



INSTRUCTION - DOOR KIT TN02840

RECORD OF REVISIONS

(When updated, this document is changed in its entirety)

REV	DATE	DESCRIPTION	BY	APPROVAL
B	SEP-08-2017	ECR 2017-0021, correct insert reference Fig 3.	DNE	
A	NOV-21-2016	Update format	DNE	DNE
-	JUN-24-2011	Initial Release	DNE	RCK

PURPOSE

This instruction is to be used as guidance for locating of TD02840 Door Kit (Figure 1).

REQUIREMENTS

Standard tools, hardware, consumables, and finish materials, required and not supplied.

- Single Plug Door Kit TD02840
- Drawing 02840 – Door assembly and material list.
- Before locating verify approval method.
- Determine added mass and use of ground/shore power cord will not cause flexing and cracking of the skin, AC 43.13-2 (as amended) Chapter 1.
- Locating in cowl panel may be considered a Major Alteration (14 CFR 43 - Appendix A to Part 43 - (a) (viii)).
- For questions regarding these instructions contact Tanis Aircraft Products, airframe manufacturer, FAA, or approved representative.

INSTALLATION

⚠ CAUTION: DO NOT use solid rivets in composite panel. Use of reduced head rivets not recommended.

Kit includes aluminum doubler/backing plate, hinged door, and latch assemblies.

- Installation preformed as small patch repair, AC43.13-1 (as amended) Chapters 3 and 4, and reference AC 43.13-2 (as amended) Chapter 1.
- Specific Preheat Kit Instruction and/or airframe manufacturer procedures may augment or supersede these instructions.
- Locating indicator light under door may require field fabricated offset bracket, reference drawing 02840, and Notes in Step 4.

PROPRIETARY DATA

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Installation - Sheet Metal Panel/Fairing


Use appropriate rivets per drawing 02840.

1. Prepare installation site.
2. For increased surface area, additional or alternate doubler and/or tying in to stringer, may be desirable.
3. Fit doubler(s) and door to match surface contours (Figure 2).
4. Transfer/match drill holes from doubler(s) through panel, if using alternate doubler(s) match existing rivet patterns when applicable.

Note: Do Not cut hole for indicator light unless locating light under door. Locating light under door may require off set bracket (required Bezel inset 9.5 x 1.3 MM), reference drawing 02840.

5. Countersink door hinge rivet and plug screw holes. When using 100° flush rivets countersink or dimple as required.
6. Apply sealant to all faying surfaces and rivets, assemble and rivet in place.
7. Finish as required.
8. Locate optional friction tape or equivalent (Note 2, drawing 02840).

Installation - Fiberglass and Composite Panel/Fairing

 **CAUTION: Do Not** buck or use solid rivets in fiberglass or composite panels or structures.

Panel construction/material composition may require Monel rivet equivalents verses aluminum rivets, reference drawing 02840.

1. Prepare installation site.
2. Additional outer doubler (TD02838), or equivalent, may be required for riveting.
For increased surface area, additional or alternate doubler and/or tying in to stringer, may be desirable.
3. Fit doubler(s) and door to match surface contours (Figure 2).
4. Transfer/match drill holes from doubler through panel, if using alternate doubler(s) match existing rivet patterns when applicable.

Note: Do Not cut hole for indicator light unless locating light under door. Locating light under door may require off set bracket, reference drawing 02840. Offset bracket not generally required due to composite panel thickness (required Bezel inset 9.5 x 1.3 MM).

If not using outer doubler - plug is mounted directly to inner doubler and aircraft panel is cut to accommodate screw head, button vs. flush.

5. Prep holes, use inserts as required, and pot accordingly (Figure 3).
6. Once potting adhesive is cured sand to match contour, and sand edges of larger holes.
7. Countersink door hinge rivet locations and plug screw holes, if using 100° flush rivets for outer doubler cut countersink rivet sites.
8. Apply sealant to all faying surfaces and rivets, assemble and rivet in place.
9. Finish as required.
10. Locate optional friction tape or equivalent (Note 2, drawing 02840).

