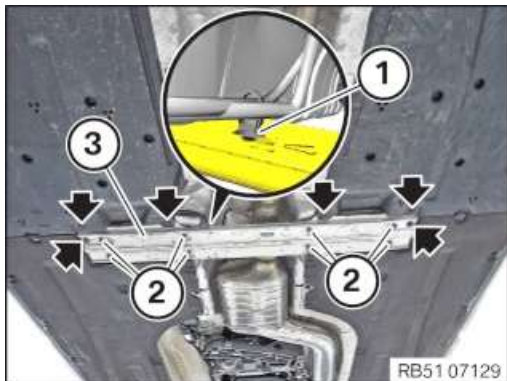


18 00 018 Remove & install complete exhaust system

PRELIMINARY WORK

1 – Remove the connecting support from the tunnel



- Remove screws (arrows).
- **If installed:** Loosen clamp (1).
- Loosen screws (2).
- Guide out and remove connecting support (3) on the tunnel.

MAIN WORK

2 – Remove complete exhaust system



WARNING

Hot surfaces.

Risk of burning!

- Perform all work only on components that have cooled down.



CAUTION

Component with heavy weight.

Danger of injury!

- Note component's centre of gravity.
- Support component using a jack.
- Secure component against falling off the jack.

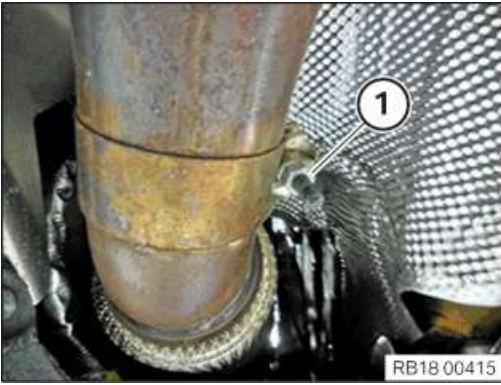


CAUTION

Heavy component.

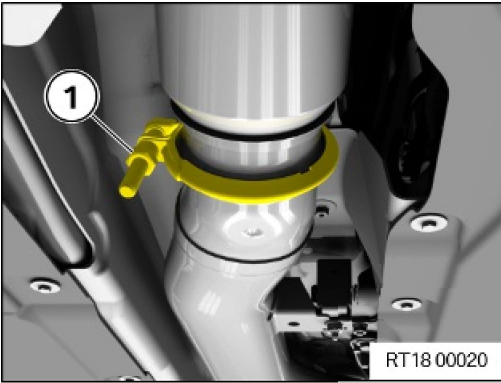
Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.



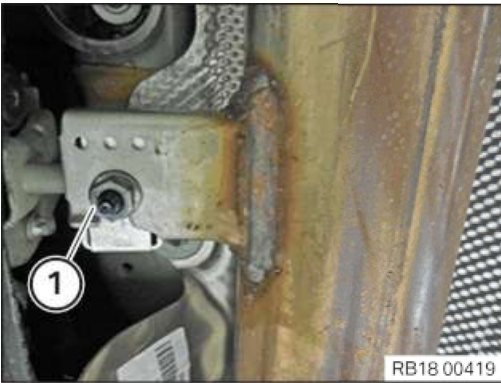
- **Equipment specification 1 (ribbon clamp)**

Detach the ribbon clamp (1).

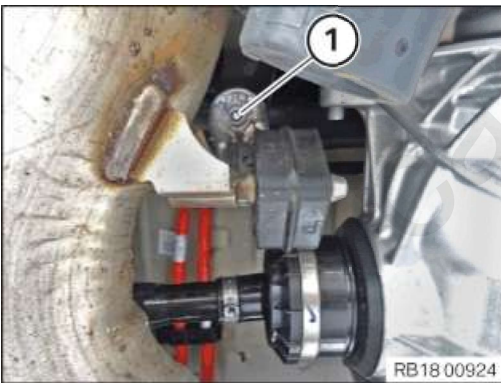


- **Equipment specification 2 (V-clips)**

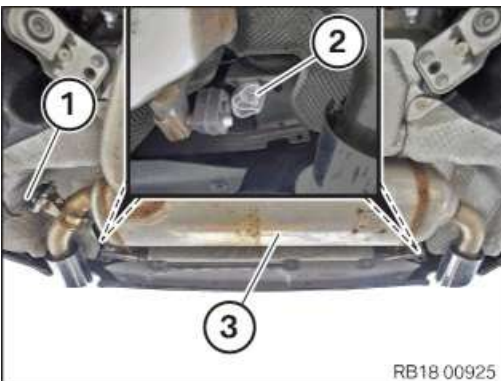
Unfasten clamp (1).



- Loosen nut (1).



- Release nut (1) on the rear axle support.



- Unlock plug connection (1) and disconnect.
- Loosen nuts (2).
- Lower and remove the exhaust system (3) with the assistance of a second person.

3 – Installing the complete exhaust system



CAUTION

Component with heavy weight.

Danger of injury!

- Note component's centre of gravity.
- Support component using a jack.
- Secure component against falling off the jack.

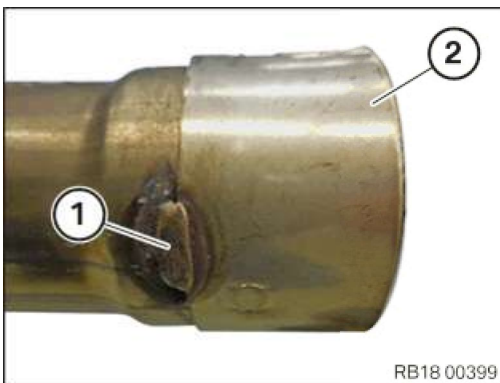


CAUTION

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.



CAUTION

Swarf resulting from sawing or grinding components.

Danger of injury!



- Conduct all work in appropriate personal protective equipment only.



- Wear safety goggles and protective gloves.

• Equipment specification 1 (ribbon clamp)

Open the weld seam (1) with a conventional tool.

- Remove ribbon clamp (2).
- Renew the (2) ribbon clamp.

Parts: Ribbon cable clamp

- Feed in and install the exhaust system (3) with a second person.
- Renew nuts (2).

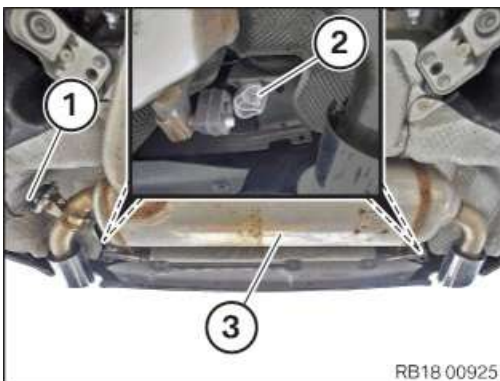
Parts: Nuts

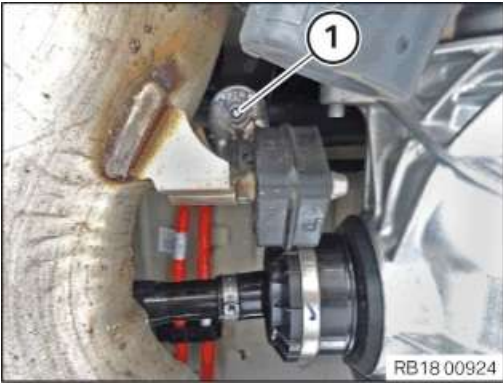
- Tighten nuts (2).

Rear silencer to body / bumper support

M8	Replace nuts.	Tightening torque	19 Nm
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- Connect connectors (1) and lock.
The connector (1) must engage audibly.





- Renew nut (1).

Parts: Nut

- Tighten the bolt (1) on the rear axle support.

Exhaust system to rear axle carrier

Nut M8	Renew nut.	Tightening torque	19 Nm
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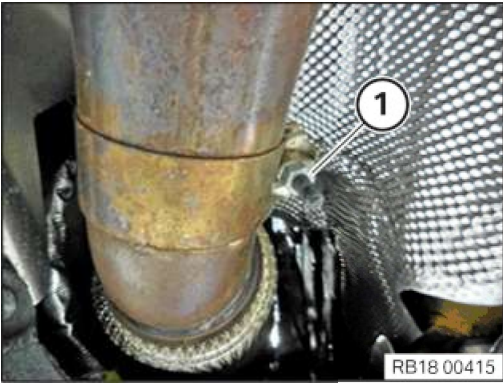
- Renew nut (1).

Parts: Nut

- Tighten nut (1).

Front pipe / petrol particulate filter on transmission holder

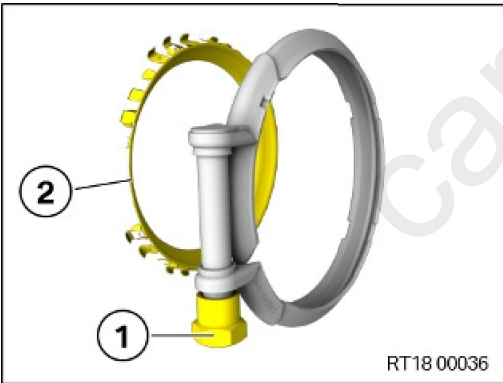
M8	Renew nut.	Tightening torque	19 Nm
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- Tighten the ribbon clamp (1).

Exhaust system to catalytic converter

Ribbon cable clamp	Renew flat band clip.	Tightening torque	26 Nm
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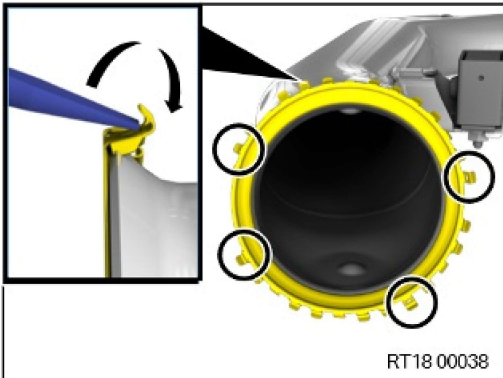


- **Equipment specification 2 (V-clips)**

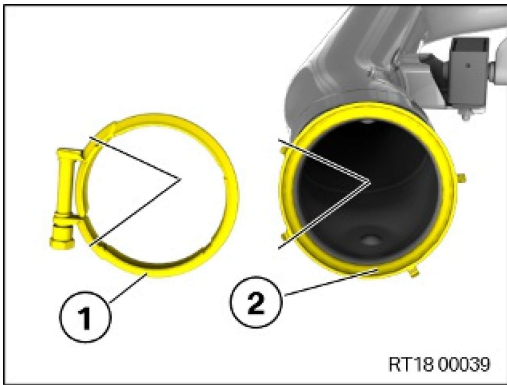
Renew V-band clamp.

Parts: V-band clamp

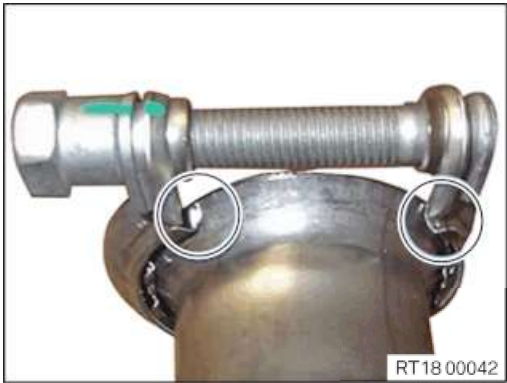
Unscrew the nut (1) and remove the sealing ring (2).



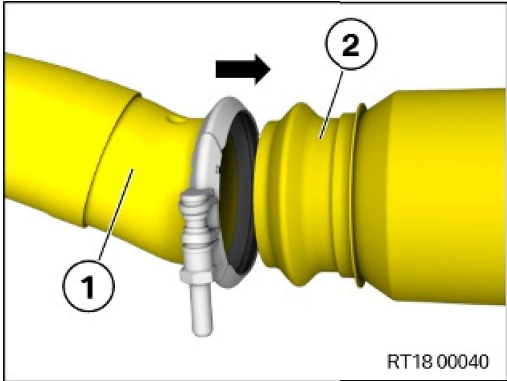
- Bend all sheet metal tabs over with a suitable tool, except those in the marked areas.



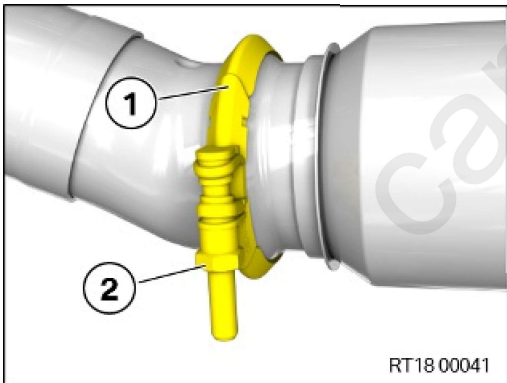
- Mount the V-clip (1) on the sealing ring (2).
- Make sure that the V-clip (1) is positioned correctly on the sealing ring (2).



- Ensure that the V-clip rests against the sheet metal tabs in the marked areas after mounting.



- Connect the exhaust system (1) with the catalytic converter (2) and position it correctly (arrow).

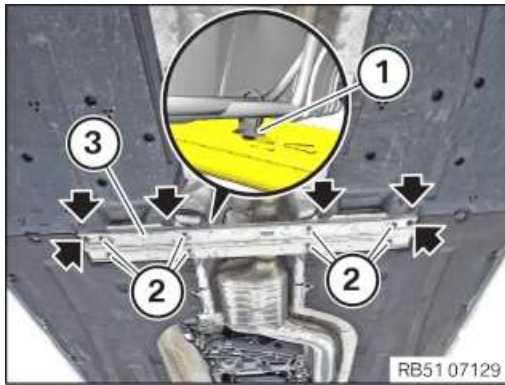


- Make sure that V-clip (1) is fitted correctly.
- Tighten down screw (2).

V-clip to catalytic converter

V-band clamp	Renew V-band clamp.	Tightening torque	22 Nm
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4 – Install the connecting supports on the tunnel



- Guide in and install connecting support (3) on the tunnel.
- Tighten the screws (2).

Connecting support to tunnel

M8x25 screw		Tightening torque	20 Nm
Screw		Tightening torque	3 Nm

- Tighten screws (arrows).

Connecting support to tunnel

M8x25 screw		Tightening torque	20 Nm
Screw		Tightening torque	3 Nm

- **If installed:** Secure clamps (1).

