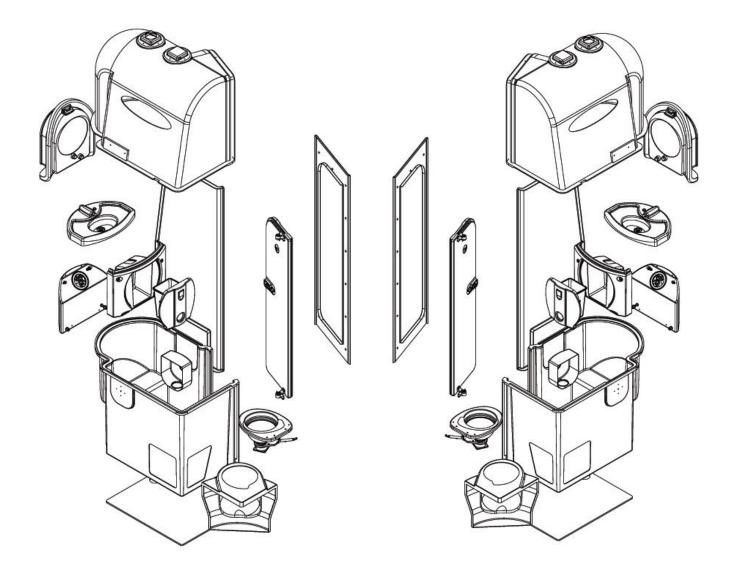


2051 & 1502 Toilet Cubicle



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

(When the holding tank is full, the dashboard LED *we* 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 $LED \overset{\text{WC}}{\longrightarrow}$ 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 throught 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 is used at all times.

Domestric 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.
 - Switch on power to the cubicle (see page 3) 4.
 - 5. Press the flush button to open the toilet valve and drop the complete sachet into the bowl.



- 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.
- The hand wash tank should be emptied and re-filled dailey. To help maintain a clean tank and freshwater the use of a sanitiser is recommended. Shades can supply a suitable product that disinfects the water, that is safe to drink and nonirritable to the skin and eyes. Cat No. 800060

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.
- Disinfect the hand wash tanks and flush through with clean water.

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

<u>Note</u>

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

Jump Starting

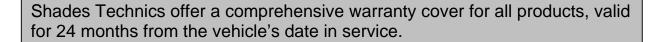
When jump starting the vehicle, please ensure that the dashboard master Switche, WC, is off!

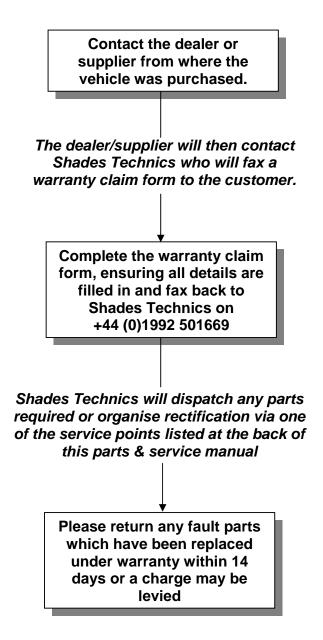
Fault Reporting Procedure

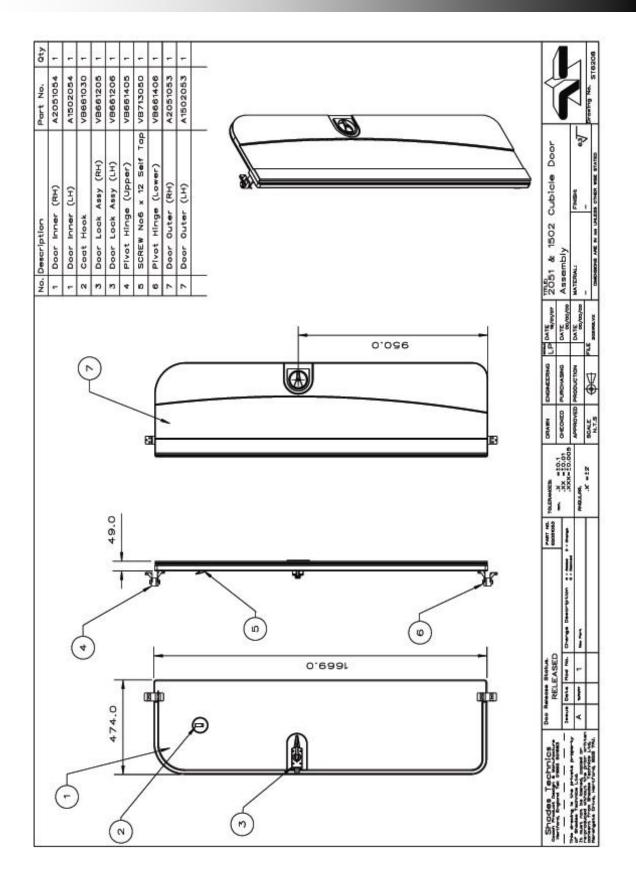
- 1. In the unlikely event of a fault occurring an emergency parts kit has been supplied along with the enclosed comprehensive fault analysis flow chart
- 2. Using these charts, determine the cause of the fault and replace the faulty item from the kit if possible.
- 3. To order a replacement kit or non-kit 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 dispatched a simple warranty procedure must be followed.

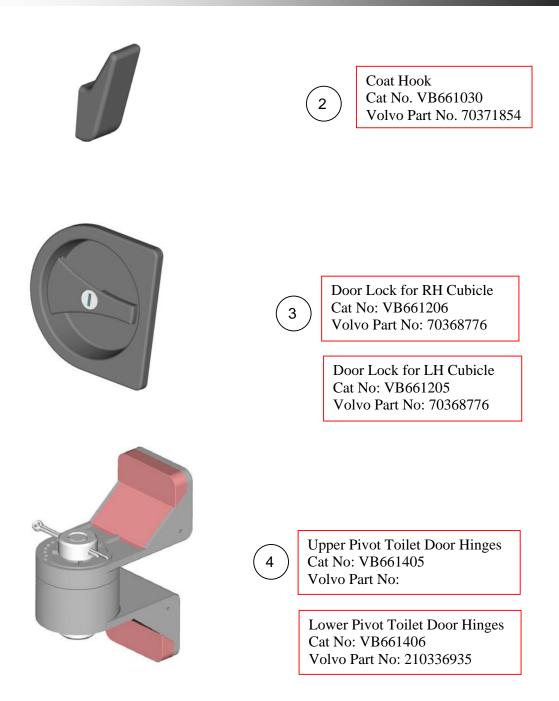
Notes:

