

Head-To-Head Lunchboxes

Drop In Locker Shootout

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Lunchbox or drop-in lockers are often overlooked by the off-road rags. Much of the time we know we are going to bigger tires, regearing and so forth, so replacing the entire differential makes sense. Then there is the "drop-it-off-at-a-shop" method of building project vehicles, which makes it real easy to forget what a normal guy goes through to build a [vehicle](#).

Here at Jp magazine, we do much of our own work in our driveways. Just like you guys, when we are in the middle of an install with some cool new part and we get to something that needs a specialized tool, either we make it or go buy it. After years of working on Jeeps, we have a pretty good selection of tools and skills (including specialized differential tools), so we think nothing of swapping differentials and gears.

Well that's great, but what if you don't have a dial-indicator, an inch-pound torque wrench, setup bearings, or bearing pullers? These things aren't cheap, and unless you start doing gears for friends it doesn't make sense to buy the tools for one [Jeep](#). Besides, not all locker installs come with a gear-swap. By the time you got done buying a locker, gears, and a setup kit (not to mention tools), you are easily looking at \$750, not counting the actual install itself. These lunchbox lockers are a fraction of that price, and if you decide you don't like the quirks of an automatic locker, you can put your spider gears back in and go back to an open differential.

A lot of experienced Jeepers kind of look down their noses at drop-in lockers. Many guys forget what it was like starting out with minimal tools and minimal money. Not us. You can install these things in your driveway in an afternoon, and they are relatively cheap. Get one, put it in, and see if you like having your Jeep locked up or not.

So we got together all the lunchboxes we could for the most common Jeep axle ever, the Dana 44. We took our test-mule Jeepster with a swapped-in 30-spline CJ Dana 44 and slogged through a couple of weeks' worth of 105-plus-degree days of installs and testing to bring you this shootout.

Aussie Locker

The Aussie Locker is a relative newcomer to the Jeep market. Bill Cole took his knowledge from [off-road](#) racing and from being a co-founder of the company that originally produced the Lock-Right to start Torq-Master Technology, and designed a new lunchbox locker with some improvements. The big thing we noticed was that its design makes it a little easier to install, as there is only one set of springs and there is no fishing involved.

The center section gears are bigger than the Lock-Right and the Spartan, which is a good thing. However, in our application with our J-truck-sourced carrier, we had to grind a little bit to get the center section in. Since the stock carrier is the weak point, grinding the carrier was out of the question. We ground less than 1/8-inch off the edges of one side gear and it still ended up bigger than the others. The company tells us that what we saw wasn't normal, and with thousands of units out there, they have only seen it a few times with the Dana 44. It is somewhat more common with the Dana 35 and could have possibly been because of the old design of the carrier.

It was also easier to install than the Lock-Right thanks to the slots for the springs and pins. While the pin is stepped to center the spring, we wonder if it being much easier to put together means that it will also be easier for those springs to pop out of there. We asked the company and were told that they have not had any such complaints, so we are just passing along information.

Once installed, the Aussie Locker worked great, with minimal clicking around corners on-road, and it seemed to be always locked off-road.

Hard Facts

Manufacturer: Torq-Masters

Technology, IncModel: Aussie Locker

Part number: XD-14430

Price: \$240

Use thrust washers: Yes

Pros: Great instructions, low price

Cons: Possible to lose springs, didn't fit carrier

Lock-Right Locker

Lock-Right has become the old standby of drop-in lockers. It has been manufactured by various companies over the years, and now Richmond Gear has its name on it. We got our test unit from Randy's Ring and Pinion as they have a good price, ship fast, and great customer service.

The design of the Lock-Right really hasn't changed much over the years. There is only so much you can do within the confines of a stock carrier. It works the same way it worked 12 years ago when Trasborg installed the last one. There is some clicking of the teeth around corners that can be heard with the radio off and windows out, but with the radio on, the only person that will hear it is the one standing outside the [Jeep](#).

Some things to note: The finish is smoother than the Aussie Locker, there are two sets of springs that need to nest in each other, and you need to have a pick or tiny screwdriver on hand to install them (see "Four Hour Locker" in this issue). Otherwise, the installation goes off without a hitch, even though the pictures in the directions leave a little to be desired.

