

INSTRUCTION OVERVIEW FOR Electronic Parking Brake Service Tool

Stock No.81276

Part No.FCR-EPB

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS PRODUCT.



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DRAPER

GENERAL INFORMATION

These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product.

Whilst every effort has been made to ensure the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

TITLE PAGE

1.1 INTRODUCTION: USER MANUAL FOR: ELECTRONIC PARKING BRAKE SERVICE TOOL Stock no. 81276 Part no. FCR-EPB

1.2 REVISIONS:

Date first published July 2015

As our user manuals are continually updated, users should make sure that they use the very latest version.

Downloads are available from: http://www.drapertools.com/b2c/b2cmanuals.pgm

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1.3 UNDERSTANDING THIS MANUALS SAFETY CONTENT:

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CAUTION! Information that draws attention to the risk of damage to the product or surroundings.

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GUARANTEE

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Safety Information

For your own safety and the safety of others, and to prevent damage to the equipment and vehicles, read this manual thoroughly before operating your EPB service tool. The safety messages presented below and throughout this user's manual are reminders to the operator to exercise extreme care when using this device. Always refer to and follow safety messages and test procedures provided by vehicle manufacturer. Read, understand and follow all safety messages and instructions in this manual.

Safety Message Conventions Used

We provide safety messages to help prevent personal injury and equipment damage. Below are signal words we used to indicate the hazard level in a condition.

A DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury to the operator or to bystanders.

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.

Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor injury to the operator or to bystanders.

Important Safety Instructions

And always use your EPB service tool as described in the user's manual, and follow all safety messages.

- Do not route the test cable in a manner that would interfere with driving controls.
- Do not exceed voltage limits between inputs specified in this user's manual.
- Always wear goggles to protect your eyes from propelled objects as well as hot or caustic liquids.
- Fuel, oil vapors, hot steam, hot toxic exhaust gases, acid, refrigerant and other debris produced by a malfunction engine can cause serious injury or death. Do not use the EPB service tool in areas where explosive vapor may collect, such as in below-ground pits, confined areas, or areas that are less than 18 inches (45 cm) above the floor.
- Do not smoke, strike a match, or cause a spark near the vehicle while testing and keep all sparks, heated items and open flames away from the battery and fuel / fuel vapors as they are highly flammable.
- Keep a dry chemical fire extinguisher suitable for gasoline, chemical and electrical fires in work area.
- Always be aware of rotating parts that move at high speed when an engine is running and keep a safe distance from these parts as well as other potentially moving objects to avoid serious injury.
- Do not touch engine components that get very hot when an engine is running to avoid severe burns.
- Block drive wheels before testing with engine running. Put the transmission in park (for automatic transmission) or neutral (for manual transmission). And never leave a running engine unattended.
- Do not wear jewelry or loose fitting clothing when working on engine.

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Note: Draper Tools accepts no responsibility for any accident or injury arising from servicing the vehicles system. When interpreting results from the vehicle, always follow the manufacturer's recommendation for repair.

1 Using This Manual

We provide tool usage instructions in this manual. Below are the conventions we used in the manual.

1.1 Bold Text

Bold text is used to highlight selectable items such as buttons and menu options.

Example:

Press the ENTER button to select.

1.2 Symbols and Icons

1.2.1 Solid Spot

Operation tips and lists that apply to specific tool are introduced by a solid spot •.

Example:

When System Setup is selected, a menu that lists all available options displays. Menu options include:

- Languages
- Unit
- Beep
- Keypad Test
- LCD Test
- About
- Shortcuts

1.2.2 Arrow Icon

An arrow icon indicates a procedure.

Example:

To change menu language:

1. Scroll with the arrow keys to highlight Language on the menu.

2. Press the ENTER button to select.

1.2.3 Note and Important Message

Note

A NOTE provides helpful information such as additional explanations, tips, and comments.

Example:

NOTE

Test results do not necessarily indicate a faulty component or system.

Important

IMPORTANT indicates a situation which, if not avoided, may result in damage to the test equipment or vehicle.

Example:

IMPORTANT

Do not soak keypad as water might find its way into the EPB service tool.

2 Introduction

The new Electronic Park Brake Service Tool is specially designed to allow the service and maintenance of brake systems on multiple brands of vehicles where electronic brake systems are fitted.

With the tool properly connected to the vehicle's data link connector (DLC), you can use the EPB service tool to read diagnostic trouble codes and view "live" data readings from EPB control systems. You can also save "recordings" of the data readings.

2.1 Descriptions

This section illustrates external features, ports and connectors of the tool.



Figure 2-1 Front View

- 1 Diagnostic Port provides connection between the EPB service tool and vehicle.
- 2 LCD Display shows menus, test results and operation tips.
- 3 Function Keys / Shortcut keys three keys that correspond with "buttons" on some screens for executing special commands or provide quick access to most frequently used applications or functions.
- 4 ENTER Key executes a selected option and generally goes to the next screen.
- 5 Direction Keys select an option or scroll through a screen of data or text.

6 **Power Switch** - turns on/off the EPB service tool and press and hold for 5 seconds for emergency reboots.

- 7 HELP Key displays helpful information.
- 8 BACK Key exits a screen and generally returns to previous screen.

9 TF Card Port - holds the TF memory card for data backup and software update.

10 USB Port - provides a USB connection between the EPB service tool and PC or laptop.

IMPORTANT

Do not use solvents such as alcohol to clean keypad or display. Use a mild nonabrasive detergent and a soft cotton cloth.

2.2 Accessory Descriptions

This section lists the accessories that go with the EPB service tool. If you find any of the following items missing from your package, contact your local dealer for assistance.

- 1 User's Guide provides operation instructions for the usage of the EPB service tool.
- 2 **USB Cable** provides connection between the EPB service tool and a computer to upgrade the tool.
- 3 TF Memory Card contains the EPB service tool's operating software and applications.

IMPORTANT

Do not remove the memory card unless performing updates to the card.

- 4 Diagnostic Cable provides connection between the EPB service tool and vehicle.
- 5 Nylon Carry Pouch stores the EPB service tool and its accessories.

2.3 Technical Specifications

Display: Backlit, 480*272 TFT color display

Working Temperature: 0 to 60 \degree C (32 to 140 \degree F)

Storage Temperature: -20 to 70° C (-4 to 158° F)

Power Supply: 8-18V vehicle power, 12V AC/DC power, 3.3V USB power

Dimensions (L*W*H): 200*130*40mm

Gross Weight: 1.2Kg

Protocols: SAE J1850 (VPW and PWM), ISO 9141-2, ISO 14230-2 (KWP 2000), ISO 15765-4 (CAN)

3 Getting Started

This section describes how to provide power to the EPB service tool, provides brief introductions of applications loaded on the EPB service tool and display screen layout and illustrates how to input text and numbers with the EPB service tool.

3.1 Providing Power to EPB Service Tool

Before using the EPB service tool, make sure to provide power to the EPB service tool.

The unit operates on any of the following sources:

- 12-volt vehicle power
- USB connection to personal computer

3.1.1 Connecting to Vehicle Power

The EPB service tool normally powers on whenever it is connected to the data link connector (DLC).



To connect to vehicle power:

- 1. Locate the data link connector (DLC). The DLC is generally located under the dash on the driver side of the vehicle.
- 2. Attached the diagnostic cable to the EPB service tool and tighten the captive screws to ensure good connection.
- 3. Connect a correct adapter to the data cable according to the vehicle being serviced and plug it into the vehicle DLC.
- 4. Switch the ignition key to the ON position.
- 5. The EPB service tool automatically boots up.

IMPORTANT

Never try to provide power for the EPB service tool from USB connection when the EPB service tool is communicating with a vehicle.

3.1.2 Connecting to Personal Computer with USB Cable

The EPB service tool also receives power through the USB port when it is connected to a PC for updating software and transferring saved files.

To connect to PC:

- 1. Insert the small end of the USB cable to the USB port at the right side of the EPB service tool and the large end to a computer.
- 2. Press the power switch of the EPB service tool to power it on.

3.2 Application Overview

When the EPB service tool boots up, the home screen opens. This screen shows all applications loaded on the unit.

Following applications are preloaded into the EPB service tool:

- OBDII/EOBD leads to OBDII screens for all 9 generic OBD system tests.
- EPB leads to screens for diagnostic trouble code information, live datastream, ECU information, special functions of electric parking brake systems on 13 vehicle makes sold worldwide.
- Setup leads to screens for adjusting default settings to meet your own preference and view information about the EPB service tool.
- Playback leads to screens for access saved data files.



Figure 3-1 Sample Home Screen

3.3 Input Dialog Box

This section illustrates how to use the tool to input letters and numbers, such as VIN number, channel number, test values and DTC number. Typically, you may be required to input letters or numbers when you are doing any of the following operations.

- VIN entry
- input channel number
- set adaptation value
- look up DTCs

The tool provides 4 different types of keyboard to meet your specific needs. Depending on the needs of text entry, it automatically shows the most suitable keypad.

- classic QWERTY keyboad for input of texts that contain both letters and numbers
- numeric keyboard for input of numbers

- alphabet keyboard for input of letters
- hexadecimal keyboard for special functions.
- To input text with the EPB service tool:

1. When you are requested to input text, press the function key **Keyboard**, and the keyboard displays.



Figure 3-2 Sample Input Text Screen

Scroll with the arrow keys to highlight your desired letter or number and press the ENTER key to confirm.



Figure 3-3 Sample Numeric Keyboard Screen

- 3. To delete a letter or number, use the function key **Previous** to move the cursor to it and then press the **Backspace** button.
- 4. When finished the entry, press Finish key to continue.

4 Diagnostic Operations

This section illustrates how to use the EPB service tool to read and clear diagnostic trouble codes, and view "live" data readings and ECU information on Electronic Parking Brake systems of 13 vehicles and also save "recordings" of the data readings.

4.1 Vehicle Identification

The vehicle identification information presented is provided by the ECM of the vehicle being tested. Therefore, certain attributes of the test vehicle must be entered into the tool to ensure the data displays correctly. The vehicle identification sequence is menu driven, you simply follow the screen prompts and make a series of choices. Each selection you make advances you to the next screen. Exact procedures may vary somewhat by vehicle.

It typically identifies a vehicle by the following methods.

- Manual vehicle selection
- Manual VIN entry

NOTE

Not all identification procedure listed below is applicable to all vehicles. Available options may vary by vehicle manufacturer.

4.1.1 Manual Vehicle Selection

- To identify a vehicle by manual vehicle selection:
 - 1. Scroll with the arrow keys to highlight **EPB** from the Application menu and press the **ENTER** key to start. If you have the application assigned to one of the function keys at the bottom of the screen, you can alternatively press the function key to start the application.



Figure 4-1 Sample Application Menu

2. A screen with vehicle manufacturer displays. Select the vehicle manufacturer being tested.



Figure 4-2 Sample Vehicle Manufacturer Selection Screen

On each screen that appears, select the correct option and then press the ENTER key. Do this until the complete vehicle information is entered and the diagnostic menu displays.

Application/EPB														
				VOLVO										
Toyota	~	N		Volvo		N	abielo							
						v	enicie	_						
	1	XC7	כ		$\{ \cdot \}$	<u>.</u>		./		1				
	2	XC6)					1	£ 1					
000	3	V70							Year					
OBDI	4	S80		1	2009									
				2	2008									
				3	2007						L.	J.		
	-													

Figure 4-3 Sample Vehicle Selection Screen

4.1.2 Manual VIN Entry

Manual VIN Entry identifies a vehicle by manually inputting a 17-digit VIN code.

- To identify a vehicle by manual VIN entry:
 - 1. Refer to Step 1-2 of 4.1.1 manual vehicle selection.
 - 2. A virtual keyboard opens for VIN entry. Input a valid VIN code as required on screen and use the function key **Finish** to confirm. The tool starts to identify the vehicle.

	VIN Enter											
J34	J34210											
Q	W	Е	R	т	Y	U	-	0	P	7	8	9
Α	S	D	F	G	н	J	к	L	*	4	5	6
Ζ	X	С	V	В	Ν	М	-	,	/	1	2	3
Ca	Caps Lock SPACE						•	0	-			
	Finish Previous Backspace						e					
Finish Previous					JS			Васк	space	9		

Figure 4-4 Sample Manual VIN Entry with Keyboard

4.2 Diagnostic Function Selection

This section illustrates how to work on the electronic parking brake systems.

- To perform diagnosis:
 - 1. Turn the ignition off.
 - 2. Release the park brake and make sure the car is properly blocked.
 - 3. Locate the vehicle'16-pin Data Link Connector (DLC)
 - 4. Plug into the diagnostic cable to the vehicle's DLC.
 - 5. Turn the ignition on.
 - 6. Scroll with the arrow keys to highlight EPB from Home screen and press the ENTER key.
 - 7. After you have completed the identification of vehicle and the EPB service tool establishes communication with the vehicle, the Diagnostic Menu displays.

The menu options may include:

Read Codes

- Erase Codes
- Live Data
- ECU Information
- Special Function

NOTE

Not all function options listed above are applicable to all vehicles. Available options may vary by the year, model, and make of the test vehicle. A "The selected mode is not supported!" message displays if the option is not applicable to the vehicle under test.

4.2.1 Read Codes

Read Codes menu lets you read trouble codes found in the control unit.

To read codes from a vehicle:

1. Scroll with the arrow keys to highlight Read Codes from Diag. Menu and press the ENTER key.

	Diag. Menu
1	Read Codes
2	Erase Codes
3	Live Data
4	ECU Information
5	Special Function

Figure 4-5 Sample Function Menu Screen

 A code list including code number and its description displays. Use the up and down arrow keys to scroll through data to select lines, and left and right arrow keys to scroll back and forth through different screens of data.



Figure 4-6 Sample Code Screen

- 3. Press function key Save to store DTC information. Or use the BACK key to exit.
- 3. If there is no trouble code, the following screen displays. Press any key to return to the function menu.



