

PART NUMBER P4510854 P5153327

Lowering Spring Upgrade Kit Components

- (2) Front Coil Springs
- (2) Rear Coil Springs

READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

*When fitting the Mopar Lowering Springs on 2006 an newer model year RWD Chrysler 300C, Dodge Charger RT and Daytona and Dodge Magnum RT vehicles equipped with Sachs Nivomat self-leveling rear shock absorbers, please note that a rear shock change is required for proper suspension performance and appearance. To ensure proper operation on these vehicles, 2005 model rear non self-leveling shocks (or equivalent) are required to achieve proper ride height characteristics and maintain proper suspension handling characteristics. Failure to replace the original equipment, self-leveling rear shocks on these vehicles as described will result in a rear ride height that is too high and poor handling characteristics.

WARNINGS AND CAUTIONS

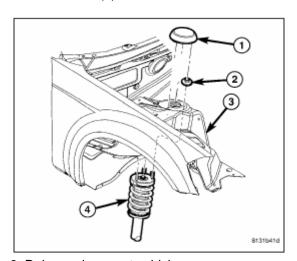
MOPAR PERFORMANCE PARTS
RECOMMENDS PROFESSIONAL
INSTALLATION BY AN ASE CERTIFIED
TECHNICIAN. A VEHICLE HOIST, TORQUE
WRENCHES AND SPECIALIZED REMOVAL
AND INSTALLATION TOOLS ARE
REQUIRED.

WARNING: DO NOT REMOVE THE STRUT SHAFT NUT WHILE STRUT ASSEMBLY IS INSTALLED IN VEHICLE, OR BEFORE THE COIL SPRING IS COMPRESSED WITH A COMPRESSION TOOL. THE SPRING IS HELD UNDER HIGH PRESSURE.

CAUTION: Only frame contact hoisting equipment can be used on this vehicle. All vehicles have a fully independent rear suspension. The vehicles cannot be hoisted using equipment designed to lift a vehicle by the rear axle. If this type of hoisting equipment is used, damage to rear suspension components will occur.

FRONT SHOCK ASSEMBLY REMOVAL

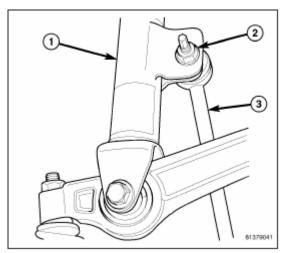
- 1. If equipped, remove front shock tower cap (1) from top of shock assembly (4).
- 2. Remove three nuts (2) fastening shock assembly (4) to shock tower (3).



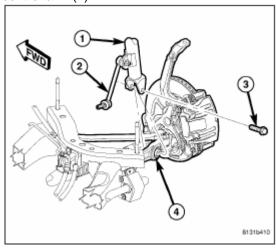
- 3. Raise and support vehicle.
- 4. Remove wheel mounting nuts (3), then tire and wheel assembly (1).
- 5. Remove nut (2) fastening stabilizer link (3) to shock assembly (1). Slide link ball joint stem from shock assembly.



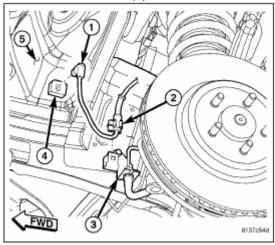
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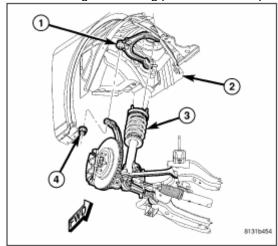
6. Remove bolt (3) securing shock assembly (1) to lower control arm (4).



7. Disconnect wheel speed sensor cable routing clip (2) at brake tube bracket (3).



8. Loosen nut (4) attaching upper ball joint stud (1) to knuckle. Back nut off until nut is even with end of stud. Keeping nut on at this location will help keep end of stud from distorting while using puller in next step.

