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OF
ARMORED VEHICLES



VOLUME II

ARMORED CARS, SCOUT CARS,
AND PERSONNEL CARRIERS

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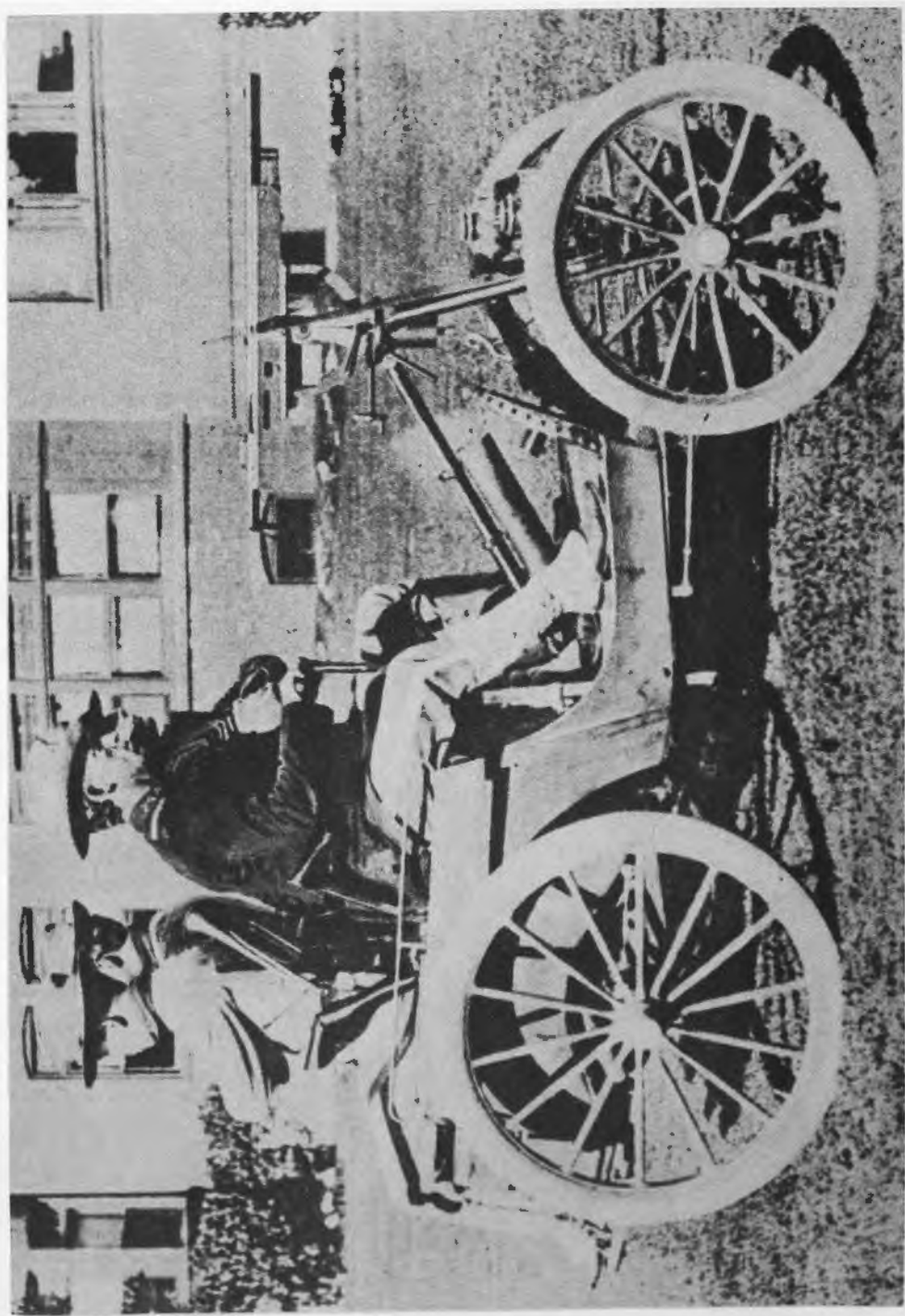
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Section I

INTRODUCTION

"I, a peaceful scribbler, am ashamed to be thinking about destructive machines; but, they are intended to protect honest people who fire badly from dishonest ones who fire too well."

— Voltaire

When Daimler invented the internal combustion engine in 1886, it was natural that the application of the automobile to military purposes would follow as the automobile was developed commercially.

Major (later Colonel), R. P. Davidson, Illinois National Guard, commandant of Northwestern Military and Naval Academy at Lake Geneva, Wisconsin, was the pioneer in the field of designing military combat vehicles in the United States. He designed and had built at his own expense, as early as 1898, a three-wheel automobile mounting a Colt automatic gun with an armor shield. In 1900, Major Davidson took a light automobile armed with a Colt rifle-caliber machine gun with swivel mount to Washington, D. C., carrying a message from Major General Joseph Wheeler to Lieutenant General Nelson A. Miles. Three years later, before General Miles retired as Chief of Staff, he recommended to the Secretary of War that five cavalry regiments should be equipped with vehicles of the type designed by Major Davidson.

General Miles' recommendation was ignored, and it was not until nearly thirty years later that the United States mechanized its first cavalry regiment. Between 1898 and 1915, Colonel Davidson continued to design and build armored cars, although his work was not subsidized.

In 1915, the Jeffery Quad, known as Armored Car No. 1, was built for the Ordnance Department but was not pursued with much interest until 1916. This vehicle, as well as some other commercial types privately paid for by the 1st Armored Motor

Battery of the New York National Guard, saw service on the Mexican border.

It was later determined that there would be little use for armored cars on the Western Front, and interest in their development died down.

Between World Wars I and II, the Army continued to design and experiment with armored cars, half-tracks, and scout cars; and when the United States entered the second world war, American armored cars and half-track vehicles represented the finest of such equipment in the world.

From 1915 to the present, a number of armored cars have been developed, tested, and rejected for various reasons. A few have been adopted as standard equipment for a period of time; however, usually a better vehicle was developed which took its place.

The first armored car built in 1915 weighed 12,600 pounds, had a crew of four men, was armed with four machine rifles, had a maximum speed of 25 miles per hour, and had .15 to .2 inches of armor.

The T18E2 was the heaviest armored car which the United States has built. It was developed in 1942, weighed 53,000 pounds (gross), had a four man crew, was armed with one 57-mm gun, two .30 caliber machine guns, one .45 caliber sub-machine gun, had a maximum speed of 50 miles per hour, and had armor from $\frac{3}{8}$ to 3 inches in thickness (bottom was $\frac{3}{8}$ of an inch). This vehicle had eight wheels, all driven.

The 75-mm gun is the largest we have put on an armored car. The 75-mm Gun Motor Carriage, T66 (utilizing the armored car chassis T19E1), was tested in 1942. The vehicle weighed 31,500 pounds combat loaded, and had a crew of five men, a maximum speed of 60 miles per hour, and $\frac{1}{4}$ - to $\frac{1}{2}$ -inch armor.

The Palmer Board in 1942 reviewed seven types of armored cars and recommended that armored cars carry a crew of four men, be armed with a 37-mm gun and two .30 caliber machine guns, one of which would be mounted for use against aircraft, provide all-round and overhead protection against caliber .30

armor peircing ammunition at 50 yards range, have a maximum speed of 55 miles per hour with independently sprung and independently articulated wheels, and not exceed 14,000 pounds combat loaded. It was concluded that eight wheels were desirable and six wheels required. Of the armored cars reviewed by the Palmer Board, Armored Car, M8, most nearly fulfilled the requirement.

During World War II experimentation continued with half-track vehicles, and in 1944 it was decided to develop a forward area cargo and personnel carrier as a full-tracked vehicle. Although at the present time there are half-track vehicles still in use, they will eventually be replaced by full-tracked cargo and personnel carriers.

Subsequent pages contain data and photographs of individual vehicles. An effort has been made to include all types; however, several models and experimental versions have been omitted. Major characteristics only have been listed in an effort to show the trend in development. Technical data has been taken wherever possible from **Development Manual**, Research and Development Division, Detroit Arsenal; **Catalogue of Standard Ordnance Items**, Office of the Chief of Ordnance; or from reports of various boards which tested the vehicles. Symbols:

T—Experimental type

E—Experimental modification

M—Standardized type

A—Standardized modification

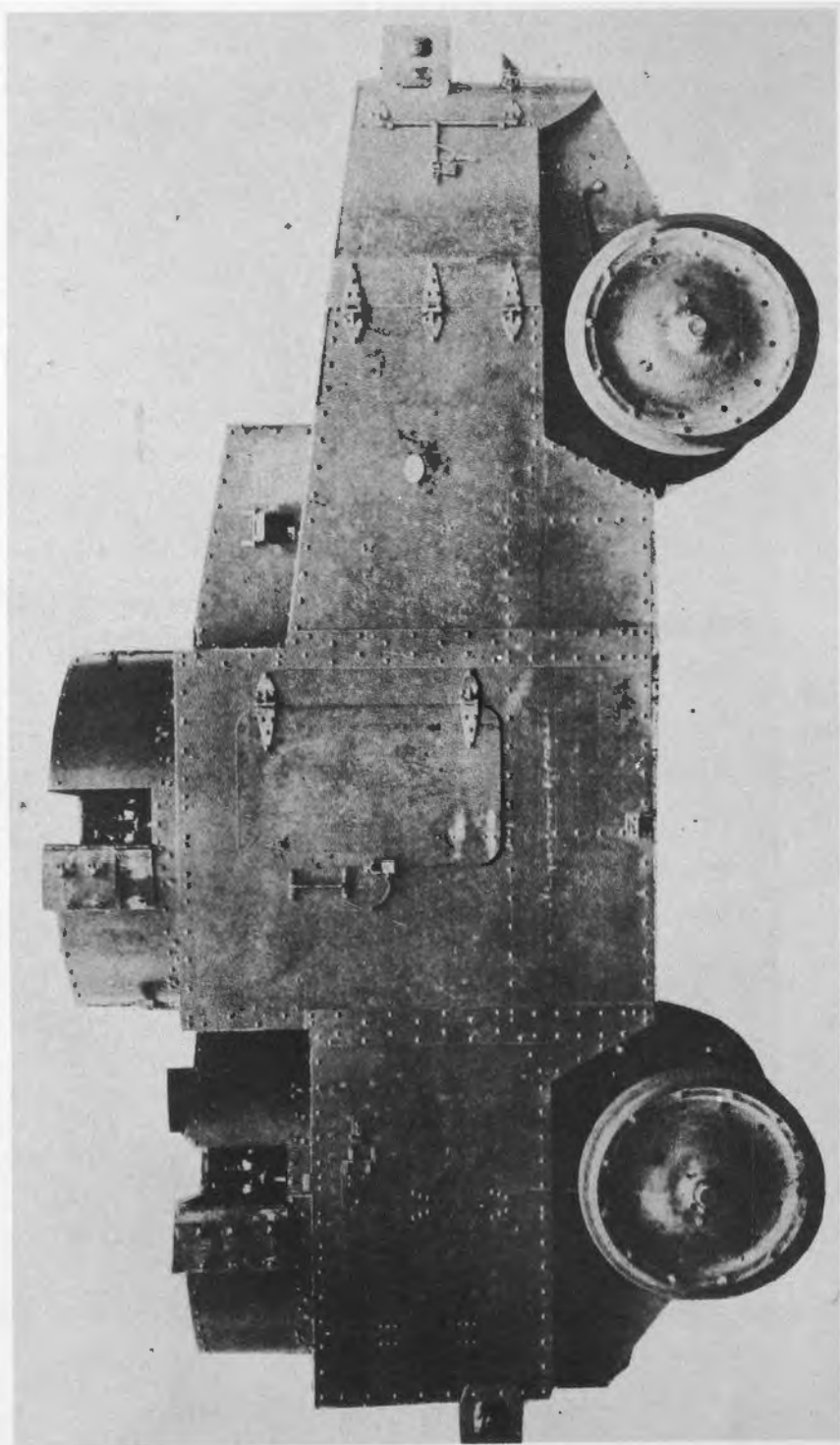


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Section II
ARMORED CARS

"Speed is unfortunately a most expensive commodity; alike in battleships, motor cars, race horses and women, a comparatively small increase in speed may double the price of the article."

Col A P Wavell



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Item No. 1

**VEHICLE NOMENCLATURE. ARMORED CAR No. 1
(JEFFERY)**

Date Produced: 1915

Armament: Four machine rifles (two spare)

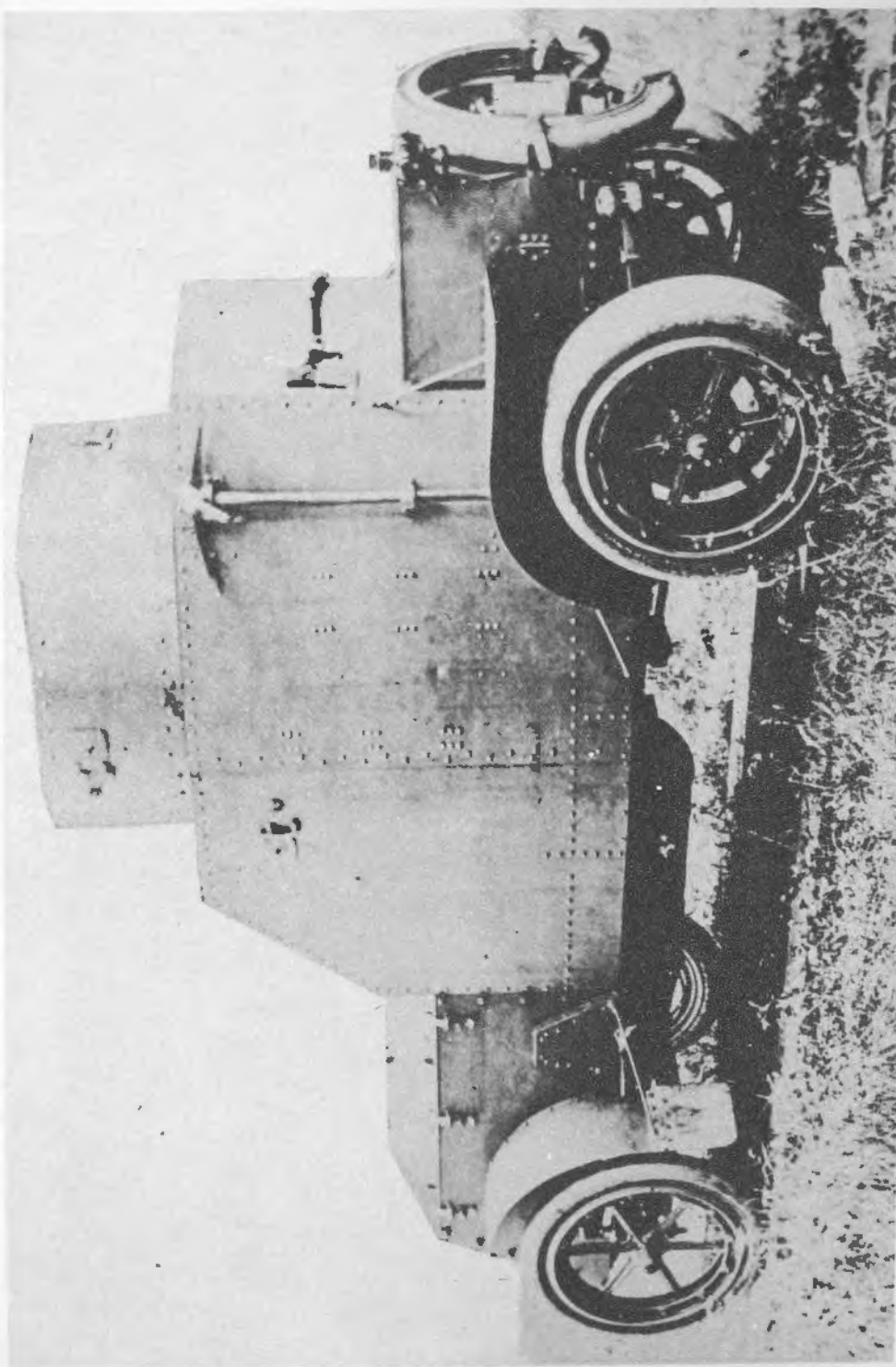
Armor: .15 and .2"

Maximum Speed: 25 MPH

Weight: 12,600 lbs

Engine: Buda, 40-HP

Crew: Four men



[REDACTED]

Item No. 2

VEHICLE NOMENCLATURE: WHITE ARMORED CAR

Date Produced: 1915

Armament: One MG

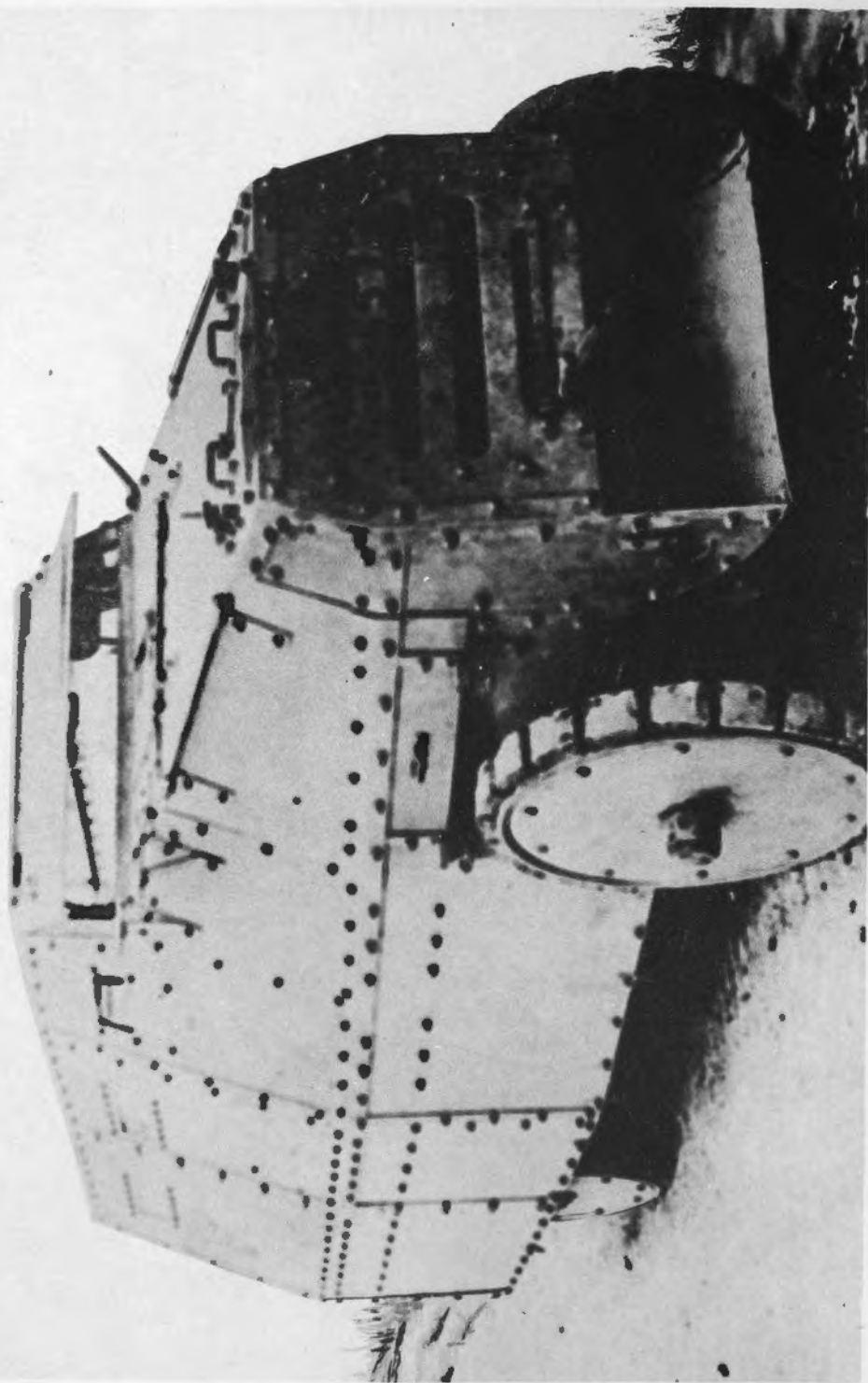
Armor: .15 and .2"

Maximum Speed: 40 MPH

Weight: 9000 lbs

Engine: 36 BHP

Crew: Four men



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Item No. 3

VEHICLE NOMENCLATURE: MACK ARMORED CAR

Date Produced: 1916

Armament: Two Colt MGs

Armor: 0.2"

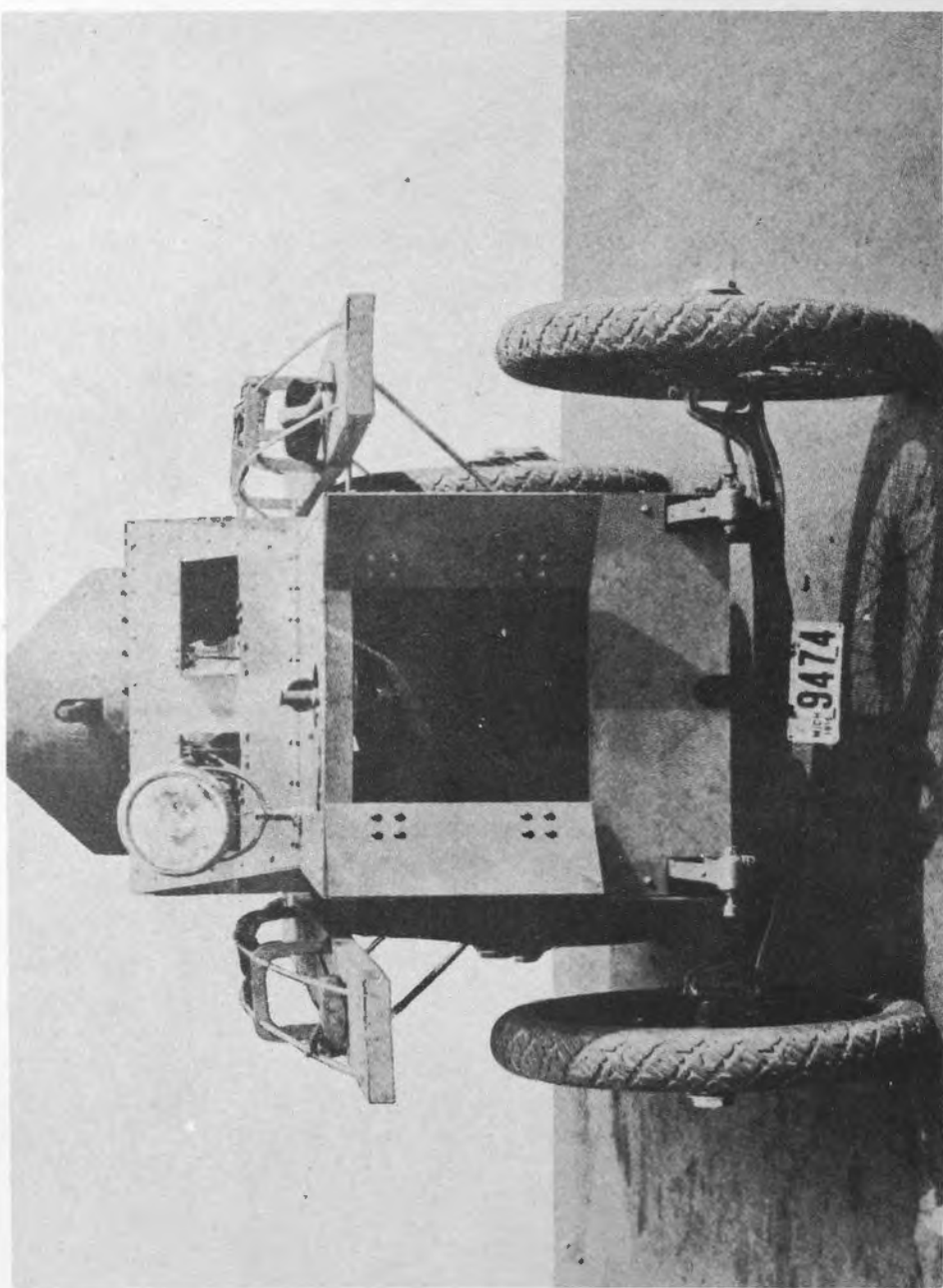
Maximum Speed: 30 MPH

Weight: 8980 lbs

Engine: 45 BHP

Crew: Five to seven men

Remarks: Vehicle was produced for a unit of the New York National Guard and was privately financed. This unit also had one Locomobile and one White armored car. All three had identical hulls.



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Item No. 4

VEHICLE NOMENCLATURE: KING ARMORED CAR

Date Produced: 1916

Armament: One MG

Armor: 0.187"

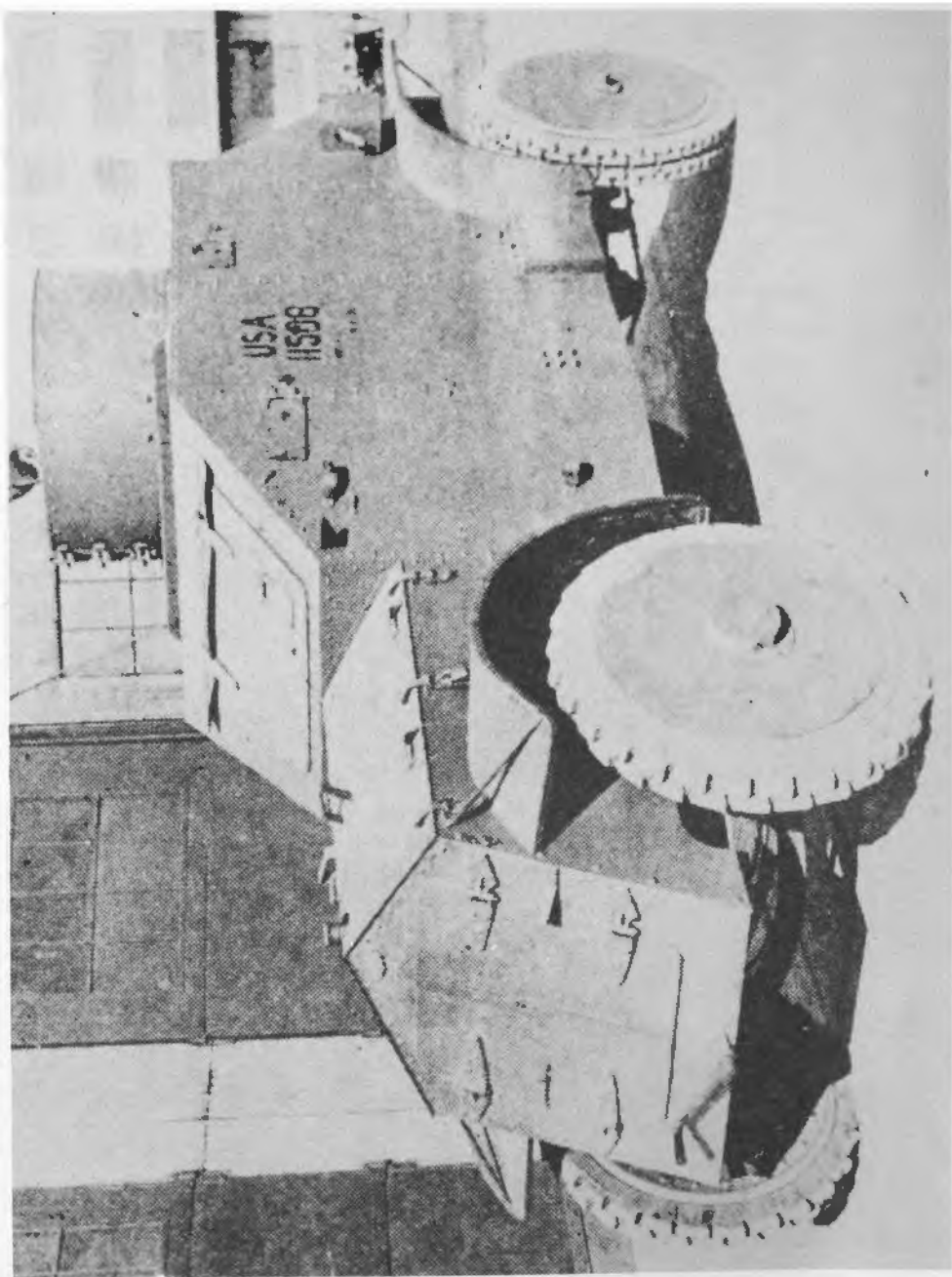
Maximum Speed: 45 MPH

Weight: 5280 lbs

Engine: 70 BHP

Crew: Three men

Remarks: Manufactured by the Armored Motor Car Company, Detroit, Michigan, in 1916. This car was tested by the Army and Marine Corps. In 1917 and early 1918 two King cars were converted by the Ordnance Department.





