

**Important!**

An incorrectly adjusted gearshift mechanism can result in tooth meshing noises be transmitted into the passenger compartment.

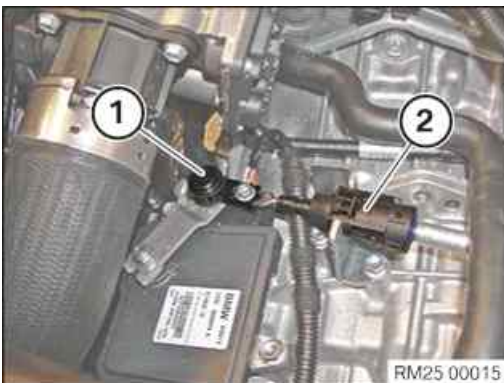
**Necessary preliminary tasks:**

- Move selector lever into "P" position
- Remove [intake filter housing](#)

**Removal:**

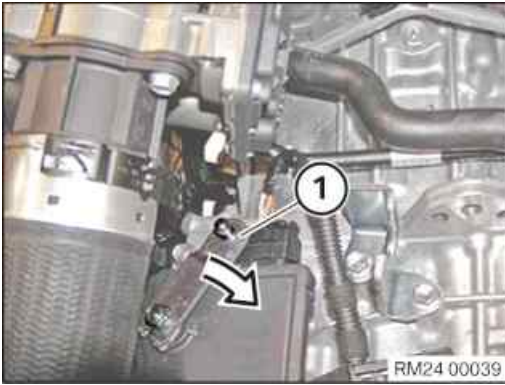
Release screw (1).

The head piece for tolerance compensation must be easily moveable before installation.

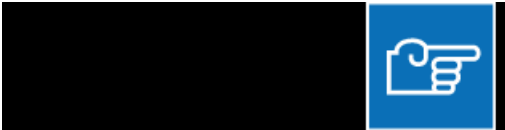


Release ball socket (1) from ball stud.

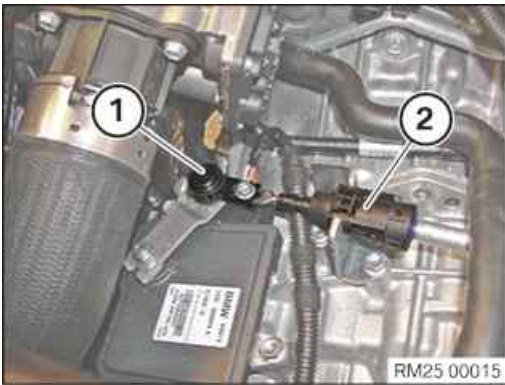
Release cable (2) from support angle.



Position "P" of selector lever (1) is the rearmost locked position.



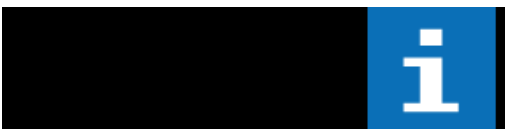
Installation:



Press in cable (2) into support angle.
Ensure cable counter support audibly engages.
Press on ball socket (1) onto ball stud.



Tighten screw (1).
Tightening torque [24 51 1AZ](#).



Required follow-up work:

- Install [intake silencer housing](#)

00 Danger of injury if oil comes into contact with eyes and skin



Danger of injury!

Contact with eyes or skin may result in injury!

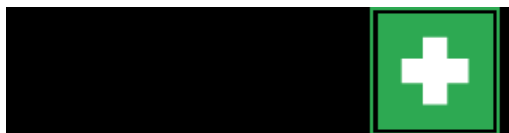
Possible symptoms are:

- Impaired sight
- Irritation of the eyes
- Reddening of the skin
- Rough and cracked skin



Protective measures/rules of conduct:

- Wear safety goggles.
- Wear oil-resistant protective gloves.
- Observe country-specific safety regulations.



First aid measures:

- Eye contact: Immediately flush eyes with lots of water for at least 15 minutes. In the case that it is available, use an eye wash bottle. If eye irritation persists, consult a doctor.
- Skin contact: Wash off with soap and water immediately. If irritation persists, consult a doctor.

Note: Do not use solvents/thinners.

00 Danger of poisoning if oil is ingested/absorbed through the skin

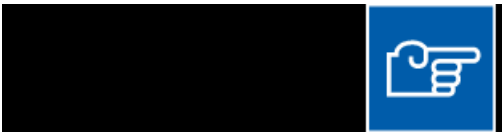


Danger of poisoning!

Ingesting oil or absorbing through the skin may cause poisoning!

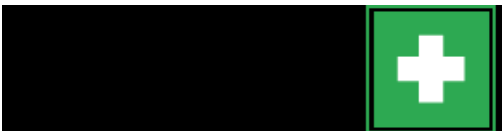
Possible symptoms are:

- Headaches
- Dizziness
- Stomach aches
- Vomiting
- Diarrhoea
- Cramps/fits
- Unconsciousness



Protective measures/rules of conduct:

- Fill oil in appropriately marked containers only.
- Do not fill oil in containers meant for drinking out of. (bottles for beverages, glasses or cups)
- Observe country-specific safety regulations.



First aid measures:

- Do not induce vomiting.

If the person affected is still conscious, he/she must rinse out their mouth with water, drink plenty of water and consult a doctor immediately.

Do not administer anything to an unconscious person via their mouth; place them in a stable position on their side. Call the emergency doctor immediately.

**Important!**

Transmissions are filled with fluid. Oil level does not have to be compensated!

Only in the event of discernible external damage to exchange transmission or discernible oil leakage from exchange transmission - check [oil level](#).

After completing work:

- Only use the [approved](#) automatic transmission fluid.
- Reset adaptation values.
- Perform clutch and gear ratio adaptation.

Failure to comply with this requirement will result in serious damage to the automatic transmission!

**Recycling:**

Catch and dispose of escaping transmission oil.

Observe country-specific waste disposal regulations

**Necessary preliminary tasks:**

- [Remove automatic transmission](#) (without wheel alignment!).



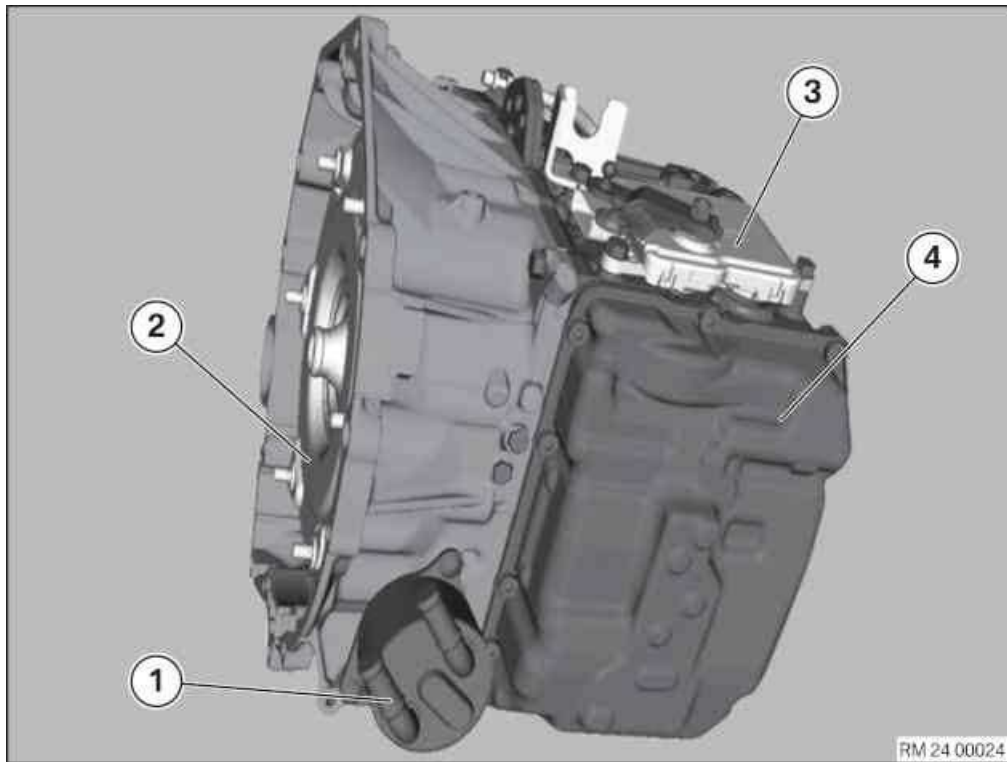
Remount following parts.

- Converter, transportation retainerÂ (1).
- Remount holder for shift cable

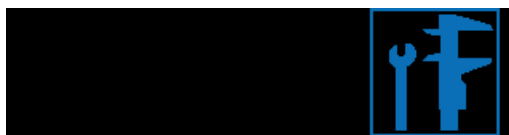
**Required follow-up work:**

- Install [automatic transmission](#) (without wheel alignment!).

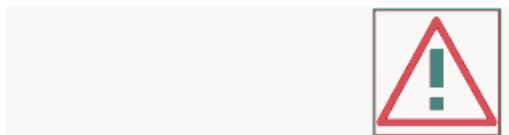
24 00 ... Overview of transmission housing (AISIN F21FT)



- 1 [Transmission oil cooler](#)
- 2 [Torque converter](#)
- 3 [Electronic transmission control \(EGS\)](#)
- 4 [Hydraulic shift unit](#)

**Special tools required:**

- [00 2 030](#)
- [23 4 150](#)
- [11 6 480](#)

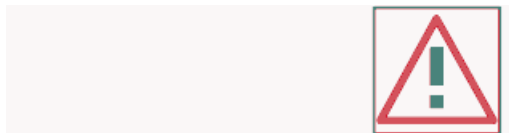
**Attention!**

To prevent heavy damage to the engine block, the protruding thread of the transmission bolts absolutely must be checked for damage and corrosion **before removal**.

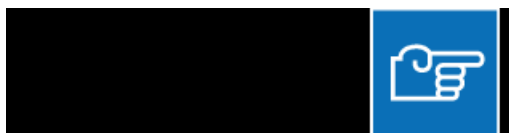
If there are signs of corrosion, the rust must be removed and the threads must be cleaned **before removal**.

Replace rusted, damaged screws.

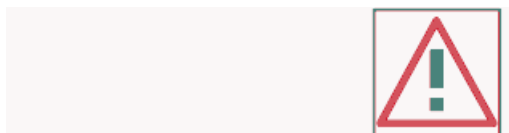
Failure to comply with this instruction will result in serious damage to the engine block and transmission.

**Safety information:**

Before removing the transmission, it is **essential** to check the tight fit of the engine mount and ensure that the rubber coating of the engine mount is in perfect condition. If the rubber coating is porous and has cracks, remove the [transmission with engine](#).

**Note:**

After completion of work, [check transmission oil level](#).

**Attention!**

Use only the [approved automatic transmission oil](#) in this automatic transmission.

Failure to comply with this requirement will result in serious damage to the automatic transmission!

Attention!

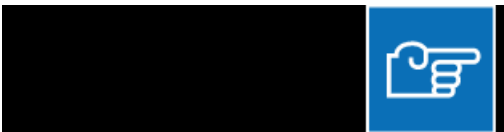
An incorrectly adjusted gearshift mechanism can result in tooth meshing noise being transmitted to the passenger compartment.

Adjust [selector lever](#).

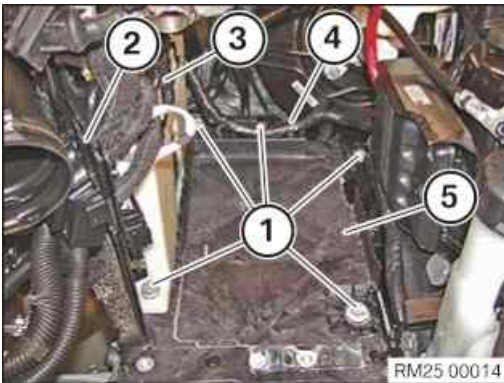


Necessary preliminary work:

- Remove [battery](#).
- Secure engine in [installation position](#).
- Loosen the right [wheel arch cover](#).
- Remove [front axle support](#).
- **No wheel alignment is required for removal and installation of front axle support.**
- Remove [starter motor](#).
- Remove [left](#) output shaft only at transmission end and hang up.
- Remove [right](#) output shaft only at transmission end and hang up.



Removal:



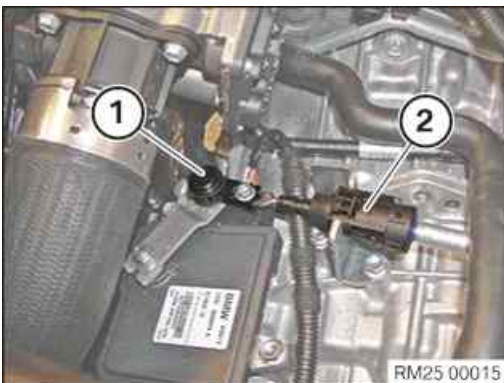
Release screws (1).

Release battery partition wall (2) from the bracket and remove.

Release control unit (3) from the bracket.

Release wiring harness (4) from the battery tray (5).

Remove battery tray (5).



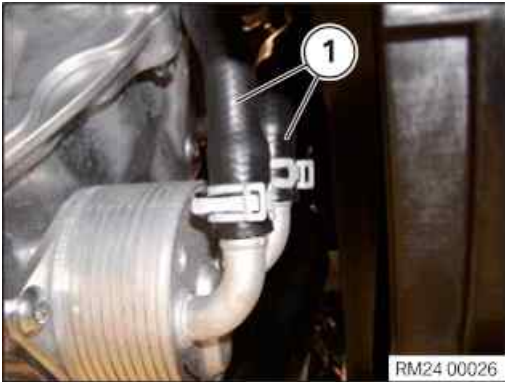
Release ball socket (1) from ball stud.

Release cable (2) from the support angle.



Unlock connector (1).

Loosen clamp (2) with wiring harness from transmission and place to one side.



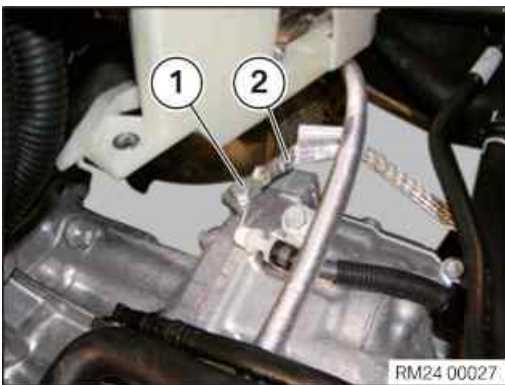
Attention!

[Follow notes for carrying out repair work on the cooling system.](#)

Unfasten hose clamps.

Disconnect the coolant hoses (1) from the transmission oil cooler.

Catch the emerging coolant.

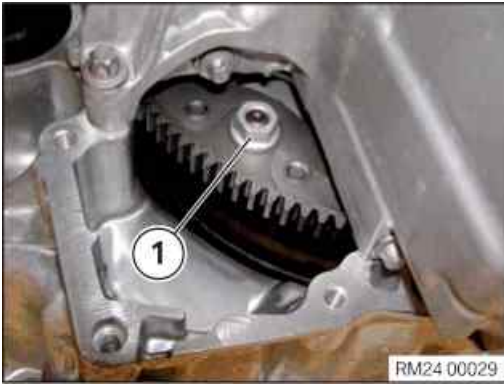


Release screw (1).

Loosen ground strap (2) from transmission and place to one side.



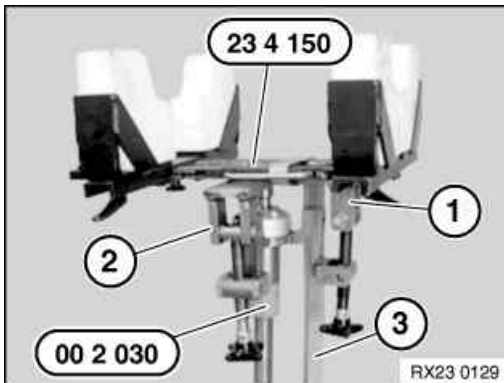
Release screws (1).



Crank engine with special tool [11 6 480](#) at vibration damper in direction of rotation.

Release nut (1) on torque converter.

Crank engine further and release remaining 5 nuts.



Supporting transmission:

Support the transmission with special tool [23 4 150](#) and [00 2 030](#).

Secure transmission with the tensioning strap (3).

Tasks are described in [gearbox holder](#).

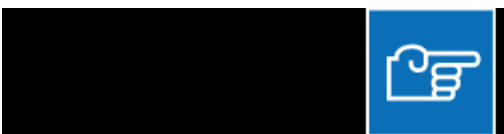


Release bolts and remove the transmission. **Attention!**

Transmission mounting bolts differ in length.

Note installation position.

Installing the wrong bolts may cause serious damage.



Installation:



Bore hole (1) of driving plate must be accessible from recess on engine oil sump. Check that fitting sleeves (2) are correctly fitted.

Replace damaged fitting sleeves.



Rotate torque converter until bore hole in torque converter is flush with bore hole in drive plate.

Flange-mount automatic transmission to engine and screw on.

Tightening torque [24 00 1AZ](#).



Crank engine with special tool [11 6 480](#) at vibration damper in direction of rotation.

Parts: Replace nuts (1).

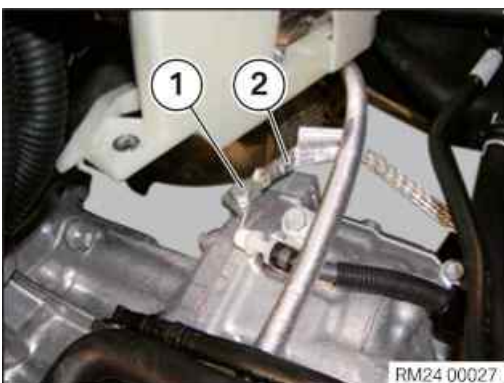
Screw 6 nuts (1) on torque converter.

