# **M & MV Tractor**

**Operators Manual** 

1004204R2

Reprinted

CASE III



This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED. The message that follows the symbol contains important information about your safety. Carefully read the message. Make sure you fully understand the causes of possible injury or death.

SB001

IF THIS MACHINE IS USED BY AN EMPLOYEE, IS LOANED, OR IS RENTED, MAKE SURE THAT THE OPERATOR UNDERSTANDS THE TWO INSTRUCTIONS BELOW.

#### BEFORE THE OPERATOR STARTS THE ENGINE:

- 1. GIVE INSTRUCTIONS TO THE OPERATOR ON SAFE AND CORRECT USE OF THE MACHINE.
- 2. MAKE SURE THE OPERATOR READS AND UNDERSTANDS THE OPERATOR'S MANUAL FOR THIS MACHINE.



#### IMPROPER OPERATION OF THIS MACHINE CAN CAUSE INJURY OR DEATH.

BEFORE STARTING THE ENGINE, DO THE FOLLOWING:

- 1. READ THE OPERATOR'S MANUAL.
- 2. READ ALL SAFETY DECALS ON THE MACHINE.
- 3. CLEAR THE AREA OF OTHER PERSONS.

LEARN AND PRACTICE SAFE USE OF MACHINE CONTROLS IN A SAFE, CLEAR AREA BEFORE YOU OPERATE THIS MACHINE ON A JOB SITE.

It is your responsibility to observe pertinent laws and regulations and to follow manufacturer's instructions on machine operation and maintenance.

See your Authorized Case dealer for additional operator's manuals, parts catalogs, and service manuals.

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## INTRODUCTION

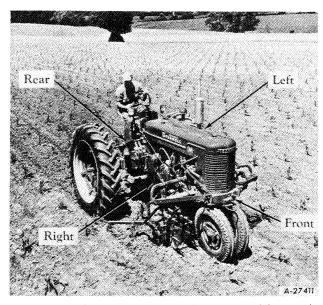
Assembled in this book are operating and maintenance instructions for the Farmall M and MV. This material has been prepared in detail in the hope that it will prove helpful to you in providing a better understanding of the correct care and efficient operation of your tractor.

If you should need information not given in this manual, or require the services of a trained mechanic, get in touch with the International Harvester dealer in your locality. Dealers are kept informed on the latest methods of servicing tractors. They carry stocks of IH parts, and are backed in every case by the full facilities of a nearby International Harvester District Office.

Throughout this manual the use of the terms LEFT, RIGHT, FRONT, and REAR must be understood to avoid confusion when following instructions. LEFT and RIGHT indicate the left and right sides of the tractor when facing forward in the driver's seat. Reference to FRONT indicates the radiator end of the tractor, and REAR the drawbar.

The illustrations in this manual are numbered to correspond with the pages on which they appear; for example, *Illusts.* 6 and 6A are on page 6.

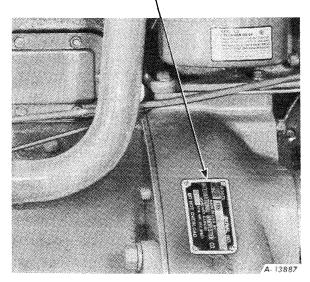
When in need of parts, always specify the tractor and engine serial numbers. The tractor serial number is stamped on a name plate attached on the left side of the clutch housing. The serial number is preceded by the letters FBK for the Farmall M and FBKV for the Farmall MV. See Illust. 2. The engine serial number is stamped on the right side of the



engine crankcase above the battery ignition unit. This serial number is preceded by the letters FBKM for the Farmall M and FBKVM for the Farmall MV. See Illust. 2A.

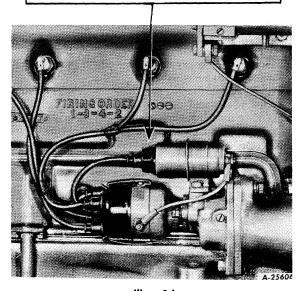
For ready reference we suggest that you write these serial numbers in the spaces provided below. The prefix letters printed in the boxes below are for the Farmall M; for the Farmall MV, change them accordingly.

