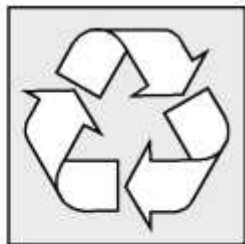


11 65 040**Removing and installing/replacing high-pressure exhaust turbocharger (small turbocharger) (N47S)****Special tools required:**

- [11 8 600](#)

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

Only perform this repair work on an engine that has cooled down.

**Recycling:**

Catch escaping engine oil with suitable auxiliary materials.
Observe country-specific waste disposal regulations.

Necessary preliminary tasks:

- Remove acoustic cover
- Remove air filter housing.

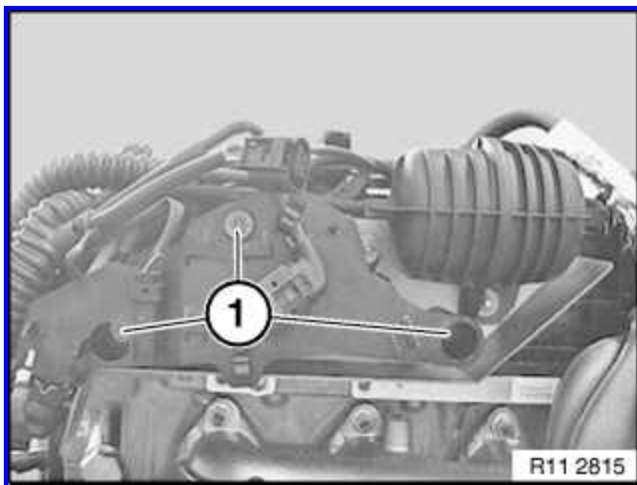


- Remove fan cowl
- Remove right charge-air duct
- Remove cover for windscreen cowl panel.

**Important!****In event of exhaust turbocharger damage:**

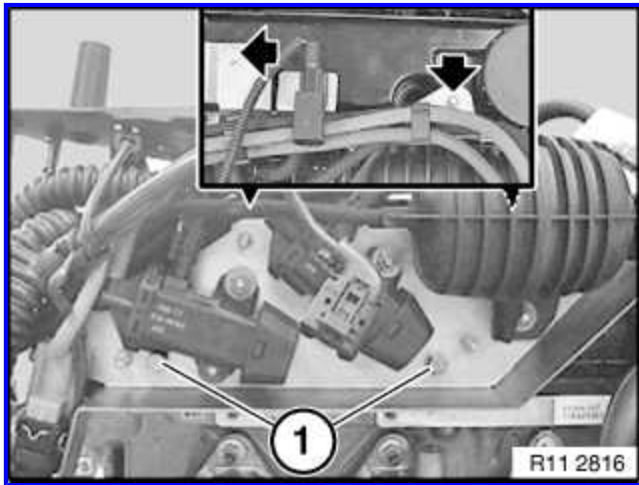
- Pressure pipes
- Charge air cooler
- Intake plenum

- must be checked for foreign bodies, damage and correct function.

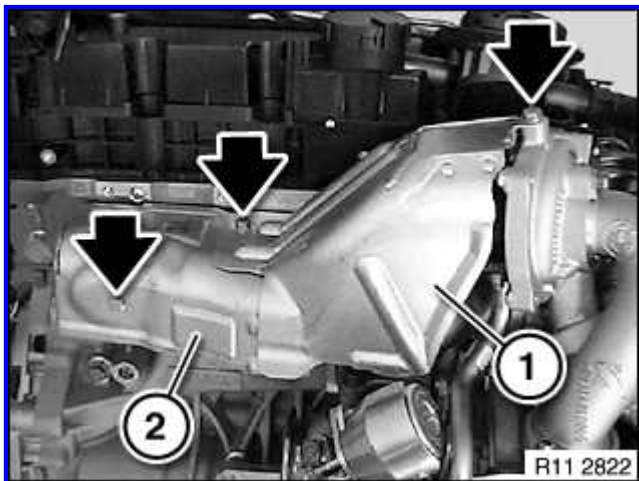
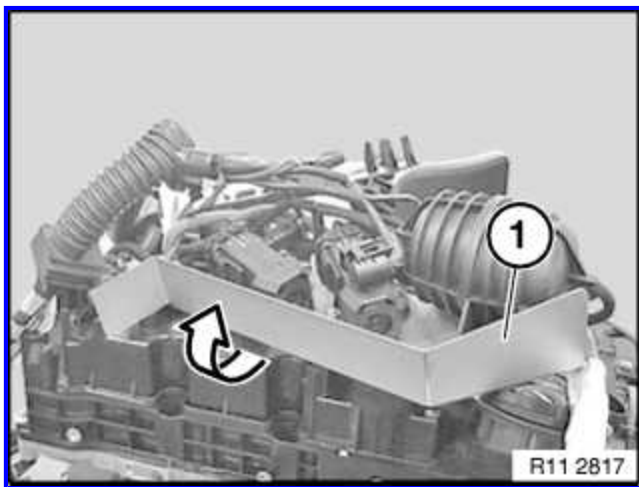


