SECTION 51: FIREWALL FORWARD MISCELLENEA

NOTE: These instructions do not cover "ALL" instructions needed complete your aircraft.

MANUFACTURER INSTRUCTIONS SUPPLIED WITH EACH COMPONENT SHOULD BE READ THOROUGHLY.

Always follow the best practices contained within the reference material listed in Section 1.

HAVE MULTIPLE QUALIFIED INDIVIDUALS INSPECT YOUR WORK through all stages of the build process.

EVEN EXPERT BUILDERS CAN MISS OBVIOUS THINGS.

NOTE: A color PDF of this section is available on the Van’s Aircraft Website.

NOTE: See the RV-14 Firewall Forward Turntable on the Van’s Aircraft Website for an interactive depiction of the firewall forward area.

NOTE: Photographs presented in this section should be used forREFERENCE ONLY and do not supersede previous steps or figures. Some parts depicted in this section may vary slightly from final production versions.

Step 1: Route the ignition harness as depicted in the figures for this section.

The spark plug "B Nuts" are labeled for location. For example, "T1" goes to the top of cylinder #1. Cylinder labels are embossed on the engine case near the pushrod tubes. See Figure 1 and Figure 2.

Step 2: Install the spark plugs according to the engine manufacturers’ instructions.

FIGURE 1: SPARK PLUG LABEL

FIGURE 2: CYLINDER LABEL

FIGURE 3: AFT LEFT SIDE IGNITION HARNESS ROUTING
FIGURE 1: FORWARD LEFT SIDE IGNITION HARNESS ROUTING

LOWER LEFT IGNITION HARNESS
FIGURE 1: UPPER IGNITION HARNESS ROUTING

RIGHT SIDE IGNITION HARNESS

LEFT SIDE IGNITION HARNESS
FIGURE 1: RIGHT SIDE IGNITION HARNESS ROUTING
(TAILDRAGGER ONLY)

ROUTE IGNITION HARNESS THROUGH CLAMPS
FIGURE 1: RIGHT SIDE IGNITION HARNESS ROUTING
(TRI GEAR ONLY)

ROUTE IGNITION HARNESS THROUGH CLAMPS
Step 1: On some engines, the "fuel spider" on top of the engine may come with a fluid fitting installed in the "GAGE" port. If installed, remove this fluid fitting.

Step 2: Order the plug called out in Figure 1 from Van's Aircraft and install it into the fuel spider. For more information on installing fluid fittings see Section 5.27. Note the plug removed from the #3 Cylinder when installing the manifold pressure hose may be used (See Page 43-00).

Step 3: Add insulated boots where indicated in Figure 2.

Step 4: Adjust the alternator belt tension as described in the alternator manufacturers' documentation, then tighten and secure the alternator belt tension lock bolt.

Step 5: Secure the alternator belt tension lock bolt with safety wire as shown in Figure 3.

Step 6: **ONLY WHEN ALL ELECTRICAL WORK HAS BEEN COMPLETED**, attach the WH-P25 2AWG Ground Strap to the negative terminal on the battery.

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FIGURE 1: FUEL SPIDER

FIGURE 2: INSTALL INSULATED BOOTS

FIGURE 3: ALTERNATOR
Step 1: Verify that ALL wires (including those for avionics) and control cables have been routed through the firewall and secured with tie wraps as necessary before proceeding. See the RV-14 Firewall Forward Turntables on the Van's Aircraft website for locations.

Step 2: Fabricate the FF-00086A and FF-00086B Fire Sleeves according to the table below.

<table>
<thead>
<tr>
<th>QTY</th>
<th>PART #</th>
<th>LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>FF-00086A</td>
<td>2 11/16 [68.3 mm]</td>
</tr>
<tr>
<td>2</td>
<td>FF-00086B</td>
<td>2 1/2 [63.5 mm]</td>
</tr>
</tbody>
</table>

Step 3: Secure the wire and cable bundles passing through the FF-00001 Firewall Penetration Fittings as shown in Figures 1-3.

- **FIGURE 1**: Secure wire and cable bundle
- **FIGURE 2**: Pot and wrap cable bundle
- **FIGURE 3**: Secure fire sleeve