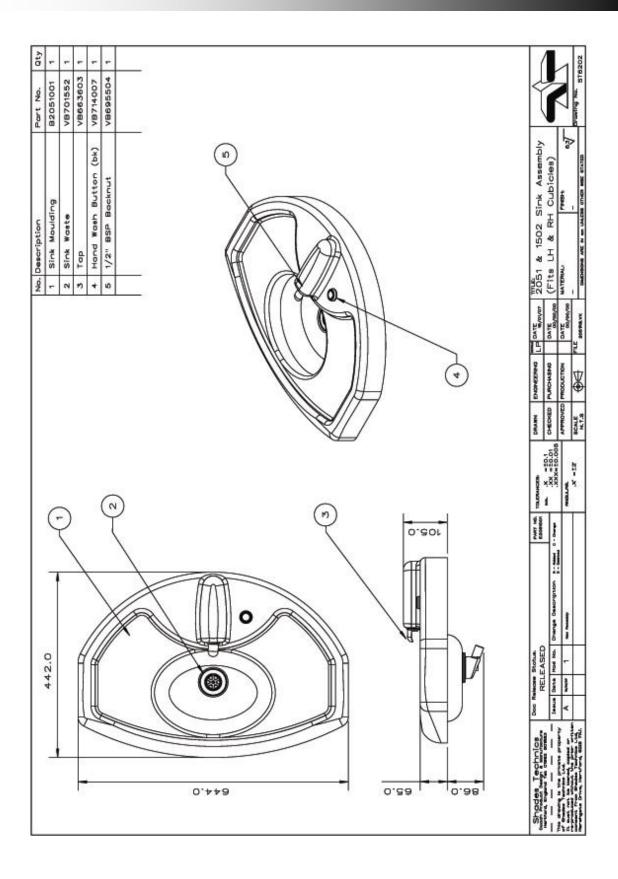
• Tampering, unauthorised involvement or preventable damage will result in a charge being levied

