

Inteli Control Error Codes

ST-102. R2 E-Series Inteli Control



Summary

The information listed below is provided as general guidelines to assist in troubleshooting. It is ultimately the owner's/ distributor's/ technician's responsibility to properly troubleshoot the piece of equipment down to the failed component(s). Girbau North America's will not be held liable for any part replacement and/or labor associated with the misdiagnosed troubleshooting of the equipment.

It is recommended to run the Test Mode to assist in troubleshooting any error codes. There are Test Mode videos located on our website www.gnalaundry.com. Click on Services and Support. Click on Technical Service.

| Display | Description | Action |
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| 1 | Emergency stop error- Emergency stop switch has been pushed in | <ol style="list-style-type: none">1. Turn the red E-stop knob left or right to release. Press the stop key on the display to reset.2. Verify wiring to E-stop switch. |
| 2 | Communication fault- Communication fault between the inverter and microprocessor. | <ol style="list-style-type: none">1. Verify incoming line voltage to the inverter. Voltage should be within 10% of rated specs.2. Verify the communication cable connection at the micro and inverter. Clean plugs with contact cleaner and reseat plug.3. Verify the integrity of the motor discharge resistor and the Earth ground. Please refer to ST-112R*. (RMG055 and below)4. Verify the inductor is functioning. (EH060 and above) |
| 4 | Inverter sequence failure- Communication failure between the inverter and microprocessor | |
| 34 | Inverter disconnection- Non-controlled inverter disconnection | |
| 3 | Inverter auto-blocked- Inverter disconnected for safety reasons. | <ol style="list-style-type: none">1. Turn off power supply for 3 seconds and retry.2. Verify the cooling fan is functional and rotating the correct way.3. Verify the inverter is free of debris/ lint.4. Verify wiring between the inverter and motor.5. Verify the phase to phase voltage at the inverter. All phases should be balanced.6. Verify the integrity of the motor discharge resistor and the Earth ground. Please refer to ST-112R* |
| 5 | Inverter overcurrent- Excessive motor current/ inverter output shorted. IPM shunt error | <ol style="list-style-type: none">1. Verify the basket movement restrictions. Possibly caused by the basket catching on something, motor seizing up, or bad bearings.2. Verify the operation of the drain. Look inside drain valve/ pump, make sure no debris has restricted valve movement.3. Verify the inverter's heatsink is clear of debris and the inverter fan is operating properly. Clean inverter.4. Verify the inverter's cover is installed. This cover creates a wind tunnel.5. Remove the belt and spin the motor by hand to test for bad motor bearings.6. Verify input voltage is within the recommended range.7. Isolate the inverter by disconnecting the motor and jumping out the klixons, run |
| 30 | Inverter overcurrent during acceleration | |
| 31 | Inverter overcurrent during deceleration | |

