

2014 BMW 528i xDrive Sedan AWD (F10) L4-2.0L Turbo (N20)

Vehicle > Transmission and Drivetrain > Differential Assembly > Pinion Flange > Service and Repair > Removal and Replacement

REMOVING AND INSTALLING THREE-HOLE FLANGE [REP-REP-RAF0126-2611100 - V.9]

Repair instruction

Removing and installing three-hole flange

26 11 100 | REP-REP-RAF0126-2611100 - V.9

26 11 100 Removing and installing three-hole flange



Special tools required:

- 23 0 020
- 33 5 040
- 33 5 070

Important!

The slide-in nut must be replaced by a new one.

The sunk nut already has a screw locking.

After the propeller shaft has been screwed into the rear axle final drive (sunk nut), a **hardening time of at least 2 hours** is absolutely necessary.

The hardening time may be extended at lower temperatures!

Failure to comply with these instructions may cause serious damage!

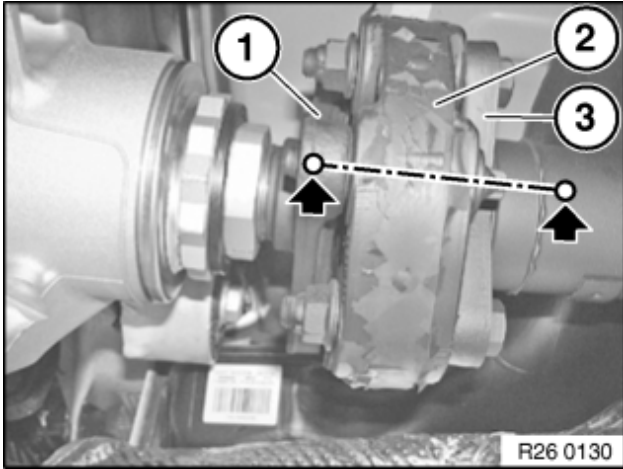


Necessary preliminary tasks:

- Remove propeller shaft



Since the three-hole flange, the flexible disc and the propeller shaft are balanced as a single unit, the balance quality of the propeller shaft, flexible disc and three-hole flange may be compromised slightly when the three-hole flange is replaced.



Important!

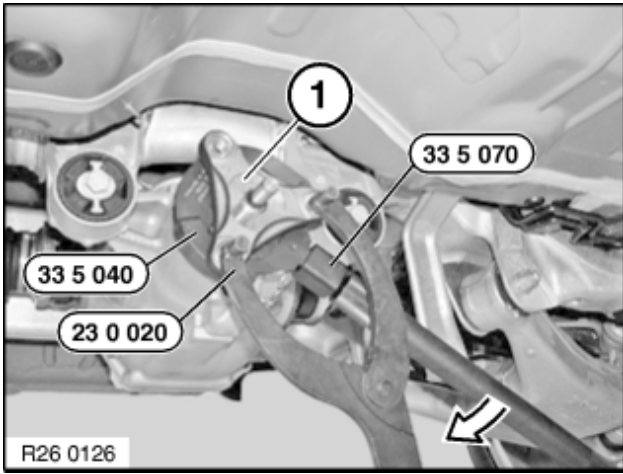
Before removing propeller shaft:

The three-hole flange and the propeller shaft must be reassembled in the same position.

Mark three-hole flange (1), flexible disc (2) and propeller shaft (3) in one plane.

Installation note:

Replace ZNS bolts and self-locking nuts.



Important!

The sunk nut must be opened against direction of travel in clockwise direction.

If an attempt is made to open the sunk nut in direction of travel in clockwise direction, the sunk nut is automatically screwed in further and the insert collar of the 12-edge flange nut is severely damaged.

If the insert collar of the flange nut was damaged, the propeller shaft can **no longer** be secured using a new sunk nut and the rear axle differential must be replaced.

Release insert nut against direction of travel in **clockwise direction** with special tool 33 5 040 and 33 5 070.