Item No. 5

VEHICLE NOMENCLATURE: WHITE ARMORED CAR

Date Produced: 1917

Armament: Two MGs (one spare)

Armor: 0.15 to 0.25"

Maximum Speed: 40 MPH

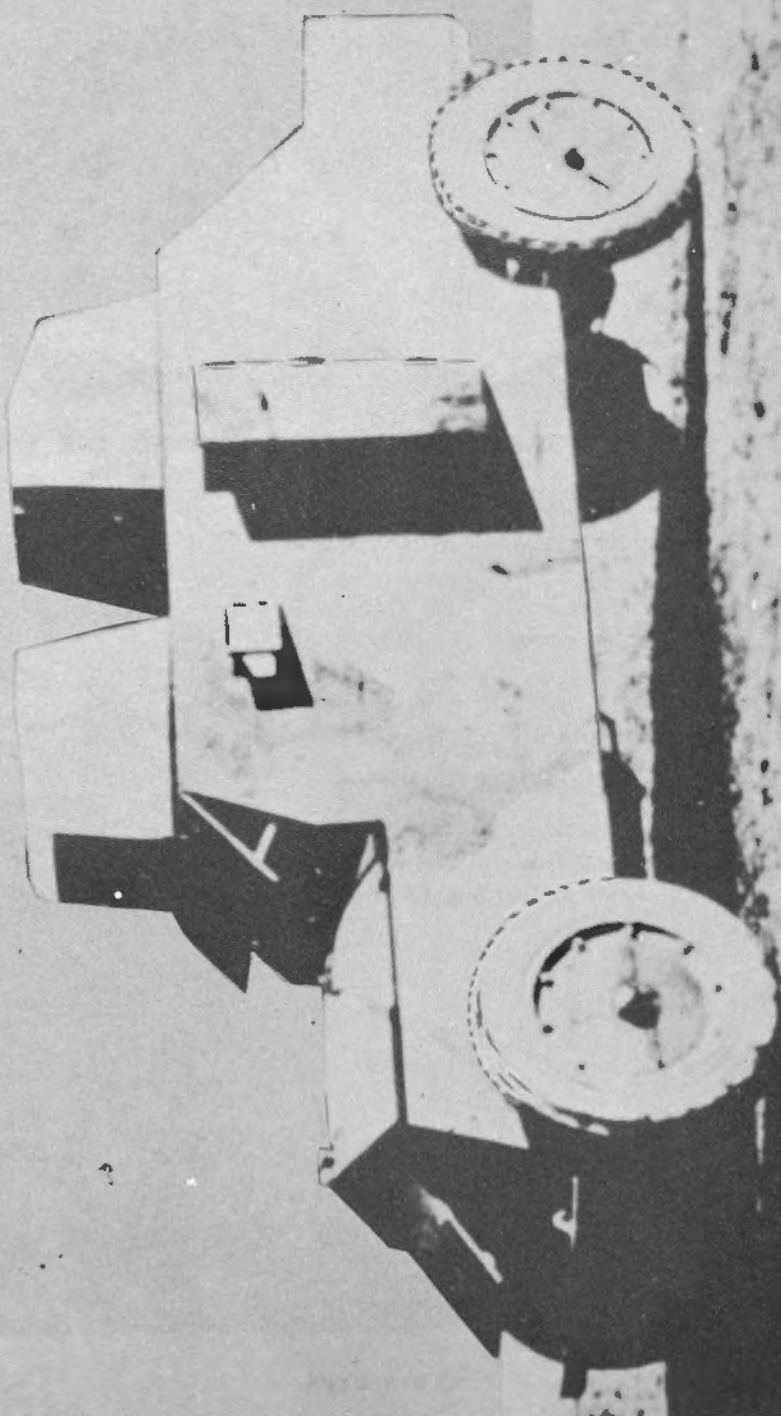
Weight: 7430 lbs

Engine: 45 BHP

Crew: Three men

Remarks: This car was tested by the School of Musketry at Fort Sill, Oklahoma.





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Item No. 6

**VEHICLE NOMENCLATURE: WHITE ARMORED CAR
(AEF)**

Date Produced: 1918 in the AEF

Armament: One MG, one 37-mm semiautomatic gun

Armor: 0.32"

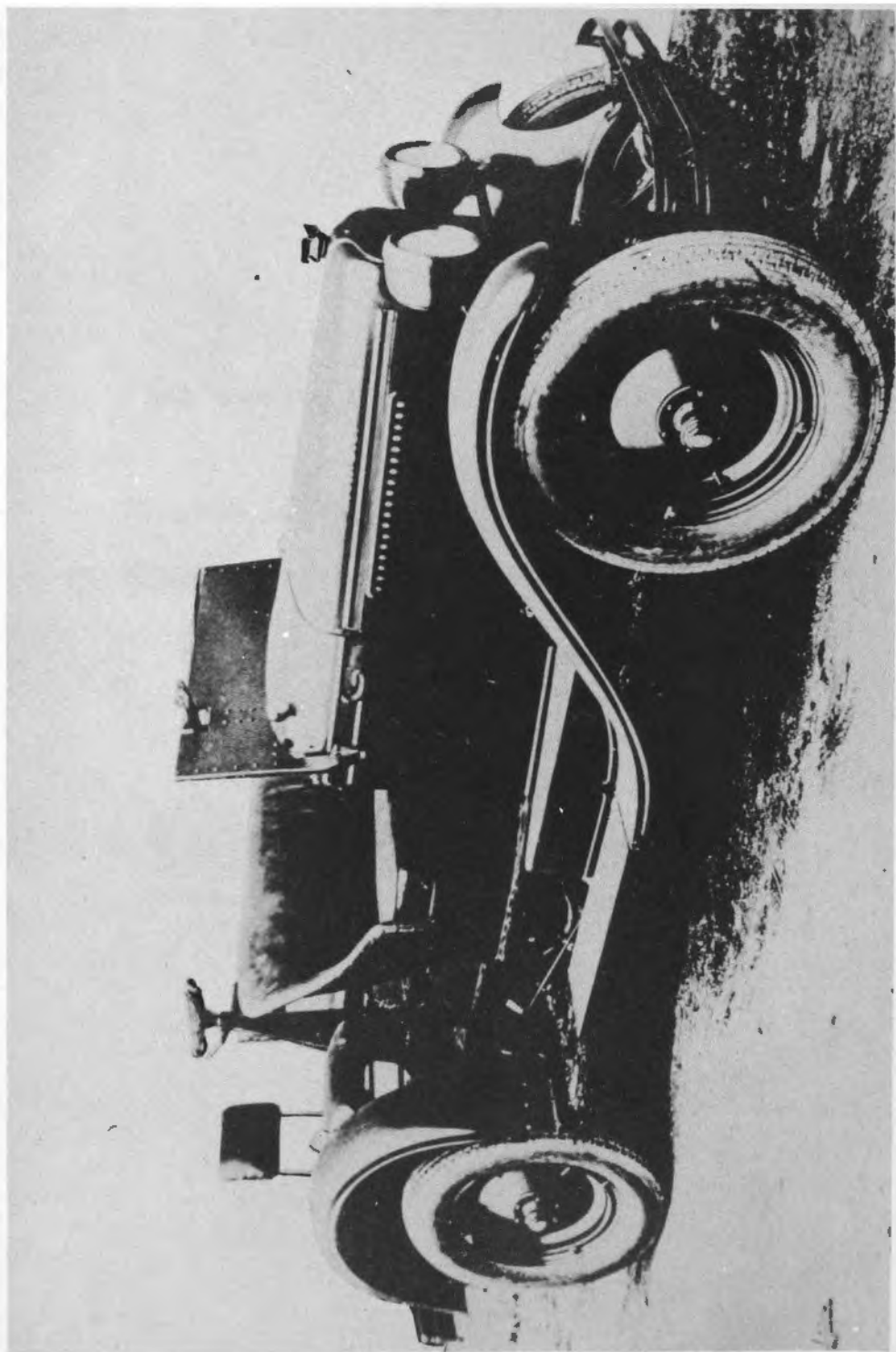
Maximum Speed: 25 MPH

Weight: 11,000 lbs

Engine: 45 BHP

Crew: Four men

Remarks: A dummy pilot car with wooden hull and double turrets was designed and built in France in 1918. Design was adopted as tentative standard by the Ordnance Department and remained so until 1921.



Item No. 7

**VEHICLE NOMENCLATURE: ARMORED CAR, TT
(PONTIAC CHASSIS)**

Date Produced: 1928

Armament: Two MGs

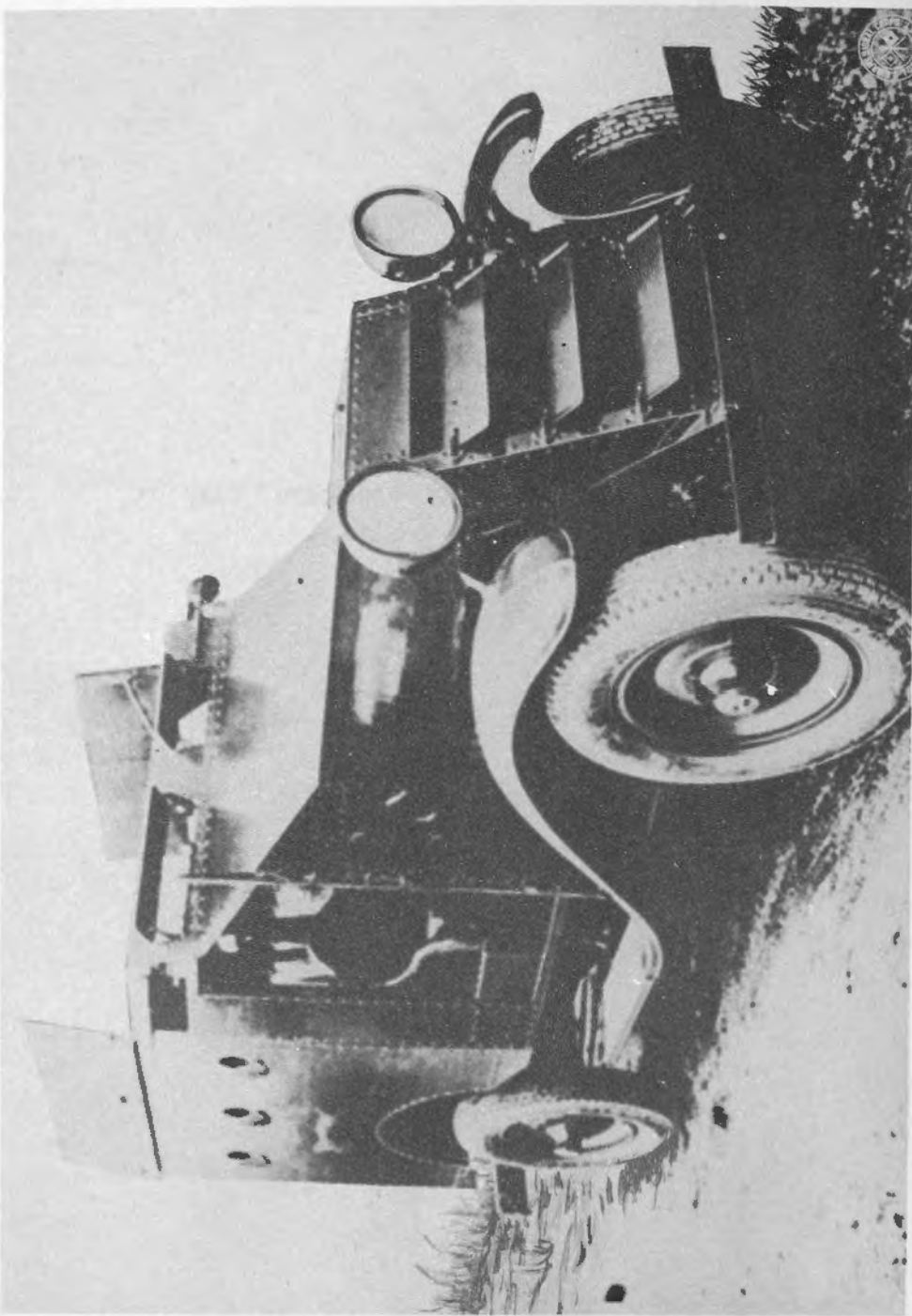
Armor: 0.25"

Maximum Speed: 45 MPH

Weight: 2600 lbs

Engine: 57 BHP

Crew: Four men



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Item No. 8

**VEHICLE NOMENCLATURE: ARMORED CAR, T2
(LaSALLE CHASSIS)**

Date Produced: 1928

Armament: One MG, two SMGs

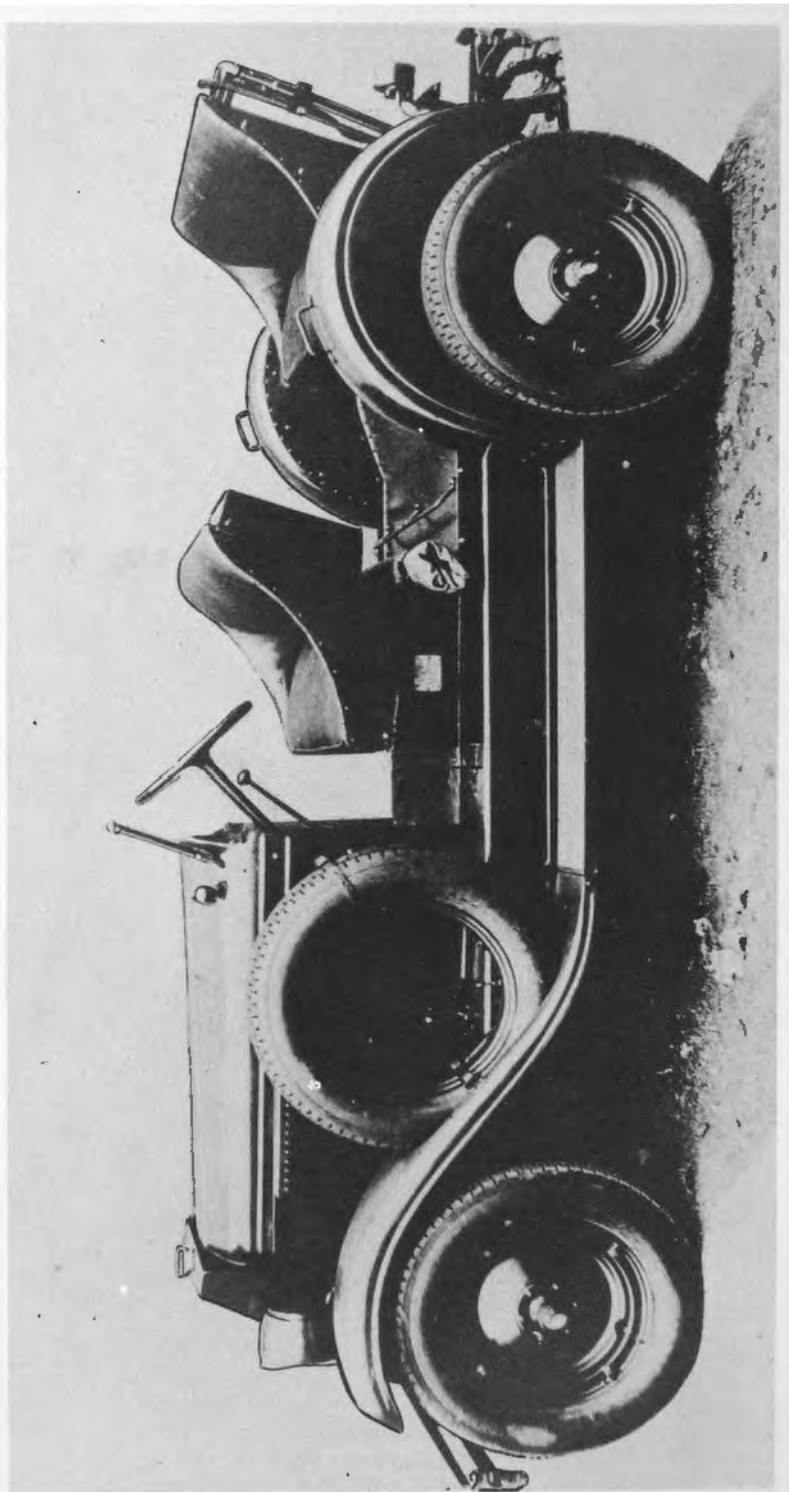
Armor: 0.125"

Maximum Speed: 70 MPH

Weight: 4850 lbs

Engine: 86 BHP

Crew: Four men



[REDACTED]

Item No. 9

**VEHICLE NOMENCLATURE: ARMORED CAR, T3
(PONTIAC)**

Date Produced: 1928

Armament: None

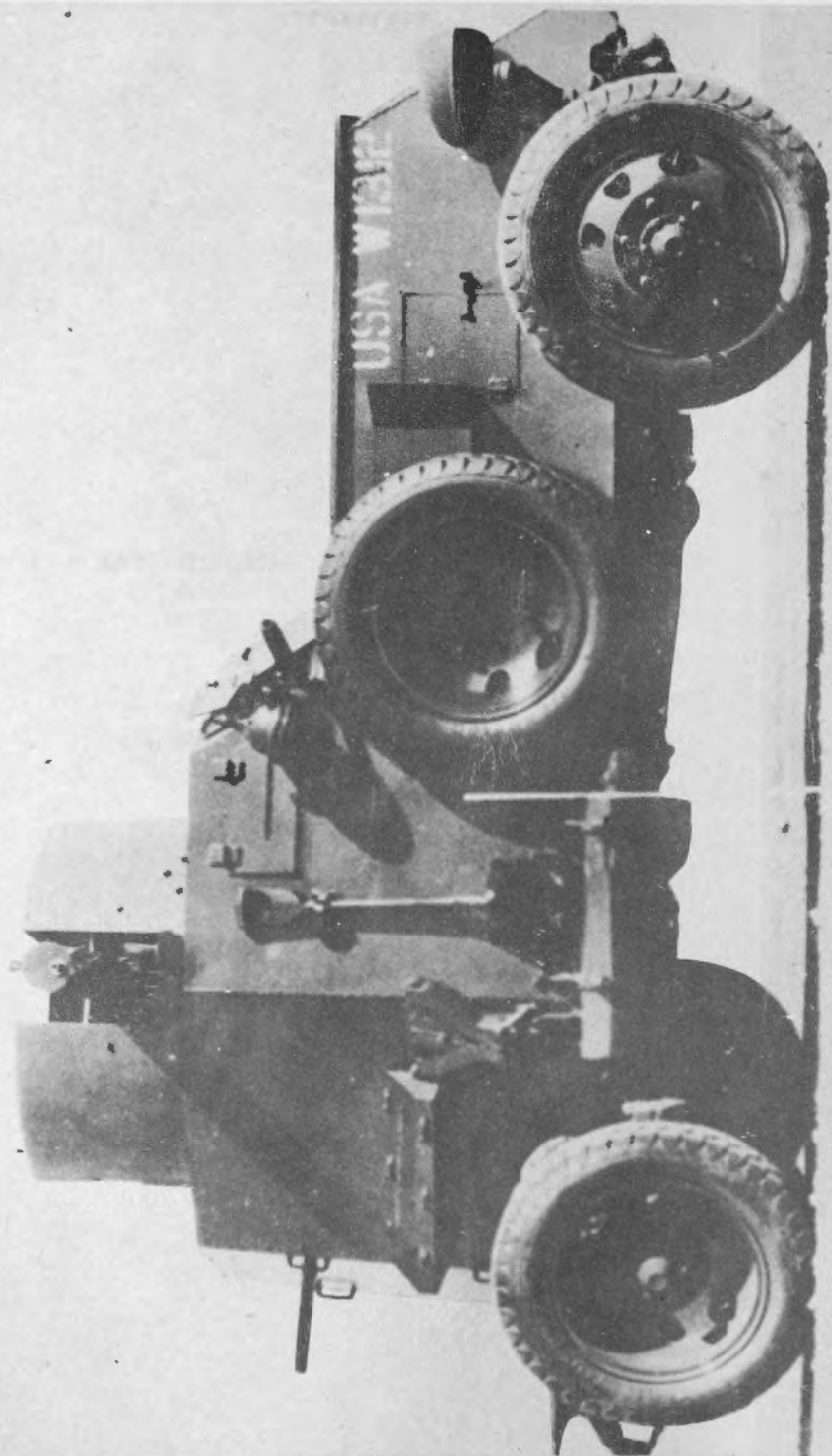
Armor: 0.25" over radiator and windshield

Maximum Speed: 45 MPH

Weight: 2700 lbs

Engine: Pontiac, 6-cylinder, 57-HP

Crew: Four men



[REDACTED]

Item No 10

VEHICLE NOMENCLATURE: ARMORED CAR, T7

Date Produced: 1929

**Armament: One cal .50 MG, two cal .30 MGs, one
cal .45 SMG**

Armor: 3/16"

Maximum Speed: 70 MPH

Weight: 7200 pounds

Engine: 6-cylinder Franklin

Crew: Four men



Item No. 11

VEHICULAR NOMENCLATURE: ARMORED CAR, T8

Date Produced: 1928

Armament: One cal .30 MG, one cal .45 SMG

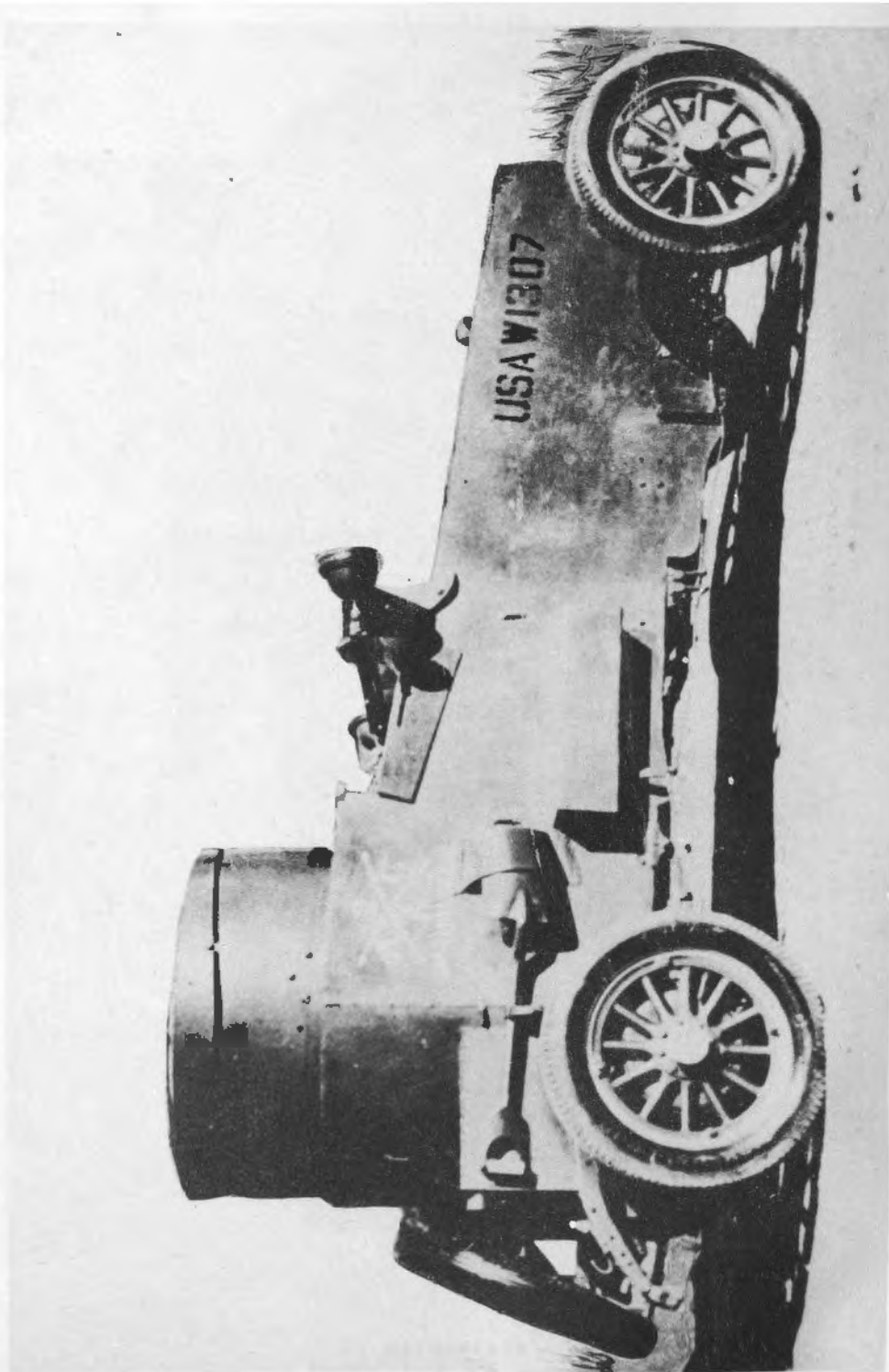
Armor: 3/16"

Maximum Speed: 55 MPH

Weight: 3800 lbs

Engine: 6-cylinder Chevrolet

Crew: Three men



[REDACTED]

Item No. 12

VEHICLE NOMENCLATURE: ARMORED CAR, T9

Date Produced: 1929

Armament: One cal .30 MG, one cal .45 SMG

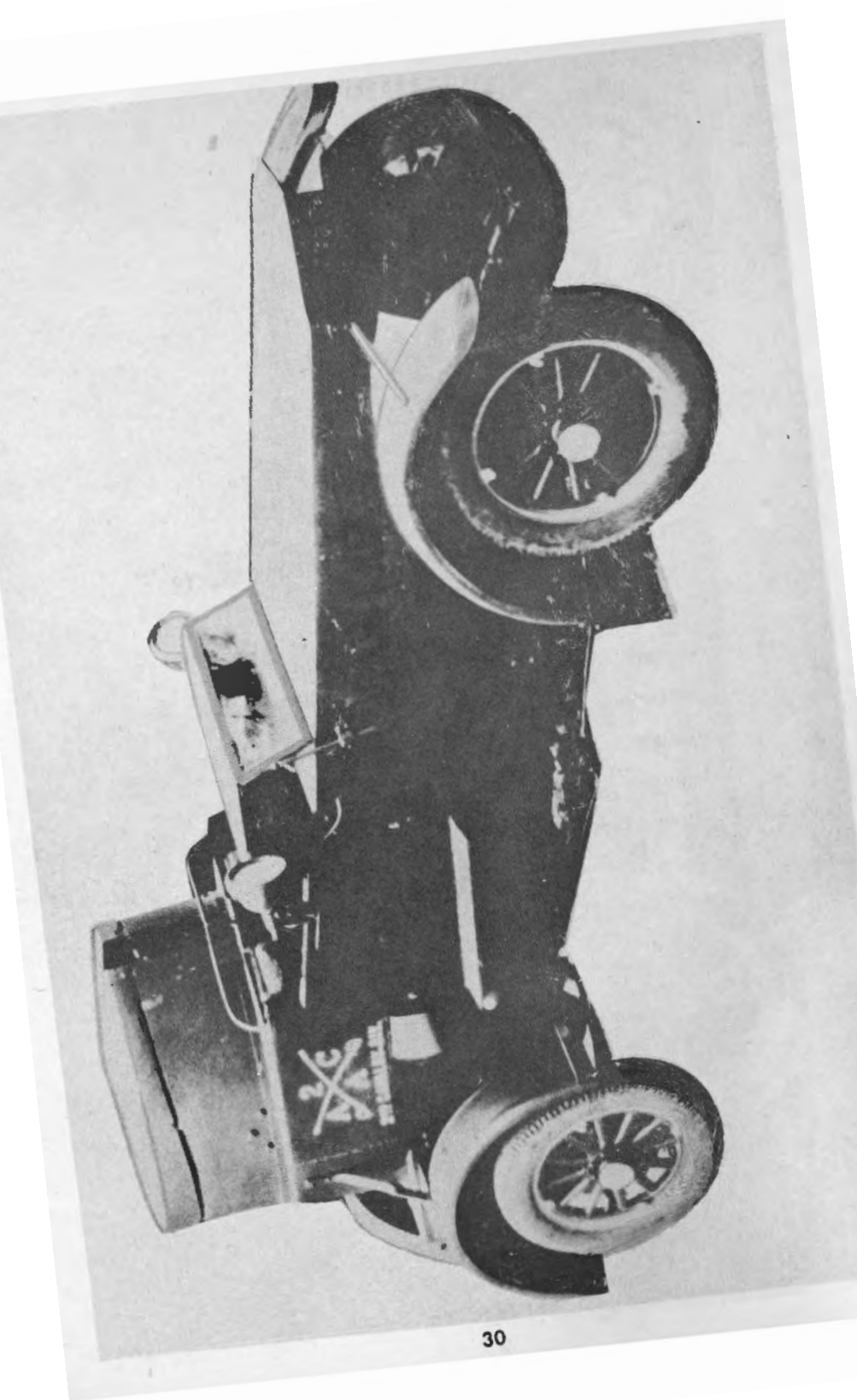
Armor: 3/16"

