



BUILDERS MANUAL ADDENDUM

ADDENDUM NUMBER: W001
EFFECTED MANUAL Wing
SUBJECT: Wing rigging
DATE: March 2005

An easier and more accurate way to rig the wings using a “dumpy level”.

USE IN CONJUNCTION WITH WING RIGGING MANUAL

Technique:

As per manual, get the aircraft in flying attitude (belly of aircraft horizontal in pitch & roll axis). Remember the roof can be used for left/ right (roll axis) but cannot be used for front to rear (pitch axis), as the front carry through spar is lower than the rear spar!

Wing Sweep (sketch PLAN VIEW)

1. Set up the dumpy, approximately 200mm ahead of the front carry through spar and 1m out from the wing tip. (See top sketch)
2. Set the dumpy so that distance A to the roof spar is the same. This will ensure that the roof truss is parallel with the dumpy sight line.
3. Put a straight edge on the edge of the spar (at roof) and take a reading, move the straight edge to the wing tip, move the spar rearwards or forward until the same reading as B is obtained.
4. Move to the opposite wing. In the end all B readings must be within reasonable tolerance.
5. Check sweep by measuring from tail post to wing tip. (as per manual)
6. Drill front spar TOP Holes as per manual.

Wing Dihedral (sketch FRONT VIEW)

1. Move the dumpy to the front of the frame. About 3m+.
2. Get the plane level, flying attitude. (Use dumpy to measure from floor tubes)
3. A = roof, front spar, level.
B = Dumpy reading, from bottom of spar, on ruler.
C = add 60mm to reading B, at 2170mm from spar root, this will give 1.5° dihedral (where lift strut bracket attaches)
D = add 104mm to B at wing tip; this will give 1.5° dihedral.
4. Clamp the front lift strut brackets in position. When readings verified, drill through front spar bolt.

Wing Washout

1. At wing tip, rear spar, add 16mm to reading B+D. this will give 1° washout. (16mm as built into wing)

