# □ 17 11 001 Replacing cap for radiator 3 FRUs

#### + 17 11 501



# Warning

Take care when working on the cooling system: risk of burns if the system is hot.

Do not work on the cooling system until it has had ample time to cool down.

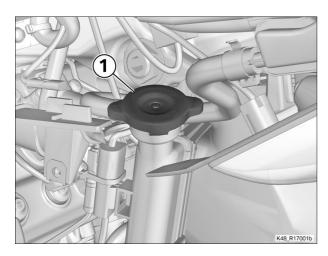
# **Preparatory work**

Removing right bottom side panel Removing right radiator cowl Remove the right side panel

# **Core activity**

#### (-) Removing radiator cap

• Replace cap (1).



#### **Finishing work**

Install the right side panel Install the right radiator cowl Installing right bottom side panel Final check of work performed

# □ 17 11 008 Removing/installing radiator (without draining/refilling coolant system) 3 FRUs

+ 17 11 508

# **Preparatory work**

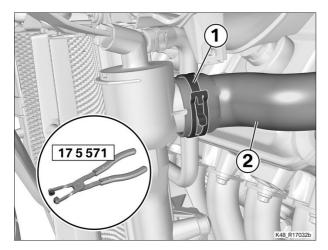
# => Draining coolant, refilling/bleeding system (Description in item: 17 00 504, Billed as a separate item)

Disconnecting feed line for coolant Removing radiator hose cover

#### **Core activity**

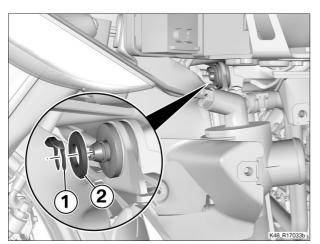
#### (-) Removing complete radiator

- ▶ Disconnecting coolant hose between engine and radiator at radiator
- Open clip (1) with pliers (No. 17 5 571).
- Disconnect coolant hose (2).



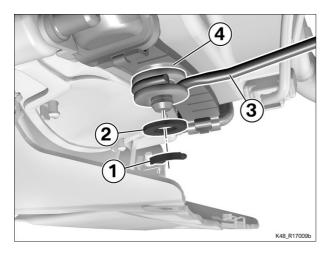
 $\blacksquare$ 

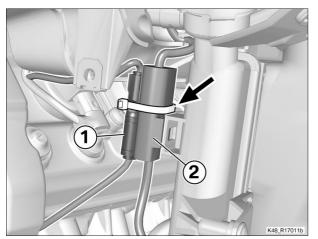
• Remove clip (1) and washer (2).



#### ► Releasing strut for radiator at bottom

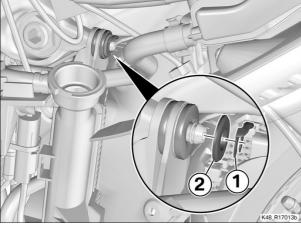
- Remove clip (1) and washer (2).
- Detach strut (3) from radiator (4).



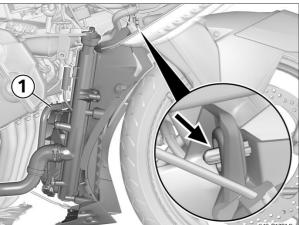




- Remove cable tie (arrow).
- Remove plug (1) for the crankshaft sensor.
- Remove and disconnect plug (2) for the fan.

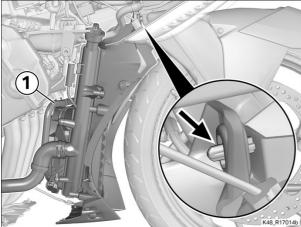


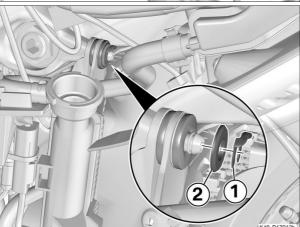
• Remove clip (1) and washer (2).

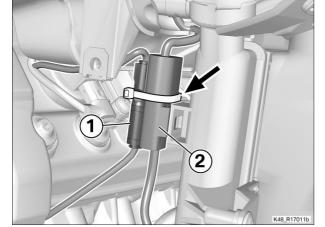


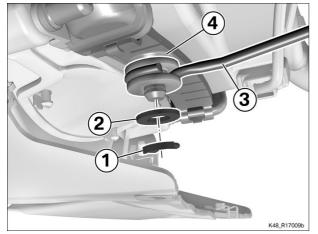
- Disengage radiator (1) complete with mounted parts from the retaining pins (arrow) of the air guide for oil cooler on left and right and remove.
- Take care not to damage the radiator and the mounted parts.

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# (-) Installing complete radiator

- Insert radiator (1) complete with mounted parts, seat it on the retaining pins (arrow) of the air guide for oil cooler on left and right and install.
- Take care not to damage the radiator and the mounted parts.

