

**Flyzone**<sup>TM</sup>  
how high will you soar



# playmate<sup>TM</sup> RTF

## ASSEMBLE ONLY WITH ADULT SUPERVISION

Please read through this instruction booklet to **THOROUGHLY** familiarize yourself with the assembly and flight characteristics of this airplane prior to assembly. Please inspect all parts carefully before starting assembly! If any parts are missing, broken or defective, or if you have any questions about the assembly or flying of this airplane, please call us at (217) 398-8970 and we'll be glad to help. ***This product is suitable only for people of 14 years and older.***

## WARRANTY

**Hobbico® Inc.** guarantees this kit to be free from defects in both material and workmanship at the date of purchase. This warranty does not cover any component parts damaged by use or modification. **In no case shall Hobbico's liability exceed the original cost of the purchased kit.** Further, Hobbico, Inc. reserves the right to change or modify this warranty without notice. In that Hobbico, Inc. has no control over the final assembly or material used for final assembly, no liability shall be assumed nor accepted for any damage resulting from the use by the user of the final user-assembled product. By the act of using the user-assembled product, the user accepts all resulting liability. **If the buyer is not prepared to accept the liability associated with the use of this product, the buyer is advised to return this kit immediately in new and unused condition to the place of purchase.** To make a warranty claim send the defective part or item to Hobby Services at the address below:

**Hobby Services**  
3002 N. Apollo Dr. Suite 1  
Champaign IL 61822 USA

Include a letter stating your name, return shipping address, as much contact information as possible (daytime telephone number, fax number, e-mail address), a detailed description of the problem and a photocopy of the purchase receipt. Upon receipt of the package, the problem will be evaluated as quickly as possible.

**FCC REQUIREMENT** This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions.



- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

**NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.**

### CE COMPLIANCE INFORMATION FOR THE EUROPEAN UNION

**Instructions for Disposal of Waste Equipment by Private Users in the European Union:** This symbol on the product or its packaging indicates this product must not be disposed of with other household waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or location where you purchased the product.



#### Declaration of Conformity:

Product: Tactic TTX402 2.4GHz 4-Channel Tx Rx

Item number: TACJ2402, Equipment class: 1



Tactic TTX402 transmitter and Tactic TR421 receiver: The objects of the declaration described here are in conformity with the requirements of the specifications listed below, following the provisions of the European 2006/95/EC Low Voltage Directive:

EN 60950-1:2006 Safety

The objects of the declaration described here are in conformity with the requirements of the specifications listed below, following the provisions of the European R&TTE directive 1995/5/EC:

ETSI EN 300 328 V1.7.1 Technical requirements for radio equipment

ETSI EN 301 489-1 V1.8.1, 301 489-17 V1.3.2 General EMC requirements for radio equipment

Tactic™  
c/o Hobbico, Inc.  
2904 Research Road  
Champaign, IL USA 61826

The associated regulatory agencies of the following countries recognize the noted certifications to this product as authorized for sale and use.

UK	DE	DK	BG	SE	FI	FR
EE	LV	LT	PL	CZ	SK	HU
RO	SI	AT	IT	ES	PT	IE
NL	LU	MT	CY	GR		

## PRECAUTIONS

Your Playmate should not be considered a toy, but rather a sophisticated, working model that functions very much like a full-size airplane. Because of its performance capabilities, the Playmate, if not assembled and operated correctly, could possibly cause injury to yourself or spectators and damage to property.

1. Operate the plane **according to instructions**. **DO NOT** alter or modify the model. If you make any modifications, you void your warranty.
2. **Test** the operation of the model **before each flight** to ensure that all equipment is operating properly and that the model remains structurally sound.
3. Fly only indoors or on very calm days (with wind speeds less than 5mph) and in large open areas free of trees, people, buildings, or any other obstacles.
4. Although the Playmate is designed to be successfully flown by the first time pilot, you may still benefit from the assistance of an

experienced pilot for your first flights. If you're not a member of an R/C club, your local hobby shop has information about clubs in your area whose membership includes experienced pilots. You can also contact the National Academy of Aeronautics (AMA) which has over 2,500 chartered clubs across the country. Instructor training programs and insured newcomer training are available through any of these clubs. Contact the AMA at the following address or toll-free phone number:

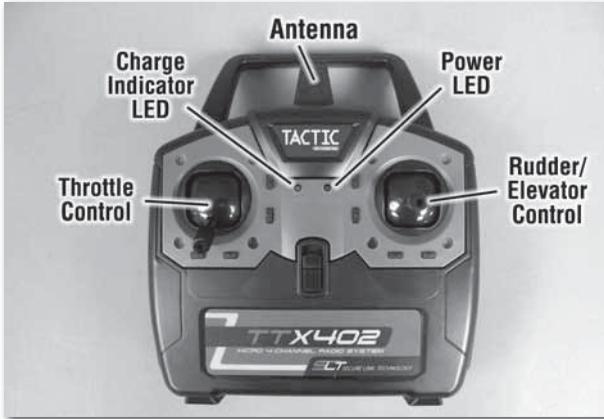


Academy of Model Aeronautics  
5151 East Memorial Drive  
Muncie, IN 47302-9252  
Tele. (800) 435-9262  
Fax (765) 741-0057  
[www.modelaircraft.org](http://www.modelaircraft.org)

The R/C model hobby becomes more and more enjoyable as your experience grows. Your chances for success and graduation to higher levels are very good if you take your time and follow the flying instructions carefully and completely. We hope you enjoy flying your Playmate plane.

## GLOSSARY

- **Lithium Polymer (LiPo) Battery:** Rechargeable battery which is used to power the airplane. LiPo batteries are lighter and smaller than most other types of rechargeable batteries.



- **Transmitter (TX):** This is the hand-held unit that sends the signal to the control unit, or RX.
- **Rudder:** Controls turning direction.
- **Elevator:** Controls altitude.

## UNPACK THE BOX

Check the parts against those shown below. If any parts are damaged or missing, give us a call at: (217) 398-8970.



## GET THE MODEL READY TO FLY

### PREPARE THE TRANSMITTER



## TRANSMITTER CAUTIONS

- Do not use rechargeable (NiCd) batteries.
- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon-zinc) or rechargeable (NiCd) batteries.

## CHARGING THE PLANE'S LIPO BATTERY



1. Open the charge lead door on the back of the transmitter by sliding it out and then swinging it open.

## IMPORTANT!

### NEVER LEAVE A CHARGING BATTERY UNATTENDED!

**WARNING!!** Failure to follow all instructions could cause permanent damage to the battery and its surroundings, and cause bodily harm!

- ONLY use the Playmate transmitter or optional 1S charger to charge the LiPo battery.
- ALWAYS charge in a fireproof location.
- NEVER allow battery temperature to exceed 150°F [65°C].
- NEVER disassemble or modify pack wiring in any way or puncture cells.
- NEVER place on combustible materials or leave unattended during charge or discharge.
- ALWAYS KEEP OUT OF REACH OF CHILDREN.
- Unplug the battery if it gets warm, even if the left LED has not gone out.
- **WARNING:** Misuse or malfunction may overheat the battery and charger, resulting in personal injury or damage to surroundings.



2. With the power switch on the transmitter set to “OFF”, connect the battery to the charge port inside the charging compartment.



3. If the battery is in a discharged state, the green charge LED will illuminate. If the battery is already charged, the LED will remain off.

4. When the charging process has been completed, the LED will go out.

5. After each flight, remove the battery pack from the airplane and allow it to cool completely before recharging.

6. **Do not leave the battery connected to the Playmate for an extended period of time. This can cause permanent damage to the battery.**

### BATTERY RECYCLING

**ATTENTION:** The product you have purchased is powered by a rechargeable battery. At the end of the battery’s useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste system. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

