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SERVICE LETTER 00060

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Subject: Installation and Use of Control Stick Opening Covers

Affected Models: All RV Aircraft Models

Required Action: Recommended installation of stick boot covers to prevent potential unsafe operation due to control locking

Time of Compliance: At or before the next annual condition inspection

Supersedes Notice: None

Labor Required / SLSA Warranty Allowance: N/A

Level of Certification: N/A

Synopsis:

Foreign objects and debris (FOD) are a problem not only on a runway or taxiway, but also pose significant risk in the cockpit. When conducting maintenance, we are careful during the inspection, upgrade, or repair of the aircraft to remove every tool or object involved, yet we may not always consider that unsecured objects may become FOD when dropped or moved in the airplane due to aircraft forces and flight dynamics. These unsecured objects may fall into places we cannot access or beyond our reach, and in certain cases can become jammed in a critical control system such as a control stick, rudder pedals or other control components above and below the cockpit floor or in the tail cone.

Pilots are sometimes lucky enough to walk away from FOD-related accidents and incidents, such as in 2005 when a RV-8 sustained substantial damage after a ball point pen and relief jar jammed/inhibited the aircraft control system. Others have not been so lucky, however, and the results were fatal. There is an endless list of possible objects that could jam a control system and no system is completely immune. Therefore, we should do what we can to mitigate the possibility of FOD jamming a control system or other important mechanisms in the aircraft.

All RV's use control sticks which pass through an opening in a floorboard or bulkhead. Wherever possible, these openings need to be covered by a stick boot that will prevent foreign objects from entering the area where the control components are housed. Figures 1 and 2 are from the RV-14 Kit Assembly Instructions. This solution may easily

be applied to the RV-6,7, and 9, as well. Although the stick openings on the RV-3,4, and 8 are larger, the same general method and design may be applied for those models.

The forward control stick penetration through the center sections of the RV-8, RV-10 and RV-12/12iS are located on the vertical surface of the bulkhead. While it may be somewhat less likely for an object to find its way through these openings, it is still quite possible, and these openings should also be covered/protected.

The control boot for the RV-12iS is depicted in Figure 3. Interior kits for the RV-12/12iS include a set of these control stick boots.

Refer to the following drawings and kit assembly sections regarding the mechanisms discussed in this bulletin for each model listed below.

- RV-3 See DWG 27
- RV-4 See DWG 28
- RV-6 See DWG 37 and DWG 40
- RV-7 See DWG 34 and DWG 38
- RV-8 See DWG 25 and DWG 77
- RV-9 See DWG 34 and DWG 38
- RV-10 See KAI Section 39
- RV-14 See KAI Section 42

Method of Compliance:

Step 1: Construct a doubler ring similar to F-14114, which is shown in Figure 1 and Figure 2.

Step 2: Make a stick boot from lightweight cloth material or leather. A draw string is typically used to cinch together then tie off the top of the boot around the control stick. Leave enough diameter in the top of the stick boot to allow access for removal of any quick disconnect pins or electrical connections for removable co-pilot control sticks, as applicable.

Step 3: For aircraft such as the RV-12, in which the stick boot will never have to be removed for inspection, the boot may be permanently adhered to the bulkhead.

For aircraft such as a RV-6,7,9 where the seat pan must be removed for inspections the boot will need to be attached with screws, Drill at least four (4) screw attach locations through the doubler ring into the seat pan or bulkhead. Refer to the locations shown in Figure 2 for reference. Install K1000-08 nutplates in the floor or seat pan in these locations. These screws will allow the boot to be removed.

