

1996-2015 All Gas Engine Models

Engine Liter/ CID/ Type

Engine Liter/ CID/ Type	Certifi-	cation Type	Trans.	Type	Comput-	erized	Engine Manage-				
Management	Fuel Induc-	tion System	Ignition	Timing, °BTDC @RPM	TSB	EPA & CARB	Emis-				
Recall	Emis-	sion Con-	trol Sys-	tem SRI	Emission Control Systems						
CA	F E D	A / T	M / T	P C V	A C L	A I S	E G R	E V A P	C A T	S P K	F R
O 2 S											

1996

1.9L/116/L4 Z3	X	X	X	X	YES 31	SFI	14	--	--	--
	X	--	--	X 18	X 6	X 33	X	X 30		
1.9L/116/L4 Except Z3	X	X	X	X	YES 31	SFI	14	--	--	--
	--	X	--	--	X 18	X 6	X 33	X	X 30	
2.8L/170/L6	X	X	X	X	YES 29	SFI	14	27	2	--
	X	--	X 32	--	X 18	X 22	X 33	X	X 28	
3.2L/196/L6	X	X	X	X	YES 16	SFI	14	--	2	--
	X	--	--	--	X 18	X 6	X 33	X	X 30	
4.4L/268/V8	X	X	X	X	YES 31	SFI	14	--	--	--
	X	--	X 32	--	X 20	X 22	X 33	X	X 28	
5.4L/328/V12	X	X	X	X	YES 31	SFI	14	--	3	--
	X	--	X 32	--	X 17	X 22	X 34	X	X 28	

1997

1.9L/116/L4 Z3	X	X	X	X	YES 31	SFI	14	--	--	--
	X	--	--	X 18	X 6	X 33	X	X 30		
1.9L/116/L4 Except Z3	X	X	X	X	YES 31	SFI	14	--	--	--
	--	X	--	--	X 18	X 6	X 33	X	X 30	
2.5L/152/L6	X	X	X	X	YES 29	SFI	14	--	2	--
	X	--	X 32	--	X 18	X 6	X 33	X	X 30	
2.8L/170/L6 (328i, 528i)	X	X	X	X	X	YES 29	SFI	14	--	--
	2	--	X	--	X 32	--	X 18	X 22	X 33	X
2.8L/170/L6 (Z3)	X	X	X	X	YES 29	SFI	14	--	2	--
	--	X	--	X 32	--	X 18	X 6	X 33	X	X 30
3.2L/192/L6	X	X	X	X	YES 16	SFI	14	--	2	--
	X	--	X 32	--	X 18	X 6	X 33	X	X 30	
4.4L/268/V8	X	X	X	X	YES 31	SFI	14	--	--	--
	X	--	--	--	X 20	X 22	X 33	X	X 28	
5.4L/328/V12	X	X	X	X	YES 31	SFI	14	--	3	--
	X	--	X 32	--	X 20	X 22	X 34	X	X 28	

1998

1.9L/116/L4 Z3	X	X	X	X	YES 31	SFI	14	--	--	--
	X	--	X 32	--	X 19	X 6	X 33	X	X 30	
1.9L/116/L4 Except Z3	X	X	X	X	YES 31	SFI	14	--	--	--
	--	X	--	X 32	--	X 19	X 6	X 33	X	X 30
2.5L/152/L6	X	X	X	X	YES 29	SFI	14	--	2	--
	X	--	X 32	--	X 19	X 6	X 33	X	X 30	
2.8L/170/L6 (328i, 528i)	X	X	X	X	X	YES 29	SFI	14	--	--
	2	--	X	--	X 32	--	X 18	X 22	X 33	X
2.8L/170/L6 (Z3)	X	X	X	X	YES 29	SFI	14	--	2	--
	--	X	--	X 32	--	X 18	X 6	X 33	X	X 30
3.2L/192/L6	X	X	X	X	YES 16	SFI	14	--	2	--
	X	--	X 32	--	X 19	X 6	X 33	X	X 30	
4.4L/268/V8	X	X	X	X	YES 23	SFI	14	--	--	--
	X	--	X 32	--	X 20	X 22	X 33	X	X 28	
5.4L/328/V12	X	X	X	X	YES 23	SFI	14	--	3	--
	X	--	X 32	--	X 20	X 22	X 34	X	X 28	

