

PTFE Oil Seals

With changing technology in automotive engines, higher demands are being placed on the engine's oil seals. Oil Seal design has had to change to cope with these changes. The solution is PTFE, more commonly known as Teflon. This fully synthetic material makes it perfect for combating high speeds and aggressive oil additives.

PTFE oil seals are designed to be low friction and can operate with dry operation or insufficient lubrication. PTFE also has excellent thermal properties, with an operating temperature range of -130C to +200C. PTFE seals are manufactured without a pretensioning spring due to the seal having plastic memory effect, this means when the seal is heated, it attempts to return to its original form / shape.

One of the main causes of a PTFE Oil Seal failure is caused during installation. Not following the correct installation process and not using the correct tools will cause premature failure.

Tips for fitting PTFE Seals

1. Only remove the PTFE seals from their protective packing immediately before installation to protect them from contamination.
2. The PTFE seal's sealing lip is protected by either a plastic or cardboard sleeve. This sleeve must stay in place until the seal is installed.
3. The protective sleeve can be used to assist in installation or a specialist tool as used by the OEM manufacturer must be used.
4. The seal and the shaft must be completely dry. Do not use any grease or lubricants on the seal surfaces.
5. Ensure the shaft is in perfect condition and does not exhibit any sharp edges.
6. Align the new seal correctly and push onto the shaft using the correct tool with an even motion. The use of any oil or grease will cause premature failure.
7. Remove the installation tool and allow the seal to sit 4-5 hours before starting the engine. This allows the seal to adapt to the shaft perfectly.

Some Popular PTFE Seals

Part Number	Description	Application
98555	Rear Main Housing Assy	Mazda 3 BK-BL 2.0,2.3,2.5L 2004-on
		Mazda 6 GG, GY & GH 2.3, 2.5L 2002-2012
		Ford Focus LS, LT, LV, LW 2.0L 2005-on
97977	Crankshaft Front	Holden Commodore VX, VY, VZ, VE, VF 5.7,6.0, 6.2L 2000 - on
98266	Crankshaft Front	Holden Captiva CG 3.0, 3.2L 2006-on
		Holden Colorado RC 3.6L 2008-2012
		Holden Commodore VE-VF 3.0,3.6L 2006-on



This is intended as a general guide, for complete instructions always refer to the OEM manufacturer
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