

Fuel on the Farm. Kerosene, gasoline, distillate, diesel and LP.

From the early 1920s until the introduction of the new models in 1939, most IH tractors were designed to run on kerosene.

In the early 1900s farms and small towns had kerosene for lamps.

Gasoline, however, was not widely available.

No cars, no gas stations.

Kerosene was available. It was needed for illumination and heat.

Kerosene combusts well only in a hot environment. Early tractors were started on gasoline and then when hot, switched to kerosene. That switch was done with manual valves.

That also meant that early tractors had two fuel tanks. A small tank for gasoline and a larger, main tank for kerosene. Typically the gasoline tank was a gallon or less. The kerosene tank might be 10 to 20 gallons.

Distillate is a petroleum product that can be extracted during the crude oil refining process. Distillate falls between kerosene and gasoline in characteristics. It gained some popularity around 1940 because of its availability and lower cost at that time.

By 1950, virtually all tractors ran only on gasoline or diesel fuel. For older tractors that had two tanks, the larger tank was then used for

gasoline, not kerosene. The small tank was unused.

IH introduced diesel tractors in the later 1930s. Early diesel engines were difficult to start when cold. Those diesels were again started on gasoline and switched over to diesel fuel when warmed up.

Diesel engine development persisted, however because diesel engines have advantages. Diesel engines have significantly lower maintenance requirements than gasoline engines. Diesel fuel has often been less expensive than gasoline.

By the late 1950s diesel engines were improved to start directly. Even then, unless the engine was hot it was necessary to pre-heat the cylinders. Electrically powered heating plugs (glow plugs) were used.

Many diesels still require some glow plug use, even today.

LP (Liquefied Petroleum) enjoyed popularity in the early 1950s and again in the 1970s. There are advantages and disadvantages to LP. None of those pros and cons are overwhelming however. Over time the encumbrances in handling pressurized gas limited the use of LP. LP tractors can normally be recognized by the large circular tank.

The tank often obstructed the operator's view. Today, farm tractor engines run on a single fuel. Either gasoline, diesel or LP.

Generally diesel for larger tractors, gasoline for small tractors, commercial users may use LP.

LEFT. This is a photo of the fuel tanks on our ancient 15-30 McCormick Deering. The small cylinder in right center is the original gasoline tank. The large oval tank immediately behind it is the original kerosene tank. Beyond that is a similar but smaller water tank. The water tank has a pop can covering the inlet. Water was added to engines designed to run primarily on kerosene to make them run smoother when hot. The water was introduced through the carburetor to reduce pre-ignition, which was undesirable.



BELOW: A photo taken in 1955 on the Phinney Brothers Farm near Granite Falls, Minnesota. The photo was taken for the Midpane Gas Company and used in a LP gas promotion. The three farmers are Gunval Knutson, Merle Phinney and Wayne Phinney. The tractors are a Farmall 400, a Farmall Super M and a Farmall H. Photos courtesy of the Phinney Family.



BELOW: This is another Phinney photo from around 1930. This is a Farmall F-20. Notice the two tank setup. No water tank on this tractor. IH engineers have solved the pre-ignition problem with improved engine cooling. The F-20 has a sack of feed riding on the drawbar. Apparently his tractor was handy enough to help with simple chores. In the background: windmill, water pump, barn and grain bin.

