

Engine oil: draining or extracting; renewing oil filter



WARNING

Warnings for high-voltage system:

Work that must be performed with the ignition switched off → Chapter.

Working in the vicinity of high-voltage components → Chapter.

Handling high-voltage wires → Chapter.

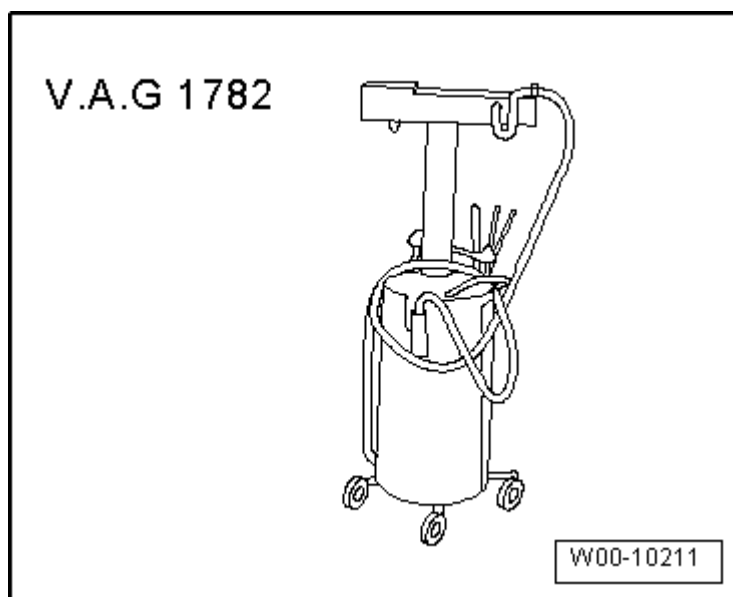


Note

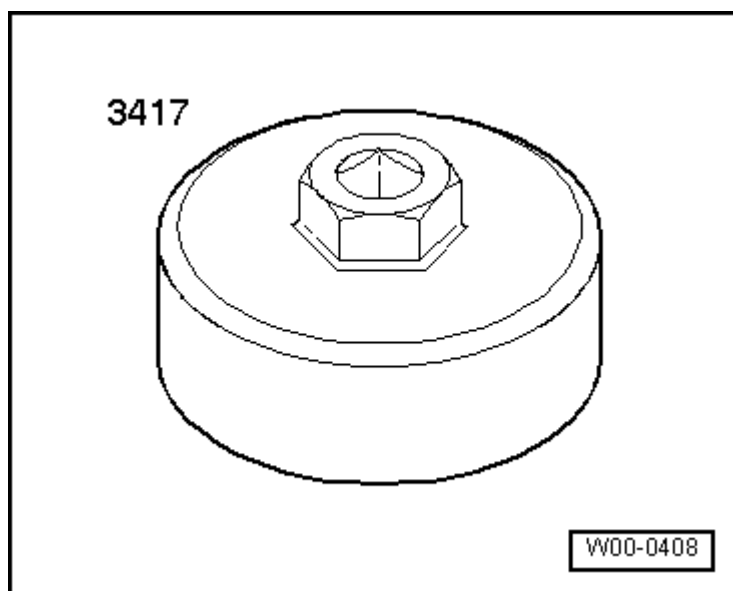
- ◆ For engine oil capacities and oil grades refer to Maintenance tables.
- ◆ Oil should always be changed when engine is warm.
- ◆ Observe disposal regulations.
- ◆ Keep components clean.

Special tools and workshop equipment required

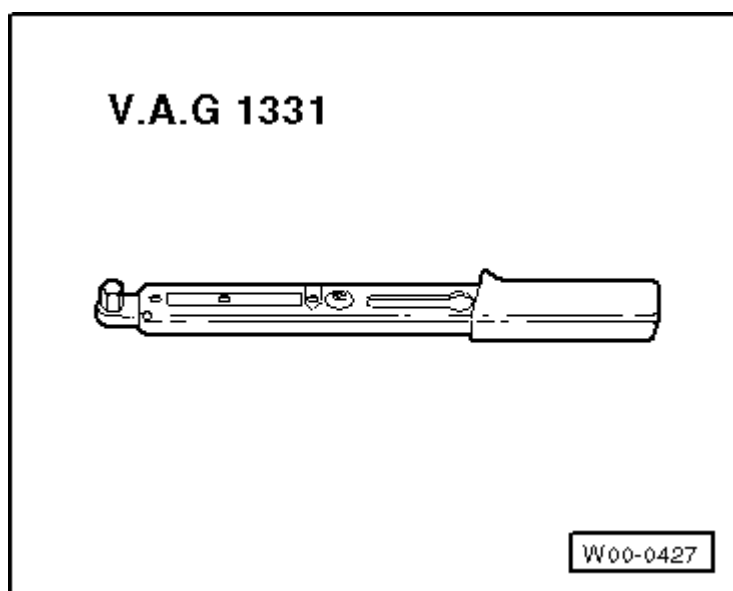
- ◆ Used oil collection and extraction unit -V.A.S 6622 A-
- ◆ Or used oil collection and extraction unit -V.A.G 1782-



- ◆ Oil filter tool -3417-
- ◆ Hazet strap wrench -2171-1-



- ◆ Torque wrench -V.A.G 1331-
- ◆ Oil mop cloth -VAS 6204/1-
- ◆ Socket (32 mm)
- ◆ Socket (36 mm)



Notes for engines with turbocharger → Chapter

4-cyl. diesel engine 2.0 ltr. TDI common rail → Chapter

6-cyl. diesel engine 3.0 ltr. TDI common rail → Chapter

4-cyl. petrol engine 2.0 ltr. TFSI → Chapter

6-cyl. petrol engine 3.0 ltr. TFSI, 3.2 ltr. FSI → Chapter

Notes for engines with turbocharger

When the engine oil and oil filter have been changed, it is important to note the following after starting the engine for the first time:

- ◆ The engine must only run at idling speed as long as the oil pressure warning lamp in the dash panel is on.
- ◆ Do not rev up!

