BMW V45.20 Diagnostics List(Note:For reference only)

		Menu		Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	CAS Car Access System	√	√	√	√	√	1.Personalisation key number 2.Disable_enable key	
			DDE Diesel Electronics	√	√	√	√	√	1.DDE-CAS adjustment 2.Air-mass flow sensor adaptation 3.Regeneration, particulate filter 4.Idle speed adjustment 5.Exhaust-gas recirculation adjustment 6.Starting torque adjustment 7.Consumption calculation adjustment 8.Injector rate adjustment 9.Quantity mean-value adaptation 10.Reset variants 11.Bleeding, fuel system 12.EOBD readiness codes 13.Read measured values 14.Register battery change	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			DME Digital Motor Electronics	√	√	√	√	√	1.DME-CAS adjustment 2.CO adjustment 3.Clear adaptations 4.Delete adaptations/variants 5.Idle speed adjustment 6.Consumption indicator adjustment 7.Learning Valvetronic limit positions 8.Venting, cooling system 9.Register battery change 10.Remove Valvetronic servomotor 11.OBD readiness codes	
			EGS Transmission control	√	√	√	√	√	1.Reset adaptation values 2.Reset learning functions 3.Mechatronics adjustment 4.Oil-level adjustment	
			EKPS Fuel-pump control	√	√	√	√	√		
		Chassis	AL Active steering	√	√	√	√	√	1.Startup/adjustment, active front steering	
			DSC Dynamic Stability Control	√	√	√	√	√	1.Bleeding DSC Hydraulics 2.Mix Up Check BrakeLines	
			EPS Electronic Power Steering	√	√	√	√	√		
			RDC Tyre pressure control	√	√	√	√	√		
			AMP Amplifier	√	√	√	√	√		
			AHM Trailer module	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
1 Series	E81/E82/ E87/E88	Body	CA Comfort Access	√	√	√	√	√		
			CCC-A Applications	√	√	√	√	√		
			CCC-ANT Aerial tuner	√	√	√	√	√		
			CCC-ASK Audio system controller	√	√	√	√	√		
			CCC-BO User interface	√	√	√	√	√		
			CCC-GW Gateway	√	√	√	√	√		
			CDC CD Changer	√	√	√	√	√		
			CHAMP-BO User interface	√	√	√	√	√		
			CHAMP-GW Gateway	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			CON Controller	√	√	√	√	√		
			CVM Convertible-top module	√	√	√	√	√		
			DAB Digital tuner	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√	Start windows initialising Rear windows, initialising Rear windows, test	
			FRM Footwell Module	√	√	√	√	√		
			FRM2 Footwell module 2	√	√	√	√	√		
			FZD Function centre, roof	√	√	√	√	√	1.Initializ rain sensor	
			IHR Integrated heater control	√	√	√	√	√		
			IHKR Interagted heating/air-conditioning regulation	√	√	√	√	√		
			IHKA Integrated automatic heating/air conditioning	√	√	√	√	√	1.Flap motors 2.Coolant compressor	
			INSTR Instrument cluster	√	√	√	√	√		
			JBE Junction-box electronics	√	√	√	√	√		
			JBE2 Junction Box electronics 2	√	√	√	√	√		
			JNAV Navigation system, Japan	√	√	√	√	√		

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			M-ASK-BO User interface	√	√	√	√	√		
			M-ASK-GW Gateway	√	√	√	√	√		
			M-ASK-NAV Navigation system	√	√	√	√	√		
			MRS Multiple Restraint system	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD Radio	√	√	√	√	√		
			RAD2-BO User interface	√	√	√	√	√		
			RAD2-GW Gateway	√	√	√	√	√		
			RLSS Rain/light solar sensor	√	√	√	√	√	1.Initializ rain sensor	
			SDARS satellite tuner	√	√	√	√	√		
			SINE Siren with tilt sensor	√	√	√	√	√		
			SMBF Seat module, passenger	√	√	√	√	√		
			SMFA Seat module, driver	√	√	√	√	√		
			TCU Telematic Control unit	√	√	√	√	√		
			ULF Universal charging and hands-free factility	√	√	√	√	√		
			ULF-SBX Interface box	√	√	√	√	√		
			ULF-SBX-H Interface box High	√	√	√	√	√		
		Short test		√	√	√				
			CCC_ANT.C04						1.Recoding	
			CCC_ANT.C05						1.Recoding	
			CCC_ANT.C06						1.Recoding	
			CCC_ANT.C07						1.Recoding	
			CCC_ANT.C08						1.Recoding	
			CCC_ANT.C09						1.Recoding	
			CCC_ASK.C04						1.Recoding	
			CCC_ASK.C05						1.Recoding	
			CCC_ASK.C06						1.Recoding	

BMW V45.20 Diagnostics List(Note:For reference only)

	Menu			Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	CCC_ASK.C07						1.Recoding	
			CCC_GW.C02						1.Recoding	
			CCC_GW.C03						1.Recoding	
			CCC_GW.C04						1.Recoding	
			CCC_GW.C05						1.Recoding	
			DWA_IRS.C05						1.Recoding	
			DWASINE.C02						1.Recoding	
			DWASINE.C03						1.Recoding	
			Maintenance \ CBS Reset						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Vehicle inspection 9.Exhaust emission inspection 10.Diesel particle filter	

BMW **V45.20** Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Maintenance \ CBS Correct						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Diesel particle filter 9.Vehicle inspection 10.Exhaust emission inspection	
			Maintenance						1.Delete transport mode	
			Service functions						1.Adjustment, Steering-angle sensor	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer	
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		
		Chassis	ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			EHC/EDC (Signal-axle air suspension)	√	√	√	√	√		
			ADS Throttle-Valve Control	√	√	√	√	√		
	E39		AHK (Active-Axle Kinematics)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
	E30	Body	CVM Convertible-top module	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√		
			EKM (Electronic Body Module)	√	√	√	√	√		
			EML (Elec. throttle)	√	√	√	√	√		
			FHK (Rear Heater A/C System)	√	√	√	√	√		
			GR (Cruise control)	√	√	√	√	√		
			GSA (Closed-Loop-Controlled Differential-Lock AWD)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√		
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			MID (Multi Information Display)	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√		
			SPM/SM	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			URS (Rollover sensor)	√	√	√	√	√		
			VMX (Top-speed Regulation)	√	√	√	√	√		
			VNC (Variable Camshaft Control)	√	√	√	√	√		
			XEN (XENON LIGHTS)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
			ZCS/FA Coding						1.Display Coding code and print	

BMW V45.20 Diagnostics List(Note:For reference only)

	Menu			Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	ZCS/FA Coding						1. Key Test 2. Display status of all keys 3. Disable/Enable key	

				BMW **V45.20** Diagnostics List(Note:For reference only)						
Menu				**Functions**						
Series	**Chassis**	**Module**	**ECU System**	**Sys. Info.**	**Read code**	**Clear code**	**Data Stream**	**Actuation**	**Special Functions**	**Others**
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer 1.Idle speed 2.Exhaust-gas recirculation 3.Start basic injection quantity 4.Limitation delivery 5.Injection rate 6.Consumption calculation 7.Injector rate adjustment	
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Chassis	ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			EHC/EDC (Signal-axle air suspension)	√	√	√	√	√		
		Body	ADS Throttle-Valve Control	√	√	√	√	√		
			AHK (Active-Axle Kinematics)	√	√	√	√	√		
			CVM Convertible-top module	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√		
			EKM (Electronic Body Module)	√	√	√	√	√		
			EML (Elec. throttle)	√	√	√	√	√		
			FHK (Rear Heater A/C System)	√	√	√	√	√		
			GR (Cruise control)	√	√	√	√	√		
			GSA (Closed-Loop-Controlled Differential-Lock AWD)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√		
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			MID (Multi Information Display)	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√		
			SPM/SM	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			URS (Rollover sensor)	√	√	√	√	√		
			VMX (Top-speed Regulation)	√	√	√	√	√		

BMW **V45.20** Diagnostics List(Note:For reference only)									
Menu				Functions					
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
	E36		VNC (Variable Camshaft Control)	√	√	√	√	√		
			XEN (XENON LIGHTS)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
			ZCS/FA Coding						1.Display Coding code and print	
			CAR MEMORY\LIGHTING\External lights\Daytime driving light						1.Active 2.Not active	
			CAR MEMORY\LIGHTING\External lights\Home lights						1.Not active 2.40 s 3.90 s 4.150 s 5.240 s	
			CAR MEMORY\LIGHTING\Interior lighting\ON during unlock						1.Active 2.Not active	
			CAR MEMORY\LIGHTING\Interior lighting\ON at terminal R off, light on beforehand						1.Active 2.Not active	
			CAR MEMORY\LIGHTING\Interior lighting\Soft ON/OFF						1.Active 2.Not active	
			CAR MEMORY\ANTI-THEFT SYSTEM\Interior lighting\Interior sensor						1.Active 2.Not active	
			CAR MEMORY\ANTI-THEFT SYSTEM\Interior lighting\Tilt alarm sensor						1.Active 2.Not active	
			CAR MEMORY\ANTI-THEFT SYSTEM\Interior lighting\Arm/disarm						1.remote control 2.locks and remote control	

BMW V45.20 Diagnostics List(Note:For reference only)

	Menu			Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	CAR MEMORY\ANTI-THEFT SYSTEM\Interior lighting\Acknowledge\Disarm visually						1.Active 2.Not active	
			CAR MEMORY\ANTI-THEFT SYSTEM\Interior lighting\Acknowledge\Arm visually						1.Active 2.Not active	
			CAR MEMORY\ANTI-THEFT SYSTEM\Interior lighting\Acknowledge\Arm visually, lids closed						1.Active 2.Not active	
			CAR MEMORY\CENTRAL LOCKING\RC interior light						1.Active 2.Not active	
			CAR MEMORY\CENTRAL LOCKING\Open luggage compartment via remote control						1.when disarmed 2.always	
			CAR MEMORY\CENTRAL LOCKING\Lock again 2 min after unlocking without opening						1.Active 2.Not active	
			CAR MEMORY\CENTRAL LOCKING\Automatic locking after starting off						1.Active 2.Not active	
			CAR MEMORY\CENTRAL LOCKING\Centre lock button, when locked						1.Active 2.Not active	
			CAR MEMORY\CENTRAL LOCKING\Entrance aid						1.Active 2.Not active	

BMW **V45.20** Diagnostics List(Note:For reference only)										
Menu				**Functions**						
Series	**Chassis**	**Module**	**ECU System**	**Sys. Info.**	**Read code**	**Clear code**	**Data Stream**	**Actuation**	**Special Functions**	**Others**
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer 1.Idle speed 2.Exhaust-gas recirculation 3.Start basic injection quantity 4.Limitation delivery 5.Injection rate 6.Consumption calculation 7.Injector rate adjustment	
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Chassis	ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			LEW (Steering-angle sensor)	√	√	√	√	√		
			MFL (Multi-function steering wheel)	√	√	√	√	√		
			RDC (Tyre pressure control)	√	√	√	√	√		
		Body	BIT (Basis Interface Telephone)	√	√	√	√	√		
			BM (On-board monitor)	√	√	√	√	√		
			CVM Convertible-top module	√	√	√	√	√		
			GR (Cruise control)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√	1.Reset service interval indicator	
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√		
			SMB (Entrance aid,passenger)	√	√	√	√	√		
			SMF (Seat memory,driver)	√	√	√	√	√		
			SPMBT (Mirror memory,passenger)	√	√	√	√	√		
			SPMFT (Mirror memory,driver)	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			SZM (Switching center, center console)	√	√	√	√	√		
			URS (Rollover sensor)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

	Menu			Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Mirror memory, passenger Code Index 01						1.Recoding	
			Convertible top module Code Index 03						1.Recoding	
			Immobiliser Code Index 81						1.Recoding	
			Mirror memory, driver Code Index 01						1.Recoding	
			Central Body Electronic Code Index 01						1.Recoding	
			Central Body Electronic Code Index 02						1.Recoding	
			Central Body Electronic Code Index 04						1.Recoding	
			Central Body Electronic Code Index 05						1.Recoding	
			Heater and A/C control Code Index 01						1.Recoding	
			Heater and A/C control Code Index 02						1.Recoding	
			Heater and A/C control Code Index 03						1.Recoding	
			Heater and A/C control Code Index 12						1.Recoding	
			Heater and A/C control Code Index 13						1.Recoding	
			Heater and A/C control Code Index 14						1.Recoding	

BMW **V45.20** Diagnostics List(Note:For reference only)										
Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Heater and A/C control Code Index 15						1.Recoding	
			Heater and A/C control Code Index 16						1.Recoding	
			Heater and A/C control Code Index 17						1.Recoding	
			Instrument cluster Code Index 02						1.Recoding	
			Instrument cluster Code Index 03						1.Recoding	
			Instrument cluster Code Index 04						1.Recoding	
			Instrument cluster Code Index 05						1.Recoding	
			Instrument cluster Code Index 06						1.Recoding	
			Instrument cluster Code Index 07						1.Recoding	
			Instrument cluster Code Index 08						1.Recoding	
			Light switching centre Code Index 26						1.Recoding	
			Light switching centre Code Index 27						1.Recoding	
			Light switching centre Code Index 28						1.Recoding	
			Light switching centre Code Index 29						1.Recoding	

	Menu			Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Light switching centre Code Index 31						1.Recoding	
			Light switching centre Code Index 32						1.Recoding	
			Light switching centre Code Index 34						1.Recoding	
			Light switching centre Code Index 35						1.Recoding	
			Light switching centre Code Index 36						1.Recoding	
			Steering-angle sensor Code Index 01						1.Recoding	
			ABS with automatic stability control Code Index 03						1.Recoding	
			ABS with automatic stability control Code Index 04						1.Recoding	
			ABS with automatic stability control Code Index 05						1.Recoding	
			Airbag Code Index 07						1.Recoding	
			Airbag Code Index 31						1.Recoding	
			Park distance control Code Index 03						1.Recoding	
			Radio Code Index 01						1.Recoding	
			Radio Code Index 02						1.Recoding	

BMW V45.20 Diagnostics List(Note:For reference only)

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Sunroof module Code Index 01						1.Recoding	
			Sunroof module Code Index 02						1.Recoding	
			Sunroof module Code Index 03						1.Recoding	
			Sunroof module Code Index 04						1.Recoding	
			Seat module Code Index 01						1.Recoding	
			Type pressure control Code Index 01						1.Recoding	
			Rain/light sensor Code Index 02						1.Recoding	
			Basic telephone interface Code Index 02						1.Recoding	
			CVM_e46.C04						1.Recoding	
			DSC5_7.C13						1.Recoding	
			DSC5_7.C17						1.Recoding	
			DSC5_7.C19						1.Recoding	
			EWS.C81 AEWS						1.Recoding	
			GM5.C06						1.Recoding	
			GT.C03						1.Recoding	
			GT.C04						1.Recoding	
			GT.C05						1.Recoding	
			GT.C06						1.Recoding	
			GT.C07						1.Recoding	
			GT.C08						1.Recoding	

				Functions						
									BMW **V45.20** Diagnostics List(Note:For reference only)	

			Menu				Functions			
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			LWS5.C01						1.Recoding	
			MK60.C01						1.Recoding	
			MK60.C04						1.Recoding	
			MK60.C06						1.Recoding	
			MK60.C12						1.Recoding	
			MK60.C13						1.Recoding	
			MRS4_16.C32						1.Recoding	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Recirculated air memory						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Temperature unit						1.℃ 2.℉	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Set fan power\Key 1						1.Not active 2.Raise 3.Lower	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Set fan power\Key 2						1.Not active 2.Raise 3.Lower	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Set fan power\Key 3						1.Not active 2.Raise 3.Lower	

BMW V45.20 Diagnostics List(Note:For reference only)

		Menu		Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Set fan power\Key 4						1.Not active 2.Raise 3.Lower	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Display blower bar in automatic mode\Key 1						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Display blower bar in automatic mode\Key 2						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Display blower bar in automatic mode\Key 3						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Display blower bar in automatic mode\Key 4						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Open ventilation in warm up phase\Key 1						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Open ventilation in warm up phase\Key 2						1.Not active 2.Active	

BMW V45.20 Diagnostics List(Note:For reference only)

	Menu			Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Open ventilation in warm up phase\Key 3						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Open ventilation in warm up phase\Key 4						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Flaps,after terminal 15,on\Key 1						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Flaps,after terminal 15,on\Key 2						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Flaps,after terminal 15,on\Key 3						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Flaps,after terminal 15,on\Key 4						1.Not active 2.Active	

BMW **V45.20** Diagnostics List(Note:For reference only)									
Menu				**Functions**					
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Correction set temperature\Key 1						1.Not active 2.+1° 3.+2° 4.+3° 5.-3° 6.-1° 7.-2° 8.-3°	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Correction set temperature\Key 2						1.Not active 2.+1° 3.+2° 4.+3° 5.-3° 6.-1° 7.-2° 8.-3°	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Correction set temperature\Key 3						1.Not active 2.+1° 3.+2° 4.+3° 5.-3° 6.-1° 7.-2° 8.-3°	

				Functions						
									BMW V45.20 Diagnostics List(Note:For reference only)	

			Menu						**Functions**	
Series	**Chassis**	**Module**	**ECU System**	**Sys. Info.**	**Read code**	**Clear code**	**Data Stream**	**Actuation**	**Special Functions**	**Others**
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Correction set temperature\Key 4						1.Not active 2.+1° 3.+2° 4.+3° 5.-3° 6.-1° 7.-2° 8.-3°	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Air conditioning on at\Key 1						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Air conditioning on at\Key 2						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Air conditioning on at\Key 3						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Air conditioning on at\Key 4						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Automatic blower function\Key 1						1.Not active 2.Active	

				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Automatic blower function\Key 2						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Automatic blower function\Key 3						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Automatic(IHKA)\Automatic blower function\Key 4						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Manual(IHKR)\Recirculated air memory						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Manual(IHKR)\Set fan power\Key 1						1.Not active 2.Raise 3.Lower	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Manual(IHKR)\Set fan power\Key 2						1.Not active 2.Raise 3.Lower	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Manual(IHKR)\Set fan power\Key 3						1.Not active 2.Raise 3.Lower	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
3 Series	E46		Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Manual(IHKR)\Set fan power\Key 4						1.Not active 2.Raise 3.Lower	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Manual(IHKR)\Correction set temperature\Key 1						1.Not active 2.+1° 3.+2° 4.+3° 5.-3° 6.-1° 7.-2° 8.-3°	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Manual(IHKR)\Correction set temperature\Key 2						1.Not active 2.+1° 3.+2° 4.+3° 5.-3° 6.-1° 7.-2° 8.-3°	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Manual(IHKR)\Correction set temperature\Key 3						1.Not active 2.+1° 3.+2° 4.+3° 5.-3° 6.-1° 7.-2° 8.-3°	

BMW V45.20 Diagnostics List(Note:For reference only)

