INSTRUCTION MANUAL

ALMOST-READY-TO-FLY

T-34
MENTOR

Requires: 0.40-0.55 cu. in. displacement 2-stroke
0.52-0.56 cu. in. displacement 4-stroke
4-channel radio w/ 5 standard servos

Specifications

- Wing Span: 58.0 in / 1470 mm
- Wing Area: 577 sq in / 37.2 sq dm
- Flying Weight: 5.0-5.5 lbs / 2200-2500 g
- FuseLage Length: 48.0 in / 1220 mm

*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 engine 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.

The World Models Manufacturing Co., LTD.
www.theworldmodels.com

FACTORY PRE-FABRICATED
ALMOST-READY-TO-FLY(ARF) SERIES
MADE IN CHINA
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.
- **CA**: Apply instant glue (C.A. glue, super glue.)
- **N.I.**: Must be purchased separately!
- **L/R**: Assemble left and right sides the same way.
- **L/R**: Ensure smooth non-binding movement while assembling.
- **Covering Film**: Peel off shaded portion covering film.
- **3mm**: 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 pair
2. SCREW PB2x14mm – 4 pcs
   SCREW PB2x10mm – 2 pcs
   SCREW PWA2.6x8mm – 6 pcs
   CLEVIS PL4112103 – 2 pcs
   STRAPER PL4112102 – 2 pcs
   FUEL TUBE Ø6x5mm – 4 pcs
   TRI-HORN M3x14mm (L) PL4111185 – 2 sets
   PUSHROD Ø1.8x665mm w/ Threads (For Rudder) – 1 pc.
   WASHER d3xD7mm – 4 pcs
   SCREW PWA2x8mm – 8 pcs
   SCREW PB2x12mm – 3 pcs
   PUSHROD Ø1.8x665mm w/ Threads (For Rudder) – 1 pc.
   COLLAR Ø3.6mm w/ set screw – 4 sets
3. WING JOINER 6x16x84.5mm – 1 pc.
4. MAIN LANDING GEAR – 1 pair
   SCREW PA3x12mm – 8 pcs
   MOUNTING PLATE (For Landing Gear) PL4114020 – 4 pcs
5. MAIN WHEEL Ø50mm – 2 pcs
   COLLAR Ø3.6mm w/ set screw – 4 sets
6. FUSELAGE – 1 pc.
   SCREW PA3x25mm – 1 pc.
   WASHER d3xD7mm – 1 pc.
   STABILIZER & ELEVATOR – 1 set
7. VERTICAL FIN & RUDDER – 1 set
8. FUEL TANK 320cc PL1111320 – 1 set
   CABLE TIE 1.5x5x400mm – 1 pc.
   DOUBLE-SIDED TAPE 40x100mm – 1 pc.
9. ENGINE MOUNT PL51111030 – 1 set
   SOCKET HEAD SCREW M3x25mm – 4 pcs
   WASHER d3xD7mm – 4 pcs
10. FRONT LANDING GEAR – 1 set
    FRONT WHEEL Ø50mm – 1 pc.
    COLLAR Ø4.1mm w/ set screw – 4 sets
    STEERING ARM PL4112401 – 1 set
11. SOCKET HEAD SCREW M3x25mm – 4 pcs
    WASHER d3xD7mm – 8 pcs
    M3 NUT – 8 pcs
    THROTTLE PUSHWIRE Ø1.2x430mm – 1 pc.
    PLASTIC TUBE d2xD3x380mm – 1 pc.
12. COWLJING – 1 pc.
    TRANSPARENT 3D TEMPLATE – 1 pc.
    SCREW PWA2.6x12mm – 4 pcs
    SILICON GROMMET d1.5xD6.5mm – 4 pcs
    SPINNER Ø57mm PL2111057 – 1 set
13. TRI-HORN M3x22mm (L) PL4111251 – 1 set
    CLEVIS PL4112103 – 1 pc.
    FUEL TUBE Ø6x5mm – 1 pc.
    SCREW PB2x14mm – 3 pcs
    PUSHROD Ø1.8x665mm w/ Threads (For Elevator) – 1 pc.
    COLLAR Ø4.1mm w/ set screw – 4 sets
14. TRI-HORN M3x14mm (L) PL4111185 – 1 set
    FUEL TUBE Ø6x5mm – 2 pcs
    STRAPER PL4112102 – 2 pcs
    FRONT WHEEL PUSHWIRE Ø1.2x430mm – 1 pc.
    PLASTIC TUBE d2xD3x380mm – 1 pc.
15. LINKAGE CONNECTOR Ø2.1mm HW111060 – 2 sets
16. PLYWOOD 6x82x117mm (For Fuselage Servos) – 1 pc.
    BALSA 9x9x104mm (For Servos Stand) – 2 pcs
    FUEL TUBE Ø6x5mm – 2 pcs
    STRAPER PL4112102 – 2 pcs
    FRONT WHEEL PUSHWIRE Ø1.2x430mm – 1 pc.
    PLASTIC TUBE d2xD3x380mm – 1 pc.
17. SPONGE 60x70x82mm – 1 pc.
18. CANOPY – 1 pc.
    SCREW PWA2.3x8mm – 6 pcs
    SILICON GROMMET d1.5xD6.5mm PL1265035 – 6 pcs
    PILOT PC001063A/B – 2 sets
    DOUBLE-SIDED TAPE – 1 pc.
19. SOCKET HEAD SCREW M3x25mm – 2 pcs
    WASHER d3xD12mm – 2 pcs
    PLYWOOD 3x45x90mm (Wing Protection) – 1 pc.
20. DECALS:A052DEC – 1 set

