

Shades Technics

R08 -1920RS Toilet Cubicles & 645 Kitchen



Manual

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To Switch The Cubicle On:


Engage the WC Master switch on the dashboard. The cubicle interior lamp will turn on for 30 seconds and the vacant lamp will come on after 1 minute. The cubicle is now ready to use. *(It is recommended that the vehicle engine is running)*


Cubicle Interior Light:

On entry, the interior lamp will come on automatically and illuminate the "Occupied" lamp. The interior lamp is controlled by a movement sensor which will switch off the light automatically shortly after the cubicle is vacated and illuminate the "Vacant" lamp.

To Flush The Toilet:


Push the flush button  once to flush the toilet with a set quantity of water. Should a further flush be required, wait for the flush cycle to complete then press the button again.

(When the holding tank is full, the dashboard LED  will illuminate and the "Occupied" lamp will signal. The toilet is now out of use until the holding tank is emptied.

(When the clean water tank is empty the dashboard LED  will illuminate and the "Occupied" lamp will signal. The toilet is now out of use until the water tank is re-filled.)

To Wash Your Hands:

Depress the handwash button  once to dispense a set amount of water.

(When the handwash tank is empty the dashboard LED  will illuminate to alert the driver..)

In Case of Emergency:

Depressing the red alarm button will alert the driver and sound a buzzer.

Cubicle Extractor Fan:

The ventilator fan runs at half speed when the cubicle is vacant and switches to full speed when the cubicle is occupied.

Water Tank Filling & Emptying

Tanks are filled via the hose connectors located in the side locker. The holding tank is emptied by pressing a button behind the locker door beneath the cubicle, which operates a pneumatic valve. This must be operated with the parking brake ON.

To Switch The Kitchen On:

Engage the Kitchen Master switch on the dashboard. The kitchen lamp will turn on, the boiler LED panel will light and fridge fan will start. *(It is recommended that the vehicle engine is running)*

Kitchen Hot Drinks System:


The water heater will take 20-30 minutes to reach temperature and the hot faucet should start to drip. This is due to the expansion inside the boiler as it gets hot. The LED display panel "Drinks" light will also come on.

To dispense the hot water, place a cup inside the sink, push and hold the RED button until finished.


Kitchen Cold Drinks System:

The cold-water chiller is located inside the fridge this means that when the fridge is cold, the water inside the chiller is also cold.

To dispense the cold water, place a cup inside the sink, push and hold the BLUE button until finished.

(When the drink water tank is empty the dashboard LED  will illuminate and the kitchen drinks facility will not work until the drink tank is re-filled.)

Lockable Storage:

The storage cupboard has been  designed to hold coffee, tea and sugar sachets with a pot for stirers.

Coolbox - Fridge:

The coolbox will take approximately 2 hours to get to 5 Deg C from warm but can go as low as 3 Deg C during operation. This time depends on the contents of the fridge and the times are based on it being empty. For best performance it is advisable to introduce pre-chilled items into the fridge.

The unit is equipped with an 'ECO' mode which allows the unit to run on low power when the vehicle is switched off and this can maintain a steady 5 Deg C.

The battery guard will detect low voltage in 'ECO' mode and cut power to the unit saving the batteries.

Cubicle Cleaning

The cubicle is manufactured from Glass Reinforced Plastic (GRP) with high gloss interior and lightly textured exterior surfaces. This surface finish is delicate and must only be washed down using a mild detergent. The use of a caustic or abrasive material is not recommended, as this will affect the appearance.

Toilet Bowl Cleaning

To protect the finish of the Stainless Steel toilet bowl do not use abrasives of any kind. To clean the bowl, use a mild anti-bacterial detergent and suitable brush.

Litter Bin

The cubicle features a plastic bin located in the sink area. The use of a bin liner is recommended.

Soap Dispenser

To fill the dispenser, unlock the mirror cabinet, lift the lid of the dispenser and fill with liquid soap.

Toilet Roll

It is recommended that a high biodegradable paper is used at all times.

Domestic grade toilet paper is not recommended as this can block the system.

The toilet roll is located inside the lower vanity door. Unlock and open the door, slide the roll onto the spindle.

Daily Routine

- Prior to the vehicle entering service the holding tank should be charged with an additive to sanitise the effluent.
- The recommended product is **Shades Super Sani ECO**, formulated from natural essential oils, this formaldehyde-free formula is contained within a water soluble membrane. A single 16 gram sachet contains the recommended dosage for 110 litre capacity holding tank and will function for a maximum of three days.
To apply:
 1. Ensure the holding tank is empty.
 2. Check the tank evacuation valve is closed
 3. Check the WC clean water tank is full.
 4. Switch on power to the cubicle (see page 3)
 5. Press the flush button to open the toilet valve and drop the complete sachet into the bowl.

Caution
Do not open the sachet .

- It is recommended that the WC supply tank is drained and the holding tank is emptied at the end of every day.
- The daily addition of a couple of drops of mild detergent into water resting in the toilet bowl will lubricate the slider and protect the seal.

Weekly Routine

- Check extractor fan function.
- Inspect the security of the faucet, door hinges and toilet seat. Check the operation of the cubicle door and lock function. Test alarm button and buzzer function.
- Open vanity door, check electrical and plumbing connections for security and leaks.
- Check water flow to the hand basin is smooth and constant.

Quartely Routine

- Flush out holding tank with clean water. (the holding tank must be empty and the vehicle positioned so that the holding tank evacuation valve is over a sewage drainage point)
- The two cubicles are fitted with a high-pressure 360 degree washer jet and can be activated by attaching a hose pipe. The connections are next to the tank filler inlets behind a rear locker door and a hose runs to each tank jet. It is recommended that the hose is left on full for 2 minutes with the waste tank valve left open.
- Lubricate holding tank evacuation valve. (to be carried out immediately after flushing through the holding tank).
Undo the four fixing bolts holding the soil valve assembly together and remove the main body section. Lubricate the slide paddle using lithium grease or similar so the open/close operation is smooth. Replace the valve body and bolt together. Do not over tighten as this will restrict the operation of the valve.

If the vehicle is to be parked in zero or sub-zero temperatures, it is imperative that all water containers are completely drain beforehand.

Note

No warranty claims will be accepted on any winter damaged parts.

Jump Starting

When jump starting the vehicle, please ensure that the dashboard master Switch, **WC**, is off!

Fault Reporting Procedure

1. Should a system fault occur, we recommend checking the fault analysis flow charts at the end of this manual.
2. Using these charts, determine the cause of the fault and replace the faulty item from the kit if possible.
3. To order a replacement kit or non-kit part contact the dealer as specified on the contents page (Page 2) of this manual, quoting the cubicle serial number.
4. In order for replacement goods to be dispatched a simple warranty procedure must be followed.

Notes:

- **Tampering, unauthorised involvement or preventable damage will result in a charge being levied**

Warranty Claim Procedure

Shades Technics offer a comprehensive warranty cover for all products, valid for 24 months from the vehicle's date in service.

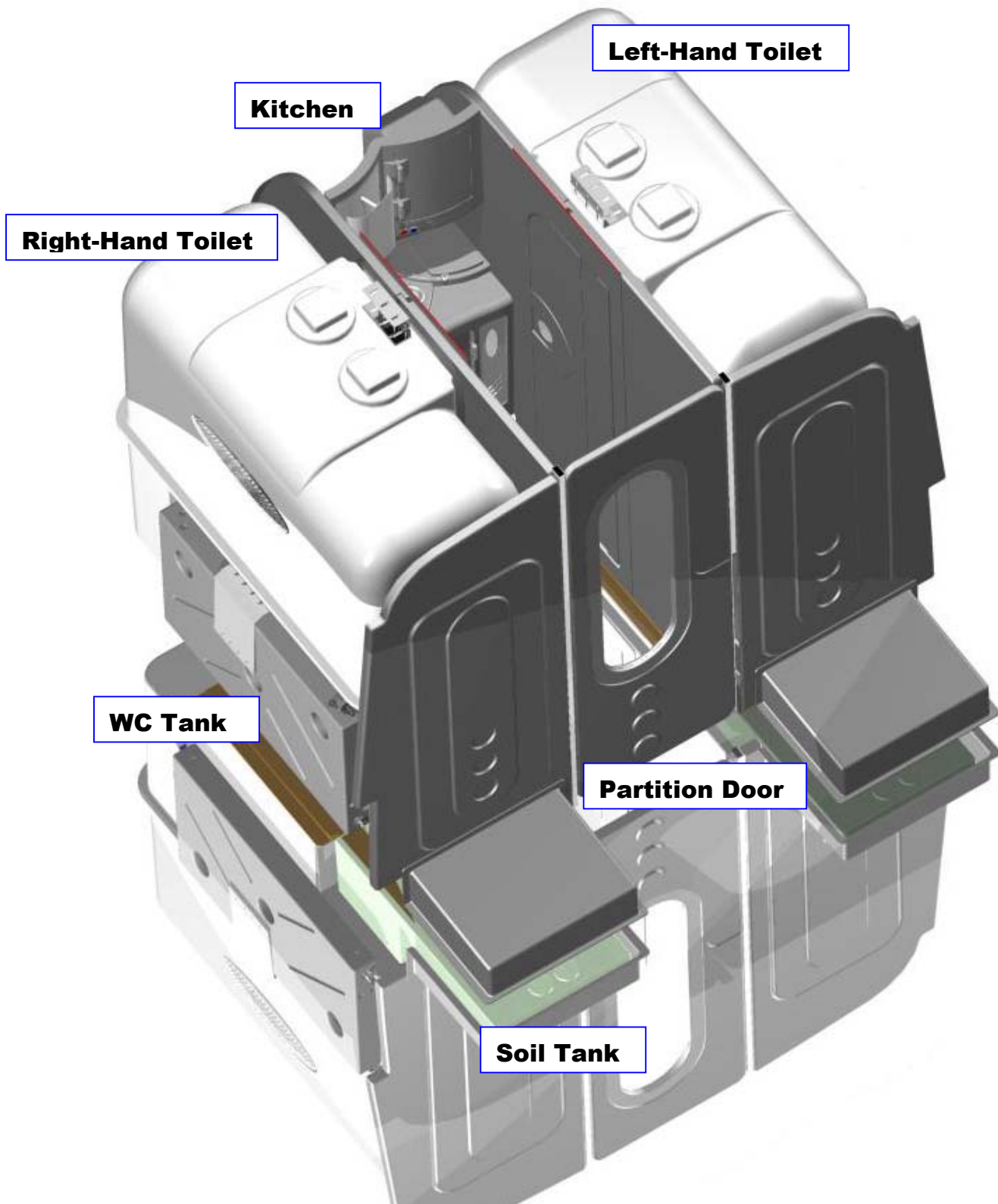
Contact the dealer or supplier from where the vehicle was purchased.

The dealer/supplier will then contact Shades Technics who will fax a warranty claim form to the customer.

Complete the warranty claim form, ensuring all details are filled in and fax back to Shades Technics on +44 (0)1992 501669

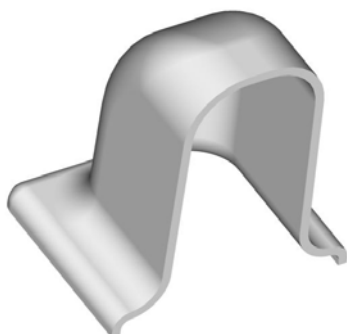
Shades Technics will dispatch any parts required or organise rectification via one of its MAN service points.

Please return any faulty parts that have been replaced under warranty within 14 days or a charge may be levied





Sprung Door Hinge
Cat No: MA661405 Upper
Cat No. MA661406 Lower



Sprung Door Hinge Cover
Cat No: MA661407



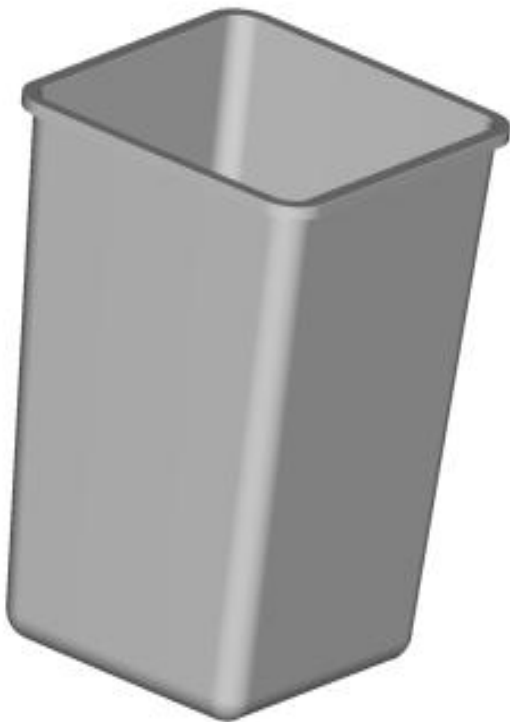
RH Door Lock
Cat No: MA661206



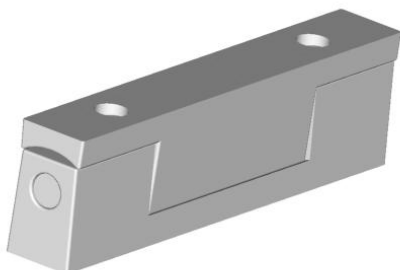
Coat Hook
Cat No: MA661030



Clear Buffer
Cat No: MA713515



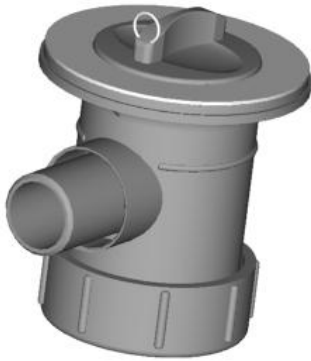
Litter Bin
Cat No: MA661040



Edgemount Hinge
Cat No: MA661410



Faucet
Cat No: MA663607



Floor/Sink Drain
Cat No: MA701550



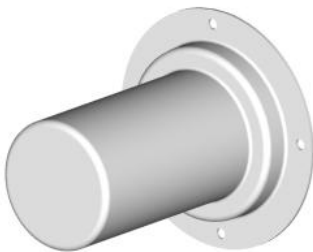
Flush/Hand Wash Button
Cat No: MA714007



Flush/Hand wash Button
Cat No: MA714007



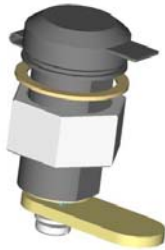
Alarm Button
Cat No: MA714030



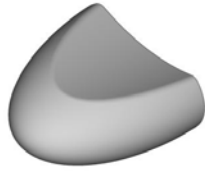
Toilet Roll Holder
Cat No: MA661616



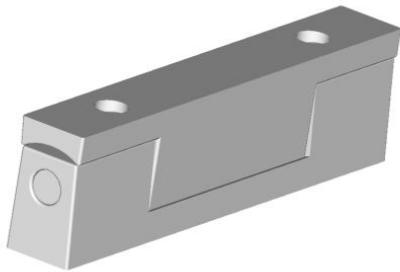
Black Screw Knob
Cat No: MA663408



Happich Lock
Cat No: MA661217



Litter Bin Knob
Cat No: MA661214



Edgemount Hinge
Cat No: MA661410

Cubicle Upper Vanity Spares



Clear Buffer
Cat No: MA713515



Soap Dispenser
Cat No: MA661660

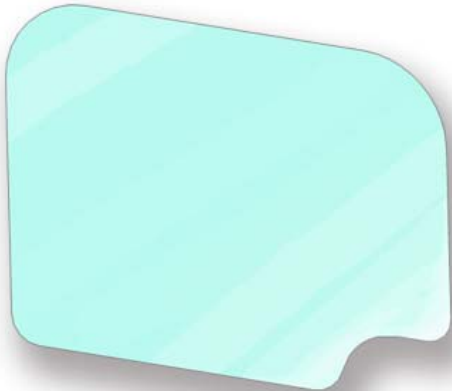


Happich Lock
Cat No: MA661217



Hand Dryer
Cat No: MA661800

Cubicle Upper Vanity Spares



Vanity Mirror
Cat No: MA661818



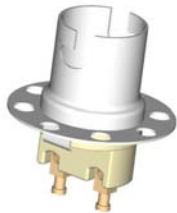
Door Catch
Cat No: MA663958



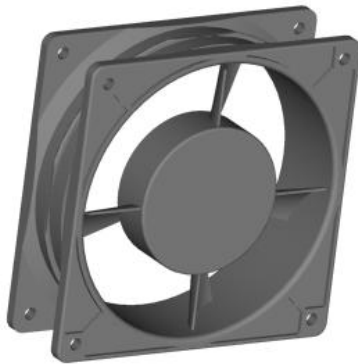
Hand Dryer Button Cover
Cat No: MA661805



