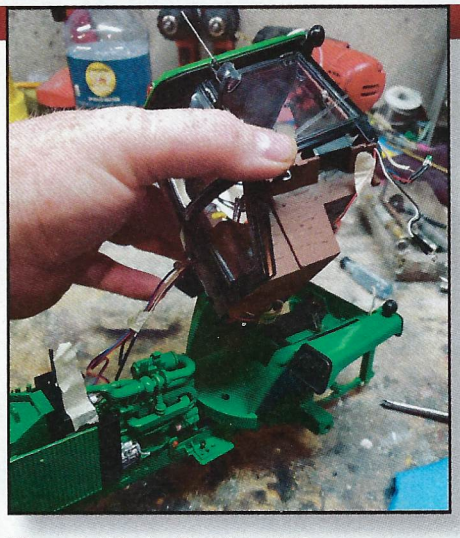
The new-in-the-box 4450 and the leftover 4960 parts.



The cab lifted off of the 4450, exposing all of the wires.

Creating a JOHN DEERE Concept

Hello and welcome back, fellow toy collectors and builders. This month, I'm going to build a concept tractor that could have happened, but didn't. I am talking about building a John Deere 4460.

Following the 55 Series John Deere small-chassis round-cab reign that started with the 30 Series in 1972, production started on the more modern 7000 Series tractors. The 8000 Series large-chassis tractor was not quite ready for production, so John Deere developed the 60 Series large-chassis tractors with a new side exhaust, battery box, fender and step configuration. I often wondered what it would have been like to have these same updates on the small-chassis tractors.

I have a soft spot for the Precision line of tractors due to their unbelievable level of detail and the ability to reuse leftover parts, since their design screws together and apart.

I had built a series of three 4650 John Deeres using the 4960 Precision, leaving me those extra parts, along with some of those 4450s that were sold on clearance a few years ago at a bargain price. So it sounds like I have all the makings of a 4460 available, along with a set of our 18.4x38 rear tires and modern John Deere rims. It looks like this could be a fun concept!

Starting the project is much like many of the past. I first turn over the tractor. With my past experience working with these tractors in the Precision line, I know I have to remove the two screws under the front weight bracket, the screws under each of the battery boxes and then the screws located on each side of the rear panels that hide under the battery box, and the hood will be off. The lights are an added feature to the 4450, so the wires to the lights in the hood are pulled out and the hood is set aside.

With the hood removed, the next project is removing the cab. With a quick inspection, I see the screws to remove the top half of the cab are located under the fenders, in the same spots as they were on both the 4430 and 4440 Precisions. The 4450 differs in that an additional plastic shield hides the wires leading to the lights, which will have to come out. There are just two mushroom pins that will have to be drilled to remove this shield. Using a 1/8-inch drill bit, I carefully drill the mushroomed head off of these pins, then gently pry off the shield with a small flat screwdriver. I now have access to the two screws holding the

The underside of the 4450, with arrows pointing to the screws that need to be removed to take off the battery boxes and weight bracket.

top half of the cab onto the tractor.

With the shield and screws removed from both sides of the cab, I give the top half of the cab the "wiggle" test. It moves, but with a little more effort than expected. Eventually, I have the top half lifted about half an inch and I can see the problem. There are lots, and I mean LOTS, of wires leading to the dash, cab, fenders and hood. I have no intention of having working lights on the 4460, so I try my best to pull wires free and save as many of them as I can. But before too long, I just start cutting. I finally have the cab and interior off of the tractor and set aside.

The next step is removing the four screws holding the cab base to the chassis of the tractor. The 4450 in now stripped and ready for the transformation to begin.

Now I have one pile of parts removed and one pile of replacement parts setting on my bench. I guess the best way to install them is to reverse the order, and the last thing I took off was the cab base. With this, I test fit the 4960 cab base. It fits well. As a matter of fact, the four screws that hold it in place even line up, so I install two screws to hold it in place for now.

The next task is seeing if the top half of the 4450 cab will fit onto the 4960 base. From my experience converting the 4960s to 50/55 Series tractors, slight modifications were necessary and this case is no different. With the first test fit, I can see that some trimming is needed on both the right and left side of the cab's top half. On the right side where the two meet, I use my Dremel to notch a triangle-shaped piece out of the top half. On the left side, I need to trim the entire length of where the door frame meets the fender base.

With those both completed, I give it a second test fit. The rear tabs that slide down into the base are too wide and hit before the cab slides completely down into the base. Using my hand grinder, I trim these two areas. With another test fit, the cab is setting down into the fender base nicely and matching up so well that the rear screws that hold the two together can be reinstalled, but the fronts will have to be drilled and replaced.

Now that I have the cab semi-assembled, the next test fit will check if the hood still fits with the newly installed cab. I slide the hood on for a test fit and things look good, but not 100 percent. It seems that the cab sets a little too high for a correct match. I look under the fender base and see that there is indeed a big gap between the chassis and the base, which means there is room to lower the base. Seeing this, I remove the hood, cab top and fender base, taking the tractor back to where we started.

