

McBerns AutoWellWasher™

(Australian Patent No. 655111)

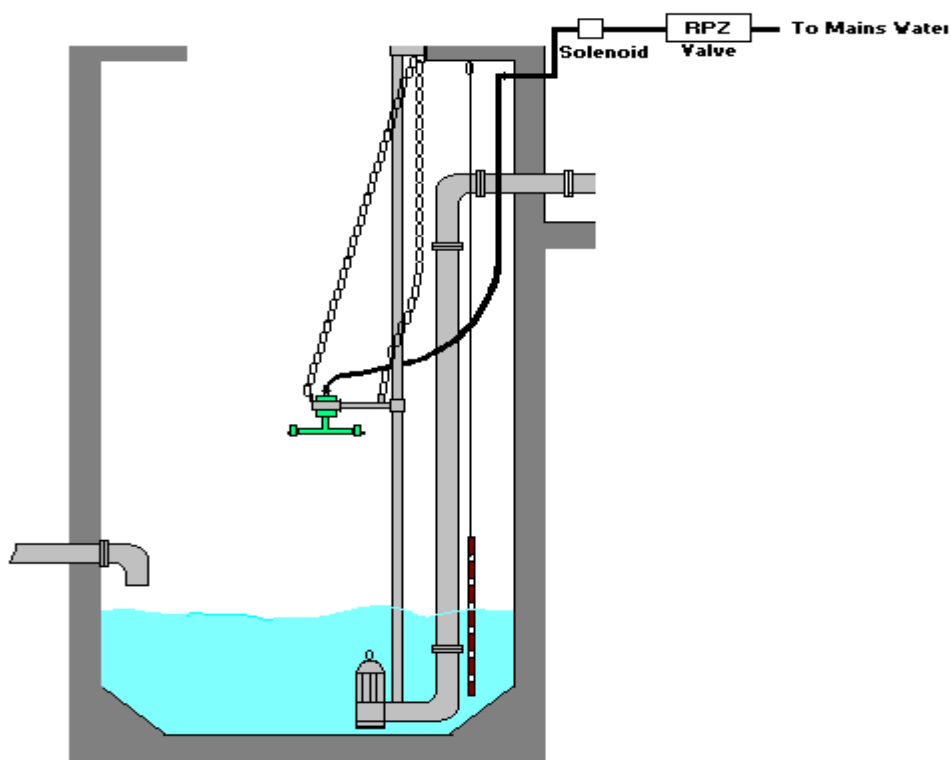
(International Patent Appl.No.PCT/AU00/00084)

INSTALLATION and MAINTENANCE INSTRUCTIONS

For

GUIDE RAIL MOUNTING BRACKET

The guide rail bracket is adjustable to fit most guide rail configurations, shapes and dimensions. These include single rails of 3" and 2" diameter and twin rails from 1" to 3". Positioning of the device in the well can be critical to the effectiveness of the wash system. Configuration of wells can differ but, in general the Washer should be positioned in the clearest available space to ensure the rotating arms do not come in contact with guide rails, chains, probes, etc. We recommend the washer be positioned approximately 1 metre above the duty level.



STEP 1) Your first task is to assemble the bracket according to whether you are mounting to a single or double guide rail. The two methods are shown in the diagrams on page 4. There are 4 alternative positions for the rear angle pieces. Choose the position which has the bracket secure on the rail, but still allows the bracket to slide up and down.

STEP 2) The two lengths of chain must now be attached to the points provided. One is at the front of the washer's head clamp, and the other on top of the bracket at the rear. The chains must be of sufficient length to lower the Washer to your chosen operating point down the guide rail.

STEP 3) Now secure the Washer head in the clamp of the bracket and attach $\frac{3}{4}$ " flexible hose to the $\frac{3}{4}$ " SS nipple on the Washer head. Use a good quality hose that can resist sulphides, not ordinary garden hose. We have found "Gates Adaptaflex"™ hose to be suitable.

STEP 4) The next step is to set the rotation speed by adjusting the spray buckets. This is best achieved by connecting water to the Washer and testing your adjustments before installing on the guide rail. By loosening the bolt which passes through each bucket, the nozzle housing can rotate through 360 degrees (see Figure 2). The nozzles need to be pointing in opposite directions to cause the spray arms to rotate. Speed of rotation is affected by the angle at which the nozzles are set (Figure 3). Best results are obtained with slow rotation, but care must be taken to allow for drops in water pressure at times of peak water usage in the locality. A temporary drop in water pressure can cause the Washer to stop.