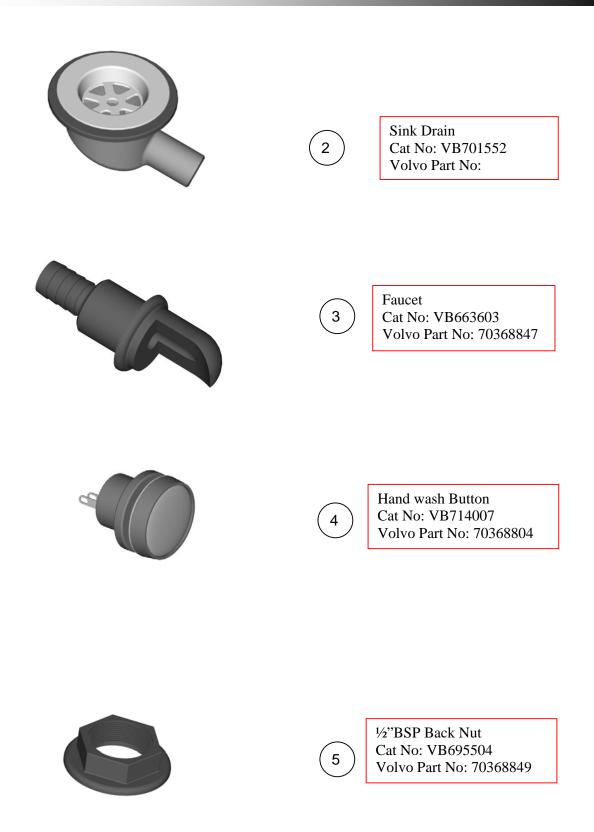


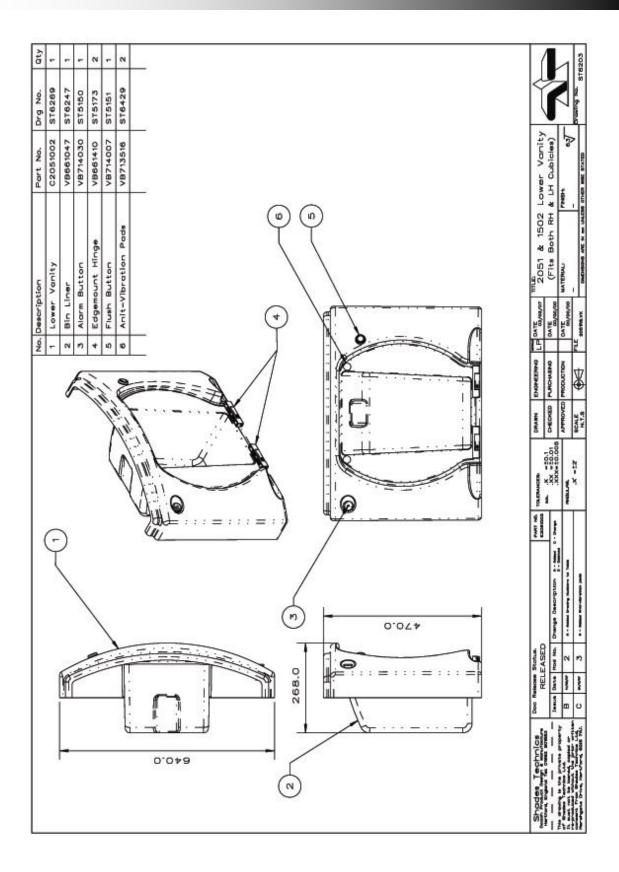


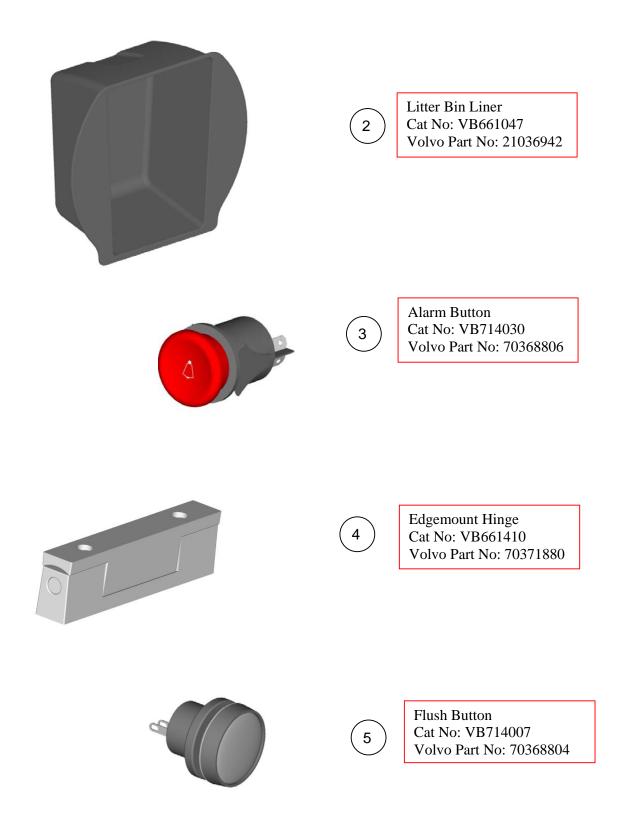


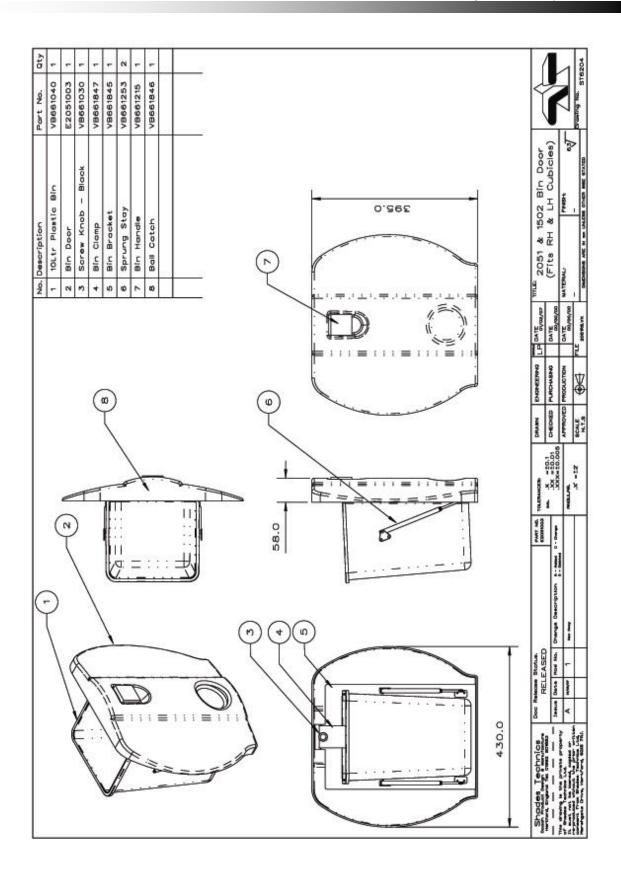




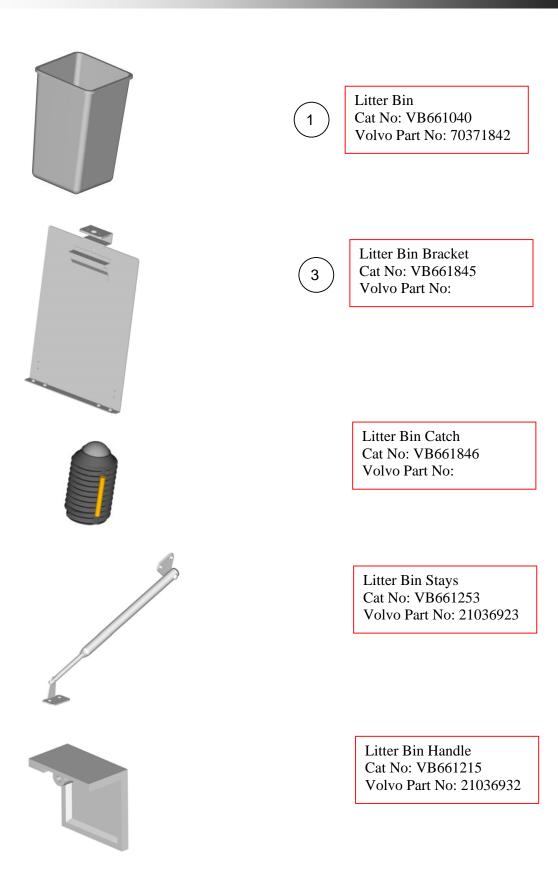


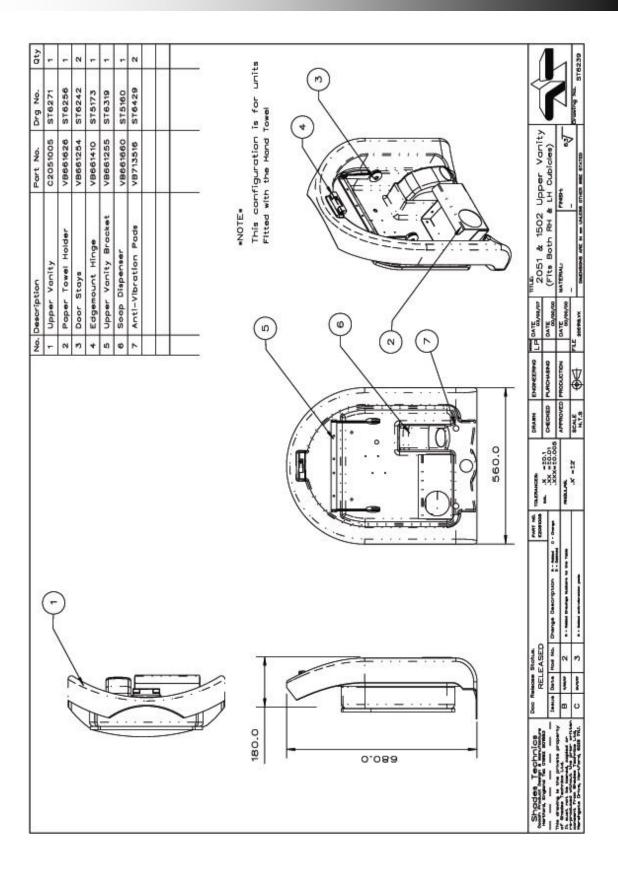