Tightening torque [24 40 1AZ](#).

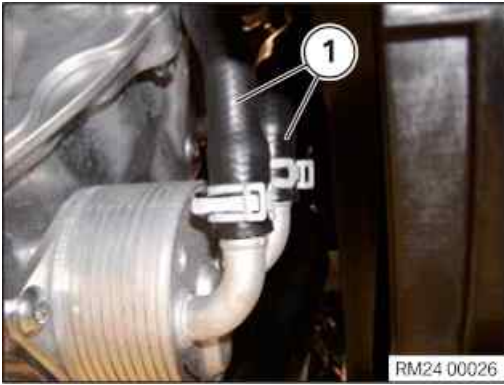


Screw the transmission on the transmission mount with the screws (1).

Tightening torque [22 32 1AZ](#).



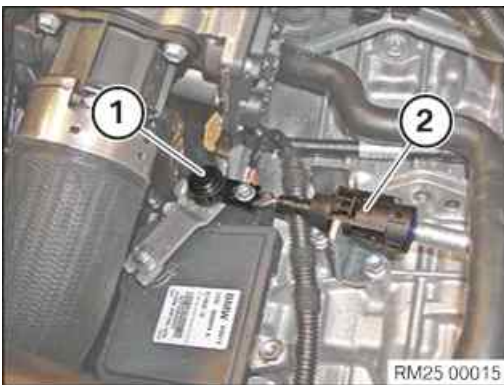
Screw ground strap (2) on the transmission with the screw (1).



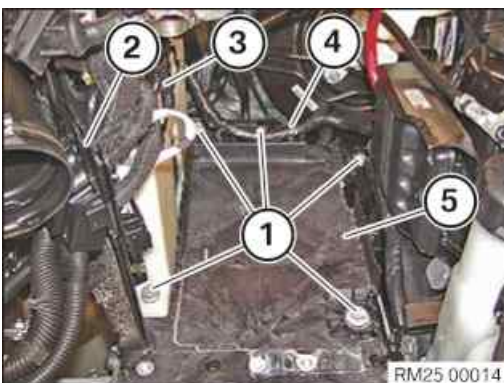
Slide the coolant hoses (1) onto the transmission oil cooler.
Secure hose clamps.



Secure clamp (2) on transmission with the wiring harness.
Lock connector (1).



Press in cable (2) into the support angle.
Ensure cable counter support audibly engages.
Press on ball socket (1) onto the ball stud.



Install battery tray (5).
Tighten down screws (1).
Install wiring harness (4) on the battery tray (5).
Insert control unit (3) into the bracket.
Insert battery partition wall (2) into the bracket.



Required reworking:

- Install [front axle support](#).
- **No wheel alignment is required for removal and installation of front axle support.**
- Install [left](#) output shaft.
- Install [right](#) output shaft.
- Install [starter](#).
- Install the right-hand [wheel arch cover](#).
- Install [battery](#).
- Top up [coolant](#).

00 Safety instructions for handling oil



Warning!

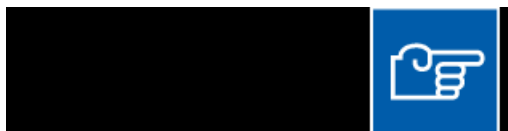
[Danger of poisoning](#) if oil is ingested/absorbed through the skin!

[Risk of injury](#) if oil comes into contact with eyes and skin!



Recycling:

Observe country-specific waste disposal regulations.



Measures if oil is unintentionally released:

- Personal precautionary measures: Danger of slipping! Keep non-involved persons away from the work area. Wear personal protective clothing/equipment.
- Environmental protection measures: Prevent oil from draining into drain channels, sewerage systems, pits, cellars, water and the ground.
- Limiting spread: Use oil blocks to prevent the surface spread of oil.
- Cleaning procedure: Bind and dispose of escaped oil with nonflammable absorbents.

Note: Do not flush oil away with water or aqueous cleaning agents.

23 Transmission designations

Breakdown of BMW designation:

A5S 300J (former designation)		
A	Transmission type	- S = Manual gearbox - A = Automatic transmission
5	Number of forward gears	
S	Type of top gear	- D = Direct gear - S = Overdrive gear
300	Max. input torque (Nm)	
J	Code letter of transmission manufacturer	- G = Getrag - J = Jatco - R = GMPT (General Motors Powertrain) - Z = ZF (Zahnradfabrik Friedrichshafen)
SMG	Notes	SMG = Sequential M gearbox/transmission

GS6-37BZ (new designation according to BMW Group Standard GS 90007)		
G	Transmission	
S	Transmission type	- S = Manual gearbox - A = Automatic transmission
6	Number of forward gears	
-		- = Standard with manual gearshift - HP = Hydraulic planetary gear - DKG= twin-clutch gearbox
37	Transmission type	26 = D-transmission 31 = C-transmission 39 = F-transmission 37 = H-transmission 53 = G-transmission 17 = I-transmission 47= J transmission SMG -7-speed 45 = K transmission 36= Transmission DKG
B	Gear set	- B = Petrol gear ratio - D = Diesel gear ratio - S= Sport gear ratio

Z	Code letter of transmission manufacturer	- G = Getrag - Z = ZF (Zahnradfabrik Friedrichshafen) - A = AISIN
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Manual gearbox:

BMW designation	Manufacturer	Manufacturer designation	Remarks
S5D 200G	Getrag	B transmission (220/5)	
S5D 200G	Getrag	B transmission (221/5)	for M41 engine only
S5D 250G	Getrag	B transmission (220/5)	Reinforced version
S5D 260Z	ZF	C-transmission (S5-31 D)	for M51 engine only
S5D 280Z	ZF	C-transmission (S5-31)	
S5D 310Z	ZF	C-transmission (S5-31)	up to 9.95
S5D 320Z	ZF	C-transmission (S5-31)	from 9.95 (reinforced version)
GS5S31BZ (SMG)	ZF	C transmission	SMG
GS5-39DZ	ZF	F transmission	
S6S 420G	Getrag	D-transmission (226/6)	
S6S 420G (SMG)	Getrag	D transmission	SMG
S6S 560G	Getrag	E-transmission (286/6)	
GS6-37BZ	ZF	H-transmission	
GS6S37BZ (SMG)	ZF	H-transmission	
GS6-37DZ	ZF	H-transmission	
GS6-37BG	Getrag	H-transmission	
GS6-53BZ	ZF	G-transmission	
GS6-53DZ	ZF	G-transmission	
GS6-17BG	Getrag	I-transmission	
GS6-17DG	Getrag	I-transmission	
GS7S47BG (SMG)	Getrag	J-transmission (247)	SMG -7-gear
GS7D36SG	Getrag	DKG (436)	DKG -7-gear
GS6- 45BZ	ZF	K transmission	
GS6- 45DZ	ZF	K transmission	
GS6-60DA/BA	AISIN	BG6	

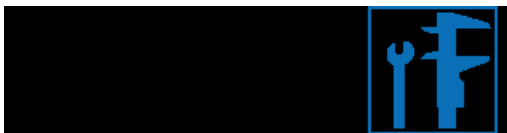
7DCT300	Getrag	7DCT	DKG -7-gear
GS6-58DG/BG	Getrag		
GS6-59DG/BG	Getrag		

Automatic transmission:

BMW designation	Manufacturer	Manufacturer designation	Remarks
A4S 200R	General Motors Powertrain	GM4	
A4S 270R	General Motors Powertrain	THM-R1w	Transmission wide-stepped
A4S 310R	General Motors Powertrain	THM-R1	
A5S 300J	Jatco	Jatco	
A5S 310Z	ZF	5HP-18	
A5S 325Z	ZF	5HP-19	
A5S 440Z	ZF	5HP-24	
A5S 560Z	ZF	5HP-30	
A5S 360R / 390R	GM	GM5	
GA6F21AW	AISIN	GA6F21AW	
GA6HP19Z	ZF	6HP19	
GA6HP26Z	ZF	6HP26	
GA6HP32Z	ZF	6HP32	
GA6L45R	GM	GM6	
GA6F21AW	AISIN	GA6F21AW	
GA8F22AW	AISIN	GA8F22AW	
GA8G45	AISIN	8G45	
GA8HP45Z	ZF	8HP45	
GA8HP50Z	ZF	8HP50	
GA8HP51Z	ZF	8HP51	
GA8HP70Z	ZF	8HP70	
GA8HP75Z	ZF	8HP75	
GA8HP76Z	ZF	8HP76	
GA8P70H	ZF	8P70	Hybrid
GA8P75H	ZF	8P75	Hybrid
GA8HP90Z	ZF	8HP90	
GA8HP95Z	ZF	8HP95	

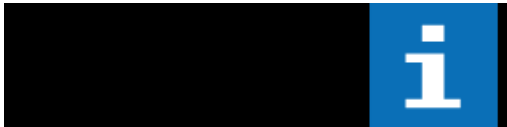
GA7AHSCD	Daimler	AHS-C	Hybrid
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23 ... Universal BMW transmission take-up



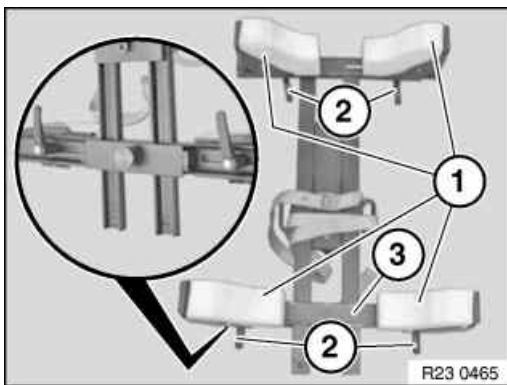
Special tools required:

- [00 2 030](#)
- [23 4 050](#)



Note:

- The universal transmission bracket is introduced for the E60 AWD
- Suitable for manual and automatic transmissions

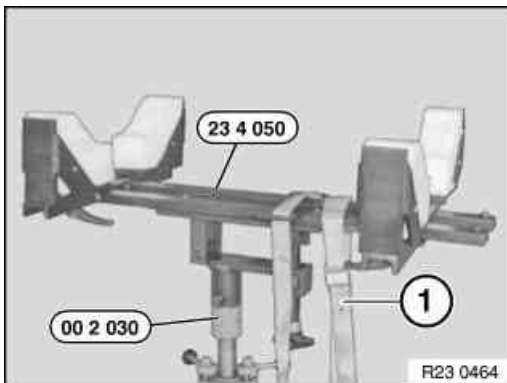


Important!

Front and rear supports (1) can be laterally adjusted by means of screws (2).

Carrier (3) of rear supports (1) can be longitudinally adjusted by means of screw.

Supports must be adapted in length and width to the transmission.



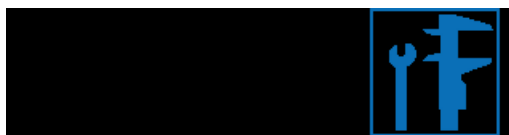
Supporting transmission:

Support transmission with special tools [23 4 050](#) , [00 2 030](#) .

Important!

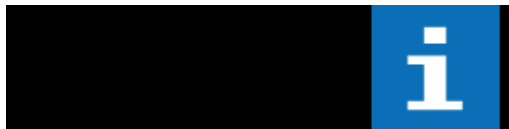
Transmission must be secured with tensioning strap (1).

23 Universal gearbox holder



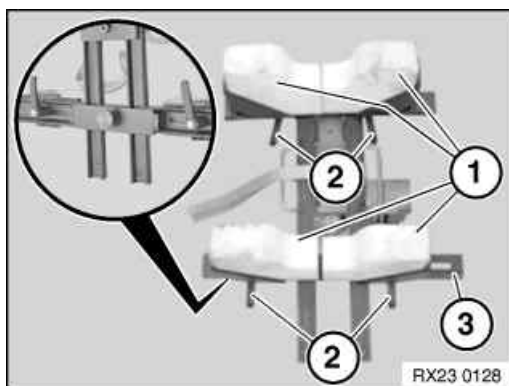
Special tools required:

- [00 2 030](#)
- [23 4 150](#)



Note:

- Suitable for manual gearbox and automatic transmission



Important!

Supports (1) can be adjusted at the side using screws (2).

Support (3) of rear supports (1) can be longitudinally adjusted by means of screw.

Supports must be adapted in length and width to the transmission.



Supporting transmission:

Support transmission with special tools [23 4 150](#) , [00 2 030](#) .

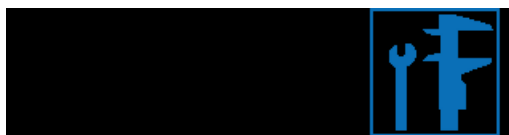
Joint (1) to height adjustment.

Joint (2) to inclination angle adjustment.

Important!

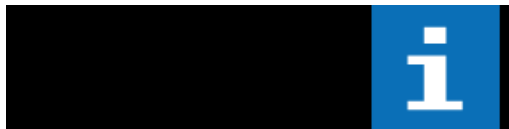
Transmission **must** be secured with tensioning strap (3).

23 Universal transmission retaining bridge



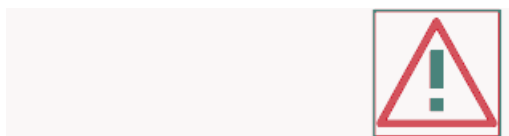
Special tools required:

- 0 495 187
- [24 0 200](#)



Note:

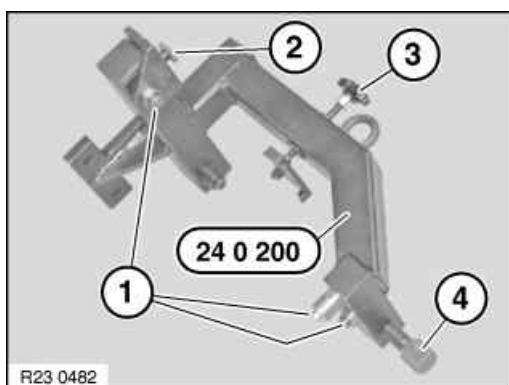
- Transmission retaining bridge [24 0 200](#) is suitable for manual and automatic transmissions



Attention!

The adapter and shaft must be adapted to positively lock with the transmission.

(Danger of injury)



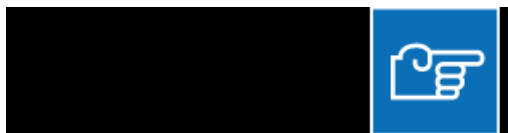
Adapt the adapter (1) and spindle with the thrust piece (3) on the transmission.

Adjust the length using the sliding piece (2).

Screw in spindle (4).

Attention!

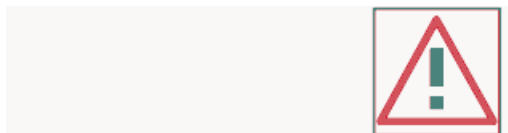
Before mounting on assembly stand 0 495 187 check retraining bridge for tight fit.



Attention!

After completion of work, check [transmission oil level](#).

Record the quantity of the automatic transmission fluid that was drained.

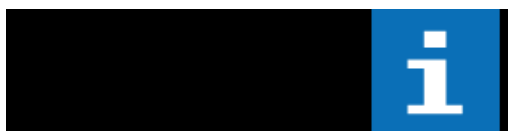


Attention!

Use only the [approved automatic transmission oil](#) in this automatic transmission.

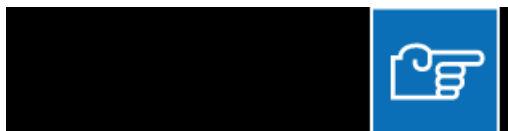
Otherwise the automatic transmission may incur extensive damage!

Do not drain oil before the transmission has cooled down.



Necessary preliminary tasks:

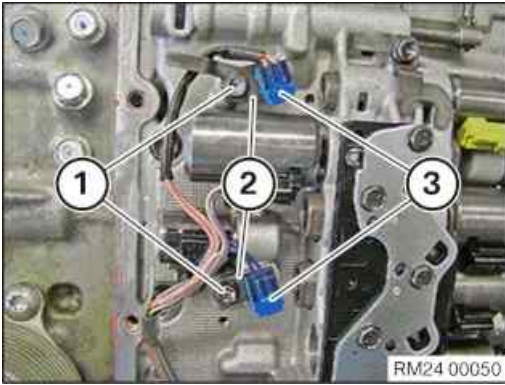
- Disconnect [negative battery cable](#).
- Drain off [transmission oil](#).
- [Remove left charge air duct](#).
- Remove [fan cowl](#).
- Remove [radiator](#).
- Remove [charge air cooler](#).
- Remove [EGS](#).



Removal:



Release screws and remove cover.



Release screws (1).

Remove locking plates (2) with oil temperature sensors (3).

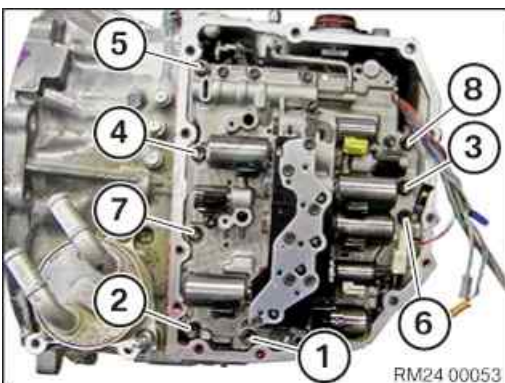


Disconnect connectors of magnet and pressure valves. **Attention!**
Pay attention to routing of cables.



Release output speed sensor connector (1) from bracket and place to side. **Attention!**

Observe connector (1) installation position.



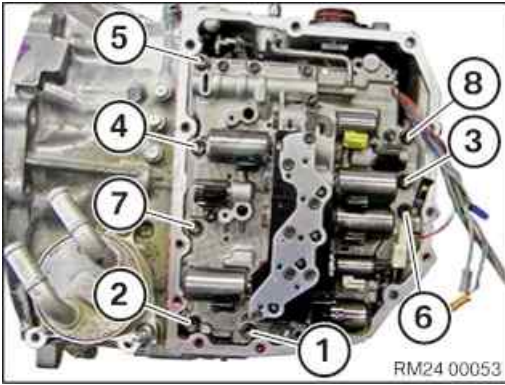
Attention!

