



Which do you prefer in your tractor?

**—a combination distillate-gasoline engine
—or a high-compression straight
gasoline engine?**

*You can have either in your
McCormick-Deering O-4 or O-6*

It is now generally recognized that to get maximum power and economy from a given grade of fuel the engine must be specially designed to burn that grade of fuel. Distillate and high-octane gasoline being the two grades of tractor fuel now most commonly used, McCormick-Deering O-4 and O-6 tractors are supplied with either of two types of engine—one designed especially for distillate and one for high-octane gasoline.

Distillate does not vaporize as readily as high-grade gasoline and its anti-knock rating is considerably lower. Consequently, to assure proper vaporization and combustion, the fuel mixture in the McCormick-Deering distillate engine is preheated in the intake manifold (heat control valve adjusted to "hot" position) and compression is held at a point which prevents undesirable detonation or knocking. Moreover, by means of a radiator shutter and heat indicator regularly supplied, the operating temperature of the engine can be maintained at the higher level necessary for full efficiency when burning distillate.

You can also use gasoline with very satisfactory results in this engine when you want to—as, for example, when using the tractor for miscellaneous jobs of short duration, for wintertime operation, etc. (Heat control



(Left) Left side of distillate-gasoline engine, with manifold heat control.

(Right) High-compression engine for use only with gasoline of 70-octane rating or better.



valve is then adjusted to "cold" position.) That is why it is called a combination distillate-gasoline engine. It should be remembered, though, that this engine was designed primarily to give you maximum power, economy, and smooth performance when operated on distillate.

On the other hand, the McCormick-Deering high-compression engine was designed to burn high-octane gasoline exclusively. Gasoline vaporizes readily under all conditions, so no fuel-heating arrangement is necessary. This engine has a "cold" manifold. And the compression ratio, higher than that of the distillate engine, guarantees the maximum in power, economy, and smooth performance from this grade of fuel.

The type of engine you select will depend on the grade of fuel you intend to use regularly—and that in turn depends on comparative fuel prices in your locality, the fuel tax situation, climatic conditions, kind of work and length of operating periods, and finally your own preferences.

Some owners, for reasons of economy, find it advantageous to burn distillate most of the time, but they like to be in a position to switch from distillate to gasoline and back again according to changing prices, operating conditions, and the season of the year. For them, the "combination" engine is a natural choice.

A good many other owners figure that more power from a higher-priced fuel is preferable—and these owners want the high-compression engine designed to burn high-grade gasoline exclusively, 70-octane or better.

You can have either type of engine in your O-4 or O-6 tractor.