

~~RESTRICTED~~ FM 30-40

FREDERICK L. DEVEREUX, JR.  
2nd Lt., 10th Cavalry

WAR DEPARTMENT

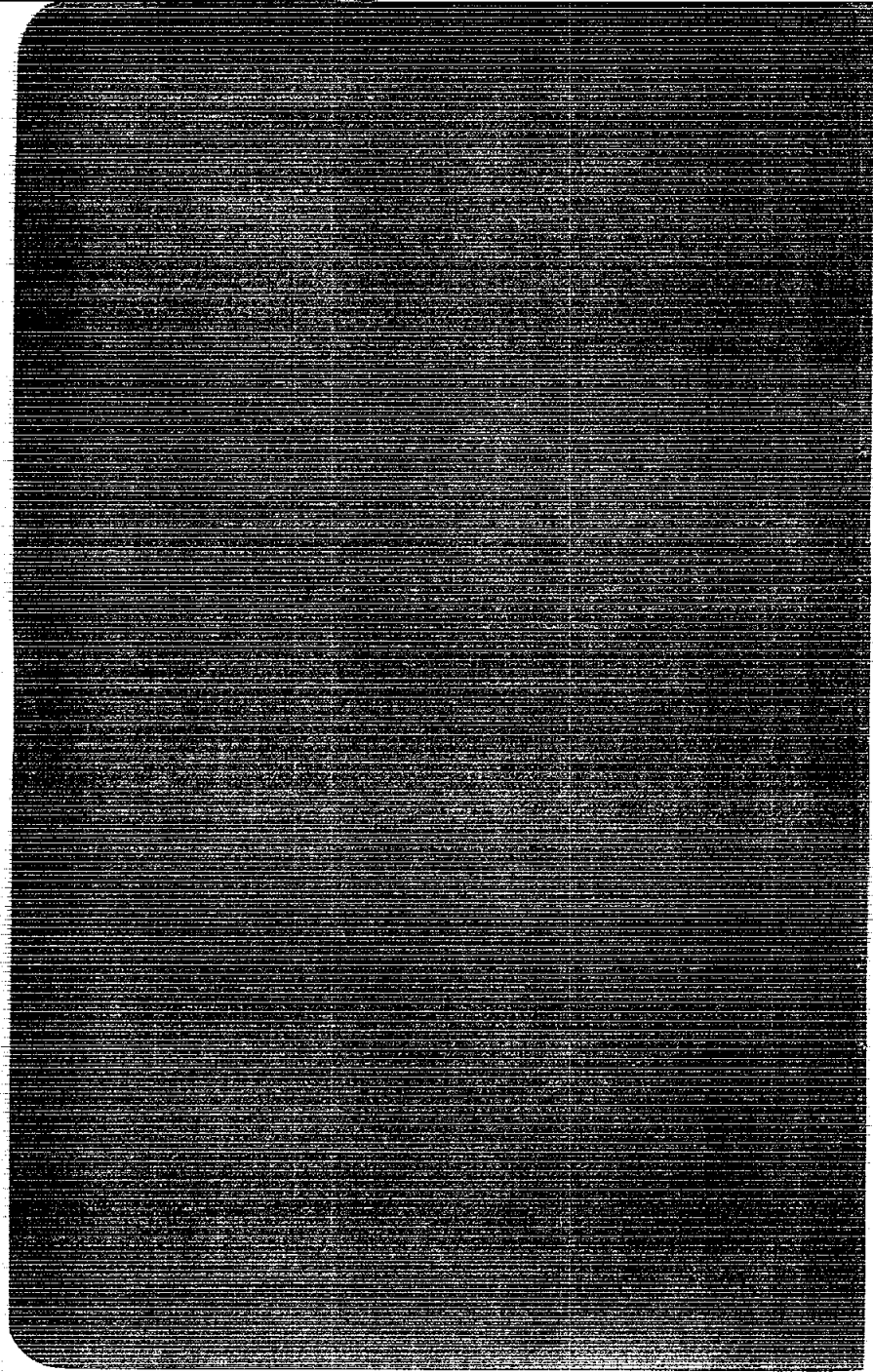
BASIC FIELD MANUAL



MILITARY INTELLIGENCE

IDENTIFICATION OF  
UNITED STATES ARMORED  
VEHICLES

May 21, 1941



**BASIC FIELD MANUAL**

**MILITARY INTELLIGENCE  
IDENTIFICATION OF  
UNITED STATES ARMORED VEHICLES**

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Prepared under direction of the  
Chief of Staff



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WASHINGTON, May 21, 1941.

FM 30-40, Military Intelligence, Identification of United States Armored Vehicles, is published for the information and guidance of all concerned.

