



INSTRUCTION – DOOR KIT

Subject: P/N: TD03097
2-Plug Door Kit

Document No: TN03097
Revision: C
Date: JUN-02-2022

RECORD OF REVISIONS

When revised document changed in its entirety.

REV	DATE	DESCRIPTION	BY	CKD
C	JUN-02-2022	Add switch mod option	DNE	GDO
B	DEC-14-2015	Update with 03097 Rev B revision notes.	GDO	DNE
A	OCT-27-2015	Initial Release	DNE	DNE

Current revision approval:

1. PURPOSE

This instruction provides guidance for installation of the Subject kit listed above and may be used as a subassembly in airframe specific or higher-level kit. Kit may be installed with optional Door Switch p/n: TU03273

2. REQUIREMENTS

Standard aviation tools, hardware, and consumables are required and not supplied.

- 2 Place Door Kit p/n: TD03097.
- Drawing: 03097 (primary material list and installation guide).
- Before installing in any structural location verify applicability and approval method.
- Determine that the added mass and use of a ground/shore power cord will not cause flexing and cracking of the skin, AC 43:13-2 (as amended) Chapter 1.
- Installation in cowl panel may be considered a Major Alteration (14 CFR 43 - Appendix A to Part 43 - (a) (viii)).
- For questions regarding installation contact Tanis Aircraft Products, airframe manufacturer, FAA, or approved representative.

3. INSTALLATION

Kit includes aluminum doublers, blanking plate, hinge, door, and latch assemblies.

- Design is for installation as a small patch repair per AC43.13-1B Chapters 3 and 4 and/or applicable airframe manufacturer procedures.
- Specific Preheat Kit installation instructions and/or airframe manufacturer procedures may augment or supersede these instructions (GippsAero SB-GA8-2015-160).
- When installing with Door Switch p/n: TU03273 refer to Instruction: TN03273 for door modification requirements.

PROPRIETARY DATA

Tanis Aircraft Products proprietary rights are included in the information disclosed herein. The recipient by accepting this document agrees that neither this document nor the information disclosed herein nor any part thereof shall be reproduced or transferred to other documents or used or disclosed to others for manufacturing or for any other purpose except as specifically authorized in writing by Tanis Aircraft Products - 952-224-4425.

Installation - Sheet Metal Panel

⚠ CAUTION: The use of reduced head rivets is not recommended with this installation.

Start installation with review of door drawing 03097. In addition, when installing with Door Switch review Instruction: TN03273 refer to Figure 4.1

1. Dimpling or use of the supplied 0.080-inch outer doubler is required for proper countersinking of flush screws and rivets that are to be located under door.
2. Indicator light requires recessed/stepped hole refer to door drawing: 03097.
3. Prepare aircraft panel/skin per manufacturer's procedures and reference AC 43.13-1 (as amended) Ch 4, § 4.
4. When installing Door Switch refer to door drawing: 03097 and Instruction: TN03273 for door modification requirements.
5. Use of supplied doublers may not be required.
6. For increased surface area, or tying into stringers or intermediate frames, field fabricated doubler of appropriate thickness and material may be used.
7. Use appropriate rivets for application - solid or blind - as called out in drawing: 03097 sized accordingly.
8. When required fit doublers and door to match surface contours Figure 4.2.
9. Transfer/match drill holes from doublers through panel, if using alternate doublers match existing rivet patterns when applicable.
10. Countersink rear hinge holes for flush rivets.
11. Countersink screw and rivet holes in outer doubler if used or alternately dimple aircraft skin and or doubler as applicable.
12. Cut/drill two 8mm holes for the light's shank. Light may be mounted in field fabricated standoff plate configured to compensate for clearance requirements of bezel and door when not using outer doubler.
13. Cut/drill two locations to fit 9.5mm light bezel.
14. Cut/drill latch receptacles mounting holes in aircraft panel for number #4 (0.125") blind rivets or appropriate #3 solid rivets.
15. Realign assembly on aircraft and match drill as required.
16. Install hinge and doublers with sealant on all faying surfaces and align latch receptacles. Wet install all rivets with sealant.
17. If not using second AC plug position fit blanking plate on backside of assembly (mounting hardware supplied by installer).
18. Install winged studs and retaining washers. Position door under hinge, latch in place, match drill with hinge for #3 rivets and rivet in place.
19. Finish as required.
20. Install optional friction tape, gasket sheet or equivalent on inside door surface refer to drawing 03097.

Installation - Fiberglass and Composite Panel



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

Start installation with review of door drawing 03097. In addition, when installing with Door Switch review Instruction: TN03273 refer to Figure 4.1