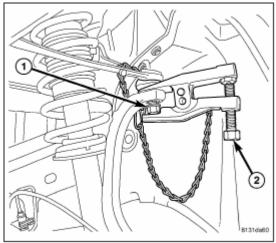




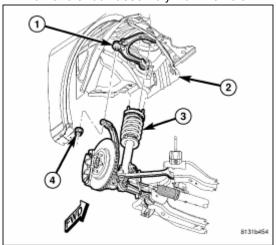
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CAUTION: In following step, use care not to damage ball joint seal boot while sliding Puller, Special Tool 9360, into place past seal boot.

9. Using Puller (2), Special Tool 9360, separate upper ball joint stud (1) from knuckle.



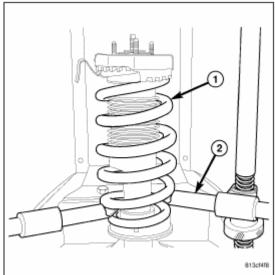
- 10. Remove nut (4) from end of upper ball joint stud (1).
- 11. Tip top of knuckle outward using care not to overextend bake flex hose.
- 12. Remove shock assembly from vehicle.



compress coil spring. Follow manufacturer's instructions closely.

WARNING: Do not remove shock shaft nut before coil spring is compressed. Coil spring is held under pressure and must be compressed, removing spring tension from upper and lower mounts, before shock removal.

1. Position shock assembly coil spring (1) on hooks (2) of Compressor following manufacturer's instructions. Install clamp securing shock to lower spring coil.



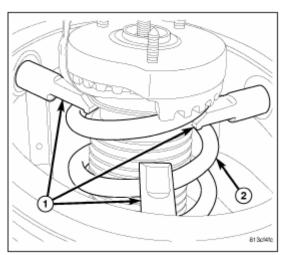
2. Position Compressor upper hooks (1) on upper coil spring (2) following manufacturers instructions. To ease installation, rotate shock as necessary positioning shock in compressor so that upper spring coil ends (step in upper mount) at straight outward position from Compressor.

DISASSEMBLY

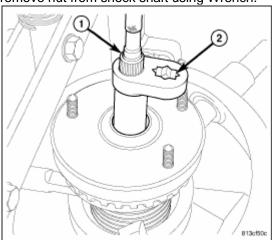
For shock assembly disassembly and assembly, use of shock Spring Compressor, Pentastar Service Equipment (PSE) tool W-7200, or equivalent, is recommended to



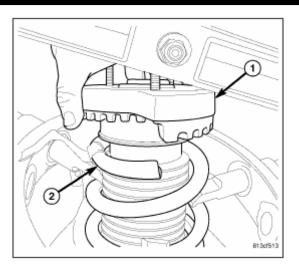
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- 3. Compress coil spring until all spring tension is removed from upper mount.
- 4. Position Wrench (2), Special Tool 9362, on shock shaft retaining nut. Next, insert 8 mm socket though Wrench onto hex located on end of shock shaft. While holding shock shaft from turning, remove nut from shock shaft using Wrench.



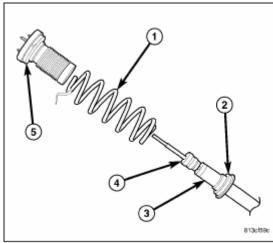
- 5. Remove clamp from bottom of coil spring and remove shock and lower isolator out through bottom of coil spring.
- 6. Remove upper mount (1) from shock shaft and coil spring.



NOTE: Prior to removing spring from compressor, note location of lower spring coil end in relationship to compressor to ease assembly of components later.

7. Back off compressor drive, releasing tension from coil spring. Push back compressor upper hooks and remove coil spring from Compressor.

Set aside original coil springs (1). They will not be reused.



- 8. Inspect shock assembly components for following and replace as necessary:
 - Inspect shock (3) for any condition of shaft binding over full stroke of shaft.