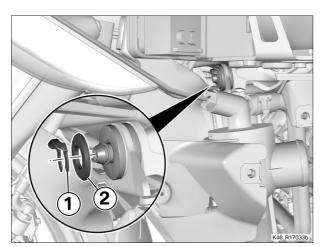
• Install washer (2) and clip (1).

- Connect plug (2) for the fan and install.
- Hold plug (1) for the crankshaft sensor in position.
- Secure the cable tie (arrow).

#### ► Securing strut for radiator at bottom

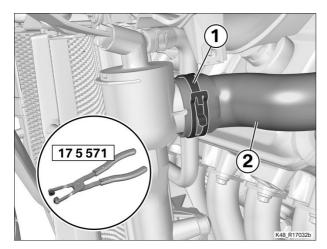
- Secure strut (3) to radiator (4).
- Install washer (2) and clip (1).

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 $\blacksquare$ 

• Install washer (2) and clip (1).



# ► Connecting coolant hose between engine and radiator at engine

- Connect coolant hose (2).
- Secure clip (1) with pliers (No. 17 5 571).

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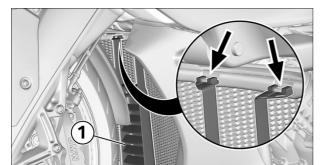
# **Finishing work**

Installing radiator hose cover Connecting feed line for coolant Final check of work performed

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# □ 17 11 038 Removing/installing or replacing dirt deflector for radiator 2 FRUs

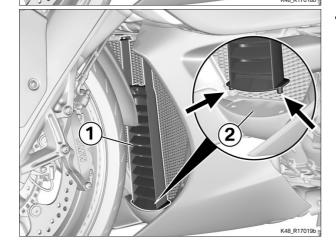
+ 17 11 546



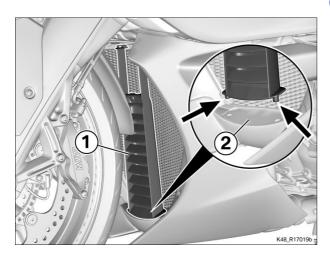
# **Core activity**

# (-) Removing dirt deflector

• Unclip the holders (arrows) for dirt deflector (1).



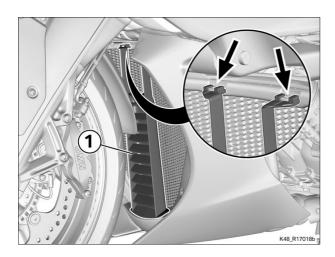
• Disengage dirt deflector (1) from air guide (2) and remove, noting the holders (arrows).



#### (-) Installing dirt deflector

• Seat dirt deflector (1) in air guide (2) and install. Make sure that the holders (arrows) engage with an audible click.

• Clip in the holders (arrows) for dirt deflector (1).



**Finishing work**Final check of work performed

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# □ 17 11 039 Removing/installing or replacing screen for radiator 5 FRUs

#### + 17 11 547

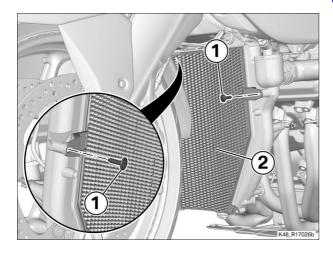
#### **Preparatory work**

Removing left bottom side panel Removing left radiator cowl Removing radiator hose cover Removing right radiator cowl Removing spoiler for radiator Removing air guide for radiator

#### **Core activity**

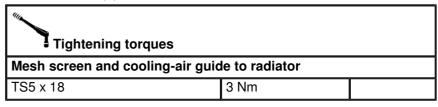
#### (-) Removing screen

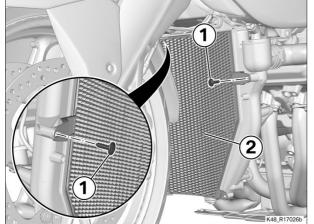
- Remove screws (1).
- Disengage dirt screen (2) and remove.



#### (-) Installing screen

- Hold screen (2) in position.
- Install screws (1).

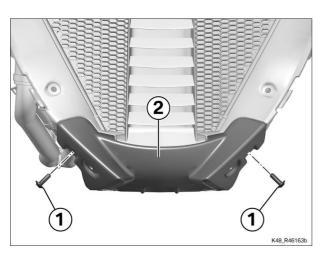




#### Finishing work

Installing air guide for radiator Installing spoiler for radiator Install the right radiator cowl Installing radiator hose cover Installing left radiator cowl Installing left bottom side panel Final check of work performed

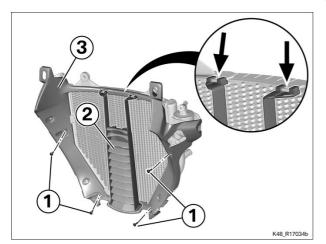
# □ 17 11 510 Replacing radiator (radiator removed) 3 FRUs



# **Core activity**

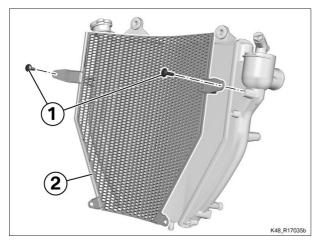
# (-) Removing spoiler for radiator

- Remove screws (1).
- Remove spoiler (2).



