



New Yanmar 3-cyl. diesel engine fits into Cub 184 and cost Mike Schnoebelen about \$2,300.

IH Cub Repowered With Diesel

Faced with replacing the 18-hp gas engine in his Cub 184, Mike Schnoebelen opted to power it up with a new Yanmar 3-cylinder diesel.

"It fits fine, and I didn't have to cut any frame rails, so I knew if I wanted to put the old motor back, I could," explains Schnoebelen. "It probably cost me \$2,300 with the engine, hoses and other parts, but I got 24 hp and new technology. It was still a lot cheaper than buying a new tractor."

He made new motor mounts, modified the flywheel, built a mount for the hydraulic pump, and made air intake and exhaust fixtures. With a career in metal fabrication and a well-fixed shop, complete with a metal lathe, modifying the engine and tractor was relatively easy.

Modifying the flywheel was the most complicated step. The new flywheel had a different bolt pattern from the existing clutch and pilot bearing. Schnoebelen discovered that a roller bearing from an old Chevy 350 matched up to the new flywheel. He did have to cut and heat shrink a piece of flat steel to fill in the recessed flywheel in order to get the clutch and pressure plate to fit.

Schnoebelen built a new mount for the former direct gear-drive hydraulic pump. To power it, he installed a pulley drive off the front of the crankshaft with two pulleys sized to provide the correct rpm's. As it was positioned close to the same spot as on the original engine, he was able to use the original hydraulic outlet pipe, though he did need a



Modifying the flywheel was the most complicated step in process, says Schnoebelen.

new return hose.

Because the new diesel was shorter than its predecessor, Schnoebelen had to fabricate a shroud from the fan to the radiator. He also fabricated air intakes from the air cleaner to the manifold and from the manifold to the muffler.

Wiring in the diesel was also relatively simple. He wired the glow plug and the fuel shutoff through the starter solenoid. He connected the glow plug switch to the crank position and the fuel shut off to the shut off position of the key.

"The new engine works great," says Schnoebelen. "The old engine was a flat head, C-60 with a thermo siphon instead of a water pump. It always ran hot. This is a better setup."

Contact: FARM SHOW Followup, Mike Schnoebelen, 2955 Hwy #22, Riverside, Iowa 52327 (ph 319 648-5113).

High Capacity Cordless Grease Gun

"It works twice as fast as any other cordless grease gun on the market, yet requires only about half as much effort to use," says Dick Kluge, Groton Enterprises, Groton, S. Dak., about the new Alemite 575 12-volt cordless grease gun. He's a dealer for the product and exhibited it at the recent Fort Wayne, Ind., farm show.

The unit weighs 6.8 lbs. and comes with a dual 12-volt battery and a 36-in. long super flexible rubber hose. It delivers grease under high pressure - up to 6,500 psi - at a high flow rate of 5 1/4 oz. per min. at 1,000 psi. It can be loaded either by replacing the 14 oz. cartridge or with a bulk fill hose.

"Its weight is balanced nicely which makes it easy to use. And it works fast," says Groton. "It takes only about four minutes to pump out a cartridge of grease. Pull the trigger once and you get one shot of grease. Holding the trigger will cause it to pump a steady stream of grease."

"You can get six cartridges out of each battery charge. You can use one battery while you're charging up the other one. By the time you pump six cartridges of grease the other battery will be charged up."

Sells for \$219 plus S&H.



New gun delivers grease under high pressure - up to 6,500 psi - at a high flow rate of 5 1/4 oz. per min. at 1,000 psi.

Contact: FARM SHOW Followup, Dick Kluge, Groton Enterprises, 13340 407th Ave., Groton, S. Dak. 57445 (ph 605 397-8589).

Turn-A-Tool Carousel

If finding the right tool often gives you headaches, Kathy Marquardt may have just the right medicine. Her Turn-A-Tool Carousel displays a ton of tools and stores them in less than 4 sq. ft. of floor space. Best of all, you can adapt the carousel to match any set of tools.

"I got tired of looking for tools, so I decided to build something that would let me find them quickly," recalls Marquardt, an electrical and mechanical engineer. "People liked the way it looked, so I started building them to sell."

What makes her tool carousel unique is its use of Velcro for easy customization. The carousel itself stands 53 in. tall on a wooden base and spins on a 12-in. dia. lazy Susan. Two U-shaped 1-in. wide steel straps mounted to the lazy Susan bolt to a 12 1/2-in. diameter, 43-in. tall fabric covered tube core.

"The Velcro lets me easily adapt the hangers for different size tools," says Marquardt. "It will hold shop tools, household repair tools, sewing accessories, even cooking tools."

Each Turn-A-Tool Carousel comes with more than 70 tool holders, not counting plastic pouches. Holders vary from a belt of 13 1-in. diameter steel rings to individual 2-in. diameter plastic rings. Plastic pouches, slip cords and more are all backed with Velcro to be attached as needed. Marquardt even includes extra Velcro strips for customizing the carousel further.

The carousels sell for \$216 plus \$38 ship-



Carousel stands 53 in. tall on wooden base and spins on a 12 in. dia. lazy Susan. Velcro straps make carousel easily customizable.

ping. Marquardt is also planning to market smaller counter top carousels to hold jewelry and other items.

Contact: FARM SHOW Followup, Kathy Marquardt, 1205 118th Place SW, Oklahoma City, Okla. 73170 (ph 405 692-0585).



When done cleaning sewer pipe, Hicswa coils line inside tire for storage.

He Uses A Tire To Store His Roto Rooter

"It makes Roto Rooter lines much easier to handle and store," says Tom Hicswa, Hammonton, N.J., who stores Roto Rooter lines for cleaning sewer lines in an old 15-in. tire, with drain holes drilled into it.

He simply drilled a series of 1 1/4-in. dia. holes about 12 in. apart all the way around the circumference of the tire. When he's done cleaning out a sewer pipe, he disconnects the 10-ft. sections of line and coils them one after another inside the tire. Then he uses a hose to wash it off. The water drains out through the holes in the tire.

"It keeps all the lines neatly stored in one place and off the ground, out of the dirt and water. And it's always ready for the next time I need it," says Hicswa. "I use the Roto Rooter on a sewer line that runs from my house to my septic tank, and also occasionally to help neighbors. Once I've coiled the Roto Rooter



Holes drilled through tire allow water to drain out when Hicswa washes off cable.

inside the tire I roll it into my barn or pickup until the next time I need it. The tire doesn't take up much space."

Contact: FARM SHOW Followup, Tom Hicswa, 2169 Elwood Rd., Hammonton, N.J. 08037 (ph 609 561-7623).