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Toyota Pickup Powered By Freightliner Diesel

Great mileage and more power is what Sheldon Martin got when he installed a Freightliner diesel engine in a Toyota Tacoma pickup. The truck now gets 30 mpg on the highway and 26 mpg in the city compared to the 26 and 20 mpg ratings for a conventional 2009 Tacoma.

"I've had the truck running for a year and a half and put 20,000 miles on it," says Martin, who actually used parts from a couple of totaled-out Tacomas to "build" the truck.

A 2001 Toyota Tacoma that had been submerged under water for several years contributed the cab, bed, frame rails and suspension. A rolled-over 2002 Tacoma 4x4 provided three doors, cab interior, fuel tank and steering linkage.

"The Mercedes OM612 diesel engine, T1N

transmission and all related electronics came out of a 2003 Freightliner Sprinter 2500 that had rolled on its side," says Martin. "It only had 27,000 miles on it."

The 5-cyl. engine was a tight fit and required multiple alterations to the Tacoma engine compartment. The taller engine required modification of the engine belly cross members and removal of the front differential. A completely new cross member for the transmission was needed as well. Front to back was also tight, with the engine positioned inches from the firewall. The A/C auxiliary fan is partially recessed into the front bumper.

"I used the Mercedes viscous fan, a Tacoma radiator and a Tacoma A/C condenser with a Flex-a-lite fan," says Martin. "All the engine

accessory drives, such as the alternator and A/C compressor, are from the Sprinter. I built an aluminum cold-air intake box with a K&N filter, and the exhaust is a custom 3-in. with a Magnflo performance muffler."

One of the added complexities involved unneeded Sprinter electronics. The engine and transmission control modules, antilock braking system, and antitheft systems were designed to communicate with each other. All had to be hooked up and functioning, even though they had no practical purpose with the Tacoma system.

Once he had the guts of the transplant worked out, Martin painted the truck and installed Autometer gauges on the pillar for boost and exhaust temperature, and installed a Scan-Gauge on the steering column. All of

the Tacoma instrument cluster gauges, including the tachometer, work by means of custom pulse wheels and electronic converters. He also replaced the 4.10 ratio locking differential with a non-locking 4.53 ratio axle for better fuel economy.

Martin acknowledges the job was challenging, but well worth the effort. "I spent Saturdays and evenings for about seven months (including body work) to get it running and several months more driving it to work out the bugs," he says. "With a good set of tools and lots of time, anything is possible."

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Rotating Incinerator Makes Quick Work Of Carcasses

The Turn-A-Nator from Sammy Massey promises to turn carcasses into ashes faster with less fuel at temperatures of up to 1,600 degrees. The largest of the new incinerators can reduce a 300-lb. hog carcass to ash in an hour and a half.

"These units are designed for everyone from the livestock farmer who needs to clean up an occasional dead animal, to the vet clinic that offers pet cremation as a service," says Massey. "The T1000, our large unit, will incinerate a 200-lb. carcass in about an hour. Our smaller T150 will dispose of about 500 lbs. of chickens in two hours."

Massey's original backyard crematory (FARM SHOW Vol.29, No. 1) used a wedge-shaped, self-feeding design with a bottom burn. His new Turn-A-Nator speeds the incineration with a constant tumble of the carcass for faster and more efficient disposal.

"The turning busts up the ashes so the flame keeps hitting the carcass directly," says Massey. "As a result, it takes as little as half a gallon of diesel fuel per 100 lbs., much less than other incinerators on the market. The turning also busts up the bones, eliminating the need for a crusher."

The Turn-A-Nator, with its propane tank shape, has stationary ends with a revolving center barrel. The largest unit has a 4-ft. wide, 12-ft. long footprint. At one end, a diesel or propane-fed burner injects flame into the firebox while a fan forces extra air into the firebox for a cleaner burn. At the other end of the unit, an optional afterburner cleans up virtually all the smoke.

"You can set the time so the 1/3 hp motor rotates the firebox as fast as one revolution per minute or as slow as one per five minutes," says Massey.



Rotating Turn-A-Nator tumbles the carcass as it burns, using as little as 1/2 gal. of fuel per 100 lbs.

The standard door on the T1000 handles a 300-lb. carcass, but Massey says it could be made large enough for a 500-lb. carcass.

The Turn-A-Nator comes in small, medium and large with the smaller T150 designed to handle 150-lb. carcasses. Prices vary from \$5,900 for the smaller unit to \$6,900 for the T500 and \$7,900 for the

larger T1000 size. An optional afterburner adds \$2,000 to the cost of any size unit. Massey says he can build larger units to order.

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Allis Chalmers Brand Comes Back

This past fall Briggs & Stratton brought the Allis Chalmers brand back to life at the big lawn and garden expo in Louisville, Ky. The new AC130 lawn tractor, complete with the old logo and color, is available as a 23 hp with a 42-in. mower deck or a 24 hp with a 46-in. deck.

"We've had a very strong and positive reaction to the reintroduction of the brand," says Troy Blewett, Briggs & Stratton. "People remember it fondly, and the Allis Brand still has a significant following."

Briggs & Stratton only claims rights to the brand in the lawn and garden market. The company's Simplicity division was once a division of Allis Chalmers until sold in 1983.

"It's very possible that we may expand

the hp range, but we aren't coming out with an ag tractor," assures Blewett.

The new AC models are also not going to replace any Simplicity models, nor will they feature the Simplicity free-floating mower decks with their manicured cut.

"Simplicity has the premiere mower deck in the industry," says Blewett. "With the new Allis brand models, Simplicity dealers can offer a tractor that gives a nice cut at an economically attractive entry level price."

Both tractors feature a Briggs & Stratton Extended Life Series V-Twin engine. They both have a hydrostatic transmission, cruise control, a cast iron front axle, and a tight turning radius. The 23 hp will retail for approximately \$1,700 and the 24 hp for \$1,999 (www.allischalmerslawn.com).



New Allis Chalmers 130 lawn tractor, complete with the old logo and color, has a 23 hp engine with a 42-in. mower deck or a 24 hp engine with a 46-in. deck.