Figure 4-7 Sample No Fault Screen

4.2.2 Erase Codes

Erase Codes menu lets you to clear all current and stored DTCs from the control module. Also it erases all temporary ECU information, so make sure that the selected system are completely checked and serviced by technicians and no vital information will be lost before clearing codes.

NOTE

- To clear codes, make sure that the ignition key is switched to ON with the engine off.
- Erase Codes does not fix the problem that caused the fault! DTCs should only be erased after correcting the condition(s) that caused them.

To clear codes:

1. Scroll with the arrow keys to highlight **Erase Codes** from Diag. Menu and press the **ENTER** key.

	Diag. Menu
1	Read Codes
2	Erase Codes
3	Live Data
4	ECU Information
5	Special Function

Figure 4-8 Sample Function Menu Screen

2. Follow the on-screen instructions and answer questions about the vehicle being tested to enter into next screen.



Figure 4-9 Sample Erase Codes Screen 1

3. Press the function key **Yes** to complete the procedure.



Figure 4-10 Sample Erase Codes Screen 2

3. Check the codes again. If any codes remain, repeat the Erase Codes steps.

4.2.3 Live Data

Live Data menu lets you view and record real time PID data from EPB system. Menu options typically include:

- All Data List
- Custom Data List

4.2.3.1 All Data List

ALL Data List menu lets you view all live PID data from EPB system.



To view all live PID data

1. Scroll with the arrow keys to highlight Live Data from the menu.



Figure 4-11 Sample Diag. Menu Screen

2. Press the **ENTER** key to display the live data menu.

	Live Data
1	All Data
2	Custom List

Figure 4-12 Sample Live Data Selection Screen

3. Select the All Data from the menu and press the ENTER key to display the datastream screen.

Live Data		
Voltage of terminal 87 at control unit	0.0	V
A7/3n1(SBC Control unit)		
Wake-up line from control unit N10/10	0.1	V
(Driver-side SAM control module)		
Power supply Valve relay	0.0	V
Power supply A7/3m1 (High Pressure and	0.1	V
Pause One Graphic	S	ave

Figure 4-13 Sample All Data Screen

4. Scroll with the up and down arrow keys to highlight a line, if the **One Graphic** on the bottom is highlighted, it indicates the graphing is available for the selected line. Press the function key **One Graphic** to display the PID graph.

L6/1 (Left front spe	eed sensor)	10 mph 15.0
		5.0
Pause	Two Graphics	Save

Figure 4-14 Sample PID graph Screen

5. Press the function key Two Graphics to display two PID graphs in one screen.



Figure 4-15 Sample Two PID Graph Screen

6. Press the function key **Merge Graph** to display two PID plots in one coordinate for easy and intuitive diagnosis.



Figure 4-16 Sample Merged PID Plots Screen

- 7. To record the data to memory of the EPB service tool, use the function key **SAVE**, and press **Stop Saving** to stop recording at any time.
- 8. Press Text to return to text viewing of PID data.
- 9. Select **Pause** to suspend collecting data from the EPB service tool and use the **Continue** key to resume collecting data.
- 10.Press the **Back** key to return to the previous menu.

4.2.3.2 Custom Data List

Custom Data List menu lets you to minimize the number of PIDs on the data list and focus on any suspicious or symptom-specific data parameters.



- To create a custom data list:
- 1. Select Custom List from the menu and press the ENTER key.



Figure 4-17 Sample Live Data Screen

2. The custom datastream selection screen displays. Scroll with the up and down arrow keys to highlight a line, press the **ENTER** key and then repeat the action to make more selections.

	Live Data	
1	Voltage of terminal 87 at control unitA7/3n1(SBC	1
	Control unit)	
1	Wake-up line fron control unit N10/10 (Driver-side SAM	2
	control module)	
1	Power supply Valve relay	3
V	Power supply A7/3m1 (High Pressure and return pump)	4
1	L6/1 (Left front speed sensor)	5
	Selected All Clear All View D	ata

Figure 4-18 Sample Custom List Selection Screen

NOTE

To deselect an item, select it again and then press the **ENTER** key. Alternatively, use the function keys **SELECT ALL** and **CLEAR ALL** to select or deselect all items at once.

3. When finished selection, use the function key VIEW DATA to display selected items.

Live Data		
Voltage of terminal 87 at control unit	0.0	V
A7/3n1(SBC Control unit)		
Wake-up line from control unit N10/10	0.1	V
(Driver-side SAM control module)		
Power supply Valve relay	0.0	V
Power supply A7/3m1 (High Pressure and	0.1	V
Pause One Graphic	S	ave

Figure 4-19 Sample Datastream Screen

4.2.4 ECU Information

ECU Information screen displays the identification data of the control module under test, such as the control module identification string and the control module coding.

I

To read ECU information: 1. Select ECU Information from Diag. menu and press the ENTER key.

	Diag. Menu
1	Read Codes
2	Erase Codes
3	Live Data
4	ECU Information
5	Special Function

Figure 4-20 Sample Function Menu Screen

2. A screen with detailed information of the selected control module displays.

ЕРВ			
MB number	0355456232		
Supplier	Bosch		
Hardware status	11 / 04		
Software statua	11 / 04		
Diagnosis identifier	0/3		
Save	Back		

Figure 4-21 Sample ECU Information Screen

3. Press function key Save to store ECU information. Or use the BACK key to exit.

4.2.5 Special Functions

Special Functions let you perform bi-directional tests on electronic parking brake systems of multiple vehicle brands. The tests let you to deactivate and re-activate brake control system, set new brake pad thickness after AUDI A8 service, bleed the brake systems and more.

Some tests display a command to the operator. For example, if "Pressing Brake Pedal" displays, the operator has to press and hold the brake pedal and then continue. Actual tests vary by vehicle manufacturer, year, make.

Typical special test options include:

Deactivate/Activate SBC/EPB systems – allows to deactivate brakes for further service or maintenance work on brake systems or activate brakes when service or maintenance work on brake systems are completed.

Adaptation on Audi A8 – allows to set new pad thickness of rear brakes calipers after changing brake discs & pads on Audi A8 models.

Replace hydraulic brake systems fluid/bleed brake system on Mercedes SBC vehicles – allows to change brake fluid/bleed brake system.

Perform service reset and service position on BMW EPB vehicles – allows to do the CBS reset and CBS correction for front brake and rear brake.

Perform activation/service work on Volvo PBM vehicles – allows to perform installation check, applying parking brake, releasing parking brake, activating service mode and exiting service mode.

Reset memory on Toyota EPB vehicles – allows to clear the learned memory of the EPB ECU.

Perform brake cable replacement and electric parking brake replacement – allows to fit in or remove the brake cable safely, adjust brake cable's tension and calibrate the electric parking brake replacement.

Save and write clutch pedal programming on Renault EPB vehicles – allows to save clutch pedal programming on Renault vehicles fitted with manual gearbox. After this command is activated, the tool allows to "flash" the electric parking brake unit with the saved clutch data.

Perform control function and reset function on Opel EPB vehicles – allows to apply/release park brake cable service, provide park brake cable service replacement procedures and calibrate the parking brake systems after brake service.

Sensor calibration on Honda EPB vehicles – allows to program the current output value of each sensor into the electric parking brake unit.

Provides parking brake unjam procedure and perform longitudinal accelerometer calibration on Land Rover EPB vehicles – allows to drive the electronic park brake so it is unjamed in the releasing direction and then drive it into mounting position or the latching position; also allows to perform longitudinal accelerometer calibration.

EPB systems must be deactivated before carrying out any maintenance/service work on the brakes such as changing of pads, discs and calipers.

Use proper tools to avoid the risk of body injuries of mechanics and technicians and damage to the brake system.

Make sure the vehicle is properly blocked after deactivation of the systems.

- To perform special tests on a vehicle:
 - Scroll with the arrow keys to highlight the Special Function from the Diag. Menu and press the ENTER key.

	Diag. Menu
1	Read Codes
2	Erase Codes
3	Live Data
4	ECU Information
5	Special Function

Figure 4-22 Sample Function Menu Screen

2. A group selection screen, test selection screen, several step-by-step instruction screens may appear. Select the special function you want to perform from the menu and press the ENTER key. Read and follow all on-screen instructions carefully. If necessary, use the function keys to perform commands or answer any questions. If more than 3 function keys displays, use the left and right arrow keys to select a command and press the ENTER key to confirm.

	ЕРВ
1	Deactivate system 'SBC'
2	Activate system 'SBC'
3	Customer complaints(without fault codes)
4	Replace hydraulic brake system fluid./Bleed brake
	system

Figure 4-23 Sample Special function Screen

3. When completed, press the **BACK** key to return to previous screens.

5 OBDII/EOBD Operations

OBD-II/EOBD menu lets you access all OBD service modes. According to ISO 9141-2, ISO 14230-4, and SAE J1850 standards, the OBD application is divided into several sub programs, called 'Service \$xx'. Below is a list of OBD diagnostic services:

- Service \$01 request current powertrain diagnostic data
- Service \$02 request powertrain freeze frame data
- Service \$03 request emission-related diagnostic trouble codes
- Service \$04 clear/reset emission-related diagnostic information
- Service \$05 request oxygen sensor monitoring test results

- Service \$06 request on-board monitoring test results for specific monitored systems
- Service \$07 request emission-related diagnostic trouble codes detected during current or last completed driving cycle
- Service \$08 request control of on-board system, test or component
- Service \$09 request Vehicle Information

When OBDII/EOBD application is selected from Home screen, the EPB service tool starts to detect the communication protocol autometically. Once the connection has established, a menu that lists all of the tests available on the identified vehicle displays. Menu options typically include:

- System Status
- Read Codes
- Freeze Frame Data
- Erase Codes
- Live Data
- I/M Readiness
- O2 Sensor Test
- On-board Monitor Test
- Component Test
- Vehicle Information
- Modules Present
- Code Lookup

NOTE

Not all function options listed above are applicable to all vehicles. Available options may vary by the year, model, and make of the test vehicle. A "The selected mode is not supported!" message displays if the option is not applicable to the vehicle under test.

5.1 System Status

System Status option open a screen with a summary of system status of the vehicle under test.

- To view summary system status of a vehicle:
 - 1. Scroll with the arrow keys to highlight **System Status** from Diagnostic Menu and press the **ENTER** key.

	Diagnostic Menu
1	System Status
2	Read Codes
3	Erase Codes
4	Live Data
5	Freeze Frame
6	I/M Readiness
7	O2 Monitor Test
8	On-board Monitor Test

Figure 5-1 Sample Diagnostic Menu Screen

2. A screen with detailed information displays.

System Status			
MIL Status	OFF		
Code Found	0		
Monitors N/A	OFF		
Monitors OK	3		
Monitors INC	3		
	H & L		
	A Carl		

Figure 5-2 Sample System Status Screen

5.2 Read Codes

Read Codes menu lets you read both stored codes and pending codes found in the control unit. Typical menu options include:

- Stored Codes
- Pending Codes

Diagnostic trouble codes stored in a control module are used to help identify the cause of a trouble or troubles with a vehicle. These codes have occurred a specific number of times and indicate a problem that requires repair.

Pending codes are also referred to as maturing codes that indicate intermittent faults. If the fault does not occur within a certain number of drive cycles (depending on vehicle), the code clears from memory. If a fault occurs a specific number of times, the code matures into a DTC and the MIL illuminates or blinks.

To read codes/pending codes from a vehicle:

1. Scroll with the arrow keys to highlight **Read Codes** from Diagnostic Menu and press the **ENTER** key.

	Diagnostic Menu
1	System Status
2	Read Codes
3	Erase Codes
4	Live Data
5	Freeze Frame
6	I/M Readiness
7	O2 Monitor Test
8	On-board Monitor Test

Figure 5-3 Sample Diagnostic Menu Screen

Select Stored Codes/Pending Codes and press the ENTER key to confirm. A code list including code number and its description displays.



Figure 5-4 Sample Read Codes Screen

If no DTCs are present the message "No (Pending) Codes Found!" is displayed. If any manufacturer specific or enhanced codes detected, select vehicle a make before viewing DTC information.



Figure 5-5 Sample No Codes Screen

3. Use the up and down arrow keys to scroll through data to select lines, and left and right arrow keys to scroll back and forth through different screens of data.

Trouble Codes				
P0113/\$10 Intake Air Temperature Sensor 1 Circuit High				
P0123/\$10	Throttle/Pedal Position Sensor/Switch A Circuit High			
P0222/\$10	Throttle/Pedal Position Sensor/Switch B Circuit Low			
P2122/\$10	Throttle/Pedal Position Sensor/Switch D Circuit Low			
P2127/\$10	Throttle/Pedal Position Sensor/Switch E Circuit Low			
U0001/\$10	High Speed CAN Communication Bus			
P0100/\$10	Mass or Volume Air Flow A Circuit			
Save				

Figure 5-6 Sample Code Screen

4. Press function key Save to store DTC information. Or use the BACK key to exit.

5.3 Erase Codes

Erase Codes menu lets you to clear all current and stored DTCs from the control module. Also it erases all temporary ECU information, including freeze frame. So make sure that the selected system are completely checked and serviced by technicians and no vital information will be lost before clearing codes.

NOTE

- To clear codes, make sure that the ignition key is switched to ON with the engine off.
- Erase Codes does not fix the problem that caused the fault! DTCs should only be erased after correcting the condition(s) that caused them.

To clear codes:

1. Scroll with the arrow keys to highlight **Erase Codes** from Diagnostic Menu and press the **ENTER** key.

	Diagnostic Menu
1	System Status
2	Read Codes
3	Erase Codes
4	Live Data
5	Freeze Frame
6	I/M Readiness
7	O2 Monitor Test
8	On-board Monitor Test

Figure 5-7 Sample Diagnostic Menu Screen

2. Follow the on-screen instructions and answer questions about the vehicle being tested to complete the procedure.



Figure 5-8 Sample Erase Codes Screen

3. Check the codes again. If any codes remain, repeat the Erase Codes steps.

5.4 Live Data

Live Data menu lets you view and record real time PID data from the electronic control module.

