

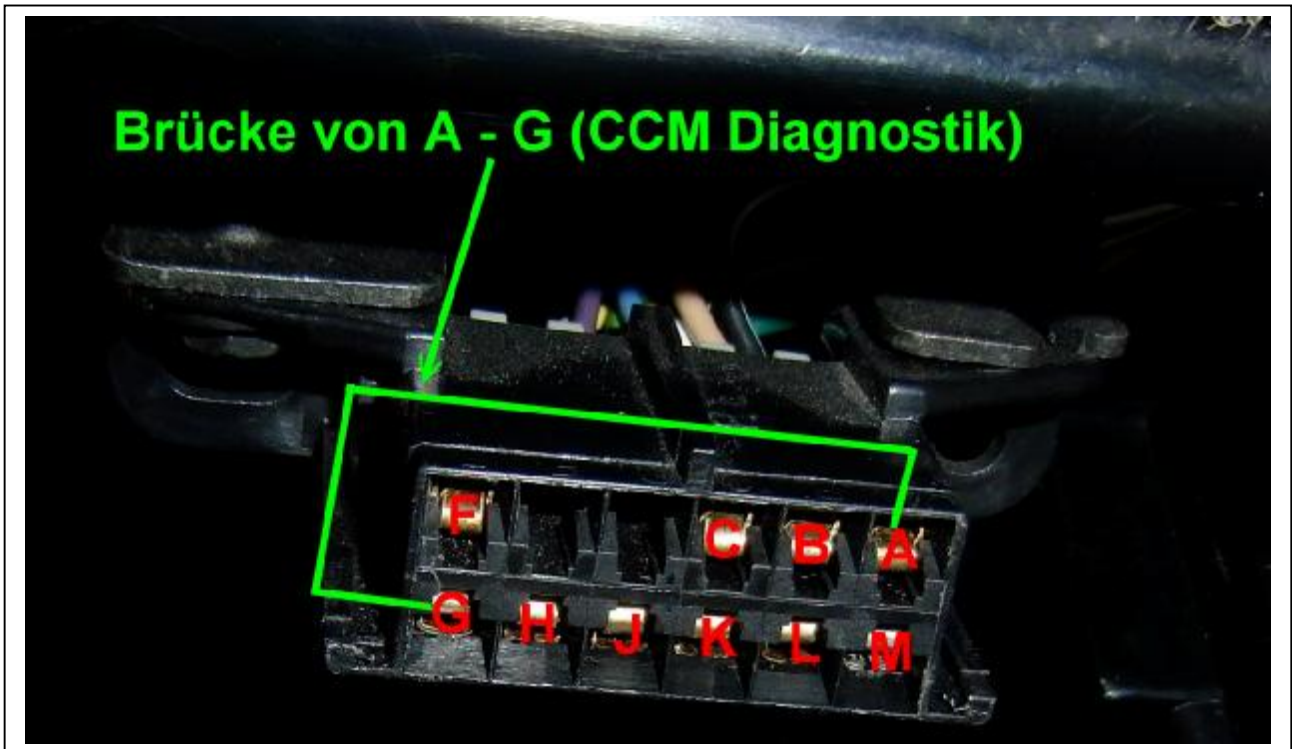
# Übersicht



1.	Diag Mode CCM / ECM (ab C4 1990)	Seite 2-7
2.	CCM Fault Code List	Seite 8
3.	LTPWS Fault Code List	Seite 9
4.	ABS Fault Code List	Seite 9
5.	SIR (Airbag) Fault Code List	Seite 6
6.	ECM Fault Code List (LT5; VIN J)	Seite 10
7.	ECM Fault Code List (L98; VIN 8)	Seite 10
8.	Automatic Air Conditioning Fault Code List	Seite 11
9.	Selective Ride Control FX3 Code List	Seite 11

