SWZ-SWZ-2240465 Shaped element, VIN: XXXXXXX

ISTA system 4.1.22.17498 Data version R3.54 Programming -

version

VIN XXXXXXX Vehicle 3'/F30/SEDAN/335i/N55/AUTO/US/LL/2014/07

Int.lev.works - Int.lev.(cur.) - Int.lev.(tar.) -

Mileage 0 km

2240465 Shaped element

Minimum set: Mechanical tools

AM



In conjunction with: 33 5 120 = 0495851

Note: For pulling out drive shaft from rear

data

axle differential in combination with

33 5 120

Storage Location: B30

C30

SI number: 01 12 11 (724)

SWZ-SWZ-2240515 Socket, VIN: XXXXXXX

ISTA system 4.1.22.17498 Data version R3.54 Programming -

version

VIN XXXXXXX Vehicle 3'/F30/SEDAN/335i/N55/AUTO/US/LL/2014/07

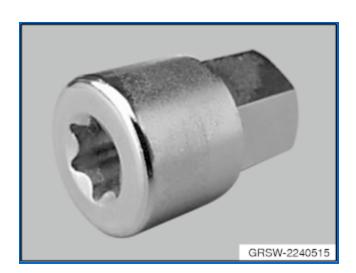
Int.lev.works - Int.lev.(cur.) - Int.lev.(tar.) -

Mileage 0 km

2240515 Socket

Minimum set: Mechanical tools

Mechanical tool



Note: Torx socket E10. For removing and

data

installing vibration absorber on rear

axle differential.

Storage Location: B30

SI number: 01 12 11 (724)

SWZ-SWZ-0490504 Torque angle measuring dial, VIN: XXXXXXX

ISTA system 4.1.22.17498 Data version R3.54 Programming -

version data

VIN XXXXXXX Vehicle 3'/F30/SEDAN/335i/N55/AUTO/US/LL/2014/07

Int.lev.works - Int.lev.(cur.) - Int.lev.(tar.) -

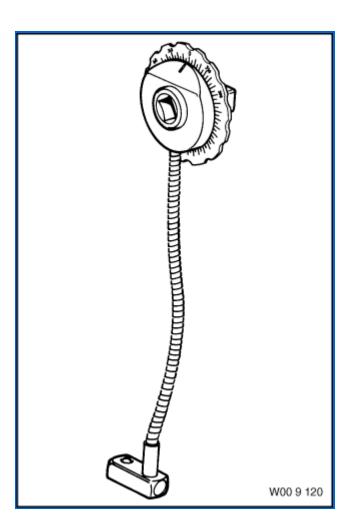
Mileage 0 km

0490504 Torque angle measuring dial

009120

Minimum set: Mechanical tools

AM



Note: For torsion angle adjustment of

cylinder head bolts (all engines) And reinforcement plate front axle support

E46

Storage Location: A4

SWZ-SWZ-0495554 Extension, VIN: XXXXXXX

ISTA system 4.1.22.17498 Data version R3.54 Programming -

version

VIN XXXXXXX Vehicle 3'/F30/SEDAN/335i/N55/AUTO/US/LL/2014/07

Int.lev.works - Int.lev.(cur.) - Int.lev.(tar.) -

Mileage 0 km

0495554 Extension

335070

Minimum set: Mechanical tools

ΑM



Note: (2 pieces) Pull-out extension for 33 5

data

040, 33 5 050, 33 5 060.

Storage Location: A18

B18

SI number: 01 21 06 (300)

Consisting of:

1 = 0495592 Extension

Note: (Extension (1 item))

discontinued, can only be ordered

using complete tool

REP-REP-RAF3018N55-1800020 Removing and installing complete exhaust system (N55)

, VIN: XXXXXXX

ISTA 4.1.22.17498 Data R3.54 Programming - system version data

VIN XXXXXXX Vehicle 3'/F30/SEDAN/335i/N55/AUTO/US/LL/2014/07

Int.lev.works - Int.lev.(cur.) - Int.lev.(tar.) -

Mileage 0 km

18 00 020 Removing and installing complete exhaust system (N55)



Warning!

Risk of burning!

Only perform this repair work after engine has cooled down.

Danger of injury!

Removal of the exhaust system must be carried out with the assistance of a second person.



Necessary preliminary tasks:

- Only F21, F22, F23, F31, F32, F33, F34:
 Remove rear trailing link.
- F23, F31, F33, F34, F36 only:
 Remove tension strut (rear axle) left or right.

