

PRODUCT INFORMATION

0.020" CYLINDER HEAD SPACER SHIMS

Cylinder Head Spacer Shims help restore the valve train geometry, valve clearance, compression ratio and cam timing to factory specifications on engines where the cylinder head and/or block surfaces have been resurfaced below factory limits.

Shims from **Innovative Machine & Supply** are precision cut from 0.020" cold rolled steel. Shims are individually produced using our CNC laser. This eliminates the rolled edge present on shims that are manufactured using a punch press.

Shims from **Innovative Machine & Supply** are made from steel for several important reasons:

- 1) Steel has a higher heat tolerance than copper, the material used for some other cylinder head shims. In hotter running late model engines, heat resistance is very important to insure the integrity of the shim. Steel is superior for this environment.
- 2) Steel cylinder head shims have a hardness factor similar to that of the block. This allows the gasket fire ring to properly "crush" as the head is torqued to spec.
- 3) Steel shims are less likely to be damaged in shipping and from mishandling or mishaps in the shop.

Innovative Machine & Supply is dedicated to being the #1 manufacturer of cylinder head spacer shims. We are constantly developing new part numbers to meet the needs of the ever-changing engine rebuilding/ remanufacturing industry. If we do not have the part you need today, we will probably have it tomorrow. Many new part numbers are developed in response to the calls we receive; please contact us if you do not find the shim for your application.

The information listed in this catalog has been compiled from reliable sources and is correct to the best of our knowledge. Innovative Machine & Supply cannot assume responsibility for possible error. Innovative Machine & Supply liability, expressed or implied, is limited to the stated selling price of any defective goods.

- **CATALOG VERSION 24.01 – Updated February**
- **ALL SHIMS ALSO AVAILABLE IN 0.030, 0.040, & 0.060” THICKNESS**
- **CUSTOM DESIGNED SHIMS & GASKETS**
- **COPPER GASKETS FOR ANY ENGINE:
0.021 / 0.032 / 0.043 / 0.050 / 0.064 /
0.072 / 0.081 / 0.093”**
- **REVERSE ENGINEERING ON ANY PART**
- **FULL SERVICE DESIGN & MANUFACTURING**

INNOVATIVE MACHINE & SUPPLY - 636 600 1171

ACURA

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.5ℓ 4 Cyl.	13-15	ILX	Fel-Pro 26529PT Mahle 54815	New N/A Min N/A	HSHO15D
1.6ℓ (D16A1) 4 Cyl.	86-89	Integra (DOHC 16V)	Fel-Pro 9451PT1 Mahle 5774,5825	New 5.195-5.200" Min 5.190"	HSAC16
1.7ℓ (B17A1) 4 Cyl.	92-93	Integra GS-R (DOHC 16V) (VTEC)	Fel-Pro 9274PT Mahle 54254	New 5.589-5.593" Min 5.581"	HSHO16
1.7ℓ (D17) 4 Cyl.	01-05	EL (SOHC 16V)	Fel-Pro 26236PT Mahle 54459	New 3.659-3.663" Min 3.651"	HSHO17
1.8ℓ (B18C) 4 Cyl.	94-01	Integra GS-R, Type R (DOHC 16V) (VTEC)	Fel-Pro 9274PT Mahle 54254	New 5.589-5.593" Min 5.581"	HSHO16
1.8ℓ (B18A,B) 4 Cyl.	90-01	Integra GS, LS (DOHC 16V)	Fel-Pro 9698PT Mahle 5889	New 5.1984-5.1988" Min 5.1868"	HSAC18
2.0ℓ (K20A) 4 Cyl.	02-06	RSX (DOHC 16V) (K20A3)	Fel-Pro 26403PT Mahle 54521	New 4.092-4.098" Min 4.090"	HSHO20C
2.0ℓ (K20Z 3) 4 Cyl.	04-11	CSX	Fel-Pro 26337PT Mahle 54531	New 4.093- 4.096" Min 4.090"	HSHO20E
2.0ℓ (R18A/Z) 4 Cyl.	13-15	ILX (SOHC 16V)	Fel-Pro 26397PT Mahle 54528	New 4.526-4.530" Min 4.520"	HSHO18B
2.2ℓ (F22B) 4 Cyl.	97	CL (SOHC 16V) (VTEC)	Fel-Pro 9958PT1 Mahle 54216	New 3.935-3.939" Min 3.932"	HSHO23A
2.3ℓ (F23A) 4 Cyl.	98-99	CL (SOHC 16V) (VTEC)	Fel-Pro 9958PT1 Mahle 54216	New 3.935-3.939" Min 3.932"	HSHO23A
2.3ℓ (K23A1) 4 Cyl.	07-12	RDX (TURBO)	Beck/Arnley 035-2157 Mahle N/A	New 4.092-4.096" Min N/A	HSAC23
2.4ℓ (K24A2) 4 Cyl.	04-08	TSX (DOHC 16V)	Fel-Pro 26337PT Mahle 54523, 54526	New 4.093-4.096" Min 4.087"	HSHO24

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ACURA (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.4ℓ (K24Z3) 4 Cyl.	09-15	ILX, TSX (DOHC 16V)	Fel-Pro 26435PT Mahle 54772	New 4.093-4.096" Min 4.086"	HSHO24A
2.7ℓ (C27A) V6	87-90	Legend (SOHC 24V)	Fel-Pro 9531PT Mahle 5773	New 5.2362" Min 5.2282"	HSHO27 (2)
3.0ℓ (J30A) V6	97-99	CL (SOHC 24V) 3.2 (01-03) 3.5 (01-02)	Fel-Pro 26260PT Mahle 54217	New 4.762-4.766" Min N/A	HSHO30 (2)
3.0ℓ (J32A) V6	97-99	CL (VTEC) (SOHC 24V)	Fel-Pro 26260PT Mahle 54524	New 4.762-4.766" Min N/A	HSHO35 (2)
3.2ℓ (6VD1) V6	96-97	SLX (SOHC 24V)	Fel-Pro 9174PT Mahle 54038	New 4.126" Min 4.118"	HSIS32 (2)
3.2ℓ (C32A) V6	91-98	TL, Legend (SOHC 24V)	Fel-Pro 9031,9032PT Mahle 5915,5916	New 3.935-3.939" Min 3.927"	HSAC32L HSAC32R
3.2ℓ (J32A) V6	01-03	TL, CL (VTEC) (SOHC 24V)	Fel-Pro 26260PT Mahle 54524	New 4.762-4.766" Min N/A	HSHO35 (2)
3.2ℓ (J32A) V6	04-08	TL (VTEC) (SOHC 24V)	Fel-Pro 26265PT Mahle 54578	New 4.762-4.766" Min 4.758"	HSHO35A (2)
3.5ℓ (J32A) V6	01-02	MDX (VTEC) (SOHC 24V)	Fel-Pro 26260PT Mahle 54524	New 4.762-4.766" Min N/A	HSHO35 (2)
3.5ℓ (J35A) V6	03-06	MDX (SOHC)	Fel-Pro 26265PT Mahle 54578	New 4.762-4.766" Min 4.758"	HSHO35A(2)
3.5ℓ (J35A) V6	05-08	RL, TL (SOHC)	Fel-Pro 26329PT Mahle 54530	New 4.762-4.766" Min 4.758"	HSHO35A(2)
3.5ℓ (J35A7,Z2) V6	09-18	RDX, TL, TSX (SOHC)	Fel-Pro 26509/10PT Mahle 54755,54756	New 4.762-4.766" Min 4.758"	HSHO35B(2)
3.5ℓ (6VE1) V6	98-99	SLX (DOHC 24V)	Fel-Pro 9256,9254PT Mahle 54410,54411	New 5.236" Min N/A	HSIS32A (2)

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ACURA (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.5ℓ (C35A) V6	96-04	RL (SOHC 24V)	Fel-Pro 9031,9032PT Mahle 5915,5916	New 3.935-3.939" Min 3.927"	HSAC32L HSAC32R
3.5ℓ (J35A) V6	01-02	MDX (VTEC)(SOHC 24V)	Fel-Pro 26260PT Mahle 54524	New 4.762-4.766" Min 4.758"	HSHO35 (2)

ALLIS CHALMERS *(copper gaskets available for all listings)*

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.3ℓ 4 Cyl		Tractor 201, 226	Fel-Pro 7514S Mahle	New N/A Min N/A	HSAL201
3.8ℓ 6 Cyl		Tractor 230, 262	Fel-Pro 7805B Mahle 3293	New N/A Min N/A	HSAL230
4.9ℓ 6 Cyl		Tractor 265, 301	Fel-Pro 8289B Mahle 3803	New N/A Min N/A	HSAL301

AMC

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
5.9ℓ (360) V8	72-92	AMC/JEEP (343, 360, 390, 401)	Fel-Pro 8266PT-1 Mahle 3467	New N/A Min N/A	HSAM59

AUDI

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.6ℓ (ME) 4 Cyl.	82-83	4000, Diesel (16V) SOHC	Fel-Pro 8841,8844, 8845PT Mahle 3730, 3766	New 5.238" Min 5.220"	HSVK16-D2
1.8ℓ (JN,MG) 4 Cyl.	84-87	4000 (SOHC 8V) (Water Cooled)	Fel-Pro 9090PT Mahle 3758	New 5.238" Min 5.215"	HSVK18
1.8ℓ (AEB) 4 Cyl.	97-06	A4, TT, Quattro (20V DOHC) (Turbo included)	Fel-Pro 26182PT Mahle 54397	New 5.493" Min 5.480"	HSVK18A
2.0ℓ (3A) 4 Cyl.	88-90	80, 90	Fel-Pro 9570PT Mahle 5872	New 5.215-5.230" Min 5.205"	HSVK20

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AUDI (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ (AB) 4 Cyl.	92-96	80, 80 Quattro, 100, Coupe, A6 (16V)	Fel-Pro 26164PT Mahle 54330	New 5.5120" Min 5.4940"	HSVK20A
2.0ℓ (BPY/BWT) 4 Cyl.	05-11	A3, A4, A4 Quattro, Q5	Fel-Pro 26318PT Mahle 54601	New N/A Min N/A	HSVK20C
2.0ℓ (BPY/BWT) 4 Cyl.	08-18	A3, A4, A4 Quattro, A5, Q3, Q5	Fel-Pro 26455PT Mahle 54738 Beck/Arnley 035-2117	New N/A Min N/A	HSVK20D
2.1ℓ (WD) 5 Cyl.	76-91	100, 200, 80, Quattro, Coupe (WD, WE, WU, KH) (SOHC)	Fel-Pro N/A Mahle N/A	New 5.236" Min 5.226"	HSVK22
2.1ℓ (WU) 5 Cyl.	84-91	200, 4000, 5000 Quattro (SOHC)	Fel-Pro 9282B Mahle N/A	New 5.236" Min 5.226"	HSVK22A
2.2ℓ (JT/KX) 5 Cyl.	84-85	Coupe, 4000, 5000, 5000 Turbo (Quattro) (SOHC)	Fel-Pro 21211PT Mahle 3657	New 5.236" Min 5.226"	HSVK22
2.2ℓ (KZ/MC) 5 Cyl.	84-91	200, 200 Quattro, 4000, 5000, Coupe Turbo	Fel-Pro 9282B Mahle N/A	New 5.236" Min 5.226"	HSVK22A
2.2ℓ (AAN) 5 Cyl.	91-97	S4, S6 (Turbo) (DOHC)	Fel-Pro N/A Mahle N/A	New 4.650" Min N/A <small>Measure from Center of Valve Stem Top Edge of Head.</small>	HSVK22B
2.8ℓ () V6	92-98	A4, A6, 100 Quattro, 90 Quattro, Cabriolet (12V SOHC)	Fel-Pro HS26704PT Mahle 54042	New 5.495" Min 5.482"	HSAU28 (2)
2.7ℓ (APB) 6 Cyl.	00-05	A6 Quattro, Allroad, S4 (Turbo) (30V DOHC)	Fel-Pro 26607PT Mahle 54716	New N/A Min 5.482"	HSAU27
2.8ℓ (AHA) V6	97-01	A4, A6, A8, Quattro (30V DOHC)	Fel-Pro 26328PT Mahle 54624	New 5.495" Min 5.482"	HSAU28A (2)
3.2ℓ (195) 6 Cyl.	04-09	A3 Quattro, TT Quattro	Fel-Pro 26648PT Mahle 54629	New N/A Min 5.480"	HSVK32

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BMW

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.3ℓ (W10B16) 4 Cyl.	02-06	One (16V SOHC)	Fel-Pro Mahle	New 3.820" Min	HSBM16
1.6ℓ (W11B16) 4 Cyl.	02-08	Minicooper (Tritec eng) (16V SOHC)	Fel-Pro 26382PT Mahle 54438	New 3.820" Min	HSBM16
1.6ℓ (N14B16) 4 Cyl.	07-16	Minicooper (Prince eng) (Turbo included) (N18B16 also)	Fel-Pro 26457PT Mahle 54783	New Min	HSBM16B
1.8ℓ (M10) 4 Cyl.	80-85	318i, 320i	Fel-Pro 21212 B Mahle 3651	New 5.085-5.090" Min 5.063"	HSBM18
1.8ℓ (M42) 4 Cyl.	89-95	318i	Fel-Pro HS26247PT Mahle HS54682B	New 5.508-5.516" Min 5.494"	HSBM18A
1.9ℓ (M44) 4 Cyl.	96-99	318i, Z3	Fel-Pro 26585PT Mahle 54728	New 5.508-5.516" Min 5.494"	HSBM18A
2.0ℓ (M10) 4 Cyl.	66-76	2000, 2000c, 2000cs 2002, 2002ti, 320i	Fel-Pro 21212 B Mahle 3651	New 5.085-5.090" Min 5.063"	HSBM18
2.0ℓ (S14) 4 Cyl.	88-	320i-S (16V)	Fel-Pro N/A Mahle N/A	New 3.778-3.779" Min 3.765"	HSBM23
2.3ℓ (S14) 4 Cyl.	86-91	M3 E30 (16V DOHC)	Fel-Pro N/A Mahle N/A	New 3.778-3.779" Min 3.765"	HSBM23
2.4ℓ (M21D) 6 Cyl.	85-86	324D, 324TD, 524D, 524TD (DIESEL)	Fel-Pro N/A Mahle N/A	New 5.835" Min 5.827"	HSBM24D
2.5ℓ (M20) 6 Cyl.	87-93	325i, 325ic, 325is, 325ix, 525	Fel-Pro 9397 B Mahle 4839	New 4.920-4.925" Min 4.909"	HSBM25
2.5ℓ (M50/M52) 6 Cyl.	91-98	323, 325, 525 (DOHC 24V)	Fel-Pro 26252PT Mahle 54733	New 140 mm Min 139.7 mm	HSBM25A
2.5ℓ (M52) 6 Cyl.	99-06	323i, 325Ci, 525i, X3, Z3, Z4 (DOHC 24V)	Fel-Pro 26245PT Mahle 54414	New 140 mm Min 139.7 mm	HSBM25C

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BMW (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.7ℓ (M20) 6 Cyl.	82-89	325E, 525E, 528E	Fel-Pro 9397B Mahle 4839	New 4.935-4.940" Min 4.909"	HSBM25
2.8ℓ (M54) 6 Cyl.	99-00	328Ci, 528i, Z3 (DOHC 24V)	Fel-Pro 26245PT Mahle 54414	New 140 mm Min 139.7 mm	HSBM25C
2.8ℓ (M50/M52) 6 Cyl.	96-98	328i, 328iS, 528i, Z3 (DOHC 24V)	Fel-Pro 26252PT Mahle 54733	New 140 mm Min 139.7 mm	HSBM25A
2.8ℓ () 6 Cyl.	79-81	528i, 628i, 728i	Fel-Pro 9099B Mahle 3650	New 5.085-5.090" Min 5.063"	HSBM28
3.0ℓ 6 Cyl.	94-95	M3	Fel-Pro 26606PT Mahle 54681	New N/A Min N/A	HSBM30A
3.0ℓ (M54) 6 Cyl.	01-06	330Ci, 530i, X3, X5, Z3, Z4 (DOHC 24V)	Fel-Pro 26245PT Mahle 54414	New 140 mm Min 139.7 mm	HSBM25C
3.2ℓ 6 Cyl.	96-00	M3, Z3	Fel-Pro 26245PT Mahle 54414	New N/A Min N/A	HSBM30A
3.4ℓ (M30) 6 Cyl.	82-93	535i, 635Csi, 735i (3530cc)	Fel-Pro 26580PT Mahle 4863	New 5.085-5.090" Min 5.063"	HSBM34
3.5ℓ (M30) 6 Cyl.	83-93	535i, 635Csi, 735i (DOHC)	Fel-Pro 26580PT Mahle 4863	New 3.788-3.779" Min 3.766"	HSBM34
4.0ℓ (M60) V8	93-95	540i, 740i (DOHC 32V)	Fel-Pro 26342, 26343PT Mahle 54725, 54726	New 5.510" Min 5.500"	HSBM40L HSBM40R
4.8ℓ (M62) V8	04-100,3	550i, 650i, 750i, X5 (DOHC 32V)	Fel-Pro N/A Mahle 11127530257	New 5.510" Min 5.500"	HSBM48 (2)

CADILLAC

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.8ℓ (173) V6.	85-88	Passenger Cars	Fel-Pro 8699PT-2, 9471PT Mahle 3549, 3793	New 3.585-3.595" Min 3.575"	HSGM28 (2)

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CADILLAC (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.0ℓ (181) V6	97-01	Catera (DOHC 24V) (Vin R)	Fel-Pro 26189, 26173PT Mahle 54636, 54635	New 5.272-5.280" Min 5.272"	HSGM30-OPEL
3.0ℓ (182) V6	10-14	CTS, SRX DOHC (VIN Y)	Fel-Pro 26559, 26560PT Mahle 54668, 54667	New 2.400" Min N/A	HSGM30AL HSGM30AR
3.2ℓ (197) V6	03-04	CTS, DOHC OE # 55354629	Fel-Pro 26489PT Mahle 54735	N/A	HSCD32 (2)
4.1ℓ (252) V8	82-88	Using Aftermarket Gasket	Fel-Pro 8753PT-1 Mahle 5781	N/A	HSCD49 (2)
4.5ℓ (273) V8	88-92	Using Aftermarket Gasket	Fel-Pro 8753PT-1 Mahle 5781	N/A	HSCD49 (2)
4.6ℓ (281) V8	93-11	Cadillac Northstar Eng. (L37, LD8) (32V)	Fel-Pro 26150, 26151PT Mahle 54356,54357	New N/A Min .4134"	HSCD46L HSCD46R
4.9ℓ (300) V8	91-95	Using Aftermarket Gasket	Fel-Pro 8753PT-1 Mahle 5781	N/A	HSCD49 (2)
5.7ℓ (350) V8	90-00	Passenger Cars	Fel-Pro 7733PT-2 Mahle 5746	N/A	HSGM57 (2)
6.0ℓ (365) V8	56-63	Passenger Cars	Fel-Pro7893PT-1 Mahle 3361BS	N/A	HSCD390 (2)
6.4ℓ (390) V8	56-63	Passenger Cars	Fel-Pro7893PT Mahle N/A	N/A	HSCD390 (2)
7.0ℓ (429) V8	64-67	Passenger Cars	Fel-Pro7893 PT-1 Mahle 3361BS	New 3.420" Min N/A	HSCD429 (2)
7.7/8.2ℓ (472,500) V8	68-76	Passenger Cars	Fel-Pro 8255PT Mahle 3852	N/A	HSCD500 (2)

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CATERPILLAR

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
10.4ℓ V8		DIESEL	Fel-Pro 8493PT Mahle N/A	New 3.785" Min 3.774"	HSCAT3208
V8		DIESEL	Fel-Pro Mahle N/A	New 4.430-4.450" Min 4.390"	HSCAT3408

CHRYSLER

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.4ℓ (86) 4 Cyl.	79-84	Colt, Champ (SOHC 8V) <i>J Engine</i>	Fel-Pro 9352PT Mahle 3675	New 4.216" Min 4.200"	HSMT15
1.5ℓ (92) 4 Cyl.	91-95	Colt (SOHC 12V) <i>Q Engine</i>	Fel-Pro 9758PT Mahle 5907	New 4.2086-4.2165" Min 4.2006"	HSMT15
1.5ℓ (92) 4 Cyl.	85-90	Colt (SOHC 8V) <i>Q Engine</i>	Fel-Pro 9352PT Mahle 3675	New 4.2086-4.2165" Min 4.2006"	HSMT15
1.6ℓ (98) 4 Cyl.	89-90	Colt (DOHC, Turbo) <i>K Engine (4G61)</i>	Fel-Pro 9627PT Mahle 5811	New 5.200" Min 5.1929"	HSMT20B
1.8ℓ (107) 4 Cyl.	89-94	Laser, Colt (SOHC 8V)	Fel-Pro 9846PT Mahle 5812	New 3.484" Min 3.476"	HSMT18A
1.8ℓ (112) 4 Cyl.	92-94	Colt, Colt Vista (SOHC 16V)	Fel-Pro 9887PT Mahle 54172	New 4.720-4.728" Min 4.712"	HSMT18B
2.0ℓ (122) 4 Cyl.	83-89	Pick Up, Colt Vista (SOHC 8V) (G63B)	Fel-Pro 9086PT Mahle 5703	New 3.543-3.548" Min 3.5230"	HSMT20B
2.0ℓ (122) 4 Cyl.	83-91	Colt Vista (SOHC 8V) (G63B)	Fel-Pro 9086PT Mahle 5703	New 3.543-3.548" Min 3.5230"	HSMT20B
2.0ℓ (122) 4 Cyl.	89-94	Laser (DOHC 16V) (4G63)	Fel-Pro 9627PT Mahle 5875	New 5.1968-5.201" Min 5.188"	HSMT20B
2.0ℓ (G52B) 4 Cyl.	74-79	Passenger Cars & Light Trucks (4G52 also)	Fel-Pro 8788B Mahle N/A	New 5.193-5.201" Min 5.185"	HSMT20C

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CHRYSLER (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ (ECB) 4 Cyl.	95-05	Cirrus, Neon, Stratus, Breeze, SX2.0 (SOHC)	Fel-Pro 9036PT, 26500PT Mahle 5936A	New 4.568" Min 4.56"	HSCH20
2.0ℓ (ECC) 4 Cyl.	95-99	Neon, Avenger, Sebring (DOHC 16V) (420A)	Fel-Pro 9922PT Mahle 54044A	New 5.4115-5.4193" Min 5.4035"	HSCH20A
2.0ℓ (122) 4 Cyl.	07-12	Caliber (DOHC 16V)	Fel-Pro 26557PT Mahle N/A	New N/A Min N/A	HSCH24C
2.0ℓ 4 Cyl.	13-16	Dodge Dart	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSCH20B
2.2ℓ (135) 4 Cyl.	81-90	Caravan, Voyager, Omni, Horizon, Aries, LeBaron, Daytona, Charger, Turismo	Fel-Pro 9296PT Mahle 54097	New 4.133" Min 4.113"	HSCH22
2.4ℓ (144) 4 Cyl.	90-93	Ram, Power Ram 50 (SOHC 8V)	Fel-Pro 9388PT Mahle 5747	New 3.543-3.548" Min 3.5230"	HSMT24
2.4ℓ (144) 4 Cyl.	92	Colt Vista (SOHC 8V)	Fel-Pro 9388PT Mahle 5747	New 3.543-3.548" Min 3.5230"	HSMT24
2.4ℓ (144) 4 Cyl.	93-95	Colt Vista (SOHC 16V)	Fel-Pro 9932PT Mahle 54119G	New 4.720-4.728" Min 4.712"	HSMT24A
2.4ℓ (144) 4 Cyl.	07-20	200, Sebring, Avenger, Caliber, Journey (DOHC 16V)	Fel-Pro 26332, 26557PT Mahle N/A	New N/A Min N/A	HSCH24C
2.4ℓ (146) 4 Cyl.	95-01	Caravan, <i>Passenger Cars</i> (DOHC 16V)	Fel-Pro 9924PT Mahle 54044	New 5.428-5.430" Min 5.4035"	HSCH24
2.4ℓ (148) 4 Cyl.	02-10	Caravan, <i>Passenger Cars</i> (DOHC 16V)	Fel-Pro 26206, 26202PT Mahle 54420	New 5.4115-5.4193" Min 5.4035"	HSCH24A
2.4ℓ (146) 4 Cyl.	01	PT Cruiser (DOHC 16V) (SINGLE YEAR APPLICATION)	Fel-Pro 9946PT Mahle 54403	New 5.428-5.430" Min 5.4035"	HSCH24B
2.4ℓ (4G64) 4 Cyl.	01-05	Stratus (Coupe), Sebring (SOHC 16V)	Fel-Pro 26172PT Mahle 54329	New 4.724" Min N/A	HSMT24B