Menu options typically include:

- Complete Data List
- Custom Data List

5.4.1 Complete Data List

Complete Data List menu lets you view all live PID data from a selected system.

- To view all live PID data:
 - 1. Scroll with the arrow keys to highlight Live Data from Diagnostic Menu and press the ENTER key.

	Diagnostic Menu
1	System Status
2	Read Codes
3	Erase Codes
4	Live Data
5	Freeze Frame
6	I/M Readiness
7	O2 Monitor Test
8	On-board Monitor Test

Figure 5-9 Sample Diagnostic Menu Screen

2. Select **Complete List** from the menu and press the **ENTER** key to display the datastream screen

	Live Data
1 Complete List	
2 Custom List	

Figure 5-10 Sample Live Data Menu Screen

3. Use the up and down arrow keys to scroll through data to select lines, and left and right arrow keys to scroll back and forth through different screens of data.

Complete List			
Number of DTCs		0	
Fuel Systems 1 Status		OL	
Fuel Systems2 Status			
Calculate load value	م المر محمقة من	0.0	%
Engine Coolant Temperatu	ıre	57	°F
Short Term Fuel Trim-Ban	k 1	0.0	%
Pause	One Graphic	Save	

Figure 5-11 Sample Complete List Screen

4. Scroll with the up and down arrow keys to highlight a line, if the **One Graphic** on the bottom is highlighted, it indicates the graphing is available for the selected line. Press the function key **One Graphic** to display the PID graph.



Figure 5-12 Sample PID Graph Screen

5. Press the function key Two Graphics to display two PID graphs in one screen



Figure 5-13 Sample Two PID Graph Screen

6. Press the function key **Merge Graph** to display two PID plots in one coordinate for easy and intuitive diagnosis.



Figure 5-14 Sample Merge Graph Screen

- 7. To record the data to memory of the EPB service tool, use the function key **SAVE**, and press **Stop Saving** to stop recording at any time.
- 8. Select Text to return to text viewing of PID data.
- 9. Press Pause to suspend collecting data and use the Start key to resume collecting data.

10.Use the **Back** key to return to diagnostic menu.

5.4.2 Custom Data List

Custom Data List menu lets you to minimize the number of PIDs on the data list and focus on any suspicious or symptom-specific data parameters.

- To create a custom data list:
 - 1. Select Custom List from the menu and press the ENTER key.



Figure 5-15 Sample Live Data Menu Screen

2. The custom datastream selection screen displays. Scroll with the up and down arrow keys to highlight a line, press the **ENTER** key and then repeat the action to make more selections.

Cus	tom List	
Mumbers of DTCs		1
Vert Fuel Systems 1 Status		2
Tuel Systems2 Status		3
Calculate load value		4
M Engine Coolant Temperature		5
M Short Term Fuel Trim-Bank 1		6
Multication Long Term Fuel Trim-Bank 1		7
Selected All C	lear All View Da	ata

Figure 5-16 Sample Custom Datastream Selection Screen

NOTE

To deselect an item, select it again and then press the **ENTER** key. Alternatively, use the function keys **SELECT ALL** and **CLEAR ALL** to select or deselect all items at once.

3. When finished selection, use the function key VIEW DATA to display selected items.

Custom List		
Number of DTCs	0	
Fuel Systems 1 Status	OL	
Fuel Systems2 Status	- 1	
Calculate load value	0.0	%
Engine Coolant Temperature	57	°F
Short Term Fuel Trim-Bank 1	0.0	%
Pause One Graphic	Si	ave

Figure 5-17 Sample Datastream Screen

5.5 Freeze Frame

Freeze Frame menu displays freeze frame data, a snapshot of critical vehicle operating conditions automatically recorded by the on-board computer at the time of the DTC set. It is a good function to help determine what caused the fault.



To view freeze frame data:

1. Select Freeze Frame from the Diagnostic Menu. Details of freeze frame data displays.

	Diagnostic Menu
1	System Status
2	Read Codes
3	Erase Codes
4	Live Data
5	Freeze Frame
6	I/M Readiness
7	O2 Monitor Test
8	On-board Monitor Test

Figure 5-18 Sample Diagnostic Menu Screen

2. Use the up and down arrow keys to scroll through data to select lines, and left and right arrow keys to scroll back and forth through different screens of data. If no freeze frame detected, the message "No freeze frame data stored!" is displayed.

Freeze Frame Data		
Load	0.0%	
speed	0. km/h	
Temperature	-12 °C	
Temperature	-40°C	
Absolute pressure	0.00 mbar	
Voltage	0.000V	
Timing angle	5.5 BTDC	
Save	Back	

Figure 5-19 Sample Freeze Data Screen

3. Press function key Save to store freeze frame information. Or use the BACK key to exit.

5.6 Read I/M Readiness Status Data

I/M Readiness option allows to view a snapshot of the operations for the emission system on OBDII/EOBD vehicles.

I/M Readiness is a useful function used to check if all monitors are OK or N/A. The vehicle's computer performs tests on the emission system during normal driving conditions. After a specific amount of drive time (each monitor has specific driving conditions and time required), the computer's monitors decide if the vehicles emission system is working correctly.

When the monitor's status is:

- OK vehicle was driven enough to complete the monitor.
- INC (Incomplete) vehicle was not driven enough to complete the monitor.
- N/A (Not Applicable) vehicle does not support that monitor.

There are two types of I/M Readiness tests:

- Since DTCs Cleared shows status of the monitors since the DTCs were last cleared.
- This Drive Cycle shows status of monitors since the start of the current drive cycle.

Below is a list of abbreviations and names of OBD II monitors supported by the EPB service tool.

No.	Abbreviation	Name
1	Misfire Monitor	Misfire Monitor
2	Fuel System Mon	Fuel System Monitor
3	Comp. Component	Comprehensive Components Monitor
4	Catalyst Mon	Catalyst Monitor
5	Htd Catalyst	Heated Catalyst Monitor
6	Evap System Mon	Evaporative System Monitor
7	Sec Air System	Secondary Air System Monitor
8	A/C Refrig Mon	Air Conditioning Refrigerant Monitor
9	Oxygen Sens Mon	Oxygen Sensor Monitor
10	Oxygen Sens Htr	Oxygen Sensor Heater Monitor
11	EGR System Mon	Exhaust Gas Recirculation System Monitor

NOTE

- To review I/M Readiness status, make sure that the ignition key is switched to ON with the engine off.
- Not all monitors are supported by all vehicles.

To retrieve I/M Readiness Status data:

1. Scroll with the arrow keys to highlight *I/M* Readiness from Diagnostic Menu and press the ENTER key. If vehicle supports both types of monitors, a screen for monitor type selection displays. Select a monitor type and press the ENTER key.

	Diagnostic Menu
1	System Status
2	Read Codes
3	Erase Codes
4	Live Data
5	Freeze Frame
6	I/M Readiness
7	O2 Monitor Test
8	On-board Monitor Test

Figure 5-20 Sample Diagnostic Menu Screen

Depending on readiness test, one of these 2 screens will be present. Use the up and down arrow keys to scroll through data to select lines, and left and right arrow keys to scroll back and forth through different screens of data.

Since DTCs cleared		
Malfunction Indicator lamp(MIL) Status	OFF	
Misfire Monitoring	ОК	
Fuel system Monitoring	ОК	
Comprehensive component Monitoring	ОК	
Catalyst Monitoring	INC	
Heated Catalyst Monitoring	N/A	
Evaporative system Monitoring	INC	
Secondary air system Monitoring	N/A	

Figure 5-21 Sample IM Readiness Screen 1

Or

This Drive Cycle		
Malfunction Indicator lamp(MIL) Status	OFF	1
Misfire Monitoring	ОК	
Fuel system Monitoring	OK	
Comprehensive component Monitoring	OK	
Catalyst Monitoring	INC	
Heated Catalyst Monitoring	N/A	
Evaporative system Monitoring	INC	
Secondary air system Monitoring	N/A	

Figure 5-22 Sample IM readiness screen 2

3. Press the **BACK** key to exit.

5.7 O2 Monitor Test

OBD II regulations require certain vehicles monitor and test oxygen (O2) sensors to isolate fuel and emissions related faults. The O2 Monitor Test function is used to retrieve completed O2 sensors monitor test results.

The O2 Monitor Test is not an on-demand test. O2 sensors are not tested when selected via the menu but tested when engine operating conditions are within specified limits.

If the vehicle uses a controller area network (CAN) protocol to communicate, this function is not supported by vehicle. Refer to "On-Board Monitor Tests" on page 38-39 for O2 monitor data of CAN-equipped vehicles.



To retrieve O2 monitor data:

1. Scroll with the arrow keys to highlight **O2 Monitor Test** from Diagnostic Menu and press the **ENTER** key. A screen with a list of available sensors displays.

	Diagnostic Menu
1	System Status
2	Read Codes
3	Erase Codes
4	Live Data
5	Freeze Frame
6	I/M Readiness
7	O2 Monitor Test
8	On-board Monitor Test

Figure 5-23 Sample Diagnostic Menu Screen

2. Scroll with the arrow keys to highlight an O2 sensor and press the **ENTER** key to confirm. A screen with details of the selected sensor displays.

	O2 Monitor Test
1 O2 Bank1 Sensor1	
2 O2 Bank1 Sensor2	

Figure 5-24 Sample O2 Monitor Test screen

3. Use the up and down arrow keys to scroll through data to select lines, and left and right arrow keys to scroll back and forth through different screens of data.

		O2 Bank1 Sensor 1	
1	\$81		[]]
2	\$82		
3	\$83		

Figure 5-25 Sample O2 Bank1 Sensor 1 Screen

4. Press Enter key to view data of selection.

\$81			
Module	\$10		
Test Value	15		
Min Limit	0		
Max Limit	255		
Save			

Figure 5-26 Sample data of \$81 screen

5. Press the BACK key to exit and return.

5.8 On-Board Monitor Test

The On-Board Monitor Test function is useful after servicing or after clearing a vehicle ECU's memory. It receives test results for emission-related powertrain components and systems that are not continuously monitored for Non-CAN vehicles. And for CAN vehicles, it receives test data for emission-related powertrain components and systems that are and are not continuously monitored. It is vehicle manufacturer who is responsible for assigning test and component IDs.

NOTE

Test results do not necessarily indicate a faulty component or system.

To request on-board monitor test results:

1. Scroll with the arrow keys to highlight **On-Board Monitor Test** from Diagnostic Menu and press the **ENTER** key.

	Diagnostic Menu
1	System Status
2	Read Codes
3	Erase Codes
4	Live Data
5	Freeze Frame
6	I/M Readiness
7	O2 Monitor Test
8	On-board Monitor Test

Figure 5-27 Sample Diagnostic Menu Screen

2. Depending on the protocol the vehicle used, one of these 2 screens shows.







Figure 5-29 Sample CAN vehicle test screen

3. Scroll with the arrow keys to highlight a test group and press the ENTER key to confirm. A screen with details of the selected sensor displays. Use the up and down arrow keys to scroll through data to select lines, and left and right arrow keys to scroll back and forth through different screens of data.

For non-CAN vehicles, test screen is illustrated as below:

Or

Test \$01 Data			
ID	00		
Module	\$10		
Test Value	0000		
Min Limit			
Max Limit	0000		
Status	ок		

Figure 5-30 Sample Non-CAN vehicle test screen
For CAN vehicles, test screen is illustrated as below:

Test \$01 Data	
MEAS	0.450
MIN	0.312
МАХ	0.630
STS	ОК

Figure 5-31 Sample Can vehicle test screen

4. Press the **BACK** key to exit and return.

5.9 Component Test

Component Test allows the EPB service tool to control operation of vehicle components, tests or systems.

NOTE

- Some manufacturers do not allow tools to control vehicle systems.
- •The manufacturer sets the criteria to automatically stop test. Refer to appropriate vehicle service manual before using this function.

To perform a component test:

1. Scroll with the arrow keys to highlight **Component Test** from Diagnostic Menu and press the **ENTER** key. A screen with a list of available tests displays.

	Diagnostic Menu
6	I/M Readiness
7	O2 Monitor Test
8	On-board Monitor Test
9	Component Test
10	Vehicle Info.
11	Modules Present
12	DTC Lookup
1	System Status

Figure 5-32 Sample Diagnostic Menu Screen

2. Scroll with the arrow keys to highlight a system or component, press the **ENTER** key to start test and the EPB service tool displays the message "Command Sent!".



Figure 5-33 Sample Component test screen

3. Press the BACK key to exit and return.

5.10 Request Vehicle Information

Vehicle Information allows to request the vehicle's VIN number, calibration ID(s) which identifies software version in vehicle control module(s), calibration verification numbers (CVN(s)) and in-use performance tracking on model year 2000 and newer OBD II compliant vehicles.

CVNs are calculated values required by OBD II regulations. They are reported to check if emission-related calibrations have been changed. Multiple CVNs may be reported for a control module. It may take several minutes to do the CVN calculation. In-use performance tracking tracks performance of key readiness monitors.

NOTE

Available options will vary depending on the vehicle under test.

To request vehicle information:

1. Scroll with the arrow keys to highlight **Vehicle Info.** from Diagnostic Menu and press the **ENTER** key.

	Diagnostic Menu
6	I/M Readiness
7	O2 Monitor Test
8	On-board Monitor Test
9	Component Test
10	Vehicle Info.
11	Modules Present
12	DTC Lookup
1	System Status

Figure 5-34 Sample Diagnostic Menu Screen

2. Follow on-screen instruction and send the command to read vehicle information. A screen with a list of available options displays.



Figure 5-35 Sample Vehicle Info Screen

3. Scroll with the arrow keys to highlight an available option and press the **ENTER** key. A screen with details of the selected option displays.

	Calibration ID
Calibration Identifications	1K0907115A 0050
	and the second sec
Save	Back

Figure 5-36 Sample Calibration ID Screen

4. Press function key Save to store the readiness data. Or use the BACK key to exit and return.

5.11 Modules Present

The EPB service tool identifies module IDs and communication protocols for OBD2 modules in the vehicle.

