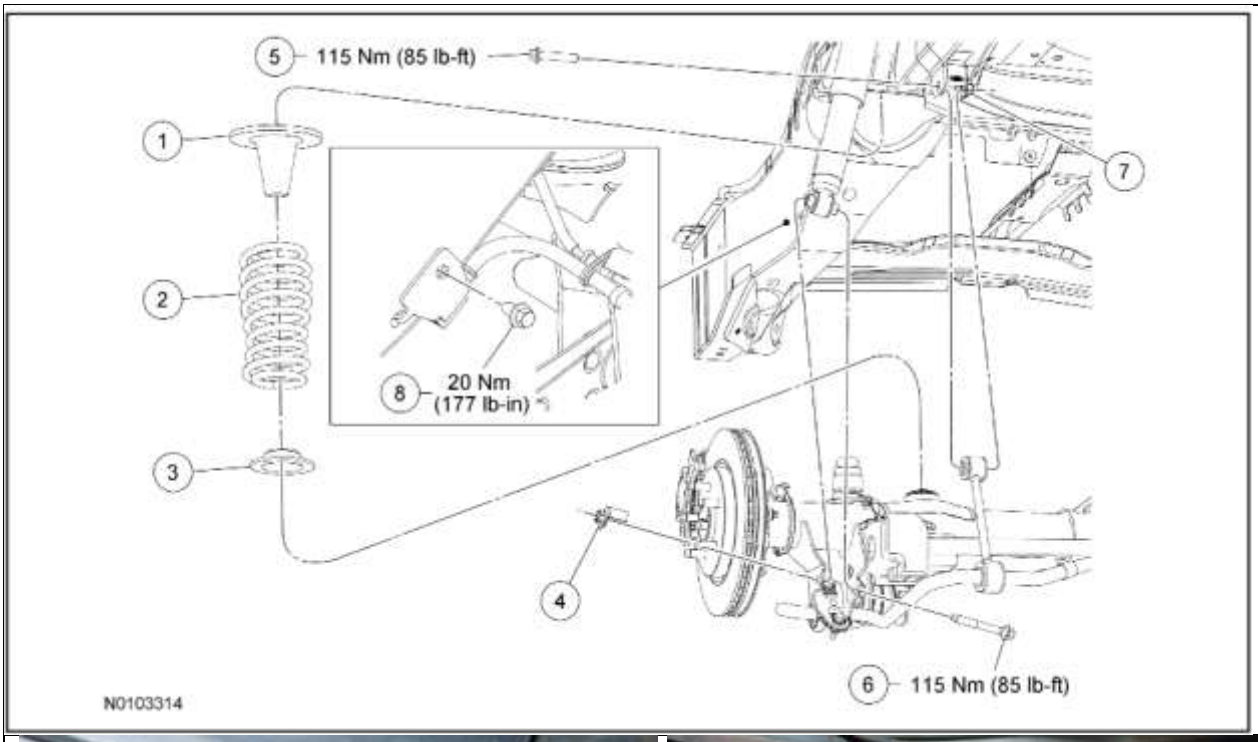
Front and Rear Spring Swap

Disclaimer: Ford recommends the use of new bolts for the suspension components (items 4, 5, 6, and 7). Others including myself have not replaced these bolts during installation. Internet research yielded that typical reasoning is a locking residue that is one time use during factory assembly. A popular unnamed vendor did not recommend using new bolts during installation and on that vendor's advice I proceeded. I used loc-tite on the fasteners and was satisfied since this is a new car and fatigue cycles are low still. However, if something breaks you're on your own.

Rear Springs



1. Loosen the lug nuts on both rear wheels. Block up the front wheels to prevent rolling.
2. Jack the car up and support the car from the frame with jack stands.