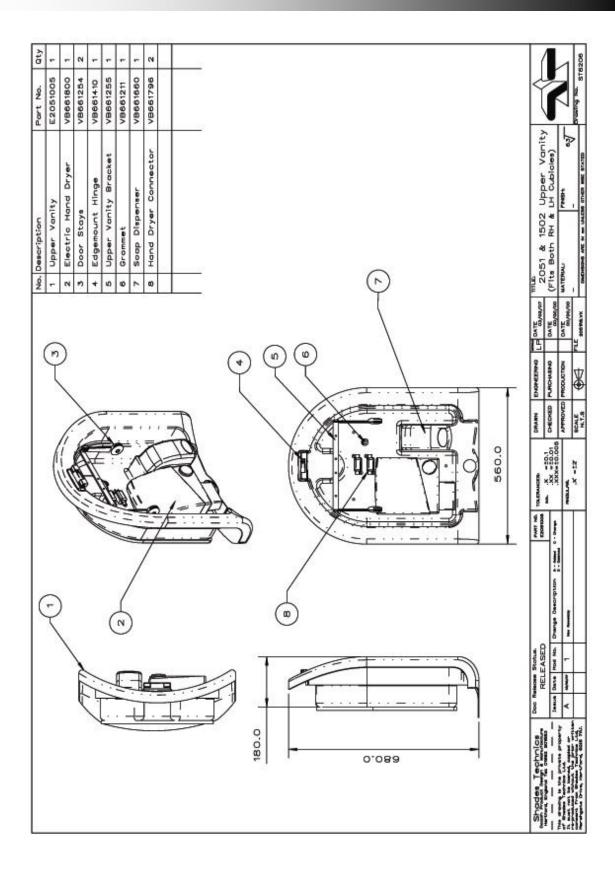


Cubicle Vanity Door Spares



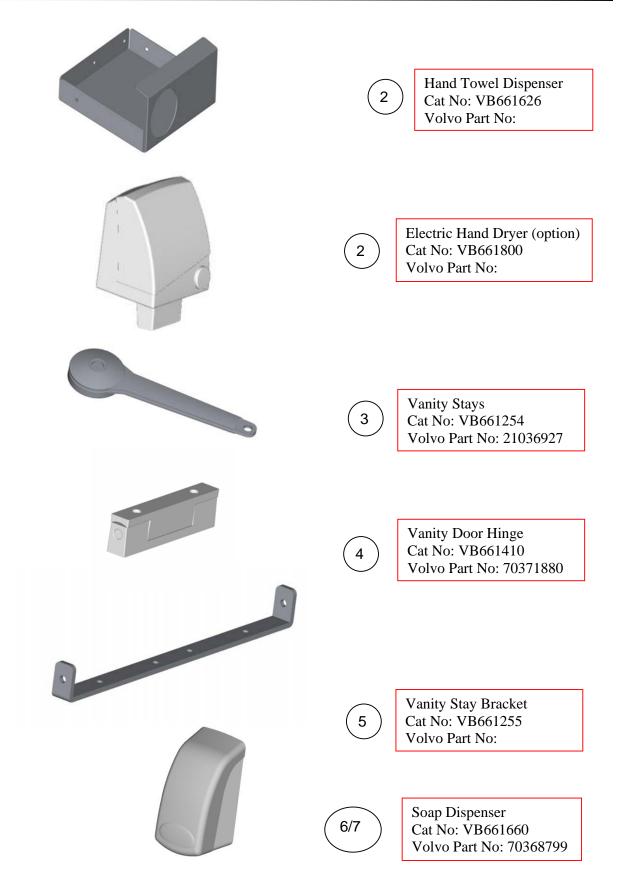


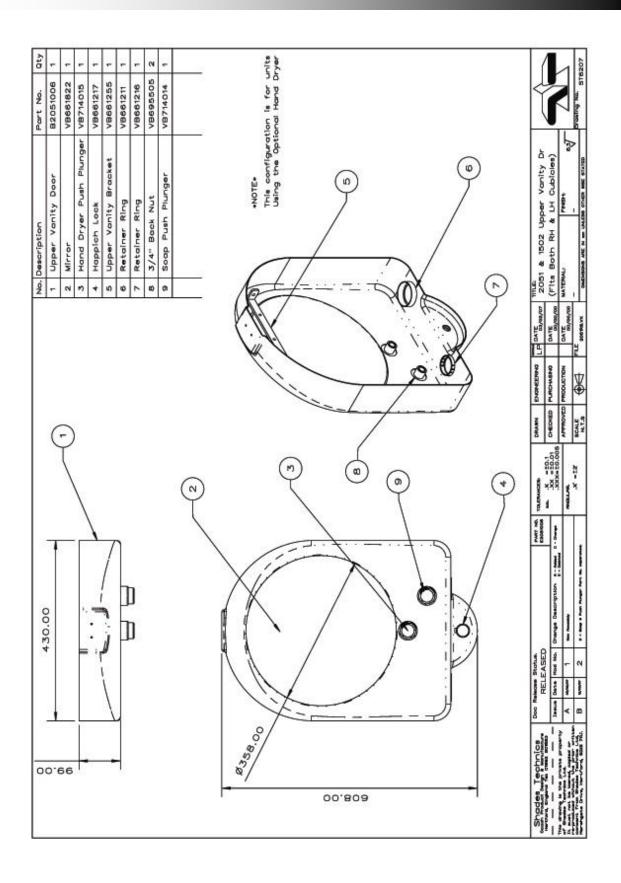
Cubicle Upper Vanity Spares (hand towel)

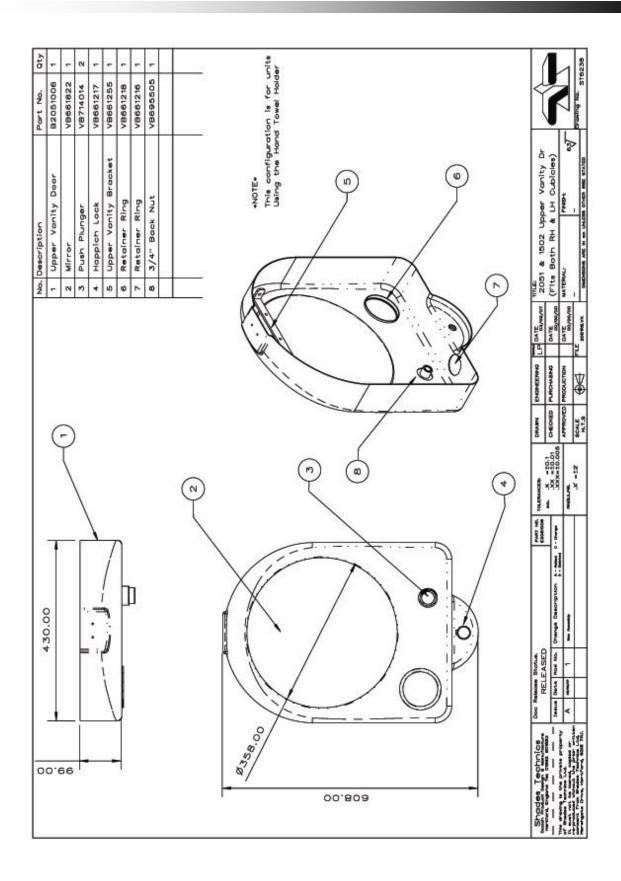


Cubicle Upper Vanity Spares (hand dryer)