**COVERING:**

- TOUGHON STL 100 WHITE
- TOUGHON STL 201 BLACK
- TOUGHON STL 250 BLUE
- TOUGHON STL 312 B RIGHT RED
- TOUGHON STL 320 ORANGE
- TOUGHON STL 331 CUB YELLOW
2 Aileron Servo

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

- PB2x14mm Screw: 4
- PB2x10mm Screw: 2
- PWA2x8mm Screw: 8

Straper
Fuel Tube Ø6x5mm

PB2x10mm
Fuel Tube Ø6x5mm

PB2x14mm
Tri-horn M3x14mm(L)

Clevis

PWA2x8mm

Pushrod Ø1.8x115mm

Bottom View
3 Main Wing

- Please dry fit wing joiner into left and right wing to make sure they fit with the proper dihedral angle, mark the wing joiner if necessary. Apply epoxy glue to both sides of all surfaces in contact. Use a stick to apply the glue to inner side of wing joiner sleeve, and apply the glue to wing joiner before putting them together. Wing joiner not glued properly will lead to wing failure and plane crash.

Wing Joiner
6x1.6x84.5mm

4 Main Landing Gear

PA3x12mm Screw

8

Bottom View

5 Main Wheels

3.6mm Collar

4

3.6mm Collar
3mm Set Screw
6 Stabilizer & Elevator

Temporary install the main wing, adjust leveling of the stabilizer to make it as parallel to the main wing as possible.

7 Vertical Fin & Rudder

8 Fuel Tank
9 Engine Mount

![Diagram of Engine Mount]

- **M3x25mm Socket Head Screw**: 4
- **d3xD7mm Washer**: 4
- **Engine Mount PL51111030**

> Blind nuts are off-centered to keep the spinner at the fuselage axis.

10 Front Wheel

![Diagram of Front Wheel]

- **4.1mm Collar**: 4
- **3mm Set Screw**: 4
- **Front View**
- **Completed**

11 Engine

![Diagram of Engine]

- **M3x25mm Socket Head Screw**: 4
- **d3xD7mm Washer**: 8
- **M3 Nut**: 8
- **Plastic Tube**: d2xD3x380mm
- **Installed Engine Position**

If the engine throttle control is on the opposite side, install the throttle push-wire accordingly.

Install the throttle servo with the drive pinion on the same side of throttle push-wire.

Raise throttle servo if necessary to provide clearance between throttle and front wheel push-wire.
12 Cowling

- Please refer to the attached sheet for usage of the transparent 3D template.
- First insert the grommet to the cowling then apply screw.