Screws have different lengths.

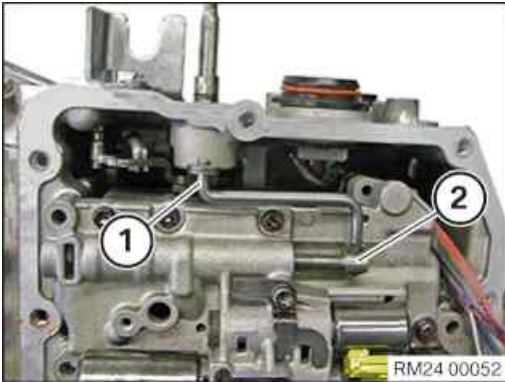
Numbers: 3, 4, 6, 7, 8 = 21mm.

Numbers: 2, 5 = 31mm.

Number: 1 = 51 mm.

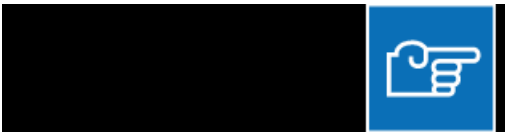


Evenly release screws in specified sequence.

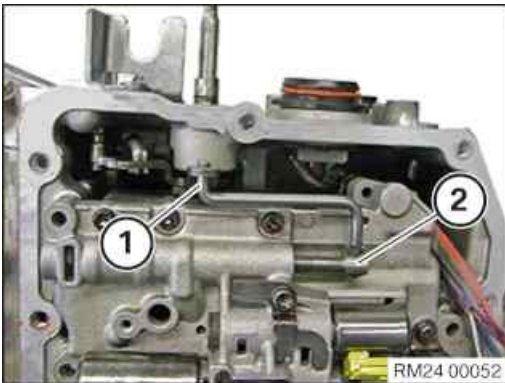


Disconnect lever (1) from gearshift shaft.

When removing selector unit, slide in gear selector valve (2) and hold down.
Remove selector unit.



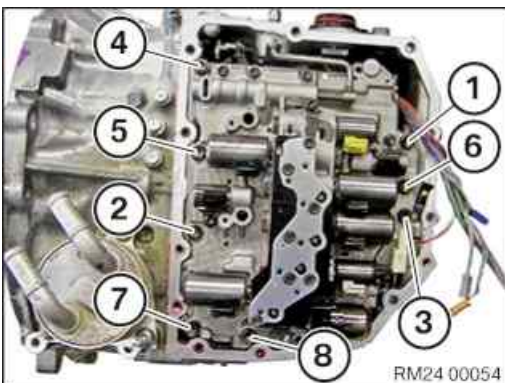
Installation:



Join shift unit to transmission.

Pull gear selector valve (2) slightly out of shift unit.

Insert lever (1) into gearshift shaft.



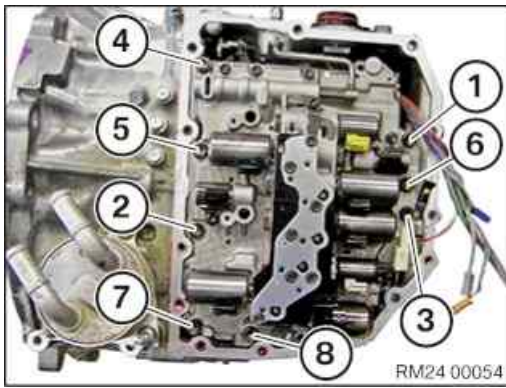
Attention!

Screws have different lengths.

Numbers: 1, 2, 3, 5, 6 = 21 mm.

Numbers: 4, 7 = 31 mm.

Number: 8 = 51 mm.



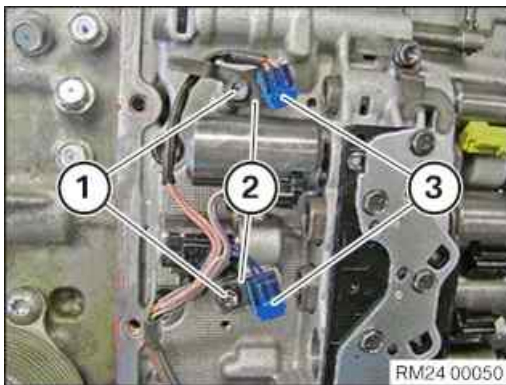
Attention!

Insert screws slightly during installation, align selector unit and tighten down in specified order.

Tightening torque: [24 30 2AZ](#).



Clip output speed sensor connector (1) in on bracket.



Install oil temperature sensors (3) with locking plates (2).

Tighten down screws (1).

Tightening torque: [24 30 3AZ](#).

Attention!

Coat gaskets with automatic transmission fluid.



Connect connectors of solenoid and pressure control valves and lock.



Parts: Renew screws and cover.

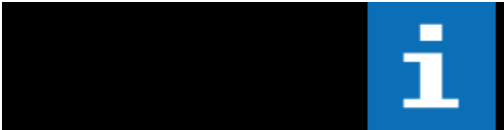
Clean sealing surface of transmission and completely remove the sealing compound.

Apply new liquid sealing compound.

Liquid sealing compound: for this, see **Product and Measures Management Aftersales measure 62281551**

Install cover and screw.

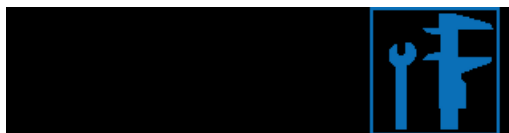
Tightening torque: [24 30 1AZ](#).



Required follow-up work:

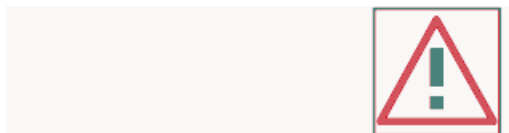
- Install [radiator](#).
- Install [fan cowl](#).
- Install [charge air cooler](#).
- Install left [charge air duct](#).
- Install [EGS](#).
- Add [transmission fluid](#).
- Connect [battery earth lead](#).

24 11 041 Removing and installing/replacing transmission oil cooler (AISIN F21FT/F22AW)



Special tools required:

- [16 1 070](#)



Important!

After completion of work, check [gearbox oil level](#).

Use only the approved [transmission oil](#).

Failure to comply with this requirement will result in serious damage to the automatic transmission!

Important!

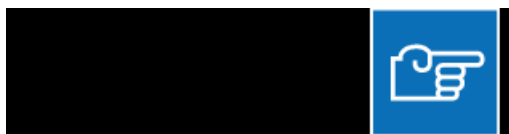
No dirt is allowed to enter the oil circuit.

Failure to comply with this requirement will result in serious damage to the automatic transmission!

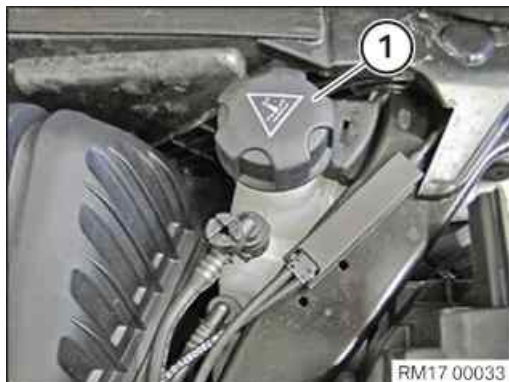


Necessary preliminary tasks:

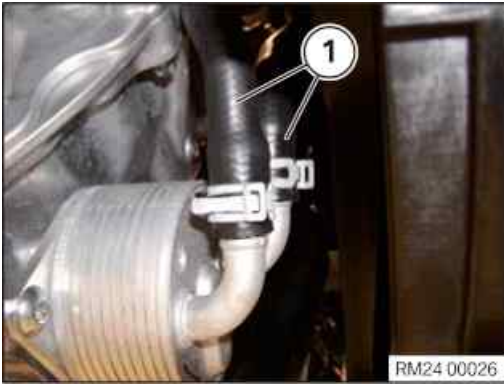
- Remove front [underbody protection](#).
- Remove [intake silencer housing](#).
- Drain off [transmission oil](#).



Removal:



Unscrew sealing cap (1) on coolant expansion tank.



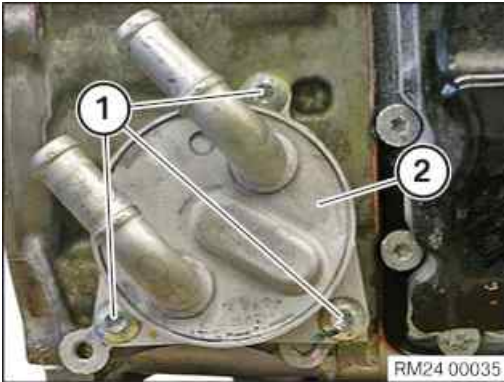
Important!

[Follow notes for carrying out repair work on the cooling system.](#)

Unfasten hose clamps.

Disconnect the coolant hoses (1) from the transmission oil cooler.

Catch the emerging coolant.



Release screw (1).

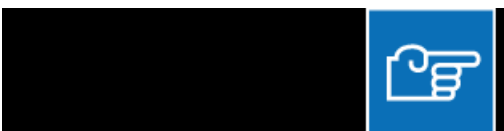
Remove transmission oil cooler (2).



Shut the openings on the transmission oil cooler using special tool [16 1 070](#).



Shut the openings on the transmission using special tool [16 1 070](#).



Installation:



Remove the special tool [16 1 070](#) from the openings in the transmission.



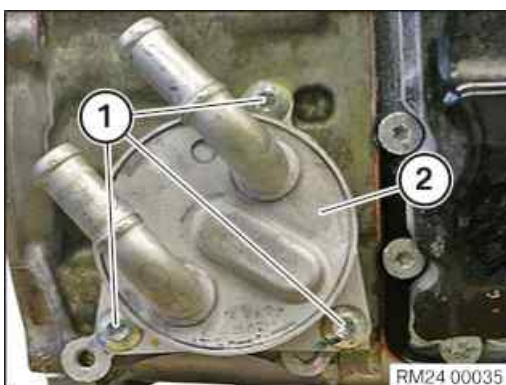
Remove special tool [16 1 070](#) from the openings on the transmission oil cooler.



Parts: Replace sealing rings (1).

Clean contact surfaces.

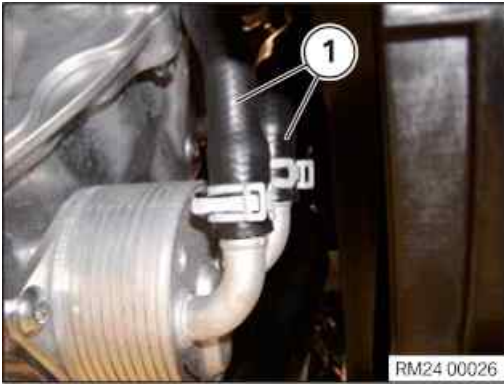
Coat sealing rings (1) with clean transmission oil.



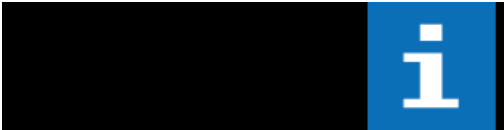
Install the transmission oil cooler (2).

Tighten screw (1).

Tightening torque [24 11 4AZ](#).



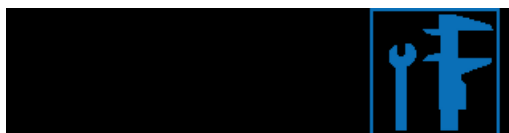
Slide the coolant hoses (1) onto the transmission oil cooler.
Secure hose clamps.



Required follow-up work:

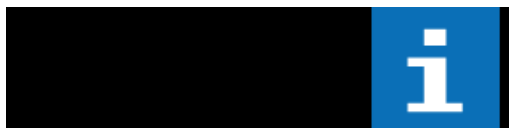
- Top up [coolant](#).
- Add [transmission fluid](#).
- Install [intake filter housing](#)
- Install front [underbody protection](#).
- Carry out vehicle test

24 21 516 Replacing radial shaft seal for drive shaft (AISIN F21FT)



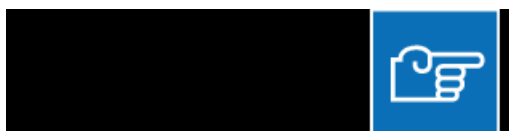
Special tools required:

- [23 0 490](#)
- [2 358 818](#)

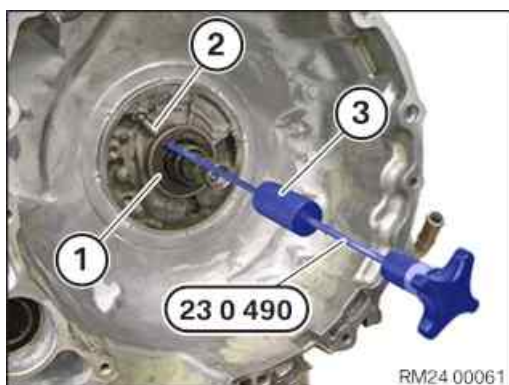


Necessary preliminary work:

- Remove [gearbox](#)
- Remove [torque converter](#)



Removal:



Punch a hole in radial shaft seal (1) at position (2) with centre punch.

Important!

Do not use a drill as drillings may result in transmission malfunction.

Screw special tool [23 0 490](#) into radial shaft seal (1).

Drive radial shaft seal (1) out with impact weight (3).



Installation:



Clean sealing surface.

Coat sealing lip of radial shaft seal with clean transmission oil.

Slide radial shaft seal (1) onto special tool [2 358 818](#) and drive in up to limit position.

Important!

Do not damage radial shaft seal (1).



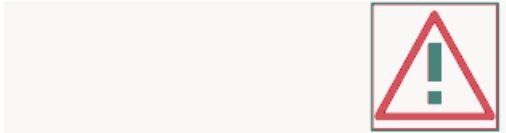
Required follow-up work:

- Install [torque converter](#)
- Install [transmission](#)

**Important!**

After completion of work, check [transmission oil level](#).

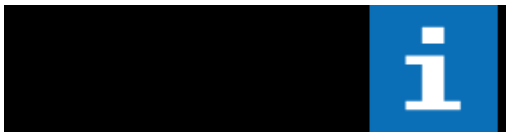
Make a note of drained ATF quantity.

**Important!**

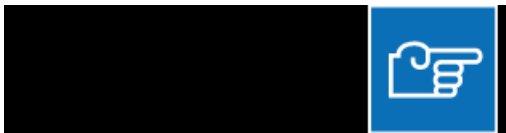
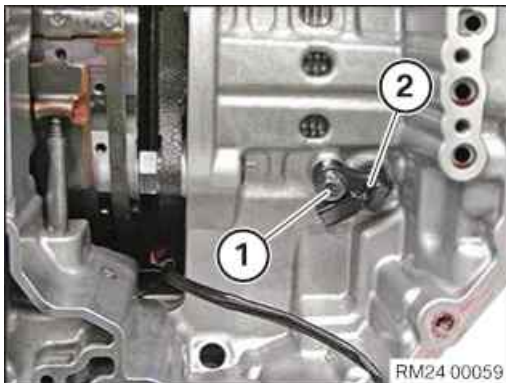
Use only the [approved automatic transmission oil](#) in this automatic transmission.

Otherwise the automatic transmission may incur extensive damage!

Do not drain oil before the transmission has cooled down.

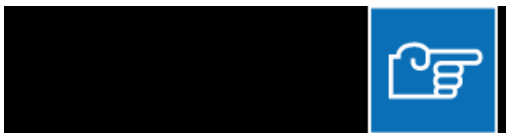
**Necessary preliminary work:**

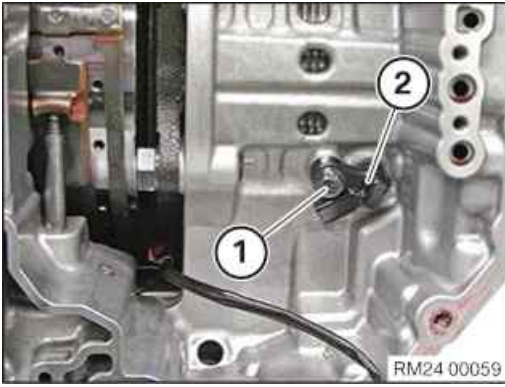
- Remove [hydraulic shift unit](#)

**Removal:**

Release screw (1).

Remove sensor (2).

**Installation:**

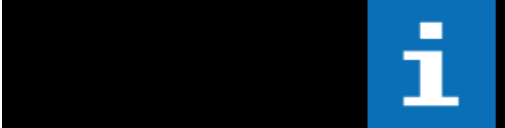


Install sensor (2) and fasten with screw (1).

Important!

Coat sealing ring with clean transmission oil.

Tightening torque: [24 35 1AZ](#).



Required follow-up work:

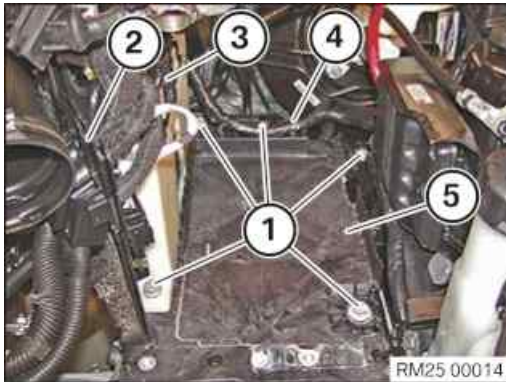
- Install [hydraulic shift unit](#)

**Attention!**

- Check breather for completeness after removal.
- Broken-off breather retaining lugs will result in serious damage to and failure of the automatic transmission.

