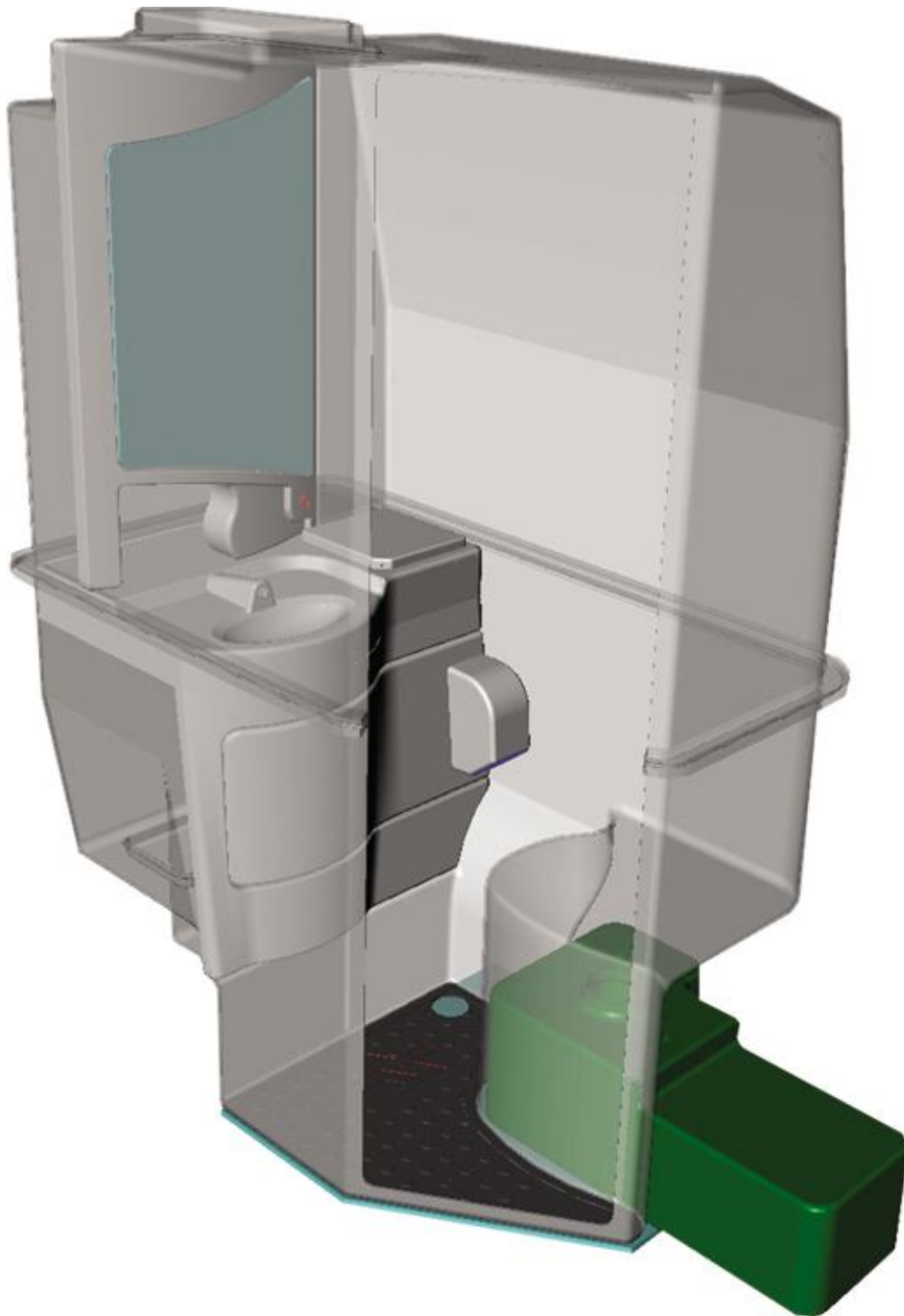


Shades Technics

1906 Toilet Cubicle



Manual

CUBICLE OPERATING INSTRUCTIONS

CLEANING & HYGENE

CUBICLE MAINTENANCE

WARRANTY CLAIMS

SPARE PARTS CATALOGUE

- Door
- Sink
- Vanity
- Vanity Door
- Bin Lid
- Upper Vanity
- Upper Vanity Door
- Fan
- Toilet Bowl
- Flush Tank
- Soil Tank
- Handwash Tank
- Front Fascia
- Cubicle Base
- Cubicle Top
- External
- General Spares
- Legends

ELECTRICAL DIAGRAMS

- PCB Layout
- Cubicle Circuit Diagram

FAULT FINDING CHARTS

PARTS REPLACEMENT INSTRUCTIONS


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. NOTE: The toilet will flush automatically if the cubicle is vacated without flushing first.

(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. Both have the option of manual fill:- The handwash 40mm fill pipe is accessed by removing the litter bin and the flush tank, fitted with a 100mm screw cap, can be accessed through the floor trap.

The holding tank is emptied by firmly pulling the handle on the slide valve fitted underneath the tank.

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 sink area. Removing this bin gives access to the 40mm fill pipe and drain tap for the hand wash tank. 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 such as *Bay West* or *Mini Tork* is used at all times, **(320 sheet roll Cat no: 800103)**.

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 “RC” (Cat No: 800022)** or **“ECO” (catalogue No: 800026)**, the formaldehyde-free formula of both types is contained within a water soluble membrane. A single 8 gram sachet contains the recommended dosage for 55 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)
To flush out:
 1. Switch on the cubicle.
 2. Connect a hosepipe to a mains water supply.
 3. Depress the flush button once to open the slide valve.
 4. When the valve opens, insert the end of the hose pipe down through the bowl, into the soil pipe. When the valve closes the hose will be held into position by the paddle pressure.
 5. Turn on the water to the hose pipe and fill the holding tank, being careful not to overfill.
 6. Switch off the water to the hose and open the evacuation valve to empty the tank.
 7. Press the flush button to open the valve and remove the hosepipe.
- 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. In the unlikely event of a fault occurring an emergency parts kit has been supplied along with the enclosed comprehensive fault analysis flow chart
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.

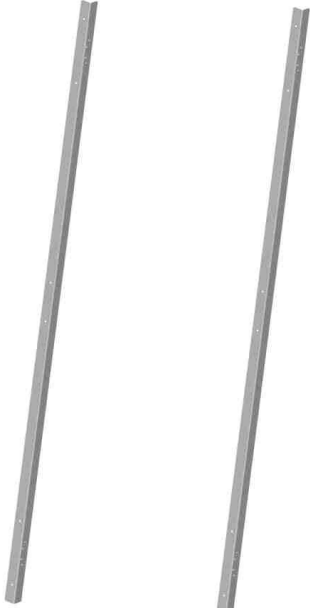
Complete the warranty claim form, ensuring all details are filled in and fax back to Shades Technics on +44 (0)1992 501669

Shades Technics will dispatch any parts required or organise rectification via one of the service points listed at the back of this parts & service manual

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

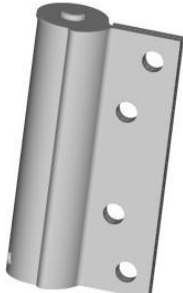


Door Lock
Cat No: 661206

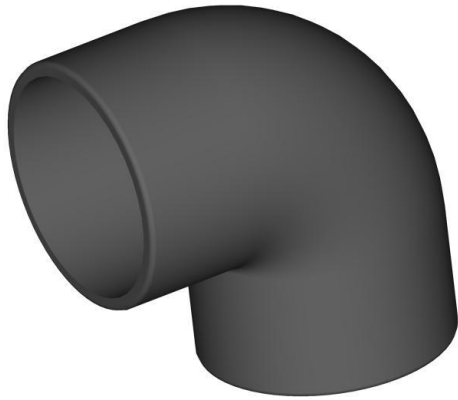


Fascia Support
Cat No: TBA

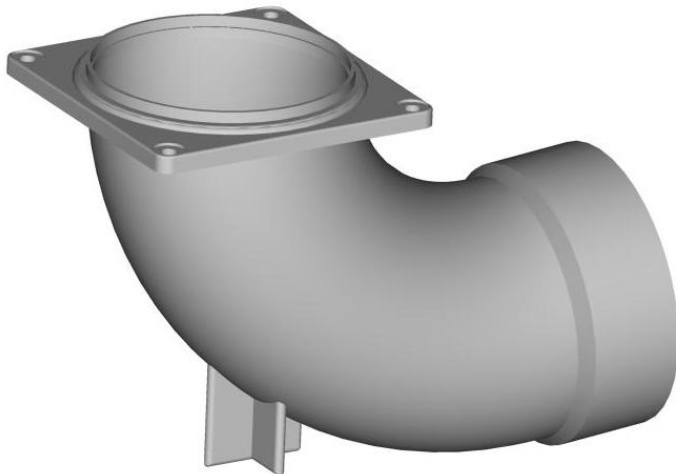
Door Support Angle
Cat No: TBA



Self-Closing Toilet Door Hinges
Cat No: 661400



Soil Elbow
Cat No: 735699



Soil Elbow
Cat No: 735706



Lamp Cover
Cat No: 712111



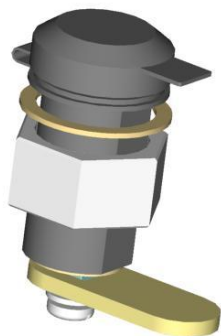
Faucet
Cat No: 663603



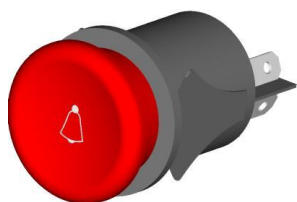
Floor/Sink Drain
Cat No: 701550



Flush/Hand wash Button
Cat No: 714007



Hoppich Lock
Cat No: 661217



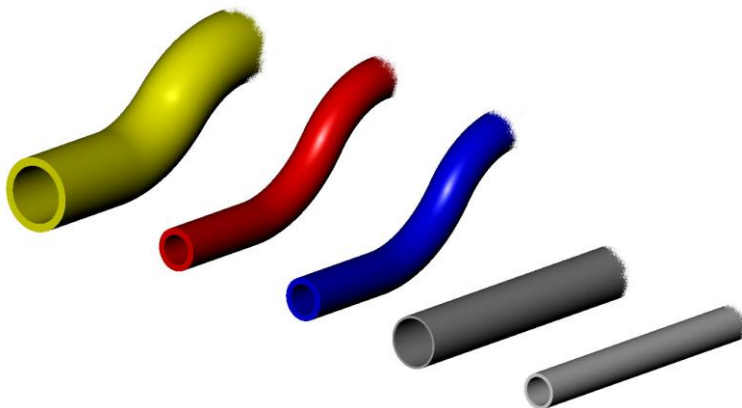
Alarm Button
Cat No: 714030



Vertical Float Switch
Cat No: 714500



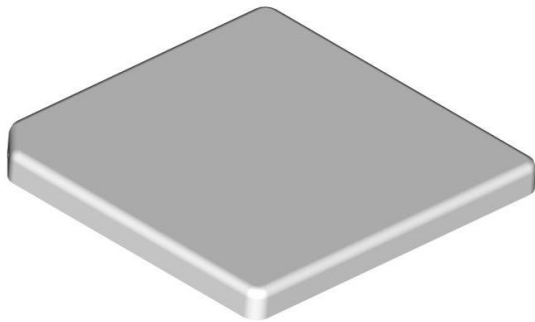
Horizontal Float Switch
Cat No: 714510



744060 - 3/4" Overflow Hose
744040 - 1/2" Red Hose
744030 - 1/2" Blue Hose
745003 - 21.5mm Grey Pipe
747052 - 15mm White Pipe



