

Medium Tank M4A3(76)W HVSS

GENERAL DATA

Crew:	5 men
Length: Gun forward w/sandshields and muzzle brake	297 inches
Length: Gun to Rear w/sandshields and muzzle brake	287 inches
Length: w/o Gun, w/Sandshields	247 inches
Gun Overhang: Gun forward and muzzle brake	50 inches
Width: w/sandshields	118 inches
Height: Over cupola	117 inches
Tread:	89 inches
Ground Clearance:	17 inches
Fire Height:	90 inches
Turret Ring Diameter: (inside)	69 inches
Weight Combat Loaded:	74,200 pounds *
Weight Unstowed:	68,100 pounds*
Power to Weight Ratio: Net	12.1 hp/ton
Gross	13.5 hp/ton
Ground Pressure: Zero penetration	11.0 psi

*all weights based on T66 tracks

ARMOR

Type: Turret, cast homogeneous steel; Hull, rolled and cast homogeneous steel; Welded assembly

Hull Thickness:	Actual	Angled w/Vertical
Front, Upper	2.5 inches	47 degrees
Lower	4.25 to 2.0 inches	0 to 56 degrees
Sides	1.5 inches	0 degrees
Rear	1.5 inches	10 to 22 degrees
Top	0.75 inches	83 to 90 degrees
Floor, Front	1.0 inches	0 degrees
Rear	0.5 inches	90 degrees
Turret Thickness: T23 Turret		
Gun Shield	3.5 inches	0 degrees
Front	2.5 inches	40 to 56 degrees
Sides	2.5 inches	0 to 13 degrees
Rear	2.5 inches	0 degrees
Top	1.0 inches	90 degrees

ARMAMENT

Primary: 76mm Gun M1A1, M1A1C, or M1A2 in mount M62 in turret
 Traverse: Hydraulic and Manual 360 degrees
 Traverse Rate: (max) 15 seconds/360 degrees
 Elevation: Manual -25 to -10 degrees
 Tiring Rate: (max) 20 rounds/minute
 Loading System: Manual
 Stabilizer System: Elevation only

Secondary:

- (1) .50 caliber MG HB M2 flexible AA mount on turret
- (1) .30 caliber MG M1919A4 coaxial w/75mm gun in turret
- (1) .30 caliber MG M1919A4 in bow mount
- (1) 2 inch smoke Mortar (smoke) fixed in turret
- Provision for (5) .45 caliber SMG M3

AMMUNITION

71 rounds of 76mm	12 hand grenades
600 rounds .50 caliber	18 rounds 2 inch smoke
900 rounds .45 caliber	
6250 rounds .30 caliber	

FIRE CONTROL AND VISION EQUIPMENT

Primary Weapon:	<u>Direct</u>	<u>Indirect</u>
	Telescope M71D	Azimuth Indicator M19
	Periscope M4A1 with	Gunner's Quadrant M1
	Telescope M47A2	Elevation Quadrant M9
Vision Devices:	<u>Direct</u>	<u>Indirect</u>
Driver	Hatch	Periscope M6 (2)
Asst. Driver	Hatch	Periscope M6 (2)
Commander	Vision cupola	Periscope M6 (1)
Gunner	None	Periscope M4A1 (1)
Loader	Hatch and Pistol Port	Periscope M6 (1)
Total Periscopes: M4A1 (1), M6 (6)		
Total Pistol Ports: Hull (0), Turret (1)		
Vision Cupolas: (1) w/6 vision blocks on turret top		

ENGINE

Make and Model: Ford GAA
 Type: 8 cylinder, 4 cycle, 60 degree V8
 Cooling System: Liquid Ignition: Magneto
 Displacement: 1100 cubic inches
 Bore and Stroke: 5.4 X 6 inches
 Compression Ratio: 7.5:1
 Net Horsepower (max): 450 hp at 2600 rpm
 Gross Horsepower (max): 500 hp at 2600 rpm
 Net Torque (max): 950 ft-lb at 2200 rpm
 Gross Torque (max): 1140 ft-lb at 2200 rpm
 Weight: 1560 lb. dry
 Fuel: 80 octane gasoline 168 gallons
 Engine Oil: 32 quarts

POWER TRAIN

Clutch: Dry disc, 2 plate
 Transmission: Synchronesh, 5 speeds forward, 1 reverse
 Gear Ratios: 1st 7.56:1 4th 1.11:1
 2nd 3.11 5th 0.73:1
 3rd 1.78 Reverse 5.65:1

Steering: Controlled differential

Bevel Gear Ratio: 3.53:1 Steer Ratio: 1.5515:1

Brakes: Mechanical, external contracting

Final Drive: Herringbone gear Gear ratio: 2.84:1

Drive Sprocket: At front of vehicle with 13 teeth

Pitch Diameter: 25.038 inches

RUNNING GEAR

Suspension: Horizontal volute Spring

12 dual wheels in 6 bogies (3 bogies/track)

Tire Size: 20 X 6.25 inches

4 Dual track return rollers (2/tracks)

6 single track return rollers (1 at rear of each bogie)

Dual adjustable idler at rear of each track

Idler Size: 22 X 6.25 inches

Shock absorbers fitter on each bogie

Tracks: Center guide: T66, T80, and T84

Type: (T66) Single pin, 23 inch width, chevron, cast steel

(T80) Double pin, 23 inch width, rubber and steel

(T84) Double pin, 23 inch width, rubber

Pitch: 6 inches

Shoes per Vehicle: 158 (79/track)

Ground Contact Length: 151 inches

ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC

Main Generator: (1) 30 volts, 50 amperes, driven by power take-off from main engine

Auxiliary Generator: (1) 30 volts, 50 amperes, driven by the auxiliary engine

Battery: (2) 12 volts in series

COMMUNICATIONS

Radio: SCR 508, 528 or 538 in rear of turret; SCR 506 (command tank only) in right front sponson

Interphone: (part of radio) 5 stations

Flag Set M238, Panel Set AP50A, Spotlight, Siren

Flares: 3 each, M17, M18, M19, and m21 (command tanks only)

Ground Signals Projector M4 (command tanks only)

FIRE AND GAS PROTECTION

(2) 10 carbon dioxide, fixed

(2) 4 pound carbon dioxide, portable

(2) 1 1/2 Quart decontaminating apparatus

PERFORMANCE

Maximum Speed: Sustained, level road 26 miles/hour

Maximum Grade: 60 percent

Maximum Trench: 7.5 feet

Maximum Vertical Wall: 24 inches

Maximum Fording Depth: 36 inches

Minimum Turning Circle: (diameter) 62 feet

Cruising Range: Roads approx. 100 miles

