

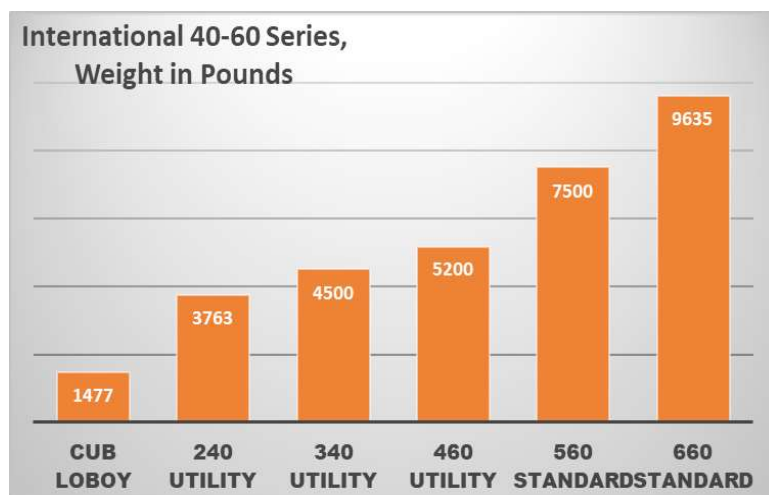
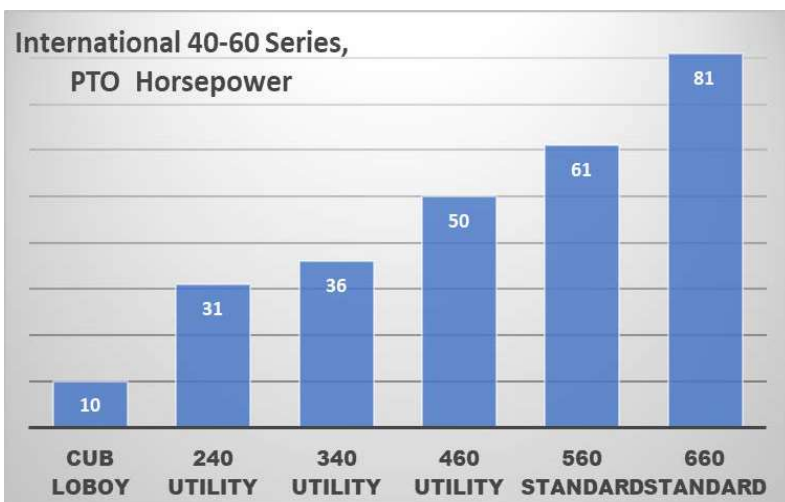
The 40 60 Series Internationals. (1958-63)

The International 240 Utility.	(1958-1962)
The International 340 Utility.	(1958-1963)
The International 450 Utility.	(1958-1963)
The International 560 Standard.	(1958-1963)
The International 660 Standard.	(1959-1963)

With this series, IH added a new model, the 560 International. The 560 filled the huge horsepower gap between the 460 and the 660



Cub LoBoy, 240 Utility, 340 Utility, 460 Utility, 560 Standard, 660 Standard.





Cub LoBoy, 240 Utility, 340 Utility, 460 Utility, 560 Standard, 660 Standard.



The International 240 Utility. (1958-1962)

The 240 Utility used the same 123 CI engine as the 230 and 200 which it replaced. The 240 runs

at 2,000 RPM for increased power. The 230 ran at 1,800 RPMs and the 200 ran at 1,400.



ABOVE: The 240 Utility is a powerful little tractor producing 31 horsepower. This tractor is shod with turf tires. It spent much of its working life tending golf courses in Nebraska. The exhaust from Utility tractors can be ejected upward through the hood or rearward beneath the rear axle. This 240 is setup for rear exhaust. I prefer that. It makes work under trees simpler.

RIGHT: The 240 has an adjustable front end, as do virtually all Utility tractors. The short front to rear wheel base makes for easy turns in a small radius.

Also, as with most Utility tractors, the 240 is easily mounted from ahead of the rear tire.