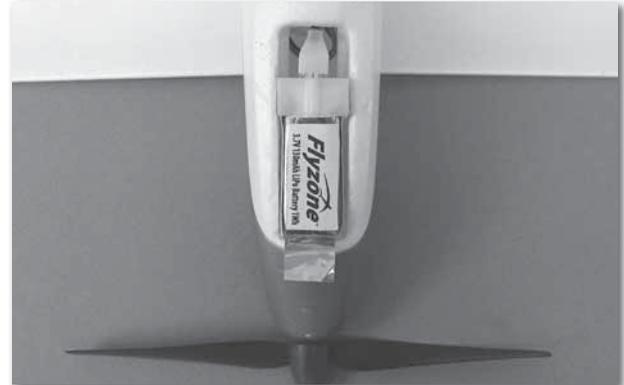
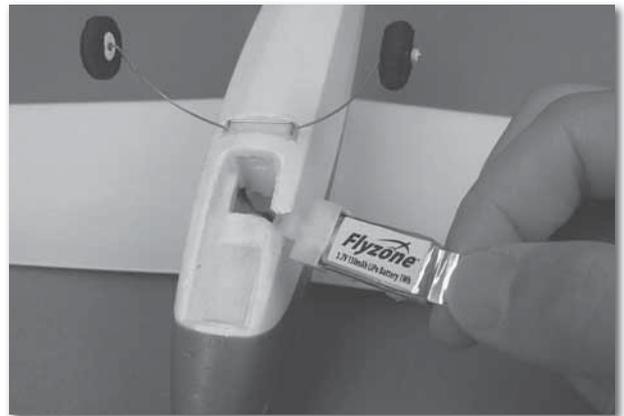
**WARNING:** This product contains a chemical known to the State of California to cause cancer.

## FIRST FLIGHT

### INSTALL THE AIRPLANE BATTERY



1. Be sure your transmitter has fresh “AA” batteries installed. Turn on the transmitter by moving the switch up.



2. Connect the battery to the airplane and press it into the battery compartment. The hook and loop material will hold it in place.

during flight. **NOTE:** Always stay clear of the propeller when the battery is plugged into the airplane!

### **CHECK THE CONTROL DIRECTIONS**



1. When the right control stick is moved down, the elevator should move up.



2. When the right control stick is moved to the left, the rudder should move to the left.



3. With the left control stick in the down position, the propeller should not be rotating. To test the operation of the motor, be sure to have a firm grasp of the airplane with your hands clear of the rotational arc of the propeller. Be sure to point the nose of the airplane away from people or obstructions. **Note: When the LiPo battery is first plugged into the Playmate, the propeller will not rotate until the left control stick is first moved all the way to the down position and you hear a single beep. Move the left control stick all the way up to full throttle and you will hear another single beep. Return the left control stick all the way down and you will hear two beeps (the propeller will slowly rotate over during this procedure). Once this is done, the motor is considered “armed” and will rotate if the left control stick (throttle) is moved up.**

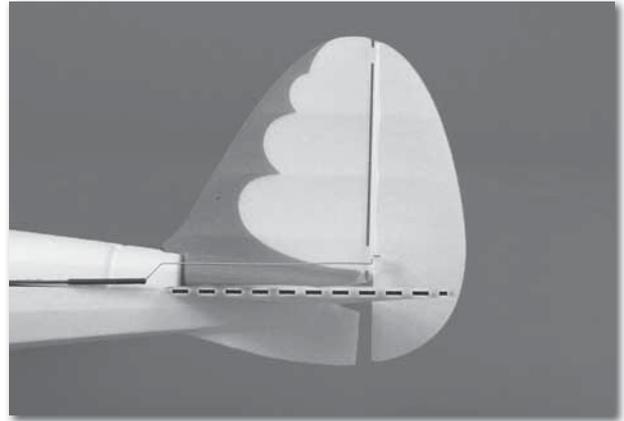
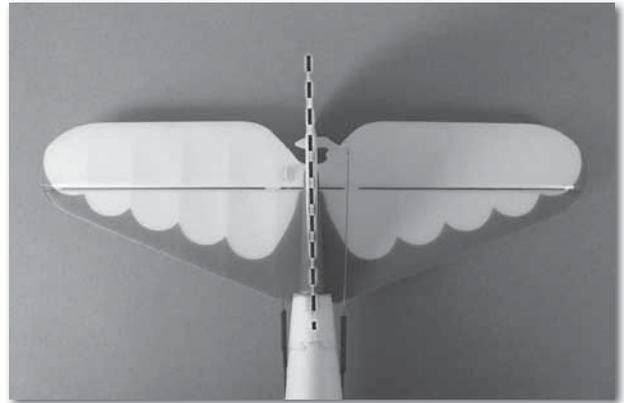
*If any of the control surfaces need to be reversed using the procedure in Step 4, we recommend unplugging the LiPo battery from the airplane to prevent accidental rotation of the propeller. Turn off the transmitter.*

