

TM 9-705

★ RESTRICTED

WAR DEPARTMENT

TECHNICAL MANUAL

SCOUT CAR M3A1

OCTOBER 26, 1942

★ *Dissemination of restricted matter — The information contained in restricted documents and the essential characteristics of restricted materiel may be given to any person known to be in the service of the United States and to persons of undoubted loyalty and discretion who are cooperating in Government work, but will not be communicated to the public or to the press except by authorized military public relations agencies. (See also paragraph 18 b, AR 380-5, 28 September 1942.)*

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WAR DEPARTMENT
Washington, October 26, 1942

SCOUT CAR M3A1

Prepared under the direction of the
Chief of Ordnance

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PART I — OPERATING INSTRUCTIONS**Section I****INTRODUCTION**

	Paragraph
Scope	1
Data	2

1. SCOPE.

a. This manual is published for the information and guidance of the using arms and services.

b. In addition to a description of the Scout Car M3A1, this manual contains technical information required for the identification, use, and care of the material.

c. Specific information for the guidance of operating personnel (crew) is contained in part I. Information chiefly for the guidance of organizational maintenance personnel (using arm's unit mechanics) is contained in part II.

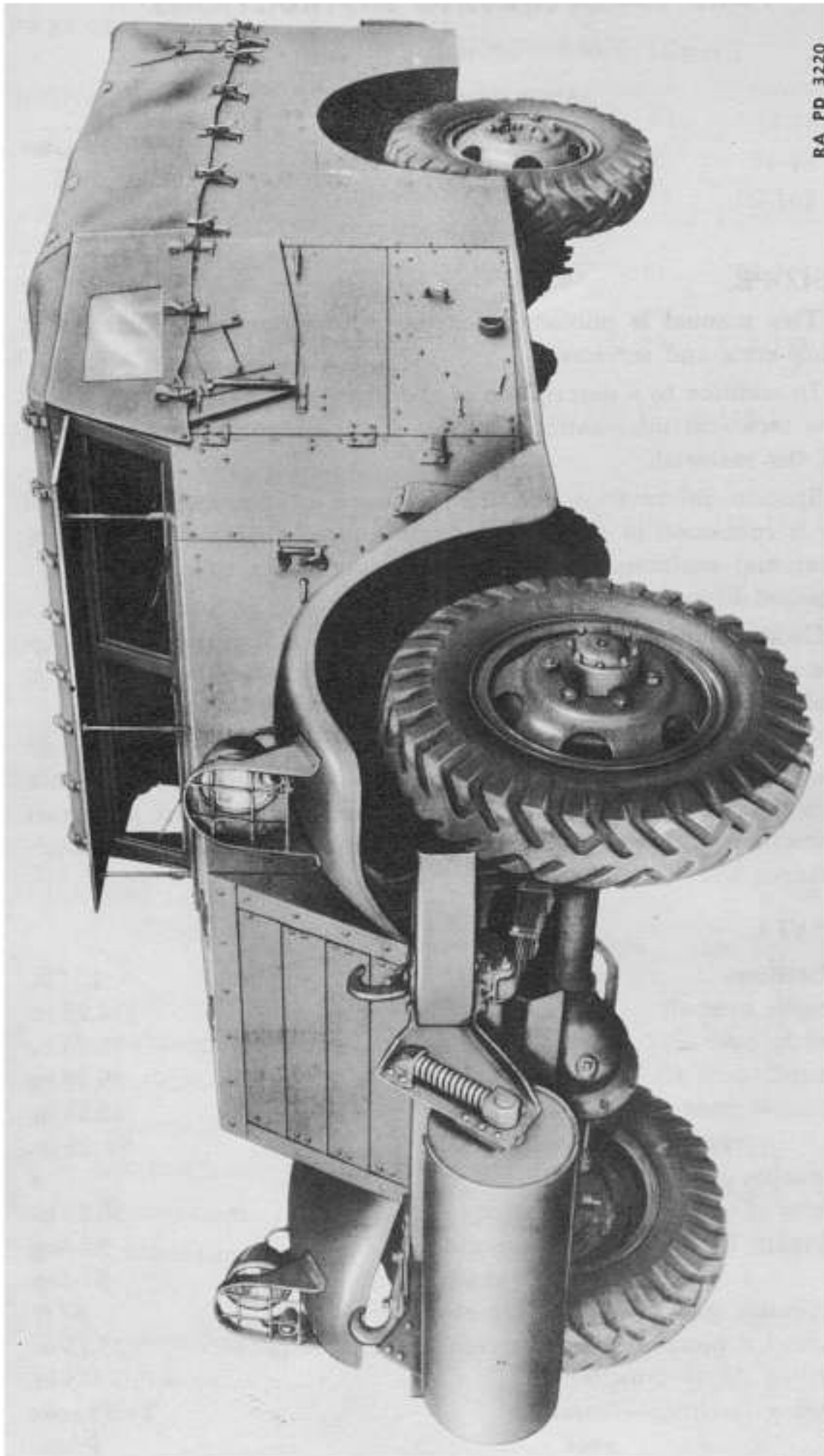
d. Disassembly, assembly, and such repairs as may be handled by using arms personnel will be undertaken only under the supervision of an officer or the chief mechanic.