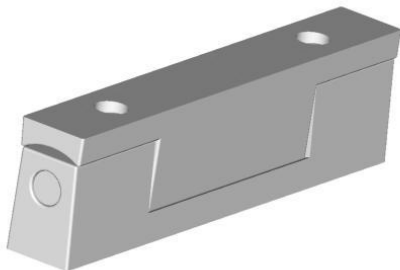
Litter Bin Knob
Cat No: 661214



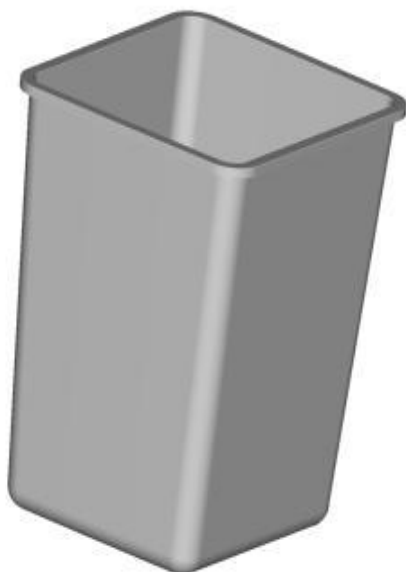
Litter Bin Lid
Cat No: TBA



Clear Buffer
Cat No: 713515

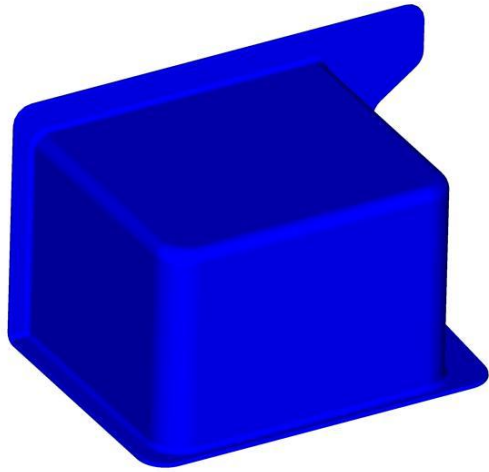


Edgemount Hinge
Cat No: 661410

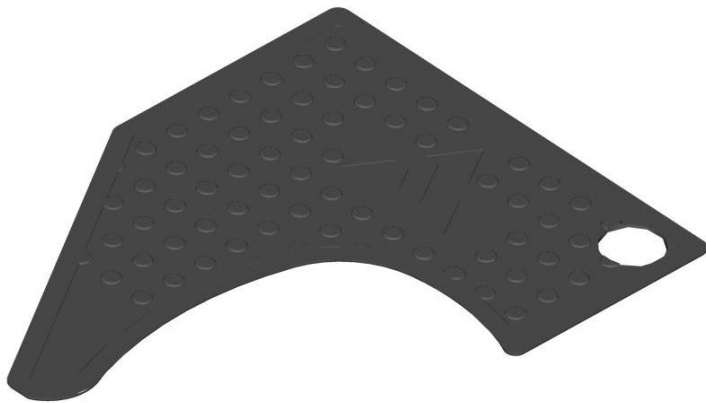


Litter Bin
Cat No: 661040

Cubicle Upper Vanity Spares



Soil Tank Cover
Cat No: TBA



Floor mat
Cat No: 661478

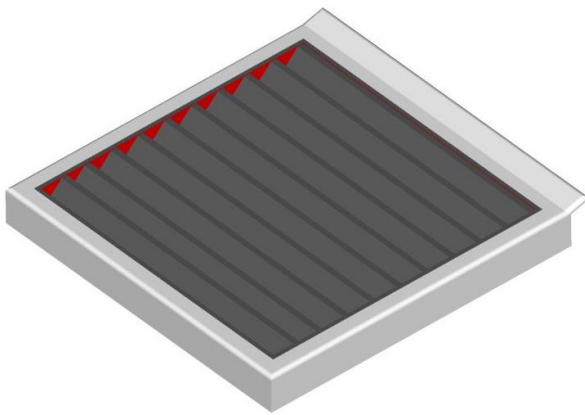


Smoke Alarm
Cat No: 661120

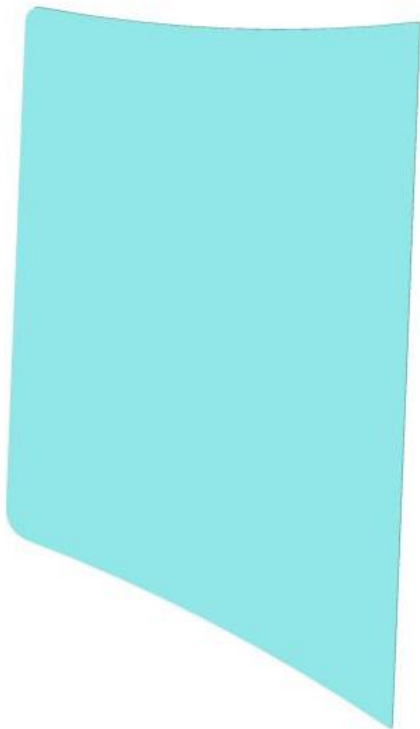
Cubicle Upper Vanity Spares



Bayonet Bulb
Cat No: 712028



Fan cover
Cat No: 727225



Mirror
Cat No: 661813

Cubicle Toilet Seat Spares



S/Steel Bowl (no seat)
Cat No: 731250

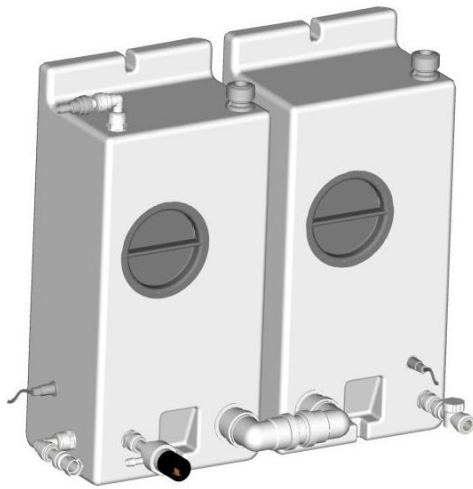


Swivel Straight 1/2" BSP – 1/2" Barbed end
Cat No: 702520

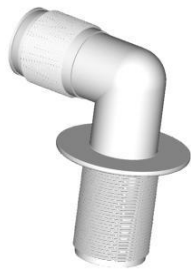


Piston and Slide Valve Assembly
Cat No: 735713

PIR
Cat No: 712080



Assembled Hand wash Tank with Fittings
Cat No:



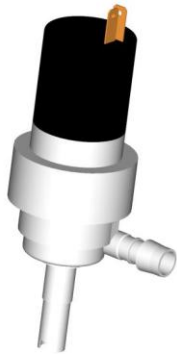
Elbow $\frac{3}{4}$ " x $\frac{3}{4}$ " Tank Fitting
Cat No: 744003



$\frac{3}{4}$ " Swivel Hose Connector
Cat No: 744005



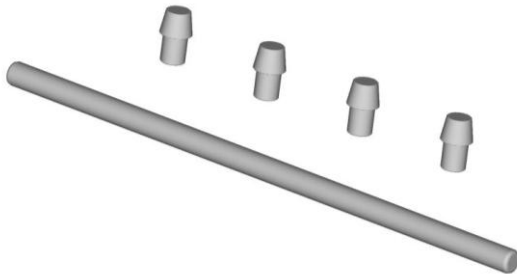
21.5mm x $\frac{3}{4}$ " Elbow
Cat No: 744002



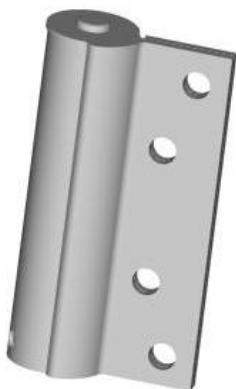
Handwash Pump
Cat No: 702110



Isolator Switch and Key
Cat No: 661221

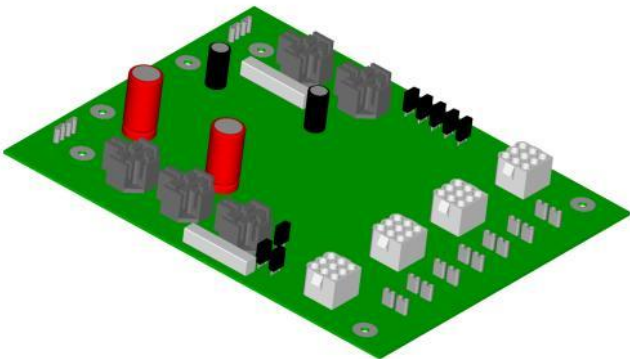


Door Hinge Kit
Cat No: 661401

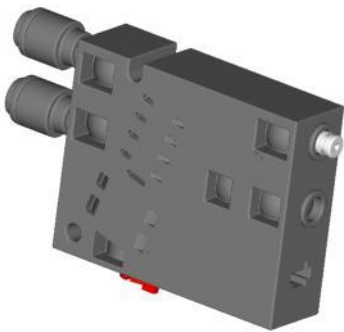


Liobex Hinge
Cat No: 661400

Cubicle Front Fascia Spares



PCB Control Board
Cat No: 730615



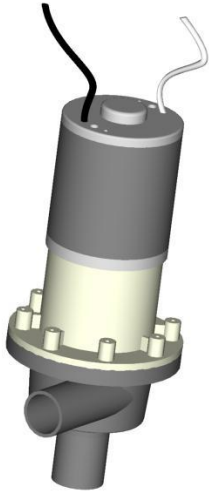
Isonic Valve
Cat No: 735714



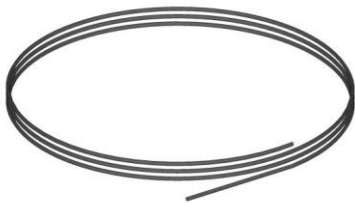
Floor Grip Tape
Cat No: 661480



Toilet Role Holder
Cat No: 661618



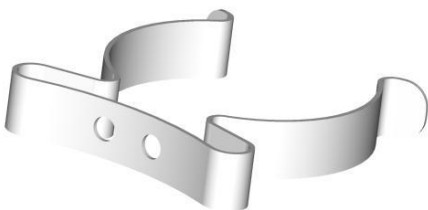
Flush Pump
Cat No: 702180



4mm Air Pipe
Cat No: 735722



Clear Plastic Insulation Sleeve 6.1 x 7.9
Cat No: 713047



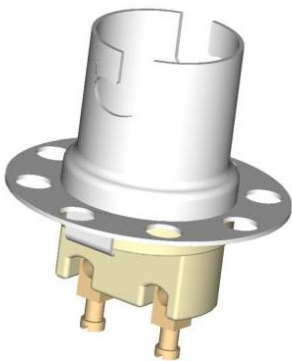
Terry Clip
Cat No: 713285



Door Striker Angle
Cat No:



Hydrocalor
Cat No: 661800



Bulb Holder
Cat No: 712027



Thumb Screw
Cat No: 663408

Soil Tank Evacuation Assembly

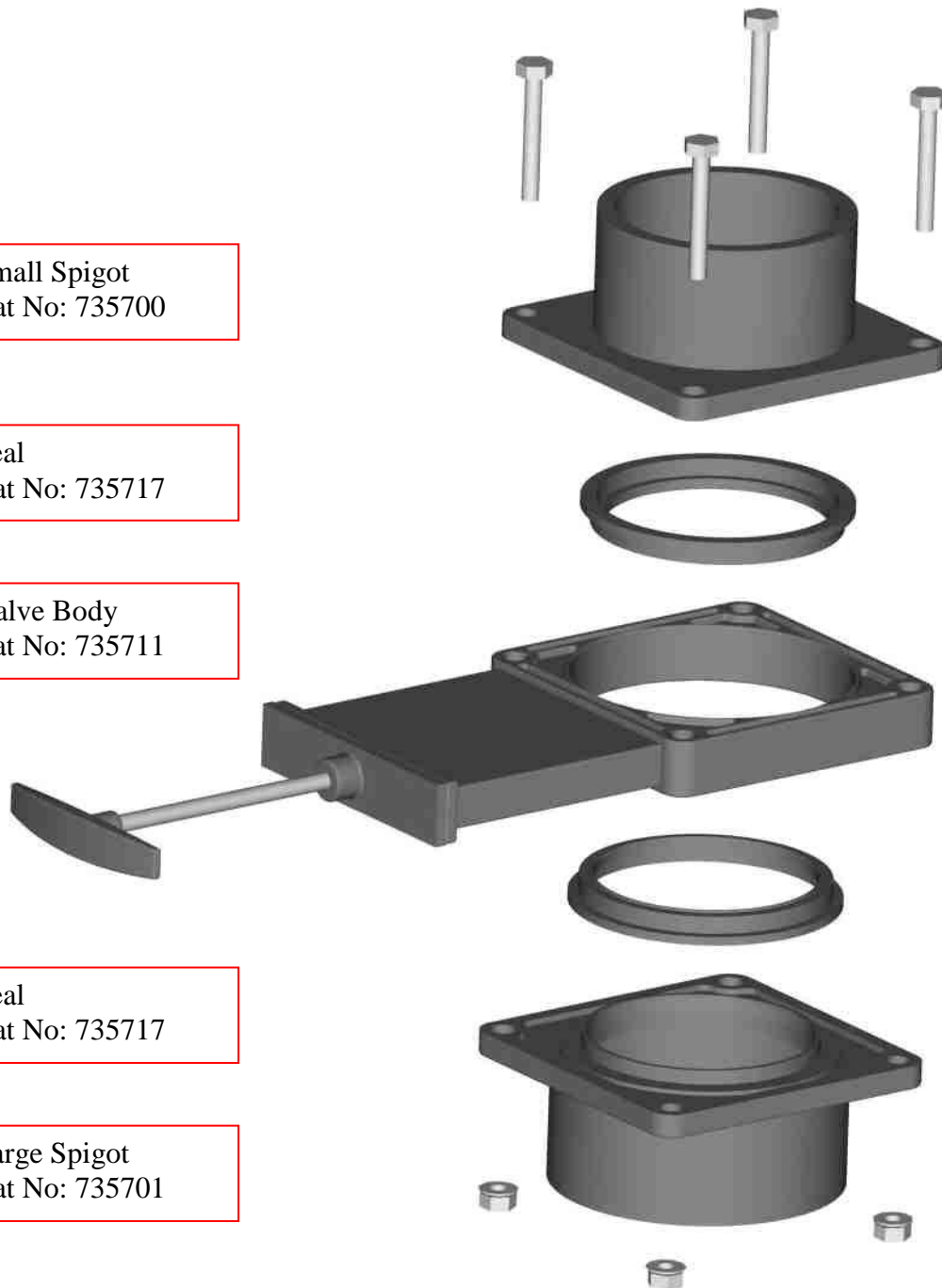
Small Spigot
Cat No: 735700

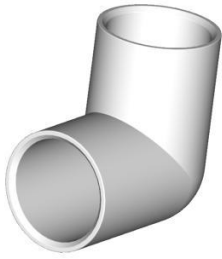
Seal
Cat No: 735717

Valve Body
Cat No: 735711

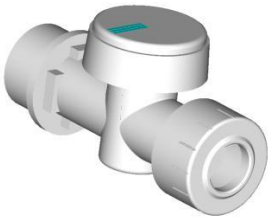
Seal
Cat No: 735717

Large Spigot
Cat No: 735701

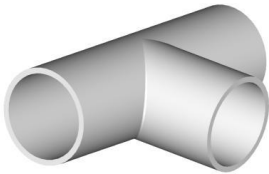




Knuckle Bend
Cat No: 744120



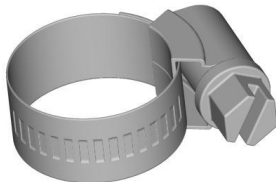
Shut off Tap
Cat No: 747037



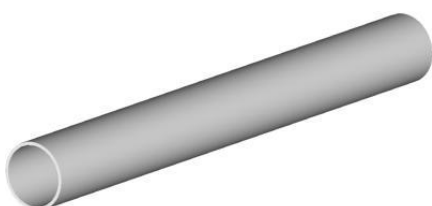
T Push Fit
Cat No: 744121



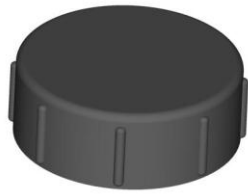
1/2" Potable Hose
Cat No: 744030



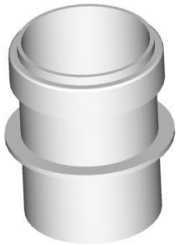
12-22 Hose Clip
Cat No: 744041



21.5mm Rigid Pipe
Cat No: 747055



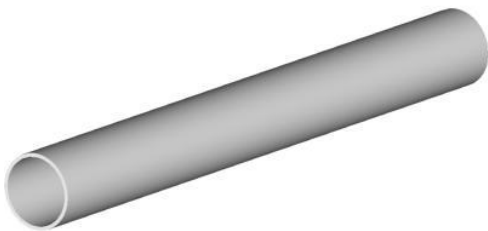
Black End Cap
Cat No: 732061



Tank Connector
Cat No: 732064



Swivel Bend
Cat No: 732063



40mm Pipe
Cat No: 732062

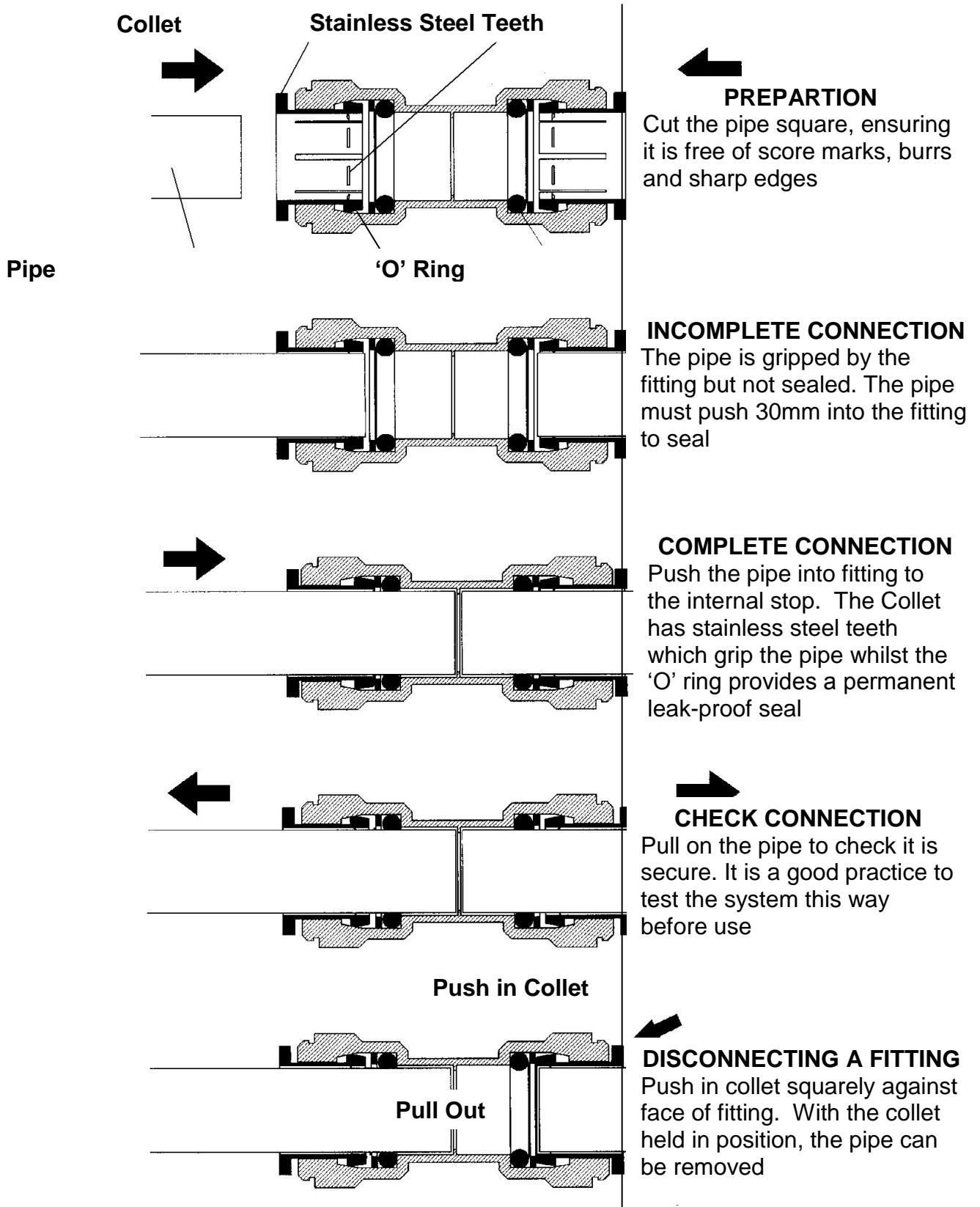


Hose Barb Connector
15mm x 1/2" Speedfit
Cat No: 747027

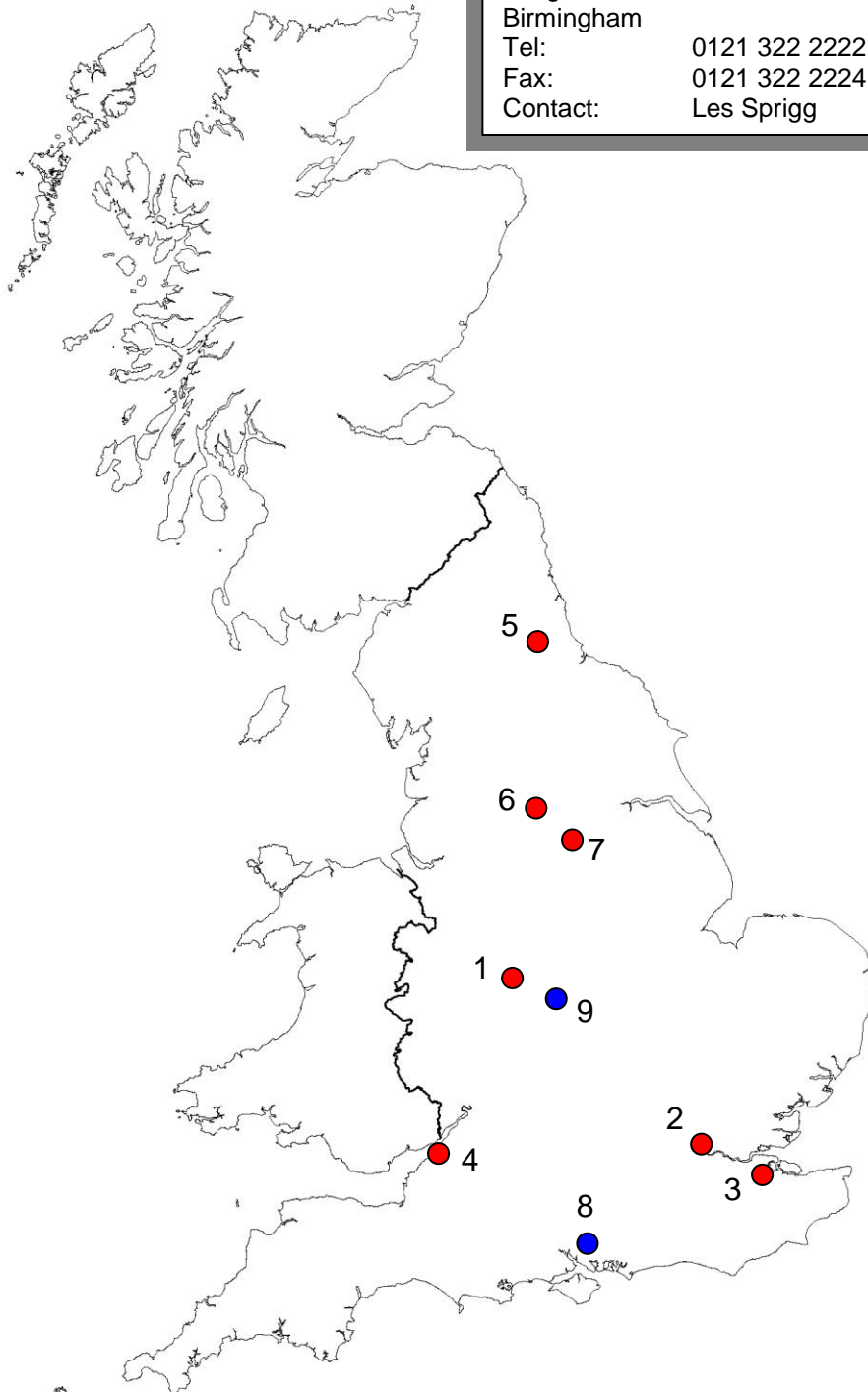


15 mm Stem Elbow Connector
Cat No: 744122

Service Instructions



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



1. MIDLANDS
 Flights Motor Services Ltd
 Beacon House
 Long Acre
 Birmingham
 Tel: 0121 322 2222
 Fax: 0121 322 2224
 Contact: Les Sprigg

2. LONDON
 Dorset Travel Services Ltd
 Victoria Coach Station (Arrivals)
 3, Eccleston Place
 London
 Tel: 0171 730 8867
 Fax: 0171 730 6492
 Contact: Glenn Pearson

3. KENT
 Simon Electronic Services
 738 Maidstone Road
 Wigmore
 Gillingham
 Kent
 Tel & Fax: 01634 364889
 Contact: Simon Darby

4. WEST COUNTRY
 PCV Auto Electrical
 13A Anchor Road
 Kingswood
 Bristol
 Tel: 0831 567 801
 Fax: 0117 939 0089
 Contact: Brian Cox

