

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

**From:** Technical Support

**Model:** AU, EX, FL & MX

**Subject:** "PUMP: Trans Not Ok" Diagnostic Steps

Since the release of the Labrie multiplex diagnostic manuals for each specific unit, a more effective method for troubleshooting the failure mode identifier "**PUMP: TRANS NOT OK**" has been created. The manuals are as follows:

- **Expert: 153142**
- **Automizer: 153143**
- **Witke: 153144**
- **Minimax: 153145**

The method outlined below can be used in conjunction with the unit-specific diagnostic manuals. Only basic tools are needed for this troubleshooting: a quality multimeter (preferably used with back probe leads), assorted screwdrivers, and a set of cutting pliers (for removing zip ties).

**\*Note\*** Accurate diagnostic information will require use of the body serial number specific electrical schematics. This ensures correct connection information as connector/wire numbers are dependent on chassis manufacturer as well as whether a Labrie cab conversion has been performed.

**Be sure to follow all appropriate lockout tag out procedures and work instructions as contained in service and repair manuals as well as your standard shop/facility procedures before attempting this procedure.**

"**PUMP: TRANS NOT OK**" indicates a breakdown in one of the two portions of the pump circuit.

Wire 104o originates at Node 10. When the pump switch is depressed, voltage is sent through wire 104o. Wire 104o is used to sense all safety features are met and terminates as an input into the Transmission Control Module as "Pump Request Chassis".

The 104 circuit acts as a request circuit to ask the chassis for a return signal after stating the body is ready to allow pump engagement.

When the transmission parameters are met, a return signal via wire 149i sends voltage to two specific locations. The **first** 149i runs to is Node 10 as input "Pump Running Chassis" and the **second** location is spade location 1 of the pump relay.

A breakdown in either of these circuits will cause this error code to manifest.

\*It is important to note, specifically with wire 149i, the system may believe the pump is engaged but due to a broken splice or other fault, the relay may not latch. This situation would prevent voltage from passing through the relay to the dump valves/PTO, thus preventing hydraulic function even though Node 10 is seeing power on wire 149i. This scenario would NOT result in a "**PUMP: TRANS NOT OK**" code. \*

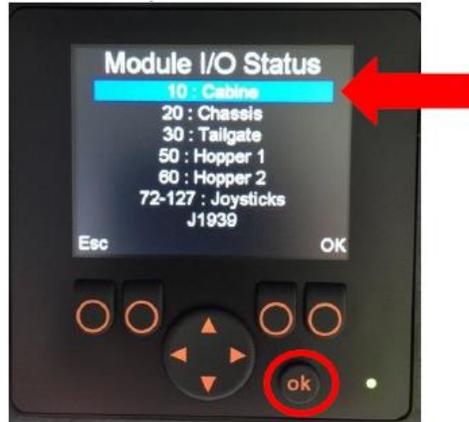
Step #1) With the engine running, attempt to engage the pump and verify the complaint. **If the display screen** shows "PUMP: TRANS NOT OK", continue to step #2.

Step #2) Cycle the key "OFF" and to the "ON" position only. Starting the engine is not necessary. Utilizing the Labrie multiplex display, perform the following steps:

Depress "Menu" then select "I/O Status"



Next, select Module: "10\_Cabine"



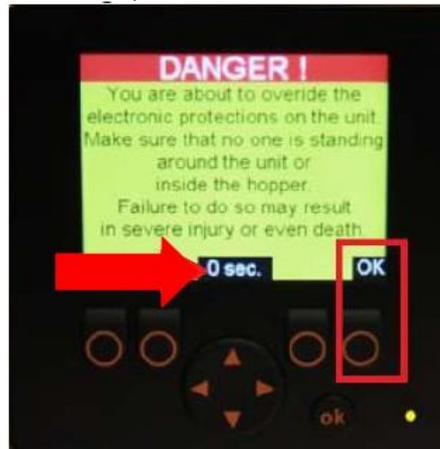
Once in the Module 10 screen, depress the "Output" button.



After entering the output screen, select the "Force" button.



