

This Technical Reference Information supersedes T.R.I. 11 02 84 (2033) dated October 1985. It has been updated to include several new engine versions.

Please remove and discard T.R.I. 11 02 84 (2033) dated October 1985 from your T.R.I. binder.

SUBJECT: Engine Identification

MODEL: All U.S. Versions since 1978

CONDITION: Determination of engine information on displacement size, country version, fuel system, revision state and engine serial number from codes stamped on engine block.

CORRECTION: Enclosed explanation of codes stamped in engine block should clarify information. If you are investigating a code which does not appear in the enclosures (i.e. grey market import), contact your regional technical manager for assistance.

GENERAL INFORMATION: Various codes may be stamped into the engine block. These codes represent:

1. ENGINE NUMBER AND CODE:

NEW ENGINES INSTALLED IN PRODUCTION

Engine Number:

A series production engine will have an eight-digit engine number consisting of two groups of four digits. The 1 st block contains 4 digits with information on the assembly line and serial number of engines produced daily.

The 2nd block shows the factory code and day of production.

0 001 0 000

0	Assembly line	
0 or 1=		M10, M42
2 or 3 =		M20, M21,, M50 Munich/Steyr
4 or 5 =		M30
6 =		S14, S38, M70

001 = Serial number

0 =	Factory code
0 -4	=Munich
5 -9	=Steyr (Austria)

000 = Production day

Engine Code: **(New Engines Installed in Production)**

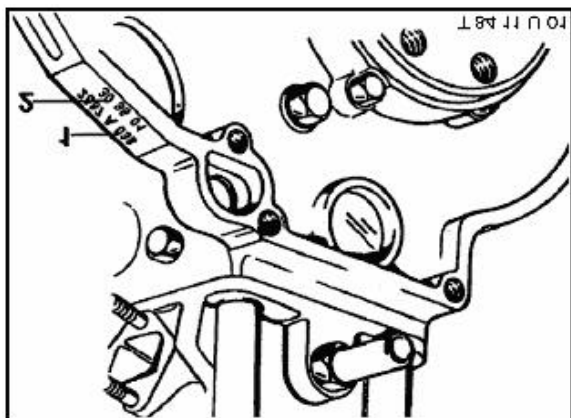
In addition to the eight digit engine number, an engine designation code is stamped in series production engines for model identification. The decoding of these numbers can be accomplished using Attachment 1.

Note: These production engine designation codes are different from the codes of new/remanufactured engines obtained from the parts dept. and should not be confused with them. This code (see below) provides information on displacement, number of cylinders, fuel system, change status and country version of engines installed during production:

Hyphens and dashes are not die-stamped in the sequence, e.g.

16 4V B/A stands for:

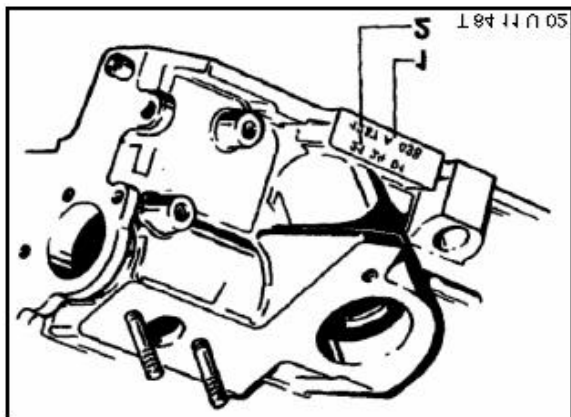
16 =	Displacement (e.g. 1.6 l)
4/6/12 =	4- or 6- or 12-cylinders
E/V/T =	Fuel Injected/Carbureted/Turbocharged engine
A,B,C =	Internal BMW information (change index)
A/C/E/W/Y/Z =	Country Codes
K =	Catalytic converter



1 = Engine Number

2 = Engine Code

Fig. 1 M10-, M30-, S14 and S38 engines
(Flywheel End of Crankcase)

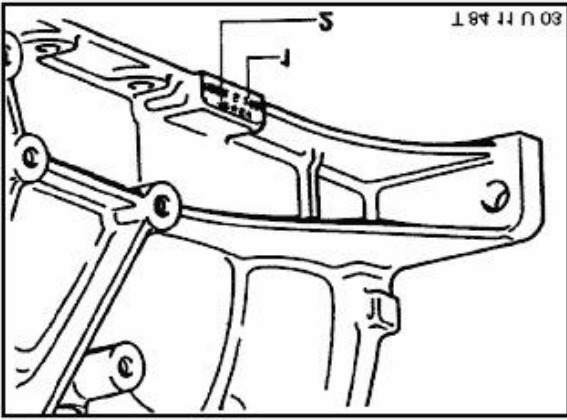


1 = Engine Number

2 = Engine Code

Fig. 2 M20/M21 Engine

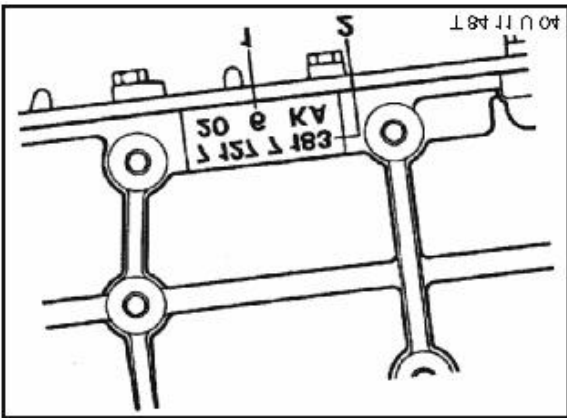
(Intake Side of Crankcase)