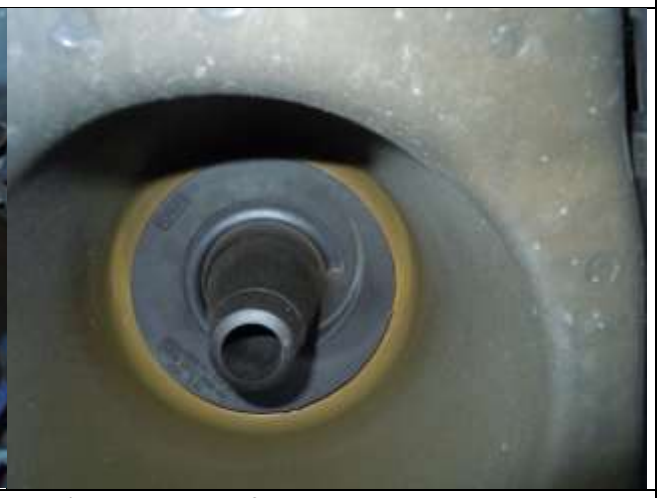
NOTE: I used large jackstands and had to support the car from the rear frame rails. If possible, use the body jacking points.

3. Finish removing both wheels.

4. Use an 15mm socket to remove the sway bar end link bolts on both sides.

5. Remove the 10mm bolt holding the brake hose bracket. Remove the bracket from its position and let it hang.

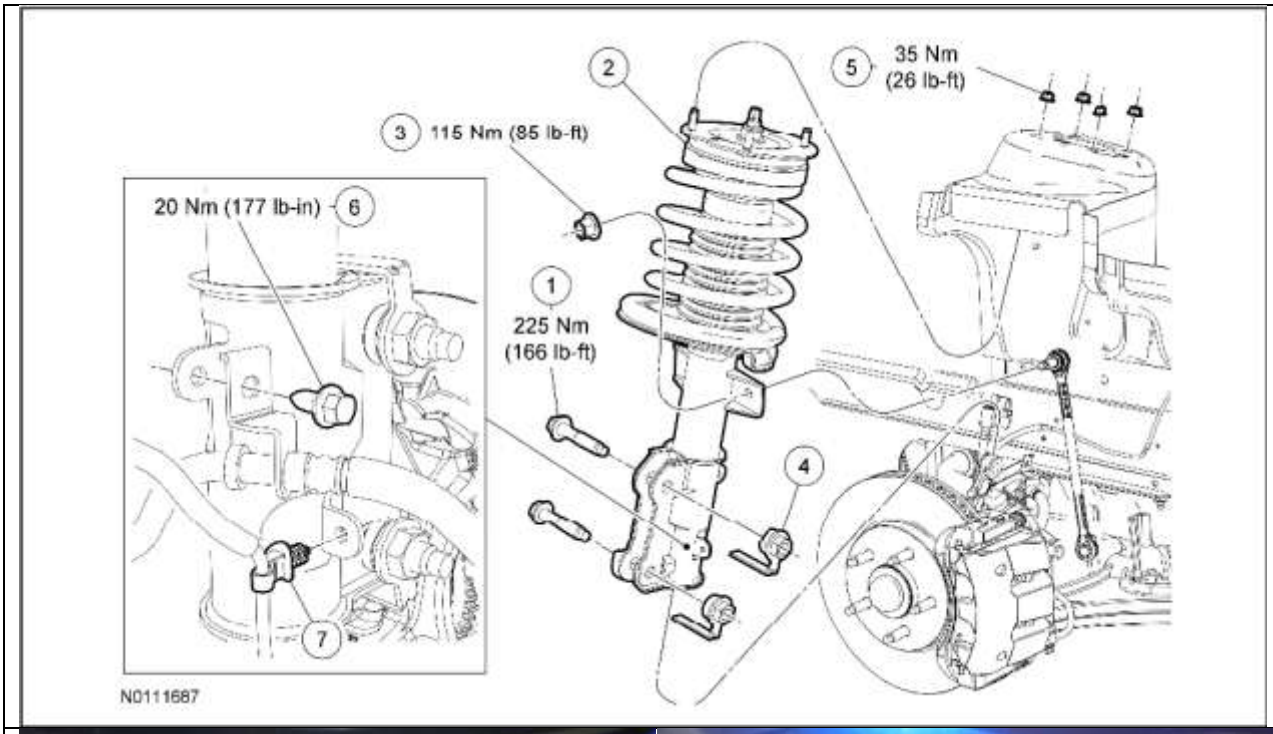

6. Locate a jack below the driver's side spring. Jack up the axle to support the axle.
7. Remove the 15mm shock absorber bolt.