Release screws (1).

Release screws (1) and mounting screws at top.

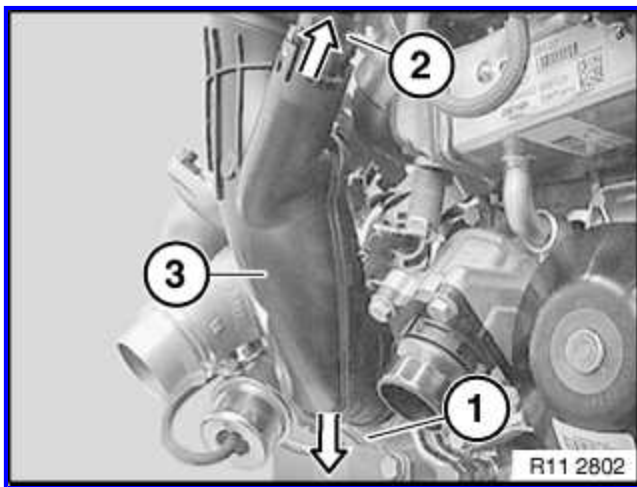
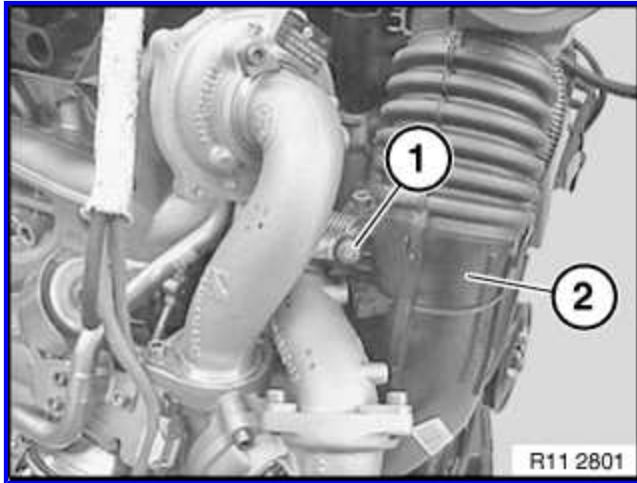


Remove retaining plate (1) and set down in upward direction of valve hood.



Release screws on heat shield (1). Heat shield (2) remains on exhaust manifold.

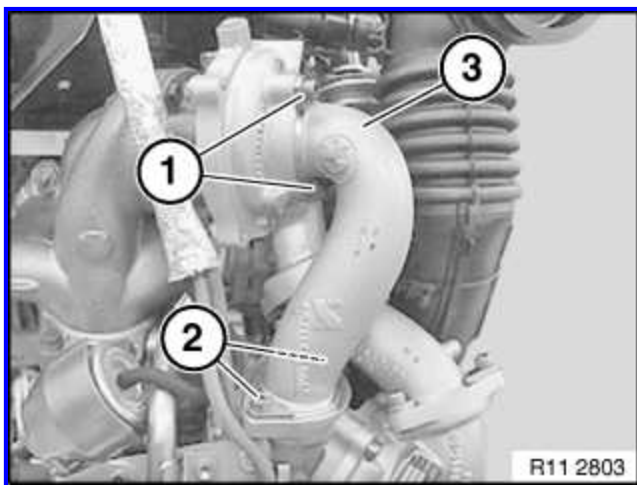
Release screw (1) on intake hose (2).