		Menu								
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Manual(IHKR)\Correction set temperature\Key 4						1.Not active 2.+1° 3.+2° 4.+3° 5.-3° 6.-1° 7.-2° 8.-3°	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Manual(IHKR)\Air conditioning on at\Key 1						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Manual(IHKR)\Air conditioning on at\Key 2						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Manual(IHKR)\Air conditioning on at\Key 3						1.Not active 2.Active	
			Car Key Memory\IHKA [Integrated automatic heating/ A/C control]\Manual(IHKR)\Air conditioning on at\Key 4						1.Not active 2.Active	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\KOM [Instrument cluster]\Language						1.German 2.English UK 3.English US 4.Italian 5.Spanish 6.Japanese 7.French 8.English (CDN) 9.Gulf states 10. ---	
			Car Key Memory\KOM [Instrument cluster]\Distance						1.KM 2.MLS3.---	
			Car Key Memory\KOM [Instrument cluster]\Time						1.24H 2.12H	
			Car Key Memory\KOM [Instrument cluster]\Fuel consumtion						1.L/100 KM 2.MPG(UK) 3.MPG(US) 4.KM/LITRE	
			Car Key Memory\KOM [Instrument cluster]\Temperature						1.℃ 2.℉	
			Car Key Memory\KOM [Instrument cluster]\Outside temperature warning						1.Not active 2.Active	
			Car Key Memory\KOM [Instrument cluster]\Ignition key						1.Not active 2.Active	
			Car Key Memory\LSZ/LCM [Light switching center]\Day time running lights						1.Not active 2.Active	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights						1.Not active 2.40 Seconds 3.90 Seconds 4.150 Seconds 5.240 Seconds	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with dipped beam						1.Not active 2.Active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with rear sidelights						1.Not active 2.Active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with front sidelights						1.Not active 2.Active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with instrument lights						1.Not active 2.Active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with license plate						1.Not active 2.Active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with front fog lights						1.Not active 2.Active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with main beam						1.Not active 2.Active	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with brake lights						1.Not active 2.Active	
			Car Key Memory\PDC [Park Distance Control]\Switch on message(rear)						1.Not active 2.Active	
			Car Key Memory\RAD [Radio]\New generation radio key selective						1.Not active 2.Active	
			Car Key Memory\SMF [Seat memory, driver]\Seat position						1.When car is unlocked 2.When door is opened 3.Not active	
			Car Key Memory\SPMBT [Mirror memory, passenger]\Mirror memory,automatic parking function						1.Not active 2.Active	
			Car Key Memory\SPMBT [Mirror memory, passenger]\Convenient folding mirrors						1.Not active 2.Active	
			Car Key Memory\SPMFT [Mirror memory, driver]\Mirror memory,automatic parking function						1.Not active 2.Active	
			Car Key Memory\SPMFT [Mirror memory, driver]\Convenient folding mirrors						1.Not active 2.Active	
			Car Key Memory\TCU [Telematic Control unit]\Speed raising volume stage(GAL)						1.30 KM/H 2.40 KM/H 3.48 KM/H 4.56 KM/H	

Series	**Chassis**	**Module**	**ECU System**	**Sys. Info.**	**Read code**	**Clear code**	**Data Stream**	**Actuation**	**Special Functions**	**Others**

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\TCU [Telematic Control unit]\Wake up by e-call						1.Not active 2.Active	
			Car Key Memory\ULF [Universal charging and hands-free facility]\Mobile phone model						1.Nokia 3110 2.Sismens s10 3.Identifying model	
			Car Key Memory\ULF [Universal charging and hands-free facility]\Voice recognition						1.Not active 2.German	
			Car Key Memory\ULF [Universal charging and hands-free facility]\Speed raising volume stage						1.1 KM/H 2.30 KM/H 3.40 KM/H 4.48 KM/H 5.56KM/H 6.63 KM/H	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Compartment sensor,front passenger						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Passenger compartment sensor back(touring)						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Tilt sensor						1.Not active 2.Active	

				Functions						
Series	**Chassis**	**Module**	**ECU System**	**Sys. Info.**	**Read code**	**Clear code**	**Data Stream**	**Actuation**	**Special Functions**	**Others**
			Car Key Memory\ZKE [Central Body Electronic]\Burglar alarm system\Activating and deactivating dwa						1.Rc only 2.Key and rc	
			Car Key Memory\ZKE [Central Body Electronic]\Burglar alarm system\Disarm visually						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Burglar alarm system\Disarm acoustically						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Burglar alarm system\Arm visually						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Burglar alarm system\Arm acoustically						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Burglar alarm system\Arm visually doors/lids closed						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Burglar alarm system\Arm acoustically doors/lids closed						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Burglar alarm system\Acknowledgement without dwa						1.Not active 2.Active	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu

				Menu					**Functions**	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Rc interior light						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Rc panic mode						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Release rear window from inside						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\"open luggage compartment via Remote control"						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Relock 2 minutes after unlocking						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Centre lock button when locked						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Automatic locking\Car						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Automatic locking\Key 1						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Automatic locking\Key 2						1.Not active 2.Active	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Automatic locking\Key 3						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Automatic locking\Key 4						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Selective central locking\Car						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Selective central locking\Key 1						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Selective central locking\Key 2						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Selective central locking\Key 3						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Selective central locking\Key 4						1.Not active 2.Active	

BMW **V45.20** Diagnostics List(Note:For reference only)										
Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Convenient access\Car						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Convenient access\Key 1						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Convenient access\Key 2						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Convenient access\Key 3						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Convenient access\Key 4						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Unlock remote\Key 1						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Unlock remote\Key 2						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Unlock remote\Key 3						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Central locking\Unlock remote\Key 4						1.Not active 2.Active	

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			BMW **V45.20** Diagnostics List(Note:For reference only)							
			Menu	**Functions**						
			Car Key Memory\ZKE [Central Body Electronic]\Window regulators/slide/tilt sunroof\One touch open,driver's window						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Window regulators/slide/tilt sunroof\One touch close,driver's window						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Window regulators/slide/tilt sunroof\One touch open,passenger's window						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Window regulators/slide/tilt sunroof\One touch close,passenger's window						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Window regulators/slide/tilt sunroof\One touch open,rear windows						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Window regulators/slide/tilt sunroof\One touch close,rear windows						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Window regulators/slide/tilt sunroof\One touch open sunroof						1.Not active 2.Active	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\ZKE [Central Body Electronic]\Window regulators/slide/tilt sunroof\One touch close sunroof						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Window regulators/slide/tilt sunroof\Convenient closing rc						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Window regulators/slide/tilt sunroof\Convenient opening rc						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Window regulators/slide/tilt sunroof\Lower power window after trapping						1.Long 2.Short	
			Car Key Memory\ZKE [Central Body Electronic]\Window regulators/slide/tilt sunroof\Open power window after door open						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Interior lighting\On during unlock						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Interior lighting\"on at terminal R off light Previously on"						1.Not active 2.Active	

BMW **V45.20** Diagnostics List(Note:For reference only)										
Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\ZKE [Central Body Electronic]\Interior lighting\Soft on/off						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Windscreen wipers\Rain sensor						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Windscreen wipers\Switch down when stationary						1.Not active 2.Active	
			Car Key Memory\ZKE [Central Body Electronic]\Windscreen wipers\Wipe interval when astaionary						1.3 second 2.5 second	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	
			CAS Car Access System	√	√	√	√	√	1.Personalisation key number 2.Disable_enable key	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			DDE Diesel Electronics	√	√	√	√	√	1.DDE-CAS adjustment 2.Air-mass flow sensor adaptation 3.Regeneration, particulate filter 4.Idle speed adjustment 5.Exhaust-gas recirculation adjustment 6.Starting torque adjustment 7.Consumption calculation adjustment 8.Injector rate adjustment 9.Quantity mean-value adaptation 10.Reset variants 11.Bleeding, fuel system 12.EOBD readiness codes 13.Read measured values 14.Register battery change	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.DME-CAS adjustment 2.CO adjustment 3.Clear adaptations 4.Delete adaptations/variants 5.Idle speed adjustment 6.Consumption indicator adjustment 7.Learning Valvetronic limit positions 8.Venting, cooling system 9.Register battery change 10.Remove Valvetronic servomotor 11.OBD readiness codes	
			EGS Transmission control	√	√	√	√	√	1.Reset adaptation values 2.Reset learning functions 3.Mechatronics adjustment 4.Oil-level adjustment	
			GWS Gear selector switch	√	√	√	√	√		
			EKPS Fuel-pump control	√	√	√	√	√		
			VTC Valvetronic	√	√	√	√	√		
			VTC2 Valvetronic 2	√	√	√	√	√		
			VTG Transfer case	√	√	√	√	√		
			AL Active steering	√	√	√	√	√	1.Startup/adjustment, active front steering	
			ARS Dynamic Drive	√	√	√	√	√		

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Chassis	DSC Dynamic Stability Control	√	√	√	√	√	1.Bleeding DSC Hydraulics 2.Mix Up Check BrakeLines	
			EDCSHL Damper satellite, rear left	√	√	√	√	√		
			EDCSHR Damper satellite, rear right	√	√	√	√	√		
			EDCSVL Damper satellite, front left	√	√	√	√	√		
			EDCSVR Damper satellite, front right	√	√	√	√	√		
			EHC Electronic Ride-Height Control	√	√	√	√	√	1.Check Ride Level Sensors 2.Delete Energy Saving Mode 3.Check Air Supply System 4.Check Compressor Relay 5.Check Raise/lower Function	
			EMF Parking brake	√	√	√	√	√	1.Workshop braking-in 2.Assembly mode 3.Positioning-travel check	
			LDM Longitudinal Dynamics Management							
			RDC Tyre pressure control	√	√	√	√	√		
			VDM Vertical Dynamics Management	√	√	√	√	√		
			ACSM Crash Safety Module	√	√	√	√	√		
			AHM Trailer module	√	√	√	√	√		
			AMPH Hi-Fi amplifier	√	√	√	√	√		
			AMPT Top Hi-Fi amplifier	√	√	√	√	√		
			CA Comfort Access	√	√	√	√	√		
			CCC-A Applications	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
	E90/E91/ E92/E93	Body	CCC-ANT Aerial tuner	√	√	√	√	√		
			CCC-ASK Audio system controller	√	√	√	√	√		
			CCC-BO User interface	√	√	√	√	√		
			CCC-GW Gateway	√	√	√	√	√		
			CDC CD Changer	√	√	√	√	√		
			CHAMP-BO User interface	√	√	√	√	√		
			CHAMP-GW Gateway	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			CNAV Navigation system, China	√	√	√	√	√		
			CON Controller	√	√	√	√	√		
			DAB Digital tuner	√	√	√	√	√		
			DVD-C DVD Changer	√	√	√	√	√		
			FD Rear-compartment display	√	√	√	√	√		
			FKA Rear heater/air conditioning	√	√	√	√	√		
			FLA High Beam Assist	√	√	√	√	√		
			FRM2 Footwell module 2	√	√	√	√	√		
			FZD Function centre, roof	√	√	√	√	√	1.Initializ rain sensor	
			HKL Rear-lid lift	√	√	√	√	√		
			HUD Head-Up Display	√	√	√	√	√		
			IBOC Digital tuner US	√	√	√	√	√		
			IHKA Integrated automatic heating/air conditioning	√	√	√	√	√	1.Flap motors 2.Coolant compressor	
			INSTR Instrument cluster	√	√	√	√	√		
			JBE2 Junction Box electronics 2	√	√	√	√	√		
			JNAV Navigation system, Japan	√	√	√	√	√		
			KHM Headphones moudule	√	√	√	√	√		
			KNAV Navigation system, Korea	√	√	√	√	√		
			M-ASK-BO User interface	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			M-ASK-GW Gateway	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RFK Reversing camera	√	√	√	√	√		
			RLSS Rain/light solar sensor	√	√	√	√	√	1.Initializ rain sensor	
			RSE Rear Seat Entertainment	√	√	√	√	√		
			SDARS satellite tuner	√	√	√	√	√		
			SINE Siren with tilt sensor	√	√	√	√	√		
			SMBF Seat module, passenger	√	√	√	√	√		
			SMFA Seat module, driver	√	√	√	√	√		
			TCU Telematic Control unit	√	√	√	√	√		
			ULF-SBX Interface box	√	√	√	√	√		
			ULF-SBX-H Interface box High	√	√	√	√	√		
			VM Video Module	√	√	√	√	√		
			VSW video switch	√	√	√	√	√		
		Short test		√	√	√				
			CCC_ANT.C04						1.Recoding	
			CCC_ANT.C05						1.Recoding	
			CCC_ANT.C06						1.Recoding	
			CCC_ANT.C07						1.Recoding	
			CCC_ANT.C08						1.Recoding	
			CCC_ANT.C09						1.Recoding	
			CCC_ASK.C04						1.Recoding	
			CCC_ASK.C05						1.Recoding	
			CCC_ASK.C06						1.Recoding	
			CCC_ASK.C07						1.Recoding	
			CCC_GW.C02						1.Recoding	
			CCC_GW.C03						1.Recoding	
			CCC_GW.C04						1.Recoding	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	CCC_GW.C05						1.Recoding	
			DWA_IRS.C05						1.Recoding	
			DWASINE.C02						1.Recoding	
			DWASINE.C03						1.Recoding	
			Maintenance \ CBS Reset						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Vehicle inspection 9.Exhaust emission inspection 10.Diesel particle filter	
			Maintenance \ CBS Correct						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Diesel particle filter 9.Vehicle inspection 10.Exhaust emission inspection	
			Maintenance						1.Delete transport mode	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Service functions						1.Adjustment, Steering-angle sensor	
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer	
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		
		Chassis	ABS Antilock brake	√	√	√	√	√	1.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 2.RESET ABS MOTOR RELAY CLOCK COUNTER	
			EHC/EDC (Signal-axle air suspension)	√	√	√	√	√		
			ADS Throttle-Valve Control	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
	E28	Body	AHK (Active-Axle Kinematics)	√	√	√	√	√		
			CVM Convertible-top module	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√		
			EKM (Electronic Body Module)	√	√	√	√	√		
			EML (Elec. throttle)	√	√	√	√	√		
			FHK (Rear Heater A/C System)	√	√	√	√	√		
			GR (Cruise control)	√	√	√	√	√		
			GSA (Closed-Loop-Controlled Differential-Lock AWD)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√		
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			MID (Multi Information Display)	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√		
			SPM/SM	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			URS (Rollover sensor)	√	√	√	√	√		
			VMX (Top-speed Regulation)	√	√	√	√	√		
			VNC (Variable Camshaft Control)	√	√	√	√	√		
			XEN (XENON LIGHTS)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
		Coding / Program	ZCS/FA Coding						1.Display Coding code and print	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	

		Menu		Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer 1.Idle speed 2.Exhaust-gas recirculation 3.Start basic injection quantity 4.Limitation delivery 5.Injection rate 6.Consumption calculation 7.Injector rate adjustment	
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
E34		Chassis	ABS Antilock brake	√	√	√	√	√	1.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 2.RESET ABS MOTOR RELAY CLOCK COUNTER	
			EHC/EDC (Signal-axle air suspension)	√	√	√	√	√		
		Body	ADS Throttle-Valve Control	√	√	√	√	√		
			AHK (Active-Axle Kinematics)	√	√	√	√	√		
			CVM Convertible-top module	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√		
			EKM (Electronic Body Module)	√	√	√	√	√		
			EML (Elec. throttle)	√	√	√	√	√		
			FHK (Rear Heater A/C System)	√	√	√	√	√		
			GR (Cruise control)	√	√	√	√	√		
			GSA (Closed-Loop-Controlled Differential-Lock AWD)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√		
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			MID (Multi Information Display)	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√		
			SPM/SM	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			URS (Rollover sensor)	√	√	√	√	√		
			VMX (Top-speed Regulation)	√	√	√	√	√		
			VNC (Variable Camshaft Control)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			XEN (XENON LIGHTS)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
		Coding / Program	ZCS/FA Coding						1.Display Coding code and print	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	

BMW V45.20 Diagnostics List (Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer 1.Idle speed 2.Exhaust-gas recirculation 3.Start basic injection quantity 4.Limitation delivery 5.Injection rate 6.Consumption calculation 7.Injector rate adjustment	
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Chassis	ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			EHC/EDC (Signal-axle air suspension)	√	√	√	√	√		
			LEW (Steering-angle sensor)	√	√	√	√	√		
			MFL (Multi-function steering wheel)	√	√	√	√	√		
		Body	AIC (Automatic Interval Control)	√	√	√	√	√		
			BM (On-board monitor)	√	√	√	√	√		
			GR (Cruise control)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√	1.Reset service interval indicator	
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			MID (Multi Information Display)	√	√	√	√	√		
			NAV Navigation system	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SES (Language-input system)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√		
			SPM/SM	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			SZM (Switching center, center console)	√	√	√	√	√		
			VID (Video Module)	√	√	√	√	√		
			DSP (Digital Sound Processor)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			STH (Park heating)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
			ABS with automatic stability control Code Index 06						1.Recoding	
			Dynamic stability control Code Index 06 Code Index 10						1.Recoding	
			Basic telephone interface Code Index 01						1.Recoding	
			Immobiliser Code Index 01 Code Index 02 Code Index 81						1.Recoding	
			Cruise control Code Index 04						1.Recoding	
			Cruise control Code Index 05						1.Recoding	
			Central Body Electronic Code Index 04 Code Index 05 Code Index 10						1.Recoding	
			GT Code Index 01 Code Index 02 Code Index 03 Code Index 04 Code Index 05 Code Index 06 Code Index 07						1.Recoding	

				Functions						
Series	**Chassis**	**Module**	**ECU System**	**Sys. Info.**	**Read code**	**Clear code**	**Data Stream**	**Actuation**	**Special Functions**	**Others**
			Heater and A/C control Code Index 01 Code Index 02 Code Index 03 Code Index 10						1.Recoding	
			Instrument cluster Code Index 05						1.Recoding	
			Instrument cluster Code Index 04 Code Index 05 Code Index 06 Code Index 07 Code Index 11 Code Index 12						1.Recoding	
			Lamp control module Code Index 14 Code Index 15 Code Index 16 Code Index 17 Code Index 18 Code Index 19 Code Index 20 Code Index 21 Code Index 22 Code Index 23 Code Index 24						1.Recoding	
			Airbag Code Index 04 Code Index 06 Code Index 07 Code Index 10						1.Recoding	

The table title: **BMW V45.20 Diagnostics List**(Note:For reference only)

Menu

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Steering-angle sensor Code Index 01						1.Recoding	
			Park distance control Code Index 02 Code Index 03						1.Recoding	
			Radio Code Index 01 Code Index 02						1.Recoding	
			Rain/light sensor Code Index 02						1.Recoding	
			Telematic Control unit Code Index 02						1.Recoding	
			TV Code Index 02						1.Recoding	
			Universal charging and hands-free facility Code Index 01 Code Index 02 Code Index 03 Code Index 04 Code Index 05 Code Index 06						1.Recoding	
			Independent heating Code Index 01						1.Recoding	
			Car Key Memory\IHKA/ IHKR[A/C heater]\Automatic(IHKA)\Recirculated air memory						1.Active 2.Not active	
			Car Key Memory\IHKA/ IHKR[A/C heater]\Automatic(IHKA)\Temperature unit						1.℃ 2.℉	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\IHKA/ IHKR[A/C heater]\Manual(IHKR)\Recirculated air memory						1.Active 2.Not active	
			Car Key Memory\IHKA/ IHKR[A/C heater]\Key selective						1.Active 2.Not active	
			Car Key Memory\KOM [Instrument cluster]\Language						1.German 2.English UK 3.English US 4.Italian 5.Spanish 6.Japanese 7.French 8.English (CDN) 9.Gulf states 10. ---	
			Car Key Memory\KOM [Instrument cluster]\Distance						1.KM 2.MLS	
			Car Key Memory\KOM [Instrument cluster]\Time						1.24H 2.12H	
			Car Key Memory\KOM [Instrument cluster]\Fuel consumption						1.1/100KM 2.MPG(UK) 3.MPG(US) 4.km/litre	
			Car Key Memory\KOM [Instrument cluster]\Temperature						1.℃ 2.℉	
			Car Key Memory\KOM [Instrument cluster]\Outside temperature warning						1.Active 2.Not active	

BMW V45.20 Diagnostics List(Note:For reference only)

