

#### **D91-HND**

- Version V1.08 (Aug.13,2001)
- 1. Added some Japanese models
- 2. Year Identification function (before 98/ later) first introduced
  - Version V1.17 (Feb. 25,2002)

Added auto type selection/connection by engine rpm

• Version V1.21B (April 22,2003)

Increase Engine and Transmission system for HONDA equipped with OBD-II connector (The Models equipped with OBD-II connector from 1997 later)

Version V1.23 (Oct. 02,2003)

Increase more models for Engine and Transmission system versions on models equipped with OBD-II connector.

- Version V1.23 to V1.50 (March 03,2004)
- 1. Engine system, supplement versions.
- 2. SRS system, supplement version announcement that almost new ECU not supports for Read Fault Code function.
- 3. ABS system, supplement 7 kind of versions and full data stream.
- 4. ABS system, supplement Fault Code list.
  - Version V1.50 to V1.50 SP1 (May 31,2004)

Improve Multiplexer data error for Non-OBD-II connector.



#### **D91-4 VASS**

#### Version V4.00

- 1) Added support for reading readiness code (engine only)
- 2) Fixed A6 instrument cluster connection problem.
- 3) Fixed incorrect coding problem.
- 4) Fixed link failure after clear fault code problem.
- 5) Auto search "Data Stream" from ECU part number.
- 6) Coding ECU function: 7 code support.
- 7) Add vehicle model after 2002 support.

#### Version V4.50 (Oct. 30,2003)

#### Add New System:

#### 1. ENGINE

**Engine III** 

#### 2. CHASSIS

- 1) Locking
- 2) Brake booster
- 3) Brake booster assistance
- 4) Parking brake
- 5) Interior
- 6) Passenger's seat
- 7) Driver's seat, rear
- 8) Climate control, rear
- 9) Auxiliary heater
- 10) Drivers side boarding assistance I & II

#### 3. BODY

- 1) Access & Start permission
- 2) Driver-side door
- 3) Passenger-side door
- 4) Left rear door & Right rear door
- 5) Wiper
- 6) Roof
- 7) Auxiliary fuel tank
- 8) Stabilizers
- 9) Sliding door right
- 10) Sliding door left
- 11) Towing protection
- 12) Trailer function
- 13) Rear spoiler

#### 4. ACCESSORIES

- 1) Display control
- 2) Display control, rear
- 3) Telephone
- 4) Voice control & Voice amplification
- 5) Radio-tuner-digital & Radio-tuner-Satellite
- 6) TV tuner & TV-tuner-digital
- 7) Vehicle position detection



## **D91-4 VASS**

## • Version 4.50 SP2 (Feb 26, 2004)

- 1). Increase re-try link function.
- 2). Increase information after coding complete, and check code number.
- 3). Improve Coding show error for 3 Type coding.
- 4). Improve Engine, Instrument Cluster, A/C, SRS communication fail for Audi A6.
- 5). Improve Engine, Instrument Cluster communication fail for VW Lupo.
- 6). Revised indication word.



#### **D91-1 BMW**

Version V3.04 (Oct. 24,2001)

Added OBD-II Multiplexer support.

Version V3.05 (Nov. 12,2001)

Fixed fault code description in EGS9.22 100/104/105/106.

- Version V3.11 (Jan. 13,2002)
- 1. Fixed the fault read code bug for IHKA (address code)
- 2. Fixed the fault read code bug for KOMBI (address code)
- 3. Added Data Stream for IHKR39
- 4. Implemented resend function to Siemens protocol
  - Version V3.12 (Jan. 27,2002)
- 1. Corrected inter byte delay for COMBI system
- 2. Disabled "Link Failure" message when connecting to ABS5
- 3. Modified and added some of the MS42.0 fault codes
  - Version V3.50 (July 29,2002)
- 1. Improved Teves ABS Road and Clear Fault Code problem
- 2. Combined English and Chinese Version
  - Version V3.50SP1 (July 30,2002)
- 1. Fix ZKE3 activation bug
- 2. Fixed Teves ABS clear fault code problem on E36 3 series.
  - Version V4.30 (Oct. 13,2003)
- 1. MRS4 read/clear code support
- 2. Added PDC up to 2002
- 3. Added EWS up to 2002
- 4. Add ZKE up to 2002
- 5. Add LCM, SZM and XENON\_L / XENON\_Rup to 2003
  - Version V4.30 SP1 (Jan. 12, 2004)
- 1. LCM system, supplement fault code description.
- 2. Supplement LCM related version LCM\_A/ LCM\_II/ LCM\_/III.
- 3. Engine MS41.1/ BMS43/ DME3.3.1/ DME 1.7.2 systems, supplement missing fault code descriptions.
- 4. Transmission system, EGS7.11, Improved Fault Code 16 description (Chinese version only)
  - Version V4.30 SP2 (Feb. 07,2004)
- 1. Engine, DME, MS420, BMS43 and BMS46 systems, improve fault codes can't be read problem.



