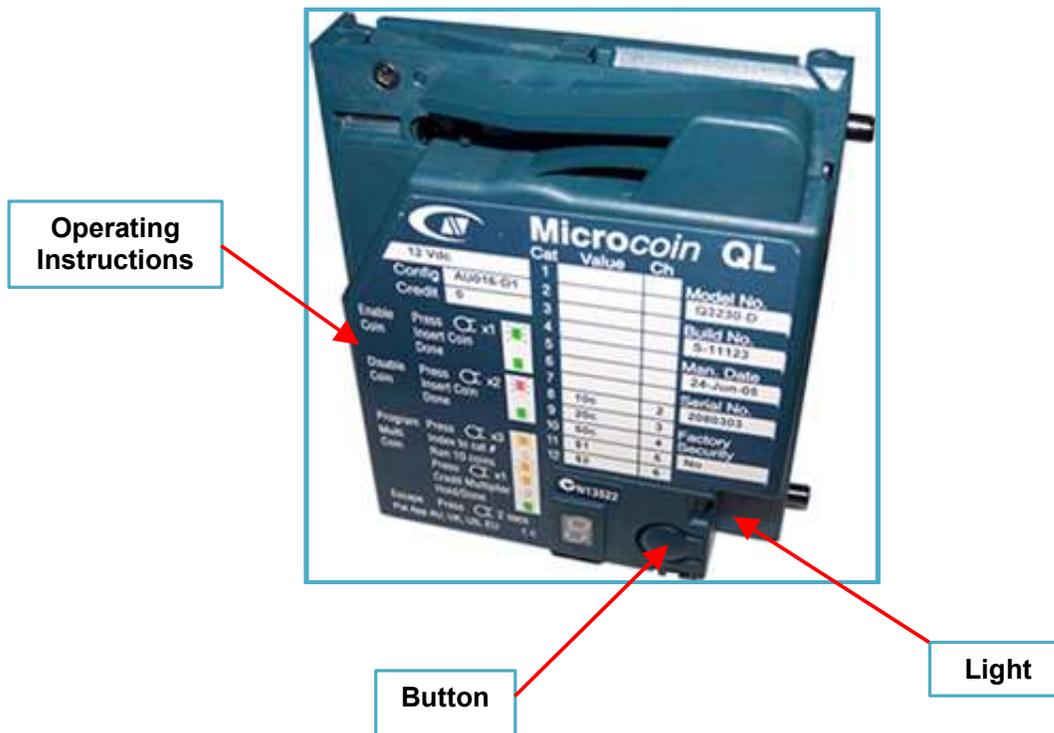
Service agent refer to -   Microsystems Controls Pty Ltd
Unit 6, 11 Robertson Place
South Penrith NSW 2750
Ph. 61+2 4731 6655
sales@microcoin.com

Coin activation Cont'd…

- The Microcoin QL-Timer can be programmed using its On-Board Programming facility (OPB).
- Each OBP feature can be accessed by a series of button presses, using the OBP programming button, which is located below the LED indicators.
- Please use a **firm** and **rapid** button press to access each Mode. You will be shown a unique "M" LED flash sequence to indicate the selected Mode.

Feature	Description	Visual Indicators
Enable Coin	Press button once. LED flashes GREEN	M (flashing green) 1 2 3
	Pass the coin to be enabled through the QL. If successful, LED will go steady GREEN	M (steady green) 1 2 3
Disable Coin	Press button twice. LED flashes RED	M (flashing red) 1 2 3
	Pass the coin to be disabled through the QL. If successful, LED will go steady GREEN	M (steady green) 1 2 3
Program Multi Coin	Press button 3 times LED flashes ORANGE	M (flashing orange) 1 2 3
	Press Button to get to required Cat number Displayed on side of unit	(1 – 12)
	Pass 10 Coins through the QL LED flashes ORANGE	M (flashing orange)
	After the 10th coin or token has passed through LED will go steady ORANGE	M (steady orange)
	Display should now show number "1" This is the credit multiplier, Number 1 = 1 pulse = $1 If programming a Token to = $10, press button until Display shows "0"	1
	Press & Hold Button, LED will go steady GREEN	(steady green)

5.2   Coin Acceptor – Removal

⚠️   **Always disconnect power before removal of unit**

Open the rear door of the customer control unit, the coin acceptor is mounted on the left-hand side. Shown on right is the stainless-steel vertical clip that holds the coin acceptor in place. Push upwards on this bracket and it will slide a short distance.

Press upwards at this point
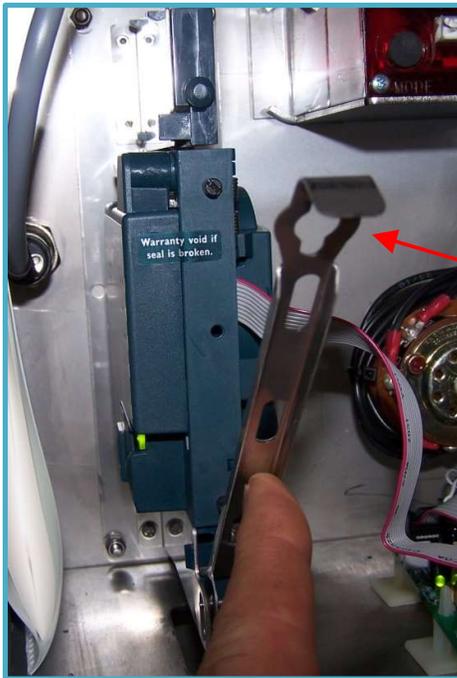
Once the bracket slides up slightly, pull it backwards towards you. This bracket is hinged on the bottom and will simply pivot. See photo on left.

With bracket down, the coin acceptor will slide from its mount. Disconnect the small ribbon cable form the interface board as shown on right.

5.3   Coin Acceptor Cleaning

Once the coin acceptor has been removed, it can be opened for cleaning.

