

| Model(s)            | Year        | Eng. Code   | Trans. Code | VIN Range<br>From | VIN Range To |
|---------------------|-------------|---|-------------|-------------------|--------------|
| Golf                | 2010 – 2013 | All   | All         | AII               | All          |
| GTI                 | 2010 – 2013 | All   | All         | All               | All          |
| Jetta<br>SportWagen | 2010 – 2013 | All   | All         | All               | All          |
| Jetta               | 2011 -2013  | 2.0L<br>(CBFA, CCTA,<br>CPLA, CPPA)<br>2.0L TDI<br>(CJAA) | All         | All               | All          |
| Beetle              | 2012-2013   | 2.0L<br>(CBFA, CCTA,<br>CPLA, CPPA)                       | All         | All               | All          |
| Passat              | 2012-2013   | 3.6L<br>(CDVB)<br>2.0L TDI<br>(CKRA)                      | All         | All               | All          |

#### **Condition**

**48 13 03** July 15, 2013 **2030353** Supersedes T. B. V481302 dated March 18, 2013 to include additional model year applicability and update the software part and version numbers.

Poor Power Steering Assistance, DTCs 16344 014, 16353 014, 16355 014, 02614 014 Stored in Power Steering Control Module J500

Customer may comment:

- · Steering stiff at engine start up.
- Yellow power steering warning light on.
- Red power steering warning light on.



The customer concern may or may not be duplicated, and the following Diagnostic Trouble Codes (DTCs) are present in the power steering control module (J500).

| DTC       | Description   |
|-----------|---|
| 16353 014 | Control module faulty   |
| 16344 014 | Control module faulty   |
| 16355 014 | Control module faulty   |
| 16347 014 | Control module faulty   |
| 16346 014 | Control module faulty   |
| 02614 014 | Control module faulty   |
| 02391 011 | Terminal 30 reference open circuit  |
| 03803 005 | Steering angle sensor for power-assisted steering, no or incorrect basic setting/adaptation |
| 03803 000 | Steering angle sensor for power-assisted steering, no or incorrect basic setting/adaptation |



The diagnostic trouble codes (DTC) logged in the vehicle systems are not limited to the faults listed above. Follow the chart below that list the part numbers and the software level to determine if the service solution applies.

#### **Technical Background**

Voltage drop in power steering control unit (J500) at start up or during steering operation.

#### **Production Solution**

Improved software.



#### **Service**



The software update takes place in two steps. DO NOT end the program too early. **Before the update,** record and save adaptation channels 3, 4 and 9 in address word 44 using Vehicle Self Diagnosis (VSD). The information will be needed for the steering module (J500) basic setting adaptation procedure when the update is completed.

The software versions listed in the following table were up-to-date when this TSB was published. Further software versions may have been released since.

#### **Update-Programming Procedure:**



To Update-Programming using SVM, **review and follow** instructions in **Technical Bulletin Instance 2014603** "Software Version Management".

The SVM Process must be completed in its entirety so the database receives the update confirmation response. A warranty claim may not be reimbursed if there is no confirmation response to support the claim.

### Note:

Prior to launching VAS-PC or ODIS application and starting control module update process, confirm tester screen saver and power settings in accordance with Special Tools and Equipment - Service Information Circular # VVT-12-02. Failure to do so may result in the tester entering power save mode during data transfer, and subsequent control module failure.

When using the VAS 5054A wireless transmitter head for a flash procedure, please connect a USB cable between the transmitter head and the tester. Failure to do so may lead to errors during the flash procedure.

VAS tools must only be used with their power adapters plugged in. Under no circumstances should they be used on battery power alone during the programming procedure.



Update the power steering control module (J500) using the SVM Unit code as listed in the table below:

| Old Software Part<br>No. | Old Software Version | New Software Part<br>No. | New Software<br>Version (or higher) | SVM Unit<br>Code |
|--------------------------|----------------------|--------------------------|-------------------------------------|------------------|
| 1K0 909 144 L            | 2901                 | 1K0 909 144 R            | <mark>3501</mark>                   | 3143             |
| 1K0 909 144 J            | 3001                 | 1K0 909 144 R            | <mark>3501</mark>                   | 3143             |
| 1K0 909 144 M            | 3201                 | 1K0 909 144 R            | <mark>3501</mark>                   | 3143             |
| 1K0 909 144 N            | 3301                 | 1K0 909 144 R            | <mark>3501</mark>                   | 3143             |
| 1K0 909 144 P            | 3305                 | 1K0 909 144 R            | <mark>3501</mark>                   | 3143             |

The procedure can be found in GFF under Functions/ Component Selection, Software Version Management, Adapting Software.



#### **WARNING:**

Radiator Fan(s) may cycle ON high speed during the Update Process! There is a risk that personal injury may result if contact is made with spinning fan blades.

Keep hands and all objects away from Radiator Fan(s) during Update Process!