- To view module IDs and communication types:
 - 1. Scroll with the arrow keys to highlight **Modules Present** from Diagnostic Menu and press the **ENTER** key.

	Diagnostic Menu
6	I/M Readiness
7	O2 Monitor Test
8	On-board Monitor Test
9	Component Test
10	Vehicle Info.
11	Modules Present
12	DTC Lookup
1	System Status

Figure 5-37 Sample Diagnostic Menu Screen

2. A screen with the module IDs and protocols displays.

	Module Present	
Protocol		ID
KWP 2000		\$10
		I BUD
Save		

Figure 5-38 Sample Module Present Screen

3. Press function key Save to store the readiness data. Or use the BACK key to exit and return.

5.12 DTC Lookup

DTC Lookup menus allows to request DTC definitions stored in the EPB service tool.

To Look up DTCs: 1. Scroll with the arrow keys to highlight **DTC Lookup** from Diagnostic Menu and press the ENTER key.

2

	Diagnostic Menu
6	I/M Readiness
7	O2 Monitor Test
8	On-board Monitor Test
9	Component Test
10	Vehicle Info.
11	Modules Present
12	DTC Lookup
1	System Status

Figure 5-39 Sample Diagnostic Menu Screen

3. Enter a valid code number and press the function key **Finish**.

					DT	C Loc	kup					
P00	0 0 0			L K								11
						_						
Q	W	Е	R	T	Y	U		0	Р	7	8	9
A	S	D	F	G	Н	J	к	L	*	4	5	6
Ζ	X	С	V	В	Ν	М	-	,	1	1	2	3
Ca	ps Lo	ck		_	3	SPAC	E	_	-	•	0	-
_												
Finish Previous Backspace			е									

Figure 5-40 Sample DTC Lookup Screen

4. A screen with code number and its definition displays. If definition could not be found (SAE or Manufacturer Specific), the EPB service tool displays "DTC definition not found! Please refer to vehicle service manual!" If a P1xxx, C1xxx, B1xxx or U1xxx code is entered, select a vehicle make to look for DTC definitions. Press the **Back** key to exit.



Figure 5-41 Sample Trouble Codes Screen

6 Playback Data

The Playback option leads to screens for review of recorded test results.

To review recorded data:

1. Scroll with the arrow keys to highlight PlayBack from home screen and press the ENTER key.



Figure 6-1 Sample Home Screen

2. A screen with a list of test records displays. If no data is recorded, the message "No Data available!" is displayed.

	Scan
1	Datastream> scan-MAKE-EOBD—savefile
2	Ecu Information>scan-MAKE-EOBDsavefile
3	Trouble Code>scan-MAKE-USA-Ford-savefile
4	Trouble Code>scan-MAKE-Asia-Hyundai-savefile
5	Ecu Information>scan-MAKE-EUROPE-Bmw-savefile
6	Ecu Information>scan-MAKE—EUROPE-Fiat-savefile
7	Ecu Information>scan-MAKE-EOBD—savefile
	Delete All

Figure 6-2 Sample Playback Screen

3. Scroll with the arrow keys to highlight a vehicle record and press the **ENTER** key. Details of the test record displays. Use the up and down arrow keys to scroll through data to select lines.

	Read Codes
P0113/\$10	Intake Air Temperature Sensor 1 Circuit High
P0123/\$10	Throttle/Pedal Position Sensor/Switch A Circuit High
P0222/\$10	Throttle/Pedal Position Sensor/Switch B Circuit Low
P2122/\$10	Throttle/Pedal Position Sensor/Switch D Circuit Low
P2127/\$10	Throttle/Pedal Position Sensor/Switch E Circuit Low
U0001/\$10	High Speed CAN Communication Bus
P0100/\$10	Mass or Volume Air Flow A Circuit
Prin	t

Figure 6-3 Sample Test Data Details Screen

 If you are reviewing live data or freeze frame data, use the function key Next Frame or Pre. Frame to scroll through all possible frames when necessary.

1 c	of 4 Frame			
Numbers of DTCs		0		
Fuel system 1 status		-/ /		
Fuel System 2 status	£ 4			
Calculated Load Value	and the second sec	0.0	%	
Engine Coolant Temperature	10	°F		
Short Term Fuel Trim-Bank 1		0.0	%	
Pre.Frame	Print	NextFrame		

Figure 6-4 Sample Test Data Details Screen

 To erase a record, scroll with the arrow keys to highlight it and press the function key Delete. To delete all records, press the function key Delete All. Answer Yes to delete and No to quit.

7 System Setup

This section illustrates how to program the EPB service tool to meet your specific needs. When Setup application is selected, a menu with available service options displays. Menu options typically include:

- Language
- Unit
- Beep Set
- Key Test
- LCD Test
- About

Shortcuts

7.1 Select Language

Selecting Language opens a screen that allows you to choose system language. The EPB service tool is set to display English menus by default.

To configure system language:

1. Scroll with the arrow keys to highlight Language from Setup menu and press the ENTER key.



Figure 7-1 Sample Setup Screen

2. Press the **LEFT/RIGHT** arrow key select a language and press the **ENTER** key to confirm. Press the **Back** key to exit and return.



Figure 7-2 Sample Language Selection Screen

7.2 Change Units

Selecting Unit opens a dialog box that allows you to choose between US customary or metric units of measure.

To change the unit setup:

1. Scroll with the arrow keys to highlight Units from Setup menu and press the ENTER key.



Figure 7-3 Sample Setup Screen

Press the **LEFT/RIGHT** arrow key select an item and press the **ENTER** key to save and return.



Figure 7-4 Sample Language Selection Screen

7.3 Configure Beeper

Selecting Beep Set opens a dialog box that allows you to turn on/off the beeper.

To turn on/off the beeper:

1. Scroll with the arrow keys to highlight Beep Set from Setup menu and press the ENTER key.



Figure 7-5 Sample Setup Screen

2. Press the LEFT/RIGHT arrow key select an item and press the ENTER key to save and return.



Figure 7-6 Sample Beeper On/Off Selection Screen

7.4 Test Keypad

Selecting Key Test option opens a screen that allows you to check the functionality of the keypad.

To test the keypad:

1. Scroll with the arrow keys to highlight Key Test from Setup menu and press the ENTER key.



Figure7-7 Sample Setup Screen

- 2. Press any key to start test. The virtue key corresponding with the key you pressed will be highlighted on the screen if it works correctly.
- 3. To quit the test, click the F2 function key twice.

7.5 LCD Keypad

|

Selecting LCD Test option opens a screen that allows you to check the functionality of the display.

- To test the display:
- 1. Scroll with the arrow keys to highlight **LCD Test** from Setup menu and press the **ENTER** key to start test. Check if there are any missing spots in the LCD screen.



Figure 7-9 Sample LCD Test Screen

2. To quit the test, press the **Back** key.

7.6 Tool Information

Selecting About option opens a screen that show information about your EPB service tool, such as serial number and register password which may be required for product registration.



To view information of your EPB service tool:

1. Scroll with the arrow keys to highlight About from Setup menu and press the ENTER key.



Figure 7-10 Sample Setup screen

- 2. A screen with detailed information of the EPB service tool displays.
- 3. Press the **Back** key to exit and return to the Setup menu.

7.7 Configure Shortcut Keys

Selecting Shortcuts option lets you to change the functionality of the shortcut buttons.

- To assign a function to a shortcut button:
 - 1. Scroll with the arrow keys to highlight **Shortcuts** from Setup menu and press the **ENTER** key. A screen with available shortcut keys displays.



Figure 7-12 Sample Setup screen

2. Press the **UP/DOWN** arrow key select a shortcut key and press the **ENTER** key. A screen with a list of loaded applications displays.

ShortCuts
1 Edit ShortCuts F1 Function
2 Edit ShortCuts F2 Function
3 Edit ShortCuts F3 Function
and the second of the second

Figure 7-13 Sample Shortcuts Screen

- Scroll with the UP/DOWN arrow keys to highlight an application and press the ENTER key to assign the application to the shortcut key.
 Press any key to exit and return.

7. DISPOSAL

7.1 DISPOSAL

- At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.
- Contact your local authority for details of collection schemes in your area. In all circumstances:
 - Do not dispose of power tools with domestic waste.
 - Do not incinerate.
 - Do not abandon in the environment.
 - Do not dispose of WEEE* as unsorted municipal waste.



* Waste Electrical & Electronic Equipment.

Function List						
AutoMaker:Audi Version:V5.00	AutoMaker:Audi Version:V5.00					
Vehicle Type	Year	Control Unit				
Audi A4	2008 - 2012	Parking Brake				
Audi A4 USA/CAN	2009 - 2012	Parking Brake				
Audi A5	2008 - 2012	Parking Brake				
Audi A5 USA/CAN	2008 - 2012	Parking Brake				
Audi A6	2005 - 2012	Parking Brake				
Audi A6 USA/CAN	2005 - 2012	Parking Brake				
Audi A7	2011 - 2012	Parking Brake				
Audi A7 USA/CAN	2011 - 2012	Parking Brake				
Audi A8	2003 - 2012	Parking Brake				
Audi A8 USA/CAN	2004 - 2012	Parking Brake				
Audi Q5	2009 - 2012	Parking Brake				
Audi Q5 USA/CAN	2009 - 2012	Parking Brake				

Function List					
AutoMaker:Bentley Version:V5.00					
Vehicle Type	Year	Control Unit			
BENTLEY	before 2014	Parking Brake			

AutoMaker:BENZ Version:V5.00

Model	Year	Model Series	System Name	Special Function
E-Class	Up to 05/2005	211	SBC-Right Sensotronic Brake Control	0001, 0002, 0003, 0004, 0005
E-Class	Up to 05/2005	211	SBC-Sensotronic Brake Control	0001, 0002, 0003
E-Class	From 06/2005 to	211	SBC-Right Sensotronic Brake Control	0001, 0002, 0003, 0004, 0005
E-Class	From 06/2005 to	211	SBC-Sensotronic Brake Control	0001, 0002, 0003
CLS	Up to 05/2005	219	SBC-Right Sensotronic Brake Control	0001, 0002, 0003, 0004, 0005
CLS	From 06/2005 to	219	SBC-Right Sensotronic Brake Control	0001, 0002, 0003, 0004, 0005
S-Class	Up to 06/2009	221	Electronic parking brake-Electric parking brake	
S-Class	As of 07/2009	221	Electronic parking brake-Electric parking brake	
CL	ALL	216	Electronic parking brake-Electric parking brake	
MayBach	Up to 08/2006	240	SBC-Sensotronic Brake Control	0001, 0002, 0003
MayBach	Up to 08/2006	240	SBC-Right Sensotronic Brake Control	0001, 0002, 0003, 0004, 0005
MayBach	As of 09/2006	240	SBC-Sensotronic Brake Control	0001, 0002, 0003
MayBach	As of 09/2006	240	SBC-Right Sensotronic Brake Control	0001, 0002, 0003, 0004, 0005
SL	Up to 08/2003	230	SBC-Sensotronic Brake Control	0001, 0002, 0003
SL	From 09/2003 to	230	SBC-Right Sensotronic Brake Control	0001, 0002, 0003, 0004, 0005
SL	From 09/2003 to	230	SBC-Sensotronic Brake Control	0001, 0002, 0003
SL	From 06/2006 to	230	SBC-Right Sensotronic Brake Control	0001, 0002, 0003, 0004, 0005
SL	From 06/2006 to	230	SBC-Sensotronic Brake Control	0001, 0002, 0003
SL	As of 03/2008	230	SBC-Right Sensotronic Brake Control	0001, 0002, 0003, 0004, 0005
SLR	2006 - 2009	199	SBC-Sensotronic Brake Control	0001, 0002, 0003
SLS-class	2011 -	197	Electronic parking brake-Electric parking brake	
CLA-class	2013 -	117	N128 (Electric parking brake control unit)	0006, 0007, 0008, 0009, 0010
M-Class /GL-Class	2012 -	166	N128 (Electric parking brake control unit)	0006, 0007, 0008, 0009, 0010
SLK-class	2010 -	172	N128 (Electric parking brake control unit)	0006, 0007, 0008, 0009, 0010
A-Class	2012 -	176	N128 (Electric parking brake control unit)	0006, 0007, 0008, 0009, 0010
SLS-class	2011 -	197	N128 (Electric parking brake control unit)	0006, 0007, 0008, 0009, 0010
SL-class	2012 -	231	N128 (Electric parking brake control unit)	0006, 0007, 0008, 0009, 0010
B-class	2012 -	246	N128 (Electric parking brake control unit)	0006, 0007, 0008, 0009, 0010

AutoMaker:bmw Version:V5.00

Version:V5.	Version: V5. 00						
Series	Model Series	Part	Systems	Service Function			
7 Series	E65	Chassis	EMF Parking brake	Parking Brake			
X5 Series	E70	Chassis	EMF Parking brake	Parking Brake			
X6 Series	E71	Chassis	EMF Parking brake	Parking Brake			
Z Reihe	Z4_E89	Chassis	EMF Parking brake	Parking Brake			
5 Series	F07	Chassis	EMF Parking brake	Parking Brake			
5 Series	F10/F11	Chassis	EMF Parking brake	Parking Brake			
5 Series	F18	Chassis	EMF Parking brake	Parking Brake			
6 Series	F12/F13	Chassis	EMF Parking brake	Parking Brake			
7 Series	F01/F02/F04	Chassis	EMF Parking brake	Parking Brake			
X3 Series	F25	Chassis	EMF Parking brake	Parking Brake			
X6 Series	E72	Chassis	EMF Parking brake	Parking Brake			

Function List						
AutoMaker:Bugatti Version:V5.00						
Year	Vehicle Type	Control Unit				
before 2014	BUGATTI	Parking Brake				

	Function List					
AutoMaker:Citroen Version:V5.00						
Vehicle Type	System Name	Ecu Name				
C4 PICASSO	Electric secondary brake	FSE				
C4 PICASSO	ABS	ESP_81				
C5 (X7)	Electric secondary brake	FSE				
C5 (X7)	ABS	ESP_81				

