

1 Manufacturer/Marque	2			3						4 Min Oil Temp(°C)
	(b)		(c)	(b)		(c)	(d)	(e)	(f)	
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (% Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	
ASIA										
The engine code is located on the cylinder block on the left hand side rear. It is made up of the first characters of the engine number.										
Rocsta										
1.8l Engine Code JF8	0.5	700	800	0.3	200	0.97	1.03	2500	3000	80
BENTLEY MOTORS LIMITED										
Includes Rolls-Royce models up to and including 2002 models. For Rolls-Royce models 2003 onward, refer to Rolls-Royce Motor Cars Ltd. The VIN can be found on the VIN Plate										
Rolls Royce 1992/93 Models										
Where the 10th character of the VIN is N or P.	0.5	530	800	0.3	200	0.97	1.03	2500	2800	80
Bentley 1992/93 Models										
Where the 10th character of the VIN is N or P.	0.5	530	800	0.3	200	0.97	1.03	2500	2800	80
Rolls Royce 1994/95 Models										
Where the 10th character of the VIN is R or S.	0.5	600	750	0.3	200	0.97	1.03	2500	2700	80
Bentley 1994/95 Models										
Where the 10th character of the VIN is R or S.	0.5	600	750	0.3	200	0.97	1.03	2500	2700	80
Rolls Royce 1996/97 Models										
Where the 10th character of VIN is T or V.	0.5	500	670	0.3	200	0.97	1.03	2500	2700	80
Bentley 1996/97 Models										
Where the 10th character of the VIN is T or V.	0.5	500	670	0.3	200	0.97	1.03	2500	2700	80
Rolls Royce 1998/1999/2000/2001/2002 Models										
(10th Character of VIN is W, X, Y, 1 or 2) with 6.75 litre V8 (6th character of VIN is 1, 2, or 3)	0.5	500	670	0.3	200	0.97	1.03	2500	2700	80
(10th Character of VIN is W, X, Y, 1 or 2) with 5.4 litre V12 (6th character of VIN is 6)	0.5	525	675	0.3	200	0.97	1.03	2500	3000	60
Bentley 1998/1999/2000/2001 Models										
Where the 10th character of the VIN is W, X, Y or 1 with 6.75 litre V8 where the 6th character of the VIN is 1, 2 or 3.	0.5	500	670	0.3	200	0.97	1.03	2500	2700	80
Where the 10th character of the VIN is W, X, Y or 1 with 4.4 litre V8 where the 6th character of the VIN is 5.	0.5	575	725	0.3	200	0.97	1.03	2500	3000	60
Bentley 2002 to 2009 Models										
(10th Character of VIN is 2/3) with 6.75 litre single turbo V8 (6/7th characters of VIN , are 22, 23, 25, 26, 31 or 32)	0.5	500	670	0.3	200	0.97	1.03	2500	2700	80
6.0 litre twin turbo W12 (5th Character of VIN is E or F)	0.3	500	650	0.2	200	0.97	1.03	2000	2500	80
6.75 litre twin turbo V8 (6/7th characters of VIN, are 34, 37, 42, 43, 45 or 48)	0.5	500	800	0.3	200	0.97	1.03	2500	2700	80

1 Manufacturer/Marque	2			3			4			
	(b)	(c)		(b)	(c)	(d)	(e)	(f)		
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (% Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
Bentley 2002 to 2010 Models										
6.0 litre twin turbo W12 (5th Character of VIN is E, F or G)	0.3	500	650	0.2	200	0.97	1.03	2000	2500	80
6.75 litre twin turbo V8 (6/7th Characters of VIN are 34,37,42,43,45 or 48)	0.5	500	800	0.3	200	0.97	1.03	2500	2700	80
Bentley 2002 to 2013 Models										
6.0 litre twin turbo W12 (5th Character of VIN is B, E, F, G, H, J or K)	0.3	500	650	0.2	200	0.97	1.03	2000	2500	80
Bentley 2011 to 2013 Models										
6.75 litre twin turbo V8 (5th Character of VIN is A)	0.3	510	610	0.3	200	0.97	1.03	2500	2700	80
Bentley 2012 to 2014 Models										
4.0 litre twin turbo V8 (5th Character of VIN is N or E)	0.3	500	650	0.3	200	0.97	1.03	2400	2600	80
BMW AG										
The Engine Code is stamped on the Engine Block and VIN Plate. No longer on VIN plate from 03/2011.										
7 series (E65/E66)										
740Li Saloon Engine Code N62 B40 A	0.2	450	650	0.2	200	0.97	1.03	2300	2700	60
750Li Saloon Engine Code N62 B48 B	0.2	450	650	0.2	200	0.97	1.03	2300	2700	60
760i / Li Saloon Engine Code N73 B60 A - First used before 01/03/2005	0.2	450	650	0.2	200	0.97	1.03	2300	2700	60
760i / Li Saloon Engine Code N73 B60 A - First used on or after 01/03/2005	0.2	590	700	0.2	200	0.97	1.03	2300	2700	60
7 series (F01/F02)										
740i / Li Saloon Engine Code N54 B30 A	0.2	600	860	0.2	200	0.91	1.05	2300	2700	60
740i / Li Saloon Engine Code N55 B30 A	0.2	600	860	0.2	200	0.97	1.03	2300	2700	60
750i / Li Saloon Engine Code N63 B44 A	0.2	600	860	0.2	200	0.97	1.03	2300	2700	60
750i / Li Saloon Engine Code N63 B44 B	0.2	550	850	0.2	200	0.97	1.03	2300	2700	60
760Li Saloon Engine Code N74 B60 A	0.2	550	800	0.2	200	0.97	1.03	2300	2700	60
X5 series (E53)										
X5 3.0i Engine Code 30 6S 3 - First used before 01/07/2002	0.2	600	800	0.3	200	0.97	1.03	2300	2700	60
X5 3.0i Engine Code 30 6S 3 - First used on or after 01/07/2002	0.2	600	800	0.2	200	0.97	1.03	2300	2700	60
X5 4.4i Engine Code 44 8S 2 - First used before 01/07/2002	0.2	550	750	0.3	200	0.97	1.03	2300	2700	60
X5 4.4i Engine Code 44 8S 2 - First used on or after 01/07/2002	0.2	550	750	0.2	200	0.97	1.03	2300	2700	60
X5 4.4i Engine Code N62 B44 A	0.2	550	700	0.2	200	0.97	1.03	2300	2700	60
X5 4.6is Engine Code 46 8S 1 - First used before 01/07/2002	0.2	500	700	0.3	200	0.97	1.03	2300	2700	60
X5 4.6is Engine Code 46 8S 1 - First used on or after 01/07/2002	0.2	500	700	0.2	200	0.97	1.03	2300	2700	60
X5 4.8is Engine Code N62 B48 A	0.2	550	750	0.2	200	0.97	1.03	2300	2700	60
X5 series (E70)										
X5 3.0si Engine Code N52 B30 A	0.2	600	860	0.2	200	0.91	1.05	2300	2700	60

1	2			3			4			
Manufacturer/Marque	(b)	(c)		(b)	(c)	(d)	(e)	(f)		
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (% Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
X5 xDrive30i Engine Code N52 B30 A	0.2	600	860	0.2	200	0.91	1.05	2300	2700	60
X5 4.8i Engine Code N62 B48 B	0.2	550	750	0.2	200	0.97	1.03	2300	2700	60
X5 xDrive48i Engine Code N62 B48 B	0.2	550	750	0.2	200	0.97	1.03	2300	2700	60
X5 xDrive50i Engine Code N63 B44 A	0.2	600	860	0.2	200	0.97	1.03	2300	2700	60
X5 M Engine Code S63 B44 A	0.2	550	750	0.2	200	0.97	1.03	2300	2700	60
X5 series (F15)										
X5 xDrive50i Engine Code N63 B44 B	0.2	600	860	0.2	200	0.97	1.03	2300	2700	60
X6 series (E71)										
X6 xDrive35i Engine Code N54 B30 A	0.2	600	860	0.2	200	0.91	1.05	2300	2700	60
X6 xDrive35i Engine Code N55 B30 A	0.2	600	860	0.2	200	0.97	1.03	2300	2700	60
X6 xDrive50i Engine Code N63 B44 A	0.2	600	860	0.2	200	0.97	1.03	2300	2700	60
X6 M Engine Code S63 B44 A	0.2	550	750	0.2	200	0.97	1.03	2300	2700	60
CADILLAC										
SRX										
3.6L V6 Engine Code LY7	0.3	605	655	0.2	200	0.97	1.03	2355	2505	80
4.6L V8 Engine Code LH2	0.3	610	660	0.2	200	0.97	1.03	2425	2575	80
Escalade										
6.2L V8 Engine Code L92 or L9H	0.3	575	625	0.2	200	0.97	1.03	2500	3000	80
CHRYSLER JEEP										
The 10th digit of the VIN number denotes the model year i.e. X = 1999 MY and Y = 2000 MY.										
Jeep Commander										
5.7 Automatic 06-07 model year	0.3	575	650	0.2	200	0.97	1.03	2400	2600	97
5.7 Automatic 07-08 model year	0.3	575	650	0.2	200	0.97	1.03	2400	2600	97
5.7 Automatic 5 gears 08-09 model year	0.3	575	675	0.2	200	0.97	1.03	2400	2600	95
Chrysler Voyager										
2.0l Manual, Short Wheelbase	0.5	800	1000	0.3	200	0.97	1.03	2000	2200	80
3.3l Automatic, Short Wheelbase	0.5	700	900	0.3	200	0.97	1.03	2000	2200	80
3.3l Automatic, Long Wheelbase	0.5	700	900	0.3	200	0.97	1.03	2000	2200	80
2.4l 2001 Model Year	0.5	650	900	0.3	200	0.97	1.03	2300	2500	80
2.4 Manual 06-07 model year	0.3	800	900	0.2	200	0.97	1.03	2400	2600	86
2.4 Manual 07-08 model year	0.3	800	900	0.2	200	0.97	1.03	2400	2600	86

