



B-25J MITCHELL ARF

B-25J EP CONVERSION

Following are some instruction notes for converting your Top Flite® B-25J ARF to electric power. These are only basic guidelines, so this procedure should be attempted only by modelers who have some experience scratch-building or making other modifications on their own.

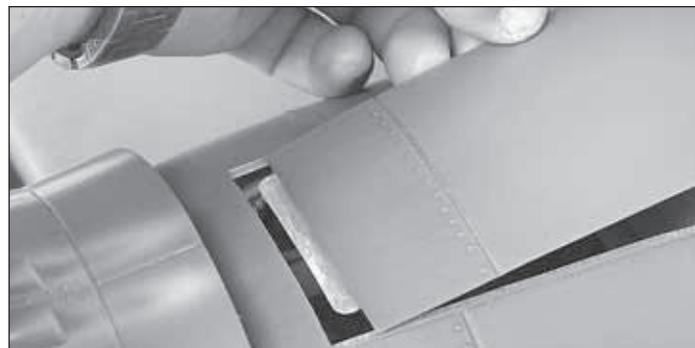
THESE ARE THE ITEMS ILLUSTRATED IN THIS CONVERSION:

- 1. Motor mount (2) Great Planes® (GPMG1255)
- 2. Prop Adapter (2) Great Planes (GPMQ4906)
- 3. Motor (2) RimFire™ (GPMG4715)
- 4. ESC (2) Castle Creations (CSEM2010)
- 5. Dean's Ultra (4) Male (WSDM3000)
- 6. Dean's Ultra (2) Female (WSDM1302)
- 7. 3200mAh Lipo (2) 7.2V (GPMP0622)
- 8. 3200mAh Lipo (2) 11.1V (GPMP0623)
- 9. 12" Adhesive back Velcro® (2) GPMQ4480

STEPS FOR COMPLETION



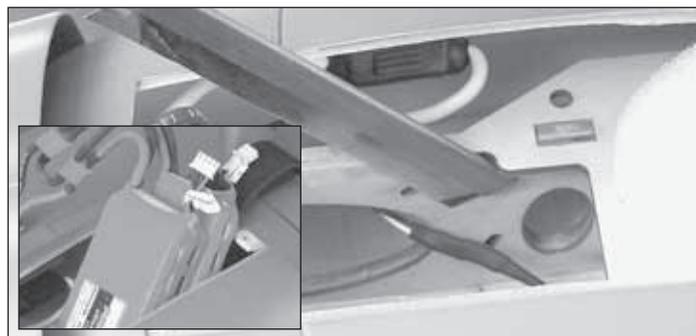
1. Cut the hatch in the bottom of both engine nacelles 4" x 3" between the back of the cowling and landing gear door with a thin razor saw. Keep this neat because you are creating a finished edge with the cut. Use masking tape along the edge while cutting to provide a guide and keep the edge clean.



2. Install two (2) pieces of G-10 or 1/64" ply to the sides of the opening to form a ledge for the hatch to sit on. Then, install one (1) piece to the end of the hatch to lip under the front edge to lock the hatch in front.



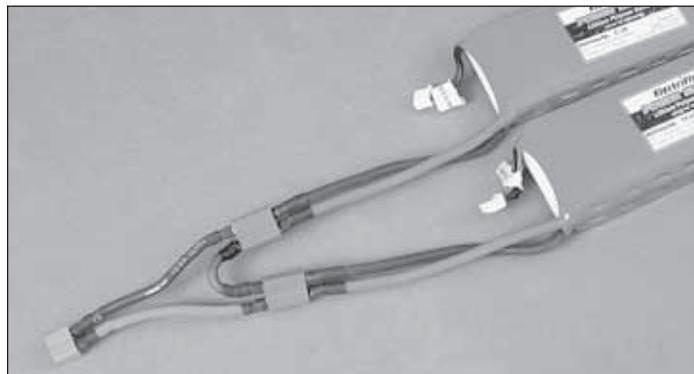
3. Install two (2) small pieces of 1/16" scrap ply under the inside edge of the nacelle to accept the hatch hold down screws. There are several aftermarket hatch latches that will work well also.



4. Cut and remove the middle cross member in the tank floor to provide room for the batteries to mount diagonal and secure them with double-sided Velcro attached to the sub structure of the nacelle.

ELECTRIC POWER SYSTEM SPECIFICATIONS

Motor: RimFire out-runner 42-60-480kv
ESC: Castle™ Creations 80Ah



Battery: Electrify™ 2-cell (7.4v – 3200mAh) and
ElectriFly 3-cell (11.1V, 3200mAh) in series
delivering 18.5V at 20C.
Plug: All Deans Ultra, 12ga wire stranded
Prop: Master Airscrew 14" x 7" three blade

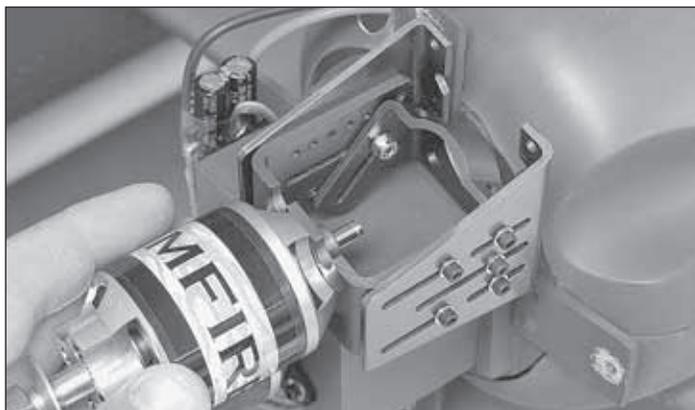
Tested Performance:

Motor rpm max: 7800
Motor rpm min: 1100
Amp draw max: 42
Watts: 680

GOOD LUCK AND HAVE FUN



❑ 5. Drill a 1/2" hole in lower right front of the nacelle (from the pilots seat) to make an exit for the ESC leads.



❑ 6. Mount and secure the adjustable motor mount in the existing glow mounting holes and the pre-installed blind nuts. This procedure will help maintain proper engine thrust angles already built into the airframe.

❑ 7. Mount the motor to the mount and adjust the motor forward to clear the front lip of the cowling from the prop. Mount the ESC to the right side of the mount with adhesive Velcro and route the wires into the battery compartment.

❑ 8. Test fit the cowling to check the clearance of the prop. Blades should be no closer than 1/8".

❑ 9. Connect all servo and ESC leads as with any normal radio and EP installation. The ESC servo leads can be connected with a "Y" together and connected to the throttle port on your receiver. Remember to clip the "Hot" lead from the ESC (procedure shown in ESC manual) servo lead so the receiver will be powered only from the Rx battery and not the BEC. Leaving the hot lead attached from the ESC, can damage your receiver and/or the ESC.

❑ 10. Take time to properly set the C.G. before flight.

Also take time to properly balance your props prior to test flying. A prop that isn't balanced will be much more noticeable with an EP since the motor is essentially vibration free.

❑ 11. There is essentially no difference flying the B-25 with EP vs glow. With the setup and batteries outlined above you will easily get 8 to 10 minutes of flying time from a fresh battery charge. At 20 to 21 lbs. flying weight the B-25 will cruise nicely at 65% power, which will greatly increase your flight time.