K9000® 2.0
Operators Manual

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

Furever Clean Dog Wash
1654 Brousson Dr
Victoria
British Columbia
V8N5M9

Tel: 250-2179433
Email: info@fureverclean.ca
Website: fureverclean.ca

Explanation of symbols used in this manual

STOP	**Stop, following instructions prior to proceeding**
(warning symbol)	**Warning**
(tip symbol)	**Tip**
Important	**Important - Take note**

Date	Summary of Changes	Sections Changed/Added	Author/s	Version
21/02/2018	New Manual	1st Edition Published	Phil Worrell	1.0
29/05/2018	Detail Electricals	2.3, 4.1.1, 4.1.3, 4.4, 5.2 & 11.3	Phil Worrell	2.0
29/11/2018	K9000ECU Board Updates	All parts of section 9	Phil Worrell	
13/12/2018	EJ Series pump new exploded view	4.1.2.2	Phil Worrell	
27/03/2019	Attaching a suction line to a pump instructions	New section 2.4	Phil Worrell	

Version	2.0
Status	Published
Date	02/04/2019
Author/s	Phil Worrell
Build Approver	Tim Darmanin
Sales Approver	Evelyn Rutherford

Table of Contents

1 K9000 2.0 Inspection and Acceptance on Delivery:

Inspect the K9000 2.0 on arrival and prior to unwrapping to ensure there is no travel damage. If there is any damage, please contact Furever Clean Dog Wash before accepting delivery.
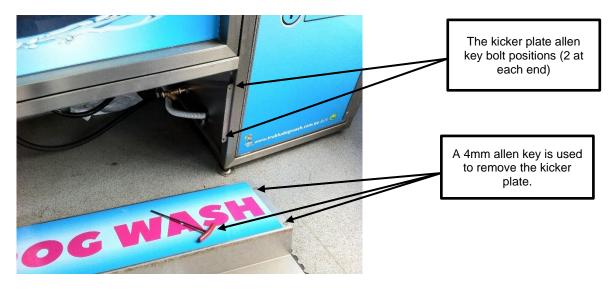
Caution should be taken when the K9000 2.0 has been delivered and is being unloaded. The K9000 2.0 weighs approx. 630 pounds. Ensure a qualified operator of the unloading equipment is used to lift or move the K9000 2.0 Dog Wash.

The K9000 2.0 (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 2.0 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*.

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

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

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.

1.1 K9000 2.0 System Specifications

SYSTEM WITHOUT ON BOARD HOT WATER UNIT		
Power	208/240V	16 AMP (10 AMP max load)
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 0r 20mm AS2845.1 Lic WMKA1335	
WASTE	2" DIA Outlet as well as, a minor trade waste application to be made to the local water regulator (As per local requirements)	
SYSTEM WITH ON BOARD HOT WATER UNIT		
Power Instant Hot Water or	208/240V	16 AMP (10 AMP max load) for dog wash as well as External *(dependent upon inlet water temperature and # of dog wash units to be installed) (with instant electric hot water service)*
Power Hot Water Storage Tank	208/240V	40 AMP (32 AMP max load)
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	45 Degrees Fahrenheit
	Maximum	85 Degrees Fahrenheit
Factory Set water temperature	32-34 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 0r 20mm AS2845.1 Lic WMKA1335	
WASTE	2" DIA Outlet as well as, a minor trade waste application to be made to the local water regulator (As per local requirements)	
Tundish	Required for hot water relief pipe (storage tank system only)	
DIMENSIONS / WEIGHT		
Dimensions	Length 2150mm / Height 1850mm / Depth 600mm	
Weight	K9000 2.0 – 285kg	
APPROVALS		
CSA Approved – Each machine is CSA inspected and labelled		
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		
EPA Registered Noise tested rating of 66dba @ 4 meters		
USAGES		
Water Usage: Average 10 litres per minute or 50 litres per wash (5 minutes)		
Average power usage per wash cycle is .76kwh (dependent on hot water source)		

2   Installation:

The K9000 2.0 Dog Wash can be installed either indoors or outdoors.

2.1   Levelling and Positioning the K9000 2.0

The K9000 2.0 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 2.0 and adjust the feet according to get the K9000 2.0 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 2.0!
Once the K9000 2.0 is level, use the supplied spacer washes and anchor screws to secure the K9000 2.0 to the ground.

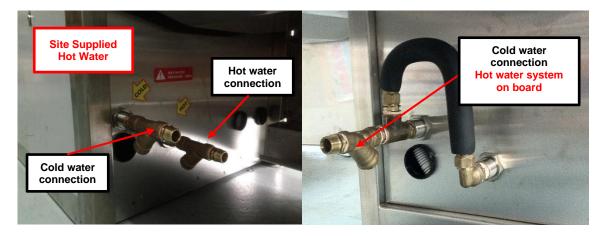## 2.2 Connecting the Water Supply and Waste to the K9000 2.0.

⚠️ Before connecting the K9000 2.0 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 2.0. 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 2.0 without an on-board hot water unit. While the picture on the right shows the water entry point for a K9000 2.0   with an on-board hot water unit.

Once connected the regulator can be adjusted to ensure the K9000 2.0 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 utilized 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 to 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 will be an instantaneous unit.

2.2.2.1   Site Supplied Hot Water

Shown below is a K9000 2.0 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 Furever Clean Dog Wash to ensure your existing hot water supply is adequate.
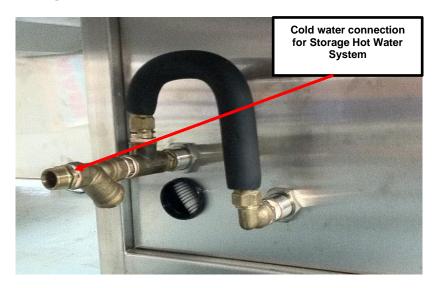
2.2.2.2   On Board Hot Water Storage Unit - Breaker
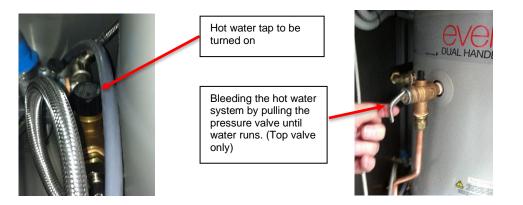
The below picture is a K9000 2.0 with an on-board hot water storage service.

2.2.2.3 Shown picture below shows the water entry point for a K9000 2.0 with a hot water storage service.

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.

