ideal standard mainsflush

COMMERCIAL INSTALLATION & SERVICE BOOKLET
July 2005

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TABLE OF CONTENTS

Introduction,
Australian Standard Requirements .......................................................... 3
Architects Specification Guide Lines .................................................... 3
Description, Features & Very Important Notes...................................... 4
Selection of Wall Faced & Wall Hung Pans............................................ 4

Commercial Installation Guide Lines,
Mainsflush Commercial Plumbing Guidelines.......................................... 5
Pressure Loss & Flow Graph.................................................................... 6
Typical Multiple Installation of Mainsflush.............................................. 7
Typical Plumbing Installation................................................................. 7
Common Installation Errors................................................................. 7
Installation Requirements.................................................................... 8
Handy Plumbing Hints.......................................................................... 9
Acoustic Flush Pipe & Acoustic Insulation.............................................. 9

Mainsflush Products
Mainsflush Product Selection Guide......................................................... 10
Pressure Vessel Selection Guide............................................................. 11

Commissioning, Maintenance, Servicing & Warranty,
Commissioning of Flush Valve .............................................................. 11
Sonic Sense Touch Pad Set Up............................................................... 12
Maintenance & Servicing..................................................................... 13
Spare Parts & Valve Kit Components.................................................... 14
Trouble Shooting & Warranty............................................................... 15
Flush Valves Connected to the Drinking Water Service

The following outlines the requirements for the installation of Mains Pressure Flush Valves connected to potable water services all as described within Section 10.9 of Australian Standard 3500.1:2003 requirements.

10.9.1 General
Flush valves for connection to either the water service or to a storage tank supplying other fixtures shall incorporate within the valves a back siphonage prevention device, and shall be installed in accordance with Clause 10.9.2 to 10.9.7.

10.9.2 Compatibility
The flush valve shall be compatible with the fixture to which it is connected.

10.9.3 Pipe Size
The minimum pipe size serving the flush valve shall be DN 25. The sizes of all pipe work supplying the valve/s shall be hydraulically calculated. Refer page 4 & 12.

10.9.4 Protection
The back siphonage prevention device incorporated in the flush valve shall be protected against interference and possible blockage.

10.9.5 Location
The flush valve shall be installed such as to place the outlet at a minimum of 450mm above the rim of the pan.

10.9.6 Pressure and Velocity Limitations
Flushing valves shall only be installed where the pressure and flow is sufficiently high to effectively operate the valve and not interfere with the operation of any other appliances dependent on the pressure from the water supply.

10.9.7 Branch Service Pipe
For maintenance purposes the branch service pipe to each flush valve or group of flush valves shall be provided with a stop valve.

Sonic Sense Touch Pads Specifications

Sonic Sense Dual Flush Touch Pad Oval S/S 120mm x 90mm or Rectangular S/S Touch Pad 110mm x 70mm or Coloured Glass 98mm x 98mm.
Dual Flush Touch Pad to provide 2.5 second half flush and full flush from 3.5 seconds to 5 seconds. Touch Pad to convert the sound of a finger touching the sensing area into an electrical impulse. Touch Pad to incorporate electronic PCB control unit be supplied with Power Pack and 2 metres of lead.

25mm Mainsflush Valve Specifications
Australian made flush valve that complies with Australian Standards 3500.1: 2003, carrying Water Mark approval and triple AAA Water Conservation Rating. Mainsflush Valve to incorporate only one moving part, use a solenoid capable of converting electrical pulse provided by SonicSense Touch Pad and provide built-in air brake and back siphonage protection. The valve to provide flow adjustment to accurately set 3/6 litre flush. Valve to be installed with 25mm Ball Valve, 25mm Barrel Union, 25mm M/F Elbow & 40mm Cap & Lining.

Installation
To meet the requirements of Section 9.9 of Australian Standard 3500.1: 2003. This booklet is supplied with each Mainsflush Valve, it is to be clearly understood and followed by the installing plumber. Depending on the type/style of installation, Mainsflush is supplied in either kit form or individual components; please consult this booklet or Reece Plumbing Centres for correct selection.
Advice on installation can be gained by contacting Reece Trade Product Specialists.

