

DISP	#CYL	STR-Y	END-Y	APPLICATION	EPW #	E-Direct #
Acura						
98-1.6L	DOHC4	1986	1989	D16A1	ACU1590	
107-1.8L	DOHC4	1994	2001	B18C1, B18C5	ACU1797	
112-1.9L	DOHC4	1990	2001	B18A1, B18B1	ACU1834	
122-2.0L	DOHC4	2002	2006	K20A3	ACU1998	
122-2.0L	DOHC4	2002	2006	K20A2/K20Z1	ACU1998S	
171-2.7L	V-6	1987	1990	C27A1	ACU2675	
183-3.0L	V-6	1997	2002	J30A1	ACU2997	
212-3.5L	V-6	2001	2002	J35A3	ACU3471	
212-3.5L	V-6	2003	2006	J35A5	ACU3471L	
212-3.5L	V-6	2005	2008	J35A8	ACU3471LL	
212-3.5L	V-6	1996	2004	C35A1	ACU3475	
American Motors						
150-2.5L	OHV-4	1983	1990	2.5L	AM150	EAM150
150-2.5L	OHV-4	1991	1995	2.5L	AM150L	EAM150L
150-2.5L	OHV-4	1996	2002	2.5L	AM150LL	EAM150LL
151-2.5L	OHV-4	1980	1983	2.5L	AM151	
173-2.8L	V-6	1980	1984	2.8L	CH173	ECH173
173-2.8L	V-6	1985	1986	2.8L	CH173L	ECH173L
232-3.8L	L-6	1964	1979	3.8L	AM232	
242-4.0L	OHV-6	1987	1995	4.0L	AM242	EAM242
242-4.0L	OHV-6	1996	1998	4.0L	AM242L	EAM242L
242-4.0L	OHV-6	1999	2002	4.0L	AM242LL	EAM242LL
258-4.2L	L-6	1971	1990	4.2L	AM258	EAM258
304-5.0L	V-8	1970	1981	5.0L	AM304	
360-5.9L	V-8	1970	1991	5.9L	AM360	EAM360
401-CID	V-8	1971	1978	6.6L	AM401	
Audi						
98-1.6L	L-4	1976	1980	EJ	VW1588	
98-1.6L	L-4	1981	1987	DIESEL CR,JK	VW1588D	
107-1.8L	L-4	1983	1993	JN, MG	VW1780	
Buick						
112-1.8L	OHV-4	1982	1982	1.8L Pass Vin 'G'	CH112	
133-2.2L	OHV-4	1990	1993	2.2L	CH133	
133-2.2L	OHV-4	1994	1997	2.2L	CH133L	ECH133L
133-2.2L	OHV-4	1998	2003	2.2L Vin 4, 5	CH133LL	ECH133LL

DISP	#CYL	STR-Y	END-Y	APPLICATION	EPW #	E-Direct #
138-2.3L	DOHC4	1989	1995	2.3L QUAD 4 Vin 'A' & 'D'	OL138	
138-2.3L	OHC-4	1992	1994	2.3L SOHC Vin '3'	OL138S	
146-2.4L	DOHC4	1996	1999	2.4L DOHC Quad 4	OL146	EOL146
151-2.5L	OHV-4	1977	1984	2.5L w/o Roller Cam	PT151	
151-2.5L	OHV-4	1985	1991	2.5L Vin'2','R',& 'U' w/Roller Cam	PT151L	EPT151L
173-2.8L	V-6	1980	1984	2.8L	CH173	ECH173
173-2.8L	V-6	1985	1986	2.8L	CH173L	ECH173L
173-2.8L	V-6	1987	1993	2.8L	CH173LL	ECH173LL
173-2.8L	V-6	1987	1989	2.8L	CH173LW	
181-3.0L	V-6	1985	1988	3.0L Vin 'L'	BU181L	
189-3.1L	V-6	1988	1994	3.1L exc Vin 'M'	CH189	
189-3.1L	V-6	1994	1999	3.1L Vin 'M'	CH189M	ECH189M
189-3.1L	V-6	1999	2005	3.1L Vin 'J'	CH189L	
204-3.3L	V-6	1989	1993	3.3L Vin 'N'	BU204	
225-CID	V-6	1964	1967	3.7L	BU225	
231-3.8L	V-6	1975	1977	3.8L	BU231O	
231-3.8L	V-6	1977	1985	3.8L exc Turbo	BU231E	EBU231E
231-3.8L	V-6	1979	1987	3.8L Vin '7' & '9' w/Turbo	BU231ET	
231-3.8L	V-6	1986	1988	3.8L exc Turbo	BU231EL	
231-3.8L	V-6	1986	1988	3.8L Vin '3'	BU231ERL	
231-3.8L	V-6	1988	1995	3.8L Vin 'C' & Vin 'L'	BU231ECL	
231-3.8L	V-6	1995	1997	3.8L 3800 Vin 'K'	BU231EKL	EBU231EKL
231-3.8L	V-6	1997	2009	3.8L 3800 Vin 'K'	BU231EKLL	EBU231EKLL
231-3.8L	V-6	1991	2005	Vin '1' w/S.Charger	BU231SC	EBU231SC
250-4.1L	L-6	1966	1984	4.1L	CH250	ECH250
252-4.1L	V-6	1980	1984	4.1L	BU252	
260-4.3L	V-8	1975	1982	4.3L Passenger Car except Diesel	OL260	
267-4.4L	V-8	1979	1982	4.4L	CH267	ECH267
301-4.9L	V-8	1977	1981	4.9L except Turbo	PT301	
305-5.0L	V-8	1976	1986	5.0L exc Vin 'G' H/O	CH305	ECH305
307-5.0L	V-8	1980	1984	OLDSMOBILE ENG	OL307	
307-5.0L	V-8	1985	1990	OLDSMOBILE ENG	OL307L	
325-5.3L	V-8	2005	2009	5.3L LS4 Vin C	CH325LL	
350-5.7L	V-8	1968	1981	5.7L	BU350	
350-5.7L	V-8	1967	1986	5.7L	CH350	ECH350
350-5.7L	V-8	1968	1980	5.7L except Diesel & High Performance	OL350	

DISP	#CYL	STR-Y	END-Y	APPLICATION	EPW #	E-Direct #
403-6.6L	V-8	1977	1979	6.6L not Included: Intake Manifold Gasket	OL403	
401-CID	V-8	1959	1966	6.6L	BU401	
430-CID	V-8	1967	1969	7.0L	BU430	
455-7.5L	V-8	1970	1976	7.5L	BU455	
Cadillac						
112-1.8L	OHV-4	1982	1982	1.8L Pass Vin 'G'	CH112	
173-2.8L	V-6	1987	1989	2.8L	CH173LW	
244-4.0L	V-6	1995	1999	4.0L DOHC Northstar	OL244	
252-4.1L	V-6	1980	1984	4.1L	BU252	
252-4.1L	V-8	1982	1987	4.1L	CA252	
273-4.5L	V-8	1988	1992	4.5L	CA273	
281-4.6L	V-8	1993	1999	4.6L	CA281	ECA281
281-4.6L	V-8	2000	2005	4.6L Vin 'A','Y','9'	CA281L	ECA281L
281-4.6L	V-8	2006	2010	4.6L DOHC Northstar SRX, STS, XLR Vin 'A'	CA281LL	
298-4.9L	V-8	1991	1995	4.9L Vin 'B'	CA298	
307-5.0L	V-8	1985	1990	OLDSMOBILE ENG	OL307L	
350-5.7L	V-8	1968	1980	5.7L except Diesel & High Performance	OL350	
425-7.0L	V-8	1977	1979	7.0L	CA425	
472-7.7L	V-8	1968	1974	7.7L	CA472	
500-8.2L	V-8	1974	1976	8.2L	CA500	
Chevrolet						
61-1.0L	OHC-3	1985	2000	1.0L	CH61	ECH61
84-1.4L	DOHC4	2011	2016	1.4L LUJ/LUV Turbo Cruze & Sonic	CH1364T	
92-1.5L	L-4	1985	1989	4XC1	CH92	
98-1.6L	L-4	1985	1988	1.6L	CH98	
98-1.6L	DOHC4	2004	2008	1.6L L91 E-Tec II	CH98L	
112-1.8L	OHC-4	1976	1981	1.8L Luv Pickup	CH110L	
112-1.8L	OHV-4	1982	1982	1.8L Pass Vin 'G'	CH112	
112-1.8L	DOHC4	2011	2016	1.8L LUW/LWE Cruze & Sonic	CH1796	
119-1.9L	OHC-4	1982	1985	1.9L	CH119	
133-2.2L	OHV-4	1990	1993	2.2L	CH133	
133-2.2L	OHV-4	1994	1997	2.2L	CH133L	ECH133L
133-2.2L	OHV-4	1998	2003	2.2L Vin 4, 5	CH133LL	ECH133LL
133-2.2L	DOHC4	2000	2008	2.2L	CH133LD	
138-2.3L	DOHC4	1989	1995	2.3L QUAD 4 Vin 'A' & 'D'	OL138	
151-2.5L	OHV-4	1977	1984	2.5L Passenger & Truck w/o Roller Cam	PT151	