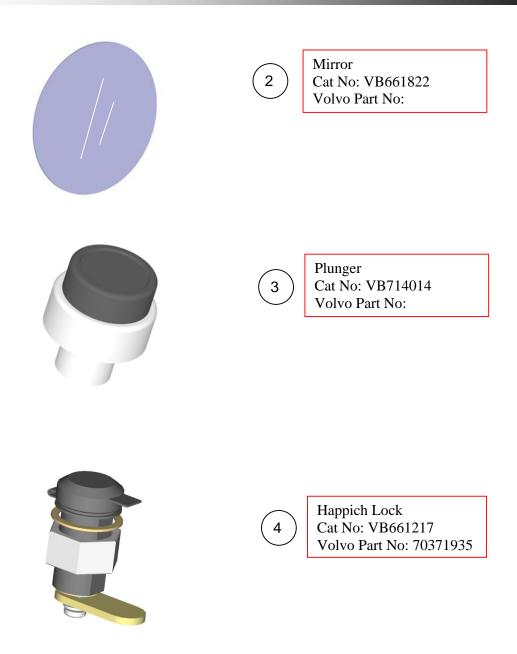




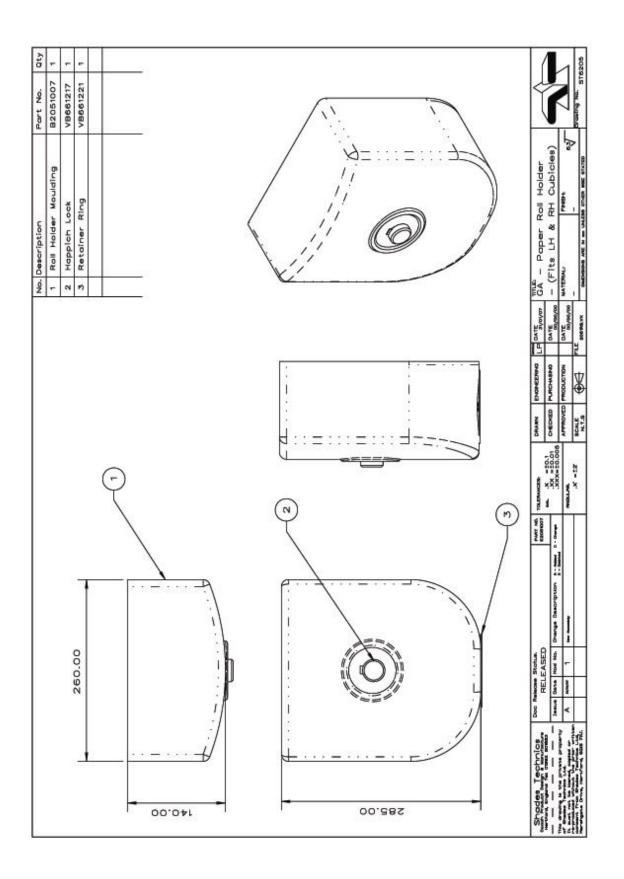




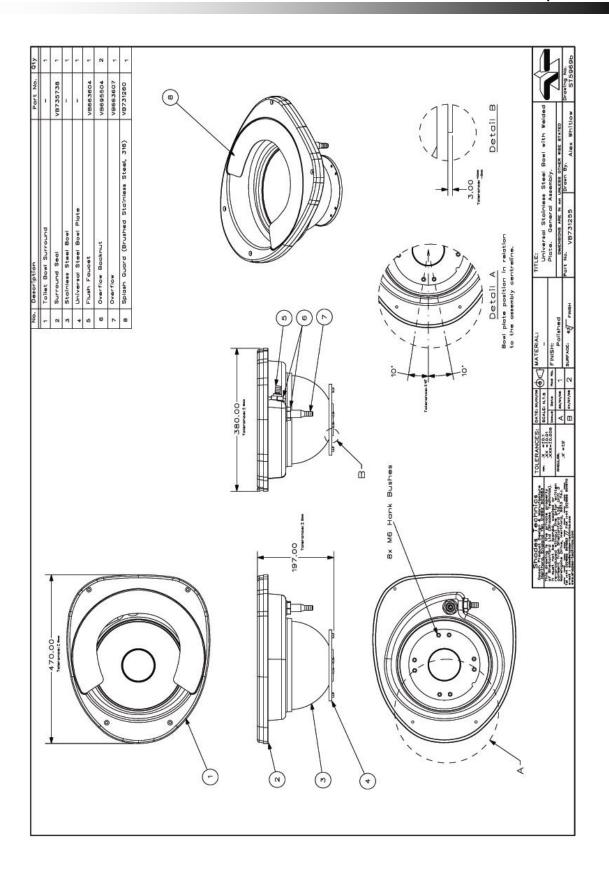
Cubicle Upper Vanity Door Spares



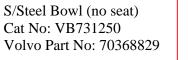














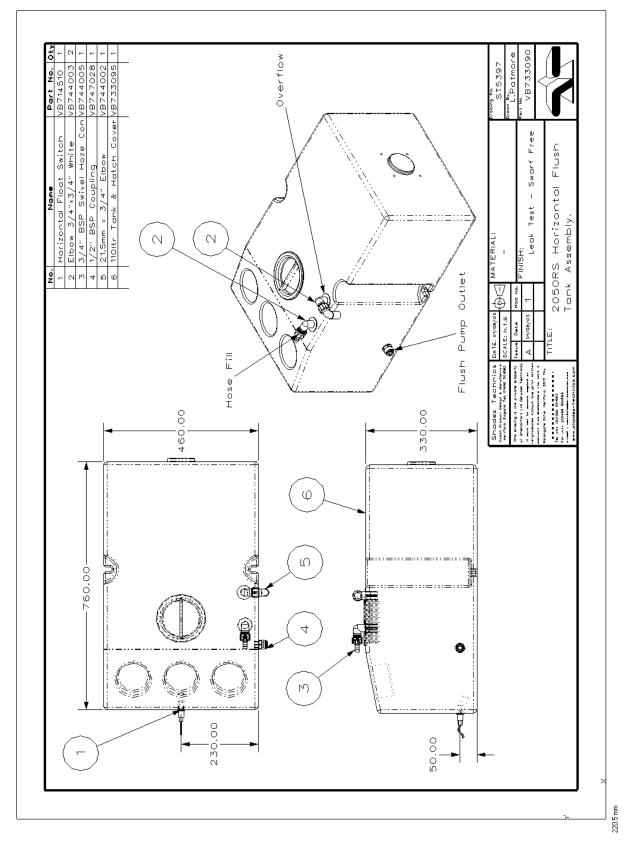


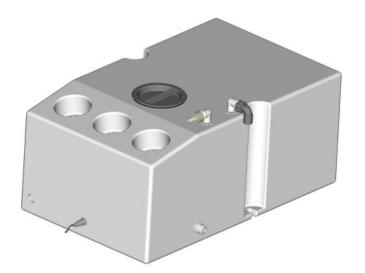
Swivel Straight ¹/₂" BSP – ¹/₂" Barbed end Cat No: VB702521 Volvo Part No:

> Isonic Valve Cat No: VB735714 Volvo Part No: 70368764

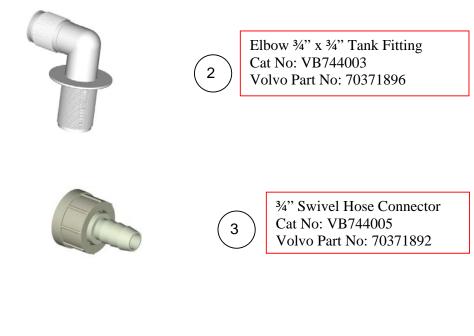


Piston and Slide Valve Assembly Cat No: VB735713



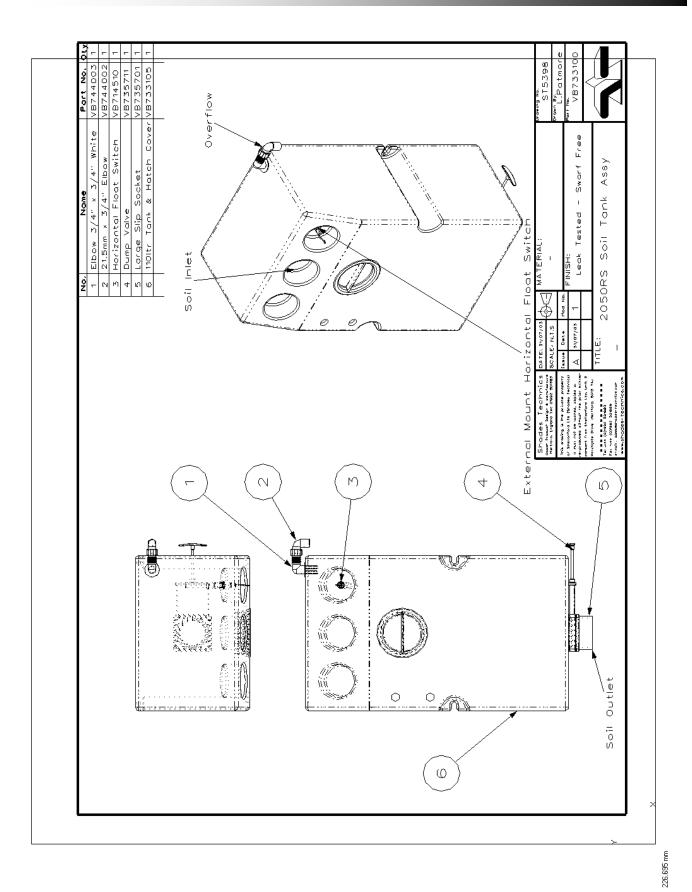


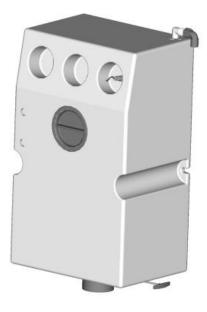
Flush Tank Cat No: VB733090 Volvo Part No: 70371876