Reece Website:
A range of product and technical information is available in PDF and can be easily down loaded.
DESCRIPTION, FEATURES & VERY IMPORTANT NOTES

The Ideal Standard Mainsflush System uses revolutionary toilet technology to create a new world of design possibilities for domestic and commercial bathrooms. Mainsflush is a sanitary flushing system, activated by an electronic SonicSense Touch Pad, which works directly from high-pressure (mains) water supplies. The Mainsflush System replaces the need for a Cistern; it is dual flush and AAA Water Conservation Rated.

Providing a striking minimalist presence, Mainsflush SonicSense Touch Pads operate at the touch of a finger. Mainsflush represents consumer luxury and is available in sleek oval and classic rectangular stainless steel shapes, plus square coloured glass and mirror finishes. For the more adventurous, custom-made touch pads and/or use of your own choice of ceramic tile, achieves an amazing new look in your bathroom.

Mainsflush also carries the following features:
- Watermark Approved to Spec 020 Lic. W20023
- AAA Water Conservation Rated
- Australian Designed & Manufactured
- Activated by an electronic SonicSense Touch Pad
- Strong durable valve and touch pads.
- No need for a cistern
- Half & full flush feature
- Only one moving part
- Built in backflow prevention
- SonicSense can be installed on most ceramic tiles
- Distributed exclusively by Reece Plumbing

Very Important Notes – please read

- The minimum pipe size serving the flush valve shall be DN 25. The sizes of all pipe work supplying the valve/s shall be hydraulically calculated. The feed line supplying Mainsflush in all commercial installations shall be 32mm or larger. The number of toilets, the distance between toilets, the type of application and the height of the building will have an effect on pipe size.
- Mainsflush Flush Valves shall only be installed where the pressure and flow is sufficiently high to effectively operate the valve/s and not interfere with the operation of any other appliances dependent on the pressure from the water supply.
- Pressure Vessels can be used in conjunction with Mainsflush in situations where insufficient water is available or where other water fixtures will incur pressure loses when the Mainsflush is activated. The feed line from the pressure vessel will still need to be calculated to meet the demands of the system. Mainsflush should be run on it’s own dedicated line.
- Australian Standard Requirements for flush valves must be met. See Page 3. If in doubt, a professional Hydraulics Engineer should be engaged. Reece Pty is not responsible for any plumbing designs involving Mainsflush.

MAINSFLUSH SUITS WALL FACED & WALL HUNG PANS

Expressions  Pozzi Ginori Join  Lavabi 500  Leda
Newport  Chipperfield  Alto  Newson
## Mainsflush Commercial Plumbing Selection Guide

### Building Type

#### Continuous Commercial Demand
- Shopping Centres, Hospitals

<table>
<thead>
<tr>
<th>Type 2: Medium Commercial</th>
<th>Number of Toilets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Vessel Size (Ltrs)</td>
<td>1</td>
</tr>
<tr>
<td>10 Metres from Pressure Vessel</td>
<td>24</td>
</tr>
<tr>
<td>15 Metres from Pressure Vessel</td>
<td>32</td>
</tr>
<tr>
<td>20 Metres from Pressure Vessel</td>
<td>32</td>
</tr>
</tbody>
</table>

**Important Note:** *If the property has the nominated pipe size (above) installed that is applicable to the type of application and the number of toilets being connected, pressure vessels will not be required.*

### Building Type

#### High Demand over short period of time
- Theatres, Major Sporting Venues

<table>
<thead>
<tr>
<th>Type 3: Heavy Commercial</th>
<th>Number of Toilets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Vessel Size (Ltrs)</td>
<td>1</td>
</tr>
<tr>
<td>10 Metres from Pressure Vessel or larger pipe supply</td>
<td>24</td>
</tr>
<tr>
<td>15 Metres from Pressure Vessel or larger pipe supply</td>
<td>32</td>
</tr>
<tr>
<td>20 Metres from Pressure Vessel or larger pipe supply</td>
<td>32</td>
</tr>
</tbody>
</table>