		Menu		Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\KOM [Instrument cluster]\Ignition key						1.Active 2.Not active	
			Car Key Memory\KOM [Instrument cluster]\Washer fluid warning						1.Active 2.Not active	
			Car Key Memory\KOM [Instrument cluster]\Rear lid warning						1.Active 2.Not active	
			Car Key Memory\KOM [Instrument cluster]\Doors warning						1.Active 2.Not active	
			Car Key Memory\KOM [Instrument cluster]\Brake light warning						1.Active 2.Not active	
			Car Key Memory\KOM [Instrument cluster]\Rear sidelights warning						1.Active 2.Not active	
			Car Key Memory\KOM [Instrument cluster]\Dipped beam warning						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Key in ignition warning(if door is opened)						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Day time running lights						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Day time running lights(ECE)						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Day time running lights(US)						1.Active 2.Not active	

BMW **V45.20** Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
	E39		Car Key Memory\LSZ/LCM [Light switching center]\Home lights						1.Not active 2.40 Seconds 3.90 Seconds 4.150 Seconds 5.240 Seconds	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with dipped beam						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with rear sidelights						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with front sidelights						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with instrument lights						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with license plate						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with front fog lights						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with main beam						1.Active 2.Not active	

BMW V45.20 Diagnostics List(Note:For reference only)

		Menu								
Series	**Chassis**	**Module**	**ECU System**	**Sys. Info.**	**Read code**	**Clear code**	**Data Stream**	**Actuation**	**Special Functions**	**Others**
		Coding / Program	Car Key Memory\LSZ/LCM [Light switching center]\Home lights with brake lights						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Key in ignition warning(if door is opened)						1.Active 2.Not active	
			Car Key Memory\PDC [Park Distance Control]\Switch on message(rear)						1.Active 2.Not active	
			Car Key Memory\RAD[Radio]\New generation radio key selective						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Compartment sensor,front passenger						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Passenger compartment sensor back(touring)						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Tilt sensor						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Activating and deactivating dwa						1.RC ONLY 2.KEY AND RC	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Disarm visually						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Disarm acoustically						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Arm visually						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Arm acoustically						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Arm acknowledgement when all doors/lids closed						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Acknowledgement without dwa						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Rc interior light						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Rc panic mode						1.Active 2.Not active	

Series	**Chassis**	**Module**	**ECU System**	**Sys. Info.**	**Read code**	**Clear code**	**Data Stream**	**Actuation**	**Special Functions**	**Others**
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Open luggage compartment via remote control						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Relock 2 minimum after unlocking						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Automatic locking						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Automatic locking(key 1)						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Automatic locking(key 2)						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Automatic locking(key 3)						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Automatic locking(key 4)						1.Active 2.Not active	

BMW V45.20 Diagnostics List(Note:For reference only)

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Automatic locking speed						1.0 KM/H 2.4 KM/H 3.8 KM/H 4.12 KM/H 5.16 KM/H 6.20 KM/H 7.24 KM/H 8.28 KM/H	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Automatic relocking						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Selective central locking						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Selective central locking(key 1)						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Selective central locking(key 2)						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Selective central locking(key 3)						1.Active 2.Not active	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Selective central locking(key 4)						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\Window deactivation condition						1.Open door 2.Close door	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch open,driver's window						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch close,driver's window						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch open,passenger's window						1.Active 2.Not active	

					Functions					
			BMW V45.20 Diagnostics List(Note:For reference only)							
		Menu			Functions					
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch close,passenger's window						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch open,rear windows						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch close,rear windows						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch open sunroof						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch close sunroof						1.Active 2.Not active	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
5 Series			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\Convenient closing rc						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\Convenient opening rc						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\Lower power window after trapping						1.Long 2.Short	
			Car Key Memory\ZKE [Central Body Electronic] \Interior lighting\Soft on/off						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Windscreen wipers\Switch down when stationary						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Windscreen wipers\Wipe interval when staionary						1.3 Seconds 2.5 Seconds	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	CAS Car Access System	√	√	√	√	√	1.Personalisation key number 2.Disable_enable key	
			DDE Diesel Electronics	√	√	√	√	√	1.DDE-CAS adjustment 2.Air-mass flow sensor adaptation 3.Regeneration, particulate filter 4.Idle speed adjustment 5.Exhaust-gas recirculation adjustment 6.Starting torque adjustment 7.Consumption calculation adjustment 8.Injector rate adjustment 9.Quantity mean-value adaptation 10.Reset variants 11.Bleeding, fuel system 12.EOBD readiness codes 13.Read measured values 14.Register battery change	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			DME Digital Motor Electronics	√	√	√	√	√	1.DME-CAS adjustment 2.CO adjustment 3.Clear adaptations 4.Delete adaptations/variants 5.Idle speed adjustment 6.Consumption indicator adjustment 7.Learning Valvetronic limit positions 8.Venting, cooling system 9.Register battery change 10.Remove Valvetronic servomotor 11.OBD readiness codes	
			EGS Transmission control	√	√	√	√	√	1.Reset adaptation values 2.Reset learning functions 3.Mechatronics adjustment 4.Oil-level adjustment	
			EKPS Fuel-pump control	√	√	√	√	√		
			GWS Gear selector switch	√	√	√	√	√		
			SMG Sequential Manual Gearbox	√	√	√	√	√		
			ACC Active Cruise Control	√	√	√	√	√		
			ACC2 Active Cruise Control 2	√	√	√	√	√		
			AL Active steering	√	√	√	√	√	1.Startup/adjustment, active front steering	
			ARS Dynamic Drive	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
				Menu				**Functions**		
		Chassis	DSC Dynamic Stability Control	√	√	√	√	√	1.Bleeding DSC Hydraulics 2.Mix Up Check BrakeLines	
			DSC Dynamic Stability Control PLUS	√	√	√	√	√	1.Bleeding DSC Hydraulics 2.Mix Up Check BrakeLines	
			DSC Dynamic Stability Control Premium	√	√	√	√	√	1.Bleeding DSC Hydraulics 2.Mix Up Check BrakeLines	
			EDC Damper Control	√	√	√	√	√		
			EHC Electronic Ride-Height Control	√	√	√	√	√	1.Check Ride Level Sensors 2.Delete Energy Saving Mode 3.Check Air Supply System 4.Check Compressor Relay 5.Check Raise/lower Function	
			LDM Longitudinal Dynamics Management	√	√	√	√	√		
			LRR Long-range sensor	√	√	√	√	√		
			RDC Tyre pressure control	√	√	√	√	√		
			ACSM Crash Safety Module	√	√	√	√	√		
			AHL Adaptive directional headlights	√	√	√	√	√		
			AHM Trailer module	√	√	√	√	√		
			ALBBF active backrest width, front passenger	√	√	√	√	√		
			ALBFA active backrest width, driver	√	√	√	√	√	1.ALBFA initalization	
			AMP Amplifier	√	√	√	√	√		
			CA Comfort Access	√	√	√	√	√		
			CCC-A Applications	√	√	√	√	√		
			CCC-ANT Aerial tuner	√	√	√	√	√		

				Functions						
BMW V45.20 Diagnostics List(Note:For reference only)										
Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			CCC-ASK Audio system controller	√	√	√	√	√		
			CCC-BO User interface	√	√	√	√	√		
			CCC-GW Gateway	√	√	√	√	√		
			CDC CD Changer	√	√	√	√	√		
			CHAMP-BO User interface	√	√	√	√	√		
			CHAMP-GW Gateway	√	√	√	√	√		
			CIC Car Inforamtion Computer	√	√	√	√	√		
			CIC GW Gateway	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			CNAV Navigation system, China	√	√	√	√	√		
			CON Controller	√	√	√	√	√		
			DVD-C DVD Changer	√	√	√	√	√		
			DAB Digital tuner	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√		
			FD Rear-compartment display	√	√	√	√	√		
			FLA High Beam Assist	√	√	√	√	√		
			HKL Rear-lid lift	√	√	√	√	√		
			HUD Head-Up Display	√	√	√	√	√		
			IHKA Integrated automatic heating/air conditioning	√	√	√	√	√	1.Flap motors 2.Coolant compressor	
			IHKA2 Integrated automatic heating/air conditiong	√	√	√	√	√		
			INSTR Instrument cluster	√	√	√	√	√		
			JNAV Navigation system, Japan	√	√	√	√	√		
			KBM Body Basic Module	√	√	√	√	√		
			KGM Body Gateway Module	√	√	√	√	√		
			KHI Headset interface	√	√	√	√	√		
			KNAV Navigation system, Korea	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Body	LM2 AHL2 Light module 2 with adaptive headlight 2	√	√	√	√	√		
			LM2 Light Module 2	√	√	√	√	√		
			LM2 Light Module 2 with adpative headlight	√	√	√	√	√		
			M-ASK-BO User interface	√	√	√	√	√		
			M-ASK-GW Gateway	√	√	√	√	√		
			M-ASK-NAV Navigation system	√	√	√	√	√		
			MPM Micro-power module	√	√	√	√	√	Register battery change	
			NVE Night Vision Electronics	√	√	√	√	√		
			NVK Night Vision camera	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RLS Rain/Light Sensor	√	√	√	√	√	1.Initializ rain sensor	
			RLSS Rain/light solar sensor	√	√	√	√	√	1.Initializ rain sensor	
			SBSL Satellite, B-pillar, left	√	√	√	√	√		
			SBSR Satellite, B-pillar, right	√	√	√	√	√		
			SDARS satellite tuner	√	√	√	√	√		
			SFZ Satellite vehicle centre	√	√	√	√	√		
			SGM-SIM Safety and Gateway Module (SIM)	√	√	√	√	√		
			SGM-ZGM Safety and Gateway Module (ZGM)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√	1.Delivery position 2.Initialize slide_tilt sunroof	
			SHZH Independent/auxiliary heater	√	√	√	√	√		
			SINE Siren with tilt sensor	√	√	√	√	√		
			SMBF Seat module, passenger	√	√	√	√	√		
			SMFA Seat module, driver	√	√	√	√	√		

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			SVS Language processing system	√	√	√	√	√		
			SZL Switch center, steering column	√	√	√	√	√		
			SZL Steering column switch centre 2	√	√	√	√	√		
			SZM/BZM Switching/Control center, center console	√	√	√	√	√		
			TCU Telematic Control unit	√	√	√	√	√		
			TLC Lane Departure Warning	√	√	√	√	√		
			TMBF Door module, front passenger	√	√	√	√	√		
			TMFA Door module, driver	√	√	√	√	√		
			ULF Universal charging and hands-free factility	√	√	√	√	√		
			ULF-SBX Interface box	√	√	√	√	√		
			ULF-SBX-H Interface box High	√	√	√	√	√		
			VM Video Module	√	√	√	√	√		
		Short test		√	√	√				
			ACSM.C08						1.Recoding	
			ACSM.C21						1.Recoding	
			ACSM.C22						1.Recoding	
			CAS2.C05						1.Recoding	
			CAS3.C06						1.Recoding	
			DSC8_RPA.C01						1.Recoding	
			DSC8_RPA.C02						1.Recoding	
			DSC8_RPA.C03						1.Recoding	
			DSC8_RPA.C04						1.Recoding	
			DSC8_RPA.C07						1.Recoding	
			DSC8_RPA.C0A						1.Recoding	
	E60/E61		DSC8_RPA.C0C						1.Recoding	
			DWA_IRS.C04						1.Recoding	

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			DWA_IRS.C05						1.Recoding	
			DWASINE.C02						1.Recoding	
			DWASINE.C03						1.Recoding	
			DWASINE.C04						1.Recoding	
			EKP_E60.C02						1.Recoding	
			EKPM60_2.C03						1.Recoding	
			GKE11P.C00						1.Recoding	
			GKE11P.C01						1.Recoding	
			GKE11P.C02						1.Recoding	
			GKE11T.C05						1.Recoding	
			IHKA_E60.C06						1.Recoding	
			IHKA_E60.C07						1.Recoding	
			IHKA_E60.C08						1.Recoding	
			IHKA_E60.C09						1.Recoding	
			IHKA_E60.C0C						1.Recoding	
			IHKA_E60.C0D						1.Recoding	
			KBM.C03						1.Recoding	
			KBM.C04						1.Recoding	
			KBM.C05						1.Recoding	
			KBM.C06						1.Recoding	
			KBM.C07						1.Recoding	
			KBM.C08						1.Recoding	
			KGM.C03						1.Recoding	
			KMBI_E60.C04						1.Recoding	
			KMBI_E60.C05						1.Recoding	
			KMBI_E60.C06						1.Recoding	
			KMBI_E60.C07						1.Recoding	
			LM_E60.C0B						1.Recoding	

				Functions						
				Menu					**Functions**	
Series	**Chassis**	**Module**	**ECU System**	**Sys. Info.**	**Read code**	**Clear code**	**Data Stream**	**Actuation**	**Special Functions**	**Others**
			LM_E60.C0C						1.Recoding	
			LM_E60.C0D						1.Recoding	
			LM_E60.C0E						1.Recoding	
			MASK_E60.C05						1.Recoding	
			MASK_E60.C06						1.Recoding	
			MASK_E60.C07						1.Recoding	
			MASK_E60.C08						1.Recoding	
			MASK_E60.C09						1.Recoding	
			MASK_E60.C0B						1.Recoding	
			MASK_E60.C0C						1.Recoding	
			PDC_E65.C01						1.Recoding	
			PDC_E65.C02						1.Recoding	
			RLSS_E70.C02						1.Recoding	
			RLS_E65.C06						1.Recoding	
			SZM_E60.C02						1.Recoding	
			SZM_E60.C03						1.Recoding	
			SZM_E60.C04						1.Recoding	
			AHM_E60.C02						1.Recoding	
			AHM_E60.C03						1.Recoding	
			AHM_E60.C04						1.Recoding	
			ALC_KWP.C05						1.Recoding	
			ALC_KWP.C06						1.Recoding	
			ALC_KWP.C07						1.Recoding	
			CBFS_E65.C04						1.Recoding	
			CBFS_E65.C05						1.Recoding	
			CBFS_PLX.C10						1.Recoding	
			CBFS_PLX.C11						1.Recoding	
			CBFS_PLX.C12						1.Recoding	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	CBFS_PLX.C14						1.Recoding	
			CCC_ANT.C04						1.Recoding	
			CCC_ANT.C05						1.Recoding	
			CCC_ANT.C06						1.Recoding	
			CCC_ANT.C07						1.Recoding	
			CCC_ANT.C08						1.Recoding	
			CCC_ANT.C09						1.Recoding	
			CCC_ASK.C03						1.Recoding	
			CCC_ASK.C04						1.Recoding	
			CCC_ASK.C05						1.Recoding	
			CCC_ASK.C06						1.Recoding	
			CCC_ASK.C07						1.Recoding	
			CCC_GW.C01						1.Recoding	
			CCC_GW.C02						1.Recoding	
			CFAS_E65.C04						1.Recoding	
			CFAS_E65.C05						1.Recoding	
			CFAS_PLX.C10						1.Recoding	
			CFAS_PLX.C11						1.Recoding	
			CFAS_PLX.C12						1.Recoding	
			CFAS_PLX.C14						1.Recoding	
			MDS_SHD.C03						1.Recoding	
			MDS_SHD.C04						1.Recoding	
			MDS_SHD.C06						1.Recoding	
			M_SHD.C07						1.Recoding	
			MPM.C01						1.Recoding	
			SBSL_E60.C04						1.Recoding	
			SBSL_E60.C05						1.Recoding	
			SBSR_E60.C04						1.Recoding	

BMW V45.20 Diagnostics List(Note:For reference only)

				Menu						Functions		
Series	Chassis	Module	ECU System		Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions		Others
			SBSR_E60.C05							1.Recoding		
			SFZ_E60.C03							1.Recoding		
			SFZ_E60.C04							1.Recoding		
			SFZ_E60.C05							1.Recoding		
			SFZ_E60.C06							1.Recoding		
			SFZ_E60.C07							1.Recoding		
			SFZ_E60.C08							1.Recoding		
			SFZ_E60.C09							1.Recoding		
			SGM.C0A							1.Recoding		
			SGM.C0B							1.Recoding		
			SGM.C0C							1.Recoding		
			SGM.C0D							1.Recoding		
			SMCDS_LI.C04							1.Recoding		
			SMCDS_LI.C06							1.Recoding		
			SMCDS_LI.C07							1.Recoding		
			SMCDS_RE.C04							1.Recoding		
			SMCDS_RE.C06							1.Recoding		
			SMCDS_RE.C07							1.Recoding		
			SZL_E60.C04							1.Recoding		
			SZL_E60.C05							1.Recoding		
			SZL_E60.C06							1.Recoding		
			SZL_E60.C07							1.Recoding		
			TE_BFT.C05							1.Recoding		
			TE_BFT.C06							1.Recoding		
			TE_BFT.C07							1.Recoding		
			TE_BFT.C08							1.Recoding		
			TE_FAT.C05							1.Recoding		
			TE_FAT.C06							1.Recoding		

BMW **V45.20** Diagnostics List(Note:For reference only)										
Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			TE_FAT.C07						1.Recoding	
			TE_FAT.C08						1.Recoding	
			ULF_MOST.C02						1.Recoding	
			ULF_MOST.C03						1.Recoding	
			ULF_MOST.C05						1.Recoding	
			ULF2MOST.C10						1.Recoding	
			TCU_JAPN.C01						1.Recoding	
			AFS.C03						1.Recoding	
			AFS.C04						1.Recoding	
			AFS_60.C05						1.Recoding	
			AFS_60.C06						1.Recoding	
			AMP_TOP.C02						1.Recoding	
			AMP_TOP.C03						1.Recoding	
			ARS.C0B						1.Recoding	
			ARS.C0C						1.Recoding	
			ARS.C0D						1.Recoding	
			ARS.C0E						1.Recoding	
			ARS.C0F						1.Recoding	
			MSV70.C01						1.Recoding	
			MSV70.C03						1.Recoding	
			EK928.C0C						1.Recoding	
			EK9282.C10						1.Recoding	

BMW V45.20 Diagnostics List(Note:For reference only)

