

Scotsman®

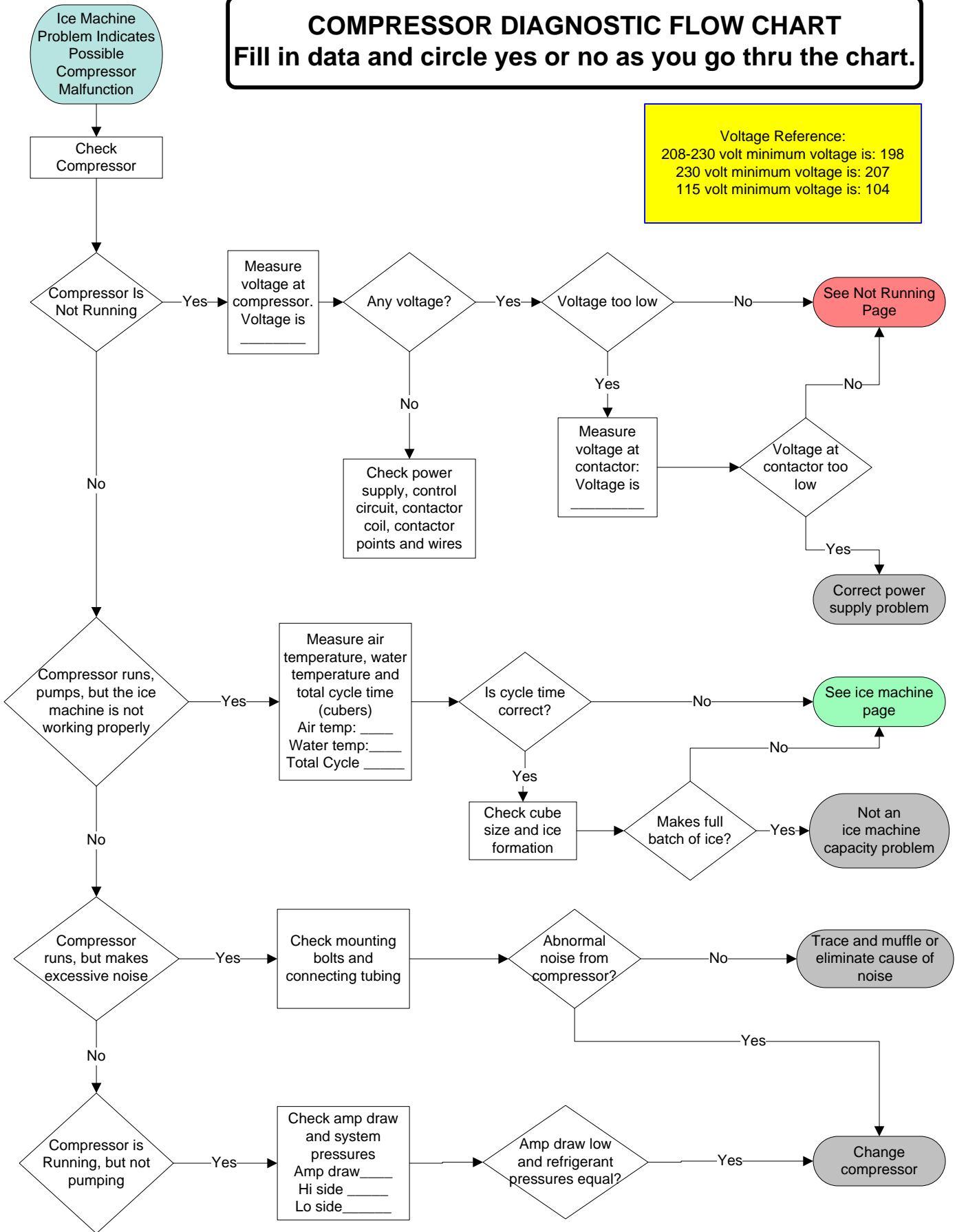
Compressor Diagnostics:

Flow Chart and Check List

COMPRESSOR DIAGNOSTIC FLOW CHART

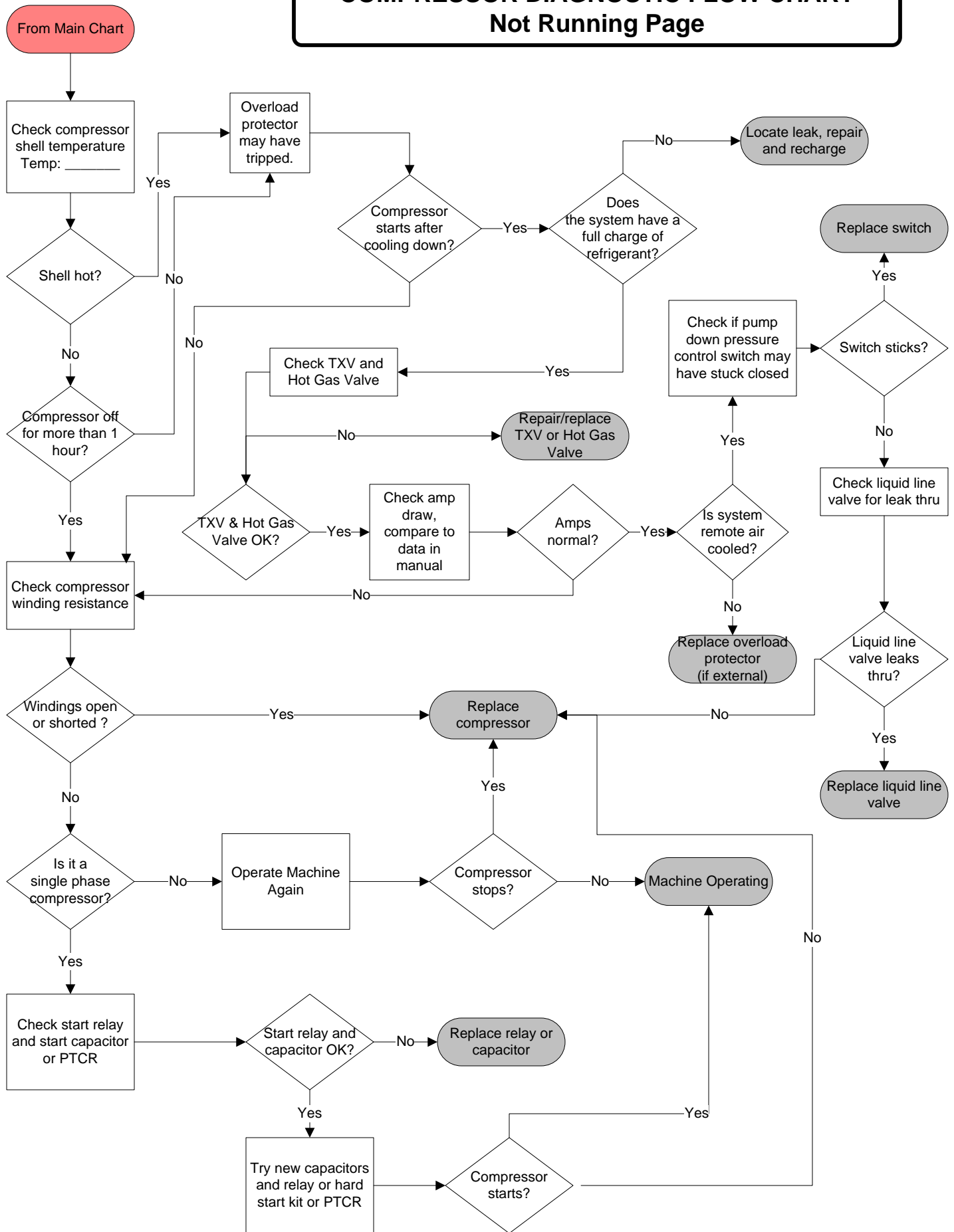
Fill in data and circle yes or no as you go thru the chart.

Voltage Reference:
 208-230 volt minimum voltage is: 198
 230 volt minimum voltage is: 207
 115 volt minimum voltage is: 104