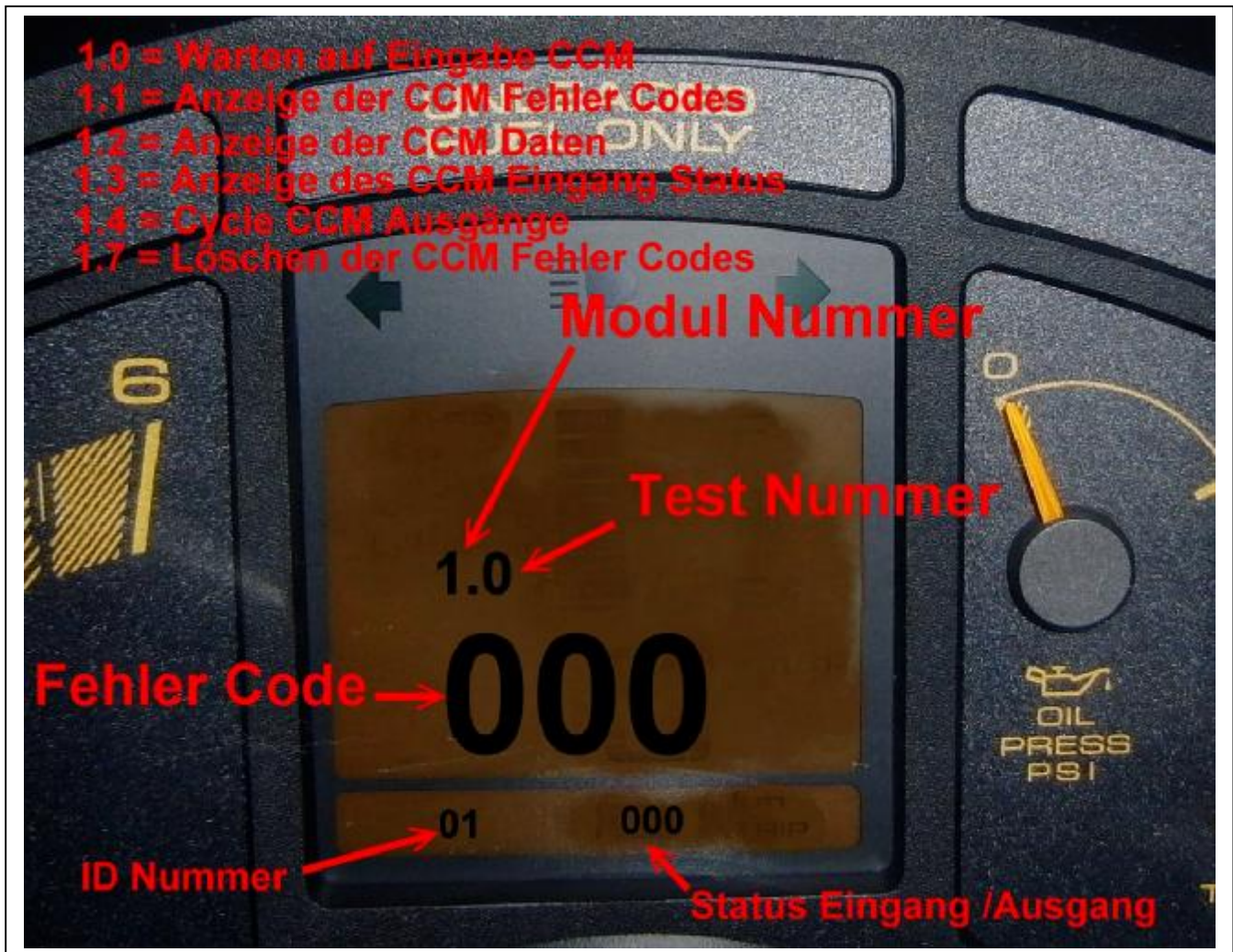
Um in den CCM / ECM Diagnose Mode zu gelangen (am Display der C4 ab 1990) :