	Menu			Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Maintenance \ CBS Reset						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Vehicle inspection 9.Exhaust emission inspection 10.Diesel particle filter	
			Maintenance \ CBS Correct						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Diesel particle filter 9.Vehicle inspection 10.Exhaust emission inspection	
			Maintenance						1.Delete transport mode	
			Service functions						1.Adjustment, Steering-angle sensor	
			CAS Car Access System	√	√	√	√	√		
			DME/DDE Digital motor/Diesel electronics	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME2 Digital Motor Electronics 2	√	√	√	√	√		
			EKPS Electronic Fuel pump	√	√	√	√	√		
			EGS/SMG Transmission management	√	√	√	√	√		
			VTG Transfer case	√	√	√	√	√		
			EME Electrical machine electronics	√	√	√	√	√		
			GWS Gear selector switch	√	√	√	√	√		
		Chassis	SME Accumulator management electronics	√	√	√	√	√		
			AL Active steering	√	√	√	√	√		
			ICM Integrated chassis management	√	√	√	√	√		
			RDC Tyre pressure control	√	√	√	√	√		
			DSC Dynamic Stability Control	√	√	√	√	√		
			EMF Parking brake	√	√	√	√	√		
			HSR Rear-axle slip-angle control	√	√	√	√	√		
			EPS Electronic Power Steering	√	√	√	√	√		
			EHC Electronic Ride-Height Control	√	√	√	√	√		
			VDM Vertical Dynamics Management	√	√	√	√	√		
			EDCSVL Damper satellite, front left	√	√	√	√	√		
			EDCSVR Damper satellite, front right	√	√	√	√	√		
			EDCSHL Damper satellite, rear left	√	√	√	√	√		
			EDCSHR Damper satellite, rear right	√	√	√	√	√		
			JBE Junction-box electronics	√	√	√	√	√		
			ACSM Crash Safety Module	√	√	√	√	√		
			SZL Switch center steering column	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Menu				**Functions**			
	GT(F07)	Body	TRSVC All round view camera	√	√	√	√	√		
			SWW Lane change warning	√	√	√	√	√		
			ZGM Central Gateway Module	√	√	√	√	√		
			RSE Rear Seat Entertainment	√	√	√	√	√		
			TCU/ULF Telephone	√	√	√	√	√		
			HUD Head-Up Display	√	√	√	√	√		
			VSW video switch	√	√	√	√	√		
			SEC Supplementary control unit	√	√	√	√	√		
			SEC2 Supplementary control unit 2	√	√	√	√	√		
			VM Video Module	√	√	√	√	√		
			EMALI Left electric motor reel	√	√	√	√	√		
			EMARE Right electric motor reel	√	√	√	√	√		
			FZD Function centre, roof	√	√	√	√	√		
			NVE Night Vision Electronics	√	√	√	√	√		
			KAFAS Camera based driver assist systems	√	√	√	√	√		
			FLA High Beam Assist	√	√	√	√	√		
			INSTR Instrument cluster	√	√	√	√	√		
			CIC/CHAMP Car headunit platform	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			CON Controller	√	√	√	√	√		
			FCON Rear Compartment controller	√	√	√	√	√		
			SMFAH Seat module, driver's side rear	√	√	√	√	√		
			SMBFH Seat module, passenger's side rear	√	√	√	√	√		
			HKL Rear-lid lift	√	√	√	√	√		
			SMFA Seat module, driver	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			SMBF Seat module, passenger	√	√	√	√	√		
			AHM Trailer module	√	√	√	√	√		
			FRM Footwell Module	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			FD Rear compartment display	√	√	√	√	√		
			FD2 Rear compartment display 2	√	√	√	√	√		
			RFK Reversing camera	√	√	√	√	√		
			IHKA Integrated automatic heating/air conditioning	√	√	√	√	√		
			FKA Rear-cabin automatic A/C	√	√	√	√	√		
			HKA Rear-cabin automatic A/C	√	√	√	√	√		
		Short test		√	√	√				
		Coding / Program	Maintenance \ CBS Reset \Software reset						1.Engine Oil 2.Front barke 3.Rear brake 4.Vehicle check 5.Brake fluid 6.Vehicle inspection 7.Exhaust emission inspection	
		Driver	CAS Car Access System	√	√	√	√	√		
			DME/DDE Digital motor/Diesel electronics	√	√	√	√	√		
			DME2 Digital Motor Electronics 2	√	√	√	√	√		
			EKPS Electronic Fuel pump	√	√	√	√	√		
			EGS/SMG Transmission management	√	√	√	√	√		
			VTG Transfer case	√	√	√	√	√		

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			EME Electrical machine electronics	√	√	√	√	√		
			GWS Gear selector switch	√	√	√	√	√		
		Chassis	SME Accumulator management electronics	√	√	√	√	√		
			AL Active steering	√	√	√	√	√		
			ICM Integrated chassis management	√	√	√	√	√		
			RDC Tyre pressure control	√	√	√	√	√		
			DSC Dynamic Stability Control	√	√	√	√	√		
			EMF Parking brake	√	√	√	√	√		
			HSR Rear-axle slip-angle control	√	√	√	√	√		
			EPS Electronic Power Steering	√	√	√	√	√		
			EHC Electronic Ride-Height Control	√	√	√	√	√		
			VDM Vertical Dynamics Management	√	√	√	√	√		
			EDCSVL Damper satellite, front left	√	√	√	√	√		
			EDCSVR Damper satellite, front right	√	√	√	√	√		
			EDCSHL Damper satellite, rear left	√	√	√	√	√		
			EDCSHR Damper satellite, rear right	√	√	√	√	√		
			JBE Junction-box electronics	√	√	√	√	√		
			ACSM Crash Safety Module	√	√	√	√	√		
			SZL Switch center steering column	√	√	√	√	√		
			TRSVC All round view camera	√	√	√	√	√		
			SWW Lane change warning	√	√	√	√	√		
			ZGM Central Gateway Module	√	√	√	√	√		
			RSE Rear Seat Entertainment	√	√	√	√	√		
			TCU/ULF Telephone	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
	F10	Body	HUD Head-Up Display	√	√	√	√	√		
			VSW video switch	√	√	√	√	√		
			SEC Supplementary control unit	√	√	√	√	√		
			SEC2 Supplementary control unit 2	√	√	√	√	√		
			VM Video Module	√	√	√	√	√		
			EMALI Left electric motor reel	√	√	√	√	√		
			EMARE Right electric motor reel	√	√	√	√	√		
			FZD Function centre, roof	√	√	√	√	√		
			NVE Night Vision Electronics	√	√	√	√	√		
			KAFAS Camera based driver assist systems	√	√	√	√	√		
			FLA High Beam Assist	√	√	√	√	√		
			INSTR Instrument cluster	√	√	√	√	√		
			CIC/CHAMP Car headunit platform	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			CON Controller	√	√	√	√	√		
			FCON Rear Compartment controller	√	√	√	√	√		
			SMFAH Seat module, driver's side rear	√	√	√	√	√		
			SMBFH Seat module, passenger's side rear	√	√	√	√	√		
			HKL Rear-lid lift	√	√	√	√	√		
			SMFA Seat module, driver	√	√	√	√	√		
			SMBF Seat module, passenger	√	√	√	√	√		
			AHM Trailer module	√	√	√	√	√		
			FRM Footwell Module	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			FD Rear compartment display	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			FD2 Rear compartment display 2	√	√	√	√	√		
			RFK Reversing camera	√	√	√	√	√		
			IHKA Integrated automatic heating/air conditioning	√	√	√	√	√		
			FKA Rear-cabin automatic A/C	√	√	√	√	√		
			HKA Rear-cabin automatic A/C	√	√	√	√	√		
		Short test		√	√	√				
		Coding / Program	Maintenance \ CBS Reset \Software reset						1.Engine Oil 2.Front barke 3.Rear brake 4.Vehicle check 5.Brake fluid 6.Vehicle inspection 7.Exhaust emission inspection	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer	
			EGS Transmission control	√	√	√	√	√		
			EML (Elec. throttle)	√	√	√	√	√		
			GR (Cruise control)	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		
	E24	Chassis	ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			ADS Throttle-Valve Control	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Menu				**Functions**			
		Body	EHC/EDC (Signal-axle air suspension)	√	√	√	√	√		
			CVM Convertible-top module	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√		
			EKM (Electronic Body Module)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√		
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			MID (Multi Information Display)	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√		
			SPM/SM	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			URS (Rollover sensor)	√	√	√	√	√		
			VMX (Top-speed Regulation)	√	√	√	√	√		
			VNC (Variable Camshaft Control)	√	√	√	√	√		
			XEN (XENON LIGHTS)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
		Coding / Program	ZCS/FA Coding						1.Display Coding code and print	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	
			CAS Car Access System	√	√	√	√	√	1.Personalisation key number 2.Disable_enable key	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			DDE Diesel Electronics	√	√	√	√	√	1.DDE-CAS adjustment 2.Air-mass flow sensor adaptation 3.Regeneration, particulate filter 4.Idle speed adjustment 5.Exhaust-gas recirculation adjustment 6.Starting torque adjustment 7.Consumption calculation adjustment 8.Injector rate adjustment 9.Quantity mean-value adaptation 10.Reset variants 11.Bleeding, fuel system 12.EOBD readiness codes 13.Read measured values 14.Register battery change	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.DME-CAS adjustment 2.CO adjustment 3.Clear adaptations 4.Delete adaptations/variants 5.Idle speed adjustment 6.Consumption indicator adjustment 7.Learning Valvetronic limit positions 8.Venting, cooling system 9.Register battery change 10.Remove Valvetronic servomotor 11.OBD readiness codes	
			EGS Transmission control	√	√	√	√	√	1.Reset adaptation values 2.Reset learning functions 3.Mechatronics adjustment 4.Oil-level adjustment	
			EKPS Fuel-pump control	√	√	√	√	√		
			GWS Gear selector switch	√	√	√	√	√		
			SMG Sequential Manual Gearbox	√	√	√	√	√		
			VTC Valvetronic	√	√	√	√	√		
			VTC2 Valvetronic 2	√	√	√	√	√		
			ACC2 Active Cruise Control 2	√	√	√	√	√		
			AL Active steering	√	√	√	√	√	1.Startup/adjustment, active front steering	
			ARS Dynamic Drive 2	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Chassis	DSC Dynamic Stability Control	√	√	√	√	√	1.Bleeding DSC Hydraulics 2.Mix Up Check BrakeLines	
			DSC Dynamic Stability Control PLUS	√	√	√	√	√	1.Bleeding DSC Hydraulics 2.Mix Up Check BrakeLines	
			DSC Dynamic Stability Control Premium	√	√	√	√	√	1.Bleeding DSC Hydraulics 2.Mix Up Check BrakeLines	
			EDC Damper Control	√	√	√	√	√		
			LDM Longitudinal Dynamics Management	√	√	√	√	√		
			LRR Long-range sensor	√	√	√	√	√		
			RDC Tyre pressure control	√	√	√	√	√		
			ACSM Crash Safety Module	√	√	√	√	√		
			AHL Adaptive directional headlights	√	√	√	√	√		
			AMP Amplifier	√	√	√	√	√		
			CA Comfort Access	√	√	√	√	√		
			CCC-A Applications	√	√	√	√	√		
			CCC-ANT Aerial tuner	√	√	√	√	√		
			CCC-ASK Audio system controller	√	√	√	√	√		
			CCC-BO User interface	√	√	√	√	√		
			CCC-GW Gateway	√	√	√	√	√		
			CDC CD Changer	√	√	√	√	√		
			CHAMP-BO User interface	√	√	√	√	√		
			CHAMP-GW Gateway	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			CNAV Navigation system, China	√	√	√	√	√		
			CON Controller	√	√	√	√	√		
			CVM Convertible-top module	√	√	√	√	√		
			DAB Digital tuner	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Body	DVD-C DVD Changer	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√		
			FLA High Beam Assist	√	√	√	√	√		
			HUD Head-Up Display	√	√	√	√	√		
			IBOC Digital tuner US	√	√	√	√	√		
			IHKA Integrated automatic heating/air conditioning	√	√	√	√	√	1.Flap motors 2.Coolant compressor	
			IHKA2 Integrated automatic heating/air conditiong	√	√	√	√	√		
			INSTR Instrument cluster	√	√	√	√	√		
			JNAV Navigation system, Japan	√	√	√	√	√		
			KBM Body Basic Module	√	√	√	√	√		
			KGM Body Gateway Module	√	√	√	√	√		
			KNAV Navigation system, Korea	√	√	√	√	√		
			LM2 AHL2 Light module 2 with adaptive headlight 2	√	√	√	√	√		
			LM2 Light Module 2	√	√	√	√	√		
			LM2 Light Module 2 with adpative headlight	√	√	√	√	√		
			M-ASK-BO User interface	√	√	√	√	√		
			M-ASK-GW Gateway	√	√	√	√	√		
			MPM Micro-power module	√	√	√	√	√	Register battery change	
			NVE Night Vision Electronics	√	√	√	√	√		
			NVK Night Vision camera	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RLS Rain/Light Sensor	√	√	√	√	√	1.Initializ rain sensor	
			RLSS Rain/light solar sensor	√	√	√	√	√	1.Initializ rain sensor	
			SBSL Satellite, B-pillar, left	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			SBSR Satellite, B-pillar, right	√	√	√	√	√		
			SDARS satellite tuner	√	√	√	√	√		
			SFZ Satellite vehicle centre	√	√	√	√	√		
			SGM-SIM Safety and Gateway Module (SIM)	√	√	√	√	√		
			SGM-ZGM Safety and Gateway Module (ZGM)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√	1.Delivery position 2.Initialize slide_tilt sunroof	
			SHZH Independent/auxiliary heater	√	√	√	√	√		
			SINE Siren with tilt sensor	√	√	√	√	√		
			SMBF Seat module, passenger	√	√	√	√	√		
			SMFA Seat module, driver	√	√	√	√	√		
			SVS Language processing system	√	√	√	√	√		
			SZL Switch center, steering column	√	√	√	√	√		
			SZL Steering column switch centre 2	√	√	√	√	√		
			SZM/BZM Switching/Control center, center console	√	√	√	√	√		
			TCU Telematic Control unit	√	√	√	√	√		
			TLC Lane Departure Warning	√	√	√	√	√		
			TMBF Door module, front passenger	√	√	√	√	√		
			TMFA Door module, driver	√	√	√	√	√		
			ULF Universal charging and hands-free factility	√	√	√	√	√		
			ULF-SBX Interface box	√	√	√	√	√		
			ULF-SBX-H Interface box High	√	√	√	√	√		
			VM Video Module	√	√	√	√	√		
		Short test		√	√	√				

			BMW V45.20 Diagnostics List(Note:For reference only)							
		Menu				**Functions**				
Series	**Chassis**	**Module**	**ECU System**	**Sys. Info.**	**Read code**	**Clear code**	**Data Stream**	**Actuation**	**Special Functions**	**Others**
	E63/E64		ACSM.C08						1.Recoding	
			ACSM.C21						1.Recoding	
			ACSM.C22						1.Recoding	
			CAS2.C05						1.Recoding	
			CAS3.C06						1.Recoding	
			DSC8_RPA.C01						1.Recoding	
			DSC8_RPA.C02						1.Recoding	
			DSC8_RPA.C03						1.Recoding	
			DSC8_RPA.C04						1.Recoding	
			DSC8_RPA.C07						1.Recoding	
			DSC8_RPA.C0A						1.Recoding	
			DSC8_RPA.C0C						1.Recoding	
			DWA_IRS.C04						1.Recoding	
			DWA_IRS.C05						1.Recoding	
			DWASINE.C02						1.Recoding	
			DWASINE.C03						1.Recoding	
			DWASINE.C04						1.Recoding	
			EKP_E60.C02						1.Recoding	
			EKPM60_2.C03						1.Recoding	
			GKE11P.C00						1.Recoding	
			GKE11P.C01						1.Recoding	
			GKE11P.C02						1.Recoding	
			GKE11T.C05						1.Recoding	
			IHKA_E60.C06						1.Recoding	
			IHKA_E60.C07						1.Recoding	
			IHKA_E60.C08						1.Recoding	
			IHKA_E60.C09						1.Recoding	
			IHKA_E60.C0C						1.Recoding	

	Menu			Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
6 Series			IHKA_E60.C0D						1.Recoding	
			KBM.C03						1.Recoding	
			KBM.C04						1.Recoding	
			KBM.C05						1.Recoding	
			KBM.C06						1.Recoding	
			KBM.C07						1.Recoding	
			KBM.C08						1.Recoding	
			KGM.C03						1.Recoding	
			KMBI_E60.C04						1.Recoding	
			KMBI_E60.C05						1.Recoding	
			KMBI_E60.C06						1.Recoding	
			KMBI_E60.C07						1.Recoding	
			LM_E60.C0B						1.Recoding	
			LM_E60.C0C						1.Recoding	
			LM_E60.C0D						1.Recoding	
			LM_E60.C0E						1.Recoding	
			MASK_E60.C05						1.Recoding	
			MASK_E60.C06						1.Recoding	
			MASK_E60.C07						1.Recoding	
			MASK_E60.C08						1.Recoding	
			MASK_E60.C09						1.Recoding	
			MASK_E60.C0B						1.Recoding	
			MASK_E60.C0C						1.Recoding	
			PDC_E65.C01						1.Recoding	
			PDC_E65.C02						1.Recoding	
			RLSS_E70.C02						1.Recoding	
			RLS_E65.C06						1.Recoding	
			SZM_E60.C02						1.Recoding	

				Functions						
			Menu							**Functions**
Series	**Chassis**	**Module**	**ECU System**	**Sys. Info.**	**Read code**	**Clear code**	**Data Stream**	**Actuation**	**Special Functions**	**Others**
			SZM_E60.C03						1.Recoding	
			SZM_E60.C04						1.Recoding	
			AHM_E60.C02						1.Recoding	
			AHM_E60.C03						1.Recoding	
			AHM_E60.C04						1.Recoding	
			ALC_KWP.C05						1.Recoding	
			ALC_KWP.C06						1.Recoding	
			ALC_KWP.C07						1.Recoding	
			CBFS_E65.C04						1.Recoding	
			CBFS_E65.C05						1.Recoding	
			CBFS_PLX.C10						1.Recoding	
			CBFS_PLX.C11						1.Recoding	
			CBFS_PLX.C12						1.Recoding	
			CBFS_PLX.C14						1.Recoding	
			CCC_ANT.C04						1.Recoding	
			CCC_ANT.C05						1.Recoding	
			CCC_ANT.C06						1.Recoding	
			CCC_ANT.C07						1.Recoding	
			CCC_ANT.C08						1.Recoding	
			CCC_ANT.C09						1.Recoding	
			CCC_ASK.C03						1.Recoding	
			CCC_ASK.C04						1.Recoding	
			CCC_ASK.C05						1.Recoding	
			CCC_ASK.C06						1.Recoding	
			CCC_ASK.C07						1.Recoding	
			CCC_GW.C01						1.Recoding	
			CCC_GW.C02						1.Recoding	
			CFAS_E65.C04						1.Recoding	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			CFAS_E65.C05						1.Recoding	
			CFAS_PLX.C10						1.Recoding	
			CFAS_PLX.C11						1.Recoding	
			CFAS_PLX.C12						1.Recoding	
			CFAS_PLX.C14						1.Recoding	
			MDS_SHD.C03						1.Recoding	
			MDS_SHD.C04						1.Recoding	
			MDS_SHD.C06						1.Recoding	
			M_SHD.C07						1.Recoding	
			MPM.C01						1.Recoding	
			SBSL_E60.C04						1.Recoding	
			SBSL_E60.C05						1.Recoding	
			SBSR_E60.C04						1.Recoding	
			SBSR_E60.C05						1.Recoding	
			SFZ_E60.C03						1.Recoding	
			SFZ_E60.C04						1.Recoding	
			SFZ_E60.C05						1.Recoding	
			SFZ_E60.C06						1.Recoding	
			SFZ_E60.C07						1.Recoding	
			SFZ_E60.C08						1.Recoding	
			SFZ_E60.C09						1.Recoding	
			SGM.C0A						1.Recoding	
			SGM.C0B						1.Recoding	
			SGM.C0C						1.Recoding	
			SGM.C0D						1.Recoding	
			SMCDS_LI.C04						1.Recoding	
			SMCDS_LI.C06						1.Recoding	
			SMCDS_LI.C07						1.Recoding	

				Functions						
				BMW V45.20 Diagnostics List(Note:For reference only)						
	Menu						**Functions**			
Series	**Chassis**	**Module**	**ECU System**	**Sys. Info.**	**Read code**	**Clear code**	**Data Stream**	**Actuation**	**Special Functions**	**Others**
			SMCDS_RE.C04						1.Recoding	
			SMCDS_RE.C06						1.Recoding	
			SMCDS_RE.C07						1.Recoding	
			SZL_E60.C04						1.Recoding	
			SZL_E60.C05						1.Recoding	
			SZL_E60.C06						1.Recoding	
			SZL_E60.C07						1.Recoding	
			TE_BFT.C05						1.Recoding	
			TE_BFT.C06						1.Recoding	
			TE_BFT.C07						1.Recoding	
			TE_BFT.C08						1.Recoding	
			TE_FAT.C05						1.Recoding	
			TE_FAT.C06						1.Recoding	
			TE_FAT.C07						1.Recoding	
			TE_FAT.C08						1.Recoding	
			ULF_MOST.C02						1.Recoding	
			ULF_MOST.C03						1.Recoding	
			ULF_MOST.C05						1.Recoding	
			ULF2MOST.C10						1.Recoding	
			TCU_JAPN.C01						1.Recoding	
			AFS.C03						1.Recoding	
			AFS.C04						1.Recoding	
			AFS_60.C05						1.Recoding	
			AFS_60.C06						1.Recoding	
			AMP_TOP.C02						1.Recoding	
			AMP_TOP.C03						1.Recoding	
			ARS.C0B						1.Recoding	
			ARS.C0C						1.Recoding	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			ARS.C0D						1.Recoding	
			ARS.C0E						1.Recoding	
			ARS.C0F						1.Recoding	
			Maintenance \ CBS Reset						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Vehicle inspection 9.Exhaust emission inspection 10.Diesel particle filter	
			Maintenance \ CBS Correct						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Diesel particle filter 9.Vehicle inspection 10.Exhaust emission inspection	
			Maintenance						1.Delete transport mode	
			Service functions						1.Adjustment, Steering-angle sensor	

