

**Warning!****Risk of burning!**

Only perform this repair after engine has cooled down.

Danger of injury!

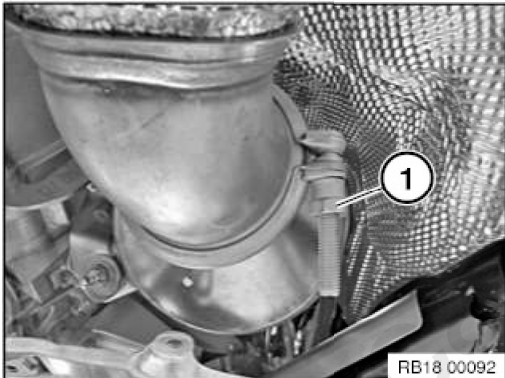
Removal of the exhaust system must be carried out with the assistance of a second person.

**Necessary preliminary work:**

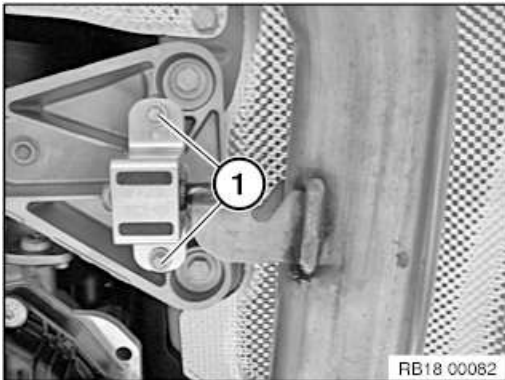
- **Only F21, F22, F23, F31, F32, F33, F34:**
Remove rear trailing link.
- **F23, F31, F33, F34, F36 only:**
Remove tension strut (rear axle) left or right.



Support exhaust system with a suitable jack and secure it against falling down.

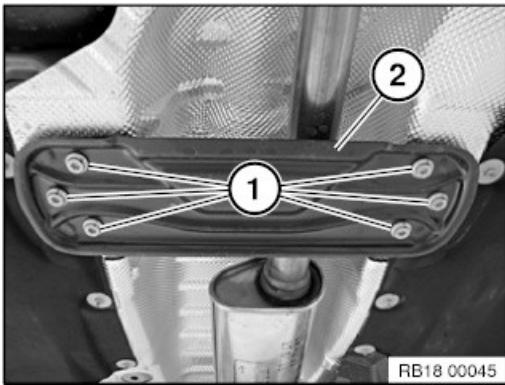


Release clamp (1).
Renew V-band clamp.
Tightening torque 18 31 1AZ.



Release screws (1).
Tightening torque 18 20 2AZ.



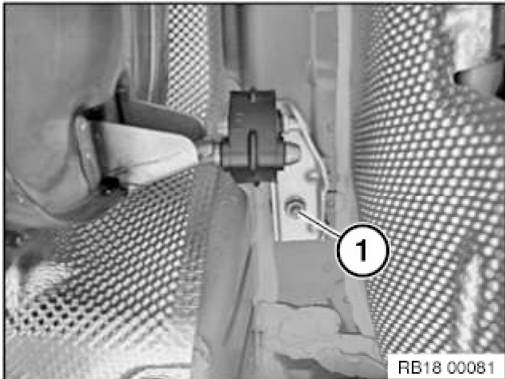


If fitted:

Release screws (1).

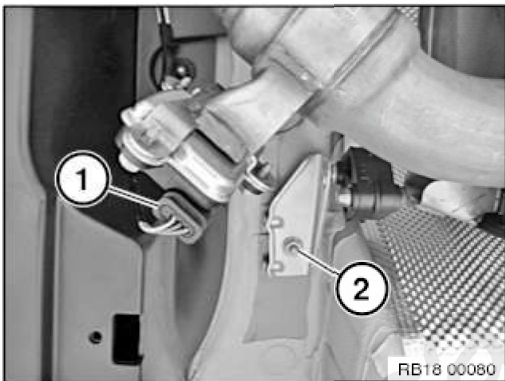
Tightening torque 18 31 3AZ.

Remove reinforcement plate (2).



Slacken nut (1).

Tightening torque 18 20 3AZ.



Unlock connector (1) and pull off.

Slacken nut (2).

Tightening torque 18 20 3AZ.

Lower and remove exhaust system with assistance of a second person.



Installation note:

Check rubber mount for damage.

If necessary, replace damaged rubber mounts.

Check exhaust system for leak tightness.



18 12 081 Removing and installing/replacing actuator drive for exhaust flap (N20, N26, N55)



Warning!

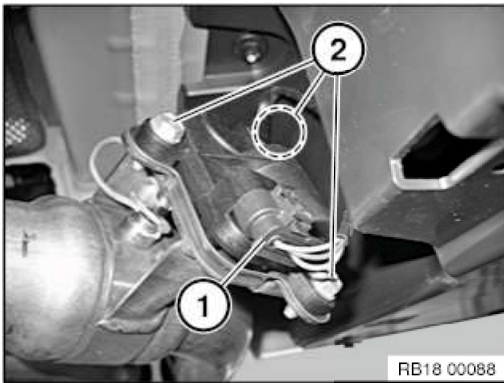
Risk of burning!

Only perform this repair work after the exhaust system has cooled down.