**Important Note:** *If the property has the nominated pipe size (above) installed that is applicable to the type of application and the number of toilets being connected, pressure vessels will not be required.*

### Chart Notes

- Depending on the diversity factor additional Pressure Vessels may need to be installed.
- The above design criteria are required to be implemented when sizing water supply pipe work systems servicing Ideal Standard Mainsflush Flush Valves.
- The table above is based on diversity factors directly related to commercial buildings and the possible number of valves being used simultaneously i.e. type 3; 50% could be used at any one time.

For the purpose of the exercise we have also assumed that the inlet static pressure at the valve is not less than 550 kPa (55 metres head) or 350 kPa (35 metres head) dynamic and where pressures are greater than 550 kPa flow characteristics would ensure greater volumes of water passing through the system. Pipe size requirements may change in high-pressure situations.

For installations of more than 6 valves we recommend that a qualified professional Hydraulics Engineer be engaged.
Pressure Loss Water Pressure (kPa)
NOTE: This Hydraulic Design is a typical example of a multiple installation of mains flush. For calculations and pipe sizing for multiple installations of mains flush, please consult a professional Hydraulic Services Engineer. This diagram is typical of a multilevel installation. However, local water regulations may vary installation requirements.

TYPICAL PLUMBING INSTALLATIONS

COMMON INSTALLATION ERRORS

- Incorrect supply pipe size installed. Please refer to pages 5.
- Plastic Pipe (In many brands of plastic pipe and associated fittings the internal diameter is not equivalent to copper)
- Australian Standards not complied with. Refer page 3.
- Lines not flushed before installation.
- No access for service.
- Water pressure not tested before installation.
- Valves not commissioned properly
### INSTALLATION REQUIREMENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mainsflush Valve</strong></td>
<td>Must be installed vertically either in a 90mm wall cavity or in the ceiling space using mounting screws provided, be plumbed with loose coupling connections on both inlet and outlet of valve.</td>
</tr>
<tr>
<td><strong>Wall Cavity</strong></td>
<td>Minimum wall cavity required to install valve is 70mm (minimum access panel of 300mm x 300mm is required).</td>
</tr>
<tr>
<td><strong>Isolating Ball Valves</strong></td>
<td>Must be installed upstream of each flush valve.</td>
</tr>
<tr>
<td><strong>Non Return Valves</strong></td>
<td>Must be installed upstream if a pressure vessel has been installed.</td>
</tr>
<tr>
<td><strong>Pipe Installation</strong></td>
<td>Fix inside walls using saddles with silicone where pipe fits through studs.</td>
</tr>
<tr>
<td><strong>Line Strainer</strong></td>
<td>Installed upstream of flush valve or group of flush valves.</td>
</tr>
<tr>
<td><strong>Pipe Size</strong></td>
<td>Refer to Mainsflush Plumbing Pipe Selection Guide Page 5. If using poly upsize one size above copper. Eg 32mm to 40mm. Larger pipe sizes maybe required due to the number of valves.</td>
</tr>
<tr>
<td><strong>Water Supply</strong></td>
