# **GEARBOX BB 3:1 FOR MP JET ELECTROMOTOR AC 25/35 Mk2**

The gearbox BB 3:1, pinion wheel 3 mm dia (MPJ 8204) is recommended for use with electromotors MP JET AC 25/35 Mk2 type (MPJ 20104-20109). The gearbox has two ball bearings. For folding the propeller use one of the propeller spinners with a collet 3 mm dia, for non folding propeller a collet prop adapter MPJ 8030 or 8031 – select the type of the collet directly for your propeller (MPJ 8030 for APC - narrow hub, MPJ 8031 for other - wide hub).

#### ASSEMBLING ELECTROMOTOR WITH GEARBOX

It is not necessary to adjust the length of the output shaft of the driving electromotor.

For glueing the pinion wheel use suitable glue (for example Loctite 638 or Weicon LOCK AN 306-38). It is necessary to remove the grease from both parts (the pinion wheel and shaft) by acetone or benzine. The glue is hardened without air access and by the contact with metal surfaces in a small gap. The glue does not harden on a free surface but only after putting the pinion wheel on the shaft due to the catalytic effect of the metal. The pinion wheel could by manipulated after half an hour and the hardening is finished after 12 hours. The position of the front of the pinion wheel should fit the frontal part of the shaft. Maximum distance between the parts can be 0,1 mm. In case of repeated glueing all scraps of the glue should be removed. The metal surface should stay clean to keep the bind fixed. Put the electromotor with the pinion wheel into the gearbox to the backstop. Attach electromotor to gearbox with three screws M2x5 (put in packet). Use only this screws, (the screws longer than 5 mm can damage the winding or the rotor). Electric wires should be protected from vibrations, press or pulling should be omitted and the bends should display the radius of at least 15 mm.

### MOUNTING DRIVE UNIT TO MODEL KIT

The electromotor with gearboxes mounting on the firewall with three PAN HEAD screws 2,2x13. The other possibility is using the front adapter MPJ 8037. The firewall must be rigid with cooling holes.

The gearboxes could be mounted using two methods:

- 1. standard mounting on the firewall with three radial lugs.
- 2. like standard electromotor dismount three PAN HEAD screws 2,2 x6,5, put the front adapter MPJ 8037, use the PAN HEAD screws 2,2x9,5. The complete gearbox with the front adapter is mounted like the standard electromotor on the firewall in the side fuselage.

Please make the holes in the front of the fuselage for air ventilation for cooling the electromotor.

# The mounting of the propeller:

For folding propeller use one of the propeller spinners with a collet 3 mm dia, for non folding propeller a collet prop adapter MPJ 8030 or 8031 – select the type of the collet directly for your propeller (MPJ 8030 for APC - narrow hub, MPJ 8031 for other - wide hub).

### MAINTENANCE

Lubricate the ball bearings with light machine oil, for gears quality machine grease is recommended. Please do not use the silicone type grease (or with PTFE), it would shorten the durability of the metal pinion wheel. Keep the gearboxes clean from dust.

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