

M113A3 APC TECHNICAL DATA

Presented 04 April 2022



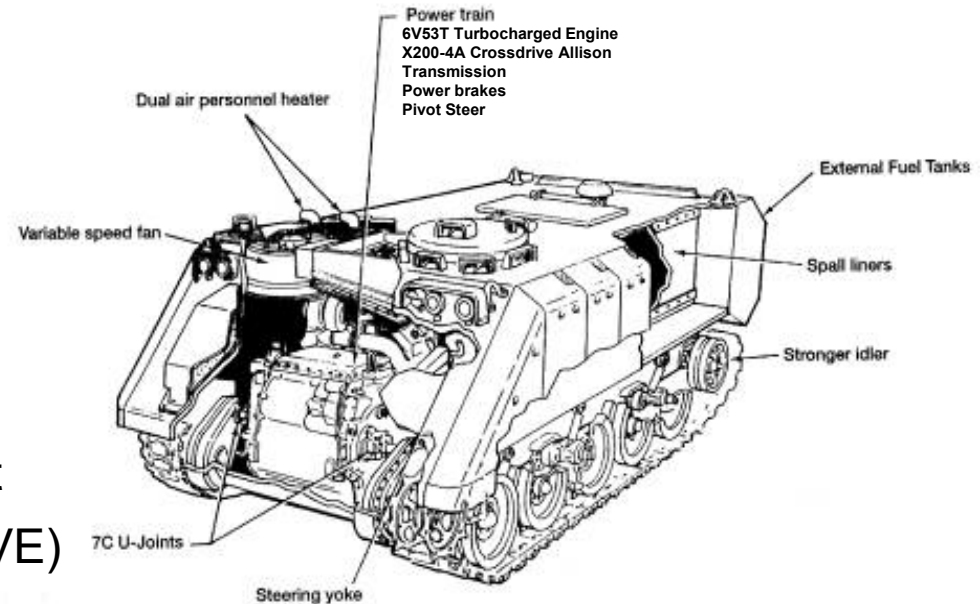
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M113 Vehicle Evolution



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

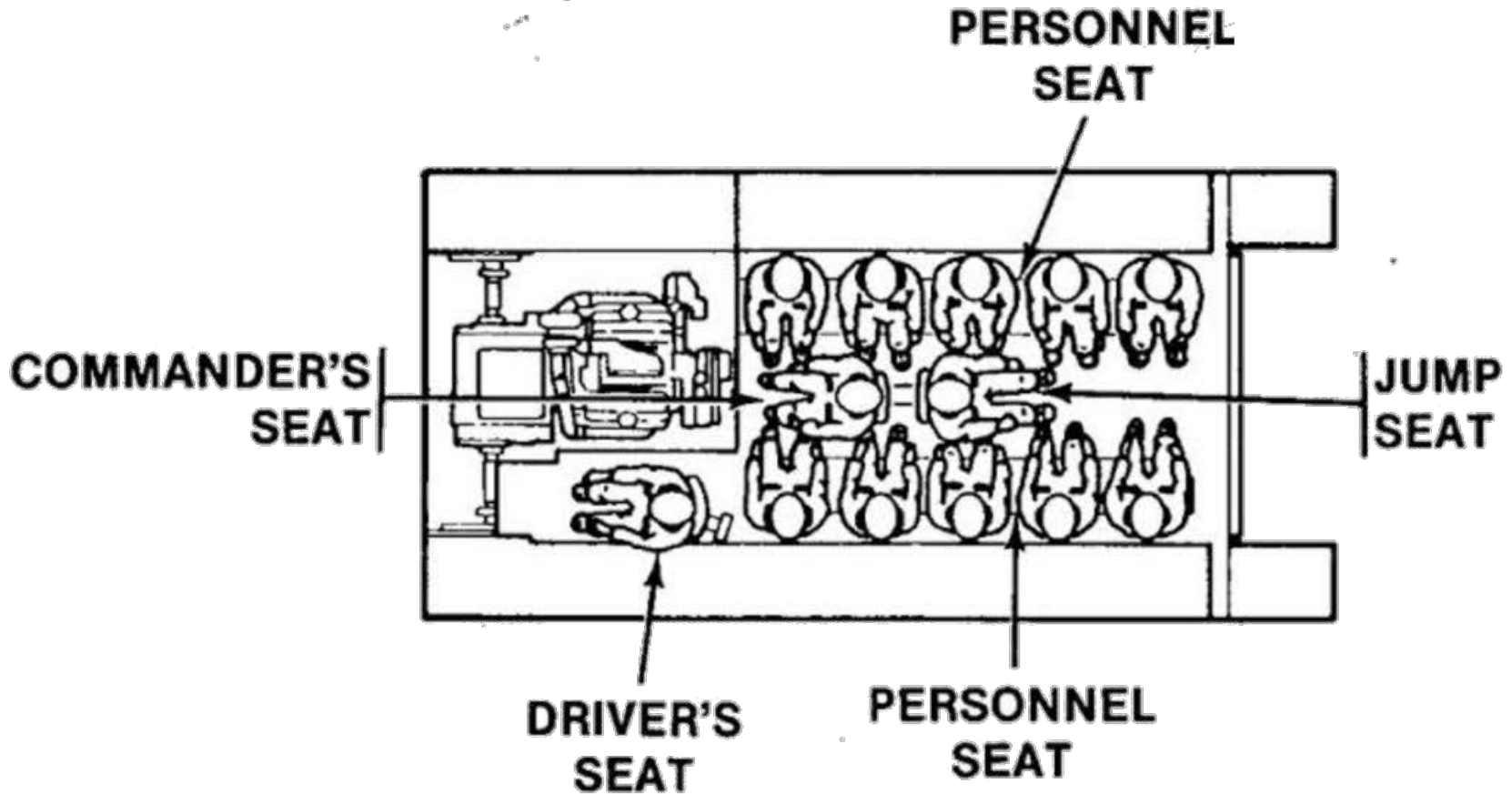


M113 Performance Comparison

- 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

PERFORMANCE ANALYSIS			
ITEM	CONFIGURATION		
	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
Performance			
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)
Engine			
Make and model	Detroit Diesel 6V53	Detroit Diesel 6V53T	Detroit Diesel 6V53T
Fuel	Diesel	Diesel	Diesel
Rated Horsepower	212 HP	265 HP	275 HP
Transmission			
Make and model	Allison TX 100-1	Allison TX 100-1A	Allison X 200-4
Type	Automatic - 3 speeds	Automatic - 3 speeds	Hydrokinetic
Steering	Differential or Pivot Brake	Differential or Pivot Brake	Hydrostatic
Armor			
	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.

Type	Protection Levels
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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)	Mine Classified
Steel (3/4 Inch)	Mine Classified

Basic Armor, M113FOV

Basic Armor Protection Levels

Direction Of Attack	Location	Thickness (inches)	Obliquity Degree	0.30 CAL AP MV2775 FPS Range (Meters)	14.5 MM API MV3281 FPS Range (Meters)	155 MM HE TNT Loaded Distance (Feet)
Direct, Front	SLOPE					
	• FRONT UPPER	1.50	45	0	726	---
	• FRONT LOWER	1.50	30	0	1022	---
+/- 30 Flank	SLOPE					---
	• Front Upper	1.50	41	0	828	
	• Front Lower	1.50	52	0	522	
	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	Rear on Ramp	1.50	8	140	1210	---
	Rear Off Ramp	1.50	9	137	1210	---
Overhead	Roof	1.50	0	---	---	103

Fleet Pictures