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CHRYSLER (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.4ℓ 4 Cyl.	13-17	Chrysler 200, Dart, Ram ProMaster(15-22)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSCH20B
2.5ℓ (153) 4 Cyl.	86-95	Caravan, Voyager, Ram Van, Daytona, Shadow, Sundance	Fel-Pro 9296PT Mahle 54097	New 4.1330" Min 4.1130"	HSCH22
2.5ℓ (EEB,152) V6	95-00	All Pass Cars (-98), Stratus (-99) (SOHC)	Fel-Pro 9037, 9158PT Mahle 54150G, 54248	New 4.725" Min 4.717"	HSCH25 (2)
2.5ℓ (6G73) V6	2000	Avenger, Sebring (SOHC)	Fel-Pro 9158PT Mahle 54248	New 4.720-4.730" Min 4.717"	HSCH25A (2)
2.6ℓ (G54B) 4 Cyl.	78-80	D50 Pickup, Arrow Pickup, Challenger, Sapporo, Colt	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSMT26A
2.6ℓ (156) 4 Cyl.	81-89	Challenger, Colt, D-50 Pickup, Arrow, Ram Pick Up, Aries, Reliant, Le Baron, New Yorker, Caravan, Voyager	Fel-Pro 8770PT Mahle N/A	New 3.543" Min 3.523"	HSMT26
2.7ℓ (165) 5 Cyl.	03-06	Sprinter 2500, 3500 (Diesel DOHC) Turbo	Fel-Pro 26319PT Mahle 54429	New 4.994-5.009" Min N/A	HSMB27
2.7ℓ (167) V6	98-10	Concorde, Intrepid, Sebring Stratus (DOHC 24V)	Fel-Pro 9514, 9517PT Mahle 54230,54231	New 4.491-4.494" Min N/A	HSCH27L HSCH27R
3.0ℓ (6G72) V6	87-00	Caravan, Voyager, Dynasty, Daytona, Le Baron, Spirit, Acclaim, New Yorker, Ram 50, Raider (SOHC)	Fel-Pro 9112PT Mahle 5765	New 3.303-3.311" Min 3.295"	HSMT30 (2)
3.0ℓ (6G72) V6	91-96	Stealth (DOHC)	Fel-Pro 9842, 26186PT Mahle 54492	New 5.200-5.210" Min 5.1888"	HSMT30A (2)
3.0ℓ (182) V6	88-92	Monaco, Premier (SOHC) <i>Volvo/Renault Engine</i>	Fel-Pro 9389, 9387B1 Mahle N/A	New 4.363" Min 4.363"	HSVO30L HSVO30R
3.0ℓ (6G72) V6 (24V)	01-05	Sebring, Stratus (SOHC)	Fel-Pro 9537PT Mahle 54494	New 5.200-5.210" Min 5.1888"	HSMT30A (2)
3.2ℓ (197) V6	98-01	Concord, Intrepid, (SOHC-24V)	Fel-Pro 9425, 9455PT Mahle 54113, 54112	New N/A Min N/A	HSCH32 (2)

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CHRYSLER (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.3ℓ (201) V6	90-00	Intrepid, Caravan, Voyager	Fel-Pro 9676PT-1 9673PT-1 Mahle 54087G, 54086G	New 4.248-4.253" Min 4.240"	HSCH33L HSCH33R
3.3ℓ (202) V6	01-10	Caravan, Voyager	Fel-Pro 9978, 9981PT Mahle 54322, 54323	New 4.248-4.253" Min 4.240"	HSCH33A (2)
3.5ℓ (215) V6	93-97	Passenger Cars (SOHC 24V) Vin F	Fel-Pro 9926, 9927PT Mahle 5979, 5978	New 4.7392-4.749" Min 4.7312"	HSCH35L HSCH35R
3.5ℓ (215) V6	99-10	Passenger Cars (SOHC 24V) Vin G, M	Fel-Pro 9507/9505, 26208/26209PT Mahle 54112/54113 54371/54372	New 4.7392-4.749" Min 4.7312"	HSCH35A (2)
3.6ℓ (220) V6	11-20	Passenger Cars (DOHC 24V)	Fel-Pro 26542PT, 26541PT Mahle 54880, 54879	New 4.573" Min N/A	HSCH36L HSCH36R
3.6ℓ V6	16-22	Passenger Cars	Fel-Pro N/A Mahle 55402, 55401	New N/A Min N/A	HSCH36BL HSCH36BR
3.7ℓ V6	60-80	Chrysler / Dodge 170, 189, 255	Fel-Pro HS7918PT-4 Mahle	New N/A Min N/A	HSCH255
3.7ℓ (226) V6	02-12	Light Truck (SOHC 12V)	Fel-Pro 26229PT Mahle 54250	New 4.585-4.595" Min 4.585"	HSCH37 (2)
3.8ℓ (231) V6	91-00	Imperial, Town & Country, Caravan, Voyager VIN L	Fel-Pro 9535, 9536PT Mahle 5894, 5895	New 0.954" Min N/A Measured from Outer Head Bolt	HSCH38L HSCH38R
3.8ℓ (231) V6	01-10	Light Truck VIN L	Fel-Pro 9996, 9997PT Mahle 54324,54325	New .945" Min N/A	HSCH38AL HSCH38AR
3.9ℓ (238) V6	87-91	Dodge V6 Truck	Fel-Pro 9111PT Mahle 5741	N/A	HSCH39A (2)
3.9ℓ (239) V6	92-03	Dodge V6 Truck (Magnum)	Fel-Pro 9910PT Mahle 5941	N/A	HSCH39 (2)
4.0ℓ (241) V6	07-11	Passenger Cars (SOHC 24V) Vin G	Fel-Pro 26208, 26209PT Mahle 54371, 54372	New 4.7392-4.749" Min 4.7312"	HSCH35A (2)

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CHRYSLER (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
(242) L6	37-60	Chrysler (Desoto, Dodge, Fargo incl) (228,237,242,251,265)	Fel-Pro 7256C Mahle	New N/A Min N/A	HSCH242
4.7ℓ (285/287) V8	00-13	Dodge, Ram, Light Truck (SOHC 16V)	Fel-Pro 26157PT Mahle 54237A	New 4.585-4.592" Min 4.585"	HSCH47 (2)
5.2ℓ (318) V8	57-67	Dodge 303, 315, 318, 326	Fel-Pro 7734PT Mahle 55137	N/A	HSCH303 (2)
5.2ℓ (318) V8	67-92	Passenger Car & Light Truck (Non Magnum) (273,318,340,360)	Fel-Pro 8553PT Mahle 3536	N/A	HSCH52 (2)
5.2ℓ (318/360) V8	91-03	Dodge V8 Truck (Magnum)	Fel-Pro 26179PT Mahle 5940	N/A	HSCH52A (2)
340 V8	68-73	Passenger Car & Light Truck	Fel-Pro 8553PT Mahle 3536	N/A	HSCH52 (2)
5.7ℓ (345) V8	03-20	300, Dodge, Magnum Truck (Hemi)	Fel-Pro 26284,26286 26426, 26423PT Mahle 54417A, 54418A	New 4.6330" Min N/A	HSCH57L HSCH57R
350 V8	58-78	Passenger Car & Light Truck (350,361,383,400, 413,426, 440) Desoto	Fel-Pro 8519PT1 Mahle N/A	N/A	HSCH63 (2)
5.9ℓ (360) V8	71-92	Passenger Car & Light Truck	Fel-Pro 8553PT Mahle 3536	N/A	HSCH52 (2)
5.9ℓ (360) V8	93-03	Dodge V8 Truck (Magnum)	Fel-Pro 9898PT Mahle 5940	N/A	HSCH52A (2)
5.9ℓ (359) L6	89-98	D250,350, Ram 2500, 3500 Cummins (Diesel)	Fel-Pro 9313PT Mahle 4068	New 3.747-3.749" Min 3.700"	HSCH59D
5.9ℓ (359) V6	98-02	Ram 2500, 3500 Cummins (Diesel)	Fel-Pro 9522PT Mahle 54174	New 4.140" Min 4.124"	HSCH59DB
5.9ℓ (359) L6	03-09	Ram 2500, 3500 Cummins (Diesel)	Fel-Pro 26216, 26218PT Mahle 54556A	New 4.140" Min 4.124"	HSCH59DA

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CHRYSLER (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
6.1ℓ (370) V8	05-10	300, Dodge, Jeep (06-10)	Fel-Pro 26366PT Mahle 54734	New 2.761" Min N/A	HSCH61 (2)
6.4ℓ (392) V8	11-22	300, Challenger, Charger, Durango	Fel-Pro 26568, 26569PT Mahle N/A	New N/A Min N/A	HSCH64 (2)
6.7ℓ (408) L6	07-18	B Series, Ram 2500, 3500, ISB Cummins (Diesel)	Fel-Pro 26679PT Mahle 54774	New N/A Min N/A	HSCH67
7.0ℓ (426) V8	64-71	Hemi (Performance App)	Fel-Pro 1106 Mahle N/A	N/A	HSCH70-1106
8.0ℓ (488) V10	94-03	Dodge V10 Truck (Iron Block)	Fel-Pro 9034PT Mahle 54045	N/A	HSCH80 (2)

CUSHMAN

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
(327) 3 cyl		Truckster/ Haulster	Fel-Pro N/A Mahle N/A	New Min	HSCU327
3.9ℓ (4B) 4 cyl		L4 (DIESEL)	Fel-Pro N/A Mahle N/A	New Min	HSCUM39

DAEWOO

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.6ℓ (A16) 4 Cyl.	99-02	Lanos (DOHC 16V)	Fel-Pro 26385PT Mahle N/A	New 5.440" Min 5.438"	HSDW16
2.0ℓ (X20SE) 4 Cyl.	99-02	Nubira (DOHC 16V)	Fel-Pro 26317PT Mahle 54395A	New 5.276-5.280" Min 5.270"	HSIS22
2.2ℓ (X22SE) 4 Cyl.	99-02	Leganza (DOHC 16V)	Fel-Pro 26317PT Mahle 54395A	New 5.276-5.280" Min 5.271"	HSIS22

INNOVATIVE MACHINE & SUPPLY - 636 600 1171

FIAT

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.3ℓ (128A) 4 Cyl.	71-82		Fel-Pro 21195PT Mahle N/A	New Min	HSFT13

FORD

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.3ℓ (81) 4 Cyl.	88-97	Festiva, Aspire (Mazda Eng.)	Fel-Pro 9555PT Mahle 5880	New 4.228-4.236" Min 4.220"	HSFO13
1.5ℓ (91) 4 Cyl.	14-20	Escape, Fusion	Fel-Pro 26750PT Mahle N/A	New N/A Min N/A	HSFO15
1.6ℓ (98/116) 4 Cyl.	81-85	Escort, EXP, LN7, Lynx	Fel-Pro 9309PT-2 Mahle 5739	New 5.080" Min 5.055"	HSFO19
1.6ℓ (B6) 4 Cyl.	86-89	Tracer (SOHC)	Fel-Pro 9461PT Mahle 5736	New 4.228-4.236" Min 4.220"	HSMZ16
1.6ℓ (B6E) 4 Cyl.	91-94	Capri (DOHC) (Turbo included)	Fel-Pro 9691PT Mahle 5868	New 5.268-5.2767" Min 5.2677"	HSMZ16A
1.6ℓ (97) 4 Cyl.	11-19	Fiesta VIN J	Fel-Pro 26593PT Mahle 54839	New 4.601" Min N/A	HSFO16A
1.8ℓ (112) 4 Cyl.	91-96	Escort, Tracer (DOHC)	Fel-Pro 9717PT Mahle 5878	New 5.2681-5.2759" Min 5.2767"	HSMZ18
1.9ℓ (116) 4 Cyl.	85-96	Escort, EXP, Lynx	Fel-Pro 9309PT-2 Mahle 5884	New 5.080" Min 5.055"	HSFO19
2.0ℓ (MA) 4 Cyl.	79-82	Courier (SOHC)	Fel-Pro 8502PT Mahle N/A	New 3.815" Min 3.795"	HSMZ16-MA
2.0ℓ (121) 4 Cyl.	97-99	Escort, Tracer (SOHC)	Fel-Pro 9309PT-2 Mahle 54227	New 5.075-5.085" Min 5.065"	HSFO19
2.0ℓ (RF) 4 Cyl.	84-87	Passenger Car (SOHC) (Diesel)	Fel-Pro NA Mahle NA	New 5.277-5.290" Min N/A	HSMZ20-D1

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FORD (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ (FS) 4 Cyl.	93-97	Probe (DOHC 16V)	Fel-Pro 9711PT Mahle 5942	New 4.8996-4.9035" Min 4.8936"	HSMZ20A
2.0ℓ (ZETEC) 4 Cyl.	95-03	Contour, Mystique, Cougar, Escort (DOHC 16V) (ZETEC)	Fel-Pro 9005PT Mahle 54197	New 5.230-5.236" Min 5.225"	HSFO20
2.0ℓ (121) 4 Cyl.	00-04	Escort, Focus, (SOHC) (VIN P)	Fel-Pro 9539PT Mahle 54350	New 5.075-5.085" Min 5.065"	HSFO20A
2.0ℓ (122) 4 Cyl.	12-18	Edge, Escape, Explorer Focus, Fusion, Taurus	Fel-Pro 26592PT Mahle 54997	New N/A Min N/A	HSFO20B
2.0ℓ (121) 4 Cyl.	05-13	Passenger Cars & Light Trucks (Duratec) (DOHC 16V)	Fel-Pro 26250PT Mahle 54516	New N/A Min N/A	HSMZ23A
2.0ℓ (122-Vin9) 4 Cyl.	12-18	Edge, Escape, Explorer, Focus, Fusion, Taurus (Lincoln MKC/T/Z 13-16)	Fel-Pro 26592PT Mahle 54997	New N/A Min N/A	HSFO20F
2.2ℓ (134) 4 Cyl.	89-92	Probe, Probe Turbo (12V)	Fel-Pro 9572PT Mahle 5851	New 3.620-3.624" Min 3.612"	HSMZ22A
2.3ℓ (140) 4 Cyl.	74-01	Passenger Car (except Tempo & Topaz), Light Truck, Aerostar (OHC) (includes Turbo)	Fel-Pro 8993PT-1 Mahle 4029	New 3.780-3.790" Min N/A	HSFO23
2.3ℓ (140) 4 Cyl.	01-11	Passenger Cars & Light Trucks (Duratec) (DOHC 16V)	Fel-Pro 26250, 26316PT Mahle 54516,54729	New N/A Min N/A	HSMZ23A
2.4ℓ (144) L6	60-83	Falcon, Mercury Comet	Fel-Pro 7916PT1 Mahle 3910	N/A	HSFO200
2.5ℓ (KL) V6	93-97	Probe (DOHC 24V)	Fel-Pro 9921, 9923PT Mahle 54061,54060	New 5.252-5.260" Min 5.246"	HSMZ25 (2)
2.5ℓ (153) 4 Cyl.	98-01	Ranger (OHC)	Fel-Pro 8993PT-1 Mahle 4029	New 3.780-3.790" Min N/A	HSFO23
2.5ℓ (152) L4	09-12	Escape, Fusion, Mercury Mariner, Milan	Fel-Pro 26522PT Mahle 54727	New 4.881" Min 4.875"	HSMZ25B

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FORD (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.5ℓ () V6	01-02	Mercury Cougar (DOHC)	Fel-Pro 26165, 26166PT Mahle 54360	New 5.154-5.167" Min 5.154"	HSFO25L HSFO25R
2.5ℓ (152) 4 Cyl.	11-20	Escape, Fusion, Transit Connect	Fel-Pro 26521PT Mahle 54980	New N/A Min N/A	HSFO25B
2.5ℓ (155) V6	95-00	Mercury Mystique, Cougar, Contour	Fel-Pro 9038, 9039PT Mahle 55020, 55019	New 5.154-5.167" Min 5.154"	HSMZ25AL HSMZ25AR
2.8ℓ (170) L6	61-72	Falcon, Mercury Comet, Mustang	Fel-Pro 7916PT Mahle 3910	N/A	HSFO200
2.8ℓ (171) V6	74-79 83-86	Bobcat, Capri, Mustang, Pinto Aerostar, Bronco II, Ranger	Fel-Pro 9136PT, 9132PT Mahle N/A	New 2.885-2.890" Min 2.875"	HSFO28L HSFO28R
2.9ℓ (177) V6	86-92	<i>Passenger Cars, Light Trucks</i>	Fel-Pro 9511, 9510PT Mahle 5721, 5722	New 2.885-2.890" Min 2.875"	HSFO29L HSFO29R
3.0ℓ (VG30) V6	93-98	Villager	Fel-Pro 9571PT Mahle 5826	New 4.2047-4.2200" Min 4.1967"	HSNS30 (2)
3.0ℓ (181) V6	96-09	Passenger Cars, Light Trucks (<i>Duratec</i>)(DOHC)	Fel-Pro 9481/82, 9540/41,26233/12PT Mahle 54364,54363 54517,54518/19	New 5.155-5.163" Min N/A	HSFO30AL HSFO30AR
3.0ℓ (183) V6	86-08	Ranger, Aerostar (OHV) (exc. Windstar)	Fel-Pro 9902, 9903PT Mahle 5927,5926	New 3.620-3.630" Min N/A	HSFO30L HSFO30R
3.0ℓ (183) V6	86-07	Pass Car, Light Truck (OHV) (incl. Windstar)	Fel-Pro 9885PT Mahle 5891	New 3.620-3.630" Min N/A	HSFO30B (2)
3.2ℓ 5 Cyl	13-20	Dura Torq – DTCi OE GASKET # BB3Z-6051-A	Fel-Pro N/A Mahle N/A	New 3.482" Min N/A	HSFO32
3.3ℓ (200) 4 Cyl	28-34	Model A/B	Fel-Pro N/A Mahle N/A	New Min	HSFOMODELA/B
3.3ℓ (VG33E) V6	99-02	Villager (SOHC 12V)	Fel-Pro 26219PT Mahle 54393	New 4.205-4.220" Min N/A"	HSNS33 (2)

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Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.3ℓ (200) L6	63-83	Passenger Car	Fel-Pro 7916PT-1 Mahle 3910	N/A	HSFO200
3.4ℓ (207) V6	96-99	Taurus (Yamaha Eng.)	Fel-Pro N/A Mahle N/A	N/A	HSFO34L HSFO34R
3.5ℓ (213) V6	10-21	Expedition, Explorer, F-150, Taurus, Transit VIN T & G (Not VIN 8)	Fel-Pro 26880,26487 26881,26488PT Mahle 54989, 54988	New 4.844" Min N/A	HSFO35L HSFO35R
3.6ℓ (221) V8	32-38	Flat Head – “21 Stud” (2 may be required)	Fel-Pro 7548B Mahle N/A	New N/A Min N/A	HSFO221
3.8ℓ (230) V6	82-96	Cougar, T-Bird, Mustang, Light Trucks (RWD)	Fel-Pro 8857PT-1 Mahle 54191	New 3.055-3.070" Min 3.045"	HSFO38A (2)
3.8ℓ (230) V6	88-95	Lincoln Continental, Sable, Taurus, Windstar (FWD)	Fel-Pro 9560PT Mahle 5786	New 3.055-3.070" Min 3.045"	HSFO38A (2)
3.8ℓ (232) V6	96	Windstar	Fel-Pro 9234PT Mahle 5786	N/A	HSFO38D (2)
3.8ℓ (232) V6	97-98	Mustang (RWD)	Fel-Pro 9262,9263PT Mahle 54178, 54177	N/A	HSFO38BL HSFO38BR
3.8ℓ (232) V6	97-04	Mustang, Windstar Truck (97-03), Car (99-04)	Fel-Pro 9250, 9253PT Mahle 54454,54453	N/A	HSFO38C (2)
3.9ℓ (239) V8	42-48	Flat Head - “24 Stud” w/ 3 large irregular water holes	Fel-Pro 7548B Mahle 1026	N/A	HSFO239-7548 (2)
3.9ℓ (239) V8	42-48	Flat Head - “24 Stud” w/ 2 small round water holes	Fel-Pro 7283B Mahle	N/A	HSFO239-7283 (2)
3.9ℓ (239) V8	49-53	Flat Head	Fel-Pro 7525, 7526PT Mahle 1084,1085	N/A	HSFO239-7525 HSFO239-7526
3.9ℓ (239) V8	54-62	Passenger Car, Light Truck (256, 272, 292, 312)	Fel-Pro 7999PT Mahle 1176TC	N/A	HSFO239-7999 (2)

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FORD (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.9ℓ (240) Strght 6	65-74	Light Truck	Fel-Pro 8168PT Mahle 3824	N/A	HSFO49
4.0ℓ (244) V6	90-00	Light Truck (Explorer) (OHV) (VIN X Only)	Fel-Pro 9724PT-2, 9725PT-2 Mahle 5887,5888	New 2.890-2.895" Min 2.880"	HSFO40L HSFO40R
4.0ℓ (245) V6	97-11	Mustang, Ranger, Explorer (SOHC) (Vin E)	Fel-Pro 26300, 26301PT Mahle 54196,54195	New 4.864" Min N/A	HSFO40BL HSFO40BR
4.1ℓ (250) L6	69-80	Passenger Car	Fel-Pro 7916PT Mahle 3910	N/A	HSFO200
4.1ℓ (255) V8	49-53	Flat Head	Fel-Pro 7525, 7526PT Mahle 1084,1085	N/A	HSFO239-7525 HSFO239-7526
4.2ℓ (256) V6	97-08	Light Truck (OHV)	Fel-Pro 9250, 9253PT Mahle 54454,54453	N/A	HSFO42 (2)
4.3ℓ (260) V8	62-65	Passenger Car, Light Truck	Fel-Pro 8548PT-2 Mahle 3428	N/A	HSFO58A (2)
4.5ℓ (VT275) V6	06-09	Navistar, Maxx Force 5, Ford LCF, International City Star	Fel-Pro N/A Mahle N/A	New 3.738-3.740" Min 3.740"	HSFO45 (2)
4.6ℓ (281) V8	94-10	Passenger Car, Light Truck (SOHC & DOHC)	Fel-Pro 9790/2PT-2 26306/7PT Mahle 54232/3 54457/8,54400/1	New 5.310-5.312" Min 5.298"	HSFO46L HSFO46R
4.6ℓ (281) V8	03-04	Mustang (DOHC) VIN Y	Fel-Pro 26187, 26222PT Mahle 54896	New N/A Min N/A	HSFO46AL HSFO46AR
4.6ℓ (281) V8	03-04	Mustang, Lincoln (DOHC) VIN R	Fel-Pro 26188, 26217PT Mahle 54609, 54610	New N/A Min N/A	HSFO46BL HSFO46BR
4.6ℓ (281) V8	06-10	Light Truck (SOHC) (16V Triton) 3 Valve VIN 8	Fel-Pro 26306, 26307PT, Mahle 54400, 54401	New 5.310-5.312" Min 5.298"	HSFO54L HSFO54R
4.7ℓ (289) V8	66-69	Passenger Car, Light Truck	Fel-Pro 8548PT-2 Mahle 3428	N/A	HSFO58A (2)