1. Use of the supplied 0.080-inch outer doubler is required for proper countersinking of flush screws and rivets that are to be located under door.
2. Indicator light requires recessed/stepped hole refer to door drawing: 03097.
3. Prepare aircraft panel/skin per manufacturer's procedures and reference AC 43.13-1 (as amended) Ch 4, § 4.
4. When installing Door Switch refer to door drawing: 03097 and Instruction: TN03273 for door modification requirements.
5. For increased surface area, or tying into stringers or intermediate frames, field fabricated doubler of appropriate thickness and material may be used in place of supplied doubler.
6. Panel construction may require Monel rivet equivalents verses aluminum rivets.
7. Position doublers and door hinge on installation site, with the thicker 0.080 doubler to the outside.
8. When required fit doublers and door to match curvature of surfaces refer to Figure 4.2.
9. Transfer/match drill holes from doublers through panel.
10. For fiberglass or composite panel installations undercut panel core 0.15 to 0.25 from edge of all holes. Inject potting adhesive into rivet and screw holes, and seal open edge of larger holes with same adhesive, Figures 4.2 and 4.3.
11. Once potting adhesive is cured sand to match contour, and sand edges of larger holes.
12. Countersink rivet holes in hinge, screw, and rivet, holes in outer doubler.
13. Cut/drill 2 locations in outer doubler to fit 9.5mm light bezel.
14. Cut/drill latch receptacles mounting holes for number #4 (0.125-inch) blind rivets.
15. Realign hinge, doublers, and receptacles, on panel and match drill cured adhesive.
16. Install hinge and doublers with sealant on all faying surfaces and align latch receptacles. Wet install all rivets with sealant.
17. If not using second AC plug position fit blanking plate on backside of assembly (mounting hardware supplied by installer).
18. Install winged studs and retaining washers. Position door under hinge, latch in place, match drill with hinge for #3 rivets and rivet in place.
19. Finish as required.
20. Install optional friction tape, gasket sheet or equivalent on inside door surface refer to drawing 03097.

4. FIGURES



Figure 4.1. Example of installed Door Kit with optional Door Switch. For switch installation refer to Instruction: TN03273.

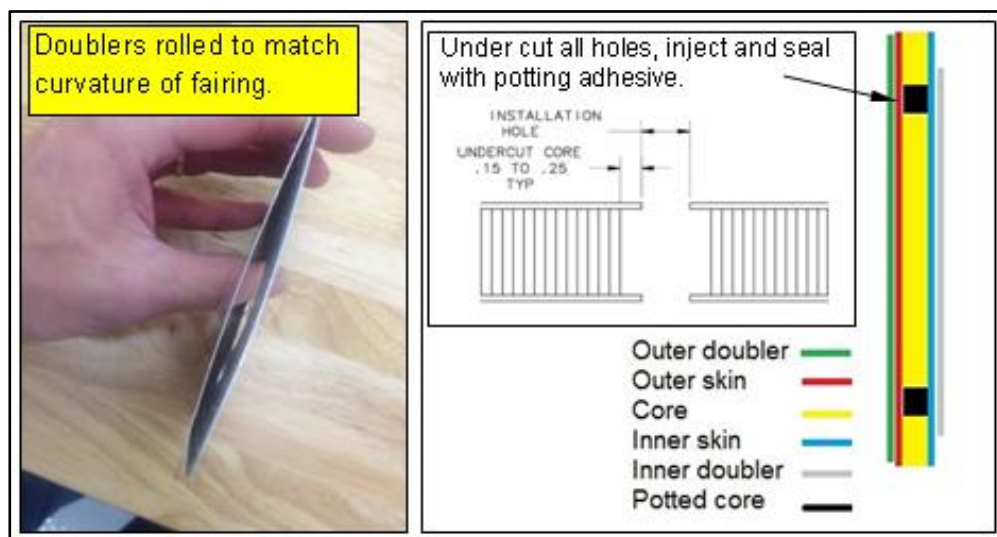


Figure 4.2. Composite and fiberglass panel installation. When required fit/roll doublers and door to match panel. Undercut, pot and seal of all open edges. Verify through applicable Airframe Manufacturers procedures proper rivet material for location of installation. Composite panel installations may require Monel rivets vs. aluminum rivet in fiberglass.

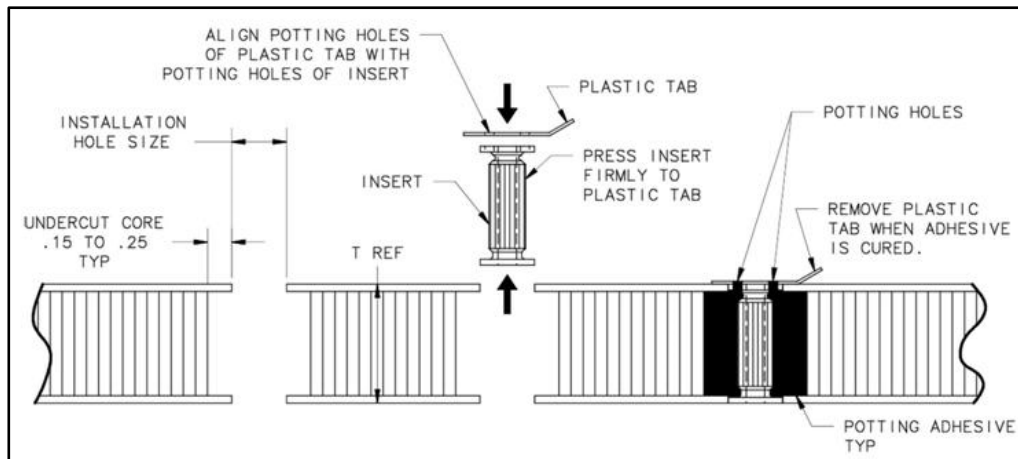


Figure 4.3. Example of NAS1834 Potted in Insert used in composite or honeycomb panel of 0.25 inches or more.

--- End ---