Additional Information

Overview of Tightening Torques

Rear silencer to body / bumper support

Used in step 3

M8	Replace nuts.	Tightening torque	19 Nm
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Exhaust system to rear axle carrier

Used in step 3

Nut M8	Renew nut.	Tightening torque	19 Nm
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Front pipe / petrol particulate filter on transmission holder

Used in step 3

M8	Renew nut.	Tightening torque	19 Nm
----	------------	-------------------	-------

Exhaust system to catalytic converter

Used in step 3

Ribbon cable clamp	Renew flat band clip.	Tightening torque	26 Nm
--------------------	-----------------------	-------------------	-------

V-clip to catalytic converter

Used in step 3

V-band clamp	Renew V-band clamp.	Tightening torque	22 Nm
--------------	---------------------	-------------------	-------

Connecting support to tunnel

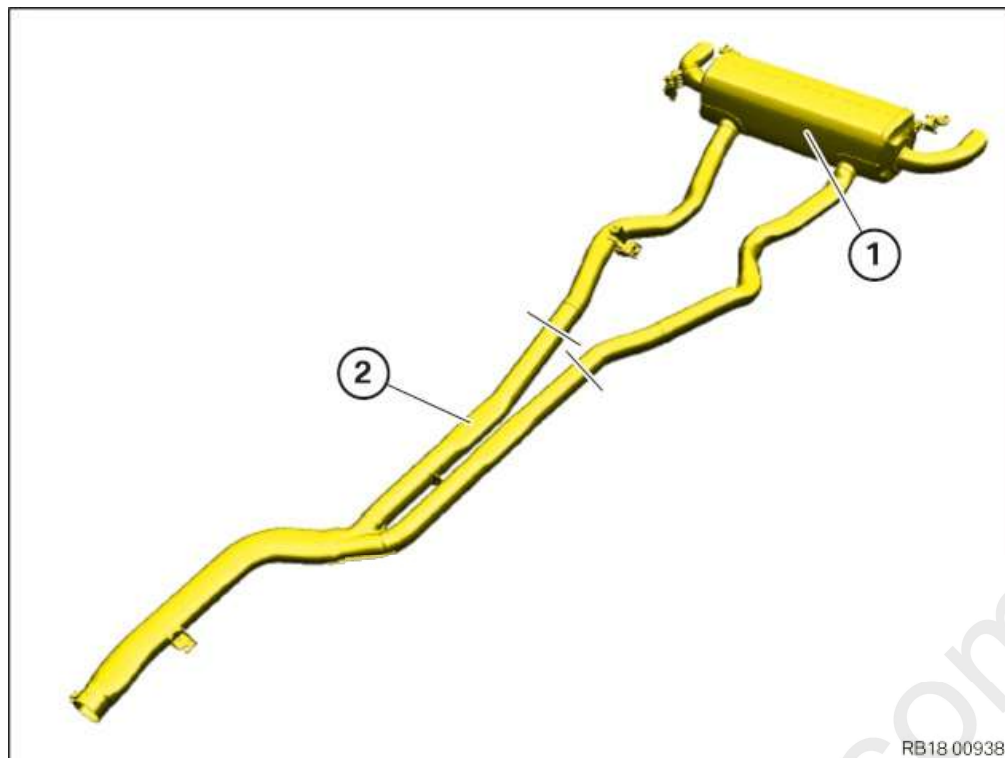
Used in step 4

M8x25 screw		Tightening torque	20 Nm
Screw		Tightening torque	3 Nm

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18 10 120 Replace front pipe

Replace front pipe

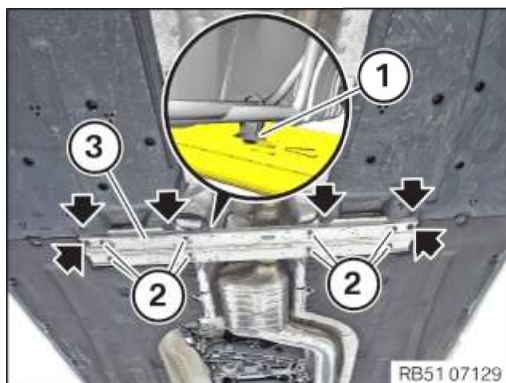


1 Rear silencer

2 Front pipe

PRELIMINARY WORK

1 – Remove the connecting support from the tunnel



- Remove screws (arrows).
- **If installed:** Loosen clamp (1).
- Loosen screws (2).
- Guide out and remove connecting support (3) on the tunnel.

MAIN WORK

2 – Remove front pipe



WARNING

Hot surfaces.

Risk of burning!

- Perform all work only on components that have cooled down.



CAUTION

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.



CAUTION

Swarf resulting from sawing or grinding components.

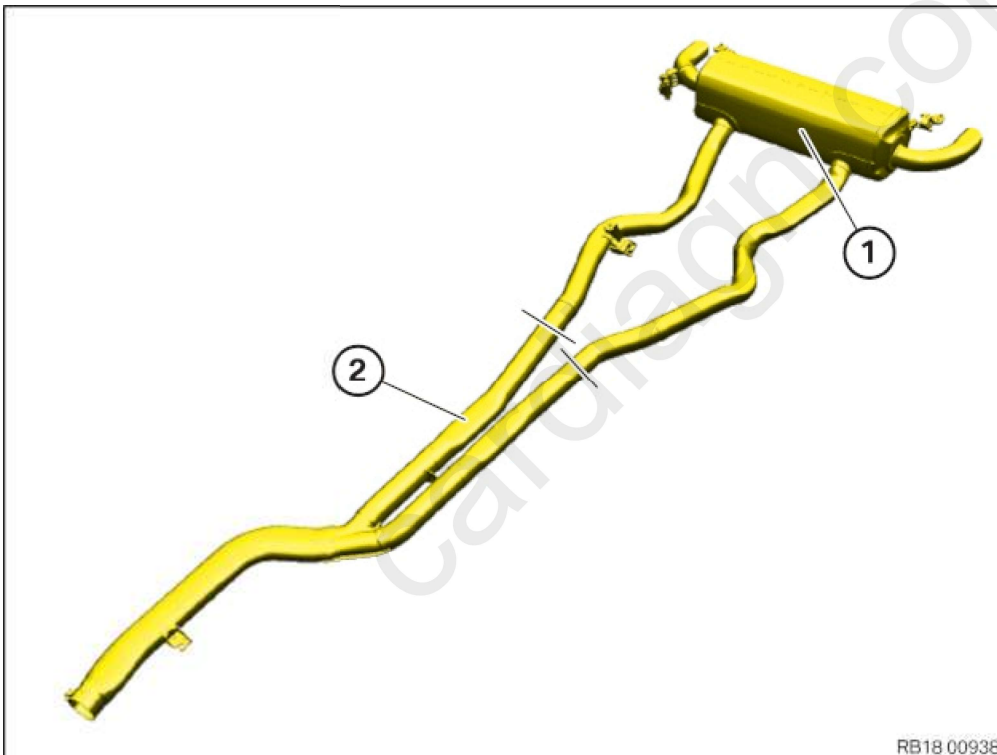
Danger of injury!



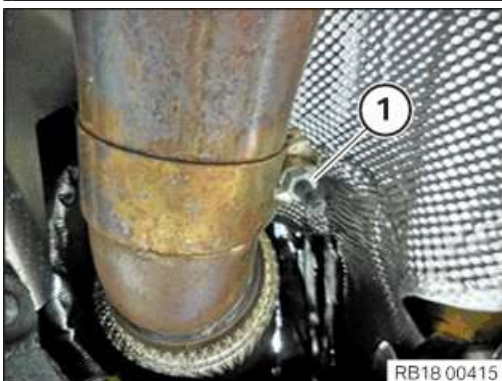
- Conduct all work in appropriate personal protective equipment only.



- Wear safety goggles and protective gloves.

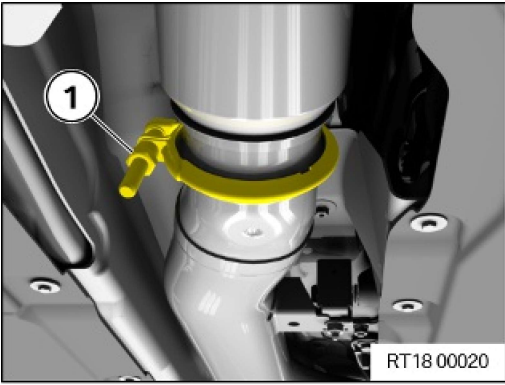


- If the separation point is not marked by a punch mark in the pipe, determine the separation point by means of the pipe length on the new front silencer (2).
- Transfer the separation point to the component to be replaced and mark.
- Secure front pipe (2) and rear silencer (1) to prevent them from falling down.
- Cut through the component to be renewed at the marked point with a suitable tool.



- **Equipment specification 1 (ribbon clamp)**

Detach the ribbon clamp (1).



- **Equipment specification 2 (V-clips)**

Unfasten clamp (1).



- Unfasten nut (1).



- Lower, guide out and remove front pipe (2) with the help of an auxiliary person.

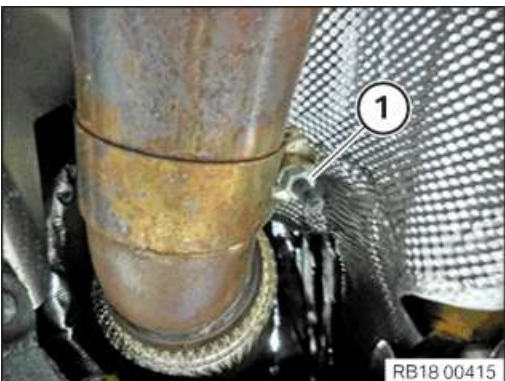
3 – Install the front pipe



- Renew front pipe (1).

Parts: Front pipe

- Feed in and install front silencer (1) with an auxiliary person.



- **Equipment specification 1 (ribbon clamp)**

Parts: Ribbon cable clamp

Tighten the ribbon clamp (1).

Exhaust system to catalytic converter

Ribbon cable clamp	Renew flat band clip.	Tightening torque	26 Nm
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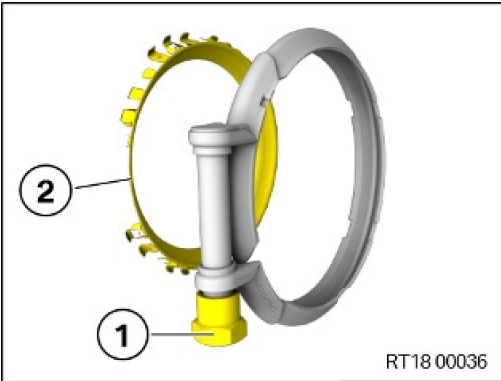
- Renew nut (1).

Parts: Nut

- Tighten nut (1).

Front pipe / petrol particulate filter on transmission holder

M8	Renew nut.	Tightening torque	19 Nm
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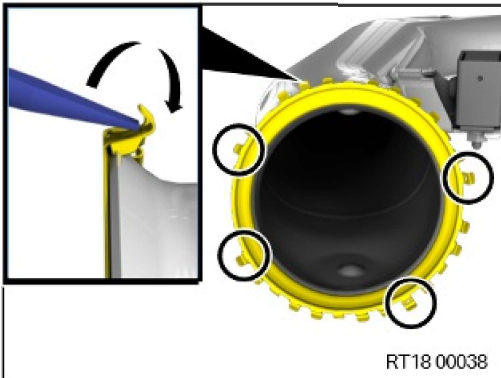


- **Equipment specification 2 (V-clips)**

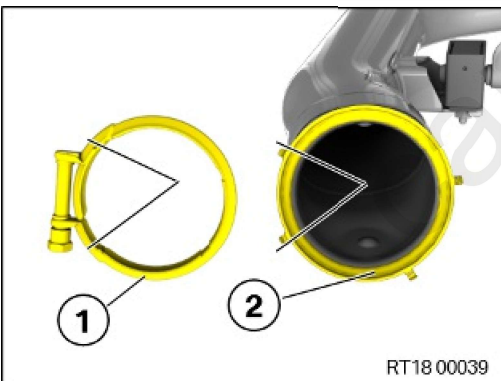
Renew V-band clamp.

Parts: V-band clamp

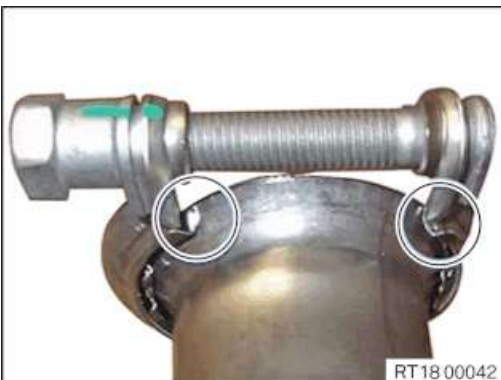
Unscrew the nut (1) and remove the sealing ring (2).



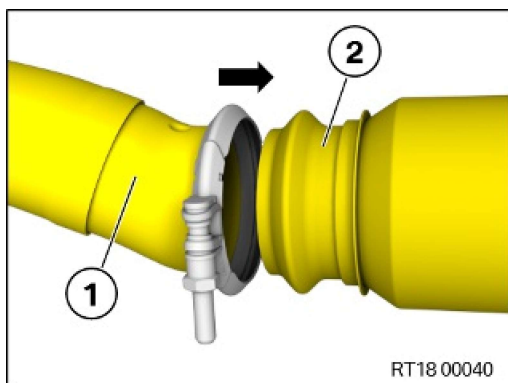
- Bend all sheet metal tabs over with a suitable tool, except those in the marked areas.



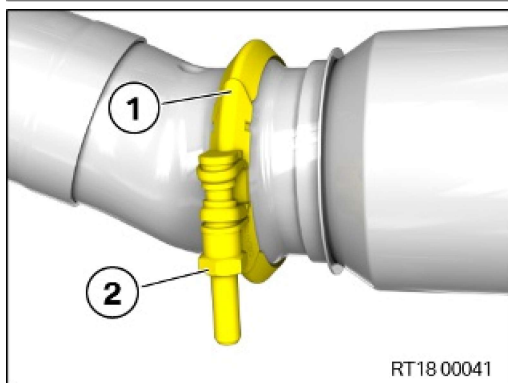
- Mount the V-clip (1) on the sealing ring (2).
- Make sure that the V-clip (1) is positioned correctly on the sealing ring (2).



- Make sure that the V-clip rests against the sheet metal tabs after mounting (marks).



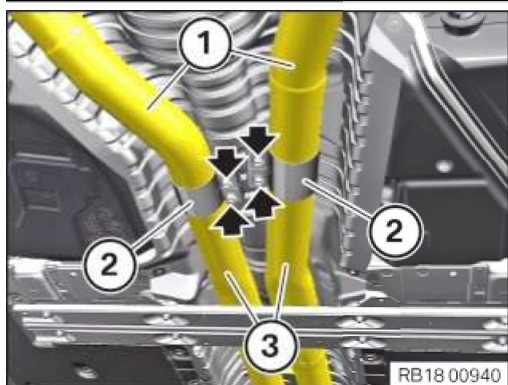
- Connect the exhaust system (1) to the catalytic converter (2) (arrow) and position it correctly.