1999-2000

1.9L/116/L4	X	X	X	X	YES 31	SFI	14	--	--	--
-------------	---	---	---	---	--------	-----	----	----	----	----

	X	--	X 32	--	X 19	X 6	X 33	X	X 30			
2.5L/152/L6 (323is, iC)	X		X		X	X	YES 29		SFI	14	--	25
--	X	--	X 32	--	X 19	X 6	X 33	X	X 30			
2.5L/152/L6 (Z3, 323i)	X		X		X	X	YES 26		SFI	14	--	25
--	X	--	X 32	--	X 19	X 6	X 33	X	X 30			
2.8L/170/L6 (328is, iC)	X		X		X	X	YES 29		SFI	14	--	25
--	X	--	X 32	--	X 19	X 6	X 33	X	X 30			
2.8L/170/L6 (Z3, 328i, 528i)	X		X		X	X	YES 26		SFI	14	--	
2.5	--	X	--	X 32	--	X 19	X 6	X 33	X	X 30		
3.2L/192/L6	X		X		X	X	YES 16		SFI	14	--	--
--	X	--	X 32	--	X 19	X 6	X 33	X	X 30			
4.4L/268/V8	X		X		X	X	YES 24		SFI	14	--	--
--	X	--	X 32	--	X 20	X 15	X 33	X	X 28			
5.4L/328/V12	X		X		X	X	YES 23		SFI	14	--	3
--	X	--	X 32	--	X 20	X 21	X 34	X	X 28			
2000												
5.0L/303/V8	X		X	--	X	YES 12		SFI	14	--	--	--
--	X	--	X 9	--	X 19	X 22	X 33	X	X 28			
2001												
2.5L/152/L6	X		X		X	X	YES 13		SFI	14	--	--
--	X	--	X 32	--	X 19	X 6	X 33	X	X 30			1
3.0L/182/L6 DOHC	X		X		X	X	YES 13		SFI	14	7	--
1	X	--	X 9	--	X 19	X 6	X 33	X	X 30			
3.2L/192/L6	X		X		X	X	YES 12		SFI	14	--	--
--	X	--	X 9	--	X 19	X 6	X 33	X	X 30			1
4.4L/268/V8	X		X		X	X	YES 24		SFI	14	7	--
--	X	--	X 32	--	X 19	X 22	X 33	X	X 28			
5.0L/303/V8	X		X	--	X	YES 12		SFI	14	48	--	1
--	X	--	X 9	--	X 19	X 22	X 33	X	X 28			
5.4L/328/V12	X		X		X	X	YES 23		SFI	14	--	--
--	X	--	X 32	--	X 19	X 21	X 34	X	X 28			
2002												
2.5L/152/L6	X		X		X	X	YES 13		SFI	14	--	--
--	X	--	X 32	--	X 19	X 6	X 33	X	X 30			
3.0L/182/L6 DOHC	X		X		X	X	YES 13		SFI	14	--	--
--	X	--	X 9	--	X 19	X 6	X 33	X	X 30			
3.2L/192/L6	X		X		X	X	YES 12		SFI	14	--	--
--	X	--	X 9	--	X 19	X 6	X 33	X	X 30			
4.4L/268/V8	X		X		X	X	YES 11		SFI	14	--	--
--	X	--	X 32	--	X 19	X 22	X 33	X	X 28			40
4.6L/282/V8	X		X		--	YES 24		SFI	14	--	--	--
--	X	--	X 32	--	X 19	X 22	X 33	X	X 28			
5.0L/303/V8	X		X	--	X	YES 12		SFI	14	--	--	--
--	X	--	X 9	--	X 19	X 22	X 33	X	X 28			
5.4L/328/V12	X		X		X	X	YES 11		SFI	14	--	--
--	X	--	X 32	--	X 19	X 21	X 34	X	X 28			
2003												
2.5L/152/L6	X		X		X	X	YES 13		SFI	14	--	--
--	X	--	X 32	--	X 19	X 6	X 33	X	X 30			
3.0L/182/L6 DOHC	X		X		X	X	YES 13		SFI	14	--	--
--	X	--	X 32	--	X 19	X 6	X 33	X	X 30			
3.2L/192/L6	X		X		X	X	YES 12		SFI	14	--	--
--	X	--	X 32	--	X 19	X 6	X 33	X	X 30			
4.4L/268/V8	X		X		X	X	YES 11		SFI	14	--	--
--	X	--	X 32	--	X 19	X 22	X 33	X	X 28			36 40
4.6L/282/V8	X		X		--	YES 24		SFI	14	--	--	--
--	X	--	X 32	--	X 19	X 22	X 33	X	X 28			