Maximum Speed: 50 MPH

Weight: 3700 lbs

Engine: 4-cylinder Plymouth

Crew: Three men



[REDACTED]

Item No. 13

**VEHICLE NOMENCLATURE: ARMORED CAR, T10
(WHIPPET)**

Date Produced: 1929

Armament: One cal .30 MG, one cal .45 SMG

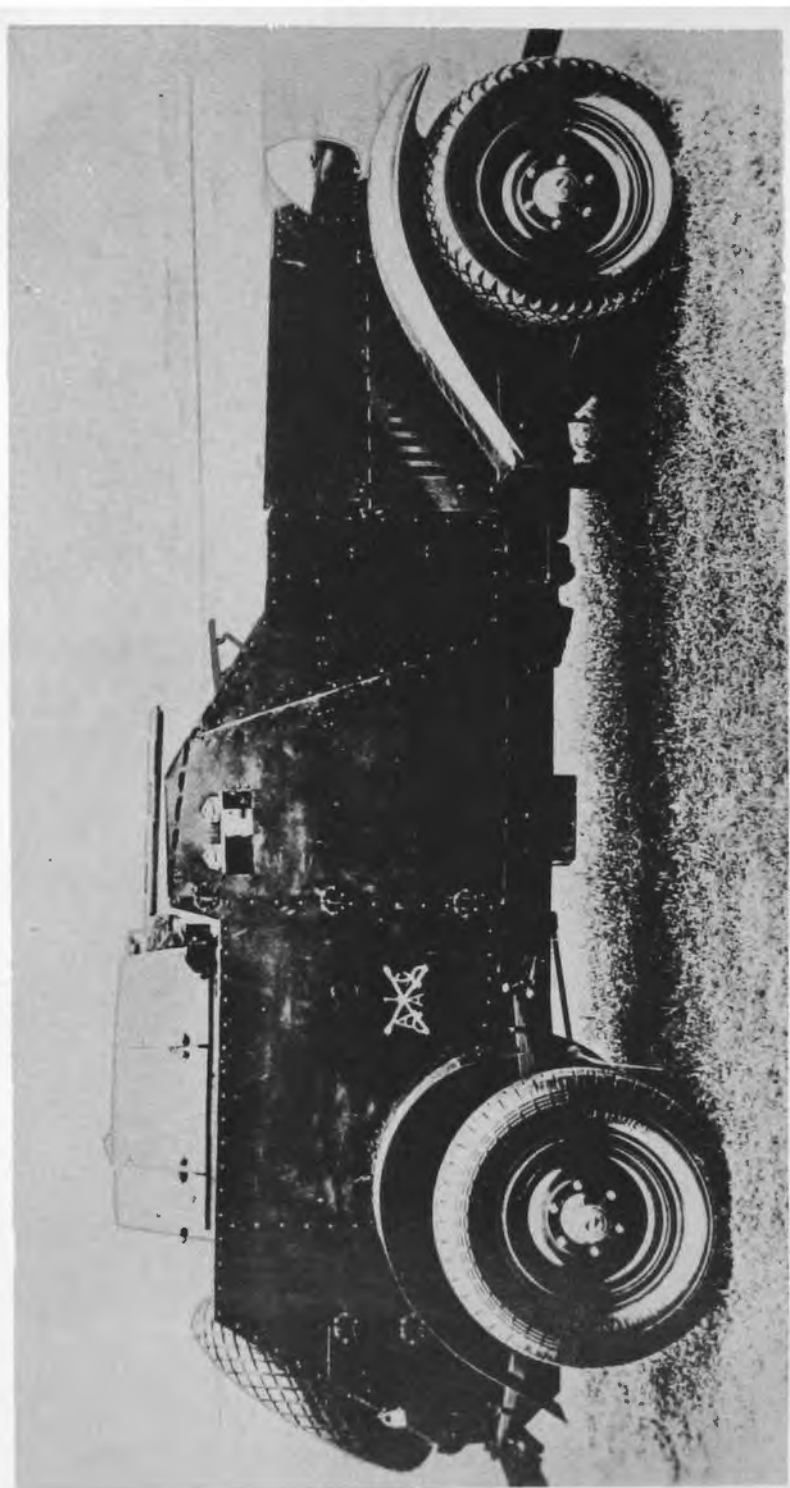
Armor: 0.187"

Maximum Speed: 55 MPH

Weight: 3800 lbs

Engine: 6-cylinder Whippet

Crew: Three men



[REDACTED]

Item No. 14

**VEHICLE NOMENCLATURE: ARMORED CAR, T2E
(LaSALLE CHASSIS)**

Date Produced: 1930

**Armament: One MG, cal .30 or cal .50 (One rifle
and one SMG)**

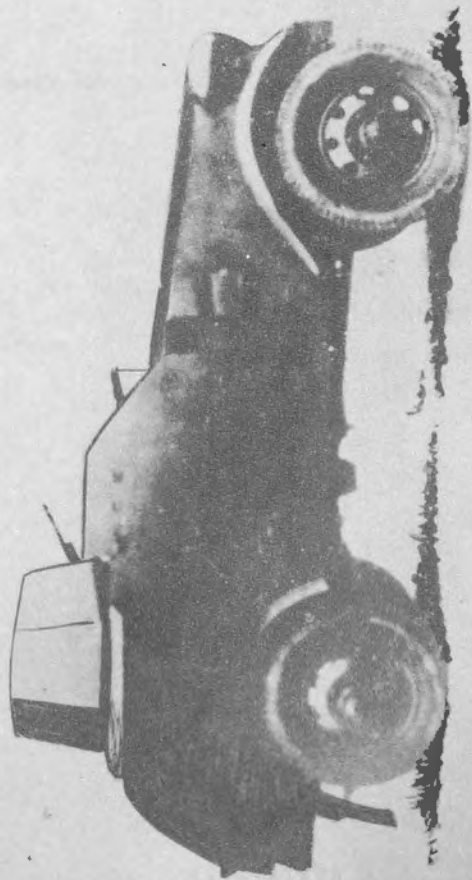
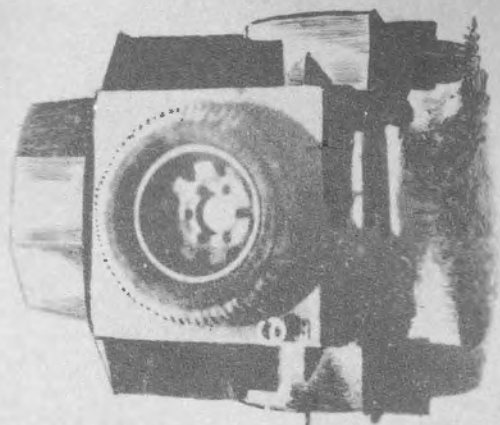
Armor: 0.125"

Maximum Speed: 60 MPH

Weight: 6000 lbs

Engine: 86 BHP

Crew: Three men



[REDACTED]

Item No. 15

VEHICLE NOMENCLATURE: ARMORED CAR, T6

Date Produced: 1931

**Armament: One cal .50 MG
Two cal .30 MGs
One cal .45 SMG**

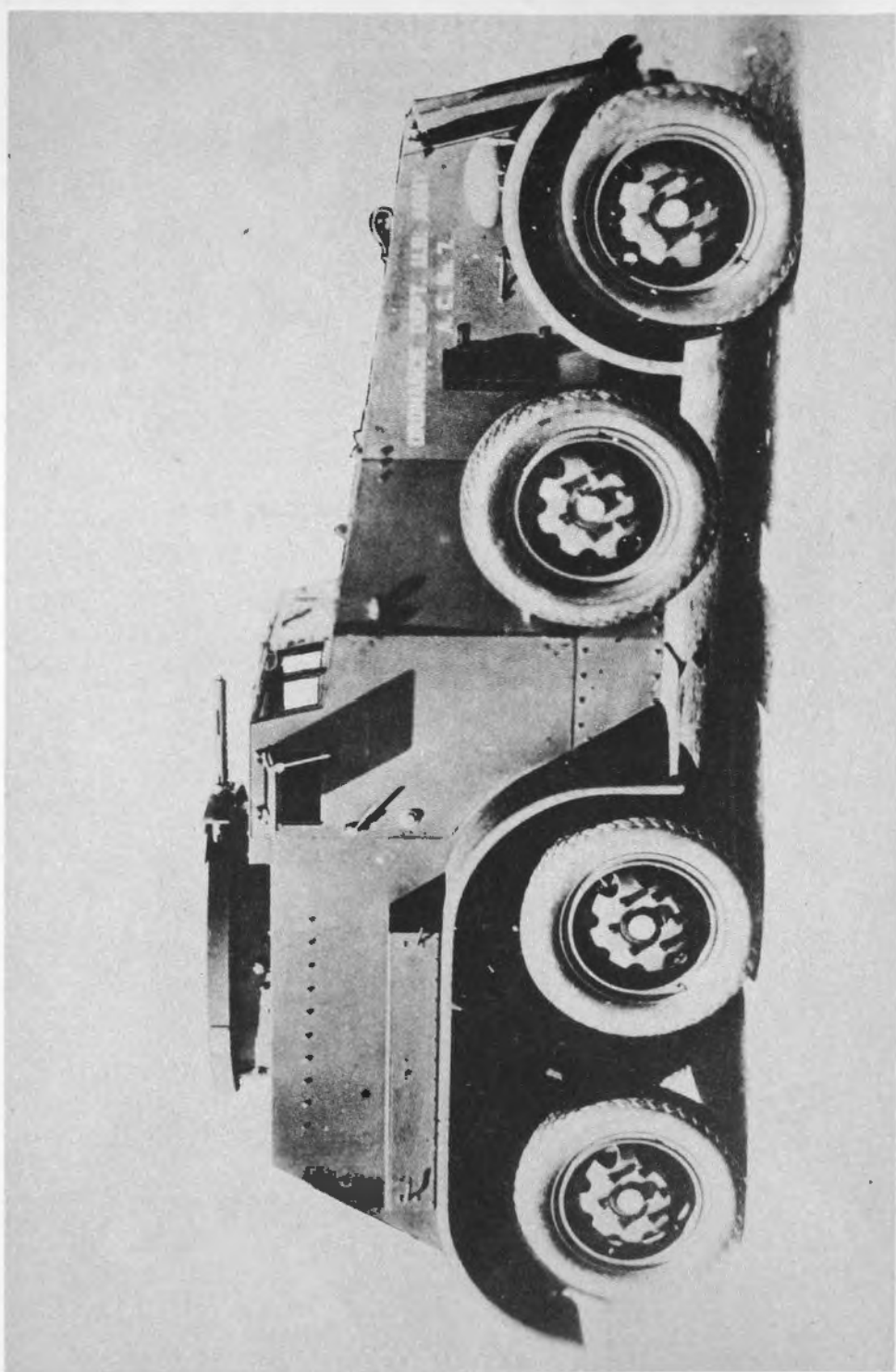
Armor: 3/16"

Maximum Speed: 70 MPH

Weight: 7200 lbs

Engine: 6-cylinder Franklin

Crew: Four men



[REDACTED]

Item No. 16

VEHICLE NOMENCLATURE: ARMORED CAR, M1

Date Produced: 1931

**Armament: One cal .50 MG and one cal .30 MG
in combination mount
One cal .45 SMG**

Armor: 0.25 and 0.375"

Maximum Speed: 55 MPH

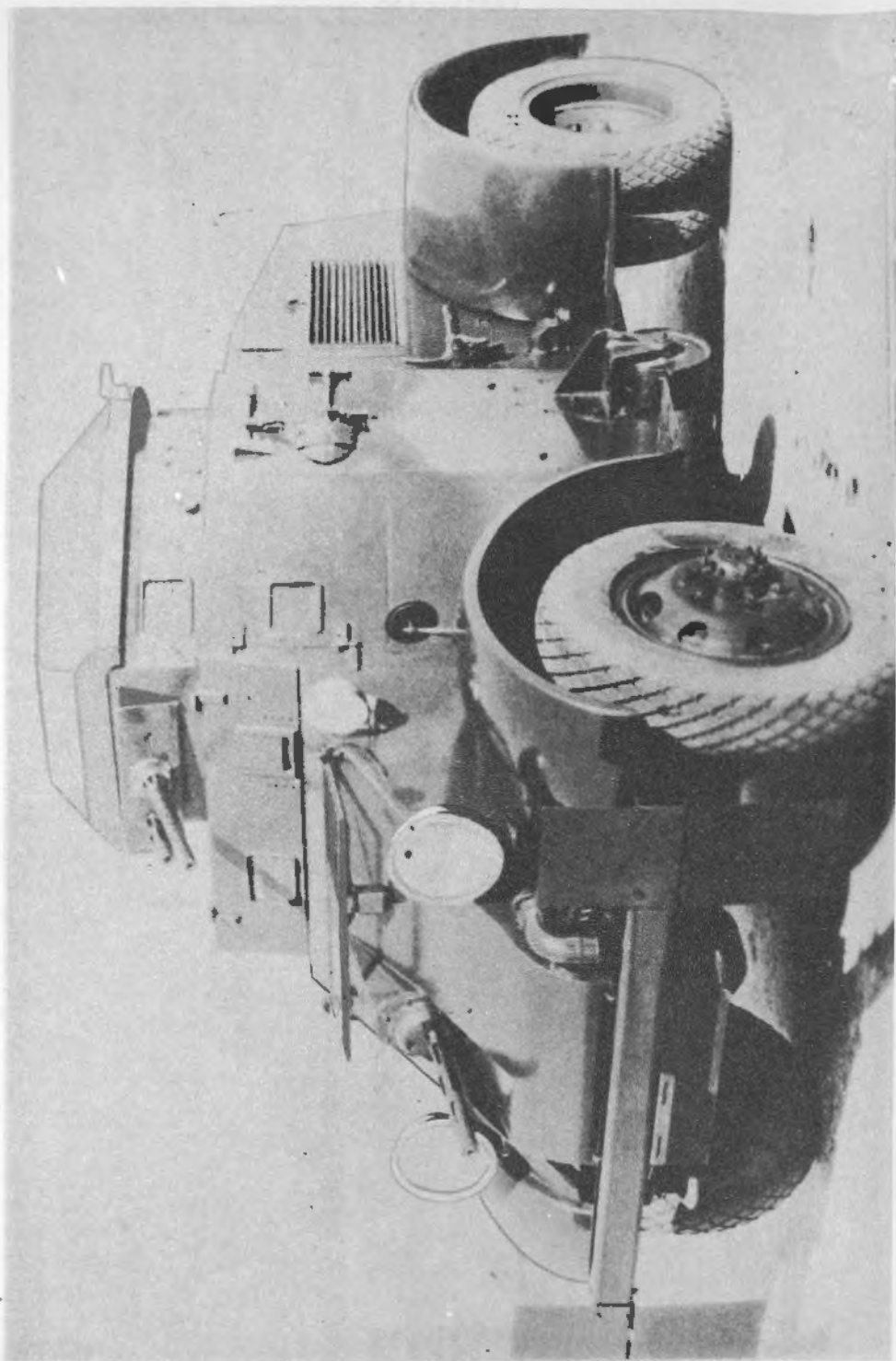
Weight: 9200 lbs

Engine: Cunningham, 8-cylinder V-type, 130-HP

Crew: Four men

Cruising Radius: 250 miles

**Remarks: In the development stage this vehicle was
known as the T4.**



[REDACTED]

Item No. 17

VEHICLE NOMENCLATURE: ARMORED CAR, T11

Date Produced: 1932

**Armament: One .50-caliber machine gun
Two .30-caliber machine guns**

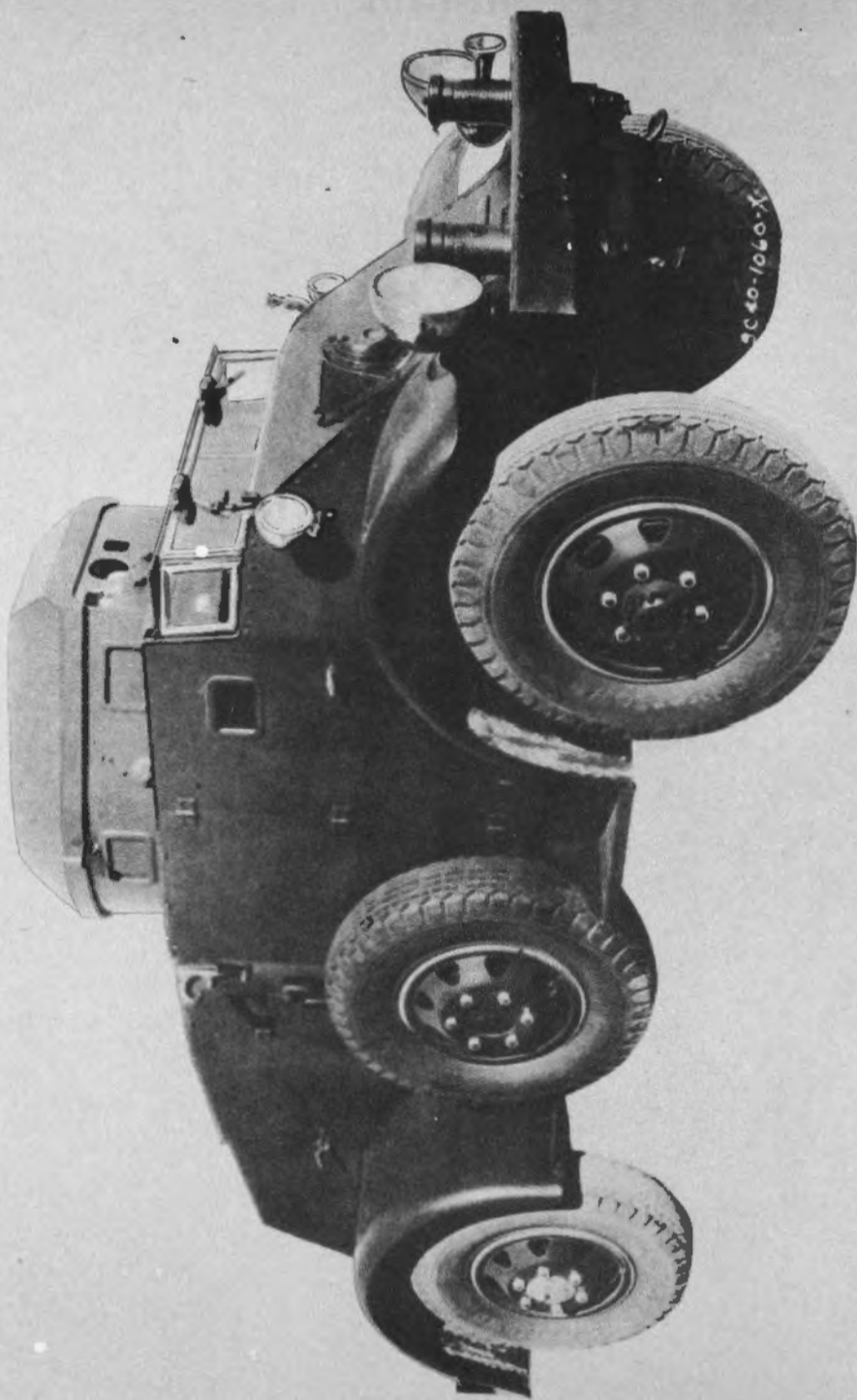
Armor: 1/8, 3/16, and 1/4"

Maximum Speed: 55 MPH

Weight: 8740 lbs

Engine: Cadillac, 8-cylinder, V-type

Crew: Four men



[REDACTED]

Item No. 18

VEHICLE NOMENCLATURE: ARMORED CAR, T11E1

Date Produced: 1934

Armament: One .50-caliber machine gun and one
.30-caliber machine gun in combination
mount
One .30-caliber machine gun in front
plate

Armor: 1/4, 3/8, and 1/2"

Maximum Speed: 60 MPH

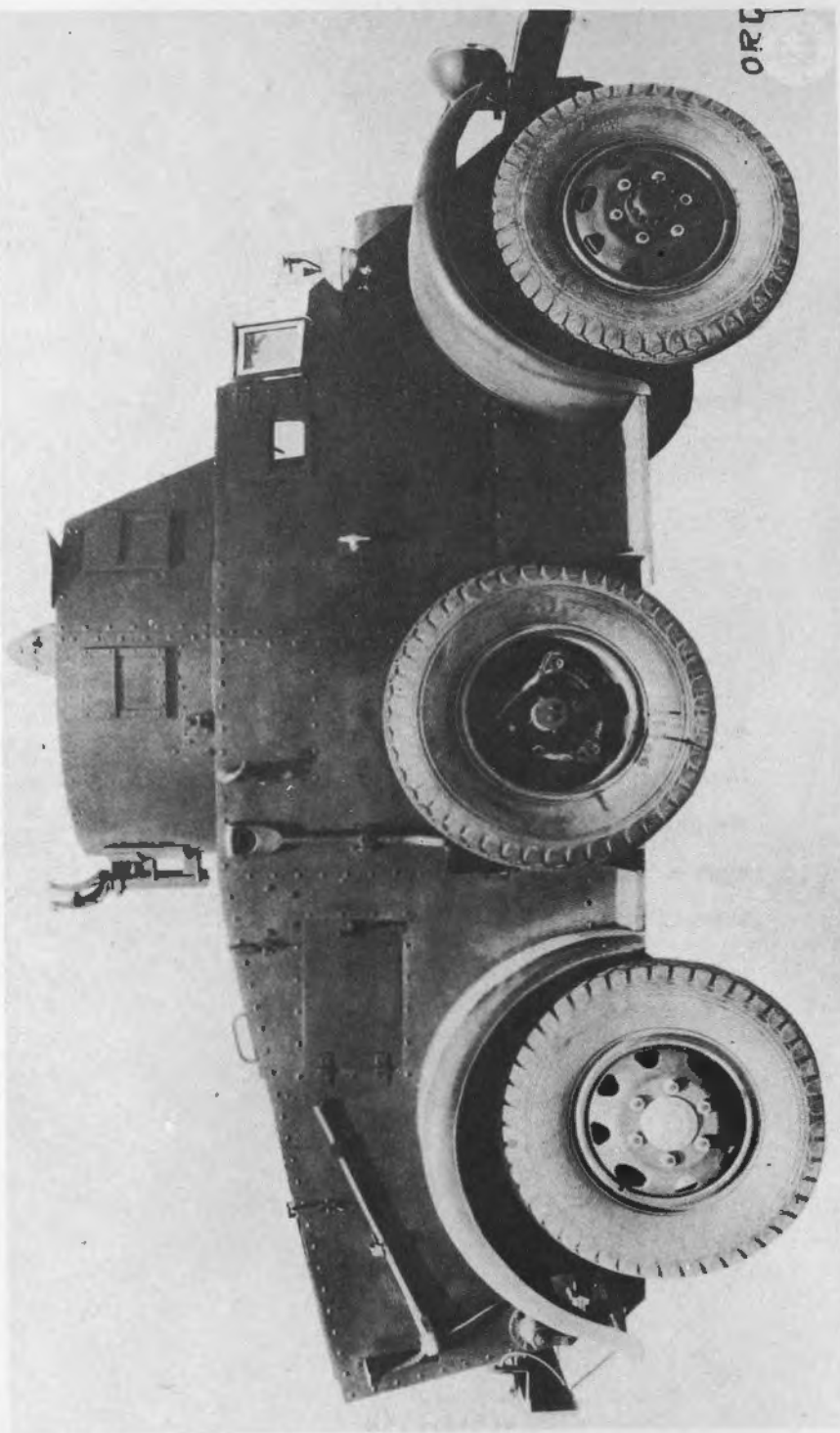
Weight: 12,900 lbs gross

Engine: Cadillac, 8-cylinder, V-type, 118-HP

Crew: Four men

Cruising Radius: 250 miles

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Item No. 19

VEHICLE NOMENCLATURE: ARMORED CAR, T11E2

Date Produced: 1935

**Armament: One .50-caliber machine gun
Two .30-caliber machine guns**

Armor: 1/4, 3/8, and 1/2"

Maximum Speed: 60 MPH

Weight: 14,300 lbs gross

Engine: Hercules WXLC3, 118-HP

Crew: Four men

Cruising Radius: 250 miles



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Item No. 20

VEHICLE NOMENCLATURE: TRACKLESS TANK

Date Produced: 1941

Armament: No guns or gun mounts were provided
on the vehicle tested

Armor: 1/4 to 1/2"

Maximum Speed: 75 MPH

Weight: 20,150 lbs

Engine: Guiberson Radial Diesel, Model T-1020

Crew Space: The transmission of power to the driving wheels is carried forward along the sides of the hull. This feature gives more usable space in the fighting compartment.

Cruising Range: 500 to 600 miles

Remarks: This vehicle was tested by the Armored Board for use as an armored car but not for use as a tank. Vehicle has a fixed type turret. This vehicle was the forerunner to Armored Car, T13.



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Item No. 21

VEHICLE NOMENCLATURE: ARMORED CAR, T13

Date Produced: 1942

**Armament: One 37-mm gun
Two .30-caliber machine guns (one bow
gun and one coaxial with 37-mm)**

Armor: 1/4 to 5/8"

Maximum Speed: 65 MPH

Weight: 25,350 lbs

Engine: Guiberson, Series 4, Radial Diesel

Crew: Five men

Remarks: Two cars were tested by the Armored Board. The independently sprung and independently articulated wheels, together with the large amplitude permitted, gave the vehicle a smooth ride. The weight and tendency toward mechanical failures caused the Palmer Board to recommend termination of development. This vehicle was also referred to as the Trackless Tank.