1 = Engine Number

2 = Engine Code

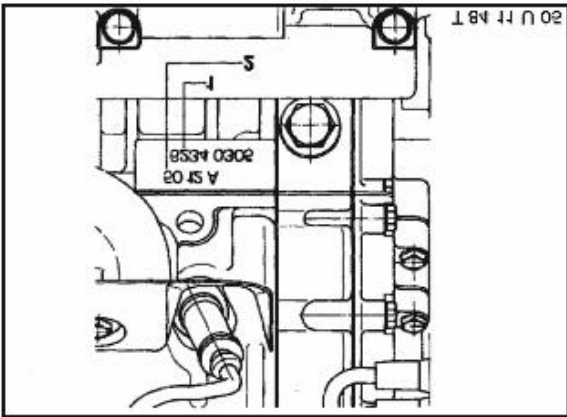
Fig 3. M42 Engine
(intake Side of Crankcase)



1 = Engine Number

2 = Engine Code

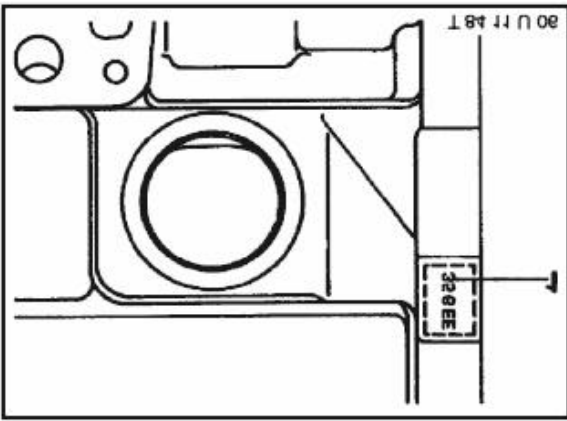
Fig. 4 M50 Engine
(Intake Side of Crankcase)



1 = Engine Number

2 = Engine Code

Fig. 5 M70 Engine
(Right Front Side of Crankcase)



1 = Engine Number

Fig. 6 S38 Engine
(Water Pump Flange)

2. ENGINE NUMBER AND CODE:

NEW/REMANUFACTURED ENGINES OBTAINED FROM YOUR PARTS DISTRIBUTION CENTER

Engine Number:

After grinding off the numbers for the original engine data, information for the remanufactured engine is now die-stamped in the same position as for new engine identification.

Similar to series production engines, the 8-digit engine number also consists of 2 blocks of 4 digits, but stand for different data:

- The 1st block of 4 digits provides information on the serial number of engines produced daily.
- The 2nd block contains a code for either a remanufactured or for a new engine as well as the month and year of production.

Example:

0001 A 12 7

7 Production year: 1987

12 Production month: December

A Code: A = Exchange engine
N = New engine

0001 Serial number (each month)

Engine Code:

Codes for new/remanufactured spare parts engines are also different from the codes used on series production engines:

The decoding of these numbers can be accomplished using Attachment 2 for U.S. version engines. This decoding identifies the specific part number of the engine.

Attachment 1 to T.R.I. 11 02 84 (2033)

CODES FOR NEW ENGINES INSTALLED IN PRODUCTION: US MODELS

Model	Model Year	Engine	Code Explanation (SAE hp) Type		
E30					
318i	1984-1985	M10	18 4K A	101 hp	
318is	1991	M42	18 4S 1	134 hp, 16-valves	
325e	1984-1986	M20/2.7	27 6K A	121 hp	
325e	1987	M20/2.7	27 6K B	128 hp	
325i, 325ix, 325is, 325iC	All Years		M20/2.5	25 6K 1	168 hp
M3			S14	23 4E A	192 hp
E28					
524td	1985-1986	M21	24 6T A	114 hp	
528e	1983-1986	M20/2.7	27 6K A	121 hp	
528e	1987-1988	M20/2.7	27 6K B	128 hp	
533i	1983-1984	M30	32 6E A	177 hp	
535i	1985-1988	M30	34 6K A	182 hp	
M5	1988		S38	35 6E E	256 hp
E34					
525i	to 8/90		M20/2.5	25 6E 2	168 hp
525i	from 9/90		M50	25 6S 1	188 hp, 24-valves
535i	from 1989		M30	34 6K B	208 hp
M5	from 1991		S38	36 6S 1	310 hp
E24					
633CSi	1978-1984	M30	32 6E A	177 hp	
635CSi, L6		M30	34 6K A	182 hp	
635CSi	1988-1989	M30	34 6K B	208 hp	
M6	1987-1988	S38	35 6E E	256 hp	
E31					
850i			M70	50 12 A	295 hp
E23					
733i	1978-1984	M30	32 6E A	177 hp	
735i	1985-1987	M30	34 6K A	182 hp	
E32					
735i			M30	34 6K B	208 hp
750iL		M70	50 12 A	295 hp	