5.0L/303/V8	X	X	--	X	YES 12	SFI	14	--	--	--
	X	--	X 32	--	X 19	X 22	X 33	X	X 28	
6.0L/364/V12	X	X	X	--	YES 11	DFI	14	--	--	36
	X	--	X 32	--	X 19	X 22	X 33	X	X 28	
2004										
2.5L/152/L6	X	X	X	X	YES 10	SFI	14	--	--	--
	X	--	X 32	--	X 19	X	X 33	X	X	
3.0L/182/L6 DOHC	X	X	X	X	YES 10	SFI	14	--	--	--
37 38	X	--	X 32	--	X 19	X	X 33	X	X	
3.2L/192/L6	X	X	X	X	YES 12	SFI	14	--	--	--
	X	--	X 32	--	X 19	X	X 33	X	X	
4.4L/268/V8	X	X	X	X	YES 11	SFI	14	--	--	36 37
38 39	X	--	X 32	--	X 19	X	X 33	X	X	
4.8L/293/V8	X	X	X	--	YES 11	SFI	14	--	--	37 38
39	X	--	X 32	--	X 19	X	X 33	X	X 28	
6.0L/364/V12	X	X	X	--	YES 11	DFI	14	--	--	36 39
	X	--	X 32	--	X 19	X 22	X 33	X	X 28	
2005										
2.5L/152/L6	X	X	X	X	YES 10	SFI	14	--	--	--
	X	--	X 32	--	X 19	X	X 33	X	X	
3.0L/182/L6 DOHC	X	X	X	X	YES 10	SFI	14	--	--	--
	--	X	--	X 32	--	X 19	X	X 33	X	X
3.2L/192/L6	X	X	X	X	YES 12	SFI	14	--	--	--
	X	--	X 32	--	X 19	X	X 33	X	X	
4.4L/268/V8	X	X	X	X	YES 11	SFI	14	--	--	36
	X	--	X 32	--	X 19	X	X 33	X	X	
4.8L/293/V8	X	X	X	--	YES 11	SFI	14	--	--	--
	X	--	X 32	--	X 19	X	X 33	X	X 28	
6.0L/364/V12	X	X	X	--	YES 11	DFI	14	--	--	36
	X	--	X 32	--	X 19	X 22	X 33	X	X 28	
2006										
2.5L/152/L6	X	X	X	X	YES 41	SFI	14	--	--	--
	X	--	X 32	--	X 19	X	X 33	X	X	
3.0L/183/L6 DOHC (M54)	X	X	X	X	YES 41	SFI	14	--		
	--	--	X	--	X 32	--	X 19	X	X 33	
3.0L/183/L6 DOHC (N52)	X	X	X	X	YES 35	SFI	14	--		
	--	--	X	--	--	X 19	X	X 33	X	X 28
3.2L/198/L6	X	X	X	X	YES 41	SFI	14	--	--	--
	X	--	X 32	--	X 19	X	X 33	X	X	
4.4L/268/V8	X	X	X	X	YES 41	SFI	14	--	36	--
	X	--	--	--	X 19	X	X 33	X	X	
4.8L/293/V8	X	X	X	X	YES 41	SFI	14	--	--	--
	X	--	--	--	X 19	X	X 33	X	X 28	
5.0L/305/V10	X	X	X	--	YES 41	SFI	14	--	--	--
	X	--	X 32	--	X 19	X 22	X 33	X	X 28	
6.0L/364/V12	X	X	X	--	YES 41	DFI	14	--	--	--
	X	--	X 32	--	X 19	X 22	X 33	X	X 28	
2007										
3.0L/183/L6 DOHC (N51)	X	X	X	X	YES 42	SFI	14	--		
	--	--	X	--	X 32	--	X 19	X 43	X 33	
3.0L/183/L6 DOHC (N52KP)	X	X	X	X	YES 42	SFI	14	--		
	--	--	X	--	--	X 19	X 43	X 33	X	X 28
3.0L/183/L6 DOHC (N54)	X	X	X	X	YES 44	DFI	14	--		
	46	--	X	--	--	X 19	X 43	X 33	X	X 28
3.2L/198/L6	X	X	--	X	YES 12	SFI	14	--	--	--
	X	--	X 32	--	X 19	X	X 33	X	X	
4.4L/268/V8	X	X	X	X	YES 41	SFI	14	--	36 47	--

