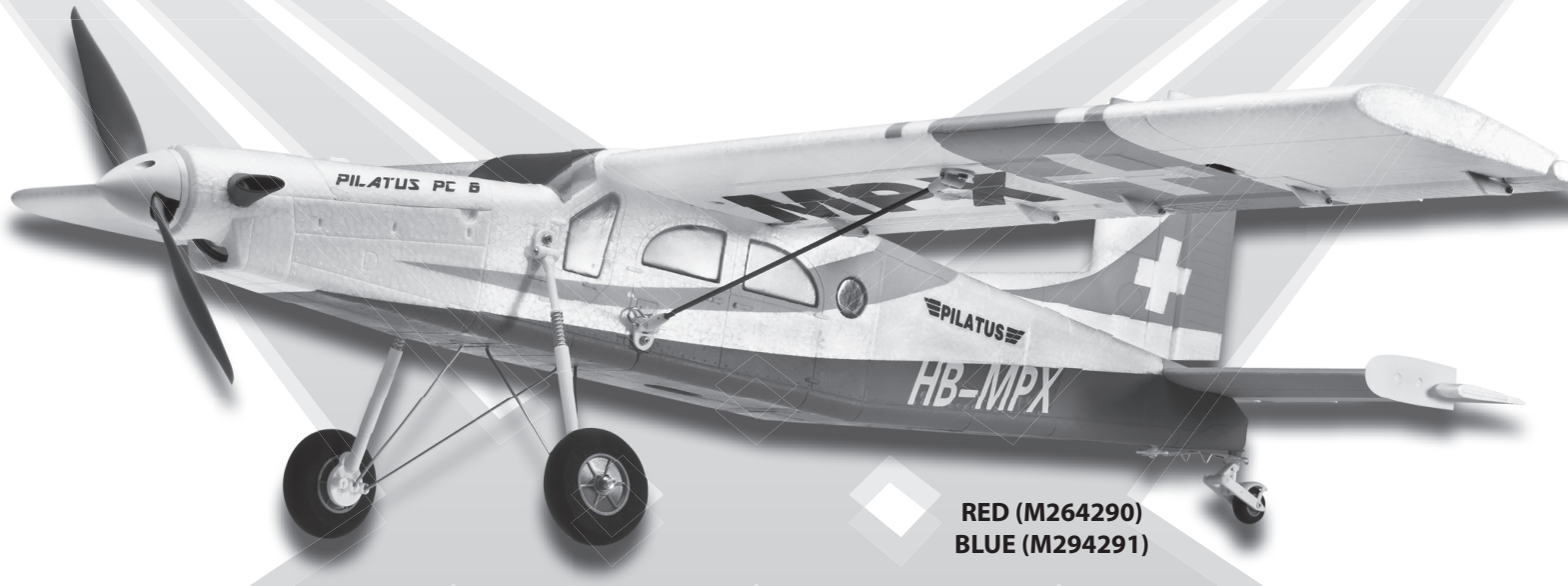
MULTIPLEX®

RR RECEIVER READY

PILATUS PC 6

OPERATION MANUAL Ver 1.0



RED (M264290)
BLUE (M294291)

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SECTION 1

INTRODUCTION

Congratulations on your choice of the Multiplex Pilatus PC-6 Turbo Porter airplane. Designed to emulate the full-scale, single-engine, seven-seater STOL (Short Take-Off and Landing) aircraft, the radio control version boasts Multiplex's resilient Elapor foam construction and comes with servos, high performance brushless motor and efficient speed control all preinstalled. Its realistic design elements include simulated rivets and panel lines, aerials, glazed cockpit, a scale sprung undercarriage and attractive painted finish. With detachable wings and tail plane and large control surfaces, the Pilatus PC-6 is easy to assemble and transport and is amazingly agile in the air. Capable of performing dazzling aerobatic maneuvers, vertical climbs, knife-edge passes, torque rolls and extremely short takeoffs and landings, this attractive model will be a show stopper at the field. Add the optional float set to the Pilatus PC-6 and extend your missions to the snow and water! You will look forward to hours of flying fun with your Multiplex Pilatus PC-6!

Warning, Caution, Tip and Note Boxes

Warning

Caution

Tip

Note

Warning: Be sure to read this section for your own safety.
Caution: Be sure to read this section to prevent accidents and damage to your model.
Tip: This section will help you maximize the performance of your model.
Note: This section will provide more detailed explanations.

Caution

The Pilatus PC6 is a radio control model plane designed for novice pilots over 14 years of age. Improper assembly or user negligence can lead to serious injury and/or property damage to yourself or other people. Multiplex is not responsible for any damages or injuries caused by the user's negligence or improper assembly of the model. Be sure to read the instruction manual thoroughly before assembly and flying.

Caution

Safety is of the utmost importance when flying any model aircraft. Third party insurance is mandatory. If you join a model club or association, suitable coverage will usually be available through the organization. It is your personal responsibility to ensure that your insurance is adequate (i.e. that its coverage includes powered model aircraft). Always fly in such a way that you do not endanger yourself or others. Bear in mind that even the best RC systems are subject to outside interference. No matter how many years of accident-free flying you have, there is always the possibility of an unforeseen problem or error that can cause an accident. Make it your job to keep your models and your radio control system in perfect operating condition at all times. Check and observe the correct charging procedure for the batteries you are using.
Before every flight, check that the wing and tail panels are attached and firmly seated. Also check to make sure that each control surface is operating correctly.