The coin acceptor is opened as shown on the right, the side that opens is spring loaded, and will close it self when released.
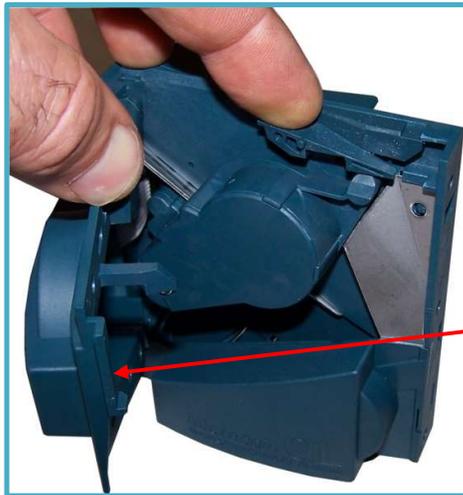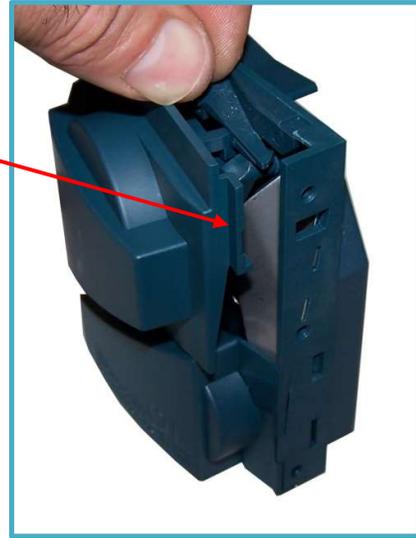
Open the side completely as shown on the left. This will allow ease of cleaning.

Using a soft damp cloth, wipe the inside area that you can see in photo on right.

Important
Do not use harsh detergents.

Once the unit has been cleaned, it is a simple case of re-inserting the unit in the reverse order that was shown on previous page.
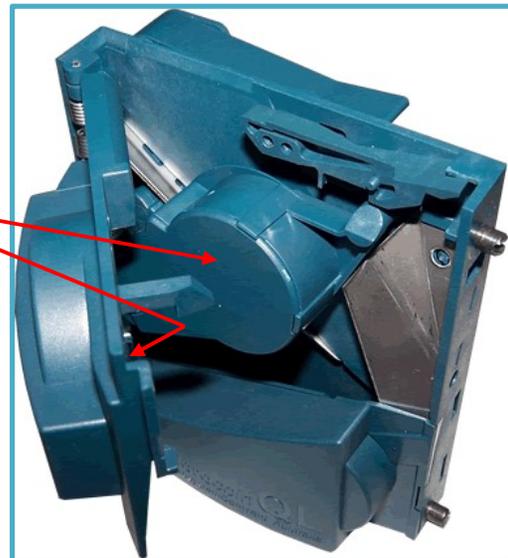
6 Note Acceptor (Mei)

6.1 Note Acceptor Fault Codes

The MEI note acceptor has built in diagnostics; this comes in the form of a flashing indicator light. The type of fault can be determined by the number of times this indicator light flashes. Below is the table to reference when trying to determine what fault the MEI note acceptor has. The label below is also stuck to the back of the note acceptor magazine.

The magazine that holds the notes must be clipped into its normal position to ensure you get an accurate fault code.

If the magazine is removed or dislodged in any way, the only fault code that you will receive will be No 5, magazine removed.
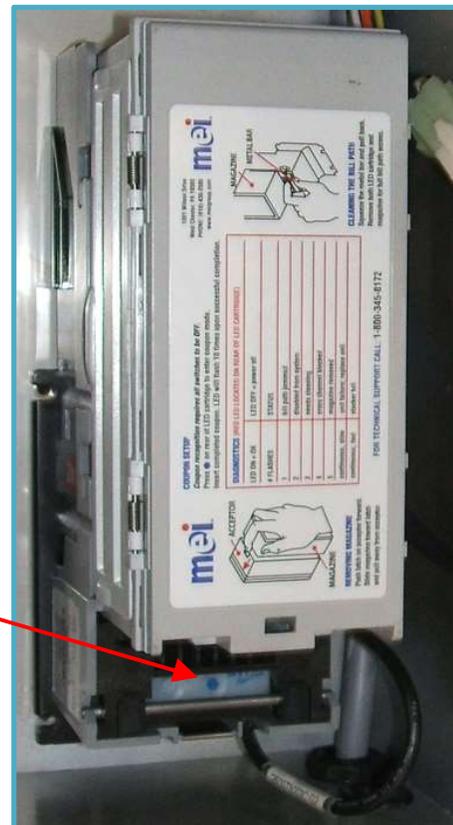
Fault code indicating light

6.2   Note Acceptor Removal

⚠️ **Always disconnect power before removal of unit**

To remove the note acceptor for either cleaning or servicing, there are four small nuts that need to be undone to slide the unit out of the back of the customer control unit. These nuts will need to be removed fully to allow the unit to come free. Once the unit is free from the mounting studs, unplug the cable from the right-hand side looking from rear.