Bayonet Bulb
Cat No: MA712028



Bulb Holder
Cat No: MA712027



Ventilator Fan
Cat No: MA727500



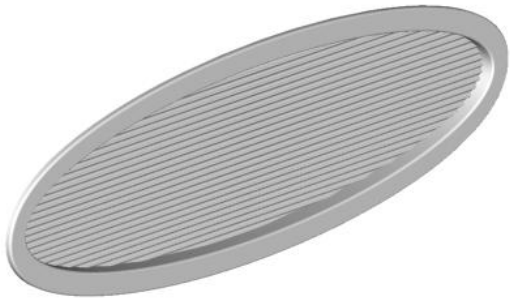
Nylon Screw
Cat No: MA713151



Seat Stopper
Cat No: MA713500



Terry Clip (pump)
Cat No: MA713285



Window
Cat No: MA661050



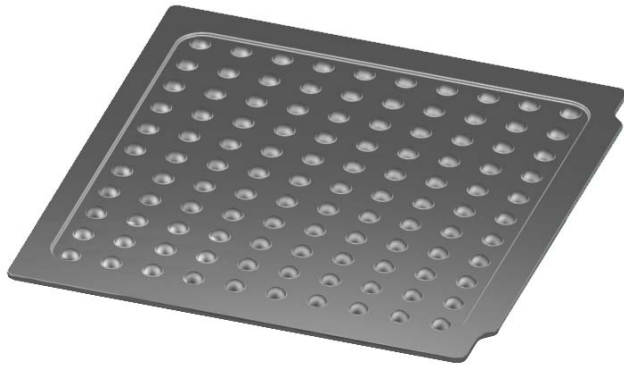
210mm Grab Handle
Cat No: MA661165



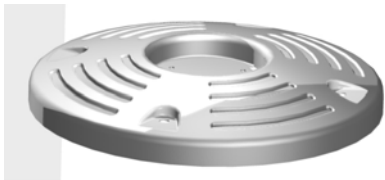
Hand Wash Pump
Cat No: MA702110



Flush Pump
Cat No: MA702180



Rubber Floor Mat
Cat No: MA661476



Fan Cover
Cat No: MA661477

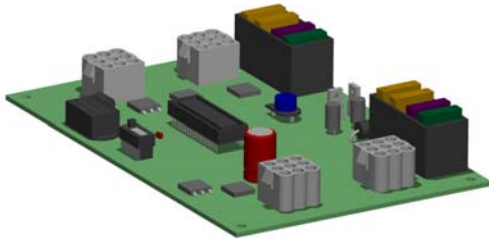


Lamp Cover
Cat No: MA661478

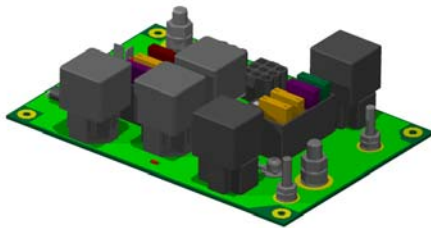


PIR Sensor
Cat No: MA712025

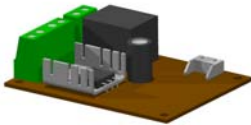
610mm Grab Handle
Cat No: MA661160



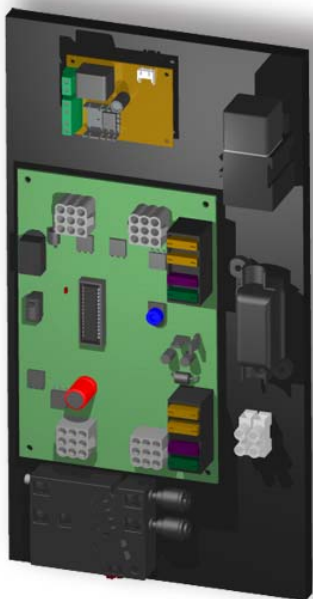
Cubicle PCB
Cat No: MA730616



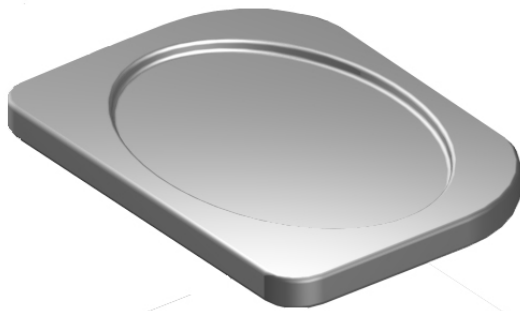
Kitchen PCB
Cat No: MA735650



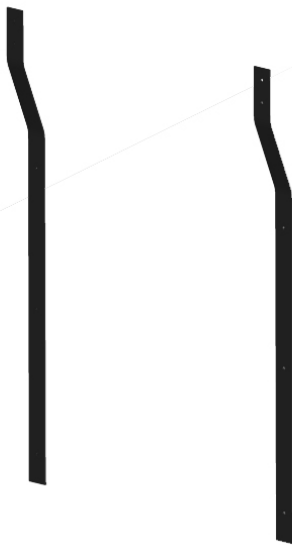
PIR PCB
Cat No: MA712025



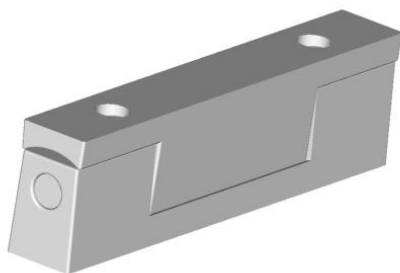
PCB Assembly
Cat No: MA730655



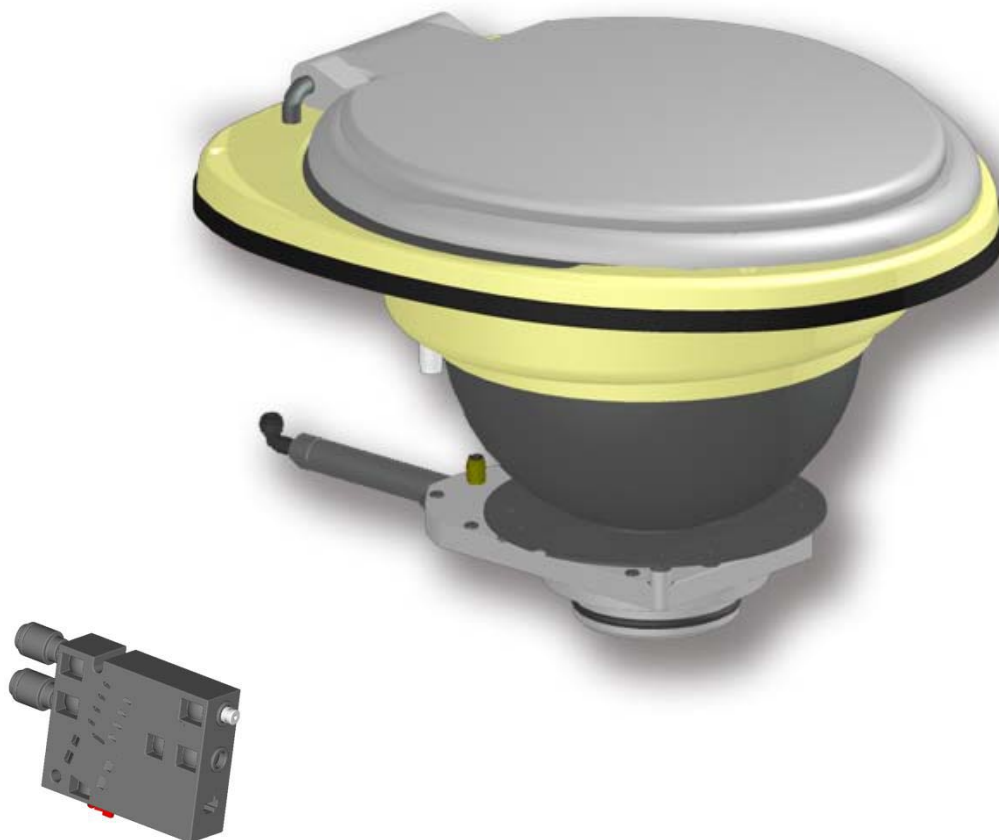
Baby Changer Mattress
Cat No: MA661481



Baby Changer Straps
Cat No: MA661480

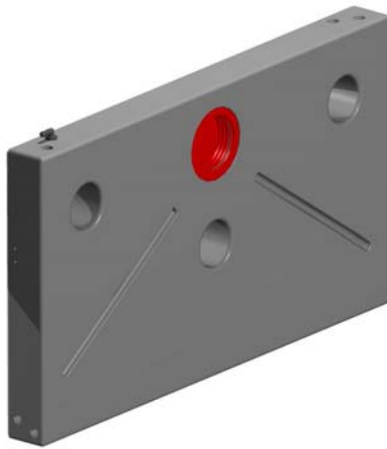


Edgemount Hinge
Cat No: MA661410



1	Pneumatic Slide Valve	MA735713
3	Control Box	MA735714
	Pneumatic Slide Valve & Control Box	MA735732
4	Brass Back Nut	MA695504
5	Bowl Jet	MA663603
6	Bowl Overflow	MA701502
7	Splash Shield	MA661986
8	Stainless Steel Seat Hinges	MA735102
9	Toilet Seat and Lid	MA735101
10	WC Bowl Assy	MA688221

Flush Tank Spares



WC Freshwater Tank
Cat No: MA733038

WC Freshwater Tank Assy
RH Assy = Cat No: MA733032
LH Assy = Cat No: MA733033

Elbow $\frac{3}{4}$ " x $\frac{3}{4}$ " Tank Fitting
Cat No: MA744003



21.5mm x $\frac{3}{4}$ " Elbow
Cat No: MA744002



$\frac{1}{2}$ " BSP Hose Barb Con
Cat No: MA747032



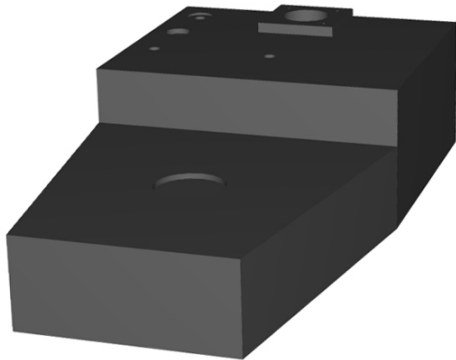
Horizontal Float Switch
Cat No: MA714510



Hatch Cover
Cat No: MA732051



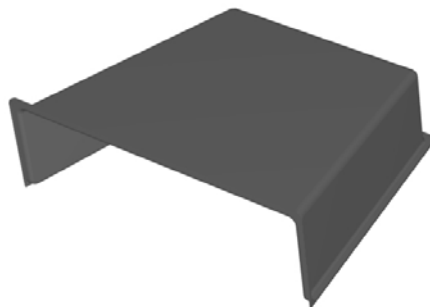
$\frac{1}{2}$ " Potable Hose
Cat No: MA744030



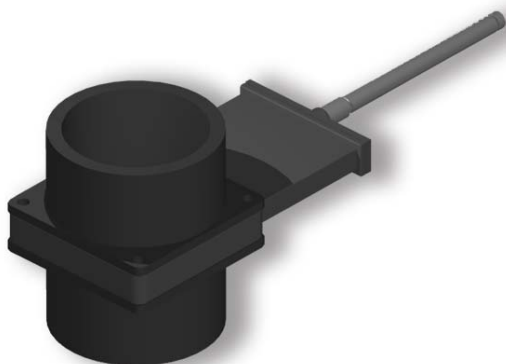
Soil Tank
RH = Cat No: MA733028
LH = Cat No: MA733029
RH Assy = Cat No: MA733030
LH Assy = Cat No: MA733031



Tank Washer Jet
Cat No: MA733035

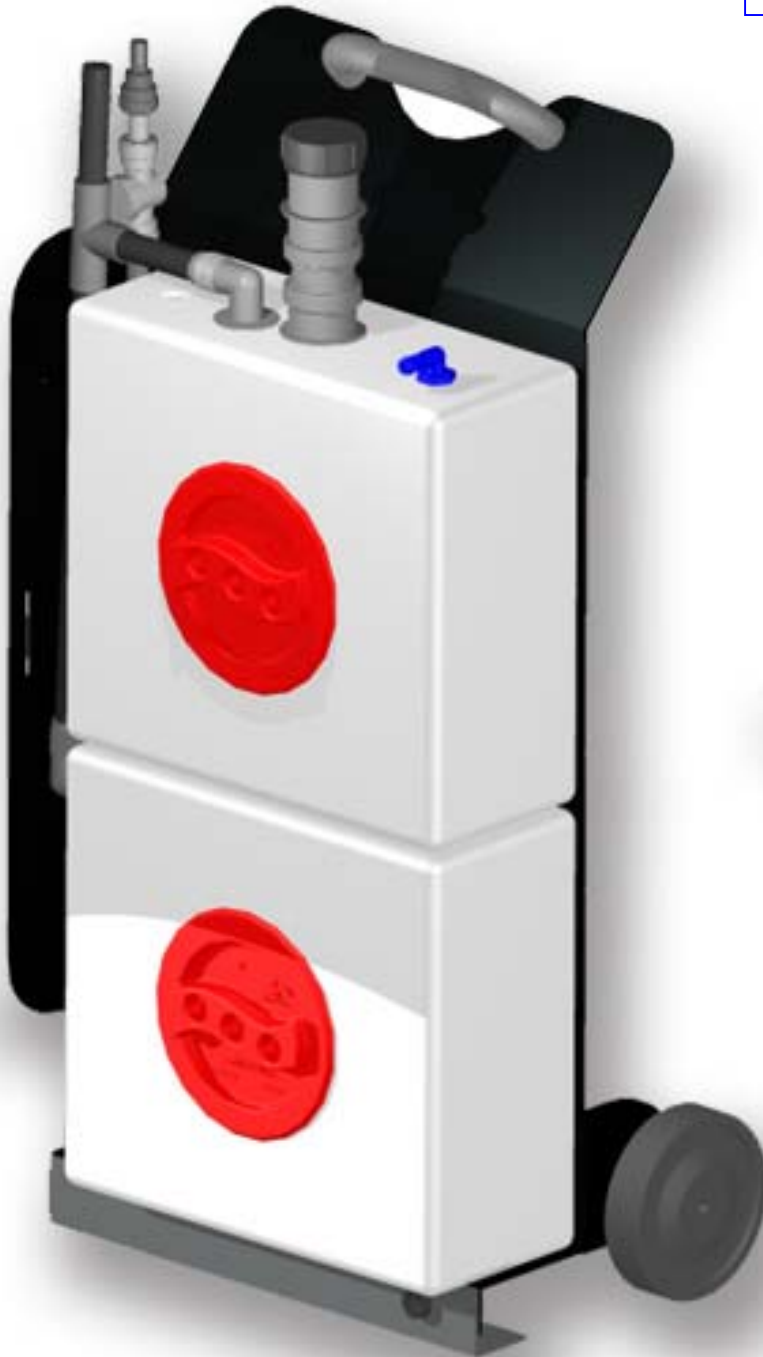


Soil Tank Cover
Cat No: MA733880



Pneumatic Dump Valve
Cat No: MA735734

Trolley Assembly
Cat No: MA801101

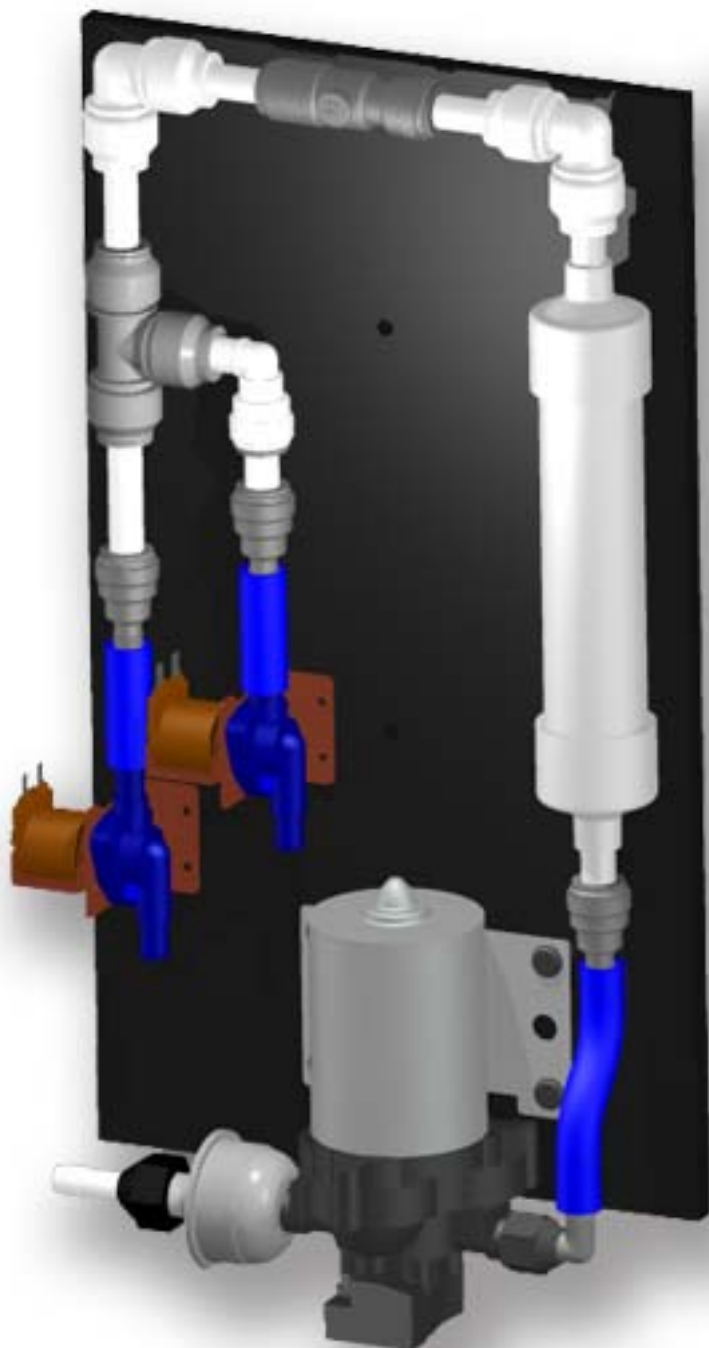


Water Tank with Hatch Cover
Cat No: MA733860

See separate sheet for
plumbing fittings.

Wheels (pair)
Cat No: MA801110

Kitchen Pump Board Spares



Board Assembly
Cat No: MA661700

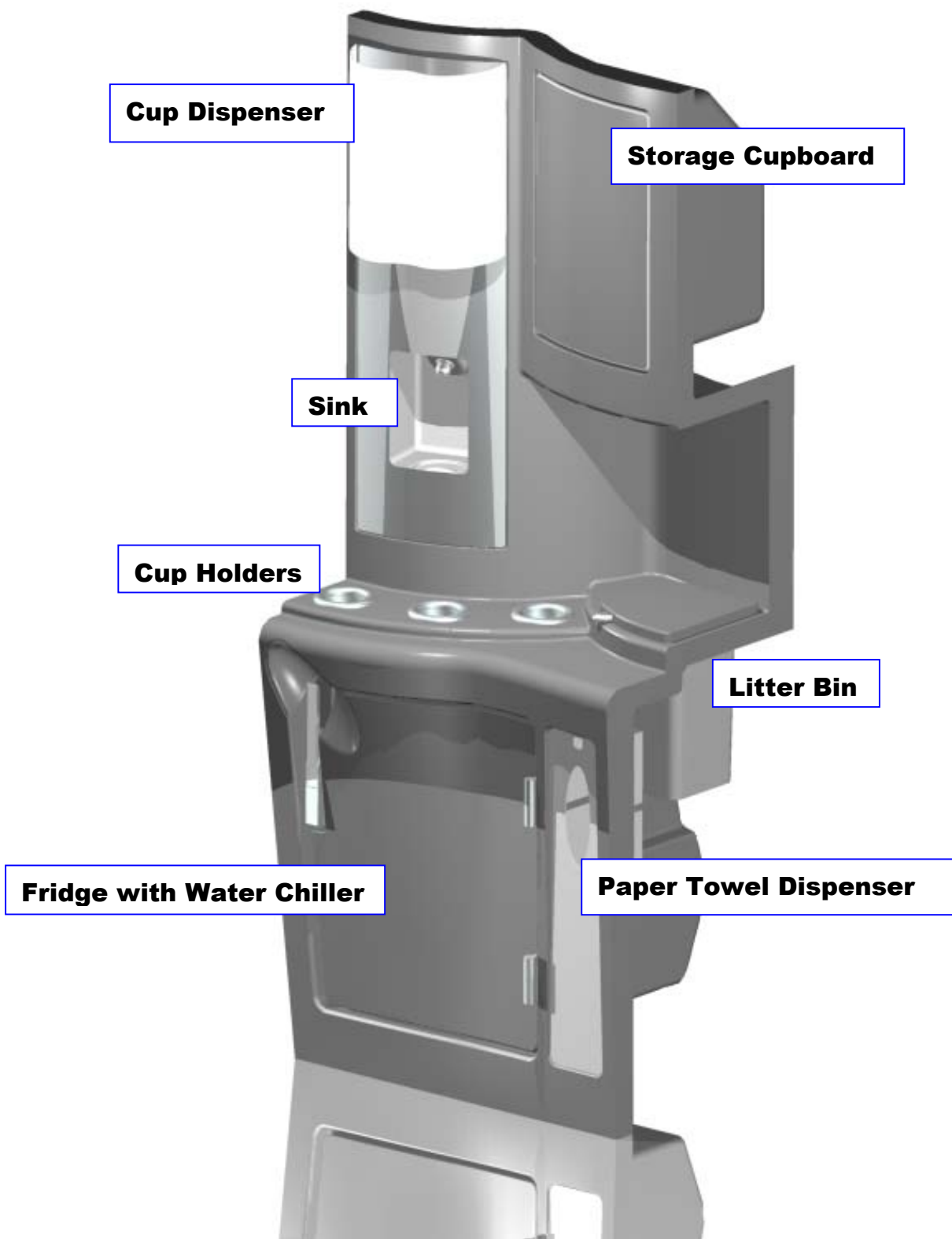
Hydrofilter (6 month life span)
Cat No: MA722017 (single unit)
Cat No: MA722015 (pack of 6)

Solenoid Valve
Cat No: MA714620

Particle Filter
Cat No: MA722025

Drinks Pump
Cat No: MA702016

See separate sheet for plumbing fittings.





HYDROCALOR
M500 Water Heater
Cat No: MA697010



Litter Bin
Cat No: MA661002

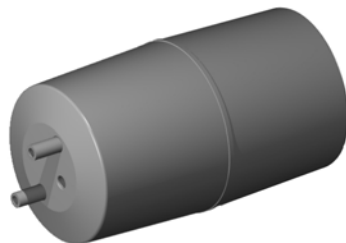


SS Sprung Hinge
Cat No: MA735104

Fridge Shelf
Cat No: MA790660



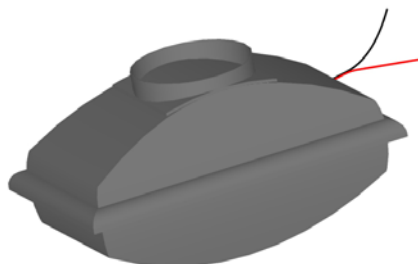
Water Chiller
Cat No: MA790661



Cup Holder
Cat No: MA790658



Cooling Unit
Cat No: MA703108





Cupboard Shelves
Cat No: MA790659



Fridge Door Lock
Cat No: MA663020



Cup Dispenser
Cat No: MA790662



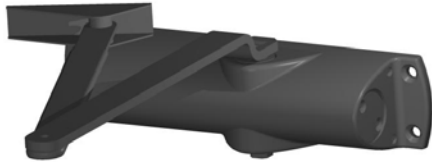
Paper Towel Dispenser
Cat No: MA



Kitchen Indicator Panel
Cat No: MA712510



Door Push Plate
Cat No: MA712025



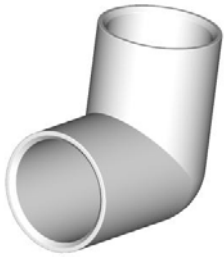
Door Closer
Cat No: MA697010



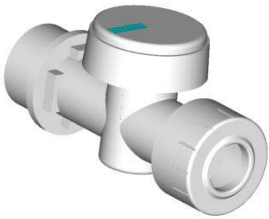
Partition Door Glass
Cat No: MA661050



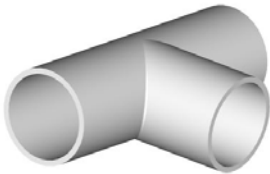
Door Handle
Cat No: MA697010



Knuckle Bend
Cat No: MA744120



Shut off Tap
Cat No: MA747037



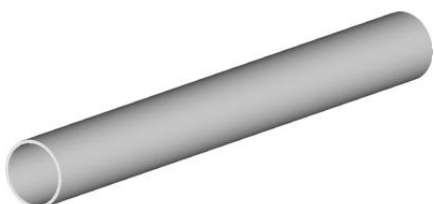
T Push Fit
Cat No: MA744121



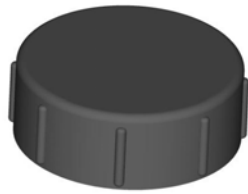
1/2" Potable Hose
Cat No: MA744030



12-22 Hose Clip
Cat No: MA744041



21.5mm Rigid Pipe
Cat No: MA747055



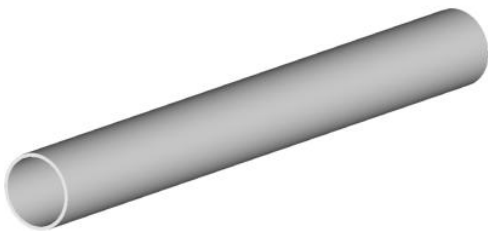
Black End Cap
Cat No: MA732061



Tank Connector
Cat No: MA732064



Swivel Bend
Cat No: MA732063



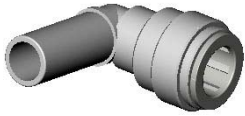
40mm Pipe
Cat No: MA732062



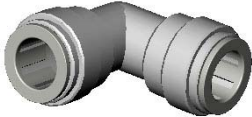
Hose Barb Connector
15mm x 1/2" Speedfit
Cat No: MA747027



15 mm Stem Elbow Connector
Cat No: MA744122



15mm Stem Elbow
Cat No: MA747016



15mm Equal Elbow
Cat No: MA747015



15mm T Connector
Cat No: MA747020



15mm Drain Valve
Cat No: MA747037



15mm x 3/4" BSP Tap
Adaptor
Cat No: MA747024



15mm Male Coupler
Cat No: 747028



15mm Service Valve
Cat No: 747035

Cubicle Legends



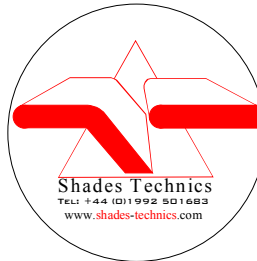
No Standing
Cat No:735560



Emergency Alarm
Cat No:735566



No Smoking
Cat No:735563



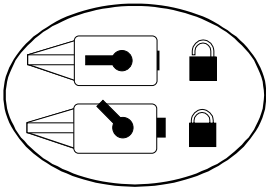
Shades Technics
Cat No:735568



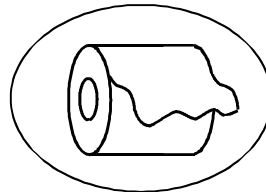
Male Cubicle
Cat No:



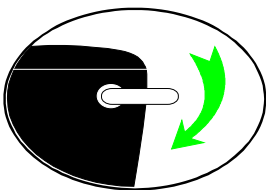
Female Cubicle
Cat No:



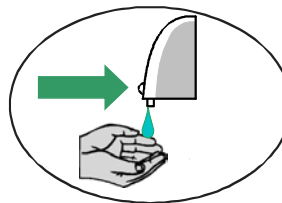
Door Lock RH
Cat No:735564



Toilet Roll
Cat No:735569



Flush
Cat No:735562



Soap Dispenser
Cat No:



Hand wash
Cat No:735561



Litter Bin
Cat No:735567



Baby Changer
Cat No:735561

Description

The Toilet Cubicle Control Board is a solid state electronic control unit that manages all toilet cubicle functions. All output devices are short circuit and over-voltage protected for reliability and safety.

