

Published: 11-May-2011

Front Suspension -

Coil Spring Suspension

| Item | Specification |
|-------|---|
| Front | Conventional coil spring with a twin tube damper and a high stress stabilizer bar |

Road Spring Identification

| Part Number | Specification | Isolator |
|-------------|----------------------|-----------|
| LR 001131 | Green/Yellow/Orange. | LR 001145 |

Torque Specifications

| Description | Nm | lb-ft |
|--|------------|------------|
| Damper locknut* | 80 | 59 |
| Front subframe crossbrace: | | |
| M10* | 45 | 33 |
| M16* | 140 + 240° | 103 + 240° |
| Front subframe to body bolts* | 140 + 240° | 103 + 240° |
| Front ride height sensor | 10 | 7 |
| Halfshaft to hub bolt* | 45 + 80° | 33 + 80° |
| Lower control arm front bolt | 140 + 45° | 104 + 45° |
| Lower control arm rear nut and bolt | 175 | 129 |
| Lower control arm taper ball joint locknut* | 100 | 74 |
| Spring and damper assembly top mounting nuts | 30 | 22 |
| Stabilizer bar clamp bolts | 175 | 129 |
| Stabilizer bar link nuts* | 60 | 44 |
| Wheel knuckle to damper clamp bolt | 110 | 81 |

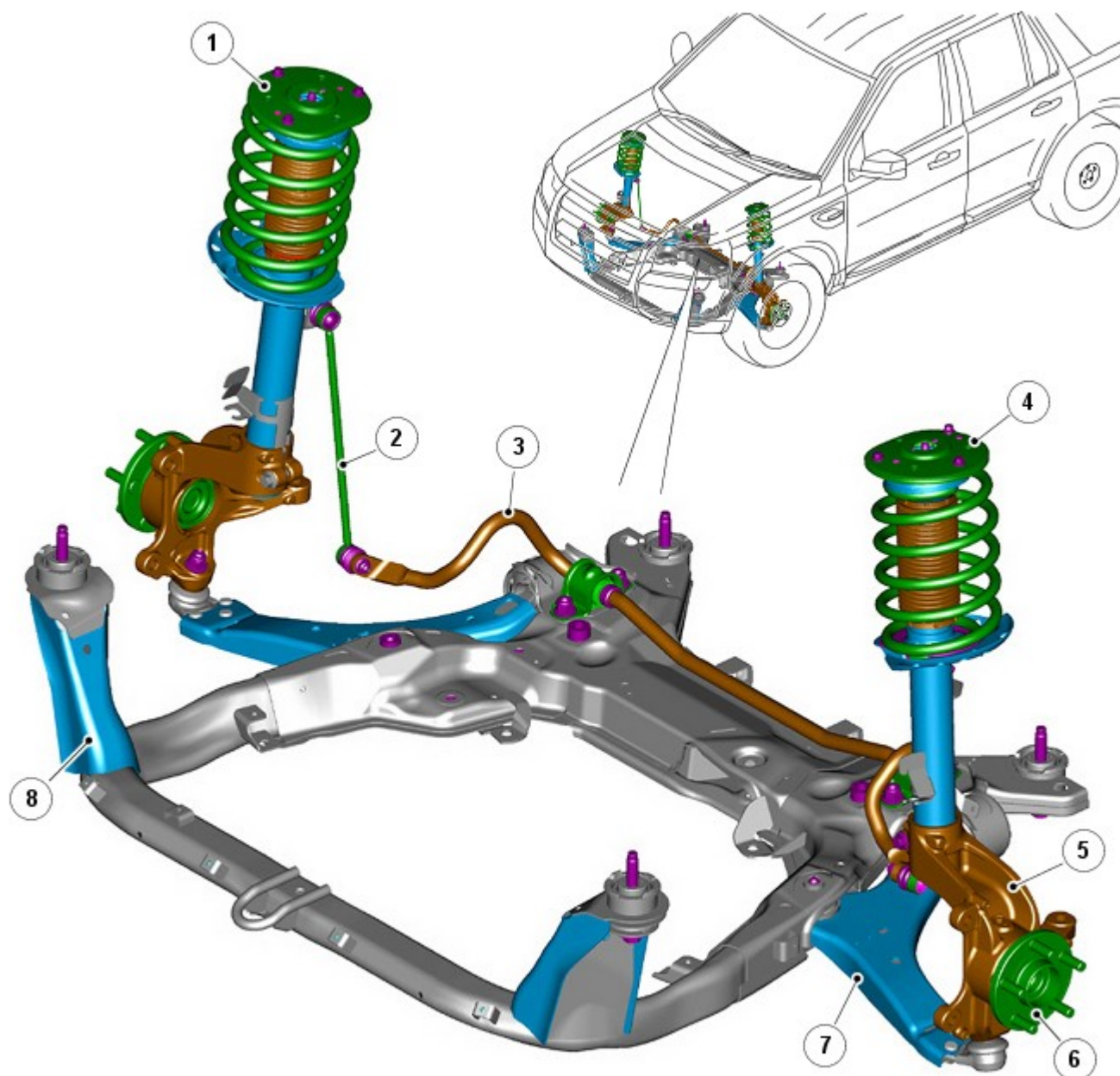
* New nuts/bolts must be fitted

Part Number Front Suspension - Front Suspension

Description and Operation

Published: 11-May-2011

COMPONENT LOCATION



E78738

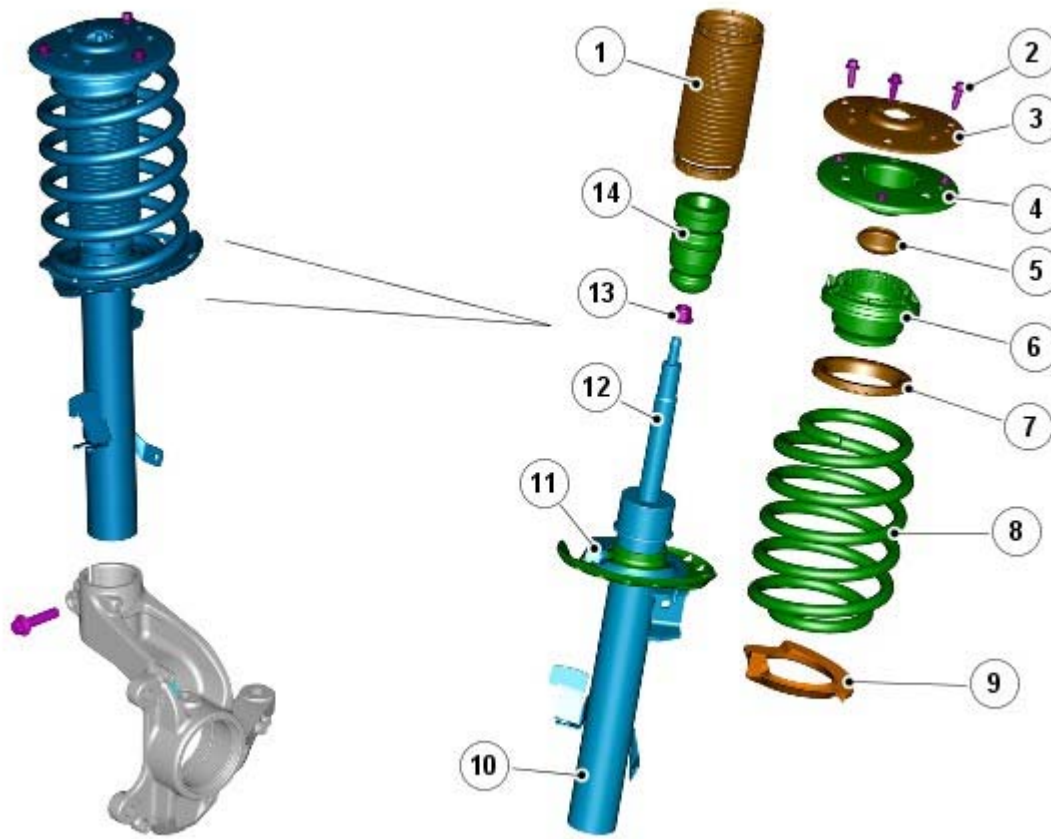
| Item | Part Number | Description |
|------|-------------|--|
| 1 | - | Right Hand (RH) spring and damper assembly |
| 2 | - | Stabilizer bar link |
| 3 | - | Stabilizer bar |
| 4 | - | Left Hand (LH) spring and damper assembly |
| 5 | - | Wheel knuckle |
| 6 | - | Hub and bearing assembly |
| 7 | - | Lower control arm |
| 8 | - | Subframe |

OVERVIEW

The front suspension features long travel McPherson struts to optimize on and off road performance.

The suspension components are mounted on a subframe. The subframe is mounted on 4 bushes which have differing compression rates to absorb lateral and longitudinal loading. This provides a rigid platform for front suspension cornering loads, frontal impact absorption and also provides a towing point for off-road recovery.

SPRING AND DAMPER



E78739

| Item | | Description |
|------|--|---------------------------|
| 1 | | Boot |
| 2 | | Bolts - Top mount (3 off) |
| 3 | | Upper top mount plate |
| 4 | | Lower top mount plate |
| 5 | | Bump washer |
| 6 | | Top mount bearing |
| 7 | | Spring isolator |
| 8 | | Spring |
| 9 | | Spring Isolator |
| 10 | | Damper body |
| 11 | | Spring seat |
| 12 | | Damper piston rod |
| 13 | | Locknut |
| 14 | | Spring aid |

The spring and damper assembly is a twin tube design with the conventional coil spring located on a welded spring seat on the damper tube. The lower end of the damper body locates in the wheel knuckle which is clamped with a bolt.

The damper functions by restricting the flow of hydraulic fluid through internal galleries within the damper. The damper rod moves axially within the damper, its movement limited by the flow of fluid through the galleries, providing damping of undulations in the terrain. The damper rod is sealed at its exit point from the damper body to maintain the fluid within the unit and to prevent the ingress of dirt and moisture. The seal also incorporates a wiper to keep the rod clean.