BMW **V45.20** Diagnostics List(Note:For reference only)										
Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	CAS Car Access System	√	√	√	√	√		
			DME/DDE Digital motor/Diesel electronics	√	√	√	√	√		
			DME2 Digital Motor Electronics 2	√	√	√	√	√		
			EKPS Electronic Fuel pump	√	√	√	√	√		
			EGS/SMG Transmission management	√	√	√	√	√		
			VTG Transfer case	√	√	√	√	√		
			EME Electrical machine electronics	√	√	√	√	√		
			GWS Gear selector switch	√	√	√	√	√		
		Chassis	SME Accumulator management electronics	√	√	√	√	√		
			AL Active steering	√	√	√	√	√		
			ICM Integrated chassis management	√	√	√	√	√		
			RDC Tyre pressure control	√	√	√	√	√		
			DSC Dynamic Stability Control	√	√	√	√	√		
			EMF Parking brake	√	√	√	√	√		
			HSR Rear-axle slip-angle control	√	√	√	√	√		
			EPS Electronic Power Steering	√	√	√	√	√		
			EHC Electronic Ride-Height Control	√	√	√	√	√		
			VDM Vertical Dynamics Management	√	√	√	√	√		
			EDCSVL Damper satellite, front left	√	√	√	√	√		
			EDCSVR Damper satellite, front right	√	√	√	√	√		
			EDCSHL Damper satellite, rear left	√	√	√	√	√		
			EDCSHR Damper satellite, rear right	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

	Menu			Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
	F12/F13	Body	JBE Junction-box electronics	√	√	√	√	√		
			ACSM Crash Safety Module	√	√	√	√	√		
			SZL Switch center steering column	√	√	√	√	√		
			TRSVC All round view camera	√	√	√	√	√		
			SWW Lane change warning	√	√	√	√	√		
			ZGM Central Gateway Module	√	√	√	√	√		
			RSE Rear Seat Entertainment	√	√	√	√	√		
			TCU/ULF Telephone	√	√	√	√	√		
			HUD Head-Up Display	√	√	√	√	√		
			VSW video switch	√	√	√	√	√		
			SEC Supplementary control unit	√	√	√	√	√		
			SEC2 Supplementary control unit 2	√	√	√	√	√		
			VM Video Module	√	√	√	√	√		
			EMALI Left electric motor reel	√	√	√	√	√		
			EMARE Right electric motor reel	√	√	√	√	√		
			FZD Function centre, roof	√	√	√	√	√		
			NVE Night Vision Electronics	√	√	√	√	√		
			KAFAS Camera based driver assist systems	√	√	√	√	√		
			FLA High Beam Assist	√	√	√	√	√		
			INSTR Instrument cluster	√	√	√	√	√		
			CIC/CHAMP Car headunit platform	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			CON Controller	√	√	√	√	√		
			FCON Rear Compartment controller	√	√	√	√	√		
			SMFAH Seat module, driver's side rear	√	√	√	√	√		

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			SMBFH Seat module, passenger's side rear	√	√	√	√	√		
			HKL Rear-lid lift	√	√	√	√	√		
			SMFA Seat module, driver	√	√	√	√	√		
			SMBF Seat module, passenger	√	√	√	√	√		
			AHM Trailer module	√	√	√	√	√		
			FRM Footwell Module	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			FD Rear compartment display	√	√	√	√	√		
			FD2 Rear compartment display 2	√	√	√	√	√		
			RFK Reversing camera	√	√	√	√	√		
			IHKA Integrated automatic heating/air conditioning	√	√	√	√	√		
			FKA Rear-cabin automatic A/C	√	√	√	√	√		
			HKA Rear-cabin automatic A/C	√	√	√	√	√		
			CVM Convertible-top module	√	√	√	√	√		
			PMA Parking assistant	√	√	√	√	√		
			CBX-ECALL ComBox emergency call	√	√	√	√	√		
			CANSIN Anti_theft alarm system	√	√	√	√	√		
		Short test		√	√	√				
		Coding / Program	Maintenance \ CBS Reset \Software reset						1.Engine Oil 2.Front barke 3.Rear brake 4.Vehicle check 5.Brake fluid 6.Vehicle inspection 7.Exhaust emission inspection	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer	
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		
		Chassis	ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			EHC/EDC (Signal-axle air suspension)	√	√	√	√	√		
			ADS Throttle-Valve Control	√	√	√	√	√		
	E23		AHK (Active-Axle Kinematics)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Body	CVM Convertible-top module	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√		
			EKM (Electronic Body Module)	√	√	√	√	√		
			EML (Elec. throttle)	√	√	√	√	√		
			FHK (Rear Heater A/C System)	√	√	√	√	√		
			GR (Cruise control)	√	√	√	√	√		
			GSA (Closed-Loop-Controlled Differential-Lock AWD)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√		
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			MID (Multi Information Display)	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√		
			SPM/SM	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			URS (Rollover sensor)	√	√	√	√	√		
			VMX (Top-speed Regulation)	√	√	√	√	√		
			VNC (Variable Camshaft Control)	√	√	√	√	√		
			XEN (XENON LIGHTS)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
		Coding / Program	ZCS/FA Coding						1.Display Coding code and print	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer	
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		
		Chassis	ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			EHC/EDC (Signal-axle air suspension)	√	√	√	√	√		
			ADS Throttle-Valve Control	√	√	√	√	√		
	E32		AHK (Active-Axle Kinematics)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Body	CVM Convertible-top module	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√		
			EKM (Electronic Body Module)	√	√	√	√	√		
			EML (Elec. throttle)	√	√	√	√	√		
			FHK (Rear Heater A/C System)	√	√	√	√	√		
			GR (Cruise control)	√	√	√	√	√		
			GSA (Closed-Loop-Controlled Differential-Lock AWD)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√		
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			MID (Multi Information Display)	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√		
			SPM/SM	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			URS (Rollover sensor)	√	√	√	√	√		
			VMX (Top-speed Regulation)	√	√	√	√	√		
			VNC (Variable Camshaft Control)	√	√	√	√	√		
			XEN (XENON LIGHTS)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
		Coding / Program	ZCS/FA Coding						1.Display Coding code and print	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	

BMW V45.20 Diagnostics List(Note:For reference only)

		Menu		Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer 1.Idle speed 2.Exhaust-gas recirculation 3.Start basic injection quantity 4.Limitation delivery 5.Injection rate 6.Consumption calculation 7.Injector rate adjustment	
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		

BMW **V45.20** Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Chassis	ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			EHC/EDC (Signal-axle air suspension)	√	√	√	√	√		
			LEW (Steering-angle sensor)	√	√	√	√	√		
			MFL (Multi-function steering wheel)	√	√	√	√	√		
		Body	AIC (Automatic Interval Control)	√	√	√	√	√		
			BM (On-board monitor)	√	√	√	√	√		
			EML (Elec. throttle)	√	√	√	√	√		
			GR (Cruise control)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√	1.Reset service interval indicator	
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			MID (Multi Information Display)	√	√	√	√	√		
			NAV Navigation system	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SES (Language-input system)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√		
			SPM/SM	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			SZM (Switching center, center console)	√	√	√	√	√		
			VID (Video Module)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			DSP (Digital Sound Processor)	√	√	√	√	√		
			STH (Park heating)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
			Airbag Code Index 02 Code Index 07 Code Index 10						1.Recoding	
			ABS with automatic stability control Code Index 01						1.Recoding	
			Dynamic stability control Code Index 10						1.Recoding	
			Check control module Code Index 04						1.Recoding	
			Immobiliser Code Index 01 Code Index 02 Code Index 81						1.Recoding	
			Central Body Electronic Code Index 01 Code Index 04 Code Index 05 Code Index 10						1.Recoding	
			Cruise control Code Index 01						1.Recoding	

				Functions						
			Menu							
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			GT Code Index 01 Code Index 02 Code Index 03 Code Index 04 Code Index 05 Code Index 06 Code Index 07						1.Recoding	
			Boot lid module Code Index 01						1.Recoding	
			Instrument cluster Code Index 12						1.Recoding	
			Lamp control module Code Index 18 Code Index 21 Code Index 22 Code Index 23 Code Index 24						1.Recoding	
			Steering-angle sensor Code Index 01						1.Recoding	
			Park distance control Code Index 01 Code Index 03						1.Recoding	
			Sunroof module Code Index 01 Code Index 02 Code Index 03 Code Index 04						1.Recoding	
			Seat module Code Index 02						1.Recoding	

BMW V45.20 Diagnostics List(Note:For reference only)

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Basic telephone interface Code Index 02						1.Recoding	
			TV Code Index 02						1.Recoding	
			ASC5.C06						1.Recoding	
			DSC.C01						1.Recoding	
			KMBI_E38.C10						1.Recoding	
			KMBI_E38.C11						1.Recoding	
			FGR2.C04						1.Recoding	
			FGR2.C05						1.Recoding	
			IHK_E38.C01						1.Recoding	
			IHK_E38.C02						1.Recoding	
			IKE.C02						1.Recoding	
			IKE.C03						1.Recoding	
			IKE.C05						1.Recoding	
			LCM.C14						1.Recoding	
			LCM.C15						1.Recoding	
			LCM.C16						1.Recoding	
			LCM.C17						1.Recoding	
			LM.C03						1.Recoding	
			MRSZ.C06						1.Recoding	
			TV1.C01						1.Recoding	
			ZAE2.C03						1.Recoding	
			ZAE2.C05						1.Recoding	
			Car Key Memory\IHKA/ IHKR[A/C heater]\Recirculated air memory						1.Active 2.Not active	
			Car Key Memory\IHKA/ IHKR[A/C heater]\Temperature unit						1.℃ 2.℉	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\KOM [Instrument cluster]\Language						1.German 2.English UK 3.English US 4.Italian 5.Spanish 6.Japanese 7.French 8.English (CDN) 9.Gulf states 10. ---	
			Car Key Memory\KOM [Instrument cluster]\Temperature						1.℃ 2.℉	
			Car Key Memory\KOM [Instrument cluster]\Outside temperature warning						1.Active 2.Not active	
			Car Key Memory\KOM [Instrument cluster]\Distance						1.KM 2.MLS	
			Car Key Memory\KOM [Instrument cluster]\Time						1.24H 2.12H	
			Car Key Memory\KOM [Instrument cluster]\Fuel consumption						1.1/100KM 2.MPG(UK) 3.MPG(US) 4.Km/litre	
			Car Key Memory\LSZ/LCM [Light switching center]\Key in ignition warning(if door is opened)						1.Active 2.Not active	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\LSZ/LCM [Light switching center]\Day time running lights						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Day time running lights(ECE)						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Day time running lights(US)						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights						1.Not active 2.40 Seconds 3.90 Seconds 4.150 Seconds 5.240 Seconds	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with dipped beam						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with front sidelights						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with instrument lights						1.Active 2.Not active	
	E38		Car Key Memory\LSZ/LCM [Light switching center]\Home lights with license plate						1.Active 2.Not active	

BMW V45.20 Diagnostics List(Note:For reference only)

		Menu		Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with front fog lights						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with main beam						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Home lights with brake lights						1.Active 2.Not active	
			Car Key Memory\LSZ/LCM [Light switching center]\Key in ignition warning(if door is opened)						1.Active 2.Not active	
			Car Key Memory\PDC [Park Distance Control]\Rear volume						1.Stage 1 2.Stage 2 3.Stage 3 4.Stage 4 5.Stage 5 6.Stage 6	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Compartment sensor,front passenger						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Passenger compartment sensor back(touring)						1.Active 2.Not active	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Tilt sensor						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Activating and deactivating dwa						1.RC ONLY 2.KEY AND RC	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Disarm visually						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Disarm acoustically						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Arm visually						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Arm acoustically						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Arm acknowledgement when all doors/lids closed						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Burglar alarm system\Acknowledgement without dwa						1.Active 2.Not active	

BMW **V45.20** Diagnostics List(Note:For reference only)										
Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Rc interior light						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Rc panic mode						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Open luggage compartment via remote control						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Relock 2 minimum after unlocking						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Automatic locking						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Automatic locking(key 1)						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Automatic locking(key 2)						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Automatic locking(key 3)						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Automatic locking(key 4)						1.Active 2.Not active	

				Functions						
			Menu							
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Automatic locking speed						1.0 KM/H 2.4 KM/H 3.8 KM/H 4.12 KM/H 5.16 KM/H 6.20 KM/H 7.24 KM/H 8.28 KM/H	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Automatic relocking						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Selective central locking						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Selective central locking(key 1)						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Selective central locking(key 2)						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Selective central locking(key 3)						1.Active 2.Not active	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\ZKE [Central Body Electronic] \Central locking\Selective central locking(key 4)						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\Window deactivation condition						1.Open door 2.Close door	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch open,driver's window						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch close,driver's window						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch open,passenger's window						1.Active 2.Not active	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
7 Series			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch close,passenger's window						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch open,rear windows						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch close,rear windows						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch open sunroof						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\One touch close sunroof						1.Active 2.Not active	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\Convenient closing rc						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\Convenient opening rc						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Window regulators/slide /tilt sunroof\Lower power window after trapping						1.Long 2.Short	
			Car Key Memory\ZKE [Central Body Electronic] \Interior lighting\Soft on/off						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Windscreen wipers\Switch down when stationary						1.Active 2.Not active	
			Car Key Memory\ZKE [Central Body Electronic] \Windscreen wipers\Wipe interval when staionary						1.3 Seconds 2.5 Seconds	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	

BMW **V45.20** Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			CAS Car Access System	√	√	√	√	√	1.Personalisation key number 2.Disable_enable key	
		Driver	DDE Diesel Electronics	√	√	√	√	√	1.DDE-CAS adjustment 2.Air-mass flow sensor adaptation 3.Regeneration, particulate filter 4.Idle speed adjustment 5.Exhaust-gas recirculation adjustment 6.Starting torque adjustment 7.Consumption calculation adjustment 8.Injector rate adjustment 9.Quantity mean-value adaptation 10.Reset variants 11.Bleeding, fuel system 12.EOBD readiness codes 13.Read measured values 14.Register battery change	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			DME Digital Motor Electronics	√	√	√	√	√	1.DME-CAS adjustment 2.CO adjustment 3.Clear adaptations 4.Delete adaptations/variants 5.Idle speed adjustment 6.Consumption indicator adjustment 7.Learning Valvetronic limit positions 8.Venting, cooling system 9.Register battery change 10.Remove Valvetronic servomotor 11.OBD readiness codes	
			DME2 Digital Motor Electronics 2	√	√	√	√	√	1.Reset adaptation values 2.Reset learning functions	
			EGS Transmission control	√	√	√	√	√		
			EKPS Fuel-pump control	√	√	√	√	√		
			VTC Valvetronic	√	√	√	√	√		
			VTC2 Valvetronic 2	√	√	√	√	√		
			VTC2 Valvetronic, bank 2	√	√	√	√	√		
			ACC Active Cruise Control	√	√	√	√	√		
			ACC2 Active Cruise Control 2	√	√	√	√	√		
			ARS Dynamic Drive	√	√	√	√	√		
			ARS Dynamic Drive 2	√	√	√	√	√		
			CIM Chassis Integration Module	√	√	√	√	√	1.Calibration Steering Column	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Chassis	CIM2 Chassis Integration Module 2	√	√	√	√	√		
			DSC Dynamic Stability Control	√	√	√	√	√	1.Bleeding DSC Hydraulics 2.Mix Up Check BrakeLines	
			EDC Damper Control	√	√	√	√	√		
			EHC Electronic Ride-Height Control	√	√	√	√	√	1.Check Ride Level Sensors 2.Delete Energy Saving Mode 3.Check Air Supply System 4.Check Compressor Relay 5.Check Raise/lower Function	
			EMF Parking brake	√	√	√	√	√	1.Workshop braking-in 2.Assembly mode 3.Positioning-travel check	
			RDC Tyre pressure control	√	√	√	√	√		
			AHL Adaptive directional headlights	√	√	√	√	√		
			AHM Trailer module	√	√	√	√	√		
			AMP Amplifier	√	√	√	√	√		
			ANT Aerial/antenna tuner	√	√	√	√	√		
			ASK audio system controller	√	√	√	√	√		
			BZM Control centre, centre console	√	√	√	√	√		
			CA Comfort Access	√	√	√	√	√		
			CD Control Display	√	√	√	√	√		
			CD Control Display_GW	√	√	√	√	√		
			CEM Clean Energy Module	√	√	√	√	√		
			CDC CD Changer	√	√	√	√	√		
			CNAV Navigation system, China	√	√	√	√	√		
			CON Controller	√	√	√	√	√		

		BMW **V45.20** Diagnostics List(Note:For reference only)							
Menu				**Functions**						
Series	**Chassis**	**Module**	**ECU System**	**Sys. Info.**	**Read code**	**Clear code**	**Data Stream**	**Actuation**	**Special Functions**	**Others**
			DVD-C DVD Changer	√	√	√	√	√		
			DAB Digital tuner	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√		
			FBI Flexible Bus Interface	√	√	√	√	√		
			FBZM Rear compartment, control center, center console	√	√	√	√	√		
			FCON Rear Compartment controller	√	√	√	√	√		
			FD Rear-compartment display	√	√	√	√	√		
			FKA Rear heater/air conditioning	√	√	√	√	√		
			FLA High Beam Assist	√	√	√	√	√		
			HKL Rear-lid lift	√	√	√	√	√		
			IBOC Digital tuner US	√	√	√	√	√		
			IHKA Integrated automatic heating/air conditioning	√	√	√	√	√	1.Flap motors 2.Coolant compressor	
			INSTR Instrument cluster	√	√	√	√	√		
			JNAV Navigation system, Japan	√	√	√	√	√		
			KHI Headset interface	√	√	√	√	√		
			KNAV Navigation system, Korea	√	√	√	√	√		
			LM Lights Module	√	√	√	√	√		
			LM2 AHL2 Light module 2 with adaptive headlight 2	√	√	√	√	√		
			LM2 Light Module 2	√	√	√	√	√		
			LM2 Light Module 2 with adpative headlight	√	√	√	√	√		
			NAV (Navigation system)	√	√	√	√	√		
			NVE Night Vision Electronics	√	√	√	√	√		
			NVK Night Vision camera	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

