Money-Saving Repairs & Maintenance Shortcuts

Mobile Tool System Opens Up Wide

The Shadow Tool Staging System from Shadow Tool Company takes tool cabinets to a new level. Open the panels on the 36-in. wide cabinet, and you have a 7 1/2-ft. wide wall of tools. One glance and a needed tool can be located. At the end of the day, one glance tells you if all the tools have been returned.

"My brother is a mechanic and was tired of having to walk back and forth to get tools to work on equipment," says Kelly Tvrdy Benes, Shadow Tool Company. "He showed me a cabinet on wheels that he built, and I was speechless. He redesigned the concept of a toolbox. With the help of other mechanics, we spent 6 years refining and redesigning it, and getting feedback."

Benes previously designed automated equipment and helped inventors find manufacturers and markets. With her brother, the first step was securing a patent, then came revisions and improvements, such as 8-in. wheels and split panels and adding features suggested by other mechanics.

The Shadow comes in two models. Both are 36 in. wide and 30 in. deep and expand to 7 1/2 ft. when opened. The TSS 5.2 is 5 ft., 2 in. high, and offers keyed lock and lower drawer security, two large tool canister racks, a driver holding bank, shelves, a 10 by 14-in. swivel out worktable, extension panels, and more. The 800 lb., 6-ft. 5-in. tall, TSS 6.5 includes all the features of the 5.2. but is taller.

Both models include an LED lighting system with battery backup for remote work, 110-volt duplex ports, USB A and C style ports, a 12-volt outlet, a GFI safety outlet, and a covered male inlet port.

The optional Master Accessory Package (MAP) includes specially designed racks and hooks for a multitude of tools. It also offers an electrical lead and cord wrap, a magnetic cell phone holder, and other features.

Priced at \$16,300 (\$17,200 with MAP) for the TSS 5.2 and \$16,500 (\$17,500 with the MAP) for the TSS 6.5, the tool staging cabinets are finding a diverse customer base. It includes professional mechanics and the companies they work for in widely different industries. The key, according to Benes, is the ability to save time and reduce losses, both key to a better bottom line.



Shadow tool system opens to 7 1/2 ft. wide, giving easy access to tools.

"If a mechanic can save 90 min. a day running back and forth for tools, that's a huge savings for companies facing a shortage of mechanics," she explains. "Shadow Tool Staging Systems are basically a mobile workshop. Compared to automotive and diesel toolboxes, we're actually on the low end. Some of them can run \$25,000 to \$30,000."

Cost cutting comes through time saved, but also fewer lost tools and potential damage to equipment. "We've had a huge response from the military and aviation markets," says Benes. "Foreign objects left behind can take out a jet turbine. A military procurement officer described a wrench left behind in a tank tread that cost \$3 million in repairs."

Benes said the reception to the Shadow Staging System has been intense. "Anyone who has touched a wrench starts drooling," she says. "Until Shadow came along, there wasn't a solution to a large volume of tools that had a small footprint when not used. It doesn't take up space, yet it expands into a large tool wall for easy access to all the tools used regularly."

Contact: FARM SHOW Followup, Shadow Tool Company, 3157 Farnum St. #7104-208, Omaha, Neb. 68131 (ph 402-401-6600 or 402-720-9008 or toll-free 844-742-3698; info@shadowstagingsystem.com; www. shadowstagingsystem.com).



Klein Plier Wrench open to 2 in. wide with 20 adjustment points.

Reversible Jaw Pliers Grip Anything

These dual-purpose pliers from Klein Tools work like both an adjustable pipe wrench and large-capacity pliers. The Plier Wrench has a two-in-one set of jaws that functions as a wrench on flat-sided fasteners and as a V-jaw pliers for pipe, hex bolts, conduit, and other round objects.

The wrench opens to 2 in. wide with 20 adjustment points for customized sizing with the smooth parallel jaws found in traditional plier wrenches. But when extra bite is needed, the tool offers the added versatility of knurled teeth on a second set of jaws.

To use, press the silver adjusting button on the side to fully extend the jaw position. Open the handles to their furthest open position. This enables you to pivot the bottom jaw piece out of the channel, reverse it, and

insert it back into place. Press the adjusting button again and adjust the jaw to the desired position. This adjustment process can be performed with one hand, allowing quick swaps in confined spaces. Likewise, the high lever ratio provides a firm grip for holding or bending on the job.

