

TRUCK BED Toolboxes



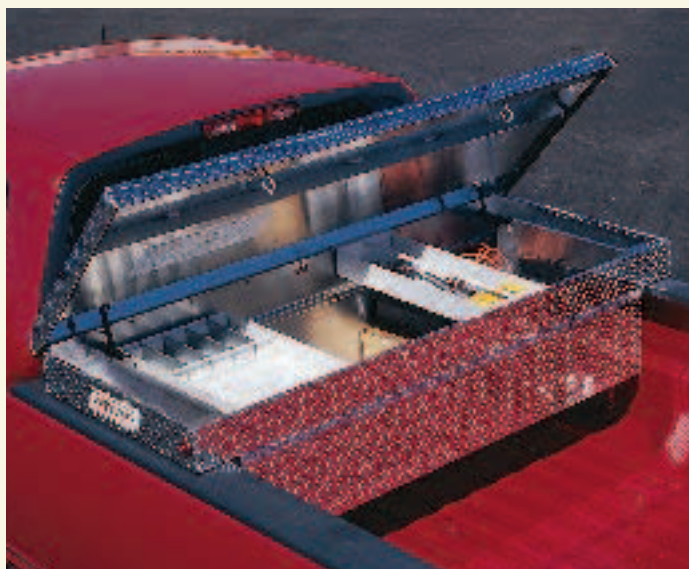
At one time, driving a pickup truck was a dead giveaway that you worked in the trades. Nowadays, all kinds of people drive pickups, but you can still identify tradesmen by the way they outfit their trucks.

The problem with a pickup bed is that it's just a big open box. Light-duty caps protect cargo from bad weather, but they're easy to break into; commercial-duty caps are more secure, but they're expensive. Neither type of cap provides any way to separate tools from materials, and you have to remove caps to haul oversize loads like jacuzzis, furnaces, or rolls of insulation.

That's where truck boxes come in. They secure and protect valuable items without monopolizing the entire cargo area. At least 60 U.S. companies make truck boxes, some selling every kind of box imaginable, others offering a single spe-

Well-designed
storage systems
organize and
protect tools

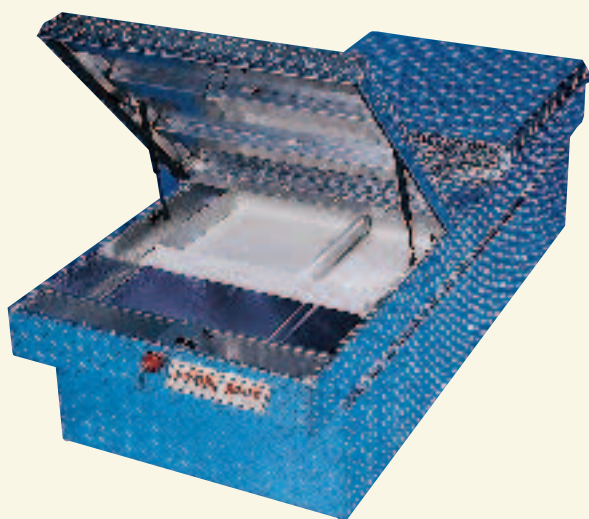
by David Frane



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READING BODY WORKS



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Figure 1. Crossover boxes are available with “gull-wing” lids (above), a single lid (top left), or double lids (top right).

cialized product. While there’s no secret to manufacturing boxes, quality does vary. The trick to buying a truck box is knowing what kind you need and which type of construction will give you the most durability for the least amount of money.

Crossover Boxes

Crossover boxes are the most common type of truck box (see Figure 1). They mount right behind the cab and span from one side of the bed to the other. They project 6 to 8 inches above the bed rail, so you can still see out the rear window of the cab. Their bottoms sit several inches above the bed, so there’s room to slide sheet goods and other materials under them.

Crossover boxes are anywhere from 19 to 27 inches wide and 12 to 18 inches tall. Boxes for full-size trucks are 70 to 72 inches long; models designed for midsize and compact trucks

are about a foot shorter. The most obvious distinguishing feature of a crossover box is the type of lid.

Gull-wing boxes have a pair of opposing lids that hinge at or near the center of the truck. The lids open to about 45 degrees, making access easy from the ground but more difficult from the truck bed. One problem with the gull-wing design is that it’s hard to fit large objects through the small openings at the ends of the box. It’s also tough to get long items, like tripods and shovels, in and out of partially loaded boxes, because you have to sneak them under the center divider. One advantage of the dual-lid design, however, is that you can open one end without exposing the contents at the other end to the weather.