- ◆ When the warning lamp has gone out, the full oil pressure is attained and the engine can be revved up.



Caution

If the engine is revved up the turbocharger can be damaged or fail completely. As the turbocharger runs at very high speeds, the bearings can fail within a few seconds if not sufficiently lubricated.

If the turbocharger displays oil leaks, vibrations or unusual noises, turn off the engine immediately.

4-cyl. diesel engine 2.0 ltr. TDI common rail

- Remove engine cover panel → Chapter.

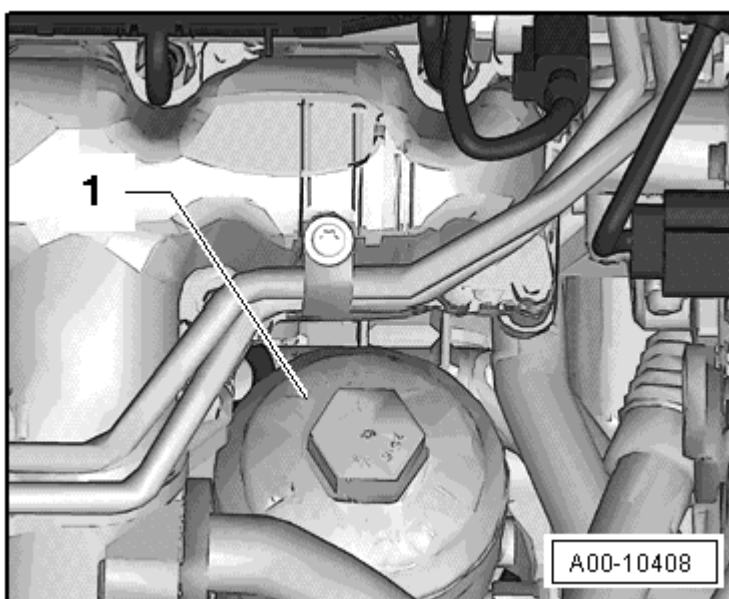
Removing oil filter

- Loosen sealing cap -1- using socket (36 mm).
- Wait a few minutes to allow engine oil to flow back into engine.
- Completely remove sealing cap -1-.



Note

- ◆ *Taking out the filter element will open a valve, and the oil in the filter housing will automatically flow into the crankcase.*
- ◆ *Make sure that no engine oil drips onto the engine block; use a cloth if necessary.*



Extracting engine oil

- Insert extraction probe of oil extractor via oil dipstick tube and extract engine oil.

