

WHAT'S THE DIFFERENCE BETWEEN A 200 SERIES TRACTOR AND A 3000, 400 OR 4000 SERIES TRACTOR?

To begin with, J. I. Case is the company that designed the 200 and 400 series of garden tractors. The 200 series consists of the 210 gear-drive 10 HP Kohler engine model, the 220, 222, 224 hydraulic drive 10, 12 & 14 HP Kohler engine models and the 226 Onan 16 HP twin cylinder model that was introduced by Ingersoll in 1984.

In 1988, Ingersoll discontinued the entire 200 series and replaced it with the 3000 series consisting of the 3010, 3012, 3014, 3016, 3018 and 3020PS (power steering) models. These were offered with Kohler Magnum single cylinder engines, Vanguard V-twin engines and Onan horizontal opposed twins, depending upon the year of manufacture with HP ratings of 10, 12, 14, 16, 18 and 20, respectively. There was also a 3118 all hydraulic model for 1992 and 1993, more on that below in the explanation about the 4100 series.

The 200 series and the 3000 series are called "Lo Pro" or "Low Profile" garden tractors because they sit lower to the ground than the 400 and 4000 models do by four inches. Make no mistake; the Lo Pro models are every inch a true garden tractor. They will power the 38" and 48" snowcasters as well as the 38", 44" and 48" rotary mower decks but rated HP does play a part in attachment selection. They will not power the 60" decks because their wheelbase was held to 46 inches and that is the sole reason for them not being compatible with the big deck.

The 400 series consists of the 442, 444 Kohler K powered 12 and 14 HP models and the 446 and 448 Onan twin 16 and 18 HP models. The 442 and 444 were introduced in 1969 but the 442 became discontinued at the end of the 1971 model year. In 1972, the 16 HP 446 came on the scene and was considered to be the "top model" until the 18 HP 448 was added in 1980. These models are referred to as "Big Wheel" or "High Wheel" or "High Clearance" tractors because they offer an additional four inches of clearance under their axles that the 200/3000 series does not have as well as the 16" rear rim size instead of the 12" rim size.

Ingersoll discontinued the 400 series totally at the end of the 1988 production year and introduced the 4000 series to take its place. The 4000 series consists of the 4014, 4016, 4018, 4020 and 4020PS up to the year 2000.

In 1992, Ingersoll also introduced a line of tractors that did not use belts to drive the mower decks or snowcaster. This was called the "All Hydraulic" or "AH Series" and in the final two years, the "AHD or All Hydraulic Diesel Series. Customers could buy a 4118 or 4120 gas powered 18 or 20 HP model or a 4118D model with a 18 HP

three cylinder, water-cooled Perkins diesel underneath an extended hood. The AH program came to an end in 1994.

So now that you have a better understanding of the various models, let's discuss the actual difference between the two series.

Between 1969 and 1979, the 200 and 400 series used a 46" wheelbase. Wheelbase is the measurement from the center of the rear axle to the center of the front axle. The frames of both tractors are nearly identical. I am told that there is a small difference in the "kick up" area of the frame where it goes over the trans-axle but I have not taken the time to check this out personally. The big difference in the frames has to do with the Snap Fast mount that is welded to the front frame rails. The Snap Fast attachments (decks, snowcasters, utility blades) are a "universal fit" between all the series and they are therefore "mounting height sensitive". The Snap Fast mount on a 400 series hangs down lower from the tractor frame than it does on the 200 series to compensate for the difference in ground clearance.

The trans-axes are essentially identical between the two series in every way except for two distinctions. The 200 series uses 5 bolts to hold the rims to the axle flange and the 400 series uses 6 bolts. Therefore, the axle shafts are different but only in the number of holes that are drilled and tapped in the flange that is welded to the shaft. The other difference has to do with the hydraulic motor that drives the trans-axle. The 400 series uses a motor with a larger internal displacement than the 200 series motor has. Smaller displacement motors spin faster than large displacement motors do when the same volume of oil is forced through them. The Lo Pro needs a faster motor because the small tires have to rotate more full revolutions to cover the same distance as the larger tires do.

The front axle and spindles are totally different between the two series in order to achieve the higher ground clearance of the 400's. Both series use the same front rims and tires but because the 400 axle is wider, a different tie rod and drag link is needed. The obvious differences are the rear tires and rims and therefore, different fenders are used.

A minor difference is the bell-crank shaft, that raises and lower attachments along with the length of the lift links between the bell-crank and the mower decks. Other than those items, many of the parts are identical in a given year such as steering wheels, steering shafts, decals, hoods, oil coolers, gas tanks, engines, pump mounts, travel/lift valves, levers, PTO clutch, headlamps, battery trays, hydraulic oil reservoirs, steering gears and so forth. The operating weight of the two tractor series is often within 30 pounds of one another.

Both series can be fitted with Flow Control Valves, Rear PTO Valve kits, sleeve hitches, Holding Valve kits and winter cabs. Both series will plow dirt or snow, cut

your grass, rototill your garden and they will plow, disc, harrow and plant your garden.

In 1979, the 444, 446 and 448 models had two inches added to the 46 inch wheelbase to increase it to the 48" where it remains today on all 4000 models. The 200's remained with a 46" wheelbase until they were discontinued at the end of the 1988 production year and all 3000's that followed, were built with the same wheelbase. It's very easy to determine if your 400 is a "short wheelbase model" or a "long wheelbase model". Just measure the distance along the checker plate floorboard between the pedestal that supports the steering column/dashboard and the pedestal that supports operator's seat. Short WB tractors measure 13 inches and long WB tractors measure 15".

Just so you know, this is another factor that you have to take into consideration when buying a used sleeve hitch for your 400 series tractor. The early sleeve hitches (H24/J24) have a lift bar that is two inches shorter than the lift bar used on post 79 tractors. Ingersoll apparently resolved this problem with the K24 sleeve hitch. This is not an issue for 200 series owners because the sleeve hitch for a 200 is a different model than the 400 hitch. The H22, J22 and K22 sleeve hitches are built for the 200's. For more info on sleeve hitches, see the FAQ on sleeve hitches.

I also should speak about the three-point hitch because this comes up on a regular basis. Please see the FAQ titled "Can I install a three-point hitch on my 200 series?" for that answer.

For the most part, the differences are minimal and it all comes down to personal preference. Some people love the taller 400's and 4000's because they ride a bit smoother, "look cooler" because they are more like the larger, full-size ag tractors in appearance and that they will take a three-point hitch. They also love them for the four extra inches of ground clearance because they can take them into areas on their property that would be problematic for the Lo Pro. On the other side of the coin, there are owners who prefer to cut grass with the 200 and 3000 models, citing easier mounting and dismounting and a lower center of gravity that is important when mowing steep inclines.

As always, there's a simple solution to this dilemma. Buy one of each.

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