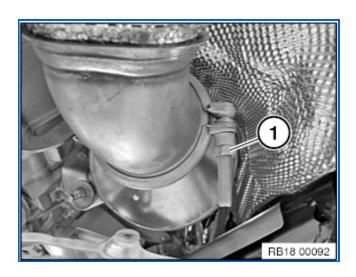


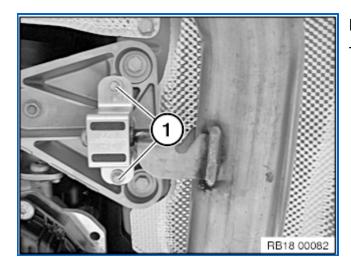
Support exhaust system with a suitable jack and secure it against falling down.

Release clamp (1).

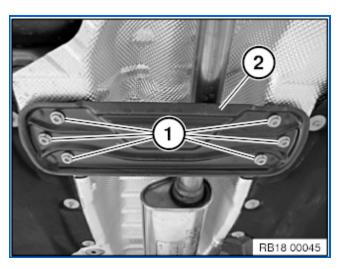
Renew V-band clamp.

Tightening torque 18 31 1AZ.





Release screws (1).
Tightening torque <u>18 20 2AZ</u>.

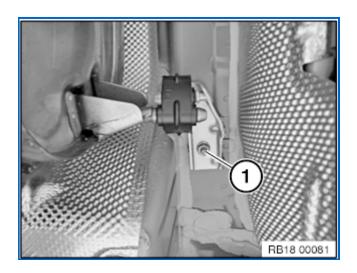


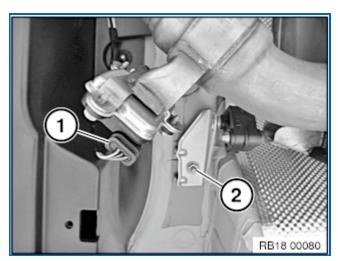
If fitted:

Release screws (1).
Tightening torque 18 31 3AZ.
Remove reinforcement plate (2).

Unfasten nut.

Tightening torque 18 20 3AZ.





Unlock connector from exhaust flap and pull off. Slacken nut (2).

Tightening torque 18 20 3AZ.

Lower and remove exhaust system with assistance of a second person.



Installation note:

Check rubber mount for damage.

If necessary, replace damaged rubber mounts.

Check exhaust system for leak tightness.

REP-REP-RAF3026-2611000 Removing and installing propeller shaft (inserted) completely, VIN: XXXXXXX

ISTA system version	4.1.22.17498	Data version	R3.54	Programming - data
VIN	XXXXXX	Vehicle	3'/F30/SEDAN/335	i/N55/AUTO/US/LL/2014/07
Int.lev.works	-	Int.lev.(cur.)	-	Int.lev.(tar.) -
Mileage	0 km			

26 11 000

Removing and installing propeller shaft (inserted) completely

Special tools required:

- <u>00 9 120</u>
- 00 9 130
- 33 0 080
- 33 5 070



Important!

On four-wheel drive vehicles with defective, nonengaging drive, it is imperative that the following information is taken account of.

Additional work when replacing the propeller shaft.



Important!

Replacement of the sunk nut on the rear axle final drive is absolutely required!

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 complete exhaust system.
- Remove heat shields.
- Support transmission with lifter.
- Remove <u>cross member</u> if necessary.



Important!

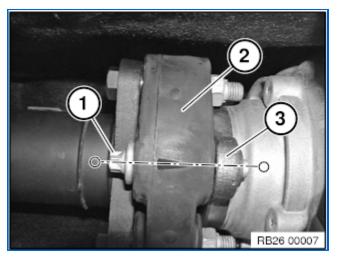
Adhere without fail to the installation and bolt-tightening sequence.

Installation sequence:

- 1. Join propeller shaft to transmission
- 2. Join propeller shaft to rear axle final drive
- 3. Join centre mount

Screw-fastening sequence:

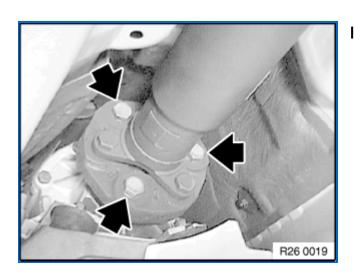
- 1. Insert nut
- 2. Flexible disc to transmission
- 3. Centre mount



Important!

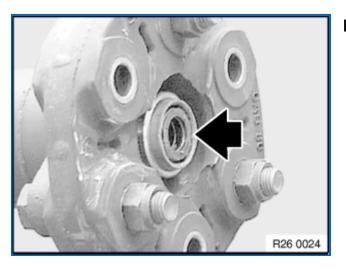
To avoid buzzing sound after refitting the propeller shaft:

- 1. The flexible disc connection (1) on the front at the propeller shaft **must** be marked in one plane with the flexible disc (2) and the three-bolt flange (3) before removal.
- 2. During installation the three-bolt flange (3) must be forced back together again with the flexible disc (2) in the same position.
- 3. Replace ZNS screws and self-locking nuts.



