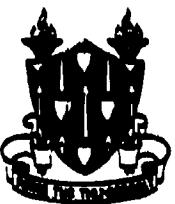


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# VEHICLE CHARACTERISTICS



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THE ARMORED SCHOOL

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# VEHICLE CHARACTERISTICS

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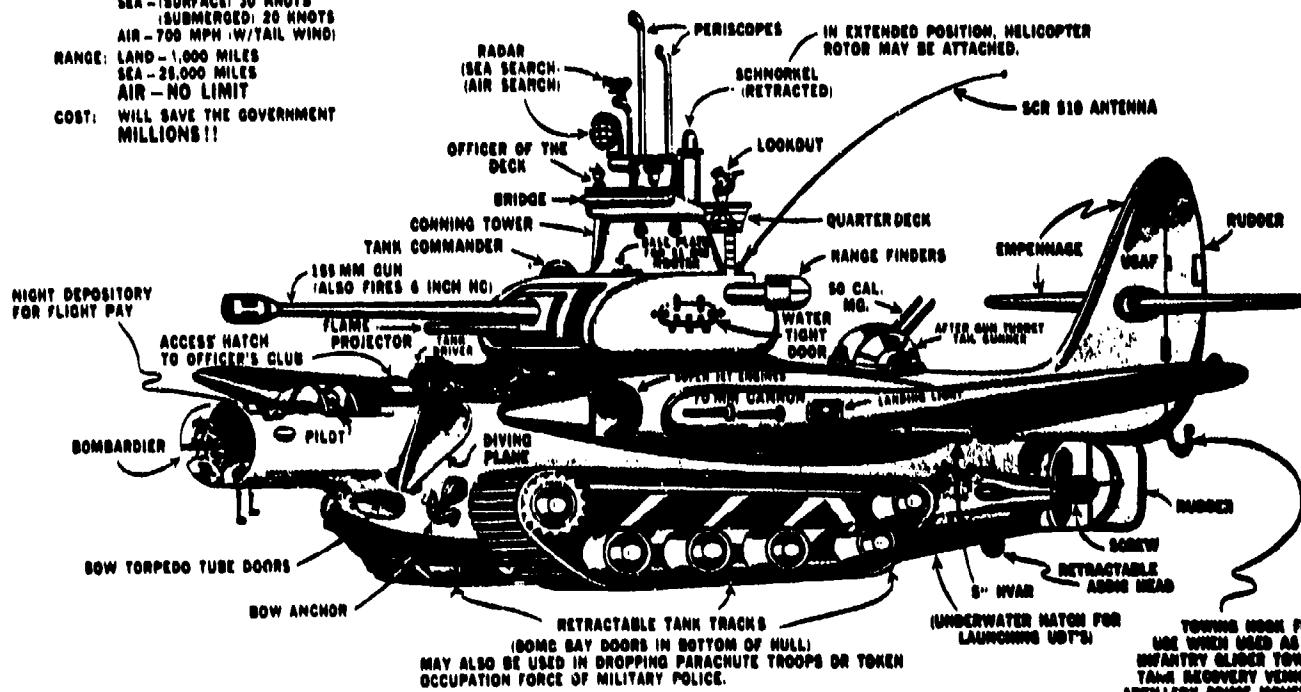
**SPEAKING OF  
CHARACTERISTICS...**



# Dream Weapon



**SPEED:** LAND - 50 MPH  
SEA - (SURFACE) 30 KNOTS  
(SUBMERGED) 20 KNOTS  
AIR - 700 MPH (W/TAIL WIND)  
**RANGE:** LAND - 1,000 MILES  
SEA - 28,000 MILES  
AIR - NO LIMIT  
**COST:** WILL SAVE THE GOVERNMENT MILLIONS!!



(BOMB BAY DOORS IN BOTTOM OF HULL)  
MAY ALSO BE USED IN DROPPING PARACHUTE TROOPS OR TAKEN  
OCCUPATION FORCE OF MILITARY POLICE.

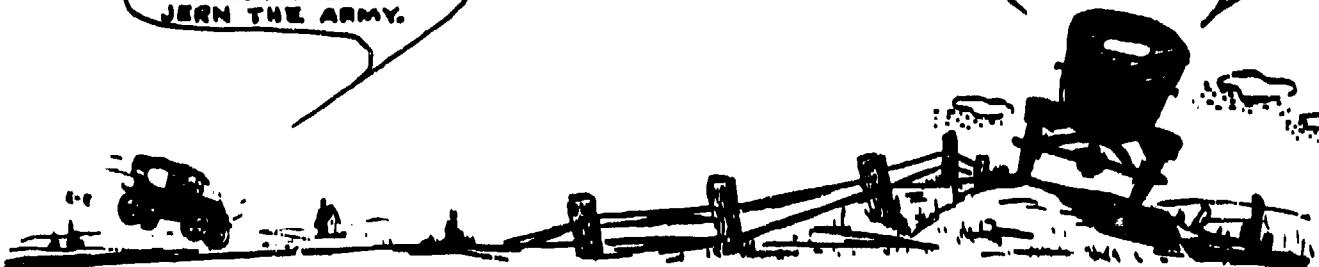
**NOTE:**  
DOZER BLADE AND HEAD DIGGER  
MAY BE ATTACHED, THUS RENDERING  
ENGINEERS UNNECESSARY.

**NOTE:** HOOK MAY BE ROTATED FOR USE AS CARRIER  
ARRESTING HOOK; USE NOT ANTICIPATED AT THIS TIME.  
**NOTE:** DEVELOPMENT OF THIS WEAPON IS NOT TO BE CONSTRUED  
AS INTENTION TO ABOLISH THE COAST GUARD.

DERN THOUGHTY  
OF OUR BOY, GETTIN'  
IN THAT DREAM  
WEAPON OUTFIT.

I'M SO PROUD OF  
OUR SUN, PAW,  
SINCE HE'S A  
DREAM WEAPON  
COMMANDER.

HURRY, PAW! IF'N WE  
DON'T KETCH'EM HE'LL  
JERN THE ARMY.



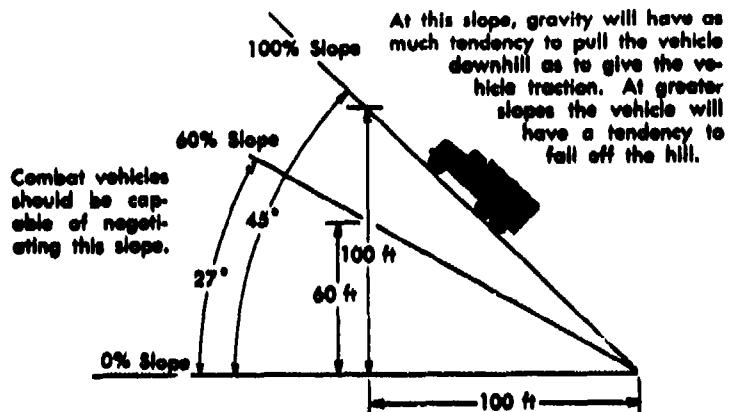


Figure 1. Gradiability scale.

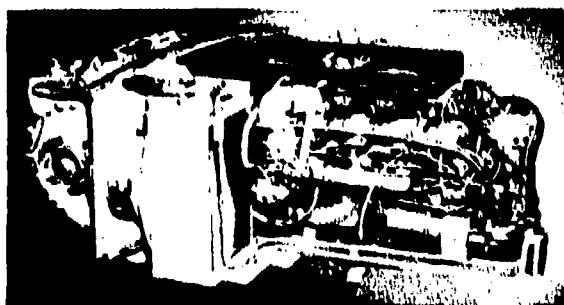


Figure 2. Typical power package utilizing the new family-type engine.

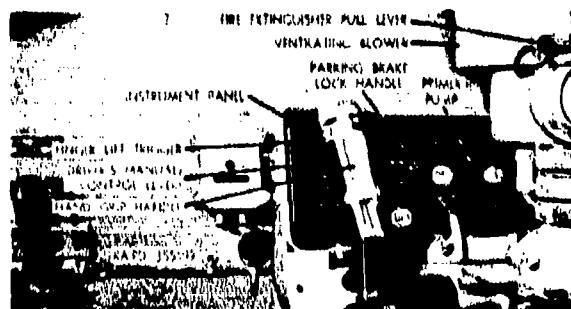


Figure 4. Wobble-stick control for full-track vehicles using cross-drive transmission.

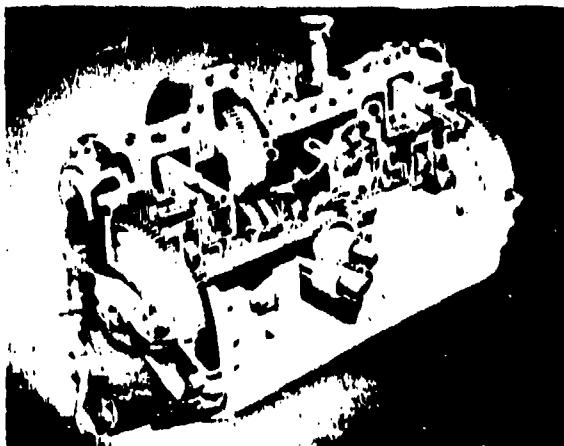


Figure 3. Cross-drive transmission.



Figure 5. Planetary converter.

# VEHICLE CHARACTERISTICS

This text supersedes unnumbered pamphlet, The Armored School, entitled, *Vehicle Characteristics and Installations*

## INTRODUCTION

1. SCOPE. This text is a compilation of characteristics and data of combat vehicles organic to units of the various ground combat arms. It is intended to familiarize students attending The Armored School with the combat vehicles included in their course or instruction and which are or may soon be organic to their parent organizations. The pictorial review, including silhouettes, will enable you to more easily recognize the vehicles when you see them. As a student you must realize that this text is furnished to you as a unit of instruction, or it may be preliminary to a unit of instruction. In either case it is your duty to study each and every vehicle included. *Do not attempt to remember all data, but do study each vehicle nomenclature, picture, and silhouette relating them so as to be able to intelligently discuss them in class.* The data presented may be used as a basis for tactical problems included in various courses at The Armored School.

## 2. TERMS AND SYMBOLS.

### a. Model Numbers.

(1) "M" numbers. Vehicles assigned model numbers with the prefix "M" are or have been standard and are filling a requirement as organic equipment.

(2) "T" numbers. Vehicles assigned model numbers with the prefix "T" are new vehicles in development stages. These vehicles are usually intended to replace some existing standard vehicle. In such a case the classification portion of the vehicle data sheet will explain the development status and which vehicle it will replace.

b. Unknown or doubtful information. In some cases a description or specification item will be marked "unknown." At the time this text was compiled, this information was either not available or was classified too high to be included. Specifications marked "estimated" are not verified but were either computed from existing information or estimated from comparison with like vehicles.

c. Maximum computed gradability. This is the steepest slope, measured in per cent, which

a vehicle can negotiate. Per cent of slope is defined as the ratio between the vertical rise and the horizontal distance traveled. In other words, a 100 per cent grade is the grade angle at which the force of gravity has as much tendency to drag the vehicle back down the grade as it does to hold the vehicle against the ground and provide traction (fig 1).

d. Turning radius. Radius of minimum circle within which vehicle can negotiate a complete turn.

e. Cruising range. Average distance vehicle will travel on one full tank of fuel at rated consumption. Warning: Do not depend on these figures as being accurate on every vehicle under all conditions. Fuel mileages are inconsistent due to terrain, vehicle, driver, and weather difference. Give yourself a liberal margin on these figures.

f. Classification. Normally vehicles are classified from the standpoint of suitability for use. The ratings are: standard, substitute standard, limited standard, and obsolete. Due to the rapid change-over of vehicle models, no attempt is made to classify the vehicle in this text other than to give the general classification, which includes such information as whether or not the vehicle is being used, if it is to be replaced soon, and if it is to be replaced what vehicle will replace it. This will give the student a general idea of current distribution of vehicles and what to expect in the future.

3. VEHICLE DEVELOPMENT TRENDS. In order to offset the rapid changes in tables of equipment and to prolong the useful life of this text, vehicles which are now under development and likely to be made standard in the very near future are included in this text. Their status will be clarified under Classification on each characteristics sheet.

NOTE: The statements made under "Classification" are based on tables of equipment, field requirements, and trends. They are not based on official plans. Classification and specifications of experimental vehicles are subject to change frequently.

These "T"-model vehicles will be studied and discussed in class for comparison purposes only. Do not count on using all of these vehicles because very often "T"-model vehicles never make the "M" grade. Before we look into the "T" vehicles let us consider the present development trends in combat vehicles.

a. *Power plant.* An out-and-out program is being launched to standardize all engines in future Army vehicles. These engines are called the Army family of engines, consisting of three major cylinder barrel sizes using various numbers of cylinders and arrangements. These engines are of the air-cooled type utilizing individual cylinders (barrels) with the valves overhead. This means only three sizes of valves, cylinders, pistons, pins, rings, etc., must be stocked for replacement parts to supply all sizes of vehicles. The space limitations of engine compartments in vehicles and the need for more powerful engines is provided by this new family of engines; they will be supplied in horizontally and vertically opposed and "V" types in various sizes capable of filling most any requirement. These engines are equipped with quick release fuel, oil, and electrical connections allowing quick removal of entire power packages (fig 2). Another interesting feature is that hot oil is provided by the engine for heating crew compartments with core-type heaters.

b. *Power train.* All power trains will utilize some type of torque converter which will eliminate the need for a clutch and reduce the number of gear changes in the transmission. Transmissions will utilize planetary gears with servo shifting or engaging mechanisms controlled either automatically or manually through remote controls.

(1) Full-track vehicles will utilize a family of combination transmission, differential, and steering mechanisms called "cross-drive" transmissions; they will be supplied in four sizes to

meet various requirements (fig 3). These cross-drive transmissions are controlled by a remote control called the "wobble stick." This wobble stick provides two speeds forward, a neutral, a neutral steer, and a reverse by moving the lever forward or back. To steer the vehicle to the right the lever must be moved to the right. To steer the vehicle to the left, move the lever to the left. The vehicle will pivot to infinity by placing the lever in neutral steer position and then moving it in the direction you desire to turn (fig 4).

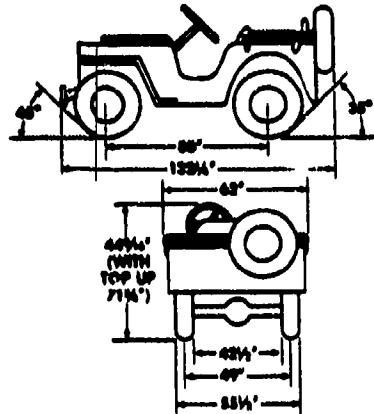
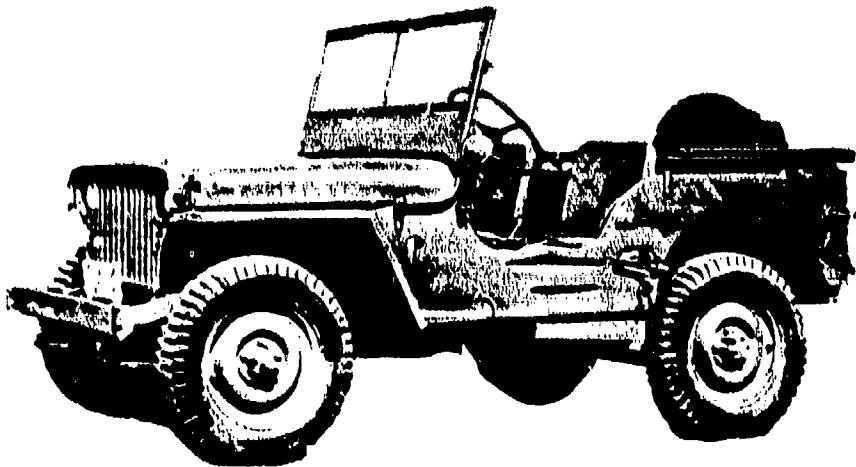
(2) Wheeled vehicles will utilize a series of five transmissions and transfer case combinations called "planetary converters." The five sizes make sufficient combinations to provide for all wheeled vehicles (fig 5).

c. *Accessories.* Generators, starters, batteries, and instruments will all be standard 24-volt and will be waterproofed. Magneto's will be standardized and waterproofed. A similar standardization and interchangeability program is also in effect on other units to reduce replacement part stocks and simplify repairs.

d. *Ease of maintenance.* In general, the new vehicles will be easier to maintain. It is true that some of the parts are not as yet readily accessible, but accessibility (in general) is greatly improved over old-type vehicles. An example is the T44 cargo tractor, in which the power package rolls out on rails for accessibility. The engine may be started and tested while pulled out of the compartment. The mechanic may stand on the floor and reach most any part of the power package.

4. CLASSIFIED MATTER. You are reminded of Army Regulation 385-5, *Safeguarding Military Information*. Information contained in this text will not be made available to the general public. It will be entrusted only to those individuals whose official duties require such knowledge or possession.

# TRUCK, 1/4-TON, 4x4, COMMAND RECONNAISSANCE



## GENERAL DATA

**Purpose:** To carry personnel, primarily for reconnaissance; to transport light cargo; to tow trailer or light field piece.  
**Classification:** At printing date, this vehicle is standard in all organizations requiring such a vehicle. However, improvements are in order and have been applied to the projected model, the Truck, Utility, M38, which will eventually replace the 1/4-ton truck.

**Manufacturer:** Willys or Ford. Willys Overland Company held the primary contract; Ford Motor Company manufactured the vehicle under a subcontract to Willys. Both vehicles are the same except for model numbers. The Willys Model number is MB. The Ford model number is GPW.

**Technical manual:** 9-800, 9-1803A, 9-1806B.

**Lubrication order:** DA LO 9-800.

**Paris list:** ORD 7 SNL G50G, ORD 8 SNL G50S, ORD 9 SNL G500.

Price of vehicle*	\$1051
Crew (number of personnel)	3
Weight, combat loaded	8888-0974 lb
Length, over-all	11 ft
Width, over-all	5.14 ft
Height, over-all	5.81 ft
Shipping dimensions	.031 cu ft; 57 sq ft
Wheelbase	80 in
Tread (center to center of wheels):	
Front	49 in
Rear	49 in
Approach angle	45 deg
Departure angle	35 deg
Ground clearance	8.75 in
Electrical system	6-volt

## PERFORMANCE

Gross horsepower to weight ratio	0.9 hp per ton
Cruising range	300 mi
Fuel consumption	30 mpg
Maximum allowable speed	65 mph
Maximum gradability	60 per cent

\* Price based on vehicle with equipment.

Turning radius (right or left)	17.5 ft
Fording depth	31 in
Pay load	800 lb
Towed load	1000 lb

## ENGINE

Make (manufacturer)	Willys or Ford
Model number	Willys 412
Brake horsepower	54
Torque	105 ft lb @ 2000 rpm
Rated speed (not governed)	4000 rpm
Construction and design	In-line, L-head
Number of cylinders	4
Displacement, total	184.3 cu in
Compression ratio	6.48:1
Cooling system	Liquid
Ignition	Battery, distributor

## CHASSIS AND POWER TRAIN

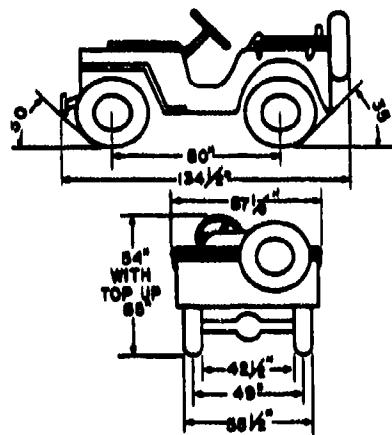
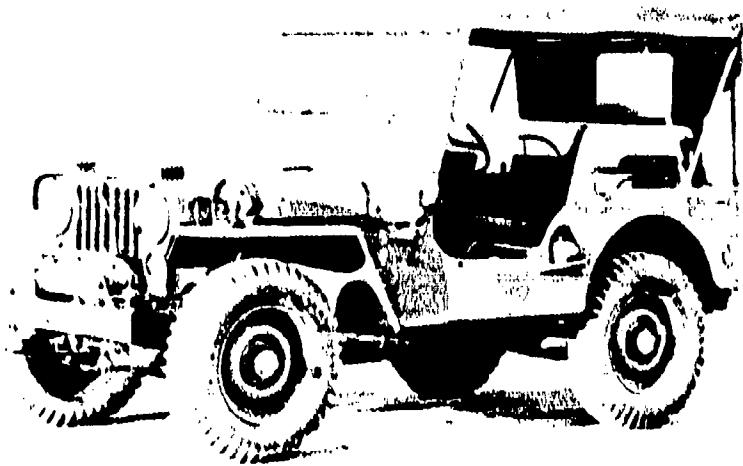
Clutch	Single disc
Transmission	Synchromesh
Control	Direct, hand lever
Speeds forward	3
Speeds reverse	1
Transfer case	Selective sliding gear
Control	Direct, hand lever
Speeds	2
Differential	Conventional (hypoid)
Steering control	Steering wheel
Brakes:	
Operating principle	Hydraulic
Control	Foot
Drive	All wheel (Hotchkiss)
Number of wheels	4 (single)
Suspension	Four semielliptic springs

## FUEL

Total	15 gal
Cooling system	11 qt
Crankcase, with filter	8 qt
Engine air cleaner (each)	75 qt
Transmission	75 qt
Differential	1.25 qt
Transfer case	1.25 qt

## ADDITIONAL DATA

# TRUCK, 1/4-TON, 4x4, UTILITY, M38



## GENERAL DATA

**NOTE:** These specifications are tentative and subject to change.  
**Purpose:** To carry personnel, primarily for reconnaissance; to transport light cargo; to tow trailer or light field piece.  
**Classification:** This is the future standard 1/4-ton truck. It is now under accelerated tests. In event of an emergency this vehicle would probably be put into production. It would replace the 1/4-ton shown on page 3.

**Manufacturer:** Willys.

**Technical manuals:** 9-804, 9-1804A, 9-1804B.

**Lubrication order:** DA LO 9-804.

**Parts list:** ORD 7 SNL G740, ORD 8 SNL G740, ORD 9 SNL G740.

**Price of vehicle** ..... \$2689

Crew (number of personnel) ..... 3

Weight, combat loaded ..... 3460 lb

Length, over-all ..... 11.19 ft

Width, over-all ..... 4.76 ft

Height, over-all ..... 5.41 ft

Shipping dimensions (estimated) ..... 8.01 cu ft; 87 sq ft

Wheelbase ..... 50 in

Tread (center to center of wheels):

Front ..... 49 in

Rear ..... 49 in

Approach angle ..... 30 deg

Departure angle ..... 35 deg

Ground clearance ..... 8.6 in

Electrical system ..... 24-volt

## PERFORMANCE

Gross horsepower to weight ratio ..... 04.8 hp per ton

Cruising range (estimated) ..... 180 mi

Fuel consumption (estimated) ..... 30 mpg

Maximum all-wheel speed ..... 60 mph

Maximum gradability ..... 60 per cent

Turning radius ..... 90 ft

Fording depth (estimated) ..... 31 in

Pay load ..... 800 lb

\*Price without winch and with equipment.

Towed load (estimated) ..... 1000 lb  
 Winch load (estimated) ..... 500 lb

## ENGINE

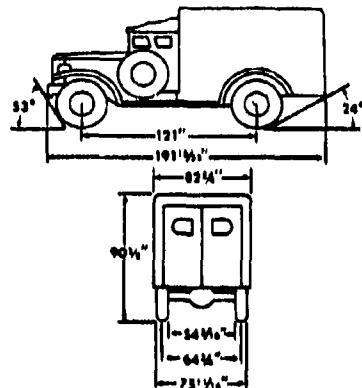
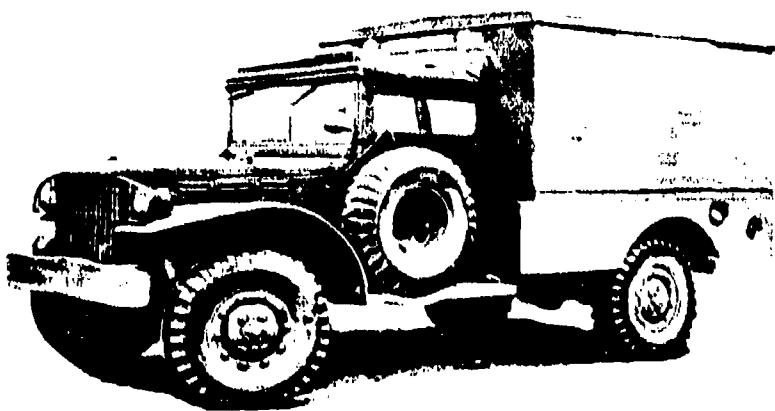
Make (manufacturer)	Willys
Model number	MC
Brake horsepower	60
Torque	108 ft lb @ 3000 rpm
Rated speed	4000 rpm
Construction and design	In-line, L-head
Number of cylinders	4
Displacement, total	104.8 cu in
Compression ratio	8.5:1
Cooling system	Liquid
Ignition	Battery, distributor

## CHASSIS AND POWER TRAIN

Clutch	Single disc
Transmission	Synchronous
Control	Direct, hand lever
Speeds forward	3
Speeds reverse	1
Transfer case	Selective sliding gear
Control	Direct, hand lever
Speeds	3
Differential	Conventional (hypoid)
Steering control	Steering wheel
Brakes:	
Operating principle	Hydraulic
Control	Foot
Drive	All-wheel (Motchkas)
Number of wheels	4 (single)
Suspension	Four semielliptic springs
Fuel:	CAPACITIES
Total	10 gal
Cooling system	11 qt
Crankcase	3 qt
Engine air cleaner (each)	.683 qt
Transmission	.75 qt
Differential	1.25 qt
Transfer case	1.25 qt
Winch gear case (estimated)	.5 qt

## ADDITIONAL DATA

# TRUCK, 3/4-TON, 4x4, AMBULANCE, KD



## GENERAL DATA

Purpose: To transport sick and wounded personnel in the field and on the highway.

Classification: This is the current standard field ambulance. It supersedes Ambulance, WC 54. A new Ambulance, M40, is being developed to replace the one shown here.

Manufacturer: Chrysler Corporation, Dodge Division.

Technical manual: G-808, G-1808A, G-1808B, G-1809A.

Lubrication order: DA LO 9-808.

Parts list: ORD 7 SNL G-502, ORD 8 SNL G-502, ORD 9 SNL G-502.

Price of vehicle *	\$1671
Crew (number of personnel)	9
Weight, combat loaded	8080 lb
Length, over-all	15.9 ft
Width, over-all	6.6 ft
Height, over-all	7.5 ft
Shipping dimensions	888.3 cu ft 110 sq ft
Tread (center to center of wheels)	64.75 in
Ground clearance	10.5 in
Electrical system	.6-volts

## PERFORMANCE

Gross horsepower to weight ratio	21.5 hp per ton
Cruising range (loaded)	240 mi
Fuel consumption	.8 mpg
Maximum allowable speed	54 mph
Maximum gradability	35.0 per cent
Turning radius	16 1/4 ft
Fording depth	34 in
Angle of approach	33 deg
Angle of departure	24 deg
Pay load	1800 lb
Towed load	1000 lb
Winch load	5000 lb

\*Price based on basic vehicle less equipment.

## ENGINE

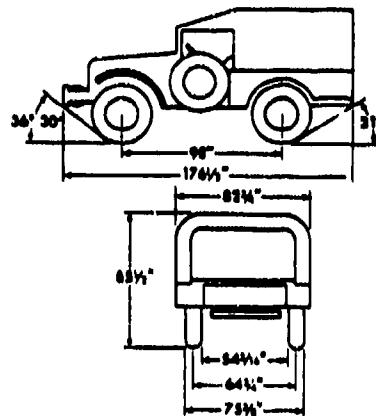
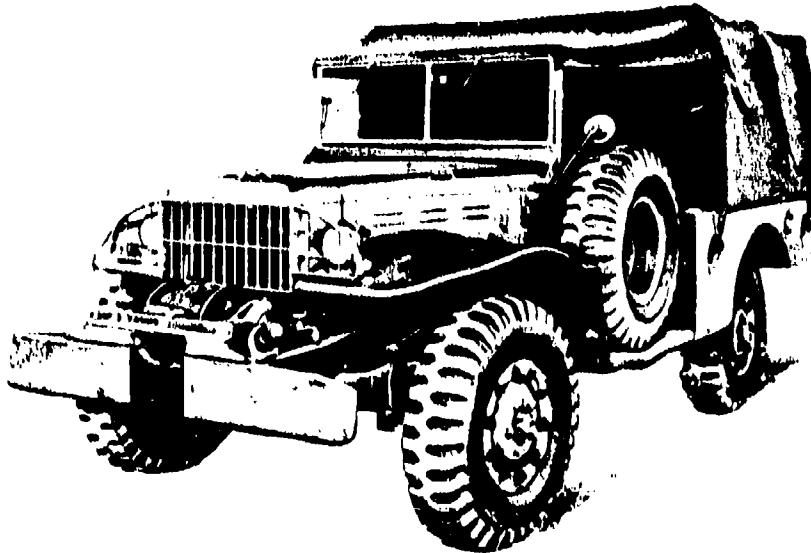
Make (manufacturer)	Dodge
Model number	T214
Brake horsepower	93 hp
Torque	180 ft lb @ 1200 rpm
Maximum governed speed	3800 rpm
Construction and design	In-line, L-head
Number of cylinders	6
Displacement, total	300.8 cu in
Compression ratio	6.7:1
Cooling system	Liquid
Ignition	Battery, distributor

## CHASSIS AND POWER TRAIN

Clutch	Single dry disc
Transmission	Selective sliding
Control	Direct hand lever
Speeds forward	4
Speeds reverse	1
Transfer case	Constant mesh
Control	Hand lever for front wheels
Speeds	1
Differential	Conventional
Steering control	Steering wheel
Brakes	Hydraulic
Operating principle	Foot-pedal
Control	All-wheel
Drive	
Fuel:	
Total	.90 gal
Cooling system	.17 qt
Crankcase	.5 qt
Engine air cleaner	.1 qt
Transmission	.2 1/2 qt
Differential	.6 qt
Transfer case	.15 qt
Winch gear case	.1 qt

## ADDITIONAL DATA

# TRUCK, $\frac{3}{4}$ -TON, 4x4, WEAPONS CARRIER AND COMMAND WEAPONS CARRIER



## GENERAL DATA

**Purpose:** To transport weapons, tools, equipment, and personnel; also used for command and reconnaissance.

**Classification:** At printing date, these vehicles are standard; however, improvements are in order and will be incorporated in the following projected models: Truck,  $\frac{3}{4}$ -Ton, 4x4, Cargo, M37, which will eventually replace the weapons carrier; and truck,  $\frac{3}{4}$ -Ton, 4x4, Utility, M42, which will replace the command weapons carrier.

**Manufacturer:** Dodge Division, Chrysler Corporation.

**Technical manuals:** G-808, G-1808A, G-1808B, G-1829A.

**Lubrication order:** DA LO 9-808.

**Parts lists:** ORD 7 SNL G308, ORD 8 SNL G308, ORD 9 SNL G308.

**Price of vehicle\*** \$1890

Crew (number of personnel) 2

Weight, combat loaded 7740 lb

Length, over-all 14.70 ft

Width, over-all 6.84 ft

Height, over-all 7.12 ft

Shipping dimensions 722.66 cu ft; 101.40 sq ft

Wheel base 98 in

Tread (center to center of wheels):

Front 64 1/4 in

Rear 64 1/4 in

Approach angle 37 deg

Departure angle 31 deg

Ground clearance 10.82 in

**Electrical system:**

Command weapons or tier 12-volt

Weapons carrier 6-volt

Communication system (command weapons carrier only) Radio

## PERFORMANCE

Gross horsepower to weight ratio 21.6 hp per ton

Cruising range 210 mi

Fuel consumption 8 mpg

Maximum allowable speed 55 mph

Maximum gradability 60 per cent

\* Price based on basic price of vehicle less equipment.

\*\* NOTE: Last production equipped with 7800-pound load capacity winch.

