

# **Overhauling McCormick-Deering Farmall Tractors**

## **Operator's Manual**

**A-120-S**

**Reprinted**








*THIS SAFETY ALERT SYMBOL INDICATES IMPORTANT SAFETY MESSAGES IN THIS MANUAL. WHEN YOU SEE THIS SYMBOL, CAREFULLY READ THE MESSAGE THAT FOLLOWS AND BE ALERT TO THE POSSIBILITY OF PERSONAL INJURY OR DEATH.*

M171B

If Safety Decals on this machine use the words **Danger, Warning or Caution**, which are defined as follows:

- **DANGER:** Indicates an immediate hazardous situation which if not avoided, will result in death or serious injury. The color associated with Danger is RED.
- **WARNING:** Indicates an potentially hazardous situation which if not avoided, will result in serious injury. The color associated with Warning is ORANGE.
- **CAUTION:** Indicates an potentially hazardous situation which if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. The color associated with Caution is YELLOW.

If Safety Decals on this machine are ISO two panel Pictorial, decals are defined as follows:

- The first panel indicates the nature of the hazard.
- The second panel indicates the appropriate avoidance of the hazard.
- Background color is YELLOW.
- Prohibition symbols such as   and  if used, are RED.



# WARNING

IMPROPER OPERATION OF THIS MACHINE CAN CAUSE INJURY OR DEATH. BEFORE USING THIS MACHINE, MAKE CERTAIN THAT EVERY OPERATOR:

- Is instructed in safe and proper use of the machine.
- Reads and understands the Manual(s) pertaining to the machine.
- Reads and understands ALL Safety Decals on the machine.
- Clears the area of other persons.
- Learns and practices safe use of machine controls in a safe, clear area before operating this machine on a job site.

It is your responsibility to observe pertinent laws and regulations and follow Case Corporation instructions on machine operation and maintenance.

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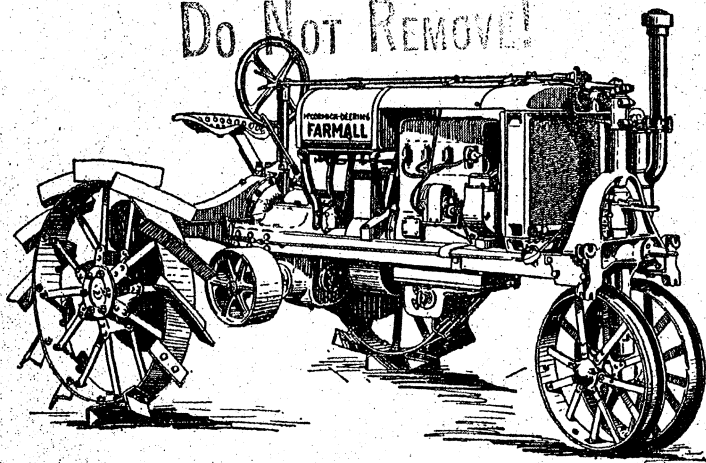
# OVERHAULING

## M<sup>c</sup>CORMICK-DEERING FARMALL TRACTORS

SHOWN BY ACTUAL PHOTOGRAPHS

DEPT. 12 RECORD COPY

DO NOT REMOVE!



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## **CLEANING COOLING SYSTEM**

It is advisable to clean the cooling system at least once a year and more frequently if the water contains lime, salt or gypsum. The system should be examined frequently to see that the water passages are not clogged by scale, sediment or other deposits. It is important that the cooling water should have free circulation through the radiator, the cylinder water jacket and the radiator connections.

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## **USE CLEAN WATER ONLY**

If it is possible to use rain water in the cooling system, very little or no scale will be formed. Nearly all other kinds of water will produce a scale. Such scale can be dissolved or loosened so that it can be flushed out. For this purpose use a mixture of one part commercial muriatic acid and seven parts rain water. Put this in the cooling system and allow to remain from 24 to 36 hours before the work of general overhauling is started. Drain and flush the cooling system to remove all the acid. The treatment should be repeated if the scale remains.

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## **REMOVE THE DIRT**

Before starting the work of overhauling, it is always advisable to remove the dirt which has accumulated on the tractor. This dirt contains grit which may injure the engine or working parts if it should come in contact with them. When various parts are opened up for inspection, dirt might fall in or get into the grease or oil and eventually find its way into some bearing or on other working part, causing wear and decreasing the efficiency. A little care in removing the dirt will be playing safe and may avoid injury in the future.



