

TECHNICAL REPORT

Recommendations for
disassembly and assembly
of hydraulic lifters – AJUSA
reference 85008000

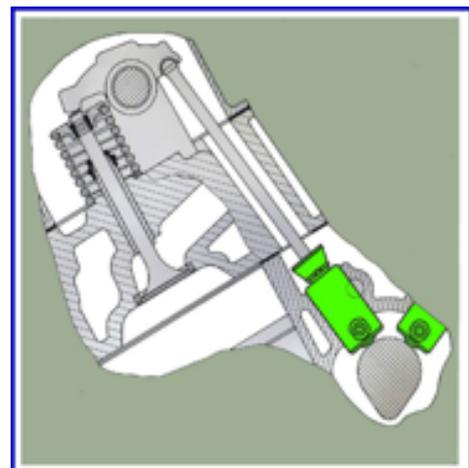
PURPOSE

Inform all customers about some **recommendations** when **disassembling** and **assembling hydraulic lifters** in VM engines.

INTRODUCTION

In VM engines reason of this report, the hydraulic lifters are **roller type** of direct action and are located in the block, that is why it is necessary **to disassemble nocks to reach them.**

A direct action roller **is the one that one of the sides is in direct contact with the camshaft**, in this case the lifter type has a roller in the area of friction with the cam and the other side is concave to accommodate the pushrod that actuates the rocker.



RECOMMENDATIONS FOR THE DISASSEMBLY OF HYDRAULIC LIFTERS

- Before disassembly it is recommended to **let the engine cool down**.
- Disconnect the ground cable off the battery..
- Empty the cooling system following the manufacturer specs.
- Disassemble water, intake and exhaust manifolds, valve cover and **all those components detailed in the vehicle repair manual**, so nocks can be reached.
- Disassemble the **valve cover kits and pushrods**.
- **Loosen screws of the nocks** following the specs of the repair manual, mark heads, it is advisable to keep the position for later assembly.
- Remove nocks.
- Mark and remove supports of the lifters which prevent these turn in their housing.
- Place the extractor in the block opening and hold firmly on the hydraulic lifter head, to **remove it off its housing**. This operation must be made with all hydraulic lifters.

It is advisable to keep the position for later assembly.



Do not use magnetized objects which may cause an incorrect functioning of some hydraulic components.

RECOMMENDATIONS FOR THE ASSEMBLY OF HYDRAULIC LIFTERS

- **Lub** hydraulic lifters, pushrods, rockers, etc.
- **Assemble hydraulic lifters** with the **same tooling** used for disassembly and fix with the supports in the corresponding cylinder.



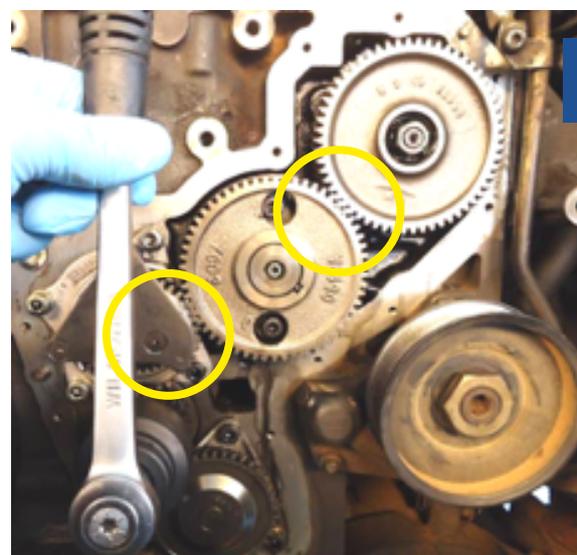
SUPPORT

LIFTER OIL HOLE

- **Assemble nocks** (see technical tip number 7), intake and exhaust manifolds following the specs in the repair manual.
- **Place pushrods** in the correct position.



- **Assemble rockers** in the same order they were disassembled
- **Turn the crankshaft until cylinder number one** is on the upper deadlock and block.

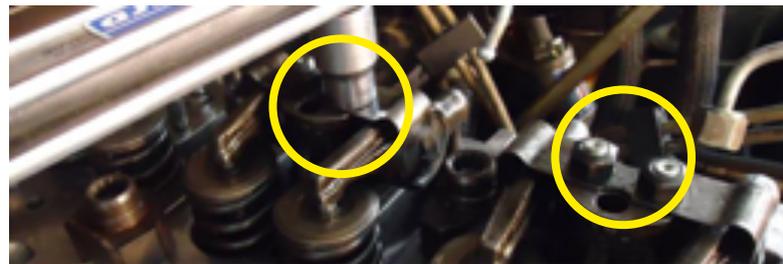


marks

To avoid the valve hitting the piston when tightening the rocker it is advisable to follow the procedure detailed next.

Torque 29,4Nm, nuts of cylinders 2 and 3

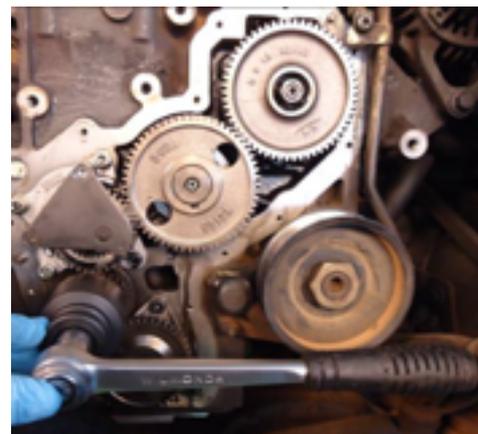
- Tighten nuts of the rockers located in cylinders 2 and 3, 29,4 Nm.



- Unlock crankshaft and **turn 90° to the right to tighten nuts of the rockers** of cylinders 1 and 4, torque 29,4Nm.

- **Check that depth marks** are correct and turn crankshaft several times.

- **Assemble** water manifold, valve cover, and **all those components** detailed in the vehicle repair manual.



Torque 29,4Nm, Nuts of cylinders 1 and 4