## **D91-DAEWOO**

- Version V1.02SP2 (Feb. 02, 2004)
- 1. Fixed Display format errors for part of OBD-II DTCs.
- 2. Added Auto-Detecting procedure for connection initialization of every system.
- 3. Fixed lacked units for part of AT system data stream.



## D91-Ford

- Version V1.00 to V1.00SP1 (August 08, 2004)
- ${\it 1. Transmission, CPP /PNP /CCSF /SS1F /SS2F /TCCF /TCILF, improved \ Data \ stream \ problem.}$
- 2. Model Mondeo /Metrostar, ABS /HEC /ACM /EATC /RCM /RHID /LHID, improved Read Fault Code problem.
- 3. Model Escape, ABS /GEM /RCM, improve Read Fault problem.
- 4. Model Mondeo 1995~1997, ABS system improved Read Fault Code problem.



#### **D91-NSN**

- Version V 2.0~V2.50 (Sep. 16,2002)
- 1. Added Self-Learning Fail porcedure
- 2. Fixed Ignition Timing Reading on Engine Data Stream

#### Version V 2.50~V2.50A (Oct. 03,2002)

Improved Self-Learning function for Engine system (It will fail to link up if Engine ECU does not have the Self-Learning function)

#### Version V 2.50A~V2.70 (June 30,2003)

- 1. Increase 4WD system that its functions are Read Fault Code / Clear Fault Code and full Data Stream.
- 2. Increase ACT/SUS system that its functions are Read Code and Clear Fault Code.
- 3. Increase TCS system that its functions are Read Fault Code and Clear Fault Code.
- 4. Increase SRS system versions up to 2003 for models equipped with OBD-II connector.
- 5. Fix SRS bugs for models equipped with OBD-II connector.
- 6. Increase CVT systems for up to 2003 on models equipped with OBD-II connector.
- 7. Fix bug for IVMS jump back error.
- 8. NISSAN model equipped with OBD-II Diagnostic Connector
- 1) Engine System:
  - A) Increase ACTIVATION function items
  - B) Increase Work Support items
- 2) Increase NATS (Nissan Anti-Theft System) for models equipped with NATS V1.0, V2.0 and V5.0

#### Version V2.70~2.70D (Sep. 26,2003)

- 1. Fix bugs for NATS 2.0 and 5.0
- 2. Fix miner bug for self-learning quit if it not support.

#### Version V 2.70SP3

- 1. Models equipped with OBD-II connector only, supplement Activation and work support functions
- 2. Models equipped with 14-Pin connector, improved Self-Learning function.



## D91-MAZ

- Version V1.10 (June 03,2002)
- 1. Added fault code for impulse ABS
- 2. Fixed the connection for D91 connector to impulse ECU
- 3. Add fault code for impulse Engine / AT/ ABS
- 4. Add OBD-II fault code list from P17xx and P18xx
- 5. Add 2-pin Lead for 6+1 Pin / 20 Pin diagnostic connector
  - Version V1.50 (Aug. 02,2002)

#### For ABS/ AB/ AC/ CRUISE

Increase connecter function for D51-C-2P-MAZ cable to connect with 17+ 8 pin connector.

• Version V1.62SP1 (Feb. 16,2004)

Supplemented more models for both Mazda and Ford vehicles on selection page.



#### **OB91-2 MB**

Version V3.61G (Dec.18,2001)

Auto-Switch supported in Pin-selector Pages

Version V3.63(Jan. 02,2002)

Added AAM, EAM, TC.