Installation note:

- Renew ZNS screws and self-locking nuts
- Grip mounting bolts of flexible disc at nuts and tighten down by way of bolts.



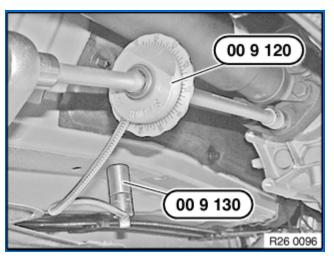
Installation note:

Check centring mount.

If necessary, replace damaged <u>centring</u>.

Grease centring mount.

- Grease: BMW Service Operating Fluids.



Installation note:

Tighten down screws/bolts to specified torque.

Secure angle of rotation special tool <u>00 9 120</u> with magnets 00 9 130 to vehicle underbody and screw down further according to angle of rotation.

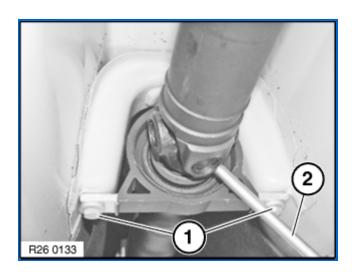
Tightening torque <u>26 11 1AZ</u>.

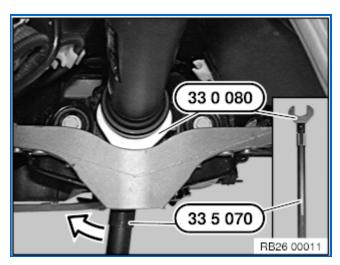
Slacken screws (1)

Tightening torque 26 11 5AZ.

Using a suitable tool (2), secure propeller shaft at centre universal joint against twisting.

Remove screws of centre mount fully only after opening insert nut.





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!

The sunk nut must be opened clockwise - see direction of arrow.

Turning the recessed nut in anticlockwise direction will automatically tighten the recessed nut further and significantly damage the bi-hexagonal flange nut.

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.

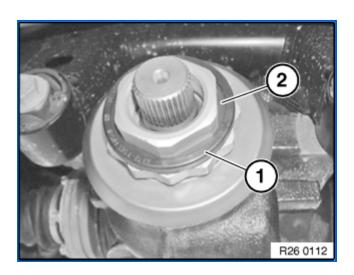
Release sunk nut clockwise with special tools 33 0 080 and 33 5 070.

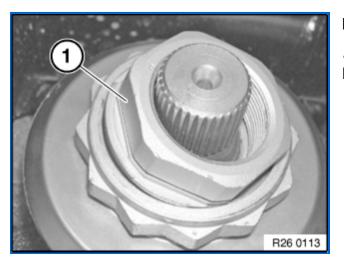
Tightening torque <u>26 11 6AZ</u>.

Remove retaining clip (1) and gasket (2).

Installation note:

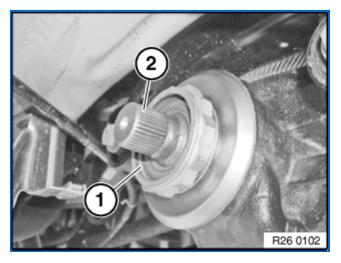
Retaining clip and gasket must be replaced.





Remove insert nut (1).

Installation note:
Insert nut must be replaced.



Before installing propeller shaft:

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

Top up insert collar (1) with grease.

Grease: BMW Service Operating Fluids.

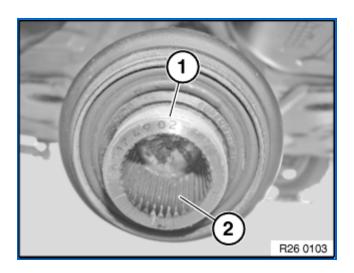
Clean thread (1) of joint hub to remove adhesive residues.

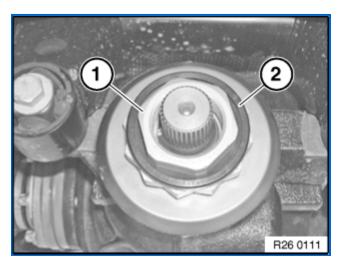
Clean hub teeth (2), then coat with grease.

Grease: BMW Service Operating Fluids.

Important!

Thread of joint hub must **not** be fouled with grease.





Place insert nut (1) with seal in insert collar of flange nut. Install retaining clip (2).



Important!

Adhere without fail to the installation and bolt-tightening sequence.

