



R140.77

Removal/installation recommendations

CITROËN:	Relay I, C25 (series 1 and 2), Jumper I	OE reference 3350-29, 71714450
FIAT:	Talento 290, Ducato (230-231-232-234-280), Ducato Nuovo (279-280/2/4), Ducato R90	
PEUGEOT:	J5 (series 1 and 2), Boxer I	
ALFA ROMEO:	AR6	
TALBOT:	Express MKII	

IDENTIFICATION OF NTN-SNR WHEEL BEARING KIT R140.77



Traceability:
SNR EC.42317.S01



COMMON PROBLEMS

PROBLEMS WITH ROLLING NOISE AND BEARING FAILURE

Probable causes

Damaged hub

Check the condition of the hub before installing the bearing.

Take care not to damage the bearing seats when removing the hub.

Incorrect lubrication

Use **100grams (50grams per bearing)** of multi-purpose grease when installing the bearings. A lack of lubrication will inevitably cause spalling of the inner ring **(no.3)** and subsequent bearing failure.



Incorrectly adjusted bearings

This installation requires a specific fitting procedure, specific tightening torques and special shims (available from the manufacturer's dealer network). If this procedure is not followed correctly it may result in the bearings being under or over tightened, this normally leads to a premature failure of the bearings.



An incorrectly adjusted bearing can cause noise and premature bearing failure. The failure of the bearing often causes damage to other surrounding parts such as the knuckle, hub and drive shaft.



The tightening torque for the drive shaft nut is 450 Nm.

REPLACEMENT

Specialist tools are required

Hydraulic press.

Ball joint splitter: OE 1847038000

Dial gauge

SNR recommends using HAZET tool 1779/-1 or similar

Safety precautions

Always replace corroded or damaged nuts and bolts.

Always replace all seals.

This installation requires initial lubrication; SNR recommends

NTN-SNR **Universal Multi-Purpose** grease or similar.



Tightening torques

- Wheel speed sensor bolt (no.1): **8 Nm**
- Drive shaft nut(s) (no.4): Type 10Q and 14Q vans: M28 **450 Nm**
- Bolt – lower ball joint (no.7): **60 Nm**
- Wheel fasteners: M14 **160 Nm** ; M16 **180 Nm**



It is important that the specified tightening torques are applied, for the bearing to function correctly.

REMOVAL

1) Raise the vehicle and remove the front wheels

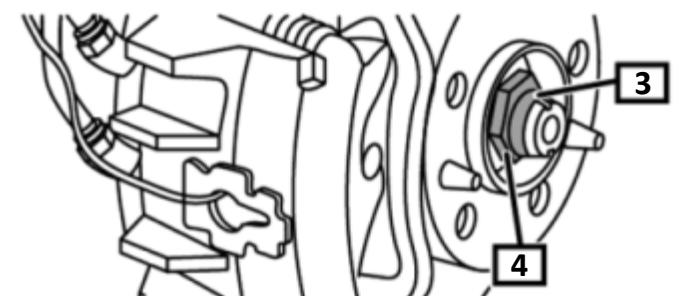
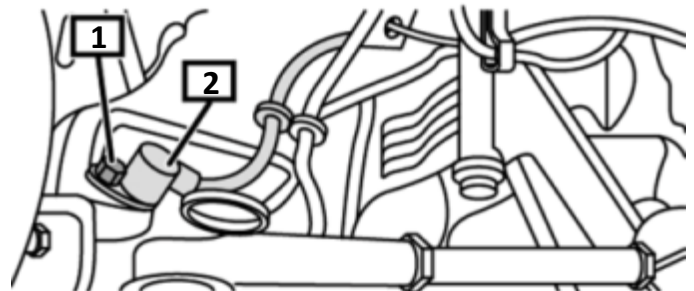
2) Unscrew the wheel sensor bolt (no.1)

3) Remove the speed sensor (no.2)

4) Disengage the safety retainer (no.3)