Operation

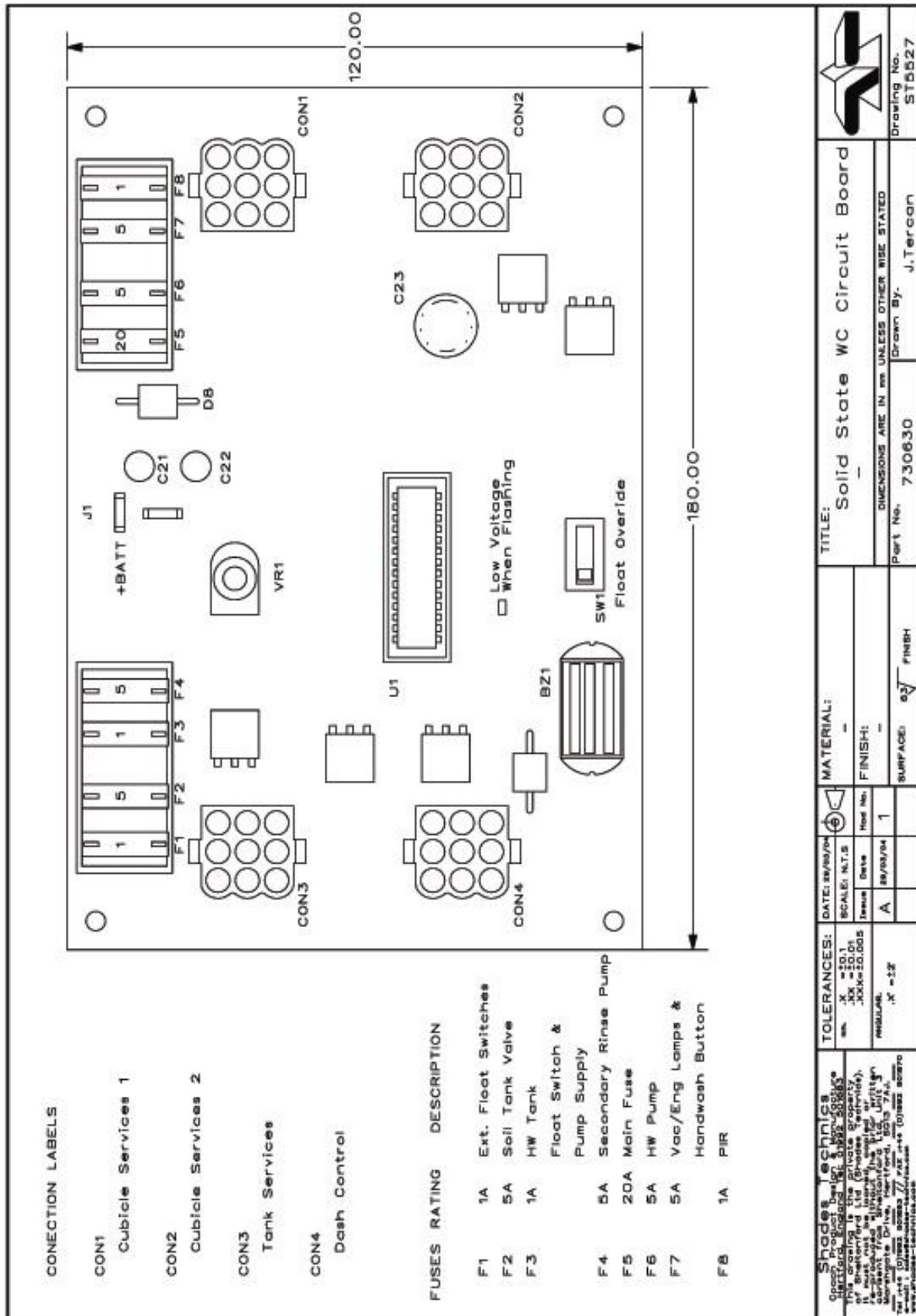
Power-up & voltage low indicator

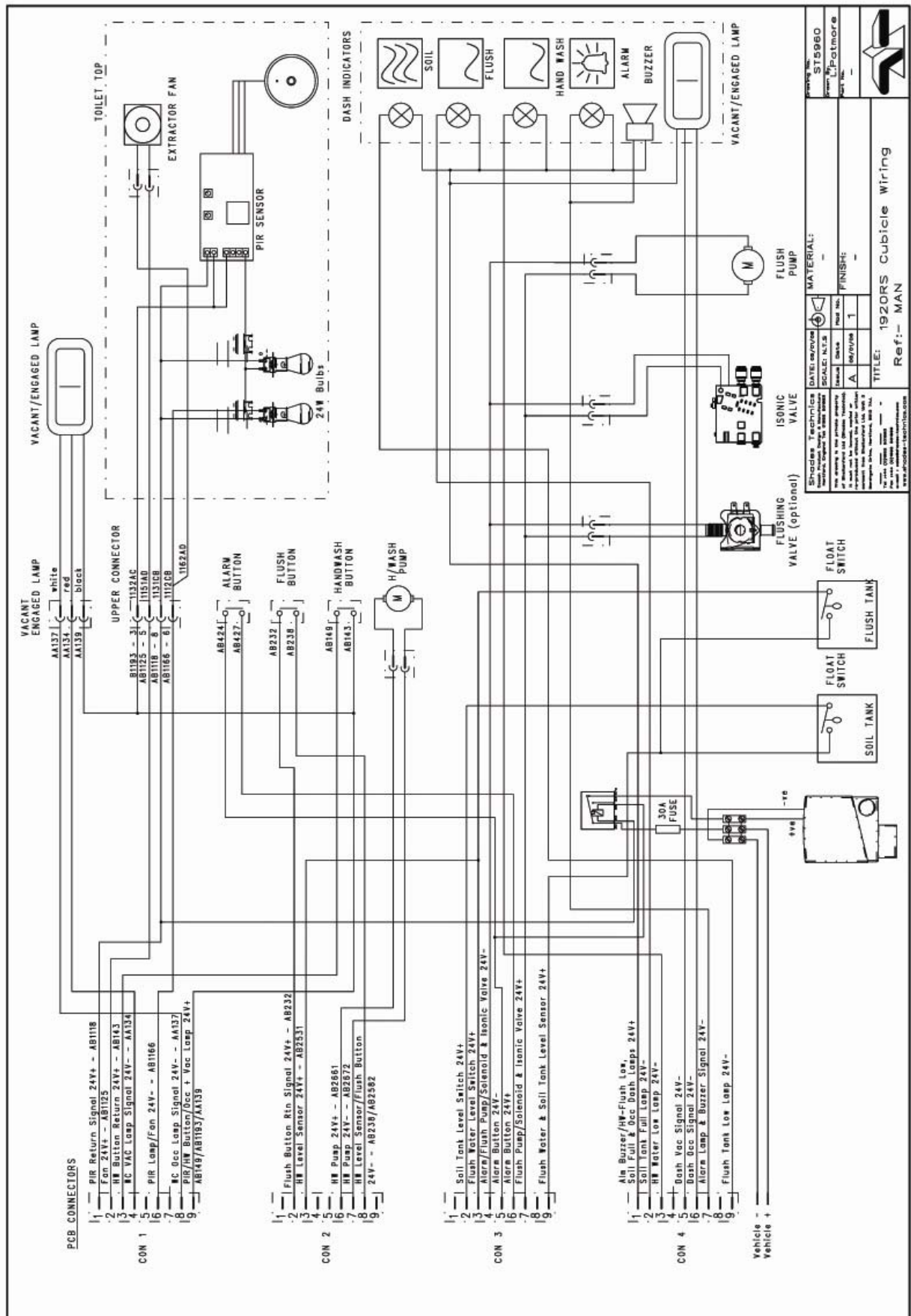
On power-up the control board enters the shut-down mode for 60 seconds. In shut-down mode, the occupied lamp will be on and all other outputs off.

After 60 seconds, provided that the voltage is not too low, the control board will enter the normal operating mode.

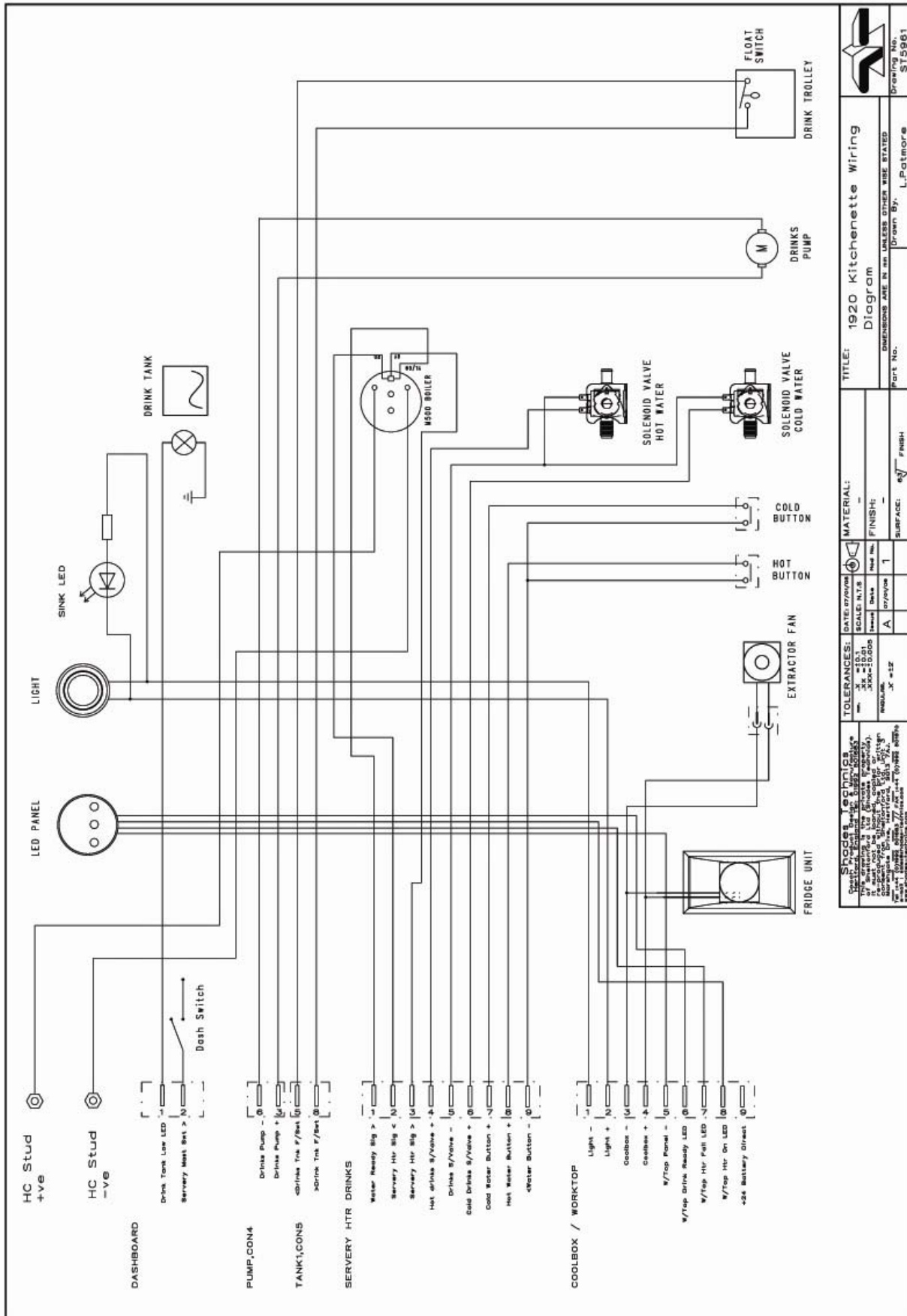
If at any time the voltage drops below the threshold (set by VR1) for more than 5 seconds, the control board will re-set. After a re-set, the board starts in the shut-down mode for another 60 seconds before being fully functional.

The threshold voltage is factory set to 22V, the RED 'low voltage' LED will begin to flash if the supply drops below the threshold.





Standard	Technical	DATE	REV	SCALE	N.T.S.	MATERIAL:
ST5960	ST5960					
FINISH:						
TITLE: 192ORS Cubicle Wiring	Ref:- MAN					



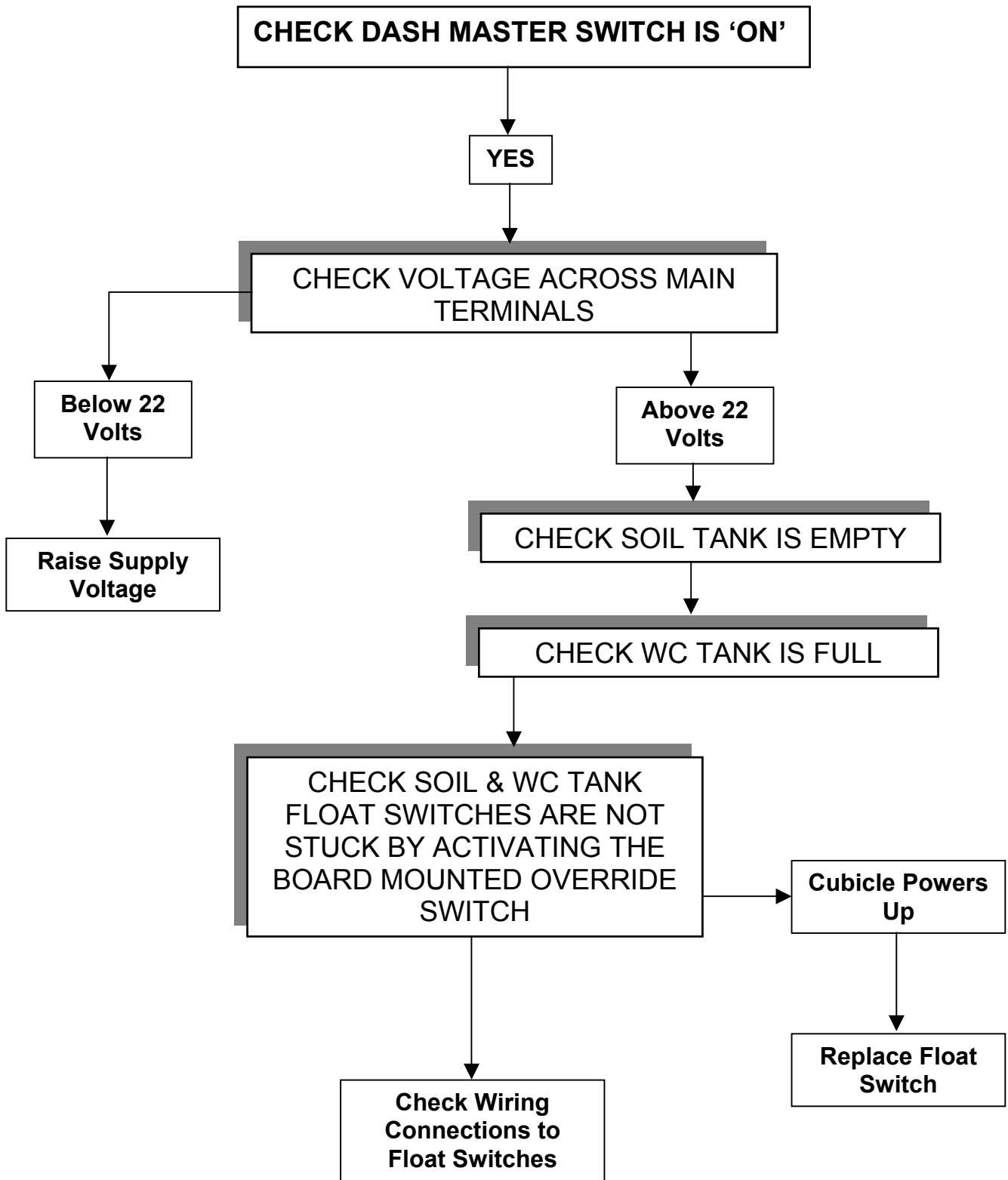
		TITLE: 1920 Kitchenette Wiring Diagram DIMENSIONS ARE IN mm UNLESS OTHERWISE STATED Drawn By: L. Patmore	
TOLERANCES: mm: .X = ±0.01 .XX = ±0.02 .XXX = ±0.03 .X = ±0.5 .XX = ±1.0 .XXX = ±1.5 UNLESS OTHERWISE STATED		MATERIAL: FINISH: - SURFACE: eq finish	Part No.: ST5981
DATE: 07/09/08 SCALE: N.T.S. DRW: L.P. CHECK: L.P. APP'D: L.P. DATE: 07/09/08 SCALE: N.T.S. DRW: L.P. CHECK: L.P. APP'D: L.P.	DATE: 07/09/08 SCALE: N.T.S. DRW: L.P. CHECK: L.P. APP'D: L.P.	DATE: 07/09/08 SCALE: N.T.S. DRW: L.P. CHECK: L.P. APP'D: L.P.	DATE: 07/09/08 SCALE: N.T.S. DRW: L.P. CHECK: L.P. APP'D: L.P.

TOILET

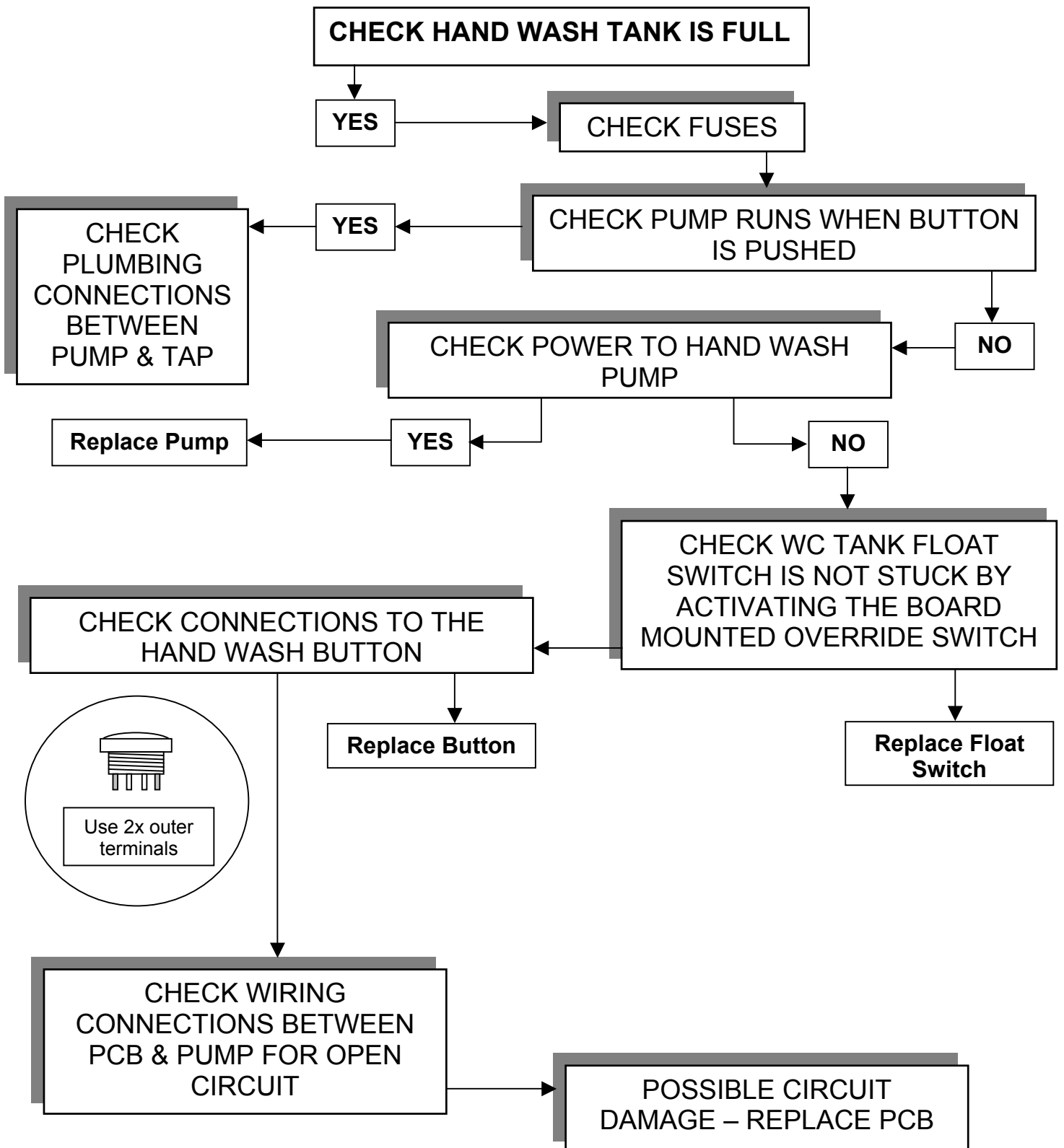
1. Toilet Fails To Power Up
2. No Water From Hand Wash Faucet
3. Extractor Fan Not Functioning
4. Hydro-Jet Not Working – No Water or Pneumatic Valve
5. Hydro-Jet Pneumatic Valve Opens – No Water
6. Hydro-Jet Water Flows – Pneumatic Valves Does Not Open
7. Poor Water Flow Around Bowl
8. Interior Lamp Stays On Too Long/Not Long Enough
9. Aircalor Hand – Drier Not Functioning
10. Vacant/Engaged Lamp Fails
11. Interior Lamp Fails
12. Alarm Button/Buzzer Not Functioning
13. Bad Toilet Odour