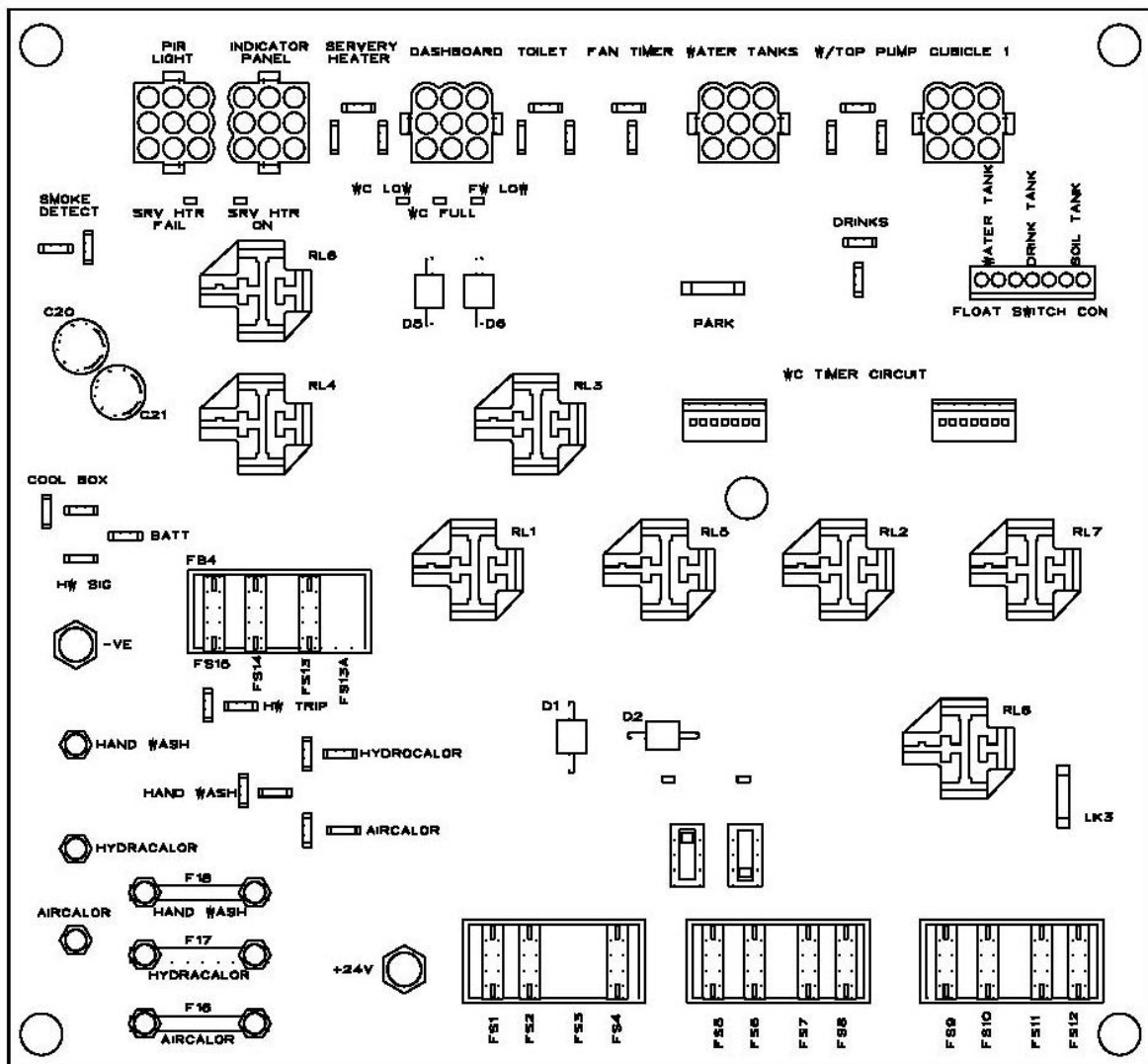
5. NORTH EAST
 Prolek Crook
 Auto Electrical Services
 Rear High Hope Street
 Crook
 Co Durham
 Tel & Fax: 01388 762630
 Contact: Bill Simpson

6. WEST YORKSHIRE
 Wallace Arnold
 Lowfields Road
 (off Geldred Road)
 Leeds
 Tel: 0113 263 6456
 Fax: 0113 231 0749
 Contact: Barry Mace

7. SOUTH YORKSHIRE
 Moseley PCV Ltd
 Elmsall Way, Dale Lane
 South Elmsall
 Pontefract
 Tel: 01977 609 000
 Fax: 01977 609 900
 Contact: Mike Coleman

For EvoBus vehicles only

<p>9. MIDLANDS EvoBus (UK) Ltd Ashcroft Way Crosspoint Business Park Coventry Tel: 02476 626000 Fax: 02476 262006 Contact: Jamie Evans</p>	<p>8. HAMPSHIRE Pentagon of Fareham Standard Way Fareham Hampshire Tel: 01329 286224 Fax: 01329 823432 Contact: Kevin Dart</p>
--	--



Notes for All Boards

Fuses FS13 and FS13A not to be fitted both at the same time as feedback from the direct battery feed and the board feed. I.E. Battery Isolator can occur.

FS13A is only for Board fed cool box
 FS13 is only for direct battery fed cool box
 Smoke Detector Circuit not fused

Off Board – B500 relay fitted, Hand Dryer relay fitted.

PCB REFERENCE DIAGRAM (continued)

Fuses			Relays		
FS1	10A	WC Water Low, Soil Full, Hydroflush and Handwash Relays Main Power	RL1	10/20A	WC Services Fitted
FS2	5A	PIR Unit Relay Contact Power and Fluorescent Lamp with Integral PIR Unit	RL2	10/20A	Hydroflush Control Fitted
FS3	3A	Cubicle Fan Direct	RL3	10/20A	WC Low Water Cut off Fitted
FS4	3A	WC Override Control Switch	RL4	10/20A	Soil Full Cut Off Fitted
FS5	3A	Servery Override Control Switch	RL5	10/20A	Handwash Control Fitted
FS6	3A	Alarm Lamp and Buzzer	RL6	10/20A	Hydrocalor Fail Control Fitted
FS7	5A	Flush Pump	RL7	10/20A	Servery Services Fitted
FS8	5A	Handwash Pump	RL8	10/20A	Servery Services Low Water Cut Off Fitted
FS9	1A	Timer Unit Controlling Hydroflush, Handwash and Timed Cut of Fan.	Links		
FS10	3A	Work Top Drinks Pump Button and Pump	LK3		Hydrocalor Isolating Link
FS11	5A	Servery Services	Park		Link to Top Switch Connection for Override
FS12	3A	Servery Boiler Signal			
FS13	NIL	Direct Supply for Cool Box			
FS13A	NIL	Board Supply to Cool Box			
FS14	1A	Remote PIR Board Control			
FS15	3A	Handwash Trip			
FS16	40A	Aircalor			
FS17	40A	Drinks Hydrocalor / B500			
FS18	NIL	Handwash Hydrocalor / B500			

