YORK®

Service Information

File In/With:	SI0321 New 616
Equipment Affected:	YVAA (only models listed in this letter)
Low Discharge Superheat Trips	

GENERAL

Through job site applications it has been discovered that specific YVAA chiller circuits may exhibit low discharge superheat faults due to the quantity of oil in the oil separator. Engineering testing has determined that to correct the nuisance superheat trips it is recommended to reduce the oil charge in these specific circuits. This change is only applicable to the units and circuits listed in the *Tables on page* 2.

PROCEDURE

In order to properly adjust the oil level in the unit, use the following steps.

1. Use the *Tables on page* 2 to identify the unit and the amount of oil to remove per the corresponding compressors installed in the unit.
2. Verify the compressors are the correct size as listed.
3. Lockout and tagout the unit.
4. Using a container with graduated measuring indicators and the below chart, remove the required oil from the service port on the oil line from the oil separator to the compressor.
5. **IMPORTANT:** If refrigerant was previously removed to remedy the low discharge superheat nuisance faults make sure to correct to the proper refrigerant levels at this time by adding the adjusted refrigerant back into the system.
6. Put unit back into service.
7. Allow the unit to operate at full load for one hour noting the oil level in the separator.
   (**NOTE:** While the compressor is running at full speed, the oil level should be visible in the sight glass of the oil separator.)

TABLE 1 - YVAA FIELD OIL CHARGE REMOVAL FOR UNITS WITH MICROCHANNEL CONDENSER COILS

AFFECTED YVAA MODELS	SYSTEM 1				SYSTEM 2			
	COMPRESSOR	OLD OIL CHARGE, GALLONS	NEW OIL CHARGE, GALLONS	AMOUNT TO REMOVE	COMPRESSOR	OLD OIL CHARGE, GALLONS	NEW OIL CHARGE, GALLONS	AMOUNT TO REMOVE
0295/1015	151mm	4.2	3.8	0.4	145m	3.1	no change	no change
0303/1093	151mm	4.1	3.7	0.4	145m	3.0	no change	no change
0305/1065	151mm	4.1	3.7	0.4	145m	3.0	no change	no change
0308/1088	151mm	4.3	3.9	0.4	145m	3.2	no change	no change
0318/1188	151mm	4.3	3.9	0.4	145m	3.3	no change	no change
0323/1143	151mm	4.1	3.7	0.4	151mm	4.1	3.7	0.4
0333/1173	151mm	4.1	3.7	0.4	151mm	4.1	3.7	0.4
0343/1193	151mm	4.2	3.8	0.4	151mm	4.2	3.8	0.4
0345/1215	151mm	4.3	3.9	0.4	151mm	4.3	3.9	0.4
0368/1288	170mm	5.6	4.1	1.5	145mm	5.0	4.0	1.0
0373/1343	170mm	5.3	4.0	1.3	145mm	2.9	no change	no change
0375/1315	170mm	5.6	4.1	1.5	145mm	4.3	3.8	0.5
0398/1388	170mm	5.6	4.1	1.5	151mm	5.1	4.1	1.0
0413/1443	170mm	5.5	4.0	1.5	151mm	4.3	4.0	0.3
0425/1515	170mm	5.6	4.1	1.5	151mm	4.4	4.1	0.3
0428/1488	170mm	5.6	4.1	1.5	151mm	5.1	4.1	1.0
0443/1543	170mm	5.0	4.0	1.0	170mm	5.0	4.0	1.0
0475/1665	170mm	5.8	4.2	1.6	170mm	5.8	4.2	1.6
0483/1693	170mm	5.1	4.0	1.1	170mm	5.1	4.0	1.1
0490/1650	170mm	5.2	4.0	1.2	170mm	5.2	4.0	1.2
0500/1750	170mm	5.2	4.0	1.2	170mm	5.2	4.0	1.2
0523/1843	170mm	5.8	4.2	1.6	170mm	5.8	4.2	1.6

TABLE 2 - YVAA FIELD OIL CHARGE REMOVAL FOR UNITS WITH COPPER ALUMINUM ROUND TUBE CONDENSER COILS

AFFECTED YVAA MODELS	SYSTEM 1				SYSTEM 2			
	COMPRESSOR	OLD OIL CHARGE, GALLONS	NEW OIL CHARGE, GALLONS	AMOUNT TO REMOVE	COMPRESSOR	OLD OIL CHARGE, GALLONS	NEW OIL CHARGE, GALLONS	AMOUNT TO REMOVE
0303/1093	151mm	4.1	3.7	0.4	145m	3.0	no change	no change
0323/1143	151mm	4.1	3.7	0.4	151mm	4.1	3.7	0.4
0333/1173	151mm	4.1	3.7	0.4	151mm	4.1	3.7	0.4
0343/1193	151mm	4.2	3.8	0.4	151mm	4.2	3.8	0.4
0373/1343	170mm	5.3	4.0	1.3	145mm	2.9	no change	no change
0413/1443	170mm	5.5	4.0	1.5	151mm	4.3	4.0	0.3
0443/1543	170mm	5.0	4.0	1.0	170mm	5.0	4.0	1.0
0483/1693	170mm	5.1	4.0	1.1	170mm	5.1	4.0	1.1
0490/1650	170mm	5.2	4.0	1.2	170mm	5.2	4.0	1.2
0500/1750	170mm	5.2	4.0	1.2	170mm	5.2	4.0	1.2
0523/1843	170mm	5.8	4.2	1.6	170mm	5.8	4.2	1.6