

handy tractor with good power steering. It makes an excellent loader tractor.

"Our **New Holland** 166 hay inverter is a neat piece of machinery and does a great job of gathering two or three windrows into one. Since using the inverter we've found that we need to make only 1/2 to 1/3 as many trips over the fields with our heavy forage harvesting equipment. Also, the inverter picks up far fewer stones than a rake does."

On the minus side, he lists his **New Holland** 40 silo blower. "This 1,000 rpm blower was constantly plugging. We couldn't solve the problem so we traded it in for the company's model 60 blower. It delivers haylage into our 108-ft. high silo with ease."

Alexander L. Thomson, Woodbury, Ct.: Alexander likes the diesel engine in his 1990 **Dodge** W-250 pickup. "Chrysler's decision to use a proven engine in their pickups was a wise one. This engine will start at 0 degrees without waiting for the manifold heater to cycle. It's also fuel efficient - I can usually get 20 mpg with an empty pickup in the summer. Also, the engine has amazing torque. The only downside is that it takes forever for the engine to warm up, and it should have a 6-speed transmission. There's too much of a gap between second and third gear when pulling heavy loads up hills."

"My worst buys are certain off-shore shop tools. Chisels and punches made in Taiwan and India are terrible - they simply bend and break. An electrical terminal-end assortment from Taiwan has crimp-type terminals that won't stay crimped and won't take solder. I wasted \$29.95 on them."

Donald Risser, Bainbridge, Pa.: Donald's impressed with his 1997 **Big Jim** Quantum silo unloader made by Jamesway. "It lets us chop haylage 10 points wetter and cut it longer than we could before, which results in much better feed since more leaves are saved and there's less heat damage. Yet it can still unload feed 3 to 4 times faster. It replaced a Goliath II unloader that we previously used in our Harvestore 20 by 70-ft. silo."

Earl Wagler, Millbank, Ontario: Earl's happy with his 1975 **Ford** 6600 tractor. "We bought it equipped with an 8-split transmission with dual power which results in a total of 16 speeds. It's an excellent tractor. It has about 7,000 hours on it and has required only minor repairs. We haven't had to do anything to the drive train, engine, transmission, or hydraulics."

"Our 1982 **Case** 2290 tractor is neither a best nor a worst buy. We bought it new in 1982, but before it had even 3,000 hours it needed major transmission and rear end repairs. The park gear had some broken gears, and the crown gear and pinion gear had to be repaired. The total repair cost was \$10,500. Since then it has been a good tractor."

Blake Jaenisch, Granite Falls, Minn.:

John Pomerening, Wauzeka, Wis.: John's "best buy" is a 1978 **IH** 1440 Axial-Flow combine he bought at a farm auction for \$30,000 when it was two years old.

It's been used every year since to harvest 500 acres of corn, soybeans and spring wheat in Pomerening's operation and to custom-harvest 3,000 acres a year. The combine, which now has 11,000 hours on it, has had two remanufactured IH engines and the 4-row (38-in.) corn head has been rebuilt three times. The combine is also on its third set of tires.

"We're winding down the custom harvesting end of the operation and we couldn't justify the expense of a new

"My 1998 **Wilrich** field cultivator is easy to set up and pulls smooth.

"My **King** 7-ft. belly mower is my worst buy. The wheel bearings went out which caused pulleys on the main drive to bend."

Ray W. Knight, Welch, Okla.: "My 1990 **Ford** 7710 tractor is my worst buy. The transmission was hard to shift and would jump out of 2nd gear. It was also hard to get in reverse. The dealer repaired the transmission four times but it still didn't shift right. He finally replaced my tractor with a **Ford** 7740."

Norma Oliver, Hebron, Neb.: "I like my 1996 **Ford** F-150 4-WD extended cab pickup. It handles nice and the 350 cu. in.

"The dealer repaired the transmission four times but it still didn't shift right."

engine has a lot of power and has been trouble-free. It rides nice and is a beautiful pickup."

John Cooke, Monroe, Conn.: "My best buy is a 1960's **Oliver** 500D I bought for \$2,000 12 years ago to clear eight acres of second growth maple trees with a Bush Hog. Actually, the tractor is a British-built David Brown imported by Oliver and renamed the 500D. Mine's one of only four known of in Connecticut.

"In the 12 years I've owned it I haven't had to fix a thing on the tractor, except to replace one of the bolts on the drawbar. My only complaint is that one of the two fuel filters takes up to three weeks to get because it has to be special ordered from our local auto parts store.

"Otherwise, I can't believe how dependable the tractor is for mowing, digging post holes, plowing snow, etc."

Raymond Burt, Turtle Creek, N.B.: "I've had exceptional service from the 1953, '57, '67, '77 and '88 full-size **GMC** pickups I've owned. I traded off the '88 with 90,000 virtually trouble-free miles on it for a 1995 Chevy S-10 in 1996. No problems with it, either."

On the negative side, Raymond was disappointed with a **Lawn Boy** 8 hp, two-stage snowblower he bought new in 1995. "You couldn't adjust the friction wheels, which are like a clutch, and the belt-tightener never worked. I kept this worst buy only three years before I got rid of it."

J. Glenn Fisher, Chickamauga, Ga.: "My 1984 **Nissan** 4-WD pickup has 310,000 miles on it, and I still use it every day.

"My 1984 **Nissan** Maxima diesel has 301,000 miles and is also used every day. No major problems with either vehicle."

\$150,000 or \$200,000 machine," says John. "We've probably spent a total of \$30,000 on repairs and have always used preventive maintenance to keep ahead of potential problems. We've fixed it up because the design is so outstanding.

"When we retire it, we'll get another Case-IH machine since we're loyal to 'red' and have been since the 1940's. We plan to move up a size, to a used 1660 probably. Whatever we get, it'll have big shoes to fill."

