

## Preventative Maintenance Procedures

System: Water Chillers

Maintenance Task Description	Frequency	Skill Level	Time Hours	Special Tools Req'd.	Parts	Specific Safety Instructions
Check compressor oil levels in oil level sight glass	W	J	0.25	None	None	2,3
Check liquid line sight glass/moisture indicator	W	J	0.25	None	None	2,3
Check condenser coils for dirt debris and clean if necessary	W	A	0.25	Water Hose & Pressure Washer	None	1,2,3
Check programmable operating setpoints and safety cut-outs and assure that they are correct for application	Q	J	0.25	None	None	None
Check compressor and cooler heaters for operation	Q	J	0.25	Volt meter	None	2,3
Check compressor superheat on evaporator and economizer TXV's	SA	J	0.25	Thermometer & Gauge Set	None	2,3
Check condenser and economizer subcooling	SA	FT	1	Thermometer	None	2,3
Leak check the chiller	SA	FT	1	Halid torch or soapy water	None	2,3
Sample compressor oil and replace if necessary	A	FT	1	None	None	2,3
Disconnect power source and lock-out; check tightness of power wiring connections	A	FT	1	None	Refrig	1,2,3

** Skill Level Legend	
O	Unskilled Laborer
A	Apprentice Mechanic
J	Journeyman Mechanic
M	Master Mechanic
FT	Factory Trained Tech.

\*\*\* The time indicated is for the required to service one unit

* Frequency Legend	
D	Daily
W	Weekly
M	Monthly
Q	Quarterly
SA	Semi-Annually
A	Annually

### Safety instructions to observe when working with this equipment are as follows:

- 1 Warning:** When working on Water Chiller electrical components, provide a lockout device, a lock out tag and a tagout device on the electrical breaker or on the disconnect switch. See sheet PART I - Page 5-9 & 5-10 for panel, breaker and/or disconnect switch. The devices shall be in full compliance with Appendix 11-13.
- 2 Caution:** All clothing should be checked to insure that loose ends of clothing or other objects may not be caught in the rotating machinery.
- 3 Caution:** Be sure that the unit is properly grounded before working on the chiller.
- 4 Caution:** Never pressurize the unit in excess of the manufacturers recommended pressures.
- 5 Caution:** Before opening the compressor housing for repair, the internal pressure within the compressor must be relieved.
- 6 Caution:** Removal and reinstallation of the compressor, chiller evaporator and condenser heads will require special lifting equipment that is capable of handling the weight. Special care and safety will be required to prevent injury to personnel and equipment from swinging equipment.