

TM 10-1451

MAINTENANCE MANUAL



2½ Ton 6 x 6
Model AFKWX-353 Truck
BUILT FOR
UNITED STATES ARMY

TM 10-1451

FORM X-4210

General Motors Truck

TM 10-1451
WAR DEPARTMENT

Washington, April 23, 1942

TM 10-1451, Maintenance Manual, Truck, 2½ Ton, 6 x 6 GMC (Model AFKWX-353) published by the Yellow Truck & Coach Manufacturing Company is furnished 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

Maintenance Manual

GMC 2½ TON 6x6
MODELS AFKWX-353



TM 10-1451

FORM X-4210

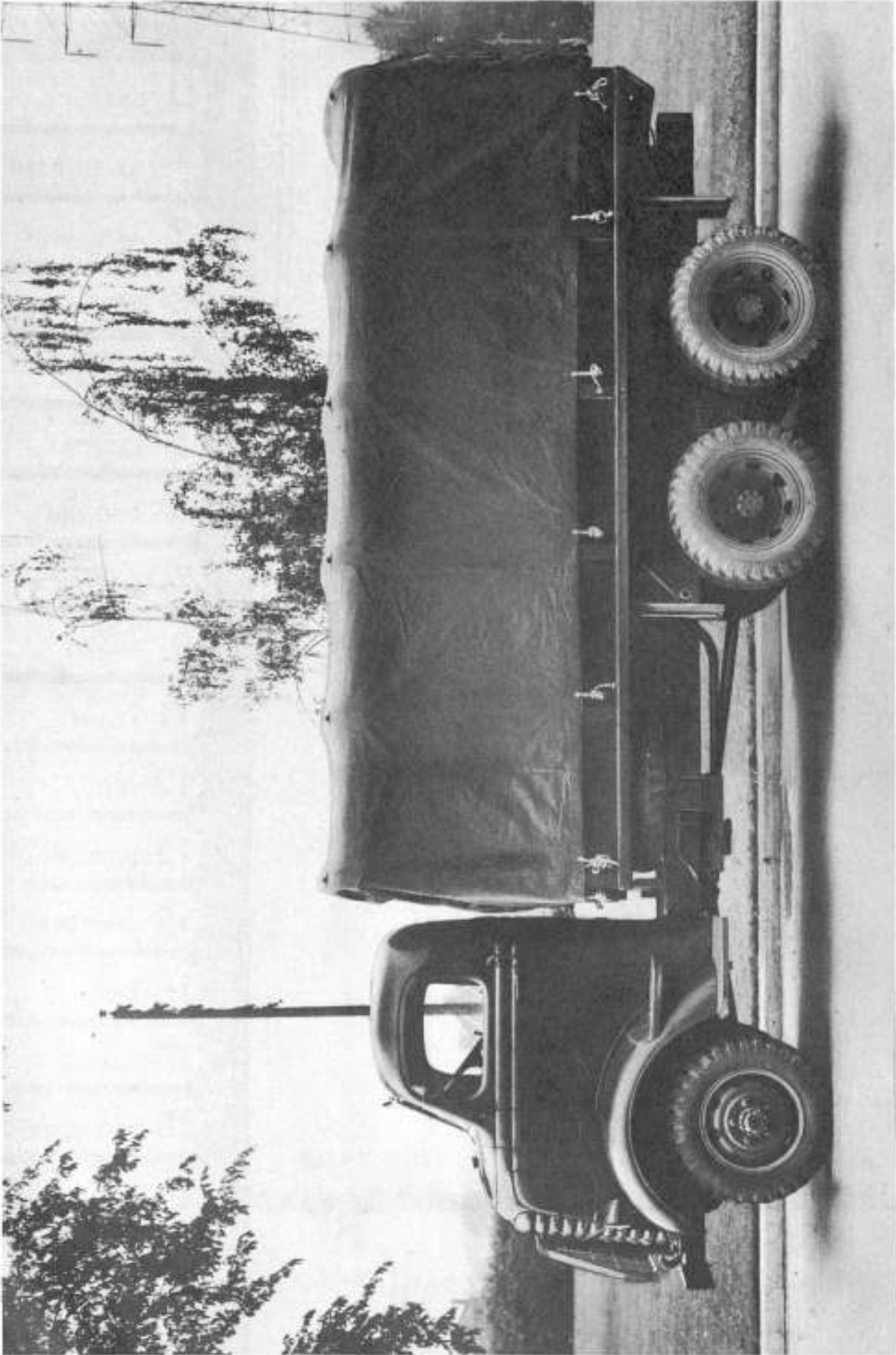
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GENERAL MOTORS TRUCK & COACH

