

# PRISE DIAG 16 POINTS

- 1 Ground
- 2
- 3 CIS-E Continuous Fuel injection system (CFI)
- 4
- 5 ASD Automatic locking differential
- 6 SRS / AB Supplemental Restraint System / Air Bag
- 7 RB Roll Bar
- 8 DI Distributor ignition
- 9 ADS Adaptive Damping System
- 10 RST Roadster Soft Top
- 11 ATA Anti Theft Alarm system
- 12 IRCL Infrared Remote Central Locking
- 13 ETC Electronic automatic Transmission Control
- 14 ESCM Engine System Control Module (MAS)
- 15
- 16 Voltage, Ignition ON (Circuit 15) (Not equipped on all models.)

## Defaults

### **3 CONTINUOUS FUEL INJECTION SYSTEM (CFI)**

- 1 No fault found
- 2 Throttle position switch - wide open throttle (WOT), signal faulty
- 3 Engine coolant temperature sensor faulty
- 4 Air flow sensor position potentiometer voltage illogical
- 5 Oxygen sensor signal illogical
- 6 Not used
- 7 TNA/TD signal (RPM) read by CFI control module
- 8 Altitude pressure signal from ignition control module illogical
- 9 Electronic hydraulic actuator (EHA) current faulty.
- 10 Throttle position switch - closed throttle position fault (idle)
- 11 Air injection system, open or short circuit
- 12 Absolute pressure values from EZL ignition control module are illogical or Exhaust gas recirculation temperature sensor
- 13 Intake air temperature reading is illogical
- 14 Vehicle speed signal read by CFI control module is illogical
- 15 Not used

- 16 Exhaust gas recirculation switchover valve, open or short circuit
- 17 Oxygen sensor is shorted to positive or ground
- 18 Current to idle control valve is illogical
- 19 Not used
- 20 Not used
- 21 Not used
- 22 Oxygen sensor heater voltage illogical
- 23 Short circuit to positive in purge switchover valve circuit
- 24 Not used
- 25 Short circuit to positive in start valve circuit
- 26 Short circuit to positive in upshift delay solenoid valve circuit
- 27 Data exchange between CFI control module and ignition control module interrupted
- 28 Intermittent contact in engine coolant temperature sensor circuit
- 29 CFI and ignition control module reading different engine coolant temperatures - Faulty sensor or wires
- 30 Not used
- 31 Intermittent contact in engine coolant temperature sensor circuit
- 32 Not used
- 33 Not used
- 34 Engine coolant temperature read from ignition control module illogical

## 5 **Automatic Locking Differential (ASD)**

- 1 No fault found
- 2 Adaptive damping system control module
- 3 Stop lamp switch
- 4 Left front axle vehicle speed sensor signal
- 5 Right front axle vehicle speed sensor signal
- 6 Rear speed sensor signal
- 7 No speed signal from any sensor, missing ground
- 8 Adaptive damping system valve or stop lamp switch

## 6 **Supplemental Restraint System (SRS) - Analog-**

- 1 No fault found
- 2 SRS Control unit self test failure
- 3 Driver Airbag squib (Firing charge circuit)
- 4 Front passenger Airbag squib
- 5 Driver seat belt buckle switch (ETR,)
- 6 Front passenger seat belt buckle switch (ETR)
- 7 Front passenger Airbag resistor
- 8 Voltage supply interrupted (Circuit 15R)
- 9 SRS Warning Lamp (with flashing SRS warning lamp Impulse counter scan tool button held too little time to read out the DTC memory or too long to erase DTC codes. Reread codes.)
- 10 SRS Control unit activated - Replace (1990 and later switch to next circuit if used 3 times replace)

## **7 Roll Bar (RB) for RST**

- 1 No faults found
- 2 Roll bar control module
- 3 Volts supply
- 4 Driver seat belt lock relay open circuit or short circuit to Battery + or ground (-).
- 5 Passenger seat belt lock relay open circuit or short circuit to Battery + or ground (-).
- 6 Roll bar deployment solenoid, open circuit or short circuit to Battery + or ground (-).
- 7 Left and/or right axle switch, roll bar, short circuit to 30 or 31
- 8 Roll bar warning lamp
- 9 SRS warning lamp and/or code scanner button held to erase faulty
- 10 SRS control unit

