

## Hovey Whing-Ding II – UK Modifications

This is a list of Modifications which were applied to the UK version of the Hovey Whing-Ding II **G-MBAB** (PFA Project No. 116-10706) which are shown as either Mandatory (M) or Optional (O) to enable limited compliance with BCAR Section 'S'. Whilst it was built under PFA rules, and a Permit-to-Fly was issued, it was never accepted as a PFA Approved type.

UK builders should note that after 2007 the Whing-Ding can be built as a **Sub-115kg de-regulated microlight (SSDR)** not requiring any formal certification provided the weight is kept below 100Kg (not difficult). This means that all the Modifications shown as 'Mandatory' are not any more. However they do remain Highly Recommended.

### Wings

HWD2/W1/M	Wing leading edge strengthened to Drawing 104A.
HWD2/W2/M	Fourth wing spacer added at Wing Station 94.
HWD2/W3/O	Wing strut end-fittings improved by the addition of rod-end bearings, to Drawing 106-11A.

### Fuselage

HWD2/F1/M	Fuselage Rear Boom Tube – increase diameter to 3 ¼” <u>or</u> increase wall thickness to 18swg (0.048”).
HWD2/F2/M	Fit basic instruments – Altimeter, ASI, Compass, and RPM indicator. CHT and EGT are recommended.
HWD2/F3/M	Fit a fuel gauge visible from the cockpit.
HWD2/F4/M	Fit a fuel cock operable from the cockpit.
HWD2/F5/M	Fit a full four-point shoulder harness.
HWD2/F6/O	Move the seat forward and extend the front fuselage to keep the CG correct if a heavier engine is fitted.
HWD2/F7/O	Add inspection panels in the top and bottom skins for all flying and landing wire attachments, and for the rear bearing.
torque tube HWD2/F8/O	Install a higher power engine than the McCulloch 101. Any engine of 22-30hp should suffice with a reduction unit max prop diameter of about 54”.
and a HWD2/F9/O	Fit rigging pins through the fuselage bulkheads and spar ends to aid assembly and rigging.
HWD2/F10/O	Replace ply seat with moulded plastic seat.

## **Undercarriage**

HWD2/U1/O	Move the u/c back by about 2" to improve the ground handling and to relieve the ground loads on the boom tube.
tailwheel and HWD2/U2/O	Fit bigger main-wheels (up to 4.00 x 4) to cope with grass surfaces (wheelbarrow wheels).
HWD2/U3/O	Add brakes if using a tailwheel (see Mod HWD2/T6/O below)

## **Tail unit**

HWD2/T1/M	Replace the fin support (Pt. No. 105-10) with a different one eliminating the reverse curve (i.e. triangulating the structure). See Drawing 105-10A.
HWD2/T2/M	Reduce the tail ply doubler thickness (Stabiliser and Rudder) to 1.5mm if using the built-up tail unit.
HWD2/T3/M	Replace the rudder hinge lacing with metal hinges.
HWD2/T4/M	Raise the lower rudder batten to clear the elevator horn at full left rudder deflection and full up elevator to eliminate mutual interference.
HWD2/T5/O	Connect the rudder to the tailwheel torque tube via a spring-damped system.
HWD2/T6/O	Use a tailskid instead of a wheel if operating exclusively from grass.
HWD2/T7/O	Add suspension to the tailwheel fork unit.

## **General**

HWD2/G1/M	Upgrade all cable sizes – 3/32" to 1/8" and 1/16" to 3/32".
HWD2/G2/M	Ensure that all moving bolts in the control circuits are fitted with castle nuts and split-pins, not stiff-nuts (Simmonds or Nyloc).

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Builder of G-MBAB and BMAA Orphan Godfather for the type.

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