

# Coil-Over Mounting Kit

Dodge Ram 2500/3500 Pickup | 2003-2012

Part #: 122810



## SAFETY WARNING

BDS Suspension Co. recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known.



## SPECIAL TOOLS

A plasma cutter is highly recommended for this installation, if one is not available a 4-1/2" hole saw will suffice. A welder is also required. This kit is designed to specifically work with the BDS 4-link long arm system with an indexing ring kit installed. Use with other systems is not recommended due to the extra wheel travel gained with this kit.

## INSTALLATION INSTRUCTIONS

1. Park vehicle on clean, flat, and level surface.
2. Disconnect the battery, welding is required for this installation.
3. Raise the front of the vehicle and support the frame rails with jack stands.
4. Support the front axle with a hydraulic jack.
5. Remove the front wheels.
6. Remove the inner fenders, retain all fasteners. (Fig 1)

## Box Kit

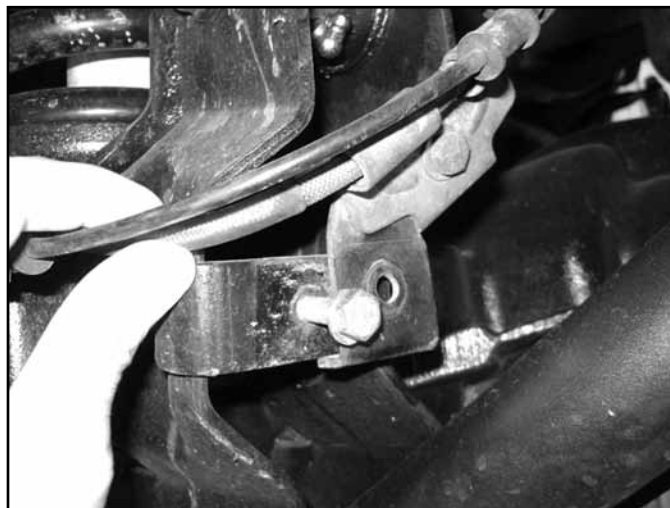
Part #	Qty	Description
2700	2	03-12 Dodge Coilover Upper Mount
2703	1	03-12 Dodge Coilover Drill / Cut Template
2704	2	Coilover Lower Support
2705	2	Coilover Lower Support w/ Nut
2737	2	Reservoir Mount
	1	loc-tite
820	1	bolt pack - Coilover Mount
	2	1/2"-13 x 6" bolt - grade 8 - yellow zinc
	16	1/2"-13 x 1-1/4" bolt - grade 8 - yellow zinc
	26	1/2" SAE Thru hardened washer - yellow zinc
	10	1/2"-13 Serrated edge flanged nut - clear zinc
	8	1/2"-13 Prevailing torque nut - yellow zinc
	2	9/16"-12 x 3-1/2" bolt - grade 8 - yellow zinc
	2	9/16" SAE Thru hardened washer - yellow zinc

**FIGURE 1**



7. Disconnect the brake lines from the axle, retain the hardware. Disconnect / adjust ABS wires to allow for extra droop later in the installation. (Fig 2)

**FIGURE 2**



8. Disconnect the sway bar links from the sway bar clevis bracket which is included in the long arm kits (Fig 3).

**FIGURE 3**



9. Disconnect the drag link from the pitman arm (retain nut), disconnect the trackbar from the frame bracket. (Fig 4)

**FIGURE 4**



10. Vehicles WITHOUT transfer case indexing ring kit installed or gas model trucks: Disconnect the driveshaft from the front axle. Note: It may be necessary to heat the front axle yoke to get the loc-tite to break free. Retain all hardware. (Fig 5) (Diesel trucks w/ indexing ring kit installed may skip this step)

**FIGURE 5**



11. Disconnect the front shocks and allow the axle to droop out. Remove the coil springs, remove the front shocks. Check for adequate clearance of brake lines, ABS wires, driveshaft to exhaust (gas models), etc.
12. Prep the axle for welding, remove corrosion and paint from the lower coil bucket, remove the factory lower shock nut clips, and test fit the weld on support plates. A minor amount of modification to the weld in support plates may be required due to variations in the lower coil bucket on the axle.
13. Install new 9/16" shock hardware bolt into the lower mount to hold the plates into place - SNUG THE BOLT, do not tighten. Weld the support plates into place, allow to cool, and coat with paint. (Fig 6a, 6b)

**FIGURE 6A**



**FIGURE 6B**



14. Remove the upper shock towers.
15. Drill the 3 factory shock tower mounting holes out to 1/2"~9/16". Bolt the included template (#02703) in place and drill the remaining 3 holes out to 1/2"~9/16". Repeat on opposite side. The template is only used for drilling holes and will not be installed on the vehicle once drilling is completed. (Fig 7a)
16. The ID of the template will also be used for material removal. Place the template on top of the coil bucket and use bolts to locate it in place. Use the plasma cutter to remove the lip of the stock coil bucket. If a plasma cutter is not available, a 4-1/2" hole saw can be used to remove the lip and create clearance for the coilover assembly. Use lots of lubrication, the factory lip of the frame will keep the hole saw centered. (Fig 7b)

