Rollaway "Weighted" Cart Saves Storage Space

"This home-built cart saves a lot of floor space," says Cal Miner, Willmar, Minn., who used 2 folding chair carts and some bogey wheels off old riding mower decks to make a handy storage cart.

The 8-ft. long cart rides on a tongue dolly at one end and a series of concrete-filled wheels at the other end. Half the cart has an open floor, while the other half has a "floor" of suitcase weights.

"I have a big yard so I have a lot of garden tractor implements and attachments. My homemade cart gives me a way to store everything together all year long," says Miner. "I keep the cart in my shed and use it to store everything from my snowblower and snowblade to my riding mower deck, bagger and leaf blower, so no matter the season I'm always using something on it. All my other implements and attachments, such as weights and chutes and chains, can stay together on the cart instead of taking up space on the shed's floor."

He made the cart's floor by placing 2 cart frames together, one on top of the other, and then welding them together. He also welded in a crossbar at the midpoint for strength. He laid in four 12-in. sq., 1 1/2 in. thick suitcase weights end-to-end to form a floor that covers half the cart. "The weights support my snowblower during the summer and my lawn mower bagger during the winter," says Miner.

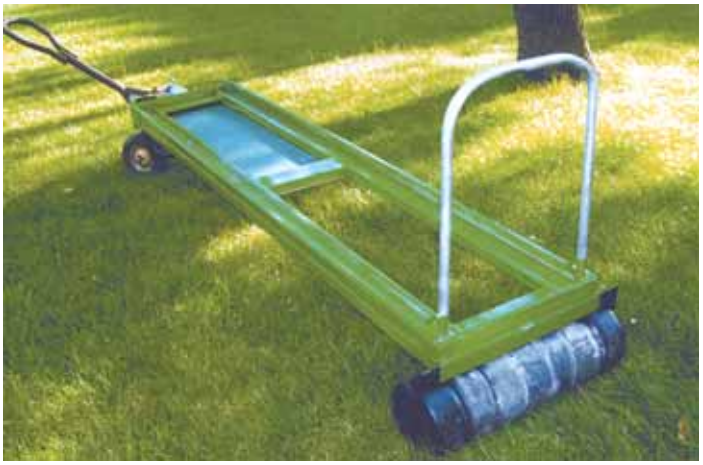
He welded a metal tongue and dolly on one end of the cart and a carrier made from pipe at the back end of the cart, which supports the leaf vac/blower on his riding mower.

The back end of the cart rides on a series of bogie wheels placed side by side. He removed the bearings from all the wheels, stacked the wheels vertically using a section of plastic pipe to keep them straight, and ran a 3/4-in. dia. shaft through them to form an axle. Then he filled all the wheels with concrete. "The weight of the concrete keeps the cart well balanced, with a low center of gravity that keeps the cart from getting top heavy," says Miner.

A metal plate welded to the cart fits between the 2 outside wheels, which are held on with cotter pins.

"I used bogie wheels because I happened to have a lot of them on hand, but you could create any kind of axle and wheels with a low profile," says Miner.

Contact: FARM SHOW Followup, Cal Miner, 3971 N.E. 8th St., Willmar, Minn. 56201 (ph 320 235-3351).



Cal Miner used 2 folding chair carts and some bogey wheels off old riding mower decks to make this handy storage cart. "It saves a lot of floor space," he says.

Upgrade Injection For More Power

You can add power and fuel efficiency to pre-2007 diesels by upgrading to "full fuel flow" injectors, says Ryan Casserly of Full Force Diesel. The company sells remanufactured stock and performance injectors with the chips and other components needed to maximize power from older diesel engines.

"Fuel systems in older diesels didn't come with a lot of power compared to their potential," says Casserly. "We remanufacture the injectors to produce more power, but what we've found is that we also bumped the fuel economy. The biggest increase is with our performance injectors."

The company offers stock and performance injectors for Ford Power Stroke and Dodge Cummins diesels. The company carries new injectors as well as pre 2007 ones that they remanufacture with new tungsten-coated plungers and new nozzles. Flow is matched to a 1 percent variation for long life and precise fuel delivery.

"A lot of what we deal with are engines from 1994 to 2007," says Casserly. "The Powerstroke 7.3 and 6.0 are where we made our market."

