

IMS Bearing Service: Prequalification of Your Engine

If you have read our Technical Service Bulletin regarding the problematic IMS bearing found in all 996s, 997s, Boxsters and Caymans years 1997-2008, you may be wondering what the first step in addressing this issue is.

When your vehicle is brought in to have the IMS bearing serviced, whether it is installing the Retrofit kit, Solution or removing the sealing ring, certain steps are taken to ensure that the engine is a good candidate before any work begins.

First, the oil from the engine is drained and the oil filter is removed. The oil, oil filter (which we cut open) and oil filter housing are thoroughly inspected, searching for metal flake and/or other debris that may have circulated through the system. Next, the oil sump cover is removed and inspected for debris. We also check the oil pump pickup screen for any materials while the sump cover is still removed. The sump cover is then cleaned and resealed.

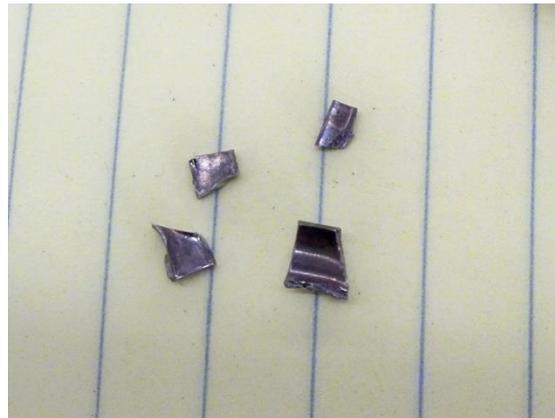
Many times, metal flake is found in the oil and filter, which is typically a strong indication that the IMS bearing has begun to fail. As with the IMS bearing service itself, it is very important to have a trained professional perform the qualification step of this procedure, as the amount and type of metal flake and debris will determine whether or not the engine is a good candidate for the service. Therefore, depending upon what is discovered during this inspection, we will determine on a case-by-case basis if the bearing service should or should not be performed. In some cases, so much debris is found that the engine is considered to be compromised, and a full rebuild is needed.

In the event that there is too much metal flake and debris found to have cycled through the engine, we will not under any circumstance perform the IMS bearing service. This is for a few reasons:

1. Internal engine components may have already been compromised and damaged from the debris cycling through the system.
2. Even if the IMS bearing is serviced, remaining debris in the engine can cycle through, damage the new bearing, and produce even more debris.
3. Due to both above listed reasons, the time and money spent on performing the IMS bearing service on a bad candidate engine will be wasted.



Here, we are performing the inspection of the oil, oil filter and housing, and sump cover. We look for and assess any metal flake and debris that may be present.



These pieces of metal were discovered in a customer's sump cover after it was removed for inspection. They are pieces of the IMS bearing cage and part of a timing chain roller, and had cycled through the engine's oil system. Unfortunately, this engine had been compromised even though the IMS bearing had not completely failed yet. The engine will need to be disassembled and fully inspected for any further damage caused by the circulation of this and any other debris.