A sweet little worker.





ABOVE: Amazingly, the 240 uses the same basic engine as the A which was introduced in 1939. The A used an improved version of the engine that was developed for the F-12. Good engineering endures.

RIGHT: This 240 Utility is equipped with a simple drawbar, PTO and a belt pulley. By the time this tractor was built, belt pulleys were rare.



International 240 Utility Specification

31 Horsepower on the Belt
 28 Traction Horsepower
 In Production from 1958 to 1962
 Total Manufactured, 10,289
 This 240 was Manufactured in 1959
 4 Cylinder, 123 Cubic Inch, Gas Engine
 Engine RPM, 2,000
 Fuel Tank Capacity, 16 Gallons
 Standard Rear Tires, 11.2 X 28
 Speeds, 1.8, 3.4, 4.5, 11.8, Rev. 2.8
 MPH
 Standard Weight, 3,763 pounds
 6-volt
 1962 Price, \$2,700



Hydraulics

A hydraulic system enables a tractor to lift machines during field operations, to operate accessories such as front-end loaders, to power hydraulic motors and much more.

A hydraulic system consists of several elements.

A pump that is driven by the tractor engine.

Oil and an oil reservoir that supplies oil to the pump.

High pressure hoses that connect the pump to a load.

Valves that direct pressurized oil to a load.

The load, which can be an expandable cylinder that lifts implements or a motor that drives another machine such as an auger.

The principals of hydraulics were known and utilized since the 1600s.

The tractors of the 1920s did not have hydraulic systems.

The two row mounted cultivators, which were very common on early Farmalls were lifted by the farmer using levers. The levers were operated from the drivers seat.

IH introduced hydraulic systems on its H and M models in 1939. This low power but effective system was branded "Lift-All".

IH also introduced a pneumatic lift system on the 1939 Farmall A and B models. The pneumatic system was driven by exhaust gas pressure. I know from personal experience that the pneumatic system was hard to maintain and use. It was short lived and soon superseded by hydraulics.



The Lift-All system was powered by a belly pump within the frame of the tractor. The pump was post-clutch, so it was only active when the clutch was released. That meant the tractor needed to be moving or resting in neutral. That was a big limitation.

For example, if the load could not be lifted on the go, the tractor needed to be stopped and placed in neutral in order to lift the implement.

Low system pressure was also a limitation.

IH developed an improved hydraulic system, branded "Touch-Control", by the mid- 1940s.

That system was initially used on the Super A, the Cub and the Farmall C, all of which were introduced in the later 1940s.

The Touch-Control system was driven directly by the engine. That meant the hydraulic system was "live" anytime the engine was running. A big improvement.

On the smaller tractors, the Super A, the C and the Cub, IH provided hydraulically actuated lift arms mounted to the tractor bodies. Those arms were fine for lifting mounted implements.

Unfortunately, the system, as designed, was very limited in oil supply. There was not enough oil capacity to drive extra cylinders. Cylinders like those needed for a front end loader.

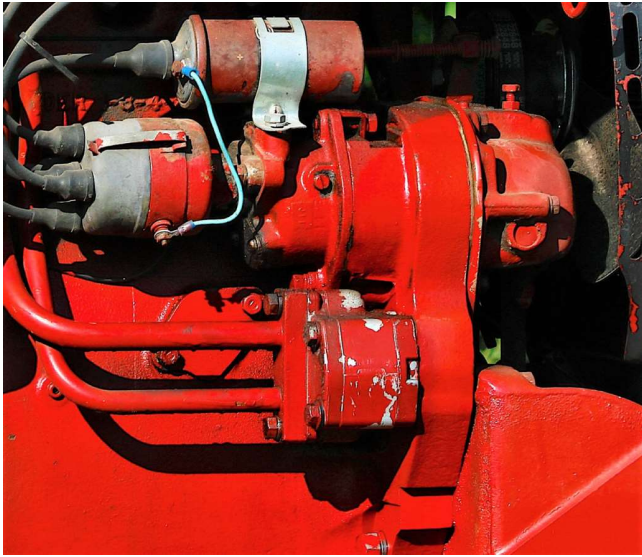
Nevertheless, many Farmall Cs and Super Cs were used with front end loaders.

