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Safety Precautions

To avoid personal injury, instrument damage and/or damage to your vehicle; do not use the V-CHECKER before reading this manual.

This manual describes common test procedures used by experienced service technicians. Many test procedures require precautions to avoid accidents that can result in personal injury, and/or damage to your vehicle or test equipment. Always read your vehicle's service manual and follow its safety precautions before and during any test or service procedure. **ALWAYS** observe the following general safety precautions:

- When an engine is running, it produces carbon monoxide, a toxic and poisonous gas. To prevent serious injury or death from carbon monoxide poisoning, operate the vehicle ONLY in a well-ventilated area.
- To protect your eyes from propelled objects as well as hot or caustic liquids, always wear approved safety eye protection.
- When an engine is running, many parts (such as the coolant fan, pulleys, fan belt etc.) turn at high speed. To avoid serious injury, always be aware of moving parts. Keep a safe distance from these parts as well as other potentially moving objects.
- Engine parts become very hot when the engine is running. To prevent severe burns, avoid contact with hot engine parts.

- Before starting an engine for testing or trouble-shooting, make sure the parking brake is engaged. Put the transmission in park (for automatic transmission) or neutral (for manual transmission). Block the drive wheels with suitable blocks.
- Connecting or disconnecting test equipment when the ignition is ON can damage test equipment and the vehicle's electronic components. Turn the ignition OFF before connecting the V-CHECKER to or disconnecting the V-CHECKER from the vehicle's Data Link Connector (DLC).
- To prevent damage to the on-board computer when taking vehicle electrical measurements, always use a digital multimeter with at least 10meg Ohms of impedance.
- Fuel and battery vapors are highly flammable. To prevent an explosion, keep all sparks, heated items and open flames away from the battery and fuel / fuel vapors. DO NOT SMOKE NEAR THE VEHICLE DUR-ING TESTING.
- Don't wear loose clothing or jewelry when working on an engine. Loose clothing can become caught in the fan, pulleys, belts, etc. Jewelry is highly conductive, and can cause a severe burn if it makes contact between a power source and ground.

About V-CHECKER

Applications

V-CHECKER is a powerful, affordable handy scanner designed for all VW, AUDI, SKODA, and SEAT vehicles. It is small in size, robust in design, competitive in price and easy to use. With only 10% of the cost of a large special tool, it can nearly do the same work as that of a VAG1551/1552. This is a stand alone unit; it does not need a laptop computer to operate.

Available Functions

- Control Unit Information
- Read Fault Codes
- Measuring Blocks
- Clear Fault Codes
- Basic Setting
- Adaptation
- Independent Channel Value
- Output Tests
- Coding Control Unit
- Login
- Service Oil Reset
- Code Modes
- Dealership Code Set

Supported Systems

V-CHECKER can support the following systems:
[Engine],[Transmission],[Airbag],etc.
there are 78 systems available.

Main Features

- Low price: the price is only about 10% of that for a large special tool

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- Powerful functions: it can nearly do the same work as that of a VAG1551/1552
- Powered via diagnostic connector, no additional power is needed
- Plug and play, ease to use
- High reliable and accurate

Appearance and Key Descriptions

The appearance of a V-CHECKER is as shown in the above figure.

1. LCD screen: 128*64 pixels
2. Diagnostic extension cable: OBDII -16PIN
3. [↑] key: select item or scroll to previous screen
4. [←] key: confirm / left
5. [→] key: return / right
6. [↓] key: select item or scroll to next screen
7. [OK]key: confirm selection and enter
8. [Exit]key: cancel and return

Operation Instructions

Preparation for Testing

The V-CHECKER aids in monitoring electronic and emissions-related faults in your vehicle and retrieving fault codes related to malfunctions in these systems. Mechanical problems such as low oil level or damaged hoses, wiring or electrical connectors can cause poor engine performance and may also cause a "false" fault code. Fix any known mechanical problems before performing any test. See your vehicle's service manual or a mechanic for more information.

Check the following areas before starting any test:

- Check the engine oil, power steering fluid, transmission fluid (if applicable), engine coolant and other fluids for proper levels. Top off low fluid levels if needed.

- Make sure the air filter is clean and in good condition. Make sure all air filter ducts are properly connected. Check the air filter ducts for holes, rips or cracks.

