



Peter Trant and friend Paul Carter say restoration projects don't come any tougher than the 1938 Deere AR they restored to "like new" condition.

## Restored 1938 AR Deere Looks "Factory New"

By Contributing Editor Lorn Manthey

Peter Trant had no intention of starting a restoration project when he stopped by his friend Earl's family farm. But that all changed when Earl's dad Herb showed him a pile of rusted parts piled under a shade tree. "When I got home, I just couldn't get that picture out of my mind," he says.

A few weeks later Trant brought Earl a well-preserved 1941 British Columbia license plate and told him, "It's going to

cost you." Earl's quick response was "How much?," to which Trant replied, "All that rusty green iron under the tree on your Dad's farm." They shook hands on the trade, and Trant says it's still open to question about who got the best deal.

Trant and his friend Paul Carter originally thought they'd assemble the parts into yard art, but the possibility of getting the engine running changed their minds. The men soon

learned that all the parts were castoffs from Earl making one tractor out of two and were either worn out, broken, or missing altogether. Not deterred in the least, Trant says "Paul and I have restored several car engines, so we stitched up the cracks in the block, sleeved the cylinders, salvaged the original pistons, installed new rings, polished the crankshaft, fitted new valves and re-ground the cam." Trant joined the Two Cylinder Club and found the magazine a great source of information and leads for missing parts.

"Local collectors had some of what we needed, and we made some castings for another collector in trade for some bits we needed," Trant says. His friend Earl loaned him levers from one of his tractors, which they used to cast patterns for replacements. As with most restorations, luck also played a part in the finished project.

Trant found a radiator with the correct core design at a local swap meet for just \$10. It was larger than what they needed, so they cut it down, soldered on the old header plates, and Trant says it looks great and doesn't leak a drop.

Restoring the wheels was another story because the original steels had been cut down for pneumatic tires. Trant eventually connected with a fellow in Northern Saskatchewan known as 2 Bang Tractor, who "sold me a very nice pair of rear wheels, a set of frozen radiator shutters and some parts we didn't even know we were missing." Trant also bought a set of torn but solid fenders from 2 Bang, which he carefully grafted together with sections of those from Earl, to

make a restored pair.

After the tractor was re-assembled and running, they decided metal cleats weren't practical for driving on pavement. "Paul and I looked at pictures of other wheel restorations and decided we could make our own treads if we had the right materials," Trant says. "As luck would have it, I was able to buy treads for the front and rear wheels from a man who worked at a re-treading plant. He showed me how to prepare the joints and provided the vulcanizing material. We jerry-rigged an oven to join the tread ends, then filled the 'gutters' on the outside edges with long and strong bondo. After finding an appropriate glue, this was a perfect solution and the wheels look factory-made," Trant says.

Carter and Trant agree that resurrecting the old tractor was more work than anticipated, but Trant says they didn't keep track of time because it was great fun.

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The two men started with a bunch of rusted parts piled under a shade tree.

## Funk-Inspired Ford 9N Repower

"I was inspired to repower my 1940 Ford 9N tractor by Funk, a company that used to sell a do-it-yourself repower kit for Ford N-series tractors. I figured since they put in-line 6's in them back in the 1950's, why couldn't I?" says Courtney Koster, Lakewood, Colo.

She put a Ford Falcon in-line 6 engine in place of the worn-out 4-cyl. in her 9N. She got the in-line 6 from a 1962 Falcon she had been using for parts to restore her Ford Ranchero.

"I learned to weld from my dad as a teen, and my dad and grandpa were mechanics, so the work comes naturally to me," Koster says.

"I built the frame out of channel iron, and extended the front end about 10 in. because there were no adapter plates or conversions available. You can still get the flat head V8's and small block Chevy adapters, but I didn't want that."

According to Koster, the most challenging part was taking the engine in and out a few times to find out how it would fit and getting the motor mounts right.