<td>Water supply 25mm pipe must connect to all valves; minimum delivering flow rate 1.5 litres per second is required at 350kPa dynamic pressure (flow). Supply lines must be flushed before valve is connected.</td>
</tr>
<tr>
<td><strong>Water Pressure</strong></td>
<td>If pressure exceeds 500kPa an adjustable Pressure Reduction Valve must be installed. A Water Hammer Arrestor may be required in some applications.</td>
</tr>
<tr>
<td><strong>Flush Pipe</strong></td>
<td>40mm diameter flush pipe, minimum length 450mm, connected to valve by a 40mm cap &amp; lining. Length of flush pipe will vary according to installation. It is recommended for heights over 2.7 metres that for every 1.5 metres of flush pipe 2 x 45 degree bends are installed to slow water flow to pan.</td>
</tr>
<tr>
<td></td>
<td>NB: Extended lengths of flush pipe can cause an air-activated hydraulic noise. Except for final connection to pan, 90° bends should not be used as it causes water turbulence noise. For best results Geberit Silent Acoustic Flush Pipe &amp; Fittings are recommended from valve outlet to pan.</td>
</tr>
<tr>
<td><strong>Acoustic Insulation</strong></td>
<td>It is recommended that acoustic plumbing noise dampening materials be used in dwellings where increased levels of sound protection may be required. (Open plan bathrooms with hard floors, flush noise may be accentuated).</td>
</tr>
<tr>
<td><strong>Access for Service</strong></td>
<td>Suitable easy access for service must be provided, by way of ceiling manhole or wall access by using front touchpad or front/rear access panel that as a minimum is 300mm x 300mm. A minimum of 70mm is required above the white valve bonnet to allow access to flow adjustment screw.</td>
</tr>
<tr>
<td><strong>SonicSense Touch Pad</strong></td>
<td>Should be installed vertically, centred above the toilet, between 900mm and 1100mm from floor. Allen Key screws provided with the touch plate screw directly onto an electrical backing plate (not supplied). Glass touch pads should be sealed with neutral silicone. Touch Pad should be installed high enough to ensure toilet seat does not rest against touch pad. If touch pad is installed in a “wet area” care must be taken to seal electronics from any moisture. If using ceramic touch pads Bostik non skinning mastic 5612 adhesive is recommended.</td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td>Mains supply 240 Volt – Standard Power point.</td>
</tr>
<tr>
<td><strong>Lead Connections</strong></td>
<td>Each SonicSense touch pad is supplied with 2 metres of electrical leads with male and female connectors plus power-pack transformer. “Connect power lead to touchpad, and then valve (lead with spade connection) to touchpad, male and female connections will only allow connection the correct way”. If longer leads are required they are available in sets of 2 and extend 2m, 5m, 7m &amp; 10m.</td>
</tr>
<tr>
<td><strong>Packing Material</strong></td>
<td>The polystyrene packing material supplied with the valve should be placed around valve and taped in place using duct tape or similar. This provides additional sound insulation. If the client wants a premium result additional acoustic insulation is recommended.</td>
</tr>
</tbody>
</table>
For the best results run a branch line to farthest valve from water source, and loop branch line back to mains supply line.