Plug Connection

Small Nuts

Small Nuts
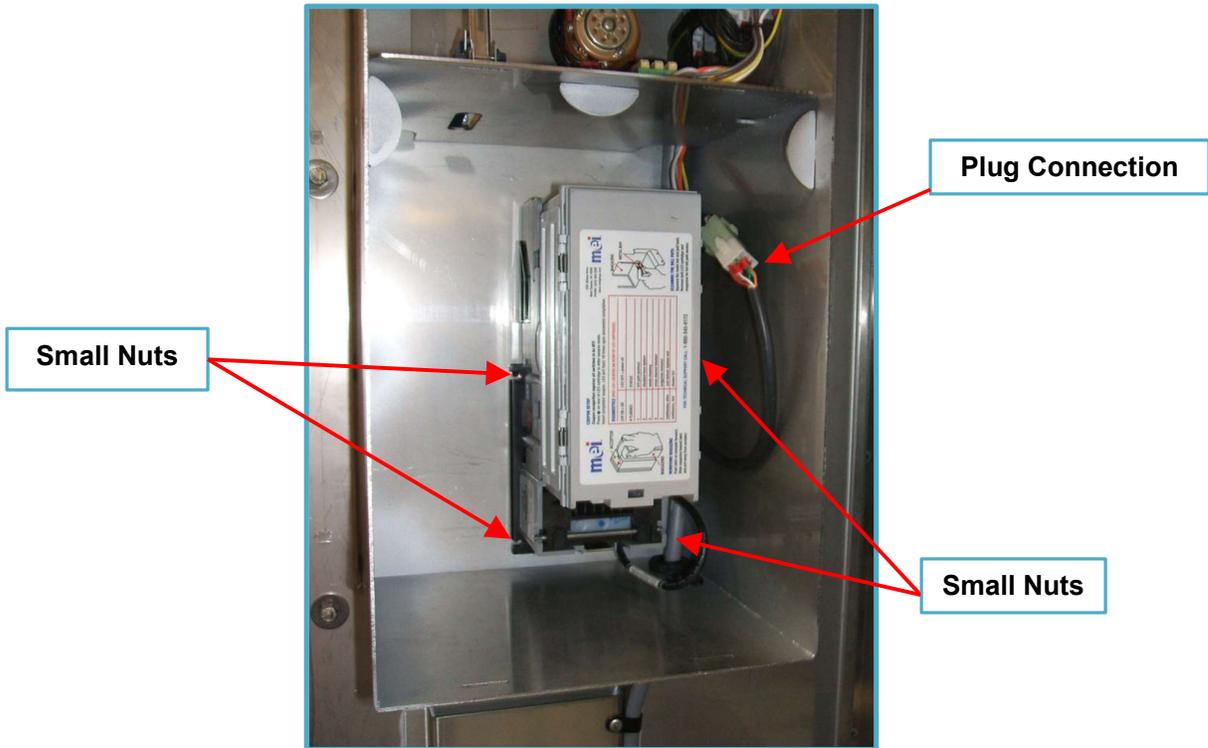
MARS DIP SWITCH SETTINGS FOR TRU BLU K9000
Set Switches 1, 2, 3, 4, 5, 6 to "ON"
Set Switches 4*, 7, 8 to "OFF
Note from 2016 only 7 & 8 "OFF"

Switch	6
Harness Enable	OFF
Always Enable	ON
Switch	7
1 Pulse Per Dollar	OFF
4 Pulse Per Dollar	ON
Switch	8
Gaming/Retail Inter	OFF
Vending Interface	ON

ON   OFF
8 7 6 5 4 3 2 1

Switch				1	2
Bill	Acceptance	1	way	ON	OFF
Bill	Acceptance	2	way	OFF	ON
Bill	Acceptance	4	way	ON	ON
Switch 3					
High Security OFF High Acceptance ON					
Switch				4	5
Accept OFF Reject ON			$10		$20
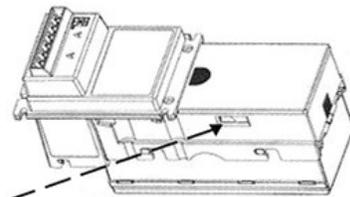
6.3   Note Acceptor Cleaning

If the note acceptor shows signs of decreased performance, it may be in need of cleaning.
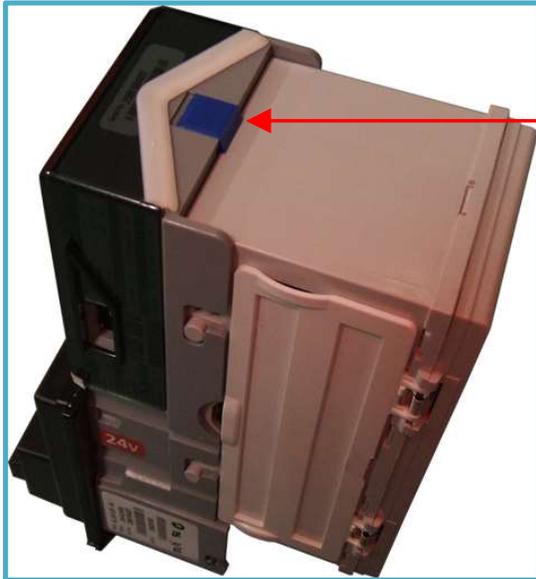
To remove the stacker from the note acceptor, press the blue catch forward and slide the rear compartment up.
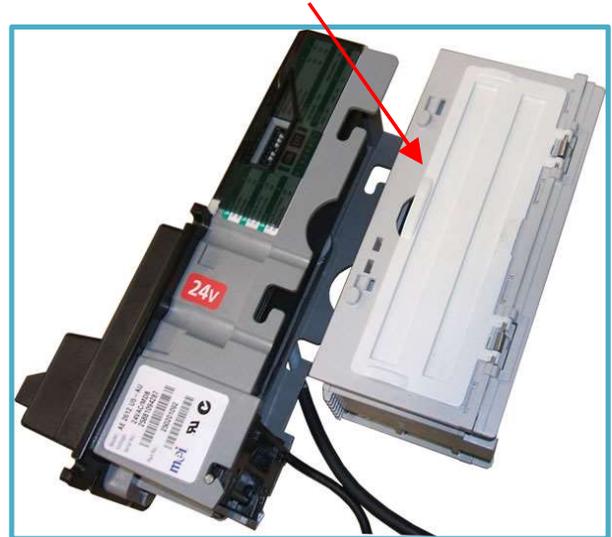
To remove the lower sensor block, raise the locator pin shown above and slide the sensor block out

Remove unit and clean with a slightly moist cloth. Pay special attention to the optical lights. Do not use harsh solvents.

7 Note Acceptor (GBA ST1)

7.1 Cassette Fitting / Removal

To fit a note cassette to the GBA ST1 validator, ensure that the cassette lid is level with purple cassette clip of the GBA ST1 body.

- Line up the four cassette locating studs with the four location slots in the channel and push the cassette firmly towards the validator body. The studs will locate into the joints.
- To ensure that the cassette latch has successfully re-engaged, press down on the cassette lid.
- **Remove the cassette by sliding the cassette clip forwards** (away from the cassette) and lifting the cassette away from the GBA ST1 unit.

7.2   Cleaning the Validator Note Path

Equipment Required:
- Cotton swab or lint-free cloth
- Cleaning Solution – a mix of up to 50% Iso-Propyl Alcohol (IPA) is recommended. Do not use more than 50% IPA.

⚠️ **Never** use solvent based cleaning agents, such as alcohol, petrol, methylated spirit or white spirit on this product as the unit will be severely damaged.

