

FX134, FX1234, FX3030

Problem and Solutions

Unit Will Not Power Up

Turn the power switch on. The unit LCD will display revision program and filter life within 3 to 5 seconds after turning on unit.

If this process does not happen then see the trouble shooting tips below.

1. Check power cord is firmly plugged into unit all the way.
2. Check Circuit breaker on unit. Check that it is not tripped.
3. Check power source to unit. Check with voltage meter.
4. Fan should run after turning on power switch.
5. Check for LED light on main PCB is powered up. Remove low side gauge and verify red LED lights on PCB.
6. Check power to the power supply PCB (120 volts AC in) and power from the (PCB 12 volts DC out).
7. Unit passes the above checklist. The LCD or Main PCB maybe bad.
8. Call technical support. 1800-277-3808 ext 313

Unit Stuck In PT Calibration Mode

Turn the power switch on. The unit LCD will display revision program and filter life within 3 to 5 seconds after turning on unit. Then re zeroing Pressure Transducer will display. During the Pressure re zeroing mode the recovery compressor will run first until Pressure transducer is in a vacuum. (5 to 6 seconds) The pressure transducer will then zero out to zero on both PT1 and PT2. The vacuum pump will run for a short period of time and turn off. (5 seconds) The unit will then look to see if air purge is needed. If no air purge is needed then the compressor will turn on and clear out pressure sample and then displays Main Menu. If air purge is called out, then unit will show purge pressures. One as what tank pressure and what the purge target is. This process from turning unit on to main menu display is 60 seconds. Note: If the unit needs to purge then process will take longer than the 60 seconds. Additional 5 minutes is possible depending on pressure in recovery tank being purged.

If the above process does not happen then see trouble shooting tips below.

1. If recovery compressor runs continually see the follow trouble shooting tips.
 - a. Check service hose ends that there tight and couplers are tight.
 - b. Check to see if calibration is off on pressure transducer (PT 1) Recalibrate if necessary. Rerun start up to see if problem is corrected. . (Run PT diagnostic test in service menu)
3. Check that vacuum pump is good. The vacuum pump should come on for a bout 5 seconds after the recovery compress shuts off. If the vacuum Pump runs continually. Please see trouble shooting tips below.
 - a. Check oil level on vacuum pump. (Vacuum pump over filled won't pull vacuum.)
 - b. Check service hose ends that there tight and couplers are tight.
 - c. Check to see if calibration is off on pressure transducer (PT 1) Recalibrate if necessary. Rerun start up to see if problem is corrected. . (Run PT diagnostic test in service menu)
 - d. Check vacuum hose on vacuum pump is tight.
5. Check tank pressure and purge tank if needed. Purge mode in maintenance menu.

Oil Drain Bottle Blew Oil Out

1. Check tank valves and tank hoses are open.
2. Check tank pressure and purge tank if needed. Air purge in maintenance menu.

Compressor Kicking Breaker

1. Extension Cord heavy enough 14gauge at least.
2. Manually purge Compressor on suction and discharge port in service menu. LV1, LV2, LV4, HV2, and HV3. The purge will drain thru oil drain bottle port. Empty oil from drain bottle before hand.

Unit Will Not Recover Refrigerant

1. Check for pressure on gauges.
2. Checks the service couplers are open.
3. Check tank valve are open.
4. Check that the compressor is running.
5. Check tank pressure and purge tank if needed. Air purge in maintenance menu.
6. Close liquid ball valve on tank filter. If recovery then happens the charge solenoid valve has dirt in valve.

Unit Will Not Refill Refrigerant

1. Check for pressure on Red gauge.
2. Checks the Red service coupler is open.
3. Check tank valve are open.

4. Check that the virgin tank bottle valve is open and refill adaptor not over tightened.
5. Check that the compressor is running.
6. Check tank pressure and purge tank if needed. Air purge in maintenance menu.
7. Close liquid ball valve on tank filter. If recovery then happens the charge solenoid valve has dirt in valve.

Unit Will Not Pull Into Vacuum during Recovery

1. Check the service couplers are tight to service hoses.
2. Check that the compressor is running.
3. Check that gauges are calibrated.
 - a. Remove couplers from service hoses. Gauges should read 0 PSI. If adjustment is needed, then remove plastic plug from plastic lenses and adjust to 0 psi.
4. Check that the o rings in service couplers are good. Remove couplers from car service ports and recover hoses. If gauge pull down into vacuum o rings need replaced.
5. Check tank pressure and purge tank if needed. Air purge in maintenance menu.
6. Close liquid ball valve on tank filter. If recovery then happens the charge solenoid valve has dirt in valve.
7. Remove service couplers from car and pull vacuum on service hose only.

Unit Vacuum Pump Will Not Pull Deep Vacuum

1. Check the service couplers are tight to service hoses.
2. Check that vacuum pump is running.
3. Check that oil level in sight glass is not over filled.
4. Check that gauges are calibrated.
5. Remove service couplers from car and pull vacuum on service hose only.

