



Description	Rear Parking Distance Sensor Installation Instructions
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Part Number	000 054 630 A
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Fitment	Description	Application
	Jetta Sedan /Wagon	99.5>04
	Passat Sedan /Wagon	98>04
	Golf/GTI	99.5>04
	Touareg	04> *

*** Not applicable with Touaregs equipped with skid plates or factory parking assistance system.**

Supplier	Votex GmbH
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Published date:	Revision 1 03-12-04
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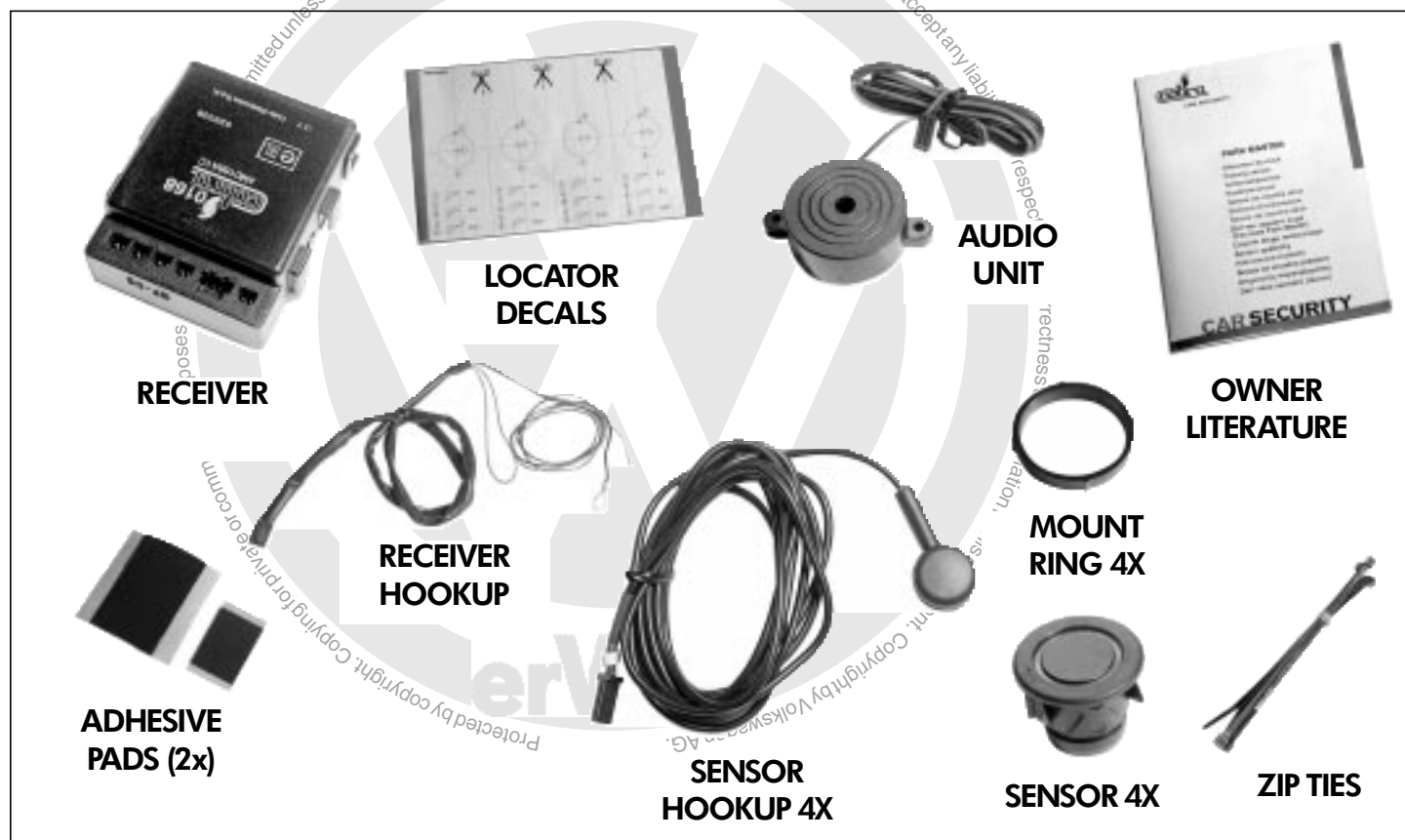
Sections:	Page 1 Installation and Initialization
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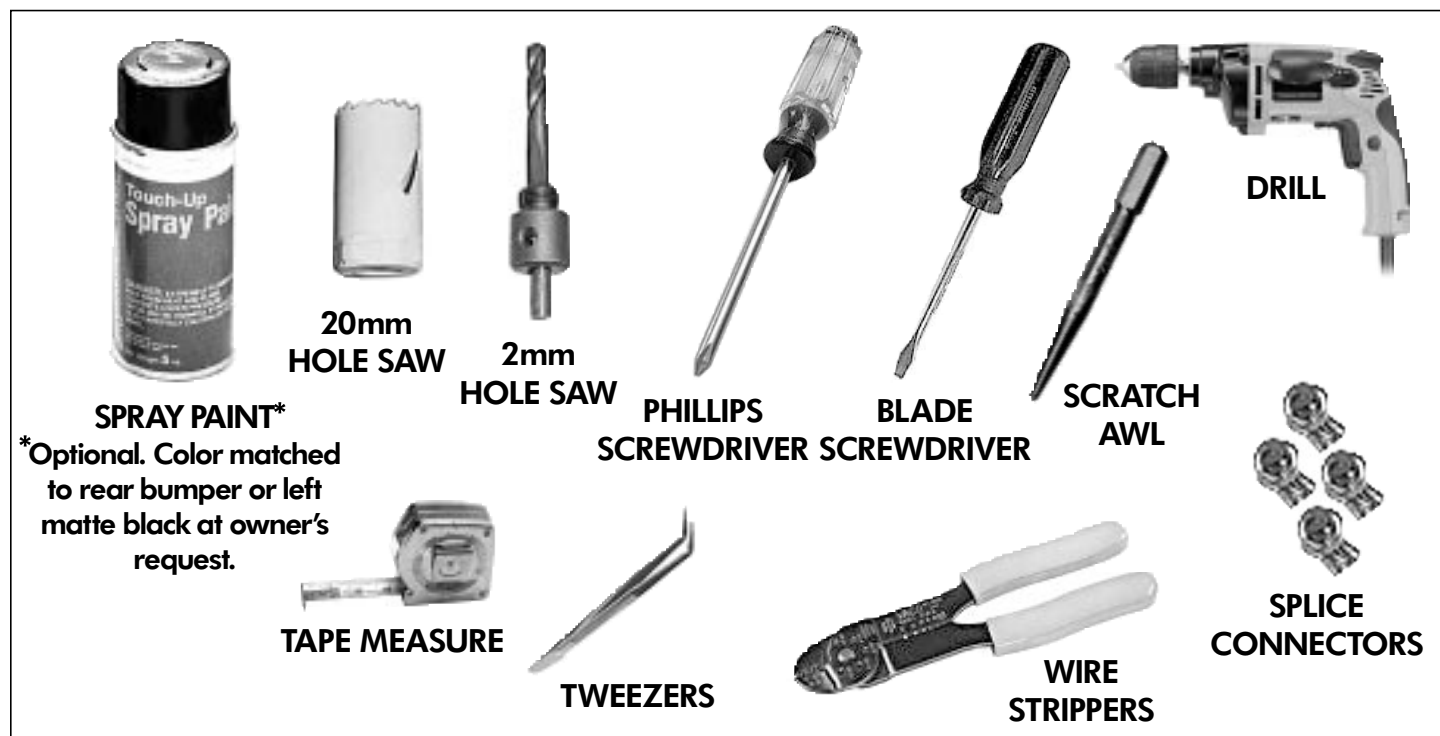
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000 054 630 A Parking Aid installation kit



