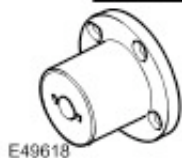


Wheel Knuckle (60.25.01)

Special Service Tools

204-506/1



Halfshaft remover/replacer
204-506/1 (LRT-60-030/1)

204-506/2



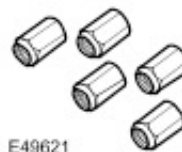
Halfshaft remover/replacer
204-506/2(LRT-60-030/2)

204-506/3



Halfshaft remover/replacer
204-506/3 (LRT-60-030/3)

204-506/5



Retainers - halfshaft remover/replacer
204-506/5 (LRT-60-030/5)

204-506-01




Halfshaft installer adapter
204-506-01



Ball joint separator
205-754 (LRT-54-027)

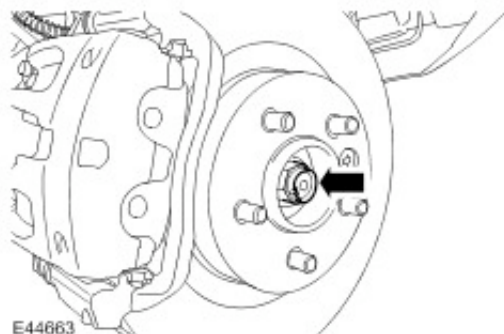
Removal

All vehicles

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 wheel and tire.
3. Loosen the halfshaft retaining nut.




Vehicles with standard brakes

4. Remove the brake disc.
For additional information, refer to [Brake Disc - Vehicles Without: Brembo Brakes \(70.12.10\)](#)

Vehicles with high performance brakes

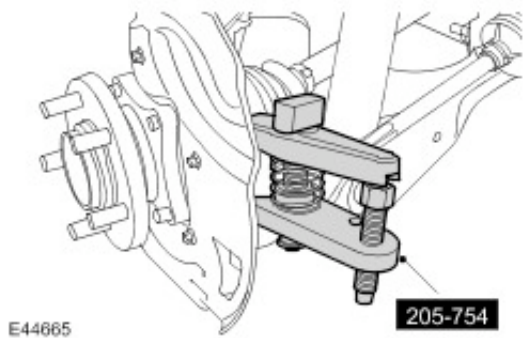
5. Remove the brake disc.
For additional information, refer to [Brake Disc - Vehicles With: Brembo Brakes \(70.12.10\)](#)

All vehicles

6. Remove the halfshaft retaining nut.
 Discard the nut.
7. Loosen the tie-rod end ball joint retaining nut.

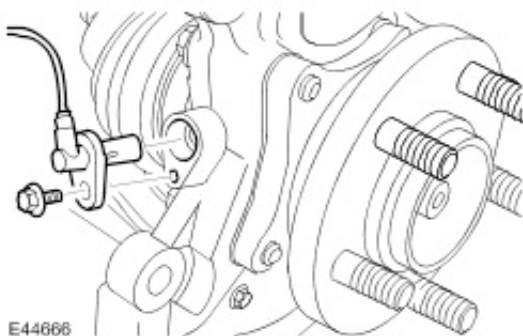
8 . Using the special tool, release the tie-rod end ball joint from the wheel knuckle.

 Discard the nut.



9 . Release the wheel speed sensor from the wheel knuckle.

 Remove the bolt.



10



CAUTION: Use a Torx socket to prevent the ball joint rotating whilst removing the nut.



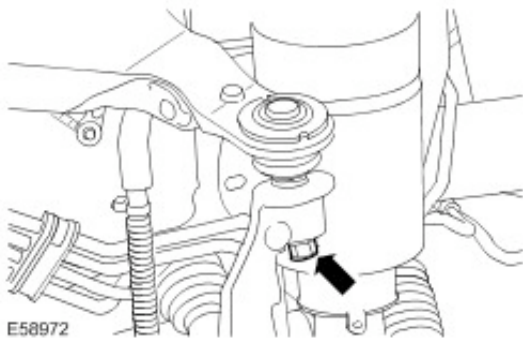
CAUTION: Note the position of the hardened steel washer. The hardened steel washer must be installed between the stabilizer bar link and the upper arm. Failure to follow this instruction may result in damage to the vehicle.

Release the stabilizer bar link.

 Discard the nut.



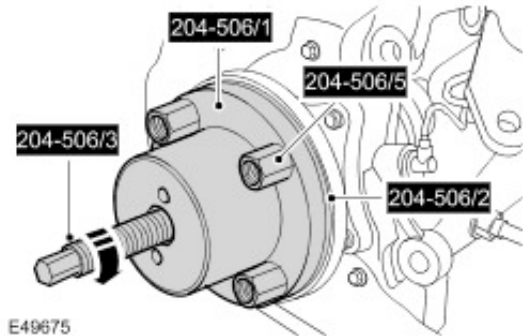
11 . Loosen the upper arm retaining nut.



12 . Using the special tool, release the upper arm ball joint.