Important **Anti-static precautions should always be observed when cleaning the GBA ST1 unit**

1. Ensure the power supply to the GBA ST1 unit is switched OFF.
2. Remove the Cassette by sliding the cassette clip forwards (away from the cassette) and lifting the cassette away from the GBA ST1 unit.
3. Disconnect all external cables attached to the Bottom Sensor Assembly through the side walls of the Channel Assembly.
4. Pinch together the central tabs of the purple bottom plate clip, and gently slide the Bottom Sensor Assembly away from the Channel Assembly.
5. Pick off and discard any large items of debris from the note path of the Bottom Sensor Assembly. Repeat for the other side of the note path (on the drive belt assembly).
6. Using the cotton swab, or lint-free cloth, wetted with cleaning solution and applying light force only, carefully clean all sensor windows in both halves (upper and lower) of the note path. If a sensor window has become badly scratched do not attempt to polish it, contact your local regional office for further advice.
7. Continue with the swab, or lint-free cloth, to clean the rest of the note path, including sprung rollers.
8. Visible parts of belts can be cleaned by wiping with a cleaning solution-soaked cotton swab or wipe.   It is not possible to clean the whole belt surface without removing the belts from the unit.
9. Use an additional swab or cloth to dry the cleaned area, if required.
10. Slide the clean Bottom Sensor Assembly back into the Channel, ensuring that the bottom plate clip latches securely into both sides of the Channel.
11. Re-connect the external cables.
12. Re-fit the Cassette.
13. The supply to the unit can now be switched ON.

7.3   Clearing a Note Jam

1. Ensure the power supply to the GBA ST1 unit is switched OFF.
2. Remove the Cassette by sliding the cassette clip forwards (away from the cassette) and lifting the cassette away from the GBA ST1 unit.
3. Disconnect all external cables attached to the Bottom Sensor Assembly through the side walls of the Channel Assembly.
4. Pinch together the central tabs of the bottom plate clip, and gently slide the Bottom Sensor Assembly away from the Channel.
5. Clear the jammed note(s) from the note path.
6. Re-assemble unit and switch the power supply back ON.

7.4 Troubleshooting

Problem Symptoms	Possible Cause	Investigate	Possible Solution
Unit does not work - belt motor does not run, no LED colour	1. Power supply not switched on. 2. Power supply not connected. 3. Poor electrical connection(s). 4. Unit carrying out self-test. 5. PSU failure	1. Power supply and power cable. 2. Diagnostics indicator or illuminated note guide (if fitted). 3. Interface and 18-way cable assemblies.	1. Ensure power to validator is connected and turned on. 2. Ensure Interface and 18-way cable are connected firmly and correctly.
All programmed notes are rejected	1. Acceptance inhibited for all notes. 2. MASG not working. 3. Escrow sensor not working.	1. Software configuration.	1. Use on-board button or GBA Talk to enable required notes.
Poor or no acceptance of one or more programmed notes	1. Note acceptance inhibited. 2. Poor sensor readings. 3. Insufficient power supply capacity.	1. Note inhibit settings. 2. Bottom Sensor Assembly fitting. 3. Note path cleanliness.	1. Use on-board button or GBA Talk to enable required notes. 2. Use GBA Talk to check sensor levels and re-calibrate if necessary. 3. Clean validator note path.
Notes fail to stack correctly	1. Escrow sensor not working. 2. Stacker motor not working. 3. Stacker mechanism not working.	1. Stacker motor cable connections. 2. Stacker jams. 3. Damaged / distorted note in cassette.	1. Ensure all cables are connected properly. 2. Ensure cassette is located correctly and free from damage.
Unit does not communicate with host machine	1. Incorrect interface selected. 2. Poor electrical connection(s).	1. Configuration of validator. 2. Interface and 18-way cable assemblies.	1. Use on-board button or GBA Talk to select required interface. 2. Ensure Interface and 18-way cable are connected firmly and correctly.
Belt motor and/or stacker motor runs continuously after power ON	1. Poor electrical connection(s)	1. Internal harnessing.	1. Ensure Interface and 18-way cable are connected firmly and correctly.
Unit does not provide credit for accepted note	1. Incorrect interface selected. 2. Poor electrical connection(s).	1. Configuration of validator. 2. Interface and 18-way cable assemblies.	1. Use on-board button or GBA Talk to select required interface. 2. Ensure Interface and 18-way cable are connected firmly and correctly.

8   Temperature Valve

8.1   Temperature Adjustment

The temperature valve mixes the hot and cold water to a safe temperature. The base setting is 35º. In some instances, operators may wish to increase or decrease the water temperature slightly to compensate for seasonal changes.

Adjustment procedure:

1.   Remove amber safety cap from the end of valve (picture A).

2.   Undo the brass lock nut.

3.   Using the amber safety cap rotate clock-wise to decrease temperature and anti-clockwise to increase temperature (picture B).

4.   Re tighten the lock nut.

5.   Refit amber safety cap.

NOTE: Temperature will change with the slightest adjustment. Care should be taken not to over-adjust. If in doubt check water temperature with a thermometer and DO NOT EXCEED 38º.
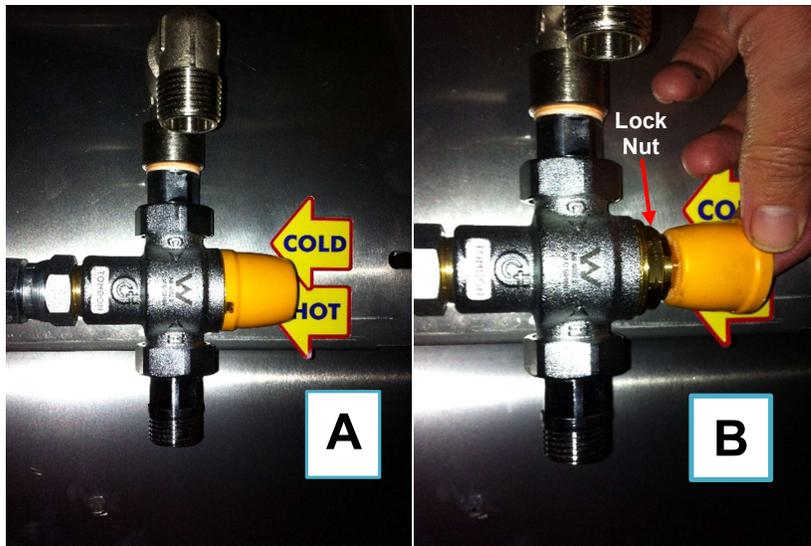
9 Dryer

9.1 By-Pass Dryer - Operation (Summer/Winter)

NOTE: Set for summer operation when the weather is consistently warm and above 30deg C (86deg F)
Set for winter operation when the weather is colder and you want the dryer to blow warmer air.
In some warmer climates, it may not be necessary to alter this tap to the winter position.
Do NOT operate the dryer in the WINTER position during hot & warm weather; this will cause distress to the dog

Set the Dryer bypass tap to the position as shown for **SUMMER** operation.