Tractor serial number FBK

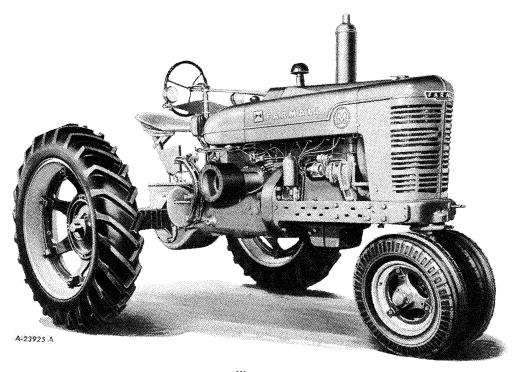


Illust. 2
Location of tractor serial number.

Engine serial number FBKM\_\_\_\_\_



Illust. 2A
Location of engine serial number.



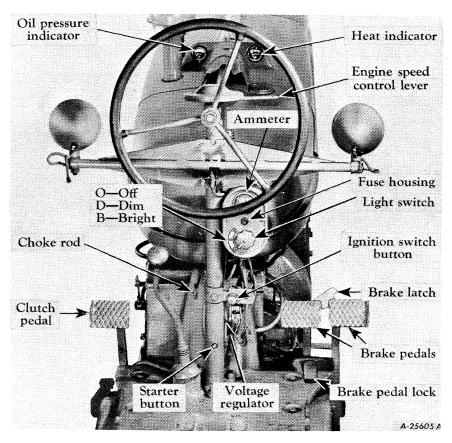
Illust. 3
Right front view of the Farmall M.



Illust. 3A Right front view of the Farmail MV.

## Instruments and Controls

A variety of special equipment is available for use with the Farmall M and MV. The instructions for operating and maintaining the special equipment have been included in the instructions for operating and maintaining the tractor. Disregard the instructions for special equipment not on your tractor.



Illust. 4
Location of controls.

## Brake Pedals

These pedals are used to stop the tractor, to hold the tractor in a stationary position, or to assist in making sharp turns as outlined below:

To stop the tractor, depress both pedals at the same time. Before driving the tractor in high gear, always latch the pedals together.

To hold the tractor in a stationary position, latch the pedals together, depress and lock them in this depressed position by using the brake pedal lock.

To assist in making a sharp turn, operate the pedals individually, depressing the pedal on the

side toward which the turn is to be made.

The brake pedal latch (*Illusts. 4 and 16*) is used to latch both brake pedals together, causing the brakes to operate simultaneously.

Caution! Always latch the brake pedals together when driving the tractor in high gear (5th speed). To latch the pedals together, engage the latch (located in back of left pedal, *Illust.* 16) in the slot in back of the right pedal. When brake pedals are not latched together, the latch should rest in the slot in back of the left brake pedal.

The brake pedal lock (Illust. 16) is used to lock the brake pedals in the depressed position which prevents the tractor from moving.

#### Clutch Pedal

This pedal, when depressed all the way, disengages the engine from the transmission.

#### Choke Rod

The choke rod makes it possible to regulate the carburetor choke from the driver's seat. Pulling out on the choke rod closes the carburetor choke for starting the engine; pushing it back in opens the choke.

### Carburetor Choke Lever

## (Tractors without Starting Motor)

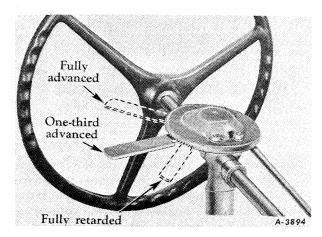
The carburetor choke lever controls the air supply to the carburetor. When the choke lever is moved toward the rear (closed position), the air supply is cut off, thereby enriching the fuel mixture for starting the engine. Move the carburetor choke lever all the way to the rear before cranking the engine. Moving the choke lever forward opens the choke for normal engine operation.