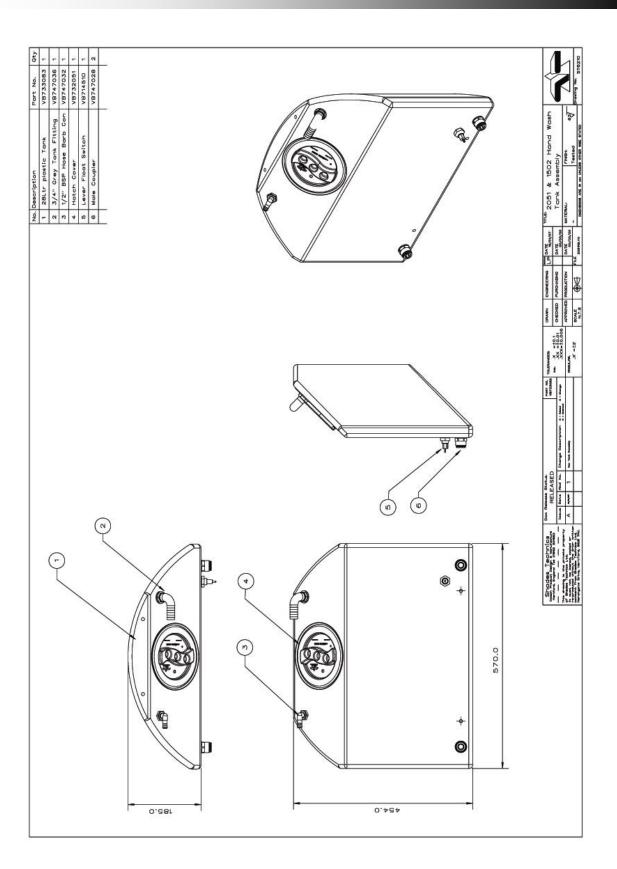
21.5mm x ³/₄" Elbow Cat No: VB744002 Volvo Part No: 70378190





Soil Tank Cat No: VB733100 Volvo Part No: 70371872

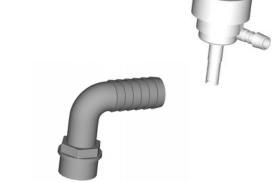






Assembled Hand wash Tank With Fittings Cat No: VB733080 Volvo Part No: 70371850

> Handwash Pump Cat No: VB702110 Volvo Part No: 70368755



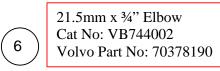
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³⁄₄" Swivel Hose Connector Cat No: VB744005 Volvo Part No: 70371892







Elbow ³4" x ³4" Tank Fitting Cat No: VB744003 Volvo Part No: 70371896

•NOTE. RH Base is a mirror of LH Base ST6205 ST6202 ST6203 ST6204 ST6222 ST6209 ST6108 Part No. D A2051051 5 VB713286 VB713286 VB713286 VB713286 VB713286 VB713286 VB713286 VB713286 VB70102 VB70102 VB701051 VB701051 Assy 2051 & 1502 Base Assy Vanity Assy Ider Assy op Assy ank Door Assy (SS Bowl Ass) Drain Wash 00 Lower Sick Btn Roll 2 0 TOLENHOER 21- X (0) 902.0 1 0.926 4 \odot 0.21 1390.0 6

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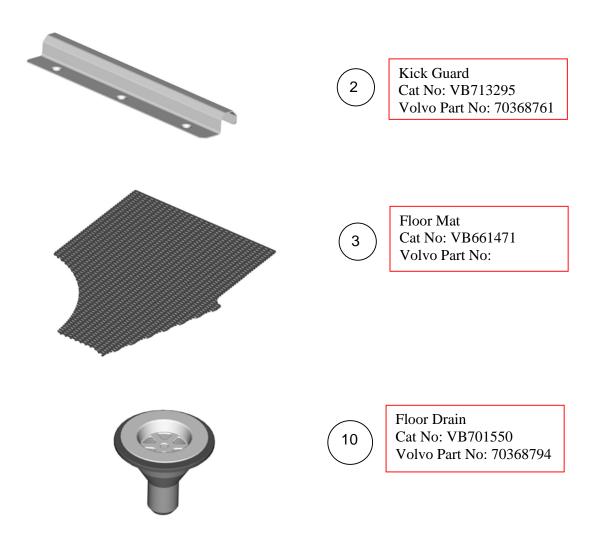
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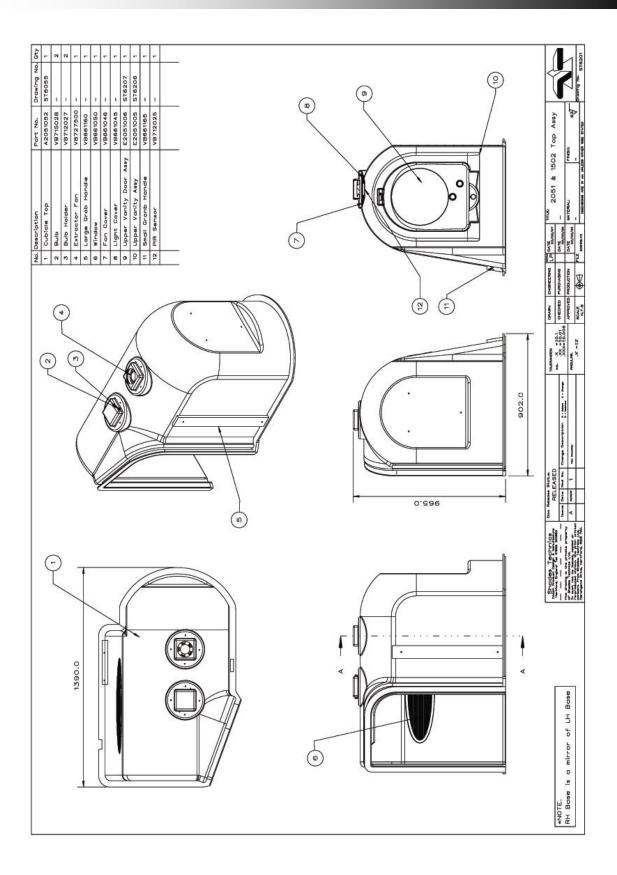
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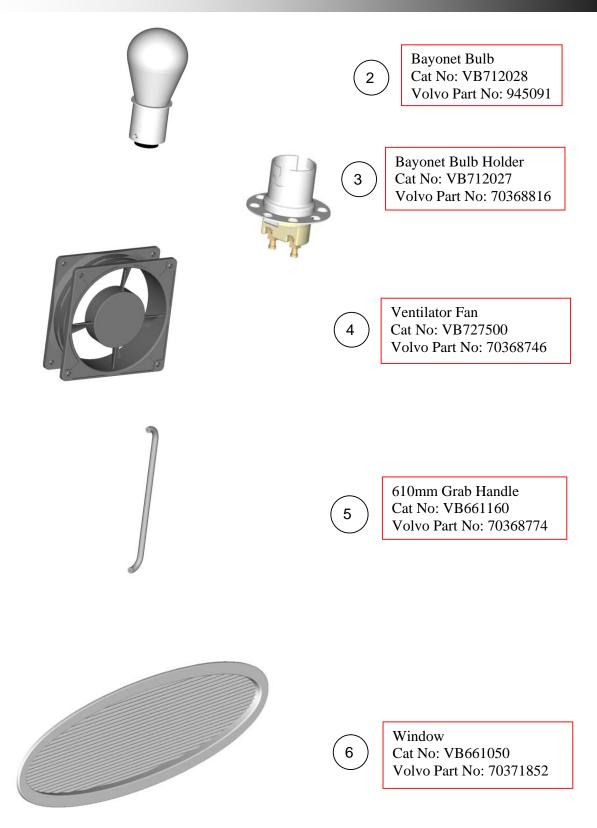
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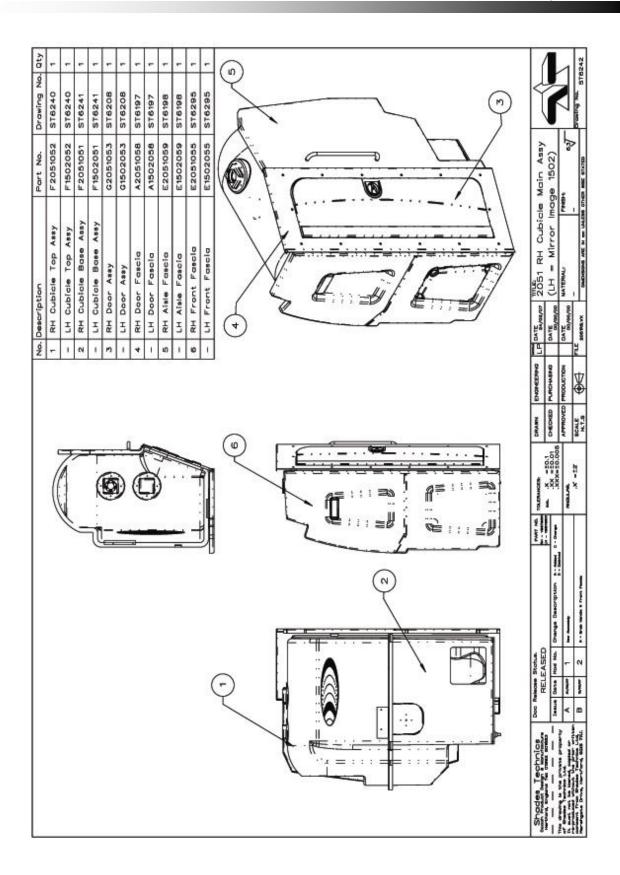
Cubicle Base Spares