Set the Dryer bypass tap to the position as shown for **WINTER** operation. The tap is set at an angle of 45 degrees to the pipe
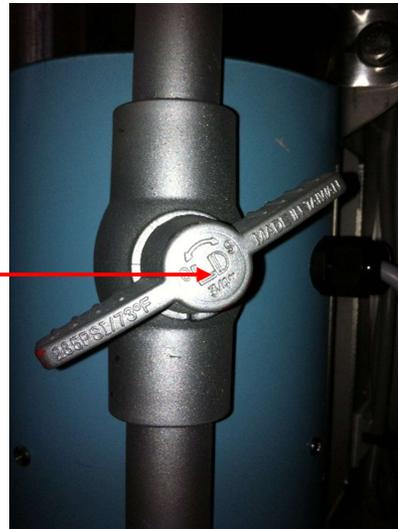
9.2   Heated Dryer - Operation (Heat Settings)

The K9000 dog wash comes equipped with an adjustable blower heat setting for drying dogs. This is controlled by a toggle switch.

Heat Toggle Switch

HEAT SWITCH

This toggle switch is marked with the sticker shown on the right. The setting of this switch is dependent on the temperature range the dog wash unit is being operated in. i.e. the temperature of the day.
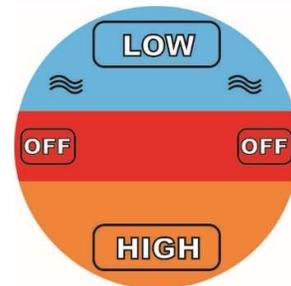
HEAT SWITCH SETTINGS

Using the picture shown on the right, set the heat switch to the appropriate position, taking into consideration the temperature range that the dog wash is operating in. The sticker shown on right is also stuck onto the K9000 dryer. Use HIGH when it is less than 5 deg, use LOW when it is 5 – 15 deg and use the OFF position when the temperature is greater than 15 deg.

HIGH SETTING NOT AVAILABLE IN HOT CLIMATES

9.3 Dryer Hose Connection

TRU BLU DOGWASH K9000
DRYER HOSE CONNECTION

2. Locking Nut

1. Screw

5. Dryer Elbow

4. Hose end

3. Groove

1. Undo screw and locking nut.
2. Insert dryer hose machine end into elbow
3. Align groove in dryer machine end to the screw
4. While rotating hose end back and forth, gently finger tighted the screw so that it locates itself into the hose end groove
5. By doing this, the screw will hold the hose in the elbow
6. Do not overtighten, overtightening will distort the hose end and prevent the hose from the normal swivel function
7. When this is done correct, the screw will hold the hose in place yet the hose will continue to rotate.
8. If the hose does not rotate, the scew may be inserted to far.
9. Once the screw has been adjusted correctly, use a small spanner to tighten the lock nut without turning the screw any further.

10 Override Key (Wash down Key)

The K9000® is equipped with an "OVERRIDE KEY"

The operation of this key enables the owner/attendant to operate the wash down facility without inserting any money.

During this wash down function, all selections on the rotary dial are available except the dryer.

This wash down function is not to be used for washing dogs.

Important

Remove key after wash down is complete.

11 LED 6 Operating and Programming Instructions
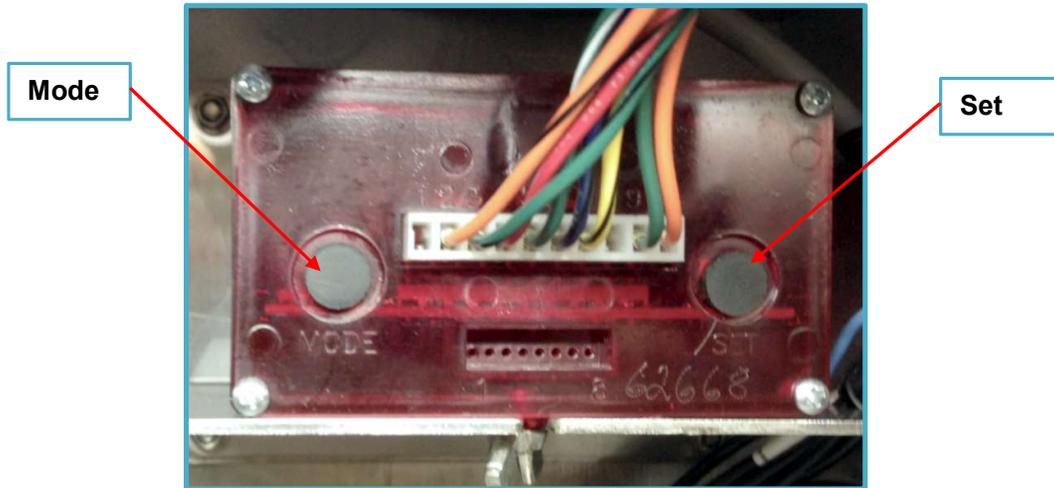
Push Mode to change from item to item. Push Set to set desired value or choose option for that item. Pushing Set repeatedly causes numbers to increase. Holding Set causes numbers to decrease.

The symbol ⊠ represents a programmable digit. Default values are shown in [ ].

