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## **Walton Fabrication Leaf Spring Installation - Lose the Tube... Gain A 'Tude!**

*Converting to Open-Drive with a Walton Fabrication Parallel Leaf Kit*

In reality, torque-tube rearends aren't all that bad when you think about it. OK, that may just apply to those who favor completely stock drivetrains in early pickups, but we're not here to discuss the advantages of factory components, as we've yet to find many. No, we're here to discuss the opposite--the advantages of ditching the old stuff in favor of the new, improved, and obviously better stuff out there specifically designed for our applications.

Case in point: Walton Fabrication's new parallel-leaf kit for '47-54 Chevy/GMC 1/2-tons. While these particular [trucks](#) came from the factory equipped with similar equipment, as we all know, leaf-over options don't leave you with many, well, options, especially if you're considering a stance adjustment or transmission swap. Albeit already lowered in the rear, this particular setup wasn't done favorably (unless you favor open-ended 5-inch steel tube lowering blocks, leaf-spring pads easily a couple inches below scrub, and some "creative" welding to boot). So, along with the obvious intent of relowering the [truck](#) correctly, the other objective was to address the torque tube--or rather, to address the ridding of the torque tube to make room for an open-drive rearend, to be more precise.

With future plans calling for a Tremec TKO five-speed in place of the old granny-gear factory transmission, it was mandatory that not only the rearend be swapped, but that it be swapped for one with a suitable ring-and-pinion ratio. Normally, anyone running a three-speed manual or automatic would most likely opt for something in the low 3s (a 3.00:1 is a pretty good all around gear for a regular cruiser). With an overdrive, you have room to breathe, so anything 3.50 and higher is recommended, especially if you're after some low-end grunt. With that in mind, a Dana 44 with a nice, short gear became available free of charge, and it happened to come out of a '52 [Chevy](#) 1/2-ton (so the work of flipping spring perches was already done...or so I figured), so it was the natural choice. Otherwise, options such as a '55-59 Task Force rearend or even a late-model Nissan Pathfinder were the next likely candidates. Also, I learned that a '55-59 1/2-ton third member will drop right in a '47-54 housing using the stock axles. I haven't researched this more in-depth, but someone may want to.

Now, with the issues of the rearend itself handled, it was just a matter of finding a ways to mount the Dana in the '53 chassis. As you've already seen by the title of the story, Walton Fabrication stepped up to the plate to handle that. Using all existing holes in the frame, their bolt-in leaf kit is literally that--bolt-in. With the exception of the spring pads, which need to be welded to the axle housing once positioned, everything from the spring hangers to the shock mounts bolt to the frame using holes previously occupied by factory rivets. Now, I won't lie--the rivets can put up a real fight, but once they're gone, you don't have to worry about them ever again, so a few hours (or more) spent grinding, drilling, and hammering isn't all that bad. As for the spring pads that were supposedly going to work, well, the Walton kit moves the leafs inboard a tad--enough so that only half of each leaf actually rested on the perches--so off they had to come. Initially, the kit was designed for leaf-overs that are still over, not guys who scarfed up a free rearend already modified! Nevertheless, the pads were carefully removed with the aid of a Sawzall and an angle grinder, followed by the placement of and subsequent welding of the new ones provided in the Walton kit (which actually afforded more drop due to their higher profile).

Welding and rearend housing straightening (highly recommended) aside, the remainder of the kit installation is a no-brainer. Tools to have at your disposal: a 1/2-inch electric or a good 1/4-inch pneumatic

drill; an angle grinder with sufficient discs for not only grinding, but smoothing, as well; a hammer and punch set; an air ratchet; various handtools; and, of course, a good floor jack with even better jackstands. A full Saturday ought to serve as enough time for the job, especially considering the fact that it's not required to pull the bed off the frame (I did, but that was to allow better photo-taking abilities). The results should be indicated initially by the components of the kit itself: lower-profile/wider-width leaf springs with half the leaf pack versus stock; modern bushings and actual spring shackles; modern gas-charged shocks; and beefy, well-constructed brackets. On top of attaining a substantially better ride, you can expect a substantially lower stance, as well, which will depend on what size lowering blocks you choose, if any are used at all. Follow along and see how this anxious AD loses the tube...and gains a 'tude!



Whether or not you're losing the tube, if you want to lower your '47-54 Chevy 1/2-ton right, you gotta do it right with a parallel leaf kit from Walton Fabrication. Along with a set of beefy, modern-style springs, you also get U-bolts and five-hole plates, precision hangers and brackets, shocks, shock mounts, and all necessary hardware. Lowering blocks are also available for those wanting more of a drop, like me.



When purchased, the truck sat nice and low in the rear. Unfortunately, it didn't ride so nice in the rear.



One of the reasons why the ride wasn't so favorable--5-inch blocks fab'd from steel tube. The KYB Gasadjust shocks were installed after acquiring, but actually worsened the ride by stiffening things up.