## ADJUSTING THE CONTROL TRIMS



4. If the elevator does not move in the correct direction according to step #1, you can reverse its movement by pressing and holding either elevator trim button and switching on the power to the transmitter. You will hear three fast beeps confirming the change.

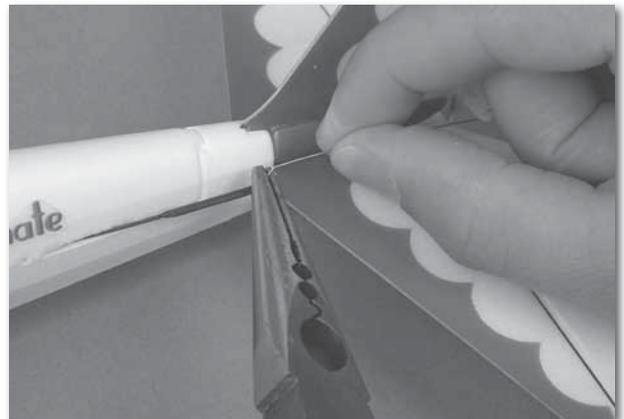
5. If the rudder does not move in the correct direction according to step #2, you can reverse its movement by pressing and holding either rudder trim button and switching on the power to the transmitter. You will hear three fast beeps confirming the change.



1. Before making your first flight, use the trim buttons for the right control stick to center the elevator and rudder. Adjust the trim as necessary using the trim buttons until the elevator and rudder are in line with the horizontal stabilizer and vertical fin as shown.



6. If the rudder is operating on the left control stick, turn off the transmitter, move the left control stick to the upper left position, the right control stick to the upper right position, and then turn on the transmitter. The transmitter will make three quick beeps followed by one or two longer beeps. Test the operation of the rudder and confirm the change. This procedure toggles the rudder function between the left and right control sticks.



2. If additional trim is required beyond what the trim buttons are capable of (when the maximum trim has been reached, the

transmitter will make a continuous fast beeping), the bends in the pushrods can be adjusted to “mechanically” change the trim of the control surfaces. When setting up the trims for the first flight, be sure that you will have trim movement available in both directions so you can make fine adjustments during the flight. Do not make your first flight with any of the trim buttons set at their maximum position. Mechanically trim the control surfaces as necessary if this is the case.

## **CHOOSE A GOOD FLYING SITE**

**The Playmate should be flown indoors, but can also be flown outside only when the wind speed is 5 mph [8km/h] or less.** If the wind is calm or very light, the Playmate will be docile and easy to control. Also, find an area clear of trees, power lines and other structures. A flying field for R/C planes is best. Don't fly around groups of people, especially children.

## **PREPARE FOR TAKEOFF**

1. Find an open area free of buildings, trees, power lines and people. If flying indoors, we recommend a minimum flying area of 60' x 60' [18m x 18m] with a 12' [4m] ceiling. A single court gymnasium would be a good choice.
2. For your first few flights, fly only when the wind is calm. After you are comfortable with the airplane, you can fly in winds that are no more than 5 miles per hour [8km/h]. If flown in stronger winds, the plane will be very difficult to control or may be blown downwind and not have enough power to get back.
3. Make sure the battery pack is fully charged and that the transmitter has fresh “AA” batteries installed.