The tool itself is forged with US-made tool steel. Though it's designed for rugged use, Klein Tools sells a replacement jaw if it's

Klein Tools are sold through the company website and by over 75 retailers. Prices vary by retailer, but the 10-in. Plier Wrench retails for about \$50.

Contact: FARM SHOW Followup, Klein Tools (www.kleintools.com).

Fuel Pump Fix Can Save Thousands

You can fix the CP4 high-pressure fuel pump problem with Ford Super Duty Trucks with a diesel common rail (DCR) Pump Conversion Kit from S&S Diesel Motorsport. Sudden failure of the CP4 pump in the 6.7-liter Power Stroke diesel engine can result in repairs costing more than \$10,000. That cost is in addition to unexpected downtime of a work truck.

The kit, which was just introduced in June, was a team effort of S&S and PurePower Technologies. The latter is a division of fuel system manufacturer Stanadyne.

"The pump is well proven overseas in many industrial applications," says Rhett Fleming, S&S Diesel. "Stanadyne said it would work in the Power Stroke engine. We've had it in development for the past year and a half, racking up as many miles as we could to prove it would work."

Fleming reports the reaction to the kit has been extremely positive. "People are chomping at the bit," he says.

The CP4 pump has been subject to recalls and lawsuits. The S&S conversion resolves the problem before it occurs and possibly takes out the entire high-pressure fuel system.

The DCR replacement has low hydraulic and acoustical noise, ultra-fast response time, and is biofuel and low-lubricity fuel compatible. The patented eccentric drive technology features pressure-lubricated cam and bushings, increasing performance, efficiency, and benchmark durability. The fuel control actuator (FCA) uses high-quality corrosion-resistant components and propriety features that keep large debris from entering



Diesel Common Rail conversion kit for 6.7-liter Power Stroke engines.

the actuator. The DCR provides maximum fuel delivery of 1,250 mm³ per revolution (25 percent more than a CP4.2) providing plenty of fuel for even worn injectors that have high return.

"The kit's suggested retail price is \$1,990," says Fleming. "The conversion takes about the same amount of time as installing a new CP4. It'll take a certified mechanic with all the hardware, mounts, and brackets 5 to 8 hours."

Fleming suggests that a DIY installation is possible for someone confident, handy and experienced. "Kits do come with detailed instructions," he adds.

Initially, kits will be available for 2011 to 2019 F250 to F750 trucks. Plans are for 2020+ compatibility. See the company's web page for a list of dealers.

Contact: FARM SHOW Followup, S&S Diesel Motorsport, 1471 W. Tipton St., Seymour, Ind. 47274 (info@ssdiesel.com; www.ssdiesel.com).



Flow-Thru cleaning brushes connect to a hose or parts washer and come with poly or brass bristles.

Flow-Thru Brushes Make Clean-Up Easier

Flow-Thru brushes from Ohio Brush Works deliver solvents direct to the surfaces being cleaned. The flow-through design is available to use with both a parts washing brush and an ordinary cleaning brush.

"Like our other brushes, the Flow-Thru brushes are American-made, quality brushes," says Keith Moreland, Ohio Brush Works. "They're designed to outlast, outperform and become a permanent tool in your cleaning arsenal."

The Flow-Thru parts brush is available with soft, medium, or stiff polyester filament or brass bristles. The brush, bristles, and hoses are solvent and oxidation resistant and can be used with either petroleum or waterbased cleaning solutions.

The parts brushes connect to most parts washers with their 29-in. neoprene hose

adapter. Once connected, the polyester filaments do not absorb water and offer good abrasion resistance and excellent bend recovery. They also offer excellent heat

Flow-Thru cleaning brushes are available in soft and medium polyester filaments. They offer all the properties of the parts brushes and come with a hose adapter to connect to most garden and household hoses.

Brushes can be purchased online through Amazon and Eastwood. Eastwood prices ranged from \$17.11 to \$29.95 for poly brushes and \$49.95 for the brass parts brush.

Contact: FARM SHOW Followup, Ohio Brush Works, 8455 Rausch Dr., Plain City, Ohio 43064 (ph 740-368-9981; http://ohiobrushworks.com).