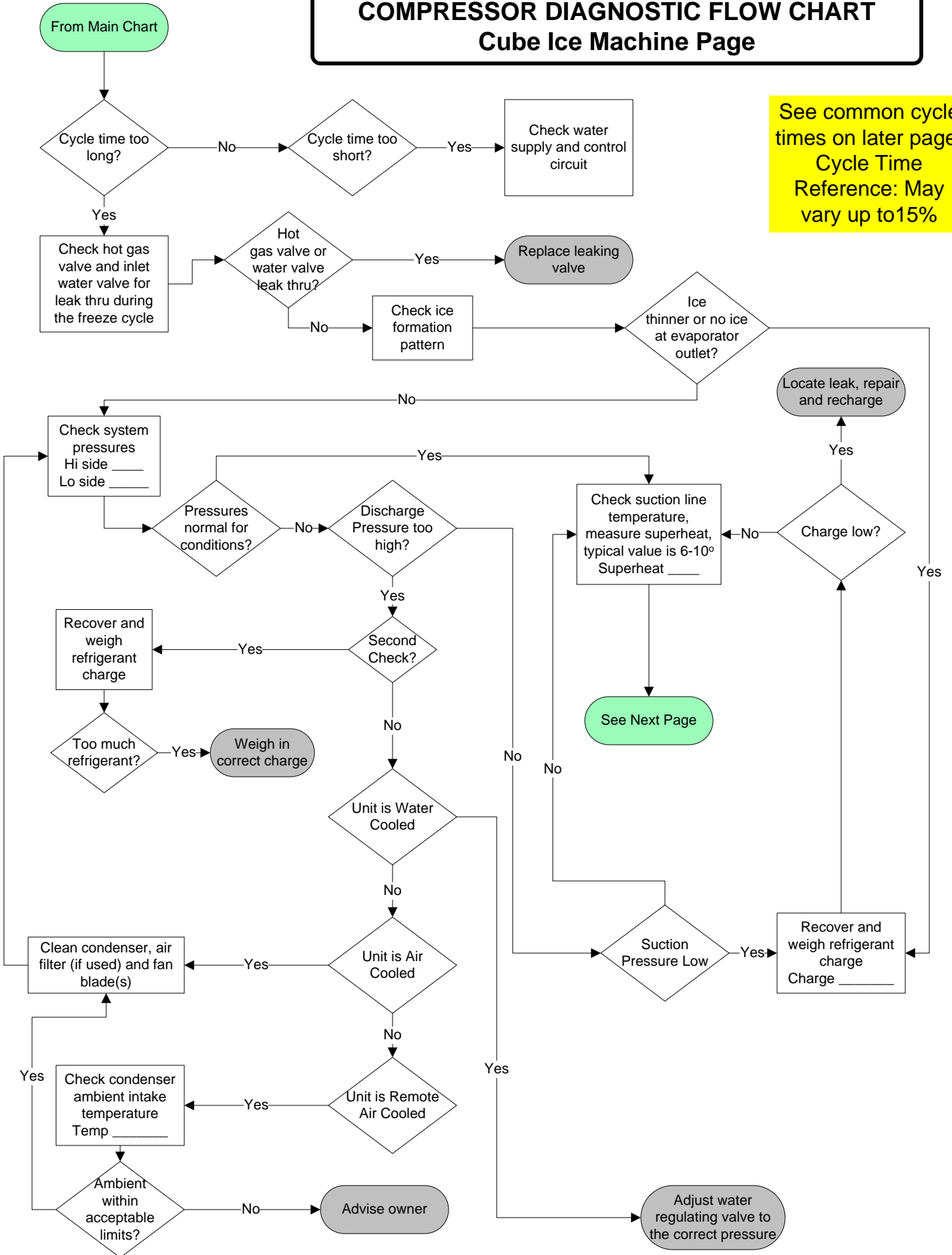
COMPRESSOR DIAGNOSTIC FLOW CHART

Not Running Page



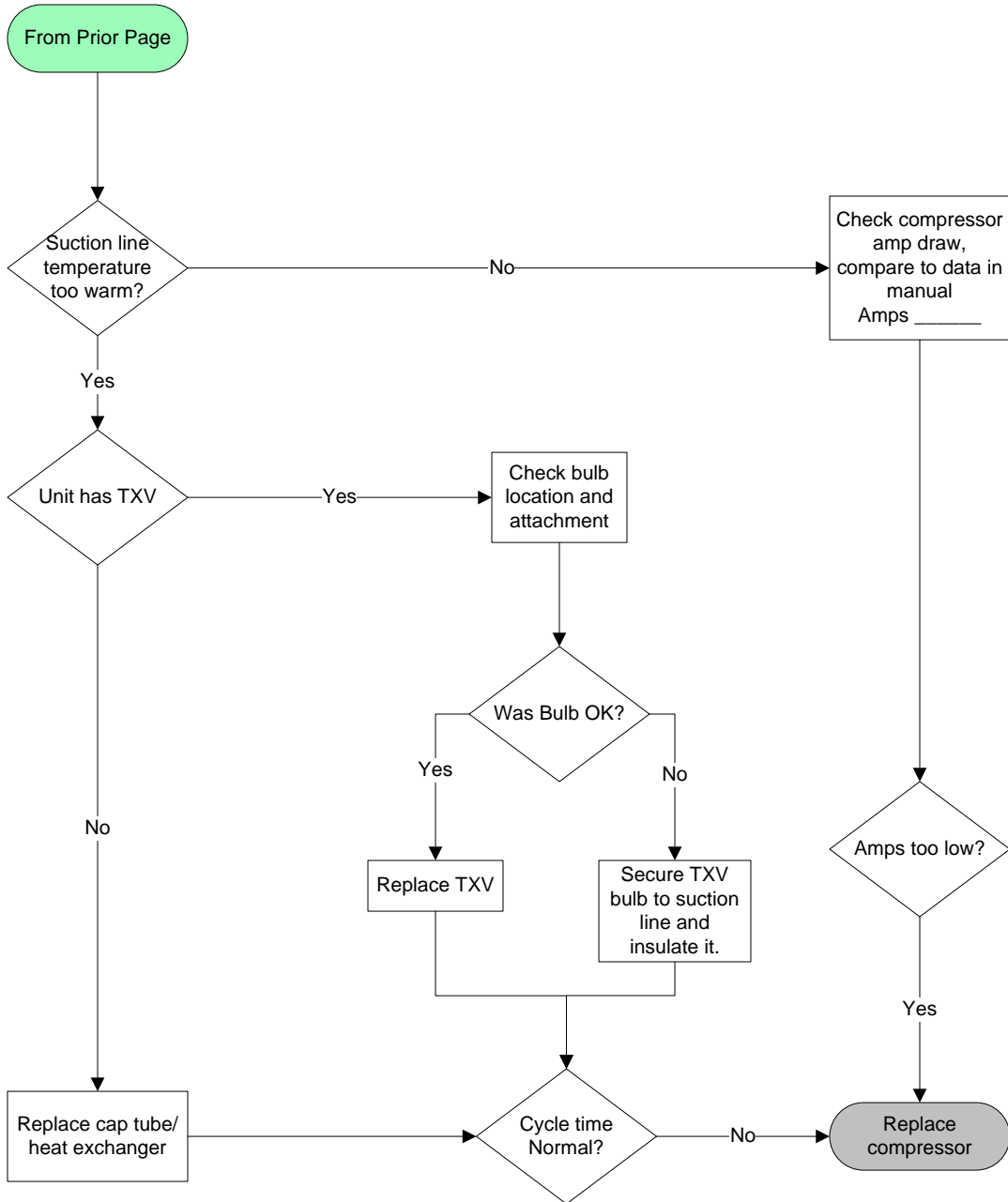
COMPRESSOR DIAGNOSTIC FLOW CHART Cube Ice Machine Page

See common cycle times on later page.
Cycle Time Reference: May vary up to 15%



COMPRESSOR DIAGNOSTIC FLOW CHART

Cube Ice Machine Page, continued



	Condenser	Cycle Times			Compressor Amps - Freeze Cycle		
		70/50	80/60	90/70	115	208-230	3 phase
C0322	Air Cooled	10-12	13-14	14-16	7.3-4.8		
C0322	Water Cooled	9-11	12	10-12	7.3-4.8		
C0330	Air Cooled	9-10	11-12	12-13	6.2-4.8		
C0330	Water Cooled	8-10	11	10-11	6.2-4.8		
C0522	Air Cooled	11-13	14	16-18	7.9-6.5		
C0522	Water Cooled	13-15	16	15-16	7.9-6.5		
C0522	Remote Air	13-14	13-14	14-15	7.9-6.5		
C0530	Air Cooled	13	15	17	8-6.5		
C0530	Water Cooled	10	13	13	8-6.5		
C0530	Remote Air	11-13	14-15	15	8-6.5		
C0630	Air Cooled	10-11	11-12	11-12		5.8-5	
C0630	Water Cooled	9	11	11		5.8-5	
C0630	Remote Air	9	9-10	10		5.8-5	
C0722	Air Cooled	13	14	17-18		5.8-5.0	
C0830	Air Cooled	11	13	14		6.4-5.3	
C0830	Water Cooled	11	13-14	13-14		6.4-5.3	
C0830	Remote Air	11	11-12	13		6.4-5.3	
C1030	Air Cooled	9-10	11-12	12-13		7.3-4.8	