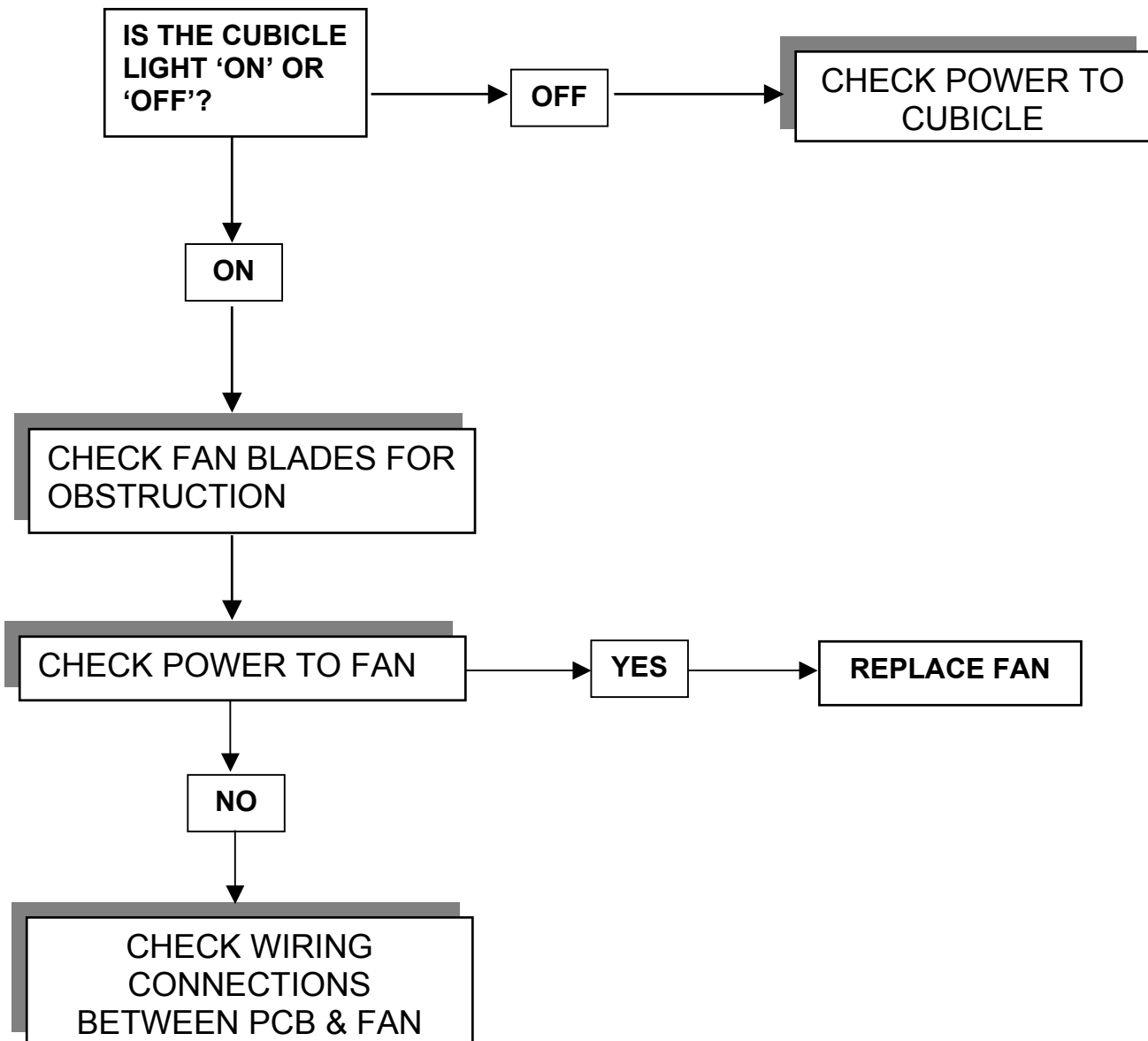
KITCHEN

1. No Hot or Cold Water From Kitchen Faucet
2. Drinking Water Dispensing Problems
3. Water Flow From Kitchen Faucets Too Slow/Fast
4. Cold Water Flows from Hot Drinks Faucet
5. Cool Box Does Not Get Cold
6. Kitchen 'Hot Drinks' LED Not Working
7. Kitchen 'Power' LED Not Working

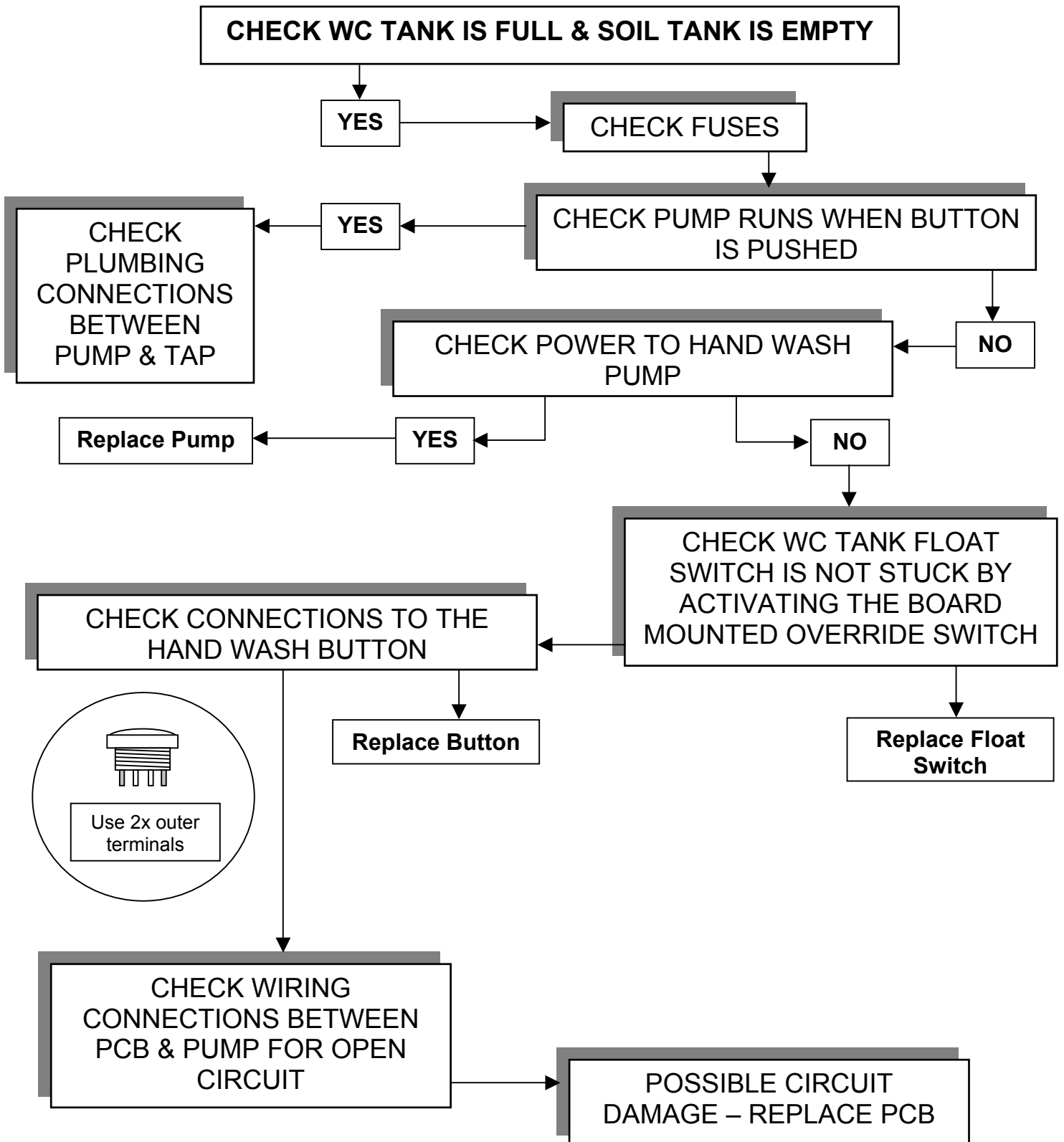


No Water From Hand Wash Faucet

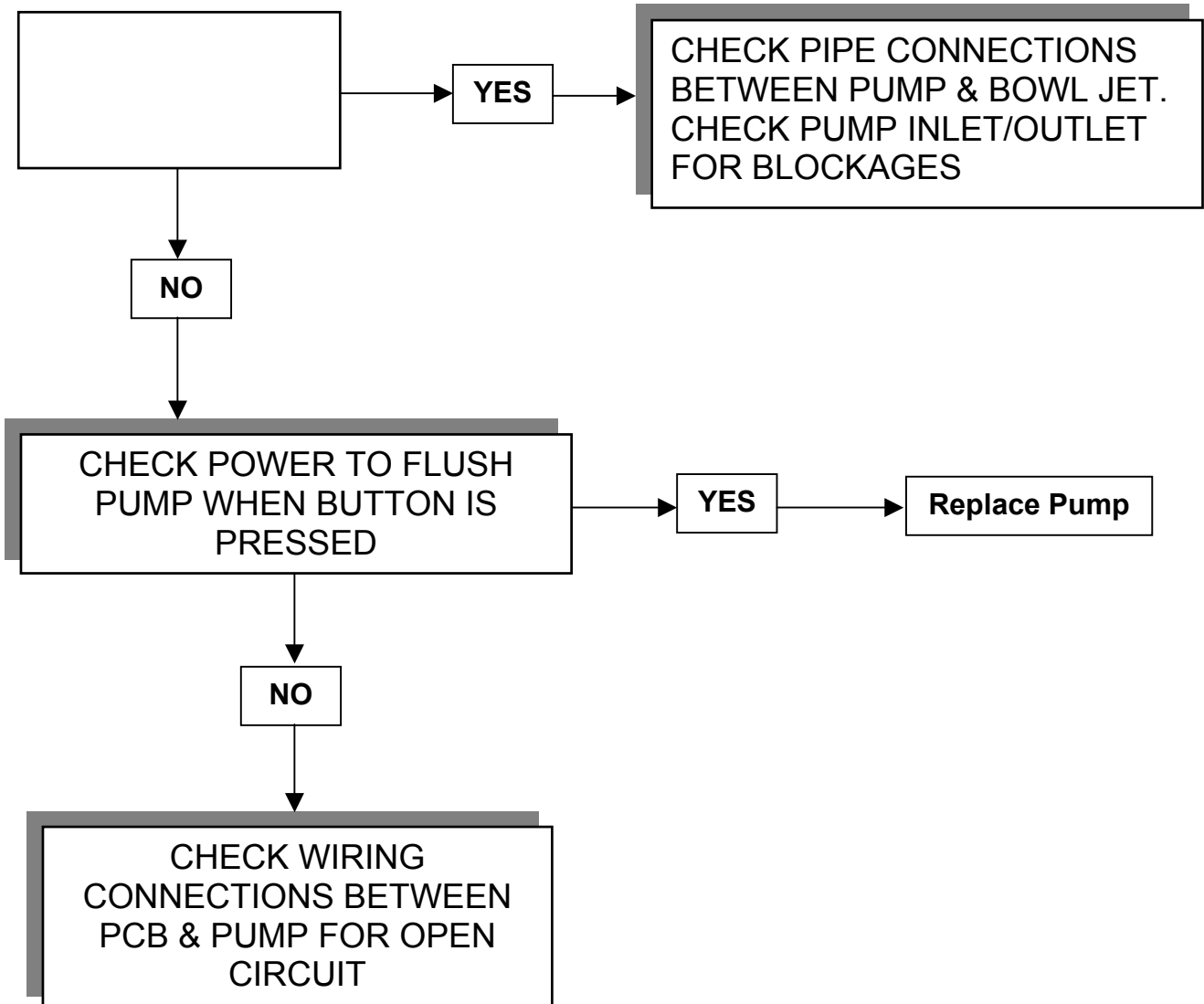




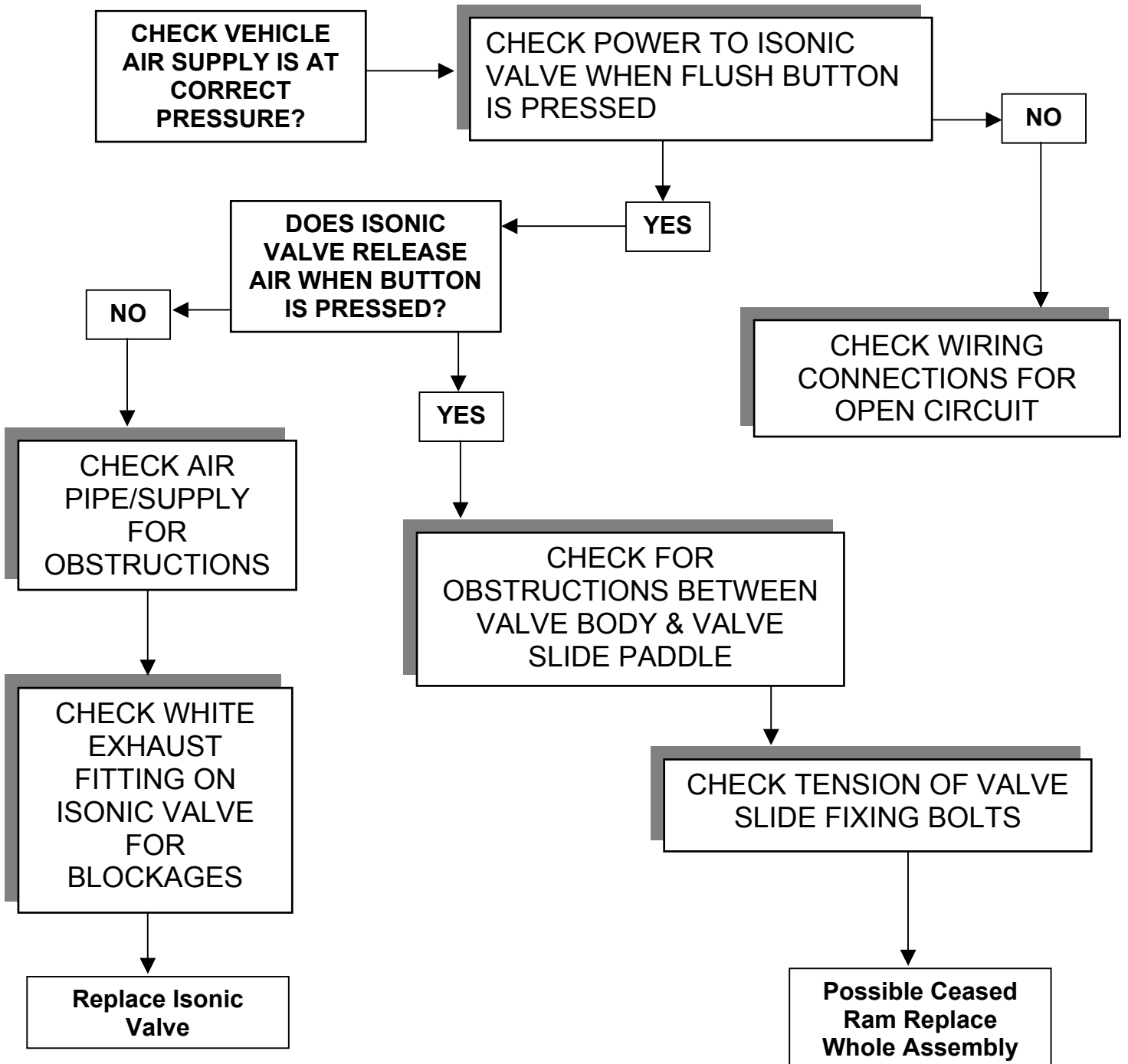
Hydro-Jet Not Working – No Water or Pneumatic Valve

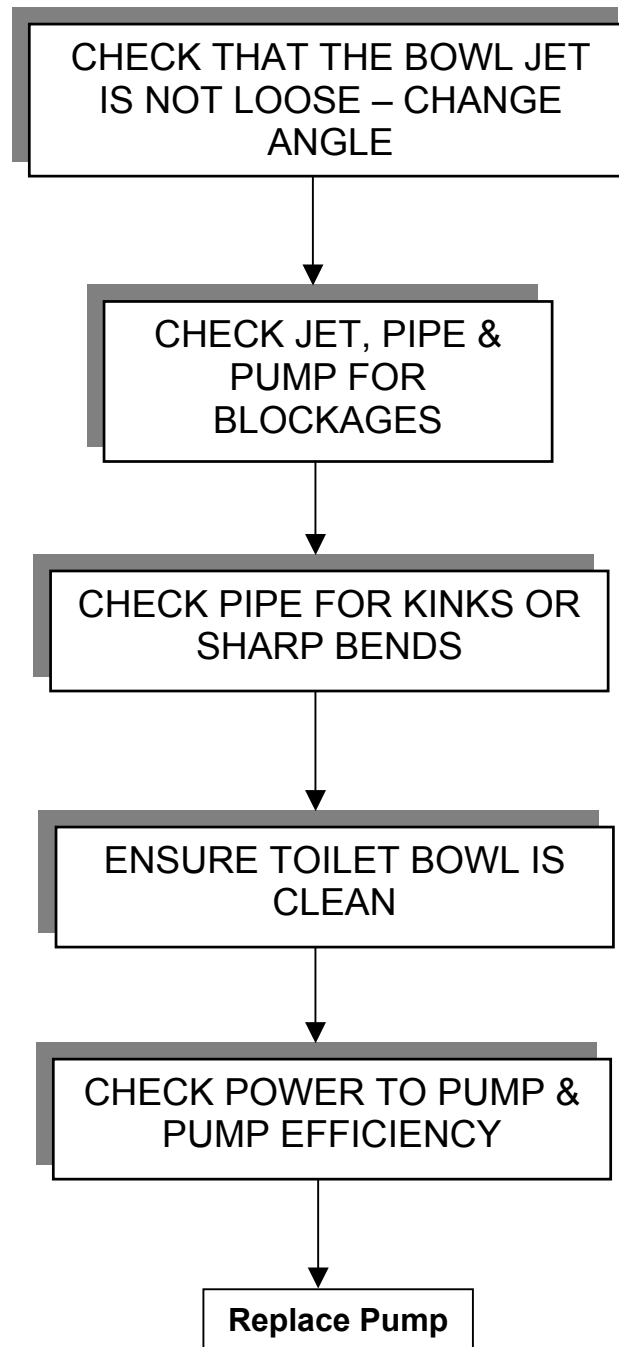


Hydro-Jet Valve Opens – No Water



Hydro-Jet Water Flows – Pneumatic Valve Does Not Open





Interior Lamp Stays On Too Long/Not Long Enough

THE INTERIOR LAMP SENSOR DETECTS BOTH HEAT & MOVEMENT. IT IS PRE-SET TO TURN OFF THE INTERIOR LAMPS 30 SECONDS FROM ITS LAST DETECTION

