


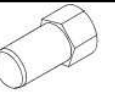

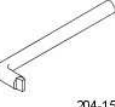


**Front Suspension - Shock Absorber and Spring Assembly**

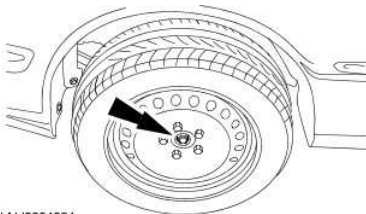
Removal and Installation

Special Tool(s)	
 204-192	Separator, Ball Joint 204-192 (JD-219)
 HTJ12002	Powertrain Assembly Jack HTJ1200-2
 205-491	Wheel hub puller 205-491
 20549101	Adapter nuts 205-491-01
 204-269	Forcing screw 204-269
 204-159	Knuckle splitter 204-159

**Removal**

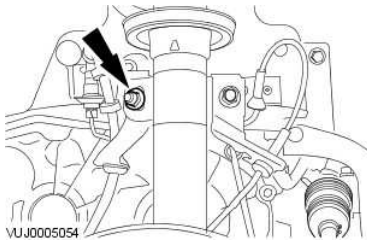
All vehicles

1. Loosen the wheel hub nut.



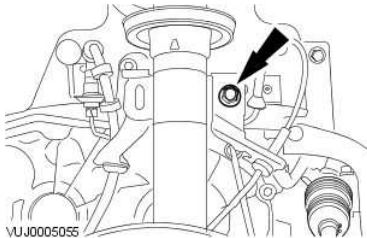
VUJ0004084

2. Remove the wheel and tire.  
For additional information, refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).
3. Detach the brake hose retaining bracket.



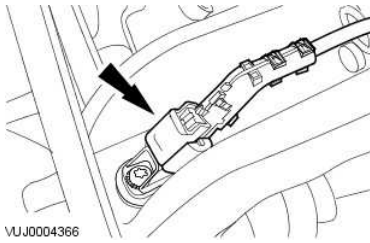
VUJ0005054

4. Detach the stabilizer link bar.




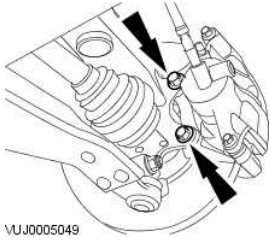
VUJ0005055

5. Disconnect the front wheel speed sensor electrical connector.



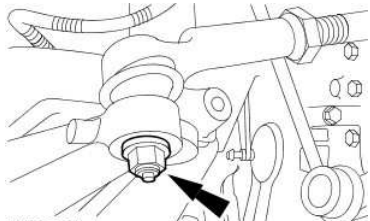
VUJ0004366

6.  **CAUTION:** Secure the brake caliper and anchor plate assembly to one side.  
Remove the brake caliper and anchor plate assembly.



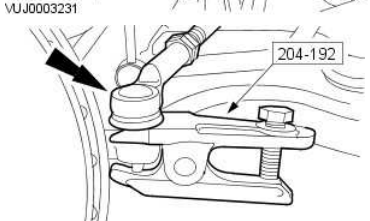
VUJ0005049

7. Remove the tie-rod end retaining nut.



VUJ0003231

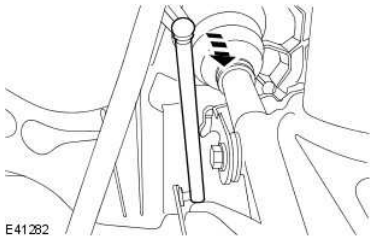
8. **NOTE:** When the tie-rod end is separated from the wheel hub assembly, the ball joint seal should be protected to prevent damage.  
Using the special tool, detach the tie-rod end.



VUJ0003233

Vehicles with high intensity discharge headlamps

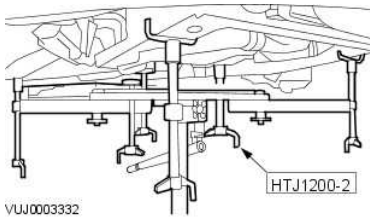
9. Detach the link rod from the headlamp leveling sensor.