	Menu			Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Body	PM Power Module	√	√	√	√	√	Register battery change	
			RLS Rain/Light Sensor	√	√	√	√	√	1.Initializ rain sensor	
			SASL Satellite, A-pillar, left	√	√	√	√	√		
			SASR Satellite, A-pillar, right	√	√	√	√	√		
			SBSL Satellite, B-pillar, left	√	√	√	√	√		
			SBSR Satellite, B-pillar, right	√	√	√	√	√		
			SDARS satellite tuner	√	√	√	√	√		
			SEC Supplementary control module	√	√	√	√	√		
			SEC2 Supplementary control unit 2	√	√	√	√	√		
			SFZ Satellite vehicle centre	√	√	√	√			
			SG-FD Control module, rear-compartment	√	√	√	√	√		
			SG-FD-GW Control module, rear-compartment	√	√	√	√	√		
			SGM-SIM Safety and Gateway Module (SIM)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√	1.Delivery position 2.Initialize slide_tilt sunroof	
			SHZH Independent/auxiliary heater	√	√	√	√	√		
			SIM Safety and Information Module	√	√	√	√	√		
			SINE Siren with tilt sensor	√	√	√	√	√		
			SMBF Seat module, passenger	√	√	√	√	√		
			SMFAH Seat module, driver's side rear	√	√	√	√	√		
			SMBFH Seat module, passenger's side rear	√	√	√	√	√		
			SSBF Satellite, seat, passenger	√	√	√	√			
			SSFA Satellite, seat, driver	√	√	√	√			

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
	E65/E66		SSH Satellite, seat, rear	√	√	√	√	√		
			STVL Satellite, door, front left	√	√	√	√	√		
			STVR Satellite, door, front right	√	√	√	√	√		
			SVS Language processing system	√	√	√	√	√		
			TEL Telephone	√	√	√	√	√		
			TMBFH Door module, passenger's side rear	√	√	√	√	√		
			TMBFT Door module, passenger door	√	√	√	√	√	1.Initialising the power windows	
			TMFAH Door module, driver's side rear	√	√	√	√	√		
			TMFAT Door module, driver's door	√	√	√	√	√	1.Initialising the power windows	
			VM Video Module	√	√	√	√	√		
			SMFA Seat module, driver	√	√	√	√	√		
			TCU Telematic Control unit	√	√	√	√	√		
			WIM Wiper module	√	√	√	√	√	1.Vent SRA 2.Assembly Position	
			ZGM Central Gateway Module	√	√	√	√	√		
			ZBM Two-batery management	√	√	√	√	√		
		Short test		√	√	√				
			ALC_KWP.C06						1.Recoding	
			ALC_KWP.C07						1.Recoding	
			ASK.C02						1.Recoding	
			ASK.C03						1.Recoding	
			ASK.C04						1.Recoding	
			ASK.C05						1.Recoding	
			CAS.C02						1.Recoding	

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			CAS.C03						1.Recoding	
			CAS.C04						1.Recoding	
			CAS.C05						1.Recoding	
			CFAS_E65.C02						1.Recoding	
			CBFH_E65.C03						1.Recoding	
			CBFH_E65.C04						1.Recoding	
			CBFH_E65.C05						1.Recoding	
			CBFH_E65.C06						1.Recoding	
			CBFH_PLX.C10						1.Recoding	
			CBFH_PLX.C11						1.Recoding	
			CBFH_PLX.C12						1.Recoding	
			CBFH_PLX.C14						1.Recoding	
			CBFS_E65.C03						1.Recoding	
			CBFS_E65.C04						1.Recoding	
			CBFS_E65.C05						1.Recoding	
			CBFS_E65.C06						1.Recoding	
			CBFS_PLX.C10						1.Recoding	
			CBFS_PLX.C11						1.Recoding	
			CBFS_PLX.C12						1.Recoding	
			CBFS_PLX.C14						1.Recoding	
			CFAH_E65. C03						1.Recoding	
			CFAH_E65. C04						1.Recoding	
			CFAH_E65. C05						1.Recoding	
			CFAH_E65. C06						1.Recoding	
			CFAH_PLX. C10						1.Recoding	
			CFAH_PLX. C11						1.Recoding	
			CFAH_PLX. C12						1.Recoding	
			CFAH_PLX. C14						1.Recoding	

				Functions						
				BMW V45.20 Diagnostics List(Note:For reference only)						
		Menu		Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			CFAS_E65.C02_BFS						1.Recoding	
			CFAS_E65.C02_FAH						1.Recoding	
			CFAS_E65.C02_FAS						1.Recoding	
			CFAS_E65.C03						1.Recoding	
			CFAS_E65.C04						1.Recoding	
			CFAS_E65.C05						1.Recoding	
			CFAS_E65.C06						1.Recoding	
			CFAS_PLX.C10						1.Recoding	
			CFAS_PLX.C11						1.Recoding	
			CFAS_PLX.C12						1.Recoding	
			CFAS_PLX.C14						1.Recoding	
			CIM2.C04						1.Recoding	
			CIM.C03						1.Recoding	
			DWA_IRS.C03						1.Recoding	
			DWA_IRS.C05						1.Recoding	
			DWASINE.C02						1.Recoding	
			DWASINE.C03						1.Recoding	
			DWASINE.C04						1.Recoding	
			EDCK65.C19						1.Recoding	
			EHC_65I6.C03						1.Recoding	
			EHC_65I6.C04						1.Recoding	
			EHC_65I6.C10						1.Recoding	
			EHC_65I6.C11						1.Recoding	
			EK927.C0C						1.Recoding	
			EK928.C0C						1.Recoding	
			EK9282.C10						1.Recoding	
			EK9282.C12						1.Recoding	
			EMF_E65.C07						1.Recoding	

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	FBI_E65.C02						1.Recoding	
			FLA_E65.C03						1.Recoding	
			FLA_E65.C04						1.Recoding	
			FLA_E65.C05						1.Recoding	
			GKE11P.C00						1.Recoding	
			GKE11P.C01						1.Recoding	
			GKE11P.C02						1.Recoding	
			HKA_E66.C01						1.Recoding	
			HKL.C02						1.Recoding	
			HKL.C03						1.Recoding	
			HKL.C04						1.Recoding	
			HKL.C05						1.Recoding	
			IHKA_E65.C03						1.Recoding	
			IHKA_E65.C04						1.Recoding	
			IHKA_E65.C05						1.Recoding	
			LM2_E6x.C32						1.Recoding	
			LM_E60.C0A						1.Recoding	
			LM_E60.C0B						1.Recoding	
			LM_E60.C0C						1.Recoding	
			LM_E60.C0D						1.Recoding	
			LM_E60.C0E						1.Recoding	
			LM_E65.C05						1.Recoding	
			LM_E65.C06						1.Recoding	
			MMC_E65.C01						1.Recoding	
			MSV70.C03						1.Recoding	
			NIVI.C04						1.Recoding	
			PDC_E65.C01						1.Recoding	
			PDC_E65.C02						1.Recoding	

				Functions						
				Menu						
Series	**Chassis**	**Module**	**ECU System**	**Sys. Info.**	**Read code**	**Clear code**	**Data Stream**	**Actuation**	**Special Functions**	**Others**
			PGS.C03						1.Recoding	
			RLS_E65.C02						1.Recoding	
			RLS_E65.C06						1.Recoding	
			SGM.C0C						1.Recoding	
			SGM.C0D						1.Recoding	
			SHZH_E65.C02						1.Recoding	
			TAG_BH.C03						1.Recoding	
			TAG_BT.C03						1.Recoding	
			TAG_FH.C03						1.Recoding	
			TAG_FT.C03						1.Recoding	
			TE65_ECE.C02						1.Recoding	
			TE65_US.C01						1.Recoding	
			TMBT_E65.C03						1.Recoding	
			TMBT_E65.C04						1.Recoding	
			TMBT_E65.C05						1.Recoding	
			TMBTHE65.C03						1.Recoding	
			TMBTHE65.C04						1.Recoding	
			TMBTHE65.C05						1.Recoding	
			TMFT_E65.C03						1.Recoding	
			TMFT_E65.C04						1.Recoding	
			TMFT_E65.C05						1.Recoding	
			TMFTHE65.C03						1.Recoding	
			TMFTHE65.C04						1.Recoding	
			TMFTHE65.C05						1.Recoding	
			TUNERE65.C03						1.Recoding	
			WIM_E65.C03						1.Recoding	

				Functions						
Series	**Chassis**	**Module**	**ECU System**	**Sys. Info.**	**Read code**	**Clear code**	**Data Stream**	**Actuation**	**Special Functions**	**Others**
			Maintenance \ CBS Reset						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Coolant 9.Vehicle inspection 10.Exhaust emission inspection 11.Diesel particle filter	
			Maintenance \ CBS Correct						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Diesel particle filter 9.Vehicle inspection 10.Exhaust emission inspection	
			Maintenance						1.Delete transport mode	
			Service functions						1.Adjustment, Steering-angle sensor	
			CAS Car Access System	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME/DDE Digital motor/Diesel electronics	√	√	√	√	√		
			DME2 Digital Motor Electronics 2	√	√	√	√	√		
			EKPS Electronic Fuel pump	√	√	√	√	√		
			EGS/SMG Transmission management	√	√	√	√	√		
			VTG Transfer case	√	√	√	√	√		
			EME Electrical machine electronics	√	√	√	√	√		
			GWS Gear selector switch	√	√	√	√	√		
		Chassis	SME Accumulator management electronics	√	√	√	√	√		
			AL Active steering	√	√	√	√	√		
			ICM Integrated chassis management	√	√	√	√	√		
			RDC Tyre pressure control	√	√	√	√	√		
			DSC Dynamic Stability Control	√	√	√	√	√		
			EMF Parking brake	√	√	√	√	√		
			HSR Rear-axle slip-angle control	√	√	√	√	√		
			EPS Electronic Power Steering	√	√	√	√	√		
			EHC Electronic Ride-Height Control	√	√	√	√	√		
			VDM Vertical Dynamics Management	√	√	√	√	√		
			EDCSVL Damper satellite, front left	√	√	√	√	√		
			EDCSVR Damper satellite, front right	√	√	√	√	√		
			EDCSHL Damper satellite, rear left	√	√	√	√	√		
			EDCSHR Damper satellite, rear right	√	√	√	√	√		
			JBE Junction-box electronics	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
	F01/F02/ F03/F04	Body	ACSM Crash Safety Module	√	√	√	√	√		
			SZL Switch center steering column	√	√	√	√	√		
			TRSVC All round view camera	√	√	√	√	√		
			SWW Lane change warning	√	√	√	√	√		
			ZGM Central Gateway Module	√	√	√	√	√		
			RSE Rear Seat Entertainment	√	√	√	√	√		
			TCU/ULF Telephone	√	√	√	√	√		
			HUD Head-Up Display	√	√	√	√	√		
			VSW video switch	√	√	√	√	√		
			SEC Supplementary control unit	√	√	√	√	√		
			SEC2 Supplementary control unit 2	√	√	√	√	√		
			VM Video Module	√	√	√	√	√		
			EMALI Left electric motor reel	√	√	√	√	√		
			EMARE Right electric motor reel	√	√	√	√	√		
			FZD Function centre, roof	√	√	√	√	√		
			NVE Night Vision Electronics	√	√	√	√	√		
			KAFAS Camera based driver assist systems	√	√	√	√	√		
			FLA High Beam Assist	√	√	√	√	√		
			INSTR Instrument cluster	√	√	√	√	√		
			CIC/CHAMP Car headunit platform	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			CON Controller	√	√	√	√	√		
			FCON Rear Compartment controller	√	√	√	√	√		
			SMFAH Seat module, driver's side rear	√	√	√	√	√		
			SMBFH Seat module, passenger's side rear	√	√	√	√	√		

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			HKL Rear-lid lift	√	√	√	√	√		
			SMFA Seat module, driver	√	√	√	√	√		
			SMBF Seat module, passenger	√	√	√	√	√		
			AHM Trailer module	√	√	√	√	√		
			FRM Footwell Module	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			FD Rear compartment display	√	√	√	√	√		
			FD2 Rear compartment display 2	√	√	√	√	√		
			RFK Reversing camera	√	√	√	√	√		
			IHKA Integrated automatic heating/air conditioning	√	√	√	√	√		
			FKA Rear-cabin automatic A/C	√	√	√	√	√		
			HKA Rear-cabin automatic A/C	√	√	√	√	√		
		Short test		√	√	√				
		Coding / Program	Maintenance \ CBS Reset \Software reset						1.Engine Oil 2.Front barke 3.Rear brake 4.Vehicle check 5.Brake fluid 6.Vehicle inspection 7.Exhaust emission inspection	
		Driver	DME Digital Motor Electronics	√	√	√	√	√		
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
8 Series	E31	Chassis	ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			EHC/EDC (Signal-axle air suspension)	√	√	√	√	√		
		Body	CVM Convertible-top module	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√		
			EKM (Electronic Body Module)	√	√	√	√	√		
			EML (Elec. throttle)	√	√	√	√	√		
			FHK (Rear Heater A/C System)	√	√	√	√	√		
			GR (Cruise control)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√		
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			MID (Multi Information Display)	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√		
			SPM/SM	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			URS (Rollover sensor)	√	√	√	√	√		
			VMX (Top-speed Regulation)	√	√	√	√	√		
			VNC (Variable Camshaft Control)	√	√	√	√	√		
			XEN (XENON LIGHTS)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	ZCS/FA Coding						1.Display Coding code and print	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	
		Driver	CAS Car Access System	√	√	√	√	√	1.Personalisation key number 2.Disable_enable key	
			DME Digital Motor Electronics	√	√	√	√	√	1.DME-CAS adjustment 2.CO adjustment 3.Clear adaptations 4.Delete adaptations/variants 5.Idle speed adjustment 6.Consumption indicator adjustment 7.Learning Valvetronic limit positions 8.Venting, cooling system 9.Register battery change 10.Remove Valvetronic servomotor 11.OBD readiness codes	
			DKG Twin-clutch gearbox	√	√	√	√	√		
			EGS Transmission control	√	√	√	√	√	1.Reset adaptation values 2.Reset learning functions 3.Mechatronics adjustment 4.Oil-level adjustment	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			EKPS Fuel-pump control	√	√	√	√	√		
			GWS Gear selector switch	√	√	√	√	√		
		Chassis	DSC Dynamic Stability Control	√	√	√	√	√	1.Bleeding DSC Hydraulics 2.Mix Up Check BrakeLines	
			EDC Damper Control	√	√	√	√	√		
			EMF Parking brake	√	√	√	√	√	1.Workshop braking-in 2.Assembly mode 3.Positioning-travel check	
			EPS Electronic Power Steering	√	√	√	√	√		
			RDC Tyre pressure control	√	√	√	√	√		
			AMP Amplifier	√	√	√	√	√		
			CA Comfort Access	√	√	√	√	√		
			CDC CD Changer	√	√	√	√	√		
			CIC Car Inforamtion Computer	√	√	√	√	√		
			CIC-GW Gateway	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			CON Controller	√	√	√	√	√		
			CTM Convertible-top module	√	√	√	√	√		
			DAB Digital tuner	√	√	√	√	√		
			DVD-C DVD Changer	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√		
			FLA High Beam Assist	√	√	√	√	√		
			FRM2 Footwell module 2	√	√	√	√	√	Start windows initialising Rear windows, initialising Rear windows, test	
			FZD Function centre, roof	√	√	√	√	√	1.Initializ rain sensor	
			IHR Integrated heater control	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
X1-E84		Body	IHKR Interagted heating/air-conditioning regulation	√	√	√	√	√		
			IHKA Integrated automatic heating/air conditioning	√	√	√	√	√	1.Flap motors 2.Coolant compressor	
			INSTR Instrument cluster	√	√	√	√	√		
			JBE2 Junction Box electronics 2	√	√	√	√	√		
			M-ASK-BO User interface	√	√	√	√	√		
			M-ASK-GW Gateway	√	√	√	√	√		
			MRS Multiple Restraint system	√	√	√	√	√		
			NAV Navigation system	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD Radio	√	√	√	√	√		
			RAD2-BO User interface	√	√	√	√	√		
			RAD2-GW Gateway	√	√	√	√	√		
			RLSS Rain/light solar sensor	√	√	√	√	√	1.Initializ rain sensor	
			SINE Siren with tilt sensor	√	√	√	√	√		
			SMFA Seat module, driver	√	√	√	√	√		
			TCU Telematic Control unit	√	√	√	√	√		
			ULF Universal charging and hands-free factility	√	√	√	√	√		
			ULF-SBX Interface box	√	√	√	√	√		
			ULF-SBX-H Interface box High	√	√	√	√	√		
			VM Video Module	√	√	√	√	√		
		Short test		√	√	√				
			CCC_ANT.C04						1.Recoding	
			CCC_ANT.C05						1.Recoding	
			CCC_ANT.C06						1.Recoding	
			CCC_ANT.C07						1.Recoding	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	CCC_ANT.C08						1.Recoding	
			CCC_ANT.C09						1.Recoding	
			CCC_ASK.C04						1.Recoding	
			CCC_ASK.C05						1.Recoding	
			CCC_ASK.C06						1.Recoding	
			CCC_ASK.C07						1.Recoding	
			CCC_GW.C02						1.Recoding	
			CCC_GW.C03						1.Recoding	
			CCC_GW.C04						1.Recoding	
			CCC_GW.C05						1.Recoding	
			DWA_IRS.C05						1.Recoding	
			DWASINE.C02						1.Recoding	
			DWASINE.C03						1.Recoding	
			Maintenance \ CBS Reset						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Vehicle inspection 9.Exhaust emission inspection 10.Diesel particle filter	

BMW **V45.20** Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Maintenance \ CBS Correct						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Diesel particle filter 9.Vehicle inspection 10.Exhaust emission inspection	
			Maintenance						1.Delete transport mode	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Air-mass flow sensor adaptation 5.Regeneration, particulate filter 1.Idle speed 2.Exhaust-gas recirculation 3.Start basic injection quantity 4.Limitation delivery 5.Injection rate 6.Consumption calculation 7.Injector rate adjustment 8.Air-mass flow sensor 9.Quantity mean-value adaptation 10.Register battery change 11.Read measured values 12.Bleeding, fuel system 13.EOBD readiness codes 14.Compression test	
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		
			EKPS (Fuel-pump control)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
X3-E83		Chassis	VTG Transfer case	√	√	√	√	√		
			ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			LEW (Steering-angle sensor)	√	√	√	√	√		
			MFL (Multi-function steering wheel)	√	√	√	√	√		
		Body	AIC (Automatic Interval Control)	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√	1.Reset service interval indicator	
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SMF (Seat memory,driver)	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			VID (Video Module)	√	√	√	√	√		
			DSP (Digital Sound Processor)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
			DXC8_E83.C02						1.Recoding	
			DXC8_E83.C06						1.Recoding	
			EWS.C81						1.Recoding	
			GM5.C05						1.Recoding	
			GM5.C04						1.Recoding	
			GT.C04						1.Recoding	
			GT.C05						1.Recoding	

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	GT.C06						1.Recoding	
			GT.C07						1.Recoding	
			IHK_E46.C16						1.Recoding	
			IHK_E46.C17						1.Recoding	
			IHK_E83.C18						1.Recoding	
			IHKR_E46.C14						1.Recoding	
			IHKR_E46.C15						1.Recoding	
			LSZ.C34						1.Recoding	
			LSZ.C35						1.Recoding	
			LSZ.C36						1.Recoding	
			LWS5.C01						1.Recoding	
			MDS_SHD.C06						1.Recoding	
			MDS_SHD.C07						1.Recoding	
			MRS4RD.C60						1.Recoding	
			PDC.CO3						1.Recoding	
			RA_NG.C01						1.Recoding	
			RA_NG.C02						1.Recoding	
			RLS.C02						1.Recoding	
			SM_E46.C01						1.Recoding	
			SVT.C01						1.Recoding	
			TV2.CO2						1.Recoding	
			TV2.CO3						1.Recoding	
			VGSG83.C02						1.Recoding	
			VGSG83.C03						1.Recoding	
			VGSG83.C04						1.Recoding	
			VGSG83.C05						1.Recoding	
			DDE626.C04						1.Recoding	
			DDE626.C07						1.Recoding	