2.2.2.4 On Board Instantaneous Hot Water Unit

The pictures below are examples of instantaneous hot water units which may be fitted either on the left-hand side of the cabinet or on the rear of the dog wash cabinet.
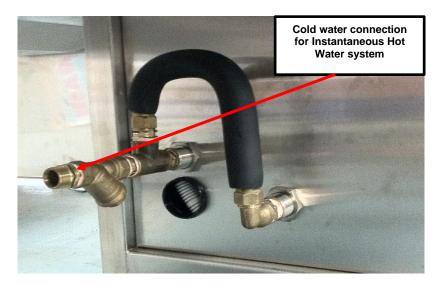
Only qualified personnel should access the on-board hot water unit as there is "live" equipment inside.
The instantaneous water heater heats the water while it is flowing through the unit.

To adjust the water temperature, use the tempering valve, refer to section 6 Temperature Valve Adjustment.
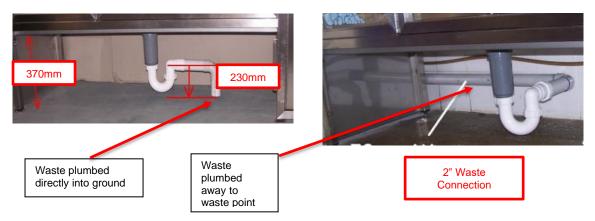
The electronic instantaneous water heater heats the water while it is flowing through the unit.

Shown picture below shows the water entry point for a K9000 2.0 with an instantaneous hot water service.

Cold water connection for Instantaneous Hot Water system

2.2.3 Connecting the Waste

Connect the 2" (inch) waste using the P-trap (supplied in the install kit)

370mm · 230mm

Waste plumbed directly into ground

Waste plumbed away to waste point

2" Waste Connection

2.3   Connecting the Power – For Your Electrician

The K9000 2.0 needs to be hardwired to the switch board on its own circuit. The size of the circuit depends on the specific specification of your K9000 2.0, refer to the rating plate located inside the cabinet to confirm your maximum load. This circuit needs to have a GFCI (Ground Fault-Circuit Interrupter) on the switch board as the K9000 2.0 has no ground fault protection.
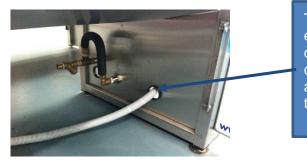
The following bullet points highlight the necessary electrical safety requirements you need as part of the electrical installation of your K9000 2.0:
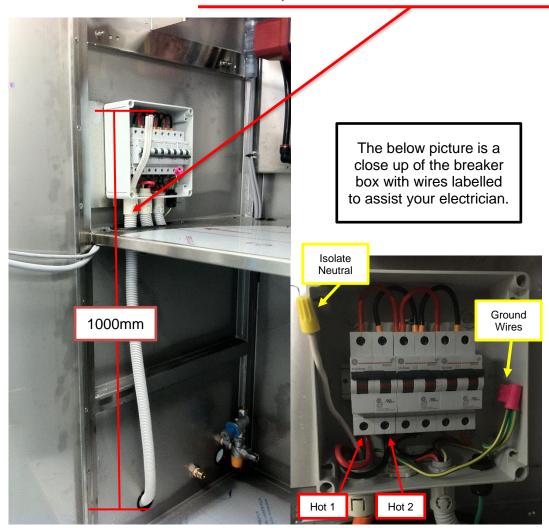
- ****Branch Circuit Breaker in site Switch Board***
- ****GFCI in site Switch Board***
- ***External Disconnect Device, between site switch board & dog wash***

*Size of circuits, breakers etc dependent on specifications of your K9000 2.0, refer to the rating plate located inside the cabinet.

The photo below left is the main electrical cable inside the dog wash. It enters through the gland at the bottom of the dog wash, close to ground level. Run the power cable in 25mm flexible conduit as there is a socket already installed into the bottom of the breaker box.

1000mm

The below picture is a close up of the breaker box with wires labelled to assist your electrician.

Isolate Neutral

Ground Wires

Hot 1   Hot 2

The photo left is of the main electrical cable entry point to the dog wash. Once you have run the conduit to this point, THEN leave another 1 meter for the termination inside the dog wash.

2.4   Attaching a Suction Line to a Pump

Pictured on the left is that of a pump inside the dog wash with the pump head circled to enable you to understand the orientation of the pump head when fitted in the dog wash. The middle picture is a close up of the pump head while the last picture is of the suction line to be fitted to the pump head.

Prior to attaching the suction line to the pump, attach it to the soap management system.
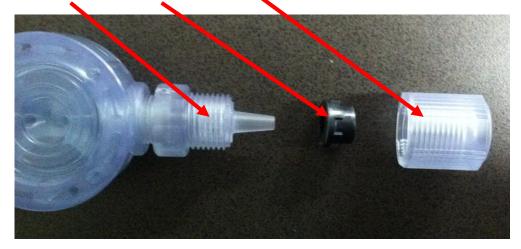
Step 1 Undoing the pump and identifying the pieces.
Starting with the pump head, undo the fitting nut at the bottom of the pump head. This is where the suction line will be attached to the pump.
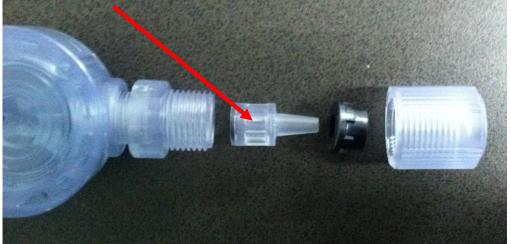
The first pieces we see when the fitting nut is removed are the:
Hose adaptor and Hose stopper.

Remove the hose adaptor.

Between the hose adaptor and the pump head there is an O ring, sometimes it stays in the pump head but mostly it comes out seated in the hose adaptor. The O ring is an important part as it helps seal the pump head making for better suction.

The pictures below show the O ring seated in the hose adaptor, the hose adaptor without the O ring and the O ring still in the pump head (left behind). It is vital that we locate the O ring and ensure that it is seated into the hose adaptor.

We are now ready to attach the suction line to the pump.

Step 2 Attaching the Suction Line to the Pump.
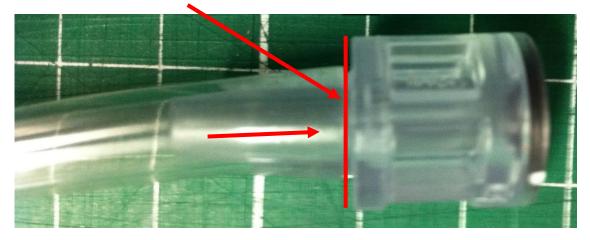
Firstly, we feed the suction line through the fitting nut.