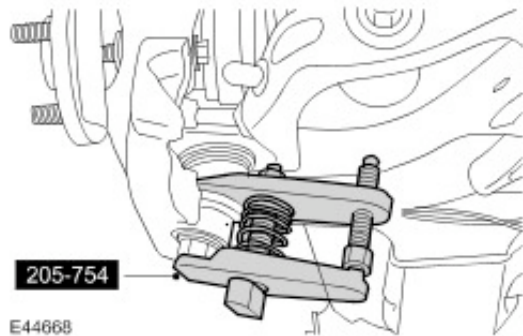


13 . Using the special tools, release the halfshaft from the drive flange.



14 . Remove the lower ball joint retaining nut.

15 . Using the special tool, release the lower ball joint from the steering knuckle.



16 . Remove the upper arm retaining nut.

 Discard the nut.

17




CAUTION: The lower arm ball joint can be damaged by excessive articulation. The wheel knuckle must be fully supported at all times. Do not allow the wheel knuckle to hang on the lower arm. Failure to follow this instruction will result in damage to vehicle.

NOTE:

Do not disassemble further if the component is removed for access only.


Remove the wheel knuckle.

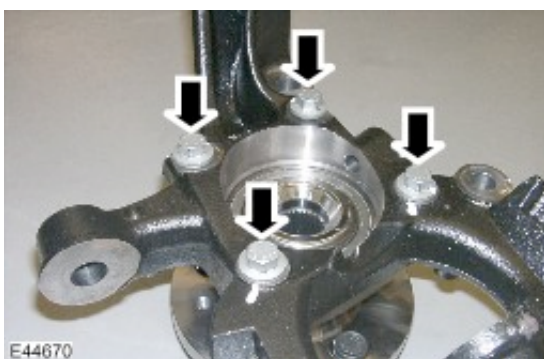
18 . Remove the brake disc dust shield.

 Remove the five retaining bolts.



19 . Remove the wheel hub.

 Remove the 4 bolts.



Installation

All vehicles


1 . Clean the components.

2 . Install the wheel hub.

 Tighten the 4 bolts to 115 Nm (85 lb.ft).

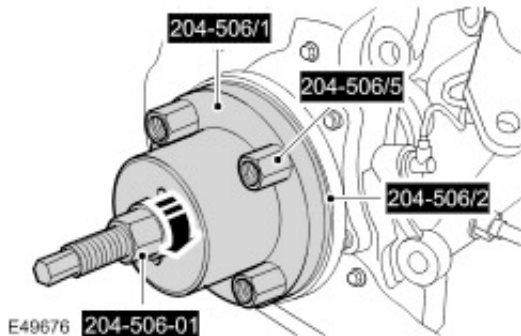
3 . Install the brake disc dust shield.


 Tighten the 5 bolts to 10 Nm (7 lb.ft).

- 4  **CAUTION: The lower arm ball joint can be damaged by excessive articulation. The wheel knuckle must be fully supported at all times. Do not allow the wheel knuckle to hang on the lower arm. Failure to follow this instruction will result in damage to vehicle.**


With assistance, install the wheel knuckle.

- 5 . Using the special tools, install the halfshaft in the wheel hub.



- 6 . Connect the upper arm and wheel knuckle.
 -  Install a new nut and tighten to 70 Nm (52 lb.ft).

Vehicles without Active Stabilization


- 7  **CAUTION: Make sure the hardened steel washer is installed between the stabilizer bar link and the upper arm. Failure to follow this instruction may result in damage to the vehicle.**

-  **CAUTION: Use a Torx socket to prevent the ball joint rotating whilst installing the nut.**

Secure the stabilizer bar link.

-  Install a new nut and tighten to 175 Nm (129 lb.ft).

Vehicles with Active Stabilization

- 8  **CAUTION: Make sure the hardened steel washer is installed between the stabilizer bar link and the upper arm. Failure to follow this instruction may result in damage to the vehicle.**


-  **CAUTION: Use a Torx socket to prevent the ball joint rotating whilst installing the nut.**

Secure the stabilizer bar link.

-  Install a new nut and tighten to 175 Nm (129 lb.ft).


- 9 . Tighten the lower arm ball joint retaining nut to 115 Nm (85 lb.ft).

10 . Connect the tie-rod end ball joint.

 Install a new nut and tighten to 70 Nm (52 lb.ft).

11 . Install a new halfshaft retaining nut and lightly tighten.

12 . Install the wheel speed sensor.

 Tighten the bolt to 10 Nm (7 lb.ft).

Vehicles with standard brakes

13 . Install the brake disc.

For additional information, refer to [Brake Disc - Vehicles Without: Brembo Brakes \(70.12.10\)](#)


Vehicles with high performance brakes

14 . Install the brake disc.


For additional information, refer to [Brake Disc - Vehicles With: Brembo Brakes \(70.12.10\)](#)

All vehicles

15 . Tighten the new halfshaft retaining nut to 350 Nm (258 lb.ft).

 Stake the nut to the halfshaft.

16 . Install the wheel and tire.

 Tighten the wheel nuts to 140 Nm (103 lb.ft).