Installation sequence:

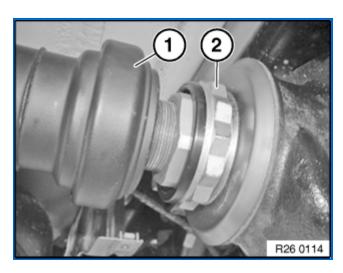
- 1. Join propeller shaft to transmission
- 2. Join propeller shaft to rear axle final drive
- 3. Join centre mount

Screw-fastening sequence:

- 1. Insert nut
- 2. Flexible disc to transmission
- 3. Centre mount

Slide propeller shaft (1) to the limit position onto insert nut and secure.

Secure propeller shaft at centre universal joint against



turning with a mounting lever.

Important!

The bi-hexagonal flange nut (2) must not be used for bracing.

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

Insert nut must be screwed into place within 5 min. Tightening torque 26 11 6AZ.

REP-REP-RAF2033-3310016 Removing and installing (replacing) rear axle differential, VIN: XXXXXXX

ISTA system version	4.1.22.17498	Data version	R3.54	Programming - data
VIN	XXXXXXX	Vehicle	3'/F30/SEDAN/335i/N55/AUTO/US/LL/2014/07	
Int.lev.works	-	Int.lev.(cur.)	-	Int.lev.(tar.) -
Mileage	0 km			

33 10 016

Removing and installing (replacing) rear axle differential

Special tools required:

- 33 5 206
- 33 5 200
- 33 5 124
- 2 240 465
- 33 5 121
- 33 5 122
- 33 5 123
- 2 360 787
- 2 240 265
- 2 240 464
- 33 5 125
- 2 360 944



Warning!

Rear axle differential must be lashed with tensioning strap 33 5 206 to prevent it from falling out when the output shafts are pressed off.

Important!

When reinstalling the current rear axle differential, both radial shaft seals of the output shafts must be



replaced!

The circlips on both output shafts must be replaced!

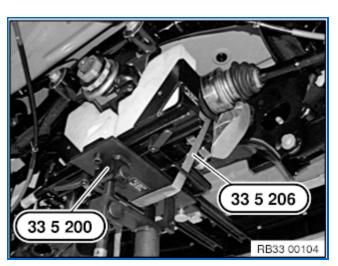


Necessary preliminary tasks:

- Remove <u>vibration absorber</u> at screw connection of rear of rear axle differential.
- If necessary, remove rear tension struts.
- Remove propeller shaft from rear axle differential.
 - Disconnect propeller shaft at rear axle differential.
 - Release centre mount.
 - Tie up propeller shaft to underbody.

Note:

Bending the propeller shaft by an excessive angle can cause premature damage to the joint/propeller shaft!



Position special tool33 5 200 on workshop jack.

Support rear axle final drive33 5 200 with special tool.

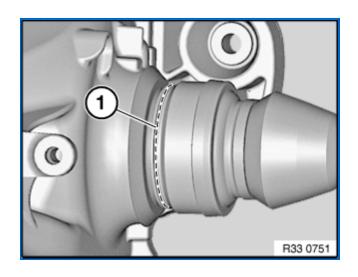
Lash rear axle final drive unit to special tool33 5 200 with tightening strap 33 5 206.

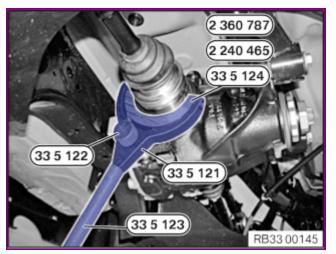
Important!

Securing strap33 5 206 must be passed through between output shafts and rear axle final drive cover.

Important!

Insert special tools 33 5 124or <u>2 240 465</u> into the all-round slot (1) of the output shaft!



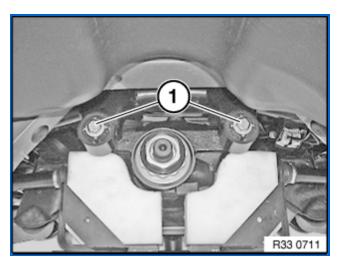


Left output shaft only:

Press out the output shaft from the rear axle differential with jerky movements using the following special tools. Complete special tools depending on the motorisation.

- N13, B38,
 N20B20: 33 5 121, 33 5 122, 33 5 123, <u>2 240 465</u>
- N47, B47, N55,
 N57: 33 5 121, 33 5 122, 33 5 123, 33 5 124
- N20B28: 33 5 121, 33 5 122, 33 5 123 and 33 5 124 or 2 360 787

The thrust piece of the screw 33 5 122 must be in contact with the rear axle differential.



Release screws (1).

