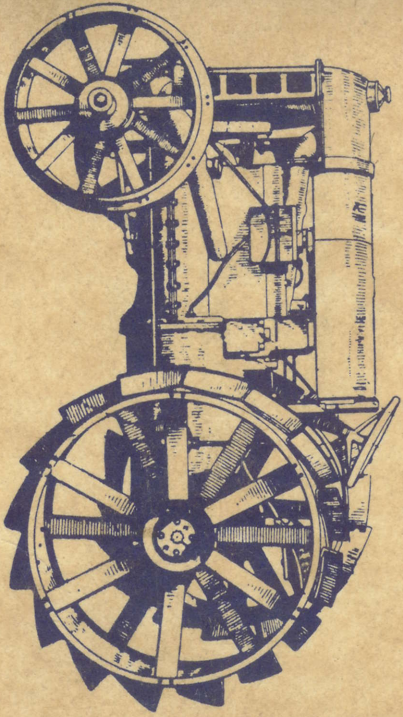


FORDSON

FARM TRACTOR



CONSTRUCTION

OPERATION

REPAIR.

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BY
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1925

CHAPTER VII

OPERATION AND MAINTENANCE OF FORDSON TRACTOR

Putting Tractor in Service—Precautions before Starting the Tractor—Transmission Oiling Important—Fill Both Fuel Tanks—Control Lever Arrangement—How to Start Fordson Tractor Motor—How to Shift Gears—To Put Tractor in Action—To Stop Tractor—How to Drive the Tractor—How the Clutch Works—How Vaporizer Works—Best Mixture of Air and Gas—Function of Shunt Valve Lever—Function of Float Mechanism—How Vaporizer is Adjusted—Gasoline May Be Used—Water in Fuel Causes Trouble—Construction and Action of Air Washer—Fordson Tractor Maintenance—Transmission Lubrication—Keep Timer Oiled—Keep Tractor Clean—Lubrication Chart—Putting Tractor Up for Winter—Important Instructions to Operator Summarized—Don't Race the Motor—Shifting Gears—Braking the Tractor—Lubrication—Hitch.

THE Fordson tractor has been in the market now for several years and thousands have been given tests that demonstrate their practical value in the numerous applications in agricultural work to which they have been applied. The general construction of this tractor, which is made by Henry Ford and Son of Dearborn, Mich., has been described in the preceding chapter, but owing to demands of our readers, information regarding the operation and use of this tractor as furnished by its makers has been compiled in a separate chapter because the importance of the subject warrants a more complete exposition in this 1920 edition.

Many farmers are already familiar with the opera-

The Fordson Tractor

tion of the Ford tractor motor which is modified slightly from that used in the passenger car for tractor use and increased in power. The ignition system is the same as used in the Model T, as is the cooling and engine lubrication. The gearing operates on the sliding gear principle, however, and the carburetor uses kerosene as fuel for regular operation though gasoline is used for starting purposes and for running the engine until it gets warmed up enough to use the heavier fuel.

The instructions that have been given in preceding chapters relative to repairs of the model T power plant apply just as well to that of the Ford tractor. The engine is subject to the same troubles as that of the passenger car and truck and the same remedies will cure them. Special instructions are given for handling the clutch and gear shift of the tractor, which differ in operation from similar devices in the touring car or truck. Suggestions are also given for the use of the tractor in plowing and interesting photographs are presented showing the tractor at work.

Putting Tractor in Service.—Before starting the tractor, the following instructions must be followed: (1) Fill the radiator with clean water. (2) Fill the crank case to the proper level with heavy, high-grade motor oil. (3) Fill the transmission housing to the level with heavy fluid gear oil. (4) Fill the kerosene tank nearly full. (5) Fill the gasoline tank nearly full. (6) Fill the air washer with clean water.