1. Brücke Pin G (CCM Diagnostik) vom ALDL Anschluss A (Ground) am ALDL Port.

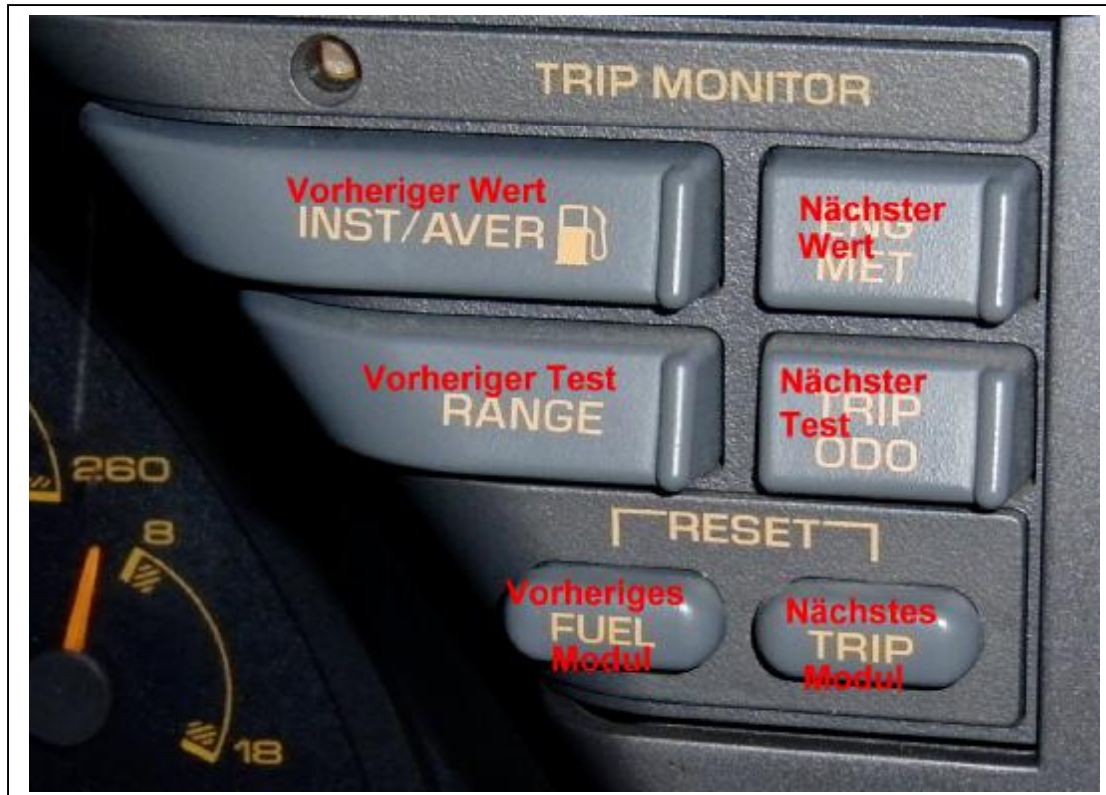


<u>ALDL Anschluss</u>	
<b>A</b>	Masse
<b>B</b>	ECM Diagnose
<b>C</b>	Ride Control Diagnose
<b>F</b>	T.C.C. (VIN 8) L98
<b>G</b>	CCM Diagnose
<b>H</b>	ABS Diagnose
<b>J</b>	E&C BUS Data
<b>K</b>	SIR Diagnose
<b>L</b>	SIR Data
<b>M</b>	Serial Data

2. Zündung ein schalten (nicht Starten)
3. jetzt zeigt das CCM alle Fehler Codes an.



Automatik Mode  
Jeder Code wird 3 sek. angezeigt.  
CCM ist Modul 1  
ECM ist Modul 4  
Am Ende der Code Liste wird --- angezeigt.



Auswahl mit dem TRIP/ODO Knopf  
Anzeige der Codes mit ENG/MET Knopf.  
Zurück mit INST/AVER Knopf

### Modul CCM

1.0 = Warten auf Eingabe CCM  
1.1 = Anzeige der CCM Fehler Codes

#### 1.2 = Anzeige der CCM Daten

1.2 = CCM Test Eingänge	
<u>Data ID</u>	<u>Daten Wert</u>
01	Benzin Tankanzeige
02	Dimmer Licht
03	Licht Sensor
04	Timmer Heizbare Heckscheibe
05	Geschwindigkeit M.P.H
06	Pass Key (Zündschlüssel)
07	Zündung Spannung (Volt)
08	Geschaltete Batterie Spannung (Volt)
09	Cluster Birne Dimmer PWM 0-100%
10	Cluster LCD Beleuchtung PWM 0-100%
11	Radio & Klimaanlage Dimmer PWM 0-100%
12	LED Dimmer PWM 0-100%
13	Oil Wechsel Monitor 100000 Zähler
14	CCM Software Version

