RAMBLER EP

Speed 400 motor
Requires: 4-channel radio w/ 4 micro servos
15A speed controller and 7-8 cells 1000 mAh hump pack battery

--- Specifications ---

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing Span</td>
<td>39.5 in / 1000 mm</td>
</tr>
<tr>
<td>Wing Area</td>
<td>259 sq in / 16.7 sq dm</td>
</tr>
<tr>
<td>Flying Weight</td>
<td>22 oz / 620 g</td>
</tr>
<tr>
<td>Fuselage Length</td>
<td>31.5 in / 805 mm</td>
</tr>
</tbody>
</table>

*Specifications are subject to change without notice.*

Warning! This model is not a toy.
It is designed for maximum performance. Please seek advice if one is not familiar with this kind of electric powered precision model. Operating this model without prior preparation may cause injuries. Remember, safety is the most important thing. Always keep this instruction manual at hand for quick reference.
BEFORE YOU BEGIN

Read through the manual before you begin, so you will have an overall idea of what to do.

Check all parts. If you find any defective or missing parts contact your local dealer. Please DRY FIT and check for defects for all parts that will require CA or Epoxy for final assembly. Any parts you find to be defective after the gluing process may be difficult to remove for warranty replacement. The manufacturer will replace any defective parts, but will not extend to the parts that are good before gluing to defective parts during assembly. Warranty will not cover any parts modified by customer.

Symbols used throughout this instruction manual comprise of the following:

- **AB**: Apply epoxy glue.
- **C.A**: Apply instant glue (C.A.glue, super glue.)
- **Apply thread locker**
- **Ensure smooth non-binding movement while assembling.**
- **Assemble left and right sides the same way.**
- **Cut off shaded portion.**
- **Peel off shaded portion covering film.**
- **Must be purchased separately!**
- **Drill holes with the specified diameter (here: 3mm).**
- **Pierce the shaded portion covering film.**
- **Pay close attention here!**
- **Warning!** Do not overlook this symbol!
## Parts List

1. MAIN WING – 1 pc.
2. PUSHROD Ø1.4x58mm w/ Threads (For Aileron) – 2 pcs
   - FUEL TUBE Ø4x4mm – 4 pcs
   - STRAPER – 2 pcs
   - CLEVIS – 2 pcs
   - HORN – 2 pcs
   - SCREW PM2x16mm – 4 pcs
3. FUSELAGE – 1 pc.
   - STABILIZER & ELEVATOR – 1 set
4. VERTICAL FIN & RUDDER – 1 set
5. TAIL LANDING GEAR – 1 set
6. PUSHROD Ø1.4x425mm w/ Threads (For Rudder) – 1 pc.
   - CLEVIS – 1 pc.
   - FUEL TUBE Ø4x4mm – 1 pc.
   - HORN – 1 set
   - SCREW PM2x8mm – 2 pcs
7. PUSHROD Ø1.4x405mm w/ Threads (For Elevator) – 1 pc.
   - CLEVIS – 2 pcs
   - FUEL TUBE Ø4x4mm – 1 pc.
   - HORN – 1 pc.
   - SCREW PM2x8mm – 2 pcs
8. SPEED 400 MOTOR – 1 set
   - 400 GEAR BOX – 1 set
   - PROPELLER – 1 pair
   - SPINNER Ø36mm – 1 set
   - COWLING – 1 pc.
   - SCREW PWA2x8mm – 4 pcs
8A. M2 NUT – 4 pcs
   - SCREW PM2x22mm – 4 pcs
   - WASHER d2x05mm – 8 pcs
   - PLYWOOD (F1A) 3x53x54mm – 1 pc.
   - PLYWOOD (F1B) 3x30x36mm – 1 pc.
   - CARBON FIBER TUBE d3x05x11mm – 4 pcs
9. STRAPER – 2 pcs
   - FUEL TUBE Ø4x4mm – 2 pcs
   - SPONGE 10x50x150mm – 1 pc.
   - BATTERY TIE 200mm – 1 pc.
   - DOUBLE-SIDED TAPE 30x35mm – 1 pc.
10. PLYWOOD 2x20x64mm (Wing Protection) – 1 pc.
   - SCREW PM2.5x16mm – 2 pcs
   - WASHER d2.5x08mm – 2 pcs
11. MAIN LANDING GEAR – 1 set
   - LANDING WIRE STRAPS PL411030 – 2 pcs
   - SCREW PA2.3x12mm – 4 pcs
   - MAIN WHEEL Ø40mm – 2 pcs
   - COLLAR Ø2.6mm w/ set screw – 2 sets
12. CANOPY – 1 pc.
   - SCREW PWA2x8mm – 4 pcs

**COVERING:**
- LIGHTEX SGX 196000 COVERING-RAMBLER EP
- LIGHTEX SGX 100 WHITE
1 Main Wing

! Bottom View

- Apply instant type CA glue to both sides of each hinge.