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By ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL,  
*Chief of Staff.*

OFFICIAL:

E. S. ADAMS,  
*Major General,  
The Adjutant General.*

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(For explanation of symbols, see FM 21-6.)

~~RESTRICTED~~

## BASIC FIELD MANUAL

## MILITARY INTELLIGENCE

IDENTIFICATION OF UNITED STATES ARMORED  
VEHICLES

## SECTION I

## GENERAL

- 1. PURPOSE.—The purpose of this manual is to serve as a guide in the identification of armored vehicles of the United States.
- 2. SCOPE.—Only those armored vehicles of the United States in current operation are covered. They are shown by photographs and silhouettes. When photographs are not given, blank spaces have been left so that they may be added when provided.
- 3. NECESSITY.—Quick and accurate identification of both hostile and friendly armored vehicles is of vital importance in modern warfare. The importance of the armored vehicles and the required cooperation make it imperative that all arms and services and all ranks be familiar, not only with the equipment used in our service, but with all other equipment likely to be encountered on the field of battle. The ever-widening sphere of action of armored vehicles requires knowledge of such equipment by all personnel, no matter where located in the theater of operations.
- 4. TRAINING.—The rapid movements and the different angles of presentation assumed by armored vehicles in movement make positive identification an extremely difficult task for any but thoroughly trained observers. Effective training can be accomplished only by the employment of a definite and logical system of identification methods. The ready identification can be accomplished only by thorough study of the different types and by constant practice in observing all types of vehicles in the field.

■ 5. METHOD OF IDENTIFICATION.—*a.* Observers must be able to detect quickly and analyze rapidly every possible indication of identity of armored vehicles.

*b.* These identifications may be grouped into three general classes:

(1) Characteristic visible features of individual vehicles; generally indicative of the type and, when noted in sufficient detail, of the particular model. Among these characteristic features are—

General shape and size.

Open or closed top.

Turrets, including top and hold turrets, cupolas, and periscopes.

Wheeled, track, or half-track vehicles.

Location of drive sprocket wheel (front or rear drive).

Number of bogie wheels, whether skirted or open.

Guns and mounting of guns (shield, ball, or turret mounted).

Ventilation apertures, louvers or grids.

Wireless apparatus, location of lights, accessories, and handrails.

(2) Operation and maneuver characteristics, including speed, maneuverability, cross-country, and performance features.

(3) Characteristic sounds—during dark and other periods of low visibility, sound will usually be the only means of identity.

*c.* In general, identification will be accompanied by noting and combining indications under all three classes. In order that all possible indications may be quickly noted and evaluated, the observer must be trained to know what characteristic indications are most likely to be detected under conditions existing at the moment of observation. He must thoroughly understand the effect of distance on visible characteristics.

■ 6. USE OF FIELD GLASSES.—Field glasses or other similar medium power glasses are of great value in distinguishing the characteristic visible features of armored vehicles at a distance. All observers and others whose duties are concerned with identification of armored vehicles should be equipped with field glasses and required to use them habitually in observation.

■ 7. CLASSIFICATION OF ARMORED VEHICLES.—Armored vehicles may be generally classified as wheeled, full-track laying, and half-track.

a. *Wheeled*.—This type comprises scout and armored cars and uses the conventional automotive chassis. The speed range is higher than the track laying types. They do not, however, possess the cross-country mobility of either the full-track laying or the half-track vehicles. The operating range is approximately 250 miles. Their high speed and radius of action render them particularly suitable for reconnaissance missions.

b. *Full-track laying*.—This classification includes all vehicles which are supported and propelled entirely by tracks. Vehicles using this type of drive possess a high degree of cross-country mobility. The speed range is normally from 25 to 35 miles per hour. They are used for attack and combat missions, and particularly those requiring shock action and fire power. The application of the heavy, medium, and light tank will vary according to circumstances. In some instances, the medium or heavy tank may be utilized to break through and destroy antitank defenses, and the light tank then utilized for exploiting the success gained. Under other conditions, as when antitank defenses are not well organized, the light tank itself may be used as a break-through vehicle. Frequently the medium or heavy tank will be attached to light tank elements and utilized to provide close, heavier caliber fire support. Other circumstances may arise where the medium or the heavy tank is utilized as a supporting vehicle for infantry advance.

c. *Half-track*.—This type of vehicle, a combination of the track laying and wheeled types, is usually driven by a short track on the rear and steered by conventional front wheels. Half-track vehicles are used generally as reconnaissance vehicles, personnel carriers, prime movers for artillery, and for other uses which do not require as high a degree of cross-country mobility as those for which the full-track laying types are employed. The speed range is from 35 to 45 miles per hour.