1	2		3		4					
Manufacturer/Marque	(b)	(c)	(b)	(c)	(d)	(e)	(f)			
	(a) Normal Idle Speed		(a) Fast Idle Speed							
	Max CO Limit (% Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
Chrysler Grand Voyager										
3.3 Automatic 06-07 model year	0.3	700	800	0.2	200	0.97	1.03	2400	2600	88
3.3 Automatic 07-08 model year	0.3	700	800	0.2	200	0.97	1.03	2400	2600	88
Chrysler Grand Voyager (RT)										
3.8 Automatic 6 gears 08-09 model year	0.3	600	730	0.2	200	0.97	1.03	2500	2700	97
3.8 Automatic 6 gears 09 model year	0.3	630	730	0.2	200	0.97	1.03	2500	2700	96
CITROEN										
The VIN Code consists of the 6th and 7th character of the VIN for 2 digit codes and the 6th to the 9th character for 4 digit codes. The Engine Code consist of the 6th to 8th character of the VIN number for 3 digit codes. The Engine Code can be found on the Engine Block.										
Grand C4 Picasso										
1.8i 16v VIN Code 6FYC	0.5	550	850	0.3	200	0.97	1.03	2000	2400	80
2.0i 16v VIN Code RFJH	0.5	550	850	0.3	200	0.97	1.03	2000	3000	80
1.6i Engine Code 5FS	0.5	550	850	0.3	200	0.97	1.03	2000	3000	80
1.6i Engine Code 5FV	0.5	600	800	0.3	200	0.97	1.03	2000	3000	80
1.6i Engine Code 5FW	0.5	600	950	0.3	200	0.97	1.03	2000	3000	80
1.6i Engine Code 5FX	0.5	600	950	0.3	200	0.97	1.03	2000	3000	80
1.6i Engine Code 5FT	0.5	600	950	0.3	200	0.97	1.03	2000	3000	80
New Grand C4 Picasso										
1.6 VTi VIN Code 5FS0	0.5	600	900	0.3	200	0.97	1.03	2000	3000	100
1.6 THP VIN Code 5FV	0.5	600	800	0.3	200	0.97	1.03	2000	3000	93
C8										
2.0i auto VIN Code RFNE	0.5	600	800	0.3	200	0.97	1.03	2000	2500	80
2.0i VIN Code RFNC	0.5	600	800	0.3	200	0.97	1.03	2000	2500	80
2.0i VIN Code RFJC	0.5	700	950	0.3	200	0.97	1.03	2000	3000	80
2.0i VIN Code RFJF	0.5	700	950	0.3	200	0.97	1.03	2000	3000	80
2.2i VIN Code 3FZC	0.5	600	800	0.3	200	0.97	1.03	2000	2500	80
2.2i VIN Code 3FYC	0.5	600	800	0.3	200	0.97	1.03	2000	2400	80
Berlingo Multispace (MPV)										
1.1l injection VIN Code HDZF	0.5	800	900	0.3	200	0.97	1.03	2000	2500	80
1.4l injection VIN Code KFXF	0.5	800	900	0.3	200	0.97	1.03	2000	2500	80
1.4l injection VIN Code KFWB	0.5	750	950	0.3	200	0.97	1.03	2000	3000	80
1.4i VIN Code KFWC	0.5	650	900	0.3	200	0.97	1.03	2000	2500	80
1.6l injection 16v VIN Code NFUB	0.5	650	850	0.3	200	0.97	1.03	2000	3000	80

1	2			3			4			
Manufacturer/Marque	(b)	(c)		(b)	(c)	(d)	(e)	(f)		
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (%) Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
1.6l injection 16v VIN Code NFUP	0.5	800	900	0.3	200	0.97	1.03	2000	3000	80
1.6i VIN Code NFUC	0.5	650	900	0.3	200	0.97	1.03	2000	2500	80
1.6i VIN Code NFU1	0.5	650	900	0.3	200	0.97	1.03	2000	2500	80
1.6i VIN Code NFU9	0.5	650	900	0.3	200	0.97	1.03	2000	2500	80
1.8l injection VIN Code LFXF	0.5	750	850	0.3	200	0.97	1.03	2000	2500	80
1.6i Engine Code NFU	0.5	600	900	0.3	200	0.97	1.03	2000	3000	80
1.6i Engine Code NFR	0.5	600	900	0.3	200	0.97	1.03	2000	3000	80
1.6i Engine Code 5FK	0.5	600	900	0.3	200	0.97	1.03	2000	3000	80
1.6i Engine Code 5FS	0.5	550	850	0.3	200	0.97	1.03	2000	3000	80
Synergie (MPV)										
2.0l injection VIN Code UB	0.5	800	900	0.3	200	0.97	1.03	2000	2500	80
2.0l injection VIN Code RFVB	0.5	750	850	0.3	200	0.97	1.03	2000	2500	80
2.0l injection 16v VIN Code RFNC	0.5	600	800	0.3	200	0.97	1.03	2000	3000	80
2.0l injection 16v VIN Code RFNF	0.5	600	800	0.3	200	0.97	1.03	2000	3000	80
Relay Van										
2.0i with sixth character of VIN = T	0.5	750	950	0.3	200	0.97	1.03	2000	2500	80
Berlingo (Van)										
1.1i VIN Code HFXB	0.5	700	900	0.3	200	0.97	1.03	2000	2500	80
1.4l injection VIN Code KFXE	0.5	800	900	0.3	200	0.97	1.03	2000	2500	80
1.4l injection VIN Code KFXF	0.5	800	900	0.3	200	0.97	1.03	2000	2500	80
1.4l injection VIN Code KFVB	0.5	750	950	0.3	200	0.97	1.03	2000	3000	80
1.6i Engine Code 5FK	0.5	600	900	0.3	200	0.97	1.03	2000	3000	80
1.6i Engine Code NFU	0.5	600	900	0.3	200	0.97	1.03	2000	3000	80
1.6i Engine Code NFR	0.5	600	900	0.3	200	0.97	1.03	2000	3000	80
Dispatch (Van)										
2.0l injection 16v VIN Code RFNC	0.5	600	800	0.3	200	0.97	1.03	2000	3000	80
2.0i Engine Code RFH	0.5	600	800	0.3	200	0.97	1.03	2000	2400	80
Dispatch (MPV)										
2.0i 16v VIN Code RFHC	0.5	600	800	0.3	200	0.97	1.03	2000	3000	80
Nemo Multispace										
1.4i VIN Code KFVC	0.5	650	750	0.3	200	0.97	1.03	2000	3000	80
1.4i Engine Code KFT	0.5	650	850	0.3	200	0.97	1.03	2000	3000	80

1	2			3						4
Manufacturer/Marque	(a)	(b)	(c)	(a)	(b)	(c)	(d)	(e)	(f)	
	Normal Idle Speed			Fast Idle Speed						
	Max CO Limit (%) Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
COLEMAN MILNE										
<i>The engine code is located on the VIN plate attached to the bonnet slam panel.</i>										
Saab 9000 based Limousine From Model Year 1992 Onwards (with catalyser)										
Saab 9000 based Limousines (7 or 8 seat models only)	0.5	700	950	0.3	200	0.97	1.03	2000	2500	80
Saab 95 Based Limousine										
Saab 95 based Limousine 2.0T	0.5	700	950	0.3	200	0.97	1.03	2000	2500	80
Saab 95 based Limousine 2.3T	0.5	700	950	0.3	200	0.97	1.03	2000	2500	80
Saab 95 based Limousine 2.3 Turbo	0.5	700	950	0.3	200	0.97	1.03	2000	2500	80
Saab 95 based Limousine 3.0 V6	0.5	700	950	0.3	200	0.97	1.03	2000	2500	80
Mercedes based Limousines (7 or 8 seats)										
E200 Engine Code M111942	0.5	700	800	0.3	200	0.97	1.03	2200	2800	80
E230 Engine Code M111970	0.5	700	800	0.3	200	0.97	1.03	2200	2800	80
E240 V6 Engine Code M112911	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
E280 Engine Code M104945	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
E320 Engine Code M104995	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
E280 V6 Engine Code M112921	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
E320 V6 Engine Code M112941	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
E200K Engine Code M111947	0.5	700	800	0.3	200	0.97	1.03	2200	2800	80
Mercedes based Hearses										
E200 Engine Code M111942	0.5	700	800	0.3	200	0.97	1.03	2200	2800	80
E230 Engine Code M111970	0.5	700	800	0.3	200	0.97	1.03	2200	2800	80
E240 V6 Engine Code M112911	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
E280 Engine Code M104945	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
E320 Engine Code M104995	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
E280 V6 Engine Code M112921	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
E320 V6 Engine Code M112941	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
E200K Engine Code M111947	0.5	700	800	0.3	200	0.97	1.03	2200	2800	80
Ford Scorpio based Limousine (7 or 8 seats)										
Engine Type DOHC 2.0l 16V Engine Code N3A 7 or 8 seat models only	0.5	825	925	0.3	200	0.95	1.09	2800	3100	80
Engine Type DOHC 2.0l 8V Engine Code N9D or N9F 7 or 8 seat models only	0.5	825	925	0.3	200	0.95	1.09	2800	3100	80
Engine Type DOHC 2.0l 8V Engine Code NSD 7 or 8 seat models only	0.5	825	925	0.3	200	0.95	1.09	2800	3100	80
Engine Type V6 2.9l injection Engine Code BOB (Cosworth) 7 or 8 seat models only	0.5	675	775	0.3	200	0.95	1.09	2800	3100	80
Engine Type V6 2.9l Engine Code BRG 7 or 8 seat models only	0.5	850	950	0.3	200	0.95	1.09	2800	3100	80
Engine Type DOHC 2.3l Engine Code Y5A 7 or 8 seat models only	0.5	825	925	0.3	200	0.95	1.09	2800	3100	80

1	2		3		4					
Manufacturer/Marque	(b)	(c)	(b)	(c)	(d)	(e)	(f)	Min Oil Temp(°C)		
	Normal Idle Speed		Fast Idle Speed							
	(a) Max CO Limit (% Vol)	Min Limit (RPM)	(a) Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)		Max Limit (RPM)	
Ford based Hearses										
Engine Type DOHC 2.3l injection Engine Code Y5A	0.5	825	925	0.3	200	0.95	1.09	2800	3100	80
Ford Scorpio based Hearses										
Engine Type DOHC 2.0l 16V Engine Code N3A	0.5	825	925	0.3	200	0.95	1.09	2800	3100	80
Engine Type DOHC 2.0l 8V Engine Code N9D or N9F	0.5	825	925	0.3	200	0.95	1.09	2800	3100	80
Engine Type DOHC 2.0l 8V Engine Code NSD	0.5	825	925	0.3	200	0.95	1.09	2800	3100	80
Engine Type V6 2.9l Engine Code BOB (Cosworth)	0.5	675	775	0.3	200	0.95	1.09	2800	3100	80
Engine Type V6 2.9l Engine Code BRG	0.5	850	950	0.3	200	0.95	1.09	2800	3100	80
Ford Fairlane based Models										
Fairlane Saloon	0.5	600	950	0.3	200	0.97	1.03	2000	2500	80
Fairlane Estate	0.5	600	950	0.3	200	0.97	1.03	2000	2500	80
Dorchester Limousine	0.5	600	950	0.3	200	0.97	1.03	2000	2500	80
Cardinal Hearse	0.5	600	950	0.3	200	0.97	1.03	2000	2500	80
DAEWOO										
Chassis No. is formed from the last eight digits of the VIN number.										
Korando										
2.3 Petrol (From Chassis No XP0000001)	0.1	700	800	0.3	200	0.97	1.03	2200	2800	80
Musso										
2.3 Petrol (From Chassis No XP0000001)	0.1	700	800	0.3	200	0.97	1.03	2200	2800	80
DAIHATSU										
Hijet										
1.3l HC 5M/T EFI	0.5	850	900	0.3	200	0.97	1.03	2000	2400	80
CB42	0.5	850	900	0.3	200	0.97	1.03	2000	2400	80
Extol										
1.3l	0.3	600	700	0.2	200	0.97	1.03	1950	2050	80
DODGE										
Journey										
2.4 Manual 5 gears 08-09 model year	0.3	650	750	0.2	200	0.97	1.03	2400	2600	83
2.4 Manual 5 gears 09 model year	0.3	650	750	0.2	200	0.97	1.03	2400	2600	83