Menu				Functions						

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			DDE626.C08						1.Recoding	
			DDE626.C09						1.Recoding	
			DDE626.C10						1.Recoding	
			DDE626.CO1						1.Recoding	
			KMB_E85.C05						1.Recoding	
			KMB_E85.C06						1.Recoding	
			KMB_E85.C07						1.Recoding	
			KMB_E85.C08						1.Recoding	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	
		Driver	CAS Car Access System	√	√	√	√	√		
			DME/DDE Digital motor/Diesel electronics	√	√	√	√	√		
			DME2 Digital Motor Electronics 2	√	√	√	√	√		
			EKPS Electronic Fuel pump	√	√	√	√	√		
			EGS/SMG Transmission management	√	√	√	√	√		
			VTG Transfer case	√	√	√	√	√		
			EME Electrical machine electronics	√	√	√	√	√		
			GWS Gear selector switch	√	√	√	√	√		
			SME Accumulator management electronics	√	√	√	√	√		
			AL Active steering	√	√	√	√	√		
			ICM Integrated chassis management	√	√	√	√	√		
			RDC Tyre pressure control	√	√	√	√	√		
			DSC Dynamic Stability Control	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Chassis	EMF Parking brake	√	√	√	√	√		
			HSR Rear-axle slip-angle control	√	√	√	√	√		
			EPS Electronic Power Steering	√	√	√	√	√		
			EHC Electronic Ride-Height Control	√	√	√	√	√		
			VDM Vertical Dynamics Management	√	√	√	√	√		
			EDCSVL Damper satellite, front left	√	√	√	√	√		
			EDCSVR Damper satellite, front right	√	√	√	√	√		
			EDCSHL Damper satellite, rear left	√	√	√	√	√		
			EDCSHR Damper satellite, rear right	√	√	√	√	√		
	X3-F25		JBE Junction-box electronics	√	√	√	√	√		
			ACSM Crash Safety Module	√	√	√	√	√		
			SZL Switch center steering column	√	√	√	√	√		
			TRSVC All round view camera	√	√	√	√	√		
			SWW Lane change warning	√	√	√	√	√		
			ZGM Central Gateway Module	√	√	√	√	√		
			RSE Rear Seat Entertainment	√	√	√	√	√		
			TCU/ULF Telephone	√	√	√	√	√		
			HUD Head-Up Display	√	√	√	√	√		
			VSW video switch	√	√	√	√	√		
			SEC Supplementary control unit	√	√	√	√	√		
			SEC2 Supplementary control unit 2	√	√	√	√	√		
			VM Video Module	√	√	√	√	√		
			EMALI Left electric motor reel	√	√	√	√	√		
			EMARE Right electric motor reel	√	√	√	√	√		
			FZD Function centre, roof	√	√	√	√	√		
			NVE Night Vision Electronics	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Body	KAFAS Camera based driver assist systems	√	√	√	√	√		
			FLA High Beam Assist	√	√	√	√	√		
			INSTR Instrument cluster	√	√	√	√	√		
			CIC/CHAMP Car headunit platform	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			CON Controller	√	√	√	√	√		
			FCON Rear Compartment controller	√	√	√	√	√		
			SMFAH Seat module, driver's side rear	√	√	√	√	√		
			SMBFH Seat module, passenger's side rear	√	√	√	√	√		
			HKL Rear-lid lift	√	√	√	√	√		
			SMFA Seat module, driver	√	√	√	√	√		
			SMBF Seat module, passenger	√	√	√	√	√		
			AHM Trailer module	√	√	√	√	√		
			FRM Footwell Module	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			FD Rear compartment display	√	√	√	√	√		
			FD2 Rear compartment display 2	√	√	√	√	√		
			RFK Reversing camera	√	√	√	√	√		
			IHKA Integrated automatic heating/air conditioning	√	√	√	√	√		
			FKA Rear-cabin automatic A/C	√	√	√	√	√		
			HKA Rear-cabin automatic A/C	√	√	√	√	√		
		Short test		√	√	√				

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	Maintenance \ CBS Reset \Software reset						1.Engine Oil 2.Front barke 3.Rear brake 4.Vehicle check 5.Brake fluid 6.Vehicle inspection 7.Exhaust emission inspection	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer 1.Idle speed 2.Exhaust-gas recirculation 3.Start basic injection quantity 4.Limitation delivery 5.Injection rate 6.Consumption calculation 7.Injector rate adjustment	
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Chassis	ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			EHC/EDC (Signal-axle air suspension)	√	√	√	√	√		
			LEW (Steering-angle sensor)	√	√	√	√	√		
			MFL (Multi-function steering wheel)	√	√	√	√	√		
		Body	AIC (Automatic Interval Control)	√	√	√	√	√		
			BIT (Basis Interface Telephone)	√	√	√	√	√		
			BM (On-board monitor)	√	√	√	√	√		
			GR (Cruise control)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√	1.Reset service interval indicator	
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			NAV Navigation system	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SES (Language-input system)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√		
			SPM/SM	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			SZM (Switching center, center console)	√	√	√	√	√		
			VID (Video Module)	√	√	√	√	√		
X Series			DSP (Digital Sound Processor)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
	X5-E53		STH (Park heating)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
			MRS3.C10						1.Recoding	
			ATC4_5.C01						1.Recoding	
			GM3_E53.C04						1.Recoding	
			GM3.C10						1.Recoding	
			GT.C01						1.Recoding	
			GT.C02						1.Recoding	
			GT.C03						1.Recoding	
			GT.C04						1.Recoding	
			GT.C05						1.Recoding	
			GT.C06						1.Recoding	
			GT.C07						1.Recoding	
			IHKA_E53.C03						1.Recoding	
			LCM.C18						1.Recoding	
			LCM.C20						1.Recoding	
			LCM.C21						1.Recoding	
			LCM.C22						1.Recoding	
			LCM.C23						1.Recoding	
			LCM.C24						1.Recoding	
			LWS5.C01						1.Recoding	
			MDS_SHD.C06						1.Recoding	
			MDS_SHD.C07						1.Recoding	
			PDC.C01						1.Recoding	
			PDC.C03						1.Recoding	
			RA_NG.C01						1.Recoding	
			RA_NG.C02						1.Recoding	
			RDC.C01						1.Recoding	

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			BMW V45.20 Diagnostics List(Note:For reference only)							
		Menu					**Functions**			
		Coding / Program	RLS.C02						1.Recoding	
			SM_E53.C01						1.Recoding	
			TEL.C02						1.Recoding	
			TV2.C02						1.Recoding	
			TV2.C03						1.Recoding	
			ULF.C01						1.Recoding	
			ULF.C02						1.Recoding	
			ULF.C03						1.Recoding	
			ULF.C04						1.Recoding	
			ULF.C05						1.Recoding	
			ULF.C06						1.Recoding	
			ZHZ.C01						1.Recoding	
			DSC5_7.C11						1.Recoding	
			DSC5_7.C14						1.Recoding	
			DSC5_7.C15						1.Recoding	
			DSP.C01						1.Recoding	
			DSP2.C02						1.Recoding	
			DXC8_E53.C01						1.Recoding	
			DXC8_E53.C03						1.Recoding	
			DXC8_E53.C04						1.Recoding	
			EHC.C06						1.Recoding	
			EWS.C81						1.Recoding	
			KMB_E39.C06						1.Recoding	
			KMB_E39.C07						1.Recoding	
			KMBI_E38.C12						1.Recoding	
			MRS4_16.C32						1.Recoding	
			TCU_IBUS.C01						1.Recoding	
			TCU_IBUS.C02						1.Recoding	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			TCU_IBUS.C03						1.Recoding	
			TCU_IBUS.C04						1.Recoding	
			TCU_IBUS.C05						1.Recoding	
			TCU_IBUS.C06						1.Recoding	
			TCU_IBUS.C07						1.Recoding	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	
			CAS Car Access System	√	√	√	√	√	1.Personalisation key number 2.Disable_enable key	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			DDE Diesel Electronics	√	√	√	√	√	1.DDE-CAS adjustment 2.Air-mass flow sensor adaptation 3.Regeneration, particulate filter 4.Idle speed adjustment 5.Exhaust-gas recirculation adjustment 6.Starting torque adjustment 7.Consumption calculation adjustment 8.Injector rate adjustment 9.Quantity mean-value adaptation 10.Reset variants 11.Bleeding, fuel system 12.EOBD readiness codes 13.Read measured values 14.Register battery change	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.DME-CAS adjustment 2.CO adjustment 3.Clear adaptations 4.Delete adaptations/variants 5.Idle speed adjustment 6.Consumption indicator adjustment 7.Learning Valvetronic limit positions 8.Venting, cooling system 9.Register battery change 10.Remove Valvetronic servomotor 11.OBD readiness codes	
			EGS Transmission control	√	√	√	√	√	1.Reset adaptation values 2.Reset learning functions 3.Mechatronics adjustment 4.Oil-level adjustment	
			GWS Gear selector switch	√	√	√	√	√		
			EKPS Fuel-pump control	√	√	√	√	√		
			QMVH [Lateral-moment distribution, rear axle]	√	√	√	√	√		
			VTC Valvetronic	√	√	√	√	√		
			VTC2 Valvetronic 2	√	√	√	√	√		
			VTG Transfer case	√	√	√	√	√		
			AL Active steering	√	√	√	√	√	1.Startup/adjustment, active front steering	

BMW V45.20 Diagnostics List(Note:For reference only)

		Menu		Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
Series	Chassis	Module	ECU System							
		Chassis	ARS Dynamic Drive	√	√	√	√	√		
			DSC Dynamic Stability Control	√	√	√	√	√	1.Bleeding DSC Hydraulics 2.Mix Up Check BrakeLines	
			EDCSHL Damper satellite, rear left	√	√	√	√	√		
			EDCSHR Damper satellite, rear right	√	√	√	√	√		
			EDCSVL Damper satellite, front left	√	√	√	√	√		
			EDCSVR Damper satellite, front right	√	√	√	√	√		
			EHC Electronic Ride-Height Control	√	√	√	√	√	1.Check Ride Level Sensors 2.Delete Energy Saving Mode 3.Check Air Supply System 4.Check Compressor Relay 5.Check Raise/lower Function	
			EMF Parking brake	√	√	√	√	√	1.Workshop braking-in 2.Assembly mode 3.Positioning-travel check	
			RDC Tyre pressure control	√	√	√	√	√		
			VDM Vertical Dynamics Management	√	√	√	√	√		
	X5-E70		ACSM Crash Safety Module	√	√	√	√	√		
			AHM Trailer module	√	√	√	√	√		
			AMPH Hi-Fi amplifier	√	√	√	√	√		
			AMPT Top Hi-Fi amplifier	√	√	√	√	√		
			CA Comfort Access	√	√	√	√	√		
			CCC-A Applications	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Body	CCC-ANT Aerial tuner	√	√	√	√	√		
			CCC-ASK Audio system controller	√	√	√	√	√		
			CCC-BO User interface	√	√	√	√	√		
			CCC-GW Gateway	√	√	√	√	√		
			CDC CD Changer	√	√	√	√	√		
			CHAMP-BO User interface	√	√	√	√	√		
			CHAMP-GW Gateway	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			CNAV Navigation system, China	√	√	√	√	√		
			CON Controller	√	√	√	√	√		
			DAB Digital tuner	√	√	√	√	√		
			DVD-C DVD Changer	√	√	√	√	√		
			FD Rear-compartment display	√	√	√	√	√		
			FKA Rear heater/air conditioning	√	√	√	√	√		
			FLA High Beam Assist	√	√	√	√	√		
			FRM2 Footwell module 2	√	√	√	√	√	Start windows initialising Rear windows, initialising Rear windows, test	
			FZD Function centre, roof	√	√	√	√	√	1.Initializ rain sensor	
			HKL Rear-lid lift	√	√	√	√	√		
			HUD Head-Up Display	√	√	√	√	√		
			IBOC Digital tuner US	√	√	√	√	√		
			IHKA Integrated automatic heating/air conditioning	√	√	√	√	√	1.Flap motors 2.Coolant compressor	
			INSTR Instrument cluster	√	√	√	√	√		
			JBE2 Junction Box electronics 2	√	√	√	√	√		
			JNAV Navigation system, Japan	√	√	√	√	√		
			KHM Headphones moudule	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			KNAV Navigation system, Korea	√	√	√	√	√		
			M-ASK-BO User interface	√	√	√	√	√		
			M-ASK-GW Gateway	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RFK Reversing camera	√	√	√	√	√		
			RLSS Rain/light solar sensor	√	√	√	√	√	1.Initializ rain sensor	
			RSE Rear Seat Entertainment	√	√	√	√	√		
			SDARS satellite tuner	√	√	√	√	√		
			SINE Siren with tilt sensor	√	√	√	√	√		
			SMBF Seat module, passenger	√	√	√	√	√		
			SMFA Seat module, driver	√	√	√	√	√		
			TCU Telematic Control unit	√	√	√	√	√		
			ULF-SBX Interface box	√	√	√	√	√		
			ULF-SBX-H Interface box High	√	√	√	√	√		
			VM Video Module	√	√	√	√	√		
			VSW video switch	√	√	√	√	√		
		Short test		√	√	√				
			Maintenance \ CBS Reset						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Vehicle inspection 9.Exhaust emission inspection 10.Diesel particle filter	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	Maintenance \ CBS Correct						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Diesel particle filter 9.Vehicle inspection 10.Exhaust emission inspection	
			Maintenance						1.Delete transport mode	
			Service functions						Adjustment, Steering-angle sensor	
			CAS Car Access System	√	√	√	√	√	1.Personalisation key number 2.Disable_enable key	
			DDE Diesel Electronics	√	√	√	√	√	1.DDE-CAS adjustment 2.Air-mass flow sensor adaptation	

BMW V45.20 Diagnostics List (Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.DME-CAS adjustment 2.CO adjustment 3.Clear adaptations 4.Delete adaptations/variants 5.Idle speed adjustment 6.Consumption indicator adjustment 7.Learning Valvetronic limit positions 8.Venting, cooling system 9.Register battery change 10.Remove Valvetronic servomotor 11.OBD readiness codes	
			EGS Transmission control	√	√	√	√	√	1.Reset adaptation values 2.Reset learning functions 3.Mechatronics adjustment 4.Oil-level adjustment	
			GWS Gear selector switch	√	√	√	√	√		
			EKPS Fuel-pump control	√	√	√	√	√		
			QMVH [Lateral-moment distribution, rear axle]	√	√	√	√	√		
			VTG Transfer case	√	√	√	√	√		
			AL Active steering	√	√	√	√	√	1.Startup/adjustment, active front steering	
			ARS Dynamic Drive	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Chassis	DSC Dynamic Stability Control	√	√	√	√	√	1.Bleeding DSC Hydraulics 2.Mix Up Check BrakeLines	
			EDCSHL Damper satellite, rear left	√	√	√	√	√		
			EDCSHR Damper satellite, rear right	√	√	√	√	√		
			EDCSVL Damper satellite, front left	√	√	√	√	√		
			EDCSVR Damper satellite, front right	√	√	√	√	√		
			EHC Electronic Ride-Height Control	√	√	√	√	√	1.Check Ride Level Sensors 2.Delete Energy Saving Mode 3.Check Air Supply System 4.Check Compressor Relay 5.Check Raise/lower Function	
			EMF Parking brake	√	√	√	√	√	1.Workshop braking-in 2.Assembly mode 3.Positioning-travel check	
			Integrated Chassis Management	√	√	√	√	√		
			RDC Tyre pressure control	√	√	√	√	√		
			VDM Vertical Dynamics Management	√	√	√	√	√		
			ACSM Crash Safety Module	√	√	√	√	√		
			AHM Trailer module	√	√	√	√	√		
			AMPH Hi-Fi amplifier	√	√	√	√	√		
			AMPT Top Hi-Fi amplifier	√	√	√	√	√		
			CA Comfort Access	√	√	√	√	√		
			CCC-A Applications	√	√	√	√	√		
			CCC-ANT Aerial tuner	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			CCC-ASK Audio system controller	√	√	√	√	√		
			CCC-BO User interface	√	√	√	√	√		
			CCC-GW Gateway	√	√	√	√	√		
			CDC CD Changer	√	√	√	√	√		
	X6-E71		CHAMP-BO User interface	√	√	√	√	√		
			CHAMP-GW Gateway	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			CNAV Navigation system, China	√	√	√	√	√		
			CON Controller	√	√	√	√	√		
			DAB Digital tuner	√	√	√	√	√		
			DVD-C DVD Changer	√	√	√	√	√		
			FD Rear-compartment display	√	√	√	√	√		
			FKA Rear heater/air conditioning	√	√	√	√	√		
			FLA High Beam Assist	√	√	√	√	√		
		Body	FRM2 Footwell module 2	√	√	√	√	√	Start windows initialising Rear windows, initialising Rear windows, test	
			FZD Function centre, roof	√	√	√	√	√	1.Initializ rain sensor	
			HKL Rear-lid lift	√	√	√	√	√		
			HUD Head-Up Display	√	√	√	√	√		
			IBOC Digital tuner US	√	√	√	√	√		
			IHKA Integrated automatic heating/air conditioning	√	√	√	√	√	1.Flap motors 2.Coolant compressor	
			INSTR Instrument cluster	√	√	√	√	√		
			JBE2 Junction Box electronics 2	√	√	√	√	√		
			JNAV Navigation system, Japan	√	√	√	√	√		
			KHI Headset interface	√	√	√	√	√		
			KNAV Navigation system, Korea	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			M-ASK-BO User interface	√	√	√	√	√		
			M-ASK-GW Gateway	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RFK Reversing camera	√	√	√	√	√		
			RLSS Rain/light solar sensor	√	√	√	√	√	1.Initializ rain sensor	
			RSE Rear Seat Entertainment	√	√	√	√	√		
			SDARS satellite tuner	√	√	√	√	√		
			SINE Siren with tilt sensor	√	√	√	√	√		
			SMBF Seat module, passenger	√	√	√	√	√		
			SMFA Seat module, driver	√	√	√	√	√		
			TCU Telematic Control unit	√	√	√	√	√		
			ULF-SBX Interface box	√	√	√	√	√		
			ULF-SBX-H Interface box High	√	√	√	√	√		
			VM Video Module	√	√	√	√	√		
			VSW video switch	√	√	√	√	√		
		Short test		√	√	√				
			Maintenance \ CBS Reset						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Vehicle inspection 9.Exhaust emission inspection 10.Diesel particle filter	

				Functions						
Menu				Functions						

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	Maintenance \ CBS Correct						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Diesel particle filter 9.Vehicle inspection 10.Exhaust emission inspection	
			Maintenance						1.Delete transport mode	
			Service functions						1.Adjustment, Steering-angle sensor	

				BMW **V45.20** Diagnostics List(Note:For reference only)						
		Menu			Functions					
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer	
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		
		Chassis	ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			EHC/EDC (Signal-axle air suspension)	√	√	√	√	√		
	Z1-E30		ADS Throttle-Valve Control	√	√	√	√	√		
			AHK (Active-Axle Kinematics)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Body	CVM Convertible-top module	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√		
			EKM (Electronic Body Module)	√	√	√	√	√		
			EML (Elec. throttle)	√	√	√	√	√		
			FHK (Rear Heater A/C System)	√	√	√	√	√		
			GR (Cruise control)	√	√	√	√	√		
			GSA (Closed-Loop-Controlled Differential-Lock AWD)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√		
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			MID (Multi Information Display)	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√		
			SPM/SM	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			URS (Rollover sensor)	√	√	√	√	√		
			VMX (Top-speed Regulation)	√	√	√	√	√		
			VNC (Variable Camshaft Control)	√	√	√	√	√		
			XEN (XENON LIGHTS)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
		Coding / Program	ZCS/FA Coding						1.Display Coding code and print	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer 1.Idle speed 2.Exhaust-gas recirculation 3.Start basic injection quantity 4.Limitation delivery 5.Injection rate 6.Consumption calculation 7.Injector rate adjustment	
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		