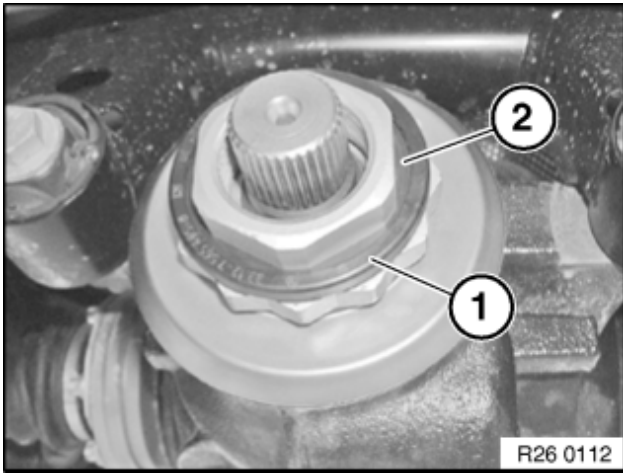
Grip with special tool 23 0 020.

Release three-hole flange (1) from bevel pinion.

Tightening torque:

26 11 6AZ	Type	Thread	Tightening specifications	Dimension

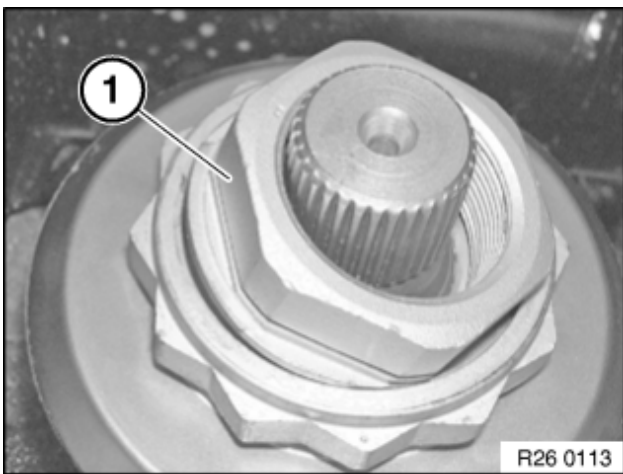
<p>6AZ Input flange, rear axle final drive (insert nut to propeller shaft/three- hole flange)</p>	<p>F01 / F02 / F03 / F06 / F07 / F10 / F11 / F12 / F13 / F18 / F15 / F16 / F20 / F21 / F22 / F23 / F25 / F26 / F30 / F31 / F32 / F33 / F34 / F35 / F36 / F85 / F86 PHEV / F15 PHEV / F87 / F30 PHEV</p>		<p>Replace insert nut! Allow min. 2 hours hardening time</p>	<p>100 Nm</p>
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Remove retaining clip (1) and gasket (2).

Installation note:

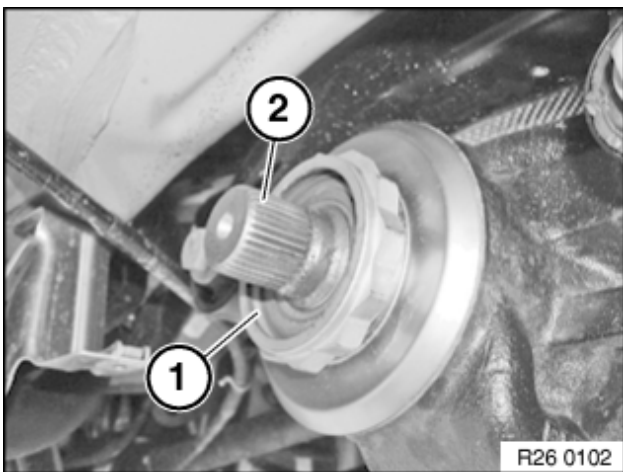
Retaining clip and gasket must be replaced.



Remove insert nut (1).

Installation note:

Insert nut must be replaced.