e. In all cases where the nature of the repair, modification, or adjustment is beyond the scope or facilities of the unit, the responsible ordnance service should be informed in order that trained personnel with suitable tools and equipment may be provided, or proper instructions issued.

2. DATA.

Wheelbase	131 in.
Length, over-all	221.25 in.
Width, over-all	71.25 in.
Height, over-all	79.25 in.
Tread — front	63.25 in.
rear	65.25 in.
Capacity, crew	8
Center of gravity above ground.....	30.25 in.
Bridging limit — approach angle	37 deg.
departure angle	35 deg.
Minimum turning circle diameter	57 ft.
Ground clearance (transfer case).....	15.75 in.
Fording depth (muffler).....	24 in.
Towing facilities — front	Tow hooks
rear	Pintle
Pintle height	28.25 in.

SCOUT CAR M3A1



RA PD 3220

Figure 1 — Left Front View

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RA PD 3221

Figure 2 — Right Front View

SCOUT CAR M3A1



RA PD 13091

Figure 3 — Rear View

	Low	High
Speed (transfer case low and high):		
Reverse	5.05 mph	9.5 mph
First	6.0 mph	11.1 mph
Second	9.5 mph	17.6 mph
Third	17.0 mph	32.3 mph
Fourth	29.5 mph	55.5 mph
Maximum allowable speed		45 mph
Transmission capacity		5 qt
Transfer case capacity		3½ qt
Front axle capacity		3 qt
Rear axle capacity		3½ qt
Gasoline tank capacity (2 tanks)		30 gal
Cooling system capacity (gasoline engine)		19 qt
Crankcase capacity:		
Gasoline engine-powered vehicles		6 qt
Hercules Diesel engine		7 qt
Buda Diesel engine		9 qt

Chassis number—model and serial numbers are stamped on plate on dash.

Engine number—engine number is stamped on name plate on the right side of engine.