- Make sure all engine belts are in good condition. Check for cracked, torn, brittle, loose or missing belts.

- Make sure mechanical linkages to engine sensors (throttle, gearshift position, transmission, etc.) are secure and properly connected. See your vehicle's service manual for locations.

- Check all rubber hoses (radiator) and steel hoses (vacuum/fuel) for leaks, cracks, blockage or other damage. Make sure all hoses are routed and connected properly.

- Make sure all spark plugs are clean and in good

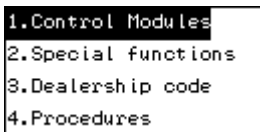condition.Check for damaged,loose, disconnected or missing spark plug wires.

● Make sure the battery terminals are clean and tight. Check for corrosion or broken connections. Check for proper battery and charging system voltages.

● Check all electrical wiring and harnesses for proper connection. Make sure wire insulation is in good condition, and there are no bare wires.

● Make sure the engine is mechanically sound. If needed, perform a compression check, engine vacuum check, timing check (if applicable), etc.

Connect the V-CHECKER

1. Turn the ignition off.

2. Locate the vehicle's 16-pin Data Link Connector (DLC).

3. Connect the V-CHECKER cable connector to the vehicle's DLC. Turn the ignition on, The V-CHECKER will auto start, the following screen will be displayed.

> **VW / AUDI**
> V3.3
> Professional diagnose tool
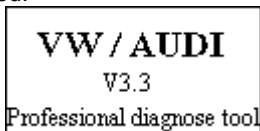
4. Wait a moment, the screen will auto display the main menu:

> 1.Control Modules
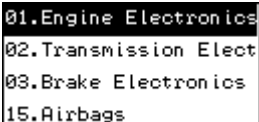> 2.Special functions
> 3.Dealership code
> 4.Procedures

● **[Control Modules]**: enter the control module selection menu

- **[Special Functions]**: enter the special function menu
- **[Dealership Code]**: to set up the dealer code
- **[Procedures]**: help information for main operation procedures

Control Modules

Select [Control Module] in the main menu and then press [←] key. The screen will display the system selection menu as follow:
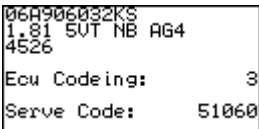
```
01.Engine Electronics
02.Transmission Elect
03.Brake Electronics
15.Airbags
```

There are 78 systems available. Here let's take [01. Engine Electronics] for example. Select [01. Engine Electronics], and press [←] key. The screen will display the following message:

```
On communication...
```

After successful communication, the screen will display the ECU version information as shown in the figure below:

```
06A906032KS
1.81 5VT NB AG4
4526
Ecu Codeing:        3
Serve Code:     51060
```

Press any key, V-CHECKER will enter the function menu for engine electronics system:

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```
1.Control Unit Info
2.Read Fault Codes
3.Measuring Blocks
4.Clear Fault Codes
```

Control Unit Info

Select [Control Unit Info] in the main function menu and then press [←] key. The screen will display the control unit information:

```
06A906032KS
1.8I 5VT NB AG4
4526
Ecu Codeing:        3
Serve Code:     51060
```

Read Fault Codes

Select [Read Fault Code] in the function menu and then press [←] key. If the system has fault code(s), the screen will display the fault code(s) and descriptions:

```
18034.P1626 Data-bus
powertrain:missing me
ssage from transmissi
on comtrol        1/8
```
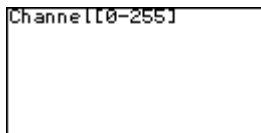
As seen on the left bottom, the front digit is the No. of the displayed fault code, while latter digit is the number of total fault codes.

Press [↓] to read the next page, press [↑] for the previous page.

Measuring Blocks

Select [Measuring Block] in the function menu and then press [←] key. The screen will be displayed as shown below.

```
Channel[0-255]
```

You should input the Channel Number first (from 0-255).