Tools required for Parking Aid installation

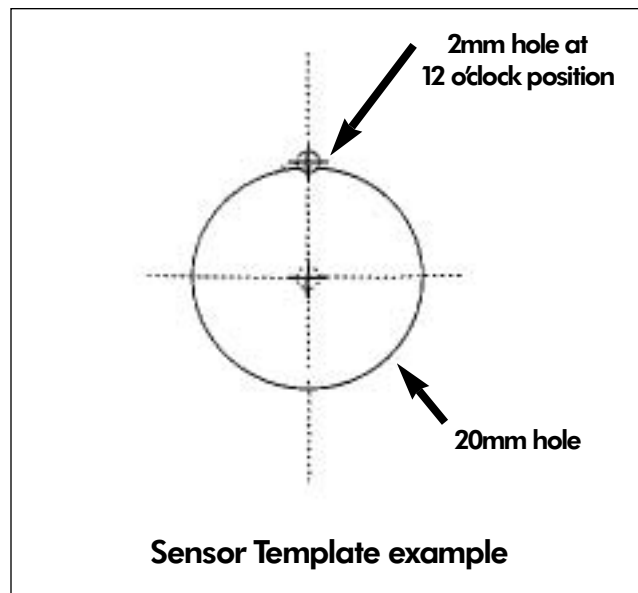




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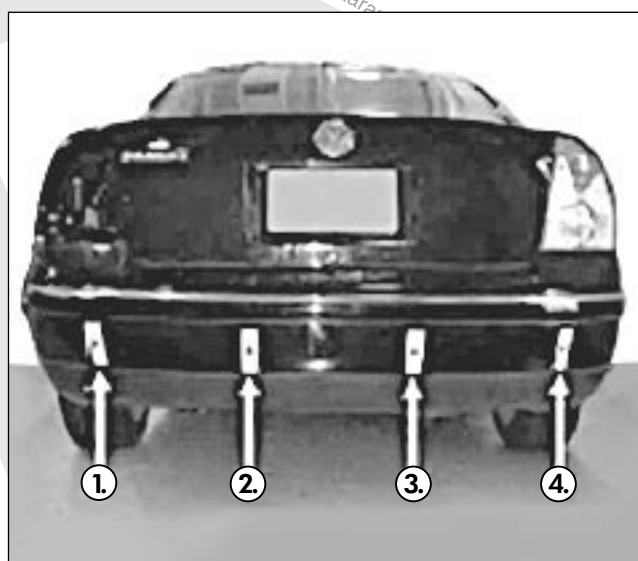
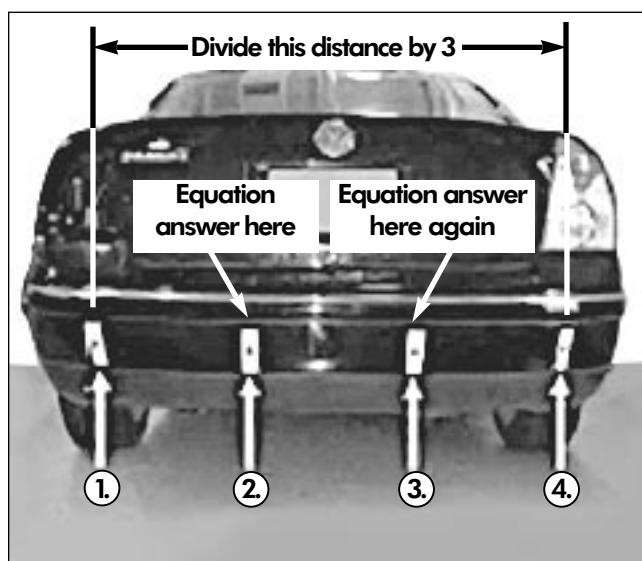
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Step#1 Positioning the sensor templates
Use a suitable cleaner to remove dust and grease from the bumper cover. Apply a template decal at positions #1 and #4, beneath the center of the right and left brake lights, and centered vertically on the wide ridge of the bumper cover.

Step#1A
Place the templates so that the 2 mm drilling at the edge of the 20 mm drilling is at the 12 o'clock position.



Step#1B
Measure the distance between template decals at positions #1 and #4. Divide the measurement by 3 and use the result to determine the location for the templates for sensors #2 & #3.