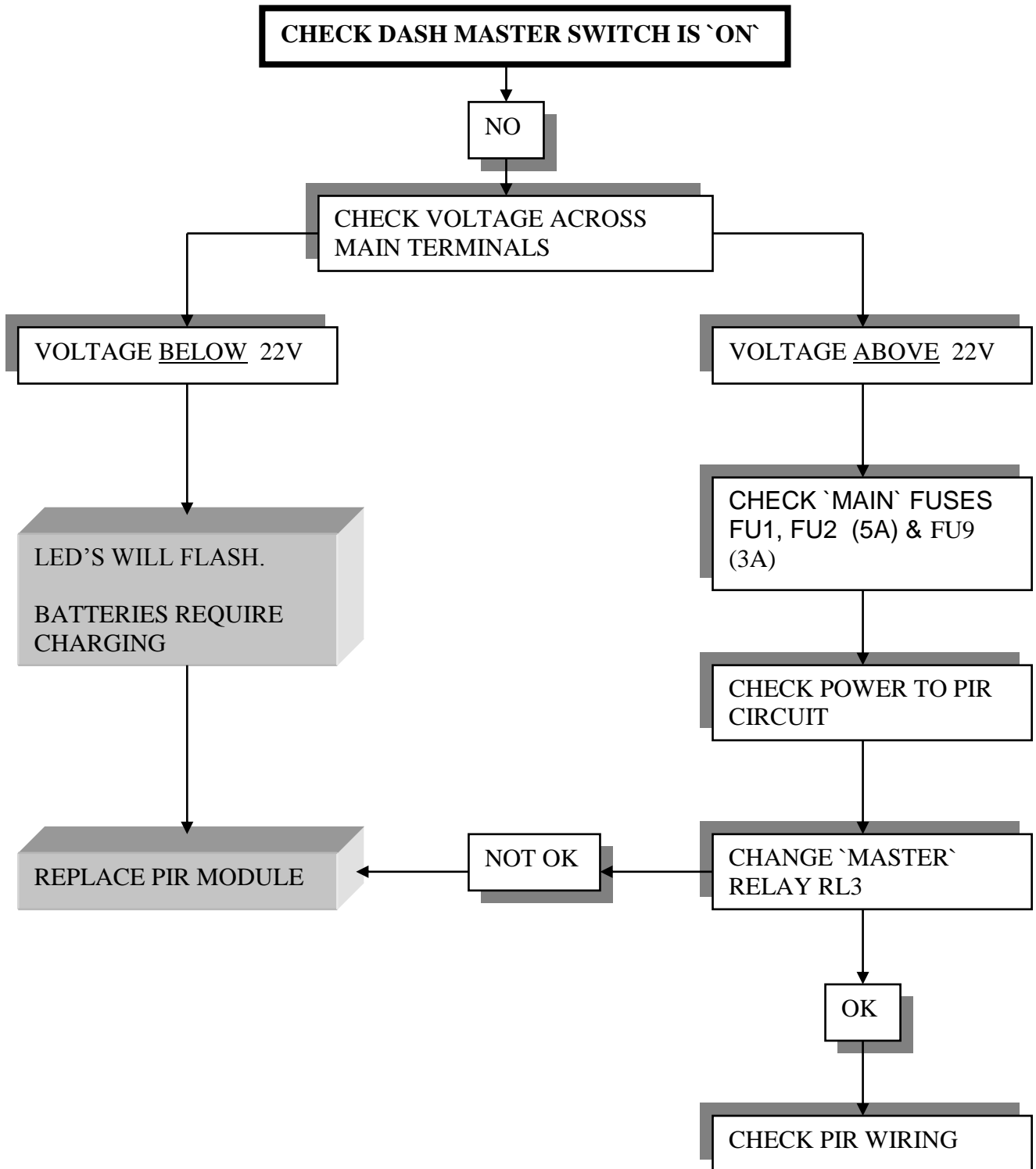
Potential Cubicle Faults

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

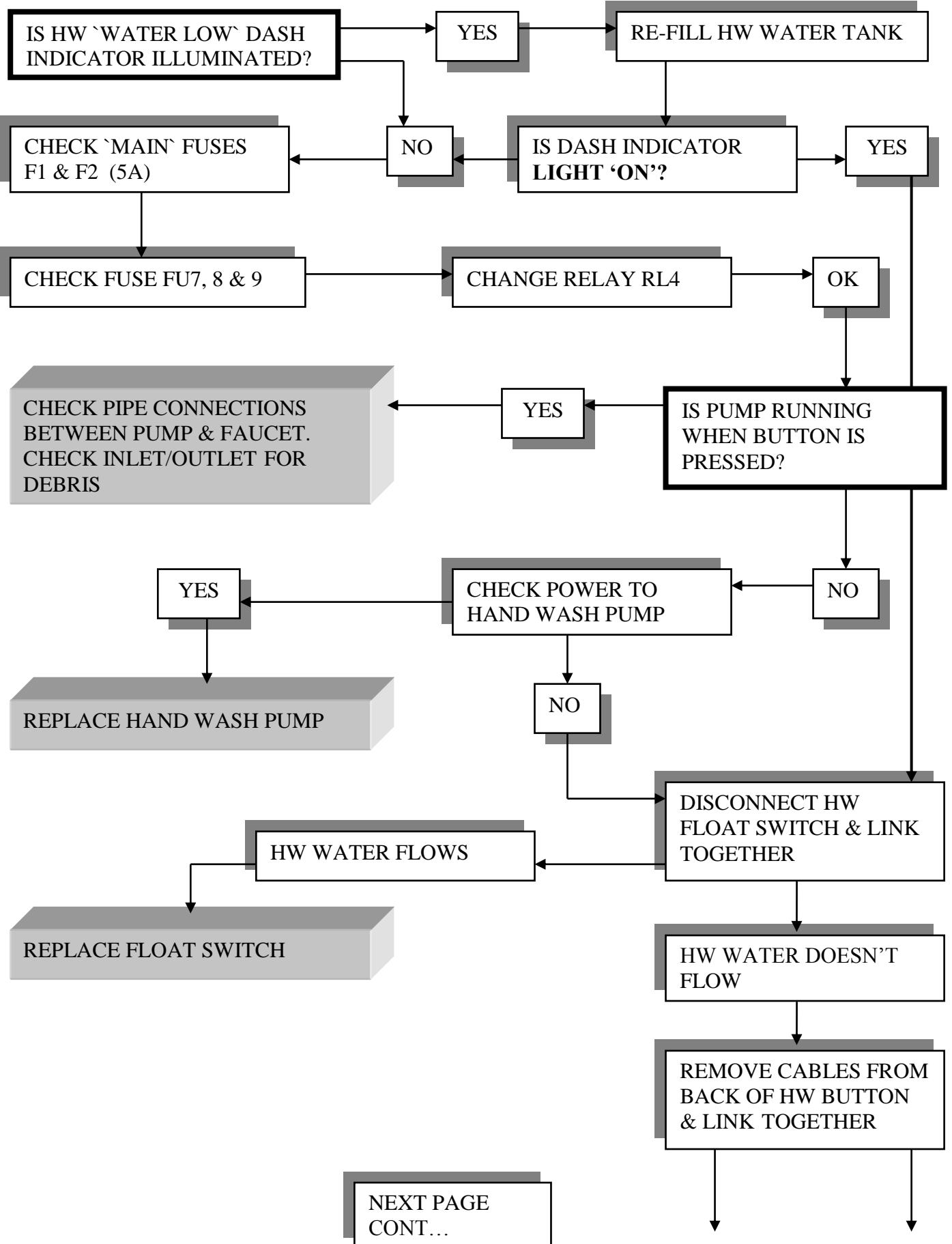
Toilet Fails To Power Up

Rapid Antidotes

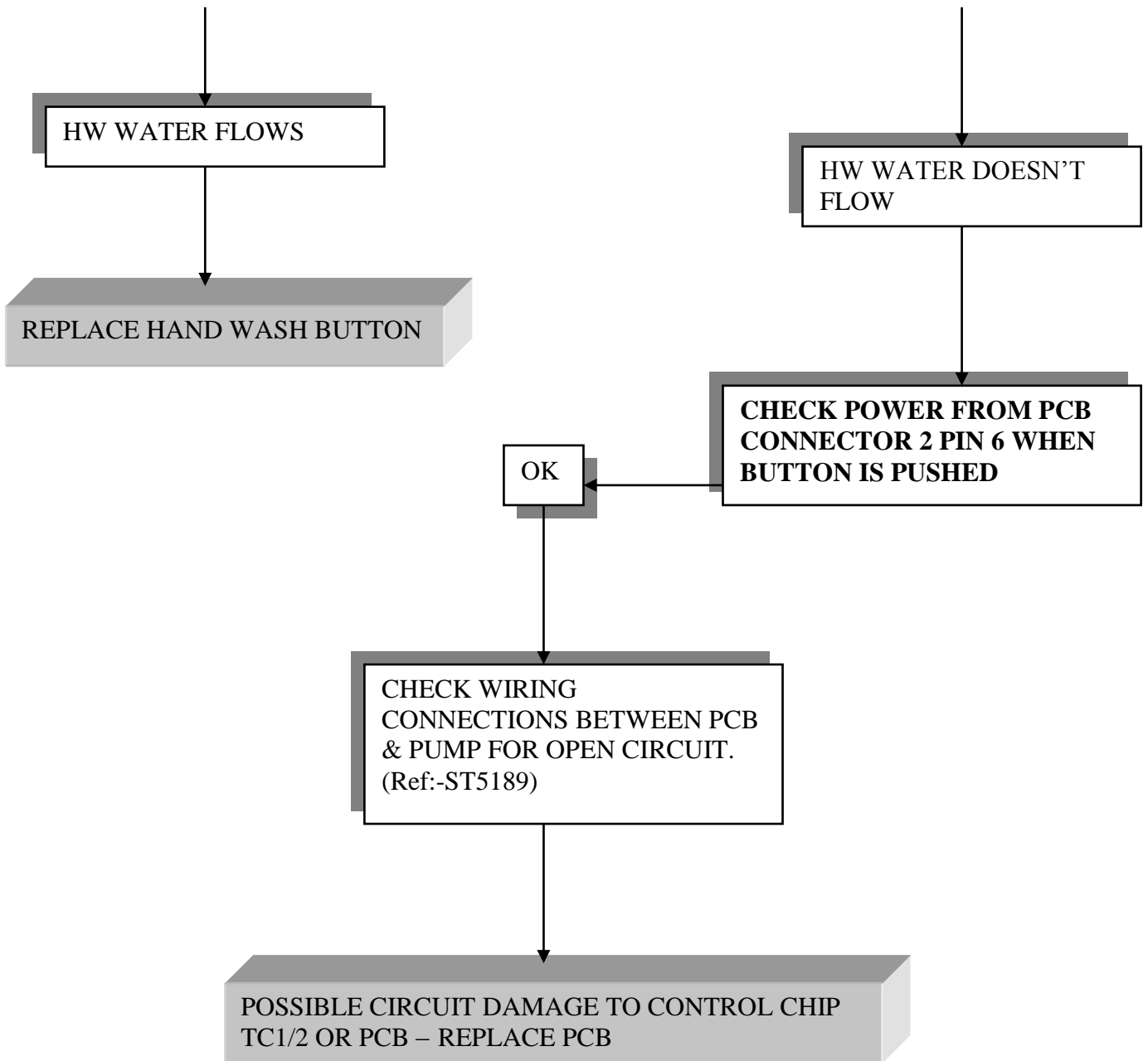
- Recharge batteries
- Check fuses
- Replace PIR module



No Water From Hand Wash (HW) Faucet



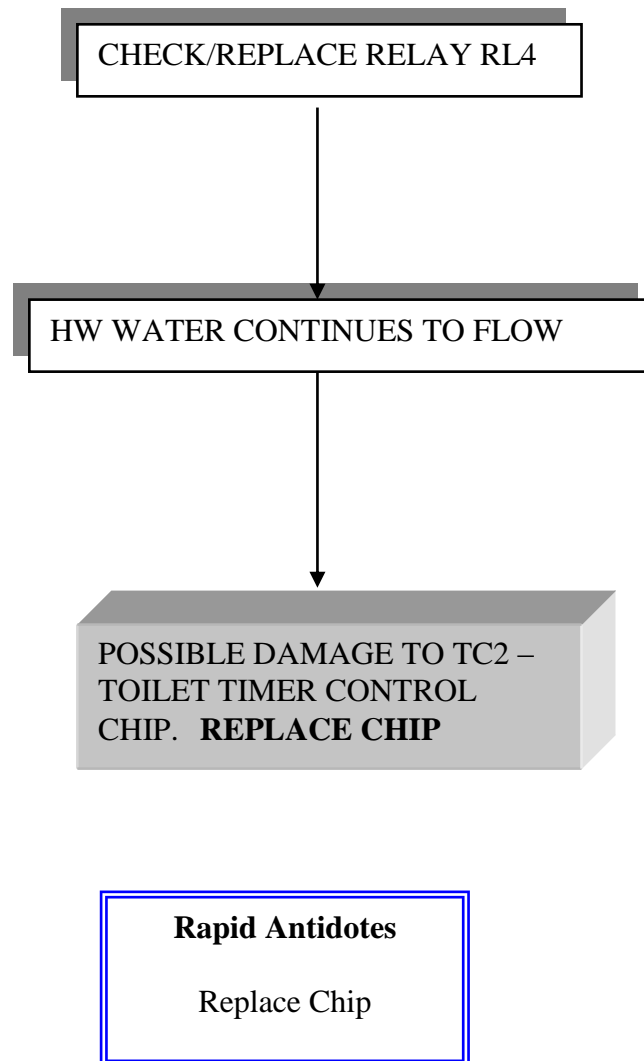
No Water From Hand Wash (HW) Faucet - cont.....



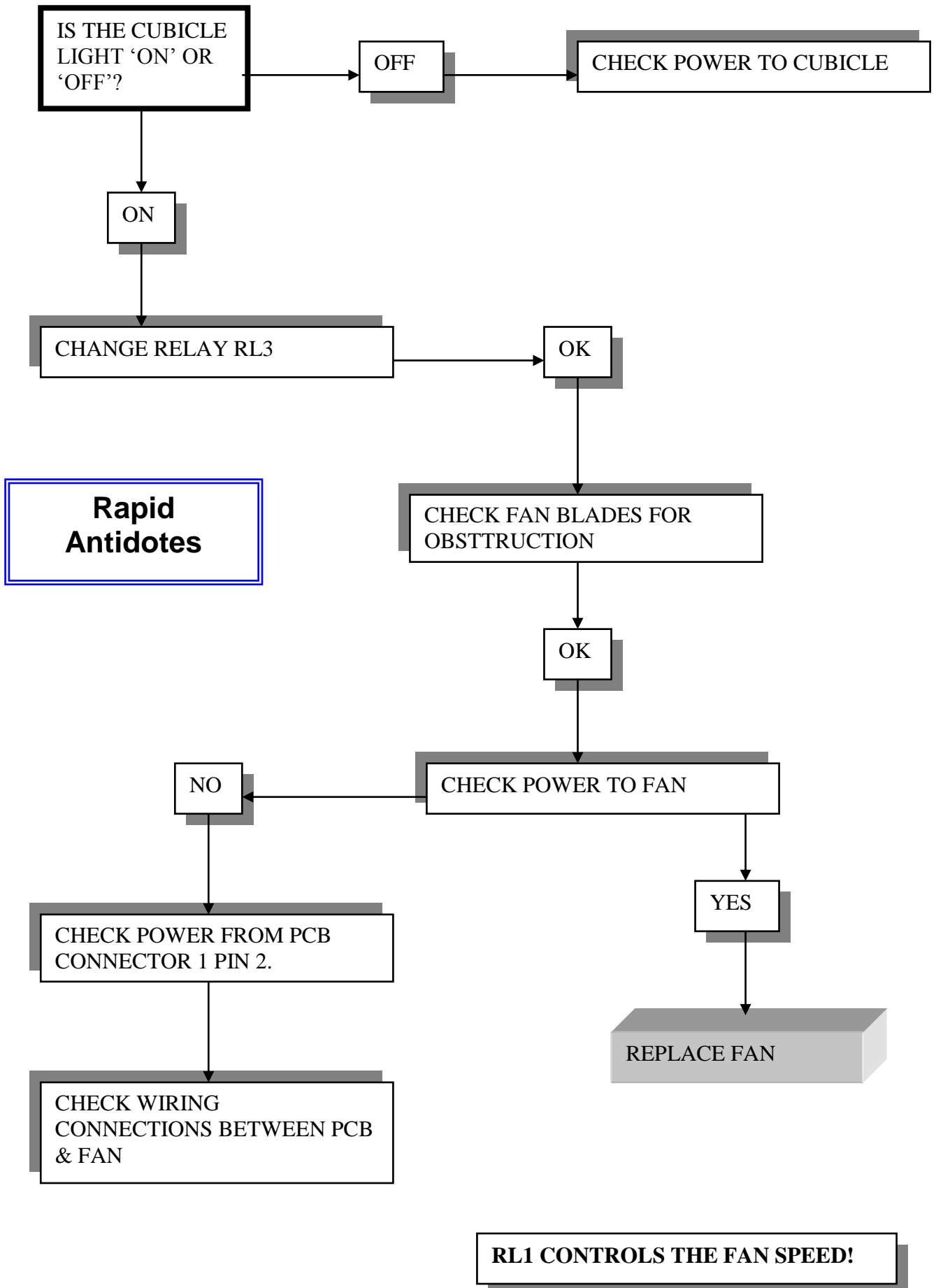
Rapid Antidotes

- o Check fuses
- o Check inlet/outlet for debris
- o Replace hand wash pump
- o Replace float switch
- o Replace handwash button
- o Replace PCB