1	2		3		4					
Manufacturer/Marque	(b)	(c)	(b)	(c)	(d)	(e)	(f)			
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (% Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
FIAT										
Engine Codes appear on the VIN Plate as well as on the Engine Block.										
Ducato (VIN prefix ZFA230000)										
2.0 Petrol Engine Code RFW	0.5	800	900	0.3	200	0.97	1.03	2500	2900	80
Ducato (VIN prefix ZFA244000)										
2.0 Petrol Engine Code RFL	0.5	750	950	0.3	200	0.97	1.03	2500	2900	80
Fiorino (VIN prefix ZFA146000)										
1.4 ie	0.35	800	900	0.3	200	0.97	1.03	2500	2900	80
Fiorino Cargo (VIN Prefix ZFA225000)										
1.4 Van	0.5	700	800	0.2	200	0.97	1.03	2000	3000	80
Punto (VIN Prefix ZFA176000)										
Petrol Van	0.35	850	950	0.3	200	0.97	1.03	2500	2900	80
Punto (VIN Prefix ZFA188000)										
1.2 Van	0.5	700	800	0.3	200	0.97	1.03	2500	2900	80
Doblò Cargo (VIN Prefix ZFA223000)										
1.2 Van	0.5	730	830	0.3	200	0.97	1.03	2500	2900	80
1.4 Van	0.5	650	750	0.2	200	0.97	1.03	2100	2700	80
Doblò Cargo (VIN Prefix ZFA263000)										
1.4	0.5	700	800	0.2	200	0.97	1.03	2100	2700	80
500L MPW (LWB) 2013-2014										
0.9 105bhp TwinAir	0.3	800	900	0.2	200	0.97	1.03	2600	2800	87
FORD										
The Engine Code can be found either on the VIN plate or engine block.										
Ka Engine Type HCS / ENDURA-E										
1.3l Engine Code J4	0.5	825	925	0.3	200	0.95	1.09	2800	3100	80
Ka Engine Type DURATEC 8V										
1.3l Engine Code A9	0.3	830	930	0.2	200	0.95	1.03	2800	3100	80
Fiesta Engine Type DURATEC 8V										
1.3l Engine Code A9J	0.3	700	800	0.2	200	0.97	1.03	2800	3100	80
Courier Engine Type HCS										
1.1l Engine Code G6	0.5	850	950	0.3	200	0.95	1.09	2800	3100	80

1	2			3						4
Manufacturer/Marque	(b)		(c)	(b)		(c)	(d)	(e)	(f)	Min Oil Temp(°C)
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (% Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	
1.3l Engine Code J6	0.5	850	950	0.3	200	0.95	1.09	2800	3100	80
Fiesta Engine Type HCS										
1.1l Engine Code G6 Automatic	0.5	850	950	0.3	200	0.95	1.09	2800	3100	80
1.3l Engine Code J6	0.5	850	950	0.3	200	0.95	1.09	2800	3100	80
Escort Engine Type HCS										
1.3l Engine Code J6	0.5	850	950	0.3	200	0.95	1.09	2800	3100	80
1.3l Engine Code J4	0.5	800	900	0.3	200	0.95	1.09	2800	3100	80
Escort Engine Type CVH										
1.4l Engine Code F4	0.5	840	900	0.3	200	0.95	1.09	2800	3100	80
Explorer Engine Type V6 SOHC										
4.0l Engine Code X	0.5	680	780	0.3	200	0.95	1.09	2800	3100	80
Galaxy Engine Type DOHC 8V										
2.0l Engine Code NS - 7 seat model	0.5	825	925	0.3	200	0.95	1.09	2800	3100	80
Galaxy Engine Type DOHC 16V										
2.3l Engine Code Y5 - 7 seat model	0.5	825	925	0.3	200	0.95	1.09	2800	3100	80
Galaxy Engine Type CD-V6 24V										
2.8l Engine Code AA - 7 seat model	0.5	650	750	0.3	200	0.95	1.09	2800	3100	80
2.8l Engine Code AM - 7 seat model	0.5	650	750	0.3	200	0.95	1.09	2800	3100	80
2.8l Engine Code AY - 7 seat model	0.5	650	750	0.3	200	0.95	1.09	2800	3100	80
Galaxy Engine Type DOHC										
2.0l Engine Code ZVS - 7 seat model	0.5	825	925	0.3	200	0.95	1.09	2800	3100	80
2.3l Engine Code E5S - 7 seat model	0.5	825	925	0.3	200	0.95	1.09	2800	3100	80
Maverick Engine Type OHC 12V										
2.4l Engine Code KA	0.5	750	850	0.3	200	0.95	1.09	2800	3100	80
Maverick Engine Type ZETEC-E 16V										
2.0l Engine Code YF	0.5	700	800	0.3	200	0.95	1.03	2800	3100	80
Maverick Engine Type DURATEC-V6										
3.0l Engine Code AJ	0.5	700	800	0.3	200	0.95	1.03	2800	3100	80
Transit / Tourneo Engine Type OHC										
2.0l Engine Code NC	0.5	850	950	0.3	200	0.95	1.09	2800	3100	80
Transit / Tourneo Engine Type DOHC 8V										
2.0l Engine Code NS	0.5	825	975	0.3	200	0.95	1.09	2800	3100	80

1	2		(c)	3		(d)	(e)	(f)	4	
Manufacturer/Marque	(a)	Normal Idle Speed	(a)	Fast Idle Speed						
	Max CO Limit (% Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
Transit / Tourneo Engine Type V6										
2.9l Engine Code BR	0.5	850	950	0.3	200	0.95	1.09	2800	3100	80
Transit / Tourneo Connect Engine Type ZETEC-E / DURATEC										
1.8l Engine Code EYP	0.5	670	730	0.3	200	0.95	1.03	2800	3100	80
Transit / Tourneo Engine Type DOHC 16V										
2.3l Engine Code E5F	0.5	825	975	0.3	200	0.95	1.09	2800	3100	80
Transit / Tourneo Engine Type DOHC DURATEC HE										
2.3l Engine Code GZF	0.3	700	800	0.2	200	0.97	1.03	1950	2050	80
HONDA										
The Serial Code consists of the 4th, 5th, and 6th digits of the VIN number. The Serial Number consists of the last 7 digits of the VIN number.										
Shuttle										
2.3l Shuttle LS/ES - Serial Code RA3	0.5	700	850	0.3	200	0.97	1.03	2500	3000	80
Stream										
Stream 1.7l Serial Code RN1	0.5	650	750	0.3	200	0.97	1.03	2500	3000	80
Stream 1.7l Serial Code RN1, 1 July 2002 onwards	0.3	650	750	0.2	200	0.97	1.03	2500	3000	80
Stream 2.0l Serial Code RN3	0.5	650	750	0.3	200	0.97	1.03	2500	3000	80
Stream 2.0l Serial Code RN3, 1 July 2002 onwards	0.3	650	750	0.2	200	0.97	1.03	2500	3000	80
HUMMER										
H3										
3.7L - Engine Code LLR	0.3	650	750	0.2	200	0.97	1.03	2500	3000	80
5.3L V8 - Engine Code LH8	0.3	500	600	0.2	200	0.97	1.03	2500	3000	80
HYUNDAI										
The Engine Code is stamped on the Engine Block and the 10th digit of the VIN denotes the year of manufacture.										
Santa Fe										
Santa Fe 2.4D Engine Code G4JP 2001 Model	0.5	700	900	0.3	200	0.97	1.03	2000	2500	80
Santa Fe 2.7D Engine Code G6BA 2001 Model	0.5	600	800	0.3	200	0.97	1.03	2000	2500	80
Santa Fe 2.4D Engine Code G4JP 2002 Model	0.5	700	900	0.3	200	0.97	1.03	2000	2500	80
Santa Fe 2.7D Engine Code G6BA 2002 Model	0.5	600	800	0.3	200	0.97	1.03	2000	2500	80
Santa Fe 2.4D Engine Code G4JS 2003 Model	0.3	700	900	0.2	200	0.97	1.03	2400	2600	80

1 Manufacturer/Marque	2			3						4 Min Oil Temp(°C)
	(b)		(c)	(b)		(c)	(d)	(e)	(f)	
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (% Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	
Santa Fe 2.7D Engine Code G6BA 2003 Model	0.3	600	800	0.2	200	0.97	1.03	2400	2600	80
Santa Fe 2.4D Engine Code G4JS 2004 Model	0.3	700	900	0.2	200	0.97	1.03	2400	2600	80
Santa Fe 2.7D Engine Code G6BA 2004 Model	0.3	600	800	0.2	200	0.97	1.03	2400	2600	80
Santa Fe 2.4D Engine Code G4JS 2005 Model	0.3	700	900	0.2	200	0.97	1.03	2400	2600	80
Santa Fe 2.7D Engine Code G6BA 2005 Model	0.3	600	800	0.2	200	0.97	1.03	2400	2600	80
Santa Fe 2.7D Engine Code G6EA 2006 Model	0.3	580	780	0.2	200	0.97	1.03	2400	2600	80
Santa Fe 2.7D Engine Code G6EA 2007 Model	0.3	580	780	0.2	200	0.97	1.03	2400	2600	80
Santa Fe 2.7D Engine Code G6EA 2008 Model	0.3	580	780	0.2	200	0.97	1.03	2400	2600	80
Santa Fe 2.7D Engine Code G6EA 2009 Model	0.3	580	780	0.2	200	0.97	1.03	2400	2600	80
ISUZU										
Trooper										
3.2 V6	0.5	700	900	0.3	200	0.97	1.03	2500	3000	80
3.5	0.5	700	900	0.3	200	0.97	1.03	2500	3000	80
KIA										
The VIN number can be found on the VIN Plate.The Engine Code is stamped on the Engine Block and the 10th digit of the VIN denotes the year of manufacture.										
Pride Van										
Pride Van fitted with Feedback carburettor from VIN KNEDA **** P6005272	0.5	700	750	0.5	200	0.95	1.3	2500	3000	80
Pride Van fitted with fuel injection from VIN KNEDA **** RK003266	0.5	650	750	0.5	200	0.95	1.3	2500	3000	80
Sedona										
Sedona 2.5l V6 Engine Code KV6	0.5	675	775	0.3	200	0.97	1.03	2300	3000	80
Sedona 2.7l VIN commencing KNEMB	0.3	600	850	0.2	200	0.97	1.03	2500	3000	80
LAND ROVER										
The Model Code consists of the 4th & 5th digit of the VIN number and defines the model. The Serial Number consists of the last 6 digits of the VIN number found on the VIN Plate. The Engine Code consists of the 8th digit of the VIN number and defines the engine type.										
Discovery Model Code LJ										
2.0l LTi Engine Code Y	0.5	500	1000	0.3	200	0.95	1.09	2500	3000	70
3.9l V8 Engine Code M Serial number 117885 onwards	0.5	500	1000	0.3	200	0.95	1.09	2500	3000	70
Discovery Model LT										
All engines	0.5	500	1000	0.3	200	0.95	1.09	2500	3000	70

