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.
Jeff Troy’s TAMEcat Trainer 40 ARF

INDEX

BEFORE YOU BEGIN ......................................................... P.1
PARTS LIST ................................................................. P.2
ASSEMBLY ................................................................. P.3-P.11
SAFETY PRECAUTIONS ............................................... P.11

BEFORE YOU BEGIN

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

2 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.

3 Symbols used throughout this instruction manual comprise of the following :-

- **Application of Epoxy Glue**
- **Application of Instant Glue (C.A. glue, super glue.)**
- **Application of Thread Locker**
- **Must be purchased separately!**
- **Assemble left and right sides the same way.**
- **Ensure smooth non-binding movement while assembling.**
- **Peel off shaded portion covering film.**
- **Cut off shaded portion.**
- **Drill holes with the specified diameter (here: 3mm).**
- **Pierce the shaded portion covering film.**
- **Pay close attention here!**
- **Warning!** Do not overlook this symbol!

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Parts List

1. MAIN WING -- 1 set
2. WING JOINER 8x23x205.4mm -- 1 pc.
3. SCREW PB2x14mm -- 4 pcs
   STRAPER -- 2 pcs
   FUEL TUBE Ø6x5mm -- 4 pcs
   CLEVIS -- 2 pcs
   HORN (L) -- 2 sets
   PUSHROD Ø1.8x150mm w/ Threads (For Aileron) -- 2 pcs
4. STABILIZER & ELEVATOR -- 1 set
   FUSELAGE -- 1 pc.
5. VERTICAL FIN & RUDDER -- 1 pc.
   BALSA (Tail Skid) 6x26.3x172.9mm -- 2 pcs
6. MAIN LANDING GEAR -- 1 set
   COLLAR Ø4.1mm w/ set screw -- 4 sets
   WHEEL Ø65mm -- 2 pcs
   MOUNTING PLATE 12x20mm -- 4 pcs
   SCREW PA3x12mm -- 8 pcs
7. FRONT LANDING GEAR -- 1 set
   COLLAR Ø4.1mm w/ set screw -- 4 sets
   WHEEL Ø65mm -- 1 pc.
   STEERING ARM Ø4.1mm w/ set screw -- 1 set
   BOMB -- 1 pc.
   FRONT WHEEL PUSHROD Ø1.6x620mm -- 1 pc.
   PLASTIC TUBE d3xD4x320mm -- 1 pc.
8. ENGINE MOUNT PL5111030 -- 1 set
   SOCKET HEAD SCREW M4x25mm -- 4 pcs
   WASHER d4x9mm -- 4 pcs
9. FUEL TANK 320cc -- 1 set
   BALSA 8x8x101mm (For Fuel Tank Position Fixing) -- 1 pc.
   RUBBER BAND (6x60mm) -- 2 pcs
10. SCREW PM3x25mm -- 4 pcs
    WASHER d3xD7mm -- 8 pcs
    M3 NUT -- 8 pcs
    THROTTLE PUSHWIRE Ø1.2x900mm -- 1 pc.
    PLASTIC TUBE d2xD3x600mm -- 1 pc.
11. SCREW PB2x12mm -- 2 pcs
    FUEL TUBE Ø6x5mm -- 1 pc.
    CLEVIS -- 1 pc.
    HORN (L) -- 1 set
    PUSHROD Ø1.8x260mm w/ Threads (For Elevator) -- 1 pc.
12. SCREW PB2x12mm -- 4 pcs
    FUEL TUBE Ø6x5mm -- 2 pcs
    CLEVIS -- 2 pcs
    HORN (L) -- 2 sets
    PUSHROD Ø1.8x230mm w/ Threads (For Rudder) -- 2 pcs
13. LINKAGE CONNECTOR Ø2.1mm -- 2 sets
14. STRAPER -- 3 pcs
    FUEL TUBE Ø6x5mm -- 3 pcs
    SPONGE 10x80x200mm (For Radio Equipment) -- 2 pcs
    PLYWOOD 4x170x195.2mm -- 1 pc.
    SCREW PWA2x8mm -- 4 pcs
15. SOCKET HEAD SCREW M4x40mm -- 2 pcs
    WASHER d4.2xD14.5mm -- 2 pcs
    PLASTIC PLATE 1x25x120mm (Wing Protection) -- 1 pc.
16. COWLING -- 1 pc.
    TRANSPARENT 3D TEMPLATE -- 1 pc.
    SCREW PWA2.6x12mm -- 4 pcs
    SILICON GROMMET d1.5xD6.5mm -- 4 pcs
    SPINNER Ø62mm -- 1 pc.
17. COCKPIT -- 1 pc.
    SCREW PM3x16mm -- 2 pcs
    WASHER d3xD7mm -- 2 pcs
    PILOT (PC101050A) -- 2 pcs
18. DECALS A244DEC -- 1 set

COVERING:

TOUGHLON STL244FUS
TOUGHLON STL244STA
TOUGHLON STL244WIG
TOUGHLON STL100
LIGHTEX SGX311
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 pockets, and apply the glue to wing joiner before putting them together. Wing joiner not glued properly will lead to wing failure and plane crash.
3 Aileron Servos

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

4 Stabilizer & Elevator

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

*Also refer to step 18 Wing Setting
5 Vertical Fin & Rudder

- Pre-glued

6 Main Landing Gear

- PA3x12mm Screw: 8
- 4.1mm Collar: 4
- 3mm Set Screw
- Mounting Plate 12x20mm
- PA3x12mm 2mm

Completed

Bottom View

Completed

Bottom View
7 Front Landing Gear

- 4.1mm Collar
- Bottom View
- Front

Completed Front

- 3mm Set Screw
- Front Wheel Pushrod Ø1.6x620mm
- Plastic Tube d3xD4x320mm

Bomb

8 Engine Mount

- M4x25mm Socket Head Screw
- d4xD9mm Washer
- Engine Mount PL5111030

Blind nuts are off-centered to keep the spinner at the fuselage axis.
9 Fuel Tank

Install Balsa 8x8x101mm (For Fuel Tank Position Fixing)
Rubber Band

Fuel Tank 320cc

AB

10 Engine

PM3x25mm Screw
4
d3xD7mm Washer
8
M3 Nut
8

Installed Engine Position

Plastic Tube d2xD3x600mm

AB

PM3x25mm

4.25 in.