If plastic pipe is to be used please refer to table 1.1 AS3500.1: 2003 for equivalent pipe sizes to copper.

To comply with Section 10.9 of Australian Standard 3500.1:2003, 25mm minimum connection size to each valve.

Conduct pressure test & flow test to ensure in accordance with requirements of this booklet and AS3500.1: 2003.

If valves are to be installed in a multi-storey building allow for additional pressure loss of 10kPa per metre.

The number of valves and simultaneous demand must be considered when sizing pipes. If other fixtures are connected to the supply line feeding toilets e.g. shower. Calculations of flow rate and pressures must be undertaken to ensure adequate water supply. If in doubt a Hydraulic Consultant should be engaged.

Limit the number of changes of directions in pipe work. This will result in less friction loss, better valve performance and reduce the possible water cavitation noise. Upsizing pipe work will also reduce friction losses and improve valve functioning.

If you require any help contact Reece Trade Product Specialist via your local Reece branch. Depending on location a site inspection service may be available.

To pressure check line before commissioning the flush valve (see page 9) turn the centre set screw in the white bonnet down until the piston softly seats. Remember to re-adjust. Under normal conditions the valve will flow water, then stop.

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**ACOUSTIC FLUSH PIPE & INSULATION**

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty Per Valve</th>
<th>Reece Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1433000</td>
<td>Geberit HDPE Silent Pipe (2.9mtr) 56mm</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1433106</td>
<td>Geberit Silent Clamp S/S – 56</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>1433052</td>
<td>Geberit Silent Elbow 88.5 deg - 56mm</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>1430676</td>
<td>Geberit Top Trap Adaptor 56mm x 40mm</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1430676</td>
<td>Geberit Bottom Trap Adaptor 56mm x 40mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(To connect to pan, push 40mm DWV in to adaptor using soapy water or o ring grease, then cut DWV to length.)</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>510576</td>
<td>Walraven Bifix P Clamp 1301 - 57mm - 64mm</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>510621</td>
<td>Walraven Wall Plate M10 FI - Clamps to wall frame</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Holds Flush Pipe in Place – Install top &amp; bottom)</td>
</tr>
</tbody>
</table>

Minimum length of vertical flush pipe from valve to inlet of pan is 450mm. If flush pipe is over 2.5 metres, water from flush valve will need to be slowed down. To achieve, offset flush pipe every 1.5m. (See page 7). You will require an extra 2 x 45 deg Geberit Silent Bends (code 1433036) and 4 x additional Clamps (code 1433106).

**Acoustic Insulation**

- Polystyrene Insulation is supplied with valve and should be used.

Acoustic plumbing noise dampening materials is suggested in dwellings where increased level of sound protection is essential. Pyrotek SOUNDLAG is recommended.

- Code 1904430 Sound Lag Pipe Wrapping 5 Mtr X 1350mm Roll
- Code 1908680 Sound Lag Pipe Wrapping 3 Mtr X 1350mm Roll
## MAINSFLUSH PRODUCT SELECTION GUIDE

### Flush Valves
**For Pans**

<table>
<thead>
<tr>
<th>Code</th>
<th>Product Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1806799</td>
<td><strong>Mainsflush Mains Pressure Flush Valve - 25mm Valve Only</strong></td>
</tr>
</tbody>
</table>
| 1860193 | **25mm Mainsflush Valve & Fittings Pack**  
Includes Mainsflush Valve, 25mm  
(Barrel Union, Elbow & Ball Valve + 40mm Cap & Lining) |

### Dual Flush
**Touch Pads for Pans**

<table>
<thead>
<tr>
<th>Code</th>
<th>Product Description</th>
</tr>
</thead>
</table>
| 1806798 | **Mainsflush S/S Dual Flush Oval Touch Pad**  
90mm x 120mm.  Contents: touchpad/electronics, screws, power pack, installation instructions and leads. |
| 1806802 | **Mainsflush S/S Dual Flush Rectangular Touch Pad**  
110mm x 70mm.  Contents: touchpad/electronics, screws, power pack, installation instructions and leads. |
| 1806872 | **Mainsflush Glass Dual Flush Square Touch Pad**  
98mm x 98mm.  Contents: touchpad/electronics, power pack, installation instructions and leads. |
| 1806873 | **Aqua/White Mainsflush Glass Touchpad** |
| 1806874 | **Silver Mainsflush Glass Touchpad** |
| 1806875 | **Ivory Mainsflush Glass Touchpad** |
| 1806876 | **Blue Mainsflush Glass Touchpad** |
| 1806877 | **Mirror Mainsflush Glass Touchpad** |
| 1806806 | **Mainsflush S/S Dual Flush Touch Pad**  
300mm x 300mm.  Contents: touchpad/electronics, screws, power pack, installation instructions and leads. |

### Single Flush
**Touch Pad for Pans**

<table>
<thead>
<tr>
<th>Code</th>
<th>Product Description</th>
</tr>
</thead>
</table>
| 1806885 | **Mainsflush S/S Single Flush Touch Pad**  
110mm x 70mm. (public toilet areas)  
Contents: touchpad/electronics, screws, power pack, installation instructions and leads. |
| 1806886 | **Mainsflush S/S Single Flush Touch Pad**  
300mm x 300mm. (public toilet area’s)  
Contents: touchpad/electronics, screws, power pack, installation instructions and leads. |

### Ceramic Dual Flush
**Touch Tile for Pans**

<table>
<thead>
<tr>
<th>Code</th>
<th>Product Description</th>
</tr>
</thead>
</table>
| 1806826 | **Mainsflush Dual Flush Ceramic Tile Touch Pad**  
“All Tiles” Supplied by Customer  
Contents: touchpad/electronics, screws, power pack, installation instructions and leads  
**Maximum Tile Size 300mm x 300mm** |
| 4930536 | **Bostik 5612 Non Skinning Mastic 450gm Tube**  
Use to stick Mainsflush Ceramic Tiles.  
Will not cure – allows for strong bond & future removal of tile. |
Davey Pressure Vessels &
Mainsflush Accessories