2 Aileron Servos

PM2x16mm Screw 4

 Ø1mm pilot holes for World Models tri-horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.

L/R

! Bottom View
3 Stabilizer & Elevator
Temporary install the main wing, adjust leveling of the stabilizer to make it as parallel to the main wing as possible.

- Apply instant type CA glue to both sides of each hinge.

4 Vertical Fin & Rudder

- Apply instant type CA glue to both sides of each hinge.
5 Tail Landing Gear

- Bottom View

6 Rudder Pushrod

- Ø 1mm pilot holes for World Models tri-horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.

- Bottom View

7 Elevator Pushrod

- Ø 1mm pilot holes for World Models tri-horn are pre-drilled. Please look for pin-hole marks at under side of control surfaces.

- Bottom View
8 Motor / Cowling

- This step is for Geared Speed 400 motor set up. Please follow step 8A for Direct Drive Brushless motor set up.

1. Sock Head Screw
2. PM2x12mm Screw
3. PWA2x8mm Screw
4. PA2.6x10mm Screw
5. M2 Nut
6. d2x05mm Washer
7. 3mm Set Screw

- TO ALLOW FOR BACKLASH OF MATCHING GEAR, PUT A PIECE OF THIN PAPER BETWEEN THE GEARS AND THEN TIGHTEN THE M2.6X7mm SCREWS. REMOVE THE PAPER BEFORE FLYING.

8A Brushless motor / Cowling

- This step is for Direct Drive Brushless motor set up. Please follow step 8 for Geared Speed 400 motor set up.

1. PM2x22mm Screw
2. M2 Nut
3. d2x05mm Washer
4. d2x05x11mm Carbon Fiber Tube
5. Brushless motor
6. N.I.
7. Competed
9 Radio Equipment

![Diagram of radio equipment components]

10 Main Wing

**PM2.5x16 mm Screw**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>d2.5 x D8 mm Washer</td>
</tr>
</tbody>
</table>

![Diagram of main wing components]

Wing Protection 2x20x64 mm

11 Main Landing gear

**PA2.3x12 mm Screw**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>2.6 mm Collar</td>
</tr>
<tr>
<td>2</td>
<td>3 mm Set Screw</td>
</tr>
</tbody>
</table>

![Diagram of main landing gear components]
12 Canopy

PWA2 x 8mm Screw

13 Wing Setting

- Adjust the wing and fuselage configuration as shown in the diagrams.

A = A'  B = B'  C = C'
14 Control Throws

Adjust the control throws as shown in the diagram. These throws are good for general flying. You can adjust according to your personal preference.

15 C.G.

The ideal C.G. position is 58mm (2.28 in.) behind the leading edge measured at where the wing meets the fuselage. In order to obtain the C.G. specified, add weight to the fuselage or move the battery position. Check the C.G. before flying.

! Warning!
Important Safety Precautions

# First time flyer should never fly by himself/herself. Assistance from experienced flyer is absolutely necessary.

# Pre-flight adjustment must be done before flying, it is very dangerous to fly a badly pre-adjusted aircraft.

# RAMBLER EP is specially designed to be powered by geared speed 400 motor.

# Make sure the air field is spacious, never fly the plane too close to people and never get too close to a running propeller.

# If you find wrinkles on the covering as a result of weather changes, you can use hot iron to remove the wrinkles. Please begin with lower temperature setting and gradually raise the temperature until the wrinkles are gone. Too hot an iron may damage the covering.

# Check and re-tighten up all factory assembled screws, use thread locker if applicable.
Product Registration Form (US Customers)

We would like to share with you any relevant information regarding your model, including product news and free upgrade parts when applicable. Please fill in the following and send to AirBorne Models, 4749-K, Bennett Drive, Livermore, CA 94551 USA.

1. Name:____________________________________________________________
2. Address:_________________________________________________________
3. Phone #:_________________________ E-mail: _______________________
4. Model:___________________________________________________________
   Wing QC# _________ Fuselage QC# ________________________________
   (QC numbers are stamped on wing and fuselage)
5. Date of Purchase:__________________________________________________
6. Store Name:______________________________________________________

Please call AirBorne Models at 925 371 0922 for any assistance in filling this form. Thank you very much for purchasing our product.