#### Version V4.00 (Sep.16,2002)

- 1. Fixed the service status of data stream that displays "???" for all instrument clusters (KI/ ICM)
- 2. For ML:
- (1) Fixed the data stream Yes/No inverted problem on the TC (Transfer Case) system
- (2) For AAM, added 4 new model versions for Data Stream
- (3) Increased BAS with Data stream
- (4) Increased the ESP with Data stream
- (5) Increased AAC with Data stream (2002 version)
- 3. Fixed some display bugs for AAC, especially for 220/203 and model 2002 163.
- 4. For Model 220, the 6/8 cylinders can be identified
- 5. For PTS, added notice text selector in R for rear sensors
- 6. Increased SPRINTER engine and some pin assignments for KI, DAS systems

#### Version V4.00D (Oct. 22,2002)

- 1. Model 220 ESP Data Stream, fixed Text Display error
- 2. KI / ICM on OBD-II connector, fixed connection fail (Relayed pin switch to wrong pin position)
- 3. Engine waveform function and refresh screen function were fixed
- 4. SIM 4 all Data Stream bugs were fixed
- 5. Increased Data Stream for SAM on Model 210
- 6. Modified SRS BAE/ZAE fault code.



#### **D91-7 PV MB**

#### Version V1.40D (Dec. 04,2001)

- 1. ICM, national factor added 0.3 & 0.4
- 2. ME 2.0 added downstream O2 sensors
- 3. KI system added national factor adaptation
- 4. Added AAM SYSTEM AND TC (Transfer Case) system with data stream
- 5. Added EAM system

#### Version V1.41 (Jan. 02,2002)

Over all improvement in body system

#### Version V1.41~1.50 (July. 29,2002)

#### Model 203:

Increased Engine System SIM4 (As of 2002)

Increased Transmission 722.6 (As of 2002)

Increased Climate Control (As of Production)

Increased Traction Control: TEVES ESP/BAS

Increased SRS (As of Production)

#### **Model 220:**

Increased Transmission: 722.6 (As of 2002)
Increased Climate Control (As of Production)

Increased ICM (As of 2002)

Increased SRS (As of Production)

#### Model 168:

Increased Engine: ECM (As of Production)

Increased Transmission: Front Auto Transmission (As of Production)

Increase SRS (As of Production)

#### Version V1.50~1.50C(Sep. 25,2002)

- 1. Modified Engine ME-SFI for Data Stream communication timing.
- 2. Fixed Engine HFM-SF (one version). It lost some Data Stream pages.

#### Version V1.50D (Oct. 22,2002)

- 1. Model 220 ESP Data Stream, fixed Text Display error
- 2. KI / ICM on OBD-II connector, fixed connection fail (Pin switch was connected to wrong pin position)
- 3. Engine waveform function and refresh screen function are fixed
- 4. SIM 4 all Data Stream bugs are fixed.
- 5. Increased Data Stream for SAM on Model 210.
- 6. Modified SRS BAE/ZAE faulty code.

#### Version V1.50E~G (March 11,2003)

- 1. Add new version of AAM for model 163
- 2. Modify ME system Read Fault code function, fault codes exist but can not read out.
- 3. Cancel Authorization code for AB/SRS Adaptation. It need to enter authorization code when selected Adaptation item



#### **D91-7 PV MB**

#### Version V1.50SP1~SP3 (April 20,2004)

- 1. Change the "Model Selection Page", and become same as the "Star Diagnosis".
- 2. Model 140/220 (S), 210 (E), 203 (C), 163 (ML), increase Short Test.
- 3. Model 220 (S), 203(C), 163 (ML), EIS / EAM system versions, increase Change Coding for Xenon Light.
- 4. Model 220 (S), 203 (C), 215 (CL), increase DTR, function includes "Read & Clear Fault Code".
- 5. Model 211 (E), 230 (SL), increase SBC, function includes "Read & Clear Fault Code".
- 6. Model 230 (SL), increase RVC (new generation system of RB), function includes "Read & Clear Fault Code".
- 7. Model 230 (C), 208 / 209 (CLK), 215 (CL), increase RCM, function includes "Read & Clear Fault Code".
- 8. Model 220 (S), 215 (CL), increase TSTH (Radio Remote Control Stationary Heater), function includes "Read & Clear Fault Code".
- 9. Model 208 (CLK), 209 (CLK), Increase TLC, function includes "Read & Clear Fault Code".
- 10.Model 230 (SL), increase BNS (Vehicle Power Supply Control Module), function includes "Read & Clear Fault Code".
- 11. Model 220 (S), Transmission system, improve connection problem.
- 12.Traction system (ABS / ETS / ASR / ESP/ BAS), ABS system, improve the data problem which appear "?"
- 13.Model 203 (C), EGS system, increase EGS system manufacture by M.M.

