



# *T-28 Trojan* *Instruction Manual*

**PLUG-N-PLAY®**



***Charge-and-Fly™ Park Flyer***

Wingspan: 44 in (1118mm)  
Length: 36 in (914mm)  
Weight (RTF): 30 oz (875 g)  
Servos: Four 3-wire servos  
Motor: PKZ 480 960Kv outrunner brushless motor  
ESC: E-flite 25A brushless (EFLA1025)



## T-28 Trojan Plug-N-Play Instruction Manual

Congratulations on your purchase of the ParkZone® T-28 Trojan Plug-N-Play® airplane (PKZ4475). We at ParkZone are committed to giving you the most enjoyable flight experience possible. In order to have a safe and successful flight, we ask that you do not fly until you have read these instructions thoroughly.

This airplane comes almost fully assembled in order to allow you to get in the air quickly. Your T-28 Trojan Plug-N-Play (PNP®) already has the 3-wire servos, a ParkZone 480 outrunner brushless motor, and an E-flite Pro 25A brushless ESC installed. The decals have already been applied, as well. You will only need to add your own battery (a 3S 1800+mAh Li-Po is recommended), as well as a receiver and transmitter.

Note: Although the airplane can function with a 4-channel radio system, we suggest that you use a computer radio system with at least 6 channels so you can use dual rates and make end-point adjustments. These features will greatly add to the flying capabilities of the aircraft.

In as little as an hour, you can be ready for your first flight with the T-28 Trojan PNP. This means you can spend your time refining your flying skills, not your building skills.

### Warning

Although your ParkZone T-28 Trojan PNP comes almost ready to fly, this aircraft is for experienced RC pilots only and is not a toy! Misuse of the plane can cause serious bodily harm and damage to property. Therefore, only an experienced RC pilot should fly it.

## Step 1

### Charging Your Flight Battery

We recommend that you choose either the 2200mAh 3S Li-Po (PKZ1030) or the ParkZone 1800mAh 3S Li-Po (PKZ1031) to power your T-28 Trojan PNP. The Li-Po battery must be charged with a charger that is specifically designed to handle Li-Po batteries, such as the ParkZone 2- to 3-cell Li-Po Charger (PKZ1040). Regardless of the battery you choose, always follow the charger and battery instructions in order to avoid any damage to the battery, charger, property or yourself.