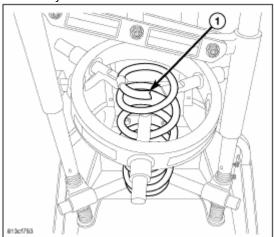
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- Inspect upper mount (5) for cracks and distortion and its retaining studs for any sign of damage.
- Inspect upper spring isolator (5) for severe deterioration.
- Inspect lower spring isolator (2) for severe deterioration.
- Inspect dust shield for tears and deterioration.
- Inspect jounce bumper (4) for cracks and signs of deterioration.

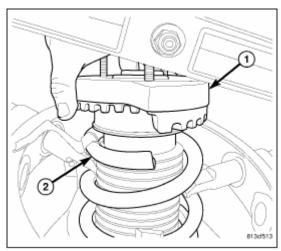
ASSEMBLY

CAUTION: Use care not to damage coil spring coating during spring assembly. Damage to coating will jeopardize its corrosion protection.

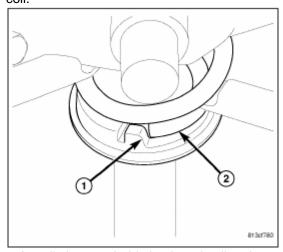
1. Place MOPAR coil spring (part number and Mopar logo right side up) in compressor lower hooks following manufacturer's instructions. To ease shock reassembly, rotate coil spring around until upper coil (1) ends at straight outward position from Compressor. Proper orientation of spring to upper mount (once installed) is necessary.



- 2. Position compressor upper hooks over coil spring following manufacturers instructions.
- 3. Compress coil spring far enough to allow shock installation.
- 4. Install upper mount (1) onto coil spring (2). Match step in upper isolator to end of spring coil.



5. Install shock through bottom of coil spring until lower spring isolator (on shock) contacts lower end of coil spring. Match step built into isolator (1) to lower coil end (2). Once in this position, stabilizer bar bracket should point straight inward toward compressor body. If not, rotate isolator on shock body until alignment is achieved when isolator is correctly positioned with lower spring coil.

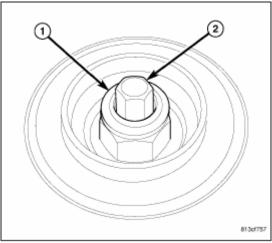


6. Install clamp to hold shock and coil spring together.



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7. Install retaining nut (1) on shock shaft (2) as far as possible by hand. Make sure nut is installed far enough for 8 mm socket to grasp hex (2) on end of shaft for tightening.



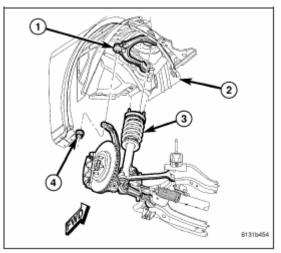
- 8. Install wrench (on end of a torque wrench), Special Tool 9362, on shock shaft retaining nut. Next, insert 8 mm socket though Wrench onto hex located on end of shock shaft. While holding
- shock shaft from turning, tighten nut using Wrench to 90 N·m (66 ft. lbs.) torque.
- 9. Slowly release tension from coil spring by backing off Compressor drive fully. As tension is relieved, make sure shock components are properly in place.
- 10. Remove clamp from lower end of coil spring and shock. Push back spring compressor upper and lower hooks, then remove shock assembly from spring compressor.

INSTALLATION

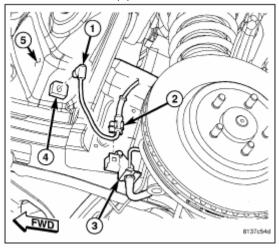
1. Place shock assembly into front suspension using reverse direction in which it was removed.

CAUTION: It is important to tighten nut as described in following step to avoid damaging ball stud joint.

