Mitsubishi Job Site Sheet

System Information

Outdoor Unit	Model #		Serial #	
Indoor Units	**Circuit A**	**Circuit B**	**Circuit C**	**Circuit D**
Location				
Model #				
Serial #				
Type of Controller				

Outdoor Unit:

Voltage L1-L2:_____
DC Bus Voltage: _____
Zone A Voltages: *S1 –S2* _____ *S1-S3*_____ *S2-S3*_____
Zone B Voltages: *S1 –S2* _____ *S1-S3*_____ *S2-S3*_____
Zone C Voltages: *S1 –S2* _____ *S1-S3*_____ *S2-S3*_____
Zone D Voltages: *S1 –S2* _____ *S1-S3*_____ *S2-S3*_____

If voltages are not within range, shut power off to the outdoor unit. Remove wires for each zone and recheck voltages at outdoor terminal strips.

Zone A Voltages: *S1 –S2* _____ *S1-S3*_____ *S2-S3*_____
Zone B Voltages: *S1 –S2* _____ *S1-S3*_____ *S2-S3*_____
Zone C Voltages: *S1 –S2* _____ *S1-S3*_____ *S2-S3*_____
Zone D Voltages: *S1 –S2* _____ *S1-S3*_____ *S2-S3*_____

What is the size and type of wire used to connect the indoor units? _____
Is there a disconnect at the indoor units? (Y or N)
Are there wire splices or junction box connections in the indoor unit wiring circuit? (Y or N)
Is there a condensate pump installed? (Y or N)
Are there any faults being displayed on the outdoor circuit boards? (Y or N)
If yes, list the LED fault sequence being displayed. (Example **Red** 2x flashing **Yellow** off)
What is the Suction Pressure at the compressor?
What is the Discharge Pressure at the compressor?
What is the ambient temperature?
What is the suction Line temperature at the compressor?
What is the liquid line temperature before the LEV's?

Indoor Units:

Diagnostic Instructions:

Run all the units in heat or cool with the fan speed set to high. Set the controller as high or low as possible for the mode you are in. Wait 20 minutes then record the following information.

Are there any faults being displayed on the indoor units? (Y or N)
If yes list the LED fault being displayed and the indoor unit number.

Indoor Unit A

Mode: Cooling - Heating Set point_____
Voltage:
S1–S2 _____ *S1-S3*_____ *S2-S3*_____
Inlet Temperature DB°F_____
Outlet Temperature DB°F_____
Saturated liquid line temperature: _____
Suction line temperature: _____
Degrees of Superheat or Subcooling: _____

Indoor Unit B

Mode: Cooling - Heating Set point_____
Voltage:
S1–S2 _____ *S1-S3*_____ *S2-S3*_____
Inlet Temperature DB°F_____
Outlet Temperature DB°F_____
Saturated liquid line temperature: _____
Suction line temperature: _____
Degrees of Superheat or Subcooling: _____

Indoor Unit C

Mode: Cooling - Heating Set point_____
Voltage:
S1–S2 _____ *S1-S3*_____ *S2-S3*_____
Inlet Temperature DB°F_____
Outlet Temperature DB°F_____
Saturated liquid line temperature: _____
Suction line temperature: _____
Degrees of Superheat or Subcooling: _____

Indoor Unit D

Mode: Cooling - Heating Set point_____
Voltage:
S1–S2 _____ *S1-S3*_____ *S2-S3*_____
Inlet Temperature DB°F_____
Outlet Temperature DB°F_____
Saturated liquid line temperature: _____
Suction line temperature: _____
Degrees of Superheat or Subcooling: _____

Diagnostic Information

Refrigerant:

Multi head systems are susceptible to cross piping and wiring. Always cycle one head on at a time and check the TD across the indoor coil. If TD is normal then wiring and piping are correct, if not trace wiring and piping for each zone and correct.