ITEM	DISPLAY/OPTIONS	REPRESENTS
1	COIN VALU[$.25] K9000 set to 1.00	The monetary value assigned to a single coin pulse. Adj. from $0.05 to $5.00
2	C: ⊠ ⊠ [30] K9000 set to 1.00	Time per coin/pulse. Adj. from 0:01 to 9:59.
3	S ⊠ ⊠ ⊠ [008] K9000 set to 10	Number of coins/pulses to start. Adj. from 1 to 200.
4	AUX VALU CN. ⊠ ⊠ [4] K9000 set to 1	Auxiliary coin/pulse input pulse multiplier. Adj from 1 to 80
5	B ⊠ ⊠ ⊠ [9] Leave	Coins/Pulses to bonus. Bonus time is given when this coin/pulse is received.
6A	BOUNS TIME ⊠ ⊠ .##	Amount of time added for bonus/pulse.
6B	⊠ ⊠ ⊠ ⊠ [00:00] Leave	Adj. from 00:00 to 99:59.
7	[SINGLE BOUNS] MULTIPLE BONUS REPEAT BONUS Leave	Bonus time is only added one time when bonus coin pulse is received. Bonus time is added for every coin after bonus coin pulse is received. Bonus time is added when bonus coin pulse is received and added again for every multiple of bonus coin (i.e. 20th coin, 40th coin, 60th coin, etc.)
8	[SHOW BONUS TIME] HIDE BONUS TIME Leave	Bonus time is added to time remaining and timer counts down normally. Bonus time is added to time remaining. Timer display then changes to show "-- On -- "until time expires.
9	[DEBIT MODE] CREDIT MODE BOTH K9000 set to Debit Mode	Money counts down as coins are inserted. Money counts up as coins are inserted. Money counts up as coins are inserted, plus a prompt of "ADD $X MORE" if start price is not reached.
10	[DELAYED START] INSTANT START K9000 set to Delayed Start	Two second delay before timing starts after start price is reached. Timing starts as soon as start price is reached.
11	HL ⊠ ⊠ [10]	Length of warning horn is seconds at one minute of time remaining.

	K9000 set to 10	
12	[PULSED HORN] CONTINUOUS HORN K9000 set to Pulsed Horn	Horn output will pulse for amount of time set in HL ⊠ ⊠ Horn output will stay on continuously for entire last minute.
13	[RESTART OFF] RESTART ON K9000 set to Restart On	Restart feature turned off. Full price required after time expires. Timer may be restarted with one coin for 20 seconds after time expires.
14	GT: ⊠⊠ [25]	Amount of time given to restart timer. Adj. from 20 sec to 60 sec.
15	[STD] USER MIX RTRO K9000 set to Standard Settings	Standard greeting message is displayed. User programmed custom greeting message is displayed. Standard message then custom message is displayed. Price to start is displayed. No scrolling message.
16	M ⊠ : ⊠⊠ [5:00] Leave	Length of wash down cycle using remote control. Adj. from 0:00 to 9:59.
17	⊠ ⊠ ⊠ ⊠ [1 2 3 4] Leave	Adjustable remote access code.
18	CC PULSE VALUE $ ⊠ : ⊠⊠ [$ .25] Leave	Monetary value assigned to credit card pulse received on pin #8 during count up.
19	[DOLLARS ON COUNT UP] SECONDS ON COUNT UP	During credit card use, timer displays dollar amount charged to card as it accumulates. During credit card use, timer displays time counting up/
20	[ENG] SPH E & S K9000 set to Standard Settings	Standard message and prompt is displayed in English. Standard message and prompt is displayed in Spanish. Standard message and prompt is displayed in English then displayed in Spanish.
21	EXIT	Timer returns to standby.

12 Floor Lifting Tool

The following procedure is to be used for the lifting of the floor in the Dog Wash.

⚠️ Caution should be taken when raising the floor as there are pinch points between the floor and the base of the unit. Ensure tool and gloves are used.

Floor Lifting Tool

The tool shown opposite is to be used for lifting the dog wash floor when needed. It is also required that "rigger" gloves be worn when performing this task.

To lift the dog wash floor, open the dog entry door, using the tool as shown above, slide the hooked end under the front edge of the floor and slide sideways until the hooked end locates into one of the notches in the front edge, then lift.

Once the floor has been lifted sufficiently, grasp the floors front edge with your free hand and release the tool. Ensure that you are wearing proper protective gloves, *rubber gloves are not sufficient*. If you wish to wear rubber gloves, ensure that you wear a pair of "rigger" gloves as well (double glove).

13 Operator Maintenance

The K9000 can operate in temperatures from 5-40 degrees Celsius if you experience temperatures outside of this range check with your plumber for appropriate insulation.

To gain access to the cabinet, unlock the pad lock and open the door by using the handle. Use the override key supplied to access the dog wash functions. The below Maintenance Schedule needs to be implemented to ensure the dog wash runs at its best and complies with the warranty.

13.1 Maintenance Schedule

*DAILY:

- Clean Dog Wash area + rinse unit with wash gun.

*MONDAY & FRIDAY:

- Collect Money + record timer reading.
- Lift floor platform, remove hair from filter screen and rinse with wash gun.   If the dog wash is indoors, perform this action every 25 dogs.
- Open cabinet, check soap levels and change if required.
- Check for air in product lines, bleed if necessary.

*WEEKLY:

- Clean down stainless steel with INOX (WD spray), wipe with rag. Do not use abrasive cleaning products.

*MONTHLY:

- Clean dryers, remove excess hair from bottom of foam filter, clean all surfaces (includes top & bottom).
- Clean coin mechanism.
- Clean note validator.
- Check the rotary dial is tight, tighten as necessary.
- Check dog restraints (chains, attachments & fittings).
- Check tub door latches.
- Flush drains, refer to cleaning section for instructions.

*3 MONTHLY:

- Clean dryers, remove excess hair from bottom of foam filter, clean all surfaces (includes top & bottom).
- Clean coin mechanism.
- Clean note validator.
- Check the rotary dial is tight, tighten as necessary.
- Check dog restraints in each tub (chains, attachments & fittings).
- Check tub door latches.

