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AUSTRALIAN MILITARY FORCES

**INSTRUCTION BOOK  
DRIVING & MAINTENANCE**

*for*

**Trucks  $\frac{1}{4}$  Ton (U.S.A.)**  
**(Inc. Trailers, 2 Wheel, 8 cwt.)**

Make: Willys-Overland Model MB (4 x 4)  
Ford Model GPW (4 x 4)

1944

Prepared by Staff of the Master-General  
of the Ordnance and issued under the  
direction of the Commander-in-Chief,  
Headquarters Australian Military Forces

By Authority

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## SCOPE AND PURPOSE

The scope and purpose of this Instruction Book is to provide the basic information necessary for the correct and economical operation of the vehicle concerned. The instructions contained in the following pages will be carried out by the driver in charge of the vehicle in accordance with the maintenance routines and intervals stated.

Drivers will not attempt to carry out repairs or make adjustments beyond their permitted scope, and where any adjustments are to be carried out by the driver under supervision, he will report to the appropriate tradesman (driver-mechanic or unit fitter) and have the benefit of his advice and assistance.

Some adjustments are to be carried out by driver mechanics only. These are listed in the end of the book and none of these will be attempted by the driver.

All driver's maintenance will be recorded in the Vehicle Log Book AAB 20B except the drills specially marked as not recorded.

## GENERAL DESCRIPTION

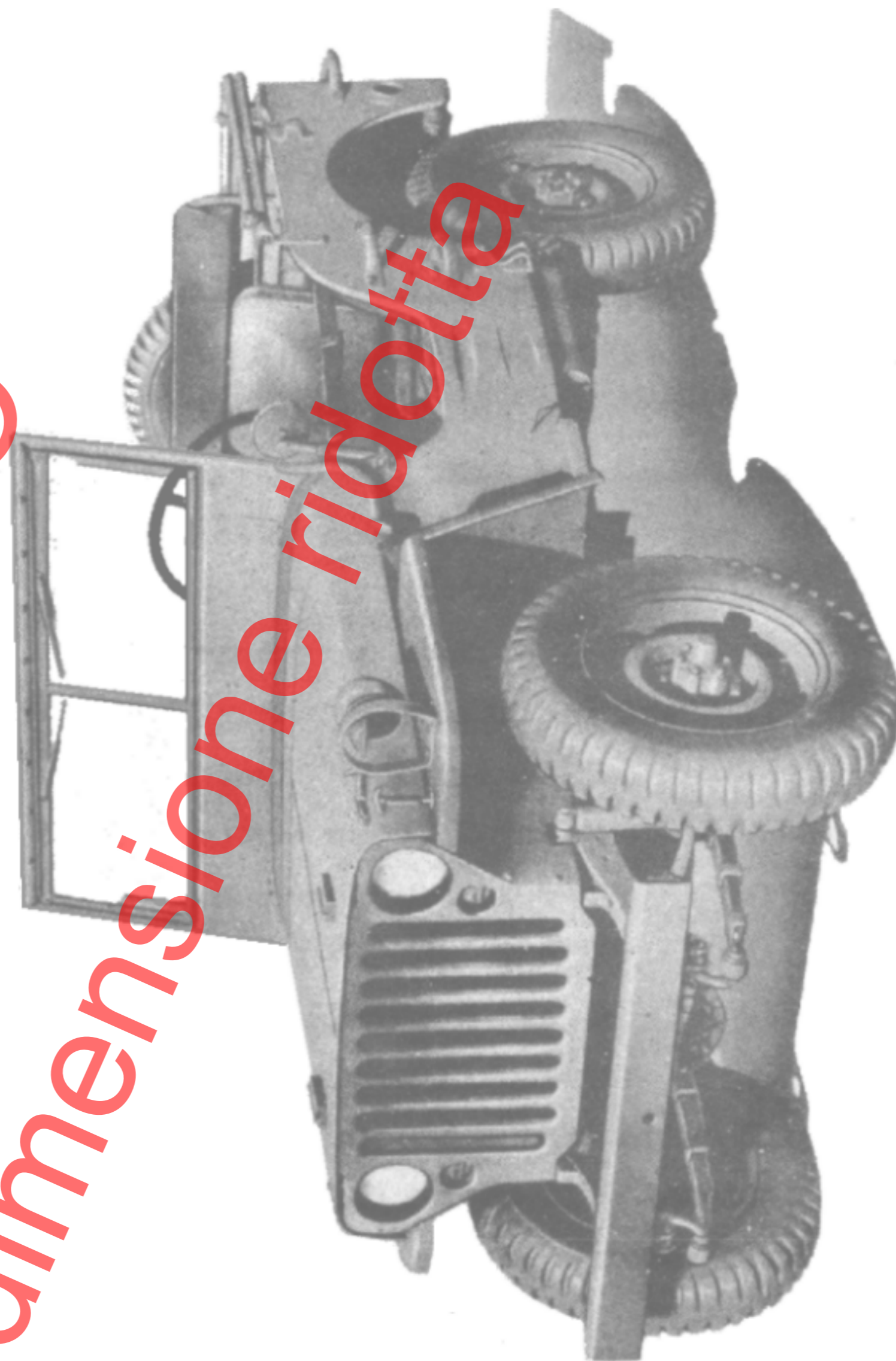
The vehicle described in this Instruction Book is known as the Truck  $\frac{1}{4}$  ton (U.S.A.). Both the Willys-Overland Model MB (4 x 4) and Ford Model GPW (4 x 4) are identical. It has been introduced as a general purpose vehicle and fills a variety of roles.

