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TROUBLESHOOTING GUIDE

All Cycle Counters

NOTE: This document is being supplied to our current customers for trouble shooting purposes only

The troubleshooting table provides the mechanic with guidance for diagnosing malfunctions and the recommended course of action to remedy the fault.

Fault	Probable Cause	Action
No power to unit when the aircraft battery power is applied which would be indicated by a blank display	1. Check Circuit breaker 2. Check the Connector	1. Reset the Circuit breaker 2. Turn off aircraft battery power and check connector with reference to the attached applicable DWg.
High Ng and or Np cycles	Engine Signal Generator is noisy	Verify electrical connector at Signal Generator is clean and secure. ** <u>Perform signal quality check below.</u>
Blinking cursor in the top left corner of the display	Electro-static discharge has damaged the computer board	Contact AKV to Install a ground bonding strap from the enclosure to airframe ground is present, secure and has < 1 Ohm resistance. Cycle Counter will need to be returned to AKV for repair.

NOTE: If the above actions do not resolve the issue, contact AKV to arrange for unit to be returned for repair.

**** Signal quality check**

1. Connect an oscilloscope to the cycle counter airframe wire harness female connector for Ng or Np whichever signal is of concern.

- Refer to attached Dwg NCC-006 for the Arriel 1, LTS101 & T53
- Refer to attached Dwg BK117-004 for the BK117(EC145)
- Refer to attached Dwg AS332-004 for the AS332

2. Ground run the A/C at idle and observe the quality of the sine-wave signal is as shown in Fig 1.

3. Whilst observing the oscilloscope, slowly increase the FCL to the flight position and observe that the sine-wave remains as shown in Fig 1 thru the speed change.

NOTE: A bad sine-wave signal will look similar to figure 2. If this is observed, replace the signal generator and perform the test again to confirm the quality of the signal is displayed like Fig 1.

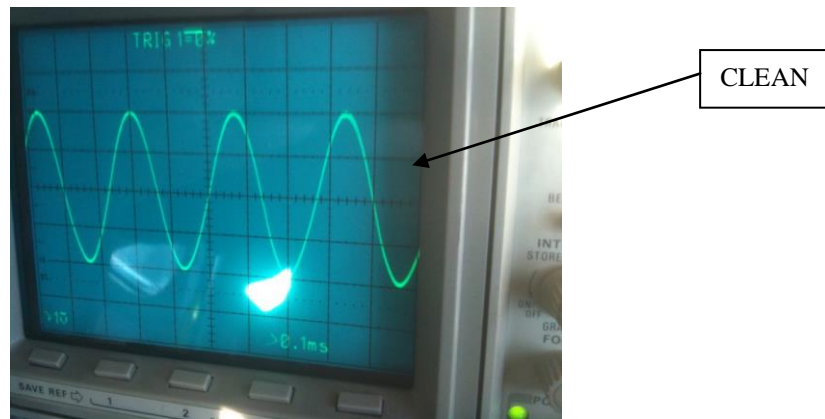


Fig. 1 (good)