E41282

All vehicles

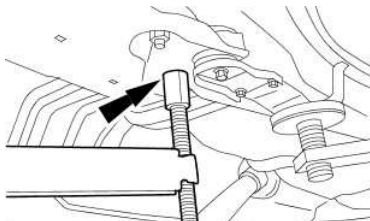
10. Install the special tool.



VUJ0003332

11. **NOTE:** Left-hand shown, right-hand similar.

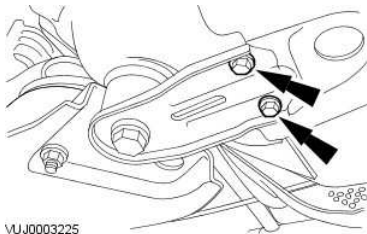
Position and adjust the special tool rear height adjuster.



VUJ0003333

12. **NOTE:** Left-hand shown, right-hand similar.

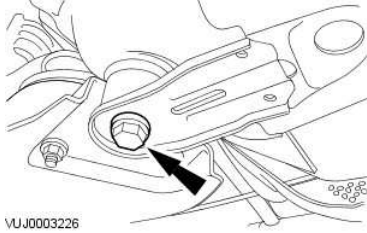
Remove the front subframe reinforcement plate retaining bolts.



VUJ0003225

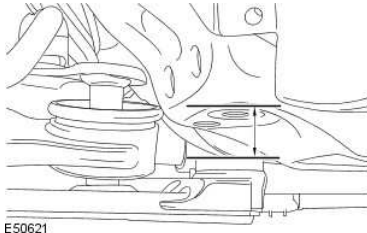
13. NOTE: Left-hand shown, right-hand similar.

Remove the front subframe rear mount retaining bolts.



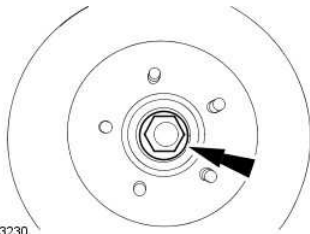
VUJ0003226

14. Using the special tool, lower the front subframe to a maximum of 30 mm (1.18 inches).



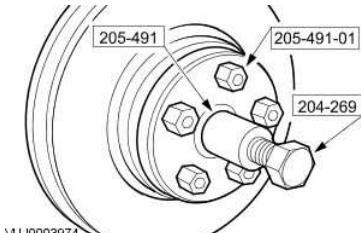
E50621

15. Remove and discard the wheel hub nut.



VUJ0003230

16. Using special tools, detach the halfshaft.

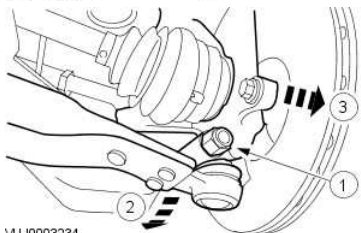


VUJ0003974

17. **CAUTION:** To prevent damage to the lower arm bushing, make sure the subframe is lowered before detaching the lower arm ball joint.

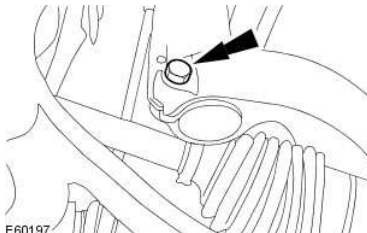
Detach the wheel knuckle.

1. Remove the lower arm ball joint retaining nut and bolt.
2. Reposition the lower arm.
3. Detach the wheel knuckle from the halfshaft.
  1. Remove and discard the lower arm ball joint shield.