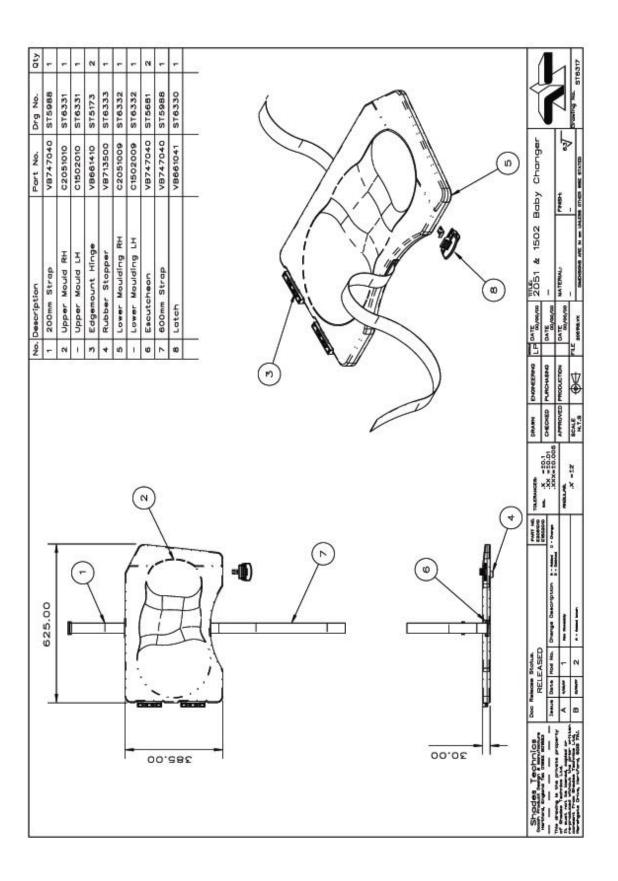


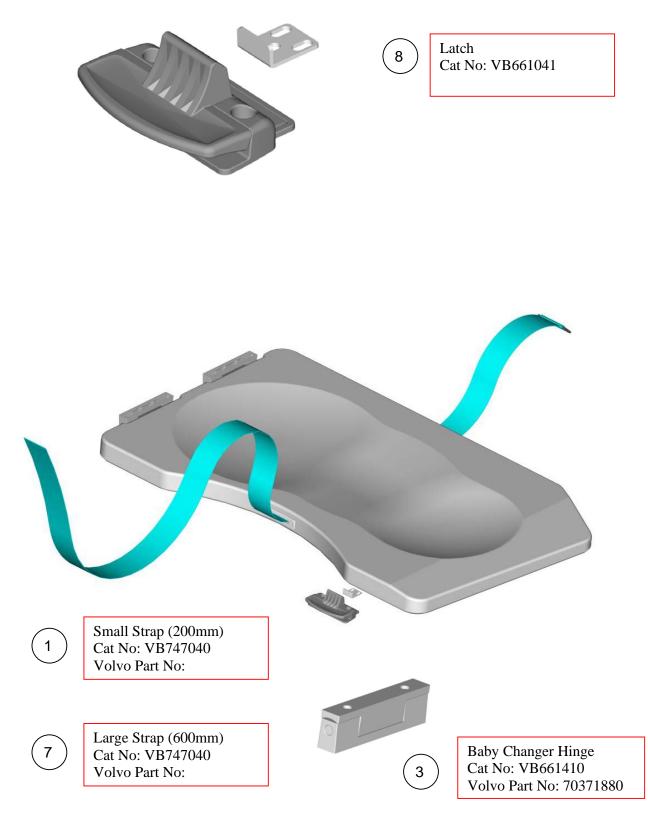


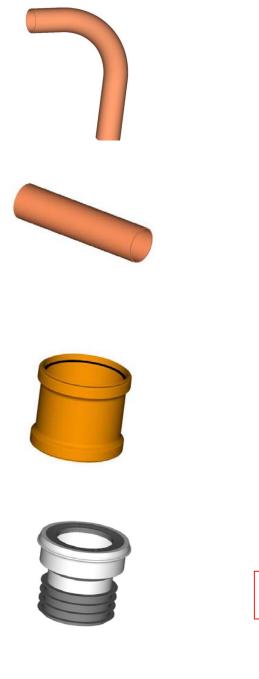




610mm Grab Handle Cat No: VB661160 Volvo Part No: 70368774







110mm Sweep Bend x 1000mm long Cat. No.: VB735755 Volvo Part No. 70371864

> 110mm Sweep Bend Extension Cat No: VB735756

> > 110mm Soil Pipe Coupling Cat No: VB735757

110mm Straight Pan Connector with Gasket Cat No: VB735759



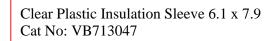
90mm ID x 38mm Grey Socket Ring Cat No: VB735762



Flush Pump Cat No: VB702180 Volvo Part No: 70368753



4mm Air Pipe Cat No: VB735722 Volvo Part No: 980830





Terry Clip Cat No: VB713285 Volvo Part No: 70371905













Knuckle Bend Cat No: VB744120 Volvo Part No: 70371889

Shut off Tap Cat No: VB747037 Volvo Part No: 70371895

> T Push Fit Cat No: VB744121 Volvo Part No: 70371899

¹/₂" Potable Hose Cat No: VB744030 Volvo Part No: 70371923

> 12-22 Hose Clip Cat No: VB744041 Part No: 943471

21.5mm Rigid Pipe Cat No: VB747055 Volvo Part No: 70371897

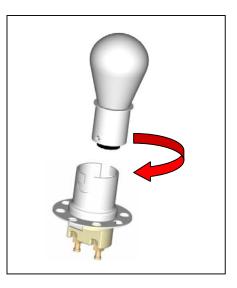
Cubicle Legends



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

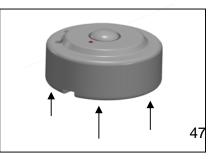
Part = Bulbs Location = Cubicle Top Replacement....