The damper rod is located through a central hole in the top mount assembly. The rod is threaded at its outer end. A self-locking nut secures the top mount to the damper rod. A spring aid is fitted to the damper rod to prevent the top mount contacting the top of the damper during full suspension compression and also assists the suspension tune. A boot is fitted between the damper body and the top mount and protects the damper piston rod from damage.

The coil spring fitted differs with vehicle specification. Each spring is colour coded to identify its rating and fitment

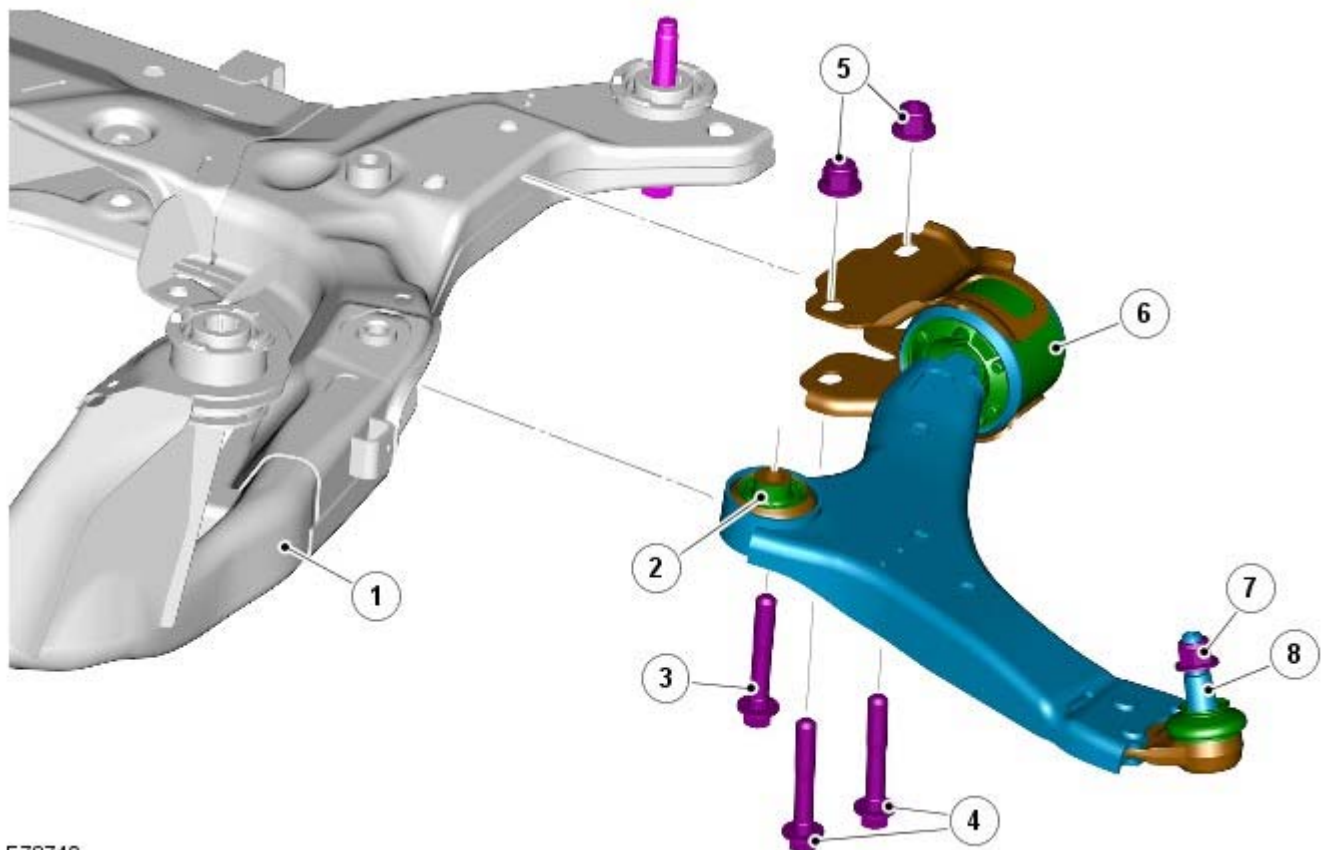
requirements.

The coil spring is located in a spring seat which is an integral part of the damper body and contains a spring isolator. The design of the spring seat prevents the spring rotating. The spring has a linear rate compression and is inclined to counter cornering forces. The opposite end of the coil spring is also located in a spring isolator which is fitted in the top mount assembly. Both spring isolators are made from rubber and prevent any noise produced during damper and spring compression/extension from being transmitted to the vehicle body.

The top mount is fitted with a top mount bearing which is located between the 2 top mount plates and the damper rod. A self locking nut secures the damper rod to the top mount. The top mount bearing reduces steering resistance by preventing the spring from 'winding' up when the steering is turned. The top mount attaches to a strengthened turret on the chassis with 3 integral studs and self-locking nuts.

Two brackets are welded to the damper body. One bracket provides for the attachment of the stabilizer link. The second bracket provides for the attachment of the brake hose and wheel speed sensor cable. This bracket also positively locates the damper into the wheel knuckle and its location is critical to controlling the vehicle trim height.

LOWER CONTROL ARM



E78740

| Item | Description |
|------|--------------------------------|
| 1 | Subframe |
| 2 | Ball bush |
| 3 | Bolt - front attachment |
| 4 | Bolt - rear attachment (2 off) |
| 5 | Nut - rear attachment (2 off) |
| 6 | Hydrabush |
| 7 | Locknut |
| 8 | Taper ball joint |

The lower control arm assembly comprises the control arm, a rubber bush, a hydrabush and a ball joint.

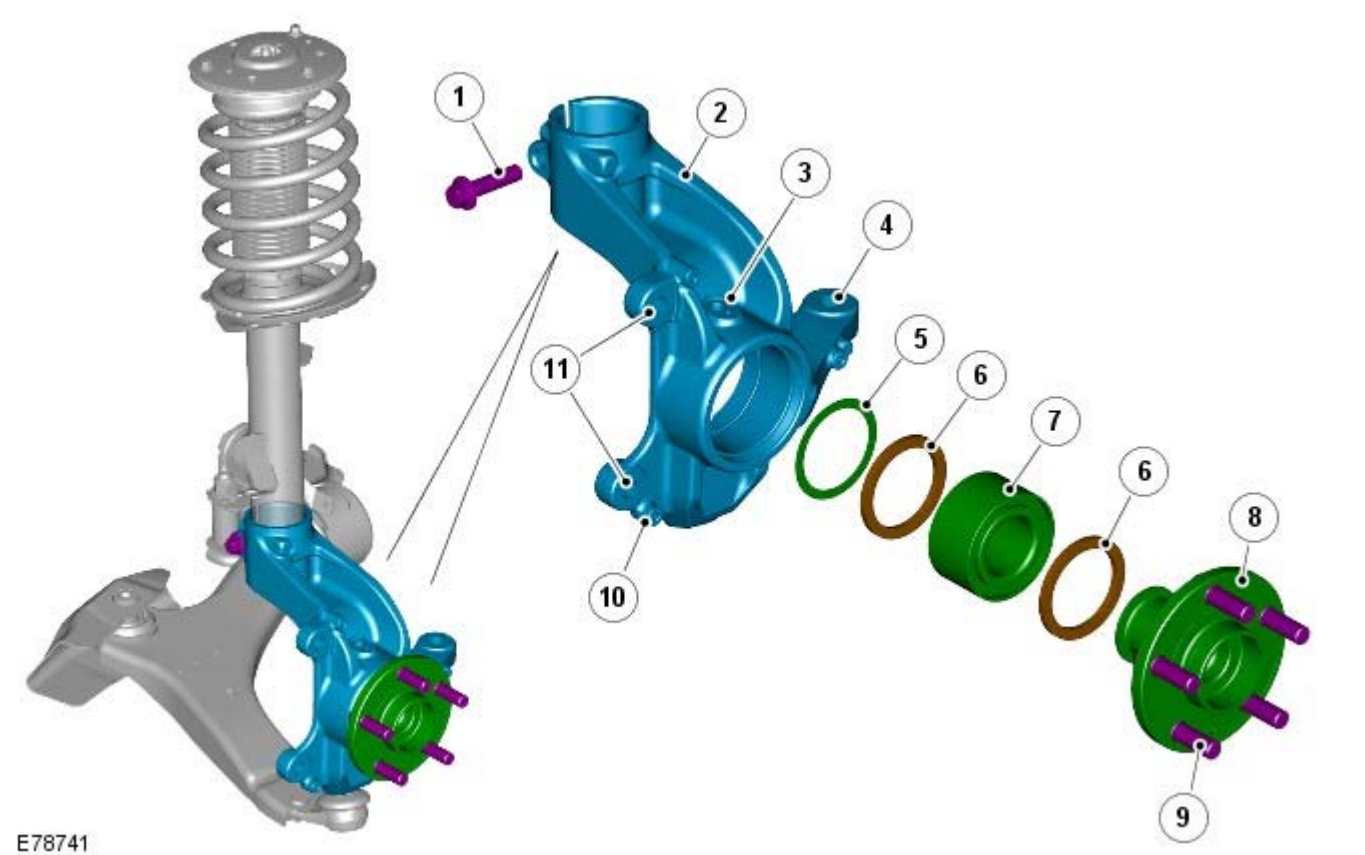
The control arm is a pressed steel fabrication. The outer end is fitted with a non-serviceable taper ball joint which mates with the wheel knuckle.

The 2 inner attachments locate in the subframe. The forward attachment is a non-serviceable rubber bush which is pressed into the control arm. This joint locates in a slot in the subframe and is secured with a bolt which is screwed into a threaded boss on the subframe.

The rearward attachment is a hydrabush which is located on a spigot on the control arm. The hydrabush has 2 welded

brackets which provides for its attachment to the subframe with 2 bolts and nuts. The hydrabush contains hydraulic fluid and valves which allow controlled displacement of the bush to improve bump and handling characteristics and also reduce road noise transmission. The bush becomes progressively stiffer as the forces on it increase, such as severe braking.