AutoMaker:Ford Version:V5.00

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Vehicle	Capacity	Fngine Type	Vear	Module
	capacity		2000 0005	DDD
Focus C-MAX	1.4L	DURATEC 16V	2002 -2007	EPB
Focus C-MAX	1.6L	DURATEC 16V	2002 -2007	EPB
Focus C-MAX	1.6L	DURATEC VCT	2002 -2007	EPB
Focus C-MAX	1.6L	Duratorq Turbo Diesel Common Rail Injection	2002 -2007	EPB
Focus C-MAX	1.8L	DURATEC-HE / 14	2002 -2007	EPB
Focus C-MAX	1.8L	Duratorq Turbo Diesel Common Rail Injection	2002 -2007	EPB
Focus C-MAX	2.0L	DURATEC-HE / I4	2002 -2007	EPB
Focus C-MAX	2.0L	Duratorq Turbo Diesel Common Rail Injection	2002 -2007	EPB
GALAXY\S-Max	1.6L	Duratorq Turbo Diesel Common Rail Injection	2010	PBM
GALAXY\S-Max	1.6L	EcoBoost - Gas Turbocharged Direct Injection	2010	PBM
GALAXY\S-Max	1.8L	Duratorq Turbo Diesel Common Rail Injection	2006	PBM
GALAXY\S-Max	2.0L	DURATEC-HE / I4	2006 - 2010	PBM
GALAXY\S-Max	2.0L	Duratorq Turbo Diesel Common Rail Injection	2006 - 2010	PBM
GALAXY\S-Max	2.0L	Duratorq Turbo Diesel Common Rail Injection StgV	2010	PBM
GALAXY\S-Max	2.0L	EcoBoost - Gas Turbocharged Direct Injection	2010	PBM
GALAXY\S-Max	2.2L	Duratorq Turbo Diesel Common Rail Injection	2006	PBM
GALAXY\S-Max	2.2L	Duratorq Turbo Diesel Common Rail Injection StgV	2010	PBM
GALAXY\S-Max	2.3L	DURATEC-HE / I4	2006 - 2010	PBM
GALAXY\S-Max	2.5L	15	2006	PBM
LS	3.0L	Other	2003 - 2005	EPB
LS	3.9L	4V	2003 - 2006	EPB
MONDEO	1.6L	DURATEC VCT	2007 - 2011	PBM
MONDEO	1.6L	Duratorq Turbo Diesel Common Rail Injection	2011	PBM
MONDEO	1.6L	EcoBoost - Gas Turbocharged Direct Injection	2011	PBM
MONDEO	1.8L	Duratorq Turbo Diesel Common Rail Injection	2007	PBM
MONDEO	2.0L	DURATEC-HE / I4	2007	PBM
MONDEO	2.0L	Duratorq Turbo Diesel Common Rail Injection	2007 - 2011	PBM
MONDEO	2.0L	Duratorq Turbo Diesel Common Rail Injection StgV	2007 - 2011	PBM
MONDEO	2.0L	EcoBoost - Gas Turbocharged Direct Injection	2007 - 2011	PBM
MONDEO	2.2L	Duratorq Turbo Diesel Common Rail Injection	2007	PBM
MONDEO	2.2L	Duratorq Turbo Diesel Common Rail Injection StgV	2011	PBM
MONDEO	2. 3L	DURATEC-HE / I4	2007 - 2011	PBM
MONDEO	2.5L	15	2007	PBM
Transit Connect	t 2. OL	DURATORQ_DI	2001	EPB
Transit Connect	t 2.4L	DURATORQ_DI	2000	EPB

AutoMaker:GM Version:V5.00

Vehicle Type	Sub Vehicle	Year	Control Unit	
Chevrolet	Volt	2008-2014	Parking Brake	
Chevrolet	Malibu	2008-2014	Parking Brake	
Chevrolet Truck	Captiva Sport	2008-2014	Parking Brake	
Cadillac	CTS	2008-2014	Parking Brake	
Cadillac	SRX	2008-2014	Parking Brake	
Buick	Allure	2008-2014	Parking Brake	
Buick	Lacrosse	2008-2014	Parking Brake	
Buick	Regal	2008-2014	Parking Brake	

AutoMaker:Hyundai Version:V5.00

Area	Vehicle	Year	Engine	System	Subsystem
Hyundai(General)	AZERA (HG)	2013	G 3. 0 DOHC	EPB	Electric Parking Brake
Hyundai(General)	AZERA (HG)	2013	G 2. 4 DOHC	EPB	Electric Parking Brake
Hyundai (General)	AZERA (HG)	2012	G 3 0 DOHC	FPR	Flectric Parking Brake
Hyundai (General)	AZERA (HG)	2012	G 2 4 DOHC	FPR	Flectric Parking Brake
Hyundai (General)	EQUUS (VI)	2012	G 5. 0 GDI	EPB	Electric Parking Brake
Hyundai (General)	EQUUS (VI)	2014	G 3.8 GDI	EPB	Electric Parking Brake
Hyundai (General)	EQUUS (VI)	2013	G 5.0 GDI	EPB	Electric Parking Brake
Hyundai (General)	EQUUS (VI)	2013	G 3.8 GDI	EPB	Electric Parking Brake
Hyundai(General)	EQUUS(VI)	2012	G 5.0 GDI	EPB	Electric Parking Brake
Hyundai (General)	EQUUS (VI)	2012	G 3.8 GDI	EPB	Electric Parking Brake
Hyundai(General)	EQUUS (VI)	2011	G4.6MPI	EPB	Electric Parking Brake
Hyundai(General)	EQUUS(VI)	2011	G3.8MPI	EPB	Electric Parking Brake
Hyundai(General)	EQUUS(VI)	2010	G4.6MPI	EPB	Electric Parking Brake
Hyundai(General)	EQUUS(VI)	2010	G 3.8 MPI	EPB	Electric Parking Brake
Hyundai(General)	GRAND SANTAFE (NC)	2014	G 3.0 GDI	EPB	Electric Parking Brake
Hyundai(General)	GRAND SANTAFE (NC)	2014	G 3.3 GDI	EPB	Electric Parking Brake
Hyundai(General)	ROHENS (BH)	2013	G 3.0 GDI	EPB	Electric Parking Brake
Hyundai(General)	ROHENS (BH)	2013	G 3.3 GDI	EPB	Electric Parking Brake
Hyundai(General)	ROHENS (BH)	2012	G 3.0 GDI	EPB	Electric Parking Brake
Hyundai (General)	ROHENS (BH)	2012	G 3.3 GDI	EPB	Electric Parking Brake
Hyundai(General)	ROHENS (BH)	2011	G 3.3 MPI	EPB	Electric Parking Brake
Hyundai(General)	ROHENS (BH)	2011	G 4.6 MPI	EPB	Electric Parking Brake
Hyundai (General)	ROHENS (BH)	2011	G 3.8 MPI	EPB	Electric Parking Brake
<u>Hyundai(General)</u>	ROHENS (BH)	2010	G 3.3 MPI	EPB	Electric Parking Brake
Hyundai(General)	ROHENS (BH)	2010	G 4.6 MPI	EPB	Electric Parking Brake
Hyundai(General)	ROHENS (BH)	2010	G 3.8 MPI	EPB	Electric Parking Brake
Hyundai(General)	ROHENS (BH)	2009	<u>G 4.6 MPI</u>	EPB	Electric Parking Brake
Hyundai (General)	ROHENS (BH)	2009	<u>G 3.8 MP1</u>	EPB	Electric Parking Brake
Hyundai (General)	ROHENS (BH)	2009	<u>G 3. 3 MP1</u>	EPB	Electric Parking Brake
Hyundai (General)	SANTAFE (DM)	2013	G 3. 0 GD1	EPB	Electric Parking Brake
Hyundai (USA)	AZERA (HG)	2013	G 3. 3 GD1	EPB	Electric Parking Brake
Hyundai (USA)	AZEKA (HG)	2012		EPB	Electric Parking Brake
Hyundal (USA)	ELANIKA GI (GD)	2013		EFD	Electric Parking Brake
Hyundai (USA)	EQUUS(VI)	2013		EFD	Floatria Parking Brake
Hyundai (USA)	FOULS (VI)	2012		FPR	Floctric Parking Brake
Hyundai (USA)	CENESIS (BH)	2011		FPR	Floctric Parking Brake
Hyundai (USA)	GENESIS (BH)	2013	G 3 8 GDI	FPR	Electric Parking Brake
Hyundai (USA)	GENESIS (BH)	2013	G 4 6 MPI	FPR	Electric Parking Brake
Hyundai (USA)	GENESIS (BH)	2013	G 5. 0 GDI	FPR	Electric Parking Brake
Hyundai (USA)	GENESIS (BH)	2012	G 3 8 GDI	EPB	Electric Parking Brake
Hyundai (USA)	GENESIS (BH)	2012	G 4 6 MPI	EPB	Electric Parking Brake
Hyundai (USA)	GENESIS (BH)	2011	G 4. 6 MPI	EPB	Electric Parking Brake
Hyundai (USA)	GENESIS (BH)	2011	G 3. 8 MPT	EPB	Electric Parking Brake
Hvundai (USA)	GENESIS (BH)	2011	G 3.3 MPI	EPB	Electric Parking Brake
Hyundai (USA)	GENESIS (BH)	2010	G 3.8 MPI	EPB	Electric Parking Brake
Hyundai (USA)	GENESIS (BH)	2010	G4.6MPI	EPB	Electric Parking Brake
Hyundai (USA)	GENESIS (BH)	2010	G 3.3 MPI	EPB	Electric Parking Brake
Hyundai (USA)	GENESIS (BH)	2009	G 3.8 MPI	EPB	Electric Parking Brake
Hyundai (USA)	GENESIS (BH)	2009	G4.6MPI	EPB	Electric Parking Brake
Hyundai (USA)	GENESIS (BH)	2009	G 3.3 MPI	EPB	Electric Parking Brake
Hyundai (USA)	SANTAFE SPORT (DMA)	2013	G 2.0 T-GDI	EPB	Electric Parking Brake
Hyundai (USA)	SANTAFE SPORT (DMA)	2013	G 2.4 GDI	EPB	Electric Parking Brake
Hyundai (USA)	SANTAFE (NC)	2013	G 3.3 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	EQUUS/CENTENNIAL (VI)	2014	G 5.0 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	EQUUS/CENTENNIAL (VI)	2014	G 3.8 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	EQUUS/CENTENNIAL (VI)	2013	G 3.8 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	EQUUS/CENTENNIAL (VI)	2013	G 5.0 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	EQUUS/CENTENNIAL (VI)	2013	G 4.6 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	EQUUS/CENTENNIAL (VI)	2013	G 3.8 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	EQUUS/CENTENNIAL (VI)	2012	G 3.8 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	EQUUS/CENTENNIAL (VI)	2012	G 5.0 GDI	EPB	Electric Parking Brake
<u>Hyundai (Europe)</u>	EQUUS/CENTENNIAL (VI)	2012	G 4.6 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	EQUUS/CENTENNIAL (VI)	2012	G 3.8 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	EQUUS/CENTENNIAL (VI)	2011	G 4.6 MPI	EPB	Electric Parking Brake

Function List

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Hyundai (Europe)	EQUUS/CENTENNIAL (VI)	2011	G 3.8 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	EQUUS/CENTENNIAL (VI)	2010	G 4.6 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	EQUUS/CENTENNIAL (VI)	2010	G 3.8 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2013	G 3.3 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2013	G 3.3 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2013	G 3.8 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2013	G 5.0 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2013	G 3.8 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2013	G 4.6 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2012	G 5.0 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2012	G 3.3 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2012	G 3.8 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2012	G 3.3 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2012	G 4.6 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2012	G3.8MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2011	G 4.6 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2011	G3.8MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2011	G 3.3 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2010	G 4.6 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2010	G3.8MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2010	G3.3MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2009	G 4.6 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2009	G3.8MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH)	2009	G 3.3 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH) -U.S.	2013	G 5.0 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH) -U.S.	2013	G 3.8 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	GENESIS (BH) -U.S.	2013	G 4.6 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	GRANDEUR/AZERA (HG)	2013	G 3. 0 DOHC	EPB	Electric Parking Brake
Hyundai (Europe)	GRANDEUR/AZERA (HG)	2013	G 2. 4 DOHC	EPB	Electric Parking Brake
Hyundai (Europe)	GRANDEUR/AZERA (HG)	2012	G 3. 0 DOHC	EPB	Electric Parking Brake
Hyundai (Europe)	GRANDEUR/AZERA (HG)	2012	G 2. 4 DOHC	EPB	Electric Parking Brake
Hyundai (Europe)	i30(GD)	2013	G1.8MPI	EPB	Electric Parking Brake
Hyundai (Europe)	i30(GD)	2013	G 1.6 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	i30(GD)	2013	G 2. 0 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	i30(GD)	2013	F 1.6 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	i30(GD)	2013	D 1. 6 TCI-U2	EPB	Electric Parking Brake
Hyundai (Europe)	i30(GDe)	2013	G 1.6 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	i30(GDe)	2013	G 1.6 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	i30(GDe)	2013	D 1. 6 TCI-U2	EPB	Electric Parking Brake
Hyundai (Europe)	i30(GDe)	2013	D 1. 4 TCI-U2	EPB	Electric Parking Brake
Hyundai (Europe)	i30(GDe)	2013	G 1.4 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	i40(VF)	2013	G 2. 0 DOHC	EPB	Electric Parking Brake
Hyundai (Europe)	i40(VF)	2013	G 2. 0 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	i40(VF)	2013	G 1.6 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	i40(VF)	2013	D 1. 7 TCI-U2	EPB	Electric Parking Brake
Hyundai (Europe)	i40(VF)	2012	G 2. 0 DOHC	EPB	Electric Parking Brake
Hyundai (Europe)	i40(VF)	2012	G 2.0 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	i40(VF)	2012	G 1.6 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	i40(VF)	2012	D 1.7 TCI-U2	EPB	Electric Parking Brake
Hyundai (Europe)	SANTAFE (DM)	2013	G 3.3 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	SANTAFE (DM)	2013	G 2.4 MPI	EPB	Electric Parking Brake
Hyundai (Europe)	SANTAFE (DM)	2013	G 2.4 GDI	EPB	Electric Parking Brake
Hyundai (Europe)	SANTAFE (DM)	2013	D 2.2 TCI-R	EPB	Electric Parking Brake
Hyundai (Europe)	SANTAFE (DM)	2013	D 2. 0 TCI-R	EPB	Electric Parking Brake