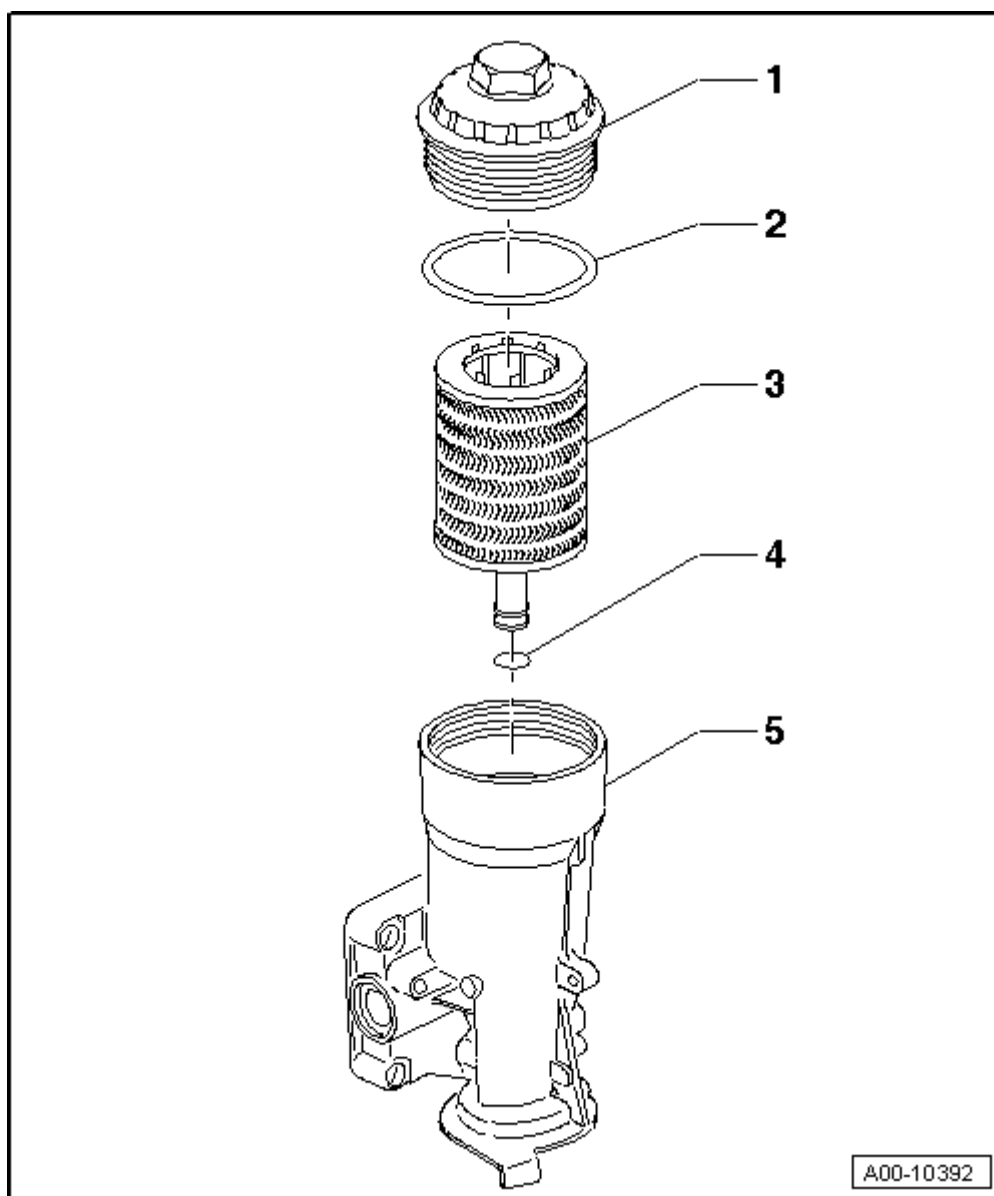


Note

- ◆ *Use flexible extraction probe with largest possible diameter.*
- ◆ *Only insert extraction probe until initial resistance is encountered, otherwise the tip can become diverted on the bottom of the sump and a large amount of used oil will remain in the engine.*
- ◆ *Observe operating instructions for extraction unit.*

Renewing oil filter element

- Pull out filter element -3-.
- Remove O-rings -2- and -4-.



- Lightly lubricate new O-rings -2- and -4- with engine oil and insert O-rings.
- Insert filter element -3- into air cleaner housing -5-.
- Tighten sealing cap -1- to appropriate torque using socket (32 mm).
- Fill up engine oil; note specifications → [Chapter](#).
- Then check oil level → [Chapter](#).
- Install engine cover panel → [Chapter](#).

Tightening torque	Nm
Sealing cap	25

6-cyl. diesel engine 3.0 ltr. TDI common rail



Note

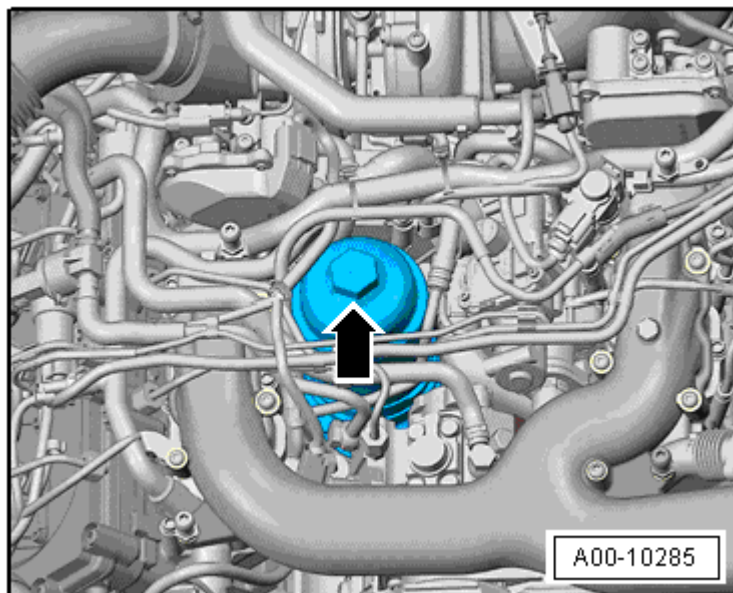
There are two possible types:

- Remove engine cover panel → Chapter.

Removing oil filter

- Loosen sealing cap -arrow- using socket -SW 32-.

Type 1:

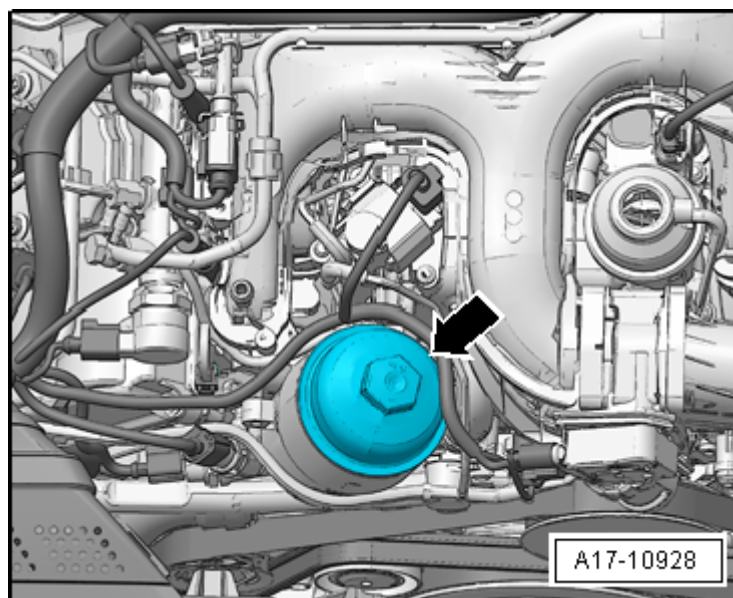


Type 2:

- Wait a few minutes to allow engine oil to flow back into engine.
- Completely remove sealing cap -arrow-.

