

## DATA SHEETS

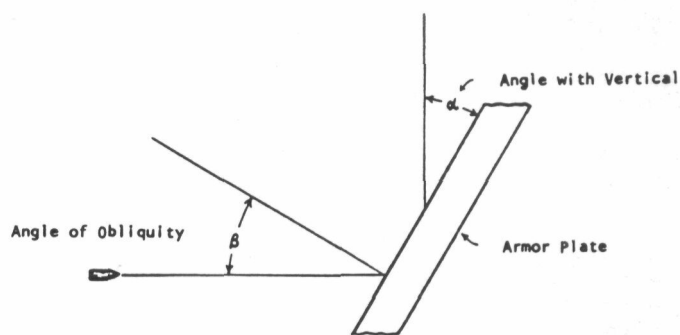
Details of the main production vehicles described in this volume are tabulated in the following data sheets.

Vehicle dimensions were taken from the original vehicle drawings when these were available. Other sources were the official characteristics sheets, proving ground test reports, and manufacturer's data. Some dimensions such as height or ground clearance vary depending upon the vehicle load and resulting spring compression. The design reference values are quoted in these cases to permit comparison between vehicles.

Clarification of some of the terms used in the data sheets may be desirable. The tread is the distance between the track centerlines. The ground contact length is the distance between the centers of the front and rear road wheels. This value is used to calculate the ground contact area and the ground pressure of the vehicle. The vehicle combat weight is used in the latter calculation. The combat weight included the crew with a full load of fuel, stowage, and ammunition. If available, the exact weight of an experimental vehicle is shown, in some cases only approximate weights were available. For production vehicles, the average weight is often rounded off to the nearest 1000 pounds. The terms left and right are used from the perspective of someone seated in the vehicle driver's seat.

When available, the maximum values are quoted for the gross and net engine horsepower and torque. The gross horsepower and torque are the values obtained with only the accessories essential to engine operation without the effect of items such as air cleaners or generators. The net values reflect the operation of the engine as installed in the vehicle with all of its accessories. The power to weight ratios were calculated using

the combat weight. During the operational life of the vehicle, the stowage items and arrangement frequently varied resulting in weight and some performance changes. In such cases, the stowage specified when the vehicle was new or during its period of greatest use is shown. Some items may have been omitted because of security restrictions.



Security restrictions also limit information available on certain vehicles. This particularly applies to the use of composite special armor. On the early vehicles, the armor is specified by type, thickness, and angle with the vertical. This angle is measured between a vertical plane and the armor plate surface as indicated by the angle alpha in the sketch. In this two dimensional drawing, the angle beta is the angle of obliquity defined as the angle between a line perpendicular to the armor plate and the path of a projectile impacting the plate.

## ARMORED UTILITY VEHICLE T16 (M44)

### GENERAL DATA

Crew: (driver, bow gunner, commander, 24 infantry) 27 men  
 Length: 256.3 inches  
 Width: 119.6 inches  
 Height: Over cupola 100.0 inches  
 Tread: 96.0 inches  
 Ground Clearance: 18.3 inches  
 Weight, Combat Loaded: 51,000 pounds  
 Weight, Unstowed: 41,000 pounds  
 Power to Weight Ratio: Net 15.7 hp/ton  
                                     Gross 18.0 hp/ton  
 Ground Pressure: Zero penetration 8.1 psi

### ARMOR

Type: Hull, rolled and cast homogeneous steel; Welded assembly  
 Hull Thickness:                      Actual                      Angle w/Vertical  
 Front, Upper                      0.375 inches (10mm)                      60 degrees  
                     Middle                      0.625 inches (16mm)                      10 degrees  
                     Lower                      0.50 inches (13mm)                      0 to 68 degrees  
 Sides, Upper                      0.50 inches (13mm)                      0 degrees  
                     Lower                      0.375 inches (10mm)                      0 degrees  
 Rear, Upper                      0.50 inches (13mm)                      0 degrees  
                     Lower                      0.375 inches (10mm)                      53 degrees  
 Top, Front                      0.375 inches (10mm)                      82 degrees  
                     Center                      0.375 inches (10mm)                      90 degrees  
                     Sides                      0.375 inches (10mm)                      70 degrees  
 Sponson Floor                      0.375-0.25 inches (10-6mm)                      90 degrees  
 Floor                      0.3125 inches (8mm)                      90 degrees

### ARMAMENT

- (1) .50 caliber MG HB M2 flexible in T107 mount on roof
- (1) .30 caliber MG M1919A4 in bow mount
- Provision for (2) .45 caliber SMG M3 or .30 caliber Carbine M1
- Provision for (25) .30 caliber Rifle M1
- (1) 2.36 inch Rocket Launcher M9

### AMMUNITION

- 550 rounds .50 caliber
- 420 rounds .45 caliber or 480 rounds .30 caliber (carbine)
- 1000 rounds .30 caliber (machine gun)
- 10 rockets 2.36 inch HEAT
- 4 smoke pots
- 12 hand grenades

### VISION EQUIPMENT

Vision Devices:	Direct	Indirect
Driver	Hatch	Periscope T24 (3)
Bow Gunner	Hatch	Periscope T24 (3)
Commander	Hatch	Periscope T24 (6)
Troop Compartment	Hatch and pistol ports (10)	Periscope T24 (2)

Total Periscopes: T24 (14)

Total Pistol Ports: (10)

### ENGINE

Make and Model: Continental R-975-D4  
 Type: 9 cylinder, 4 cycle, radial  
 Cooling System: Air                      Ignition: Magneto  
 Displacement: 973 cubic inches  
 Bore and Stroke: 5x5.5 inches  
 Compression Ratio: 5.7:1  
 Net Horsepower: (max) 400 hp at 2400 rpm  
 Gross Horsepower: (max) 460 hp at 2400 rpm  
 Net Torque: (max) 940 ft-lb at 1700 rpm  
 Gross Torque: (max) 1025 ft-lb at 1800 rpm  
 Weight: 1212 pounds, dry  
 Fuel: 80 octane gasoline 250 gallons  
 Engine Oil: 36 quarts

### POWER TRAIN

Bevel Gear Ratio: 1.29:1  
 Transmission: Torqmatic, 3 speeds forward, 1 reverse  
     Gear Ratios: 1st 1.000:1                      3rd 0.244:1  
                                     2nd 0.421:1                      reverse 0.756:1  
 Torque Converter: Detroit Transmission 900AD  
     Ratio: (max) 4.7:1  
 Steering: Controlled differential, steering brake levers  
     Bevel Gear Ratio: 3.133:1                      Steering Ratio: 1.6:1  
 Brakes: Mechanical, external contracting  
 Final Drive: Spur gear                      Gear Ratio: 3.82:1  
 Drive Sprocket: At front of vehicle with 14 teeth  
     Pitch Diameter: 26.52 inches

### RUNNING GEAR

Suspension: Torsion bar  
     12 individually sprung dual road wheels (6/track)  
     Tire Size: 25.5x4.5 inches  
     8 dual track return rollers (4/track)  
     Dual adjustable idler at rear of each track  
     Idler Size: 25.7 inches, steel, no tire  
     Shock absorbers on first two and last two road wheels on each side  
 Tracks: Center guide  
     Type: Single pin, 21 inch width, cast steel chevron  
     Pitch: 6.0 inches  
     Shoes per Vehicle: 166 (83/track)  
     Ground Contact Length: 149.1 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC  
 Main Generator: (1) 24 volts, 50 amperes, driven by main engine  
 Auxiliary Generator: (1) 24 volts, 50 amperes, driven by auxiliary engine  
 Battery: (2) 12 volts in series

### COMMUNICATIONS

Radio: SCR 506 and SCR 508; SCR 508 and AN/VRC-3; SCR 506, SCR 510, and RC 99; SCR 508, SCR 506, AN/URC-1, and AN/VRC-3; or SCR 506, SCR 510, AN/VRC-3, and RC99

### FIRE AND GAS PROTECTION

- (3) 10 pound carbon dioxide, fixed
- (2) 4 pound carbon dioxide, portable
- (1) 1 1/2 quart decontaminating apparatus M2

### PERFORMANCE

Maximum Speed: Level road 32 miles/hour  
 Maximum Tractive Effort: TE at stall 49,000 pounds  
     Per Cent of Vehicle Weight: TE/W 96 per cent  
 Maximum Grade: 60 per cent  
 Maximum Trench: 7 feet  
 Maximum Vertical Wall: 24 inches  
 Maximum Fording Depth: 40 inches  
 Minimum Turning Circle: (diameter) 44 feet  
 Cruising Range: Roads approx. 180 miles

## ARMORED INFANTRY VEHICLE T18E1(M75)

### GENERAL DATA

Crew: (driver, commander, 10 infantry)	12 men
Length:	204.5 inches
Width: Oversandshields	112.0 inches
Height: Overcupola	108.5 inches
Tread:	97.0 inches
Ground Clearance:	18.0 inches
Weight, Combat Loaded:	41,500 pounds
Weight, Unstowed:	36,669 pounds
Power to Weight Ratio: Net	14.3 hp/ton
Gross	18.1 hp/ton
Ground Pressure: Zero penetration	8.5 psi

### ARMOR

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

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	0.50 inches (13mm)	73 degrees
Middle	0.625 inches (16mm)	33 degrees
Lower	0.625 inches (16mm)	27 degrees
Sides	0.625 inches (16mm)	0 degrees
Rear	0.625 inches (16mm)	0 degrees
Top, Early	0.375 inches (10mm)	90 degrees
Late	0.50 inches (13mm)	90 degrees
Sponson Floor	0.50 inches (13mm)	90 degrees
Floor, Early	1.25 inches (32mm)	90 degrees
Late	1.00 inches (25mm)	90 degrees

### ARMAMENT

(1) .50 caliber MG HB M2 flexible on commander's cupola  
 Provision for (1) .45 caliber SMG M3A1  
 (1) 3.5 inch Rocket Launcher M20

### AMMUNITION

1800 rounds .50 caliber  
 180 rounds .45 caliber  
 10 rockets 3.5 inch M35

### VISION EQUIPMENT

Vision Devices:	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M19 (infrared) (1) late vehicles only
Commander	Hatch and 6 vision blocks	None
Troop Compartment	Roof Hatch	
Total Periscopes:	M17 (4), M19 (infrared) (1)	
Total Vision Blocks:	(6) in cupola	

### ENGINE

Make and Model: Continental AO-895-4  
 Type: 6 cylinder, 4 cycle, opposed  
 Cooling System: Air Ignition: Magneto  
 Displacement: 895.9 cubic inches  
 Bore and Stroke: 5.75 x 5.75 inches  
 Compression Ratio: 6.5:1  
 Net Horsepower: (max) 295 hp at 2800 rpm  
 Gross Horsepower: (max) 375 hp at 2800 rpm  
 Net Torque: (max) 640ft-lb at 1800 rpm  
 Gross Torque: (max) 775ft-lb at 2100rpm  
 Weight: 1765 pounds (dry)  
 Fuel: 80 octane gasoline 150 gallons  
 Engine Oil: 44 quarts

### POWER TRAIN

Transmission: Cross-drive CD-500-4, 2 ranges forward, 1 reverse  
 Single stage hydraulic torque converter  
 Stall multiplication: 4:1  
 Overall Usable Ratios: low 15.6:1 reverse 15.6:1  
 high 4.1:1

Steering Control: Mechanical, T-bar

Steering Rate: 6.5 rpm

Brakes: Multiple disc

Final Drive: Spur gear Gear Ratio: 4.1:1

Drive Sprocket: At front of vehicle with 12 teeth

Pitch Diameter: 23.422 inches

### RUNNING GEAR

Suspension: Torsion bar  
 10 individually sprung dual road wheels (5/track)  
 Tire Size: 25.5 x 4.5 inches  
 6 dual track return rollers (3/track)  
 Dual compensating idler at rear of each track  
 Idler Size: 22.5 x 4.5 inches, steel, no tire  
 Shock absorbers on 1st 2 and last 2 road wheels per side (early vehicles)  
 on 1st and last road wheels per side (late vehicles)

Tracks: Center guide, T91E3

Type: Single pin, 21 inch width, steel w/detachable rubber pad

Pitch: 6 inches

Shoes per Vehicle: 140 (70/track)

Ground Contact Length: 115.75 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC

Main Generator: (1) 24 volts, 150 amperes, driven by main engine

Auxiliary Generator: 28 volts, 300 amperes, early vehicles only, later removed

Battery: (2) 12 volts in series

### COMMUNICATIONS

Radio: AN/GRC-3 thru 8, AN/VRC-13 thru 15, AN/VRC-7, or AN/VRQ-1 thru 3

Interphone: AN/UIC-1, 3 stations

### FIRE PROTECTION

(2) 10 pound carbon dioxide, fixed

(1) 5 pound carbon dioxide, portable

### PERFORMANCE

Maximum Speed: Level road 44 miles/hour

Maximum Tractive Effort: TE at stall 35,300 pounds

Per cent of Vehicle Weight: TE/W 85 per cent

Maximum Grade: 60 per cent

Maximum Trench: 5.5 feet

Maximum Vertical Wall: 24 inches

Maximum Forging Depth: w/o kit 48 inches

w/kit 80 inches

Minimum Turning Circle: (diameter) pivot

Cruising Range : Roads approx 115 miles

## ARMORED INFANTRY VEHICLE T73

### GENERAL DATA

Crew: (driver, commander, 10 infantry)	12 men
Length:	212 inches
Width:	108 inches
Height: Over cupola	90 inches
Tread:	87 inches
Ground Clearance:	18 inches
Weight, Combat Loaded:	40,500 pounds
Weight, Unstowed:	36,400 pounds
Power to Weight Ratio: Net	14.6 hp/ton
Gross	18.5 hp/ton
Ground Pressure: Zero penetration	8.0 psi

### ARMOR

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

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	0.625 inches (16mm)	33 degrees
Driver's Cupola	0.625 inches (16mm)	46 degrees
Lower	0.625 inches (16mm)	0 to 27 degrees
Sides	0.625 inches (16mm)	0 degrees
Rear	0.625 inches (16mm)	0 degrees
Top, Front	0.5 inches (13 mm)	81 degrees
Center	0.5 inches (13mm)	90 degrees
Sides	0.5 inches (13mm)	80 degrees
Sponson Floor	0.375 inches (10mm)	90 degrees
Floor	1.0 inches (25mm)	90 degrees

### ARMAMENT

- (1) .50 caliber MG HB M2 flexible on commander's cupola
- Provision for (1) .45 caliber SMG M3A1
- (1) 3.5 inch Rocket Launcher M20

### AMMUNITION

- 1800 rounds .50 caliber
- 180 rounds .45 caliber
- 10 rockets 3.5 inch M35

### VISION EQUIPMENT

Vision Devices:	Direct	Indirect
Driver	Hatch	Periscope M17 (4)
Commander	Vision blocks (6) in cupola, hatch	None
Troop compartment	Hatch and pistol port(1)	None

Total Periscopes: M17 (4)

Total Vision Blocks: (6) in cupola

Total Pistol Ports: (1)

### ENGINE

Make and Model: Continental AO-895-4	
Type: 6 cylinder, 4 cycle, opposed	
Cooling System: Air	Ignition: Magneto
Displacement:	895.9 cubic inches
Bore and Stroke:	5.75 x 5.75 inches
Compression Ratio:	6.5:1
Net Horsepower: (max)	295 hp at 2800 rpm
Gross Horsepower: (max)	375 hp at 2800 rpm
Net Torque: (max)	640 ft-lb at 1800 rpm
Gross Torque: (max)	775 ft-lb at 2100 rpm
Weight:	1765 pounds, dry
Fuel: 80 octane gasoline	150 gallons
Engine Oil:	44 quarts

### POWER TRAIN

Transmission: Cross-drive XT-500-3, 3 ranges forward, 1 reverse

Single stage hydraulic torque converter

Stall Multiplication: 4:1

Overall Usable Ratios: low 5.57:1 high 1.27:1  
intermediate 2.56:1 reverse 6.43:1

Steering Control: Mechanical, steering brake levers

Brakes: Multiple disc

Final Drive: Spur gear Gear Ratio: 4:1

Drive Sprocket: At front of vehicle with 12 teeth

Pitch Diameter: 28.8 inches

### RUNNING GEAR

Suspension: Torsion bar

10 individually sprung dual road wheels (5/track)

Tire Size: 25.5 x 4.5 inches

6 dual track return rollers (3/track)

Dual compensating idler at rear of each track

Idler Tire Size: 25.5 x 4.5 inches

Shock absorbers on first and last road wheels on each side

Tracks: Center guide, T91E3

Type: Single pin, 21 inch width, steel w/detachable rubber pad

Pitch: 6 inches

Shoes per Vehicle: 144 (72/track)

Ground Contact Length: 120 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC

Main Generator: (1) 24 volts, 100 amperes, driven by main engine

Auxiliary Generator: None

Battery: (2) 12 volts in series

### COMMUNICATIONS

Radio: AN/GRC-3 thru 8, AN/VRC-13 thru 15, AN/VRC-7, or AN/VRQ-1 thru 3

Interphone: AN/UIC-1, 2 stations

### FIRE PROTECTION

(2) 10 pound carbon dioxide, fixed

(1) 5 pound carbon dioxide, portable

### PERFORMANCE

Maximum Speed: Level road	38 miles/hour
Maximum Tractive Effort: TE at stall	32,200 pounds
Per Cent of Vehicle Weight: TE/W	80 per cent
Maximum Grade:	60 per cent
Maximum Trench:	6.5 feet
Maximum Vertical Wall:	18 inches
Maximum Fording Depth:	60 inches
Minimum Turning Circle: (diameter)	18 feet
Cruising Range: Roads	approx. 115 miles

**ARMORED PERSONNEL CARRIER M59(T59)**

**GENERAL DATA**

Crew: (driver, commander, 10 infantry) 12 men  
 Length: Overall 221.0 inches  
 Width: Over track shrouds 128.5 inches  
 Height: Vehicles F7-F1312 over MG 102.6 inches  
 Vehicles F1313-F2941 over MG 112.5 inches  
 Vehicles F2942 up, over M13 cupola 109.0 inches  
 Tread: 103.0 inches  
 Ground Clearance: 18.0 inches  
 Weight, Combat Loaded: 42,600 pounds  
 Weight, Unstowed: 39,500 pounds  
 Power to Weight Ratio: Net 11.9 hp/ton  
 13.7 hp/ton  
 Ground Pressure: Zero penetration 8.4 psi

**ARMOR**

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

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	0.625 inches (16mm)	50 degrees
Middle	0.625 inches (16mm)	0 degrees
Lower	0.625 inches (16mm)	55 degrees
Sides	0.625 inches (16mm)	0 degrees
Rear	0.625 inches (16mm)	7 degrees
Top	0.375 inches (10mm)	90 degrees
Floor	1.0 inches (25mm)	90 degrees

**ARMAMENT**

(1) .50 caliber MG HB M2 on commander's cupola, vehicles F7-F2941  
 (1) .50 caliber MG HB TT in M13 cupola, vehicles F2942 up  
 Provision for (1) .45 caliber SMG M3A1

**AMMUNITION**

1470 rounds .50 caliber, vehicles F7-F2941  
 2205 rounds .50 caliber, vehicles F2942 up  
 180 rounds .45 caliber

**VISION EQUIPMENT**

Vision Devices:	Direct	Indirect
Driver	Hatch	Periscope M17 (3) Periscope M19 (infrared) (1)
Commander, F7-F1312	Vision blocks (6) in cupola, hatch	None
F1313-2941	Hatch	Periscope M17 (4)
F2942 up	Vision blocks (4) in cupola, hatch	Periscope sight M28 (1)
Troop Compartment	Roof hatch (2)	None
Total Periscopes:	F7-F1312, M17 (3), M19 (infrared) (1) F1313-F2941, M17 (7), M19 (infrared) (1) F2942 up, M17 (3), M19 (infrared) (1), M28 (1)	
Total Vision Blocks:	F7-F1312, (6) in cupola F1313-F2941, None F2942 up, (4) in cupola	

**ENGINE**

Make and Model: GMC Model 302 (two)  
 Type: 6 cylinder, 4 cycle, in-line  
 Cooling System: Liquid Ignition: Delco  
 Displacement: (each) 301.6 cubic inches  
 Bore and Stroke: 4.0 x 4.0 inches  
 Compression Ratio: 7.2:1  
 Net Horsepower: (each max) 127hp at 3350rpm  
 Gross Horsepower: (each max) 146hp at 3600rpm  
 Net Torque: (each max) 254ft-lb at 1800rpm  
 Gross Torque: (each max) 265 ft-lb at 1800 rpm  
 Weight: (each) 630 pounds, dry  
 Fuel: 80 octane gasoline 135 gallons  
 Engine Oil: (each) 11 quarts

**POWER TRAIN**

Transmission: Hydramatic (two), 4 speeds forward, 1 reverse  
 F7-F590 Model 300MG, F591 up Model 301MG  
 Overall Usable Ratios: 1st 4.09:1 4th 1:1  
 2nd 2.63:1 reverse 4.54:1  
 3rd 1.55:1

Right Angle Drive: (two) Gear Ratio: 1.9:1  
 Steering: Controlled differential, steering brake levers  
 High Range: 1:1.092 Low Range: 2.359:1  
 Final Drive: Spur gear Gear Ratio: 4.25:1  
 Drive Sprocket: At front of vehicle with 12 teeth  
 Pitch Diameter: 23.422 inches

**RUNNING GEAR**

Suspension: Torsion bar  
 10 individually sprung dual road wheels (5/track)  
 Tire Size: 25.5 x 4.5 inches  
 6 dual track return rollers (3/track)  
 Dual compensating idler at rear of each track  
 Idler Tire Size: 25.5 x 4.5 inches  
 Shock absorbers on first and last road wheels on each side  
 Tracks: Center guide, T91E3  
 Type: Single pin, 21 inch width, steel w/detachable rubber pads  
 Pitch: 6 inches  
 Shoes per Vehicle: 144 (72/track)  
 Ground Contact Length: 121.25 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC  
 Main Generator: (1) 28 volts, 100 amperes, driven by main engine  
 Auxiliary Generator: None  
 Battery: (2) 12 volts in series

**COMMUNICATIONS**

Radio: AN/GRC-3 thru 8 or AN/VRC-13 thru 22  
 Interphone: AN/UIC-1, 2 stations

**FIRE PROTECTION**

(2) 10 pound carbon dioxide, fixed  
 (1) 5 pound carbon dioxide, portable

**PERFORMANCE**

Maximum Speed: Level road	32 miles/hour
Water	4.3 miles/hour
Maximum Tractive Effort: TE at stall	30,000 pounds
Per Cent of Vehicle Weight: TE/W	70 per cent
Maximum Grade:	60 per cent
Maximum Trench:	5.5 feet
Maximum Vertical Wall:	18 inches
Maximum Fording Depth:	floats
Minimum Turning Circle: (diameter)	30 feet
Cruising Range: Roads	approx. 120 miles

## 4.2 inch SELF-PROPELLED MORTAR M84

### GENERAL DATA

Crew:	6 men
Length: Overall	221.0 inches
Width: Over track shrouds	128.5 inches
Height: Over M13 cupola	109.0 inches
Tread:	103.0 inches
Ground Clearance:	18.0 inches
Weight, Combat Loaded:	47,100 pounds
Weight, Unstowed:	41,122 pounds
Power to Weight Ratio: Net	10.8 hp/ton
Gross	12.4 hp/ton
Ground Pressure: Zero penetration	9.2 psi

### ARMOR

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

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	0.625 inches (16mm)	50 degrees
Middle	0.625 inches (16mm)	0 degrees
Lower	0.625 inches (16mm)	55 degrees
Sides	0.625 inches (16mm)	0 degrees
Rear	0.625 inches (16mm)	7 degrees
Top	0.375 inches (10mm)	90 degrees
Floor	1.0 inches (25mm)	90 degrees

### ARMAMENT

Primary: 4.2 inch mortar M30 on mount 8731738 in rear hull  
M24A1 ground mount stowed on rear hull

Traverse: Manual	50 degrees (25 degrees to left or right)
Elevation: Manual	+45 to +59 degrees
Loading System:	Manual

### Secondary:

(1) .50 caliber MG HB TT in M13 cupola  
(1) .30 caliber MG M1919A4  
Provision for (1) .45 caliber SMG M3A1  
Provision for (2) .30 caliber Rifles M1  
Provision for (1) .30 caliber Carbine M2  
(1) 3.5 inch Rocket Launcher M20

### AMMUNITION

88 rounds 4.2 inch  
2205 rounds .50 caliber  
3000 rounds .30 caliber (machine gun)  
180 rounds .45 caliber  
64 rounds .30 caliber (rifle)  
360 rounds .30 caliber (carbine)

### FIRE CONTROL AND VISION EQUIPMENT

Primary Weapon: Indirect  
Sight Unit M34A2  
Gunner's Quadrant M1A1  
Fuze Setter M27

Vision Devices:	Direct	Indirect
Driver	Hatch	Periscope M17 (3) Periscope M19 (infrared) (1)
Commander	Vision blocks (4) in cupola, hatch	Periscope sight M28 (1)
Mortar Crew	Roof hatch	None

Total Periscopes: M17 (3), M19 (infrared) (1), M28 (1)  
Total Vision Blocks: (4) in M19 cupola

