

PUBLISHED: 26-JUL-2013
2011.0 RANGE ROVER (LM), 204-05

VEHICLE DYNAMIC SUSPENSION

FRONT AIR SPRING (G1615406)

REMOVAL AND INSTALLATION

SPECIAL TOOL(S)



204-538

Air spring tester

REMOVAL

1.



WARNING:

Do not work on or under a vehicle supported only by a jack. Always support the vehicle on safety stands.

Raise and support the vehicle.

2.

For additional information, refer to: [Shock Absorber and Spring Assembly](#) (204-01 Front Suspension, Removal and Installation).

3.



NOTE:

Mount the assembly in a vertical position.

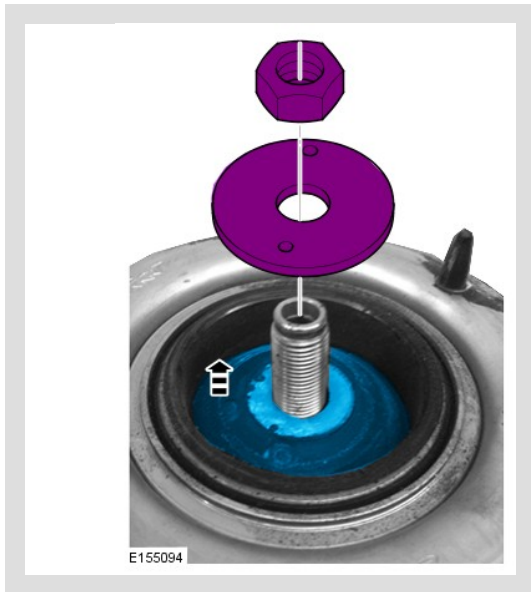


Using a 8mm allen key and a suitable tool remove the top nut.

4.

NOTE:

Retain the washer for further use.



Remove the upper bush.

5.



Using a suitable soft hammer tap the plastic piston in the vertical direction to raise it off the spring seat and remove it from the O-rings.

6.

CAUTION:

Remove any dirt from this area before installing.



Raise the piston off the spring seat.

7.

CAUTION:

Before pushing the top mount off the damper rod make sure you have squared up the top mount to the vertical axis as it will be force tilted due to the air spring.



Lift off the top mount from the damper rod, push up in a vertical direction.

INSTALLATION

1.

⚠ CAUTION:

Make sure this area is clean from any dirt.

△ NOTE:

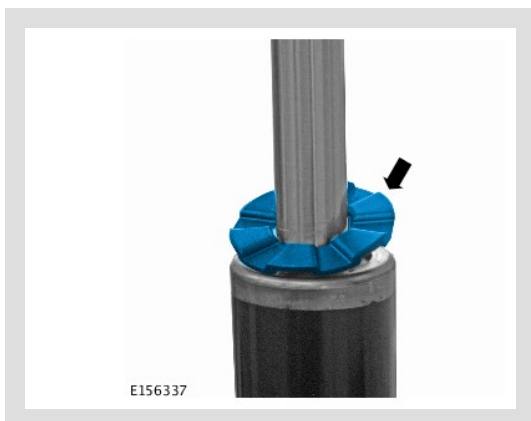
When the air spring is removed the spring aid, bump washer, O-rings and spacer from the damper rod will be displaced.



2.

△ NOTE:

Make sure the plastic washer is installed flat to the base prior to installing the spring aid



Install new plastic washer as shown.

3.

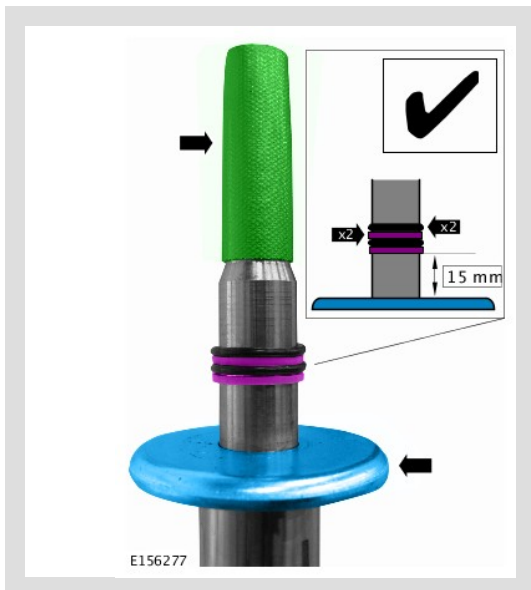


Install the new spring aid.

4.

NOTE:

Use a suitable protective tape as protection and then pass the spacers and O-rings over the thread, remove the tape after the O-rings are installed.

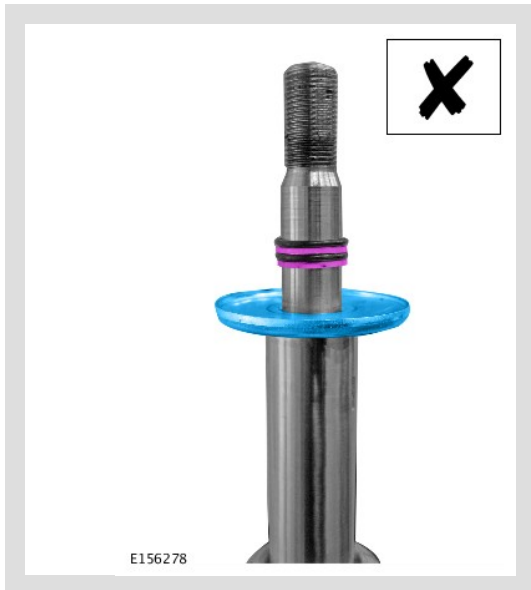


Place the O-rings and spacers in the following order, spacer, O-ring, spacer and O-ring. Place the new bump washer on damper tenon prior to installing the seals.

