

**Detroit Speed**  
**Front Speed Kit**  
**1967-87 GM C10 Truck**  
**P/N: 032084, 032085 & 032086**

The Detroit Speed Front Speed Kit is designed to improve the handling and performance of your 1967-87 GM C10 Truck while lowering the front ride height by 4-1/2". The Speed Kit includes 2" drop coil springs and shocks as well as forged aluminum 2-1/2" drop spindles with forged steel steer arms. The uprights include hub packs with a dual bolt pattern offering a 5 x 5" or 5 x 4-3/4" bolt pattern. The 1971-72 truck applications include new upper ball joints and outer tie rods. The kit for the 1967-70 truck applications includes new upper and lower ball joints, outer tie rods and billet steel tubular tie rod adjusters.



PN: 032086 - 1967-70 C10 Truck

Item #	Description	Quantity
1	Forged Aluminum Upright Assemblies, LH and RH	2
2	2" Drop Coil Springs	2
3	Front Shocks	2
4	Upper Ball Joints (1967-72 applications only)	2
5	Outer Tie Rod End (1967-72 Applications only)	2
6	Lower Ball Joints (1967-70 applications only)	2
7	Tubular Tie Rod Adjusters (1967-70 applications only)	2
8	Instructions	1

**IMPORTANT:**

All work should be performed by a qualified technician. Please read the entire set of instructions and fully understand all of the steps involved before beginning the project. Always make sure to wear the appropriate safety equipment for the job and properly support the vehicle. If you have any questions before, during, or after the installation, feel free to contact Detroit Speed by phone at (704) 662-3272 or by email at [tech@detroitsspeed.com](mailto:tech@detroitsspeed.com).

1973-87 C10 Wheel & Tire Fitment Suggestions					
Diameter (in.)	Width (in.)	Backspacing (in.)	Lug Nut Thread Pitch	Recommended Tire Size	Comments
Stock Inner Fender					
18	9	5.25	1/2"-20	275/45R18	Deep Lug Nuts Required
19				275/40R19	
20				275/35R20	
Modified or No Inner Fender					
18	11	6.50	1/2"-20	295/45R18	Deep Lug Nuts Required
19				295/40R19	
20				305/35R20	

**NOTE:** Minimum wheel diameter of 17" with an inside wheel diameter of at least 16.250" will be required.

**Caution:** Some brake applications will not work with 17" wheels. Flush mount valve stems may also be required on wheels with a behind the center valve stem location.

**NOTE:** Required parts for the C10 Speed Kit front suspension include new front brakes. OE-style GMT800 truck new front brake upgrades are recommended below. Aftermarket front brake systems are also available through Baer and Wilwood for the C10 Speed Kit.

**OE-style Brake Recommendations:**

Front Caliper, RF	Raybestos FRC11713N
Front Caliper, LF	Raybestos FRC11714N
Front Brake Pads	Raybestos EHT1363H
Brake Hose	Raybestos BH38102 (Use on 1967-72 applications)
Brake Hose, RF	Raybestos BH 38065 (Use on 1973-87 applications)
Brake Hose, LF	Raybestos BH 38066 (Use on 1973-87 applications)
Brake Rotor, 13"	Detroit Speed 050403

**Baer Brake System Part Numbers:**

4301586	Pro+ 13" rotor (R, B, or S for caliper color)
4301587	Pro+ 14" rotor (R, B, or S for caliper color)
4301588	Extreme+ 14" rotor (R, B, or S caliper color)

**Wilwood Brake System Part Numbers:**

140-16781	Superlite 6 piston caliper, 13.06" slotted rotor, black powder coat
140-16781-D	Superlite 6 piston caliper, 13.06" drilled & slotted rotor, black powder coat
140-16781-DR	Superlite 6 piston caliper, 13.06" drilled & slotted rotor, black powder coat
140-16781-R	Superlite 6 piston caliper, 13.06" slotted rotor, red powder coat
140-16780	Aerolite 6 piston caliper, 14.25" slotted rotor, black powder coat
140-16780-D	Aerolite 6 piston caliper, 14.25" drilled & slotted rotor, black powder coat
140-16780-DR	Aerolite 6 piston caliper, 14.25" drilled & slotted rotor, red powder coat
140-16780-R	Aerolite 6 piston caliper, 14.25" slotted rotor, red powder coat

## Installation:

1. Raise the vehicle on jack stands so that the frame is level with the ground. Remove the front wheels from the vehicle.
2. Disconnect the front sway bar from the lower control arms if equipped by removing the factory 3/8" hardware (Figure 1). Remove the outer tie rods from the steer arms.