### ENGINE

Make and Model: GMC Model 302 (two)  
Type: 6 cylinder, 4 cycle, in-line  
Cooling System: Liquid Ignition: Delco  
Displacement: 301.6 cubic inches  
Bore and Stroke: 4.0 x 4.0 inches  
Compression Ratio: 7.2:1  
Net Horsepower: (each max) 127 hp at 3350 rpm  
Gross Horsepower: (each max) 146 hp at 3600 rpm  
Net Torque: (each max) 254 ft-lb at 1800 rpm  
Gross Torque: (each max) 265 ft-lb at 1800 rpm  
Weight: (each) 630 pounds, dry  
Fuel: 80 octane gasoline 135 gallons  
Engine Oil: (each) 11 quarts

### POWER TRAIN

Transmission: Hydramatic Model 301MG (two), 4 speeds forward, 1 reverse

Overall Usable Ratios:	1st	4.09:1	4th	1:1
	2nd	2.63:1	reverse	4.54:1
	3rd	1.55:1		

Right Angle Drive: (two) Gear Ratio: 1.9:1  
Steering: Controlled differential, steering brake levers  
High Range: 1:1.092 Low Range: 2.359:1  
Final Drive: Spur gear Gear Ratio: 4.25:1  
Drive Sprocket: At front of vehicle with 12 teeth  
Pitch Diameter: 23.422 inches

### RUNNING GEAR

Suspension: Torsion bar  
10 individually sprung dual road wheels (5/track)  
Tire Size: 25.5 x 4.5 inches  
6 dual track return rollers (3/track)  
Dual compensating idler at rear of each track  
Idler Tire Size: 25.5 x 4.5 inches  
Shock absorbers on first and last road wheels on each side

Tracks: Center guide, T91E3  
Type: Single pin, 21 inch width, steel w/detachable rubber pads  
Pitch: 6 inches  
Shoes per Vehicle: 144 (72/track)  
Ground Contact Length: 121.25 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC  
Main Generator: (1) 28 volts, 100 amperes, driven by main engine  
Auxiliary Generator: None  
Battery: (2) 12 volts in series

### COMMUNICATIONS

Radio: AN/GRC-3 thru 8 or AN/VRC-13 thru 22  
Interphone: AN/UIC-1, 2 stations

### FIRE PROTECTION

(2) 10 pound carbon dioxide, fixed  
(1) 5 pound carbon dioxide, portable

### PERFORMANCE

Maximum Speed: Level road	27 miles/hour
Water	3.5 miles/hour
Maximum Tractive Effort: TE at stall	30,000 pounds
Per Cent of Vehicle Weight: TE/W	64 per cent
Maximum Grade:	60 per cent
Maximum Trench:	5.5 feet
Maximum Vertical Wall:	18 inches
Maximum Forging Depth:	floats
Minimum Turning Circle: (diameter)	30 feet
Cruising Range: Roads	approx. 100 miles

## ARMORED PERSONNEL CARRIER M113

### GENERAL DATA

Crew: (driver, commander, 11 infantry) 13 men  
 Length: Overall 191.5 inches  
 Width: Overtrack shrouds 105.75 inches  
 Height: Over MG 98.25 inches  
 Tread: 85.0 inches  
 Ground Clearance: 16.1 inches  
 Weight, Combat Loaded: 22,900 pounds  
 Weight, Unstowed: 20,160 pounds  
 Power to Weight Ratio: Gross hp 18.8 hp/ton  
 Ground Pressure: Zero penetration: 7.3 psi

### ARMOR

Type: Hull, rolled 5083/5086 H32 aluminum armor,  
 Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.50 inches (38mm)	45 degrees
Lower	1.50 inches (38mm)	30 degrees
Sides, Upper	1.75 inches (44mm)	0 degrees
Lower	1.25 inches (32mm)	0 degrees
Rear, On Ramp	1.50 inches (38mm)	8 degrees
Off Ramp	1.50 inches (38mm)	9 degrees
Top	1.50 inches (38mm)	90 degrees
Floor	1.125 inches (29mm)	90 degrees

### ARMAMENT

(1).50 caliber MG HB M2 on commander's cupola

### AMMUNITION

2000 rounds .50 caliber

### VISION EQUIPMENT

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M19 (infrared) (1)
Commander	Hatch	Periscope M17 (5)
Troop Compartment	Roof/Hatch	None

Total Periscopes: M17 (9), M19 (infrared) (1)

### ENGINE

Make and Model: Chrysler 75M  
 Type: 8 cylinder, 4 cycle, vee  
 Cooling System: Liquid Ignition: Battery  
 Displacement: 360.8 cubic inches  
 Bore and Stroke: 4.125x3.375 inches  
 Compression Ratio: 7.8:1  
 Gross Horsepower: (max) 215hp at 4000rpm  
 Gross Torque: (max) 332 ft-lb at 2800 rpm  
 Weight: 688 pounds, dry  
 Fuel: gasoline, MIL G-3056B 80 gallons  
 Engine Oil: 10 quarts

### POWER TRAIN

Transfer Case: Gear Ratio 1.00:1  
 Transmission: Allison TX-200-2A  
 Torque Converter: Hydraulic, single stage, multiphase w/lockup  
 Torque Converter Stall Ratio: 3.0:1  
 Transmission Ratios: 1st 5.296:1 5th 1.39:1  
 2nd 3.81:1 6th 1.00:1  
 3rd 2.69:1 reverse 6.042:1  
 4th 1.936:1

Steering: DS200 controlled differential, steering brake levers  
 Input Ratio: 1.28:1 Steering Ratio: 1.1 to 1.786:1

Brakes: Differential band

Final Drive: Spur gear Gear Ratio: 3.928:1

Drive Sprockets: At front of vehicle with 10 teeth

Pitch Diameter: 19.618 inches

### RUNNING GEAR

Suspension: Flat track, torsion bar  
 10 individually sprung dual road wheels (5/track)  
 Tire Size: 24x2.1 inches  
 Dual adjustable idler at rear of each track  
 Idler Size: 21 x2.1 inches  
 Shock absorbers on first and last road wheels on each side  
 Tracks: Center guide, T130E1  
 Type: Single pin, 15 inch width, steel w/detachable rubber pad  
 Pitch: 6 inches  
 Shoes per Vehicle: 127 (63 left, 64 right)  
 Ground Contact Length: 105 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC

Main Generator: (1) 28 volts, 100 amperes, driven by main engine

Auxiliary Generator: None

Battery: (2) 12 volts in series

### COMMUNICATIONS

Radio: AN/GRC-3 thru 8, AN/VRC-24, AN/GRC-19, AN/VRQ-1 thru 3,  
 AN/PRC-8 thru 10, AN/GRR-5 or AN/VRC-12

Interphone: AN/UIC-1, 2 stations

### FIRE PROTECTION

(1) 5 pound carbon dioxide, fixed  
 (1) 5 pound carbon dioxide, portable

### PERFORMANCE

Maximum Speed: Level road	40 miles/hour
Water	3.5 miles/hour
Maximum Tractive Effort: TE at stall	18,000 pounds
Per Cent of Vehicle Weight: TE/W	79 per cent
Maximum Grade:	60 per cent
Maximum Trench:	5.5 feet
Maximum Vertical Wall:	24 inches
Maximum Fording Depth:	floats
Minimum Turning Circle: (diameter)	26 feet
Cruising Range: Roads	approx. 200 miles

## ARMORED PERSONNEL CARRIER M113A1

### GENERAL DATA

Crew: (driver, commander, 11 infantry) 13 men  
 Length: Overall 191.5 inches  
 Width: Over track shrouds 105.75 inches  
 Height: Over MG 98.25 inches  
 Tread: 85.0 inches  
 Ground Clearance: 16.1 inches  
 Weight, Combat Loaded: 24,080 pounds  
 Weight, Unstowed: 20,870 pounds  
 Weight, Air Drop: 18,860 pounds  
 Power to Weight Ratio: 17.6 hp/ton  
 Ground Pressure: Zero penetration 7.6 psi

### ARMOR

Type: Hull, rolled 5083/5086 H32 aluminum armor,  
 Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.50 inches (38mm)	45 degrees
Lower	1.50 inches (38mm)	30 degrees
Sides, Upper	1.75 inches (44mm)	0 degrees
Lower	1.25 inches (32mm)	0 degrees
Rear, On Ramp	1.50 inches (38mm)	8 degrees
Off Ramp	1.50 inches (38mm)	9 degrees
Top	1.50 inches (38mm)	90 degrees
Floor	1.125 inches (29mm)	90 degrees

### ARMAMENT

(1) 50 caliber MG HB M2 on commander's cupola

### AMMUNITION

2000 rounds, 50 caliber

### VISION EQUIPMENT

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M19 (infrared) (1)
Commander	Hatch	Periscope M17 (5)
Troop Compartment	Roof Hatch	None

Total Periscopes: M17 (9), M19 (infrared) (1)

### ENGINE

Make and Model: General Motors 6V53  
 Type: 6 cylinder, 2 cycle, vee  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 318 cubic inches  
 Bore and Stroke: 3.875 x 4.5 inches  
 Compression Ratio: 17.0:1  
 Gross Horsepower: (max) 212 hp at 2800rpm  
 Gross Torque: (max) 492 ft-lb sat 1300rpm  
 Weight: 1310 pounds, dry  
 Fuel: diesel oil MIL-VV-F-800 95 gallons  
 Engine Oil: 22 quarts

### POWER TRAIN

Transfer Case: Overall ratio 1.286:1 overdrive  
 Transmission: Allison TX-100  
 Torque Converter: Hydraulic, single stage, multiphase w/lockup  
 Torque Converter Stall Ratio: 3.5:1  
 Transmission Ratios: 1st 3.81:1 3rd 1.00:1  
 2nd 1.936:1 reverse 4.35:1

Steering: DS200 controlled differential, steering brake levers

Input ratio: 1.28:1 Steering Ratio: 1.1 to 1.786:1

Brakes: Differential band

Final Drive: Spur gear Gear Ratio: 3.928:1

Drive Sprockets: At front of vehicle with 10 teeth

Pitch Diameter: 19.618 inches

### RUNNING GEAR

Suspension: Flat track, torsion bar  
 10 individually sprung dual road wheels (5/track)

Tire Size: 24 x 2.1 inches

Dual adjustable idler at rear of each track

Idler Size: 21 x 2.1 inches

Shock absorbers on first and last road wheels on each side

Tracks: Center guide T130E1

Type: Single pin, 15 inch width, steel w/detachable rubber pad

Pitch: 6 inches

Shoes per Vehicle: 127 (63 left, 64 right)

Ground Contact Length: 105 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC

Main Generator: (1) 28 volts, 100 amperes, driven by main engine

Auxiliary Generator: None

Battery: (2) 12 volts in series

### COMMUNICATIONS

Radio: AN/GRC-3 thru 8, AN/VRC-24, AN/GRC-19, AN/VRQ-1 thru 3,  
 AN/PRC-8 thru 10, AN/GRR-5 or AN/VRC-12

Interphone: AN/UIC-1, 2 stations

### FIRE PROTECTION

(1) 5 pound carbon dioxide, fixed

(1) 5 pound carbon dioxide, portable

### PERFORMANCE

Maximum Speed: Level road 40 miles/hour

Water 3.6 mile/hour

Maximum Tractive Effort: TE at stall 19,800 pounds

Per Cent of Vehicle Weight: TE/W 82 per cent

Maximum Grade: 60 per cent

Maximum Trench: 5.5 feet

Maximum Vertical Wall: 24 inches

Maximum Fording Depth: floats

Minimum Turning Circle: (diameter) 26 feet

Cruising Range: Roads approx. 300 miles



## ARMORED PERSONNEL CARRIER M113A2

### GENERAL DATA

Crew: (driver, commander, 11 infantry) 13 men  
Length: Overall w/o external fuel tanks 191.5 inches  
Overall w/external fuel tanks 208.5 inches  
Width: Over track shrouds 105.75 inches  
Height: Over MG 99.25 inches  
Tread: 85.0 inches  
Ground Clearance: 17.1 inches  
Weight, Combat Loaded: w/o external tanks 25,007 pounds  
w/external tanks 25,880 pounds  
Weight, Unstowed: w/o external tanks 21,887 pounds  
w/external tanks 22,760 pounds  
Powerto Weight Ratio: w/o external tanks 17.0 hp/ton  
w/external tanks 16.4 hp/ton  
Ground Pressure: Zero penetration w/o ext tanks 7.9 psi  
w/ext tanks 8.2 psi

### ARMOR

Type: Hull, rolled 5083/5086 H32 aluminum armor,  
Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.50 inches (38mm)	45 degrees
Lower	1.50 inches (38mm)	30 degrees
Sides, Upper	1.75 inches (44mm)	0 degrees
Lower	1.25 inches (32mm)	0 degrees
Rear, On Ramp	1.50 inches (38mm)	8 degrees
Off Ramp	1.50 inches (38mm)	9 degrees
Top	1.50 inches (38mm)	90 degrees
Floor	<b>1.125 inches (29mm)</b>	90 degrees

### ARMAMENT

(1) .50 caliber MG HB M2 on commander's cupola

### AMMUNITION

2000 rounds. 50 caliber

### VISION EQUIPMENT

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M19 (infrared) (1)
Commander	Hatch	Periscope M17 (5)
Troop Compartment	Roof Hatch	None

Total Periscopes: M17 (9), M19 (infrared) (1)

### ENGINE

Make and Model: General Motors 6V53  
Type: 6 cylinder, 2 cycle, vee  
Cooling System: Liquid  
Displacement: 318 cubic inches  
Bore and Stroke: 3.875 x 4.5 inches  
Compression Ratio: 17.0:1  
Gross Horsepower: (max) 212 hp at 2800rpm  
Gross Torque: (max) 492 ft-lbs at 1300rpm  
Weight: 1310 pounds, dry  
Fuel: diesel oil MIL-VV-F-800 95 gallons  
Engine Oil: 22 quarts

### POWER TRAIN

Transfer Case: Overall ratio 1.286:1 overdrive  
Transmission: Allison TX-100  
Torque Converter: Hydraulic, single stage, multiphase w/lockup  
Torque Converter Stall Ratio: 3.5:1  
Transmission Ratios: 1st 3.81:1 3rd 1.00:1  
2nd 1.936:1 reverse 4.35:1

Steering: DS200 controlled differential, steering brake levers  
Input Ratio: 1.28:1 Steering Ratio: 1.1 to 1.786:1

Brakes: Differential band

Final Drive: Spur gear Gear Ratio: 3.928:1

Drive Sprockets: At front of vehicle with 10 teeth

Pitch Diameter: 19.618 inches

### RUNNING GEAR

Suspension: Flat track, torsion bar  
10 individually sprung dual road wheels (5/track)

Tire Size: 24 x 2.1 inches

Dual adjustable idler at rear of each track

Idler Size: 21 x 2.1 inches

Shock absorbers on first 2 and last road wheels on each side

Tracks: Center guide, T130E1 and T150

Type: T130E1, Single pin, 15 inch width, steel w/detachable rubber pad

T150, Double pin, 14.81 inch width, steel w/chevron rubber pad

Pitch: 6 inches

Shoes per Vehicle: 127 (63 left, 64 right)

Ground Contact Length: 105 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC

Main Generator: (1) 28 volts, 100 amperes, driven by main engine

Auxiliary Generator: None

Battery: (2) 12 volts in series

### COMMUNICATIONS

Radio: AN/GRC-3 thru 8, AN/VRC-24, AN/GRC-19, AN/VRQ-1 thru 3,  
AN/PRC-8 thru 10, AN/GRR-5 or AN/VRC-12

Interphone: AN/UIC-1, 2 stations

### FIRE AND NBC PROTECTION

(1) 5 pound carbon dioxide, fixed

(1) 5 pound carbon dioxide, portable

Gas participate filter unit

### PERFORMANCE

Maximum Speed: Level road 40 miles/hour

Water 3.6 miles/hour

Maximum Tractive Effort: TE at stall 19,800 pounds

Per Cent of Vehicle Weight: TE/W 79 per cent\*

Maximum Grade: 60 per cent

Maximum Trench: 5.5 feet

Maximum Vertical wall: 24 inches

Maximum Fording Depth: floats

Minimum Turning Circle: (diameter) 26 feet

Cruising Range: Roads approx. 300 miles

\* without external fuel tanks

## ARMORED PERSONNEL CARRIER M113A3

### GENERAL DATA

Crew: (driver, commander, 11 infantry) 13 men  
 Length: Overall 208.5 inches  
 Width: Over track shrouds w/o applique armor 105.75 inches  
       w/applique armor 120.0 inches  
 Height: Over MG w/o shield 99.25 inches  
       Over MG w/shield 100.43 inches  
 Tread: 85.0 inches  
 Ground Clearance: 17.1 inches  
 Weight, Combat Loaded: w/o applique armor 27,200 pounds  
       w/applique armor 31,000 pounds  
 Weight, Unstowed: w/o applique armor 23,880 pounds  
 Weight, Air Drop: 22,128 pounds  
 Power to Weight Ratio: w/o applique armor 20.2 hp/ton  
       w/applique armor 17.7 hp/ton  
 Ground Pressure: w/o applique armor 8.6 psi  
       w/applique armor 9.8 psi

### ARMOR

Type: Basic hull structure, rolled 5083/5086 H32 aluminum armor, Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.50 inches (38mm)	45 degrees
Lower	1.50 inches (38mm)	30 degrees
Sides, Upper	1.75 inches (44mm)	0 degrees
Lower	1.25 inches (32mm)	0 degrees
Rear, On Ramp	1.50 inches (38mm)	8 degrees
Off Ramp	1.50 inches (38mm)	9 degrees
Top	1.50 inches (38mm)	90 degrees
Floor	1.125 inches (29mm)	90 degrees

Steel armor incorporated in floor for blast protection.

Attachment points on hull for applique armor to provide

Protection against 14.5 mm ammunition.

Spall protection liners inside crew compartment.

### ARMAMENT

(1) .50 caliber MG HB M2 on commander's cupola

Gun shield kit available for installation on cupola

### AMMUNITION

2000 rounds .50 caliber

### VISION EQUIPMENT

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M19 (infrared) (1)
Commander	Hatch	Periscope M17 (5)
Troop Compartment	Roof Hatch	None

Total Periscopes: M17 (9), M19 (infrared) (1)

### ENGINE

Make and Model: General Motors 6V53T  
 Type: 6 cylinder, 2 cycle, vee, turbosupercharged  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 318 cubic inches  
 Bore and Stroke: 3.875 x 4.5 inches  
 Compression Ratio: 18.0:1  
 Gross Horsepower: (max) 275 hp at 2800 rpm  
 Gross Torque: (max) 627 ft-lbs at 1600 rpm  
 Weight: 1495 pounds, dry  
 Fuel: diesel oil MIL-VV-F-800 95 gallons  
 Engine Oil: 22 quarts

### POWER TRAIN

Transmission: Allison X-200-4 or X-200-4A  
 Torque Converter: Hydraulic, single stage, multiphase w/lockup  
 Torque Converter Stall Ratio: 2.72:1 to 3.32:1  
 Transmission Ratios: 1st 4.16:1 4th 1.04:1  
                           2nd 2.34:1 reverse 1 6.62:1  
                           3rd 1.46:1 reverse 2 2.16:1

Steering: Hydrostatic, steering yoke

Steering Ratios:	1st	2.15:1	4th	1.20:1
	2nd	1.52:1	reverse 1	3.76:1
	3rd	1.29:1	reverse 2	1.47:1

Brakes: Multiple plate, oil cooled

Final Drive: Spur gear Gear Ratio: 3,928:1

Drive Sprockets: At front of vehicle with 10 teeth

Pitch Diameter: 19.618 inches

### RUNNING GEAR

Suspension: Flat track, torsion bar  
 10 individually sprung dual road wheels (5/track)

Tire Size: 24x2.1 inches

Dual adjustable idler at rear of each track

Idler Size: 21 x 2.1 inches

Shock absorbers on first 2 and last road wheels on each side

Tracks: Center guide T130E1 and T150

Type: T130E1, Single pin, 15 inch width, steel w/detachable rubber pad

T150, Double pin, 14.81 inch width, steel w/chevron rubber pad

Pitch: 6 inches

Shoes per Vehicle: 127 (63 left, 64 right)

Ground Contact Length: 105 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC

Main Generator: (alternator) 28 volts, 200 amperes driven by main engine

Auxiliary Generator: None

Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

### COMMUNICATIONS

Radio: AN/VRC-12

Interphone: AN/UIC-1, 2 stations

### FIRE AND NBC PROTECTION

(1) 5 pound carbon dioxide, fixed

(1) 5 pound carbon dioxide, portable

Gas particulate filter unit

### PERFORMANCE

Maximum Speed: Level road 40 miles/hour  
                           Water 3.6 miles/hour

Maximum Grade: 60 per cent

Maximum Trench: 5.5 feet

Maximum Vertical Wall 24 inches

Maximum Fording Depth: Floats, but restricted to 40 inches

Minimum Turning Circle: (diameter) pivot

Cruising Range: Roads approx. 300 miles

**ARMORED SELF-PROPELLED 81mm MORTAR CARRIER M125A2**  
(Based upon the APC M113A2)

**GENERAL DATA**

Crew: 6 men  
 Length: Overall 191.5 inches  
 Width: Overall 105.75 inches  
 Height: Over MG 99.25 inches  
 Tread: 85.0 inches  
 Ground Clearance: 17.1 inches  
 Weight, Combat Loaded: 25,410 pounds  
 Weight, Unstowed: 23,970 pounds  
 Weight, Air Transport: 20,780 pounds  
 Power to Weight Ratio: 16.7 hp/ton  
 Ground Pressure: Zero penetration 8.1 psi

**ARMOR**

Type: Hull, rolled 5083/5086 H32 aluminum armor,  
 Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	.50 inches (38mm)	45 degrees
Lower	.50 inches (38mm)	30 degrees
Sides, Upper	.75 inches (44mm)	0 degrees
Lower	.25 inches (32mm)	0 degrees
Rear, On Ramp	.50 inches (38mm)	8 degrees
Off Ramp	.50 inches (38mm)	9 degrees
Top	.50 inches (38mm)	90 degrees
Floor	1.125 inches (29mm)	90 degrees

**ARMAMENT**

Primary: 81mm mortar M252

Secondary:

(1) .50 caliber MG HB M2 on cupola

**AMMUNITION**

114 rounds 81mm  
 600 rounds .50 caliber

**VISION EQUIPMENT**

Vision Devices:	Direct	Indirect
Driver	Hatch:	Periscope M17 (4) Periscope M19 (infrared) (1)
Commander	Hatch	Periscope M17 (5)
Crew Compartment	Roof Hatch	None

Total Periscopes: M17 (9), M19 (infrared) (1)

**ENGINE**

Make and Model: General Motors 6V53  
 Type: 6 cylinder, 2 cycle, vee  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 318 cubic inches  
 Bore and Stroke: 3.875 x 4.5 inches  
 Compression Ratio: 17.0:1  
 Gross Horsepower: (max) 212 hp at 2800 rpm  
 Gross Torque: (max) 492 ft-lbs at 1300 rpm  
 Weight: 1310 pounds, dry  
 Fuel: diesel oil MIL-VV-F-800 95 gallons  
 Engine Oil: 22 quarts

**POWER TRAIN**

Transfer Case: Overall ratio 1.286:1 overdrive  
 Transmission: Allison TX-100  
 Torque Converter: Hydraulic, single stage, multiphase w/lockup  
 Torque Converter Stall Ratio: 3.5:1  
 Transmission Ratios: 1st 3.81:1 3rd 1.00:1  
 2nd 1.936:1 reverse 4.35:1

Steering: DS200 controlled differential, steering brake levers

Input Ratio: 1.28:1 Steering Ratio: 1.1 to 1.786:1

Brakes: Differential band

Final Drive: Spur gear Gear Ratio: 3.928:1

Drive Sprockets: At front of vehicle with 10 teeth

Pitch Diameter: 19.618 inches

**RUNNING GEAR**

Suspension: Flat track, torsion bar

10 individually sprung dual road wheels (5/track)

Tire Size: 24x2.1 inches

Dual adjustable idler at rear of each track

Idler Size: 21 x 2.1 inches

Shock absorbers on first 2 and last road wheels on each side

Tracks: Center guide, T130E1 and T150

Type: T130E1, Single pin, 15 inch width, steel w/detachable rubber pad

T150, Double pin, 14.81 inch width, steel w/chevron rubber pad

Pitch: 6 inches

Shoes per vehicle; 127 (63 left, 64 right)

Ground Contact Length: 105 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC

Main generator: (1) 28 volts, 100 amperes, driven by main engine

Auxiliary Generator: None

Battery: (2) 12 volts in series

**COMMUNICATIONS**

Radio: AN/GRC-3 thru 8, AN/VRC-24, AN/GRC-19, AN/VRQ-1 thru 3  
 AN/PRC-8 thru 10, AN/GRR-5 or AN/VRC-12

Interphone: AN/UIC-1, 4 stations

**FIRE AND NBC PROTECTION**

(1) 5 pound carbon dioxide, fixed

(1) 5 pound carbon dioxide, portable

Gas particulate filter unit

**PERFORMANCE**

Maximum Speed: Level road	40 mile/hour
Water	3.6 miles/hour
Maximum Tractive Effort: TE at stall	19,800 pounds
Per Cent of Vehicle weight: TE/W	78 per cent
Maximum Grade:	60 per cent
Maximum Trench:	5.5 feet
Maximum Vertical Wall:	24 inches
Maximum Fording Depth:	floats
Minimum Turning Circle: (diameter)	26 feet
Cruising Range: Roads	approx. 300 miles

