

Down to Details

BY CHUCK STEFFENS

Front End Swap

A few people who have seen the Precision John Deere 4020 No. 3 that I converted to a wide front tractor, have requested the directions on the process. So this month, I will give you that, plus converting a Heritage Edition 4010 into a narrow front tractor.

This can be a very easy project only taking a few hours and needing some basic toy building tools: a small flat screwdriver, a small Phillips screwdriver, small punch, Dremel tool, light hammer, heat gun, drill with a .095 drill bit and a very small amount of epoxy.

To get the project started, I used a NIB 4020 No. 3 and a NIB 4010. What I have found is that all the 4020s and 4000s are assembled the same, so this swap would work with any of them for the wide front donor. However, the No. 3 4020 is the only one with the narrow front so you're stuck there.

Once both tractors are unpacked, the first thing to do is remove the gauge cluster on each tractor. This is done by using your flat screwdriver and getting between the cluster and the hood and gently prying out. To be safe, you may want to heat the hood area around the cluster first. I have found that sometimes the cluster just pops out with the smallest amount of pressure, and the next time, it requires a little work. The clusters on the 4000 and 4020 are pretty stout, but the ones on the 4010 are flimsier and will require more patience to remove without breaking.

Once the cluster has been removed, there will be two screws exposed that hold on the lower dash and rear of the hood. Before removing these two screws, get some tape and tape the console levers and shifting levers as tight to the dash as possible (you will thank me later). This will hold them up, keeping the pin that holds them in

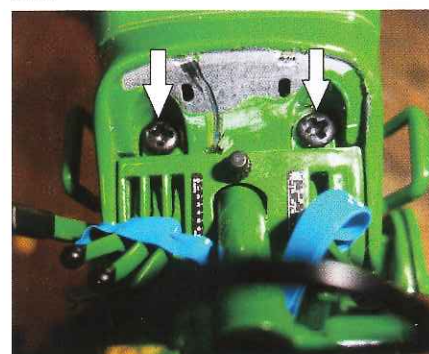


The 4010 and 4020 fresh out of the box.

right in front of the front axle of the pedestal on both tractors, in the center. Removing this screw will now allow you to remove the hood by just lifting up on it.

The next task will be removing both front ends. We will tackle the 4010 first. To start with I warm the vertical shaft and

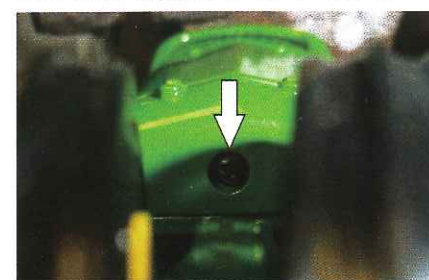
place under the console from sliding out.



Dash removed exposing the two rear hood screws.

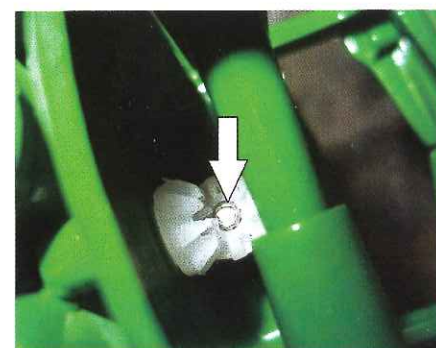
Now proceed with removing the two screws that were under the gauge cluster. Once removed, the dash on the 4000 and 4020 will come completely off, but the one on a 4010 will just have to be slid back out of place when you remove the hood.

Now there will also be a screw under the front of the tractor to hold on the front of the hood. This screw will be



Screw hidden under the front end holding on the front of the hood.

then use a small punch, gently tapping the steering shaft down not damaging the steering gear.

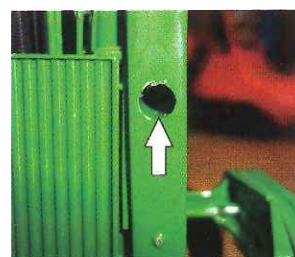


Front steering gears and shaft.

Once the gear has broken free from the steering shaft, there will be a screw on the front of the 4010 front axle that will release the front axle from the tractor.

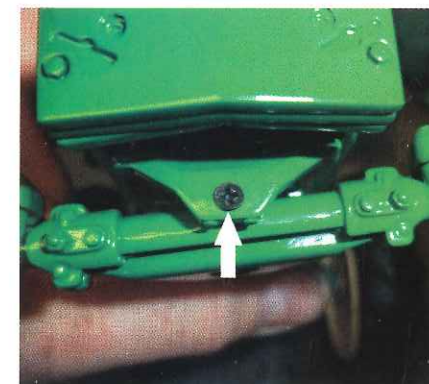
Now gently pull the steering shaft from the steering gear to remove the wide front. On the 4000 and 4020, there is no screw but instead a pressed pin that can be removed.

However, with a little patience, I



Screw hidden under the hood holding the two halves together.

have found that both screws can be removed without taking the pin out. With the wide front now off, there will be two screws exposed on the wide front mounting bracket that will have to be removed, and voilà, next tractor.



Front screw on the 4010 wide front axle.

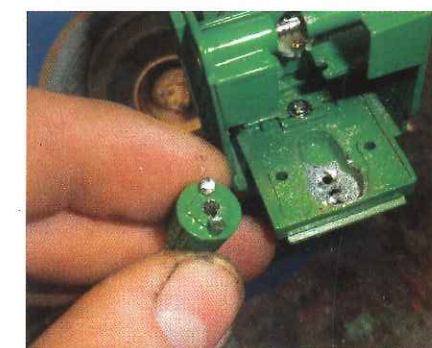


Engine of the 4020 slide forward.