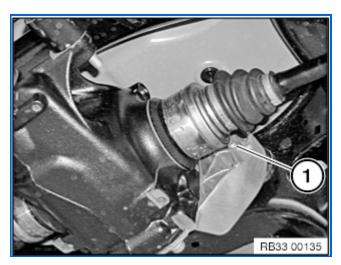
Tightening torque 33 17 1AZ

Installation note:

Adhere to the installation sequence at the end of the document in order to prevent distortion of the rear axle final drive during installation and thereby avoid potential complaints about noise.

Release nut (1) and push screw towards rear to the limit position.

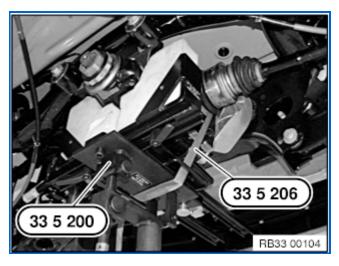
Tightening torque 33 17 2AZ.



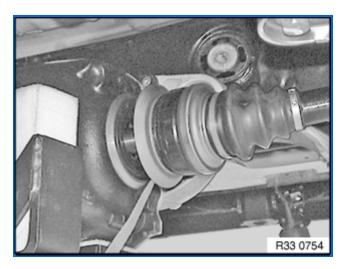
Installation note:

Replace nut.

Adhere to the installation sequence at the end of the document in order to prevent distortion of the rear axle final drive during installation and thereby avoid potential complaints about noise.



Lower rear axle final drive with special tool33 5 200.



Press (tilt) rear axle final drive on right upwards.

Feed out left output shaft in downward direction and tie up.

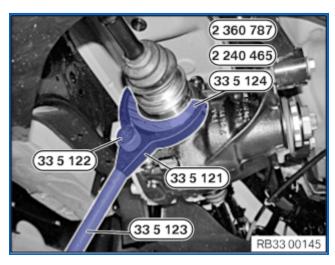
Swing rear axle final drive towards left side.

Right output shaft:

Press out the output shaft from the rear axle differential with jerky movements using the following special tools.

Complete special tools depending on the motorisation.

- N13, B38,



N20B20: 33 5 121, 33 5 122, 33 5 123, 2 240 265

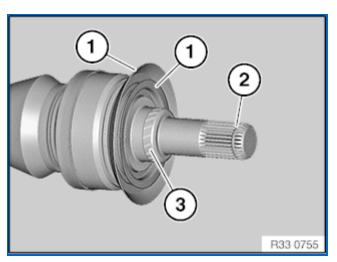
N47, B47, N55,
 N57: 33 5 121, 33 5 122, 33 5 123, 33 5 124

 N20B28: 33 5 121, 33 5 122, 33 5 123 and 33 5 124 or 2 360 787

The thrust piece of the screw 33 5 122 must be in contact with the rear axle differential.

Feed out output shaft and tie up.

Remove rear axle final drive.



Important!

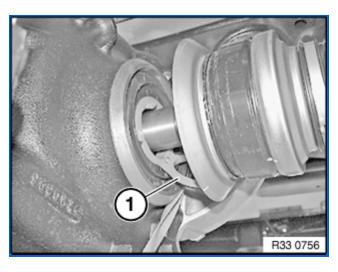
High installation forces indicate that the output shaft spline teeth are damaged or deformed!

Check gearing and replace components if damaged.

Check dust plate (1) for damage, renew if necessary.

Circlip (2) must be renewed!

Coat highlighted contact surface (3) of output shaft with approved final drive oil.



Installation note:

Insert output shaft into rear axle final drive.

Pull out assembly protection ring at lug (1) until one of the two predetermined breaking points gives.

Press the output shaft into the rear axle differential using the following special tools (depending on motorisation) and a rubber mallet.



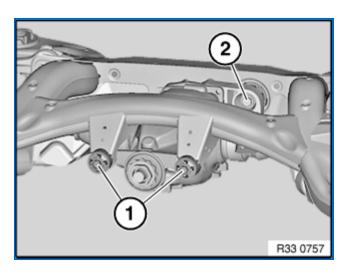
N13, B38, N20B20: 2 240 464

- N47, B47, N55, N57: 33 5 125

- N20B28: 33 5 125 or 2 360 944

Installation note:

The output shafts must audibly snap in place on the rear axle differential.



Assembly sequence:

- 1. Insert the rear axle final drive into the rear axle support using the workshop jack and special tool33 5 200.
- 2. Insert screws (1) (do not tighten).
- 3. Insert bolt from rear and replace nut (2) (do not tighten down).
- 4. Release securing strap, lower special tool33 5 200 and move it away.
- Tighten down screws (1).
 Tightening torque 33 17 1AZ
- Tighten nut (2).Tightening torque 33 17 2AZ



After installation:

 Check <u>oil level in the rear axle final drive</u>, correct if necessary.

