HOW-TO: repairing ABS unit (VW part nr. 8E0 614 111B) on VW Passat B5

Автор pavel. translate vadmore and Lucky3D

Эта статья переведена специально для наших друзей из www.passatworld.com
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Оригинальная статья на русском языке ЗДЕСЬ

This article translated specially for our friends from www.passatworld.com
Special thanks for translation: vadmore and Lucky3D
Original article in russian language HERE

SYMPTOMS of the faulty unit:
connection between diagnostic equipment and ABS unit can't be established (unit can't be found)
the following error arises:

01203 - Electrical Connection between ABS and Instrument Cluster
03-10 - No Signal – Intermittent

While engine is running, ABS lamp and STOP (red exclamation mark) lights up periodically or computer beeps three times.

WARNING!

All the repair operations, described below are for your acquaintance only.
Author will NOT take any responsibility in case you damage anything.
ABS unit is a part of the braking system and any interference into it could be prohibite

RECOMMENDATIONS

If you don't have any experience in electronics repair, DO NOT try to repair it yourself.
If you have any questions, ask on forum before completely destroying the unit.
A few faulty ABS units were repaired and all of them are working right now.
There is no information on how long they will work after repair.

DESCRIPTION

Clicking on some of the pictures will open a new browser window with a high resolution photo (2300 x 1700).
Be warned, that size of some of them could be up to 1 Mb. Keep an eye on your traffic.

ABS unit consists of two parts: hydraulic and electrical control unit.
Under the hood:
Consider that if electrical part is malfunctioning, your brakes will work anyway, except for some EDL etc. This means that if you remove electrical part, you can still drive your car, just keep in mind that working and behave accordingly. In that case, don't forget to isolate all the disconnected parts.

**REPAIR PROCEDURE**

Start from taking electrical part off the car:

Lift up left wheel and take it off. Consider using jack stand, cause you will need to spend some t
Remove the fenderliner, by unscrewing 11 TORX bolts.
Unscrew the fluid container for windshield washer (2 bolts behind the fenderliner and 1 is under
Push it slightly to the left to gain access to the ABS unit.
Remove the connector from the electrical part:
Remove the connector from hydraulic pump (under the electrical part).
Remove the electrical part off the hydraulic part (6 T-20 bolts).

Now you need to cut off the upper plastic cap.
You can use a sharp knife or any similar tool just to cut a bit along the accessible sides.
Do not use excessive force or you can end up with the knife ruining electrical parts on board.
When you cut deep enough, try to hook up the cap with a flat screwdriver on the side opposite to the connector. It should apart easily.
Now you will see a ceramic board with a plenty of electrical components covered with some gel-

**DO NOT touch it or you will completely damage the unit.**
Dimensions of the box that has been opened are 70 by 83 mm.
Now close the electrical board, so you can only access place where board is connected to the contact plates on the electrical unit case.
Secure it with adhesive tape. Now you can be sure that you won't touch the board accidentally.
Find the place where board is connected to the contact plates by two wires.
Take a needle and try to slightly push the wires.
Gotcha! The contact between these two wires and contact plates is loose.
This is the problem of these ABS units.
Now your task is to carefully remove gel-like substance from contact plates.
Use any suitable tool like toothpick.
Do it with great care! There are very thin wires all around, you can easily tear them.

Tin the contact plate and solder long (10 cm) and thin (ca 0.3 mm) wire to it.
Tin the silver conductors at the place of their maximum distance from the board.
Place copper wire between the silver conductors and solder them all together.
This will provide heat dislocation from the contact plate and hopefully will solve a problem of un:
Cut the remaining part of copper wire.
**Attention!** Animated picture:
Now, when everything is done, connect the electrical part to the hydraulic part (do not screw the bolts yet), re-attach the connectors to the electrical part and to the hydraulic pump. Turn ignition on (do not start the engine). Everything works great if the ABS lamp and exclamation mark are not blinking and beeper is silent.

Now use SuperGlue to place the plastic cap back on electrical unit. Mount and connect everything in reverse order.

You're done!

Good luck!

If you have any questions, do not hesitate to contact me.

My profile in forum HERE

Pavel

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