On to the narrow front removal. With the hood off the 4020 the same way as the 4010, you will need to remove the steering gear in the same manner as was done on the 4010. Then remove the screw that holds the front of the tractor together. This screw is behind the side screens in front of the radiator. Once this screw has been removed, gently pry the front of the tractor open and grab the engine to slide the engine and front-end assembly forward. This makes removing the front end much easier.

If you got the steering gear removed, the lower roll-o-matic part of the front end will come out. With that removed,

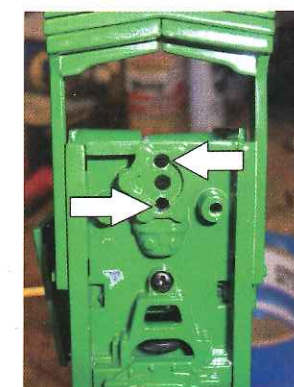
you will now need to use your Dremel to grind off the riveted-over pins that hold the narrow front pedestal on. Once the tops of the pins have been ground down slightly, grab the pedestal and gently move back and forth and it will come off.



Narrow front removed from the 4020.



Underside with the front end removed.



Holes drilled in the 4010 front end making it ready for the narrow front.

With the front ends off, there will be a few more small tasks. On the 4020, the hydraulic pump guard will have to be removed for wide front clearance.

To do this, there is a screw in front of the radiator that will have to be removed. This will allow the guard to come off. On the 4010, you will have to drill two holes under the tractor to install the narrow front.

All that needs to be done here is to use the right size drill bit (.095), and use the indent under the steering box on the 4010 as your guide. Just place the drill bit so that the edge will line up with the indentation on the steering box parallel with the tractor and drill.

Now when installing the front ends, I use a small amount of epoxy on the narrow front pedestal when mounting. Make sure you mount the pedestal the right way or the roll-o-matic will be facing backward. Once the pedestal is mounted, slide the roll-o-matic and steering shaft up the pedestal, then apply a very small amount of epoxy to the inside of the steering gear and reinstall the gear to the top of the steering shaft.

For mounting the wide front, Ertl was nice enough to have the mounting locations on the 4020 for the wide front. Just simply use the screws and mount the wide front bracket under the tractor and reassemble like the narrow front using a small amount of epoxy on the steering gear and sliding everything back in place. Once the steering gear and shaft are reassembled right, reinstall the screw that holds on the wide front.

Reinstalling the hoods are the only thing left to do, and if you were careful and the pin that holds the console and shift levers didn't come out, then you are about done. If you're like me though, the pins come out, so just take your time with a needle-nose pliers and line the levers up and reinstall the pins.

One more thing that I had to do to mine was change the rear tires to make them look more like the tractors around my area. On the 4010, I used the rear rims and tires off a 4000 Precision to represent 18.4-34s. On the 4020, I used rear rims and tires off a 3020 Precision to better represent 16.9-38s.

The rear rims and tires can be removed from the 4000 series tractor

Continued on page 72.

Down to Details Continued

by using a heat gun and warming the axle caps then pulling outward on the rims. On the 3020, the axle caps are plastic, but the rims are press-fit on the axle, so removal is basically the same.

I feel that this is one of the easiest and least expensive customs you can do. With the price of the 4010 as cheap as \$41 on eBay, and the No. 3 4020 still under \$100, it would be a good starter project if you never worked on a Precision before.

If you have any more questions about this project or any other Precision project, I can be contacted at csteffens@peoplepc.com.

Thanks, Chucky.

TF



Completed tractors.

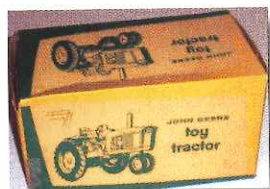
2-DAY FARM TOY AUCTION

KC Hall, 1501 East Walnut Street, Algona, Iowa (From Hwy. 18 & Main Street, 3 blocks south)

Friday and Saturday, July 22 & 23, 2011
Friday at 5 p.m. and Saturday at 9:30 a.m.

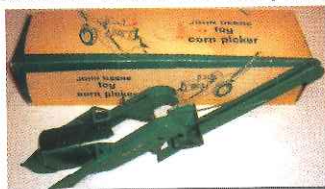
MOORE'S FARM TOYS

Rollo and Janice Moore – Owners
Selling 700 or More Toys



SELLING FRIDAY: 5:00 p.m.—Selling numerous 1/16, 1/64 farm toys; trucks, Tonkas, Nylint, Structo and more; many SpecCast & Ertl tractors in boxes and much more.

SELLING SATURDAY: 9:30 a.m.—Over 450 lots quality farm toys, majority in boxes; several duplicates; lots of Ertl Precisions, SpecCast models in boxes; Big Bud, Versatile, JD, IH, MF, Ford, AC, Steiger, MM, Oliver, Case, Case IH and many others; 8 pedal tractors including JD 20, 7410, 4020 WFE, 30 Series; Case IH 7250 & 8950; and Ford TW 35.



Cornwell Inc.
Land & Home Brokers-Auctioneers
P.O. Box 43, Aurora, Nebraska 68818-0043
www.cornwellauction.com

Go to
www.cornwellauction.com
for complete listing and several pictures

Cornwell Inc.
Land & Home Brokers-Auctioneers
P.O. Box 43, Aurora, Nebraska 68818-0043
www.cornwellauction.com