Turning radius	21.16 ft
Fording depth	34 in
Pay load	1800 lb
Towed load	1000 lb
Winch load**	5000 lb

## ENGINE

Make (manufacturer)	Dodge
Model number	T-214

Brake horsepower 98

Torque 180 ft lb @ 1200 rpm

Maximum governed speed 3200 rpm

Construction and design In-line L-head

Number of cylinders 6

Displacement, total 300.8 cu in

Compression ratio 6.7:1

Cooling system Liquid

Ignition Battery, distributor

## CHASSIS AND POWER TRAIN

Clutch Single disc

Transmission Selective sliding gear

Control Direct hand lever

Speeds forward 4

Speeds reverse 1

Transfer case Constant mesh

Control Direct hand lever

Speeds 1

Differential Conventional (hypoid)

Steering control Steering wheel

Brakes Operating principle Hydraulic

Control Foot

Drive All-wheel

Number of wheels 4 (single)

Suspension Four semielliptic springs

**Fuel:**

Total 80 gal

Crankcase 5 qt

Cooling system 17 qt

Engine air cleaner (each) 1 qt

Transmission 0.5 qt

Differential (front or rear) 0 qt

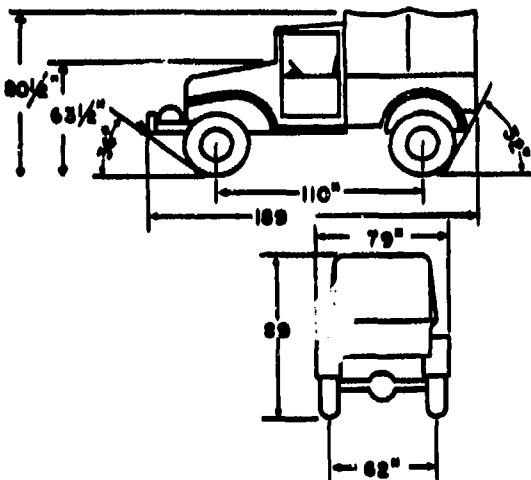
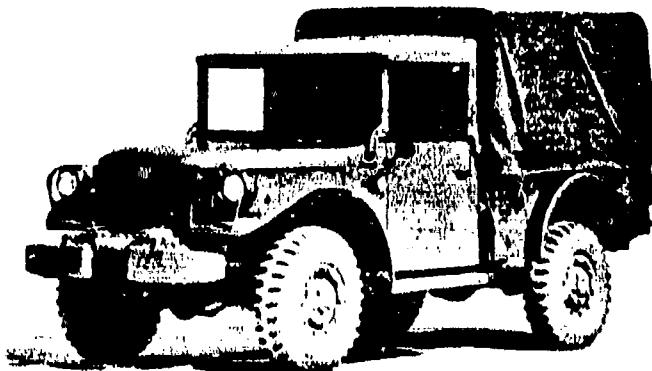
Transfer case 1.5 qt

Winch gear case 1 qt

## CAPACITIES

ADDITIONAL DATA

# TRUCK, 3/4-TON, 4x4, CARGO, M37



## GENERAL DATA

**NOTE:** These specifications are tentative and subject to change.  
**Purpose:** To transport weapons, tools, equipment, and personnel.  
**Classification:** This is the future 3/4-ton truck. It is being tested and in event of an emergency would probably be put into production. It would replace the weapons carrier shown on page 6.  
**Manufacturer:** Dodge Division, Chrysler Corporation.  
**Technical manuals:** 9-840, 9-1840A, 9-1840B.  
**Lubrication order:** DA LO 9-840.

**Parts list:** ORD 7 SNL G741, ORD 8 SNL G741, ORD 9 SNL G741.

Price of vehicle*	\$4400
Crew (number of personnel)	3
Weight, combat loaded	8350 lb
Length, over-all	15.81 ft
Width, over-all	6.98 ft
Height, over-all	7.41 ft
Shipping dimensions (estimated)	712 cu ft
	101 sq ft
Wheel base	115 in
Tread (center to center of wheels):	
Front	58 in
Rear	58 in
Approach angle	44 deg
Departure angle	38 deg
Ground clearance	10.75 in
Electrical system	12-volt

## PERFORMANCE

Gross horsepower to weight ratio	32.5 hp per ton
Cruising range (estimated)	340 mi
Fuel consumption (estimated)	8 mpg
Maximum allowable speed (estimated)	55 mph
Maximum gradability	60 per cent
Turning radius	15.25 ft
Fording depth (estimated)	.34 in
Pay load (estimated)	1800 lb
Towed load (estimated)	1000 lb
Winch load	7500 lb

\*Price with winch and equipment.

## ENGINE

Make (manufacturer)	Dodge
Model number	7245
Brake horsepower	94 hp
Torque	188 ft lb @ 1800 rpm
Maximum governed speed	6800 rpm
Construction and design	In-line, L-head
Number of cylinders	6
Displacement, total	330.3 cu in
Compression ratio	8.8:1
Cooling system	Liquid
Ignition	Battery, distributor

## CHASSIS AND POWER TRAIN

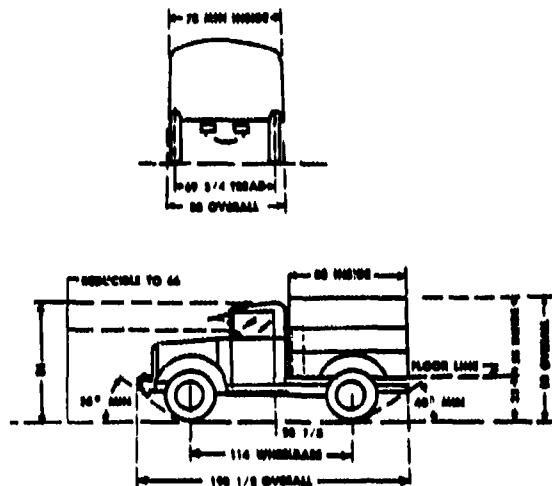
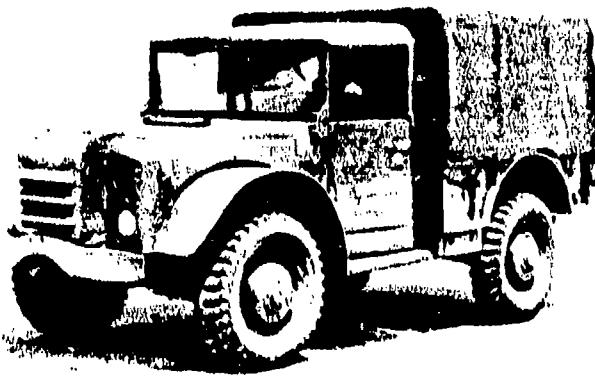
Clutch	Single disc
Transmission	Selective sliding gear
Control	Direct, hand lever
Speeds forward	4
Speeds reverse	1
Transfer case	Selective sliding gear
Control	Direct, hand lever
Speeds	2
Differential	Conventional (hypoid)
Steering control	Steering wheel
Brakes:	
Operating principle	Hydraulic
Control	Foot
Drive	All wheel (Hotchkiss)
Number of wheels	4 (single)
Suspension	Four semielliptic springs

## FUEL CAPACITIES

Fuel:	
Total	30 gal
Cooling system	.25 qt
Crankcase	.5 qt
Engine air cleaner (each)	1 qt
Transmission (estimated)	.5 qt
Differential (front or rear) (estimated)	.5 qt
Transfer case (estimated)	.5 qt
Winch gear case (estimated)	.1 qt

## ADDITIONAL DATA

# CARRIER, CROSS-COUNTRY, 3/4-TON, 4x4, T53



## GENERAL DATA

**NOTE:** These specifications are tentative and subject to change.  
**Purpose:** To provide a 3/4-ton cross-country carrier with a 1-1/4-ton highway capacity incorporating new design features providing improved performance and riding characteristics. It is in line with the standardization program utilizing the family line of air-cooled engine and hydraulic torque converter.

**Classification:** This vehicle is not standard. It is in the experimental stage. If issued it will probably replace the 3/4 ton Weapons Carrier or the proposed M37 3/4 ton cargo truck.

**Manufacturer:** Chrysler Corp.

**Technical manual:** Not assigned.

**Lubrication order:** Not assigned.

**Parts list:** Not assigned.

Price of Vehicle	Unknown
Crew (number of personnel)	8
Weight, combat loaded	8000 lb
Length, overall	15.8 ft
Width, overall	6.9 ft
Height, overall	7.4 ft
Shipping dimensions (estimated)	758 cu ft
Wheelbase	101 sq ft

Tread (center to center of wheel):	
Front	69.75 in
Rear	69.75 in
Approach angle	38 deg
Departure angle	40 deg
Ground clearance	14 in
Electrical system	34-volt

## PERFORMANCE

Gross horsepower to weight ratio	.85 hp per ton
Cruising range (estimated)	300 mi
Fuel consumption (estimated)	10 mpg
Maximum allowable speed	80 mph
Maximum gradability	.85 per cent
Turning radius	35 ft
Fording depth	42 in
Pay load	1800 lb
Towed load	4000 lb
Winch load	7500 lb

## ENGINE

Make (manufacturer)	Continental
Model number	AO-408-1
Brake horsepower	155
Torque	840 ft lb @ 1400 rpm
Maximum governed speed	5000 rpm
Construction and design	Opposed I-head
Number of cylinders	6
Displacement, total	103.2 cu in
Compression ratio	8.8:1
Cooling system	Air cooled
Ignition	Magneto

## CHASSIS AND POWER TRAIN

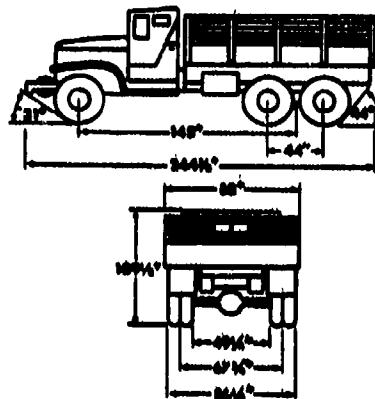
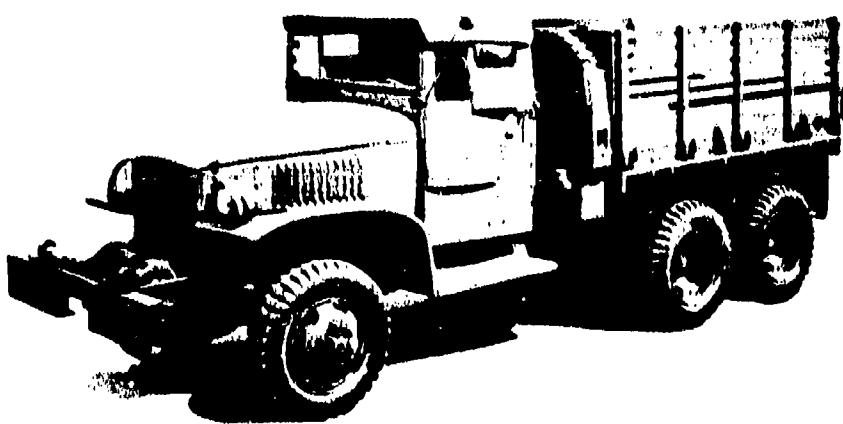
Clutch	None
Transmission	Torque converter
Control	Automatic
Speeds forward	9
Speeds reverse	1
Transfer case	Constant mesh
Control	None
Speeds	1
Differential	Automatic locking
Steering	Steering wheel
Brakes:	
Operating principle	Hydraulic (sealed)
Control	Foot
Drive	All-wheel
Number of wheels	4 (single)
Suspension	Independent torsion bar

## CAPACITIES

Fuel:	
Total	40 gal
Cooling system	None
Crankcase	14 qt
Engine air cleaner (estimated)	1 qt
Transmission	Unknown
Differential (each) (estimated)	3 qt
Transfer case	Unknown
Winch gear case (estimated)	1 qt

## ADDITIONAL DATA

# TRUCK, 2½-TON 6x6, CARGO, CCKW 352, SWB



## GENERAL DATA

**Purpose:** To transport personnel or cargo and to act as a light prime mover. It is also used for mounting special bodies such as the shop truck body, dump body, searchlight, decontaminator, and air compressor.

**Classification:** This vehicle is standard in all current tables of equipment. The Truck, 2½-Ton, Cargo, M34, will be manufactured as a replacement for this vehicle in the future.

**Manufacturer:** General Motor Truck and Coach Company.

**Technical manual:** 9-801, 9-1801, 9-1802-A, 9-1885-A, 9-1886-C, 9-1827-B, 9-1827-C, 9-1885-A.

**Lubrication order:** DALO 9-801.

**Parts list:** ORD 7, SNL G-508, ORD 8, SNL G-508, ORD 9, SNL G-508.

**Price of vehicle:** \$6817

**Crew (number of personnel):** 15

**Weight, combat loaded<sup>a</sup>:** 15,700 lb

**Length, over-all:** 20.4 ft

**Width, over-all:** 7.9 ft

**Height, over-all:** 5.08 ft

**Shipping dimensions (uncrated):** 997 cu ft

**Tread (center to center of wheels):** 141.1 sq ft

**Front:** 55.55 in

**Rear:** 87.75 in

**Ground clearance:** 9.75 in

**Electrical system:** 6-volt

## PERFORMANCE

**Gross horsepower to weight ratio:** 18.6 hp per ton

**Cruising range:** 500 mi

**Fuel consumption:** 7.8 mpg

**Maximum allowable speed:** 45 mph

**Maximum gradability:** 81 per cent

**Turning radius:** 34 ft

**Fording depth:** 30 in

**Pay load:** 5,550 lb

**Towed load:** 4,500 lb

**Winch load:** 10,000 lb

<sup>a</sup> Price based with winch and without equipment.

<sup>aa</sup> For winch, add 700 pounds to weight.

<sup>aaa</sup> Tread data based on equipment with banjo axles.

## ENGINE

Make (manufacturer)	GMC
Model number	570
Brake horsepower	31.8
Torque	110 ft-lb @ 1400 rpm
Maximum governed speed	3750 rpm
Construction and design	In-line, 1-head
Number of cylinders	6
Displacement, total	360.5 cu in
Compression ratio	8.75:1
Cooling system	Liquid
Ignition	Battery, distributor

## CHASSIS AND POWER TRAIN

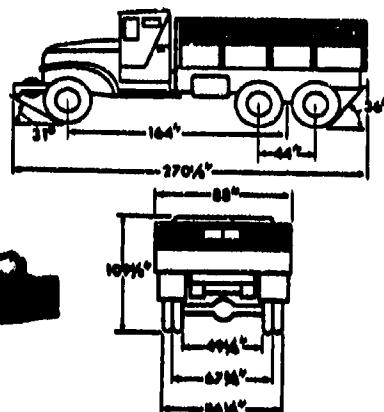
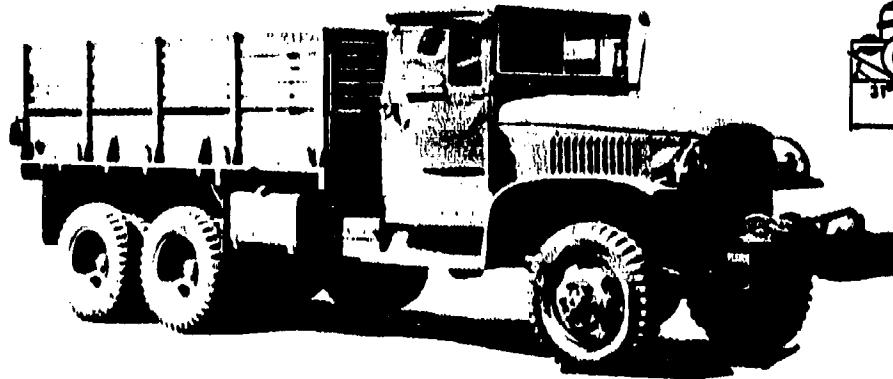
Clutch	Single disc
Transmission	Selective sliding, overdrive
Control	Direct, hand lever
Speeds forward	3
Speeds reverse	1
Transfer case	Selective sliding
Control	Direct, hand lever
Speeds	3
Differential	Conventional
Steering control	Steering wheel
Brakes:	
Operating principle	Hydraulic, booster
Control	Foot pedal
Drive	All-wheel
Number of wheels	8 (4 dual, 2 single)
Suspension:	
Front	Semielliptic springs
Rear	Logie, inverted semielliptic springs

## CAPACITIES

Fuel:	
Total	40 gal
Cooling system	19 qt
Crankcase:	
Old sump (shallow)	7.5 qt
New sump (deep)	10 qt
Engine air cleaner (each)	1.5 qt
Transmission	5.5 qt
Differential	3.5 qt
Transfer case	3.5 qt
Winch gear case	1.5 qt

## ADDITIONAL DATA

# TRUCK, 2½-TON 6x6, CARGO, CCKW 353, LWB



## GENERAL DATA

**Purpose:** To transport personnel or general cargo on the highway and cross-country. It is also used for mounting special bodies such as the shop truck, dump body, searchlight, decontaminator, and air compressor.

**Classification:** This vehicle is standard in all current tables of equipment. The Truck, 2½-Ton, 6x6, M34, will be manufactured and issued in place of this vehicle in the future.

**Manufacturer:** General Motors Truck and Coach Division (GMC). Technical manual: 9-801, 9-1801, 9-1802A, 9-1885A, 9-1886C, 9-1887B, 9-1887C, 9-1888A, 9-1889A.

**Lubrication order:** DA LO 9-801.

**Parts list:** ORD 7 SNL G-508, ORD 8 SNL G-508, ORD 9 SNL G-508.

**Price of vehicle\*** \$1847  
**Crew (number of personnel)** 3  
**Weight, combat loaded\*\*** 18,700 lb  
**Length, over-all** 22.5 ft  
**Width, over-all** 7.5 ft  
**Height, over-all** 9.08 ft  
**Shipping dimensions** 9.01 cu ft  
 168 in. sq. ft  
 164 in.

**Wheelbase** 164 in

**Tread, (center to center of wheels): \*\*\***  
 Front 60 in  
 Rear 67.5 in  
**Approach angle** 10° 01 deg  
**Departure angle** 10° 06 deg  
**Ground clearance** 9.87 in  
**Electrical system** 6-volt

## PERFORMANCE

**Gross horsepower to weight ratio** 12.6 hp per ton  
**Cruising range** 300 mi  
**Fuel consumption** 7.5 mpg  
**Maximum allowable speed** 45 mph  
**Maximum gradability** 65 per cent  
**Turning radius** 35 ft  
**Fording depth** 30 in  
**Pay load** 5030 lb

\* Price based on vehicle without equipment and with winch.

\*\* For winch add 700 pounds to weight.

\*\*\* Tread data based equipment with banjo axles.

<b>Towed load</b>	4500 lb
<b>Winch load</b>	10,000 lb

## ENGINE

<b>Make (manufacturer)</b>	GMC
<b>Model number</b>	670
<b>Brake horsepower</b>	91.5
<b>Torque</b>	218 ft lb @ 1400 rpm
<b>Maximum governed speed</b>	1750 rpm
<b>Construction and design</b>	In-line, 6-head
<b>Number of cylinders</b>	6
<b>Displacement, total</b>	365.8 cu in
<b>Compression ratio</b>	8.75: 1
<b>Cooling system</b>	Liquid
<b>Ignition</b>	Battery, distributor

## CHASSIS AND POWER TRAIN

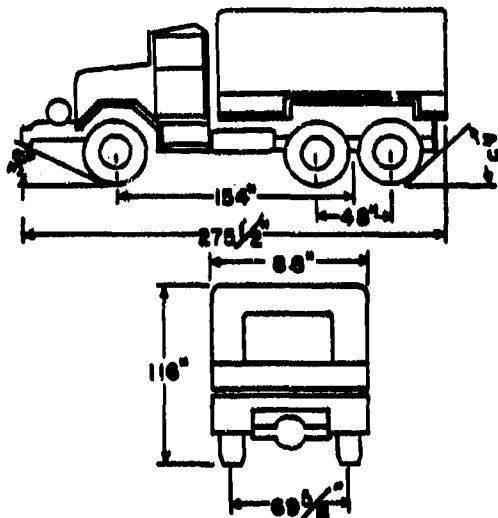
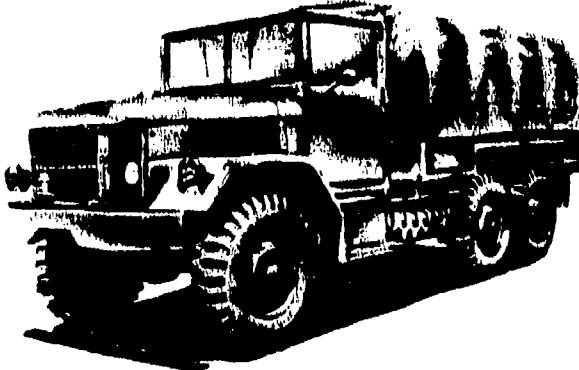
<b>Clutch</b>	Single disc
<b>Transmission</b>	Selective sliding, overdrive
Control	Direct, hand lever
Speeds forward	5
Speeds reverse	1
<b>Transfer case</b>	Selective sliding
Control	Direct, hand lever
Speeds	5
<b>Differentials</b>	Conventional
<b>Steering control</b>	Steering wheel
<b>Brakes:</b>	
Operating principle	Hydraulic, booster
Control	Foot pedal
<b>Drive</b>	All-wheel
<b>Number of wheels</b>	4 (4 dual, 1 single)
<b>Suspension:</b>	
Front	Semielliptic springs
Rear	Bogie, inverted semielliptic springs

<b>Fuel:</b>	
Total	40 gal
Cooling system	19 qt
<b>Crankcase:</b>	
Old sump	7.5 qt
New sump	10 qt
<b>Engine air cleaner</b>	1 qt
<b>Transmission</b>	5.5 qt
<b>Differential (each)</b>	6.5 qt
<b>Transfer case</b>	1.55 qt
<b>Winch gear case</b>	1.75 qt

## CAPACITIES

## ADDITIONAL DATA

# TRUCK, 2½-TON, 6x6, CARGO, M34



## GENERAL DATA

**NOTE:** These specifications are tentative and subject to change.  
**Purpose:** To transport personnel and general cargo on the highway and cross-country.

**Classification:** This vehicle is scheduled to replace the Truck, 2½-Ton, GMC. In case of emergency it would probably be produced in quantity as was the GMC model during World War II.

**Manufacturer:** Reo Motor Company.

**Technical manuals:** 9-819, 9-1819A, 9-1819B.

**Lubrication order:** DA LO 9-819.

**Parts kit:** ORD 7 SNL G748, ORD 8 SNL G748, ORD 9 SNL G748.

**Price of vehicle:** \$8,675.

**Crew (number of personnel):** 1.

**Weight, combat loaded:** 17,500 lb.

**Length, over-all (with winch):** 22.75 ft.

**Width, over-all:** 7.65 ft.

**Height, over-all:** 8.65 ft.

**Shipping dimensions:** 960 cu ft; 160 cu ft.

**Wheelbase:** 104 in.

**Tread (center to center of wheels):**

Front 99.65 in.

Rear 99.65 in.

**Approach angle:** 35 deg.

**Departure angle (estimated):** 35 deg.

**Ground clearance:** 14 in.

**Electrical system:** 24-volt.

## PERFORMANCE

**Gross horsepower to weight ratio:** 15.75 hp per ton.

**Cruising range (estimated):** 375 mi.

**Fuel consumption:** 7.5 mpg.

**Maximum allowable speed (estimated):** 45 mph.

**Maximum gradability (estimated):** 65 per cent.

**Turning radius (estimated):** 34 ft.

**Fording depth (estimated):** 38 in.

**Pay load:** 5,000 lb.

**Towed load (estimated):** 4,500 lb.

**Winch load (estimated):** 10,000 lb.

\* Prices with winch and equipment.

## ENGINE

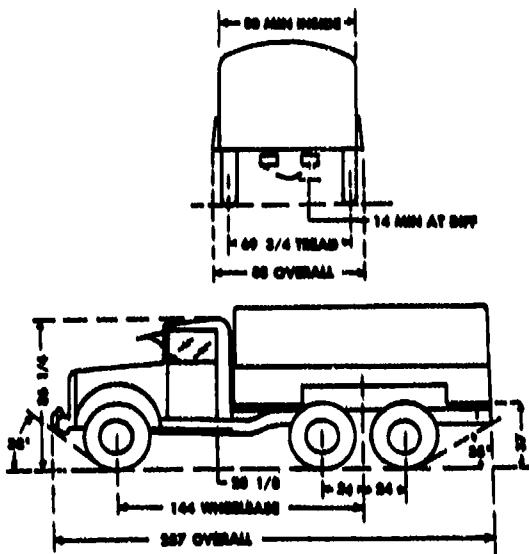
Make (manufacturer)	Reo
Model number	OH-601
Brake horsepower	140
Torque	550 ft lb @ 1400 rpm
Maximum governed speed	3400 rpm
Construction and design	In-line, 6-head
Number of cylinders	6
Displacement, total	341 cu in
Compression ratio	6.75:1
Cooling system	Liquid
Ignition	Battery, distributor

## CHASSIS AND POWER TRAIN

Clutch	Single disc
Transmission	Selective sliding gear
Control	Direct, hand lever
Speeds forward	1
Speeds reverse	1
Transfer case	Selective sliding gear
Control	Driver, hand lever
Speeds	1
Differential	Conventional
Steering control	Steering wheel
Brakes:	
Operating principle	Hydraulic, booster
Control	Foot
Drive	All-wheels
Number of wheels	8 (single)
Suspension:	
Front	Semielliptic springs
Rear	Bogie, inverted semielliptic springs
Fuel:	
Total	50 gal
Cooling system	51 qt
Crankcase (estimated)	10 qt
Engine air cleaner (each)	3 qt
Transmission (estimated)	3 qt
Differential (estimated)	3 qt
Transfer case (estimated)	3 qt
Winch gear case (estimated)	1 1/4 qt

## ADDITIONAL DATA

# TRUCK, 2½-TON, 6x6, CARGO, T55



## GENERAL DATA

**NOTE:** These specifications are tentative and subject to change.  
**Purpose:** For transporting cargo and personnel cross-country and over highways. Primarily intended as a lightweight, compact vehicle practical for transporting by air.  
**Classification:** This vehicle is in development stages. It may in some cases replace the Truck, 2½-Ton, GMC, but is not intended for over-all replacement. A definite requirement exists for a lightweight vehicle of this size for airborne units.

**Manufacturer:** Chrysler Corporation.

**Technical Manuals:** Not assigned.

**Lubrication order:** Not assigned.

**Parts list:** Not assigned.

Price of vehicle	Unknown
Crew (number of personnel)	3
Weight, combat loaded	18,500 lb
Length, over-all	21.4 ft
Width, over-all	7.05 ft
Height, over-all	8.15 ft
Shipping dimensions	1027.7 cu ft; 156.8 sq ft
Tread (center to center of wheels):	
Front	69.75 in
Rear	69.75 in
Ground clearance	12.25 in
Electrical system	12.6-volt

## PERFORMANCE

Gross horsepower to weight ratio	45.6 hp per ton
Cruising range	500 mi
Fuel consumption	7.50 mpg
Maximum allowable speed	Unknown
Maximum gradability	65 per cent
Turning radius	20 ft
Fording depth	42 in
Pay load	8000 lb
Towed load	5000 lb
Winch load	7500 lb

## ENGINE

Make, (manufacturer)	Continental
Model number	A0-408-2

## ADDITIONAL DATA

Brake horsepower	187
Torque	558 ft lb @ 3000 rpm
Maximum governed speed	3000 rpm
Construction and design	Opposed, I-head
Number of cylinders	6
Displacement, total	402 cu in
Compression ratio	8.5:1
Cooling system	Air
Ignition	Magneto

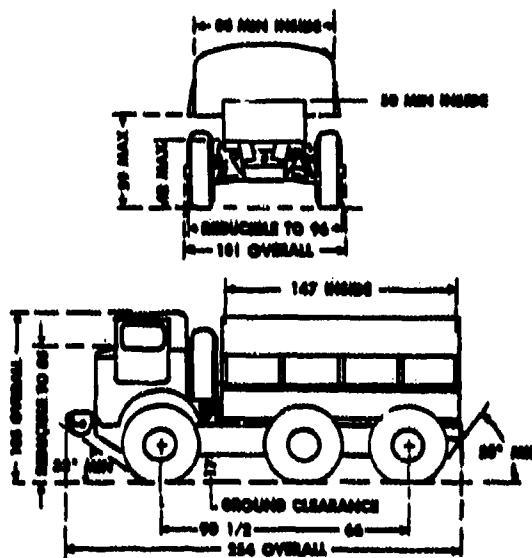
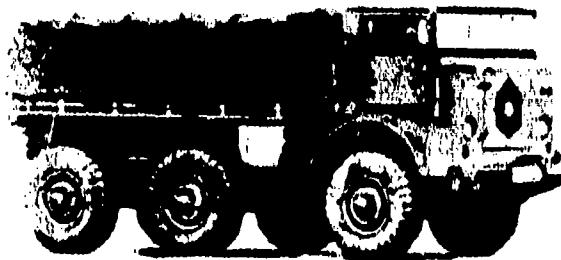
## CHASSIS AND POWER TRAIN

Clutch	None
Transmission	Torque converter and planetary gear
Control	Automatic
Speeds forward	6
Speeds reverse	3
Transfer case	Transmission coupled
Control	None
Speeds	1
Differential	Automatic locking
Steering control	Steering wheel
Brakes:	
Operating principle	Hydraulic (sealed)
Control	Foot pedal
Drive	All-wheel
Number of wheels	8 (single)
Suspension:	
Front	Independent, torsion bar
Rear	Bogie, inverted semielliptic spring

## CAPACITIES

Fuel:	40 gal
Total	
Cooling system	None
Crankcase	14 qt
Engine air cleaner (each)	Unknown
Transmission	Unknown
Differential	Unknown
Transfer case	Unknown
Winch gear case	Unknown

# CARRIER, CROSS-COUNTRY, 5-TON, 6x6, T51



## GENERAL DATA

**NOTE:** These specifications are tentative and subject to change.  
**Purpose:** To transport personnel and general cargo cross-country and over highways.

**Classification:** This vehicle incorporates the most desirable design features available. These features are being tested and in the future may be built into T/O&E vehicles. To date the vehicle is not standard.

**Manufacturer:** General Motors Corporation.

**Technical manual:** Not assigned.

**Lubrication order:** Not assigned.

**Part list:** Not assigned.

**Price of vehicle:** \$18,540.

**Crew (number of personnel):** 10 men.

**Weight, combat loaded:** 56,000 lb.

**Length, over-all:** 21.18 ft.

**Width, over-all:** 8.41 ft.

**Height, over-all:** 10.78 ft.

**Shipping dimensions:** Unknown.

**Wheelbase:** 136.8 in.

**Tread (center to center of wheels):**

Front 88 in.

Rear 80 in.

**Approach angle:** 30 deg.

**Departure angle:** 30 deg.

**Ground clearance:** 10.5 in.

**Electrical system:** 24 volt.

## PERFORMANCE

**Gross horsepower to weight ratio (estimated):** 18.27 hp per ton.

**Cruising range:** 300 mi.

**Fuel consumption (estimated):** 5.8 mpg.

**Maximum allowable speed:** 38 mph.

**Maximum gradability:** 38 per cent.

**Turning radius:** 38 ft.

**Fording depth:** 78 in.

**Pay load:**

Highway 10,000 lb.

Cross-Country 8,000 lb.

Towed load 7,500 lb.

Winch load 10,000 lb.

\* Price with winch and equipment.

## ENGINE

Make (manufacturer)	Continental
Model number	A-556-8
Brake horsepower	400 hp
Torque	480 ft lb @ 1400 rpm
Maximum governed speed	6000 rpm
Construction and design	Vertical, opposed, I-head
Number of cylinders	8
Displacement, total	337.0 cu in
Compression ratio	8.5:1
Cooling system	Air cooled
Ignition	Magnetic

## CHASSIS AND POWER TRAIN

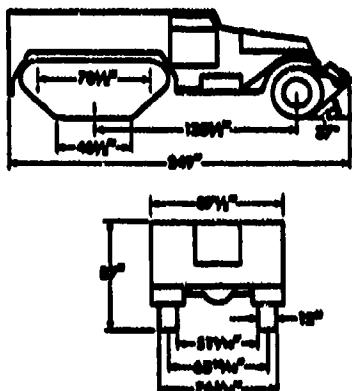
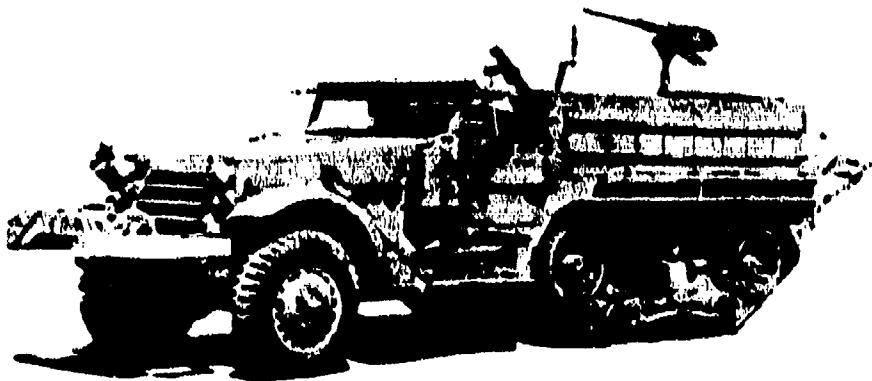
Clutch	None
Transmission	Torque converter
Control	1st to 2d, manual remote; 3d to 5d, automatic
Speeds forward	8
Speeds reverse	1
Transfer case	Constant mesh
Control	None
Speeds	1
Differential	Automatic locking
Steering control	Steering wheel
Brakes:	
Operating principle	Air hydraulic (sealed)
Control	Foot
Drive	All-wheel
Number of wheels	8 (single)
Suspension	Independent torsion bar

## CAPACITIES

Fuel:	70 gal
Total	None
Cooling system	16 qt
Crankcase	Unknown
Engine air cleaner (each)	Unknown
Transmission	Unknown
Differential	Unknown
Transfer case	Unknown
Winch gear case	Unknown

## ADDITIONAL DATA

# CARRIER, HALF-TRACK, MORTAR, 81-MM, M21



## GENERAL DATA

**Purpose:** To provide a self-propelled mount for the 81-mm mortar.  
**Classification:** The armored division infantry battalion has a requirement for motor carriages for the 81-mm mortar. The half-track must fill this requirement until a better vehicle is developed.