WHEEL KNUCKLE AND HUB ASSEMBLY



| Item | | Description |
|------|--|--|
| 1 | | Clamp bolt |
| 2 | | Wheel knuckle |
| 3 | | Anti-lock Brake System (ABS) wheel speed sensor mounting |
| 4 | | Steering tie-rod attachment |
| 5 | | ABS wheel speed sensor pulse ring |
| 6 | | Seal |
| 7 | | Wheel bearing |
| 8 | | Hub |
| 9 | | Wheel stud |
| 10 | | Disc shield attachment |
| 11 | | Brake caliper attachment |

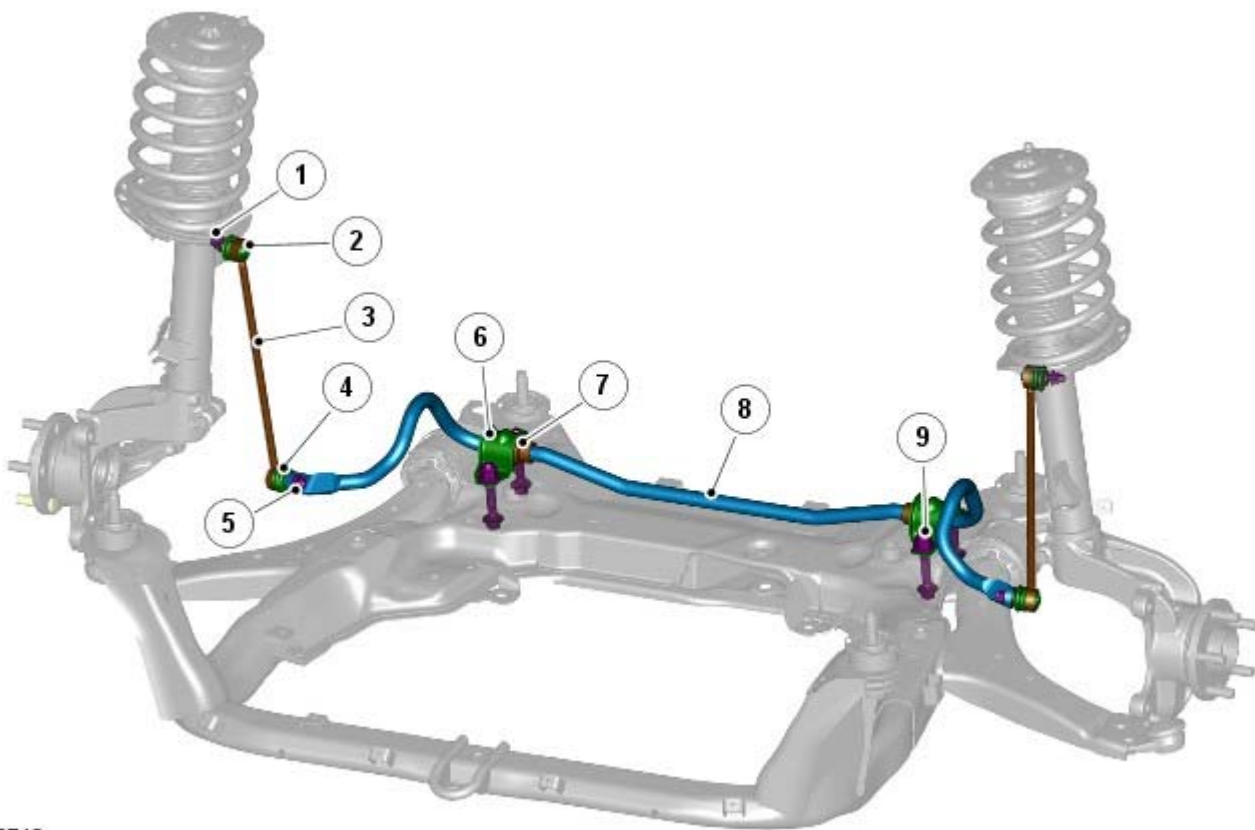
The cast steel wheel knuckle provides the attachment for the lower control arm, spring and damper assembly, wheel hub and bearing assembly and the steering tie-rod.

The extended lower boss on the knuckle provides for the attachment of the steering gear tie-rod ball joint. The ball joint is a taper fitting and is secured with a locknut. The tie-rod allows for the adjustment of the front wheel toe angle.

The upper section of the wheel knuckle has a location hole for the damper body. The damper body slides into the hole and locates against an abutment. The rear face of the hole is split and allows the damper body to be secured in the wheel knuckle with a clamp bolt.

Mounting locations are provided for the brake caliper and the brake disc shield. A hole in the top face of the wheel knuckle provides the location for the ABS wheel speed sensor which is secured with a bolt.

STABILIZER BAR



E78742

| Item | | Description |
|------|--|------------------|
| 1 | | Locknut (hidden) |
| 2 | | Ball joint |
| 3 | | Link |
| 4 | | Ball joint |
| 5 | | Locknut |
| 6 | | Clamp |
| 7 | | Bush |
| 8 | | Stabilizer bar |
| 9 | | Bolt (2 off) |

The stabilizer bar is attached to the rear of the subframe with bushes and mounting brackets. The pressed steel brackets locate over the bushes and are attached to the cross member with bolts screwed into threaded locations in the subframe. The stabilizer bar has 'anti-shuffle' collars pressed in position on the inside edges of the bushes. The collars prevent sideways movement of the stabilizer bar.

The stabilizer bar is manufactured from 20.5 mm diameter, manganese steel bar. Each end of the stabilizer bar curves forwards to attach to a ball joint on a stabilizer link. Each stabilizer link is secured to a bracket on the damper body with a locknut. The links, which are not handed, allow the stabilizer bar to move with the wheel travel providing maximum effectiveness.

The stabilizer bar bushes are the compression type which grip the bar under compression by the mounting brackets. When fitting replacement bushes, it is important to ensure the bushes are correctly orientated to the bar. Failure to correctly align the bushes will result in excessive pre-load (wind-up) in the bushes when the suspension is at its nominal ride height.

Published: 11-May-2011

Front Suspension - Front Suspension

Diagnosis and Testing



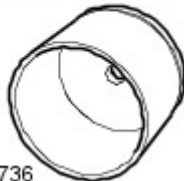


For additional information.

REFER to: [Suspension System](#) (204-00 Suspension System - General Information, Diagnosis and Testing).

Front Suspension - Front Wheel Bearing

Removal and Installation

Special Tool(s)

| | |
|---|---|
|  <p>204-348/3 E87735</p> | <p>204-348/3 Remover/Installer, Wheel Hub/Wheel Bearing</p> |
|  <p>E73709</p> | <p>204-348-01 Adapter for 204-348</p> |
|  <p>204-528/1 E87736</p> | <p>204-528/1 Remover/Installer, Bushing</p> |
|  <p>204-536/2 E87737</p> | <p>204-536/2 Remover/Installer, Bushing</p> |
|  <p>205-802/5 E87691</p> | <p>205-802/5 Remover, Wheel Hub/Bearing</p> |

Removal

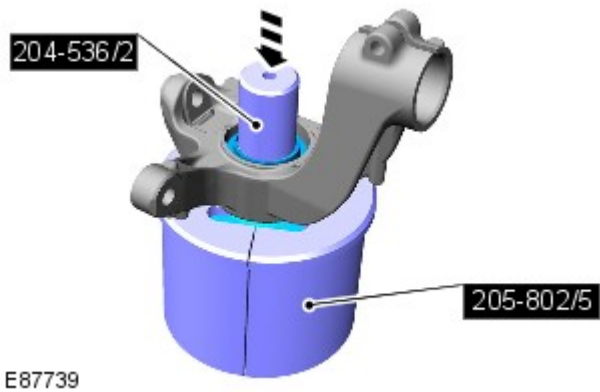
NOTE: The wheel bearing is supplied as part of the drive flange assembly.

1.  **WARNING:** Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

2. Remove the wheel knuckle.

Refer to: [Wheel Knuckle](#) (204-01 Front Suspension, Removal and Installation).



3.

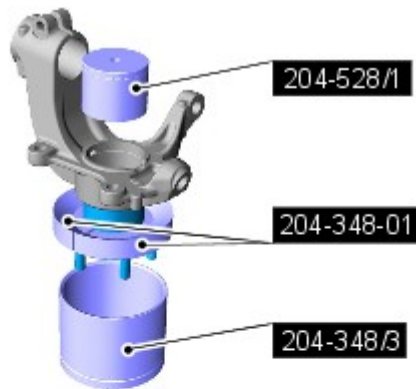
- Position the wheel knuckle assembly in a press and support on special tool.


Special Tool(s): [205-802/5](#)

- Using the special tool, press the drive flange assembly out of the wheel knuckle.

Special Tool(s): [204-536/2](#)

Installation



1.  **CAUTION:** Make sure that a new drive flange assembly is installed.

- Position the new drive flange assembly in the special tools.

Special Tool(s): [204-348/3](#), [204-348-01](#)

- Using the special tool, press the drive flange assembly into the wheel knuckle.

Special Tool(s): [204-528/1](#)



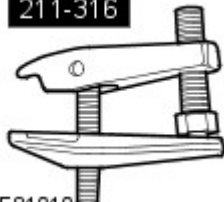
2. Install the wheel knuckle.

Refer to: [Wheel Knuckle](#) (204-01 Front Suspension, Removal and Installation).

Front Suspension - Lower Arm

Removal and Installation

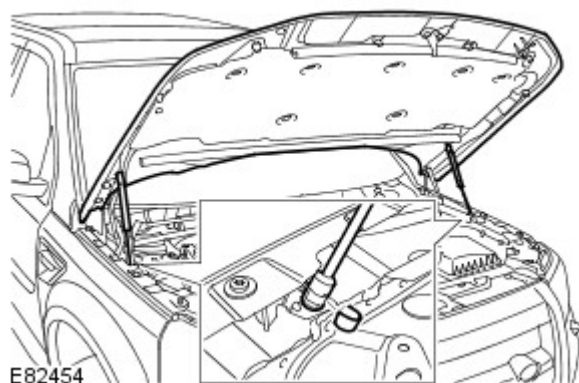
Special Tool(s)

| | |
|--|----------------------------------|
|  E82091 | 204-619 G-Clamp |
|  E79462 | 205-857 Remover, Halfshaft |
|  E81010 | 211-316 Separator, Ball Joint |

Removal

1. Remove the plenum chamber panel.

Refer to: [Plenum Chamber](#) (412-01 Climate Control, Removal and Installation).