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FORD (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
4.9ℓ (300) Strght 6	65-97	Light Truck	Fel-Pro 8168PT Mahle 3824	New 3.700" Min N/A	HSFO49
5.0ℓ (302) V8	68-01	Passenger Car, Light Truck (Except 1982-85 High Output & 1969-71 Mustang Boss)	Fel-Pro 8548PT-2 Mahle 3428	N/A	HSFO58A (2)
5.0ℓ (302) V8	11-14	F-150, Mustang VIN F	Fel-Pro 26550, 26551PT Mahle 55005, 55006	New N/A Min N/A	HSFO50AL HSFO50AR
5.4ℓ (330) V8	97-14	Passenger Car, Light Truck (SOHC & DOHC) VIN A, X, 6, L	Fel-Pro 9790/2PT-2, 26306, 26307 Mahle 54232/3, 54457/8, 54400/1	New 5.310-5.312" Min 5.298"	HSFO46L HSFO46R
5.4ℓ (330) V8	04-14	Light Truck (SOHC) (16V Triton) 3 Valve Vin 8	Fel-Pro 26306, 26307PT Mahle 54400, 54401	New 5.310-5.312" Min 5.298"	HSFO54L HSFO54R
5.8ℓ (351C) V8	70-82	Passenger Car, Light Truck	Fel-Pro 8347PT-1 Mahle 3502	N/A	HSFO58 (2)
5.8ℓ (351M) V8	75-82	Passenger Car, Light Truck	Fel-Pro 8347PT-1 Mahle 3502	N/A	HSFO58 (2)
5.8ℓ (351W) V8	69-97	Passenger Car, Light Truck	Fel-Pro 8548PT-2 Mahle 3428	N/A	HSFO58A (2)
5.8ℓ (352, etc.) V8	58-76	Passenger Car, Light Truck (332, 352, 360, 390, 406, 410, 427, 428)	Fel-Pro 8554PT Mahle 3389	New 3.345-3.375" Min N/A	HSFO58B (2)
6.0ℓ (363) V8	03-10	Light Truck (Diesel-32V) PowerStroke (Navistar) (18mm dowel pin hole)	Fel-Pro 26374PT (18mm) Mahle 54450(18mm)	New 3.738-3.74" Min 3.738-3.74"	HSFO60D (2)
6.0ℓ (363) V8	03-10	Light Truck (Diesel-32V) PowerStroke (Navistar) (20mm dowel pin hole)	Fel-Pro 26375PT (20mm) Mahle 54579A(20mm)	New 3.738-3.74" Min 3.738-3.74"	HSFO60-20 (2)
6.1ℓ (370) V8	79-91	Truck	Fel-Pro 8559PT-1 Mahle 3979	N/A	HSFO370 (2)
6.2ℓ (379) V8	10-22	E (17-19) & F-Series F-150 (10-14)	Fel-Pro 26665PT, 26666PT Mahle 54899 Left Right-N/A	New N/A Min N/A	HSFO62L HSFO62R

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FORD (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
6.4ℓ (391) V8	08-10	Light Truck (Diesel-32V) PowerStroke (Navistar)	Fel-Pro 26565PT Mahle 54657	New 3.7400" Min 3.7400"	HSFO64 (2)
6.6ℓ (400) V8	71-82	Passenger Car, Light Truck	Fel-Pro 8347PT-1 Mahle 3428	N/A	HSFO58 (2)
6.7ℓ (406) V8	11-23	F-Series (full size pick-up truck) PowerStroke Diesel	Fel-Pro 26661PT, 26662PT Mahle 54887, 54886	New 4.645-4.651" Min 4.620"	HSFO67L HSFO67R
6.8ℓ (415) V10	03-19	F250, F350, E350, Excursion	Fel-Pro 26304, 26305PT Mahle 54243,54242	New 5.310-5.312" Min N/A	HSFO68L HSFO68R
7.0ℓ (429) V8	69-73	Passenger Car, Light Truck	Fel-Pro 8265PT-1 Mahle 3978	N/A	HSFO460 (2)
7.5ℓ (460) V8	72-96	Passenger Car, Light Truck	Fel-Pro 8265PT-1, 8558PT-1 Mahle 3978	N/A	HSFO460 (2)
6.9ℓ (Navistar) V8	83-87	Light Truck (DIESEL)	Fel-Pro 8891PT-1 Mahle 3789G	New 4.795-4.805" Min 4.795"	HSFO69D (2)
7.3ℓ (Navistar) V8	88-94	Light Truck (Turbo included) (DIESEL)	Fel-Pro 9047PT Mahle 5869G	New 4.795-4.805" Min 4.795"	HSFO73D (2)
7.3ℓ (Navistar) V8	95-03	Light Truck (Turbo) (DIESEL)	Fel-Pro 9239PT Mahle 54204	New 5.095-5.105" Min 5.095"	HSFO73AD (2)

FORD TRACTOR (*copper gaskets available for all listings*)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ (119.7) L4		Tractor (GAS) (2N, 8N, 9N)	Fel-Pro 7277B Mahle	New N/A Min N/A	HSFO8N
2.4ℓ (153) L4		Tractor (GAS)	Fel-Pro 8445B Mahle	New N/A Min N/A	HSFO175-T
2.8ℓ (172) L4		Tractor (GAS)	Fel-Pro 7761B Mahle	New N/A Min N/A	HSFO172-T

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FORD TRACTOR (con't) *(copper gaskets available for all listings)*

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.9ℓ (175) L3		Tractor (GAS/DIESEL)	Fel-Pro 8445B Mahle	New N/A Min N/A	HSFO175-T
3.0ℓ (183) L3		Tractor (GAS/DIESEL)	Fel-Pro 8445B Mahle	New N/A Min N/A	HSFO175-T
3.2ℓ (192) L4		Tractor (GAS)	Fel-Pro 7761B Mahle	New N/A Min N/A	HSFO172-T
3.2ℓ (192) L4		Tractor (GAS/DIESEL)	Fel-Pro 8446B Mahle	New N/A Min N/A	HSFO192-D
3.8ℓ (233) L4		Tractor (DIESEL)	Fel-Pro 8447B Mahle	New N/A Min N/A	HSFO233D
4.2ℓ (256) L4		Tractor (GAS/DIESEL)	Fel-Pro 8619B Mahle	New N/A Min N/A	HSFO256T
4.4ℓ (268) L4		Tractor (GAS/DIESEL)	Fel-Pro 8619B Mahle	New N/A Min N/A	HSFO256T
6.6ℓ (401) L6		Industrial, M/D & H/D Truck (DIESEL)	Fel-Pro 9871PT Mahle	New Min	HSFO401D-T
7.8ℓ (474) L6		Industrial, M/D & H/D Truck (DIESEL)	Fel-Pro 9871PT Mahle	New Min	HSFO401D-T

GENERAL MOTORS

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.0ℓ (G10) 3 Cyl.	85-88	Sprint, Sprint Turbo (SOHC) (<i>Suzuki Engine</i>)	Fel-Pro 9435PT Mahle 5704	New 3.750-3.755" Min N/A	HSSZ10A
1.2ℓ () 4 Cyl.	13-15	Chevy Spark	Fel-Pro 26753PT Mahle N/A	New N/A Min N/A	HSGM12
1.4ℓ (83) 4 Cyl.	11-20	Cruze, Sonic, Trax, Volt Turbo (DOHC)	Fel-Pro 26540PT Mahle 54898	New N/A Min N/A	HSGM14

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GENERAL MOTORS (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.4ℓ (LE2, LV7) 4 Cyl.	16-22	Buick, Chevy, GMC	Fel-Pro N/A Mahle 55352	New N/A Min N/A	HSGM15
1.5ℓ (4XC1) 4 Cyl.	85-88	Spectrum (SOHC)	Fel-Pro 9436PT Mahle 5705	New 3.390" Min 3.370"	HSIS15
1.5ℓ (LFV, L3A) 4 Cyl.	16-22	Buick, Chevy, GMC	Fel-Pro N/A Mahle 55352	New N/A Min N/A	HSGM15
1.6ℓ (4ALC) 4 Cyl.	85-88	Nova (VIN 4)	Fel-Pro 9410PT Mahle 3756	New 3.395-3.400" Min 3.385"	HSTO16
1.6ℓ (97) 4 Cyl.	89-02	Tracker, Sunrunner (Suzuki Engine) (SOHC 8V & 16V) (VIN 6)	Fel-Pro 9683PT-1 Mahle 5866	New 3.750" Min 3.740"	HSSZ16
1.6ℓ (4AGE) 4 Cyl.	88	Nova (DOHC) (VIN 5)	Fel-Pro 9661PT Mahle 5797	New 4.568" Min 4.555"	HSTO16B
1.6ℓ (98) 4 Cyl.	88-93	Pontiac (Daewoo Eng) (OHC)	Fel-Pro 9553PT Mahle 5867	New 3.780" Min 3.770"	HSGM16
1.6ℓ (98) 4 Cyl.	04-05	Aveo, Wave (DOHC)	Fel-Pro 26378PT Mahle 54700	New 5.280-5.289" Min 5.280"	HSGM16A
1.6ℓ (98) 4 Cyl.	06-08	Aveo, Aveo 5, Wave (DOHC)	Fel-Pro 26379PT Mahle 54701	New 5.280-5.289" Min 5.280"	HSGM16B
1.6ℓ (L91) 4 Cyl.	09-11	Aveo, Aveo 5, G3, Wave (DOHC)	Fel-Pro 26516PT Mahle 54702	New 5.280-5.289" Min 5.280"	HSGM16C
1.8ℓ (L91) 4 Cyl.	11-18	Cruze, Sonic (DOHC)	Fel-Pro 26516PT Mahle 54702	New 5.280-5.289" Min 5.280"	HSGM16C
1.8ℓ (4FB1) 4 Cyl.	81-85	LUV, I-Mark (DIESEL)	Fel-Pro N/A Mahle N/A	New 4.055" Min 4.047"	HSIS18-D
1.8ℓ (G180Z) 4 Cyl.	76-82	LUV (SOHC)	Fel-Pro 8621PT1 Mahle 3553	New 3.672-3.678" Min 3.656"	HSIS19

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GENERAL MOTORS (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.8ℓ (112) 4 Cyl.	82-86	Pontiac (Brazilian) Engine (OHC)	Fel-Pro 9014PT Mahle 5779	New 3.780-3.790" Min 3.765"	HSGM20
1.8ℓ (1ZZFE) 4 Cyl.	98-08	Prizm (98-02) Vibe(03-08) (DOHC 16V)	Fel-Pro 26158PT-1 Mahle 54383	New 4.520-4.527" Min N/A	HSTO18B
1.8ℓ (2ZRFE) 4 Cyl.	2009	Pontiac Vibe (DOHC)	Fel-Pro 26513PT Mahle 54773	New 4.213" Min N/A	HSTO18D
1.9ℓ (G200Z) 4 Cyl.	82-85	S10 (SOHC)	Fel-Pro 8621PT1 Mahle 3553	New 3.672-3.678" Min 3.656"	HSIS19
2.0ℓ (121) 4 Cyl.	87-89	Chevrolet Engine (OHV)	Fel-Pro 9469PT Mahle 5871G	New 5.315-5.320" Min 5.305"	HSGM20A
2.0ℓ (122) 4 Cyl.	07-10	Chevy, Pontiac, Saturn Passenger Cars Ecotech, DOHC (VIN X)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSGM20B
2.0ℓ (122) 4 Cyl.	87-94	Pontiac (Brazilian) Engine (OHC) (VIN H, K, M)	Fel-Pro 9014PT Mahle 5779	New 3.780-3.785" Min 3.765"	HSGM20
2.0ℓ (J20A) 4 Cyl.	99-03	Tracker (DOHC 16V)	Fel-Pro 26278PT Mahle 54499	New 5.274-5.276 Min 5.271"	HSSZ18
2.0ℓ (122) 4 Cyl.	04-07	Optra (DOHC 16V)	Fel-Pro 26317PT Mahle 54395A	New 5.315-5.330" Min 5.305"	HSIS22
2.2ℓ (134) 4 Cyl.	90-97	Chevrolet Engine (OHV) (VIN 4)	Fel-Pro 9469PT Mahle 5871G	New 5.315-5.320" Min 5.305"	HSGM20A
2.2ℓ (134) 4 Cyl.	94-03	S-10 Pick-Up & Passenger Car (OHV)	Fel-Pro 9170PT-1 Mahle 54051	New 5.315-5.330" Min 5.305"	HSGM22
2.2ℓ (134.1) 4 Cyl.	00-08	Chevrolet, Oldsmobile, Pontiac, Saturn, Lt Trks & Pass Cars (DOHC) (ECOTEC) (Opel Engine)	Fel-Pro 26223PT Mahle 54440	New 5.080-5.085" Min 5.070"	HSGM22A
2.2ℓ (134) 4 Cyl.	09-12	Chevrolet, Oldsmobile, Pontiac, Saturn, Lt Trks & Pass Cars (DOHC) (ECOTEC) (Opel Engine)	Fel-Pro 26466PT Mahle 54563	New 5.085" Min 5.070"	HSGM24B

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GENERAL MOTORS (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.3ℓ (138) 4 Cyl.	88-95	Quad 4 (DOHC: VIN A, D) (SOHC: VIN 3)	Fel-Pro 9515PT Mahle 5870	New 2.915" Min 2.905"	HSGM23
2.4ℓ (145) 4 Cyl.	06-17	Chevrolet, Buick, Pontiac, Saturn, GMC; Lt Trks & Pass Cars (DOHC) (ECOTEC)	Fel-Pro 26466PT, 26517PT Mahle 54563, 54874	New 5.085" Min 5.070"	HSGM24B
2.4ℓ (146) 4 Cyl.	96-99	Cavalier, Malibu, Quad 4 w/ EGR (DOHC: Vin 4, T)	Fel-Pro 9115PT Mahle 5929	New 2.275" Min .010" max. Remove	HSGM24
2.4ℓ (146) 4 Cyl.	99-02	Cavalier, Malibu, Quad 4 w/o EGR (DOHC: Vin 4, T)	Fel-Pro 9059PT Mahle 54236	New 2.275" Min .010" max. remove	HSGM24A
2.4ℓ (2AZFE) 4 Cyl.	09-10	(Pontiac) Vibe (DOHC 16V)	Fel-Pro 26323PT Mahle 54409	New 5.090" Min N/A	HSTO24C
2.5ℓ (151) 4 Cyl.	85-91	Buick, Oldsmobile, Pontiac (VIN U)	Fel-Pro 9406PT Mahle N/A	New 3.240-3.250" Min 3.230"	HSGM25
2.5ℓ (151) 4 Cyl.	79-93	Buick, Chevrolet, Oldsmobile, Pontiac (VIN R)	Fel-Pro 9405PT1 Mahle 5701	New 3.250" Min N/A	HSGM25A
2.5ℓ 4 Cyl.	13-17	Buick, Cadillac, Chevrolet, GMC	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSGM25B
2.5ℓ (153) 4 Cyl.		Marine Applications	Fel-Pro 17000 Mahle 1179Vm	New Min	HSGM30-MARINE
2.8ℓ (169) 4 Cyl.	04-06	Colorado, Canyon	Fel-Pro 26335PT Mahle 54780	New N/A Min N/A	HSGM28A
2.8ℓ (173) V6	80-93	Passenger Cars, Light Truck (VIN L, S, W, X, Z, 1, 7)	Fel-Pro 8699PT-2, 9471PT Mahle 3549, 3793	New 3.5805-3.5950" Min 3.575"	HSGM28 (2)
2.9ℓ (178) V4	07-12	GMC Canyon, Chevy Colorado (DOHC)	Fel-Pro 26389PT Mahle 54981	New N/A Min N/A	HSGM29
3.0ℓ (181) 4 Cyl.		Marine Applications	Fel-Pro 17000 Mahle 1179Vm	New Min	HSGM30-MARINE

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GENERAL MOTORS (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.0ℓ (181) V6	00-05	Saturn L300, LW2, LW300 (DOHC 24V) (Vin R)	Fel-Pro 26173PT Mahle 54636	New 5.272-5.280" Min 5.272"	HSGM30-OPEL
3.0ℓ (182) V6	10-12	Equinox, Captiva Sport DOHC (VIN Y)	Fel-Pro 26559, 26560PT Mahle 54668, 54667	New 2.400" Min N/A	HSGM30AL HSGM30AR
3.1ℓ (189) V6	88-05	Passenger Cars, Light Truck (VIN M, T, W, J)	Fel-Pro 8699PT-2, 9471PT, 9957PT Mahle 3549, 3793, 54059	New 3.5805-3.5950" Min 3.575"	HSGM28 (2)
194 L6	62-67	<i>Chevrolet Engine</i>	Fel-Pro 8006PT Mahle 3829	N/A	HSGM292
3.4ℓ (207) V6	91-97	LQ1 Eng./Passenger Cars (VIN X) (DOHC 16V)	Fel-Pro 9113PT Mahle 4957	New 3.457-3.460" Min 3.447"	HSGM34 (2)
3.4ℓ (207) V6	96-09	LA1 Eng./Passenger Cars (VIN E) (OHV 12V) (96-99 VAN)	Fel-Pro 9071PT Mahle 4956	New 3.585-3.595" Min 3.575"	HSGM34A (2)
3.4ℓ (207) V6	93-95	Camaro, Firebird	Fel-Pro 9105PT Mahle 4955	New 3.425-3.430" Min N/A	HSGM34B (2)
3.5ℓ (213) V6	06-11	Buick, Chevrolet, Pontiac, Saturn Pass Cars	Fel-Pro 26324, 26325PT Mahle 54648,54649	New N/A Min N/A	HSGM35A (2)
3.5ℓ (211) L5	04-06	Chevrolet Colorado, GMC Canyon, H3 (Hummer)	Fel-Pro 26336PT Mahle 54736	New N/A Min N/A	HSGM35B
3.5ℓ (211,213,214) V6	04-07	Buick, Chevrolet, Pontiac	Fel-Pro 26314PT Mahle 54647	New N/A Min N/A	HSGM35C (2)
215 L6	64-65	<i>Chevrolet Engine</i>	Fel-Pro 8006PT Mahle 3829	N/A	HSGM292
3.5ℓ (216) 6 Cyl.	37-53		Fel-Pro 7276B Mahle	New N/A Min N/A	HSGM216
3.6ℓ V6	04-20	Buick (08-22), Cadillac,Chevy, GMC, Pontiac, Saturn	Fel-Pro 26376PT, 26377PT Mahle 54662, 54661	New 2.400" Min N/A	HSGM36L HSGM36R

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GENERAL MOTORS (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.7ℓ (223) L5	07-12	Colorado, Hummer H3, H3T (07-10) (DOHC)	Fel-Pro 26390PT Mahle 54982	New N/A Min N/A	HSGM37
230 L6	63-70	<i>Chevrolet Engine</i>	Fel-Pro 8006PT Mahle 3829	N/A	HSGM292
3.8ℓ (231) V6	86-87	Buick Regal (Vin 7) Pontiac Firebird (1989)	Fel-Pro 9441PT Mahle HS3797	New N/A Min N/A	HSGM38C (2)
3.8ℓ (231) V6	90-95	<i>Buick Engine (Vin L)</i>	Fel-Pro 9644PT Mahle 5768	New 0.054-0.066" Min 0.044" Measured from machined pad to deck	HSGM38A (2)
3.8ℓ (231) V6	95-09	<i>Buick Engine (Vin K)</i>	Fel-Pro 9917, 9918PT Mahle 5912, 5913	New 0.054-0.066" Min 0.044" Measured from machined pad to deck	HSGM38B (2)
3.8ℓ (235) 6 Cyl	53-63	Passenger Cars, Light Truck	Fel-Pro 7619 C Mahle N/A	New N/A Min N/A	HSGM235
3.9ℓ (237) V6	06-11	Passenger Cars	Fel-Pro 26324, 26325PT Mahle 54648,54649	New N/A Min N/A	HSGM35A (2)
4.1ℓ (248) 6 Cyl	53-55	Light Truck (OHV)	Fel-Pro 7391S Mahle N/A	New Min	HSGM248
250 L6	62-89	<i>Chevrolet Engine</i>	Fel-Pro 8501PT-1, 8006PT Mahle 3829	N/A	HSGM292
4.2ℓ (256) L6	02-09	Light Truck (DOHC-24V): Trailblazer (LL8)	Fel-Pro 26214PT Mahle 54385	New N/A Min N/A	HSGM42
4.3ℓ (262) V6	85-14	<i>Chevrolet Engine</i>	Fel-Pro 9354PT-1 Mahle 5744	New 3.065" Min N/A	HSGM43 (2)
4.3ℓ (262) V6	85-93	<i>Chevrolet Engine</i> (w/ steam holes)	Fel-Pro 9354PT-1 Mahle 5744	New 3.065" Min N/A	HSGM43A (2)
4.3ℓ V6	14-22	Silverado 1500 Sierra 1500	Fel-Pro N/A Mahle N/A	N/A	HSGM43B (2)

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GENERAL MOTORS (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
265 V8	55-57	Chevrolet Engine	Fel-Pro 7733PT-2 Mahle 5746	N/A	HSGM57 (2)
283 V8	57-67	Chevrolet Engine	Fel-Pro 7733PT-2 Mahle 5746	N/A	HSGM57 (2)
292 L6	63-89	Chevrolet Engine	Fel-Pro 8501PT-1, 8006PT Mahle 3829	N/A	HSGM292
4.8ℓ (294) V8	02-17	Chevrolet Engine Vin T	Fel-Pro 26191, 26190PT Mahle 54441, 54442	New 4.750" Min 4.732"	HSGM53 (2)
4.9ℓ (300) V8	64-67	Buick	Fel-Pro 8172PT Mahle 3364	N/A	HSGM300(2)
302 V8	67-69	Chevrolet Engine	Fel-Pro 7733PT-2 Mahle 5746	N/A	HSGM57 (2)
5.0ℓ (305) V8	75-02	Chevrolet Engine	Fel-Pro 8510PT Mahle 5745	N/A	HSGM50 (2)
5.0ℓ (307) V8	68-73	Chevrolet Engine	Fel-Pro 7733PT-2 Mahle 5746	N/A	HSGM57 (2)
5.3ℓ (325) V8	02-14	Chevrolet Engine Vin T Hummer (08-10)	Fel-Pro 26191, 26190PT Mahle 54441, 54442	New 4.732" Min N/A	HSGM53 (2)
5.3ℓ (325) V8	14-21	Chevrolet Engine	Fel-Pro 26744PT Mahle 55332	N/A	HSGM53A (2)
5.3ℓ (327) V8	62-69	Chevrolet Engine	Fel-Pro 7733PT-2 Mahle 5746	N/A	HSGM57 (2)
5.6ℓ (340) V8	64-67	Buick	Fel-Pro 8172PT Mahle 3364	N/A	HSGM300(2)
5.7ℓ (350) V8	02-	Chevrolet Engine Vin T	Fel-Pro 26190PT Mahle 54442	New 4.732" Min N/A	HSGM53 (2)
5.7ℓ (348) V8	58-65	Big Block	Fel-Pro 8007PT Mahle N/A	N/A	HSGM409 (2)

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GENERAL MOTORS (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
5.7ℓ (350) V8	67-02	<i>Chevrolet Engine</i> (Except VIN B, H, J, P, R, X)	Fel-Pro 7733PT-2 Mahle 5746	N/A	HSGM57 (2)
5.7ℓ (350) V8	68-76	<i>Oldsmobile Engine (also</i> <i>330, 400, 425, 455 Eng.)</i>	Fel-Pro 8171PT-1 Mahle 3436	N/A	HSGM57O (2)
5.7ℓ (346) V8	97-01	<i>Chevrolet Engine</i> LS1	Fel-Pro 9284PT Mahle 54442	New 4.755" Min 4.732"	HSGM57B (2)
5.7ℓ (350) V8	92-97	<i>Chevrolet Engine</i> LT1	Fel-Pro 9966PT Mahle 5922	N/A	HSGM57C (2)
6.0ℓ (364) V8	01-20	<i>Chevrolet Engine</i> Vin U, Hummer (03-07)	Fel-Pro 26192 PT Mahle 54445	New 4.732" Min N/A	HSGM60 (2)
6.2ℓ (376) V8	08-17	<i>Chevrolet Engine</i> Vin U, Hummer (08-09)	Fel-Pro 26192 PT Mahle 54445	New 4.732" Min N/A	HSGM60 (2)
6.5ℓ V8	92-02	<i>Light Truck (DIESEL)</i>	Fel-Pro 9701PT Mahle 4021	New 3.853-3.863" Min 3.853"	HSGM65D (2)
6.5ℓ (396) V8	65-70	<i>Chevrolet Engine</i>	Fel-Pro 8180PT-2 Mahle 3805VC	N/A	HSGM74 (2)
6.6ℓ (400) V8	70-80	<i>Chevrolet Engine</i>	Fel-Pro 8364PT Mahle 3432SG	N/A	HSGM66 (2)
6.6ℓ (403) V8	01-16	<i>DuraMax Engine (Turbo</i> <i>Diesel) (OHV 32V),</i> <i>Hummer (06)</i>	Fel-Pro 26401, 26402PT Mahle 54580, 54584	N/A	HSGM66-D (2)
6.6ℓ (400) V8	58-79	<i>Pontiac Engine</i> (326, 350, 370, 389, 400, 421, 428, 455)	Fel-Pro 8518PT Mahle 3494VC	N/A	HSGM400-P (2)
6.6ℓ (401) V8	59-66	<i>Buick Engine</i>	Fel-Pro 7922PT Mahle 1191	N/A	HSGM401-B (2)
6.6ℓ (402) V8	70-72	<i>Chevrolet Engine</i>	Fel-Pro 8180PT-2 Mahle 3805VC	N/A	HSGM74 (2)

