



Valve Seat Fallout On 2007-2010 Mini Cooper 1.6L, N12 Engines

The AERA Technical Committee offers the following information regarding valve seat fallout on 2007-2010 Mini Cooper 1.6L N12 engines. These DOHC four cylinder engines use aluminum cylinder heads with 16 powdered metal (PM) insert valve seats.

It has been reported the intake or exhaust valve seats may become dislodged during normal engine operation on these engines. In some reported instances intake valve seat inserts have dropped shortly after re-installing heads after engine overheating and head gasket service.

At first, intake locations had been reported to fall out more often, which may only be a coincidence as lately exhaust locations have fallen out as well. For engines affected with this type of failure, replacement of all valve seats is the best action possible to assure the actual interference fit of ALL inserts. Therefore, complete seat replacement is recommended to help prevent possible repeat type failure to reoccur in other locations.