AutoMaker:Jaguar Version:V5.00

Vehicle Type	Model Year	Engine Type	Capacity	System Name
New XK	2006. 5-2009	V8NA	3. 5L	FSJB(BCM)
New XK	2006.5-2009	V8NA	4.2L	FSJB(BCM)
New XK	2006.5-2009	V8SC		FSJB(BCM)
New XK	2010-2013	V8NA		PBM
New XK	2010-2013	V8SC		PBM
Jaguar XF	2008-2009	V8NA		PBM
Jaguar XF	2008-2009	V8SC		PBM
Jaguar XF	2008-2009	V6NA		PBM
Jaguar XF	2008-2009	V6DIESEL		PBM
Jaguar XF	2010-2011	V8NA	4.2L	PBM
Jaguar XF	2010-2011	V8NA		PBM
Jaguar XF	2010-2011	V8SC		PBM
Jaguar XF	2010-2011	V6NA		PBM
Jaguar XF	2010-2011	V6DIESEL		PBM
XJ range	2010-2012	V6NA		PBM
XJ range	2010-2012	V8NA		PBM
XJ range	2010-2012	V8SC		PBM
XJ range	2010-2012	V6DIESEL		PBM

Function	List
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AutoMaker:KIA Version:V5.00

Area	Vehicle Type	Year	Engine	System	Subsystem
Kia(General)	CARENS/RONDO (RP)	2014	G 2.0 MPI	EPB	Electric Parking Brake
Kia(General)	CADENZA (VG)	2013	G 2. 4 DOHC	EPB	Electric Parking Brake
Kia(General)	CADENZA (VG)	2012	G 2. 4 DOHC	EPB	Electric Parking Brake
Kia(USA)	OPTIMA (TFQF)	2013	G 2.0 T-GDI	EPB	Electric Parking Brake
Kia(USA)	OPTIMA (TFQF)	2013	G 2.4 GDI	EPB	Electric Parking Brake
Kia(USA)	OPTIMA (TFQF)	2012	G 2.0 T-GDI	EPB	Electric Parking Brake
Kia(USA)	OPTIMA (TFQF)	2012	G 2.4 GDI	EPB	Electric Parking Brake
Kia(Europe)	CADENZA (VG)	2013	G 3. 5 DOHC	EPB	Electric Parking Brake
Kia(Europe)	CADENZA (VG)	2012	G 3. 5 DOHC	EPB	Electric Parking Brake
Kia(Europe)	CARENS/RONDO (RP)	2014	G 2.0 MPI	EPB	Electric Parking Brake
Kia(Europe)	CARENS/RONDO (RP)	2014	G 2.0 GDI	EPB	Electric Parking Brake
Kia(Europe)	CARENS/RONDO (RP)	2014	G 1.6 GDI	EPB	Electric Parking Brake
Kia(Europe)	CARENS/RONDO (RP)	2014	D 1.7 TCI-U2	EPB	Electric Parking Brake
Kia(Europe)	Cee'd(JD)	2013	G 1.6 MPI	EPB	Electric Parking Brake
Kia(Europe)	Cee'd(JD)	2013	G 1.6 T-GDI	EPB	Electric Parking Brake
Kia(Europe)	Cee'd(JD)	2013	G 1.4 MPI	EPB	Electric Parking Brake
Kia(Europe)	Cee'd(JD)	2013	G 1.6 GDI	EPB	Electric Parking Brake
Kia(Europe)	Cee'd(JD)	2013	D 1.6 TCI-U2	EPB	Electric Parking Brake
Kia(Europe)	Cee'd(JD)	2013	D 1.4 TCI-U2	EPB	Electric Parking Brake
Kia(Europe)	OPTIMA (TF)	2013	G 2.0 MPI-NU	EPB	Electric Parking Brake
Kia(Europe)	OPTIMA (TF)	2013	G 2. 0 DOHC	EPB	Electric Parking Brake
Kia(Europe)	OPTIMA (TF)	2013	G 2. 4 DOHC	EPB	Electric Parking Brake
Kia(Europe)	OPTIMA (TF)	2013	G 2.4 GDI	EPB	Electric Parking Brake
Kia(Europe)	OPTIMA (TF)	2013	D 1.7 TCI-U2	EPB	Electric Parking Brake
Kia(Europe)	OPTIMA (TF)	2012	G 2. 0 DOHC	EPB	Electric Parking Brake
Kia(Europe)	OPTIMA (TF)	2012	G 2. 4 DOHC	EPB	Electric Parking Brake
Kia(Europe)	OPTIMA (TF)	2012	G 2. 4 GDI	EPB	Electric Parking Brake
Kia(Europe)	OPTIMA (TF)	2012	D 1.7 TCI-U2	EPB	Electric Parking Brake
Kia(Europe)	Quoris(KH)	2013	G 3.8 MPI	EPB	Electric Parking Brake

		Function	List			
AutoMaker:Landrov Version:V5.00	AutoMaker:Landrover Version:V5.00					
Vehicle Type	Model Year	Engine Type	Capacity	System Name		
Discovery	2005-2009	V6NA		PBM		
Discovery	2005-2009	V8NA		PBM		
Discoverv Discoverv	2005–2009 2010–2011	V6DIESEL V6NA		PBM PBM		
Discovery	2010-2011 2010-2011	V8NA V6DIFSFI	5. 0L 2 7I	PBM PRM		
Discoverv	2010-2011	V6DIESEL	3. 0L	PBM		
Discoverv	From 2012	V8NA		PBM		
Discoverv	From 2012	V6DIESEL	2.7L	PBM		
Discovery	From 2012	V6DIESEL	3. OL	PBM		
Range Rover Sport	2005 (2006US) - 2009	V8NA		PBM		
Range Rover Sport	2005 (2006US) - 2009	V8SC		PBM		
Range Rover Sport	2005 (2006US) - 2009	V6DIESEK		PBM		
Range Rover Sport	2007-2009	V8DIESEL		PBM		
Range Rover Sport	2010	V8NA	5. OL	PBM		
Range Rover Sport	2010	V8SC	5. 0L	PBM		
Range Rover Sport	2010	V6DIESEL	3.0L	PBM		
Range Rover Sport	2010	V8DIESEL		PBM		
Range Rover Sport	From 2012	V6DIESEL	3. OL	PBM		
Range Rover Sport	From 2012	V8NA	5.0L	PBM		
Range Rover Sport	From 2012	V8SC	5.0L	PBM		
Range Rover	2007-2009	V8DIESEL		PBM		
Range Rover	2007-2009	V8NA		PBM		
Range Rover	2007-2009	V8SC		PBM		
Range Rover	2010-2010.5	V8DIESEL		PBM		
Range Rover	2010-2010.5	V8NA		PBM		
Range Rover	2010 - 2010 = 5	V8SC		PBM		

AutoMaker:Lexus Version:V5.00

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Area	Model	year	Mode code	Vehicle Spec	Option1	Optio2	Option3	System Name
Europ(Others)	GS350		GRL	2GR-FSE	Radar Cruise			Electric Parking Brake
Europ(Others)	GS350		GRL	2GR-FSE	Others			Electric Parking Brake
Europ(Others)	GS250		GRL	4GR-FSE	Radar Cruise			Electric Parking Brake
Europ(Others)	GS250		GRL	4GR-FSE	Others			Electric Parking Brake
Europ(Others)	AVENSIS		ADT	1AD-FTV	-1111	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS		ADT	1AD-FTV	-1111	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS		ADT	1AD-FTV	1111-	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS		ADT	1AD-FTV	1111-	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS		ADT	2AD-FHV	-1111	w/ Smart Key	Radar Cruise	Electric Parking Brake
Europ(Others)	AVENSIS		ADT	2AD-FHV	-1111	w/ Smart Key	Others	Electric Parking Brake
Europ(Others)	AVENSIS		ADT	2AD-FHV	-1111	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS		ADT	2AD-FHV	-1111	w/o Smart Key	Others	Electric Parking Brake
Europ(Others)	AVENSIS		ADT	2AD-FHV	1111-	w/ Smart Key	Radar Cruise	Electric Parking Brake
Europ(Others)	AVENSIS		ADT	2AD-FHV	1111-	w/ Smart Key	Others	Electric Parking Brake
Europ(Others)	AVENSIS		ADT	2AD-FHV	1111-	w/o Smart Key	0.1	Electric Parking Brake
Europ (Others)	AVENSIS		ADT	2AD-FHV	1111-	w/o Smart Key	Others	Electric Parking Brake
Europ (Others)	AVENSIS		ADI	ZAD-FIV	-1111	w/ Smart Key		Electric Parking Brake
Europ (Others)	AVENSIS		ADT	2AD FTV		w/o Smart Key		Electric Parking Brake
Europ (Others)	AVENSIS		ADT	2AD = F I V 2AD = FTV	1111-	W/ Smart Key		Electric Parking Brake
Europ (Others)	AVENSIS		ADI 7PT	$2AD = \Gamma IV$ 17P = FAE	_1111	w/o Smart Key		Electric Farking Brake
Europ (Others)	AVENSIS		ZRI 7DT	17P_FAE	_1111	w/o Smart Key		Electric Parking Brake
Europ (Others)	AVENSIS		ZRI 7RT	1ZR - FAE 17R - FAE	<u>-1111</u> 1111–	w/ Smart Koy		Electric Parking Brake
Europ (Others)	AVENSIS		ZRT 7RT	17R-FAF	1111-	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS		ZRT	27R-FAE	-1111	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS		ZRT	27R-FAE	-1111	w/o_Smart_Key		Electric Parking Brake
Europ(Others)	AVENSIS		ZRT	2ZR-FAE	1111-	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS		ZRT	2ZR-FAE	1111-	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS		ZRT	3ZR-FAE	-1111	w/ Smart Kev		Electric Parking Brake
Europ(Others)	AVENSIS		ZRT	3ZR-FAE	-1111	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS		ZRT	3ZR-FAE	1111-	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS		ZRT	3ZR-FAE	1111-	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS		ZRT	3ZR-FE	-1111	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS		ZRT	3ZR-FE	-1111	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS		ZRT	3ZR-FE	1111-	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS		ZRT	3ZR-FE	1111-	w/o Smart Key		Electric Parking Brake
Europ(Others)	GS450h		GWL	NULL	Radar Cruise			Electric Parking Brake
Europ(Others)	GS450h		GWL	NULL	Others			Electric Parking Brake
Europ(Others)	LFA		LFA	NULL	-1201			Electric Parking Brake
Europ(Others)	LFA		LFA	NULL	1201-	D 11		Electric Parking Brake
Europ(Others)	LS460		USF	NULL	-1209	Brazil	Radar Cruise	Electric Parking Brake
Europ (Others)	LS460		USF	NULL NUL I	-1209	Brazil	Others Deden Condes	Electric Parking Brake
Europ (Others)	LS460		USF	NULL NULI	1209	Others Others	Addar Cruise	Electric Parking Brake
Europ (Others)	LS460		USF	NULL NULI	1209	Viners	Duners Padan Cruiza	Electric Parking Brake
Furon (Others)	LS400 I S460		USF	NULL	1209-	Korea	Aduar Cruise	Flectric Parking Brake
Furon (Others)	LS460		USF	NULL	1209-	Others	Radar Cruise	Flectric Parking Brake
Europ (Others)	LS460		USF	NULL	1209-	Others	Others	Electric Parking Brake
Europ (Others)	LS600h		UVF	NULL	-809	Radar Cruise	5 01101 0	Electric Parking Brake
Europ(Others)	LS600h		UVF	NULL	-809	Others		Electric Parking Brake
Europ(Others)	LS600h		UVF	NULL	0809-0910	Radar Cruise		Electric Parking Brake
Europ(Others)	LS600h		UVF	NULL	0809-0910	Others		Electric Parking Brake
Europ(Others)	LS600h		UVF	NULL	0910-1209	Radar Cruise		Electric Parking Brake
Europ(Others)	LS600h		UVF	NULL	0910-1209	Others		Electric Parking Brake
Europ(Others)	LS600h		UVF	NULL	1209-	Korea	Radar Cruise	<u>Electric Parking Brak</u> e
Europ(Others)	LS600h		UVF	NULL	1209-	Korea	Others	Electric Parking Brake
Europ(Others)	LS600h		UVF	NULL	1209-	Others	Radar Cruise	Electric Parking Brake
Europ(Others)	LS600h		UVF	NULL	1209-	Others	Others	Electric Parking Brake
Europ(Others)	AVENSIS		AZT	NULL	w/Smart Key			Electric Parking Brake
Europ(Others)	AVENSIS		AZT	NULL	w/o Smart Key			Electric Parking Brake
USA	GS350	2013		2GR-FSE	RADAR CRUISE			Electric Parking Brake
USA	GS350	2013		2GR-FSE	Others			Electric Parking Brake
USA	GS450h	2013		2GR-FXE	RADAR CRUISE			Electric Parking Brake
USA	GS450h	2013		2GR-FXE	Uthers			Electric Parking Brake
USA	LFA	2012		ILK-GUE				Electric Parking Brake