**Necessary preliminary tasks:**

- [Remove vehicle battery](#)

**Removal:**

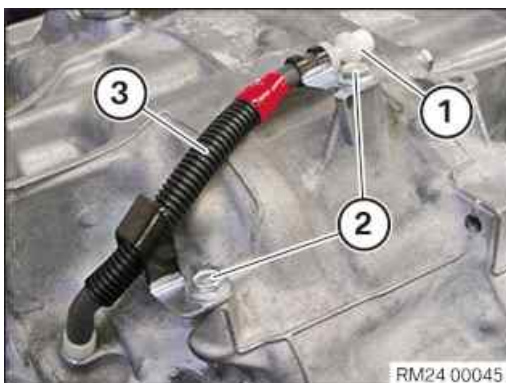
Release screws (1).

Release vehicle battery partition wall (2) from bracket and remove.

Release control unit (3) from bracket.

Detach wiring harness (4) from battery tray (5).

Remove battery tray (5).



Release screws (1).

Lever breather (2) out of transmission housing with a suitable tool.

Note:

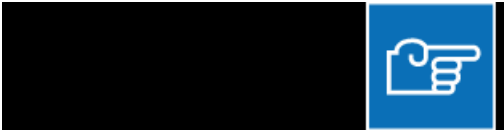
For vehicles from 01/2017 onwards, the bottom holder is not installed.

For vehicles up to 01/2017, the bottom holder (e.g. in the case of damage) can be omitted and need not be installed.

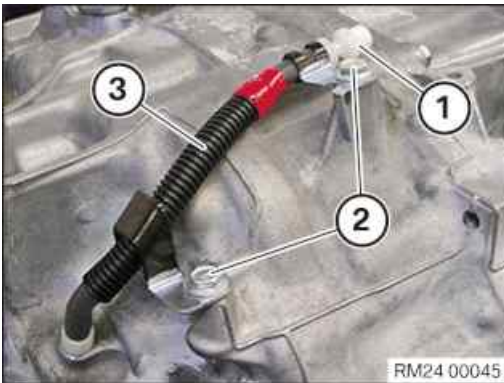


Check breather for completeness.

Retaining lugs (1) must not be broken off and be left behind in the transmission.



Installation:



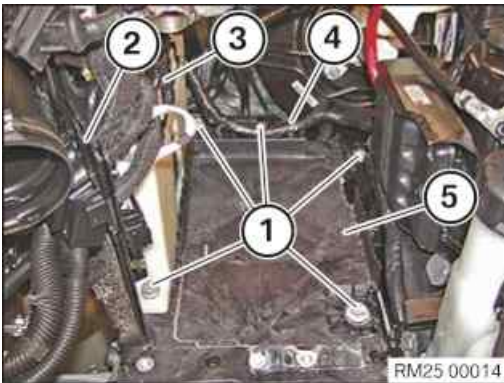
Push breather (2) into the transmission housing.

Tighten down screws (1).

Note:

For vehicles from 01/2017 onwards, the bottom holder is not installed.

For vehicles up to 01/2017, the bottom holder (e.g. in the case of damage) can be omitted and need not be installed.



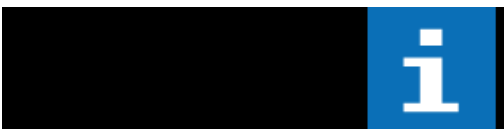
Install battery tray (5).

Tighten down screws (1).

Install wiring harness (4) on battery tray (5).

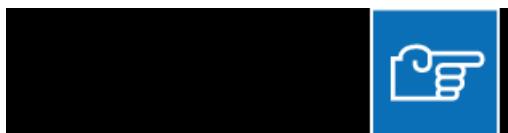
Insert control unit (3) in bracket.

Insert vehicle battery partition wall (2) in bracket.



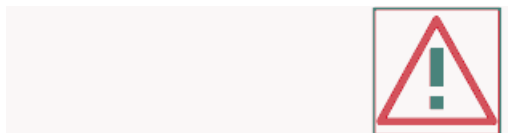
Required follow-up work:

- Install [vehicle battery](#)

**Important!**

After completion of work, check [transmission oil level](#).

Make a note of drained ATF quantity.

**Important!**

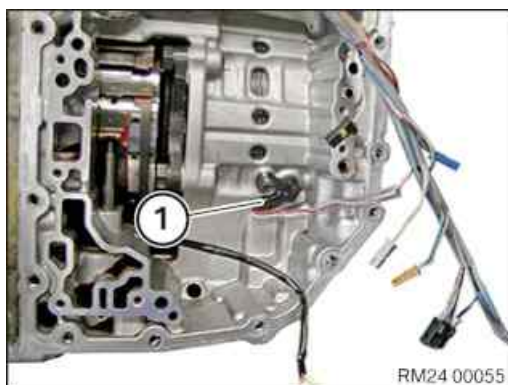
Use only the [approved automatic transmission oil](#) in this automatic transmission.

Otherwise the automatic transmission may incur extensive damage!

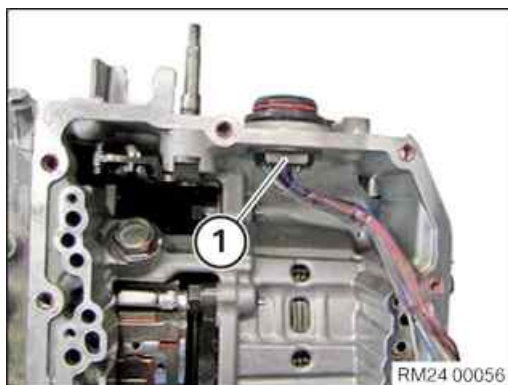
Do not drain oil before the transmission has cooled down.

**Necessary preliminary tasks:**

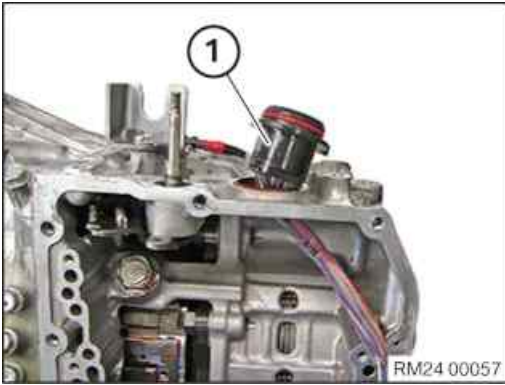
- Remove [hydraulic shift unit](#)

**Removal:**

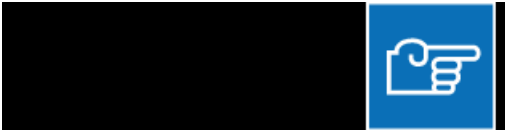
Disconnect connector (1).



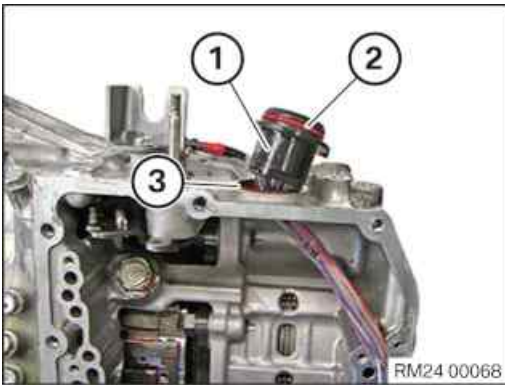
Unlock slide (1).



Pull wiring harness (1) out of transmission housing.



Installation:



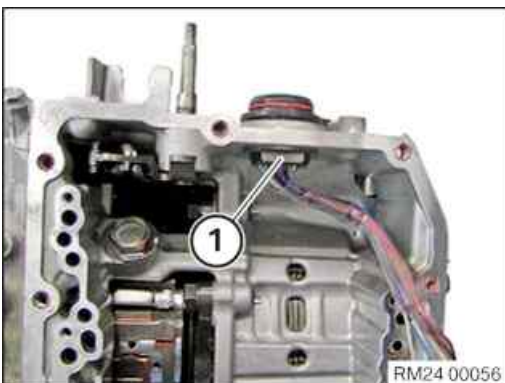
Parts: Renew gaskets (2) and (3).

Insert wiring harness (1) into transmission.



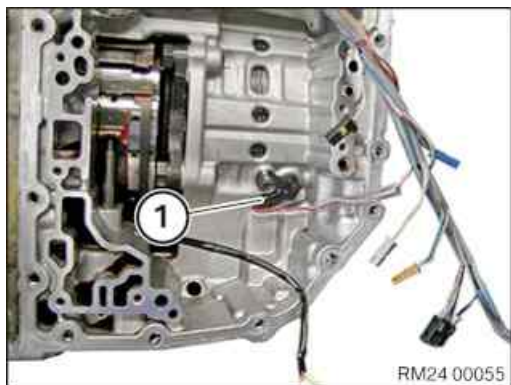
Important!

Connector of lug (1) must be fitted in transmission recess (2).

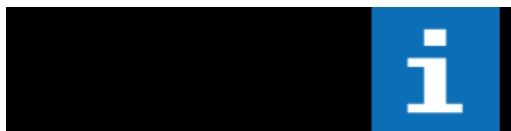


Parts: Renew slide (1).

Lock slide (1).



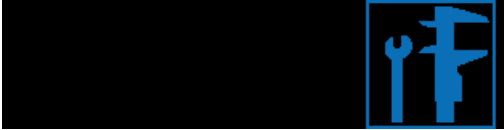
Connect and lock connector (1).



Required follow-up work:

- Install [hydraulic shift unit](#)

24 12 130 Removing and installing/replacing radial shaft seal for gearshift shaft (AISIN F21FT)



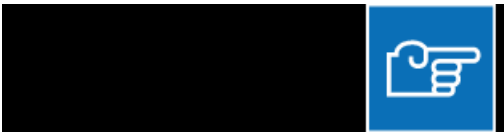
Special tools required:

- [24 4 290](#)



Necessary preliminary tasks:

- Remove [throttle valve assembly](#).
- Remove the [EGS control unit](#).



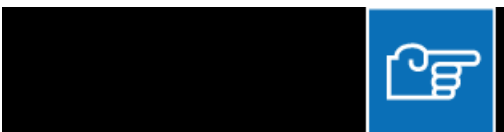
Removal:



Lever out sealing ring (1) with a screwdriver. **Important!**

Mask off the screwdriver tip.

The surfaces of the sealing ring making contact with the gearshift shaft and the transmission must not be damaged.



Installation:



Coat sealing lips of new radial shaft seal with clean transmission oil.

Drive in radial shaft seal with special tool [24 4 290](#) until it stops.



Required follow-up work:

- Install the [EGS control unit](#).
- Install [throttle body](#).

**Important!**

An incorrectly adjusted gearshift mechanism can result in tooth meshing noises be transmitted into the passenger compartment.

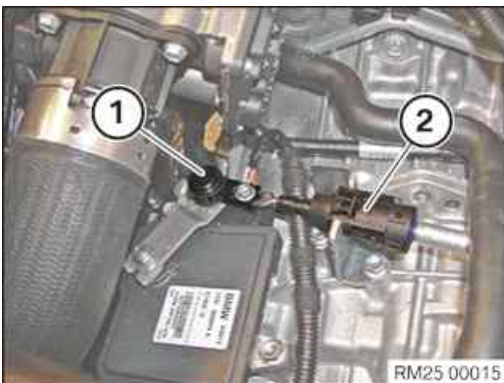
**Necessary preliminary tasks:**

- Move selector lever into "P" position
- Remove [intake filter housing](#)

**Removal:**

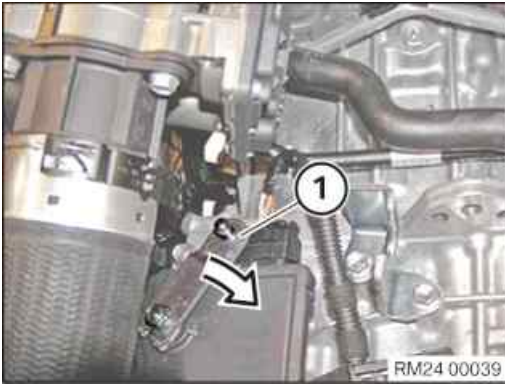
Release screw (1).

The head piece for tolerance compensation must be easily moveable before installation.

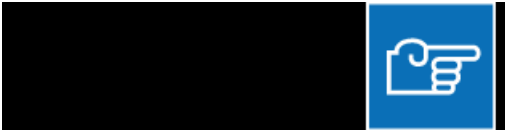


Release ball socket (1) from ball stud.

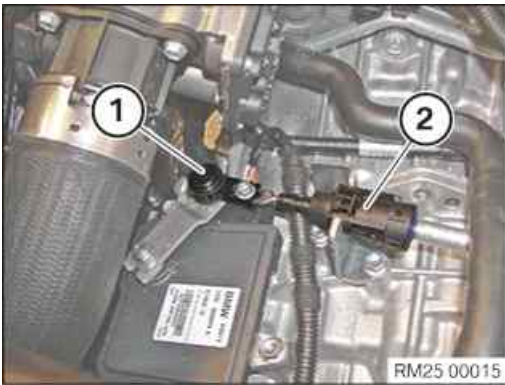
Release cable (2) from support angle.



Position "P" of selector lever (1) is the rearmost locked position.



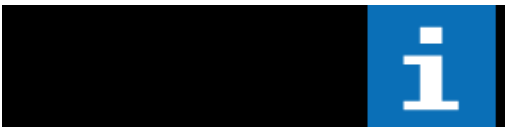
Installation:



Press in cable (2) into support angle.
Ensure cable counter support audibly engages.
Press on ball socket (1) onto ball stud.



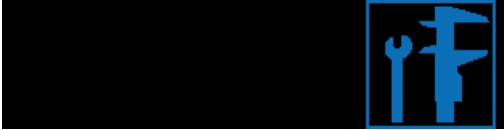
Tighten screw (1).
Tightening torque [24 51 1AZ](#).



Required follow-up work:

- Install [intake silencer housing](#)

24 12 130 Removing and installing/replacing radial shaft seal for gearshift shaft (AISIN F21FT)



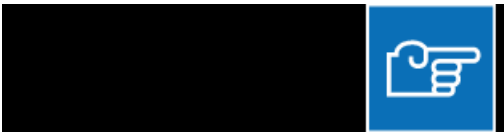
Special tools required:

- [24 4 290](#)



Necessary preliminary tasks:

- Remove [throttle valve assembly](#).
- Remove the [EGS control unit](#).



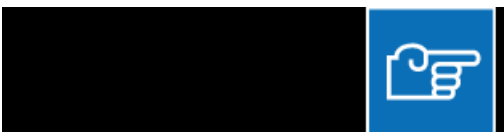
Removal:



Lever out sealing ring (1) with a screwdriver. **Important!**

Mask off the screwdriver tip.

The surfaces of the sealing ring making contact with the gearshift shaft and the transmission must not be damaged.



Installation:



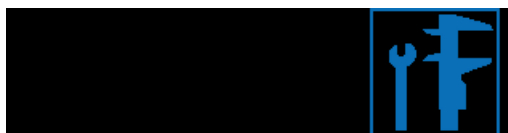
Coat sealing lips of new radial shaft seal with clean transmission oil.

Drive in radial shaft seal with special tool [24 4 290](#) until it stops.

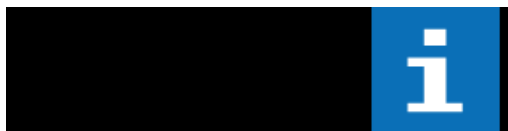


Required follow-up work:

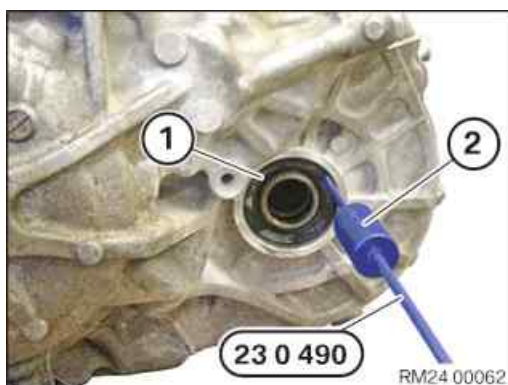
- Install the [EGS control unit](#).
- Install [throttle body](#).

**Special tools required:**

- [23 0 490](#)
- [2 413 037](#)
- [2 414 017](#)

**Necessary preliminary tasks:**

- [Remove](#) left output shaft
- Remove [intake silencer housing](#)

**Removal:**

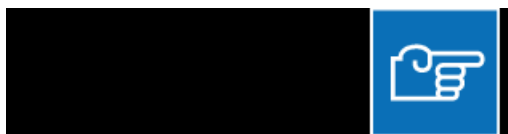
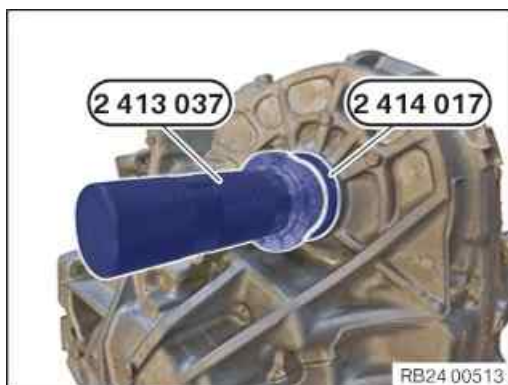
Drive a hole into radial shaft seal using a centre punch.

Important!

Do not use a drill as swarf may result in transmission malfunction.

Thread special tool [23 0 490](#) into radial shaft seal (1).

Drive out radial shaft seal (1) with impact weight (2).

**Installation:****Installation note:**

Coat sealing lips of new radial shaft seal with clean transmission oil.

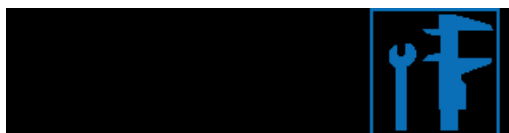
Drive in radial shaft seal with handle [2 413 037](#) and special tool [2 414 017](#) till the limit position.