Dearchded spring ends didn't help the ride quality much, either.



First order of business (after securing the truck on jackstands, of course), was to get rid of the complete rearend, springs and all.



Unlike newer spring bushings, the early Chevy springs use threaded ends that you manually lube through zerk fittings. Buzz the bushings out, then, after making sure there's no load on the spring, pry the end out of the hanger.



Since the springs were coming out with the rearend as one unit, the torque tube had to be disconnected from the tranny. First, all fluid was drained. Along with the threaded collar, there's also a plate mount that needs to come lose.



I've learned to be resourceful when doing jobs by myself. To remove the rearend assembly from beneath the truck without breaking an already broken back, I positioned the torque tube yoke on an old skateboard while walking the axle out with a floor jack.



The stock spring packs had roughly 10 leafs (this set had a few pulled in the past); the Walton Fabrication springs are modern-style, featuring only four leafs and a wider width.



Waiting in the wings, a recently donated Dana 44, purportedly from a '60s GMC, was ready to take up rear in the '53. Having been pulled from a lowered '52 Chevy 1/2-ton, I thought I would be ahead of the game in regards to spring pad location (not having to weld spring pads), but that would not be the case.



Rolled beneath the chassis, the Dana's overall width was right on the money, as expected. Now, it was simply a matter of removing the old suspension brackets and installing the Walton pieces.



Walton highly stressed that his kit installs easily without having to remove the bed, and it does. However, since a hydraulic lift wasn't accessible, it was easier to photograph the remainder of the job with it off (it needed to come off for future jobs anyway).



If you've never experienced the joy of removing beefy chassis rivets, you don't know what you're missing! The front and rear spring hangers as well as the shock mounts all attach to the frame with double-headed 3/8-inch rivets, each of which usually become very accustomed to being where they're at (in other words, stubborn to come out).



I found the easiest way to start coercing the rivets out was to first drill the head, starting with a pilot and ending with a bit size close to that of the rivet's shank.



From there, a 4-inch grinder with a mean composite disc was used to rid what remained of the rivet heads. As you can see, there was still plenty of rivet left still to be removed.



If the rivets wouldn't budge with a heavy hammer and a punch, the drill was used again to run through the framerrail and into the back of the remaining rivet head.



There was a great feeling of relief once the first spring hanger and its rivets were taken care of; unfortunately, there were still three more hangers and two shock brackets to remove! Once the last rivet is gotten rid of, run a 25/64 bit through each hole.



The Walton bracketry is not only well-engineered, as you will soon see, it bolts to the frame with no modifications or tweaking--and there are no pesky rivets to deal with ever again.



The forward spring hangers bolt directly to the existing holes in the frame, and are designed to fit without removal (let alone modification) of the stock E-brake cable brackets.



Same for the rear leaf spring brackets--they bolt right to the three vacant holes left from the stock ones.



However, you will need to drill one additional hole for added strength with the extra hardware.



With the front and rear hangers attached with the supplied bolts and Nylocs, the new springs were ready to be installed.



Start with the forward ends first (the side with the pre-installed bushing). A punch comes in handy to help guide the bushings into place.



With the leaf spring still supported on the jack, the rear bushings can be installed, as shown. Using a bit of lubricated persuasion helps get the bushings in place without too much muscled effort.



The dogbones were rattle-canned a contrasting gunmetal gray, then cinched on with an air ratchet.



Once the leafs were hung, it became apparent that the old spring pads weren't going to fly--the Walton kit moves the springs inward a little over a half inch each side (it's really designed for a "stock" leaf-over setup to begin with). Considering my welding skills (or lack thereof), I made a 911 call to Jobe Jimenez to help with the additional chores. First off, the stock-but-flipped pads were cut off.



After careful removal of the old pads, the rearend was recentered between the framerrails, then the pinion angle set. Doing that revealed that even if the old pads would have worked, the pinion angle would have been way, way off, so it wasn't such a bad deal.



Anytime you weld on a rearend housing, chances of warping are very high, if not guaranteed (so be prepared to have it straightened professionally). With my 110V HTP, Jobe was able to turn the heat way down and still attain good-penetrating welds (in short sequences).



The following morning, I repainted the affected areas, then slid my lowering blocks between the springs and the housing. With the compressor ready and willing, I grabbed my 1/2-inch air ratchet and snugged the five-hole plates in place with the lower shock mounts on the outside.



The shock studs were then bolted to the plates, followed by the uppers being installed on the framerrails.



Walton provides reinforcing plates for the uppers, which bolt to the inside of the frame, with the studs on the opposite side, as shown.



Save for running new brake lines and having a driveshaft made, the '53 is ready to hit the road, this time with a more satisfactory ride. All things considered, including the spring pad modification, this is easily a one-day deal, especially if you've got a friend to help you out. While I opted to convert to open drive, the kit will just as easily drop your stock torque tube rear, like it was originally designed to.