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| 32 | Inverter overcurrent | <p>Test Mode.</p> <ol style="list-style-type: none"> 8. Verify the motor windings are not shorted or open. Phase to phase should read about the same. Phase to klixon should read open. Phase to motor housing should read open. 9. Verify the amperage draw across each leg of power going to the motor. Amperage draw should be similar. 10. Verify the integrity of the motor harness/ power coming into the inverter |
| 6 | <p>Motor over heating- Motor's klixons (thermal protection) are open. The klixons should close one the motor cools down.</p> | <ol style="list-style-type: none"> 1. Verify he basket movement restrictions. Possibly caused by the basket catching on something, motor seizing up, or bad bearings. 2. Check inside drain valve, make sure no debris has restricted valve movement. 3. Verify the inverter is clear of debris and the inverter fan is operating properly. Clean inverter. 4. Verify dip switches on the inverter are set correctly. 5. Remove the motor pulley belt and spin the motor to test for bad motor bearings. 6. Isolate the inverter by disconnecting the motor and jumping out the klixons. Run Test Mode. 7. Verify that the motor windings are not shorted or open. 8. Verify the amperage draw across each leg of power going to the motor. Amperage draw should be similar. 9. Verify dip switch settings on the inverter. 10. Check for bad motor bearings. 11. Verify the integrity of the motor harness/ power coming into the inverter |
| 7 | <p>Inverter over voltage DC buss</p> | <ol style="list-style-type: none"> 1. Verify the voltage coming into the inverter is within the recommended range. Too high or too low of input voltage can cause this alarm. 2. Verify resistance of the brake resistor (if equipped) the resistance should be either 40 or 160Ω. 3. Verify any restrictions in basket or motor movement. 4. Possible bad inverter 5. Possible bad inductor (if equipped) |
| 8 39 | <p>Inverter over heating- IPM over temperature, Inverter thermal relay overload- Inverter current above programmed value</p> | <ol style="list-style-type: none"> 1. Verify the customer is not over sudsing the machine. 2. Verify he basket movement restrictions. Possibly caused by the basket catching on something, motor seizing up, or bad bearings. 3. Verify the operation of the drain. Look inside drain valve/ pump, make sure no debris has restricted valve movement. 4. Verify the inverter's heatsink is clear of debris and the inverter fan is operating properly. Clean inverter. 5. Verify the inverter fan motor is functional. 6. Verify the inverter's cover is installed. This cover creates a wind tunnel. 7. Remove the belt and spin the motor by hand to test for bad motor bearings. 8. Isolate the inverter by disconnecting the motor and jumping out the klixons, run Test Mode. 9. Verify the motor windings are not shorted or open. Phase to phase should read about the same. Phase to klixon should read open. Phase to motor housing should read open. 10. Verify the amperage draw across each leg of power going to the motor. Amperage draw should be similar. 11. Verify the integrity of the motor harness/ power coming into the inverter |

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| 9 33 10 | <p>General inverter failure/ failure in inverter's memory</p> <p>Unidentified inverter failure- This is the default alarm code for the EGO inverters</p> | <ol style="list-style-type: none"> 1. Verify the inverter is clean and not damaged. 2. Verify the integrity of the motor discharge resistor and the Earth ground. Please refer to ST-112R*. 3. Verify the belt is not slipping, possibly replace the belt. 4. Verify the wiring between A1 to A2. Verify wiring from A1 to M1. 5. Verify that all three phases to the motor are balanced phase to phase. |
| 11 28 | <p>Unbalance control failure</p> <p>Unbalance switch failure</p> | <ol style="list-style-type: none"> 1. Verify the machine is properly loaded, the machine should be at least ¾ filled with linen. 2. Verify the machine is properly installed/ leveled. 3. Verify the integrity of the shocks and springs. Replace if necessary. 4. Verify functionality of the balance switch 5. Inspect unbalance switch wiring 6. Verify that the belt is not slipping. Replace if necessary. 7. Verify the unbalance value listed in the service manual. If above value, replace the inverter. |
| 12 35 | <p>Inverter ID error</p> <p>Inverter configure error</p> | <ol style="list-style-type: none"> 1. Verify inverter is the correct part for washer. 2. Verify the MK10 identifier plug is correct. 3. Verify the parameter have been properly loaded and verified. 4. Verify the microprocessor has the latest firmware loaded. |
| 13 | <p>Door lock or door close failure</p> | <ol style="list-style-type: none"> 1. Verify the door lock adjustments with ST-113 R*(RMG055 and smaller) 2. Verify the functionality of the door hinge switch (EH060 and larger) in Test mode 3. Verify the functionality of the door lock switch (EH060 and larger) in Test mode. 4. Adjust the door catch in the upmost position (EH060 and larger). 5. Inspect door lock/ closed wiring 6. Replace the door lock |
| 14 | <p>Failure of card access</p> | <ol style="list-style-type: none"> 1. Check card connector cable at X12 on A1 board. 2. Replace card reader. |
| 15 18 | <p>Fault detection A5 (I/O1) board</p> <p>A5 board communication failure</p> | <ol style="list-style-type: none"> 1. Disconnect the A6 board by turning off power and remove X2 connector plug. 2. Inspect cable connections X1 on A5 to X11 on A1. 3. Verify input LED A5-H21 4. Replace A5 board if the alarm still exist. 5. Replace A1 board if step 3 didn't resolve the alarm. |
| 16 19 | <p>Fault detection A6 (I/O2)</p> <p>Communication failure between microprocessor and A6 board.</p> | <ol style="list-style-type: none"> 1. Verify A6 board is activated in the setup configuration. 2. Verify A6 board is wired correctly. 3. Verify 12 VDC on +A1 buss on A6 board 4. Verify 12 VDC on + A3 buss on A6 board 5. Verify input LED A6-H17 |