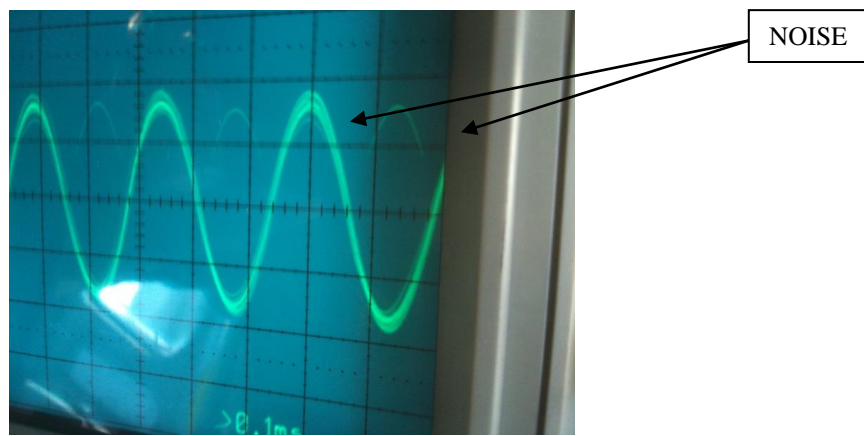
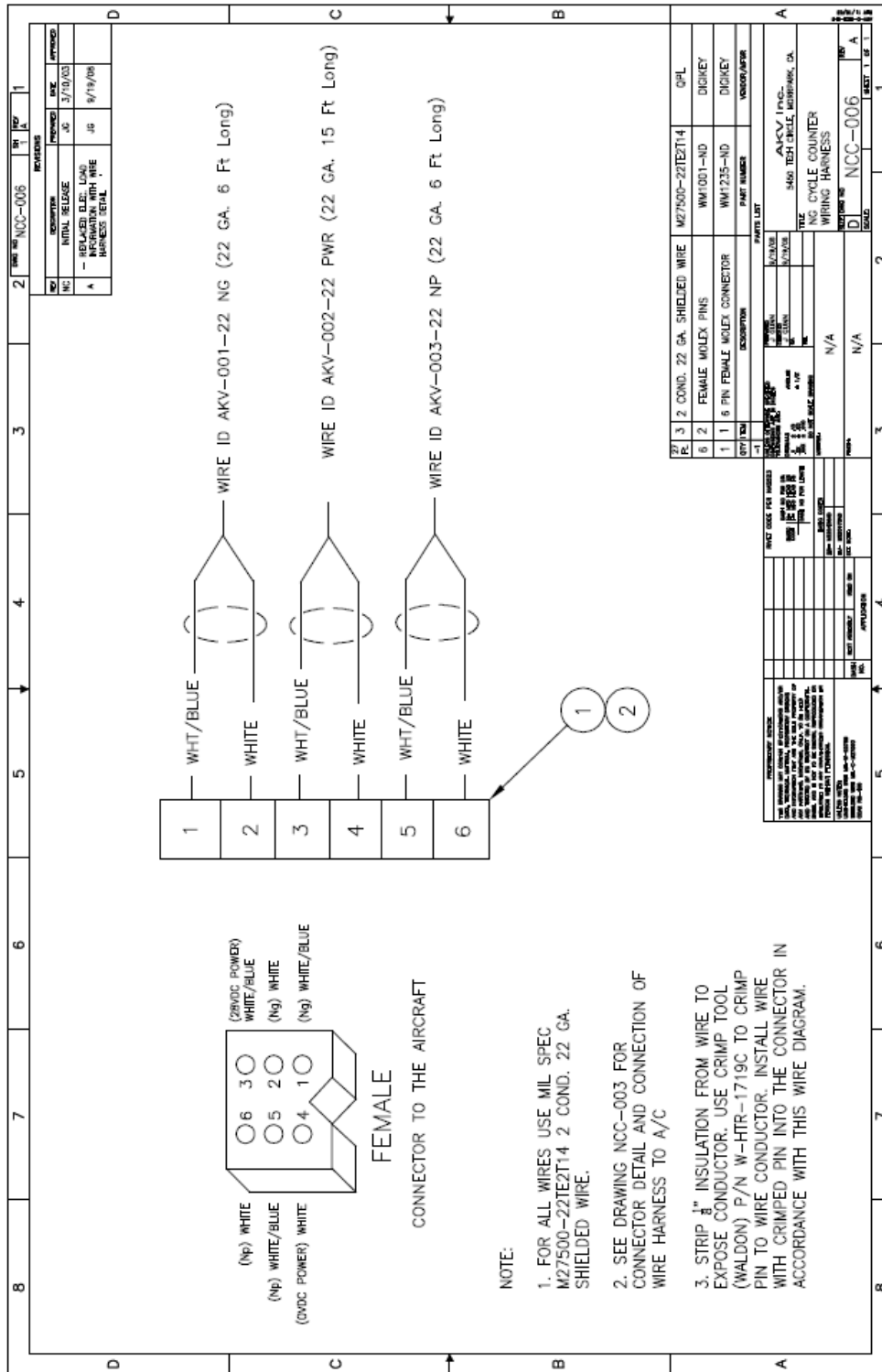