Attention!

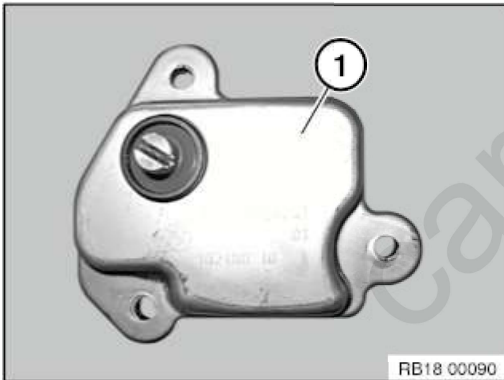
Read and comply with notes on protection against electrostatic damage (ESD protection)



Unlock connector (1) and pull off.

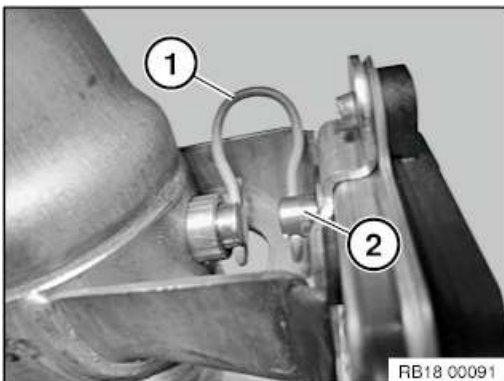
Unfasten screws (2).

Remove actuator drive for exhaust flap.



Installation note:

It is essential that the heat shield (1) for the actuator drive is reinstalled.



Installation note:

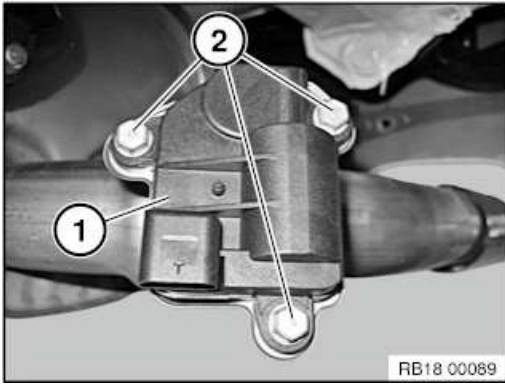
Do not connect connector for actuator drive.

Actuator drive is at the end stop.

Check exhaust flap for freedom of movement.

Install the controller drive for exhaust flap and make sure that the controller drive (2) has been correctly connected to the C clamping bracket (1) of the exhaust flap.





Install actuator drive for exhaust flap (1).

Tighten down screws (2).

Tightening torque 18 31 7AZ.

Connect the connector for the actuator drive.



Installation note:

If the actuator drive is over the end stop and cannot be connected with the C-retainer of the exhaust flap, the actuator drive must be moved to the mounting position via the BMW diagnosis system. To do this, connect the connector for the actuator drive before installation.

Connect the vehicle with the BMW diagnosis system:

- Select the exhaust flap control.
- Select installation position button.



**Warning!**

Risk of burning!

Only perform this repair work after engine has cooled down.

Danger of injury!

Removal of the exhaust system must be carried out with the assistance of a second person.

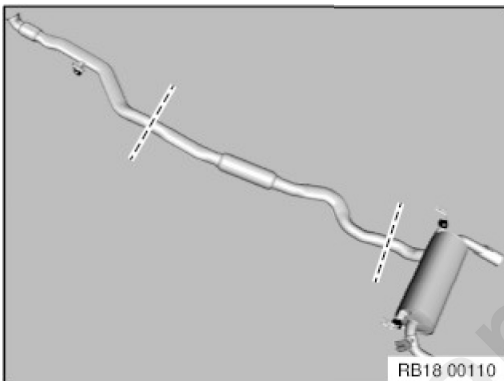
**Necessary preliminary tasks:**

- **F21 only:**

Remove rear trailing link.



Support front pipe with a suitable jack and secure against falling down.

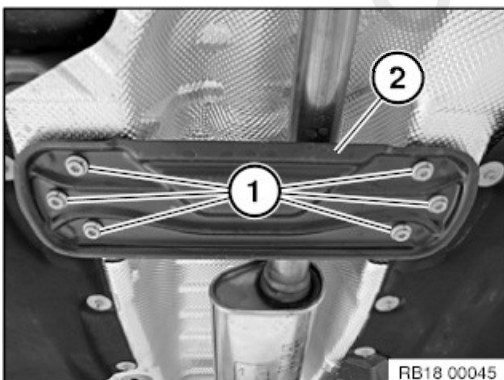
**Note:**

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 pipe.

Carry over separation point to defective front pipe and mark.

Secure front pipe against falling off.

Cut through exhaust pipes at marked point with a suitable tool and deburr.

**If fitted:**

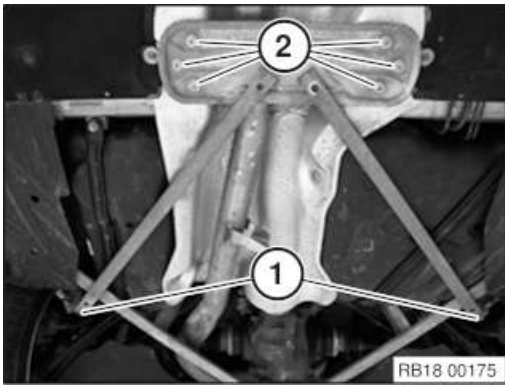
Release screws (1).

