



Name	Description	Repair Action
Lock Monitor	Lid lock didn't occur or lid lock signal not seen by control due to lack of connection.	Check the resistance of the lid lock assembly. Check the harness for open wires and/or connerom the board to the lock assembly. If lock assembly and harness prove good at the if service, replace the lid lock assembly.
Lid Monitor	Control did not get lid closed signal from switch while motor was moving. Could mean the switch didn't close or control didn't get the signal because of lack of connection.	Replace lid lock if this happens frequently.
Locked Rotor Monitor	For 5 straight seconds control not seeing signal changes indicating the motor is turning while trying to spin.  Could mean the motor isn't rotating or Control didn't get the signal because of lack of connection.	<ul> <li>Physically check the washer for anything prevenotor movement.</li> <li>Check harness and harness connectors from the ot the motor.</li> <li>Verify hall sensor is connected to the main harned washer in Service Mode and run TEST 13. Spin Test. If hall sensor is bad or disconnected, the bivill start to spin normally and then stop spinning after approximately 5 seconds. Ensure hall sens roperly connected and positioned on the motor. If basket spins for approximately 15 seconds, the insor is most likely NOT the cause.</li> <li>TCO should reset in approximately 45 minute. If is tripped, make sure motor moves freely and that nothing is jamming it. Replace motor if it does no</li> </ul>
Reset Monitor	Control is resetting the software by itself due to criteria it believes could resolve itself upon reset.	Check for loose connections at the control. Recc. if any.     Check for recommended house line voltage to tisher.
Mode Shifter	Control didn't see the transition from Agitate to Spin or vice-versa in the time required. Could mean the shift didn't occur or Control didn't get the signal because of lack of connection.	Check mode shifter coupler for damage and the to slide in and out freely.  Using an ohm meter, check to ensure mode shiftch is in the open position.  Check resistance of mode shifter motor (approxy 5.7K ohms).  Check for 120VAC to the mode shifter motor at other J512 connector.  If voltage is present, replace the mode shifter.
Critical Flood Level by Pressure. Pressure level exceeds 17.5" above pressure port.	Control received an extended period of pressure readings that is nearing over-flow levels. Pressure 17.5".  Voltage Output must be present. Could mean water did get that high due to briefly stuck water valve. Voltage output of sensor too high for actual water level because of sensor or water in pressure tube increasing pressure.	Check pressure tube for pinches where it goes to top cover grommet.  Check pressure tube for trapped water.  Check water valve operation and for any leaking valves.  Check the output voltage from the pressure senensure it matches the water level in the basket according to the pressure sensor chart.  Ensure pressure chamber port is free from obstrusing drill bit size 1/16" by hand so as not to drill through the inner wall.
Max Fill — Pressure: Pressure level exceeds 16.5" above pressure port.	Main micro received and extended period of pressure readings that is greater than maximum allowable fill volume. Pressure 16.5". Voltage output must be present. Could mean water did get that high due to briefly stuck water valve. Voltage output of Sensor too high for actual water level because of sensor or water in pressure tube increasing pressure. This could	<ul> <li>This can happen if a large wet load is placed in the sher.</li> <li>Check pressure tube for pinches where it goes the top cover grommet.</li> <li>Check pressure tube for trapped water.</li> <li>Check for any leaking water valves.</li> <li>Check the output voltage from the pressure senensure it matches the water level in the basket according to the pressure sensor chart.</li> </ul>
	Lock Monitor  Lid Monitor  Locked Rotor Monitor  Reset Monitor  Mode Shifter  Critical Flood Level by Pressure. Pressure level exceeds 17.5" above pressure port.  Max Fill Pressure. Pressure. Pressure level exceeds	Lock Monitor  Lid lock didn't occur or lid lock signal not seen by control due to lack of connection.  Control did not get lid closed signal from switch while motor was moving. Could mean the switch didn't close or control didn't get the signal because of lack of connection.  Locked Rotor Monitor  For 5 straight seconds control not seeing signal changes indicating the motor is turning while trying to spin.  Could mean the motor isn't rotating or Control didn't get the signal because of lack of connection.  Control is resetting the software by itself due to criteria it believes could resolve itself upon reset.  Control didn't see the transition from Agitate to Spin or vice-versa in the time required. Could mean the shift didn't occur or Control didn't get the signal because of lack of connection.  Critical Flood Level by Pressure Pressure level exceeds 17.5" above pressure port.  Control received an extended period of pressure readings that is nearing over-flow levels. Pressure 17.5".  Voltage Output must be present. Could mean water did get that high due to briefly stuck water valve. Voltage output of sensor or water in pressure tube increasing pressure.  Main micro received and extended period of pressure readings that is greater than maximum allowable fill volume. Pressure 16.5". Voltage output must be present. Could mean water did get that high due to briefly stuck water valve. Voltage output of Sensor too high for actual water level because of sensor or loohigh for actual water level because of sensor or loohigh for actual water level because of sensor or loohigh for actual water level because of sensor or loohigh for actual water level because of sensor or loohigh for actual water level because of sensor or loohigh for actual water level because of sensor or loohigh for actual water level because of sensor or loohigh for actual water level because of sensor or loohigh for actual water level because of sensor or loohigh for actual water level because of sensor or loohigh for actual water level because of se