5.

⚠ CAUTION:

Make sure the location washer is installed in the correct orientation with the outer lip facing downwards.



6.

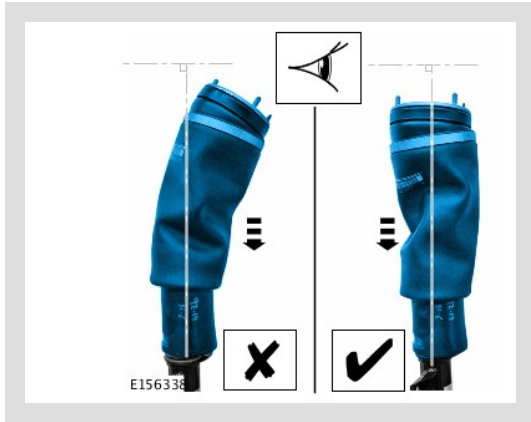


Install the lower O-rings and spacers as follows, spacer, O-ring, spacer, O-ring and spacer.

7.

NOTE:

Before pushing the top mount home on the damper tenon and O-rings, check the correct handed markings on the air sleeve, and then square up the top mount to be at 90 degrees with the axis of the damper



Place the new air spring over the damper rod, entering the damper tenon through the top mount. Lower the piston on the O-rings and push down on the spring seat.

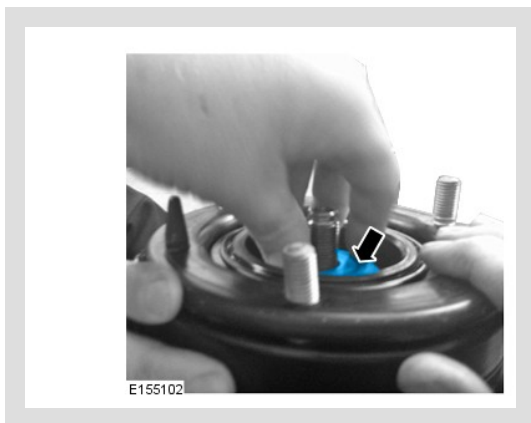
8.

NOTE:

Make sure the protective tape is removed prior to installing the air sleeve and the locating tab on the piston enters the hole in the spring seat.

Install the new air sleeve.

9.



Install the upper rubber bush onto the damper tenon.

10.



Install the rebound washer.

11.

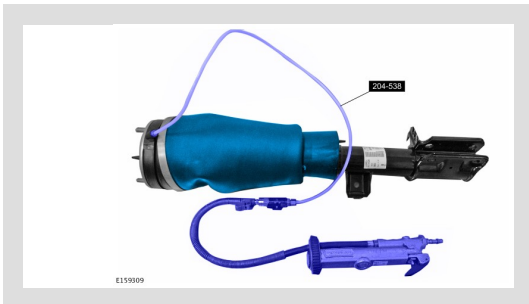


Torque 90 Nm

12.

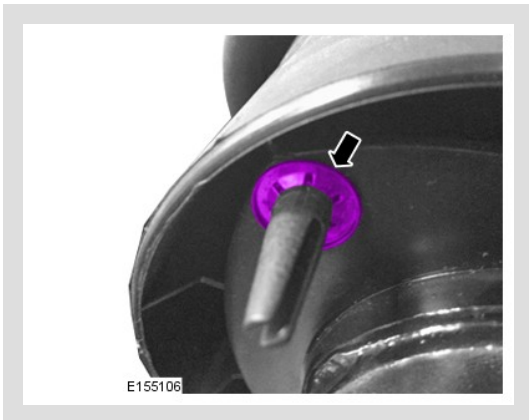
⚠ CAUTIONS:

- Keep hands and fingers away from the area during inflation.
- The shock absorber must be securely mounted in a suitable clamp before carrying out this step.



Using the special tool coupled to a tire inflator with a gauge, apply approximately 5 bar of air pressure to the air spring to fully seat the piston over the O-rings.

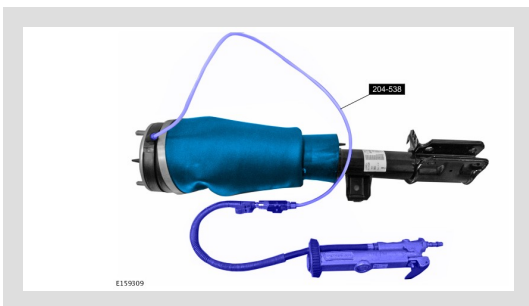
13.



Install the spring clip onto the piston peg below the spring seat using a suitable tool.

14. Carry out an air leak test using a suitable water bath.

15.



Using the special tool deflate the air spring.

16. For additional information, refer to: [Shock Absorber and Spring Assembly](#) (204-01 Front Suspension, Removal and Installation).