



ALTITUDE ADJUSTMENT Everything You Need to Know

About Drop Spindles

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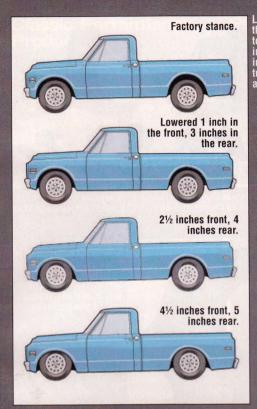
he custom classic truck movement has been around a long time and over the years a variety of trends have emerged. One of the most popular has been a lowered stance and it really took root in Central California with Fresno as the epicenter. By the mid '70s, it seemed everyone in the Central Valley had a lowered Chevy truck, and many of them were closer to the ground thanks to old-time tricks like hacking a coil or two off the front springs or heating them with a torch.

While it made for a cool-looking truck, the ride and handling suffered.

In 1981, Western Chassis was formed to address problems associated with lowering Tri-Five Chevys. They produced the first reproduction drop spindle for those cars and it didn't take long for them to figure out the truck guys would want them, too. Western soon introduced a drop spindle for the C10 Chevy pickup and the rest, as they say, is history. Almost overnight, dropped Chevy pickups were everywhere. In fact, a few enterprising dealerships were selling new

trucks equipped with drop spindles and lowered rear suspensions.

Today there are a variety of drop spindles available for trucks with stock suspensions, as well as for those that use a Mustang II-based IFS or an OEM clip. Regardless of the application, there are a number of questions to ask when selecting replacement spindles, stock or dropped. One of the most critical is the changes, if any, that are made to tread width, which could mean the wheels and tires you just bought won't fit. Along the same lines, ask what bolt circles are available.



LMC offers these drawings to show the impact lowering has on a truck's street appeal.

Brothers Truck Parts has a gigantic inventory of '47-87 truck parts and accessories, including spindles and suspension kits. This is an example of a stock-height '63-70 GM spindle for disc brakes.

Compare the stocker to this drop spindle from Brothers. Note the spindle pin has been moved up to lower the truck and the caliper bracket has been reoriented for proper alignment.

Classic Performance Products' new modular spindles lower '60-87 trucks 2 inches, while providing more room for wide wheels and tires.

Make sure the wheels you have, or the wheels you want, will bolt on. Other important issues are the brakes used. With some spindles, stock calipers and rotors can be retained; with others, aftermarket brakes may be required. The size of the brake calipers and the diameter of the rotors may impose limitations on the wheels that will fit.

To gather more information on the number of sources, find out what's available, and get a few tips while we were at it, here's the lowdown on drop spindles.

Brothers

Specializing in '47-87 Chevy and GMC truck parts, Brothers has one of the biggest parts inventories in the business, including suspension components. We asked Brothers' John Lawrence for a few comments on drop spindles and here's what he had to say:

The standard aftermarket drop spindles that are used on '60-87 Chevy trucks are loosely based on '71-87 stock spindles. These drop spindles allow you to keep your stock



ccP's spindle and brake kits come in a variety of configurations, including 5- or 6-stud rotors with stock or aftermarket calipers.

coil, stock shock, steering geometry and get a $2\frac{1}{2}$ -inch drop without any other modifications. The only issue with these drop spindles is that on '63-70 trucks it widens the track width $\frac{3}{4}$ inch per side.

In 1971, GM released trucks that came standard with disc brakes. In doing this they had to widen the track width ¾ inch per side (actually, late '70 trucks came with a 1½-inch wider rearend in anticipation of the disc brakes). This becomes an issue

if using custom wheels and/or tires. To counter this problem, Classic Performance Products released their modular spindles, which retain the stock track width or only minimally widen it depending on the specific '60-70 application. These spindles can also be used to tuck the wheels in on '71-87 trucks when using a custom wheel/tire combo. The modular spindles produce a 2-inch drop compared to the 2½-inch drop of standard drop spindles.



For trucks with GM clips, Fatman Fabrications offers their new G-Tech spindle with improved suspension geometry over the stock design and a 2-inch drop.



Mopar torsion bar clips are popular conversions. Fatman offers 2-inch drop spindles that accept either the Volare 11-inch or the Cordoba 12-inch factory disc brakes and brackets.



This is the Performance Online's $2\frac{1}{2}$ -inch drop spindle and disc brake conversion for '63-70 Chevrolet/GMC/C10/C15 trucks. Stock-height kits are also available.



Trucks with GM F- and X-bodies can be dropped 2 inches with these spindles from Premier Street Rod Parts. These will accept any brakes that fit stock spindles.



Along with drop spindles and kits, LMC offers shock absorbers for lowered trucks.



For those looking for dropped springs, LMC has those as well.



Scott's now offers CCP drop spindles as an option on their custom independent front suspension systems.



Classic Performance Products

CCP provides products for GM, Ford, and Chrysler cars, and '47-72 Chevy and '49-64 Ford trucks. To take advantage of their expertise we asked their own Jeff Norton the following questions:

Q. How much drop can I expect?
A. With just spindles 2 inches; up to 5 inches with special springs.

Q. Will there be a tread-width change?

A. Yes, they move the wheels in ¾ inch per side.

Q. What brakes fit?
A. Stock 12- and 13-inch, CPP
14-inch, Wilwood, and many others.

Q. What springs are required?
A. Totally up to customer; we have 1-, 2-, and 3-inch drop front springs.

Q. Are different length shocks necessary?

A. That depends on the coil springs used, stock or dropped.

Q. How much suspension travel will the truck have?

A. Truck will have complete suspension travel like stock.

Q. Will the truck turn as sharp as stock?

A. Yes, the truck will have complete turning radius just like stock.

Q. Any changes in steering geometry that will make my truck handle differently?

A. No changes.

Q. What alignment specs are used? A. Factory alignment specs.

Q. Are drop spindles as strong as the originals?

A. Our spindles are forged and are as strong if not stronger than the originals.

Fatman Fabrications

One of the best-known names in street rod suspension components, Fatman has several drop spindles that fit our purposes. For trucks with a clip from a '67-69 Camaro, '68-74 Nova, or '64-72 Chevelles, Fatman's new G-TECH spindle provides a 2-inch drop for a lower center of gravity, and has the upper ball joint raised 1½

inches to obtain the improved camber curve necessary to properly plant wide, sticky modern radial tires. A 20-percent improvement in skid pad numbers has been observed and the steering arm position has been optimized to eliminate bumpsteer. Any disc brake system that fits the stock spindle will fit these.

