

P2006T



SPECIFICATION AND DESCRIPTION



QUALITY AIRCRAFT SINCE 1948
TECNAM

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P2006T

This document applies only to the Tecnam P2006T and is published for the purpose of providing general information for the evaluation of design, powerplant, performance and equipment.



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Cover photo: P2006T flying over Capri island

GENERAL DESCRIPTION

TECNAM P2006T IN A CLASS OF ITS OWN

The Tecnam P2006T Twin has established itself as the aircraft of choice for not only the world's most reputable Flight Training Organisations but private owners alike. A firm favourite with leading General Aviation flight-test journalists, who praise its styling, handling, and very low operating costs.



NASA Leaptech

With so many P2006T already in service worldwide, it consistently comes out on top following the most stringent of competitor fly-off evaluations. Not just from Flight Schools but Tecnam has also won orders from NASA, a number of Air Forces and other niche operators who now fly special versions of the Twin, such as the P2006T SMP.

At the heart of the P2006T is the Rotax912S aircraft engine. The Rotax 912S is FAR 33 certified and approved to operate on automotive fuel, giving it a significant edge over standard GA engines.

Some of the key benefits of the P2006T's engines include a reduced frontal area and better power-to-weight ratio. Lower fuel consumption, lower propeller rpm resulting in higher efficiency and a lower noise profile and stable cylinder head temperatures due to liquid cooling. Its relatively high power to weight (rated at 73 kW/100 hp) makes the Rotax 912S a popular choice in the aviation industry.

This twin-engine formula offers higher safety and lower operating costs than its single engine

counterparts. The P2006T light twin-engine aircraft has in fact a lower standard empty weight than comparable single engine four seat aircraft in the 180 hp or 200 hp class.

The Tecnam P2006T has the best Payload/Maximum Takeoff Weight ratio (0.36) among its direct competitors. This can be attributed to the high structural, systems efficiency and because of the excellent power to weight ratio of the Rotax engine.

The wing-mounted engines relieve the aerodynamic load on the wing with a consequently lighter structure. The remarkable efficiency of the Tecnam P2006T is also attributable to the low propeller speed and the low engine drag. These, together with a streamlined fuselage, result in unparalleled aerodynamic efficiency.

Boasting the highest ceiling and climb speed among its competitors, operators especially value the option to use automotive fuel as well as AVGAS. This not only leads to dramatically reduced direct costs but also makes it possible to fly in areas where AVGAS is difficult to find or

perhaps prohibitively expensive. The dependable twin-engine configuration of the Tecnam P2006T allows it to be flown over long distances and in areas where ground facilities are poor.

The Tecnam P2006T high wing feature is unique in its class and is especially valued by operators in the training environment as a further safety benefit as the engines, the props and the flaps are out of the way in the event of a gear up landing.

Construction

Tecnam P2006T is a twin-engine four-seat aircraft with fully retractable landing gear. The superior high-wing configuration offers stability, superior cabin visibility and easy access for passengers and luggage. Tecnam has used its extensive experience with aluminium airframes to create in the Tecnam P2006 a robust yet very light airframe, resulting in an outstanding payload-to-total weight ratio.

The wings are of traditional construction, that is essentially a mono spar configuration. Integral fuel tanks are located outboard of the engines, holding 100 litres each for a total of 200 litres.

A laminar flow NACA 63A airfoil of moderate thickness has been selected for the semitapered wing planform. This offers low drag and good high altitude performance. The wide slotted aluminium flaps are electrically operated and allow for stall speeds below 48kts. These flaps offer the potential for very steep approaches and short landings. Frise ailerons allow aggressive roll rates with minimal

adverse yaw. Aileron control is via internal cabin cables linked to push-rods in the wing leading edges. Particular attention has been paid to the cabin's structural design in order to ensure the required crash worthiness as prescribed in recent amendments to the FAA-FAR23 and EASA-CS23 codes. Fuselage structure, seats and seat belts combine to protect occupants in event of a hard landing. The Tecnam P2006T's ability to conform to such rigid safety requirements has been proven during dynamic tests carried out by a certified laboratory, demonstrating forward load factors up to 26g. The horizontal stabilator is an all-moving structure, designed for remarkable longitudinal control stability with excellent control authority.

A wide trim-tab, part of the stabilator trailing edge, doubles as an anti-servo tab device. The cable-type pitch trim is controlled by a wheel located between the pilots' seats and is fitted with a position indicator. As with most of the aircraft body, the horizontal stabilator and the vertical fin are metallic. The rudder features an electrically controlled trim-tab with a position indicator situated on the instrument panel.