■ 8. ARRANGEMENT OF DATA.—In the interests of uniformity, armored vehicles for all countries will be listed in the following order:

*a. Scout cars and armored cars.*—This category will comprise vehicles used primarily for reconnaissance purposes. Scout cars normally have no turret protection.

*b. Light tanks.*—In general, this category will comprise all tanks from 5 to 15 tons.

*c. Medium tanks.*—This category will comprise all tanks from 15 to 35 tons.

*d. Heavy tanks.*—This category will comprise armored vehicles over 35 tons.

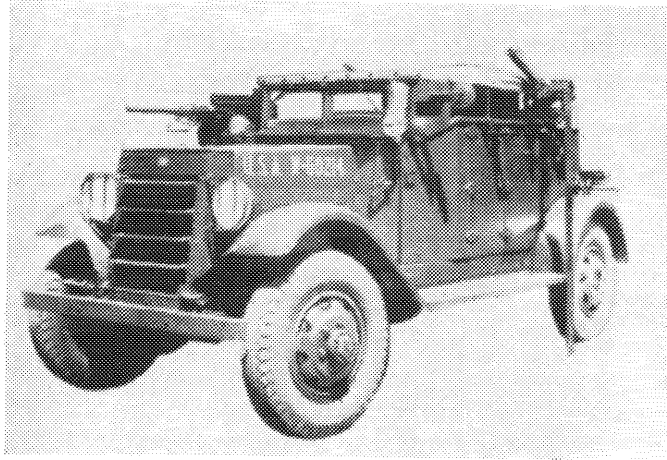
*e. Other vehicles.*—This category will include personnel carriers, machine-gun carriers, mortar carriers, half-track vehicles, etc.

■ 9. **DISTINCTIVE MARKINGS.**—Armored vehicles of various nations may frequently be identified by distinctive markings. These markings are subject to change and may vary during different phases of any one campaign. The markings normally will be such that they can be visible from the air and from the rear, but infrequently will the markings be visible from the front. These distinctive markings, when known, should be communicated to personnel by instructions issued in the field.

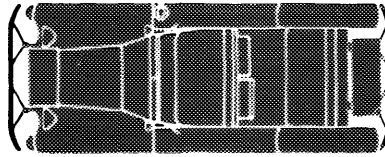


SECTION II  
ARMORED VEHICLES OF THE UNITED STATES

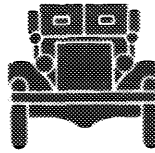
UNITED STATES  
ARMY



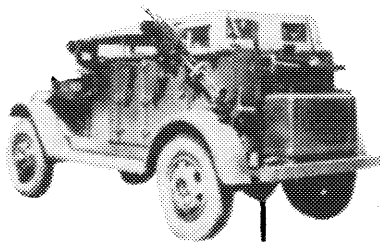
SCOUT CAR M1.



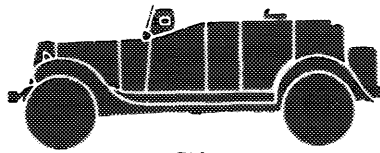
Top.



Front.



Rear.

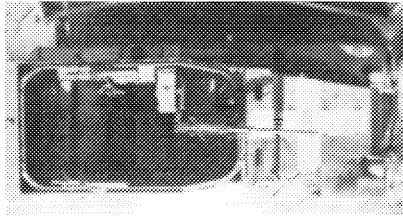


Side.

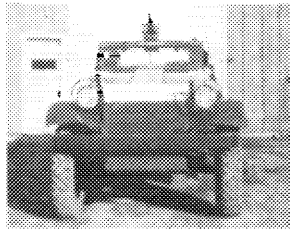
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ARMY



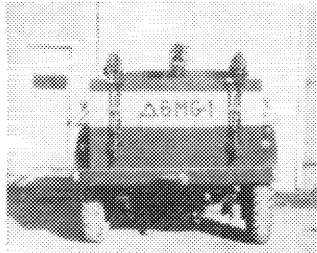
SCOUT CAR M3.



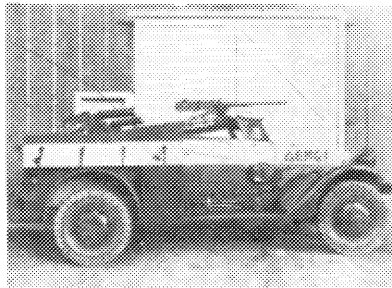
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Front.