To use a loader, farmers added an extra oil reservoir and more valves.

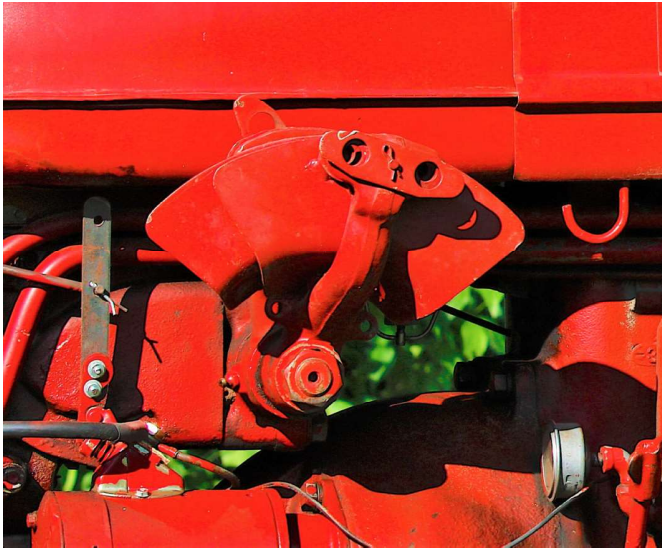
By the early 1950s IH produced a more capable hydraulic system branded "Hydra-Touch".

That was a fully modern system by the mid 1950s. With Hydra-Touch, IH offered adequate pressure, sufficient oil volume, plenty of valves and numerous accessory outlets.

The rod in the top center of this photo is the hydraulic control lever. It operates the single, one way hydraulic valve on this Farmall M. The pump and reservoir are both in the belly of the tractor near the far end of the lever. This Lift-All is virtually identical on other contemporary models such as the H or W versions.



ABOVE: The rectangular module in the lower center is the hydraulic pump. It is driven directly by the engine to produce “live” hydraulic power. The metal tubes to the left are oil “in” and oil “out”. A very similar looking pump was used on all models.



ABOVE: The mechanism in the center of this photo consists of two hydraulically controlled arms. The arms rotate on the central shaft. Each arm is operated by a separate lever. The hydraulic system on this Farmall C was primarily designed to lift a mounted cultivator.

To do so, one side of the mounted cultivator was connected to each arm with appropriate metal linkage.



ABOVE: This view of a Farmall Super C shows the remnants of hardware which was added to operate a mounted loader. The two levers just right of the steering column are the factory supplied controls for lifting a cultivator. Everything else, valves, hoses, and a since-removed reservoir tank, was added by a former owner for use with the loader. The angle-iron brackets held the extra two gallon oil tank.

Messy, but effective.



ABOVE: Three levers control the Hydra-Touch system on this 1958 Farmall 460. Two operate auxiliary systems. One controls the FAST HITCH drawbar.

The International 340 Utility.

(1958-1963)

The International 340 Utility replaced the 350 Utility but with a new, smaller engine and a reduction in power.

Of course, it had the new rectangular styling and a full set of options.



ABOVE: The 340 is less powerful than the 350 which came immediately before it. The 340 is almost as powerful as the 300 that preceded the 350. It retained a good power to weight ratio.

RIGHT: This 340 has a vertical exhaust, TA, Fast Hitch, wrap-over fenders, and PTO. None of the 300 Utilities had a belt pulley. This tractor has been modified for an alternator. The fuel tank extends as low as gravity flow will allow for maximum capacity. The 300 had a “too small” fuel tank.





ABOVE: The new 135 CID engine that was proven on the 330 was then used on both the row-crop and Standard versions of the 340.

RIGHT: This 340 has Fast Hitch with a three point hitch adapter. It was used extensively with a rear mounted mower. The weight of the mower explains why it does not have rear wheel weights.