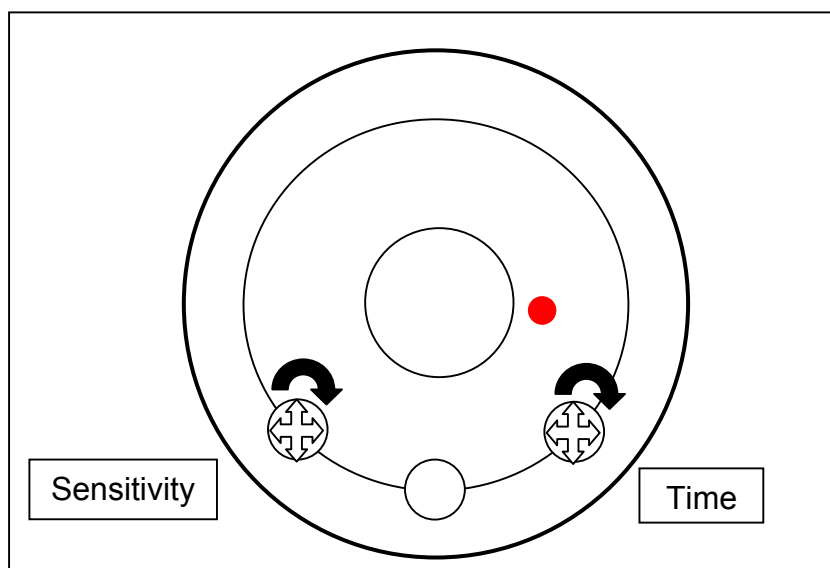
TO EXTEND THE TIME

**TURN RIGHT ADJUSTER
CLOCKWISE**

TO REDUCE THE TIME

**TURN RIGHT ADJUSTER
ANTI-CLOCKWISE**

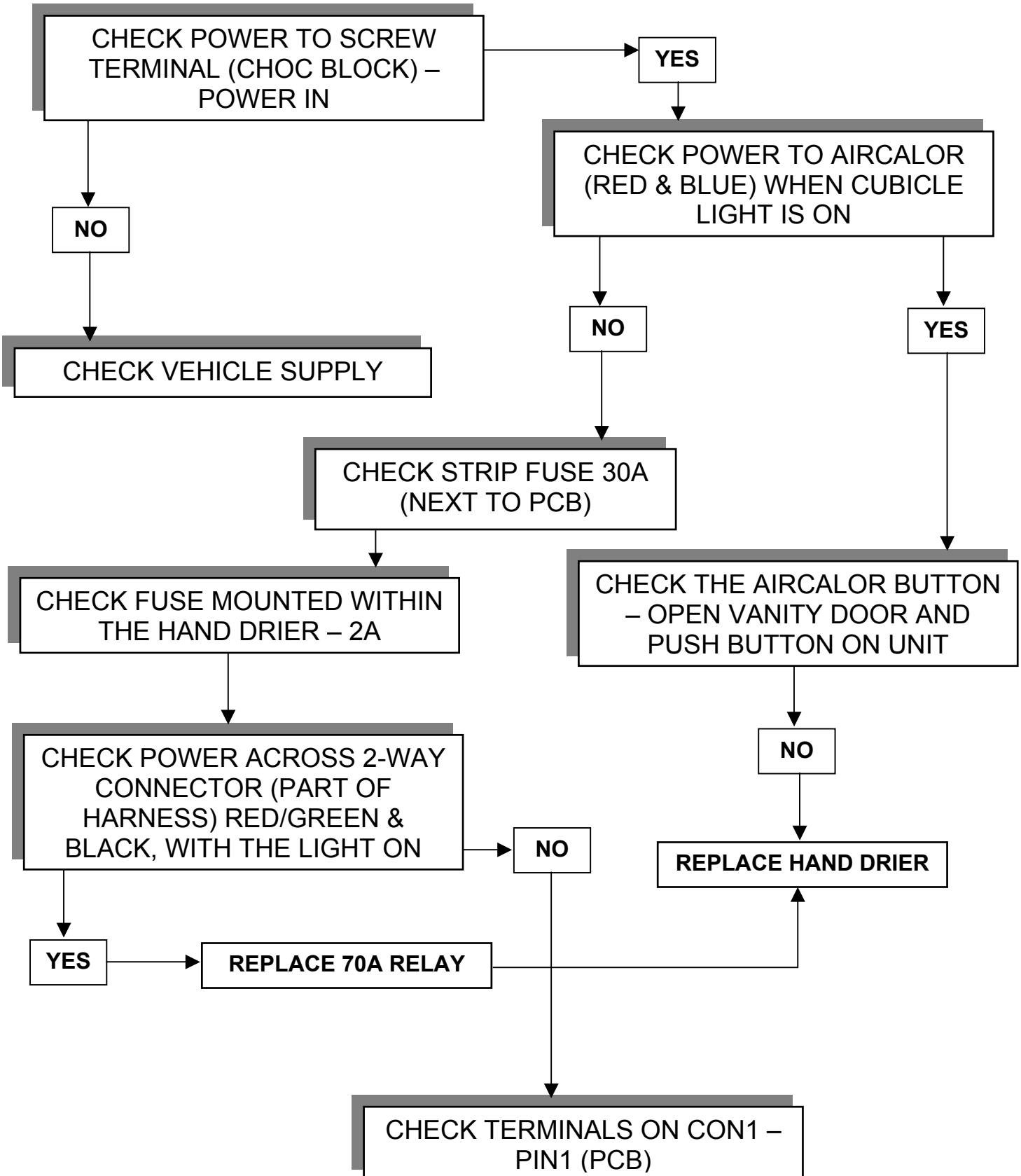
**IF ADJUSTMENT DOES
NOT ALTER THE TIME –
REPLACE PIR PCB &
SENSOR**

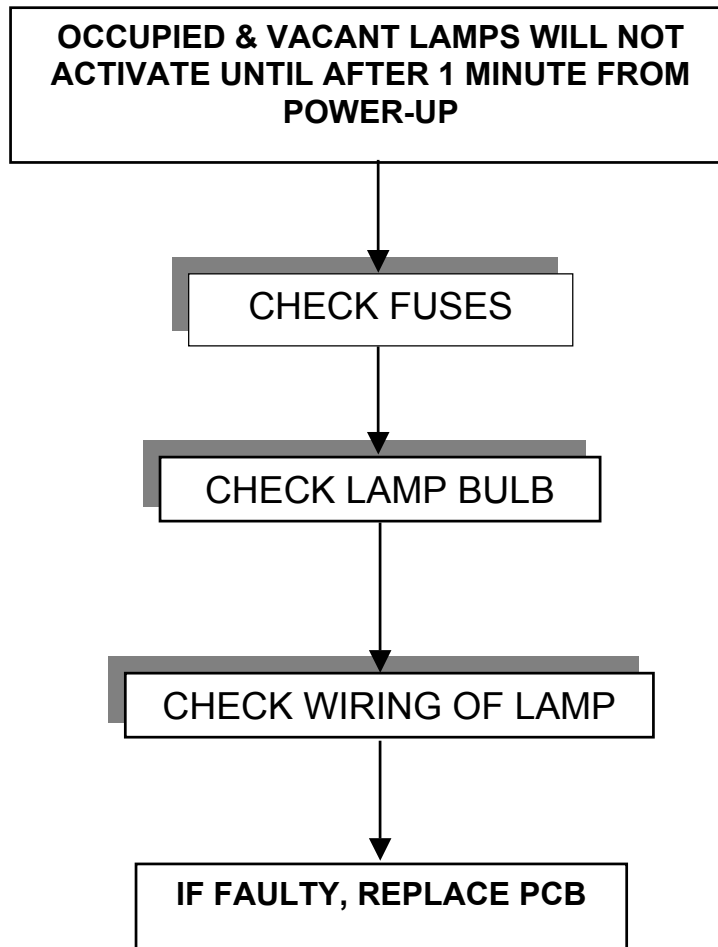


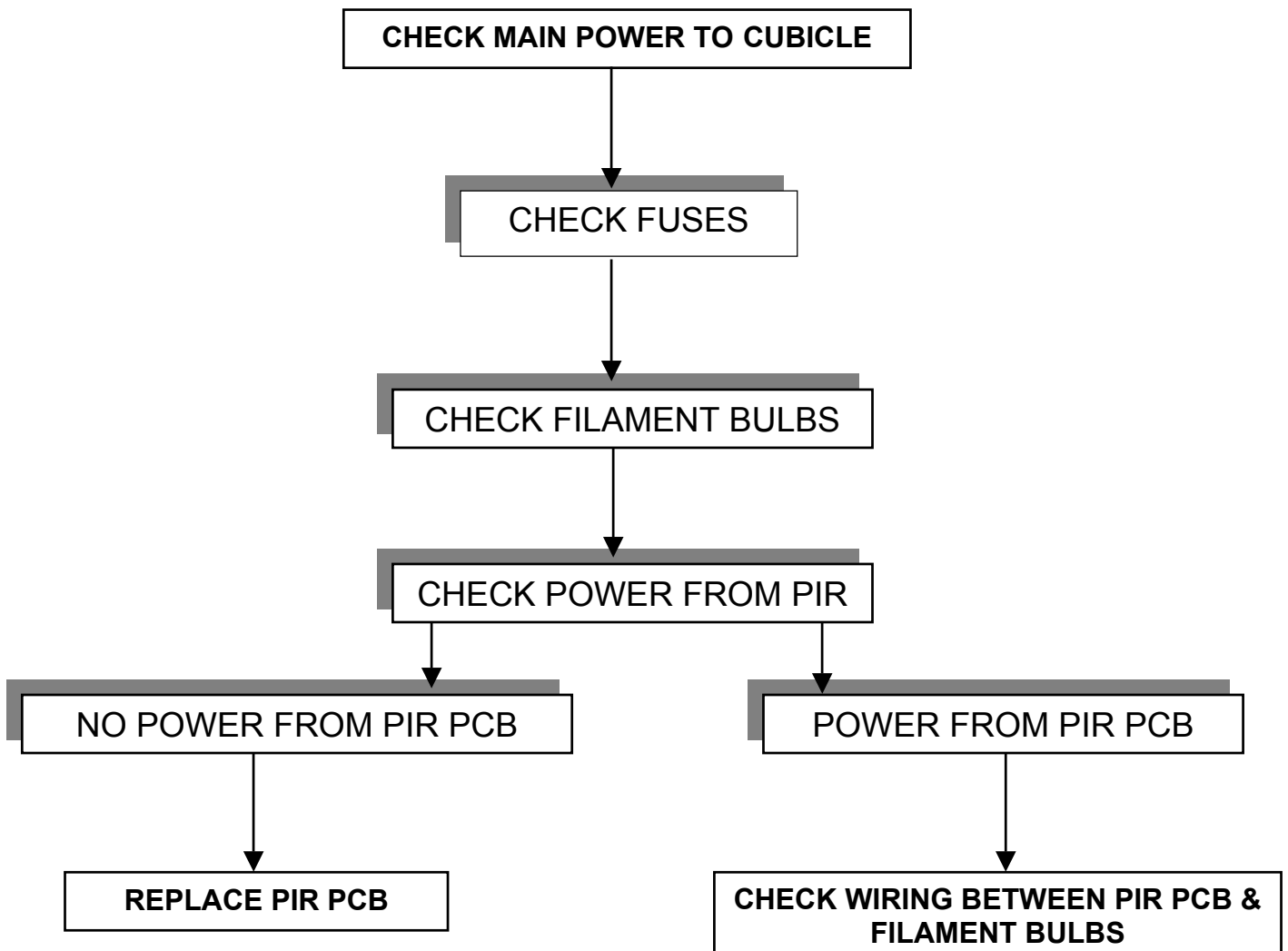
THE LEFT HAND ADJUSTER ALTERS THE SENSITIVITY OF THE SENSOR – CLOCKWISE TO INCREASE

Aircalor Hand – Drier Not Functioning

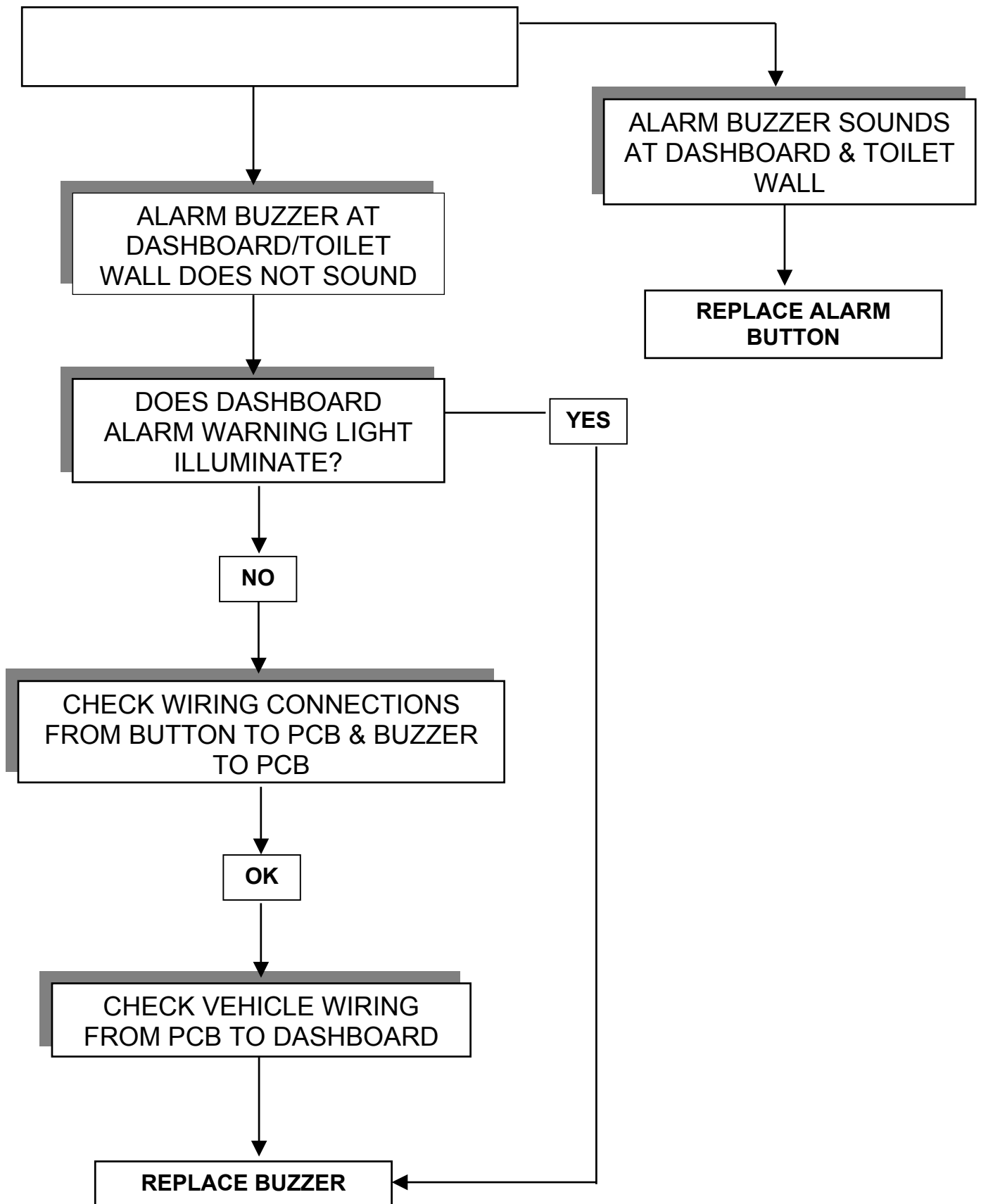
The Aircalor Hand-Drier will only Function with the WC Master Switch On and the Cubicle Interior Light On.

