

VOLKSWAGEN 1998-2004 Passat

PRECAUTIONS

Warning: Acid has strong corrosive properties. If batteries are handled inappropriately, there is a risk that personal injury may result from exposure to harmful electrolyte influences. Therefore, suitable remedies for acid damage must be kept readily available. Soapy water would be a suitable remedy.

Warning: If electrolyte drips out from the battery, skin can be burned by acid, and the vehicle may be affected by acid erosion and corrosion. It is a possibility that safety-related vehicle components can be damaged.

Warning: The gas resulting from charging and partially after charging is explosive. In extreme cases, if the battery is handled inappropriately, the emitted gases may cause the battery to explode.

Warning: Producing sparks by sanding, welding, cutting and open flames, as well as smoking near a battery is forbidden. Producing sparks through electrostatic discharge must also be avoided. Always touch the vehicle body before touching the battery.

Caution: Only perform battery procedures in suitable and well-ventilated locations.

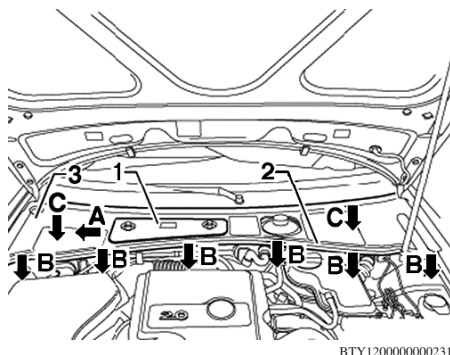


Fig. 1 Plenum chamber cover removal

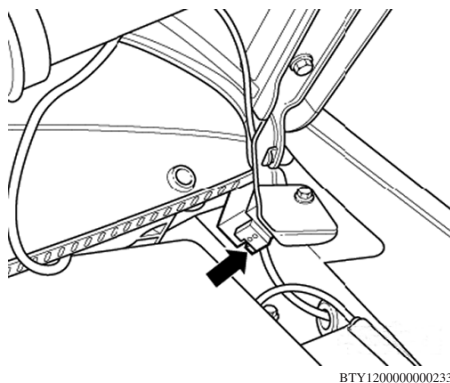


Fig. 3 Cowl removal. Late build (Part 1 of 2)

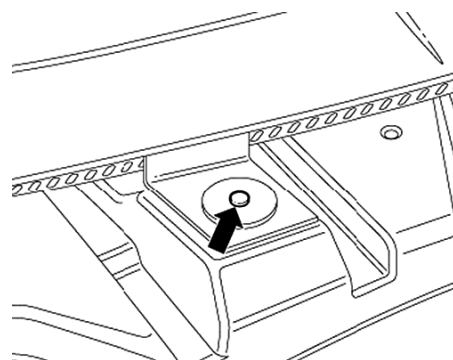


Fig. 2 Cowl removal. Early build

BATTERY

Removal

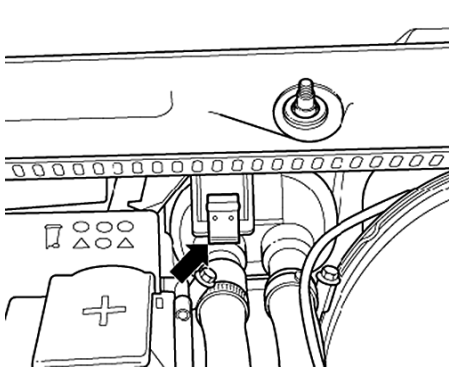
- Record radio anti-theft code and station presets.
- Turn off all lamps and accessories.
- Turn ignition switch to OFF position.
- Remove plenum chamber cover as follows:
 - Push battery cover (1) aside (arrow A) and remove, Fig. 1.
 - Remove rubber seal (2) toward front (arrows B), Fig. 1.
 - Remove plenum chamber cover (3) toward front and remove from vehicle, Fig. 1.
- On models equipped with dome brace,** remove cowl panel as follows:
 - On early build models,** remove bolt (arrow) and lift cowl panel up carefully, Fig. 2.
 - On late build models,** remove left-hand and center metal clips (arrow) toward front and carefully pry cowl off, Fig. 3.

- On all models,** remove metal bolts (arrows) from lid of protective housing for control modules and remove lid, Fig. 4.
 - Remove internal nut of protective housing (arrow), Fig. 5.
 - Remove protective housing bracket bolt (arrow), Fig. 6.
 - Remove protective housing from rubber mounting, and push slightly forward.
- On all models,** loosen clamp bolt, and disconnect battery ground cable from battery ground terminal.
 - Loosen clamp bolt, and disconnect battery positive cable from battery positive terminal.
 - Remove battery mounting bracket bolt (arrow), Fig. 7.
 - Remove battery mounting bracket.
 - Carefully lift and remove battery.

Installation

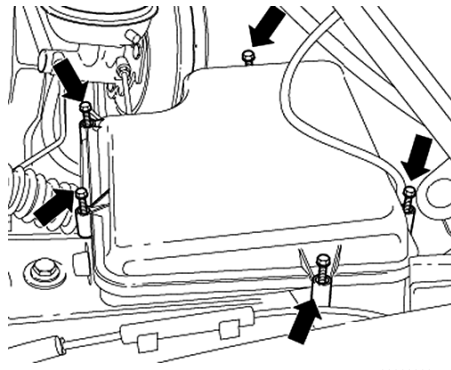
- Install mounting bracket, and torque mounting bolt to 18 ft. lbs.