Pressure Vessels suit Mainsflush in
Retrofit or new situations

Robust hydro-pneumatic water pressure
vessels of captive diaphragm design.
5 Year Guarantee

Pressure Vessel Capacity 24 litre,
Draw off 9 litres, Maximum working
pressure 1050kpa. Bottom entry 1” BSP
Male port.

Dia 300mm x 445 mm H

Pressure Vessel 50 litres,
Draw off 20 litres, maximum working
pressure 700kPa. Side entry 1” BSP Male port

Dia 380mm x 570 mm H

Pressure Vessel 100 litres,
Draw off 42 litres, maximum working
pressure 1050kPa. Free Standing Unit –
1 ¼ ” Side entry port

Dia 500mm x 680 mm H

Vessel Accessories

Bracket to suit:
24 Litre Davey Pressure Vessel

Mainsflush Vessel Fittings Pack

Davey Pressure Vessel Plastic Cover
(supplied with vessel)

20mm (3/4”) M/F 500kPa
Adjustable Pressure Reducing Valve
(includes non return feature)
COMMISSIONING OF FLUSH VALVE

To test and set the Mainsflush Valve you will need a blade screwdriver and a 10 litre calibrated bucket. As debris is the major cause of valve malfunction, please properly flush supply line before connecting and commissioning valve.

Turn "set screw" to adjust flow

- Remove the lower end of the flush pipe and place into the 10-litre bucket.
- Connect the power to the sensor. A flush will automatically be discharged into the pan.
- **To set valve:** activate system by touching the full flush area on the SonicSense Touch Pad and measure the volume discharge. If 6 litres of water is discharged the valve has been set and no further action is required.
- **To adjust volume:** use blade screw driver and adjust the "set screw' located in the centre of the white bonnet (pictured) of the valve. Screw anticlockwise (up) to increase volume, clockwise (down) to reduce volume.
- The full flush when set correctly is 6 litres.
- If the valve has been installed and not used for an extended period of time the valve may require a maintenance service. Refer to page 12. Then recommissioned as above.
- Can be turned down to suit new 4.5 litre pans

**Please Note:**
In low-pressure areas the "set screw" may need to be screwed in until the water stops then screwed out again before the valve can be set & tested.

SONICSENSE TOUCH PAD SET UP

Remove all power from the unit. The following illustrates the available jumper settings. (As viewed from the rear of the touch pads). As can be seen in the diagram (below), the jumpers 1 and 2 are set in the off position. The table that follows beneath shows the effect of the jumpers in all available positions. Set the jumpers to the setting most appropriate for your installation.

**Note:** Touch plate must be installed vertically and be solidly mounted on firmly fixed electrical wall box or bracket (not supplied). Insecure mounting will cause inconsistent operation. If installing Mainsflush SonicSense Ceramic Tile Touch Pads, “Bostik 5612 non skinning mastic is recommended” is recommended. See page 9.

The electronic PCB on rear of touch pad will fit into 6cm (wide) x 7cm (long) hole.

Having set the jumpers as required, reapply power to the unit. When satisfied with the setting, apply silicone to the jumper select area, ensuring that a good seal is formed.

**NOTES:** Jumper select settings only take effect once the jumpers are set as desired, and the power is turned OFF (for at least 2 Secs) and then power reapplied for the new settings to take effect. IMPORTANT: Silicone sealant must be of "NEUTRAL CURE" composition. Failure to observe this will void any warranty claims.
Once commissioned the Mainsflush Valve will provide years of trouble free operation. Regular maintenance may be required in areas of high usage, high water pressure, poor water quality and where customer requires regular interval service. The following will assist service personal when conducting maintenance service.