Tightening torque 18 31 3AZ.

Remove reinforcement plate (2).

Lower and remove front pipe.





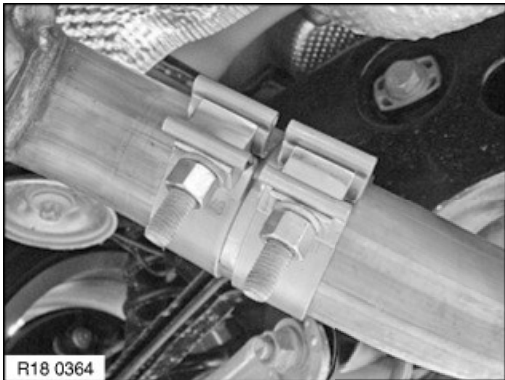
If fitted:

Release screws (1).

Tightening torque 18 20 4AZ.

Unfasten screws (2).

Tightening torque 18 20 5AZ.



Installation note:

Adjust new front pipe to fit and connect with clamps.

Align clamping sleeves so that:

- Nuts point downwards.
- Cutting line is in middle of clamping sleeve.
- There is sufficient spacing to adjoining components.

Centre clamp and tighten down.

Tightening torque 18 31 5AZ/6AZ.



Installation note:

Check rubber mount for damage, replace if necessary.

Check exhaust system for leak tightness.



**Warning!**

Risk of burning!

Only perform this repair work after engine has cooled down.

Danger of injury!

Removal of the exhaust system must be carried out with the assistance of a second person.

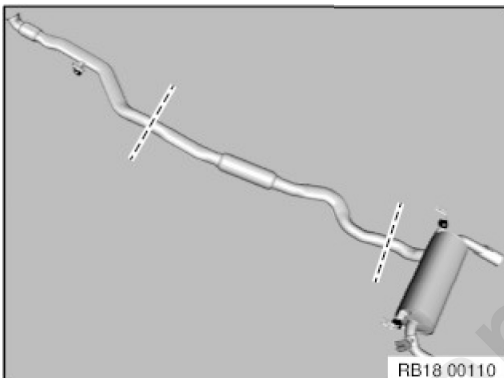
**Necessary preliminary tasks:**

- **F21 only:**

Remove rear trailing link.



Support front pipe with a suitable jack and secure against falling down.

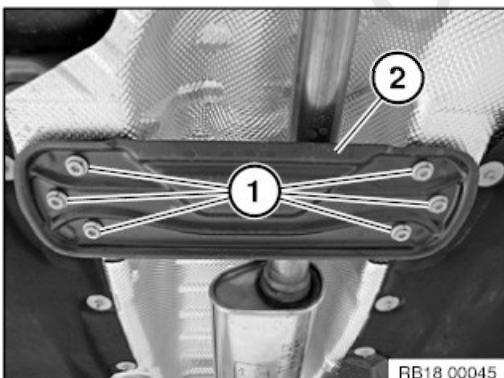
**Note:**

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 pipe.

Carry over separation point to defective front pipe and mark.

Secure front pipe against falling off.

Cut through exhaust pipes at marked point with a suitable tool and deburr.

**If fitted:**

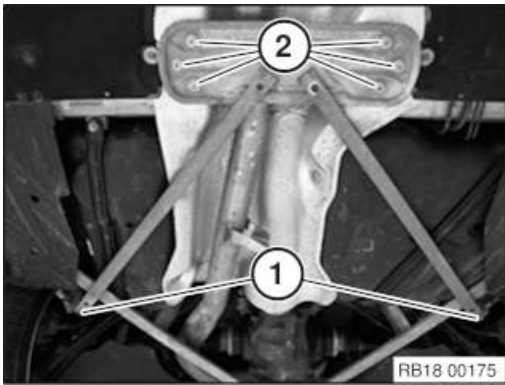
Release screws (1).

Tightening torque 18 31 3AZ.

Remove reinforcement plate (2).

Lower and remove front pipe.





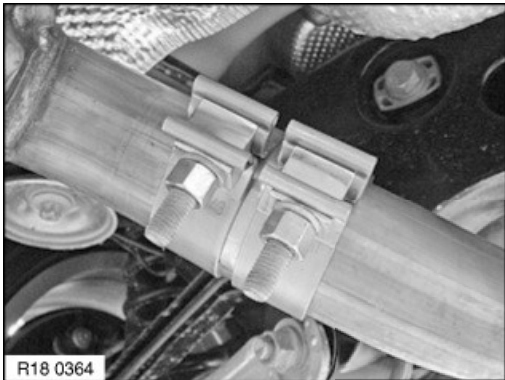
If fitted:

Release screws (1).

Tightening torque 18 20 4AZ.

Unfasten screws (2).

Tightening torque 18 20 5AZ.



Installation note:

Adjust new front pipe to fit and connect with clamps.

Align clamping sleeves so that:

- Nuts point downwards.
- Cutting line is in middle of clamping sleeve.
- There is sufficient spacing to adjoining components.

