

speed truck transmission that is in turn connected to the rear end of a 5-ton military truck. The front wheels are off a Ford pickup while the 3 1/2-ft. high rear wheels are off an old grader. I had to modify the rear wheels to fit the Ford axle. I made a center plate to fill the hole in the wheel and then drilled new holes in the plate. The hood is made from sheet metal while the rear fenders are off a Massey Ferguson tractor that had burned up.

I used rectangular steel tubing to build a front-end loader, which is equipped with a quick-tach bucket. The loader is raised or lowered by two matching hydraulic cylinders. The exhaust manifold is off the Toyota and is mounted upside down, with a new muffler attached on top. The two transmissions gear the tractor down so it can go from a slow crawl up to 20 mph. (Dean Leigh, 85 12<sup>th</sup> Ave., Whitehorse, Yukon Territories, Canada Y1A 4K2 ph 867 633-2284)



I converted the manual lift pickup on a friend's New Holland 640 "Silage Special" baler to hydraulic lift. The baler, which is about seven years old, came equipped with a standard manual lift pickup so every time my friend went over a ditch or switched fields, he had to get out of his tractor and raise the pickup up out of the way.

To make the modification, I took the manual crank and screw assembly apart, welded in a metal bracket, and hooked up the top part of a 1 by 6-in. hydraulic cylinder. I also extended the pivoting button bracket to adapt to the bottom part of the cylinder. The bracket has a slot in it which allows the pickup to ride up or down and follow the ground contour.

My total cost was \$250 (Canadian) for the bracket, hydraulic cylinder, and hoses. (Maurice J. Gagnon, New Brunswick, Canada)



My new "Johnny Rake" is designed to recondition gravel driveways and to aerate lawns and remove thatch. It measures 48 in. wide by 20 in. long and is equipped with three rows of self-cleaning steel teeth that face backward.

It pulls by chain behind a garden tractor. A rack on top of the rake allows weights to be added for extra downpressure. It works great on driveways to fill in wheel ruts and potholes; to break up manure in horse arenas and paddocks; and to level out mole hills in pastures. One woman even

pulls the rake behind her Honda car to smooth out her 1/4-mile long driveway.

The secret to the rake's success is the way the chains hook to it. They run through loops at the front of the rake and fasten to pegs at the back so that they actually push the rake from behind, allowing the front end to float freely. If the rake hits an object, the front end simply lifts up and over without bouncing around a lot. Rocks up to 4 inches in diameter pass right through the rake without plugging it up. If bigger rocks are a problem, you can attach a rope to the back of the rake and pull on it on-the-go from the driver's seat to let the rock pass through. The same idea can be used if any tall weeds get caught in the rake.

It sells for \$299 plus S&H. (John Patakas, 24829 S.E. 376<sup>th</sup> St., Enumclaw, Wash. 98022 ph 360 802-2238; E-mail: johnnyrake@foxinternet.net)



I built my own riding lawn mower that's equipped with a 6-ft. deck. The front axle is a Chevrolet Chevette rear axle, which I reversed, while the rear steering axle is home-built. The rig is driven by an 8 hp Briggs & Stratton gas engine mounted on back and is hooked up to a 5-speed manual car transmission. The transmission is geared down by a series of pulleys and sprockets. Power steering is provided by a pair of single-acting cylinders which operate off a small power steering pump that's belt-driven off the engine. The seat is off an old garden tractor. I use a hydraulic control valve to steer. All gauges mount on a dash.

The deck is powered by a 15 hp Tecumseh gas engine and has four Murray blades. A pair of big castor wheels on front keep the deck level. A hydraulic cylinder that operates off a small hydraulic pump is used to raise and lower the deck.