DISP	#CYL	STR-Y	END-Y	APPLICATION	EPW #	E-Direct #
151-2.5L	OHV-4	1985	1991	2.5L Pass & Truck Vin'2','R',& 'U' w/Roller Cam	PT151L	EPT151L
153-CID	OHV-4	1962	1970	2.5L	CH153	
169-2.7L	DOHC4	2004	2006	2.7L LK5	CH169T	
173-2.8L	V-6	1980	1984	2.8L	CH173	ECH173
173-2.8L	V-6	1985	1986	2.8L	CH173L	ECH173L
173-2.8L	V-6	1987	1993	2.8L	CH173LL	ECH173LL
173-2.8L	V-6	1987	1989	2.8L	CH173LW	
189-3.1L	V-6	1988	1994	3.1L exc Vin 'M'	CH189	
189-3.1L	V-6	1994	1999	3.1L Vin 'M'	CH189M	ECH189M
189-3.1L	V-6	1999	2005	3.1L Vin 'J'	CH189L	
200-3.3L	V-6	1978	1979	3.3L	CH200	
207-3.4L	V-6	1993	1995	3.4L Vin 'S'	CH207	
207-3.4L	V-6	1991	1995	3.4L Vin 'X'	CH207L	
207-3.4L	V-6	1996	1997	3.4L Vin 'X'	CH207LL	
207-3.4L	V-6	1996	2005	3.4L Vin 'E'	CH207T	ECH207T
211-3.5L	DOHC5	2004	2005	3.5L	CH211	
214-3.5L	V-6	2006	2008	3.5L Vin K, N	CH214	
217-3.6L	V-6	2004	2012	3.6L Vin 7	CH217E	
217-3.6L	V-6	2009	2014	3.6L Vin V	CH217	
223-3.7L	DOHC5	2007	2012	3.7L	CH223	
229-3.8L	V-6	1980	1984	3.8L	CH229	
230 CID	L-6	1963	1970	3.8L	CH230	
231-3.8L	V-6	1977	1985	3.8L exc Turbo	BU231E	EBU231E
231-3.8L	V-6	1986	1988	3.8L exc Turbo	BU231EL	
231-3.8L	V-6	1979	1987	3.8L Vin '7' & '9' w/Turbo	BU231ET	
231-3.8L	V-6	1986	1988	3.8L Vin '3'	BU231ERL	
231-3.8L	V-6	1988	1995	3.8L Vin 'C' & Vin 'L'	BU231ECL	
231-3.8L	V-6	1995	1997	3.8L 3800 Vin 'K'	BU231EKL	EBU231EKL
235-3.9L	L-6	1948	1953	3.9L	CH235	
235-3.9L	L-6	1954	1962	3.9L	CH235L	ECH235L
250-4.1L	L-6	1966	1984	4.1L	CH250	ECH250
256-4.2L	L-6	2002	2005	4.2L Vin 'S'	CH256	ECH256
256-4.2L	L-6	2006	2009	4.2L Vin 'S'	CH256L	
262-4.3L	V-6	1985	1986	4.3L	CH262	
262-4.3L	V-6	1987	1990	4.3L	CH262L	ECH262L
262-4.3L	V-6	1990	1992	4.3L Vin 'B','Z'	CH262LT	ECH262LT

DISP	#CYL	STR-Y	END-Y	APPLICATION	EPW #	E-Direct #
262-4.3L	V-6	1993	1995	4.3L Vin 'Z'	CH262LZ	ECH262LZ
262-4.3L	V-6	1992	1995	4.3L Vin 'W'	CH262LLW	ECH262LLW
262-4.3L	V-6	1996	2007	4.3L Vin 'W', 'X'	CH262LX	ECH262LX
265-CID	V-8	1955	1957	4.3L	CH265	ECH265
265-4.3L	V-8	1994	1996	4.3L Vin 'W'	CH265L	
267-4.4L	V-8	1979	1982	4.4L	CH267	ECH267
283-4.6L	V-8	1957	1967	4.6L	CH283	ECH283
292-4.8L	L-6	1963	1984	4.8L	CH292	
292-4.8L	L-6	1985	1989	4.8L	CH292L	
293-4.8L	V-8	1999	2004	4.8L Vin 'V'	CH293	ECH293
293-4.8L	V-8	2005	2009	4.8L Vin 'V'	CH293L	
305-5.0L	V-8	1976	1986	5.0L exc Vin 'G' H/O	CH305	ECH305
305-5.0L	V-8	1982	1986	5.0L High Output	CH305HO	
305-5.0L	V-8	1987	1995	5.0L	CH305T	ECH305T
305-5.0L	V-8	1987	1993	5.0L w/Roller Cam	CH305LR	
305-5.0L	V-8	1996	2002	5.0L Vin 'M'	CH305M	ECH305M
307-5.0L	V-8	1968	1973	5.0L	CH307	
307-5.0L	V-8	1985	1990	5.0L Olds Engine Vin 'Y'	OL307L	
325-5.3L	V-8	1999	2003	5.3L Vin 'T', 'Z'	CH325	ECH325
325-5.3L	V-8	2004	2009	5.3L Vin 'T', 'Z'	CH325L	
325-5.3L	V-8	2005	2009	5.3L LS4 Vin C	CH325LL	
325-5.3L	V-8	2007	2013	5.3L Vin 'O','3','J','M' w/Active Fuel Mgmt	CH325AF	
327-5.4L	V-8	1962	1969	5.4L	CH327	ECH327
327-5.4L	V-8	1962	1968	5.4L Truck	CH327T	
346-5.7L	V-8	1997	2004	5.7L Vortec V-8	CH346	ECH346
350-5.7L	V-8	1967	1986	5.7L	CH350	ECH350
350-5.7L	V-8	1968	1980	5.7L except Diesel & High Performance	OL350	
350-5.7L	V-8	1968	1986	5.7L 40,50,60 Series Truck	CH350T	ECH350T
350-5.7L	V-8	1987	1993	5.7L	CH350L	ECH350L
350-5.7L	V-8	1990	1992	5.7L Vin '7' Police	CH350LL	ECH350LL
350-5.7L	V-8	1987	1995	5.7L LD Trk Vin 'K' with EFI	CH350LT	ECH350LT
350-5.7L	V-8	1992	1997	5.7L LT1 Vin 'P'	CH350LP	ECH350LP
350-5.7L	V-8	1996	2002	5.7L Trk Vin 'R'	CH350TL	ECH350TL
364-6.0L	V-8	1999	2003	6.0L Truck	CH364	ECH364
364-6.0L	V-8	2004	2008	6.0L Truck Vin 'N','U'	CH364L	ECH364L
364-6.0L	V-8	2005	2007	6.0L Pass Vin 'U'	CH364LL	

DISP	#CYL	STR-Y	END-Y	APPLICATION	EPW #	E-Direct #
364-6.0L	V-8	2005	2008	6.0L Truck Vin 'H'	CH364LH	
364-6.0L	V-8	2007	2009	6.0L Vortec V-8 Truck Vin 'Y' w/Active Fuel Mgmt	CH364AF	
366-6.0L	V-8	1966	1985	6.0L Truck exc LPG & Gear Drive	CH366	
366-6.0L	V-8	1986	1990	6.0L Truck w/o Gear Drive	CH366L	
366-6.0L	V-8	1991	1998	6.0L Truck	CH366LL	
376-6.2L	V-8	2007	2008	6.2L L92 w/AFM	CH376E	
376-6.2L	V-8	2008	2010	6.2L Pass Vin 'W' LS3	CH376	
376-6.2L	V-8	2010	2013	6.2L L92 Vin 2 Truck	CH376T	
381-6.2L	V-8	1982	1993	6.2L Chevy/GMC Diesel Trucks	CH378	
395-6.5L	V-8	1992	2005	6.5L Diesel Truck	CH395	ECH395
396-6.5L	V-8	1965	1969	6.5L	CH396	ECH396
400-6.6L	V-8	1970	1976	6.6L	CH400SB	ECH400SB
402-6.6L	V-8	1970	1972	6.6L	CH402	ECH402
403-6.6L	V-8	2001	2007	6.6L Duramax Diesel	CH403T	ECH403T
427-7.0L	V-8	1966	1969	7.0L Pass	CH427	ECH427
427-7.0L	V-8	1969	1990	7.0L Truck	CH427T	
427-7.0L	V-8	1991	1998	7.0L Truck	CH427TL	ECH427TL
454-7.4L	V-8	1971	1990	7.4L Pass & Truck	CH454	ECH454
454-7.4L	V-8	1991	1994	7.4L Lt Truck	CH454LT	ECH454LT
454-7.4L	V-8	1995	1997	7.4L Vin 'N'	CH454LLT	ECH454LLT
454-7.4L	V-8	1996	2001	7.4L Truck Vin 'J'	CH454LRT	ECH454LRT
496-8.1L	V-8	2001	2004	8.1L Trk Vin 'G'	CH496T	ECH496T
496-8.1L	V-8	2005	2007	8.1L Trk Vin 'G'	CH496TL	ECH496TL
Chrysler						
89-1.5L	OHC-4	1985	1990	1.5L Colt,Eagle,Premier,Summit G15B,4G15,Q	CR1468	
89-1.5L	OHC-4	1991	1994	1.5L SOHC 12 valve G15B,4G15,Q	CR1468L	
98-1.6L	DOHC4	1991	1995	1.6L DOHC 16V non-Turbo Mits Mirage & Hyundai	CR1595	
107-1.7L	OHC-4	1989	1994	1.7L 4G37 SOHC 8-Valve Laser & Eclipse	CR1755	
110-1.8L	OHC-4	1983	1988	1.8L G62B Passenger Car w/Turbo	CR1795T	
112-1.8L	OHC-4	1992	2002	4G93 1.8L 16 Valve SOHC 4 cyl used in Colt Vista,	CR1834	
121-2.0L	OHC-4	1995	2004	Dodge Neon 2.0L SOHC 16-V	CR1996	
121-2.0L	OHC-4	1995	2000	Dodge Neon & Mitsubishi Eclipse 420A 2.0L DOHC 16V	CR1996L	ECR1996L
121-2.0L	OHC-4	1983	1988	2.0L Ram 50, Colt Vista, 'A' G63B Engine	CR1997A	
121-2.0L	OHC-4	1989	1992	4G63, G63B 2.0L SOHC 8V Colt Vista & Gallant	CR1997AL	
121-2.0L	OHC-4	1990	1992	4G63 2.0L DOHC 16V	CR1997L	
121-2.0L	OHC-4	1993	1994	2.0L DOHC 16-Valve 4G63 Laser & Eclipse	CR1997LL	