Figure 1 - Disconnect Sway Bar

3. Place a floor jack under the lower control arm and remove the shocks from the vehicle (Figure 2). Remove the floor jack so the upper control arm sits on the jounce bumper on the frame.



Figure 2 - Remove Shocks

4. Remove the brake hose from the brake caliper on both sides of the vehicle. **NOTE:** Push a piece of rubber hose in the brake hose fitting to keep it from leaking (Figure 3).

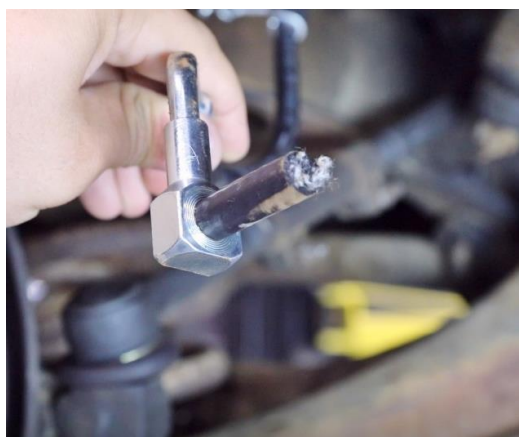


Figure 3 - Remove Brake Hose

5. Remove the cotter pins from the upper and lower ball joint castle nuts. Loosen both ball joint castle nuts.
6. Place a floor jack back under the lower control arm and thread the upper and lower ball joint castle nut so they are at the end of the threads on the ball joint. Lower the floor jack slowly to see if the spindle will loosen from the ball joints and rest on the castle nuts. If not, you may need to try and shock the ball joints loose from the spindle with a rubber hammer or use a ball joint separator.
7. Once the upper ball joint is separated from the spindle, lower the floor jack so the lower control arm and spindle drop all the way down out of the upper ball joint stud. **CAUTION:** The coil spring will be under pressure.
8. The coil spring can be removed from the vehicle at this point. Remove the lower ball joint castle nut and remove the spindle and brake assembly from the vehicle.
9. For 1973-87 applications, skip to **Step 15**. For 1971-72 applications, skip to **Step 13**. For 1967-70 applications, continue to the next step.
10. Remove the inner tie rod cotter pin and castle nut. Remove the inner tie rod from the center link. Remove the outer tie rod from the tie rod adjuster sleeve and install it into the center link where the inner tie rod was removed. Tighten the castle nut and install the cotter pin. **NOTE:** Your outer tie rod will now be your inner tie rod.
11. Thread the provided tie rod adjuster adapter and jam nut onto the inner tie rod. **NOTE:** The smaller thread diameter on the tie rod adjuster adapter, will be installed onto the inner tie rod.
12. The lower control arm ball joint is pressed into the control arm so you may want to remove the lower control arm from the vehicle in order to remove the ball joint. Once the old ball joint is pressed out, press the new provided ball joint into the lower control arm. Re-install the lower control arm if removed. Torque the lower control arm U-bolts to 85 ft-lbs.
13. Remove the upper ball joint from the upper control arm by removing the four bolts. Install the provided ball joint with the new hardware into the upper control arm and tighten (Figure 4).



**Figure 4 – Replace Upper Ball Joint**

14. Thread the provided outer tie rod and jam nut into the tie rod adjuster so you have a similar thread length showing on the inner and outer tie rod on both sides of the vehicle.
15. Install the provided shock onto the upper shock mount stud on the frame. **NOTE:** A new upper shock mount stud is provided if you need to replace the one in your frame. Install the provided hardware to hold the shock in place. Do not torque the upper shock mount hardware at this time.