With the fender base in my hand, I flip it over and see that the four stands the base sets on are plenty long. Even better, they have an indent cast into them that could be ground away, lowering the base about 0.100 inch closer to the chassis, which is close to being the exact amount the cab and hood were off. With my angle die grinder, I grind those indents flush. I reassemble the parts and give the hood one more test fit. Things do indeed look better, even nearly perfect.

Now the tractor looks like a tractor again, but I need some wheels for the back. The original rear wheels were held on using a 3/16 axle, so I grab an 8-inch length of 3/16 rod and install it into the chassis, then slide on a set of my modern John Deere rims with my 18.4x38 tires. Then I see my next obstacle: The tires hit the fenders. Now what? Well, I would like to say I did some polishing here and modifying there, but instead I just went Neanderthal on it!

The lower sections of the cab are trimmed, giving the cab the correct fit onto the fender base.

The cab "stands" have been trimmed down flush to lower the base and better line up with the hood.

The completed "what if" John Deere 4460 tractor.

To handle this obstacle, I first saw that the fenders laid back at an angle, which I had not noticed before. I decided to see if I could bend the fender forward and gain the clearance I needed to fit the tires under the fenders. So off comes the hood, cab top and fender base. Laying the fender on a paper towel at an angle, I make one of those "gentle" taps with the hammer, hoping not to damage the paint. After about seven of those blows, I test fit again. I keep doing this until the fender is more parallel to the tire, which gives me just enough room to fit the tire under the fender and spin it freely.

We now have the tractor back on all four tires, with the cab and hood all fitting properly. The next step is seeing how the side exhaust will fit. I slide the 4960 side exhaust pipe into the hole in the fender to which it is mounted. It looks good, but it doesn't quite look right where it meets the engine, mainly because the muffler is missing from the exhaust pipe.

With this in mind, I remove the hood again and test fit the muffler under the hood. I see there is too much "junk" in the way for it to fit properly, mainly the air filter assembly. With a little help from my needle-nosed pliers, I remove the air filter assembly and test fit the muffler again. After a little more work, the hood fits. I apply some glue to the inside of the muffler where it meets the pipe and we have a side exhaust.

Onto the next obstacle! The 60 Series had both batteries located on the left side of the tractor in a completely new battery box design and an updated set of steps that I will need to install.

Giving the 4960 battery box a test fit, I can see it will interfere with the original battery box mount. It appears if I cut some clearance out of the 4960 battery box and some clearance out of the front of the 4450 mount, I can have a secure mounting of the box and steps. With my Dremel, I start by making small cuts, continuing to test fit, then modify, then test fit, until the box fits tight to the frame and flush with the cab base, giving me plenty of area to securely mount the assembly to the tractor.

With the battery box assembly fitting tight to the frame, I see that it extends a little past the fender. With the tight fit the tire has under the fender already, I realize I will have to trim this excess with my Dremel so it is flush with the fender. The final task is drilling, tapping and installing two 0-80 bolts holding the new battery box to the old battery box mount.

We are getting really close now! One of the final modifications is removing the original 4450 muffler and precleaner, which doesn't take a whole lot of effort. To remove the muffler and precleaner, flip the hood over. There will be a single screw holding each in place that will need to be removed. With these screws removed, the muffler pops out, leaving a big hole. Removing the precleaner leaves a much smaller hole, but leaves a "boot" cast into the hood which will require some grinding to remove. Using my angle die grinder, I grind the "boot" off the hood. I next apply some body filler to smooth the hood. Lastly, I remove the fuel cap, radiator cap and chrome hood emblem by pushing them out from the back side. Then we are off to priming the hood with fill primer and finally off to paint.

If luck is on your side, the paint turned out well and final assembly went well, all that is needed is a set of decals to finish the tractor. I had my buddy, Cliff, at Sign Makers make me some that I would guess to be correct. They are copied after the 4960 striping, but modified to fit the smaller 4450 tractor. If anybody needs a set, I think I had him make me about 50 of them, so I should have some.

Now I have a "what if" tractor. Yes, I know it never happened, but you just never know what could have happened. There may even be a farmer-built model like this in a shed somewhere.

As always, I hope you were able to learn a trick or two this month. Check out Chucky's Precisions, Pullers and Parts at www.chuckysprecisionspullersandparts.com for past articles and lots of parts, including the rims, tires and decals used on this project. *TF*

Living just northwest of Dyersville, Iowa, in the heart of farm country and farm toy replica country, Chuck Steffens has found a niche in the toy world, building high-detailed replicas in his spare time. He shares his experiences with Toy Farmer *readers, hoping to lead other collectors to personalize one of their own tractors. Comments or suggestions can be directed to csteffens@wildblue.net.*