1	2		3					4		
Manufacturer/Marque	(b)	(c)	(b)		(c)	(d)	(e)	(f)		
	Normal Idle Speed		Fast Idle Speed							
	(a) Max CO Limit (% Vol)	Min Limit (RPM)	Max Limit (RPM)	(a) Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
Discovery Model Code LA										
All engines	0.5	500	1000	0.3	200	0.95	1.09	2500	3000	70
Revised Discovery 4 Model Code LA										
3.0L Engine Code 306PS From VIN serial No. 000001	0.5	450	750	0.3	200	0.95	1.09	2350	2650	70
5.0L Engine Code 508PN From VIN serial No. 513340	0.5	450	750	0.3	200	0.95	1.09	2400	2600	70
Range Rover Classic Model Code LH										
3.9l V8 Engine Code M Serial number 656861 onwards	0.5	500	1000	0.3	200	0.95	1.09	2500	3000	70
4.2l V8 Engine Code 3	0.5	500	1000	0.3	200	0.95	1.09	2500	3000	70
Range Rover Model Code LP and LM										
All engines	0.5	500	1000	0.3	200	0.95	1.09	2500	3000	70
Revised Range Rover Model Code LM										
5.0L Engine Code 508PN From VIN serial No. 306627	0.5	560	860	0.3	200	0.9	1.09	2400	2600	70
5.0L s/c Engine Code 508PS From VIN serial No. 306628	0.5	560	860	0.3	200	0.9	1.09	2400	2600	70
New Range Rover Model Code LG										
3.0L s/c Engine Code 306PS From VIN serial No. 000001	0.5	450	750	0.3	200	0.9	1.09	2350	2650	70
5.0L Engine Code 508PN From VIN serial No. 000001	0.5	560	860	0.3	200	0.9	1.09	2350	2650	70
5.0L s/c Engine Code 508PS From VIN serial No. 000001	0.5	560	860	0.3	200	0.9	1.09	2350	2650	70
Range Rover Sport Model Code LS										
All engines	0.5	500	1000	0.3	200	0.95	1.09	2500	3000	70
Revised Range Rover Sport Model Code LS										
5.0L Engine Code 508PN From VIN serial No. 215634	0.5	450	750	0.3	200	0.9	1.09	2400	2600	70
5.0L s/c Engine Code 508PS From VIN serial No. 212652	0.5	450	750	0.3	200	0.9	1.09	2400	2600	70
New Range Rover Sport Model Code LW										
3.0L s/c Engine Code 306PS From VIN serial No. 000001	0.5	450	750	0.3	200	0.9	1.09	2350	2650	70
5.0L s/c Engine Code 508PS From VIN serial No. 000001	0.5	560	860	0.3	200	0.9	1.09	2350	2650	70
Defender Model Code LD										
All engines	0.5	500	1000	0.3	200	0.95	1.09	2500	3000	70
MAZDA										
The VDS code consists of the 4th to 9th digit in the VIN number. The VIN can be found on the VIN plate. The serial number consists of the last 6 digits of the VIN number.										
E2000 Van										
2.0l VDS Code SR1JC2 serial number 800001 onwards	0.5	750	850	0.3	200	0.97	1.03	2400	2600	80

1 Manufacturer/Marque	2			3						4 Min Oil Temp(°C)
	(b)		(c)	(b)		(c)	(d)	(e)	(f)	
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (% Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	
Premacy (7 seat)										
2.0l VDS Code CP69S2, CP69S5	0.5	650	750	0.3	200	0.97	1.03	2400	3000	80
MPV										
2.0l VDS Code LW19F2	0.5	600	700	0.3	200	0.97	1.03	2400	2600	80
2.3l VDS Code LW1932	0.5	600	700	0.3	200	0.97	1.03	2400	3000	80
Mazda5										
1.8l VDS Code CR1982	0.5	650	750	0.3	200	0.97	1.03	2400	3000	80
2.0l VDS Code CR19F2	0.5	600	700	0.3	200	0.97	1.03	2400	3000	80
MERCEDES BENZ										
The VIN Code consists of digits 4 to 9 of the VIN number. A4 = Automatic 4-speed, A5 = Automatic 5-speed, M5 = Manual 5-speed, SM5 = Semi-Manual 5-speed, M5/s = Manual 5 speed with sports gearbox. K = Kompressor, SWB = Short Wheel Base, LWB = Long Wheel Base										
CL (140)										
CL 420 A5 Coupé VIN Code 140063	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80
CL 500 A5 Coupé VIN Code 140070	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80
CL 600 A5 Coupé VIN Code 140076	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80
CL (215)										
CL 500 A5 Coupé VIN Code 215375	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80
CL 500 (ZEV) A5 Coupé VIN Code 215375	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80
CL 55 AMG A5 Coupé VIN Code 215375	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80
CL 600 A5 Coupé VIN Code 215378	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80
CL (216)										
CL500 A7 VIN Code 216371	0.3	500	650	0.2	200	0.97	1.03	2200	2800	80
CL500 A7 VIN Code 216373	0.3	610	710	0.2	200	0.97	1.03	2200	2800	80
CL600 A5 VIN Code 216376	0.3	550	700	0.2	200	0.97	1.03	2200	2800	80
CL63 AMG A7 VIN Code 216374	0.3	500	700	0.2	200	0.97	1.03	2200	2800	80
CL63 AMG A7 VIN Code 216377	0.3	500	700	0.2	200	0.97	1.03	2200	2800	80
CL65 AMG A5 VIN Code 216379	0.3	540	690	0.2	200	0.97	1.03	2200	2800	80
CL Coupé (C215)										
CL 500 Automatic VIN Code 215375	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
CL 55 AMG Automatic VIN Code 215373	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
CL 55 AMG Automatic VIN Code 215374	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
CL 600 Automatic VIN Code 215376	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80

1	2				3						4
Manufacturer/Marque	(b)		(c)	(b)		(c)	(d)	(e)	(f)	Min Oil Temp(°C)	
	(a) Normal Idle Speed			(a) Fast Idle Speed							
	Max CO Limit (%) Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)		
CL 600 Automatic VIN Code 215378	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80	
CL 65 AMG Automatic VIN Code 215379	0.5	630	800	0.3	200	0.97	1.03	2200	2800	80	
S-Class (140)											
S 280 A5 Saloon VIN Code 140028	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80	
S 320 A5 Saloon VIN Code 140032	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80	
S 420 A5 Saloon VIN Code 140042	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S 500 A5 Saloon VIN Code 140050	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S 320 A5 Limousine VIN Code 140033	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80	
S 420 A5 Limousine VIN Code 140043	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S 500 A5 Limousine VIN Code 140051	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S 600 A5 Limousine VIN Code 140057	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S-Class (220)											
S 600 A5 Limousine VIN Code 220178	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S 320 A5 Saloon VIN Code 220065	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80	
S 430 A5 Saloon VIN Code 220070	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S 500 A5 Saloon VIN Code 220075	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S 320 A5 Limousine VIN Code 220165	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80	
S 430 A5 Limousine VIN Code 220170	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S 500 A5 Limousine VIN Code 220175	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S 280 A5 Saloon VIN Code 220063	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80	
S 55 AMG A5 Limousine VIN Code 220175	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S 500 A5 Pullman VIN Code 220875	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S 55 AMG A5 Saloon VIN Code 220073	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S 55 AMG A5 Limousine VIN Code 220173	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S 600 A5 Pullman VIN Code 220878	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S 63 AMG A5 VIN Code 220178	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S 55 AMG A5 Saloon VIN Code 220075	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80	
S-Class (221)											
S63 AMG SWB A7 VIN Code 221077	0.3	500	700	0.2	200	0.97	1.03	2200	2800	80	
S63 AMG LWB A7 VIN Code 221174	0.3	500	700	0.2	200	0.97	1.03	2200	2800	80	
S63 AMG LWB A7 VIN Code 221177	0.3	500	700	0.2	200	0.97	1.03	2200	2800	80	
S65 AMG LWB A7 VIN Code 221179	0.3	540	690	0.2	200	0.97	1.03	2200	2800	80	
S600 LWB A7 VIN Code 221176	0.3	550	700	0.2	200	0.97	1.03	2200	2800	80	
S500 SWB A7 VIN Code 221071	0.3	500	650	0.2	200	0.97	1.03	2200	2800	80	

1	2			3						4
Manufacturer/Marque	(b)	(c)		(b)	(c)	(d)	(e)	(f)		
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (% Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
S500 LWB A7 VIN Code 221171	0.3	500	650	0.2	200	0.97	1.03	2200	2800	80
S500 LWB A7 VIN Code 221173	0.3	610	710	0.2	200	0.97	1.03	2200	2800	80
S450 SWB A7 VIN Code 221070	0.3	500	650	0.2	200	0.97	1.03	2200	2800	80
S450 LWB A7 VIN Code 221170	0.3	500	650	0.2	200	0.97	1.03	2200	2800	80
S350 SWB A7 VIN Code 221056	0.3	550	700	0.2	200	0.97	1.03	2200	2800	80
S350 SWB A7 VIN Code 221057	0.3	670	770	0.2	200	0.97	1.03	2200	2800	80
S350 LWB A7 VIN Code 221156	0.3	550	700	0.2	200	0.97	1.03	2200	2800	80
S350 LWB A7 VIN Code 221157	0.3	670	770	0.2	200	0.97	1.03	2200	2800	80
S280 SWB A7 VIN Code 221054	0.3	550	700	0.2	200	0.97	1.03	2200	2800	80
S280 LWB A7 VIN Code 221154	0.3	550	700	0.2	200	0.97	1.03	2200	2800	80
S-Class (W220)										
S280 SWB Automatic VIN Code 220063	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
S430 LWB Automatic VIN Code 220170	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
S430 SWB Automatic VIN Code 220070	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
S-Class Saloon (V222)										
S500 L A7 VIN Code 222182	0.3	550	750	0.2	200	0.97	1.03	2200	2800	80
S63 AMG L A7 VIN Code 222177	0.3	550	800	0.2	200	0.97	1.03	2200	2800	80
G-Class (V463)										
G63 AMG A7 Vin Code 463272	0.3	500	700	0.2	200	0.97	1.03	2200	2800	80
GL-Class (X164)										
GL 450 A7 5 Door VIN Code 164871	0.5	600	750	0.3	200	0.97	1.03	2200	2800	98
GL 500 A7 5 Door VIN Code 164886	0.3	600	750	0.2	200	0.97	1.03	2500	3000	98
GL-Class (X166)										
GL 63 AMG A7 VIN Code 166874	0.3	500	700	0.2	200	0.97	1.03	2200	2800	80
M-Class (163)										
ML 320 A5 5 Door Estate VIN Code 163154	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
ML 350 Automatic VIN Code 163157	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
ML 430 A5 5 Door Estate VIN Code 163172	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80
ML 500 A5 VIN code 163175	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80
ML 55 AMG A5 Estate VIN Code 163174	0.5	600	750	0.3	200	0.97	1.03	2200	2800	80
M-Class (164)										
ML 350 5 Door A7 VIN Code 164186	0.3	550	700	0.2	200	0.97	1.03	2500	3000	97
ML 500 5 Door A7 VIN Code 164172	0.3	600	750	0.2	200	0.97	1.03	2500	3000	98
ML 500 5 Door A7 VIN Code 164175	0.3	600	750	0.2	200	0.97	1.03	2500	3000	98