X	--	--	--	X 19	X	X 33	X	X			
4.8L/293/V8	X	X	X	X	YES 45		SFI	14	--	--	--
X	--	--	--	X 19	X	X 33	X	X 28			
5.0L/305/V10	X	X	X	X	YES 45		SFI	14	--	--	--
X	--	X 32	--	X 19	X	X 33	X	X 28			
6.0L/364/V12	X	X	X	--	YES 45		DFI	14	--	--	--
X	--	--	--	X 19	X	X 33	X	X 28			
2008											
3.0L/183/L6 DOHC (N51)		X	X	X	X	YES 42		SFI	14	--	
--	--	X	--	X 32	--	X 19	X 43	X 33	X	X 28	
3.0L/183/L6 DOHC (N52)		X	X	X	X	YES 42		SFI	14	--	
--	--	X	--	--	--	X 19	X 43	X 33	X	X 28	
3.0L/183/L6 DOHC (N54)		X	X	X	X	YES 44		DFI	14	--	
--	--	X	--	--	--	X 19	X 43	X 33	X	X 28	
3.2L/198/L6	X	X	--	X	YES 12		SFI	14	--	--	--
X	--	X 32	--	X 19	X	X 33	X	X			
4.0L/244/V8	X	X	X	X	YES 41		SFI	14	--	--	--
X	--	--	--	X 19	X	X 33	X	X 28			
4.4L/268/V8	X	X	X	X	YES 41		SFI	14	--	--	--
X	--	--	--	X 19	X 22	X 33	X	X 28			
4.8L/293/V8	X	X	X	X	YES 45		SFI	14	--	--	--
X	--	--	--	X 19	X 22	X 33	X	X 28			
5.0L/305/V10	X	X	X	X	YES 45		SFI	14	--	--	--
X	--	X 32	--	X 19	X	X 33	X	X 28			
6.0L/364/V12	X	X	X	--	YES 45		DFI	14	--	--	--
X	--	--	--	X 19	X	X 33	X	X 28			
2009-10											
3.0L/183/L6 DOHC (N51)		X	X	X	X	YES 42		SFI	14	--	
--	--	X	--	X 32	--	X 19	X 43	X 33	X	X 28	
3.0L/183/L6 DOHC (N52K)		X	X	X	X	YES 42		SFI	14	--	
--	--	X	--	--	--	X 19	X 43	X 33	X	X 28	
3.0L/183/L6 DOHC (N54)		X	X	X	X	YES 44		DFI	14	--	
48	--	X	--	--	--	X 19	X 43	X 33	X	X 28	
4.0L/244/V8	X	X	X	X	YES 41		SFI	14	--	--	--
X	--	--	--	X 19	X	X 33	X	X 28			
4.4L/268/V8	X	X	X	X	YES 41		SFI	14	--	--	--
X	--	--	--	X 19	X 22	X 33	X	X 28			
4.8L/293/V8	X	X	X	X	YES 45		SFI	14	--	--	--
X	--	--	--	X 19	X 22	X 33	X	X 28			
5.0L/305/V10	X	X	X	X	YES 45		SFI	14	--	--	--
X	--	X 32	--	X 19	X	X 33	X	X 28			
6.0L/364/V12	X	X	X	--	YES 45		DFI	14	--	--	--
X	--	--	--	X 19	X 22	X 33	X	X 28			
2011											
3.0L/183/L6 DOHC (N51)		X	X	X	X	YES 42		SFI	14	--	
--	--	X	--	X 32	--	X 19	X 43	X 33	X	X 28	
3.0L/183/L6 DOHC (N52K)		X	X	X	X	YES 42		SFI	14	--	
--	--	X	--	--	--	X 19	X 43	X 33	X	X 28	
3.0L/183/L6 DOHC (N54)		X	X	X	X	YES 44		DFI	14	--	
--	--	X	--	--	--	X 19	X 43	X 33	X	X 28	
3.0L/183/L6 DOHC (N55)		X	X	X	X	YES 11		SFI	14	--	
--	--	X	--	--	--	X 19	X 6	X 33	X	X 30	
4.0L/244/V8	X	X	X	X	YES 11		SFI	14	--	--	--
X	--	--	--	X 19	X 22	X 33	X	X 28			
4.4L/268/V8	X	X	X	X	YES 11		SFI	14	--	49	--
X	--	--	--	X 19	X 22	X 33	X	X 28			
6.0L/364/V12	X	X	X	--	YES 25		DFI	14	--	--	--