Typical Super heat for the indoor unit in cooling mode with more than a 5degree deviation from set point with the fan speed set to high is between 2-5 degrees F

Typical Sub-Cooling for the indoor unit in heating mode with more than a 5degree deviation from set point with the fan speed set to high is between 5-9 degrees F

Max Pressure Drop on the indoor unit and piping is 50 Psi

Max Psi drop between the discharge Psi and Saturated liquid line in A/C mode 150 Psi

Electrical:

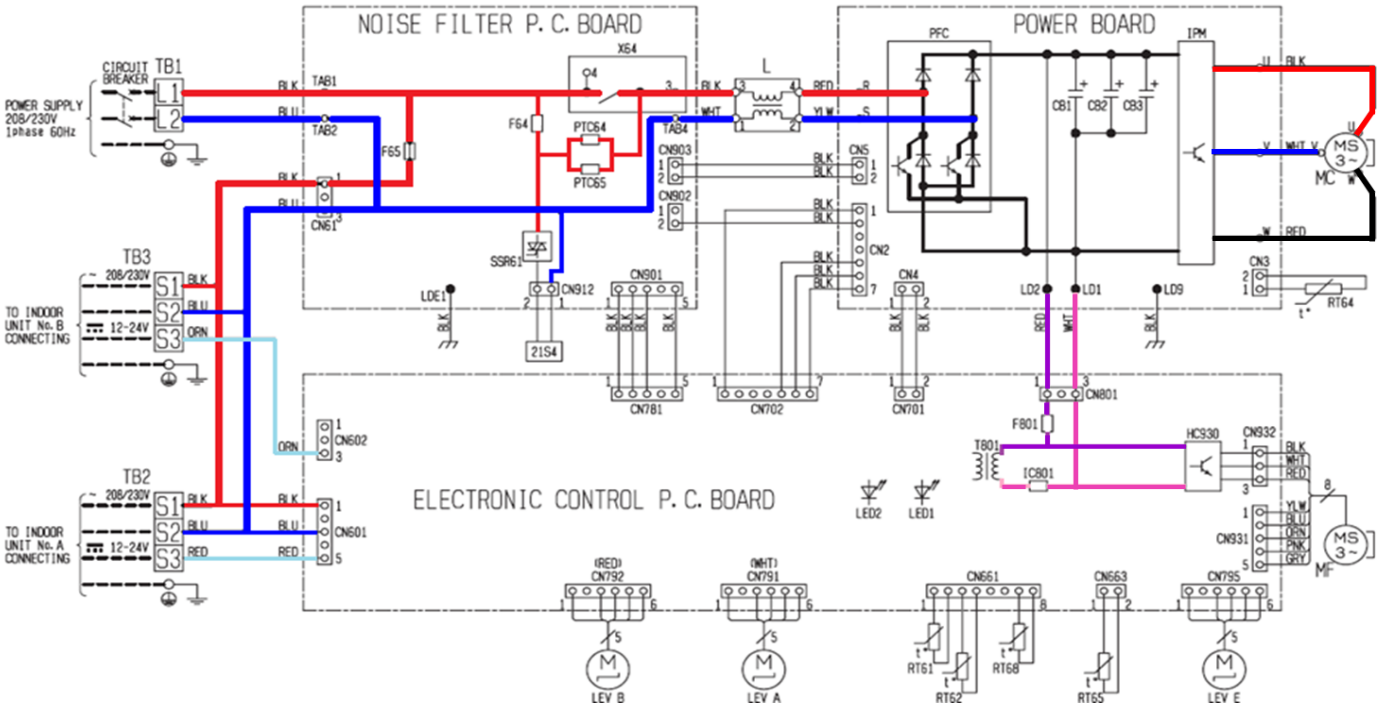
Check line voltage at the outdoor unit (L1-L2) and voltage being supplied to each indoor unit at S1, S2 & S3. Readings should be as followed:

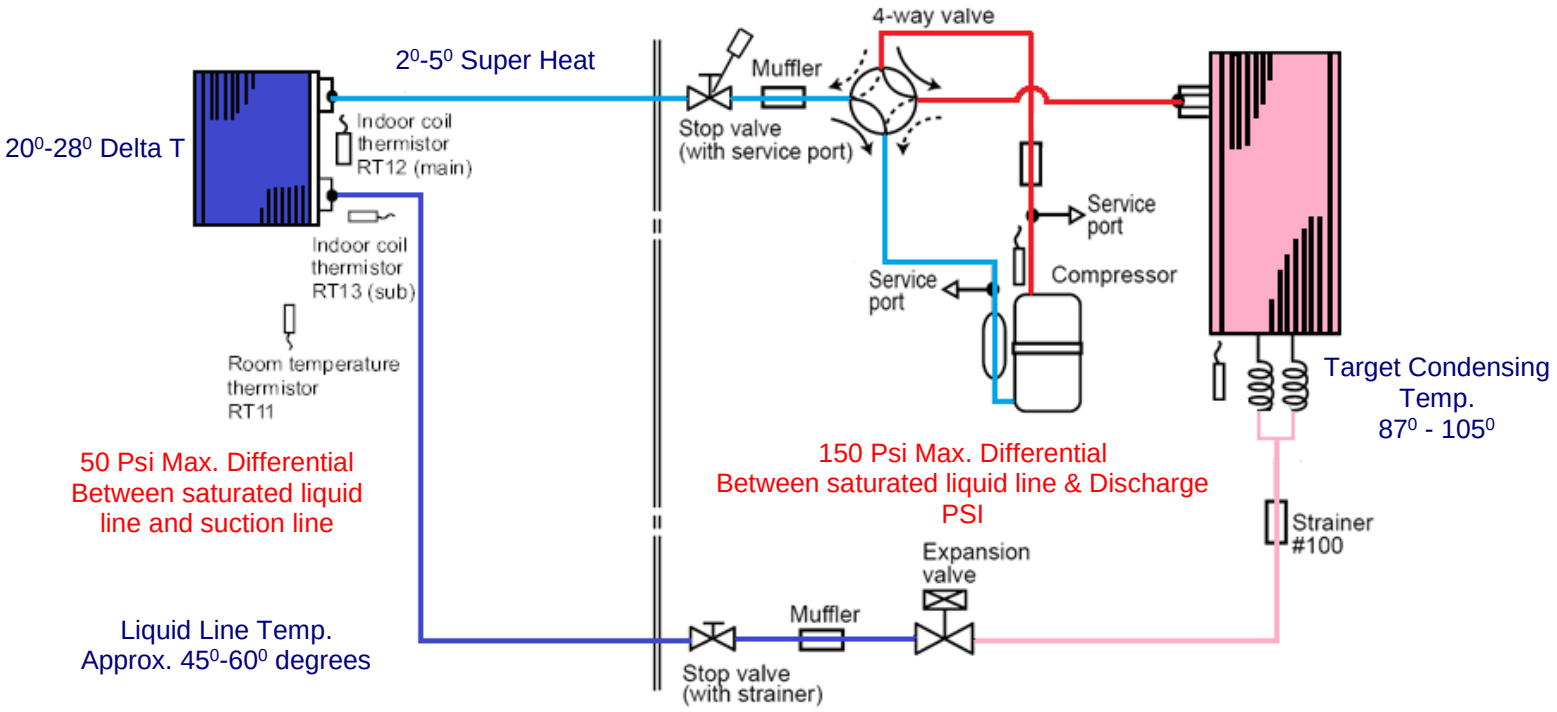
L1 – L2 = 208/240 Volts A/C
S1 - S2 = 208/240 Volts A/C
S1 – S3 Should be the same as S1 – S2
S2 –S3(wires connected) = Pulsating D/C Voltage
S2 –S3(wires disconnected) = 24 -29 D/C Volts steady
S2 – S3 = 80 – 120 VDC S1 and S2 are Swapped
DC Bus Voltage = 1.414 x input voltage
M-Net Voltage 28-30Vdc

Do Not remove any wires until the DC Bus voltage is below 17 VDC

Controls:

-The return thermistor has a built in heat off set of 7 degrees F when the system is in the heating mode
- MVZ air handlers that use the KUMO Control should use a remote temperature sensor to sense room temperature





Readings are at High speed fan max deviation from set point