

ERROR CODES THAT CORRESPOND TO THE INDOOR UNIT

Error Code	Error Information	Error Code Solutions
F1	Communication Fault	<ol style="list-style-type: none"> 1. Check if the wiring harness is loose. If loose, reseal. 2. Check if the wires between the indoor and outdoor units are connected in the correct order per the wiring diagram 3. Check the ground connection cable and assure there is not a faulty connection. 4. Check the PCB Board and components <ul style="list-style-type: none"> - Assure there are no loose or broken wires (if lose reseal, if broken repair) - Check current from indoor terminal block to PCB Board, assuring there is current that is passing thru (if not replace PCB Board)
F2	Room Temperature Sensor Fault	<ol style="list-style-type: none"> 1. Check if the resistance on the thermistor temperature sensor is nomial, if not replace thermistor. 2. Check thermistor temperature sensor wires and assure there is no short via the PCB Board (i.e false solder or inproper solder on PCB Board) 3. Change PCB Board if step above are taken and error code F2 resumes.
F3	Indoor Coil Pipe Outlet Temperature Sensor Fault	Follow Recommended Resolution for error code F2
	Indoor Coil Pipe Inlet Temperature Sensor Fault	Follow Recommended Resolution for error code F2
	Indoor Coil Pipe Middle Temperature Sensor Fault	Follow Recommended Resolution for error code F2
F4	PG (Indoor) Fan Motor Fault	<ol style="list-style-type: none"> 1. Check if the motor wires are loose. If loose, reseal. 2. Assure there is voltage coming into the motor and capacitor (if applicable) 3. Check the cross flow fan for obstructions. 4. Check the PCB Board and components <ul style="list-style-type: none"> - Assure there are no loose or broken wires (if lose reseal, if broken repair) - Check current from indoor terminal block to PCB Board, assuring there is current that is passing thru (if not replace PCB Board)
FA	Communication Fault between the Wall thermostat and indoor board	<ol style="list-style-type: none"> 1. Check if the wiring harness is loose. If loose, reseal. 2. Check if the wires between the indoor unit and wall thermostat are connected in the correct order per the wiring diagram. 3. Check if there is current that is being passed from indoor PCB Board to Wall thermostat terminal (replace thermostat) 4. If there is no current passing throught to Wall thermostat terminal (replace PCB Board)

ERROR CODES THAT CORRESPOND TO THE OUTDOOR UNIT

Error Code	Error Information	Error Code Solutions
P2	Outdoor module protection error	<ol style="list-style-type: none"> 1. Check the wiring harness of the compressor to see if it is loose. If loose, reset. 2. Check if the wires between the outdoor unit PCB Board and outdoor unit terminal block are connected in the correct order per the wiring diagram. 3. Check IPM module for short or false connections (replace IPM Board) 4. Check compressor for normal operations.
P3	Alternating current has caused overload in outdoor unit	<ol style="list-style-type: none"> 1. Check voltage for consistency. Power fluctuations will cause this error code 2. Check environment temperatures to not exceed normal operating temperatures.
P4	Outdoor environmental temperature exceeds normal operation or condenser discharge temperature exceeds normal	<ol style="list-style-type: none"> 1. Check refrigerant pressures for inconsistencies (loss of refrigerant or too much 2. Check compressor temperature switch functionality. (if not current response coming out of switch, item must be replaced.) 3. Outdoor environment temperatures are too low or too high. (Normal operating parameters are -4 degrees to 131 degrees Fahrenheit)
P7	Abnormality in outdoor units voltage / current	<ol style="list-style-type: none"> 1. Check voltage coming in from disconnect or electrical whip to be within the units normal operating voltage (i.e 110-115v 1 phase 60hz or 208-230v 1 phase 60hz) 2. Check IPM Module for correct voltage from outdoor terminal block. 3. Check PCB Board of outdoor unit for correct voltage
P8	Selector Valve Fault / Insufficient Refrigerant	<ol style="list-style-type: none"> 1. Connect gauges to the system and check the refrigerant pressures, (if low on refrigerant add refrigerant if too much refrigerant is added remove to stabilize pressures) 2. Check high and low pressure valves are opening. 3. Check tube temperature sensor is firmly connected, (reset if possible) 4. Check current between PCB Board and pressure switches, (if none present replace PCB Board)
F6	Outdoor Sensor Fault	<ol style="list-style-type: none"> 1. Check outdoor sensor for normal resistance. (if not, replace outdoor sensor) 2. Check if the wiring harness is loose. (If loose, reset) 3. Check the PCB Board and Sensor Components <ul style="list-style-type: none"> - Assure there are no loose or broken wires (if loose reset, if broken repair) - Check current from sensor to PCB Board, assuring there is current that is passing thru (if not replace PCB Board)
FF	Outdoor Fan Motor Fault	<ol style="list-style-type: none"> 1. Make sure correct voltage coming into the motor (if not replace motor) <ul style="list-style-type: none"> - If voltage is correct but motor does not spin (replace motor) 2. If motor voltage is correct and motor is spinning, reset connections on the PCB Board (replace PCB board if error code persists)
FC	Compressor Start-up Failure	<ol style="list-style-type: none"> 1. Check the wiring harness of the compressor to see if it is loose. If loose, reset. 2. Check voltage coming in to compressor to be within the units normal operating voltage (i.e 110-115v 1 phase 60hz or 208-230v 1 phase 60hz) 3. Check the PCB Board <ul style="list-style-type: none"> - Assure there are no loose or broken wires (if loose reset, if broken repair) - Check current from PCB Board to compressor, assuring there is current that is passing thru (if not replace PCB Board)

