VAN'S AIRCRAFT, INC.

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Date:	September 11, 2009
Subject:	Revised Firewall Forward Wiring Harness (Powerplant Kit)
Affected Models:	RV-12 Powerplant Kits
Required Action:	Rework WH-RV12-ROTAX Firewall Forward Wiring Harness as described below.
Time of Compliance:	Prior to first power-up of electrical system
Synopsis:	The Firewall Forward Wiring Harness needs to be modified to ensure that damage to the Rectifier Regulator does not occur when the electrical system is powered-up.

Corrective action for affected WH-RV12-ROTAX Firewall Forward Wiring Harnesses:

If the harness has NOT been installed in the aircraft OR if assembly has not progressed beyond Page 45-04: Perform Steps 3 and 4 listed below.

If the harness has been installed in the aircraft AND the aircraft electrical system has NOT yet been powered-up: Perform Steps 1 through 4 and 9 listed below.

If the harness has been installed in the aircraft AND the aircraft electrical system has been powered-up: Perform Steps 1 through 9 listed below.

<u>Step 1:</u> Remove the 965 335 Connector Housing from the 965 347 Rectifier Regulator. See Page 45-05, Figure 1.

<u>Step 2:</u> Remove the WH-P45 (YEL) wire and spade connector from the L position in the 965 335 Connector Housing. See Page 45-05, Figure 2. There is a small tab on the spade connector that must be depressed by inserting a small thin object into the side of the connector housing without wires (the side that abuts the 965 347 Rectifier Regulator) alongside the flat side of the spade connector. Once this tab is pressed down the spade terminal will unlock and slide out of the connector housing.

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<u>Step 3:</u> Cut the WH-P45 (YEL) wire approximately 1 inch from where the wire splits from a single wire into two wires.

Step 4: Cover the cut end of the WH-P45 (YEL) wire with heatshrink.

<u>Step 5:</u> Remove the 965 345 Rectifier Regulator from the firewall. See Page 45-02, Figure 3.

<u>Step 6:</u> Inspect the bottom of the 965 345 Rectifier Regulator for burn marks (particularly near the L terminal).

If there are burn marks then return the rectifier regulator to Van's Aircraft for replacement with a new rectifier regulator. Upon receiving the replacement rectifier regulator, proceed to Step 8.

If there are no burn marks then proceed to Step 7.

<u>Step 7:</u> Using an ohm meter, place the positive lead on the C terminal of the 965 345 Rectifier Regulator and the negative lead on the L terminal of the rectifier regulator and read the resistance.

If there is an open circuit (infinite resistance) between the C terminal and the L terminal, then return the rectifier regulator to Van's Aircraft for replacement with a new rectifier regulator. Upon receiving the replacement rectifier regulator, proceed to Step 8.

If the resistance reads between 7 and 9 Mega ohms then proceed to Step 8. If the resistance reads outside that range return the rectifier regulator to Van's Aircraft for replacement with a new rectifier regulator. Upon receiving the replacement rectifier regulator, proceed to Step 8.

<u>Step 8:</u> Re-install the 965 345 Rectifier Regulator to the firewall using AN4-5A bolts. See Page 45-02, Figure 3.

<u>Step 9:</u> Re-install the 965 335 Connector Housing to the 965 347 Rectifier Regulator. See Page 45-05, Figure 1.