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AAPEX 2010

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We look forward to greeting you there!

iSCAN-II / D91 Latest Versions (July, 2010)

ISCAN-II SAAB	V2.00 SP1	English/Chinese/Japanese	2010-07-08
ISCAN-II FIAT	V3.00 / V2.00 SP2	English/Chinese/Japanese	2010-07-08
ISCAN-II HONDA	V3.01	English/Chinese/Japanese	2010-07-08
ISCAN-II MITSUBISHI	V3.00 / V2.03 / V1.06	English/Chinese/Japanese	2010-07-08
D91-FIAT	V2.02 SP2	English/Chinese/Japanese	2010-07-08
D91-MITSUBISHI	V4.06 / V3.56	English/Chinese/Japanese	2010-07-08

VeDiS Yearly Update Project (YUP) Software

Software releases monthly for D91-EURO PRO YUP 2010 / D91-ASIAN PRO YUP 2010. YUP customers, please get the updates from website.

Technical Guidance

VW / AUDI: DSG Basic Setting

Introduction:

The twin-clutch transmission, also known as the Direct Shift Gearbox (DSG) or dual-clutch transmission, is an automated transmission that can change gears faster

than any other geared transmission. Twin-clutch transmissions deliver more power and better control than a traditional automatic transmission and faster performance than a manual transmission.

The twin-clutch transmission is essentially two separate transmissions with a pair of clutches between them. One transmission (or gearbox) provides odd-numbered speeds (ie first, third and fifth gear), the other provides even-numbered speeds (second, fourth and sixth). When the car starts out, the "odd" gearbox is in first gear and the "even" gearbox is in second gear. The clutch engages the odd gearbox and the car starts out in first gear. When it's time to change gears, the transmission simply uses the clutches to switch from the odd gearbox to the even gearbox, for a near-instant change to second gear. The odd gearbox again, engaging third gear, and the next change the transmission swaps gearboxes again, engaging third gear, and the even gearbox pre-selects fourth gear. The twin-clutch transmission's computerized controller calculates the next likely gearchange based on speed and driver behavoior and has the "idle" gearbox pre-select that gear.

When to do DSG Basic Setting:

- 1. After replacing the mechatronic
- 2. 18115 Interface in Mechatronic Module
- 3. 01087 Basic Setting Not Performed

Prerequisites:

Before proceed the DSG basic setting, please make sure the the following conditions: 1. ATF temperature should be between $30 \sim 100^{\circ}$ C ($86 \sim 210^{\circ}$ F).

- 2. Shift position: P
- 3. Turn ignition ON
- 4. Start the engine
- 5. Step on brake pedal, not on accelerator pedal.

Example: 2008 VW GOLF GTI

Procedures on iSCAN-II:

Example: 2008 VW GOLF GTI

1. Select Vehicle Diagnostic -> select EUROPEAN

1 MENU 1 Vehicle Diagnostic 2 Component Test System (External Modules) 3 IMS ² (Interface Module Simulation System) 10 OBD-II Standard Compliant	2 Vehicle Diagnostic 1 [ASIAN] 2 [EUROPEAN] 3 [USA]
Simulation System) 10 OBD-II Standard Compliant iSCAN-II (V1.08)USEN 20 SETUP	

2. Select VASS software



3. Select Diagnostics, then select VOLKSWAGEN



4. Select Common system, then select Transmission electronics

7	8	
Select System	Common system	
	1 (01) Engine electronics I	
	2 (02) Transmission electronics	
1 Common system	3 (03) ABS	
2 Power transmission system	4 (08) A/C heater electronics	
3 Chassis system	5 (09) Electronic central electrics	
4 Body system	6 (15) Airbags	
5 Comfort and Convenient system	7 (16) Steering wheel electronics	
6 Electronic system 1	8 (17) Dash panel insert	
7 Electronic system 2	9 (19) Data Bus on Board	
	Diagnostic Interface	
	10 (25) Immobilizer	
	11 (35) Central locking	

5. Select Data Stream to check that the temperature transmission fluid is within the specified scope.



6. Select Basic Setting

1	12
CAN system - 02	Basic Setting - 02
 Identification Read Fault Code Clear Fault Code Data Stream Value Block Adaptation Basic Setting Login ECU Coding ECU 	Block number: (0-255)

7. Set Transmission Tolerances (Engaged Calibration). Input the block number 061 and press ENTER to confirm input.

(The transmission will be activated, please exit this setting after all the activation.)

13	14
Basic Setting - 02	Basic Setting - 02
Block number: 061 (0-255)	Basic Setting 061
	1 163
	Measured values in
ENTER: Confirm input	ENTER: Measured values

(The value before activation)

(The value after activation)



8. Set Transmission Tolerance (Synch. Point Measurement) Input the block number 060 and press ENTER to confirm input.



9. Set Clutch Adaptation.

If the Control Module Software Version < 0800, the block value is 062. If the Control Module Software Version >= 0800, the block value is 067.

19	20	2
CAN system - 02	Identification - 0	2
1Identification2Read Fault Code3Clear Fault Code4Data Stream5Value Block6Adaptation7Basic Setting8Login ECU9Coding ECU	ECU Type Part number Extend Coding Dealer Number	GSG DSG 02E300051 1960 20 61010

10. Set Clutch Adaptation. The value 1960 > 0800, so input the black number 067.



11. Set Reset Values (Clutch Safety Function)

Input the block number 068 and press ENTER to confirm input.



12. Set Reset Values (Pressure Adaptation)

Input the block number 065 and press ENTER to confirm input.

25	26
Basic Setting - 02	Basic Setting - 02
Block number: 065 (0-255)	Basic Setting 065 1 0.00 bar 2 0.00 bar
ENTED: Confirm input	4 0.00 bar Measured values not in
ENTER: Confirm input	ENTER: Measured values

13. Set Reset Values (Steering Wheel Paddle Installation) Input the block number 063 and press ENTER to confirm input. (If the steering wheel paddle is not equipped on the car, please skip this step.)



14. Set Reset Values (ESP & Tip Cruise Control Installation)

Input the block number 069 and press ENTER to confirm input.

(If there is no ESP & Tip Cruise Control Installation on the car, please skip this step.)



15. Please check and clear fault code after successful basic setting.

31	32
CAN system - 02	Read Fault Code - 02
 Identification Read Fault Code Clear Fault Code Data Stream Value Block Adaptation Basic Setting Login ECU Coding ECU 	No Fault Code.

16. After replacing the mechatronic or successful basic setting,

please proceed the test drive.

Please be sure that ATF temperature is between $30 \sim 100^{\circ}$ ($86 \sim 210^{\circ}$ F).

- (1) Drive in Tiptronic Mode from stand still up to 6th Gear.
- (2) While doing that make sure to drive in Gears 3 or 5 for approx. 5 minutes and also in 4 or 6 for approx. 5 minutes.

(3) The engine speed window for all gears is 1200 - 3500 RPM (for clutch calibration).

(4) Perform one sharp braking followed by a full throttle acceleration (oil return check).

(5) Evaluate creep and starting-off points.

(6) Check for leaks.

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