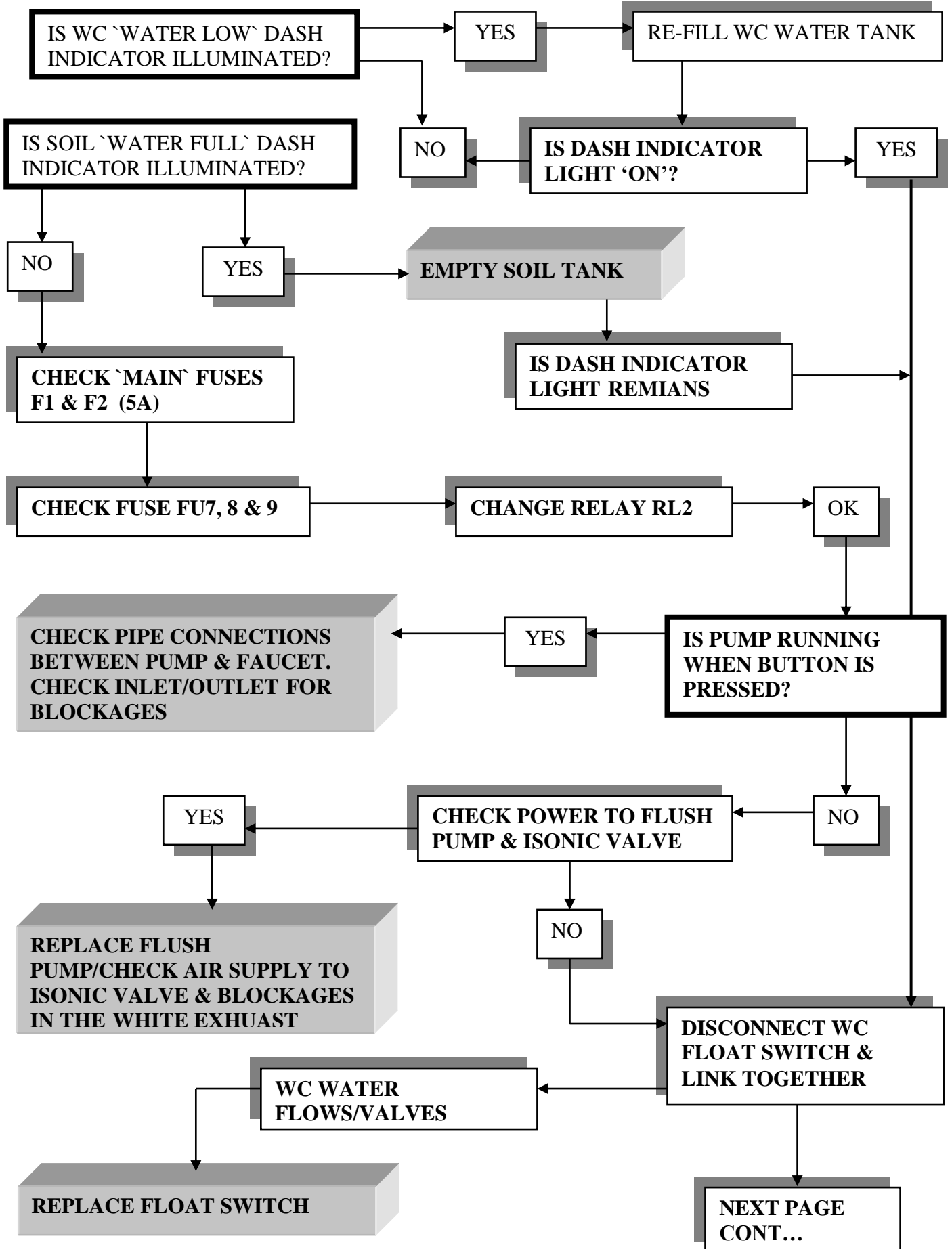
Hand Wash Water Runs Continuously



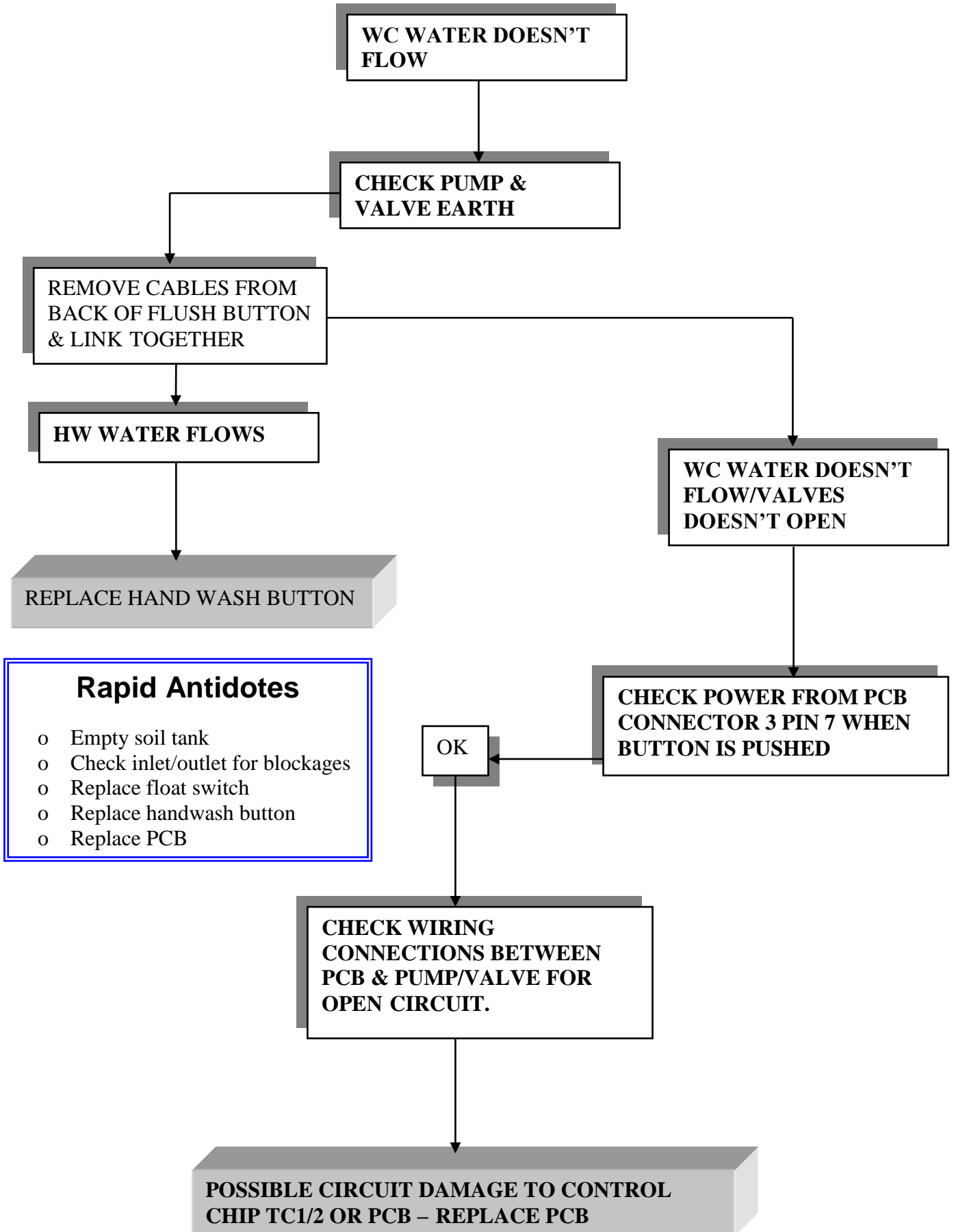
Extractor Fan Not Functioning



Hydro-Jet Not Working – No Water or Pneumatic Valve



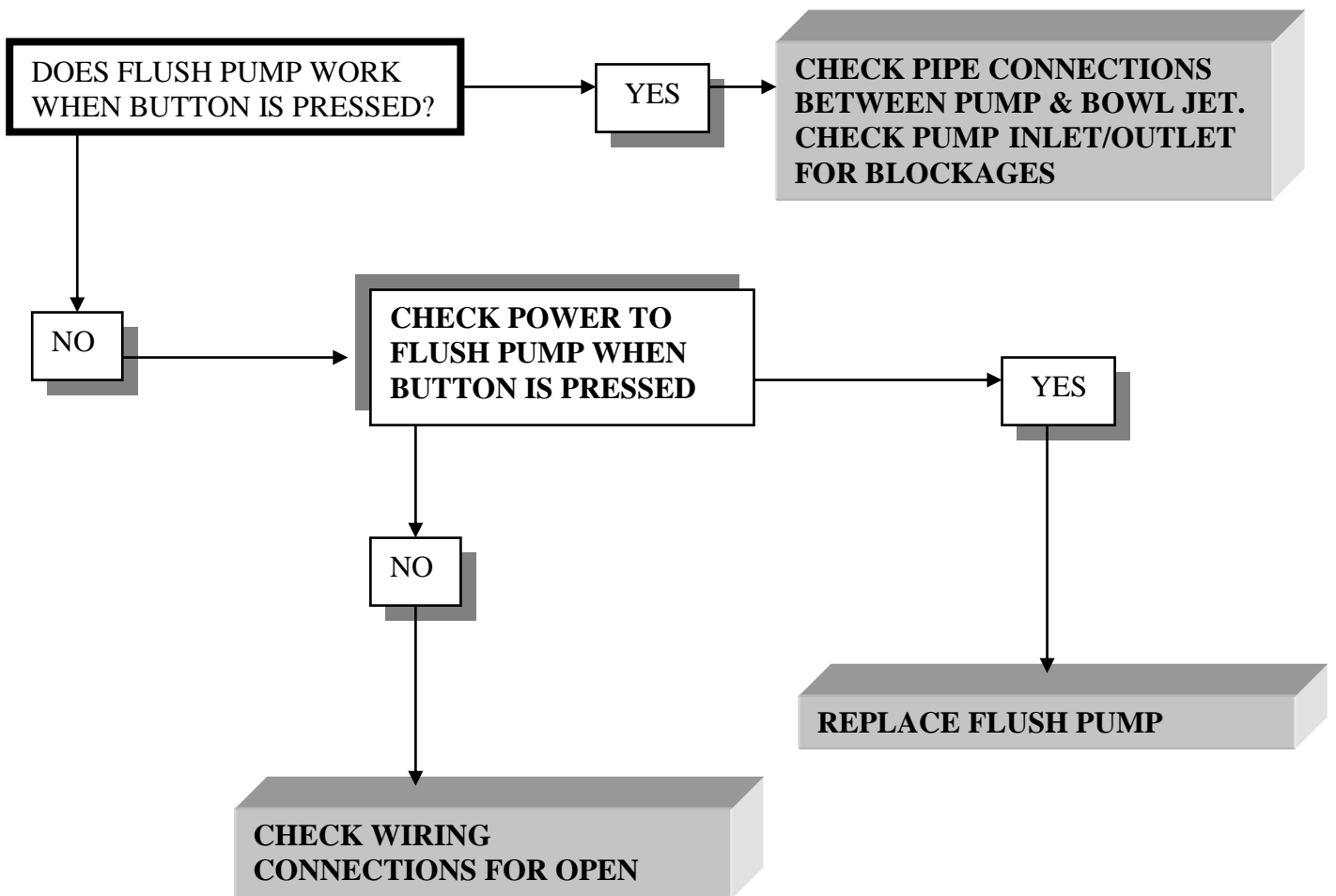
No Water From Hand Wash (HW) Faucet - cont.....