[REDACTED]

Item No. 22

VEHICLE NOMENCLATURE: ARMORED CAR, T17

Date Produced: 1942

Armament: One 37-mm gun and one .30-caliber machine gun in combination mount in turret

Two .30-caliber machine guns

Provision for one .45-caliber submachine gun

Armor: 1/4 to 1-1/4"

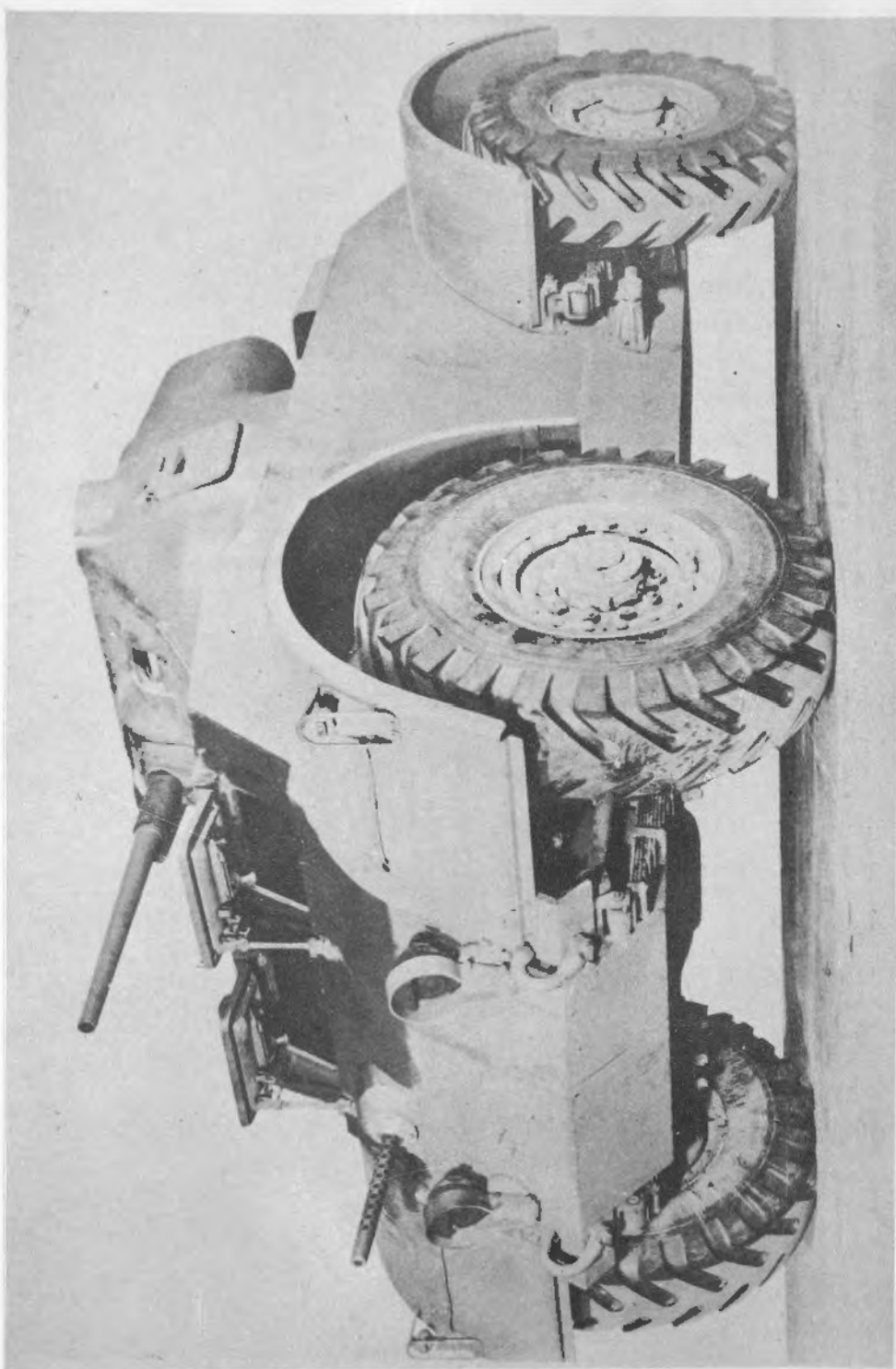
Maximum Speed: 60 MPH

Weight: 32,000 lbs

Engine: Two Hercules JXD, 6-cylinder

Crew: Five men

Remarks: This car was considered too large and production was limited to 250 cars which the British agreed to accept. None were ever sent overseas. The guns were removed, and the vehicles assigned for military police use in the United States.



[REDACTED]

Item No. 23

VEHICLE NOMENCLATURE: ARMORED CAR, T17E1

Date Produced: 1941

Armament: One 37-mm gun and one .30-caliber machine gun in combination mount
Two .30-caliber machine guns (one in bow; one on turret)

Aarmor: 1/2 to 1-3/4"

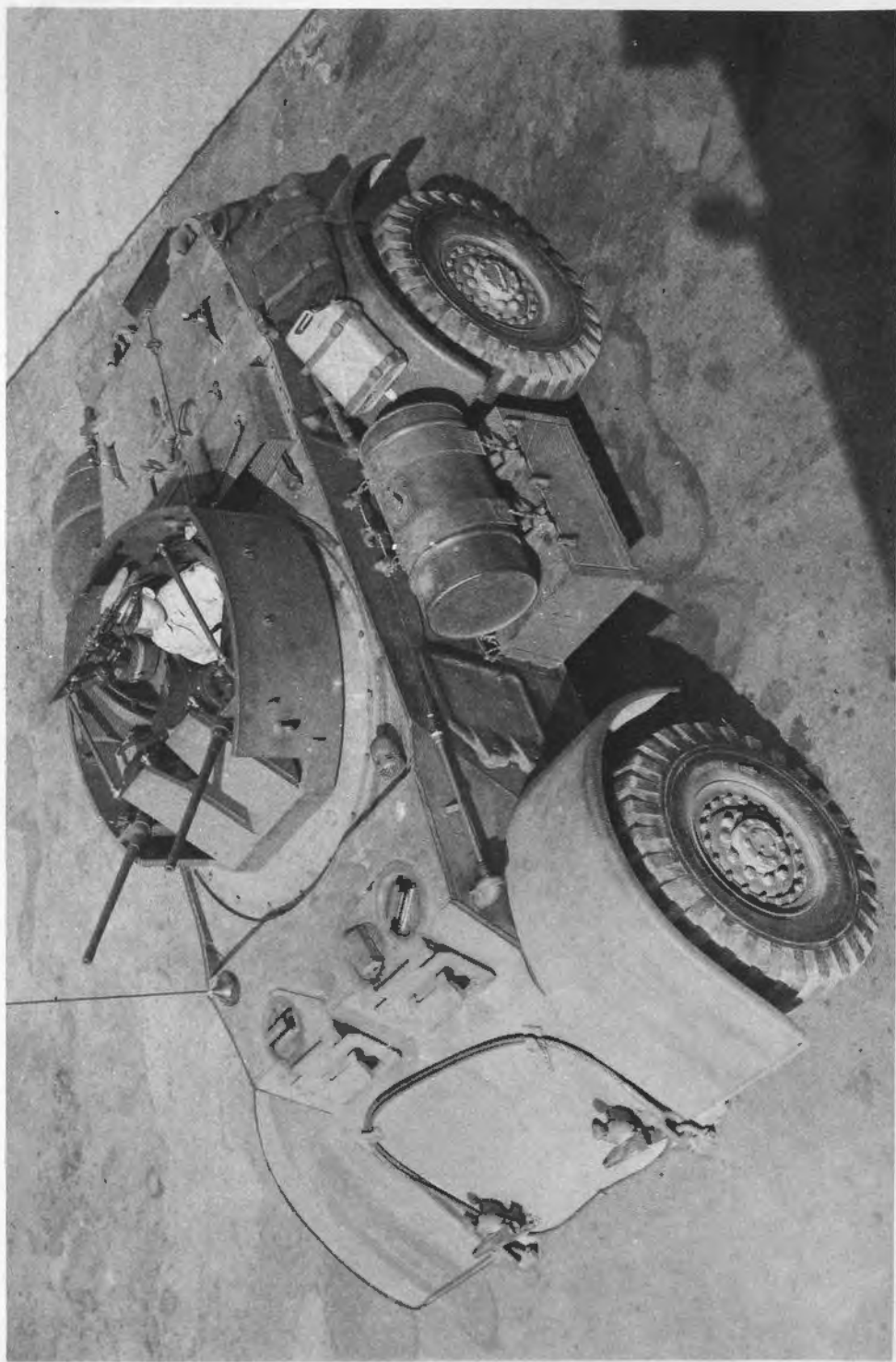
Maximum Speed: 55 MPH

Weight: 30,705 lbs gross

Engine: GMC 270

Crew: Five men

Remarks: The vehicle was intended for British use and was modified to satisfy British requirements. Limited procurement of the T17E1 was authorized for international aid, but later changed to the T17E2.



[REDACTED]

Item No. 24

VEHICLE NOMENCLATURE: ARMORED CAR, T17E2

Date Produced: 1943

Armament: Two .50-caliber machine guns in Fraser-Nash turret
Provision for one .45-caliber submachine gun

Armor: 1/4 to 1-1/4"

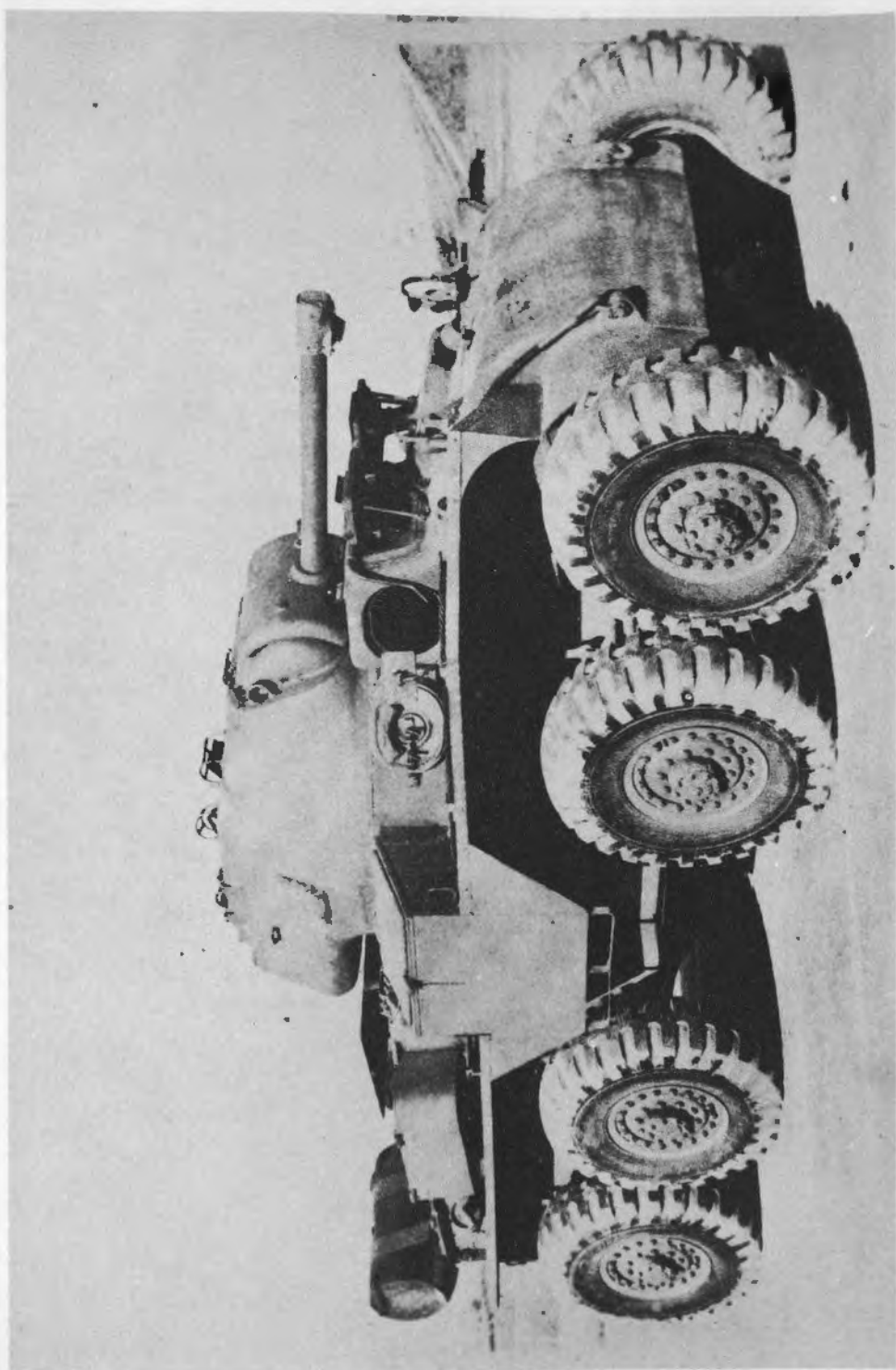
Maximum Speed: 55 MPH

Weight: 26,558 lbs gross

Engine: Two 6-cylinder GMC 270

Crew: Five men

Remarks: One thousand of these vehicles were manufactured at the request of the British. Armored Car, T17E1, is similar to Armored Car, T17E2, except it has a tank type turret.



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Item No. 25

VEHICLE NOMENCLATURE: ARMORED CAR, T18E2

Date Produced: 1942

**Armament: One 57-mm gun
Two cal .30 MGs
One cal .45 SMG**

Armor: 3/8 to 3"

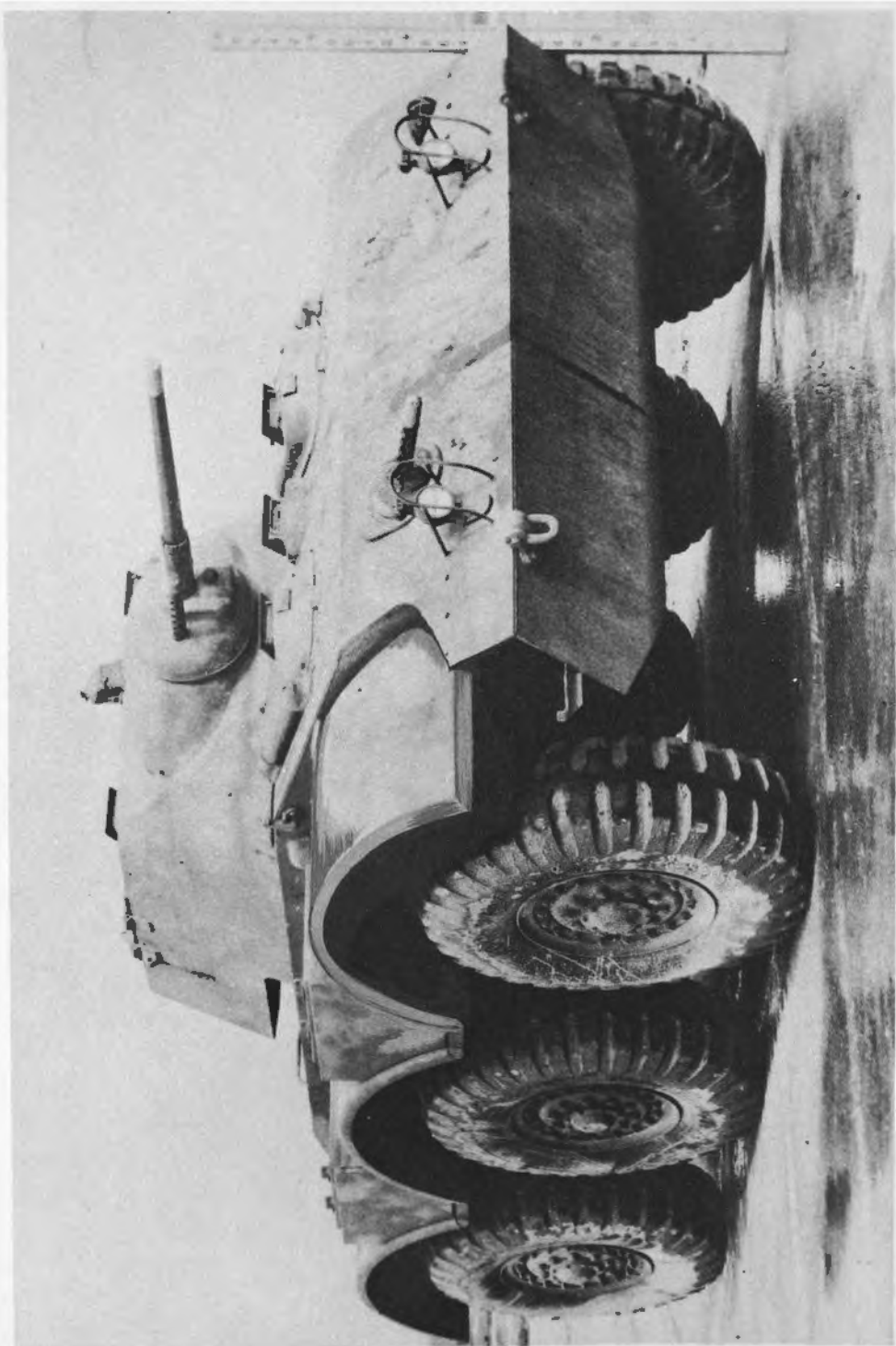
Maximum Speed: 50 MPH

Weight: 53,000 lbs gross

Engine: 6-cylinder GMC

Crew: Five men

Remarks: Only two pilot models of Armored Car, T18, were manufactured; one of which was retained by the manufacturers for engineering purposes, and the other modified to become the pilot T18E2 and shipped to England for test. Thirty vehicles (T18E2) were produced and all issued to United Kingdom. The T18 is almost identical to the T18E2 but was armed with a 37-mm gun.



[REDACTED]

Item No. 26

VEHICLE NOMENCLATURE: ARMORED CAR, T19E1

Date Produced: 1942

**Armament: One 37-mm gun and one cal .30 MG
in combination mount
One cal .30 MG in bow**

Armor: 1/4 to 1/2"

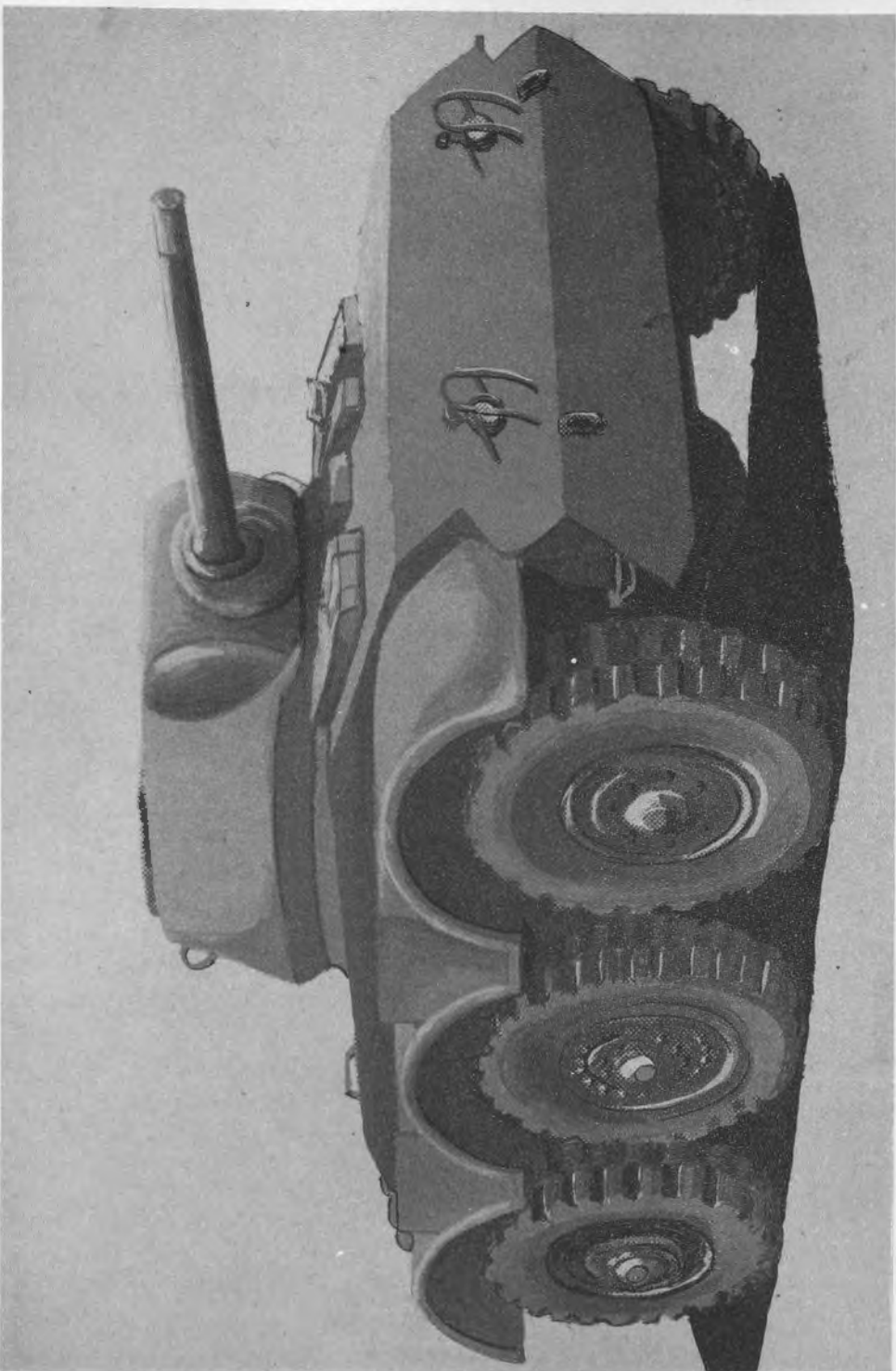
Maximum Speed: 55 MPH

Weight: 28,500 lbs combat loaded

Engine: Twin Cadillac V-8

Crew: Five men

Remarks: This armored car is practically a tank on wheels. Dimensions and weight are greatly in excess of those desired in an armored reconnaissance vehicle. One very desirable feature is independent articulation and springing of the wheels.



Item No. 27

**VEHICLE NOMENCLATURE: 75-mm GUN MOTOR
CARRIAGE, T66**

Date Produced: 1942

Armament: 75-mm gun

Armor: 1/4 to 1/2"

Maximum Speed: 60 MPH

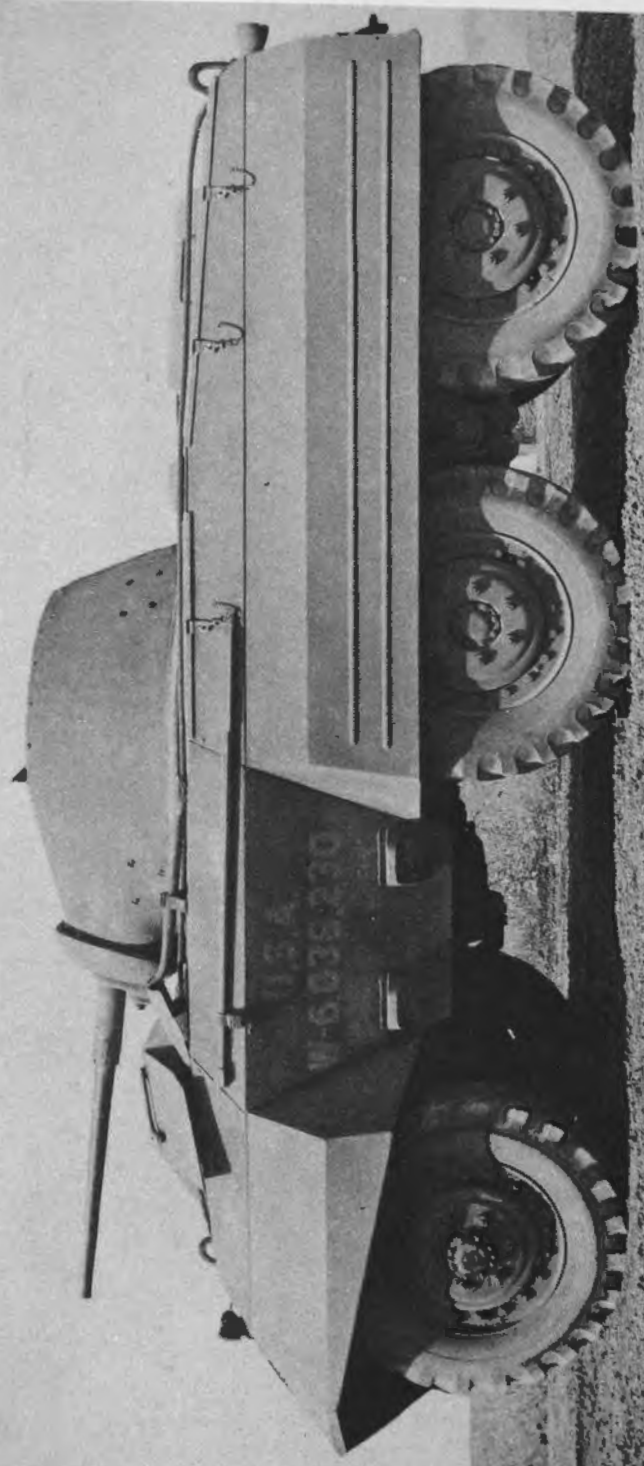
Weight: 31,500 lbs combat loaded

Engine: Twin Cadillac

Crew: Five men

Cruising Range: 300 miles

Remarks: Chevrolet Division, General Motors Corporation, completed the pilot model, but the project was closed at the direction of the Special Vehicle Board which met at Aberdeen Proving Ground, November 1942. The 75-mm gun was mounted on chassis of Armored Car, T19E1.



Item No. 28

**VEHICLE NOMENCLATURE: ARMORED CAR, M8,
GREYHOUND**

Date Produced: 1942

**Armament: One 37-mm gun, M6, and one cal .30
MG in combination mount in turret
One cal .50 MG, antiaircraft, on turret**

Armor: 1/8 to 3/4"

Maximum Speed: 55 MPH

Weight: 17,400 lbs

Engine: 6-cylinder, Hercules JXD

Crew: Four men

**Remarks: In the development stage this vehicle was
known as the T22.**



[REDACTED]

Item No. 29

**VEHICLE NOMENCLATURE: ARMORED UTILITY
CAR, M20, DEERHOUND**

Date Produced: 1943

Armament: One cal .50 MG on ring mount
Provision for one 2.36" Rocket Launcher, M9A1

Armor: 1/8 to 3/4"

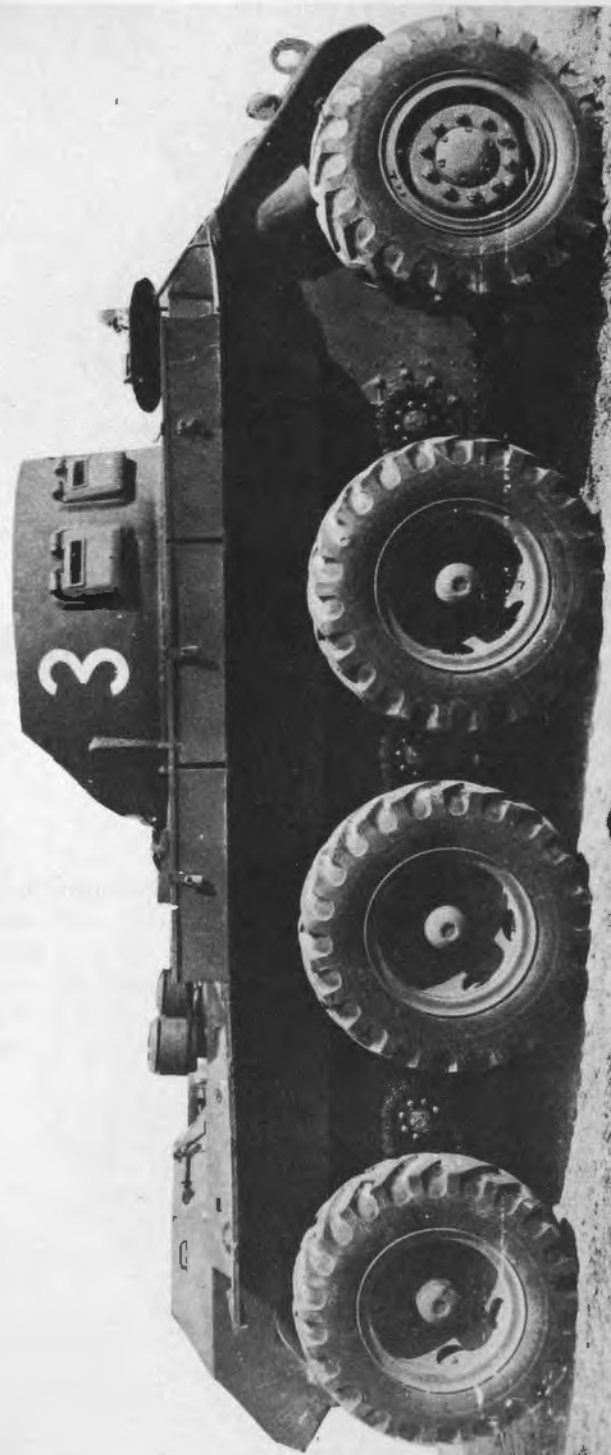
Maximum Speed: 55 MPH

Weight: 12,800 lbs unloaded

Engine: 6-cylinder Hercules JXD

Crew: Two to six men

Remarks: The vehicle was originally standardized as Armored Utility Car, M10. To avoid confusion with the 3" Gun Motor Carriage, M10, in tank destroyer organizations, the designation was changed to Armored Utility Car, M20. In the development stage the M20 was known as the T26.