DISP	#CYL	STR-Y	END-Y	APPLICATION	EPW #	E-Direct #
121-2.0L	OHC-4	1989	1998	4G63 16V 2.0L DOHC Turbo	CR1997LT	
121-2.0L	DOHC4	2003	2006	4G63 16V 2.0L DOHC Turbo	CR1997LLT	
121-2.0L	OHC-4	2002	2006	4G94	CR1999	
121-2.0L	DOHC4	2007	2009	Vin 'A','B'	CR1999L	
135-2.2L	OHC-4	1981	1992	2.2L Passenger Car except Turbo	CR2200	
135-2.2L	OHC-4	1986	1987	2.2L Pass w/Turbo w/o Intercooler	CR2200T	
143-2.4L	OHC-4	1989	1995	2.4L SOHC 8 Valve Mitsubishi Van & Pickup	CR2350	
143-2.4L	OHC-4	1993	2005	4G64 2.4L SOHC 16V Eclipse, Expo, Galant, Montero	CR2350L	
144-2.4L	DOHC4	2007	2010	4B12	CR2359	
148-2.4L	L-4	1995	2000	Stratus / Breeze 2.4 litre 2.4L 16V DOHC	CR2429	ECR2429
148-2.4L	L-4	2001	2007	2.4L 16V DOHC4 EDZ PT Cruiser, Caravan, Voyager	CR2429L	ECR2429L
148-2.4L	DOHC4	2003	2009	EDV/EDT Turbo	CR2429LT	
152-2.5L	V-6	1995	2000	6G73 SOHC 2.5L 24V V-6	CR2497	
150-2.5L	OHV-4	1991	1995	2.5L	AM150L	EAM150L
150-2.5L	OHV-4	1996	2002	2.5L AMC and Dodge Dakota	AM150LL	EAM150LL
153-2.5L	OHC-4	1986	1995	2.5 L Pass.& Truck non-Turbo w/o Roller Lifters	CR2500	
153-2.5L	OHC-4	1989	1995	2.5L Pass. Car & Truck w/Roller Followers	CR2500L	
153-2.5L	OHC-4	1989	1992	2.5L Turbo Daytona, Spirit, Shadow, Sundance	CR2500TL	
156-2.6L	OHC-4	1978	1983	2.6L Passenger Car & Truck F,W	CR2600	
156-2.6L	OHC-4	1983	1989	2.6L Passenger Car & Truck F,W exc Turbo	CR2600L	
156-2.6L	OHC-4	1984	1989	2.6L Turbo	CR2600T	
164-2.7L	L-5	2003	2005	2.7L Sprinter	CR164T	
167-2.7L	V-6	1998	2008	2.7 DOHC Vin 'R'	CR167	ECR167
167-2.7L	V-6	2009	2010	2.7 DOHC Vin 'D'	CR167L	ECR167L
170-2.8L	OHV-6	1960	1969	2.8L Passenger Car & Truck	CR170	
183-3.0L	V-6	1987	1996	3.0L Passenger Car & Truck	CR183	ECR183
183-3.0L	V-6	1994	2000	SOHC 6G72 3.0L 12V FWD Caravan & Voyager	CR183F	
183-3.0L	V-6	1992	1996	Diamante 12 valve 3.0L SOHC	CR183L	
183-3.0L	V-6	1991	1999	3.0L DOHC 24 valve Diamante, 3000GT, Stealth	CR183LL	
183-3.0L	V-6	1995	2005	3.0L SOHC Montero, Montero Sport	CR183M	
183-3.0L	V-6	1991	1999	6G72 24V 3.0L DOHC 3000GT Turbo	CR183LT	ECR183LT
198-CID	OHV-6	1970	1974	3.2L Passenger Car & Truck	CR198	
201-3.3L	V-6	1990	1997	3.3L Passenger & Truck	CR201	
201-3.3L	V-6	1998	2007	3.3L Van vin 'G', 'R'	CR201L	
215-3.5L	V-6	1993	1997	3.5L 24 valve SOHC	CR215	
215-3.5L	V-6	1998	2004	3.5L 24 Valve Vin 'G'	CR215L	ECR215L

DISP	#CYL	STR-Y	END-Y	APPLICATION	EPW #	E-Direct #
215-3.5L	V-6	2005	2007	3.5L 24 Valve Vin 'G','M','V'	CR215LL	ECR215LL
215-3.5L	V-6	1997	2004	3.5L 6G74 Montero, Montero Sport	CR3496	
220-3.6L	V-6	2011	2013	3.6L 24v V6 Vin 'G'	CR220	
225-3.7L	L-6	1960	1987	3.7L Passenger Car & Truck	CR225	
225-3.7L	V-6	2002	2007	3.7L SOHC 12V V6 Vin K Truck	CR226	ECR226
230-CID	L-6	1937	1954	218/230 F.H. 6cyl Industrial & Marine applications	CR230	
232-3.8L	V-6	1991	1998	3.8 L V-6	CR231	ECR231
232-3.8L	V-6	1999	2008	3.8L Truck w/Hyd Roller Camshaft Vin 'L'	CR231L	ECR231L
232-3.8L	V-6	2004	2008	3.8L Grand Caravan, Town and Country	CR231LL	
232-3.8L	V-6	2009	2010	3.8L Grand Caravan, Town and Country	CR231LLL	
234-3.8L	V-6	2003	2006	6G75 24v SOHC	CR234	
239-3.9L	V-6	1987	1991	Truck 3.9L	CR238	
239-3.9L	V-6	1992	2003	3.9L	CR238L	ECR238L
287-4.7L	V-8	1999	2007	4.7L Dodge Truck, Jeep	CR287	ECR287
287-4.7L	V-8	2008	2010	Vin N w/o H/O - Ram 1500, Dakota, Durango, Grand Cherokee	CR287L	ECR287L
318-5.2L	V-8	1959	1966	5.2L Passenger Car & Truck	CR318E	
318-5.2L	V-8	1967	1990	5.2L Pass. Car & LD Truck exc. Premium LA engine	CR318	ECR318
318-5.2L	V-8	1985	1989	5.2L Passenger	CR318L	
318-5.2L	V-8	1990	2003	5.2L 'Magnum' Truck Engine	CR318LL	ECR318LL
340-CID	V-8	1968	1973	5.6L Passenger Car except 3-2bl carbs	CR340	ECR340
345-5.7L	V-8	2003	2006	5.7 Hemi Vin 'D', 'H' Passenger & Truck	CR345	ECR345
345-5.7L	V-8	2007	2008	5.7 Hemi Vin 'T'	CR345L	
345-5.7L	V-8	2009	2011	5.7 Hemi Vin 'T'	CR345LL	
359-5.9L	L-6	1989	1998	5.9L Cummins Diesel exc Turbo	CR359	
359-5.9L	L-6	1999	2002	5.9L 24v Cummins Diesel	CR359L	ECR359L
359-5.9L	L-6	1989	1998	5.9L 12v Cummins Turbo Diesel	CR359T	ECR359T
359-5.9L	L-6	2003	2007	5.9L 24v Turbo Diesel - Vin '6', 'C'	CR359TL	ECR359TL
360-5.9L	V-8	1971	1988	5.9L Passenger Car & Light Truck	CR360	ECR360
360-5.9L	V-8	1989	1991	5.9L Truck w/Roller Cam	CR360LT	
360-5.9L	V-8	1992	2003	5.9L Magnum Truck Engine	CR360LLT	ECR360LLT
361-CID	V-8	1959	1966	5.9L Passenger Car Engine	CR361	
361-CID	V-8	1960	1977	5.9L Truck Engine	CR361T	
370-CID	V-8	2005	2010	6.1 Hemi Vin 3, W	CR370	
383-6.3L	V-8	1959	1971	6.3L Passenger Car & Truck	CR383	ECR383
400-6.6L	V-8	1972	1978	6.6L Passenger Car except HP	CR400	
400-6.6L	V-8	1972	1980	6.6L Truck	CR400T	