## **FLYING THE PLAYMATE**

1. Perform a range check on your radio system before each flight. Switch on the transmitter and then connect the battery to the plane. Have a helper hold the airplane. **CAUTION:** Keep your hands behind the propeller. Walk 50' [15m] away from the airplane (or the maximum distance your flying site allows), holding the transmitter with the antenna pointing up. Move the right control stick, checking that the control surfaces respond. Arm the propeller and move the throttle stick up to check the motor. If you still have control of the airplane, it is safe to fly. If you do not have control of the plane, make sure the batteries in the transmitter are fresh and the battery in the plane is charged.
2. With the throttle stick in the full up position, hand launch the Playmate into the wind (or if inside, launch in a direction that will provide you with the largest available space to make your first turn), at a slight upward angle. **NOTE:** For the first couple of flights, we recommend having a helper hand launch the airplane.

3. Your transmitter controls the altitude, direction and speed of the airplane. The right control stick controls the direction and altitude and the left stick controls the throttle. After you become comfortable with the flight characteristics of the Playmate, the plane can fly comfortably at 1/2- to 3/4-throttle.

4. When your airplane is moving away from you, moving the right control stick to the left will make your plane turn to the left. Moving the stick to the right will make the airplane turn to the right. To stop the turn, move the stick the opposite direction until the airplane is flying straight.

5. When the airplane is coming toward you, moving the right control stick left still causes left rudder, but your airplane goes to your right. In short, you have to reverse the way you control the rudder. Here's a good way to familiarize yourself with the controls: When the airplane is coming toward you, turn your body so that you are facing the same direction the airplane is going, looking over your shoulder at the airplane. Now when you move the right control stick left, the plane will go to your left.

6. Don't let the airplane get too far away from you. The farther away it is, the harder it is to see what the airplane is doing.

7. When learning to fly, it is best to keep the airplane high enough so that if you make a mistake, you have enough altitude to correct the mistake.

8. When you have become comfortable with the flight characteristics of the Playmate, it can takeoff from the ground. A smooth surface is required for the wheels to roll.

## **LANDING THE PLAYMATE**

It's a known fact among fellow R/C pilots that your airplane will land. It is up to you as to where and how it lands.

1. For your first couple of flights we recommend that you attempt to land before the motor stops. When the battery voltage becomes low during flight, the motor will stop rotating to protect the battery from being discharged to an unsafe voltage. Flight speed will begin to decrease before this occurs. Land the Playmate when you notice a decrease in flight speed.

2. When the transmitter battery power gets low, the transmitter will make a continuous beeping. When this happens, it's time to land your Playmate.

3. During your first flight, while at a high altitude, turn the motor off by moving the left control stick down and note how the Playmate reacts. This will give you an idea of how the airplane will react during a landing without power.

4. To land the Playmate, fly downwind, past the landing area. Gently turn into the wind and gradually reduce the throttle so that the airplane starts to slow into a smooth, descending path. Adjust the throttle as needed to reach the landing area, but not fly past it.

5. Just before landing, at about 1 foot [0.3m] above the ground, move the throttle control stick all the way down and apply some up elevator (right control stick down) to land the Playmate safely on the landing gear and tail skid.

**CAUTION:** If, during a rough landing, the propeller on the Playmate should become jammed and cannot rotate with the throttle in the run position, the battery and airplane electronics could become damaged. Immediately lower the throttle to stop the motor.

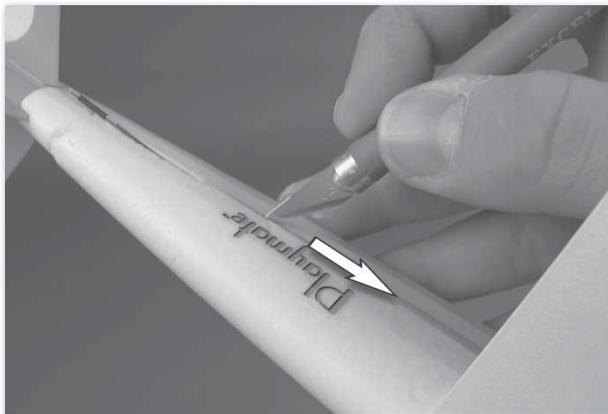
## ***AFTER THE FLIGHT***

Disconnect and remove the battery from the airplane. Then, switch the transmitter off. Allow the motor and battery to cool before recharging. Check the airplane over to make sure nothing has come loose or may be damaged.