Rubber Band

Fuel Tank 320cc

Rubber Band

Fuel Tank 320cc

AB

d3xD7mm Washer

M3 Nut

Throttle Pushwire Ø1.2x900mm

N.I.
11 Elevator Pushrod

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

PB2x12mm Screw 2

12 Rudder Pushrod

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

PB2x12mm Screw 4

13 Servo Set

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

Front Wheel Pushrod
Throttle Pushwire

- Please refer to the attached sheet for linkage connector installation.
Install and arrange the servos as shown in the diagram.

Completed

Radio Equipment

14

Main Wing

15

- PWA2.6x12mm Screw
- Plywood 4x170x195.2mm
- PWA2.6x12mm
- M4x40mm Socket Head Screw
- d4.2xD14.5mm Washer
- d4.2xD14.5mm Washer
- Plastic Plate 1x25x120mm
- M4x40mm Socket Head Screw
- d4.2xD14.5mm Washer

Completed

Fuel Tube Ø6x5mm
- Straper
- Elevator Servo
- Throttle Servo
- Rudder Servo
- Nose Gear Pushrod
- Throttle Pushrod

Completed
**16 Cowling & Spinner**

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

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>PWA2.6x12mm Screw</td>
<td>4</td>
</tr>
<tr>
<td>d1.5xD6.5mm Silicon Grommet</td>
<td>4</td>
</tr>
</tbody>
</table>

- Please refer to the attached sheet for usage of the transparent 3D template.

**17 Cockpit**

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM3x16mm Screw</td>
<td>2</td>
</tr>
<tr>
<td>d3xD7mm Washer</td>
<td>2</td>
</tr>
</tbody>
</table>

**18 Wing Setting**

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

- A=A'
- B=B'
- C=C'

P.10
19 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.

Rudder

13mm HIGH RATE 8mm LOW RATE
13mm

Elevator

15mm HIGH RATE 9mm LOW RATE
15mm

Aileron

12mm HIGH RATE 8mm LOW RATE
12mm

20 C.G.

The ideal C.G. position is 100mm (4 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.

# Jeff Troy’s TAMEcat Trainer 40 ARF is specially designed to be powered by 2C 0.40-0.55 / 4C 0.52-0.72 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.
Usage of the transparent 3D template

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

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

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.

Shoulder

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

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.
There are only two kinds of airplanes — Fighters and Targets. Hello, Fighter Ace!

Thank you for purchasing my F-14 TAMEcat EP ARF from The World Models.

The original F-14 TAMEcat was a .40-size, nitro-powered model. The design was originally published as a plan set in Model Aviation magazine as a primary trainer with very gentle flight characteristics. Despite its jet-like appearance, the original F-14 TAMEcat is an ideal airplane for beginners to radio control flying. The .40-size F-14 TAMEcat Trainer ARF is also available from The World Models.

There are a few significant differences between that airplane and the EP version you have before you. Most important is that the F-14 TAMEcat EP ARF is not intended for use as a primary trainer, although it does have reasonably gentle flying characteristics when operated at lower motor speeds.

The EP model is much smaller than the original design, there is a lower dihedral angle in the wing, and its extreme lightness and high-power TWM brushless outrunner motor will allow the model to fly faster than I would recommend for basic flight training. If a true, primary training version of the TAMEcat is desired, please purchase the F-14 TAMEcat Trainer ARF from The World Models.

Now that you understand the differences between the electric-powered F-14 TAMEcat EP ARF and the larger, .40-size F-14 TAMEcat Trainer ARF for nitro (glow engine) power, here are a few suggestions for getting the best performance from your F-14 TAMEcat EP ARF.

1. **The nose gear is not steerable**, so the model’s nose should be pointed directly into the wind when attempting an ROG (Rise Off Ground) takeoff. Landings should also be made directly into the wind.

2. **If flying from a grass field**, try removing the main landing gear and the nose gear. This will save weight and reduce aerodynamic drag, thus improving the model’s overall flight performance.

3. **Please use the recommended 3S lithium-polymer battery**. Several flights were made using a less powerful 2S battery, and we found the power output of 2S batteries to be sub-standard for this model in wind conditions above dead calm.

4. **Finally, your F-14 TAMEcat EP ARF can be used satisfactorily as a flight trainer if flown with a qualified RC flight instructor**. At two-thirds to three-quarters power, the F-14 TAMEcat EP ARF is gentle and easily managed, and will satisfactorily fulfill a flight training role.

For flight training, the model should be equipped with a radio control system with a “buddy box” feature for the instructor, and the student pilot should use the buddy box controller. The correct connecting cable should be used between the transmitter and the extra controller.

When the student is competent, s/he should be able to handle the F-14 TAMEcat EP ARF unassisted. Please enjoy assembling and flying your F-14 TAMEcat EP ARF, and please follow all the model’s directions for many happy landings.

Once again, thank you for choosing the F-14 TAMEcat EP ARF.

Warmest regards,

Jeff Troy