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409-6.7L	V-8	2008	2010	6.7L Cummins-Dodge Turbo Diesel	CR409	
413-CID	V-8	1960	1977	6.8L Truck Only	CR413T	
440-7.2L	V-8	1966	1978	7.2L Passenger Car except HP & engine w/3-2bl carb	CR440	ECR440
440-7.2L	V-8	1972	1980	7.2L Truck Only	CR440T	
488-8.0L	V-10	1994	2003	8.0L V-10 Truck Vin 'W'	CR488	
Daewoo						
134-2.2L	DOHC4	1998	2000	2.2L X22SE DOHC	IZ2198	
134-2.2L	DOHC4	2001	2003	2.2L X22SE DOHC 4 Cyl	IZ2198L	
Ford						
80-1.3L	OHV-4	1988	1993	1.3L Festiva & Aspire Vin 'H','K'	F1324	
80-1.3L	OHV-4	1994	1997	1.3L Aspire 1324cc SOHC 8 valve	F1324L	
98-1.6	DOHC4	2011	2013	1.6L Fiesta Vin 'J'	F1596	
109-1.8L	DOHC4	1990	1998	1.8L Mazda 'BP' DOHC 16v Escort Tracer	F1839	
116-1.9L	OHC-4	1987	1990	1.9L Passenger Car & Truck	F1900L	
116-1.9L	OHC-4	1991	1996	1.9L S.E.F.I. w/Roller Camshaft	F1900LL	
116-1.9L	OHC-4	1987	1990	1.9L Passenger Car & Truck w/Roller Camshaft	F1900RL	
122-2.0L	DOHC4	1993	2003	2.0L FS DOHC 16v Probe And MX6	F1991	
122-2.0L	DOHC4	2005	2008	Duratec / MZR 16v DOHC Vin 'N'	F1999	
121-2.0L	DOHC4	1995	2004	2.0L Contour, Focus, Mystic 2.0 DOHC 16 valve	F121	EF121
121-2.0	L-4	1996	2004	2.0L Escort w/roller cam Vin 'P'	F121L	EF121L
122-2.0L	OHC-4	1971	1974	Passenger Car 2.0L Pinto & Capri	F122	
122-2.0L	OHC-4	1983	1988	2.0L Ranger except Roller Cam	F122L	
122-2.0L	DOHC4	2004	2010	2.0L 16v Duratec Focus Vin 'N'	F122LL	
133-2.2L	OHC-4	1989	1992	Probe Vin' C' , 'L'	F133	
138-2.3L	DOHC4	2001	2006	2.3L DOHC 16v Duratec 23 Ranger (Vin 'D') & Focus (Vin 'Z')	F138	EF138
138-2.3L	DOHC4	2005	2009	2.3L DOHC 16v Vin 'H'; 'Z'	F138L	
140-2.3L	OHC-4	1974	1984	Passenger Car & Truck 2.3L exc Turbo,HSC & EFI	F140	
141-2.3L	OHV-4	1984	1991	2.3L Passenger Car except HO	F140HSC	
140-2.3L	OHC-4	1985	1987	2.3L Bronco II & Ranger w/o Roller Cam	F140L	
140-2.3L	OHC-4	1979	1984	2.3L Passenger Car w/Turbo	F140T	
140-2.3L	OHC-4	1989	1994	2.3L Ranger w/Dual Plug	F140LT	
141-2.3L	OHV-4	1992	1994	92/94 Hi-swirl comb 2.3L OHV engine used in Tempo	F140LHSC	
140-2.3L	OHC-4	1995	1997	2.3L Ranger w/Dual Plug & Roller Camshaft	F140LTL	
140-2.3L	OHC-4	1985	1993	2.3L OHC Mustang & T-Bird	F140LL	
140-2.3L	OHC-4	1985	1993	2.3L OHC w/Turbo	F140LLT	
153-2.5L	V-6	1993	2002	Probe	MA2507	

DISP	#CYL	STR-Y	END-Y	APPLICATION	EPW #	E-Direct #
153-2.5L	OHV-4	1986	1990	2.5L Passenger Car w/CFI	F153HSC	
153-2.5L	OHC-4	1998	2001	2.5L SOHC-4 Ranger Vin 'C' w/ Roller Cam	F153T	
155-2.5L	V-6	1995	2001	Duratec 24v 2.5L DOHC V-6 Vin 'L'	F155	EF155
170-2.8L	OHV-6	1961	1972	2.8L Passenger Car & Truck	F170	
171-2.8L	V-6	1974	1979	PASSENGER CAR 2.8L	F171	
171-2.8L	V-6	1983	1986	Truck 2.8L	F171L	
179-2.9L	V-6	1986	1992	2.9L Ranger, Bronco II	F177	EF177
181-3.0L	V-6	1996	2000	3.0L 24 valve Duratec DOHC Taurus	F181	
181-3.0L	DOHC6	2001	2004	24v Vin '1' Escape	F181L	
182-3.0L	V-6	2002	2007	12v Vin 'U'	F182	
183-3.0L	V-6	1986	1991	3.0L Passenger Car & Truck except SHO	F183	EF183
183-3.0L	V-6	1992	2008	3.0L Aerostar/Ranger Vin 'U'	F183L	EF183L
183-3.0L	V-6	1992	2007	3.0L Taurus, Windstar	F183LL	
200-3.3L	OHV-6	1963	1983	3.3L Passenger Car & Truck	F200	EF200
223-3.6L	OHV-6	1954	1964	3.6L Passenger Car & Truck	F223	
232-3.8L	V-6	1982	1987	3.8L Passenger Car & Truck	F232	
232-3.8L	V-6	1988	1993	3.8 L MFI-Roller (exc Turbo)	F232L	EF232L
232-3.8L	V-6	1994	1995	3.8L Passenger & Truck (incl Windstar)	F232LL	
232-3.8L	V-6	1996	2004	3.8L Passenger w/RWD and Truck	F232LLL	EF232LLL
232-3.8L	V-6	1989	1995	3.8L Vin 'C' & Vin 'R' Supercharged	F232SC	
232-3.8L	V-6	2004	2007	3.9L OHV Vin 6 Freestar	F238	
239-CID	V-8	1949	1953	3.9L Passenger Car & Truck	F239L	
240-3.9L	OHV-6	1965	1974	3.9L Passenger Car & Truck	F240	
244-4.0L	V-6	1990	1993	4.0L Aerostar, Explorer, Ranger	F244	EF244
244-4.0L	V-6	1994	2001	4.0L Hyd Roller Cam	F244L	EF244L
244-4.0L	V-6	1997	2006	4.0L SOHC V-6 Explorer, Mountaineer, Ranger	F244OHC	EF244OHC
245-4.0L	V-6	2005	2009	4.0L SOHC V-6 Mustang Vin N	F245	
250-4.1L	OHV-6	1969	1980	4.1L Passenger Car	F250	
255-4.2L	V-8	1980	1982	4.2L Passenger Car & Truck	F255	
256-4.2L	V-6	1997	2004	Truck 4.2L V-6	F256	EF256
260-CID	V-8	1962	1965	4.3L Passenger Car	F260	
281-4.6L	V-8	1991	2005	4.6L SOHC Vin 'W'	F281	EF281
281-4.6L	V-8	1993	1997	4.6L DOHC Vin 'V'	F281D	EF281D
281-4.6L	V-8	1996	2002	4.6L Romeo engine Vin 'X' Mustang, Mustang GT	F281L	EF281L
281-4.6L	V-8	1997	1999	4.6L SOHC Vin 6 Truck	F281T	EF281T
281-4.6L	V-8	2000	2004	4.6L Truck SOHC Vin 6	F281TL	EF281TL

DISP	#CYL	STR-Y	END-Y	APPLICATION	EPW #	E-Direct #
281-4.6L	V-8	2006	2010	4.6L SOHC 24v Vin 'H' Mustang Bulle	F281H	
289-3.6L	V-8	1964	1968	4.7L Passenger Car & Truck	F289	EF289
292-4.8L	V-8	1957	1964	4.8L Passenger Car & Truck	F292	EF292
300-4.9L	OHV-6	1969	1984	4.9L Light Duty Truck except Canada	F300LD	EF300LD
300-4.9L	OHV-6	1985	1996	4.9L Light Duty Truck	F300LDL	EF300LDL
300-4.9L	OHV-6	1969	1984	4.9L HD Truck 80/83 over 8500# GVW	F300HD	
302-5.0L	V-8	1968	1985	5.0L Passenger Car & Truck except HP & HO	F302	EF302
302-5.0L	V-8	1983	1985	5.0L Passenger Car HO Option	F302HO	
302-5.0L	V-8	1986	1995	5.0L Passenger Car HO option	F302HOL	EF302HOL
302-5.0L	V-8	1986	1995	5.0L Passenger w/EFI & Roller Cam except HP & HO	F302L	EF302L
302-5.0L	V-8	1986	1991	5.0L Light Duty Truck exc Roller Cam	F302LT	EF302LT
302-5.0L	V-8	1992	1993	5.0L Light Duty Truck w/Roller Camshaft	F302LLT	EF302LLT
302-5.0L	V-8	1994	2001	5.0L Light Duty Truck w/Roller Camshaft	F302LLLT	EF302LLLT
302-5.0L	V-8	2011	2014	5.0L DOHC Coyote Engine Vin 'F'	F302LL	
312-5.1L	V-8	1956	1957	5.1L Passenger Car	F312	
330-5.4L	V-8	1964	1978	5.4L OHV Truck	F330	
330-5.4L	V-8	1997	2004	5.4L SOHC Truck	F330L	EF330L
330-5.4L	V-8	1999	2004	5.4L DOHC Navigator vin A,R	F330LD	
330-5.4L	V-8	2004	2009	5.4L SOHC 24v Vin '5'	F330LL	EF330LL
330-5.4L	V-8	1999	2004	5.4L Supercharged SOHC Lightning Vin '3'	F330SC	
351-5.7L	V-8	1970	1974	5.7L Passenger Car except HP	F351C	EF351C
351-5.7L	V-8	1975	1982	5.7L 75/79 Passenger Car, 75/82 Truck	F351M	EF351M
351-5.7L	V-8	1969	1986	5.7L Passenger Car & Truck exc (69) w/4bl Carb	F351W	EF351W
351-5.7L	V-8	1980	1991	5.7L Passenger Car w/HO option	F351WHO	
351-5.7L	V-8	1987	1993	5.7L Passenger Car & Truck	F351WL	EF351WL
351-5.7L	V-8	1993	1997	5.7L F150 Lightning	F351WLT	
351-5.7L	V-8	1994	1997	5.7L LD Truck w/Roller Camshaft	F351WRLT	EF351WRLT
352-5.8L	V-8	1958	1967	5.8L Passenger Car & Truck	F352	EF352
359-5.9L	V-8	1974	1978	5.9L MD & HD Truck	F359	
360-5.9L	V-8	1968	1976	5.9L Truck	F360	EF360
361-5.9L	V-8	1964	1978	5.9L MD & HD Truck	F361	
363-6.0L	V-8	2003	2007	VT365 Powerstroke Diesel Vin 'C', 'P'	F363T	EF363T
370-6.1L	V-8	1979	1987	6.1L Truck	F370	
389-6.4L	V-8	1975	1978	6.4L MD & HD Truck	F389	
390-6.4L	V-8	1961	1976	6.4L Passenger Car & Truck	F390	EF390
391-6.4L	V-8	1964	1978	6.4L Truck	F391	

