Money-Saving Repairs & Maintenance Shortcuts

Shop Doors Powered By 50:1 Gear Head

Tom Harmon of Dinwiddie, Va., built a large shop door opener using supplies he had on hand.

"I started with an old 50:1 gear head, powered by a residential garage opener," he says. "Then I bought a 13-tooth sprocket that moves a #50 chain, connected to both ends of the door, with two idler pulleys and a #50 chain off a 472 Haybine."

Harmon explains that everything is connected through the bale tensioner bracket from a 1950s New Holland Super 77 baler.

"I probably put less than \$50 out of pocket into this. Cables and pulleys tie the two doors together at the top."

He estimates he spent three days working on the door.

"I got lucky. Most of it worked exactly like I wanted—not a lot of redos."

He later installed an additional switch on the outside of the door so he wouldn't have to walk inside to open it.

"I wouldn't want anything different. This design works great."



"I started with an old 50:1 gear head, powered by a residential garage opener," says Harmon.

Contact: FARM SHOW Followup, Tom Harmon, Dinwiddie, Va. (ph 804-720-7514).



Adapter goes from the 5th wheel kingpin to a 2-in. receiver hitch.

Homemade Adapter Adds Versatility To Winch

Winching non-operational equipment from yard sites and road ditches is at the core of Cole Hardman's business. To handle these sometimes difficult tasks, he used to mount a winch near the front of his flatbed trailer, but it took up valuable space, was pulled from a low angle, and was semi-permanent, leaving it exposed to wind, rain and snow.

To address these challenges, Hardman built a small hitch adapter for the winch to mount onto the fifth wheel of his ProStar road tractor.

"The adapter goes from the 5th wheel kingpin to a 2-in. receiver hitch," he says. "Having it sit up there in a higher position provides a much better angle for winching heavy vehicles onto the trailer, plus I can use the entire deck. The adapter also swivels 360 degrees so I can get at the equipment no matter where they're sitting."

If the winch isn't needed, it can be easily removed for storage by simply pulling a clip and sliding out the pin that secures it. Hardman can also use the adapter at the back of his truck or on the regular hitch carrier.

"I originally thought about welding the kingpin to the bottom of the winch carrier, but opted to go the route of the receiver tube," Hardman says. "That way, I can still use my winch on the front of the trailer or in the hitch



Winch is easily removed for storage by simply pulling a clip and sliding out the pin that holds it in place.

of my pickup. The adapter works great, and I can quickly take it off and store it in the garage if I don't need it."

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Surber's custom-built gantry trailer looks like it was factory-made. He uses it as a safer way to haul propane and other tanks that are difficult to secure on a flatbed trailer.



Shop-Built Gantry Trailer

As an accomplished metalworker, Frank Surber isn't afraid to tackle any homemade project, big or small. He mounted scaffolding on a school bus chassis to install the rafters, lighting and an overhead bridge crane inside his shop. A former oil field mechanic, he's built welding trailers and a transmission jack, and has helped neighbors build useful equipment from scrap metal.

Surber recently built a heavy-duty gantry trailer for hauling propane tanks, totes and other items too large to fit inside a truck box. He built the framework using 2 3/8-in. oilfield tubing. The gantry beam is made from a 4-in. H-beam.

To raise and lower the payload, Surber installed a 3,500-lb. electric winch along with an old boat winch. He widened and split the drum to pay out and take up the cable for moving the hoist winch.

The hoist winch trolley is constructed from 1/2-in. plate steel with 1 3/4-in. dia. cam rollers. The trailer features a sturdy tongue hitch and rides on a pair of wheels from an old wagon. Surber says the gantry works well for safely lifting and hauling different-sized LP tanks and totes with sturdy metal frames.

Contact: FARM SHOW Followup, Frank Surber, Peacock, Texas.



Winch and cable trolley allow for easy lifting and hauling of large items.



Dual Saw Saves Space

While browsing online recently, the Makita LF1000 Flipover saw caught our attention. This innovative saw serves two functions, acting as both a miter saw and a table saw by flipping the work surface over. It's built for both workshop and job site use.

The LF1000 is designed to optimize your workspace. In a crowded workshop, this saw's ability to smoothly switch between a table saw and a miter saw eliminates the need for multiple tools, greatly reducing clutter and cost.

"This tool has transformed my workflow. It's compact enough for my truck and powerful enough for all my cutting tasks. I no longer drag around two saws," said one reviewer.

With 1,650 Watts and a cutting capacity of up to 10.25 in., it features a tilt function for angled cuts.

The LF1000 is unavailable in the U.S. It costs about &epsilon1,150 (\$1,350 USD). You can find it at Mister Worker and eBay.

Contact: FARM SHOW Followup, Mister Worker (www.misterworker.com).



Dual saw flips over and can be used as a miter saw or table saw.