cycles have completed with backup micro seeing lid • Check harness and connectors that go to the open. Could mean the switches didn't occur or backup | • If the error will not clear, replace the lid switch.

Voltage output must be present. Could mean water did | according to the pressure sensor chart.

of sensor or water in pressure tube increasing pressure. through the inner wall.

Check to make sure house water supply valves ned on.

If voltage is present and no operation, replace the shifter.

2. If house frequency is good, update software.

Check pressure tube for trapped water.

output of sensor too high for actual water level because • Ensure pressure chamber port is free from obstr using drill bit size 1/16" by hand so as not to drill

Check pressure tube for pinches where it goes  $t^{1}$  top cover grommet.

Check the output voltage from the pressure sen ensure it matches the water level in the basket

Ensure pressure chamber port is free from obsti using drill bit size 1/16" by hand so as not to drill

. Check the frequency of the AC power outlet. If the than a few Hz off of 60Hz, notify utility company.

Check the output voltage from the pressure sen ensure it matches the water level in the basket

Check each valves operation. (Replace water vild send back to GE Appliances.)

Check water valve operation.

according to the pressure sensor chart.

Check pressure tube for trapped water.

Open and close the lid to clear the error.

Signal feedback state from the mode shifter (agitate or spin) and the state requested by the control are not the same and the basket or agitator is rotating faster than 3-4 RPM. Agitate mode feedback signal is no voltage.

• Check mode shifter coupler for damage and the to slide in and out freely.

• Use ohm meter to ensure harness shows contin the mode shifter from the control.

• Check resistance of mode shifter motor (approx / 5.7K ohms).

• Check for 120VAC to the mode shifter motor at introl J512 connector.

get that high due to briefly stuck water valve. Voltage • Check pressure tube for pinches where it goes to top cover grommet

**Binary Display** 

Fault Chart

Fault # displayed in

cycle status lights

Filled circles

indicate light on

0

1 000000

2 0 0 0 0 0 0

3 00000

4 000 000

5 00000

7 0000000

8 00000

9 00000

10 00000

11818100000

12 0 0 0 0 0

13 00000

00000

14 000000

16 0 0 0 0 0

17 0 0 0 0 0

18 0 0 0 0 0 0

19 0 0 0 0 0

20 0 0 0 0

21 0 0 0 0 0

23 0 0 0 0

000000

32 0 0 0 0 0

290D2158G005

Pressure Sensor Loss

9 Lid Switch Redundancy

10 Mode Shift Feedback

11 Clock Monitor

0 0 0 0 0

Thermistor

10000Ω

Primary Ground Bond

This determines if there has been a too great of a difference in the pressure sensor reading and the

expected pressure sensor reading for the amount of

water the control calculated it has put in. It assumes there is a pressure leak, a clog in the pressure hose/

ystem delaying the increase in pressure, or a

Start attempted for a 4th cycle when the previous 3

processor didn't get the signal because of lack of

significant amount water leaking out.

onnection. See Fault #2 as well.

. AC power line frequency is not 60Hz.

pressure readings that is nearing over-flow levels.

. Software failure. 12 Redundant Flood Condition Backup processor received an extended period of

Pressure 18.0"

