## WEEP SYSTEM TROUBLESHOOTING

#### **SECTION A: APPLIES TO ALL WEEP SYSTEMS**

# REMEMBER!! A NORMALLY OPEN VALVE ALLOWS WATER FLOW WHEN POWER IS OFF. A NORMALLY CLOSED VALVE DOES NOT ALLOW WATER FLOW WHEN POWER IS OFF.

WATER RUNS CONTINUOUSLY----NORMALLY OPEN VALVE---NO POWER =WATER FLOW.
VERIFY POWER TO VALVE WITH VOLTMETER. IF CORRECT VOLTAGE IS THERE
YOU SHOULD BE ABLE TO FEEL A SLIGHT MAGNETISM WHEN HOLDING A SMALL
SCREW-DRIVER ON TOP OF SOLENOID COIL. IF NOT LOOSEN NUT OR CLIP HOLDING
COIL TO VALVE BODY. LIFT SLIGHTLY AND YOU SHOULD FEEL A RESISTANCE FROM
MAGNETIC COIL. IF NOT YOUR COIL IS PROBABLY BAD. DO NOT LIFT COIL COMPLETELY
OFF AS THIS CAN BURN UP A GOOD COIL WITHOUT THE MASS OF THE STEM IN IT.

IF COIL IS GOOD YOU PROBABLY HAVE A BAD DIAPHRAGM OR DIRT HOLDING THE VALVE OPEN, OR A STUCK PLUNGER. A SMALL SPECK OF SAND IS ALL IT TAKES, IN THE RIGHT PLACE, ON THE VALVE SEAT.

NORMALLY CLOSED VALVE---NO POWER = NO FLOW VERIFY THERE IS NO POWER ON SOLENOID COIL. ONCE AGAIN THE SAME DIRT CAN CAUSE THE SAME PROBLEM, OR A STUCK PLUNGER OR BAD DIAPHRAGM.

TEMPERATURE SENSOR OR CAPILLARY TUBE CAN BE DEFECTIVE AND NOT SWITCHING THE POWER ON AND OFF ACCURATELY, THROUGH THE CONTROLLER.

TEMPERATURE SENSOR LOCATION IS EXTREMELY IMPORTANT!!!!!!!!! DO NOT INSTALL SENSOR WHERE IT CAN EVER BE IN DIRECT SUNLIGHT OR WHERE IT IS POSSIBLE TO PICK UP HEAT FROM ANOTHER SOURCE. DO NOT MOUNT SENSOR ON EXTERIOR WALL OF A HEATED ROOM AS THIS CAN CAUSE READINGS 5 TO 10 DEGREES HIGH. SOMETIMES THE HEAT FROM EQUIPMENT ROOM CAN FLOAT THROUGH CRACKS OR THE FRESH AIR INTAKE FOR THE BOILERS AND GIVE A FALSE READING. ALSO MAKE SURE YOUR BAY LIGHTING IS NOT HEATING UP YOUR SENSOR. EVEN THE SUN REFLECTING OFF ANOTHER SURFACE CAN WARM UP THE SENSOR TO MAKE IT INACCURATE.

### **SECTION B**: APPLIES TO DIXMOR WEEPMIZER

THE WEEPMIZER IS DESIGNED FOR A NORMALLY OPEN SOLENOID VALVE. CAUTION!!!! SOME COMPANIES HAVE US MODIFY IT FOR A NORMALLY CLOSED VALVE, WHICH WILL MAKE THE FOLLOWING PROCEDURES BACKWARDS. WE HAVE AN EASY WAY TO MAKE SOME OF THE CHECKS TO DETERMINE WHAT THE PROBLEM IS. THE FOLLOWING APPLIES TO A SYSTEM USING A NORMALLY OPEN VALVE.

### WATER RUNS CONTINUOUSLY---

PUSH BUTTON "A" THREE TIMES, DISPLAY WILL READ "OUT 1". NOW CYCLE "B" BUTTON A FEW TIMES. DISPLAY WILL CYCLE BETWEEN "IS ON" AND "IS OFF". EACH TIME YOU CYCLE IT YOU SHOULD HEAR THE SOLENOID VALVE CLICK, OR FEEL IT IF THE ROOM IS NOISY. IF THERE IS NO CLICK, CHECK THE FUSE LOCATED JUST LEFT OF THE GREEN WIRING CONNECTOR ON BOTTOM OF UNIT. IF FUSE IS BLOWN DO NOT REPLACE IT WITH ANYTHING BIGGER THAN 5 AMPS. IF FUSE IS GOOD, VERIFY PROPER VOLTAGE IS COMING INTO PINS 9 & 10 (FAR LEFT TWO WIRES). VERIFY VOLTAGE IS PASSING THROUGH WEEPMIZER WITH VOLTMETER AT THE SOLENOID COIL. IF VOLTAGE IS ON PINS 9 & 10 BUT NOT COMING OUT 6 & 8 THERE IS A PROBLEM INTERNALLY AND UNIT MUST BE RETURNED FOR REPAIR.

DO NOT GET CONFUSED; WITH A NORMALLY OPEN VALVE, WHEN OUTPUT 1 LIGHT IS ON THAT MEANS POWER IS GOING TO VALVE AND WATER IS NOT RUNNING. WHEN OUTPUT 1 LIGHT IS OFF THE WATER SHOULD RUN.

#### TEMPERATURE IS NOT READING CORRECTLY---

SENSORS MUST BE LOCATED IN SUCH A MANNER THAT THEY CAN NOT PICK UP HEAT FROM FALSE SOURCES AS MENTIONED ABOVE. MAKE SURE YOU DO NOT RUN SENSOR LEAD WIRE ALONG A CONDUIT CARRYING 120 OR MORE VOLTS, AS THIS CAN SOMETIMES CAUSE A FALSE READING. ALSO DO NOT RUN SENSOR LEAD WIRES ALONG FLUORESCENT LIGHT FIXTURES.

THE BEST WAY TO CHECK THE SENSOR IS TO PACK IT IN SNOW OR CRUSHED ICE FOR 15 MINUTES. AFTER THIS TIME YOU SHOULD GET A READING OF 32 OR 33 DEGREES. IF IT IS NO MORE THAN 5 DEGREES OFF YOU CAN CALIBRATE THE SENSOR BY TURNING

THE TINY SCREW EMBEDDED IN THE SILICONE ON BACK OF SENSOR. TURNING THE SCREW CLOCKWISE 1 COMPLETE TURN SHOULD LOWER THE READING APPROXIMATELY 2 DEGREES, AND OF COURSE COUNTERCLOCKWISE SHOULD RAISE THE READING.

THE SENSOR AND THE CONTROL BOX ARE BOTH CALIBRATED ELECTRONICALLY WHEN THEY ARE BUILT BUT SOMETIMES AN ELECTRONIC COMPONENT CAN CHANGE CHARACTERISTICS AFTER BEING IN USE FOR A SHORT PERIOD OF TIME. IF ADJUSTING THE SENSOR DOES NOT CURE THE PROBLEM YOU WILL HAVE TO RETURN THE COMPLETE UNIT TO HAVE IT RECALIBRATED.

IF YOU ARE WORKING WITH A DIXMOR WEEPMIZER AND STILL CAN NOT FIGURE IT OUT CALL NICK, OR JOHN, OR MORRIS AT DIXMOR--- PHONE 303-794-1387 or 303-794-0597. WE WILL DO OUR BEST TO HELP YOU SOLVE YOUR PROBLEM.

ADDITIONAL HINTS: IF YOUR WEEPMIZER IS READING -22 THAT INDICATES THAT IT IS NOT SEEING A SENSOR. THE SENSOR COULD BE BAD OR THE WIRES GOING TO IT COULD BE CUT OR BROKEN. A QUICK CHECK FOR THIS IS TO TAKE A SHORT PIECE OF SMALL GAUGE WIRE AND TOUCH BETWEEN TERMINALS 1 AND 2 (FAR RIGHT HAND TERMINALS) ON THE GREEN PLUG, WHERE THE SENSOR WIRES ARE. THIS SHOULD NOW READ 112 OR 113. IF IT DOES THEN YOUR SENSOR CIRCUIT IS OPEN.

IF YOUR WEEPMIZER IS READING 112 OR 113 THE WIRES OR SENSOR COULD BE SHORTED. DISCONNECT THE SENSOR AND IT SHOULD READ -22

IF THESE CHECKS DO NOT HELP, CALL US OR RETURN THE UNIT TO US FOR REPAIR, AS THE PROBLEM IS PROBABLY IN THE BLUE BOX.