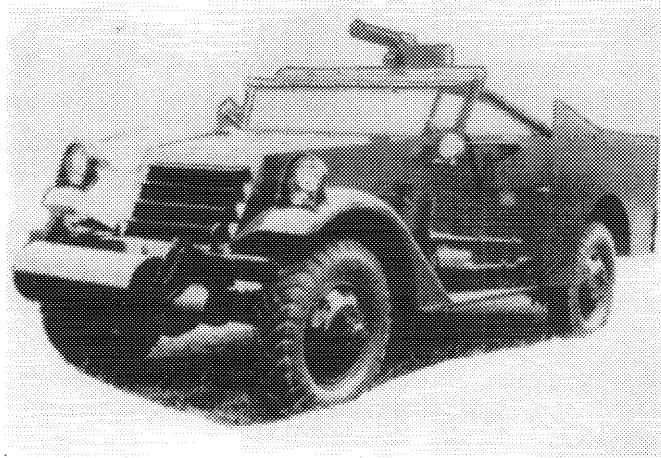


Rear.

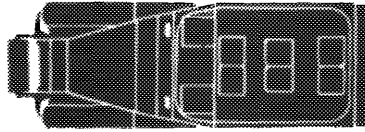


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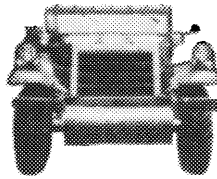
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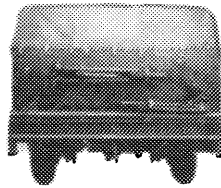
SCOUT CAR M3A1.



Top.



Front.

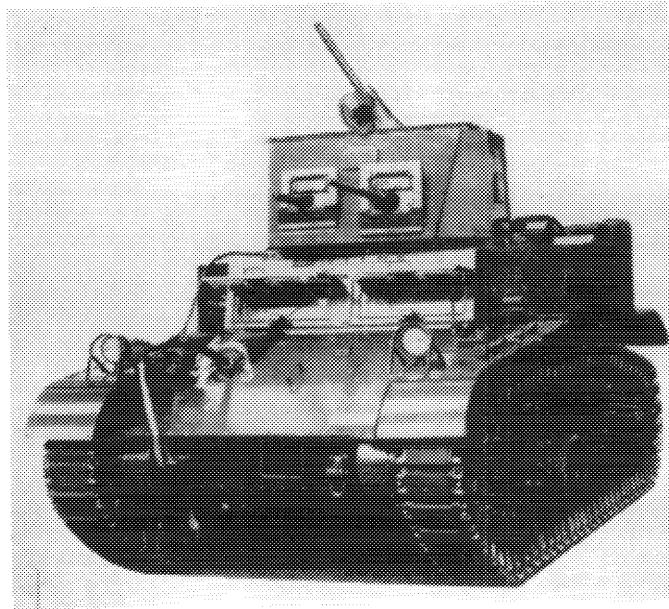


Rear.



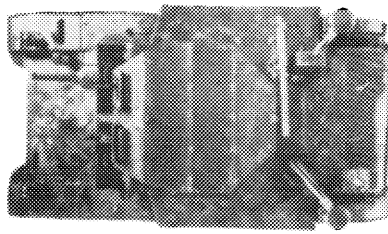
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UNITED STATES  
ARMY

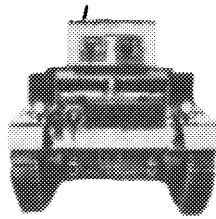


LIGHT TANK M1A1.

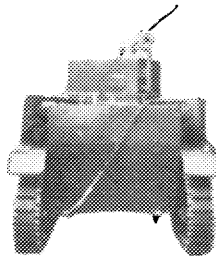




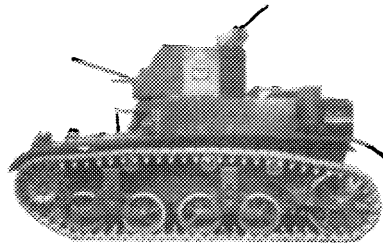
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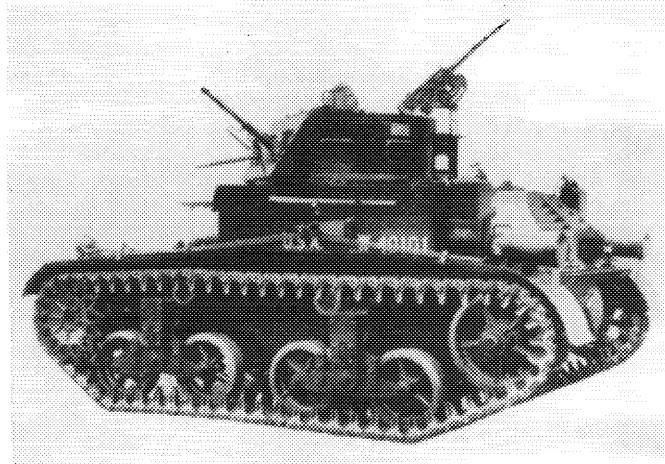


Rear.