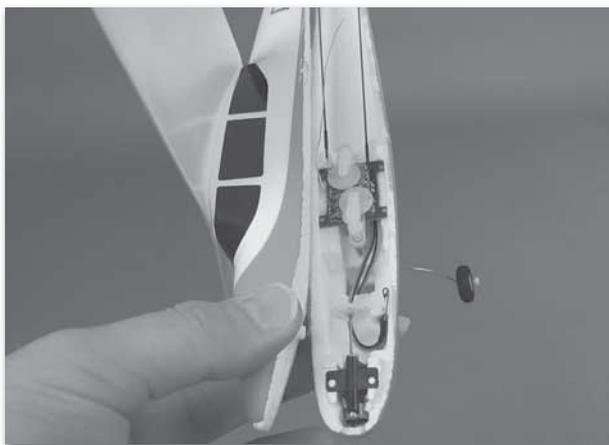
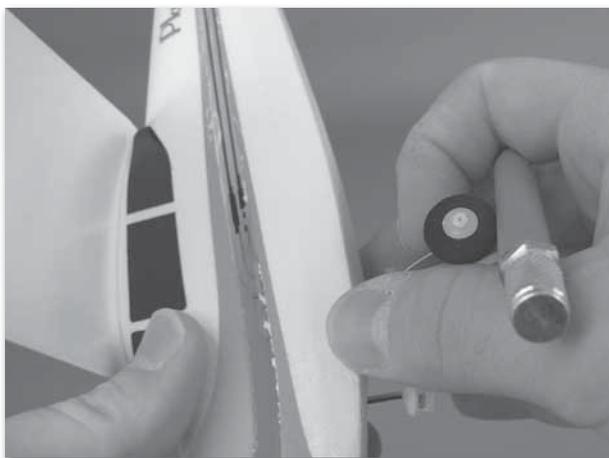
## ***REPAIRS***

Even the best R/C pilots in the world damage their airplanes every now and then. In the unfortunate event that you damage your airplane, repairs are fairly simple to make yourself. If there are any cracks in the wing or fuselage, apply 6-minute epoxy, white glue, or foam-safe CA glue to the broken areas and hold them together with clear packaging tape. Let the glue cure, leaving the tape in place for added strength.

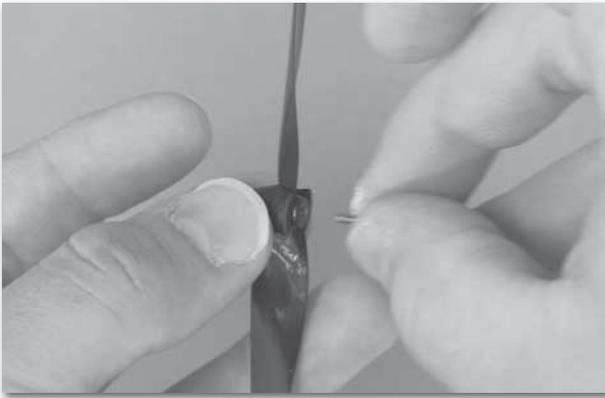
## ***REINSTALLING THE PROPELLER***



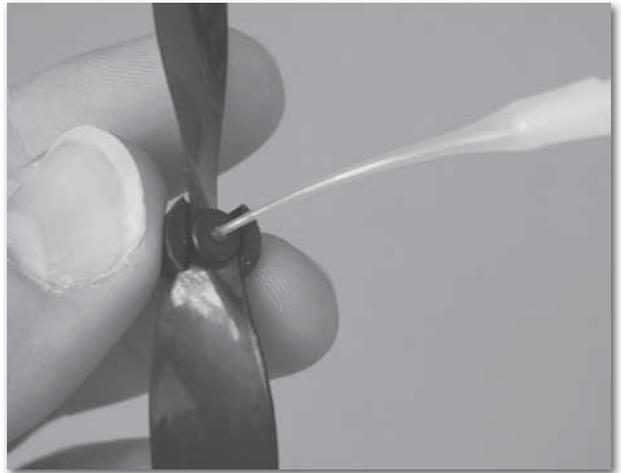
1. Use the tip of a hobby knife (a paring knife would suffice) to cut the side seam of the Playmate (either side may be cut). Be careful to only insert the tip of the knife into the seam, as penetrating too far may damage the internal components of the Playmate.