- Make sure that V-clip (1) is fitted correctly.
- Tighten down screw (2).

V-clip to catalytic converter

V-band clamp	Renew V-band clamp.	Tightening torque	22 Nm
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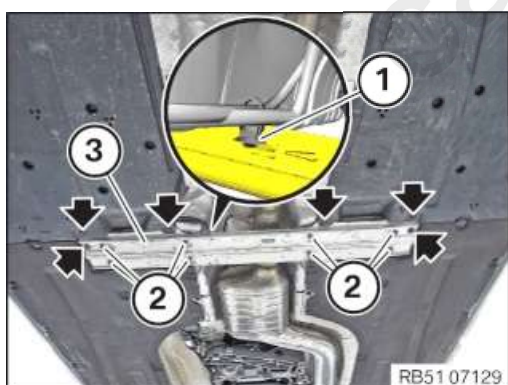
- Connect the rear silencer (1) to the front pipes (2) using the clamps (3).
- Centre the clamps (2) and tighten the nuts (arrows).

Clamp with partial replacement of exhaust system

Clamp		Tightening torque	45 Nm
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POSTPROCESSES

4 – Install the connecting supports on the tunnel



- Guide in and install connecting support (3) on the tunnel.
- Tighten the screws (2).

Connecting support to tunnel

M8x25 screw		Tightening torque	20 Nm
Screw		Tightening torque	3 Nm

- Tighten screws (arrows).

Connecting support to tunnel

M8x25 screw		Tightening torque	20 Nm
Screw		Tightening torque	3 Nm

- **If installed:** Secure clamps (1).

Additional Information

Overview of Tightening Torques

Exhaust system to catalytic converter Used in step 3

Ribbon cable clamp	Renew flat band clip.	Tightening torque	26 Nm
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Front pipe / petrol particulate filter on transmission holder Used in step 3

M8	Renew nut.	Tightening torque	19 Nm
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V-clip to catalytic converter Used in step 3

V-band clamp	Renew V-band clamp.	Tightening torque	22 Nm
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Clamp with partial replacement of exhaust system Used in step 3

Clamp		Tightening torque	45 Nm
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Connecting support to tunnel Used in step 4

M8x25 screw		Tightening torque	20 Nm
Screw		Tightening torque	3 Nm

18 12 081 Replacing the controller drive for exhaust flap

1 – Remove controller drive for exhaust flap



WARNING

Hot surfaces.

Risk of burning!

- Perform all work only on components that have cooled down.

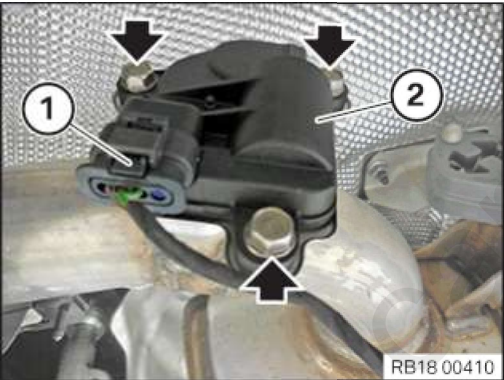


RISK OF DAMAGE

 **Electrostatic discharge.**

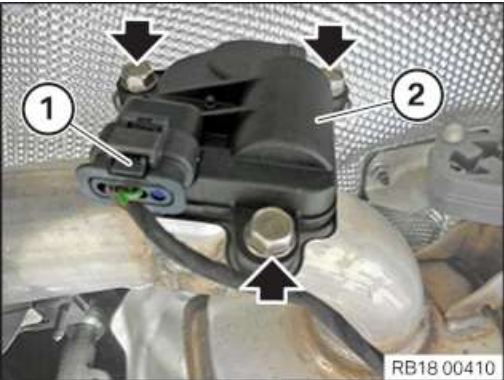
Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.



- Unlock connector (1) and pull off.
- Remove screws (arrows).
- Feed the controller drive for exhaust flap (2) out and remove.

2 – Install controller drive for exhaust flap.



- Feed in and install controller drive for exhaust flap (2)
- Tighten screws (arrows).

Controller drive exhaust flap to exhaust system

M6x16		Tightening torque	8,5 Nm
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- Connect and lock the connector (1).
The connector (1) must engage audibly.

Additional Information

Overview of Tightening Torques

Controller drive exhaust flap to exhaust system

Used in step 2

M6x16		Tightening torque	8,5 Nm
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Links

Repair instructions

Used in step

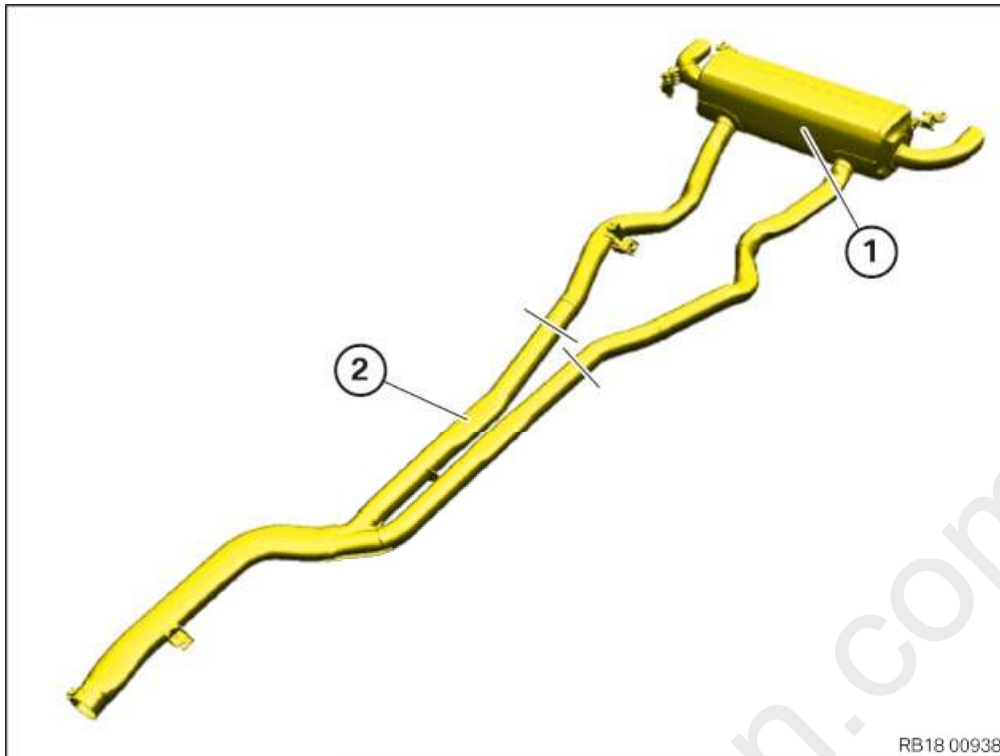
61 35 ... Notes on ESD protection (Electro Static Discharge)	1
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18 12 031 Replacing the rear silencer

1 – Remove rear silencer (exhaust system without petrol particulate filter)

Replace rear silencer (exhaust system without petrol particulate filter)



1 Rear silencer

2 Front pipe



WARNING

Hot surfaces.

Risk of burning!

- Perform all work only on components that have cooled down.



CAUTION

Component with heavy weight.

Danger of injury!

- Note component's centre of gravity.
- Support component using a jack.
- Secure component against falling off the jack.



CAUTION

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.



CAUTION

Swarf resulting from sawing or grinding components.

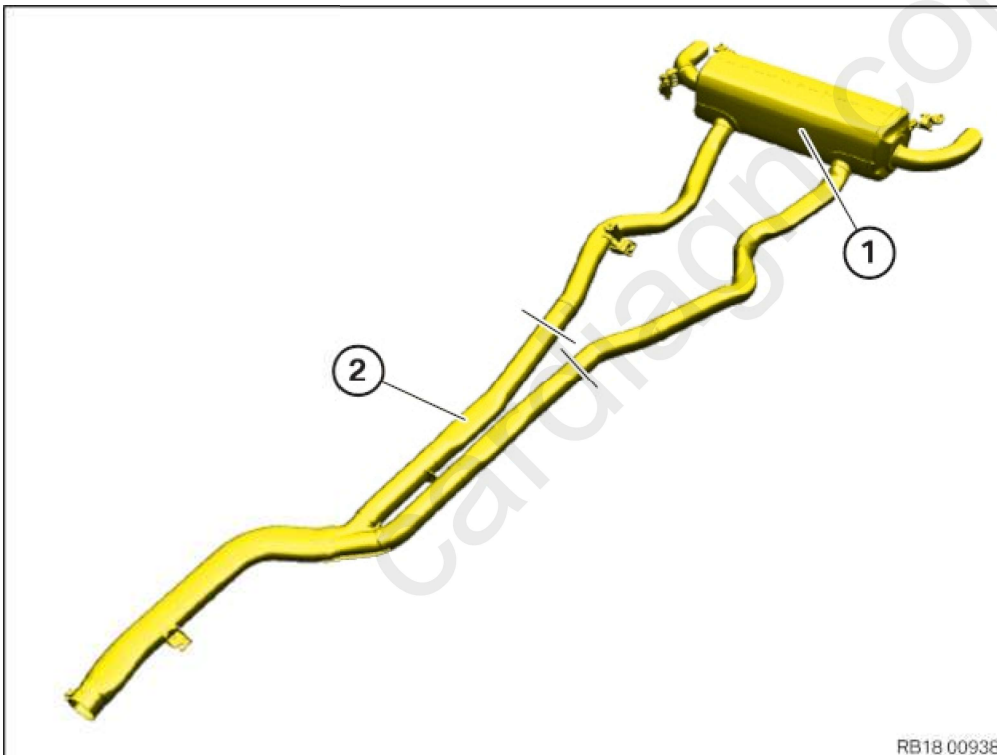
Danger of injury!



- Conduct all work in appropriate personal protective equipment only.



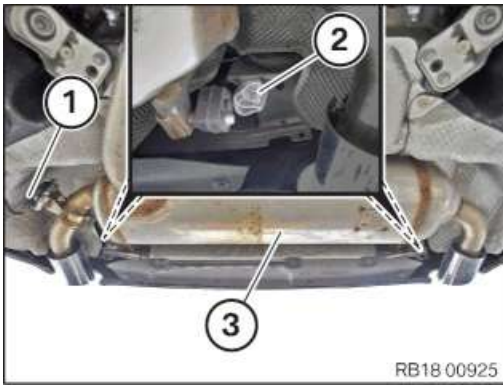
- Wear safety goggles and protective gloves.



- If the separation point is not marked by a punch mark in the pipe: Determine the separation point using the length of the pipe on the new component.
- Transfer the separation point to the component to be replaced and mark.
- Secure front pipe (2) and the rear silencer (1) against falling down.
- Cut through the component to be renewed at the marked point using a suitable tool.



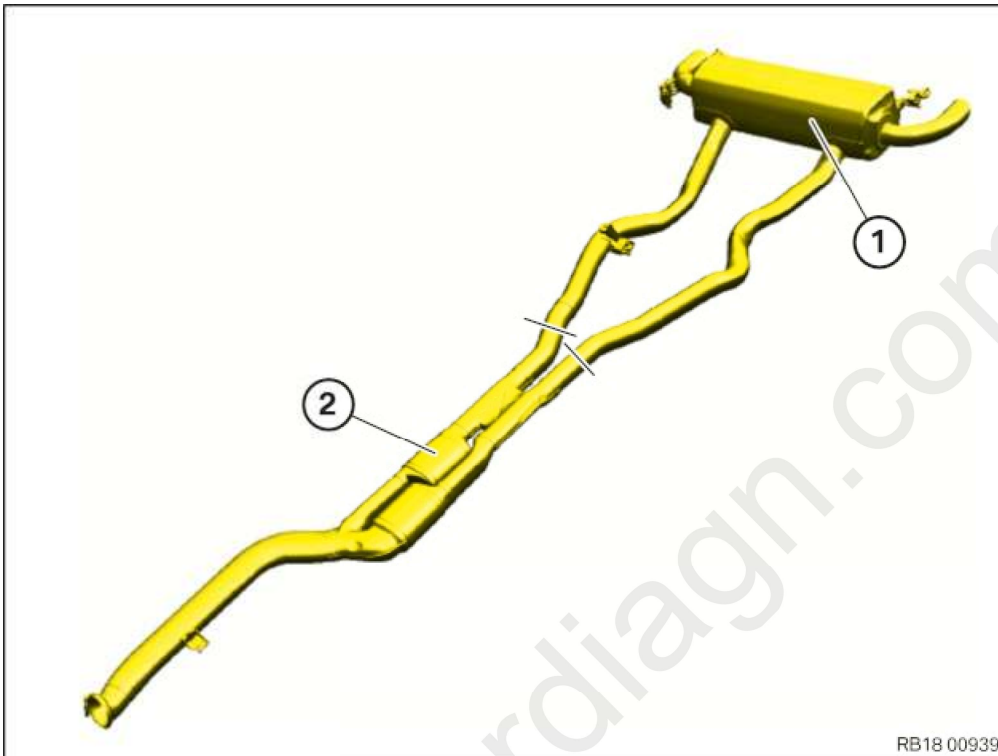
- Release the nut (1) on the rear axle support.



- Unlock plug connection (1) and disconnect.
- Loosen nuts (2).
- Lower the rear silencer (3) with the assistance of another person and remove it.

2 – Removing rear silencer (exhaust with petrol particulate filter)

Replace rear silencer (exhaust system with petrol particulate filter)



1 Rear silencer

2 Petrol particulate filter



WARNING

Hot surfaces.

Risk of burning!

- Perform all work only on components that have cooled down.



CAUTION

Component with heavy weight.

Danger of injury!

- Note component's centre of gravity.
- Support component using a jack.
- Secure component against falling off the jack.



CAUTION

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.



CAUTION

Swarf resulting from sawing or grinding components.

