



# ***FPT GENUINE CYLINDER HEAD LEADING YOUR ENGINE***



***GENUINE  
PARTS***

# How CylinderHead works

## A key role in the engine

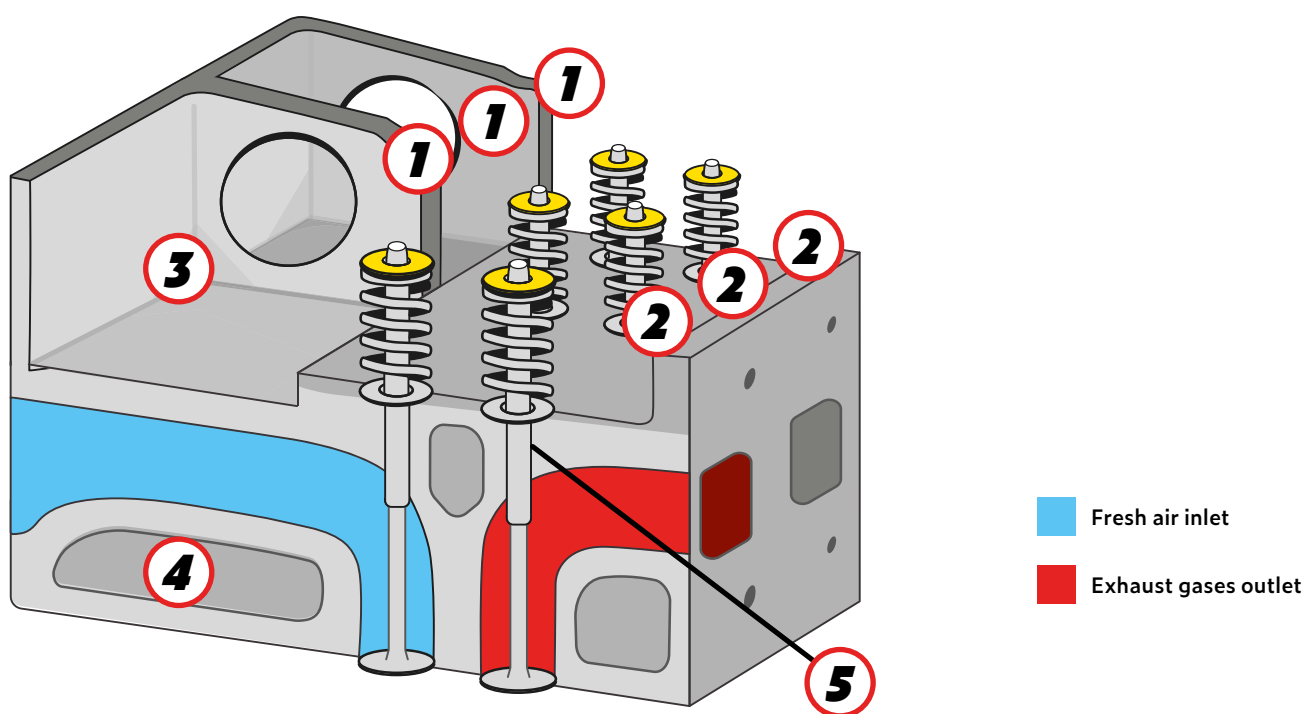
The cylinder head plays an important role in a motor vehicle: in fact, most of the activities that make the engine run have something to do with the cylinder head.

It is the seat for the valve train (intake and exhaust valves, cones, springs, rocker arms, tappets, camshaft, ...), spark plugs (for NG engines), injectors.

The cylinder head is responsible for the coolant to get to the engine block which cools the components of the engine. The head gasket prevents the leakage of water or oil inside the combustion chambers, and keeps these fluids separated.

The structure of the cylinder head is complex: it is made up of ducts (intake and exhaust) which allow the flow of air in the cylinder and the outflow of exhaust gases and coolant chambers to keep the temperature of all the parts within the given ranges.

Cylinder heads are made in aluminium alloy for light applications and cast iron for medium/heavy engines.



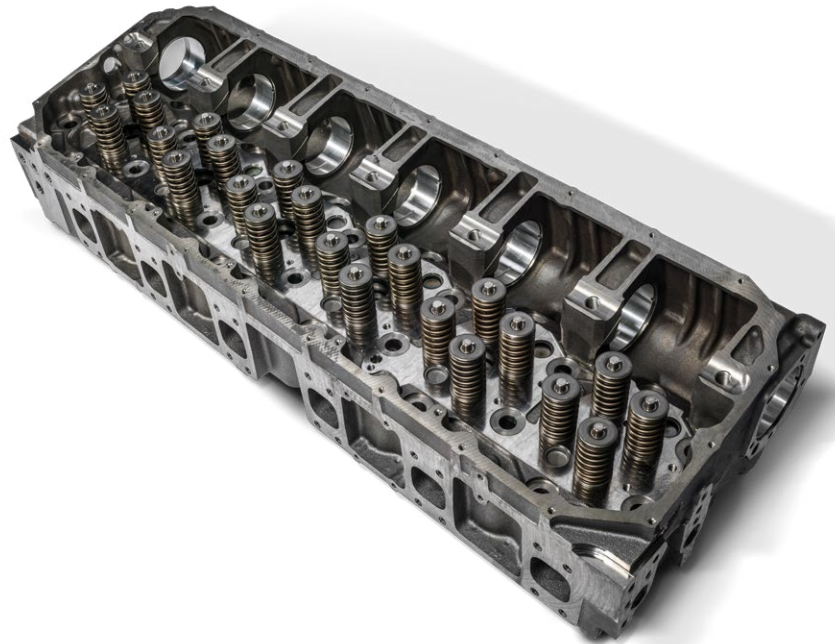
- 1** INTAKE VALVES      **2** EXHAUST VALVES      **3** CAMSHAFT SEAT  
**4** COOLANT PASSAGE      **5** VALVE GUIDE