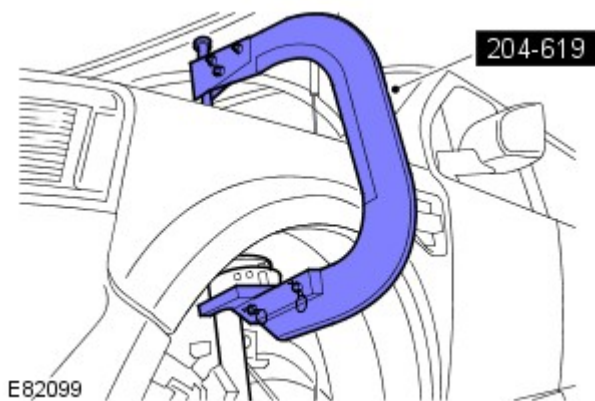
2. Release the hood support struts and secure the hood in an upright position.

3.  **WARNING:** Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

4. Remove the wheel and tire.

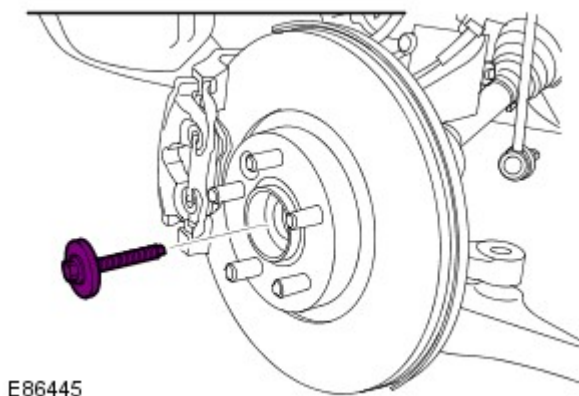
Refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).



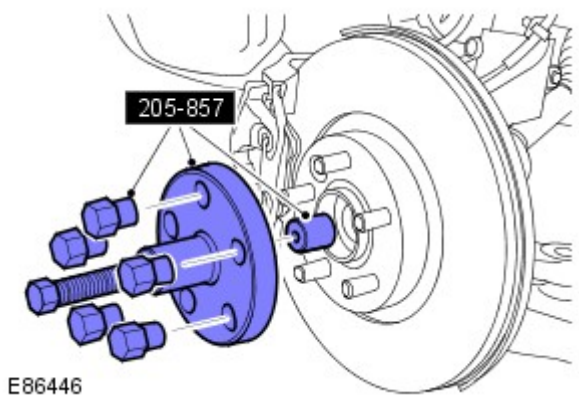
5. **NOTE:** This step requires the aid of another technician.

Compress the spring and damper assembly.

Special Tool(s): [204-619](#)

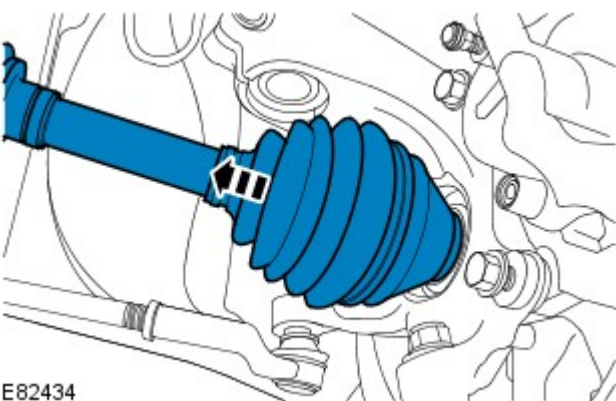


6. Remove and discard the front halfshaft bolt.



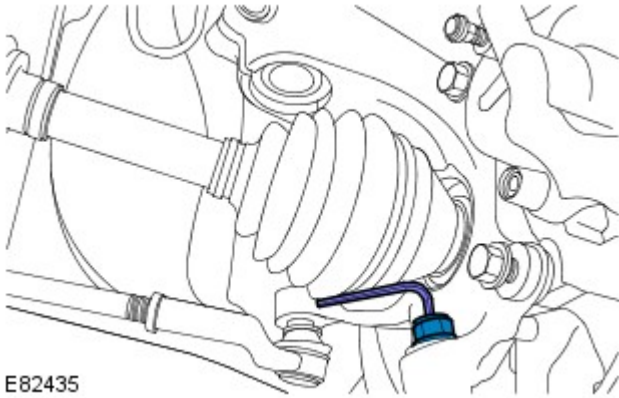
7. Partially release the front halfshaft from the wheel knuckle.

Special Tool(s): [205-857](#)



8. **⚠ CAUTION:** Do not allow halfshafts to hang unsupported at one end or joint damage will occur.

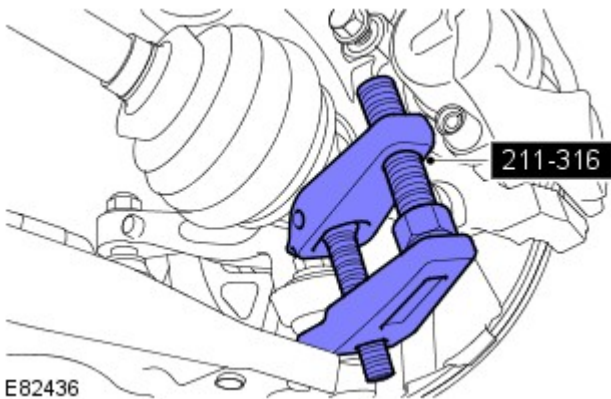
Partially release the front halfshaft from the wheel knuckle.



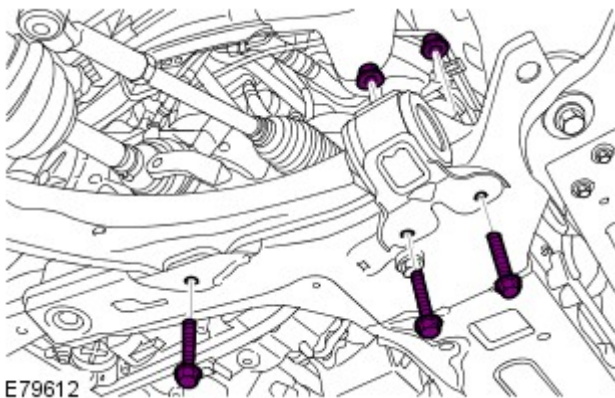
9.  **WARNING:** Make sure that a new lower arm ball joint nut is installed.



CAUTION: Make sure that the ball joint ball does not rotate.

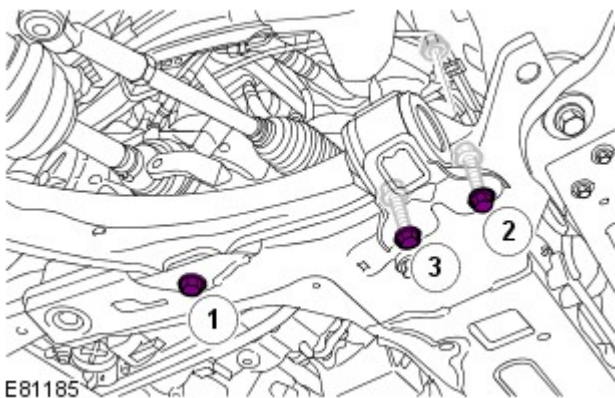


10. *Special Tool(s):* [211-316](#)



11. Remove and discard the lower arm bolts.

Installation



1. **NOTE:** Make sure that new nuts and bolts are installed.

- Install the lower suspension arm.
- Tighten bolt 1.

Torque:

Stage 1: 140 Nm

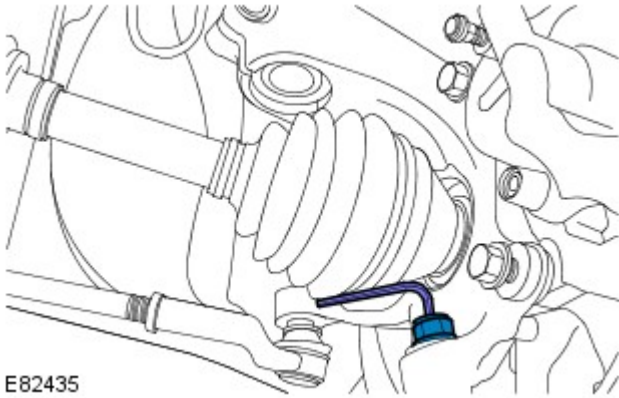
Stage 2: 45°

- Tighten bolt 2 to


Torque: 175 Nm


- Tighten bolt 3 to

Torque: 175 Nm




E82435

2.  **WARNING:** Make sure that a new lower arm ball joint nut is installed.

 **CAUTION:** Make sure that the ball joint ball does not rotate.

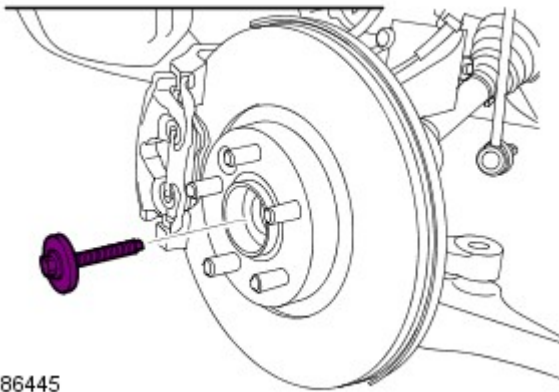
Torque: 100 Nm

3.  **CAUTION:** Do not allow halfshafts to hang unsupported at one end or joint damage will occur.

Fully insert the front halfshaft into the wheel knuckle.

4. **NOTE:** This step requires the aid of another technician.

Release the tension from the spring and damper assembly and remove the special tool.



E86445

5. **CAUTIONS:**

 Make sure that a new bolt is installed.