Note

- ◆ Taking out the filter element will open a valve, and the oil in the filter housing will automatically flow into the crankcase.
- ◆ Make sure that no engine oil drips onto the engine block; use a cloth if necessary.



Extracting engine oil

- Insert extraction probe of oil extractor via oil dipstick tube and extract engine oil.

Note

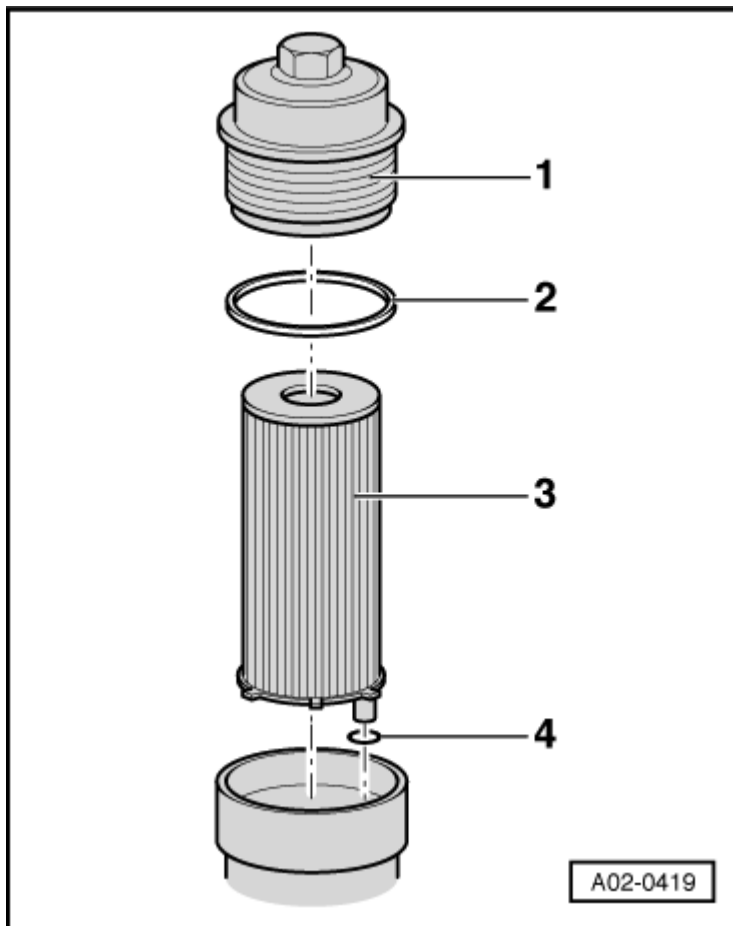
- ◆ Use flexible extraction probe with largest possible diameter.
- ◆ Only insert extraction probe until initial resistance is encountered, otherwise the tip can become diverted on the

bottom of the sump and a large amount of used oil will remain in the engine.

- ◆ *Observe operating instructions for extraction unit.*

Changing oil filter element: Type 1

- Pull filter element -3- out of cap -1-.
- Remove O-rings -2- and -4-.
- Lightly lubricate new O-rings -2- and -4- with engine oil and insert O-rings.
- Insert filter element -3- in oil filter housing, paying attention to installation position of filter (lug on filter).
- Tighten sealing cap to specified torque using socket (32 mm).



