

Portable Crane Sprouts Legs For Heavy Lifts

Sidney Stubbs can easily load a trailer or pickup box using his home-built crane that slips into a receiver hitch. For heavy lifts, he attaches a stable base with legs and a ball hitch for near 180-degree flexibility.

"There are cranes on the internet that attach to receiver hitches for lifting objects over the tailgate, but I wanted one that had a stable base and worked with the tailgate down," says Stubbs. "Using the ball hitch lets me move it around, while the adjustable leg jacks let me use it on uneven ground."

Stubbs picked up the folding crane mast and boom on closeout, but says any folding crane would work. His adjusts in height, lifting the boom up to 97 in. above the ground when mounted to a receiver hitch. A hand winch mounted to the boom feeds a tow strap up and through the rotating boom.

The crane mast came with 2 by 2-in. tubing for a standard receiver hitch at its lower end.

To get the increased stability and versatility he wanted, Stubbs fabricated a base with a 2 by 2-in. center rail. Two cross arms each have two, 300-lb., RV stabilizer jacks with adjustable legs at either end. The legs attach at a slight outward angle similar to outrigger legs. A quick release lever extends them from 11 to 19 in. in height.

The center rail has the ball hitch at one end and the coupler for the crane's receiver hitch tube bolted to the other. The ball hitch locks the base in place while allowing Stubbs to pivot it from side to side for setup.

The coupler is a length of 2 1/2 by 2 1/2-in. tubing with a 1 1/2-in., male half hammer threaded pipe union with a nut welded to the underside of the coupler. A second male half pipe union is welded to the tongue just behind the ball hitch.

"The cross bars have female half threaded pipe unions welded to their top centers,"

says Stubbs. "To mount them to the tongue, I match the pipe union halves and tighten down the nuts. Once I drop the legs into place and adjust them to match the contour, I attach the crane."

Stubbs says the portable nature of the crane and its base adds to the versatility. "You can lift any kind of heavy object and swing it into the bed of the truck," he says. "When you're done, you can break it down into 4 pieces. The largest is the crane, and it folds up like a jackknife, only 46 in. long."

Stubbs says the crane is handy when deer hunting and can even be used to pull fence posts out of the ground.

Contact: FARM SHOW Followup, Sidney Stubbs, RR1, Site 6, Box 21, Beaverlodge, Alta. Canada T0H 0C0 (ph 780 354-2727; sid.s47@hotmail.com).



Home-built crane slips into receiver hitch to load a trailer or pickup bed. For heavy lifts, a stable base with legs is attached.

Hydraulic Lift Fits Receiver Hitch

Rick Robinson turned a front-mount manual lift on his garden tractor into a power lift with his receiver hitch hydraulics.

"The 740 and 758 Deere lawn and garden tractors have 2 sets of hydraulics, but the front-mount thatcher is a manual lift," says Robinson. "I wanted to use the hydraulics to lift and lower it. I've seen other designs, but I wanted more travel than they offered."

Robinson knew Deere offers a hydraulic cylinder to lift and lower front-mount tillers on their garden tractors. He ordered one from his dealer and designed a base, arm, and boom around it.

"I had Schaus-Vorhies Manufacturing, a local fabricator, put the pieces together for me," says Robinson.

The base was a solid steel bar sized to fit in the garden tractor's 1 1/2-in. receiver hitch. Two short lengths of steel welded to the sides of the bar for gussets and also overlapping the end provide an anchoring clevis to pin the base of the cylinder. A vertical arm of 1

1/4-in. sq. steel bar was butt welded to the top of the receiver hitch bar and sits just to the rear of the cylinder.

"A 1 1/2-ft. length of 1 by 2-in. steel bar serves as the lift boom," says Robinson.

The fabricator welded two, 4 by 6-in. lengths of steel plate to either side of the first third of the boom. They overlap the lower side of the boom. Holes drilled through either end of the plates serve as pivot points for the vertical arm and the cylinder ram.

"The length of the boom beyond the end of the ram and the placement of the ram doubles the lift distance of the cylinder," says Robinson. "I always want things overbuilt. The tractor hydraulics have plenty of power to lift anything the front end can handle."

Robinson says he can easily lift and lower the thatcher. He also uses the lift to transport a 4-ft. harrow used to spread grass seed.

"I expect that if I hooked the boom to the floor, it could lift the rear end of the tractor off the floor," says Robinson.



Rick Robinson turned the front-mount manual lift on his garden tractor into a hydraulic-operated power lift, by using the tractor's receiver hitch.

Contact: FARM SHOW Followup, Rick Robinson, 2342 200th. St., Fairfield, Iowa 52556 (ph 641 472-4481 or 641 919-8702).

"Made It Myself" 3-Pt. Crane Mounted On Wheels

Texas farmer Glenn Thompson, of Fredericksburg, recently converted an old 3-pt. mounted crane to a 2-wheeled model that hooks up to a ball hitch mounted on front or back of his Deere compact tractor. He uses it to move garden tractors and the implements that go with them around on his farm.

"I borrowed the idea from my friend Cliff Ingold in Harper, Texas," says Thompson. "I bought the crane more than 20 years ago, but didn't use it much because it was heavy and difficult to hook up to a 3-pt. hitch. Hooking up to a ball hitch is much easier, and mounting the crane on wheels makes the crane a lot easier to maneuver into tight places."

The crane rides on 12-in. high by 8-in. wide wheels off an old golf cart. Thompson used 3-in. channel iron and angle iron to build an axle and a long tongue that's fitted with a ball hitch. He also bolted a hand-operated winch onto the tongue. The axle hubs and spindles for the wheels, as well as the winch, were purchased from Northern Tool & Equipment (www.northerntool.com; ph 800 221-0516).

He wanted to raise or lower the boom using the winch to pivot it up or down, so he mounted the crane's 2 stub shafts—originally designed to hook up to the tractor's lower lift arms—on a pair of pillow block bearings.

"It works better than I expected," says Thompson. "I pull the crane behind the tractor up close to what I want to lift and unhook it, then turn around and attach the



Glenn Thompson mounted an old 3-pt. mounted crane on wheels and hooks it up to a ball hitch on his Deere compact tractor. "Works great to move garden tractors and their implements around on my farm," he says.

crane on front of the tractor and swing it precisely over the object. I can use either the winch or a chain hoist to do the lifting. I used a 2,500-lb. winch so the boom has plenty of

leverage."

Contact: FARM SHOW Followup, Glenn Thompson, 7542 North State Hwy. 16, Fredericksburg, Texas 78624 (ph 830 990-

4521 or cell ph 830 992-7443; uffda@beecreek.net).