

Detroit Speed Anti-Squat Kit 1967-72 GM Square Body Truck P/N: 040119DS

The Detroit Speed Anti-Squat Kit is a 100% bolt-on kit that has been designed to provide instant center and pinion angle adjustability on your 1967-72 GM C10 truck. With the DSE lowering spacers, you can also achieve a 1/2" to 1-1/2" drop with this kit. The DSE truck arm relocation brackets provide four instant center locations to tune anti-squat. The DSE pinion angle/lowering spacers provide ride height and pinion angle adjustments. The slotted design of the spacers allows for easy installation and adjustments. New electroplated U-bolts and hardware are also included in this kit.



ltem #	Description	Quantity
1	Truck Arm Chassis Mount	2
2	Lowering Block – Angled	4
З	Lowering Block – Flat	
4	3/4" x 3-1/2" x 9-1/2" U-Bolt	2
5	3/4"-16 Tall Hex Nut	4
6	6 3/4" Heavy Duty Flat Washer	
7	Truck Arm Hardware Bag	
8	Instructions	1

Hardware Kit Checklist – Detroit Speed Ant-Squat Kit						
Part Number Description		Quantity	Check			
200112	Truck Arm Hardware Bag	1				
980137FS	3/4"-10 x 4-1/2" L Hex Head Bolt	2				
960111FS	3/4"-10 Nylock Nut	2				
970075FS	3/4" SAE Flat Washer	4				
980059FS	3/8"-24 x 1" L Hex Head Bolt	12				
960032FS	3/8"-24 Nylock Nut	12				
970023FS	3/8" SAE Washer	24				

<u>IMPORTANT:</u>

All work should be performed by a qualified technician. Please read the complete set of instructions and fully understand all 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 <u>sales@detroitspeed.com</u>.

Installation:

- 1. It is not necessary to remove the bed from the truck for this installation however it does make it easier. Raise the vehicle up on jack stands so that the frame is level with the ground. Place two jack stands under the rear axle tubes to support the rear axle so the rear brake lines are not in tension.
- 2. Remove the shocks from the lower shock plates by removing the hardware. Remove the lower spring retainers on the truck arms to free the coil springs from the truck arms (Figure 1).



Figure 1 – Remove Shocks and Springs

3. Lower the truck arms from the rear axle by removing the U-bolts and nuts (Figure 2 on the next page).



Figure 2 – Lower Truck Arms

4. Remove the truck arms from the chassis by removing the front mounting bolts from the factory brackets (Figure 3). **NOTE:** This is a good time to inspect the truck arm bushings for replacement. DSE does offer replacement truck arm bushings (PN: 041405DS).



Figure 3 – Remove Truck Arms

5. Next, you will need to remove the front truck arm chassis brackets by removing the six rivets holding each bracket to the chassis (Figure 4).

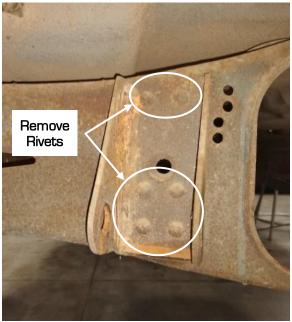


Figure 4 – Remove Truck Arm Brackets Page 3 of 6

6. Once the truck arm brackets have been removed, drill out the twelve holes using a 13/32" drill bit. Then, install the DSE truck arm chassis mounts using the provided 3/8"-24 x 1"L hex head bolts, washers and Nylock nuts (Figure 5). Torque the 3/8"-24 hardware to 35 ft-lbs.



Figure 5 – Install Truck Arm Chassis Mounts

7. Install the front of the truck arms into the DSE truck arm mounts using the provided 3/4"-10 x 4-1/2" L hex head bolts, washers and Nylock nuts and tighten (Figure 6). Do not torque the hardware at this time. **NOTE:** DSE recommends installing the truck arms in the 2rd hole from the bottom as a starting point. The bottom hole in the bracket is the stock truck arm mounting location.



Figure 6 – Install Truck Arms

NOTE: Instant center numbers are expressed as distance forward of rear axle centerline, then height above ground level. Nominal settings are in bold (Figure 7 on the next page). Heights will vary with wheel sizes and ride height.

Tuning With Anti-Squat:

Anti-Squat [A.S] adjustments effect the amount of body squat caused by acceleration. Increasing A.S % transfers more acceleration forces through the suspension links instead of the coil springs, thus creating less body squat. Vertical loading of the tire also increases, which increases forward traction.

Truck Arm Position at Chassis Mount	Instant Center Fwd." / Ht."	Anti-Squat % (Short bed)	Anti-Squat % (Long bed)
Bottom Hole (Factory)	48.5" / 9.3"	97 %	103%
2nd Hole	48.5" / 10.3"	107%	114%
3rd Hole	48.5" / 11.3"	117%	125%
Top Hole	48.5" / 12.3"	127%	136%

Figure 7 -	Instant Center,	Ride Height &	Anti-Squat Settings

NOTE: Instant center numbers are expressed as distance forward of rear axle centerline, then height above ground level. Heights will vary with wheel sizes and ride height. Numbers provided represent Detroit Speed Kit 2 (PN: 041652DS)

8. Raise the truck arms up to the rear axle. Install the provided U-bolts through the truck arm axle perch, truck arm and lower shock plates if needed. Install the provided U-bolt washers and nuts to hold the truck arms in place (Figure 8). NOTE: The DSE Track Bar/Shock Relocation Kit has been installed in this truck (PN: 040118DS).



Figure 8 – Raise Truck Arm to Axle

9. Place the desired lowering block/pinion angle spacers between the axle pad and the truck arm. Slide the blocks around the U-bolts using the slotted holes to get them in position (Figure 9). Repeat this step for the opposite side of the truck. NOTE: DSE recommends a starting point of one flat spacer paired with one angled spacer per side. Place the short side of the angle toward the front to rotate the pinion down. There is an additional angled lowering block that can be used for additional pinion angle and ride height adjustment.



Figure 9 - Install Lowering Blocks. Page 5 of 6

10. Tighten the U-bolts evenly on both sides of the truck (Figure 10). Torque the U-bolts to 200 ftlbs. Re-install the shocks to the lower shock plates. Torque the lower shock bolts to 40 ft-lbs.



Figure 10 – Tighten U-bolts

11.Re-install the lower spring retainers to keep the coil springs in place on the truck arms (Figure 11).



Figure 11 - Re-install Spring Retainers

12.Set the vehicle on the ground. Roll the truck back and forth while jouncing the suspension. At this point, you can now torque the front truck arm hardware to 140 ft-lbs. Installation in now complete.

If you have any questions before or during the installation of this product, please contact Detroit Speed at <u>sales@detroitspeed.com</u> or 704.662.3272

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