**ARMORED SELF-PROPELLED 107mm MORTAR CARRIER M106A2  
(Based upon the APC M113A2)**

**GENERAL DATA**

Crew: 6 men  
 Length: Overall 194 inches  
 Width: Overall 112.75 inches  
 Height: Over MG 99.25 inches  
 Tread: 85.0 inches  
 Ground Clearance: 17.1 inches  
 Weight, Combat Loaded: 26,910 pounds  
 Weight, Unstowed: 24,604 pounds  
 Weight, Air Transport: 20,620 pounds  
 Power to Weight Ratio: 15.8 hp/ton  
 Ground Pressure: Zero penetration 8.5 psi

**ARMOR**

Type: Hull, rolled 5083/5086 H32 aluminum armor, Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.50 inches (38mm)	45 degrees
Lower	1.50 inches (38mm)	30 degrees
Sides, Upper	1.75 inches (44mm)	0 degrees
Lower	1.25 inches (32mm)	0 degrees
Rear, On Ramp	1.50 inches (38mm)	8 degrees
Off Ramp	1.50 inches (38mm)	9 degrees
Top	1.50 inches (38mm)	90 degrees
Floor	1.125 inches (29mm)	90 degrees

**ARMAMENT**

Primary: 107mm (4.2 inch) mortar M30

Secondary:

(1) .50 caliber MG HB M2 on cupola

**AMMUNITION**

88 rounds 107mm (4.2 inch)

600 rounds .50 caliber

**VISION EQUIPMENT**

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M19 (infrared) (1)
Commander	Hatch	Periscope M17 (5)
Crew Compartment	Roof Hatch	None

Total Periscopes: M17 (9), M19 (infrared) (1)

**ENGINE**

Make and Model: General Motors 6V53  
 Type: 6 cylinder, 2 cycle, vee  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 318 cubic inches  
 Bore and Stroke: 3.875 x 4.5 inches  
 Compression Ratio: 17.0:1  
 Gross Horsepower: (max) 212 hp at 2800rpm  
 Gross Torque: (max) 492 ft-lbs at 1300rpm  
 Weight: 1310 pounds, dry  
 Fuel: diesel oil MIL-VV-F-800 95 gallons  
 Engine oil: 22 quarts

**POWER TRAIN**

Transfer Case: Overall ratio 1.286:1 overdrive  
 Transmission: Allison TX-100  
 Torque Converter: Hydraulic, single stage, multiphase w/lockup  
 Torque Converter Stall Ratio: 3.5:1  
 Transmission Ratios: 1st 3.81:1 3rd 1.00:1  
 2nd 1.936:1 reverse 4.35:1  
 Steering: DS200 controlled differential, steering brake levers  
 Input Ratio: 1.28:1 Steering Ratio: 1.1 to 1.786:1

Brakes: Differential band  
 Final Drive: Spur gear Gear Ratio: 3.928:1  
 Drive Sprockets: At front of vehicle with 10 teeth  
 Pitch Diameter: 19.618 inches

**RUNNING GEAR**

Suspension: Flat track, torsion bar  
 10 individually sprung dual road wheels (5/track)  
 Tire Size: 24 x 2.1 inches  
 Dual adjustable idler at rear of each track  
 Idler Size: 21 x 2.1 inches  
 Shock absorbers on first 2 and last road wheels on each side  
 Tracks: Center guide, T130E1 and T1 50  
 Type: T130E1, Single pin, 15 inch width, steel w/detachable rubber pad  
 T150, Double pin, 14.81 inch width, steel w/chevron rubber pad  
 Pitch: 6 inches  
 Shoes per Vehicle: 127 (63 left, 64 right)  
 Ground Contact Length: 105 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC  
 Main Generator: (1) 28 volts, 100 amperes, driven by main engine  
 Auxiliary Generator: None  
 Battery: (2) 12 volts in series

**COMMUNICATIONS**

Radio: AN/GRC-3 thru 8, AN/VRC-24, AN/GRC-19, AN/VRQ-1 thru 3,  
 AN/PRC-8 thru 10, AN/GRR-5 or AN/VRC-12  
 Interphone: AN/UIC-1, 4 stations

**FIRE AND NBC PROTECTION**

(1) 5 pound carbon dioxide, fixed  
 (1) 5 pound carbon dioxide, portable  
 Gas particulate filter unit

**PERFORMANCE**

Maximum Speed: Level road	40 miles/hour
Water	3.6 miles/hour
Maximum Tractive Effort: TE at stall	19,800 pounds
Per Cent of Vehicle Weight: TE/W	74 per cent
Maximum Grade:	60 per cent
Maximum Trench:	5.5 feet
Maximum Vertical Wall:	24 inches
Maximum Fording Depth:	floats
Minimum Turning Circle: (diameter)	26 feet
Cruising Range: Roads	approx. 300 miles

**ARMORED SELF-PROPELLED 120mm MORTAR CARRIER M1064A3  
(Based upon the APC M113A3)**

**GENERAL DATA**

Crew: 4 men  
 Length: Overall 209.4 inches  
 Width: Overtrackshrouds 105.75 inches  
 Height: OverMG 99.25 inches  
 Tread: 85.0 inches  
 Ground Clearance: 17.1 inches  
 Weight, Combat Loaded: 28,900 pounds  
 Weight, Unstowed: 23,360 pounds  
 Power to Weight Ratio: 19.0 hp/ton  
 Ground Pressure: Zero penetration 9.2 psi

**ARMOR**

Type: Hull, rolled 5083/5086 H32 aluminum armor,  
 Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.50 inches (38mm)	45 degrees
Lower	1.50 inches (38mm)	30 degrees
Sides, Upper	1.75 inches (44mm)	0 degrees
Lower	1.25 inches (32mm)	0 degrees
Rear, On Ramp	1.50 inches (38mm)	8 degrees
OffRamp	1.50 inches (38mm)	9 degrees
Top	1.50 inches (38mm)	90 degrees
Floor	1.125 inches (29mm)	90 degrees

**ARMAMENT**

Primary: 120mm mortar M121

Secondary:

(1) .50 caliber MG HB M2 on cupola

**AMMUNITION**

69 rounds 120mm  
 600 rounds .50 caliber

**VISION EQUIPMENT**

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M19A1 (infrared) (1)
Commander	Hatch	Periscope M17 (5)
Crew Compartment	Roof Hatch	None

Total Periscopes: M17 (9), M19A1 (infrared) (1)

**ENGINE**

Make and Model: General Motors 6V53T  
 Type: 6 cylinder, 2 cycle, vee, turbosupercharged  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 318 cubic inches  
 Bore and Stroke: 3.875 x 4.5 inches  
 Compression Ratio: 18.0:1  
 Gross Horsepower: (max) 275 hp at 2800 rpm  
 Gross Torque: (max) 627 ft-lbs at 1600 rpm  
 Weight: 1495 pounds, dry  
 Fuel: diesel oil MIL VV-F-800 95 gallons  
 Engine Oil: 22 quarts

**POWER TRAIN**

Transmission: Allison X-200-4 or X-200-4A  
 Torque Converter: Hydraulic, single stage, multiphase w/lockup  
 Torque Converter Stall ratio: 2.72:1 to 3.32:1  
 Transmission Ratios: 1st 4.16:1 4th 1.04:1  
                           2nd 2.34:1 reverse 1 6.62:1  
                           3rd 1.46:1 reverse 2 2.16:1  
 Steering: Hydrostatic, steering yoke  
 Steering Ratios: 1st 2.15:1 4th 1.20:1  
                           2nd 1.52:1 reverse! 3.76:1  
                           3rd 1.29:1 reverse 2 1.47:1

Brakes: Multiple plate, oil cooled

Final Drive: Spur gear Gear Ratio: 3.928:1

Drive Sprockets: At front of vehicle with 10 teeth

Pitch Diameter: 19.618 inches

**RUNNING GEAR**

Suspension: Flat track, torsion bar  
 10 individually sprung dual road wheels (5/track)  
 Tire Size: 24 x 2.1 inches  
 Dual adjustable idler at rear of each track  
 Idler Size: 21 x 2.1 inches  
 Shock absorbers on first 2 and last road wheels on each side  
 Tracks: Center guide, T130E1 and T150  
 Type: T130E1, Single pin, 15 inch width, steel w/detachable rubber pad  
       T150, Double pin, 14.81 inch width, steel w/chevron rubber pad  
 Pitch: 6 inches  
 Shoes per Vehicle: 127 (63 left, 64 right)  
 Ground Contact Length: 105 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC  
 Main Generator: (alternator) 28 volts, 200 amperes, driven by main engine  
 Auxiliary Generator: None  
 Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

**COMMUNICATIONS**

Radio: AN/VRC-12  
 Interphone: AN/UIC-1, 2 stations

**FIRE AND NBC PROTECTION**

(1) 5 pound carbon dioxide, fixed  
 (1) 5 pound carbon dioxide, portable  
 Gas particulate filter unit

**PERFORMANCE**

Maximum Speed: Level road	40 miles/hour
Water	3.6 miles/hour
Maximum Grade:	60 per cent
Maximum Trench:	5.5 feet
Maximum Vertical Wall:	24 inches
Maximum Fording Depth:	Floats, but restricted to 40 inches
Minimum Turning Circle: (diameter)	pivot
Cruising Range: Roads	approx. 300 miles

**FIRE SUPPORT TEAM VEHICLE (FIST-V) M981  
(Based upon the APC M113A2)**

**GENERAL DATA**

Crew: 4 men  
 Length: Overall 208.5 inches  
 Width: Over track shrouds 105.75 inches  
 Height: Head erected 134.25 inches  
     Head stowed 115.75 inches  
     Air transport 103.5 inches  
 Tread: 85.0 inches  
 Ground Clearance: 17.1 inches  
 Weight, Combat Loaded: 27,900 pounds  
 Weight, Unstowed: 26,200 pounds  
 Power to Weight ratio: 15.2 hp/ton  
 Ground Pressure: Zero penetration 8.9 psi

**ARMOR**

Type: Hull, rolled 5083/5086 H32 aluminum armor

Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.50 inches (38mm)	45 degrees
Lower	1.50 inches (38mm)	30 degrees
Sides, Upper	1.75 inches (44mm)	0 degrees
Lower	1.25 inches (32mm)	0 degrees
Rear, On Ramp	1.50 inches (38mm)	8 degrees
Off Ramp	1.50 inches (38mm)	9 degrees
Top	1.50 inches (38mm)	90 degrees
Floor	1.125 inches (29mm)	90 degrees

**ARMAMENT**

- (1) 7.62mm M60 MG on operator's cupola
- (3) 5.56mm M16A1 rifles stowed
- (2) 4 tube smoke grenade launchers

**AMMUNITION**

- 800 rounds 7.62mm
- 840 rounds 5.56mm
- 16 smoke grenades

**FIRE DIRECTION AND VISION EQUIPMENT**

Ground/vehicular laser locator designator (G/VLLD)

AN/TAS-4 night sight

Targeting station controls and displays

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M19 (infrared) (1)
Commander	None	Panoramic telescope
Operator	Hatch and 7 vision blocks	Tank periscope
Crew Compartment	vision block in rear ramp	Periscope M26 (2)

Total Periscopes: M17 (4), M19 (infrared) (1), M26 (2)

Tank Periscope (1), Panoramic Telescope (1)

**ENGINE**

Make and Model: General Motors 6V53  
 Type: 6 cylinder, 2 cycle, vee  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 318 cubic inches  
 Bore and Stroke: 3.875 x 4.5 inches  
 Compression Ratio: 17.0:1  
 Gross Horsepower: (max) 212 hp at 2800rpm  
 Gross Torque: (max) 492 ft-lbs at 1300rpm  
 Weight: 1310 pounds, dry  
 Fuel: diesel oil MILVV-F-800 95 gallons  
 Engine Oil: 22 quarts

**POWER TRAIN**

Transfer Case: Overall ratio 1.286:1 overdrive  
 Transmission: Allison TX-100  
     Torque Converter: Hydraulic, single stage, multiphase w/lockup  
     Torque Converter Stall Ratio: 3.5:1  
     Transmission Ratios: 1st 3.81:1 3rd 1.00:1  
                                     2nd 1.936:1 reverse 4.35:1

Steering: DS200 controlled differential, steering brake levers

Input Ratio: 1.28:1 Steering Ratio: 1.1 to 1.786:1

Brakes: Differential band

Final Drive: Spur gear Gear Ratio: 3.928:1

Drive Sprockets: At front of vehicle with 10 teeth

Pitch Diameter: 19.618 inches

**RUNNING GEAR**

Suspension: Flat track, torsion bar  
 10 individually sprung dual road wheels (5/track)  
 Tire Size: 24 x 2.1 inches  
 Dual adjustable idler at rear of each track  
 Idler Size: 21 x 2.1 inches  
 Shock absorbers on first 2 and last road wheels on each side  
 Tracks: Center guide, T130E1 and T150  
     Type: T130E1, Single pin, 15 inch width, steel w/detachable rubberpad  
             T150, Double pin, 14.81 inch width, steel w/chevron rubber pad  
     Pitch: 6 inches  
     Shoes per Vehicle: 127 (63 left, 64 right)  
     Ground Contact Length: 105 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC  
 Main Generator: (1) 28 volts, 100 amperes, driven by main engine  
 Auxiliary Generator: None  
 Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel  
**COMMUNICATIONS**  
 Radio: AN/VRC-46, AN/GRC-160(3), AN/PSG-5, AN/PSG-2A,  
 AN/GRA-39, TSEC/KY-57  
 Interphone: 4 stations

**FIRE AND NBC PROTECTION**

- (1) 5 pound carbon dioxide, fixed
- (1) 5 pound carbon dioxide, portable
- Gas particulate filter unit

**PERFORMANCE**

Maximum Speed: Level road	40 miles/hour
Water	3.6 miles/hour
Maximum Tractive Effort: TE at stall	19,800 pounds
Per Cent of Vehicle Weight: TE/W	71 per cent
Maximum Grade:	60 per cent
Maximum Trench:	5.5 feet
Maximum Vertical Wall:	24 inches
Maximum Fording Depth:	floats
Minimum Turning Circle: (diameter)	26 feet
Cruising Range: Roads	approx. 300 miles

## ARMORED COMMAND POST CARRIER M577A2

### GENERAL DATA

Crew: 5 men  
 Length: Overall 191.5 inches  
 Width: Overtrackshrouds 105.75 inches  
 Height: Over antenna guards 106.5 inches  
 Tread: 85.0  
 Ground Clearance: 17.1 inches  
 Weight, Combat Loaded: 25,450 pounds  
 Weight, Unstowed: 24,247 pounds  
 Weight, Air Transport: 23,120 pounds  
 Power to Weight Ratio: 16.7 hp/ton  
 Ground Pressure: Zero penetration 8.1 psi

### ARMOR

Type: Hull, rolled 5083/5086 H32 aluminum armor  
 Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.75 inches (44mm)	0 degrees
Middle	1.50 inches (38mm)	45 degrees
Lower	1.50 inches (38mm)	30 degrees
Sides, Upper	1.75 inches (44mm)	0 degrees
Lower	1.25 inches (32mm)	0 degrees
Rear, On Ramp	1.50 inches (38mm)	8 degrees
OffRamp	1.50 inches (38mm)	9 degrees
Top	1.50 inches (38mm)	90 degrees
Floor	1.125 inches (29mm)	90 degrees

### ARMAMENT

(6) 7.62mm M14 rifles stowed

### AMMUNITION

720 rounds 7.62mm, rifle

### VISION EQUIPMENT

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M19 (infrared) (1)
Crew Compartment	Roof Hatch	None

Total Periscopes: M17 (4), M19 (infrared) (1)

### ENGINE

Make and Model: General Motors 6V53  
 Type: 6 cylinder, 2 cycle, vee  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 318 cubic inches  
 Bore and Stroke: 3.875x4.5 inches  
 Compression Ratio: 17.0:1  
 Gross Horsepower: (max) 212 hp at 2800 rpm  
 Gross Torque: (max) 492 ft-lbs at 1300 rpm  
 Weight: 1310 pounds, dry  
 Fuel: diesel oil MIL-VV-F-800 120 gallons  
 Engine Oil: 22 quarts

### POWER TRAIN

Transfer Case: Overall ratio 1.286:1 overdrive

Transmission: Allison TX-100

Torque Converter: Hydraulic, single stage, multiphase w/lockup

Torque Converter Stall Ratio: 3.5:1

Transmission Ratios: 1st 3.81:1 3rd 1.00:1  
 2nd 1.936:1 reverse 4.35:1

Steering: DS200 controlled differential, steering brake levers

Input Ratio: 1.28:1 Steering Ratio: 1.1 to 1.786:1

Brakes: Differential band

Final Drive: Spur gear Gear Ratio: 3.928:1

Drive Sprockets: At front of vehicle with 10 teeth

Pitch Diameter: 19.618 inches

### RUNNING GEAR

Suspension: Flat track, torsion bar

10 individually sprung dual road wheels (5/track)

Tire Size: 24 x 2.1 inches

Dual adjustable idler at rear of each track

Idler Size: 21 x 2.1 inches

Shock absorbers on first 2 and last road wheels on each side

Tracks: Center guide T130E1 and T150

Type: T130E1, Single pin, 15 inch width, steel w/detachable rubber pad

T150, Double pin, 14.81 inch width, steel w/chevron rubber pad

Pitch: 6 inches

Shoes per Vehicle: 127 (63 left, 64 right)

Ground Contact Length: 105 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC

Main Generator: (1) 28 volts, 100 amperes, driven by main engine

Auxiliary Generator: (1) 28 volts, 150 amperes, driven by auxiliary engine

Battery: (2) 12 volts in series

### FIRE PROTECTION

(1) 5 pound carbon dioxide, fixed

(1) 5 pound carbon dioxide, portable

### PERFORMANC

Maximum Speed: Level road 40 miles/hour

Water 3.6 miles/hour

Maximum Tractive Effort: TE at stall 19,800 pounds

Per Cent of Vehicle Weight: TE/W 78 per cent

Maximum Grade: 60 per cent

Maximum Trench: 5.5 feet

Maximum Vertical Wall: 24 inches

Maximum Fording Depth: floats

Minimum Turning Circle: (diameter) 26 feet

Cruising Range: Roads approx. 370 miles

**STANDARD INTEGRATED COMMAND POST SYSTEM CARRIER M1068A3**

**GENERAL DATA**

Crew: 4 men  
 Length: Overall 202 inches  
 Width: Over track shrouds 105.75 inches  
 Height: Over antenna guards 106.5 inches  
 Tread: 85.0 inches  
 Ground Clearance: 17.1 inches  
 Weight, Combat Loaded: 27,130 pounds  
 Weight: Unstowed: 25,508 pounds  
 Power to Weight Ratio: 20.3 hp/ton  
 Ground Pressure: Zero penetration 8.6 psi

**ARMOR**

Type: Hull, rolled 5083/5086 H32 aluminum armor,  
 Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.75 inches (44mm)	0 degrees
Middle	1.50 inches (38mm)	45 degrees
Lower	.50 inches (38mm)	30 degrees
Sides, Upper	.75 inches (44mm)	0 degrees
Lower	.25 inches (32mm)	0 degrees
Rear, On Ramp	.50 inches (38mm)	8 degrees
Off Ramp	.50 inches (38mm)	9 degrees
Top	.50 inches (38mm)	90 degrees
Floor	1.125 inches (29mm)	90 degrees

**ARMAMENT**

(4) 5.56mm M16A1 rifles stowed

**AMMUNITION**

600 rounds 5.56mm

**VISION EQUIPMENT**

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M19A1 (infrared) (1)
Crew Compartment	Hatch	None

Total Periscopes: M17 (4), M19A1 (infrared) (1)

**ENGINE**

Make and Model: General Motors 6V53T  
 Type: 6 cylinder, 2 cycle, vee, turbosupercharged  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 318 cubic inches  
 Bore and Stroke: 3.875x4.5 inches  
 Compression Ratio: 18.0:1  
 Gross Horsepower: (max) 275 hp at 2800 rpm  
 Gross Torque: (max) 627 ft-lbs at 1600 rpm  
 Weight: 1495 pounds, dry  
 Fuel: diesel oil MIL-VV-F-800 120 gallons  
 Engine Oil: 22 quarts

**POWER TRAIN**

Transmission: Allison X-200-4 or X-200-4A  
 Torque Converter: Hydraulic, single stage, multiphase w/lockup  
 Torque Converter Stall ratio: 2.72:1 to 3.32:1  
 Transmission ratios: 1st 4.16:1 4th 1.04:1  
                                   2nd 2.34:1 reverse! 6.62:1  
                                   3rd 1.46:1 reverse 2 2.16:1  
 Steering: Hydrostatic, steering yoke  
 Steering Ratios: 1st 2.15:1 4th 1.20:1  
                                   2nd 1.52:1 reverse 1 3.76:1  
                                   3rd 1.29:1 reverse 2 1.47:1

Brakes: Multiple plate, oil cooled

Final Drive: Spur gear Gear Ratio: 3.928:1

Drive Sprockets: At front of vehicle with 10 teeth

Pitch Diameter: 19.618 inches

**RUNNING GEAR**

Suspension: Flat track, torsion bar  
 10 individually sprung dual road wheels (5/track)  
 Tire Size: 24 x 2.1 inches  
 Dual adjustable idler at rear of each track  
 Idler Size: 21 x 2.1 inches  
 Shock absorbers on first 2 and last road wheels on each side  
 Tracks: Center guide, T130E1 and T150  
 Type: T130E1, Single pin, 15 inch width, steel w/detachable rubber pad  
           T150, Double pin, 14.81 inch width, steel w/chevron rubber pad  
 Pitch: 6 inches  
 Shoes per Vehicle: 127 (63 left, 64 right)  
 Ground Contact Length: 105 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC

Main Generator: (alternator) 28 volts, 200 amperes, driven by main engine

Auxiliary Generator: (1) 28 volts, 150 amperes, driven by auxiliary engine

Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

**FIRE AND NBC PROTECTION**

(1) 5 pound carbon dioxide, fixed  
 (1) 5 pound carbon dioxide, portable  
 Gas particulate filter unit

**PERFORMANCE**

Maximum Speed: Level road	40 miles/hour
Water	3.6 miles/hour
Maximum Grade:	60 per cent
Maximum Trench:	5.5 feet
Maximum Vertical Wall:	24 inches
Maximum Fording Depth:	Floats, but restricted to 40 inches
Minimum Turning Circle: (diameter)	pivot
Cruising Range: Roads	approx. 370 miles



**ANTITANK COMBAT VEHICLE, IMPROVED TOW VEHICLE M901A1**  
(Based upon the APC M113A2)

**GENERAL DATA**

Crew. Mechanized infantry 4 men  
 Armored cavalry 5 men  
 Length: Overall 191.5 inches  
 Width: Over track shrouds 105.75 inches  
 Height: Head erected 134.25 inches  
 Head stowed 115.75 inches  
 Air transport 103.5 inches  
 Tread: 85.0 inches  
 Ground Clearance: 17.1 inches  
 Weight, Combat Loaded: approx. 26,000 pounds  
 Power to Weight Ratio: 16.3 hp/ton  
 Ground Pressure: Zero penetration 8.3 psi

**ARMOR**

Type: Hull, rolled 5083/5086 H32 aluminum armor

Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.50 inches (38mm)	45 degrees
Lower	1.50 inches (38mm)	30 degrees
Sides, Upper	1.75 inches (44mm)	0 degrees
Lower	1.25 inches (32mm)	0 degrees
Rear, On Ramp	1.50 inches (3 8mm)	8 degrees
Off Ramp	1.50 inches (3 8mm)	9 degrees
Top	1.50 inches (38mm)	90 degrees
Floor	1.125 inches (29mm)	90 degrees

**ARMAMENT**

Primary: TOW missile launcher

Secondary:

- (1) 7.62 mm M60 MG on gunner's cupola
- (2) 5.56 mm M16A1 rifles stowed
- (2) 4 tube smoke grenade launchers

**AMMUNITION**

- 10 TOW2 missiles
- 800 rounds 7.62mm
- 560 rounds 5.56mm
- 16 smoke grenades

**FIRE DIRECTION AND VISION EQUIPMENT**

Primary Weapon: TOW2 guidance system

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M19 (infrared) (1)
Commander	None	Panoramic telescope
Gunner	Hatch and 7 vision blocks	TOW sight assembly
Crew compartment	vision block in rear ramp	Periscope M26 (2)

Total Periscopes: M17 (4), M19 (infrared) (1), M26 (2)

TOW sight assembly, panoramic telescope

Total Vision Blocks: (8)

**ENGINE**

Make and Model: General Motors 6V53

Type: 6 cylinder, 2 cycle, vee

Cooling System: Liquid

Ignition: Compression

Displacement: 318 cubic inches

Bore and stroke: 3.875 x 4.5 inches

Compression Ratio: 17.0:1

Gross Horsepower: (max) 212 hp at 2800 rpm

Gross Torque: (max) 492 ft-lbs at 1300 rpm

Weight: 1310 pounds, dry

Fuel: diesel oil MIL-VV-F-800 95 gallons

Engine Oil: 22 quarts

**POWER TRAIN**

Transfer Case: Overall ratio 1.286:1 overdrive

Transmission: Allison TX-100

Torque Converter: Hydraulic, single stage, multiphase w/lockup

Torque Converter Stall Ratio: 3.5:1

Transmission Ratios: 1st 3.81:1 3rd 1.00:1

2nd 1.936:1 reverse 4.35:1

Steering: DS200 controlled differential, steering brake levers

Input Ratio: 1.28:1 Steering Ratio: 1.1 to 1.786:1

Brakes: Differential band

Gear Ratio: 3.928:1

Final Drive: Spur gear

Drive Sprockets: At front of vehicle with 10 teeth

Pitch Diameter: 19.618 inches

**RUNNING GEAR**

Suspension: Flat track, torsion bar

10 individually sprung dual road wheels (5/track)