8. Use the jack to lower the axle. Remove the driver's side spring . If necessary, remove and replace the spring isolators.
9. If you have a replacement shock, remove the access panel in the trunk and unbolt the upper shock mount. Install the new shock but do not torque the nut.

10. Install the new spring. Either match the coils to the mount indention or have the tag (Ford OEM only) facing the disc.
11. Jack up the axle and install the lower shock bolt.
12. Continue jacking the axle up until the driver's side lifts off the jack stand.
13. Torque the lower shock bolt to 85 ft lbs.
14. If needed, torque the upper shock bolt to 30 ft lbs.
15. Lower the car back onto the jackstand.
16. Repeat steps 5 through 15 for the passenger side.
17. Install both the sway bar end link bolts. Torque to 85 ft lbs.
18. Install the wheels. Torque the lug nuts to 100 ft lbs in a star pattern.
19. Jack the car up and remove the jack stands.
20. Cleanup and inspect your handiwork.

Front Suspension



1. Remove the four nuts holding the strut brace if equipped.
2. Support the driver's side of the car with a jack. Loosen the driver's side wheel.
3. Jack the car up and remove the wheel.


4. Support the car with a jackstand on the frame.
5. Move the jack to support the lower control arm.


6. Remove the 10mm bolt holding the wheel speed sensor in place.
7. Remove the push on wire holder for the wheel speed sensor.


8. Remove the 10mm bolt for the brake hose bracket from the strut.
9. Remove the 18mm nut from the front sway bar end link. Use a 17mm crescent wrench on the back side of the strut bracket. Use the jack to adjust the strut for the end link removal.


10. Remove the remaining two13 mm nuts from the top of the strut.
11. Remove the two 21mm bolts from the spindle to strut connection. These are tight. You can use a wrench on the opposite side or rotate them until the welded bar pushes against the strut.
12. Be prepared to support the disc brake as it will want to swing out onto the floor (or your lap).


13. Use the jack to lower the control arm. Allow the disc brake to swing out; it will be caught/supported by the steering tie rod.
14. Remove the strut.


15. Attach the spring tensioner.
16. Tighten the spring tensioner until the spring can move freely in the strut. Note the start and end position of the tensioner, a lot of travel will be taken out of the spring. The new spring is placed beside it (Boss 302 OEM).


17. There are several methods to remove the upper nut from the strut. Ford service most likely has a special tool for it to reach the nut inside its recess. I jammed a wrench in the recess and turned the stud with a 10mm socket until it came loose.
18. It is best to avoid gripping on the shock shaft. To do so, obtain a 22mm deep well socket with a ¾" drive.
19. Insert a 3/8" drive extension through the socket and attach the 10mm socket to it.
20. You can now grip the large socket with channel locks or vise grips and spin the stud with the 3/8" drive and a ratchet. This method will allow for proper disassembly and reassembly. I had to have a shop retorque the nut to 76 ft lbs while I had the car in for alignment since I did not have the large socket. IT WILL NOT WORK with a ¼" drive extension (now broken).


21. If the upper bearing comes apart (lucky me) be patient in putting it back together. Ensure that all the dirt is out of the bearings prior to reinstallation. If necessary, clean all the components, wipe them down, and re-grease them. Line up the upper and lower sections and rotate them, making sure all the dirt is out. Press them together. There will be a click if it is done correctly.
22. Decompress the spring and remove the tensioner.
23. Remove any rubber isolators from the old spring and install them on the new one.
24. Install the tensioner on the new spring and tighten it up. Test fit it on the strut assembly (old or new) to check for height (the upper mount should fit flush against the shoulder of the shock shaft).
25. Reverse steps 17 through 2 for installation. Torque the strut assembly to 76 ft lbs. Refer to the diagram at the beginning for other torque specs. DO NOT use metal tools on the shock shaft to hold it still. Either use the concentric socket method described in steps 18 through 20 or have a shop torque the nut correctly. An impact wrench will get enough torque on it to get you to the shop.
26. Jack up the car and remove the jack stand.
27. Install the wheel and lower the car to keep the wheel from spinning.
28. Torque the lug nuts to 100 ft lbs in a star pattern.
29. Repeat steps 2 through 28 for the passenger side.
30. Place the strut brace back on the car and torque the four nuts to 26 ft lbs.

Done.