 Make sure that the brake hose is not twisted and is correctly located.

Install a new front halfshaft bolt.

Torque:
 Stage 1: 45 Nm
 Stage 2: 80°

6. Install the wheel and tire.

Refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).

7. Lower the hood and secure the support struts with the clips.

8. Install the plenum chamber panel.

Refer to: [Plenum Chamber](#) (412-01 Climate Control, Removal and Installation).

Front Suspension - Front Stabilizer Bar

Removal and Installation

Removal



CAUTION: Nuts and bolts must be tightened with the weight of the vehicle on the suspension.

NOTE: Only use clean water as a lubricant for the bushing, if required.

NOTE: Removal steps in this procedure may contain installation details.



1. **WARNING:** Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

2. Remove the front wheels and tires.

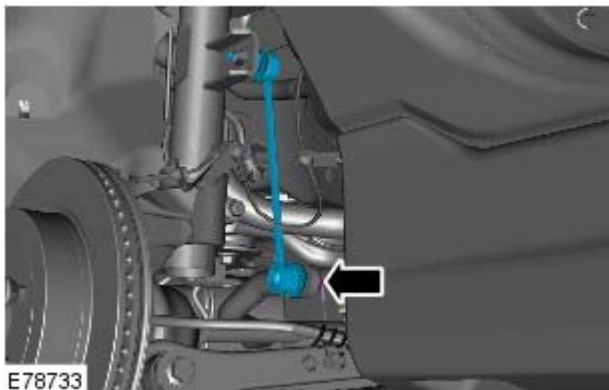
Refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).

3. Remove the driveshaft.

Refer to: [Driveshaft - Vehicles Without: Diesel Particulate Filter \(DPF\)](#) (205-01 Driveshaft, Removal and Installation).

4. Remove the catalytic converters.

Refer to: [Catalytic Converter](#) (309-00A Exhaust System - I6 3.2L Petrol, Removal and Installation).

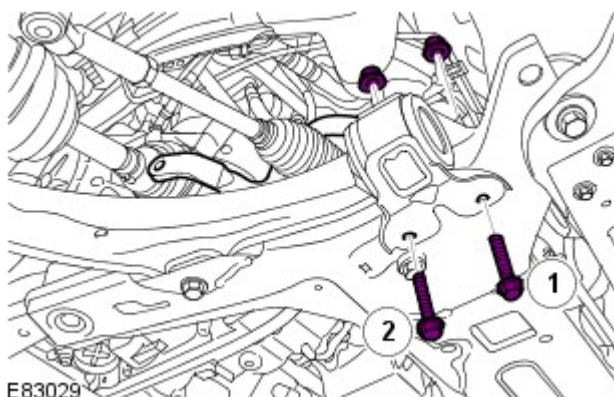


5. **CAUTION:** Make sure that the ball joint ball does not rotate.

- Disconnect both stabilizer bar links.

Torque: 60 Nm

- Discard the nuts.



6. **WARNING:** Make sure that new nuts are installed.

- Tighten in the sequence shown.

Torque: 175 Nm


- Repeat the above procedure for the other side.



7. **NOTE:** Do not disassemble further if the component is removed for access only.

Remove the stabilizer bar bushings.

Installation

1.  **CAUTION:** Nuts and bolts must be tightened with the weight of the vehicle on the suspension.

To install, reverse the removal procedure.

Front Suspension - Front Stabilizer Bar Bushing

Removal and Installation

Removal

1.  **WARNING:** Make sure to support the vehicle with axle stands.

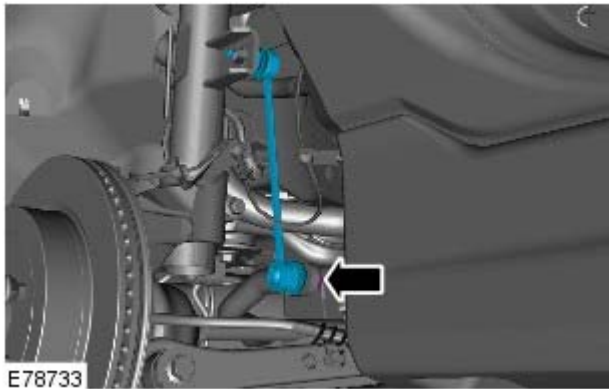
Raise and support the vehicle.


2. Remove the front wheels and tires.

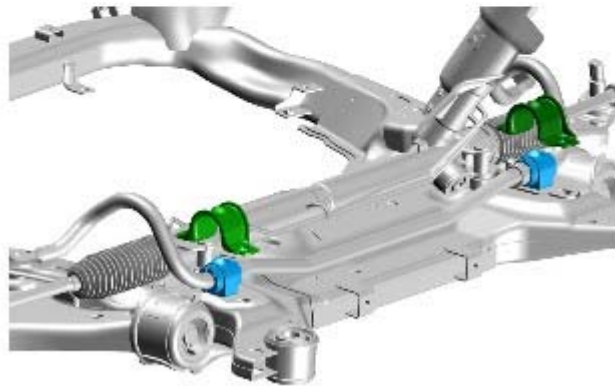
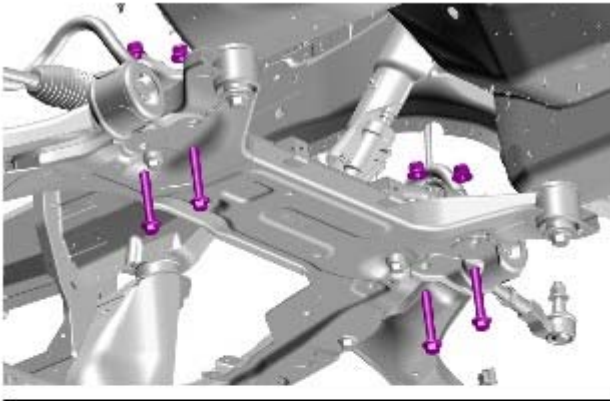
Refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).

3. Remove the engine undershield.

Refer to: [Engine Undershield](#) (501-02 Front End Body Panels, Removal and Installation).

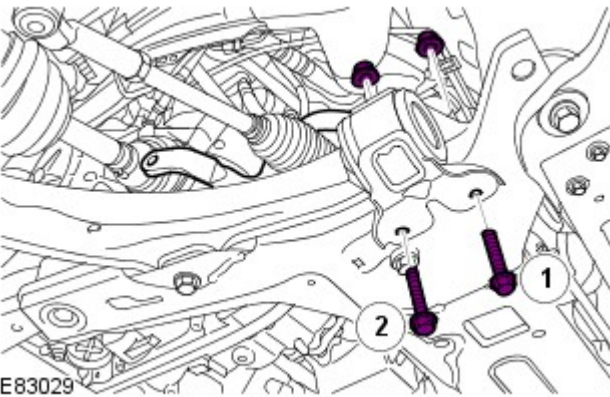


4.  **CAUTION:** Make sure that the ball joint ball does not rotate.
 - Disconnect both front stabilizer bar links from the stabilizer bar.
 - Discard the nuts.




E 81203

Installation



E83029

1.  **WARNING:** Make sure that new nuts are installed.

Install the stabilizer bar bushings.

Torque: 175 Nm

2.  **WARNING:** Make sure that new nuts are installed.

 **CAUTION:** Make sure that the ball joint ball does not rotate.

Install the stabilizer link bar.

Torque: 60 Nm

3. Install the engine undershield.

Refer to: [Engine Undershield](#) (501-02 Front End Body Panels, Removal and Installation).


4. Install the wheels and tires.

Refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).

Front Suspension - Front Stabilizer Bar Link

Removal and Installation

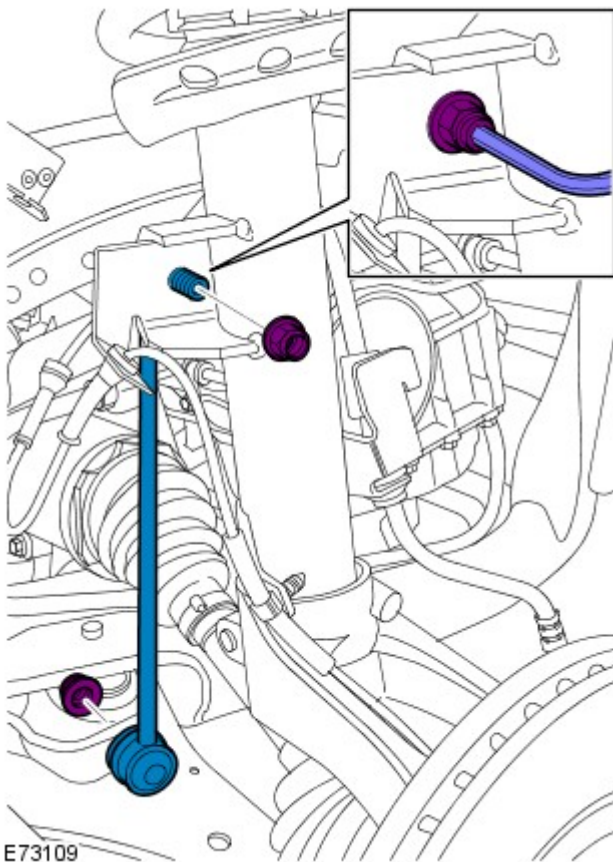
Removal


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. Remove the front wheel.

Refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).



3.  **WARNING:** Make sure that new nuts are installed.