Fig. 2 (bad)

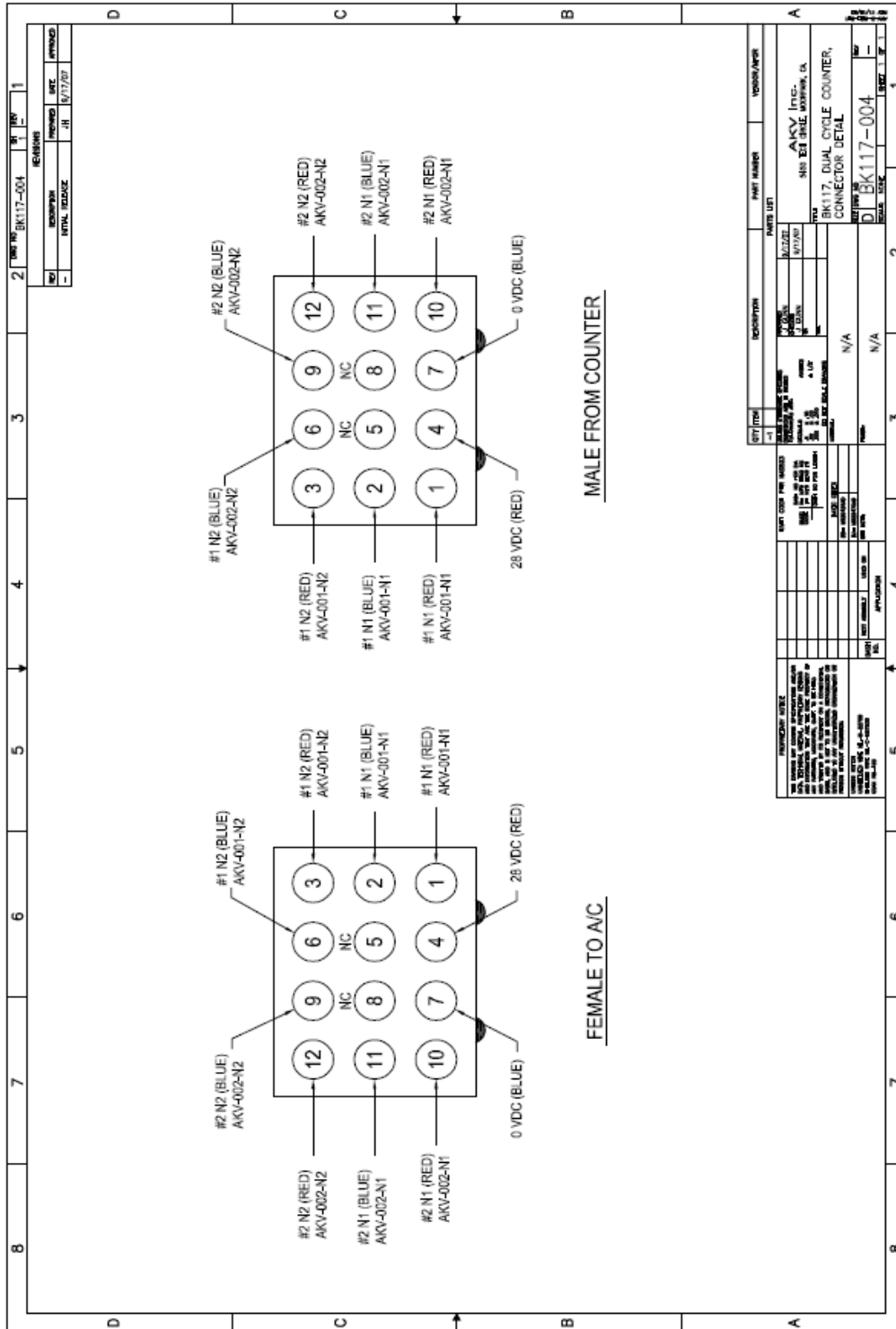
Single Engine Cycle Counter (all) Dwg NCC-006





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BK117 Cycle Counter Dwg BK117-004



AS332 Cycle Counter Dwg AS332-004