Caution

Flying Your Aircraft

- You should only fly at an official model airfield.
- Check that other pilots and spectators are positioned safely before flying your model.
- Wait for other pilots to land their models if they are flying already.
- Do not fly the plane behind yourself or others.
- Do not fly under the influence of alcohol or drugs or if you are feeling ill.
- Do not fly during thunderstorms or high wind.
- Do not fly in an area where people are gathered or near tall buildings.
- Do not fly near streets or where vehicles or trains pass by.
- Do not fly near explosive materials.
- Do not fly near power lines or transmission towers.
- Be sure to do pre-flight safety checks of the model before flying.
- Always remember that the pilot is responsible for any outcome that may occur during the flight.

FEATURES AND SPECIFICATIONS

Features

- Powerful Brushless Motor
- Factory-assembled, painted finish with decals already applied
- Available in two attractive color schemes
- Sprung scale undercarriage with large wheels
- Offset-hinged landing flaps for steep descents and short take-off runs

Specifications

- Wingspan: 49.2 in. (1250 mm)
- Overall length: 36.6 in. (930 mm)
- All-up weight: 39 oz. (1100 g)
- Total surface area: 369 sq.in. (23.8 dm^2)
- Wing loading: 46 g/dm^2
- RC Functions: 6 Channel (rudder, elevator, aileron, flaps, and motor)
- Flight time: > 7 min Using Recommended Battery (3S ~2200Ah)

ITEMS REQUIRED TO READY THIS MODEL FOR FLIGHT

RR RECEIVER READY

The Pilatus PC-6 is a Receiver Ready model where some assembly is required and additional items are needed for completion and operation. The items listed below are needed to complete and fly this model:

- Medium Body Cyanoacrylate Glue
- 6 Channel Radio and Receiver
- 3S, 11.1v, 2200 ~ 2500 mAh LiPo Battery w/2 Pin T-Type Connector
- Charger Suitable for the Battery Above