	X	--	X 32	--	X 19	X 22	X 33	X	X 28			
2012												
2.0L/122/L4	X	X	X	X	YES 11			SFI	14	--	--	--
	X	--	--	--	X 19	X 6	X 33	X	X 30			
3.0L/183/L6 DOHC (N51)	X	X	X	X				YES 42		SFI	14	--
	--	--	X	--	X 32	--	X 19	X 43	X 33	X	X 28	
3.0L/183/L6 DOHC (N52K)	X	X	X	X				YES 42		SFI	14	--
	--	--	X	--	--	--	X 19	X 43	X 33	X	X 28	
3.0L/183/L6 DOHC (N54)	X	X	X	X				YES 44		DFI	14	--
	--	--	X	--	--	--	X 19	X 43	X 33	X	X 28	
3.0L/183/L6 DOHC (N55)	X	X	X	X				YES 11		SFI	14	--
	--	--	X	--	--	--	X 19	X 6	X 33	X	X 30	
4.0L/244/V8	X	X	X	X	YES 11			SFI	14	--	--	--
	X	--	--	--	X 19	X 22	X 33	X	X 28			
4.4L/268/V8	X	X	X	X	YES 11			SFI	14	--	--	--
	X	--	--	--	X 19	X 22	X 33	X	X 28			
6.0L/364/V12	X	X	X	--	YES 25			DFI	14	--	--	--
	X	--	X 32	--	X 19	X 22	X 33	X	X 28			
2013												
2.0L/122/L4	X	X	X	X	YES 11			SFI	14	--	--	--
	X	--	--	--	X 19	X 6	X 33	X	X 30			
3.0L/183/L6 DOHC (N51)	X	X	X	X				YES 42		SFI	14	--
	--	--	X	--	X 32	--	X 19	X 43	X 33	X	X 28	
3.0L/183/L6 DOHC (N52K)	X	X	X	X				YES 42		SFI	14	--
	--	--	X	--	--	--	X 19	X 43	X 33	X	X 28	
3.0L/183/L6 DOHC (N54)	X	X	X	X				YES 44		DFI	14	--
	--	--	X	--	--	--	X 19	X 43	X 33	X	X 28	
3.0L/183/L6 DOHC (N55)	X	X	X	X				YES 11		SFI	14	--
	--	--	X	--	--	--	X 19	X 6	X 33	X	X 30	
4.0L/244/V8	X	X	X	X	YES 11			SFI	14	--	--	--
	X	--	--	--	X 19	X 22	X 33	X	X 28			
4.4L/268/V8	X	X	X	X	YES 11			SFI	14	--	--	--
	X	--	--	--	X 19	X 22	X 33	X	X 28			
6.0L/364/V12	X	X	X	--	YES 25			DFI	14	--	--	--
	X	--	X 32	--	X 19	X 22	X 33	X	X 28			
2014												
2.0L/122/L4	X	X	X	X	YES 11			SFI	14	--	--	--
	X	--	--	--	X 19	X 6	X 33	X	X 30			
3.0L/183/L6 DOHC (N54)	X	X	X	X				YES 44		DFI	14	--
	--	--	X	--	--	--	X 19	X 43	X 33	X	X 28	
3.0L/183/L6 DOHC (N55)	X	X	X	X				YES 11		SFI	14	--
	--	--	X	--	--	--	X 19	X 6	X 33	X	X 30	
4.4L/268/V8	X	X	X	X	YES 11			SFI	14	--	--	--
	X	--	--	--	X 19	X 22	X 33	X	X 28			
6.0L/364/V12	X	X	X	--	YES 25			DFI	14	--	--	--
	X	--	X 32	--	X 19	X 22	X 33	X	X 28			
2015												
2.0L/122/L4	X	X	X	X	YES 11			SFI	14	--	--	--
	X	--	--	--	X 19	X 6	X 33	X	X 30			
3.0L/183/L6 DOHC (N54)	X	X	X	X				YES 44		DFI	14	--
	--	--	X	--	--	--	X 19	X 43	X 33	X	X 28	
3.0L/183/L6 DOHC (N55)	X	X	X	X				YES 11		SFI	14	--
	--	--	X	--	--	--	X 19	X 6	X 33	X	X 30	
4.4L/268/V8	X	X	X	X	YES 11			SFI	14	--	--	--
	X	--	--	--	X 19	X 22	X 33	X	X 28			
6.0L/364/V12	X	X	X	--	YES 25			DFI	14	--	--	--
	X	--	X 32	--	X 19	X 22	X 33	X	X 28			