Retractable Landing gear

The retractable landing gear of the Tecnam P2006T is powered by a reversible electric pump. The main landing gear has trailing link suspension, constructed from high strength aluminium alloys and high tensile 15CDV6 steel which is directly attached to the fuselage main bulkheads. An oleo-

pneumatic shock absorber provides excellent ground load absorption.

The main landing gear retraction is very simple, rotating through 90° into two fuselage side pods. The main gear of the Tecnam P2006T is actuated by an aluminium pushrod, which is connected to the hydraulic ram. The main landing gear is equipped with Cleveland wheels (6.00-6) and rudder pedals with toe brakes. The nose landing gear features a 5.00-5 wheel and telescopic strut with an oleo-pneumatic shock absorber. It is linked to the cabin's front bulkhead through a steel truss.

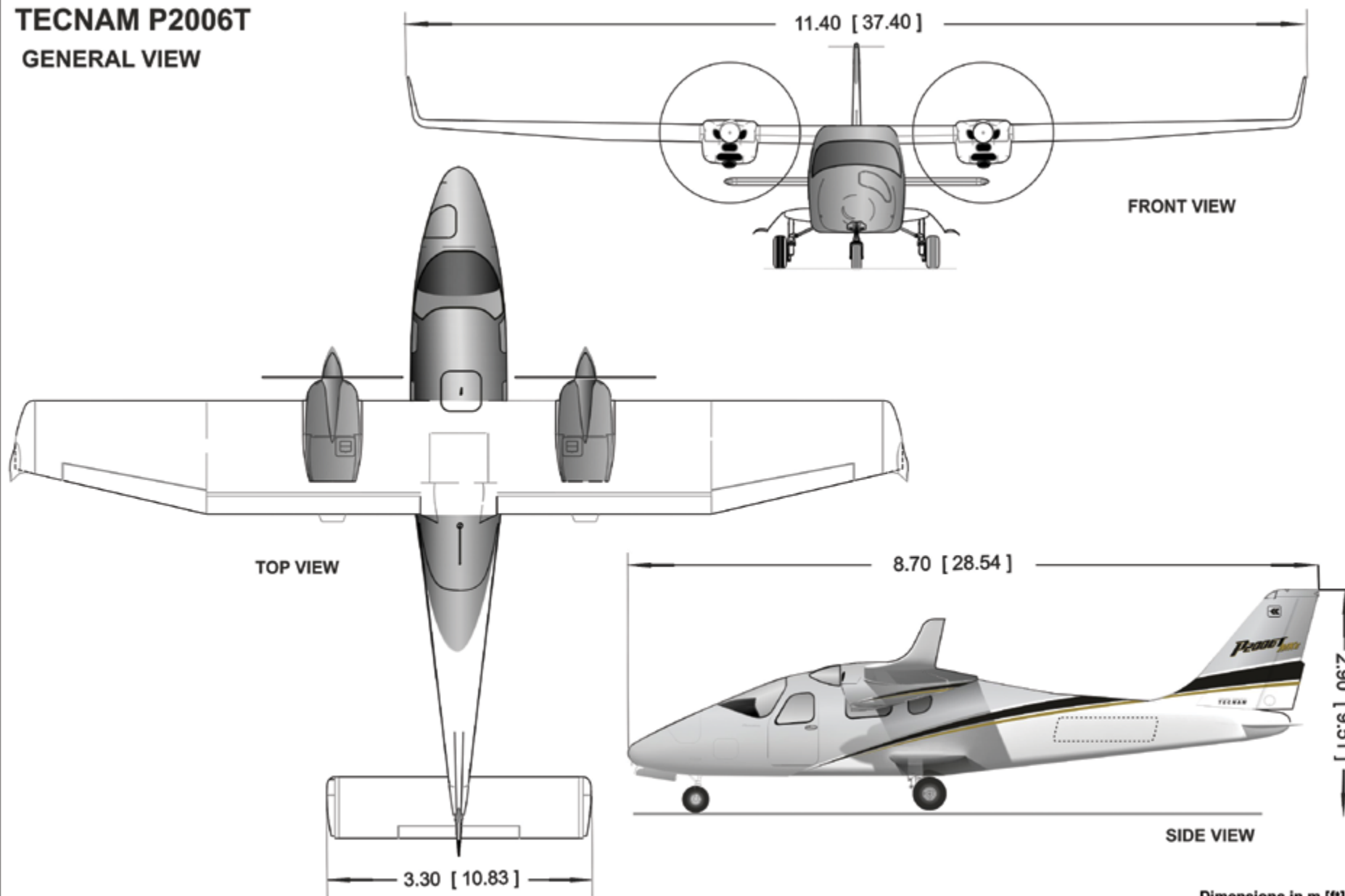
The gear extension of the Tecnam P2006T is fast for higher safety and is operated by a hydraulic ram through a drag brace, which in turn locks it into the down position. When extended, the nose wheel is connected by push-rods to the rudder pedals. A system of lights and a warning horn informs the pilot of the status of the landing gear's, extended/retracted position.