## **8 Distributor Ignition (DI).**

- 1 No fault found
- 2 Maximum retard setting on at least one cylinder has been reached
- 3 Engine coolant temperature sensor faulty
- 4 Load sensor in EAL/AKR control module faulty
- 5 Knock sensors 1 and/or 2 faulty
- 6 Camshaft position sensor faulty
- 7 Knock output switch in EAL/AKR ignition control module faulty
- 8 Transmission overload switch does not close
- 9 Transmission overload switch does not open
- 10 Data exchange from EAL/AKR engine control module to CFI control module faulty.
- 11 Preference resistor faulty
- 12 Tn-signal is outside the tolerance range
- 13 Full load contact does not open.
- 14 Idle speed contact does not open.
- 15 Ignition coil 1 output from EAL/AKR ignition control module faulty
- 16 Ignition coil 2 output from EAL/AKR ignition control module faulty
- 17 Crankshaft position sensor faulty
- 18 Magnets for crankshaft position sensor (CKP) not recognized.
- 19 Ground, coding from left EAL/AKR ignition control module not present.
- 20 Ignition control module DTC memory faulty.
- 21 Load sensor in control module faulty. (Recognized with engine running)
- 22 -25 Not used
- 26 Ignition control module data exchange fault
- 27 LH-SFI control module data exchange fault
- 28 Electronic accelerator control module/idle speed control data exchange fault
- 34 Ignition misfire detected at cylinder 1 (104) / cylinder 1 (119)
- 35 Ignition misfire detected at cylinder 5 (104) / cylinder 5 (119)
- 36 Ignition misfire detected at cylinder 3 (104) / cylinder 4 (119)

- 37 Ignition misfire detected at cylinder 6 (104) / cylinder 8 (119)
- 38 Ignition misfire detected at cylinder 2 (104) / cylinder 6 (119)
- 39 Ignition misfire detected at cylinder 4 (104) / cylinder 3 (119)
- 40 Ignition misfire detected at cylinder 7 (119)
- 41 Ignition misfire detected at cylinder 8 (119)

## 9 **Adaptive Damping System (ADS)**

- 1 No fault found
- 2 Adaptive damping system control module
- 3 Body acceleration sensor
- 4 Wheel acceleration sensor
- 5 Steering angle sensor
- 6 Front axle solenoid valves 1
- 7 Front axle solenoid valves 2
- 8 Rear axle solenoid valves 1
- 9 Rear axle solenoid valves 2
- 12 Right front axle vehicle speed signal or ABS Signal
- 13 Oil level switch (ADS)
- 14 Steering angle sensor not activated/initialized
- 15 Comfort or sport switch (ADS) short circuit
- 17 Vehicle load sensor
- 18 Adaptive damping system warning lamp
- 19 Volts supply too low
- 20 Steering angle sensor
- 21 Volts supply too high
- 22 Comfort or sport switch (ADS)

## 10 **Roadster Soft Top (RST)**

- 1 No faults stored
- 2 Limit switch, left locked, soft top storage compartment cover
- 3 Limit switch, right locked, soft top storage compartment cover
- 4 Limit switch, left closed, soft top storage compartment cover
- 5 Limit switch, right closed, soft top storage compartment cover
- 6 Limit switch, left locked, soft top fabric bow
- 7 Limit switch, right locked, soft top fabric bow
- 8 Limit switch, left closed, soft top fabric bow
- 9 Limit switch, right closed, soft top fabric bow
- 10 Limit switch, left front locked, soft top
- 11 Limit switch, right front locked, soft top
- 12 Limit switch soft top storage compartment cover open
- 13 Limit switch soft top fabric bow raised
- 14 Limit switch soft top down (in storage compartment)