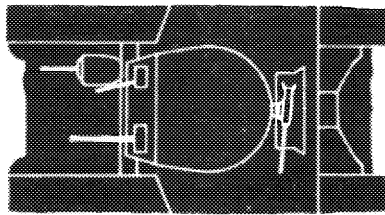


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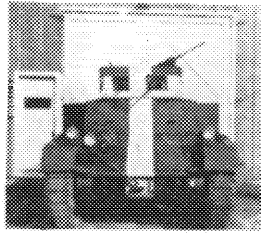
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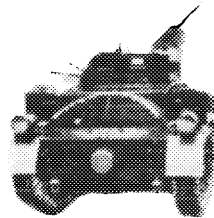
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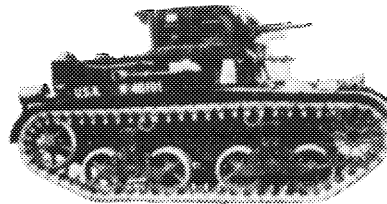
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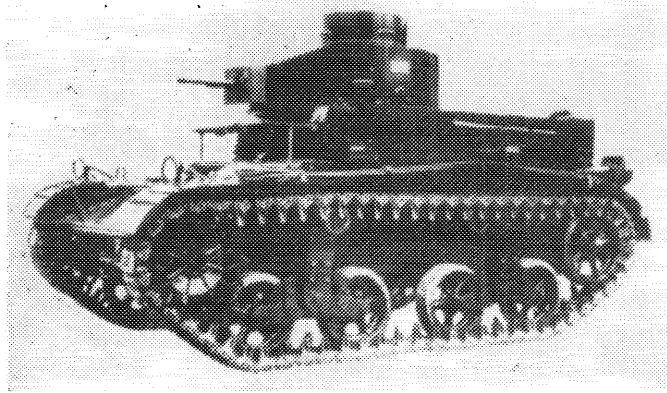


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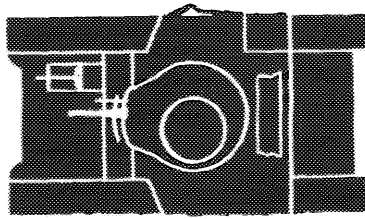


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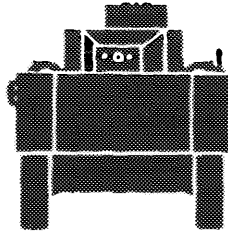
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ARMY



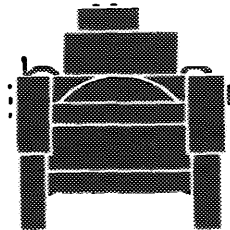
LIGHT TANK M2A1.



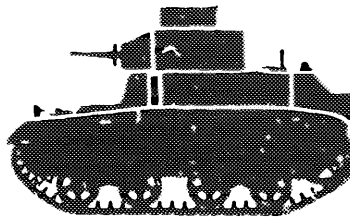
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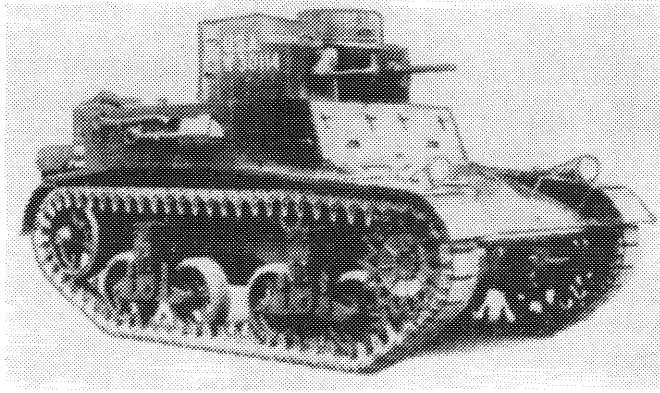


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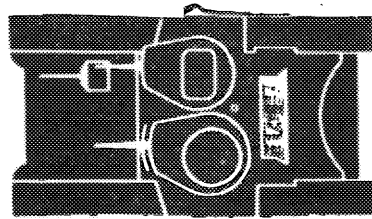


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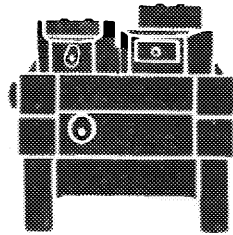
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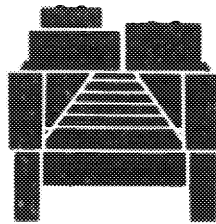
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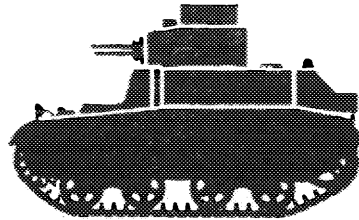
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Front.