Centre clamp and tighten down.

Tightening torque 18 31 5AZ/6AZ.



Installation note:

Check rubber mount for damage, replace if necessary.

Check exhaust system for leak tightness.



18 12 081 Removing and installing/replacing actuator drive for exhaust flap (N20, N26, N55)



Warning!

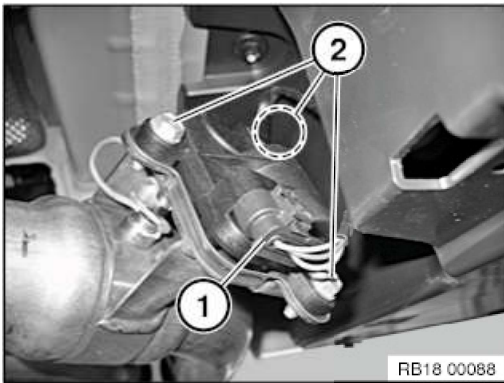
Risk of burning!

Only perform this repair work after the exhaust system has cooled down.



Attention!

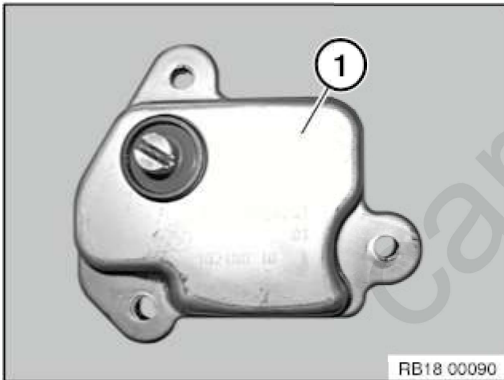
Read and comply with notes on protection against electrostatic damage (ESD protection)



Unlock connector (1) and pull off.

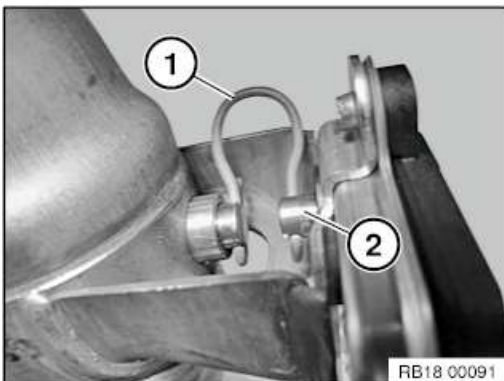
Unfasten screws (2).

Remove actuator drive for exhaust flap.



Installation note:

It is essential that the heat shield (1) for the actuator drive is reinstalled.



Installation note:

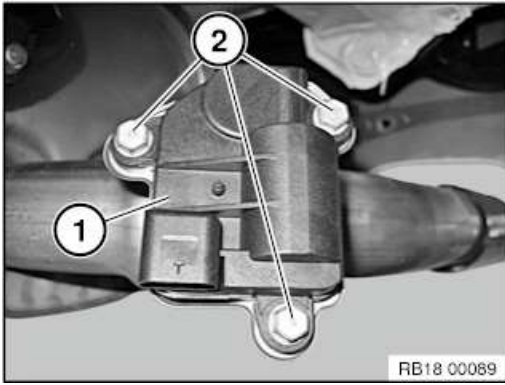
Do not connect connector for actuator drive.

Actuator drive is at the end stop.

Check exhaust flap for freedom of movement.

Install the controller drive for exhaust flap and make sure that the controller drive (2) has been correctly connected to the C clamping bracket (1) of the exhaust flap.





Install actuator drive for exhaust flap (1).

Tighten down screws (2).

Tightening torque 18 31 7AZ.

Connect the connector for the actuator drive.



Installation note:

If the actuator drive is over the end stop and cannot be connected with the C-retainer of the exhaust flap, the actuator drive must be moved to the mounting position via the BMW diagnosis system. To do this, connect the connector for the actuator drive before installation.

Connect the vehicle with the BMW diagnosis system:

- Select the exhaust flap control.
- Select installation position button.



**Warning!**

Risk of burning!

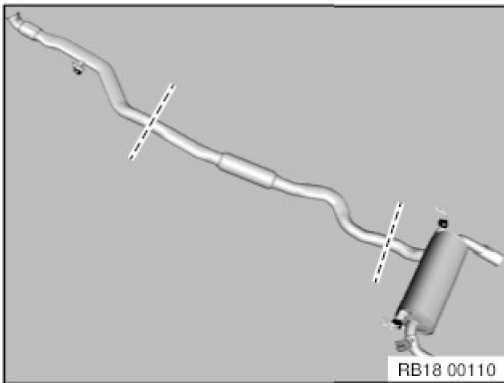
Only perform this repair work after engine has cooled down.

Danger of injury!

Removal of the exhaust system must be carried out with the assistance of a second person.

**Necessary preliminary tasks:**

- Support front pipe with a suitable jack and secure against falling down.
- **F21 only:**
Remove rear trailing link.