Tire Size: 24 x 2.1 inches

Dual adjustable idler at rear of each track

Idler Size: 21 x 2.1 inches

Shock absorbers on first 2 and last road wheels on each side

Tracks: Center guide, T130E1 and T1 50

Type: T130E1, Single pin, 15 inch width, steel w/detachable rubber pad

T150, Double pin, 14.81 inch width, steel w/chevron rubber pad

Pitch: 6 inches

Shoes per Vehicle: 127 (63 left, 64 right)

Ground Contact Length: 105 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC

Main Generator: (1) 28 volts, 100 amperes, driven by main engine

Auxiliary Generator: None

Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

**COMMUNICATIONS**

Radio: AN/VRC-64, AN/GRC-160

Interphone: 5 stations

**FIRE AND NBC PROTECTION**

(1) 5 pound carbon dioxide, fixed

(1) 5 pound carbon dioxide, portable

Gas particulate filter unit

**PERFORMANCE**

Maximum Speed: Level road 40 miles/hour

Water 3.6 miles/hour

Maximum Tractive Effort: TE at stall 19,800 pounds

Per cent of Vehicle Weight: TE/W 76 per cent

Maximum Grade: 60 percent

Maximum Trench: 5.5 feet

Maximum Vertical Wall: 24 inches

Maximum Fording Depth: floats

Minimum Turning Circle: (diameter) 26 feet

Cruising Range: Roads approx. 300 miles

**20mm SELF-PROPELLED AIR DEFENSE GUN M163A1  
VULCAN AIR DEFENSE SYSTEM  
(Carrier M741A1)**

**GENERAL DATA**

Crew: 4 men  
 Length: 191.5 inches  
 Width: Over flotation pods 112.4 inches  
 Height: Overall 115 inches  
 Tread: 85 inches  
 Ground Clearance: 16.1 inches  
 Weight, Combat Loaded: 27,542 pounds  
 Power to Weight Ratio: 15.4 hp/ton  
 Ground Pressure: Zero penetration 8.7 psi

**ARMOR**  
 Type: Hull, rolled 5083/5086 H32 aluminum armor,  
 Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.50 inches (38mm)	45 degrees
Lower	1.50 inches (38mm)	30 degrees
Sides, Upper	1.75 inches (44mm)	0 degrees
Lower	1.25 inches (32mm)	0 degrees
Rear, On Ramp	1.50 inches (38mm)	8 degrees
Off Ramp	1.50 inches (38mm)	9 degrees
Top	1.50 inches (38mm)	90 degrees
Floor	1.125 inches (29mm)	90 degrees

**ARMAMENT**

Primary: 20mm cannon M168 in mount M157A1

Traverse: Electric	360 degrees
Traverse Rate: (max)	4.8 seconds/360 degrees
Elevation: Electric	+80 to -5 degrees
Elevation Rate: (max)	60 degrees/second
Firing Rate: High	3000 rounds/minute
Low	1000 rounds/minute
Burst Limits: High rate only	10, 30, 60, or 100 rounds

Secondary:  
 (4) 5.56mm M16A1 rifles stowed

**AMMUNITION**

2100 rounds 20mm  
 800 rounds 5.56mm

**FIRE CONTROL AND VISION EQUIPMENT**

Primary Weapon: Sight M61, night sight AN/TVS-2B, Telescope M134,  
 AN/VPS-2 radar set

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M19 (infrared) (1)
Commander	Hatch	None
Gunner	open turret	None
Crew Compartment	None	None

Total Periscopes: M17 (4), M19 (infrared)(1)

**ENGINE**

Make and Model: General Motors 6V53  
 Type: 6 cylinder, 2 cycle, vee  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 318 cubic inches  
 Bore and Stroke: 3.875 x 4.5 inches  
 Compression Ratio: 17.0:1  
 Gross Horsepower: (max) 212 hp at 2800 rpm  
 Gross Torque: (max) 492 ft-lbs at 1300 rpm  
 Weight: 1310 pounds, dry  
 Fuel: diesel oil MIL-VV-F-800 95 gallons  
 Engine Oil: 22 quarts

**POWER TRAIN**

Transfer Case: Overall Ratio 1.286:1 overdrive  
 Transmission: Allison TX-100  
 Torque Converter: Hydraulic, single stage, multiphase w/lockup  
 Torque Converter Stall Ratio: 3.5:1  
 Transmission Ratios: 1st 3.81:1 3rd 1.00:1  
 2nd 1.936:1 reverse 4.35:1

Steering: DS200 controlled differential, steering brake levers  
 Input Ratio: 1.28:1 Steering Ratio: 1.1 to 1.786:1

**Brakes: Differential band**

Final Drive: Spur gear Gear Ratio: 3.928:1  
 Drive Sprockets: At front of vehicle with 10 teeth  
 Pitch Diameter: 19.618 inches

**RUNNING GEAR**

Suspension: Flat track, torsion bar w/hydraulic lockout  
 10 individually sprung dual road wheels (5/track)  
 Tire Size: 24 x 2.1 inches  
 Dual adjustable idler at rear of each track  
 Idler Size: 21 x 2.1 inches  
 Shock absorbers on first and last road wheels on each side

Tracks: Center guide, T130E1  
 Type: Single pin, 15 inch width, steel w/detachable rubber pad  
 Pitch: 6 inches  
 Shoes per Vehicle: 127 (63 left, 64 right)  
 Ground Contact Length: 105 inches

**ELECTRICAL SYSTEM**

M741 vehicle:  
 Nominal Voltage: 24 volts DC  
 Main Generator: (1)28 volts, 100 amperes, driven by main engine  
 Battery: (2) 12 volts in series

**M157A1 gun mount:**

Battery: (3) 24 volts in parallel

**FIRE PROTECTION**

(1)5 pound carbon dioxide, fixed  
 (1)5 pound carbon dioxide, portable

**PERFORMANCE**

Maximum Speed: Level road	40 miles/hour
Water	3.6 miles/hour
Maximum Tractive Effort: TE at stall	19,800 pounds
Per Cent of Vehicle Weight: TE/W	72 per cent
Maximum Grade:	60 per cent
Maximum Trench:	5.5 feet
Maximum Vertical Wall:	24 inches
Maximum Fording Depth:	floats
Minimum Turning Circle: (diameter)	26 feet
Cruising Range: Roads	approx. 300 miles

**CHAPARRAL AERIAL INTERCEPT GUIDED MISSILE SYSTEM  
ON  
GUIDED MISSILE EQUIPMENT CARRIER M730A2**

**GENERAL DATA**

Crew: (in cab) 5 men  
 Length: Overall 239.88 inches  
 Width: Over track shrouds 105.75 inches  
 Height: Over canopy bows 113.88 inches  
 Tread: 85.0 inches  
 Ground Clearance: 17.1 inches  
 Weight, Combat Loaded: 29,300 pounds  
 Weight, Without Missile Pallet: 14,691 pounds  
 Power to Weight Ratio: 18.8 hp/ton  
 Ground Pressure: Zero penetration 8.8 psi

**ARMOR**

None

**ARMAMENT**

The M54A2 Chaparral guided missile pallet armed with 4 MIM-72 missiles

**AMMUNITION**

12 MIM-72 Chaparral missiles (including 4 on launcher)

**VISION EQUIPMENT**

Windows in cab or open top vehicle

**ENGINE**

Make and Model: General Motors: 6V53T  
 Type: 6 cylinder, 2 cycle, vee, turbosupercharged  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 318 cubic inches  
 Bore and Stroke: 3.875x4.5 inches  
 Compression Ratio: 18.0:1  
 Gross Horsepower: (max) 275 hp at 2800 rpm  
 Gross Torque: (max) 627 ft-lbs at 1600 rpm  
 Weight: 1495 pounds, dry  
 Fuel: diesel oil MIL-VV-F-800 111 gallons  
 Engine Oil: 22 quarts

**POWER TRAIN**

Transmission: Allison X-200-4  
 Torque Converter: Hydraulic, single stage, multiphase w/lockup  
 Torque Converter Stall Ratio: 2.72:1 to 3.32:1  
 Transmission Ratios: 1st 4.16:1 4th 1.04:1  
 2nd 2.34:1 reverse 1 6.62:1  
 3rd 1.46:1 reverse 2 2.16:1  
 Steering: Hydrostatic, steering yoke  
 Steering Ratios: 1st 2.15:1 4th 1.20:1  
 2nd 1.52:1 reverse 1 3.76:1  
 3rd 1.29:1 reverse 2 1.47:1

Brakes: Multiple plate, oil cooled

Final Drive: Spur gear Gear Ratio: 3.928:1

Drive Sprockets: At front of vehicle with 10 teeth

Pitch Diameter: 19.618 inches

**RUNNING GEAR**

Suspension: Flat track, torsion bar  
 10 individually sprung dual road wheels (5/track)

Tire Size: 24 x 2.1 inches

Dual adjustable idler at rear of each track

Idler Size: 21 x 2.1 inches

Shock absorbers on first 2 and last road wheels on each side

Tracks: Center guide, T130E1

Type: Single pin, 15 inch width, steel w/detachable rubber pad

Pitch: 6 inches

Shoes per Vehicle: 130 (65/track)

Ground Contact Length: 111 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC

Main Generator: (alternator) 28 volts, 200 amperes, driven by main engine

Auxiliary Generator: None

Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

**FIRE AND NBC PROTECTION**

(1) 5 pound carbon dioxide, fixed

(1) 5 pound carbon dioxide, portable

Gas particulate filter unit

**PERFORMANCE**

Maximum Speed: Level road 37 miles/hour

Maximum Grade: 60 per cent

Maximum Trench: 5.5 feet

Maximum Vertical Wall: 24 inches

Maximum Forging Depth: 40 inches

Minimum Turning Circle: (diameter) 28 feet

Cruising Range: Roads 255 miles

**SELF-PROPELLED FLAME THROWER CARRIER M132A1**  
(Based upon the APC M113A1)

**GENERAL DATA**

Crew: (driver, flame thrower operator) 2 men  
 Length: Overall 191.5 inches  
 Width: Over track shrouds 105.75 inches  
 Height: Over cupola periscope guard 95.75 inches  
 Tread: 85.0 inches  
 Ground Clearance: 16.1 inches  
 Weight, Combat Loaded: 23,895 pounds  
 Weight, Air Transport: 20,885 pounds  
 Power to Weight ratio: 17.7 hp/ton  
 Ground Pressure: Zero penetration 7.6 psi

**ARMOR**

Type: Hull, rolled 5083/5086 H32 aluminum armor, Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.50 inches (38mm)	45 degrees
Lower	1.50 inches (38mm)	30 degrees
Sides, Upper	1.75 inches (44mm)	0 degrees
Lower	1.25 inches (32mm)	0 degrees
Rear, On Ramp	1.50 inches (38mm)	8 degrees
Off Ramp	1.50 inches (38mm)	9 degrees
Top	1.50 inches (38mm)	90 degrees
Floor	1.125 inches (29mm)	90 degrees

**ARMAMENT**

Primary: M10-8 flame thrower in cupola mount  
 Traverse: 360 degrees  
 Elevation: +55 to -15 degrees  
 Duration of fire: 32 seconds

Secondary:

(1) 7.62mm M73 MG coaxial w/flame gun in cupola

**AMMUNITION**

200 gallons flame fuel  
 200 rounds 7.62mm

**FIRE CONTROL AND VISION EQUIPMENT**

Primary Weapon Sight: Periscope in cupola

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M17 (4)
Flame Operator	Hatch and (4) vision blocks	Periscope sight M28D

Total Periscopes: M17 (4), Periscope sight (1)

Total Vision Blocks: (4) in cupola

**ENGINE**

Make and Model: General Motors 6V53  
 Type: 6 cylinder, 2 cycle, vee  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 318 cubic inches  
 Bore and Stroke: 3.875 x 4.5 inches  
 Compression Ratio: 17.0:1  
 Gross Horsepower: (max) 212 hp at 2800 rpm  
 Gross Torque: (max) 492 ft-lbs at 1300 rpm  
 Weight: 1310 pounds, dry  
 Fuel: diesel oil MTL-VV-F-800 95 gallons  
 Engine Oil: 22 quarts

**POWER TRAIN**

Transfer Case: Overall Ratio 1.286:1 overdrive  
 Transmission: Allison TX-100  
 Torque Converter: Hydraulic, single stage, Multiphase w/lockup  
 Torque Converter Stall Ratio: 3.5:1  
 Transmission Ratios: 1st 3.81:1 3rd 1.00:1  
 2nd 1.936:1 reverse 4.35:1

Steering: DS200 controlled differential, steering brake levers  
 Input Ratio: 1.28:1 Steering Ratio: 1.1 to 1.786:1

Brakes: Differential band  
 Final Drive: Spur gear Gear Ratio: 3.928:1

Drive Sprockets: At front of vehicle with 10 teeth  
 Pitch Diameter: 9.618 inches

**RUNNING GEAR**

Suspension: Flat track, torsion bar  
 10 individually sprung dual road wheels (5/track)  
 Tire Size: 24x2.1 inches  
 Dual adjustable idler at rear of each track  
 Idler Size: 21 x 2.1 inches  
 Shock absorbers on first and last road wheels on each side  
 Tracks: Center guide, T130E1  
 Type: Single pin, 15 inch width, steel w/detachable rubberpad  
 Pitch: 6 inches  
 Shoes per Vehicle: 127 (63 left, 64 right)  
 Ground Contact Length: 105 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC  
 Main Generator: (1) 28 volts, 100 amperes, driven by main engine  
 Battery: (2) 12 volts in series

**COMMUNICATIONS**

Radio: AN/GRC-3 thru 8, AN/VRC-24, AN/GRC-19, AN/VRQ-1 thru 3  
 AN/PRC-8 thru 10, AN/GRR-5 or AN/VRC-12  
 Interphone: AN/UIC-1, 2 stations

**FIRE PROTECTION**

(1) 5 pound carbon dioxide, fixed  
 (1) 5 pound carbon dioxide, portable

**PERFORMANCE**

Maximum Speed: Level road	40 miles/hour
Water	3.6 miles/hour
Maximum Tractive Effort: TE at stall	19,800 pounds
Per Cent of Vehicle Weight: TE/W	83 per cent
Maximum Grade:	60 per cent
Maximum Trench:	5.5 feet
Maximum Vertical Wall:	24 inches
Maximum Fording Depth:	floats
Minimum Turning Circle: (diameter)	26 feet
Cruising Range: Roads	approx. 300 miles

**SMOKE GENERATOR CARRIER M1059**  
(Based upon the APC M113A2)

**GENERAL DATA**

Crew: (driver, commander, operator) 3 men  
 Length: Overall 191.5 inches  
 Width: Overtrack shrouds 105.75 inches  
 Height: Over smoke generators 100.75 inches  
 Tread: 85.0 inches  
 Ground Clearance: 17.1 inches  
 Weight, Combat Loaded: 24,400 pounds  
 Power to Weight Ratio: 17.4 hp/ton  
 Ground Pressure: Zero penetration 7.7 psi

**ARMOR**

Type: Hull, rolled 5083/5086 H32 aluminum armor,  
 Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.50 inches (38mm)	45 degrees
Lower	1.50 inches (38mm)	30 degrees
Sides, Upper	1.75 inches (44mm)	0 degrees
Lower	1.25 inches (32mm)	0 degrees
Rear, On Ramp	1.50 inches (38mm)	8 degrees
Off Ramp	1.50 inches (38mm)	9 degrees
Top	1.50 inches (38mm)	90 degrees
Floor	1.125 inches (29mm)	90 degrees

**ARMAMENT**

(1) .50 caliber MG HB M2 on commander's cupola

**AMMUNITION**

2000 rounds .50 caliber

**SMOKE EQUIPMENT**

Smoke generator system M157  
 (2) Smoke generators M54  
 (1) air compressor assembly  
 (1) control panel assembly  
 (1) fog oil pump tank assembly, 120 gallon  
 (2) 5 gallon fuel cans w/special plugs

**VISION EQUIPMENT**

Vision Devices:	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M19 (infrared) (1)
Commander	Hatch	Periscope M17 (5)
Smoke Operator	Hatch and vision block (1)	None

Total Periscopes: M17 (9), M19 (infrared) (1)

Total Vision Blocks: (1) in rear ramp

**ENGINE**

Make and Model: General Motors 6V53  
 Type: 6 cylinder, 2 cycle, vee  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 318 cubic inches  
 Bore and Stroke: 3.875 x 4.5 inches  
 Compression Ratio: 17.0:1  
 Gross Horsepower: (max) 212 hp at 2800 rpm  
 Gross Torque: (max) 492 ft-lbs at 1300 rpm  
 Weight: 1310 pounds, dry  
 Fuel: diesel oil MIL-VV-F-800 95 gallons  
 Engine Oil: 22 quarts

**POWER TRAIN**

Transfer Case: Overall ratio 1.286:1 overdrive  
 Transmission: Allison TX-100  
 Torque Converter: Hydraulic, single stage, multiphase w/lockup  
 Torque Converter Stall Ratio: 3.5:1  
 Transmission Ratios: 1st 3.81:1 3rd 1.00:1  
 2nd 1.936:1 reverse 4.35:1

Steering: DS200 controlled differential, steering brake levers  
 Input Ratio: 1.28:1 Steering Ratio: 1 1 to 1.786:1

Brakes: Differential band

Final Drive: Spur gear Gear Ratio: 3.928:1

Drive Sprockets: At front of vehicle with 10 teeth

Pitch Diameter: 19.618 inches

**RUNNING GEAR**

Suspension: Flat track, torsion bar  
 10 individually sprung dual road wheels (5/track)  
 Tire Size: 24 x 2.1 inches  
 Dual adjustable idler at rear of each track  
 Idler Size: 21 x 2.1 inches  
 Shock absorbers on first 2 and last road wheels on each side

Tracks: Center guide, T130E1 and T150

Type: T130E1, Single pin, 15 inch width, steel w/detachable rubber pad  
 T150, Double pin, 14.81 inch width, steel w/chevron rubber pad

Pitch: 6 inches

Shoes per Vehicle: 127 (63 left, 64 right)

Ground Contact Length: 105 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC

Main Generator: (1) 28 volts, 100 amperes, driven by main engine

Auxiliary Generator: None

Battery: (2) 12 volts in series

**COMMUNICATIONS**

Radio: AN/VRC-46, AN/GRC-160

Interphone: 2 stations

**FIRE AND NBC PROTECTION**

(3) 5 pound carbon dioxide, fixed

(1) 5 pound carbon dioxide, portable

Gas particulate filter unit

**PERFORMANCE**

Maximum Speed: Level road 40 miles/hour  
 Water 3.6 miles/hour

Maximum Tractive Effort: TE at stall 19,800 pounds  
 Per Cent of Vehicle Weight: TE/W 81 per cent

Maximum Grade: 60 per cent

Maximum Trench: 5.5 feet

Maximum Vertical Wall: 24 inches

Maximum Forging Depth: floats

Minimum Turning Circle: (diameter) 26 feet

Cruising Range: Roads approx. 300 miles

**ARMORED COMMAND AND RECONNAISSANCE CARRIERS M114 AND M114A1**

**GENERAL DATA**

Crew: (driver, commander, observer) 3 men  
 Jump seat provided for one passenger

Length: Overall 175.75 inches  
 Width: Over track shrouds 91.75 inches  
 Height: Over M2 MG, M114 94.1 inches  
                   M114A1 84.9 inches  
 Tread: 72.75 inches  
 Ground Clearance: 14.25 inches  
 Weight, Combat Loaded: M114 15,093 pounds  
                                   M114A1 15,276 pounds  
 Weight, Unstowed: M114 12,354 pounds  
                                   M114A1 12,537 pounds  
 Power to Weight Ratio: Net M114 15.2 hp/ton  
                                   M114A1 15.0 hp/ton  
                                   Gross M114 21.2 hp/ton  
                                   M114A1 20.9 hp/ton  
 Ground Pressure: Zero penetration, M114 5.0 psi  
                                   M114A1 5.1 psi

**ARMOR**

Type: Hull, rolled aluminum armor, Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.25 inches (32mm)	70 degrees
Lower	1.75 inches (44mm)	28 degrees
Sides, Upper	1.25 inches (32mm)	0 degrees
Lower	0.75 inches (19mm)	0 degrees
Rear	1.25 inches (32mm)	0 degrees
Top	1.5 inches (38mm)	90 degrees
Floor	1.00 inches (25mm)	90 degrees

**ARMAMENT**

- (1) .50 caliber MG HB M2 on commander's cupola, M114
- (1) .50 caliber MG HB M2 TT on commander's station, M114A1
- (1) 7.62mm MG M60 at observer's station
- (1) 7.62mm rifle M14, stowed
- (1) 40mm grenade launcher M79, stowed

**AMMUNITION**

- 1000 rounds .50 caliber 8 hand grenades
- 3000 rounds 7.62mm for M60 MG
- 150 rounds 7.62mm for M14 rifle
- 48 rounds 40mm for M79 grenade launcher
- 3 66mm M72 light antitank weapon (LAW)

**VISION EQUIPMENT**

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M26 (3) Periscope M19 (infrared)(1)
Commander	Hatch and 8 vision blocks	None
Observer	Hatch	Periscope M13 (1)

Total Periscopes: M13 (1), M19 (infrared) (1), M26 (3)  
 Total Vision Blocks: (8)

**ENGINE**

Make and Model: Chevrolet 283-V8 Military  
 Type: 8 cylinder, 4 cycle, vee  
 Cooling System: Liquid                   Ignition: Delco  
 Displacement: 283 cubic inches  
 Bore and Stroke: 3.875 x 3 inches  
 Compression Ratio: 8:1  
 Net Horsepower: (max) 115 hp at 3600 rpm  
 Gross Horsepower: (max) 160 hp at 4200 rpm  
 Net Torque: (max) 210 ft-lb at 2400 rpm  
 Gross Torque: (max) 240 ft-lb at 2800 rpm  
 Fuel: 80 octane gasoline 110 gallons  
 Engine Oil: 7 quarts

**POWER TRAIN**

Transmission: Hydramatic Model 305MC  
 Automatic, 4 speeds forward, 1 reverse

Gear Ratios:	1st 4.09:1	4th 1.00:1
	2nd 2.63:1	reverse 4.54:1
	3rd 1.55:1	

Steering: Allison GS 100-3, geared, clutch-brake, steer bar  
 Brakes: Multiple plate, oil cooled  
 Final Drive: Integral w/GS 100-3                   Gear Ratio: 4.17:1  
 Drive Sprockets: At front of vehicle with 11 teeth  
                   Pitch Diameter: 14.00 inches

**RUNNING GEAR**

Suspension: Flat track, torsion bar  
 8 individually sprung dual road wheels (4/track)  
 Tire Size: 22 x 2 inches  
 Dual adjustable idler at rear of each track  
 Idler Size: 13.25 x 1.75 inches  
 Shock absorbers on first and last road wheels on each side

Tracks: Double center guide  
 Type: Band type, 16.5 inch width  
 Pitch: Cross bar, 4 inches, 8 cross bars/32 inch section  
 Sections per Vehicle: 20 (10/track)  
 Ground Contact Length: 91 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC  
 Main Generator: (alternator) 24 volts, 100 amperes, driven by main engine  
 Auxiliary Generator: None  
 Battery: Early (2) 12 volts in series  
           Late (4) 12 volts, 2 sets of 2 in series connected in parallel

**COMMUNICATIONS**

Radio: AN/PRC 8, 9, 10 & 25; AN/VRC 12, 24, 43, 45, 46 & 47;  
           AN/VRC 8, 9, 13, 15, 16, 17, 18 & 35; AN/GRC 3, 4, 7, 8, & 15;  
           AN/VRQ 1 thru 3; AN/GRR 5  
 Interphone: AN/UIC 1 or AN/VIC 1, 3 stations

**FIRE PROTECTION**

- (1) 5 pound carbon dioxide, fixed
- (1) 5 pound carbon dioxide, portable

**PERFORMANCE**

Maximum Speed: Level road	36 miles/hour
Water	3.4 miles/hour
Maximum Tractive Effort: TE at stall	9500 pounds
Per Cent of Vehicle Weight: TE/W M114	63 per cent
M114A1	62 per cent
Maximum Grade:	60 per cent
Maximum Trench:	5 feet
Maximum Vertical Wall:	20 inches
Maximum Fording Depth:	floats
Minimum Turning Circle: (diameter)	16 feet
Cruising Range: Roads	approx. 275 miles

**FMC ARMORED COMMAND AND RECONNAISSANCE CARRIER  
(Dutch and Canadian Lynx configurations)**

<b>GENERAL DATA</b>			<b>ENGINE</b>	
Crew: ( driver, commander, observer)		3 men	Make and Model: General Motors 6V53	
Length: Overall		181 inches	Type: 6 cylinder, 2 cycle, vee	
Width: Overtrack shrouds		95 inches	Cooling System: Liquid	Ignition: Compression
Height: Over .50 caliber MG on M26 cupola		85.5 inches	Displacement:	318 cubic inches
Tread:		74.25 inches	Bore and Stroke:	3.875x4.5 inches
Ground Clearance:		16.1 inches	Compression Ratio:	17.0:1
Weight, Combat Loaded: Dutch		18,650 pounds	Gross Horsepower: (max)	212 hp at 2800 rpm
	Lynx	19,340 pounds	Gross Torque: (max)	492 ft-lbs at 1300 rpm
Weight, Air Drop: Dutch		16,300 pounds	Weight:	1310 pounds, dry
	Lynx	17,030 pounds	Fuel: diesel oil, Dutch	87 gallons
Power to Weight Ratio: Dutch		22.7 hp/ton		Lynx
	Lynx	21.9 hp/ton	Engine Oil:	22 quarts
Ground Pressure: Dutch		6.6 psi	<b>POWER TRAIN</b>	
	Lynx	6.9 psi	Transfer Case: Overall Ratio 1.286:1 overdrive	
<b>ARMOR</b>			Transmission: Allison TX-100	
Type: Hull, rolled 5086 aluminum armor			Torque Converter: Hydraulic, single stage, multiphase w/lockup	
			Torque Converter Stall Ratio: 3.5:1	
Welded assembly			Transmission Ratios:	1st 3.81:1 3rd 1.00:1
<b>Hull Thickness:</b>	<b>Actual</b>	<b>Angle w/Vertical</b>		2nd 1.936:1 reverse 4.35:1
Front, Upper	1.25 inches (32mm)	60 degrees	Steering: DS200 controlled differential, steering brake levers	
Lower	1.75 inches (44mm)	29 degrees	Input Ratio: 1.28:1	Steering Ratio: 1.1 to 1.786:1
Sides, Upper	1.25 inches (32mm)	0 degrees	Brakes: Differential band	
Lower	0.75 inches (19mm)	0 degrees	Final Drive: Spur gear	Gear Ratio: 3.928:1
Rear, Upper	1.25 inches (32mm)	0 degrees	Drive Sprockets: At front of vehicle with 10 teeth	
Lower	1.25 inches (32mm)	30 degrees	Pitch Diameter: 19.618 inches	
Top	1.25 inches (32mm)	90 degrees	<b>RUNNING GEAR</b>	
Floor	1.00 inches (25mm)	90 degrees	Suspension: Flat track, torsion bar	
<b>ARMAMENT</b>			8 individually sprung dual road wheels (4/track)	
(1) .50 caliber MG HB M2 TT on cupola M26			Tire Size: 24x2.1 inches	
(1) 7.62mm MG at observers station			Dual adjustable idler at rear of each track	
<b>AMMUNITION</b>			Idler Size: 21 x 2.1 inches	
1155 rounds .50 caliber		8 hand grenades	Shock absorbers on first and last road wheels on each side	
2000 rounds 7.62mm			Tracks: Center guide, T130E1	
3 66mm M72 light antitank weapon (LAW)			Type: Single pin, 15 inch width, steel w/detachable rubber pad	
<b>VISION EQUIPMENT</b>			Pitch: 6 inches	
Vision Devices	Direct	Indirect	Shoes per Vehicle: 119 (59 left, 60 right)	
Driver, Dutch	Hatch	Periscope M17 (4)	Ground Contact Length: 94 inches	
		Periscope M19 (infrared) (1)	<b>ELECTRICAL SYSTEM</b>	
Driver, Lynx	Hatch	Periscope M17 (5)	Nominal Voltage: 24 volts DC	
		Periscope M19 (infrared) (1)	Main Generator: (1) 28 volts, 100 amperes, driven by main engine	
Commander, Dutch	Hatch and	None	Auxiliary Generator: None	
	8 vision blocks		Battery: (2) 12 volts in series	
Commander, Lynx	Hatch and	None	<b>COMMUNICATIONS</b>	
	8 vision blocks		Radio: AN/VRC-46, AN/VRC-49, AN/GRC-125	
Observer, Dutch	Hatch	Periscope M17 (4)	Interphone: AN/UIC-1, 3 stations	
Observer, Lynx	Hatch	Periscope M17 (3)	<b>FIRE PROTECTION</b>	
		Periscope M17C (2)	(1) 5 pound carbon dioxide, fixed	
Total Periscopes: Dutch, M17 (8), M19 (infrared) (1)			(1) 5 pound carbon dioxide, portable	
	Lynx, M17 (8), M17C (2), M19 (infrared) (1)		<b>PERFORMANCE</b>	
Total Vision Blocks: 8 in cupola M26			Maximum Speed: Level road	40 miles/hour
			Water	4 miles/hour
			Maximum Grade:	60 per cent
			Maximum Trench:	5 feet
			Maximum Vertical Wall:	24 inches
			Maximum Fording Depth:	floats
			Minimum Turning Circle: (diameter)	24 feet
			Cruising Range: Roads	approx. 325 miles

**ARMORED CAVALRY ASSAULT VEHICLE (ACAV)**  
**(Based upon the APC M113A1)**

**GENERAL DATA**

Crew: 5 to 9 men  
 Length: Overall: 191.5 inches  
 Width: Over track shrouds 105.75 inches  
 Height: Over MG shields 99.43 inches  
 Tread: 85.0 inches  
 Ground Clearance: 16.1 inches  
 Weight, Combat Loaded: approx. 24,000 pounds  
 Weight, Unstowed: approx. 21,000 pounds  
 Power to Weight ratio: 17.7 hp/ton  
 Ground Pressure: Zero penetration 7.6 psi

**ARMOR**

Type: Hull, rolled 5083/5086 H32 aluminum armor,  
 Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.50 inches (38mm)	45 degrees
Lower	1.50 inches (38mm)	30 degrees
Sides, Upper	1.75 inches (44mm)	0 degrees
Lower	1.25 inches (32mm)	0 degrees
Rear, On Ramp	1.50 inches (38mm)	8 degrees
Off Ramp	1.50 inches (38mm)	9 degrees
Top	1.50 inches (38mm)	90 degrees
Floor	1.125 inches (29mm)	90 degrees

Steel armor shields provided for .50 caliber and 7.62mm MG.

Ballistic plate added to bottom front of hull.

**ARMAMENT**

- (1) .50 caliber MG HB M2 on commander's cupola
- (2) 7.62mm M60 MG on hull roof
- (1) 40mm M79 grenade launcher in troop compartment

**AMMUNITION**

- 2000 rounds .50 caliber
- 4000 rounds 7.62mm for M60 MG
- 48 rounds 40mm for M79 grenade launcher

**VISION EQUIPMENT**

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M19 (infrared) (1)
Commander	Hatch	Periscope M17 (5)
Troop Compartment	Roof Hatch	None

Total Periscopes: M17 (9), M19 (infrared) (1)

**ENGINE**

Make and Model: General Motors 6V53  
 Type: 6 cylinder, 2 cycle, vee  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 318 cubic inches  
 Bore and Stroke: 3.875x4.5 inches  
 Compression Ratio: 17.0:1  
 Gross Horsepower: (max) 212 hp at 2800 rpm  
 Gross Torque: (max) 492 ft-lbs at 1300 rpm  
 Weight: 1310 pounds, dry  
 Fuel: diesel oil MTN-VV-F-800 95 gallons  
 Engine Oil: 22 quarts

**POWER TRAIN**

Transfer Case: Overall ratio 1.286:1 overdrive  
 Transmission: Allison TX-100  
 Torque Converter: Hydraulic, single stage, multiphase w/lockup  
 Torque Converter Stall Ratio: 3.5:1  
 Transmission Ratios: 1st 3.81:1 3rd 1.00:1  
 2nd 1.936:1 reverse 4.35:1

Steering: DS200 controlled differential, steering brake levers  
 Input Ratio: 1.28:1 Steering Ratio: 1.1 to 1.786:1

Brakes: Differential band  
 Final Drive: Spur gear Gear Ratio: 3.928:1  
 Drive Sprockets: At front of vehicle with 10 teeth  
 Pitch Diameter: 19.618 inches

**RUNNING GEAR**

Suspension: Flat track, torsion bar  
 10 individually sprung dual road wheels (5/track)  
 Tire Size: 24 x 2.1 inches  
 Dual adjustable idler at rear of each track  
 Idler Size: 21 x 2.1 inches  
 Shock absorbers on first and last road wheels on each side  
 Tracks: Center guide T130E1  
 Type: Single pin, 15 inch width, steel w/detachable rubber pad  
 Pitch: 6 inches  
 Shoes per Vehicle: 127 (63 left, 64 right)  
 Ground Contact Length: 105 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC  
 Main Generator: (1) 28 volts, 100 amperes, driven by main engine  
 Auxiliary Generator: None  
 Battery: (2) 12 volts in series

**COMMUNICATIONS**

Radio: AN/GRC -3 thru 8, AN/VRC-24, AN/GRC-19, AN/VRQ-1 thru 3  
 AN/PRC-8 thru 10, AN/GRR-5 or AN/VRC-12  
 Interphone: AN/UIC-1, 2 stations

**FIRE PROTECTION**

- (1) 5 pound carbon dioxide, fixed
- (1) 5 pound carbon dioxide, portable

**PERFORMANCE**

Maximum Speed: Level road 40 miles/hour  
 Water 3.6 miles/hour  
 Maximum Tractive Effort: TE at stall 19,800 pounds  
 Per cent of Vehicle Weight: TE/W 82 per cent  
 Maximum Grade: 60 per cent  
 Maximum Trench: 5.5 feet  
 Maximum Vertical Wall: 24 inches  
 Maximum Fording Depth: floats  
 Minimum Turning Circle: (diameter) 26 feet  
 Cruising Range: Roads approx 300 miles



**FMC ARMORED INFANTRY FIGHTING VEHICLE**  
**(Dutch configuration, Squad Vehicle)**

**GENERAL DATA**

Crew: 10 men  
 Length: Overall 207 inches  
 Width: Overall 111 inches  
 Height: Over weapon station 110 inches  
 Tread: 85 inches  
 Ground Clearance: 17 inches  
 Weight, Combat Loaded: 30,175 pounds  
 Weight, Unstowed: 25,075 pounds  
 Power to Weight Ratio: 17.2 hp/ton  
 Ground Pressure: Zero penetration 9.6 psi

**ARMOR**

Type: Hull, rolled 5083/5086 H32 aluminum armor,  
 Welded assembly

Hull Thickness:	Actual	Angle w/Vertical
Front, Upper	1.50 inches (38mm)	45 degrees
Lower	1.50 inches (38mm)	30 degrees
Sides, Upper	1.75 inches (44mm)	0 degrees
Lower	1.25 inches (32mm)	0 degrees
Rear, On Ramp	1.50 inches (38mm)	8 degrees
Off Ramp	1.50 inches (38mm)	9 degrees
Top	1.50 inches (38mm)	90 degrees
Floor	1.125 inches (29mm)	90 degrees

Steel spaced laminate armor on hull front, sides, and rear and on the sides of the weapon station turret.

**ARMAMENT**

- (1) 25mm Oerlikon KBA cannon in turret weapon station
- (1) 7.62mm MAG MG in turret weapon station

**AMMUNITION**

- 315 rounds 25mm
- 1840 rounds 7.62mm

**VISION EQUIPMENT**

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M27 (4) Passive Periscope UA9630 (1)
Commander	Hatch	Periscope M17 (4) Periscope M20A1 (1)
Gunner	Hatch	Periscope M27 (4)
Troop Compartment	Roof Hatch Firing Ports (5)	Periscope M17 (4) Periscope M27 (1)

Total Periscopes: M17 (8), M20A1 (1), M27 (9), Passive UA9630 (1)

**ENGINE**

Make and Model: General Motors 6V53T  
 Type: 6 cylinder, 2 cycle, vee, turbosupercharged  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 318 cubic inches  
 Bore and Stroke: 3.875 x 4.5 inches  
 Compression Ratio: 1 7.0:1  
 Gross Horsepower: (max) 260 hp at 2800 rpm  
 Gross Torque: (max) 570 ft-lbs at 1300 rpm  
 Weight: 1495 pounds, dry  
 Fuel: diesel oil MTL-VV-F-800 110 gallons  
 Engine Oil: 22 quarts

**POWER TRAIN**

Transfer Case: Overall ratio 1.286:1 overdrive  
 Transmission: Allison TX-100A  
 Torque Converter: Hydraulic, single stage, multiphase w/lockup  
 Torque Converter Stall Ratio: 3.5:1  
 Transmission Ratios: 1st 3.81:1 3rd 1.00:1  
 2nd 1.936:1 reverse 4.35:1  
 Steering: DS200 controlled differential, steering brake levers  
 Input Ratio: 1.28:1 Steering Ratio: 1.1 to 1.786:1  
 Brakes: Differential band  
 Final Drive: Spur gear Gear Ratio: 4.31:1  
 Drive Sprockets: At front of vehicle with 10 teeth  
 Pitch Diameter: 19.618 inches

**RUNNING GEAR**

Suspension: Flat track, torsion tube over bar  
 10 individually sprung dual road wheels (5/track)  
 Tire Size: 24 x 2.1 inches  
 Dual adjustable idler at rear of each track  
 Idler Size: 21 x 2.1 inches  
 Shock absorbers on first and last road wheels on each side  
 Tracks: Center guide T1 30E1  
 Type: Single pin, 15 inch width, steel w/detachable rubber pad  
 Pitch: 6 inches  
 Shoes per Vehicle: 127 (63 left, 64 right)  
 Ground Contact Length: 105 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC  
 Main Generator: (1) (alternator) 28 volts, 180 amperes driven by main engine

Auxiliary Generator: None

Battery: (2) 12 volts in series

**COMMUNICATIONS**

Radio: AN/VRC-47, AN/VRC-64  
 Interphone: AN/VIC-1, 5 stations plus external phone

**FIRE PROTECTION**

- (1) 5 pound carbon dioxide, fixed
- (1) 5 pound carbon dioxide, portable

**PERFORMANCE**

Maximum Speed: Level road	40 miles/hour
Water	3.9 miles/hour
Maximum Grade:	60 per cent
Maximum Trench:	5.5 feet
Maximum Vertical Wall:	25 inches
Maximum Fording Depth:	floats
Minimum Turning Circle: (diameter)	28 feet
Cruising Range: Roads	approx. 300 miles

## MECHANIZED INFANTRY COMBAT VEHICLE XM701

### GENERAL DATA

Crew:	12 men
Length: Overall	245 inches
Width: Overall	124 inches
Height: Overall	113 inches
Tread:	106 inches
Ground Clearance:	18 inches
Weight, Combat Loaded: Steel	54,050 pounds
Aluminum	50,750 pounds
Weight, Unstowed: Steel	49,670 pounds
Aluminum	46,370 pounds
Power to Weight Ratio: Net hp, Steel	12.8 hp/ton
Aluminum	13.6 hp/ton
Power to Weight ratio: Gross hp, Steel	15.7 hp/ton
Aluminum	16.8 hp/ton
Ground Pressure: Zero penetration, Steel	11.1 psi
Aluminum	10.4 psi

### ARMOR

Type: (all five pilots) Turret rolled homogeneous steel armor, Welded assembly

Turret Thickness	Actual	Angle w/Vertical
Front	0.75 inches (19mm)	60 degrees
Sides	1.625 inches (41mm)	0 to 23 degrees
Rear	1.437 inches (36mm)	30 degrees
Top	0.687 inches (17mm)	90 degrees

Type: (pilots 1,2,3) Hull rolled homogeneous steel armor, Welded assembly

Hull Thickness	Actual	Angle w/Vertical
Front, Upper	0.687 inches (17mm)	60 degrees
Middle	0.625 inches (16mm)	50 degrees
Lower	0.625 inches (16mm)	70 degrees
Sides, Upper	0.687 inches (17mm)	50 degrees
Above Sponson	1.50 inches (38mm)	0 degrees
Below Sponson	1.25 inches (32mm)	0 degrees
Sponson Bottom	0.375 inches (10mm)	90 degrees
Rear	1.25 inches (32mm)	15 degrees
Top	0.625 inches (16mm)	90 degrees
Floor, Front	0.625 inches (16mm)	90 degrees
Rear	0.375 inches (10mm)	90 degrees

Type: (pilots 4,5) Hull rolled aluminum armor, Welded assembly

Hull Thickness	Actual	Angle w/Vertical
Front, Upper	1.565 inches (40mm)	60 degrees
Middle	1.75 inches (44mm)	50 degrees
Lower	1.75 inches (44mm)	70 degrees
Sides, Upper	1.687 inches (43mm)	50 degrees
Above Sponson	3.5 inches (89mm)	0 degrees
Below Sponson	2.875 inches (73mm)	0 degrees
Sponson Bottom	1.062 inches (27mm)	90 degrees
Rear	2.875 inches (73mm)	15 degrees
Top	1.656 inches (42mm)	90 degrees
Floor, Front	1.75 inches (44mm)	90 degrees
Rear	1.062 inches (27mm)	90 degrees

### ARMAMENT

- (1) 20mm Hispano Suiza 820 cannon in turret weapon station
- (1) 7.62mm M73 MG coaxial w/20mm cannon
- (2) 7.62mm M60 MG in hull ball mounts
- (10) 7.62mm M14 rifled, stowed, five firing ports
- (2) 40mm M79 grenade launchers, stowed
- (8) fixed smoke grenade launchers

### AMMUNITION

1250 rounds 20mm	16 smoke grenades
1500 rounds 7.62mm for M73 MG	16 hand grenades
3000 rounds 7.62mm for M60 MG	
1200 rounds 7.62mm for M14 rifles	
96 rounds 40mm for M79 launcher	

### VISION EQUIPMENT

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M27 (1) Periscope M24 (infrared) (1)
Commander	Hatch and 8 vision blocks	None
Gunner	Hatch	Periscope M34C
Troop Compartment	Roof hatch and 6 vision blocks	Periscope M27 (1)

Total Periscopes: M17 (4), M24 (infrared) (1), M27 (2), M34C (1)  
Total Vision Blocks: (14)

### ENGINE

Make and Model: General Motors 8V71T  
Type: 8 cylinder, 2 cycle, vee, turbosupercharged

Cooling System: Liquid	Ignition: Compression
Displacement:	567.5 cubic inches
Bore and Stroke:	4.25 x 5 inches
Compression Ratio:	17:1
Net Horsepower: (max)	345 hp at 2300 rpm
Gross Horsepower: (max)	425 hp at 2300 rpm
Net Torque: (max)	895 ft-lbs at 1700 rpm
Gross Torque: (max)	980 ft-lbs at 1700 rpm
Weight:	2422 pounds, dry
Fuel: diesel oil MIL-VV-F-800	275 gallons
Engine Oil:	37 quarts

### POWER TRAIN

Transmission: Allison XTG-411-2A

Torque Converter: Hydraulic, single stage, multiphase w/lockup		
Torque Converter Stall Ratio: 3.5:1		
Transmission Ratios:	1st 4.69:1	4th 0.794:1
	2nd 3.18:	reverse 1 5.6:1
	3rd 1.59:1	reverse 2 3.79:1

Steering: 1st, 2nd and 1st reverse, clutch-brake steering  
3rd, 4th and 2nd reverse, geared steering

Brakes: Multiple plate, oil cooled

Final Drive: Planetary gear Gear Ratio: 5.35:1

Drive Sprockets: At front of vehicle with 11 teeth  
Pitch Diameter: 21 inches

### RUNNING GEAR

Suspension: Flat track, torsion bar  
10 individually sprung dual road wheels (5/track)  
Tire Size: 32 x 4 inches  
The rear road wheel serves as an adjustable idler

Tracks: Center guide  
Type: Double pin, 15 inch width, steel w/detachable rubber pad  
Pitch: 6 inches  
Ground Contact Length: 163 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC

Main Generator: (1) (alternator) 28 volts, 100 amperes, driven by main engine

Auxiliary Generator: (1) 28 volts, 100 amperes, driven by auxiliary engine

Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

### COMMUNICATIONS

Radio: AN/VRC-47

Interphone: 3 stations plus external phone and loudspeaker

### FIRE AND NBC PROTECTION

- (1) 5 pound carbon dioxide, fixed
- (1) 5 pound carbon dioxide, portable
- E51 collective protector

### PERFORMANCE

Maximum Speed: Level road	40 miles/hour
Water	3.8 miles/hour
Maximum Grade:	60 per cent
Maximum Trench:	8 feet
Maximum Vertical Wall:	36 inches
Maximum Forging Depth:	floats
Minimum Turning Circle: (diameter)	pivot
Cruising Range: Roads	approx. 350 miles

## MECHANIZED INFANTRY COMBAT VEHICLE XM723

### GENERAL DATA

Crew:	(12 optional)	11 men
Length: Overall		245 inches
Width: Overall		126 inches
Height: Overall		109 inches
Tread:		96 inches
Ground Clearance:		19 inches
Weight, Combat Loaded:		43,000 pounds
Weight, Unstowed:		39,000 pounds
Weight, Air Transport:		35,000 pounds
Power to Weight ratio: Gross hp		20.9 hp/ton
Ground Pressure: Zero penetration		6.8 psi

### ARMOR

The turret is protected by a combination of steel, 5083 aluminum, and 7039 aluminum armor.

The hull is assembled with spaced laminate armor on the vertical sides and rear. The side slopes are 7039 aluminum armor. The top, bottom and front are 5083 aluminum armor. Steel applique armor is installed on the bottom front for mine protection.

### ARMAMENT

Primary: 20mm automatic gun M139 or XM236 in turret mount  
 Traverse: Electrohydraulic and manual 360 degrees  
 Traverse Rate: (max) 6 seconds/360 degrees  
 Elevation: Electrohydraulic and manual +60 to -10 degrees  
 Elevation Rate: (max) 60 degrees/second  
 Firing Rate: 850 to 1050 rounds/minute  
 Stabilizer System azimuth and elevation

### Secondary:

- (1) 7.62mm M219 or XM238 MG coaxial w/20mm gun in turret
- (6) .45 caliber SMG M3A1 ball mounted in firing ports

### AMMUNITION

- 600 rounds 20mm
- 3400 rounds 7.62mm
- 4000 rounds .45 caliber

### FIRE CONTROL AND VISION EQUIPMENT

Primary Weapon Sights: Periscope M36E2 (day/night)  
 External ring sight

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope (4)
Commander	Hatch	Periscope (5)
Gunner	Hatch	Periscope (7)
Troop Compartment	Roof Hatch	Periscope (6)

Total Periscopes: (22)

### ENGINE

Make and Model: Cummins VTA-903T  
 Type: 8 cylinder, 4 cycle, vee, turbosupercharged  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 903 cubic inches  
 Bore and Stroke: 5.5 x 4.75 inches  
 Compression Ratio: 15.5:1  
 Gross Horsepower: (max) 500 hp at 2600 rpm  
 Gross torque: (max) 1025 ft-lbs at 2350 rpm  
 Weight: 2450 pounds, dry  
 Fuel: diesel oil MIL-VV-F-800 197 gallons  
 Engine Oil: 22 quarts

### POWER TRAIN

Transmission: General Electric HMPT-500  
 Hydromechanical, automatic range selection  
 Steering: Hydrostatic, steering yoke  
 Brakes: Multiple plate, oil cooled  
 Final Drive: Spur gear Gear Ratio: 4.959:1  
 Drive Sprockets: At front of vehicle with 11 teeth  
 Pitch Diameter: 21 inches

### RUNNING GEAR

Suspension: Torsion tube over bar  
 12 individually sprung dual road wheels (6/track)  
 Tire Size: 24 x 4 inches  
 2 single and 1 dual track return rollers per track  
 Dual adjustable idler at rear of each track  
 Idler Size: Outer, 20.0 x 3.7 inches  
 Inner, 19.9 x 5.7 inches  
 Shock absorbers on first 2 and last road wheels on each side  
 Tracks: Center guide  
 Type: Single pin, 21 inch width, steel w/detachable rubber pads  
 Pitch: 6 inches  
 Shoes per Vehicle: 166 (83/track)  
 Ground Contact Length: 150 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24volts DC  
 Main Generator: 28 volts, 220 amperes, driven by main engine  
 Auxiliary Generator: None  
 Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel  
 COMMUNICATIONS  
 Radio: AN/VRC-47, AN/VRC-64  
 Interphone: AN/VIC-1, 5 stations

### FIRE PROTECTION

- (1) 7 pound Halon, fixed in engine compartment
- (1) 5 pound Halon, fixed in crew compartment
- (1) 5 pound carbon dioxide, portable

### PERFORMANCE

Maximum Speed: Level road	45 miles/hour
Water	5 miles/hour
Maximum Grade:	60 per cent
Maximum Trench:	8.3 feet
Maximum Vertical Wall:	36 inches
Maximum Fording Depth:	floats
Minimum Turning Circle: (diameter)	pivots
Cruising Range: Roads	approx. 300 miles

## INFANTRY FIGHTING VEHICLES M2 AND M2A1

### GENERAL DATA

Crew: M2	9 men
M2A1	10 men
Length: Overall	254 inches
Width: overall	126 inches
Height: Over commander's hatch	117 inches
Tread:	96 inches
Ground Clearance:	18 inches
Weight, Combat Loaded: M2	50,259 pounds
M2A1	50,261 pounds
Weight, Unstowed: M2	42,289 pounds
M2A1	43,500 pounds
Weight, Air Transport:	40,775 pounds
Power to Weight Ratio: Gross hp , M2	19.9 hp/ton
M2A1	19.9 hp/ton
Ground Pressure: Zero penetration, M2	7.8 psi
M2A1	7.8 psi

### ARMOR

The turret is armored by a combination of steel, 5083 aluminum, and 7039 aluminum armor.

The hull is assembled with spaced laminate armor on the vertical sides and rear. This consists of two 0.25 inch thick steel plates one inch apart spaced 31/2 inches from the 1 inch thick aluminum armor. The side slopes are 7039 aluminum armor. The top, bottom and front are 5083 aluminum armor. Steel applique armor 0.375 inches thick is installed on the front third of the bottom for mine protection.