Tightening torque	Nm
Sealing cap	35

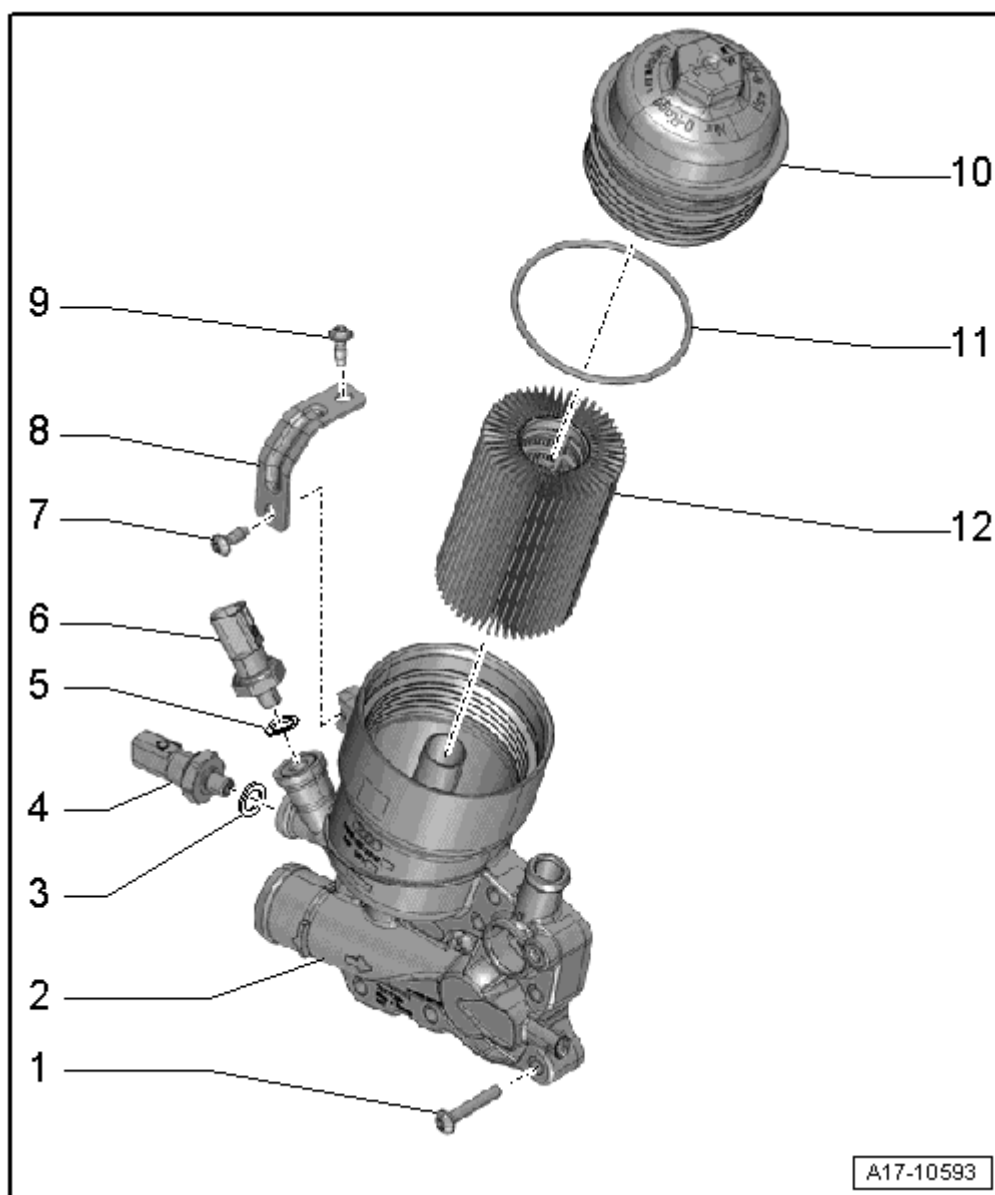
Changing oil filter element: Type 2

- Pull filter element -12- out of cap -10-.
- Remove O-ring -11-.
- Lightly lubricate new O-ring -11- and insert O-ring.
- Insert filter element -12- in oil filter housing, paying attention to installation position of filter.
- Tighten sealing cap to specified torque using socket (32 mm).

 **Note**

Disregard items -1...9-.

Tightening torque	Nm
Sealing cap	35



Filling up engine oil

- Fill up engine oil; note specifications in Maintenance tables.
- Then check oil level → [Chapter](#).
- Install engine cover panel → [Chapter](#).

4-cyl. petrol engine 2.0 ltr. TFSI



Note

There are two possible types:



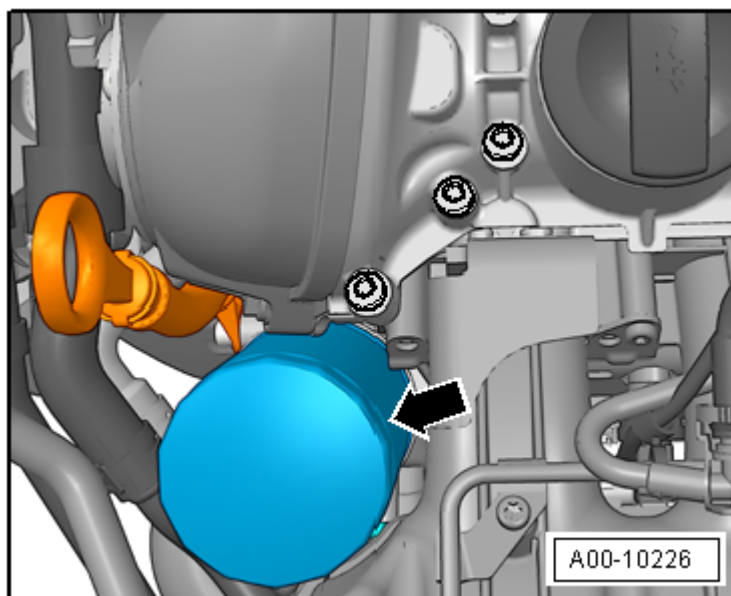
Note

Make sure that no engine oil drips onto the engine block; use a cloth if necessary.

- Remove engine cover panel → [Chapter](#).