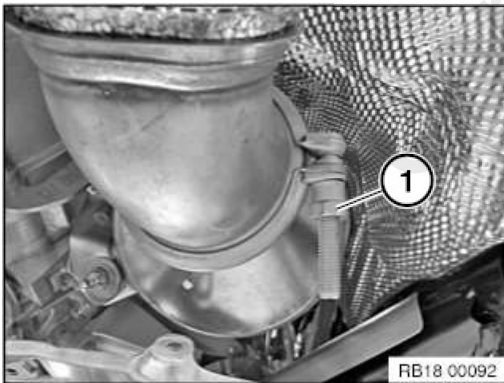
**Note:**

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 pipe.

Carry over separation point to defective front pipe and mark.

Secure front silencer against falling out.

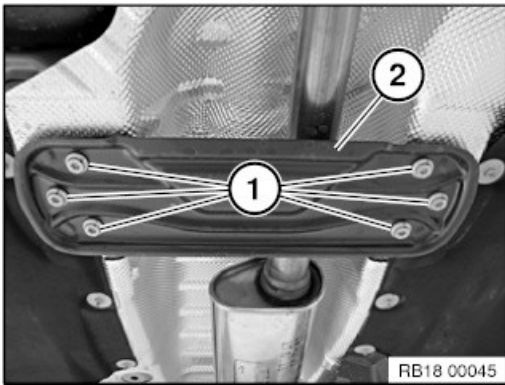
Cut through exhaust pipes at marked point with a suitable tool and deburr.



Release clamp (1).

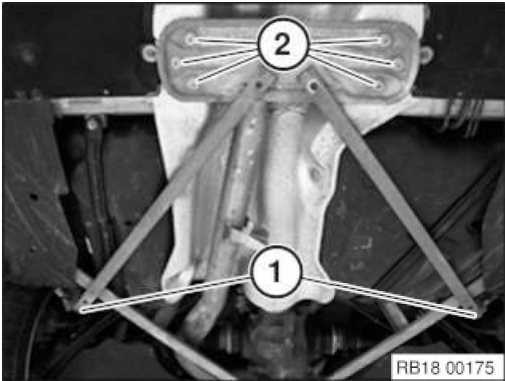
Tightening torque 18 31 1AZ.





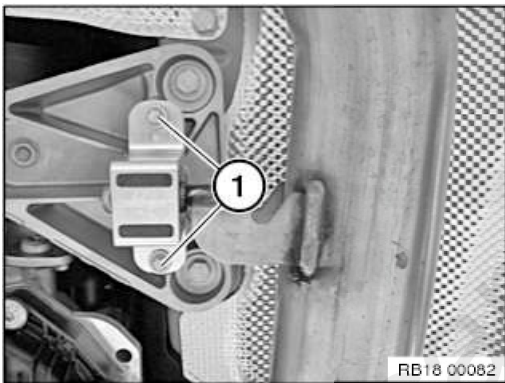
If fitted:

Release screws (1).
 Tightening torque 18 31 3AZ.
 Remove reinforcement plate (2).

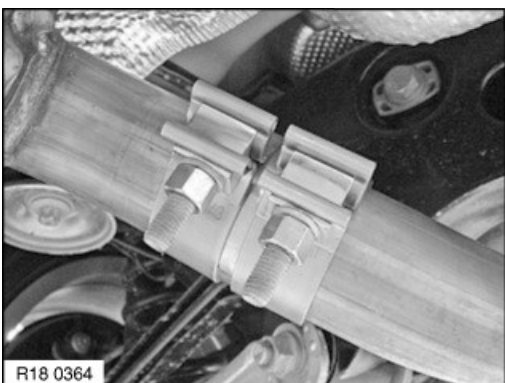


If fitted:

Release screws (1).
 Tightening torque 18 20 4AZ.
 Unfasten screws (2).
 Tightening torque 18 20 5AZ.



Release screws (1).
 Tightening torque 18 20 2AZ.



Installation note:

Adjust new front silencer and connect with clamps.

Align clamping sleeves so that:

- Nuts point downwards.
- Cutting line is in middle of clamping sleeve.
- There is sufficient spacing to adjoining components.

Centre clamp and tighten down.

Tightening torque 18 31 3AZ.



Installation note:

Check rubber mount for damage, replace if necessary.

Check exhaust system for leak tightness.



**Warning!**

Risk of burning!

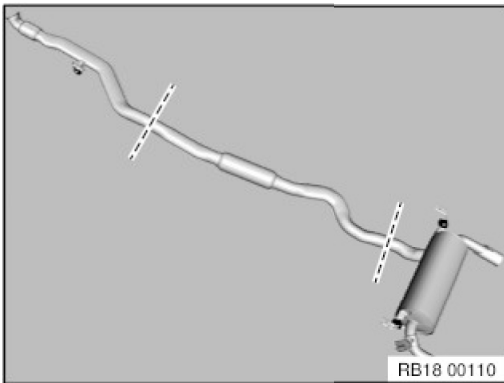
Only perform this repair work after engine has cooled down.

Danger of injury!

Removal of the exhaust system must be carried out with the assistance of a second person.

**Necessary preliminary tasks:**

- Support rear silencer with a suitable jack and secure against falling down.
- **F23, F31, F33, F34, F36 only:**
Remove right trailing link.