**FIGURE 7A**

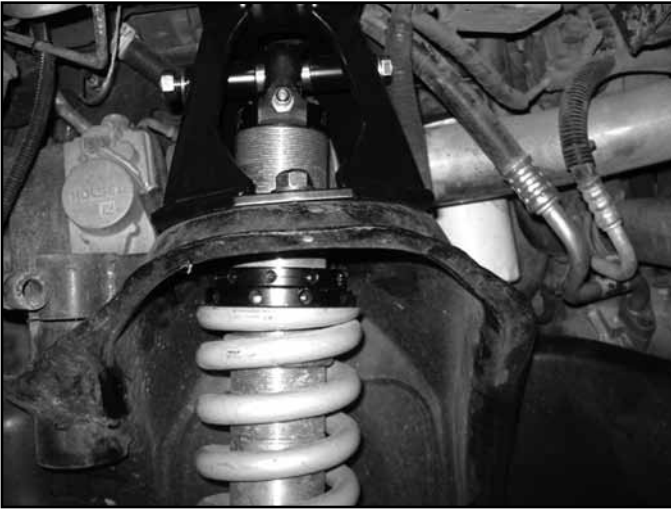


**FIGURE 7B**



17. Place the upper coilover mount on top of the coil bucket. Do NOT bolt it in at this time. Install the coilover assembly at this time, the hose will point FORWARD out of the coilover body. Route the reservoir through the coil bucket hole and the new upper coilover mount.
18. Attach the upper coilover mount to the coilover with new 1/2" x 6" bolt, washers, and prevailing torque nuts (BP #820). Note: The bracket to the coilover will be a tight fit. (Fig 8a)
19. Attach the upper coilover mount to the frame with (6) 1/2" x 1-1/4" bolts, washers, and nuts, use loc-tite on hardware. 5 places will use a serrated edge flanged nut, due to difficult access, the front easily accessible spot will require a washer and prevailing torque nut. See figure for nut location. (Fig 8b, 8c, 8d)

**FIGURE 8A**



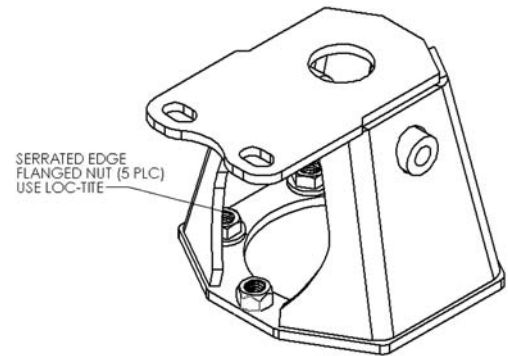
**FIGURE 8B**



**FIGURE 8C**



**FIGURE 8D**



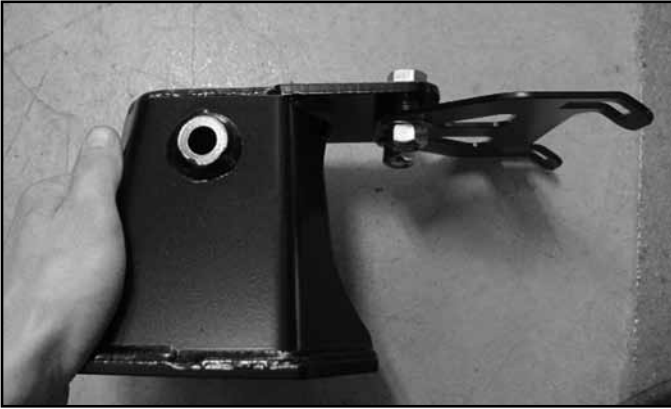
20. Tighten all 1/2" upper coilover hardware to 65 ft-lbs.
21. Raise the axle and attach the lower coilover mount to the axle with new 9/16" bolt with washer. Tighten to 95 ft-lbs.
22. Loosely reinstall the inner fender well and mark areas that will need to be trimmed to clear the upper coilover mount. Trim area from the inner fender and reinstall with factory hardware. (Fig 9)

**FIGURE 9**



23. Attach the reservoir mount to the upper coilover mount with ½" hardware with washers and loc nuts. Tighten to 65 ft-lbs. Attach reservoir to the mount with hose clamps included with Fox Coilover Box Kit. (Fig 10a, 10b)

**FIGURE 10A**



**FIGURE 10B**



24. Allow the axle to droop out fully, reattach the driveshaft with factory hardware with loctite, tighten to factory specifications. If axle is unable to be reattached it may be necessary to clearance the dual cardan at the transfer case to allow for extra droop, additionally an indexing ring kit may be required as indicated in the pre-installation notes. Gas models may require exhaust modification at this time for driveshaft clearance at full droop.
25. Reattach brake line relocation brackets to the axle with factory hardware, slide the brake line in the holding bracket if additional slack is required. Secure ABS wires at this time.
26. Reattach sway bar links to the sway bar, tighten to 35 ft-lbs.
27. Reattach the drag link to the pitman arm with factory nut, tighten to 65 ft-lbs.
28. Reinstall wheels, lower vehicle to the ground, torque lug nuts to factory specifications.
29. Turn the steering wheel to get the trackbar to link up with the frame bracket. Attach with correct hardware and tighten to 120 ft-lbs 03-07 / 150 ft-lbs 08-12 model years.
30. Perform a steering sweep, check the brake lines / ABS wires for any interference issues.
31. Check for clearance between upper coilover bracket and any other lines or wires. Reroute as necessary.
32. Recheck all hardware after 500 miles.