Volare and Cordoba suspensions have proven to be viable budget front



Speedway Motors' steel Mustang II spindles with a 2-inch drop.

suspensions for trucks, but share a common problem with ride height. To get a low stance, the torsion bars need to be loosened so much that suspension travel suffers, causing a harsh ride from bottoming out. As a cure, Fatman offers 2-inch drop spindles for these front ends.

Performance Online

Via their website, Performance
Online offers a complete line of suspension components for '47-87 Chevy trucks and '48-64 Fords. Drop spindle kits are available for '63-70 and '71-72 trucks.

1963-70 kits include:

- · Upper and lower ball joints
- Outer tie rod ends
- High-performance adjusting sleeves 1971-72 kits include:
- Upper ball joints
- · Outer tie rod ends

Premier Street Rods

Not only is Premier Street Rods a licensed manufacturer of General Motors '47-53 Chevy truck cabs and a distributor of street rod parts and accessories, the company also manufacturers their own GM F- and X-body 2-inch drop spindle. These can be used on trucks with Camaro/Firebird or Nova clips.

LMC Truck Parts

From a product line that covers Chevy trucks from '47 to date, LMC offers drop spindles and complete kits with springs and shocks to drop '60-72 Chevy trucks anywhere from a little to



Trucks with clips from '64-72 GM A-bodies can benefit from these 2-inch drop spindles from Speedway Motors.

a lot. See the drawings on page 59 for examples.

Scott's Hotrods 'N Customs

Scott's teamed up with Classic Performance Products to offer a drop spindle that will work with all major manufacturer's big brake kits on Scott's Hotrods custom independent front suspensions. Scott's Mustang II spindle can be used on trucks that have converted to the classic Mustang suspension or custom IFS such as a Scott's Hotrods suspension.

Speedway Motors

Bill Smith lays claim to running the oldest speed shop in the country. Speedway has an incredible inventory and prides itself on being able to fill an order the day it's received. For a Mustang Il-based IFS, Speedway offers a 2-inch steel drop spindle as well as an A-body drop spindle for trucks with Chevelle clips.

Western Chassis

Its development of the drop spindle made it possible to lower a truck and still retain the factory ride and handling qualities. Today Western Chassis continues to supply suspension components through a large dealership network. Over the years, the staff at Western has heard it all. Here is a list of frequently asked questions they compiled for us.

Q. Why is a drop spindle a better choice than using a drop spring?



In some cases your truck may wind up with more wheel and tire than will clear the fender opening. Reshaping the fender lip with Eastwood's fender roller could be the cure.

A. By using a drop spindle you will be maintaining a factory ride quality. Lowering springs are usually rated higher than stock springs depending on the amount of drop, taking away from the factory ride. We try to have our spring design as close to a factory ride as possible.

Q. Are drop spindles as strong as OEM spindles?

A. There are many aftermarket drop spindles and most of them are made as strong as factory spindles. We designed our spindles to meet or exceed factory strength.

Q. Can I use my stock brakes when I change to a drop spindle?

A. Many if not all aftermarket manufactures design their spindles to accept all factory brake components. Western Chassis does have a design that will convert some drum brake applications to disc brakes.

Q. Will I have to use a different wheel size with a drop spindle?

A. Depending on the application, some drop spindles do require that you use a larger wheel than factory. Western Chassis does have some applications that require larger wheels. This is due to the position of the bearing pin or bearing on the spindle that could interfere with wheel clearance.

Q. Do I have to modify my

frame or chassis if I install a drop spindle?

A. The majority of drop spindles on the market may require some slight modifications to the lower control arm. This is due to the offset of the wheel that the consumer may be running. Trimming will allow clearance for the wheel to roll freely when making any right or left-hand turns.

Western Chassis always suggests that the consumer lower the vehicle first before purchasing or ordering wheels for their truck. Wheels can be very expensive and we would not want anyone to run into a problem after the fact. Offsets and backspacing are important to consider when purchasing wheels. In some cases you may not need to trim the control arms depending on the size of wheel. For instance, a 15-inch wheel will have less clearance than a 20-inch wheel due to the larger diameter of the wheel.

SOURCES

BROTHERS TRUCK PARTS

(951) 808-9790 www.brotherstrucks.com

CLASSIC PERFORMANCE PRODUCTS, INC.

(714) 522-2000

www.classicperform.com

THE EASTWOOD COMPANY (800) 343-9353

www.eastwood.com

FATMAN FABRICATIONS

(704) 545-0369

www.fatmanfab.com

LMC TRUCK

(800) 562-8782

www.lmctruck.com

PERFORMANCE ONLINE INC. (POL)

(714) 278-0098

www.performanceonline.com

PREMIER STREET ROD PARTS AND MANUFACTURING CORPORATION

(800) 447-5000

www.premierstreetrod.com

SCOTT'S HOTRODS 'N' CUSTOMS

(805) 485-0382

www.scottshotrods.com

SPEEDWAY MOTORS

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www.speedwaymotors.com

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