### Warning

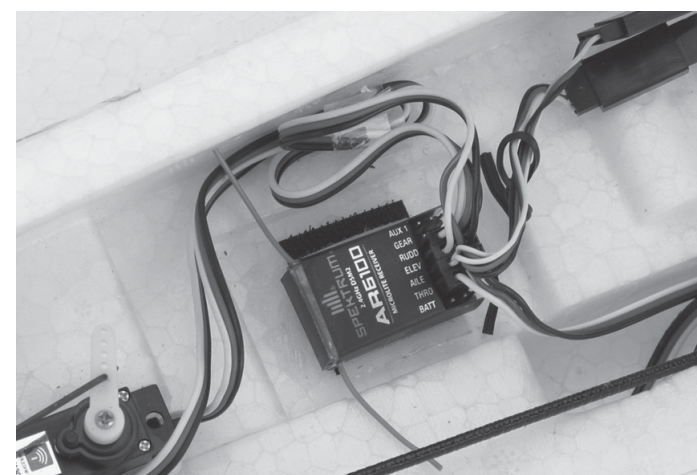
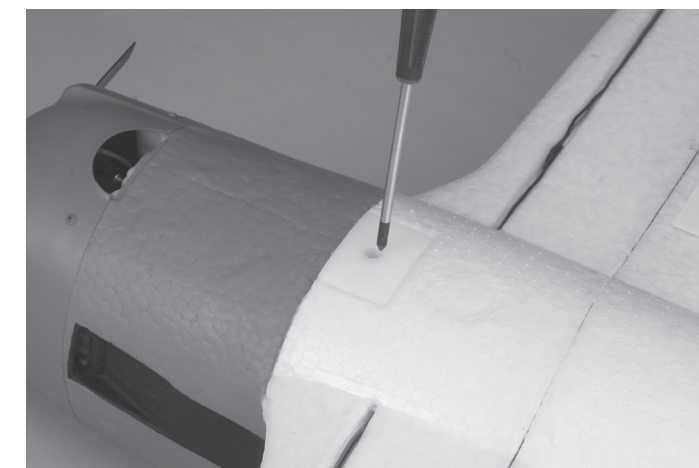
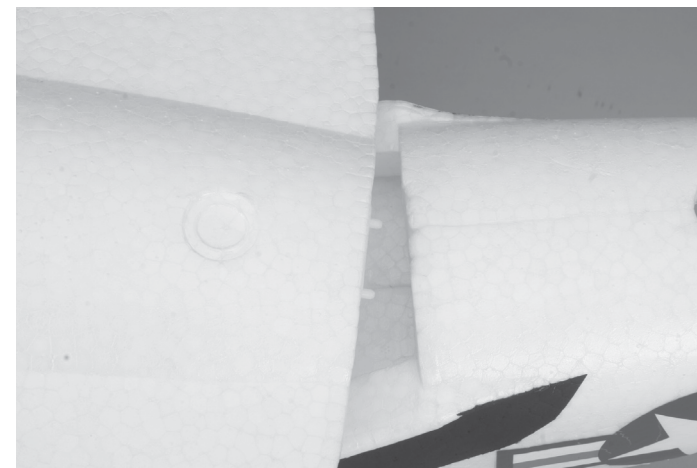
Failure to use the proper charger for a Li-Po battery can result in serious damage, and if left charging long enough, will cause a fire. ALWAYS use caution when charging Li-Po batteries.

## Step 2

### Attaching the Wing

In order to attach the wing of your T-28, please follow these simple instructions:

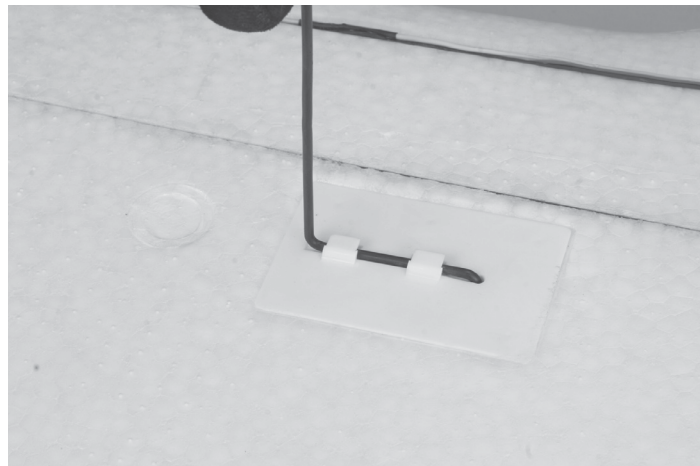
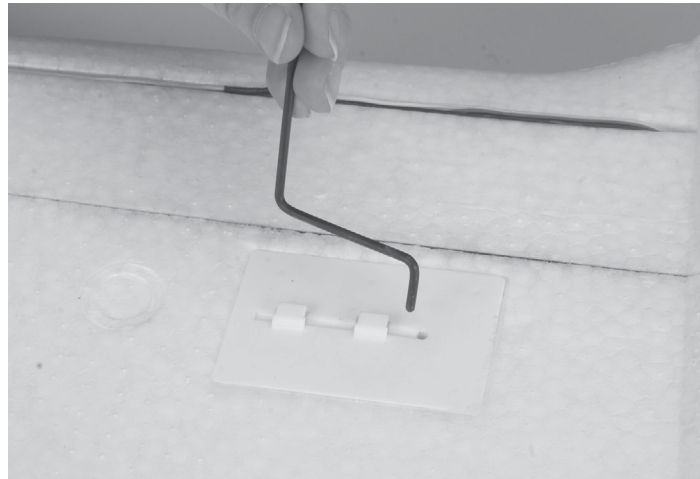
1. Locate the included wing securing screw.
2. Turn over the fuselage so you are looking at the bottom. Do the same with the wing.
3. Route the aileron leads through the access hole in the bottom of the fuselage.
4. Carefully align the two locator pins on the front of the wing into the two small holes in the front of the fuselage.
5. Slide the aileron leads inside the fuselage so that they will not become pinched in between the wing and the fuselage when securing the wing.
6. Slide the bottom of the leading edge of the wing into the fuselage as shown, making certain it is perfectly centered. This must be done correctly in order to allow the screw to thread into the fuselage. Once you are certain the wing is centered, tighten the screw to secure the wing.
7. The wing is correctly installed when no gap exists between the wing and fillet.
8. Gently pull up on the rear of the canopy hatch to remove and set aside.
9. Connect the aileron leads to the pre-installed Y-harness, noting proper orientation. The servo leads are polarized to fit one way.