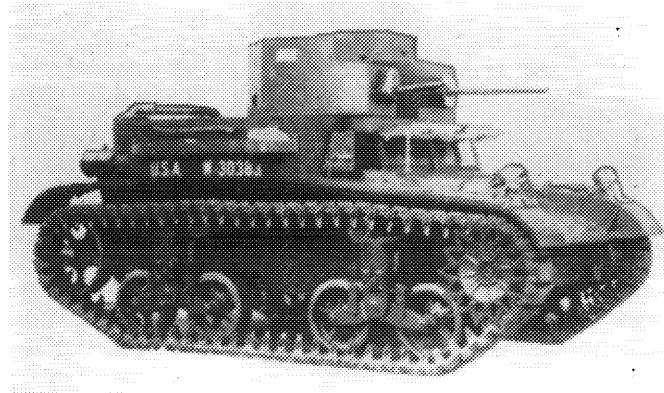


Rear.



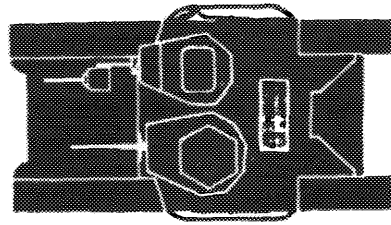
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UNITED STATES  
ARMY

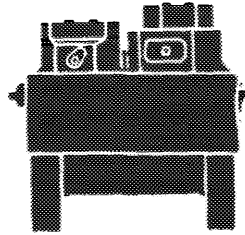


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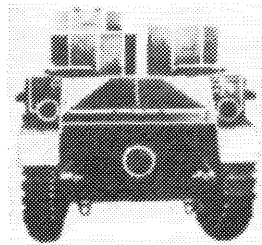




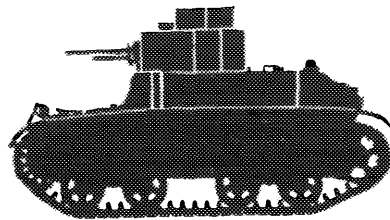
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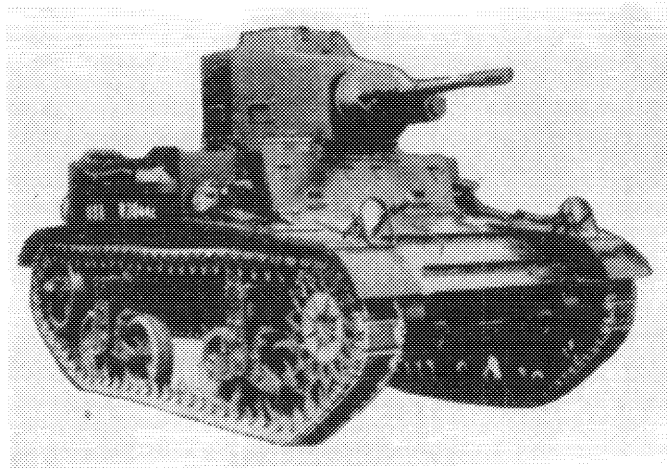


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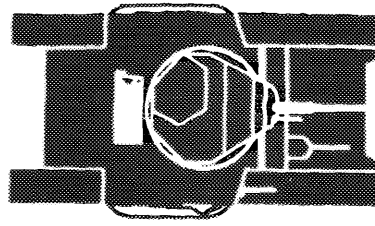


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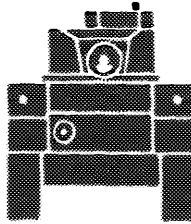
**UNITED STATES  
ARMY**



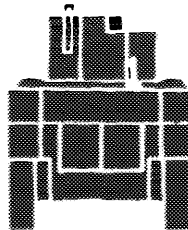
**LIGHT TANK M2A4.**



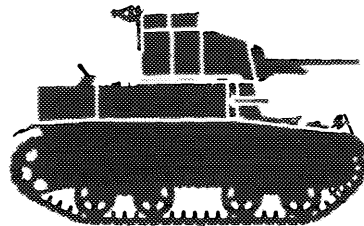
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Front.