Top Cover

Cord

Plug

B SMTH-18

B RBBD-18

6 000000

binary format using

Fault #

displayed

7-segment

Fault Code (Dec)	Name	Description	Repair Acti
13	Redundant Lid Unlocked	In spin mode, the lid switch feedback has voltage (lid closed), for more than 5 seconds the motor speed feedback assumes the basket is spinning > 4-5RPM when the lid lock feedback has no voltage (Lid Unlocked).  Lid Switch Feedback has no Voltage when the BRPM is > 4-5RPM.	Check lid sv y of lid lock position. Opened or Closed. Check contiler operation of lid lock. 120VAC while activating Check for plyviring harness from the control to lock assembly.
14	Lid Lock Failure	Signal received by control is indicating the lock will not lock or unlock when requested or the lid switch is indicating open when the signal received indicated locked.	Verify that the continuity at J513 on the control.  Check lid sv. y of lid lock position. Opened or Closed.  Check continuity at J513 on the control.  Check continuity at J513 on the control.  Check for properation of lid lock. 120VAC while activating.  Check lid lock properation of lid lock assembly.  If lid lock as:
15	Water Temp Sensor Invalid	Thermistor disconnected/not present.     Failed thermistor.	Check them i-manual.  Check wiring arness and connections.  Replace the twhen adaptive drain evels occurs to tru to remove the rest of the water in the tub.
16	Adaptive Drain/Slow Drain	The total number of times during machine life the actual amount of time the pressure sensor indicated the wash water had drained to empty exceeded the calculated time by the software.	<ul> <li>This fault is twiter adaptive drain cycle occurs to try to remove the rest of the water in the tab.</li> <li>If the adapt drain cycle times out, the control will run a drain pump clearing algorithm to free the pump impe of debris. Then it will finish draining. If drain clearing algorithm fails look for fault 18,</li> <li>If fault 16 is 0 and fault 18 never occurs there is no problem. If fault 16 and fault 18 equal each other in fau.</li> <li>Check wate alve operation.</li> <li>Check pres tube for pinches where it goes through top cover grommet.</li> <li>Check the cout voltage from the pressure sensor to ensure it matches the water level in the basket according to pressure sensor chart.</li> <li>Check pres tube for trapped water.</li> <li>Ensure pres chamber port is free from obstruction using drill bit size 1/16" by hand so as not to drill through in the pressure.</li> </ul>
17	Dry Load Sense Timeout	Dry load sense times out and moves to the next part of the cycle selected. This occurs when the washer is not reaching the target speed within a defined time limit for the load type selected.	1. Check for ver in the bottom of the tub. If so drain and try cycle again
18	Drain Pump Clearing algorithm failed	While draining the pressure sensor value for water level did not indicate the washer was empty before the Max Continuous Drain ON time was reached.	This fault is and will be seen with fault 16 when drain pump clearing algorithm failed to remove the blockage and rest of the water in the tub. Also this fault may occur due to possible issue with the pressure sell r system. If drain pump system is working correctly, refer to the last four steps of fault 8.  Check the d1 pump for blockage.  Check Own Manual & Installation Instructions for proper standpipe height.  Check resisted of the pump (13.5 ohms) from J512 connector on the control.  If open circulated wiring harness to the pump and pump motor.  Check for 1. AC to the drain pump.  If voltage is sent and pump does not operate, replace pump.  Check water tube for pinches where it goes through top cover grommet.  Check the out voltage from the pressure sensor to ensure it matches the water level in the basket according to pressure sensor chart.  Check press tube for trapped water.  Ensure press chamber port is free from obstruction using drill bit size 1/16" by hand so as not to drill through the er wall.
19	UI State Timeout	This will happen if a cycle is paused or canceled and water is left in the tub for more than 24 hours.	<ul> <li>This is norm/peration. This will happen if the consumer and/or control switched cycle to a paused state.</li> <li>Check water live operation.</li> <li>Check press<sup>3</sup> tube for pinches where it goes through top cover grommet.</li> <li>Check the out voltage from the pressure sensor to ensure it matches the water level in the basket according to<sup>3</sup> pressure sensor chart.</li> <li>Check press<sup>3</sup> tube for trapped water.</li> <li>Ensure presse chamber port is free from obstruction using drill bit size 1/16" by hand so as not to drill through the er wall.</li> </ul>

