

1. INITIAL PREPARATION

- A. Remove flaps, ailerons, and landing lights. Remove wings from airplane.
- B. Strip fabric from wings--save all P. K. Screws for reuse.
- C. Thoroughly inspect bare wing structure for any damage, and make necessary repairs according to C. A. A. specifications. NOTE: If leading edge is damaged, and must be replaced, make replacement at this stage, using clecos to hold new leading edge in place.
- D. Remove and flush all rivets in lower spar caps, that attach the ribs to the spar, and the doublar at rear strut attach point. In area of aileron and flap hinge, remove doublar from lower side of rib if desired.
- E. Check rib caps with straight edge. The rib caps should be straightened so that the straight edge fits flat across ribs caps when placed in a span wise position. CLEAN ALL STRUCTURE.
- F. Rig the wings on suitable saw horses, with the upper side of the wings up. Level both wings spars, both lengthwise and crosswise. Place straight edge across the outboard ends of main spars. Before placing bevel pretractor on straight edge, set the pretractor for 2 1/2 degrees. Place the pretractor on the straight edge, and raise the trailing edge spar (only) at the out board end, until the bubble in the bevel pretractor indicates that the 2 1/2 degrees have been obtained. (See illustration on installation drawing.)
- G. Clamp wings securely to sawhorses.

2. Placing & drilling Top Skins (Use #40 Drill)

- A. For wings with large gasoline tanks, trim top skins #1, both left and right to fit tank bay area.
- B. If AN 470 AD Rivets are to be used, lay shim strips, furnished with the kit, the length of the groove in rib caps, and tack rivet, using flush rivets.
- C. Lay top #1 right or left skin in place, maintaining 1/2" lap on leading edge, above outcuts for ribs, and align with ribs.
- D. Drill leading edge through pilot holes in skin, then drill ribs from front to back on all ribs concurrently. Secure with clecos while drilling. Use wooden block to maintain pressure on skin against rib while drilling, maintaining approximately 1.50" hole centers.
- E. Drill trailing edge and cleco. Note: Use this drilling sequence on all skins except Tip Skins.
- F. Place and drill all skins in sequence of their numbers, placing all skins in position as to location, right and left, top or bottom, and as to numbers shown on drawing #R-1007, with chromated side of skins facing inboard.
- G. Place top tip skin in position, drill through pilot holes and cleco, starting at the leading edge and drill around tip, and last rib, adding clecos progressively. Do not buckle or warp skins. Keep skins, as smooth, and tight as possible at all times.
- H. Remove top skins.

3. PLACING AND DRILLING BOTTOM SKINS (USE #40 DRILL)

- A. Turn wings over, continuing to maintain the 2 1/2 degrees warp, as when fitting the top skins.
- B. Place Bottom #1 Skin, left or right in position, and drill through pilot holes and cleco. Maintain 1/2" lap over leading edge.
- C. Assemble, drill, and cleco, in the same sequence as for the top skins.
- D. Treat Bottom Tip Skins in same manner as Top Tip Skins.