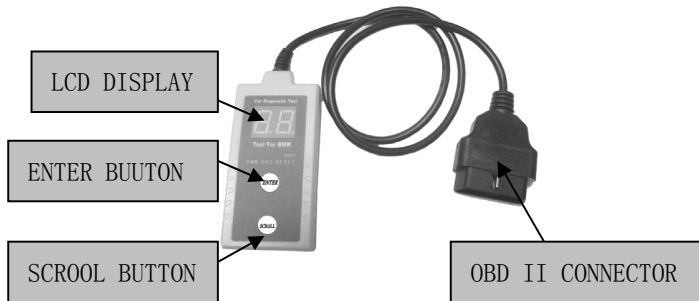


Where to buy cost-effective diagnostic tool: [www.autoobdtools.com](http://www.autoobdtools.com)

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## Tool Description



1. **LCD DISPLAY:** shows the test results.
2. **ENTER BUTTON:** confirms a selection of a menu list, or returns to the main menu.
3. **SCROLL BUTTON:** Scrolls through menu items or cancel an operation.
4. **OBD II CONNECTOR:** Connects the B800 to the vehicle's Data link Connector(DLC)

## DIRECTIONS

- 1.) Turn on key (DO NOT START ENGINE)
- 2.) Plug tool into diagnostic connector Tool is ready to use when it displays "FA".  
(Reverse steps 1 and 2 if you encounter problems)
- 3.) Use the "Scroll" button to select one of the following functions:

## Functions:



Read Airbag Faults.

How to Read Airbag Faults. The tool automatically starts in the "FA" mode, (though it won't read the fault codes until you press the "ENTER" button). When ENTER is pressed the first number shown will be the correct code chart to use.

Note: if it shows "--". There are no codes to display. Pressing ENTER a 2<sup>nd</sup> time will display the first fault code (see page 6 for explanation.) To view the next fault pressing ENTER again, and so on. At the end of the fault list the display will show "--". Press ENTER to return to "FA". If you encounter problems see troubleshooting page 15"



Clear Airbag light/Faults:

**How to Clear the Airbag (SRS) Light.** It is important what you know exactly why the airbag light came on before resetting it always read the code and look it up first.

**WARNING: DO NOT PROCEED WITH RESET UNTIL TAKING APPROPRIATE ACTION TO DIAGNOSE, UNDERSTAND AND SOLVE THE PROBLEM WITH THE AIRBAG SYSTEM.**

- 1.) Using the "Scroll" button, select "CA": Press "ENTER"



The tool will reset the SRS light and display. If Airbag light does not appear reset, or it comes right back on moment you reset it, then there is still a problem with the SRS system needs to be fixed.

## Making sense of the codes

- 1.) On the following pages, locate the correct chart for your car according to the first tow digit number displayed by the tool:

### Code Reading Example:

After plugging the tool, "FA" is displayed (See page 5)

Pressing ENTER will start the process. Before showing a code the tool will first tell you which code chart to use:

First indication is the chart #:



**First indication is never a fault code!** In this example, the tool is telling you to use the chart labeled FF (see page 7)

Press ENTER again-the first code will be displayed, example:



This is an example of a code : "1b"(not16)

- 2.) Look up the two digit code in the chart to obtain meaning

After resetting a code, drive vehicle over 15mph and re-check. If code persists or the SRS light returns contact a BMW dealer.

### USE THESE CODE DEFINITIONS WISELY:

The code definitions contained in this manual should be regarded as a starting point for diagnosing a problem. The codes that your BMW generates can be misleading. There may also be errors in this manual. Before spending your money on a repair or replacement parts, make sure you have a clear understanding of the problem.

## Code Tables

### USE THESE CODE DERINITIONS WISELY:

The code definitions contained in this manual should be regarded as a starting point for diagnosing a problem. The codes that your BMW generates can be misleading. There may also be errors in this manual. Before spending your money on a repair or replacement parts, make sure you have a clear understanding of the problem.

#### Table FF

##### Code Fault

1	Crash sensor closed once
2	Crash sensor closed more than once
5	Crash sensor closed permanently
OD	Two firing circuits short-circuited
13	Crash-sensor supply wire, left, open circuit
14	Crash-sensor supply wire, right, short circuit
1B	One firing circuit, short circuit to positive
21	One firing circuit, short circuit to earth
2A	Resistance in the driver' s airbag firing circuit too low
2B	Resistance in firing circuit II (seat-belt tensioner or passenger' s airbag) too low
2C	Resistance in firing circuit III (passenger' s airbag or equivalent resistance) too low
2D	Resistance in the driver' s airbag firing circuit too high
2E	Resistance in firing circuit II (seat-belt tensioner or passenger' s airbag) too high

**Warning 1:** Codes can be misleading and there may also be errors in this manual.

Never depend solely on fault codes for diagnosis.