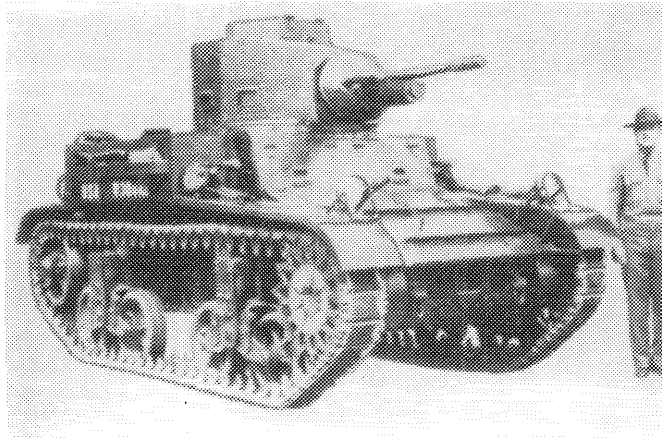


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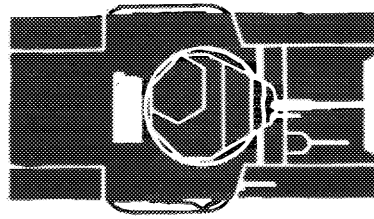
Side.

UNITED STATES  
ARMY

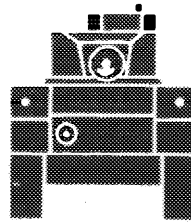


LIGHT TANK M3.

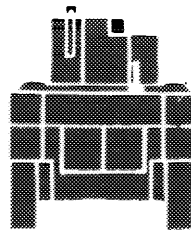
General external appearance and armament same as Light  
Tank M2A4.



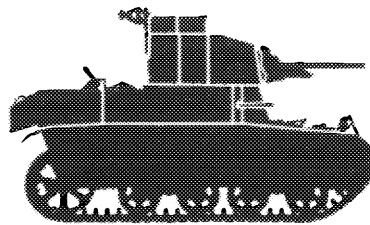
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Front.

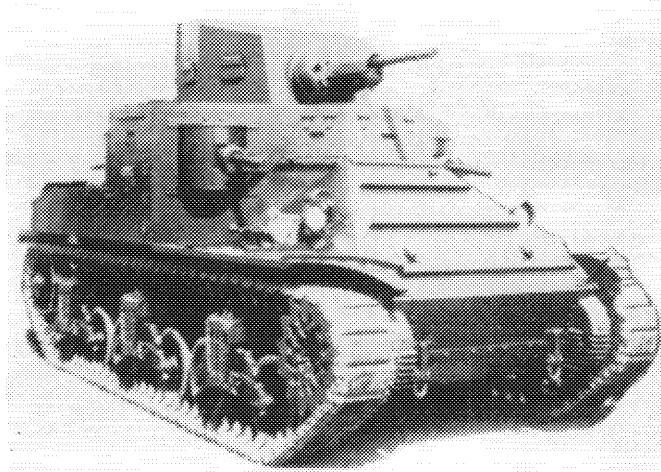


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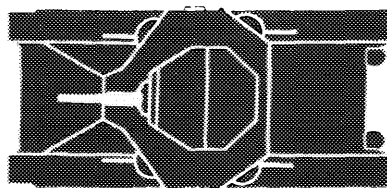


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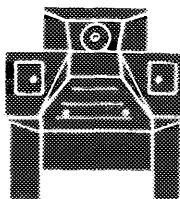
**UNITED STATES  
ARMY**



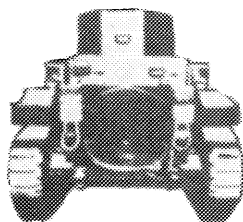
**MEDIUM TANK M2A1.**



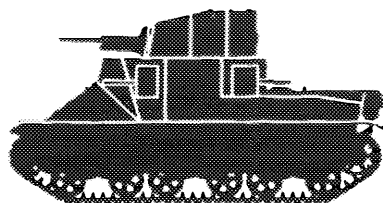
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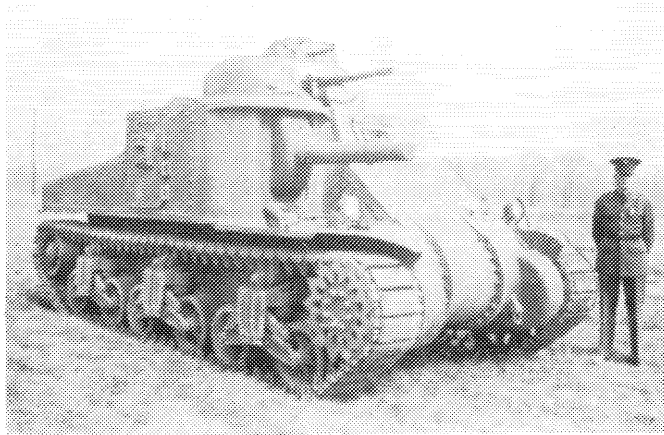


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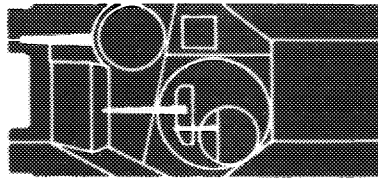
Side.