## **OVERHAULING McCORMICK-DEERING FARMALL TRACTORS**

Farmall tractors are designed throughout to give maximum service. The highest quality of materials and workmanship is employed. However, in any machine a certain amount of wear will inevitably occur, so that sooner or later adjustments must be made to take up this wear, and worn parts replaced with new ones. To meet these requirements, Farmall tractors are designed for convenient overhauling which can be done without extensive machine shop equipment.

This book has been prepared to acquaint Farmall owners and operators with the construction of their tractors and to assist them in doing any necessary overhauling work they wish to do with the least possible effort. Actual photographs have been used wherever possible to show the various overhauling operations. Sufficient reading matter is included to make each picture and operation plain.

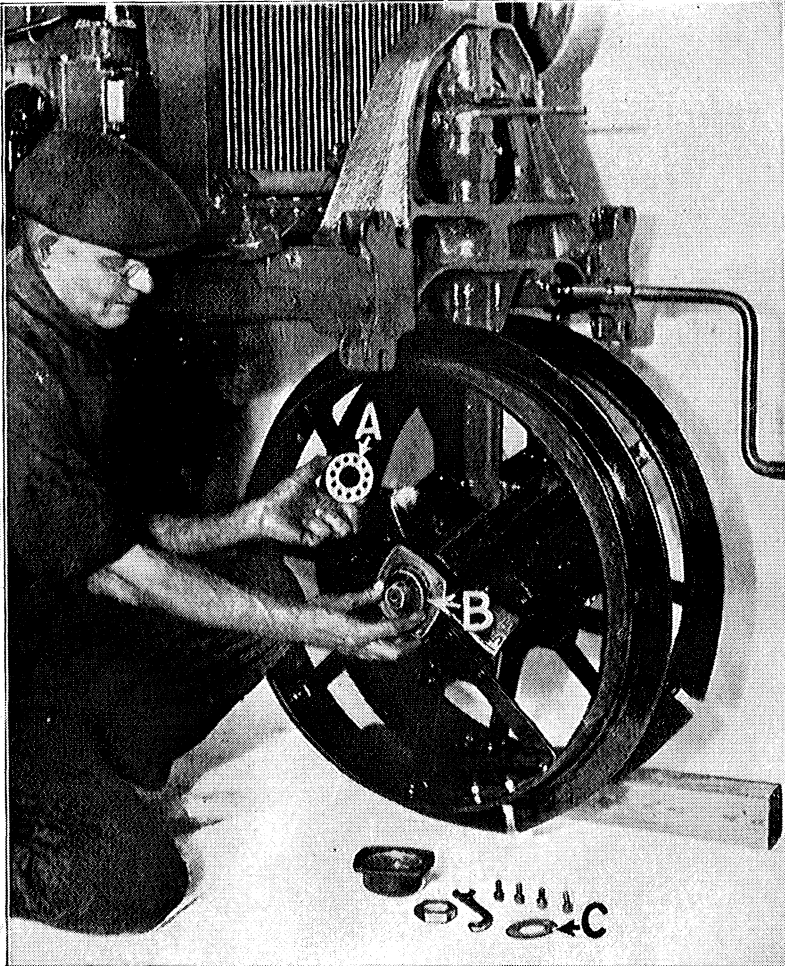
With the increased demand for power machines and the intensive use of tractors has come the development of special equipment for servicing these machines. The application of this equipment is shown in several places in this book. Should you desire to have experienced workmen service your tractor, complete overhauling assistance can be arranged for through the McCormick-Deering dealer. It is advantageous to have the overhauling work done during slack seasons. A thorough winter overhauling is good insurance against loss of time during the busy season.