X--Equipped

--Not Equipped

1 --Service Interval Indicator (SII) system.

2 --Certain 323i & 328i models built between 6/95 & 12/98, M3 models built between 1/96 & 12/98, 528 models built between 3/96 & 8/98, Z3 models built between 7/96 & 1/99, may experience Check Engine lamp lighting w/DTCs 83 &/or 244 due to a faulty crankshaft position sensor. Source: BMW Voluntary Emissions Recall 99E A01.

3 --Certain 750 & 850 models built between 1/95 & 5/99 may experience Check Engine lamp lighting w/DTCs 26, 27, 63-68 &/or 69-74 due to faulty crankcase ventilation valves. Source: BMW Voluntary Emissions Recall 99E A03.

4 --Certain M5 models built between 9/22/00 & 10/13/00, may have an improper DME installed. Source: BMW Service Bulletin 12 14 00.

5 --Certain 323i, iA & 328i, iA models built between 3/98 & 7/99, 323iC, iCA & 328iC, iCA models built between 2/99 & 7/99, 528 models built between 2/99 & 7/99, Z3 2.3L models built between 9/98 & 7/99 & Z3 2.8L models built between 4/99 & 7/99, may not meet EPA & CARB OBD requirements. These models will require PCM programming. Source: BMW Emissions Recall 00E A01.

6 --Type, TWC; number of catalytic converters, 1.

7 --Certain X5 models built between 8/14/00 & 9/8/00 may have an improperly installed fuel tank vent line fitting. Source: BMW Service Bulletin 16 52 00.

8 --On certain M5 models built between 9/99 & 2/00, the 02S readiness codes will not set in the ECM/DME. Source: BMW Service Bulletin 12 24 99.

9 --If equipped, pump type.

10 --Siemens MS. Equipped w/MIL.

11 --SFI/OBD II. Equipped w/MIL.

12 --Siemens MSS 52. Equipped w/MIL.

13 --Siemens MS 43. Equipped w/MIL.

14 --Electronically controlled, no adjustment.

15 --Two TWC & two WU-TWC.

16 --Siemens MS 41.2. Equipped w/MIL.

17 --On 5 & 7 Series, EVAP canister is located at left rear wheel housing. On 8 Series, EVAP canister is located in engine compartment.

18 --EVAP canister is located in engine compartment.

19 --EVAP canister is located at rear of vehicle near fuel tank.

20 --EVAP canister is located at lefthand rear wheel housing.

21 --Two integrated catalytic converter assemblies. HC absorbing catalytic converter, electrically heated coil, metallic back-up catalytic converter & main catalytic converter.

22 --Type, TWC; number of catalytic converters, 2.

23 --DME M5.2.1. Equipped w/MIL.

24 --DME M7.2. Equipped w/MIL.

25 --DFI. Equipped w/MIL.

26 --Siemens MS 42. Equipped w/MIL.

27 --On certain 328i models, secondary AIR pump must be inspected & repositioned. Source: BMW Emissions Recall No. 96E-A01.