DIVISION OF
YELLOW TRUCK & COACH MANUFACTURING COMPANY
PONTIAC, MICHIGAN

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GMC TRUCK 1½ to 3-TON 6 x 6 TRUCK

GMC MAINTENANCE MANUAL

Introduction

This maintenance manual has been especially prepared to cover the GMC trucks applying on contracts shown on front cover and is published for the information and guidance of all concerned.

If the utmost in performance and reliability are to be expected, good driving practices should always be observed and each truck periodically inspected in order to make necessary adjustments and perform needed service at the right place at the right time.




All information essential to the proper maintenance and repair of these trucks is contained in this manual. All who are charged with the responsibility of performing such service or with driving the vehicles should study this book thoroughly and refer to it frequently.

GMC MAINTENANCE MANUAL

Serial Number Locations

Delay and confusion can be avoided when correct serial numbers of vehicle are specified on parts orders and correspondence.

The following illustrations show where numbers appear on this particular model. (Serial numbers shown in these pictures are only typical and therefore must not be quoted.)

		
<p align="center">Chassis Number</p> <p>Stamped on right hand frame side rail above front spring.</p>	<p align="center">Engine Number</p> <p>Plate on left hand side of engine.</p>	<p align="center">Cab Number</p> <p>At engine side of cowl on L. H. side.</p>

Form Number

This publication is identified by a Form Number. Specify this number in all references to this book.

FORM No. X4210

G M C MAINTENANCE MANUAL

General Data

Wheelbase-----	164"
Engine	
Type-----	270
Horsepower - S.A.E.-----	34.35
Displacement - Cu. In.-----	269.5
Bore-----	3-25/32"
Stroke-----	4"
Cylinders -----	6
Engine Governed Speed (R.P.M.)-----	2750

Capacities

Fuel Tank - (Gals.)-----	40
Engine Crankcase - Refill (Qts.)-----	10
Cooling System (Qts.)-----	23
Transmission (Pts. or Lbs.)-----	13
Transfer Case (Pts. or Lbs.)-----	4
Front Axle Differential (Pts. or Lbs.)-----	13-1/2
Rear Axle Differential (Pts. or Lbs.)-----	17
Oil Bath Air Cleaner (Qts.)-----	3

G M C MAINTENANCE MANUAL

Group Index

Instructions and Illustrations Covering Various
Units in These Vehicles are Shown in Following Groups:

GROUP NAME	GROUP NO.
Driver's Instructions -----	DR.950
Front Axle -----	1.9001
Rear Axle -----	2.10501
Body-----	3.4101
Brakes -----	4.12801
Clutch -----	5.10101
Cooling System -----	6.10201
Wiring -----	7W.1601
Starting Motor and Battery -----	7S.0551A
Distributor, Coil and Spark Plugs-----	7D.0701
Generator-----	7G.0801
Lighting Equipment-----	7L.1201
Miscellaneous Electric-----	7M.0351
Engine-----	8.9901
Frame -----	11.6001
Fuel System -----	12.11701
Lubrication -----	13.1601
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Propeller Shafts-----	18.9601
Wheels, Hubs and Bearings -----	19.10301
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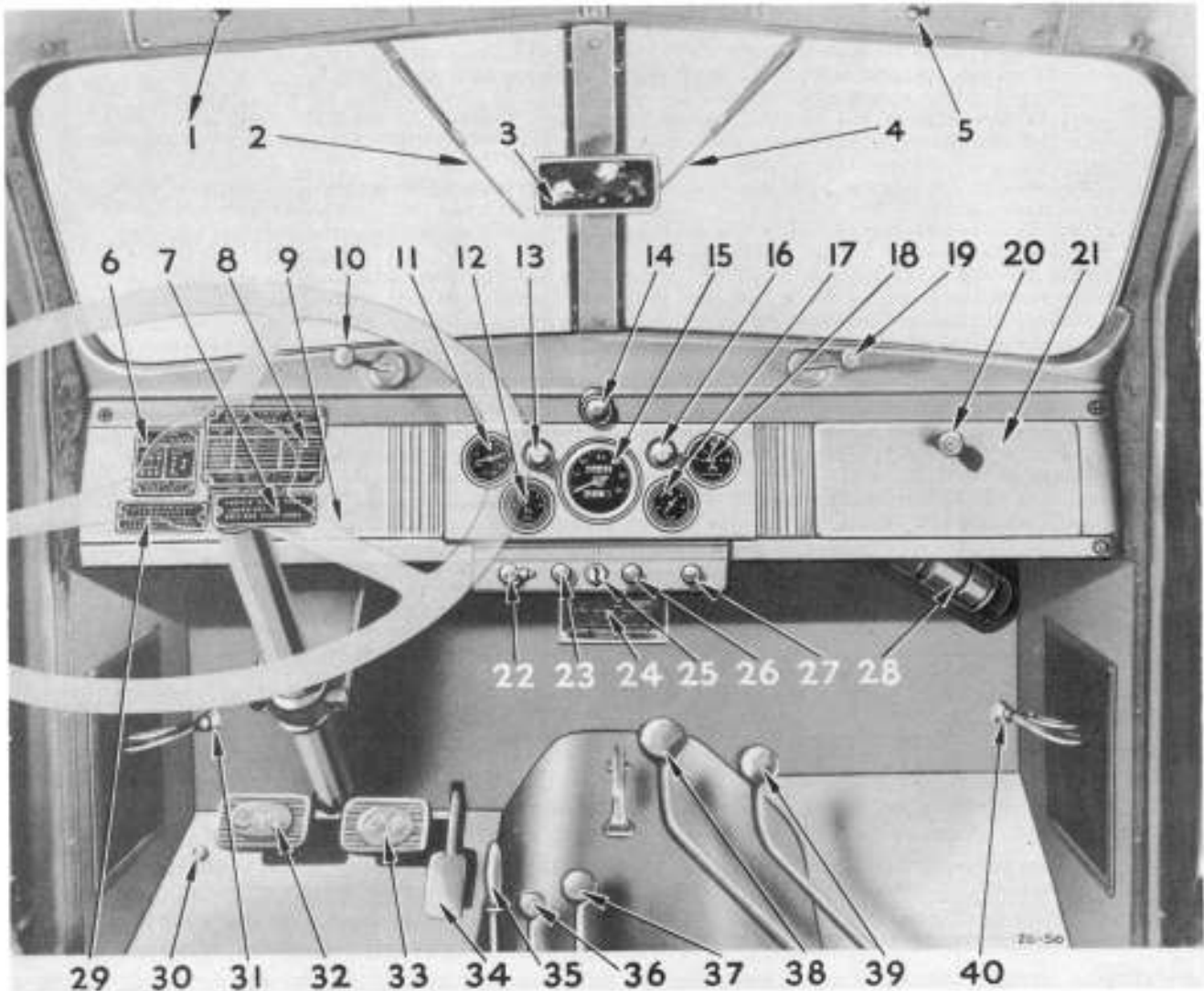
Driver's Instructions

Fig. 1 Interior of Driver's Cab - Showing Controls and Instruments.