After selecting "Force" a countdown will begin.  
At the end of the countdown, press the "OK" button to enter force mode.



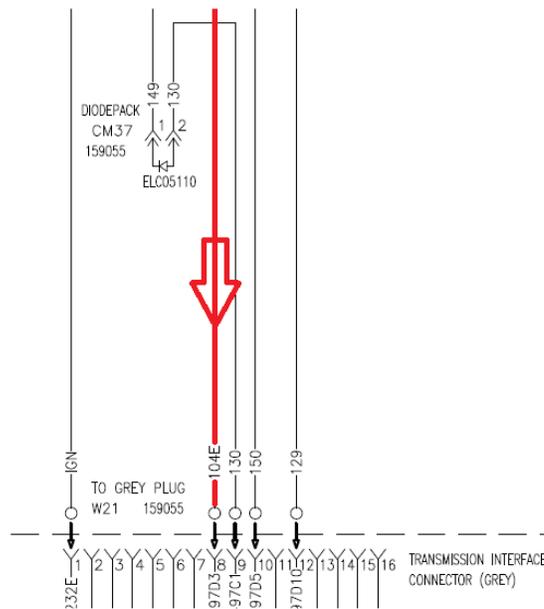
Note the addition of "Force Active" in the center of the screen. This is to alert the technician that force mode has been entered successfully. Also note the buttons on the far right have become an "ON" and "OFF" toggle.



### Step #3)

A) Locate output "OUT 12" and force it "ON". With this output forced move to the appropriate Labrie/chassis interface connector (see body serial number specific drawings for exact connector number). Measure voltage on the pump trans request wire (104E). **If voltage is present** proceed to step #4.

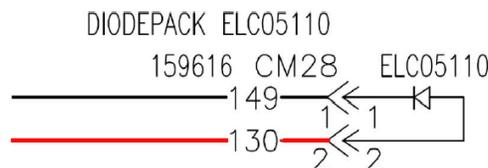
B) **If no voltage is present**, verify that voltage is leaving Node 10, wire 104o, pin 02, connector X20. **If voltage is not** leaving the module then the node 10 is defective/damaged; replace it. **If voltage is** leaving the module; there is one of two issues. Either a break in the wiring caused by an Emergency stop switch/panic bar or an outside fault (such as an abraded/cut wire, corrosion/water in a connector, etc.) is present. Repair the 104 wire before proceeding to step #4



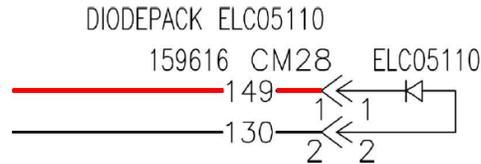
Step #4) Locate wire 130 on the same chassis interface connector and check for voltage. **If no voltage** is present, the transmissions parameters for pump engagement are not met. Service transmission and/or TCM.

**If voltage** is present on wire 130 then locate the diode pack this is located between wires 130 and 149. Remove the diode pack and proceed to step #5.

Step #5) Perform a check of the diode pack using a digital multi-meter. With the multi-meter set to the diode check function, place the red lead on pin 2 and the black lead on pin 1. There should be continuity through the diode.



Next, place the red lead on pin 1 and the black lead on pin2. There should not be continuity through the diode.



**If the diode passed** the above test proceed to step #6.

**If the diode did not pass** the above test replace the diode and then proceed to step #6.

**NOTE: Connector CM28 & wire 149 on the illustrations are for reference only; the specific connector & wire numbers may vary. To find the diode on the wiring schematic, locate wire #130 and trace it to the diode pack, typically on page 1.**

Step #6) Reconnect the diode onto wires 130 and 149. Check for voltage on wire 149.

**If voltage is not present**, then the diode continuity check was performed incorrectly. Replace the diode.

**If voltage is present** on wire 149 then proceed to step #7.

Step #7) Locate wire 149 at Node 10, connector X10, pin 16 AND spade location 1 of the pump relay. Check for voltage.

**If voltage is present**, then the node 10 is defective/damaged replace it.

**If no voltage is present**, then the 149 wire is broken between the diode location and Node 10. Locate the break and repair.

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