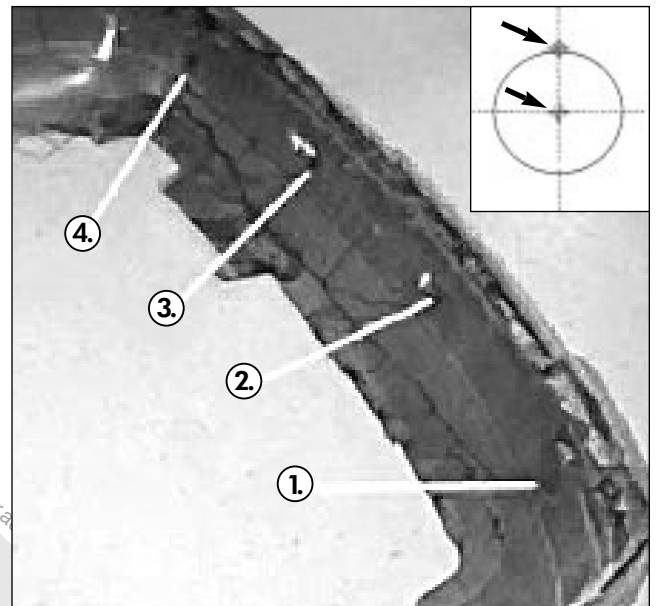
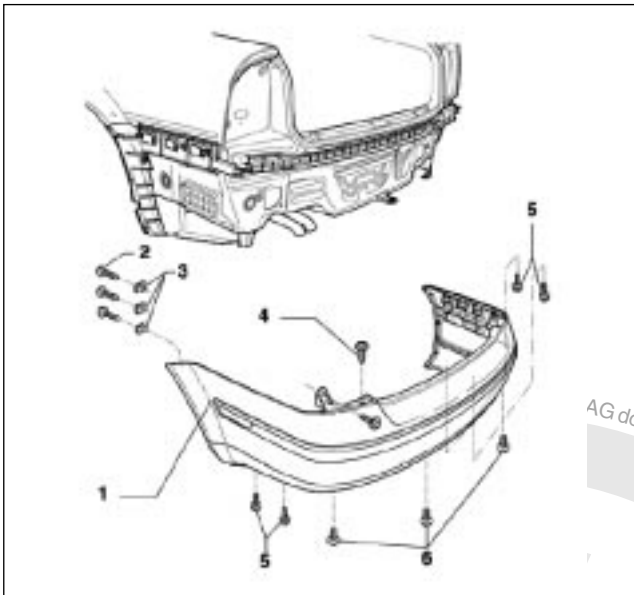
Step#1C
Apply the #2 and #3 template decals, centered vertically on the wide ridge of the bumper cover. Do **NOT** drill at this step.



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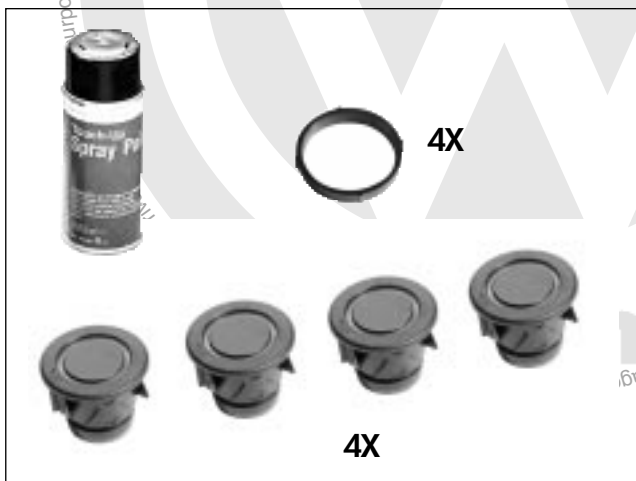


Step#2

Remove the rear bumper cover. See VESIS, Body Exterior; Repair Group 63, Rear Bumper from 10.00.