Then we place the hose stopper on the suction line.

Push the hose onto the hose adaptor so that it is flush, this is vital to ensure a good seal.

Then fit the hose adaptor to the hose, ensuring the O ring is seated into position. Push the hose stopper onto the hose adaptor as firmly as possible.

Now we attach the suction line fittings back into the pump head.

As we tighten the fitting nut the hose stopper will close up on the hose adaptor and the task is complete.

A picture of a pump in position with its suction line attached.

2.5 Completing the Installation

Now that the K9000 2.0 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 2.0.

3   Commissioning the Unit
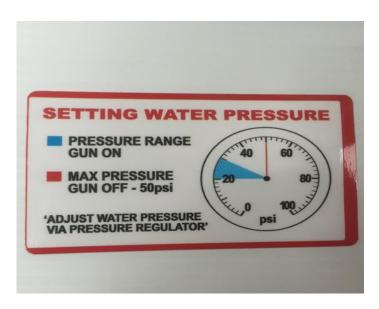
The K9000 2.0 is delivered with sufficient product for approximately 100 washes and it is recommended that commissioning the unit occurs after installation.

Commissioning the unit requires the following tests to be undertaken;

- Override key wash (refer section 8)
- Insert Coins
- Insert Tokens (if applicable)
- Insert Notes (if applicable)

During the tests check the following;
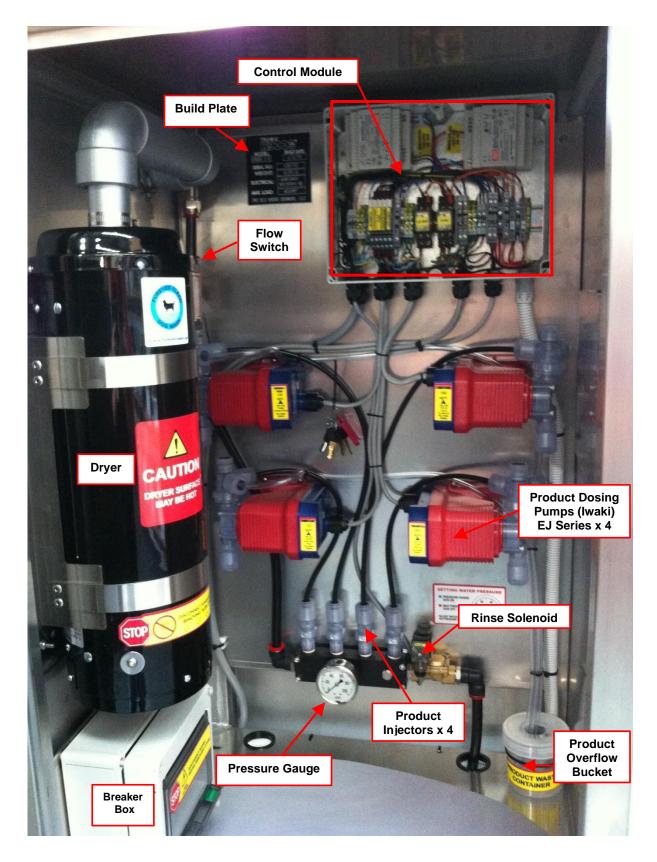
- water pressure gauge: when pressure gun is being utilised, the pressure range should be between 20 & 30 psi and when gun is off the psi should be in the range 40 to 50 psi. Refer section 2.2.1 re regulation of water pressure.

- water temperature, should be cool at a 40cm distance from the wash gun, refer section 6 for water temperature adjustment.

4   Main Board Components

4.1   K9000 2.0   Main Board with Iwaki EJ Series Pumps
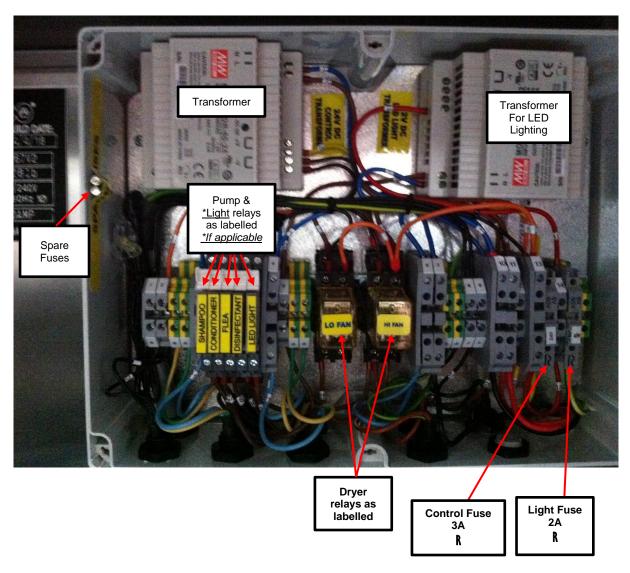
4.1.1 Control Module

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

⚠️ *The cover from the Control Module should never be removed unless the power is disconnected. Disconnect the power at the external disconnect device prior to proceeding.*

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. To identify this, you will need to turn the power back on, but do not perform any maintenance with the power on, turn the power off once you have confirmed if a fuse has blown.

4.1.2 Product Dosing Pump Factory Settings (Iwaki EJ Series Pumps)

Settings are guidelines/recommendations for K9000 products:
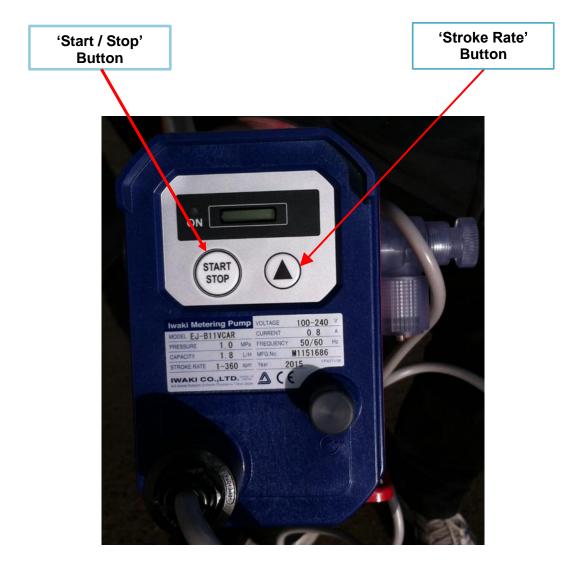
- Shampoo: 200 SPM*
- Condition rinse: 180 SPM*
- Tea Tree Herbal +: 120 SPM*
- Tub disinfectant: 120 SPM*