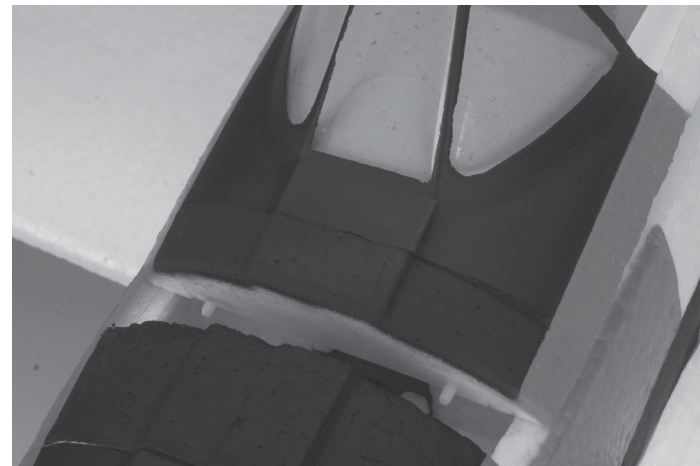
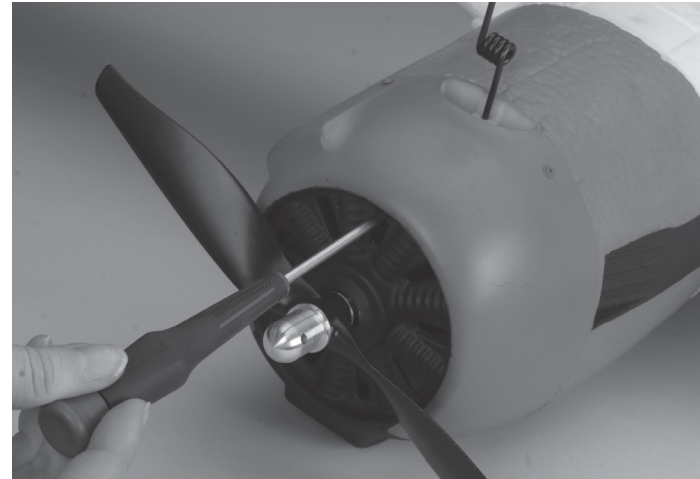
## Step 3

### Installing the Landing Gear

1. Install the main landing gear by inserting it into the locator hole in the wing. Swivel the landing gear toward the retaining clips and gently snap into place.
2. Insert the nose gear into the steering assembly on the underside of the cowl with the flat spot facing forward.