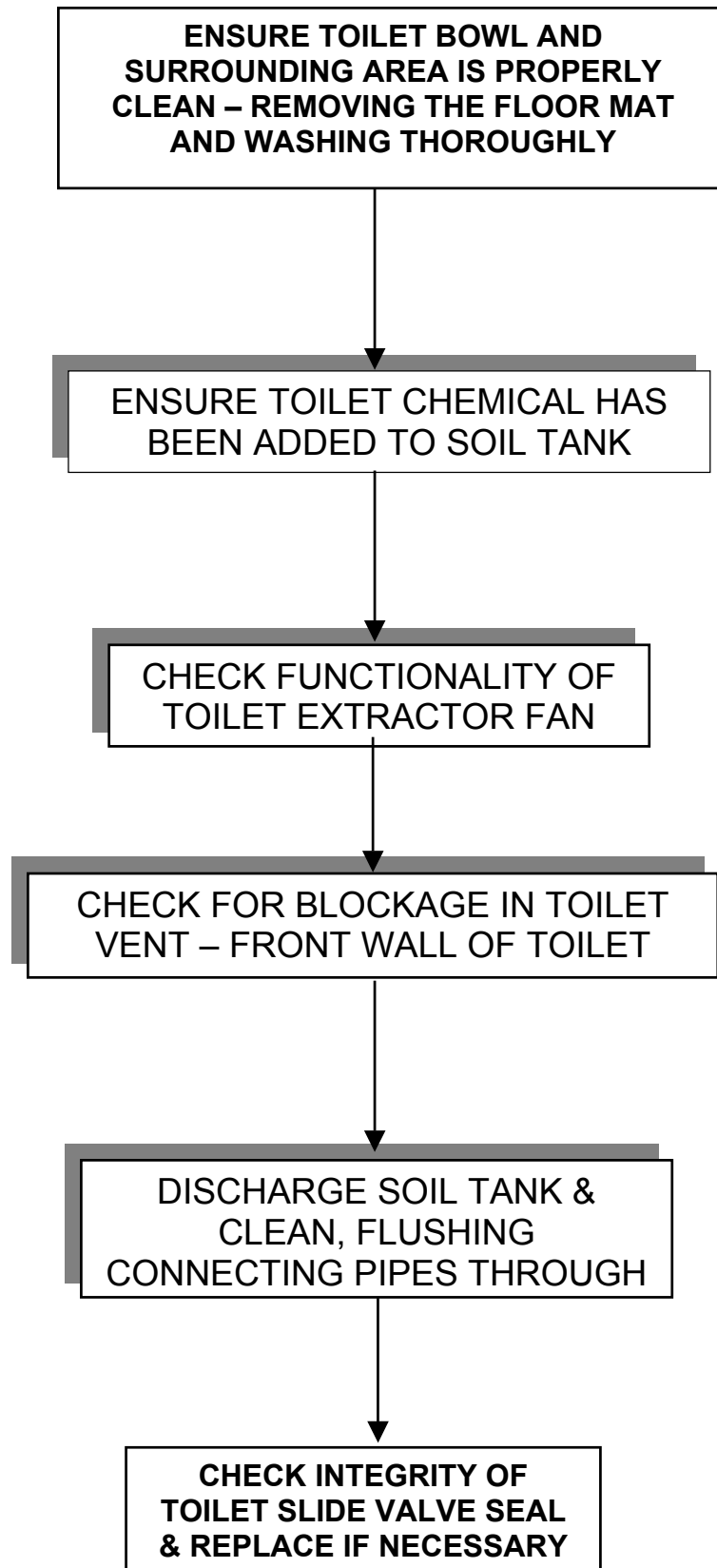




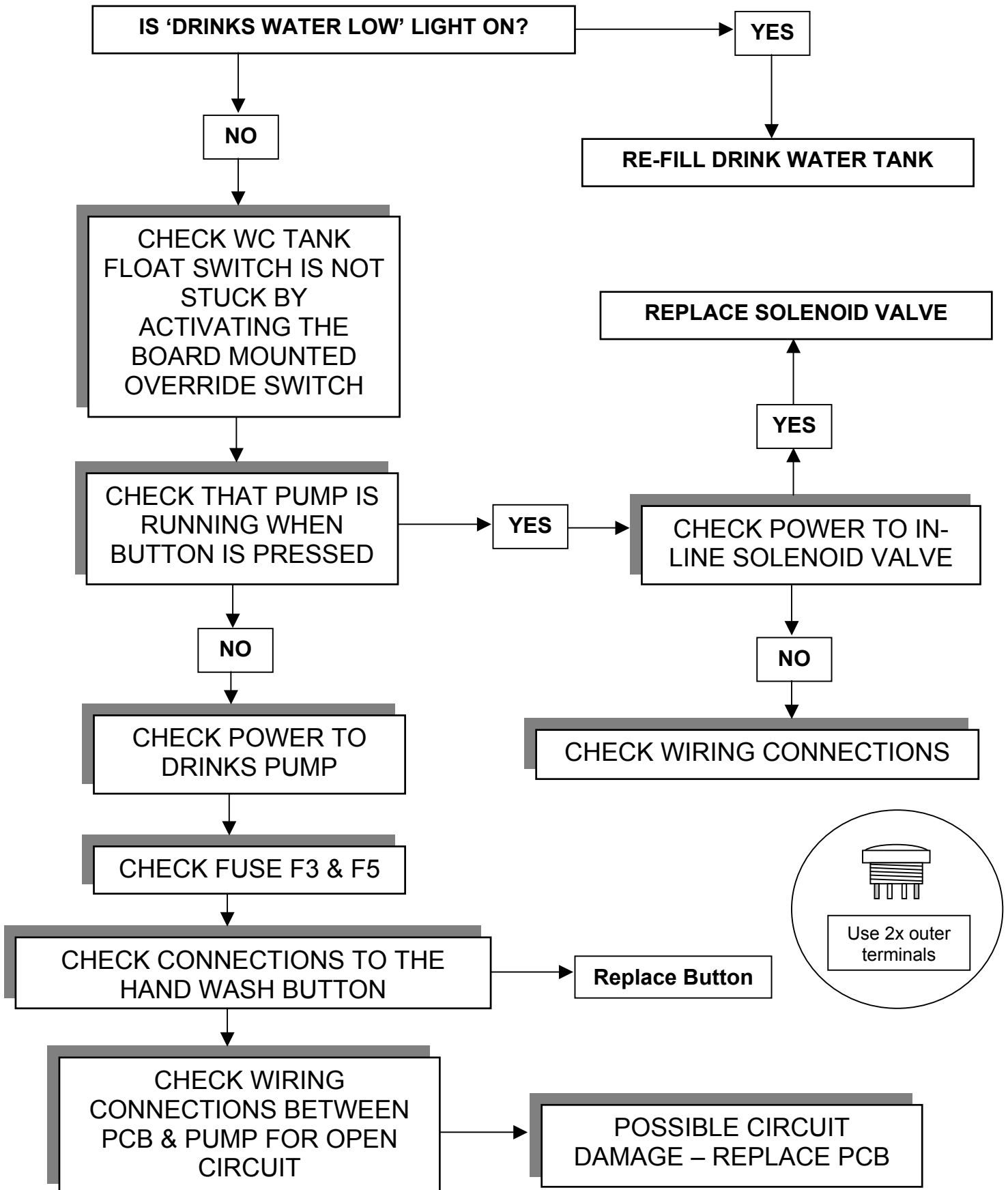


Alarm Button/Buzzer Not Functioning





No Hot/Cold Water From Kitchen Faucet



Drinking Water Dispensing Problems

**HOT WATER FAUCET STEAMING – WATER HEATER BOILING
OR WARM WATER ONLY**

REPLACE M500 BOILER

HOT WATER FAUCET SPLUTTERS WHEN DISPENSING WATER

**CHECK PLUMBING
FITTINGS ARE PUSHED
HOME SECURELY**

**CHECK FOR SMALL
WATER LEAKS IN
PLUMBING SYSTEM**

DELAY IN DISPENSING DRINKING WATER

**CHECK SOLENOID
VALVE FOR BLOCKAGES**

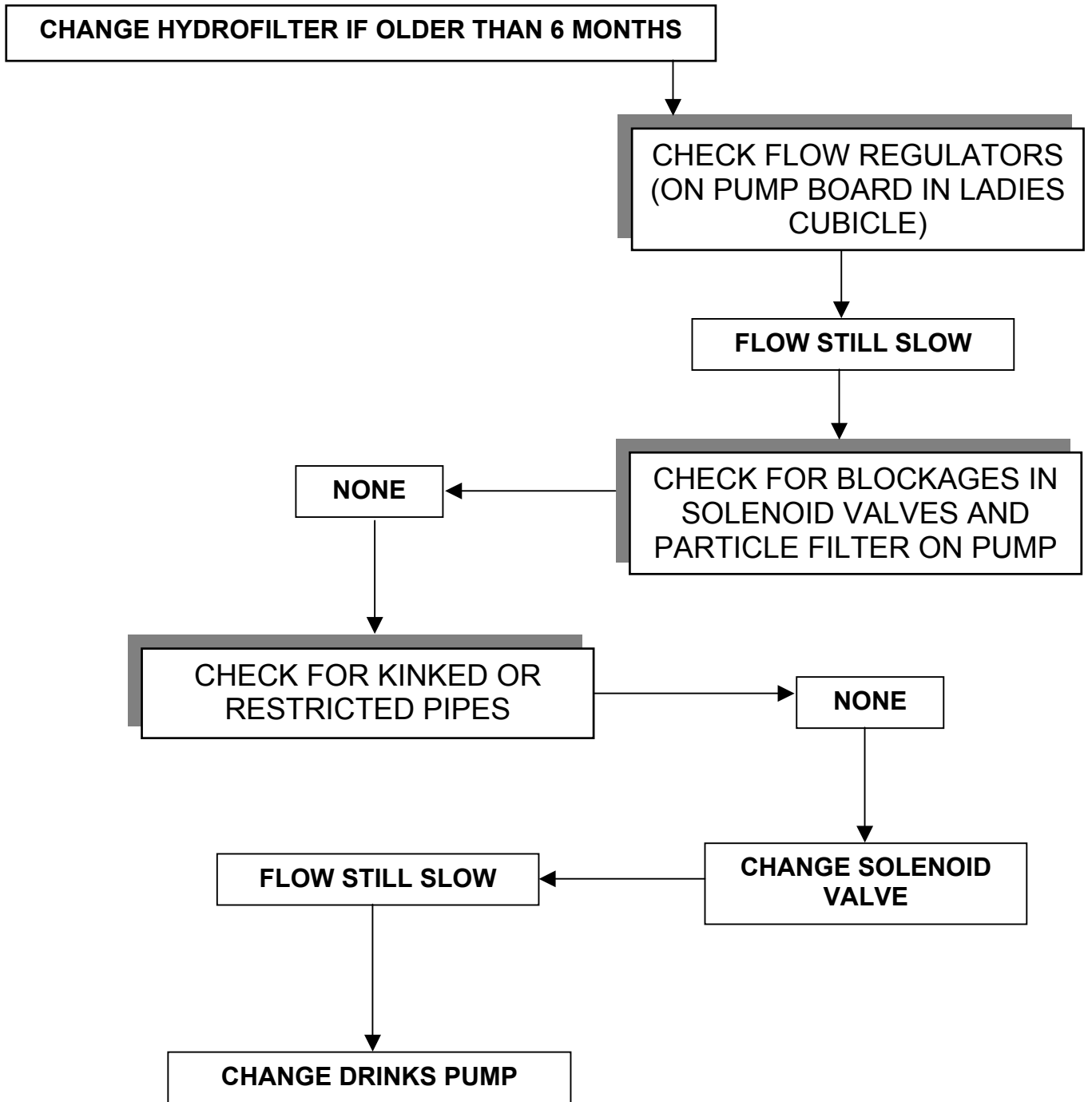
REPLACE SOLENOID VALVE

OK

**CHECK PLUMBING
FITTINGS ARE SECURE
& PIPE BETWEEN TANK
AND PUMP IS NOT BENT
OR DAMAGED**

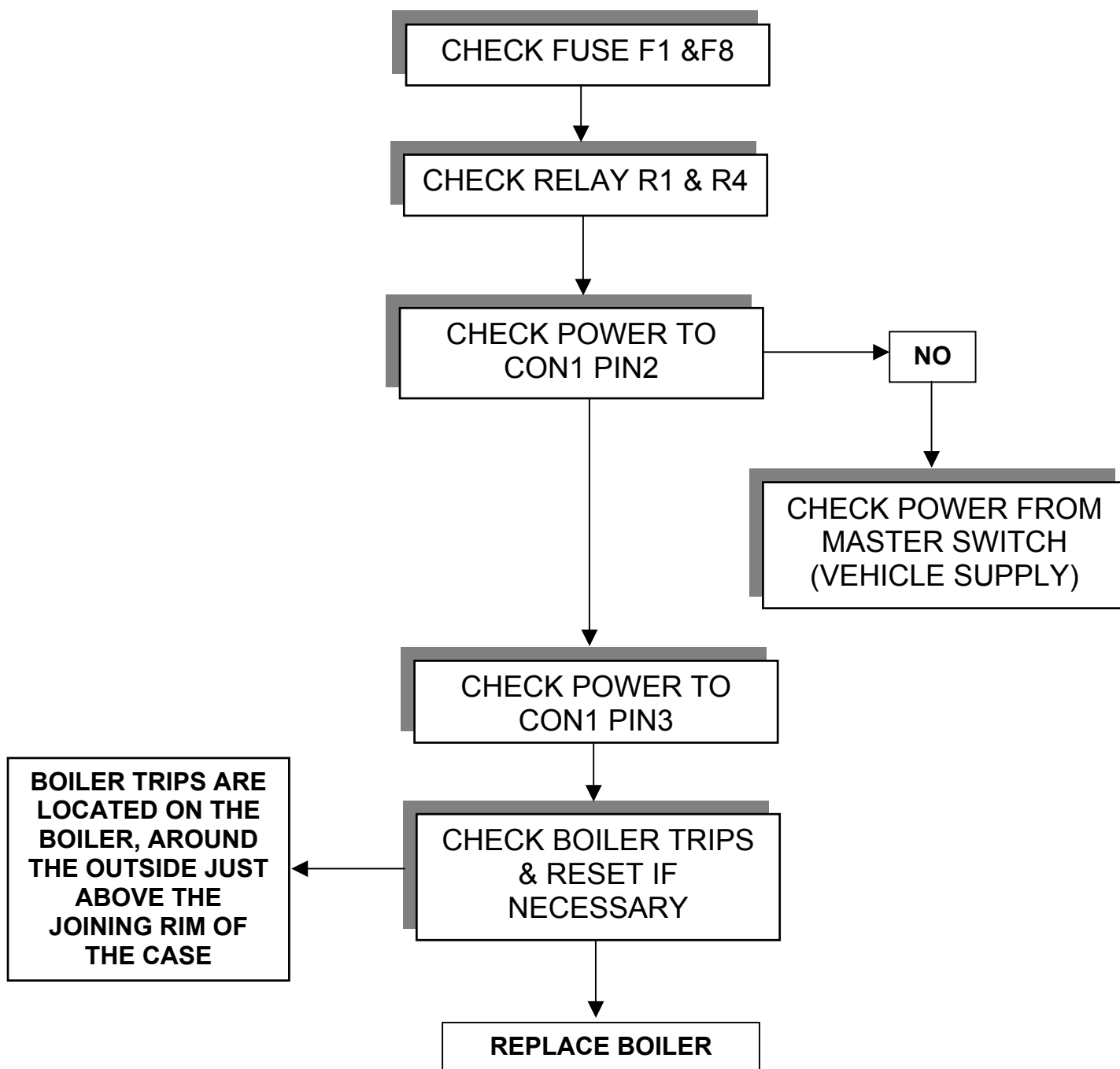
**CHECK FOR SMALL
WATER LEAKS IN
PLUMBING SYSTEM**

Water Flow from Kitchen Faucet Too Slow

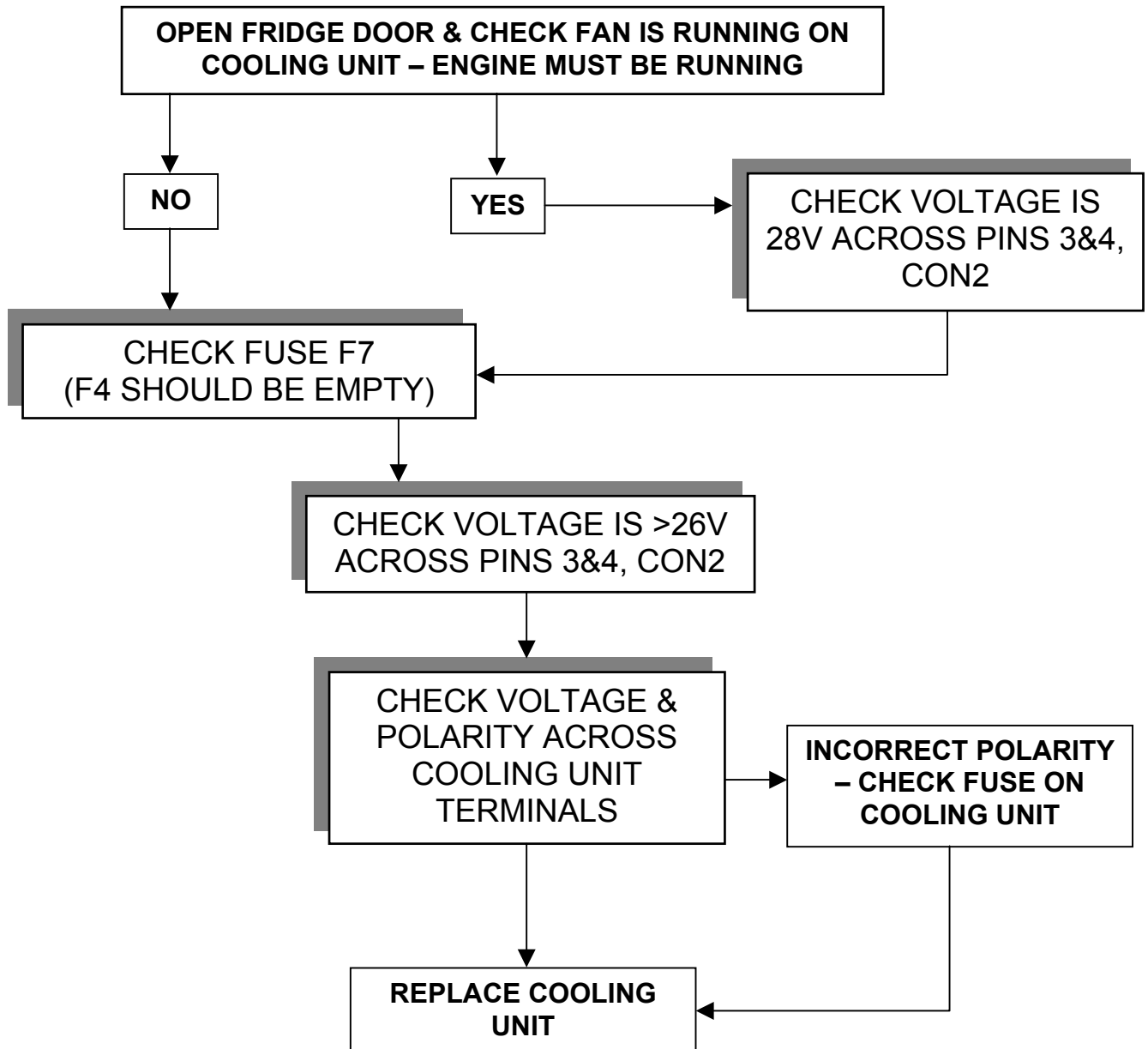


Cold Water Flows from Hot Drinks Faucet

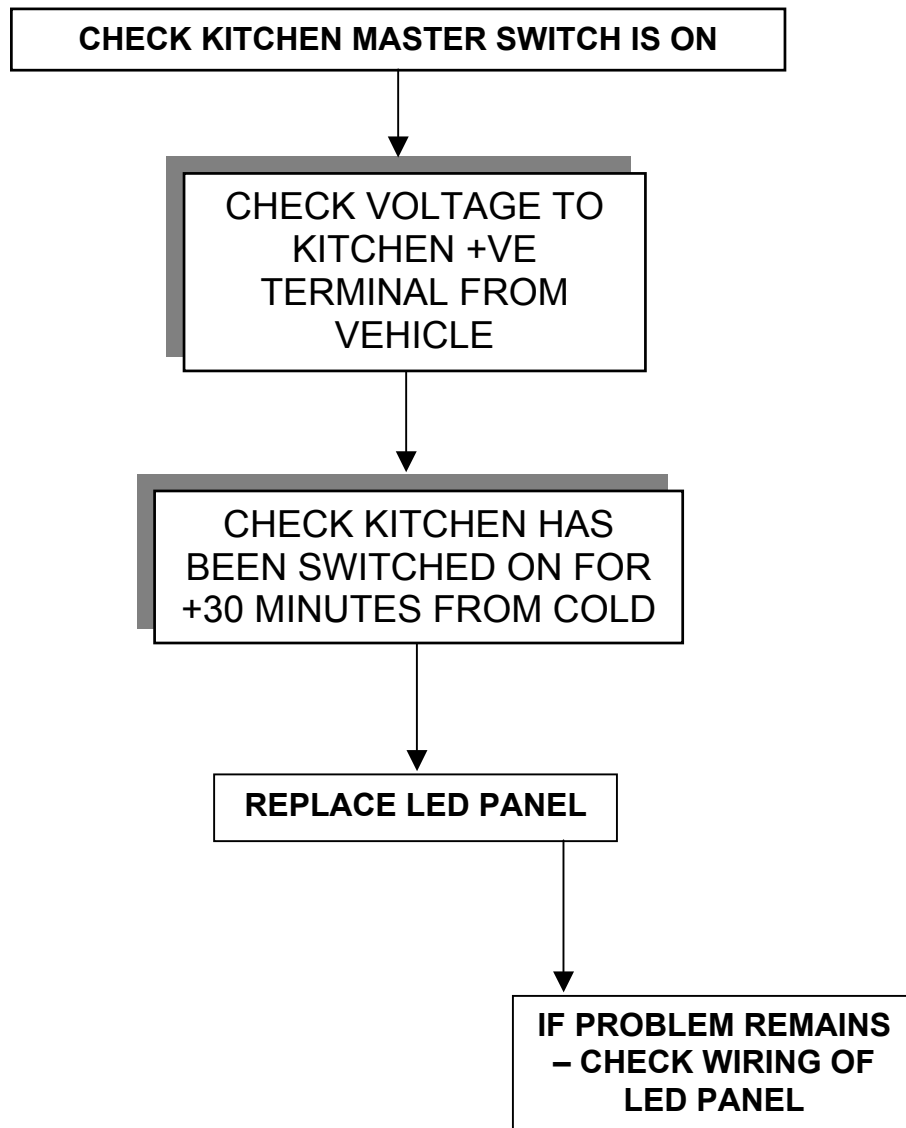
COLD WATER RUNS FROM HOT FAUCET – AFTER 20 MINUTES OF BEING SWITCHED ON



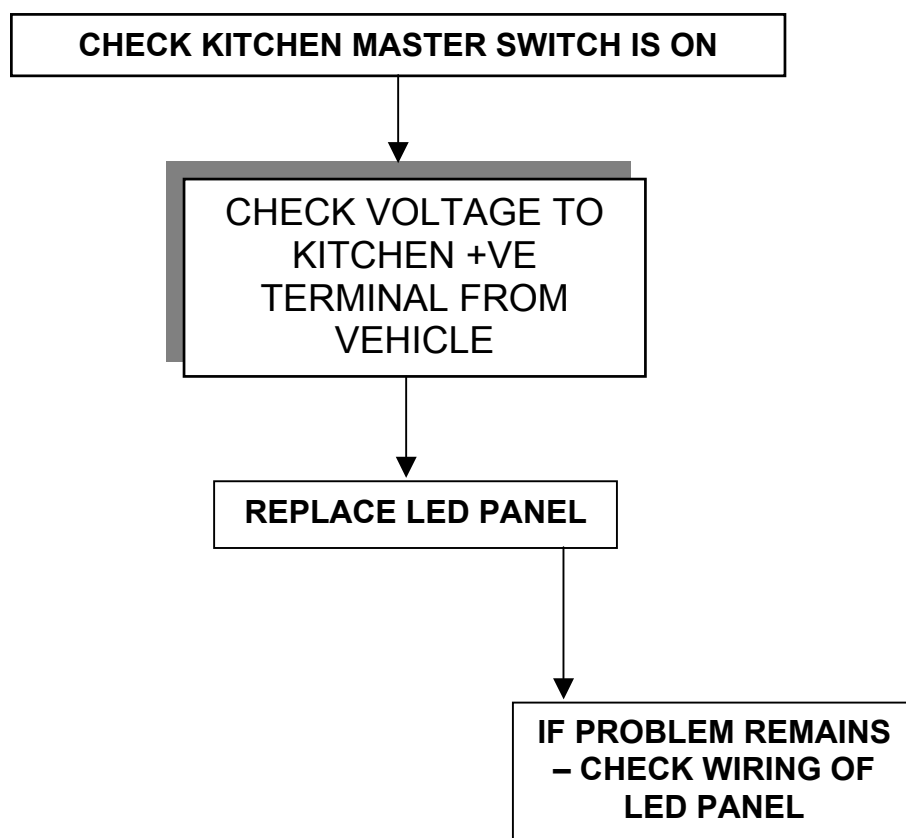
Cool Box Does Not Get Cold



Kitchen Hot Drinks LED Not Working



Kitchen 'Power' LED Not Working



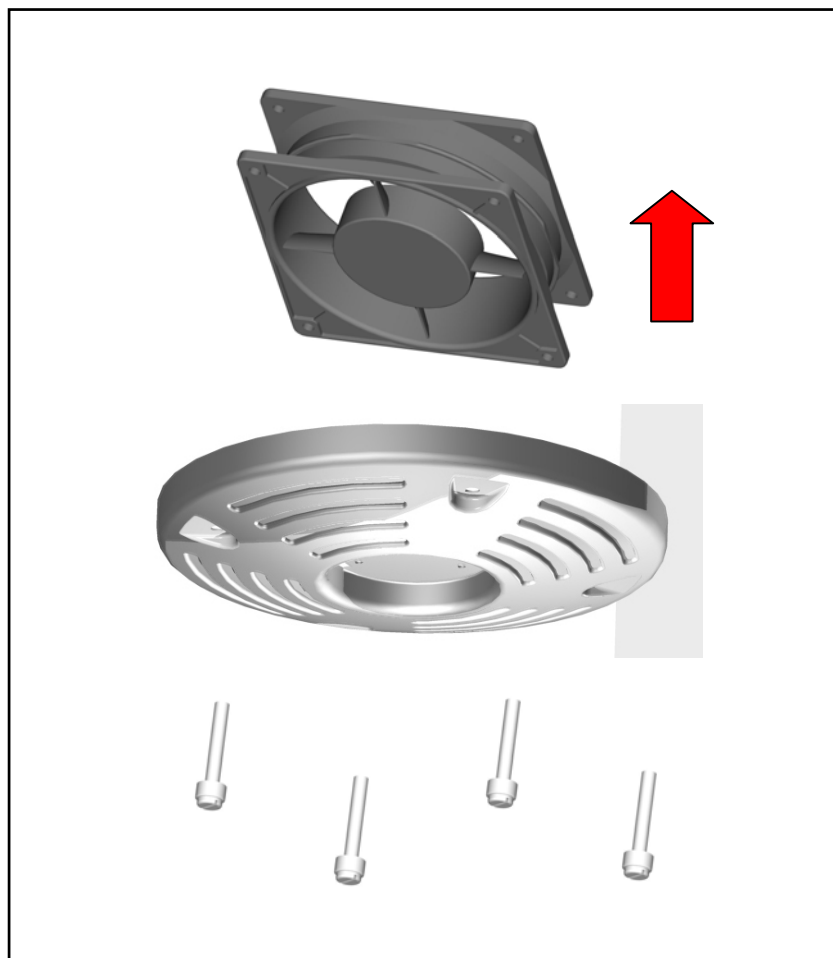
The following section details where to find key components and how to replace them.

Part = Extractor Fan

Location = Cubicle Top

Replacement

1. DISCONNECT THE POWER TO THE CUBICLE
2. REMOVE PLASTIC FAN COVER – 4x NYLON SCREWS
3. REMOVE 4x FAN FIXING BOLTS
4. DISCONNECT THE WIRING TERMINALS FROM THE FAN
5. FIT NEW FAN – CHECKING DIRECTION ARROW OF AIR FLOW. (ARROW MUST POINT UP)

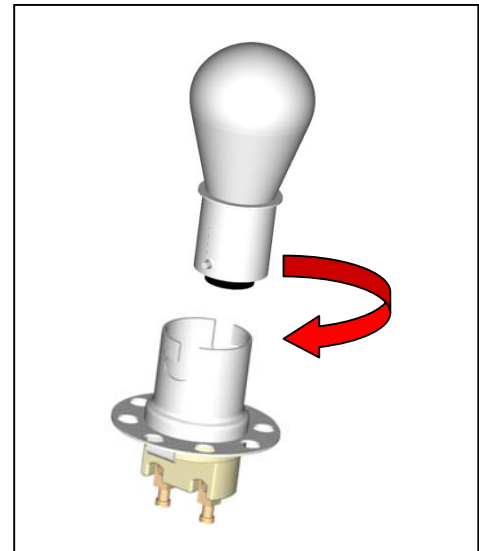


Part = Bulbs

Location = Cubicle Top

Replacement....

1. DISCONNECT THE POWER TO THE CUBICLE
2. REMOVE PLASTIC LIGHT COVER – 4x NYLON SCREWS
3. DISCONNECT PIR CONNECTOR
4. TWIST BULB TO RELEASE AND REPLACE

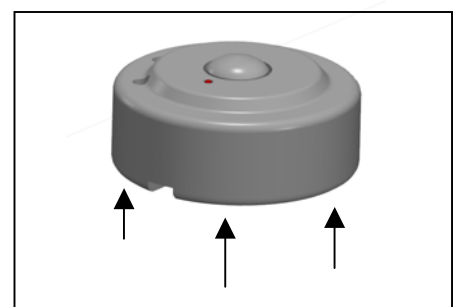


Part = PIR Sensor

Location = Cubicle Top

Replacement....

