

11 - SEAT ASSEMBLY AND INSTALLATION

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SEAT ASSEMBLY AND INSTALLATION

SEAT ASSEMBLY

- Wipe all parts down with acetone to remove markings before assembly.
 - All parts must have their edges sanded smooth with 120 grit sandpaper.
 - Paint or polish as desired.
1. Become familiar with the Seat Assembly **Parts Drawings** and collect the parts shown in the drawings.
 2. Drill the holes in the Seat Bottom Frame as shown in **FIGURE 11-02**.
 3. Install Slider Plates (KPST0078) to the Seat Bottom Frame. Countersink the Plate holes with a 100° Countersink to allow the head of the Countersunk Machine Screw to lay flush. **NOTE:** A long 3/8" wrench will be needed to install the nuts inside the Seat Bottom Frame. **HINT:** You may also tape a wrench to a stick or tube.
 4. Modify Seat Latch Mount (KPST0090) and Seat Latch (KPST0091) per **FIGURE 11-04**.
 5. Install Slide Assemblies with Seat Slider Block (KPST0076) and Seat Latch Mount to Fuselage. Refer to **SEAT INSTALLATION**. **IMPORTANT:** Do not install the Spring or Spring Pin at this time.
 6. Slide the Seat Bottom Assembly into the Slides from the aft. Adjust as needed to allow smooth sliding. **NOTE:** The use of Floating Nut Plates allows adjustment of the Slider Assemblies to the Seat Bottom Assembly.
 7. Proceed with the rest of the Seat Assembly only after the Seat Bottom Frame slides easily. **NOTE:** Trimming of components and additional shims may be needed. Refer to **FIGURE 11-07** for trimming of Seat Shims (KPST0089).
 8. Remove The Seat Bottom Assembly from the Fuselage by sliding aft. Mark the Seat Bottom Frame on the top centerline of tubes where the Seat Pans attach. Tape the pans in place. Make sure the holes are aligned on the tube centerline. Transfer drill #30, deburr, and rivet.
 9. Cleco the Seat Back Attach Gusset - Standard (KPST0080) to the welded tang on the Seat Bottom Frame. See **FIGURE 11-09**. Align the forward hole in the gusset with the tube centerline. Clamp in place and transfer drill #11 through both sides of the Frame tube. **NOTE:** Use a drill press to get a straight hole.

10. Assemble the Seat Back. Slide Lower Seat Back Brace (KPST0087) over the lower ends of the Seat Back Frame (ST-SBF). Position, drill, and rivet. **IMPORTANT:** Make sure the curved tube of the Lower Seat Back Brace is to the aft. Refer to **FIGURE 11-10**. Position the 3 pieces of the Seat Back Plate (KPST0073-1 thru -3). Drill and rivet. See **FIGURE 11-10A**.
11. If installing Optional Headrests, fit them up now.
12. Remove Seat Latch Mount and Seat Slider Block.
13. Assemble Latch Assembly per **FIGURE 11-13**. Trim the ends of the Roll Pin, as required, to allow easy movement within the Slider Block.
14. Press 1" Seat End Plugs into ends of Seat Bottom Frame. A rubber or plastic mallet may be required.
15. Fit Seat Back Frame to Seat Bottom. Transfer drill #11 through the bottom Seat Back holes and welded tang on the seat bottom if necessary.
16. Remove Seat Back Frame. Fabricate Lacing Wires per **FIGURE 11-16**. Slip Lacing Wires into pockets. Use a hot knife or soldering iron to burn holes above Lacing Wires per **FIGURE 11-16**.
17. Pull Seat Back Cushion over frame. Use Long Zip Ties to securely attach Seat Back Cushion through the melted holes.
18. Bolt Gusset and Seat Back to Bottom Frame. Bolt Brace to top of Gusset.
19. Center Seat Bottom Cushion on Seat Bottom Frame Assembly. Mark where the side Velcro meets the Frame. Remove the bottom Velcro strips and glue in place. Use tape to hold the strips while glue sets.
20. Set cushion into place and wrap the aft retaining strap around the Seat Frame tube and above the Seat Pan. Press into place. Wrap fwd center retaining strap around the forward frame tube and above the Seat Pan. Press into place. Wrap fwd side retaining straps around the frame tubes. Press into place. Press Cushion into place.
21. Install Latch Assembly to Fuselage. Pull forward end of Seat Latch inboard and up to lock the Seat Pin in the un-latch position. Install Seats into Fuselage. Check for free fore and aft movement. Also check for correct latching in all positions. Seats should be slid aft when exiting the aircraft.
22. Bolt Spacer (KSHW0042) into place to act as an aft stop for the Seat.

SEAT BELT INSTALLATION

- Wipe all parts down with acetone to remove markings before assembly.
 - All parts must have their edges polished smooth before installation to avoid cracking in service.
1. Become familiar with the Seat Belt Installation **Parts Drawings** and collect the parts shown in the drawings.
 2. Bolt the Seat Belt ends into their respective places. Refer to the **Parts Drawing**.
NOTE: *The tang attached to the Flap Handle Assembly may be bent to better align with the Seat Belt end when tightened.*

OPTIONAL HEADREST ASSEMBLY

- Wipe all parts down with acetone to remove markings before assembly.
 - All parts must have their edges polished smooth before installation to avoid cracking in service.
1. Become familiar with the Optional Headrest Assembly **Parts Drawings** and collect the parts shown in the drawings.
 2. Mark and drill the Headrest Frame as shown in **FIGURE 11B-02**. Rivet the Washers to the inside of the Headrest Frame as shown. The Washers will form “buttons” for the Internal Brace Tube to snap over.
 3. Measure and mark up from the lower ends of the Set Back Frame aft side. See **FIGURE 11B-03**. Drill a #11 hole through only the Seat Back Frame aft side.
 4. Pin the Headrest Frame in place. Drill the 2nd set of holes. Refer to **FIGURE 11B-04**. Remove the Headrest Frame and drill the Seat Back Frame to 1/4". Install Rivet-nuts. Refer to **FIGURE 11B-04A**.
 5. Bolt the Headrest Frame to the Seat Back Frame. Cut the Headrest Internal Tube to length from Raw Stock. File the ends of the tube to match the angle of the Headrest Frame for best fit. ***HINT:** Cut the Internal Tube long, file to length, and chamfer the ends of the Internal Tube to fit over the washers.* Snap the tube onto the buttons.
 6. Remove the Head Rest Assembly and cover the Seat Back Frame. Refer to **Seat Assembly**.
 7. After covering, find the locations of the 4 Rivet-nuts and melt through with the tip of a soldering iron or hot knife.
 8. Bolt on the Headrest Frame with the Internal Brace Tube in place.
 9. Slip the Headrest Cover over the frame and close the Velcro.

OPTIONAL SHORTER PILOT SEAT ASSEMBLY

- Wipe all parts down with acetone to remove markings before assembly.
 - All parts must have their edges sanded smooth with 120 grit sandpaper.
 - Paint or polish as desired.
1. Become familiar with the Optional Shorter Pilot Seat Assembly **Parts Drawings** and collect the parts shown in the drawings.
 2. Follow the directions for the standard Seat Assembly, but replace Seat Back Attach Gusset - Standard (KPST0080) with Seat Back Attach Gusset – Small (KPST0110). **NOTE:** *The Seat Back Frame will mount in a location farther forward on the gusset than on the standard Seat Assembly.* Refer to **FIGURE 11C-02**.