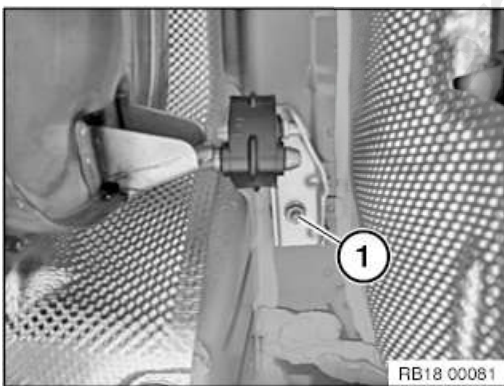
**Note:**

If the separation point line is not marked by a punch mark in the pipe, determine the separation point by means of the pipe length on the new rear silencer.

Carry over separation point to faulty rear silencer and mark.

Secure rear silencer against falling off.

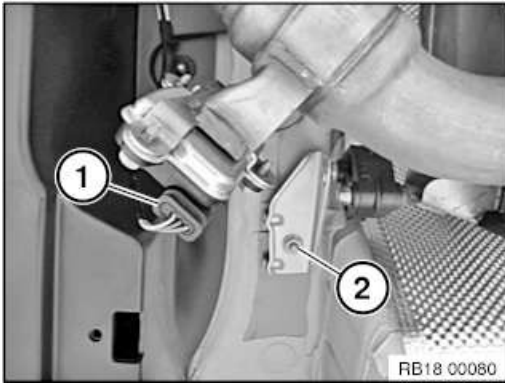
Cut through exhaust pipes at marked point with a suitable tool.



Unfasten nut.

Tightening torque 18 20 3AZ.



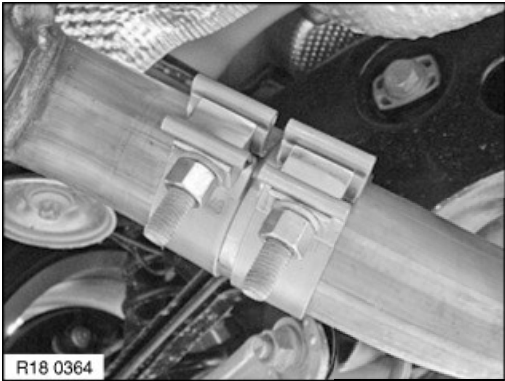


Unlock connector (1) from exhaust flap and pull off.

Slacken nut (2).

Tightening torque 18 20 3AZ.

Lower and remove the rear silencer carefully with assistance of a second person.



Installation note:

Adjust rear silencer and connect with clamp.

Align clamping sleeves so that:

- Nuts point downwards.
- Cutting line is in middle of clamping sleeve.
- There is sufficient spacing to adjoining components.

Centre clamp and tighten down.

Tightening torque 18 31 5AZ.



Installation note:

Check rubber mount for damage, replace if necessary.

Check exhaust system for leaks.



18 12 081 Removing and installing/replacing actuator drive for exhaust flap (N20, N26, N55)



Warning!

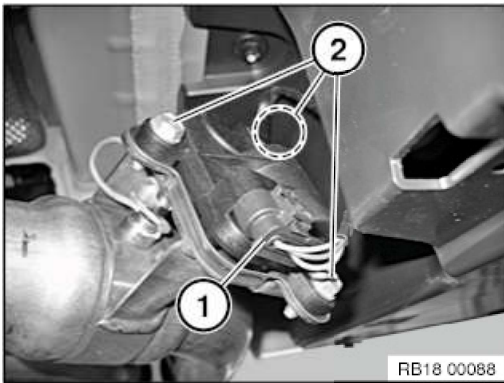
Risk of burning!

Only perform this repair work after the exhaust system has cooled down.



Attention!

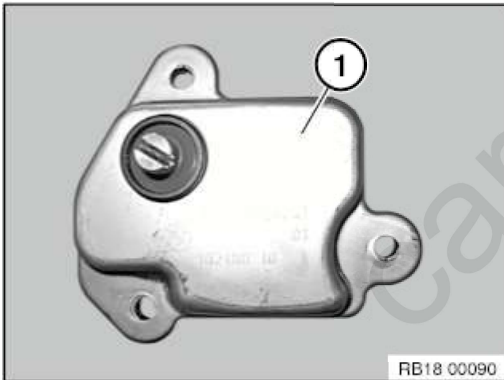
Read and comply with notes on protection against electrostatic damage (ESD protection)



Unlock connector (1) and pull off.

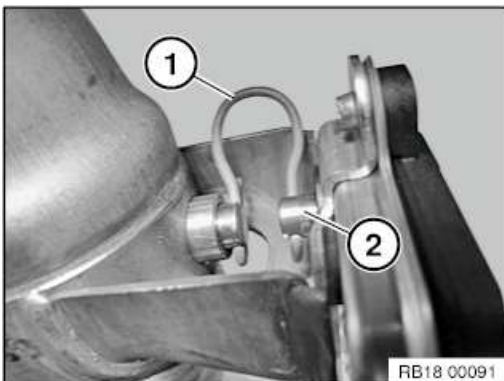
Unfasten screws (2).

Remove actuator drive for exhaust flap.



Installation note:

It is essential that the heat shield (1) for the actuator drive is reinstalled.