DISP	#CYL	STR-Y	END-Y	APPLICATION	EPW #	E-Direct #
391-6.4L	V-8	2008	2010	6.4L 32v Powerstroke Diesel Vin 'R'	F391D	
400-6.6L	V-8	1971	1982	6.6L Passenger Car & Truck	F400	EF400
406-6.7L	V-8	2011	2015	6.7L F250 SuperDuty Turbo Powerstroke Diesel	F406	
415-6.8L	V-10	1997	2005	6.8L SOHC Triton V-10 Truck	F415	EF415
415-6.8L	V-10	2005	2009	6.8I SOHC 30v Triton V-10 Truck	F415L	
420-6.9L	V-8	1983	1987	6.9L Diesel Ford Truck	F420	
428-7.0L	V-8	1966	1970	7.0L Passenger Car except HP	F428	EF428
429-7.0L	V-8	1968	1973	7.0L Passenger Car	F429	EF429
429-7.0L	V-8	1979	1992	7.0L Truck	F429T	
429-7.0L	V-8	1991	1997	7.0L MD & HD Truck w/Fuel Injection	F429TL	
445-7.3L	V-8	1988	1993	7.3L Diesel Truck	F445D	
445-7.3L	V-8	1994	1995	7.3L Turbo Diesel - Big Pin (1.308' dia.)	F445DT	
445-7.3L	V-8	1996	2003	7.3L Power Stoke Diesel	F445PS	EF445PS
460-7.5L	V-8	1968	1985	7.5L Passenger Car & Truck	F460	EF460
460-7.5L	V-8	1985	1992	7.5L Truck	F460TL	EF460TL
460-7.5L	V-8	1993	1997	7.5L Truck	F460TLL	EF460TLL
GEO						
61-1.0L	OHC-3	1985	2000	1.0L	CH61	ECH61
92-1.5L	OHC-4	1985	1989	4XC1	CH92	
98-1.6L	OHC-4	1990	1993	1.6L 4XE1 12V SOHC-4 in Storm	IZ1588	
98-1.6L	OHC-4	1992	2000	1.6L Tracker G16KV SOHC 16V	SZ1590L	
98-1.6L	DOHC4	1993	1997	1.6L DOHC 4AFE Prism	TO1587LDL	
109-1.8L	DOHC4	1993	1997	1.8L 16V DOHC-4 7AFE used in Corolla, Celica	TO1762	
Honda						
90-1.5L	OHC-4	1984	1987	1.5L EW1,3,& 4; D15A2,3 Engine CRX-CRXHF	HO1488W	
91-1.5L	OHC-4	1988	1991	1.5L D15B2 16V SOHC; D15B7, D15B8 8V SOHC	HO1493	
91-1.5L	OHC-4	1992	1995	1.5L D15B7 16V, D15B8 8V SOHC	HO1493L	
91-1.5L	OHC-4	1992	1995	1.5L D15Z1 16v SOHC Civic VTec	HO1493V	
91-1.5L	OHC-4	2007	2008	1.5L FIT Vtec L15A1 SOHC 16V	HO1497	
98-1.6L	OHC-4	1988	2000	1.6L D16A6 Civic & CRX Si; D16Z6 Civic V-Tec	HO1590	
98-1.6L	OHC-4	1996	2000	1.6L Civic EX, del Sol SI, VTec	HO1590L	
98-1.6L	DOHC4	1994	2000	1.6L DOHC 16 valve Civic SI, del Sol, VTec	HO1595	
104-1.7L	OHC-4	2001	2005	1.7L D17A1, D17A2, D17A6 16v	HO1688	
107-1.8L	OHC-4	1979	1983	1.8L EK1 Engine except California	HO1751	
107-1.8L	OHC-4	2006	2009	1.8L I-VTEC, Civic DX,EX,LX	HO1799	
111-1.8L	OHC-4	1983	1987	1.8L ES1,2,3,A18A1 & ET2 Engines	HO1829	

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122-2.0L	OHC-4	1985	1989	2.0L Accord & Prelude	HO1955	
122-2.0L	DOHC4	1988	1991	2.0L Prelude 16 valve DOHC B20A5	HO1958	
122-2.0L	OHC-4	1988	1990	2.0L Prelude 12 valve SOHC B20A3	HO1958S	
122-2.0L	DOHC4	1997	2001	2.0L B20B4, B20Z2 16V DOHC4 CRV	HO1997	
126-2.1L	DOHC4	1990	1991	2.1L Prelude Si DOHC B21A1	HO2056	
132-2.2L	OHC-4	1990	1997	2.2L Accord F22A1/F22A4 & F22B2; Prelude S F22A1;	HO2156	
132-2.2L	DOHC4	1993	2001	2.2L H22A1, H22A4 16V DOHC4 Prelude VTec	HO2157	
138-2.2L	SOHC4	1998	2002	2.2L Accord F23A1, F23A4, F23A5; Odyssey F23A7	HO2254	
138-2.2L	DOHC4	1992	1996	2.3L Prelude Si w/H23A1 16 valve DOHC	HO2259	
143-2.4L	DOHC4	2002	2010	2.4L K24A1, K24Z1 CRV; K24A4, K24A8	HO2354	
143-2.4L	DOHC4	2008	2011	2.4L K24Z2/3; K24Z6	HO2354L	
183-3.0L	V-6	2003	2007	3.0L Vtec Accord J30A4,J30A5;Hybrid JNA1	HO2997	
212-3.5L	V-6	1999	2001	3.5L 24v Odyssey J35A1	HO3471	
212-3.5L	V-6	2002	2008	3.5L 24v J35A4, J35A6/7, J35A9, J35Z1	HO3471L	
212-3.5L	V-6	2008	2011	3.5L 24v J35Z2; J35Z4; J35A7	HO3471LL	
Hyundai						
89-1.5L	OHC-4	1986	1994	1.5L G4AJ,G4DJ,G15B EXCEL & SCOUPE	HY1468	
89-1.5L	OHC-4	1995	2000	1.5L Accent G4EK SOHC 12 valve	HY1495	
89-1.5L	DOHC4	1996	1997	1.5L Accent G4EK DOHC 16v	HY1495D	
98-1.6L	DOHC4	2001	2010	G4ED DOHC 4 Accent	HY1599	
98-1.6L	DOHC4	2010	2017	G4FD DOHC Accent & Velostar	HY1591	
109-1.8L	DOHC4	1996	1998	1.8L G4DM 16v DOHC Elantra Tiburon	HY1796	
109-1.8L	DOHC4	2011	2016	1.8L Nu Elantra, Coupe	HY1797	
109-1.8L	DOHC4	1993	1995	1.8L G4CN DOHC 16 Valve used in Elantra w/ & w/o	HY1836	
122-2.0L	DOHC4	1997	2010	2.0L G4GF DOHC-4 Elantra, Tiburon	HY1975	
122-2.0L	DOHC4	1992	1998	2.0L DOHC 16 Valve G4CP Sonata	HY1997	
122-2.0L	DOHC4	2011	2017	2.0L DOHC Theta II Turbo	HY1998T	
143-2.4L	OHC-4	1989	1991	2.4L Sonata G64B	HY2350	
143-2.4L	OHC-4	1999	2005	2.4L DOHC 16 valve Sonata, Santa Fe, Sirius	HY2351	
144-2.4L	DOHC4	2006	2008	2.4L DOHC 16 valve Sonata	HY2359	
144-2.4L	DOHC4	2009	2013	2.4L DOHC 16 valve Theta II	HY2359L	
144-2.4L	DOHC4	2011	2016	2.4L DOHC 16 valve Thete II GDI	HY2359LL	
144-2.4L	DOHC4	2011	2013	2.4L DOHC 16 valve Sonata, Hybrid	HY2359LLL	
152-2.5L	DOHC4	1999	2001	2.5L DOHC V6 G6BW Delta Engine Sonata	HY2493	
162-2.7L	V-6	2001	2008	2.7L G6BA DOHC 24V V6 Santa Fe, Sonata, Tiburon	HY2657	
181-3.0L	V-6	1990	1998	3.0L G6AT SOHC V6 Sonata	HY2972	