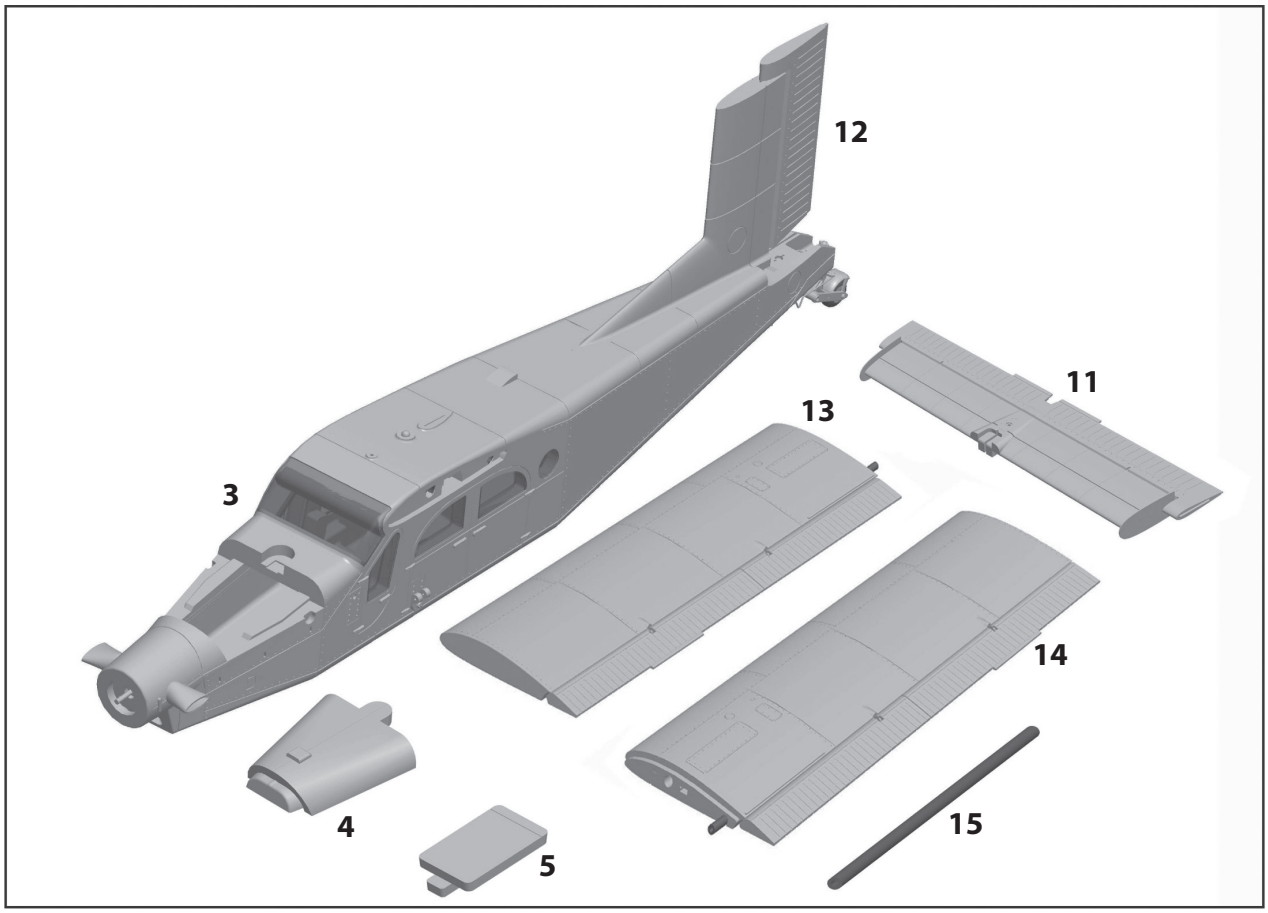
PARTS LAYOUT AND LISTING

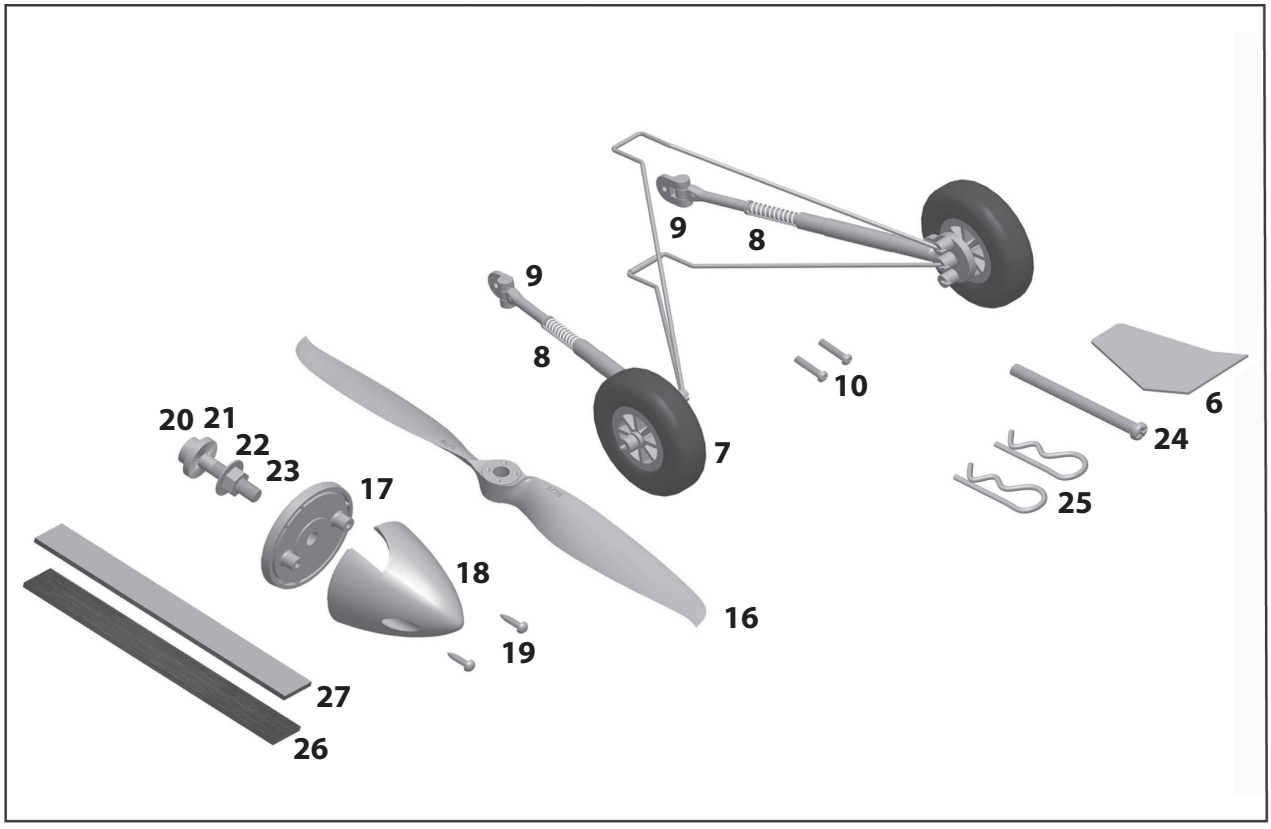
Note

Examine your kit carefully! MULTIPLEX model kits are subject to constant quality checks throughout the production process, and we hope that you are completely satisfied with the contents of your model kit. However, we would ask you to check all the parts before you start construction, as we cannot exchange components which you have already worked on. If you find any part is not acceptable for any reason, please contact our Customer Service Department. Please note the contents of the package.

1. Manual – Not Shown
2. Mini Catalog – Not Shown
3. Fuselage (factory-assembled, with installed motor controller, ELE and RUD servos)
4. Battery access hatch
5. Fuselage servo access hatch
6. Aerial strake (plastic)
7. Main undercarriage (factory-assembled)
8. Main undercarriage compression spring x 2 pieces
9. Upper spring strut Plastic Ready made
10. M3 x 20 mm Phillips head screw
11. Tail Plane (tail plane and elevator, factory-assembled)
12. Fin and rudder (factory glued to fuselage)
13. Left wing (factory-assembled, with installed AIL servo)
14. Right wing (factory-assembled, with installed AIL servo)
15. Wing joiner tube 395mm CFRP
16. Propeller, 11 x 5.5" Electric
17. Spinner back plate (50 mm)
18. Spinner cone (50 mm)
19. Spinner cone retaining screws x 2 pieces (2.3 x 8 mm)
20. Tapered collet 4 x 6 mm
21. Tapered collet adapter
22. Washer Steel 6.2 mm I.D.
23. M6 Steel Nut
24. M4 x 45 mm Phillips head screw for tail plane
25. Wire retainer clips x 2 pieces
26. Hook-tape, 20 x 140mm
27. Loop tape, 20 x 140mm
28. Decals – Not Shown

PARTS LAYOUT AND LISTING (cont.)