Installation note:

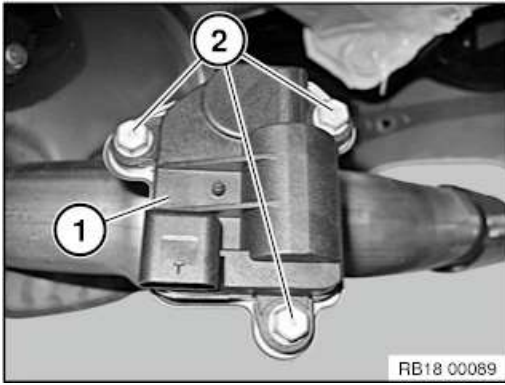
Do not connect connector for actuator drive.

Actuator drive is at the end stop.

Check exhaust flap for freedom of movement.

Install the controller drive for exhaust flap and make sure that the controller drive (2) has been correctly connected to the C clamping bracket (1) of the exhaust flap.





Install actuator drive for exhaust flap (1).

Tighten down screws (2).

Tightening torque 18 31 7AZ.

Connect the connector for the actuator drive.



Installation note:

If the actuator drive is over the end stop and cannot be connected with the C-retainer of the exhaust flap, the actuator drive must be moved to the mounting position via the BMW diagnosis system. To do this, connect the connector for the actuator drive before installation.

Connect the vehicle with the BMW diagnosis system:

- Select the exhaust flap control.
- Select installation position button.



**Warning!**

Risk of burning!

Only perform this repair work after the exhaust system has cooled down.

Important!

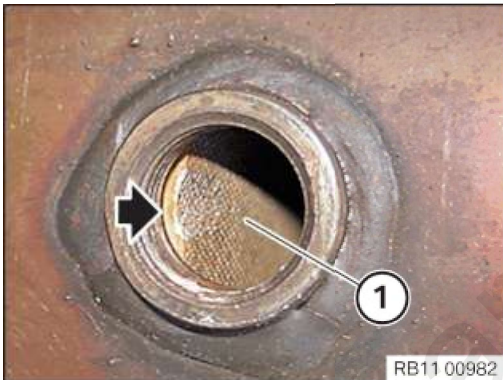
This cleaning of the catalytic converter may only be performed once.

**Protective work clothing!**

Respirator mask type: FFP3, face mask, overalls and gloves must be worn.

*Necessary preliminary tasks:*

- Remove the control sensor.
- Remove monitoring sensor.



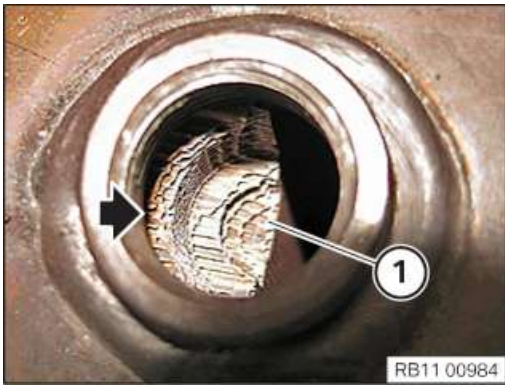
Displacement of the monolith (1) by the exhaust gas pressure is possible.

The damage is discernible from the impression on the oxygen sensor.



Check damage on monolith (1).



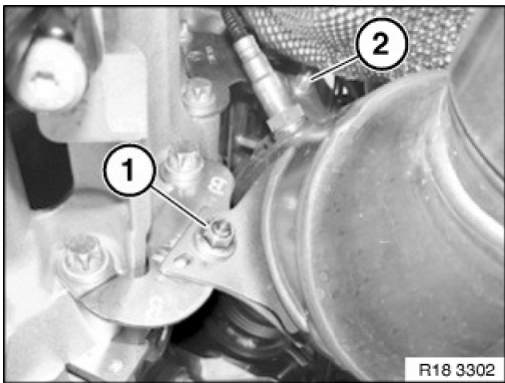


Check damage on monolith (1). *Note:*

The catalytic converter must be replaced if the monolith (1) exhibits the damage shown above.

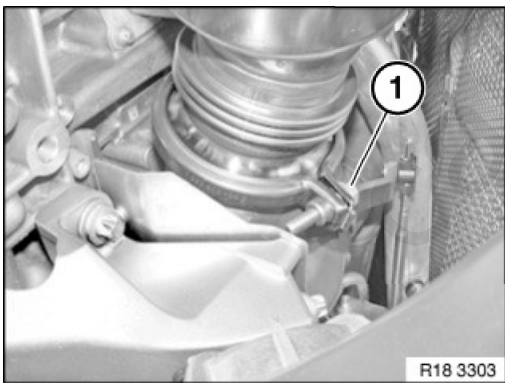


Remove the catalytic converter.



Release nuts (1) and (2).

Tightening torque 18 20 1AZ.



Release clamp (1). The clamp must be renewed every time it is removed.

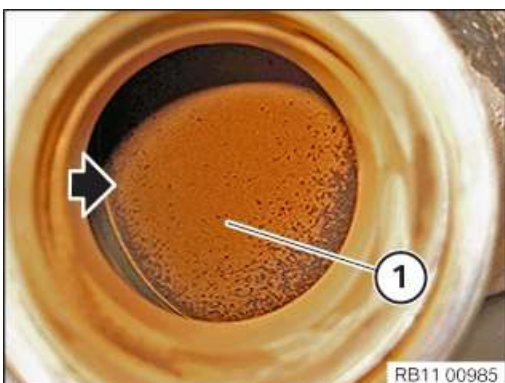
Tightening torque 18 31 2AZ.