16. With a floor jack under the lower control arm, place the correct upright assembly onto the lower control arm ball joint. Thread the castle nut and washer onto the lower ball joint to keep the upright assembly in place (Figure 5). **NOTE:** The steer arm on the corner assembly will be pointing towards the front of the vehicle.



Figure 5 - Install Upright Assembly

17. Place the provided coil spring into the lower control arm coil spring pocket. Orientate the spring so the tail of the spring lands between the two small holes or half way over the single hole in the coil spring pocket (Figure 6).



Figure 6 - Locate Coil Spring

18. Slowly raise the lower control arm with the floor jack so the coil spring fits up into the upper spring pocket in the frame (Figure 7). The upright assembly will also need to line up with the upper ball joint stud.

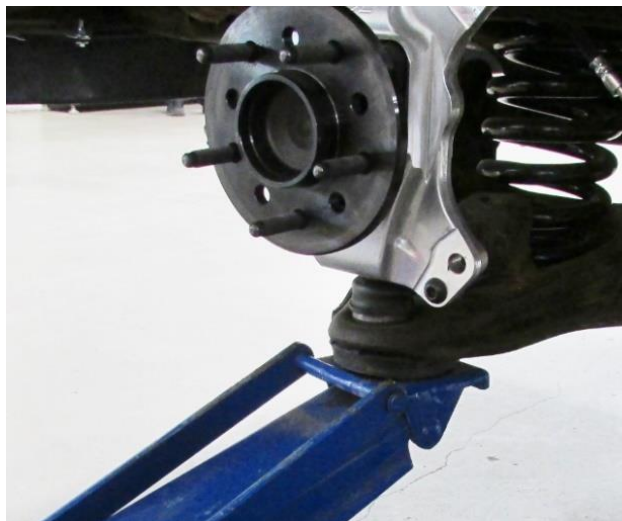
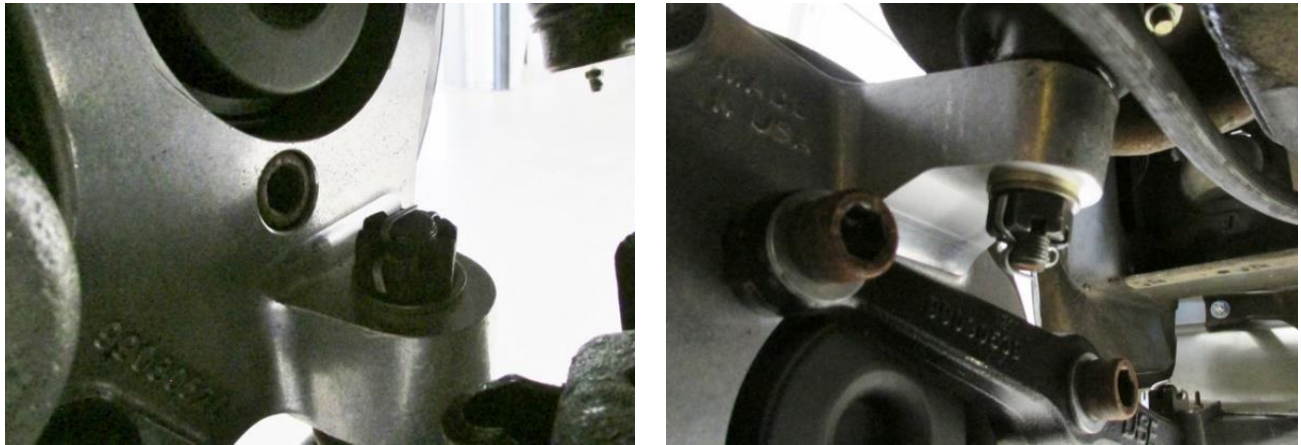


Figure 7 - Install Upright to Upper Ball Joint

19. As you raise the lower control arm, position the shock so it fits between the two tabs on the lower control arm. Once the shock mounting hole lines up with the tabs, install the lower shock bolt through the shock and mounting tabs. Install the hex nut and washer onto the bolt however do not torque the fasteners at this time.
20. Verify that the coil spring has fit into the upper spring pocket and raise the floor jack up until you can fit the upper ball joint stud into the upright. Thread the castle nut and washer onto the ball joint to hold it in place.
21. Confirm the coil spring is correctly located in the upper and lower spring pockets. Then, tighten the upper and lower ball joint nuts. Torque the lower ball joint nut to 90 ft-lbs. and the upper ball joint nut to 50 ft-lbs. Apply additional torque to the castle nut to align and install the cotter pin in the upper and lower ball joints. Split the cotter pin and bend one half around the top side of the castle nut and the other half around the bottom side of the castle nut. Trim the cotter pin as needed (Figure 8).