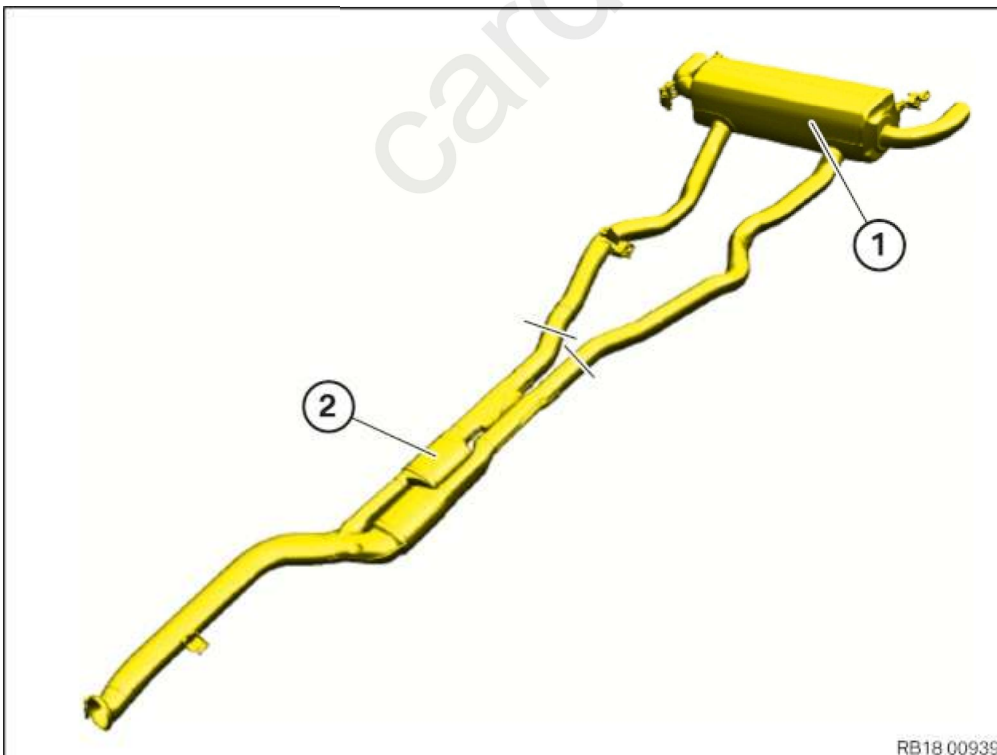
Danger of injury!



- Conduct all work in appropriate personal protective equipment only.

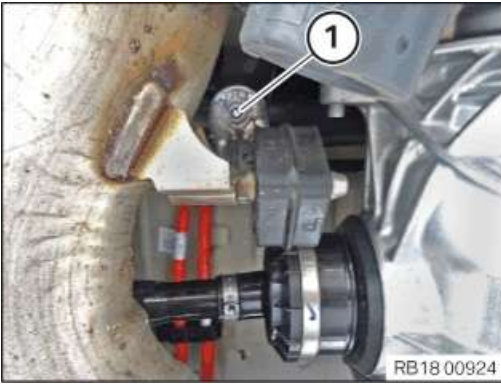


- Wear safety goggles and protective gloves.

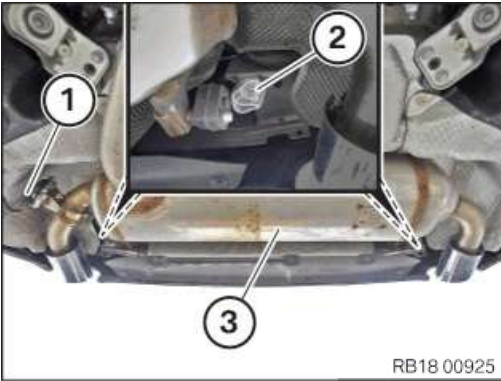


- If the separation point is not marked by a punch mark in the pipe: Determine the separation point using the length of the pipe on the new component.
- Transfer the separation point to the component to be replaced and mark.
- Secure petrol particulate filter (2) and the rear silencer (1) against falling down.
- Cut through the component to be renewed at the marked point using a suitable tool.

RB18 00939



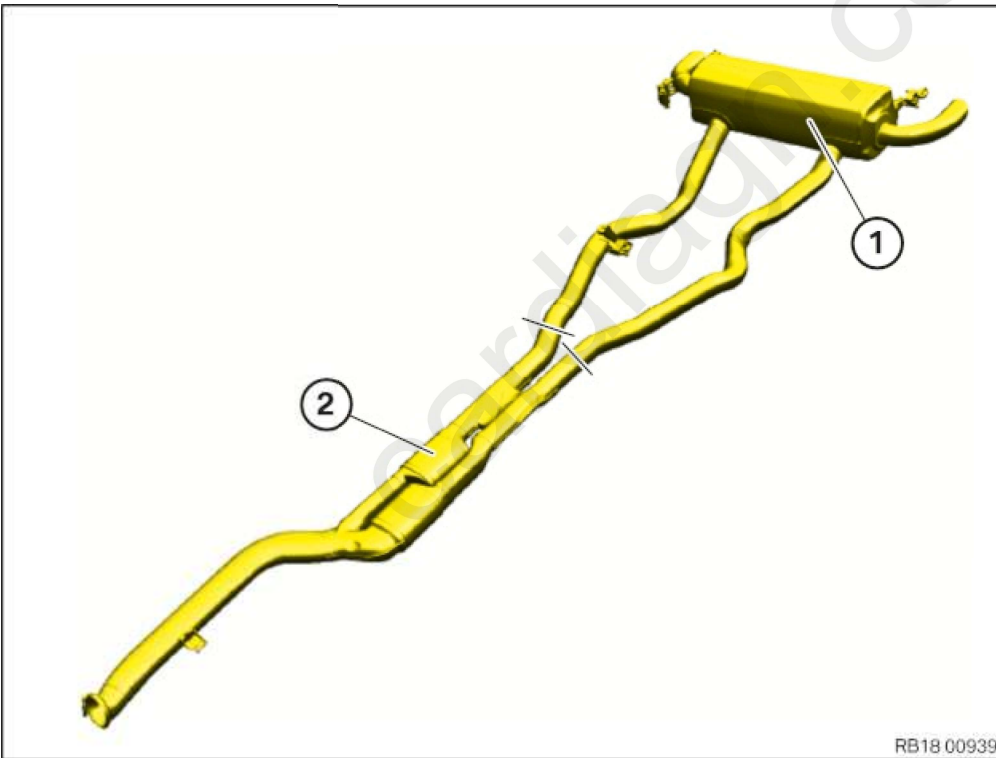
- Release the nut (1) on the rear axle support.



- Unlock plug connection (1) and disconnect.
- Loosen nuts (2).
- Lower the rear silencer (3) with the assistance of another person and remove it.

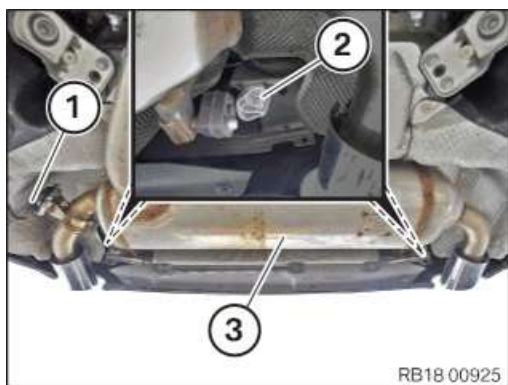
3 – Install rear silencer (exhaust system with petrol particulate filter)

Replace rear silencer (exhaust system with petrol particulate filter)



1 Rear silencer

2 Petrol particulate filter

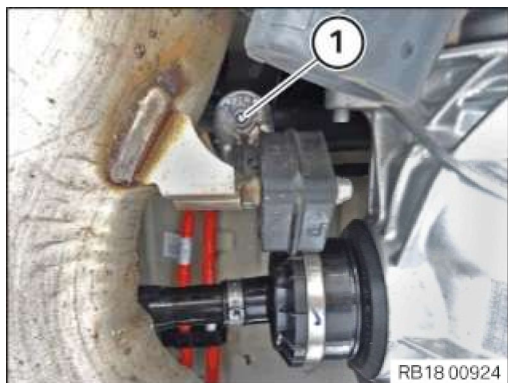


- Renew the rear silencer (3) .
Parts: Rear silencer
- Feed in and install rear silencer (3) with a second person.
- Renew nuts (2).
Parts: Nuts
- Tighten nuts (2).

Rear silencer to body / bumper support

M8	Replace nuts.	Tightening torque	19 Nm
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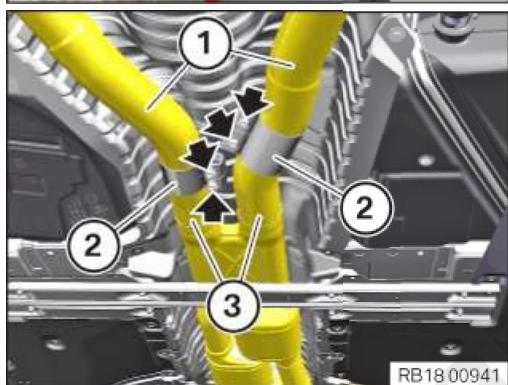
- Connect connectors (1) and lock.
The connector (1) must engage audibly.



- Renew nut (1).
Parts: Nut
- Tighten the bolt (1) on the rear axle support.

Exhaust system to rear axle carrier

Nut M8	Renew nut.	Tightening torque	19 Nm
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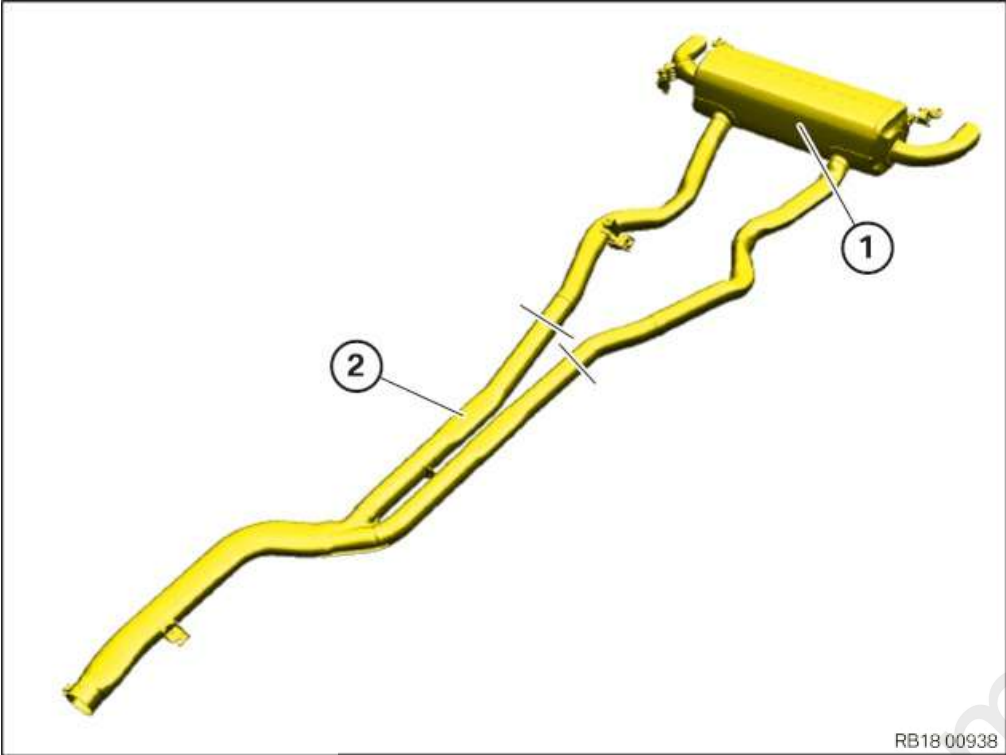
- Connect the rear silencer (1) to the front pipes (2) using the clamps (3).
- Centre the clamps (2) and tighten the nuts (arrows).

Clamp with partial replacement of exhaust system

Clamp		Tightening torque	45 Nm
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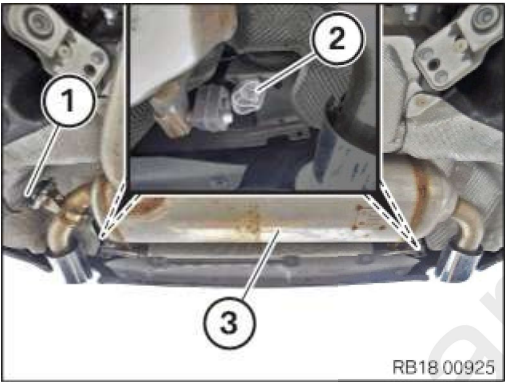
4 – Install rear silencer (exhaust system without petrol particulate filter)

Replace rear silencer (exhaust system without petrol particulate filter)



1 Rear silencer

2 Front pipe

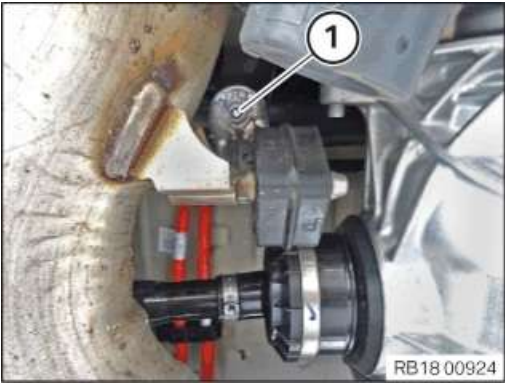


- Renew the rear silencer (3) .
Parts: Rear silencer
- Feed in and install rear silencer (3) with a second person.
- Renew nuts (2).
Parts: Nuts
- Tighten nuts (2).

Rear silencer to body / bumper support

M8	Replace nuts.	Tightening torque	19 Nm
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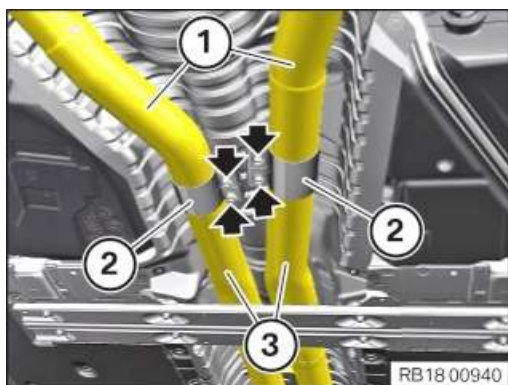
- Connect connectors (1) and lock.
The connector (1) must engage audibly.



- Renew nut (1).
Parts: Nut
- Tighten the bolt (1) on the rear axle support.

Exhaust system to rear axle carrier

Nut M8	Renew nut.	Tightening torque	19 Nm
--------	------------	-------------------	-------



- Connect the rear silencer (1) to the front pipes (2) using the clamps (3).
- Centre the clamps (2) and tighten the nuts (arrows).

Clamp with partial replacement of exhaust system

Clamp		Tightening torque	45 Nm
-------	--	-------------------	-------

Additional Information

Overview of Tightening Torques

Rear silencer to body / bumper support Used in step 34

M8	Replace nuts.	Tightening torque	19 Nm
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Exhaust system to rear axle carrier Used in step 34

Nut M8	Renew nut.	Tightening torque	19 Nm
--------	------------	-------------------	-------

Clamp with partial replacement of exhaust system Used in step 34

Clamp		Tightening torque	45 Nm
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18 32 005 Removing and installing/replacing catalytic converter



WARNING

Hot surfaces.

Risk of burning!

- Perform all work only on components that have cooled down.

PRELIMINARY WORK

1 – Removing the acoustic cover



WARNING

Hot surfaces.

Risk of burning!

- Perform all work only on components that have cooled down.



RISK OF DAMAGE

Damage to the acoustic cover.