In so doing, secure catalytic converter against falling out.

Feed out catalytic converter and remove.

Installation note:

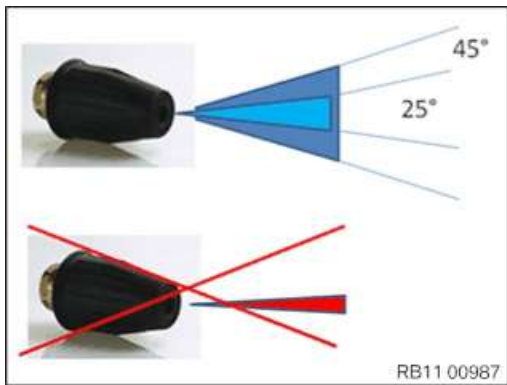
Clean sealing surface. Renew clamp and gasket.



Fouled monolith (1)

Cleaning is recommended.

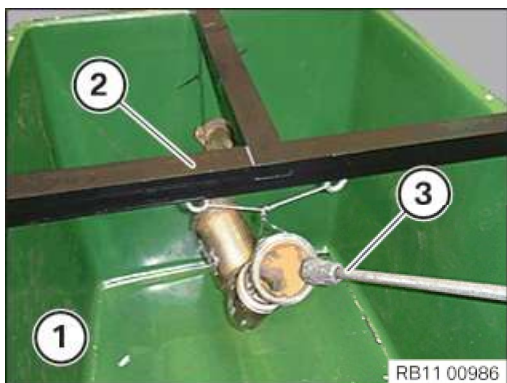




Important!

Do not use a dot air vent setting.

Set spray jet between 25° and 45°.



Important!

Risk of damage! to monolith due to a high-pressure nozzle which is set too high.

Minimum distance between high-pressure nozzle and monolith 150 mm

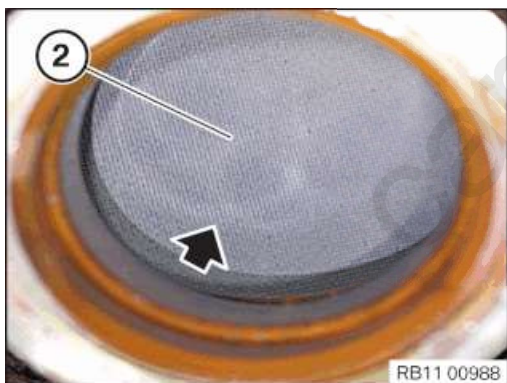
Suspend catalytic converter with a holder (2) in a suitable drip pan (1) and catch the waste water.

Clean catalytic converter with a high-pressure cleaner (3).



Important!

The rinsing water must be disposed of in accordance with the Chinese waste water standards.



Cleaned monolith (2)

After cleaning, check the monolith for damage and for correct installation position.



Reassemble the vehicle.

Check exhaust system for leaks.



**Warning!**

Risk of burning!

Only perform this repair work after the exhaust system has cooled down.

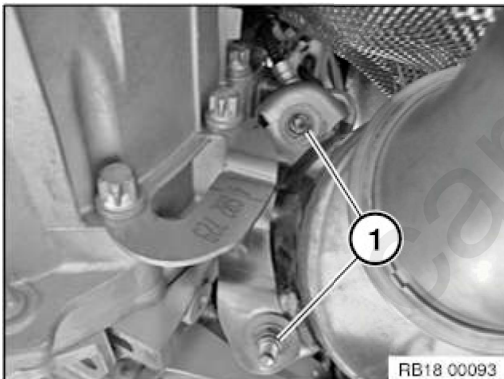
*Necessary preliminary tasks:*

- Remove front underbody protection.
- Remove rear underbody protection.
- Remove exhaust system.
- Expose monitoring sensor cable.
- **All-wheel drive vehicles only:**
Remove reinforcement plate.
- **Do the following only F87:**
Remove stiffening plate

*Note:*

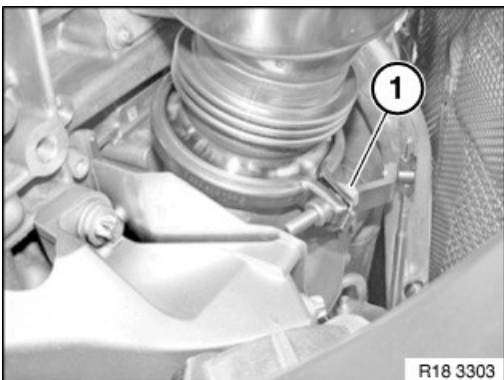
The oxygen sensor is in danger of being damaged when the catalytic converter is removed and installed.

Remove the control sensor.



Release nuts (1).

Tightening torque 18 20 1AZ.



Release clamp (1). The clamp must be renewed every time it is removed.

Tightening torque 18 31 2AZ.

In so doing, secure catalytic converter against falling out.

Feed out catalytic converter and remove.

Installation note:

Clean sealing surface. Renew clamp and seal.





Remount the monitoring sensor when replacing the catalytic converter.

Reassemble the vehicle.

Check exhaust system for leak tightness.

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