REP-REP-RAF2033-3331_TILGER Removing and installing/replacing vibration

absorber, VIN: XXXXXXX

ISTA 4.1.22.17498 Data R3.54 Programming - system version data

VIN XXXXXXX Vehicle 3'/F30/SEDAN/335i/N55/AUTO/US/LL/2014/07

Int.lev.works - Int.lev.(cur.) - Int.lev.(tar.) -

Mileage 0 km

version

33 31 017 Removing and installing/replacing vibration absorber

Special tools required:

- <u>2 240 515</u>
- 83 30 2 444 999

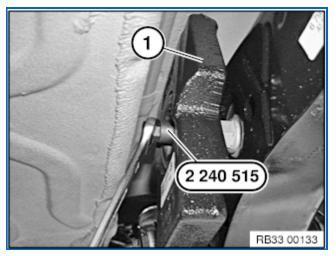


Attention!

Different vibration absorbers are installed depending on the vehicle equipment and motorisation.

The vibration absorbers have different nominal frequencies depending on the equipment and motorisation.

The nominal frequency is noted on the vibration absorber and its observation is mandatory.



Release the screw M8 on the vibration absorber (1) with special tool <u>2 240 515</u> and ring spanner (AF 13).

Tightening torque 33 17 3AZ.

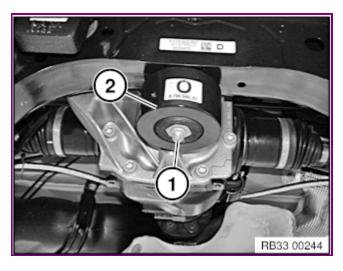
Remove vibration absorber (1).



Release the screw on the vibration absorber with special tool 83 30 2 444 999 and wrench socket.

Remove vibration absorber (1).

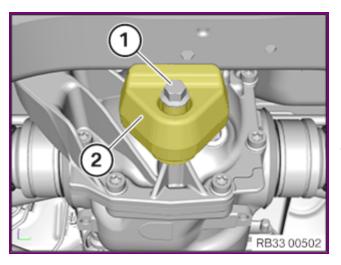
Tightening torque 33 17 7AZ.



Loosen screw (1).

Tightening torque 33 17 4AZ.

Remove vibration absorber (2).



Loosen screw (1).

Tightening torque 33 17 5AZ.

Remove vibration absorber (2).

Installation note:

It is mandatory to ensure correct installation position. The flat side of the vibration absorber (2) faces the rear axle support.

AZD-AZDMUC3317-F2X_F3X Rear axle final drive suspension, VIN: XXXXXXX

ISTA system 4.1.22.17498 Data version R3.54 Programming -

version data

VIN XXXXXXX Vehicle 3'/F30/SEDAN/335i/N55/AUTO/US/LL/2014/07

Int.lev.works - Int.lev.(cur.) - Int.lev.(tar.) -

Mileage 0 km

33 17 Rear axle final drive suspension

		Туре	Thread	Tightening specifications	Dimension
1AZ	Rear differential to rear axle carrier, front	F20 / F21 / F22 / F23 / F30 / F31 / F32 / F33 / F34 / F35 / F36	M12	Follow repair instruction.	100 Nm
2AZ	Rear differential to rear axle carrier, rear	F20 / F21 / F22 / F23 / F30 / F31 / F32 / F33 / F34 / F35 / F36	M14	Observe instructions in Repair Manual. Renew nut.	165 Nm
3AZ	Vibration absorber to screw connection of rear axle differential, rear	F20 / F21 / F22 / F23 / F30 / F31 / F32 / F33 / F34 / F35 / F36	M8		28 Nm
4AZ	Vibration absorber to rear axle support, rear	F20 / F21 / F22 / F23 / F30 / F31 / F32 / F33 / F34 / F35 / F36	M8		19 Nm
5AZ	Vibration absorber to rear axle differential	F20 / F21 / F22 / F23 / F30 / F31 / F32 / F33 / F34 / F35 / F36	M12	Renew screw.	100 Nm
6AZ	Vibration absorber to screw connection of rear axle differential, rear	F20 / F21 / F22 / F23 / F30 / F31 / F32 / F33 / F34 / F35 / F36	M10x32	Renew screw. Jointing torque	56 Nm
				Angle of rotation	90 °
7AZ	Vibration absorber to screw connection of rear axle differential, rear	F20 / F21 / F22 / F23 / F30 / F31 / F32 / F33 / F34 / F35 / F36	Torx E14 M 10x32	Renew screw.	
				Jointing torque Angle of rotation	56 Nm 90 °