Rapid Antidotes

- o Empty soil tank
- o Check inlet/outlet for blockages
- o Replace float switch
- o Replace handwash button
- o Replace PCB

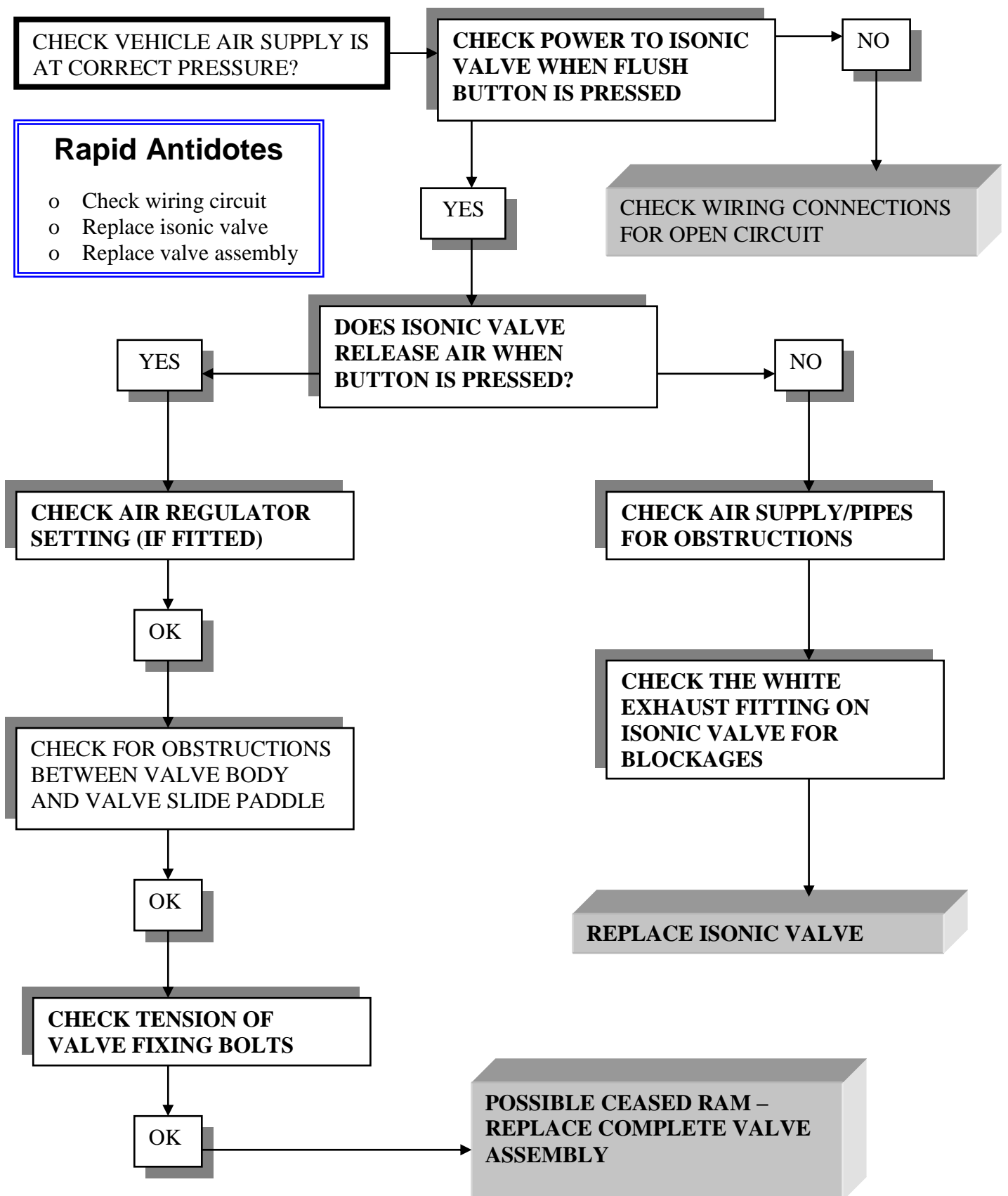
Hydro-Jet Pneumatic Valve Opens – No Water



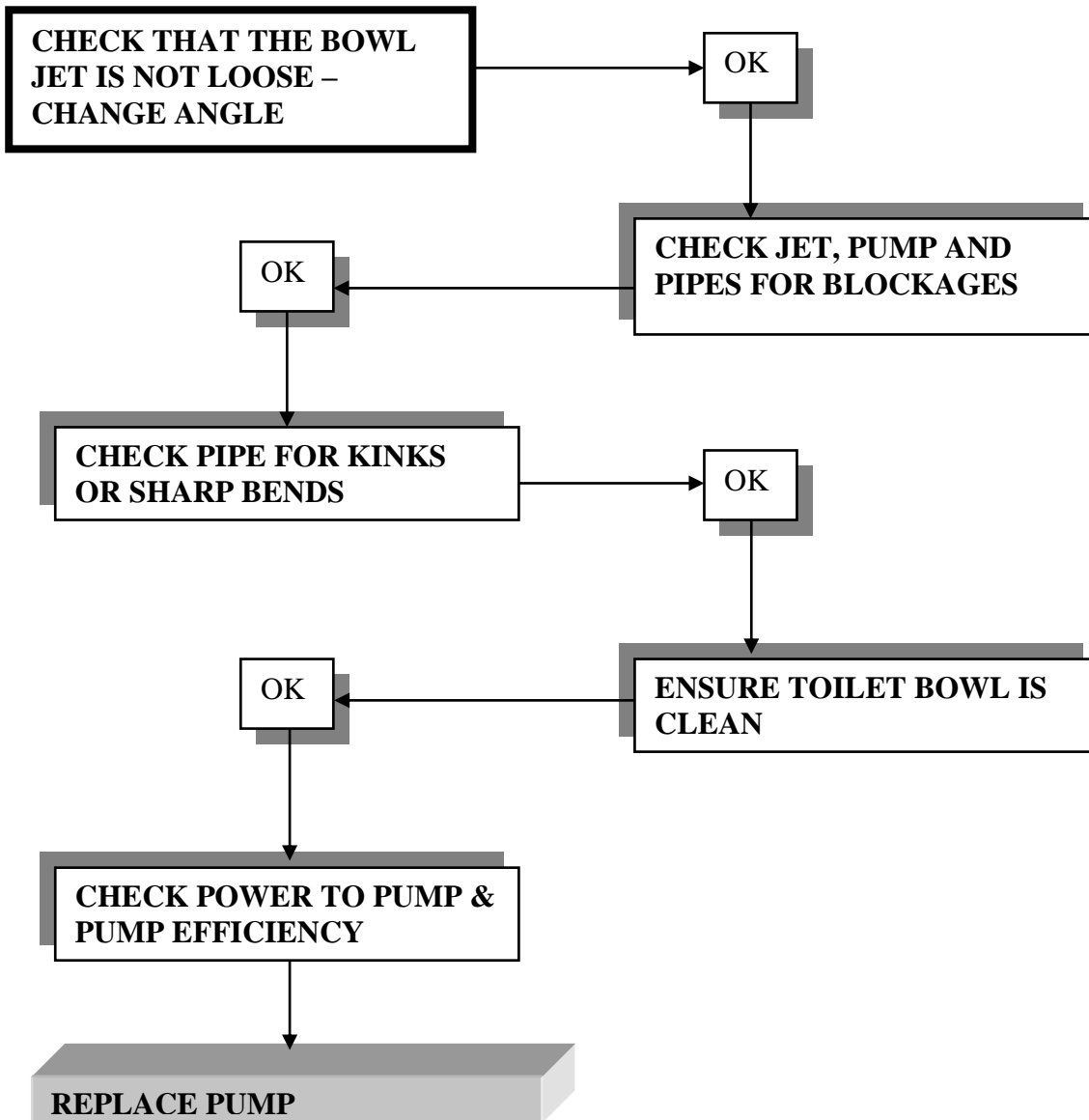
Rapid Antidotes

- o Check pump inlet/outlet
- o Replace flush pump
- o Check wiring circuit

Hydro-Jet Water Flows - Pneumatic Valve Does Not Open



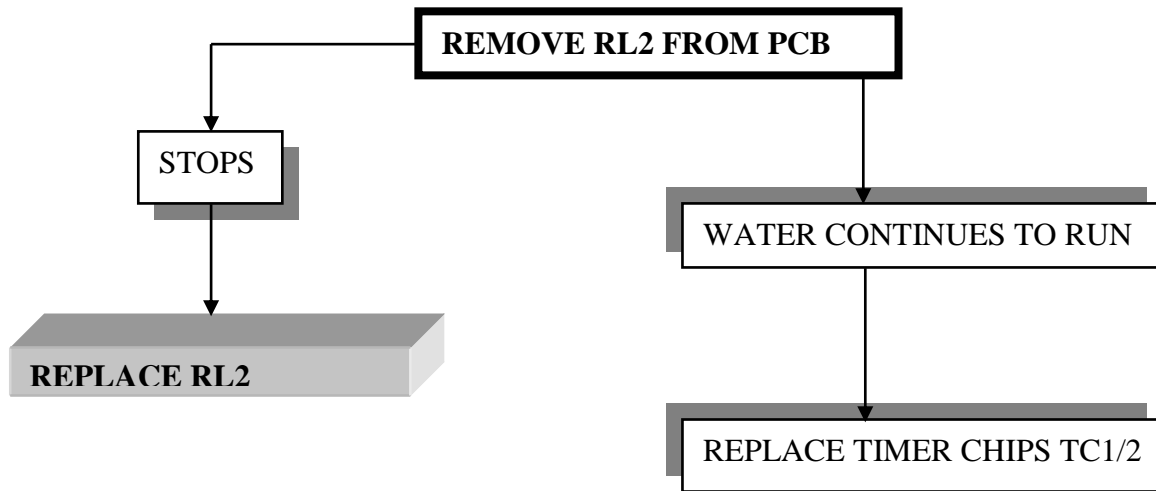
Poor Water Flow Around Bowl



Rapid Antidotes

- Replace pump

Hydro-Jet Flushing Constantly



Rapid Antidotes

- Replace RL2

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

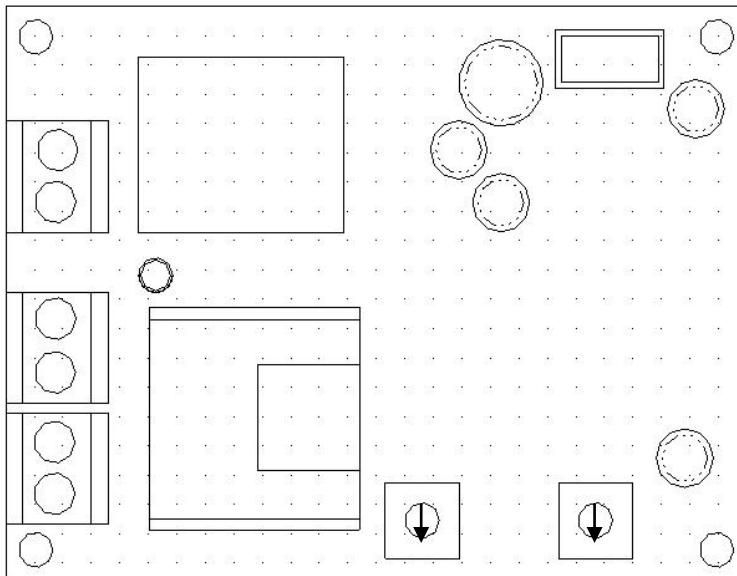
TO EXTEND THE TIME SETTING

TURN WHITE ADJUSTER
CLOCKWISE

TO REDUCE THE TIME SETTING

TURN WHITE ADJUSTER
ANTI-CLOCKWISE

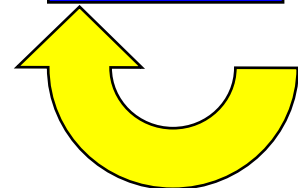
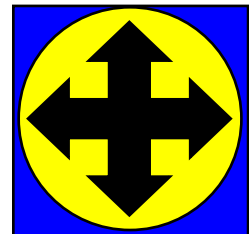
IF ADJUST DOES NOT
ALTER THE TIME –
REPLACE PIR PCB



