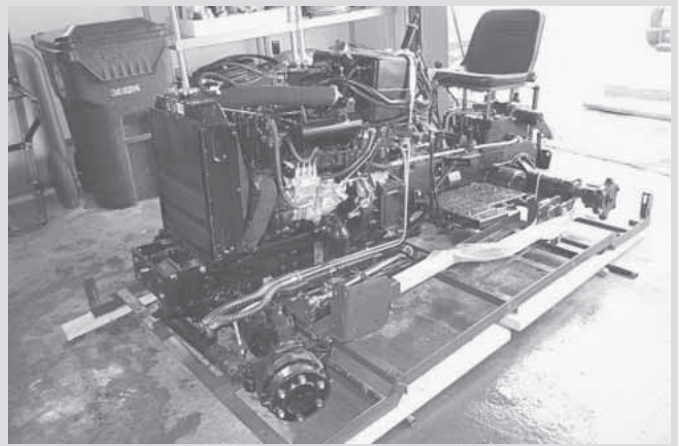


Shelley's "crate" tractor as it came out of the van. He bought it from a dealer in Connecticut.



Tractor came partially assembled. It took Shelley and a friend 2 weekends to finish it.

## I Built My Own "Crate Tractor"

By Mark Shelley, Holden, Massachusetts

When I bought a house in 2003 with a 600-ft. driveway, I realized my snowblower and garden tractor weren't up to the job anymore.

I priced smaller Deere tractors but they were around \$25,000. So I went on the internet and stumbled across the Chinese Tractor Owners Association ([www.CTOA.net](http://www.CTOA.net)).

I learned about Chinese-built tractors on there and eventually bought a "crate tractor" from a dealer about 200 miles away. I bought the Jinma 224 for \$5,400 — still packed in its shipping crate — and spent two weekends

putting it together in my garage.

The crate fit into my cargo van with 2 in. to spare. I removed the crate bolts slowly since some were under a lot of tension. Some parts were shipped partially assembled and I found it useful to keep all nuts, bolts, washers and other parts together as they came out of the box.

A friend and I were able to put the tractor together without too much trouble.

Here are some of the lessons I learned on the project:

Read the manual early and often. Although

the translations make it difficult sometimes, they're invaluable. There's no 800 number to call so you're on your own but the CTOA has a lot of useful information.

For example, at about 10pm one night, I had questions about what I was doing and posted a message on the CTOA forum. By breakfast the following morning, I had some answers.

I recommend replacing all Chinese fluids and filters. This saves a lot of future headaches.

Dismantle and clean the fuel system from

the tank all the way to the injector pump. Don't forget the thimble filters, pump cylinder, sediment bowl, and the inline filter. Don't use any of the fuel that may have been shipped in the tank.

Pay special attention to all of the electrical connections. If one is frayed or a connection looks suspect, repair it immediately.

I've got a detailed step-by-step description of this project on my website at [www.diyquest.com/ctoa](http://www.diyquest.com/ctoa) or readers can email me at [DIYGuy@DIYQuest.com](mailto:DIYGuy@DIYQuest.com).



Once the wheels were on, the biggest job left was to add the sheet metal.



Completed tractor has a 3-pt. hitch, pto and a front weight rack. Shelley says it runs great and has only had a couple small problems in four years of use.

## Should You Build Your Own Chinese Tractor?

If you're mechanically resourceful and don't mind working with 1950's technology, you might enjoy the challenge and rewards of putting together your own tractor, says Mark Shelley, Holden, Mass.

After putting a Jinma 224 together (see story above), he learned a lot and has some advice for anyone thinking about doing the same. "Go into it with your eyes wide open."

There are three ways to buy a crate tractor. You can import it yourself, work with an import broker, or buy from one of a growing number of dealers.

"The greatest source of frustration with importing Chinese tractors is dealing with the international community and learning what it takes to bring a product into the country. It's just a matter of how much you're willing to learn."

Self-importing means that you own the tractor from the moment it leaves the Chinese factory. "It's your job to arrange for it to get on a boat. It's your job to get it unloaded when it arrives in the U.S. And it's your job to usher it through customs." He

says the process can take up to 180 days.

An import broker can handle the paperwork. "They'll deal with the shipping company, they deal with tracking the shipping, and they'll let you know when to come to pick up the crate at the port."

Small dealers, on the other hand, order shipping containers full of crate tractors and you just buy them like any other tractor. "I bought my crate tractor from a dealer four years ago for \$5,400. If I'd self-imported the tractor, it would probably have cost about \$5,000. So I spent \$400 more but didn't have to deal with the headaches and costs of importing it," he says.

Once you get the crate tractor, dealing with warranty parts can be another problem. If you've self-imported a tractor and a part doesn't work, the warranty says you'll get it free but you've got to get the part from China and that can again take 180 days. If you're working with a dealer, you might get it a lot sooner.

"My tractor has only had two parts replaced in 4 years -- a radiator hose and a starter motor. I had no trouble finding a U.S.-equiva-

lent hose and a dealer shipped me a new starter motor that same day," says Shelley.

Your guide to putting the tractor together will be a manual that was likely put together by someone who is not necessarily an expert in English. For example, instead of "anti-freeze," it might say "happy freeze-proof liquid".

Shelley says it's important to understand how Chinese factories ship crate tractors. He says workers first put the tractors together to ensure that they work. Then, they take them apart for shipping. That presents a lot of opportunity for parts to be misplaced or lost.

On the CTOA website, you can learn about all kinds of problems people have had with the tractors. Shelley notes, for instance, that because of the way the hydraulics are routed, if you disconnect a hydraulic hose while the motor is running, you can destroy your pump in about a half second because there's no bleed valve on the pump. "And folks have done that so often they put zip ties on the quick connects so the valve can't come undone."

He notes that importers are buying these

tractors, building them here, and selling them as entry-level tractors under brand names like Farm Pro, Nortrac, Agracat, Emerybuilt and others. So if you want to pay a little more to avoid the hassles of importing and assembly, you can buy from them. "There's a whole thread on the CTOA forum tracking whose tractor is what."

There are also new businesses popping up that put Chinese tractors together for a fee. Graham Sliker, owner of Bolton Power Equipment in Bolton, Mass. was one of the first to do so. ([www.boltonpowerequip.com](http://www.boltonpowerequip.com); 978 779-5541) He puts together imported Chinese equipment such as tractors, wood chippers, backhoes and more in a small garage attached to his house.

To find a Chinese tractor dealer or to find out about other Chinese-built "crate" equipment, your best bet is to go to [www.google.com](http://www.google.com) on the internet and search up "Chinese built equipment". If you don't have access to the internet, your local librarian can help you.