

An innovator model airplane in the scale turbo prop class!

High level detailing and flight performance wich will surely surprise many modellers and this legendary airplane lovers.



After years of research, the Juniaer team is honored to introduce our Turbo Prop version of the T-27 Tucano model airplane, adapted from the 50cc platform with a carbon fiber mount for King Tech KT45TP turbine. Manufactured 100% with Full Composite, with exclusive air cooling system and realistic appearance. Tested and approved in flight, our solutions proved to be at the height of the most demanding modelists and pilots, providing an international quality ARF kit manufactured in Brazil with the best materials available in the market.

This is the **T-27 Tucano 45TP ARF Juniaer**, ready for retracts installation, with scale flaps, exquisite finishing and available with many painting schemes, very realistic, all embossed details, with rivets, antennas, opening side door with installed hinge and lock, panel divisions, compartments, static terminals, pitot tubes, landing gear doors, cockpit with instruments panels and clear canopy. Engine cowl in two parts for easy removing and maintenance with exhaust replicas.

Made of high quality epoxy resin with structural reinforcements , low weight and high resistance due to the high tecnology FULL COMPOSITE vacum lamination tecnique. Wing and stabilizer with aluminum tubes (1 tube on wing and 1 tube in stabilizer) , laminated with fiberglass and epoxy resin with carbon fiber reinforcements and lser cut plywood structures. Clear plastic canopy , epoxy resin canopy bold , epoxy resin cockpit with instruments panels. Ailerons , flaps , rudder and elevators factory hinged in perfect alignment, Rudder to be glued with epoxy with hinge point provided with the kit. Servos tray and tank tray in laser cut plywood , to be glued.

Exquisite finishing with automotive paint , scale stickers apllyed and PU glazed for long lasting great durability.

Steady flight pattern, realistic and acrobatic. Capable of many manouvers such as rolls, slow rolls, cuban eights, knife edge, inverted flight and much more you can create.

DOES NOT INCLUDE ASSEMBLY ACCESSORIES, such as linkages, retracts, wheels, engine, spinner, propeller, radio and electronic equipments, etc... 2 fiberglass fuel/smoke fluid 1700ml tanks and 2 pilot busts included.

Specifications:

Wingspan: 2,30m (90.55 in) Lenght: 2,05m (80.71 in) Wing Area: 84,63 dm² Wing Loading: 113g/dm²

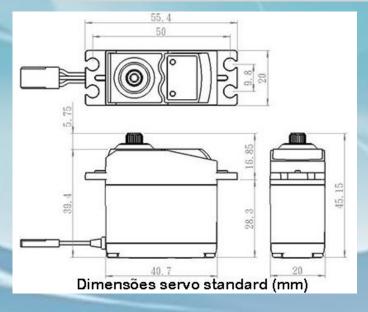
Weight: approx. 4,6 Kg (10.14 lb) (without accessories) 11,5 a 12 Kg (25.35 to 26.45 lb) (flying weight)

Radio: Minimum 12 channels (not included)

Servos: All servos must be metal gears , standard size , except rudder servo , wich can be giant size (not included)

8 servos standard size 13Kg (180oz/in) or more torque (2 ailerons, 2 flaps, 2 elevators, 1 rudder and 1 retracts)

Suggestions: SAVOX: SAVSC0251MG FUTABA: S3305MG , S3306MG SPEKTRUM: SPMSA6150





Turbo prop: 40 to 45 Turbo Prop Turbine

Suggestion: King Tech K-45TP - perfect instalation





Fuel and smoke fluid tanks (included with the kit): 1,7 L (57oz) each (approximately 8 minutes flights)

Spinner: 3 ½" aluminum (not included)

Propeller: 20x14 three blade (or according to turbine's manual)

Aluminum wing tube:

1 wing tube on wing (1" external diameter x 1/4" thickness x 885mm lenght)

1 wing tube on stabilizer (1/2" external diameter x 0.42" thickness x 340mm lenght)

C.G. (Center of Gravity): C.G. range is beetween 127mm and 133mm from the leading edge of the wing , **C.G.** point is at 130mm (5.11 Inches) from the leading edge , measured at the wing root. Wing chord is 453mm (17.83 inches). To check the balance hold your airplane in the inverted position by the wing root at the indicated C.G. point , without fuel. Retracts must be up. The airplane must be with light nose weight tendency. **Never hold your model airplane only by the wing tips , always hold it by wing roots (closer to the fuselage). Never take off your model airplane without checking the balance. If there is a tail weight tendency you must add weight to the front of the model airplane until the balance is correct. A model airplane with tail weight tendency will not fly as it should , it can cause serious accidents and damage to people and properties around the flying area.**