DCM, increase "Data Stream" function.

#### Version V1.50SP3~SP4 (April 27,2004)

- 1. Model 163 (ML), supplement AAM system Versions.
- 2. SRS system manufacture by TRW, improve data stream.
- 3. Model 220 (S), supplement ESP system Versions.
- 4. CDI2, improve communication fail with all models.
- 5. Chinese Version, improve Chinese Character.

#### Version 1.50 SP4~SP5(June 08,2004)

- 1. Model 220 167 (S), improve data stream and service reset for instrument board.
- 2. Model 220 (S), Chassis, ESP system, improve access fail.
- 3. Body, SAM system, improve data stream.
- 4. Model 220 (S), DAS system, Improve service reset and date stream for instrument board.
- 5. Model 163 (ML), increase date stream and service reset for instrument board.
- 6. Model 140(S), Climate, KLA system, improve CASELOAD.
- 7. Model 124 (E), improve Impulse system,
- 8. V-Class, Engine system, increase Diesel selection item.



#### **D91-11 MB-PRO**

#### Version IV 1.00~IV1.00B (May 20,2002)

- 1. Added PTS system for model 140.
- 2. Improved Engine system SIM4 (some Data Stream items which desplay "???" problem)
- 3. Added system ESP and BAS (Teves) for model 203
- 4. Increased SRS Data Stream function for model 203
- 5. Increased PTS Data Stream function for model 203
- 6. Increased OCP Data Stream function
- 7. Added AAC system for model 220,223.
- 8. Added Climate control system REAR AAC/STH
- 9. Enhanced Short Test, extended old systems SRS / Engine / Transmission / DM

#### Version IV 1.00B~IV1.50 (June 14,2002)

- 1. Improved PMS Data Stream
- 2. Improved EM2.0 V8 Engine (Data stream only showed 6 Cylinders)
- 3. Added systems for model 168 (A Class) as following:

Drive: ECM (Engine Control Monnlith)

ACS (Automatic Clutch System)

FTC (Front Transmission Control)

**GRM** (Gear Recongnition Module)

Chassis: ESP

BODY: AB

RFL

**ATA** 

Information and Communication:

ICM (Instrument Cluster Module)

Seats and Doors:

DCM1 (Front left Door)

DCM2 (Front Right Door)

DCM3 (Rear Left Door)

DCM4 (Rear Right Door)

Climate Control:

Air Conditioning

#### Version IV1.50~IV1.50C(Sep. 25,2002)

- 1. Modified Engine ME-SFI for Data Stream communication timing
- 2. Fixed Engine HFM-SF of one version. It was loosing some of the Data Stream pages.

#### Version V1.50D (Oct. 22,2002)

- 1. On Model 220 ESP Data Stream, fixed Text Display error
- 2. KI / ICM on OBD-II connector, fixed connection Fail (pin switch was connected to wrong pin position)
- 3. Engine waveform function and refresh screen function were fixed
- 4. SIM 4 all Data Stream bugs are fixed.
- 5. Increased Data Stream for SAM on Model 210.
- 6. Modified SRS BAE/ZAE faulty code



#### **D91-11 MB-PRO**

#### Version V1.50E~G (March 11,2003)

- 1. Add new version of AAM for model 163
- 2. Modify ME system Read Fault code function, fault codes exist but can not read out.
- 3. Cancel Authorization code for AB/SRS Adaptation. It need to enter authorization code when selected Adaptation item

#### Version V1.50SP1~SP3 (April 20,2004)

- 1. Change the "Model Selection Page", and become same as the "Star Diagnosis".
- 2. Model 140/220 (S), 210 (E), 203 (C), 163 (ML), increase Short Test.
- 3. Model 220 (S), 203(C), 163 (ML), EIS / EAM system versions, increase Change Coding for Xenon Light.
- 4. Model 220 (S), 203 (C), 215 (CL), increase DTR, function includes "Read & Clear Fault Code".
- 5. Model 211 (E), 230 (SL), increase SBC, function includes "Read & Clear Fault Code".
- 6. Model 230 (SL), increase RVC (new generation system of RB), function includes "Read & Clear Fault Code".
- 7. Model 230 (C), 208 / 209 (CLK), 215 (CL), increase RCM, function includes "Read & Clear Fault Code".
- 8. Model 220 (S), 215 (CL), increase TSTH (Radio Remote Control Stationary Heater), function includes "Read & Clear Fault Code".
- 9. Model 208 (CLK), 209 (CLK), Increase TLC, function includes "Read & Clear Fault Code".
- 10.Model 230 (SL), increase BNS (Vehicle Power Supply Control Module), function includes "Read & Clear Fault Code".
- 11. Model 220 (S), Transmission system, improve connection problem.
- 12.Traction system (ABS / ETS / ASR / ESP/ BAS), ABS system, improve the data problem which appear "2"
- 13. Model 203 (C), EGS system, increase EGS system manufacture by M.M.