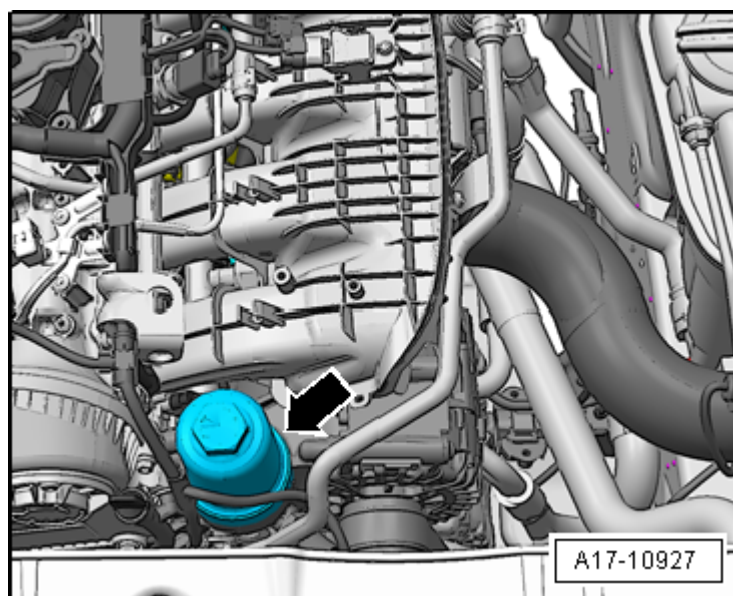
Removing oil filter: Type 1

- Use Hazet strap wrench -2171-1- or oil filter tool -3417- to slacken oil filter cartridge -arrow- and then remove it.
- Clean sealing surface for oil filter at engine.



Removing oil filter: Type 2

- Loosen oil filter housing -arrow- using socket (32 mm).
- Wait a few minutes to allow engine oil to flow from oil filter housing back into engine.
- Completely remove oil filter housing - arrow-.
- Clean sealing surface for oil filter housing at engine.



Extracting engine oil: Types 1 and 2

- Insert extraction probe of oil extractor via oil dipstick tube/oil filter housing and extract engine oil.



Note

- ♦ Use flexible extraction probe with largest possible diameter.
- ♦ Only insert extraction probe until initial resistance is encountered, otherwise the tip can become diverted on the bottom of the sump and a large amount of used oil will remain in the engine.
- ♦ Observe operating instructions for extraction unit.

Installing oil filter cartridge: Type 1

- Lubricate rubber seal on oil filter cartridge with engine oil.
- Screw in oil filter cartridge with oil filter tool -3417- and tighten to specified torque.

Tightening torque	Nm
Oil filter cartridge	22+/-2

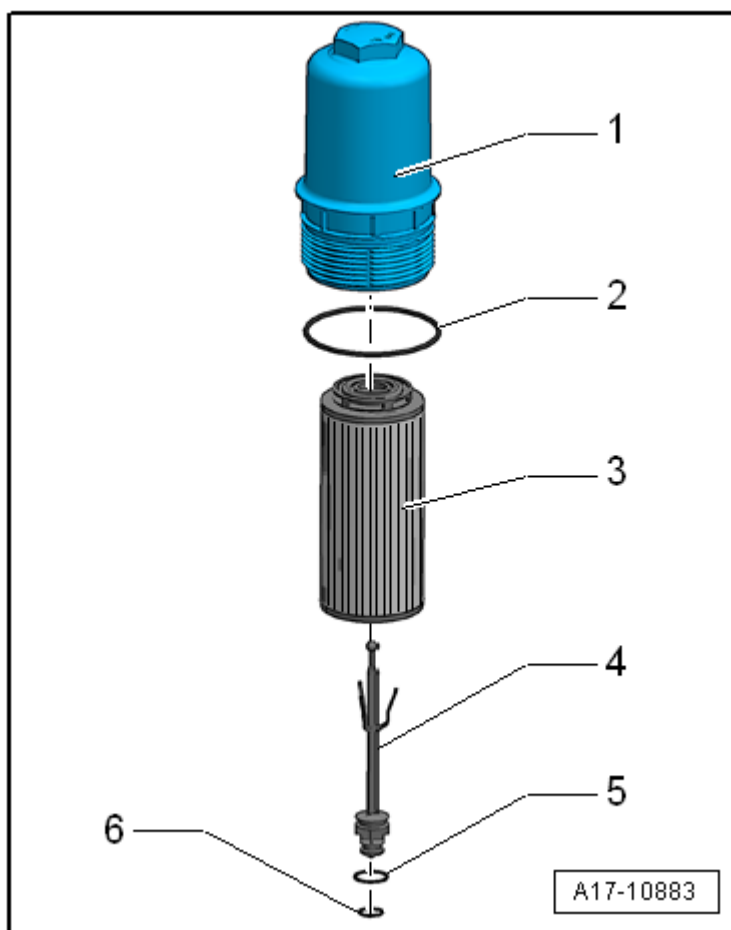
Changing oil filter element: Type 2

- Pull out filter element -3-.
- Lightly lubricate new O-ring -2- with engine oil and insert into groove on oil filter housing -1-.
- Renew filter element -3-.

**Note**

Disregard remaining items -4, 5, 6-.

- Tighten oil filter housing to specified torque using socket (32 mm).



Tightening torque	Nm
Oil filter housing	25

Filling up with engine oil: Types 1 and 2

- Fill up engine oil; note specifications → [Chapter](#).