Jerky movements during disassembly and excessive application of force during installation may result in breakage of the acoustic cover.

- Disassemble or mount the acoustic cover carefully.
- Disassemble or mount snap-lock couplings of the ball pivots one after the other.
- Disassemble or mount acoustic cover only at temperatures $>20^{\circ}\text{C}$.
- Use only distilled water as an auxiliary material during installation, no lubricants.



- Release the acoustic cover (1) towards the top from the rubber mounts (marks).

2 – Removing intake silencer housing



RISK OF DAMAGE

Damage to the clean air line. Damage to the air filter.

For changing the air filter insert, if the upper section of intake filter housing is only raised and not completely removed, the clean air line and the air filter insert may be damaged.

- Do not lift upper section of intake filter housing by force.
- Unfasten clamp.
- Remove upper section of intake filter housing completely.



- Unlock plug connection (1) and disconnect.
- Unfasten clamp (2).
- Pull out and remove the intake silencer housing (3) from the rubber mounts towards the top.

3 – Remove the front oxygen sensor



WARNING

Hot surfaces.

Risk of burning!

- Perform all work only on components that have cooled down.



RISK OF DAMAGE

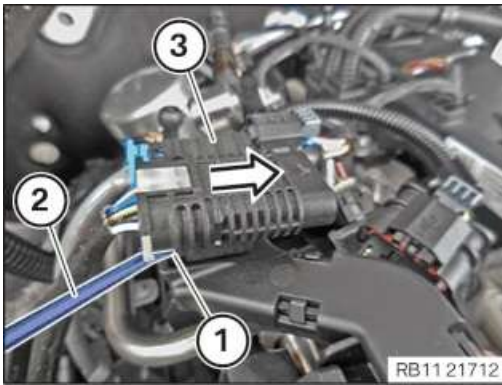
Damage to wires when disconnecting connectors and plug connections.

Sheared wires can cause a short circuit.

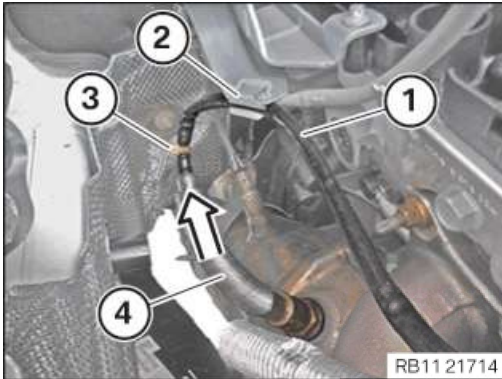
- Do not pull on the wires when disconnecting connectors and plug connections.



- Unlock and loosen connector (1).



- Unlock the locks (1) with a conventional screwdriver (2) and release.
- Feed out the connector (3) in **the direction of arrow** and set aside.



- Detach the line of the front oxygen sensor (1) from the holder (2).
- Unfasten cable strap (3).
- Feed out the heat shield (4) in **direction of arrow** and set it aside.



- Release and remove the control sensor (1) with the special tool.

4 – Remove the monitoring oxygen sensor



WARNING

Hot surfaces.

Risk of burning!

- Perform all work only on components that have cooled down.



RISK OF DAMAGE

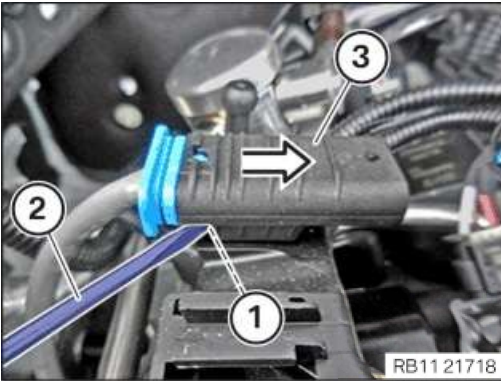
Damage to wires when disconnecting connectors and plug connections.

Sheared wires can cause a short circuit.

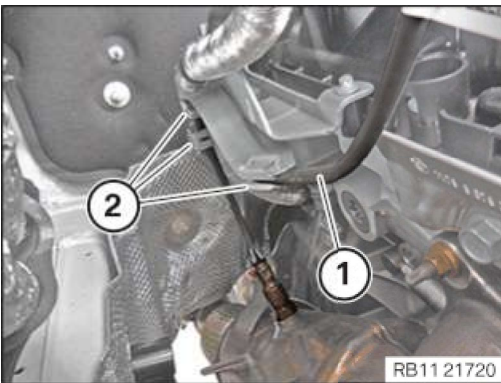
- Do not pull on the wires when disconnecting connectors and plug connections.



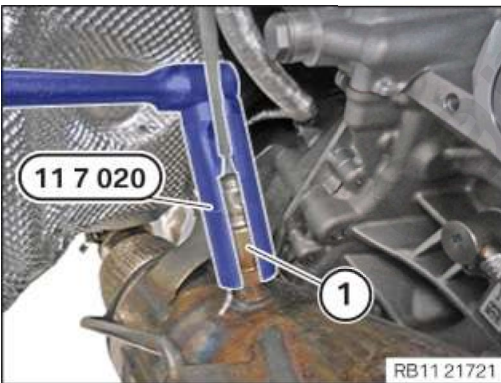
- Unlock and loosen connector (1).



- Unlock the lock (1) with a suitable screwdriver (2).
- Feed out the connector (3) in the direction of the **arrow** and set it aside.

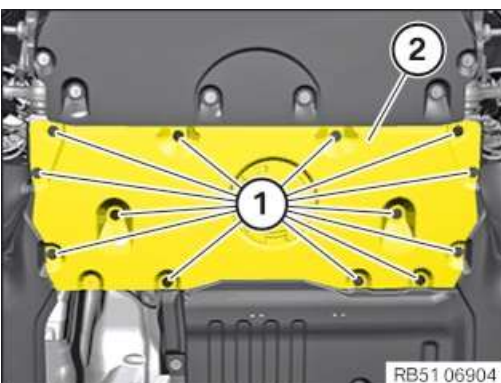


- Detach the line of the monitoring oxygen sensor (1) from the holder (2).



- Release the monitoring oxygen sensor (1) using special tool .
- Remove the monitoring sensor (1).

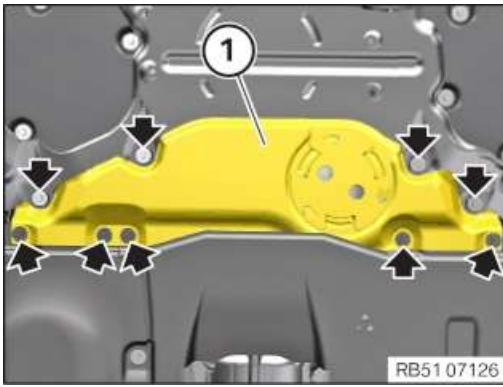
5 – Removing the centre underbody protection



- **Version with rear-wheel drive:**

Loosen screws (1).

Remove centre underbody protection (2) .

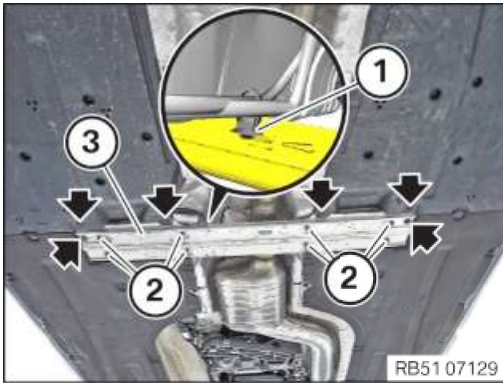


- **Version with all-wheel drive:**

Remove screws (arrows).

Feed out and remove the centre underbody protection (1).

6 – Remove the connecting support from the tunnel



- Remove screws (arrows).

- **If installed:** Loosen clamp (1).

- Loosen screws (2).

- Guide out and remove connecting support (3) on the tunnel.

7 – Remove complete exhaust system



WARNING

Hot surfaces.

Risk of burning!

- Perform all work only on components that have cooled down.



CAUTION

Component with heavy weight.

Danger of injury!

- Note component's centre of gravity.
- Support component using a jack.
- Secure component against falling off the jack.

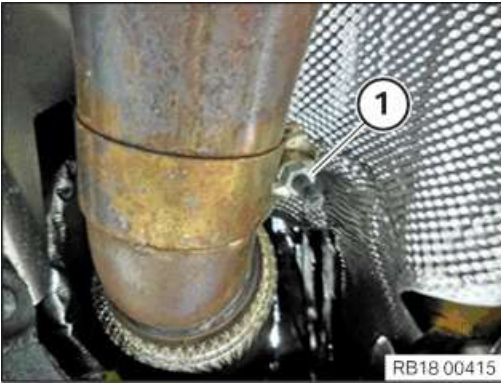


CAUTION

Heavy component.

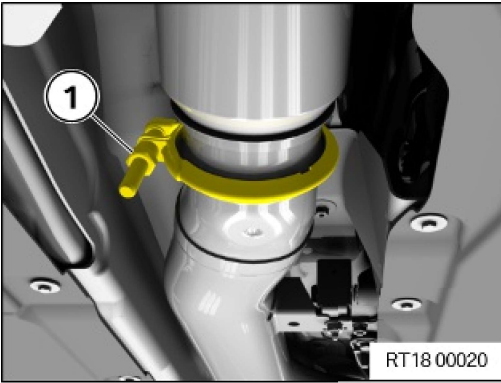
Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.



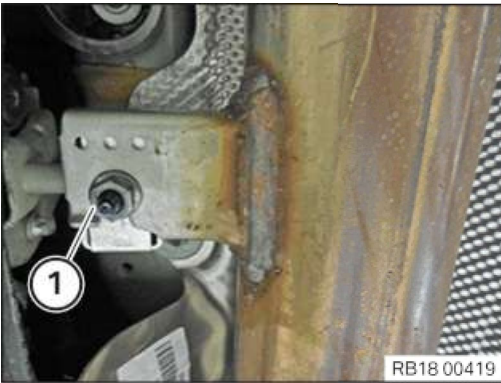
- **Equipment specification 1 (ribbon clamp)**

Detach the ribbon clamp (1).

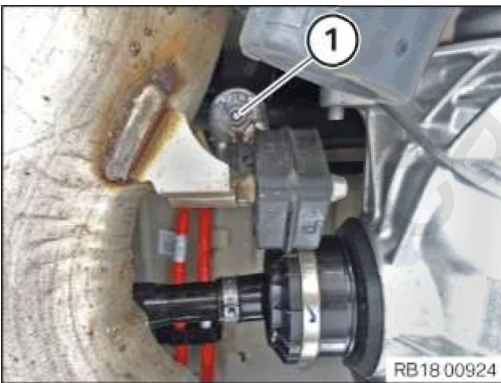


- **Equipment specification 2 (V-clips)**

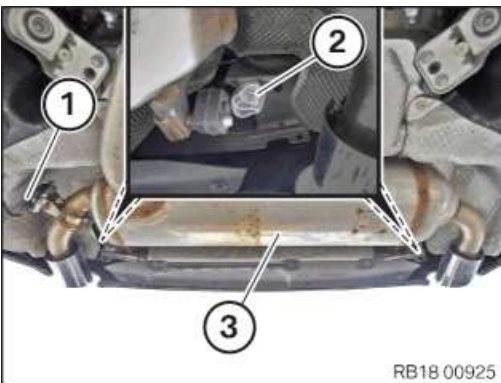
Unfasten clamp (1).



- Loosen nut (1).



- Release nut (1) on the rear axle support.



- Unlock plug connection (1) and disconnect.
- Loosen nuts (2).
- Lower and remove the exhaust system (3) with the assistance of a second person.

MAIN WORK

8 – Remove catalytic converter



WARNING

Hot surfaces.

Risk of burning!

- Perform all work only on components that have cooled down.



CAUTION

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.

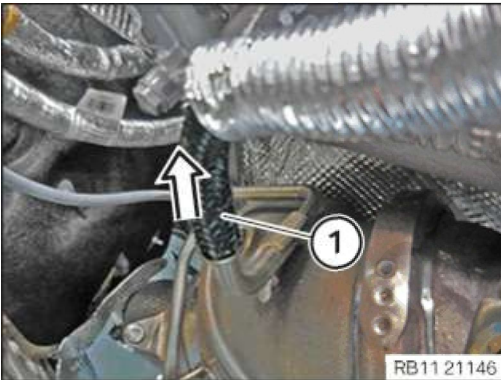


CAUTION

Component with heavy weight.

Danger of injury!

- Note component's centre of gravity.
- Support component using a jack.
- Secure component against falling off the jack.

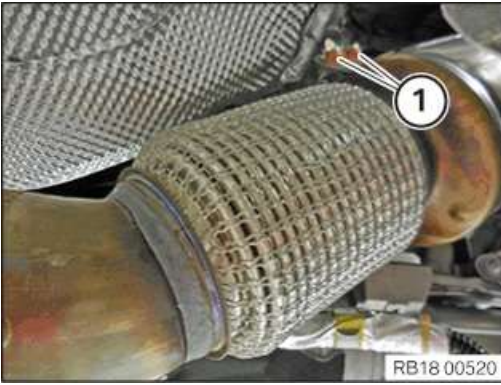


- **If installed: Disconnect pressure hose.**

Pull off pressure hose (1) in direction of arrow and set it aside.



- Loosen V-band clamp (1).



- Loosen nuts (1).



- Unlock and loosen clamp (1).
- Feed out catalytic converter and remove.

9 – Install catalytic converter



- Renew the V-clip (1).
- Parts:** V-band clamp



- Renew the gasket (1).
- Parts:** Gasket



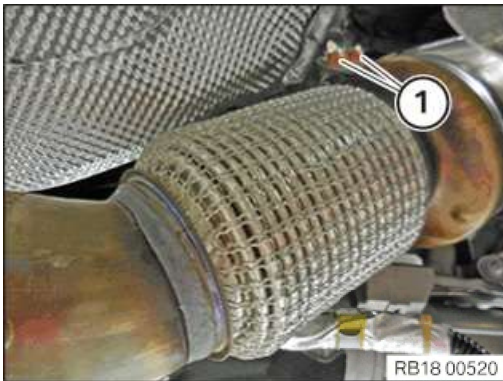
- Feed in and install catalytic converter.
 - Lock clamp (1).
- The clamp (1) must engage audibly.



- Tighten V-band clamp (1).

Catalytic converter to turbocharger

V-band clamp	Replace V-band clamp.	Tightening torque	19 Nm
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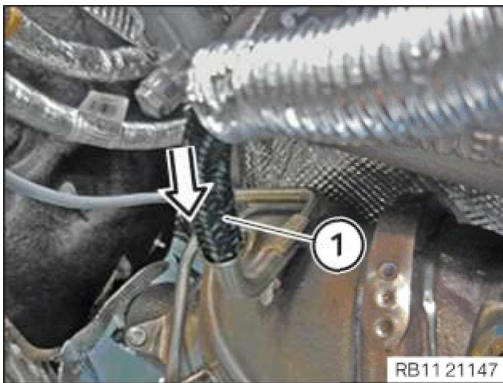
- Renew nuts (1).

