

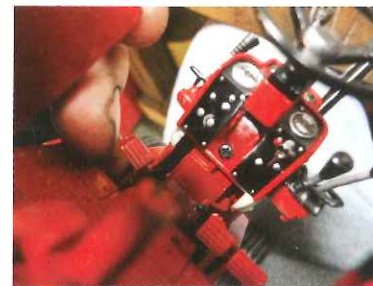
# Converting to a 766 gas



A new-in-the-box 1066 and the engine out of a Precision 460.



The seat cushion lifted from the seat frame of the 1066, exposing the screw that will need to be removed to take the seat off.



The lower dash filler panel removed showing another screw that will need to be removed.

**H**ello again! This month in "Down to Details," I am going to convert a perfectly good International 1066 Precision into a tractor that is about as different from it as possible, a 766 gas. The 766 does share quite a few similarities with the 1066 in that the sheet metal is the same and the chassis is only slightly different.

The big difference is obviously the engine. However, Ertl did produce an engine that will work. The Farmall 460, though nowhere near the same tractor as the IH 66 series, did have the same family of engine used in the 766.

To get this project started, the customer gave me a new-in-the-box International white panel 1066. I then went to the Chuckville salvage yard and found a Precision 460 that had fallen onto hard times. I would like to tell you that I was able to gently remove the engine from the 460 and keep the rest of the tractor as parts for later projects, but it didn't go that way. The engine in the 460 is cast into the frame and that leaves only one way to remove the engine—cut it out. So that is what I did. I took the 460 over to the band saw and cut the engine out.

With the 460 engine out, I proceeded to tear down the 1066.

First, you will have to remove the seat from the 1066. To remove the seat, you will have to use a fine-tipped screwdriver to get between the seat cushion and the seat frame and gently pry, not getting too aggressive in any one area, but working around the whole seat.

Once you get the cushion edge free from the frame, you can lift it slightly to see three pins in the seat holding the cushion to the frame. Again, use your screwdriver to pry the cushion free from the frame. If you get two of the pins free, that will be enough to move the cushion out of the way so that you can remove the screw in the center of the frame holding the seat assembly to the tractor.

With the seat out of the way, the next task is removing the hood. To do this, you will have to remove the lower dash shield under the steering wheel by getting between the shield and dash and prying out. This piece should

come off easily, but it is small enough to get lost, so always have a place for screws and parts.

With the shield off, you will now be able to see the screw that was hidden behind it. Remove this screw and the dash/steering column will come off, freeing the rear of the hood.

For the front of the hood, I recommend using my good ol' buddy, the heat gun. The weight bracket and upper grille section will have to come out. Both can be a challenge that could easily lead to broken parts. First, slowly warm the hood, making sure you aim the heat gun toward the front of the tractor. If you are not careful and try heating the hood by aiming the heat gun toward the back, you could melt the grille, which could lead to a personal salvage yard of your own.

Once the hood is heated so it is warm to the touch, but not hot, use your fine-tipped flat screwdriver and ever so gently get between the top of the upper grille and the hood and gently pry the grille. Then move to a different spot on the grille and try again. Keep working on small areas until the grille comes free. With the grille out, you can see the top screw that needs to come out.

OK, the top screw is out. Next are the bottom two screws behind the weight bracket. Again, gently warm the weight bracket, paying close attention to the areas around it. Once warmed, use the flat screwdriver and pry forward. There are two pins on the weight bracket that are glued to the chassis of the tractor and if you get too aggressive, they will break. This can be fixed, but it is better not to break them.

With the weight bracket off, you can see the two screws hidden behind it. Remove these along with the top screw that was behind the grille and the whole grille assembly will come off.

With the grille assembly off, lift the front of the hood and slowly slide it back. Lo and behold, the hood will be off. Be careful, because the grille assembly also holds the wide

front pivot bracket in place. To be safe, just remove the bracket and let the wide front come off the tractor so it can be stored safely with the rest of the parts.

Onto the next task, removing the engine from the 1066. Unlike the engine in the 460, the engine in the 1066 is a separate piece that can be removed. It just takes a little work. First, I recommend removing the wheels and fenders. The wheels need to come off to gain work space, but the fenders should come off just for safekeeping. To remove the wheels, I simply grab them with my hands, twist and pull, making sure not to drop the tractor. These wheels have always come off easily for me. Now that the wheels are off, you access the fender screws, two on each. These screws will need to be completely removed because there is a pin in the fender bracket that keeps it in the proper location on the tractor.

With the wheels and fenders removed, it is time to split the chassis to get to the engine. There are going to be two screws holding the chassis together. Both will be on the right side of the tractor. One will be located under the brake drum and the second under a plug on the chassis. To remove the brake drum, use your flat-tipped screwdriver and gently pry out. Again, take your time and work the whole area. It is held in place with two pins that are glued to the chassis. Once it has been removed, you will see the screw that will need to come out.

Next, remove the plug located under the battery box. These plugs can be a bugger. I usually have had good luck warming the area and using my X-Acto knife to free it from the tractor, but this one was not cooperating. So I had to drill the center with a 52 drill bit and tap it with an 0.080 bolt to pull it out. Once removed, it will give you access to the second screw.

Now that both of these screws have been removed, the trickiest part of the build takes place. Ever so gently, pull the chassis halves apart. The front half will be no problem, but the rear of the tractor still has the three-point, rockshaft and PTO area along with the platform and the pedals. Taking your time and being careful, you will be able to get an angled shot at the one screw at the rear of the engine holding

it in place. With this screw out and the chassis still spread cautiously, remove the engine. We are getting there.

With the engine removed, put the chassis halves back together, then reinstall the two screws you removed earlier and the repowering can begin.

To start this process, I grab the 460 engine and attempt to fit it into the 1066 chassis. It fits, but is going to take some tweaking. First, I trim the rear mounting plate to allow the engine to slide farther back into the frame. After a few test fits, I had the engine fitting nicely and wanted to see what my next obstacle was going to be. Wanting the engine to sit in place during this time, I applied a small amount of glue to the rear of the engine and slid it back into the frame for safekeeping.

With the engine looking good in the frame and appearing like I should have no problem mounting it to the chassis, the next step was giving it the proper fit at the front of the engine. There was a large gap between the fan and the radiator of the tractor. To fix this problem, I noticed the radiator shroud area was two pieces and could be separated. With my flat-tipped screwdriver, I gently pried the two halves apart about 0.150 of an inch. This gave me a nice compromise of filling the gap between the engine and the radiator, but still allowed me to keep the steering shaft in place.

OK, it looks like everything is going to fit and look right. Next, test fit the hood. I slowly drop the hood onto the chassis, but hit a snag—the carburetor intake tube was hitting the filler panel under the hood. To solve this, I used my Dremel to give it a little clearance. (I later learned I was wasting my time; more on that later.) After clearing the filler panel, the hood fit on the chassis nicely and it was starting to look like a tractor!

The last step is mounting the engine. To do this, I drilled the front engine mounts, then drilled and taped the frame of the tractor to match. With a couple 0.080 bolts in the front and some epoxy on the rear, that engine is not going anywhere.

Next time we meet, I am going to take this build even further and convert it from a wide-front tractor to a narrow front, and also change it from a white-panel tractor to a black-strip model.

TF



The upper grille and headlight bezel removed showing another screw.



The grille and hood removed from the 1066.



The engine removed from the 1066 chassis and chassis halves back together, with the 460 engine waiting for installation.



The hood test fitted.



The front engine mount drilled with a 0.080 bolt install, ready to be mounted to the frame.