13 Rudder Pushrod

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

14 Elevator Pushrod

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

- 3x3mm Set Screw: 2
- Linkage Connector: 2
- M2 Nut: 2
- 2mm Washer: 4

Throttle Pushwire

N.I. Throttle Servo

N.I. M2 Nut

3mm

2mm

1.5mm

Please refer to the attached sheet for linkage connector installation.

16 Servos

- Balsa 9x9x104mm
- Rudder Pushrod
- Elevator Pushrod
- Fuel Tube Ø6x5mm
- Plywood 6x82x117mm

Front Wheel Pushwire Ø1.2x430mm

Front View

Bottom View

17 Radio Equipment

- Install and arrange the servos as shown in the diagram. Intall Sponge for inserting Battery and Receiver.

Steering Arm

Fuel Tank 320cc

N.I. Charge Receptacles KP0041300

N.I. Throttle Servo

N.I. Rudder Servo

Rudder Pushrod

N.I. Elevator Servo

N.I. Battery

N.I. Receiver

Fuel Tube Ø6x5mm

Sponge

Bottom View
18 Canopy

- First insert the grommet to the canopy then apply screw.

Apply double-sided tape Pilot

19 Main Wing

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

20 Wing Setting
**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.

# T-34 is specially designed to be powered by 2C 0.40-0.55 / 4C 0.52-0.56 engine, using a more powerful engine does not mean better performance. In fact, over powered engine may cause structural damage and injuries.

# 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. Don’t use hot iron near the seams or edges, hot iron will melt the glue and shrink the covering at the same time, causing the seams to pull away.

# Check and re-tighten up all factory assembled screws, use thread locker if necessary.
Drill 2mm hole at servo horn.

Insert linkage connector into servo horn.

Make sure shoulder of screw is cleared from servo horn. Add washer to reduce play if necessary.

Tighten up the round nut against the shoulder. Apply CA or permanent thread locker.

After fastening the round nut, make sure that the linkage connector can rotate freely.

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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.
Usage of the transparent 3D template

This transparent 3D template is used for position guidance of the actual cutting of the pre-painted cowling.

1. Simply cut the transparent 3D template to fit your engine and exhaust pipe, then slide onto the actual cowling and use as template to mark the openings required for final cutting.
Optional Parts

( ACCESSORIES )

180mm Extension

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
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<tbody>
<tr>
<td>KW0011800</td>
<td>180mm</td>
<td>1 set</td>
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Fuel Filler

<table>
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<tr>
<td>PL8110030</td>
<td>15 x 22 x 49mm</td>
<td>1 x 1 pc</td>
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180mm Y-Cord

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<tr>
<td>KW0021800</td>
<td>180mm</td>
<td>1 pc</td>
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For park flyers of small electric models

Charge Receptacles

<table>
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Clevis Wrench

<table>
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<tbody>
<tr>
<td>PL8210010</td>
<td>1 set</td>
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Special tool for clevis installation. Suitable for standard and small (EP) clevis.

Standard Servo

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Size</th>
<th>Package</th>
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<tbody>
<tr>
<td>SV4031</td>
<td>Speed: 0.17 sec / 60° @4.8V 0.14 sec / 60° @6.0V</td>
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</tr>
<tr>
<td></td>
<td>Torque: 3.2kg.cm / 44.8 oz - in @4.8V 4.1kg.cm / 57.4 oz - in @6.0V</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Size: 40.6 x 20 x 37mm / 1.60 x 0.79 x 1.46 in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weight: 39.4 g / 1.39 oz</td>
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Field Stand

<table>
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<th>Code No.</th>
<th>Size</th>
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<tbody>
<tr>
<td>MS9111430</td>
<td>600 x 240 x 310mm</td>
<td>1 pc</td>
</tr>
</tbody>
</table>
Ducted Fan  Pattern

Warbirds  Funfly

Scale  Electric

Sports  Glider

Trainer  Boat

Accessories

Covering
(Lightex / Toughlon)

The World Models
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