

Proteus WeldSaver Technical Service Bulletin 2015-12-07

Subject: Preparing WeldSavers for tool tear down and transport during cold weather

During the winter of 2014-15 several WeldSaver units were damaged when coolant water wasn't thoroughly drained prior to shipment. The damage occurred during transport in very cold weather. The remaining coolant water froze and expanded inside the WeldSavers and inside some valves.

The crux of the problem is that the water shutoff valve that is part of the WeldSaver assembly is a Normally Closed device. This means that when the unit is powered down, the valve closes and stays closed as long as no power is applied. Workers are told to drain coolant water out of the lines or to blow water out of the lines with compressed air before tooling is shipped, but often workers are not aware that the valve is closed. The result is that sometimes enough water remains inside the WeldSaver to cause freeze damage.

There are two possible methods of clearing coolant water that will avoid the freeze damage problem:

1. The WeldSaver assembly can be initially cleared by orienting it so that the supply and return lines are vertical. The coolant that resides in the unit below the closed valve will drain out. But then the assembly must be turned vertically 180 degrees so that whatever water was sitting above the closed valve can now also drain out.
2. Use the mechanical bypass on the valve, which manually opens the valve. Now the water will easily drain from vertical pipes, or it can be removed using compressed air. But PLEASE NOTE: The mechanical bypass MUST BE RESET to the original state before shipping the equipment. If this is not done, then the risk is that the end customer will deploy the tooling but the valve will not close on command because the mechanical bypass prevents valve closure. RESET THE MECHANICAL BYPASS. For more instruction on setting the mechanical valve bypass, please consult the Technical Reference Manual for your WeldSaver. Also, you can call Proteus Industries at 650-964-4163 or RAM Solutions/MJM Sales at 248-299-0525.