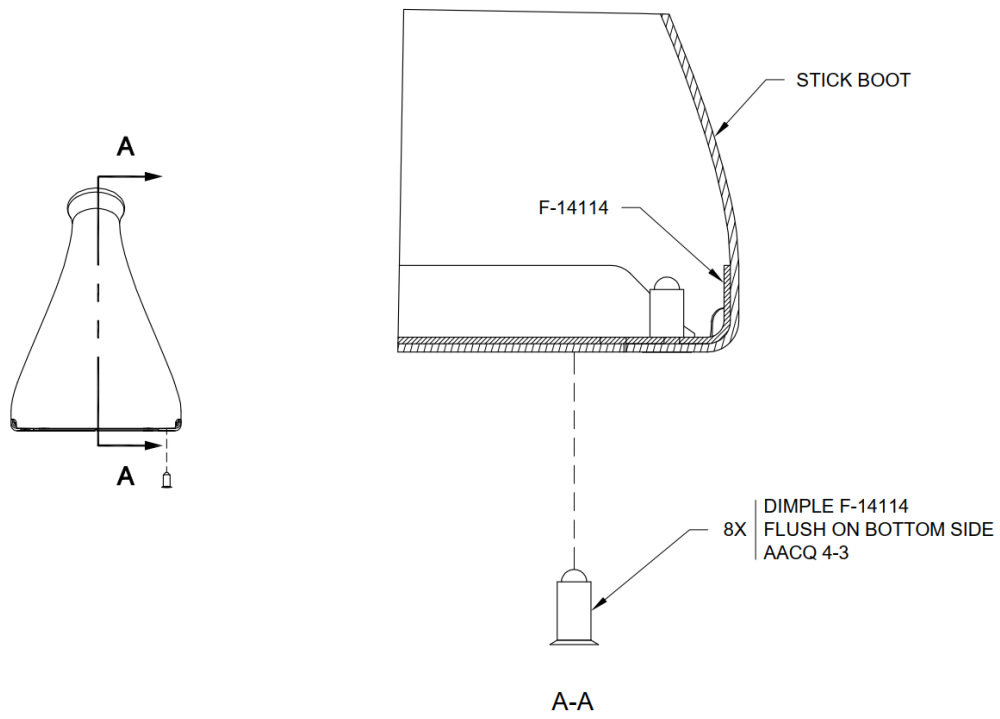


FIGURE 1: STICK BOOT AND STICK BOOT DOUBLER ASSEMBLY

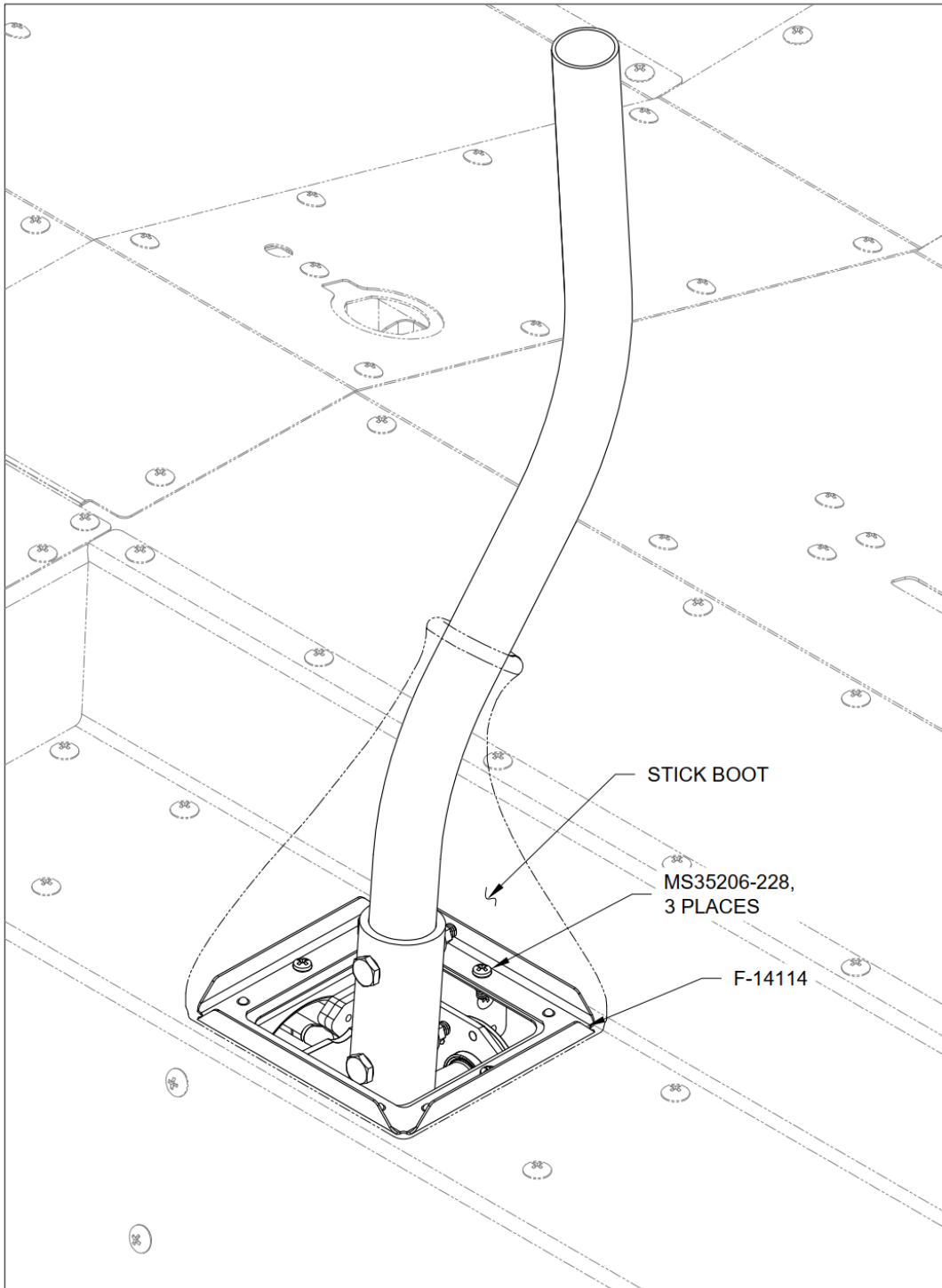


FIGURE 2: STICK BOOT DOUBLER



FIGURE 3: RV-12iS STICK BOOT