



# Installation Instructions Watermarked Action Switch Box

## **Rainwater/Main Supply Change Over Pump System**

Models: WM-ASB-SMH350, WM-ASB-SMH450,  
WM-ASB-SMH550, WM-ASB-JS110  
**(Watermarked to ATS5200.477)**

### Product Data

<b>Specifications</b>	<b>Data</b>
Maximum Pressure	500kPa
Maximum Temperature	40 Degree C
Rated Supply Voltage	230-240V a.c.
Maximum Electrical Load	10 Amp
Minimum Flow Rate for Rainwater Switching	3 litre per minute
Mains Water Supply Inlet	RP3/4
Rainwater Supply (Pump) Inlet	RP3/4
Service (House) Supply Outlet	RP3/4

### **Important**

**Ensure the installation is in accordance with AS/NZS 3500.1 (Plumbing & Drainage – Water Services) and other relevant standards, codes & regulations.**

# Installation – Action Switch Box

Watermarked Rainwater/main Supply Change Over Pump System



## IMPORTANT

- a) Plumbers, drainers and electricians must refer to the Action Tanks Installation Instructions.
- b) **Please leave the installation instructions in a safe dry place inside the Action Switch Box for reference by others.**
- c) **All instructions, homeowner manuals and warranty information must be passed onto the owner OR builder (to pass on to owner/tenant).**
- d) **Check that these instructions correlate to the tank model to be installed.** Correct installation of this Action Tank by a qualified tradesman, licensed in the state and local authority in which the system is to be installed, is mandatory for warranty and the quality of water stored.

## CONSIDERATIONS

- a) Action Rainwater Harvesting Systems in most cases will require no other backflow prevention devices but you are advised to seek confirmation from the relevant local authority or council.
- b) Consideration should be given to the quality of water entering the Action Switch Box. High/abnormal chemicals, heavy metals, biological content can affect the operation of the systems and may void the warranty.

## REQUIREMENTS (items not supplied)

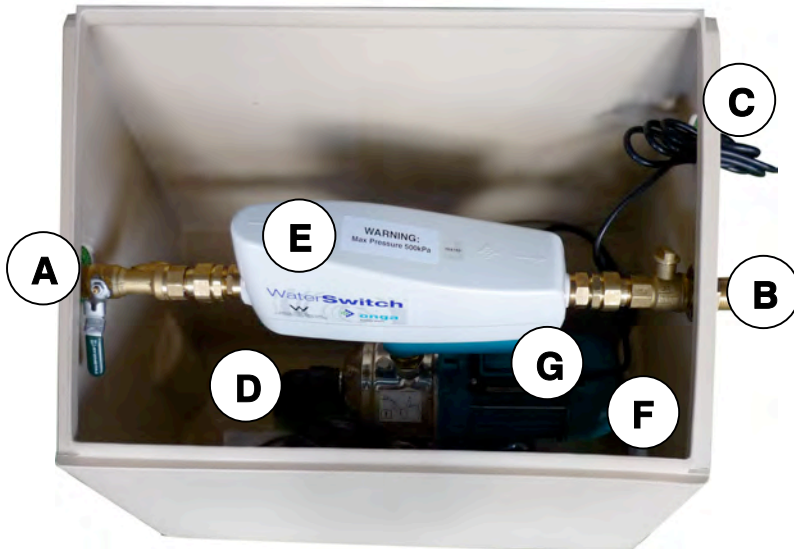
Items listed below are a guide only, all other materials required to complete the Action Tank installation are standard products and fittings, which will be subject to your site conditions and installation requirements.

- **Fasteners / Brackets to secure box to wall/post (refer to step 1.3)**
- **Additional hose, pipes and plumbing fittings as required.**
- **Inline filter to be installed at tank outlet (refer to step 2.4)**
- **Float switch extension cable (if required) (refer to Step 2.6)**
- **Non-return valve (if required) (refer to step 3.3)**

## 1. PLACEMENT

- 1.1. **IMPORTANT:** IT IS RECOMMENDED THE ACTION SWITCH BOX IS INSTALLED WITHIN FOUR (4) METRES OF YOUR TANK FOR OPTIMAL PERFORMANCE.
- 1.2. **Position the Action Switch Box in a suitable location near the water tank.**
- 1.3. **Secure the Action Switch Box.** The Action Switch Box can be screwed directly onto a wall or post using suitable fasteners or brackets.

## 2. CONNECTIONS



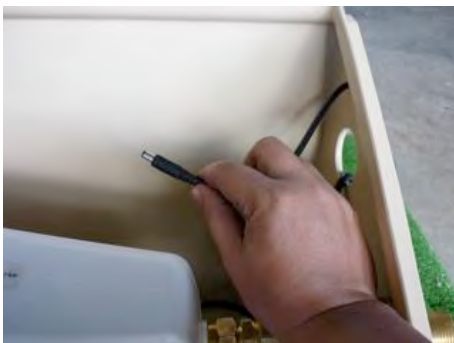
- A:** Mains Water Inlet  
**B:** Service Line Outlet  
**C:** Power Plug  
**D:** Tank (Rainwater) Water Inlet  
**E:** Water Switch  
**F:** Pump  
**G:** Indicator Light 'Mains Water In Use'

**Loose Items:**

- 1 x Tank Level Float Kit
- 1 x Installation Instructions & Owner's Manual Pack

- 2.1. Check your mains water pressure is less than 500kPa.
- 2.2. Flush the mains water line and connect the line to the **Mains Water Inlet (A)**.  
**IMPORTANT: Please leave isolation valve closed.**
- 2.3. Connect your service line to the **Service Line Outlet (B)**. This is the line that will supply water to the designated applications (such as toilet, cold water laundry tap, outside tap).  
**IMPORTANT: Please leave isolation valve closed.**
- 2.4. Flush the tank water line and connect to the **Tank Water Inlet (D)**.  
**RECOMMENDATION: We recommend the installation of an inline filter (not supplied) at the tank outlet to prevent sediments blocking the pump.**
- 2.5. Install the tank level float inside the tank. (**NOTE: You may need to remove the tank leaf strainer for easy access and re-fit on the job is completed.**) The bottom of the float must sit 75mm above the tank outlet. Bring the float cable out from the top of the tank.
- 2.6. Feed the float cable through a conduit and into the Action Switch Box. **as shown in Figure 1.** A float switch extension cable may be required, which can be purchased through your local Onga dealer or Action Tank Industries. **NOTE: Installation further than the required 4m can reduce pressure. For extended distance consult your local 'ONGA' pump dealer.**
- 2.7. Plug the float socket to the underside of the Onga Water Switch. Loop the excess cable on the brass fitting with cable ties provided **as shown in Figure 2.** **NOTE: Please make sure the float socket is securely connected.**

**Figure 1: (refer to step 2.6)**



**Figure 2: (refer to step 2.7)**



### **3. COMMISSIONING**

**Materials needed:**

- **Non-return check valve may be required (refer to step 3.3)**

**IMPORTANT: OPEN ALL STOP COCK/VALVES INSIDE THE CONTROL BOX SLOWLY ONE AT A TIME. FAILURE TO DO SO COULD CAUSE 'WATER HAMMER' AND CAN DAMAGE THE WATERSWITCH.**

- 3.1. If the tank is empty,** fill the tank with water to about 400mm in depth.
- 3.2. Connect the Power Plug (C) to a power source.** This power source must be on a stand-alone circuit protected by a circuit breaker.
- 3.3. Open the tank outlet valve. *NOTE:*** *Your pump may need priming and you may need to install a non-return check valve if the bottom of the Action Switch Box is higher than your tank outlet (refer to Onga Pump instructions).*
- 3.4. Open the isolation valve at the Mains Water Inlet slowly.** Failure to do this can cause damage to the Water Switch.
- 3.5. Open the isolation valve at the Service Outlet.**
- 3.6. Make sure there are no water leaks inside the box.**
- 3.7. Turn power ON to the Action Switch Box.**

**CHECK TANK WATER SUPPLY:**

- 3.8. Turn on the outside tap/application that is connected the Action Switch Box.** You will need to run the water for a little while to let all the air out from the line. The indicator light at the water switch should be on "TANK". Turn off the tap. The pump should stop after 1 minute. If the pump continues to run constantly or is turning on and off by itself refer to the Onga pump trouble shooting guide.
- 3.9. Check toilets and washing machine cold water tap.** Make sure water is available at these service point and no water leaks.

**CHECK MAINS WATER SUPPLY:**

- 3.10. Turn power OFF to the Action Switch box.** Turn on the outside tap to make sure water is coming out. Indicator light at the water switch should be on "MAINS".
- 3.11. Turn power back ON to the Action Switch box.** The system is now ready for use.

### **4. OWNERS MANUAL**

- 4.1. IMPORTANT Complete the 'Owners Manual' enclosed** with the warranty sheets located in the Action Switch Box making sure that the serial number of the Action Switch Box has been entered in the manual (this number can be found written on the inside of the lid and on a sticker situated on the back of the Action Switch Box).
- 4.2. PASS THE COMPLETED HOMEOWNERS MANUAL ONTO THE PROPERTY OWNER OR BUILDER.**

## 5. TROUBLE SHOOTING

Please see relevant Trouble Shooting Steps or call Action Tanks Support on 1800 066 587.

Symptoms	Cause	Remedy
(1) No water is being delivered from pump	Water tank is empty	Wait until the tank has some water in it
	No power at outlet	Check power supply, circuit breakers and plug
	Bad signal from level sensor	Check installation and operation of the level sensor
	Pump has overheated	Allow pump to cool
	Pump is worn by abrasive or chemically aggressive material	Have pump serviced by professional. Check rain water system for source of materials
(2) No water is being delivered from pump: [WaterSwitch has gone into 'lost prime' mode (mains LED on, tank LED flashing)]	Valve on or between tank & WaterSwitch inlet is closed	Open gate valve. Check other taps (e.g. toilet water cistern tap) to make sure they are fully open
	Pump is not primed	Prime the pump before connecting WaterSwitch
	Filter cartridge is at end of life	Replace filter cartridge
(3) No water supply at all	Valves are closed	Open all valves
	Blockage in system	Clean tank interior, unblock all pipes
	Incoming mains water pressure is greater than 500kPa	Fit a pressure reduction valve to reduce incoming mains pressure
(4) Poor water pressure	Filter cartridge at end of life	Replace filter cartridge
	Too much flow through WaterSwitch	Have a pump professional look at flow rate
	Pump too small for application	Have a pump professional recommend a larger pump
(5) If pump runs on	Pump continuously runs	Bleed system of air. Activate appliances sequentially from the nearest to furthest. May need to repeat 3 times. If problems persist contact the manufacturer.

Please contact Action Tanks on 1800 066 587 for your nearest service agent locations.

### Action Tank Industries Pty Ltd

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**[www.actiontanks.com.au](http://www.actiontanks.com.au)**