Single-lid crossover boxes are equipped with lids that hinge along the side of the box next to the cab. This type of lid is becoming more popular than gull-wing lids because they give complete access to the interior, and since there’s no center divider, it’s easier to get bulky items in and out.

Some companies produce a two-lidded version of this box. One advantage is that you can open one lid without exposing the contents under the other lid to the weather. But this type of two-lidded box also has a cross member at the center, so it’s harder to load and unload long objects.

Either way, however, the lid or lids swing well past 45 degrees, so access is better than with gull wings. Some of the larger single-lid boxes will hold a miter saw and small compressor with room to spare for hoses, cords, and hand tools.

Side Boxes

Those who don’t like the way crossover boxes take up prime cargo space tend to prefer side boxes, because they use the waste space above wheel wells and bed rails (Figure 2). Side boxes are easier to get into because they’re shallow and mount right at the edge of the truck. Like crossover boxes, the outboard edges bolt to the bed rail; but the inboard edges are connected to legs that bolt to the bottom of the truck bed.



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High side boxes are the most common type of side box. They typically run the full length of the cargo area, although shorter versions are also available, and project 16 to 18 inches above the rails and 12 to 16 inches into the bed. Doors on the outside face flip down like hopper windows, with chains or cables to keep them from swinging down against the side of the truck. High boxes eat up a little space above the cargo area, but there's still room fore and aft of the wheel wells to tuck things underneath, and all of the space between the wheel wells is free. Side boxes can be mounted on one or both sides of a truck. In effect, they make the cargo area deeper, so you can haul sheet goods on edge or stack light materials higher than usual. On the downside, high boxes partially block your view through the rear window.

Low-profile side boxes also run front to back on the bed rails. Like crossover boxes, however, they're low and hang down into the cargo area. The lids on low-profile units swing open from the top and are held up by gas pistons. Some low boxes run the entire length of the bed, but the more common arrangement is a low-profile box that runs between the tailgate and a crossover box. This setup increases tool storage, though it does reduce the space for cargo. In a full-size truck, however, there should still be room to slide sheet goods between the wheel wells.

Slide-Outs

Most truck boxes come with a tray or shelf for storing small hand tools. But it's difficult to organize a lot of small parts in a crossover or side box. To solve this problem, a number of companies make bed-mounted drawers that run on heavy duty slides (Figure 3, page 42). These drawers are housed in metal cases that are 9 to 12 inches tall. They come in a variety of lengths and widths, and are equipped with adjustable dividers that let you create compartments of different sizes and shapes.



READING BODY WORKS

Figure 2. Low side boxes (top) are often used in conjunction with a crossover box. High side boxes leave room for storage underneath, and some have an extra compartment on top (above).

A few companies make slide-out platforms. Designed for use with a cap, these sliding beds offer no protection from theft or weather, but make it easy to get at tools and materials stored near the front of the bed without climbing over all the stuff stored at the rear of the bed. The sliding bed has no built-in compartments, but you can outfit it with shelves or boxes, or just use the flat surface to hold tools and materials; some builders even use the tail end of the platform as a job-site workbench.

The thing to look for on any slide-out drawer or platform is how smoothly it glides and how much weight it will carry. This goes for the tops of drawer units, too, which will take the same abuse as an unprotected truck bed. Also check the lock mechanism. You don't want the drawer or platform to slide out when you accelerate, and the platform shouldn't move while you're working on it.



Figure 3. Full-extension sliding beds (left) give the best access to cap-covered pickups. These beds are rated at more than 1,000 pounds fully extended, and can even be used as a work platform. Lighter-duty drawer units are useful in open beds for organizing small tools and parts (right).

Steel vs. Aluminum

Commercially made truck boxes have been around for at least 35 years. Early boxes were made from sheet steel; later on, manufacturers began using aluminum and even polyethylene. These days the trend is towards aluminum, but there are still plenty of good-quality steel boxes being made. Aluminum is not as strong as steel of the same thickness, but neither steel nor aluminum provides complete security. With the right tools and enough time, a determined thief can get into any kind of box.

Steel. On average, steel boxes are slightly sturdier and about

20% cheaper than comparable aluminum boxes. You can buy a professional-grade steel crossover box for a full-size pickup for between \$350 and \$400; the same box would run \$50 to \$75 more in aluminum. The problem with steel, of course, is that it rusts, especially in damp climates or near saltwater. To prevent rust, some manufacturers make boxes from something called galvanealed steel, which is said to hold paint better than ordinary galvanized steel. After the box has been welded together, it's sprayed or dipped in primer, then finish painted. If you chip the paint, the box won't rust as long as the galvanealed coating is intact.