AZD-AZDMUC2611-02 Propeller Shaft. complete, VIN: XXXXXXX

ISTA system 4.1.22.17498 Data version R3.54 Programming -

version data

VIN XXXXXXX Vehicle 3'/F30/SEDAN/335i/N55/AUTO/US/LL/2014/07

Int.lev.works - Int.lev.(cur.) - Int.lev.(tar.) -

Mileage 0 km

26 11 Propeller Shaft. complete

		Туре	Thread	Tightening specifications	Dimension
1AZ	Front flexible disc to transmission output flange ZNS screws and nuts All versions			Replace screws and nuts, jointing torque and angle of rotation must be observed without fail. Tightening via screw	
		F01 / F02 / F03 / F06 / F07 / F10 / F11 / F12 / F13 / F15 / F16 / F18 / F20 / F21 / F22 / F23 / F25 / F26 / F30 / F31 / F32 / F33 / F34 / F35 / F36 / F80 / F82 / F83 / F85 / F86 / F18 PHEV / F15 PHEV / F87 / F30 PHEV	M12-10.9	Jointing torque	55 Nm
				Angle of rotation	90 °
2AZ	Front flexible disk to propeller shaft ZNS screws and nuts			Replace screws and nuts, jointing torque and angle of rotation must be observed without fail.	
	All versions			Tighten via nut	
		F01 / F02 / F03 / F06 / F07 / F10 / F11 / F12 / F13 / F15 / F16 / F18 / F20 / F21 / F22 / F23 / F25 / F26 / F30 / F31 / F32 / F33 / F34 / F35 / F36 / F80 / F82 / F83 / F85 / F86 / F18 PHEV /	M12-10.9	Jointing torque	55 Nm

		F15 PHEV / F87 / F30 PHEV			
				Angle of rotation	90 °
3AZ	Flexible disc, rear, to transmission drive flange (inserted) ZNS screws and nuts All versions			Replace screws and nuts, jointing torque and angle of rotation must be observed without fail. Tightening via screw	
		F01 / F02 / F03 / F06 / F07 / F10 / F11 / F12 / F13 / F18 / F20 / F21 / F22 / F23 / F30 / F31 / F32 / F33 / F34 / F36 / F85 / F86 / F18 PHEV	ASA M12-10.9	Jointing torque Angle of rotation	55 Nm
4AZ	Flexible disc, rear, to propeller shaft ZNS screws and nuts All versions			Replace screws and nuts, jointing torque and angle of rotation must be observed without fail. Tighten via nut	
		F01 / F02 / F03 / F06 / F07 / F10 / F11 / F12 / F13 / F18 / F20 / F21 / F22 / F23 / F30 / F31 / F32 / F33 / F34 / F35 / F36 / F85 / F86 / F18 PHEV	M12-10.9	Jointing torque	55 Nm
5AZ	Centre mount to body	F01 / F02 / F03 / F06 / F07 / F10 / F11 / F12 / F13 / F15 / F16 / F18 / F20 / F21 / F22 / F23 / F25 / F26 / F30 / F31 / F32 / F33 / F34 / F35 / F36 / F85 / F86 / F18 PHEV / F15 PHEV / F87 / F30 PHEV		Angle of rotation	90 °
6AZ	Input flange, rear axle final drive (insert nut to	F01 / F02 / F03 / F06 / F07 / F10 / F11 / F12 / F13 / F18		Replace insert nut! Allow min. 2 hours hardening time	

	propeller shaft/three-hole flange)			Jointing torque Loosen the insert nut	120 Nm
				through 90° Tightening torque	85 Nm
		F15 / F16 / F20 / F21 / F22 / F23 / F25 / F26 / F30 / F31 / F32 / F33 / F34 / F35 / F36 / F85 / F86 PHEV / F15 PHEV / F87 / F30 PHEV		rigilieriilig torque	85 Nm
7AZ	Front propeller shaft to transfer box/front axle differential	F01 / F02 / F06 / F07 / F10 / F11 / F12 / F13 / F15 / F16 / F20 / F21 / F22 / F23 / F25 / F26 / F30 / F31 / F32 / F33 / F34 / F36 / F85 / F86 / F15 PHEV		Renew screws, jointing torque and angle of rotation must be observed without fail.	
				Jointing torque Angle of rotation	20 Nm 45 °
8AZ	Constant velocity joint propeller shaft to rear axle differential	F06 M6 / F10 M5 / F12 M6 / F13 M6	M10	Replace screws and shims, jointing torque and angle of rotation must be observed without fail. Jointing torque Angle of rotation	20 Nm 90 °
9AZ	Front propeller shaft to rear propeller shaft/constant velocity joint	F06 M6 / F10 M5 / F12 M6 / F13 M6	M12x1	-	60 Nm

AZD-AZDMUC1831-F30N55 Exhaust pipe with catalytic converter / complete system, VIN: XXXXXXX