International 340 Utility Specifications

36 Horsepower on the Belt
 35 Traction Horsepower
 In Production from 1958 to 1963
 Total Manufactured, 12,000
 This 340 was Manufactured in 1960
 135 Cubic Inch Gasoline Engine
 166 Cubic Inch Diesel Engine
 Engine RPM, 2,000
 Fuel Tank Capacity, 15 Gallons
 Standard Rear Tires, 11.2 X 28
 Speeds, 1.8, 3.8, 5.2, 7.3, 16.1, Rev. 2.2 MPH
 Standard Weight, 4,000 pounds
 6-Volt
 1963 Price, \$3,400



The International 460 Utility.

(1958-1963)

The International 460 used the same, new, six-cylinder engines as the Farmall 460. Those are the 221 CID gas and the 236 CID diesel.

Both engines run at 1,800 RPMs.

It normally came with PTO, TA, and live hydraulics with two valves.

Many of these 460 Utilities were equipped with loaders and backhoes.

This one was a dedicated loader tractor.



ABOVE: This sturdy 460 Utility needed no extra weight. The loader that was mounted on it for its working life was weight enough.

RIGHT: This 460 Utility was special ordered without a drawbar, PTO or hydraulics. That is very unusual. It was used as a dedicated loader tractor. Hydraulic power was supplied by a front-mounted pump driven directly from the crankshaft.





ABOVE: The new, six cylinder gasoline engine provided plenty of power for loader work. This tractor has a Unit body, no mounting rails. The loader was mounted to the two threaded holes beneath the radiator and the three holes on the lower right.

International 460 Utility Specifications

50 Horsepower on the Belt
 36 Traction Horsepower
 In Production from 1958 to 1963
 Total Manufactured, 11,911
 This 460 was Manufactured in 1959
 221 CID Gasoline Engine
 236 CID Diesel Engine
 Engine RPM, 1,800
 Fuel Tank Capacity, 23 Gallons
 Standard Rear Tires, 11.2 X 28
 Speeds, 1.8, 3.9, 5.3, 7.5, 16.5, Rev.
 2.3 MPH
 Standard Weight, 5,200 pounds
 12-volt, Negative Ground
 1963 Price, \$4,100

RIGHT: This 460 Utility has the uncommon direction changing lever. Notice the black headed shaft to the left of the normal shift lever. That additional lever reverses all the gears when shifted. That control is specific to loader or construction tractors.



The International 560 Standard.

The 560 International (Standard) used the same six-cylinder engines as the 560 Farmall and the 660 International. Those are a 263 CID gas and a 281 CID diesel.

(1958-1963)

Hydra Touch hydraulics and a TA were both optional.

Optional attachments included a front loader and a backhoe. The 560 is well suited for both jobs.



International 560 Standard Specifications

61 Horsepower on the Belt
45 Traction Horsepower
In Production from 1958 to 1963
Total Manufactured, 5,598
This 560 was Manufactured in 1963
263 CID Gasoline Engine
281 CID Diesel Engine
Engine RPM, 1,800
Fuel Tank Capacity, 33 Gallons
Standard Rear Tires, 16.9 X 30
Speeds, 2.1, 3.7, 5.2, 7.3, 16.2, Rev. 2.7 MPH
Standard Weight, 6,563 to 9,460 pounds
12-volt, Negative Ground
1963 Price, \$5,500

ABOVE: *The 560 Standard is a massive tractor. Nevertheless, it handles well with power steering and disc brakes. Fully loaded for field work it weighs over 10,000 pounds.*

RIGHT PAGE: *The 560 Standard has over the wheel, Dakota fenders, a swivel seat, swinging drawbar, hydraulics, power steering, lights, and PTO. No belt pulley. The seat swings to the left or right for easier mounting and to provide space for the operator to stand while driving. A safe place to stand is a great help on long days in the fields.*



ABOVE: This left side view of the new 560 engine shows the generator, engine oil filter and exhaust manifold. IH was late to switch from generators to alternators.



Tractor Fenders

This article is about back wheel fenders.

Tractors seldom have front wheel fenders.