C1030	Water Cooled	10	11-12	11-12		7.3-4.8	
C1030	Remote Air	10-11	11-12	12-13		7.3-4.8	
C1448	Air Cooled	12-13	14-15	15-16		12.5-7.6	
C1448	Water Cooled	13-14	15-16	15-16		12.5-7.6	
C1448	Remote Air	11	11-12	14-15		12.5-7.6	
C1848	Air Cooled	10-11	12-13	13-14		16-10	
C1848	Water Cooled	10-11	12-13	13		16-10	
C1848	Remote Air	10-11	12	13		16-10	
C2148	Water Cooled	9-10	11-12	11-12		15.4-12.6	
C2148	Remote Air	10	10	12		15.4-12.6	
C2648	Remote Air	10-12	12-14	13-15		13.2-12.9	
CME1056	Air Cooled	14-16	17-18	18-20		10	
CME1056	Water Cooled	14-16	16-17	15-18		10	
CME1056	Remote Air	15-18	16-17	17-19		10	
CME1356	Air Cooled	13-16	17-18	19-21		15.7-17	9-10
CME1356	Water Cooled	15-17	17-18	18-19		15.7-17	9-10
CME1356	Remote Air	14-15	16-17	18-20		15.7-17	9-10
CME1386	1300 RL	15-16	17-18	18-19		15	8
CME1656	Air Cooled	18-21	19-21	21-23		15-17	11
CME1656	Water Cooled	16-18	17-18	18-19		15-17	11
CME1656	Remote Air	18-20	19-21	21-22		15-17	11
CME1686	1600 RL	16-18	18-19	19-20		15	8
CME1856	Water Cooled	15-17	16-18	16-18		19	11
CME2006	Remote Air	14-16	15	15-16		19	11
CME2086	2000 RL	14-15	15	15-16		20	14
CME256	Air Cooled	16-19	19-20	19-21	7.9		
CME256	Water Cooled	14-16	16-18	19-22	7.9		