2. Place upper ball joint stud (1) through hole in top of knuckle and install nut (4). Tighten nut by holding ball joint stud with a hex wrench while turning nut with a wrench. Tighten nut using crow foot wrench on torque wrench to 47 N·m + 90° turn (35 ft. lbs. +90° turn) torque.



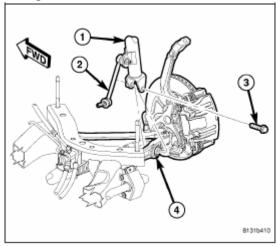
3. Connect wheel speed sensor cable routing clip (2) at brake tube bracket (3).



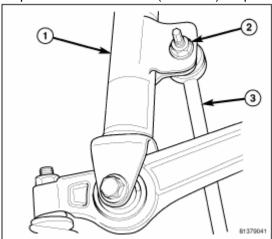


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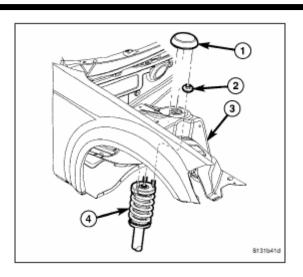
4. Install lower shock mounting bolt (3) attaching shock assembly (1) to lower control arm (4). **Do** not tighten bolt at this time.



5. Slide stabilizer link (3) ball joint stem into shock assembly from front. Install nut fastening link (3) to shock assembly (1). Tighten nut by holding ball joint stud while turning nut. Tighten nut using crow foot wrench on torque wrench to 128 N·m (95 ft. lbs.) torque.



- 6. Install tire and wheel assembly. Tighten wheel mounting nuts (3) to 150 N·m (110 ft. lbs.) torque.
- 7. Lower vehicle.
- 8. Install three nuts (2) fastening shock assembly (4) to shock tower (3). Tighten nuts to 27 N·m (20 ft. lbs.) torque.
- 9. If equipped, align shock tower cap (1) with shock mounting nuts (2) and snap into place.



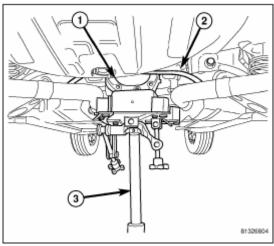
REAR SPRING REMOVAL

- 1. Raise and support vehicle.
- 2. On both sides of vehicle, remove wheel mounting nuts, then rear tire and wheel assembly.
- 3. Position an extra pair of jack stands under and support forward end of engine cradle to help stabilize vehicle during rear suspension removal/installation.
- 4. Perform following if vehicle is equipped with dual exhaust or are servicing right side on vehicle with single exhaust.
 - a. Position under-hoist utility jack or stand several inches below exhaust at muffler.
 - b. Disconnect exhaust isolators at muffler and resonators hangers.
 - c. Lower exhaust down to rest upon top of jack or stand placed below muffler.

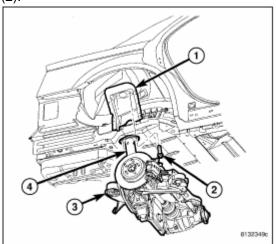


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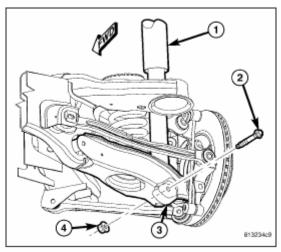
6. Position under-hoist utility jack or transmission jack (3) under center of rear axle differential (1). Raise jack head to contact differential and secure in place. When securing crossmember to jack, be sure not to secure stabilizer bar.



7. Remove shock absorber (1) upper mounting screws (2).



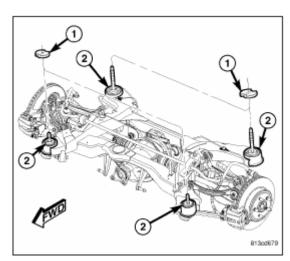
8. Remove shock absorber (1) lower mounting bolt (2) and nut (4).