Required follow-up work:

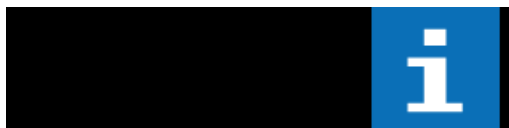
- Install left [output shaft](#)
- Check [gearbox oil level](#)
- Install [intake silencer housing](#)

24 21 516 Replacing radial shaft seal for drive shaft (AISIN F21FT)



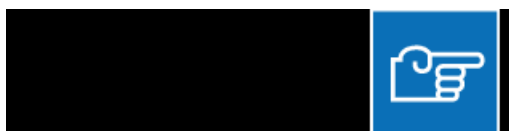
Special tools required:

- [23 0 490](#)
- [2 358 818](#)

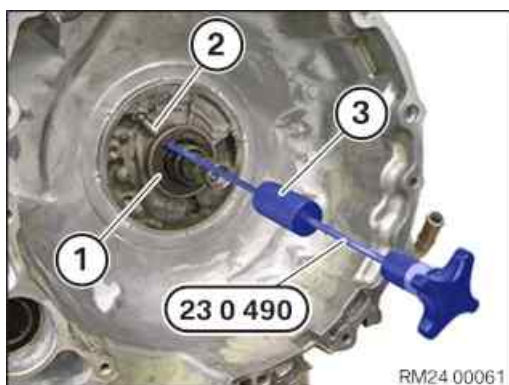


Necessary preliminary work:

- Remove [gearbox](#)
- Remove [torque converter](#)



Removal:



Punch a hole in radial shaft seal (1) at position (2) with centre punch.

Important!

Do not use a drill as drillings may result in transmission malfunction.

Screw special tool [23 0 490](#) into radial shaft seal (1).

Drive radial shaft seal (1) out with impact weight (3).



Installation:



Clean sealing surface.

Coat sealing lip of radial shaft seal with clean transmission oil.

Slide radial shaft seal (1) onto special tool [2 358 818](#) and drive in up to limit position.

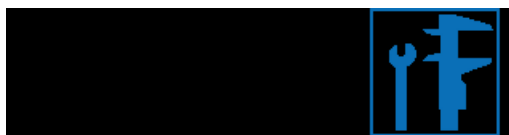
Important!

Do not damage radial shaft seal (1).

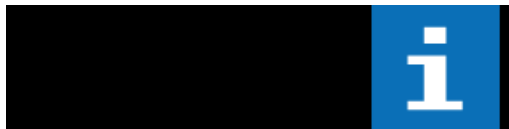


Required follow-up work:

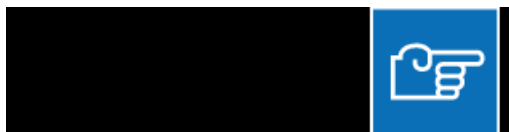
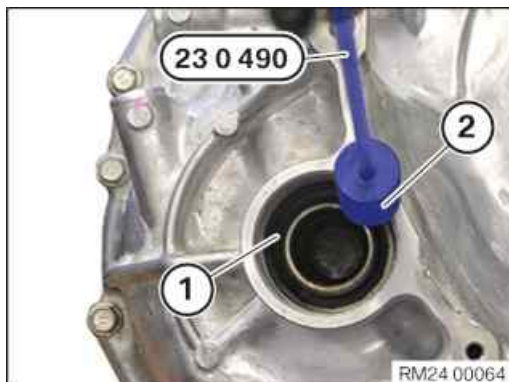
- Install [torque converter](#)
- Install [transmission](#)

**Special tools required:**

- [23 0 490](#)
- [2 358 465](#)

**Necessary preliminary work:**

- [Remove](#) right output shaft.
- Remove [intake silencer housing](#).

**Removal:**

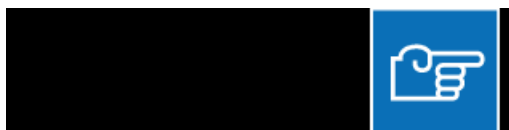
Drive a hole into radial shaft seal using a centre punch.

Important!

Do not use a drill as drillings may result in transmission malfunction.

Screw special tool [23 0 490](#) into radial shaft seal.

Drive out radial shaft seal (1) with impact weight (2).

**Installation:****Installation note:**

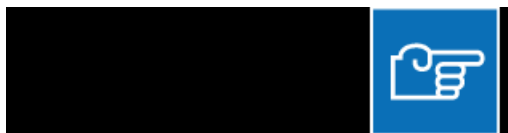
Coat sealing lips of new radial shaft seal with clean transmission oil.

Drive shaft seal firmly home with special tool [2 358 465](#).



Required follow-up work:

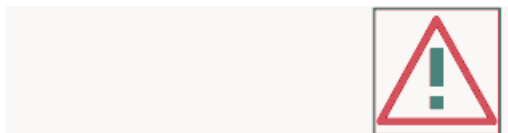
- Install right [output shaft](#).
- Check [transmission oil level](#).
- Install [intake silencer housing](#).



Attention!

After completion of work, check [transmission oil level](#).

Record the quantity of the automatic transmission fluid that was drained.

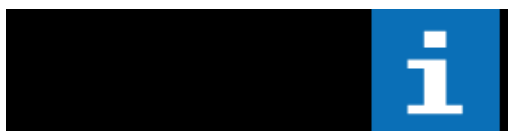


Attention!

Use only the [approved automatic transmission oil](#) in this automatic transmission.

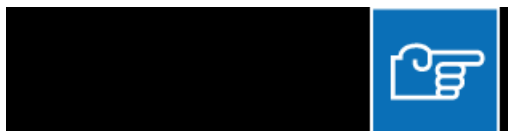
Otherwise the automatic transmission may incur extensive damage!

Do not drain oil before the transmission has cooled down.



Necessary preliminary tasks:

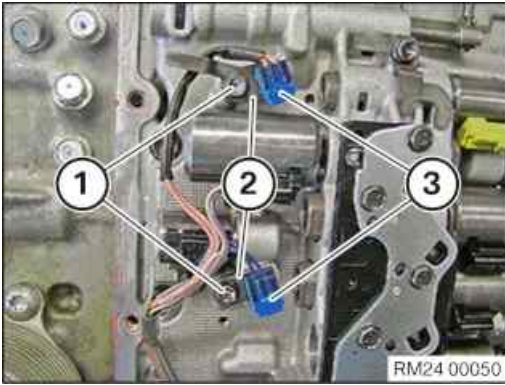
- Disconnect [negative battery cable](#).
- Drain off [transmission oil](#).
- [Remove left charge air duct](#).
- Remove [fan cowl](#).
- Remove [radiator](#).
- Remove [charge air cooler](#).
- Remove [EGS](#).



Removal:



Release screws and remove cover.



Release screws (1).

Remove locking plates (2) with oil temperature sensors (3).

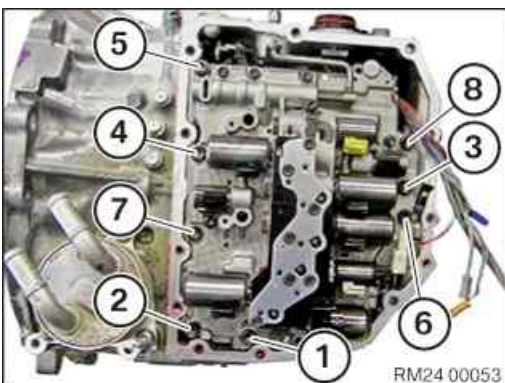


Disconnect connectors of magnet and pressure valves. **Attention!**
Pay attention to routing of cables.



Release output speed sensor connector (1) from bracket and place to side. **Attention!**

Observe connector (1) installation position.



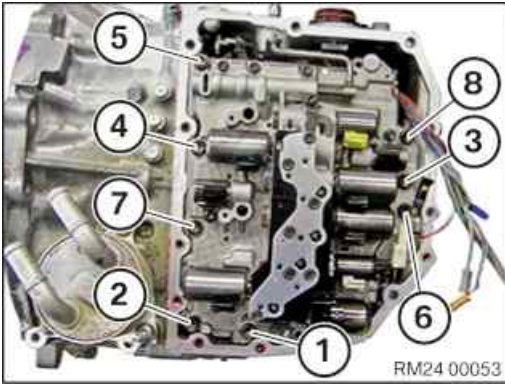
Attention!

Screws have different lengths.

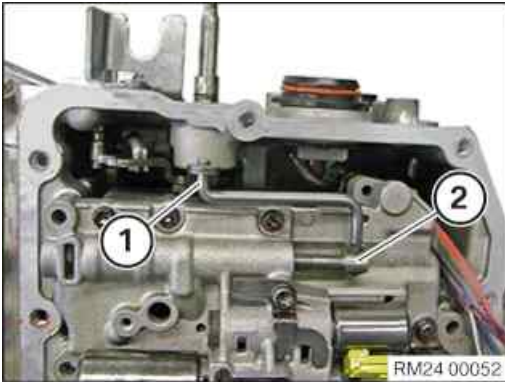
Numbers: 3, 4, 6, 7, 8 = 21mm.

Numbers: 2, 5 = 31mm.

Number: 1 = 51 mm.

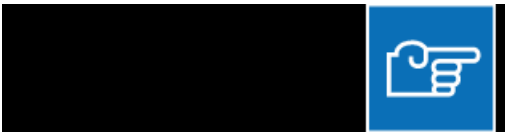


Evenly release screws in specified sequence.

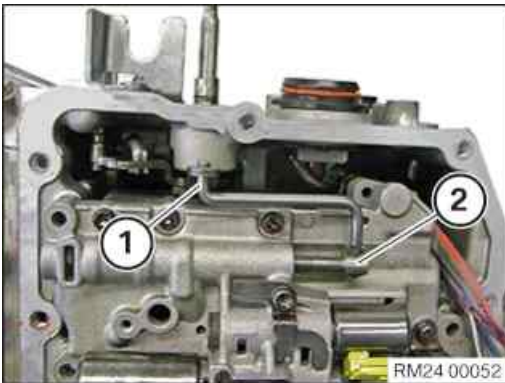


Disconnect lever (1) from gearshift shaft.

When removing selector unit, slide in gear selector valve (2) and hold down.
Remove selector unit.



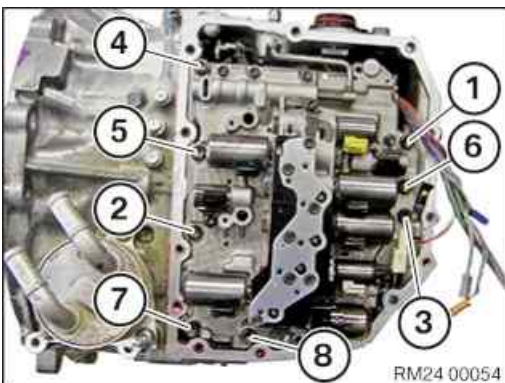
Installation:



Join shift unit to transmission.

Pull gear selector valve (2) slightly out of shift unit.

Insert lever (1) into gearshift shaft.



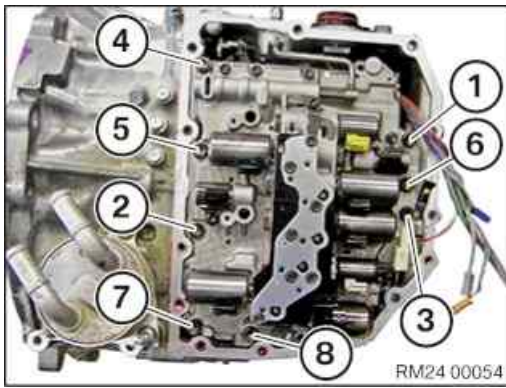
Attention!

Screws have different lengths.

Numbers: 1, 2, 3, 5, 6 = 21 mm.

Numbers: 4, 7 = 31 mm.

Number: 8 = 51 mm.



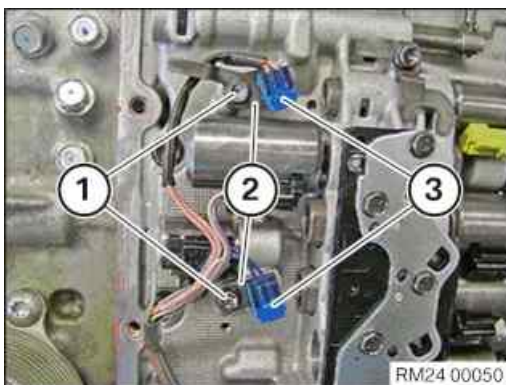
Attention!

Insert screws slightly during installation, align selector unit and tighten down in specified order.

Tightening torque: [24 30 2AZ](#).



Clip output speed sensor connector (1) in on bracket.



Install oil temperature sensors (3) with locking plates (2).

Tighten down screws (1).

Tightening torque: [24 30 3AZ](#).

Attention!

Coat gaskets with automatic transmission fluid.



Connect connectors of solenoid and pressure control valves and lock.



Parts: Renew screws and cover.

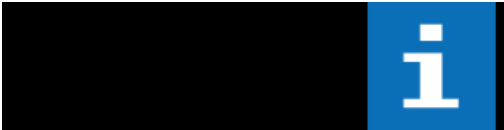
Clean sealing surface of transmission and completely remove the sealing compound.

Apply new liquid sealing compound.

Liquid sealing compound: for this, see **Product and Measures Management Aftersales measure 62281551**

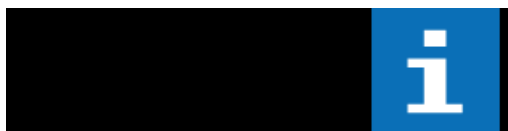
Install cover and screw.

Tightening torque: [24 30 1AZ](#).

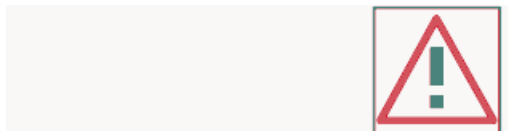


Required follow-up work:

- Install [radiator](#).
- Install [fan cowl](#).
- Install [charge air cooler](#).
- Install left [charge air duct](#).
- Install [EGS](#).
- Add [transmission fluid](#).
- Connect [battery earth lead](#).



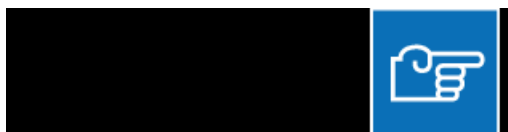
In the event of an open circuit, e.g. discharged battery or electrical fault, the parking lock must be unlocked manually, otherwise the wheels will be blocked and the vehicle cannot be moved.



Attention!

Secure vehicle against rolling, e.g. with chocks.

When manually unlocking the parking lock, apply the brake, as there is otherwise a risk that the motor vehicle will roll when manually unlocking the parking lock.



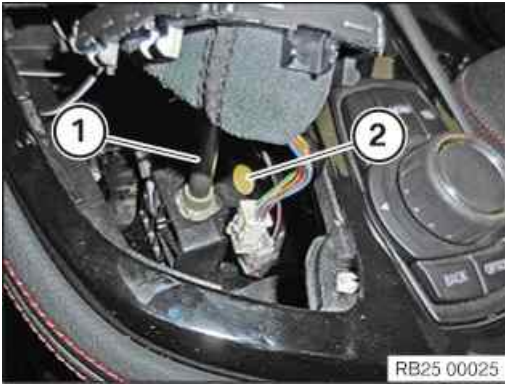
Removal:



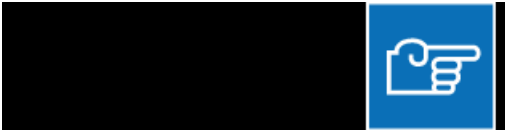
Unclip lever cuff (1) and pull upwards.



Unlock connector (1).



Push yellow release lever (2) down and hold.
Move selector lever (1) in "R" direction and engage "N" position.
Let go of the yellow release lever (2) again.



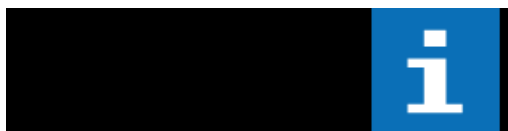
Installation:



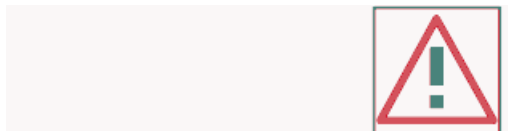
Lock connector (1).



Push lever cuff (1) down until it engages.



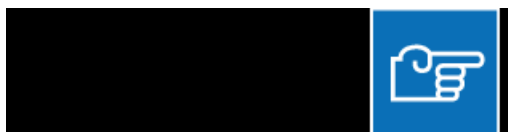
In the event of an open circuit, e.g. discharged battery or electrical fault, the parking lock must be unlocked manually, otherwise the wheels will be blocked and the vehicle cannot be moved.



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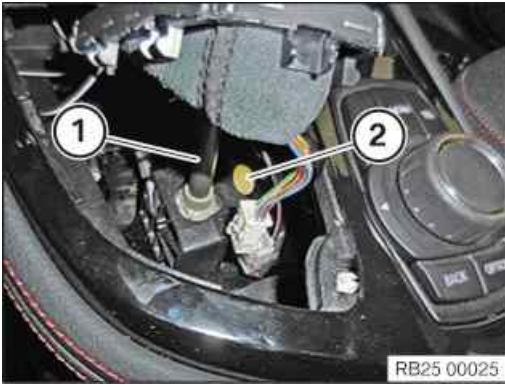
Removal:



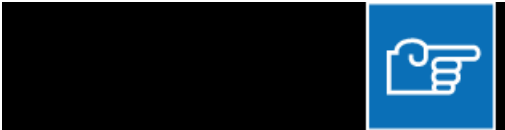
Unclip lever cuff (1) and pull upwards.



Unlock connector (1).