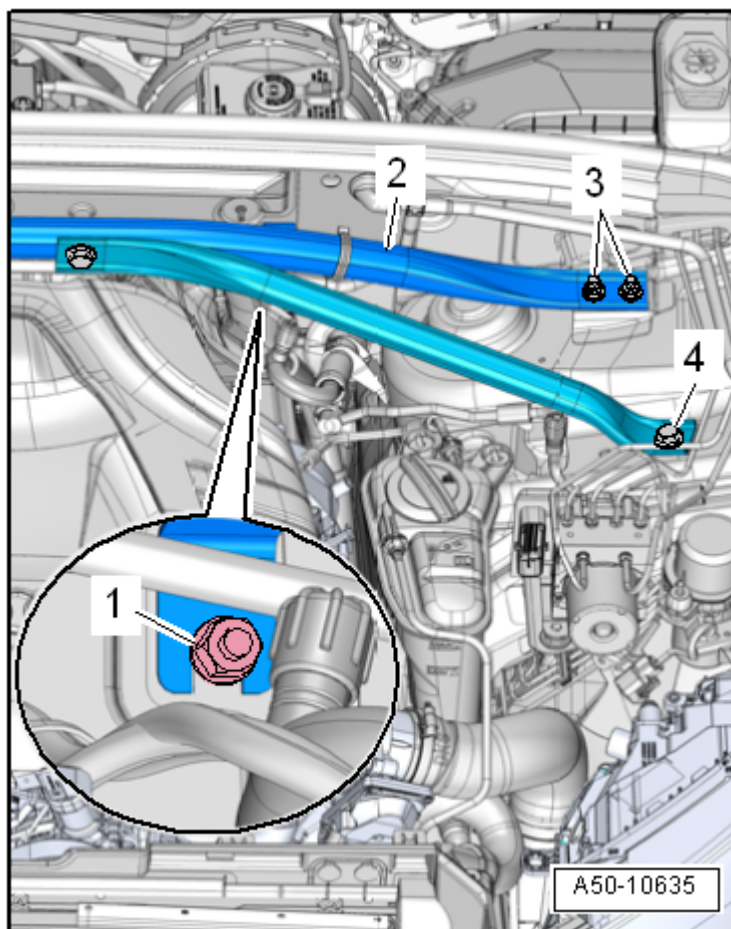
**Note**

For type 2: Fill up engine oil slowly. Narrow filler neck with housing structure beneath it causes oil to disperse very slowly.

- Then check oil level → [Chapter](#).
- Install engine cover panel → [Chapter](#).

6-cyl. petrol engine 3.0 ltr. TFSI, 3.2 ltr. FSI

- Remove engine cover panel → Chapter.
- Remove body brace; to do so, remove nuts -1- and 3- and bolt -4-.



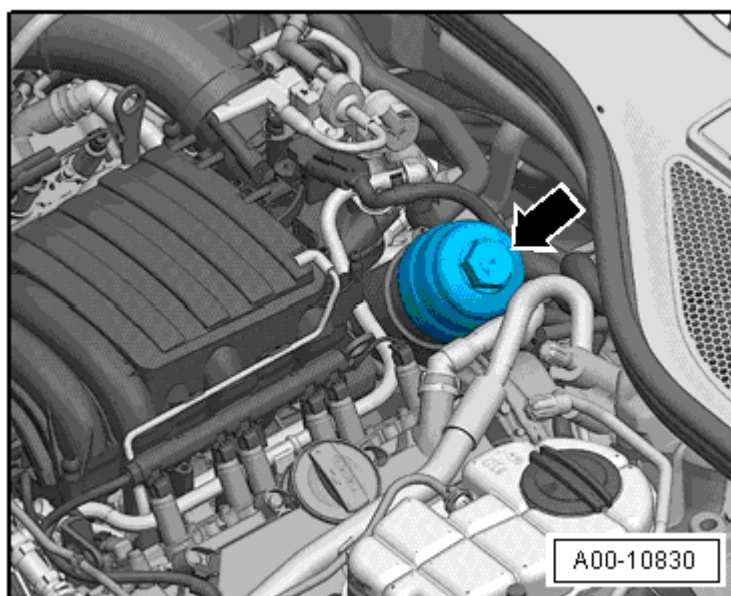
Removing oil filter

- Loosen sealing cap -arrow- using socket (36 mm).
- Wait a few minutes to allow engine oil to flow back into engine.
- Completely remove sealing cap -arrow-.



Note

- ◆ Taking out the filter element will open a valve; the oil in the filter housing will then automatically flow into the crankcase.
- ◆ Make sure that no engine oil drips onto the engine block; use a cloth if necessary.



Extracting engine oil

- Insert extraction probe of oil extractor via oil dipstick tube/oil filter housing and extract engine oil.

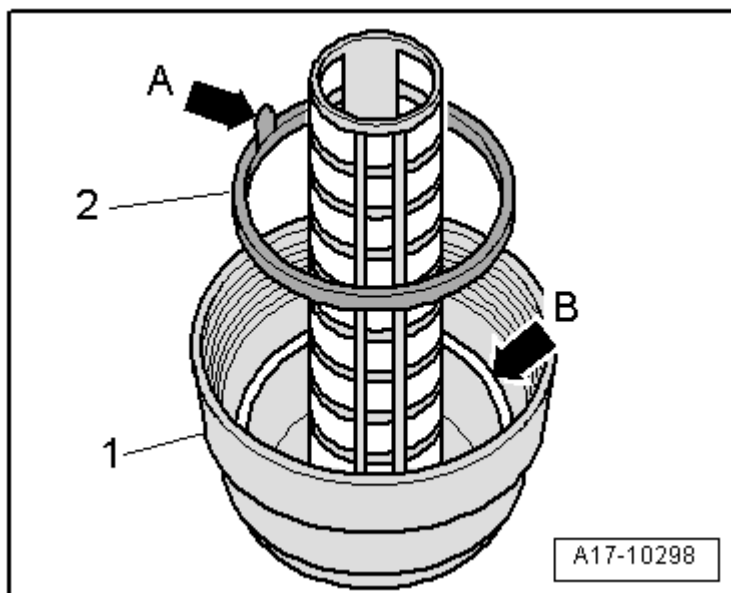


Note

- ◆ Use flexible extraction probe with largest possible diameter.
- ◆ Only insert extraction probe until initial resistance is encountered, otherwise the tip can become diverted on the bottom of the sump and a large amount of used oil will remain in the engine.
- ◆ Observe operating instructions for extraction unit.

