

Traces of oil in area of oil cooler (inner V) on engine 642

Topic number	LI18.30-N-056338
Version	4
Design group	18.30 Oil cooling system
Date	05-27-2016
Validity	Model 639 with engine 642 Model 906 with engine 642
Reason for change	Edit to remedy
Reason for block	

Complaint:

- Traces of oil in area of oil cooler (inner V) on engine 642
- Traces of oil at drain points of inner V

Cause:

- 1- Oil leak from the Turbocharger Inlet Seal (175). See attachment "OM 642 Turbocharger.jpg"
- 2- Seals between engine block and oil cooler may be leaking due to incorrect installation.

Remedy:

- 1- Verify oil is not leaking from the Turbocharger Inlet Seal (175). See attachment "OM 642 Turbocharger.jpg"
- 2- Reference Service Bulletin V-B-09.00/01 "Operations in Clean Air Line Area"
- 3- Remove Oil Cooler; refer to WIS document "AR18.30-S-6840SE."

NOTE: Do not remove any parts until you drain all the coolant. Refer to WIS document "AR20.00-D-1140SD." If you do not drain the coolant and remove the oil cooler, coolant will leak into the oil passages and may cause engine damage.

- 4- Before removing oil cooler, clean the area around the outside of the oil cooler to ensure all debris has been removed. See attachment "Oil Cooler Top.jpg"

Note: Failure to do so may result in debris or foreign objects entering the engine causing engine problems.

- 5- When replacing the oil cooler O-ring seals, ensure the new part A 642 188 04 80 is installed. See attachment "new_gasket.jpg."

- 6- Clean residual oil around oil cooler passages in the top of the engine block.

Note: When cleaning, it is essential to start from the center of the hole and wipe outward as debris or foreign objects may enter the hole and cause engine failure. See attachment "Clean Away from holes.jpg"

Note: The oil cooler is not the cause and must not be replaced.

Note: "Reworking" contact surfaces (e.g. with abrasive paper or machining) to remove sealant residues is not permitted. Any consequential damage caused by this is not covered by the warranty or goodwill provisions.

Attachments	
File	Description
new_gasket.jpg	Picture of old and new gasket
Oil Cooler Top.jpg	Oil Cooler Top View. Clean around area before removing to ensure area is free of debris. Failure to do so may result in debris entering engine causing engine failure
OM 642 Turbocharger.jpg	Verify oil is not leaking from the Turbocharger Inlet Seal (175)

XENTRY TIPS

Clean away from holes.jpg

Clean away from the holes. Debris or fallen objects may enter the holes and cause the engine failure.

Symptoms

Power generation / Engine lubrication/oil cooling / Function / Oil level too low

Power generation / Engine lubrication/oil cooling / Leakage / External oil loss

Parts

Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 642 188 04 80			Gasket, oil cooler to cylinder crankcase	2		X

Operation numbers/damage codes

Op. no.	Operation text	Time	Damage code	Note
18-6840	REMOVE/INSTALL/SEAL OIL HEAT EXCHANGER FOR ENGINE, REPLACE IF NECESSARY		18242 04	<p>Engine oil heat exchanger seal leaking</p> <p>The listed damage code is not to be considered as an acceptance of costs.</p> <p>Please refer to the applicable warranty and goodwill policies.</p>