Push yellow release lever (2) down and hold.
Move selector lever (1) in "R" direction and engage "N" position.
Let go of the yellow release lever (2) again.



Installation:



Lock connector (1).

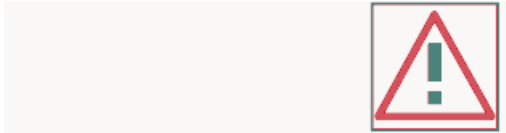


Push lever cuff (1) down until it engages.

**Important!**

After completion of work, check [transmission oil level](#).

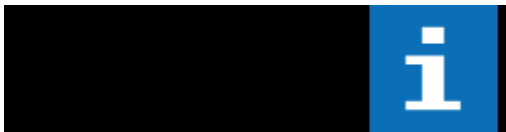
Make a note of drained ATF quantity.

**Important!**

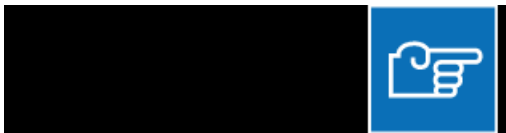
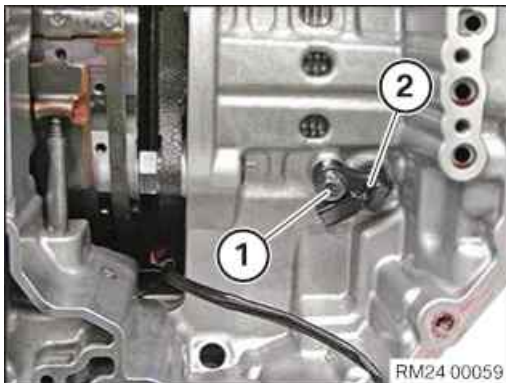
Use only the [approved automatic transmission oil](#) in this automatic transmission.

Otherwise the automatic transmission may incur extensive damage!

Do not drain oil before the transmission has cooled down.

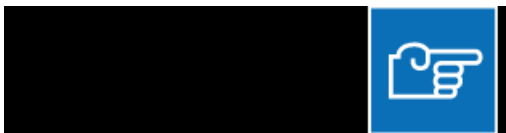
**Necessary preliminary work:**

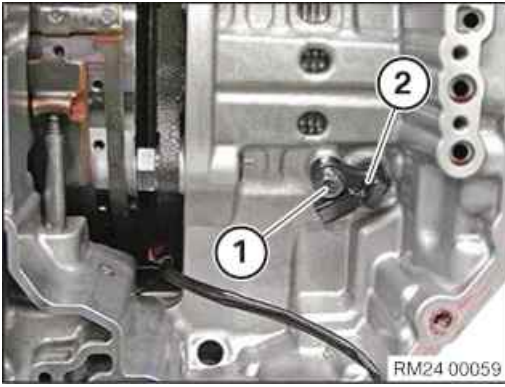
- Remove [hydraulic shift unit](#)

**Removal:**

Release screw (1).

Remove sensor (2).

**Installation:**

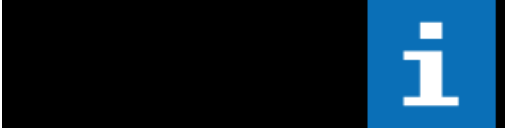


Install sensor (2) and fasten with screw (1).

Important!

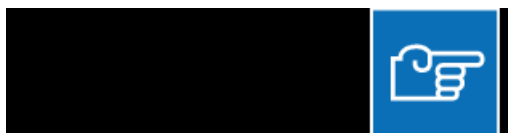
Coat sealing ring with clean transmission oil.

Tightening torque: [24 35 1AZ](#).



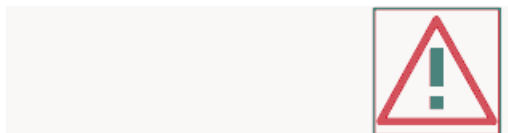
Required follow-up work:

- Install [hydraulic shift unit](#)

**Important!**

After completion of work, check [transmission oil level](#).

Make a note of drained ATF quantity.

**Important!**

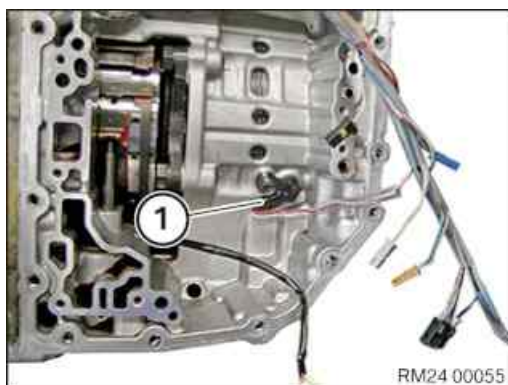
Use only the [approved automatic transmission oil](#) in this automatic transmission.

Otherwise the automatic transmission may incur extensive damage!

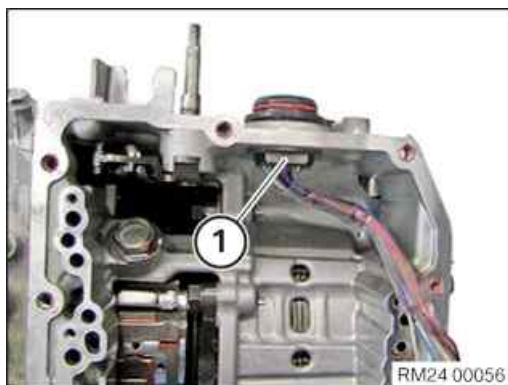
Do not drain oil before the transmission has cooled down.

**Necessary preliminary tasks:**

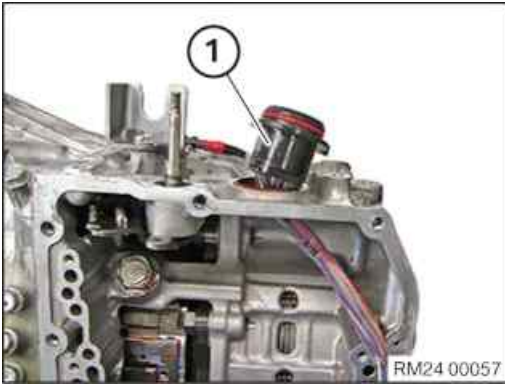
- Remove [hydraulic shift unit](#)

**Removal:**

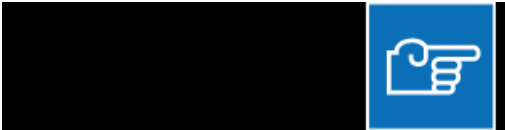
Disconnect connector (1).



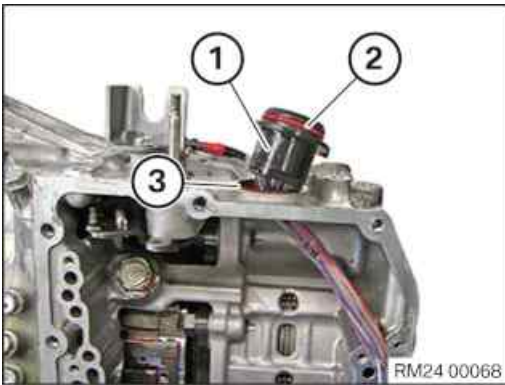
Unlock slide (1).



Pull wiring harness (1) out of transmission housing.



Installation:



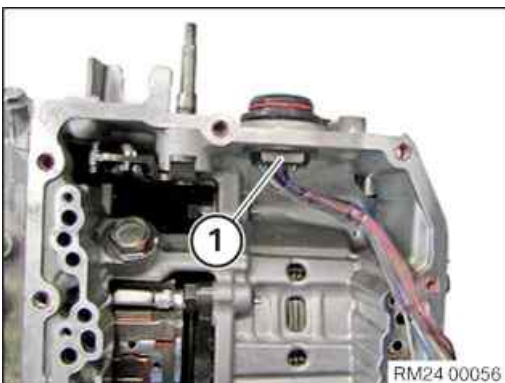
Parts: Renew gaskets (2) and (3).

Insert wiring harness (1) into transmission.



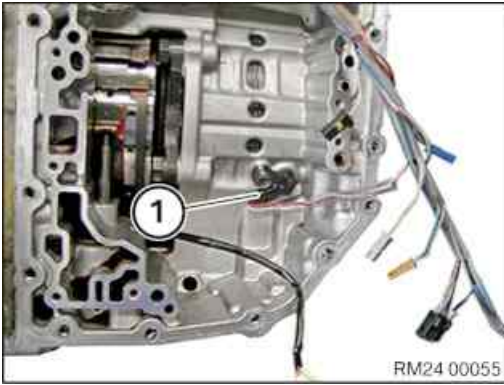
Important!

Connector of lug (1) must be fitted in transmission recess (2).

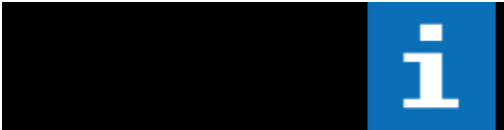


Parts: Renew slide (1).

Lock slide (1).

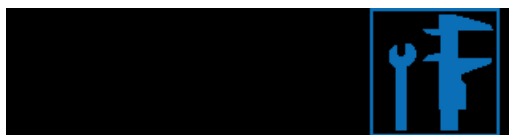


Connect and lock connector (1).

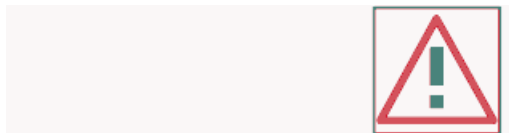


Required follow-up work:

- Install [hydraulic shift unit](#)

**Special tools required:**

- [00 2 550](#)
- [24 4 260](#)

**Important!**

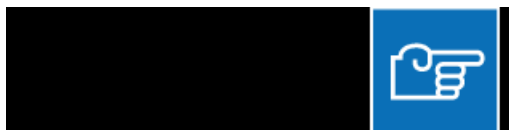
After completion of repair work, check the [transmission oil level](#).

[Use only approved transmission oil.](#)

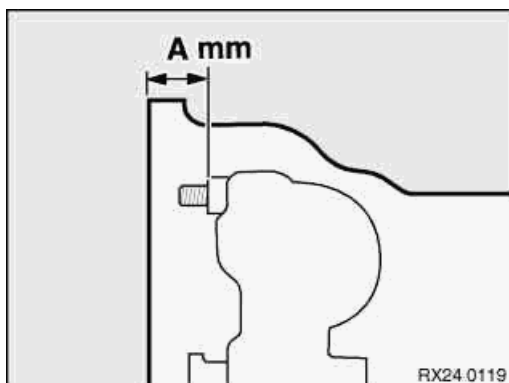
Failure to comply with this instruction will result in serious damage to the transmission.

**Necessary preliminary tasks:**

- Drain off [transmission oil](#).
- Remove [automatic transmission](#).

**Removal:**

Determine distance between contact surface and surface (1) of threaded hole in torque converter with special tool [00 2 550](#).

**Note:**

Measured value must be greater than A.

A = 13,7 mm



Screw special tool [24 4 260](#) to torque converter.

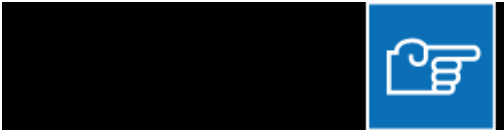
Remove torque converter.

Note:

Do not damage radial shaft seal when removing torque converter.

Remove torque converter and set down vertically.

When torque converter is removed, transmission oil flows out.



Installation:

Push torque converter with special tool [24 4 260](#) through radial shaft seal onto transmission shaft as far as it will go.

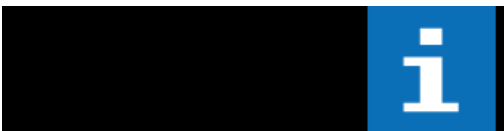
Press torque converter by hand into converter housing. Converter hub recess must snap into place in driver of pump impeller. The torque converter must be felt to slip inwards.

Important!

Do not damage radial shaft seal and bearing.

If the torque converter is not correctly installed, the driver of the transmission oil pump may be damaged when the transmission is flanged to the engine.

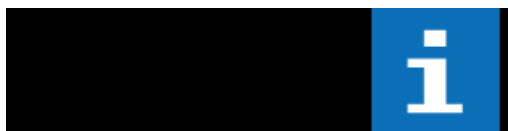
Align the torque converter in such a way that the recess on the converter hub lines up with the oil pump driver.



Required follow-up work:

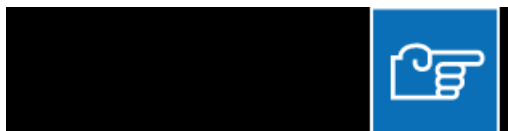
- Install [automatic transmission](#).
- Add [transmission oil](#).

24 61 005 Removing and installing or replacing EGS (AISIN F21FT)

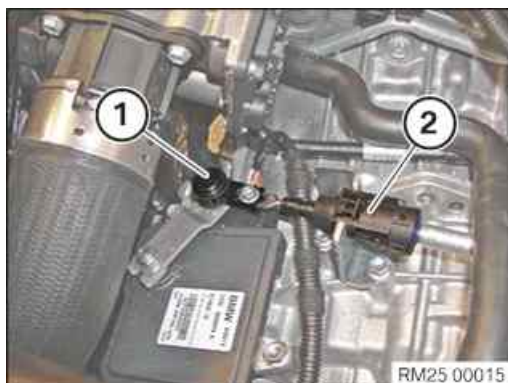


Necessary preliminary tasks:

- Clamp off [battery earth lead](#).
- [Remove intake silencer housing](#).



Removal:



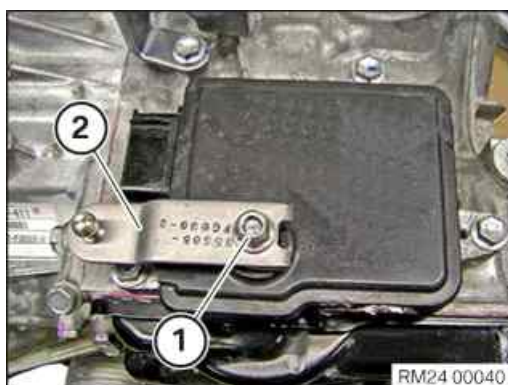
Release ball socket (1) from ball stud.

Release the cable (2) from the support angle.



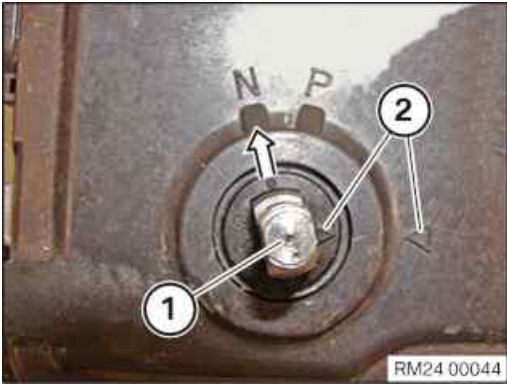
Unlock connector (1).

Release clamp (2) with wiring harness from transmission and place to one side.

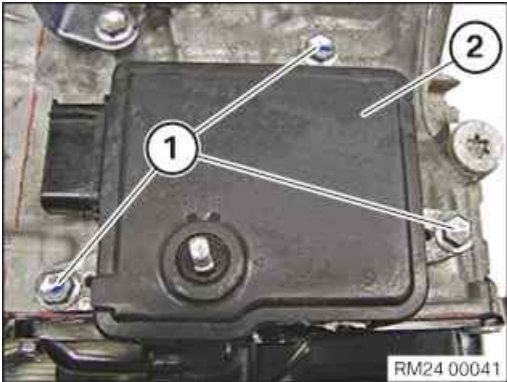


Slacken nut (1).

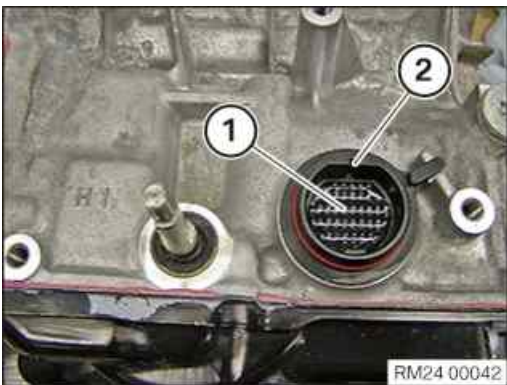
Remove selector lever (2).



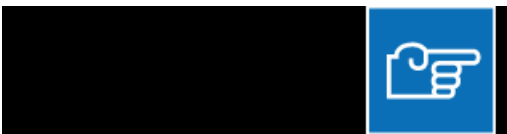
Before removal of the EGS, lever (1) must point towards "N".
The arrows (2) must point to each other.



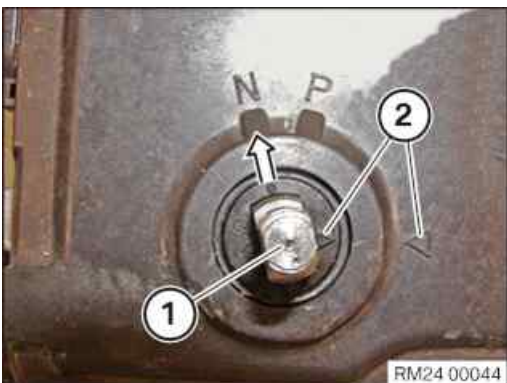
Release screws (1).
Remove EGS (2).



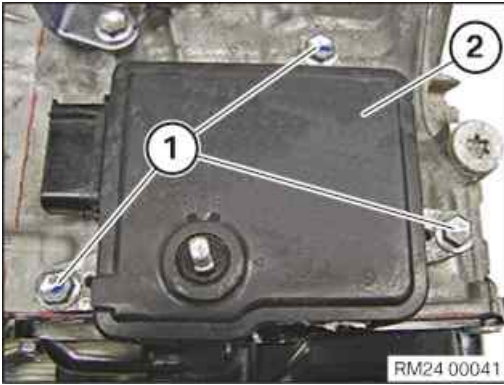
Pins (1) of sealing sleeve (2) must not be touched.