Precautions Before Starting the Motor.—Before starting the motor fill the radiator, by removing cover at top (see Fig. 117), with clean fresh water. If clean water cannot be obtained it is advisable to strain it through muslin or other similar material to prevent any foreign

Putting Tractor in Service

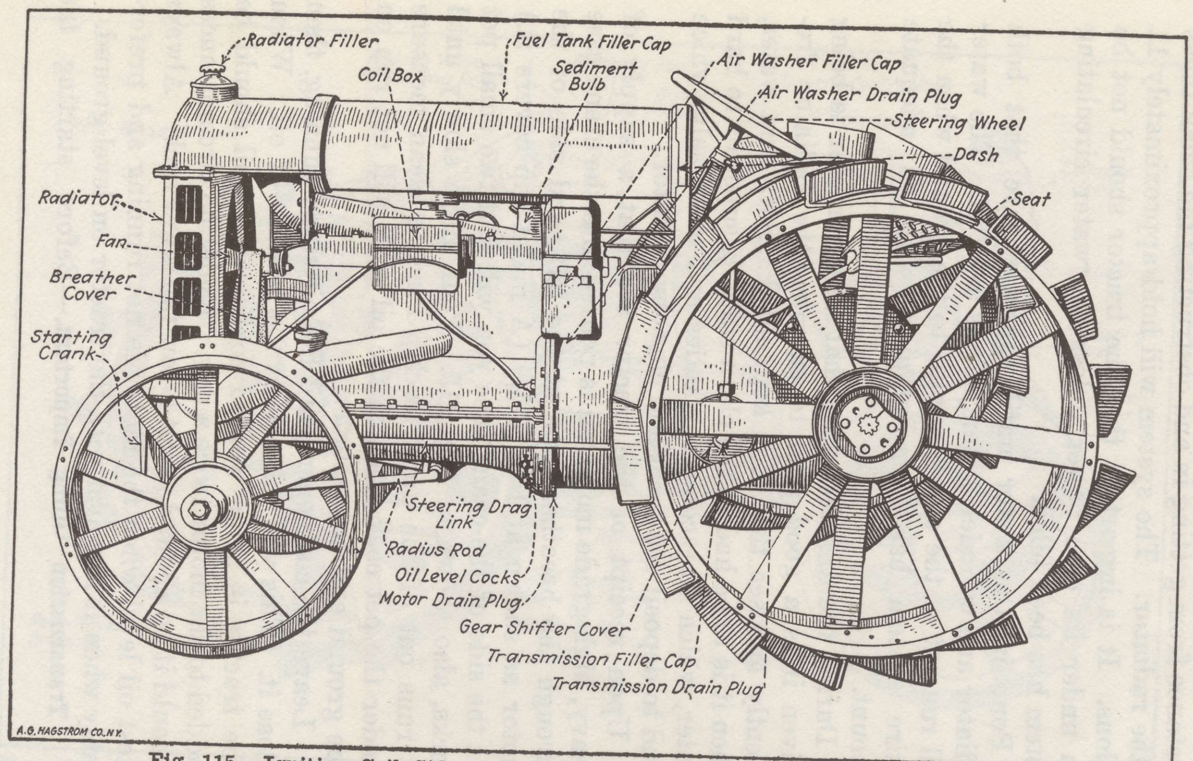


Fig. 115.—Ignition Coil Side of Fordson Tractor Showing Air Washer Location.

The Fordson Tractor

substance from getting in and obstructing the small tubes of the radiator. The system will hold approximately 11 gallons. It is important that the tractor should not be run under its own power unless the water circulating system has been filled.