*Note: Strokes Per Minute

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

Should you be using another approved product please contact Furever Clean Dog Wash 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.*

4.1.2.1 Bleeding Product Dosing Pumps (Iwaki - EJ 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:
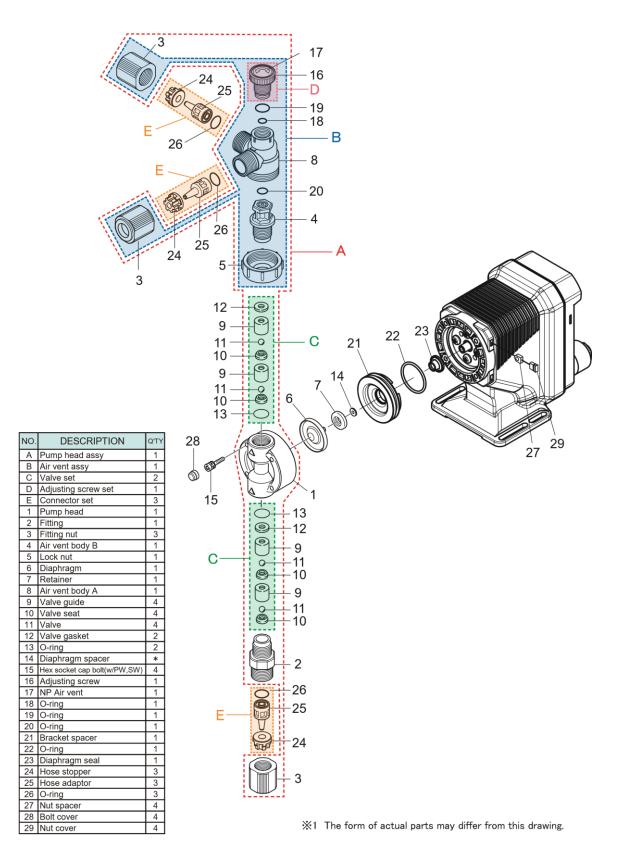
1. Select the product you wish to bleed by pushing the number associated with the product on the key pad e.g. 1 for shampoo, 2 for rinse etc

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 the 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.

4.1.2.2 Iwaki Dosing Pump – EJ Series Exploded View

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

※1 The form of actual parts may differ from this drawing.

4.1.3 Breaker Box

The Breaker Box contains the safety circuit breakers for the dog wash.

⚠️ *The cover from the Breaker Box should never be removed unless the power is disconnected. Disconnect the power at the external disconnect device prior to proceeding.*

The below picture shows the Breaker Box as set at the factory, you will notice that all the safety circuit breakers are in the on position.
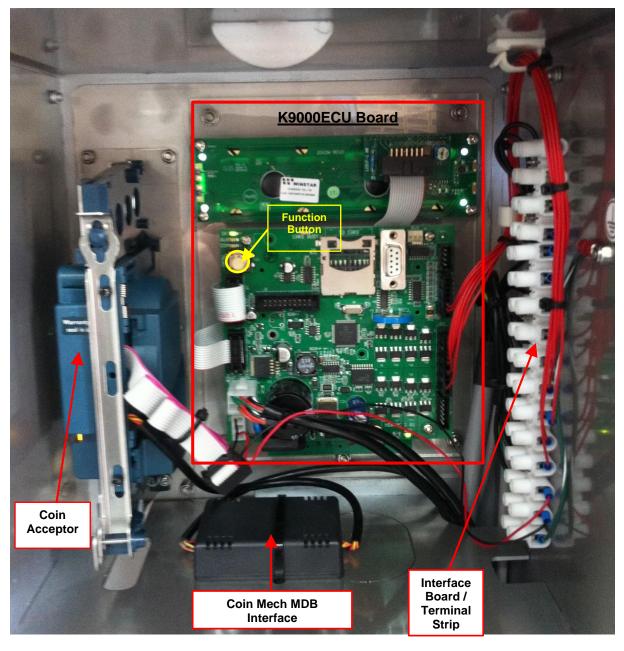
Each of the safety circuit breakers are "doubles' and this is reflected in the labelling of the Breaker Box.

K9000 with On-Board Hot Water	K9000 with Site Hot Water
1 & 2 MAIN POWER *16AMP*	1 & 2 MAIN POWER *16AMP*
3 & 4 HOT WATER *40AMP* (Electric Tank Heater only)	3 & 4 UNIT POWER *6AMP*
5 & 6 DRYER *16AMP*	5 & 6 DRYER *16AMP*
7 & 8 UNIT POWER *6AMP*	7 & 8 Not utilized

