

THE SYMPTOMS

- Leaking oil.
- Engine management light is on.
- Contamination of critical components such as clutches, electrical systems, drive and Timing Belts.
- Poor running or loss of power (Electronic VVT systems).
- Engine damage.

THE REASON

- The Seal will not provide adequate sealing if there is visual wear that can be detected by touch or low level measuring equipment.
- Contamination within the sealing area adheres to the engine oil creating an abrasive paste that wears away areas of contact.
- Small lines or scoring around the circumference of the machined part.
- The service life of the Seal can be affected by different environments from thermal expansion to composite materials.

THE SOLUTION

Double bladed 45° seals that incorporate a wiper seal in front of the main blades will combat the erosive paste considerably compared to the common single 45° bladed seal.

 REPLACE ANY COMPONENT THAT WILL AFFECT THE OPERATION OF THE NEW SEAL.

OIL SEAL DAMAGE

General advice



THE PREPARATION

- Clean the area around the Seal especially the wearing surfaces.
- Check the replacement part is correct by studying the markings on the Seal.
- The sizing of a Seal is not written the same as a normal engineered part. It appears like this: **A x B x C**:
 “A” equals the inner or crankshaft diameter
 “B” equals the outer diameter or seal housing
 “C” equals the seal thickness or depth of seal housing
- Inspect the machined components for wear and replace the worn parts.
- The Seal application tool is orientation specific.
- Check the Seal lips are seated correctly.

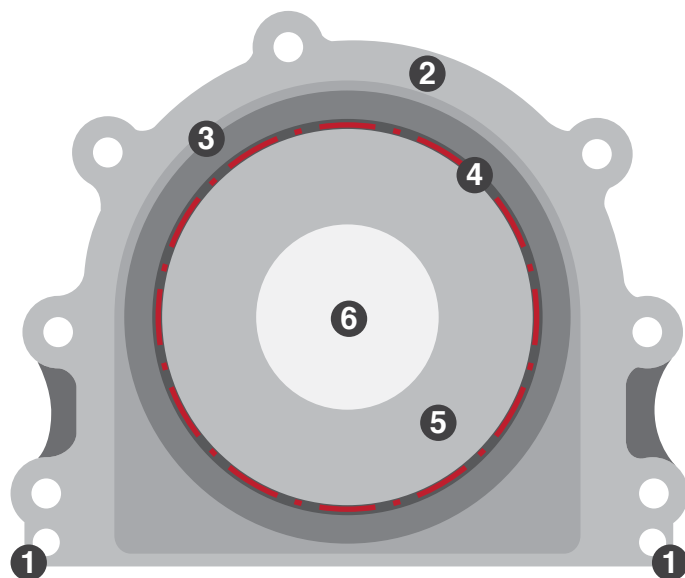
THE INSTALLATION

- When removing and installing a new Seal, it is recommended that manufacturer approved tools are used to prevent damage to the sealing surface.
- Most Seals come mounted on a plastic guide which also protects the Seal during installation.
- DO NOT lubricate Crankshaft Seals, fit them dry.
- Lubricate all other Seals with engine specific oil, prior to fitment.
- The use of a Seal fitting tool (or dolly) is recommended to prevent damage.

! DO NOT USE A SCREW DRIVER TO REMOVE THE SEAL AS THIS MAY CAUSE SURFACE DAMAGE.

OIL SEAL INSTALLATION

General advice



- 1** Locating dowel hole x 2.
- 2** Paper gasket contact face.
- 3** Seal body.
- 4** Main section seal.
- 5** Fitment dolly / Installation tool.
- 6** Engine side crankshaft.

APPLICATION TOOL SIDE VIEW



BGA products are to be replaced by an experienced automotive installer. This information is to be used as reference only. Always seek manufacturer specification.