```
01
Select:[↑][↓]  Enter:[↵]
  0123456789ABCDE
FGHIJKOPQRSTUVWX
YZabcdefghijkopq
rstuvwxyz.()[]\/
```

You can input the Channel Number with the [↑], [↓], and [←] key:

- [↑] and [↓] keys: select digit or letter
- [←]: enter the selected digit or letter

For example, enter Channel number 01 and press [←] key, the screen will display the data stream for data block 01, as shown in the figure below:

```
NUM  1 ████    0 RPM
        ██-48.0 ℃
        ██000.00 %
        00110110
```
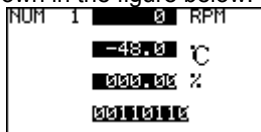
Here you can press [↓] key to switch to the next block, or press [↑] to return to the previous block.

Clear Fault Codes

Select [Clear Fault Codes] in the function menu and then press [←] key. The screen will display a message as shown below:

```
On erasing...
[Key on,ENG off]
```
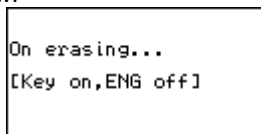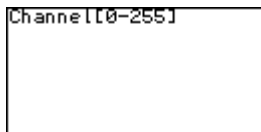
The fault codes will be erased.

Basic Settings

Basic Settings mode is very similar to Measuring Blocks. The content of each display group is the same. The difference between the functions is that the Control Module may try to perform various calibrations while in Basic Settings mode.

Warning!

You should refer to the Factory Repair Manual for your particular car (or some other documented procedure) before "playing" with the Basic Settings function. Failure to follow the proper procedures can result in serious damage to the vehicle.

Select [Basic Settings] in the function menu and then press [←] key. The screen will be displayed as shown below.
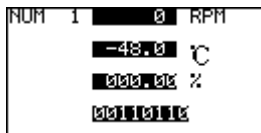
```
Channel[0-255]
```

You should input the Channel Number first (from 0-255).

```
01
Select:[↑][↓]  Enter:[↵]
■0123456789ABCDE
FGHIJKOPQRSTUVWX
YZabcdefghijkopq
rstuvwxyz.()[]\/
```

You can input the Channel Number with the [↑], [↓], and [←] key:

- [↑] and [↓] keys: select digit or letter
- [←]: enter the selected digit or letter

Notes:

Multiple Groups are not permitted in Basic Settings. The data presented in each Basic Settings Group varies greatly from Control Module to Control Module and between different models and years. Some groups are documented in the Factory Repair Manuals, but many are not.

Adaptation

The Adaptation function allows you to alter certain values and/or settings in control modules that support it.

Select [Adaptation] in the function menu and then press [←] key. The screen will be displayed as shown below.

You should input the Channel Number first (from 0-255).

You can input the Channel Number with the [↑], [↓], and [←] key:

- [↑] and [↓] keys: select digit or letter
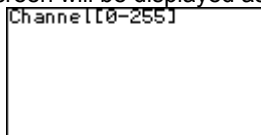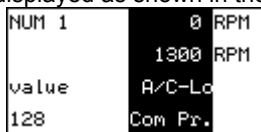- [←]: enter the selected digit or letter

When the Block number is entered, press [←]. The screen will be displayed as shown in the figure:

```
NUM 1            0 RPM
              1300 RPM
value         A/C-Lo
128           Com Pr.
```

Here you can press [↑] and [↓] keys to adjust the adaptation value, and then press [←] key to save the adaptation value, or press [→] key to cancel the operation and return.

Independent Channel Value
Select [Independent Channel Value] in the function menu and then press [←] key. The screen will be displayed as shown below.

```
Channel[0-255]



```

You should input the Channel Number first (from 0-255).

```
01
Select:[↑][↓]  Enter:[↵]
0123456789ABCDE
FGHIJKOPQRSTUVWX
YZ abcdefgh ij kopq
rstuvwxyz.() []\/
```

You can input the Channel Number with the [↑], [↓], and [←] key:

● [↑] and [↓] keys: select digit or letter
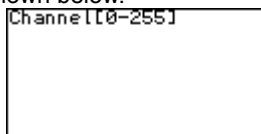● [←]: enter the selected digit or letter

When the channel number is entered, press [←]. The screen will be displayed as shown in the figure:

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```
NUM 1
Single Reading    255
```

Here you can press [↑] and [↓] keys to adjust the channel value, and then press [←] key to save the channel value, or press [→] key to cancel the operation and return.