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| 17 20 | Fault detection A10 (tilt) board A10 board communication fault | <ol style="list-style-type: none"> 1. Verify A10 board is activated in the setup. 2. Verify 12 VDC on X1-1 on A10, referenced to X1-5 3. Verify 12 VDC on X1-2 on A10, referenced to X1-5 4. Check connection X1-6, clean with contact cleaner 5. Verify input LED A10-H17 6. Replace A10 board |
| 21 | Bath over level- Too much water is detected in the bath | <ol style="list-style-type: none"> 1. Run Test mode to verify the pressure switch is indicating the basket is empty. 2. Verify that the water valves are turning off when they are supposed to. 3. Verify the functionality of the drain valve 4. Verify the air dome and/ or pressure tube is not clogged or dirty 5. Check for loose/ poor wire connection between microprocessor and pressure switch. 6. Replace drain valve 7. Replace pressure switch |
| 22 | Bath level failure- The bath level is not reading what it should be | <ol style="list-style-type: none"> 1. Run Test mode to verify the pressure switch is indicating the basket is empty. 2. Verify that the water valves are turning off when they are supposed to. 3. Verify the functionality of the drain valve 4. Verify the air dome and/ or pressure tube is not clogged or dirty 5. Check for loose/ poor wire connection between microprocessor and pressure switch. 6. Replace drain valve 7. Replace pressure switch |
| 23 27 26 | Bath over temperature Temp probe failure Faulty heat system- | <ol style="list-style-type: none"> 1. Possible thermistor failure if alarm shows at the beginning of the fill. The thermistor should read about 12kΩ at room temperature. As the temperature increases the resistance should decrease (NTC). 2. Verify wiring. 3. Verify electric relay or steam valves are operating properly. |
| 24 | Drain failure- Slow bath drain | <ol style="list-style-type: none"> 1. Verify that the water valves are turning off when they are supposed to. 2. Verify the functionality of the drain valve 3. Verify the drain piping is not clogged and is properly sized. 4. Verify the bottom of the drain pipe is not submerged under water. 5. Verify the air dome and/ or pressure tube is not clogged or dirty. 6. Check for loose/ poor wire connection between microprocessor and pressure switch. 7. Replace drain valve 8. Replace pressure switch |
| 25 | Faulty water supply- Slow bath fill | <ol style="list-style-type: none"> 1. Verify water supply valve is open. 2. Clean water valve filter screen (conical filter) 3. Verify the water supply pressure is adequate. 4. Place machine in test mode to test the functionality of the water valves, drain, and pressure switch circuit. 5. Verify hot or cold fill valves are receiving the 12 VDC coil voltage 6. Verify air dome is not clogged 7. Verify pressure switch tube is not clogged. 8. Replace/ repair valve. 9. Replace pressure switch and/ or pressure switch tube. |

