

Cleaning Head Bolt Threads in Cylinder Blocks

When cleaning cylinder head bolt threads in cylinder blocks, especially late model engines that utilise torque to yield head bolts, it is strongly advised that you DON'T use standard engineering taps for this purpose.

Head bolts have a rolled thread to allow for greater surface contact area, allowing for higher loads that are applied to these bolts during service. It's also common that the thread in cylinder blocks will suffer from slight stretching over time.

The use of a standard tap to clean the cylinder head bolt threads in the engine block can remove extra material from the thread itself. In some instances as much as 0.152 mm (6 thou) or more, reducing the surface contact area between the head bolt and the block thread.

This results in the incorrect amount of clamping load applied to the cylinder head gasket and can cause premature head gasket sealing failure or damage to the block thread.

As an alternative to standard engineering taps, try using the old cylinder head bolts. A machined groove, 2-3mm deep, with a sharp 90 degree edge, along the length of the bolt thread, will remove any foreign debris without removing any additional material from the block thread.



Why not ask your engine machinist to groove some of the old bolts while they surface the cylinder head?

This will ensure you can clean the block threads without doing any damage.

NOW AVAILABLE

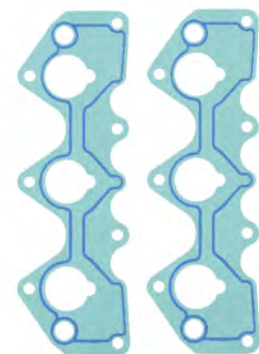
Audi A1 8X	CZCA	2015 on
Audi A3 8V	CZCA	2014 - 2016
Timing Belt Seal Kit	SK140	
Camshaft Seal Rear	OSS0488	
Camshaft Seal Front	OSS0487	
Crankshaft Seal Front	OSS0489	
Crankshaft Seal Rear	OSS0490	
Austin Rover, KIA Landrover	25K4F, K5, KV6	2000 - 2004
Valve Regrind Set	V2690SS	
Head Gasket	S2266SS	2 required
Rocker Cover	RC3235	2 required
Head Bolt Set	HBS081	
Manifold Inlet	MS3788	
Manifold Exhaust	MS3331	
Manifold Collector	MG3332	
Valve Stem Seal Set	VSS0306/24	
Camshaft Seal Rear	SK065	(4 seals)
Camshaft Seal Front	SK064	(2 seals)
Crankshaft Seal Front	OSS0084	
Crankshaft Seal Rear	OSA0007	
Timing Belt Seal Kit	SK063	Front belt only
BMW 3,5,6,7 Series	M30	1969 - 1993
Head Bolt Set	HBS376	
Daewoo Cielo	A15MF	1995 - 1998
Throttle Body	TB1162	
Daihatsu Delta V116/8/9	14B	1985 - 2002
Water Pump	WP195	
Fiat Ducato	F1AE0481	2007 - 2014
Head Bolt Set	HBS345	
Ford Falcon Explorer F-Truck 4.6L, 5.4L		2001 - 2010
Head Bolt Set	HBS094H	2 required
Ford Falcon, F-Truck ZL, XF	4.1L	1984 - 1993
Fuel Pump	FP101	



Landrover Freelander
25K4F
Head Gasket: S2266SS



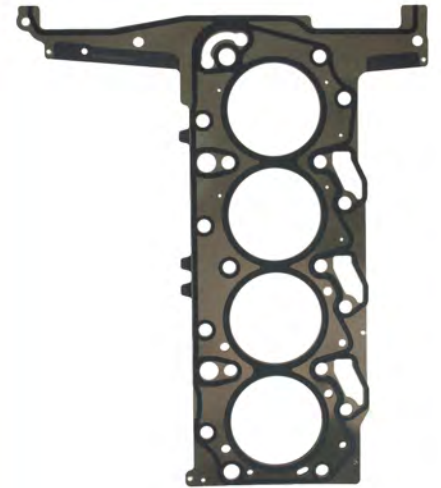
Landrover Freelander
25K4F
Rocker Cover: RC3235