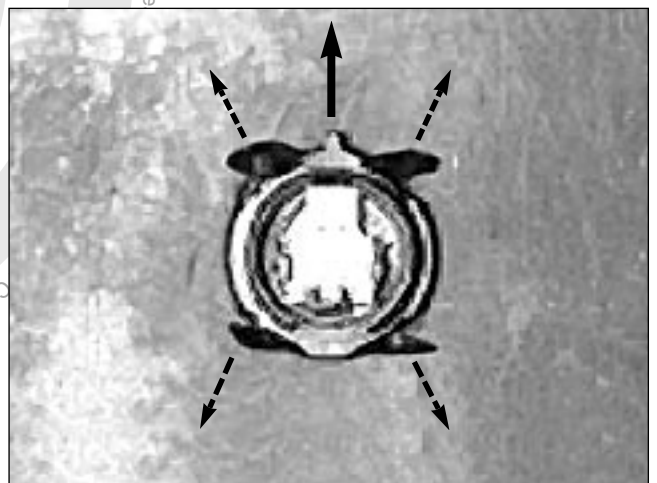
Step#3

Drill a 2mm pilot hole at the center and at the 12 o' clock position of the 20mm circle of all four templates. Use the hole saw to drill out the 20 mm. circle of all four templates. Do not allow the drill to tilt up or down when using the hole saw.



Step#4 Sensor preparation

Insert a protective ring into the circular groove on the face of each sensor. Apply two coats of paint to sensor faces and allow paint to dry. When paint is dry, remove protective rings from sensors with tweezers. Note: painting the sensors is optional. They may be left matte black if the customer desires.



Step#5

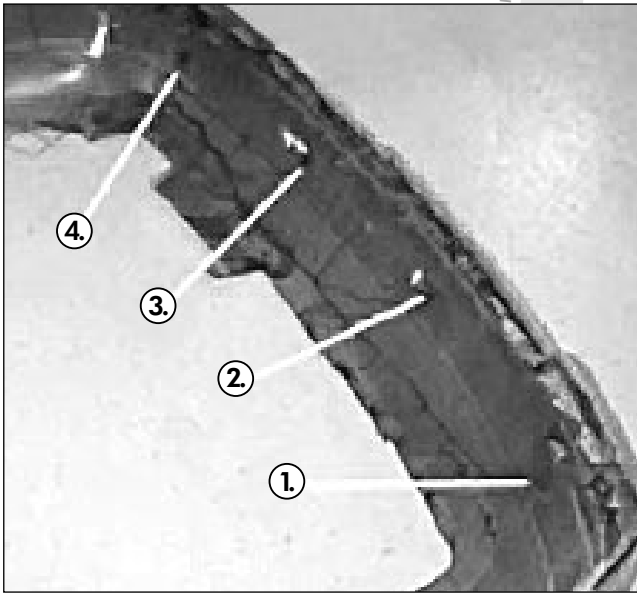
Install sensors in bumper cover with the locating ridge on the sensor barrel in a vertical position. Secure the sensors in the bumper cover by bending the tabs on the sensor barrel outward.



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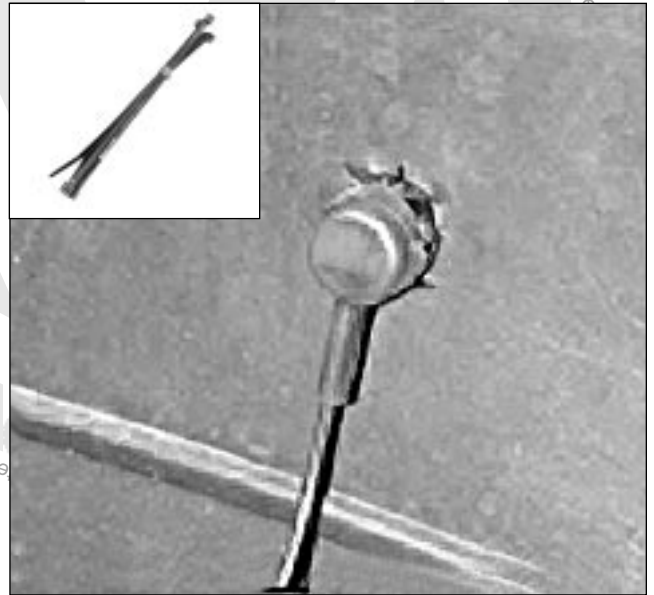
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Step#6 Connect the sensor wires

The sensor wires are numbered and should be installed in sequence across the bumper. Wire 1 should be on left end of the bumper, and wire 4 should be on right.