INTRODUCTION

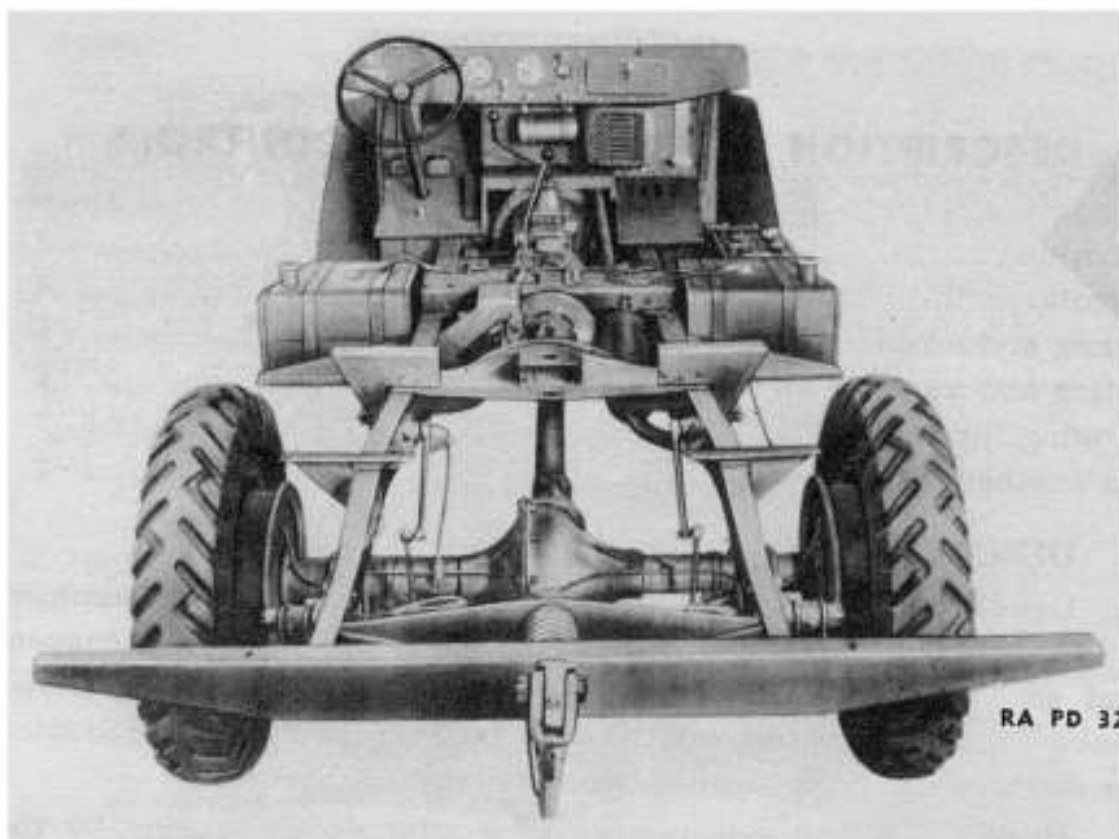


Figure 4 — Chassis Plan View

SCOUT CAR M3A1

Section II

DESCRIPTION, OPERATION AND CONTROLS

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3. DESCRIPTION (figs. 1, 2, 3, and 4).

a. **General.** This vehicle consists of a specially designed commercial type, four-wheel drive truck chassis. It is powered by a conventional six cylinder gasoline engine or one of two makes of Diesel engines. The chassis is surmounted by a special armored body mounted on a double-drop type, channel section frame.

b. **Hood.** Top and side protection is afforded the engine by the 1/4-inch armor plate hood which is made of two double panels hinged together to facilitate opening. Two latches on each side secure the hood when closed. A four-blade, 1/4-inch armor plate shutter is provided for radiator protection and is operated manually from the driver's compartment. Stops are provided to hold the shutters open in three intermediate positions between the fully opened and closed positions.

c. **Windshield.** The shatterproof glass windshield, in two sections, is clamped into and flush with the weather stripped frame structure. It is necessary to loosen the clamps and remove the glass sections manually before lowering into place the protective shield of 1/2-inch armor plate, hinged at the top to the windshield supporting frame, and held normally in a raised position by three cowl props. For observation purposes, vision slots are provided in the shield.

d. **Body.** The body is protected by 1/4-inch armor plate at the sides and rear. Each side door is provided with a quadrant to hold the door open at various positions, and a folding armor shield to heighten the armor protection for the driver's compartment. The side shields are hinged to the respective doors and held in an upright position by vertical rods which extend up from and are latched to the doors. Observation openings are provided in the side shields similar to the vision slots in the front shield. Fuel tanks are placed under the seats in the driver's compartment and protected underneath by a steel plate. Vents are provided for conducting fresh air from beneath the hood into the driver's compartment.