# TOTAL PERFORMANCE
# VAN'S AIRCRAFT

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Service Letters and Bulletins: www.vansaircraft.com/public/service.htm

# SERVICE BULLETIN 16-04-10

**Date Released:**            March 30th, 2016

**Date Effective:**           March 30th, 2016

**Subject:**                  RV-12 switch module harness update (single or dual EFIS)

**Affected Models:**          ELSA RV-12 SkyView or Garmin Avionics kits
delivered between Feb 14, 2014 and April 10, 2016.
SLSA RV-12 serial numbers 12033 thru 12067.

**Required Action:**          Test and reconfigure, as necessary, the WH-00031 Switch
Module Harness

**Time of Compliance:**       At or before the next condition inspection.

**Supercedes Notice:**        None

**Labor Required / SLSA Warranty Allowance:**  1.0 Hour / 1.0 hour

**Level of Certification:**   (Owner, LSA Repairman Inspection - *not applicable to
SLSA*), LSA Repairman Maintenance, A&P

**Synopsis:**

During the development of the Garmin Avionics Kit option for the RV-12, the power to
the MFD (Multi-Function Display or co-pilot EFIS) and COM was routed through the
avionics switch. This allowed the MFD to be turned off during an electrical failure.
However, this caused other unintended minor errors within the electrical system.

Turning off the MFD has little effect on the overall time that the RV-12 electrical system
will function in an emergency situation when running off the main battery. Both Garmin
and Dynon systems more than meet the requirements with the MFD left on, even without
a backup battery. Leaving the MFD on also allows more situational awareness thus
enhancing safety.

The WH-00031 should be configured as described below. The harness should be
checked and/or reconfigured even if used with a single screen system.

If wired correctly, the MFD will turn on and off with the master switch.

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**Method of Compliance:**

Step 1: Download the latest applicable electrical schematic from downloads page of the Van's Aircraft web site. Review and use the schematic as reference.

Step 2: **If equipped with dual screens:**  With the Avionics switch off, turn on the Master switch. If both screens power up the wiring is correct. Go to Step 9. If the right side screen does not power up go to Step 3.

       **If equipped with a single screen:**  With the Avionics switch, Master Switch and Com Radio all on, remove the Com fuse.  If the Com Radio turns off, the wiring is correct. Go to step 9.  If the Com Radio remains powered, go to step 3.

Step 3: Remove the PFD (Primary Flight Display or pilot screen) from the left instrument panel. See KAI Section 42C for Dynon and 42N for Garmin. Although not required, for better access (if desired) remove the F-1240 Upper Forward Fuselage Skin per KAI Section 29A.

Step 4: Label, then remove the WH-00031 Switch & Fuse Module Harness 25-Pin D-Sub connector from the back of the AV-50001 switch module. See KAI Section 42M. Remove the backshell.  If necessary, the pin locations will be changed at this connector only.

If equipped, removal of the dimmer knob and harness may also facilitate checking the harness.

Step 5: Label, then remove the switch module harness 25-Pin D-Sub from the AV-50000A Control Module for continuity testing. No pins will be moved at this connector.

Step 6: Use an ohmmeter to check that wires P520 and P527 wires are connected as shown in Figure 1.

If they are not, locate and move the wire pinout locations in the AV-50001 Switch & Fuse Modlule  D-Sub connnector) as required to match the configuration shown in Figure 1.

Step 7: Re-install the backshell removed in Step 3. Re-install the WH-00031 harness.

Re-install the F-1240 Upper Forward Fuselage Skin if removed in Step 3.

Re-install the PFD removed in Step 3.

Step 8: Download the latest version of the POH, Flight Training Supplement and Maintenance Manual from the RV-12 Service Information page.