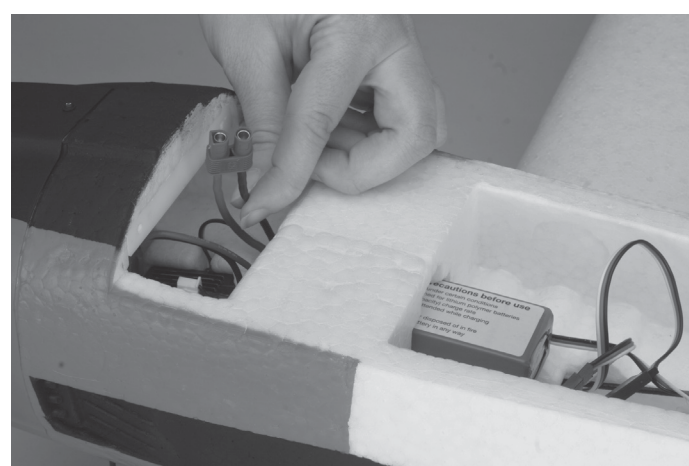
3. Align the retaining screw with the flat spot on the cowl. The retaining screw should be visible through the front of the cowl.
4. Using a Phillips screwdriver, tighten the retaining screw. The retaining screw should be accessible through the front of the cowl, however, you may choose to remove the cowl for easier access.
5. Reposition the T-28 so that it is resting on the landing gear.



## Step 4

### Attaching the Horizontal Stabilizer

1. Locate the horizontal stab of the tail.
2. Slide tail in allotted space of fuse, making sure the control horn installed into the horizontal tail will properly align with pushrod and clevis exiting the back fuse.
3. When you are certain the tail is centered correctly and in the right place, use the tape provided to properly secure the tail to the fuselage as shown. Use the tape on the top and bottom of each side of the tail (total of 4 applications).
4. Turn on the transmitter and plug in flight battery. Make sure trim levers are centered and the left stick is in the full down position.
5. Locate the clevis and rod exiting the right side of the fuselage, and attach the clevis to the control surface as shown.
6. Make any trim adjustments as necessary prior to flight (see step 7).



**Note:** To make trim adjustments to the horizontal stabilizer:

a. Turn on radio transmitter

b. Plug in fully charged battery into fuse

c. Use the elevator trim of the radio by moving up or down to center the tail at neutral when the gimbal is also at neutral. If these changes are not sufficient, center the transmitter elevator trim lever, then remove the clevis from the control surface and turn clevis in or out as needed to move the control surface back to neutral.

**Warning:** Always keep hands and all objects away from the propeller in case the motor is engaged. A moving propeller can cause severe injury and damage!



## Step 5

### Installing the Propeller and Spinner

1. Slide propeller on. Make sure center of the pitch numbers on prop are visible from the front of airplane.
2. Screw prop hub on. Inserting a hex driver through the prop hub and tightening helps ensure the hub is secure.



## Step 6

### Installing the Receiver

Carefully plug in the servo leads into the corresponding channels of the receiver you have chosen. The servo plugs may have to be trimmed carefully with a hobby knife if you are using a Spektrum, JR® or HiTec radio system in order to fit correctly into the receiver.

Confirm that the servo leads/plugs are in the correct channel of the receiver. Do this by:

1. Turning on the transmitter.
2. Installing a charged flight battery.
3. Plug flight battery into ESC.

4. Check all functions to ensure proper setup. Keep all body parts away from the propeller. You can also make any trim adjustments to the control surfaces at this time. Once you are satisfied that the channels are functioning correctly, you can turn off the radio system.

Install the receiver into the allotted space within the fuselage. Make sure it is secure. Carefully route the antenna (when applicable) so it exits the fuselage just behind the canopy. It should then simply fall along the fuselage and can be secured through the vertical stab. When the antenna is routed correctly, it should hang several inches (5"–7") below the fuselage.