4.2 Cash Box Components

4.2.1 Top Section of Cash Box

4.2.2 Coin Box Terminal Strip Wiring Schedule
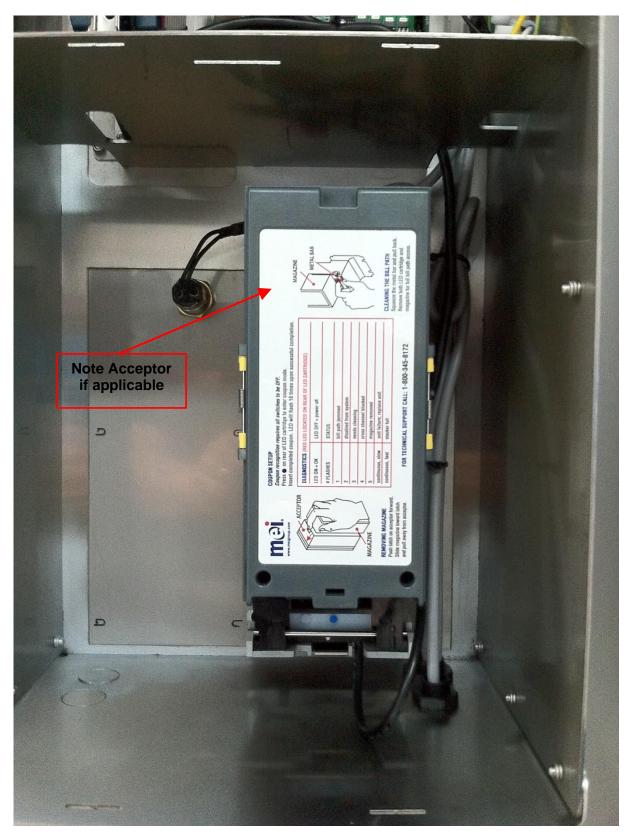
K9000 Wiring Schedule		Coin Box Terminal Strip Wiring Schedule
0	Earth	
1	-24V DC	
2	+24V DC	
3	DOOR SWITCH, FLOW SWITCH OVER RIDE	
4	FLOW SWITCH	
5	DISINFECT	
6	DRY HI	
7	DRY LO	
8	FLEA	
9	CONDITION	
10	RINSE	
11	SHAMPOO	
12	LIGHTS	
13	SPARE	
14	DOOR SWITCH	
15	O/RIDE	
16	SEC 1	
17	SEC 2	
18	+12V DC LED LIGHT	
19	-12V DC LED LIGHT	
20	UNIT POWER HOT 1	
21	UNIT POWER HOT 2	
22	12 VDC INPUT HOT 1	
23	DRYER HOT 1	
24	DRYER HOT 2	
25	DRYER LOW HOT 1	
26	DRYER HI HOT 1	
27	SHAMPOO HOT 1	
28	CONDITIONER HOT 1	
29	FLEA HOT 1	
30	DISSINFECTANT HOT 1	
31	HOT WATER HOT 1 *(if applicable)*	
32	HOT WATER HOT 2 *(if applicable)*	
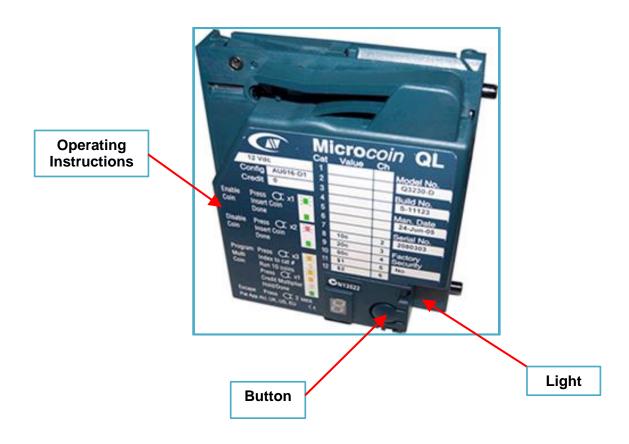
4.2.3   Bottom Section of Cash Box

A K90002.0 has two cash box sections, with the bottom section containing the note acceptor. As the K9000 Lite does not have a note acceptor it only has a one section cash box.

Note Acceptor if applicable

4.3   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

Coin activation Cont'd…

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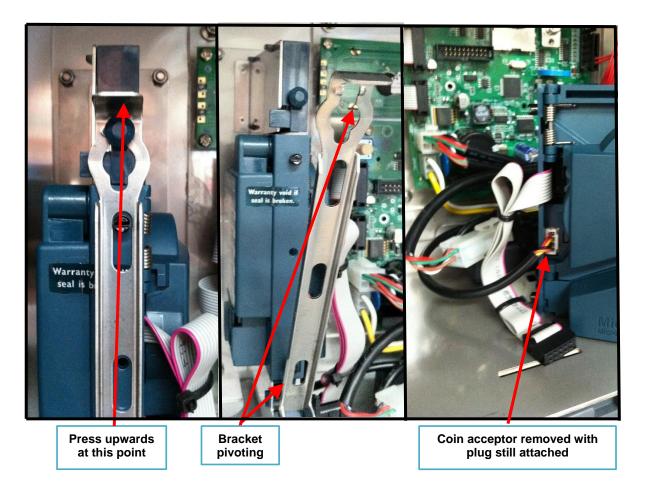- Each OBP feature can be accessed by a series of button presses, using the OBP programming button, which is located below the LED indicators.
- Please use a **firm** and **rapid** button press to access each Mode. You will be shown a unique "M" LED flash sequence to indicate the selected Mode.

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)

4.4 Coin Acceptor – Removal

⚠️ **Always disconnect power before removal of unit.**
Disconnect the power at the external disconnect device prior to proceeding.

Open the rear door of the top cash box, the coin acceptor is mounted on the left-hand side. Shown below left 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.

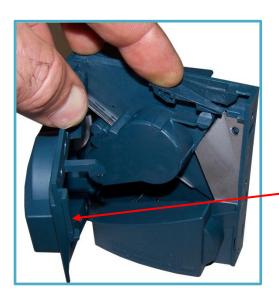| Press upwards at this point	Bracket pivoting	Coin acceptor removed with plug still attached

Once the bracket slides up slightly, pull it backwards towards yourself. This bracket is hinged on the bottom and will simply pivot. See middle picture
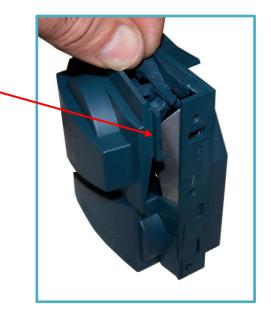
With the bracket down, the coin acceptor will slide from its mount. If possible do not disconnect the plug as the wires are delicate. If it is necessary to remove the plug use a tiny screw driver, _DO NOT PULL ON THE WIRES_.

4.5   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.
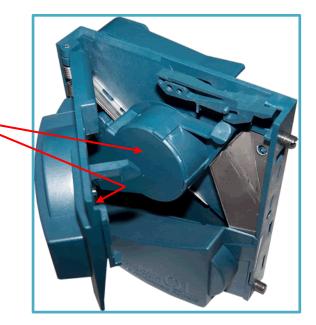
Open the side completely as shown on the left. This will allow ease of cleaning.

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.