Parts: Nuts

- Tighten nuts (1).

Catalytic converter to holder

M8 nut	Renew nut.	Tightening torque	28 Nm
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- **If installed: Connect pressure hose.**

Renew pressure hose (1).

Parts: Pressure hose

- Connect the pressure hose (1) in direction of arrow to the limit position.

POSTPROCESSES

10 – Installing the complete exhaust system



CAUTION

Component with heavy weight.

Danger of injury!

- Note component's centre of gravity.
- Support component using a jack.
- Secure component against falling off the jack.

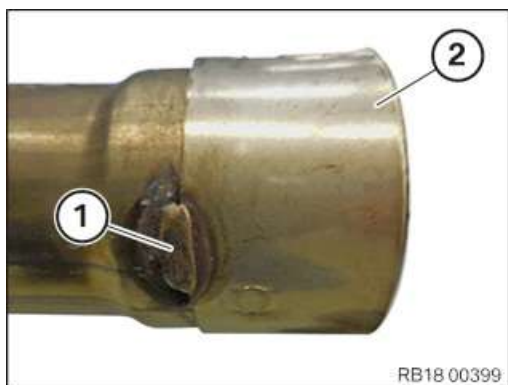


CAUTION

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.



CAUTION

Swarf resulting from sawing or grinding components.

Danger of injury!



- Conduct all work in appropriate personal protective equipment only.



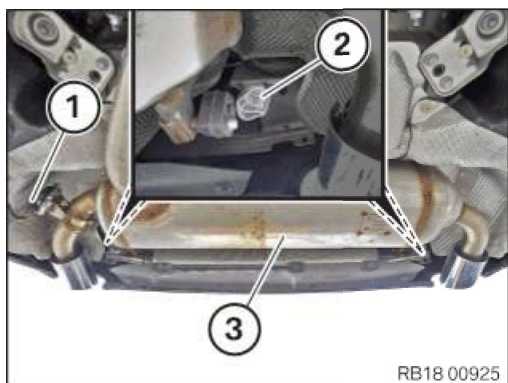
- Wear safety goggles and protective gloves.

Equipment specification 1 (ribbon clamp)

Open the weld seam (1) with a conventional tool.

- Remove ribbon clamp (2).
- Renew the (2) ribbon clamp.

Parts: Ribbon cable clamp



- Feed in and install the exhaust system (3) with a second person.
- Renew nuts (2).

Parts: Nuts

- Tighten nuts (2).

Rear silencer to body / bumper support

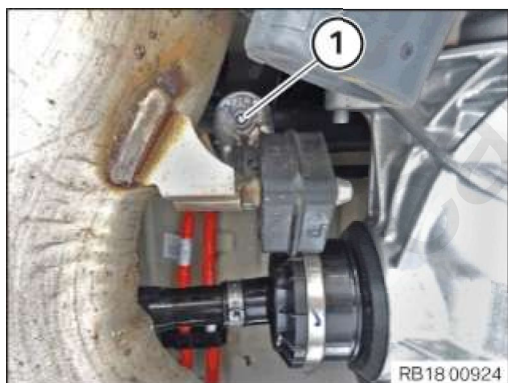
M8	Replace nuts.	Tightening torque	19 Nm
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- Connect connectors (1) and lock.
The connector (1) must engage audibly.

- Renew nut (1).

Parts: Nut

- Tighten the bolt (1) on the rear axle support.



Exhaust system to rear axle carrier

Nut M8	Renew nut.	Tightening torque	19 Nm
--------	------------	-------------------	-------

- Renew nut (1).

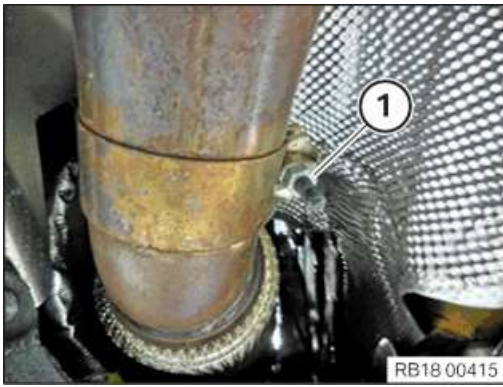
Parts: Nut

- Tighten nut (1).

Front pipe / petrol particulate filter on transmission holder

M8	Renew nut.	Tightening torque	19 Nm
----	------------	-------------------	-------

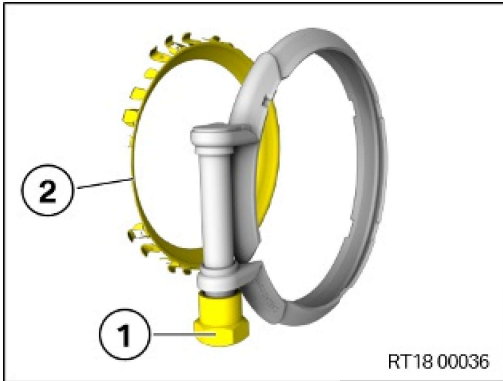




- Tighten the ribbon clamp (1).

Exhaust system to catalytic converter

Ribbon cable clamp	Renew flat band clip.	Tightening torque	26 Nm
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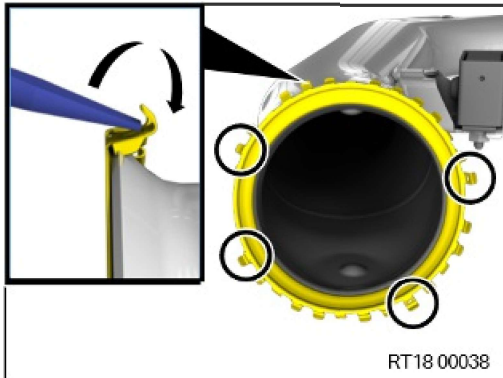


Equipment specification 2 (V-clips)

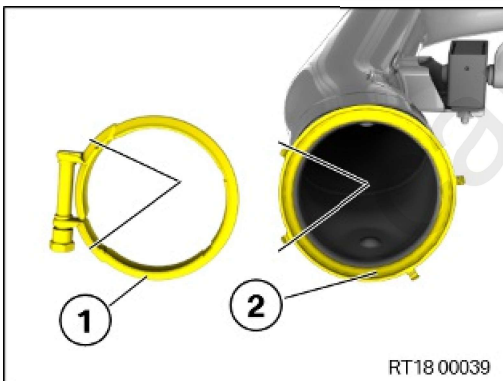
Renew V-band clamp.

Parts: V-band clamp

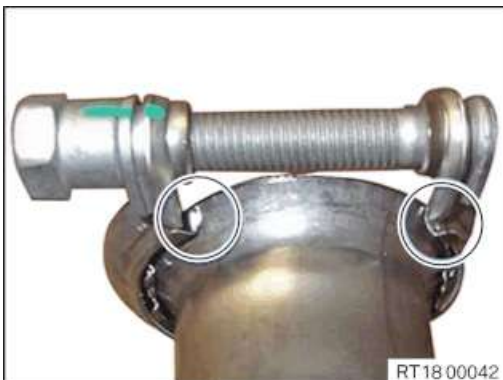
Unscrew the nut (1) and remove the sealing ring (2).



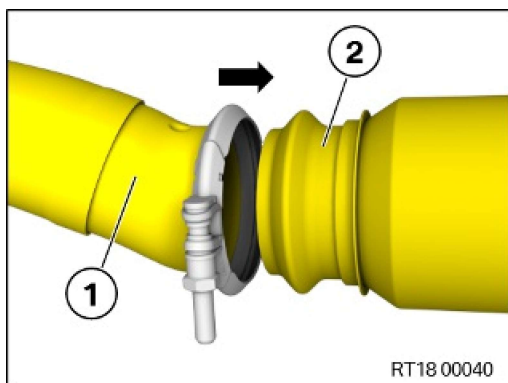
- Bend all sheet metal tabs over with a suitable tool, except those in the marked areas.



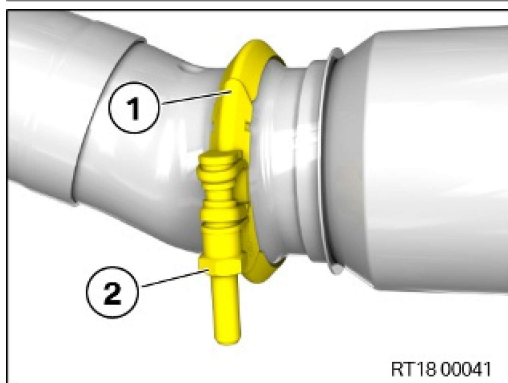
- Mount the V-clip (1) on the sealing ring (2).
- Make sure that the V-clip (1) is positioned correctly on the sealing ring (2).



- Ensure that the V-clip rests against the sheet metal tabs in the marked areas after mounting.



- Connect the exhaust system (1) with the catalytic converter (2) and position it correctly (arrow).

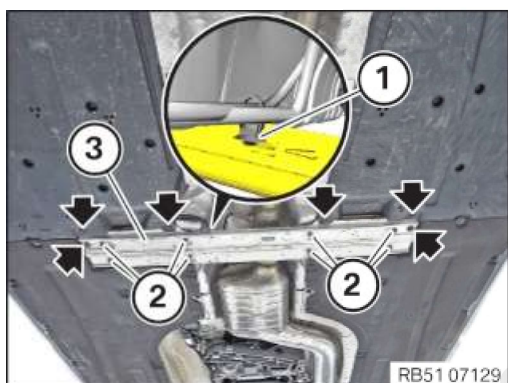


- Make sure that V-clip (1) is fitted correctly.
- Tighten down screw (2).

V-clip to catalytic converter

V-band clamp	Renew V-band clamp.	Tightening torque	22 Nm
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11 – Install the connecting supports on the tunnel



- Guide in and install connecting support (3) on the tunnel.
- Tighten the screws (2).

Connecting support to tunnel

M8x25 screw		Tightening torque	20 Nm
Screw		Tightening torque	3 Nm

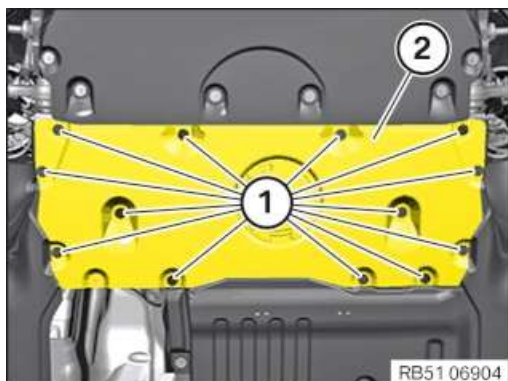
- Tighten screws (arrows).

Connecting support to tunnel

M8x25 screw		Tightening torque	20 Nm
Screw		Tightening torque	3 Nm

- **If installed:** Secure clamps (1).

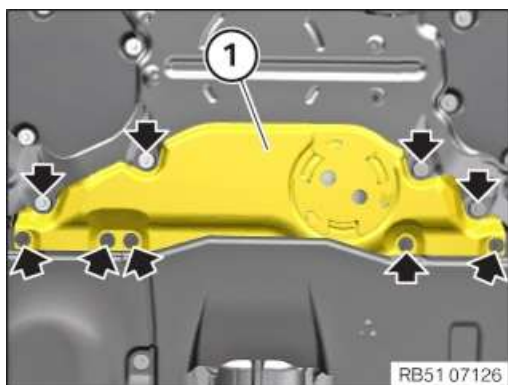
12 – Installing the centre underbody protection



- **Version with rear-wheel drive:**
Position central underbody protection (2).
Tighten the screws (1).

Underbody protection

Hexagon screw		Tightening torque	3 Nm
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• **Version with all-wheel drive:**

Guide in and install the centre of underbody protection (1).

Tighten screws (arrows).

Underbody protection

Hexagon screw		Tightening torque	3 Nm
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13 – Install the monitoring oxygen sensor



TECHNICAL INFORMATION

New oxygen sensors are to be greased lightly and evenly on the thread.

For oxygen sensors that are reused, the following should be observed:

Lightly and evenly grease the oxygen sensor only on the thread. Do not clean and grease that part of the oxygen sensor which protrudes in the exhaust branch (sensor ceramics).

For additional information see: 11 00 ... Overview of consumables in Electronic Parts Catalogue



• Prepare the oxygen sensor.

Do not damage the sensor ceramics.

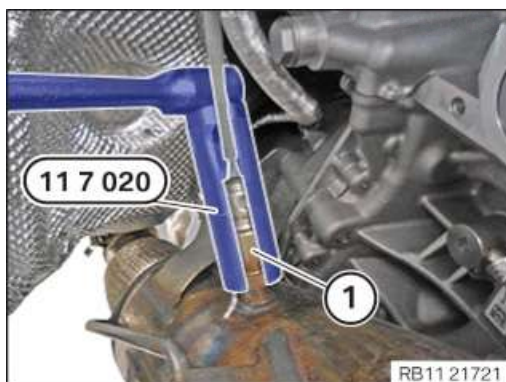
(1) = Thread

(2) = Sensor ceramics

• Grease the thread (1) of the Lambda monitoring oxygen sensor thinly and evenly.

Expendable materials

Brake block paste	3 g, Bag	83192158851
* TU = Trade Unit. TU numbers cannot be ordered! For invoicing purposes only.	100 g, Tube	83192158852
	5 g, TU*	83230140233

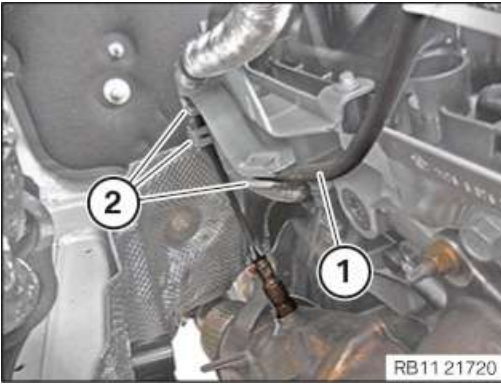


• Feed in the monitoring oxygen sensor (1) and install.

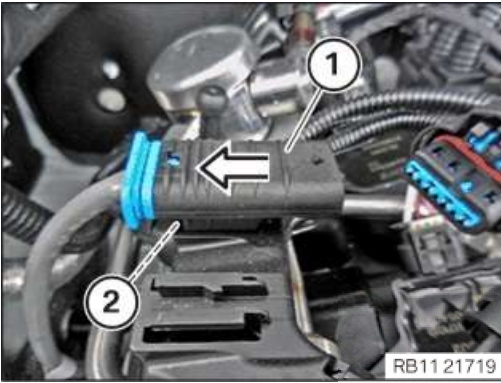
• Tighten monitoring oxygen sensor (1) using special tools [0 493 751 \(11 9 150\)](#) and [0 491 075 \(11 7 030\)](#).