Method 1
- Turn water and power off.
- Check and clean incoming strainer.
- Check operation of ball valve/s and all other plumbing components.
- Undo top two screws located left and right of centre screw and remove white bonnet from body of valve. Inspect white bonnet and all o’rings for any wear & tear or any damage replace rubber components as required.
- Use a pair of long nosed pliers to remove piston (careful not to drop it), inspect for debris, damage or worn piston rubbers. Remove flow control nut from top of piston and check for debris. Reassemble then either regrease with Rocol or replace.
- Reassemble valve, recommission and re-test. Refer above
- Rocol Silicone must be used when regreasing valve. See page 13.

Method 2
- Alternately remove valve by unscrewing inlet and outlet connections.
- Turn valve upside down, place blade screwdriver through black rubber boot and push piston out. Check piston and piston rubbers for any debris, wear and tear.
- Unscrew flow control from top of piston, check clean and remove any debris. Replace all rubber washer components as required, replace flow control or piston if required.
- Reassemble valve, recommission and re-test.
- Rocol Silicone must be used when regreasing valve. See page 13.

### MAINSFLUSH VALVE SPARE PARTS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART NO</th>
<th>DESCRIPTION</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>623001</td>
<td>VALVE BODY</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>623008</td>
<td>PILOT END ASS. (WHITE BONNET)</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>M2969</td>
<td>SCREW S/STEEL M5X25</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>623006</td>
<td>FLUSHER PIPE NUT</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>623012</td>
<td>RUBBER BOOT</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>623003</td>
<td>FLUSHER PIPE NUT NITRILE</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>M2974</td>
<td>O’RING BS117 NITRILE</td>
<td>2</td>
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<td>8</td>
<td>623015</td>
<td>PISTON ASSEMBLY</td>
<td>1</td>
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<tr>
<td>9</td>
<td>6227-3</td>
<td>O’RING BS008 NITRILE</td>
<td>1</td>
</tr>
</tbody>
</table>

Rocol Silicone must be used when regreasing valve. See page 13.
SPARE PARTS & VALVE KIT COMPONENTS

Rubbers Kit

Code 1806852 MFL130 20mm
Code 1806855 MFL140 25mm

Solenoid Valve Coil

Code 1806858 24 Volt Coil suit Touch Pad

Mainsflush Valve Lubricant

Code 1903702

Flow Control Kit

Code 1806853 MFL130 20mm
Code 1806856 MFL140 25mm

Pressure Reducing Valve

Code 108886 Apex 20M/F

Mainsflush Valve Kit Components

Code 1860193 Mainsflush Valve & Fittings Pack
Code 1405560 40mm Cap & Lining
Code 210025 25mm Brass Barrel Union
Code 207925 25mm Brass M/F Elbow
Code 1003609 25mm Ballofix M/F Ball Valve

Extension Leads

Code 1806861 2 m Extension Lead
Code 1806862 5 m Extension Lead

Piston Kit

Code 1806851 MFL130 20mm
Code 1806854 MFL140 25mm

Flow Control Kit

Code 1806853 MFL130 20mm
Code 1806856 MFL140 25mm

Mainsflush Valve Kit Components

Code 1860193 Mainsflush Valve & Fittings Pack
Code 1405560 40mm Cap & Lining
Code 210025 25mm Brass Barrel Union
Code 207925 25mm Brass M/F Elbow
Code 1003609 25mm Ballofix M/F Ball Valve

Extension Leads

Code 1806861 2 m Extension Lead
Code 1806862 5 m Extension Lead

Rubbers Kit

Code 1806852 MFL130 20mm
Code 1806855 MFL140 25mm

Solenoid Valve Coil

Code 1806858 24 Volt Coil suit Touch Pad

Mainsflush Valve Lubricant

Code 1903702

Flow Control Kit

Code 1806853 MFL130 20mm
Code 1806856 MFL140 25mm

Pressure Reducing Valve

Code 108886 Apex 20M/F

Mainsflush Valve Kit Components

Code 1860193 Mainsflush Valve & Fittings Pack
Code 1405560 40mm Cap & Lining
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Code 1806854 MFL140 25mm
### MAINSFLUSH VALVE & TOUCH PAD TROUBLESHOOTING