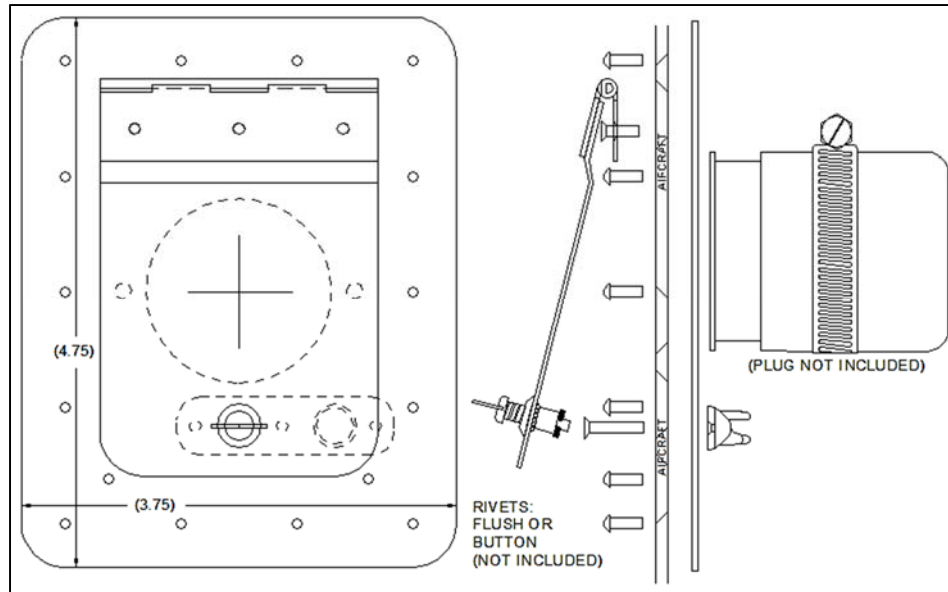


Figure 1. Example of door lay assembly.

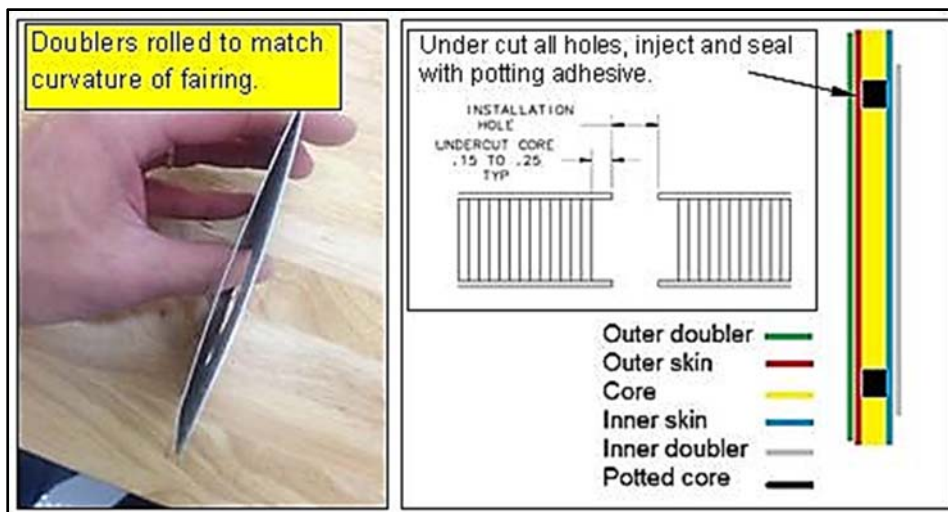


Figure 2. Example of composite panel layup. Undercut, pot, and seal of all open edges.

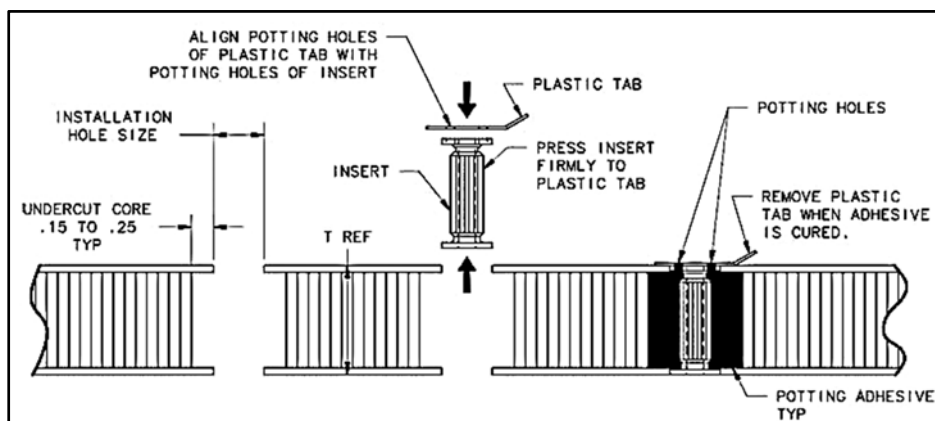


Figure 3. NAS1834 Potted in Insert, used with composite panel of 0.25 inches or more.