 **CAUTION:** Use an Allen key to prevent the ball joint rotating whilst removing the nut.

Torque: 60 Nm

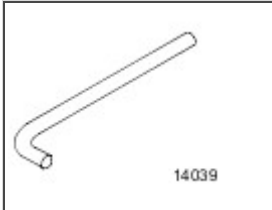
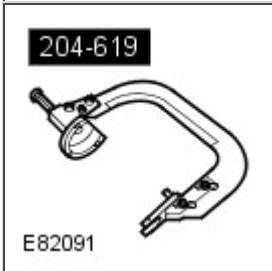
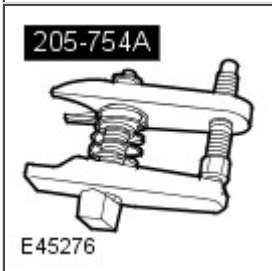
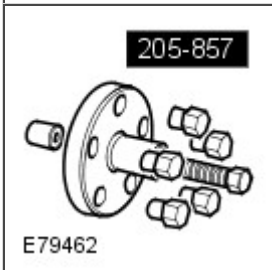
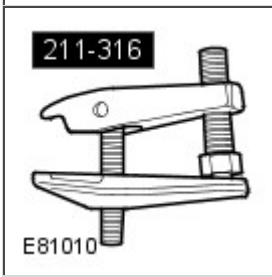
Installation

1. To install, reverse the removal procedure.

Front Suspension - Wheel Knuckle

Removal and Installation

Special Tool(s)

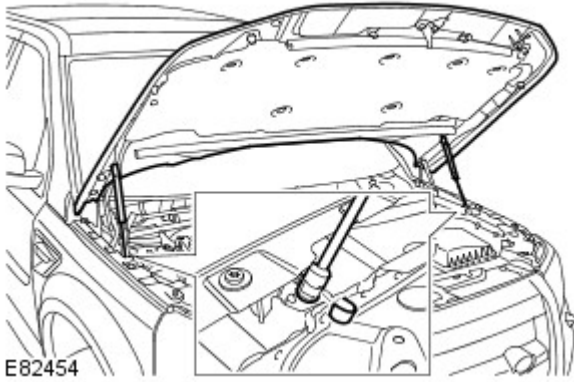
| | |
|---|-----------------------------------|
|  <p>14039</p> | 204-159 Lever, Wheel Knuckle |
|  <p>204-619 E82091</p> | 204-619 G-Clamp |
|  <p>205-754A E45276</p> | 205-754A Splitter, Ball Joints |
|  <p>205-857 E79462</p> | 205-857 Remover, Halfshaft |
|  <p>211-316 E81010</p> | 211-316 Separator, Ball Joint |

Removal

NOTE: Removal steps in this procedure may contain installation details.

1. Remove the plenum chamber panel.

Refer to: [Plenum Chamber](#) (412-01 Climate Control, Removal and Installation).



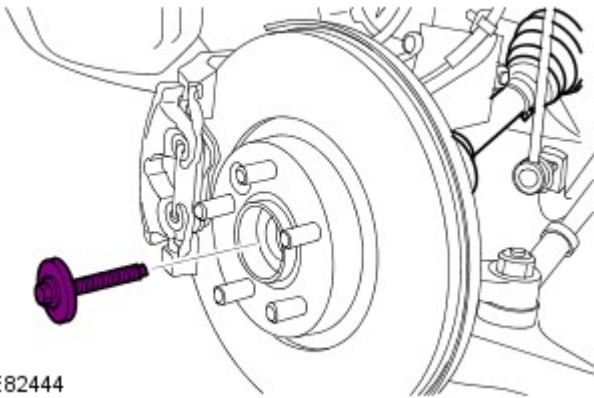
2. Release the hood support struts and secure the hood in an upright position.

3.  **WARNING:** Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

4. Remove the wheel and tire.

Refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).



5. **CAUTIONS:**



Discard the bolt.

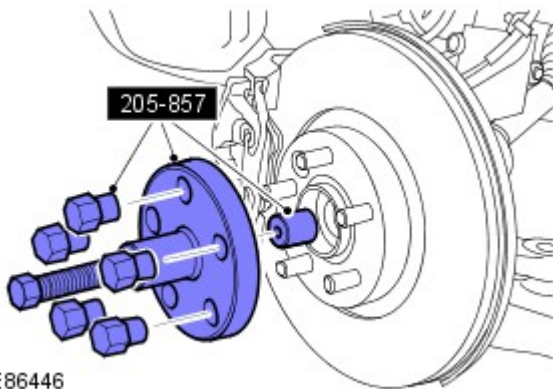



Do not use air tools to install the bolt. Failure to follow this instruction may result in damage to the component.

Torque:

Stage 1: 45 Nm

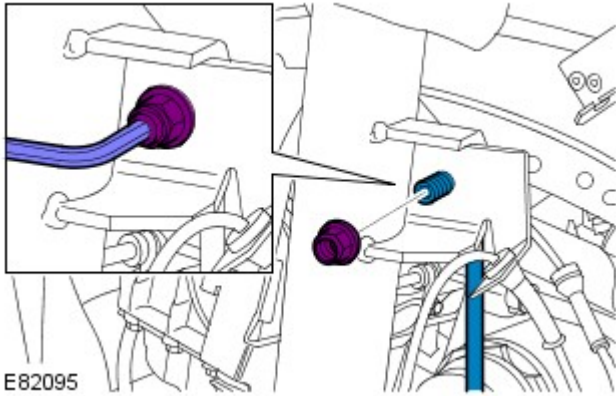
Stage 2: 60°




6.  **CAUTION:** Do not use a hammer to detach the halfshaft from the hub assembly, failure to follow this instruction may result in damage to the halfshaft.

Partially release the front halfshaft from the wheel knuckle.

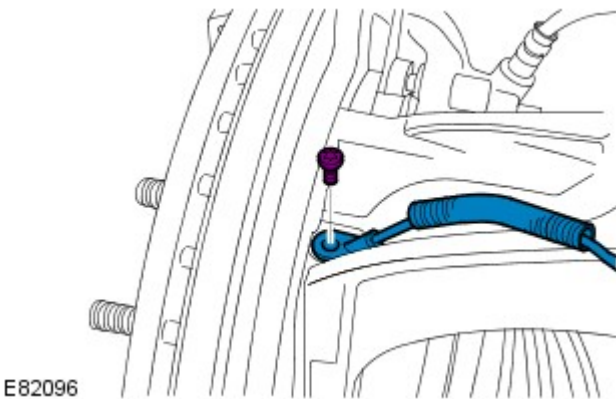
Special Tool(s): [205-857](#)



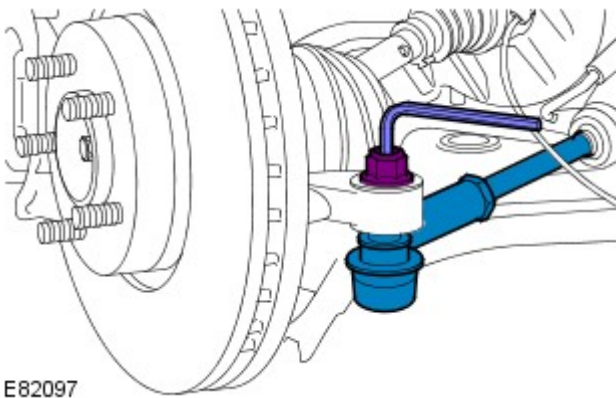
7.  **WARNING:** Make sure that a new nut is installed.


 **CAUTION:** Make sure that the ball joint ball does not rotate.


Torque: 60 Nm



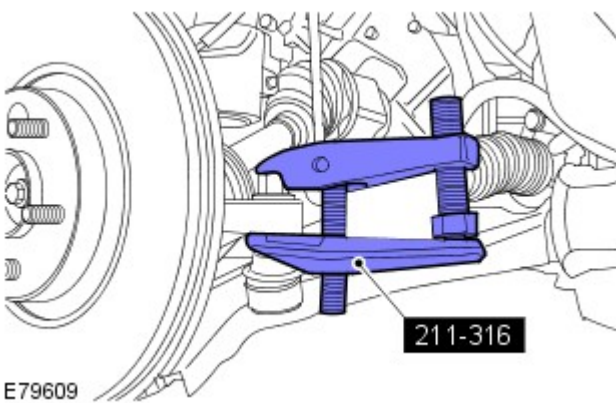
8. *Torque:* 5 Nm



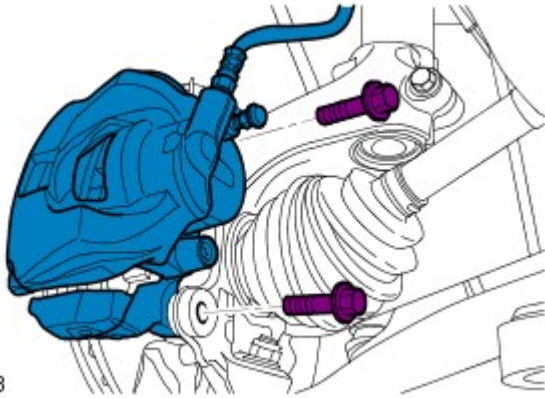
9.  **WARNING:** Make sure that a new tie-rod end nut is installed.

 **CAUTION:** Make sure that the ball joint ball does not rotate.

Torque: 80 Nm

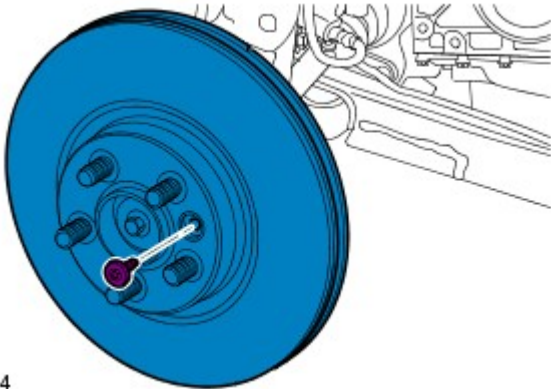


10. *Special Tool(s):* [211-316](#)

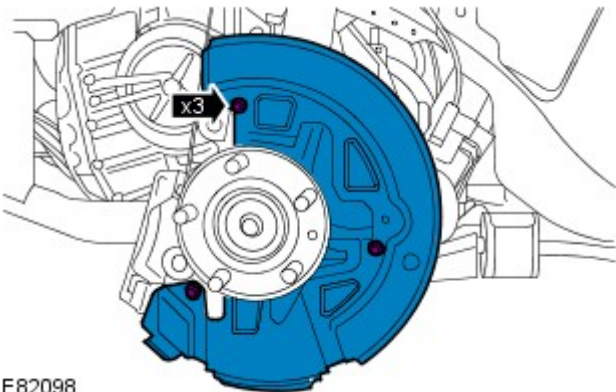


11.  **CAUTION:** Make sure that no load is placed on the brake hose.