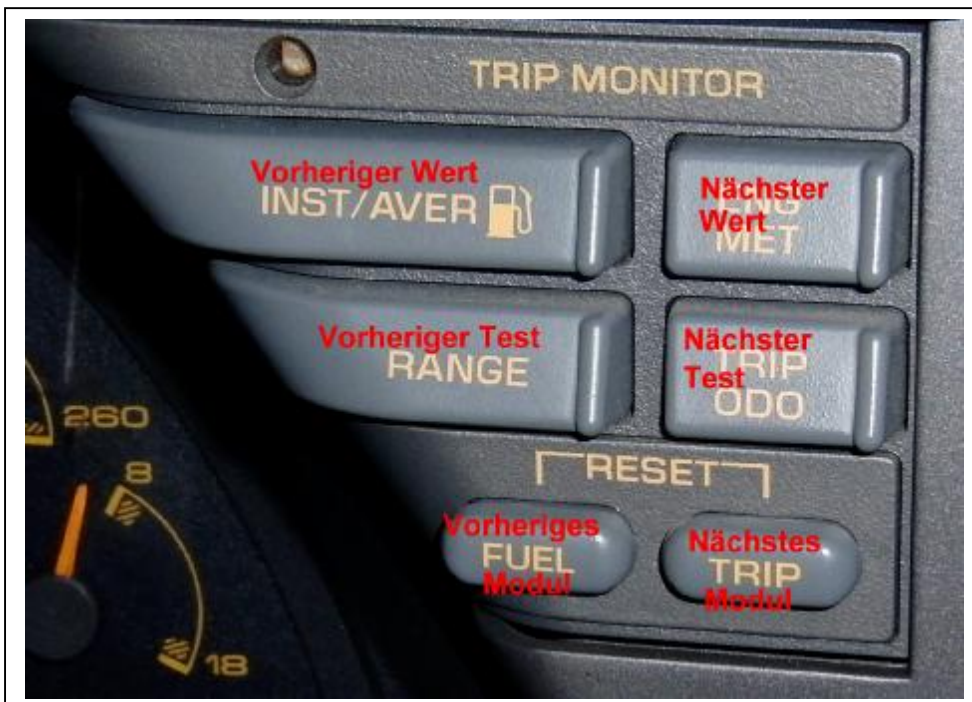
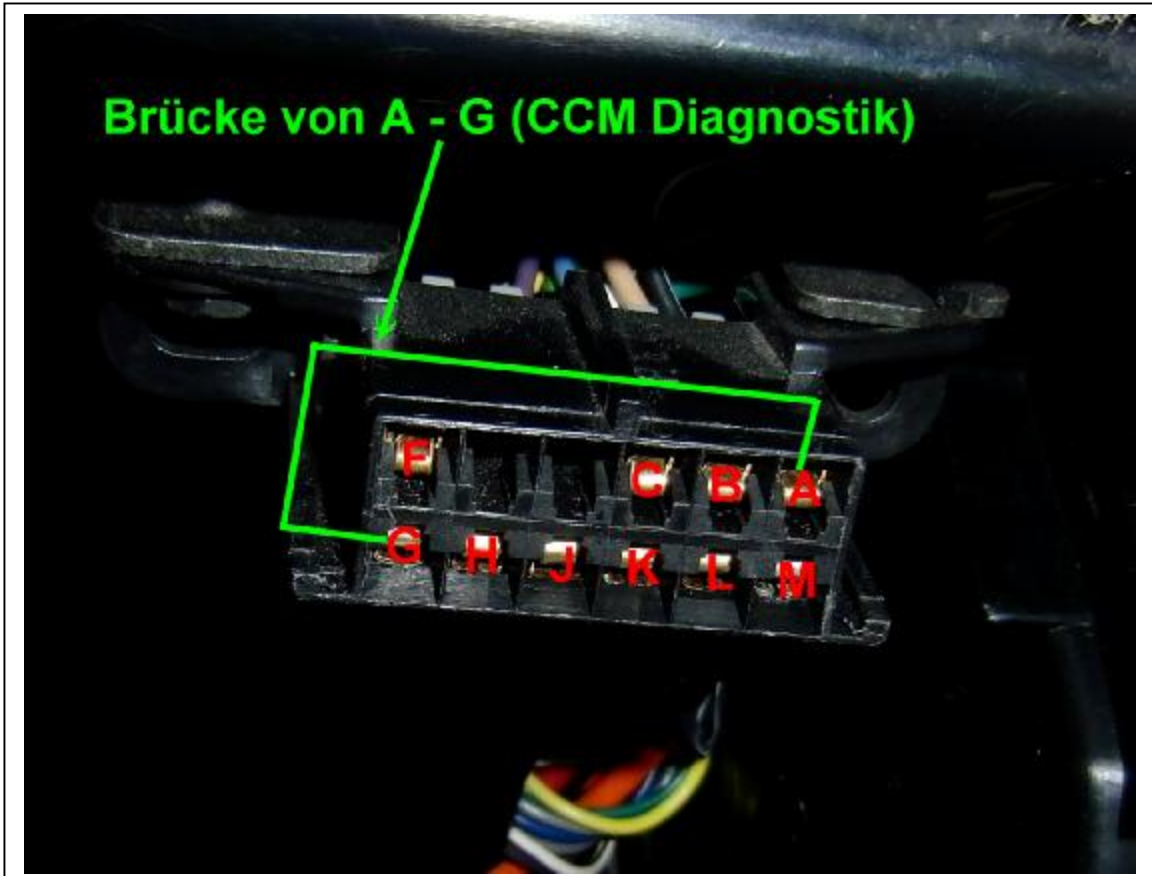
<b>1.3 = CCM Eingang Status</b>	
<b>Eingang ID</b>	<b>Wert Eingang</b>
01	PASS Key Benzin 1 = Eingeschaltet
02	Englisch / Metrisch 1 = Metrisch
03	Tür Schlüssel Schalter 1 = Ein
04	Rechte Tür 1 = Auf
05	Linke Tür 1 = Auf
06	Schlüssel in Zündung 1 = geschlossen
07	hintere Scheibe 1 = offen
08	Tür entriegelt 1 = ja
09	Tür verriegelt 1 = ja
10	Park Licht 1 = Ein
11	Heizbare Heckscheibe 1 = Ein
12	Sicherheitsgurt 1 = Eingerastet
13	Fernlicht 1 = Ein
14	Niedriger Motor Ölstand 1 = niedriger Ölstand

