



**T-51 Mustang - 3/4 Scale Kit**

## Description

Titan Aircraft is pleased to offer the T-51D Mustang. This P-51D replica incorporates material and systems not commonly found in comparably priced aircraft. This, combined with Titan Aircraft's renowned reputation for high quality products, superior aircraft performance, and outstanding customer support, is sure to provide the kit builder and pilot a very pleasurable experience.

This kit has a documented build time of 1,600 hours and includes all required materials, components, and fasteners, with the exception of the engine, propeller, and instruments. When equipped with the 245 hp Honda 3.5L V6 engine, a scale 4-blade constant speed propeller, and a full complement of necessary flight instruments, a finished T-51D could cost well under \$100,000.

Titan Aircraft is providing an aircraft that combines friendly low speed handling characteristics with agility and high performance. The T-51D is rated at a +6g / -4g load limit capability at a weight of 1,650 lbs. When equipped with the Honda 3.5L V6 engine and the landing gear retracted, a T-51D cruises around 180 mph and has a climb rate of approximately 2,500 f/m. In landing configuration, the stall speed is in the 50 mph range.

If you want the look and feel of the real thing at an affordable price, contact Titan Aircraft. We look forward to hearing from you.



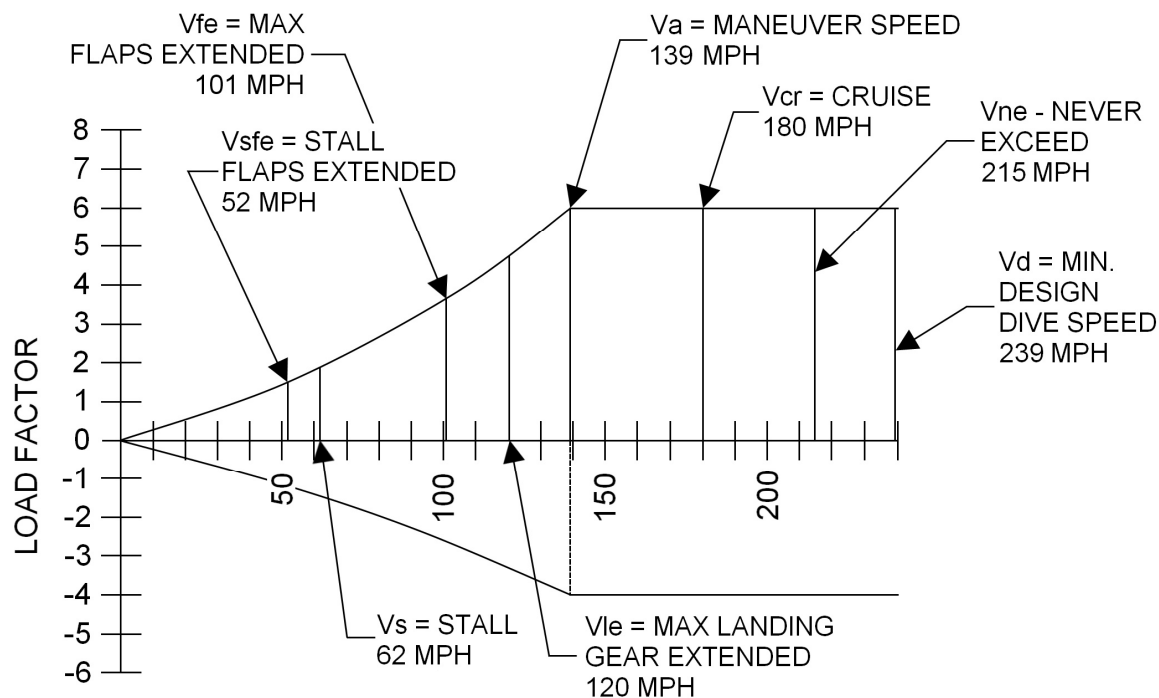
## Specifications and Performance

<b>Empty Weight:</b>	850 - 1,180 lbs	385.6 - 535.2 kg	<b>Engine:</b>	Rotax 912/914, Suzuki V6, & Honda V6	
<b>Gross Weight:</b>	1,320 - 1,850 lbs	598.7 - 839.1 kg	<b>Power:</b>	80 - 245 hp	59 - 183 kw
<b>Length:</b>	23 ft 6 in	7.16 m	<b>VNE:</b>	215 mph	346 kph
<b>Height:</b>	9 ft 2 in	2.79 m	<b>Cruise Speed:</b>	150 - 180 mph	241 - 290 kph
<b>Wing Span:</b>	24 ft	7.32 m	<b>Stall Speed:</b>	42 - 52 mph	67 - 84 kph
<b>Wing Area:</b>	118 sq ft	10.96 sq m	<b>Range:</b>	720 mi	1,159 km
<b>Cabin Width:</b>	26 in	660.4 mm	<b>Climb Rate:</b>	1,200 - 2,500 fpm	6.1 - 12.7 m/s
<b>Cabin Head Room:</b>	48 in	1,219.2 mm	<b>Take Off Run:</b>	250 - 400 ft	76.2 - 121.92 m
<b>Cabin Leg Room:</b>	46 in	1,168.4 mm	<b>Landing Roll:</b>	300 - 400 ft	91.44 - 121.92 m
<b>Fuel Capacity:</b>	26 gal	98.4 l	<b>Ceiling:</b>	16,000 - 18,000 ft	4,876.8 - 5486.4 m

\*Performance of aircraft varies with engine, propeller, gear box, & installed options

\*\*Specifications subject to change without notice

\*\*\*Performance specifications are based on specific conditions and may vary from aircraft to aircraft





