Assembly and Operation Instructions

Before you begin, examine the components included with this kit. If any parts are missing, broken or defective, or if you have any questions about the gear drive, please call us at (217) 398-8970 and we’ll be glad to help. If you are calling for replacement parts, please look up the part numbers and have them ready when calling.

PARTS LIST - These are the parts included with this kit. Each of the parts is also available separately.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>GPMG0220</td>
<td>Great Planes ElectriFly T-400 1.7:1 Gearbox w/Prop Adapter</td>
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<tr>
<td>GPMG0325</td>
<td>Great Planes ElectriFly T-400 Motor</td>
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<tr>
<td>APCQ5018</td>
<td>APC 10 x 7 Slow-Flyer Propeller</td>
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<tr>
<td>(2) 2.6mm motor mounting screws</td>
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<tr>
<td>GPMM2020</td>
<td>Great Planes ElectriFly C-20 Mini High Frequency ESC w/BEC (speed control included only with ElectriFly T-400GD w/ESC system)</td>
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ASSEMBLY

Refer to this photo to mount the motor and gearbox to your plane.

1. Mount the motor and gearbox to the motor mount on your model using the 2.6mm screws included with this kit. Do not fully tighten the screws.

2. Slip the pinion gear onto the motor shaft. Align the pinion gear with the spur gear and tighten the set screw using a .050” hex wrench (for security, add a small drop of thread locking compound to the threads of the set screw before tightening).

3. Tighten the screws that hold the gearbox and motor to the motor mount. Spin the driveshaft on the gearbox. If it does not spin freely, loosen the motor mount screws and adjust the gearbox until the gear mesh between the pinion gear and the spur gear allows the system to operate smoothly. Tighten the screws.

4. Mount the prop adapter to the driveshaft. Use a 1.5mm hex wrench to tighten the set screw in the prop adapter. Be certain the set screw is locked onto the flat spot in the driveshaft. For additional security, add a small drop of thread locking compound to the set screw before installing it in the prop adapter.

5. Mount the propeller spacer and the propeller to the prop adapter and securely tighten the screw that holds on the propeller. Be certain to use the prop washer. **Note:** The propeller spacer is required with the APC propeller included with this kit, but may not be required for other propellers.

6. Follow the instructions included with the speed control to solder the speed control to the motor.

PRECAUTIONS

Unless specifically testing the operation of the motor, gearbox or propeller, remove the propeller from the model while performing setup or maintenance to the model in your shop.
Keep all body parts and loose clothing away from the gear drive while the battery is connected to the speed control.

Connect the battery to the speed control only when ready to fly. Never leave the battery connected to the speed control between flights.

Never place your body within the arc of the propeller when the battery is connected to the speed control. The motor may accidentally start without warning. Even though the plane is powered by an electric motor, the rotating propeller can cause serious injury.

After each flight, allow the motor and speed control to cool for at least 10 minutes.

If the rotating propeller should strike the ground, disconnect the battery and check the propeller for nicks and cracks. Plug the battery into the speed control and slowly start the motor, checking that the propeller shaft is not bent and the gears on the gear drive are not stripped.

**PROPELLER SAFETY INSTRUCTIONS**

Before installing the propeller, remove any flash along the edges of the propeller by scraping with a sharp knife.

With the propeller airfoil side forward, use the correct nut and washer to secure the propeller to the gear drive. Re-check after each flight.

Keep spectators at least 20 feet away from and out of the path of the rotating propeller.

Wear safety glasses and hand protection when operating model engines. Do not permit any objects to touch the moving propeller. Remain clear of the propeller arc.

Inspect the propeller after each flight. Discard any propeller that has nicks, scratches, or any other visible defect. Do not repair, alter, or modify the propeller.

Paint the tips of the propeller white to increase its visibility while turning.

**OPERATION**

Before mounting the propeller to the gearbox, test-run the system.

1. Follow the instructions included with the speed control to run the motor. Listen to the motor and gearbox for free operation. If necessary, adjust the gear mesh between the pinion gear and the spur gear by loosening the motor mount screws and adjusting the position of the gearbox.

2. Make certain the propeller shaft on the gearbox turns counter-clockwise when the throttle is advanced. If not, follow the instructions included with the speed control to reverse the direction of the motor.

3. Due to a short break-in period, the motor and gearbox will not produce full power until after the first few flights.