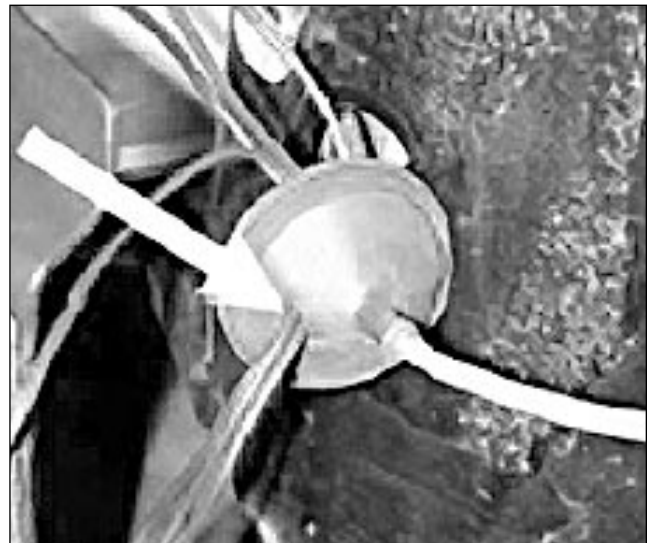
Step#6A Connect the sensor wires

Make sure connector sealing cap is securely installed on the sensor barrel. Route the sensor wires toward right side of vehicle and secure wires to each other with tie-straps.



Step#7

Pry out grommet for right rear side marker harness.



Step#8

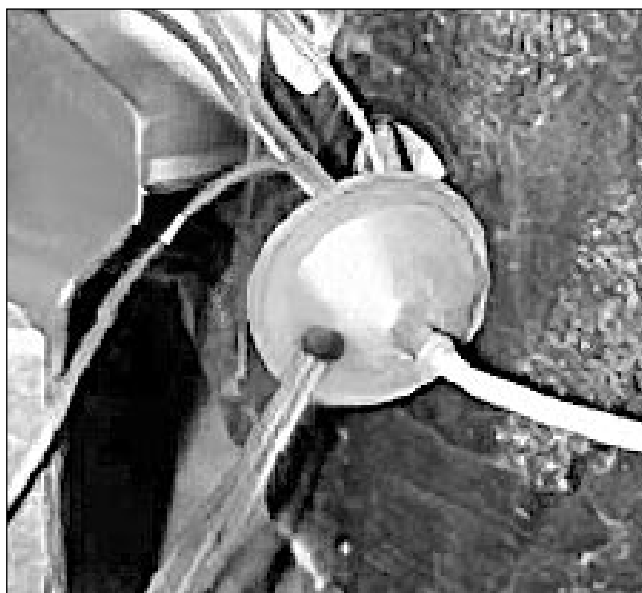
Cut a small hole in the sealing grommet and push wires through. Leave enough slack in the sensor wires for the bumper cover to rest on the floor without hanging from the wires. Make sure the number label for each sensor wire is passed through the grommet to the inside of the vehicle.