28 --Four HO2S.

29 --Siemens MS 41.1. Equipped w/MIL.

30 --Two HO2S.

31 --DME M5.2. Equipped w/MIL.

32 --Pump type.

33 --EI/Direct Ignition System.

34 --DI.

35 --Siemens MSV70 Engine Management System. Equipped w/MIL.

36 --On 745i chassis number DP68404 to DP73415, 745iL DS45296 to DS54391, 760 DC47004 to DC47013, 760iL DK10759 to DK11170, X5 4.4i LV00047 to LV54391, 545i B087021 to B088625, 545iA B010703 to B114778, 645Ci B215011 to B215668, 645CiA B189025 to B191235, 645Cic B260020 to B260713 and 645CicA B320023 to B322905, the DME may require reprogramming for oxygen sensor diagnostics. Source BMW Emission 04E-A04.

37 --On 2004 X5 models produced between 4/5/04 to 4/24/04, the suction jet pump may have been

inadvertently attached to the left side sensor. This could cause fuel starvation leading to stalling. Source BMW Emission 04V-402.

38 --On certain 2004 X5 models the in-tank fuel line may have been incorrectly attached. This could leading to stalling. Source BMW Emission 04V-402000.

39 --On certain 2004 5, 6, 7 & X5 8 & 12 cylinder models, if engine stalling occurs after a short period of operation, the Digital Engine Management control unit may require replacement. Source BMW Emission 04V-344000.

40 --On certain 2002-03 745i & 745Li 4.4L engine models from start of production through 9/30/02, may experience erratic engine performance & MIL illumination which may be due to faulty ignition coils. Source BMW Emission 03E-A01.

41 --ME9.2.2 Engine Management System. Equipped w/MIL.

42 --MSV80 Engine Management System. Equipped w/MIL.

43 --Type TWC. Near engine & under body catalytic converters.

44 --MSD80 Engine Management System. Equipped w/MIL.

45 --ME9.2.3 Engine Management System. Equipped w/MIL.

46 --On certain 325 models built from 5/24/06 through 10/10/06, the original DME programming may cause OBD system not to detect various emission system components. In the event of a component failure, the MIL will not illuminate. Source BMW Voluntary Emission Recall Campaign 07E-A01.

47 --On certain ALPINA B7 models built from 11/10/06 to 07/25/07, The DME programming may cause the required OBD diagnostic test not to run to completion. Source BMW Voluntary Emission Recall Campaign 07E-A04.

48 --On certain 2009 528 & 535 models built from 2/10/09 to 8/27/09, may experience a DME software error which would affect OBD communication efficiency. Source BMW Emission Recall SI B 12 23 09.

49 --On certain 2011 X5 and X6 4.4L engine models built to 3/2011 and 528, 535, 550, 640, 740 and 750 4.4L engine models built to 1/2011, may consume engine oil above permissible specification and may run rough at times. White or blue smoke may also be seen exiting the exhaust system due to construction material of the crankcase ventilation lines and vent pipes becoming brittle from engine compartment temperatures. Source BMW Emission Recall SI B11 07 12.

ACL--Air Cleaner (Thermostatic Air Cleaner)

AIS--Air Injection System

A/T--Automatic Transmission

BTDC--Before Top Dead Center

CA--California

CARB--California Air Resources Board

CAT--Catalytic Converter

CID--Cubic Inch Displacement

DME--Digital Motor Electronic (Motronic) Control System

DFI--Gasoline Direct Fuel Injection

DI--Distributor Ignition

EGR--Exhaust Gas Recirculation

EI--Electronic Ignition

EPA--Environmental Protection Agency

EVAP--Evaporative Emission Control System

FED--Federal

FI--Fuel Injection

FR--Fillpipe Restrictor

MFI--Multiport Fuel Injection

M/T--Manual Transmission

O2S--Oxygen Sensor

PCV--Positive Crankcase Ventilation

RPM--Revolutions Per Minute

SFI--Sequential Fuel Injection

SPK--Spark Control

SRI--Service Reminder Indicator

TSB--Technical Service Bulletin

TWC--Three-Way Catalytic Converter

VP-20--Bosch VP-20 Diesel Engine Control System

WU-TWC--Warm Up-Three Way Catalytic Converter