**Manufacturer:** White Motor Company.  
**Technical manual:** G-710, G-710A, G-711, G-1887B, G-1887C,  
 G-1888A, G-1888A.

**Lubrication order:** DALO G-710.

**Part lists:** ORD 7 SNL G-108, ORD 8 SNL G-108, ORD 9 SNL  
 G-108.

Price of vehicle*	\$8,188
Crew (number of personnel)	6
Weight, combat loaded	50,000 lb
Length, over-all	20.75 ft
Width, over-all	7.25 ft
Height, over-all	7 ft
Shipping dimensions (uncrated)	1000.0 cu ft 151.0 sq ft
Tread center to center of:	
Track on Rear	60-10-10 in
Front wheels	64-1/4 in
Ground clearance	17.4 in
Electrical system	12-volt
Communication system	Radio

## PERFORMANCE

Gross horsepower to weight ratio	14.8 hp per ton
Cruising range	300 mi
Fuel consumption	0.4 mpg
Maximum allowable speed	18 mph
Maximum gradability	60 per cent
Turning radius	30 ft
Fording depth	35 in
Approach angle	37 deg with roller; 32 deg with winch
Departure angle	35 deg
Pay load	45,000 lb
Towed load	45,000 lb
Winch load	10,000 lb

## ENGINE

Make (manufacturer)	White
Model number	180 AX
Brake horsepower	148
Torque	380 ft lb @ 1800 rpm
Maximum governed speed	Nmt governed
Construction and design	In-line, L-head
Number of cylinders	6
Displacement, total	386 cu in
Compression ratio	6.44:1
Cooling system	Liquid
Ignition	Battery, distributor

## CHASSIS AND POWER TRAIN

Clutch	Single dry disc
Transmission	Selective sliding
Control	Direct hand lever
Speeds forward	4
Speeds reverse	1

\* Price based on unit price basic vehicle plus artillery equipment.

Transfer case	Selective sliding
Control	Direct hand lever
Speeds	Conventional
Differential	Steering wheel
Steering control	

Brakes:	
Operating principle	Master, hydraulic
Control	Foot pedal
Drive	Front sprocket on tracks. All tracks and wheels drive.
Number of wheels	
Suspension	Leaf, vertical valve springs.
Tracks:	
Construction	Endless band, rubber
Width	18 in

ARMAMENT	
Primary armament	Mortar, 81-mm
Traverse:	
Right	45 mil
Left	45 mil
Elevation	40 to 80 deg
Secondary armament:	
Cal .50, MG	1

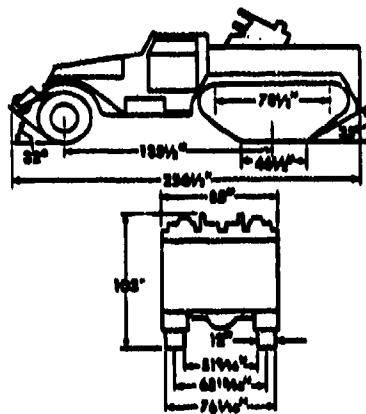
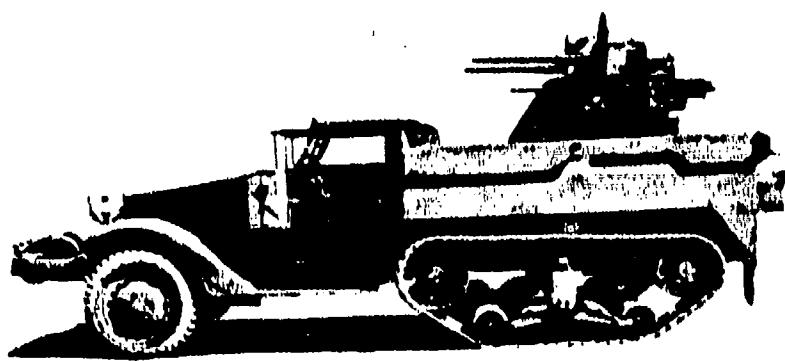
Hull:	ARMOR
Construction	Homogeneous plate
Thickness:	
Front windshield	1/4 in
Sides	1/4 in
Rear	1/4 in
Top	None
Floor	None

Fuel:	CAPACITIES
Total	
Right tank	60 gal
Left tank	60 gal
Cooling system	60 gal
Crankcase	10 qt
Engine air cleaner (each)	(estimated) 1/4 qt
Transmission	
Differential:	
Front	5 qt
Rear	9 qt
Transfer case	5 qt
Winch gear case	4 qt

Ammunition:	
Primary weapon	97 rounds
Secondary weapon	400 rounds
Cal .50	

## ADDITIONAL DATA

# CARRIAGE, MOTOR, MULTIPLE GUN, M16



## GENERAL DATA

**Purpose:** To provide mobility for multiple machine guns for anti-aircraft protection.

**Classification:** A requirement exists for armored motor carriages for multiple machine guns in armored artillery units. The Half-Track, M16, will fill this requirement until the T77 multiple-gun motor carriage is in production and meets the demand.

**Manufacturer:** White Motor Company.

**Technical manual:** 9-710; 9-1710; 9-1710A; 9-1711; 9-1887B; 9-1887C; 9-1888A; 9-1889A.

**Lubrication order:** DA LO 9-710.

**Parts list:** ORD 7, SNL G-108, ORD 8 SNL G-108, ORD 9 SNL G-108.

**Price of vehicle\*** \$10,581

**Crew (number of personnel)** 5

**Weight, combat loaded** 31,840 lb

**Length, overall** 18' 0 1/4"

**Width, overall** 6' 11 1/2"

**Height, overall** 8' 0 1/2"

**Shipping dimensions (unloaded)** 18' 0 1/4" x 6' 11 1/2" x 8' 0 1/2"

**Tread center to center of:**

Tracks on rear ..... 68'-10 1/4" in

Front wheels ..... 64'-7 1/2" in

**Ground clearance** 11 1/4 in

**Electrical system** 12-volt

**Communication system** Radio

## PERFORMANCE

**Gross horsepower to weight ratio** 14.8 hp per ton

**Cruising range (loaded)** 100 mi

**Fuel consumption (loaded)** 3.5 mpg

**Maximum allowable speed** 50 mph

**Maximum gradability** 50 per cent

**Turning radius** Right, 30 ft; left, 60 ft

**Fording depth** 32 in

**Approach angle** Koller, 67 deg; winch, 68 deg

**Departure angle** Koller, 67 deg; winch, 68 deg

**Pay load** 3000 lb

**Towed load** 4000 lb

**Winch load** 10,000 lb

## ENGINE

**Make (manufacturer)** White

**Model number** 180 AX

**Brake horsepower** 148 at 6000 rpm

**Torque** 380 ft-lb at 1800 rpm

**Maximum governed speed** Not governed

**Construction and design** L-head, in-line

**Number of cylinders** 6

**Displacement, total** 566 cu in

**Compression ratio** 6.44:1

**Cooling system** Liquid

**Ignition** Battery, distributor

## CHASSIS AND POWER TRAIN

**Clutch** Single dry disc

\* Price based on unit price basic vehicle plus artillery equipment.

<b>Transmission</b>	Selective sliding
<b>Control</b>	Direct-hand lever
<b>Speeds forward</b>	1
<b>Speeds reverse</b>	1
<b>Transfer case</b>	Selective sliding
<b>Control</b>	Direct hand lever
<b>Speeds</b>	1
<b>Differential</b>	Conventional
<b>Steering control</b>	Steering wheel
<b>Brakes:</b>	
Operating principle	Booster, hydraulic
Control	Foot pedal
<b>Drive</b>	Front sprocket on tracks; all tracks and wheels drive
<b>Number of wheels</b>	10
<b>Suspension</b>	Leaf, vertical valve springs
<b>Treads:</b>	
Construction	Endless band, rubber
Width	18 in

## ARMAMENT

Cal .50 MG ..... 4

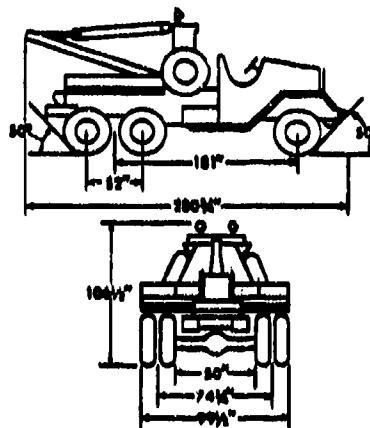
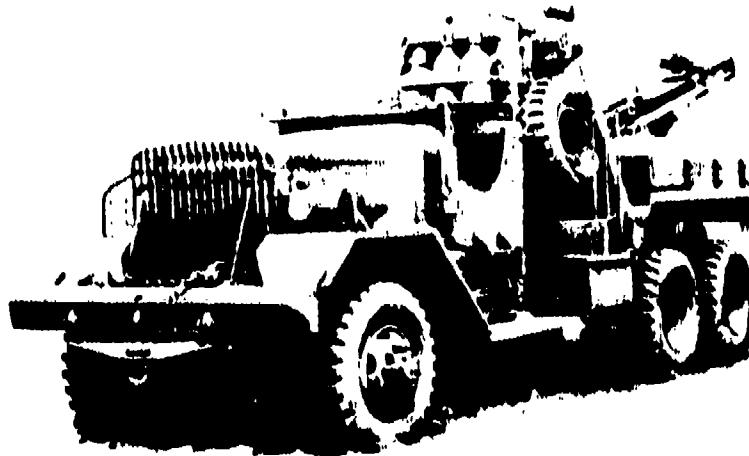
<b>Hull:</b>	<b>ARMOR</b>
Construction	Homogeneous plate
Thickness:	
Front (windshield cover)	16 in
Sides	16 in
Rear	16 in
Top	None
Floor	None

<b>Fuel:</b>	<b>CAPACITIES</b>
Total	60 gal
Right tank	30 gal
Left tank	30 gal
Cooling system	4 qt
Crankcase	14 qt (estimated)
Engine air cleaner (each)	1 1/4 qt (estimated)
Transmission	8 1/2 qt, front; 9 qt, rear
Transfer case	9 qt
Winch gear case	4 qt
Ammunition:	
Cal .50	5000 rounds

## ADDITIONAL DATA

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

# TRUCK, WRECKING, HEAVY, M1A1



## GENERAL DATA

**Purpose:** For towing, salvaging, and recovering vehicles and heavy equipment. Also for various jobs requiring heavy hoisting and winching.

**Classification:** Standard. As yet no vehicle is in production to replace this vehicle.

**Manufacturer:** Ward-La France Truck Division and Kenworth Motor Truck Company.

**Technical manual:** 0-708, 0-708, 0-1708A, 0-1708B, 0-1708C, 0-1708D, 0-1708E, 0-1808B, 0-1808C, 0-1808A, 0-1808A.

**Lubrication order:** DA LO 0-708.

**Parts list:** ORD 7 SNL G116, ORD 8 SNL G116, ORD 9 SNL G116.

Price of vehicle*	\$14,007
Crew (number of personnel)	2
Weight, combat loaded	31,000 lb
Length, over-all	30.08 ft
Width, over-all	8.75 ft
Height, over-all	8.78 ft
Shipping dimensions	1781.0 cu ft; 207.5 cu ft
Wheelbase	181 in
Tread (center to center of wheels):	
Front	70.68 in
Rear	74.78 in
Approach angle	30 deg
Departure angle	30 deg
Ground clearance	11 in
Electrical system	12-volt

## PERFORMANCE

Gross horsepower to weight ratio	0.0 hp per ton
Cruising range	250-300 mi
Fuel consumption	8 mpg
Maximum allowable speed	48 mph
Maximum gradability	34 per cent
Turning radius	38 ft
Fording depth	40 in
Pay load	5000 lb
Towed load	60,000 lb
Winch load:	
Front	30,000 lb
Rear	17,500 lb
Boom load	16,000 lb

\* price based on vehicle and equipment.

## ENGINE

Make (manufacturer)	Continental
Model number	41R
Brake horsepower	445
Torque	560 ft-lb @ 1800 rpm
Maximum governed speed	3400 rpm
Construction and design	In-line, 1-head
Number of cylinders	6
Displacement, total	301 cu in
Compression ratio	8.85:1
Cooling system	Liquid
Ignition	Battery, distributor

## CHASSIS AND POWER TRAIN

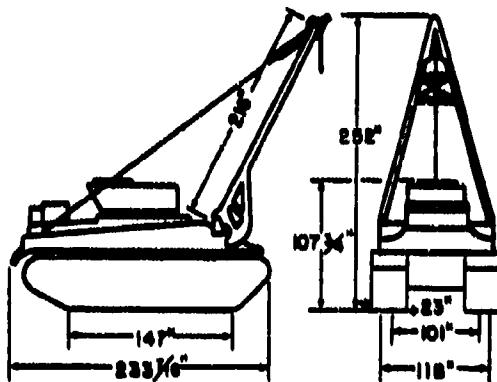
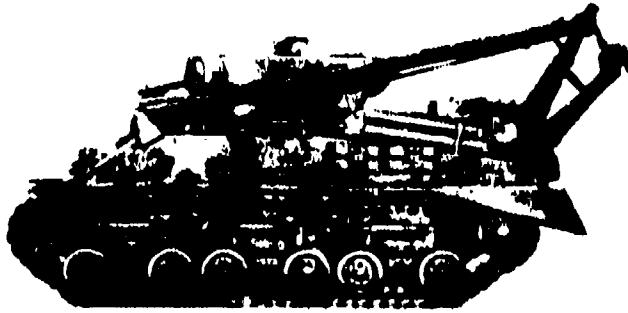
Clutch	Single disc
Transmission	Selective sliding gear with override
Control	Direct, hand lever
Speeds forward	5
Speeds reverse	1
Transfer case	Selective sliding gear
Control	Direct, hand lever
Speeds	2
Differential	Conventional
Steering control	Steering wheel
Brakes:	
Operating principle	Air
Control	Foot
Drive	All-wheel
Number of wheels	8 (2 single, 4 dual)
Suspension:	
Front	Semielliptic springs
Rear	Bogie, inverted semielliptic springs

## CAPACITIES

Fuel:	
Total	100 gal
Cooling system	100 qt
Crankcase	14 qt
Engine air cleaner	1 qt
Transmission	12 qt
Differential:	
Front	5 qt
Rear	7 qt
Transfer case	0 qt
Winch gear case:	
Front	1 1/4 qt
Rear	0 qt

## ADDITIONAL DATA

# VEHICLE, TANK RECOVERY, M32A1B3



## GENERAL DATA

Purpose: To recover disabled tanks and mechanized equipment.  
Classification: This vehicle is standard and no replacement has as yet been developed.

Manufacturer: Lima Locomotive Works.

Technical manual: 9-788.

Lubrication orders: DA LO 9-788.

Parts list: ORD 7 SNL G-187, ORD 8 SNL G-187, ORD 9 SNL G-187.

Price of vehicle\* ..... \$56,067

Crew (number of personnel) ..... 5

Weight, combat loaded ..... 68 tons

Length, over-all:

Boom in up position (estimated) ..... 26 ft

Boom in down position (estimated) ..... 30 ft

Width, over-all ..... 9.75 ft

Height, over-all (travel position) (estimated) ..... 9.7 ft

Shipping dimensions (estimated) ..... 2110 cu ft

Boom in up position (estimated) ..... 9.8 ft

Tread (center to center of track) ..... 101 in

Ground clearance ..... 17.5 in

Ground pressure ..... 10.0 lb/sq in

Electrical system ..... 34-volt

Communication system ..... Radio and Interphone

## PERFORMANCE

Gross horsepower to weight ratio ..... 10.8 hp per ton

Cruising range ..... 100 mi

Fuel consumption ..... 8 mpg

Maximum allowable speed ..... 35 mph

Maximum gradability ..... 60 per cent

Turning radius ..... 31 ft

Fording depth ..... 30 in

Maximum trench vehicle will cross ..... 90 in

Maximum vertical obstacle can negotiate ..... 24 in

Winch load ..... 80,000 lb

Boom load ..... 30,000 lb

## ENGINE

Make (manufacturer) ..... Ford

Model number ..... GAA

Brake horsepower ..... 500

Torque ..... 950 ft lb @ 2100 rpm

Maximum governed speed ..... 2800 rpm

Construction and design ..... V, 1-head

Number of cylinders ..... 8

Displacement, total ..... 1100 cu in

Compression ratio ..... 7.8:1

Cooling system ..... Liquid

Ignition ..... Magneto

\* Price based on vehicle without armament.

## CHASSIS AND POWER TRAIN

Clutch	Multiple disc
Transmission	Syachromesh
Control	Direct, hand lever
Speeds forward	8
Speeds reverse	1
Differential	Controlled
Steering control	Two hand levers
Brakes:	
Operating principle	Mechanical band
Control	Two hand levers
Drive	Front sprocket
Number of wheels	18 (dual)
Suspension	Horizontal volute spring
Tracks:	
Construction	Center guide rubber and steel
Shoes or blocks	79 cm
Width	80 in

## ARMAMENT

MG, ring mounted	80 cal (1 in)
MG, bow mounted	30 cal (1 in)

Hull:	ARMOR
Construction	Homogeneous plate

Thickness:	
Front	2.5 in
Sides	1.5 in
Rear	1.5 in
Top	1.75 in
Floor	1.0-1.5 in

Fixed turret:	
Ring diameter	.60 in

Construction	Open top, homogeneous plate
Thickness (estimated)	.1 in

## VISION AND SIGHTING EQUIPMENT

Periscope, vision	M6
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## CAPACITIES

Fuel:	
Total	168 gal
Right tank	84 gal

Left tank	84 gal
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Cooling system	14 gal
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Chankcase	.08 qt
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Engine air cleaner (each)	.05 qt
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Transmission	164 qt
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Differential	
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Final drive (each)	Integral with transmission
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Winch gear case	.5 qt
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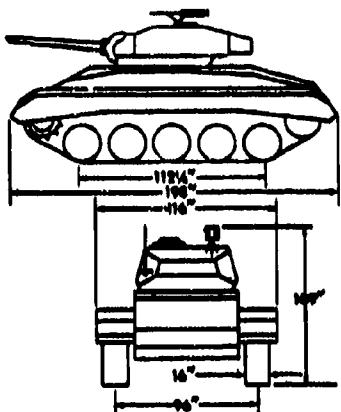
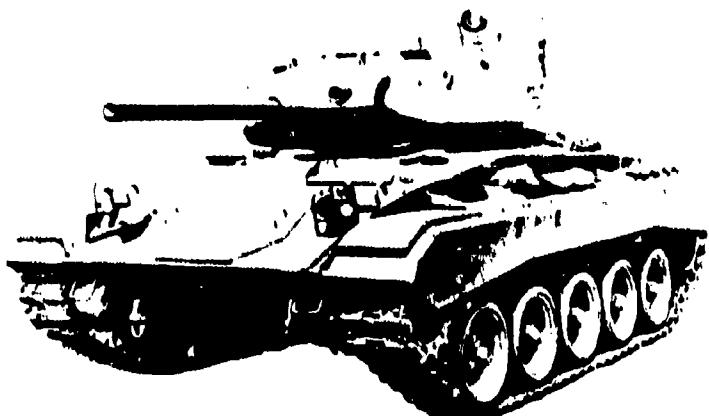
Ammunition:	
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Cal .50	600 rounds
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Cal .30	6250 rounds
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## ADDITIONAL DATA

# TANK, LIGHT, M24



## GENERAL DATA

**Purpose:** To provide mobile firepower and crew protection for offensive combat.

**Classification:** At present this vehicle is the standard light tank. Eventually to be superseded by the new Light Tank, T41.

**Manufacturer:** Cadillac Motor Car Division (GMC).

**Technical manuals:** G-720, G-1727A, G-1728A, G-1729B, G-1729C, G-1825A, G-1826A, G-1829A.

**Lubrication order:** DA LO G-728.

**Parts list:** ORD 7 SNL G-800, ORD 8 SNL G-800, ORD 9 SNL G-800.

**Price of vehicle\*** ..... \$89,655

**Crew (number of personnel)** ..... 4 or 5

**Weight, combat loaded** ..... 30 tons

**Length, over-all**

- Gun in firing position ..... 18.0 ft
- Gun in traveling position ..... 18.0 ft

**Width, over-all** ..... 9.00 ft

**Height, over-all** ..... 7.25 ft

**Shipping dimensions** ..... 1440 cu ft  
180 in ft

**Tread (center to center of track)** ..... 96 in

**Ground clearance** ..... 17.75 in

**Ground pressure** ..... 11.08 lb/sq in

**Electrical system** ..... 24-volt

**Communication system** ..... Radio and interphones

## PERFORMANCE

**Gross horsepower to weight ratio** ..... 11.0 hp per ton

**Cruising range** ..... 100 mi

**Fuel consumption** ..... 00 mpg

**Maximum allowable speed** ..... 00 mph

**Maximum gradability** ..... 60 per cent

**Turning radius** ..... 30 ft

**Fording depth** ..... 48 in

**Maximum vertical obstacle can negotiate** ..... 36 in

**Maximum trench vehicle will cross** ..... 36 in

**Range of primary armament:**

- With HE shell or WP smoke at 45° 07' or 811 miles ..... 10,995 yds
- With APC-T projectile at 45° or 800 miles ..... 10,870 yds

**Velocity of primary armament:**

- With HE shell or WP smoke at 45° 07' or 811 miles ..... 1980 fps
- With APC-T projectile, at 45° or 800 miles ..... 8000 fps
- With HVAP-T shot or HEAT ..... 8800 fps

## ENGINE

**NOTE:** This vehicle has two engines as described below.

**Make (manufacturer)** ..... Cadillac

**Model number** ..... 44T94

**Brake horsepower** ..... 110

**Torque** ..... 340 ft-lb @ 1800 rpm

**Rated speed (Not governed)** ..... 0400 rpm

**Construction and design** ..... V, L-head

**Number of cylinders** ..... 8

**Displacement, total (each engine)** ..... 846 cu in

**Compression ratio** ..... 7.08:1

**Cooling system** ..... Liquid

**Ignition** ..... Battery, distributor

## CHASSIS AND POWER TRAIN

**Clutch** ..... None

**Transmission** ..... Hydra-Matic

**Control** ..... Automatic

**Speeds forward** ..... 4

**Speeds reverse** ..... None

\* Price based on vehicle and artillery equipment.

<b>Transfer case</b>	<b>Synchronesh</b>
Control	Remote, hand lever
Speeds forward	2
Speeds reverse	2
Differential	Controlled
Steering control	Two hand levers
Brakes	
Operating principle	Mechanical, band
Control	Two hand levers
Drive	Front sprocket
Number of wheels	10 (dual)
Suspension	Individual torsion bar
Tracks	
Construction	Center guide, rubber and steel
Shoes or blocks	7/8 in
Width	16 in

## ARMAMENT

<b>Primary armament</b>	<b>Gun, 75-mm; M6</b>
Traverse:	
Right	600 deg
Left	600 deg
Elevation	15 deg
Depression	-10 deg
Recoil mechanism	Concentric
Stabilizer system	Gyro on elevation only
<b>Secondary armament:</b>	
Caliber .50 MG	1 (AA)
Caliber .30 MG	1 (bow); 1 (coastal)

## ARMOR

<b>Hull:</b>	<b>Homogeneous plate</b>
Construction	
Thickness:	
Front	1 in
Sides	1 in
Rear	7/8 in
Top	50 in
Floor	50 in
<b>Turret:</b>	
Ring diameter	60 in
Construction	Homogeneous plate
Thickness:	
Front	1.5 in
Sides	1 in
Rear	1 in
Top	50 in

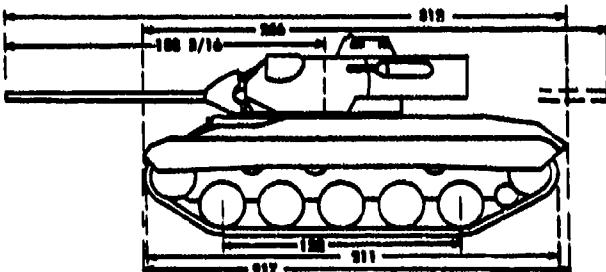
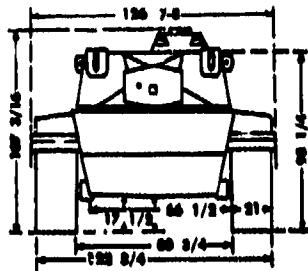
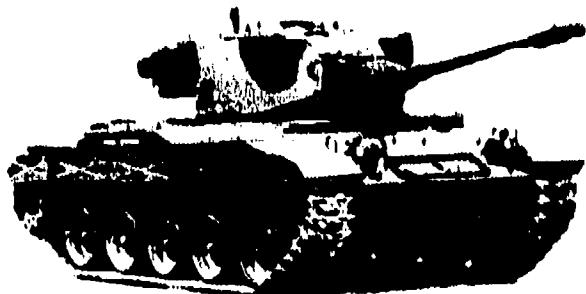
## VISION AND SIGHTING EQUIPMENT

<b>Periscope, vision</b>	M6
<b>Periscope, commander's</b>	M6
<b>Quadrant elevation</b>	M9
<b>Telescope, gunner's</b>	M71G
<b>Periscope, gunner's</b>	M10C

## CAPACITIES

<b>Total</b>	110 gal
Right tank	55 gal
Left tank	55 gal
Cooling system	10 gal
Crankcase (each)	8 gal
Engine air cleaner (each)	3 gal
Transmission (each)	13 gal
Differential	20 gal
Transfer case	4 gal
Final drive (each)	2 gal
<b>Ammunition:</b>	
Primary weapon	48 rounds
Secondary weapons:	
Caliber .50	400 rounds
Caliber .30	3750 rounds

# TANK, LIGHT, T41



## GENERAL DATA

**NOTE:** These specifications are tentative and subject to change.  
**Purpose:** To provide mobile fire power and crew protection for offensive combat. To provide a tank with complete azimuth and elevation stabilization together with a range finder.  
**Classification:** This vehicle may eventually replace the M24 light tank. To date it is not standard.  
**Manufacturer:** Detroit Arsenal.  
**Technical manuals:** Not assigned.  
**Lubrication order:** Not assigned.  
**Parts list:** Not assigned.  
**Price of vehicle:** \$25,000  
**Crew, (number of personnel):** 4  
**Weight, combat loaded:** 25.8 tons  
**Length, over-all:**  
 Gun in firing position 86.0 ft  
 Gun in traveling position 81.03 ft  
**Width, over-all:** 10.50 ft  
**Height, over-all:** 8.9 ft  
**Shipping dimensions (estimated):** 1440 cu ft  
 160 sq ft  
**Tread (center to center of track):** 101.75 in  
**Ground clearance:** 17.5 in  
**Ground pressure:** 10 lb / sq in  
**Electrical system:** 12-volt  
**Communication system:** Radio and interphone

## PERFORMANCE

**Gross horsepower to weight ratio:** 19.0 hp per ton  
**Cruising range:** 180 mi  
**Fuel consumption (estimated):** 1 mpg  
**Maximum allowable speed:** 41.0 mph  
**Maximum gradability:** 60 per cent  
**Turning radius:** Pivot to infinity  
**Fording depth:** 44 in  
**Maximum trench vehicle will cross:** 98 in  
**Maximum vertical obstacle can negotiate:** 38 in  
**Range of primary armament:**  
 With HE shell or WP smoke at 45° 07' or 811 mils ... Unknown  
 With APC-T projectile at 45° or 800 mils ... Unknown  
**Velocity of primary armament:**  
 With HE shell or WP smoke at 45° 07' or 811 mils ... Unknown  
 With APC-T projectile, at 45° 07' or 800 mils ... Unknown  
 With HVAP-T shot or HEAT ... Unknown

## ENGINE

**Make (manufacturer):** Continental  
**Model number:** AOS-895-1  
**Brake horsepower:** 500  
**Torque:** 945 ft lb @ 2400 rpm  
**Maximum governed speed:** 2800 rpm  
**Construction and design:** Opposed, I-head  
**Number of cylinders:** 6  
**Displacement, total:** 898 cu in  
**Compression ratio:** 5.51  
**Cooling system:** Air  
**Ignition:** Magneto

## CHASSIS AND POWER TRAIN

**Clutch:** None  
**Transmission:** Cross-drive, with torque converter  
**Control:** wobble stick  
**Speeds forward:** 2

**Speeds reverse:** 1  
**Differential:** Cross-drive  
**Steering control:** wobble stick  
**Brakes:**  
 Operating principle ... Multiple disc  
 Control ... Foot pedal  
**Drive:** Track  
**Number of wheels:** 10 (dual)  
**Suspension:** Individual torsion bar  
**Tracks:**  
 Construction ... Center guide, steel  
 Shoe or blocks ... 75 ea  
 Width ... 81 in

## ARMAMENT

**Primary Armament:** Gun, 76-mm, T91  
 Traverse:  
 Right ... 360 deg  
 Left ... 360 deg  
 Elevation ... 30 deg  
 Depression ... -9 deg  
 Recoil mechanism ... Concentric  
 Stabilizer system ... Complete azimuth and elevation by Vickers.  
**Secondary armament:**  
 Cal .50 MG ... 2 (1-AA; 1-coaxial)  
 Cal .30 MG ... 2 (turret blisters)

## Hull:

**Construction:** Homogeneous plate  
**Thickness:**  
 Front ... 1 in  
 Sides ... 1 in  
 Rear ... 75 in  
 Top ... 50 in  
 Floor ... 1.05-0.75 in

## Turret:

**Ring diameter:** 60 in  
**Construction:** Homogeneous plate  
**Thickness:**  
 Front ... 1.7 in  
 Sides ... 1 in  
 Rear ... 1 in  
 Top ... 50 in

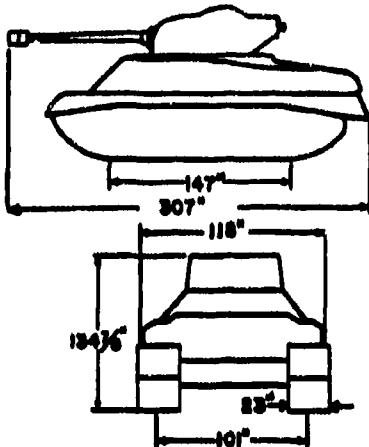
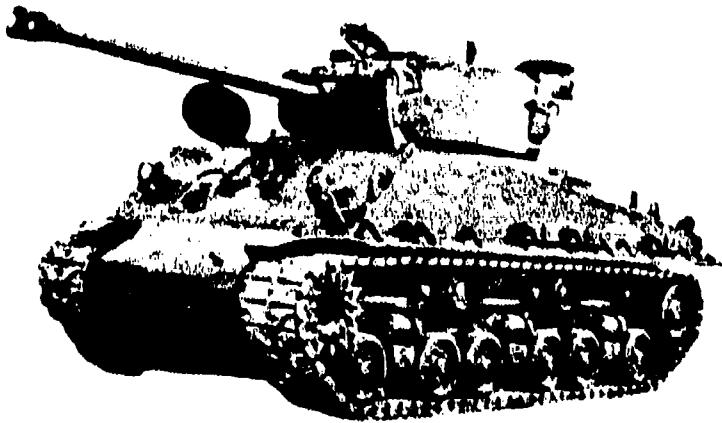
## VISION AND SIGHTING EQUIPMENT

**Periscope, vision:** M17  
**Periscope, commander's:** M15  
**Range finder:** Coincidence  
**Quadrant elevation:** M9  
**Periscope, gunner's:** M10

## Fuel:

**Total:** 148 gal  
**Cooling system:** None  
**Crankcase:** 58 qt  
**Engine air cleaner (each):** Unknown  
**Transmission:** Unknown  
**Final drive:** Unknown  
**Ammunition:**  
 Primary weapon ... 40 rounds  
 Secondary weapons:  
 Cal .50 ... 1540 rounds  
 Cal .30 ... 6500 rounds

# TANK, MEDIUM, M4A3E8



## GENERAL DATA

**Purpose:** To provide mobile fire power and crew protection for offensive combat.

**Classification:** To date this vehicle is one of the standard medium tanks. Its design has been made obsolete by medium tanks M88, M48, and T48, but for issue it remains standard. Eventually the new T48 or a similar designed tank will replace it.

