

Oil Leak at Vibration Damper Area

Topic number	LI01.40-N-077649
Version	5
Function group	01.40 - Crankcase, timing case cover, end cover
Date	9/10/25
Validity	Engine OM654
Reason for change	Part number A6540103216 added

Complaint

Oil leakage observed near the vibration damper, traced to a faulty radial shaft sealing ring at the front crankshaft flange. (see photo in attachment)

Cause

The sealing lip of the radial shaft sealing ring has worn a groove into the front crankshaft flange. This wear compromises the sealing integrity between the crankshaft and the radial shaft sealing ring in its original assembly position.

Remedy

Install a crankcase cover equipped with a design-optimized radial shaft sealing ring. This updated sealing ring features a revised lip structure that relocates the sealing surface outside the worn area of the crankshaft.

Part Numbers:

A654 010 32 16 replaces A654 010 91 01 → Valid for all OM654 engines from production start.

A654 010 04 12 replaces A254 010 03 01 → Valid for all OM654 engines phased in from 2020.

Additional Notes:

The original crankcase cover assembly position remains unchanged, allowing continued use of the existing special tool (refer to WIS documentation).

No engine or crankshaft replacement is required when installing the updated crankcase cover with the optimized sealing ring.

Attachments	
File	Description
Radialwellendichtring undicht.JPG	Leaky radial shaft sealing ring



Verschleiß am Kurbelwellenflansch vorn.JPG

Wear on front crankshaft flange



WIS-References		
Document number	Title	Note
AR01.40-D-8922TSM	Remove/install cover with front radial shaft sealing ring	Model 907
AR01.40-S-8922EA	Remove/install cover with front radial shaft sealing ring	Model 447
AR01.40-D-8922TSK	Remove/install cover with front radial shaft sealing ring	Model 910

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

XENTRY Tips

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A6540100412			CRANKCASE COVER	1	Optimized radial shaft sealing ring	X
A6540103216			CRANKCASE COVER	1	Optimized radial shaft sealing ring	X

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			0109304	Front cover of crankcase is leaky
			0301004	Front sealing ring of crankcase is leaky