### ARMAMENT

Primary: 25mm automatic gun M242 in turret mount

Traverse: Electric and manual	360 degrees
Traverse Rate: (max)	6 seconds/360 degrees
Elevation: M2, Electric and manual	+59 to -9 degrees
M2A1, Electric and manual	+57 to -9 degrees
Elevation Rate: (max)	60 degrees/second
Firing Rate:	Single shot, 100, 200 rounds/minute
Stabilizer System:	Electric, azimuth and elevation

Primary: TOW missile system dual launcher on turret

Traverse: w/turret	360 degrees
Elevation:	+29 to -19 degrees
Elevation Rate: (max)	15 degrees/second

Secondary:

- (1) 7.62mm M240C MG coaxial w/25mm gun in turret
- (6) 5.56 M231 firing port weapons
- (1) 7.62mm M60 MG stowed
- (9) 5.56mm M16A1 rifles, M2 only
- (10) 5.56mm M16A1 rifles, M2A1 only

### AMMUNITION

- 900 rounds 25mm
- 2200 rounds 7.62mm (M240C)
- 2200 rounds 7.62mm (M60)
- 4200 rounds 5.56mm (M231)
- 2520 rounds 5.56mm (M16A1), M2 only
- 2800 rounds 5.56mm (M16A1), M2A1 only
- 3 66mm M72A2 light antitank weapons (LAW)
- 5 TOW or Dragon missiles, M2 only + 2 TOW in launcher
- 5 TOW 2 or Dragon missiles, M2A1 only + 2 TOW 2 in launcher

### FIRE CONTROL AND VISION EQUIPMENT

Primary Weapon Sights: Integrated sight unit (day/night)  
5x auxiliary sight, late vehicles  
External ring sight

Vision Devices	Direct	Indirect
Driver	Hatch	Periscopes (4)
Commander	Hatch	Periscope M17 (7) early Periscope M17 (6) late Periscope M27 (1)
Gunner	Hatch	Periscope (2)
Troop compartment	Roof Hatch	Periscope (7)

Total Periscopes: (21)

### ENGINE

Make and Model: Cummins VTA-903T	
Type: 8 cylinder, 4 cycle, vee, turbosupercharged	
Cooling System: Liquid	Ignition: Compression
Displacement:	903 cubic inches
Bore and Stroke:	5.5 x 4.75 inches
Compression Ratio:	15.5:1
Gross Horsepower: (max)	500 hp at 2600 rpm
Gross Torque: (max)	1025 ft-lbs at 2350 rpm
Weight:	2450 pounds, dry
Fuel: diesel oil MIL-VV-F-800	197 gallons
Engine Oil:	22 quarts

### POWER TRAIN

Transmission: General Electric HMPT-500	
Hydromechanical, automatic range selection	
Steering: Hydrostatic, steering yoke	
Brakes: Multiple plate, oil cooled	
Final Drive: Spur gear	Gear Ratio: M2, 4.959:1 M2A1, 5.561:1

Drive Sprockets: at front of Vehicle with 11 teeth

Pitch Diameter: 21 inches

### RUNNING GEAR

Suspension Torsion bar

12 individually sprung dual road wheels (6/track)

Tire Size: 24 x 4 inches

2 single and 1 dual track return rollers per track

Dual adjustable idler at rear of each track

Idler Size: Outer, 20.0 x 3.7 inches

Inner, 19.9 x 5.7 inches

Shock absorbers on first 3 and last road wheels on each side

Tracks: Center guide

Type: Single pin, 21 inch width, steel w/detachable rubber pad

Pitch: 6 inches

Shoes per Vehicle: 166 (84 left, 82 right)

Ground Contact Length: 154 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC

Main Generator: 28 volts, 220 amperes, driven by main engine

Auxiliary Generator: None

Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

### COMMUNICATIONS

Radio: AN/VRC-46, AN/GRC-160, M2 and M2A1

Interphone:

### FIRE PROTECTION AND NBC PROTECTION

(1) 7 pound Halon, fixed in engine compartment

(2) 5 pound Halon, fixed in crew compartment

(2) 2.75 pound Halon, portable

Gas particulate filter unit, M2A1 only

### PERFORMANCE

Maximum Speed: Level road	41 miles/hour
Water	4.5 miles/hour
Maximum Grade:	60 per cent
Maximum Trench:	8.3 feet
Maximum Vertical Wall:	36 inches
Maximum Fording Depth:	floats
Minimum Turning Circle: (diameter)	pivot
Cruising Range: Roads	approx. 300 miles

## CAVALRY FIGHTING VEHICLES M3 AND M3A1

### GENERAL DATA

Crew:		5 men
Length: Overall:		254 inches
Width: Overall		126 inches
Height: Over commander's hatch		117 inches
Tread:		96 inches
Ground Clearance:		18 inches
Weight Combat Loaded: M3		49,945 pounds
	M3A1	50,510 pounds
Weight, Unstowed: M3		41,975 pounds
	M3A1	43,600 pounds
Weight, Air Transport:		40,775 pounds
Power to Weight Ratio: Gross hp, M3		20.0 hp/ton
	M3A1	19.8 hp/ton
Ground Pressure: Zero penetration, M3		7.7 psi
	M3A1	7.8 psi

### ARMOR

The turret is armored by a combination of steel, 5083 aluminum, and 7039 aluminum armor.

The hull is assembled with spaced laminate armor on the vertical sides and rear. This consists of two 0.25 inch thick steel plates one inch apart spaced 3 1/2 inches from the 1 inch thick aluminum armor. The side slopes are 7039 aluminum armor. The top, bottom and front are 5083 aluminum armor. Steel applique armor 0.375 inches thick is installed on the front third of the bottom for mine protection.

### ARMAMENT

Primary: 25mm automatic gun M242 in turret mount

Traverse. Electric and manual	360 degrees
Traverse Rate: (max)	6 seconds/360 degrees
Elevation: M3, Electric and manual	+59 to -9 degrees
	M3A1, Electric and manual +57 to -9 degrees
Elevation Rate: (max)	60 degrees/second
Firing Rate:	Single shot, 100, 200 rounds/minute
Stabilizer System	Electric, azimuth and elevation

Primary: TOW missile system dual launcher on turret

Traverse: w/turret	360 degrees
Elevation:	+29 to -19 degrees
Elevation Rate: (max)	15 degrees/second

Secondary:

- (1) 7.62mm M240C MG coaxial w/25mm gun in turret
- (1) 7.62mm M60 MG stowed
- (5) 5.56mm M16A1 rifles stowed

### AMMUNITION

- 1500 rounds 25mm
- 4400 rounds 7.62mm (M240C)
- 3200 rounds 7.62mm (M60)
- 1680 rounds 5.56mm (M16A1)
- 3 66mm M72A2 light antitank weapons (LAW)
- 12 TOW missiles, M3
- 12 TOW 2 missiles M3A1

### FIRE CONTROL AND VISION EQUIPMENT

Primary Weapon sights: Integrated sight unit (day/night)  
5x auxiliary sight, late vehicles  
External ring sight

Vision Devices	Direct	Indirect
Driver	Hatch	Periscope (4)
Commander	Hatch	Periscope M17 (7) early (6) late Periscope M27 (1)
Gunner	Hatch	Periscope (2)
Troop Compartment	Roof Hatch	Periscope (7) M3 Periscope (6) M3A1

Total Periscopes: (21) M3, (20) M3A1

### ENGINE

Make and Model: Cummins VTA-903T

Type: 8 cylinder, 4 cycle, vee, turbosupercharged

Cooling System: Liquid	Ignition: Compression
Displacement:	903 cubic inches
Bore and Stroke:	5.5 x 4.75 inches
Compression Ratio:	15.5:1
Gross Horsepower: (max)	500 hp at 2600 rpm
Gross Torque: (max)	1025 ft-lbs at 2350 rpm
Weight:	2450 pounds, dry
Fuel: diesel oil MIL-VV-F-800	197 gallons
Engine Oil:	22 quarts

### POWER TRAIN

Transmission: General Electric HMPT-500

Hydromechanical, automatic range selection

Steering: Hydrostatic, steering yoke

Brakes: Multiple plate, oil cooled

Final Drive: Spur gear      Gear Ratio: M3, 4.959:1  
M3A1, 5.561:1

Drive Sprockets: At front of vehicle with 11 teeth

Pitch Diameter: 21 inches

### RUNNING GEAR

Suspension: Torsion bar

12 individually sprung dual road wheels (6/track)

Tire Size: 24 x 4 inches

2 single and 1 dual track return rollers per track

Dual adjustable idler at rear of each track

Idler Size: Outer, 20.0 x 3.7 inches

Inner, 19.0 x 5.7 inches

Shock absorbers on first 3 and last road wheels on each side

Tracks: Center guide

Type, Single pin, 21 inch width, steel w/detachable rubber pad

Pitch: 6 inches

Shoes per Vehicle: 166 (84 left, 82 right)

Ground Contact Length: 154 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC

Main Generator: 28 volts, 220 amperes, driven by main engine

Auxiliary Generator: None

Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

### COMMUNICATIONS

Radio: AN/VRC-12, AN/PRC-77

Interphone:

### FIRE AND NBC PROTECTION

(1) 7 pound Halon, fixed in engine compartment

(2) 5 pound Halon, fixed in crew compartment

(2) 2.75 pound Halon, portable

Gas particulate filter unit, M3A1 only

### PERFORMANCE

Maximum Speed: Level road      41 miles/hour  
Water      4.5 miles/hour

Maximum Grade: 60 per cent

Maximum Trench: 8.3 feet

Maximum Vertical Wall: 36 inches

Maximum Forging Depth: floats

Minimum Turning Circle: (diameter) pivot

Cruising Range: Roads      approx. 300 miles

## INFANTRY FIGHTING VEHICLES M2A2 AND M2A2 RESTOW

### GENERAL DATA

Crew: M2A2	9 men
M2A2 Restow	10 men
Length: Overall	258 inches
Width: w/armor tile kit	142 inches
w/o armor tile kit	129 inches
Height: Over commander's hatch	117 inches
Tread:	96 inches
Ground Clearance:	18 inches
Weight, Combat Loaded: w/armor tile kit	approx. 66,000 pounds
w/o armor tile kit	approx. 60,000 pounds
Weight, Air Transport:	approx. 44,000 pounds
Power to Weight Ratio: w/armor tile kit	18.2 hp/ton
w/o armor tile kit	20.0 hp/ton
Ground Pressure: Zero penetration, w/armor tile kit	10.2 psi
w/o armor tile kit	9.3 psi

### ARMOR

Turret: 5083 aluminum armor structure with steel applique armor. Provision for the installation of armor tiles on the front and right side.  
Hull: 5083 and 7039 aluminum armor structure with steel applique armor on the front, sides and bottom. Spaced laminate steel armor on rear and lower side skirts. Provision for the installation of armor tiles on the upper front and vertical sides.

### ARMAMENT

Primary: 25mm automatic gun M242 in turret mount  
    Traverse: Electric and manual 360 degrees  
    Traverse Rate: (max) 6 seconds/360 degrees  
    Elevation: Electric and manual +57 to -9 degrees  
    Elevation Rate: (max) 60 degrees/second  
    Firing Rate: Single shot, 100, 200 rounds/minute  
    Stabilizer System: Electric, azimuth and elevation  
Primary: TOW missile system dual launcher on turret  
    Traverse: w/turret 360 degrees  
    Elevation: +29 to -19 degrees  
    Elevation Rate: (max) 15 degrees/second  
Secondary:  
    (1) 7.62mm M240C MG coaxial w/25mm gun in turret  
    (2) 5.56mm M231 firing port weapons  
    (1) 7.62mm M60 MG stowed  
    (9) 5.56mm M16A1 rifles stowed, M2A2 only  
    (10) 5.56mm M16A1 rifles stowed, M2A2 restow only

### AMMUNITION

900 rounds 25mm  
2200 rounds 7.62mm (M240C)  
2200 rounds 7.62mm (M60)  
2520 rounds 5.56mm (M231)  
2520 rounds 5.56mm (M16A1), M2A2  
2800 rounds 5.56mm (M16A1), M2A2 restow  
3 66mm M72A2 light antitank weapons (LAW)  
3 AT4 missiles, M2A2 restow only  
6 Stinger missiles, M2A2 w/MAN/PADS only  
5 TOW 2 or Dragon missiles + 2 TOW 2 in launcher  
    or  
5 TOW 2 or 3 TOW 2 and 2 Javelin missiles, M2A2 restow only  
+ 2 TOW 2 in launcher

### FIRE CONTROL AND VISION EQUIPMENT

Primary Weapon Sights: Integrated sight unit (day/night)  
5x auxiliary sight  
External ring sight  
Vision Devices: Direct Indirect  
Driver: Hatch Periscope (4)  
Commander: Hatch Periscope M17 (6)  
Periscope M27 (1)  
Gunner: Hatch Periscope (2)  
Troop Compartment: Roof Hatch Periscope (6)  
Total Periscopes (19)

### ENGINE

Make and Model: Cummins VTA-903T  
Type: 8 cylinder, 4 cycle, vee, turbosupercharged  
Cooling System: Liquid Ignition: Compression  
Displacement: 903 cubic inches  
Bore and Stroke: 5.5 x 4.75 inches  
Compression Ratio: 14.5:1  
Gross Horsepower: (max) 600 hp at 2600 rpm  
Gross torque: (max) 1225 ft-lbs at 2300 rpm  
Weight: 2650 pounds, dry  
Fuel: diesel oil MIL-VV-F-800 175 gallons  
Engine Oil: 26 quarts

### POWER TRAIN

Transmission: General Electric HMPT-500-3 or HMPT-500-3EC  
Hydromechanical, automatic range selection  
Steering: Hydrostatic, steering yoke  
Brakes: Multiple plate, oil cooled  
Final Drive: Spur gear Gear Ratio: 5.561:1  
Drive Sprockets: At front of vehicle with 11 teeth  
Pitch Diameter: 21 inches

### RUNNING GEAR

Suspension: Torsion bar  
12 individually sprung dual road wheels (6/track)  
Tire Size: 24 x 4 inches  
2 single and 1 dual track return rollers per track  
Dual adjustable idler at rear of each track  
Idler Size: Outer, 20.0 x 3.7 inches  
Inner, 19.9 x 5.7 inches  
Shock absorbers on first 3 and last road wheels on each side  
Tracks: Center guide  
Type: Single pin, 21 inch width, steel w/detachable rubber pad  
Pitch: 6 inches  
Shoes per Vehicle: 166 (84 left, 82 right)  
Ground Contact Length: 154 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC  
Main Generator: 28 volts, 300 amperes, driven by main engine  
Auxiliary Generator: None  
Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

### COMMUNICATIONS

Radio: AN/VRC-46, AN/GRC-160  
Interphone:

### FIRE AND NBC PROTECTION

(1) 7 pound Halon, fixed in engine compartment  
(2) 5 pound Halon, fixed in crew compartment  
(2) 2.75 pounds Halon, portable  
Gas particulate filter unit

### PERFORMANCE

Maximum Speed: Level road 35 miles/hour  
Water 4.0 miles/hour  
Maximum Grade: 60 per cent  
Maximum Trench: 7 feet  
Maximum Vertical Wall: 30 inches  
Maximum Fording Depth: floats  
Minimum Turning Circle: (diameter) pivot  
Cruising Range: Roads approx. 250 miles

## CAVALRY FIGHTING VEHICLES M3A2 AND M3A2 RESTOW

### GENERAL DATA

Crew:	5 men
Length: Overall	258 inches
Width: w/armor tile kit	142 inches
w/o armor tile kit	129 inches
Height: Over commander's hatch	117 inches
Tread:	96 inches
Ground Clearance:	18 inches
Weight, Combat Loaded: w/armor tile kit	approx. 66,000 pounds
w/o armor tile kit	approx. 60,000 pounds
Weight, Air Transport:	approx. 44,000 pounds
Power to Weight Ratio: w/armor tile kit	18.2 hp/ton
w/o armor tile kit	20.0 hp/ton
Ground Pressure: Zero penetration, w/armor tile kit	10.2 psi
w/o armor tile kit	9.3 psi

### ARMOR

Turret: 5083 aluminum armor structure with steel applique armor. Provision for the installation of armor tiles on the front and right side.  
Hull: 5083 and 7039 aluminum armor structure with steel applique armor on the front, sides and bottom. Spaced laminate steel armor on rear and lower side skirts. Provision for the installation of armor tiles on the upper front and vertical sides.

### ARMAMENT

Primary: 25mm automatic gun M242 in turret mount

Traverse: Electric and manual	360 degrees
Traverse Rate: (max)	6 seconds/360 degrees
Elevation: Electric and manual	+57 to -9 degrees
Elevation Rate: (max)	60 degrees/second
Firing Rate:	Single shot, 100, 200 rounds/minute
Stabilizer System:	Electric, azimuth and elevation

Primary: TOW missile system dual launcher on turret

Traverse: w/turret	360 degrees
Elevation:	+29 to -19 degrees
Elevation Rate: (max)	15 degrees/second

### Secondary:

- (1) 7.62mm M240C MG coaxial w/25mm gun in turret
- (1) 7.62mm MG M60 MG stowed
- (5) 5.56 mm M16A1 rifles stowed

### AMMUNITION

- 1500 rounds 25mm
- 4200 rounds 7.62mm (M240C)
- 3400 rounds 7.62mm (M60)
- 1680 rounds 5.56mm (M16A1)
- 3 66mm M72A2 light antitank weapons (LAW)
- 3 AT4 missiles, M3A2 restow only
- 12 TOW missiles

### FIRE CONTROL AND VISION EQUIPMENT

Primary Weapon Sights:	Integrated sight unit (day/night)
	5x auxiliary sight
	External ring sight
Vision Devices	Direct                      Indirect
Driver	Hatch                      Periscope (4)
Commander	Hatch                      Periscope M17 (6)
	Periscope M27 (1)
Gunner	Hatch                      Periscope (2)
Troop Compartment	Roof Hatch              Periscope (5)

Total Periscopes: (18)

### ENGINE

Make and Model: Cummins VTA-903T	
Type: 8 cylinder, 4 cycle, vee, turbosupercharged	
Cooling System: Liquid	Ignition: Compression
Displacement:	903 cubic inches
Bore and Stroke:	5.5 x 4.75 inches
Compression Ratio:	14.5:1
Gross Horsepower: (max)	600 hp at 2600 rpm
Gross Torque: (max)	1225 ft-lbs at 2300 rpm
Weight:	2650 pounds, dry
Fuel: diesel oil MIL-VV-F-800	175 gallons
Engine Oil:	26 quarts

### POWER TRAIN

Transmission: General Electric HMPT-500-3 or HMPT-500-3EC	
Hydromechanical, automatic range selection	
Steering: Hydrostatic, steering yoke	
Brakes: Multiple plate, oil cooled	
Final Drive: Spur gear	Gear Ratio: 5.561:1
Drive Sprockets: At front of vehicle with 11 teeth	
Pitch Diameter: 21 inches	

### RUNNING GEAR

Suspension: Torsion bar
12 individually sprung dual road wheels (6/track)
Tire Size: 24 x 4 inches
2 single and 1 dual track return rollers per track
Dual adjustable idler at rear of each track
Idler Size: Outer, 20.0 x 3.7 inches
Inner, 19.9 x 5.7 inches
Shock absorbers on first 3 and last road wheels on each side
Tracks: Center guide
Type: Single pin, 21 inch width, steel w/detachable rubber pad
Pitch: 6 inches
Shoes per Vehicle: 166 (84 left, 82 right)
Ground Contact Length: 154 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC
Main Generator: 28 volts, 300 amperes, driven by main engine
Auxiliary Generator: None
Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

### COMMUNICATIONS

Radio: AN/VRC-46, AN/VRC-47, AN/PRC-77, AN/GRC-160
Interphone:

### FIRE AND NBC PROTECTION

- (1) 7 pound Halon, fixed in engine compartment
- (2) 5 pound Halon, fixed in crew compartment
- (2) 2.75 pound Halon, portable
- Gas particulate filter unit

### PERFORMANCE

Maximum Speed: Level road	35 miles/hour
Water	4.0 miles/hour
Maximum Grade:	60 per cent
Maximum Trench:	7 feet
Maximum Vertical Wall	30 inches
Maximum Forging Depth:	floats
Minimum Turning Circle: (diameter)	pivot
Cruising Range: Roads	approx. 250 miles

## INFANTRY FIGHTING VEHICLES M2A2ODS AND M2A3

### GENERAL DATA

Crew:	10 men
Length: Overall:	258 inches
Width: w/armor tile kit	142 inches
w/o armor tile kit	129 inches
Height: Over commander's hatch	117 inches
Tread:	96 inches
Ground Clearance:	18 inches
Weight, Combat Loaded: w/armor tile kit	approx. 67,000 pounds
w/o armor tile kit	approx. 61,000 pounds
Weight, Air Transport:	approx. 45,000 pounds
Power to Weight Ratio: w/armor tile kit	17.9 hp/ton
w/o armor tile kit	19.7 hp/ton
Ground Pressure: Zero penetration, w/armor tile kit	10.4 ps
w/o armor tile kit	9.4 psi

### ARMOR

Turret: 5083 aluminum armor structure with steel applique armor. Provision for the installation of armor tiles on the front and right side.  
Hull: 5083 and 7039 aluminum armor structure with steel applique armor on the front, sides, and bottom. Spaced laminate steel armor on rear and lower side skirts. Provision for the installation of armor tiles on the upper front and vertical sides.

### ARMAMENT

Primary: 25mm automatic gun M242 in turret mount  
    Traverse: Electric and manual 360 degrees  
    Traverse Rate: (max) 6 seconds/360 degrees  
    Elevation: Electric and manual +57 to -9 degrees  
    Elevation Rate: (max) 60 degrees/second  
    Firing Rate: Single shot, 100, 200 rounds/minute  
    Stabilizer System: Electric, azimuth and elevation

Primary: TOW missile system dual launcher on turret  
    Traverse: w/turret 360 degrees  
    Elevation: +29 to -19 degrees  
    Elevation Rate: (max) 15 degrees/second

### Secondary:

- (1) 7.62mm M240C MG coaxial w/25mm gun in turret
- (2) 5.56mm M231 firing port weapons
- (1) 7.62mm M60 MG stowed
- (10) 5.56mm M16A1 rifles stowed

### AMMUNITION

- 900 rounds 25mm
- 2200 rounds 7.62mm (M240C)
- 2200 rounds 7.62mm (M60)
- 2520 rounds 5.56mm (M231)
- 2800 rounds 5.56mm (M16A1)
- 3 66mm M72A2 light antitank weapons (LAW)
- 3 AT4 missiles
- 5 TOW2 or 3 TOW2 and 2 Javelin missiles + 2 TOW2 in launcher

### FIRE CONTROL AND VISION EQUIPMENT

Primary Weapon Sights:	Integrated sight unit (day/night)
	5x auxiliary sight
	External ring sight
	Laser range finder
	Target acquisition system, M2A3 only
Vision Devices	Direct                      Indirect
Driver	Hatch                      Periscope (4)
	Thermal viewer
Commander	Hatch                      Periscope M17 (6)
	Periscope M27 (1)
	Independent viewer, M2A3 only
	Forward looking infrared system
Gunner	Hatch                      Periscope (2)
Troop Compartment	Roof Hatch                Periscope (6)
Total Periscopes: (19)	

### ENGINE

Make and Model: Cummins VTA-903T  
Type: 8 cylinder, 4 cycle, vee, turbosupercharged  
Cooling System: Liquid                      Ignition: Compression  
Displacement: 903 cubic inches  
Bore and Stroke: 5.5 x 4.75 inches  
Compression Ratio: 14.5:1  
Gross Horsepower: (max) 600 hp at 2600 rpm  
Gross Torque: (max) 1225 ft-lbs at 2300 rpm  
Weight: 2650 pounds, dry  
Fuel: diesel oil MIN-VV-F-800 175 gallons  
Engine Oil: 26 quarts

### POWER TRAIN

Transmission: General Electric HMPT-500-3EC  
    Hydromechanical, automatic range selection  
Steering: Hydrostatic, steering yoke  
Brakes: Multiple plate, oil cooled  
Final Drive: Spur gear                      Gear Ratio: 5.561:1  
Drive Sprockets: At front of vehicle with 11 teeth  
    Pitch Diameter: 21 inches

### RUNNING GEAR

Suspension: Torsion bar  
    12 individually sprung dual road wheels (6/track)  
Tire Size: 24 x 4 inches  
    2 single and 1 dual track return rollers per track  
Dual adjustable idler at rear of each track  
Idler Size: Outer, 20.0 x 3.7 inches  
    Inner, 19.9 x 5.7 inches  
Shock absorbers on first 3 and last road wheels on each side  
Tracks: Center guide  
    Type: Single pin, 21 inch width, steel w/detachable rubber pad  
    Pitch: 6 inches  
Shoes per Vehicle: 166 (84 left, 82 right)  
Ground Contact Length: 154 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC  
Main Generator: 28 volts, 300 amperes, driven by mam engine  
Auxiliary Generator: None  
Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

### COMMUNICATIONS AND NAVIGATION

Radio: SINGARS w/SIP/INC  
Pos/Nav w/inertial GPS system  
Commander's tactical display w/map graphics  
Squad tactical display /FLIR monitor  
Enhanced position location reporting system  
Combat identification system  
Vehicular intercommunication system (VIS)

### FIRE AND NBC PROTECTION

- (1) 7 pounds Halon, fixed in engine compartment
- (2) 5 pound Halon, fixed in crew compartment
- (2) 2.75 pound Halon, portable

### PERFORMANCE

Maximum Speed: Level road	35 miles/hour
Water	4.0 miles/hour
Maximum Grade:	60 per cent
Maximum Trench:	7 feet
Maximum Vertical Wall:	30 inches
Maximum Fording Depth:	floats
Minimum Turning Circle: (diameter)	pivot
Cruising Range: Roads	approx. 250 miles



**ARMORED VEHICLE MOUNTED ROCKET LAUNCHER M270  
(Rocket Launcher M269 on Carrier M993)**

**GENERAL DATA**

Crew: (driver, commander, gunner)	3 men
Length: Overall:	274.5 inches
Width: Overall-	117 inches
Height: w/launcher stowed	102 inches
w/launcher fully elevated	232 inches
Tread:	96 inches
Ground Clearance:	17 inches
Weight, Combat Loaded: w/12 rockets	52,990 pounds
w/2 missiles	52,428 pounds
Weight, Empty:	42,800 pounds
Weight, M993 Carrier Only:	32,200 pounds
Power to Weight Ratio: w/12 rockets	18.9 hp/ton
Ground Pressure: Zero penetration, w/12 rockets	7.4 psi

**ARMOR**

Both the carrier and launcher are lightly armored.  
The cab is 7039 aluminum armor and the hull is 5083 aluminum armor.  
The cab windows are armor glass with louvers for splinter protection.