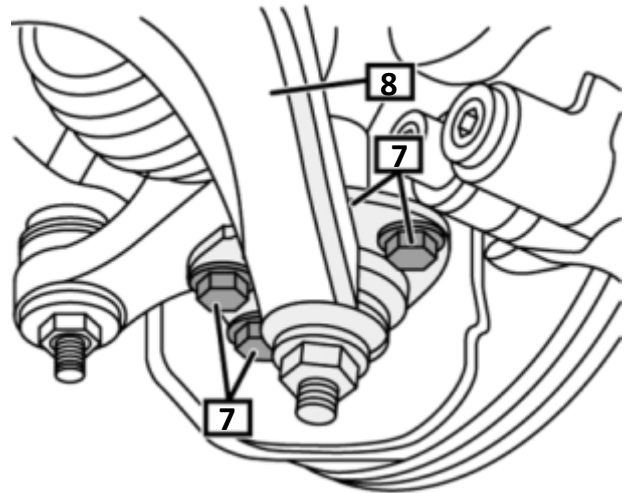
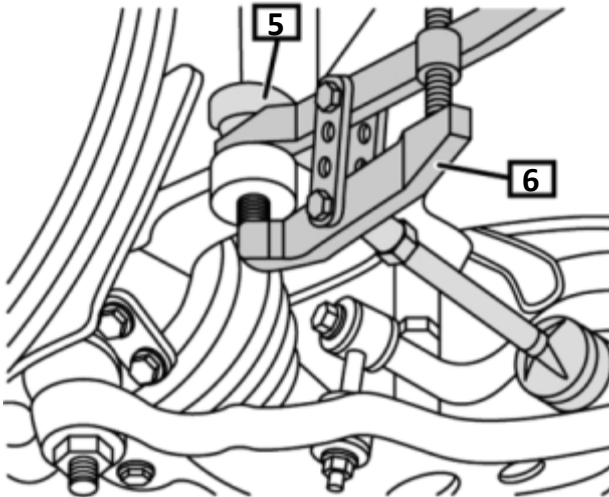
5) Unscrew the drive shaft nut (no.4)

6) Remove the brake caliper and brake disc



7) Use a ball joint splitter to remove the steering ball joint from the knuckle (no.5)

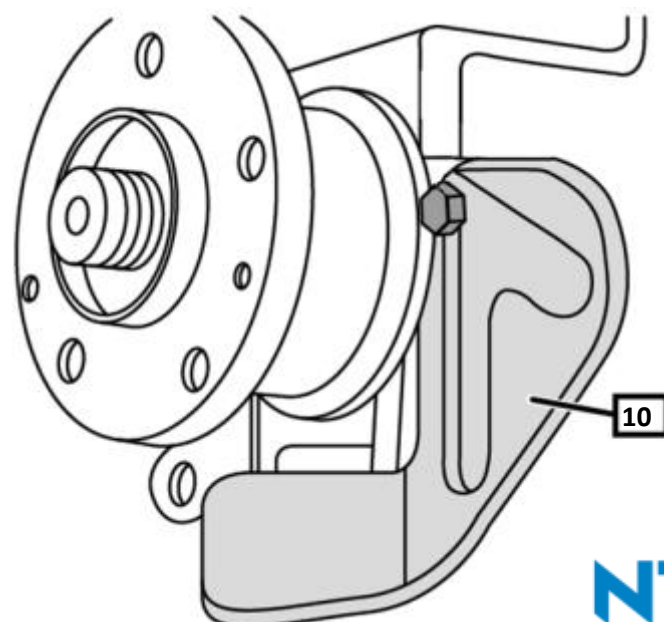
Special tool required: Ball joint splitter (**no.6**): OE 1847038000



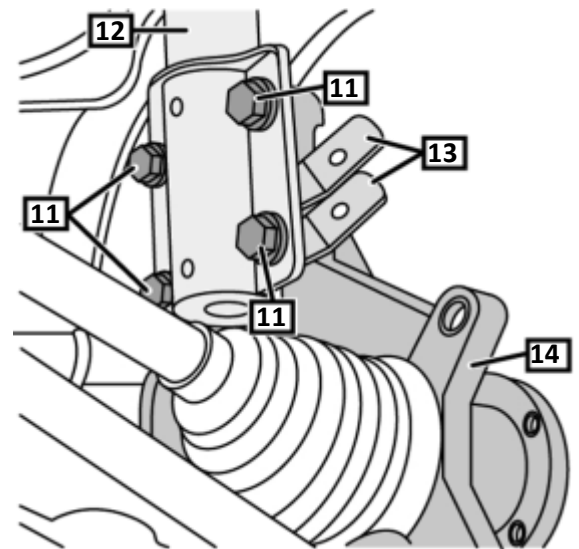
8) Remove the bolts from the lower ball joint (no. 7) to release the control arm (no. 8)

9) Remove the lower ball joint from the knuckle

10) Remove the back plate (no. 10)



- 11) Unscrew the strut to knuckle bolts (no.11)
- 12) Separate the strut from the knuckle (no.12 and 14)
- 13) Remove the knuckle (no.14)
- 14) Remove the brake line bracket (no.13)



BEARING REPLACEMENT

- 1) Remove the knuckle (no.14)
- 2) Use a press to extract the hub from the knuckle
- 3) Use an extractor to extract the bearings off the hub making sure not to damage the bearing seats.
- 4) Press the bearing cup and seals out of the knuckle, keep the spacer sleeve for later use.
- 5) Clean and inspect the parts for damage or excessive wear.
- 6) Place the bearing rings in the knuckle

ADJUSTING THE AXIAL PLAY

1) Position the bearings and the spacer sleeve in to the knuckle.