**Warning 2:** Most SRS repairs require a BMW factory trained technician.

- 2F Resistance in firing circuit III (passenger's airbag or equivalent resistance) too high
- 31 Airbag warning light
- 32 Diagnostic unit faulty

## Table 01

### Code Fault

- 1 Control nit fault, A/D Convertor
- 2 Firing circuit, driver's airbag
- 3 Firing circuit, belt tensioner, driver's side
- 4 Firing circuit, belt tensioner, passenger's side
- 5 Firing circuit, passenger's airbag
- 6 EEPROM
- 7 SPI communication
- 0C Ignition voltage, driver's airbag
- 0D Ignition voltage, belt tensioner, driver's side
- 0E Ignition voltage, belt tensioner, passenger's side
- 0F Ignition voltage, passenger's airbag
- 10 Voltage autarky capacitor
- 11 Supply voltage
- 12 Control unit fault, TZ-locking wire
- 13 Fault lamp
- 14 Seat occupancy passenger
- 15 Pressure sensor driver
- 16 Pressure sensor passenger
- 17 Control unit fault, temperature
- 18 Seat belt buckle driver
- 19 Seat belt buckle passenger
- 30 Control unit fault, autarky case marker

**Warning 1:** codes can be misleading and there may also be errors in this manual. Never depend solely on fault codes for diagnosis.

**Warning 2:** Most SRS repairs require a BMW factory trained technician.

31	control unit fault, safety switch/supervision
32	control unit fault, airbag driver LSH
33	Control unit fault, airbag driver LSL
34	Control unit fault, airbag driver LSL
35	Control unit fault, ignition contact feet point
36	Control unit fault, belt tensioner driver LSH
37	Control unit fault, belt tensioner driver LSL
38	Control unit fault, swinging voltage test
39	Control unit fault, belt tensioner passenger LSH
3A	Control unit fault, belt tensioner passenger LSL
3B	Control unit fault, power source fault
3C	Control unit fault, airbag passenger LSH
3D	Control unit fault, airbag passenger LSL
3E	Control unit fault, reed coil
3F	Control unit fault, multiplexer
41	Control unit fault, ignition capacitor airbag driver
43	Control unit fault, ignition capacitor airbag driver
44	Control unit fault, ignition capacitor belt tensioner driver
45	Control unit fault, ignition capacitor belt tensioner passenger
46	Control unit fault, ignition capacitor airbag passenger
47	Control unit fault, signal track M1
48	Control unit fault, signal track M2
49	Short circuit between firing squibs
4C	Control unit fault, Universal ZAE fault
4D	ault crashtelegramm
4F	Unknown error location

**Warning 1:** Codes can be misleading and there may also be errors in this manual. Never depend solely on fault for diagnosis.

**Warning 2:** Most SRS repairs require a BMW factory trained technician.

## Table 02 and Table 38

### Code Fault

1	internal ECU error
2	warn lamp
3	Supply voltage
4	Firing circuit, driver airbag
5	Firing circuit, belt tensioner, driver side
6	Firing circuit, belt tensioner, passenger side
7	Firing circuit, passenger airbag
8	Firing circuit, side airbag, front left side
9	Firing circuit, side airbag, front right side
0A	Firing circuit, side airbag, rear left side
0B	Firing circuit, side airbag, rear right side\
0C	Firing circuit, head airbag, front left side
0D	Firing circuit, head airbag, front right side
0E	Firing circuit, battery disconnection
0F	Firing circuit, passenger airbag, Stage 2
10	Seat belt buckle switch, driver
11	Seat belt buckle switch, passenger
12	Sensor, side airbag, left, data line
13	Sensor, side airbag, left, parameter fault
14	Sensor, side airbag, left, data fault
15	Sensor, side airbag, right, data line
16	Sensor, side airbag, right, parameter fault
17	Sensor, side airbag, right, data fault
18	Seat occupancy detector, passenger
19	Seat occupancy detector, passenger
1A	Seat occupancy detector, passenger: Coding data

**Warning 1:** Codes can be misleading and there may also be errors in this manual. Never depend solely on fault codes for diagnosis.

