

WESSEX Low-Cost 600RES ELECTRIC THERMAL MODELS

2018 brushless motor specification

The brushless drive train remains unchanged, purchased ONLY from RobotBirds. Price subject to change.

409682 VALUE OUTRUNNER D2826-6/A2212-06 2200Kv	£12.95
400265 Robotbirds BASIC -40A ESC	£11.55
400232 Programme Card (useful, but we can share)	£5.46

411615 Graupner folding prop 8x4.5 (20x11) (Graupner part number; 1335.20.11)	£12.96
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Note: This prop may now have a different spinner design.

The above to be used with our standard prop Graupner folding prop 8X4.5 (20x11) and spinner and 7 cell 2200 NiMH battery only from Component Shop.

Note: The ESC will probably come set up for Lipos, so it will need to be programmed for NiMH. (you will know if it is incorrect as the motor will not run continuously). The programme card is very useful in setting up the motor.

From 2018 we will use the CAM height limiter from Hyperflight, set at 30 seconds and 150m altitude: £40.50

<http://www.hyperflight.co.uk/products.asp?code=CAM&name=cam-height-limiter>

The brushed motor set-up is now discontinued.

The brushless motor shaft can be carefully pushed through to reverse the mounting (take care not to put a side load on the small ball race) in order to fit in the fuselage in the same way as the 600 can motor. Alternatively use a spare motor shaft (reversed) to push through in order to re-use the circlip. See below for more info.

Motor spec: RobotBirds ref: 409682; Model No. A2826-6; Kv 2200;
Shaft dia. 3.17mm; Rec prop 8x4; Battery 7.4v – 11.1v; Idle current 1.8A;
Load current 18.5A; Power 300W; Min ESC 30A; Approx thrust 730g.

Spare Shafts – 465233
Spare Bearings – 465121

Useful notes on shaft reversal from Denis Grocott:

Hi Chris,

I thought you might like to know that the part number you quoted for replacement motor shafts is correct. I recently bought 2 spare shafts and have used one of these for the procedure below to develop a technique for reversing the shaft and re-using the circlip. This means that the circlip can do its intended shaft retention job and the grub screws are 'back-up' not the only means of securing the shaft.

Items needed are motor/spare motor shaft/1.mm Allen key/broad bladed screwdriver/a 2in length of 14swg wire to use as drift/43 mm of 1/4 in diameter thick walled brass or aluminium tube which just slides over motor shaft.

I then used this procedure:-

- 1) Loosen both grub screws holding the shaft to the motor end case.
- 2) Remove the circlip. I used a screwdriver with a ¼in wide blade as a suitable lever – taking care to use some tissue around the motor to stop the circlip escaping around your workshop!
- 3) Attach this circlip to a spare motor shaft.
- 4) Slide the brass tube over the exposed motor shaft to support the ball bearing cage.
- 5) Place motor and tube between jaws of bench vice and press exposed part of shaft into the motor end case.
- 6) Remove from vice.
- 7) Hold the motor and brass tube vertically on a suitable hard surface and place the 14swg 'drift' on the end of the shaft. Tap firmly and move the shaft into the motor end case by about mm – this allows the new shaft to be aligned with existing one..
- 8) Grip the brass tube securely in the chuck of drill press and place the spare motor shaft under the motor against the end of the installed by inserting into the small recess in the end case. [this job could be done in a bench vice if the jaws open wide enough]
- 9) Ensure that the whole assembly is vertical and begin to operate the chuck lowering handle.
- 10) Continue pressing until the circlip just makes contact with the motor end case.
- 11) Remove motor and re-tighten the grub screws.
- 12) Retrieve the old shaft from inside the brass tube and keep as spare for 'next time'.
- 13) Job done.

Regards Denis Grocott

See: www.wessexaml.co.uk

<http://www.wessexaml.co.uk/home600res.html>

Chris Hague

February 2018