CAUTION: When removing crossmember mounting bolts (2 and 3) it is important NOT to loosen or remove crossmember mounting bolts on opposite side of vehicle. Doing so will require rear wheel alignment following reinstallation to ensure proper thrust angle.

9. Remove both front and rear crossmember mounting bolts (2 and 3) on repair-side of vehicle.

CAUTION: To avoid damaging other components of vehicle, do not lower crossmember (1) any further than necessary to remove shock absorber.

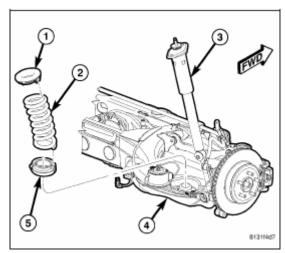




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- 10. **Slowly** lower jack allowing repair-side of crossmember to drop. **Do not lower jack at a fast rate.** Lower jack just enough to allow top of shock absorber to clear body flange.
- 11. Remove shock absorber (3) by tipping top outward and lifting lower end out of pocket in spring link (4).
- 12. Disconnect brake hose at bracket mounted to body to avoid overextending hose, damaging it, during following step.
- 13. Slowly lower jack until crossmember is low enough to remove coil spring. **Do not lower jack any further than necessary to remove spring.**
- 14. Remove coil spring and isolators (1, 2 and 5).

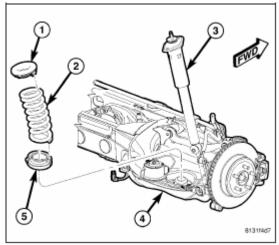
Set aside original coil springs (2). They will not be reused.



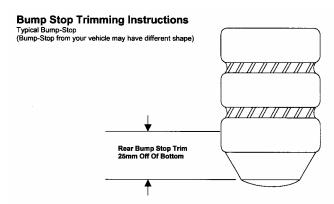
INSTALLATION

1. Install upper (1) and lower (5) isolators on new MOPAR coil spring (2).

NOTE: Before installing coil spring, make sure isolators (1 and 5) are completely installed on ends of spring.



- 2. Position a 15mm wrench on upper shock shaft retaining nut. Next, hold the shock shaft using a 6mm wrench (or equivalent). While holding shock shaft from turning, remove nut from shock shaft using wrench. Remove upper shock mount and dust boot from shock to expose rear bump stop.
- 3. Trim rear bump stops (one per shock) as shown in the diagram below.

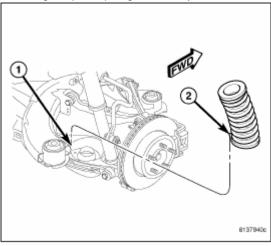


4. Install upper shock mount on rear shock shaft using reverse direction in which it was removed. Torque upper shock nut to 90 N·m (66 ft. lbs.) torque.

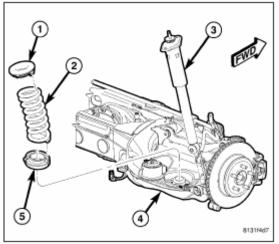


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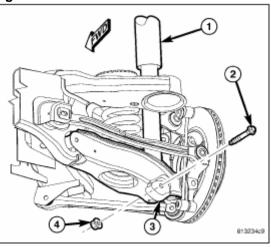
5. Install coil spring with isolators into spring pocket of spring link (1) fitting lower isolator (2) to shape of pocket, then align top of spring with body mount.



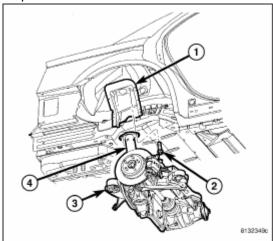
6. Install shock absorber (3) by setting lower end into pocket in spring link (4), then tipping top inward until aligned with upper mounting holes.



7. Install lower shock mounting bolt and nut. **Do not tighten at this time.**



- 8. Carefully raise jack, guiding coil spring and upper end of shock absorber (4) into mounted positions.
- 9. Install shock absorber upper mounting screws (2). Tighten upper mounting screws to 52 N⋅m (38 ft. lbs.) torque.