DISP	#CYL	STR-Y	END-Y	APPLICATION	EPW #	E-Direct #
213-3.5L	V-6	2002	2006	G6AU DOHC V6 XG350, Santa Fe	KI3497	
213-3.5L	V-6	2010	2013	3.5L DOHC V6 24 valve Lamba II	HY3470	
Infiniti						
181-3.0L	V-6	1990	1996	J30 w/VG30DE	NI2960D	
199-3.3L	V-6	1996	2004	QX4 w/VG33E	NI3272	
International						
345-5.7L	V-8	1968	1980	5.0L (304,304E), 5.6L (345,345E) Engines	IH345	
392-6.4L	V-8	1968	1980	6.4L V392E	IH392	
446-7.3L	V-8	1975	1982	7.3L MV404, MV446	IH446	
Isuzu						
89-1.5L	OHC-4	1985	1989	1.5L Spectrum 4XC1 except Turbo	CH92	
98-1.6L	OHC-4	1990	1993	1.6L 4XE1 12V SOHC-4 in Geo Storm and Isuzu Stylus	IZ1588	
122-2.0L	OHC-4	1983	1987	2.0L G200Z Impulse, Pick-Up & Trooper II	IZ1949	
134-2.2L	DOHC4	1998	2000	2.2L X22SE DOHC 4 Cyl Amigo, Rodeo & Daewoo	IZ2198	
134-2.2L	DOHC4	2001	2003	X22SE DOHC 4 Cyl Amigo, Rodeo & Daewoo	IZ2198L	
137-2.3L	OHC-4	1986	1992	2.3L 4ZD1 Amigo, Impulse, Trooper II, & Pick-up	IZ2254	
156-2.6L	OHC-4	1988	1997	2.6L Amigo, Rodeo, PU, Trooper II	IZ2559	
193-3.2L	V-6	1992	1997	3.2L 6VD1 SOHC 24 valve V-6 Rodeo & Trooper	IZ3165	
193-3.2L	DOHC6	1998	2004	3.2L 6VD1W 24V DOHC V-6 Amigo, Rodeo	IZ3165D	
213-3.5L	V-6	1998	2003	3.5L Trooper 6VE1 DOHC	IZ3494	
Jeep						
134-CID	L-4	1940	1972	2.2L L & F Head	J134	EJ134
150-2.5L	OHV-4	1996	2002	2.5L AMC and Dodge Dakota	AM150LL	EAM150LL
225-CID	V-6	1964	1967	3.7L Passenger car & Jeep	BU225	
225-3.7L	V-6	2002	2012	3.7L SOHC 12V V6 Vin K Truck	CR226	ECR226
231-3.8L	V-6	1975	1977	3.8L Passenger Car & Jeep	BU2310	
231-3.8L	V-6	2007	2011	3.8L Wrangler	J231	
242-4.0L	OHV-6	1987	1995	4.0L Jeep Cherokee	AM242	EAM242
242-4.0L	OHV-6	1996	1998	4.0L	AM242L	EAM242L
242-4.0L	OHV-6	1999	2002	4.0L	AM242LL	EAM242LL
258-4.2L	L-6	1971	1990	4.2L Passenger car & Jeep	AM258	EAM258
304-5.0L	V-8	1970	1981	5.0L Passenger car & Truck	AM304	
360-5.9L	V-8	1970	1991	5.9L Passenger car & Jeep	AM360	EAM360
401-CID	V-8	1971	1978	6.6L Not Included: Intake Manifold Gasket	AM401	
Kia						
92-1.5L	DOHC4	2001	2002	A5D DOHC Rio	KI1493	

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98-1.6L	DOHC4	2003	2005	Rio A6D DOHC	KI1594	
98-1.6L	DOHC4	1995	1997	1.6L 16 valve DOHC Sephia	KI1597	
98-1.6L	DOHC4	2006	2008	G4ED DOHC 4 Kia Rio	HY1599	
98-1.6L	DOHC4	2010	2017	G4FD DOHC Rio & Soul	HY1591	
109-1.8L	DOHC4	1998	2004	1.8L 16 valve DOHC Sephia, Spectra	KI1793	
109-1.8L	DOHC4	2011	2016	1.8L ULEV Forte	HY1797	
122-2.0L	DOHC4	1995	2002	2.0L DOHC 16 valve Sportage	KI1998	
122-2.0L	DOHC4	2011	2017	2.0L DOHC Theta II Turbo	HY1998T	
122-2.0L	DOHC4	2012	2017	2.0L DOHC Nu	KI1999	
144-2.4L	DOHC4	2009	2013	2.4L DOHC 16 valve Theta II	HY2359L	
144-2.4L	DOHC4	2011	2016	2.4L DOHC 16 valve Thete II GDI	HY2359LL	
213-3.5L	V-6	2002	2006	G6AU DOHC V6 Amanti, Sedona, Sorento	KI3497	
213-3.5L	V-6	2010	2013	3.5L DOHC V6 24 valve Lamba II	HY3470	
Lexus						
153-2.5L	L-4	1988	1991	ES250	TO2507	
181-3.0L	V-6	1992	1993	ES300	TO2958L	
183-3.0L	V-6	1994	2004	ES300	TO2995	
202-3.3L	V-6	2004	2010	ES330, RX330	TO3310	
211-3.5L	V-6	2005	2010	ES350, RX350	TO3456	
Marine						
181-3.0L	OHV-4	1980	1992	3.0L Mercruiser	CH181	
224-3.7L	L-4	1970	2000	3.7L Mercury Marine	F470	
502	V-8	1970	2000	8.2L Marine BBC w/Roller Cam	CH502	
Mazda						
91-1.5L	DOHC4	1995	1998	1.5L DOHC 16 Valve Protege	MA1489	
98-1.6L	OHC-4	1986	1994	1.6L 323,Tracer exc Turbo	MA1597	
98-1.6L	DOHC4	1990	1993	1.6L B6 16V DOHC Miata & MX5	MA1597D	
109-1.8L	OHC-4	1990	1994	1.8L 'BP01' Protégé, MX5, Miata	MA1839	
109-1.8L	DOHC4	1990	1998	1.8L Mazda 'BP' DOHC 16V Fuel Injected Protege, MX5, Miata	F1839	
109-1.8L	DOHC4	1999	2000	1.8L 16V DOHC FP Engine	MA1839D	
109-1.8L	DOHC4	1999	2005	1.8L 16V DOHC4 Miata MX5	MA1839L	
122-2.0L	OHC-4	1979	1981	2.0L Pass & Truck incl Courier MA Engine exc Calif	MA1970	
122-2.0L	OHC-4	1982	1984	2.0L Pass & Truck incl Courier MA Engine exc Calif	MA1970L	
122-2.0L	DOHC4	1993	2003	Mazda FS 2.0L DOHC 16V Probe and MX6	F1991	
122-2.0L	OHC-4	1983	1987	2.0L FE Engine 626, B2000 Pick-Up	MA1998	
133-2.2L	OHC-4	1988	1992	2.2L 626,MX6,Probe	MA2184	

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133-2.2L	OHC-4	1987	1993	2.2L B2200 Pickup F2 8 Valve	MA2184L	
133-2.2L	OHC-4	1988	1992	2.2L 626,MX6,Probe	MA2184T	
133-2.2L	DOHC4	2003	2008	MZR/L3 16 valve DOHC non turbo A3S, A5, A6I	MA2261	
153-2.5L	V-6	1993	2002	2.5L 24V DOHC KL Engine in 626, MX6, Millenia &	MA2507	
156-2.6L	OHC-4	1989	1994	2.6L B2600I, MPV w/G6 SOHC 12 valve	MA2606	
181-3.0L	V-6	1988	1998	3.0L SOHC V6 JE Engine in MPV & 929	MA2954	
MG Sports Car						
110-1.8L	OHV-4	1971	1980	1.8L MGB, MGBGT	MG1798	
Mitsubishi						
89-1.5L	L-4	1985	1990	G15B	CR1468	
89-1.5L	L-4	1991	1994	12 VALVE	CR1468L	
98-1.6L	L-4	1991	1995	4G61	CR1595	
107-1.8L	L-4	1989	1994	G62B	CR1755	
109-1.8L	L-4	1983	1988	G62B W/TURBO	CR1795T	
112-1.8L	L-4	1992	2002	4G93	CR1834	
122-2.0L	L-4	1983	1988	G63B 'A'	CR1997A	
122-2.0L	L-4	1989	1992	G63B SOHC	CR1997AL	
122-2.0L	L-4	1990	1992	4G63 DOHC W/O TURBO	CR1997L	
122-2.0L	L-4	1993	1994	4G63 DOHC W/O TURBO	CR1997LL	
122-2.0L	L-4	1989	1998	4G63 DOHC W/TURBO	CR1997LT	
121-2.0L	DOHC4	2003	2006	4G63 16V 2.0L DOHC Turbo	CR1997LLT	
121-2.0L	OHC-4	2002	2006	4G94	CR1999	
143-2.4L	L-4	1989	1995	4G64	CR2350	
143-2.4L	L-4	1993	2005	4G64 16v	CR2350L	
152-2.5L	V-6	1995	2000	6G73	CR2497	
156-2.6L	L-4	1983	1989	G54B	CR2600L	
183-3.0L	V-6	1987	1996	6G72 SOHC	CR183	ECR183
183-3.0L	V-6	1992	1996	6G72 SOHC	CR183L	
183-3.0L	V-6	1991	1999	6G72 DOHC	CR183LL	
183-3.0L	V-6	1991	1999	6G72 DOHC W/TURBO	CR183LT	
234-3.8L	V-6	2003	2006	6G75 24v SOHC	CR234	
Nissan						
91-1.5L	OHC-4	1982	1984	1.5L Passenger Car E15, E15S except Turbo	NI1487	
91-1.5L	OHV-4	1979	1982	1.5L Passenger Car A15 210,310,310GX Non-Calif	NI1488	
98-1.6L	OHC-4	1968	1973	1.6L Passenger Car & Truck L16 Engine	NI1595	
98-1.6L	OHC-4	1983	1988	1.6L Passenger Car E16,E16I,E16S Engines	NI1597	