## Step 7

Your T-28 Trojan PNP comes out of the box with the E-flite® 25-amp brushless ESC. This controller has been designed for use in radio control aircraft and is designed to support motor currents up to 25 amps continuous, and up to 4 micro servos with a 2- to 3-cell Li-Po battery. It is suitable to use with most radio brands. The E-flite 25A ESC comes in an impressive plastic case with exposed, finned heat sinks for both of the motor drive mosfets and, unlike many controllers, there is also a finned heat sink fitted to the BEC regulators to give a more reliable and more powerful power supply to the servos. If you intend to fly your T-28 Trojan PNP stock, then there is no need to program your ESC. It comes installed with the default settings. If you intend to re-program the ESC, we strongly recommend removing the propeller first in order to keep it from spinning if the motor is accidentally engaged.

**Note:** ALWAYS assume the motor and the propeller are live. ALWAYS keep clear of the propeller at all times. The high rpm of the brushless motor can cause severe injury.

### E-flite 25-Amp ESC Features:

- Two soft cut settings (for 2- and 3-cell Li-Po battery packs)
- 70% Smart Cut feature
- Brake option
- Timing options for up to 4-pole inrunner and 4-pole outrunner motors
- 2 setting options for the throttle input range

### Using Your E-flite 25-Amp Brushless Controller:

The E-flite 25A controller is very simple to use and, for safety, will not arm the motor until the throttle stick has been held in the Idle/Off position for more than 1 second. The controller will report the soft cut voltage setting every time you plug in the battery by first making a low, long beep to show startup. Then, it makes 2 or 3 medium length, mid-tone beeps to indicate the cell count (or 7 beeps if 70% Smart Cut is selected), helping you to check the setting before every flight. To prepare for flight, you should first turn on your transmitter and ensure the throttle is set to the Idle/Off position. Next, plug in the flight pack to the speed control and listen for the tones to indicate soft-cut voltage. After the controller has indicated the cell count, it will make one set of 3 medium length, rising tones to tell you it is armed and ready to fly, or 2 sets of fast rising tones if you are entering the programming mode. For your own safety, and the safety of others, you should always treat the motor and propeller as though they are live and dangerous, remembering the motor could start at any time. Keep any body parts, clothing and tools clear of the propeller arc. Never leave the battery connected when you are not flying the aircraft. Always remove the battery pack from the model before charging the battery, and when finished flying.



## Step 8

### Range Checking your Radio System

After you have finished the final assembly, it is time to range check the radio system within the T-28 Trojan PNP.

#### Prior to each flying session:

- Make sure that no one around may be flying, or is getting prepared to fly, on the same channel that you are on. After this is confirmed, turn on transmitter with prior to plugging in flight battery. With airplane on the ground and motor running, you should walk away approximately 100 feet and still have full control of all functions. If this is not the case, do not fly! Call Product Support at 1-877-504-0233.

- Always make sure that all controls are functioning per the transmitter input that you are giving. This includes ailerons, rudder, elevator, and throttle.
- Always make sure you have fully charged the transmitter batteries.

**Always remove the flight battery from the airplane when you are done flying, or when you are on the way to the flying field.**