### **Engine Speed Control Lever**

This lever controls the speed of the engine and, when set in a given position, will maintain a uniform engine speed even though the engine load may vary.

The rated or maximum full load governed speed is 1450 r.p.m.; maximum idle speed is approximately 1595 r.p.m.; minimum idle speed (hand throttle) is 400 to 450 r.p.m. with the engine speed control lever fully retarded. See Illust. 5. Never operate the engine at more than the regular governed speed. Excessive speeds are harmful.

The governor is set at the factory and should require no adjustment. Consult your International Harvester dealer if the governor does not function properly.



Illust. 5 Various positions of the engine speed control lever.

#### Oil Pressure Indicator

This indicator (Illusts. 4 and 5A) shows whether lubricating oil is circulating through the engine. The indicator needle should be in the white area when the engine is running (Illust. 5A). If it is not in the white area, stop the engine immediately and investigate the cause of the oil pressure failure. If you are unable to find the cause, be sure to consult your International Harvester dealer before operating the engine.



Illust. 5A

Oil pressure indicator, showing needle in correct operating position.

## Ignition Switch Button

This button closes and opens the electrical circuit for operating and stopping the engine. Pull the button out for operating and push it in to stop the engine.

Caution: On tractors with battery ignition, when the engine is not operating or the engine has stalled and the operator leaves the tractor, the ignition switch button must be pushed all the way in, so that the switch is in the "off" position, to prevent battery discharge.

#### Starter Switch Button

To start the engine, adjust the choke rod and press down on the starter switch button as explained on page 10.

### Light Switch

The switch has three positions: "D"—dim lights; "B"—bright lights; and "O"—off.

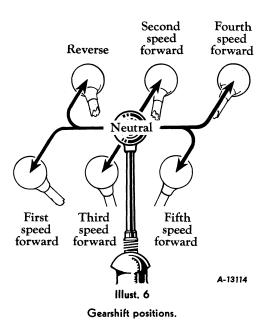
#### Ammeter

This instrument indicates the charging rate of the generator or the discharge rate of the battery. If it shows discharge continuously, investigate the cause to avoid completely discharging the battery and possible damage to the generator. Refer to pages 46 to 57 for additional information on electrical equipment.

## Gearshift Lever

This lever is used to select the various gear ratios in the transmission. There are five forward speeds and one reverse speed. See Illust. 6.

Note: The fifth speed is locked out when steel wheels are used; for further instructions refer to page 16.



#### Power Take-Off Shifter Rod

The shifter rod is used to engage or disengage the power take-off. Refer to pages 16 and 17 for operating instructions.

#### Radiator Shutter Control Crank

The control crank opens and closes the radiator shutter, controlling the engine temperature. Turn the crank counterclockwise to close the shutter and clockwise to open the shutter.

Note: Tractors with gasoline engines are not regularly equipped with this feature.

#### Heat Indicator

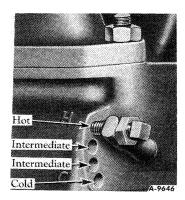
This indicator (Illusts. 4 and 6A) registers the temperature of the liquid in the cooling system. The indicator pointer should be in the center of the "RUN" range (Illust. 6A) for engines using distillate or kerosene for fuel, and on the low side of the "RUN" range for engines using gasoline for fuel.



Illust, 6A

Heat indicator in correct operating position when operating on distillate or kerosene.

#### Manifold Heat Control Lever



Illust, 6B

Heat control valve set in hot position (distillate or kerosene engines only).

This control lever (*Illust. 6B*) is used only on distillate or kerosene engines. For normal operation, set the lever in the top notch "HOT" position. If the distillate or kerosene engine is to be operated on gasoline, set the control lever in the bottom notch "COLD" position, and remove the manifold shield. For complete instructions refer to pages 12 to 14.



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