Down to Details

By Chuck Steffens

This month I am going to build or maybe unbuild Ertl's Precision 856. There are quite a few people who have been happy having their 856 with a cab, but I have had quite a few requests from collectors who wanted theirs without the cab. I had been dragging my feet on this one for quite some time for two reasons: 1) the 856 is still too expensive as far as I am concerned to be customizing and 2) I really don't have a whole lot of experience working on the 806, 1456 or the 856 or know anyone who has had much experience with them. I was able to pick two of them up at dealer cost, so that helped inspire the project. With the lack of experience on these style tractors—well I guess there is only one way to get the experience—tear one apart!

International 856 NIB with the cab.

The first step on this project was removing the cab. At first it didn't look too overly complicated. There was a clamp around each axle that had two screws that I removed. This freed the rear of the cab. After these were removed I grabbed the cab and gave it a little "wiggle" to try to determine how else the cab was mounted. After my "wiggle" test I managed to figure out that I had no idea how else this cab was mounted.

With some more investigation I could see there were two screws under each step mounting the cab to the steps or the steps to the cab? But the problem is I could only get a screwdriver to one of these screws, so I removed the screw I could see and gave the cab another "wiggle" test and nothing—I then found another screw mounting the step to the frame of the tractor. On the left side of the tractor it was easy to get to the screw with my screwdriver, so out it came. Now on the right side I had to do some more searching and what I found was a cap on the bracket covering the screw that held the right side step to the frame. With some gentle prying I was able to remove this screw which should have freed the steps from the chassis. With my next "wiggle" test I found out I was wrong.

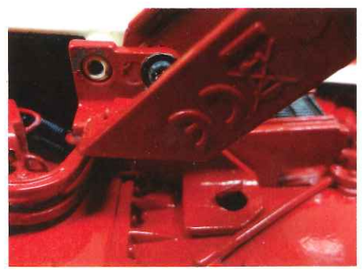
Okay there are still those two screws, one on each side holding the steps to the cab, but how do I get them out? For the life of me I couldn't figure it out, so here is when you start taking some risks.

When I looked closely to the lower step supports it looked as if they may be

Two screws located around each axle.

The lower step support freed from the step bracket and the step bracket freed from the chassis.

Cab removed and exposing the two holes in the hood.



Screws located under the steps.

Battery box removed from the battery.

Wishbone removed from the front axle.

casted separate from the step and step frame. So I got in between the frame and the step support with my flat screwdriver and began prying and hoping, then some more prying. Suddenly it started to work free…hey, I was getting lucky. The backside of the step support popped free from the cab frame then all I needed to do was pull the support out of the step and it was off. Now repeat on the second side—okay progress.

Now with the step supports out of the way I could get at those two screws that eluded me earlier. With those two screws out of the way it was time for the next "wiggle" test. Ahh, it was moving but it was by no means free. Hmm…I guess the next step is to remove the brackets holding the cab to the frame.

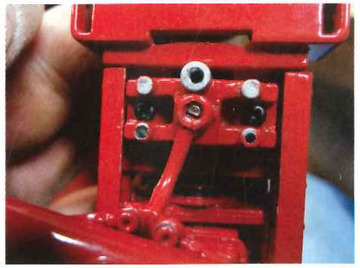
With all of the screws removed I started on the left side of the tractor because it looked like that one would come off easier. So I got between the bracket and the step with my flat screwdriver and pried down working all sides of the bracket and slowly it came off. The cab wiggled a little more. On to the right side, with some gentle prying it was off. But with the right side the bracket will have to come out away from the tractor about a half of an inch to clear the chassis.

So now another "wiggle" test and the cab is feeling like it wants to come off, but it lets me know it is not done fighting yet! So I give it a little more pull tilting the cab forward and voilà, the cab is free. What I learned is the front of the cab was glued to the hood and the cab had a hook holding it to the hood, and when I tilted the cab forward it freed the hook. With the cab free all that remained were the wires heading down though the cab into the hood for the dash lights. With a set of side cutters that problem was fixed.

Alright the cab is off. All that is left of the cab's remnants are the battery box covers. With my small flat screwdriver I get between the battery box and the battery and pry out and…voilà they are off. Now what to do with the tractor. Being the cab was glued to the hood and there were two holes in the hood—one for the wires and the second for the hook—I knew this project was long from over.

The pivot pin removed from the front axle and the axle tube lifted exposing the screw holding the saddle on.

Saddle mount removed allowing the weight bracket to come off and freeing the front of the hood.



Saddle removed exposing yet another two screws that need to be removed.

Rear of the hood lifted up along with the platform lifted for clearance.

I guess that takes us to the next step in converting the 856 to an open station tractor. I have never been able to figure out how to get the hood off a Precision 806 or 1456 and being this 856 was based on the same design I knew there was going to be some learning coming my way. I just hope I don't break anything important.