## Description of Kit Packages

The T-51 Mustang utilizes aircraft grade 2024-T3 aluminum, 6061-T6 aluminum, and 4130 chromoly steel in its manufacture. The kit construction methods use blind rivets, known as pulled rivets, and structural adhesive throughout. An option to use solid rivets is available.

### Main Wing Panel Kit

- Completed, ready to install aileron assemblies
  - Completed spars and leading edges
    - Preformed ribs (14)
  - Preformed aft spars and fittings
    - Aileron pushrods
- Wiring kits for strobes and marker lights
  - Preformed webs and stringers
    - Precut wing skins
  - Pitot tube and plumbing
- Manufactured flap hinge fittings
- Hardware, rivet, and adhesive kits



### Center Section Kit

- Prebuilt center section assembly with:
- Retractable main landing gear legs
  - Main landing gear hydraulic cylinders
- Wheel, tire, and Matco brake assemblies
- Additional items:
- (3) Fuel tanks with fittings and plumbing
    - Flap assemblies with brackets
  - Landing gear wiring and switch kit
    - Landing gear hydraulic system
      - Hydraulic brake system
  - Hardware and rivet kits



## Description of Kit Packages Continued

### Fuselage Kit

- Fuselage frame, welded and stress relieved
  - Preformed canopy frame
  - Precut outer fuselage skins
    - Stainless steel firewall
    - Lexan for windscreen
  - Precut cockpit interior skins
  - Vertical stabilizer fairings
  - Hydraulic pump with mount
  - Prebuilt control stick assembly
- Forward and aft rudder pedal assemblies
  - Rudder and elevator bellcranks
    - Electric flap system
    - Rudder cable kit
  - Instrument panel with hood
- Completed, ready to install tailwheel assembly
  - Preformed fuselage bulkheads
- Tailwheel door and attach mounts
- Landing gear selector assembly
- Precut push/pull flight control tubes
- Forward baggage compartment kit
  - Aft baggage compartment kit
    - Aluminum belly kit
    - Electrical kit
- Engine cowlings with hardware
  - Hardware and rivet kits



## Description of Kit Packages Continued

### Tail Kit

- Completed horizontal spars and leading edges
  - Preformed horizontal aft spars
  - Precut upper and lower horizontal skins
- Completed, ready to install vertical stabilizer
- Completed, ready to cover rudder structure
- Completed, ready to cover elevator structure
- Elevator trim tab with electric actuator installed
  - Aluminum dorsal fin
- Predrilled rudder and elevator hinges
  - Poly-Fiber covering package
  - Hardware and rivet kits



