

/Vehicles/Allies/USA/01-LightTanks/M3-M5Stuart/Data/M5A1.htm | Up-dated: M3/M5 Stuart

- M3 Stuart (early)
- M3 Stuart (late)
- M3 Stuart (late/Diesel)
- M3A1 Stuart
- M3A3 Stuart
- M5 Stuart
- M5A1 Stuart

M5A1 Light Tank

GENERAL DATA			
General Designation(s)	General Stuart Mark VI (British Army)		
Type	Light Tank	Radio Equipment	SCR-506/508/528/538
Manufacturer(s)	Cadillac Division of General Motors Corp., General Motors Corp., Massey Harris Co.		
How	4	• Commander/gunner in turret left rear • Loader in turret right rear • Driver in hull left front • Assistant driver in hull right front	
Production Quantity	6810 + 775 remanufactured or converted	Production Period	November 1942 - June 1944

DIMENSIONS			
Combat weight	15380 kg	Ground pressure	0.863 kg/cm²
Length w/Gun	4.338 m	Length /Hull	4.338 m
Barrel Overhang	0 m	Height over MG mount	2.57 m
Width	2.24 m	Ground clearance	0.419 m
Fire height	1.90 m	Turret ring diameter	1.187 m

ARMAMENT			
Primary Armament	37 mm Gun M6 L/56 on M44 Mount (1)	Ammunition Carried	147
Traverse	360° (manual or hydraulic)	Elevation	+20° to -10° (manual with Stabilizer)
Traverse speed (360°)	20°/sec	Sight	M5A1
Secondary Armament	3 x .30 caliber MG M1919A4 (7.62 mm) (2)	Ammunition Carried	6750
	1 x .45cal (9 mm) M1 sub-machine gun (3)		420
Location	1: turret - 2: bow, coaxial, AA - 3: turret inside		

ARMOR				
Assembly	Welding			
Armor Detail (from the horizontal)	Front	Side	Rear	Top/Bottom
Hull	44 mm / 67°	29 mm / 90° (front) 15 mm / 90° (rear)	25 mm / 73°	13 mm / 0° (front) 10 mm / 0° (rear)
Superstructure	29 mm / 42 °	25 mm / 90°	25 mm / 90° (lower) 25 mm / 41° (upper)	13 mm / 0°
Turret	44 mm / 80°	32 mm / 90°	32 mm / 90°	13 mm / 0-15°
Mantlet	51 mm / 76-90°	-	-	-

AUTOMOTIVE			
Engine	2 x Cadillac Series 42	Type & Displacement	2 x V8, 5.7 liters
Horsepower (maximum)	2 x 148 hp at 3200 rpm	Power/Weight Ratio	19.2 hp / ton
Gearbox	Twin Hydramatic: 4 forward, 1 reverse	Steering	Controlled differential & Steering levers
Brakes	Mechanical, external contracting	Fuel Capacity	405 L Gasoline (Petrol)

SUSPENSION			
Type	Vertical volute spring suspension (VVSS)	Road wheels	2 bogies, 2 road wheels/bogie
Track return rollers	3	Sprocket-Wheels	14 tooth, front
Idler Sprockets	Adjustable, rear	Shock absorbers	-
Track Type	T16E1: Outside guide, double pin, rubber bushed, reversible rubber		
Width	295 mm	Pitch	140 mm
Links(shoes)	66	Track ground contact	2.97 m
Track Type	TT16E2: Outside guide, double pin, rubber bushed, non-reversible rubber		
Width	295 mm	Pitch	140 mm
Links(shoes)	66	Track ground contact	2.97 m
Track Type	T36E6: Outside guide, double pin, rubber bushed, steel, parallel grouser		
Width	295 mm	Pitch	140 mm
Links(shoes)	66	Track ground contact	2.97 m
Track Type	T55E1, Outside guide, double pin, rubber bushed, steel, chevron		
Width	295 mm	Pitch	140 mm
Links(shoes)	66	Track ground contact	2.97 m

PERFORMANCES			
Maximum Speed	58 km/h on road 39 km/h off road	Range	161 km on road
Mileage	252 L/100 km on road	Maximum grade	31° (from horizontal)
Trench crossing	1.62 m	Vertical obstacles	0.46 m
Maximum fording depth	0.91 m	Minimum turning diameter	12.8 m

Sources			
AFV Database	OnWar.com	Vehicles.com	F

Drawings
M5A1 Stuart

File
M5A1 Stuart

