



SI B11 14 17 Engine February 2019 Technical Service

N20 AND N26 ENGINES: TURBOCHARGER ELECTRIC WASTEGATE ACTUATOR LINKAGE PIN CORROSION

This Service Information bulletin replaces SI B11 14 17 dated February 2018

What's New:

• No changes. Reposting

MODEL

E84 (X1) Produced from 7/2012 to 2/2015	E89 (Z4) Produced from 9/2013 to 10/2016	F10 (5 Series Sedan) Produced from 7/2013 to 10/2016	F22 (2 Series Coupe) With N20 engine produced from 11/2013 to 6/2016
F22 (2 Series Coupe) With N26 engine produced from 11/2014 to 6/2016	F22 (2 Series Convertible) With N20 engine produced from 11/2014 to 6/2015	F22 (2 Series Convertible) With N26 engine produced from 07/2015 to 6/2016	F25 (X3) Produced from 04/2013 to 8/2017
F30 (3 Series) With N20 engine produced from 7/2012 to 10/2016	F30 (3 Series) With N26 engine produced from 7/2012 to 7/2016	F30 (3 Series Sports Wagon) With N20 engine produced from 3/2013 to 6/2016	F32 (4 Series Coupe) With N20 engine produced from 7/2013 to 6/2016
F32 (4 Series Coupe) With N26 engine produced from 7/2013 to 6/2016	F33 (4 Series Convertible) With N20 engine produced from 11/2013 to 6/2015	F33 (4 Series Convertible) With N26 engine produced from 11/2013 to 6/2016	F34 (3 Series Gran Turismo) With N20 engine produced from 3/2013 to 6/2015
F34 (3 Series Gran Turismo) With N26 engine produced from 7/2014 to 6/2016	F36 (4 Series Gran Coupe) With N20 engine produced from 3/2014 to 6/2015	F36 (4 Series Gran Coupe) With N20 engine produced from 3/2014 to 6/2016	F26 (X4) With N20 engine produced from 4/2014 to 3/2016
F15 (X5 40E iPerformance) with N20 engine produced from 8/2015 to 7/2018			

UPDATE! SITUATION

One of the following can be solved with the procedures described in this bulletin.

- The turbocharger wastegate actuator linkage pin is found seized (corrosion) or broken when replacing a defective wastegate actuator or turbocharger.
- The turbocharger wastegate actuator linkage pin is found seized (corrosion) or broken when removing and installing the turbocharger for another repair (I.e. cylinder head replacement, engine replacement).



Example: The turbocharger wastegate actuator linkage pin (1) is rusted and cannot be removed.

Or



Example: The turbocharger wastegate actuator linkage pin (1) has already broken or is missing due to corrosion. The remaining portion of the pin is seized in the hole and it cannot be removed.

PROCEDURE

Use the attached procedure to remove the turbocharger, remove the remaining portions of the corroded electric wastegate linkage pin and install the electric wastegate linkage pin repair clip P/N 83 30 2 456 269.

PARTS INFORMATION

Part Number	Description	Quantity
83 30 2 456 269	Turbo charger repair clip	1
11 65 8 612 575	Fastening set	1

Refer to the ETK and the applicable repair instructions for one-time use fasteners and/or component information regarding additional or replacement screws, gaskets, and seals that need to be installed and claimed.

WARRANTY INFORMATION

Covered in conjunction with the covered repair that required the following additional job procedure to be performed.

Defect Code:	Refer to KSD2	KSD2 Defect Code that applies to the covered repair work which necessitated this additional job procedure to be performed	
Labor Operation:	Labor Allowance:	Description:	
11 99 000	6 FRU	Work time for this additional job to replace a corroded wastegate linkage pin, cleaning the	

clip (Associated work – in conjunction with performing another repair)
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Work time labor operation code 11 99 000 is not considered a Main labor operation. Also, since the "work time" FRU allowance to be claimed is specified, a separate punch time is not required. However, it still requires an explanation on the repair order and in the claim comments section.

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ATTACHMENTS

View PDF attachment <u>B111417 procedure</u>.

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Remove the turbocharger from the vehicle. Refer to Repair Instruction 11 65 020 Removing and installing/replacing exhaust turbocharger.

This repair instruction states to remove the entire wastegate actuator before removing the turbocharger.

When the wastegate linkage pin cannot be removed the alternate procedure in this document must be followed to remove the turbocharger and the electric wastegate actuator.





Remove both of the electric wastegate actuator Torx screws (1).

Rotate the wastegate actuator (1) upward in the direction of the arrow.

Temporarily secure the wastegate actuator in this position with a wire tie or similar fastening device.

Continue removing the turbocharger using the applicable repair instruction.

The wastegate actuator may have to be repositioned a few times during the turbocharger removal procedure.

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Once the turbocharger has been removed then the corroded pin must be removed.

If you are reusing the wastegate actuator then it must be secured with wire ties (1) so that it does not get damaged during the next steps.

Modify a hacksaw blade (1) as shown using a pair of sheet metal cutters (2).

Cutting the angle on the hacksaw blade will increase access to the corroded wastegate pin.



Install the modified hacksaw blade into a suitable holder tool as shown in the illustration.





A pneumatic tool with a thin blade (1) can also be used to remove the pin.

Use the modified blade (1) to trim/remove the remaining portion of the waste gate pin.

Important!

Do not damage the waste gate lever surface.

Damage to the surface can cause binding.



Use a fine metal file (1) to gently remove any existing burrs.

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Remove the wastegate linkage from the wastegate lever.

Inspect the wastegate lever (1) for damage.

Use a fine metal file or polishing pad as needed to remove any remaining burrs.

Continue with the repairs as described in the repair instructions.

The following steps describe the installation of the new waste gate repair clip P/N 83 30 2 456 269

Perform this portion of the repair after the turbocharger is reinstalled as per the applicable repair instructions.



Remove the M8 Torx screws from fastening set P/N 11 65 8 612 575.

Discard the small spring steel clip.

Install the wastegate actuator as per the applicable repair instruction and torque the fasteners.

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Remove the wastegate repair clip P/N 83 30 2 456 269 from the package.

The clip is pre-bent (1) intentionally to place a predetermined preload on the wastegate lever and linkage. See arrows.

Do not straiten the repair clip before installation.

Install the portion of the clip with the channel onto the wastegate linkage arm (1).

Then gently rotate the eye to the center of the wastegate lever in the direction of the arrow.

Make sure the channel portion of the repair clip and linkage (1) locks together.

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Finish assembling the vehicle as per the applicable repair instructions.

When the clip (1) is correctly installed it will look like the example in illustration.

The eyelet (2) must be locked in place.