**Warning 2:** Most SRS repairs require a BMW factory trained technician.



1B	Child seat detector
1C	Child seat detector
1D	Child seat detector: Coding data
1F	Child seat detector: Hardware
20	sensor, side airbag, left, Line fault
21	sensor, side airbag, right, Line fault
35	sensor, side airbag, left: Coding data
36	sensor, side airbag, right: Coding data
FF	Unknown error location

**Table 40**

## Code Fault

1	firing circuit, driver airbag, Stage 1
2	firing circuit, belt tensioner, driver side
3	firing circuit, belt tensioner, passenger side
4	firing circuit, passenger airbag, Stage 1
5	firing circuit, side airbag, front left side
6	firing circuit, side airbag, rear left side
7	firing circuit, side airbag, rear left side
8	firing circuit, side airbag, rear left side
9	firing circuit, head airbag, front left side
0A	firing circuit, head airbag, front right side
0B	firing circuit, battery disconnection 1
0C	firing circuit, passenger airbag, Stage 2
0D	firing circuit, driver airbag, Stage 2
0E	firing circuit, head airbag, rear left side
0F	firing circuit, head airbag, rear left side
10	firing circuit, battery disconnection 2
11	Supply voltage

**Warning 1:** Codes can be misleading and there may also be errors in this manual. Never depend solely on fault codes for diagnosis.

**Warning 2:** Most SRS repairs require a BMW factory trained technician.

12	Error lamp (AWL)
13	Information lamp (HWL)
14	Seat belt buckle switch, driver
15	Seat belt buckle switch, passenger
16	Satellite, left sensor (for side airbag), comms fault or open circuit
17	Satellite, right sensor (for side airbag), comms fault or open circuit
18	External over roll sensor (UERS)
19	Seat occupied recognition 2(SBE1)
1A	Seat occupied recognition 1(SBE1)
1B	crash telegram memory
1C	Firing circuit coupling, driver airbag, Stage 1
1D	Firing circuit coupling, belt tensioner, driver side
1E	Firing circuit coupling, belt tensioner, passenger side
1F	Firing circuit coupling, passenger airbag, Stage 1
20	Firing circuit coupling, side airbag, front left side
21	Firing circuit coupling, side airbag, front right side
22	Firing circuit coupling, side airbag, rear left side
23	Firing circuit coupling, side airbag, rear right side
24	Firing circuit coupling, head airbag, front left side
25	Firing circuit coupling, head airbag, front right side
26	Firing circuit coupling, battery disconnection 1
27	Firing circuit coupling, passenger airbag, Stage 2
28	Firing circuit coupling, driver airbag, Stage 2
29	Firing circuit coupling, hear airbag, rear left side
2A	Firing circuit coupling, hear airbag, rear right side
2B	Firing circuit coupling, battery disconnection 2
2C	Checksum coding data
2D	Satellite, front, comms fault or open circuit
2E	Seat back locking driver

**Warning 1:** Codes can be misleading and there may also be errors in this manual.

Never depend solely on fault codes for diagnosis.

**Warning 2:** Most SRS repairs require a BMW factory trained technician.

2F	Seat back locking passenger
30	Seat back locking K-Bus
F0	Control unit fault, internal error
FF	Unknown error location

## Table 10 and Table 04 Code Fault

1	firing circuit, driver airbag, Stage 1
2	firing circuit, belt tensioner, driver side
3	Firing circuit, belt tensioner, passenger side
4	Firing circuit, passenger airbag, Stage 1
5	Firing circuit, side airbag, front left side
6	Firing circuit, side airbag, front light side
7	Firing circuit, side airbag, rear left side
8	Firing circuit, side airbag, rear light side
9	Firing circuit, head airbag, front left side
0A	Firing circuit, head airbag, front light side
0B	Firing circuit, battery safety switch 1
0C	Firing circuit, passenger airbag, Stage 2
0D	Firing circuit, head airbag, Stage 2
0E	Firing circuit, head airbag, rear left side
0F	Firing circuit, head airbag, rear right side
10	Firing circuit, battery safety switch 2
11	Firing circuit, belt tensioner, rear left
12	Firing circuit, belt tensioner, rear right
13	Firing circuit, belt tensioner, rear middle
14	Firing circuit
15	Firing circuit, driver airbag, Stage 2

**Warning 1:** Codes can be misleading and there may also be errors in this manual. Never depend solely on fault codes for diagnosis.

**Warning 2:** Most SRS repairs require a BMW factory trained technician.

16	Firing circuit
30	Firing circuit, driver airbag, Stage 1
31	Firing circuit, belt tensioner, river side
32	Firing circuit, belt tensioner, passenger side
33	Firing circuit, passenger airbag, Stage 1
34	Firing circuit, side airbag, front left side
35	Firing circuit, side airbag, front left side
36	Firing circuit, side airbag, rear left side
37	Firing circuit, side airbag, rear right side
38	Firing circuit, head airbag, front left side
39	Firing circuit, head airbag, front right side
3A	Firing circuit, battery safety switch 1
3B	Firing circuit, passenger airbag, Stage 2
3C	Firing circuit, driver airbag, Stage 2
3D	Firing circuit, head airbag, rear left side
3	Firing circuit, head airbag, rear light side
3F	Firing circuit, battery safety switch 2
40	Firing circuit, belt tensioner, rear left
41	Firing circuit, belt tensioner, rear right
42	Firing circuit, belt tensioner, rear middle
43	Firing circuit
44	Firing circuit, passenger airbag, Stage 2
45	Firing circuit,
50	Supply voltage
51	Fault lamp (AWL)
52	Warning lamp (HWL)
60	Seat belt buckle switch, driver
61	Seat belt buckle switch, passenger
62	Seat belt buckle switch, rear left

**Warning 1:** Codes can be misleading and there may also be errors in this manual. Never depend solely on fault codes for diagnosis.

**Warning 2:** Most SRS repairs require a BMW factory trained technician.

63	Seat belt buckle switch, rear right
64	Seat belt buckle switch, rear middle
70	Seat occupancy sensor
71	Seat occupancy sensor II
72	Seat occupancy sensor and K-Bus
73	Seat occupancy sensor Driver
74	Seat occupancy sensor Passenger
75	External Roll Sensor
80	Satellite (MRSA),front
81	Satellite (MRSA),front left
82	Satellite (MRSA),front left
83	Satellite (MRSA),front left
84	Satellite (MRSA),front right
85	Satellite (MRSA),front right
86	Satellite (MRSA),front right
87	Satellite (MRSA),front right
88	Satellite (MRSA),front left
90	Coding block (CBD-Block)
91	Crash telegram memory
F0	Internal error

End of Code Tables

**Warning 1:** Codes can be misleading and there may also be errors in this manual. Never depend solely on fault codes for diagnosis.

**Warning 2:** Most SRS repairs require a BMW factory trained technician.

## Glossary

**AC**=Air conditioner

**ABS**=Anti-lock Brake System

**ASC**=kid control (see "Intervention")

**ADS**=Aux Throttle Position Motor

**AHK**=Active Rear Axle Kinematics

**BLS**=Brake Light Switch

**Check Engine Light:** on the dashboard, indicates the DME was detected a problem

**CC**=Check control

**CD**=Carbon Monoxide

**CDE**=ECU for Diesel Engine

**Diagnostic Connector:** Where the SRS Scan and Reset for BMW plugs into the car.

**DISA** =intake runner length tuning mechanism

**DME** = Engine ECU (Gasoline engine): Monitors and controls all engine sensors and functions

**DSC** = Dynamic Stability Control

**DTC** = Diagnostic Trouble Code

**DWA** = Alarm system

**E** = Communications error: See "Flashing E below"

**EGS** = Electronic Automatic Transmission

**EKAT**= Electrically heated catalytic convertor

**EKM** = electronic Body Module

**EML** = Electronic Throttle Control

**EVAP** = relates to fuel vapor recovery often his code indicates a loose gas cap

**EWS** = Drive away protection (alarm system)

**Fault code:** a "code" stored in the SPS controller memory bank that indicates a past or present problem.

**Fuel Trim** = adjustments to maintain proper air fuel ratio (see Lambda Control)

**Flashing E:** (in this product display) communication problem in the following

**GM** = General Module

**Intervention, MSR, ASC=**

Intervention is when another control unit

(1.e.sdid control) requests a power/torque change from the **DME**.

Code indicates **DME** assessed the request as being incorrect or too long.

**Lambda Control** = Code means DME is unable to maintain requisite air/fuel ratio due to external factor (air see fuel trim)

**LDP**=Loss Diagnosis Pump

**Load Calculation Cross Check (HFM VS TPS)**= when actual air flow exceeds +/-25% of calculated air flow.

**MDK**=Motorized Throttle Valve

**MLF**=Multi function Steering Wheel

**MSR**=Drag Torque Intervention (torque reduction for anti skid) see Intervention above

**NTC**=coolant temperature sensor

**Oilservice & Inspection:** Also called Si (abbrev. For service interval) maintenance reminder lights

**PWG**=Pedal Sensor Potentiometer

**QL**=idle air mass adaption (see Fuel Trim)

**RAM**=SRS random access memory

**ROM**=SRS program memory

**Scan Tool:** Generic term for this product

**SI**=Service Interval

**SMG**=BMW Motorsport Sequential

Gearbox

**TD**=Tachometer Signal

**TEV**=Evap,fuel tank vent/purge valve

**Ti Additive:** idle fuel adaption (see fuel trim)

**Ti multiplicative:** adaption a percentage +/- of injector tome (see Fuel Trim)

**TR signal**= from DME, RPM and valve position

**VANOS**=Adjustable Valve Train

**VDS**=Vehicle Description System. VIN Digits 4-7

**VIN**=Vehicle identification number.

**ZAB**=see ASC

**ZKE**=Central Body Electronics For further definitions, please consult documentation for the vehicle.

## Common Problems/Troubleshooting/Appendix

### ① Flashing E message on tool:

Occasionally the B800 will flash “E” when an attempt is made to read codes or reset the Airbag/SRS light. “E” means the car is not responding to the tool: This happens when the data line (also called “diagnostic bus”) in the car “hung” or disabled.

### Things To Try to Resolve the Flashing “E”:

**1.) Reversing the power-up sequence:** Plug in the SRS Scan Reset for BMW in first, Then turning on the ignition key. This in the opposite of the routine specified by the manual and the tool label. This procedure has proven very effective on some cars.

**2.) Insertion Depth:** Check the insertion depth of the SRS Scan Reset for BMW. If it is not fully inserted the unit will not work

**3.) Pin 19:** Observe that pin 19 of your diagnostic connector is not processed. A number of models had pin 19 improperly installed. While you're looking at the diag port ENTER ahead and check out all the pins.

**4.) Cycle power:** Plug in tool, cycle the ignition key on and off two or three times (do not start engine)

**5.) Other warning lights:** Observe that no other malfunction indicator lights are on. Often a malfunctioning module (i. e DME, EGS/transmission, ABS traction control, etc...) can hang the diagnostic bus (see above).

**6.) Power resetting of all modules (entire car)**

- a.) Disconnect the main car battery.
- b.) Activate the emergency flasher lights (this will fully drain all power from all ECUs) wait 5 minutes.
- c.) Reconnect the main battery and try the tool again.

**7.) Module Troubleshooting:** If you suspect a particular module is malfunctioning or damaged, you may wish to consult repair documentation for the car and attempt to isolate the problem by removing the module from the diagnostic bus. **WARNNG:** This Procedure is for qualified mechanics only.

**ABS service bulletin 34 01 96:** BMW circulated a service dulletin and low cost repair advice detailing the malfunction of the ABS unit wiring which caused diagnostic bus problems on a large number of BMWs. This is often the problem on BMWs built prior to 10/1994 that are getting the "E" message on the SRS Scan Reset for BMW code tool.

## **8.) The Dealer**

Visit your local BMW dealership. It will not serve it's intended purpose if the diagnostic bus is impaired by a malfunctioning control module. If one of the modules is inhibiting communications it is necessary to visit a BMW dealer or qualified repair facility to diagnose and fix/replace the bad module.

## **②Flashing E message on older BMWs:**

The SRS Scan and Reset for BMW was designed to work on 1991 and later BMWs. However, from 1991 to 1993 the tool often will not work due to two factors: BMW did not wire the SRS controllers to the main diagnostic lines, and BMW did not cleanly phase out the older 5WK4-025,027 and 035 controllers (which it is not compatible with.)

## **③Display is not working.**

Every unit goes through two display tests before being shipped to you, so it is unlikely that the display is dead. The display on it is not bright enough to be read in direct sunlight or strong indirect sunlight .Cup your hand around the display or move the vehicle to a darker area. It is also possible that the tool is not powered due to insufficient insertion into the diagnostic connector or recessed pins in the BMW diagnostic connector port. See above problem 1, section 3"Pin 19".