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98-1.6L	OHC-4	1989	1990	1.6L GA16I Pulsar NX, Sentra NX	NI1597L	
98-1.6L	DOHC4	1991	2000	1.6L GA16DE DOHC 16 valve Sentra, 200SX	NI1597LL	
107-1.8L	DOHC4	2000	2006	Sentra QG18DE DOHC 16 Valve	NI1769	
107-1.8L	OHC-4	1973	1974	1.8L Passenger Car & Truck L18 Engine	NI1770	
107-1.8L	DOHC4	2007	2012	1.8L MR18DE Cube and Versa	NI1798	
122-2.0L	OHC-4	1974	1979	2.0L Passenger Car & Truck L20B	NI1952	
122-2.0L	OHC-4	1980	1985	2.0L Z20,Z20E,Z20S	NI1952L	
122-2.0L	OHC-4	1982	1986	2.0L Stanza,200SX,Stanza S/W	NI1974	
122-2.0L	OHC-4	1986	1989	2.0L Stanza Sedan CA20E	NI1974L	
122-2.0L	DOHC4	1991	2000	2.0L DOHC-4 SR20DE 200SX, Sentra	NI1998	
133-2.2L	OHC-4	1981	1983	2.2L Z22E, Z22S Engines 200SX & 720 Pickup	NI2187	
146-2.4L	OHC-4	1983	1989	2.4L Z24, Z24I, 720	NI2389	
146-2.4L	OHC-4	1989	1997	2.4L KA24E SOHC 12 VALVE	NI2389L	
146-2.4L	DOHC4	1991	2004	2.4L KA24DE DOHC 16V 240SX, Altima	NI2389LL	
146-2.4L	OHC-6	1970	1984	2.4L Passenger Car L24,L24E,810,240Z,Maxima	NI2393	
151-2.5L	DOHC4	2002	2010	2.5L DOHC 16v 4cyl - Altima, Sentra SE-4, Frontier,	NI2488	
156-2.6L	OHC-6	1974	1975	2.6L Passenger Car L26,260Z	NI2565	
173-2.8L	OHC-6	1975	1983	2.8L Pass Car L28,L28E,280Z,280ZX except Turbo	NI2753	
173-2.8L	OHC-6	1981	1983	2.8L L28ET, 280ZX Engine w/Turbo	NI2753T	
181-3.0	SOHC6	1984	1995	3.0L Passenger Car & Truck VG30,VG30E	NI2960	
181-3.0	DOHC6	1990	1996	3.0L VG30DE DOHC 24v V-6 300ZX, Infiniti J30	NI2960D	
181-3.0	SOHC6	1993	1998	3.0L VG30E SOHC 12V Quest	NI2960Q	
181-3.0	DOHC6	1995	2001	3.0L VQ30DE DOHC 24V V-6 Maxima	NI2988	
201-3.3L	V-6	1996	2004	3.3L VG33E SOHC 12v V-6 Pathfinder & Infiniti QX4	NI3272	
213-3.5L	V-6	2001	2009	3.5L VQ35DE 24v DOHC Altima, Maxima, Murano, Pathfinder	NI3498	
241-4.0L	V-6	2005	2010	4.0L VQ40DE 24v DOHC Pathfinder, Frontier, Xterra	NI3954	
339-5.5L	V-8	2004	2010	5.5L VK56DE 32v DOHC V-8 Titan, Armada, Pathfinder	NI5552	
Oldsmobile						
112-1.8L	L-4	1982	1982	CHEVY ENGINE	CH112	
134-2.2L	L-4	1990	1993	CHEVY ENGINE	CH133	
138-2.3L	DOHC4	1989	1995	2.3L QUAD 4 Vin 'A' & 'D'	OL138	
138-2.3L	OHC-4	1992	1994	2.3L SOHC Vin '3'	OL138S	
146-2.4	DOHC4	1996	1999	2.4L DOHC Quad 4	OL146	EOL146
151-2.5L	L-4	1977	1984	PONTIAC ENGINE	PT151	
151-2.5L	L-4	1985	1991	PONTIAC ENGINE	PT151L	EPT151L
173-2.8L	V-6	1980	1984	CHEVY ENGINE	CH173	ECH173

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173-2.8L	V-6	1985	1986	CHEVY ENGINE	CH173L	ECH173L	
173-2.8L	V-6	1987	1993	CHEVY ENGINE	CH173LL	ECH173LL	
173-2.8L	V-6	1987	1989	CHEVY ENGINE	CH173LW		
181-3.0L	V-6	1985	1988	BUICK ENGINE	BU181L		
189-3.1L	V-6	1988	1994	CHEVY ENGINE	CH189		
189-3.1L	V-6	1994	1999	VIN 'M'	CH189M	ECH189M	
204-3.3L	V-6	1989	1993	BUICK ENGINE	BU204		
214-3.5L	V-6	1999	2002	3.5L 24v DOHC Northstar V6 Aurora Vin 'H'	OL214		
	225	V-6	1964	1967	BUICK ENGINE	BU225	
231-3.8L	V-6	1975	1977	BUICK ENGINE	BU231O		
231-3.8L	V-6	1977	1985	BUICK ENGINE	BU231E	EBU231E	
231-3.8L	V-6	1986	1988	BUICK ENGINE	BU231EL		
231-3.8L	V-6	1986	1988	W/ROLLER CAM	BU231ERL		
231-3.8L	V-6	1988	1995	3800 W/BAL SHAFT	BU231ECL		
250-4.1L	L-6	1966	1984	CHEVY ENGINE	CH250	ECH250	
244-4.0L	V-8	1995	2003	4.0L 32V DOHC Northstar V8 Vin 'C' Aurora	OL244		
252-3.0L	V-6	1980	1984	BUICK ENGINE	BU252		
260-4.3L	V-8	1975	1982	4.3L Passenger Car except Diesel	OL260		
301-4.9L	V-8	1977	1981	PONTIAC ENGINE	PT301		
305-5.0L	V-8	1976	1986	CHEVY ENGINE	CH305	ECH305	
307-5.0L	V-8	1980	1984	5.0L Specify year & Camshaft	OL307		
307-5.0L	V-8	1985	1990	5.0L Olds Engine Vin 'Y'	OL307L		
350-5.7L	V-8	1968	1980	5.7L except Diesel & High Performance	OL350		
403-6.6L	V-8	1977	1979	6.6L not Included: Intake Manifold Gasket	OL403		
455-7.5L	V-8	1968	1976	7.5L Specify year	OL455		
Pontiac							
112-1.8L	L-4	1982	1982	CHEVY ENGINE	CH112		
122-2.0L	OHC-4	1989	1994	2.0L 8v Vin 'H', 'K' (LE4)	PT122		
138-2.3L	L-4	1989	1995	OLDS QUAD 4	OL138		
151-2.5L	OHV-4	1977	1984	2.5L Passenger & Truck w/o Roller Cam	PT151		
151-2.5L	OHV-4	1985	1991	2.5L Pass & Truck Vin '2', 'R', & 'U' w/Roller Cam	PT151L	EPT151L	
173-2.8L	V-6	1980	1984	CHEVY ENGINE	CH173	ECH173	
173-2.8L	V-6	1985	1986	CHEVY ENGINE	CH173L	ECH173L	
173-2.8L	V-6	1987	1993	CHEVY ENGINE	CH173LL	ECH173LL	
173-2.8L	V-6	1987	1989	CHEVY ENGINE	CH173LW		
181-3.0L	V-6	1985	1988	BUICK ENGINE	BU181L		

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189-3.1L	V-6	1988	1994	CHEVY ENGINE	CH189	
189-3.1L	V-6	1994	1999	VIN 'M'	CH189M	ECH189M
229-3.8L	V-6	1980	1984	CHEVY ENGINE	CH229	
231-3.8L	V-6	1975	1977	BUICK ENGINE	BU231O	
231-3.8L	V-6	1977	1985	BUICK ENGINE	BU231E	EBU231E
231-3.8L	V-6	1986	1988	BUICK ENGINE	BU231EL	
231-3.8L	V-6	1986	1988	BUICK W/ROLLR CAM	BU231ERL	
231-3.8L	V-6	1988	1995	3800 W/BAL SHAFT	BU231ECL	
250-4.1L	L-6	1966	1984	CHEVY ENGINE	CH250	ECH250
252-4.1L	V-6	1980	1984	BUICK ENGINE	BU252	
260-4.3L	V-8	1975	1982	OLDSMOBILE ENG	OL260	
262-4.3L	V-6	1985	1986	CHEVY ENGINE	CH262	
262-4.3L	V-6	1987	1990	CHEVY ENGINE	CH262L	ECH262L
301-4.9L	V-8	1977	1981	4.9L except Turbo	PT301	
305-5.0L	V-8	1976	1986	CHEVY ENGINE	CH305	ECH305
305-5.0L	V-8	1982	1986	CHEVY ENGINE	CH305HO	
305-5.0L	V-8	1987	1993	CHEVY ENGINE	CH305LR	
307-5.0L	V-8	1968	1973	CHEVY ENGINE	CH307	
307-5.0L	V-8	1980	1984	OLDSMOBILE ENG	OL307	
307-5.0L	V-8	1985	1990	OLDSMOBILE ENG	OL307L	
326-5.3L	V-8	1966	1967	5.3L Passenger Car	PT326	
350-5.7L	V-8	1968	1977	5.7L Passenger Car except H/P	PT350	
350-5.7L	V-8	1968	1981	BUICK ENGINE	BU350	
350-5.7L	V-8	1968	1980	OLDSMOBILE ENG	OL350	
350-5.7L	V-8	1967	1986	CHEVY ENGINE	CH350	ECH350
350-5.7L	V-8	1987	1993	CHEVY ENGINE	CH350L	ECH350L
389-CID	V-8	1959	1966	6.4L except High Performance	PT389	
400-6.6L	V-8	1967	1979	6.6L except High Performance	PT400	EPT400
455-7.4L	V-8	1970	1976	7.4L except Super Duty	PT455	
Saturn						
116-1.9	L-4	1991	2002	1.9L SOHC	SA1900	
116-1.9	L-4	1991	1998	1.9L DOHC	SA1900L	
116-1.9	L-4	1999	2002	DOHC - Camshaft = Not Available	SA1900LL	
134-2.2L	DOHC4	2000	2008	2.2L DOHC Vin 'F' exc w/MT & Calif	SA2198	
Subaru						
98-1.6L	H-4	1976	1981	1.6L 1600 DL,GL,GF,EA71 H4	SU1595	