Once it's in there, you can't tell the difference between the Lock-Right and the Aussie. It behaves the same on-road, sounds the same going around corners at the local mall, and locks up the same [off-road](#). The company claims that the dual springs will make for a longer service life, but since we only put a couple of hundred miles on it with a weak V-6 and 32-inch tires, we were nowhere near testing the service life.

Hard Facts

Manufacturer: Richmond Gear

Model: Lock-Right

Part number: PT 2410

Price: \$254

Use thrust washers: Yes

Pros: Design has been around forever (likely not going anywhere, can get parts down the road), dual springs for longer life expectancy

Cons: Poor pictures with instructions (had to go online for better ones), a third hand would be useful for installing springs and pins

Spartan Locker

The Spartan Locker is a newcomer to the game, and it was obviously designed by someone who has installed one or two lunchboxes in their time. The pins are bigger, there is no skinny screwdriver or right-angle pick games to play. Again, we sourced this unit from Randy's Ring and Pinion for all the reasons mentioned before, and at the time we went to print, it was the only game in town for this brand-new locker.

This is the only unit that includes a new hardened cross-pin shaft and retaining roll pin. If your cross-shaft is worn or not hardened it isn't recommended to use these lockers, and that can be a problem because the only way to figure it out is to disassemble the rear end. Then, if your existing cross-shaft doesn't meet specs, you get to put it all back together again and order another part, which wastes your time and money. Sure, you could order the new cross-pin when you order your locker, but it often isn't needed and then would be a needless expense. So we were both surprised and glad to see a cross pin in the box when we opened it.

The instructions are pretty good. They include way less information than the Aussie locker does, but there is still enough to get the job done. However, the kit came with four retaining wires to hold the alignment pins down for ease of install. The instructions talk about having to cut wire, which was a step we didn't need to do. So they lost a point there. Minor, sure, but these lockers were all so closely matched, we want to be sure to mention it.

This is the only locker that didn't require re-using the thrust washers (the washers between the side gear and the case, which keep the spinning gear from prematurely wearing the case out). We missed it in the instructions, as it wasn't too obvious, so we thought we'd mention it here. We were concerned that it would wear the case out, but the company points out that the locker is locked most of the time, so the gears don't spin much at all and wear really isn't an issue.

Once installed, it works off-road just like the others-spool-like traction even with a [tire](#) in the air. On-road it is a bit louder than the others around tight corners. We can't help but wonder if it is louder because the spring-rate seems higher than on the other lockers.

Hard Facts

Manufacturer: Yukon Gear

Model: Spartan Locker

Part number: SL D44-30

Price: \$247 (including cross-pin)

Use thrust washers: No

Pros: Super easy install, comes with hardened cross pin

Cons: New, untried design, instructions could use some tweaking

Yukon Gear Mini-Spool

We decided to throw a mini-spool into the testing as a kind of baseline. A mini-spool is basically a Lincoln-locker for guys with no welder. There is no differentiation between the [tires](#). The tires are always and constantly locked together. This means increased tire wear, but no worries about clicking or unloading on the freeway, in puddles, or anything. Also, it's cheap if you don't worry about how much quicker your tires might be wearing.

We grabbed this one from Randy's Ring and Pinion as well, and it didn't even hit triple digits in price. The install is pretty straightforward since there are only four parts to it. As such, the company didn't think that instructions were needed. But if you are new to pulling parts out of your carrier, this can make it intimidating. Basically remove the cross pin, then pull the spider gears, side washers, and thrust washers out of there. Put the side blocks in the carrier, and then slide in the cross blocks. Not that rough. The thrust washers don't matter anymore because those side blocks won't turn ever again until you break the carrier.

Once it's in there, it works like a welded differential or spool, as you might imagine. No clicking at all comes from the rear end because there is nothing moving in the carrier anymore. However, you will hear more tire scrubbing around corners. This could be a great way for you to decide if a full spool is for you without the added trouble of swapping bearings, shims, ring gear, and so on.

Hard Facts

Manufacturer: Yukon Gear & Axle

Model: Mini-spool

Part number: YP MINS44-30

Price: \$79

Use thrust washers: No

Instructions: N/A

Pros: Dirt cheap, nothing to ever go wrong

Cons: Increased tire wear, stress on stock case can't be good