SECTION 2 - ASSEMBLY STEPS AND INSTRUCTIONS

ASSEMBLY INSTRUCTIONS

Caution

Before Assembling the Pilatus PC6

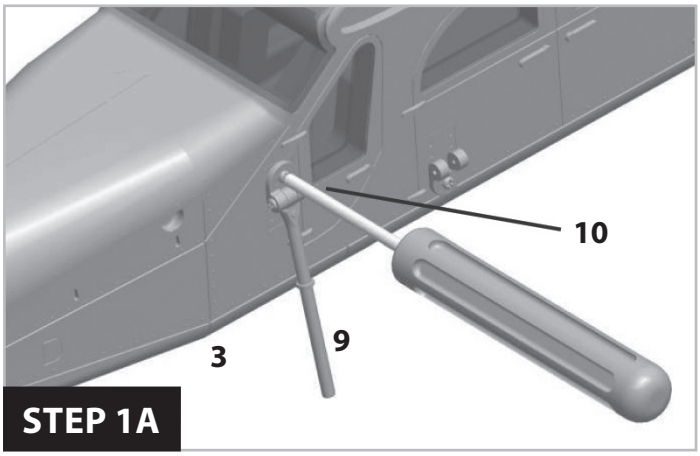
Keep in mind when assembling and flying the Pilatus PC6 that radio control model airplanes may cause injury or property damage when improperly flown or mishandled. Always follow the warnings written in the instruction manual. Improper assembly and/or usage could lead to damage and/or failure of the electronic equipment. Be sure to read this instruction manual in its entirety before assembling and flying this model.

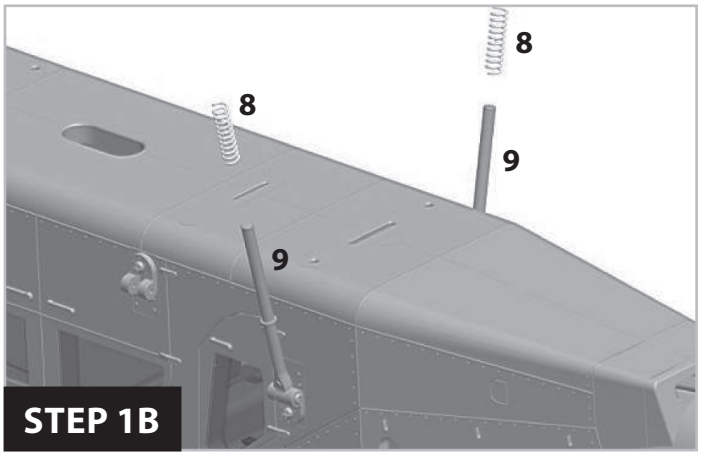
Warning

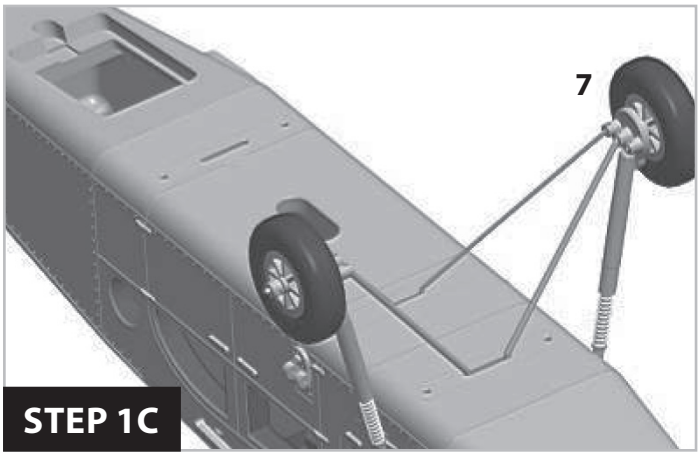
This model is made of ELAPOR™ and not Styrofoam™, therefore you cannot use typical adhesives such as white glue, polyurethane or epoxy. Make sure to only use medium-viscosity cyanoacrylate glue (or CA as used in the manual). For certain joints, it is also possible to use a hot-melt adhesive; the instructions indicate where this is the case. It is recommended you test fit each piece before applying the adhesive.

The following tools are required to build the model:

- #1 Phillips Head Screwdriver
- #2 Phillips Head Screwdriver
- Needle-nose Pliers
- 10 mm Spanner Wrench
- Thread-lock fluid
- Masking Tape
- Spring steel wire or florist's wire