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pan doesn’t flush properly</td>
<td>Check adjustment screw is set correctly, check that water pressure, and pipe sizes and flow rates fall within guidelines set out in this booklet. If all OK conduct service see pages 12 &amp; 13.</td>
</tr>
<tr>
<td>Valve won’t shut off</td>
<td>Turn off power if water stops valve is Ok, check electronics. If water continues to run turn set screw clockwise until water stops. Turn set screw anti clockwise 4-6 turns and retest. If water continues to flow remove valve and conduct service. See page 12 &amp; 13.</td>
</tr>
<tr>
<td>The Touch Pad is not sensitive enough or doesn’t work anymore.</td>
<td>Test valve first, plug power lead directly onto valve lead, bypassing touch pad. The valve should activate automatically. If it does, turn power off. Reconnect touch pad and retest. If still faulty replace touchpad. Check that the coil is 24 Volt and not 12 Volt. Rectify if required. If the touchpad is in a &quot;wet area&quot; and has been exposed to water, the touch pad cycles on and off every 4 seconds, the pad should be removed, Mainsflush need to be contacted for advice (03 544 223 367). Upon reinstallation ensure that moisture is stopped from damaging the board again.</td>
</tr>
<tr>
<td>How do I test solenoid valve?</td>
<td>Plug power lead directly onto valve lead, bypassing touch pad. The valve should activate automatically. If it does, solenoid is OK. Turn power off to stop water flow.</td>
</tr>
<tr>
<td>How do I increase/decrease water flow?</td>
<td>Use blade screw driver and adjust the “set screw” located in the centre of the white bonnet (pictured) of the valve to fine tune. Screw anticlockwise (up) to increase volume, clockwise (down) to reduce volume.</td>
</tr>
</tbody>
</table>
| Water is coming out of the airgap in valve, why is it happening and how do I stop it? | Check length and width of flush pipe. If within specification outlined within this booklet, remove valve and check black rubber boot, check for debris. If boot is damaged replace. If boot is facing toward the relief vents turn 180º so it faces away from the vents. Ensure that rubber seat still seals. Reassemble and test.  
Check that there are no horizontal runs or 90º bends in the flush pipe. Check that any 45º bends are a minimum 450mm from the outlet of the valve.  
Water flow/pressure is too high: Reduce water flow by adjusting flow control screw. |
| All other issues                                                       | Please refer to Reece Customer Care Centre 1800 080 055. |

### WARRANTY

The Ideal Standard Mainsflush Valve & SonicSense Touch Pad is guaranteed to be free from manufacturing defects for a period of 1 year subject to the following conditions:

**Mainsflush Product Warranty:** Mainsflush or Reece Plumbing can only provide all warranties. Reece provides this warranty and associated after sales service only to purchasers of the product from Reece or Reece trade customers. It is not available to persons who purchase the product from another retailer or wholesaler.

**Conditions:**

- a) A licensed plumber must install the valve.  
- b) The valve must be installed under the current AS3500 National Plumbing & Drainage Code. All service is to be arranged through Reece Customer Care Centre 1800 080 055.  
- c) Warranty will not be honoured if any of the following occurs:  
  - Damage has been caused by misuse or the unit has been incorrectly installed.  
  - Steps outlined in this booklet have not been undertaken correctly.  
  - Failure of the valve is due to foreign matter from either installation or water supply.  
  - Subject to any statutory provisions to the contrary, claims for damaged walls, carpets, furniture, foundation or any other consequential loss either directly to due leakage of the valve are also excluded from the warranty cover.

Original manufacturers and suppliers with permission to reproduce have supplied the standards and performance claims of the products described in this booklet, to Reece Pty Ltd. Reece Pty Ltd does not accept liability for their accuracy, or responsibility for changes in specification, or availability, such rights and responsibilities resting ultimately with the manufacturer’s concerned. This booklet is subject to change without notice.