DCM, increase "Data Stream" function.

#### Version V1.50SP3~SP4 (April 27,2004)

- 1. Model 163 (ML), supplement AAM system Versions.
- 2. SRS system manufacture by TRW, improve data stream.
- 3. Model 220 (S), supplement ESP system Versions.
- 4. CDI2, improve communication fail with all models.
- 5. Chinese Version, improve Chinese Character.

#### Version 1.50 SP4~SP5(June 08,2004)

- 1. Model 220 167 (S350), ICM (Instrument Cluster), improved functions for Data stream and service reset.
- 2. Model 220 (S), ESP system, improved Communication procedure problem.
- 3. Body, SAM system, improved data stream.
- 4. Model 220 (S), ICM (Instrument Cluster), improved functions for Data stream and 229.x setup value in the service reset.
- 5. Model 163 (ML), increase date stream and service reset for instrument board.
- 6. Model 140(S), Climate, KLA system, improve CASELOAD ERROR problem.
- 7. Model 124 (E), increase systems, which is impulse communication,
- 8. V-Class, Engine system, increase Diesel Engine selection item.



## **D91-MITSU**

- Version V2.00 (Oct. 29, 2003)
- 1. Increase Engine, Transmission, SRS ABS, Immobilizer systems, ID VERSION up to 2003.
- 2. Modified diagnostic enable
  - Version V2.00SP1 (Feb. 02, 2004)
- 1. Fixed ABS communication for model " Space Gear"
- 2. Add SRS for model "Savrin"
- 3. Fixed ABS activation function on model "Global Lancer"
  - Version V2.00SP4 (Apr. 28,2004)
- 1. "Lancer", ABS system (ISO- \* 03D) improved ABS activation function.
- 2. "Space Gear", ABS system (ISO- \* 036), improved communication fail problem



## D91-OPEL

- Version V1.00SP5 (Feb. 25,2004)
- 1. Engine and ABS system, improved link failure
- 2. ABS system, improved datastream data error
- 3. Vectra-B 96'~97' SRS system, improved link failure
- 4. Engine/ AT/ ABS systems, increase ID versions.



#### **D91-8 PSCH**

- Version V 1.03 (May,2002)
- 1. For PORSCHE Vehicle
- 2. The System kit comprises Engine, Transmission, ABS, Air-Bag, EZK, RDK, Alarm, Heating and PDAS. For more details, please refer to the Specifications of D91-8 for Porsche.
  - Version V 2.01 (April 21,2003)
- 1. Support new ABS (PSM) / SRS (POSIX)/ TIPTRONIC system on 996 and Boxster
- 2. Fixed an OBD-II connection problem that show ??? and occasionally link failure.
  - Version V 2.11 (Sep. 26,2003)
- 1. Add SRS (B04 & B05) fault code descriptions
- Fix a bug that cause D91 base unit to show messed texts when connecting to Tiptronics (G52) or OBD-II ISO9141/CARB/14230
  - Version V2.20 (October, 26, 2003)

OBD-II, Improved the use of OBD-II multiplexer so that pin 15 signal can be proper send out.

Version V2.20 SP1 (November, 14, 2003)

ABS/PSM, improved communication fail problem.