Item No. 30

VEHICLE NOMENCLATURE: ARMORED CAR, T27

Date Produced: 1944

Armament: One 37-mm gun

One cal .30 MG coaxially mounted with
37-mm gun

One cal .30 antiaircraft MG

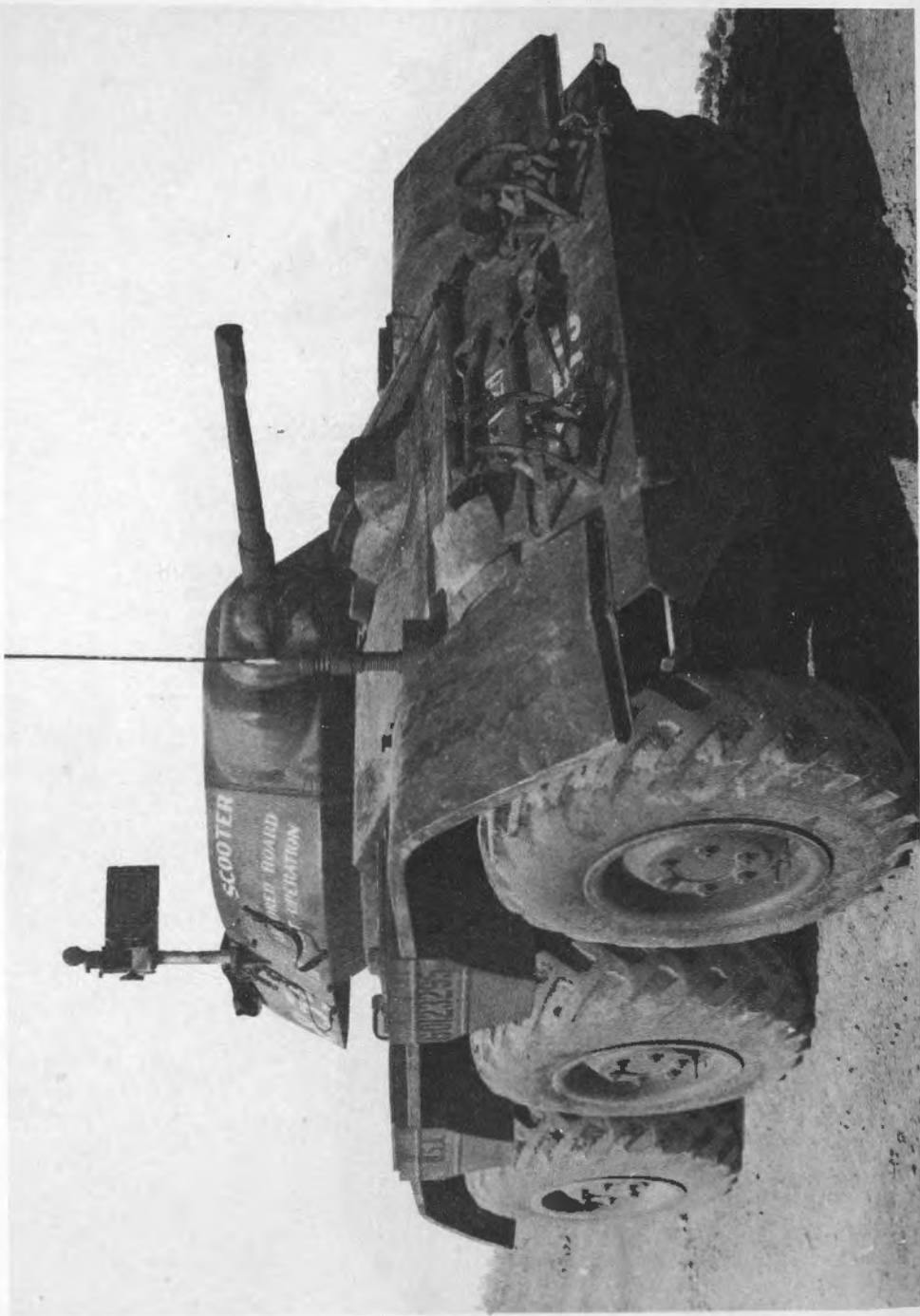
Armor: 1/4 to 3/4"

Maximum Speed: 57 MPH

Weight: 15,200 lbs loaded

Engine: Cadillac V-8

Crew: Four men



[REDACTED]

Item No. 31

**VEHICLE NOMENCLATURE: ARMORED CAR, M38,
WOLFHOUND**

Date Produced: 1945

**Armament: One 37-mm gun, M6, and one cal .30
MG in combination mount in turret**

**One cal .50 MG (flexible) on turret
Provision for one Grenade Launcher,
M8.**

**Tripod mounts for a cal .50 and a cal
.30 MG are also provided.**

Armor: 1/4 to 3/8"

Maximum Speed: 60 MPH

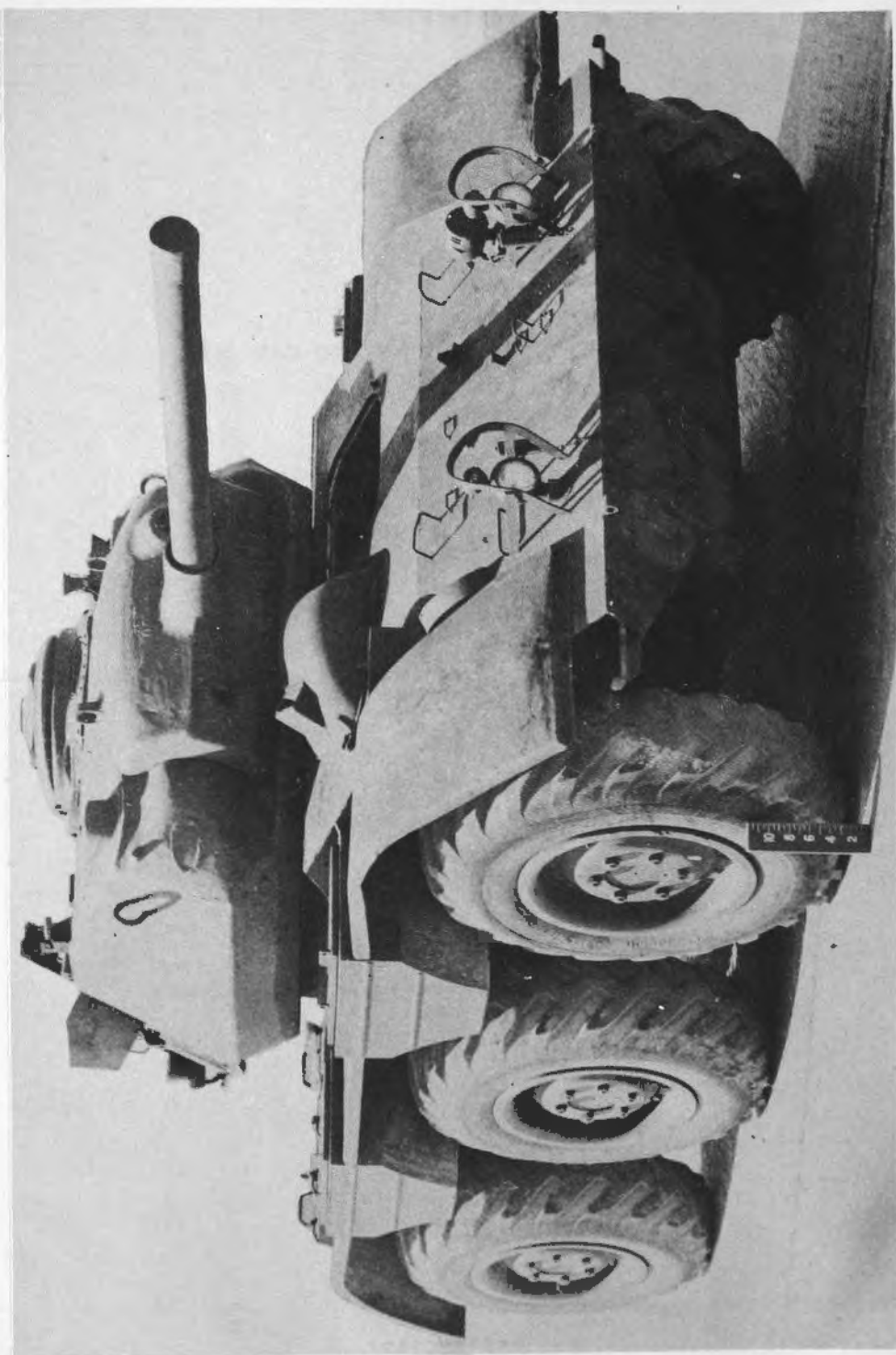
Weight: 15,300 lbs combat loaded

Engine: Codillac 42

Crew: Four men

Transmission: Hydra-Matic

**Remarks: In the development stage this vehicle was
known as the T28.**



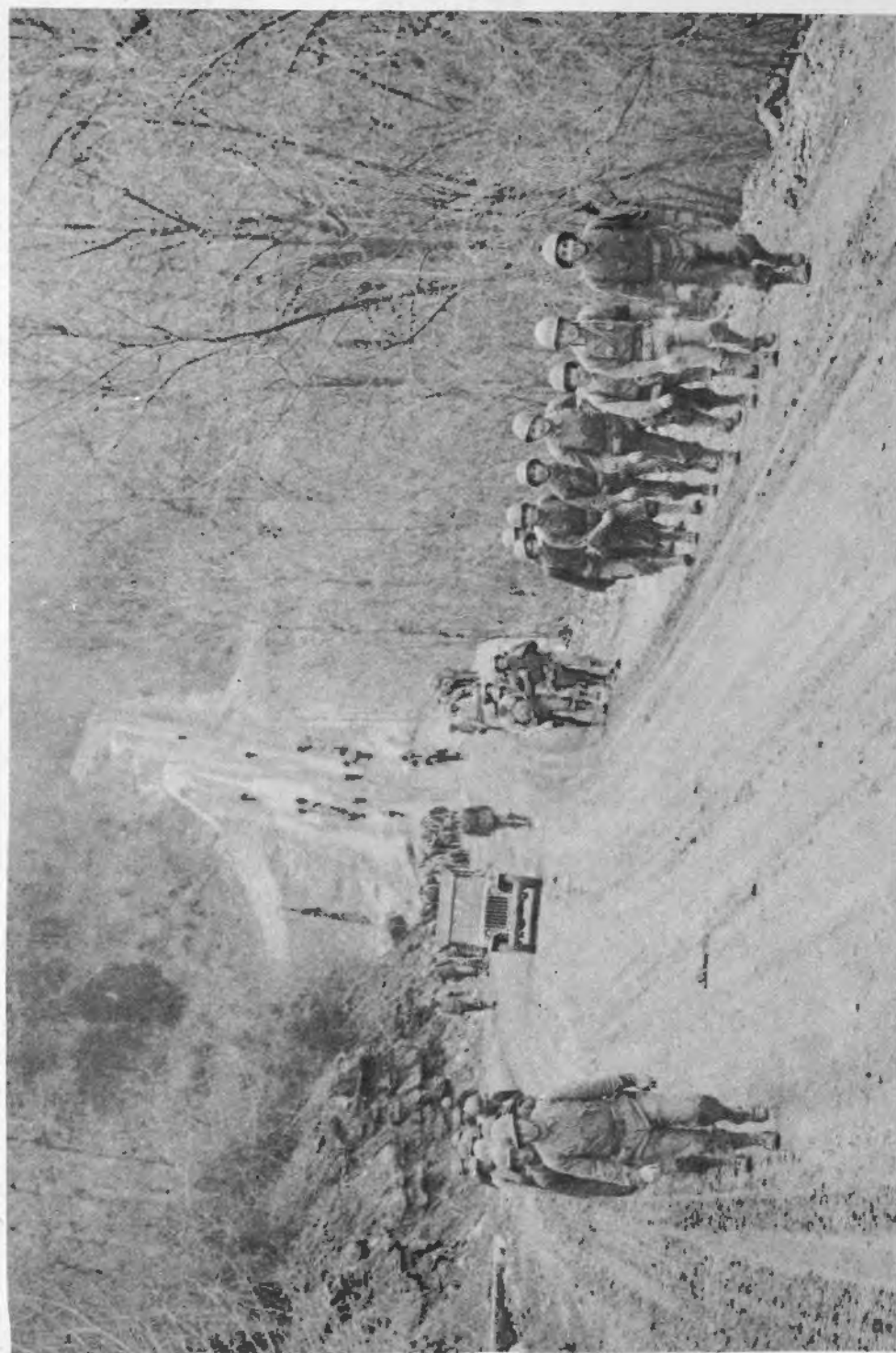
Item No. 32

**VEHICLE NOMENCLATURE: ARMORED CAR, M38
(WITH LIGHT TANK, M24, TURRET)**

Date Produced: 1946

Weight: 17,400 lbs less stowage and crew

Remarks: A Light Tank, M24, turret was mounted on Armored Car, M38, in place of the 37-mm gun turret, and a firing test was conducted. The firing test was satisfactory. Indications were that the vehicle performance would be unsatisfactory due to the increased weight. Vehicle appeared worthy of further development.



[REDACTED]

SECTION III
SCOUT CARS

"The strength of an army is estimated by multiplying the mass by the velocity."

— Napoleon



O.R.B.

[REDACTED]

Item No. 33

VEHICLE NOMENCLATURE: SCOUT CAR, M1

Date Produced: 1933

**Armament: One cal .50 MG
Two cal .30 MGs**

Armor: 1/4 to 1/2"

Maximum Speed: 50 MPH

Weight: 9000 lbs gross

Engine: Hercules JXC

Crew: Four men

Cruising Radius: 200 miles

Remarks: This car was called the T7 in the development stage.



[REDACTED]

Item No. 34

VEHICLE NOMENCLATURE: SCOUT CAR, M2

Date Produced: 1935

Armament: Four brackets for cal .30 MGs

Armor: 1/4 and 1/2"

Maximum Speed: 58 MPH

Weight: 9160 lbs gross

Engine: Lycoming, 8-cylinder MODGFC, 94-HP

Crew: Five or seven men

Cruising Radius: 200 miles

Remarks: In the development stage this vehicle was the T9.



[REDACTED]

Item No. 35

VEHICLE NOMENCLATURE: SCOUT CAR, M3

Date Produced: 1937

Armament: Track for tourelle type gun mounts

Armor: 1/4 and 1/2"

Maximum Speed: 55 MPH

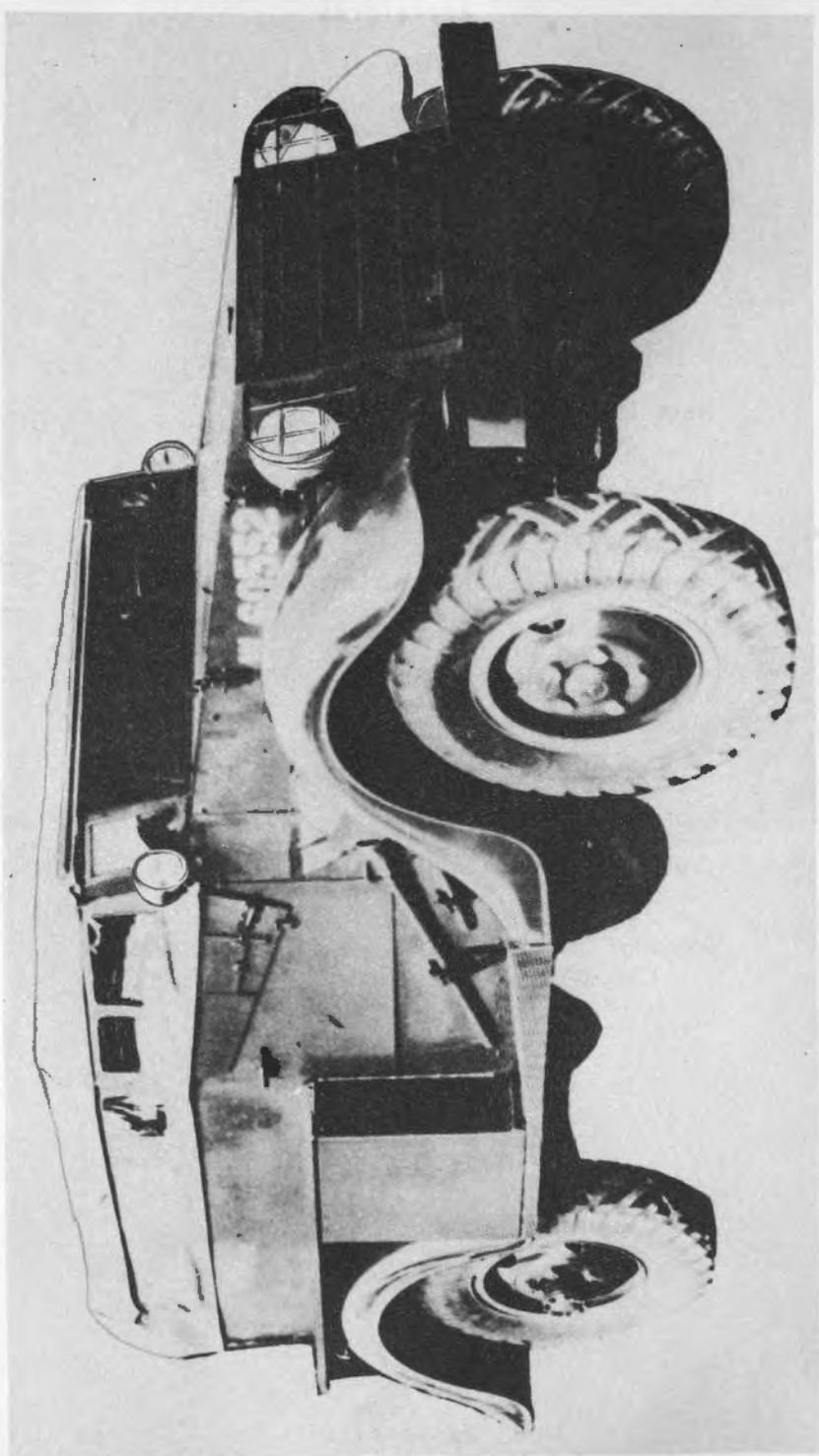
Weight: 9960 lbs gross

Engine: Hercules JXD, 6-cylinder, 90-HP

Crew: Eight men

Cruising Rodius: 250 miles

Remarks: Scout Car, M2A1, was redesignated Scout Car, M3.



[REDACTED]

Item No. 36

VEHICLE NOMENCLATURE: SCOUT CAR, M4

Date Produced: 1937

Armament: Track for tourelle type gun mounts

Armor: 1/4" hot rolled steel

Maximum Speed: 60 MPH

Weight: 9300 lbs gross

Engine: Ford V-8, 85-HP

Crew: Four men

Cruising Radius: 250 miles

Remarks: In the development stage this vehicle was the T13. Thirty-eight scout cars were manufactured for the National Guard using soft steel instead of armor plate.



Item No. 37

VEHICLE NOMENCLATURE: SCOUT CAR, M3A1

Date Produced: 1939

**Armament: One cal .50 MG on skate rail mount
One cal .30 MG on skate rail mount
Provision for one cal .45 SMG**

Armor: 1/4 and 1/2"

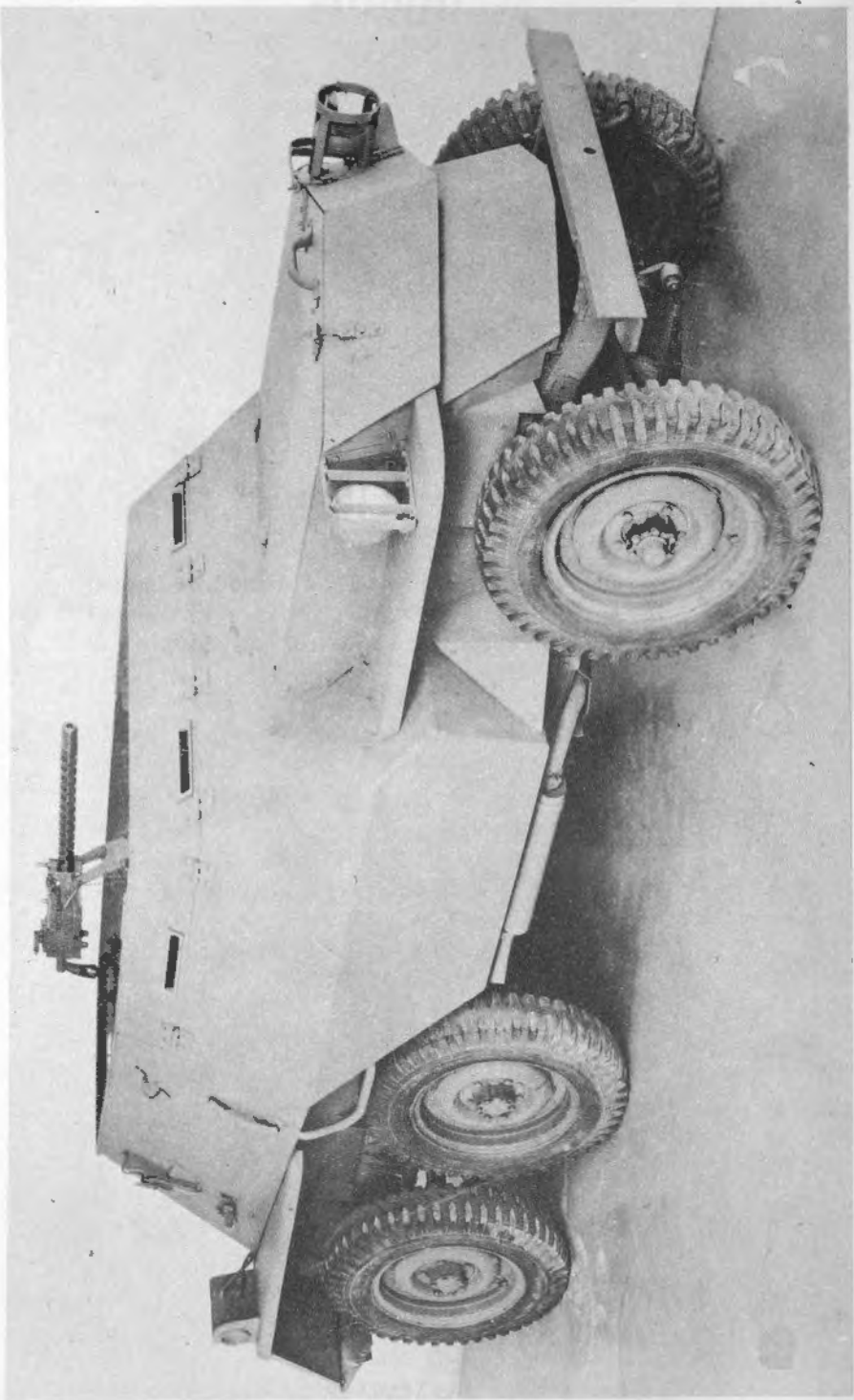
Maximum Speed: 50 MPH

Weight: 12,400 lbs

Engine: Hercules JXD

Crew: Eight men

Cruising Range: 250 miles



██████████

Item No. 38

VEHICLE NOMENCLATURE: SCOUT CAR, T24

Date Produced: 1942

**Armament: One cal .30 MG or one
cal .50 MG on pedestal mount**

Armor: 1/4", all surfaces sloped

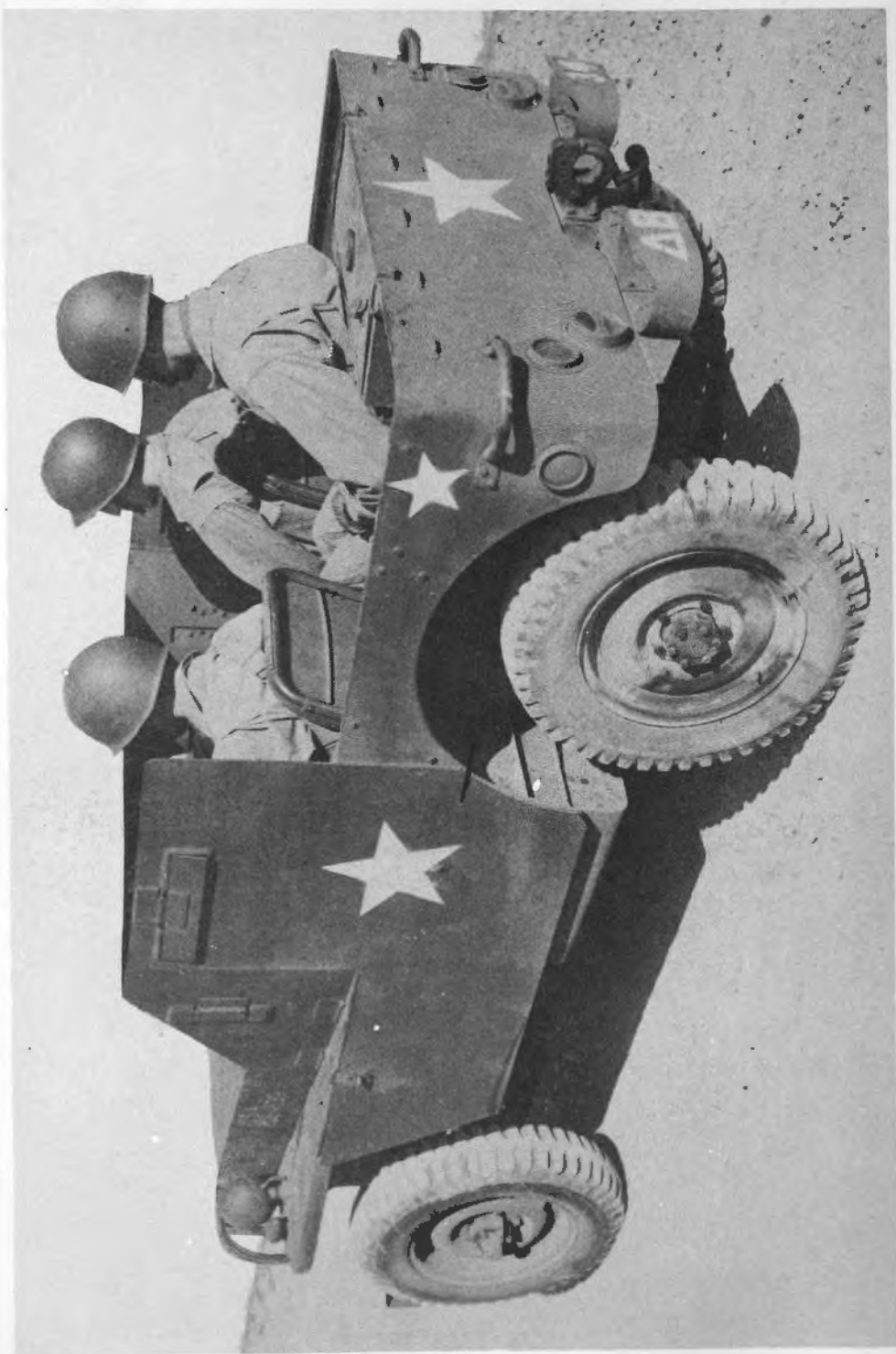
Maximum Speed: 65 MPH

Weight: 5145 lbs combat loaded

Engine: Willys Model 422

Crew: Three men

Remarks: The Palmer Board recommended in 1942 that the Scout Car, T24, be standardized for issue to tank destroyer units; however, it was not adopted.