A back-up system ensures the gear can be extended even in the event of a main system failure.

Certification

The Model P2006T is certified to the requirements of EASA CS-23 - FAR 23 including day, night, VFR and IFR. Export certification requirements may require additional equipment and charges.

TECNAM P2006T GENERAL VIEW



Dimensions in m [ft]

DESIGN WEIGHT AND LOADING

	STANDARD VFR	
	kg	lb
Maximum Take Off Weight	1.230	2,712
Empty Weight, VFR Standard	819	1,806
Useful Load	411	906
Baggage allowance	80	176
Limit Loads Factor	+3,8 -1,78 G	
Ultimate Loads Factors	+5,7 - 2,67 G	

PERFORMANCE

	STANDARD	
	Variable Pitch Propellers	
Max Cruise Speed KTAS	150 kts	278 km/h
Stall Speed (Flaps Down Power Off) KCAS	55 kts	102 km/h
Practical ceiling	14000 ft	4267 m
Take off run	988 ft	301 m
Take off distance	1293 ft	394 m
Landing Run	758 ft	231 m
Landing Distance	1145 ft	349 m
Rate of climb	1036 ft/min	5,3 m/sec
Range	669 NM	1239 km



P2006T- ITA Air Force

POWERPLANT & ACCESSORIES

The Tecnam P2006T is equipped with two four-cylinder four-stroke Rotax 912S engines of 100hp (73kW) each. These are liquid cooled with an integral reduction gearbox (1:2.4286) driving constant speed propellers with pitch feathering devices.

Engine mounts are made of high strength chrome-molybdenum steel tubes with the engines mounted on vibration absorbing mounts.

From an operational point of view, the following benefits of the Tecnam P2006T should be stressed: the option to use either automotive fuel or AVGAS allows operators to dramatically reduce the direct costs, making it possible to fly to locations where AVGAS is difficult to obtain or prohibitively expensive.

The twin-engine configuration of the Tecnam P2006T is extremely dependable, enabling the

aircraft to travel safely in long distances over water or rough terrain. The fuel system features two fuel tanks integral with the wing box for a total capacity of 200 litres (52.83 US Gal).

Each engine is equipped with a mechanically driven fuel pump with an electric backup pump. Tank selection and cross feeding are controlled by two valves positioned overhead the pilot.

ROTAX 912 S3

- 4-cylinder
- 4-stroke liquid-/air-cooled engine with opposed cylinders
- Dry sump forced lubrication with separate oil tank, automatic adjustment by hydraulic valve tappets
- Mechanical fuel pump
- Dual electronic ignition
- Propeller speed reduction unit
- Air intake system
- Gearbox Reduction Ratio 2,43:1



ROTAX®
AIRCRAFT ENGINES



STANDARD EQUIPMENT

FLIGHT INSTRUMENTS and INDICATORS

Magnetic Compass
Airspeed Ind., Kts, Two
Altimeter Dual Mode (In/hP), Two
Vertical Speed
Directional Electric
Attitude Horizon Electric, Two
Turn and Slip Indicator
O.A.T.
Pitot System Heated
Static System
Alternate Static Source
Stall Warning Audible
Landing Gear Position Light, Three
Landing Gear-In-Transit/Not Locked Light
Stabilator Trim Position Indicator
Rudder Trim Position Indicator

ENGINE INSTRUMENTS

Tachometer + Hour Recorder, Two
Manifold Press., Dual
Oil Press, Two
Oil Temp., Two
Coolant Temp., Two
Fuel Press., Two
Ammeter
Voltmeter
LH + RH Fuel Qty
Annunciator Panel Lighted Push To Test:

-LH Low Fuel
-RH Low Fuel
-LH Low Oil Press
-RH Low Oil Press
-LH Low Voltage
-RH Low Voltage
-Pilot Door Open

