

P51-D MUSTANG: CUTAWAY

The Mustang single-seat, single-engine fighter aircraft is regarded as the most potent fighter of World War II. Impressive range and maneuverabilty made it both a excellent long-range escort and a formidable ground attack fighter-bomber. The cutaway shown here is the P-51D variant with its 'bubble' canopy, redesigned wing and increased armament.

78 Two-spar and rib fin structure

81 Fabric-covered rudder rib structure

84 Fabric-covered elevator rib structure

87 Two-spar and rib tailplane structure,

79 Rudder mass balance

82 Tail navigation light

83 Port elevator trim tab

85 Elevator mass balance

86 Elevator tab actuator

80 Rudder trim tab

- 1 Hamilton Standard constant speed propeller with 11ft 2in (3.40m) diameter
- 3 Propeller hub pitch change mechanism
- 4 Armored ring behind spinner
- backplate
- 5 Propeller governor
- 6 Coolant header tank
- 7 Carburetor air intake
- 8 Starboard main wheel
- 9 Filtered air intake
- 10 Generator
- 11 Rolls-Royce/Packard V-1650-7 Merlin
- V-12 engine
- 12 Exhaust stubs
- 13 Engine bearer
- 14 Intake ducting
- 15 Fuel filter
- 16 Carburetor 17 Supercharger
- 18 Engine boost controller
- 19 Aftercooler
- 20 Engine oil tank, capacity 12.3 US gal (46.6 litres)
- 21 Oil filler cap
- 22 Detachable engline cowling panels
- 23 Starboard Browning MG 53-2 0.5in
- (12.7mm) machine-gun installation
- 24 5in (12.7cm) HVAR rockets
- 26 Wing skin panelling
- 27 Downward identification lights, red,
- green and amber
- 28 Starboard navigation light
- 29 Starboard aileron
- 30 Aileron trim tab
- 31 Aileron hinge control
- 32 Ammunition magazine, 270 rounds
- for each outboard gun
- 33 Ammunition magazine, 400 rounds
- for inboard gun
- 34 Starboard plain flap
- 35 Starboard wing fuel tank 36 Engine bay armored rear bulkhead
- 37 Hydraulic reservoir
- 38 Instrument panel
- 39 Rudder pedals

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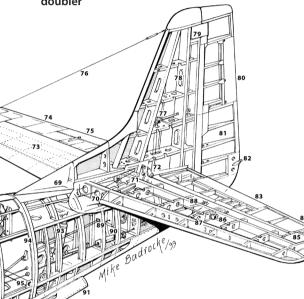
- 40 Fuel selector panel
- 41 Cockpit fuel panel

- 42 Fuselage H-section lower main longeron
- 43 Wing front spar bolted attachment
- 44 Three-axis trim control wheels
- 45 Engine throttle and propeller control quadrant
- 46 Control column
- 47 Instrument panel shroud
- 48 K-14A gunsight
- 49 Armored glass windscreen panel
- 50 Aft sliding cockpit canopy cover
- 51 Cushioned headrest
- 52 Pilot's seat
- 53 Canopy Latch
- 54 Flare launcher
- 55 Adjustable seat mounting
- 56 Oil and coolant radiator shutter controls
- 57 Wing rear spar bolted attachment
- 58 Fuselage self-sealing
- bag-type fuel cell, capacity 85 US gal (321
- litres)
- 59 Fuel pipe
- 60 SCR-522 radio transmitter/
- receiver
- 61 Pilot's head armour
- 62 Battery
- 63 Boarding handgrip
- 64 Fuselage fuel tank filler cap
- 65 Dust-proof bulkhead
- 66 Sliding canopy rail
- 67 Type F2 low-pressure
- oxygen cylinders (2)
- 68 SCR-522 antenna mast
- 69 Fin root fillet
- 70 Tailplane bolted attachment
- joints
- 71 Fin front spar joint
- 72 Elevator control links, cable actuated
- 73 Starboard tailplane
- 74 Fabric-covered elevator
- 75 Elevator trim tab
- 76 Detrolla radio antenna cable
- 77 Rudder trim tab actuator

- continuous tip-to-tip
- 88 Rudder hinge control link
- 89 Tailplane spar mounting
- 90 Tail wheel retraction jack
- 91 Tail wheel doors
- 92 Steerable tail wheel
- 93 Tail wheel shock-absorber strut
- 94 Tail assembly attaching bulkhead
- 95 Fuselage lifting bar
- 96 Radiator shutter hydraulic actuator
- 97 Type D2 low-pressure oxygen cylinders
- 98 Oxygen filler point
- 99 Coolant radiator air shutter
 - 100 Radiator exhaust duct
 - 101 Coolant radiator
 - 102 Wing root trailing edge fillet
 - 103 Oil cooler shutter control jack
 - 104 Position of flap hydraulic jack on starboard side
 - 105 Flap actuating link and interconnecting torque shaft 106 Ventral oil cooler

- 107 Wing self-sealing bag-type fuel cell, capacity 92 US gal (348.2 kitres) per side
- 108 Wing tank filler cap
- 109 Port machine-gun bay
- 110 Ammunition feed chutes
- 111 Ammunition bay
- 112 Rear spar
- 113 Flap rib structure
- 114 Port main flap
- 115 Elevator trim tab
- 116 Port elevator rib structure
- 117 Light alloy wing tip fairing
- 118 Port navigation light
- 119 Wing tip ribs
- 120 Main gear
- 121 Position of ventral pitot head on starboard side
- 122 Wing rib structure
- 123 1.000lb HE bomb
- 124 5-in (12.7cm) HVAR
- rocket

- 125 Bomb or drop tank pylon 126 Port wing rocket installation
- 127 75 US gal (284 litres) external fuel or
- napalm tank 128 Tank filler
- 129 Port main wheel
- 130 Main wheel leg door
- 131 Torque scissor links
- 132 Shock absorber leg strut
- 133 Machine-gun muzzles
- 134 Main wheel leg pivot mounting
- 135 Undercarriage mounting rib skin



- 136 Hydraulic retraction jack 137 Ventral oil cooler and coolant
- radiator ram air intake
- 138 Retractable landing light 139 Main wheel door hydraulic jack
- 140 Main wheel bay
- 141 Gun camera
- 142 Main wheel doors