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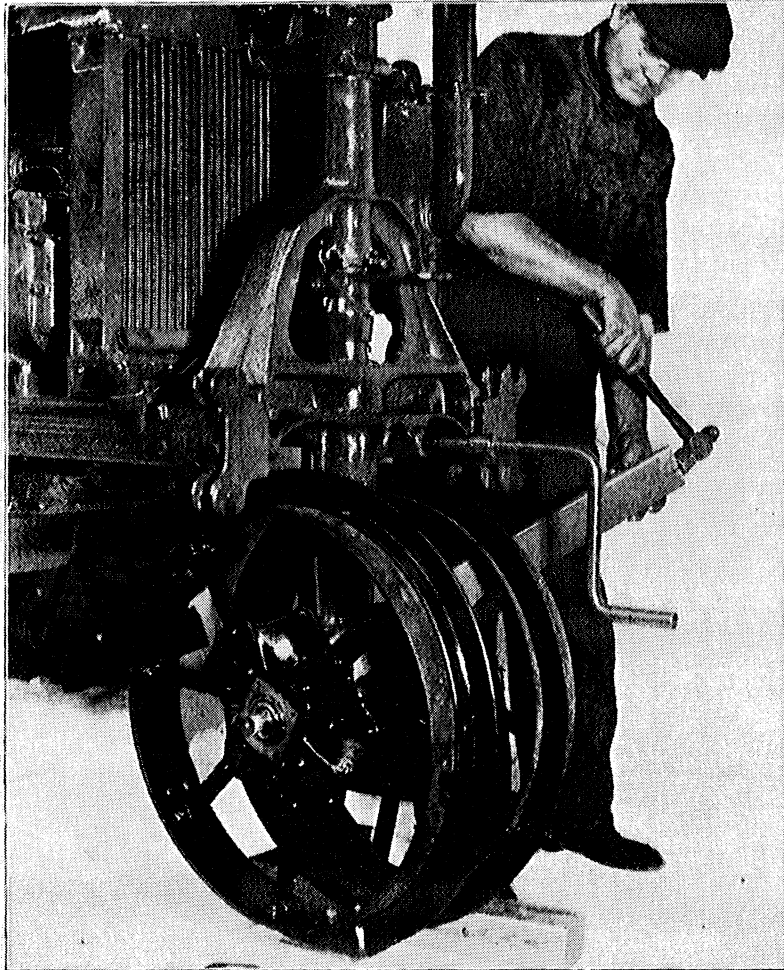
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**Illust. 1—Adjusting front wheel bearing**

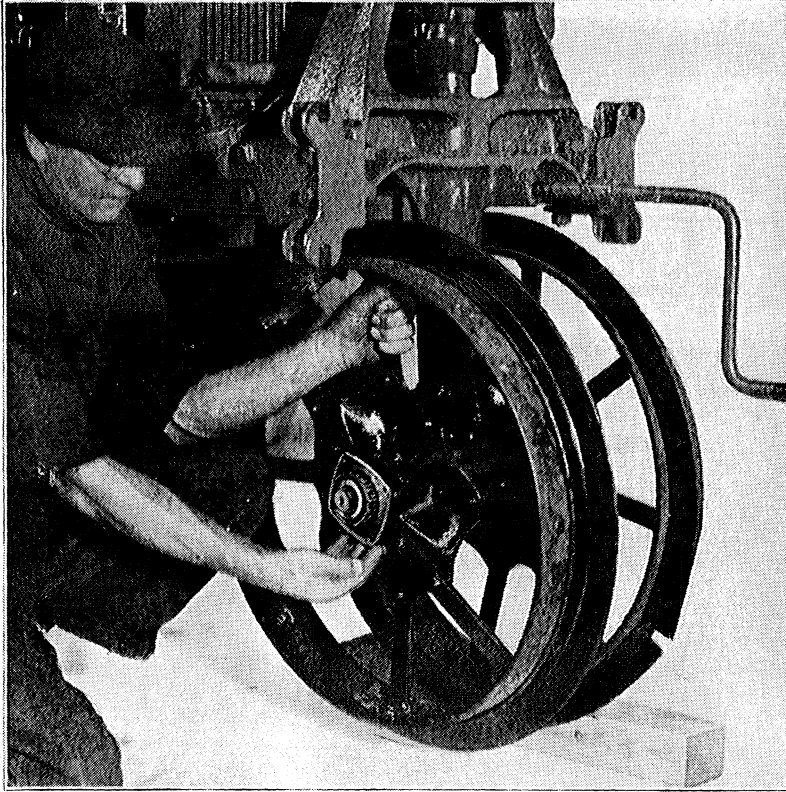
To adjust a front wheel bearing, run the opposite wheel on a block of wood as above. Remove the four cap screws and take off the hub cap. Straighten the nut lock "C" and remove the nut. Next take off the adjusting lock "A" held in left hand. The adjusting nut in the right hand should be turned to the right until just snug, at the same time rotating the wheel several turns. Then turn the nut back about one-sixteenth of a turn. Reassemble by placing adjusting lock "A" so one of the holes fits over pin "B" in the adjusting nut. Replace nut lock "C," locating the small projection on side opposite pin "B." Replace the nut, bend the lock nut, and replace the hub cap.



**Illust. 2—Removing front wheel**

To remove the front wheel proceed as in Illust. 1, and in addition take off the adjusting nut. Oftentimes the wheel can be "rocked off." If this fails, use a stick of wood as shown above and gently tap the wheel until it is loosened (see Illust. 3).





**Illust. 3—Removing front wheel**

After the front wheel has been loosened, as shown in Illust. 2, hold one hand under the bearing so it will not fall in the dirt. When a bearing of this kind becomes filled with dirt and dust it is very difficult to thoroughly clean it. This precaution will save time and difficulty later.



Our support email:

[ebooklibonline@outlook.com](mailto:ebooklibonline@outlook.com)