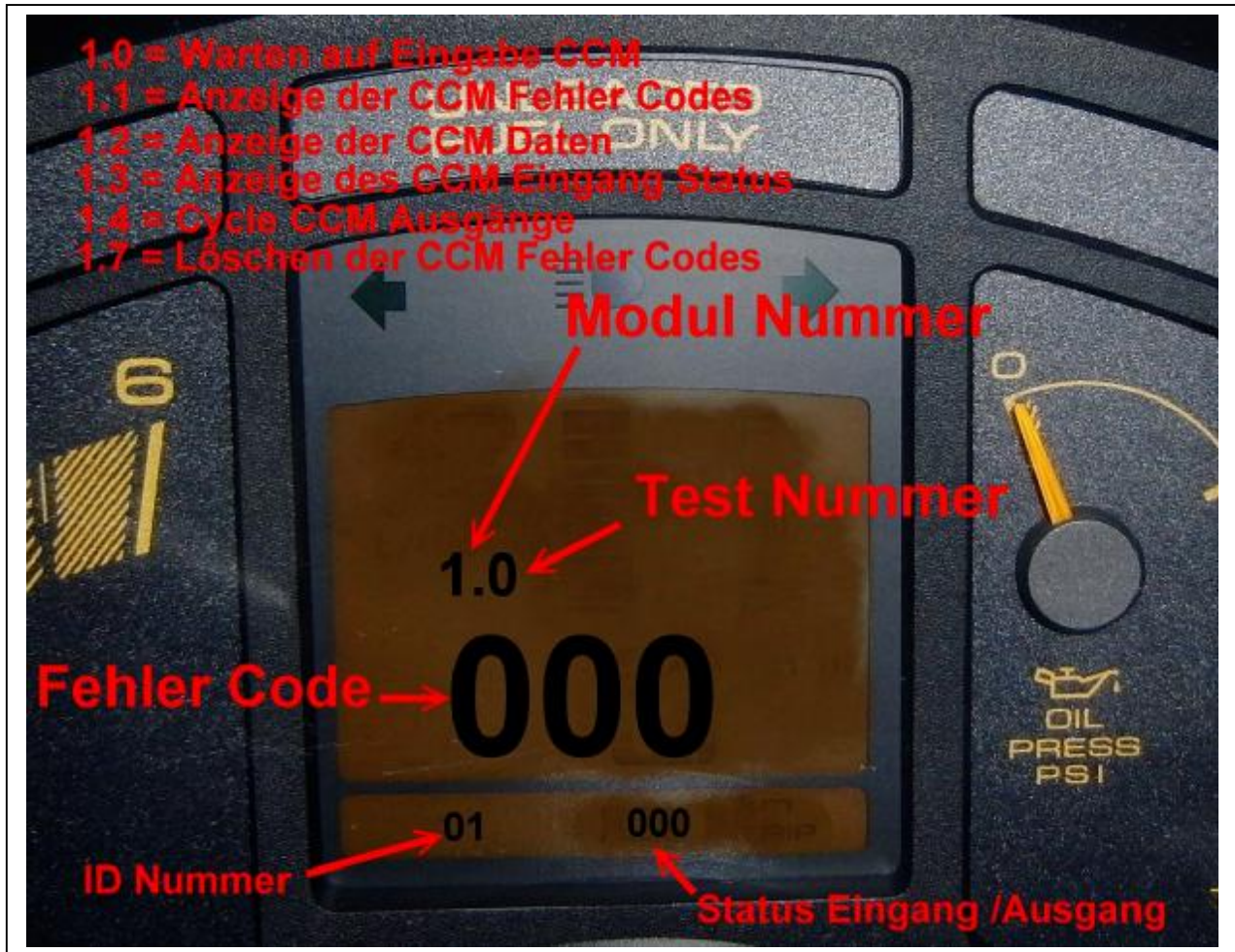
<b>1.4 = CCM Cycle Ausgänge</b>	
<b>Ausgang ID</b>	<b>Ausgang Wert</b>
01	Ölwechsel Lampe
02	Check Gauges / Instrumentenwarnleuchte Lampe
03	Fasten Seatbelt / Sicherheitsgurt Lampe
04	Security / Alarmanlage Lampe
05	Fernlicht Lampe
06	Warnleuchte 1
07	Warnleuchte 2
08	LCD Blanking Control
09	Relais Heizbare Heckscheibe
10	Courtesy Lampen / Innenbeleuchtung Relay
11	Niedriger Motorölstand Lampe
12	Starter Ein Relais
13	Zeitverzögerung Relais Zubehör BUS
14	Hupen Relais

