

**To:** All Distributors  
Regional Sales Managers and National Sales Manager

**From:** Technical Development Manager

**Model:** All with IFM Multiplex

**Subject:** Node 10 Troubleshooting- Ground Faults

It is important to note that when an output of Node 10 experiences a ground fault, the controller will shut down as a means of over-current protection. This “stop mode” can be observed via the Module 10 status light. When a ground fault occurs the the indicator light, located on the top left corner of the case, will turn red as the module shuts down.

When Node 10 shuts down all outputs cease, to include those that power up in cab components, such as joysticks, button packs, and the display screen. Node 10 will then restart and go through its initialization checks. If the ground fault is still present Node 10 will enter “stop mode” again, shut down and restart. This cycle will continue until the ground fault is resolved. See below illustration:



**Note: A full listing of module status light descriptions can be found in TSB 19-09**

The reason it is important to highlight this feature regarding Node 10's function is because the module entering “stop mode” could easily be mistaken for an input voltage or ground deficiency. This false conclusion could result in a misdiagnosis or fruitless troubleshooting. Taking this into account, it is prudent to always check the Node 10 status light if a concern of repetitive or even intermittent system shutdown occurs. A red status light on shutdown is a clear indication that a ground fault on an output is causing the controller to shut down. As always, the unit-specific electrical schematic can be obtained from LabriePlus to aid in troubleshooting.

**Please contact the LabriePlus Service Department at (800) 231-2771 with any questions or for further information.**