### Finish Kit

- Preformed canopy
- Canopy hardware and seal kit
  - Fiberglass nose bowl
  - Fiberglass belly scoop
  - Fiberglass wing tips
- Fiberglass rudder and vertical tips
- Fiberglass elevator and horizontal tips
- Forward and aft throttle quadrants
  - Seats, frames, and belts
  - Wing root fairings
- Horizontal stabilizer fairings
  - Inspection panels
- Main gear doors and attach mounts
  - Hardware and rivet kits





## Customization

The T-51 Mustang was designed and manufactured so that you, as the builder, can customize the aircraft's configuration to suit your requirements. That said, a lot of forethought is required by you to make the decisions on the engine, propeller, instrumentation, avionics (day VFR, night VRF, or IFR), and the category (experimental or light sport).

The following is a list of components to be considered by the customer to license the aircraft in whichever category is decided upon:

- Flight instrumentation
- Engine monitoring instrumentation
- Cockpit lighting
- Navigation radio equipment
- Communication radio equipment
- Landing and taxi lights
- Wiring and related components required to make a fully functional aircraft electrical system, such as circuit breakers, terminal ends, switches, etc... (Basic circuit breakers and wires are included in the kit)
- Navigational lighting, such as position light and/or strobe lights
- Antenna and associated hardware required for navigation and communication
- Date plate and decals required by the FAA
- Battery with box and associated hardware
- Radiator, plumbing, and associated hardware



There are many other items too numerous to mention but be advised that during the process of customizing your aircraft, you must follow all applicable FAA regulations. The best sources for information on building and operating a Homebuilt or Light Sport Aircraft are the EAA and your local EAA chapter's technical advisor. Also, your Titan Aircraft factory authorized dealer is a great source of information.

# Engines

Listed below are the technical specifications of the only engines recommend by Titan Aircraft for the T-51 Mustang.

## Rotax 912 ULS 3



Type: H-4, 4-stroke, liquid/air-cooled  
Displacement: 83 cu in (1,352 cc)  
Bore: 3.307 in (84 mm)  
Stroke: 2.402 in (61 mm)  
Compression Ratio: 10.5:1  
Induction: Dual CD carburetors  
Ignition: Double CDI  
Gearbox Reduction: 2.43:1  
Ramp Weight: 147 lbs (67 kg)  
Power Rating: 100 hp (74 kw) @ 5,800 rpm

## Rotax 914 UL2



Type: H-4, 4-stroke, liquid/air-cooled  
Displacement: 74 cu in (1,211 cc)  
Bore: 3.130 in (79.5 mm)  
Stroke: 2.402 in (61 mm)  
Compression Ratio: 9:1  
Induction: Turbocharged with dual CD carbs  
Ignition: Double CDI  
Gearbox Reduction: 2.43:1  
Ramp Weight: 172 lbs (78 kg)  
Power Rating: 115 hp (85 kw) @ 5,800 rpm



## Engines Continued

**Suzuki 2.7L V6**



Type: V-6, 4-stroke, liquid-cooled  
Displacement: 167 cu in (2,736 cc)  
Bore: 3.465 in (88 mm)  
Stroke: 2.953 in (75 mm)  
Compression Ratio: 9:1  
Induction: Multi-port fuel injection  
Ignition: Coil pack  
Gearbox Reduction: 2.26:1  
Ramp Weight: 307 lbs (139 kg)  
Power Rating: 183 hp (136 kw) @ 6,000 rpm

**Honda 3.5L V6**



Type: V-6, 4-stroke, liquid-cooled  
Displacement: 212 cu in (3,471 cc)  
Bore: 3.504 in (89 mm)  
Stroke: 3.661 in (93 mm)  
Compression Ratio: 10:1  
Induction: Multi-port fuel injection  
Ignition: Coil-on-plug  
Gearbox Reduction: 2.26:1  
Ramp Weight: 416 lbs (189 kg)  
Power Rating: 245 hp (183 kw) @ 5,750 rpm

## **Distributor Contact Information**

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