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TECHNICAL REPORT

Gasket set for wet cylinder liners for VM 2.5 diesel engines

ajusa

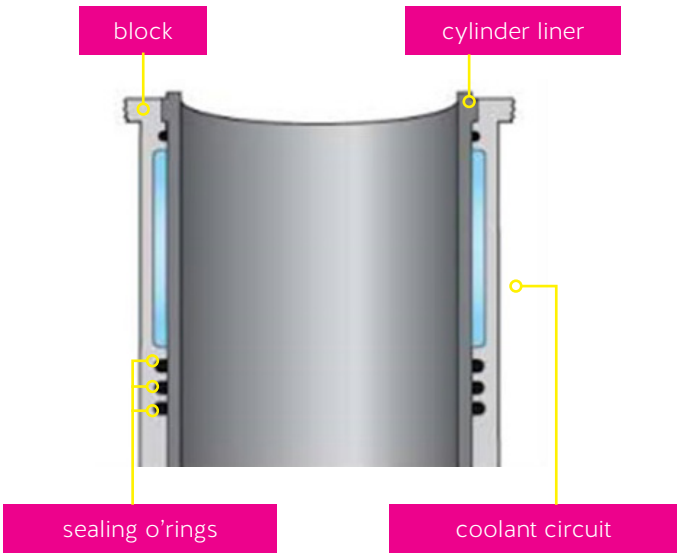
introduction

The family of **2.5 diesel engines** of the Italian manufacturer VM Motori engines, has 4 cylinders in line, 4 valves per cylinder and indirect injection.

These engines were supplied to Chrysler and Dodge to power their Voyager IV, Grand Voyager IV and Dodge RAM models.

Model	Year built	kW	CV	Engine
Grand Voyager IV (RG) 2.5 CRD	01.2001 - 02.2008	105	143	ENJ
Voyager IV (RG, RS) 2.5 CRD	02.2000 - 12.2008	105	143	ENJ
Voyager IV (RG, RS) 2.5 CRD	08.2005 - 12.2008	88	120	EDK
RAM Van 2.5 CRD	03.2002 - 12.2005	105	143	ENJ

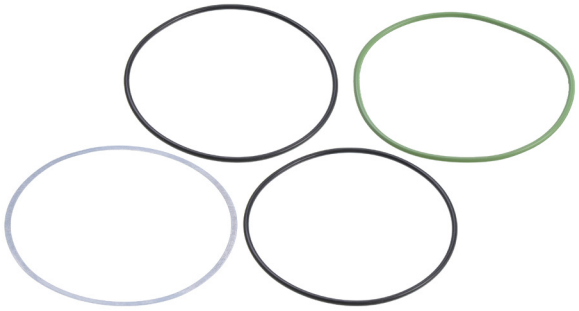
Another feature is the **removable wet liners**, which can be detached from the block and replaced if damaged.



This system makes it necessary to seal the wet cylinder liner between these liners and the engine block, since there is coolant flow between both parts.

For this sealing Ajusa has **different sets of liner gaskets** that differ from each other in the height adjustment plate of the liner

It is very important that the height of the cylinder liner is **within certain dimensions**, as this component will be responsible for sealing the cylinder area with the cylinder head gasket, to prevent combustion gas leakage.



Position	Quantity	Material	Section	Colour	Thikness	Number
1	1	Electrogalvanised steel	Rectangular	Metalized	0.15	60009800
					0.17	60009900
					0.20	60010000
					0.23	60010100
					0.25	60010200
2	2	NBR	Circular	Black		
3	1	VITON	Circular	Green		

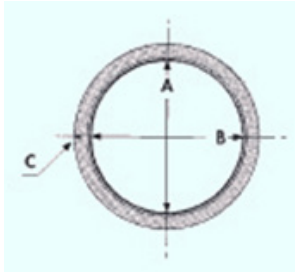
meassurement and installation

The way to measure and thus select the corresponding set would be as follows:

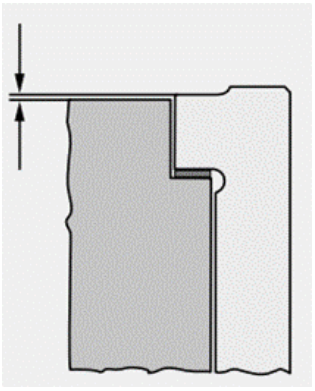
1. **Clean** the oil, sealant and antifreeze residues from the cylinder liner and block. Remove the sealing O-rings.

2.Place the liner in position in the block and rotate it 45 degrees in both directions.

3. Using a dial gauge, **measure the height** between the cylinder liner projection and the block at the 2 points indicated. Always on the camshaft side.

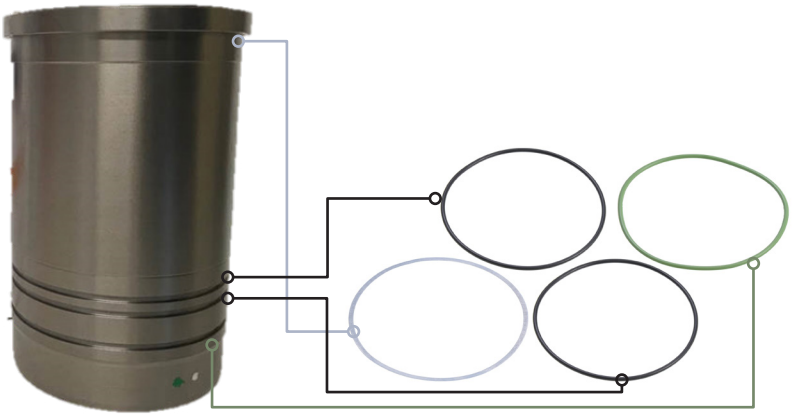


4. The height must be between 0.01-0.06mm. Therefore, you must **remove the dial gauge and the liner**, and select the appropriate spacer (0.15-0.17-0.20-0.23-0.25mm) to achieve the specified height.



5.Once the spacer has been selected, place it in its corresponding position on the liner and apply **Ajustick anaerobic sealant (ref.75000400)** on both sides.

6. **Place the 3 o-rings** in their corresponding position on the cylinder liner, as shown below:



7. Lubricate the o-rings with clean engine oil and fit the cylinder liner into the block, pressing it into place by hand.

8. Press the liner into place using the VM-1016 tool and the cylinder head bolts.

9. **Check again** that the height of the cylinder liner is between 0.01 and 0.06m.