Installation:



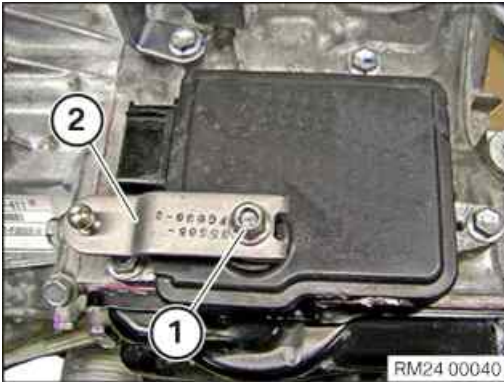
Before installation of the EGS, lever (1) must point towards "N".
The arrows (2) must point to each other.



Install EGS (2).

Tighten down screws (1).

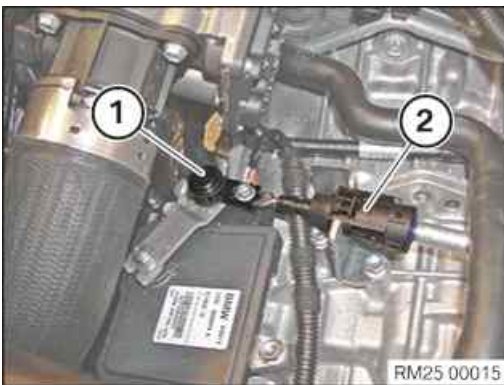
Tightening torque [24 61 1AZ](#).



Install selector lever (2).

Tighten nut (1).

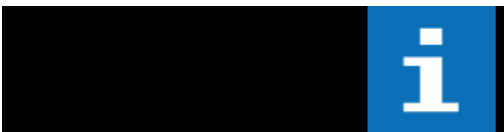
Tightening torque [24 61 2AZ](#).



Press in cable (2) into the support angle.

Ensure cable counter support audibly engages.

Press on ball socket (1) onto ball stud.



Required follow-up work:

- Install [intake silencer housing](#).
- Connect [battery earth lead](#).



Replacement:

Carry out [vehicle programming/encoding](#).



Caution!

Use only the [approved automatic transmission oil](#) in this automatic transmission.

Failure to comply with this requirement will result in serious damage to the automatic transmission!



Note:

Level out oil level in automatic transmission via overflow connector.



Necessary preliminary work:

- Remove [front underbody protection](#)
- Remove [intake filter housing](#)



Removal:



Move selector lever to "P" position.

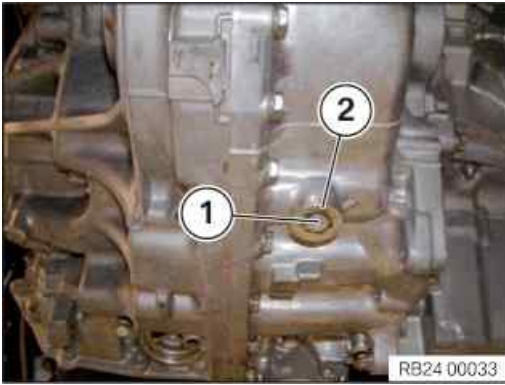
The vehicle must be horizontal and secured against rolling off.

Connect diagnosis system.

Select Service function: Transmission fluid adjustment.



Release oil filler plug (1) with Torx T55.

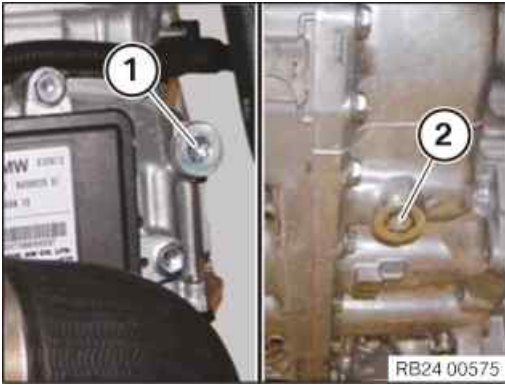


Draining transmission oil:

Release overflow plug (1) with Torx T40.

Undo oil drain plug (2) using 17 mm hexagon socket.

Tightening torque [24 11 1AZ](#).



Top up transmission oil. (Transmission oil has been drained)

Release oil filler plug (1) from engine compartment.

Tightening torque [24 11 3AZ](#).

Loosen the overflow plug (2) below at the transmission.

Tightening torque [24 11 2AZ](#).

Top up automatic transmission fluid at oil filler plug (1) until oil emerges at overflow plug (2).

Start engine and run at idle speed.

Check whether automatic transmission fluid emerges at overflow plug (2).

If not, fill automatic transmission fluid at the oil filler plug (1).

Actuate footbrake and at idle shift through all gears "P" to "D" twice for more than 2 seconds.

Then set switch to "P" position.

Recheck whether automatic transmission fluid emerges at the overflow plug (2).

Check the temperature of the automatic transmission fluid with the diagnosis system.

Increase temperature of automatic transmission fluid to 35 ... 45 °C.

Top up automatic transmission fluid until it flows over.

Screw in oil filler plug (1) and overflow plug (2).

Tightening torque [24 11 2/3AZ](#).

Installation note:

Parts: Renew sealing rings.

Check oil level (transmission oil temperature must be between 35 and 45°C):

Undo oil filler plug (1).

Slacken overflow plug (2).

Tightening torque [24 11 2/3AZ](#).

Start engine and run at idle speed.

Unscrew overflow plug (2).

Check whether automatic transmission fluid emerges at overflow plug (2).

If not, fill automatic transmission fluid at the oil filler plug (1).

Top up automatic transmission fluid until it overflows at overflow plug (2).

Actuate footbrake and at idle shift through all gears "P" to "D" twice for more than 2 seconds.

Move switch to "P" position.

Check oil level again.

Seal screws when the oil emerges slightly from overflow plug (2).

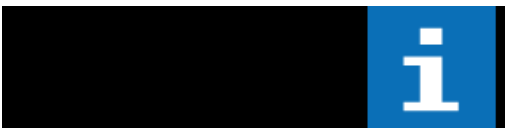
Tightening torque [24 11 2/3AZ](#).

Installation note:

Parts: Renew sealing rings.

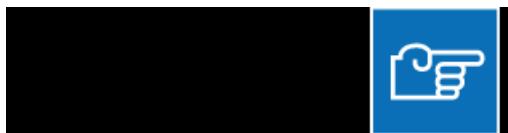
Required follow-up work:

- Install front [underbody protection](#)
- Install [intake silencer housing](#)
- Delete fault memory





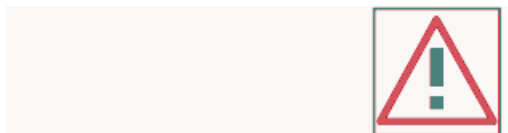
Delete fault memory with the diagnosis system.



Attention!

After completion of work, check [transmission oil level](#).

Record the quantity of the automatic transmission fluid that was drained.

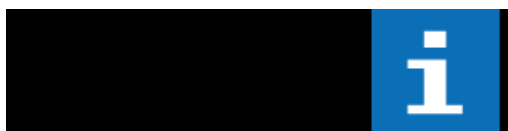


Attention!

Use only the [approved automatic transmission oil](#) in this automatic transmission.

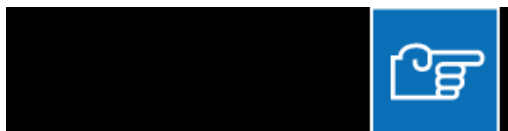
Otherwise the automatic transmission may incur extensive damage!

Do not drain oil before the transmission has cooled down.



Necessary preliminary tasks:

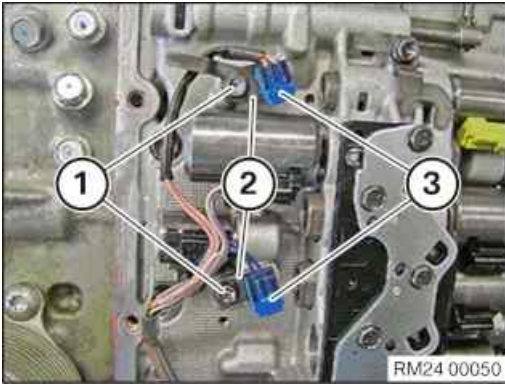
- Disconnect [negative battery cable](#).
- Drain off [transmission oil](#).
- [Remove left charge air duct](#).
- Remove [fan cowl](#).
- Remove [radiator](#).
- Remove [charge air cooler](#).
- Remove [EGS](#).



Removal:



Release screws and remove cover.



Release screws (1).

Remove locking plates (2) with oil temperature sensors (3).

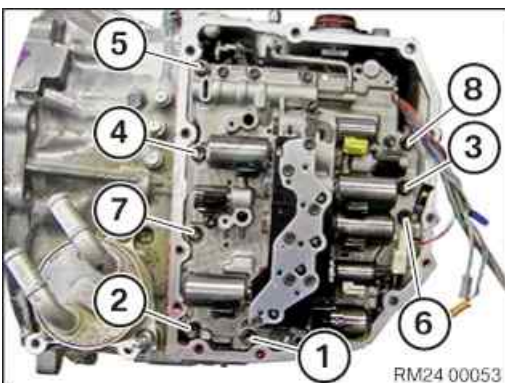


Disconnect connectors of magnet and pressure valves. **Attention!**
Pay attention to routing of cables.



Release output speed sensor connector (1) from bracket and place to side. **Attention!**

Observe connector (1) installation position.



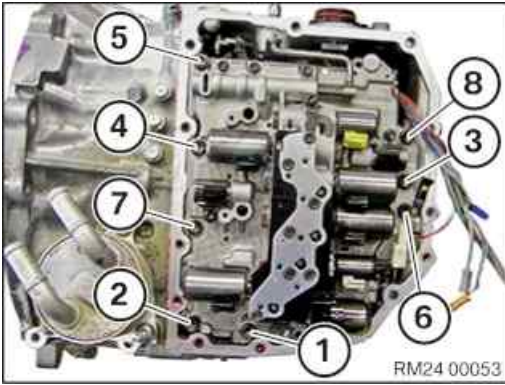
Attention!

Screws have different lengths.

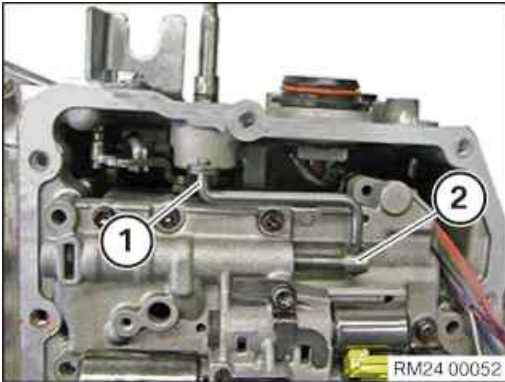
Numbers: 3, 4, 6, 7, 8 = 21mm.

Numbers: 2, 5 = 31mm.

Number: 1 = 51 mm.

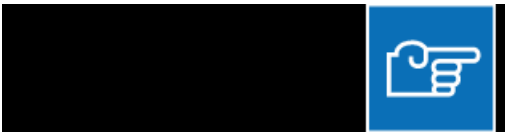


Evenly release screws in specified sequence.

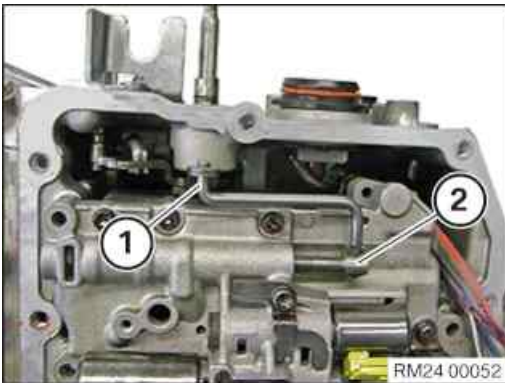


Disconnect lever (1) from gearshift shaft.

When removing selector unit, slide in gear selector valve (2) and hold down.
Remove selector unit.



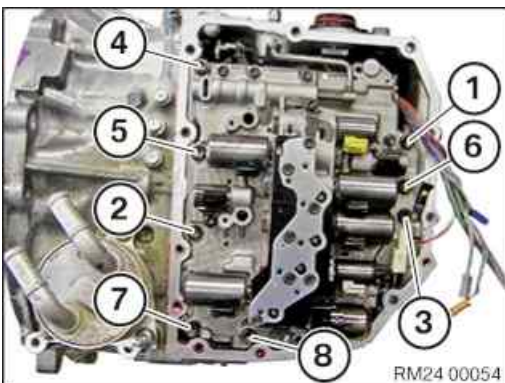
Installation:



Join shift unit to transmission.

Pull gear selector valve (2) slightly out of shift unit.

Insert lever (1) into gearshift shaft.



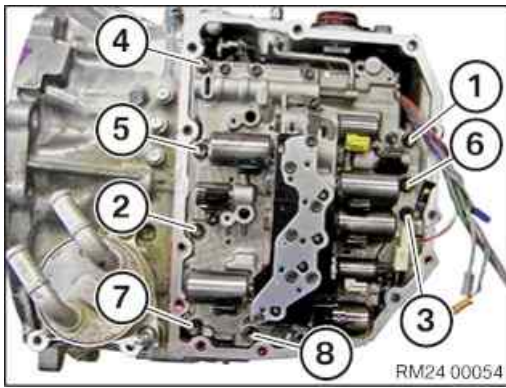
Attention!

Screws have different lengths.

Numbers: 1, 2, 3, 5, 6 = 21 mm.

Numbers: 4, 7 = 31 mm.

Number: 8 = 51 mm.



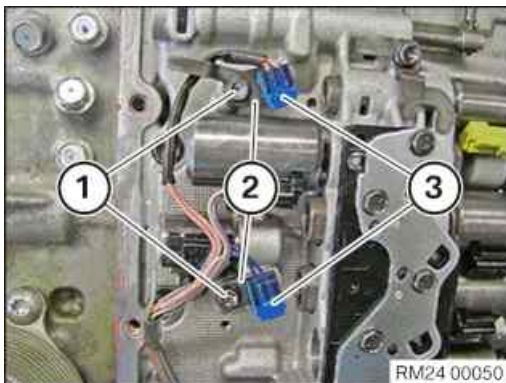
Attention!

Insert screws slightly during installation, align selector unit and tighten down in specified order.

Tightening torque: [24 30 2AZ](#).



Clip output speed sensor connector (1) in on bracket.



Install oil temperature sensors (3) with locking plates (2).

Tighten down screws (1).

Tightening torque: [24 30 3AZ](#).

Attention!

Coat gaskets with automatic transmission fluid.



Connect connectors of solenoid and pressure control valves and lock.



Parts: Renew screws and cover.

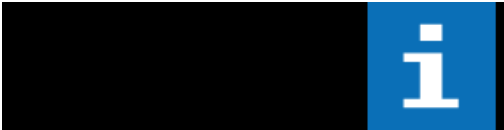
Clean sealing surface of transmission and completely remove the sealing compound.

Apply new liquid sealing compound.

Liquid sealing compound: for this, see **Product and Measures Management Aftersales measure 62281551**

Install cover and screw.

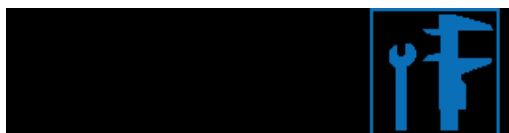
Tightening torque: [24 30 1AZ](#).



Required follow-up work:

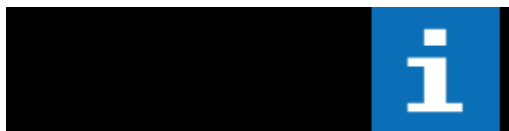
- Install [radiator](#).
- Install [fan cowl](#).
- Install [charge air cooler](#).
- Install left [charge air duct](#).
- Install [EGS](#).
- Add [transmission fluid](#).
- Connect [battery earth lead](#).

24 21 221 Replacing left radial shaft seal on differential (AISIN F21FT)



Special tools required:

- [23 0 490](#)
- [2 413 037](#)
- [2 414 017](#)

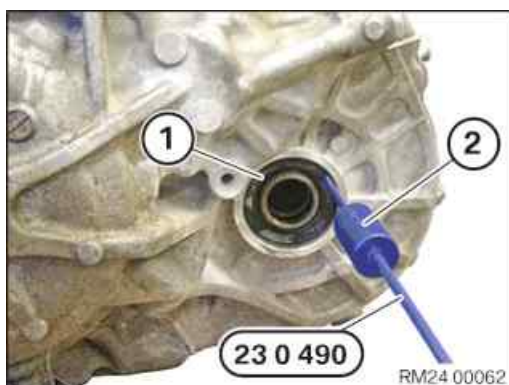


Necessary preliminary tasks:

- [Remove](#) left output shaft
- Remove [intake silencer housing](#)



Removal:



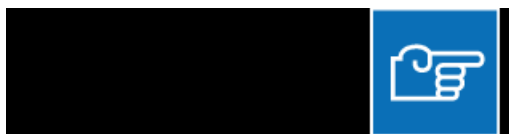
Drive a hole into radial shaft seal using a centre punch.

Important!

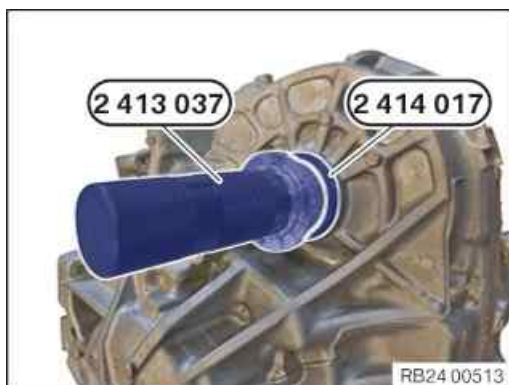
Do not use a drill as swarf may result in transmission malfunction.