## Equipped Cylinder Head

Equipped Cylinder Head includes all the components necessary for the assembly on the engine. This solution, compared to naked cylinder head, allows you to save money on the cost of all the individual components in addition to the naked cylinder head, and up to one hour for the assembly.

The equipped cylinder head is complete with following components:

- Bare cylinder head
- Injector holder cases
- Intake and exhaust valve guides
- Valve seats
- Bushings, caps and o-rings
- Intake and exhaust valves
- Springs
- Valve cones



## Main benefits that the Equipped Cylinder Head can offer:

- **ASSEMBLY AS A SINGLE COMPONENT** -The cylinder head is ready for assembly.  
Reduces risk of partial unavailability from ordering every single part number.  
Reduces risk of assembly errors by receiving the latest components direct from FPT manufacturing.
- **SAVINGS OF TIME AND MONEY FOR CUSTOMERS** - It saves time in the ordering process also eliminating the risk of errors.  
One hour of vehicle downtime is saved by avoiding the assembly of all separate individual components.  
The net price is reduced compared to the sum of the naked cylinder head plus all the individual components necessary for completion.

# Genuine Cylinder Head performance

The FPT Genuine Cylinder Heads must withstand extremely high mechanical and thermal loads due to high pressures and temperatures produced in the combustion chamber; they are designed and validated to endure any possible working condition (and more) according to the application targets.

They have a core function in controlling air flow in and out of the cylinders and fuel distribution as well as in ensuring performance and emission targets.

The cylinder heads are where many moving parts of the engine are located, they are designed by FPT to resist to wearing for every mission profile they have been developed for.

The valve train, must be finely calibrated to meet the needs of your FPT Engine.

## Why choose a FPT Genuine Cylinder Head

Only FPT Genuine Cylinder heads are designed, tested and calibrated by FPT for FPT engines to ensure the maximum performance and top quality to prevent engine failures in any operating condition.

FPT Genuine Cylinder Head can ensure:



**MORE LONGEVITY TO YOUR FPT ENGINE**



**LOW CONSUMPTION**



**OPTIMAL PERFORMANCE**



**LOW EMISSION**





Which will bring cost saving in the long term.

**THE CYLINDER HEADS ARE DESIGNED BY FPT TO RESIST WEAR AND TEAR FOR EVERY MISSION.**

# Get the most from your FPT Genuine Cylinder Head

The most common reason for cylinder head failure is overheating. FPT Genuine cylinder heads are designed and tested to work at the most severe working ambience. An engine overheat can reach conditions far beyond these already extreme limits. Once a cylinder head cracks, the coolant or the oil might begin to leak and find its way inside the combustion chambers with catastrophic results! The oil leakage can cause significant damages to the engine and sometimes engine replacement becomes necessary.

## Maintenance advices

<b>ADVICE</b>	<b>BENEFIT</b>
 <p>CHECK THERMOSTAT FUNCTIONALITY OF THE ENGINE AND REPLACE WITH GENUINE PARTS WHEN NECESSARY.</p>	<p>ENSURE THE TIMELY DETECTION OF ANY ENGINE'S TEMPERATURE ISSUE.</p>
 <p>CHECK THE DISTRIBUTION ELEMENTS (BELTS/ CHAINS, GEAR TRAIN) AND EVENTUALLY REPLACE THEM WITH FPT GENUINE PARTS ACCORDING TO SERVICE RECOMMENDATIONS.</p>	<p>KEEP TOP ENGINE PERFORMANCE AND LOW FUEL CONSUMPTION. PREVENT RISK OF SEVERE BREAKDOWNS TO PISTONS AND VALVES.</p>
 <p>ENSURE THAT THE COOLING SYSTEM IS IN TOP CONDITIONS, REGULARLY FILLED AND AT THE RIGHT PRESSURE. CHECK COOLANT LEAKS.</p>	<p>TO KEEP THE COOLING SYSTEM EFFICIENT WILL PREVENT THE RISK OF OVERHEAT IN THE ENGINE, HEAD GASKET DAMAGES AND CYLINDER HEAD CRACKS.</p>
 <p>PERFORM VALVES CLEARANCE CHECK AND ADJUSTMENT WHEN RECOMMENDED BY FPT SERVICE.</p>	<p>MAINTAIN ENGINE PERFORMANCE OVER THE TIME AND REDUCE WEARING.</p>

**If the engine temperature keeps higher than normal you should take your machine to an authorized workshop as soon as possible to avoid more severe damages.**



## 24/7 CARE & ASSISTANCE

Please, don't hesitate to contact us for any further information

[fptindustrial.com](http://fptindustrial.com)