[REDACTED]

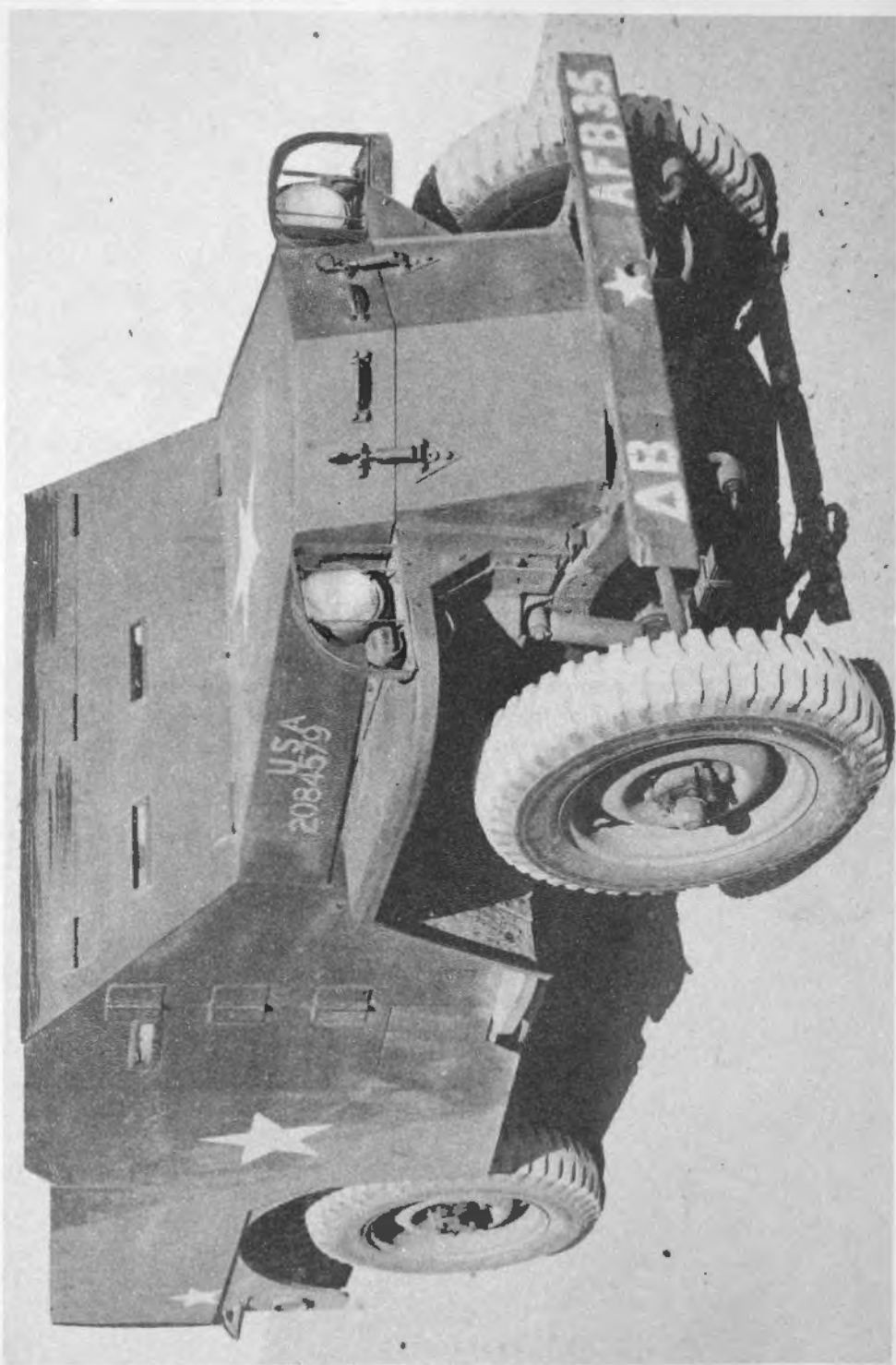
Item No. 39

VEHICLE NOMENCLATURE: SCOUT CAR, T25

Date Produced: 1943

Crew: Three men

Remarks: Approximately 515 lbs of 1/4" face-hardened armor plate was added to the 1/4-ton 4 x 4 truck. A ball mount is provided for a cal .30 MG in front slope plate. The addition of armor overloaded the vehicle, and the results were unsatisfactory.



[REDACTED]

Item No. 40

VEHICLE NOMENCLATURE: SCOUT CAR, T25E1

Date Produced: 1943

Crew: Three men

Remarks: Approximately 745 lbs of 1/4" face-hardened armor plate was added to the 1/4-ton 4 x 4 truck. The addition of armor overloaded the vehicle, and the results were unsatisfactory.



[REDACTED]

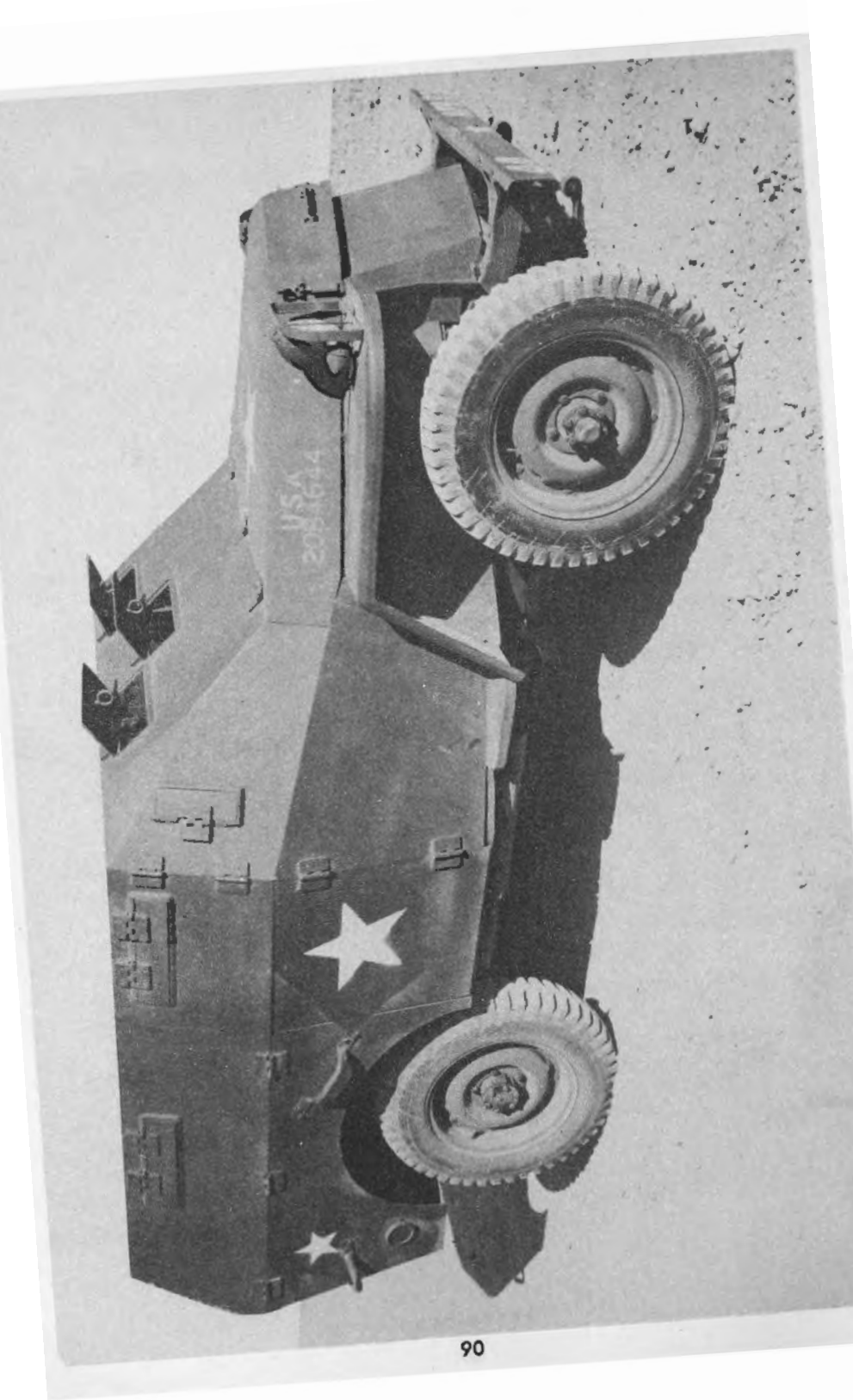
Item No. 41

VEHICLE NOMENCLATURE: SCOUT CAR, T25E2

Date Produced: 1943

Crew: Three men

Remarks: Approximately 985 lbs of 1/4" face-hardened armor plate was added to the 1/4-ton 4 x 4 truck. The addition of armor overloaded the vehicle, and the results were unsatisfactory.



[REDACTED]

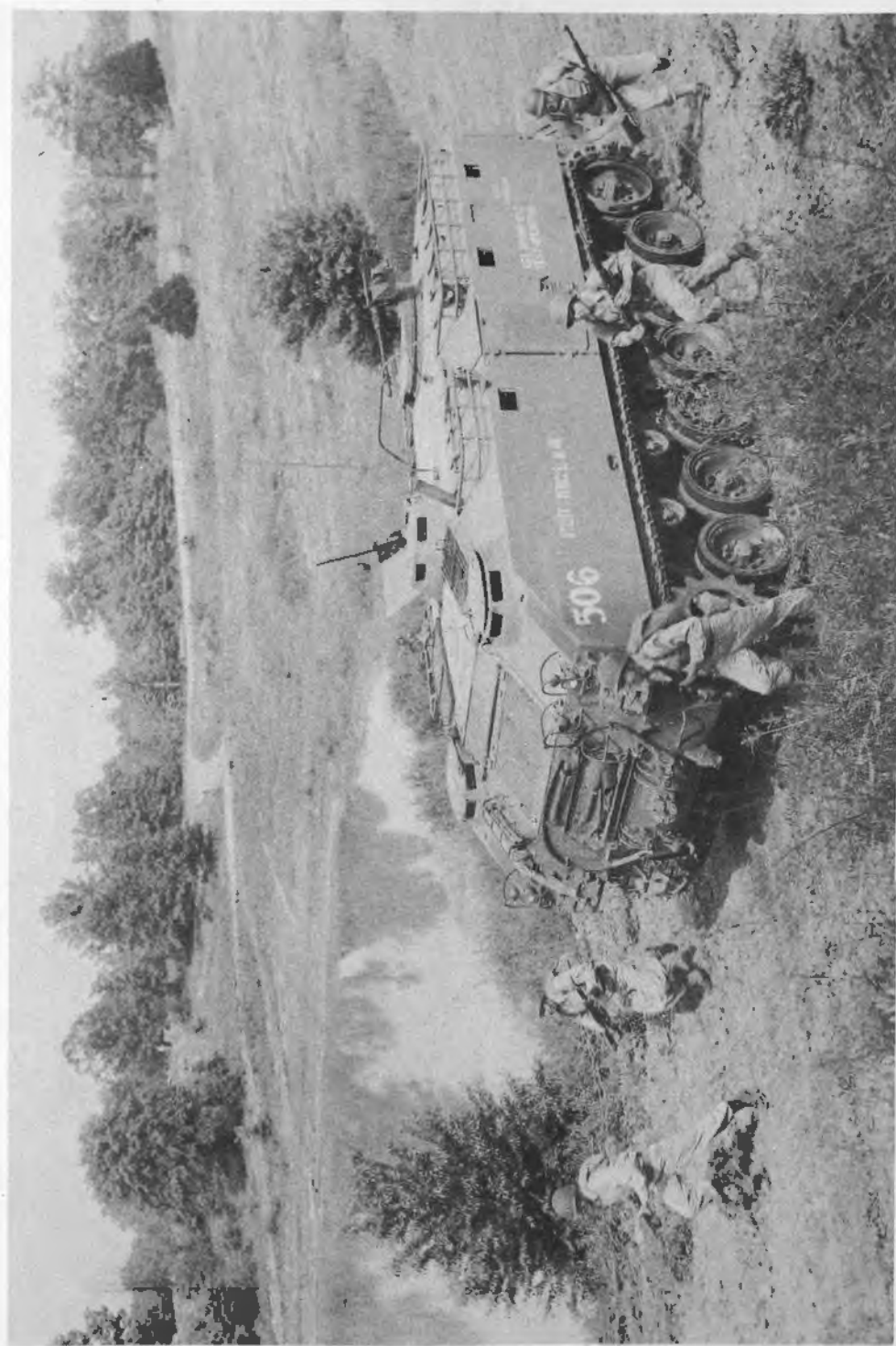
Item No. 42

VEHICLE NOMENCLATURE: SCOUT CAR, T25E3

Date Produced: 1943

Crew: Three men

Remarks: Approximately 1025 lbs of 1/4" face-hardened armor plate was added to the 1/4-ton 4 x 4 truck. The addition of armor overloaded the vehicle, and the results were unsatisfactory.



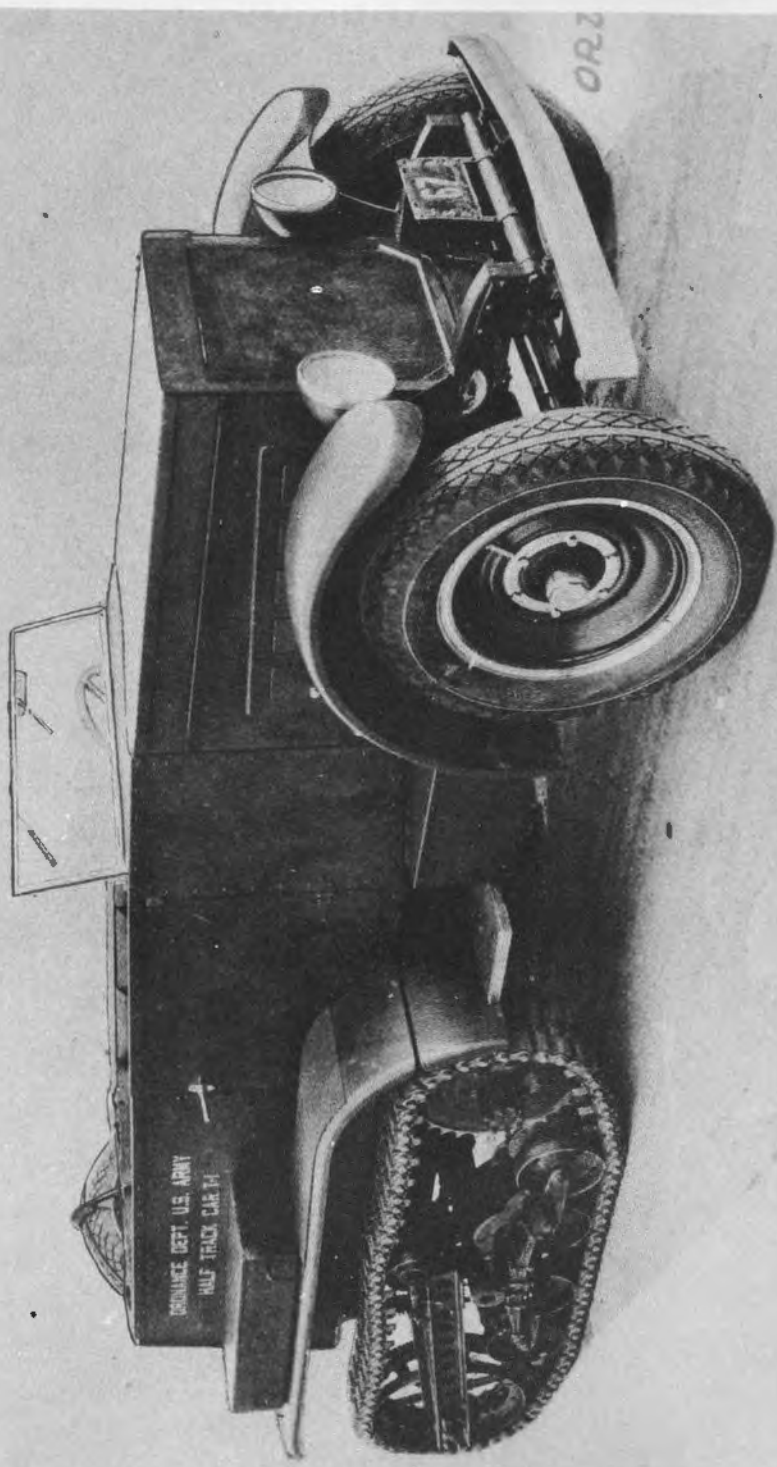


SECTION IV

PERSONNEL CARRIERS

"They have forgotten that decisive victory can only be had in open warfare."

—General Pershing



[REDACTED]

Item No. 43

VEHICLE NOMENCLATURE: CAR, HALF-TRACK, T1

Date Produced: 1932

Armament: ?

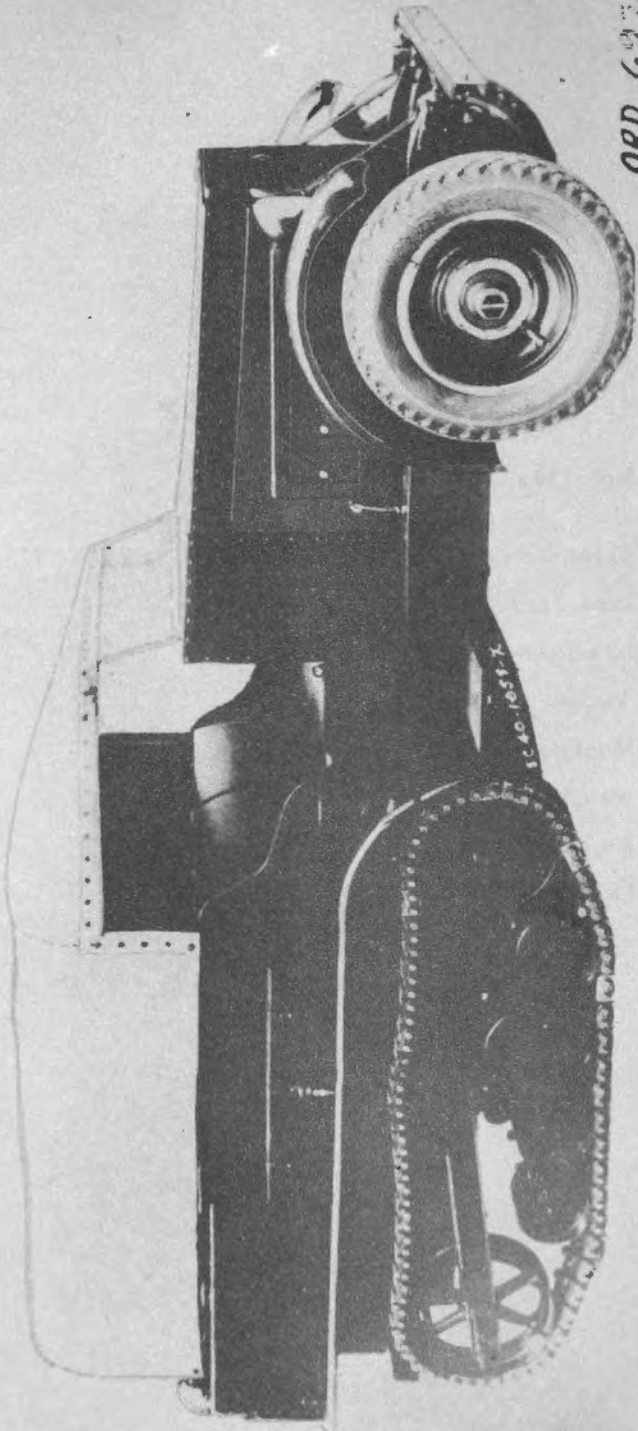
Armor: ?

Maximum Speed: 45 MPH

Weight: 6300 lbs

Engine: Cadillac, 8-cylinder, V-type, 114-HP

Pay Load: 1200 lbs



ORD. 6974

[REDACTED]

Item No. 44

VEHICLE NOMENCLATURE: CAR, HALF-TRACK, M1

Date Produced: 1933

Armament: ?

Armor: ?

Maximum Speed: 45 MPH

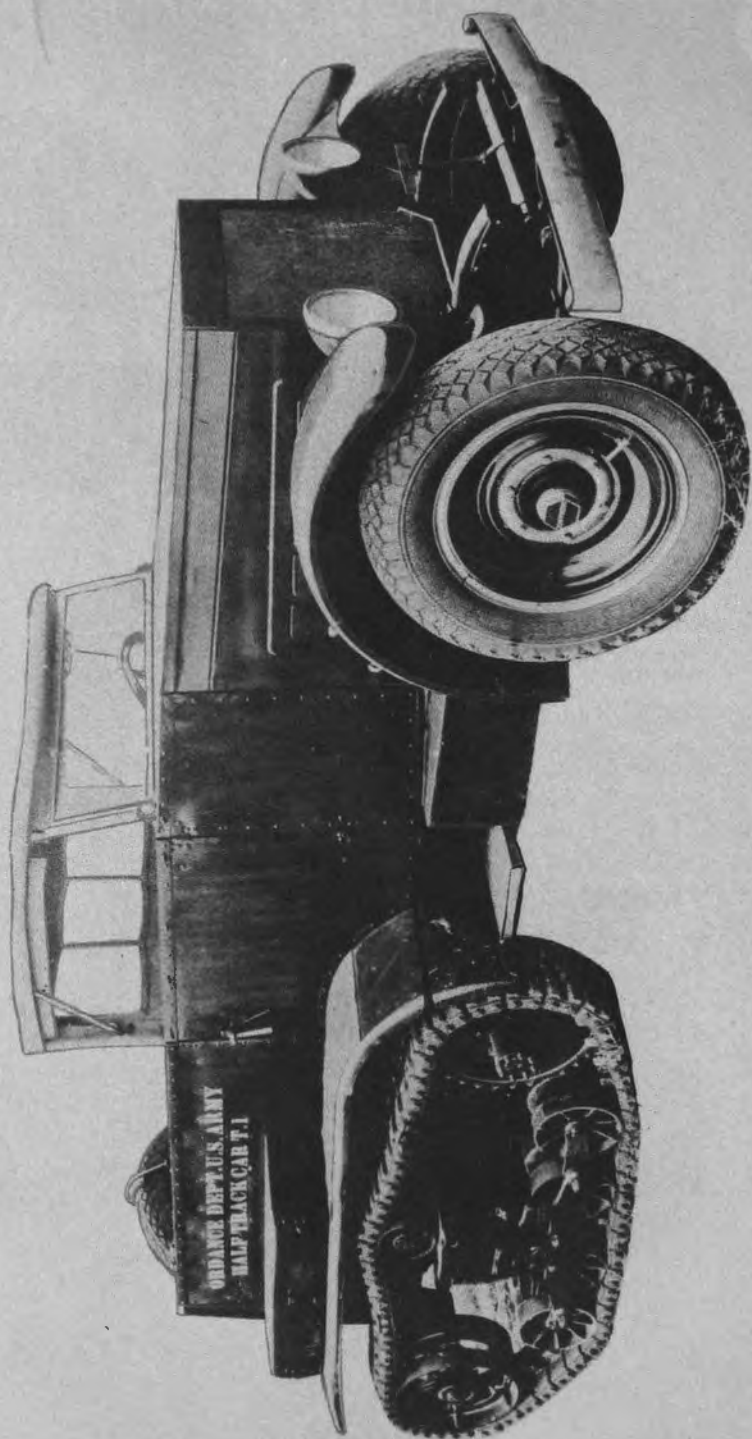
Weight: 6300 lbs

Engine: Cadillac, 8-cylinder, 115 HP

Pay Load: 1200 lbs

Cruising Radius: 100 miles

Remarks: This vehicle was the T1E1, and 30 vehicles were procured.



[REDACTED]

Item No. 45

VEHICLE NOMENCLATURE: CAR, HALF-TRACK, T1E3

Date Produced: 1934

Armament: ?

Armor: ?

Maximum Speed: 45 MPH

Weight: 7300 lbs

Engine: Cadillac, 8-cylinder V-type 115-HP

Pay Load: 1500 lbs



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[REDACTED]

Item No. 46

**VEHICLE NOMENCLATURE: CARRIER, PERSONNEL,
HALF-TRACK, T7**

Date Produced: 1938

Armament: Track for tourelle type gun mounts

Armor: 1/4 to 1/2"

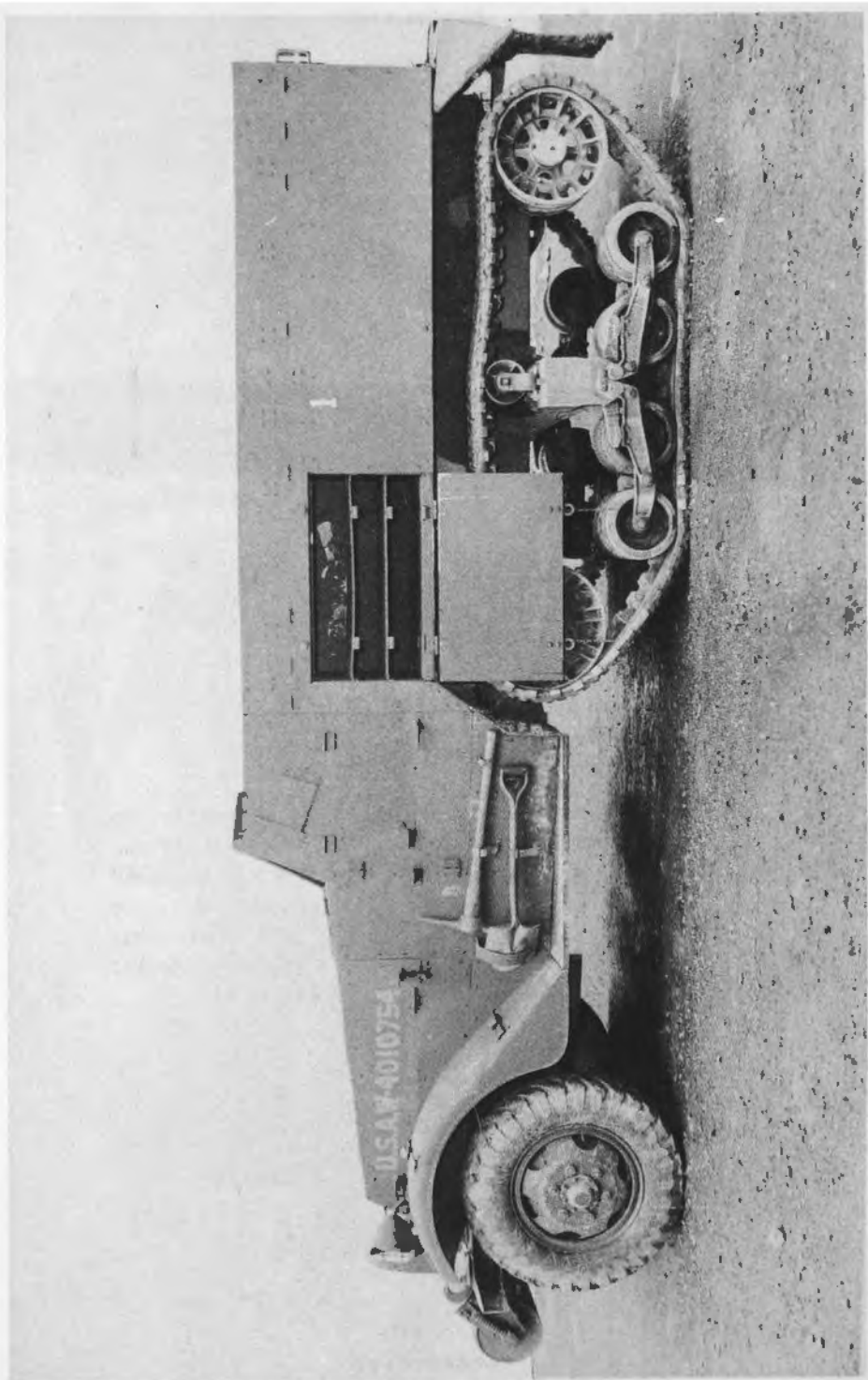
Maximum Speed: 45 MPH

Weight: 12,300 lbs gross

Engine: Hercules JXD, 6-cylinder, 90-HP

Crew: Eight men

Cruising Radius: 200 miles



Item No. 47

VEHICLE NOMENCLATURE: CAR, HALF-TRACK, ~~M2~~

Date Produced: 1940

**Armament: One cal .50 MG (flexible)
One cal .30 MG (flexible)**

Armor: 1/4 and 1/2"

Maximum Speed: 40 MPH

Weight: 19,800 lbs gross

Engine: White, 160AX

Crew: Ten men

Remarks: Half-track Car, M2A1, is similar to the M2, but has an M29 ring mount for cal .50 MG over the assistant driver's seat. Three fixed pintle sockets are mounted, one on each side and one on the rear of the body, permitting the use of a cal .30 MG. In the development stage the vehicle was known as the T14.



