

STANDARD MANUFACTURING PROCEDURE : **WING INSTALLATION**

1. POSITION THE FUSELAGE SO AS TO ALLOW AMPLE WORKING ROOM AROUND THE AIRCRAFT. BLOCK THE WHEELS TO PREVENT MOVEMENT WHILE WORKING.
2. CONFIRM THAT ALL WING AND MAIN SPAR SPLICE I.D. NUMBERS MATCH.
3. PLACE THE WINGS ON AN APPROPRIATE STAND (TWO SAW HORSES PER WING) ENSURING THAT THE LOWER WING SKIN IS PROPERLY PROTECTED. CHECK BOTH WING WIRING AT THE I.B. INCLUDING CONTROL CABLES ETC. ENSURE THAT THERE IS NOTHING LOOSE IN THE WING AND THAT ALL SHAVINGS ARE REMOVED.
4. INSPECT THE MATING SURFACES OF THE MAIN AND WING SPARS TO ENSURE THAT THERE ARE NO BURRS OR OTHER ROUGHNESS.
5. LIGHTLY LUBRICATE THE MATING SPAR SURFACES .
[Any light mineral engine oil is suitable]
6. SLIDE THE WING SPARS INTO THE MAIN SPAR ENSURING THE FOLLOWING;
 - A] FEED THE CONTROL CABLES, PITOT/STATIC LINES , FUEL LINES AND ELECTRICAL WIRES THROUGH THE HOLES IN THE FUSELAGE .
 - B] SLIDE STRAIGHT , DO NOT BEND OR TWIST THE WING.
 - C] AT THE TOP AND BOTTOM WING ROOT, TRIM THE SKINS SO THAT THERE IS ABOUT A 15MM GAP. THE WING ROOT SEAL WILL COVER IT UP.
 - D] PUSH GENTLY PAYING ATTENTION TO THE “FEEL”. YOU DO NOT WANT TO JAM THE EDGE OF THE WING SKIN INTO THE FUSELAGE.

7. INSTALL A WING BOLT IN THE MAIN SPAR ATTACHMENT BOLT HOLE.

GENTLY RAISE AND LOWER THE WING TIP TO ASSIST IN ALIGNING THE LOWER I. B. BOLT HOLES, INSERT A WING BOLT.

INSTALL ALL THE OTHER BOLTS IN THE MAIN SPAR DO NOT INSTALL NUTS AT THIS TIME.

8. ATTACH THE MEASURING CABLE TO THE LOWER RUDDER HINGE BOLT. MEASURE TO THE WITNESS MARK NEAR THE WING TIP OF EACH WING TO SET THE WING SWEEP. THE MARK IS LOCATED 3,805MM FROM THE START OF THE MAIN INBOARD SPAR. SEE 640-V-0. LOCK IN POSITION BY CLAMPING THE FRONT SPAR ATTACHMENT BRACKETS TOGETHER.

9. TO SET THE WING INCIDENCE , PLACE THE DIGITAL PROTRACTOR ON TOP OF THE WING, NEAR THE REAR FOR REAR RIBS (IN FRONT OF THE REAR SPAR) . THERE MUST BE 14 DEG. FROM THE TOP FUELAGE LONGERON. THE TRAILING EDGES OF BOTH WINGS SHOULD ALIGN AT THE SAME POSITION ON EITHER SIDE OF THE FUSELAGE.

ADJUST THE INCIDENCE BY RELEASING THE CLAMP ON THE FRONT SPAR ATTACHMENT BRACKET AND LIFTING OR LOWERING THE LEADING OR TRAILING EDGE OF THE WING. THE PRIMARY CONSIDERATION WHEN SETTING THE INCIDENCE IS THAT BOTH LEFT AND RIGHT WING ARE SET IDENTICALLY RECLAMP THE ATTACHMENT BRACKETS.

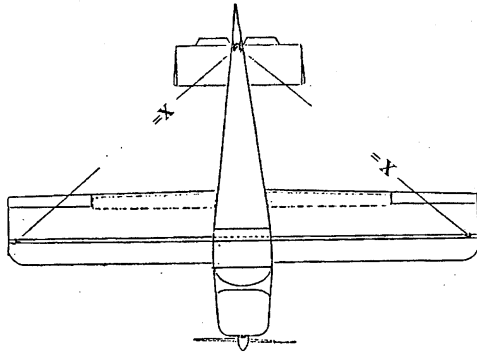
10. CONFIRM THE SETTING ESTABLISHED IN STEP #8.

CHECK THE POSITION OF THE FRONT AND REAR SPAR ATTACHMENT BRACKETS TO VERIFY THAT PROPER EDGE DISTANCE WILL BE MAINTAINED AFTER DRILLING THE ATTACHMENT BOLT HOLES. DRILL AND DEBURR THE BOLT HOLES . INSTALL AND TIGHTEN ALL WING ATTACHMENT BOLTS. (CHECK THE MINIMUM EDGE DISTANCES)

11. CONNECT ALL WIRES , CABLES, AND HOSES.

12. NOTE: ALL MAIN SPAR BOLTS AN6 ARE TORQUED TO 160-190 INCH POUNDS

PROCEED TO FLAP AND AILERON ADJUSTMENTS.



X= 5760mm + / - 25mm

SEE DRAWING 640-V-0

WORK DONE BY: _____

DATE: _____

INSPECTED BY: _____

DATE: _____