### **1.7 = Löschen der CCM Fehler Codes**

- ALDL Stecker Brücke zwischen PIN A – G, Zündung einschalten
- TRIP/ODO Knopf so oft drücken bis im Display 1.7 erscheint
- ENG/MET Knopf so lange gedrückt halten bis im Display --- erscheint (im Menü 1.7)
- Zündung aus, Brücke A – G entfernen

### Anzeige Modul ECM





4.0 = Warten auf Eingabe ECM

**4.1 = Anzeige der ECM Fehler Codes**

- ALDL Stecker Brücke zwischen PIN **A – G**, Zündung einschalten
- TRIP/RESET Knopf so oft drücken bis 4.0 im Display erscheint
- TRIP/ODO Knopf so oft drücken bis 4.7 im Display erscheint
- ENG/MET Knopf drücken, erster Code wird Angezeigt (Ende der Liste ---)  
(Mit INST/AVER kann man zurück blättern)

**4.7 = Löschen der ECM Fehler Codes**

- ALDL Stecker Brücke zwischen PIN **A – G**, Zündung einschalten
- TRIP/RESET Knopf so oft drücken bis 4.0 im Display erscheint
- TRIP/ODO Knopf so oft drücken bis 4.7 im Display erscheint
- ENG/MET Knopf so lange gedrückt halten bis im Display --- erscheint (im Menü 4.7)
- Zündung aus, Brücke A – G entfernen

## **CCM Fault Code List**

### Code Definition

- 12 On-Board Diagnostics Operational; No Codes
- 13 DIC Switches Open or Shorted to B+
- 14 DIC Switches Shorted to Ground
- 16 Ignition 3 Fuse Circuit Open
- 21 Horn Relay Coil Shorted to B+ or CCM Internal Open
- 22 Rear Defogger Relay Coil Shorted to B+ or CCM Internal Open
- 24 Courtesy Lamp Relay Coil Shorted to B+ or CCM Internal Open
- 25 Courtesy Lamp Relay Coil Circuit Open or Shorted to Ground
- 26 LCD Blanking Control Circuit Shorted to B+ or CCM Internal Open
- 27 LCD Blanking Control Circuit Open or Shorted to Ground
- 31 LCD Data Circuit Shorted to B+ or CCM Internal Open
- 32 LCD Data Circuit Open or Shorted to Ground
- 33 Data Clock Circuit Shorted to B+ or CCM Internal Open
- 34 Data Clock Circuit Open or Shorted to Ground
- 35 Data Strobe Circuit Shorted to B+ or CCM Internal Open
- 36 Data Strobe Circuit Open or Shorted to Ground
- 37 M Clock Circuit Shorted to B+ or CCM Internal Open
- 38 M Clock Circuit Open or Shorted to Ground
- 41 Loss of ECM Serial Data Communication
- 51 Pass-Key - Invalid Key Detection
- 52 Pass-Key - Key Detection Circuit Shorted
- 53 Pass-Key - Key Detection Circuit Open or Shorted to B+
- 54 Pass-Key - Fuel Enable Failure
- 61 Pass-Key - Key # 1 Programming Resistance Out of Range
- 62 Pass-Key - Key # 2 Programming Resistance High
- 63 Pass-Key - Key # 2 Programming Resistance Low
- 71 LCD Dimming Output Circuit Shorted to B+ or CCM Internal Open
- 72 LCD Dimming Output Circuit Open or Shorted to Ground
- 73 LED Display Dimming Output Circuit Shorted to B+ or CCM Internal Open
- 74 LED Display Dimming Output Circuit Open or Shorted to Ground

### **LTPWS Fault Code List**

#### *Code Definition*

- 99 Receiver/Control Module Diagnosis
- 23 Right Tire Rear Low Tire
- 24 Right Tire Rear Sensor Fault
- 33 Left Tire Rear Low Tire
- 34 Left Tire Rear Sensor Fault
- 43 Left Tire Front Low Tire
- 44 Left Tire Front Sensor Fault
- 53 Right Tire Front Low Tire
- 54 Right Tire Front Sensor Fault

### **ABS Fault Code List**

#### *Code Definition*

- 21 Right Front Wheel Speed Sensor Fault
- 22 Right Front Toothed Wheel Frequency Error
- 25 Left Front Wheel Speed Sensor Fault
- 26 Left Front Toothed Wheel Frequency Error
- 31 Right Rear Wheel Speed Sensor Fault
- 32 Right Rear Toothed Wheel Frequency Error
- 35 Left Rear Wheel Speed Sensor Fault
- 36 Left Rear Toothed Wheel Frequency Error
- 41 Right Front Solenoid Valve Fault
- 45 Left Front Solenoid Valve Fault
- 55 Rear Wheels Solenoid Valve Fault
- 61 Pump Motor or Motor Relay Fault
- 63 Solenoid Valve Relay Fault
- 71 Electronic Brake Control Module Fault
- 72 Serial Data Line Fault
- 75 Lateral Accelerometer Fault (Short or Open)
- 76 Lateral Accelerometer Fault (Signal out of Range)

### **SIR (Airbag) Fault Code List**

#### *Code Definition*

- 21 Steering Column Circuit Resistance too High
- 22 Steering Column Circuit Resistance too Low
- 23 Steering Column Circuit Voltage too High
- 23 Steering Column Circuit Voltage too Low
- 25 Short to Battery in Steering Column Circuit
- 26 Open in Steering Column Circuit
- 31 Open 36 VLT to Deployment Loop
- 32 Grounded 36 VLT to Deployment Loop
- 33 History Code, Diode B Shorted in Wiring Harness to Arming Sensor
- 34 Open in Ignition 1 Feed to Deployment Loop
- 35 Discriminating Sensor Open
- 41 and / or 42 Deployment Loop Energy Reserve Voltage Fault
- 51 Accident Detected
- 52 EEPROM Accident Data Area Full
- 61 Force Low or "INFL REST" Warning Lamp Circuit Failure
- 71 Internal DERM Fault

### **ECM Fault Code List (LT5; VIN J)**

#### *Code Definition*

- 13 Left Oxygen Sensor (Open)
- 14 Coolant Sensor (High Temp)
- 15 Coolant Sensor (Low Temp)
- 16 DIS Fault Line Malfunction
- 21 TPS (Voltage High)
- 22 TPS (Voltage Low)
- 23 IAT Sensor (Temp Low)
- 24 Vehicle Speed Sensor
- 25 IAT Sensor (Temp High)
- 31 Cam Sensor Signal Problem
- 33 MAP Sensor (Voltage High)
- 34 MAP Sensor (Voltage Low)
- 36 DIS Fault Line/Missing or Extra EST Signal
- 41 Cylinder Select Error
- 42 EST System Malfunction
- 43 ESC System Malfunction
- 44 Left Oxygen Sensor (Lean)
- 45 Left Oxygen Sensor (Rich)
- 46 PASS-Key Circuit
- 51 MEM-CAL Problem
- 52 Engine Oil Temp Sensor (Low Temp)
- 53 System Voltage Error
- 54 Fuel Pump Voltage Low
- 55 Fuel Lean Monitor
- 56 Vacuum Sensor Voltage Problem
- 61 Secondary Port Throttle System Malfunction
- 62 Engine Oil Temp Sensor High
- 63 Right Oxygen Sensor Circuit (Open)
- 64 Right Oxygen Sensor (Lean)
- 65 Right Oxygen Sensor (Rich)
- 66 Engine Power Switch Voltage (High or Low)

### **ECM Fault Code List (L98; VIN 8)**

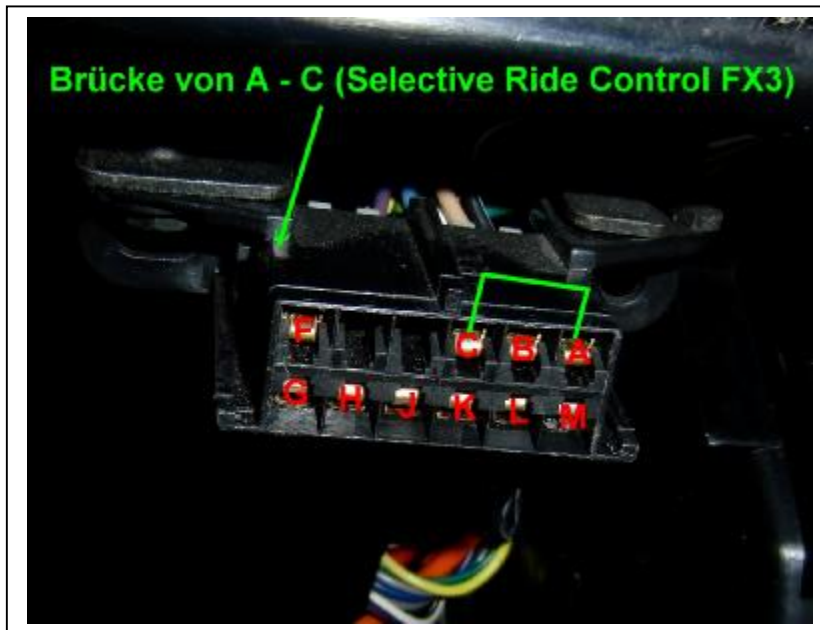
#### *Code Definition*

- 13 Oxygen Sensor (Open)
- 14 Coolant Sensor (High Temp)
- 15 Coolant Sensor (Low Temp)
- 21 TPS (Voltage High)
- 22 TPS (Voltage Low)
- 23 IAT Sensor (Temp Low)
- 24 Vehicle Speed Sensor
- 25 IAT Sensor (Temp High)
- 32 EGR System Malfunction
- 33 MAP Sensor (Voltage High)
- 34 MAP Sensor (Voltage Low)
- 41 Cylinder Select Error
- 42 EST System Malfunction
- 43 ESC System Malfunction
- 44 Oxygen Sensor (System Lean)
- 45 Oxygen Sensor (System Rich)
- 46 PASS-Key Circuit
- 51 MEM-CAL Problem
- 52 Engine Oil Temp Sensor Low
- 53 System Voltage Problem
- 54 Fuel Pump Voltage Low
- 62 Engine Oil Temp Sensor High

## Automatic Air Conditioning Fault Code List

01 + 02 Temperature Door Motor Circuit Fault  
03 (Open) + 04 (Short) Outside (Ambient) Air Temperature Sensor Fault  
05 (Open) + 06 (Short) In-Vehicle Temperature Sensor Circuit Fault  
07 (Open) + 08 (Short) Solar (Sun-Load) Sensor Circuit Fault Open or Shorted  
09 Low Freon Detected  
10 or --- Uart or "E" and "C" Bus Failure  
Diagnostic mode = push and hold the fan "up" arrow and fan "down" arrow at the same time (5 sec.)  
Push "Auto Fan" to show the fault codes  
LED flash at 60 times per minute = Fault codes be stored  
Reset = Remove Negative Battery Cable for 1 Minute

## Selective Ride Control FX3



### Abfrage Fehler Codes:

Brücke zwischen A + C am ALDL Connector  
Zündung einschalten (nicht den Motor starten)  
Durch blinken der Service Ride Control Lampe wird der Code angezeigt

### Code Liste Selective Ride Control FX3:

12	Start of code sequence
13	Left Rear time out
14	Right Front time out
21	Left Front time out
22	Right Rear time out
23	Loss of vehicle speed signal
31	Left Front out of position
32	Right Front out of position
33	Left Rear out of position
34	Right Rear out of position
41	Selective Ride Control Switch short to Voltage
42	Selective Ride Control Switch open cantacts
43	Selective Ride Control Switch open circuit