VUJ0003234

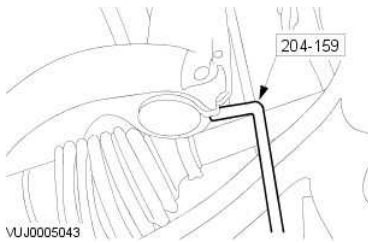
18. Remove the wheel knuckle pinch bolt.



E60197

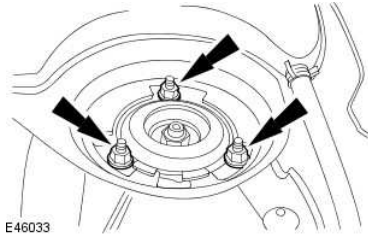
19. Using the special tool, remove the wheel knuckle.
 

- Using the special tool, spread the wheel knuckle.
- Remove the wheel knuckle.



20. **NOTE:** Note the orientation of the retaining stud marked with a paint spot.

Remove the strut and spring assembly.



**Installation**

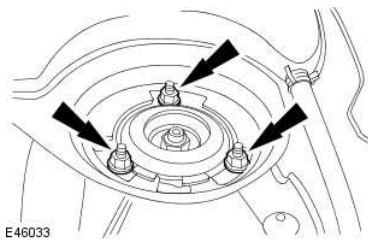
All vehicles

1. **NOTE:** Make sure orientation arrow on the strut top rubber mount faces from front to rear of the vehicle.

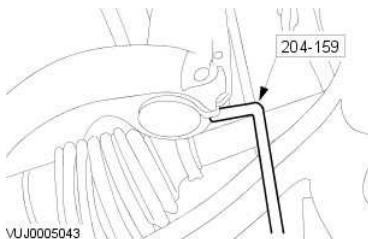
**NOTE:** Make sure the retaining stud marked with a paint spot is correctly orientated.

Install the strut and spring assembly.

- Tighten to 25 Nm.

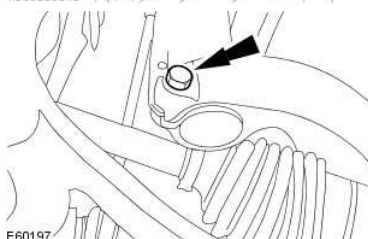


2. Using the special tool, install the wheel knuckle.



3. Install the wheel knuckle pinch bolt.

- Tighten to 85 Nm.

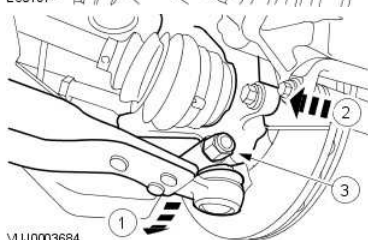


4. **NOTE:** Install a new retaining nut.

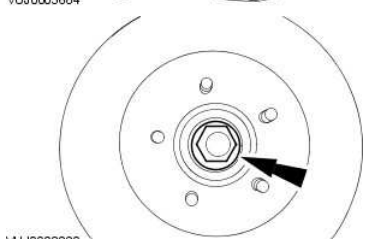
**NOTE:** Install a new lower arm ball joint shield.

Attach the wheel knuckle.

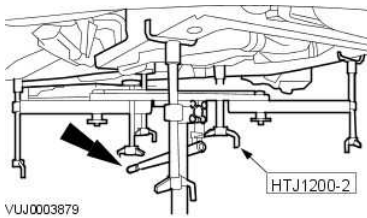
1. Reposition the lower arm.
  2. Attach the wheel knuckle to the halfshaft.
  3. Install the lower arm ball joint retaining nut and bolt.
- Tighten to 83 Nm.



5. Loosely install the new wheel hub nut.



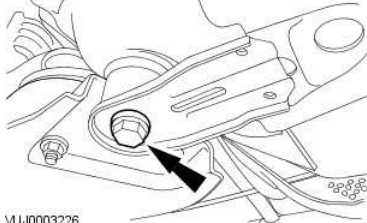
6. Using the special tool raise the front subframe.