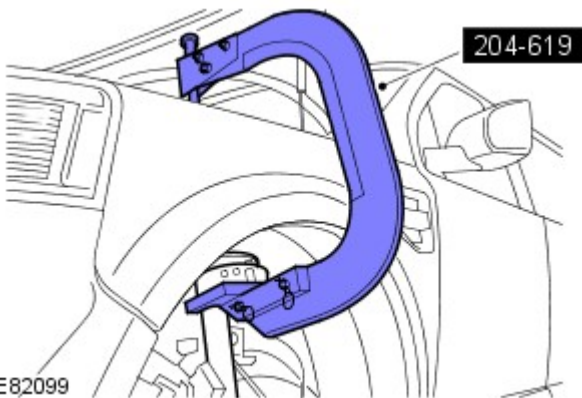
Torque: 200 Nm



12. *Torque:* 35 Nm

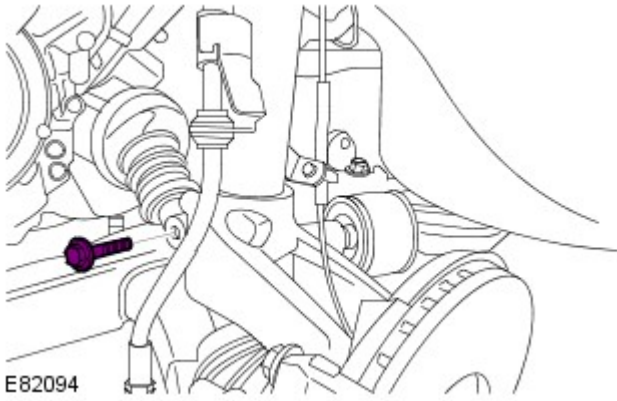


13. *Torque:* 10 Nm

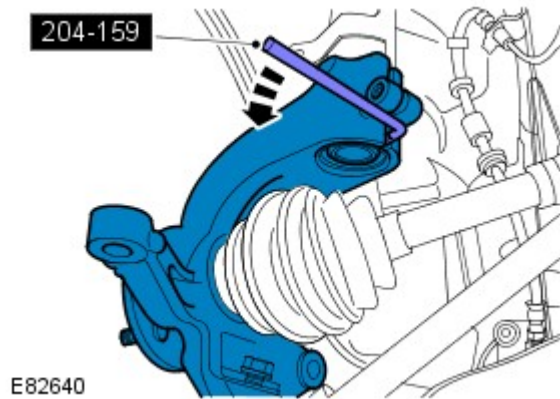


14. **NOTE:** This step requires the aid of another technician.

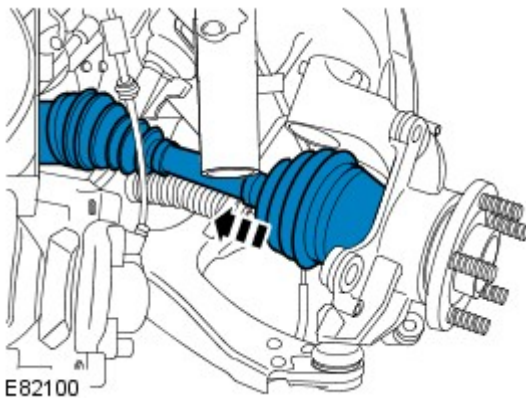
Special Tool(s): 204-619



15. Torque: 110 Nm



16. Special Tool(s): [204-159](#)



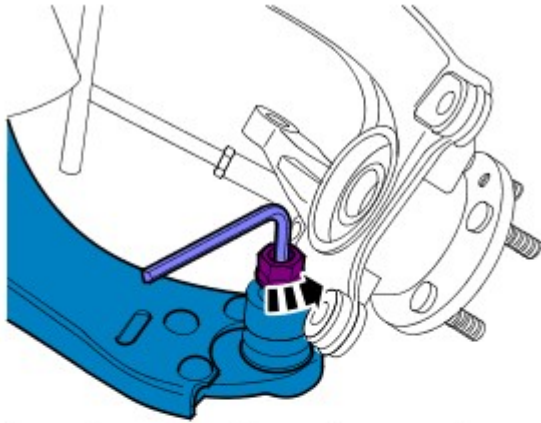
17. CAUTIONS:




Do not allow halfshafts to hang unsupported at one end or joint damage will occur.



Do not use a hammer to detach the halfshaft from the hub assembly, failure to follow this instruction may result in damage to the halfshaft.

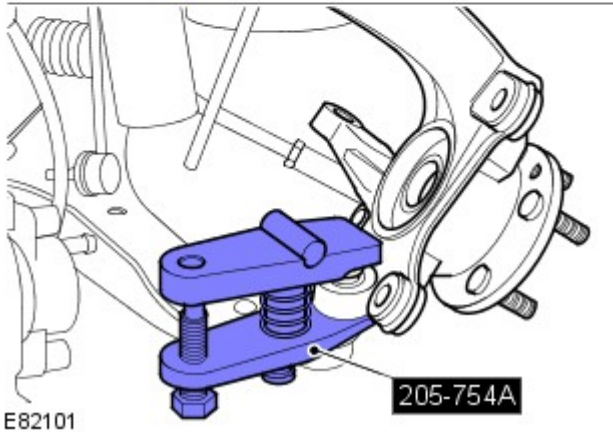


18.  **WARNING:** Make sure that a new lower arm ball joint nut is installed.

 **CAUTION:** Make sure that the ball joint ball does not rotate.

Special Tool(s): [205-754A](#)

Torque: 100 Nm



Installation

1. **CAUTIONS:**

 Make sure that the brake hose is not twisted and is correctly located.

 Nuts and bolts must be tightened with the weight of the vehicle on the suspension.

 Install the halfshaft bolt finger tight.

NOTE: Make sure that all the component mating faces are clean.

To install, reverse the removal procedure.

Front Suspension - Front Shock Absorber

Removal and Installation

Removal


WARNINGS:



Ensure the spring compressor Safe Working Load (SWL) meets or exceeds the spring rating quoted in the Specifications section.



Always follow the spring compressor manufacturer's instructions.

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. Remove the road wheel.

Refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).

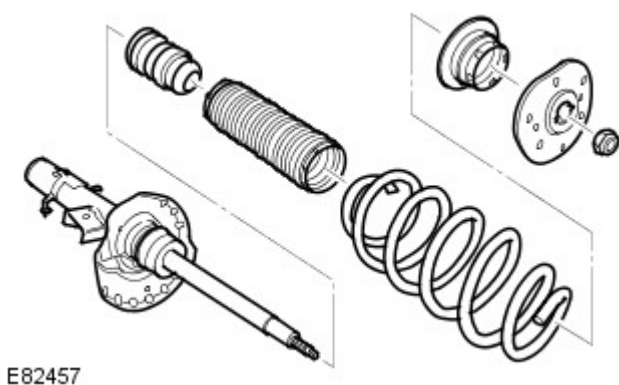
3. Remove the spring and damper assembly.

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

4. Install the spring compressor in a vise.

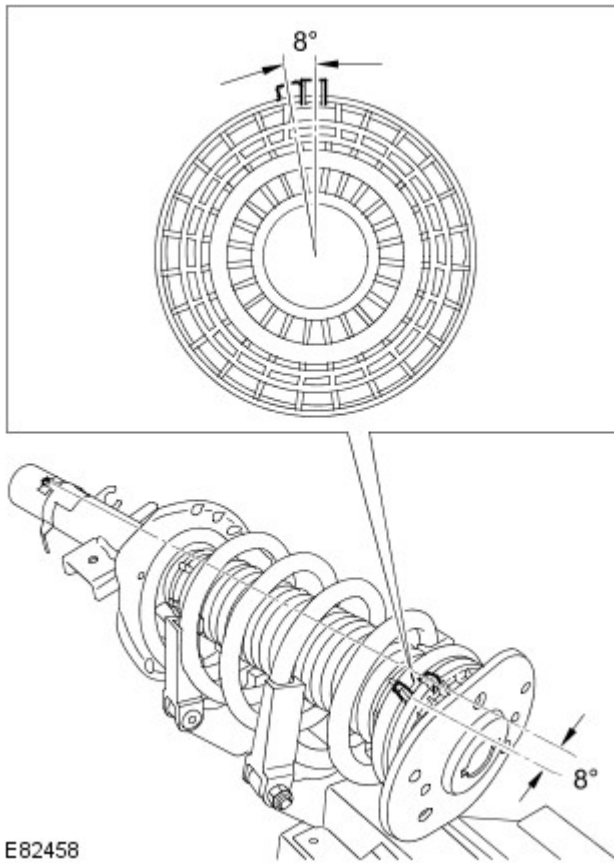
5. Install the shock absorber and spring assembly in the spring compressor.

6.  **WARNING:** Make sure that a new nut is installed.



E82457

Installation



1. **WARNINGS:**



Make sure that a new nut is installed.



It is imperative that the timing marks are aligned as shown in illustration.

Torque: 80 Nm

2. Release the tension from the spring and damper assembly and remove from the special tool.
3. Remove the spring compressor from a vise.
4. Install the spring and damper assembly.

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

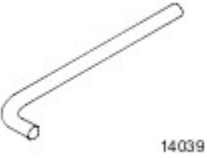
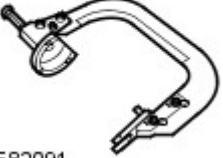
5. Install the road wheel.

Refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).