		Cycle Times			Compressor Amps - Freeze Cycle		
	Condenser	70/50	80/60	90/70	115	208-230	3 phase
CME306	Air Cooled	12-13		15-16	10		
CME306	Water Cooled	12-13		13-14	10		
CME456	Air Cooled	19-20		24-25	13		
CME456	Water Cooled	18-19		19-20	13		
CME456	Remote Air	18-20		19-21	13		
CME506	Air Cooled	20-22	22-23	23-25	10-11		
CME506	Water Cooled	21-23	22-23	23-26	10-11		
CME506	Remote Air	22-25	25-26	26-30	10-11		
CME656	Air Cooled	15-16	16-17	17-18		7-8	
CME656	Water Cooled	18-19	19	18-19		7-8	
CME656	Remote Air	16-18	18-19	18-20		7-8	
CME686	600 RL	19-23	21-22	22-25		5	3.5
CME806	Air Cooled	10-12	12-13	14-16		13	
CME806	Water Cooled	11-13	13-14	14-16		13	
CME806	Remote Air	12-14	14-15	14-16		13	
CME810	800 RL	16-18	18-20	18-21		9	6
CME810	1000 RL	15-16	15-17	15-18		11	7
CU0415	Air Cooled	25		38	1.8		
CU0515	Air Cooled	19-20	20-21	21-23	4.3-3.6		
CU0715	Air Cooled	17		25	2.6		
CU0920	Air Cooled	15		18	3.1		
CU1526	Air Cooled	22-23	25	37	5-5.5		
CU1526	Water Cooled	21-22	24	25	5-5.5		
CU2026	Air Cooled	16-17	19	26	5.4-5.9		
CU2026	Water Cooled	15-16	17	23	5.4-5.9		
CU3030	Air Cooled	13	15	20	6-7.3		
CU3030	Water Cooled	12-13	14	15	6-7.3		
CU50	Air Cooled	19-20	25-26	29-31	2.6-3.2		
EH222	600 RL	14-16	16-17	17-19		4-3.5	
EH222	800 RL	11-13	13-14	14-16		7-5.6	
EH222	1000 RL	7-9	9-10	10-11		9-6	
EH222 C	800	11-14		14-16		7-5.6	
EH222 C	1000	9-10		11-13		8-9	6.3-5.2
EH330	1200 RL	10-13	13-14	13-15		10-14	
EH430	1400 RL	11-15	15-16	16-19		9-8	
EH430	1800 RL	11-12	12-13	13-18		12-15	
EH430	2000 RL	8-12	9-13	10-15		14-15	
SCC30	Air Cooled	23	29	39	2.9-3.1		
SCC50	Air Cooled	19-20	25-26	29-31	2.6-3.2		
SCE170	Air Cooled	15	17	18	9		
SCE170	Water Cooled	16	16	16	9		
SCE275	Air Cooled	17	18	20	6-7		
SCE275	Water Cooled	17	18	19	6-7		

Compressor Replacement Check List

Suspected Failure	Checked by	Confirmed yes or no
Open windings	Ohmmeter after compressor cool down	
Broken valves	System pressures, cycle time and amp draw	
Locked rotor / will not start	Voltage check, start relay and capacitor check	
Noise / vibration	Confirming other unit parts not making noise	
Inefficient / Low capacity	Cycle time and confirming water and hot gas valves do not leak by	