FLIGHT CONTROLS

Hydraulic Toe Brakes
Parking Brake
Electric Flaps
Dual Flight Controls
Steerable Nose Wheel
Aileron Lock
Stabilator Trim (Manual)
Engine Controls
-Throttle, Two
-Propellers, Two
-Carburettor Heat, Two
-Choke, Two
Flight Trim Controls
-Rudder With Indicator
-Stabilator With Indicator
Landing Gear, Retractable Electro-Hydraulic
Landing Gear Selector Switch
Landing Gear Warning Horn
Landing Gear Emergency Extension
Fuel Control Selector With On/Off/Crossfeed

Overhead Panel Switches:

-Starter LH and RH
-Fuel Pump LH and RH
-Left Engine LH and RH Ignition Switches
-Right Engine LH and RH Ignition Switches

ELECTRICAL SYSTEM

12 volt 35 AH GILL
12 volt alternator-40 amp, two
rocker switches internally lighted
-master switch
-landing light
-taxi light
-navigation lights
-strobe light
-pitot heat
-map light
external power supply receptical
circuit breaker panel
static discharge wicks

FUEL SYSTEM

Two Integral Fuel Tanks with 200 Litres / 52.83
US Gal Total Capacity
Engine Driven Fuel Pumps, Two
Auxiliary Fuel Pumps, Electric, Two
Fuel Tank Quick Drain , Two
2 X Shut Off Valves with Cross Feed

INTERIOR

Pilot and Co-Pilot Seats Simulated Leather
- Adjustable Fore and Aft
- Vertical Adjustment
Rear Passenger Seats, Two
Seat Belts & Shoulder Harness, all Seats
wall to wall Carpeting
Fire Extinguisher
Map & Storage Pockets
Radio Call Plate
Tow Bar
Soundproofing
Luggage Compartments
Overhead Cockpit Speaker
Four Position Intercom System
First Aid Kit

INTERIOR LIGHTING

Avionics Instruments Internally Lighted
Avionics Radios Internally Lighted
Engine Instruments Internally Lighted
Flight Instruments Internally Lighted
Compass Internally Lighted
Map Light
Dimmers

EXTERIOR

Epoxy Corrosion Proofing, All Structure
LH Front Door Pilot/Co-Pilot, Lock and Key
RH Rear Door Passenger

Rear Window
All Windows Tinted
Retractable Landing Gear
Tie Down Rings
Main Wheels, 6.00 X 6 - Nose 5,00 X 5

EXTERIOR LIGHTS

Nav. Lights LED with Strobe Full LED TSO
Vertical Tail Strobe
Landing/Taxi Light LED

CABIN COMFORT SYSTEM

Windshield Defroster
Ventilator adjustable, 4 Place
Heating System

POWERPLANT and PROPELLER

Engines - 2 Rotax 912S3 100 Hp, 4 Cylinders
Liquid/Air Cooled, Integrated Reduction Gear
Dual Ignition System
Throttle Control LH/RH
Tubular Steel Engine Mount
Propellers - 2 MT, 2 Blades, Constant Speed, Full
Feathering
Propeller Spinner, Two
Propeller Control LH/RH
Air Filter, Two
Oil Filter, Two
Oil and Water Coolers, Two
Carburettor Heat with Manual Control

PRODUCT SUPPORT/DOCUMENTS

Manufacturer's Full Two Year Limited
Warranty
Pilot's Operation Handbook
Maintenance Manual
Parts Catalog
Aircraft Log Book
Engine Log Book

STANDARD GARMIN AVIONICS PACKAGE

- GTN 650 COMM/NAV/GPS Multifunction
Display with GI-106A VOR/LOC/GS/GPS
Indicator
 - GNC 255A COM/NAV with MD200 VOR
Indicator
 - GTX 345 Transponder ADS-B OUT
 - GMA 340 Audio Panel
- Others:
- DME - KING KN63 with KD572 Indicator
 - Microphone Telex 100T
 - Pilot and Co-Pilot PTT
 - ELT 406

STANDARD AVIONICS



ANALOGUE AVIONICS PACKAGE

- GTN 650 COM/NAV/GPS Multifunction Display with GI-106A VOR/LOC/GS/GPS INDICATOR
- GNC 255A COM/NAV with MD200 VOR Indicator
- GTX 345 TRANSPONDER ADS-B IN/OUT
- GMA 340 AUDIO PANEL
- Others:
 - DME - KING KN63 with KD572 Indicator
 - MICROPHONE TELEX 100T
 - PILOT and CO-PILOT PTT
 - ELT 406

AVIONIC OPTION 1

P2006T MkII

*P2006T MkII***GARMIN G1000 Nxi PACKAGE***Includes the following equipment:*

G1000 Nxi Integrated Flight Deck System, includes:

- GDU 1050 10-inch PFD
- GDU 1050 10-inch MFD
- Dual GEA 71 Engine & Airframe unit
- Dual GIA 63WAAS Com/Nav/GPS/GS/LOC
- GMA1347 Digital audio system
- GMU44 Magnetometer
- GDC72 Air data computer
- GRS79 AHRS
- GTP59 OAT
- GTX345R Mode S Transponder (ADS-B IN and OUT)
- MD302 Standby Attitude Module Digital Back Up instrument
- DME - KING KN63 - Integrated control - displayed on PFD
- Pitot System Heated

Non-Additive. Replaces all Standard Avionics.

Empty Weight 845 kg /1863 lbs 12

PAINT SCHEMES

Standard



St1 __ Colour Stripes



St2 __ Colour Stripes



St3 __ Colour Stripes



St4 __ Colour Stripes



Special Paint 1



Sp1.1 __ Paints __ Stripes



Sp1.1 __ Paints __ Stripes



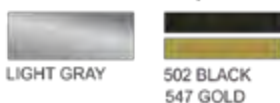
Sp1.1 __ Paints __ Stripes



Special Paint 2



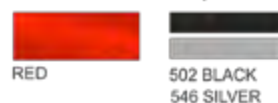
Sp2.1 __ Paint __ Stripes



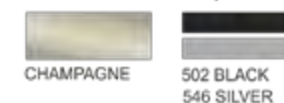
Sp2.2 __ Paint __ Stripes



Sp2.3 __ Paint __ Stripes



Sp2.4 __ Paint __ Stripes



Chrome Metallic Badge 

INTERIOR



P2006T Premium Interior

The Italian flair is not only external, but now also at your finger tips, because we have spent a great deal of time to improve every detail of the interior.

A completely new designed interior with a choice of leather seat colours, new dark material for the ceiling and the sidewalls, dimmable LED lights, USB chargers put your aircraft at the top level of comfort. It is your aeroplane, your lifestyle and you deserve the best.

Standard Interior comes with blue seats and ivory cabin.

Premium option makes your aircraft more luxurious: Alcantara leather and a dark ceiling improve your flying experience with unique ingredients. Your aircraft interior is now more exclusive with electrically adjustable comfort front seats while guaranteeing absolute compliance with the industry's strictest standards.

Premium Choice



A) Leather anthracite gray
B) Medium gray



A) Leather anthracite light gray
B) Anthracite gray

OPTIONS

Standard Analogue Version

Code	Kg	Description
T101	5,5	KCS55A HSI Slaved Compass System (exchange for Standard DG with Heading Bug)
T102	6,0	GTN 650 Com/Nav/GPS with Antennas and inst. with GI106B Indicator
T103	6,1	GTN 750 Com/Nav/GPS with Antennas and inst. with GI106B Indicator (Exchange for Standard GTN560)
T104	5,0	ADF KING KR87 with KI 227 Indicator

Glass Versions

Code	Kg	Description
T106/A	4,5	ADF BECKER RA3502 Remote Unit
T108	4	GTS800 TAS GARMIN Traffic Advisory System
T109	3,0	L-3 Storm Scope WX 500

Standard Analogue & Glass Versions

Code	Kg	Description
T110	9,0	Autopilot System S-TEC 55X DUAL AXIS with Automatic Electric Trim Turn Coordinator (exchange for Std TC) and DG with Heading Bug (exchange for Standard DG)
T111	3,0	Electric TRIM S-TEC, (already included in the option 110)
T112	0,5	Power Supply from built-in Generator (Max 20 Amps (each) @ 5800rpm
T113	1,5	Debris Protection
T114	1,0	Surround View Windows
T115/A	2,0	Leather Seats Two-Coloured (New Look)
T116	6,0	Special Paint two colours

Code	Kg	Description
T116/A	5,5	Premium Luxury Interiors (Leather Seats Two-Coloured New Look and Wall side Panel Matt Gray)
T119	5,5	Alternators 70 Amps (Exchange for standard 40 Amps)
T122	0,5	Cabin Hole 267mm Diameter (ref. Mod. 2006_229)
T123	0,5	Cabin Hatches small (two) 359x272 + 150x150 mm (length x width) (ref. Mod. 2006_170)
T124	1,5	Tailcone Hatch 395x305 mm (length x width) (ref. Mod. 2006_261)
T125		Fuselage Cover



Pascale Museum at Tecnam Headquarters Capua

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