**Figure 8 – Install Ball Joint Castle Nuts and Cotter Pins**

22. Install the outer tie rod into the steer arm on the upright and tighten the castle nut. Torque the castle nut to 35 ft-lbs. plus additional torque to align and install the cotter pin. Trim the cotter pin as needed (Figure 9).



**Figure 9 – Install Outer Tie Rod**

23. Torque the upper and lower shock mount to 60 ft-lbs. Repeat Steps 3 through 23 for the opposite side of the vehicle.

24. Detroit Speed offers 13" front brake rotors with a 5 x 5" and 5 x 4-3/4" dual bolt pattern if you plan on running OE style brake calipers and pads. Use Detroit Speed part number 050403 for the rotor kit.
25. Install your front brake kit per the manufacturers' instructions. Attach the brake hoses.
26. Re-install the sway bar end links to the lower control arms if equipped. Torque the fasteners to 25 ft-lbs. on both sides of the vehicle (Figure 10).



Figure 10 - Parts Install

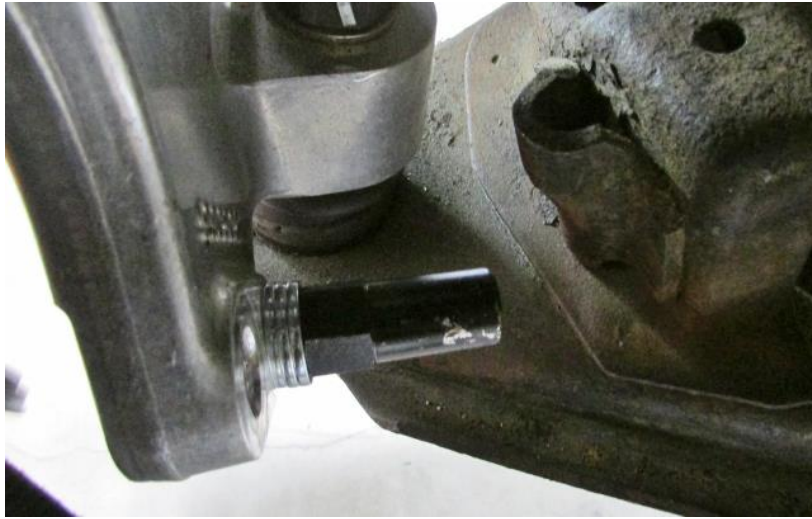
27. Re-install your wheels and tires back onto the vehicle. Lower the vehicle to the ground. Jounce the front end of the vehicle while rolling the vehicle back and forth to settle the suspension.
28. Inspect the clearance between the jounce bumper on the lower control arm and the frame. You may need to trim the jounce bumper to give you about 2" of gap between the bumper and the frame with your lowered ride height (Figure 11).



Figure 11 - Trim Jounce Bumper

29. The Detroit Speed uprights include adjustable steer stops on the backside of the uprights that can be adjusted depending on your wheel size and backspace. If you have enough wheel/tire clearance at full steering lock, you can remove the M12 steer stop bolt and remove the washers as needed to increase your turning radius (Figure 12 on the next page). **NOTE:** If you are using 20" diameter wheels, you may need to manipulate the lower control arm if the wheel is interfering with the lower control arm at full steering lock.





**Figure 12 - Steer Stop Adjustment**

30. Torque the front wheels to the manufacturers' specifications. Adjust your tie rod adjusters so you have slight toe-in on both sides of the vehicle. Detroit Speed recommends having your alignment set at a professional alignment shop so you have 0 to 1/16" of toe-in.

If you have any questions before or during the installation of this product, please contact Detroit Speed at [tech@detroitsspeed.com](mailto:tech@detroitsspeed.com) or 704.662.3272