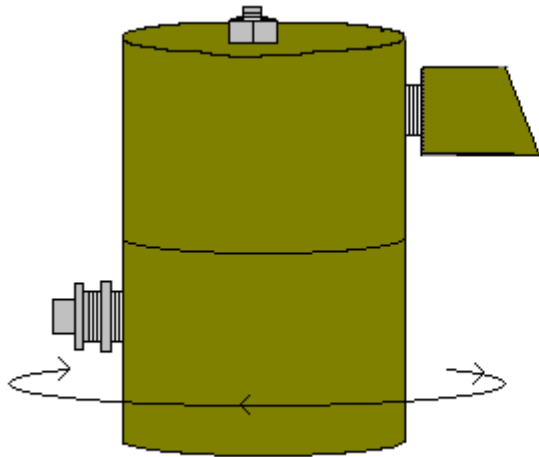


FIGURE 2

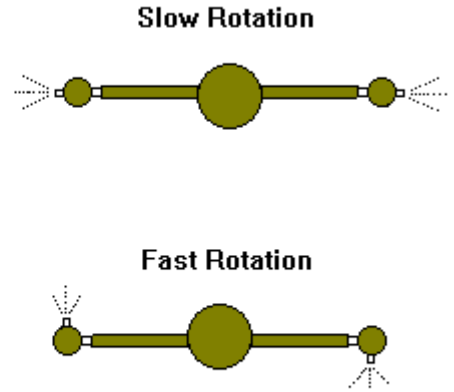


FIGURE 3

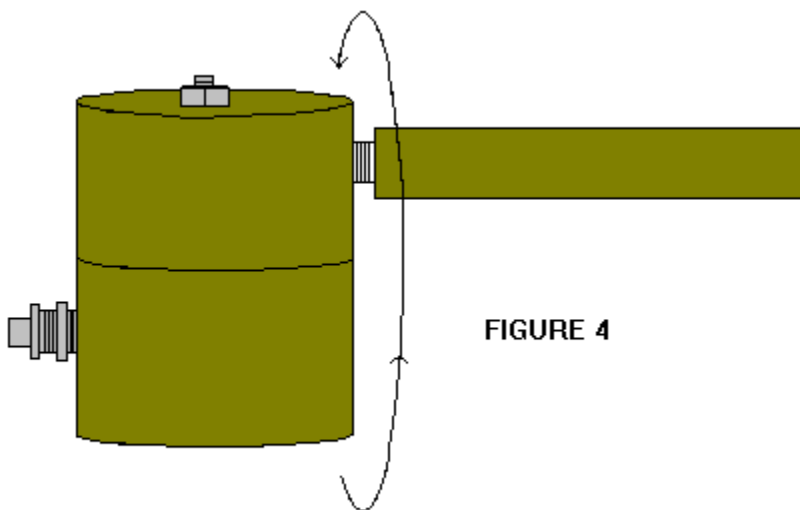
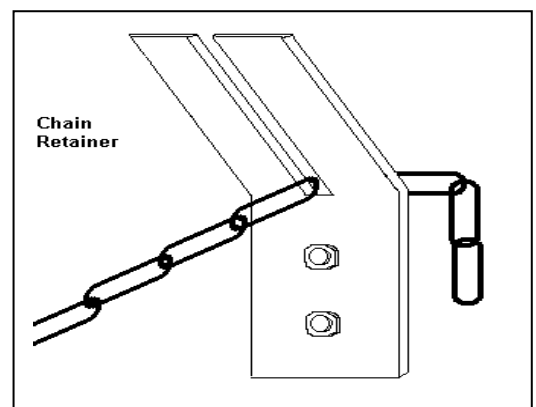


FIGURE 4

STEP 5) Now by twisting the nozzle buckets on the nipples, which join them to the spray arms, the nozzles can be directed to wash the desired areas (Figure 4). Each nozzle gives a wide fan of spray. Usually, one would be directed to cover the well wall from high to low water line. The other can be directed at a sharper angle to hit the top of the pumps, probe/float switches, guide rails etc.

STEP 6) The Washer can now be lowered down the guide rail. When in your chosen position, pull tight and secure the front chain to pull the semi-circular gripping surface onto the guide rail. Attach the top of the chains to the Chain Retainer (supplied), which is fixed to the lip of the well opening. In the case of a twin rail installation the semi-circular component is not used and you should not pull the chain tight.



It is important to ensure that the water hose is in the same vertical plane as the guide rail to which the washer is fixed. If the water line attaches to the Washer at an angle from the side, it can cause the bracket to twist on the guide rail

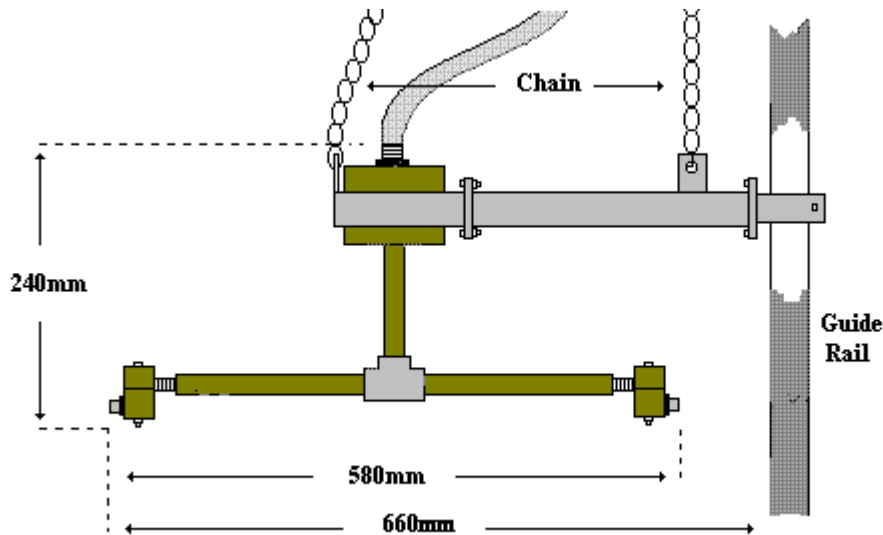
Above ground you should have already installed an approved back-flow prevention device to the water supply line. Australian Standard specifies a Reduced Pressure Zone (RPZ) valve, and we recommend a 25mm model. Between this and the Washer a solenoid valve should be fitted in the water line. This solenoid is wired to the sewage pump control board so as to open when the pump turns on, and close when the pump stops. Thus the Washer operates as the well is being emptied