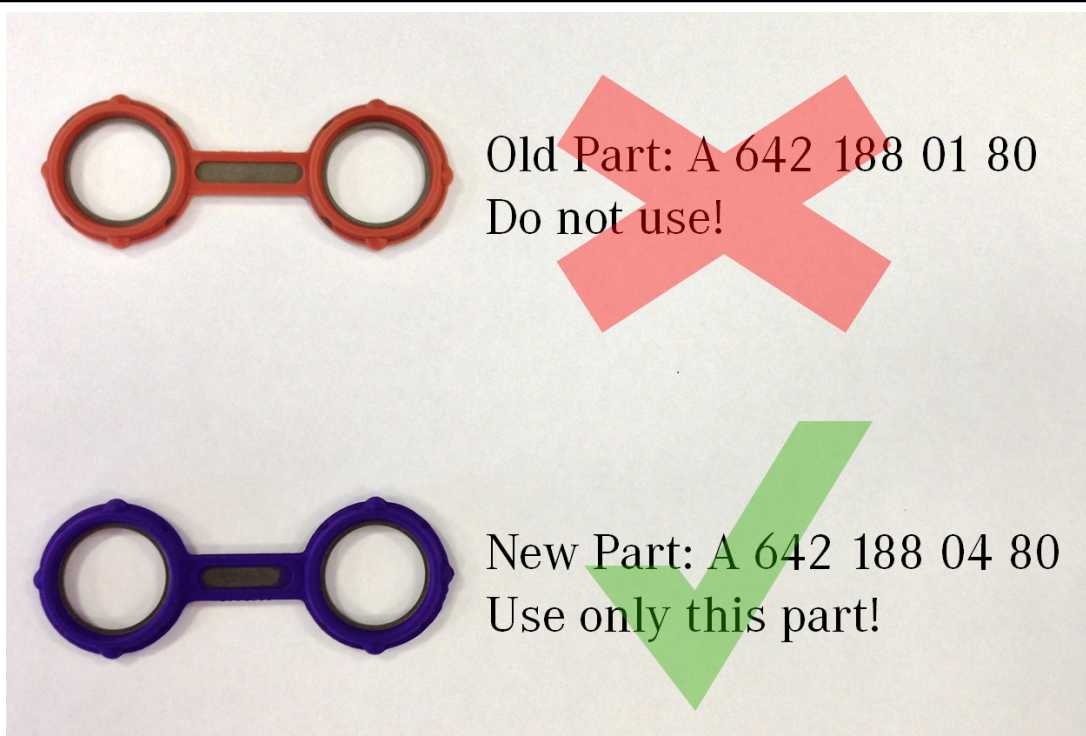
WIS-References

Document number	Title	Note	Allocation
AR18.30-S-6840SE	Remove/install oil-water heat exchanger	ENGINE 642 in MODEL 639 ENGINE 642.896 /898 / 992 /993 in MODEL 906	Remedy
AR20.00-D-1140SD	Drain Coolant	Please ensure to drain the coolant before removing any parts	Remedy

Attachments

XENTRY TIPS

new_gasket.jpg:



XENTRY TIPS

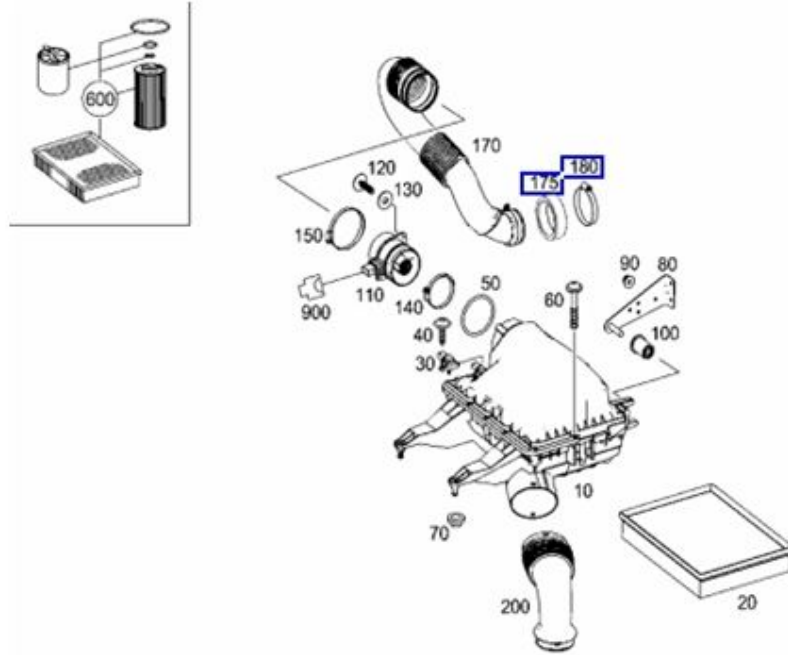
Oil Cooler Top.jpg:



XENTRY TIPS

OM 642 Turbocharger.
jpg:

OM 642



Clean away from holes.
jpg:

