Manitowoc
ICE MACHINES & REACH-INS

INSTRUCTIONS FOR INSTALLING A WATER DUMP SOLENOID VALVE ON E-0200, E-0400, E-0600, G-0600, OR G-0800 SERIES ICE MACHINES

The dump valve is a more efficient and consistent means of flushing the water trough than the overflow or siphon drain systems.

NOTE: The dump valve should not be used without a water pump delay timer on the E-0200, E-0400, or E-0600 series ice machines. If a delay timer has not already been installed, delay timer kits, 0700643 (230V) and 0700653 (115V), are available.

Kit, **7623073**, contains a 115V dump valve and is to be used on 115V ice machines.

Kit, **7623083**, contains a 230V dump valve and is to be used on 230V ice machines.

Kits include:

Item	Description	P/N
1	Dump Valve 115V	
or	Dump Valve 230V	
2	Wiring Diagram Label (Supplement).....	8106413
3	Mounting Box (for dump valve)	6647714
4	Cover (for dump valve mounting box).....	6281414
5	Barbed Tee	8391023
6	Reducing Adapter (rubber)	4301653
7	Plastic Hose Clamp	5650603
8	Self-adhesive Wire Clip (4 pieces)	5650503
9	Rubber Cap/Plug	4408203
10	Bushing (3/8" diameter).....	2502143
11	Hole Plug (1.00" diameter)	4300021
12	PVC Tube (5/8" OD x 2 3/16" long)	4420221
13	Vinyl Tube (1/2" ID x 1 1/2" long).....	6258934
14	Vinyl Tube (1/2" ID x 18" long).....	6094914
15	Vinyl Tube (1/2" ID x 36" long).....	6094974
16	1/4" Male/Female Combination Terminal (2 pieces)	2510383
17	Lead Wire (toggle switch to transformer board 3).....	2075343
18	Lead Wire (dump valve to transformer board 19)	2076063
19	Lead Wire (dump valve to transformer board 6)	2076073
20	#10-24 TC Screw (7 pieces).....	5202063
21	Installation Instructions.....	8003403
22	Lead Wire Sleeve	9202533

DUMP VALVE INSTALLATION INSTRUCTIONS

1. Disconnect the power to the ice machine by circuit breaker or main fuse box.
2. Pull ice machine away from wall to allow adequate working space for drilling holes and mounting the dump valve.
3. Remove the front panel, right-hand side panel, and the top cover.
4. a. Remove the water pump and the existing water pump outlet tube (vinyl tube from water pump to water distribution tube).
   b. Remove the existing water trough drain tube or siphon system and the drain fitting at the back of the ice machine (see Figures 1 through 5).
   c. Immediately cap or plug the water trough drain hole with Item 9 so that the water supply will not have to be shut off.

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5. Reassemble the water pump outlet tubing using the supplied barbed tee, Item 5. One of two items is needed as a coupling for this assembly, depending on the size of the water pump outlet (see assembly Illustrations 2 and 3).
   *If the existing water pump has a small outlet (1/2" OD), attach the short piece of clear vinyl tubing, Item 13, to the pump outlet. This is shown in Illustration 2.
   *If the existing water pump has a large outlet (1.00" OD), attach the rubber reducing adapter, Item 6, to the pump outlet. This is shown in Illustration 3.
6. Assemble the 18" long vinyl tube, Item 14, to the opposite end of the barbed tee, route, and connect to the water distribution tube assembly.
7. Reassemble the water flow clamp (from the old pump outlet tube) to the new pump outlet tube. Adjust the "X" dimension to 5/16" on all E-0200 ice machines and on E-0400, E-0600, G-0600, and G-0800 ice machines using a water pump other than a "Manitowoc".
   Adjust the "X" dimension to 3/8" on E-0400, E-0600, or G-0800 ice machines using a "Manitowoc" water pump.
   The water flow clamp is not required on G-0800 ice machines using a "Manitowoc" water pump.
8. Check to ensure tubing is free from any kinks.
   Do not connect the drain tube from the tee to the dump valve, at this time. This tube, Item 15, should be connected to the dump valve first and then routed from the back of the ice machine to the water pump tee.

To install the dump valve mounting box to the back of the ice machine, see Illustration 4.

9. a. Remove the three screws in the lower left-hand corner post, if they have not already been removed.
   b. Attach the mounting box to the left-hand corner post with three #10-24 thread-cutting screws. Align all mounting holes before tightening down screws.
   This box will now be used as a template to drill three holes for mounting the dump valve to the corner post. The three required holes are numbered on Illustration 4.
   c. Mark the location of the center of the holes, preferably using a center punch --- be as accurate as possible.
   d. Remove the dump valve mounting box.
   e. Drill the two holes numbered 1 and 2 (on Illustration 4) to 5/32" diameter. Drill the electrical wiring clearance hole to 1/2" diameter (hole number 3).
   f. Remount the dump valve mounting box to the corner post.
   g. **IMPORTANT** - Snap the electrical bushing into hole number 3, the electrical wiring hole.

10. Assemble the 36” long piece of clear vinyl tubing, Item 15, to the dump valve inlet and clamp with Item 7.
    Clamp the vinyl tube as close to the valve body as possible for easier mounting of the dump valve to the corner post.
11. Route the 36” long tube through the drain fitting hole in the corner post and mount the dump valve to the corner post with two #10-24 thread cutting screws, Item 20.
12. Connect the tube from the dump valve to the barbed tee on the water pump, as shown on Illustrations 2 and 3. Route the tube through the same bulkhead holes as the old drain tube had been routed, except on some ice machines where two holes exist. If two holes exist, as shown in Figure 1, use the higher of the two holes. Using Item 11, plug the unused hole.
13. a. Attach the two long lead wires (50” long) to the dump valve terminals, route the opposite ends through the electrical bushing in the corner post through the water pump lead wire hole in the bulkhead (see Figure 4) and into the control box.
    b. Attach the male/female combination terminals to the dump valve lead wires.
    *Follow the supplied wiring diagram, Item 2, when wiring the dump valve.
    c. Connect one lead wire to the transformer board terminal 19 and the other lead wire to transformer board terminal 6.
    d. Remove the hot gas solenoid lead wire from terminal 3 on the transformer board and connect it to terminal 6 on the transformer board
    e. Connect one end of the jumper wire, Item 17, to the toggle switch terminal 18 and the opposite end to transformer board terminal 3.
    *Recheck terminal wiring after completion.
    f. Using the wire clips, Item 8, clamp the dump valve lead wires to the top side channel of the ice machine so that the wires do not touch any tubing.
14. Attach cover, Item 4, to the dump valve mounting box with two #10-24 thread-cutting screws.
15. Attach a 1/2” ID drain tube to the dump valve outlet (field supplied).
16. Turn the power on and place the toggle switch in the “ice” position. Initiate the harvest mode by shorting across the sensor probes with a screwdriver for approximately six seconds. When the relay switches to the harvest mode, the water dump solenoid valve and the hot gas solenoid valve should be energized. If not, recheck the wiring and correct. When the solenoids energize, reset the ice machine to the ice making mode by turning the toggle switch off and then on (“ice”) again or by pushing the water curtain activating pin.
17. Reassemble the ice machine panels.
18. Reposition the ice machine.
19. The drain tube from the dump valve must not terminate below the water level of the floor drain and must be free of traps. Improper drain installation will cause the water to flow over the evaporator, when the dump valve is energized.