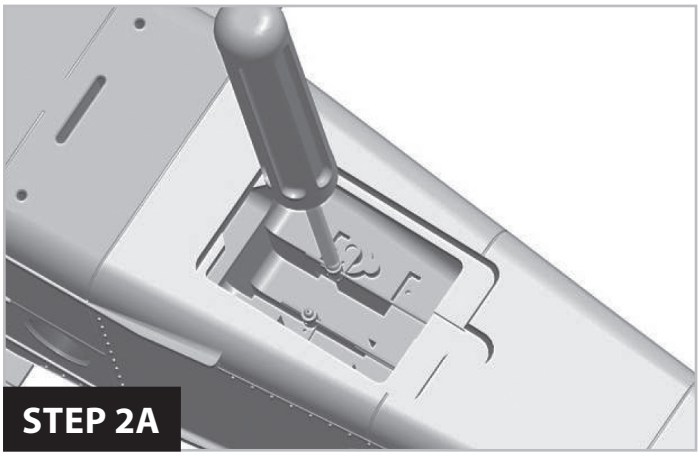


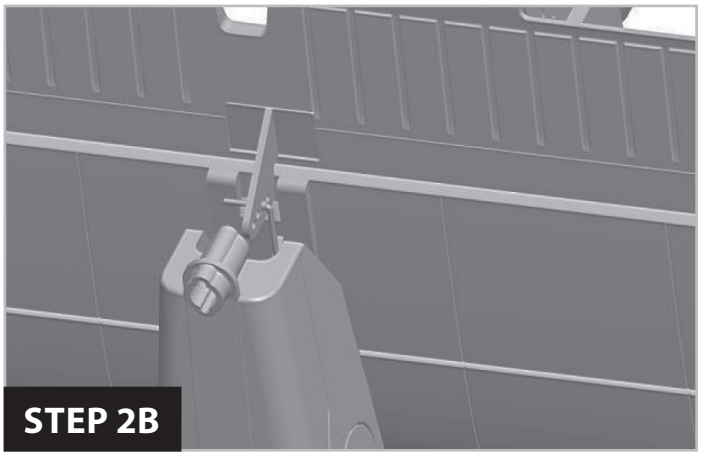
Step 1: Attaching the Undercarriage

1A: Screw the upper spring strut components (Part #9) to the fuselage in the marked position below the cockpit using the M3 x 20 mm retaining screws (Part #10).

1B: Slip the 7 x 23 mm compression springs (Part #8) onto the upper spring struts.

1C: Join the two strut components, by sliding the upper part that is attached to the fuselage, into the lower part which is connected to the main landing gear assembly (Part #7). Now push the wire undercarriage into the channels in the bottom of the fuselage, you will hear the snap into place indicating they are securely attached.

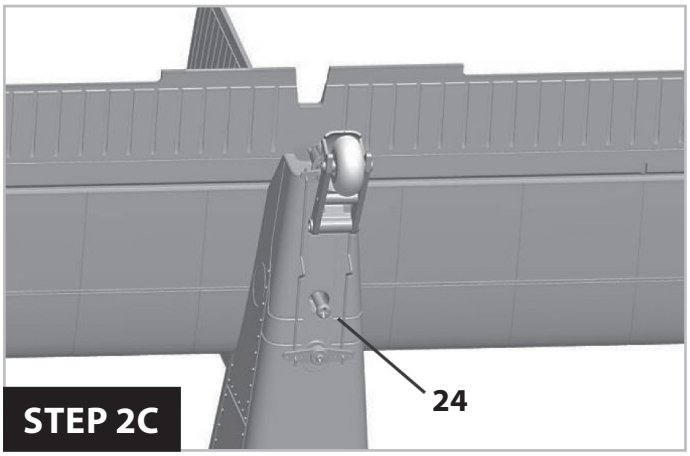




Step 2: Attaching the Elevator Assembly

2A: Remove the servo access hatch from the underside of the fuselage and set it aside. Locate the elevator servo (L.H. servo, as seen from the tail) and loosen the screw on the connector barrel so that you slide the pushrod easily.

2B: Slide the elevator assembly (Part # 11) half-way into the slot in the fuselage, using a pair of needle nose pliers, connect the elevator pushrod to the elevator horn, working from the right-hand side as shown in the illustration.



2C: With the pushrod connected, you can slide the tail plane fully into the slot, making sure that the other end of the pushrod is still located in the connector barrel at the servo. Secure the elevator assembly using the M4 x 45 mm (part # 24) Philips head screw inserted from the underside. Tighten the screw only lightly, otherwise you could damage the foam pieces. Switch your radio control system on, and set the elevator to the neutral position. Apply a drop of thread-lock fluid to the M2 screw in the swivel connector to prevent the elevator pushrod working loose, then tighten the clamping screw firmly. The servo access hatch can now be reattached.

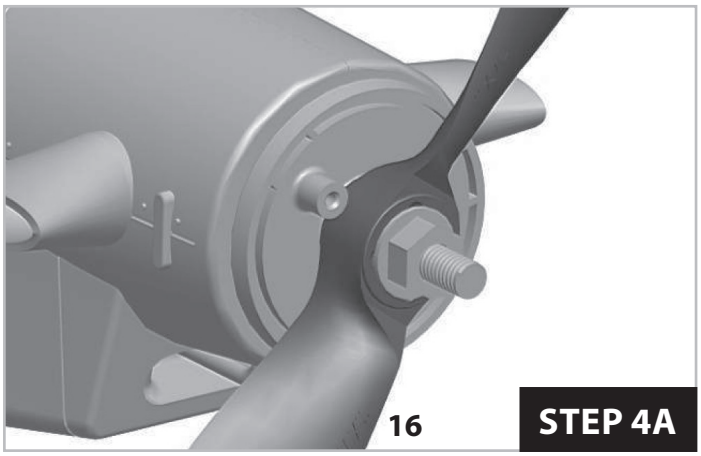
Step 3: Fitting the Wings

3A: Remove the battery hatch on top of the fuselage to gain an unobstructed view of the interior of the fuselage. Slide the CFRP wing joiner (Part #15) into one of the wing panel (Part #s 13 & 14) Thread the servo connectors through the opening in the fuselage before pushing the wing up against the fuselage. Repeat the procedure with the other wing Fit the retaining screws in the holes in the underside of both wings close to the fuselage, and tighten them firmly. The clamping screws hold the wing joiner - and with it the wings - securely against the fuselage.

Wrap tape around the two servo connectors to make it easier to handle them.

3B: Now fit the wire retainer clips (Parts #25) as shown to secure the wing struts.