- Some batteries are equipped with a central venting system (arrow). When installing, ensure hose attached to central venting system is not kinked or bent, Fig. 8.
- Attach terminal clamp of positive cable onto positive terminal of battery, and torque clamp to 44 inch lbs.
- Attach terminal clamp of ground cable onto ground terminal of battery, and torque clamp to 44 inch lbs.
- On models equipped with dome brace,** perform the following:
 - Install protective housing to rubber mounting.
 - Install protective housing bracket bolt (arrow), Fig. 6.
 - Install internal nut of protective housing (arrow), Fig. 5.
 - Install metal bolts (arrows) to lid of protective housing for control modules and install lid, Fig. 4.
- On late build models,** install cowl into place and attach lefthand and center metal clips (arrow), Fig. 3.
- On early build models,** install cowl and tighten mounting bolt (arrow), Fig. 2.
- On all models,** install plenum chamber cover as follows:
 - Install plenum chamber cover (3), Fig. 1.
 - Install rubber seal (2), Fig. 1.
 - Install battery cover (1), Fig. 1.
- Reset all preset and theft codes previously recorded to radio.
- Completely open and close all power windows.
- Inspect any affected system or component such as clock, comfort adjustment, or compass for proper settings, and adjust as required.



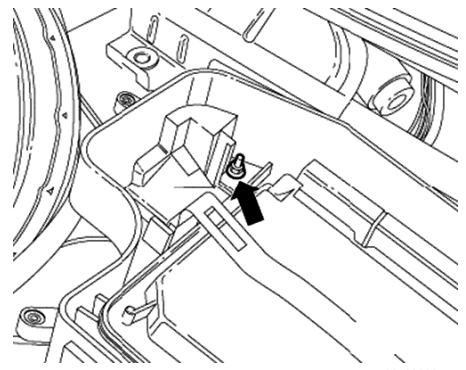
BTY120000000234

Fig. 3 Cowl removal. Late build (Part 2 of 2)



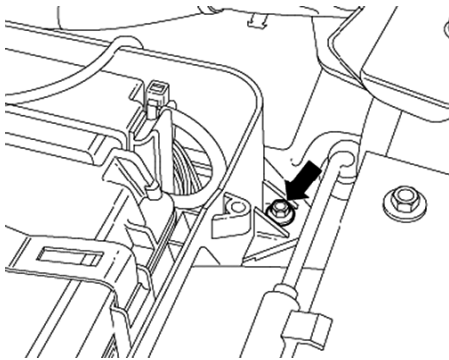
BTY120000000235

Fig. 4 Control module protective housing lid removal



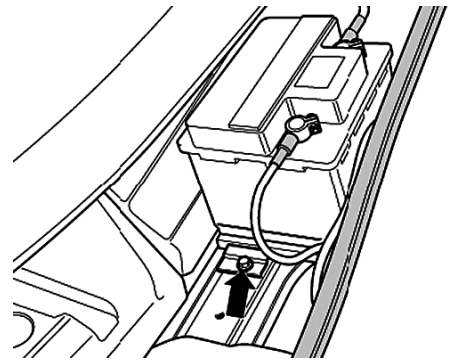
BTY120000000236

Fig. 5 Protective housing internal nut location



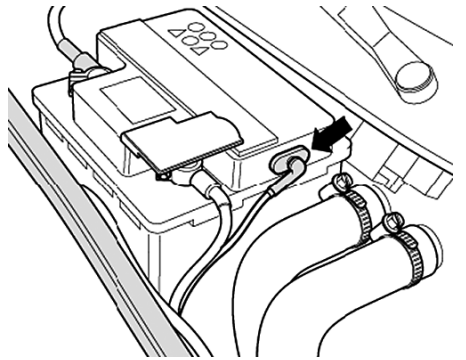
BTY120000000237

Fig. 6 Control module protective housing removal



BTY120000000238

Fig. 7 Battery removal



BTY120000000239

Fig. 8 Central venting hose attachment

The material herein may not be used without the prior express written permission of the copyright holder, including, but not limited to reproduction or transmission in any form by any means such as electronic, mechanical, photocopying, recording or otherwise; nor may it be stored on any retrieval system of any nature.

"The data reported herein has been compiled from authoritative sources. While every effort is made by the analysts to attain accuracy, manufacturing changes as well as typographical errors and omissions may occur on occasion. The publisher cannot be responsible nor does it assume any responsibility whatsoever for such omissions, errors or changes."

"Portions of materials contained herein have been reprinted under license from Volkswagen of America, Inc., License Agreement 08500VWA."

MOTOR INFORMATION SYSTEMS
MOTOR is a trademark of Hearst Business Media
A Unit of Hearst Corporation
1301 W. Long Lake, Suite 300
Troy, MI 48098

Copyright © 2012 Hearst Business Media. All rights reserved.