"I kept the original hood but extended it by the dash to look like a Funk conversion. I also made the hood hinge forward like a semi. I put a bigger flywheel and pressure plate on to accept the original clutch disc. This led to a clearance problem and no place to put the starter, so I made a hand crank which works easier than I thought it would.

"I made the hand crank by getting a crank nut from an old tractor I found on eBay. I centered it on a 1/4-in. plate and tacked it in place to make sure it was straight on the front pulley, before finally welding it in place. I modified a crank handle by lengthening it and using a die grinder on the original hole in the front so it would fit the larger diameter crank," says Koster.

She had to put a remote oil filter on as the frame hit the oil filter and HEI distributor on



Courtney Koster replaced the worn-out 4-cyl. engine in her 1940 Ford 9N with a Ford Falcon in-line, 6-cyl. engine. "I learned to weld from my dad as a teen, and he and grandpa were mechanics, so the work comes naturally to me," she says.

the Falcon engine. Koster also extended the tie rods. "I got lucky and moved the radius rods forward without any modification by using the original cups and foot pegs."

Koster says, "It has about 4 times more horsepower than a stock engine but keeps the original look. I don't think I would do anything different if I did another. It took me a little over 3 mos. to complete, tinkering on evenings and Sundays.

"So far I haven't used it much, just driving in the yard. I do antique tractor pulls and want to go pull for fun and exhibition, and also do some shows and parades."

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## "Odds And Ends" Economy-Style Tractor

"I had a lot of fun building this Economy-style loader tractor from scratch. My goal was to spend as little as possible, so I used odds and ends I got at work and parts from my uncle's farm," says Chuck Woodward, Norway, Iowa.

The tractor is painted tan and sports a brown and green hood ornament off an old Dodge Ram pickup. It has a big, rounded hood and a metal seat.

"I spent only about \$1,000 to build it," says Woodward. "It has parts from Ford, Chevrolet, and Dodge vehicles from the 1930's to the 1970s, and a Kohler engine and Model A rear end. I call my tractor a 'mutt of many years'."

He started with a half-finished tractor that someone had started building, but had given up on the project. It came with a Model A car differential but no engine or transmission. Woodward used 3-in. channel iron to build new frame rails and then installed a Kohler 23 hp. engine. It belt-drives a 4-speed transmission off a 1973 Chevrolet 3/4-ton pickup.

"The differential was in terrible shape so I took it apart and cleaned it," says Woodward. "The Model A came with a tube-shaped driveshaft, and to connect it to the transmission I had to replace the spline on the driveshaft with a universal joint."

The hood is off a 1948 Dodge pickup, which Woodward cut into four pieces to make it fit. The steering wheel is off a 1965 pickup and is attached to a homemade steering column that goes over the engine to the front axle.

He made the grille from a pair of 1/4-in. thick hammermill screens. "The screens were slightly curved, and I bent them to make them rounder," says Woodward.

He made the headlights by mounting 10 small LED bulbs in sockets, which he modified to fit inside instrument housings



Chuck Woodward used "odds and ends" he got at work, and parts from his uncle's farm, to build an Economy-style loader tractor from scratch.

fitted with glass lenses.

He used 3-in. channel iron and 2-in. tubing to build a triangle-shaped front axle that pivots at the center. "The design allows the front wheels to move up or down but not backward, which keeps the axle from breaking if the tractor bumps up hard against something," says Woodward.

The front wheels are new trailer wheels, while the 16.5 rear wheels are off the Chevy pickup. New trailer fenders mount over the rear wheels.

He used 1 by 2 steel tubing and other scrap metal to build the loader, which has a home-built 4-ft. wide bucket that's raised and lowered by 7-in. hydraulic cylinders. "To compensate for the small cylinders, I designed a bucket tilting system that works like a backhoe," says Woodward. "The cylinders are attached to 2-piece hinged steel brackets, which provides two pivot points that allow the bucket to rotate a full 180 degrees."

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