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GENERAL MOTORS (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
6.7ℓ (409) V8	58-65	Big Block	Fel-Pro 8007PT Mahle N/A	N/A	HSGM409
7.0ℓ (427) V8	66-74	Chevrolet Engine	Fel-Pro 8180PT-2 Mahle 3805VC	N/A	HSGM74 (2)
7.4ℓ (454) V8	70-95	Chevrolet Engine	Fel-Pro 8180PT2, 8523PT-1 Mahle 3805VC, 4878	N/A	HSGM74 (2)
7.4ℓ (454) V8	96-00	Chevrolet Engine, Suburban, Light Trucks	Fel-Pro 9502PT Mahle 4878	N/A	HSGM74A (2)
7.4ℓ (454) Cyl.		Marine Applications	Fel-Pro 17048 Mahle	N/A	HSGM454-MARINE
7.5ℓ (455) V8	70-76	Buick Engine (400, 430, 455)	Fel-Pro 8494PT Mahle 3492	N/A	HSGM455-B (2)
8.1ℓ (496) V8	01-07	Vortec OHV	Fel-Pro 26168, 26169PT Mahle 54348, 54349	N/A	HSGM81 (2)
8.2ℓ (500) V8	79-91	Detroit Engine (DIESEL)	Fel-Pro 8708PT Mahle N/A	N/A	HSGM82D

GEO

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.0ℓ (61) 3 Cyl.	89-00	Metro (Suzuki Engine) (VIN 2, 6)	Fel-Pro 9651PT Mahle N/A	New 3.750-3.755" Min N/A	HSSZ10
1.0ℓ (61) 3 Cyl.	86-88	Metro (Suzuki Engine)	Fel-Pro 9435PT Mahle 5704	New 4.920-4.925" Min 4.910"	HSSZ10A
1.3ℓ (79) 4 Cyl.	92-01	Metro (Suzuki Engine) (SOHC) (VIN 9)	Fel-Pro 9623PT Mahle 5759	New 3.750-3.755" Min 3.740"	HSSZ13
1.5ℓ (4XC1) 4 Cyl.	89-92	Spectrum (SOHC)	Fel-Pro 9436PT Mahle 5705	New 3.390" Min 3.370"	HSIS15

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GEO (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.6ℓ (97) 4 Cyl.	89-97	Tracker (<i>Suzuki Engine</i>) (SOHC 8V & 16V) (VIN 6)	Fel-Pro 9683PT-1 Mahle 5866	New 3.750" Min 3.740"	HSSZ16
1.6ℓ (98) 4 Cyl.	89-92	Prizm (<i>Toyota Engine</i>) (VIN 6)	Fel-Pro 8188PT Mahle 4899	New 4.568-4.570" Min 4.560"	HSTO16A
1.6ℓ (98) 4 Cyl.	90-92	Prizm GSI (<i>Toyota Engine</i>) (VIN 5)	Fel-Pro 9661PT Mahle 5797	New 4.568" Min 4.555"	HSTO16B
1.6ℓ (98) 4 Cyl.	90-93	Storm (SOHC) (<i>Isuzu Engine</i>) (VIN 6)	Fel-Pro 9684PT Mahle 5910	New 3.390" Min 3.374"	HSIS16
1.6ℓ (98) 4 Cyl.	90-91	Storm (DOHC) (<i>Isuzu Engine</i>) (VIN 5)	Fel-Pro 9685PT-1 Mahle N/A	New 5.114-5.120" Min 5.098"	HSIS16A
1.6ℓ (4AFE) 4 Cyl.	93-97	Prizm (DOHC 16V)	Fel-Pro 9604PT Mahle 54368	New 4.570" Min 4.560"	HSTO16C
1.8ℓ (7AFE) 4 Cyl.	93-97	Prizm (DOHC 16V)	Fel-Pro 9955PT Mahle 54354	New 4.567" Min 4.557"	HSTO18
1.8ℓ (4XF1) 4 Cyl.	92-93	Storm GSI (DOHC 16V)	Fel-Pro 9156PT Mahle N/A	New 5.114" Min 5.098"	HSIS18
2.0ℓ (122) 4 Cyl.	89-90	Lemans (OHC)	Fel-Pro 9014PT Mahle 5779	New 3.780-3.785" Min 3.765"	HSGM20

HERCULES

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.7ℓ (226) 4 Cyl.		D2300 Heavy Duty Truck	Fel-Pro 8557SB Mahle	New Min	HSHR27
5.6ℓ (339) 6 Cyl.		G3400 Heavy Duty Truck	Fel-Pro 7343S Mahle	New Min	HSHR39

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HINO

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
5.3ℓ (J05) 4 Cyl.		J05C, Medium Duty Truck (Turbo included)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSHNJ05
5.1ℓ (J05) 4 Cyl.		J05E, Medium Duty Truck (Turbo included)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSHNJ05-1
7.7ℓ (J08) 6 Cyl.		J08, J08E, J08E-V, Medium Duty Truck (Turbo included)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSHNJ08

HONDA

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.0ℓ (ECA1) 3 Cyl.	00-06	Insight (Hybrid)	Fel-Pro 26638PT Mahle 54522	New 4.722-4.726" Min 4.716"	HSHO10
1.3ℓ (LDA) 4 Cyl.	03-05	Civic (Hybrid)	Fel-Pro 26528PT Mahle 54532	New 4.720-4.728" Min N/A	HSHO13
1.3ℓ (EV) 4 Cyl.	84-87	Civic, CRX, Civic Hatchback (EV1, EV2, D13A2, D15A1)	Fel-Pro 9219PT-1 Mahle 3782	New 3.565-3.570" Min 3.550"	HSHO15
1.3ℓ 4 Cyl.	10-14	Insight (Hybrid)	Fel-Pro 26529PT Mahle 54815	New N/A Min N/A	HSHO15D
1.5ℓ (EM) 4 Cyl.	77-83	Civic (CVCC)	Fel-Pro 21214PT-1 Mahle 3714	New 3.565-3.570" Min 3.550"	HSHO15B
1.5ℓ (EW) 4 Cyl.	84-87	CRX, CRX Si/DX/HF, Civic, Civic Si (EW1, EW2, EW3, EW4, D15A2, D15A3)	Fel-Pro 9219PT-1 Mahle 3782	EW1 New 3.542" Min 3.535" EW3,4 New 3.570" Min 3.550" D15A2,3 New 3.540" Min 3.520"	HSHO15
1.5ℓ (D15) 4 Cyl.	88-95	CRX DX/HF, Civic, Civic CX (D15B1, D15B2, D15B6, D15B7, D15B8)	Fel-Pro 9123PT Mahle 5731	New 3.738-3.742" Min 3.730"	HSHO15A
1.5ℓ (D15Z) 4 Cyl.	92-95	Civic VX (VTEC) (SOHC 16V)	Fel-Pro 26320PT Mahle 54344, 54234	New 3.659-3.663" Min 3.651"	HSHO15C
1.5ℓ 4 Cyl.	09-16	CR-Z, Civic, Fit, Insight	Fel-Pro 26529PT Mahle 54815	New N/A Min N/A	HSHO15D

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HONDA (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.6ℓ (D16A6) 4 Cyl.	88-91	Civic Si, Civic EX, CRX Si	Fel-Pro 9123PT Mahle 5731	New 3.738-3.742" Min 3.730"	HSHO15A
1.6ℓ (B16A) 4 Cyl.	94-00	Civic, Del Sol (VTEC) (DOHC 16V)	Fel-Pro 9274PT Mahle 54254	New 5.589-5.593" Min 5.581"	HSHO16
1.6ℓ (D16Z) 4 Cyl.	92-95	Accord, Del Sol (VTEC included) (SOHC 16V)	Fel-Pro 9915PT Mahle 54234	New 3.659-3.663" Min 3.651"	HSHO16A
1.6ℓ (D16Y) 4 Cyl.	96-00	Civic, Del Sol (VTEC included) (SOHC 16V)	Fel-Pro 9915PT Mahle 54234	New 3.659-3.663" Min 3.651"	HSHO16A
1.7ℓ (D17) 4 Cyl.	01-05	Civic, Del Sol (VTEC included) (SOHC 16V)	Fel-Pro 26236PT Mahle 54459	New 3.659-3.663" Min 3.651"	HSHO17
1.8ℓ (ES, ET) 4 Cyl.	83-85	Prelude, Accord (SOHC 12V) (ES1, ES2, ES3, ET1, ET2)	Fel-Pro 9233PT, 9289PT Mahle N/A	New 3.565-3.575" Min 3.550"	HSHO18
1.8ℓ (ET/A18) 4 Cyl.	86-89	Prelude (SOHC 12V) (ET2, A18A1, A18A2) Accord	Fel-Pro 9427PT Mahle N/A	New 3.565-3.575" Min 3.550"	HSHO18A
1.8ℓ (R18A/Z) 4 Cyl.	06-22	Civic (SOHC 16V) (06-15) HR-V (16-22)	Fel-Pro 26397PT Mahle 54528	New 4.526-4.530" Min 4.520"	HSHO18B
1.8ℓ (1751) 4 Cyl.	79-81	Accord, Prelude (SOHC 12V)	Fel-Pro N/A Mahle N/A	New 3.565-3.570" Min 3.550"	HSHO18C
2.0ℓ (A20/BS) 4 Cyl.	85-89	Accord, Prelude (A20A1, A20A2, A20A3, A20A4, BS, BT)	Fel-Pro 9429PT Mahle 5735	New 3.543" Min 3.535"	HSHO20
2.0ℓ (B20) 4 Cyl.	88-91	Prelude, Prelude SE/Si (B20A3, B20A5)	Fel-Pro 9124PT-1 Mahle 5823	B20A3New 3.543" Min 3.5354" B20A5New 5.220" Min 5.192"	HSHO20A
2.0ℓ (B20B) 4 Cyl.	97-01	CR-V (DOHC 16V) (B20B, B20Z)	Fel-Pro 26159PT Mahle N/A	New 5.195-5.199" Min 5.187"	HSHO20B
2.0ℓ (K20A) 4 Cyl.	02-05	Civic (DOHC 16V) (K20A3)	Fel-Pro 26403PT Mahle 54521	New 4.092-4.098" Min 4.090"	HSHO20C

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HONDA (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ (F20C1) 4 Cyl.	00-03	S2000	Fel-Pro 26601PT Mahle 54520	New 4.132- 4.136" Min 4.122"	HSHO20D
2.0ℓ (K20Z3) 4 Cyl.	06-11	Civic Si	Fel-Pro 26337PT Mahle 54531	New 4.093- 4.096" Min 4.090"	HSHO20E
2.0ℓ (K20C2) 4 Cyl.	16-20	Civic - Non Turbo OE # 06110-5BA-A00	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSHO20F
2.0ℓ 4 Cyl.	2019	Accord	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSHO20G
2.05ℓ (B21A1) 4 Cyl.	90-91	Prelude Si	Fel-Pro 9124PT-2 Mahle 5881	New 5.201" Min 5.193"	HSHO21
2.2ℓ (F22C1) 4 Cyl.	04-09	S2000	Fel-Pro 26601PT Mahle 54520	New 4.132- 4.136" Min 4.122"	HSHO20D
2.2ℓ (F22A) 4 Cyl	90-96	Accord (DX,EX,LX,SE), Prelude (S)	Fel-Pro 9851PT Mahle 5824	New 3.9291-3.9389" Min 3.919"	HSHO22
2.2ℓ (H22A4) 4 Cyl.	97-01	Prelude SI (VTEC) (DOHC 16V)	Fel-Pro 26411PT Mahle 54241	New 5.785-5.789" Min 5.782"	HSHO22A
2.2ℓ (F18B, F20B, F22B) 4 Cyl.	94-97	Accord DX,EX,LX,SE, Odyssey (VTEC) (SOHC 16V)	Fel-Pro 9958PT1 Mahle 54216	New 3.935-3.939" Min 3.932"	HSHO23A
2.3ℓ (H23A1) 4 Cyl.	92-96	Prelude SI (DOHC 16V)	Fel-Pro 9919PT Mahle 5897	New 5.195-5.199" Min 5.190"	HSHO23
2.3ℓ (F23A) 4 Cyl.	98-02	Accord DX,EX,LX,SE, Odyssey (VTEC) (SOHC 16V)	Fel-Pro 9958 PT1 Mahle 54216	New 3.935-3.939" Min 3.932"	HSHO23A
2.4ℓ K24A1/4/8 (K24Z1) 4 Cyl.	02-11	Accord (03-07), Element (03-11), CR-V (02-09) (DOHC 16V)	Fel-Pro 26243, 26244, 26337PT Mahle 54523	New 4.093-4.096" Min 4.087"	HSHO24
2.4ℓ (K24Z3) 4 Cyl.	08-15	Accord, Civic, CR-V(10- 14), Crosstour (DOHC 16V)	Fel-Pro 26435PT Mahle 54772	New 4.093-4.096" Min 4.086"	HSHO24A

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HONDA (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.4ℓ (K24W1) 4 Cyl.	13-16	Accord, CR-V (K24W9) (I-VTECH - 16V)	Fel-Pro 26770PT Mahle N/A	New 4.407-4.411" Min N/A	HSHO24B
2.5ℓ (B20) 4 Cyl.	96-98	CR-V (DOHC 16V) (G25A4)	Fel-Pro N/A Mahle N/A	New 5.195-5.199" Min 5.187"	HSHO25
2.6ℓ (4ZE1) 4 Cyl.	94-96	Passport	Fel-Pro 8215PT Mahle 5743	New 3.667-3.671" Min 3.651"	HSIS26
2.7ℓ (C27A) V6	95-97	Accord (SOHC 24V)	Fel-Pro 9531PT Mahle 5773	New 4.1260" Min 4.1181"	HSHO27 (2)
3.0ℓ (J30A1) V6	98-02	Accord (SOHC 24V) Odyssey 3.5 (99-04) Pilot 3.5 (03-04)	Fel-Pro 26260PT Mahle 54217	New 4.762-4.766" Min N/A	HSHO30 (2)
3.0ℓ (J30A4) V6	03-07	Accord (SOHC 24V)	Fel-Pro 26334PT Mahle 54527	New 4.766-4.782" Min N/A	HSHO30A (2)
3.0ℓ (J35A1) V6	98-02	Accord (SOHC 24V)	Fel-Pro 26260PT Mahle 54524	New 4.762-4.766" Min N/A	HSHO35 (2)
3.2ℓ (6VD1) V6	94-97	Passport (SOHC 24V)	Fel-Pro 9174PT Mahle 54038	New 4.126" Min 4.118"	HSIS32 (2)
3.2ℓ (6VD1) V6	98-02	Passport (DOHC 24V)	Fel-Pro 9256, 9254PT Mahle N/A	New 5.413" Min N/A	HSIS32A (2)
3.5ℓ (J35A1) V6	99-04	Odyssey, Pilot (SOHC 24V)	Fel-Pro 26260PT Mahle 54524	New 4.762-4.766" Min N/A	HSHO35 (2)
3.5ℓ (J35A9) V6	05-10	Odyssey, Pilot, Ridgeline (SOHC)	Fel-Pro 26265PT Mahle 54578	New 4.762-4.766" Min 4.758"	HSHO35A(2)
3.5ℓ J35A7,Z2 V6	08-17	Accord, Crosstour, Odyssey, Pilot, Ridgeline (SOHC)	Fel-Pro 26509/10PT Mahle 54755,54756	New 4.762-4.766" Min 4.758"	HSHO35B(2)

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HYUNDAI

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.5ℓ (4G15) 4 Cyl.	86-94	Excel, Scoupe (SOHC 8V) (4G15, G15B, G4DJ)	Fel-Pro 9352PT Mahle 3675	New 4.215-4.220" Min 4.207"	HSMT15
1.5ℓ (G4EK) 4 Cyl.	93-02	Accent, Scoupe Turbo (SOHC 12V)	Fel-Pro 26195, 26197PT Mahle 54404, 54669	New 2.950-2.955" Min N/A	HSHY15
1.6ℓ (G4EC/ED) 4 Cyl.	01-11	Accent (DOHC 16V)	Fel-Pro 26224PT Mahle 54484	New 2.496" Min N/A	HSHY16-A
1.6ℓ 4 Cyl.	12-21	Accent, Veloster (DOHC 16V)	Fel-Pro 26554PT Mahle 55010	New N/A Min N/A	HSHY16C
1.6ℓ (G4DR) 4 Cyl.	92-95	Elantra (DOHC 16V)	Fel-Pro 9627PT Mahle 5875	New 5.197-5.200" Min 5.188"	HSMT20B
1.8ℓ (G4CN) 4 Cyl.	93-95	Elantra (DOHC 16V)	Fel-Pro 9627PT Mahle 5875	New 5.197" Min 5.189"	HSMT20B
1.8ℓ (G4GM) 4 Cyl.	96-98	Elantra, Tiburon (DOHC 16V)	Fel-Pro 26180PT Mahle 54391	New 5.1970" Min 5.189"	HSHY18
2.0ℓ (G4GM) 4 Cyl.	97-01	Elantra, Tiburon (DOHC 16V)	Fel-Pro 26180PT Mahle 54391	New 5.1970" Min 5.189"	HSHY18
1.8ℓ (G4NA) 4 Cyl.	11-14	Elantra (OE:223112E000) (DOHC)	Fel-Pro 26561PT Mahle N/A	New 4.288" Min N/A	HSHY18A
1.8ℓ (G4NA) 4 Cyl.	16	Elantra (OE:22311-2E100)	Fel-Pro N/A Mahle N/A	New 4.288" Min N/A	HSHY18B
2.0ℓ (G4NA) 4 Cyl.	11-20	Elantra (OE:22311-2E000) (DOHC)	Fel-Pro 26561PT Mahle N/A	New 4.288" Min N/A	HSHY18A
2.0ℓ (G4NA) 4 Cyl.	14-17	Elantra, Elantra GT, Tucson (OE:22311-2E100)	Fel-Pro N/A Mahle N/A	New 4.288" Min N/A	HSHY18B
2.0ℓ (122) 4 Cyl.	10-14	Genesis Coupe (DOHC) Turbo	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSHY20B

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HYUNDAIA (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ (G4CP) 4 Cyl.	92-98	Sonata (DOHC 16V)	Fel-Pro 9627PT Mahle 5875	New 5.197" Min 5.189"	HSMT20B
2.0ℓ (G4GF) 4 Cyl.	97-12	Elantra, Tiburon, Tuscon (DOHC 16V)	Fel-Pro 26180, 26181PT Mahle 54391, 54485	New 4.093-4.096" Min N/A	HSHY20
2.0ℓ (G4NA) 4 Cyl.	11-16	Tuscon (11-13), Santa Fe Sport (13-16), Sonata (11- 14) (DOHC) (Nu MPI)	Fel-Pro N/A Mahle 54998	New 4.288" Min N/A	HSHY20C
2.4ℓ (G4CS) 4 Cyl.	89-91	Sonata (SOHC 8V)	Fel-Pro 9388PT Mahle 5747	New 3.543" Min 3.523"	HSMT24
2.4ℓ (G4JS) 4 Cyl.	99-06	Sonata, Santa Fe (DOHC 16V)	Fel-Pro 26282PT Mahle 54483	New 5.197-5.200" Min 5.187"	HSMT24B
2.4ℓ (G4KC) 4 Cyl.	06-18	Santa Fe, Sonata, Tucson (DOHC 16V)	Fel-Pro 26333, 26708PT Mahle 54741, 55254 Beck/Arnley 035- 2129	New 5.060" Min N/A	HSHY24A
2.4ℓ 4 Cyl.	15-21	Santa Fe, Sonata, Tucson VIN F (DOHC 16V)	Fel-Pro 26706PT Mahle 55342	New N/A Min N/A	HSHY24B
2.7ℓ (G6BA) V6	01-09	Santa Fe (01-06), Sonata, Tiburon, Tucson (DOHC 24V)	Fel-Pro 26276, 26277PT Mahle 54503, 54504	New 5.390" Min N/A	HSHY27L HSHY27R
2.7ℓ (G6BA) V6	07-08	Santa Fe (DOHC 24V)	Fel-Pro 26340, 26341PT Mahle	New 5.390" Min N/A	HSHY27AL HSHY27AR
3.0ℓ (6GAT) V6	90-97	Sonata (SOHC 12V)	Fel-Pro 9112PT Mahle 5765	New 3.303-3.311" Min 3.295"	HSMT30 (2)
3.3ℓ V6	06-11	Azera, Santa Fe, Sonata	Fel-Pro 26757, 26758PT Mahle 54761, 54762	New N/A Min N/A	HSHY35AL HSHY35AR
3.3ℓ V6	12-19	Azera, Santa Fe	Fel-Pro 26663, 26664PT Mahle N/A	New N/A Min N/A	HSKA33L HSKA33R
3.5ℓ V6	2012	Santa Fe	Fel-Pro 26663, 26664PT Mahle N/A	New N/A Min N/A	HSKA33L HSKA33R

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HYUNDAI (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.5ℓ (G6CU) V6	02-06	Santa Fe, XG350 (DOHC 24V)	Fel-Pro 26294 , 26293PT Mahle N/A	New 5.200" Min N/A	HSHY35 (2)
3.5ℓ V6	10-12	Santa Fe	Fel-Pro 26757 , 26758PT Mahle 54761 , 54762	New N/A Min N/A	HSHY35AL HSHY35AR

INTERNATIONAL HARVESTER (*copper gaskets available for all listings*)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.5ℓ 4 Cyl.		BC144/BC154 BD144/BD154 (Gas/ Diesel)	Fel-Pro 8432PT Mahle 3482	New Min	HSIH-C154
2.6ℓ 4 Cyl.		C157/175/200	Fel-Pro 8237PT Mahle	New Min	HSIH-C157
3.6ℓ 6 Cyl.		Tractor C221/229/236/ 263/282/301 M-D Truck D264/240/220	Fel-Pro 7799CS Mahle	New Min	HSIH-C282
3.9ℓ 4 Cyl.		C239	Fel-Pro 8754PT Mahle	New Min	HSIH-C239
4.1ℓ 4 Cyl.		Tractor C248	Fel-Pro 7477S Mahle	New Min	HSIH-C248
4.6ℓ 4 Cyl.		Tractor C281/264	Fel-Pro 7510S Mahle	New Min	HSIH-C281
4.6ℓ 6 Cyl.		Tractor D282, D301 Diesel (M-D Truck also)	Fel-Pro 8334B Mahle	New Min	HSIH-D282
5.9ℓ 6 Cyl.		Tractor D361 Diesel	Fel-Pro 8352B Mahle	New Min	HSIH-D361
6.6ℓ V8	75-82	M-D Truck MV404	Fel-Pro 8475PT Mahle	New Min	HSIH-404
6.7ℓ 6 Cyl.		Tractor D407	Fel-Pro 8431PT Mahle	New Min	HSIH-806
6.8ℓ 6 Cyl.		Tractor D414 Engine (Diesel)	Fel-Pro 8367PT Mahle	New Min	HSIH-414
7.6ℓ 6 Cyl.		Tractor D466 Engine (Diesel)	Fel-Pro 8367PT Mahle	New Min	HSIH-414
9.0ℓ V8		Tractor V549 Engine M-D Truck V461/478/549	Fel-Pro 7786S Mahle	New Min	HSIH-90

