M113A3 APC TECHNICAL DATA

Presented 04 April 2022









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M113 Vehicle Evolution



M113A3 - Configuration

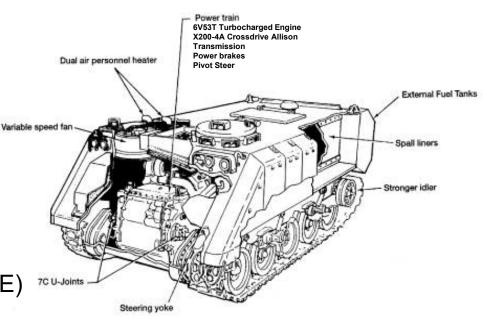
Engine – DDC 6V53T 275 hp Engine

Transmission - Allison Cross Drive X200-4A

- Steering Yoke Drivers Controls
- 200 Amp Alternator System
- 5 Roadwheel Configuration
- T150 Track (optional)
- Improved Cooling System
- NBC System
- Global Personnel Heater
- Spall Liners
- Armor Mounting Provisions
- Shock Absorbing Drivers Seat
- Driver's Enhanced Viewer (DVE)
- External Fuel Tanks
- 7C Universal Joints





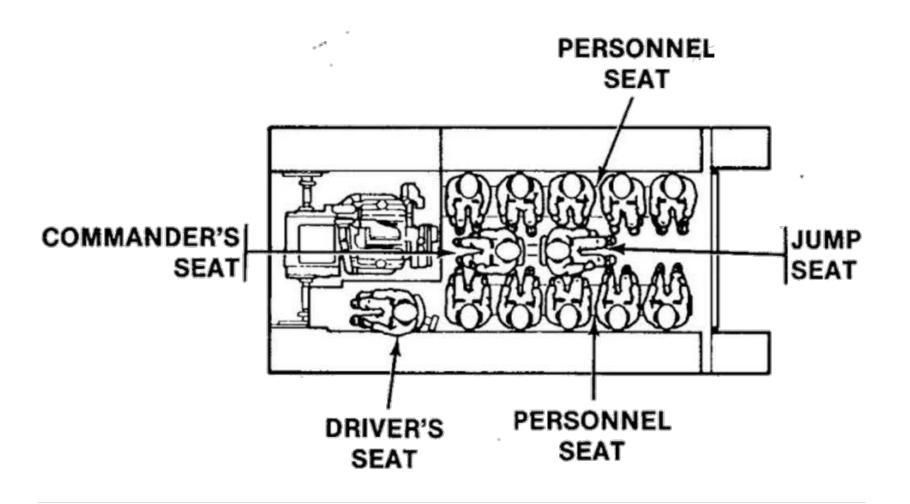


M113 Performance Comparison

- Better cross country mobility
- More powerful engine and transmission
- Faster acceleration
- Better braking
- Increased electrical power
- More payload capacity
- Improved driver controls – Yoke (no laterals)
- Better cooling
- Improved reliability & durability
- Increased troop protection and armor
- Mine protected shock absorbent seats
- External Fuel Tanks
- Lower maintenance requirements