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| 29 | Over temperature- High temperature when the machine is stopped | <ol style="list-style-type: none"> 1. Close the door of the machine to allow the cold water valve to open. 2. Press the STOP button to allow the bath to drain. Repeat steps 1 and 2 until the alarm goes away. 3. Run the Test program and verify the heating stage. 4. Verify the heating contactors are actuating when they are supposed to. |
| 36 | Inverter low voltage- Inverter's voltage is lower than operational nominal value | <ol style="list-style-type: none"> 1. Verify the supply voltage at the inverter is within the recommended operating range. 2. Possible bad inverter. |
| 37 | Inverter phase loss | <ol style="list-style-type: none"> 1. Verify phase to phase voltage to the inverter. Phase to phase voltage should be about the same. 2. Verify the Amp draw going to the inverter, the Amp draw should be the same. 3. Verify wiring and wiring connections. 4. Verify there isn't a significant voltage drop across the KA1 contactor (inverter relay). 5. Verify there isn't a significant voltage drop across the inverter filter |
| 38 | Inverter disconnection relay failure | <ol style="list-style-type: none"> 1. Verify 12 VDC across terminals 0 and 1 on the KA1 relay coil when the inverter should be turned on. 2. Verify the inverter fan is functional. 3. Verify the inverter cover is installed (if applicable). 4. Verify the inverter is clear of debris and lint. 5. Verify the phase to phase input voltage to the inverter. 6. Verify the phase to phase output voltage at the inverter. |
| 41 | Inverter detection relay failure- Inverter not detected by the control of the washing machine | <ol style="list-style-type: none"> 3. Verify the inverter cover is installed (if applicable). 4. Verify the inverter is clear of debris and lint. 5. Verify the phase to phase input voltage to the inverter. 6. Verify the phase to phase output voltage at the inverter. |
| 40 | Inverter overload- Inverter current above programmed level | <ol style="list-style-type: none"> 1. Verify the basket moves without restrictions. Possibly caused by the basket catching on something, motor seizing up, or bad bearings. 2. Check inside drain valve, make sure no debris has restricted valve movement. 3. Verify the inverter is clear of debris and the inverter fan is operating properly. Clean inverter. 4. Verify dip switches on the inverter are set correctly. 5. Remove the motor pulley belt and spin the motor to test for bad motor bearings. 6. Isolate the inverter by disconnecting the motor and jumping out the klixons. Run Test Mode. 7. Verify that the motor windings are not shorted or open. 8. Verify the amperage draw across each leg of power going to the motor. Amperage draw should be similar. 9. Check for bad motor bearings. 10. Verify the integrity of the motor harness/ power coming into the inverter |
| 42 | Washer fan motor thermal disconnect Q2 | <ol style="list-style-type: none"> 1. Verify motor cooling fan is functioning properly. 2. Reset Q2 device on the motor 3. Adjust the potentiometer on the fan motor contactor to make sure it turns on. 4. Verify wiring at CM and X2 on the inverter. |
| 100 | All programs empty | <ol style="list-style-type: none"> 1. Reprogram special programs 2. Verify all Earth ground connections |

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| 101 | All programs full | 1. Verify all program contents. Delete unused programs. |
| 102 | No memory available | 1. Verify all program contents. Delete unused programs. |
| 103 | Program full | 1. There is a maximum of 50 phases. Delete unused programs. |
| 109 | Non-modifiable program | 1. Verify the generation of model. The 1 st generation had programs 1-20 fixed. 2 nd generation (current production) has programs 80-99 fixed. |
| 112 | Out of range | 1. Clear starting time or wait and retry |
| 114 120 121 123 | Card access failure Card program memory Enter new code | 1. Verify card is inserted properly 2. Verify card reader connection at A1 board is properly connected. 3. Replace card reader |
| 119 | Insert card- Card reader does not detect card is inserted. | 1. Verify the card is properly inserted. Try to reinsert card. 2. Press stop on the keypad to clear the code. 3. Try using a different Inteli card. 4. Replace card reader. |
| 122 | Any defined configuration | 1. Verify the card is inserted properly and retry. 2. Press stop on the keypad to clear the code. |
| 128 | Inverter parameter failure- Inverter parameters don't match washing machine's memory | 1. Reload and verify parameters. The inverter parameters do not match the micro. 2. Replace the inverter. 3. Replace the microprocessor |
| 500 | Abnormal level | 1. Verify there is no water in the washer. 2. The top of the display in Test Mode should read zero when the basket is empty. |
| 501 | Not well positioned | 1. Verify the end of course tilt switch positions are correct |
| 502 | Alarm on | 1. Verify alarm and correct |
| 503 504 900 | Lock door 1 on Open and close door Locked program | 1. Press stop on the keypad, open and close the door, then restart the program. 2. Verify the door hinge switch is working when the door is opened and closed. |
| 505 | Machine program memory- Locking usage | 1. Select the pen and paper, select the modification icon (paper with lines), select lock icon, enter access code, press SEL |
| 506 | Not allowed programing | 1. Press stop button on keypad to reset |