1. REMOVE PLASTIC LIGHT COVER – 4x NYLON SCREWS
2. DISCONNECT PIR CONNECTOR
3. REMOVE 3x SCREWS ON THE INSIDE OF THE LIGHT COVER TO RELEASE THE PIR SENSOR.
4. TO RE-FIT A NEW SENSOR, REMOVE THE 3x SCREWS FROM THE BACK AND FIT THE UNIT BACK IN THE RECESS.
5. TIGHTEN THE SCREWS FROM INSIDE THE LIGHT COVER MAKING SURE TO ALIGN THE CABLE FROM THE PIR THROUGH THE SQUARE HOLE.

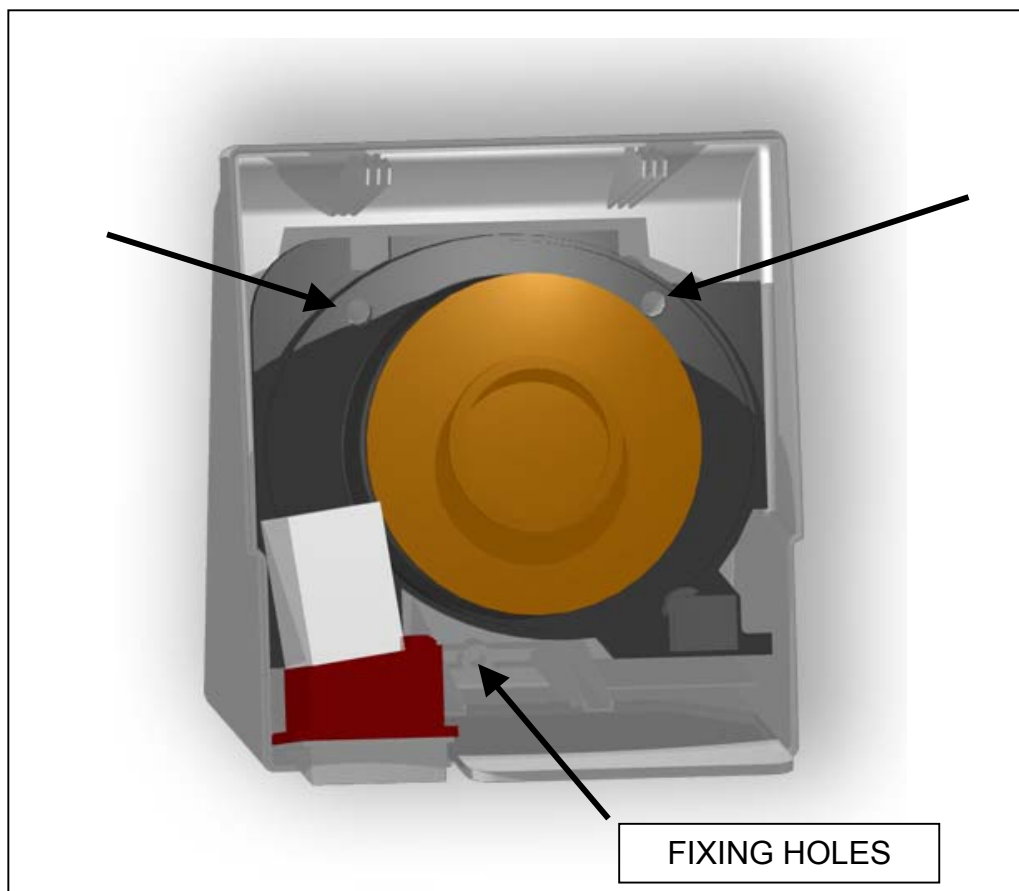


Part = Hand Drier

Location = Behind Upper Vanity Door

Replacement....

1. DISCONNECT THE POWER TO THE CUBICLE
2. UNLOCK AND OPEN THE UPPER VANITY DOOR
3. REMOVE 2x SCREWS ON THE UNDERSIDE OF THE HAND DRIER
4. REMOVE THE FRONT COVER OF THE HAND DRIER
5. REMOVE 2x RUBBER HOLE COVERS
6. REMOVE 3x SCREWS RELEASING THE UNIT FROM THE WALL
7. DISCONNECT THE 2 CABLES PASSING THROUGH THE OUTER WALL OF THE CUBICLE MAKING SURE THEY DO NOT FALL DOWN THE BACK
8. RE-CONNECT A NEW UNIT AND SCREW TO THE WALL
9. MAKE SURE THE RUBBER HOLE COVERS ARE RE-FITTED AND FIT THE COVER SECURING WITH BOTH SCREWS

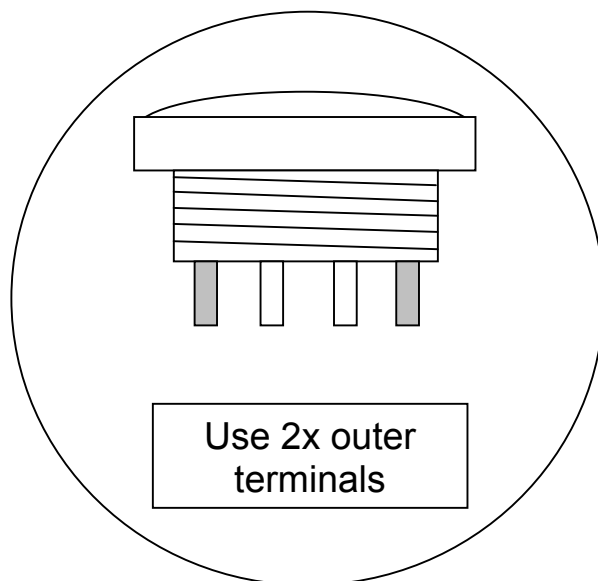


Part = Hand Wash & Flush Buttons

Location = Sink Vanity

Replacement....

1. DISCONNECT THE POWER TO THE CUBICLE
2. UNLOCK LOWER VANITY DOOR
3. REMOVE TERMINALS FROM THE BACK OF THE BUTTON
4. UNSCREW THE COLLAR ON THE UNDERSIDE OF THE BUTTON
5. BUTTON SHOULD RELEASE FROM THE TOP
6. RE-FIT NEW BUTTON AND CONNECT THE TERMINALS

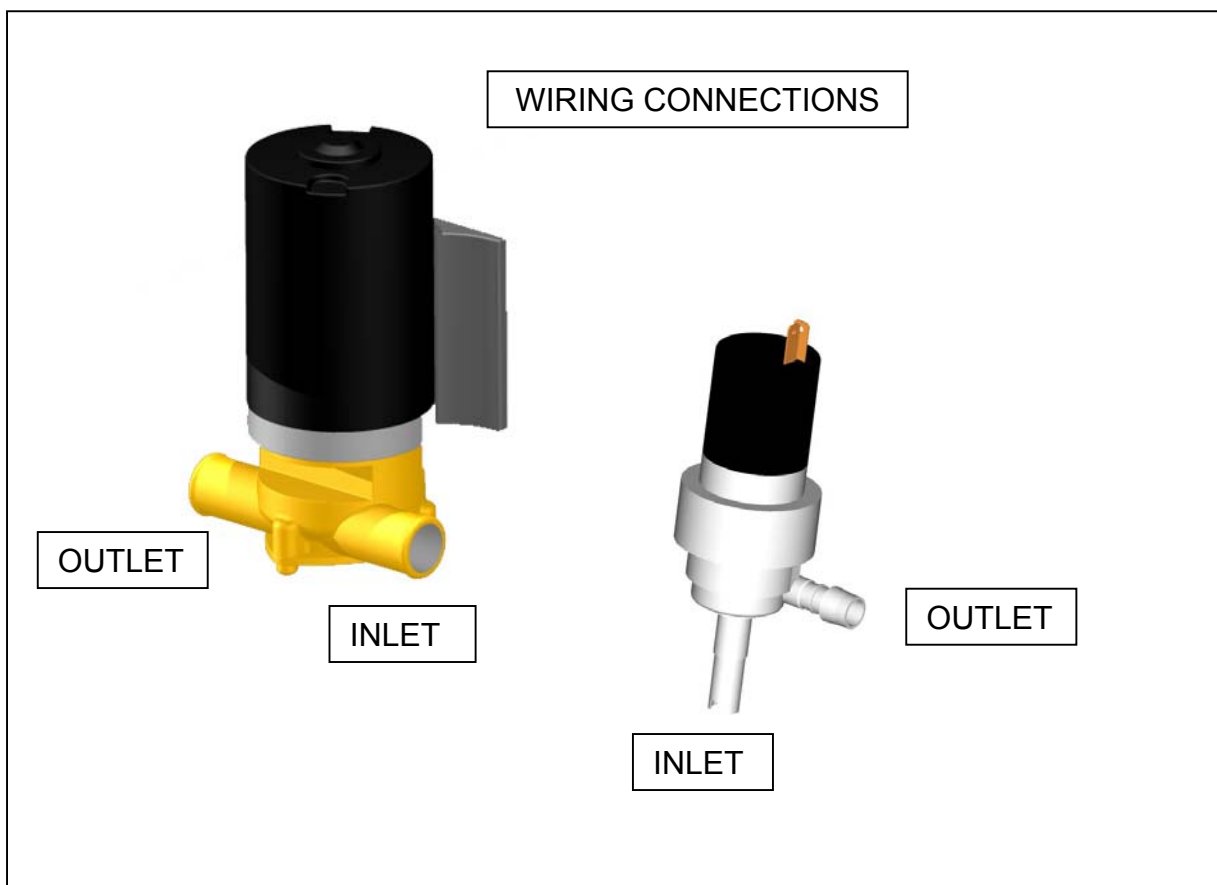


Part = Hand Wash & Flush Pump

Location = Sink Vanity

Replacement....

1. DISCONNECT THE POWER TO THE CUBICLE
2. UNLOCK LOWER VANITY DOOR
3. DRAIN FRESHWATER TANK
4. DISCONNECT THE WIRES TO THE PUMP
5. REMOVE FROM SECURING CLIP
6. RELEASE INLET AND OUTLET PIPES
7. RE-FIT NEW PUMP MAKING SURE THAT BOTH INLET AND OUTLETS ARE WATER TIGHT AND THE FLOW ARROW IS POINTING IN THE CORRECT DIRECTION
8. RE-CONNECT THE POWER
9. CLOSE THE DRAIN ON THE SUPPLY TANK
10. RE-FILL TANK WITH FRESHWATER
11. SWITCH ON POWER TO CUBICLE
12. PRIME PUMP WITH 2-3 BUTTON PUSHES



Part = Toilet Slide Valve

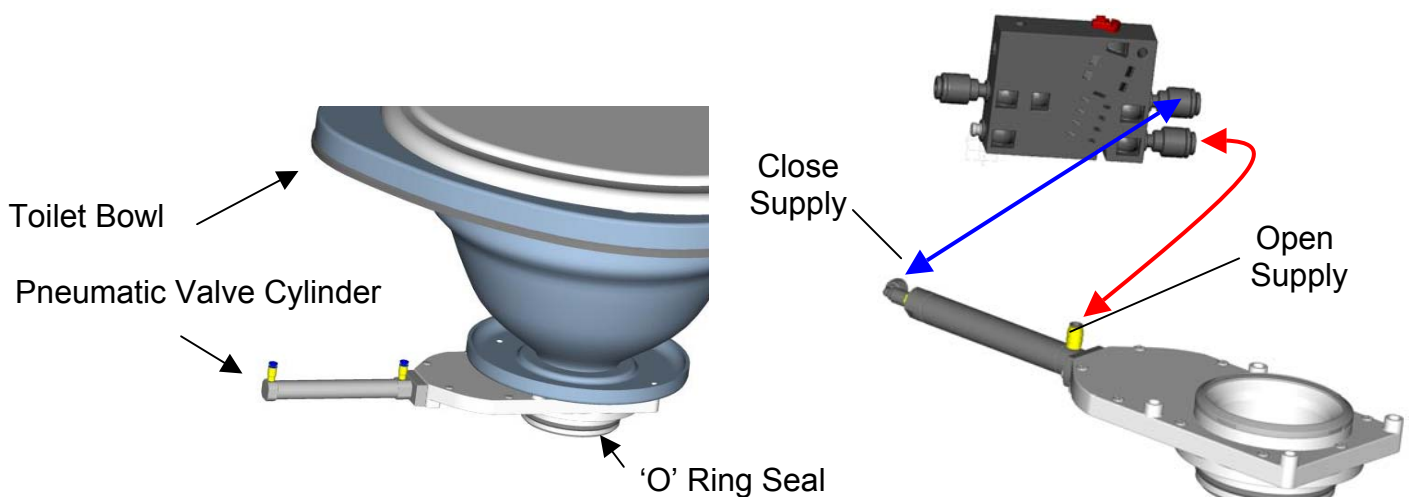
Location = Toilet Bowl

Removal....

1. DISCONNECT THE POWER TO THE CUBICLE
2. REMOVE 4x FIXING SCREWS FROM AROUND THE TOP OF THE BOWL
3. PULL & TWIST THE BOWL TO RELEASE THE SEAL FROM THE SOIL TANK
4. ONCE RELEASED, REMOVE THE SUPPLY HOSE TO THE FLUSH NOZZLE
5. LIFT BOWL OUT & REMOVE THE 2x AIR SUPPLY HOSES TO THE AIR CYLINDER
6. REMOVE 4x FIXING BOLTS SECURING THE SLIDE VALVE TO THE TOILET BOWL

Replcement....

1. POSITION THE VALVE ASSEMBLY ON THE BOTTOM OF THE BOWL AND SECURE WITH THE 4x BOLTS. TIGHTEN BOLTS TO 6KGF.CM USING A TORQUE WRENCH.
2. SMEAR GREASE OR SIMILAR AROUND THE BLACK O-RING ON THE PNEUMATIC VALVE & PASS BOWL THROUGH APERTURE ON THE COWLING PUSH FIRMLY INTO THE SOIL TANK. ENSURE THAT THE RUBBER FIN GASGET IS NOT IN THE ENTRANCE TO THE TANK AND ON THE BOTTOM OF THE VALVE.
3. RECONNECT THE AIR PIPES TO THE CYLINDER AND THE INLET PIPE TO THE FLUSH NOZZEL
4. PUSH THE BOWL FIRMLY INTO THE SOIL TANK.
5. START THE VEHICLE ENGINE & SWITCH ON THE WC MASTER SWITCH. WAIT UNTIL THE VEHICLE AIR PRESSURE IS AT MAXIMUM BEFORE ATTEMPTING TO FLUSH THE TOILET.

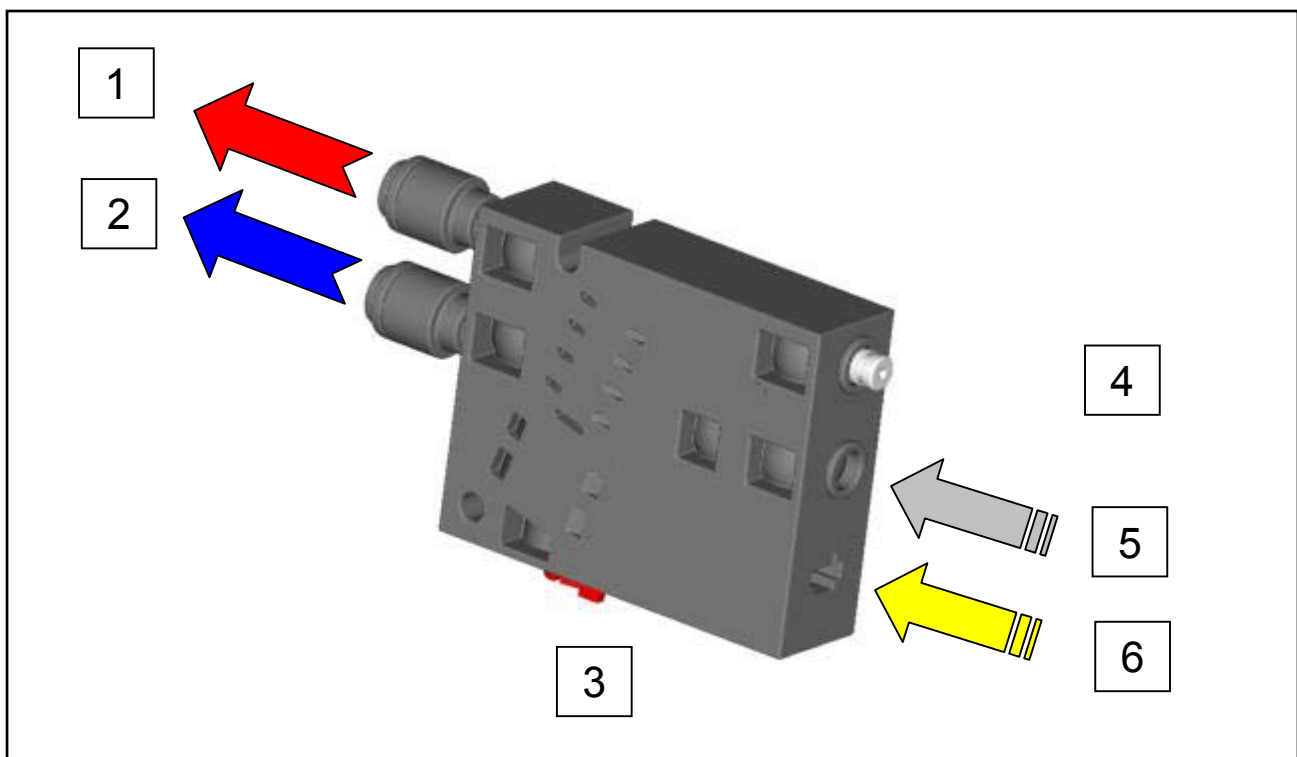


Part = Toilet Valve Control Box

Location = Fixed to the Air Cylinder or Mounted Next to the PCB

Replacement....

1. DISCONNECT THE POWER TO THE CUBICLE
2. UNCLIP THE BLACK CONTROL VALVE FROM ITS LOCATION
3. REMOVE THE ELECTRICAL CONNECTOR FROM THE VALVE
4. REMOVE THE 3x PIPES FROM THE VALVE
5. RECONNECT NEW VALVE MAKING SURE THAT THE PIPES ARE IN THE CORRECT LOCATION



1. AIR SUPPLY OUT – TO FRONT OF CYLINDER TO OPEN SLIDE VALVE
2. AIR SUPPLY OUT – TO END OF CYLINDER TO CLOSE SLIDE VALVE
3. OVERRIDE SWITCH – SWAPS PORTS 1 & 2 OVER
4. EXHAUST – MUST BE KEPT CLEAR
5. AIR SUPPLY FROM VEHICLE – 10BAR MAX
6. ELECTRICAL CONNECTOR – INCORRECT POLARITY WILL DAMAGE VALVE

Part = Drinks Boiler

Location = Behind the Cup Dispenser on the Kitchen

Replacement....