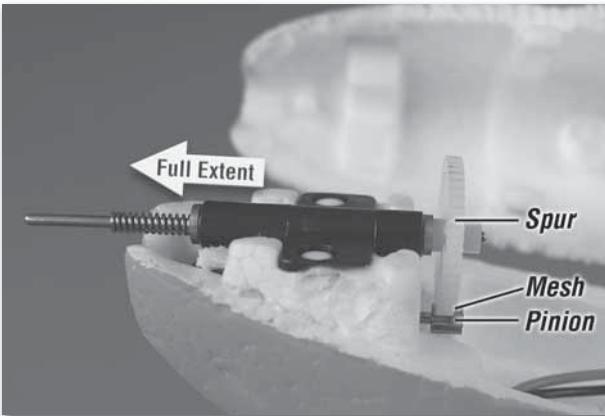
2. Open the fuselage of the Playmate by using the uncut seam as a hinge. If the uncut seam separates, simply reglue it when performing Step 7.



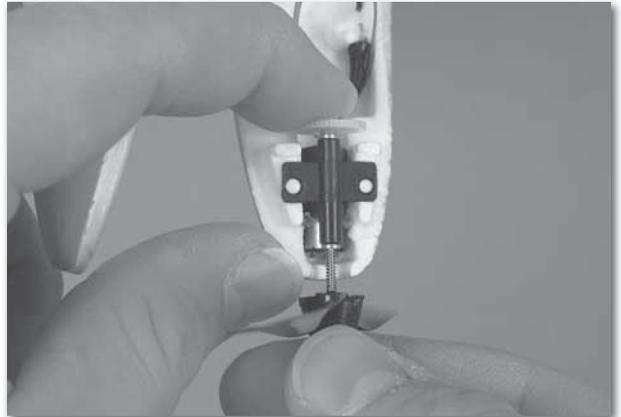
3. If the spring is still attached to the propeller, carefully remove it from the propeller. Do not stretch the spring. If you no longer have the spring, contact Product Support at (217) 398-8970, extension 5.



5. Apply a small amount of CA into the small mounting hole in the propeller. Quickly move onto step 6 before the CA fully cures.

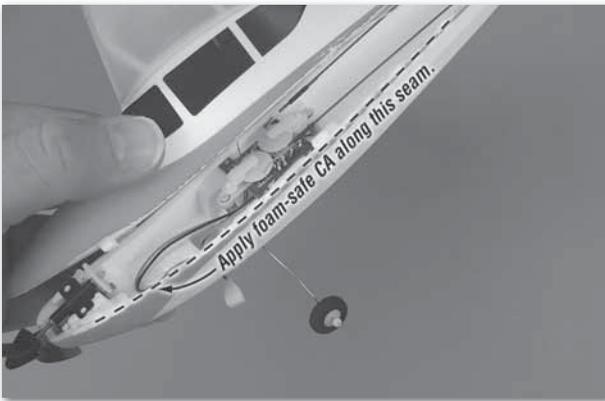


4. Slide the spur gear onto the pinion gear and move the shaft forward to the full extent. Next, reinstall the spring onto the prop shaft.



6. Using your index finger (or pliers) to hold the spur gear and shaft into the forward position, press the propeller onto the shaft and hold for one minute. Inspect the fit and make sure the propeller is secure and that the spur gear is meshed with the pinion gear.