Linkage, Horns and Hard Points:

The model airplane has high hardness structural reinforcements for control horns installation at the ailerons, flaps, elevators and rudder. These points are $40mm \times 40mm$ (15.75 inches x 15.75 inches), positioned at strategic places and must be followed right as the instructions below, under risk of loosing control causing damage and risks to people and properties around the flying area. If you wish to modify or adapt equipments that requires modifications on the original project never do that by your own, get in touch to Juniaer customer service to verify the possibility of installation.

Ailerons: 2 simple horns needed , 25mm to 35mm (1 1/8" to 1 1/4") tall. Servo arms (20mm to 25mm) (1" from center to the end) must be positioned to the wing root side. Note that in both sides of the wing has the same positioning. The horn hard point is centered with servo arm slot. Distance beetween center of control arm and control horn (in neutral position): 92mm (3.62 inches). Servos must be installed in internal ribs at wing for precise and secure linkage and covered with servos covers.

Flaps: 2 simple horns needed , 25mm to 35mm (1 1/8" to 1 1/8") tall. Servo arms (20mm to 25mm) (1" from center to the end) must be positioned to the wing root side at one side and to the wing tip at other side , as it comes from factory. The horn hard point is centered with servo arm slot. Distance beetween center of control arm and control horn (in neutral position): 85mm to 90mm (3 3/8" to 3 1/8" inches). Servos must be installed in internal ribs at wing for precise and secure linkage and covered with servos covers.

Elevators: 2 simple horns needed , 25mm to 35mm (1 1/8" to 1 1/8") tall. Servo arms (15mm to 20mm) (5/8" to 13/16" from center to the end). The horn hard points are centered with servo arms exits from the stabilizer , and from the root side of the elevators (closer to the fuselage). Servos must be installed in internal ribs at elevators for precise and secure linkage and covered with servos covers.

Rudder: 1 dual horn needed (command to both sides) total lenght beetween 100mm to 120mm (4" to $4 \frac{3}{4}$ "). Dual servo arm (command to both sides) total lenght beetween 40mm to 45mm (5/8" to 13/16"). The horn hard points are centered with pull-pull exits from the fuselage. Servo must be installed inside the fuselage at the servos tray provided , acting with pull-pull cables.

- *All control horns must be Heavy Duty and indicated to $\frac{1}{4}$ " scale models airplanes , or giant scale model airplanes
- *All servo arms must be Heavy Duty and indicated to $\frac{1}{4}$ " scale models airplanes , or giant scale model airplanes
- *All rods must be steel made , 4-40 tread or more.
- *All links e servo conectors must be Heavy Duty and indicated to $\frac{1}{2}$ " scale models airplanes, or giant scale model airplanes



Recommended Defletions of Control Surfaces:

Ailerons: Beetween 25mm (1") (low rate) to 35mm (1 7/16") (high rate) – up and down

Elevators: Beetween 16mm (5/8") (low rate) to 24mm (1") (high rate) – up and down

Rudder: Beetween 40mm (1 5/8") (low rate) to 50mm (2") (high rate) – left and right

Flaps: Beetween 0º to 10º for take off (we recommend 0º) and beetween 25º to 30º for landing

Retracts Instalation: (105º front wheel and 85º at mains)





Suggestions:



Johnny Simões engeneering

Electric or pneumatic retracts set, custom made.

Simple version (no landing light, no brakes and no gear doors conectors)

Full scale competition version (with landing light, brakes and gear doors conectors)







* Sold separately.

Robart Pneumatic:

ROBQ 636RS 85º mains retracts

ROBQ 671R e ROBQ 671L Mains Robostruts

ROBQ 640HDRS 105º front retract ROBQ 674 Front strut (fork style)

ROBQ 157VRX Air kit De Luxe large

ROBQ 190 Quick Connectors

ROBQ 169 air lines

Robart Electric:

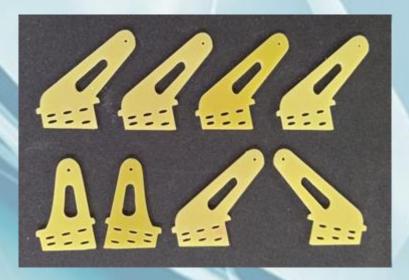
ROBQ 636RSE 85º mains retracts

ROBQ 671R e ROBQ 671L Mains Robostruts

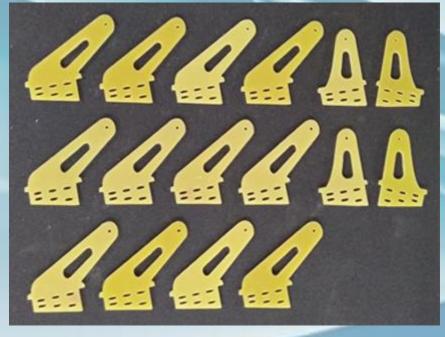
ROBQ 640HDRSE 105º front retract ROBQ 674 Front strut (fork style)

Fiberglass horn sets. Provided in two options:

Standard: 6 standard horns (2 ailerons, 2 elevators and 2 rudder) and 2 flap horns for external installation.



Double horns Heavy Duty: 12 standard horns (4 ailerons, 4 elevators and 4 rudder) and 4 flap horns for external installation.







Scale lighting system T-27 Tucano 50cc / Turboprop

Specifications:

Tension: 12v Recomendations: : Li-Po 3S 11,1V 850 mAh a 1300mAh. Exclusive battery to power the system, independent of the receiver.

Consuption corrent: 400ma - peaks of 730ma Minimal recomendation: li-po 3S 650ma 5c

On/Off: PWM-Pulse Width Modulation, switched to a receiver channel. All radio manufacturers compatible.

Anti-interference filter.

Strobo Leds: SMD-Surface Mount Device. White light: 11.000K light transmission power: 3w 120° lenses.

Wing landing lights: SMD White light: 11.000K light transmission power: 2w Four leds on each side.

Left navigation lights: SMD Red light:11.000K light transmission power: 2w Four leds on wing tip.

Right navigation lights: SMD Green light:11.000K light transmission power: 2w Four leds on wing tip. Right and left sides printed on wing tips boards.

Front landing light: Top Led 5mm: White light: 11.000K light transmission power: 0.5w

Rudder navigation lights: 2 Hat type leds 5mm 1 white and 1 red: 11.000K light transmission power: 0.5w

Up arrow printed on board for correct installation (white above and red down).

Dimensions: Main board: 50x32mm (2" x 1 ¼") Wing Tip Assembly: 35x20mm (3/8" x ¾")

Installation:

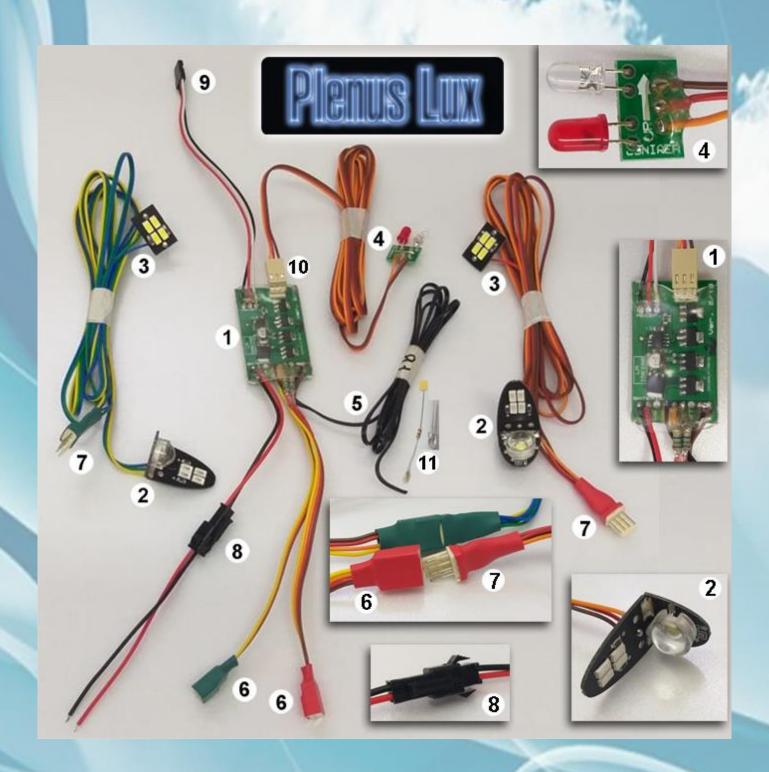
To attach the main board, wingtips boards, landing lights and rudder boards to the model airplane, use 3M high-adherence double-sided tape (red). Before gluing the tapes apply 3M 8250 adhesion promoter primer to the contact surfaces for a good result. The front landing led and resistor are sent without soldering as an optional (see details in attacked flyer). When using Johnny Simões retracts the led is included and installed, being necessary only to solder the wires.