USA	LFA	2013		1LR-GUE			Electric Parking Brake
USA	LS460	2007		1UR-FSE	RADAR CRUISE		Electric Parking Brake
USA	LS460	2007		1UR-FSE	Others		Electric Parking Brake
USA	LS460	2008		1UR-FSE	RADAR CRUISE		Electric Parking Brake
USA	LS460	2008		1UR-FSE	Others		Electric Parking Brake
USA	LS460	2009		1UR-FSE	RADAR CRUISE		Electric Parking Brake
USA	LS460	2009		1UR-FSE	Others		Electric Parking Brake
USA	LS460	2010		1UR-FSE	RADAR CRUISE		Electric Parking Brake
USA	LS460	2010		1UR-FSE	Others		Electric Parking Brake
USA	LS460	2011		1UR-FSE	RADAR CRUISE		Electric Parking Brake
USA	LS460	2011		1UR-FSE	Others		Electric Parking Brake
USA	LS460	2012		1UR-FSE	RADAR CRUISE		Electric Parking Brake
USA	LS460	2012		1UR-FSE	Others		Electric Parking Brake
USA	LS460	2013		1UR-FSE	RADAR CRUISE		Electric Parking Brake
USA	LS460	2013		1UR-FSE	Others		Electric Parking Brake
USA	LS600h	2008		2UR-FSE	RADAR CRUISE		Electric Parking Brake
USA	LS600h	2008		2UR-FSE	Others		Electric Parking Brake
USA	LS600h	2009		2UR-FSE	RADAR CRUISE		Electric Parking Brake
USA	LS600h	2009		2UR-FSE	Others		Electric Parking Brake
USA	LS600h	2010		2UR-FSE	RADAR CRUISE		Electric Parking Brake
USA	LS600h	2010		2UR-FSE	Others		Electric Parking Brake
USA	LS600h	2011		2UR-FSE	RADAR CRUISE		Electric Parking Brake
USA	LS600h	2011		2UR-FSE	Others		Electric Parking Brake
USA	LS600h	2012		2UR-FSE	RADAR CRUISE		Electric Parking Brake
USA	LS600h	2012		2UR-FSE	Others		Electric Parking Brake
USA	LS600h	2013		2UR-FSE	RADAR CRUISE		Electric Parking Brake
USA	LS600h	2013		2UR-FSE	Others		Electric Parking Brake
Japan	GS350		GRL	2GR-FSE	RADAR CRUISE		Electric Parking Brake
Japan	GS350		GRL	2GR-FSE	Others		Electric Parking Brake
Japan	GS250		GRL	4GR-FSE	RADAR CRUISE		Electric Parking Brake
Japan	GS250		GRL	4GR-FSE	Others		Electric Parking Brake
Japan	GS450h		GWL	2GR-FXE	RADAR CRUISE		Electric Parking Brake
Japan	GS450h		GWL	2GR-FXE	Others		Electric Parking Brake
Japan	LFA		LFA	1LR-GUE	-1112		Electric Parking Brake
Japan	LFA		LFA	1LR-GUE	1201-		Electric Parking Brake
Japan	LS460		USF	1UR-FSE	-1008	RADAR CRUISE	Electric Parking Brake
Japan	LS460		USF	1UR-FSE	-1008	Others	Electric Parking Brake
Japan	LS460		USF	1UR-FSE	1009-1208	RADAR CRUISE	Electric Parking Brake
Japan	LS460		USF	1UR-FSE	1009-1208	Others	Electric Parking Brake
Japan	LS460		USF	1UR-FSE	1209-	RADAR CRUISE	Electric Parking Brake
Japan	LS460		USF	1UR-FSE	1209-	Others	Electric Parking Brake
Japan	LS600h		UVF	2UR-FSE	-1008	RADAR CRUISE	Electric Parking Brake
Japan	LS600h		UVF	2UR-FSE	-1008	Others	Electric Parking Brake
Japan	LS600h		UVF	2UR-FSE	1009-1208	RADAR CRUISE	Electric Parking Brake
Japan	LS600h		UVF	2UR-FSE	1009-1208	Others	Electric Parking Brake
Japan	LS600h		UVF	2UR-FSE	1209-	RADAR CRUISE	 Electric Parking Brake
Japan	LS600h		UVF	2UR-FSE	1209-	Others	Electric Parking Brake

	Function List					
AutoMaker:Maybach Version:V5.00						
Model series	Year	System Name	Special Function			
240	Up to 08/2006	SBC-Sensotronic Brake Control	0001, 0002, 0003			
240	Up to 08/2006	SBC-Right Sensotronic Brake Control	0001, 0002, 0003, 0004, 0005			
240	As of 09/2006	SBC-Sensotronic Brake Control	0001, 0002, 0003			
240	As of 09/2006	SBC-Right Sensotronic Brake Control	0001, 0002, 0003, 0004, 0005			

AutoMaker:mini Version:V5.00

Ver S1011. VS. 00				
Series	Part	Systems	Service Function	
mini R50	Chassis	EMF Parking brake	Parking Brake	
mini R52	Chassis	EMF Parking brake	Parking Brake	
mini R53	Chassis	EMF Parking brake	Parking Brake	
mini R55	Chassis	EMF Parking brake	Parking Brake	
mini R56	Chassis	EMF Parking brake	Parking Brake	
mini R57	Chassis	EMF Parking brake	Parking Brake	
mini R58	Chassis	EMF Parking brake	Parking Brake	
mini R59	Chassis	EMF Parking brake	Parking Brake	
mini R60	Chassis	EMF Parking brake	Parking Brake	

AutoMaker:Opel Version:V5.00

1010101100		
Year	Vehicle Type	System Type
(C) 2012	Ampera	Parking Brake Control Module
(C) 2012	Astra-J	Parking Brake Control Module
(C) 2012	Insignia	Parking Brake Control Module
(B) 2011	Astra-J	Parking Brake Control Module
(B) 2011	Insignia	Parking Brake Control Module
(A) 2010	Astra-J	Parking Brake Control Module
(A) 2010	Insignia	Parking Brake Control Module
(9) 2009	Astra-J	Parking Brake Control Module
(9) 2009	Insignia	Parking Brake Control Module

Function List					
AutoMaker:Peugeot Version:V5.00					
Vehicle Type	System Name	Subsystem			
3008	ABS or ESP ECU	ESP8. 1			
3008	Electric parking brake	FSE			
5008	ABS or ESP ECU	ESP8. 1			
5008	Electric parking brake	FSE			

Function List				
AutoMaker:Porsche Version:V5.00				
Vehicle Type	Year	System Type	System Name	
Cayenne	2011-	PARKING	Park brake	
Panamera	2009-	PARKING	Park brake	

	Function List			
AutoMaker:Renault Version:V5.00				
Vehicle Type	System Name			
ESPACE IV	Parking Brake			
ESPACEIV ph2	Parking Brake			
KOLEOS/QM5	Parking Brake			
LAGUNAII ph2	Parking Brake			
SCENIC II	Parking Brake			
VEL SATIS	Parking Brake			
VELSATIS ph2	Parking Brake			

	Function List		
AutoMaker:Roewe Version:V5.00			
Vehicle Type	Year	Function	
950	all	Replace the handbrake cable	
950	all	Enable handbrake	
950	all	Release the handbrake	
950	all	Handbrake chip calibration	
950	all	Help	

	Function List		
AutoMaker:Saab Version:V5.00			
Vehicle Type	Year	Function	
9–5	2010-2011	Replace the handbrake cable	
9–5	2010-2011	Enable handbrake	
9–5	2010-2011	Release the handbrake	
9–5	2010-2011	Handbrake chip calibration	
9–5	2010–2011	Help	
Function List

AutoMaker:scion Version:V5.00

Area	Model	Mode code	Vehicle	Option1	optinon2	Option3	System Name
Europ(Others)	GS350	GRL	2GR-FSE	RadarCruise			Electric Parking Brake
Europ(Others)	GS350	GRL	2GR-FSE	Others			Electric Parking Brake
Europ(Others)	GS250	GRL	4GR-FSE	RadarCruise			Electric Parking Brake
Europ(Others)	GS250	GRL	4GR-FSE	Others			Electric Parking Brake
Europ(Others)	AVENSIS	ADT	1AD-FTV	-1111	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ADT	1AD-FTV	-1111	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ADT	1AD-FTV	1111-	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ADT	1AD-FTV	1111-	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ADT	2AD-FHV	-1111	w/ Smart Key	RadarCruise	Electric Parking Brake
Europ (Others)	AVENSIS	ADT	2AD-FHV		w/ Smart Key	Others DedewCouries	Electric Parking Brake
Europ (Others)	AVENSIS	ADT	2AD-FHV 2AD-FHV	-1111 -1111	w/o Smart Key w/o Smart Key	Others	Electric Parking Brake
Europ(Others)	AVENSIS	ADT	2AD-FHV 2AD-FHV	-1111 1111-	w/ Smart Key	RadarCruise	Electric Parking Brake
Europ(Others)	AVENSIS	ADT	2AD-FHV	1111-	w/ Smart Key	Others	Electric Parking Brake
Europ(Others)	AVENSIS	ADT	2AD-FHV	1111-	w/o Smart Key	RadarCruise	Electric Parking Brake
Europ(Others)	AVENSIS	ADT	2AD-FHV	1111-	w/o Smart Kev	Others	Electric Parking Brake
Europ(Others)	AVENSIS	ADT	2AD-FTV	-1111	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ADT	2AD-FTV	-1111	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ADT	2AD-FTV	1111-	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ADT	2AD-FTV	1111-	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ZRT	1ZR-FAE	-1111	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ZRT	1ZR-FAE	-1111	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ZRT	1ZR-FAE	1111-	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ZRT	1ZR-FAE	1111-	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ZRT	2ZR-FAE		w/ Smart Key		Electric Parking Brake
Europ (Others)	AVENCIC	ZKI ZDT	22K-FAE		w/o Smart Key		Electric Parking Brake
Europ (Others)	AVENCIC	ΔΚΙ 7DT	22R-FAE	1111-	W/ Smart Key		Electric Parking brake
Europ (Others)	AVENSIS	ZRT 7RT	37R-FAF	_1111	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ZRT	3ZR-FAE	-1111	w/o_Smart_Key		Electric Parking Brake
Europ(Others)	AVENSIS	ZRT	3ZR-FAE	1111-	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ZRT	3ZR-FAE	1111-	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ZRT	3ZR-FE	-1111	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ZRT	3ZR-FE	-1111	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ZRT	3ZR-FE	1111-	w/ Smart Key		Electric Parking Brake
Europ(Others)	AVENSIS	ZRT	3ZR-FE	1111-	w/o Smart Key		Electric Parking Brake
Europ(Others)	GS450h	GWL	NULL	RadarCruise			Electric Parking Brake
Europ(Others)	GS450h	GWL	NULL	Others			Electric Parking Brake
Europ(Others)	LFA	LFA	NULL	-1201			Electric Parking Brake
Europ(Others)	LFA	LFA	NULL	1201-			Electric Parking Brake
Europ(Others)	LS460	USF	NULL	-1209	Brazil	RadarCruise	Electric Parking Brake
Europ(Others)	LS460	USF	NULL	-1209	Brazil	Others	Electric Parking Brake
Europ (Others)	LS460	USF	NULL	-1209	Others	RadarUruise	Electric Parking Brake
Europ(Others)	LS460	USF		-1209 1200-	Vtners	Deners	Electric Parking Brake
Europ (Others)	LS400 I S460	USF	NULL	1205	Korea	Others	Electric Parking Brake
Europ(Others)	LS460	USF	NULL	1209-	Others	RadarCruise	Electric Parking Brake
Europ(Others)	LS460	USF	NULL	1209-	Others	Others	Electric Parking Brake
Europ(Others)	LS600h	UVF	NULL	-809	RadarCruise		Electric Parking Brake
Europ(Others)	LS600h	UVF	NULL	-809	Others		Electric Parking Brake
Europ(Others)	LS600h	UVF	NULL	0809-0910	RadarCruise		Electric Parking Brake
Europ(Others)	LS600h	UVF	NULL	0809-0910	Others		Electric Parking Brake
Europ(Others)	LS600h	UVF	NULL	0910-1209	RadarCruise		Electric Parking Brake
Europ(Others)	LS600h	UVF	NULL	0910-1209	Others		Electric Parking Brake
Europ(Others)	LS600h	UVF	NULL	1209-	Korea	RadarCruise	Electric Parking Brake
Europ(Others)	LS600h	UVF	NULL	1209-	Korea	Others	Electric Parking Brake
Europ(Others)	LS600h	UVF	NULL	1209-	Others	KadarCruise	Electric Parking Brake
Europ (Others)	LSOUUH	UVF 47T		1209-	otners	Utners	Electric Parking Brake
Europ(Others)	AVEN515	AZ 1	NULL	w/ Smart Key			Electric Parking Brake
Europ(Others)	AVENSIS	AZT	NULL	w/oSmart Key			Electric Parking Brake

	Function List	
AutoMaker:seat Version:V5.00		
Year	Vehicle Type	Control Unit
2011	Alhambra	Parking Brake

	unction List			
AutoMaker:skoda Version:V5.00				
Vehicle Type	Year	Control Unit		
SKODA	before 2014	Parking Brake		