- 15 Limit switch soft top up (secondary closing speed )
- 16 Limit switch roll bar retracted
- 17 Limit switch left side window down Circuit in power soft top control module, solenoid valve, roll bar retracted
- 18 Limit switch right side window down Circuit hydraulic unit, circuit solenoid valve, roll bar retracted
- 19 Axle vehicle speed signal illogical Circuit in power soft top control module, solenoid valve, roll bar extended
- 20 Hardtop installed recognition Circuit solenoid valve, roll bar extended
- 21 Power soft top switch Circuit in power soft top control module, Power windows
- 22 Roll bar switch
- 23 Roll bar control module
- 24 Roll bar crash deployment
- 25 Limit switch signals illogical
- 26 Operation time exceeded
- 27 Insufficient volts
- 28 No speedometer signal
- 29 No axle vehicle wheel speed sensor signal
- 30 Soft top operation blocked

## **11 Anti-theft Alarm System(ATA)**

- 1 No fault found
  - 2 Alarm activated, trunk sensor circuit
  - 3 Alarm activated, engine hood circuit
  - 4 Alarm triggered, glove compartment
  - 5 Alarm activated, rear door circuit Console compartment circuit
  - 6 Alarm activated, front door circuit
  - 10 Alarm activated, radio circuit
  - 12 Alarm activated, ignition circuit
  - 14 Alarm activated, brake circuit
  - 19 AT Control module faulty
  - 20 Left front door actuator, No ground connection
  - 21 ATA disarmed, Starter lock-out relay module. short to circuit 30
  - 23 ATA armed, Open to circuit 30
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- 12 Infrared Remote Control for Central Locking (IRCL)
    - 1 No fault found
    - 2 Infrared remote control module
    - 3 Supply pump, central locking system short to ground
    - 4 Infrared remote control receiver, Left front door/Right front door/Trunk lid Red indicator lamps, short to ground
    - 5 Infrared remote control receiver, Left front door/Right front door/Trunk lid Green indicator lamps, short to ground
    - 6 Supply pump, central locking system, short to circuit 30

7 Infrared remote control receiver, Left front door/Right front door/Trunk lid Red indicator lamps, short to circuit 30 or open circuit

8 Infrared remote control receiver, Left front door/Right front door/Trunk lid Green indicator lamps, in receiver have short to short to circuit 30 or open circuit

9 Driver door switch group wiring, short to circuit 30 ATA/convenience microswitch wiring short to circuit

30 ATA/convenience microswitch wiring short to circuit 30

10 Ignition/starter switch-position recognition switch, open circuit

11 Ignition/starter switch-position recognition switch, open circuit 31

12 Left front door actuator, open circuit

13 Right door actuator, open circuit

14 Trunk lid lock actuator, open circuit

### **13 Electronic Automatic Transmission Control (ETC) with CFI (722.5)**

1 No fault found

2 Not used

3 Engine load signal interrupted

4 Throttle valve switch (potentiometer) interrupted

5 Engine speed (RPM) signal interrupted

6 Vehicle speed signal interrupted

7 Output fault in 5-speed automatic transmission control module or fault in control valve.

8 5-speed automatic transmission control module

9 Control valve

10 Control valve short circuit

Electronic Transmission Control 5-speed (722.5)

1 No fault found

2 Engine control module (N3/4) does not match TCM

3 Transmission overload protection switch 4th/5th gear defective

4 CAN data line from EA/CC/ISC control module (N4/1) signal distorted

5 CAN data line from DI control module (N1/3) or HFM control module signal distorted

6 CAN data line signal distorted, Short or open circuit

7 Control valve block (Y3/1y2), open circuit or TCM (N15/1) defective

8 Automatic Transmission Control Module (TCM) (N15/1) defective

9 Control valve block (Y3/1y2)

10 Control valve block (Y3/1y2), short circuit

### **14 Continuous Fuel Injection System (MAS Controller)**

1 No fault found

2 Fuel pump relay (circuit 87) not functioning

3 TN/TD signal (RPM) interrupted

4 Output for oxygen sensor heater control defective

5 Output for air injection pump control defective

- 6 Output for kickdown switch control defective
- 7 Not used
- 8 Engine coolant temperature sensor signal out of range
- 9 Circuit 50 failure
- 10 Output failure of the start valve
- 11 A/C compressor engagement signal missing (87Z)
- 12 Output for A/C compressor control defective
- 13 Excessive A/C compressor clutch slippage
- 14 Vehicle speed signal illogical
- 15 Short circuit detected in fuel priming circuit