Output Test
Select [Output Test] in the function menu and then press [←] key. The screen will be displayed as shown below.

```
Tank breathing value-
N80 Short to earth
ECU be performed.
[→]:exit  [←]:next
```

The V-CHECKER is testing the displayed actuator. Here you can press [←] key to switch to the next actuator, or press [→] key to cancel the operation and return.

Coding Control Unit

Warning!
You should refer to the Factory Repair Manual for your particular car (or some other documented procedure) before attempting to recode a Control Module. At the very least, write down the original values. There is no other way to "undo" or restore the original values if what you're trying to do doesn't work out.

This function is used to set various options in a Control Module.

Select [Coding Control Unit] in the function menu and then press [←] key. The screen will ask you input the control unit code of the tested module.

```
Code control unit:
[0-32000]
```
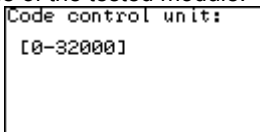
You can input the code with the [↑], [↓], and [←] key:

- [↑] and [↓] keys: select digit or letter
- [←]: enter the selected digit or letter

The control unit code can be read by using the [Control Unit Info] function.

You must code the control unit if there is no display for the vehicle identification number, or when the main module is replaced.

In general, if the new control unit has the same part number and index code as that of the old one, you just need to read the code of the old module, and code the new module with the same code.

If the new module has no index code, you cannot code it. If the index code of the new module is different from that of the old one, you must consult the dealer for the coding.

Login

The Login Function must be used on some (but not all) Control Modules before you can Recode or change Adaptation values. On others, it "enables" certain features like cruise control. Valid Login codes can be found in the Factory Repair Manual for your car.

Select [Login] in the function menu and then press [←]

key. The screen will be displayed as shown below.

```
1.5pin Password
2.7pin Password
```
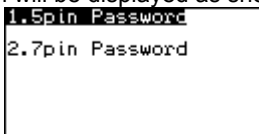
The 5-digit code is used for coding a unit, while the 7-digit code is used for Key Matching and Immobilizer 3 Adaptation.

Select one [1. 5 digits code] or [2. 7 digits code], and press [←] key. The screen will ask you input the login code.

You can easily input the code with the [↑], [↓], and [←] key:

- [↑] and [↓] keys: select digit or letter
- [←]: enter the selected digit or letter

Warning!

Make sure get the correct module code before performing this function; otherwise the system may be destroyed.

Special Function

Select [Special Function] in the main menu and then press [←] key. The screen will display a menu as shown in the figure below:

```
1.Ser/oil light reset
```

[Service/Oil Reset] function is available in the special function menu.

There is a service indicator in the instrument of VW/AUDI cars, which is used to record the remaining

safe driving distance or time for the next oil change. The indicator will light on when the driving distance or time is close to the setting value. In this case, you should change oil for your car.

After changing oil, you should reset the service/oil indicator; otherwise it will keep on light.

```
1.OIL
2.IN1
3.IN2
```
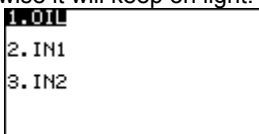
[1. OIL]: extinguish the oil lamp after service

[2. IN1]: 15000Km reset

[3. IN2]: 30000Km reset

Dealership Code

Select [Special Function] in the main menu and then press [←] key. The screen will display a menu as shown in the figure below:

```
Current code:65535
New servce station co
de:[0-65535]
```
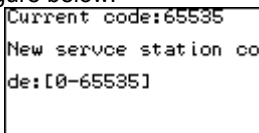
You can input the new service station code with the [↑], [↓], and [←] key:

- [↑] and [↓] keys: select digit or letter
- [←]: enter the selected digit or letter

Procedures

Select [Procedures] in the main menu and then press [←] key. The screen will display a menu as shown in the figure below:

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```
1.Eras Learnt Value
2.Adapt Throt Valve
3.Adapt Exhaust Gas
4.Auto AT Basic Set
```

Here you can find help information for several important operations.

Location of Data Link Connector

The OBD-II 16pin connector is as shown in the figure below. For Golf, it is located on the right side of steering column;For Jetta, it is located in the left driver room below instrument panel;For Santana, it is located in front of the gearbox dust cover.

For more detailed information, please refer to the Repair Manual of your vehicle.