1	2			3						4
Manufacturer/Marque	(b)		(c)	(b)		(c)	(d)	(e)	(f)	Min Oil Temp(°C)
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (%) Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	
ML 63 AMG 5 Door A7 VIN Code 164177	0.5	600	750	0.2	200	0.97	1.03	2500	3000	98
M-Class (W166)										
ML 63 AMG A7 VIN Code 166074	0.3	500	700	0.2	200	0.97	1.03	2200	2800	80
V-Class (638)										
V 230 Ambiente A4 Estate VIN Code 638234	0.5	700	800	0.3	200	0.97	1.03	2200	2800	80
V 280 Ambiente A4 Estate VIN Code 638235	0.5	650	800	0.3	200	0.97	1.03	2200	2800	80
V 230 Ambiente M5 Estate VIN Code 638234	0.5	700	800	0.3	200	0.97	1.03	2200	2800	80
V 230 Fashion A4 Estate VIN Code 638234	0.5	700	800	0.3	200	0.97	1.03	2200	2800	80
V 230 Fashion M5 Estate VIN Code 638234	0.5	700	800	0.3	200	0.97	1.03	2200	2800	80
V 230 Trend A4 Estate VIN Code 638234	0.5	700	800	0.3	200	0.97	1.03	2200	2800	80
V 230 Trend M5 Estate VIN Code 638234	0.5	700	800	0.3	200	0.97	1.03	2200	2800	80
Light Goods Vehicles										
Vito 114 M5 Light Commercial	0.5	700	800	0.3	200	0.97	1.03	2200	2800	70
Sprinter 214 M5 Light Commercial	0.5	600	850	0.3	200	0.97	1.03	2200	2800	70
Sprinter 314 M5 Light Commercial	0.5	600	850	0.3	200	0.97	1.03	2200	2800	70
Viano/Vito										
Viano 3.0	0.5	750	850	0.3	200	0.97	1.03	2000	2800	82
Viano 3.2	0.5	750	850	0.3	200	0.97	1.03	2000	2800	82
Viano 3.5	0.5	750	850	0.3	200	0.97	1.03	2000	2800	82
Vito	0.5	750	850	0.3	200	0.97	1.03	2000	2800	82
Vito 119	0.5	750	850	0.3	200	0.97	1.03	2000	2800	82
Vito 122	0.5	750	850	0.3	200	0.97	1.03	2000	2800	82
Maybach										
Maybach VIN Code 240078	0.5	650	800	0.3	200	0.97	1.03	2200	2500	96
Maybach VIN Code 240178	0.5	650	800	0.3	200	0.97	1.03	2200	2500	96
MINI (BMW AG)										
The Engine Code is stamped on the Engine Block and VIN Plate. No longer on VIN plate from 03/2011.										
MINI (R55)										
One Clubvan Engine Code N16 B16 A	0.2	700	850	0.2	200	0.97	1.03	2300	2700	60
Cooper Clubvan Engine Code N16 B16 A	0.2	700	850	0.2	200	0.97	1.03	2300	2700	60

1	2			3						4
Manufacturer/Marque	(b)	(c)		(b)	(c)	(d)	(e)	(f)		
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (% Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
MITSUBISHI										
The engine code can be confirmed from the vehicle's model code plate which is attached to the under side of the Bonnet or on top of the Headlamp Front Panel										
L300										
2.0l MPI Model Code P03V Engine Type 4G63 SOHC SWB MY 1995 to 1999	0.5	650	850	0.3	200	0.97	1.03	2500	2800	80
2.0l MPI Model Code P13V Engine Type 4G63 SOHC LWB MY 1995 to 1999	0.5	650	850	0.3	200	0.97	1.03	2500	2800	80
2.0l MPI Model Code P13T Engine Type 4G63 SOHC MY 1995 to 1999	0.5	650	850	0.3	200	0.97	1.03	2500	2800	80
Shogun										
3.5 GDI Model Code V65W Engine Type 6G74 V6 Automatic MY 2001 onwards	0.3	550	750	0.2	200	0.97	1.03	2400	2600	80
3.5 GDI Model Code V78W Engine Type 6G74 V6 Automatic MY 2001 onwards	0.3	550	750	0.2	200	0.97	1.03	2400	2600	80
3.5 GDI Model Code V78W Engine Type 6G74 V6 Manual MY 2001 onwards	0.3	550	750	0.2	200	0.97	1.03	2400	2600	80
NISSAN										
The Serial No consists of the last 6 digits of the VIN number. The Model Code is derived from positions 7 - 9 of the VIN number.										
Terrano II Model Code R20										
All versions Serial No 232476 onwards	0.3	600	1000	0.2	200	0.97	1.03	2500	3000	80
Patrol Model Code Y60										
4.2l from Serial Number 000167 to 800000	0.3	600	1000	0.2	200	0.97	1.03	2500	3000	80
Serena Model Code C23										
All versions Serial Number 000001 to 150000 + 186316 onwards	0.3	600	1000	0.2	200	0.97	1.03	2500	3000	80
Primastar										
All Versions	0.3	600	1000	0.2	200	0.97	1.03	2500	3000	80
Interstar										
All versions	0.3	600	1000	0.2	200	0.97	1.03	2500	3000	80
Kubistar										
All versions	0.3	600	1000	0.2	200	0.97	1.03	2500	3000	80
Pathfinder Pick-up Model Code D40										
All Versions	0.3	450	1500	0.2	200	0.97	1.03	2500	3000	80
NV200										
Engine Code HR16 All Versions	0.3	600	1000	0.2	200	0.97	1.03	2500	3000	80
NV400										
All versions	0.3	600	1000	0.2	200	0.97	1.03	2500	3000	80

1	2			3						4
Manufacturer/Marque	(a)	(b)	(c)	(a)	(b)	(c)	(d)	(e)	(f)	
	Normal Idle Speed			Fast Idle Speed						
	Max CO Limit (%) Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
PEUGEOT										
<i>The Engine Code consists of the 6th to 8th character in the VIN number, except Boxer Vans</i>										
806 series										
Engine Code RFV 1998cc - 7 and 8 seats	0.5	800	900	0.3	200	0.97	1.03	2000	2500	80
Engine Code RFN 1998cc - 7 and 8 seats	0.5	600	800	0.3	200	0.97	1.03	2000	3000	80
807 series										
Engine Code RFN 1997cc - 7 and 8 seats	0.5	600	800	0.3	200	0.97	1.03	2000	3000	80
Engine Code RFJ 1997cc	0.5	700	950	0.3	200	0.97	1.03	2000	3000	80
Engine Code 3FZ 2230cc - 7 and 8 seats	0.5	600	950	0.3	200	0.97	1.03	2000	3000	80
Engine Code 3FY 2230cc	0.5	600	950	0.3	200	0.97	1.03	2000	3000	80
Bipper Tepee Series										
Engine Code KfV 1360cc	0.5	650	900	0.3	200	0.97	1.03	2000	3000	80
Engine Code KfT 1360cc	0.5	650	850	0.3	200	0.97	1.03	2000	3000	80
Partner Combi Series										
Engine Code KfW 1360cc	0.5	750	950	0.3	200	0.97	1.03	2000	3000	80
Engine Code NFU 1587cc	0.5	650	850	0.3	200	0.97	1.03	2000	3000	80
Partner Tepee Series										
Engine Code NFU 1587cc	0.5	600	900	0.3	200	0.97	1.03	2000	3000	80
Engine code NFR 1587cc	0.5	600	900	0.3	200	0.97	1.03	2000	3000	80
Engine Code 5FS 1598cc	0.5	550	850	0.3	200	0.97	1.03	2000	3000	80
Engine Code 5FK 1598cc	0.5	600	900	0.3	200	0.97	1.03	2000	3000	80
Partner Van										
Engine Code KfX 1360cc	0.5	800	900	0.3	200	0.97	1.03	2000	2500	80
Engine Code KfW 1360cc	0.5	750	950	0.3	200	0.97	1.03	2000	2500	80
Engine Code NFR 1587cc	0.5	600	900	0.3	200	0.97	1.03	2000	3000	80
Engine Code 5FK 1598cc	0.5	600	900	0.3	200	0.97	1.03	2000	3000	80
Expert Van										
Engine Code RFN 1997cc	0.5	600	800	0.3	200	0.97	1.03	2000	2400	80
Engine Code RFH 1997cc	0.5	600	800	0.3	200	0.97	1.03	2000	2400	80
Old Boxer Van										
Engine Code M 1998cc (Engine Code consists of the 8th Character of the VIN)	0.5	800	900	0.3	200	0.97	1.03	2000	2500	80
New Boxer Van										
Engine Code T 1998cc (Engine Code consists of the 6th Character of the VIN)	0.5	750	950	0.3	200	0.97	1.03	2000	3000	80