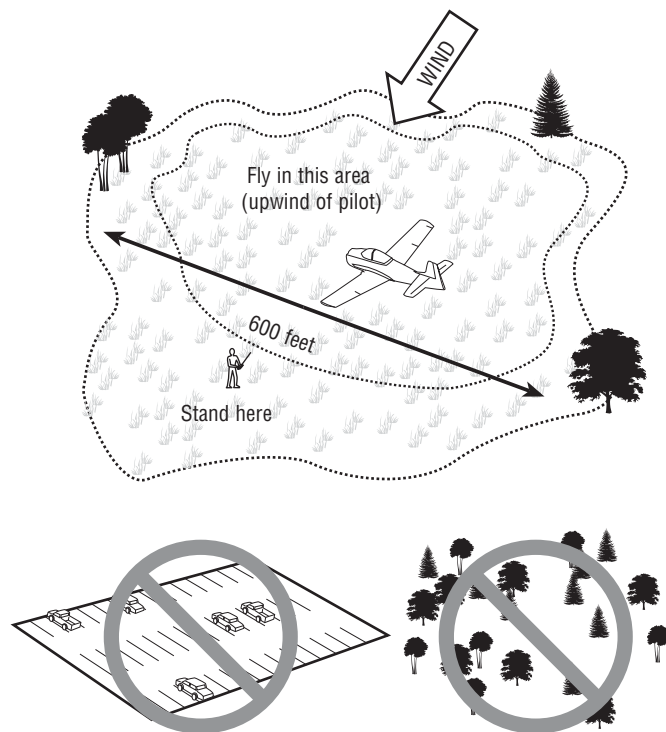
## Step 9

### Flying

Always choose a wide-open space for flying your ParkZone T-28 Trojan PNP. It is ideal for you to fly at an AMA sanctioned flying field. If you are not flying at an AMA approved site, always avoid flying near houses, trees, wires, and buildings. You should also be careful to avoid flying in areas where there are many people, such as busy parks, or school yards. Always follow local ordinances. We recommend only flying your Trojan in light winds.

#### Prior to each flight:

- Always make sure your T-28 Trojan PNP is properly trimmed.
- Always make sure the receiver, ESC, and battery are properly secured.
- Always verify the propeller is on securely.
- Always ensure the servo reversing switches on the transmitter are set correctly.
- Always verify the dual rates switch is set at where you plan on flying. We recommend LOW rates for your initial flying. The T-28 Trojan PNP is VERY maneuverable on high rates and requires a lot of experience to handle properly.



## Warranty and Follow-Up Procedures

### Warranty Period:

Exclusive Warranty- Horizon Hobby, Inc., (Horizon) warrants that the Products purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase by the Purchaser.

### Limited Warranty

(a) This warranty is limited to the original Purchaser ("Purchaser") and is not transferable. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. This warranty covers only those Products purchased from an authorized Horizon dealer. Third party transactions are not covered by this warranty. Proof of purchase is required for warranty claims. Further, Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.

(b) Limitations- HORIZON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCT. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

(c) Purchaser Remedy- Horizon's sole obligation hereunder shall be that Horizon will, at its option, (i) repair or (ii) replace, any Product determined by Horizon to be defective. In the event of a defect, these are the Purchaser's exclusive remedies. Horizon reserves the right to inspect any and all equipment involved in a warranty claim. Repair or replacement decisions are at the sole discretion of Horizon. This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the Product. This warranty does not cover damage due to improper installation, operation, maintenance, or attempted repair by anyone other than Horizon. Return of any goods by Purchaser must be approved in writing by Horizon before shipment.

### Damage Limits:

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCT, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY. Further, in no

event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability.

If you as the Purchaser or user are not prepared to accept the liability associated with the use of this Product, you are advised to return this Product immediately in new and unused condition to the place of purchase.

Law: These Terms are governed by Illinois law (without regard to conflict of law principals).

### Safety Precautions:

This is a sophisticated hobby Product and not a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the Product or other property. This Product is not intended for use by children without direct adult supervision. The Product manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or injury.

### Questions, Assistance, and Repairs:

Your local hobby store and/or place of purchase cannot provide warranty support or repair. Once assembly, setup or use of the Product has been started, you must contact Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please direct your email to [productsupport@horizonhobby.com](mailto:productsupport@horizonhobby.com), or call 877.504.0233 toll free to speak to a service technician.

### Inspection or Repairs

If this Product needs to be inspected or repaired, please call for a Return Merchandise Authorization (RMA). Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as **Horizon is not responsible**

**for merchandise until it arrives and is accepted at our facility.** A Service Repair Request is available at [www.horizonhobby.com](http://www.horizonhobby.com) on the "Support" tab. If you do not have internet access, please include a letter with your complete name, street address, email address and phone number where you can be reached during business days, your RMA number, a list of the included items, method of payment for any non-warranty expenses and a brief summary of the problem. Your original sales receipt must also be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

#### Warranty Inspection and Repairs

To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be repaired or replaced free of charge. Repair or replacement decisions are at the sole discretion of Horizon Hobby.

