

Kmart Installation Instructions Irrigation System

Step A

Truss Line Assembly:

1. Feed the 1" PVC for each projection truss through the center of each projection truss to within 6' of end of truss.
2. Measure, mark and drill a 21/32" or 9/16" hole at 5'6" intervals along the length of the PVC. All holes must be aligned.
Cut PVC 6" past the location of the last sprinkler head.
Mount all spray nozzle bodies onto PVC at location of each hole. Remove nozzle from spray nozzle bodies and set aside.

Step B

Solenoid Assembly:

1. Cement a 1¼" x 1½" x 1" tee to a 6" section of 1" PVC.
2. Cement the above section into the solenoid.
NOTE: The tee should be in a horizontal position when the solenoid is upright (wires at top). The arrows on the solenoid body should be pointing away from the tee. (Arrows indicate the direction of water flow).
3. Set the assembly inside each projection truss at the junction with the cross truss.

Step C

Trunk Line Assembly:

1. Lay out cross truss lengths of 1½" PVC.
2. Feed a section of 1¼" PVC into the center of the cross truss.
3. Cement a section of 1¼" PVC into each side of the tee connected to the solenoid. NOTE: The solenoid must be centered in the projection truss.
4. Cement the 1" sprinkler line into the solenoid.
5. Repeat Steps 1 through 4 for remaining trusses.
6. At location of water source, connect 1¼" x 1¼" x 1¼" tee to main line. Run PVC with appropriate fitting to valve at water source and connect. NOTE: Connect only to 1¼" waterline provided by Kmart. Do not attach to W' line to hose reel.

Step D

End Plug on Trunkline:

1. Cut a 6" piece of 1¼" PVC and cement into the tee located at the end of the trunk line. 2. Cement the 1¼" end cap to above section.

Step E

1. Lay out a 1¼" piece of PVC to go from the tee to the wing wall at the front of Garden Shop or canopy column. Cement to tee.
2. Attach a 90° 1¼" elbow (elbow down toward floor).
3. Attach a 6' section of 1¼" PVC.
4. Attach the ball valve.
5. Cement a piece of 1¼" PVC to ball valve and cut 6" above floor.
6. Using pipe strap, attach pipe to wall or column at 8' and 4' above floor. NOTE: Additional elbows may be required due to individual store design.

Step F

Controller Mounting:

1. Locate controller above 4" junction box and attach to wall specified by Kmart print with appropriate fasteners. Bottom of controller box should be approximately 4' above floor.
2. Run ½" seal tight flexible conduit from J-box to controller.
3. Attach wire to leads in J-box and feed through flexible conduit to controller.
4. Using wire nuts, connect transformer leads as follows: Black - Hot, White - Neutral, and Green - Ground.
5. Attach a 1" to W' reducer to controller, cement a 4" section of W' PVC to reducer, cement a 90° elbow, then another 4" section of PVC with a 90° elbow.

Step G

Ambient Temperature Control Mounting:

1. Locate ambient temperature control approximately 6" below canopy bar joists and attach to wall with appropriate fasteners.
2. Lay out and attach a length of W' PVC from bottom of temperature control to elbow from controller and cement.
3. Lay out and put a 90° bend in PVC pipe to be run from top of temperature control along a bar joist to the edge of the canopy.

Step H

Wiring - Solenoids & Ambient Temperature Control:

1. Starting at controller, feed common wire and 4-wire cable through W' PVC, through ambient temperature control and out to cross tress.
2. Run cable and common wire along bottom cord of projection tress to each solenoid. Strap cable and common wire to tress with nylon tie wraps at 4' intervals.
3. Pull a wire from cable and connect to solenoid with wire nut and Wade connector.
4. Connect common wire to solenoid with wire nut and Wade connector.
5. Repeat steps (3) & (4) for remaining solenoids.
6. Cut common wire inside ambient temperature control and connect one lead to terminal "W" and one to

terminal "R".

Step I

Wiring Controller:

1. Connect common wire to COM terminal in controller.
2. Turn water on. At this point, solenoids will be closed and water should not flow past the solenoids.
3. Touch any wire from cable to "hot post" in controller, this will correspond to terminal in controller.
4. Repeat Step 3 for remaining zones.

Step J

Flush System:

NOTE: This step must be done before installing spray nozzles and drain valves.

1. Set each station for 1 minute by turning station knob in controller box. Display will show the setting per zone as the knob is being rotated.
2. Activate system by pressing the manual program start button (top right hand corner next to red on/off switch), once. Each zone should run for one minute in sequence.

Step K

Final Assembly:

1. Screw all spray nozzles into spray nozzle bodies.
2. Cement 1" end cap to each tree line.
3. Attach plastic pipe clamps as close to each spray head as possible to prevent PVC from dipping when clamp is tightened.
4. Run system to insure even spray of all spray heads and to check for leaks.