Farm tractors have rear fenders for at least two reasons.

Safety is one reason.

Minimizing dust and dirt for the operator is another.

The Standard tractors of the 1920s had fenders that covered the entire top side of the rear wheels. Those fenders were an integral part of the working platform. Most old Standard tractors still have their fenders.



The first Row-Crop tractors, the Farmalls, had similar full-top-cover fenders as an option. Few old Farmalls have their fenders today. Those fenders may have been exposed to damage and wrecked.

Fenders were generally an option on row crop tractors in the 1940's.

Even if the row crop came with fenders, the fenders were frequently removed.

They got in the way.

There seems to be a correlation between extant fenders and tractor access.

Row crop tractors were especially hard to mount, well into the 1950's. Fenders often made that even harder.

Utility tractors are generally mounted from ahead of the rear wheel. They always have intact fenders.

LEFT: The 10-20 Standard has excellent, over-the-wheel fenders. On this model, as with most Standards, the fender is an integral part of the operator's platform. Virtually all tractors of this type have intact fenders.



LEFT: This Farmall Regular is without fenders. Very few tractors of this type have fenders now. Fenders were an optional. It may never have had fenders. Row crop tractors like this are likely to have lost their fenders for several reasons. The fenders were exposed to damage because of their location and the more versatile experiences that a row crop tractor was exposed to. Or, they simply got in the way or blocked the view of the ground and were removed intentionally.



ABOVE: This 660 Wheatland has maximum fenders. This too is a Standard model. The luxurious fenders are a fixed part of the spacious operator's platform.



ABOVE: The Farmall C has the flat, shield-like fenders that are used on row-crop tractors. Few Farmalls have fenders in place. Used fenders are relatively easy to find on the Internet. Of all the Farmall tractors, the C is probably the most difficult to mount from the rear.



ABOVE: This Farmall 100 has flat-shield fenders that are common to all A Series and Cub tractors.

On those models, fenders are always in place.



ABOVE: The 460 Utility above has a semi-wrapped fender shape that IH used on most Utility tractors. These fenders are always in place. This tractor, like all Utilities is mounted from ahead of the rear tire.



ABOVE: The Farmall 350 has simple shield fenders. This tractor, like most Farmalls is mounted by climbing up the rear hardware.

RIGHT: This 240 Farmall is unusual in that it is mounted, fairly easily from ahead of the rear wheel. Because of that, it has Utility style, wrapped fenders



The International 660. A new Standard tractor.

(1959-1963)

The 650, the 600 and the Super W-9 were very similar machines.

The 660 is much different than the 650 it replaced.

The 660 uses the new six-cylinder, high RPM, 560 engines with 60 series styling.

To get increased power the IH engineers sped this engine up by 600 RPMs to 2,400.

When fully ballasted for field work, the 660 weighs over 15,000 pounds.

It came with Hydra Touch hydraulics, and TA.

Available in gas, diesel or LP versions.



ABOVE: Everything about the 660 is huge, square, and stocky. Yet with a relatively short, front-to-back wheelbase, a well designed work platform and power steering it handles surprisingly easy.

LEFT: Blake driving the monster into position for photos.



ABOVE: The 660 came with full cover Dakota fenders. When working wide open western fields, the tractor would be most efficient in 3rd or 4th gear. The fenders prevented the fast turning wheels from throwing dust and dirt up into the operator's space. The 660 came with a swinging drawbar, fenders, PTO, and hydraulics.

International 660 Specifications

81 Horsepower on the Belt
 70 Traction Horsepower
 In Production from 1959-63
 Total Manufactured, 6,945
 This 660 was Manufactured in 1962
 263 CID Gasoline Engine
 281 CID Diesel Engine
 Engine RPM, 2400
 Fuel Tank Capacity, 35 Gallons
 Standard Rear Tires, 18 X 34
 Speeds, 2.1, 3.8, 5.3, 7.4, 16.5, Rev. 2.8 MPH
 12-volt, Negative Ground
 Standard Weight, 9,635 to 15,255 pounds
 1963 Price, \$6,000