**ARMAMENT**

The launcher is armed with 2 rocket pods of 6 rockets each or 2 missile pods each carrying a single missile

- (1) 5.56mm M16A1 rifle stowed

**AMMUNITION**

- 12 227mm M26 rockets
- or

- 2 Army tactical missile systems (ATACMS) M39

**FIRE CONTROL AND VISION EQUIPMENT**

Computer controlled fire control system that can be quickly programmed to operate with several types of rockets and missiles.

**Vision Devices:**

Armor glass windows in cab

A vision block is installed on each side of the cab

**ENGINE**

Make and Model: Cummins VTA-903T	
Type: 8 cylinder, 4 cycle, vee, turbosupercharged	
Cooling System: Liquid	Ignition: Compression
Displacement:	903 cubic inches
Bore and Stroke:	5.5 x 4.75 inches
Compression Ratio:	15.5:1
Gross Horsepower: (max)	500 hp at 2600 rpm
Gross Torque: (max)	1025 ft-lbs at 2350 rpm
Weight:	2450 pounds, dry
Fuel: diesel oil MIL-V V-F-800	163 gallons
Engine Oil:	22 quarts

**POWER TRAIN**

Transmission: General Electric HMPT-500

Hydromechanical, automatic range selection

Steering: Hydrostatic, steering yoke

Brakes: Multiple plate, oil cooled

Final Drive: Spur gear          Gear Ratio: 5.561:1

Drive Sprockets: At front of vehicle with 11 teeth

Pitch Diameter: 21 inches

**RUNNING GEAR**

Suspension: Torsion bar

12 individually sprung dual road wheels (6/track)

Tire Size: 24 x 4 inches

2 single and 2 dual track return rollers per track

Dual adjustable idler at rear of each track

Idler Size: Outer, 20.0 x 3.7 inches

Inner, 19.9 x 5.7 inches

Shock absorbers on first 2 and last road wheels on each side

Suspension lock-out to stabilize the vehicle during loading

or launching operations.

Tracks: Center guide

Type: Single pin, 21 inch width, steel w/detachable rubber pad

Pitch: 6 inches

Shoes per Vehicle: 177 (89 left, 88 right)

Ground Contact Length: 170.5 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC

Main Generator: 28 volts, 300 amperes, driven by main engine

Auxiliary Generator: 28 volts, 300 amperes driven by power take-off from transmission

Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

**COMMUNICATIONS**

Radio: RT-524A/VRC, R-442/VRC

**FIRE AND NBC PROTECTION**

- (1) 7 pound Halon, fixed in engine compartment

- (1) 2.75 pound Halon, portable

Gas particulate filter unit

**PERFORMANCE**

Maximum Speed: level road   40 miles/hour

Maximum Grade:   60 per cent

Maximum Trench:   7.6 feet

Maximum Vertical Wall:   30 inches

Maximum Fording Depth:   40 inches

Minimum Turning Circle:   pivot

Cruising Range: Roads   approx. 300 miles

## CARGO CARRIERS M29 AND M29C "WEASEL"

### GENERAL DATA

Crew:	2 to 4 men
Length: Overall, M29	125.75 inches
M29C	192.1 inches
Width: Overall, M29	66 inches
M29C	67.25 inches
Height: Over windshield	70.6 inches
Tread:	45.0 inches
Ground Clearance: M29	11.0 inches
M29C	10.5 inches
Weight, Combat Loaded: M29	5277 pounds
M29C	5971 pounds
Weight, Unstowed: M29	4077 pounds
M29C	4771 pounds
Power to Weight Ratio: Net, M29	24.6 hp/ton
M29C	21.8 hp/ton
Ground Pressure: Zero penetration: M29	1.7 psi
M29C	1.9 psi

### ARMOR

None

### ARMAMENT

None

### AMMUNITION

None

### VISION EQUIPMENT

Open top vehicle

### ENGINE

Make and Model: Studebaker 6-170	
Type: 6 cylinder, 4 cycle, L-head, in-line	
Cooling System: Liquid	Ignition: Battery
Displacement:	169.6 cubic inches
Bore and Stroke:	3 x 4 inches
Compression Ratio:	7:1
Net Horsepower: (max)	65 hp at 3600 rpm
Net Torque: (max)	130 ft-lbs at 1800 rpm
Weight:	500 pounds, dry
Fuel: 80 octane gasoline	35 gallons
Engine Oil:	5 quarts

### POWER TRAIN

Clutch: Dry disc	
Transmission: Synchromesh (2nd and 3rd), 3 speeds forward, 1 reverse	
Gear Ratios:	1st 2.66:1 3rd 1.00:1
	2nd 1.49:1 reverse 3.55:1

Transfer Case: Dual speed

Gear Ratios:	High 0.866:1 Low 2.74:1
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Steering: Controlled differential

Gear Ratio: 4.87:1	Steering Ratio: 1.73:1
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Brakes: Differential band

Drive Sprockets: At rear of vehicle with 9 teeth

### RUNNING GEAR

Suspension: Transverse leaf spring

16 dual wheels in 8 bogies (4 bogies/track)

Wheel Size: 8 x 1.25 inches

Dual Idler at front of each track

Idler Size: 11.75 x 7 inches

4 dual track return rollers (2/track)

Tracks: Center guide, T76E1

Type: Rubber band, single piece, 20 inch width

Pitch: Cross bar, 4.5 inches

Shoes per Vehicle: Cross bars 112 (56/track)

Ground Contact Length: 78.1 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 12 volts DC

Main Generator: (1)12 volts, 40 amperes, driven by main engine or if radios are installed

(1)12 volts, 55 amperes, driven by main engine

Auxiliary Generator: None

Battery: (2) 6 volts in series

### COMMUNICATIONS

Radio: SCR 506, 508, 510, 528, 608, 610, 628, 694, 714 or  
British Number 19

Interphone: None

### FIRE PROTECTION

(1) 1 quart carbon tetrachloride, portable

### PERFORMANCE

Maximum Speed: Level road	36 miles/hour
Water, M29C only	4 miles/hour

Maximum Tractive Effort: TE at stall 4200 pounds

Per Cent of Vehicle Weight: TE/W, M29 80 per cent

M29C 70 per cent

Maximum Grade: 100 per cent

Maximum Trench: 3 feet

Maximum Vertical Wall: 10 inches

Maximum Fording Depth: M29C floats

Minimum Turning Circle: (diameter) 24 feet

Cruising Range: Roads approx. 175 miles

## AMPHIBIOUS CARGO CARRIER M76 "OTTER"

### GENERAL DATA

Crew: 2 men  
 Passengers: 8 men  
 Length: Overall 195.3 inches  
 Width: Over tracks 98 inches  
 Height: Overall 103.3 inches  
 Tread: 68 inches  
 Ground Clearance: 14.7 inches  
 Weight, Combat Loaded: 12,045 pounds  
 Weight, Unstowed: 8,329 pounds  
 Power to Weight Ratio: Net 18.3 hp/ton  
                                     Gross 22.4 hp/ton  
 Ground Pressure: Zero penetration 2.0 psi

### ARMOR

None

### ARMAMENT

(1) .50 caliber MG HB M2 over assistant driver's hatch

### AMMUNITION

630 rounds .50 caliber

### VISIONEQUIPMENT

Windows in cab

### WINCH

Located in cargo compartment under the rear seat

Capacity: 5000 pounds

Cable Size: 3/8 inches x 85 feet

### ENGINE

Make and Model: Continental AOI-268-3A  
 Type: 4 cylinder, 4 cycle, opposed, fuel injection  
 Cooling System: Air Ignition: Magneto  
 Displacement: 268.8 cubic inches  
 Bore and Stroke: 4.625 x 4.000 inches  
 Compression Ratio: 6.9:1  
 Net Horsepower: (max) 110 hp at 3200 rpm  
 Gross Horsepower: (max) 135 hp at 3200 rpm  
 Net Torque: (max) 208 ft-lbs at 2200 rpm  
 Gross Torque: (max) 222 ft-lbs at 2600 rpm  
 Weight: 620 pounds.dry  
 Fuel: 80 octane gasoline 70 gallons  
 Engine Oil: 12 quarts

### POWER TRAIN

Transmission: Cross drive CD-I 50  
 Torque Converter: Hydraulic, single stage  
 Torque Converter Stall Ratio: 4.04:1  
 Overall Usable Ratios: Low 7.96:1 reverse 9.36:1  
                                     High 5.2:1

Steering: Land, mechanical steering bar  
                     Water, hydraulic, steering shaft

Brakes: Mechanical  
 Final Drive: Planetary gear Gear Ratio: 4.105:1  
 Drive Sprockets: At front of vehicle with 12 teeth  
                     Pitch Diameter: 7.639 inches

### RUNNING GEAR

Suspension: Torsion bar  
                     8 individually sprung dual road wheels (4/track)  
                     Tire Size: 6.60 x 15.00 pneumatic  
                     Dual idler at rear of each track  
                     Double acting shock absorbers on first and last road wheels  
 Tracks: Double center and outside guides  
                     Type: Band type, sectional, 30 inch width  
                     Section Length: 44 or 88 inches  
                     Pitch: Cross bar, 4 inches  
                     Shoes per Vehicle: Cross bars 176 (88/track)  
                     Ground Contact Length: 98.6 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC  
 Main Generator: (1) 28 volts, 25 amperes, driven by main engine  
 Auxiliary Generator: None  
 Battery: (2) 12 volts in series

### COMMUNICATIONS

Radio: AN/GRC-3 thru 8, AN/VRQ-1 thru 3, AN/VRC-7,  
                     AN/VRC-16 thru 18, or AN/GRC-9

Interphone: None

### FIRE PROTECTION

(1) 5 pound carbon dioxide, portable

### PERFORMANCE

Maximum Speed: Level road 28 miles/hour  
                     Water 4.5 miles/hour  
 Maximum Tractive Effort: TE at stall 8900 pounds  
                     Per Cent of Vehicle Weight: TE/W 74 per cent  
 Maximum Grade: 60 per cent  
 Maximum Trench: 5 feet  
 Maximum Vertical Wall: 18 inches  
 Maximum Fording Depth: floats  
 Minimum Turning Circle: (diameter) pivot  
 Cruising Range: Roads approx. 200 miles  
                     Water approx. 5.8 hours

**CARGO CARRIER M116 "HUSKY"  
AND  
AMPHIBIOUS ASSAULT VEHICLE XM733**

**GENERAL DATA**

Crew: M116	1 man
XM733 (driver, 5 gunners)	6 men
Passengers: M116 only, Summer gear	13 men
Winter gear	10 men
Length: Overall, M116	188.1 inches
XM733	195 inches
Width: Over track shrouds	82.1 inches
Height: M116, Over cab	79.1 inches
XM733, Overall	68 inches
Tread:	58.5 inches
Ground Clearance:	14 inches
Weight, Combat Loaded: M116	10,600 pounds
XM733	11,650 pounds
Weight, Unstowed: M116	6,700 pounds
XM733	10,000 pounds
Power to Weight Ratio: M116	30.2 hp/ton
XM733	27.5 hp/ton
Ground Pressure: Zero penetration, M116	2.6 psi
XM733	2.8 psi

**ARMOR**

M116: None  
XM733: Light steel armor bolted to the aluminum hull

**ARMAMENT**

M116  
    (1) 7.62mm rifle M14, stowed  
XM733  
    (4) 7.62mm MG M60D  
    (1) 7.62mm rifle M14  
    (1) 40mm automatic grenade launcher M175  
        or  
    (1) 7.62mm automatic gun (minigun)

**AMMUNITION**

M116  
    180 rounds 7.62mm  
XM733  
    1200 rounds 7.62mm, M60D  
    180 rounds 7.62mm, rifle  
    100 rounds 40mm M384  
        or  
    500 rounds 7.62mm, linked (minigun)

**VISION EQUIPMENT**

Windows in cab (M116) or open top vehicle

**WINCH**

Located in the hull front  
Capacity: 5000 to 6000 pounds  
Cable Size: 3/8 inches x 100 feet

**ENGINE**

Make and Model: Chevrolet 283-V8 Military  
Type: 8 cylinder, 4 cycle, vee  
Cooling System: Liquid Ignition: Delco  
Displacement: 283 cubic inches  
Bore and Stroke: 3.875 x 3 inches  
Compression Ratio: 8:1  
Net Horsepower: (max) 115 hp at 3600 rpm  
Gross Horsepower: (max) 160 hp at 4200 rpm  
Net Torque: (max) 210 ft-lbs at 2400 rpm  
Gross Torque: (max) 240 ft-lbs at 2800 rpm  
Fuel: 80 octane gasoline 65 gallon + 10 gallons stowed  
Engine Oil: 7 quarts

**POWER TRAIN**

Transmission: Hydramatic Model 305MC  
Automatic: 4 speeds forward, 1 reverse  
Gear Ratios: 1st 4.09:1 4th 1.00:  
                  2nd 2.63:1 reverse 4.54:1  
                  3rd 1.55:1

Steering: Allison GS 100-3, geared, clutch-brake, steering wheel

Brakes: Multiple plate, oil cooled

Final Drive: Integral w/GS 100-3 Gear Ratio: 4.17:1

Drive Sprockets: At front of vehicle with 11 teeth

Pitch Diameter: 14.00 inches

**RUNNING GEAR**

Suspension: Flat track, torsion bar  
10 individually sprung dual road wheels (5/track)  
Tire Size: 22 x 2 inches  
Dual adjustable idler at rear of each track  
Rotary shock absorbers on first and last road wheels on each side  
Tracks: Double center guide  
Type: Band type, 20 inch width  
Pitch: Cross bar, 4 inches, 8 cross bars/32 inch section  
Sections per Vehicle: 22 (1 I/track)  
Ground Contact Length: 103 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC  
Main Generator: (alternator) 24 volts, 100 amperes, driven by main engine  
Auxiliary Generator: None  
Battery: (4) 2 sets of 2 in series connected in parallel

**COMMUNICATIONS**

Radio: M116, AN/GRC-3 thru 9, AN/GRC-19, AN/GRR-5, AN/VRC-9,  
    AN/VRC-10, AN/VRC-18, AN/VRC-24, AN/VRC-35,  
    or AN/VRQ-1 thru 3  
    XM733, AN/GRC-125, AN/VRC-46

Interphone: AN/UIC-1, 2 stations

**FIRE PROTECTION**

(1) 5 pound carbon dioxide, portable

**PERFORMANCE**

Maximum Speed: Level road 37 miles/hour  
    Water 4.2 miles/hour  
Maximum Tractive Effort: TE at Stall 9100 pounds  
    Per Cent of Vehicle Weight: TE/W, M116 86 per cent  
    XM733 78 per cent  
Maximum Grade: 60 per cent  
Maximum Trench: 4.8 feet  
Maximum Vertical Wall: 18 inches  
Maximum Fording Depth: floats  
Minimum Turning Circle: (diameter) 16 feet  
Cruising Range: Roads approx. 300 miles

## CARGO CARRIER M548A1

### GENERAL DATA

Crew: (driver, 3 passengers in cab) 4 men  
Length: Overall 232 inches  
Width: Over track shrouds 105.75 inches  
Height: Over canopy bows 110.75 inches  
Tread: 85.0 inches  
Ground Clearance: 17.1 inches  
Weight, Combat Loaded: 28,300 pounds  
Weight, Unstowed: 16,300 pounds  
Power to Weight ratio: 15.0 hp/ton  
Ground Pressure: Zero penetration 8.5 psi

### ARMOR

None

### ARMAMENT

Optional, (1) .50 caliber MG HB M2 on M66 mount over cab

### AMMUNITION

Optional, 600 rounds .50 caliber

### VISION EQUIPMENT

Windows in cab or open top vehicle

### ENGINE

Make and Model: General Motors 6V53  
Type: 6 cylinder, 2 cycle, vee  
Cooling System: Liquid Ignition: Compression  
Displacement: 318 cubic inches  
Bore and Stroke: 3.875 x 4.5 inches  
Compression Ratio: 17.0:1  
Gross Horsepower: (max) 212 hp at 2800 rpm  
Gross Torque: (max) 492 ft-lbs at 1300 rpm  
Weight: 1310 pounds, dry  
Fuel: diesel oil MIL-VV-F-800 105 gallons  
Engine Oil: 22 quarts

### POWER TRAIN

Transfer Case: Overall ratio 1.286:1 overdrive  
Transmission: Allison TX-100  
Torque Converter: Hydraulic, single stage, multiphase w/lockup  
Torque Converter Stall ratio: 3.5:1  
Transmission Ratios: 1st 3.81:1 3rd 1.00:1  
2nd 1.936:1 reverse 4.35:1

Steering: DS200 controlled differential, steering brake levers

Input Ratio: 1.28:1 Steering Ratio: 1.1 to 1.786:1

Brakes: Differential band

Final Drive: Spur gear Gear Ratio: 3.928:1

Drive Sprockets: At front of vehicle with 10 teeth

Pitch Diameter: 19.618 inches

### RUNNING GEAR

Suspension: Flat track, torsion bar  
10 individually sprung dual road wheels (5/track)

Tire Size: 24 x 2.1 inches

Dual adjustable idler at rear of each track

Idler Size: 21 x 2.1 inches

Shock absorbers on first 2 and last road wheels on each side

Tracks: Center guide, T130E1

Type: Single pin, 15 inch width, steel w/detachable rubber pad

Pitch: 6 inches

Shoes per Vehicle: 130 (65/track)

Ground Contact Length: 111 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC

Main Generator: (1) 28 volts, 100 amperes, driven by main engine

Auxiliary Generator: None

Battery: (2) 12 volts in series

### COMMUNICATIONS

Radio: None

### FIRE PROTECTION

(1) 5 pound carbon dioxide, fixed

(1) 5 pound carbon dioxide, portable

### PERFORMANCE

Maximum Speed: Level road 35 miles/hour

Maximum Grade: 60 per cent

Maximum Trench: 5.5 feet

Maximum Vertical Wall: 24 inches

Maximum Fording Depth: 40 inches

Minimum Turning Circle: (diameter) 28 feet

Cruising Range: Roads approx. 300 miles

## 18 TON HIGH SPEED TRACTORS M4, M4C, M4A1, M4A1C, AND M4A2

### GENERAL DATA

Crew:	1 man
Passengers:	10 men
Length:	203 inches
Width: M4, M4C	97 inches
M4A1, M4A1C, M4A2	111 inches
Height:	99 inches
Tread: M4, M4C	80 inches
M4A1, M4A1C, M4A2	87.1 inches
Ground Clearance:	20 inches
Weight, Combat Loaded: M4, M4C	36,000 pounds
M4A1, M4A1C	36,500 pounds
M4A2	38,000 pounds
Power to Weight Ratio: M4, M4C	11.7 hp/ton
M4A1, M4A1C	11.5 hp/ton
M4A2	11.1 hp/ton
Ground Pressure: Zero penetration, M4, M4C	8.8 psi
M4A1, M4A1C	6.2 psi
M4A2	6.5 psi

### ARMOR

None

### ARMAMENT

(1) .50 caliber MG HB M2 on mount M49C or M66

### AMMUNITION

500 rounds .50 caliber  
 one of the following in M4 and M4A1  
 54 rounds 90mm  
 30 rounds 155mm gun  
 20 rounds 8 inch howitzer  
 12 rounds 240mm howitzer  
 M4C and M4A1C carry additional rounds

### VISION EQUIPMENT

Windows in cab

### WINCH

Gar Wood Model 4M718 located in rear hull

Capacity: 30,000 pounds

Cable Size: 3/4 inches x 300 feet

### ENGINE

Make and Model: Waukesha 145GZ  
 Type: 6 cylinder, 4 cycle, in-line  
 Cooling System: Liquid                      Ignition: Battery  
 Displacement: 817 cubic inches  
 Bore and Stroke: 5.375 x 6 inches  
 Compression Ratio: 5.95:1  
 Net Horsepower: (max) 210 hp at 2100 rpm  
 Net Torque: (max) 585 ft-lbs at 1500 rpm  
 Weight: 2150 pounds, dry  
 Fuel: 70 octane gasoline 125 gallons  
 Engine Oil: 18 quarts

### POWER TRAIN

Torque Converter: Twin-Disk Model T-10010  
 Torque Converter Gear Ratio: 1.372:1  
 Transmission: Selective  
 Gear Ratios: 1st 2.166:1                      3rd 0.437:1  
                     2nd 1.555:1                      reverse 1.822:1

Steering: Controlled Differential, steering levers

    Gear Ratio: 2.666:1                      Steering Ratio: 1.747:1

Brakes: Mechanical on controlled differential

Final Drive: Spur gear                      Gear Ratio: 2.764:1

Drive Sprockets: At front of vehicle with 13 teeth

    Pitch Diameter: 25.038 inches

### RUNNING GEAR

Suspension: Horizontal volute spring  
 8 wheels in 4 bogies (2 bogies/track)  
 Tire Size: 20 x 9 inches  
 4 track return rollers (2/track)  
 Adjustable trailing idler at rear of each track  
 Idler Size: 32 x 9 inches

Tracks: Outside guide, T48, T49, T54E1

    Type: T48, Double pin, 16.56 inch width, rubber block  
           T49, T54E1, double pin 16.56 inch width, steel  
           On M4A1, M4A1C and M4A2 extended end  
           connectors increase track width to 23.69 inches.

