

Valve Breakages - VAG engines 1.8 20v Petrol & 1.9 Diesel



Photo 1

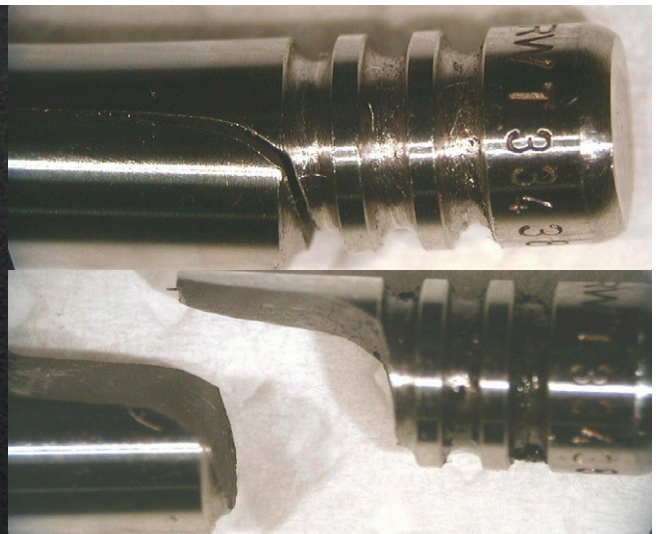


Photo 2

Cause:

Over extension / "pump-up" of hydraulic lifters
Incorrect seating of valve spring to cylinder head

Symptoms:

Valve breakage shortly after cylinder head rebuild, during first start-up or during test run.

Photo 1 represents the likely cause of failure due to hydraulic lifter.

Photo 2 represents the likely cause of failure due to incorrect location of valve spring.

Solution/Remedy:

When possible fit new hydraulic lifters, when new valves are fitted.

Ensure all components are pristine clean.

Apply lubricant to all hydraulic lifters.

Take extreme care to seat all valve springs correctly in the recess of the cylinder head.

Renew engine oil and oil filter.

Best Practice:

Ideally, plan the job so that the installation is completed at the end of the day to leave the engine overnight before starting for the first time next day.

→ Before starting, carefully crank TWO complete engine revolutions by hand to ensure no valve to piston contact.

Failure to adhere to this procedure can result in the valve to piston contact resulting in valve tip and head detachment. Our advice is to consider this procedure for all engines with hydraulic lifters.