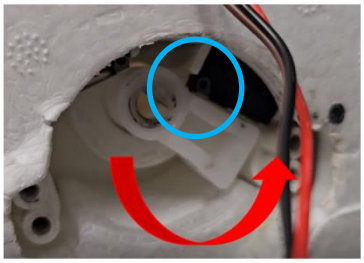
PRODUCT SUPPORT
TECHNICAL BULLETIN

July 8, 2024

Issue: Broken Ice Tray Coupler after Replacing the Hot Gas Solenoid – WS12000, i12, Peak, Peak 2000

Symptom:
The system is not producing ice and the ice tray coupler is broken. The coupler continues to break after the hot gas solenoid has been replaced.

Cause:
When the unit is in harvest mode, the ice tray contacts the refrigerant lines (circled in red) prior to the Ice Tray Coupler engaging the right side microswitch (circled in blue). The motor continues to turn putting stress on the ice tray coupler causing it to snap over time.

Short-Term Solution:
Ensure the Cold Temp sensor and the Hot Gas Solenoid are both functioning then install a modified ice tray coupler. Processes to test the cold temp sensor and hot gas solenoid detailed in page two. The modified coupler consists of an Ice Tray Coupler with a screw fastened to the right side of the coupler lever. This will ensure that the microswitch is activated, limiting the rotation of the ice tray.

Process:

Contact Product Support, (855) 588-9796, option 3, for a modified coupler. We will ask for the serial number of the affected unit; so, please have it ready. To modify existing Ice Tray Couplers, simply pre-drill a hole on the right side of the coupler lever using a 7/64” drill bit. Only drill through the right side of the lever. Screw in an M4*10 stainless steel screw into the drilled-out hole in the lever, then reinstall the modified coupler and motor.



Testing Hot Gas Solenoid

a) Unplug the unit from power. Set your multimeter to OHMS Ω and insert the meter probes into the connector of the hot gas solenoid. The operating range of a good solenoid is 88-95ohms of resistance
b) Replace hot gas solenoid if resistance is out of range.

Testing the Cold Temp Sensor

a) Dispense a cup of water from the unit and take a temperature reading of the water.
b) Unplug the unit from power and unplug the cold sensor from the PCB. With your meter set to OHMS Ω, insert the probes into the black wire ports on the connector and using the chart below, match the nearest temp reading to the resistance value to ensure sensor is functioning correctly. Needle probe adaptors are recommended for this process. Replace cold temp sensor if necessary.

Cold Temp Sensor	
Cold Water Temp (F)	K Ohms
35°F	28.6kΩ
41°F	22.2kΩ
50°F	18.1kΩ
59°F	14.7kΩ
68°F	12.1kΩ
77°F	10kΩ
86°F	8.3KΩ
95°F	6.9kΩ
104°F	5.8kΩ
113°F	4.9kΩ