# (-) Removing air guide with dirt deflector

- Remove screws (1).
- Disengage the holders (arrows) for dirt deflector (2).
- Remove air guide (3) with dirt deflector (2).

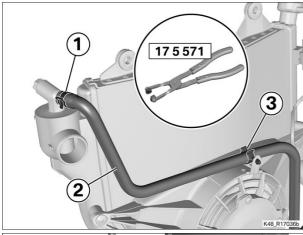


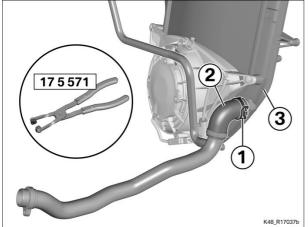
#### (-) Removing screen

- Remove screws (1).
- Remove screen (2).

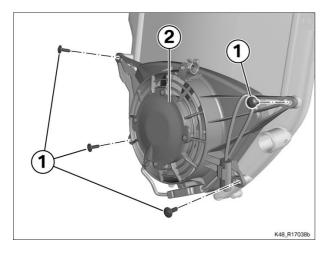
# (-) Removing return line with bypass

- Open clip (1) with pliers (No. 17 5 571).
- Disconnect bypass (2) and disengage it from holder (3).





- Open clip (1) with pliers (No. 17 5 571).
- Disconnect return line (2) from radiator (3).



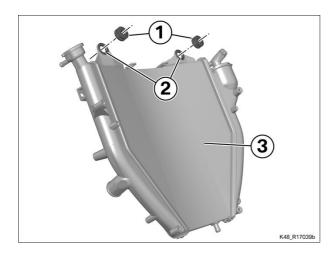
# (-) Removing fan

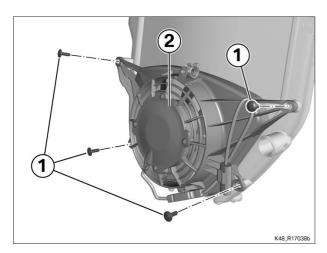
- Remove screws (1).
- Remove fan (2).

# (-) Replacing radiator

• Transfer rubber grommets (1) and inserts (2) from old to new radiator (3).

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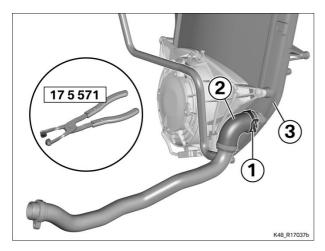




# (-) Installing fan

- Hold fan (2) in position.
- Install screws (1).

Tightening torques		
Radiator cowl/screen to radiator		
Plastic screw, TS5 x 18	3 Nm	

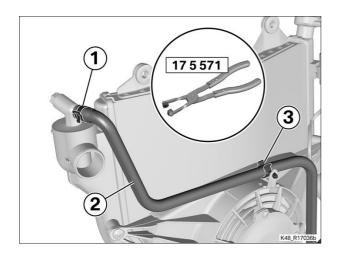


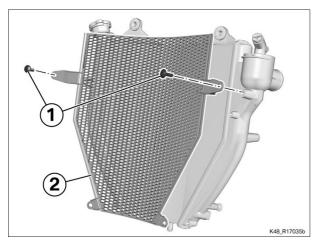
# (-) Installing return line with bypass

- Connect return line (2) to radiator (3).
- Secure clip (1) with pliers (No. 17 5 571).

- Connect bypass (2) and secure it in holder (3).
- Secure clip (1) with pliers (No. 17 5 571).

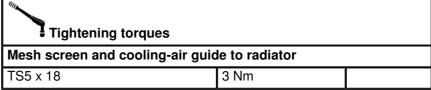
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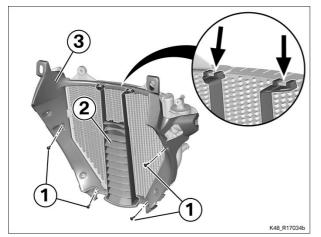




# (-) Installing screen

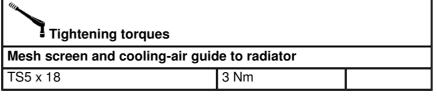
- Hold screen (2) in position.
- Install screws (1).





#### (-) Installing air guide with dirt deflector

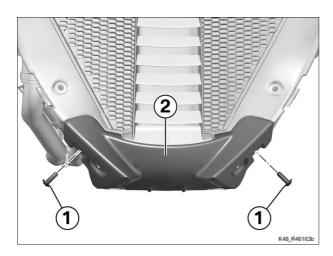
- Place air guide (3) with dirt deflector (2) in position.
- Secure the holders (arrows) for dirt deflector (2).
- Install screws (1).



# (-) Installing spoiler for radiator

- Install spoiler (2).
- Install screws (1) on left and right.

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**Finishing work**Final check of work performed

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