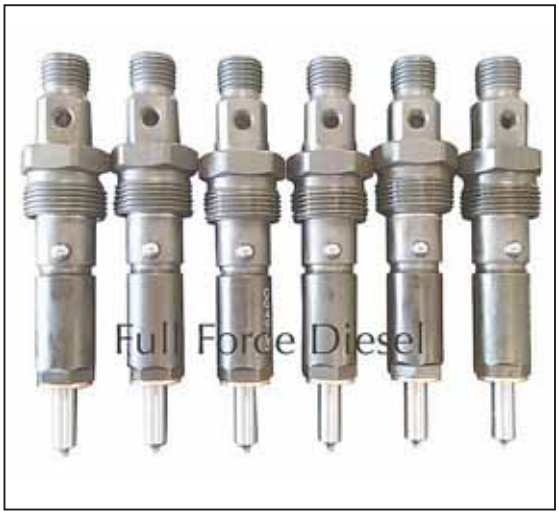
Full Force Performance injectors include multiple levels with a wide range of power increases. Models depend on year, model and end use, such as moderate or heavy towing versus recreational use. Performance chips are required for performance injectors. Prices for performance injectors start at $1,195 and can go as high as $5,000 for a set of custom injectors for race cars.

"Most of our performance injector customers are using their trucks for everyday towing and step up to the lower end of performance injectors," explains Casserly. "They want the extra boost when towing, the get-up-and-go to get there quickly. Another segment is weekend warriors pulling campers or dune buggies. A smaller segment is high performance for racing."

End use determines the recommended package, whether Stage 1, 1.5, 2 or 3, with Stage 1 recommended for heavy-duty towing. Depending on the flow size and type of performance injector ordered, other upgrades may be recommended to the fuel system, as well as to the oil and mechanical systems. Those can include turbo replacement and transmission and clutch upgrades.

Regardless of size or end use, the basic goal is the same, suggests Cassserly. "Our injectors provide more fuel, but the chips tell the engine when to fire to make the most efficient use of the fuel," he says. "Stock injectors can be slapped in without much worry, as they have less impact on fuel use or power."

Even upgrading with rebuilt stock injectors can significantly improve power output and fuel efficiency, adds Casserly. That is particularly true with less well-maintained engines and those with more than 200,000 miles.



Full Force Diesel sells remanufactured fuel injectors to maximize power and increase fuel efficiency on older diesel engines.

"You can see how people take care of their injectors by how worn they are," he says. "It is important to use oil formulated for high pressure in these diesel engines and maintain the recommended oil change schedule."

Casserly notes that lesser quality oil can be used in farm tractors. However, he recommends high quality oils like Mobil Delvac, Valvoline Turbo Blue, Amsoil or Schaeffers in truck engines.

Customers can have their current injectors rebuilt or avoid a core charge by sending the old injection set when ordering. Rebuilt sets can also be ordered and cores returned later for a core charge refund.

Contact: FARM SHOW Followup, Full Force Diesel, 1511 Sarah Court, Murfreesboro, Tenn. 37129 (ph 615 962-8291 or 615 962-8295; sales@fullforcediesel.com; www.fullforcediesel.com).

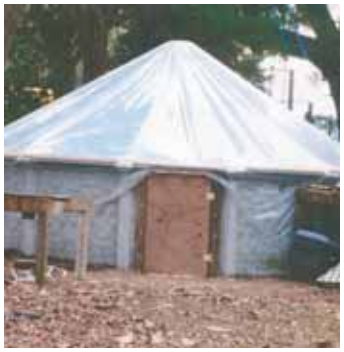
Swimming Pool Greenhouse

"I have an 18-ft. dia. by 3-ft. high above-ground swimming pool. It wasn't being used any more so I figured I'd take it down. One day, I got the idea of making a greenhouse out of it," says Robert Witt, Summerdale, Ala.

To make a center pole, he cut a 12-in. dia. circle out of plywood and mounted it on top of a 12-ft. long 2 by 4. Then he cut fourteen 6-in. pieces of 3/4-in. pvc and spaced them evenly around the perimeter of the plywood disc, screwing them down so they stick straight out. Then he glued a 45 degree pvc connector to each pipe and inserted 10-ft. pieces of pipe that run to the sides of the pool. Then he cut another circle of plywood and fastened it over the top of the first on the center pole to hold the pvc pipes tightly.

Witt then built benches around the inside walls of the greenhouse by sinking 4 by 4 legs into the ground and made a door out of 3/4-in. plywood. To cover the structure, he went to www.growersupply.com (ph 800 748-6487) and bought clear greenhouse film measuring 28 by 30 ft. to go over the top. He put foam padding on top of the center pole and used double-sided tape around the outside edge.

Contact: FARM SHOW Followup, Robert Witt, 18801 Couch Plant Rd., Summerdale, Ala. 36580 (ph 251 609-3048).



Robert Witt converted an 18-ft. dia. by 3-ft. high above-ground swimming pool into a low-cost greenhouse, building a roof and covering it with clear greenhouse film.