LED		lamp display		failure	The reason of fault and solution
code	explain	code	explain		
DF	display at on state	flicker 1/1 SEC		defrost indication	1、 Normal, the defrost state is removed, it will return to normal condition automatically
	display at off state	flicker 1/3 SEC		anti cold wind	1、 Normal (during heating mode) 2、 It will be removed when the coil pipe temperature sensor reaches certain temperature.
E2	display at off state	flicker 1/1 SEC	display at on/off state	room temp. sensor fault	1、 Check whether the resistance of the sensor is normal (the resistance is 5KΩ in the normal temperature 25°C), when it is abnormal the sensor should be replaced. 2、 Check whether there is short circuit or open circuit in the wire of the sensor, and whether the plug is connected well, whether there is welding off or rosin joint on the electric control board, if there is any, it should be repaired. 3、 When the 1 and 2 are both normal, then the components or integrated circuit is damaged, the electric control board should be replaced.
E3	display at off state	flicker 3/5 SEC	display at on/off state	coil temp. sensor fault	1、 Check whether the resistance of the sensor is normal (the resistance is 5KΩ in the normal temperature 25°C), when it is abnormal the sensor should be replaced. 2、 Check whether there is short circuit or open circuit in the wire of the sensor, and whether the plug is connected well, whether there is welding off or rosin joint on the electric control board, if there is any, it should be repaired. 3、 When the 1 and 2 are both normal, then the components or integrated circuit is damaged, the electric control board should be replaced.
E4	display at on/off state	flicker 4/6 SEC	display at off state	outdoor unit abnormal	1、 Check whether the winding resistance and operation current of the compressor are normal. 2、 Check whether the high and low pressure is normal when the unit is running. 3、 Check (whether the coil pipe sensor is normal) whether the contact of the inserter on the circuit board is well, the coil pipe temperature sensor is fixed, the evaporation of the indoor unit is well, the key is to check the evaporator temperature detected by the coil pipe temperature sensor has reached the cooling or heating temperature. 4、 Check whether the surface of the condenser is too dirty, it should be cleaned when it is too dirty.

					<ol style="list-style-type: none"> 5、 Check whether the capacitance of the outdoor motor and the fan is damaged, it should be replaced when it is damaged. 6、 If the above items are normal, the electric control board should be replaced.
E5	PG motor display at off state	flicker 5/7 SEC	display at off state	no feedback signal of indoor fan	<ol style="list-style-type: none"> 1、 Check whether two sets of plugs on the outlet end of the motor have loosed from the socket of the electric control board, insert it firmly when loosing. 2、 Check whether the indoor motor has damaged, the motor should be replaced when it is damaged 3、 Check whether the controllable silicon and other components on the electric control board have damaged, replace the controllable silicon or electric control board when they are damaged.
E6	PG motor display at off state	flicker 6/8 SEC	display at off state	no over zero signal	<ol style="list-style-type: none"> 1、 Firstly check whether the indoor fan is normal. 2、 Check whether the signal outputting from the integrated chip of the electric control board is normal, the electric control board should be replaced when the signal is abnormal.
E7	display at off state	flicker 7/9 SEC	display at off state	outdoor feedback fault	<ol style="list-style-type: none"> 1、 Check whether the winding resistance and operation current of the compressor are normal 2、 Check whether the high and low pressure is normal when the unit is running. 3、 Check whether the indoor and outdoor wiring is right; when it is wrong, connect them again according to the circuit diagram 4、 Check whether the contact of the inserter on the circuit board and the connection are well, otherwise repair faulty connection. 5、 Check whether the signal feedback wire is disconnected, replace or connect the feedback signal wire. 6、 Check whether the supply power is phase-lacking or phase opposition. 7、 Check whether the AC electromagnetic contactor is well.
E8	display at off state	flicker 8/10 SEC	display at off state	frost protection/over heat protection	<ol style="list-style-type: none"> 1、 Check whether the filter of the indoor unit is dirty or blocked, and clean if it is dirty. 2、 Check whether the indoor fan is running normally, and replace the motor if it is abnormal. 3、 Check whether indoor pipe temperature sensor is normal, and replace the sensor if it is abnormal. 4、 Check whether the system pressure is normal, if abnormal, should check whether there is leakage, and fill the refrigerant again.