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INFINITI

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ (SR20DE) 4 Cyl.	91-02	G20 (DOHC 16V)	Fel-Pro 9816PT Mahle 4917	New 5.390-5.398" Min 5.382"	HSNS20A
2.5ℓ (QR25DE) 4 Cyl.	14-17	QX60	Fel-Pro 26659PT Mahle N/A	New 5.095-5.100" Min 5.085"	HSNS25B
3.0ℓ (VG30E) V6	90-92	M30 (SOHC 12V)	Fel-Pro 9571PT Mahle 5826	New 4.205-4.220" Min 4.198"	HSNS30 (2)
3.0ℓ (VG30DE) V6	93-97	J30 (DOHC 24V)	Fel-Pro 9703PT Mahle 5865	New 5.429-5.433" Min N/A	HSNS30A (2)
3.0ℓ (VQ30DE) V6	95-99	I30 (DOHC 24V)	Fel-Pro 9508, 9509PT Mahle 54379,54380	New 4.972-4.980" Min 4.964"	HSNS30DL HSNS30DR
3.3ℓ (VG33E) V6	97-00	QX4 (SOHC 12V)	Fel-Pro 26219PT Mahle 54393	New 4.205-4.220" Min N/A	HSNS33 (2)
3.5ℓ (VQ35DE) V6	01-04	G35, I35 (02-04), FX35, QX4 (01-03) (DOHC 24V)	Fel-Pro 26239, 26240, 26241/2PT Mahle 54481,54482	New 4.972-4.980" Min N/A	HSNS35L HSNS35R
3.5ℓ (VQ35HR) V6	07-20	EX35,FX35,G35,JX35,M3 5,Q50,Q70,QX60 (DOHC 24V)	Fel-Pro 26511, 26512PT Mahle 54586,54587	New 4.972-4.980" Min N/A	HSNS35AL HSNS35AR
3.5ℓ (VQ35DE) V6	02-08	G35 (03-07), I35 (02-04), FX35 (03-08) (DOHC 24V)	Fel-Pro 26370, 26371PT Mahle 54479, 54480	New 4.972-4.980" Min N/A	HSNS40L HSNS40R
5.6ℓ (VK56DE) V8	04-09	QX56 (DOHC)	Fel-Pro 26372/73PT Mahle 54651/52	New 4.972" Min N/A	HSNS56L HSNS56R

ISUZU

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.5ℓ (4XC1) 4 Cyl.	85-89	I-Mark (SOHC)	Fel-Pro 9436PT Mahle 5705	New 3.390" Min 3.370"	HSIS15
1.6ℓ (4XE1) 4 Cyl.	91-93	Stylus (SOHC 12V)	Fel-Pro 9684PT Mahle 5910	New 5.114-5.120" Min 5.098"	HSIS16

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ISUZU (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.6ℓ (4XE1W) 4 Cyl.	89-92	I-Mark, Impulse, Stylus (DOHC16V)	Fel-Pro N/A Mahle 5911	New 5.114-5.120" Min 5.098"	HSIS16A
1.8ℓ (4FB1) 4 Cyl.	81-85	Gemini (DIESEL)	Fel-Pro N/A Mahle N/A	New 4.055" Min 4.047"	HSIS18-D
1.8ℓ (4XF1) 4 Cyl.	92	Impulse, Stylus (DOHC 16V)	Fel-Pro N/A Mahle N/A	New 5.114" Min 5.098"	HSIS18
1.8ℓ (G20Z) 4 Cyl.	81-85	I-Mark, Pick Up (SOHC)	Fel-Pro 8621PT-1 Mahle 3553	New 3.672-3.678" Min 3.656"	HSIS19
1.9ℓ (G20Z) 4 Cyl.	83-87	Impulse, Trooper, Pick Up (SOHC)	Fel-Pro 8621PT-1 Mahle 3553	New 3.672-3.678" Min 3.656"	HSIS19
2.0ℓ (4FC1) 4 Cyl.	81-85	Gemini (DIESEL)	Fel-Pro N/A Mahle N/A	New 4.055" Min 4.047"	HSIS18-D
2.2ℓ (134) 4 Cyl.	96-00	Hombre	Fel-Pro 9170PT-1 Mahle 54051	New 5.315-5.320" Min 5.305"	HSGM22
2.2ℓ (F22B) 4 Cyl.	96-97	Oasis (VTEC) (SOHC 16V)	Fel-Pro 9958PT Mahle 54216	New 3.935-3.939" Min 3.932"	HSHO23A
2.2ℓ (X22SE) 4 Cyl.	98-03	Amigo, Rodeo (DOHC 16V)	Fel-Pro 26317PT Mahle 54395A	New 5.276-5.280" Min 5.276"	HSIS22
2.2ℓ (2180) 4 Cyl.	96-00	Hombre	Fel-Pro 9170PT-1 Mahle 54051	New 5.315-5.330" Min 5.305"	HSGM22
2.3ℓ (4ZD1) 4 Cyl.	86-95	Trooper II, Pick-Up, Impulse, Amigo	Fel-Pro 9496PT Mahle 5743	New 3.6673-3.6712" Min 3.651"	HSIS23
2.3ℓ (F23A) 4 Cyl.	98-99	Oasis (VTEC) (SOHC 16V)	Fel-Pro 9958PT1 Mahle 54216	New 3.935-3.939" Min 3.932"	HSHO23A

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ISUZU (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.6ℓ (4ZE1) 4 Cyl.	88-97	Trooper II, Rodeo, Pick-Up, Amigo	Fel-Pro 8215PT Mahle 5850	New 3.6673-3.6712" Min 3.651"	HSIS26
2.8ℓ (LL2) V6	89-91	Trooper II	Fel-Pro 8699PT-2 Mahle 3549	N/A	HSGM28 (2)
2.8ℓ (169) 4 Cyl.	06	i-280	Fel-Pro 26335PT Mahle 54780	New N/A Min N/A	HSGM28A
2.9ℓ (178) V4	07-08	i-290 (DOHC)	Fel-Pro 26389PT Mahle N/A	New N/A Min N/A	HSGM29
3.0ℓ 4 Cyl.		Diesel, DOHC 16V	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSIS30D-4JJ1
3.1ℓ (CPC) V6	91-94	Rodeo, Pick Up	Fel-Pro 8699PT-2 Mahle 3549	N/A	HSGM28 (2)
3.2ℓ (6VD1) V6	92-97	Trooper II, Rodeo (SOHC & DOHC 24V)	Fel-Pro 9174PT Mahle 54038	New 4.126" Min 4.118"	HSIS32 (2)
3.2ℓ (6VD1) V6	98-04	Amigo, Rodeo (DOHC 24V)	Fel-Pro 9256, 9254PT Mahle 54410,54411	New 5.244" Min 5.236"	HSIS32A (2)
3.5ℓ (6VE1) V6	98-02	Trooper, VehiCROSS, Axiom (DOHC 24V)	Fel-Pro 9254, 9256PT Mahle 54410,54411	New 5.244" Min 5.236"	HSIS32A (2)
3.5ℓ (211) L5	06	i-350	Fel-Pro 26336PT Mahle 54736	New N/A Min N/A	HSGM35B
3.7ℓ (223) L5	07-08	i-370 (DOHC)	Fel-Pro 26390PT Mahle N/A	New N/A Min N/A	HSGM37
3.8/3.9ℓ (4BD1/2) 4 Cyl.	87-98	Truck, Bus (DIESEL) (Turbo also)	Fel-Pro N/A Mahle N/A	New 3.541-3.545" Min 3.533"	HSIS39-D
4.2ℓ (256) L6	03-08	Ascender (DOHC-24V) (LL8)	Fel-Pro 26214PT Mahle 54385	New N/A Min N/A	HSGM42

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ISUZU (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
4.3ℓ (262) V6	97-00	Hombre	Fel-Pro 9354PT-1 Mahle 5744	New 3.065" Min N/A	HSGM43 (2)
4.8ℓ (4HE1) 4 Cyl.	99-04	(Turbo also)	Fel-Pro N/A Mahle N/A	New 4.683-4.687" Min N/A	HSIS48D
5.2ℓ (4HK1) 4 Cyl.	05-10		Fel-Pro N/A Mahle N/A	New 4.685" Min N/A	HSIS48D2
5.2ℓ (4HK1) 4 Cyl.		Industrial Applications OE:8-98114256-0	Fel-Pro N/A Mahle N/A	New 4.685" Min N/A	HSIS48D3
5.2ℓ (4HK1) 4 Cyl.	11-20		Fel-Pro N/A Mahle N/A	New 4.685" Min N/A	HSIS52
5.3ℓ (325) V8	03-06	Ascender Vin T	Fel-Pro 26191, 26190PT Mahle 54441, 54442	New 4.732" Min N/A	HSGM53 (2)
7.1ℓ (6HE1) L6			Fel-Pro N/A Mahle N/A	New Min	HSIS71D
7.8ℓ (6HK1) L6	05-17	Isuzu F-Series, Chevrolet T-Series, GMC T-Series	Fel-Pro Mahle	New Min	HSIS82D
8.4ℓ (6SA1) L6			Fel-Pro Mahle	New Min	HSIS84D
8.4ℓ (6SD1) L6	84-92	Truck, Bus (DIESEL) (Turbo also)	Fel-Pro Mahle	New 6.811-6.812" Min 6.800"	HSIS84A
9.8ℓ (6UZ1) L6		DIESEL JOHN DEERE APPLICATION	Fel-Pro Mahle	New N/A Min N/A	HSIS98

INNOVATIVE MACHINE & SUPPLY - 636 600 1171

JAGUAR

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ 4 CYL	18-21		Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSJG20
3.0ℓ (181) V6	00-08	S-Type, X-Type (Duratec)(DOHC)	Fel-Pro 26248, 26249PT Mahle 54558,54559	New 5.155-5.163" Min N/A	HSFO30AL HSFO30AR
4.0ℓ V8	00-02	OE: AJ88988 (Left) OE: AJ88989 (Right)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSFO42AL HSFO42AR
4.2ℓ V6	03-10	OE: AJ88988 (Left) OE: AJ88989 (Right)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSFO42AL HSFO42AR
4.2ℓ L6	68-87	XJ6 (12V)	Fel-Pro N/A Mahle N/A OE AH-690	New 5.116" Min 5.106"	HSJG42-2
4.2ℓ L6	88-94	XJ6 (12V)	Fel-Pro N/A Mahle N/A OE NBC-2520	New 4.875" Min 4.855"	HSJG42
5.0ℓ (305) V8	10-16	Jaguar XJ (DOHC)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSRR50L HSRR50R

JEEP/EAGLE

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.5ℓ (4G15) 4 Cyl.	91-94	Summit (SOHC 12V)	Fel-Pro 9758PT Mahle 5907	New 4.2086-4.2165" Min 4.2006"	HSMT15
1.5ℓ (4G15) 4 Cyl.	89-90	Summit (SOHC 8V) (4G15, G15B, G4AJ, G4DJ)	Fel-Pro 9352PT Mahle 3675	New 4.2086-4.2165" Min 4.2006"	HSMT15
1.6ℓ (4G61) 4 Cyl.	89-90	Summit (DOHC 16V)	Fel-Pro 9627PT Mahle 5875	New 4.228-4.236" Min 4.220"	HSMT20B
1.8ℓ (4G37) 4 Cyl.	93-94	Talon (SOHC 8V)	Fel-Pro 9846PT Mahle 5812	New 3.484" Min 3.476"	HSMT18A
1.8ℓ (4G93) 4 Cyl.	92-96	Summit, Summit Wagon (SOHC 16V)	Fel-Pro 9887PT Mahle 54172	New 4.209-4.217" Min 4.201"	HSMT18B

INNOVATIVE MACHINE & SUPPLY - 636 600 1171

JEEP/EAGLE (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ (4G63) 4 Cyl.	90-98	Talon (DOHC) (Turbo included)	Fel-Pro 9627PT Mahle 5875	New 5.1968-5.201" Min 5.188"	HSMT20B
2.0ℓ (122) 4 Cyl.	07-17	Compass, Patriot (DOHC 16V)	Fel-Pro 26557PT Mahle N/A	New N/A Min N/A	HSCH24C
2.0ℓ (122) 4 Cyl.	95-98	Talon (DOHC 16V)	Fel-Pro 9922 Mahle 54044	New 5.4115-5.4193" Min 5.4035"	HSCH20A
2.2ℓ (134) 4 Cyl.	40-64	Willys, Dispatcher, Universal (L Head)	Fel-Pro N/A Mahle N/A	New Min	HSJP134
2.4ℓ (148) 4 Cyl.	02-06	Liberty, T.J, Wrangler (DOHC 16V)	Fel-Pro 26206, 26202PT Mahle 54420	New 5.4115-5.4193" Min 5.4035"	HSCH24A
2.4ℓ (144) 4 Cyl.	07-17	Compass, Patriot (DOHC 16V)	Fel-Pro 26332, 26557PT Mahle N/A	New N/A Min N/A	HSCH24C
2.4ℓ (4G64) 4 Cyl.	92	Summit Wagon (SOHC 8V)	Fel-Pro 9388PT Mahle 5747	New 3.543-3.544" Min 3.523"	HSMT24
2.4ℓ (4G64) 4 Cyl.	93-96	Summit Wagon (SOHC 16V)	Fel-Pro 9932PT Mahle 54119	New 4.720-4.728" Min 4.712"	HSMT24A
2.4ℓ 4 Cyl.	14-20	Cherokee, Compass, Renegade	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSCH20B
2.5ℓ (150) 4 Cyl.	83-02	Light Truck (OHV) (AMC Engine)	Fel-Pro 9196PT Mahle 3799	New 3.250" Min N/A	HSJP25
2.5ℓ (151) 4 Cyl.	80-83	Pick Up, Scrambler	Fel-Pro 9405PT-1 Mahle N/A	New 3.250" Min N/A	HSGM25A
2.8ℓ (173) V6	84-86	Cherokee, Comanche, Wagoneer	Fel-Pro 8699PT-2 Mahle 3549	New 3.5805-3.595" Min 3.575"	HSGM28 (2)
3.0ℓ (182) V6	88-92	Premier (SOHC) <i>Volvo/Renault Engine</i>	Fel-Pro 9836B, 9837B Mahle N/A	New 4.363" Min 4.363"	HSCH30L HSCH30R

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JEEP/EAGLE (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.3ℓ (201) V6	93-97	Vision	Fel-Pro 9676PT-1, 9673PT-1 Mahle 54087G, 54086G	New 4.248-4.253" Min 4.240"	HSCH33L HSCH33R
3.5ℓ (215) V6	93-97	Vision	Fel-Pro 9926PT, 9927PT Mahle 5979, 5978	New 4.7392-4.749" Min 4.7312"	HSCH35L HSCH35R
3.6ℓ (220) V6	11-18	Grand Cherokee, Wrangler (DOHC 24V)	Fel-Pro 26542PT, 26541PT Mahle 54880, 54879	New 4.573" Min N/A	HSCH36L HSCH36R
3.6ℓ V6	16-18	Grand Cherokee, Wrangler (2018)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSCH36BL HSCH36BR
3.7ℓ (226) V6	02-12	Commander, Grand Cherokee, Liberty (SOHC 12V)	Fel-Pro 26229PT Mahle 54250	New 4.585-4.595" Min 4.585"	HSCH37 (2)
3.8ℓ (231) V6	07-11	Wrangler (RWD)	Fel-Pro 26327, 26326PT Mahle 54740, 54739	New N/A Min N/A	HSCH38BL HSCH38BR
4.0ℓ (242) 6 Cyl.	87-06	Cherokee, Wagoneer, Wrangler	Fel-Pro 26211PT Mahle 54249	New 3.465" Min 3.437"	HSJP40
4.2ℓ (258) 6 Cyl.	65-88	Cherokee, Commander, Grand Wagoneer	Fel-Pro 8169PT Mahle 1199	New N/A Min N/A	HSJP42
4.7ℓ (285/287) V8	99-09	Grand Cherokee, Light Truck (SOHC 16V)	Fel-Pro 26157PT Mahle 54237	New 4.585-4.592" Min 4.585"	HSCH47 (2)
5.7ℓ (345) V8	05-20	Commander(05-09), Grand Cherokee(05-15) (Hemi)	Fel-Pro 26284, 26286, 26426, 26423PT Mahle 54417, 54418	New 4.6330" Min N/A	HSCH57L HSCH57R
6.4ℓ (392) V8	12-22	Grand Cherokee	Fel-Pro 26568, 26569PT Mahle N/A	New N/A Min N/A	HSCH64 (2)

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JOHN DEERE *(copper gaskets available for all listings)*

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
4.5ℓ 4 Cyl.		Tractor 276 Engine	Fel-Pro 8604SB Mahle N/A	New Min	HSJD-45
5.0ℓ 2 Cyl.		Model A Tractor 60 Series	Fel-Pro 7744SBX Mahle N/A	New Min	HSJD-60
6.8ℓ 6 Cyl.		Industrial App. 6414D Engine (Diesel)	Fel-Pro 9223B Mahle N/A	New 4.129-4.139" Min 4.104"	HSJD-414
10.1ℓ 6 Cyl.		Tractor 6619A Engine (Diesel)	Fel-Pro 8613PT Mahle N/A	New Min	HSJD-619

KIA

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.5ℓ (B6) 4 Cyl.	01-02	Cinco, Rio (DOHC 16V)	Fel-Pro 26315PT Mahle 54653	N/A	HSKA15
1.6ℓ (B6B) 4 Cyl.	95	Sephia (SOHC 16V)	Fel-Pro 9930PT Mahle 54641	N/A	HSMZ16C
1.6ℓ (B6) 4 Cyl.	03-05	Cinco, Rio (DOHC 16V)	Fel-Pro 26315PT Mahle 54653	N/A	HSKA15
1.6ℓ (G4EC/ED) 4 Cyl.	06-11	Rio, Rio5 (DOHC 16V)	Fel-Pro 26224PT Mahle 54484	New 2.496" Min N/A	HSHY16-A
1.6ℓ 4 Cyl.	10-20	Rio, Soul (DOHC 16V)	Fel-Pro 26554PT Mahle 55010	New N/A Min N/A	HSHY16C
1.8ℓ 4 Cyl.	2014	Forte (OE:223112E000) (DOHC)	Fel-Pro 15.00-8.50 Mahle N/A	New N/A Min N/A	HSHY18A
1.8ℓ (BP) 4 Cyl.	95-97	Sephia (DOHC 16V)	Fel-Pro 9717PT Mahle 5878	New 4.228-4.236" Min 4.220"	HSMZ18
1.8ℓ (T8) 4 Cyl.	98-01	Spectra, Sephia (DOHC 16V)	Fel-Pro 26221PT Mahle 54407	New 5.272-5.280" Min 5.272"	HSKA18

INNOVATIVE MACHINE & SUPPLY - 636 600 1171

KIA (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.8ℓ (T8) 4 Cyl.	01-04	Spectra (DOHC 16V)	Fel-Pro 26432PT Mahle 54408	N/A	HSKA18A
1.8ℓ 4 Cyl.	16-	Forte (OE:22311-2E100)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSHY18B
2.0ℓ (G4NA) 4 Cyl.	16-20	Forte, Forte Koup, Foretes, Soul (OE:22311-2E100)	Fel-Pro N/A Mahle N/A	New 4.288" Min N/A	HSHY18B
2.0ℓ (G4NA) 4 Cyl.	12-16	Soul, Forte (14-16) (OE:22311-2E000) (DOHC)	Fel-Pro 26561PT Mahle N/A	New 4.288" Min N/A	HSHY18A
2.0ℓ (FE) 4 Cyl.	95	Sportage (SOHC 8V)	Fel-Pro 9422PT Mahle 3763	New 3.620-3.624" Min 3.612"	HSMZ22A
2.0ℓ (FED) 4 Cyl.	95-02	Sportage (DOHC 16V)	Fel-Pro 26220PT Mahle 54449	New 5.274-5.278" Min 5.274"	HSKA20
2.0ℓ (G4GF) 4 Cyl.	04-11	Spectra, Sportage (DOHC 16V)	Fel-Pro 26181PT Mahle 54485	New 4.093-4.096" Min N/A	HSHY20
2.0ℓ (G4NA) 4 Cyl.	10-16	Forte (10-13), Optima (11-15), Sportage (11-16) (DOHC) (Nu MPI)	Fel-Pro N/A Mahle 54998	New 4.288" Min N/A	HSHY20C
2.4ℓ (G4JS) 4 Cyl.	01-06	Optima, Magentis (DOHC 16V)	Fel-Pro 26282PT Mahle 54483	New 5.197-5.200" Min N/A	HSMT24B
2.4ℓ (G4KC) 4 Cyl.	06-16	Sportage, Rondo, Optima, Magentis, Forte, Sorento (DOHC 16V)	Fel-Pro 26333PT Mahle 54741, 55254 Beck/Arnley 035- 2129	New 5.058-5.065" Min N/A	HSHY24A
2.4ℓ 4 Cyl.	16-21	Santa Fe, Sonata, Tucson VIN 3 (DOHC 16V)	Fel-Pro 26706PT Mahle 55342	New N/A Min N/A	HSHY24B
2.7ℓ (G6BA) V6	02-10	Magentis, Optima, Sportage (DOHC 24V)	Fel-Pro 26276, 26277PT Mahle 54503, 54504	New 5.390" Min N/A	HSHY27L HSHY27R
3.3ℓ V6	08-09	Sorento	Fel-Pro 26757, 26758PT Mahle 54761, 54762	New N/A Min N/A	HSHY35AL HSHY35AR

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KIA (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.3ℓ V6	14-20	Cadenza, Sedona, Sorento, Stinger	Fel-Pro 26663, 26664PT Mahle N/A	New N/A Min N/A	HSKA33L HSKA33R
3.5ℓ V6	11-14	Sedona, Sorenta	Fel-Pro 26757, 26758PT Mahle 54761, 54762	New N/A Min N/A	HSHY35AL HSHY35AR
3.5ℓ V6	12-13	Sorento	Fel-Pro 26663, 26664PT Mahle N/A	New N/A Min N/A	HSKA33L HSKA33R
3.5ℓ (G6CU) V6	02-06	Amanti, Sedona, Sorento (DOHC 24V)	Fel-Pro 26294, 26293PT Mahle N/A	New 5.200" Min N/A	HSHY35 (2)

LEXUS

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.8ℓ (2ZRFE) 4 Cyl.	11-17	CT200h (DOHC)	Fel-Pro 26515PT Mahle 54773	New 4.213" Min N/A	HSTO18D
2.0ℓ 4 Cyl.	15-21	Lexus GS Turbo, GS200t, GS300/350/450h, ISTurbo,200t, IS250/300/350	Fel-Pro N/A Mahle N/A OE: 11115-36070	New N/A Min N/A	HSLX20
2.4ℓ (2AZFE) 4 Cyl.	10-12	HS250h (DOHC 16V)	Fel-Pro 26323PT Mahle 54409	New 5.090" Min N/A	HSTO24C
2.5ℓ 4 Cyl.	13-21	ES300h, ES300th (Not available at this time)	Fel-Pro 26667PT Mahle N/A	New N/A Min N/A	
2.5ℓ (2VZFE) V6.	90-91	ES 250 (DOHC 24V)	Fel-Pro 9656PT, 9657PT Mahle 5859, 5860	New 4.805" Min N/A	HSTO25L HSTO25R
2.5ℓ (4GRFSE) V6.	06-15	IS 250 (DOHC 24V)	Fel-Pro 26419PT, 26421PT Mahle 54782,54781	New N/A Min N/A	HSLX25L HSLX25R
3.0ℓ (3VZFE) V6.	92-93	ES 300 (DOHC 24V)	Fel-Pro 9904PT, 9905PT Mahle 5859, 5860	New 4.805-4.810" Min 4.795"	HSTO25L HSTO25R
3.0ℓ (1MZFE) V6	94-98	ES300 (DOHC 24V)	Fel-Pro 9201, 9203PT Mahle 54338, 54339	New 4.905-4.909" Min N/A	HSTO30BL HSTO30BR