TIMER **SENSITIVITY**

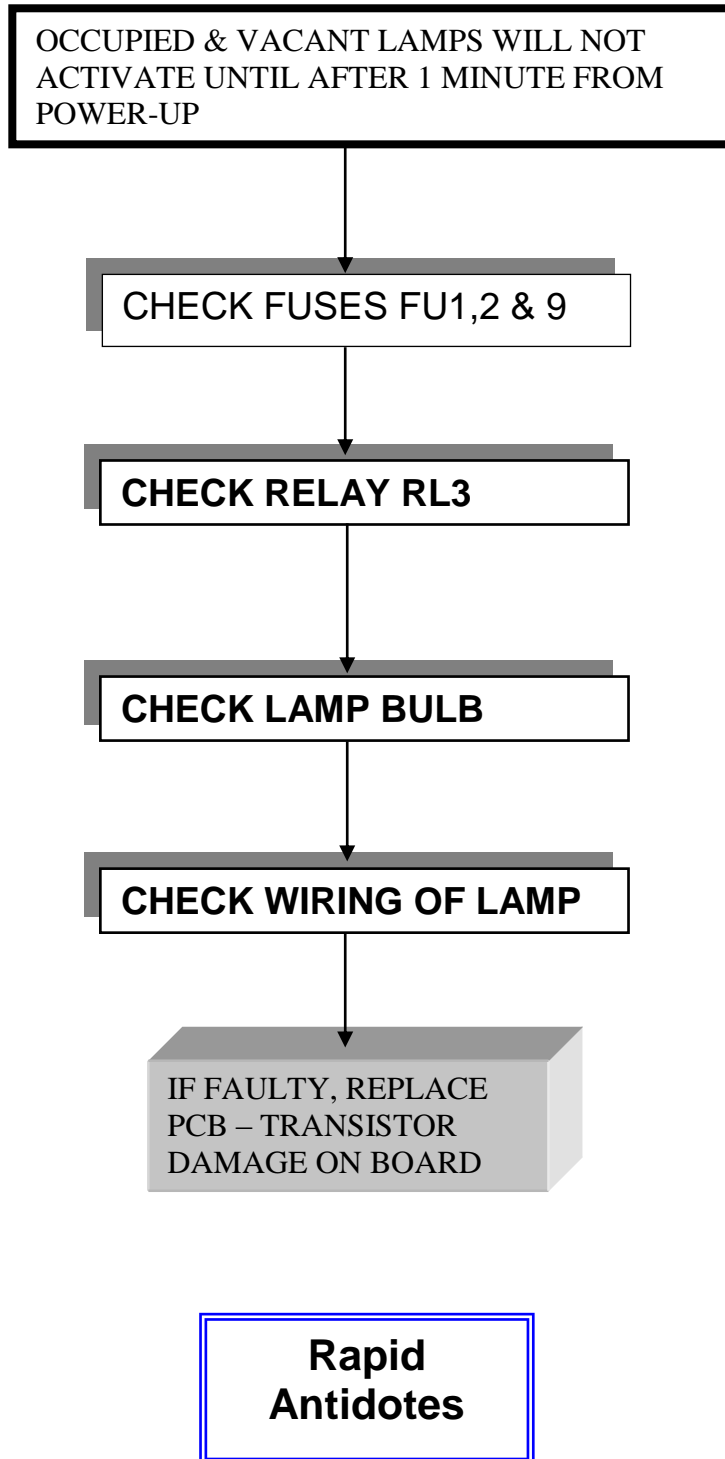
Rapid Antidotes

- o Replace PIR PCB

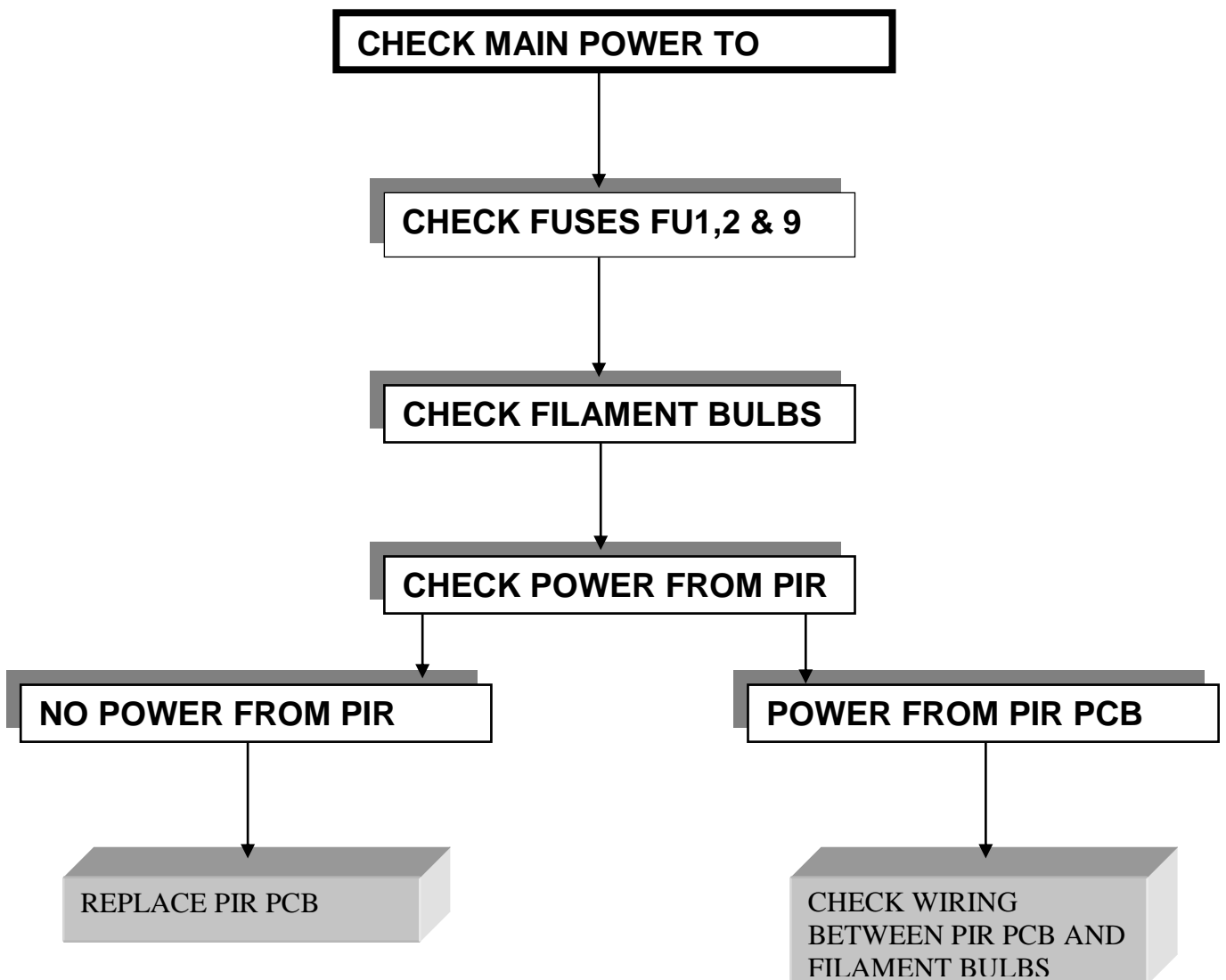


INCREASE

Vacant/Engaged Lamp Fails



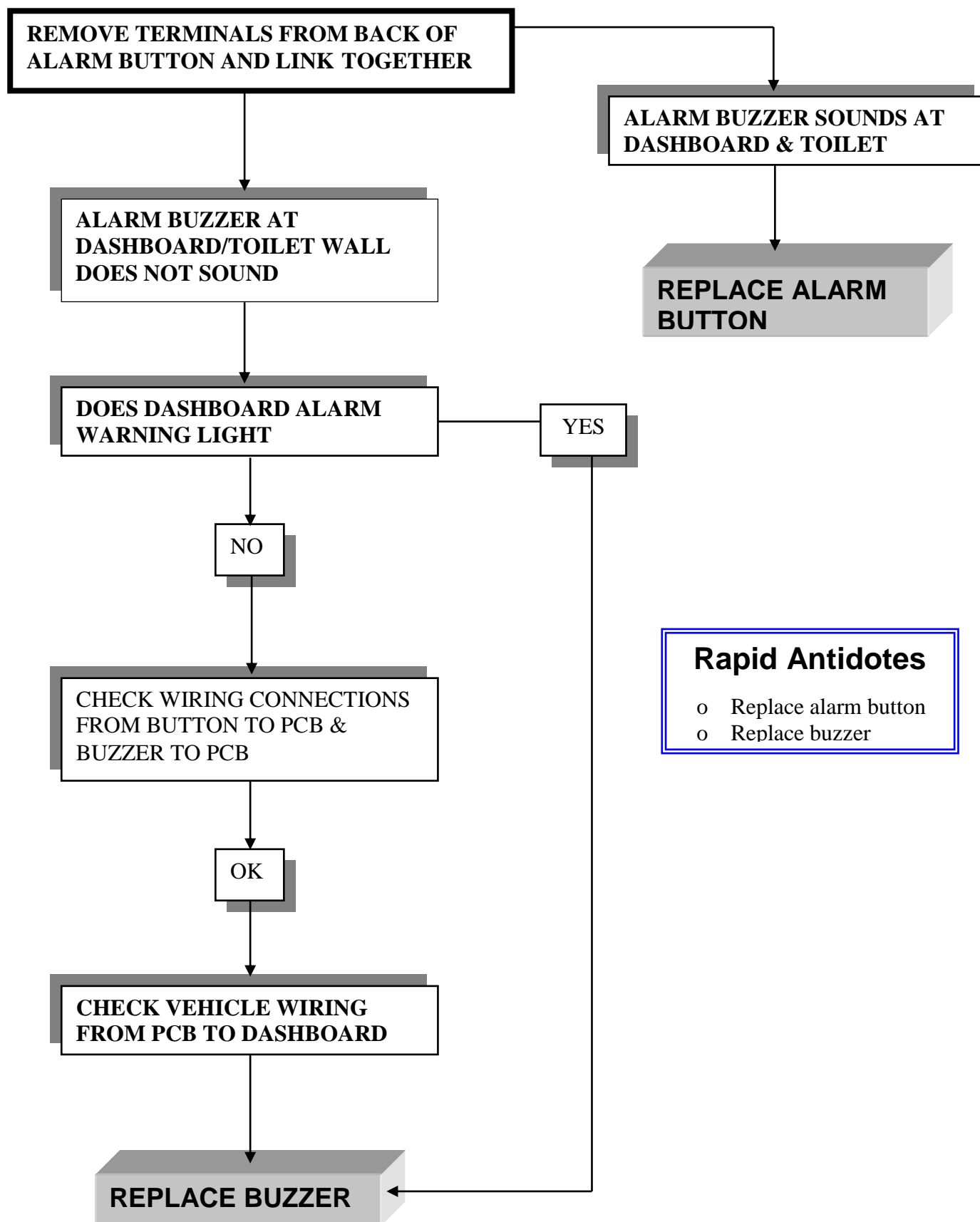
Interior Lamp Fails



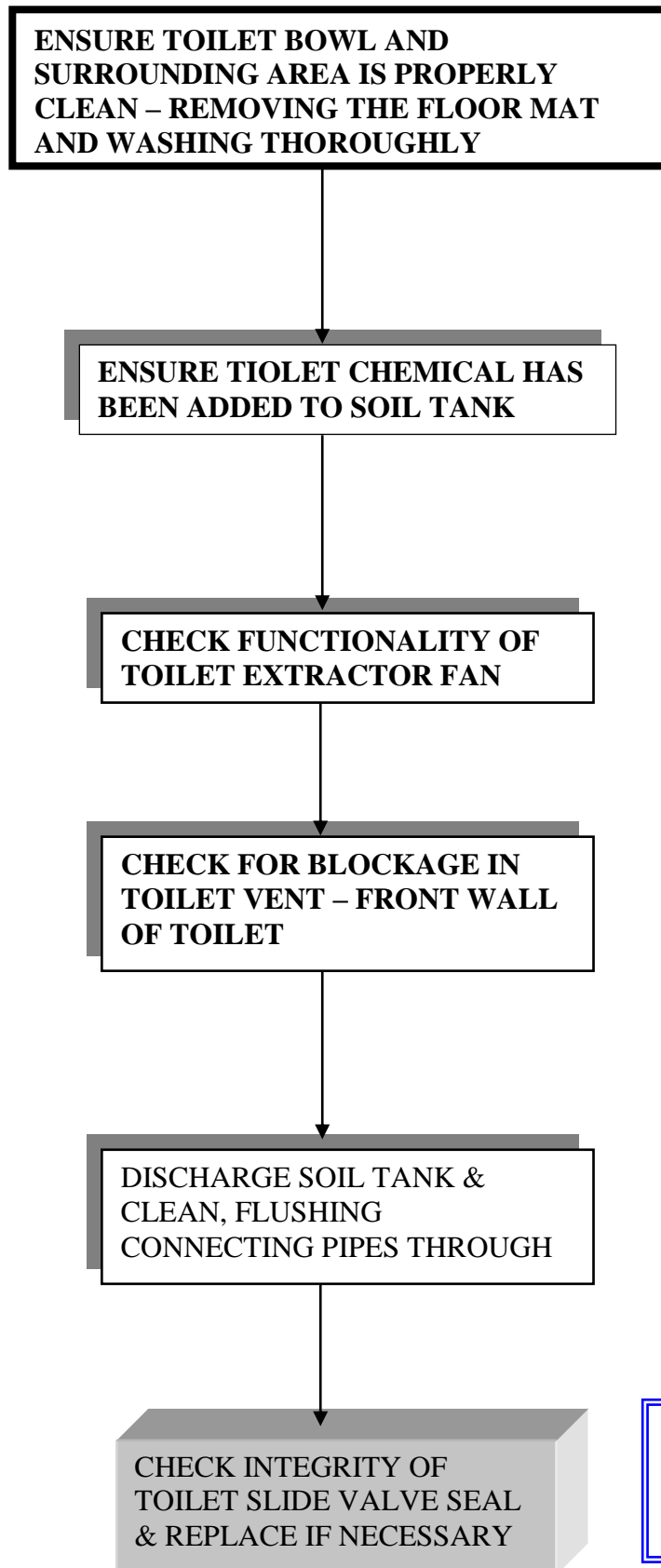
Rapid Antidotes

- o Replace PCB
- o Check wiring between PIR, PCB and bulbs

Alarm Button/Buzzer Not Working



Bad Toilet Odour



Rapid Antidotes

- o Replace toilet slide valve seal