5 Note Acceptor (Mei)

5.1 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.
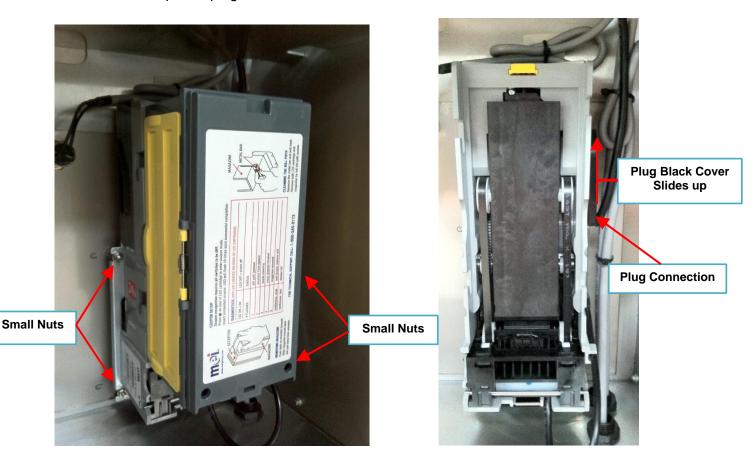
Fault code indicating light

5.2 Note Acceptor Removal
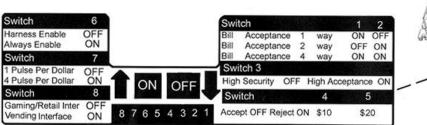
⚠️ **Always disconnect power before removal of unit.**
Disconnect the power at the external disconnect device prior to proceeding.
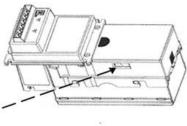
To remove the Note Acceptor for either cleaning or servicing, first remove the Note cartridge then the four small 7mm nuts need to be undone to slide the unit out of the back of the cash box. These nuts will need to be removed fully to allow the unit to come free. Once the unit is free from the mounting studs, unplug the cable from the right-hand side, you will need to slide the black cover up to unplug the cable.

MARS DIP SWITCH SETTINGS FOR K9000 2.0
Switches 3 & 8 are set to "ON"
All other Switches are set to "OFF"
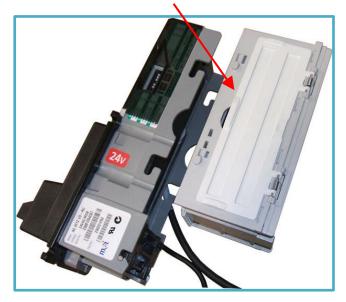
5.3 Note Acceptor Cleaning

If the Note Acceptor shows signs of decreased performance, it may be in need of cleaning.
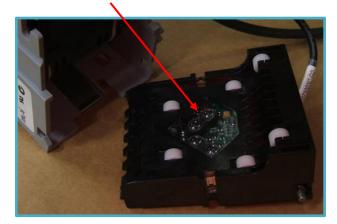
To remove the stacker from the Note acceptor, press the **blue** or **yellow** catch forward and slide the rear compartment up.

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.

6   Temperature Valve
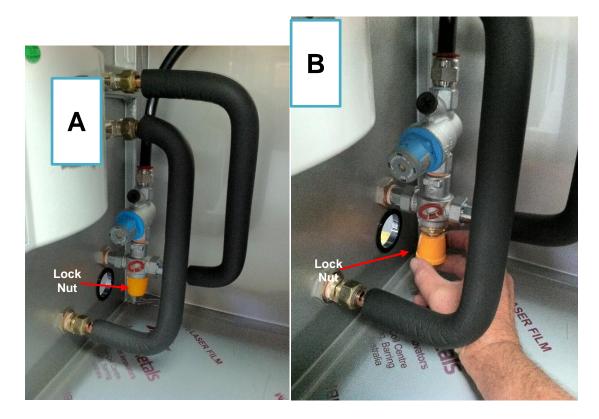
6.1   Temperature Adjustment

The temperature valve mixes the hot and cold water to a safe temperature. The base setting is 35° Celsius. 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.
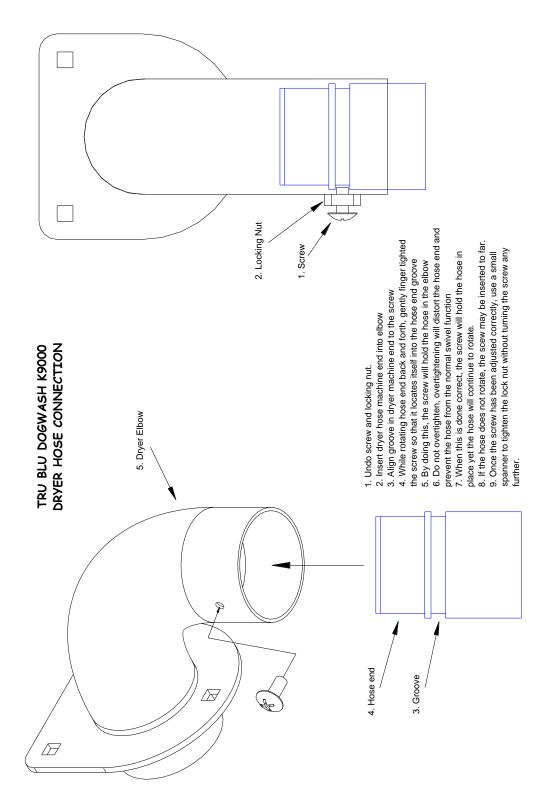
NOTE: Temperature will change with the slightest adjustment. Care should be taken not to over-adjust. If in doubt check water temperature with a thermometer and DO NOT EXCEED 38° Celsius.

7 Dryer

The K9000 2.0 comes with a 2-speed heated dryer. It does not require any action as part of the installation process.

7.1 Dryer Hose Connection

TRU BLU DOGWASH K9000
DRYER HOSE CONNECTION

5. Dryer Elbow

2. Locking Nut

1. Screw

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.

8 Override Key (Wash down Key)

The K9000 2.0 is equipped with an "OVERRIDE KEY" (Wash Down 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, only the Disinfect Tub and Rinse selections on the Key Pad are available.

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

Important

Remove key after wash down is complete.

9 Dog Wash K9000ECU Board Operating & Service Menu Programming Instructions

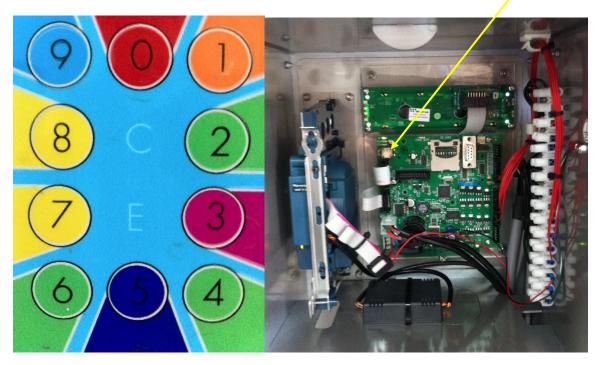The K9000ECU board functionality is updated via the Key Pad after pressing the *white button on the K9000ECU Board and holding until a long beep is heard (2nd beep)*. The K9000ECU Board is located in the Top Cash Box.