**UNITED STATES  
ARMY**

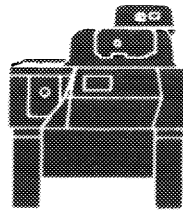


**MEDIUM TANK M3.**

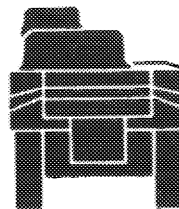




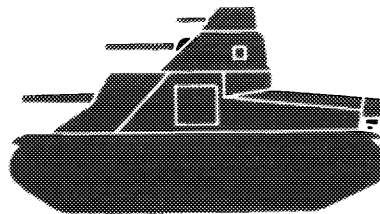
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Front.

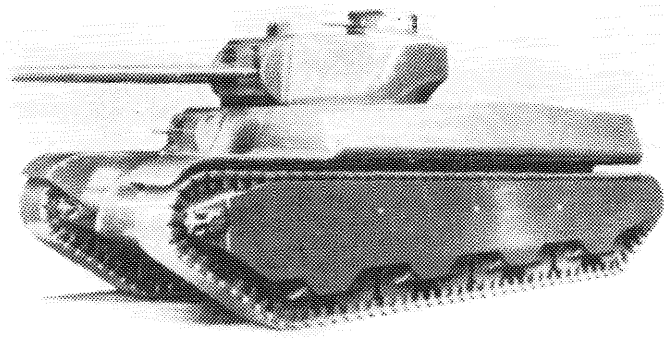


Rear.

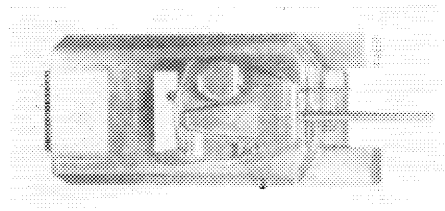


Side.

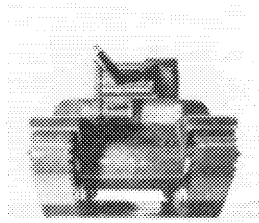
UNITED STATES  
ARMY



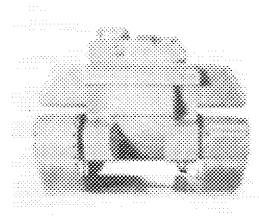
HEAVY TANK T1.



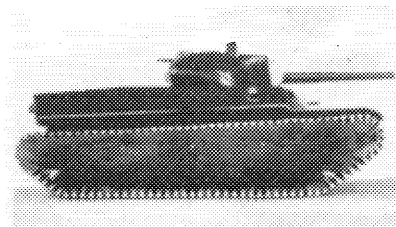
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Front.



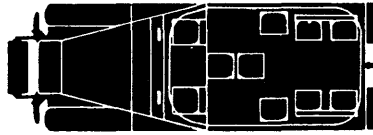
Rear.



Side.

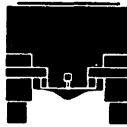
UNITED STATES  
ARMY

HALF-TRACK CAR M2.

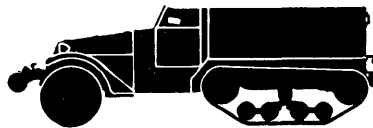


Top.

Front.



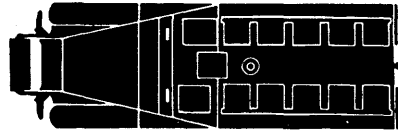
Rear.



Side.

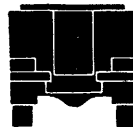
UNITED STATES  
ARMY

PERSONNEL CARRIER M3.

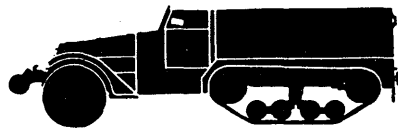


Top.

Front.



Rear.

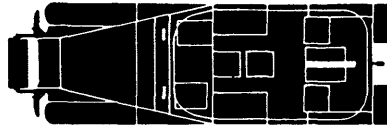


Side.

UNITED STATES  
ARMY

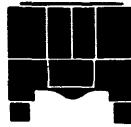
MORTAR CARRIER M4.



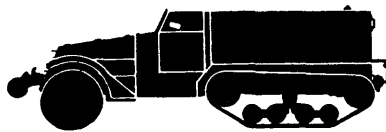


Top.

Front.



Rear.



Side.