Unlock clip (1) in direction of arrow.

Detach intake hose (2) in direction of arrow.

Remove intake hose (3).



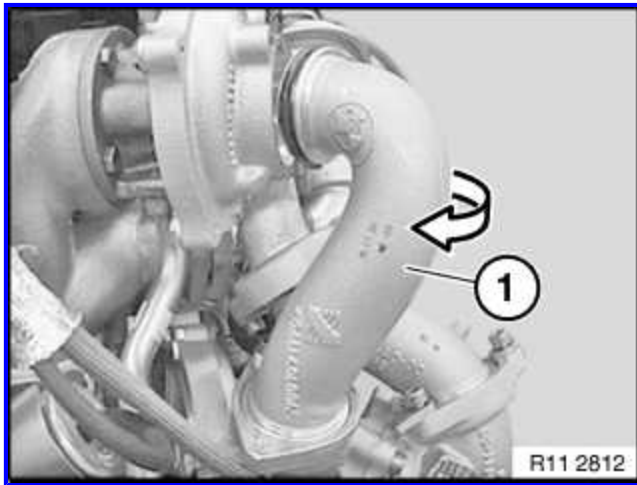
Release screws (1) and (2) on connecting pipe (3).

Twist out connecting pipe (1) in direction of arrow.

Installation note:

Check sealing rings for damage and replace if necessary.

Coat sealing rings when installing with lubricant.

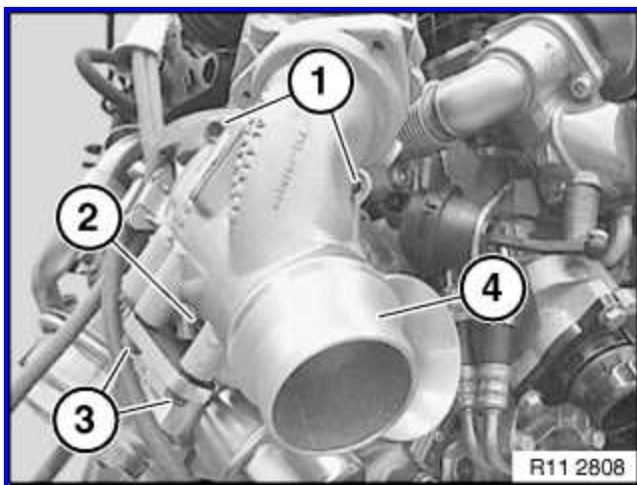
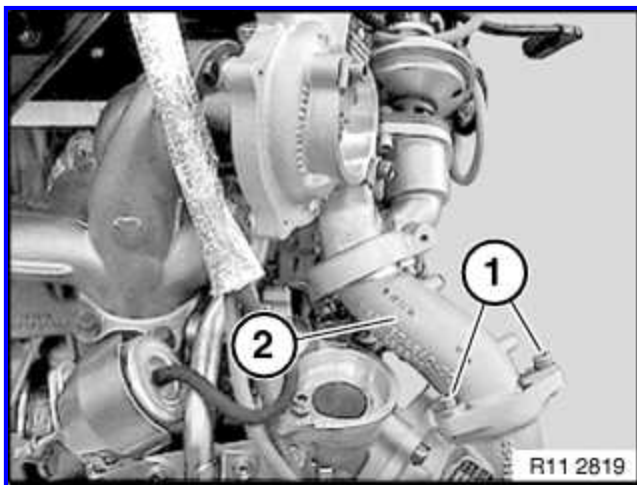


Release screws (1) on connecting pipe (2).

Installation note:

Check sealing rings for damage and replace if necessary.

Coat sealing rings when installing with lubricant.



Release screws (1).

Screw (2) can be released only vacuum unit screws (3) have been slackened slightly.

