

Old Combine Has 3 New Jobs

Shad Dewey has a 50-year-old International Harvester combine that does jobs it was never intended to do. "I looked at the prices of used tractors with loaders and thought there had to be a less expensive way to plow snow and move bales," Dewey says. He found the solution in a self-propelled combine that had "retired" many years earlier.

Dewey bought the 915 combine, two heads and a head-cart for \$800 from a scrap dealer and went to work. "I cut everything off the grain platform except the bracket that attached the head to the combine feederhouse," Dewey says. "The auger, platform pan, sicklebar and reel ended up in the scrap pile, and I should be able to get a fair amount of cash for that."

The platform-mounting bracket became the new frame for his plow blade. He welded a 3 by 6-in. rectangular tube across the bracket for extra support. "I found an old 11-ft. plow blade from a county truck that was exactly what I needed," says Dewey. He rebuilt the blade mounts to fit the combine's mounting bracket and welded it together. "Raising and lowering the feederhouse gives me more than 2 ft. of lift on the plow blade," Dewey says. "When I'm plowing I put the hydraulics in float and the blade glides right along."

Dewey says the engine on the old 915 starts real well in winter and the machine has plenty of power. He also uses the blade for pushing

dirt and general yard cleanup. "It's not as fast as a tractor, but I sit high and can see all around me."

Dewey also uses his rig to move big round bales. He built a steel frame for two bale spears and mounts it to the feederhouse just like a crop header. "I just chain it in place to hold it on when it's empty," Dewey says, "and when I lift a bale it tilts back and doesn't move. When the feederhouse is down, the forks are level to the ground and I can get right under a big bale to carry it or tip it on end."

Although Dewey's rig is oversized for a blade and bale hauler, it suits his purpose just fine, and serves a long-held passion. "I worked on a custom combine crew out of high school and really loved it. I told myself that someday I'd own a combine, and now I do. It doesn't harvest grain, but I use it several times a year, and that's even better than just harvesting grain."

Dewey's combine still has the grain unloading auger and now he's thinking of turning that into a crane arm that could be used to lift wheels or other parts around his farm.

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Shad Dewey converted an old International Harvester 915 combine to haul big round bales, mounting 2 bale spears on a steel frame that attaches to the feederhouse.



He welded an old county snowplow to the mounting brackets from a grain platform so he can use the combine to plow snow.



"It only cost me about 10 percent as much as a new sprayer," says Jerry Denger, about his self-propelled articulated sprayer.

Sprayer Built From Old Combine And 2-Ton Truck

"We built an articulated self-propelled sprayer out of parts from an International combine and a 2-ton truck," says Jerry Denger of Bloomington, Ill., about the sprayer he built with a friend, Cliff Curry. "It cost only about 10 percent of the cost of a brand new one."

Denger's economical equipment project began when he located an \$15 IH combine for just \$700. It had a good engine, a working hydrostatic drive, a serviceable cab and a very rusty harvesting system.

"We stripped everything off the combine down to the wheels and the frame," Denger says, "sorting out usable parts like the engine, the drive system, the cab and the brakes. We repositioned the steering wheels to track with the drive wheels and threw all the junk parts in the scrap pile."

The men then pulled the box, the cab, the engine, wheels and transmission from an old 2-ton Ford truck. They replaced a large portion of the combine frame with the truck frame and kept the leaf springs so the new sprayer would have a smoother ride. The cab sits on the truck's old rubber engine mounts in the center of the frame between the drive wheels.

Denger used 3/8-in. flat steel to build a center pivot into the frame behind the cab so the new rig would have articulated steering. It pivots on a 1 1/2-in. steel shaft

with poly bushings, similar to kingpins on a truck. Denger says they decided to use plastic sheathing rather than metal because of the potential for corrosive moisture from spraying. They mounted the 500-gal. water tank just behind the pivot point and located the engine between the rear steering wheels.

The finished spray rig has a 60-ft. boom. It's mounted on hydraulic arms that use the same cylinders and are in the same brackets as the old combine feederhouse. "I can move the boom up and down about 3 ft. and have an excellent view of the full width from the cab," Denger says.

The sprayer frame has 3 ft. of ground clearance so Denger can easily clear knee-high corn and full-grown beans. The machine is about 24 ft. long with a 15-ft. wheelbase. "My articulated steering setup lets the back wheels follow directly in the drive wheel tracks to minimize crop damage," Denger says. "The drive wheels have 48-in. tires and the steering wheels have 36-in. tires."

"So far my sprayer's proved to be exactly what I wanted," Denger says. "I can spray at 10 to 12 mph and go down the road at 18 to 19 mph with a real smooth ride. I could probably use a 750 or 1,000-gal. tank, but then the machine would be a lot heavier."

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Daryl Dirks built this self-propelled sprayer out of an old Deere 7700 combine for \$12,000 and a lot of time. It's equipped with a 60-ft. boom and 750-gal. tank.

Deere Combine Reborn As Self-Propelled Sprayer

"I needed a commercial self-propelled sprayer but I couldn't justify the \$60,000 price tag. I'd seen other combines turned into spray rigs so I built my own out of an old Deere combine for \$12,000 and a lot of time," says Daryl Dirks, Scott City, Kan.

The sprayer is equipped with a 60-ft. boom and 750-gal. tank. Power is provided by a 6-cyl., 135 hp diesel engine. The rig is equipped with state-of-the-art features including a sprayer controller and a GPS light bar for automatic guidance.

He started with a 1973 Deere 7700 combine that he already had. He stripped the combine down to the cab, drive train, engine, and radiator. The cab was originally located on the left side of the combine, with the engine beside it. He used the 4 by 6-in. tubular steel frame off an old Krause disk to build a new frame, then moved the cab over to the center and relocated the engine down behind the cab. A 750-gal. tank mounts behind the cab.

"The Deere combine we used probably isn't the best one for converting to a sprayer because the combine's transmission and hydrostatic pump are belt-driven. Two sets of belts went down to the front axle, which restricted where I could relocate the engine. I ended up using just one set of belts, which allowed me to position the engine down low," says Dirks.

He mounted the boom from his 3-pt. sprayer on the throat of the combine for unlimited height adjustment, from 6 in. above ground to 4 ft.

The combine's original rear axle was too small and narrow so he replaced it with the



He mounted the boom from his 3-pt. sprayer on throat of combine.

rear axle off a New Holland TR-70 combine. He also installed large 14.9 by 28 rear tires off a Deere 4755 front wheel assist tractor. The 18.4 by 38 front tires are new and slightly bigger than the original ones. "I wanted taller tires than the original ones for more speed," says Dirks. "The bigger tires, along with a bigger pulley that we installed on the driveshaft, allow us to go down the highway at speeds up to 25 mph."

"I use it mostly to spray pre and post emergence herbicides on wheat, milo, sorghum, sunflowers, and corn."

Last winter he added an air bag suspension system, installing 4 air bags designed for a Kenworth semi truck under the sprayer's front and rear axle. "The air bags improved the ride by 100 percent. An electric pump automatically controls the air pressure," says Dirks.

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