VUJ0003879

7. NOTE: Left-hand shown, right-hand similar.

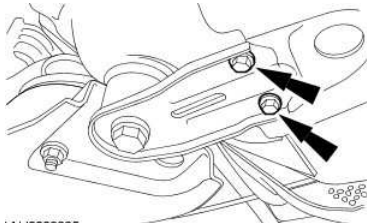
Loosely install the front subframe rear mount retaining bolts.



VUJ0003226

8. NOTE: Left-hand shown, right-hand similar.

Loosely install the front subframe reinforcement plate retaining bolts.

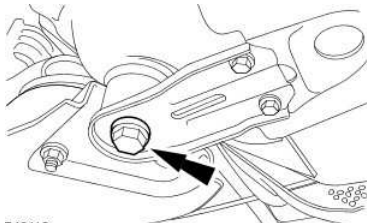


VUJ0003225

9. NOTE: Left-hand shown, right-hand similar.

Tighten the front subframe rear mount retaining bolts.

- Tighten to 142 Nm.

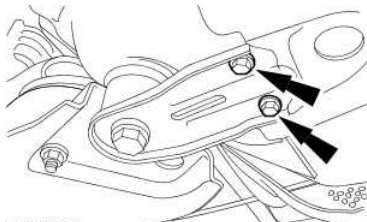


E43418

10. NOTE: Left-hand shown, right-hand similar.

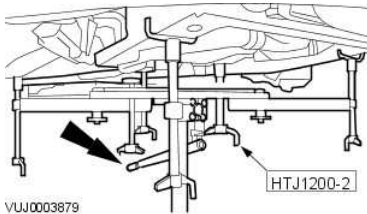
Tighten the front subframe reinforcement bolts.

- M8 to 35 Nm.
- M10 to 70 Nm.



VUJ0003225

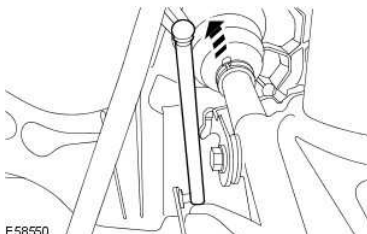
11. Remove the special tool.



VUJ0003879

Vehicles with high intensity discharge headlamps

12. Attach the link rod to the headlamp leveling sensor.



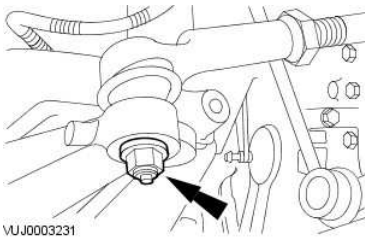
E58550

All vehicles

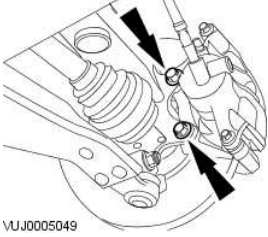
13. Attach the tie-rod end.

- Tighten to 35 Nm.

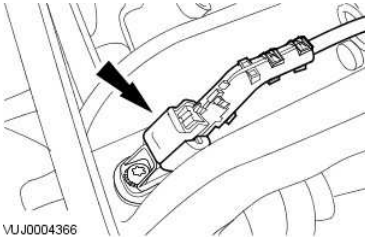




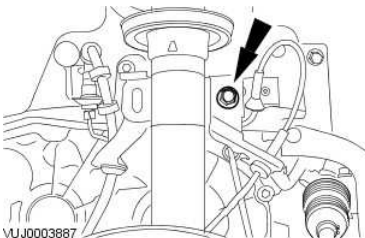
14. Attach the brake caliper and anchor plate assembly.
- Tighten to 133 Nm.



15. Connect the front wheel speed sensor electrical connector.



16. Attach the stabilizer link bar.
- Tighten to 48 Nm.



17. Attach the brake hose retaining bracket.
- Tighten to 48 Nm.



18. Install the wheel and tire.  
For additional information, refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).

19. Tighten the wheel hub nut.
- Tighten to 330 Nm.

