**Special tools required:**

- 24 4 240

**Important!**

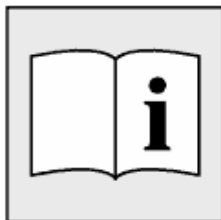
Use only the approved automatic transmission fluid in this automatic transmission.

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

Installation:

Details of approved fluid type:

refer also to adhesive label on transmission fluid sump.

*Necessary preliminary tasks:*

Remove underbody protection.

Remove heat shield from power steering gear.

Tightening torque 32 41 12AZ .

Note:

Only for cars with power steering gear.



Move selector lever to "P" position.

The vehicle must be horizontal and secured against rolling off.

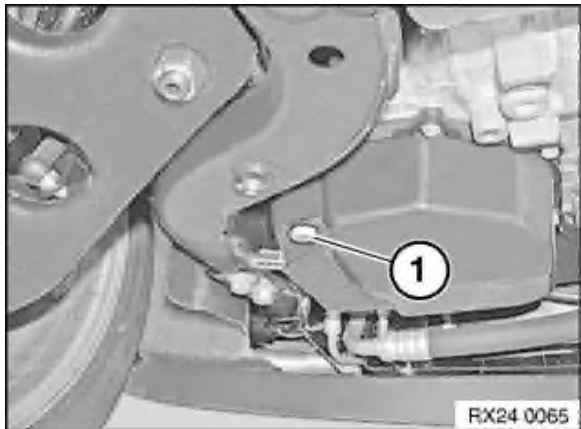
Connect BMW Diagnosis and Information System (DIS), BMW MoDiC or GT-1 to vehicle.

Release filler plug with special tool 24 4 240 .

Tightening torque 24 11 2AZ .

Note:

Illustration similar.



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

Remove M10 oil drain plug (1) from transmission sump.

Tightening torque 24 11 1AZ .

Pour in automatic transmission fluid through filler plug until fluid emerges at oil drain plug.

Start engine and run at idle speed.

Check whether ATF emerges at M10 oil drain plug.

If not, continue to add ATF.

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

Then move switch to "P" position.

Again check whether ATF emerges at M10 oil drain plug.

Interrogate temperature of automatic transmission fluid with DIS Tester, MoDiC or GT-1.

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

Top up automatic transmission fluid until it flows over.

Screw in filler plug and oil drain plug.

Tightening torque 24 11 1/2AZ .

Installation:

Replace sealing rings.

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

Open oil filler plug.

Slacken oil drain plug (1).

Tightening torque 24 11 1/2AZ .

Start engine and run at idle speed.

Unscrew oil drain plug.

Check whether ATF emerges at oil drain plug (1).

If not, pour in ATF up to filler plug.

Top up automatic transmission fluid until it overflows at oil drain plug.

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

Move switch to "P" position.

Check ATF level again.

Seal plugs when the fluid emerges slightly from the drain plug.

Tightening torque 24 11 1/2AZ .

24 4 240 Torx wrench T55

Minimum set: Mechanical tools



Note:	For releasing and tightening down oil filler plug.
Series:	R53, R55, R56
Transmission:	GA6F21WA
Storage location:	A83
SI number:	1 03 05 (174)
Order number:	24 4 240 Torx wrench T55

32 41 Pump and oil supply

	Type	Thread	Tightening specification	Measure
1AZ Bracket, power steering pump, to front axle carrier	R50, R53, R52	M8 x 1.25 x 12 screw		19 Nm
2AZ Power steering pump to front axle carrier	R50, R53, R52	M8 nut	Replace self-locking nuts	19 Nm
3AZ Pressure hose to power steering pump	R50, R53, R52	M8 x 1.25 x 20 screw		10 Nm
4AZ Pressure hose to steering gear clamp	R50, R53, R52	M6 x 1 nut	Replace self-locking nuts	8 Nm
5AZ Pressure line to steering gear	R50, R53, R52	Banjo bolt M14		34 Nm
6AZ Return line to steering gear	R50, R53, R52	Banjo bolt M16		40 Nm
7AZ Multipurpose bracket to bulkhead	R50, R53, R52	M8 x 1.25 x 20		19 Nm
8AZ Bracket, oil tank, to multipurpose bracket	R50, R53, R52	M6 nut	Replace self-locking nuts	8 Nm
9AZ Oil tank to clamp	R50, R53, R52	M6 nut	Replace self-locking nut	6 Nm
10AZ Power steering pump to rubber mount	R50, R53, R52	M6 nut	Replace self-locking nuts	8 ± 1 Nm
11AZ Power steering pump to attachment bracket	R50, R53, R52	M8 screw with Torx head		10 ± 1 Nm
12AZ Heat shield to steering gear / bracket, pressure line	R50, R53, R52	Screw M6 Nut M6	Replace self-locking nuts	8 Nm
13AZ High-pressure line to rubber mount	R50, R53, R52	M6		8 Nm
14AZ Auxiliary fan to bracket, power steering pump	R50, R53, R52	M8 nut	Replace self-locking nuts	19 Nm
15AZ Expansion hose to power steering pump	R50 / W17			36 Nm

TIS SBS 12.0 Gear oil for "MINI" automatic transmission GACVT16Z (CVT) / GA6F21WA (A

12.0 Gear oil for "MINI" automatic transmission GACVT16Z (CVT) / GA6F21WA (AISIN)

Note:

For this transmission, an oil change is necessary in accordance with Service directions.
After a repair on the transmission, the specified gear oil should be used.

GACVT16Z (CVT)

Tradename	BMW part number	Container size
Esso EZL-799	83 22 0 136 376	20 litres

GA6F21WA (AISIN)

USA only:

Tradename	BMW part number	Container size
JWS-3309 ATF	83 22 0 402 413	1 litre

All countries except USA:

Tradename	BMW part number	Container size
JWS-3309 ATF	83 22 7 542 290	1 litre

Trace

- Start
- Vehicle
- Start
- Document
- Subjects
- Display
- Reference