**Manufacturer:** Detroit Tank Arsenal (Chrysler).

**Technical manuals:** G-750, G-1781B, G-1781C, G-1781K, G-1780B, G-1780K, G-1882A, G-1882B, G-1882A, G-1882A.

**Lubrication order:** DA LO 9-750.

**Parts list:** ORD 7 SNL G-204 and G-205, ORD 8 SNL G-204 and G-205, ORD G-208, ORD 9 SNL G-204 and G-205.

**Price of vehicle\*** \$54,836

**Crew (number of personnel)** 5

**Weight, combat loaded** 37.79 tons

**Length, over-all:**

    Gun in firing position 24.75 ft

    Gun in traveling position 24.75 ft

**Width, over-all** 9.76 ft

**Height, over-all** 9.76 ft

**Shipping dimensions** 3416 cu ft; 318 sq ft

**Tread (center to center of track)** 101.0 in

**Ground clearance** 17.12 in

**Ground pressure** 10.8 lb/sq in

**Electrical system** 24-volt

**Communication system** Radio and Interphone

## PERFORMANCE

**Gross horsepower to weight ratio** 10.2 hp per ton

**Cruising range** 100 mi

**Fuel consumption** .6 mpg

**Maximum allowable speed** 38 mph

**Maximum gradability** 60 per cent

**Turning radius** .01 ft

**Fording depth** .06 in

**Maximum trench vehicle will cross** .90 in

**Maximum vertical obstacle can negotiate** .24 in

**Range of primary armament:**

    With HE shell or WP smoke at 45° 37' or 811 miles ... 14,880 yds

    With APC-T projectile at 45° or 800 miles ... 16,100 yds

**Velocity of primary armament:**

    With HE shell or WP smoke at 45° 37' or 811 miles ... 2700 fps

    With APC-T projectile at 45° or 800 miles ... 3600 fps

    With HVAP-T shot or HEAT ... 4400 fps

## ENGINE

**Make (manufacturer)** Ford

**Model number** GAA

**Brake horsepower** 500

**Torque** 980 ft lb @ 3100 rpm

**Maximum governed speed** 3800 rpm

**Construction and design** V, I-head

**Number of cylinders** 8

**Displacement, total** 1100 cu in

**Compression ratio** 7.5:1

**Cooling system** Liquid

**Ignition** Magneto

## CHASSIS AND POWER TRAIN

**Clutch** Multiple disc

**Transmission** Synchromesh

**Control** Direct, hand lever

**Speeds forward** 5

**Speeds reverse** 1

\* Price based on vehicle and artillery equipment.

**Differential** Controlled  
**Steering control** Two hand levers

**Brakes:**

    Operating principle Bands on differential

    Control Two hand levers

**Drive** Front sprocket

**Number of wheels** 18 (dual)

**Suspension** Horizontal volute spring

**Tracks:**

    Construction Center guide, rubber and steel

    Shoes or blocks 70 sq in

    Width 36 in

## ARMAMENT

**Primary armament** Gun, 76-mm, M1AB2

**Traverses:**

    Right 360 deg

    Left 360 deg

**Elevation** 35 deg

**Depression** -10 deg

**Recoil mechanism** Hydro-Spring

**Stabilizer system** Gym on elevation only

**Secondary armament:**

    Cal .50 MG 1 (AA)

    Cal .50 MG 1 (Coaxial) 1 (bow)

**Hull:**

**Construction** Homogeneous, plate

**Thickness:**

    Front 8.5 in

    Sides 8.5 in

    Rear 7.5 in

    Top 1.0-1.8 in

    Floor

**Turret:**

**Ring diameter** 60 in

**Construction** Homogeneous, cast

**Thickness:**

    Front 8.5 in

    Sides 8.5 in

    Rear 8.5 in

    Top 1 in

## VISION AND SIGHTING EQUIPMENT

**Periscope, vision** M6

**Periscope, commander's** M6

**Quadrant, elevation** M9

**Telescope, gunner's** M71D

**Periscope, gunner's** M4A1

**Fuel:**

**Total** 165 gal

**Right tank** 84 gal

**Left tank** 84 gal

**Cooling system** 14 gal

**Crankcase** .08 qt

**Engine air cleaner (each)** .08 qt

**Transmission** 164 qt

**Differential** Integral with transmission

**Final drives** Integral with transmission

**Ammunition:**

    Primary weapon 71 rounds

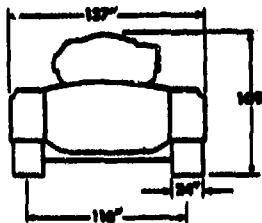
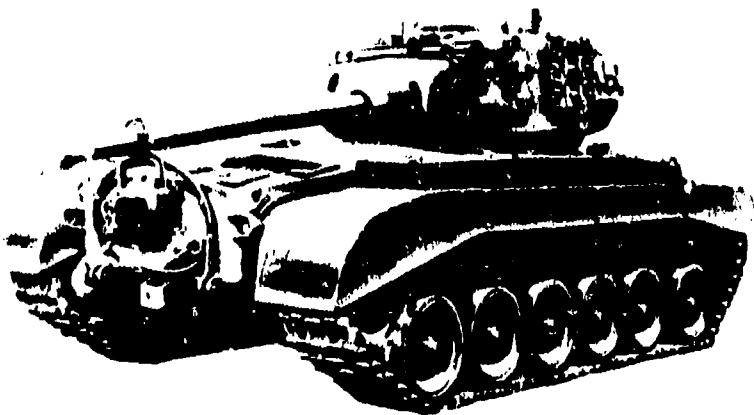
    Secondary weapons: Cal .50 600 rounds

        Cal .30 6250 rounds

**CAPACITIES**

20

# TANK, MEDIUM, M26



## GENERAL DATA

**Purpose:** To provide mobility and crew protection for 90-mm gun for offensive combat.

**Classification:** To date this vehicle is one of the standard medium tanks. Its design has been superseded by the Medium Tank, M46, which is a major modification of the M26 tank. Eventually Medium Tank, T42, will replace these present standard medium tanks.

**Manufacturer:** Fisher Tank Division (GMC); Detroit Tank Arsenal. **Technical manuals:** 9-735, 9-1781B, 9-1781G, 9-1783A, 9-1783F, 9-1783C, 9-1839A.

**Lubrication order:** DA 9-735.

**Parts list:** ORD 7 SNL G326, ORD 8 SNL G326, ORD 9 SNL G286.

<b>Price of vehicle*</b>	.....	851,024
<b>Crew (number of personnel)</b>	.....	5
<b>Weight, combat loaded</b>	.....	46 tons
<b>Length, over-all</b>	.....	
Gun in firing position	.....	37.0 ft
Gun in traveling position	.....	28.0 ft
<b>Width, over-all</b>	.....	11.5 ft
<b>Height, over-all</b>	.....	9.08 ft
<b>Shipping dimensions</b>	.....	8815.0 cu ft; 254.0 sq ft
<b>Tread (center to center of track)</b>	.....	11.0 ft
<b>Ground clearance</b>	.....	1.72 in
<b>Ground pressure</b>	.....	11.00 lb/sq in
<b>Electrical system</b>	.....	24-volt
<b>Communication system</b>	.....	Radio and interphone

## PERFORMANCE

<b>Gross horsepower to weight ratio</b>	.....	9.8 hp per ton
<b>Cruising range</b>	.....	100 mi
<b>Fuel consumption</b>	.....	6 mpg (approx)
<b>Maximum allowable speed</b>	.....	30 mph
<b>Maximum gradeability</b>	.....	60 per cent
<b>Turning radius</b>	.....	.61 ft
<b>Fording depth</b>	.....	.48 in
<b>Maximum trench vehicle will cross</b>	.....	.95 in
<b>Maximum vertical obstacle can negotiate</b>	.....	.46 in
<b>Range of primary armament:</b>		
With HE shell or WP smoke at 45°37' or 811 mils	.....	19,560 yd
With APC-T projectile at 45° or 800 mils	.....	21,400 yd
<b>Velocity of primary armament:</b>		
With HE shell or WP smoke at 45°37' or 811 mils	.....	2700 fps
With APC-T projectile, at 45° or 800 mils	.....	2670 fps
With HVAP-T shot or HEAT	.....	3350 fps

## ENGINE

<b>Make (manufacturer)</b>	.....	Ford
<b>Model number</b>	.....	GAF
<b>Brake horsepower</b>	.....	500
<b>Torque</b>	.....	950 ft lb @ 3100 rpm
<b>Maximum governed speed</b>	.....	2800 rpm
<b>Construction and design</b>	.....	V-1-head
<b>Number of cylinders</b>	.....	8
<b>Displacement, total</b>	.....	1100 cu in
<b>Compression ratio</b>	.....	7.5:1
<b>Cooling system</b>	.....	Liquid
<b>Ignition</b>	.....	Magneto

## CHASSIS AND POWER TRAIN

<b>Clutch</b>	.....	None
<b>Transmission</b>	.....	Torquematic

\* Price based on vehicle plus auxiliary equipment.

<b>Speeds forward</b>	.....	8
<b>Speeds reverse</b>	.....	1
<b>Differential</b>	.....	Controlled
<b>Steering control</b>	.....	Two hand levers
<b>Brakes:</b>		
Operating principle	.....	Band on differential
Control	.....	Two hand levers
<b>Drive</b>	.....	Rear sprocket
<b>Number of wheels</b>	.....	12 (dual)
<b>Suspension</b>	.....	Torsion bar
<b>Tracks:</b>		
Construction	.....	Center guide, rubber and steel
Shoes or blocks	.....	88 ea
<b>Width</b>	.....	88 in

## ARMAMENT

<b>Primary armament</b>	.....	Gun, 90-mm, M8
<b>Traverse:</b>		
Right	.....	360 deg
Left	.....	360 deg
<b>Elevation</b>	.....	10 deg
<b>Depression</b>	.....	-10 deg
<b>Recoil mechanism</b>	.....	Hydro-Spring
<b>Stabilizer system</b>	.....	None
<b>Secondary armament:</b>		
Cal .50 MG	.....	1 (AA)
Cal .50 MG	.....	1 (coaxial) 1 (bow)

## ARMOR

<b>Hull:</b>		Homogeneous cast
<b>Construction</b>	.....	
<b>Thickness:</b>		
Front	.....	.4 in
Sides	.....	2-3 in
Rear	.....	3 in
Top	.....	.75 in
Floor	.....	1.0-3.0 in
<b>Turret:</b>		
Ring diameter	.....	.69 in
<b>Construction</b>	.....	Homogeneous cast
<b>Thickness:</b>		
Front	.....	.4 in
Sides	.....	.3 in
Rear	.....	.3 in
Top	.....	.75 in

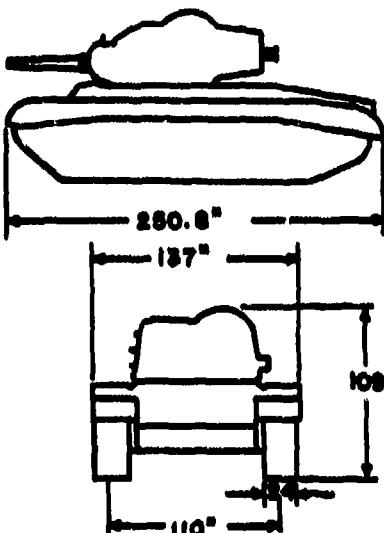
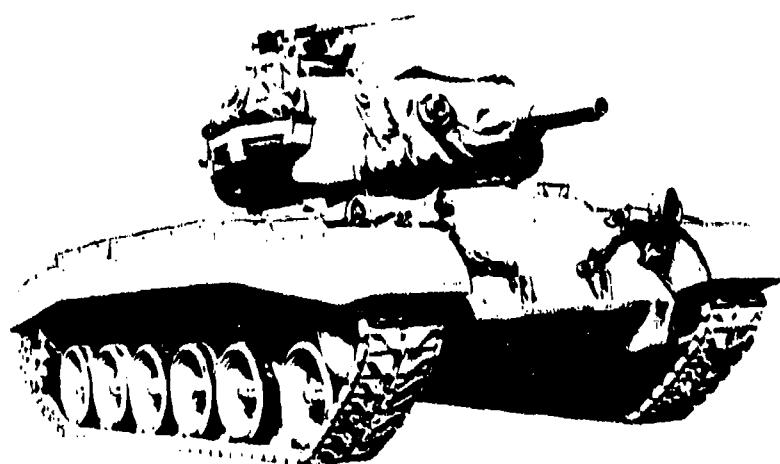
## VISION AND SIGHTING EQUIPMENT

<b>Periscope, vision</b>	.....	M6
<b>Periscope, commander's</b>	.....	M6
<b>Quadrant elevation</b>	.....	M9
<b>Telescope, gunner's</b>	.....	M71C
<b>Periscope, gunner's</b>	.....	M10F

## CAPACITIES

<b>Fuel:</b>		
Total	.....	191.5 gal
Right tank	.....	78.8 gal
Left tank	.....	112 gal
<b>Cooling system</b>	.....	22 gal
<b>Engine air cleaner (each)</b>	.....	.03 qt
<b>Transmission</b>	.....	.05 qt
<b>Differential</b>	.....	.04 qt
<b>Final drive (each)</b>	.....	.18 qt
<b>Ammunition:</b>		
Primary weapon	.....	70 rounds
Secondary weapons:		
Cal .50	.....	550 rounds
Cal .30	.....	5000 rounds

# TANK, MEDIUM, M45



## GENERAL DATA

Purpose: To provide mobility and crew protection for the 105-mm howitzer for offensive combat.  
Classification: This vehicle is standard. In design it supersedes the M4A2E5 equipped with 105-mm howitzer. To date no newer design tank carrying the 105-mm howitzer has been made for issue.

Manufacturer: Fisher Tank Division (GMC), Detroit Tank Arsenal.  
Technical manual: 9-735, 9-1785A, 9-1785B, 9-1785C, 9-1781C, 9-1781D.

Lubrication order: DA LO 9-735.

Part No.: ORD 7 SNL G286, ORD 8 SNL G286, ORD 9 SNL G286.

Price of vehicle ..... \$78,577  
Crew (number of personnel) ..... 5  
Weight, combat loaded ..... 46.25 tons  
Length, over-all:  
    Gun in firing position ..... 30.9 ft  
    Gun in traveling position ..... 30.9 ft  
Width, over-all ..... 11.5 ft  
Height, over-all ..... 9.0 ft  
Shipping dimensions (estimated) ..... 3818.0 cu ft  
Tread (center to center of track) ..... 110 in  
Ground clearance ..... 17.8 in  
Ground pressure ..... 11.98 lb/sq in  
Electrical system ..... 24-volt  
Communication system ..... Radio and interphone

## PERFORMANCE

Gross horsepower to weight ratio ..... 9.3 hp per ton  
Cruising range ..... 100 mi  
Fuel consumption ..... 8 mpg (approx)  
Maximum allowable speed ..... 30 mph  
Maximum gradability ..... 60 per cent  
Turning radius ..... 31 ft  
Fording depth ..... 48 in  
Maximum trench vehicle will cross ..... 98 in  
Maximum vertical obstacle can negotiate ..... 46 in  
Range of primary armament:  
    With HE shell or WP smoke at 45°37' or 811 mils ..... 12,203 yds  
Velocity of primary armament:  
    With HE shell or WP smoke at 45°37' or 811 mils ..... 1550 fpm  
    With HVAP-T shot or HEAT ..... 1850 fpm

## ENGINE

Make (manufacturer) ..... Ford  
Model number ..... GAF  
Brake horsepower ..... 500  
Torque ..... 950 ft lb @ 2100 rpm  
Maximum governed speed ..... 3800 rpm  
Construction and design ..... V, I-head type  
Number of cylinders ..... 8  
Displacement, total ..... 1100 cu in  
Compression ratio ..... 7.5:1  
Cooling system ..... Liquid  
Ignition ..... Magneto

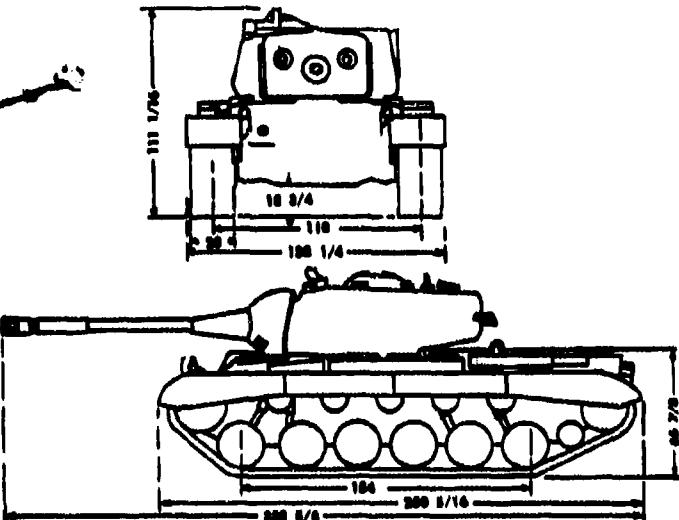
## CHASSIS AND POWER TRAIN

Clutch ..... None  
Transmission ..... Toromatic  
Control ..... Remote, hand lever  
Speeds forward ..... 3  
Speeds reverse ..... 1

\*Price based on vehicle plus artillery equipment.

Differential	Controlled
Steering control	Two hand levers
Brakes:	
Operating principle	Band on differential
Control	Two hand levers
Drive	Rear sprocket
Number of wheels	18 (Dual)
Suspension	Torsion bar
Tracks:	
Construction	Center guide Rubber and Steel
Shoes or blocks	83 cu in
Width	8.5 in
ARMAMENT	
Primary armament	Howitzer, 105-mm, M4
Traverse:	
Right	360 deg
Left	360 deg
Elevation	55 deg
Depression	-10 deg
Recoil mechanism	Hydro-Spring
Stabilizer system	None
Secondary armament:	
Cal .50 MG	1 (AA)
Cal .50 MG	1 (Bow) 1 (Coaxial)
Hull:	ARMOR
Construction	Homogeneous cast
Thickness:	
Front	4 in
Sides	3.5 in
Rear	3 in
Top	.875 in
Floor	1.0-50 in
Turret:	
Ring diameter	89 in
Construction	Homogeneous cast
Thickness:	
Front	4 in
Sides	3 in
Rear	3 in
Top	.875 in
VISION AND SIGHTING EQUIPMENT	
Periscope, vision	M15
Periscope, commander's	M13
Quadrant, elevation	M9
Periscope, gunner's	M78C
Periscope, gunner's	M10D
Periscope, panoramic	M39A1
Fuel:	CAPACITIES
Total	191.5 gal
Right tank	78.5 gal
Left tank	116 gal
Cooling system	28 gal
Crankcase	38 qt
Engine air cleaner	3.5 qt
Transmission	54 qt
Differential	18 qt
Final drive (each)	7 qt
Ammunition:	
Primary weapon	74 rounds
Secondary weapons:	
Cal .50	440 rounds
Cal .80	5000 rounds

# TANK, MEDIUM, M46



## GENERAL DATA

**NOTE:** These specifications are tentative and subject to change.  
**Purpose:** To provide mobility and crew protection for the 90-mm gun for offensive combat. To provide increased performance characteristics, reliability, and mobility in a medium tank.  
**Classification:** This vehicle is the standard medium tank. At present it is under accelerated field test. Approximately 800 M46 tanks were modified to provide them. Due to the limited number available only part of the medium tank units will receive them. Others will remain equipped with M26, M45, or M4A2E8 medium tanks.

**Manufacturer:** Detroit Arsenal.

**Technical manual:** DA TM 9-1718, DA TM 9-1718B.

**Lubrication order:** DA LO 9-718.

**Parts list:** ORD 7 SNL G-244, ORD 8 SNL G-244, ORD 9 SNL G-244.

**Price of vehicle\*** Unknown

**Crew (number of personnel)**

**Weight, combat loaded** 46 tons

**Length, over-all:**

    Gun in firing position 97.7 ft

    Gun in traveling position 80.1 ft

    Width, over-all 11.5 ft

    Height, over-all 10.4 ft

**Shipping dimensions** 8486 cu ft; (estimated) 885 sq ft

**Tread (center to center of track)** 110 in

**Ground clearance** 18.75 in

**Ground pressure** 18.0 lb/sq in

**Electrical system** 44-volt

**Communication system** Radio and Interphone

## PERFORMANCE

**Gross horsepower to weight ratio** 17.0 hp per ton

**Cruising range** 90.0 mi

**Fuel consumption** 4 mpg

**Maximum allowable speed** 30 mph

**Maximum gradability** 60 per cent

**Turning radius** Pivot to infinity

**Fording depth** 48 in

**Maximum trench vehicle will cross** 102.0 in

**Maximum vertical obstacle can negotiate** 46 in

**Range of primary armament:**

    With HE shell or WP smoke at 45°37' or 811 mils 19,500 yd

    With APC-T projectile at 45° or 800 mils 31,400 yd

**Velocity of primary armament:**

    With HE shell or WP smoke at 45°37' or 811 mils 2700 fps

    With APC-T projectile, at 45° or 800 mils 3070 fps

    With HVAP-T shot or HEAT 3050 fps

## ENGINE

**Make (manufacturer)** Continental

**Model number** AV-1790-5

**Brake horsepower** 310

**Torque** 1610 ft lb @ 2200 rpm

**Maximum governed speed** 2800 rpm

**Construction and design** V, 1-head

**Number of cylinders** 12

**Displacement, total** 1790 cu in

**Compression ratio** 6.5:1

**Cooling system** Air

**Ignition** Magneto

## CHASSIS AND POWER TRAIN

**Clutch** None

**Transmission** Cross-drive

**Control** Remote, wobble stick

**Speeds forward** 3

**Speeds reverse** 1

Differential	Cross-drive
Steering control	Wobble stick
Brakes:	
Operating principle	Mechanical, multiple disc
Control	Manual, foot pedal
Drive	Rear sprocket
Number of wheels	19 (dual)
Suspension	Individual torsion bar
Tracks:	
Construction	Center guide, rubber and steel
Shoes or blocks	8 in
Width	30 in

## ARMAMENT

Primary armament	Cum, 90-mm, MGA1
Traverse:	
Right	440 deg
Left	360 deg
Elevation	50 deg
Depression	-10 deg
Recoil mechanism	Hydro-Spring
Stabilizer system	None
Secondary Armament:	
Cal .50 MG	1 (AA)
Cal .30 MG	1 (Bow) 1 (Coastal)

## HULL

Construction	Homogeneous cast
Thickness:	
Front	4 in
Sides	3.5 in
Rear	3.5 in
Top	.875 in
Floor	1.0-3.0 in
Turret:	
Ring diameter	60 in
Construction	Homogeneous cast
Thickness:	
Front	4 in
Sides	3.5 in
Rear	3.5 in
Top	1 in

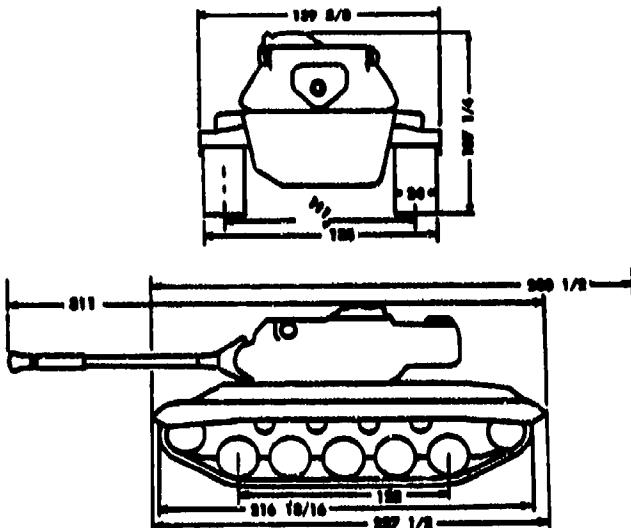
## VISION AND SIGHTING EQUIPMENT

Periscope, vision	M10
Periscope, commander's	M15
Quadrant elevation	M9
Telescope, gunner's	T178
Periscope, gunner's	M10F

## FUEL

CAPACITIES	
Total	270 gal
Right tank	110 gal
Left tank	160 gal
Cooling system	None
Crankcase	7/8 qt
Engine air cleaner (each)	3.5 qt
Transmission	100 qt
Differential	None
Final drive (each)	5.5 qt
Ammunition:	
Primary weapon	70 rounds
Secondary weapon:	
Cal .50	550 rounds
Cal .30	5000 rounds

# TANK, MEDIUM, T42



## GENERAL DATA

**NOTE:** These specifications are tentative and subject to change.  
**Purpose:** To provide mobility and crew protection for the 90-mm gun for offensive combat. To provide a medium tank with all the latest technological developments in weapons, fire control, armor, power trains, and running gears.  
**Classification:** This tank is not standard. It is being developed at present and if proven satisfactory will supersede present medium tanks.

**Manufacturer:** Detroit Arsenal.  
**Technical manual:** Not assigned.  
**Lubrication order:** Not assigned.

**Part No.:** Not assigned.

**Print of vehicle** ..... Unknown  
**Crew (number of personnel)** ..... 4  
**Weight, combat loaded** ..... 38.45 tons  
**Length, over-all**:  
 Gun in firing position ..... 35.0 ft  
 Gun in traveling position ..... 30.0 ft  
**Width, over-all** ..... 11.5 ft  
**Height, over-all** ..... 8.0 ft  
**Shipping dimensions** ..... Unknown  
**Tread (center to center of track)** ..... 111 in  
**Ground clearance** ..... 15.75 in  
**Ground pressure** ..... 10 lb/sq in  
**Electrical system** ..... 24 volt  
**Communication system** ..... Radio and interphone

## PERFORMANCE

**Gross horsepower to weight ratio** ..... 18 hp per ton  
**Cruising range** ..... 100 mi  
**Fuel consumption** ..... Unknown  
**Maximum allowable speed** ..... 30 mph  
**Maximum gradability** ..... 60 per cent  
**Turning radius** ..... Pivot to infinity  
**Fording depth** ..... 45 in  
**Maximum track vehicle will cross** ..... 78 in  
**Maximum vertical obstacle negotiable** ..... 30 in  
**Range of primary armament:**  
 With HE shell or WP smoke at 45°37' or 811 mils ..... Unknown  
 With APC-T projectile at 45° or 800 mils ..... Unknown  
**Velocity of primary armament:**  
 With HE shell or WP smoke at 45°37' or 811 mils ..... Unknown  
 With APC-T projectile, at 45° or 800 mils ..... Unknown  
 With HVAP-T shot or HEAT ..... Unknown

## ENGINE

**Make (manufacturer)** ..... Continental  
**Model number** ..... A05-598-1  
**Brake horsepower** ..... 500  
**Torque** ..... 945 ft-lb @ 3400 rpm  
**Maximum governed speed** ..... 1800 rpm  
**Construction and design** ..... Opposed, I-head  
**Number of cylinders** ..... 8  
**Displacement, total** ..... 895 cu in  
**Compression ratio** ..... 5.5:1  
**Cooling system** ..... Air  
**Ignition** ..... Magneto

## CHASSIS AND POWER TRAIN

**Clutch** ..... None  
**Transmission** ..... Cross-drive  
 Control ..... Remote, wobble stick  
**Speeds forward** ..... 1  
**Speeds reverse** ..... 1

<b>Differential</b>	.....	<b>Cross-drive</b>
Steering control	.....	Remote, wobble stick
<b>Brakes:</b>		
Operating principle	.....	Multiple disc
Control	.....	Foot pedal
<b>Drive:</b>	.....	Front sprocket
<b>Number of wheels</b>	.....	10 (Dual)
<b>Suspension</b>	.....	Independent torsion bar
<b>Tracks:</b>		
Construction	.....	Center guide steel
Shoes or blocks	.....	76 cm
Width	.....	34 in

## ARMAMENT

<b>Primary armament</b>	.....	<b>Gun, 90-mm, T119</b>
Traverse:		
Right	.....	560 deg
Left	.....	560 deg
Elevation	.....	50 deg
Depression	.....	-10 deg
Recoil mechanism	.....	Concentric
Stabilizer system	.....	Vickers on elevation
<b>Secondary armament:</b>		
Cal .50 MG	.....	1 (AA) 1 (Coaxial)
Cal .30 MG	.....	None

<b>Hull:</b>	.....	<b>ARMOR</b>
Construction	.....	Homogeneous cast
Thickness:		
Front	.....	4 in
Sides	.....	3.5 in
Rear	.....	1 in
Top	.....	1.5 in
Floor	.....	1.0-50 in

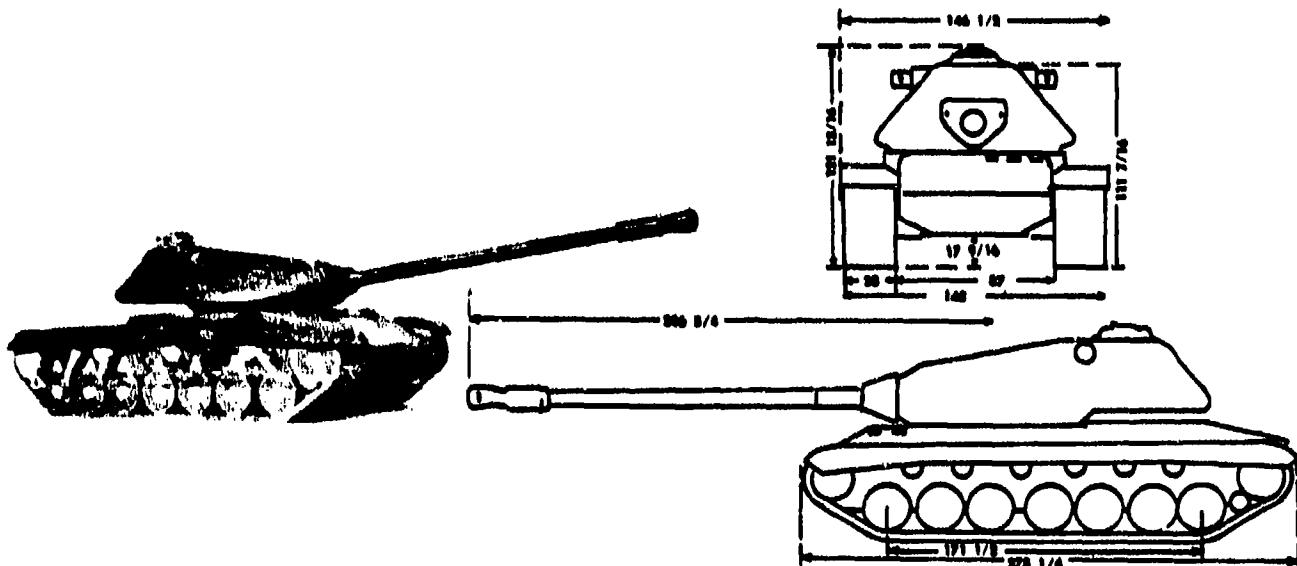
<b>Turret:</b>	.....	
Ring diameter	.....	60 in
Construction	.....	Homogeneous cast
Thickness:		
Front	.....	4 in
Sides	.....	3.5 in
Rear	.....	3 in
Top	.....	1 in

## VISION AND SIGHTING EQUIPMENT

<b>Periscope, vision</b>	.....	Unknown
<b>Periscope, commander's</b>	.....	M15
<b>Range finder</b>	.....	Stereo
<b>Quadrant elevation</b>	.....	M9
<b>Telescope, gunner's</b>	.....	Unknown
<b>Periscope, gunner's</b>	.....	M10

<b>Fuel:</b>	.....	<b>CAPACITIES</b>
Total	.....	Unknown
<b>Cooling system</b>	.....	None
<b>Crankcase</b>	.....	58 qt
<b>Engine air cleaner (each)</b>	.....	Unknown
<b>Transmission</b>	.....	Unknown
<b>Final drive (each)</b>	.....	Unknown
<b>Ammunition:</b>		
Primary weapon	.....	60 rounds
Secondary weapon	.....	1980 rounds
Cal .50	.....	

# TANK, HEAVY, T43



## GENERAL DATA

**Purpose:** To provide mobility and crew protection for the 180-mm gun for offensive combat. To provide in a heavy tank all the latest developments in weapons, fire power, armor, power train, and running gear.

**Classification:** This is not yet a standard tank. It is being developed and if proved satisfactory will supersede all existing heavy tanks. To date no suitable heavy tank is available for issue.