For more information, contact: FARM SHOW Followup, John Pomerening, N. 1011 Walker Hollow Road, Wauzeka, Wis. 53826 (ph 608 874-4513).

Hydraulic Oil Used By Caterpillar Sparks Debate

If you've rented any hydraulic-powered equipment in the past couple years - such as an anhydrous rig - you might want to find out if anyone who rented the rig before you owned a Caterpillar Challenger.

If so, it might be a good idea to drain the hydraulic oil out of your tractor as soon as possible and replace it with fresh oil.

That advice comes from the head of a major tillage equipment company who recently called FARM SHOW to voice concerns about "degradation" of oil caused by hooking up to implements that have been pulled by a Challenger. (The manufacturer asked not to be identified.)

The problem is that Caterpillar uses a straight 10W oil in its Challenger 65, 75, 85 and 95 models. The company has persisted in the practice despite a worldwide SAE standard which calls for use of 15W-30 oil (which sells for \$4 per gallon versus \$2.50 per gallon for 10W oil) in tractors with integrated transmissions, gears and hydraulic systems. The standard was established in the early 1950's and is observed by nearly every other farm equipment manufacturer.

"Lord only knows how much damage this has caused and continues to cause in farmers' tractors, such as accelerated gear wear and premature clutch failure," the manufacturer told FARM SHOW.

Every time a Challenger tractor is hooked up to an implement, 3 1/2 gal. or more of 10W oil from the tractor is exchanged into the implement's hydraulic system. Some of this "degraded" oil is then transferred into the hydraulic system of the next tractor that hooks up to the implement.

"That's one reason we don't rent any equipment anymore, in addition to concerns about transferring damaging foreign material into our hydraulic systems," says Dixon, Ill., farmer Jerry Brechon. He's a stickler when it comes to the proper care of his machinery and won't risk introducing 10W oil into his late model Deere and Ford 4-WD's. He feels the oil is too light to provide adequate lubrication of gear teeth and transmissions.

"Margins are thin enough in farming," says Brechon. "You certainly don't need costly downtime and repairs on machinery if there's a way to avoid them."

Caterpillar's service manager for E Series Challengers, Manuel Garcia, says the problem is being blown out of proportion. He

says any purchaser of a Challenger can request a heavier-weight oil.

"Our Challengers are shipped with straight 10W hydraulic oil unless otherwise specified by the customer," says Garcia. "Other specifications would be based on the implements the tractor will be used with and the ambient temperatures it'll be operated at."

So what weight oil do Cat dealers recommend to customers?

We asked Ziegler, a large Caterpillar dealer in Bloomington, Minn., what it recommends for the Challenger 75E. In most cases, they stick with Cat's straight 10W HYDO or any other commercial straight 10W hydraulic oil with the same rating, we were told.

John Inman is a consultant and retired University of California ag engineer. "Cross-contamination of hydraulic fluid is nothing new in the industry. It dates back to the 1950's," he notes. "The issues are: Is there enough accumulation to cause a problem? What damage - if any - might it cause? And when might it occur?"

That all depends on individual usage and whether recommended service intervals are observed, he says.

Two big Deere dealers we spoke with, one in Illinois and one in California, were divided on opinions of what problems - if any - hydraulic oil degradation might cause. (Like nearly all other equipment manufacturers, Deere recommends using only 15W-30 in its tractors.)

However, the tillage equipment manufacturer who called FARM SHOW insists that mixing oil of different viscosities flagrantly flaunts basic principles of lubrication and it has the potential to cause big problems. Here's what he recommends:

- If you've rented a piece of equipment that's been pulled by a Challenger in the last 12 months, drain your tractor's hydraulic, transmission and drivetrain systems and refill with the manufacturer's recommended 15W-30 hydraulic/transmission fluid.

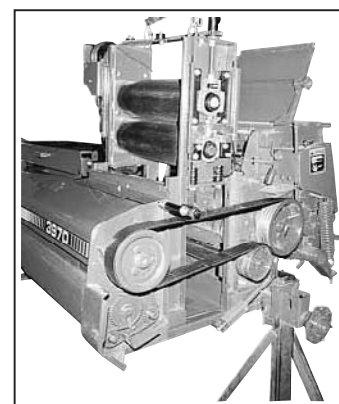
- Double check any used machinery you may have purchased recently to see if it's ever been pulled by a Challenger. If so, hook it up only to the empty side of the cylinder. Then remove the coupler and dump the oil out in a bucket and dispose of it. (**Jim Houtsma, Associate Editor**)

Kernel Processors For Deere Forage Harvesters

"More and more farmers are realizing the value of using a kernel processor to boost the nutritional value of feed," says Paul Smucker, Lancaster Silo Co., Lancaster, Pa. Last year FARM SHOW featured the company's silo blower equipped with a roller mill, as well as a kit for installing a roller mill on a pull-type forage harvester (Vol. 21, No. 5).

Now the company has introduced retrofit models for Deere 3950 and 3970 pull-type forage harvesters. In addition, its kernel processors now are factory-installed by Deere into its 5000 Series self-propelled forage harvesters.

The heart of the retrofit kit is a belt-driven insert with two 9 by 24-in. machine-grooved rolls that turn at different speeds. Processed silage moves quickly through to the auger assembly of the harvester. By removing 8 bolts the insert can be easily removed and replaced with a haylage chute (included with the kit) for processing haylage. The conversion takes only about 30 minutes. List price for the retrofit kit is \$11,500.



Kernel processor installs with 8 bolts in Deere forage harvesters.

Contact: FARM SHOW Followup, Lancaster Silo Co., 2008 Horseshoe Road, Lancaster, Pa. 17601 (ph 717 299-3721; fax 3978).