Tightening torque 11 65 2AZ.

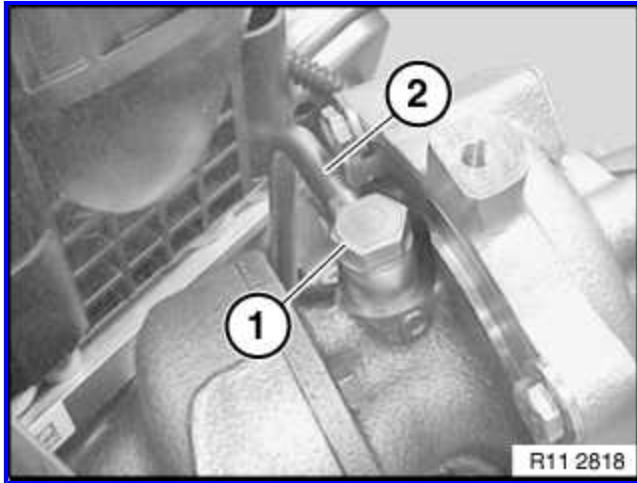
Release banjo bolt (1).

Tightening torque 11 42 2AZ.

Note:

Catch escaping engine oil in a suitable collecting vessel.

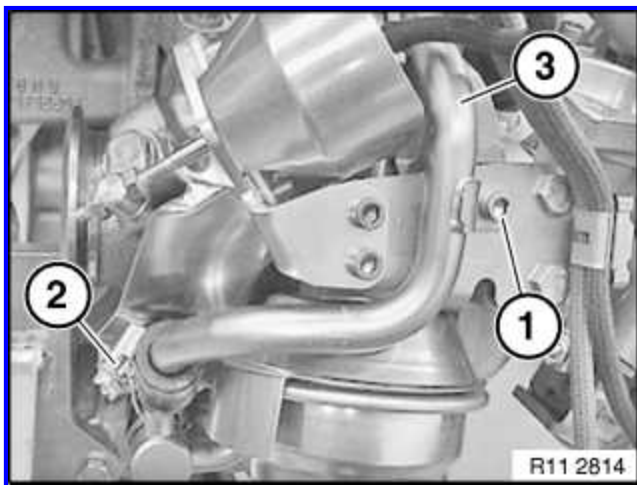
Installation note:



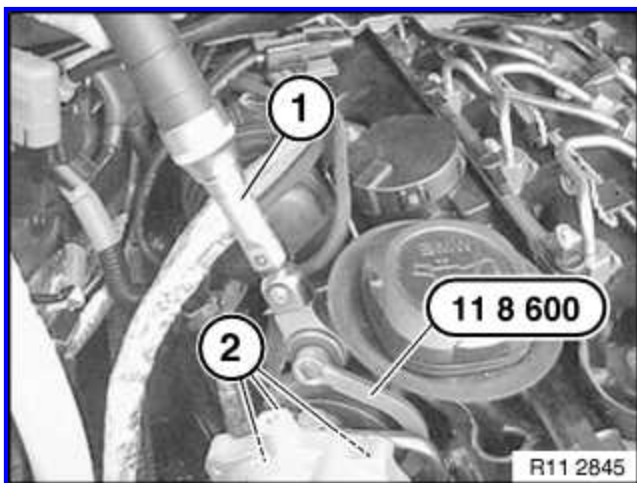
Align oil line (2) centrally.

Clean sealing surfaces and replace seal.

Check oil level and top up if necessary.



Release screw (1) and hose clamp (2) from oil return line (3).



Important!

The turbine wheel blades must not be damaged when the turbocharger is removed!

Release screws (2) on exhaust turbocharger with special tool [11 8 600](#) in conjunction with a torque wrench (1).

Installation note:

- When special tool [11 8 600](#) is used, 7 Nm on the torque wrench (1) scale correspond to an actual tightening torque of 8 Nm

Tightening torque 11 65 4AZ.

- Convert oil lines where necessary to new turbocharger.
- Replace all seals
- Clean sealing surfaces on exhaust manifold
- Replace gasket for turbocharger



Assemble engine.