- Flush drains, refer to cleaning section for instructions.
- Empty product overflow bucket.
- Check condition of product line tubes (black & clear), no kinks, tube in product tubs touch the bottom etc.
- Check wash gun operation, head rotation and swivel, replace if necessary.
- Check each of the dryer clamps, tighten as necessary.
- Check dryer hose swivel.

At the completion of the 3 monthly maintenance update the maintenance record, section 16 of this manual.

*6 MONTHLY:
- Clean dryers, remove excess hair from bottom of foam filter, clean all surfaces (includes top & bottom).
- Clean coin mechanism.
- Clean note validator.
- Check the rotary dial is tight, tighten as necessary.
- Check dog restraints in each tub (chains, attachments & fittings).
- Check tub door latches.
- Flush drains, refer to cleaning section for instructions.
- Empty product overflow bucket.
- Check condition of product line tubes (black & clear), no kinks, tube in product tubs touch the bottom etc.
- Check each of the dryer clamps, tighten as necessary.
- Check dryer hose swivel.
- Replace Wash Gun.
- Check wash gun hose assembly.

At the completion of the 6 monthly maintenance update the maintenance record, section 16 of this manual.

YEARLY:

- Clean dryers, remove excess hair from bottom of foam filter, clean all surfaces (includes top & bottom).
- Clean coin mechanism.
- Clean note validator.
- Check the rotary dial is tight, tighten as necessary.
- Check dog restraints in each tub (chains, attachments & fittings).
- Check tub door latches.
- Flush drains, refer to cleaning section for instructions.
- Empty product overflow bucket.
- Check condition of product line tubes (black & clear), no kinks, tube in product tubs touch the bottom etc.
- Check each of the dryer clamps, tighten as necessary.
- Check dryer hose swivel.
- Replace Wash Gun.
- Check wash gun hose assembly, replace if necessary.

- Replace Dryer hose assembly.
- Using warm water flush out flush out all 4 pumps, suction lines, foot valves and the actual product containers, replace as necessary.
- Yearly service to be carried out by authorized Technician.

At the completion of the yearly maintenance update the maintenance record, section 16 of this manual.

Note: No service replaces another meaning that if one service falls due at the same time as another, then both should be carried out. i.e. The Daily, Monday & Friday, Weekly and Monthly maintenance schedules could all be due and occur on the same day.

13.2 External Maintenance Items

The following pictures highlights some of the external parts of the dog wash requiring maintenance.

Dryer Hose Swivel

Wash Gun Head Rotation

Dog Restraints (fitting, chain & latch)

Rotary Dial

Wash Gun

Wash Gun Swivel

Door Latch
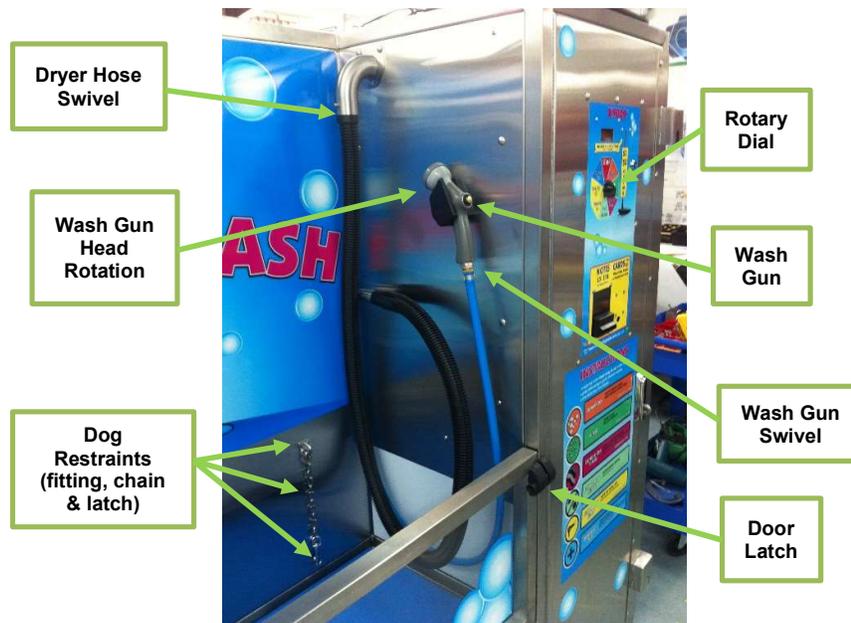
13.3 Rotary Dial Maintenance

The rotary dial should be checked each month to ensure it has not become loose. If it is found to be loose use a screw driver to tighten the screw that holds it in place.

13.4 Dryer Maintenance

Dryers need to be cleaned by hand each month to remove any hair that may have collected. Ensure you clean the bottom off the dryer as the foam filter is at the base of the dryer.

This picture highlights the 4 foam filters located at the base of the dyer that requiring cleaning

The internal dryer clamps should be checked every 3 months to ensure that the dryer pipes do not become loose. If either connection is found to be loose use a screw driver to tighten the screws that hold it in place.


Please note heated dryers only have the one clamp but have a screw that needs to be tightened.

13.5 Cleaning

- Put on suitable protective clothing, gloves, apron, and protective glasses.

- Use the wash down key to turn the machine on, select the rinse option on the rotary dial and wash the tub area of the dog wash using the dog washing gun, rinse all the excess under the edge of blue floor and turn the gun off.

- Lift the tilt floor and hold in place with the support rod attached under the floor.

⚠️ Caution should be taken when raising the floor as there are pinch points between the floor and the base of the unit. Ensure tool used (refer section 10).