Landrover Freelander
25K4F
Inlet Gasket: MS3788

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Ford Ranger PX Mazda BT50	Duratorq 22 Duratorq 22	2011 on 2011 on
Graded Head Gasket	S4990SS-1	1.10mm
Graded Head Gasket	S4990SS-2	1.15mm
Graded Head Gasket	S4990SS-3	1.20mm
Head Bolt Set	HBS261	
Rocker Cover	RC4320	
Ford Laser KN, KQ	FP, FS	1998 - 2002
Throttle Body	TB1264	
Ford Maverick	TD42	1988 - 1993
Thermostat Housing to Head	WO139	
Thermostat Housing to Timing Cvr	WO138	
Ford Ranger PJ, PK Mazda BT50 B2500/B3000	WEC, WLC WLC, WEC	2006 - 2011 2006 - 2011
Rocker Cover Set	RC3273K	
Ford Transit VM	Duratorq 22	2006 on
Head Bolt Set	HBS261	
Rocker Cover	RC4320	
Holden Captiva CG	LE5, LE9	2011 on
Rocker Cover Set	RC3500K	
Manifold Inlet Set	MS4090	
Manifold Exhaust	MG4091	
Holden Astra Barina Tigra Viva X18, Z18, F18	1998 - 2009	
Throttle Body	TB1301	
Honda Accord CD5 CE1	F22B	1993 - 1997
Head Bolt Set	HBS383	
Honda Civic	D17A	2001 - 2005
Head Bolt Set	HBS365	
Hyundai 145, iX35, Sonata	G4KD, G4KE	2007 - 2013
Kia Cerato, Magentis, Sorento, Sportage	G4KD/C/E	2008 - 2016
Throttle Body	TB2954	
Iveco Daily 35S14	F1AE0481	2005 on
Head Bolt Set	HBS345	



Ford Ranger Mazda BT50
Duratorq 22
Head Gasket: S4990SS-#



Ford Ranger Mazda BT50
Duratorq 22
Head Bolt Set: HBS261
18 x 138mm

NOW AVAILABLE

Mazda 323, 626 BJ10, GF	FP, FS	1997 - 2003
Mazda Premacy CP10	FP, FS	2000 - 2001
Throttle Body	TB1264	
Mercedes CDI	OM642	2005 on
Head Bolt Set	HBS369H	2 required
Mitsubishi Challenger, Triton	4D56	2008 - 2015
Crankshaft Seal Rear	OSS0385	
Nissan BD30, TD27, RD23 QD32, TD42		1986 - 2008
Thermostat Housing to Head	WO139	
Thermostat Housing to Timing Cvr	WO138	
Nissan Utility XFN	4100 Ford	1988 - 1990
Fuel Pump	FP101	
Renault Kangoo, Megane	K9K	2008 on
Head Bolt Set	HBS370	
Toyota 4 Runner VZN130	3VZ	1990 - 1995
Head Bolt Set	HBS021H	2 required
Toyota Dyna BU	11B, 14B	1988 - 2003
Water Pump	WP195	
Toyota F Series, Landcruiser F, 2F, 3F		1967 - 1992
Timing Cover	TC104	
Volkswagen Golf CHPA, CXSA, CZCA		2013 - 2017
Skoda Octavia, Rapid Spaceback CHPA, CZCA, CZDA		2013 on
Camshaft Seal Rear	OSS0488	
Camshaft Seal Front	OSS0487	
Crankshaft Seal Front	OSS0489	
Crankshaft Seal Rear	OSS0490	
Timing Belt Seal Kit	SK140	
Volkswagen Golf AU	CZDA	2015 on
Camshaft Seal Front	OSS0487	
Crankshaft Seal Front	OSS0489	
Crankshaft Seal Rear	OSS0490	

TECH TORQUE

Many MLS cylinder head gaskets are held together with brass construction rivets.

Rivets are placed strategically to prevent them being compressed between the cylinder head and cylinder block castings.

Variations in castings can be found, sometimes due to design improvements, casting/ tooling changes or even the introduction of aftermarket heads and blocks.

You must ensure that no part of any rivet will be compressed between the cylinder head and block.