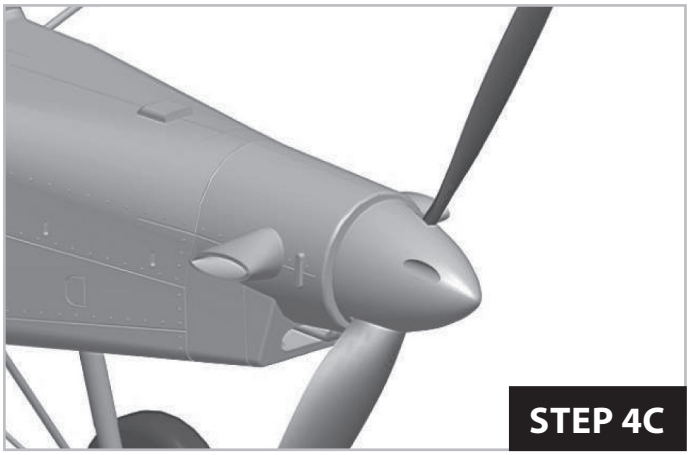
3C: Glue the strake Part # 06 in the channel on the top of the fuselage using a drop of Cyanoacrylate glue.



Step 4: Attaching the Elevator Assembly

4A: Assemble the propeller by slipping the tapered collet adapter (Part #21) over the tapered collet (Part #20) and inserting those pieces through the spinner back plate (Part # 17), and the propeller (Part #16),now place the washer (Part # 22) on the Shaft followed by the retaining nut (Part # 23).

4B: Slide the assembly onto the motor shaft and tighten the retaining nut firmly using a 10 mm open-ended spanner wrench. Once tightened turn the propeller by hand to check that the spinner back plate runs true and does not rub on the cowl.



4C: Now fit the spinner cone (Part #18) over the propeller and secure it to the back plate using the two 2.3 x 8 mm screws (Part # 19) Once again check that the spinner runs true. If the tip of the spinner "wobbles", loosen the retaining screws slightly, or remove the spinner cone, turn it through 180° and try again. Check again, and continue adjusting until the spinner runs true.

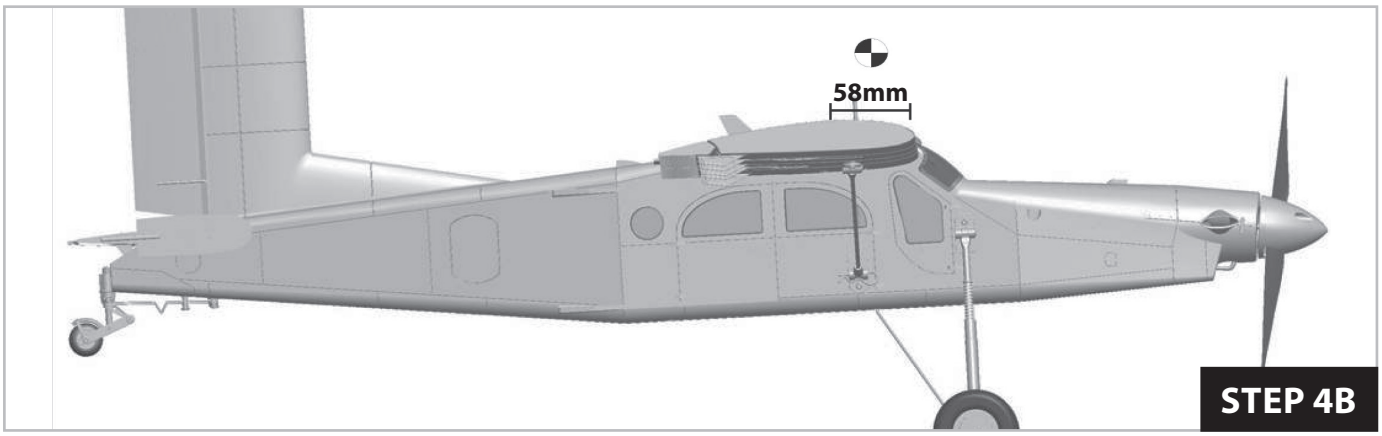
ASSEMBLY INSTRUCTIONS (cont.)

Step 5: Receiver Installation

To make it easy to fish the servo leads through the battery hatch, make a wire hook about 25 cm long using mild steel wire. The servo leads are numbered 1 through 7 with each number referencing the following control surface:

1. Left aileron
2. Elevator
3. Rudder
4. Throttle
5. Right aileron
6. Left landing flap
7. Right landing flap

The servo connectors can now be plugged into the receiver. Fix the receiver under the wing using a small piece of hook-and-loop tape (Part #s 26 & 27)



Step 6: Balancing

Position the flight battery on the battery tray in such a way that the model balances at the 2 ¼ in. (58 mm) point as measured from the wing leading edge on both sides of the fuselage. When you are satisfied, fix the battery in place using the hook-and-loop straps supplied. We recommend applying a few drops of Cyanoacrylate glue to the hook-and-loop straps to fix them permanently to the bottom of the fuselage.

Step 7: Recommended Control Surfaces

As a baseline we recommend the following control surface travels and setups. Once you become familiar with the model you can tailor the setting to your own preferences.

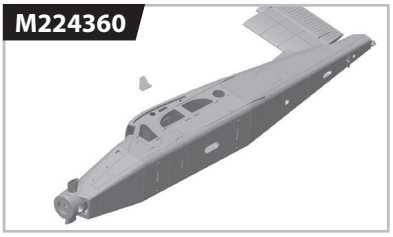
Rudder: 1 ¼ in (30 mm) (~35°) right / left, approx. 40% Expo
Elevator: 1 in. (25 mm) up, < ½ in. (12 mm), approx. 50% Expo
Ailerons: ½ in (13 mm) up, < ½ in. (12 mm) down, approx. 50% Expo
Landing Flaps: 90° down, with approx. 3mm down-elev. trim compensation, approx. 0.8 sec. delay

Step 8: Finishing

The model is supplied with two flame stickers 28 for decorating the aircraft. Apply these in the position shown on the packaging illustrations.