THE WELL WASHER KIT CONTAINS:

- | | |
|-----------------------------|------------------------------------|
| Rotating Washer Assembly | 2 x 5 metre lengths SS Chain |
| Guide Rail Mounting Bracket | Chain Retainer with 2 SS Dynabolts |
| Installation Instructions | |

TO INSTALL YOU NEED TO PROCURE:

- Back flow prevention device. (Brand is your choice but we recommend 25mm size.)
- 24volt AC Solenoid. (Brand and type is best chosen by your Electrician).
- Good quality flexible hose.



Please note the dimensions above are a guide only. Slight variations may occur.

MAINTENANCE:

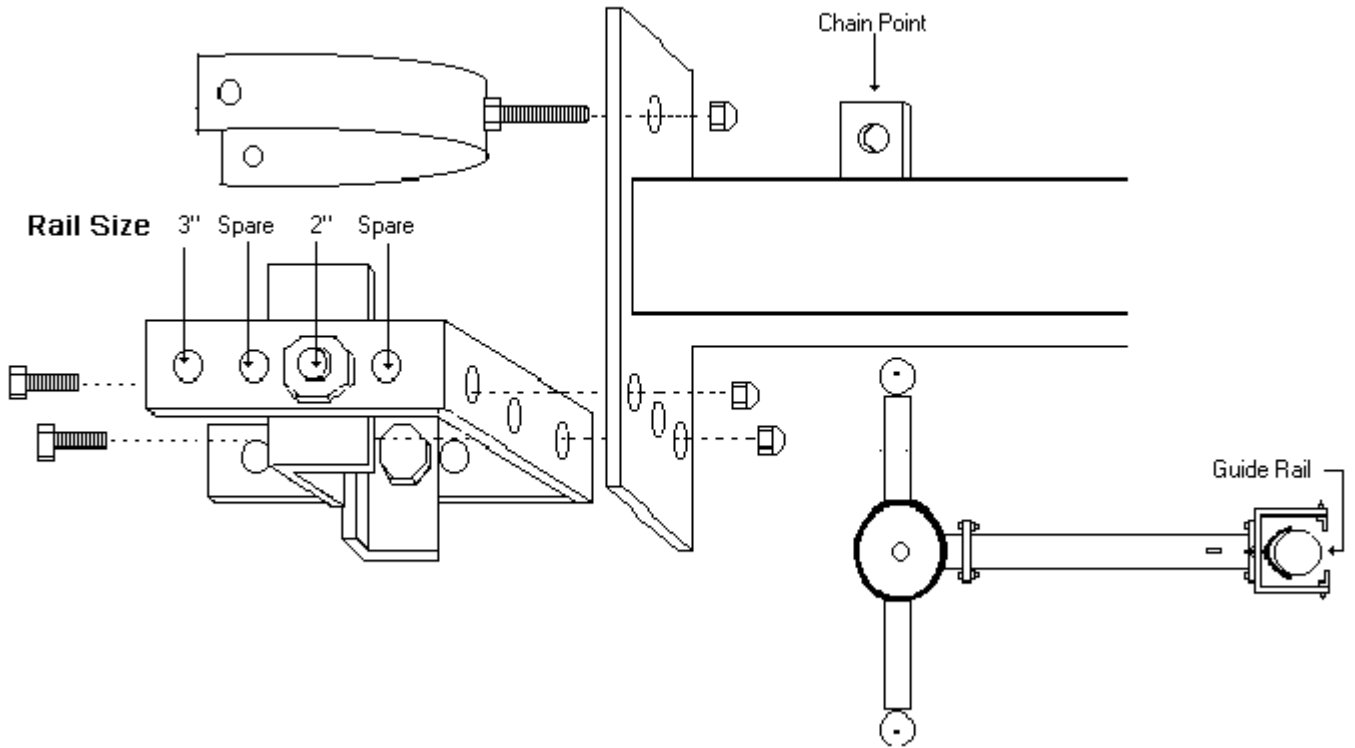
The Well Washer requires little maintenance other than to ensure that the integrity of its water supply is maintained and that it is freed of rags and other debris in the event of a "high" level.

A programmed, regular monthly inspection by responsible personnel is recommended.

Spare Parts are available if required.

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SINGLE GUIDE RAIL



NB. When assembling for twin rails the semi-circular component is discarded.

TWIN GUIDE RAIL