	DEDECRMA	NCE ANALYSIS			
	FERFORMA	CONFIGURATION			
ITEM	M113A2	M113A2 MK 1	M113A3		
General					
Weight, combat loaded	25,007 lb (11,343 kg)	25,223 lb (11,440 kg)	27,000 lb (12,247 kg)		
Personnel capacity (includes crew)	13	13	13		
Fuel capacity	95 gallons (360 litres)	95 gallons (360 litres)	95 gallons (360 litres)		
Fuel Storage	Internal Tank, Optional External Tanks	Internal Tank, Optional External Tanks	External Fuel Tanks		
<u>Performance</u>					
Speed on land	38 mph (61 km/h)	39 mph (63 km/h)	41 mph (66 km/h)		
Speed in water	3.6 mph (5.8 km/h)	3.6 mph (5.8 km/h)	3.6 mph (5.8 km/h)		
Braking	40 ft (12.2 m)	40 ft (12.2 m)	27 ft (8.2 m)		
Cruising range	300 mile (483 km)	300 mile (483 km)	300 mile (483 km)		
Turning radius	168 in. (427 cm)	168 in. (427 cm)	Pivot in Place		
Steepest Grade	60 degree	60 degree	60 degree		
Side Slope	30 degree	30 degree	40 degree		
Vertical wall	24 in. (61 cm	24 in. (61 cm	24 in. (61 cm		
Trench crossing	66 in. (168 cm)	66 in. (168 cm)	66 in. (168 cm)		
<u>Engine</u>					
Make and model	Detroit Diesel 6V53	Detroit Diesel 6V53T	Detroit Diesel 6V53T		
Fuel	Diesel	Diesel	Diesel		
Rated Horsepower	212 HP	265 HP	275 HP		
<u>Transmission</u>					
Make and model	Allison TX 100-1	Allison TX 100-1A	Allison X 200-4		
Туре	Automatic - 3 speeds	Automatic - 3 speeds	Hydrokinetic		
Steering	Differential or Pivot Brake	Differential or Pivot Brake	Hydrostatic		
<u>Armor</u>	Standard	Standard	Spall Liners/Armor Mounting Provisions		
Electrical System	24 volt 100 amp	24 volt 200 amp	24 volt 200 amp		
	2 batteries	2 batteries	4 batteries		
Environmental System					
Air Conditioning	Optional	Optional	Optional		
NBC System	NO	NO	YES		

Troops Postions M113A3



Add-On Armor Options

In addition to the basic armor protection levels provided by the M113 hull, the increased horse-power-to-ton ratios inherent in the M113A3 FOV allow the vehicles to be equipped with various add-on armor packages for increased battlefield survivability. Several different packages have been developed to provide protection levels against threat weapons ranging from 14.5 mm to 30 mm. Some packages also provide protection against hand-held antiarmor weapons like the RPG.

Туре	Protection Levels		
PASSIVE ARMOR			
Titanium	14.5 mm & 30 mm		
FMS / Rafael (EAAK)	14.5 mm		
P900 (*	14.5 mm		
United Defense L.P.	14.5 mm		
IBD	30 mm & RPG		
United Defense L.P.	30 mm & RPG		
REACTIVE ARMOR			
Rafael	30 mm & RPG		
ARL	30 mm & RPG		
United Defense L.P.	30 mm & RPG		
SPALL PROTECTION			
Kevlar Liners	Heat Overmatching		
S2 Glass Liners	Heat Overmatching		
No SPALL Contact Liners (U.D. L.P.)	Heat Overmatching		
Mine Blast			
Steel (1/4 Inch) Steel (3/4 Inch)	Mine Classified Mine Classified		

Basic Armor, M113FOV

Basic Armor Protection Levels

Direction	Location	Thicknes	Obliquity	0.30 CAL	14.5 MM	155 MM HE
Of Attack		s	Degree	AP	API	TNT Loaded
		(inches)		MV2775	MV3281	Distance
	•			FPS	FPS	(Feet)
Ça		,		Range	Range	, ,
1,8			·	(Meters)	(Meters)	
Direct,	SLOPE					
Front	• FRONT	1.50	45	0	726	
	UPPER	1.50	30	0	1022	. ===
	• FRONT					
	LOWER					_
+/- 30	SLOPE					
	• Front Upper	1.50	41	0	828	
	• Front Lower	1.50	52	0	522	
Flank	Side, upper	1.75	60	0	0	
Side, Lower		1.75	60	0	0	
90 Flank	Side Upper	1.75	0	64	1078	
	Side Lower	1.75	0	64	1078	
	Side Lower	1.25	0	246	1300	
Direct	Rear on Ramp	1.50	8	140	1210	
Rear	Rear Off Ramp	1.50	9	137	.1210	
						·
Overhead	Roof	1.50	0		w	103

Fleet Pictures















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