The SVM Process must be completed in its entirety so the database receives the update confirmation response. A warranty claim may not be reimbursed if there is no confirmation response to support the claim or action is carried out that is not explicitly stated in the Technical Bulletin.

 After the update is completed, using GFF, perform basic setting steering angle sensor – G85 and Adaptation of Electromechanical steering under address word 44 – Steering.

Check for DTCs in Brake electronics - 03 and if DTCs 00778 004 and 01309 008 is present, follow the GFF systems test plan to reset the module. If the basic settings and adaptation procedures are completed using Vehicle Self Diagnosis (VSD), the adaptation values retrieved from channels 3, 4 and 9 in address word 44 using Vehicle Self Diagnosis (VSD) will be needed to complete the operation.

# Das Auto

# **Technical Bulletin**

### Warranty

| To determine if t<br>Procedures Man |    | cedure is cov | vered unde  | r Warranty,                                    | always                                   | refer to      | the Warranty Po   | olicies and  |
|-------------------------------------|----|---------------|---|--|--|---------------|-------------------|--------------|
| Model(s)                            | ,  | Year(s)       | Eng. Code(s)  |  |  | ins.<br>le(s) | VIN Range<br>From | VIN Range To |
| Golf                                | 20 | 10 – 2013     | All   |  | A  | .II           | All               | All          |
| GTI                                 | 20 | 10 – 2013     | All   |  | A  | All           | All               | All          |
| Jetta<br>SportWagen                 | 20 | 10 – 2013     | All   |  | A  | JI            | All               | All          |
| Jetta                               | 20 | 911 -2013     | 2.0L<br>(CBFA, CCTA,<br>CPLA, CPPA)<br>2.0L TDI<br>(CJAA) |  | Α  | .ll           | All               | All          |
| Beetle                              | 20 | 012-2013      | 2.0L<br>(CBFA, CCTA,<br>CPLA, CPPA)                       |  | Α  | .II           | All               | All          |
| Passat                              | 20 | 012-2013      | 3.6L<br>(CDVB)<br>2.0L TDI<br>(CKRA)                      |  | Α  | .ll           | All               | All          |
|                                     |    |               | ;   | SAGA Codi                                      | ng                                       |               |                   |              |
| Claim Type:                         |    |               |   | Use applic                                     | able Cl                                  | aim Typ       | ne <sup>1)</sup>  |              |
| Service Number: Code                |    | HST           |   |  | Damage Location (Depends on Service No.) |               |                   |              |
| 4835 039                            |    |               |   | Use applicable when indicated in ElsaWeb (L/R) |  |               |                   |              |



| Parts Manufacturer   | Golf, GTI               | WWO <sup>2)</sup>               |     |  |  |
|--|-------------------------|---------------------------------|-----|--|--|
|  | Jetta, Jetta SW, Beetle | 3ME <sup>2)</sup>               |     |  |  |
|  | Passat                  | TX6 <sup>2)</sup>               |     |  |  |
| Labor Operation 3): Bat  | tery Charge             | 27068950 = 10 TU                |     |  |  |
| Labor Operation 3): Upo  | date Programming        | 48352599 = 40 TU                |     |  |  |
| Causal Part  |                         | Select labor operation 48352599 |     |  |  |
| Diagnostic Time <sup>4)</sup>  |                         |                                 |     |  |  |
| GFF Time expenditure 01500000 = 20 TU  |                         | J max. YES                      |     |  |  |
| Road Test 01210004 = 10 TU   |                         | IJ                              | YES |  |  |
| Technical Diagnosis  | 01320000 = 00 TU        | J max.                          | NO  |  |  |
| Claim Comment: Input "As per Technical Bulletin 2030353" in comment section of Warranty Claim.     |                         |                                 |     |  |  |
| 1) Vehicle may be outside any Warranty in which case this Technical Bulletin is informational only |                         |                                 |     |  |  |
| <sup>2)</sup> Code per warranty vendor code policy.  |                         |                                 |     |  |  |
| <sup>3)</sup> Labor Time Units (TUs) are subject to change with ELSA updates.                      |                         |                                 |     |  |  |
| <sup>4)</sup> Documentation required per Warranty Policies and Procedures Manual.                  |                         |                                 |     |  |  |

### **Required Parts and Tools**

No special parts required.

| Tool Description                  | Tool No:   |  |  |
|-----------------------------------|--|--|--|
| Midtronics Battery Tester/Charger | InCharge 940 (INC-940)   |  |  |
| VAS Diagnostic Tool               | VAS 5051B, 6150X, 6160   |  |  |
|                                   | VAS-PC Ver. Base CD V19.01.00 and Brand<br>V19.22.00 or higher |  |  |
|                                   | ODIS Ver. 1.2.1  |  |  |



#### **Additional Information**

All part and service references provided in this Technical Bulletin are subject to change and/or removal. Always check with your Parts Dept. and Repair Manuals for the latest information.