Step 9: Make appropriate entry in airframe logbook. See example below:

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Configured/checked the WH-00031 Switch Module Harness in accordance with SB 16-03-30

Signature _____ Certificate # _____
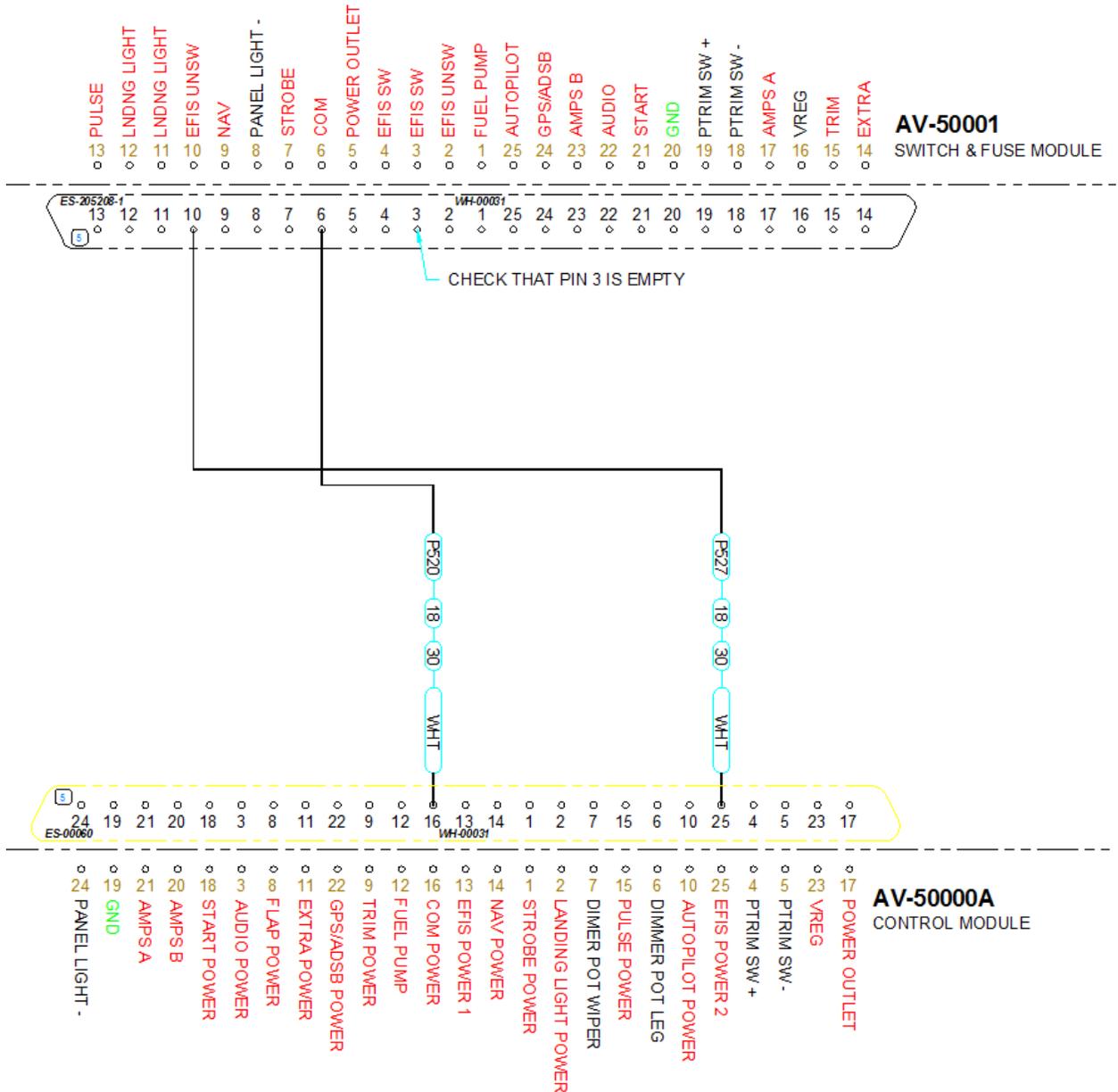


**FIGURE 1:** Harness Rev 2 Configuration – only wires applicable to this SB shown for clarity