[REDACTED]

Item No. 48

**VEHICLE NOMENCLATURE: CARRIER, PERSONNEL,
HALF-TRACK, M3**

Date Produced: 1940

Armament: One cal .30 MG

Armor: 1/4 and 1/2"

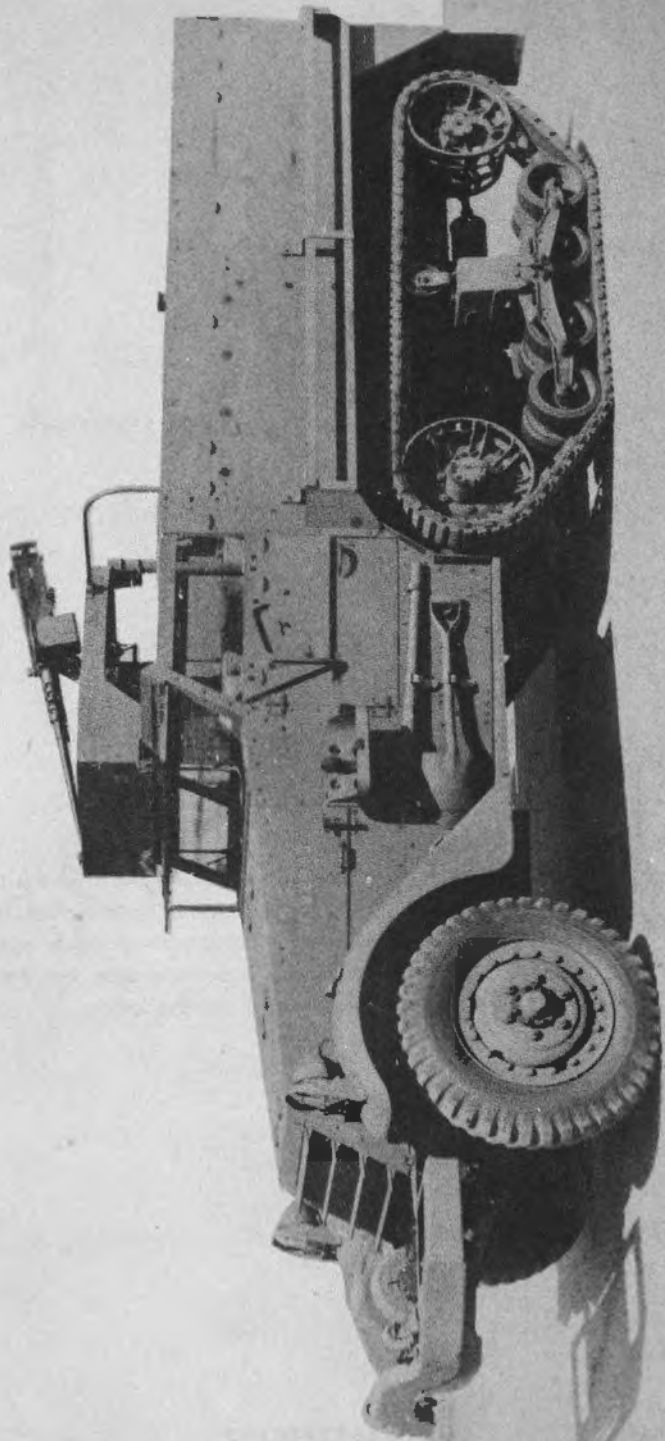
Maximum Speed: 40 MPH

Weight: 20,000 lbs gross

Engine: White, 160AX

Crew: 13 men

Remarks: Half-track personnel carrier M3A1 is similar to the M3 but has an M49 ring mount for a cal .50 MG over the assistant driver's seat. Three pintle sockets are mounted one on each side, and one on the rear of the body.



Item No. 49

**VEHICLE NOMENCLATURE: CARRIER, PERSONNEL,
HALF-TRACK, M3A1**

Date Produced: 1943

**Armament: One cal .50 MG
One cal .30 MG**

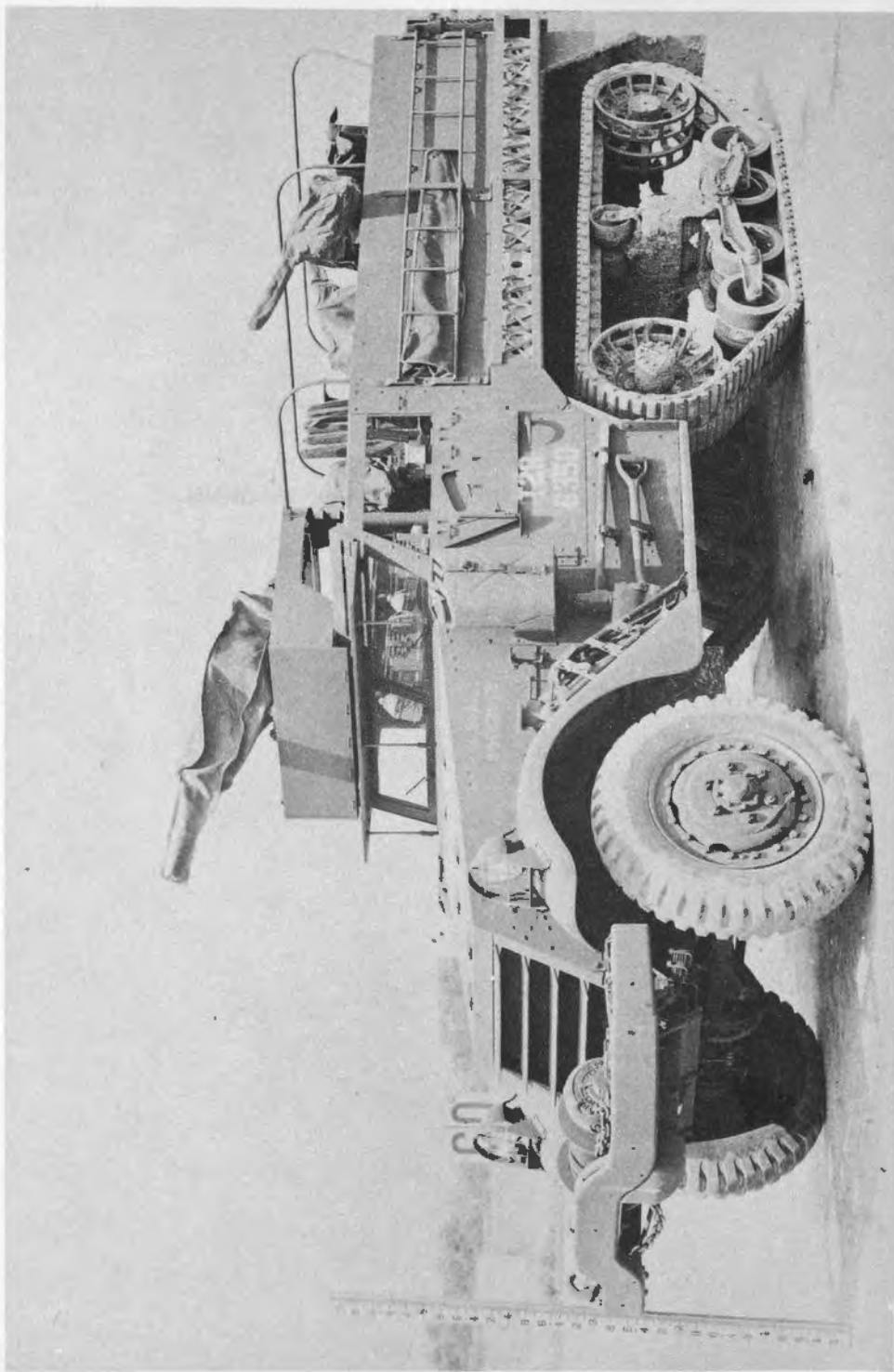
Armor: 1/4 to 1/2"

Maximum Speed: 40 MPH

Weight: 20,500 lbs

Engine: White, 160AX

Crew: 13 men



[REDACTED]

Item No. 50

VEHICLE NOMENCLATURE: CAR, HALF-TRACK, M3A2

Date Produced: 1943

Armament: One cal .30 MG (flexible)

One cal .50 MG (flexible)

Armor: 1/4 and 1/2"

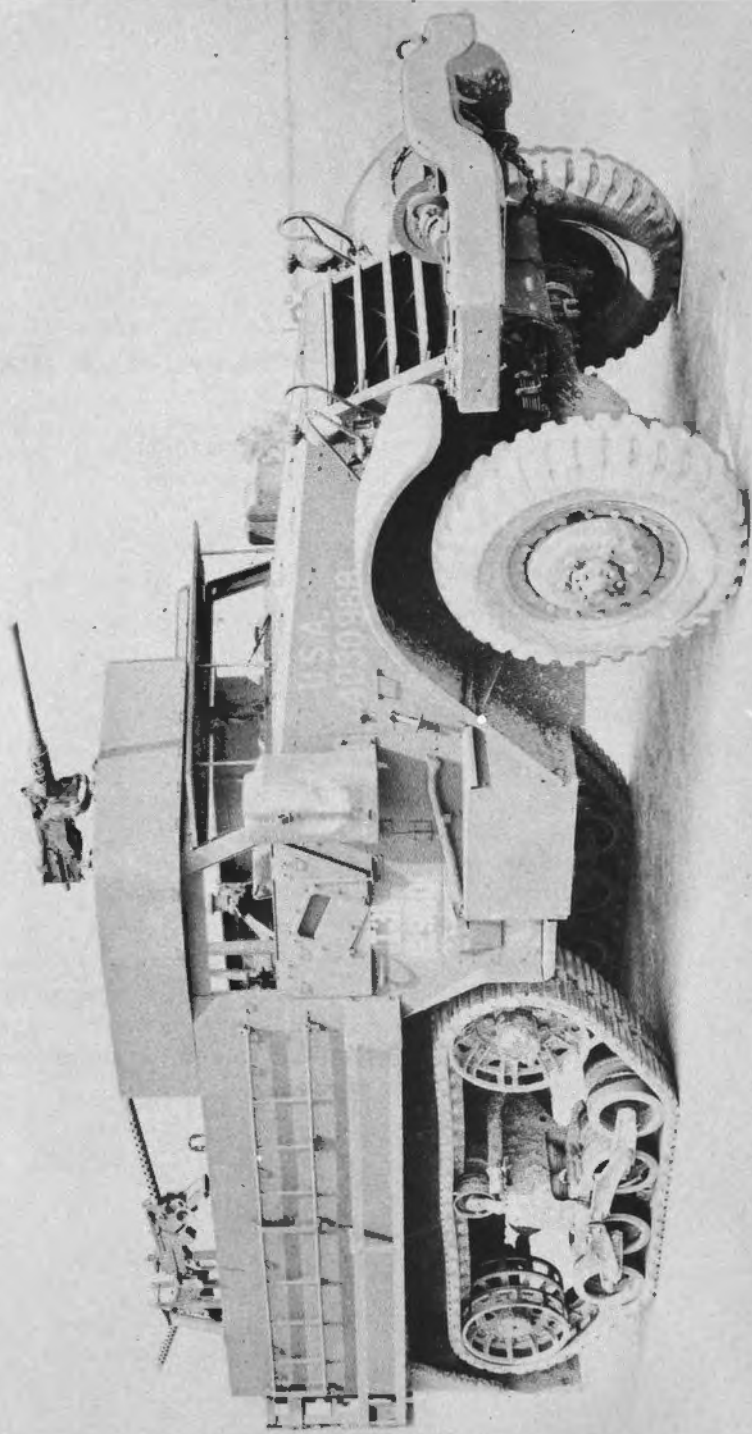
Maximum Speed: 40 MPH

Weight: 21,200 lbs gross

Engine: White, 160AX

Crew: 5-12 men

Remarks: The M3A2 is a modification of the M3A1 and designed to take the place of the M2, M2A1, M3, and M3A1. Variations in stowage arrangements through the use of boxes give the vehicle a variety of uses. Crews range from 5 to 12 men depending on the amount of stowage carried and the tactical purpose intended. The M3A2 was the T29 in the development stage. Vehicle was not produced due to the curtailment of all half-track production.



██████████

Item No. 51

VEHICLE NOMENCLATURE: CAR, HALF-TRACK, M5A2

Date Produced: 1943

**Armament: One .30-caliber machine gun (flexible)
One .50-caliber machine gun (flexible)**

Armor: 5/16 to 5/8 "

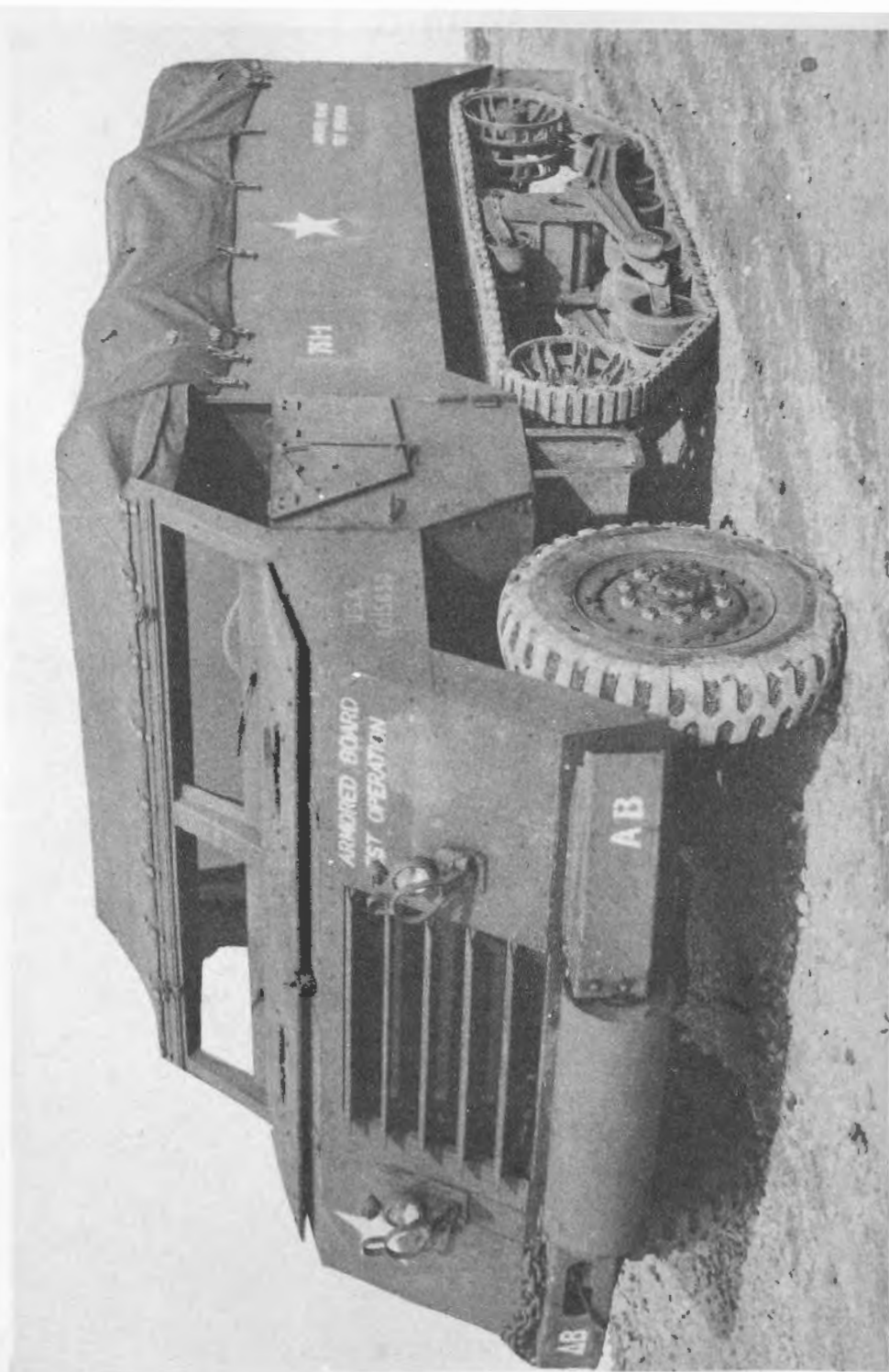
Maximum Speed: 38 MPH

Weight: 22,500 lbs gross

Engine: International Red 450B

Crew: 5-12 men

Remarks: Half-track Car, M9A1; Half-track Personnel Carriers, M5, M5A1; and Half-track Car, M5A2, are generally similar to the M2A1, M3, M3A1, and M3A2 respectively, but were manufactured by the International Harvester Company and contain that company's component parts. The windshield protective plate is 5/8" thick and the other armor is 5/16". The M5A2 was the T31 in the development stage and was to take the place of the M9A1, M5, and M5A1. Vehicle was never produced due to curtailment of half-track production.



[REDACTED]

Item No. 52

VEHICLE NOMENCLATURE: HALF-TRACK TRUCK, T16

Date Produced: 1943

Armament: One cal .50 MG on pedestal mount

Armor: 1/4" except for floor which was 1/8"

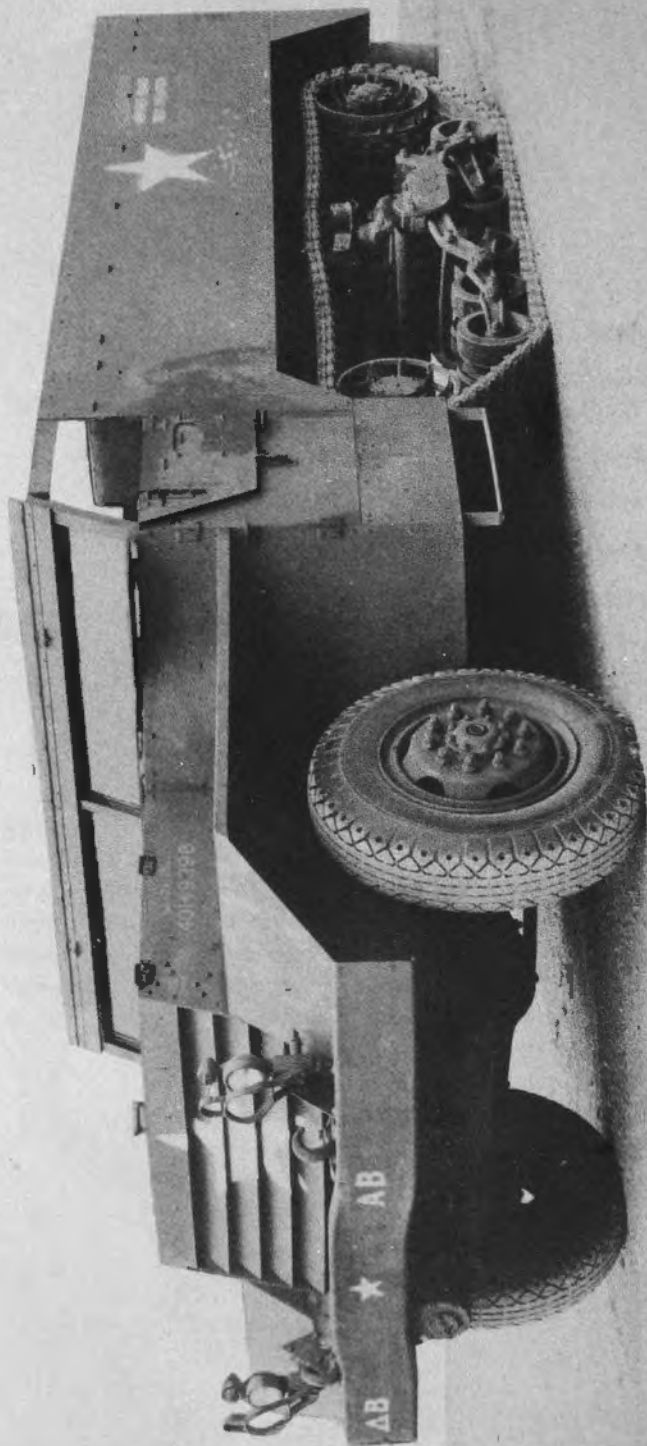
Maximum Speed: 35 MPH

Weight: 30,010 lbs combat loaded

Engine: Hercules RX1D

Crew: 14 men

Remarks: The first pilot model was completed by Diamond T Motor Company in March 1943 and the second in June 1943. Test of vehicles was completed at Aberdeen Proving Ground in June 1944. It was recommended that development for a forward area cargo and personnel carrier be carried on as a full-track vehicle.



[REDACTED]

Item No. 53

VEHICLE NOMENCLATURE: HALF-TRACK TRUCK, T17

Date Produced: 1943

Armament: One cal .50 MG on M49 ring mount

Armor: 1/4" except floor which was 1/8"

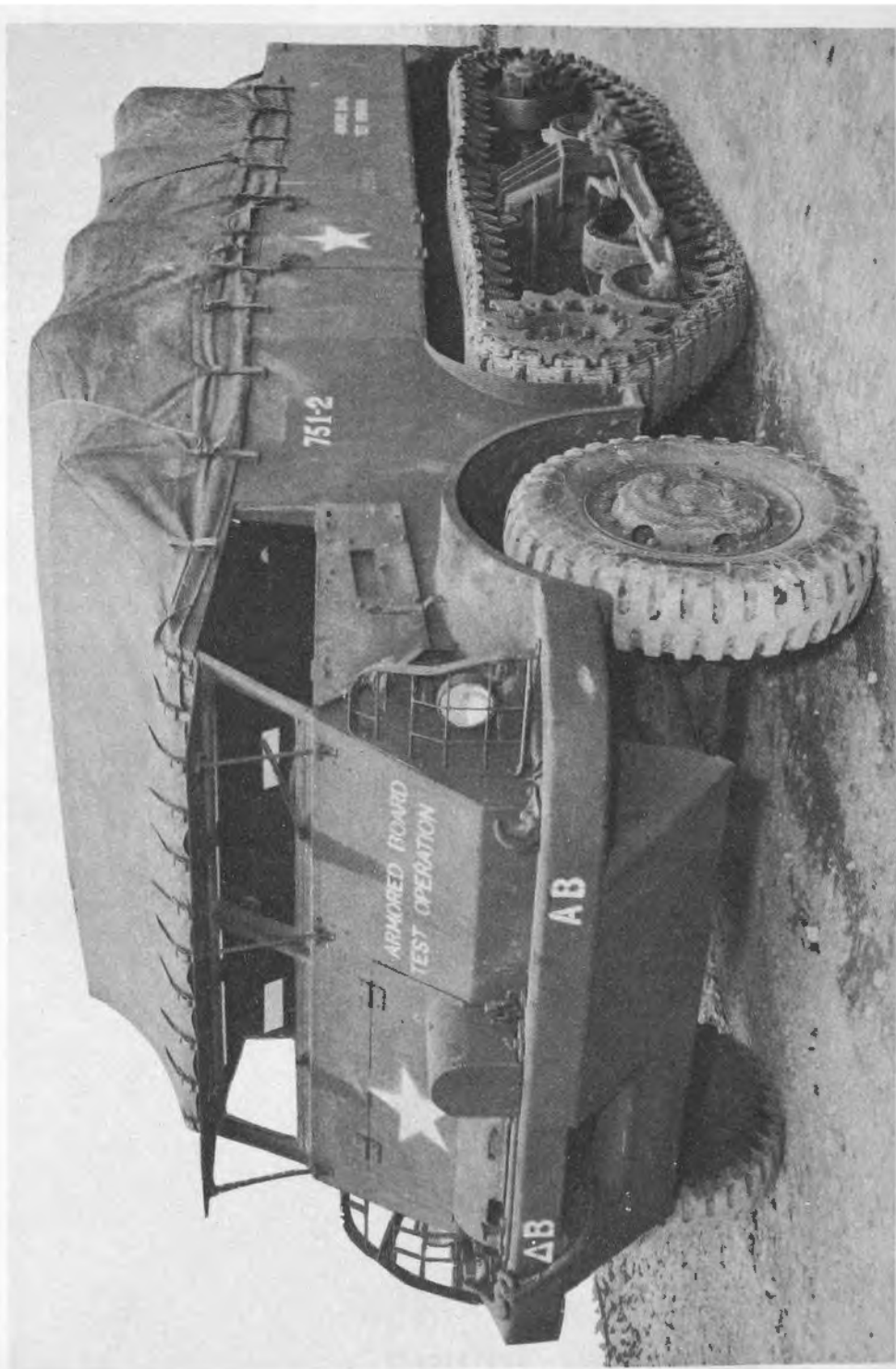
Maximum Speed: 37 MPH

Weight: 30,761 lbs combat loaded

Engine: White

Crew: 14 men

Remarks: Two pilot models were constructed; one by the Autocar Company in June 1943 and one by White Motor Company in August 1943. Test of the vehicles was completed at Aberdeen Proving Ground in June 1944. It was recommended that development for a forward area cargo and personnel carrier be carried on as a full-track vehicle.



[REDACTED]

Item No. 54

VEHICLE NOMENCLATURE: HALF-TRACK TRUCK

Date Produced: 1942-1943

Armament: None

Armor: 1/4" except floor which was 1/8"

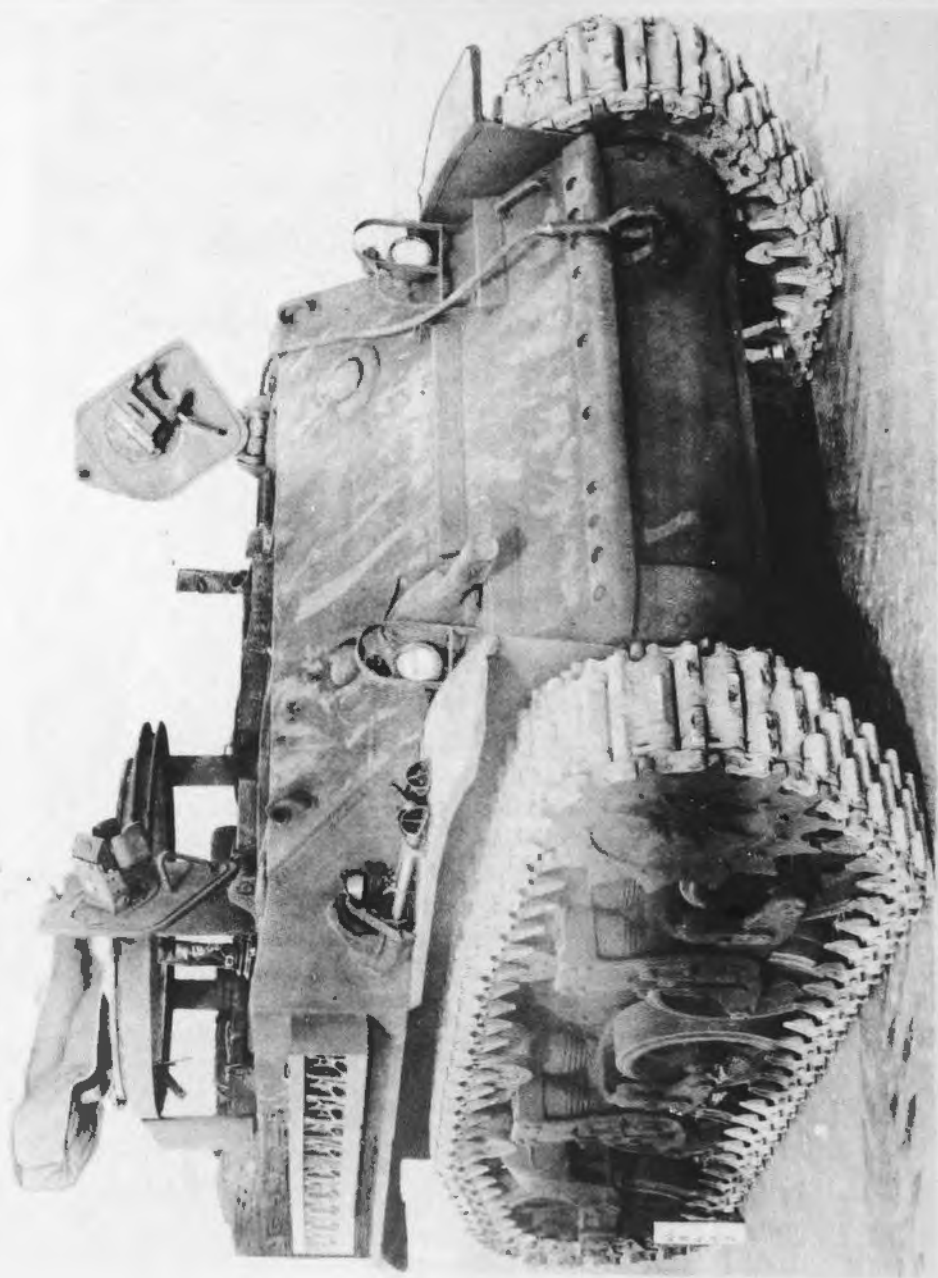
Maximum Speed: 37.7 MPH

Weight: 28,800 lbs combat loaded

Engine: Continentol

Crew: 14 men

Remarks: Two pilot models were built by Manufacturing Corporation; one completed November 1942 and the second in April 1943. Test of vehicles was completed at Aberdeen Proving Ground in June 1944. It was recommended that development for a forward cargo and personnel carrier be carried out on a full-track vehicle.