Rod attachment
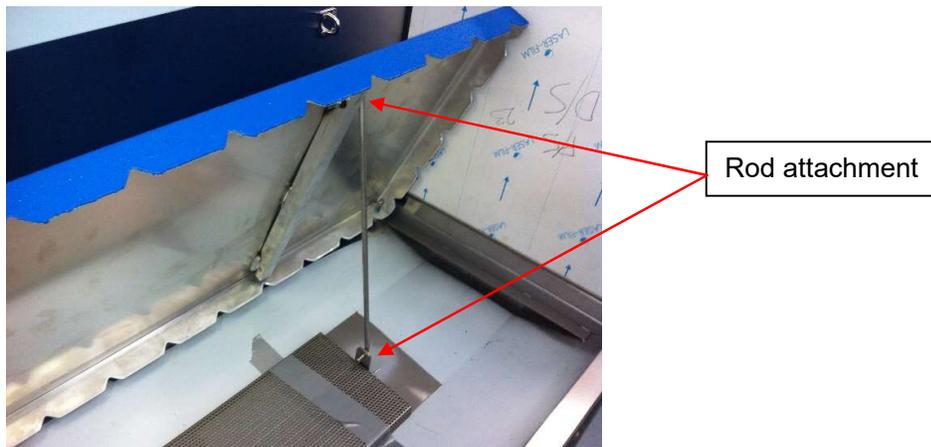
- Do not remove any filters yet. Using a small plastic scoop, gather and remove the excess hair that has collected under the tilt floor area and dispose into rubbish bin. Do not flush this down any drains.

- Using the *handle* lift and remove the stainless-steel filter in the middle of the floor area, clean this of any hair or solids. Put this filter to one side.


⚠️ Warning the stainless-steel filter can have sharp edges, "rigger" gloves need to be worn to protect against injury. If required, you can wear rubber gloves underneath the "rigger" gloves.

- Turn the wash gun back on and wash anything that remains in the under-floor area down the drain in the middle of the floor area, take note to wash the bottom side of the blue tilt floor. Turn gun off.

- Now remove the cylindrical filter from the drain in the middle of the floor. This simply pulls out, and has a small lip to enable removal. Empty contents into the rubbish; do not flush down any drains.

While the filter is removed, place the wash gun in the drain, set the wash gun to "JET", rotary dial selection to RINSE and flush the drain. Run the water gun for 20 seconds, if there are issues with the water draining away you may need to contact your plumber. Replace the cylindrical filter, and put the stainless-steel filter back into position.

Wash Gun Set to Jet

Rotary dial set to Rinse
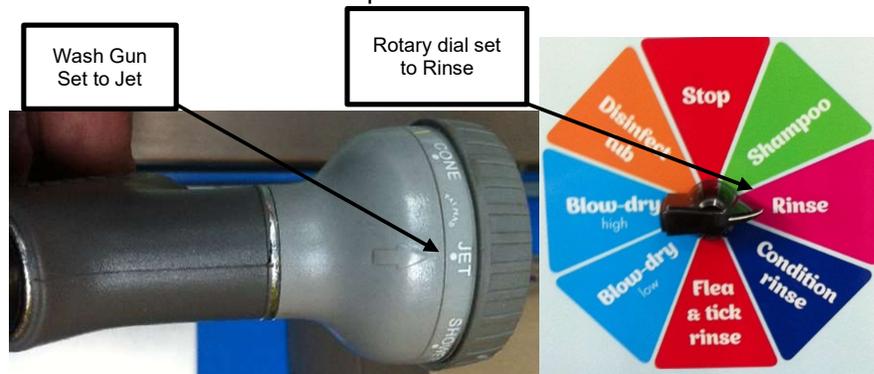
Place the wash gun in the drain press on button, you don't need to hold the gun place

- Turn the wash gun back on, select the disinfect option on the rotary dial and wash the under-floor area, return tilt floor to the down position. While still on disinfect, wash down the tub area of the dog wash. Turn gun off, remove wash down key and select the stop option on the rotary dial.

- Using soft cloth, wipe over the control panel and operator area of the dog wash. Do not use abrasive solvents.

- Clean the stainless steel by wiping down with soft cloth and INOX or WD40 spray. Do not use abrasive cleaning products and wipe down in the direction of the brushed finish.

14 General Information

It is not recommended that any person with an open wound wash a dog unless suitable protection is worn, for example if the wound is on the hand then latex or rubber gloves be worn.

It is also recommended that if a dog has broken skin it should not be washed.

14.1 Canine parvovirus

Keeping your dog wash clean.

The canine parvovirus is extremely virulent and contagious and is spread from dog to dog by direct or indirect contact with their faeces. The virus is extremely hardy and has been found to survive in faeces and other organic material such as soil for over a year. It survives extremely cold and hot temperatures. The only household disinfectant that kills the virus is bleach. Canine parvovirus will not infect humans.

If when carrying out your routine cleaning of your dog wash you discover dog faeces in or around the area, we suggest this be removed and the area disinfected with a household bleach product.

This is a very small piece of information regarding the canine parvovirus, we would strongly recommend that you familiarise yourself with more detailed information relevant to your location & situation. Useful links for further information are listed below.

http://en.wikipedia.org/wiki/Canine_parvovirus

http://www.peteducation.com/article.cfm?c=2+1556&aid=467

14.2 Instruction "How to Videos"

The Tru Blu K9000 website has a list of helpful videos to complement this manual, the link to the Tru Blu K9000 website is https://trubludogwash.com.au/resources/helpful-videos/

Videos Include:

- Your K9000 Arrives
- Introduction and Commissioning
- K9000 Dog Wash Routine Maintenance
- Setting Up Suction Lines
- How to bleed the pump on a K9000 Dog Wash
- How to bleed the new style pump
- Driving the K9000 2.0 Menu
- How to program the Timer on your Dog Wash
- How to Program the tokens on your Dog Wash
- How to change the soap on the K9000 Dog Wash
- How to change a wash gun on the K9000 Dog Wash
- How to look after the stainless steel on your K9000 Dog Wash
- How to clean your K9000 Dog Wash

15 MSDS Attachments

15.1 Material Safety Data Sheet (MSDS) Fido's Everyday Shampoo

TB-MSDS-025 Fido's
Everyday Shampoo Su

15.2 Material Safety Data Sheet (MSDS) Fido's Crème Conditioner

TB-MSDS-026 Fido's
Creme Conditioner Su

15.3 Material Safety Data Sheet (MSDS) Fido's Fre-Itch Rinse Concentrate

TB-MSDS-029 Fido's
Fre-Itch Rinse Concent

15.4 Material Safety Data Sheet (MSDS) Fido's Hydrobath Flush

TB-MSDS-028 Fido's
Hydrobath Flush Summ

16 Maintenance Record

The following record of maintenance needs to be completed at the time maintenance occurs. This will assist with any warranty claim.

Maintenance Schedule	Date of Maintenance	Initials	Comments