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Box Truck Makeover

BY EMANUEL SILVA

My first work vehicle was a 1974 GMC Vandura, a no-frills workhorse with no radio, no A/C, and no windows in the back. As my business grew, I switched to a four-wheel-drive GMC pickup truck with a radio and A/C but without the versatility of the van. Looking for a better way to keep my tools dry and organized and transport stock, I purchased my first box truck back in 2002, a Chevy Express 3500 cutaway loaded with options and upfitted with a Supreme cargo box **(1)**. It turned out to be a perfect fit for the way I like to work, with my tools close at hand on the job and a place to put them at the end of the work day. Kept clean and tidy and with my company logo and contact info in big block letters on the sides, the box truck was a rolling advertisement for my business, whether I was driving down the road or parked at a jobsite. I haven't felt the need for a pickup ever since, though I do occasionally miss the four-wheel drive on snowy New England days.

My next box truck was a 2007 Isuzu cab-over with a Utilimaster Trademaster box, a hold-over that I purchased in 2008 **(2)**. With a gross vehicle weight of more than 10,000 pounds, that truck was subject to DOT regulations as a commercial vehicle. But the truck was a beast, lasting well over 133,000 miles on a single set of tires (I drive conservatively and always try to keep weight balanced in the middle of the truck). Made with coated wood-core panels and an aluminum frame, the Utilimaster box was bulletproof.

I replaced my aging Isuzu recently with a 2021 Chevy Express 3500 cutaway fitted with a Reading 10-foot aluminum box **(3)**. As anyone who has recently tried to buy a vehicle can tell you, the process involved long wait times—over six months for the vehicle alone—and limited selection. It also required a bit of a leap of faith, as I had to configure the box online rather than view my options in person at a dealership. The cost for Reading's standard 10-foot aluminum box was about half of what I paid for the vehicle itself. This included remotely controlled locks on all doors as well as a basic LED lighting package, while the roof rack and ladder were options that added about $3,000 to the cost of the box.

Customization. I was very happy with the Utilimaster box, and would have opted for another if it had still been available. The Reading aluminum box is about half the weight, though, and as a result, my new truck is not subject to DOT regulations (though it would be if I pulled a trailer). Another advantage is that the box won't rust. On the other hand, the box is more likely to get dinged and dented from tools and hardware shifting around inside, so while I was waiting for the motor vehicle department to process my registration, I took a few steps to customize the compartments and make the box a little more rugged.

The author's first box truck, a 2002 Chevy Express 3500 **(1)**. He bought an Isuzu cab-over box truck in 2008 **(2)**, and used it until he purchased this 2021 Chevy Express 3500 cutaway, which is fitted with a Reading 10-foot aluminum box **(3)**.

Photos: Manny Silva

The first thing I did was cut face frames and doors out of 3/4-inch MDO plywood to enclose the long shelving units that are built into either side of the aluminum box **(4, 5)**. Aluminum expands and contracts a lot with changes in temperature, so before fastening the frames to the shelving with short stainless steel carriage bolts, I ran beads of OSI Quad sealant over the aluminum where the frames would be attached to keep the assembly from rattling.

I mounted the doors with stainless steel piano hinges. The doors are hinged at the bottom so that they stay open with the help of gravity, while a pair of thumb latches for each door holds them closed **(6)**.

To turn the continuous shelving into individual compartments, I cut dividers out of MDO, which I fastened to the face frames with pocket screws and L-brackets. To prevent tools and equipment inside the cabinets from banging up against the sides of the aluminum box, I cut backers out of leftover cabinet-grade 1/2-inch maple plywood. I fastened the backers to the dividers with micro-pocket screws, spacing them 1/2 inch or so away from the aluminum shell to allow for differential movement of the wood and metal and for ventilation **(7, 8)**.

To keep the contents from sliding around, I lined the bottom of each compartment with short-nap carpet, held in place with 3M Super 77 spray adhesive.

Next, I removed the steel pass-through door between the cab and the box **(9)**. Sliding loosely in tracks, the door was unneeded and rattled around. I figured that space would be better used for tool storage, so I permanently filled the opening with a 3/4-inch MDO plywood panel fastened with bolts, first running a thick bead of OSI Quad sealant to keep the panel from rattling **(10)**.

Then I built the raised shelving unit that fits over the space once occupied by the pass-through door. I screwed another, larger MDO panel sized to fit the front wall to the first one, again using plenty of OSI Quad sealant during assembly **(11)**. Next, I fastened MDO cleats to the sides of the

The author bolted simple face frames cut from sheets of MDO plywood **(4)** to divide the interior shelving into compartments **(5)**, then added doors **(6)**, dividers, and backing to prevent damage to the aluminum body **(7, 8)**. To make way for a front shelving unit, he removed the pass-through door **(9)**.

Photos: Corey Silva

box, enlisting my son Corey to hold the nuts from the outside while I fastened the stainless steel carriage bolts holding the cleats in place from the inside **(12)**. Finally, I fastened the top and bottom shelves to the cleats and to the back panel with pocket screws and added a few more cleats to keep equipment from sliding off the shelves **(13, 14)**.

Quibbles. As I mentioned, I configured this box online without having the chance to inspect an actual unit, and it turned out that it isn't perfect. For one thing, the ladder has only three rungs, even though the rails extend all the way to the roofline, making the roof rack virtually inaccessible. This is a real head-scratcher.

Another problem is that the back doors swing open only 90 degrees instead of all the way. Because of the thickness of the doors and because the interior walls measure just slightly less than 49 inches apart, I have to tilt 4x8 sheet stock when loading it into the back, instead of just sliding it in. And—again, because of the door thickness—nominal 10-foot framing lumber that measures even a fraction of an inch over 10 feet long won't fit inside.