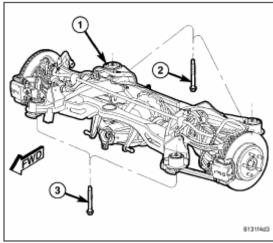


NOTE: Rear crossmember mounting bolts (2) are longer than front mounting bolts (3). Do not interchange mounting bolts.

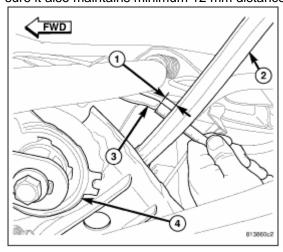


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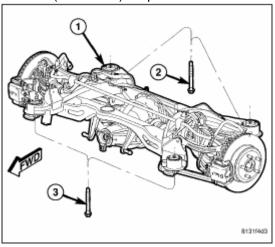
10. Install crossmember mounting bolts (2 and 3). Snug, but do not fully tighten bolts at this time.



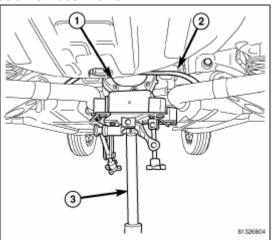
11. Measure distance (1) between from tension link (2) to body weld flange (3) directly in front of it, just outboard of front mount bushing (4). **This distance must be at least 12 mm to allow proper clearance for suspension movement.** If distance is less than 12 mm, shift that side of rear crossmember directly rearward until distance is 12 mm or greater. To do so, loosen 3 mounting bolts slightly, leaving one on opposite side of shift snugged to pivot off of. Shift crossmember rearward and snug loosened bolts. Measure opposite side to be sure it also maintains minimum 12 mm distance.



12. Tighten all crossmember mounting bolts (2 and 3) to 180 N·m (133 ft. lbs.) torque.



13. Remove jack (3) from under rear axle differential.
14. If previously lowered, raise rear exhaust back to mounted position and connect exhaust isolators at muffler and resonators hangers. Remove jack or stand below exhaust muffler.

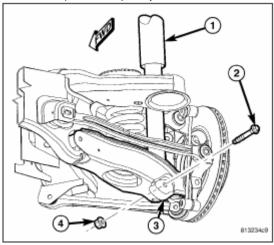


- 15. Install tire and wheel assemblies (1). Tighten wheel mounting nuts (3) to 150 N·m (110 ft. lbs.) torque.
- 16. Lower vehicle.
- 17. Position vehicle on alignment rack/drive-on lift. Raise lift as necessary to access lower mounting bolt.



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18. Tighten shock absorber lower mounting bolt nut (4) to 72 N·m (53 ft. lbs.) torque.



Inspection & Wheel Alignment

After installation, it is always important to inspect and adjust the following if necessary:

- Wheel alignment
- Tire and/or wheel-to-fender clearance
- Brake line clearance and attachments
- Brake anti-locking / anti-skid system sensors.

Proper wheel alignment is essential for efficient steering, good directional stability, and proper tire wear. The method of checking a vehicle's front and rear wheel alignment varies depending on the manufacturer and type of equipment used. The manufacturer's instructions should always be followed to ensure accuracy of the alignment, except when DaimlerChrysler Corporation's wheel alignment specifications differ. On this vehicle, the suspension angles that can be adjusted are as follows:

FRONT:

- Camber (with cradle shift/service adjustment bolt package)
- Caster (with cradle shift/service adjustment bolt package)
- Toe

REAR:

Toe

Upon completion of the MOPAR spring kit, a complete 4-wheel alignment must be performed to

ensure proper vehicle handling and safety. Wheel alignment should be set to the factory specifications defined in the appropriate DaimlerChrysler Service Manual for the specific vehicle model.