1 Manufacturer/Marque	2			3			4			
	(b)	(c)		(b)	(c)	(d)	(e)	(f)		
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (% Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
207 Van										
Engine Code KfV 1360cc	0.5	650	900	0.3	200	0.97	1.03	2000	3000	80
Bipper Van										
Engine Code KfV 1360cc	0.5	650	900	0.3	200	0.97	1.03	2000	3000	80
Engine Code KfT 1360cc	0.5	650	850	0.3	200	0.97	1.03	2000	3000	80
PROTON										
The Model Code consists of the 4th to 8th character of the VIN number.										
Jumbuck										
C97PN VIN No. PL1C97PNR3B***** Engine Type 4G15	0.75	800	850	0.3	200	0.98	1.02	2500	2800	80
Exora										
Engine Code S4PH-CFE	0.3	650	850	0.2	200	0.97	1.03	2350	2600	80
RENAULT										
The Engine Code is stamped on a plate attached to the engine. Exact location is given in the vehicle handbook.										
Alphanumeric in brackets may be found on the VIN or oval plate. X, * or ? may be replaced with any other letter or digit.										
All Models 1998 Onwards										
All Models 1998 onwards	0.5	450	1500	0.3	200	0.97	1.03	2500	3000	80
Laguna Estate										
1.8l RN, RT (B/K56A05) Engine Code F3P S7 24	0.5	725	775	0.3	200	0.97	1.03	2500	2800	80
1.8l RN, RT (B/K56B*5/J/C/15) Engine Code F3P C6 78	0.5	725	775	0.3	200	0.97	1.03	2500	2800	80
1.8l RN, RT (B/K56T*5) Engine Code F3P B6 70/74	0.5	740	790	0.3	200	0.97	1.03	2500	2800	80
1.8l RN, RT (B/K560*5/0*C) Engine Code F3P B6 70/74	0.5	740	790	0.3	200	0.97	1.03	2500	2800	80
2.0l RN, RT, RXE (B/K56C15) Engine Code F3R E7 22	0.5	750	850	0.3	200	0.97	1.03	2500	2800	80
2.0l RN, RT, RXE (B/K56C12) Engine Code F3R E7 23	0.5	700	800	0.3	200	0.97	1.03	2500	2800	80
2.0l RN, RT, RXE (B/K56C*C/H*C) Engine Code F3R E7 22	0.5	750	850	0.3	200	0.97	1.03	2500	2800	80
2.0l RN, RT, RXE (B/K56C02/H02) Engine Code F3R E7 23	0.5	700	800	0.3	200	0.97	1.03	2500	2800	80
2.0l RN, RT, RXE (B/K56L*5/L*E) Engine Code F3R J7 28/68	0.5	790	840	0.3	200	0.97	1.03	2500	2800	80
2.0l RN, RT, RXE (B/K56L0C/L*C) Engine Code F3R J7 28/68	0.5	790	840	0.3	200	0.97	1.03	2500	2800	80
2.0l RN, RT, RXE (B/K56L02) Engine Code F3R K7 29/69	0.5	740	790	0.3	200	0.97	1.03	2500	2800	80
2.0l RN, RT (B/K56L*A) Engine Code F3R K7 29/69	0.5	740	790	0.3	200	0.97	1.03	2500	2800	80
2.0l 16V RT, RXE (B/K56D05) Engine Code N7Q A7 00	0.5	770	830	0.3	200	0.97	1.03	2500	2800	80
2.0l 16V RT, RXE (B/K56M*5) Engine Code N7Q D7 04	0.5	770	830	0.3	200	0.97	1.03	2500	2800	80
V6 RT, RXE (B/K56E05) Engine Code Z7X G7 60	0.5	665	715	0.3	200	0.97	1.03	2500	2800	80

1	2		3		4					
Manufacturer/Marque	(b)	(c)	(b)	(c)	(d)	(e)	(f)			
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (%) Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
V6 RT, RXE (B/K56E02) Engine Code Z7X F7 61	0.5	665	715	0.3	200	0.97	1.03	2500	2800	80
V6 RT, RXE (B/K56R02) Engine Code Z7X U7 65	0.5	665	715	0.3	200	0.97	1.03	2500	2800	80
V6 RT, RXE (B/K56502) Engine Code Z7X 17 67	0.5	650	750	0.3	200	0.97	1.03	2500	2800	80
V6 RT, RXE (B/K56V05) Engine Code L7X A7 00	0.5	600	680	0.3	200	0.97	1.03	2500	2800	80
V6 RT, RXE (B/K56V02) Engine Code L7X B7 01	0.5	600	680	0.3	200	0.97	1.03	2500	2800	80
Renault 21 Savanna Estate										
1.7l RN, RT (K/L/B48E05) Engine Code F3N C7 22	0.5	700	900	0.3	200	0.97	1.03	2500	2800	80
1.7l RN, RT Auto (K/L/B48E02) Engine Code F3N P7 23	0.5	800	850	0.3	200	0.97	1.03	2500	2800	80
2.0l RN, RT (K/L/B48C05) Engine Code J7R U7 46	0.5	750	850	0.3	200	0.97	1.03	2500	2800	80
2.0l RN, RT Auto (K/L/B48C02) Engine Code J7R V7 47	0.5	750	850	0.3	200	0.97	1.03	2500	2800	80
2.0l RN, RT (K/L/B48R05/08) Engine Code J7R L7 40	0.5	825	925	0.3	200	0.97	1.03	2500	2800	80
2.2l RN, RT (K/L/B48K05/08) Engine Code J7R L7 54	0.5	750	850	0.3	200	0.97	1.03	2500	2800	80
2.2l RN, RT Auto (K/L/B48K02) Engine Code J7T M7 55	0.5	750	850	0.3	200	0.97	1.03	2500	2800	80
2.0l RN, RT (K48B05) Engine Code J7T M7 56	0.5	775	825	0.3	200	0.97	1.03	2500	2800	80
Espace (J63 Series)										
2.0l RN, RT, RXE (J63615) Engine Code J7R 37 68	0.5	785	835	0.3	200	0.97	1.03	2500	2800	80
2.2l RN, RT, RXE (J63705/08) Engine Code J7T V7 72	0.5	775	825	0.3	200	0.97	1.03	2500	2800	80
2.2l RN, RT, RXE Auto (J63712) Engine Code J7T W7 73	0.5	725	875	0.3	200	0.97	1.03	2500	2800	80
2.2l RN, RT, RXE Auto (J63725) Engine Code J7T 37 76	0.5	775	825	0.3	200	0.97	1.03	2500	2800	80
2.8l V6 RT, RXE Auto (J63805) Engine Code Z7W G7 12	0.5	635	785	0.3	200	0.97	1.03	2500	2800	80
2.8l V6 RT, RXE Auto (J63832/45) Engine Code Z7W H7 13	0.5	695	845	0.3	200	0.97	1.03	2500	2800	80
2.8l V6 RT, RXE Auto (J63822) Engine Code Z7W J7 17	0.5	695	845	0.3	200	0.97	1.03	2500	2800	80
Espace (J66 Series)										
2.0l RN, RT, RXE (JE0A05) Engine Code F3R J7 28/68	0.5	780	850	0.3	200	0.97	1.03	2500	2800	80
2.0l RN, RT, RXE Auto (JE0A02) Engine Code F3R K7 29/69	0.5	730	800	0.3	200	0.97	1.03	2500	2800	80
2.9l RT, RXE Auto (JE0D02) Engine Code Z7X 27 75	0.5	650	750	0.3	200	0.97	1.03	2500	2800	80
Espace (JK Series)										
2.0l JKO??? Engine Code F4R ?? ??	0.5	750	800	0.3	200	0.97	1.03	2500	2800	80
3.5l JKO??? Engine Code V4Y ?? ??	0.5	750	800	0.3	200	0.97	1.03	2500	2800	80
2.0l Turbo Engine Code F4R	0.5	750	800	0.3	200	0.97	1.03	2500	2800	80
Extra L.C.V.										
1.2l (F4060/M4/5) Engine Code C3G B7 10	0.5	670	790	0.3	200	0.97	1.03	2500	2800	80
1.2l (G40A*5) Engine Code C3G F7 12	0.5	670	790	0.3	200	0.97	1.03	2500	2800	80
1.4l (F40705/M5) Engine Code C3J H7 62	0.5	800	900	0.3	200	0.97	1.03	2500	2800	80

1	2		3		4					
Manufacturer/Marque	(b)	(c)		(b)	(c)	(d)	(e)	(f)		
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (% Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
1.4l (F40U0/P/M/K5) Engine Code E7J Q7 24	0.5	700	900	0.3	200	0.97	1.03	2500	2800	80
1.4l (F40U0/P/M/K5) Engine Code E7J Q7 26	0.5	750	850	0.3	200	0.97	1.03	2500	2800	80
1.4l (F40V0/P/M/K5) Engine Code E7J E7 20	0.5	700	900	0.3	200	0.97	1.03	2500	2800	80
1.4l (F40D05) Engine Code E7J W7 28	0.5	750	900	0.3	200	0.97	1.03	2500	2800	80
1.4l (F40S*5) Engine Code E7J S7 70	0.5	800	850	0.3	200	0.97	1.03	2500	2800	80
1.4l Auto (F40U0/P/M1) Engine Code E7 J7 73	0.5	700	900	0.3	200	0.97	1.03	2500	2800	80
1.4l Auto (F40S*1) Engine Code E7 J67 71	0.5	800	850	0.3	200	0.97	1.03	2500	2800	80
Kangoo L.C.V.										
1.2l F/K C0AAF Engine Code (D7F 710/720)	0.5	700	780	0.3	200	0.97	1.03	2500	2800	80
1.2l F/K C0AAG Engine Code (D7F D 720)	0.5	700	780	0.3	200	0.97	1.03	2500	2800	80
Trafic										
Trafic (T**EO5) Engine Code J7T A6 00	0.5	725	775	0.3	200	0.97	1.03	2500	2800	80
Trafic 4X4 (V5WE08) Engine Code J7T A6 00	0.5	725	775	0.3	200	0.97	1.03	2500	2800	80
Trafic All models 2010 onwards	0.5	725	775	0.3	200	0.97	1.03	2500	2800	80
Master										
Master T35 (FB30AE) Engine Code J7T 27 88	0.5	795	845	0.3	200	0.97	1.03	2500	2800	80
Master All models 2010 onwards	0.5	795	845	0.3	200	0.97	1.03	2500	2800	80
ROLLS-ROYCE										
<i>For Rolls-Royce models before 2003, refer to Bentley Motors Ltd. The VIN can be found on the VIN Plate</i>										
Phantom										
Phantom Engine Code N73B68A	0.3	450	650	0.2	200	0.97	1.03	2300	2700	80
Ghost										
Ghost Engine Code N74B66A	0.3	450	650	0.2	200	0.97	1.03	2300	2700	80
Wraith										
Wraith Engine Code N74B66A	0.3	450	650	0.2	200	0.97	1.03	2300	2700	80
SEAT										
<i>The Engine Code is stamped on the Engine Block.</i>										
Alhambra Series										
1.8l injection Engine with Turbo Code AJH Model Year 97 - 00	0.5	780	860	0.3	200	0.97	1.03	2500	2800	80
1.8l injection Engine with Turbo Code AWC Model Year 01 -	0.5	760	880	0.3	200	0.97	1.03	2500	3000	80
2.0l injection Engine Code ADY Model Year 97 - 00	0.5	770	870	0.3	200	0.97	1.03	2500	2800	80
2.0l injection Engine Code ATM Model Year 01 -	0.5	750	860	0.3	200	0.97	1.03	2500	3000	80