Monitoring oxygen sensor to catalytic converter

M18X1.5		Tightening torque	50 Nm
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- Guide monitoring oxygen sensor line (1) into holder (2) and install it.



- Insert and install the connector (1) in the **direction of arrow**.
- Ensure that the lock (2) engages audibly.



- Connect and lock the connector (1).
- Make sure the connector (1) engages audibly.

14 – Install the front oxygen sensor



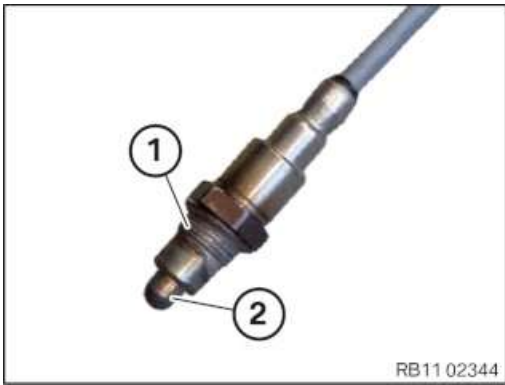
TECHNICAL INFORMATION

New oxygen sensors are to be greased lightly and evenly on the thread.

For oxygen sensors that are reused, the following should be observed:

Lightly and evenly grease the oxygen sensor only on the thread. Do not clean and grease that part of the oxygen sensor which protrudes in the exhaust branch (sensor ceramics).

For additional information see: 11 00 ... Overview of consumables in Electronic Parts Catalogue



- Prepare the oxygen sensor.
Do not damage the sensor ceramics.
(1) = Thread
(2) = Sensor ceramics
- Apply a thin and even coat of grease to the thread (1) of the front oxygen sensor.

Expendable materials

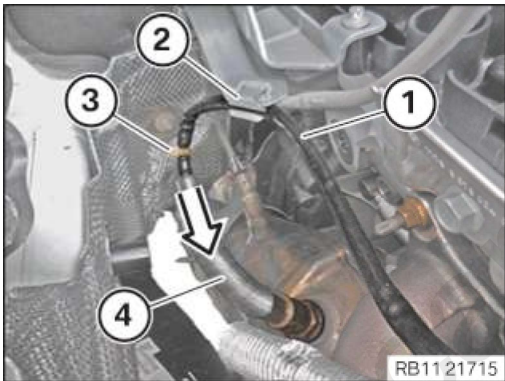
Brake block paste	3 g, Bag	83192158851
* TU = Trade Unit. TU numbers cannot be ordered! For invoicing purposes only.	100 g, Tube	83192158852
	5 g, TU*	83230140233



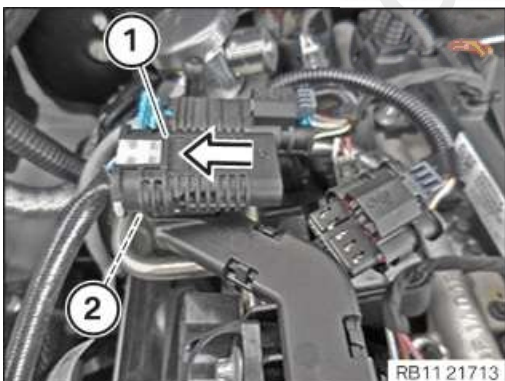
- Screw the control sensor (1) in and tighten it with the special tool .

Front oxygen sensor to catalytic converter

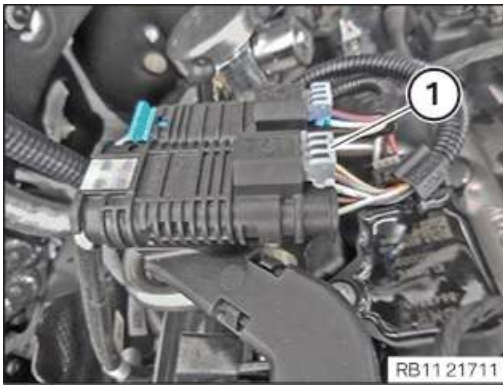
M18X1.5		Tightening torque	50 Nm
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- Guide in the heat protection (4) in the **direction of arrow** and install.
 - Renew the cable straps (3).
- Parts:** Cable strap
- Guide in and install the cable strap (3).
 - Feed in and install the line of the front oxygen sensor (1) in the holder (2).

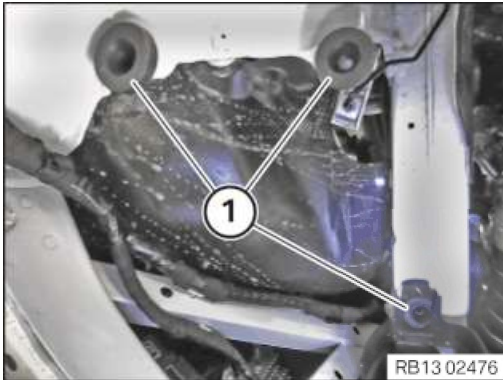


- Insert and install the connector (1) in the **direction of arrow**.
- Ensure that the lock (2) engages audibly.



- Connect and lock the connector (1).
- Make sure the connector (1) engages audibly.

15 – Installing intake silencer housing



- Check the rubber mount (1) for correct fit.



- Feed the intake filter housing (3) in and engage it in the rubber mounts.
- Tighten clamp (2).

Clean air pipe to upper section of intake filter housing

Clamp	Tightening torque	3 Nm
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- Connect connectors (1) and lock.
- The connector (1) must engage audibly.

16 – Install acoustic cover

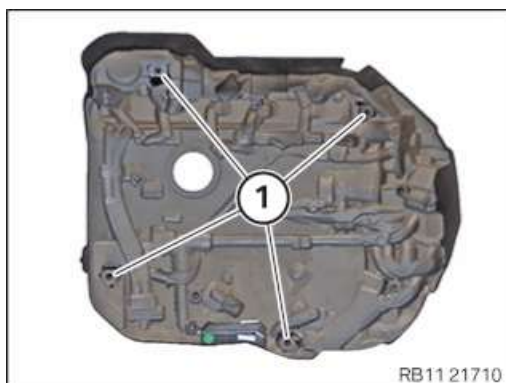


RISK OF DAMAGE

Damage to the acoustic cover.

Jerky movements during disassembly and excessive application of force during installation may result in breakage of the acoustic cover.

- Disassemble or mount the acoustic cover carefully.
- Disassemble or mount snap-lock couplings of the ball pivots one after the other.
- Disassemble or mount acoustic cover only at temperatures $>20^{\circ}\text{C}$.
- Use only distilled water as an auxiliary material during installation, no lubricants.



- Check the rubber mount (1) for correct fit in the acoustic cover.



- Install acoustic cover (1) and fix in the rubber mounts (marks).

Additional Information

Overview of Tightening Torques

Catalytic converter to turbocharger

Used in step 9

V-band clamp	Replace V-band clamp.	Tightening torque	19 Nm
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Catalytic converter to holder

Used in step 9

M8 nut	Renew nut.	Tightening torque	28 Nm
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Rear silencer to body / bumper support

Used in step 10

M8	Replace nuts.	Tightening torque	19 Nm
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Exhaust system to rear axle carrier

Used in step 10

Nut M8	Renew nut.	Tightening torque	19 Nm
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Front pipe / petrol particulate filter on transmission holder

Used in step 10

M8	Renew nut.	Tightening torque	19 Nm
----	------------	-------------------	-------

Exhaust system to catalytic converter

Used in step 10

Ribbon cable clamp	Renew flat band clip.	Tightening torque	26 Nm
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V-clip to catalytic converter

Used in step 10

V-band clamp	Renew V-band clamp.	Tightening torque	22 Nm
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Connecting support to tunnel

Used in step 11

M8x25 screw		Tightening torque	20 Nm
Screw		Tightening torque	3 Nm

Underbody protection

Used in step 12

Hexagon screw		Tightening torque	3 Nm
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Monitoring oxygen sensor to catalytic converter

Used in step 13

M18X1.5		Tightening torque	50 Nm
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Front oxygen sensor to catalytic converter

Used in step 14

M18X1.5		Tightening torque	50 Nm
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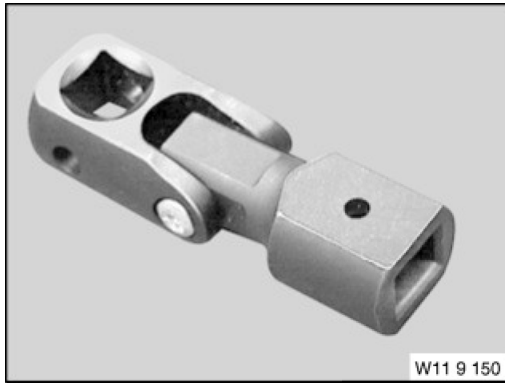
Clean air pipe to upper section of intake filter housing

Used in step 15

Clamp		Tightening torque	3 Nm
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Overview of Special Tools

0 493 751 (11 9 150) Extension



Common

Used in step 13

Usage (Socket wrench extension) For loosening and tightening the oxygen sensor

Included in the tool or work

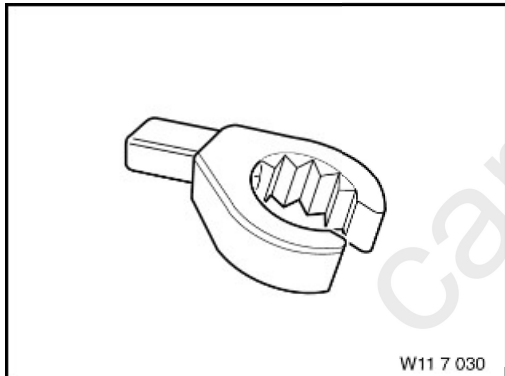
Storage location C41

Replaced by

In connection with

SI-Number 01 15 00 (609)

0 491 075 (11 7 030) Socket wrench insert



Common

Used in step 13

Usage (Socket wrench insert 22 mm) For loosening and tightening the oxygen sensor

Included in the tool or work

Storage location A9

Replaced by

In connection with

SI-Number 01 06 95 (963)

Links

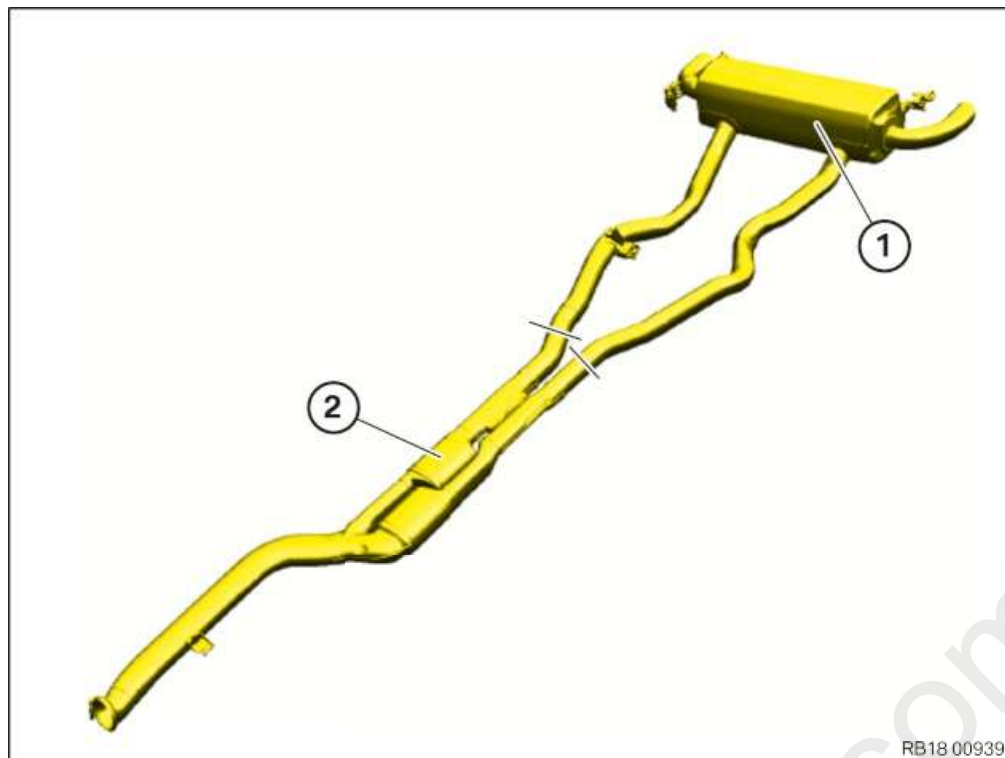
General repair instructions

Used in step

11 00 ... Overview of consumables (Electronic Parts Catalogue)	1314
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18 32 200 Replacing the petrol particulate filter

Replacing the petrol particulate filter

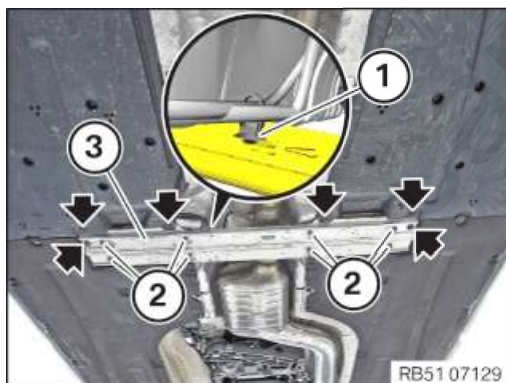


1 Rear silencer

2 Petrol particulate filter

PRELIMINARY WORK

1 – Remove the connecting support from the tunnel



- Remove screws (arrows).
- **If installed:** Loosen clamp (1).
- Loosen screws (2).
- Guide out and remove connecting support (3) on the tunnel.

MAIN WORK

2 – Removing the petrol particulate filter



WARNING

Hot surfaces.

Risk of burning!

- Perform all work only on components that have cooled down.



CAUTION

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.



CAUTION

Swarf resulting from sawing or grinding components.

Danger of injury!



- Conduct all work in appropriate personal protective equipment only.



- Wear safety goggles and protective gloves.