Recirculation

Pump

full multi-library

J514

LIU LUCK ASIII

Connector locations

Mode Shifter Motor/Switch

Positive common O

Y-20 Switch input

J514B

V-20 Lock input

R-20 H Line

COM

COM

COM

сом

Start

Capacitor

Water ve Assembly

MOI 5 2XX-4XX

CLK

Drain Pump

N-20

V-20

Connector

0-18 3 6 V-22

N-18 1 4 R-22

(O) Isolated common

Thermistor 5VDC

GND EARTH

J101

Fault Code Dec)	Name	Description	Repair Action	
20	Critical Flood Level by Gallons	Water volume into the tub exct 41 gallons as calculated by the control.  1. Pressure tube is momentariched, has water in it, partial blockage if Flood ft2 occurs.  2. Low water pressure/flow or anent pressure system blockage if NO Floot 12 occurs.	Check pressure tube for pinches where it goes through top cover grommet.  Check pressure tube for trapped water.  Check for any leaking water valves.  Check home water pressure.  Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart.	
21	Max Fill – Gallons	Water volume into the tub exct 36.3 gallons as calculated by the control. Stop.9.  1. Pressure tube is momentariphed or has water in it, partial blockage if Flooc 6, 7, or 12 occurs.  2. Low water pressure/flow or panent pressure system blockage if NO Floot 6, 7, or 12 occurs.	<ul> <li>Check pressure tube for pinches where it goes through top cover grommet.</li> <li>Check pressure tube for trapped water.</li> <li>Check for any leaking water valves.</li> <li>Check home water pressure.</li> <li>Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart. If it does not, the control will need to be replaced as the pressure sensor is mounted directly to the control.</li> </ul>	
22	Out of Balance (OOB) during Dry Load Sense	Large wet/OOB load being wa This is set if OOB condition is detected during dnl sense algorithm. Dry load sense will be abandoind wet load sense will be started.	<ul> <li>Check for excessively OOB load. Customer Education on how to distribute load.</li> <li>Check the basket for excessive friction or for being excessively out of round. Basket should spin freely and without wobble. If friction is found, remove it. If basket is bad, replace it.</li> <li>Check speed sensor for loose connection to the motor.</li> </ul>	
23	Critical Lid Lock Failure	Lock blockage     Lid Lock failure. Will not lock lock or is locked while lid is opened.	Verify that the lid lock is not blocked by any external debris.     Check lid switch continuity at J513 on the control.     Check continuity of lid lock position. Opened or Closed.     Check for proper operation of lid lock. 120VAC while activating     Check lid lock wiring harness from the control to lock assembly.	
24	Lid Logic Failure	Lid switch failure. This fault is set if the system pres the lid to be both OPEN and LOCKED for secutive seconds	1. Check harness and connections from the control to the lid lock assembly for damage and continuity.  2. Run a spin cycle. Pull up on the lid during spin for more than 5 seconds and see if this fault occurs.  Replace lid lock assemble.	
25	Pressure Sensor Dropout	Disconnected pressure hose     Pressure tube is pinched or vater in it.     Pressure sensor failure.	Check pressure tube for pinches where it goes through top cover grommet.  Check pressure tube for trapped water.  Check water valve operation and for any leaking water valves.  Check home water pressure.  Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart.  Ensure pressure chamber port is free from obstruction using drill bit size 1/16" by hand so as not to drill through the inner wall.	
26	Out of Balance (OOB) Ended Final Spin	Washer could not redistribute (2) eliminate OOB condition to achieve final targe in speed.	Manually rebalance the load, check basket for damage, and run a <b>Drain &amp; Spin</b> cycle.     If washer spins properly, talk with consumer about loading.     If the washer will not spin properly, check the balance ring, the rod and spring assemblies, the speed sensor, and the speed sensor harness for proper operation.     Check if the unit is stable and leveled.	
27	Water Accessibility	This will happen if water is I the tub with the lid open for more than 15 ms.	Check the output voltage from the pressure sensor to ensure it matches the water level in the basket according to the pressure sensor chart.     This is normal operation. This will happen if the consumer and/or control switched cycle to a paused state.	
28	Options Knobs Feedback Invalid	This fault is set if a cycle is ng and an invalid knob position is detected.	Make sure knobs are in a valid position.     Ensure knob harness is fully seated and not routed under knob assembly.	
29	Suds Lock Abatement Failure	Cycle has terminated due tomany suds.	Ensure basket is able to rotate freely.     Ensure consumer is using the proper amount of HE detergent.     Ensure speed sensor is plugged in and correctly seated to the motor.	
30	Stuck Button Fault	Buttons not operating when sed.	Check buttons and adjust.     Check button tree.     Check the clearance between the button and the backsplash hole.	
31	Out of Balance (OOB) Fallback In Final Spin	This fault is set if machine is ble to reach terminal speed during final slue to OOB.	<ul> <li>Manually rebalance the load, check basket for damage, and run a Drain &amp; Spin cycle.</li> <li>If washer spins properly, talk with consumer about loading.</li> <li>If the washer will not spin properly, check the balance ring, the rod and spring assemblies, the speed sensor, and the speed sensor harness for proper operation.</li> <li>Check if the unit is stable and leveled.</li> </ul>	
32	Critical Lid Lock Failure: Can't Unlock Lid	This fault is set when the so'e has tried multiple times to unlock the ithout success.	Check to ensure lid lock harness is correctly seated on the lid lock and control board.	

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1515

Water Valves(Cold,Fab\_Soft)

31-16928 02-17 GEA