Item No. 55

**VEHICLE NOMENCLATURE: RECONNAISSANCE
VEHICLE, T8**

Date Produced: 1944

Armament: One cal .50 MG on ring mount
One cal .30 MG in bow gun position

ARMOR: 1 to 1-1/8" except floor which is 1/2"

Maximum Speed: 40 MPH

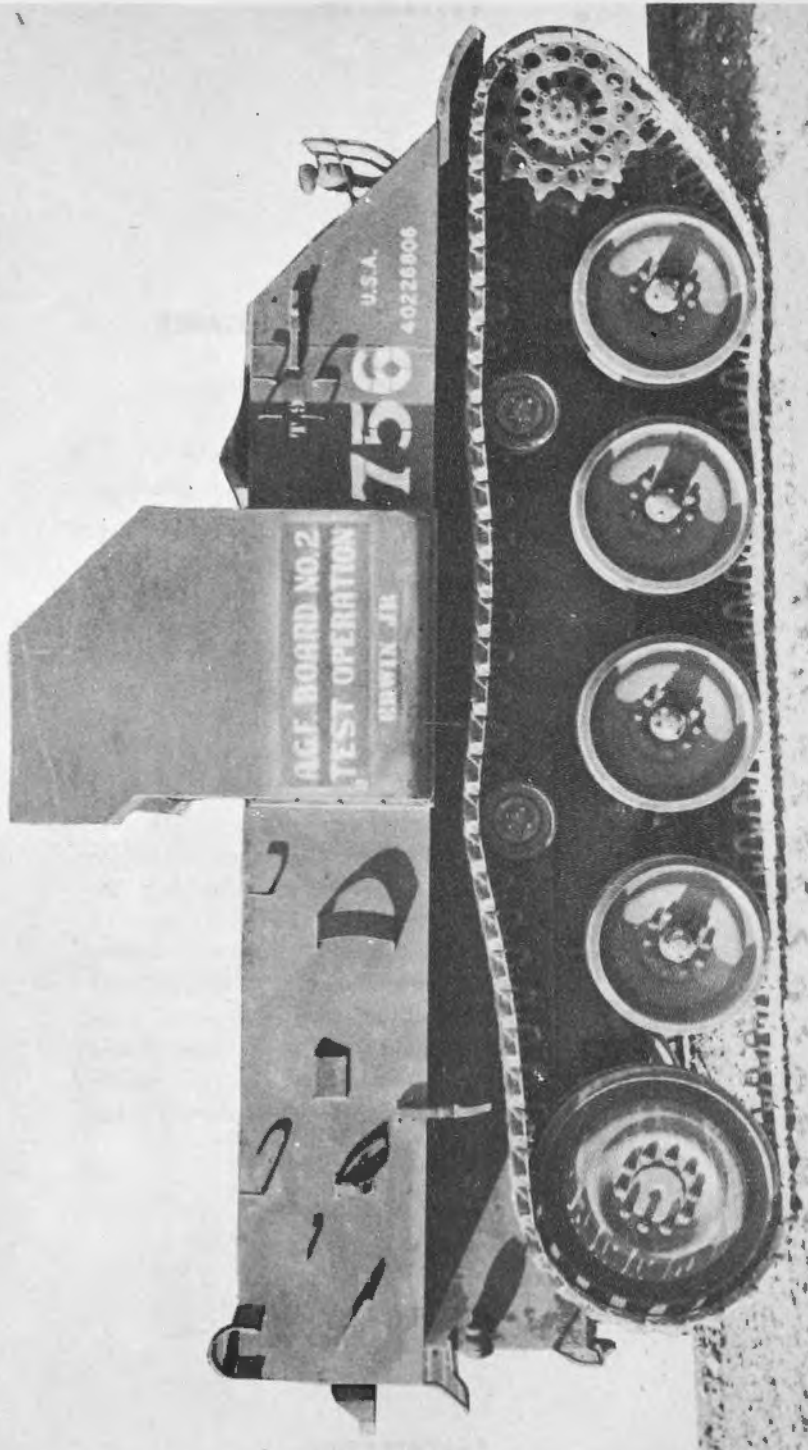
Weight: 28,200 lbs combat loaded

Engine: Cadillac, dual V-8

Crew: Six men

Cruising Range: 100 miles

Remarks: Two Light Tanks, M5A1, were converted into reconnaissance vehicles by removing the turret, adding Ring Mount, M49C, and revising stowage and crew compartment. The two vehicles (T8 and T8E1) differed as follows: T8E1 had ring mount installed centrally over turret opening and experimental 16" wide steel tracks. T8 had ring mount installed at the rear corner of the crew compartment and standard rubber tracks.



Item No. 56

VEHICLE NOMENCLATURE: ARMORED UTILITY VEHICLE, T9

Date Produced: 1945

Armament: None

Armor: 1/4"

Maximum Speed: 29.5 MPH

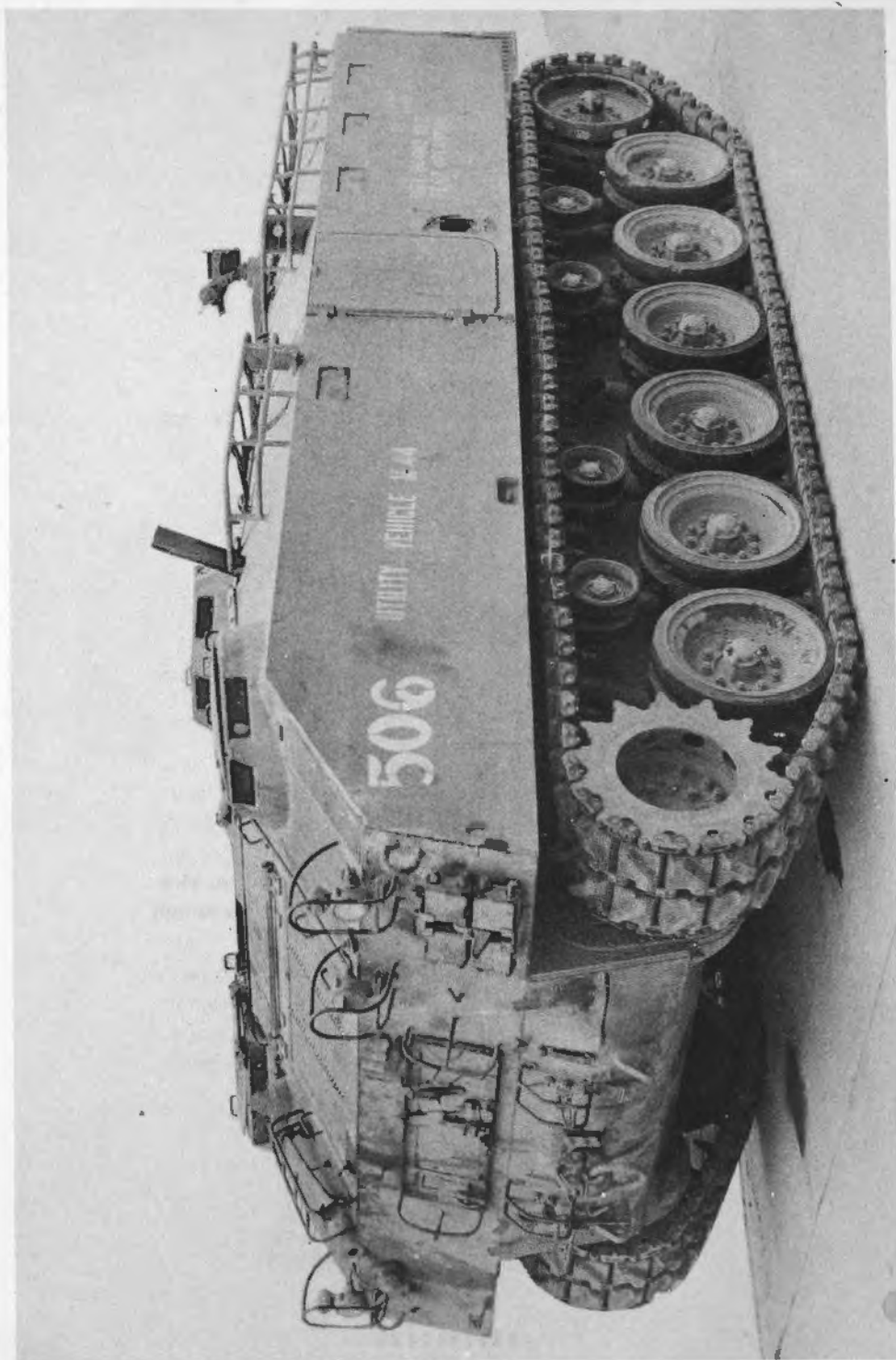
Weight: 16,400 lbs fully fueled but with no stowage

Engine: Lycoming

Crew: 12 men

Cruising Range: 140 miles

Remarks: Vehicle was designed to fill the requirement for a 12-man lightly armored personnel carrier.



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Item No. 57

VEHICLE NOMENCLATURE: ARMORED UTILITY VEHICLE, M44

Date Produced: 1945

Armament: One cal .50 MG on ring mount

One cal .30 MG in ball mount in right bow

Armor: 5/16" to 5/8"

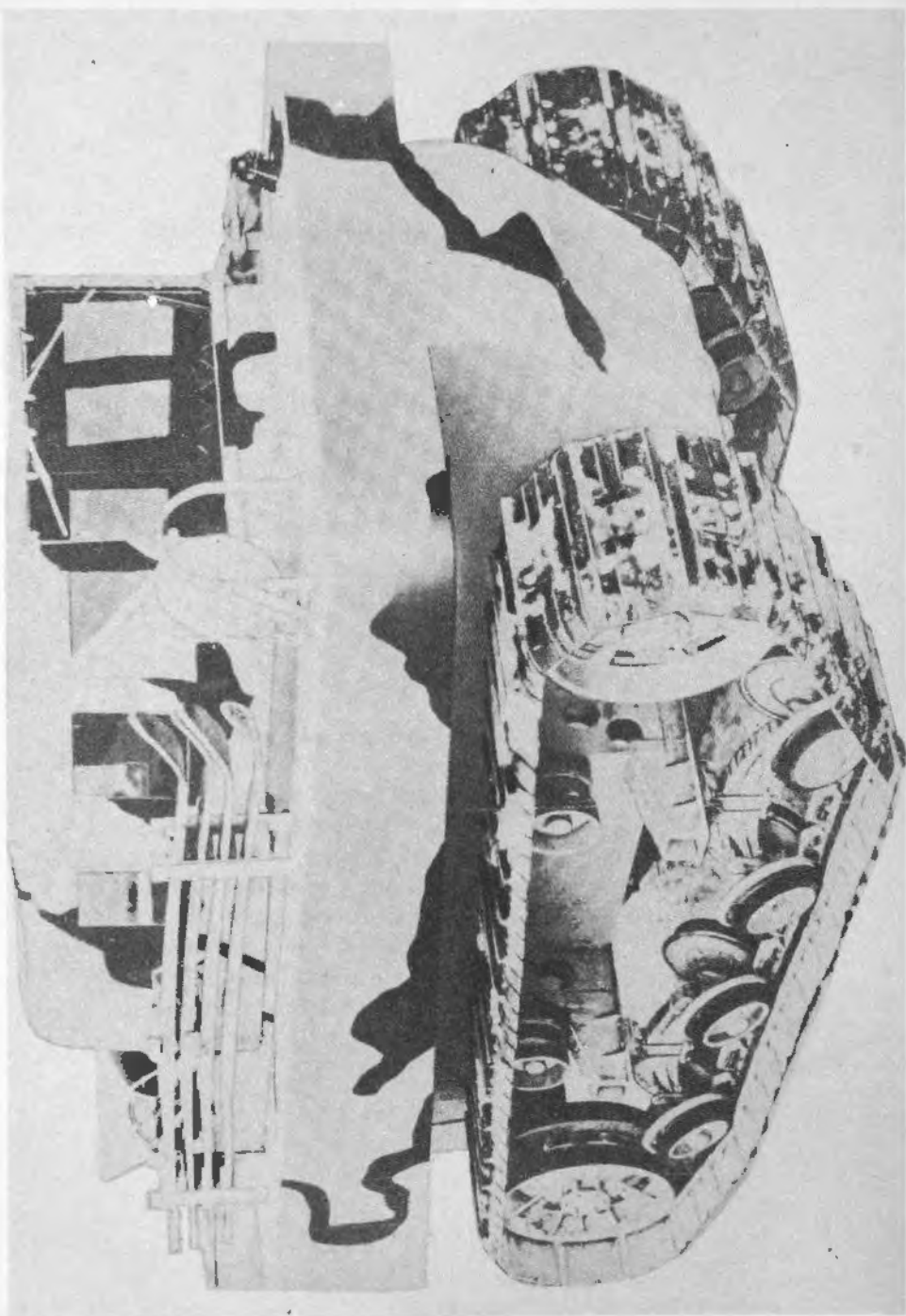
Maximum Speed: 32 MPH

Weight: 49,000 lbs combat loaded

Engine: Continental, radial

Crew: 27 men

Remarks: In the development stage this vehicle was the T16. The development of the Armored Utility Vehicle, T13, was undertaken to provide a superior armored personnel carrier to replace the half-tracks in their multiplicity of uses. The original design was predicated upon the use of the standard components of the Light Tank, M24. Subsequent requirements for increased HP dictated a change in the power train to the components of the 76-mm Gun Motor Carriage, M18, and the development vehicle was designated the T16.



[REDACTED]

Item No. 58

VEHICLE NOMENCLATURE: CARGO CARRIER, M28

Date Produced: 1943

Armament: None

Armor: None

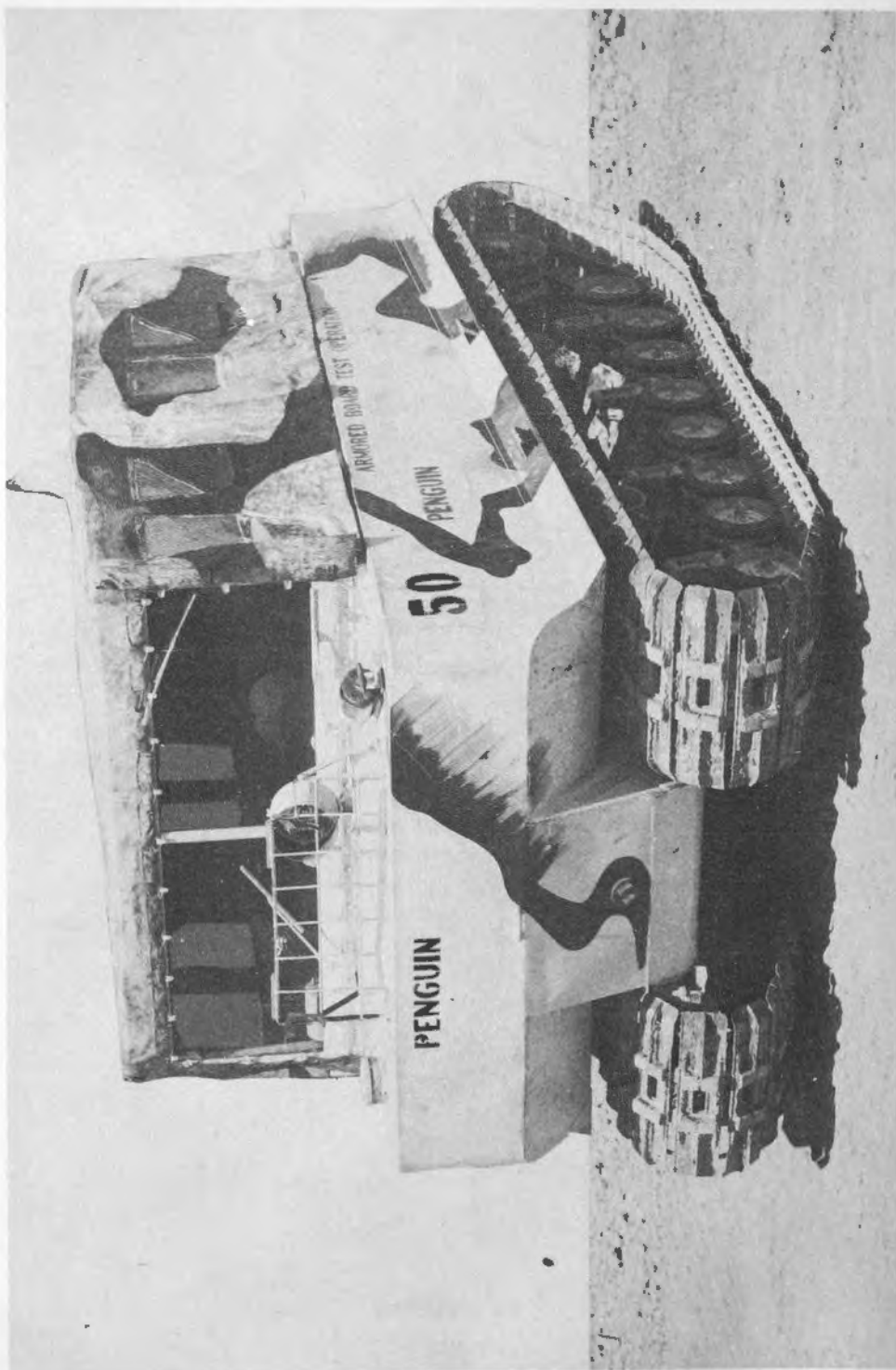
Maximum Speed: 35 MPH

Weight: 4650 lbs gross

Engine: Studebaker 6-170

Crew: Ten men

Remarks: Designed originally for use over ice and snow. Have proved useful wherever small speedy vehicles with very low ground pressures are required.



[REDACTED]

Item No. 59

VEHICLE NOMENCLATURE: CARGO CARRIER, M29

Date Produced: 1943

Armament: None

Armor: None

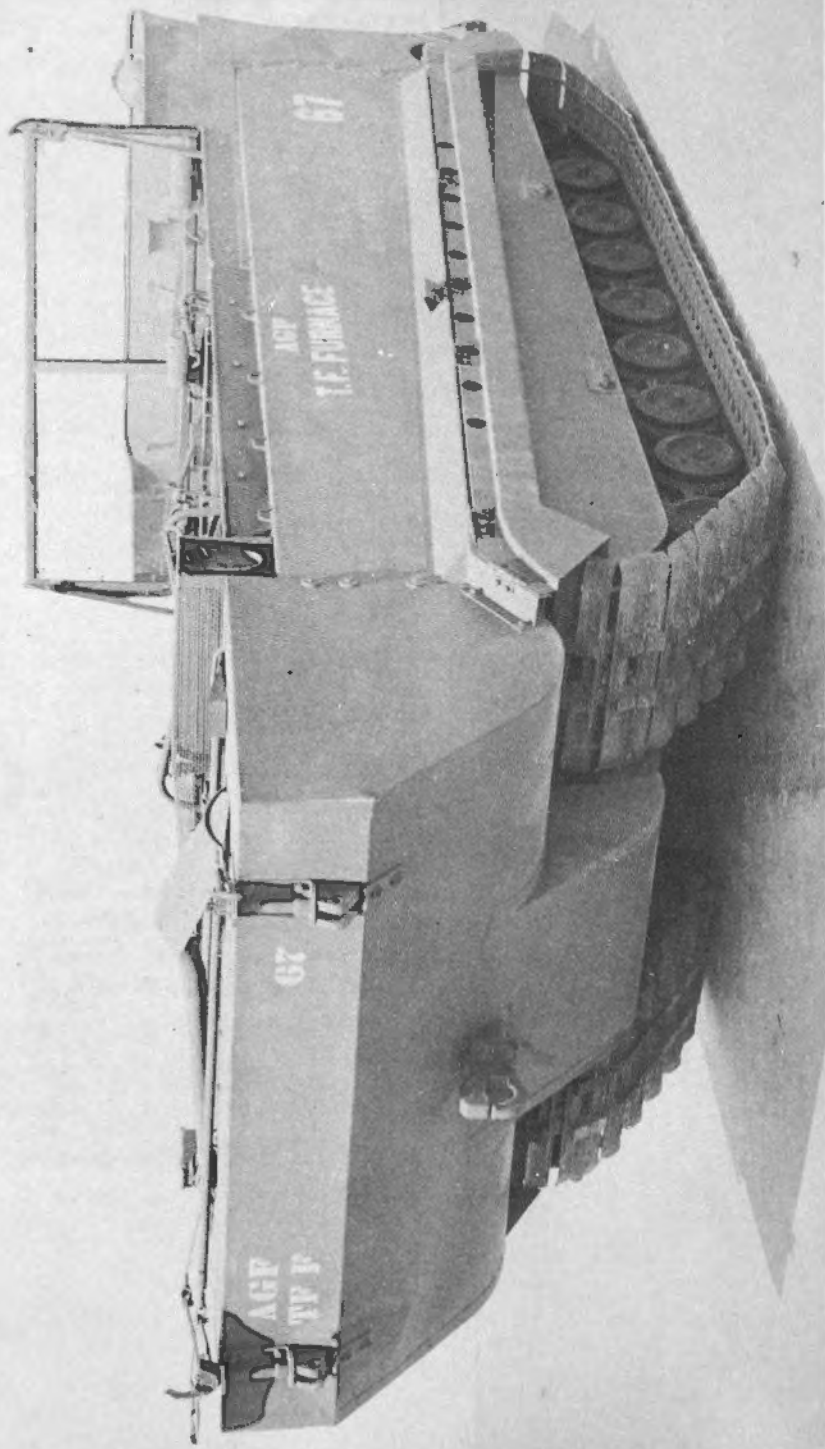
Maximum Speed: 36 MPH

Weight: 5425 lbs combat loaded

Engine: Studebaker 6-170

Crew: Two to four men

Remarks: Vehicle is basically similar to the Cargo Carrier, M28, but has a rear drive. The change in design moved the center of gravity forward and also resulted in a more desirable arrangement of engine, crew, and cargo.



[REDACTED]

Item No. 60

VEHICLE NOMENCLATURE: CARGO CARRIER, M29C

Date Produced: 1944

Armament: None

Armor: None

**Maximum Speed: 36 MPH on land
4 MPH on water**

Weight: 6000 lbs combat loaded

Engine: Studebaker 6-170

Crew: Two to four men

Remarks: This vehicle is a modification of Cargo Carrier, M29, adapted for amphibious operation. The basic Cargo Carrier, M29, is so designed that it can be converted in the field for amphibious use if required.



[REDACTED]

Item No. 61

**VEHICLE NOMENCLATURE: TRUCK, 1/4-TON, 4X4,
AMPHIBIOUS**

Date Produced: 1943

Armament: None

Armor: None

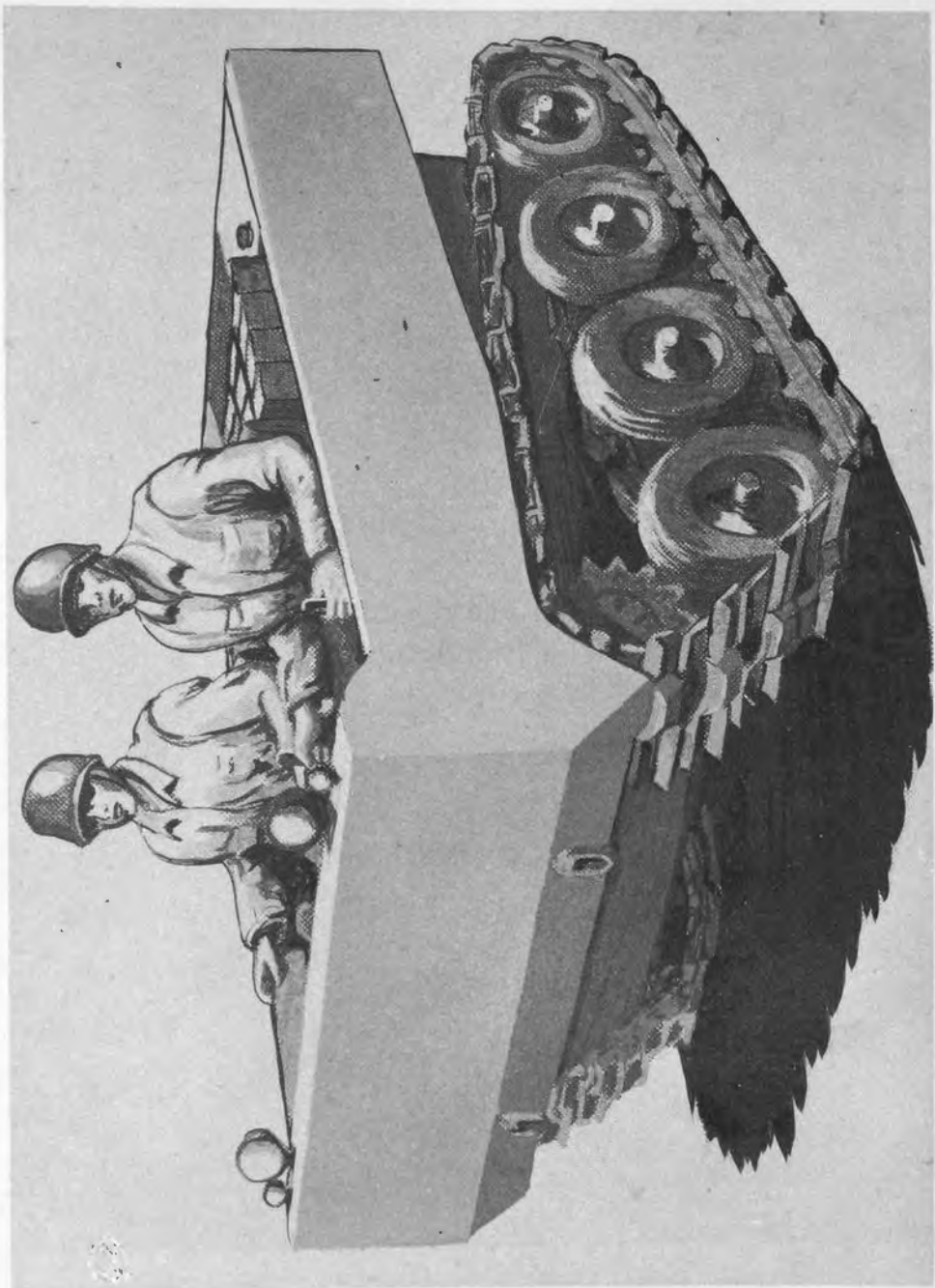
Maximum Speed: 55 MPH on land
5-1/2 MPH on water

Weight: 4300 lbs gross

Engine: Willys

Crew: Four men

Remarks: The vehicle will tow a 1/4-ton trailer
which also floats with its rated pay load.



Item No. 62

VEHICLE NOMENCLATURE: CARRIER, 1/4-TON, T26

Date Produced: 1944

Armament: None

Armor: None

Maximum Speed: 35 MPH

Weight: 4000 lbs combat loaded

Engine: Willys MB

CREW: Two to four men

Cruising Range: 300 miles

Remarks: The development of the 1/4-ton carrier, T26, was undertaken to provide a tracked vehicle of similar characteristics to the 1/4-ton truck but with greatly increased flotation. Since the Cargo Carriers, M29 and M29C, were reasonably satisfactory vehicles, further development was stopped in 1945.

██████████

Item No. 63

HALF-TRACK USED AS GUN MOTOR CARRIAGE

A number of various types and combinations of guns were mounted on the half-track chassis and employed in World War II. Generally, the M3 or some modification of the M3 was the basic vehicle used. Some of these are:

Multiple Gun Motor Carriages, M13, M14*, M15, M16, and M17 (self-propelled anti-aircraft mounts)

Combination Gun Motor Carriage, M15A1 (self-propelled anti-aircraft mount)

57-mm Gun Motor Carriage, T48 (a few built for USSR)

75-mm Gun Motor Carriages, M3, M3A1 (produced in quantity for tank destroyers)

105-mm Howitzer Motor Carriage, T19 (pilots only)

75-mm Howitzer Motor Carriage, T30 (pilots only)

81-mm Mortar Carrier, M4**, M4A1**

81-mm Mortar Carrier, M21

*Mounted on the M5 half-track chassis

**Mounted on the M2 half-track chassis

NOTES: _____

NOTES: _____

NOTES: _____

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