**Manufacturer:** Detroit Arsenal.

**Technical manuals:** Not assigned.

**Lubrication order:** Not assigned.

**Parts list:** Not assigned.

**Price of vehicle**

Unknown

**Crew (number of personnel)**

3

**Weight, combat loaded**

58 tons

**Length, over-all**

37.6 ft

**Gun in firing position**

37.6 ft

**Gun in traveling position**

36.5 ft

**Width, over-all**

11.9 ft

**Height, over-all**

10.1 ft

**Shipping dimensions**

Unknown

**Tread (center to center of track)**

117 in

**Ground clearance**

17.81 in

**Ground pressure**

18 lb/sq in

**Electrical system**

24-volt

**Communication system**

Radio and Interphone

## PERFORMANCE

**Gross horsepower to weight ratio**

14.0 hp per ton

**Cruising range**

100 mi

**Fuel consumption**

Unknown

**Maximum allowable speed**

28.6 mph

**Maximum gradability**

80 per cent

**Turning radius**

From 0 to infinity

**Fording depth**

48 in

**Maximum trench vehicle will cross**

90 in

**Maximum vertical obstacle can negotiate**

90 in

**Range of primary armament:**

With HE shell or WP smoke at 45°07' or 811 mils Unknown

With APC-T projectile at 45° or 800 mils Unknown

**Velocity of primary armament:**

With HE shell or WP smoke at 45°07' or 811 mils Unknown

With APC-T projectile at 45° or 800 mils Unknown

With HVAP-T shot or HEAT Unknown

## ENGINE

**Make (manufacturer)**

Continental

**Model number**

AV 1790-3

**Brake horsepower**

810

**Torque**

1810 ft-lb @ 2200 rpm

**Maximum governed speed**

2200 rpm

**Construction and design**

V, I-head

**Number of cylinders**

12

**Displacement, total**

1790 cu in

**Compression ratio**

6.5:1

**Cooling system**

Air

**Ignition**

Magneto

## CHASSIS AND POWER TRAIN

**Clutch**

None

**Transmission**

Cross-drive

**Control**

Remote, wobble stick

**Speeds forward**

3

**Speeds reverse**

3

<b>Differential</b>	.....	Cross-drive
<b>Steering control</b>	.....	Remote, wobble stick
<b>Brakes:</b>		
Operating principle	.....	Mechanical, multiple disc
Control	.....	Manual, foot pedal
<b>Drive</b>	.....	Near sprocket
<b>Number of wheels</b>	.....	14 (dual)
<b>Suspension</b>	.....	Independent, torsion bar
<b>Tracks:</b>		
Construction	.....	Center guide, steel
Shoes or blocks	.....	80 cm
Width	.....	38 in

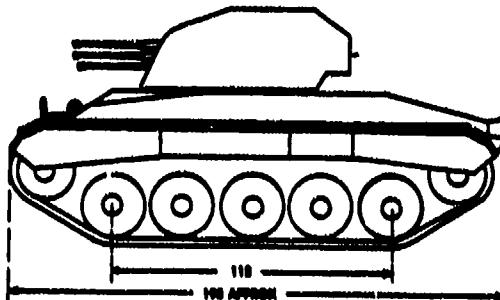
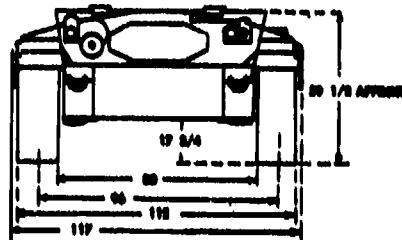
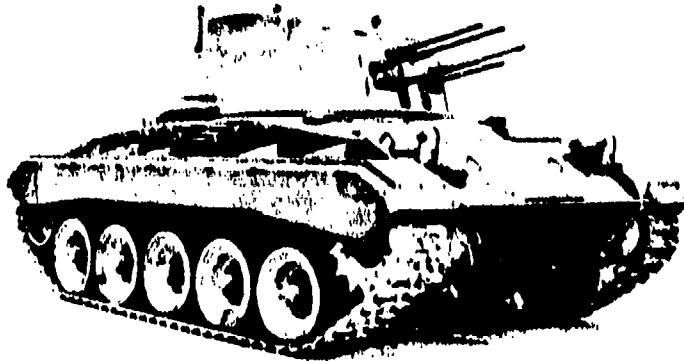
ARMAMENT	
Primary armament	..... Gun, 180-mm, T18
Traverse:	
Right	..... 360 deg
Left	..... 360 deg
Elevation	..... 10 deg
Depression	..... -8 deg
Recoil mechanism	..... Constrictive
Stabilizer system	..... None
Secondary armament:	
Cal .50 MG	..... 1 (AA) 1 (coaxial)

ARMOR	
Hull:	..... Homogeneous cast
Construction:	
Thickness:	
Front	..... 5 in
Sides	..... 5.5 in
Rear	..... 1.5 in
Top	..... 1.5 in
Floor	..... 1.0-3.0 in
Turret:	..... 50 in
Ring diameter	..... Homogeneous cast
Construction:	
Thickness:	
Front	..... 5 in
Sides	..... 0.45 in
Rear	..... 0.45 in
Top	..... 1.50 in

VISION AND FIGHTING EQUIPMENT	
Periscope, vision	..... Unknown
Periscope, commander's	..... M18
Range finder	..... Stereo
Quadrant elevation	..... M6
Periscope, gunner's	..... M10

CAPACITIES	
Fuel:	
Total	..... Unknown
Cooling system	..... None
Crankcase	..... 78 qt
Engine air cleaner (each)	..... Unknown
Transmission	..... Unknown
Differential	..... Integral with transmission
Final drive (each)	..... Unknown
Ammunition:	
Primary weapon	..... 60 rounds
Secondary weapon:	
Cal .50	..... 1980 rounds

# CARRIAGE, MOTOR, MULTIPLE GUN, T77



## GENERAL DATA

**NOTE:** These specifications are tentative and subject to change.

**Purpose:** Highly mobile armored, multiple, caliber .50 antiaircraft weapon capable of accompanying armored units.

**Classification:** A definite requirement exists in the armored division for a vehicle of this type. This vehicle is undergoing field tests at present and will probably fill the requirement.

**Manufacturer:** United Shoe Machinery Corporation.

**Technical manual:** Not assigned.

**Lubrication order:** Not assigned.

**Parts list:** Not assigned.

**Price of vehicle:** Unknown

**Crew (number of personnel):** 4

**Weight, combat loaded:** 16 tons

**Length, over-all:** 18.5 ft

**Width, over-all:** 7.75 ft

**Height, over-all (estimated):** 9 ft

**Shipping dimensions (estimated):** 1481 cu ft; 180 sq ft

**Tread (center to center of track):** 96 in

**Ground clearance:** 7.75 in

**Ground pressure:** 10.6 lb/sq in

**Electrical system:** 24-volt

**Communication system:** Radio and Interphone

## PERFORMANCE

**Gross horsepower to weight ratio:** 11.1 hp per ton

**Cruising range:** 150 mi

**Fuel consumption:** 1.5 mpg

**Maximum allowable speed:** 65 mph

**Maximum gradability:** 60 per cent

**Turning radius:** 20 ft

**Fording depth:** 40 in

**Maximum trench vehicle will cross:** 78 in

**Maximum vertical obstacle can negotiate:** 36 in

## ENGINE

**NOTE:** This vehicle has two engines as described below.

**Make (manufacturer):** Cadillac

**Model number:** 44784

**Brake horsepower (each):** 110

**Torque:** 340 ft lb @ 1500 rpm

**Brake horsepower (each):** 110

**Construction and design:** V, L-head

**Number of cylinders (each):** 8

**Displacement, total (each engine):** 346 cu in

**Compression ratio:** 7.06:1

**Cooling system:** Liquid

**Ignition:** Battery, distributor

## CHASSIS AND POWER TRAIN

**Clutch:** None

**Transmission:** Hydra-Matic

**Control:** Automatic

**Speeds:** 4

**Transfer case:** Synchromesh

**Control:** Remote, hand lever

**Speeds forward:** 3

**Speeds reverse:** 1

**Differential:** Controlled

**Steering control:** Two-hand levers

**Brakes:** Mechanical, band

**Operating principle:** Two hand levers

**Drive:** Front sprocket  
**Number of wheels:** 10 (dual)  
**Suspension:** Individual torsion bar

**Tracks:**  
Construction: Center guide, steel  
Shoes or blocks: 75 in  
Width: 16 in

## ARMAMENT

**Primary armament:** MG, Cal .50 (8 each)

Traverse:  
Right: 0 to 360 Deg  
Left: 0 to 360 Deg

Elevation: 0 to 35 Deg

Depression: -10 to 0 Deg

**Secondary armament:** Cal .30 MG 1 (bow)

**Hull:** Armor: Homogeneous plate

Construction: Thickness: 1 in

Front: 1 in

Sides: 1 in

Rear: 1 in

Top: 1 in

Floor: 1/4-1/2 in

**Turret:** Ring diameter: 60 in

Construction: Armor: Homogeneous cast

Thickness: Front: 1 in

Sides: 1 in

Rear: 1 in

Top: 1 in

## VISION AND SIGHTING EQUIPMENT

Periscope, vision: Mg (2 in)

Computing, sights: TUE1 (2 in)

**Fuel:** Capacities

Total: 110 gal

Right tank: 55 gal

Left tank: 55 gal

Cooling system: 10 gal

Crankcase (each): 8 qt

Engine air cleaner (each): 0 qt

Transmission (each): 15 qt

Differential: 30 qt

Transfer case: 4 qt

Final drive (each): 8 qt

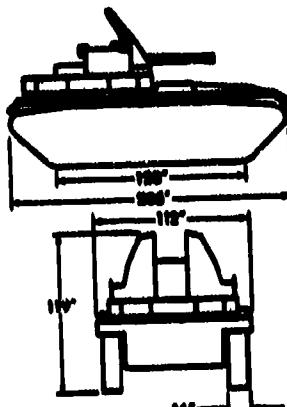
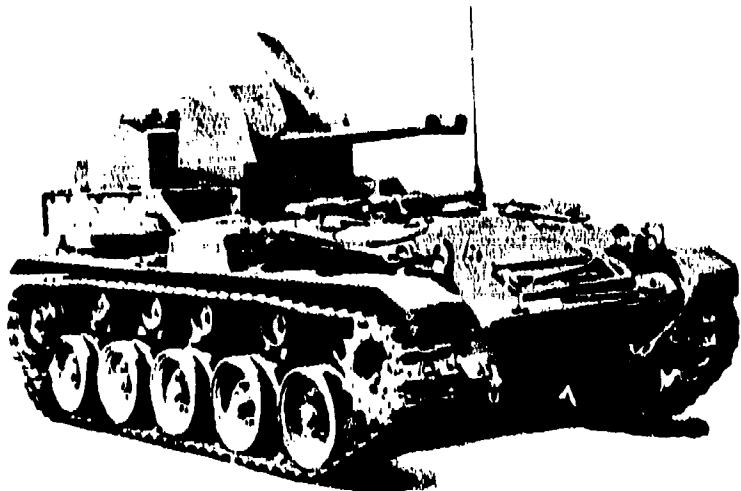
Ammunition:

Cal .50: 8700 rounds

Cal .30: 8800 rounds

## ADDITIONAL DATA

# CARRIAGE, MOTOR, TWIN 40-MM GUN, M19A1



## GENERAL DATA

Purpose: To provide mobility for the twin 40-mm guns for anti-aircraft protection. To provide armor protection for driver and crew.

Classification: This vehicle is standard. At present only a limited number are available for issue. Detroit Arsenal is now assembling these vehicles.

Manufacturer: Detroit Arsenal.

Technical manual: 9-757, 9-1787K, 9-1789A, 9-1789B, 9-1789C, 9-1884A, 9-1886A, 9-1889A.

Lubrication order: DA LO 9-757.

Part list: ORD 7 ENL G200, ORD 8 ENL G200, ORD 9 ENL G200.

Price of vehicle\* ..... \$55,701

Crew (number of personnel) ..... 5

Weight, combat loaded ..... 18.5 tons

Length, over-all ..... 19.0 ft

Gun in firing position ..... 19.0 ft

Gun in traveling position ..... 9.75 ft

Width, over-all ..... 9.5 ft

Height, over-all ..... 10.81 cu ft

Shipping dimensions ..... 189.4 cu ft

Tread (center to center of track) ..... 96 in

Ground clearance ..... 17.75 in

Ground pressure ..... 0.4 lb/sq in

Electrical system ..... 24-volt

Communication system ..... Radio and interphone

## PERFORMANCE

Gross horsepower to weight ratio ..... 11.6 hp per ton

Cruising range ..... 100 mi

Fuel consumption ..... 16 mpg

Maximum allowable speed ..... 38 mph

Maximum gradability ..... 60 per cent

Turning radius ..... 30 ft

Fording depth ..... 48 in

Maximum trench ..... 96 in

Maximum vertical obstacle can negotiate ..... 96 in

Range of primary armament:

With HE shell or WP smoke, at 45°37' or 811 mils ..... 6800 yd

With APC-T projectile, at 45° or 800 mils ..... 9475 yd

Velocity of primary armament:

With HE shell or WP smoke, at 45°37' or 811 mils ..... 2870 fps

With APC-T projectile, at 45° or 800 mils ..... 2870 fps

## ENGINE

NOTE: This vehicle has two engines as described below.

Make (manufacturer) ..... Cadillac

Model number ..... 44T84

Brake horsepower ..... 110

Torque ..... 840 ft lbs @ 1800 rpm

Rated speed (not governed) ..... 3400 rpm

Construction and design ..... V, L-head

Number of cylinders ..... 8

Displacement, total (each engine) ..... 346 cu in

Compression ratio ..... 7.08 : 1

Cooling system ..... Liquid

Ignition ..... Battery, distributor

## CHASSIS AND POWER TRAIN

Clutch ..... None

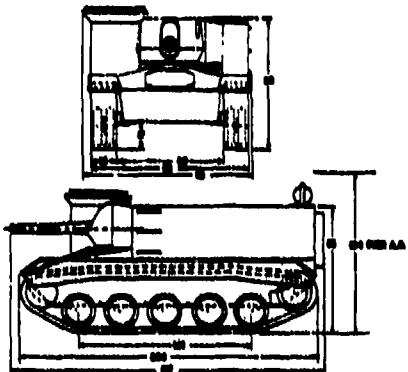
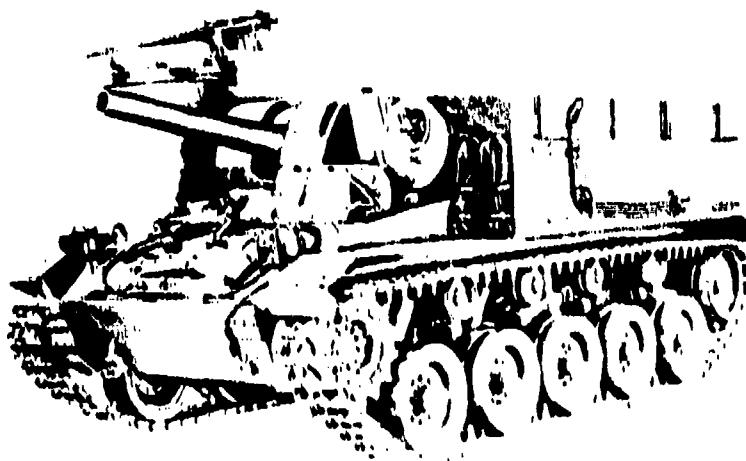
Transmission ..... Hydra-Matic

Control ..... Automatic

\* Price based on vehicle plus artillery equipment.

Speeds		Synchronous
Transfer case		Remote, hand lever
Control		Hand
Speeds forward		3
Speeds reverse		3
Differential		Controlled
Steering control		Two hand levers
Brakes		Band
Operating principle		Two hand levers
Control		Front sprocket
Drive		10 (dual)
Number of wheels		Front bar
Suspension		Center guide, steel, rubber
Tracks		Sheet or blocks
Construction		16 in
Width		16 in
ARMAMENT		
Primary armament		Gun, 40-mm (2 ea)
Traverse		50 deg
Night		50 deg
Left		50 deg
Elevation		3 deg
Depression		-3 deg
Recoil mechanism		Hydro-Spring
Stabilizer system		None
Secondary armament		None
ARMOR		
Hull		Homogeneous plate
Construction		Thickness
Front		50 in
Sides		50 in
Rear		50 in
Top		50-575 in
Floor		50-575 in
Turret		
Ring diameter		Unknown
Construction		Homogeneous plate
Thickness		Thickness
Front		50 in
Sides		50 in
Rear		51 in
Top		None
VISION AND SIGHTING EQUIPMENT		
Periscope, vision (2 ea)		M10 or M16
Sight, computing		M16
Quadrant, gunner's		M1
FUEL		
Total		110 gal
Right tank		55 gal
Left tank		55 gal
Cooling system (each)		10 gal
Crankcase (each)		8 gal
Engine air cleaner (each)		8 gal
Transmission		18 gal
Differential		10 gal
Transfer case		4.5 gal
Final drive (each)		3 gal
Ammunition:		
Primary weapon		352 rounds
Secondary weapons		None

# CARRIAGE, MOTOR, 105-MM HOWITZER, M37



## GENERAL DATA

**Purpose:** To provide a mobile 105-mm howitzer with crew protection for artillery units of an armored division.

**Classification:** At present this vehicle is standard. Eventually it will be superseded by the T98 motor gun carriage which includes all the latest improvements.

**Manufacturer:** Cadillac Motor Car Division, GMC.

**Technical manual:** 9-717.

**Lubrication order:** DA LO 9-717.

**Parts list:** ORD 7 SNL G288, ORD 8 SNL G288, ORD 9 SNL G288.

**Price of vehicle:** \$40,000.

**Crew (number of personnel):** 8.

**Weight, combat loaded:** 31.8 tons.

**Length, over-all:** 18.1 ft.

**Gun in firing position:** 18.1 ft.

**Width, over-all:** 9.9 ft.

**Height, over-all:** 9.8 ft.

**Shipping dimensions:** 16.8 ft. 159.4 in.

**Tread (center to center of track):** 96 in.

**Ground clearance:** 18.08 in.

**Ground pressure:** 9.8 lb/sq in.

**Electrical system:** 14 volt.

**Communication system:** Radio and interphone.

## PERFORMANCE

**Gross horsepower to weight ratio:** 10.8 hp per ton.

**Cruising range:** 100 mi.

**Fuel consumption:** 15 mpg.

**Maximum allowable speed:** 30 mph.

**Maximum gradability:** 60 per cent.

**Turning radius:** 30 ft.

**Fording depth:** 48 in.

**Maximum trench, vehicle will cross:** 36 in.

**Maximum vertical obstacle can negotiate:** 36 in.

**Rate of primary armament:**

With HE shell or WP smoke at 45° 07' or 811 mils ... 12,805 yd.

**Velocity of primary armament:**

With HE shell or WP smoke at 45° 07' or 811 mils ... 1880 f/s.

## ENGINE

**NOTE:** This vehicle has two engines as described below.

**Make (manufacturer):** Cadillac.

**Model number:** 44T84.

**Brake horsepower:** 110.

**Torque:** 240 ft-lb @ 1800 rpm.

**Rated speed (not governed):** 3400 rpm.

**Construction and design:** V, L-head.

**Number of cylinders:** 8.

**Displacement, total (each engine):** .046 cu in.

**Compression ratio:** 7.06:1.

**Cooling system:** Liquid.

**Ignition:** Battery, distributor.

## CHASSIS AND POWER TRAIN

**Clutch:** None.

**Transmission:** Hydra-Matic.

**Control:** Automatic.

**Speeds:** 1.

**Transfer case:** Synchromesh.

**Control:** Remote, hand lever.

\* Price based on vehicle plus artillery equipment.

<b>Speeds forward:</b>	1
<b>Speeds reverse:</b>	-1
<b>Differential:</b>	Controlled
<b>Steering control:</b>	Two hand levers
<b>Brakes:</b>	
<b>Operating principles:</b>	Band
<b>Control:</b>	Two hand levers
<b>Drive:</b>	Front, sprag
<b>Number of wheels:</b>	10 (dual)
<b>Suspension:</b>	Torsion bar
<b>Tracks:</b>	
<b>Construction:</b>	Center guide, Steel, Rubber
<b>Shoes or blocks:</b>	60 ea
<b>Width:</b>	16 in

## ARMAMENT

<b>Primary armament:</b>	Howitzer, 105-mm M4
<b>Traverse:</b>	
<b>Right:</b>	22.5 deg
<b>Left:</b>	-22.5 deg
<b>Elevation:</b>	45 deg
<b>Depression:</b>	-10 deg
<b>Recoil mechanism:</b>	Hydro-Spring
<b>Stabilizer system:</b>	None
<b>Secondary armament:</b>	
<b>Cal .50 MG:</b>	1 (AA)

<b>Hull:</b>	<b>ARMOR</b>
<b>Construction:</b>	Homogeneous plate
<b>Thickness:</b>	
<b>Front:</b>	.50 in
<b>Sides:</b>	.50 in
<b>Rear:</b>	.50 in
<b>Top:</b>	.50 in
<b>Floor:</b>	.30-.75 in

## VISION AND SIGHTING EQUIPMENT

<b>Periscope, vision:</b>	M18
<b>Quadrant, elevation:</b>	M18
<b>Telescope, gunner's:</b>	M76G
<b>Telescope, panoramic:</b>	M18AS

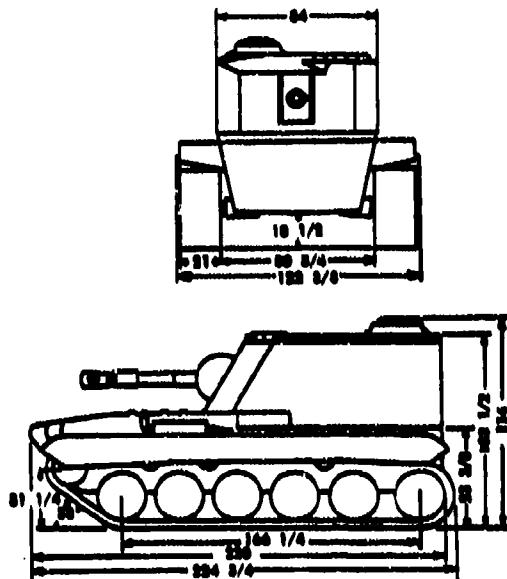
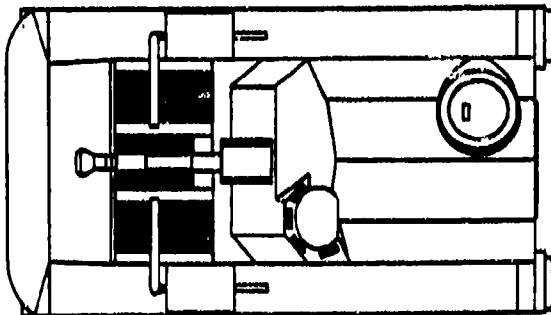
## FUEL

<b>Total:</b>	110 gal
<b>Night tank:</b>	35 gal
<b>Day tank:</b>	85 gal
<b>Cooling system (each):</b>	10 gal
<b>Crankcase (each):</b>	5 qt
<b>Engine air cleaner (each):</b>	1 qt
<b>Transmission (each):</b>	18 qt
<b>Differential:</b>	20 qt
<b>Transfer case:</b>	4.5 qt
<b>Final drive (each):</b>	3 qt
<b>Ammunition:</b>	
<b>Primary weapon:</b>	120 rounds
<b>Secondary weapons:</b>	990 rounds

## ADDITIONAL DATA

_____	_____
_____	_____
_____	_____
_____	_____

# CARRIAGE, MOTOR, 105-MM HOWITZER, T98



## GENERAL DATA

**NOTE:** The specifications are tentative and subject to change.  
**Purpose:** To provide an improved type, full-track, light, armored, highly maneuverable 105-mm howitzer motor carriage to give close support both to rapidly moving armored columns and standard infantry divisions.

**Classification:** This vehicle is not as yet standard. When put into production it will replace the Carriage, Motor, M97.

**Manufacturer:** Detroit Arsenal.

**Technical manual:** Not assigned.

**Lubrication order:** Not assigned.

**Parts list:** Not assigned.

**Price of vehicle:** Unknown

**Crew (number of personnel):** 5

**Weight, combat loaded:** 55 tons

**Length, over-all:**

    Gun in firing position ..... 18.5 ft

    Gun in traveling position ..... 18.5 ft

    Width, over-all ..... 10.5 ft

    Height, over-all ..... 9.5 ft

**Shipping dimensions (estimated):** 3650 cu ft; 246 cu ft

**Tread (center to center of track):** 101 in

**Ground clearance:** 18.5 in

**Ground pressure:** 7.65 lb/sq in

**Electrical system:** 24-volt

**Communication system:** Radio and interphone

## PERFORMANCE

**Gross horsepower to weight ratio:** 80 hp per ton

**Cruising range:** 150 mi

**Fuel consumption (estimated):** 1.9 mpg

**Maximum allowable speed:** 38.5 mph

**Maximum gradability:** 80 per cent

**Turning radius:** Pivot to infinity

**Fording depth:** 48 in

**Maximum trench:** 78 in

**Maximum vertical obstacle:** 30 in

**Range of primary armament:**

    With HE or WP smoke at 45° 07' or 811 mils ..... 18,205 yd

**Velocity of primary armament:**

    With HVAP-T shot or HEAT ..... 1850 fps

## ENGINE

**Make (manufacturer):** Continental

**Model number:** AOS 895-1

**Brake horsepower:** 500

**Torque:** 645 ft lbs @ 1400 rpm

**Maximum governed speed:** 1800 rpm

**Construction and design:** Opposed, 1-head

**Number of cylinders:** 6

**Displacement, total:** 895 cu in

**Compression ratio:** 5.8:1

**Cooling system:** Air

**Ignition:** Magneto

## CHASSIS AND POWER TRAIN

**Clutch:** None

**Transmission:** Cross-drive

**Control:** Remote, wobble stick

**Speeds forward:** 3

**Speeds reverse:** 1

**Differential:** Cross-drive

**Steering control:** Remote, wobble stick

**Brakes:** Mechanical, multiple disc

**Control:** Manual, foot pedal

**Drive:** Front sprocket

**Number of wheels:** 10, (dual)

**Suspension:** Torsion bar

**Tracks:** Center guide steel, rubber

**Construction:** Shoes or blocks

**Width:** 78 in

**Length:** 31 m

## ARMAMENT

**Primary armament:** Howitzer, 105-mm

**Traverse:** Right: 0 deg

Left: 0 deg

Elevation: -10 deg

Depression: +10 deg

Recoil mechanism: Concentric hydro-spring

Stabilizer system: None

**Secondary armament:** Cal .50 MG 1

## HULL: ARMOR

**Construction:** Homogeneous plate

**Thickness:** 8 in

Front: 8 in

Sides: 8 in

Rear: 8 in

Top: 8 in

Floor: 8 in

**Turret:** 60 in

**Ring diameter:** Homogeneous plate

**Construction:** Homogeneous plate

**Thickness:** 8 in

Front: 8 in

Sides: 8 in

Rear: 8 in

Top: 8 in

## VISION AND SIGHTING EQUIPMENT

**Periscope, vision:** M17

**Periscope, commander's:** M18

**Quadrant elevation:** Unknown

**Telescope, gunner's:** T148

**Telescope, panoramic:** T149

## FUEL CAPACITIES

**Fuel:** 160 gal

Total: None

Cooling system: 38 qt

Crankcase: Unknown

Engine air cleaner (each): Unknown

Transmission: Unknown

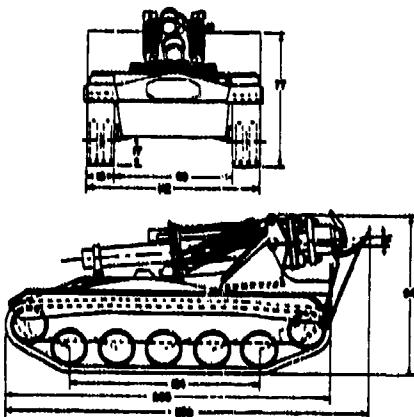
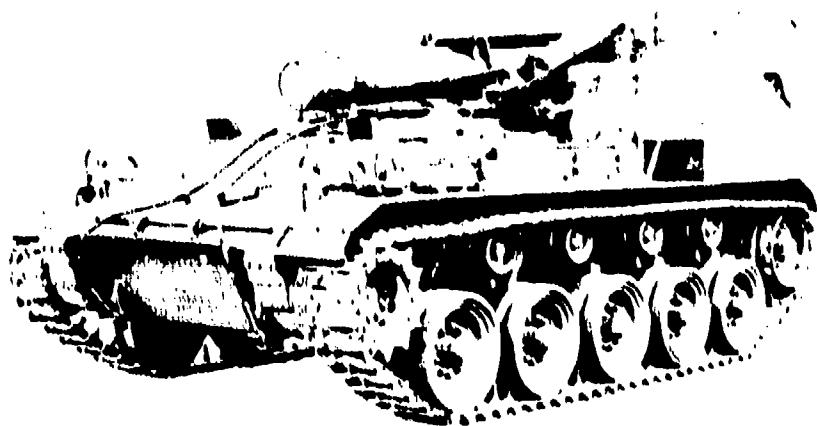
Differential: Unknown

Final drive (each): Unknown

Ammunition: Primary weapon: 100 rounds

Secondary weapons: Cal .50: 1100 rounds

# CARRIAGE, MOTOR, 155-MM HOWITZER, M41



## GENERAL DATA

Purpose: To provide a mobile 155-mm howitzer with crew protection for units of an armored division.

Classification: At present this vehicle is standard. It will eventually be superseded by the T-99 motor gun carriage.

Manufacturer: Cadillac.

Technical manual: 9-744.

Lubrication order: DA LO 9-744.

Parts list: ORD 7 SNL G886, ORD 8 SNL G886, ORD 9 SNL G886.

Price of vehicle\* ..... \$44,150

Crew (number of personnel) ..... 4 for travel; 15 for firing

Weight, combat loaded ..... 31.85 tons

Length, over-all ..... 30 ft

Gun in firing position (estimated) ..... 80 ft

Gun in traveling position ..... 70.16 ft

Width, over-all ..... 9 ft

Height, over-all ..... 8 ft

Shipping dimensions ..... 1458 cu ft; 170 sq ft

Tread (center to center of track) ..... 96 in

Ground clearance ..... 17.75 in

Ground pressure ..... 8.815 lb/sq in

Electrical system ..... 44-volt

Communication system ..... Radio and interphones

## PERFORMANCE

Gross horsepower to weight ratio ..... 10.8 hp per ton

Cruising range ..... 100 mi

Fuel consumption ..... 16 mpg

Maximum allowable speed ..... 30 mph

Maximum gradability ..... 80 per cent

Turning radius ..... 80 ft

Fording depth ..... 48 in

Maximum trench vehicle will cross ..... 108 in

Maximum vertical obstacle can negotiate ..... 40 in

Range of primary armament:

With HE shell or WP smoke at 45° 07' or 811 mils ..... 18,085 yd

Velocity of primary armament:

With HE shell or WP smoke at 45° 07' or 811 mils ..... 1880 fpe

## ENGINE

NOTE: This vehicle has two engines as described below.

Make (manufacturer) ..... Cadillac

Model number ..... 144

Brake horsepower ..... 110

Torque ..... 840 ft-lb @ 1800 rpm

Rated speed (not governed) ..... 4000 rpm

Construction and design ..... V, L-head

Number of cylinders ..... 8

Displacement, total (each engine) ..... 347 cu in

Compression ratio ..... 7.08:1

Cooling system ..... Liquid

Ignition ..... Battery, distributor

\* Price based on vehicle plus artillery equipment.