I used the mower late last summer to cut grass that hadn't been mowed all year long. The grass was 2 1/2 to 3 ft. high, but my home-built mower cut right through it with no problems. (Richard Weirmeir, RR 3, Elmwood, Ontario, Canada N0G 1S0 ph 519 363-3535)

Thanks for the story in your last issue on my walk-behind rototiller that mounts on a tractor 3-pt. I have more than 20 years of agricultural engineering experience and have recently done design work as an independent consultant. I'd be willing to help farmers and ranchers fine-tune the designs of their homemade inventions and make calculations to size components, etc. I use an Auto-Cad computer-aided design system. Free consultation available. (Roger D. Leitzen, 39567 Timber Lane, St. Peter, Minn. 56082 ph 507 386-0170)



Here's a photo of a two-headed calf that's about 70 years old. He was stillborn on



My home-built sawmill will handle the biggest, toughest logs. It's powered by a 50 hp. Cummins Onan engine, which runs the bandsaw blades and debarker. An 11 hp. Honda engine runs all hydraulics on the log carriage itself. The saw's operated by 32 switches. Our best 2-day run with the sawmill was 12,128

board feet in 17.2 hours. It was all big spruce butt logs about 16 ft. long and the customer wanted all the 2 by 12's they could get out of them. This sawmill has tremendous power and cuts precision lumber. It's a money-maker. (James K. Mitchell, 7896 U.S. 11, Potsdam, N.Y. ph 315 265-7647)

my grandfather's farm. They had the calf stuffed and we've kept it all this time. (Walt Hanefeld, 209 North 5<sup>th</sup> St., Continental, Ohio 45831 ph 419 596-4203)

My dad bought this 1976 Dodge Bighorn semi truck at an auction a few years ago, and I helped him overhaul it. It's a rare



truck - only 250 were ever made, and there are only about 50 still in existence today in the U.S. We figure this truck is worth about \$50,000. These trucks were built in 1975 and 1976, but when Chrysler started having financial problems in 1976, they quit making them. It's powered by a 400 hp Cummins diesel engine. A lot of people don't know that Dodge ever made a semi truck this big. We use the truck all the time to haul grain. My dad bought a second model for spare parts.

We also own a 1967 Dodge semi truck that we bought used and fixed up. It's equipped with a tilt cab. We use it with a low-boy carrier deck to haul liquid fertilizer tanks and to haul a bull dozer. This model isn't rare - thousands were made from the early 1960's to 1976. However, there probably aren't too many still in active use. (Robert Davis, 2030 Bixby-Wood Road, Savannah, N.Y. 13146 ph 315 365-2266)



There have been a lot of trucktors built over the years. Here's a version I built back in 1983 by connecting part of a 1956 Ford 1-ton pickup to a Farmall M tractor. It's a great toy. I'm 85 years old and recently had open heart surgery, so I haven't operated my trucktor for two or three years. It gets 6 to 10 mpg. (Burdette R. Masters, Box 304, RR 3, Chariton, Iowa 50049 ph 641 862-3275)

Thirty years ago I mounted a backhoe on back of a 1951 Ford 1 1/2-ton truck, and I still use it all the time. The backhoe is powered by a 30 hp Wisconsin 4-cyl. gas engine that mounts directly behind the cab. The engine chain-drives a 16-gal. hydraulic pump that operates the backhoe. The engine is bolted onto a steel frame that's bolted to the shortened-up truck frame. The backhoe bolts to a subframe. The backhoe was originally designed to be mounted on back of a tractor and has a 24-in. bucket. It has about a 10-ft. reach and can dig efficiently about 8 ft. deep, although it'll go down to 11 ft. if necessary. To offset the weight of the backhoe I mounted a cast iron weight on the truck's front bumper.

I've used the backhoe to dig water



lines, drain fields, wells, etc., and have also done some work for neighbors. It's a lot handier than mounting a backhoe on a tractor because I don't have to take it off all the time.

I operate the backhoe from an old steel seat using levers mounted at the back of the truck. The backhoe is equipped with seven hydraulic cylinders - one to tilt the bucket, one to pivot the arm up or down, one to raise or lower the mast up, one on each outrigger, and two cylinders that swing the backhoe from side to side. (Frank Mayo, 211 Sullivan Ave., Square Butte, Montana 59446 ph 406 737-4208)

I've attended a lot of toy shows over the years and also have a large collection of toy tractors, but I had never seen a toy Farmhand front-end loader. So I built my own 1/16-scale model that's mounted on an Ertl Farmall H. The loader can be manually raised or lowered.

Before building it I took measurements off a real Farmhand loader, which I found in the back 40 of my neighbor's place. Real Farmhand loaders are now quite rare. They were manufactured in the mid 1940's and came with a 10-ft. wide forked "bucket". It was built before balers had become popular and most farmers were still putting up hay by hand with pitchforks. The first guy in the

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