Attachment 2 to T.R.I. 11 02 84 (2033)

REMANUFACTURED ENGINES FOR U.S. MODELS

Model Application	Engine Type	Part Number	Engine Code
2002 1976 49 States	M10	11 00 9 057 924	21 US
2002 1968-73 up to 1975	M10	11 00 1 261 406	20
2002 1974-75 from 1975	M10	11 00 1 261 408	21
2002Tii Serial Numbers: 2761944 to 2764521 2762372 to 2764521 2780001 to 2782928	M10	11 00 9 056 520	22Ti US
2.5CS, CSA All Years	M30	11 00 1 263 288	25
320i 1977-79	M10	11 00 1 276 767	320 US
320i 1980-83	M10	11 00 1 276 769	320 US/1.8
318i to 1985	M10	11 00 1 705 553	318 EL US/1
318i, 318is from 1991	M42	11 00 1 727 883	18 4S 02
325e 1984-85	M20/2.7	11 00 1 289 118	325 eta US
325, 325e, 325es from 9/86 to 9/87 Prod.	M20/2.7	11 00 1 717 479	325 ET US/1
325i, 325is, 325ic from 9/87 Prod.	M20/2.5	11 00 1 722 939	202 502
325ix up to 9/87 Prod.	M20/2.5	11 00 1 717 478	325ix/US
325ix from 9/87 Prod.	M20/2.5	11 00 1 722 925	202 504
M3 up to S.N. 2190004 and from S.N.2190788	S14	11 00 1 310 599	M3/A
630CSi, 530i, 3.0Si All Years	M30	11 00 1 264 756	530 J/US
524td 1985-86	M21	11 00 1 285 897	524 AB US
528i 1979	M30	11 00 1 276 765	528 EL US
528i 1980-81	M30	11 00 1 276 775	528/2 EL US
528e 1982-83	M20/2.7	11 00 1 278 827	27 eta US
528e 1984-85	M20/2.7	11 00 1 289 054	27/1 eta US
528e to 9/87 Prod.	M20/2.7	11 00 1 716 059	27/2 eta US
528e from 9/87 to 12/87 Prod.	M20/2.7	11 00 9 059 131	
533i, 633CSi 1983	M30	11 00 1 279 923	633/4 EL US
533i, 633CSi 1984	M30	11 00 1 288 258	633/5 EL US
535i, 635CSi 1985 to 1988	M30	11 00 1 707 475	535 KAT
525i (E34)	M20/2.5	11 00 1 719 874	20 25 08
525i (E34) from 9/90 Prod.	M50	11 00 1 730 994	25 6S 02
535i (E34) from 6/88 Prod.	M30	11 00 1 720 674	30 35 05
M5 (E28), M6	S38	11 00 1 310 615	S38 KAT
M5,1991	S38	11 00 1 315 562	36 6S 02
630CSi, 530i, 3.0Si	M30	11 00 1 264 756	530 J/US

All Years			
633CSi 1978-79	M30	11 00 1 276 777	633 EI US
633CSi 1980-81	M30	11 00 1 276 778	633/2 EL US
633CSi 1982	M30	11 00 1 278 517	633/3 EL US
635CSi from 6/87 Prod.	M30	11 00 1 717 485	635 KAT/1 US/J
733i 1978-79	M30	11 00 1 271 547	733/EL US
733i 1980-81	M30	11 00 1 276 779	733/2 EL/US
733i 1982-83	M30	11 00 1 278 515	733/3 EL US
733i 1984-	M30	11 00 1 288 263	733/4 EL US
733i from 1/84 Prod.	M30	11 00 1 716 149	733/5 EL US
735i 1985	M30	11 00 1 707 473	735 KAT
735i (E23) to 9/86 Prod.	M30	11 00 1 717 482	
735i (E32) All Years	M30	11 00 1 714 359	735 32 US
735iL (E32)	M30	11 00 1 720 655	303 503
750iL to 3/90 Prod.	M70	11 00 1 715 605	750LL
750iL from 3/90 Prod.	M70	11 00 1 733 530	50 12 01
750iL All Years (RMFD Block Only)	M70	11 00 1 720 302	
850i, Auto trans.	M70	11 00 1 733 534	50 12 03
850i, Manual trans.	M70	11 00 1 733 972	50 12 05