There are 6 Service Menus available for selection once the white button has been pressed:

> 1 = PROGRAM MODE *user parameters such as time, minimum $ start up etc*
> 2 = TEST *for testing functions without inserting money*
> 3 = AUDIT *displays machines revenue, time each product used etc*
> 4 = INFO *displays K9000ECU Board information, model, version etc.*
> 5 = IMPORT *Factory use only*
> 6 = EXPORT *Factory use only*
> C = EXIT

Use the key pad to select the menu required or press C to exit the Service Menus.

The navigation processing within each menu is the same; *press 2 to go to the next item, 5 to return to the previous item or C to Exit the menu.*

Each item, within each menu uses the same process to be changed/added.

9.1 Service Menus

The following section lists each of the available Service Menu's along with an explanation and sample of the values of each item within those Menu's.

All site settings are pre-programmed as part of the manufacturing of the K9000 2.0.

9.1.1   Service Menu 1: PROGRAM MODE

The navigation processing within each menu is the same; *press 2 to go to the next item, 5 to return to the previous item or C to Exit the menu.*

Remember each item uses the same process to be changed/added, refer to section 9.
Values in blue are examples

Press 1 To enter PROGRAM mode

1: DAY DATE AND TIME *THU 14/12/17 (24HR) 14:33:20*
2: CASH START $ *(Minimum Cash Start-up Cost)* *10*
3: CASH START MINUTES *10*
4: CASH TOP UP $ *(Minimum Cash Top-up Cost*) *1*
5: CASH TOP UP SECONDS *60*
6: CARD START $ *(Minimum Card Start-up Cost)* *11*
7: CARD START MINUTES *11*
8: CARD TOP UP (*Card Top Up Amount*) $ *1*
9: CARD TOP UP SECONDS *60*
10: GRACE TIME (Seconds the machine will allow top ups to be made after the time has elapsed, this is also the time permitted for free disinfecting the tub) *30 seconds*
11: MAXIMUM CREDIT *(Maximum amount of credit permitted)* *$50.00*
12: MAX PAUSE TIME *(Maximum pause time per wash)* *30 seconds*
13: WARN TIME *(Time warning buzzer is activated prior)* *60 seconds*
14: START PAUSE TIME *(Number of times pause available)* *2*
15: LIGHT TIMER (0=OFF) *(Light time activated after wash complete, count in seconds)* *60*
16: LIGHT ON TIME 1 *(1ˢᵗ Time light comes on)* *05:00 (5am)*
17: LIGHT OFF TIME 1 *(1ˢᵗ Time light goes off)* *08:00 (8am)*
18: LIGHT ON TIME 2 *(2nd Time light comes on)* *18:00 (6pm)*
19: LIGHT OFF TIME 2 *(2nd Time light goes off)* *23:59 (11:59)*
20: OVERRIDE OPTIONS *(Options available via override key, i.e. to select shampoo press 1, disinfectant press 2, blow dryer low press 7, to remove an option just select option displayed i.e. blow dryer low press 7) RI (rinse) DI (disinfect)*
21: DOOR MON1 START TIME *00:00*
22: DOOR MON1 END TIME *00:00*
23: DOOR MON2 START TIME *00:00*
24: DOOR MON2 END TIME *00:00*
25: DOOR MONITOR 2 PULSE SECONDS *0:0*
26: HOLD C&E TO CLEAR CREDIT (s) (T*o clear time remaining)* *0*
27: ASSET NUMBER *(Your machine asset/build number)* *9001*
28: MDB DEVICES= AUTO DETECT *(Runs process to identify MDB devices such as credit card, Note reader etc)*
29: MDB AUTO DETECT (s) *(Time (seconds) MDB detection will run for. A limit is set so search will stop in not all devices available)* *15*

9.1.2   Service Menu 2: TEST

The navigation processing within each menu is the same; *press 2 to go to the next item, 5 to return to the previous item or C to Exit the menu.*

Press 2 To enter TEST mode

> E = RUN TEST

Press 2 again to display tests available for selection and <E> to access the tests.

> 1: TEST OUTPUTS <E> TEST OUTPUTS MAKE A SELECTION
> This allows you to test all functions of the dog wash, ***but it is critical that the wash gun is on prior to and while running any product through the pumps. If this does not occur extreme pressure will build up and will cause damage.***

> 2: TEST SWITCH INPUTS <E> SOLD OUT SW1 SW2
> 1YYYYYY6 N   N

This switch tests advise if the Door Switch (1st Alpha Character), Flow Switch (2nd Alpha Character) and Test Over Ride Key (3rd Alpha Character) circuits are open (Y = off) or closed (N = on. In the above example all 3 switches are open (off).

> 3: TEST BUTTONS <E> This allows you to select each button on the menu and display the value on the screen if you select a button and nothing is displayed this means the button is not functioning.

9.1.3   Service Menu 3: AUDIT

The navigation processing within each menu is the same; *press 2 to go to the next item, 5 to return to the previous item or C to Exit the menu.*

The Audit Menu items either count numbers, dollars or time for each item. Please note you may not use all items available for the audit process.
Press 3 To enter AUDIT mode

       1: ITEMS SOLD 0 (*Payments Made*)
       2: TOTAL SOLD $0.00
       3: ITEMS FREE 0
       4: TOTAL FREE $0.00
       5: ITEMS TOKEN 0
       6: TOTAL TOKEN $0.00
       7: ITEMS CASHLESS 0
       8: TOTAL CASHLESS $0.00
       9: TOTAL COINBOX $0.00
       10: TOTAL NOTES $0.00
       11: RINSE M:SS 0.00
       12: SHAMPOO M:SS 0.00
       13: CONDITIONER M:SS 0.00
       14: FLEA M:SS 0.00
       15: DISINFECT M:SS 0.00
       16: DRY LOW M:SS 0.00
       17: DRY HIGH M:SS 0.00
       18: OVERRIDE M:SS 0.00
       19: FAULT HISTORY (E=Detail)
       20: DOOR ACCESS TIMES (E=Detail)
       21: LAST RESET 00.00 XX/XX/XX

9.1.4   Service Menu 4: INFO

The navigation processing within each menu is the same; *press 2 to go to the next item, 5 to return to the previous item or C to Exit the menu.*

The information menu displays specific information about your dog wash, this information is factory set and can assist with diagnosis of your dog wash should there be an issue or if you are seeking a part.
.
1: MODEL *(Model of the K9000ECU Board)* MDBVMC-DOG
2: FIRMWARE *(Version of the program/code on the K9000ECU Board)* 2.17E
3: SERIAL NUMBER *(Serial number of the K9000ECU Board)* IDS001007105
4: ASSET NUMBER *(Build number of the dog wash)* 1366
5: MDB DEVICES = *(List of the devices available for payment)* Coin, Note, Card etc.

