1. M2 SERIES STARTUP FORM

Job Name: _____ Date: _____

Address: _____

_____

Model Number: _____

Serial Number: _____ Tag: _____

Startup Contractor: _____

Address: _____

_____ Phone: _____

1.1. Pre Startup Checklist

Installing contractor must verify the following items.	
1. Is there any visible shipping damage?	☐YES
2. Is the unit level?	☐YES
3. Are the unit clearances adequate for service and operation?	☐YES
4. Do all access doors open freely and are the handles operational?	☐YES
5. Have all shipping braces been removed?	☐YES
6. Have all electrical connections been tested for tightness?	☐YES
7. Does the electrical service correspond to the unit nameplate?	☐YES
8. On 208/230V units, has transformer tap been checked?	☐YES
9. Has overcurrent protection been installed to match the unit nameplate requirement?	☐YES
10. Have all set screws on the fans been tightened?	☐YES
11. Do all fans rotate freely?	☐YES
12. Does the field water piping to the unit appear to be correct per design parameters?	☐YES
13. Is all copper tubing isolated so that it does not rub?	☐YES
14. Have the damper assemblies been inspected?	☐YES
15. Are air filters installed with proper orientation?	☐YES
16. Have condensate drain and p-trap been connected?	☐YES
17. Is the TXV sensing bulb in the correct location?	☐YES
18. Does the TXV sensing bulb have proper thermal contact and is properly insulated?	☐YES
19. Is the actual refrigerant charge of the largest circuit in accordance with the required conditioned floor area?	☐YES
20. Are ventilation and exhaust openings unobstructed?	☐YES
21. Are markings, decals, and warnings on unit clearly visible?	☐YES
22. Are all damaged or illegible markings and warnings replaced?	☐YES
23. Has the functionality of the Refrigerant Detection System been verified?	☐YES

1.2. Ambient Temperature

Ambient Dry Bulb Temperature: _____°C/°F	Ambient Wet Bulb Temperature: _____°C/°F

1.3. Supply Fan Assembly

Alignment ☐		Check Rotation ☐	Nameplate Amps_____	
Number	hp	L1 Volts/Amps	Number	hp
1				
2				
Band Size: _____ VFD Frequency: _____			VAV Controls: _____ Springs Operating Correctly ☐	

1.4. Energy Recovery Wheel Assembly

Wheels Spin Freely ☐		Check Rotation ☐		FLA _____
Number	hp	L1 Volts/Amps	L2 Volts/Amps	L3 Volts/Amps
1				
2				

1.5. Power Exhaust Fan Assembly

Alignment ☐		Check Rotation ☐		Nameplate Amps_____
Number	hp	L1	L2	L3
1				
2				
Band Size VFD Frequency: _____			Springs Operating Correctly ☐	

1.6. Power Return Fan Assembly

Alignment ☐		Check Rotation ☐		Nameplate Amps_____
Number	hp	L1	L2	L3
1				
2				
Band Size : _____ VFD Frequency: _____			Springs Operating Correctly ☐	

1.7. Outside Air/Economizer Dampers

OA Operation Check ☐	Damper Wiring Check ☐	Gears Check ☐
RA Operation Check ☐	Damper Wiring Check ☐	Gears Check ☐
EA Operation Check ☐	Damper Wiring Check ☐	Gears Check ☐
Damper Actuator Type:_____		
Economizer Changeover Type and Operation:_____		

1.8. Unit Configuration

Water-Cooled Condenser ☐	Air-Cooled Condenser ☐
No Water Leaks ☐	Condenser Safety Check ☐
Water Flow: _____	gpm: _____
Water Inlet Temperature: _____°C/°F	Water Outlet Temperature: _____°C/°F

1.9. Compressors/DX Cooling

Check Rotation ☐						
Number	**L1 Volts/Amps**	**L2 Volts/Amps**	**L3 Volts/Amps**	**Head Pressure KPA/PSIG**	**Suction Pressure KPA/PSIG**	**Crankcase Heater Amps**
1						
2						
3						
4						

1.10. Refrigeration System 1 - Cooling Mode

	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

1.11. Refrigeration System 2 - Cooling Mode

	Pressure	**Saturated Temperature**	**Line Temperature**	**Sub-cooling**	**Superheat**
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

1.12. Refrigeration System 3 - Cooling Mode

	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

1.13. Refrigeration System 4 - Cooling Mode

	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

1.14. Refrigeration System 1 - Heating Mode (Heat Pump Only)

	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

1.15. Refrigeration System 2 - Heating Mode (Heat Pump Only)

	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

1.16. Refrigeration System 3 – Heating Mode (Heat Pump Only)

	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

1.17. Refrigeration System 4 - Heating Mode (Heat Pump Only)

	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

1.18. Air-Cooled Condenser Fans

Alignment ☐		Check Rotation ☐		Nameplate Amps_____
Number	hp	L1 Volts/Amps	L2 Volts/Amps	L3 Volts/Amps
1				
2				
3				
4				
5				
6				

1.19. Water/Glycol System

1. Has the entire system been flushed and pressure checked?	☐YES
2. Has the entire system been filled with fluid?	☐YES
3. Has air been bled from the heat exchangers and piping?	☐YES
4. Is the glycol the proper type and concentration (N/A if water)?	☐YES
5. Is there a minimum load of 50% of the design load?	☐YES
6. Has the water piping been insulated?	☐YES
7. What is the freeze point of the glycol (N/A if water)?_____	

1.20. Electric Heating

Stages_____		Limit Lockout ☐		Aux. Limit Lockout ☐
Stage	Amps	Stage	Amps	
1		5		
2		6		
3		7		
4		8		

1.21. Electric Preheating

Limit Lockout ☐		Aux. Limit Lockout ☐	
Outside Air Temperature Setpoint: _____°C/°F			
Preheat Leaving Air Temperature Setpoint: _____°C/°F			
Stage	Amps	Stage	Amps
1		3	
2		4	

1.22. A2L Mitigation Board

1. Does each port (sensor 1-3) have a male connector plugged in on both the Cabinet and Airstream board?	☐YES
2. Do the compressor(s) and gas heat operation shut off when the Cabinet Board is in the alarm state?	☐YES
3. Does the unit operate normally except compressor and gas heat operation when the Cabinet Board is in the alarm state?	☐YES
4. Do the compressor(s) shut off and fan(s) stay on when the Airstream Board is in the alarm state?	☐YES
5. Does non-compressor or gas heating/cooling stay on when both A2L Mitigation boards are in the alarm state?	☐YES

2. MAINTENANCE LOG

This log must be kept with the unit. It is the responsibility of the owner and/or maintenance/service contractor to document any service, repair or adjustments. AAON Service and Warranty Departments are available to advise and provide phone help for proper operation and replacement parts. The responsibility for proper startup, maintenance and servicing of the equipment falls to the owner and qualified licensed technician.

Entry Date	Action Taken	Name/Tel.