- 1. DISCONNECT THE POWER TO THE CUBCILE
- 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....

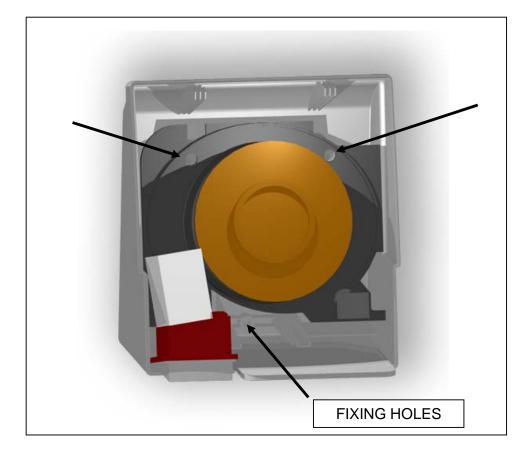
- 1. REMOVE PLASTIC LIGHT COVER 4x NYLON SCREWS
- 2. DISCONNECT PIR CONNECTOR
- 3. REMOVE 3x SCREWS ON THE INSIDE OF THE LIGHT COVER TO RELEASE THE PIR SENSOR.
- 4. TO RE-FIT A NEW SENSOR, REMOVE THE 3x SCREWS FROM THE BACK AND FIT THE UNIT BACK IN THE RECESS.
- 5. TIGHTEN THE SCREWS FROM INSIDE THE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



Part = Hand Drier

Location = Behind Upper Vanity Door Replacement....

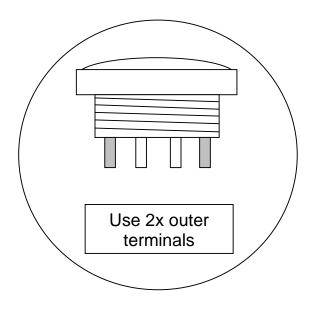
- 1. DISCONNECT THE POWER TO THE CUBICLE
- 2. UNLOCK AND OPEN THE UPPER VANITY DOOR
- 3. REMOVE 2x SCREWS ON THE UNDERSIDE OF THE HAND DRIER
- 4. REMOVE THE FRONT COVER OF THE HAND DRIER
- 5. REMOVE 2x RUBBER HOLE COVERS
- 6. REMOVE 3x SCREWS RELEASING THE UNIT FROM THE WALL
- 7. DISCONNECT THE 2 CABLES 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



Service

Part = Hand Wash & Flush Buttons Location = Sink Vanity Replacement....

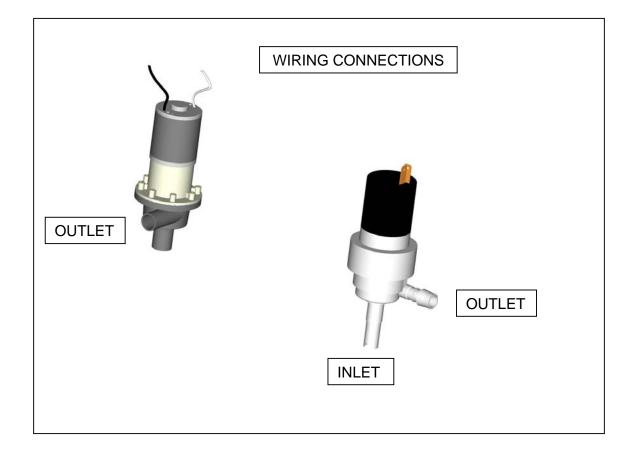
- 1. DISCONNECT THE POWER TO THE CUBICLE
- 2. UNLOCK LOWER VANITY DOOR
- 3. REMOVE TERMINALS FROM THE BACK OF THE BUTTON
- 4. UNSCREW THE COLLAR ON THE UNDERSIDE OF THE BUTTON
- 5. BUTTON SHOULD RELEASE FROM THE TOP
- 6. RE-FIT NEW BUTTON AND CONNECT THE TERMINALS



Part = Hand Wash & Flush Pump

Location = Hand Wash Pump – Bin Vanity & Flush Pump – Supply Tank Replacement....

- 1. DISCONNECT THE POWER TO THE CUBCILE
- 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

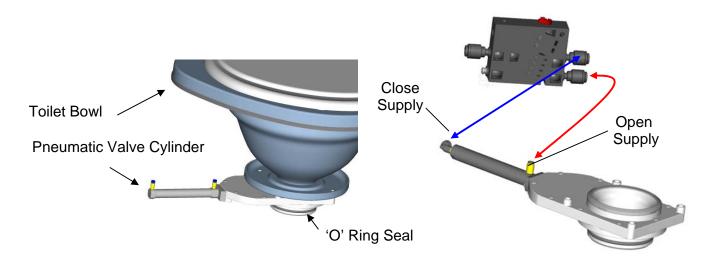
Removal....

- 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

CAUTION: As this air supply is from the vehicle (via the control valve), when it is disconnected the air pressure in the pipes will be at approx 8 bar and will cause the pipe to 'snake around' violently if it is not held firmly.

Replcement....

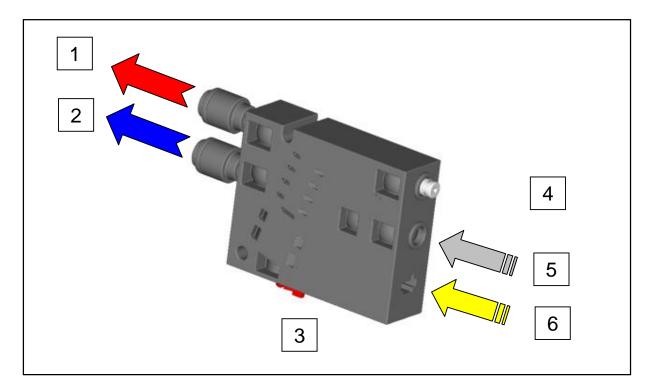
- 1. POSITION THE VALVE ASSEMBLY ON THE BOTTOM OF THE BOWL AND SECURE WITH THE 4x BOLTS. TIGHTEN BOLTS TO 6KGF.CM USING A TORQUE WRENCH.
- 2. SMEAR GREASE OR SIMILAR AROUND THE BLACK O-RING ON THE PNEUMATIC VALVE & PASS BOWL THROUGH APERTURE ON THE COWLING PUSH FIRMLY INTO THE SOIL TANK. ENSURE THAT 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 = 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

CAUTION: As this air supply is from the vehicle (via the control valve), when it is disconnected the air pressure in the pipes will be at approx 8 bar and will cause the pipe to 'snake around' violently if it is not held firmly.



- 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. OVERIDE SWITCH SWAPS PORTS 1 & 2 OVER
- 4. EXHAUST MUST BE KEPT CLEAR
- 5. AIR SUPPLY FROM VEHICLE 10BAR MAX