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LEXUS (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.0ℓ (1MZFE) V6	99-03	ES300, RX300 (DOHC 24V)	Fel-Pro 9592, 9594PT Mahle 54338, 54339	New 4.905-4.909" Min N/A	HSTO30CL HSTO30CR
3.0ℓ (2JZGE) 6 Cyl.	93-05	GS300, IS300, SC300 (DOHC 24V)	Fel-Pro 26297PT Mahle N/A	New 4.570" Min 4.560"	HSTO30D
3.3ℓ (3MZFE) V6	04-08	ES330, RX330, RX400h (DOHC 24V)	Fel-Pro 26266PT, 26267PT Mahle 54455, 54456	New 4.900" Min N/A	HSTO33L HSTO33R
3.5ℓ (2GRFE) V6	06-18	ES350, GS350, IS350, RX350 (DOHC 24V)	Fel-Pro 26321, 26322PT Mahle 54536, 54535	New 4.653" Min N/A	HSTO35L HSTO35R
4.5ℓ (1FZFE) L6	96-97	LX450 (DOHC 24V)	Fel-Pro Mahle N/A	N/A	HSTO45
4.6ℓ (3URFE) V8	07-17	GS460 (08-17) LS460 (07-17) (DOHC)	Fel-Pro 26394, 26393PT Mahle 54776, 54777	New 4.645-4.646" Min N/A	HSTO57L HSTO57R
4.7ℓ (2UZFE) V8	98-09	GX470, LX470 (DOHC 32V)	Fel-Pro 26226PT, 26227,26298,26299 Mahle 54389,54390 54537, 54538	New 4.880" Min N/A	HSTO47L HSTO47R
5.0ℓ (3URFE) V8	08-16	IS F (08-14) LS600h (9-16) (DOHC)	Fel-Pro 26394, 26393PT Mahle 54776, 54777	New 4.645-4.646" Min N/A	HSTO57L HSTO57R
5.7ℓ (3URFE) V8	08-21	LX570 (DOHC)	Fel-Pro 26393, 26394PT Mahle 54776, 54777	New 4.645-4.646" Min N/A	HSTO57L HSTO57R

MAZDA

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.2ℓ (NA) 4 Cyl.	68-70	1200	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSMZ12
1.5ℓ (E5) 4 Cyl.	81-85	Wagon, GLC (SOHC 8V)	Fel-Pro HS 9067 B Mahle N/A	New 3.564-3.670" Min 3.551"	HSMZ15
1.5ℓ (Z5) 4 Cyl.	95-98	Protégé (DOHC 16V)	Fel-Pro 9213PT Mahle 54402	New 4.733-4.741" Min 4.725"	HSMZ15A

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MAZDA (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.6ℓ (NA) 4 Cyl.	70-77	616, 808, B1600 (SOHC)	Fel-Pro 8502PT Mahle N/A	N/A	HSMZ16-MA
1.6ℓ (B6) 4 Cyl.	86-89	323, Tracer (SOHC 8V) (except Turbo)	Fel-Pro 9461PT Mahle N/A	New 4.228-4.236" Min 4.220"	HSMZ16
1.6ℓ (B6E) 4 Cyl.	89-93	323, Miata, Turbo (DOHC 16V)	Fel-Pro 9691PT Mahle 5868	New 5.268-5.2767" Min 5.2677"	HSMZ16A
1.6ℓ (B6) 4 Cyl.	90-95	323 (SOHC 8V) (non Turbo)	Fel-Pro 9696 B Mahle N/A	New 4.228-4.236" Min 4.220"	HSMZ16B
1.6ℓ (B6B) 4 Cyl.	92-93	MX3 (SOHC 16V) (93-95 323 CA Eng. Only)	Fel-Pro 9930PT Mahle 54641	N/A	HSMZ16C
1.6ℓ (B6D) 4 Cyl.	95-96	MX3 (DOHC 16V)	Fel-Pro N/A Mahle N/A	N/A	HSMZ16D
1.6ℓ (ZM) 4 Cyl.	99-03	Protege (DOHC 16V)	Fel-Pro 26391, 26392PT Mahle 54430, 54431	New 4.733-4.741" Min 4.725"	HSMZ16E
1.8ℓ (VB) 4 Cyl.	70-78	B1800, 618 (SOHC 8V)	Fel-Pro 8502PT Mahle N/A	N/A	HSMZ16-MA
1.8ℓ (BP) 4 Cyl.	90-00	323, Protege, Miata (DOHC 16V)	Fel-Pro 9717PT Mahle 5878	New 5.268-5.276" Min 5.2677"	HSMZ18
1.8ℓ (BP) 4 Cyl.	90-94	Protege (SOHC 16V)	Fel-Pro 9717PT Mahle 5878	New 4.228-4.236" Min 4.220"	HSMZ18A
1.8ℓ (NB) 4 Cyl.	01-05	Miata (DOHC 16V)	Fel-Pro 26234PT Mahle 54654	New 4.989-4.903" Min 4.893"	HSMZ18B
1.8ℓ (FP) 4 Cyl.	99-00	Protege (DOHC 16V)	Fel-Pro 9711PT Mahle 5942	New 4.8996-4.9035" Min 4.8936"	HSMZ20A
2.0ℓ (MA) 4 Cyl.	79-84	626, B2000 (SOHC 8V)	Fel-Pro 8502PT Mahle N/A	N/A	HSMZ16-MA

INNOVATIVE MACHINE & SUPPLY - 636 600 1171

MAZDA (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ (FE) 4 Cyl.	83-87	626, B2000 (except Turbo)	Fel-Pro 9422PT Mahle 3763	New 3.620-3.624" Min 3.612"	HSMZ22A
2.0ℓ (RF) 4 Cyl.	82-87	Passenger Car (SOHC) (Diesel)	Fel-Pro NA Mahle NA	New 5.277-5.290" Min N/A	HSMZ20-D1
2.0ℓ (FS) 4 Cyl.	93-03	626, MX6, Protégé (1.8) (DOHC 16V)	Fel-Pro 9711, 26194PT Mahle 5942, 54475	New 4.8996-4.9035" Min 4.8936"	HSMZ20A
2.0ℓ (LFD) 4 Cyl.	04-15	Passenger Cars & Light Trucks (Duratec) (DOHC 16V) (Ford Eng)	Fel-Pro 26250, 26409PT Mahle 54516, 54729	New N/A Min N/A	HSMZ23A
2.2ℓ (F2) 4 Cyl.	87-93	626, MX6, B2200 (SOHC 8V/12V)(Turbo included), Forklift (use with gasket that does not have timing chain opening)	Fel-Pro 9572PT Mahle 5851	New 3.620-3.624" Min 3.612"	HSMZ22A
2.2ℓ 4 Cyl.		Forklift (use with gasket that includes opening for timing chain – NOT VERY COMMON)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSMZ22B
2.3ℓ (KJ) V6	95-02	Millenia (DOHC 24V)	Fel-Pro N/A Mahle N/A	New 5.032-5.036" Min 0.006" max remove	HSMZ23 (2)
2.3ℓ (MZR) 4 Cyl.	01-13	Passenger Cars & Light Trucks (Duratec) (DOHC 16V) (Turbo incl)	Fel-Pro 26250, 26407, 26409PT Mahle 54516, 54729, 54770	New 4.882" Min N/A	HSMZ23A
2.5ℓ (KL) V6	93-02	626, Millenia, MX6	Fel-Pro 9921, 9923PT Mahle 54060, 54061	New 5.252-5.260" Min 5.246"	HSMZ25 (2)
2.5ℓ (152) L4	09-15	3, 5, 6, CX-7, Tribute	Fel-Pro N/A Mahle 55011	New 4.881" Min 4.875"	HSMZ25B
2.5ℓ L4	14-21	CX5, 3, 6	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSMZ25C
2.5ℓ (153) 4 Cyl.	98-01	B2500	Fel-Pro 8993PT-1 Mahle 4029	New 3.780-3.790" Min N/A	HSFO23
2.5ℓ (GL) V6	00-01	MPV Engine	Fel-Pro 9038,9039, 26165,26166PT Mahle 55020, 55019	New 5.252-5.260" Min 5.246"	HSMZ25AL HSMZ25AR

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MAZDA (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.6ℓ (AM1) 4 Cyl.	87-88	B2600	Fel-Pro 8770PT Mahle N/A	New 3.543" Min 3.523"	HSMT26
2.6ℓ (G6) 4 Cyl.	89-94	MPV, B2600I	Fel-Pro 9637PT Mahle 4906	New 3.5413-3.5452" Min 3.5233"	HSMZ26
3.0ℓ (JE) V6	88-98	MPV, 929 (SOHC & DOHC)	Fel-Pro 9649PT, 9650PT Mahle 5856, 5857	SOHC New 4.931-4.935" Min 4.925" DOHC New 5.707-5.711" Min 5.701"	HSMZ30L HSMZ30R
3.0ℓ (183) V6	01-09	6, MPV, Tribute, Light Trucks (Duratec)	Fel-Pro 9540/41, 26233/07/12PT Mahle 54364,54363 54517,54518/19	New 5.155-5.163" Min N/A	HSFO30AL HSFO30AR
4.0ℓ (244) V6	90-01	B4000 (OHV) (VIN X)	Fel-Pro 9081/9083PT 9724/9725PT Mahle 5887,5888	New 2.890-2.895" Min 2.880"	HSFO40L HSFO40R
4.0ℓ (244) V6	01-10	B4000 (SOHC) (Vin E)	Fel-Pro 26300 26301PT Mahle 54196,54195	New 4.864" Min N/A	HSFO40BL HSFO40BR

MERCEDES BENZ (Other applications available. Call for more information)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.8ℓ 4 Cyl. 4 Cyl.	03-05	C230 Kompressor	Fel-Pro 26650PT Mahle 54691	New N/A Min N/A	HSMB230B
1.9ℓ (M121) 4 Cyl.	55-65	190SL, 190C	Elring 831.397 Mahle N/A	New 3.339-3.346" Min .3.329"	HSMB190
2.0ℓ (M102) 4 Cyl.	84-93	190, 190E, 200, 200T, 200E	Elring N/A Mahle N/A	N/A	HSMB200
2.0ℓ 4 Cyl.	14-20	GLA250 (15-20) CLA250 (14-19)	Elring 2700160020 Mahle N/A	N/A	HSMB250GLA
2.2ℓ (M111) 4 Cyl.	94-96	C220, (16V)	Fel-Pro 26573PT Mahle 54693	New 5.350-5.354" Min 3.334"	HSMB200A
2.3ℓ (M102) 4 Cyl.	80-93	190E, 230E, 230CE, 230TE	Fel-Pro 9743PT Mahle 54699	New 3.880" Min 3.850"	HSMB230

INNOVATIVE MACHINE & SUPPLY - 636 600 1171

MERCEDES BENZ (con't)(Other applications available. Call for more information)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.3ℓ (M111) 4 Cyl.	97-04	C230 Kompressor, SLK230 (16V)	Fel-Pro 26579, 26646, 26653PT Mahle 54620, 54621	N/A	HSMB230A
2.5ℓ (M129) 6 Cyl.	85-93	190D, 250D Diesel	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSMB250
2.6ℓ 6 Cyl.	87-93	190E, 300E (90-92) 190E, 260E (87-89)	Fel-Pro HS 26285PT HS 9768PT Mahle 54697	New 3.545-3.550" Min 3.524"	HSMB260
2.8ℓ (M110) 6 Cyl.	72-85	280	Fel-Pro N/A Mahle N/A	New 3.697-3.701" Min 3.665"	HSMB280
2.8ℓ (M130) 6 Cyl.	68-72	280SL, 280SEL, 280SE, 300SEL	Fel-Pro N/A Mahle N/A	New 3.339-3.34" Min 3.307"	HSMB280L
2.8ℓ (M130) 6 Cyl.	67-72	280SE, 280SL, 300SEL	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSMB280C
2.8ℓ (M104) 6 Cyl.	92-97	280E, 280TE, C280, S280, SL280, 300SE (DOHC)	Fel-Pro N/A Mahle N/A	New 5.350" Min 5.330"	HSMB300B
2.8ℓ (M104.900) 6 Cyl.	98-	V280 (Vito) (Volkswagen engine)	Fel-Pro N/A Mahle 54343	New 5.492-5.515" Min 5.492"	HSVK28
3.0ℓ (M103) 6 Cyl.	90-93	300E, 300SE, 300TE	Fel-Pro HS 26291PT Mahle 54710	New 3.545-3.550" Min 3.524"	HSMB300A
3.0ℓ (M104) 6 Cyl.	89-93	300E, 300CE, 300TE (24V)	Fel-Pro N/A Mahle N/A	New 5.350" Min 5.330"	HSMB300B
3.0ℓ (M603) 6 Cyl.	84-96	300D, 300 TURBO, 300GD, G300 (Diesel)	Fel-Pro N/A Mahle N/A	New 5.635-5.641" Min 5.606"	HSMB300-D
3.0ℓ (M606) 6 Cyl.	93-97	E300 (24V) (Diesel)	Fel-Pro N/A Mahle N/A	N/A	HSMB300-D2
3.2ℓ (M104) 6 Cyl.	92-99	300E, 300SE, E320	Fel-Pro 26287PT, 26289PT Mahle N/A	New 5.350-5.324" Min 5.335"	HSMB320

INNOVATIVE MACHINE & SUPPLY - 636 600 1171

MERCEDES BENZ (con't)(Other applications available. Call for more information)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.5ℓ (W140) 6 Cyl.	91-98	G-CLASS, S-CLASS	ELRING # 888.739	New N/A Min N/A	HSMB350D
4.2ℓ (M119) V8	92-97	400SE, 400SEL, 400E, S420 (Later Style)	Fel-Pro N/A Mahle N/A	N/A	HSMB420L HSMB420R
5.0ℓ (M117) V8	77-85	450SLC, 500SE, 500SEL, 500SEC, 500GLC, G500	Fel-Pro N/A Mahle N/A	New 2.400" Min 2.354" Meas. at front intake side head bolt boss	HSMB500L HSMB500R
5.6ℓ (M117) V8	85-91	560SL, 560SLE, 560SEC, 560SE	Fel-Pro N/A Mahle N/A	New 2.3544-2.3622" Min 2.3445" Meas. at exhaust side head bolt area	HSMB500L HSMB500R
7.2ℓ 6 Cyl.		MB3900 (OM960LA) Med Duty Truck	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSMB72

MG/AUSTIN

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.1ℓ (1098cc) 4 Cyl.	62-74	1100, Sprite	Fel-Pro 21042C Mahle 3611	New 2.750" Min 2.734"	HSMG11
1.5ℓ (1493cc) 4 Cyl.	54-62	MGA, Magnette, Midget	Fel-Pro 21190B Mahle N/A	New N/A Min N/A	HSMG15
1.6ℓ (1622cc) 4 Cyl.	62-78	MGA, Magnette, Midget	Fel-Pro 21044C Mahle N/A	New N/A Min N/A	HSMG16

MINNEAPOLIS MOLINE (copper gaskets available for all listings)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.8ℓ (1798cc) 4 Cyl.	62-81	Marina, Sherpa, MGB	Fel-Pro 21183C Mahle 3614	New 3.140" Min N/A	HSMG18
5.5ℓ 4 Cyl.		Tractor 336-4 Engine	Fel-Pro 8323B Mahle	New Min	HSMM-336
13.1ℓ 6 Cyl.		Tractor 800 Series	Fel-Pro 7424B Mahle	New Min	HSMM-800 (3)

INNOVATIVE MACHINE & SUPPLY - 636 600 1171

MITSUBISHI

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.4ℓ (4G33) 4 Cyl.		Forklift	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSMT14
1.5ℓ (4G15) 4 Cyl.	91-96	Mirage (SOHC 12V)	Fel-Pro 9758PT Mahle 5907	New 4.2086-4.2165" Min 4.2006"	HSMT15
1.5ℓ (4G15) 4 Cyl.	85-94	Mirage, Precis (SOHC 8V) (4G15, G15B, G4AJ, G4DJ)	Fel-Pro 9352PT Mahle 3675	New 4.2086-4.2165" Min 4.2006"	HSMT15
1.5ℓ (4G15) 4 Cyl.	97-02	Mirage (SOHC 12V)	Fel-Pro 26184PT Mahle 54476	New 4.2086-4.2165" Min 4.2006"	HSMT15A
1.6ℓ (4G61) 4 Cyl.	89-92	Mirage Turbo (DOHC 6V) Eclipse, Galant, Mirage (DOHC 16V)	Fel-Pro 9627PT Mahle 5875	New 5.200" Min 5.192"	HSMT20B
1.6ℓ (4G32) 4 Cyl.	82-90	Mirage (DOHC 16V) (G32B) (85-88)	Fel-Pro 8974PT Mahle N/A	New 3.480-3.488" Min 4.2006"F	HSMT16A
1.8ℓ (4G37) 4 Cyl.	90-94	Eclipse (SOHC 8V)	Fel-Pro 9846PT Mahle 5812	New 3.484" Min 3.476"	HSMT18A
1.8ℓ (4G93) 4 Cyl.	92-96	Expo LRV, Mirage (SOHC 16V)	Fel-Pro 9887PT Mahle 54172	New 4.209-4.217" Min 4.201"	HSMT18B
1.8ℓ (4G93) 4 Cyl.	97-02	Mirage (SOHC 16V)	Fel-Pro 26183PT Mahle 54490	New 4.720-4.728" Min 4.712"	HSMT18C
2.0ℓ (122) 4 Cyl.	08-20	Lancer, Outlander, RVR (DOHC 16V)	Fel-Pro 26557PT Mahle N/A	New 5.060" Min 5.052"	HSCH24C
2.0ℓ (G63B) 4 Cyl.	83-92	Cordia, Tredia, Pick Up, Galant (SOHC 8V)	Fel-Pro 9086PT Mahle 5703	New 3.543-3.548" Min 3.523"	HSMT20B
2.0ℓ (4G63) 4 Cyl.	89-99	Eclipse, Galant (DOHC)	Fel-Pro 9627PT Mahle 5875	New 5.200" Min 5.192"	HSMT20B
2.0ℓ (G52B) 4 Cyl.	75-78	(4G52 and Forklift also)	Fel-Pro 8788B Mahle N/A	New 5.193-5.201" Min 5.185"	HSMT20C

INNOVATIVE MACHINE & SUPPLY - 636 600 1171

MITSUBISHI (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ (4G94) 4 Cyl.	03-06	Lancer	Fel-Pro 26288PT Mahle 54491	New 4.720-4.728" Min 4.712"	HSMT18C
2.0ℓ (4G63T) 4 Cyl.	03-06	Lancer Evolution AWD (DOHC) Turbo	Fel-Pro 26365PT Mahle 54433	New 5.19-5.20" Min 5.185"	HSMT20D
2.0ℓ (420A) 4 Cyl.	95-99	Eclipse (DOHC 16V)	Fel-Pro 9922PT Mahle 54044A	New 5.4115-5.4193" Min 5.4035"	HSCH20A
2.3ℓ (4D55) 4 Cyl.	83-85	MightyMax (SOHC) (Turbo)	Fel-Pro 9084PT Mahle 3786	New 3.700-3.705" Min 3.690"	HSMT23-D
2.4ℓ (4G64) 4 Cyl.	87-96	Pick Up, Van/Wagon (SOHC 8V)	Fel-Pro 9388PT Mahle 5747	New 4.720-4.728" Min 4.712"	HSMT24
2.4ℓ (G64B) 4 Cyl.	85-87	Galant (SOHC 8V), Forklift	Fel-Pro 9388PT Mahle 5747	New 3.543-3.544" Min 3.523"	HSMT24
2.4ℓ (4G64K) 4 Cyl.	93-99	Eclipse, Galant, Expo (SOHC 16V)	Fel-Pro 9932PT Mahle 54119G	New 4.720-4.728" Min 4.712"	HSMT24A
2.4ℓ (4G64FR) 4 Cyl.	97-99	Montero Sport (SOHC 16V)	Fel-Pro 26312PT Mahle N/A	N/A	HSMT24C
2.4ℓ (4G64) 4 Cyl.	99-05	Eclipse, Galant, Outlander (SOHC 16V)	Fel-Pro 26172PT Mahle 54329	New 4.720-4.730" Min 4.712"	HSMT24B
2.4ℓ (4G69) 4 Cyl.	04-12	Eclipse, Galant, Lancer, Outlander (SOHC 16V)	Fel-Pro 26235PT Mahle 54488	New 4.724 " Min 4.716"	HSMT24D
2.4ℓ (144) 4 Cyl.	08-20	Lancer, Outlander, RVR (DOHC 16V)	Fel-Pro 26557PT Mahle N/A	New N/A Min N/A	HSCH24C
2.6ℓ (G54B) 4 Cyl.	78-80	Sappora, Eterna, Colt, Galant	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSMT26A
2.6ℓ (G54B) 4 Cyl.	83-89	Mighty Max, Montero, Starion	Fel-Pro 8770, 9116PT Mahle N/A	New 3.543" Min 3.523"	HSMT26

INNOVATIVE MACHINE & SUPPLY - 636 600 1171

MITSUBISHI (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.0ℓ (6G72) V6	88-99	Galant, Sigma, Montero, Diamante (92-94), Mighty Max (90-94) (SOHC)	Fel-Pro 9112PT Mahle 5765	New 3.303-3.311" Min 3.295"	HSMT30 (2)
3.0ℓ (6G72) V6	91-99	3000, Diamante, Montero (SOHC & DOHC 24V)	Fel-Pro 9842, 26186PT Mahle 54492	New 5.200-5.210" Min 5.1888"	HSMT30A (2)
3.0ℓ (6G72) V6	99-05	Eclipse, Galant, Montero Sport (SOHC 24V)	Fel-Pro 9537PT Mahle 54494	New 5.200-5.210" Min 5.1888"	HSMT30A (2)
3.0ℓ (6B3) V6	07-20	Outlander	Fel-Pro 26410PT Mahle 54830	New 4.700" Min 4.694"	HSMT30B (2)
3.5ℓ (6G74) V6	91-04	Diamante, Montero (DOHC 24V)	Fel-Pro 26193PT Mahle 54143S	New 5.200" Min 5.1888"	HSMT35 (2)
3.5ℓ (6G74) V6	97-04	Diamante, Montero (SOHC 24V)	Fel-Pro 26193PT Mahle 54143S	New 4.724" Min 4.716"	HSMT35A (2)
3.7ℓ (226) V6	06-09	Raider (SOHC 12V)	Fel-Pro 26229PT Mahle 54250	New 4.585-4.595" Min 4.585"	HSCH37 (2)
3.8ℓ (6G75) V6	03-12	Eclipse, Galant, Montero (SOHC 24V)	Fel-Pro 26313PT Mahle 54143	New 4.700" Min N/A	HSMT38 (2)
4.7ℓ (285) V8	06-07	Raider (SOHC 16V)	Fel-Pro 26157PT Mahle 54237	New 4.585-4.592" Min 4.585"	HSCH47 (2)
4.9ℓ (4M50) 4Cyl	00-07	Med Duty Diesel (DOHC 16V)	Fel-Pro N/A Mahle N/A	New 4.193-4.232" Min 4.193"	HSMT4M50
7.5ℓ (6M60) 6Cyl	07-09	Med Duty Diesel (SOHC 24V)	Fel-Pro N/A Mahle N/A	New 3.736-3.74" Min 3.755"	HSMT6M60

NISSAN

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.2ℓ (A12) 4 Cyl.	79-82	210, Station Wagon (SOHC)	Fel-Pro 21199PT1 Mahle N/A	New 2.825-2.830" Min N/A	HSNS12

INNOVATIVE MACHINE & SUPPLY - 636 600 1171

NISSAN (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.4ℓ (A14) 4 Cyl.	75-82	210, 210B, 310, F10	Fel-Pro 21199PT1 Mahle N/A	New 2.919-2.925" Min 2.909"	HSNS12
1.5ℓ (A15) 4 Cyl.	79-82	210, 310	Fel-Pro 21199PT1 Mahle N/A	New 2.919-2.925" Min 2.909"	HSNS12
1.5ℓ (E15) 4 Cyl.	82-84	310, Sentra, Pulsar NX (SOHC)	Fel-Pro 9376PT Mahle N/A	New 4.724" Min 4.712"	HSNS16
1.6ℓ (E16) 4 Cyl.	83-88	Pulsar, Sentra (SOHC)	Fel-Pro 9376PT Mahle N/A	New 4.720-4.724" Min 4.712"	HSNS16
1.6ℓ (GA16I) 4 Cyl.	89-90	Pulsar NX, Sentra NX	Fel-Pro 9645PT Mahle 5875	New 4.748-4.756" Min 4.740"	HSNS16A
1.6ℓ (GA16DE) 4 Cyl.	91-99	NX 1600, NX Coupe, Sentra, 200SX	Fel-Pro 9819PT Mahle 4895	New 4.638-4.646" Min 4.630"	HSNS16B
1.6ℓ (L16) 4 Cyl.	70-73	510, 521 Pickup, 620 Pickup	Fel-Pro 21178PT Mahle N/A	New N/A Min N/A	HSNS20C
1.8ℓ (QG18DE) 4 Cyl.	00-06	Sentra (DOHC 16V)	Fel-Pro 26255PT Mahle 54471	New 4.638-4.646" Min 4.630"	HSNS18
1.8ℓ (CA18DE) 4 Cyl.	88-89	200SX, Pulsar (DOHC 16V)	Fel-Pro N/A Mahle N/A	New 4.957-4.965" Min 4.949"	HSNS18A
1.8ℓ (MR18DE) 4 Cyl.	07-12	Cube, Versa (DOHC 16V)	Fel-Pro 26338PT Mahle 54692	New 5.150" Min N/A	HSNS18B
1.8ℓ (L18) 4 Cyl.	73-74	610, 620 Pickup	Fel-Pro 21178PT Mahle N/A	New N/A Min N/A	HSNS20C
1.8ℓ (CA18ET) 4 Cyl.	84-87	200 SX Turbo	Fel-Pro 9236PT Mahle N/A	New 4.598" Min 4.587"	HSNS20
2.0ℓ (CA20E) 4 Cyl.	82-89	200 SX, Stanza, Stanza Sedan / Hatchback / Wagon	Fel-Pro 9236PT Mahle N/A	New 4.595-4.610" Min 4.587"	HSNS20

