


INSTALLATION INSTRUCTIONS and MAINTENANCE MANUAL

Aero Twin, Inc. Crew Door Extended Steps Kit No. AT-QK-ST
for
Quest Model 100 Aircraft

Document No. AT-QK-ST-IM

Note: This document contains important installation and weight and balance data. Do not discard. For maintenance instructions and required inspection and maintenance intervals, see the Kodiak 100 Maintenance Manual, Manual No. AM902.0.

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1.0 Installation Instructions/Maintenance Manual

Aero Twin, Inc. Crew Door Extended Steps, Kit No. AT-QK-ST

1.1 Description

The Aero Twin Crew Door Extended Steps provide the pilot and copilot with easier access to the cockpit. This is done by lowering the bottom step six inches and adding a second step 8.5 inches up from the bottom step. See figure 1.1. P/N AT-QK-ST-L is shown. The right hand step is P/N AT-QK-ST-R, and is a mirror image.

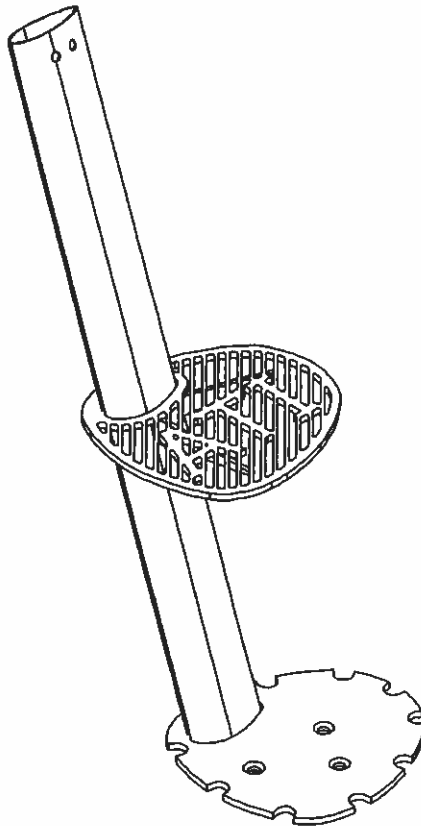


Figure 1.1. Left Hand Crew Door Extended Step, P/N AT-QK-ST-L

1.2 Installation / Removal

1.2.1 Removal:

Use the following procedure to remove the original equipment step prior to initial installation of the extended step, or to remove the extended step.

1. Remove pilot/copilot seat on side of aircraft where step is to be installed.
2. Remove floor panel between pilot seat rails.
3. Remove two (2) each MS21094-4020 bolts with NAS1149F0432P washers used to retain the step in the aircraft.
4. Slide the step down and out of the fuselage.

1.2.2 Installation:

1. If the extended step is primed only, paint to match aircraft using the procedures contained in Quest's FAA accepted maintenance manual chapter 20.
2. Slide the extended step up into the hole immediately below the crew door, and align the two bolt holes in the fuselage fitting with the bolt holes in the step tube.
3. Attach the step to the fuselage using the two (2) each MS21094-4020 bolts with NAS1149F0432P washers. Torque the bolts to 30-40 in-lbs.
4. Remove the metal step cover and fiberglass cup fairing from the original equipment step.
5. With as fine a saw blade as available, cut out the section of the metal step cover inboard of the step support as neatly as possible. Retain both pieces.
6. Attach the fiberglass cup fairing and the two parts of the metal step cover to the new lower step using the existing hardware.

1.3 Weight and Balance

When the extended crew door steps are installed, they add three (3) pounds to the aircraft at FS 47.4. If a new step is only added to one side, then only 1.5 pounds is added at FS 47.4

1.4 Inspection and Maintenance Instructions

1.4.1 General:

The Aero Twin Crew Door Extended Step installation is designed to be highly durable and fairly maintenance free. However, a maintenance program has been established to assure the continued airworthiness of the extended step and its installation. Perform the inspections and maintenance as outlined below and document actions in the aircraft records.

1.4.2 Scheduled Inspections:

Note: First inspection should be accomplished at next aircraft inspection requiring inspection of the crew door entrance steps so that subsequent inspections coincide.

At each inspection interval for which inspection of the crew door entrance steps is required by the FAA approved Kodiak 100 Maintenance Manual (Manual P/N AM902.0) or other FAA approved maintenance program, perform the following inspections on the crew door extended step:

- Visually inspect the steel structure for cracks, bends, dents, corrosion, or other defects.
- Visually inspect for security.

1.4.3 Corrosion Prevention:

The steel frame of the extended steps may either be powder coated or primed and then match painted to the aircraft. If the finish surface is marred in service or during handling, the affected area should be stripped and repainted to prevent corrosion. See Kodiak 100 Maintenance Manual (Manual P/N AM902.0) chapter 20 for instructions regarding exterior finishing. The step should be kept free of dirt and may be cleaned using water and a mild detergent.