SPARE PARTS

M224360

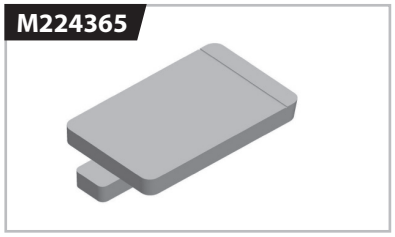


Fuselage

M224361

Battery Hatch

M224365

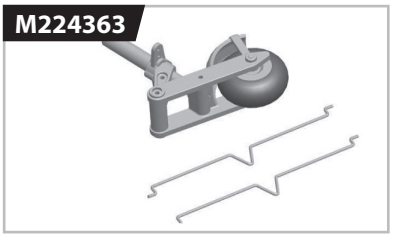


Servo Cover

M224362

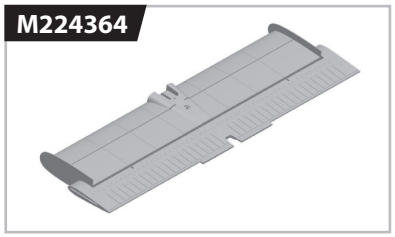
Landing Gear Assembly

M224363



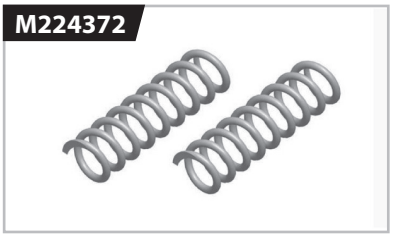
Tailwheel Including Screws

M224364



Elevator

M224372

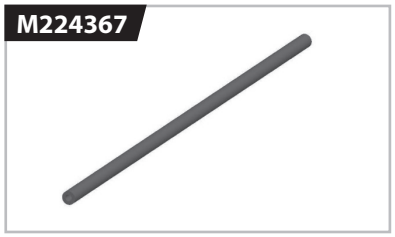


Landing Gear Springs

M224366

Wings

M224367



Wing Spar

M733179

Propeller

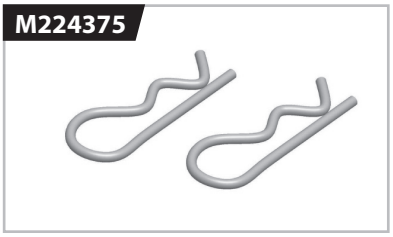
M224369

Spinner Including Screws

M224370

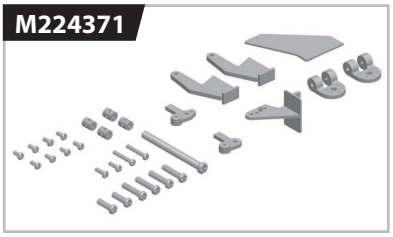
Prop Adapter

M224375



Wire Retainer Clips

M224371

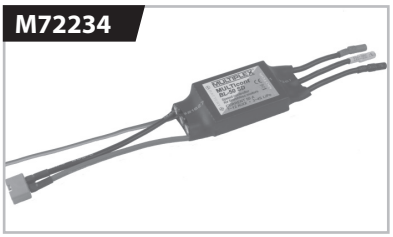


Small Parts Set (Screws and Plastic Pieces)

M825884

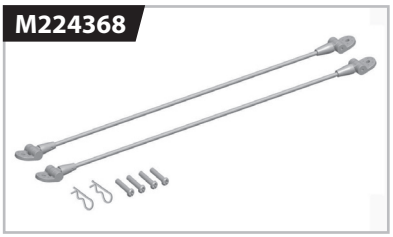
Motor

M72234



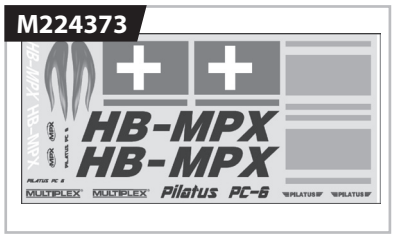
ESC

M224368



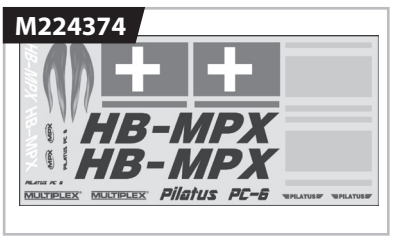
Complete Wing Strut Assembly

M224373



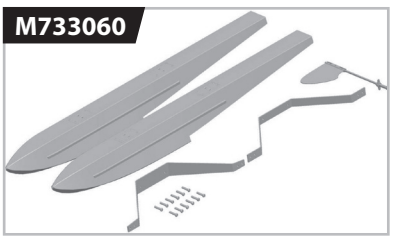
Decal Sheet - Blue

M224374



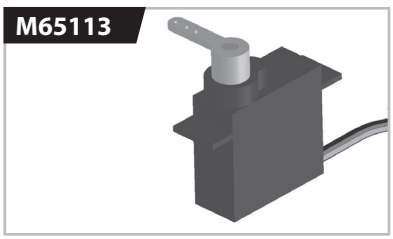
Decal Sheet - Red

M733060



Float Kit

M65113



Servo

SERVICE AND SUPPORT

Multiplex USA Customer Service
Help is available from Hitec RCD USA, Inc. Customer Service through phone support: (858) 748-6948 and e-mail: service@hitecrcd.com. Our office is generally open Monday through Friday, 8:00 AM to 4:30 PM PST. These hours and days may vary by season. Every attempt is made to answer all incoming service calls. Should you get our voice mail, please leave your name and number and a staff member will return your call.