There is also a bit of leakage when I'm driving around in the rain, both around one of the ladder-rack mounting brackets and inside a couple of the boxes that open to the exterior. The manufacturer apparently anticipated the leakage; the boxes are fitted with removable plugs.

I've finished painting the new cabinetry in the box **(15)** and will soon add the exterior lettering and a set of custom wheels to complete the makeover. I consider the six or seven days that it took me to build out the interior a good investment that will pay me back many times over in increased productivity.

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The author replaced the door with a fixed MDO panel **(10)**, then fastened a wider panel with screws and adhesive sealant to act as the back for the front cabinet **(11)**. He completed the cabinet with side cleats **(12)** and top and bottom shelves pocket-screwed to the cleats **(13, 14)**. The front cabinet is raised so that longer stock will fit underneath it **(15)**. The author finished the MDO cabinets with a couple of coats of white paint to brighten the interior.

Flex 6 ½-Inch In-Line Cordless Circular Saw

BY MARK CLEMENT

When I was editor of *Tools of the Trade*, I had a conversation with a tool designer who told me, "We're innovating in a very small space." What he meant, I believe, is that when it comes to circular saws, there's not a lot to add to them that they don't already have. A case in point is the Flex 6 1/2-inch in-line cordless circular saw, which is innovative while at the same time being influenced by other tools, some long and sadly off the market.

The saw is a bit of an oddball. It's a sort of top-handle, sort of in-line, awkward/not awkward belt-drive battery-powered circular saw with a downsized 6 1/2-inch blade. Even so, it has become my everyday carry to the point that I feel awkward using anything else.

My primary focus is as a work-alone carpenter building decks and doing general remodeling activities. I cut enough pressure treated lumber that my blade teeth turn green. I'm primarily making square cuts, so I don't need a tool that will cut deep bevels. But I do need a meat-eater that'll cut my peculiar beam ends and rip soaking-wet 2-by PT stock—and not break my arm off while doing it.

According to the manufacturer's spec sheet, the saw has a cutting capacity of 2 9/16 inches at 90 degrees, and 1 9/16 inches at 45 degrees. It will cut bevels up to 47 degrees.

Blade size and power. Even with a 6 1/2-inch-diameter blade, this saw cuts 99% of everything I need to cut: PT stair stringers, end cuts for joists and deck boards, gang cuts in composite deck boards off the stack (trimmed later with a track saw), long cuts trimming V-joint tongue-and-groove roof deckers or deck boards to length after installation. In fact, it cuts 99% of what I need cut with the base of the saw raised a little off the stock, which makes the blade guard roll easier. The saw is powered by a brushless motor that spins at 5,500 rpm. The included blade is excellent.

In use, the Flex saw reminds me of a couple of saws in the 5-inch range, including Porter-Cable's beloved 314 wormdrive 4 1/2-inch trim saw (no longer in production), and Ridgid's compact Fuego 6 1/2-inch sidewinder. While it is similar in some ways, it is also a lot different. For example, it has a belt drive that offers a plush start and quiet operation with about zero reaction torque.

In-line, blade-left. During my time at JLC Live as a presenter, I discovered that I was cutting like a West Coast wormdrive user but giving myself scoliosis doing it because—as an East Coaster—I was using a sidewinder saw. Learning to cut with one of the wormdrive saws issued by the show staff was a watershed moment for me. With its blade-left design, the Flex saw offers many of the attributes of wormdrive cutting, minus the worm gear, 10 pounds of weight (the saw weighs 7.1 pounds without the battery), the power cord, and wrist twist on every cut.

Lines of sight to the blade are magnificent. The stout aluminum shoe is clearly stamped with the blade kerf and location; so well, in fact, that I actually use the shoe sometimes. Its thickness rides along my square (I use the square as a guide; such a labor saver and the cut is dead-on). Though I'm not gentle with the tool after the cut and let it hit the ground, it comes back square.

The Flex 6 1/2-inch cordless saw has a blade-left design, an adjustable dust port, and a cutting capacity of 2 9/16 inches.

Top-ish handle and dust chute. This confluence of design features is where this saw really starts to overlap—and I don't know if this is intentional by Flex—with tools of yore.

This tool is so top-heavy—tall, really—you can't put it down like a sidewinder or worm drive. You have to lay it down (it takes a hot sec to change the neural pathways, but it works).

This is reminiscent of the old DeWalt worm drive that won many *Tools of the Trade* tool tests back when I was editor. It has a similar angle of attack to the work, and it offers an angular reach that is extremely comfortable in many different scenarios.

The dust chute is a thing of beauty. I believe its intended use is a vac hook-up. Since I'm usually more worried about tornadoes or snow on my sites, my main concern for dust is keeping it off the work. Much like the legendary Porter-Cable "chimney," the Flex ejects dust from an elbow at about 1 o'clock on the blade. It works fabulously well. What's better is that it swivels. Wind in your face? Swivel the chute. Cutting stringers and dust is getting poured on the next cut line? Swivel. Dust covering a chalk line? Again, swivel. It's awesome.

The standard kit costs $250 and comes with a massive 5.0 amp-hour battery, which is both absurdly gigantic and fantastic. It seems to last forever, but even more, it serves as a secondary "handle" to pressure the saw through the cut. The saw has a rafter hook, which is handy for framing or working at sawhorses, and a built-in LED work light. The kit also includes a charger and tote bag. flexpowertools.com

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Photo by Mark Clement