INNOVATIVE MACHINE & SUPPLY - 636 600 1171

NISSAN (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ 4 Cyl.	77-92	Forklift H20	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSNSH20
2.0ℓ (SR20DE) 4 Cyl.	91-01	Sentra, 200 SX, NX 2000	Fel-Pro 9816PT Mahle 4917	New 5.390-5.398" Min 5.382"	HSNS20A
2.0ℓ (MR20DE) 4 Cyl.	07-12	Sentra (DOHC 16V)	Fel-Pro 26338PT Mahle 54692	New 5.515" Min N/A	HSNS18B
2.0ℓ (L20) 4 Cyl.	74-80	200SX, 510, 610, 620, 710, 720	Fel-Pro 21178PT Mahle N/A	New 4.260" Min 4.245"	HSNS20C
2.2ℓ (Z24) 4 Cyl.	81-83	200SX, 720	Fel-Pro 9210PT-1 Mahle 3767	New 3.886-3.902" Min 3.878"	HSNS24
2.4ℓ (Z24) 4 Cyl.	83-89	720 Pick Up, Pathfinder, Cargovan, D21 Pick Up	Fel-Pro 9210PT-1 Mahle 3767	New 3.886-3.902" Min 3.878"	HSNS24
2.4ℓ (KA24E) 4 Cyl.	89-97	240 SX, Stanza, D21 Pick Up, Axxess MPV (SOHC 12V)	Fel-Pro mercedesPT Mahle 5863	New 3.890-3.898" Min 3.882"	HSNS24A
2.4ℓ (KA24DE) 4 Cyl.	91-94	240 SX (DOHC 16V)	Fel-Pro 9820PT Mahle 5742	New 4.972-4.980" Min 4.964"	HSNS24B
2.4ℓ (KA24DE) 4 Cyl.	95-04	240 SX, Frontier, Xterra (DOHC 16V)	Fel-Pro 26171PT Mahle 54373	New 4.972-4.980" Min 4.964"	HSNS24B1
2.4ℓ (KA24DE) 4 Cyl.	93-01	Altima (DOHC 16V)	Fel-Pro ,PT Mahle 54098G	New 4.972-4.980" Min 4.964"	HSNS24C
2.4ℓ (L24) 6 Cyl.	70-84	240Z, 810, Maxima (SOHC 12V)	Fel-Pro 21157PT-1 Mahle N/A	New 4.252" Min 4.232"	HSNS24D1
2.5ℓ (QR25DE) 4 Cyl.	02-19	Altima (02-12), Sentra (02-12), Frontier (05-19), Rogue (08-15)	Fel-Pro 26261, 26519, 26520PT Mahle 54444, 54593, 54594	New 5.095-5.100" Min 5.085"	HSNS25
2.5ℓ (QR25DE) 4 Cyl.	13-20	Altima, Rogue	Fel-Pro 26659PT Mahle N/A	New 5.095-5.100" Min 5.085"	HSNS25B

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NISSAN (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.5ℓ (SD25) V6	82-88	720 Mini Pickup (Diesel)	Fel-Pro N/A Mahle N/A	New 3.545" Min 3.531"	HSNS25D (2)
2.5ℓ 4 Cyl.		K21, K25 Forklift	Fel-Pro N/A Mahle N/A	New 4.016" Min N/A	HSNS25-K25
2.6ℓ (L26) 6 Cyl.	74-75	260Z (SOHC 12V)	Fel-Pro 21157PT-1 Mahle N/A	New 4.252" Min 4.232"	HSNS24D1
2.8ℓ (L28E) 6 Cyl.	75-80	280Z, 280ZX (SOHC 12V)	Fel-Pro 21157PT-1 Mahle N/A	New 4.252" Min 4.232"	HSNS24D1
2.8ℓ (L28E/26) 6 Cyl.	81-83 ALL YEARS	280ZX (Includes Turbo)	Fel-Pro 8799PT Mahle 3987	New 4.252-4.260" Min 4.232"	HSNS28
3.0ℓ (VG30) V6	84-98	200 SX, 300 ZX (non Turbo), Maxima, Quest (93), Pathfinder, D21 Pick Up (SOHC)	Fel-Pro 9228PT, 9571PT Mahle 5758, 5826	New 4.2047-4.2057" Min 4.1967"	HSNS30 (2)
3.0ℓ (VG30T) V6	84-89	300 ZX Turbo (SOHC)	Fel-Pro 9228PT, 9571PT Mahle 5758, 5826	New 4.2047-4.2057" Min 4.1967"	HSNS30 (2)
3.0ℓ (VG30E) V6	90-96	300 ZX (DOHC 24V) (Turbo also)	Fel-Pro 9703PT Mahle 5865	New 5.429-5.437" Min 5.421"	HSNS30A (2)
3.0ℓ (VE30DE) V6	92-94	Maxima (DOHC 24V)	Fel-Pro N/A Mahle 54495, 54496	New 5.429-5.437" Min 5.421"	HSNS30BL HSNS30BR
3.0ℓ (VQ30DE) V6	95-99	Maxima (DOHC 24V)	Fel-Pro 9508, 9509PT Mahle 54379, 54380	New 4.972-4.980" Min 4.964"	HSNS30DL HSNS30DR
3.3ℓ (VG33E) V6	96-04	Frontier P/U, Quest, Xterra (SOHC 12V)	Fel-Pro 26219PT Mahle 54393	New 4.205-4.220" Min N/A"	HSNS33 (2)
3.5ℓ (VQ35DE) V6	01-09	350Z, Altima, Maxima, Quest, Pathfinder (DOHC 24V)	Fel-Pro 26239, 26240, 26241/2PT Mahle 54481, 54482	New 4.972-4.980" Min N/A	HSNS35L HSNS35R
3.5ℓ (VQ35DE) V6	07-20	350Z, Altima, Maxima, Murano, Quest, Pathfinder (DOHC 24V)	Fel-Pro 26511, 26512PT Mahle 54586, 54587	New 4.972-4.980" Min N/A	HSNS35AL HSNS35AR

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NISSAN (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.5ℓ (VQ40DE) V6	02-09	350Z, Altima, Maxima, Murano (DOHC 24V)	Fel-Pro 26370, 26371PT Mahle 54479, 54480	New 4.972-4.980" Min N/A	HSNS40L HSNS40R
4.0ℓ (VQ40DE) V6	05-21	Frontier, Pathfinder, Xterra, NV 1500, 2500, 3500 (DOHC 24V)	Fel-Pro 26370, 26371PT Mahle 54479, 54480	New 4.972-4.980" Min N/A	HSNS40L HSNS40R
5.6ℓ (VK56DE) V8	04-17	Armada, Pathfinder, Titan (DOHC)	Fel-Pro 26372, 26373PT Mahle 54651, 54652	New 4.972" Min N/A	HSNS56L HSNS56R
7.0ℓ (GH7) V6	11-20	UD3300 (SOHC)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSNS70
		4 & 6 Cyl. Cam Tower Shims L24, L26, L28 Engines			HSNSSK6

OLIVER

3.2ℓ (194) 6 Cyl.		77, 77 Super, 177	Fel-Pro 7411B Mahle	New Min	HSWAU216
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PACKARD

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
(320) 8 Cyl.	20s-38	Packard 120 Straight 8	Fel-Pro N/A Mahle N/A	New Min	HSPK120

PERKINS *(copper gaskets available for all listings)*

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.5ℓ (152.7) 3 Cyl.		H/D Truck A3.152 Diesel	Fel-Pro 21118 Mahle	New Min	HSPE25
5.8ℓ (354) 6 Cyl.		H/D Truck A6.354 Diesel	Fel-Pro 21101B Mahle	New Min	HSPE58

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PEUGEOT

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.9ℓ (XU) 4 Cyl.	82-96	205, 305, 309, 405	Fel-Pro N/A Mahle N/A	New Min	HSPU19
2.0ℓ (XN) 4 Cyl.	71-87	504, 505 (OHV)	Fel-Pro 21221B Mahle N/A	New Min	HSPU20
2.0ℓ (XN) 4 Cyl.	70-90	Forklift	Fel-Pro N/A Mahle N/A	New Min	HSPU20FL

PORSCHE

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.5ℓ 4 Cyl.	83-88	924S, 944 (SOHC)	Fel-Pro HS 9462B Mahle 5728	New 0.941-0.949" Min 0.937" <small>Meas. from machine boss (exh. side)</small>	HSPS25
3.2ℓ (195) 6 Cyl.	04-06	Cayenne	Fel-Pro 26648PT Mahle 54629	New N/A Min N/A	HSVK32
3.4ℓ 6 Cyl.	99-01	911 (996GT3) (DOHC)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSPS34(2)

RENAULT

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ (F3N/F3R) V8	89-96	Alliance, Encore Renault 1.7, 2.0	Fel-Pro 9384PT Mahle N/A	New N/A Min N/A	HSRN20-F3R
2.2ℓ () 4 Cyl.	86-94	Medallion, Renault/Eagle	Fel-Pro N/A Mahle N/A	New 4.400" Min N/A	HSRN22

ROVER

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ (122) 4 Cyl.	12-18	Range Rover Evoque	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSFO20F

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ROVER (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ 4 Cyl.	18-20	Land Rover/Range Rover	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSJG20
2.5ℓ (19J) V6	86-90	Range Rover Model 90 & 110/127	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSRR25D
2.5ℓ V6	94-98	Land Rover Discovery, Defender Diesel	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSRR25D2
2.5ℓ (153) V6	02-05	Freelander (V6) (KV6)	Fel-Pro 26652PT Mahle 54695	New 4.683-4.687" Min 4.683"	HSRR25 (2)
3.0ℓ 6 Cyl.	13-20	Range Rover, Jaguar (Super Charged)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSRR30L HSRR30R
3.2ℓ (B6324S) 6 Cyl.	08-12	LR2	Fel-Pro 26602PT Mahle 54645	New 5.875-5.887" Min N/A	HSVO32
3.9ℓ (241) V8	94-03	Range Rover, Defender 90, Morgan (Plus 8) (V8)	Fel-Pro 26532PT Mahle 54696	New .903" End of Head - EXH Side Min .883" (0.020" Max)	HSRR39 (2)
4.0ℓ (241) V8	95-02	Range Rover, Discovery (V8)	Fel-Pro 26532PT Mahle 54696	New .903" End of Head - EXH Side Min .883" (0.020" Max)	HSRR39 (2)
4.0ℓ (245) V6	05-09	LR3 (SOHC) (Vin E)	Fel-Pro 26300, 26301PT Mahle 54196, 54195	New 4.864" Min N/A	HSFO40BL HSFO40BR
4.2ℓ (241) V8	94-95	Range Rover (V8)	Fel-Pro 26532PT Mahle 54696	New .903" End of Head - EXH Side Min .883" (0.020" Max)	HSRR39 (2)
4.4ℓ (439) V8	05-09	LR3, Range Rover	Beck/Arnley 035-2164 035-2165 Mahle N/A	New N/A Min N/A	HSRR44L HSRR44R
4.6ℓ (278) V8	96-04	Range Rover, Discovery (V8)	Fel-Pro 26532PT Mahle 54696	New .903" End of Head - EXH Side Min .883" (0.020" Max)	HSRR39 (2)
5.0ℓ (305) V8	10-18	Range Rover, Sport, LR4 (DOHC)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSRR50L HSRR50R

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SAAB

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ (B201) 4 Cyl.	69-80	99, 900 (DOHC 16V)	Fel-Pro N/A Mahle NA	New 5.532-5.540" Min 5.520"	HSSB20C
2.0ℓ (B202) 4 Cyl.	85-94	900, 9000 (DOHC 16V)	Fel-Pro HS9879PT Mahle 5827	New 5.532-5.540" Min 5.512"	HSSB20-1
2.0ℓ (B204) 4 Cyl.	95-99	900, 9-3 (DOHC 16V)	Fel-Pro 26431PT Mahle 54690	New 5.532-5.540" Min 5.520"	HSSB20
2.0ℓ (EJ20T) 4 Cyl.	02-05	9-2X (DOHC 16V)	Fel-Pro 26537PT Mahle 54467	New 5.02" Min Max Milling .012"	HSSU20 (2)
2.0ℓ (B205) 4 Cyl.	00-03	9-3 (DOHC 16V)	Fel-Pro 26428PT Mahle 54630	New 5.532-5.540" Min 5.520"	HSSB20A
2.0ℓ (B207) 4 Cyl.	03-11	9-3, 9-5 (DOHC)	Fel-Pro 26584PT Mahle 54633	New 5.080-5.085" Min 5.070"	HSGM22A
2.3ℓ (B234) 4 Cyl.	99	9-3 (DOHC 16V)	Fel-Pro 26431PT Mahle 54690	New N/A Min N/A	HSSB20
2.3ℓ (B235) 4 Cyl.	99-09	9-3, 9-5 (DOHC 16V)	Fel-Pro 26428PT Mahle 54630	New 5.488-5.496" Min 5.472"	HSSB20A
2.5ℓ (EJ251/53) 4 Cyl.	05-06	9-2X (SOHC 16V)	Fel-Pro 26170, 26415PT Mahle N/A	New 3.839" Min 3.834"	HSSU25 (2)
2.5ℓ (EJ255) 4 Cyl.	06	9-2X (DOHCTURBO16V)	Fel-Pro 26531PT Mahle 55017	New 5.020" Min MAX REMOVAL .012"	HSSU25A (2)
3.0ℓ (B308) V6	95-03	9-5, 9000 (DOHC 24V)	Fel-Pro 26189, 26173PT Mahle 54636, 54635	New 5.272-5.280" Min 5.272"	HSGM30-OPEL
3.0ℓ (182) V6	2011	9-4X DOHC (VIN Y)	Fel-Pro 26559, 26560PT Mahle 54668, 54667	New 2.400" Min N/A	HSGM30AL HSGM30AR
4.2ℓ (256) L6	05-09	9-7x (DOHC-24V)	Fel-Pro 26214PT Mahle 54385	New N/A Min N/A	HSGM42

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SAAB (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
5.3ℓ (325) V8	05-09	9-7x Vin T	Fel-Pro 26190PT Mahle 54442	New 4.732" Min N/A	HSGM53 (2)
6.0ℓ (364) V8	08-09	9-7x	Fel-Pro 26192 PT Mahle 54445	New 4.732" Min N/A	HSGM60 (2)

SATURN

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.9ℓ (LLO) 4 Cyl.	91-02	SC1, SL, SL1, SW1 (SOHC)	Fel-Pro 9971PT Mahle 5992	New 4.444-4.454" Min 4.444"	HSST19
1.9ℓ (LKO) 4 Cyl.	91-02	SC, SC2, SL2, SW2 (DOHC)	Fel-Pro 9968PT Mahle 5993	New 4.445-4.453" Min 4.444"	HSST19A
2.2ℓ (134) 4 Cyl.	00-07	Ion, L100, L200, L300, LS, LW (ECOTEC) (DOHC)	Fel-Pro 26223PT Mahle 54440	New 5.080-5.085" Min 5.070"	HSGM22A
2.4ℓ (145) 4 Cyl	06-10	Aura, Vue, Ion, Sky (DOHC)	Fel-Pro 26466PT Mahle 54563	New 5.085" Min 5.070"	HSGM24B
3.0ℓ (B308) V6	00-05	L300, LS2, LW2, LW300, Vue (DOHC 24V)	Fel-Pro 26173PT Mahle 54636	New 5.272-5.280" Min 5.272"	HSGM30-OPEL
3.5ℓ (347) V6	04-07	Vue (SOHC)	Fel-Pro 26265PT Mahle 54578	New 4.762-4.766" Min 4.758"	HSHO35A(2)
3.5ℓ (213) V6	07-10	Aura, Vue	Fel-Pro 26324, 26325PT Mahle 54648,54649	New N/A Min N/A	HSGM35A (2)
3.5ℓ (213) V6	05-06	Relay	Fel-Pro 26314PT Mahle 54647	New N/A Min N/A	HSGM35C (2)
3.9ℓ (237) V6	06-07	Relay	Fel-Pro 26324, 26325PT Mahle 54648,54649	New N/A Min N/A	HSGM35A (2)

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SUBARU

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.8ℓ (EA82) 4 Cyl.	85-94	Passenger Cars (OHC)	Fel-Pro 9392PT Mahle 5714	New 3.5655" Min 3.5450"	HSSU18 (2)
1.8ℓ (EA81) 4 Cyl.	80-87	Passenger Cars (OHC)	Fel-Pro 8818PT Mahle 3709	New 3.576-3.581" Min 3.556"	HSSU18A (2)
2.0ℓ (EJ20T) 4 Cyl.	02-05	Impreza, WRX (DOHC 16V)	Fel-Pro 26537PT Mahle 54467	New 5.019" Min 5.007"	HSSU20 (2)
2.0ℓ H4	13-18	BRZ, SCION FR-S	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSSU20AL HSSU20AR
2.2ℓ (EJ22) 4 Cyl.	90-98	Impreza, Legacy (SOHC 16V)	Fel-Pro 9854PT Mahle 5905	New 3.870" Min N/A	HSSU22 (2)
2.2ℓ (EJ251/53) 4 Cyl.	98-01	Impreza, Legacy (SOHC 16V)	Fel-Pro 26415PT Mahle N/A	New 3.839" Min 3.834"	HSSU25 (2)
2.5ℓ (EJ251/53) 4 Cyl.	96-11	Baja, Impreza, Legacy, Forrester, Outback, Sport Utility (SOHC/DOHC 16V)	Fel-Pro 26167, 26170, 26415PT Mahle N/A	New 3.839" Min 3.834"	HSSU25 (2)
2.5ℓ (EJ255/57) 4 Cyl.	06-18	Impreza, Legacy, Forrester, Outback, Sport Utility, WRX (DOHC/TURBO 16V)	Fel-Pro 26531PT Mahle 55017	New 5.020" Min MAX REMOVAL .012"	HSSU25A (2)
3.0ℓ (EZ30D) V6	05-09	Outback, B9 Tribeca (06- 07), Legacy (08-09)	Fel-Pro 26534, 26536PT Mahle 54656, 54655	New 4.878-4.882" Min 4.878"	HSSU30L HSSU30R
3.6ℓ (EZ36R) V6	10-19	Legacy, Outback, Tribeca (08-14)	Fel-Pro 26712, 26713PT Mahle 55192 Left Right N/A	New 4.878-4.884" Min N/A	HSSU36L HSSU36R

SUZUKI

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.0ℓ (G10) 3 Cyl.	85-88	Forsa, SA310	Fel-Pro 9435PT Mahle 5704	New N/A Min N/A	HSSZ10A
1.0ℓ (G10A) 3 Cyl.	92-94	Swift	Fel-Pro 9651PT Mahle N/A	New N/A Min N/A	HSSZ10

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SUZUKI (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.3ℓ (G13A,BA) 4 Cyl.	85-01	Samurai, Sidekick, Swift (SOHC)	Fel-Pro 9623PT Mahle 5759	New 3.750-3.755" Min 3.740"	HSSZ13
1.3ℓ (G13K) 4 Cyl.	89-01	Swift GTI (DOHC)	Fel-Pro 9623PT Mahle 5759	New 5.197" Min 5.175"	HSSZ13
1.3ℓ (G13BB) 4 Cyl.	98-01	Swift GTI (SOHC 16V)	Fel-Pro 9623PT Mahle N/A	New N/A Min N/A	HSSZ13A
1.6ℓ (G16) 4 Cyl.	92-01	Sidekick, Swift, Esteem, X-90 (SOHC 8V & 16V)	Fel-Pro 9683PT-1 Mahle 5866	New 3.750" Min 3.740"	HSSZ16
1.8ℓ (G18) 4 Cyl.	96-02	Esteem, Sport Sidekick (DOHC 16V)	Fel-Pro 26278PT Mahle 54499	New 4.805" Min N/A"	HSSZ18
2.0ℓ (J20A) 4 Cyl.	99-09	Vitara, Aerio (DOHC 16V)	Fel-Pro 26278PT Mahle 54499	New 4.798-4.80" Min N/A	HSSZ18
2.0ℓ (J20A) 4 Cyl.	07-09	SX4 (DOHC 16V)	Fel-Pro 26278PT Mahle 54499	New 4.798-4.80" Min N/A	HSSZ18
2.0ℓ (J20B) 4 Cyl.	10-13	SX4 (DOHC 16V)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSSZ20A
2.0ℓ (A20DMS) 4 Cyl.	04-08	Forenza, Reno (DOHC 16V)	Fel-Pro 26317PT Mahle 54395A	New 5.274-5.276 Min 5.271"	HSIS22
2.3ℓ (J23A) 4 Cyl.	04-07	Aerio (DOHC 16V)	Fel-Pro 26279PT Mahle 54500	New 4.798" Min N/A	HSSZ23
2.4ℓ (J24B) 4 Cyl.	09-13	Grand Vitara	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSSZ24
2.5ℓ (QR25DE) 4 Cyl.	09-12	Equator (DOHC)	Fel-Pro 26520PT Mahle 54594	New 5.095- 5.100" Min N/A	HSNS25
2.5ℓ (H25A) V6	99-05	Grand Vitara (DOHC 24V)	Fel-Pro N/A Mahle N/A	New N/A Min N/A"	HSSZ25L HSSZ25R

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SUZUKI (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.7ℓ (H27A) V6	01-08	Grand Vitara, XL7 (DOHC 24V)	Fel-Pro N/A Mahle N/A	New N/A Min N/A "	HSSZ27L HSSZ27R
4.0ℓ (VQ40DE) V6	09-12	Equator (DOHC 24V)	Fel-Pro 26370 , 26371PT Mahle 54479 , 54480	New 4.972-4.980 " Min N/A	HSNS40L HSNS40R

TOYOTA

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.3ℓ (K3,K4) 4 Cyl.	69-89	Corolla K3 (69-77) K4 (77-89)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSTO13
1.5ℓ (3E/3EE) 4 Cyl.	87-94	Terrel (SOHC 12V)	Fel-Pro 9483PT Mahle 5787	3E New 5.012-5.015 Min 5.000 " 3EENew 5.002-5.005 " Min 4.990 "	HSTO15
1.5ℓ (5EFE) 4 Cyl.	92-95	Paseo (DOHC 16V)	Fel-Pro 9963PT Mahle 54428	New 4.220 " Min N/A	HSTO15A
1.5ℓ (1NZFE) 4 Cyl.	00-19	Echo, Prius, Yaris (Scion XA, XB 04-06) (DOHC 16V)	Fel-Pro 26258PT Beck Arnley 035-2016 Mahle 54432	New 4.4915 " Min N/A	HSTO15B
1.5ℓ (3AC) 4 Cyl.	83-88	Terrel	Fel-Pro 9082PT Mahle N/A	New 3.400 " Min 3.425 "	HSTO15C
1.6ℓ (4AC) 4 Cyl.	83-88	Corolla, Corolla Coupe	Fel-Pro 9410PT Mahle 3756	New 3.400-3.410 " Min 3.385 "	HSTO16
1.6ℓ (4ALC) 4 Cyl.	83-88	Corolla Sedan, Corolla Liftback, Corolla FX	Fel-Pro 9410PT Mahle 3756	New 3.400-3.410 " Min 3.385 "	HSTO16
1.6ℓ (4AF) 4 Cyl.	88-89	Corolla	Fel-Pro 8188PT Mahle 4899	New 4.570 " Min 4.560 "	HSTO16A
1.6ℓ (4AFE) 4 Cyl.	88-93	Corolla (>6/92), Celica ST	Fel-Pro 8188PT Mahle 4899	New 4.570 " Min 4.560 "	HSTO16A
1.6ℓ (4AGE) 4 Cyl.	85-91	Corolla GTS, Corolla Coupe GTS, MR2	Fel-Pro 9661PT Mahle 5797	New 4.568 " Min 4.555 "	HSTO16B