## ADDITIONAL DATA

## CHASSIS AND POWER TRAIN

Clutch	None
Transmission	Hydra-Matic
Control	Automatic
Speeds	4
Transfer case	Synchromesh
Control	Remote, hand lever
Speeds forward	8
Speeds reverse	8
Differential	Controlled
Steering control	Two hand levers
Brakes	Band
Operating principle	Two hand levers
Control	Front sprocket
Drive	10 (duo)
Number of wheels	Torsion bar
Suspension	
Tracks:	
Construction	Center guide, steel, rubber
Shoes or blocks	80 in
Width	16 in

## ARMAMENT

Primary armament	Howitzer, 155-mm M1
Traverse:	
Right	80.5 deg
Left	17.0 deg
Elevation	45 deg
Depression	-8 deg
Recoil mechanism	Hydrom-Pneumatic
Secondary armament	None

## HULL

Construction	Homogeneous plate
Thickness:	
Front	.50 in
Sides	.50 in
Rear	.50 in
Top	.50 in
Floor	.50-.075 in

## VISION AND SIGHTING EQUIPMENT

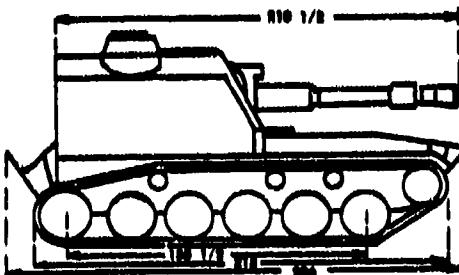
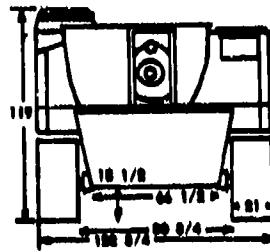
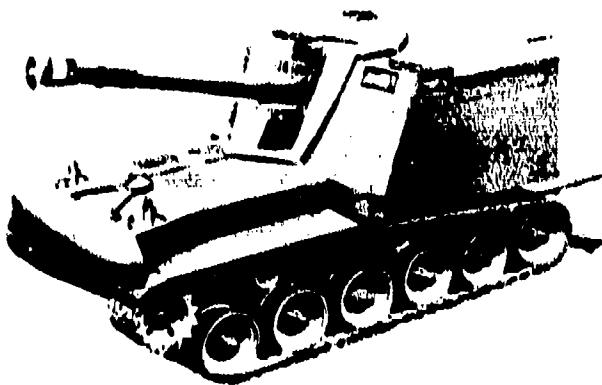
Periscope, vision	M10
Quadrant, gunner's	M1

Telescope, panoramic	M1BAG
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## FUEL

CAPACITIES	
Total	110 gal
Right tank	66 gal
Left tank	66 gal
Cooling system (each)	10 gal
Crankcase (each)	5 qt
Engine air cleaner (each)	1 qt
Transmission (each)	1 qt
Differential	40 qt
Transfer case	40 qt
Final drive (each)	8 qt
Ammunition:	
Primary weapon	38 rounds

# CARRIAGE, MOTOR, 155-MM HOWITZER, T99



## GENERAL DATA

**NOTE:** The specifications are tentative and subject to change.  
**Purpose:** To provide an improved type, full-track, lightly armored, highly mobile 155-mm gun carriage, to give close support to both rapidly moving armored columns and standard infantry divisions.

**Classification:** This vehicle is not as yet standard. When perfected it will supersede the M41 motor gun carriage.

**Manufacturer:** Detroit Arsenal.

**Technical manual:** Not assigned.

**Lubrication order:** Not assigned.

**Parts list:** Not assigned.

**Price of Vehicle** ..... Unknown

**Crew (number of personnel)** ..... 5

**Weight, combat loaded** ..... 38.85 tons

**Length, over-all** ..... 19.8 ft

**Width, over-all** ..... 10.1 ft

**Height, over-all** ..... 9.9 ft

**Shipping dimensions** ..... Unknown

**Tread (center to center of track)** ..... 101.75 in

**Ground clearance** ..... 16.8 in

**Ground pressure** ..... 5.9 lb/sq in

**Electrical system** ..... 14-volt

**Communication system** ..... Radio and interphones

## PERFORMANCE

**Gross horsepower to weight ratio** ..... 17.0 hp per ton

**Cruising range** ..... 150 mi

**Fuel consumption** ..... 9 mpg

**Maximum allowable speed** ..... 36.8 mph

**Maximum gradability** ..... 60 per cent

**Turning radius** ..... Pivot to infinity

**Fording depth** ..... 48 in

**Maximum trench vehicle will cross** ..... 78 in

**Maximum vertical obstacle can negotiate** ..... 68 in

**Range of primary armament**

With HE shell or WP smoke at 45°37' or 811 mils ..... 16,055 yd

**Velocity of primary armament:**

With HE shell or WP smoke at 45°37' or 811 mils ..... 1870 fps

## ENGINE

**Make (manufacturer)** ..... Continental

**Model number** ..... AOS-600-1

**Brake horsepower** ..... 800

**Torque** ..... 945 ft-lb @ 3400 rpm

**Maximum governed speed** ..... 3800 rpm

**Construction and design** ..... Opposed, 1-head

**Number of cylinders** ..... 6

**Displacement, total** ..... 695 cu in

**Compression ratio** ..... 5.8:1

**Cooling system** ..... Air

**Ignition** ..... Magneto

## CHASSIS AND POWER TRAIN

**Clutch** ..... None

**Transmission** ..... Cross-drive

**Control** ..... Remote, wobble stick

**Speeds forward** ..... 3

**Speeds reverse** ..... 1

Differential	.....	Cross-drive
Steering control	.....	Remote, wobble stick
Brakes	.....	
Operating principle	.....	Mechanical (multiple disc)
Control	.....	Foot pedal
Drive	.....	Front sprocket
Number of wheels	.....	10 (dual)
Suspension	.....	Tension bar
Tracks	.....	
Construction	.....	Center guide, steel, rubber
Shoes or blocks	.....	76 cm
Width	.....	1.1 m

## ARMAMENT

Primary armament	.....	Howitzer, 155-mm
Traverse	.....	
Right	.....	90 deg
Left	.....	90 deg
Elevation	.....	45 deg
Depression	.....	-45 deg
Recoil mechanism	.....	Hydro-spring
Stabilizer system	.....	None
Secondary armament	.....	
Cal. .50 MG	.....	1

## ARMOR

Hull	.....	Homogeneous plate
Construction	.....	
Thickness	.....	
Front	.....	.50 in
Sides	.....	.50 in
Rear	.....	.50 in
Top	.....	.50 in
Floor	.....	.075 in
Turret	.....	
Ring diameter	.....	Unknown
Construction	.....	Homogeneous, plate
Thickness	.....	
Front	.....	.50 in
Sides	.....	.50 in
Rear	.....	.50 in
Top	.....	.50 in

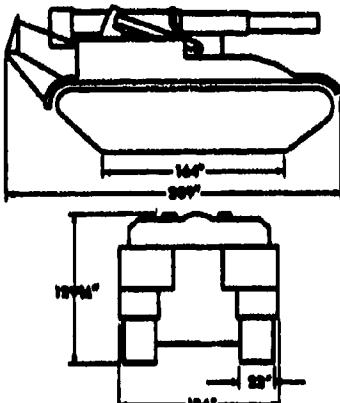
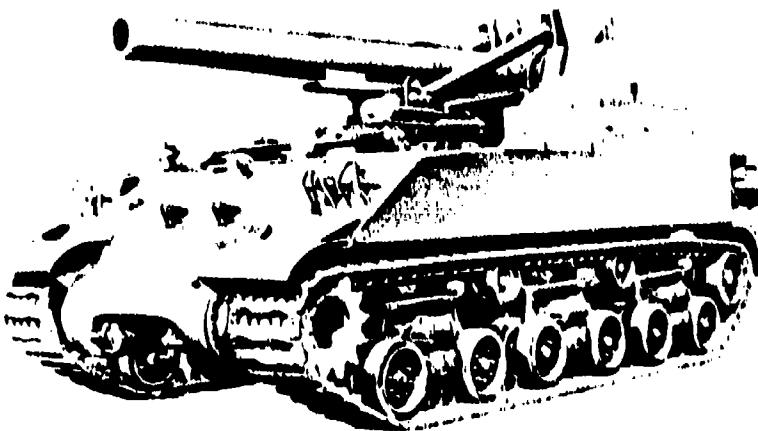
## VISION AND SIGHTING EQUIPMENT

Periscope, vision	.....	M17
Periscope, commander's	.....	M18
Quadrant, elevation	.....	Unknown
Telescope, gunner's	.....	T100
Telescope, panoramic	.....	T149

## CAPACITIES

Fuel	.....	160 gal
Total	.....	None
Cooling system	.....	None
Crankcase	.....	56 qt
Engine air cleaner (each)	.....	Unknown
Transmission	.....	Unknown
Differential	.....	Unknown
Final drive (each)	.....	Unknown
Ammunition:		
Primary weapon	.....	30 rounds
Secondary weapon	.....	1100 rounds
Cal. .50	.....	

# CARRIAGE, MOTOR, 155-MM GUN, M40, AND CARRIAGE, MOTOR, 8-INCH HOWITZER, M43



## GENERAL DATA

**Purpose:** To provide fire power mobility and crew protection in supporting artillery for offensive combat.

**Classification:** At present this vehicle is standard. It will eventually be superseded by a vehicle with torsion bar suspension, air cooled engine, cross-drive transmission, and turret-type gun mount similar to the T97, 155-mm motor gun carriage.

**Manufacturer:** Pressed Steel Car Company.

**Technical manuals:** Q-747, Q-1735, Q-1731K, Q-1747A, Q-1750B, Q-1750C, Q-1750D, Q-1751, Q-1885A, Q-1885B, Q-1885C, Q-1885A.

**Lubrication order:** DA LO Q-747.

**Parts list:** ORD 7 SNL GS88, ORD 8 SNL GS88, ORD 9 SNL GS88.

**Price of vehicle** ..... Unknown

**Crew (number of personnel)** ..... 8 in travel; 15 for firing

**Weight, combat loaded** ..... 40 tons

**Length, over-all, in firing or travel position** ..... 28.84 ft

M40, 155-mm gun ..... 28.84 ft

M40, 8-in howitzer ..... 10.88 ft

**Width, over-all** ..... 10.88 ft

**Height, over-all** ..... 10.78 ft

**Shipping dimensions** ..... 36.00 ft. cu. ft. 246.8 cu. ft.

**Tread (center to center of track)** ..... 101 in

**Ground clearance** ..... 17 in

**Ground pressure** ..... 10.8 lb/sq in

**Electrical system** ..... 44-volt

**Communication system** ..... Radio and interphone

## PERFORMANCE

**Gross horsepower to weight ratio** ..... 11.7 hp per ton

**Cruising range** ..... 100 mil

**Fuel consumption** ..... 8 mpg

**Maximum allowable speed** ..... 34 mph

**Maximum gradability** ..... .00 per cent

**Turning radius** ..... 41.5 ft

**Fording depth** ..... 36 in

**Maximum trench, vehicle will cross** ..... 36 in

**Maximum vertical obstacle can negotiate** ..... 34 in

**Range of primary armament:**

With HE 155-mm shell or WP smoke at 45°07'

or 811 miles ..... 35,718 yds

With HE 8-in shell or WP smoke at 45°07'

or 811 miles ..... 18,810 yd

**Velocity of primary armament:**

With HE 155-mm shell or WP smoke at 45°07'

or 811 miles ..... 8748 fpm

With HE 8-in shell or WP smoke at 45°07'

or 811 miles ..... 1950 fpm

## ENGINE

**Make (manufacturer)** ..... Continental

**Model number** ..... R978-C4

**Brake horsepower** ..... 400

**Torque** ..... 940 ft lb @ 1700 rpm

**Maximum governed speed** ..... 3500 rpm

**Construction and design** ..... Radial, I-head

**Number of cylinders** ..... 9

**Displacement, total** ..... 976 cu in

**Compression ratio** ..... 5.7:1

**Cooling system** ..... Air

Magneto

## CHASSIS AND POWER TRAIN

Clutch	Multiple disc
Transmission	Synchronesh
Control	Direct, hand lever
Speeds forward	3
Speeds reverse	3
Differential	Controlled
Steering control	Two hand levers
Brakes	
Operating principle	Band
Control	Two hand levers
Drive	Front sprocket
Number of wheels	18 (dual)
Suspension	Horizontal volute spring
Tracks	
Construction	Center guide, steel, rubber
Sheets or blocks	.67 in
Width	.88 in

## ARMAMENT

Primary armament:	
M40	Gun, 155-mm
M43	Howitzer, 8-inch
Traverse:	
Right	15 deg
Left	15 deg
Elevation	88 deg
Depression	5 deg
Recoil mechanism	Hydraulic

Hull:	Armor
Construction	Homogeneous plate
Thickness:	
Front	.80 in
Side	.80 in
Rear	.80 in
Top	.80 in
Floor	1.80 in

## VISION AND SIGHTING EQUIPMENT

Periscope, vision	None
Periscope, commander's	None
Range finder	None
Quadrant, elevation	M1
Telescope, gunner's (M40 only)	M69F
Telescope, gunner's (M43 only)	M69G
Telescope, panoramic	M18

Fuel:	CAPACITIES
Total	315 gal

Cooling system	None
Crankcase	.58 qt

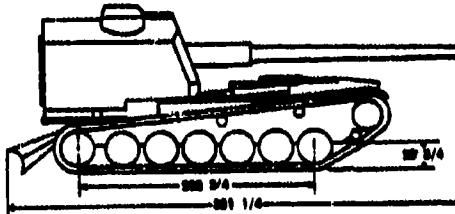
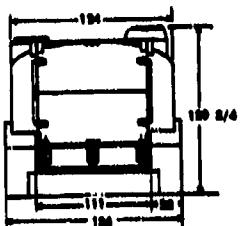
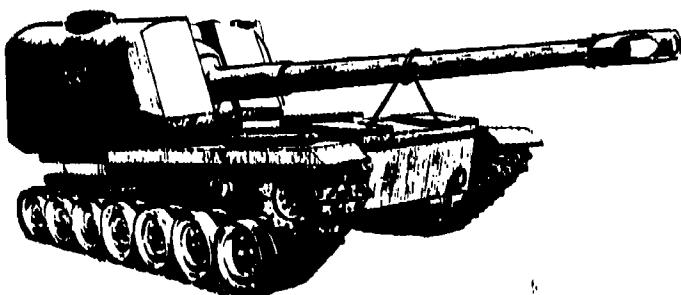
Engine air cleaner (each)	.58 qt
Transmission	164 qt

Differential	Integral with transmission
Final drive (each)	Integral with transmission

Ammunition:	
Primary weapon	12 rounds

## ADDITIONAL DATA

# CARRIAGE, MOTOR, 155-MM GUN, T97



## GENERAL DATA

**NOTE:** These specifications are tentative and subject to change.

**Purpose:** To provide an improved mobile and maneuverable gun motor carriage, capable of acting as general support artillery and also capable of giving close support to armored columns.

**Classification:** This vehicle is not as yet standard. When put into production it will replace the M40 motor gun carriage.

**Manufacturer:** Pacific Car and Foundry Company.

**Technic car number:** Not assigned.

**Lubrication Order:** Not assigned.

**Part No.:** Not assigned.

**Price of vehicle:** Unknown.

**Crew (number of personnel):** 6.

**Weight, combat loaded:** 48 tons.

**Length, over-all:** Gun in firing position, or traveling 81.77 ft.

Width, over-all 11.1 ft.

Height, over-all 10.8 ft.

**Shipping dimensions:** Unknown.

**Tread (center to center of track):** 111 in.

**Ground clearance (estimated):** 18 in.

**Ground pressure:** 16.8 lb/sq in.

**Electrical system:** 24-volt.

**Communication system:** Radio and interphones.

## PERFORMANCE

**Gross horsepower to weight ratio:** 18.5 hp per ton.

**Cruising range:** 150 mi.

**Fuel consumption:** 8 mpg.

**Maximum allowable speed:** 38 mph.

**Maximum gradability:** 60 per cent.

**Turning radius:** Pivot to infinity.

**Fording depth:** 48 in.

**Maximum trench vehicle will cross:** 96 in.

**Maximum vertical obstacle can negotiate:** 48 in.

**Range of primary armament:**

With HE shell or WP smoke at 45°37' or 811 miles 28,718 yd.

With APC-T projectile at 45° or 800 miles 24,078 yd.

**Velocity of primary armament:**

With HE shell or WP smoke at 45°37' or 811 miles 2800 fpm.

With APC-T projectile at 45° or 800 miles 2775 fpm.

## ENGINE

**Make (manufacturer):** Continental.

**Model number:** AV-1790-3.

**Brake horsepower:** 810.

**Torque:** 1810 ft-lb @ 2800 rpm.

**Maximum governed speed:** 3800 rpm.

**Construction and design:** V, I-head.

**Number of cylinders:** 12.

**Displacement, total:** 1790 cu in.

**Compression ratio:** 6.5:1.

**Cooling system:** Air.

**Ignition:** Magneto.

## CHASSIS AND POWER TRAIN

**Clutch:** None.

**Transmission:** Cross-drive.

**Control:** Remote, wobble stick.

**Speeds forward:** 8.

**Speeds reverse:** 8.

Differential	Cross-drive
Steering control	Remote, wobble stick
Brakes:	
Operating principle	Mechanical, multiple disc
Control	Manual, foot pedal
Drive	
Number of wheels	18 (dual)
Suspension	Torsion bar
Tracks:	
Construction	Center guide, rubber
Shoes or blocks	Unknown
Width	38 in

## ARMAMENT

Primary armament	Gun, 155-mm
Traverse	
Right	90 deg
Left	90 deg
Elevation	68 deg
Depression	-8 deg
Recoil mechanism	Hydro-spring
Stabilizer system	None
Secondary armament:	
Cal .50 MG	1

## ARMOR

Hull:	Homogeneous plate
Construction	
Thickness:	
Front	1 in
Sides	1 in
Rear	1 in
Top	1 in
Floor	50 in
Turret:	
Ring diameter	68 in
Construction	Homogeneous plate
Thickness:	
Front	50 in
Sides	50 in
Rear	50 in
Top	50 in

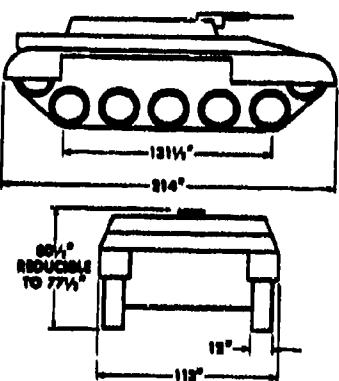
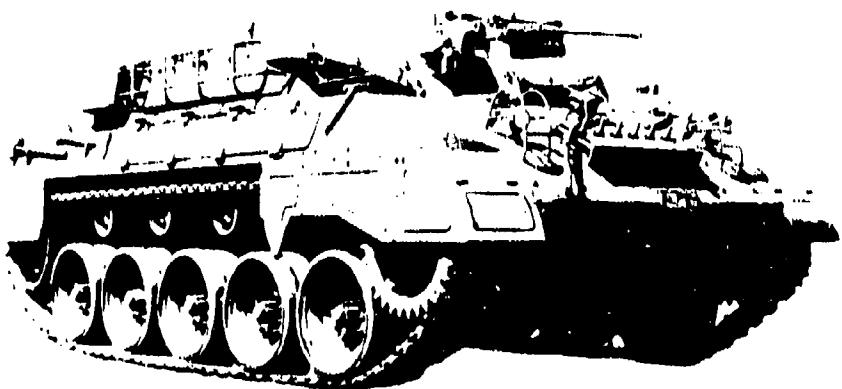
## VISION AND SIGHTING EQUIPMENT

Periscope, vision	M17
Periscope, commander's	M18
Quadrant, elevation	Unknown
Telescope, gunner's	Unknown

## CAPACITIES

Fuel:	
Total	350 gal
Cooling system	None
Crankcase	78 qt
Engine air cleaner (each)	Unknown
Transmission	Unknown
Differential	Unknown
Final drive (each)	Unknown
Ammunition:	
Primary weapon	30 rounds
Secondary weapons:	
Cal .50 MG	1100 rounds

# VEHICLE, UTILITY, ARMORED, M39



## GENERAL DATA

**Purpose:** To transport cargo and personnel in combat and for use as prime mover for light field artillery.

**Classification:** At present this vehicle is limited standard. Its power train and power plant are not in line with the standardization program. This vehicle will be superseded by either the T18 utility vehicle or T43 cargo tractor.

**Manufacturer:** Buick Motor Car Division, GMC.

**Technical manual:** 9-755, 9-1755, 9-1751G, 9-1750D, 9-1755A, 9-1755B, 9-1886B, 9-1886A, 9-1889A.

**Lubrication order:** DA LO 9-755.

**Parts list:** ORD 7 SNL G160, ORD 8 SNL G160, ORD 9 SNL G160.

**Price of vehicle** Unknown  
**Crew (number of personnel)** 10  
**Weight, combat loaded** 17.75 tons  
**Length, over-all** 17.8 ft  
**Width, over-all** 8.4 ft  
**Height, over-all** 8.6 ft  
**Shipping dimensions** 1180.5 cu ft; 169.45 cu ft  
**Tread (center to center of track)** 88.5 in  
**Ground clearance** 14.55 in  
**Ground pressure** 11.35 lb/sq in  
**Electrical system** 34-volt  
**Communication system** Radio and interphone

## PERFORMANCE

**Gross horsepower to weight ratio** .87.3 hp per ton  
**Cruising range** 180 mi  
**Fuel consumption** 9 mpg  
**Maximum allowable speed** 60 mph  
**Maximum gradability** 60 per cent  
**Turning radius** 30 ft  
**Fording depth** 48 in  
**Maximum trench vehicle will cross** 74 in  
**Maximum vertical obstacle can negotiate** 68 in  
**Pay load** 4000 lb  
**Towed load** 24,500 lb

## ENGINE

**Make (manufacturer)** Continental  
**Model number** R975C4  
**Brake horsepower** 285  
**Torque** 940 ft lb @ 1700 rpm  
**Maximum governed speed** 2400 rpm  
**Construction and design** Radial, 1-head  
**Number of cylinders** 9  
**Displacement, total** 875 cu in  
**Compression ratio** 5.7/1

**Cooling system** Air  
**Ignition** Magneto

## CHASSIS AND POWER TRAIN

**Clutch** None  
**Transmission** Torumatic  
**Control** Remote, hand lever  
**Speeds forward** 3  
**Speeds reverse** 3  
**Transfer case** Constant mesh  
**Control** None  
**Speeds** 3  
**Differential** Controlled  
**Steering control** Two hand levers  
**Brakes** Band  
**Operating principle** Two hand levers  
**Control** Front sprocket  
**Drive** Torsion bar  
**Number of wheels** 10 (dual)  
**Suspension** Center guide steel  
**Tracks** Steel  
**Construction** Shoe or blocks  
**Width** 18 in

## ARMAMENT

**Cal .50 MG** 1

**Hull:**  
**Construction** Homogeneous plate  
**Thickness:**  
 Front 50 in  
 Sides 50 in  
 Rear 50 in  
 Top 50 in  
 Floor 18 in

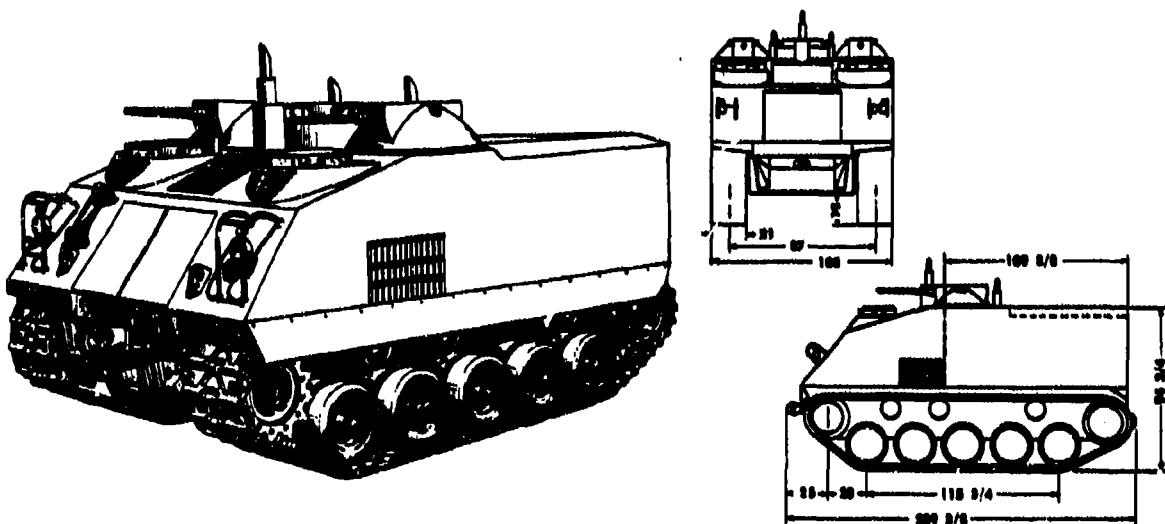
## VISION AND SIGHTING EQUIPMENT

**Periscope, vision** M18

**Fuel:**  
**Total** 165 gal  
**Right tank** 82.5 gal  
**Left tank** 82.5 gal  
**Cooling system** None  
**Crankcase** 44 qt  
**Engine air cleaner (each)** 3 qt  
**Transmission** 50 qt  
**Differential and transfer case** 50 qt  
**Final drive (each)** 50 qt  
**Ammunition:**  
**Primary weapon (Cal .50 MG)** 900 rounds

## ADDITIONAL DATA

# VEHICLE, UTILITY, ARMORED, T18



## GENERAL DATA

**NOTE:** These specifications are tentative and subject to change.  
**Purpose:** Armored personnel carrier, armored cargo carrier, litter carrier, prime mover, reconnaissance vehicle, and command post vehicle.

**Classification:** This vehicle is in development stage. It was primarily intended to fill the requirement for a 14-man armored personnel carrier for armored infantry.

**Manufacturer:** International Harvester Company.

**Technical manual:** Not assigned.

**Lubrication order:** Not assigned.

**Parts list:** Not assigned.

**Price of vehicle:** Unknown

**Crew and passengers (number of personnel):** 14

**Weight, combat loaded:** 17 tons

**Length, over-all:** 17.5 ft

**Width, over-all:** 9 ft

**Height, over-all (estimated):** 9 ft

**Shipping dimensions:** 1410 cu ft; 186 sq ft

**Tread (center to center of track):** 87 in

**Ground clearance:** 18 in

**Ground pressure:** 6.8 lbs/sq in

**Electrical system:** 14-volt

**Communication system:** Radio and interphone

## PERFORMANCE

**Gross horsepower to weight ratio:** 22 hp per ton

**Cruising range (estimated):** 150 mi

**Fuel consumption:** 1 mpg

**Maximum allowable speed:** 37 mph

**Maximum gradability:** 60 per cent

**Turning radius:** Pivot to infinity

**Fording depth:** 48 in

**Maximum trench vehicle will cross:** 66 in

**Maximum vertical obstacle:** 18 in

**Pay load:** Unknown

**Towed load:** Unknown

## ENGINE

**Make (manufacturer):** Continental

**Model number:** AO-595

**Brake horsepower:** 375

**Torque:** 756 ft lb

**Maximum governed speed:** 3800 rpm

**Construction and design:** Opposed, I-head

**Number of cylinders:** 6

**Displacement, total:** 865 cu in

Compression ratio	5.75:1
Cooling system	Air cooled
Ignition	Magnetic

## CHASSIS AND POWER TRAIN

Clutch	None
Transmission	Cross-drive (CD 800)
Control	Wobult's stick
Speeds forward	3
Speeds reverse	1
Differential	
Brakes:	Crown-drive
Operating principle	Mechanical, multiple disc
Control	Manual, foot pedal
Drive	Front sprocket
Number of wheels	10 (dual)
Suspension	Individual torsion bar
Tracks:	
Construction	Steel chevron, center guide
Shoes or blocks	78 cu in
Width	31 in

## ARMAMENT

Cal .50 MG	3 (remote controlled, one on each side of front roof)
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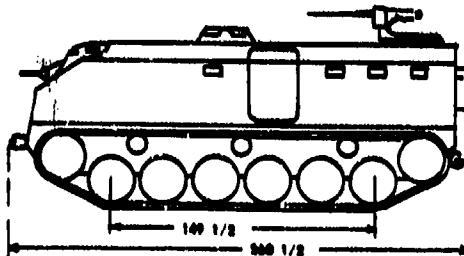
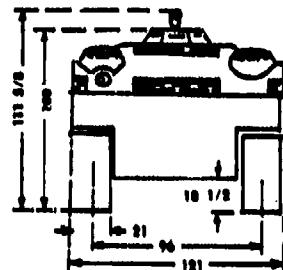
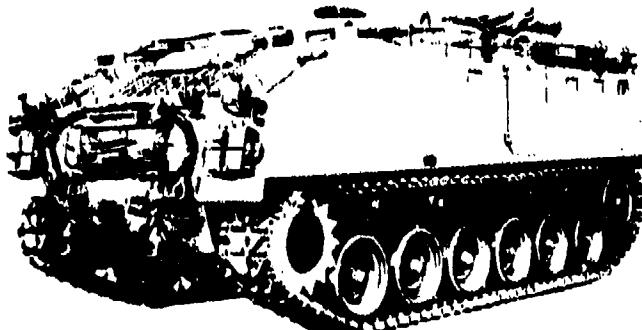
Hull:	ARMOR
Construction	Homogeneous plate
Thickness:	
Front	5/8 in
Slides	5/8 in
Rear	5/8 in
Top	5/8 in
Floor	1 in under engine

VISION AND SIGHTING EQUIPMENT	
Periscope, vision	M17 (22 ea)
Sight, periscope	T31 (4 ea)

Fusil:	CAPACITIES
Total	150 gal
Cooling system	None
Crankcase	58 qt
Engine air cleaner (each) (estimated)	3.5 qt
Transmission	Unknown
Differential	Integral with transmission
Final drive (each)	Unknown
Ammunition:	
Cal .50	3000 rounds

## ADDITIONAL DATA

# VEHICLE, UTILITY, ARMORED, M44



## GENERAL DATA

**Purpose:** Armored cargo and personnel carrier, reconnaissance vehicle, command post, prime mover, and armored maintenance vehicle.

**Classification:** The vehicle at present is T/O&E standard in armored units. As only six of these vehicles exist, they are not available for issue to field troops. The M44E1 will supersede the M44 in the future. It has the common component power train.