- a. Remove couplers from service hoses. Gauges should read 0 PSI. If adjustment is needed, then remove plastic plug from plastic lenses and adjust to 0 psi.
5. Check o rings in service couplers are good. Remove couplers from car service ports and recover hoses. If gauge pull down into vacuum o rings need replaced.

Unit Will Not Charge

1. Display stated unit charging, but weight showed the unit did not put any refrigerant in (Hose holds 2 oz). Then the check connection message came up on display after two minutes.
2. Check that the gauges are reading pressure, if so then the Charge solenoid is working. If the gauges are still in vacuum need to continue to next step.
3. Check the valves on the recovery tank and tank hoses ball valves are open.
4. Check that the service couplers are open.
5. Check that there is refrigerant available for charging. (4 to 5 lbs in tank after charge selected).
6. Check service couplers for flow restriction.
7. Check that the solenoid Valve is clicking after starting charge mode.

Unit Will Not Complete Charge

1. Display stated unit charging with pressure on gauges, but did not complete the full charge. Then the check connection message came up on display after two minutes.
2. Check that there is refrigerant available for charging. (4 to 5 lbs in tank after charge selected).

3. Vacuum pump ran for 15 minutes on closed system, and 45 minutes on opened system for deep vacuum.
4. Scale calibration need to be checked wit 1lb weight.

E5 Ball Valve Error Message

1. E5 is motorized ball valve error.
 - LV in the message indicates low side valve.
 - HV in the message indicates hi side valve
 - Number indicated which valve is having trouble.
2. Check connector on PCB for motorized ball valve location.

High Pressure cut out 450psi

1. Check tank and hose valves are open.
2. Check tank pressure.
3. Check orange high pressure switch wire for connection.
- 4.

LCD Display Is Dim or No Read out

1. PCB/LCD Assembly is bad.

Pulling Filter Down For Changing Filter Taking To Long

1. Remove filter from tank bracket and turn filter 90 degrees with red liquid hose pointed downwards. It will cut 30 minutes off recovering filter.
2. Close red tank valve off to prevent additional refrigerant into filter.

Air Flow Switch E-15 Error

1. Check wire connection on main PCB two purple wires. (FX 134A has a jumper)
2. Check that the air flow switch assembly has two clear PVC tubes attached properly, and routed correctly. One inside and one outside the cabinet. (FX1234,FX3030 units only)
3. Jump out two pins on main PCB where flow switch purple wire connect to confirm wires or flow switch is bad.
4. Unit is out of packaging and on all four wheels.

FX Error Codes

"E1-BAD TXT EPROM";	A bad scale may cause this, also.
"E2-SCALE ADC";	Connection to the scale electronics lost.
"E3-SCALE EPROM";	Scale not calibrated?
"E4-CANNOT CAL";	Scale cannot be calibrated or bad calibration.
"E5-MBV FAULT: X";	Where X is a number from 1 to 5 indicating which MBV has failed.

"E6-AMB. THRM";	Ambient thermistor in the “head” is bad.
"E7-TNK THRM";	Thermistor attached to the oil sep. is bad.
"E8-PT TRANS";	Pressure transducer is bad.
"E9-WEAK BATT";	Should never appear.
"E10-BAD FILTERTIME";	Filter code problems.
"E11-DEFAULTS NOT SET";	What it says...
"E12-BAD GRAPH MEM";	Problems with the graphics like Chinese and Russian.
"E13-BAD PTR. TO INFO MEM";	Major software corruption, fatal error.
“E15 FLOW SWITCH ERROR	Air flow switch is open.
"UNKNOWN ERROR";	What it says...

Identifier Codes FX1234/FX3030

“00001” Error #1: The air or gas readings were unstable.

- Solution: Move the unit away from sources of EMF or RFI such as radio transmitters and arc welders.

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“00002” Error #2: The air or gas readings were excessively high.

- Solution: Move the unit away from sources of EMF or RFI such as radio transmitters and arc welders.

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“00003” Error #3: The air calibration resulted in a low output.

- Solution: Prevent refrigerant from flowing into the unit through the sample inlet during air calibration.

- Solution: Allow any refrigerant in the atmosphere to dissipate before performing air calibration.
- Solution: Verify that the air intake and the exhaust are not obstructed
- Solution: Verify that the white filter is correctly plugged into the rubber grommets.
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“00004” Error #4: The unit is beyond the operating temperature range

- Solution: Move the unit to an area where the ambient temperature is within the specified operating range.
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“00005” Error #5: The refrigerant sampled has an excessively large amount of air or there was little or no sample flow due to a closed valve or plugged sample filter. This is the code to prompt the user to change the brass filter. This should be considered more as a prompt than an actual error.

- Solution: Verify the coupler valve is open.
- Solution: Verify the sample filter is not plugged with debris or oil
- Solution: Replace brass sample filter
- Solution: Verify that the white filter is correctly plugged into the rubber grommets.
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“00006” Error #6: The air sensor has expired and must be replaced before the analyzer can be used.

“00007” Error #7: The pressure read by the sensor has been determined to be too high.

- Solution: Verify that the exhaust is not obstructed.