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version data

VIN XXXXXXX Vehicle 3'/F30/SEDAN/335i/N55/AUTO/US/LL/2014/07

Int.lev.works - Int.lev.(cur.) - Int.lev.(tar.) -

Mileage 0 km

18 31 Exhaust pipe with catalytic converter / complete system

		Туре	Thread	Tightening specifications	Dimension
1AZ	Exhaust system to catalytic converter	N55 / N55 Hybrid		Renew V-band clamp.	30 Nm
2AZ	Front pipe with catalytic converter to turbocharger	N55 / N55 Hybrid	M8 x 40	Renew V-band clamp.	13 Nm
3AZ	Reinforcement plate to body	N55 / N55 Hybrid	M8		28 Nm
4AZ	Exhaust turbocharger with exhaust manifold to cylinder head	N55 / N55 Hybrid	M7		13 Nm
5AZ	Clamp between centre silencer and rear silencer	N55 / N55 Hybrid	M10		45 Nm
6AZ	Clamp between front pipe and centre silencer	N55 / N55 Hybrid	M10		45 Nm
7AZ	Actuator drive for exhaust system to exhaust system	N55 / N55 Hybrid	M6		9 Nm

SBS-ANL-SBS1996-330196149_A3 3.0 Hypoid oils for front axle differential with disc-type limited slip differential (M models and with SA209 self-locking differential), VIN: XXXXXXX

ISTA 4.1.22.17498 R3.54 Programming -Data system version data version VIN XXXXXX Vehicle 3'/F30/SEDAN/335i/N55/AUTO/US/LL/2014/07 Int.lev.works Int.lev.(cur.) -Int.lev.(tar.) Mileage 0 km

Enclosure 3 of SI 33 01 96 (149), issue 06/2006, update 01/2016

3.0 Hypoid oils for front axle differential with disc-type limited slip differential (M models and with SA209 self-locking differential)

As well as for final drive unit with electro-hydraulic limited-slip differential

Standard version: 1 Series: E82/M Coupé

Standard version: 3-Series: E90/M3, E92/M3, E93/M3

Trade name BMW part number BMW part number Container size

China Rest of the world

BMW differential oil 83 21 2 155 243 83 22 2 282 583 3x500 ml

SAF-XJ + FM Booster

Standard version: 2-Series: F87/M2

Standard version: 3-Series: Z3M, Z3 with SA209, E36 with SA209, E36/M3, E46/M3, E85/M

Roadster, E86/M Coupé, F80/M3,

Standard version: 4-Series: F82/M4 Coupé, F82/M4 GTS, F83/M4 Cabrio Standard version: 5-Series: E34/M5, E39/M5, E60/M5, E61/M5, F10/M5 E63/M6, E64/M6, F06/M6, F12/M6, F13/M6

Trade name BMW part number Container size

BMW MSP/A synthetic differential 83 22 9 405 462 1000 ml (Trade Unit)

oil

BMW MSP/A synthetic differential 83 22 2 365 988 12x1 litre

oil

BMW MSP/A synthetic differential 83 22 9 407 871 208-litre barrel

oil

Specific Hypoid oils released by name

Trade name Manufacturer/Supplier

Castrol SAF-XJ Castrol

Castrol Syntrax Limited Slip 75W-140 Castrol

MOTUL HYPO SYNT LS Motul

Mobil transmission oil VS 500 Mobil

Aral transmission oil BS-LSX Aral

BP Energear SHX-ZR BP

Avia Hypoid 75W--140 LSX AVIA

Agip HLZ Agip

FINA PONTONIC MLK Fina

Shell transmission oil ZLS-BMW Shell

Wintershall gear fluid BMS Plus Schmierstoffraffinerie Salzbergen GmbH

Westfalen Fugo BMS Westfalen AG

Note:

The above oils satisfy the demands required of lifetime oils.

Oil change intervals are given in the vehicle-specific inspection sheets.

Before opening the container, "mix" the transmission oil to distribute the additives evenly through the oil.

General information about final-drive transmission oils

Final-drive and hypoid transmission oil must fulfil the following requirements for handling high loads as arise at the tooth flanks of the hypoid gear:

- high load-carrying capacity
- high degree of immunity from seizure
- good protection against wear
- optimum frictional behaviour and temperature stability

- compatibility with sealing materials
- resistance to ageing

A brand-name hypoid transmission oil already possesses these and other characteristics thanks to its high concentration of EP agents (EP = Extreme Pressure).

Oil additives

All final drives are designed in such a way that there is absolutely no need to use oil additives. BMW is totally against the use of such additives. We will also accept no liability for any consequences resulting from the use of additives.

Date: 07/2015