1	2		3		4					
Manufacturer/Marque	(b)	(c)	(b)	(c)	(d)	(e)	(f)	Min Oil Temp(°C)		
	Normal Idle Speed		Fast Idle Speed							
	(a) Max CO Limit (% Vol)	Min Limit (RPM)	(a) Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)		Max Limit (RPM)	
2.8l V6 24V injection Engine Code AYL Model Year 01 - Inca Series										
1.4l injection Engine Codes AEX and APQ	0.5	650	750	0.3	200	0.97	1.03	2500	3000	80
1.4l injection Engine Codes AKK and AUD	0.5	690	890	0.3	200	0.97	1.03	2500	2800	80
1.4l 16V injection Engine Code AUA	0.5	600	940	0.3	200	0.97	1.03	2500	2800	80
1.6l injection Engine Code 1F (From M Registration on)	0.5	800	900	0.3	200	0.97	1.03	2800	3200	80
1.6l injection Engine Codes AEE and ALM	0.5	750	850	0.3	200	0.97	1.03	2500	2800	80
0.5 823 873 0.3 200 0.97 1.03 2500 2800 80										
SKODA										
The engine code is stamped on the engine block.										
Favorit Type 785 Van										
1.3l Engine Code 781.135B VIN Code CEF	0.5	750	850	0.3	200	0.97	1.03	2500	2800	80
1.3l Engine Code 781.136B VIN Code CFF	0.5	750	850	0.3	200	0.97	1.03	2500	2800	80
Favorit Type 787 Pickup										
1.3l Engine Code 781.135B VIN Code DEF	0.5	750	850	0.3	200	0.97	1.03	2500	2800	80
1.3l Engine Code 781.136B VIN Code DFF	0.5	750	850	0.3	200	0.97	1.03	2500	2800	80
Felicia Vanplus Type 795 Van										
1.3l Engine Code 781.135B VIN Code EEF	0.5	760	850	0.3	200	0.97	1.03	2500	2800	80
1.3l Engine Code 781.136B VIN Code EFF	0.5	760	850	0.3	200	0.97	1.03	2500	2800	80
1.3l Engine Code 781.136M VIN Code EFF	0.5	765	815	0.3	200	0.97	1.03	2500	2800	80
Felicia Type 797 Pickup										
1.3l Engine Code 781.135B VIN Code EEF	0.5	750	850	0.3	200	0.97	1.03	2500	2800	80
1.3l Engine Code 781.136B VIN Code EFF	0.5	750	850	0.3	200	0.97	1.03	2500	2800	80
1.3l Engine Code 781.135M VIN Code EEF	0.5	765	815	0.3	200	0.97	1.03	2500	2800	80
1.3l Engine Code 781.136M VIN Code EFF	0.5	765	815	0.3	200	0.97	1.03	2500	2800	80
1.6l injection Engine Code AEE	0.5	550	930	0.3	200	0.97	1.03	2500	2800	80
Felicia Fun Pickup										
1.6l injection Engine Code AEE	0.5	550	930	0.3	200	0.97	1.03	2500	2800	80
SSANGYONG										
Rexton										
320 SX	0.5	650	900	0.3	200	0.97	1.03	2000	3000	80

1 Manufacturer/Marque	2			3						4 Min Oil Temp(°C)		
	(a)	(b)	(c)	(a)	(b)	(c)	(d)	(e)	(f)			
		Normal Idle Speed			Fast Idle Speed							
		Max CO Limit (% Vol)	Min Limit (RPM)		Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda		Min Limit (RPM)	Max Limit (RPM)
Musso												
GX220	0.5	650	900	0.3	200	0.97	1.03	2500	3000	80		
2.3 Petrol	0.5	650	900	0.3	200	0.97	1.03	2000	3000	80		
Korando												
2.3 Petrol	0.5	650	900	0.3	200	0.97	1.03	2000	3000	80		
TOYOTA												
The Model Code is stamped on the VIN Plate. The series of numbers after each Engine Code relate to the last 7 digits of the VIN number.												
Previa 1990 - 1999												
Model Code TCR11 Engine Code 2TZ-FE Manual 2.4L From VIN No (last 7 digits) 0000001	0.5	650	750	0.3	200	0.97	1.03	2400	2600	60		
Model Code TCR11 Engine Code 2TZ-FE Auto 2.4L From VIN No (last 7 digits) 0000001	0.5	700	800	0.3	200	0.97	1.03	2400	2600	60		
Previa 2000 - 2006												
Model Code ACR30 Engine Code 2AZ-FE Manual 2.4L From VIN No. (last 7 digits) 0000001	0.5	650	750	0.3	200	0.97	1.03	2400	2600	60		
Model Code ACR30 Engine Code 2AZ-FE Auto 2.4L From VIN No. (last 7 digits) 0000001	0.5	600	700	0.3	200	0.97	1.03	2400	2600	60		
4 Runner 1988 - 1995												
Model Code VZN130 Engine Code 3VZ-E 3.0L From VIN No (last 7 digits) 9016985	0.5	750	850	0.3	200	0.97	1.03	2400	2600	60		
Landcruiser 90 Colorado 1996 - 2002												
Model Code VZJ95 Engine Code 5VZ-FE 3.4L From VIN No (last 7 digits) 0000001	0.5	650	750	0.3	200	0.97	1.03	2400	2600	60		
Landcruiser 2003 - 2009												
Model Code GRJ120 Engine Code 1GR-FE 4.0L From VIN No (last 7 digits) 0000001	0.3	650	750	0.2	200	0.97	1.03	2400	2600	60		
Model Code GRJ125 Engine Code 1GR-FE 4.0L From VIN No (last 7 digits) 0000001	0.3	650	750	0.2	200	0.97	1.03	2400	2600	60		
Landcruiser 80 VX/Amazon 1990 - 1998												
Model Code FZJ80 Engine Code 1FZ-FE 4.5L From VIN Nos (last 7 digits) 0093520 or 7000287	0.5	600	700	0.3	200	0.97	1.03	2400	2600	60		
Landcruiser 100 Amazon 1998 - 2007												
Model Code UZJ100 Engine Code 2UZ-FE Automatic 4.7L From VIN No (last 7 digits) 0000001	0.5	650	750	0.3	200	0.97	1.03	2400	2600	60		
Hiace 1989 - 1995												
Model Code RZH113 Engine Code 2RZ-E 2.4L From VIN Nos (last 7 digits) 0012105 or 6002420 or 8003830	0.5	750	850	0.3	200	0.97	1.03	2400	2600	60		
Model Code RZH113 Engine Code 2RZ-E 2.4L From VIN Nos (last 7 digits) 0011577 or 6002176 or 8003745	0.5	750	850	0.3	200	0.97	1.03	2400	2600	60		
Hiace 1995 - 2006												
Model Code RCH12 Engine Code 2RZ-E 2.4L From VIN No. (last 7 digits) 0000001	0.5	750	850	0.3	200	0.97	1.03	2400	2600	60		
Model Code RCH13 Engine Code 3RZ-FE 2.7L From VIN No. (last 7 digits) 0000001	0.5	650	750	0.3	200	0.97	1.03	2400	2600	60		

1	2			3						4
Manufacturer/Marque	(a)	(b)	(c)	(a)	(b)	(c)	(d)	(e)	(f)	
	Normal Idle Speed			Fast Idle Speed						
	Max CO Limit (%) Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
VAUXHALL										
<i>The Engine Code is stamped on the Engine Block.</i>										
Combo										
Engine Code C14NZ/OHC	0.5	830	990	0.3	200	0.97	1.03	2800	3200	80
Engine Code X14SZ/OHC	0.5	790	950	0.3	200	0.97	1.03	2800	3200	80
Engine Code C14SE	0.5	850	1010	0.3	200	0.97	1.03	2800	3200	80
Engine Code Z14XEP (As of MY 2005)	0.3	670	830	0.2	200	0.97	1.03	2800	3200	80
Engine Code Z16SE (As of MY 2002 - 2 in chassis)	0.5	710	930	0.3	200	0.97	1.03	2800	3200	80
Astra Van										
Engine Code C16NZ/OHC	0.5	780	940	0.3	200	0.97	1.03	2800	3200	80
Engine Code C14NZ	0.5	830	990	0.3	200	0.97	1.03	2800	3200	80
Engine Code C16SE/OHC	0.5	820	980	0.3	200	0.97	1.03	2800	3200	80
Engine Code X16SZR/OHC - (Manual)	0.5	770	930	0.3	200	0.97	1.03	2800	3200	80
Engine Code X16SZR/OHC - (Automatic)	0.5	710	910	0.3	200	0.97	1.03	2800	3200	80
Engine Code Z16SE (As of MY 1998 - W in chassis)	0.5	690	920	0.3	200	0.97	1.03	2800	3200	80
Engine Code Z16SE (As of MY 2001 - 1 in chassis)	0.5	710	930	0.3	200	0.97	1.03	2800	3200	80
Engine Code Z16XE (As of MY 2005)	0.3	710	930	0.2	200	0.97	1.03	2800	3200	80
Engine Code Z16XEP (As of MY 2005)	0.3	710	930	0.2	200	0.97	1.03	2800	3200	80
Engine Code Z14XEP (As of MY 2007)	0.3	720	880	0.2	200	0.97	1.03	2800	3200	80
Frontera										
Engine Code X22XE	0.5	670	1030	0.3	200	0.97	1.03	2800	3200	80
Sintra										
Engine Code X22XE/DOHC	0.5	600	760	0.3	200	0.97	1.03	2800	3200	80
Engine Code X30XE/DOHC	0.5	600	760	0.3	200	0.97	1.03	2800	3200	80
Monterey										
Engine Code 6VD1 (3.2l V6 24V)	0.5	720	800	0.3	200	0.97	1.03	2800	3200	80
Brava										
Engine Code 4ZD1	0.5	850	950	0.3	200	0.97	1.03	2800	3200	80
Corsa Van										
C14NZ/OHC	0.5	830	990	0.3	200	0.97	1.03	2800	3200	80
X14SZ/OHC	0.5	790	950	0.3	200	0.97	1.03	2800	3200	80
Z12XEP (As of MY 2005)	0.3	670	830	0.2	200	0.97	1.03	2800	3200	80
A12XEL(As of MY 2010 - A is 10th digit in chassis)	0.5	780	1000	0.3	200	0.97	1.03	2800	3200	80