So as with most of my projects I find it best to start with what you know and I know how to remove the wide front off of the 856. This first starts with removing the wishbone assembly from under the wide front. The wide front could be removed without removing this separately, but it is so fragile that I always like removing this separate. With a small flat screwdriver I get between the wishbone and the front axle tube and gently pry them apart working both sides at the same time as to not put a twist on the pins holding the wishbone to the axle tube. With the wishbone free I then freed the wishbone carrier from the frame of the 856 using the same flat screwdriver.

With the wishbone assembly removed from the tractor the next step is to remove the pressed pin that mounts the front axle tube to the tractor. I used side cutters to get between the pin and the mount and slowly pull the pin out.

With the pin out, now is a moment for patience. This next step is a delicate one. With the pin removed from the axle tube gently lift the front axle tube up and out of its saddle, being careful not to break the tie rods. With the tube out of the way there will be a screw in the center of the saddle that will have to be removed. With this screw removed, lift the saddle off the tractor being careful with the front axle assembly. We don't want to break those tie rods. With the saddle removed the steering arm for the front axle can be

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lifted off the steering rod and the front axle assembly can be set aside for now.

Now that the wide front is off, there will be two more screws exposed under the front axle saddle. After removing these two screws and lifting the saddle mount out from between the frame rails you will be able to lift the weight bracket off the tractor and gently lift the front of the hood up from the chassis. With the hood lifted up from the chassis gently pull the grille forward from the hood. This can be a little tricky, but it will come forward and down with no screw holding it to the hood. With the grille removed, next remove the steering rod from behind the grille so it doesn't get lost like mine did.

Hood off of tractor without anything broke!

The screw in the lower dash that needs to be removed.

Two more screws exposed after the lower dash was removed.

Dash freed from the hood and the one screw that had to be drilled out.

The front of the hood is free so it's time to give the hood a "wiggle" test, and surprisingly the hood was feeling free? That can't be right. I have done this before and have never been able to get that hood to lift like this on the 806 or 1456, so I go with it. When I was lifting the hood up, I noticed the lower dash segment where the parking brake lever is was lifting with the hood? Okay that's fine until I realized what was going on. That screw that held the cab mount on the right-hand side of the chassis held the rear of the hood on! Nice to know.

Lifting the hood off required one more thing to be done. The platform will have to be raised with the hood for the lower dash assembly to clear for removal. Be careful here as well to not stretch the springs between the clutch and brake pedals to the platform. With everything going in perfect unison between the hood, engine, lower dash and platform, the hood will be off and ready for hole repair.

With the hood off there will be screws holding the fuel tank and muffler on that will have to be removed. I had one of the three fuel tank screws give me trouble that finally made me just grab my drill and drill the head of the screw off. Now with the fuel tank removed the dash will have to come off. The dash is just glued to the hood so some light pressure from the backside will free it from the hood. You will want to pay close attention to the steering gear on the end of the steering shaft, as it will have to be removed from the shaft to remove the dash from the hood completely. This gear should just pull straight forward and off of the shaft.

With the fuel tank and dash removed the next step is to remove the TA lever. On the 856 they used an O-ring glued to the TA lever which makes easy removal. Then to the shifting levers. This is a little more complicated, but isn't too bad. You will need to get between the shifting column and the hood with the flat screwdriver and pry out in a few different spots. Be careful because the pin that the shifting levers are mounted to will stay in the hood and cause the levers to fall on the floor making you spend a half-hour looking for them like I did. With the TA and shifting levers off I then got behind the fuel cap and pushed it out leaving a hood ready for hole filling.

Finished tractor.

To fill the hole in the hood I used one of my favorite products, Metal-2-Metal, the aluminum-based body putty and two small pieces of sheet aluminum. Using my Dremel I roughed the surface of the hood on the underside and the top along with the small sheet aluminum. I applied a small amount of the Metal-2-Metal to the underside of the hood and placed the small sheet aluminum over the holes. I used a little more on the top side of the hood to fill the remaining holes.

After the bodywork was completed I masked off the top of the hood from the rest of the hood and lightly sanded the top half. I applied fill primer to take care of any of the last imperfections in the hood. After the 24-hour cure, I sanded the primed areas with 320 and the rest of the top with 600 and sprayed the top half of the hood red again.

One other item that you may want to paint is the platform. With the cab on the tractor the platform is black and should be red. There are only the three springs on the clutch and brake pedals holding the platform on the tractor. What I did was use a platform off of a damaged 806 Precision. It is narrower and has more realistic details to accent the tractor. I was also able to steal some steps off of that same 806 that took some minor repair, but were good enough to use. I mounted them on with a .080 bolt.

So if all went well with paint, no parts / screws were lost and a set of fenders were found reassembly can begin. Best bet is take your time and pay attention to the details. Remember the platform needs to go on before the hood assembly and the springs holding the platform on will drive you crazy trying to hook up, but some fine tweezers will help. After some minor paint touch-ups, you will have yourself one very nice 856 open station.

'Til next time,
Chucky. *TF*