#### Non-Warranty Repairs

**Should your repair not be covered by warranty the repair will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost.** By submitting the item for repair you are agreeing to payment of the repair without notification. Repair estimates are available upon request. You must include this request with your repair. Non-warranty repair estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Please advise us of your preferred method of payment. Horizon accepts money orders and cashiers checks, as well as Visa, MasterCard, American Express, and Discover cards. If you choose to pay by credit card, please include your credit card number and expiration date. Any repair left unpaid or unclaimed after 90 days will be considered abandoned and will be disposed of accordingly. **Please note: non-warranty repair is only available on electronics and model engines.**

Electronics and engines requiring inspection or repair should be shipped to the following address:

**Horizon Service Center  
4105 Fieldstone Road  
Champaign, Illinois 61822**

All other Products requiring warranty inspection or repair should be shipped to the following address:

**Horizon Product Support  
4105 Fieldstone Road  
Champaign, Illinois 61822**

**Please call 877-504-0233 with any questions or concerns regarding this product or warranty.**

#### Replacement Parts

Make sure that you keep your T-28 Trojan PNP flying. Replacement parts are available at your local hobby shop or from Horizon Hobby ([www.horizonhobby.com](http://www.horizonhobby.com)). Please try your local hobby shop first. By supporting them, they will be there when you need them!

Item #:	Description:	Retail
PKZ4403	Decal Sheet: T-28	\$4.99
PKZ1012	Propeller: T-28	\$3.49
PKZ1063	Servo Y-Harness: T-28/3D2	\$1.49
PKZ1081	SV80 Servo (long lead): T-28 Ailerons	\$11.99
PKZ1060	SV120 Servo (short lead): T-28 Elevator	\$12.99
PKZ1090	DSV130M Servo (short lead): T-28 Rudder	\$13.99
PKZ1011	Prop Adapter: T-28	\$5.49
PKZ1064	Metal Gear Set: DSV130M	\$5.99
PKZ4413	Clear Canopy & Painted Pilot w/Pedestal: T-28	\$7.49
PKZ4406	Main Landing Gear: T-28	\$5.49
PKZ4407	Nose Gear Set: T-28	\$2.39
PKZ4415	Instruction Manual: T-28	\$0.99
PKZ4416	480 Outrunner Brushless Motor: T-28	\$35.99
PKZ4417	Instruction Manual: T-28 PNP	\$0.99
PKZ4418	Motor Mount	\$3.99
PKZ4420	Painted Wing (No Servo): T-28	\$37.99
PKZ4422	Pushrods w/Clevis: T-28	\$2.59
PKZ4425	Horizontal Tail w/Accessories: T-28	\$10.99
PKZ4426	Cowl: T-28	\$5.99
PKZ4467	Painted Bare Fuselage: T-28	\$31.99
EFLA1025	25-Amp Pro Brushless ESC	\$59.99

#### Optional Parts

PKZ4161	FM Crystal Set CH17, 72.130	\$9.99
PKZ4162	FM Crystal Set CH19, 72.170	\$9.99
PKZ4163	FM Crystal Set CH21, 72.210	\$9.99
PKZ4164	FM Crystal Set CH50, 72.790	\$9.99
PKZ4165	FM Crystal Set CH52, 72.830	\$9.99
PKZ4166	FM Crystal Set CH54, 72.870	\$9.99
PKZ4341	Tx: (T672) CH17, 72.130: 3D2/T28	\$33.99
PKZ4351	Rx: (RA672) CH17, 72.130: 3D2/T28	\$29.99
PKZ1040	2- to 3-Cell DC Li-Po Balancing Charger	\$34.99
PKZ1030	2200mAh 11.1V Li-Po Battery	\$75.99
PKZ1031	11.1V 1800mAh Li-Po Battery	\$69.99
PKZ1050	3S LiPO and Battery Charger	\$89.99

PKZ4417



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