- Version V2.20 SP2 (January 11,2004)
- 1. ABS/PSM systems, improved link failure problem when reading fault code.
- 2. OBD-II, increase multiple ECU support.
  - Version V2.20 SP3 (June 17,2004)
- 1. Model 964/993, ALARM system, improved Communication Fail problem.
- 2. Model 964/993, ABS system, improved Communication Fail problem.
- 3. Model 964/993, AC/Heater, increase ID No. Display.
- 4. Model 964/993, AC/Heater, improved Read Fault Code problem.
- 5. Model 964/993, SRS system, improved Read Fault Code problem.
- 6. Model 993, supplement Auto-Switch for model equipped with OBD-II Diagnostic Connector.
- 7. Model 964/993, DME system, supplement Data Stream items.
  - Version V2.20 SP5(August 01,2004)
- 1. Model 964 / 968 / 993, Tiptronic and Alarm systems, improved Communication Fail problem.
- 2. Model 996/986/GT2/GT3, Engine system, improved No Data Stream function item on some versions.



## **D91-SUZ**

- Version V1.00SP2 (Feb.11, 2004)
- 1. Models equipped with OBD-II connector, improved communication fail for all systems.
- 2. "Solio" and "Jimny", increase Engine / AT / ABS.
- 3. Increase "Manual Mode Selection" item.
- 4. Increase EPS system.
  - Version V1.00SP4 (Feb.27, 2004)
- 1. "Jimny", increase SRS system.
- 2. Improved Data Stream errors.



## **OB91-6 VOLVO**

Version V 1.16 up to V1.17 (June 10,2002)

#### Added OBD-II function

• Version V 1.50 (Sep. 03,2002)

Improved Chinese Version

- Version V 1.50SP1 (Feb. 19,2004)
- 1.Increase DENSO engine ECU for S70 from 1998~2000
- 2.Increase Multi-ECU supports for OBD-II, which support Engine and Transmission diagnostics.



### D51-Asian

#### Version V3.00

- 1. Added OBD-II Engine for Nissan
- 2. Added ABS, SRS data stream for Honda
- 3. Increased ABS/SRS for Honda
- 4. Improved MAZDA Engine, SRS, Air-Bag and transmission

#### Version V3.10B

- 1. Fixed ignition timing reading on engine data stream for Nissan
- 2. Added Self-Learning fail procedure
- 3. Fixed bugs for Mitsubishi

#### Version V3.50 (Dec. 04,2002)

Honda Vehicle, increase Engine, ABS and SRS on models that equipped with OBD-II Connector only, the models from year 1997

### **D51-EURO**

#### Version V1.01A

- 1. D51-EURO Whole set including D51-BU Base Unit, D51-CC Carrying Case, D51-EURO European Cartridge, OB91-CU0, OB91-CU1, D91-IM-OBDII, OB91-CU5, OB91-CU3, OB11-MBLV
- 2. For BMW/ Mercedes-Benz/ Audi/ VW / SEAT/SKODA/ VOLVO/ Ssangyong Vehicle
- System includes Engine / Transmission / ABS / SRS. For function details, please refer to the D51-EURO Specification.

#### Version V1.50A (Nov. 21,2002)

- 1. Add EGS for 203,210
- 2. For SRS, Fix the bug for impulse can't jump back.

## **Technical Information**



#### **MERCEDES-BENZ**

## The changes after increased 229.5 specification engine Oil

Mercedes Benz has modified the Service Reset functions on instrument cluster after increase new specification engine Oil 229.5. And, this modification cause different display on instrument cluster as below.

#### ➤ Before increase 229.5 specification engine Oil,

After Service Reset, there are following changes on instrument cluster:

- 1. The wrench symbol will disappear that mean the "Reset" has been accomplished.
- 2. After access to "National Factor Setting" to revise the parameter, the mileage will less according to parameter setting.

For example: Oil Reset 229.1 (The parameter is 0.6 as setting and basic mileage is 15000km) After revised the parameter in National Factor, the mileage will change to basic mileage 9000km (15000km X 0.6 = 9000km) on instrument cluster as setting. And, the wrench symbol will appear on instrument cluster when mileage reach to 9000km.

#### > After increase 229.5 specification engine Oil,

After Service Reset, there are following differences on instrument cluster:

- 1. The wrench symbol also will disappear for indicate that "Reset" has been accomplished.
- 2. After access to "National Factor Setting" to revise the parameter, the mileage will not less as parameter setting.

For example, Oil Reset 229.1 (The parameter is 0.6 as setting and basic mileage is 15000km) After revised the parameter in National Factor, the mileage will not display 9000km (15000 X 0.6 = 9000) as setting and it will display basic mileage 15000km on instrument cluster. However, the wrench symbol still will appear on instrument cluster once the mileage reach to 9000km.

Remark: The 229.5 specification engine Oil has been released from 2003.