**Manufacturer:** Cadillac Motor Car Division.

**Technical manual:** Not assigned.

**Lubrication order:** Not assigned.

**Parts list:** Not assigned.

**Price of vehicle:** Unknown

**Crew and passengers (number of personnel):** 37

**Weight, combat loaded:** 26.08 tons

**Length, over-all:** 21.66 ft

**Width, over-all:** 10.09 ft

**Height, over-all:** 9.01 ft

**Shipping dimensions:** 3004.28 cu ft; 118.5 cu ft

**Tread (center to center of track):** 96 in

**Ground clearance:** 18.25 in

**Ground pressure:** 8.0 lb/sq in

**Electrical system:** 24-volt

**Communication system:** Radio and Interphone

## PERFORMANCE

**Gross horsepower to weight ratio:** 10.5 hp per ton

**Cruising range:** 180 mi

**Fuel consumption:** 8 mpg

**Maximum allowable speed:** 32 mph

**Maximum gradability:** 60 per cent

**Turning radius (estimated):** 51 ft

**Fording depth:** 40 in

**Maximum trench vehicle will cross:** 84 in

**Maximum vertical obstacle can negotiate:** 30 in

**Pay load (estimated):** 10,000 lb

**Towed load:** 32,000 lb

## ENGINE

**Make (manufacturer):** Continental

**Model number:** R975-D4

**Brake horsepower:** 475

**Torque:** 1073 ft lbs @ 1900 rpm

**Maximum governed speed:** 2400 rpm

**Construction and design:** Radial, 1-head

**Number of cylinders:** 9

**Displacement, total:** 970 cu in

**Compression ratio:** 8.7:1

**Cooling system:** Air

**Ignition:** Magneto

## CHASSIS AND POWER TRAIN

<b>Clutch:</b>	None
<b>Transmission:</b>	Torqmatic
<b>Control:</b>	Remote, hand lever
<b>Speeds forward:</b>	8
<b>Speeds reverse:</b>	1
<b>Transfer case:</b>	Angle, 1.29:1 ratio
<b>Differential:</b>	Controlled
<b>Steering control:</b>	Two hand levers
<b>Brakes:</b>	
<b>Operating principle:</b>	Band
<b>Control:</b>	Two hand levers
<b>Drive:</b>	Front sprocket
<b>Number of wheels:</b>	12 (dual)
<b>Suspension:</b>	Individual torsion bar
<b>Tracks:</b>	
<b>Construction:</b>	Steel chevron, center guide
<b>Shoes or blocks:</b>	64 sq in
<b>Width:</b>	21 in

## ARMAMENT

<b>Cal .50 MG</b>	1 (ring mount)
<b>Cal .30 MG</b>	1 (bow)

## ARMOR

<b>Hull:</b>	Homogeneous plate
<b>Thickness:</b>	
Front:	5/16 in
Sides:	1/4 in
Rear:	1/4 in
Top:	7/16 in
Floor:	5/16 in

## VISION AND SIGHTING EQUIPMENT

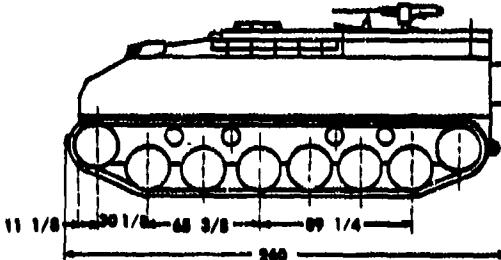
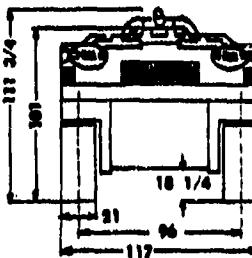
<b>Periscope, vision</b>	M17 (14 in)
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<b>Fuel:</b>	<b>CAPACITIES</b>
Total	395 gal
Cooling system	None
Crankcase	48 qt
Engine air cleaner (each) (estimated)	3.8 qt
Torque converter	0.4 qt
Transmission	28 qt
Differential	Integral with transmission
Final drive (each)	10 qt
Ammunition:	
Cal .50	550 rounds
Cal .30	1000 rounds

## ADDITIONAL DATA

# VEHICLE, UTILITY, ARMORED, M44E1

NO PHOTO  
AVAILABLE



## GENERAL DATA

**NOTE:** These specifications are tentative and subject to change.  
**Purpose:** A full-track armored carrier capable of transporting personnel or cargo. It will serve as prime mover, command post, reconnaissance vehicle, or maintenance vehicle.  
**Classification:** This vehicle is an improved version of the current standard M44 armored utility vehicle. It contains standard components such as the cross-drive transmission and air cooled (family) engines. Eventually it will replace the M44.  
**Manufacturer:** Detroit Arsenal.  
**Technical manual:** Not assigned.  
**Lubrication order:** Not assigned.  
**Parts list:** Not assigned.  
**Price of vehicle:** Unknown  
**Crew and passengers (number of personnel):** 97  
**Weight, combat loaded:** 25.5 tons  
**Length, over-all:** 21.66 ft  
**Width, over-all:** 9.75 ft  
**Height, over-all:** 9.81 ft  
**Shipping dimensions:** 1964.4 cu ft; 311.1 sq ft  
**Tread (center to center of track):** 96 in  
**Ground clearance:** 18.85 in  
**Ground pressure:** 6.3 lbs/sq in  
**Electrical system:** 24-volt  
**Communication system:** Radio and interphone

## PERFORMANCE

**Gross horsepower to weight ratio:** 19.6 hp per ton  
**Cruising range:** 180 mil  
**Fuel consumption:** 8 mpg  
**Maximum allowable speed:** 44.4 mph  
**Maximum gradability:** 60 per cent  
**Turning radius:** Pivot to infinity  
**Fording depth:** 40 in  
**Maximum trench vehicle will cross:** 84 in  
**Maximum vertical obstacle can negotiate:** 30 in  
**Pay load:** 10,000 lb  
**Tractive effort:** 48,100 lb

## ENGINE

**Make (manufacturer):** Continental  
**Model number:** ACOS-695-1  
**Brake horsepower:** 500  
**Torque:** 955 ft lb @ 2400 rpm  
**Maximum governed speed:** 2900 rpm  
**Construction and design:** Opposed, I-head  
**Number of cylinders:** 6  
**Displacement, total:** 895 cu in

**Compression ratio:** 8.5:1  
**Cooling system:** Air cooled  
**Ignition:** Magneto

## CHASSIS AND POWER TRAIN

**Clutch:** None  
**Transmission:** Cross-drive  
**Control:** Wobble-stick  
**Speeds forward:** 8  
**Speeds reverse:** 2  
**Differential:** Cross-drive  
**Steering control:** Wobble stick  
**Brakes:**  
**Operating principle:** Mechanical, multiple disc  
**Control:** Foot pedal  
**Drive:** From sprocket  
**Number of wheels:** 12 (dual)  
**Suspension:** Individual torsion bar  
**Tracks:**  
**Construction:** Steel chevron, center guide  
**Shoes or blocks:** 64 in  
**Width:** 51 in

## ARMAMENT

**Cal .50 MG:** 1 (ring mount)

**Hull:**  
**Construction:** Homogeneous plate  
**Thickness:**  
 Front: 1/2 in  
 Sides: 1/2 in  
 Rear: 1/2 in  
 Top: 1/2 in  
 Floor: 5/16 in

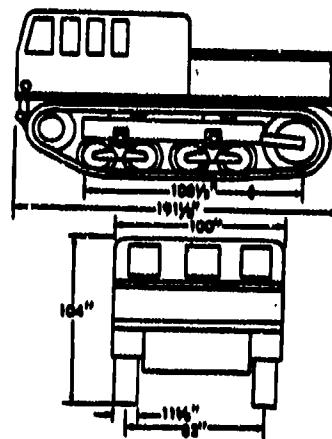
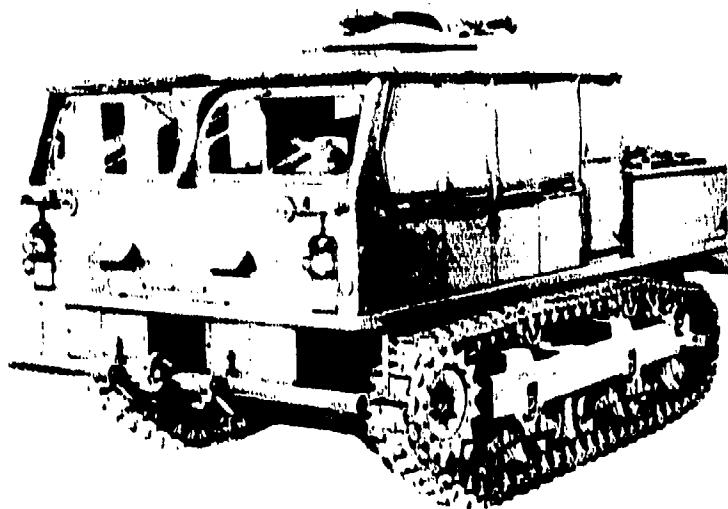
## VISION AND SIGHTING EQUIPMENT

**Periscope, vision:** M17 (14 each)

**Fuel:**  
**Total:** 225 gal  
**Cooling system:** None  
**Crankcase:** 38 qt  
**Engine air cleaner (each) (estimated):** 0.5 qt  
**Transmission:** Unknown  
**Differential:** Integral with transmission  
**Ammunition:**  
**Cal .50:** 550 rounds

## ADDITIONAL DATA

# TRACTOR, 13-TON, HIGH SPEED, M5A1



## GENERAL DATA

**Purposes:** To tow artillery over rough terrain and transport gun crews and ammunition.  
**Classification:** This vehicle at present is standard; however, it will eventually be superseded by the T40E1 cargo tractor.  
**Manufacturer:** International Harvester Company.  
**Technical manuals:** 9-786, 9-1786A, 9-1786B, 9-1885A, 9-1886C, 9-1885A.  
**Lubrication order:** DA LO 9-786.  
**Parts list:** ORD 7 SNL G162, ORD 8 SNL G162, ORD 9 SNL G162.  
**Price of vehicle** \$11,988  
**Crew (number of personnel)** 11  
**Weight, combat loaded** 18.7<sup>1/2</sup> tons  
**Length, over-all** 19.9 ft  
**Width, over-all** 8.3 ft  
**Height, over-all** 5.8 ft  
**Shipping dimensions** 1178.8 cu ft; 185.8 sq ft  
**Tread (center to center of track)** 80.18 in  
**Ground clearance** 19.75 in  
**Ground pressure** 11.1 lb/sq in  
**Electrical system** 12-volts

## PERFORMANCE

**Gross horsepower to weight ratio** 18.0 hp per ton  
**Cruising range** 185 mi  
**Fuel consumption** 1 to 3 mpg  
**Maximum allowable speed** 35 mph  
**Maximum gradability** 67 per cent  
**Turning radius** 20 ft  
**Fording depth** 48 in  
**Maximum trench vehicle will cross** 6 in  
**Maximum vertical obstacle can negotiate** 18 in  
**Towed load** 30,000 lb  
**Winch load** 15,000 lb

## ENGINE

**Make (manufacturer)** Continental  
**Model number** R-6572

\* Price based on vehicle plus artillery equipment.

<b>Brake horsepower</b>	305
<b>Torque</b>	455 ft lb @ 1600 rpm
<b>Maximum governed speed</b>	2900 rpm
<b>Construction and design</b>	In-line, I-head
<b>Number of cylinders</b>	6
<b>Displacement, total</b>	572 cu in
<b>Compression ratio</b>	6.8:1
<b>Cooling system</b>	Liquid
<b>Ignition</b>	Battery, distributor

## CHASSIS AND POWER TRAIN

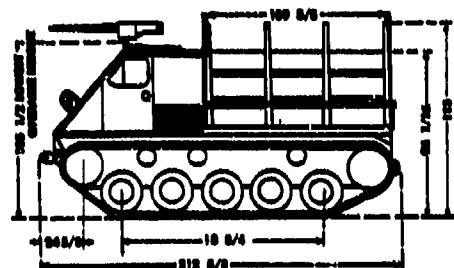
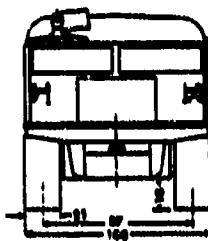
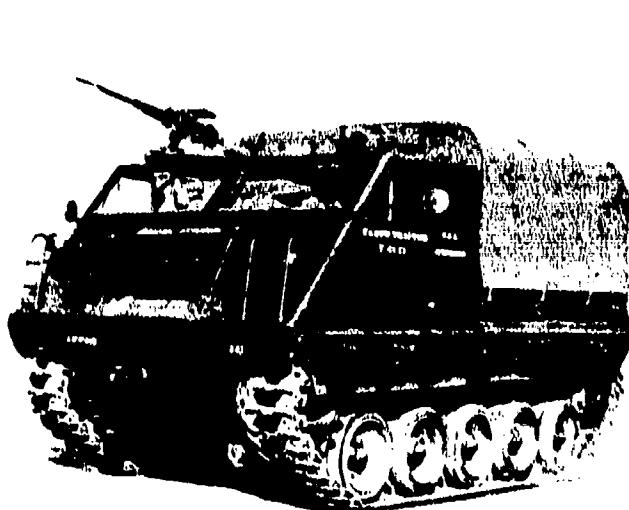
<b>Clutch</b>	Dual range, disc
<b>Transmission</b>	Constant mesh
<b>Control</b>	Direct, hand lever
<b>Speeds forward</b>	4
<b>Speeds reverse</b>	4
<b>Differential</b>	Controlled
<b>Steering control</b>	Two hand levers
<b>Brakes:</b>	
<b>Operating principle</b>	Band
<b>Control</b>	Two hand levers
<b>Drive</b>	Front sprocket
<b>Number of wheels</b>	8 (single)
<b>Suspension</b>	Vertical volute spring
<b>Tracks:</b>	
<b>Construction</b>	Outside guide, steel
<b>Shoes or blocks</b>	80 sq in
<b>Width</b>	11-1/2 in

## Fuel: CAPACITIES

<b>Total</b>	102.75 gal
<b>Right tank</b>	56.07 gal
<b>Left tank</b>	56.07 gal
<b>Cooling system</b>	20 gal
<b>Crankcase</b>	25 qt
<b>Engine air cleaner (each)</b>	5 qt
<b>Transmission</b>	50 qt
<b>Differential</b>	100 qt
<b>Final drive (each)</b>	5 qt
<b>Winch gear case</b>	60 qt

## ADDITIONAL DATA

# TRACTOR, CARGO, T43E1



## GENERAL DATA

**NOTE.** These specifications are tentative and subject to change.  
**Purpose:** Cross-country prime mover for 155-mm howitzer and lighter loads; also used as cargo or personnel carrier where no armor is required.

**Classification:** This vehicle is not as yet standard. When put into production it will supersede the M8 and M8A1 18-ton high-speed tractor.

**Manufacturer:** International Harvester Company.

**Technical manual:** Not assigned.

**Lubrication order:** Not assigned.

**Parts list:** Not assigned.

Price of vehicle	Unknown
Crew (number of personnel)	3
Weight, combat loaded	18.0 tons
Length, over-all	17.0 ft
Width, over-all	9.0 ft
Height, over-all	9.4 ft
Shipping dimensions	Unknown
Tread (center to center of track)	87 in
Ground clearance	18 in
Ground pressure	6.9 lb/sq in
Electrical system	34-volt

## PERFORMANCE

Gross horsepower to weight ratio	22.0 hp per ton
Cruising range	150 mi
Fuel consumption (estimated)	1 mpg
Maximum allowable speed	.07 mph
Maximum gradability	.60 per cent
Turning radius	Pivot to infinity
Fording depth	48 in
Maximum trench vehicle will cross	66 in
Maximum vertical obstacle will negotiate	18 in
Pay load	8000 lb
Towed load	Unknown
Winch load	Unknown

## ENGINE

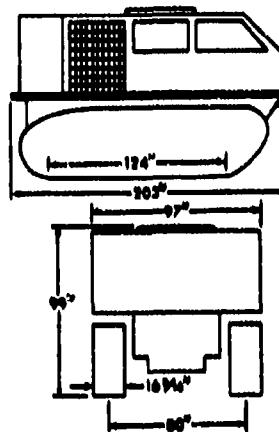
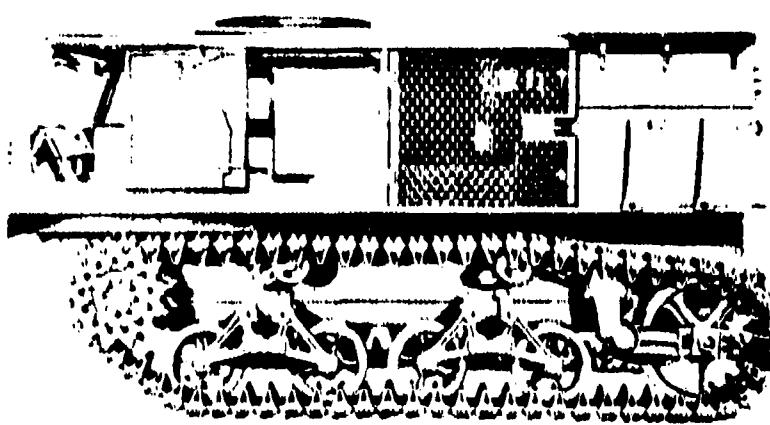
Make (manufacturer)	Continental
Model number	AO 805-8
Brake horsepower	875
Torque	768 ft-lb
Maximum governed speed	3800 rpm
Construction and design	Opposed, I-head
Number of cylinders	8
Displacement, total	385 cu in
Compression ratio	6.5:1
Cooling system	Air
Ignition	Magneto

## CHASSIS AND POWER TRAIN

Clutch	None
Transmission	Cross-drive
Control	Wobble stick
Speeds forward	3
Speeds reverse	1
Differential	Cross-drive
Steering control	Wobble stick
Brakes:	
Operating principle	Mechanical (multiple disc)
Control	Foot pedal
Drive	Front sprocket
Number of wheels	10 (dual)
Suspension	Torsion bar
Tracks:	
Construction	Center guide, steel
Shoes or blocks	76 in
Width	81 in
Fuel:	
Total	150 gal
Cooling system	None
Crankcase	56 qt
Engine air cleaner (each)	Unknown
Transmission	Unknown
Differential	Unknown
Final drive (each)	Unknown
Winch gear case	Unknown

## ADDITIONAL DATA

# TRACTOR, HIGH SPEED, 18-TON, M4 AND M4C



## GENERAL DATA

**Purpose:** To tow heavy artillery over rough terrain, transport gun crews, and ammunition.

**Classification:** This vehicle is substitute standard. It has been superseded by Cargo Tractor, M8. Both vehicles will eventually be superseded by the T40E1 or T44 cargo tractors.

**Manufacturer:** Allis-Chalmers Manufacturing Company.

**Technical manuals:** 9-785, 9-1788A, 9-1788B, 9-1788A, 9-1886C, 9-1887A, 9-1888A, 9-1889A.

**Lubrication order:** 9-785.

**Parts list:** ORD 7 SNL G180, ORD 8 SNL G180, ORD 9 SNL G180.

**Price of vehicle\*** \$15,067  
**Crew (number of personnel)** 11  
**Weight, combat loaded** 14 tons  
**Length, over-all** 16.9 ft  
**Width, over-all** 8.0 ft  
**Height, over-all** 8.1 ft  
**Shipping dimensions** 1188 cu ft; 107.6 sq ft  
**Tread (center to center of track)** 80 in  
**Ground clearance** 20 in  
**Ground pressure** 7.6 lb/sq in  
**Electrical system** 12-volt

## PERFORMANCE

**Gross horsepower to weight ratio** 10.4 hp per ton  
**Cruising range** 180 mi  
**Fuel consumption** .8 mpg  
**Maximum allowable speed** .08 mph  
**Maximum gradability** 60 per cent  
**Turning radius** 18.5 ft  
**Fording depth** 41 in  
**Maximum trench vehicle will cross** 80 in  
**Maximum vertical obstacle can negotiate** 88 in  
**Towed load** 33,700 lb  
**Winch load** 30,000 lb

\* Price based on vehicle plus artillery equipment.  
M4C is a M4 modified to carry 48 rounds of 105-mm ammunition and 8 passengers.

## ENGINE

<b>Make (manufacturer)</b>	Waukesha
<b>Model number</b>	145GZ
<b>Brake horsepower</b>	210
<b>Torque</b>	.885 ft lb @ 1800 rpm
<b>Maximum governed speed</b>	3100 rpm
<b>Construction and design</b>	In-line, 1-head
<b>Number of cylinders</b>	6
<b>Displacement, total</b>	817 cu in
<b>Compression ratio</b>	8.98:1
<b>Cooling system</b>	Liquid
<b>Ignition</b>	Battery, distributor

## CHASSIS AND POWER TRAIN

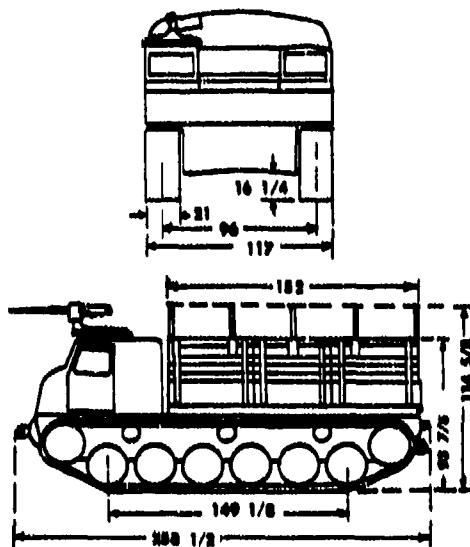
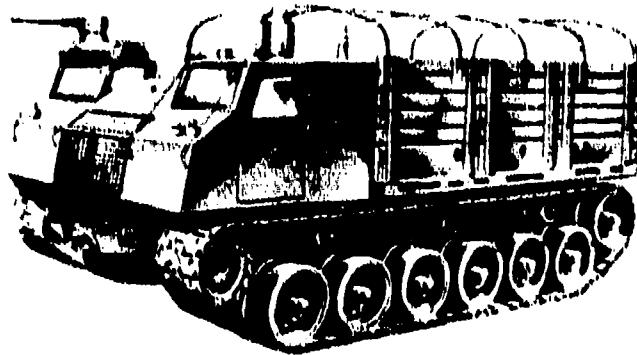
<b>Clutch</b>	Single disc
<b>Transmission</b>	Selective sliding gear with torque converter
<b>Control</b>	Direct, hand lever
<b>Speeds forward</b>	3
<b>Speeds reverse</b>	1
<b>Differential</b>	Controlled
<b>Steering control</b>	Two hand levers
<b>Brakes:</b>	
<b>Operating principle</b>	Band
<b>Control</b>	Two hand levers
<b>Drive</b>	Front sprocket
<b>Number of wheels</b>	8 (single)
<b>Suspension</b>	Horizontal coil spring
<b>Tracks:</b>	
<b>Construction</b>	Outside guide, rubber and steel
<b>Shoes or blocks</b>	.68 in
<b>Width</b>	16.89 in

## CAPACITIES

<b>Fuel, total</b>	125 gal
<b>Cooling system</b>	18 gal
<b>Crankcase</b>	18 qt
<b>Engine air cleaner (each)</b>	1.5 qt
<b>Transmission</b>	Integral with differential
<b>Differential</b>	.38 qt
<b>Torque converter (each)</b>	.04 qt
<b>Final drive (each)</b>	.10 qt
<b>Winch gear case</b>	.0 qt

## ADDITIONAL DATA

# TRACTOR, CARGO, M8



## GENERAL DATA

**Purpose:** Prime mover and cargo carrier capable of towing loads from 15,000 to 32,000 pounds. For transporting personnel, ammunition, or miscellaneous equipment totaling 10,000 pounds or more.

**Classification:** This vehicle was to be standard; however, only six of them were manufactured before the war terminated and the contract for 8000 was canceled. The requirement will eventually be filled by the new Tractor Cargo, M8E1.

**Manufacturer:** Buick Division, GMC.

**Technical manual:** Not assigned.

**Lubrication order:** Not assigned.

**Parts list:** Not assigned.

**Price of vehicle:** Unknown

**Crew (number of personnel):** 3

**Weight, combat loaded:** 17.75 tons

**Length, over-all:** 117 ft

**Width, over-all:** 10 1/2 ft

**Height, over-all:** 8 ft

**Shipping dimensions:** Unknown

**Tread (center to center of track):** 96 in

**Ground clearance:** 10.85 in

**Ground pressure:** 7.88 lb/sq in

**Electrical system:** 34-volt

## PERFORMANCE

Gross horsepower to weight ratio	19.8 hp per ton
Cruising range	500 mi
Fuel consumption	9 mpg
Maximum allowable speed	35 mph
Maximum gradability	60 per cent
Turning radius	38 ft
Fording depth	40 in
Maximum trench vehicle will cross	84 in
Maximum vertical obstacle can negotiate	80 in
Pay load	10,000 lb
Towed load	32,000 lb
Winch load	30,000 lb

## ENGINE

Make (manufacturer)	Continental
Model number	R-975D4

## ADDITIONAL DATA

Brake horsepower	475
Torque	1078 ft-lb @ 1800 rpm
Maximum governed speed	3400 rpm
Construction and design	Radial, 1-head
Number of cylinders	6
Displacement, total	78 cu in
Compression ratio	8.7:1
Cooling system	Air
Ignition	Magneto

## CHASSIS AND POWER TRAIN

Clutch	None
Transmission	Torquematic
Control	Remote, hand controller
Speeds forward	6
Speeds reverse	3
Differential	Controlled
Steering control	Two hand levers
Brakes:	
Operating principle	Mechanical bands
Control	Two hand levers
Drive	Front sprocket
Number of wheels	8 (dual)
Suspension	Tension bar
Tracks:	
Construction	Center guide, steel
Shoe or blocks	84 in
Width	81 in

## ARMOR

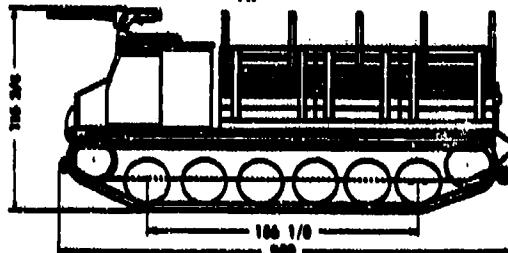
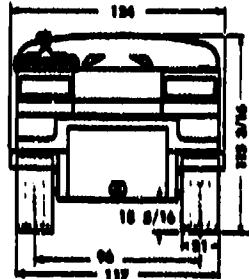
Hull	For structural strength only
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## CAPACITIES

Fuel total	225 gal
Cooling system	None
Crankcase	48 qt
Engine air cleaner (each)	4 qt
Transmission	16 qt
Differential	20 qt
Final drive (each)	5 qt
Winch gear case	Unknown

# TRACTOR, CARGO, M8E1

NO PHOTO  
AVAILABLE



## GENERAL DATA

**NOTE.** These specifications are tentative and subject to change.  
**Purpose:** An improved full-track, high-speed prime mover for artillery loads of 18,000 to 35,000 pounds and having a payload capacity of 15,000 pounds for transporting personnel, ammunition, or miscellaneous cargoes over all types of terrain.  
**Classification:** This vehicle is an improved version of the current standard M8 cargo tractor. It contains all the modern components such as cross-drive transmission and in-line air-cooled engine. Eventually it will replace the M8 cargo tractor.

**Manufacturer:** Detroit Arsenal.

**Technician's manual:** Not assigned.

**Lubrication orders:** Not assigned.

**Parts list:** Not assigned.

**Price of vehicle:** Unknown

**Crew (number of personnel):** 3

**Weight, combat loaded:** 48,750 lbs

**Length, over-all:** 22.5 ft

**Width, over-all:** 10.0 ft

**Height, over-all:** 9.5 ft

**Shipping dimensions:** 2880 cu ft; 205 sq ft

**Tread (center to center of track):** 96 in

**Ground clearance:** 18.8/18 in

**Ground pressure:** 0.17 lb/sq in

**Electrical system:** 14-volt

**Communication system:** None

## PERFORMANCE

**Gross horsepower to weight ratio:** 18.85 hp per ton

**Cruising range:** 180 mi

**Fuel consumption:** 18 mpg

**Maximum allowable speed:** 44 mph

**Maximum gradability:** .60 per cent

**Turning radius:** Pivot to infinity

**Fording depth:** 40 in

**Maximum trench vehicle will cross:** 84 in

**Maximum vertical obstacle can negotiate:** 80 in

**Pay load:** 18,000 lb

**Towed load:** 48,000 lb

**Winch load:** 48,000 lb

## ENGINE

**Make (manufacturer):** Continental

**Model number:** AOS 895-1

<b>Brake horsepower:</b>	500
<b>Torque:</b>	985 ft lb @ 3400 rpm
<b>Maximum governed speed:</b>	3400 rpm
<b>Construction and design:</b>	Opposed, I-head
<b>Number of cylinders:</b>	6
<b>Displacement, total:</b>	161 cu in
<b>Compression ratio:</b>	8.75:1
<b>Cooling system:</b>	Air cooled
<b>Ignition:</b>	Magneto

## CHASSIS AND POWER TRAIN

<b>Clutch:</b>	None
<b>Transmission:</b>	Cross-drive
Control:	Wobble stick
Speeds forward:	
Speeds reverse:	
<b>Differential:</b>	Cross-drive
<b>Steering control:</b>	Wobble stick
<b>Brakes:</b>	
Operating principle:	Mechanical, multiple disc
Control:	Manual, foot pedal
<b>Drive:</b>	Front sprocket
<b>Number of wheels:</b>	18 (dual)
<b>Suspension:</b>	Independent torsion bar
<b>Tracks:</b>	
Construction:	Steel chevron, center guide
Shoe or blocks:	14 in
Width:	81 in

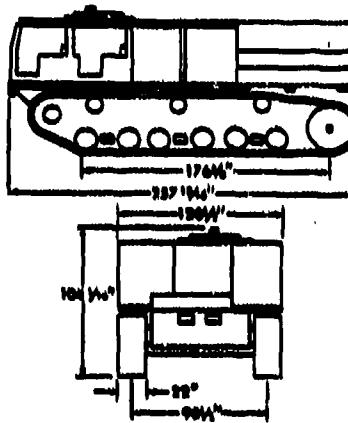
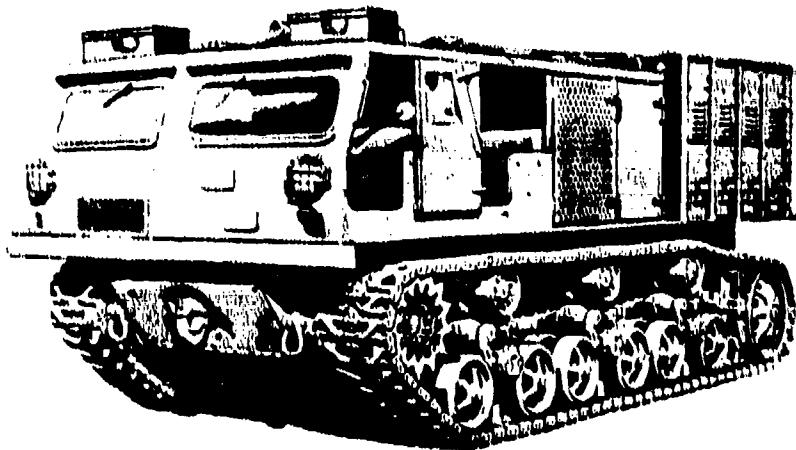
## ARMAMENT

<b>Cal .50 MG:</b>	1 (ring mount)
<b>Armor (for structural strength only):</b>	

<b>Fuel:</b>	<b>CAPACITIES</b>
Total:	225 gal
Cooling system:	None
Crankcase:	55 qt
Engine air cleaner (each) (estimated):	5.5 qt
Transmission:	Unknown
Differential:	Integral with transmission
Final drive (each):	Unknown
Winch gear case:	Unknown
Ammunitions:	
Cal .50:	500 rounds

## ADDITIONAL DATA

# TRACTOR, HIGH SPEED, M6



## GENERAL DATA

**Purpose:** To tow heavy artillery, and transport gun crews and ammunition.

**Classification:** This vehicle will not be seen in quantity in using organizations; only a small quantity were manufactured for use mainly for development and instructional purposes. The new T44 cargo tractor will fill the requirement for this type vehicle.

**Manufacturer:** Allis Chalmers Manufacturing Company.

**Technical manual:** G-788, G-1788A, G-1788, G-1888A, G-1888C, G-1887A, G-1888A, G-1888A.

**Lubrication order:** G-788

**Parts list:** ORD 7 SNL G184, ORD 8 SNL G184, ORD 9 SNL G184.

Price of vehicle*	\$85,870
Crew (number of personnel)	11
Weight, combat loaded	38.0 tons
Length, over-all	31.8 ft
Width, over-all	10 ft
Height, over-all	7.00 ft
Shipping dimensions	1819 cu ft / 214 cu ft
Tread (center to center of track)	91.8 in
Ground clearance	9.8 in
Ground pressure	0.39 lb/sq in
Electrical system	12-volt

## PERFORMANCE

Gross horsepower to weight ratio	11.8 hp per ton
Cruising range (w/tow)	188 mi
Fuel consumption	15 mpg
Maximum allowable speed	30.0 mph
Maximum gradability	60 per cent
Turning radius	18 ft
Fording depth	34 in
Maximum trench vehicle will cross	98 in
Maximum vertical obstacle can negotiate	30 in
Pay load	50,000 lb
Towed load	50,000 lb
Winch load	58,000 lb

\* Price based on vehicle plus artillery equipment.