		Menu		Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Chassis	ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			EHC/EDC (Signal-axle air suspension)	√	√	√	√	√		
		Body	ADS Throttle-Valve Control	√	√	√	√	√		
			AHK (Active-Axle Kinematics)	√	√	√	√	√		
			CVM Convertible-top module	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√		
			EKM (Electronic Body Module)	√	√	√	√	√		
			EML (Elec. throttle)	√	√	√	√	√		
			FHK (Rear Heater A/C System)	√	√	√	√	√		
			GR (Cruise control)	√	√	√	√	√		
			GSA (Closed-Loop-Controlled Differential-Lock AWD)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√		
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			MID (Multi Information Display)	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√		
			SPM/SM	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			URS (Rollover sensor)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
	Z3-E36		VMX (Top-speed Regulation)	√	√	√	√	√		
			VNC (Variable Camshaft Control)	√	√	√	√	√		
			XEN (XENON LIGHTS)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
			ZCS/FA Coding						1.Display Coding code and print	
			CAR MEMORY\LIGHTING\External lights\Daytime driving light						1.Active 2.Not active	
			CAR MEMORY\LIGHTING\External lights\Home lights						1.Not active 2.40 s 3.90 s 4.150 s 5.240 s	
			CAR MEMORY\LIGHTING\Interior lighting\ON during unlock						1.Active 2.Not active	
			CAR MEMORY\LIGHTING\Interior lighting\ON at terminal R off, light on beforehand						1.Active 2.Not active	
			CAR MEMORY\LIGHTING\Interior lighting\Soft ON/OFF						1.Active 2.Not active	
			CAR MEMORY\ANTI-THEFT SYSTEM\Interior lighting\Interior sensor						1.Active 2.Not active	

BMW V45.20 Diagnostics List(Note:For reference only)

	Menu			Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	CAR MEMORY\ANTI-THEFT SYSTEM\Interior lighting\Tilt alarm sensor						1.Active 2.Not active	
			CAR MEMORY\ANTI-THEFT SYSTEM\Interior lighting\Arm/disarm						1.remote control 2.locks and remote control	
			CAR MEMORY\ANTI-THEFT SYSTEM\Interior lighting\Acknowledge\Disarm visually						1.Active 2.Not active	
			CAR MEMORY\ANTI-THEFT SYSTEM\Interior lighting\Acknowledge\Arm visually						1.Active 2.Not active	
			CAR MEMORY\ANTI-THEFT SYSTEM\Interior lighting\Acknowledge\Arm visually, lids closed						1.Active 2.Not active	
			CAR MEMORY\CENTRAL LOCKING\RC interior light						1.Active 2.Not active	
			CAR MEMORY\CENTRAL LOCKING\Open luggage compartment via remote control						1.when disarmed 2.always	
			CAR MEMORY\CENTRAL LOCKING\Lock again 2 min after unlocking without opening						1.Active 2.Not active	
			CAR MEMORY\CENTRAL LOCKING\Automatic locking after starting off						1.Active 2.Not active	

BMW **V45.20** Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			CAR MEMORY\CENTRAL LOCKING\Centre lock button, when locked						1.Active 2.Not active	
			CAR MEMORY\CENTRAL LOCKING\Entrance aid						1.Active 2.Not active	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer 1.Idle speed 2.Exhaust-gas recirculation 3.Start basic injection quantity 4.Limitation delivery 5.Injection rate 6.Consumption calculation 7.Injector rate adjustment	
			EGS Transmission control	√	√	√	√	√		
			EKPS (Fuel-pump control)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
Z4-E85/E86		Chassis	EWS (Elec. immobilize system)	√	√	√	√	√		
			ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			EPS Electronic Power Steering	√	√	√	√	√		
			LEW (Steering-angle sensor)	√	√	√	√	√		
		Body	AIC (Automatic Interval Control)	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			CVM Convertible-top module	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		
			IKE/IKI/KOMBI	√	√	√	√	√	1.Reset service interval indicator	
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SBSL Satellite, B-pillar, left	√	√	√	√	√		
			SBSR Satellite, B-pillar, right	√	√	√	√	√		
			SIM Safety and Information Module	√	√	√	√	√		
			SMF (Seat memory,driver)	√	√	√	√	√		
			SZM (Switching center, center console)	√	√	√	√	√		
			VID (Video Module)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
			CVM_IV.C01						1.Recoding	
			CVM_IV.C02						1.Recoding	
			CVM_IV.C04						1.Recoding	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
Z Series		Coding / Program	DSP_E85.C01						1.Recoding	
			DSP_E85.C02						1.Recoding	
			EPS_E85.C01						1.Recoding	
			EPS_E85.C02						1.Recoding	
			EWS.C81						1.Recoding	
			GM5.C04						1.Recoding	
			GM5.C05						1.Recoding	
			IHK_E85.C01						1.Recoding	
			IHK_E85.C02						1.Recoding	
			IHK_E85.C03						1.Recoding	
			LSZ.C31						1.Recoding	
			LSZ.C32						1.Recoding	
			LSZ.C34						1.Recoding	
			LSZ.C35						1.Recoding	
			LSZ.C36						1.Recoding	
			LWS5.C01						1.Recoding	
			MK60.C10						1.Recoding	
			MK60.C13						1.Recoding	
			MK60.C20						1.Recoding	
			MV946.C0D						1.Recoding	
			PDC.C03						1.Recoding	
			RA_NG.C01						1.Recoding	
			RA_NG.C02						1.Recoding	
			RLS.C02						1.Recoding	
			SIM_E85.C01						1.Recoding	
			SIM_E85.C02						1.Recoding	
			SIM_E85.C03						1.Recoding	
			SIM_E85.C04						1.Recoding	

						Functions				
			Menu							
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			SM_E46.C01						1.Recoding	
			TV2.C02						1.Recoding	
			TV2.C03						1.Recoding	
			ULF.C01						1.Recoding	
			ULF.C02						1.Recoding	
			ULF.C03						1.Recoding	
			ULF.C04						1.Recoding	
			ULF.C05						1.Recoding	
			ULF.C06						1.Recoding	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	
			CAS Car Access System	√	√	√	√	√	1.Personalisation key number 2.Disable_enable key	

The title row of the table reads:

BMW V45.20 Diagnostics List(Note:For reference only)

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.DME-CAS adjustment 2.CO adjustment 3.Clear adaptations 4.Delete adaptations/variants 5.Idle speed adjustment 6.Consumption indicator adjustment 7.Learning Valvetronic limit positions 8.Venting, cooling system 9.Register battery change 10.Remove Valvetronic servomotor 11.OBD readiness codes	
			DKG Twin-clutch gearbox	√	√	√	√	√		
			EGS Transmission control	√	√	√	√	√	1.Reset adaptation values 2.Reset learning functions 3.Mechatronics adjustment 4.Oil-level adjustment	
			EKPS Fuel-pump control	√	√	√	√	√		
			GWS Gear selector switch	√	√	√	√	√		
		Chassis	DSC Dynamic Stability Control	√	√	√	√	√	1.Bleeding DSC Hydraulics 2.Mix Up Check BrakeLines	
			EDC Damper Control	√	√	√	√	√		
			EMF Parking brake	√	√	√	√	√	1.Workshop braking-in 2.Assembly mode 3.Positioning-travel check	

				Functions						

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			EPS Electronic Power Steering	√	√	√	√	√		
			RDC Tyre pressure control	√	√	√	√	√		
		Body	AMP Amplifier	√	√	√	√	√		
			CA Comfort Access	√	√	√	√	√		
			CDC CD Changer	√	√	√	√	√		
			CIC Car Inforamtion Computer	√	√	√	√	√		
			CIC-GW Gateway	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			CON Controller	√	√	√	√	√		
			CTM Convertible-top module	√	√	√	√	√		
			DAB Digital tuner	√	√	√	√	√		
			DVD-C DVD Changer	√	√	√	√	√		
			DWA Antitheft alarm system	√	√	√	√	√		
			FLA High Beam Assist	√	√	√	√	√		
			FRM2 Footwell module 2	√	√	√	√	√	Start windows initialising Rear windows, initialising Rear windows, test	
			FZD Function centre, roof	√	√	√	√	√	1.Initializ rain sensor	
			IHR Integrated heater control	√	√	√	√	√		
			IHKR Interagted heating/air-conditioning regulation	√	√	√	√	√		
			IHKA Integrated automatic heating/air conditioning	√	√	√	√	√	1.Flap motors 2.Coolant compressor	
			INSTR Instrument cluster	√	√	√	√	√		
			JBE2 Junction Box electronics 2	√	√	√	√	√		
			M-ASK-BO User interface	√	√	√	√	√		
			M-ASK-GW Gateway	√	√	√	√	√		
			MRS Multiple Restraint system	√	√	√	√	√		

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			NAV Navigation system	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD Radio	√	√	√	√	√		
			RAD2-BO User interface	√	√	√	√	√		
			RAD2-GW Gateway	√	√	√	√	√		
			RLSS Rain/light solar sensor	√	√	√	√	√	1.Initializ rain sensor	
			SINE Siren with tilt sensor	√	√	√	√	√		
			SMFA Seat module, driver	√	√	√	√	√		
			TCU Telematic Control unit	√	√	√	√	√		
			ULF Universal charging and hands-free factility	√	√	√	√	√		
			ULF-SBX Interface box	√	√	√	√	√		
			ULF-SBX-H Interface box High	√	√	√	√	√		
			VM Video Module	√	√	√	√	√		
	Z4-E89	Short test		√	√	√				
			CCC_ANT.C04						1.Recoding	
			CCC_ANT.C05						1.Recoding	
			CCC_ANT.C06						1.Recoding	
			CCC_ANT.C07						1.Recoding	
			CCC_ANT.C08						1.Recoding	
			CCC_ANT.C09						1.Recoding	
			CCC_ASK.C04						1.Recoding	
			CCC_ASK.C05						1.Recoding	
			CCC_ASK.C06						1.Recoding	
			CCC_ASK.C07						1.Recoding	
			CCC_GW.C02						1.Recoding	
			CCC_GW.C03						1.Recoding	
			CCC_GW.C04						1.Recoding	

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			CCC_GW.C05						1.Recoding	
			DWA_IRS.C05						1.Recoding	
			DWASINE.C02						1.Recoding	
			DWASINE.C03						1.Recoding	
			DWASINE.C04						1.Recoding	
			EKB945.C0D						1.Recoding	
			EKB945.C0E						1.Recoding	
			EKPM60_2.C03						1.Recoding	
			FRMFA.C07						1.Recoding	
			FRMFA.C09						1.Recoding	
			FRMFA.C10						1.Recoding	
			FRMFA.C11						1.Recoding	
			FRMFA.C12						1.Recoding	
			FRMFA.C20						1.Recoding	
			FRMFA.C21						1.Recoding	
			FZD.C06						1.Recoding	
			GKE11P.C00						1.Recoding	
			GKE11P.C01						1.Recoding	
			GKE11P.C02						1.Recoding	
			GKE11T.C05						1.Recoding	
			IHXXPL2.C01						1.Recoding	
			JBBFE.C04						1.Recoding	
			JBBFE.C05						1.Recoding	
			JBBFE.C06						1.Recoding	
			JBBFE.C07						1.Recoding	
			KMBI_PL2.C05						1.Recoding	
		Coding /	KMBI_PL2.C06						1.Recoding	
		Program	KMBI_PL2.C07						1.Recoding	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			KMBI_PL2.C08						1.Recoding	
			MK60_87.C02						1.Recoding	
			MK60_87.C03						1.Recoding	
			MK60_87.C04						1.Recoding	
			MK60_87.C05						1.Recoding	
			MK60_87.C07						1.Recoding	
			MK60_87.C08						1.Recoding	
			PDC_E87.C03						1.Recoding	
			PDC_E87.C04						1.Recoding	
			PDC_E87.C05						1.Recoding	
			RAD1.C02						1.Recoding	
			RAD1.C03						1.Recoding	
			RLS_E65.C06						1.Recoding	
			ULF2MOST.C10						1.Recoding	
			ULF_MOST.C03						1.Recoding	
			ULF_MOST.C05						1.Recoding	
			Maintenance \ CBS Reset						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Vehicle inspection 9.Exhaust emission inspection 10.Diesel particle filter	

BMW **V45.20** Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Maintenance \ CBS Correct						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Diesel particle filter 9.Vehicle inspection 10.Exhaust emission inspection	
			Maintenance						1.Delete transport mode	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
	Z8-E52	Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer	
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		
		Chassis	ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			LEW (Steering-angle sensor)	√	√	√	√	√		
			RDC (Tyre pressure control)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Body	IKE/IKI/KOMBI	√	√	√	√	√	1.Reset service interval indicator	
			RAD (Radio)	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			URS (Rollover sensor)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
		Short test								
		Coding / Program	ZCS/FA Coding						1.Display Coding code and print	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.Clear Adaptations 2.DME/DDE-EWS adjustment 3.CO adjustment 4.Smooth running measurement 5.Tank Leakage System Check 6.Secondary Air System Check 7.Status Diagnosis Functions 8.OBD Readiness Display 9.Idle speed adjustment 10.Program All Adjustments 11.Operation On Roller Dynamometer 1.Idle speed 2.Exhaust-gas recirculation 3.Start basic injection quantity 4.Limitation delivery 5.Injection rate 6.Consumption calculation 7.Injector rate adjustment	
			EGS Transmission control	√	√	√	√	√		
			EWS (Elec. immobilize system)	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
MINI-R50/R52/R53		Chassis	ABS Antilock brake	√	√	√	√	√	1.TEST PROCEDURES 2.BLEEDING THE ABS/ASC HYDRAULIC SYSTEM 3.RESET ABS MOTOR RELAY CLOCK COUNTER	
			LEW (Steering-angle sensor)	√	√	√	√	√		
			RDC (Tyre pressure control)	√	√	√	√	√		
			EHPS (Electrically assisted steering)	√	√	√	√	√		
		Body	AIC (Automatic Interval Control)	√	√	√	√	√		
			BM (On-board monitor)	√	√	√	√	√		
			IHKA/IHKR (AC/heater)	√	√	√	√	√	1.Flap motors 2.Coolant compressor	
			IKE/IKI/KOMBI	√	√	√	√	√	1.Reset service interval indicator	
			LSZ/LCM (Light switching center)	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD (Radio)	√	√	√	√	√		
			SRS (Air bag)	√	√	√	√	√		
			URS (Rollover sensor)	√	√	√	√	√		
			ZKE (Central body electronic)	√	√	√	√	√		
			BC1.C05						1.Recoding	
			BC1.C06						1.Recoding	
			BC1.C07						1.Recoding	
			CVM_IV.C02						1.Recoding	
			CVM_IV.C03						1.Recoding	
			CVM_IV.C04						1.Recoding	
			CVM_IV.C05						1.Recoding	
			CVM_IV.C06						1.Recoding	

BMW **V45.20** Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
		Coding / Program	EWS.C81						1.Recoding	
			LWS5.C01						1.Recoding	
			MK60.C08						1.Recoding	
			MK60.C11						1.Recoding	
			PDC.C03						1.Recoding	
			RA_NG.C01						1.Recoding	
			RLS.C02						1.Recoding	
			SHD.C03						1.Recoding	
			SHD.C04						1.Recoding	
			Service functions						1. Key Test 2. Display status of all keys 3. Disable/Enable key	
			CAS Car Access System	√	√	√	√	√	1.Personalisation key number 2.Disable_enable key	

BMW V45.20 Diagnostics List(Note:For reference only)

Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
MINI		Driver	DME Digital Motor Electronics	√	√	√	√	√	1.DME-CAS adjustment 2.CO adjustment 3.Clear adaptations 4.Delete adaptations/variants 5.Idle speed adjustment 6.Consumption indicator adjustment 7.Learning Valvetronic limit positions 8.Venting, cooling system 9.Register battery change 10.Remove Valvetronic servomotor 11.OBD readiness codes	
			EGS Transmission control	√	√	√	√	√	1.Reset adaptation values 2.Reset learning functions 3.Mechatronics adjustment 4.Oil-level adjustment	
		Chassis	ABS/ACS/DSC Dynamic Stability Control	√	√	√	√	√	1.Bleeding DSC Hydraulics 2.Mix Up Check BrakeLines	
			RDC Tyre pressure control	√	√	√	√	√		
			AHM Trailer module	√	√	√	√	√		
			AMP Hi-Fi amplifier	√	√	√	√	√		
			CA Comfort Access	√	√	√	√	√		
			CCC-A Applications	√	√	√	√	√		
			CCC-ANT Aerial tuner	√	√	√	√	√		
			CCC-ASK Audio system controller	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
MINI-R55/R56		Body	CCC-BO User interface	√	√	√	√	√		
			CCC-GW Gateway	√	√	√	√	√		
			CDC CD Changer	√	√	√	√	√		
			CID Central Information Display	√	√	√	√	√		
			CVM Convertible-top module	√	√	√	√	√		
			DAB Digital tuner	√	√	√	√	√		
			FRM Footwell Module	√	√	√	√	√	Start windows initialising Rear windows, initialising Rear windows, test	
			IBOC Digital tuner US	√	√	√	√	√		
			IHKA Integrated automatic heating/air conditioning	√	√	√	√	√		
			IHKS Intergrated heating/air-conditioning control	√	√	√	√	√		
			IHS Integrated heating control	√	√	√	√	√		
			INSTR Instrument cluster	√	√	√	√	√		
			JBE Junction-box electronics	√	√	√	√	√		
			JNAV Navigation system, Japan	√	√	√	√	√		
			MJOY MINI joystick	√	√	√	√	√		
			MRS Multiple Restraint system	√	√	√	√	√		
			PDC Park Distance Control	√	√	√	√	√		
			RAD Radio	√	√	√	√	√		
			RAD2-BO User interface	√	√	√	√	√		
			RAD2-GW Gateway	√	√	√	√	√		
			SDARS satellite tuner	√	√	√	√	√		
			SHD Sliding/tilting sunroof	√	√	√	√	√	1.Delivery position 2.Initialize slide_tilt sunroof	
			SZL Switch center, steering column	√	√	√	√	√		

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			ULF-SBX Interface box	√	√	√	√	√		
			ULF-SBX-H Interface box High	√	√	√	√	√		
			VM Video Module	√	√	√	√	√		
		Short test		√	√	√				
		Coding / Program	Maintenance \ CBS Reset						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Vehicle inspection 9.Exhaust emission inspection 10.Diesel particle filter	
			Maintenance \ CBS Correct						1.Engine Oil 2.Microfilter 3.Front barke 4.Rear brake 5.Vehicle check 6.Spark plugs 7.Brake fluid 8.Diesel particle filter 9.Vehicle inspection 10.Exhaust emission inspection	
			Maintenance						1.Delete transport mode	

BMW V45.20 Diagnostics List(Note:For reference only)

Menu				Functions						
Series	Chassis	Module	ECU System	Sys. Info.	Read code	Clear code	Data Stream	Actuation	Special Functions	Others
			Service functions						1.Adjustment, Steering-angle sensor	

(*):Tested;
(?):Manual on website(www.x431.com)
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CONNECTOR	X431	DIAGUN	
BMW-20	The year before 2002, you can easy to find the 20-pin round	N/A	
BMW-16	The year after 2002, and before 2007, there are only one OBDII	N/A	
CAN BUS II	The year after 2007, there are only one OBDII socket in cab	N/A	
diagun connector	N/A		
SUPER 16	ALL OBDII socket.	N/A	