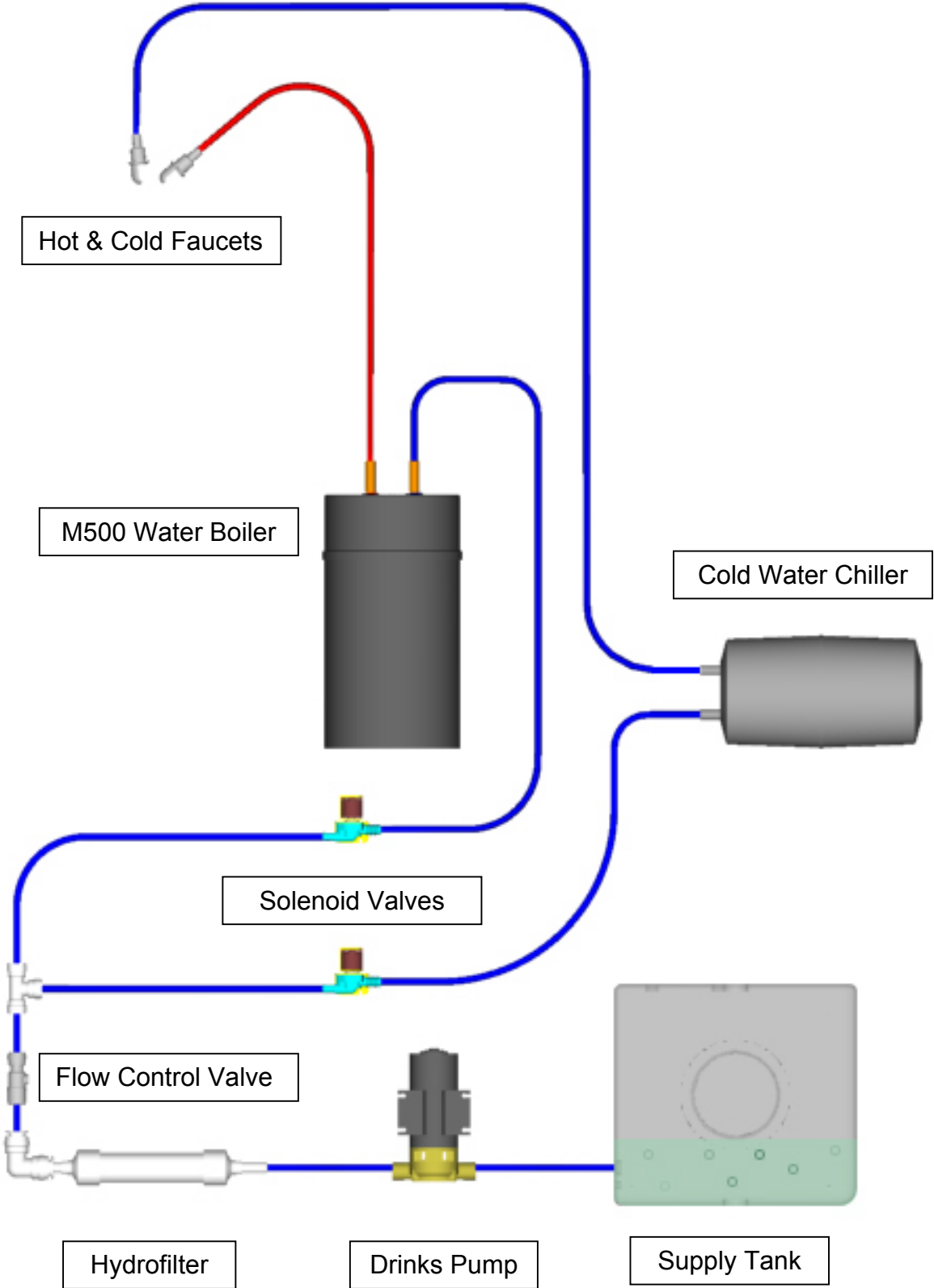
1. DISCONNECT POWER TO THE KITCHEN
2. LEAVE FOR 20 MINUTES TO COOL DOWN IF THE BOILER HAS BEEN WORKING
3. REMOVE THE 6x SCREWS HOLDING THE CUP DISPENSER SHIELD IN PLACE AND LOCATE IN A SAFE PLACE SO IT DOES NOT DAMAGE/SCRATCH THE FIRBEGGLASS PARTS
4. DISCONNECT THE CABLES FROM THE BOILER
5. DISCONNECT THE INLET AND OUTLET PIPES TO THE BOILER
6. REMOVE 2x BOLTS, TOP AND BOTTOM OF BOILER BRACKET
7. REFIT A NEW BOILER UNIT AND SECURE TO THE BRACKET WITH 2x BOLTS
8. RECONNECT THE INLET AND OUTLET PIPES AND THE CABLES
9. REMOVE THE FRONT ACCESS PANEL ON THE LH TOILET AND REMOVE **FUSE 8** FROM THE KITCHEN PCB
10. TURN KITCHEN MASTER SWITCH ON
11. PRESS AND HOLD THE HOT WATER BUTTON TO REFILL THE BOILER WITH FRESH WATER
12. ONCE THE BOILER IS FULL WATER WILL FLOW FROM HOT FAUCET
13. CHECK FOR PLUMBING LEAKS WITH THE CUP DISPENSER STILL REMOVED
14. FIT **FUSE 8** AND ALLOW 20-30 MINUTES FOR THE NEW BOILER TO GET HOT
15. ALIGN AND SECURE THE CUP DISPENSER WITH THE 6x SCREWS MAKING SURE THAT THE SHIELD SEALS AGAINST THE O-RING AROUND THE SINK Moulding
16. THE HOT FAUCET WILL DRIP WHEN THE WATER IS AT THE CORRECT TEMPERATURE

CUP DISPENSER

THE REMOVAL OF FUSE 8 IS NECESSARY TO STOP THE BOILER FROM OVERHEATING WHEN IT IS EMPTY – OVERHEATING WILL CAUSE THE TRIPS TO FAIL BUT THESE CAN BE RESET



Kitchen Plumbing Schematic

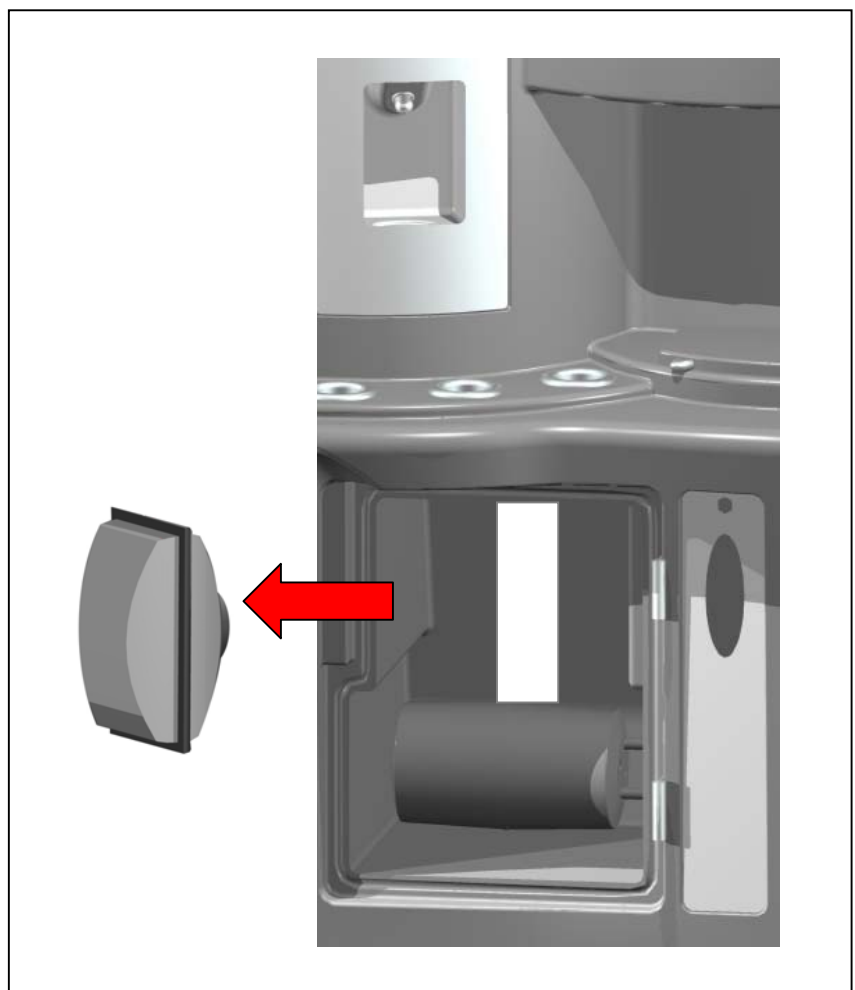


Part = Fridge Cooling Unit

Location = Inside Fridge on Kitchen

Replacement....

1. DISCONNECT THE POWER TO THE KITCHEN
2. REMOVE THE FRIDGE SHELF
3. REMOVE 5x FIXING SCREWS FROM THE RIM OF THE COOLING UNIT. THE BOTTOM SCREW SHOULD BE LEFT OUT TO ALLOW REMOVAL OF THE FRIDGE WITHOUT DISCONNECTING THE WATER CHILLER
4. REMOVE THE COOLING UNIT THROUGH THE FRIDGE DOOR AND DISCONNECT THE SUPPLY CABLES
5. REFIT THE NEW UNIT CONNECTING THE CABLES AND LEAVING THE BOTTOM SCREW OUT
6. TURN THE ENGINE ON
7. TURN THE KITCHEN MASTER SWITCH ON
8. CHECK THAT THE FAN ON THE COOLING UNIT IS WORKING



Part = LED Display Panel

Location = Front of Kitchen Above Litter Bin

Replacement....

1. DISCONNECT THE POWER TO THE KITCHEN
2. CAREFULLY UNCLIP THE LED PANEL FROM THE FRONT
3. UNCLIP THE CABLE CONNECTOR TAKING NOTE OF THE COLOUR POSITIONS
4. RECONNECT THE NEW PANEL AND PUSH FIRMLY BACK INTO THE HOLE

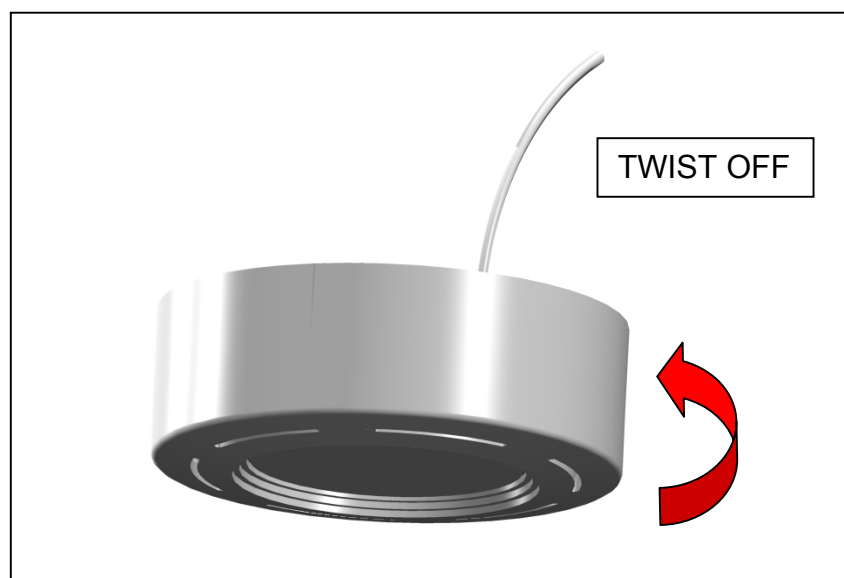


Part = Kitchen Lamp Bulb

Location = Underneath the Storage Cupboard on the Kitchen

Replacement....

1. DISCONNECT THE POWER TO THE KITCHEN
2. UNSCREW THE FRONT RIM OF THE LIGHT FITTING
3. PULL THE BULB FROM ITS HOLDER
4. REFIT A NEW BULB AND SCREW THE FRONT LENSE OF THE LIGHT BACK ON
5. TURN KITCHEN MASTER SWITCH BACK ON

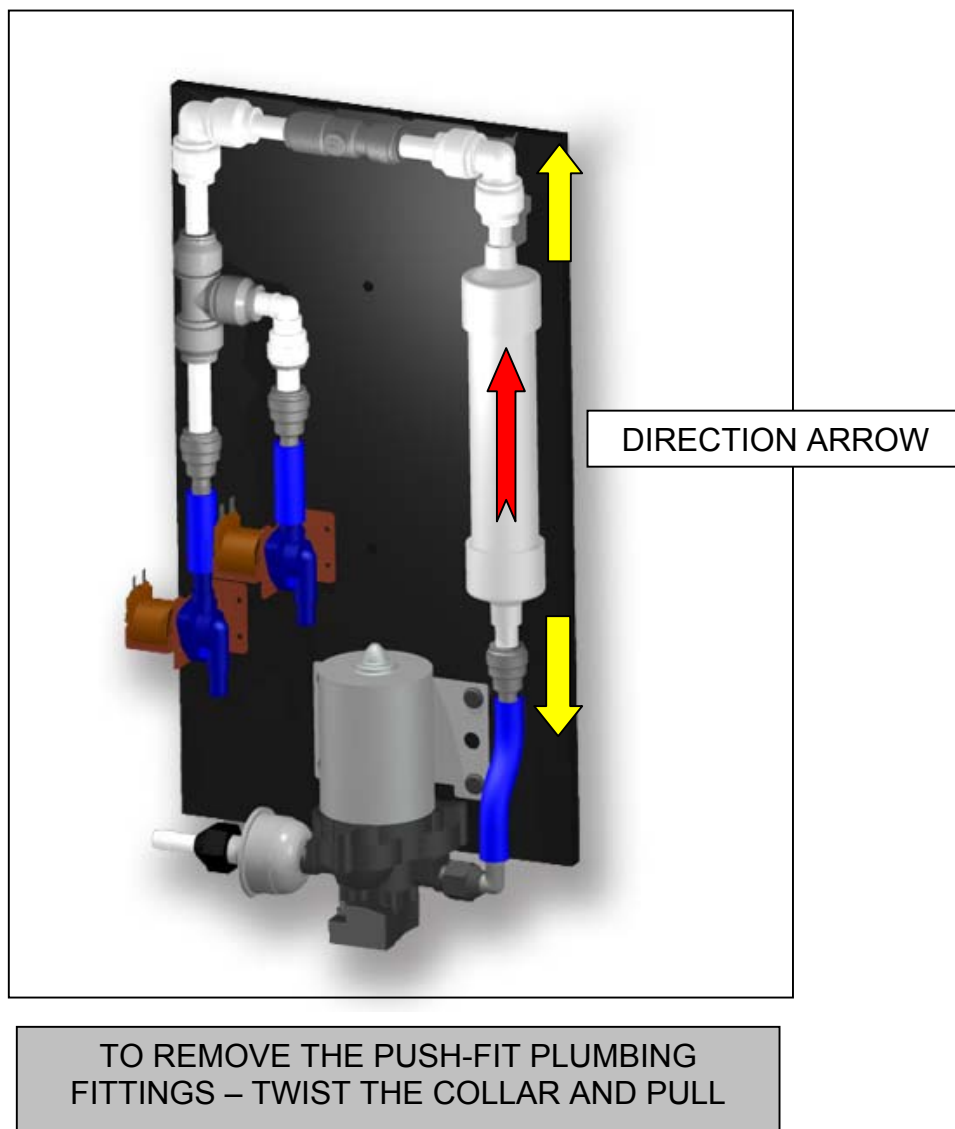


Part = Drinks Filter (Hydrofilter)

Location = Sink Vanity in LH Ladies Cubicle

Replacement....

1. THE HYDROFILTER HAS A SIX MONTH LIFE STARTING FROM ITS FIRST CONTACT WITH WATER
2. UNLOCK THE LOWER SINK VANITY DOOR
3. RELEASE THE 2 PUSH-FIT FITTINGS ON THE ENDS OF THE HYDROFILTER, UNCLIP AND REMOVE
4. REMOVE THE PLASTIC CAPS ON THE END OF THE NEW FILTER AND RINSE THROUGH WITH CLEAN WATER FOR 2 MINUTES
5. REFIT THE NEW FILTER MAKING SURE THAT THE DIRECTION ARROW IS POINTING UP
6. CHECK FOR LEAKS IN THE SYSTEM BEFORE CLOSING THE VANITY DOOR

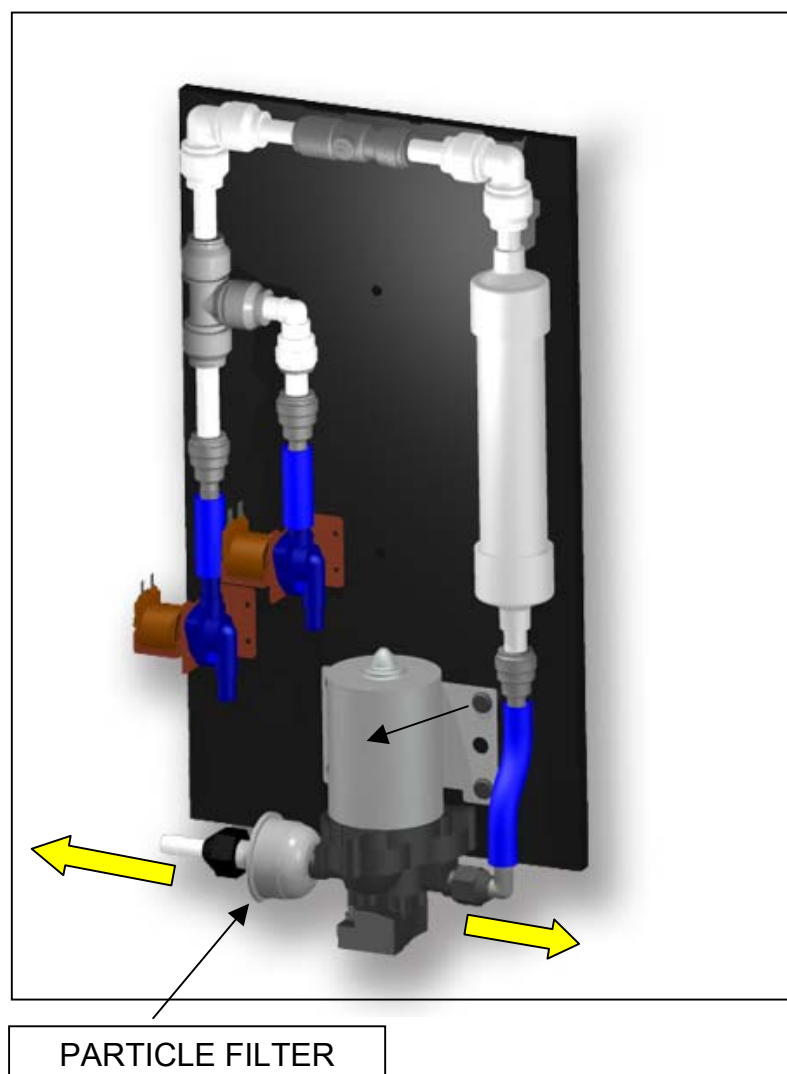


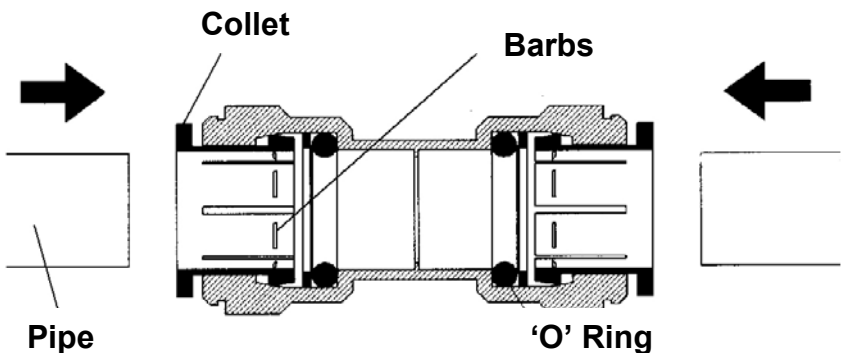
Part = Drinks Pump

Location = Sink Vanity in LH Ladies Cubicle

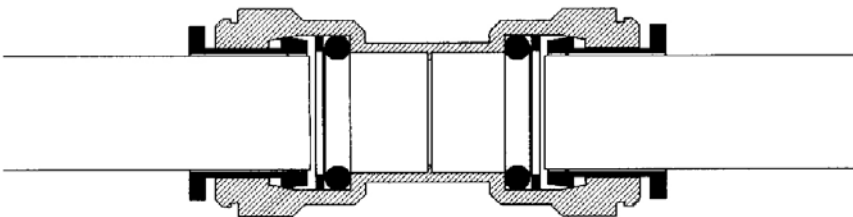
Replacement....

1. DISCONNECT THE POWER TO THE KITCHEN
2. UNLOCK THE LOWER SINK VANITY DOOR
3. UNSCREW 2x HOSE CONNECTORS ON EITHER END OF THE PUMP
4. UNSCREW THE 4x FIXING SCREWS HOLDING THE PUMP TO THE BOARD
5. DISCONNECT THE ELECTRICAL CONNECTION
6. UNSCREW THE PARTICLE FILTER FROM THE PUMP INLET AND RE-ATTACH TO THE NEW PUMP – CHECK ITS CLEAN
7. SCREW THE NEW PUMP TO THE BOARD AND RE-CONNECT THE ELECTRICAL CONNECTIONS
8. SCREW THE HOSE CONNECTIONS TO THE PUMP
9. TURN KITCHEN MASTER SWITCH ON AND PRESS THE HOT OR COLD BUTTON TO PRIME THE PUMP

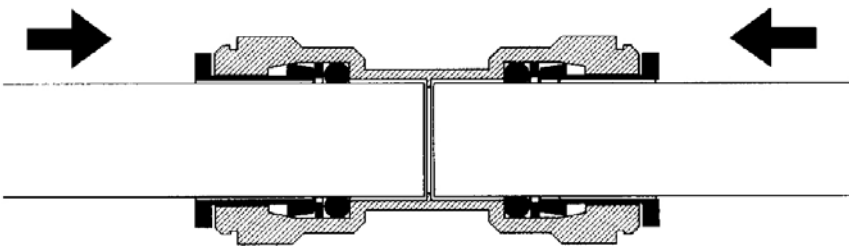




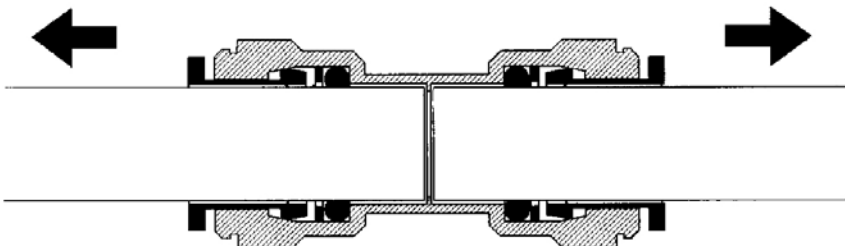
PREPARTION
Cut the pipe square, ensuring it is free of score marks, burrs and sharp edges



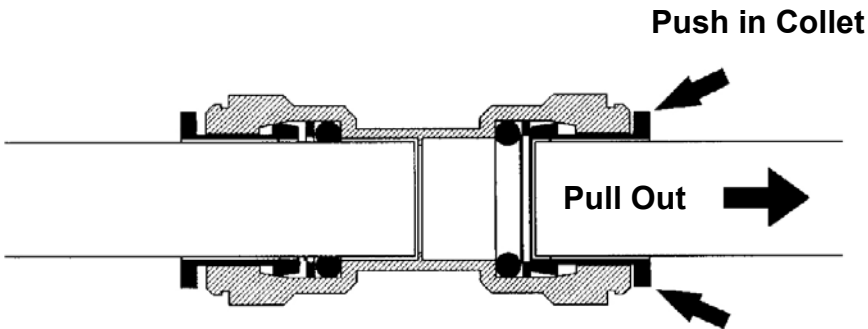
INCOMPLETE CONNECTION
The pipe is gripped by the fitting but not sealed. The pipe must push 30mm into the fitting to seal



COMPLETE CONNECTION
Push the pipe into fitting to the internal stop. The Collet has stainless steel teeth which grip the pipe whilst the 'O' ring provides a permanent leak-proof seal



CHECK CONNECTION
Pull on the pipe to check it is secure. It is a good practice to test the system this way before use



DISCONNECTING A FITTING
Push in collet squarely against face of fitting. With the collet held in position, the pipe can be removed

DO NOT INSERT FINGERS INTO THE FITTING AS THE STAINLESS STEEL TEETH MAY CAUSE INJURY