Some companies use ungalvanized steel and rely on a powder-coat finish to prevent rust. After the box is welded, it's dipped in an etching solution, then sprayed with a dry polyester powder and baked in an oven. According to the manufacturers who use this technology, baking fuses the finish to the surface of the metal, so it's tougher than paint. A powder-coat finish is hard to chip, but once the metal is exposed, it will rust.

The strength of a truck box depends on the thickness of the metal and the quality of the welds. It's cheaper to build boxes from thin metal. The steel in a low-end box might be 18- or 20-gauge, but the steel in a professional-grade box is usually 17-, 16-, or even 14-gauge. (Twenty gauge is approximately 1/32 inch thick; 14 gauge is about 1/16 inch thick.) Some companies use the same material throughout; others use thicker steel for bottoms and thinner steel for sides and tops. The doors on high side boxes take a real beating, so manufacturers usually make them from heavier material than the rest of the box. Some even put aluminum doors on steel boxes, so they won't rust as the finish wears off.

Aluminum. Aluminum boxes don't rust, but that doesn't mean they last forever. If you overload an aluminum box,



Figure 4. Look for stiffening ribs formed into the bottoms of boxes, which prevent sagging (left). A reinforcing panel tack-welded to the bottom side of the lid stiffens it and prevents it from racking (above).

Truck Toolbox Manufacturers

Adrian Steel

906 James St.
Adrian, MI 49221
800/677-2726

Products: Crossover and low side boxes, van interiors, truck and van racks

Aluminum: .072-inch diamond plate, aluminum piano hinges

Comments: Adrian's boxes come with stainless steel paddle latches and adjustable strikes. They're also equipped with rubber liners to keep tools from sliding around inside. (Steel boxes not available.)

Dee Zee Inc.

P.O. Box 3090
Des Moines, IA 50313
800/779-2102

Products: Crossover, high and low side boxes

Aluminum: .083-inch diamond plate

Comments: Dee Zee is best known for making accessories like running boards, tailgate protectors, and roll bars. They make three lines of boxes: Silver (good), Gold (better), and Platinum (best). Gold and Platinum boxes have a clear powder coating to protect them from discoloration caused by oxidation. Lids on Platinum boxes fit especially well because they're rimmed with heavy aluminum extrusions. (Steel boxes not available.)

Delta Consolidated Industries

P.O. Box 41209
Raleigh, NC 27629
800/643-0084

Products: Aluminum, steel, and poly truck boxes, job-site boxes

Aluminum: .063-inch diamond plate

Steel: Delta label (20-gauge), Magnum series (20- and 18-gauge), Payload Plus (16-gauge). All have stainless steel hinges and a powder-coat finish.

Comments: Delta produces three lines of truck boxes: Delta (good), Magnum (better), and Payload Plus (best). Doors on high side boxes have a three-point locking system. All crossover boxes come with heavy-duty adjustable lid strikes. High-end crossovers have stainless steel paddle latches.

Extendo Bed Company

P.O. Box 4364
Boise, ID 83711
800/752-0706

Product: Steel-frame sliding bed platform

Comments: Extendo Bed's platform is supported by a 100% extension "drawer slide." It's rated for 1,200 pounds at full extension, and can be locked open, closed, or at 12-inch increments. Extendo Bed comes in a wide range of sizes. You can get it without a top, and with a variety of premade shelving and cargo units.

Greenlee Textron Inc.

4455 Boeing Dr.
Rockford, IL 61109
800/435-0786

Products: Crossover, high and low side boxes, job-site boxes

Aluminum: .063-inch diamond plate

Steel: Gold series boxes are made from 14-gauge steel with a powder-coat finish and stainless steel hinges.

Comments: Greenlee is already known for making high-quality job-site boxes and is developing a truck rack.

Nevlen

96 Audubon Rd.
Wakefield, MA 01880
800/562-7225

Products: High side boxes, van interiors, van and pickup racks

Aluminum: .125-inch diamond plate

Comments: No box manufacturer I spoke with uses thicker aluminum than Nevlen. They make basic beefy boxes with three-point stainless steel locking mechanisms. (Steel boxes not available.)

Rawson-Koenig Inc.

2301 Central Pkwy.
Houston, TX 77092
800/346-8988

Products: Crossover, high side, low side boxes, service bodies, window grills and bed-mounted cranes

Aluminum: yes

Steel: 14-gauge with powder-coat finish, stainless steel hinges and paddle latches
Comments: Aluminum boxes have gas shock lid supports and stainless steel latches. Steel boxes have spring-assist supports.