For normal road operation, the vehicle utilizes the two rear driving wheels; four wheeled drive and low speed range through a transfer case (auxiliary gear box) are provided for cross country operation or steep gradients.

The power unit is the conventional 4 cylinder side-valve petrol engine and with the clutch, gear box, and transfer case, is built into a unit power plant which is mounted at four points in the chassis. The gear box is a synchromesh 3 speed type, with synchronized second and top speed gears, mounted to which is the dual range transfer case (auxiliary gear box) which incorporates the front axle drive engaging and disengaging mechanism.

Both hand and foot operated brakes are fitted, the former being mechanical and actuating an external contracting brake band at the rear of the transfer case, and the latter being hydraulic and operating on all four wheels.

The body is of the open type with an open driver's compartment. The folding top can be removed and stowed, and the windshield tilted forward on top of the hood or opened upward and outward. A spare wheel is mounted on the rear of the body, and a pintle hook is provided to haul trailed loads.



GENERAL VIEW OF TRUCK  $\frac{1}{4}$  TON (U.S.A.)

Size.....6.00 x 16 x 6 ply,  
non-directional,  
bar tread.  
(Combat tyres may  
be identified as  
split rim type).

Speed at maximum r.p.m.....65 m.p.h.  
Maximum grade ascending ability.....30°  
Minimum turning radius (left).....17'6"  
Minimum turning radius (right).....17'6"  
Maximum fording depth (fan operating)..21"  
Maximum fording depth (fan disconnected) 27"  
Road clearance.....8 1/2"

## DRIVER'S ROUTINE MAINTENANCE

### DAILY BEFORE DUTY (Not recorded in Log Book)

#### Check:

Level of fuel in tank; no leaks; filler cap secure.

Level of oil in sump; no leaks; filler cap secure.

Level of water in radiator; no leaks; filler cap and rubber seat secure.

Fuel tank sump drain covers correctly fitted.

Start engine; run at fast idling speed:

#### Check:

Oil pressure gauge registers; pressure normal.

Ammeter working; reading normal.

Fuel gauge registers correctly.

Horn and windscreen wiper for operation.

All lights (incl. black out lights) for correct operation.

Tyres, including spare, for correct pressure (use gauge); valve dust caps fitted.

Brake operating normally; pedal firm and no excessive travel.

All tools and equipment securely stowed.

Driver carries G2, G11, G13, G14, G17, and S.O.D.'s; Log Book carried in vehicle.

★ NOTE: Oil pressure and temperature gauge must be constantly checked during running.

### INSPECT MAINTENANCE. (Not recorded in Log Book)

#### Check:

Fuel level in tank.

Oil level in sump.

Air cleaner; check oil level, drain and refill as necessary.

### INSTRUMENTS AND CONTROLS

- |  |                                |
|--|--------------------------------|
| 1. Windscreen wipers                     | 17. Accelerator pedal          |
| 2. Horn button                           | 18. Speedometer                |
| 3. Steering wheel                        | 19. Accelerator foot rest      |
| 4. Hand throttle                         | 20. Temperature gauge          |
| 5. Ignition Switch                       | 21. Starting switch            |
| 6. Choke control                         | 22. Transfer case shift lever  |
| 7. Rear vision mirror                    | 23. Front axle engage lever    |
| 8. Blackout driving light switch         | 24. Gear shift lever           |
| 9. Blackout light switch                 | 25. Gear shift diagram         |
| 10. Headlight foot switch (beam control) | 26. Vehicle name plate         |
| 11. Safety strap                         | 27. Warning plate              |
| 12. Clutch pedal                         | 28. Hand brake lever           |
| 13. Instrument panel light switch        | 29. Windscreen clamps          |
| 14. Brake pedal                          | 30. Ammeter                    |
| 15. Fuel gauge                           | 31. Windscreen adjusting arms. |
| 16. Oil pressure gauge                   |                                |