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98-1.6L	H-4	1982	1989	1.6L 1600 Brat,EA71 H4 Engine	SU1595L	
109-1.8L	H-4	1980	1981	1.8L 1800GL,GLF & 4WD EA81 H4 Engine	SU1781	
109-1.8L	H-4	1982	1989	1.8L 1800 Brat, Loyale EA81 H4 exc Turbo	SU1781L	
122-2.0L	DOHC4	2002	2005	2.0L EJ205 DOHC 16-valve Turbo Impreza	SU1994	
135-2.2L	OHC-4	1990	1996	2.2L 16 valve SOHC 4 non turbo	SU2212	
150-2.5L	OHC-4	1997	2010	EJ25 2457CC 16V SOHC - Legacy, Impreza, Forester,	SU2457	
150-2.5L	DOHC4	2004	2013	EJ255/EJ257 DOHC4 Turbo-Baja,Forester,Impreza,Legacy,Outback	SU2457T	
Suzuki						
79-1.3L	OHC-4	1989	1997	1.3L G13BA 8V SOHC 4 Samurai, Swift, GEO Metro	SZ1298	
79-1.3L	OHC-4	1998	2001	1.3L G13BB 16V SOHC Metro & Swift	SZ1298L	
80-1.3L	OHC-4	1986	1989	1.3L Passenger Car & Truck	SZ1324	
98-1.6L	OHC-4	1989	1995	1.6L Geo Tracker & Sidekick G16KC	SZ1590	
98-1.6L	OHC-4	1992	2000	1.6L Geo Tracker & Sidekick G16KV, C	SZ1590L	
122-2.0L	DOHC4	1999	2003	2.0L DOHC 16 valve Vitara	SZ1995	
150-2.5L	V-6	1999	2005	2.5L DOHC 24 valve Grand Vitara	SZ2494	
Toyota						
65-1.0L	OHV-4	1968	1969	1.1L	TO1077	
79-1.3L	OHV-4	1981	1982	1.3L 4KC Engine,Starlet	TO1290	
88-1.5L	OHC-4	1981	1986	1.5L 3AC Engines	TO1452	
88-1.5L	SOHC	1987	1994	1.5L 3E, 3EE 12 Valve Engine	TO1456	
88-1.5L	DOHC4	1991	1999	1.5L 5EFE 16 valve DOHC in Paseo and Tercel	TO1497	
88-1.5L	DOHC4	2001	2009	1.5L 1NZFXE 16v DOHC Prius	TO1497L	
88-1.5L	DOHC4	2000	2010	1.5L 1NZFE 16v DOHC Echo, Yaris, Scion	TO1497LL	
98-1.6L	OHC-4	1983	1988	1.6L Specify year,Gaskets,Rod Brgs.	TO1587E	
98-1.6L	DOHC4	1985	1991	1.6L Corolla DOHC 4AGEC,4AGE,4AGELC; Specify year	TO1587ED	
98-1.6L	DOHC4	1988	1992	1.6L Celica,Corolla 4AF,4AFE 16 Valve	TO1587LD	
98-1.6L	DOHC4	1993	1997	1.6L DOHC 4AFE Camry, Corolla and Geo Prism	TO1587LDL	
109-1.8L	DOHC4	1993	1997	1.8L 16V DOHC-4 7AFE used in Corolla, Celica	TO1762	
109-1.8L	OHV-4	1980	1982	1.8L 3TC Engine; Specify year	TO1770	
109-1.8L	DOHC4	1998	2005	1.8L DOHC 16 valve Corolla, Celica, Matrix, MR2	TO1794	
109-1.8L	DOHC4	2000	2005	1.8L 2ZZGE 16v Celica GTS, Matrix XRS &	TO1796	
109-1.8L	DOHC4	2008	2013	1.8L 2ZR-FE DOHC 16v Corolla, Matrix, Yaris, Scion	TO1797	
122-2.0L	OHC-4	1972	1974	2.0L 18RC Engine; Specify year	TO1968	
122-2.0L	OHC-4	1983	1986	2.0L Celica & Camry	TO1995	
122-2.0L	OHV-4	1984	1985	2.0L 3YEC Van OHV Engine	TO1998E	
122-2.0L	DOHC4	1987	1991	2.0L Specify year	TO1998SF	

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122-2.0L	DOHC4	1996	1997	2.0L 3SFE 16 valve Rav 4 2&4WD	TO1998SFL	
122-2.0L	DOHC4	1986	1989	2.0L Celica GTS 3SGELC	TO1998SG	
122-2.0L	DOHC4	2001	2003	2.0L 1AZFE 16v DOHC Rav4	TO1998L	
122-2.0L	DOHC4	1988	1995	2.0L 16V DOHC 3SGTE Celica & MR2 Turbo	TO1998T	
134-2.2L	DOHC4	1990	2001	2.2L DOHC-4 cyl 5SFE Camry, Celica, MR2, Solera	TO2164	
134-2.2L	OHC-4	1975	1980	2.2L Specify date of Manufacturer	TO2189	
134-2.2L	OHV-4	1986	1990	2.2L 4YEC Van	TO2237	
146-2.4L	DOHC4	2001	2010	2AZFE Camry, Highlander, Rav 4, Solara	TO2362	
146-2.4L	OHC-4	1981	1984	2.4L Specify year & Month of Production	TO2367	ETO2367
146-2.4L	OHC-4	1985	1995	2.4L 22R, 22RE, 22REC	TO2367L	ETO2367L
146-2.4L	OHC-4	1985	1989	2.4L 22R Turbo	TO2367T	
146-2.4L	DOHC4	1990	2004	2.4L 16V DOHC 2TZFE Previa & 2RZFE Tacoma	TO2438	
150-2.5L	DOHC4	1999	2015	2.5L 16 valve DOHC 2ARFE	TO2494	
150-2.5L	DOHC6	1988	1991	2.5L 2VZFE 24V DOHC V6 in Camry and Lexus ES250	TO2507	
151-2.5L	OHC-6	1978	1980	2.5L 4ME Engine	TO2563	
164-2.7L	DOHC4	1994	2004	2.7L 3RZFE 16V DOHC T100, Tacoma	TO2693	
164-2.7L	DOHC4	2005	2010	2.7L 2TRFE DOHC4 Tacoma, 4-Runner	TO2694	
168-2.8L	DOHC6	1982	1988	2.8L 5MGE DOHC Engine	TO2759L	
181-3.0L	DOHC6	1986	1991	3.0L Cressida,Supra DOHC 24 Valve 7MGE	TO2954	
181-3.0L	DOHC6	1987	1991	3.0L Supra Turbo 7MGTE	TO2954T	
181-3.0L	V-6	1988	1995	3.0L 4-Runner/Pick-Up	TO2958	ETO2958
181-3.0L	V-6	1992	1993	3.0L 3VZFE 24 valve DOHC in Camry and Lexus ES300	TO2958L	
181-3.0L	V-6	1994	2004	3.0L 1MZFE 24 Valve DOHC V6 Avalon, Camry, Sienna	TO2995	
181-3.0L	V-6	1993	1998	3.0L 2JZGE DOHC 24v Supra - non turbo	TO2997	
181-3.0L	V-6	1993	1998	3.0L 2JZGTE DOHC 24v Twin Turbo Supra	TO2997T	
202-3.3L	V-6	2004	2010	3.3L 3MZFE Camry, Solara, Highlander, Sienna, ES330, RX330	TO3310	
207-3.4L	V-6	1995	2004	3.4L 5VZFE DOHC 24 valve V6 in 4-Runner, T100,	TO3378	
211-3.5L	V-6	2005	2010	3.5L 2GRFE Avalon, Camry, Rav4, Sienna, Highlander, Venza; ES350, RX350	TO3456	
237-3.9L	OHV-6	1960	1975	3.9L F Engine, Specify Date of Mfg.	TO3878	
241-4.0L	V-6	2003	2010	4.0L 1GRFE 24v 4Runner, FJ Cruiser, Tacoma, Tundra	TO3955	
241-4.0L	OHV-6	1988	1992	4.0L 3FE OHC 6 cyl Landcruiser	TO3956	
258-4.2L	OHV-6	1975	1987	4.2L 2F Engine	TO4230	
273-4.5L	V-6	1993	1997	4.5L 1FZFE DOHC 24v Landcruiser	TO4477	
285-4.6L	V-8	1998	2004	4.6L DOHC 32 valve Landcruiser, Sequoia, Tundra	TO4663	
285-4.6L	V-8	2005	2010	4.6L DOHC 32 valve Landcruiser, Sequoia, Tundra	TO4663L	
346-5.7L	V-8	2007	2013	5.7L DOHC 32 valve LandCruiser, Sequoia, Tundra	TO5663	

DISP	#CYL	STR-Y	END-Y	APPLICATION	EPW #	E-Direct #
Volvo						
121-2.0L	OHV-4	1969	1975	2.0L B20 Engines	VO1986	
140-2.3L	OHC-4	1988	1995	2.3L B230FT Turbo 740, 760, 780, 940	VO2316T	
Volkswagon						
98-1.6L	OHC-4	1976	1980	1.6L Passenger Car except Diesel EJ Engine	VW1588	
98-1.6L	OHC-4	1981	1987	1.6L Diesel CR,CS,JK,ME Engines	VW1588D	
109-1.8L	OHC-4	1983	1993	1.8L GX,HT,JH,JN,PI,RD,RV Engines except DOHC	VW1780	
109-1.8L	DOHC4	1997	2006	1.8L DOHC 20 valve Turbo Golf, Jetta, GTI, Beetle	VW1780T	
122-2.0L	OHC-4	1993	1998	2.0L SOHC-4 ABA Golf, Golf II, Jetta, Jetta II, Passat,	VW1984	
122-2.0L	DOHC4	2006	2008	2.0L Audi A3, A4, A4 Quattro, TT; VW EOS, GTI, Jetta, Passat - BPG, BPY, BW	VW1984D	
122-2.0L	OHC-4	1998	2006	2.0L SOHC-4 AEG Golf, Jetta, New Beetle, Gti	VW1984S	
171-2.8L	V-6	1992	2005	3.0L 12v AAA engine Corrado, GTi, Jetta, Passat	VW2792	