Reading Body Works

P.O. Box 650
Shillington, PA 19607
800/458-2226

Products: Crossover, high and low side boxes, truck racks

Aluminum: .063-inch diamond plate

Steel: 16-gauge galvanealed steel, dipped in primer, electrostatically painted

Comments: Reading is best known for making service bodies. Their steel boxes come with a one-year warranty against paint defects and three-year warranty against rust through. All Reading boxes come with bolt-on stainless steel hinges. Their Spacemaker Toolmate high side boxes have side doors as well as a separate upper compartment with a top-opening lid.

Rollout

232 N. 230 St.
Arma, KS 66712
316/347-4753

Products: Steel-frame sliding bed platform

Comments: Rollout runs on 24 urethane ball-bearing wheels and can be locked open or closed. Comes with a one-year warranty. The manufacturer claims a Rollout unit can carry 1,500 pounds.

Weather Guard

Knaack Manufacturing Company
420 E. Terra Cotta Ave.
Crystal Lake, IL 60014
800/456-7865

Products: Crossover, high side and low side boxes, sliding drawer and platform units, truck and van racks, van interiors, job-site boxes

Aluminum: .063-inch diamond plate, aluminum piano hinges

Steel: Mixture of 16- and 17- gauge steel, stainless steel piano hinges, powder-coat finish

Comments: Weather Guard produces the broadest line of truck boxes on the market. Steel high side boxes have aluminum doors. Lifters in single-lid crossover boxes retract into protective pockets. Push-button latches allow you to open lids when your hands are full.



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Figure 5. A three-point lock is a good feature on a high side box lid (left). The door closes securely because the latch mechanism engages in the center as well as at the ends. The box above features a two-point lock engaged by a single key at the end. Note also the protective pockets that prevent damage to the piston lid lifters.

you can actually stretch the metal in it enough so the lid no longer fits right. Also, avoid throwing heavy tools into aluminum boxes, because you can break a weld or even punch through the bottom.

The basic aluminum truck box is made from .068-inch metal (which is just over $\frac{1}{16}$ inch thick), although some manufacturers use thicker material, .072-, .100-, or even .125-inch aluminum. Obviously, thicker is better, but you gain less by using thicker aluminum than by using thicker steel.

Plastic boxes. It may be possible to make professional-duty plastic boxes, but I've never seen one. Plastic boxes are cheap and don't rust, but put enough heavy tools in a plastic box and it will sag till the lid doesn't fit right. Besides, what tradesman could sleep at night knowing that the only thing standing between his tools and a thief was something that can be cut with a drywall saw?

Fine Points

One way manufacturers strengthen a steel or aluminum box without increasing the thickness of the metal is by forming or welding U-shaped channels into the inside of the box. Expect to see these stiffeners on the bottoms and lids of all crossover boxes (Figure 4, page 42). Side boxes are narrow and well-supported by the truck rails, so it's no big deal if they don't have stiffeners. However, look for U- or L-shaped profiles formed around the edges of all lids and openings. In general, the more ribs, the better.

Joints. Tack or plug welding is fine for attaching stiffeners and hinges to the inside of the box, but look for continuous welds on the outside of the box. Gaps or pitting in the welds are a bad sign.

Hinges. It's impossible to keep paint on parts that rub against each other, so hinges should be made from materials that don't corrode. Aluminum boxes are usually equipped with aluminum hinges, as are some steel boxes. I prefer stainless steel hinges, however, because they're stronger than aluminum.

Pistons. When you shop for a box, take a good look at the pistons that hold the lids open. These won't last forever, so make sure your supplier stocks replacements. This might not seem important now, but it will after a lid falls on your head a few times. Also make sure the mounting bracket for the piston doesn't get in the way when you load the box. Finally, check the piston to see that it doesn't fold down onto your tools when you close the lid. If it does, you may eventually ruin the piston, your tools, or both. In some boxes, the pistons retract into protective pockets.

Latches and locks. The more places a lid latches, the better. It's worth looking for three-point locking systems on high side boxes (Figure 5). They're harder to break into than single point latches, and less likely to pop open when you hit a pot hole on the road. Gull-wing boxes have a single latch on each lid, but long lids, like those on single-lid crossover and low-profile side boxes, usually have two. As a convenience, the latches on some crossover boxes are linked so you can unlock and open both lids from one side of the truck. Just make sure the latches and the linkage between them are shielded against damage from shifting loads.



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