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**Date: 5 June 2023**

**Subject: Composite Design manufactured control panel for all UL engines**

**Time of compliance: Before next flight**

**Reason for this bulletin:**

Several customer have had a loss of ECU power due to an undetermined issue with the 20A ECU breaker. Stress analysis on several breakers indicated that the breakers performed per manufactures specifications using a static DC load. In actual operation with the engine several of the 20A breakers tripped causing loss of engine power. The breakers in question are from Tyco electronics - model# W28-XQ1A-20.

A revision to the UL control panels several years ago has mitigated this issue. Many of the panels fitted with the W28 series breakers are still in the field or in aircraft under construction. The new breakers have been supplied with the UL control panels for the past two+ years with no operational problems. The newer breakers are Klixon (Sensata) series 7277 or 7274 series, easily identified as having a pullable knob type actuator.

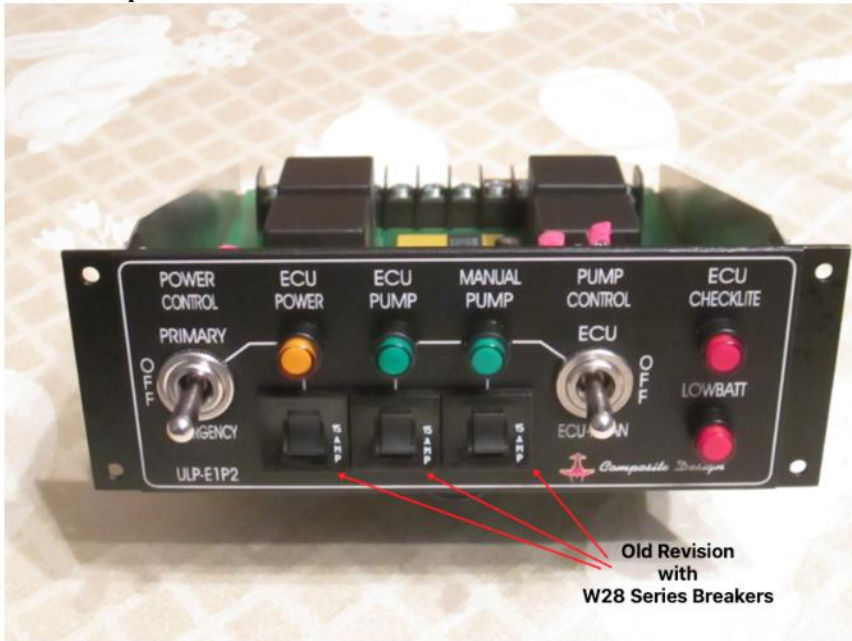
It is highly recommended that all existing control panels with the W28 series circuit breakers be refitted by Composite Design with the new breakers. This is a factory modification only.

**Action:**

If you have a subject control panel, it will need to be refitted. Contact Composite Design via the above email to schedule service or answer questions. There is a temporary interim fix that can be used prior to modifying current panels by installing a jumper on the terminal block. The addition of the jumper is meant to be a short term fix to avoid the possibility of an ECU shut down due to a tripped breaker. It will bypass the breaker in the Emergency Power Mode. This jumper addition to the panel does not require any additional wiring changes.

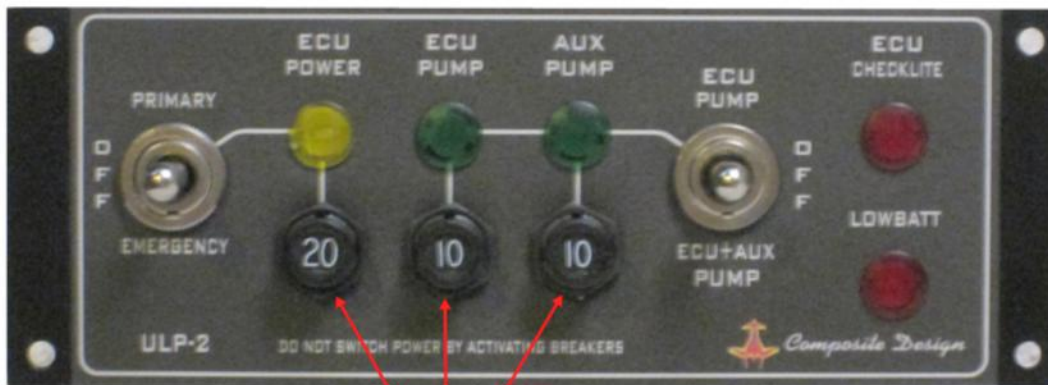
**Note the attached photos and captions for reference:**

UL control panel fitted with the older W28 series breakers.



Old Revision with W28 Series Breakers

UL control panel fitted with Klixon breakers. If you have this type of breaker the revision will not be necessary.



New Revision with Klixon Breakers

UL control panel interim jumper fix. Note the 16 gauge jumper between the ECU Power and Power Bus2 terminals.