Function List

AutoMaker:Toyota Version:V5.00

Area	Model	Year	Mode Code	Vehicle	Option1	Option2	Option3	System Name
Europ(Others)	GS350		GRL	2GR-FSE	Radar Cruise			Electric Parking Brake
Europ(Others)	GS350		GRL	2GR-FSE	Others			Electric Parking Brake
Europ(Others)	GS250		GRL	4GR-FSE	Radar Cruise			Electric Parking Brake
Europ(Others)	GS250		GRL	4GR-FSE	Others			Electric Parking Brake
Europ(Others)	AVENSI		ADT	1AD-FTV	-1111	w/ Smart Key		Electric Parking Brake
Europ(Others)	SAVENSI		ADT	1AD-FTV	-1111	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSI		ADT	1AD-FTV	1111-	w/ Smart Kev		Electric Parking Brake
Europ(Others)	SAVENSI		ADT	1AD-FTV	1111-	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSI		ADT	2AD-FHV	-1111	w/ Smart Key	Radar	Electric Parking Brake
Europ(Others)	SAVENSI		ADT	2AD-FHV	-1111	w/ Smart Key	Others	Electric Parking Brake
Europ(Others)	SAVENSI S		ADT	2AD-FHV	-1111	w/o Smart Key	Radar	Electric Parking Brake
Europ(Others)	AVENSIS		ADT	2AD-FHV	-1111	w/o Smart Kev	Others	Electric Parking Brake
Europ(Others)	AVENSI		ADT	2AD-FHV	1111-	w/ Smart Key	Radar	Electric Parking Brake
Furon (Others)	SAVENST		ADT	2AD-FHV	1111-	w/ Smart Kev	Others	Flectric Parking Brake
Europ(Others)	SAVENSI		ADT	2AD-FHV	1111-	w/o Smart Key	Radar	Electric Parking Brake
Furon (Othore)	AVENSIS		ADT	2AD_FHV	1111_	w/o Smart Koy	Othors	Flootric Parking Brako
Furon (Others)	AVENSIS		ADT	2AD-FTV	_1111	w/ Smart Key	others	Electric Parking Brake
Europ(Others)	SAVENSI		ADT	2AD-FTV	-1111	w/o Smart Key		Electric Parking Brake
F (0.1)	S		ADT	OAD DTV	1111			
Europ(Others) Europ(Others)	SAVENSI		ADT	2AD-FTV 2AD-FTV	1111-	w/ Smart Key w/o Smart Key		Electric Parking Brake
Earop (others)	S		1101			"/ O Dillar U Hoy		
Europ(Others)	AVENSI		ZRT	1ZR-FAE	-1111	w/ Smart Key		Electric Parking Brake
Europ(Others)	SAVENSI S		ZRT	1ZR-FAE	-1111	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSI		ZRT	1ZR-FAE	1111-	w/ Smart Key		Electric Parking Brake
Europ(Others)	SAVENSI		ZRT	1ZR-FAE	1111-	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSI		ZRT	2ZR-FAE	-1111	w/ Smart Kev		Electric Parking Brake
Europ(Others)	SAVENSI		ZRT	2ZR-FAE	-1111	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENST		ZRT	2ZR-FAE	1111-	w/ Smart Kev		Electric Parking Brake
Europ(Others)	SAVENSI		ZRT	2ZR-FAE	1111-	w/o Smart Key		Electric Parking Brake
Europ(Others)	AVENSI		ZRT	3ZR-FAE	-1111	w/ Smart Kev		Electric Parking Brake
Europ(Others)	SAVENSI		ZRT	3ZR-FAE	-1111	w/o Smart Key		Electric Parking Brake
Furon(Others)	AVENST		ZRT	37R-FAE	1111-	w/ Smart Kev		Electric Parking Brake
Europ(Others)	SAVENSI		ZRT	3ZR-FAE	1111-	w/o Smart Key	1	Electric Parking Brake
Furon(Others)	AVENST		7RT	37R-FF	-1111	w/ Smart Key		Flectric Parking Brake
Europ(Others)	SAVENSI		ZRT	3ZR-FE	-1111	w/o Smart Key		Electric Parking Brake
Furon (Others)	S AVENST		7RT	37R-FF	1111-	w/ Smart Koy		Electric Parking Brake
Europ(Others)	SAVENSI		ZRT	3ZR-FE	1111-	w/o Smart Key		Electric Parking Brake
Furon(Others)	S GS450b		GWI	NUL I	Radar Cruise			Flactric Parking Brake
Europ(Others)	GS450h		GWL	NULL	Others			Electric Parking Brake
Europ(Others)	LFA		LFA	NULL	-1201			Electric Parking Brake
Europ(Others)	LFA		LFA	NULL	1201-			Electric Parking Brake
Europ(Others)	LS460		USF	NULL	-1209	Brazil	Radar	Electric Parking Brake
Europ(Others)	LS460		USF	NULL	-1209	Brazil	Others	Electric Parking Brake
Europ(Others)	LS460		USF	NULL	-1209	Others	Radar	Electric Parking Brake
Europ(Others)	LS460	1	USF	NULL	-1209	Others	Others	Electric Parking Brake
Europ(Others)	LS460		USF	NULL	1209-	Korea	Radar	Electric Parking Brake
Furon (Othore)	15460		USF	NUL I	1209-	Korea	Others	Electric Parking Brake
Europ(Others)	LS460		USF	NULL	1209-	Others	Radar	Electric Parking Brake
Furon (Others)	15460		USF	NUL I	1209-	Others	Othors	Flactric Parking Broke
Europ (Others)	LS400		UVF	NULL	-809	Radar Cruise	others	Electric Parking Brake
Europ(Others)	LS600h		UVF	NULL	-809	Others	1	Electric Parking Brake
Europ(Others)	LS600h		UVF	NULL	0809-0910	Radar Cruise		Electric Parking Brake

Furon (Others)	I \$600h		UVF	NUL I	0809-0910	Others		Flectric Parking Brake
Europ (Others)	LS600h		UVE	NULI	0000 0010	Radar Cruico		Electric Parking Brake
Europ (Others)	LSGOOL		UVE	NULL	0010 1200	Others		Electric Parking Brake
Europ (Others)	LSCOOL		UVE	NULL	1200	Villers	Dodom	Electric Parking Drake
Europ (others)	L200011		UVI	NULL	1209-	Korea	Rauar	Electric rarking brake
Furon (Othore)	I \$600b		UVE	NULI	1200-	Koroa	Othors	Flootric Parking Brako
Europ (Others)	LS600h		UVE	NULL	1209	Othors	Radar	Electric Parking Brake
Europ (others)	L200011		UVI	NULL	1209-	others	Rauar	Electric rarking brake
Furon (Othore)	I \$600b		UVE	NULI	1200-	Othors	Othors	Floatria Parking Braka
Europ (Others)	AVENCT		1071°	NULL	1205 w/Smont Kow	Others	others	Electric Parking Brake
Europ (Others)	CAVENCT		AZ1 AZT	NULL	w/ Smart			Electric Parking Diake
	SAVENSI	9019	ALI	NULL DOD ESE	W/O SHIAI L			Electric Farking Drake
USA	262250	2015		ZGR-L2E	REYRADAR			Electric Farking brake
UC A	00250	9019		OCD ESE	Othoma			El cotuio Doulting Puoleo
USA	02320	2013		2GR-FSE	DADAD COULCE			Electric Parking Brake
USA	GS450n	2013		ZGR-FAE	RADAR CRUISE			Electric Parking Brake
USA	65450h	2013		2GR-FAE	Others			Electric Parking Brake
USA	LFA	2012		ILR-GUE				Electric Parking Brake
USA	LFA	2013		ILR-GUE				Electric Parking Brake
USA	LS460	2007		1UR-FSE	RADAR CRUISE			Electric Parking Brake
USA	LS460	2007		1UR-FSE	Others			Electric Parking Brake
USA	LS460	2008		1UR-FSE	RADAR CRUISE			Electric Parking Brake
USA	LS460	2008		1UR-FSE	Others			Electric Parking Brake
USA	LS460	2009		1UR-FSE	RADAR CRUISE			Electric Parking Brake
USA	LS460	2009		1UR-FSE	Others			Electric Parking Brake
USA	LS460	2010		1UR-FSE	RADAR CRUISE			Electric Parking Brake
USA	LS460	2010		1UR-FSE	Others			Electric Parking Brake
USA	LS460	2011		1UR-FSE	RADAR CRUISE			Electric Parking Brake
USA	LS 160	2011		1UR-FSF	Others			Flectric Parking Brake
USA	15460	2011		1UR_ESE	RADAR CRUISE			Electric Parking Brake
USA	15460	2012		1UD_ESE	Othoro			Electric Parking Brake
USA	15460	2012		IUN FOR	DADAD COULCE			Electric Parking Diake
USA	LS400	2013		IUR-FSE	RADAR CRUISE			
USA	LS460	2013		IUK-FSE	Others			Electric Parking Brake
USA	LS600h	2008		2UR-FSE	RADAR CRUISE			Electric Parking Brake
USA	LS600h	2008		2UR-FSE	Others			Electric Parking Brake
USA	LS600h	2009		2UR-FSE	RADAR CRUISE			Electric Parking Brake
USA	LS600h	2009		2UR-FSE	Others			Electric Parking Brake
USA	LS600h	2010		2UR-FSE	RADAR CRUISE			Electric Parking Brake
USA	LS600h	2010		2UR-FSE	0thers			Electric Parking Brake
USA	LS600h	2011		2UR-FSE	RADAR CRUISE			Electric Parking Brake
USA	LS600h	2011		2UR-FSE	Others			Electric Parking Brake
USA	LS600h	2012		2UR-FSE	RADAR CRUISE			Electric Parking Brake
USA	LS600h	2012		2UR-FSE	0thers			Electric Parking Brake
USA	LS600h	2013		2UR-FSE	RADAR CRUISE			Electric Parking Brake
USA	LS600h	2013		2UR-FSE	Others			Electric Parking Brake
Tanan	GS350	5010	GRI	2GR-FSF	RADAR CRUISE			Flectric Parking Brake
Japan	65350		CRI	2GR_ESE	Others			Electric Parking Brake
Tanan	65250		GRI	4GR-FSF	RADAR CRITER		t	Flectric Parking Brake
Japan	03230		CDI	40R FSE	Othors			Electric Parking Drake
Japan	00200 CS450b		CWI	JON LOL	RADAR CDUITER			Electric Parking DidKe
Japan	0040011		CWI	201 TAE	Othema		1	Electric Parking Drake
Japan	63490N		UTA	∠GK-FÅE	Uthers		ł	Electric Parking Brake
Japan	LFA		LFA	ILR-GUE	-1112			Electric Parking Brake
]apan	LFA		LFA	ILR-GUE	1201-			Electric Parking Brake
Japan	LS460		USF	1UR-FSE	-1008	RADAR CRUISE		Electric Parking Brake
Japan	LS460		USF	1UR-FSE	-1008	Others		Electric Parking Brake
Japan	LS460		USF	1UR-FSE	1009-1208	RADAR CRUISE		Electric Parking Brake
Japan	LS460		USF	1UR-FSE	1009-1208	Others		Electric Parking Brake
Japan	LS460		USF	1UR-FSE	1209-	RADAR CRUISE		Electric Parking Brake
Japan	LS460		USF	1UR-FSE	1209-	Others		Electric Parking Brake
Japan	LS600h		UVF	2UR-FSE	-1008	RADAR CRUISE		Electric Parking Brake
Japan	LS600h		UVF	2UR-FSE	-1008	Others		Electric Parking Brake
Japan	LS600h		UVF	2UR-FSE	1009-1208	RADAR CRUISE		Electric Parking Brake
Tapan	LS600h		UVF	2UR-FSF	1009-1208	Others	1	Electric Parking Brake
Tanan	I \$600b		UVF	2UR-FSF	1209-	RADAR CRUISE		Flectric Parking Brake
Tapan	I S600h		UVE	2UR_ESE	1209	Others	1	Electric Parking Brake
Japan	AVENCT		7RT	27R_FAF	-1202	011101 0	1	Electric Parking Broke
Japan	CAVENCE		2111 7DT	97D EAE	1202			Electric Dephing Ducke
Japan	SAVENSI		7177	ә∠к−гАЕ	1203-			Electric Parking Brake

Function List

AutoMaker:Vauxhall Version:V5.00

Year	Vehicle Type	System
(C) 2012	Ampera	Parking Brake Control Module
(C) 2012	Astra-J	Parking Brake Control Module
(C) 2012	Insignia	Parking Brake Control Module
(B) 2011	Astra-J	Parking Brake Control Module
(B) 2011	Insignia	Parking Brake Control Module
(A) 2010	Astra-J	Parking Brake Control Module
(A) 2010	Insignia	Parking Brake Control Module
(9) 2009	Astra-J	Parking Brake Control Module
(9) 2009	Insignia	Parking Brake Control Module

Function List							
AutoMaker:volvo Version:V5.00							
Vehicle Type	Year	System Type	Systen Name				
S60	2011	PBM	Park Brake Module (PBM)				
S60	2012	PBM	Park Brake Module (PBM)				
S80	2007	PBM	Park Brake Module (PBM)				
S80	2008	PBM	Park Brake Module (PBM)				
S80	2009	PBM	Park Brake Module (PBM)				
S80	2010	PBM	Park Brake Module (PBM)				
S80	2011	PBM	Park Brake Module (PBM)				
S80	2012	PBM	Park Brake Module (PBM)				
V60	2011	PBM	Park Brake Module (PBM)				
V60	2012	PBM	Park Brake Module (PBM)				
V70	2008	PBM	Park Brake Module (PBM)				
V70	2009	PBM	Park Brake Module (PBM)				
V70	2010	PBM	Park Brake Module (PBM)				
V70	2011	PBM	Park Brake Module (PBM)				
V70	2012	PBM	Park Brake Module (PBM)				
XC60	2009	PBM	Park Brake Module (PBM)				
XC60	2010	PBM	Park Brake Module (PBM)				
XC60	2011	PBM	Park Brake Module (PBM)				
XC60	2012	PBM	Park Brake Module (PBM)				
XC70	2008	PBM	Park Brake Module (PBM)				
XC70	2009	PBM	Park Brake Module (PBM)				
XC70	2010	PBM	Park Brake Module (PBM)				
XC70	2011	PBM	Park Brake Module (PBM)				
XC70	2012	PBM	Park Brake Module (PBM)				

AutoMaker:VW

Version: V5. 00						
Vehicle Type	Year	Control Unit				
Passat	2010 - 2011	Parking Brake				
Passat only USA/Canada	2006 - 2011	Parking Brake				
Tiguan	2008 - 2011	Parking Brake				
Tiguan only USA/Canada	2008 - 2011	Parking Brake				
Sharan	2011	Parking Brake				
Touareg	2010 - 2011	Parking Brake				
Touareg only USA/Canada	2010 - 2012	Parking Brake				

Function List