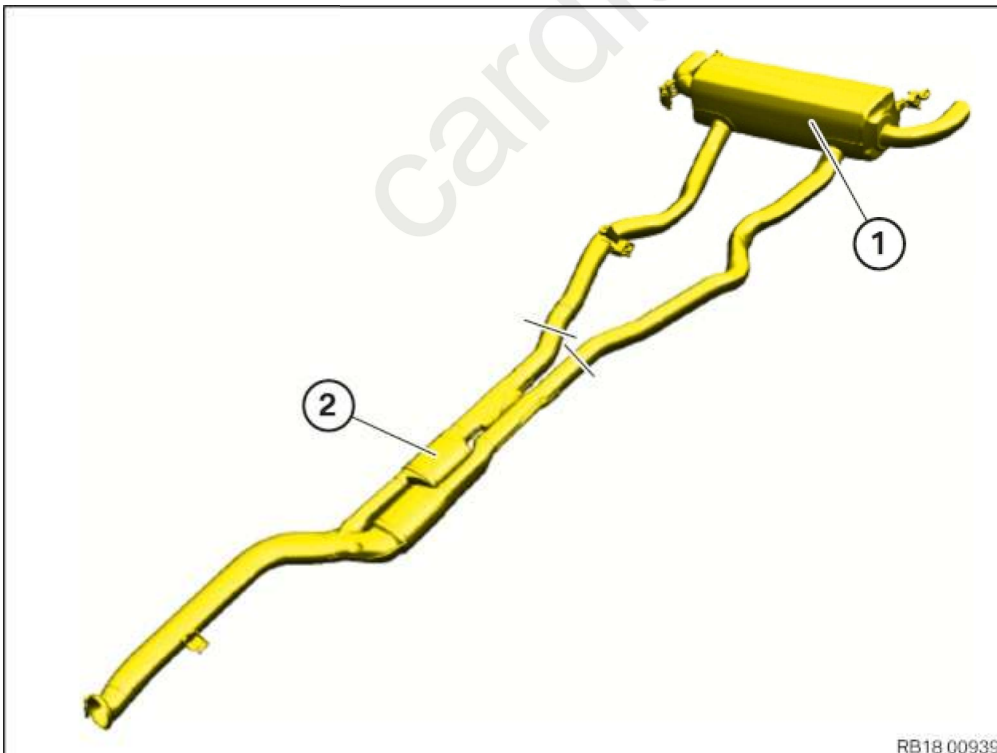


RISK OF DAMAGE

Damage to the petrol particulate filter.

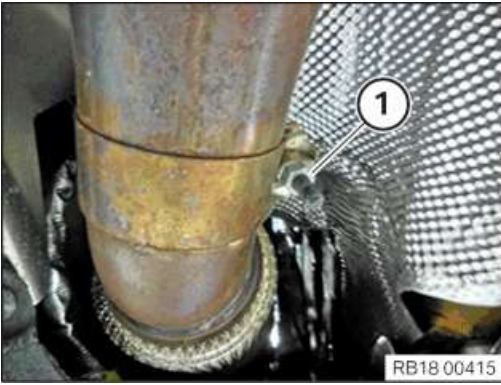
Forcibly removing, installing or dropping the petrol particulate filter down will damage it.

- Remove and install the petrol particulate filter without damaging it and without applying external force.
- Avoid impacts/knocks to the petrol particulate filter (e.g. by tools, falling down, hard contact with base).



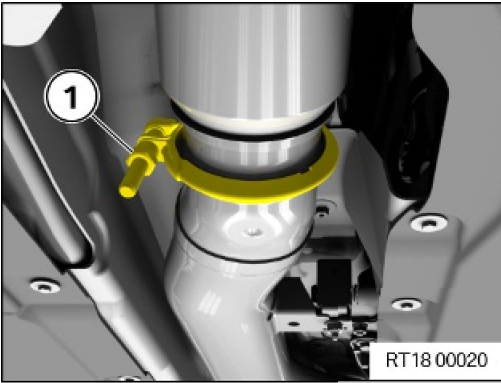
- If the separation point is not marked by a punch mark in the pipe, determine the separation point by means of the pipe length on the new front silencer (2).
- Transfer the separation point to the component to be replaced and mark.
- Secure petrol particulate filter (2) and the rear silencer (1) against falling down.
- Cut through the component to be renewed at the marked point with a suitable tool.

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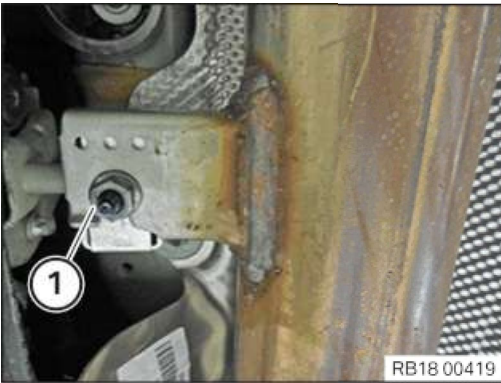
- **Equipment specification 1 (ribbon clamp)**

Detach the ribbon clamp (1).

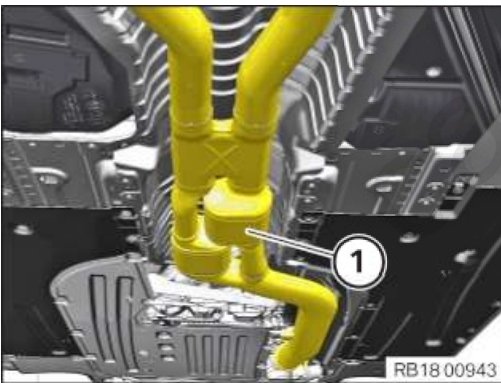


- **Equipment specification 2 (V-clips)**

Unfasten clamp (1).

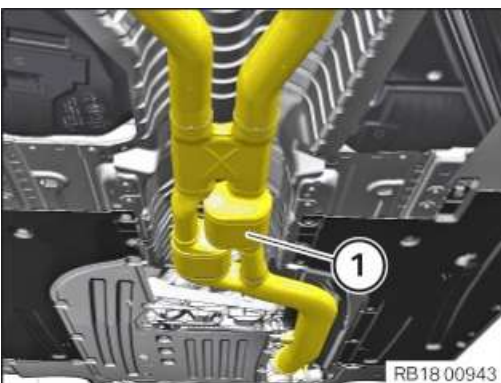


- Unfasten nut (1).



- Guide out the petrol particulate filter (1) with the assistance of a second person and remove it.

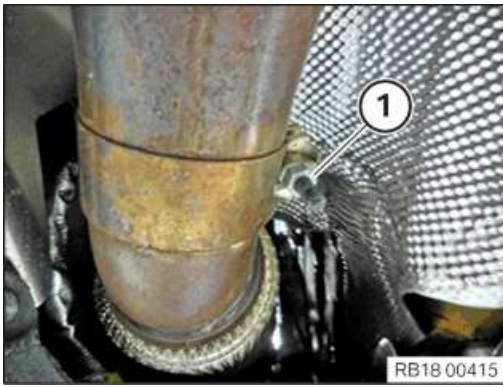
3 – Installing the petrol particulate filter



- Renew petrol particulate filter (1).

Parts: Petrol particulate filter

- Guide in and install the petrol particulate filter (1) with the assistance of a second person.



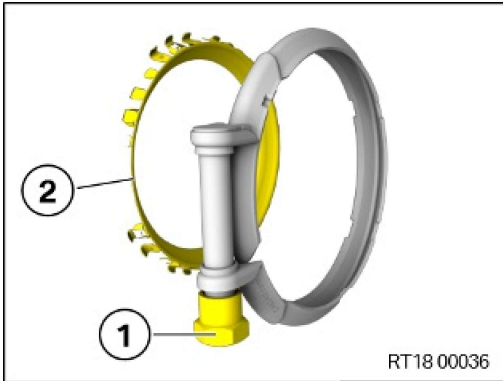
- **Equipment specification 1 (ribbon clamp)**

Parts: Ribbon cable clamp

Tighten the ribbon clamp (1).

Exhaust system to catalytic converter

Ribbon cable clamp	Renew flat band clip.	Tightening torque	26 Nm
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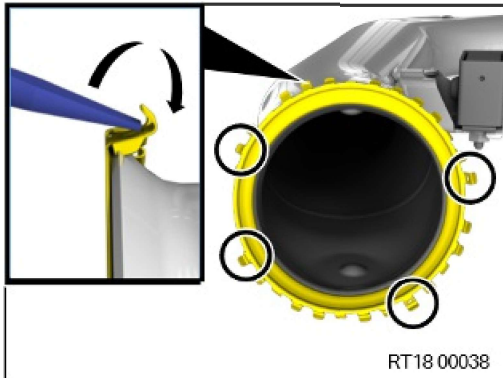


- **Equipment specification 2 (V-clips)**

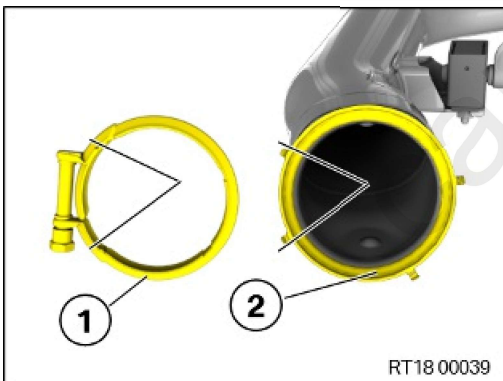
Renew V-band clamp.

Parts: V-band clamp

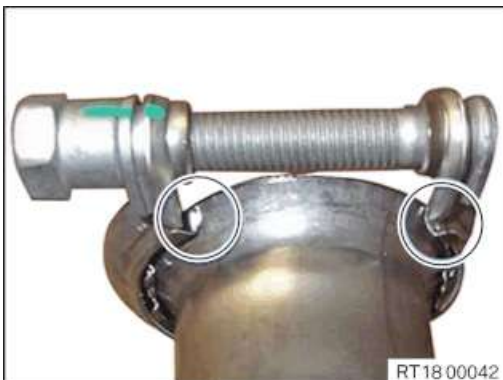
Unscrew the nut (1) and remove the sealing ring (2).



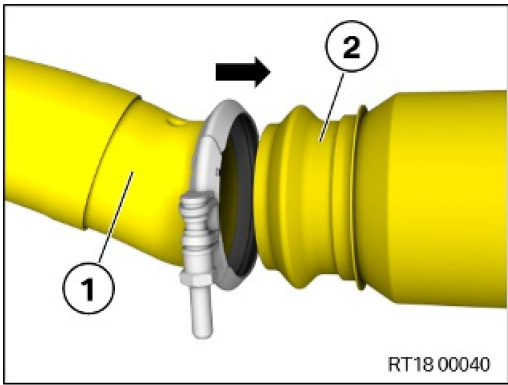
- Bend all sheet metal tabs over with a suitable tool, except those in the marked areas.



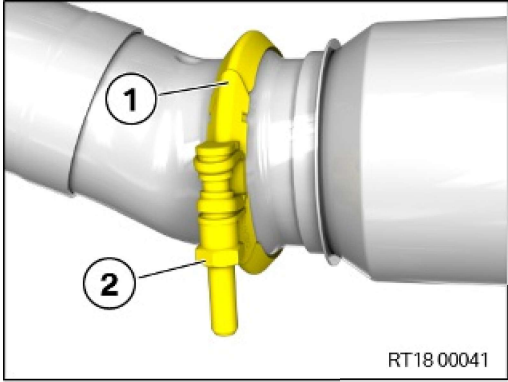
- Mount the V-clip (1) on the sealing ring (2).
- Make sure that the V-clip (1) is positioned correctly on the sealing ring (2).



- Make sure that the V-clip rests against the sheet metal tabs after mounting (marks).



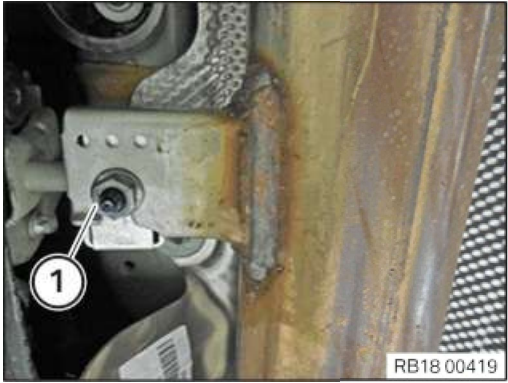
- Connect the exhaust system (1) to the catalytic converter (2) (arrow) and position it correctly.



- Make sure that V-clip (1) is fitted correctly.
- Tighten down screw (2).

V-clip to catalytic converter

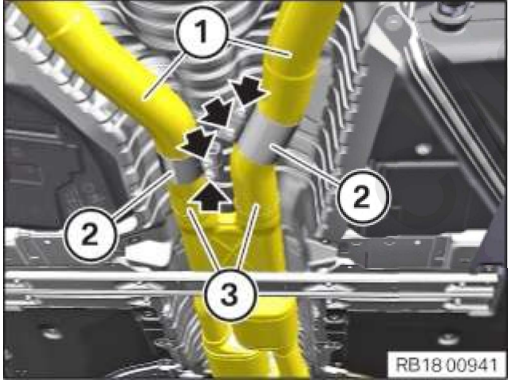
V-band clamp	Renew V-band clamp.	Tightening torque	22 Nm
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- Renew nut (1).
- Parts: Nut**
- Tighten nut (1).

Front pipe / petrol particulate filter on transmission holder

M8	Renew nut.	Tightening torque	19 Nm
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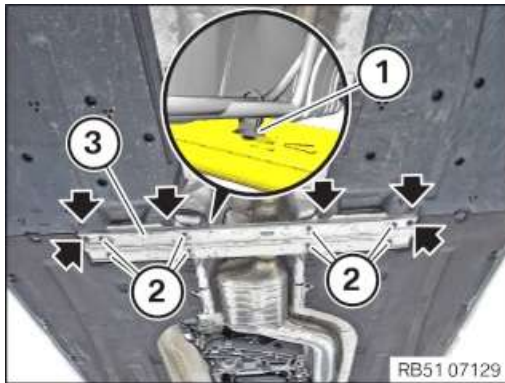


- Connect the rear silencer (1) using the clamps (2) with the petrol particulate filter (3).
- Centre the clamps (2) and tighten the nuts (arrows).

Clamp with partial replacement of exhaust system

Clamp		Tightening torque	45 Nm
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4 – Install the connecting supports on the tunnel



- Guide in and install connecting support (3) on the tunnel.
- Tighten the screws (2).

Connecting support to tunnel

M8x25 screw		Tightening torque	20 Nm
Screw		Tightening torque	3 Nm

- Tighten screws (arrows).

Connecting support to tunnel

M8x25 screw		Tightening torque	20 Nm
Screw		Tightening torque	3 Nm

- **If installed:** Secure clamps (1).

Additional Information

Overview of Tightening Torques

Exhaust system to catalytic converter

Used in step 3

Ribbon cable clamp	Renew flat band clip.	Tightening torque	26 Nm
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V-clip to catalytic converter

Used in step 3

V-band clamp	Renew V-band clamp.	Tightening torque	22 Nm
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Front pipe / petrol particulate filter on transmission holder

Used in step 3

M8	Renew nut.	Tightening torque	19 Nm
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Clamp with partial replacement of exhaust system

Used in step 3

Clamp		Tightening torque	45 Nm
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Connecting support to tunnel

Used in step 4

M8x25 screw		Tightening torque	20 Nm
Screw		Tightening torque	3 Nm