    Pitch: 6 inches

    Shoes per Vehicle: 130 (65/track)

    Ground Contact Length: 124 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 12 volts DC

Main Generator: (1) 15 volts, 26 amperes, driven by main engine

Auxiliary generator: None

Battery: (1) 12 volts

### COMMUNICATIONS

Radio: None

Interphone: None

### FIRE AND GAS PROTECTION

    (2) 4 pound carbon dioxide, portable

    (1) 1 1/2 quart decontaminating apparatus M2

### PERFORMANCE

Maximum Speed: Level road towing a 90mm gun 33 miles/hour

Maximum Grade: 60 per cent

Maximum Trench: 5 feet

Maximum Vertical Wall: 29 inches

Maximum Fording Depth: 41 inches

Minimum Turning Circle: 39 feet

Cruising Range: Roads approx 180 miles

### 13 TON HIGH SPEED TRACTORS M5, M5A1, M5A2, AND M5A3

#### GENERAL DATA

Crew:	1 man
Passengers: M5, M5A2	8 men
M5A1, M5A3	10 men
Length: M5, M5A2	191.1 inches
M5A1, M5A3	196.4 inches
Width: M5, M5A1	100.0 inches
M5A2, M5A3	114.5 inches
Height: M5, M5A2, w/o MG	104 inches
M5A1, M5A3	114.5 inches
Tread: M5, M5A1	83 inches
M5A2, M5A3	94.5 inches
Ground Clearance:	19.8 inches
Weight, Combat Loaded: M5	28,572 pounds
M5A1	30,405 pounds
M5A2	26,149 pounds
M5A3	30,350 pounds
Weight, Unstowed: M5	23,308 pounds
M5A1	24,438 pounds
M5A2	20,885 pounds
M5A3	23,025 pounds
Power to Weight Ratio: M5	16.7 hp/ton
M5A1	15.5 hp/ton
M5A2	18.0 hp/ton
M5A3	15.5 hp/ton
Ground Pressure: Zero penetration, M5	11.4 psi
M5A1	12.1 psi
M5A2	5.7 psi
M5A3	6.7 psi

#### ARMOR

None

#### ARMAMENT

- (1) .50 caliber MG HB M2 on mount M49C
- Field modification required on M5 and M5A2

#### AMMUNITION

- 400 rounds .50 caliber
- one of the following
- 56 rounds 105mm howitzer
- 24 rounds 155mm howitzer

#### VISION EQUIPMENT

Windows in cab or open top vehicle

#### ENGINE

Make and Model:	Continental R6572
Type:	6 cylinder, 4 cycle, in-line
Cooling System:	Liquid
Ignition:	Delco
Displacement:	571.7 cubic inches
Bore and Stroke:	4.75 x 5.375 inches
Compression Ratio:	6.5:1
Net Horsepower: (max)	235 hp at 2900 rpm
Net Torque: (max)	490 ft-lbs at 1600 rpm
Weight:	2026 pounds, dry
Fuel:	70 octane gasoline
Engine Oil:	100 gallons
Engine Oil:	22 quarts

#### POWER TRAIN

Clutch/Transfer Case:	
Gearratio:	Low 1.71:1      High 1.00:1
Transmission:	Constant mesh
Gear Ratio:	1st 5.43:1      4th 1.00:1
2nd	3.20:1      reverse 5.36:1
3rd	1.71:1

Steering: Controlled differential, steering brake levers

    Gear Ratio: 2.60:1      Steering Ratio: 1.844:1

Brakes: Mechanical on controlled differential

Final Drive: Spur gear      Gear Ratio: 2.35:1

Drive Sprockets: At front of vehicle with 14 teeth

    Pitch Diameter: 24.56 inches

#### RUNNING GEAR

Suspension: M5, M5A1, Vertical volute spring

    M5A2, M5A3, Horizontal volute spring

M5, M5A1, 8 wheels in 4 bogies (2 bogies/track)

    Tire Size: 20 x 6 inches

    4 track return rollers (2/track)

    Adjustable trailing idler at rear of each track

    Idler Size: 28 x 6 inches

M5A2, M5A3, 8 dual wheels in 4 bogies (2 bogies/track)

    4 dual track return rollers (2/track)

    Adjustable dual trailing idler at rear of each track

Tracks: M5, M5A1, Outside guide, M5A2, M5A3, Center guide

    Type: M5, M5A1, Double pin, 11.6 inch width, steel

    M5A2, M5A3, Single pin, 21 inch width, steel

    Pitch: 5.5 inches

    Shoes per Vehicle: M5, M5A1, 124 (62/track)

    M5A2, M5A3, 126 (63/track)

    Ground Contact Length: 108.5 inches

#### ELECTRICAL SYSTEM

Nominal Voltage: 12 volts DC

Main Generator: (1)12 volts, driven by main engine

Auxiliary Generator: None

Battery: (1) 12 volts

#### COMMUNICATIONS

Radio: None

Interphone: None

#### FIRE PROTECTION

- (1) 4 pound carbon dioxide, portable

#### PERFORMANCE

Maximum Speed: Level roads      35 miles/hour

Maximum Grade:      72 per cent

Maximum Trench:      5.5 feet

Maximum Vertical Wall:      18 inches

Maximum Fording Depth:      53 inches

Minimum Turning Circle: (diameter)      36 feet

Cruising Range: Roads      approx. 125 miles

## 38 TON HIGH SPEED TRACTOR M6

### GENERAL DATA

Crew: 1 man  
Passengers: 10 men  
Length: 257.8 inches  
Width: 120.5 inches  
Height: 104.1 inches  
Tread: 98.5 inches  
Ground Clearance: 20 inches  
Weight, Combat Loaded: 75,000 pounds  
Weight, Unstowed: 60,000 pounds  
Power to Weight Ratio: Net 10.2 hp/ton  
Ground Pressure: Zero penetration 9.9 psi

### ARMOR

None

### ARMAMENT

(1) 50 caliber MG HB M2 on mount M49C or M66

### AMMUNITION

600 rounds .50 caliber  
one of the following  
24 rounds 120mm gun  
24 rounds 8 inch gun  
20 rounds 240mm howitzer

### VISION EQUIPMENT

Windows in cab

### WINCH

Gar Wood Model 6M823 located in rear hull

Capacity: 55,000 pounds

Cable Size: 1 inch x 300 feet

### ENGINE

Make and Model: (2) Waukesha 145GZ  
Type: 6 cylinder, 4 cycle, in-line  
Cooling System: Liquid Ignition: Battery  
Displacement: 1634 cubic inches  
(817 cubic inches/engine)  
Bore and Stroke: 5.375 x 6 inches  
Compression Ratio: 5.95:1  
Net Horsepower: (max) 382hp at 2100rpm  
(191 hp/engine)  
Net Torque: (max) 1078 ft-lbs at 1500 rpm  
(539 ft-lbs/engine)  
Weight: 4300 pounds, dry  
(2150 pounds/engine)  
Fuel: 70 octane gasoline 250 gallons  
Engine Oil: 18 quarts/engine

### POWER TRAIN

Torque Converter: Twin Disk Model T-10010  
Torque Converter Gear Ratio: 4.5:1  
Transmission: Constant mesh  
Gear ratios: 1st 2.12:1 reverse 2.76:1  
2nd 1.05:1  
Steering: Controlled differential, steering levers  
Steering Ratio: 1.6:1

Brakes: Mechanical on controlled differential

Final Drive: Herringbone gear Gear Ratio: 3.06:1

Drive Sprockets: 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 inches  
6 dual track return rollers (3/track)  
Adjustable dual trailing idler at rear of each track  
Idler Size: 32 x 6 inches  
Tracks: Center guide  
Type: Double pin, 21.56 inch width, steel chevron  
Pitch: 6 inches  
Shoes per Vehicle: 168 (84/track)  
Ground Contact Length: 176.375 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 12 volts DC  
Main Generator: (1) 15 volts, 25 amperes, driven by right engine  
Auxiliary Generator: None  
Battery: (2) 12 volts in parallel

### COMMUNICATIONS

Radio: None

Interphone: None

### FIRE PROTECTION

(2) 4 pound carbon dioxide, portable

### PERFORMANCE

Maximum Speed: Level road 21 miles/hour  
Maximum Grade: 60 per cent  
Maximum Trench: 8 feet  
Maximum Vertical Wall: 30 inches  
Maximum Fording Depth: 54 inches  
Minimum Turning Circle: (diameter) 53 feet  
Cruising Range: Roads approx. 110 miles



## CARGO TRACTORS M8A1 AND M8A2

### GENERAL DATA

Crew: 2 men  
Length: 265.1 inches  
Width: 130.5 inches  
Height: 117.25 inches  
Tread: 102.5 inches  
Ground Clearance: 18.8 inches  
Weight, Combat Loaded: 63,000 pounds  
Weight, Unstowed: 44,500 pounds  
Power to Weight Ratio: Net 11.5 hp/ton  
Gross 15.9 hp/ton  
Ground Pressure: Zero penetration 9.5 psi

### ARMOR

None

### ARMAMENT

- (1) .50 caliber MG HB M2 on ring mount
- (2) .30 caliber carbine stowed
- (1) 3.5 inch rocket launcher stowed

### AMMUNITION

- 500 rounds .50 caliber
- 360 rounds .30 caliber, carbine
- 10 rounds 3.5 inch rockets

### VISION EQUIPMENT

Windows in cab

### ENGINE

Make and Model: M8A1, Continental AOS-895-3  
M8A2, Continental AOS1-895-5  
Type: AOS-895-3, 6 cylinder, 4 cycle, opposed, supercharged  
AOS1-895-5, 6 cylinder, 4 cycle, opposed, supercharged,  
w/ fuel injection  
Cooling System: Air Ignition: Magneto  
Displacement: 895.9 cubic inches  
Bore and Stroke: 5.75 x 5.75 inches  
Compression Ratio: 5.5:1  
Net Horsepower: (max) 363 hp at 2800 rpm  
Gross Horsepower: (max) 500 hp at 2800 rpm  
Net Torque: (max) 760 ft-lbs at 2060 rpm  
Gross Torque: (max) 985 ft-lbs at 2300 rpm  
Weight: approx 1900 pounds, dry  
Fuel: 80 octane gasoline 225 gallons  
Engine Oil: 44 quarts

### POWER TRAIN

Transmission: Allison CD-500-3, 2 speeds forward, 1 reverse  
w/automatic lockup in high  
Single stage hydraulic torque converter  
Stall Multiplication: 4:1  
Overall Usable Ratios: Low 15.3:1 direct 1:1  
High 4.1:1 reverse 15.3:1

Steering: Mechanical, T-bar

Brakes: Multiple plate, oil cooled

Final Drive: Spur gear Gear Ratio: 4.69:1

Drive Sprockets: At front of vehicle with 12 teeth

Pitch Diameter: 23.422 inches

### RUNNING GEAR

Suspension: Torsion bar

12 dual road wheels (6/track)

Tire Size: 25.5x4.5 inches

8 dual track return rollers (4/track)

Adjustable idler at rear of each track

Tracks: Center guide T91E3

Type: Single pin, 21 inch width, steel chevron

Pitch: 6 inches

Shoes per Vehicle: 174 (87/track)

Ground Contact Length: 157.1 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC

Main Generator: (1) 24 volts, 150 amperes, driven by main engine

Auxiliary Generator: None

Battery: (2) 12 volts in series

### COMMUNICATIONS

Radio: AN/VRC-8 to 10, AN/GRR-5

Interphone: None

### FIRE PROTECTION

(3) 10 pound carbon dioxide, fixed

(1) 5 pound carbon dioxide, portable

### PERFORMANCE

Maximum Speed: Level road 41 miles/hour

Maximum Tractive Effort: TE at stall 51,600 pounds

Per Cent of Vehicle Weight: TE/W 81 per cent

Maximum Grade: 60 per cent

Maximum Trench: 7 feet

Maximum Vertical Wall: 30 inches

Maximum Fording Depth: 42 inches

Minimum Turning Circle: (diameter) pivot

Cruising Range: Roads approx. 180 miles

**LANDING VEHICLES TRACKED PERSONNEL**  
**LVTP5 AND LVTP5A1**  
**(Armored Amphibian Assault Personnel and Cargo Carrier)**

**GENERAL DATA**

Crew: 3 men  
 Passengers: 34 men  
 Length: Overall 356 inches  
 Width: Overall 140.5 inches  
 Height: Over MG cupola 120.5 inches  
 Tread: 116.7 inches  
 Ground Clearance: Center 18 inches  
                           Sides 11 inches  
 Weight, Combat Loaded: Land operation 87,780 pounds  
                                   Water operation 81,780 pounds  
 Weight: Unstowed: 64,200 pounds  
 Power to Weight Ratio: Land operation 18.5 hp/ton  
                                   Water operation 19.8 hp/ton  
 Ground Pressure: Zero penetration 9.2 psi

**ARMOR**

Steel armor 0.25 to 0.625 inches in thickness,  
 Welded assembly

**ARMAMENT**

(1) .30 caliber MG M1919A4 in cupola mount  
 Traverse: Manual 360 degrees  
 Elevation: Manual +60 to -15 degrees

**AMMUNITION**

250 rounds .30 caliber

**VISION EQUIPMENT**

Vision Devices:	Direct	Indirect
Driver	Hatch	Periscope M17 (4) Periscope M17C(1)
Vehicle Commander	Hatch	Periscope M17 (4) Periscope M17C (1)
MG Cupola	Hatch and 5 vision blocks	None
Troop Commander	None	Periscopes M17 (2)
Total Periscopes: M17 (10), M17C (2)		
Total Vision Blocks: (5) in MG cupola		

**ENGINE**

Make and Model: Continental LV-1790-1  
 Type: 12 cylinder, 4 cycle, 90 degree vee  
 Cooling System: Liquid                      Ignition: Magneto  
 Displacement: 1791.7 cubic inches  
 Bore and stroke: 5.75x5.75 inches  
 Compression Ratio: 6.5:1  
 Net Horsepower: (max) 704 hp at 2800 rpm  
 Gross Horsepower: (max) 810 hp at 2800 rpm  
 Net Torque: (max) 1440 ft-lbs at 2000 rpm  
 Gross Torque: (max) 1610 ft-lbs at 2200 rpm  
 Fuel: 80 octane gasoline 456 gallons  
 Engine Oil: 64 quarts

**POWER TRAIN**

Transmission: Allison CD-850-4A or CD-850-4B  
 2 ranges forward, 1 reverse  
 Single stage, multiphase, hydraulic torque converter  
 Stall Multiplication: 4.3:1  
 Overall Usable Ratios: low 13.0:1            reverse 17.8:1  
   high 4.5:1

Steering: Mechanical, wobble stick

Brakes: Multiple plate, oil cooled

Final Drive: ..LVTP5, Planetary gear

                                  LVTP5A1, Spur gear

Drive Sprockets: At rear of vehicle with 17 teeth

                                  Pitch Diameter: approx. 26.5 inches

**RUNNING GEAR**

Suspension: Torsilastic

18 pairs of dual road wheels (9 pairs/track)

Tire Size: 19.4 x 6 inches

10 dual track return rollers (5/track)

Dual compensating idler at front of each track

Idler Size: 22 x 2.5 inches

Tracks: Center guide (inverted grouser)

                                  Type: Single pin, 20.75 inch width, steel

                                  Pitch: 5 inches

                                  Shoes per Vehicle: 268 (134/track)

                                  Ground Contact Length: 229.25 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC

Main Generator: (1) 24 volts, 300 amperes, driven by main engine

Auxiliary generator: (1) 28.5 volts, 175.5 amperes, driven by auxiliary engine

Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

**COMMUNICATIONS**

Radio: AN/GRC-5, AN/GRC-7 or AN/PRC-8 thru 10

Interphone: 3 stations

**FIRE PROTECTION**

(3) 5 pound carbon dioxide, fixed

(1) 5 pound carbon dioxide, portable

**PERFORMANCE**

Maximum Speed: Level Road 30 miles/hour  
                                   Water 6.8 miles/hour

Maximum Grade: 70 per cent

Maximum Trench: 12 feet

Maximum Vertical Wall: 36 inches

Maximum Fording Depth: floats

Minimum Turning Circle: (diameter) pivot

Cruising Range: Roads approx. 190 miles

                                  Water approx. 57 miles

**LANDING VEHICLES TRACKED HOWITZER  
LVTH6 AND LVTH6A1  
(Armored Amphibian Assault Howitzer Carriage)**

**GENERAL DATA**

Crew: 7 men  
Length: Overall 356 inches  
Width: Overall 140.5 inches  
Height: Over .50 caliber MG 160.5 inches  
Tread: 116.7 inches  
Turret Ring Diameter: (inside) 77.75 inches  
Ground Clearance: Center 17 inches  
  Sides 11 inches  
Weight, Combat Loaded: Land operation 86,600 pounds  
  Water operation 84,200 pounds  
Weight, Unstowed: 74,210 pounds  
Power to Weight Ratio: Land operation 18.7 hp/ton  
  Water operation 19.2 hp/ton  
Ground Pressure: Zero penetration 9.1 psi

**ARMOR**

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

Hull Thickness: 0.25 to 0.625 inches

Turret Thickness: Front 1 inch, Sides .075 inches, Top 0.25 inches

**ARMAMENT**

Primary: 105mm howitzer M49 in mount T172 in turret  
    Traverse: Hydraulic and manual 360 degrees  
    Traverse Rate: (max) 17 seconds/360 degrees  
    Elevation: Manual +59 to -4.1 degrees  
    Firing Rate: (max)  
    Loading System: Manual  
    Stabilizer System: Elevation only

**Secondary:**

- (1) .50 caliber MG HB M2 on turret
- (1) .30 caliber MG M1919A4E1 coaxial w/howitzer

**AMMUNITION**

- 151 rounds 105mm, land operation
- or
- 100 rounds 105mm, water operation
- 1050 rounds .50 caliber
- 2000 rounds .30 caliber

**FIRE CONTROL AND VISION EQUIPMENT**

Primary Weapon:             Direct                     Indirect  
  Telescope T150E2     Telescope T149E2  
  Periscope M23 (T38) Azimuth Indicator T24  
  Gunner's Quadrant M1A1

**Vision Devices:**

Driver	Hatch	Periscope M17 (4) Periscope M17C(1)
Asst. Driver	Hatch	Periscope M17 (4) Periscope M17C (1)
Commander	Hatch	Periscope M17 (4) Periscope M17C(1)
Gunner	Vision block (1)	Periscope M23 (T38) Telescope T149E2
Loader	Hatch and pistol port Vision block (2)	None

Total Periscopes: M17 (12), M17C (3), M23 (T28) (1),

Total Vision Blocks: (3) in turret side walls

**ENGINE**

Make and Model: Continental LV-1790-1  
Type: 12 cylinder, 4 cycle, 90 degree vee  
Cooling System: Liquid                     Ignition: Magneto  
Displacement: 1791.7 cubic inches  
Bore and Stroke: 5.75 x 5.75 inches  
Compression Ratio: 6.5:1  
Net Horsepower: (max) 704 hp at 2800 rpm  
Gross Horsepower: (max) 810 hp at 2800 rpm  
Net Torque: (max) 1440 ft-lbs at 2000 rpm  
Gross Torque: (max) 1610 ft-lbs at 2200 rpm  
Fuel: 80 octane gasoline 456 gallons  
Engine Oil: 64 quarts

**POWER TRAIN**

Transmission: Allison CD-850-4A or CD-850-4B  
2 ranges forward, 1 reverse  
Single stage, multiphase, hydraulic torque converter  
Stall Multiplication: 4.3:1  
Overall Useable Ratios: low 13.0:1       reverse 17.8:1  
  high 4.5:1

Steering: Mechanical, wobble stick

Brakes: Mechanical, oil cooled

Final Drive: LVTH6, Planetary gear  
  LVTH6A1, Spur gear

Drive Sprockets: At rear of vehicle with 17 teeth  
Pitch Diameter: approx. 26.5 inches

**RUNNING GEAR**

Suspension: Torsilastic  
18 pairs of dual road wheels (9 pairs/track)  
Tire Size: 19.4 x 6 inches  
10 dual track return rollers (5/track)  
Dual compensating idler at front of each track  
Idler Size: 22 x 2.5 inches  
Tracks: Center guide (inverted grouser)  
Type: Single pin, 20.75 inch width, steel  
Pitch: 5 inches  
Shoes per Vehicle: 268 (134/track)  
Ground Contact Length: 229.25 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC  
Main Generator: (1) 24 volts, 300 amperes, driven by main engine  
Auxiliary Generator: (1) 28.5 volts, 175.5 amperes, driven by auxiliary engine  
Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

**COMMUNICATIONS**

Radio: AN/GRC-5  
Interphone: AN/VIA-1, 5 stations

**FIRE PROTECTION**

- (3) 5 pound carbon dioxide, fixed
- (1) 5 pound carbon dioxide, portable

**PERFORMANCE**

Maximum Speed: Level road	30 miles/hour
Water	6.8 miles/hour
Maximum Grade:	60 per cent
Maximum Trench:	12 feet
Maximum Vertical Wall:	36 inches
Maximum Fording Depth:	floats
Minimum Turning Circle: (diameter)	pivot
Cruising Range: Roads	approx. 190 miles
Water	approx. 57 miles

## LANDING VEHICLE TRACKED PERSONNEL LVTP7

### GENERAL DATA

Crew: 3 men  
 Passengers: 25 men  
 Length: 312.75 inches  
 Width: 128.72 inches  
 Height: 128.5 inches  
 Tread: 123.8 inches  
 Ground Clearance: 16 inches  
 Weight, Combat Loaded: 50350 pounds  
 Weight, Unstowed: 38451 pounds  
 Power to Weight Ratio: 15.9 hp/ton  
 Ground Pressure: Zero penetration 7.7 psi

### ARMOR

Type: 5083 aluminum alloy armor,  
 Welded assembly

### ARMAMENT

(1) .50 caliber MG M85 in armament station  
 Traverse: electrohydraulic and manual 360 degrees  
 Traverse Rate: (max) 6 seconds/360 degrees  
 Elevation: electrohydraulic and manual +60 to -15 degrees  
 Elevation Rate: (max) 60 degrees/second

### AMMUNITION

400 rounds .50 caliber

### FIRE CONTROL AND VISION EQUIPMENT

Armament Station: 8x optical sight and ring sight

Vision devices:	Direct	Indirect
Driver	Hatch and 7 vision blocks	Periscope M24 (infrared) (1)
Commander	Hatch and 7 vision blocks	Periscope M27 (1)
Gunner	Hatch and 9 vision blocks	None
Rear Ramp	1 vision block	None

### ENGINE

Make and Model: General Motors 8V53T  
 Type: 8 cylinder, 2 cycle, vee, turbosupercharged  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 424 cubic inches  
 Bore and Stroke: 3.875 x 4.5 inches  
 Compression Ratio: 17.0:1  
 Gross Horsepower: (max) 400 hp at 2800 rpm  
 Gross Torque: (max) 825 ft-lbs at 2150 rpm  
 Weight: 2300 pounds, dry  
 Fuel: diesel oil MIL-VV-F-800 180 gallons  
 Engine Oil: 22 quarts

### POWER TRAIN

Transmission: FMC HS-400-3  
 Manually selected, full power shifting  
 4 speeds forward, 2 reverse  
 Steering: Hydrostatic  
 Brakes: Mechanical  
 Final Drive: Spur gear Gear Ratio: 3.06:1  
 Drive Sprockets: At front of vehicle with 11 teeth  
 Pitch Diameter: 21 inches

### Water Propulsion:

Primary: Waterjets  
 Secondary: Tracks

### RUNNING GEAR

Suspension: Flat track, torsion tube over bar  
 12 dual road wheels (6/track)  
 Tire Size: 26 x 4 inches  
 Dual adjustable idler at rear of each track  
 Idler Size: 20 x 3.25 inches  
 Shock absorbers on first and last road wheels on each side  
 Tracks: Center guide  
 Type: Single pin, 21 inch width, steel w/detachable rubber pad  
 Pitch: 6 inches  
 Shoes per Vehicle: 168 (84/track)  
 New Vehicle, 170 (85/track)  
 Ground Contact Length: 155 inches

### ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC  
 Main Generator: (1) 24 volts, 180 amperes, driven by main engine  
 Auxiliary Generator: None  
 Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

### COMMUNICATIONS

Radio: AN/VRC-44, AN/VRC-46  
 Interphone: C-2298/VRC, 5 stations

### FIRE PROTECTION

(1) 17 pound Halon, fixed  
 (1) 2.75 pound Halon, portable

### PERFORMANCE

Maximum Speed: Level road	40 miles/hour
Water	8.4 miles/hour
Maximum Grade:	60 per cent
Maximum Trench:	8 feet
Maximum Vertical Wall:	36 inches
Maximum Fording Depth:	floats
Minimum Turning Circle: (diameter)	pivot
Cruising Range: Roads	approx. 300 miles
Water endurance	7 hours

**ASSAULT AMPHIBIAN VEHICLE PERSONNEL AAVP7A1 (LVTP7A1)**

**GENERAL DATA**

Crew: 3 men  
 Passengers: 25 men  
 Length: 321.3 inches  
 Width: 128.7 inches  
 Height: 130.5 inches  
 Tread: 123.8 inches  
 Ground Clearance: 16 inches  
 Weight, Combat Loaded: w/o applique armor 56,552 pounds  
 Weight, Unstowed: 42,108 pounds  
 Power to Weight ratio: 14.1 hp/ton  
 Ground Pressure: Zero penetration 8.7 psi

**ARMOR**

Type: 5083 aluminum alloy armor,  
 Welded assembly  
 Steel applique armor can be installed on sides of the vehicle.

**ARMAMENT**

- (1) .50 caliber MG HB M2 in weapon station
- (1) 40mm automatic grenade launcher Mk 19 in weapon station
  - Traverse: Electric and manual 360 degrees
  - Traverse Rate: (max)
  - Elevation: Electric and manual +60 to -15 degrees
  - Elevation Rate: (max)
- (2) 4 tube smoke grenade launchers on rear of weapon station

**AMMUNITION**

- 250 rounds .50 caliber, ready
- 48 rounds 40mm, ready

**FIRE CONTROL AND VISION EQUIPMENT**

Weapon Station: Periscope sight

Vision Devices	Direct	Indirect
Driver	Hatch and 7 vision blocks	Night vision viewer AN/VVS-2(V)1A
Commander	Hatch and 7 vision blocks	Periscope M27 (1)
Gunner	Hatch and vision blocks	Periscope sight
Rear ramp	1 vision block	None

**ENGINE**

Make and Model: Cummins VT400  
 Type: 8 cylinder, 4 cycle, vee, turbosupercharged  
 Cooling System: Liquid Ignition: Compression  
 Displacement: 903 cubic inches  
 Bore and Stroke: 5.5 x 4.75 inches  
 Compression Ratio: 15.5:1  
 Gross Horsepower: (max) 400 hp at 2800 rpm  
 Gross torque: (max) 825 ft-lbs at 2050 rpm  
 Weight: 2450 pounds, dry  
 Fuel: diesel oil MIL-VV-F-800 171 gallons  
 Engine Oil: 26 quarts

**POWER TRAIN**

Transmission: FMC HS-400-3A1  
 Manually selected, full power shifting  
 4 speeds forward, 2 reverse

Steering: Hydrostatic

Brakes: Mechanical

Final Drive: Spur gear Gear Ratio: 3.06:1

Drive Sprockets: At front of vehicle with 11 teeth

Pitch Diameter: 21 inches

Water Propulsion:

Primary: Waterjets, 14,000 gallons/minute

Secondary: Tracks

**RUNNING GEAR**

Suspension: Flat track, torsion tube over bar

12 dual road wheels (6/track)

Tire Size: 26 x 4 inches

Dual adjustable idler at rear of each track

Idler Size: 20 x 3.25 inches

Shock absorbers on first and last road wheels on each side

Tracks: Center guide

Type: Single pin, 21 inch width, steel w/detachable rubber pads

Pitch: 6 inches

Shoes per vehicle: 168 (84/track)

New vehicle, 170 (85/track)

Ground Contact Length: 155 inches

**ELECTRICAL SYSTEM**

Nominal Voltage: 24 volts DC

Main Generator: (1) 24 volts, 300 amperes, driven by main engine

Auxiliary Generator: None

Battery: (4) 12 volts, 2 sets of 2 in series connected in parallel

**COMMUNICATIONS**

Radio: AN/VRC-44, AN/VRC-46

Interphone: CC2298/VRC, 5 stations

**FIRE PROTECTION**

(2) 7 pound Halon, fixed

(1) 17 pound Halon, fixed

(1) 2.75 pound Halon, portable

**PERFORMANCE**

Maximum Speed: Level road 45 miles/hour

Water 8.2 miles/hour

Maximum Grade: 60 per cent

Maximum Trench: 8 feet

Maximum Vertical Wall: 36 inches

Maximum Fording Depth: floats

Minimum Turning Circle: (diameter) pivot

Cruising Range: Roads approx. 300 miles

Water endurance 7 hours