Thread special tool [23 0 490](#) into radial shaft seal (1).

Drive out radial shaft seal (1) with impact weight (2).



Installation:



Installation note:

Coat sealing lips of new radial shaft seal with clean transmission oil.

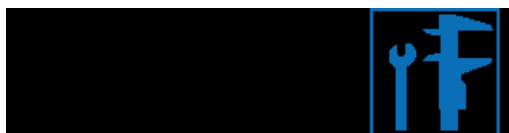
Drive in radial shaft seal with handle [2 413 037](#) and special tool [2 414 017](#) till the limit position.



Required follow-up work:

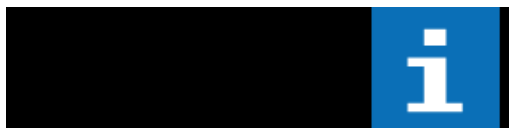
- Install left [output shaft](#)
- Check [gearbox oil level](#)
- Install [intake silencer housing](#)

24 21 516 Replacing radial shaft seal for drive shaft (AISIN F21FT)



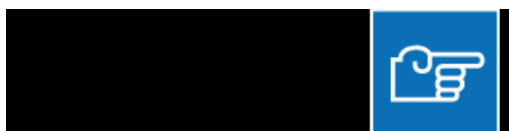
Special tools required:

- [23 0 490](#)
- [2 358 818](#)

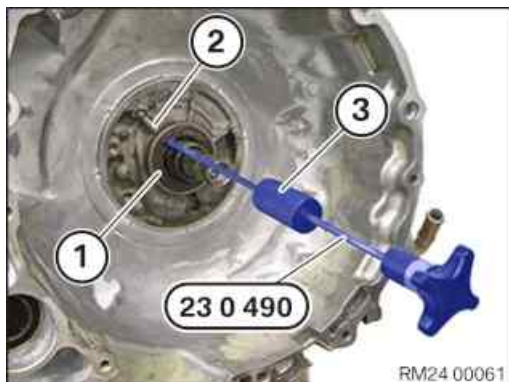


Necessary preliminary work:

- Remove [gearbox](#)
- Remove [torque converter](#)



Removal:



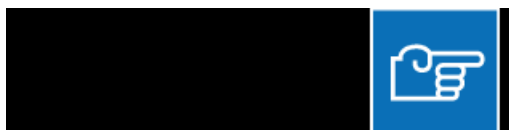
Punch a hole in radial shaft seal (1) at position (2) with centre punch.

Important!

Do not use a drill as drillings may result in transmission malfunction.

Screw special tool [23 0 490](#) into radial shaft seal (1).

Drive radial shaft seal (1) out with impact weight (3).



Installation:



Clean sealing surface.

Coat sealing lip of radial shaft seal with clean transmission oil.

Slide radial shaft seal (1) onto special tool [2 358 818](#) and drive in up to limit position.

Important!

Do not damage radial shaft seal (1).



Required follow-up work:

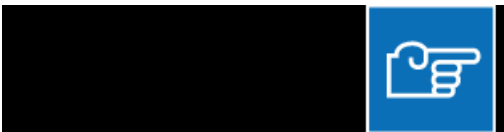
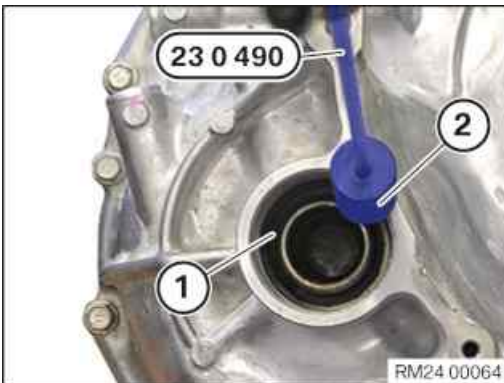
- Install [torque converter](#)
- Install [transmission](#)

**Special tools required:**

- [23 0 490](#)
- [2 358 465](#)

**Necessary preliminary work:**

- [Remove](#) right output shaft.
- Remove [intake silencer housing](#).

**Removal:**

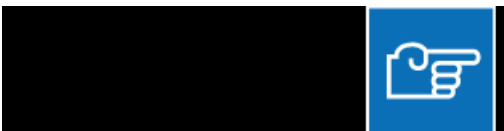
Drive a hole into radial shaft seal using a centre punch.

Important!

Do not use a drill as drillings may result in transmission malfunction.

Screw special tool [23 0 490](#) into radial shaft seal.

Drive out radial shaft seal (1) with impact weight (2).

**Installation:****Installation note:**

Coat sealing lips of new radial shaft seal with clean transmission oil.

Drive shaft seal firmly home with special tool [2 358 465](#).



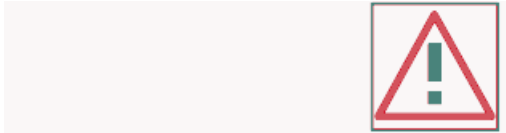
Required follow-up work:

- Install right [output shaft](#).
- Check [transmission oil level](#).
- Install [intake silencer housing](#).

**Important!**

After completion of work, check [transmission oil level](#).

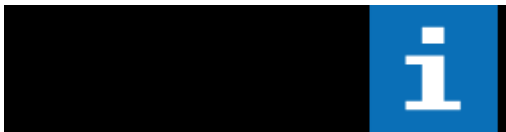
Make a note of drained ATF quantity.

**Important!**

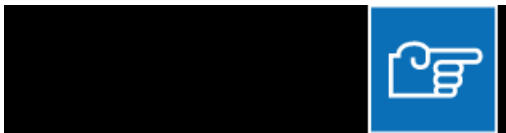
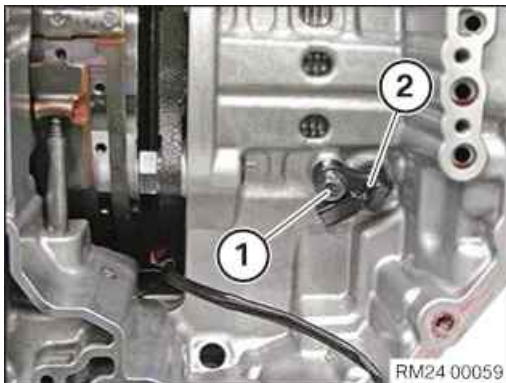
Use only the [approved automatic transmission oil](#) in this automatic transmission.

Otherwise the automatic transmission may incur extensive damage!

Do not drain oil before the transmission has cooled down.

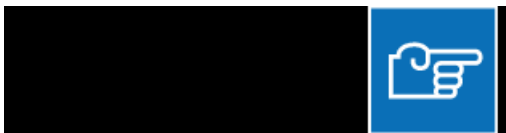
**Necessary preliminary work:**

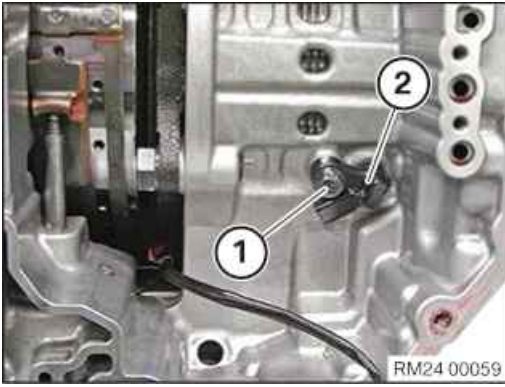
- Remove [hydraulic shift unit](#)

**Removal:**

Release screw (1).

Remove sensor (2).

**Installation:**

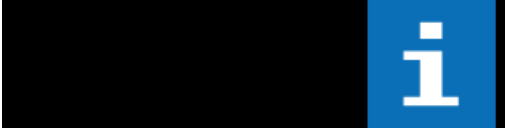


Install sensor (2) and fasten with screw (1).

Important!

Coat sealing ring with clean transmission oil.

Tightening torque: [24 35 1AZ](#).



Required follow-up work:

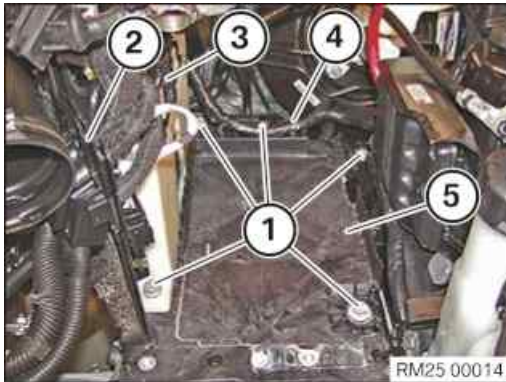
- Install [hydraulic shift unit](#)

**Attention!**

- Check breather for completeness after removal.
- Broken-off breather retaining lugs will result in serious damage to and failure of the automatic transmission.

**Necessary preliminary tasks:**

- [Remove vehicle battery](#)

**Removal:**

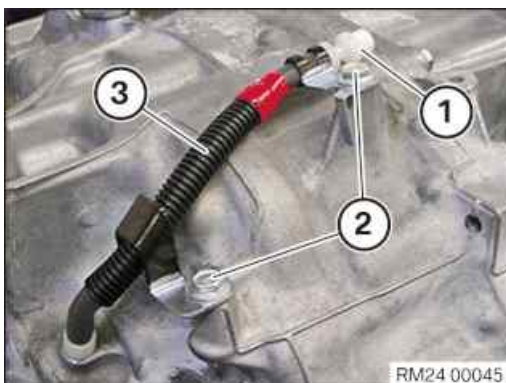
Release screws (1).

Release vehicle battery partition wall (2) from bracket and remove.

Release control unit (3) from bracket.

Detach wiring harness (4) from battery tray (5).

Remove battery tray (5).



Release screws (1).

Lever breather (2) out of transmission housing with a suitable tool.

Note:

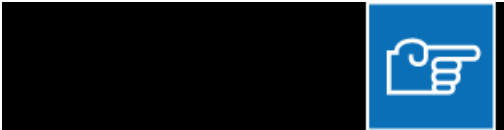
For vehicles from 01/2017 onwards, the bottom holder is not installed.

For vehicles up to 01/2017, the bottom holder (e.g. in the case of damage) can be omitted and need not be installed.

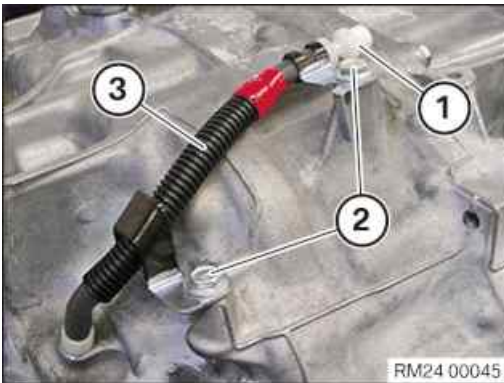


Check breather for completeness.

Retaining lugs (1) must not be broken off and be left behind in the transmission.



Installation:



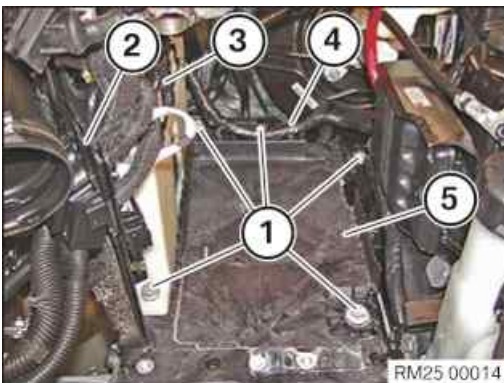
Push breather (2) into the transmission housing.

Tighten down screws (1).

Note:

For vehicles from 01/2017 onwards, the bottom holder is not installed.

For vehicles up to 01/2017, the bottom holder (e.g. in the case of damage) can be omitted and need not be installed.



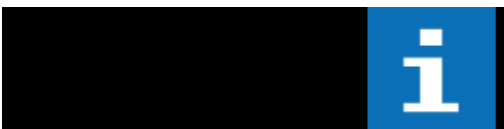
Install battery tray (5).

Tighten down screws (1).

Install wiring harness (4) on battery tray (5).

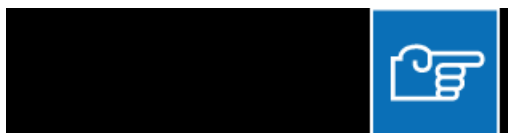
Insert control unit (3) in bracket.

Insert vehicle battery partition wall (2) in bracket.



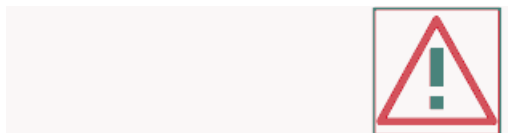
Required follow-up work:

- Install [vehicle battery](#)

**Important!**

After completion of work, check [transmission oil level](#).

Make a note of drained ATF quantity.

**Important!**

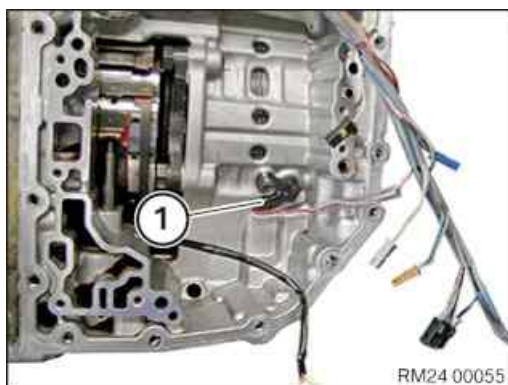
Use only the [approved automatic transmission oil](#) in this automatic transmission.

Otherwise the automatic transmission may incur extensive damage!

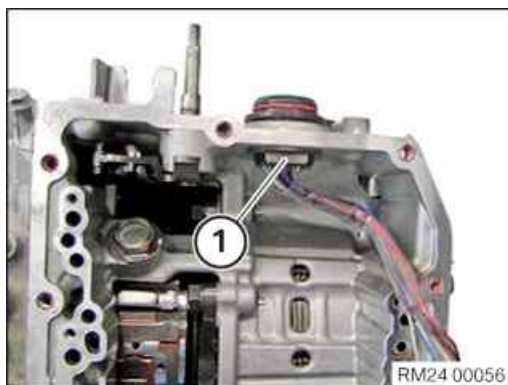
Do not drain oil before the transmission has cooled down.

**Necessary preliminary tasks:**

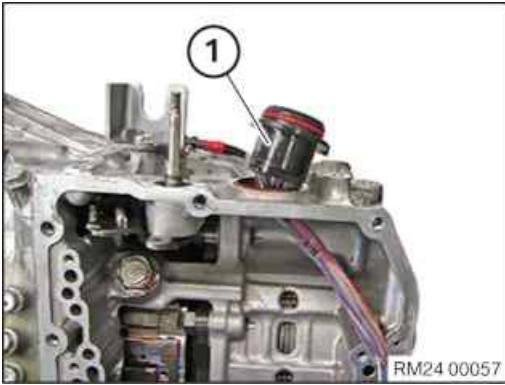
- Remove [hydraulic shift unit](#)

**Removal:**

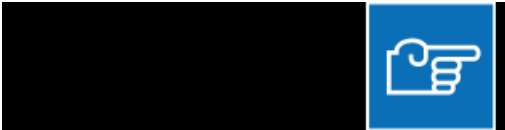
Disconnect connector (1).



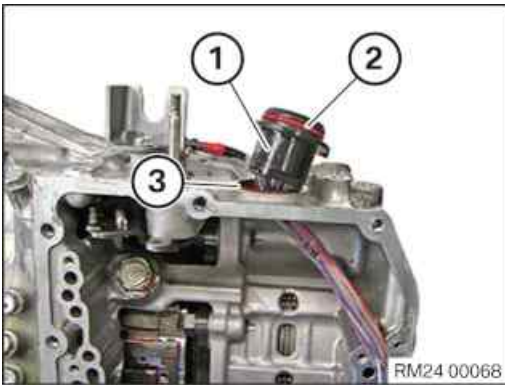
Unlock slide (1).



Pull wiring harness (1) out of transmission housing.



Installation:



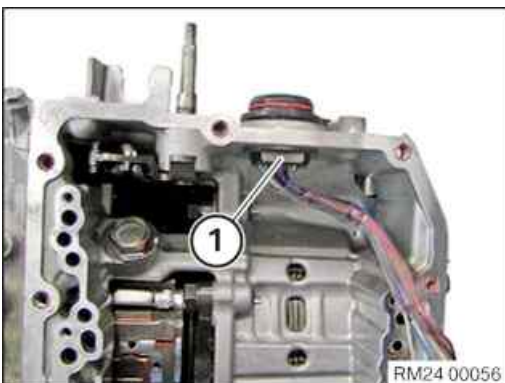
Parts: Renew gaskets (2) and (3).

Insert wiring harness (1) into transmission.



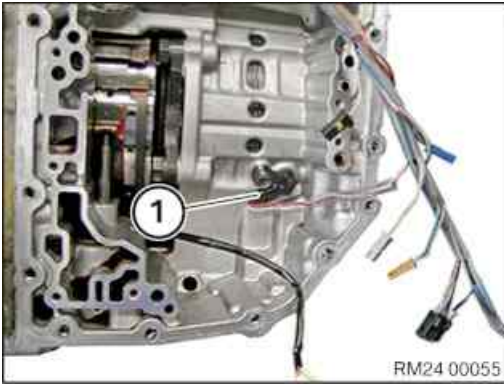
Important!

Connector of lug (1) must be fitted in transmission recess (2).

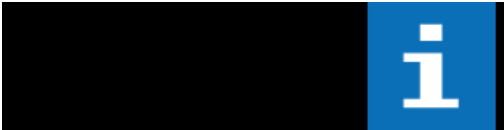


Parts: Renew slide (1).

Lock slide (1).



Connect and lock connector (1).



Required follow-up work:

- Install [hydraulic shift unit](#)