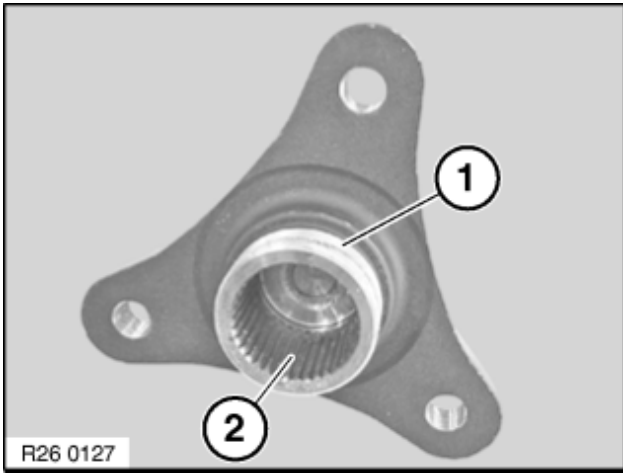


Before installing three-hole flange:

Clean insert collar (1) on flange nut and gearing on bevel pinion (2).

Fill insert collar (1) with grease.

Grease: BMW Service Operating Fluids.



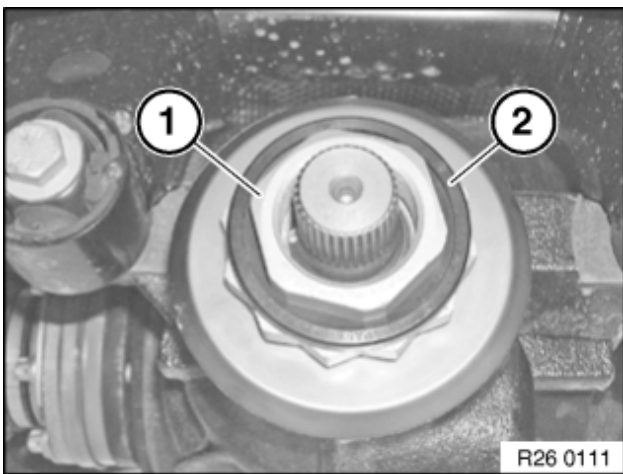
Important!

Thread of flange hub must **not** be contaminated with grease.

Clean thread (1) of flange hub to remove adhesive residues.

Clean hub teeth (2), then coat with grease.

Grease: BMW Service Operating Fluids.



Place flange nut (1) with gasket in insert collar of flange nut.

Install retaining clip (2).



Important!

The bi-hexagonal flange nut must not be used for bracing.

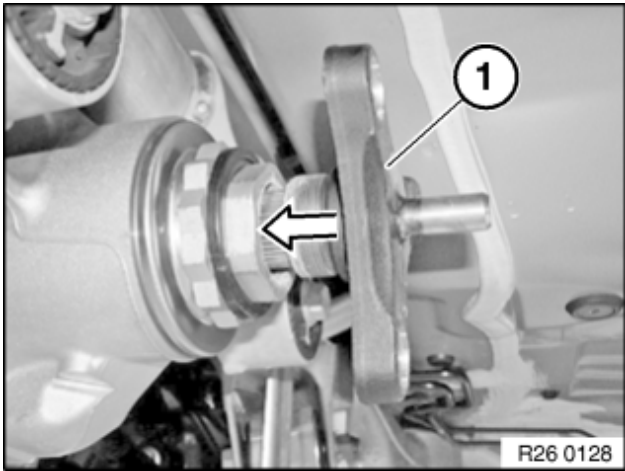
Failure to comply with this instruction may result in serious damage to the rear axle final drive.

Important!

Insert nut must be screwed into place **within 5 minutes**.

Tightening torque:

26 11 6AZ	Type	Thread	Tightening specifications	Dimension
6AZ Input flange, rear axle final drive (insert nut to propeller shaft/three-hole flange)	F01 /		Replace insert nut! Allow min. 2 hours hardening time	100 Nm
	F02 /			
	F03 /			
	F06 /			
	F07 /			
	F10 /			
	F11 /			
	F12 /			
	F13 /			
	F18 /			
	F15 /			
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	F20 /			
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F33 /				
F34 /				
F35 /				
F36 /				
F85 /				
F86				
PHEV / F15				
PHEV / F87				
/ F30				
PHEV				



Slide drive flange (1) to the limit position onto insert nut and secure.