Visitors can take a virtual ride in the 797F by viewing a 9-min. video shown inside the truck's cargo box theater, which is large enough to hold more than 40 comfortable seats.

CAT Museum Showcases Giant Equipment

There's no better way to get an eye-opening and up-close look at CAT equipment over the years than to visit the company's museum in Peoria, Ill. The 50,000-sq. ft. facility is loaded with historic machines, design stations, four theaters, eight exhibit galleries and memorabilia documenting the company's 90-year history.

Most impressive may be the 23-ft. tall 260-ton 797F mining truck that greets you on entering the museum doors. Almost five times taller than a modern SUV, the 797F boasts a 4,000-hp. engine and wheels larger than a two-car garage. Take a virtual ride in the 797F by viewing a 9-min. video shown inside the truck's cargo box theater, which is large enough to hold more than 40 comfortable seats. Viewers get a driver's seat view of the giant mining rig at work.

The museum has dozens of other videos and interactive modules that show the equipment working and how it's engineered and manufactured. Simulators show firsthand what it's like to operate machines like real operators do.

The company's 90-year history began when Holt Manufacturing and the C.L. Best Tractor Company merged to form Caterpillar. Fully restored Holt and Best tractors are at the museum, along with crawlers, excavators, and other equipment made by CAT over the years. The company has a proud history of making equipment that helped build San Francisco's cable car system, widened the Panama Canal and produced paving machines that built roads around the world. Other displays detail CAT's equipment used during WWII and its use of 3D technology to design and build machines, engines and factories.

View of massive equipment on display at the Caterpillar Visitors Center.

Students will especially be interested in how STEM (Science, Technology, Engineering and Math) is integral to the company's success and offers numerous career paths worldwide.

The museum is open Tuesdays through Saturdays, 10 a.m. to 5 p.m., and closed on major holidays.

Contact: FARM SHOW Followup, Caterpillar Visitors Center, 110 SW Washington St., Peoria, Ill. 61602 (ph 309-675-0606; www.caterpillar.com).

Slick Fix For Top Link Adjustment

Wayne Beggs says a 3-pt. tractor hitch is one of the best inventions ever, but hooking up implements can be difficult unless a person has a quick hitch coupling device. The top link nearly always needs adjusting. He says the adjusting bolt on his tractor was always difficult to turn, but one day, he came up with an idea he thought would work.

Beggs located an old steel wagon wheel about 1 1/2 in. wide and just over a foot in diameter. He had a friend attach the wheel rim onto the top link, adjusting the bracket by welding two metal rods to the bracket and the rim.

Beggs says the wheel rim is easy to grip and lets him quickly adjust the top link for whatever implement he's hooking to the tractor. He says it was a simple fix that didn't cost much and was less expensive than buying a new top link with a long pin to turn the adjustment bolt.

Contact: FARM SHOW Followup, Wayne Beggs, 3378 Augusta Hwy., Lincolnton, Ga. 30817.

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18-ft. tall bus chassis scaffolding with a 24-ft. platform on top provided a stable work platform for Surber to install the trusses for his shop.

He Mounted Scaffolding On A School Bus Chassis

"I bought an old school bus with the idea to use it for storage or as a shop office, but after removing the body from the chassis, I decided to make the chassis into a rolling scaffold platform to help me build my man cave shop," says Texan Frank Surber.

Surber gained new building skills as a teenager by working in a blacksmith shop, then joining the Army, where he cross-trained as a heavy-duty machine mechanic. He used his engineering degree to design and build oil rigs and start his own engineering and manufacturing company. "All that experience gave me plenty of ideas for retirement," Surber says.

He started the scaffold project by placing three old postal service warehouse carts across the frame rails of the bus chassis. Adding a pair of 6-in. wide flange beams on top of those rails provided two perfect channels for the scaffold posts. He put wood blocks between the beams to stabilize the scaffolding and then chained everything securely to the bus frame. While working on the scaffolding, he placed pipe stands at each corner of the bus frame to add more stability.

Surber made the work platform on top of the scaffolding out of five 2 by 4 stringers and 4-ft. by 8-ft. sheets of plywood. "I could easily and safely work the full length of the 24-ft. long platform," Suber says.

"The walls of my shop are 18 ft. high, and the trusses were another 7 ft. above that, so the rolling scaffolding was very helpful for installing the purlins, especially since I did 90 percent of the construction myself," Surber says. "I could reach between three roof trusses without moving the bus." He used a high lift loader to hold the trusses while he installed the purlins.

After framing the roof, Surber used the mobile scaffolding to roll along the outside of the building and install the first sheets of metal roofing. "Using the rolling scaffold was a lot easier than setting up stationary sections, saving me a lot of time," Surber says. "I'll probably be able to find several other uses for it around here."

Contact: FARM SHOW Followup, Frank Surber, Peacock, Texas.

Bird says he wanted his 8N to be more unique than just a regular V-8 repower. He added unique features, starting with a high-output starter and an alternator rather than a generator.

He Built A Fast Custom 8N

Jack Bird spends winters in Florida to escape Canada's cold weather. While there, he likes to attend Mecum auto and equipment auctions. In 2013, he saw three 8N Ford tractors repowered with V-8 engines at one of Mecum's auctions and decided he'd like to build out an 8N just like those.

Bird bought a "very rough" 8N equipped with a Sherman two-speed overdrive transmission. Over two winters in Florida, he did all the repowering and restoration using a conversion kit from Awesome Henry.

The engine on his tractor is a '53 Ford V-8, which he bought on eBay. It had been rebuilt in Ohio, with pistons bored out .060 over stock. The rebuilder installed Isky camshafts, high-compression pistons and Edelbrock high-compression heads. A final touch was adding an MSD distributor.

Bird says he wanted his 8N to be more unique than just a regular V-8 repower. He added unique features, starting with a high-output starter and an alternator rather than a generator. Putting disc brakes on the rear wheels required a lot of head scratching, and Bird eventually had to move both rear wheels 3/4 in. out from the main frame. He provided drawings to a local CNC shop to make the custom rotors and located the master cylinder under the right floorboard. Wildwood brake components from Summit Racing round out a system that Bird says is probably unlike any other 8N.

Other components include a Walker radiator and Speedway Autometer instruments. His speedometer has a GPS with an antenna. An Odyssey battery provides ignition, and the distinctive high-output exhaust system has glasspack mufflers. The gas and brake pedals are also custom-made. Custom painting and detailing round out the "Jimmy Red," the name he gave it to honor one of his best friends.

Bird says he's had no formal mechanical training to learn the skills needed to restore his immaculate 8N and rebuild old hit-and-miss engines. He's also built two cars for oval track racing, a hobby he and his sons still enjoy.

Contact: FARM SHOW Followup, Jack Bird, Toronto, Ontario, Canada.