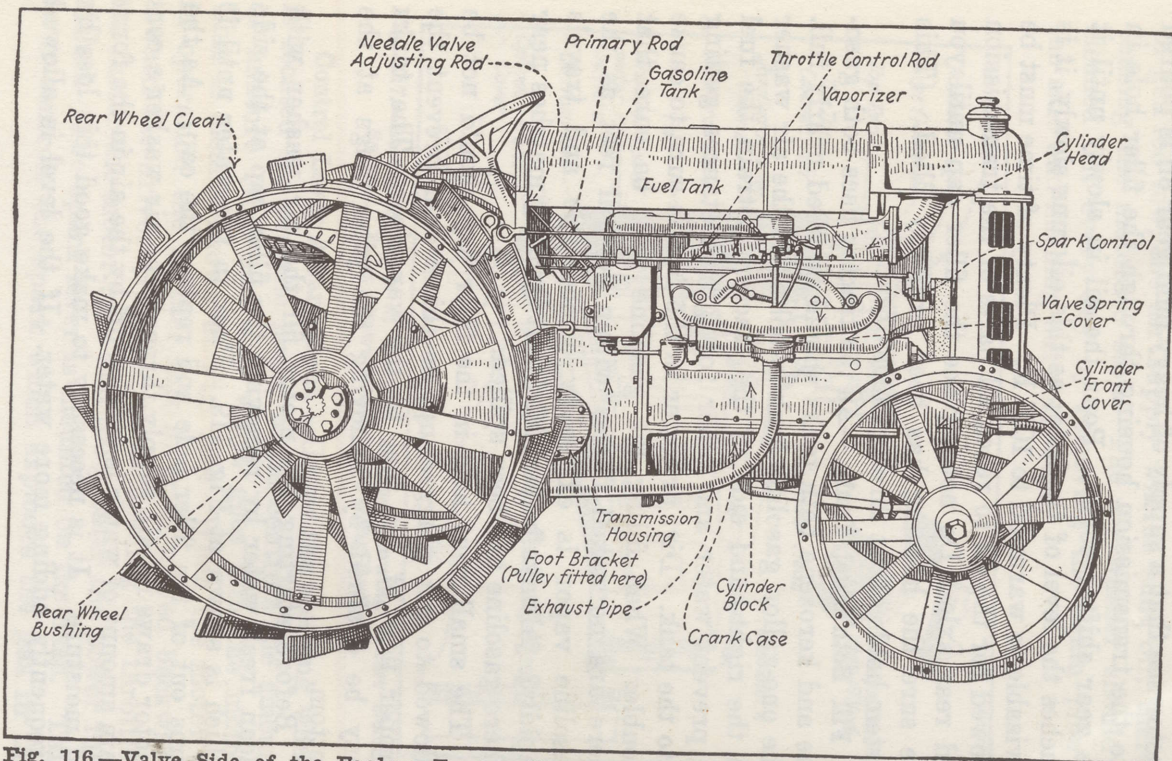
Pour in the water until you are sure that both radiator and cylinder water jackets are full. The water will run out of the overflow pipe to the ground when the entire system has been supplied with an adequate amount.

During the first few days that a new tractor is being driven it is a good plan to examine the radiator frequently and see that it is kept filled. Soft rain water, when it is to be had in the clean state, is superior to hard water, which may contain alkalies and other salts which tend to deposit sediment and clog the radiator.

Upon receipt of the tractor see that a supply of heavy, high-grade motor oil is poured into the crank case through the breather pipe at the left-hand side of the motor as shown at Fig. 115. (A metal cap covers it.) At the side of the crank case you will find two small pet cocks, also shown at Fig. 115. Pour oil in slowly until it runs out of the upper cock. Place a clean measure under the pet cock to catch the oil so it will not run on the ground and be wasted.

Leave the cock open until the oil stops running, then close it. This will take about $2\frac{1}{2}$ gallons of oil. When the tractor is being worked continuously, oil should be added to the motor twice a day. Under no circumstances should it be allowed to get below the lower cock. Always test oil level when the motor is not running and preferably when it is warm with the tractor on level ground.

Transmission Oiling Important.—Before starting the



Putting Tractor in Service

Fig. 116.—Valve Side of the Fordson Tractor Showing Auxiliary Tank for Gasoline and Location of Kerosene Vaporizer.