1	2			3						4
Manufacturer/Marque	(b)		(c)	(b)		(c)	(d)	(e)	(f)	Min Oil Temp(°C)
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (%) Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	
Z12XE (As of MY 2001 - 1 in chassis)	0.5	780	1000	0.3	200	0.97	1.03	2800	3200	80
Engine Code A10XEP	0.3	770	930	0.2	200	0.97	1.03	2800	3200	80
Engine Code A12XER	0.3	670	830	0.2	200	0.97	1.03	2800	3200	80
Zafira										
Engine Code X16XEL	0.5	700	930	0.3	200	0.97	1.03	2800	3200	80
Engine Code X18XE1	0.5	730	960	0.3	200	0.97	1.03	2800	3200	80
Engine Code Z16XE	0.5	710	960	0.3	200	0.97	1.03	2800	3200	80
Engine Code Z18XE	0.5	730	950	0.3	200	0.97	1.03	2800	3200	80
Engine Code Z20LET	0.5	730	950	0.3	200	0.97	1.03	2800	3200	80
Engine Code Z22SE (Manual)	0.5	630	850	0.3	200	0.97	1.03	2800	3200	80
Engine Code Z22SE (Auto) (with A/c)	0.5	705	925	0.3	200	0.97	1.03	2800	3200	80
Engine Code Z16XEP (as of MY2005 - 5 is the 10th digit of the VIN)	0.3	710	930	0.2	200	0.97	1.03	2800	3200	80
Engine Code Z16XE1 (as of MY2007 - 7 is the 10th digit of the VIN)	0.3	710	930	0.2	200	0.97	1.03	2800	3200	80
Engine Code Z16XER (as of MY2010 - A is the 10th digit of the VIN)	0.3	600	950	0.2	200	0.97	1.03	2800	3200	80
Engine Code A16XER (as of MY2011 - B is the 10th digit of the VIN)	0.3	600	950	0.2	200	0.97	1.03	2800	3200	80
Engine Code A18XER (as of MY2011 - B is the 10th digit of the VIN)	0.3	600	950	0.2	200	0.97	1.03	2800	3200	80
Engine Code Z18XER (as of MY2005 - 5 is the 10th digit of the VIN)	0.3	600	950	0.2	200	0.97	1.03	2800	3200	80
Engine Code Z20LER (as of MY2005 - 5 is the 10th digit of the VIN)	0.3	700	900	0.2	200	0.97	1.03	2800	3200	80
Engine Code Z20LEH (as of MY2007 - 7 is the 10th digit of the VIN)	0.3	600	950	0.2	200	0.97	1.03	2800	3200	80
Engine Code Z22YH (as of MY2005 - 5 is the 10th digit of the VIN) manual	0.3	660	880	0.2	200	0.97	1.03	2800	3200	80
Engine Code Z22YH (as of MY2005 - 5 is the 10th digit of the VIN) auto	0.3	680	900	0.2	200	0.97	1.03	2800	3200	80
Engine Code A14NEL (as of MY2012 - C is the 10th digit of the VIN)	0.3	680	780	0.2	200	0.97	1.03	2800	3200	80
Engine Code A14NET (as of MY2012 - C is the 10th digit of the VIN)	0.3	680	780	0.2	200	0.97	1.03	2800	3200	80
Engine Code A18XEL (as of MY2012 - C is the 10th digit of the VIN)	0.3	600	950	0.2	200	0.97	1.03	2800	3200	80
Engine Code A18XER (as of MY2012 - C is the 10th digit of the VIN)	0.3	600	950	0.2	200	0.97	1.03	2800	3200	80
Engine Code A16SHT	0.3	570	670	0.2	200	0.97	1.03	2800	3200	80
Engine Code A16XHT	0.3	570	670	0.2	200	0.97	1.03	2800	3200	80
Engine Code A16XNT	0.3	730	900	0.2	200	0.97	1.03	2800	3200	80
Vivaro										
Engine Code F4R	0.5	750	850	0.3	200	0.97	1.03	2200	2800	80

1	2			3						4
Manufacturer/Marque	(a)	(b)	(c)	(a)	(b)	(c)	(d)	(e)	(f)	
	Normal Idle Speed			Fast Idle Speed						
	Max CO Limit (%) Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
VOLKSWAGEN										
<i>The Engine Code is stamped on the Engine Block.</i>										
Sharan Series										
1.8l injection Engine with Turbo Code AJH Model Year 98 - 00	0.5	780	860	0.3	200	0.97	1.03	2500	2800	80
1.8l injection Engine with Turbo Code AWC Model Year 01-	0.5	760	880	0.3	200	0.97	1.03	2500	3000	80
2.0l injection Engine Code ADY Model Year 95 - 00	0.5	770	870	0.3	200	0.97	1.03	2500	2800	80
2.0l injection Engine Code ATM Model Year 01 -	0.5	750	860	0.3	200	0.97	1.03	2500	3000	80
2.8l VR6 injection Engine Codes AAA and AMY Model Year 95 - 00	0.5	650	750	0.3	200	0.97	1.03	2500	2800	80
2.8l V6 24V injection Engine Code AYL Model Year 01 -	0.5	650	750	0.3	200	0.97	1.03	2500	3000	80
Caddy Series										
1.4l injection Engine Codes AEX and APQ Model Year 95 -	0.5	690	890	0.3	200	0.97	1.03	2500	2800	80
1.4l injection Engine Code AKV Model Year 97 -	0.5	770	970	0.3	200	0.97	1.03	2500	2800	80
1.4l injection Engine Code ANX Model Year 97 -	0.5	650	890	0.3	200	0.97	1.03	2500	2800	80
1.4l injection Engine Codes AKK and AUD Model Year 01 -	0.5	600	940	0.3	200	0.97	1.03	2500	2800	80
1.4l 16V injection Engine Code AUA Model Year 01-	0.5	800	900	0.3	200	0.97	1.03	2800	3200	80
1.4l 16V injection Engine Code APE Model Year 01-	0.5	810	910	0.3	200	0.97	1.03	2800	3200	80
1.6l injection Engine Code AEE Model Year 97 -	0.5	630	930	0.3	200	0.97	1.03	2500	2800	80
1.6l injection Engine Code AFT Model Year 95 - 99	0.5	790	890	0.3	200	0.97	1.03	2500	2800	80
1.6l injection Engine Code 1F Model Year 95 - 98	0.5	700	1000	0.3	200	0.97	1.03	2500	2800	80
1.6l injection Engine Code ALM Model Year 98 -	0.5	825	875	0.3	200	0.97	1.03	2500	2800	80
1.8l injection Engine Code ADZ Model Year 97 - 98	0.5	700	975	0.3	200	0.97	1.03	2500	2800	80
Caddy Pickup Series										
1.6l injection Engine Code AEE Model Year 97 -	0.5	650	950	0.3	200	0.97	1.03	2500	2800	80
Transporter Series										
2.0l injection Engine Code AAC Model Year 95 - 98	0.5	775	825	0.3	200	0.97	1.03	2500	2800	80
2.5l injection Engine Codes AAF and ACU Model Year 90 - 96	0.5	775	825	0.3	200	0.97	1.03	2500	2800	80
2.5l injection Engine Codes AET and AVT Model Year 96 -	0.5	650	750	0.3	200	0.97	1.03	2500	2800	80
2.5l injection Engine Code APL Model Year 99 -	0.5	600	800	0.3	200	0.97	1.03	2500	2800	80
2.8l VR6 injection Engine Code AES Model Year 96 -	0.5	650	750	0.3	200	0.97	1.03	2500	2800	80
2.8l V6 24V injection Engine Code AMV Model Year 01-	0.5	650	750	0.3	200	0.97	1.03	2500	2800	80
LT Series										
2.4l injection Engine Code 1E Model Year 88 - 97	0.5	750	850	0.3	200	0.97	1.03	2500	2800	80
2.3l injection Engine Code AGL Model Year 96 - 03	0.5	650	750	0.3	200	0.97	1.03	2500	2800	80

1	2									4
Manufacturer/Marque	(b) (c)			3					(e) (f)	
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (%) Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)
VOLVO										
<i>The Engine Code is stamped on the Engine Block and also the VIN Plate.</i>										
XC90 MY 2003										
Engine Family B5244T2 VIN (Engine Code) 59	0.5	620	720	0.5	200	0.96	1.04	2500	3000	60
Engine Family B6294T VIN (Engine Code) 91	0.5	800	900	0.5	200	0.96	1.04	2500	3000	60
XC90 Series MY 2004										
Engine Code 59 B5254T2	0.5	620	720	0.3	200	0.96	1.03	2500	3000	60
Engine Code 91 B6294T	0.5	650	700	0.3	200	0.96	1.03	2500	3000	60
XC90 Series MY 2005										
Engine Code 59 B5254T2	0.5	645	695	0.3	200	0.97	1.03	2500	3000	60
Engine Code 91 B6294T	0.5	550	750	0.3	200	0.97	1.03	2500	3000	60
Engine Code 85 B8444S	0.5	650	700	0.3	200	0.97	1.03	2500	3000	60
XC90 Series MY 2006										
Engine Code 59 B5254T2	0.3	645	695	0.2	200	0.97	1.03	2500	3000	60
Engine Code 91 B6294T	0.3	625	675	0.2	200	0.97	1.03	2500	3000	60
Engine Code 85 B8444S	0.3	650	700	0.2	200	0.97	1.03	2500	3000	60
XC90 Series MY 2007										
Engine Code 59 B5254T2	0.5	645	695	0.2	200	0.97	1.03	2500	3000	60
Engine Code 85 B8444S	0.5	650	700	0.3	200	0.97	1.03	2500	3000	60
Engine Code 98 B6324S	0.3	625	675	0.2	200	0.97	1.03	2500	3000	60
XC90 Series MY 2008										
Engine Code 59 B5254T2	0.5	645	695	0.2	200	0.97	1.03	2500	3000	60
Engine Code 85 B8444S	0.5	625	675	0.3	200	0.97	1.03	2500	3000	60
Engine Code 98 B6324S	0.3	625	675	0.2	200	0.97	1.03	2500	3000	60
XC90 Series MY 2009										
Engine Code 85 B8444S	0.5	625	675	0.3	200	0.97	1.03	2500	3000	60
Engine Code 98 B6324S	0.3	625	675	0.2	200	0.97	1.03	2500	3000	60
XC90 Series MY 2010										
Engine Code 85 B8444S	0.5	625	675	0.3	200	0.97	1.03	2500	3000	60
Engine Code 98 B6324S	0.3	625	675	0.2	200	0.97	1.03	2500	3000	60

1	2			3					4	
Manufacturer/Markue	(b)	(c)		(b)	(c)	(d)	(e)	(f)		
	(a) Normal Idle Speed			(a) Fast Idle Speed						
	Max CO Limit (% Vol)	Min Limit (RPM)	Max Limit (RPM)	Max CO Limit (%Vol)	Max HC Limit (PPM)	Min Lambda	Max Lambda	Min Limit (RPM)	Max Limit (RPM)	Min Oil Temp(°C)