9.1.5   Service Menu 5: IMPORT

NOT YET IN USE

9.1.6   Service Menu 6: EXPORT

NOT YET IN USE

10 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).

11 Operator Maintenance

The K9000 2.0 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.

11.1 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 WD40 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 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 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 13 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 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 13 of this manual.
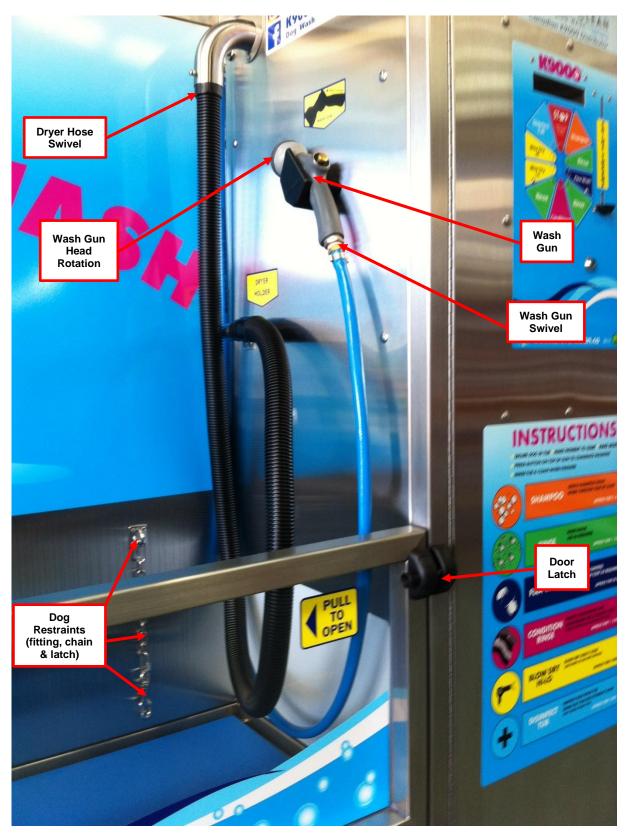
YEARLY:

- Clean dryers, remove excess hair from bottom of foam filter, clean all surfaces (includes top & bottom).
- Clean coin mechanism.
- Clean Note validator.
- Check 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.
- Yearly service to be carried out by authorized Technician.

At the completion of the yearly maintenance update the maintenance record, section 13 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.

11.2 External Maintenance Items

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

11.3 Dryer Maintenance

Dryers need to be cleaned by hand each month to remove any hair that may have collected. You will need to undo the base of the dryer using the black knob. This will allow the access to the foam filter at the base of the dryer.

DISCONNECT POWER BEFORE REMOVING DRYER FILTER COVER.
Disconnect the power at the external disconnect device prior to proceeding.

Warning dryer surface may be hot, ensure dryer has had sufficient time to cool down prior to proceeding.
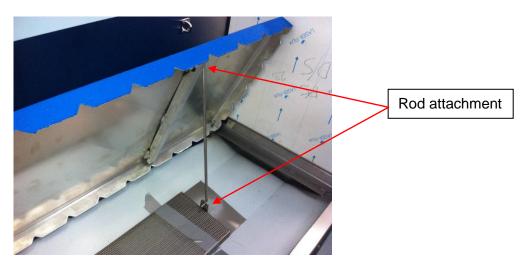

These pictures show the position of the filter requiring cleaning and how to access it.
Ensure power disconnected and that the dryer is cool prior to commencing task.

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.

11.4 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 Key Pad and wash the tub area of the dog wash using the dog wash gun, rinse all the excess hair 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.
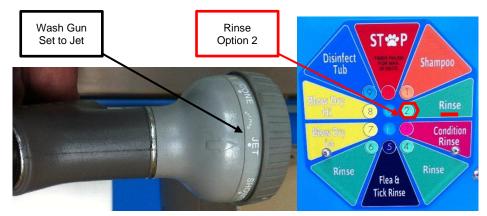

⚠️ Warning the stainless-steel filter can have sharp edges, "rigger" gloves need to be worn to protect against injury. If required, you can wear rubber gloves underneath the "rigger" gloves.

- 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.
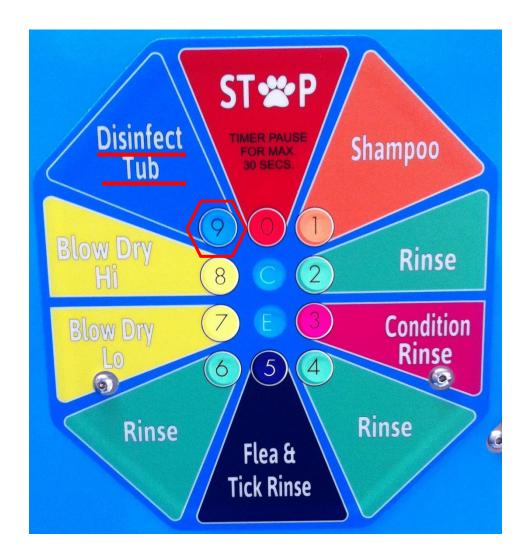
While the filter is removed, place the wash gun in the drain, set the wash gun to "JET", Key Pad selection to RINSE (option 2) and flush the drain. Run the water gun for 20 seconds, if there are issues with the water draining away you may need to contact your plumber. Replace the cylindrical filter and put the stainless-steel filter back into position.

Wash Gun Set to Jet

Rinse Option 2

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 (option 9) on the Key Pad 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 Key Pad.

- 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 WD40 spray. Do not use abrasive cleaning products and wipe down in the direction of the brushed finish.

12 General Information

12.1 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

12.2 Instruction "How to Videos"

Furever Clean Dog Wash has instruction videos to complement this manual, the link to the videos is
https://vimeo.com/album/2992132 the password for video access is: k90003280

Videos Include:

- How to clean your K9000 Dog Wash
- How to bleed the pump on a K9000 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

13 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