## ENGINE

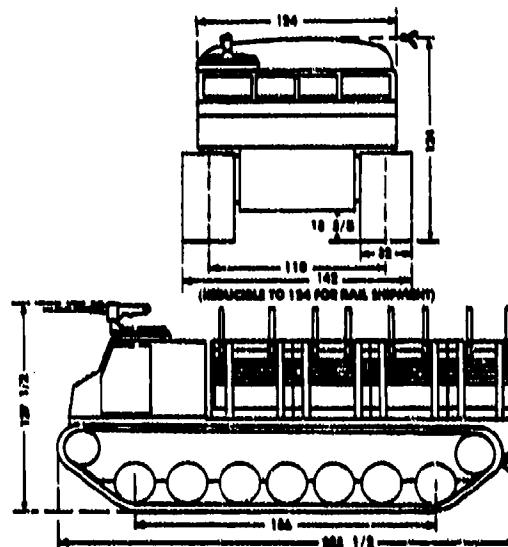
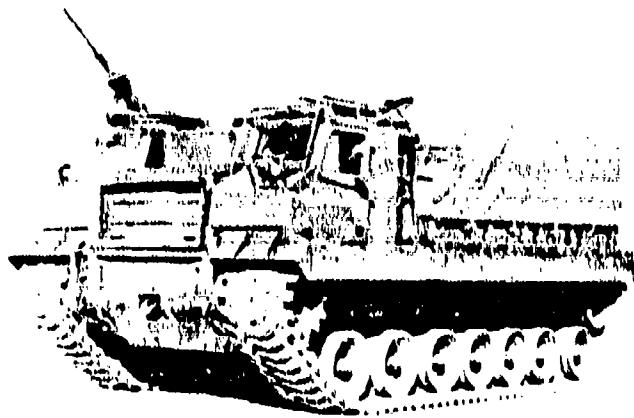
NOTE: This vehicle has two engines as described below.	
Make (manufacturer)	Waukesha
Model number	1480Z
Brake horsepower (each engine)	380 ft lb @ 1700 rpm
Maximum governed speed	1100 rpm
Construction and design	In-line, 1-head
Number of cylinders (each engine)	8
Displacement, total (each engine)	817 cu in
Compression ratio	8.0:1
Cooling system	Liquid
Ignition	Battery, distributor

## CHASSIS AND POWER TRAIN

Clutch (each engine)	Single disc
Transmission	Selective shifting gear with torque converter
Control	Direct, hand lever
Speeds forward	1
Speeds reverse	1
Differential	Controlled
Steering control	Two hand levers
Brakes:	
Operating principle	Mechanical band
Control	Two hand levers
Drive	Front (spool)
Number of wheels	18 (dual)
Suspension	Horizontal volute spring
Tracks:	
Construction	Center guide, steel
Shoe or blocks	14 in
Width	33 in
Fuel:	
Total	600 gal (1)
Cooling system (each engine)	15 gal
Crankcase (each engine)	80 qt
Engine air cleaner (each)	4.8 qt
Transmission	Integral with differential
Differential	4.8 qt
Torque converter (each)	4.8 qt
Final drive (each)	4.8 qt
Winch gear case	4.8 qt

## ADDITIONAL DATA

# TRACTOR, CARGO, T44



## GENERAL DATA

**NOTE:** These specifications are tentative and subject to change.  
**Purpose:** An improved full-track high speed prime mover for artillery loads of 40,000 to 65,000 pounds and having a payload capacity of 30,000 pounds for transporting personnel, ammunition, or miscellaneous cargo over all types of terrain.  
**Classification:** This vehicle is not yet standard. When developed and put into production, it will replace Cargo Tractor, M3; Tractor, High Speed, M6; and possibly Cargo Tractor, High Speed, M4C.  
**Manufacturer:** Detroit Arsenal.  
**Technical manual:** Not assigned.  
**Lubrication order:** Not assigned.  
**Parts list:** Not assigned.  
**Price of vehicle:** Unknown  
**Crew (number of personnel):** 2  
**Weight, combat loaded:** 49,850 tons  
**Length, over-all:** 20.7 ft  
**Width, over-all:** 11.8 ft  
**Height, over-all:** 10.8 ft  
**Shipping dimensions:** Unknown  
**Tread (center to center of track):** 18.08 in  
**Ground clearance:** 18.08 in  
**Ground pressure:** Unknown  
**Electrical system:** 24-volt

## PERFORMANCE

Gross horsepower to weight ratio	16.09 hp per ton
Cruising range	100 mi
Fuel consumption	3 mpg
Maximum allowable speed	35 mph
Maximum gradability	60 per cent
Turning radius	30 ft
Fording depth	38 in
Maximum trench vehicle will cross	68 in
Maximum vertical obstacle can negotiate	68 in
Pay load	30,000 lb
Towed load	65,000 lb
Winch load	30,000 lb

## ADDITIONAL DATA

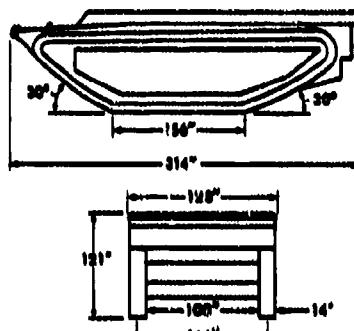
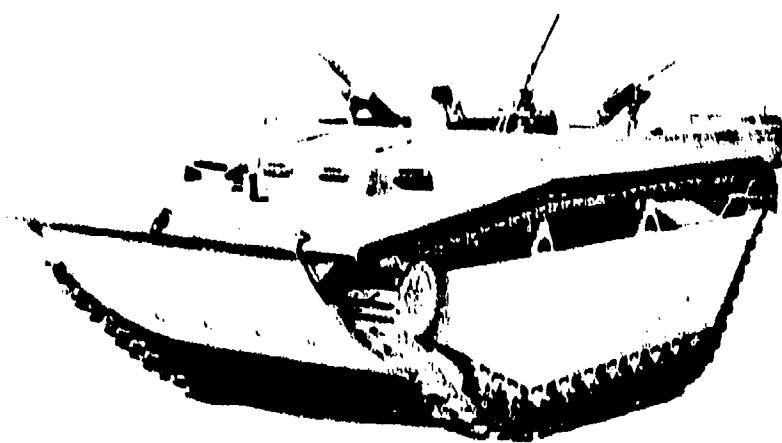
ENGINE	
Make (manufacturer)	Continental
Model number	A.V.1790-3
Brake horsepower	810
Torque	1610 ft-lb @ 2500 rpm
Maximum governed speed	8500 rpm
Construction and design	V, 1-head
Number of cylinders	8
Displacement total	1790 cu in
Compression ratio	8.81:1
Cooling system	Air
Ignition	Magneto

CHASSIS AND POWER TRAIN	
Clutch	None
Transmission	Cross-drive
Control	Remote, wobble stick
Speeds forward	4
Speeds reverse	4
Differential	Cross-drive
Steering control	Remote, wobble stick
Brakes:	
Operating principle	Mechanical, multiple disc
Control	Manual, foot pedal
Drive	Front sprocket
Number of wheels	14 (dual)
Suspension	Torsion bar
Tracks:	
Construction	Center guide, steel
Sheets or blocks	.08 in
Width	.08 in

CAPACITIES	
Fuel, total	350 gal
Cooling system	None
Crankcase	78 qt
Engine air cleaner (each)	Unknown
Transmission	Unknown
Differential	Integral with transmission
Final drive (each)	Unknown
Winch gear case	Unknown

# VEHICLE, LANDING, TRACKED (UNARMORED), LVT (4)



## GENERAL DATA

**Purpose:** For transporting personnel and cargo over rough terrain, swamp land, and self-propulsion in exposed waters. Also for landing on beach through surf.

**Classification:** To date no vehicle has been put into production to supersede the LVT (4). In event it is superseded by a production vehicle, it will be of the common component type utilizing the cross-drive transmission and air cooled engine.

**Manufacturer:** Food Machinery Corporation and St. Louis Car Company.

**Technical manuals:** 9-776, 9-1788A, 9-1788C, 9-1788, 9-1775, 9-1883A, 9-1889A.

**Lubrication orders:** DA LO 9-776.

**Parts lists:** ORD 7 SNL G209; ORD 8 SNL G209; ORD 9 SNL G209.

**Price of vehicle\*** \$25,830  
**Crew (number of personnel)** 7  
**Weight, combat loaded** 16.0 tons  
**Length, overall** 30.1 ft  
**Width, overall** 10.6 ft  
**Height, overall** 6.8 ft  
**Shipping dimensions** 4800 cu ft; 205 sq ft  
**Tread (center to center of tracks)** 114.8 in  
**Ground Clearance** 18 in (hard surface)  
**Ground pressure** 0.8 lb/sq in  
**Electrical system** 12-volt  
**Communication system** Radio and interphone

## PERFORMANCE

**Gross horsepower to weight ratio** 1.6 hp per ton  
**Cruising range** 100 mi (land)  
**Fuel consumption** 1 mpg (land)  
**Maximum allowable speed** 16 mph (land); 6 mph (water)  
**Maximum gradeability** 60 per cent  
**Turning radius** 30 ft (land)  
**Fording depth** Amphibious  
**Maximum frontal vehicle will cross** 36 in  
**Maximum vertical obstacle can negotiate** 36 in  
**Pay load** 9000 lb

\*Priced based on basic vehicle plus artillery equipment.  
**Loaded water line length** 800 in  
**Loaded freeboard (min)** 48 in  
**Loaded draft:**  
 Front 35.8 in  
 Rear 30.9 in  
**Cargo space to top of gunning** 80.7 in

## ENGINE

<b>Make (manufacturer)</b>	Continental
<b>Model number</b>	W670-3H
<b>Brake horsepower</b>	250
<b>Torque</b>	578 ft lb @ 1800 rpm
<b>Maximum governed speed</b>	3400 rpm
<b>Construction and design</b>	Radial, I-head
<b>Number of cylinders</b>	7
<b>Displacement, total</b>	687.86 cu in
<b>Compression ratio</b>	6.1:1
<b>Cooling system</b>	Air
<b>Ignition</b>	Magneto

## CHASSIS AND POWER TRAIN

<b>Clutch</b>	Multiple disc
<b>Transmission</b>	Synchromesh
<b>Control</b>	Direct, hand lever
<b>Speeds forward</b>	5
<b>Speeds reverse</b>	1
<b>Differential</b>	Controlled
<b>Steering control</b>	Two hand levers
<b>Brakes:</b>	
<b>Operating principle</b>	Band
<b>Control</b>	Two hand levers
<b>Drive</b>	Front sprocket
<b>Number of wheels</b>	8 (single)
<b>Suspension</b>	Torsional rubber
<b>Tracks:</b>	
<b>Construction</b>	Steel
<b>Shoes or blocks</b>	78 (grousers and cross chain)
<b>Width</b>	14.88 in

## ARMAMENT

Cal .50 MG or Cal .30 MG 4 ea

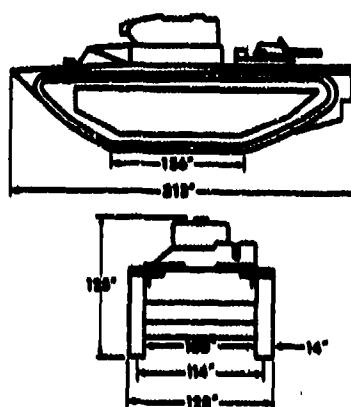
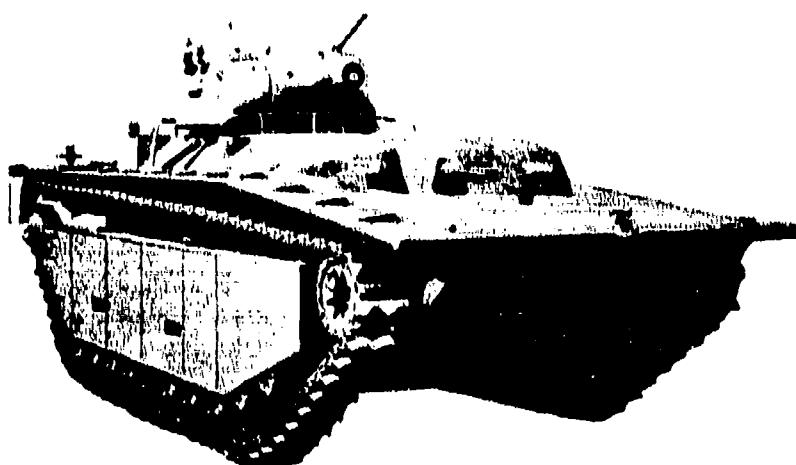
**ARMOR:** None.

## VISION AND SIGHTING EQUIPMENT

<b>Vision blocks:</b>	
<b>Fuel:</b>	<b>CAPACITIES</b>
Total	140 gal
Night tank	70 gal
Left tank	70 gal
Cooling system	None
Crankcase	Reservoir-5.7 gal
Engine air cleaner (each)	0.5 qt
Transmission	24 qt
Differential	Integral with transmission
Final drive (each)	0 qt
<b>Ammunition:</b>	
Cal .50	1000 rounds
Cal .30	8000 rounds

## ADDITIONAL DATA

# VEHICLE, LANDING, TRACKED (ARMORED), LVT (A) (4)



## GENERAL DATA

**Purpose:** For use in rough terrain, swamp land, and self-propulsion in exposed waters. Also for landing on beach through surf.

**Classification:** To date no vehicle has been put into production to supersede the LVT. In event more tracked landing vehicles are manufactured, they will follow the development trends using common components such as air cooled engines and cross-drive transmissions.

**Manufacturer:** Food Machinery Corporation, St. Louis Car Company.

**Technical manuals:** G-776, G-1788A, G-1788C, G-1788, G-1775, G-1888A, G-1889A.

**Lubrication order:** DA LO G-776.

**Parts list:** ORD 7 SNL G-809 ORD 8 SNL G-809, ORD 9 SNL G-809.

Price of vehicle*	\$41,001
Crew (number of personnel)	6
Weight, combat loaded	30 tons
Length, overall	16.0 ft
Width, overall	10.8 ft
Height, overall	10.8 ft
Shipping dimensions	3000.0 cu ft; 177.5 cu ft
Tread (center to center of track)	110.8 in
Ground clearance	18 in (hard surface)
Ground pressure	8.0 lb/sq in
Electrical system	12-volt
Communication system	Radio and telephone

## PERFORMANCE

Gross horsepower to weight ratio	18.7 hp per ton
Cruising range (land)	180 mi
Fuel consumption (land) (estimated)	1 mpg
Maximum allowable speed: (land) 31 mph; (water) 6 mph	
Maximum gradability	60 per cent
Turning radius (land)	60 ft
Fording depth	Amphibious
Maximum trench vehicle will cross	60 in
Maximum vertical obstacle can negotiate	60 in
Range of primary armament:	
With HE shell or WP smoke at 45°07' or 811 miles	9880 yds
Velocity of primary armament:	
With HE shell or WP smoke at 45°07' or 811 miles	1280 fpm

## ENGINE

Make (manufacturer)	Continental
Model number	W670-9A
Brake horsepower	280
Torque	878 ft-lb @ 1600 rpm
Maximum governed speed	3400 rpm
Construction and design	Radial, 1-head
Number of cylinders	7
Displacement, total	667.86 cu in
Compression ratio	8.1:1
Cooling system	Air
Ignition	Magneto

\*Price based on vehicle less equipment.

Loaded waterline length	870 in
Loaded freeboard (min)	97 in
Loaded draft:	

Front	11.75 in
Rear	67.95 in

## CHASSIS AND POWER TRAIN

Clutch	Multiple disc
Transmission	Selective shifting
Control	Direct, hand lever
Speeds forward	6
Speeds reverse	2
Differential	Controlled
Steering control	Two hand levers
Brakes:	
Operating principle	Band
Control	Manual
Drive	Front sprocket
Number of wheels	10 (single)
Suspension	Torsional rubber
Tracks:	
Construction	Steel
Shoe or blocks	70 (grousers and cross-chain)
Width	14.88 in

## ARMAMENT

Primary armament	Howitzer, 75-mm
Traverse:	
Right	0 to 60 deg
Left	-60 to 0 deg
Elevation	-10 to +20 deg
Depression	-20 to -10 deg
Recoil mechanism	Hydro-spring
Stabilizer system	Gyro
Secondary armament:	
Cal .50 MG	.5 (or .50 caliber)
Cal .30 MG	.30 (or .30 caliber)

## ARMOR

Hull:	Boiler plate with homogeneous plate attached.
Construction	
Thickness:	
Front	.55 in
Sides	.55 in
Rear	.55 in
Top	.55 in
Floor	None
Turret:	
Construction	Homogeneous, welded, combination plate and cast
Thickness:	
Front	1.5 in
Sides	1 in
Rear	1 in
Top	None

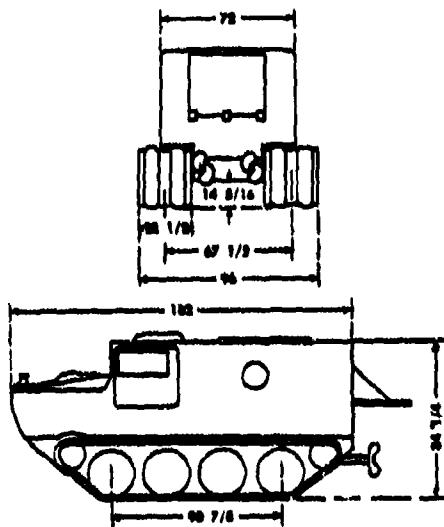
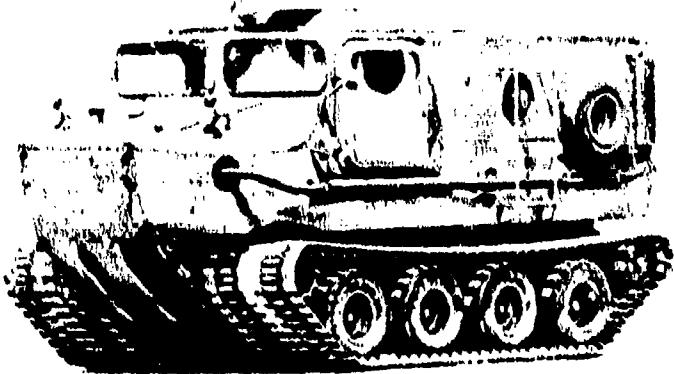
## VISION AND SIGHTING EQUIPMENT

Quadrant, elevation	M6
Telescope, gunner's	M70B
Telescope, panoramic	M18A8

## CAPACITIES

Fuel:	
Total	140 gal (3)
Right tank	70 gal
Left tank	70 gal
Cooling system	None
Crankcase	Reservoir-5.7 gal
Engine air cleaner (each) (estimated)	0 qt
Transmission	Integral with transmission
Differential	Integral with transmission
Final Drive (each)	3 qt
Ammunition:	
Primary weapon	100 rounds
Secondary weapons:	
Cal .50	6000 rounds (.50 cal MGs)

# CARRIER, CARGO, AMPHIBIOUS, T46



## GENERAL DATA

**NOTE:** These specifications are tentative and subject to change.  
**Purpose:** To provide a light amphibian cargo carrier and prime mover, convertible to a winterized vehicle, suitable for cargo or personnel and capable of being transported by air.

**Classification:** This vehicle is in development stage. When put into production it will replace Cargo Carrier, M2DC, and some of the requirements for the LVT(4).

**Manufacturer:** General Motors Corporation.

**Technical manual:** Not assigned.

**Lubrication orders:** Not assigned.

**Parts list:** Not assigned.

**Price of vehicle:** Unknown

**Crew (number of personnel):** 3

**Weight, combat loaded:** 8 tons

**Length, over-all:** 18 ft 10 in

**Width, over-all:** 8 ft

**Height, over-all:** Unknown

**Shipping dimensions:** Unknown

**Tread (center to center of track):** 6 ft 8 in

**Ground clearance:** 14.5 in

**Ground pressure:** 5.1 lb/sq in

**Electrical system:** 24-volt

**Communication system:** Radio and interphone

## PERFORMANCE

**Gross horsepower to weight ratio:** 20.8 hp per ton

**Cruising range:** 300 mi

**Fuel consumption:** 3.0 mpg

**Maximum allowable land speed:** 27.5 mph

**Maximum allowable water speed:** 4.5 mph

**Maximum gradability:** 80 per cent

**Turning radius:** Pivot to infinity

**Dredging depth:** Amphibious

**Maximum trench vehicle will cross:** 80 in

**Maximum vertical obstacle can negotiate:** 18 in

**Pay load:** 8000 lb

**Towed load:** Unknown

**Winch (Capstan) load:** Unknown

## ENGINE

Make (manufacturer)	Continental
Model number	AO-288-3
Brake horsepower	125
Torque	338 ft lb @ 2400 rpm
Maximum governed speed	5000 rpm
Construction and design	Opposed, I-head
Number of cylinders	4
Displacement, total	888.96 cu in
Compression ratio	6.0:1
Cooling system	Air
Ignition	Magneto

## CHASSIS AND POWER TRAIN

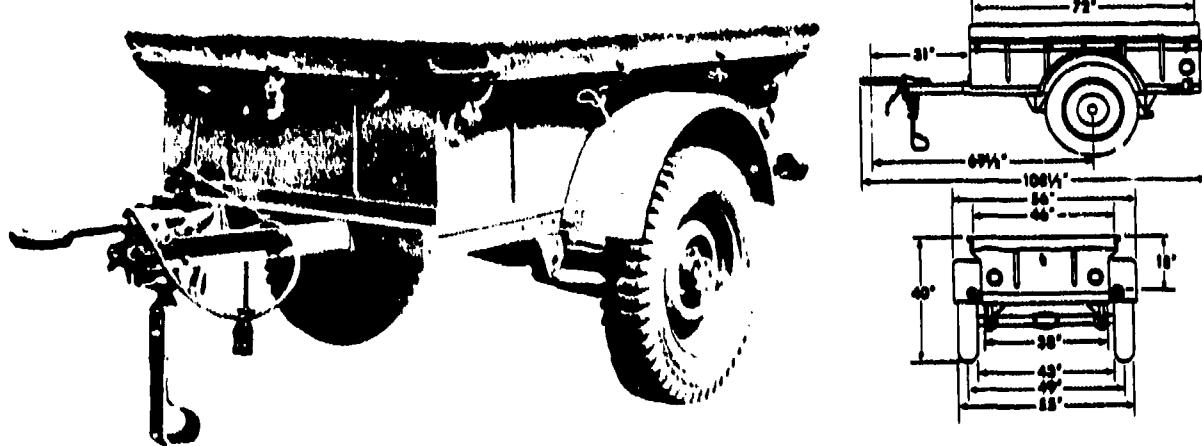
Clutch	None
Transmission	Cross-drive
Control	Remote, wobble stick
Speeds forward	3
Speeds reverse	3
Differential	Cross-drive
Steering Control	Remote, wobble stick
Brakes	Operating principle
	Mechanical
Drive	Foot-mechanical
Number of wheels	Front: sprocket drive
Suspension	8 (dual)
Tracks	Torsion bar
Construction	(Belt with cross links; link recess for tire as guide)
Shoes or blocks	80 ea
Width	28.5 in

## CAPACITIES

Fuel, total	60 gal
Cooling system	None
Crankcase	12 qt
Engine air cleaner (each)	Unknown
Transmission	Unknown
Differential	Integral with transmission
Final drive (each)	Unknown
Winch (Capstan) gear case	Unknown

## ADDITIONAL DATA

## **TRAILER, 1/4-TON, 2W, CARGO, (AMPHIBIAN)**



## **GENERAL DATA**

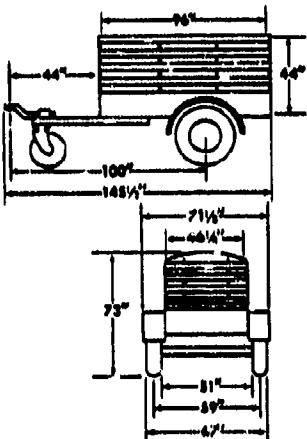
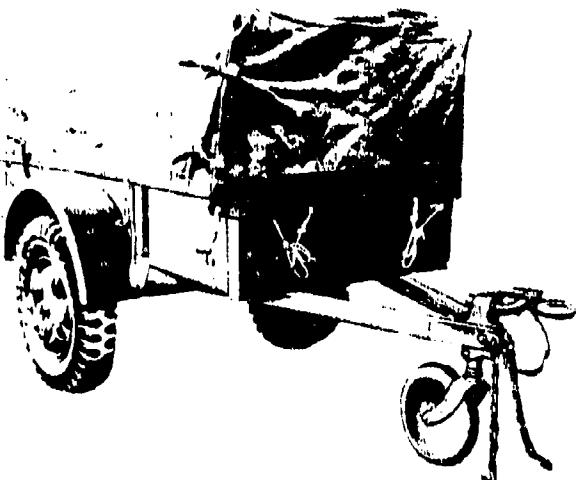
**Purpose:** Transport general cargo on land or water.  
**Classification:** Standard.  
**Manufacturer:** American Bantam Car Company, Willys Overland  
 Motors, Incorporated.  
**Techniques:** manual; 10-1281.  
**Lubrication order:** DA LO 10-1281.  
**Parts list:** SNL G329.  
**Price of vehicle** ..... \$204.00  
**Body type** ..... Cargo  
**Weight, gross** ..... 1040 lb  
**Pay load** ..... 800 lb  
**Net weight** ..... 550 lb

<b>Weight distribution:</b>	
Empty	junette, 80 pounds; axle 470 pounds.
Loaded	junette, 180 pounds; axle 697 pounds.
Length, over-all	9.5 ft
Height, over-all	8.82 ft
Width, over-all	4.00 ft
Loading height	58 in
Shipping dimensions (assembled vehicle)	155.5 cu ft; 48 sq ft
Tread (center to center of wheels)	4.00 ft
Ground clearance	12 1/4 in
Tires, 6-ply, 600-18	on
Brakes	Parking mechanical
Towing vehicle to be used:	On land any vehicle equipped with platte hook; on water, 14-ton, 4 x 4, amphibian.

#### **ADDITIONAL DATA**

Trailer will float with 300-pound pay load, with six inches free board.

# **TRAILER, 1-TON, 2W, CARGO**



## **GENERAL DATA**

**Purposes:** To transport general cargo. Also designated K-53 and K-53 and used by Signal Corps as mobile power unit; by Medical Corps to transport medical cargo for surgical truck, operating; and by Corps of Engineers to transport 5KW power unit.

**Classification:** Standard.

**Manufacturer:** Ben Hur Company.

Technical manuals: 9-883

Lubrication order: DA LO 9-880  
Bantu Net: SNI CW 18

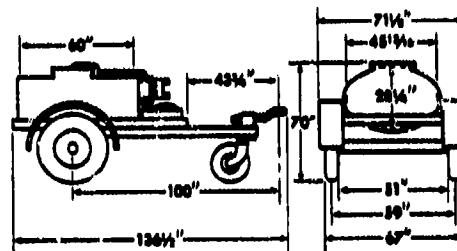
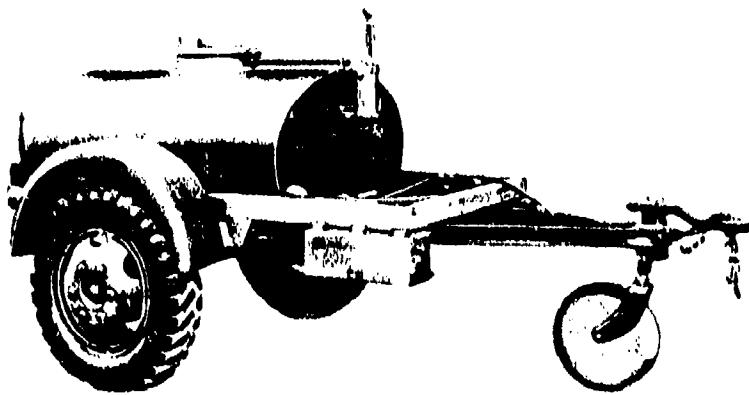
Part No.: SNL G518.  
Pn. of Vehicle

Price of vehicle \$892.00  
Body type --- Cargo, wood or steel, with stakes, sides, and canopy.  
Weight, gross 3300 lb  
Pay load 3000 lb

Net weight	1800 lb
Weight distribution:	
Empty	Lunette, 150 pounds; axle 1150 pounds
Loaded	Lunette, 260 pounds; axle 3040 pounds
Length, over-all	15.10 ft
Height, over-all	18.08 ft
Width, over-all	3.66 ft
Loading height	31.85 ft
Shipping dimensions, assembled vehicle	187 cu ft; 71.8 sq ft
Tread (center to center of wheels)	4.92 ft
Ground clearance	18 in
Tires:	
B-ply, 7.50 x 20	8 in
Brakes	Hand parking only
Towing vehicle to be used: Truck $\frac{1}{2}$ -ton capacity or greater.	

## **ADDITIONAL DATA**

# TRAILER, 1-TON, 2W, WATER TANK, 250-GALLON



## GENERAL DATA

Purpose: To transport, store, and dispense drinking water.  
 Classification: Standard.  
 Manufacturer: Ben Hur Manufacturing Company, Checker Cab  
 Manufacturing Company, Springfield Auto Works, Incorporated.  
 Technical manuals: G-888.  
 Parts list: ORD 7 SNL G-527, ORD 8 SNL G-527, ORD 9 SNL  
 G-527.  
 Price of vehicle ..... \$540  
 Body ..... Tank  
 Weight, gross, steel tank ..... 3500 lb  
 Aluminum tank ..... 3350 lb  
 Pay load ..... 1000 lb

Net load, steel tank	1500 lb
Aluminum tank	1650 lb
Weight distribution:	
Front, Lunette	885 lb; axle, 1975 lb
Rear, Lunette	870 lb; axle, 3860 lb
Length, over-all	11.26 ft
Height, over-all	8.25 ft
Width, over-all	3.56 ft
Loading height	2.20 in
Shipping dimensions (assembled vehicle)	347 cm ft; 87.4 sq ft
Tread (center to center of wheels)	4.94 ft
Ground clearance	.18 in
Tires, 8-ply, 750 x 20, operating	
Brakes	Parking, mechanical
Towing vehicle to be used	Truck, $\frac{1}{2}$ -ton, capacity or greater.

## ADDITIONAL DATA

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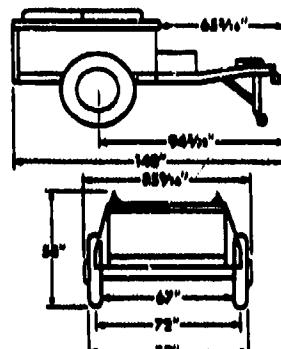
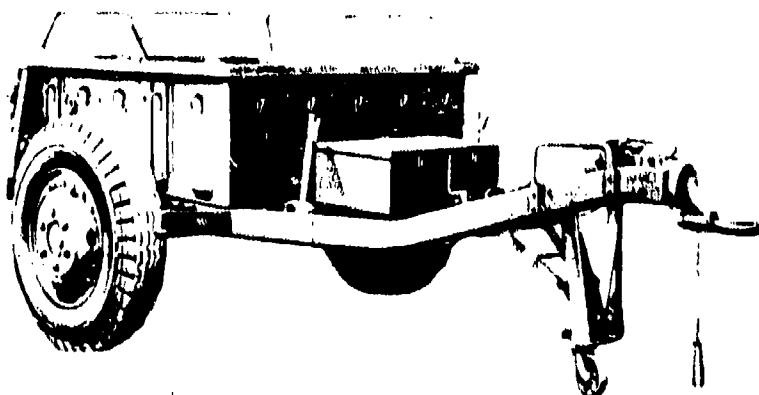


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# **TRAILER, AMMUNITION, M-10**



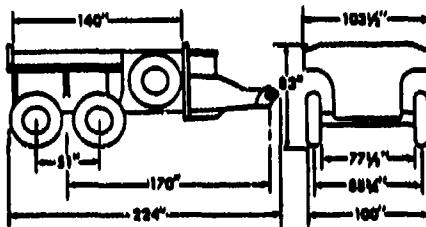
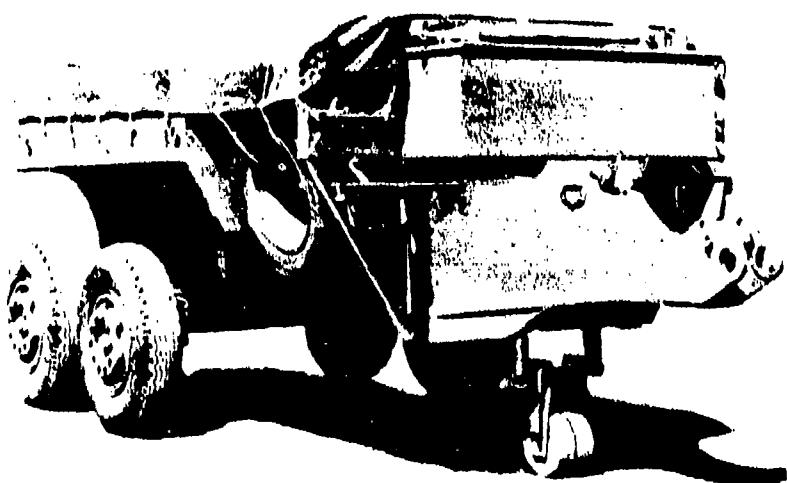
## **GENERAL DATA**

**Purpose:** To transport ammunition.  
**Classification:** Standard.  
**Manufacturer:** Frushau Trailer Company, Youngstown Steel Door Company; Schlem Brothers.  
**Technical manual:** 9-383.  
**Parts list:** ORD 7 SNL G59, ORD 8 SNL G59, ORD 9 SNL G59.  
**Price of vehicle** ..... Unknown  
**Body type** ..... Cargo  
**Weight, gross** ..... Will vary with type of ammunition

Pay load .....	Will vary with type of ammunition
Net weight .....	3000 lb
Length, over-all .....	11.66 ft
Height, over-all .....	4.85 ft
Width, over-all .....	.58 in
Shipping dimension (assembled vehicle) .....	.685.0 cu ft; 79.7 sq ft
Tread (center to center of wheels) .....	6 ft
Ground clearance .....	.23 in
Tires, 12 ply, 9.00 x 20, operating .....	3
Brakes .....	Parking, mechanical
Pintle height (rear) .....	.25 in

#### **ADDITIONAL DATA**

## **TRAILER, 8-TON, AMMUNITION, 4W, M23**



## **GENERAL DATA**

**Purpose:** To transport ammunition; 98 rounds, 188-mm., or 60 rounds, 8-inch, or 33 rounds, 240-mm ammunition.  
**Classification:** Standard.  
**Manufacturer:** Utility Trailer Manufacturing Company.  
**Technical manual:** G-790, G-1827A.  
**Lubrication order:** DA LO G-790.  
**Parts list:** ORD 7 SNL G-216, ORD 8 SNL G-216, ORD 9 SNL G-216.  
**Price of vehicle** ..... \$6,068  
**Body type** ..... Frameless  
**Weight, gross** ..... 26,000 lb  
**Pay load** ..... 16,000 lb  
**Net weight** ..... 10,000 lb

Weight distribution:	
Empty	Lumber, 2400 lb bogie 8800 lb each axle
Loaded	Lumber, 6000 lb bogie 10,000 lb each axle
Length, over-all	18.66 ft
Height, over-all	6.94 ft
Width, over-all	8.86 ft
Loading height	54 in
Shipping dimension (assembled vehicle)	1599 cu ft; 188.2 sq ft
Tread (center to center of wheels)	7.06 ft
Ground clearance	10.80 in
Tires, 12-ply 11.00 x 20	4 ea
Brakes	Service, Westinghouse air; parking, mechanical.
Towing vehicle	be used: Attached directly to 7½-ton prime mover, or towed by truck 4 or 5-ton (4x4) or greater capacity.
Pintle height	18 in

#### **ADDITIONAL DATA**