Tired of moving heavy grain augers at harvest time, Charles Johnson built this self-propelled auger. The engine is off a Gleaner combine.

Auger is driven by double groove pulleys from the combine, and its separator clutch stops and starts the auger.

Combine Turned Into Handy Self-Propelled Auger

Charles Johnson along with his father and brother were tired of the time-consuming, backbreaking job of moving heavy grain augers at harvest time. They borrowed a few ideas from FARM SHOW readers and gathered up parts they had around the farm to build a self-propelled auger.

"All the engine and auger controls are reachable standing on the ground," explains the Malta, Mont., farmer and rancher. "There's no need to climb up onto the tractor to start and stop a pto-driven auger. And there's no exposed pto shaft to work around near the intake end of auger."

Besides being safer, it's easier to operate.

"You can look straight up to the top end when positioning the auger at each bin. Also, the machine is not tippy when moving from bin to bin, and it's not likely to tip over in high winds," Johnson says.

The extra weight and engine came from a stripped down Model F Gleaner combine they bought at a neighbor's auction. Johnson removed the cab and operator's platform and lowered the engine frame as well as the radiator, hydraulic tank and pump to the bottom frame where the cleaning shoe had been.

He welded 5-in. sq. tubing to the main frame above and behind the rear axle to attach the original operator's platform, and a combine header platform lift cylinder to raise the lower intake end of his 60-ft., 8-in. Speed King auger. He mounted a 60-in. hydraulic cylinder from a Farmhand F-10 loader under the grain auger tube to raise the auger, eliminating the need for the auger's original cable winch.

The auger is driven by double groove pulleys from the combine, and its separator clutch stops and starts the auger. The cleaning fan shaft and pulley with an additional new pulley provide the right rpm speed for the jackshaft.

"We had to buy a heavier gearbox to get adequate belt pulley overhang strength as compared to the original pto gearbox," Johnson says.

He built a transfer auger from the combine's grain tank and unloading auger parts and a 240-volt electric motor power head from a bin floor sweep. He made mounting hardware so it attaches and detaches easily. That lets him use the power head for both jobs.

Johnson purchased a 12-volt gear reduction motor to power traction wheels (from a Toro riding lawn mower) under the transfer auger, which is operated by a toggle switch and heavy-duty relay mounted next to the operator's platform.

"We have about $1,200 invested in the machine," Johnson says. "We do a lot of shop projects, but this did have some challenges. We were surprised by the strength required in the auger A-frame to provide engine clearance. I would also consider doing a complete hydraulic motor drive instead of V-belt drive, and either an electric winch or hydraulic drive winch to raise and lower the auger. But these were the parts we had on hand, and the machine works very well."

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Dennis Carnahan uses rotating lights to be more visible when driving big farm equipment on busy highways.

Rotating Lights, Cameras, Make Highway Travel Safer

Dennis Carnahan says a couple of his best buys – a rotating light and a camera – make him safer when he's driving big farm equipment on busy highways between farms.

He first got the idea for rotating lights when he saw them on farm equipment in France during a visit there. When he returned to the U.S., he found out the lights were optional equipment for Deere and Case IH equipment. He started ordering them for all new equipment and bought an add-on kit for an older tractor.

"Drivers seem to respect these more than flashing lights," Carnahan says. "We put rotating lights on every machine that goes on the road including our little 100 hp tractor with a bush hog for mowing on the roadside."

Another safety device, the camera he installed on the back of his air seeder, often changes how he drives.

"I love that camera," he says. "I travel down a four-lane highway, and if I have to make a left it's nice to know what's behind me. I just feel safer. The picture quality is good – even at night."

He purchased the after-market camera from his Deere dealer and connected it to the monitor already in his cab. It worked so well he added a camera to the back of a grain cart and will add cameras to other large equipment in the future.

Carnahan doesn't endorse any particular model of rotating lights or cameras, but encourages farmers who spend any time on busy roads to consider adding them to their big equipment. Besides dealerships, the lights and cameras are available at many farm supply stores.

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Reversible dual fan module can be set to bring in fresh air, and exhaust stale air.

Simple Fan Unit Pulls Out Stale, Damp Air

You can get the musty smell out of basements or other areas with the XchangeR reversible fan from Tjernlund Products, Inc. The dual fan module can be set so both units bring in fresh air, or you can reverse both modules and exhaust the air instead. You can also reverse just one, and move air in both directions at once.

The self-contained unit can be installed by practically anyone, suggests Andrew Tjernlund. "If you are comfortable cutting a hole in the wall, you can install our fan," he says. "The rest is easy. There is no wiring to be done. Just plug in the cord."

Reversing the fan modules is easy, too. Simply pull them out, rotate and reinsert, adds Tjernlund.

The compact fan is only 16 in. long, 12 in. wide and 4 7/8 in. high with an outside vent that is 5 3/4 in. long, 14 1/4 in. wide and 7 1/8 in. high. The difference in size is due to the dual fans on the inside.

The two fans can be turned on or off manually or operated automatically by adjusting a dehumidistat control. The outside hood can be removed for easy cleaning of the screen. A plug-in speed control can be added for use with any plug-in timer.

Suggested manufacturer's retail price is $200, but Tjernlund says the fan can often be found for less. A similar unit designed for crawl spaces with concrete block foundations is priced at up to $150.

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