WARRANTY

LIMITED WARRANTY
Hitec RCD USA guarantees the component parts in this kit to be free from defects in both materials and workmanship that exist at the time of purchase for a period of 90 days from the date of purchase. If any component part fails to function because of defects in materials or workmanship during this period, the manufacturer's obligations are limited, at its discretion, to either, repair or replace the defective part.

This warranty does not cover any component part that has been damaged through use, modification, misuse, abuse, accident or neglect; nor does it cover normal wear and tear. Additionally, this warranty is void if the component part has been altered or modified or repaired by anyone other than Hitec RCD USA, Inc. or its authorized agents. Hitec RCD USA, Inc. is not responsible for loss of use of the Multiplex model, or other incidental or consequential damages. Under no circumstances shall the Manufacturer or any of its representatives be held liable for injury to persons or property damage resulting from the assembly of the product or from the use of the final user assembled product. Furthermore, no liability shall be attached to Multiplex or Hitec RCD USA, Inc. from the use of the final assembled product because: the product operates and is controlled by way of remote radio frequency; and outside radio frequencies may interfere with the product frequency, causing loss of control. Because an out-of-control model has the potential to cause personal injury and property damage, Multiplex or Hitec RCD USA, Inc. cannot be held liable for personal injury or property damage caused by the use or misuse of Multiplex model products. By the act of using the user-assembled products, the user accepts all resulting liability. Some states do not allow exclusion of incidental or consequential damages, so the above limitations and exclusion may not apply to you. Multiplex and Hitec RCD USA, Inc. hereby exclude any and all express warranties not specifically stated herein and all implied warranties of merchantability and fitness for a particular purpose. There are no warranties which extend beyond the description of the warranties contained within this document.

What to Return
Return only the component part that is defective in materials or workmanship. Please pack the unit carefully and insure it, as this warranty does not cover loss or damage in transit.

Hitec RCD USA, Inc.
12115 Paine St.
Poway CA, 92064
(858) 748-6948

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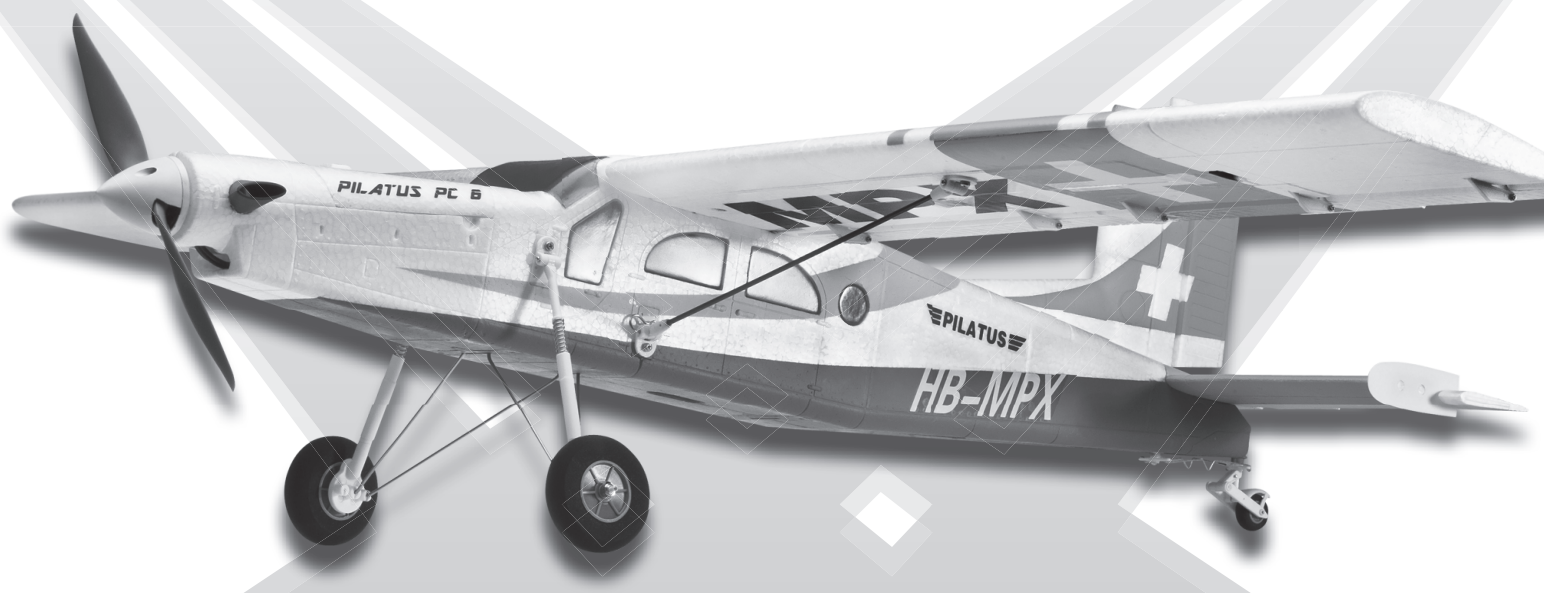
PILATUS PC 6



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