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TOYOTA (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.6ℓ (4AFE) 4 Cyl.	93-97	Corolla (DOHC 16V)	Fel-Pro 9604PT Mahle 54368	N/A	HSTO16C
1.6ℓ (2TC/3TC) 4 Cyl.	71-79	Corolla, Carina (DOHC 16V)	Fel-Pro 21179PT Mahle N/A	New 3.357" Min 3.377"	HSTO18C
1.8ℓ (7AFE) 4 Cyl.	93-97	Celica, Corolla (DOHC 16V)	Fel-Pro 9955PT Mahle 54354	New 4.567" Min 4.557"	HSTO18
1.8ℓ (2ZZGE) 4 Cyl.	00-06	Celica, Corolla, Matrix (DOHC 16V) (overlap with HSTO18B-confirm engine)	Fel-Pro 26154PT Mahle 54394	New 5.865" Min N/A	HSTO18A
1.8ℓ (1ZZFE) 4 Cyl.	98-08	Corolla, Celica, MR2 (DOHC 16V) (overlap with HSTO18A-confirm engine)	Fel-Pro 26158PT-1 Mahle 54383	New 4.520-4.527" Min N/A	HSTO18B
1.8ℓ (2TC/3TC) 4 Cyl.	80-82	Corolla (DOHC 16V)	Fel-Pro 21179PT Mahle N/A	New 3.357" Min 3.377"	HSTO18C
1.8ℓ (2ZRFE) 4 Cyl.	09-21	Corolla, Matrix, Prius, (DOHC)	Fel-Pro 26515PT Mahle 54773	New 4.213" Min N/A	HSTO18D
2.0ℓ (2SELC) 4 Cyl.	83-86	Camry, Celica	Fel-Pro 9148PT Mahle N/A	New 3.975-3.980" Min 3.965"	HSTO20A
2.0ℓ (3SFE) 4 Cyl.	87-96	Camry, Celica GT, Celica ST	Fel-Pro 9861PT Mahle 4920	New 4.965" Min 4.950"	HSTO20
2.0ℓ (3SFE) 4 Cyl.	96-00	RAV 4	Fel-Pro 9861, 9797PT Mahle 4920, 4920S	New 4.965" Min 4.950"	HSTO20
2.0ℓ (3SGTE) 4 Cyl.	88-93	Celica, MR2 (91-95)	Fel-Pro 9853PT Mahle 54464	New 4.695-4.699" Min N/A	HSTO20B
2.0ℓ (1AZFE) 4 Cyl.	01-03	RAV4 (DOHC 16V)	Fel-Pro 26160PT Mahle 54443	New 5.085" Min N/A	HSTO20C
2.0ℓ (3SGTE) 4 Cyl.	88-95	Celica, MR2 (Turbo)	Fel-Pro 9853PT Mahle N/A	New N/A Min N/A	HSTO20D

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TOYOTA (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ <i>H4</i>	17-18	86	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSSU20AL HSSU20AR
2.0ℓ (2ZRFE) 4 Cyl.	18-21	C-HR (DOHC)	Fel-Pro 26515PT Mahle 54773	New 4.213" Min N/A	HSTO18D
2.2 (3SFE) 4 Cyl.	90-97	Camry, Celica, MR2	Fel-Pro 9861PT Mahle 4920	New 4.965" Min 4.950"	HSTO20
2.2ℓ (20R) 4 Cyl.	75-80	Celica, Corona, P/U	Fel-Pro 21187PT Mahle 3592	New 3.960" Min N/A	HSTO22A
2.2ℓ (4YEC) 4 Cyl.	86-89	Van Wagon, Forklift	Fel-Pro 9417PT Mahle 5708	New 4.390-4.410" Min N/A	HSTO22B
2.2ℓ (5SFE) 4 Cyl.	90-01	Camry, Celica, MR2	Fel-Pro 9468PT Mahle 4920	New 4.963-4.967" Min 4.953"	HSTO22
2.4ℓ (22R/RE) 4 Cyl.	81-95	Celica, Corona, Pick Up, 4-Runner	Fel-Pro 26185PT Mahle 5707, 54355	22R New 3.950-3.960" Min 3.940" 22RE New 3.79-3.80" Min 3.780"	HSTO24
2.4ℓ (2TZFE) 4 Cyl.	91-97	Previa (DOHC 16V) (Also Supercharged)	Fel-Pro 9831PT Mahle 5890	New 5.316" Min N/A	HSTO24A
2.4ℓ (2RZFE) 4 Cyl.	95-04	Tacoma (DOHC 16V)	Fel-Pro 9465PT Mahle 54173G	New 5.315-5.319" Min N/A	HSTO24B
2.4ℓ (2AZFE) 4 Cyl.	01-13	Camry, Corolla, RAV4, Matrix, Highlander, Solara; SCION tC, xB (05- 15)	Fel-Pro 26323PT Mahle 54409	New 5.090" Min N/A	HSTO24C
2.5ℓ (2ARFE) 4 Cyl.	09-18	Avalon, Camry, RAV4, Scion tC (2ARFXE Not Covered)	Fel-Pro 26562, 26667PT Mahle 54994	New 4.509-4.510" Min N/A	HSTO25A
2.5ℓ (2VZE) V6	88-91	Camry (DOHC 24V)	Fel-Pro 9656PT, 9657PT Mahle 5859, 5860	New 4.805-4.810" Min 4.795"	HSTO25L HSTO25R
2.7ℓ (3RZFE) 4 Cyl.	94-04	Tacoma, 4Runner, T100 (DOHC 16V)	Fel-Pro 9465PT Mahle 54173G	New 5.315" Min N/A	HSTO24B

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TOYOTA (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.7ℓ (2TRFE) 4 Cyl.	05-20	Tacoma, 4Runner (2010) (DOHC)	Fel-Pro 26357PT Mahle 54534	New 5.615" Min 5.600"	HSTO27
2.7ℓ (1ARFE) 4 Cyl.	09-19	Highlander, Sienna, Venza	Fel-Pro 26562PT Mahle 54994	New 4.509-4.510" Min N/A	HSTO25A
2.8ℓ (5MGE) 6 Cyl.	82-88	Cressida, Celica	Fel-Pro 8969PT Mahle 3990	New 3.765" Min 3.750"	HSTO28
3.0ℓ (7MGE) 6 Cyl.	86-92	Cressida, Supra, Turbo Supra	Fel-Pro 9473PT Mahle 5769	New 4.570" Min 4.560"	HSTO30
3.0ℓ (3VZE) V6	88-95	Pick Up, 4-Runner, T-100 (SOHC 12V)	Fel-Pro 9815, 9728PT Mahle 54185, 54186	New 5.312-5.315" Min 5.302"	HSTO30AL HSTO30AR
3.0ℓ (3VZFE) V6	92-93	Camry (DOHC 24V)	Fel-Pro 9904, 9905PT Mahle 5859, 5860	New 4.800-4.805" Min 4.795"	HSTO25L HSTO25R
3.0ℓ (1MZFE) V6	94-00	Avalon, Camry, Sienna, Solara (DOHC 24V)	Fel-Pro 9201, 9203PT Mahle 54338, 54339	New 4.905-4.909" Min N/A	HSTO30BL HSTO30BR
3.0ℓ (1MZFE) V6	99-06	Avalon, Camry, Sienna, Highlander (DOHC 24V)	Fel-Pro 9489/90PT, 9592/9594PT Mahle 54336, 54337	New 4.905-4.909" Min N/A	HSTO30CL HSTO30CR
3.0ℓ (2JZGE) 6 Cyl.	93-98	Supra (DOHC 24V)	Fel-Pro 26297PT Mahle N/A	New 4.570" Min 4.560"	HSTO30D
3.3ℓ (3MZFE) V6	04-10	Camry, Highlander, Solara, Sienna (DOHC 24V)	Fel-Pro 26266PT, 26267PT Mahle 54455, 54456	New 4.900" Min N/A	HSTO33L HSTO33R
3.4ℓ (5VZFE) V6	95-04	Tacoma, 4-Runner, T-100 (DOHC 24V)	Fel-Pro 9227PT1, 9229PT1 Mahle 54137A, 54138A	New 4.805-4.808" Min 4.800"	HSTO34L HSTO34R
3.5ℓ (2GRFE) V6	05-18	Avalon, Camry, Highlander, Rav4, Sienna (DOHC 24V)	Fel-Pro 26321, 26322PT Mahle 54536, 54535	New 4.653" Min N/A	HSTO35L HSTO35R
4.0ℓ (3F) V6	88-92	Land Cruiser	Fel-Pro 9833PT Mahle N/A	New N/A Min N/A	HSTO40 HSTO40

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TOYOTA (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
4.0ℓ (1GRFE) V6	03-15	4Runner, Tacoma, Tundra (DOHC 24V)	Fel-Pro 26290, 26292, 26330 26331PT Mahle 54462, 54463	New 5.336-5.339" Min 5.324"	HSTO40AL HSTO40AR
4.2ℓ (2F) L6	75-85	Land Cruiser (Gas & Diesel)	Fel-Pro 21219B Mahle 55150	New N/A Min N/A	HSTO42
4.2ℓ (3F) V6	85-87	Land Cruiser	Fel-Pro 9833PT Mahle N/A	New N/A Min N/A	HSTO40 HSTO40
4.5ℓ (1FZFE) L6	93-97	Land Cruiser (DOHC 24V)	Fel-Pro 26582PT Mahle 54466	New 5.312-5.314" Min N/A	HSTO45
4.6ℓ (3URFE) V8	10-17	Sequoia(10-12) Tundra(10-17) (DOHC)	Fel-Pro 26394, 26393PT Mahle 54776, 54777	New 4.645-4.646" Min N/A	HSTO57L HSTO57R
4.7ℓ (2UZFE) V8	98-09	4-Runner, Land Cruiser, Sequoia, Tundra (DOHC 32V)	Fel-Pro 26226PT, 26227, 26298/9 Mahle 54389, 54390, 54538/7	New 4.880" Min N/A	HSTO47L HSTO47R
5.7ℓ (3URFE) V8	08-20	Land Cruiser, Sequoia, Tundra (DOHC)	Fel-Pro 26394, 26393PT Mahle 54776, 54777	New 4.645-4.646" Min N/A	HSTO57L HSTO57R

TRIUMPH

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.5ℓ 4 Cyl.	73-80	Spitfire ADM, ADS, FM (OHV)	Fel-Pro 21190 B PT Mahle N/A	N/A	HSTR15

VOLKSWAGEN

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.5ℓ (CK) 4 Cyl.	78-80	Rabbit, Scirocco	Fel-Pro 21200-PT1 Mahle 3609	New 5.215" Min N/A	HSVK16
1.6ℓ (AL) 4 Cyl.	76-80	Rabbit, Jetta, Scirocco	Fel-Pro 21200-PT1 Mahle 3609	New 5.215" Min N/A	HSVK16

INNOVATIVE MACHINE & SUPPLY - 636 600 1171

VOLKSWAGEN (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.6ℓ (ME) 4 Cyl.	86-92	Golf, Jetta, Diesel (16V) SOHC	Fel-Pro 9437B-1 9438B-1 Mahle 5904	New 5.238" Min 5.220"	HSVK16-D
1.6ℓ (ME) 4 Cyl.	81-86	Golf, Jetta, Rabbit, Diesel (16V) SOHC	Fel-Pro 8841,8844, 8845PT Mahle 3730, 3766	New 5.238" Min 5.220"	HSVK16-D2
1.7ℓ (CA) 4 Cyl.	81-84	Rabbit, Jetta, Scirocco, Quantum	Fel-Pro 21200-PT1 Mahle 3609	New 5.215" Min N/A	HSVK16
1.8ℓ (Various) 4 Cyl.	83-98	Rabbit, Jetta, Cabriolet, Scirocco, Golf, Quantum, Fox, Passat (SOHC & DOHC) (Water Cooled)	Fel-Pro 9090PT Mahle 3758	New 5.238" Min 5.215"	HSVK18
1.8ℓ (AEB) 4 Cyl.	98-06	Passat, Golf, Jetta, New Beetle (20V DOHC) (Turbo included)	Fel-Pro 26182PT Mahle 54397	New 5.493" Min 5.480"	HSVK18A
1.8ℓ 4 Cyl.	13-21	Jetta – Turbo (Elring Klinger Gasket)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSVK18D
1.9ℓ (AAZ) 4 Cyl.	96-06	Golf, Jetta, Beetle (SOHC Turbo) Diesel	Fel-Pro 26143, 26445,26446PT Mahle 54543	New N/A Min N/A	HSVK19D
1.9ℓ (AHU) 4 Cyl.	96-98	Golf, Jetta, Beetle (SOHC Turbo) Diesel	Fel-Pro 26444PT Mahle 54435	New N/A Min N/A	HSVK19AD
2.0ℓ (AAZ) 4 Cyl.	01-04	Beetle, Golf, Jetta (SOHC Turbo) Diesel	Fel-Pro 26143PT Mahle 54543	New N/A Min N/A	HSVK19D
2.0ℓ 4 Cyl.	90-94	Golf, Jetta, Passat (DOHC) (Water Cooled)	Fel-Pro 9570PT Mahle 5872	New 4.660" Min 4.650"	HSVK20
2.0ℓ (ABA) 4 Cyl.	93-02	Golf, Jetta, Passat, Cabrio (SOHC)	Fel-Pro 26164PT Mahle 54330	New 5.231" Min 5.221"	HSVK20A
2.0ℓ (AEG) 4 Cyl.	98-15	New Beetle (98-05), Golf(99-06), Jetta (99-15)	Fel-Pro 26161PT Mahle 54381	New 5.242" Min 5.220"	HSVK20B
2.0ℓ (BPY) 4 Cyl.	06-13	Eos, GTI, Jetta, Passat (Belt driven)	Fel-Pro 26318PT Mahle 54601	New N/A Min N/A	HSVK20C

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VOLKSWAGEN (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.0ℓ (BPY) 4 Cyl.	08-18	Beetle, Eos, GTI, Jetta, Passat Tiguan (Chain driven)	Fel-Pro 26455PT Mahle 54738 Beck/Arnley 035-2117	New N/A Min N/A	HSVK20D
2.1ℓ (KM/WE) 5 Cyl.	84	Quantum	Fel-Pro N/A Mahle N/A	New 5.236" Min 5.226"	HSVK22
2.2ℓ (KX/JT) 5 Cyl.	85-88	Quantum	Fel-Pro 9282B Mahle N/A	New 5.236" Min 5.226"	HSVK22A
2.4ℓ (AJA/AAB) 5 Cyl.	97-03	Transporter (Diesel) (SOHC)	Fel-Pro N/A Mahle N/A	New N/A Min N/A	HSVK24D
2.5ℓ (AAF) 5 Cyl.	90-00	Eurovan/Transporter	Fel-Pro N/A Mahle N/A	New 5.230" Min 5.220"	HSVK25
2.5ℓ (BGP/BGQ) 5 Cyl.	05-14	Beetle, Golf, Rabbit, Jetta (DOHC)	Fel-Pro 26388PT Mahle 54698	New 4.494" Min N/A	HSVK25A
2.8ℓ (AAA) 6 Cyl.	92-02	Corrado, Golf, Passat, Jetta (VR6) (12V)	Fel-Pro 26140PT Mahle 54343	New 5.492-5.515" Min 5.492"	HSVK28
2.8ℓ (AXK) 6 Cyl.	01-05	Eurovan, Golf, Jetta (VR6) (24V)	Fel-Pro 26142PT Mahle	New 5.492-5.515" Min 5.492"	HSVK28A
2.8ℓ (AHA) V6	98-05	Passat (30V DOHC)	Fel-Pro 26328PT Mahle 54624	New 5.495" Min 5.482"	HSAU28A (2)
3.2ℓ (195) 6 Cyl.	04-08	Golf R32, Touareg	Fel-Pro 26648PT Mahle 54629	New 5.513" Min 5.507"	HSVK32
3.6ℓ (220) V6	11-14	Routan (DOHC 24V)	Fel-Pro 26542PT, 26541PT Mahle 54880, 54879	New N/A Min N/A	HSCH36L HSCH36R
4.0ℓ (241) V6	09-10	Routan (SOHC 24V) (Vin G)	Fel-Pro 26208 26209PT Mahle 54371,54372	New 4.7392-4.749" Min 4.7312"	HSCH35A (2)

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VOLVO

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
1.9ℓ (B4204) 4 Cyl.	01-04	S40, V40	Fel-Pro 26641PT Mahle 54551	New 5.077-5.081" Min 5.0652"	HSVO20B
2.0ℓ (B20) 4 Cyl.	69-74	142, 144, 145, 1800	Fel-Pro HS21176B Mahle 54976	New 3.413" Min N/A	HSVO20
2.3ℓ (B23) 4 Cyl.	81-95	240, 740, 940, 240 Turbo, 740 Turbo, 940 Turbo	Fel-Pro 8190PT Mahle 5727	New 5.753" Min 5.732"	HSVO23
2.3ℓ (B23) 5 Cyl.	94-99	C70, S70, V70, 850 (DOHC)	Fel-Pro 26203, 26204PT Mahle 54567	New 5.076-5.080" Min 5.067"	HSVO24A
2.3ℓ (BT) 5 Cyl.	94-04	850, S60, C70, S70, V70 Turbo	Fel-Pro 26204, 26205PT Mahle 54567, 54552	New 5.076-5.080" Min 5.065"	HSVO23A
2.4ℓ (B5244T) 5 Cyl.	98-09	S60, C70, S70, V70 Turbo	Fel-Pro 26204, 26205PT Mahle 54567, 54552, 54554	New 5.076-5.080" Min 5.065"	HSVO23A
2.4ℓ (B5244S) 5 Cyl.	93-07	850, S40, S60, S70, V70, C70 (10V) (DOHC)	Fel-Pro 26203,26204 26256PT Mahle 54567, 54552, 54570	New 5.076-5.080" Min 5.067"	HSVO24A
2.5ℓ (B5254T) 5 Cyl.	04-06	V70, S80 Turbo	Fel-Pro 26205PT Mahle 54552	New 5.076-5.080" Min 5.065"	HSVO23A
2.5ℓ (B5245T) 5 Cyl.	01-09	S60, V70, XC70, XC90 (10V) (DOHC)	Fel-Pro 26256PT Mahle 54552	New 5.076-5.080" Min 5.067"	HSVO24A
2.5ℓ (B5254T2) 5 Cyl.	05-16	C30, C70, S40, S60, V50, V60, XC60, XC70 (DOHC)	Fel-Pro 26526PT Mahle 54549	New 5.076-5.080" Min 5.065"	HSVO24B
2.5ℓ (B5254T3) 5 Cyl.	05-11	C30, C70, S40, V50 (DOHC)	Fel-Pro 26640PT Mahle 54547	New 5.076-5.080" Min 5.065"	HSVO25
2.5ℓ (B5254T2) 5 Cyl.	03-09	S60, V70, XC70, XC90 (DOHC)	Fel-Pro 26256PT Mahle 54548	New 5.076-5.080" Min 5.065"	HSVO25A
2.8ℓ (B6284) 6 Cyl.	00-01	S80	Fel-Pro 26577PT Mahle 54555	New 5.076-5.080" Min 5.066"	HSVO28

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VOLVO (con't)

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
2.9ℓ (B6294T) 6 Cyl.	00-05	S80, XC90	Fel-Pro 26574, 26576PT Mahle 54550, 54553	New 5.077-5.081" Min 5.065"	HSVO29
2.9ℓ (B6304) 6 Cyl.	92-99	S80, 960, S90, V90 (DOHC)	Fel-Pro 26578PT Mahle 54568	New 5.076-5.080" Min 5.064"	HSVO30
3.2ℓ (B6324S) 6 Cyl.	07-15	S80, V70, XC70, XC90	Fel-Pro 26602PT Mahle 54645	New 5.875-5.887" Min N/A	HSVO32

WAUKESHA *(copper gaskets available for all listings)*

Engine	Year	Applications	Interchange Nos.	Head Thickness	Shim No.
3.2ℓ (194) 6 Cyl.		Industrial 185GA Gas & Diesel	Fel-Pro 7411B Mahle	New Min	HSWAU216
3.5ℓ (216) 6 Cyl.		Industrial 185GL Gas & Diesel	Fel-Pro 7411B Mahle	New Min	HSWAU216
3.8ℓ (231) 6 Cyl.		Tractor Oliver 88 Gas & Diesel	Fel-Pro 7641B Mahle	New Min	HSWAU231
3.8ℓ (232) 6 Cyl.		Industrial VR232 Gas & Diesel Tractor Oliver 1550	Fel-Pro 7411B Mahle	New Min	HSWAU216
4.3ℓ (265) 6 Cyl.		Industrial 190GL Tractor Oliver 88	Fel-Pro 7641B Mahle	New Min	HSWAU231
5.0ℓ (302) 6 Cyl.		Industrial 195GL	Fel-Pro 7856S Mahle	New Min	HSWAU320
5.1ℓ (310) 6 Cyl.		Industrial VRG310	Fel-Pro 8071B Mahle	New Min	HSWAU310
5.2ℓ (320) 6 Cyl.		Industrial 195GK	Fel-Pro 7856S Mahle	New Min	HSWAU320

PERFORMANCE

Engine	Matches	Applications	Notes	Shim No.
Buick V6 Small Block	<i>Fel Pro</i> 1000	Buick Performance 1000 (196, 231, 252)		HSGM1000
Chevrolet V8 Small Block	<i>Fel Pro</i> 1003	262, 265, 283, 302, 307, 327, 350, 400 & Race Eng	No steam holes Race engine up to 4.155" bore. Gasket bore – 4.166"	HSGM1003
Chevrolet V8 Small Block	<i>Fel Pro</i> 1004	262, 265, 283, 302, 307, 327, 350, 400 & Race Eng	No steam holes Gasket bore – 4.190"	HSGM1004
Chevrolet V8 Small Block	<i>Fel Pro</i> 1034	262, 265, 283, 302, 307, 327, 350, 400 & Race Eng	No steam holes Gasket bore – 4.200"	HSGM1034
Chevrolet V8 Small Block	<i>Fel Pro</i> 1044	262, 265, 283, 302, 307, 327, 350, 400 & Race Eng	Steam holes included Gasket bore – 4.200"	HSGM1044
Chevrolet V8 Big Block	<i>Fel Pro</i> 1017	396, 402, 427, 454 (1965- 84), 454 GEN (Mark) IV	End coolant holes both open Lower coolant holes all open Gasket bore – 4.540"	HSGM1017
Chevrolet V8 Big Block	<i>Fel Pro</i> 1093	396, 402, 427, 454 (1965- 84), 454 GEN (Mark) IV	End coolant holes both open Lower coolant holes all open Round bore. (For Pro Stock) Gasket bore – 4.620"	HSGM1093
Chrysler V8	<i>Fel Pro</i> 1008	273, 318, 340, 360	Gasket bore – 4.180"	HSCH1008
Chrysler V8	<i>Fel Pro</i> 1009	361, 383, 400, 413, 426, 440	Gasket bore – 4.410"	HSCH1009
Chrysler V8	<i>Fel Pro</i> 1039	Chrysler Wedge, Hemi	Large bore & modifications required to fit Hemi. Gasket bore – 4.590"	HSCH1039
Ford 4 Cyl.	<i>Fel Pro</i> 1035	2.3 Liter (Inline Design)	Gasket bore – 3.930"	HSFO1035
Ford V6	<i>Fel Pro</i> 1024	240, 300 (Inline Design)	Gasket bore – 4.180"	HSFO1024
Ford V8	<i>Fel Pro</i> 1021	302 "Boss", 302 SVO, 351W	Not with large overbore Gasket bore – 4.100"	HSFO1021
Ford V8	<i>Fel Pro</i> 1046	302 SVO, 351W	Gasket bore – 4.200"	HSFO1046
Ford V8	<i>Fel Pro</i> 1020	390, 406, 427, 428 CJ, 428 SCJ	Gasket bore – 4.400"	HSFO1020
Pontiac V8 Big Block	<i>Fel Pro</i> 1016	389, 400, 421, 428, 455	Gasket bore – 4.300"	HSGM1016

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