- | | | |
|--------------------------------------|---------------------------------|--|
| 1. Windshield Wiper Switch | 14. Instrument Light | 27. Instrument Light Switch |
| 2. Windshield Wiper | 15. Speedometer | 28. Tire Extinguisher |
| 3. Rear View Mirror | 16. Ammeter and Oil Gauge Light | 29. Cooling Caution Plate |
| 4. Windshield Wiper | 17. Oil Gauge | 30. Dimmer Switch |
| 5. Windshield Wiper Switch | 18. Ammeter | 31. Cowl Ventilator |
| 6. Shifting Arrangement Plate | 19. Windshield Regulator | 32. Clutch Pedal |
| 7. Publication Plate | 20. Package Compartment Lock | 33. Brake Pedal |
| 8. Road Speed Caution Plate | 21. Package Compartment | 34. Accelerator Pedal |
| 9. Steering Wheel | 22. Light Switch | 35. Hand Brake Lever |
| 10. Windshield Regulator | 23. Throttle Button | 36. Starter Lever |
| 11. Temperature Gauge | 24. Serial Number Plate | 37. Transmission Gear Shift Lever |
| 12. Fuel Gauge | 25. Ignition Switch | 38. Transfer Case Shift Lever |
| 13. Temperature and Fuel Gauge Light | 26. Choke Button | 39. Transfer Case Front Axle Shift Lew |
| | | 40. Cowl Ventilator |

PUBLICATIONS APPLYING TO THIS VEHICLE
PARTS LIST
MAINTENANCE MANUAL

"Publication Plate" - gives TM numbers of Maintenance Manual and Parts Book application to each vehicle.

GMC MAINTENANCE MANUALDRIVERS INSTRUCTIONS

Our instructions to Drivers constitute one of the most important purposes of this manual - as it is our contention that good driving embraces more than the basic acts of starting operating and stopping a motor vehicle. By adhering to good driving practices and thru complete knowledge of the vehicle, a good Driver will obtain full benefit of GMC economy - in low operating and low maintenance costs.

The natural function of a GMC truck is smooth and "rhythmic" without sharp clicks, knocks, or unusual sounds. The good Driver soon becomes accustomed to the operation or "feel" of his vehicle and regardless of his knowledge of its mechanical construction, is quick to detect any changes in its normal operation. On the other hand, the Driver is not expected to rely entirely upon sound or instinct for trouble diagnosis - and, accordingly, instruments are provided which indicate the condition of such vital items as Engine Temperature, Engine Oil Pressure, Electrical Charging Rate, Quantity of Fuel etc., all of which are useful aids to good driving. Refer to "Interior View of Cab" for the location and identity of these instruments; also read the balance of this section for useful information regarding their purpose and function.

In addition to the information contained in this section, we particularly refer all Drivers to "Service Diagnosis" data at end of each section of this book. Careful study of these items will enable the Driver to recognize even gradual changes in the mechanical condition of various units, and will thus encourage the application of corrective service BEFORE failure and BEFORE costly repairs become necessary.

Whether or not the Driver is thoroughly acquainted with properly handling a truck, or is only a beginner, this section should be studied carefully to assure complete familiarity with the details of operation which apply on these trucks.

FUNCTIONS OF CONTROLS AND INSTRUMENTS

The following items are listed in same sequence as sections of this manual. Reference to Introductory Page of each section should be made for additional service information of interest to the driver.

CAB (ALSO SEE SECTION #3 IN THIS BOOK)

WINDSHIELD WIPER. Dual windshield wipers are vacuum operated. Separate control switches are provided for independent operation of each windshield wiper

WINDSHIELD WIPER SWITCH. Switches are pulled out to turn windshield wipers "ON".

WINDSHIELD REGULATOR. Windshields are operated with control levers above instrument panel in cab. Right and Left hand windshields are each operated independently and may be held either opened or closed by turning handles to obtain desired position.

SPEEDOMETER. Speedometer indicates road speed of vehicle in miles per hour. See Fig. 3. NEVER allow vehicle speed to exceed maximum permissible road speeds as shown on chart. This is particularly important when

descending hills and extreme caution is required. It is willful neglect of good driving practices to permit excessive vehicle and engine speeds.

PACKAGE COMPARTMENT. Located on R.H. side of instrument panel is a handy built-in container for any small articles such as this Maintenance Manual, Flashlight, Glasses, Gloves, etc.

PACKAGE COMPARTMENT DOOR LOCK. Pressing inward on button unlocks door of package compartment.

SERIAL NUMBER PLATE. Numbers on this plate identify vehicle--they should always be stated when ordering parts or requesting any other service.

FIRE EXTINGUISHER. Special care should be exercised to SEE THAT ALL DRIVERS ARE