2) Install the adjustment tool (fig.1) and tighten the nut to 10 Nm; loosen it slightly and rotate the assembly in both directions, then re-tighten the nut to 10Nm

3) Place a dial gauge at the end of the bolt (fig. 2) and measure the axial play, it should range between 0.02 & 0.10 mm. the gap is adjusted by changing the spacer size.

4) Remove the adjustment tools and fill the space between the outer cages with multi- purpose grease.

5) Put the bearing and the outer seal back into the knuckle. Lubricate the bearing with 50grams of multi- purpose grease

6) Use a press to put the hub back into the knuckle by pressing on the inner ring of the outer bearing.

7) Install the spacer sleeve and then use the press to install the inner bearing on to the hub. Lubricate the bearing with 50grams of multi - purpose grease

8) Press the seal in to the knuckle

9) Continue with the installation of the knuckle

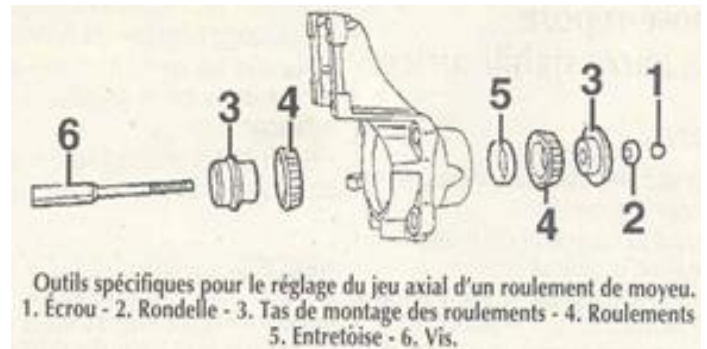


Figure 1

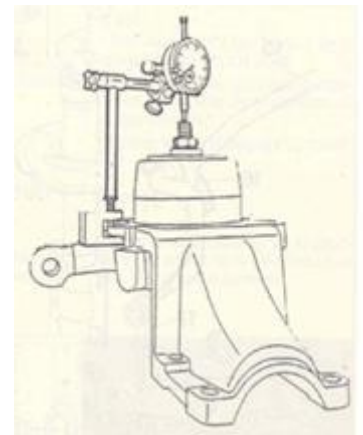
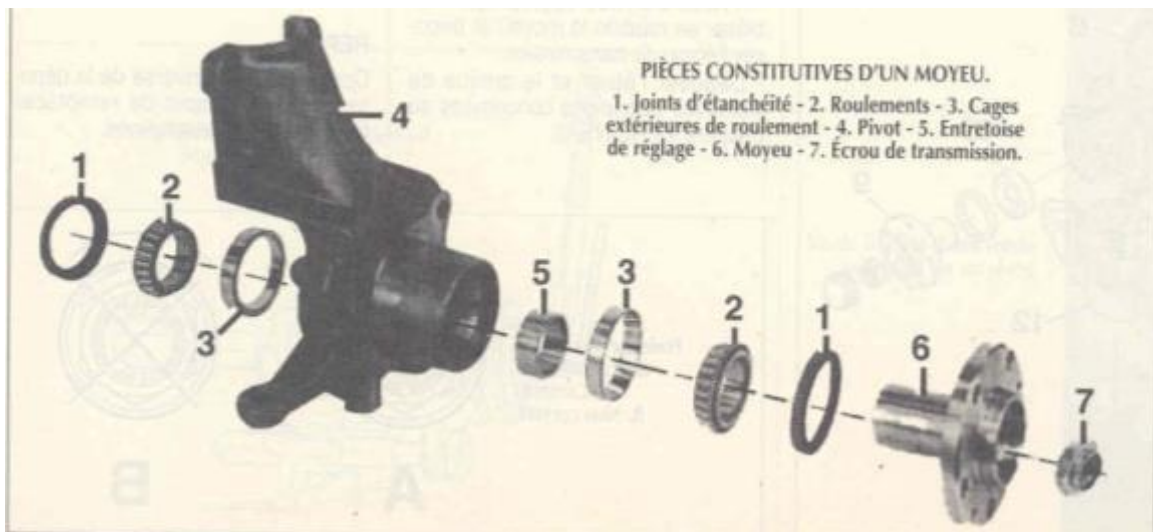


Figure 2



RE-INSTALLATION

Re-install the remaining components in the reverse order of removal



Recommendations

Make sure you have the correct fitment instructions and tools before undertaking the repair. It is important that all the parts supplied in the kit are fitted along with the new bearings.

Follow the vehicle manufacturer's installation procedures and apply the specified tightening torques.

Refer to the vehicle applications in our online catalogue: eshop.ntn-snr.com



Scan this QR code to access our online catalogue.

FOLLOW THE RECOMMENDATIONS OF THE VEHICLE MANUFACTURER!

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