## REPLACEMENT PARTS LIST



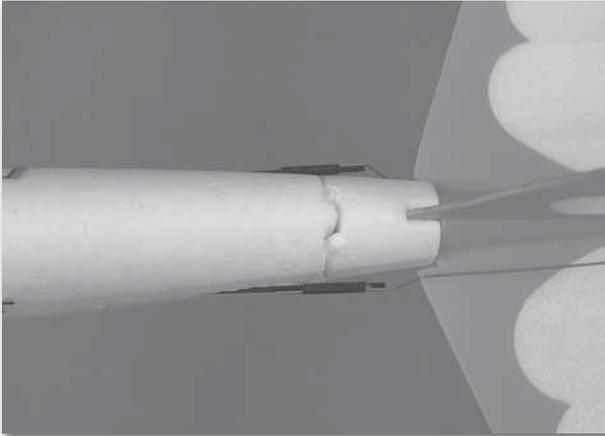
To order replacement parts for your Playmate, use the order numbers in the list below. Replacement parts are available only as listed. Replacement parts are not available from Product Support, but can be purchased from hobby shops or mail order/Internet order firms. If you need assistance locating a dealer to purchase parts, contact:

### Product Support

Phone: 217-398-0007

Fax: 217-398-7721

E-mail: [productsupport@hobbico.com](mailto:productsupport@hobbico.com)



<b><u>Stock #</u></b>	<b><u>Description</u></b>
HCAA6300	Wing
HCAA6301	Tail Set
HCAA6302	Fuse Set
HCAA6303	Landing Gear
HCAA6304	Pushrods and Control Horns
HCAA6305	Propeller with Spinner
HCAA6306	Motor with Gearbox
HCAA6307	Motor
HCAA6308	Gearbox
HCAA6309	130 mAh LiPo Battery
TRCJ2402	Tactic TTX402 2.4GHz 4-Channel Mini Transmitter
TACL1424	Tactic TR424 Micro Rx w/PZ Servos Mounted Onboard
HCAA6420	1S Micro LiPo Charger (Optional)

7. Add a small amount of foam-safe CA to the previously cut seam and close the fuselage halves, being sure not to bind the tail control linkages.

8. Small strips of clear tape may be used to secure the seams of the fuselage halves.

## TROUBLESHOOTING

<b>PROBLEM</b>	<b>CAUSE/SOLUTION</b>
<i>The power LED on the transmitter does not illuminate when the switch is moved to the ON position.</i>	<ul style="list-style-type: none"> <li>➤ The AA batteries in the transmitter are exhausted. Replace with new AA batteries.</li> <li>➤ The AA batteries in the transmitter are installed incorrectly. Reinstall the batteries correctly as described on page 3.</li> </ul>
<i>The transmitter is emitting a continuous beep.</i>	<ul style="list-style-type: none"> <li>➤ The AA batteries in the transmitter are low. Replace with new AA batteries.</li> </ul>
<i>The plane control surfaces or throttle do not respond to control stick inputs from the transmitter.</i>	<ul style="list-style-type: none"> <li>➤ The LiPo battery is depleted. Charge the battery.</li> <li>➤ The LiPo battery is not properly connected to the airplane. Disconnect the battery and reconnect it, ensuring it is fully engaged in the connector in the correct orientation.</li> <li>➤ The transmitter has become “unbound” with the airplane (the transmitter and airplane can no longer communicate with each other). To rebind the transmitter to the airplane, turn the transmitter switch to the ON position. Connect the LiPo battery to the airplane. The TTX402 will autobind with the Playmate. Confirm operation of the airplane with the transmitter. If the binding procedure fails, disconnect the battery and turn off the transmitter. Move the plane and transmitter apart with at least 2 feet (0.6m) between them and then repeat the procedure. Contact Product Support if it still fails to bind.</li> </ul>
<i>The control surfaces do not move in the correct direction.</i>	<ul style="list-style-type: none"> <li>➤ The transmitter control functions need to be reversed. Follow the reversing procedure described on page 5.</li> </ul>
<i>The rudder is controlled by the left stick.</i>	<ul style="list-style-type: none"> <li>➤ Follow the procedure described on page 6, Step 6.</li> </ul>
	<b><i>For any other problems not addressed here, please contact Product Support.</i></b>



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