Front Suspension - Shock Absorber and Spring Assembly

Removal and Installation

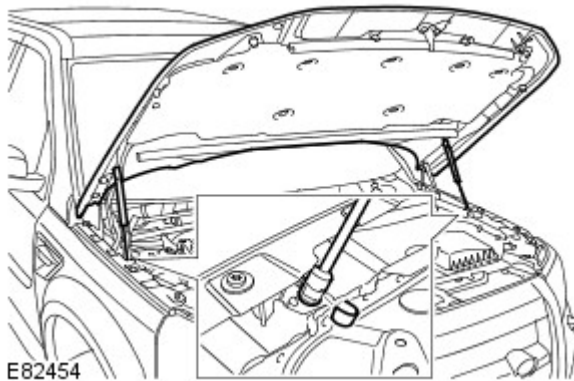
Special Tool(s)

| | |
|---|---|
|  <p>14039</p> | <p>204-159 Lever, Wheel Knuckle</p> |
|  <p>204-619 E82091</p> | <p>204-619 G-Clamp</p> |

Removal

1. Remove the plenum chamber panel.

Refer to: [Plenum Chamber](#) (412-01 Climate Control, Removal and Installation).



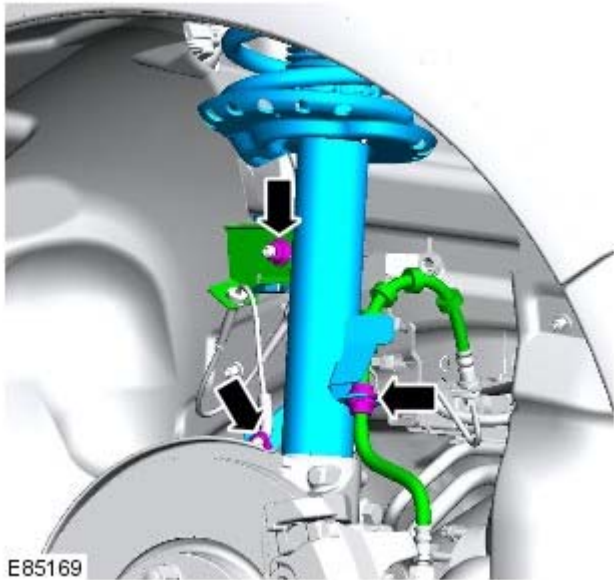
2. Release the hood support struts and secure the hood in an upright position.

3.  **WARNING:** Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

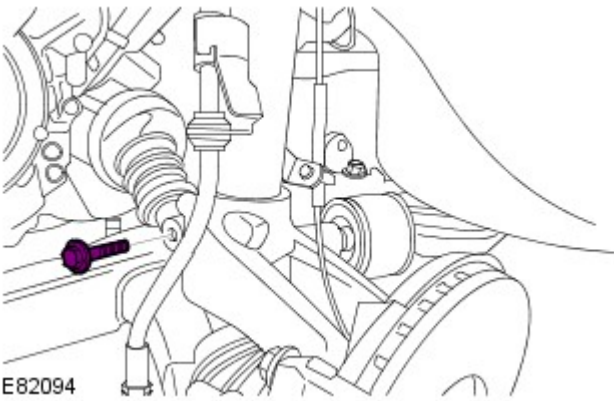
4. Remove the wheel and tire.

Refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).

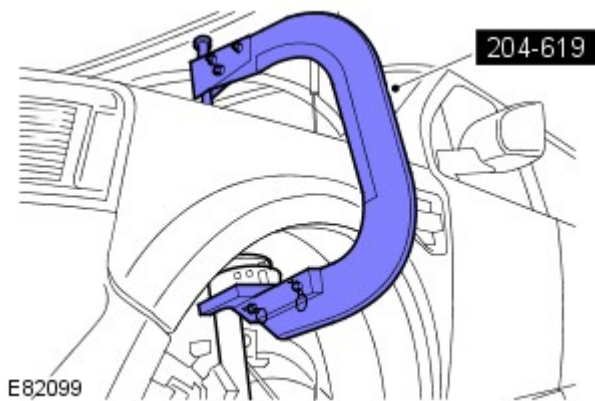


5.  **WARNING:** Make sure that a new nut is installed.

Torque: 60 Nm



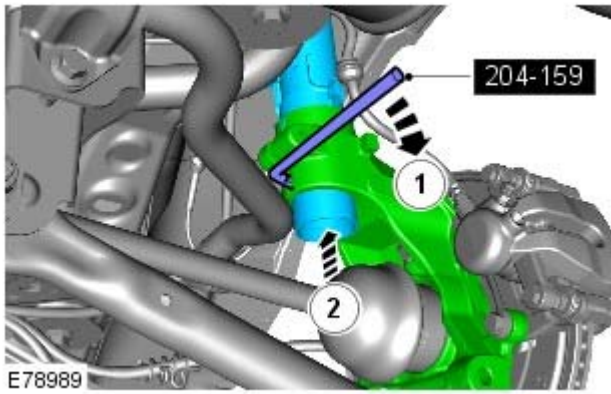
6. *Torque:* 110 Nm



7. **NOTE:** This step requires the aid of another technician.

Compress the spring and damper assembly.

Special Tool(s): 204-619

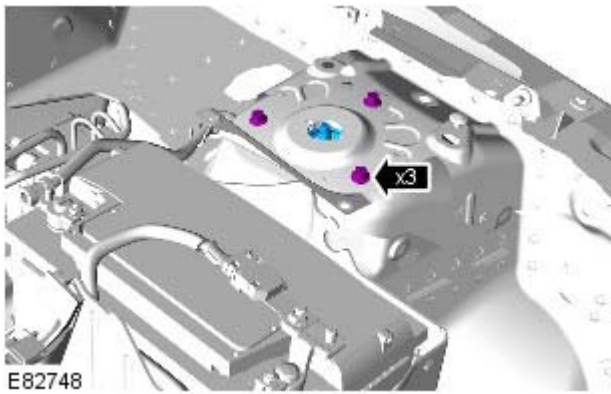


8. Release the damper from the knuckle assembly.

Special Tool(s): [204-159](#)

9. **NOTE:** This step requires the aid of another technician.

Release the tension from the spring and damper assembly and remove the tool.



10. Remove the spring and damper assembly.

Torque: 30 Nm

Installation

1. **CAUTIONS:**



Make sure that the brake hose is not twisted and is correctly located.



Nuts and bolts must be tightened with the weight of the vehicle on the suspension.

NOTE: Make sure that the component is clean, free of foreign material and lubricant.

To install, reverse the removal procedure.

Front Suspension - Spring

Removal and Installation

Removal


WARNINGS:



Ensure the spring compressor Safe Working Load (SWL) meets or exceeds the spring rating quoted in the Specifications section.



Always follow the spring compressor manufacturer's instructions.

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. Remove the road wheel.

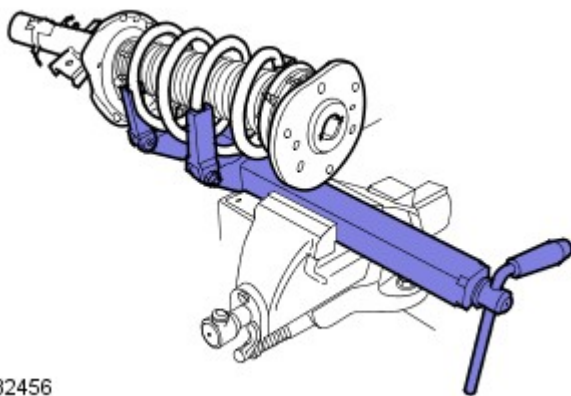
Refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).

3. Remove the spring and damper assembly.

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

4. Install the spring compressor in a vise.

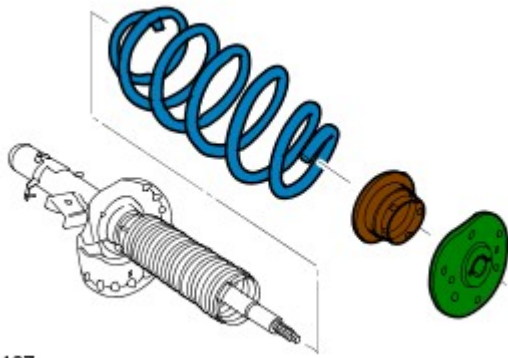
5. Install the shock absorber and spring assembly in the spring compressor.



E82456

6.  **WARNING:** Make sure that a new nut is installed.

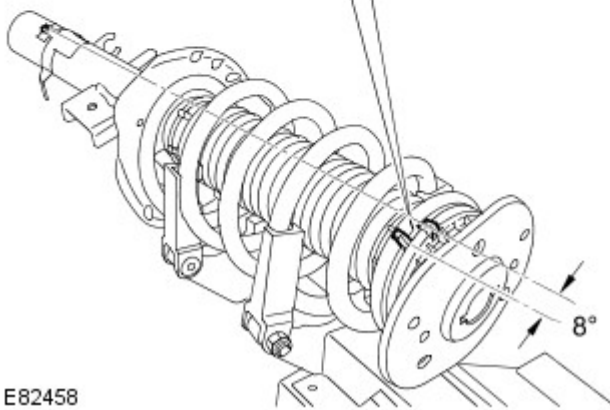
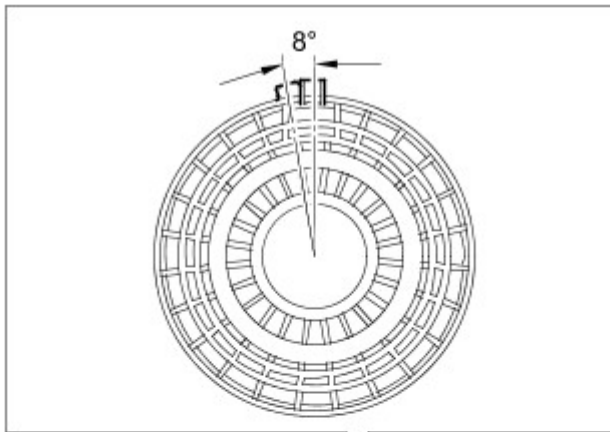
7. Remove old spring from the spring compressor.



E82467

Installation

1. Install the new spring to the compressor and compress sufficiently.



E82458

2. **WARNINGS:**



Make sure that a new nut is installed.



It is imperative that the timing marks are aligned as shown in illustration.

Torque: 80 Nm

3. Release the tension from the spring and damper assembly and remove from the special tool.
4. Remove the spring compressor from a vise.
5. Install the spring and damper assembly.

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

6. Install the road wheel.

Refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).