Operation:

The circuit requires to be connect to a receiver channel to a 3-position switch on the radio.

When the system is connected to the battery, the circuit performs a self test by turning on all lights for 1 second, indicating its perfect operation. The radio switch in the full position turns the circuit on, turning all lights on; in the middle position turns off only the landing lights keeping the navigation lights on, and in the minimum position turns off the circuit, turning off all lights.

It is recommended to disconnect the battery from the circuit when not using the model airplane for more than 5 days.



Main board (1) 50x36mm lighting system. 150mm wires and universal plugs for battery (8) and receiver (9), 1000mm led wire to front landing light (5) (led and resistor sent without soldering) (11) and rudder extension plug (10).

Left side extension (wing tip 1250mm and landing lights 550mm). 3-pin plug to main board (7). Right side extension (wing tip 1250mm and landing lights 550mm). 3-pin plug to main board (7). Wing Tip Boards (2): 35x22x20mm-correct format for installation. Landing lights boards (3): 18x11mm Rudder extension 1700mm. 3-pin plug to main board (10). Rudder main board (4): 18x19mm.

Scale Pilot Bust T-27 Tucano 45TP ARF



Width at Base: 4.33" Lenght at base: 1.85" Height: 4.72" Wheight: 1.05oz







Made of fiberglass and epoxy resin, low weight, painted and varnished according to the paint scheme for greater realism, custom-made for your T-27 Tucano Juniaer!

* 2 Included in the Turboprop version.







Custom made cockpit for T-27 Tucano 50cc, extremely detailed and realistic, ready to install in place of factory stock cockpit. Available in two options:

Flat version: for pilot busts. Doesn't allow full body pilots

Full scale version: for full body pilots.





Three Blade propeller 20x14 for 45TP



Three Blade propeller 22x12 for 45TP



* Sold separately.







Custom made extensions and conectors for T-27 Tucano 50cc in 3 options:

1-Ailerons and flaps
2-Ailerons, flaps and retracts
3-Ailerons, flaps, retracts and lights



Protection and transport covers T-27 Tucano 50cc



- ✓ Protection and transport covers for T-27 Tucano 50cc.
- ✓ Made of durable padded material for protection.
- ✓ Wing covers with zipers and carrying handle, with wing tube housing.
- √ Stabilizer covers with zipers and fuselage cover with velcro.
- ✓ Custom made by Juniaer.

Recommended assembly acessories:

- King Tech KT-45 TP turbine
- pair of 60º exhaust exits
- JC Super Props Three Blade propeller
- 3 1/2" aluminum spinner
- Johnny Simões retracts landing gear set
- UAT tank
- Heavy duty fiberglass horns set
- 16 units 4-40 spheric conections
- 8 servos MG minimum 180oz-in torque
- 3 double air valves
- 1 simple air valve for brakes
- 33 ft 3mm air lines (3 colours)
- 12 pairs of quick air conectors Robart or similar
- 20 units 3mm "T" conectors FESTO or similar
- 2 units air pressure gauges
- 2 units air fill valves
- 2 units large air tanks
- 2 units HD on/off switches (JR Gold style)
- 2 units 3200mAh LiFe 2S batteries
- 6.6 ft gasoline lines (4mm internal diameter)
- fueler and breather
- 8 aluminum servo arms
- 4-40 pull-pull system
- 4 units 4-40 full treaded wires
- 9,9V minimum 2100mAh battery for turbine
- 6 units air cilinders 38mm diam 2 3/4 lenght (gear doors)
- 12 units door hinges

* Sold separately.





Ralph Esposito at Florida Jets 2019. Best warbird cockpit trophy.



Picturess: cortesy of Ralph Esposito.









https://www.juniaer.com.br/

www.facebook.com/asaseases.juniaer

www.instagram.com/juniaermodelismo/

twitter.com/Juniaer

You Tube - JUNIAER

e-mail: juniaer@hotmail.com

(35) 9149-8548 (Whatsapp) Elton

(19) 9551-9373 (Whatsapp) Rodrigo