Renewing oil filter element

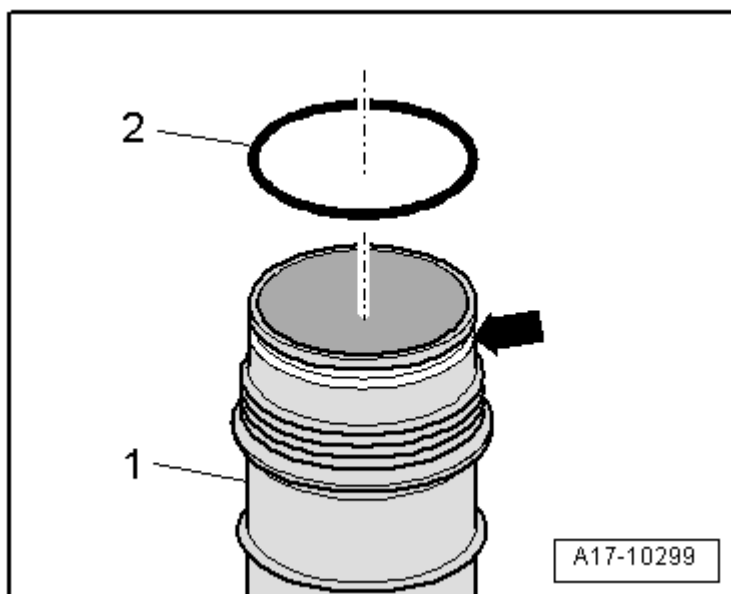
- Pull out filter element.
- Take hold of lug -arrow A- and pull seal -2- out of sealing cap -1-.
- Lubricate seal -2- with engine oil and insert so that smooth side of seal -2- faces outwards.
- Fit new seal -2- into groove -arrow B-.



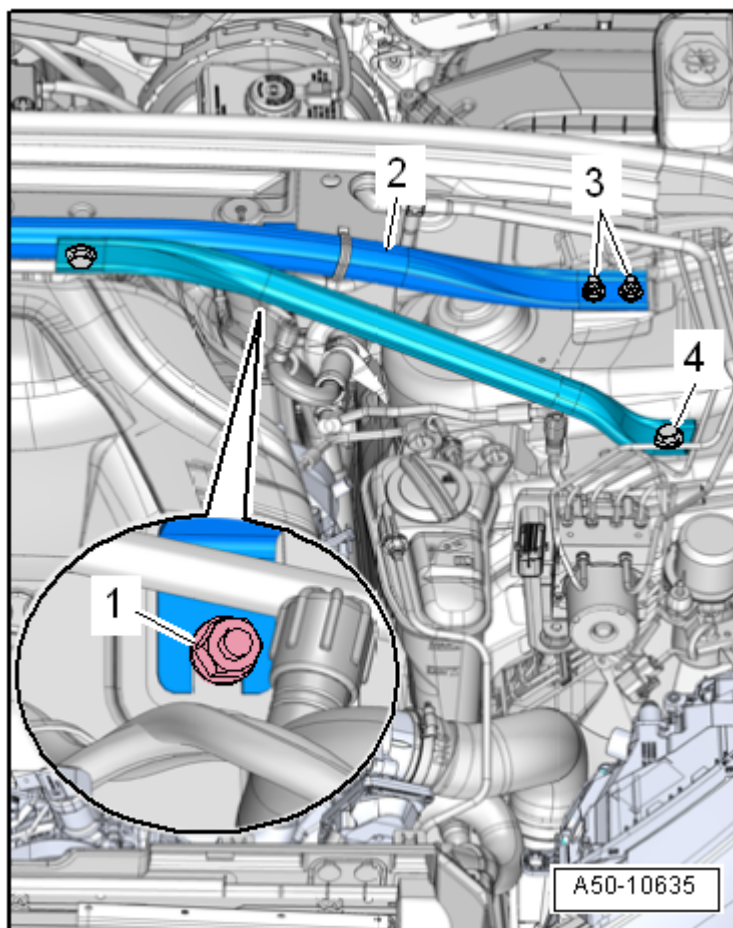
- Remove O-ring -2- on oil filter housing -1-.
- Lightly lubricate new O-ring -2- with engine oil and insert into groove -arrow-.
- Renew filter element.
- Tighten sealing cap to specified torque using socket (36 mm).

Filling up engine oil

- Fill up engine oil; note specifications → Chapter.
- Install engine cover panel → Chapter.



- Install body brace; to do so, tighten nuts and bolts to specified torque.



Tightening torque	Nm
Sealing cap	25
Securing nut on body brace -3-	30
Securing nut on body brace -1-	2.5
Securing bolt for body brace	30