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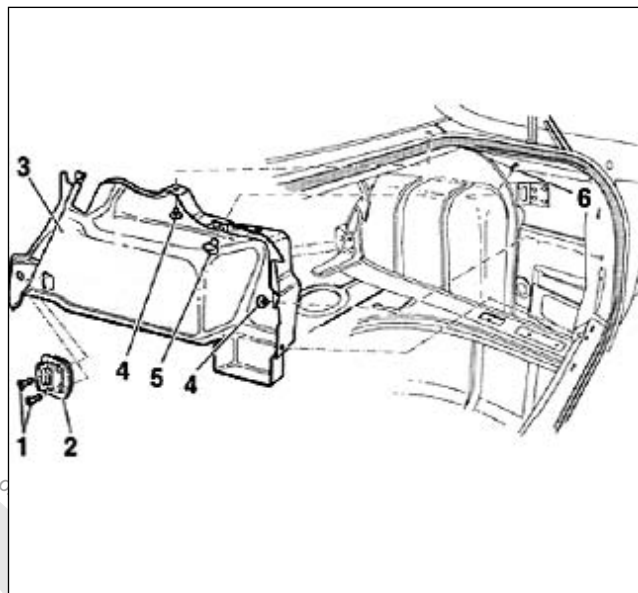
Step#9

Apply a small amount of RTV sealant on the inside of the grommet at the location of the wires. Reinstall grommet. Apply a small amount of RTV sealant on the outside of the grommet at the location of the wires.



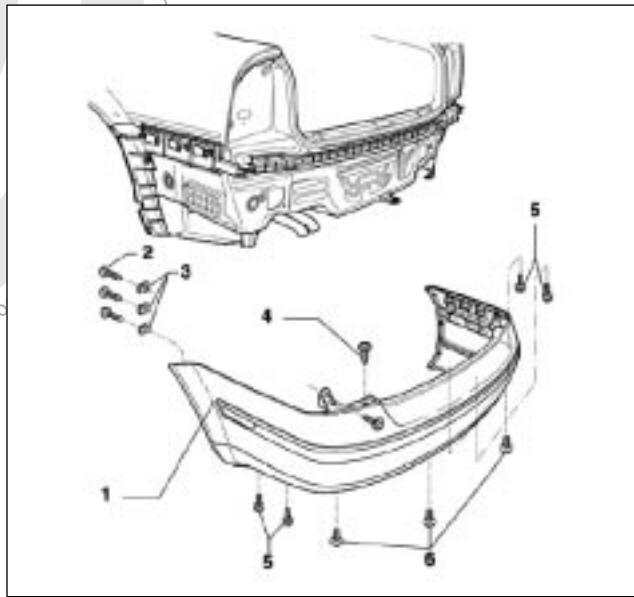
Step#11 Install the control module

Remove the protective strip from one side of the large adhesive patch and apply to Parking Aid control module. Remove other protective strip and mount module to inside of body panel.



Step#10

Remove the luggage compartment trim panel on the right side of the vehicle. Refer to VESIS, Body Interior; Rep. Gr. 70; Luggage compartment and cargo area trim, removing and installing.



Step#12

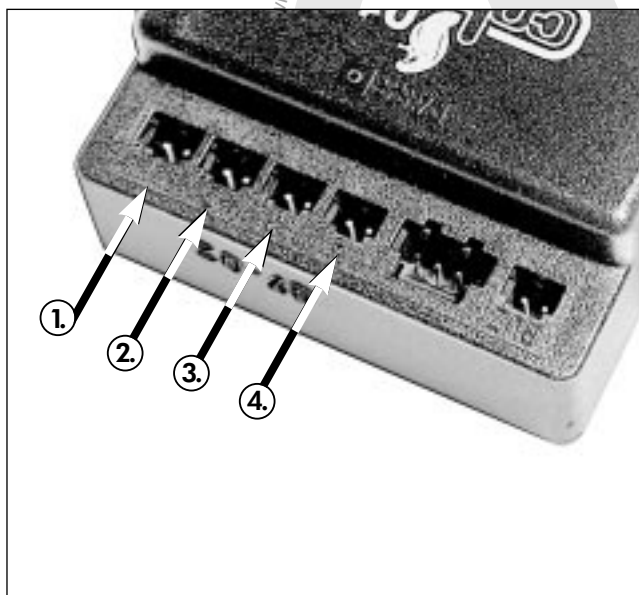
Re-install the rear bumper cover. See VESIS, Body Exterior; Repair Group 63, Rear Bumper from 10.00. Note: Attach the sensor wires to the inside bumper cover with adhesive tape and route to prevent damaging the wires.



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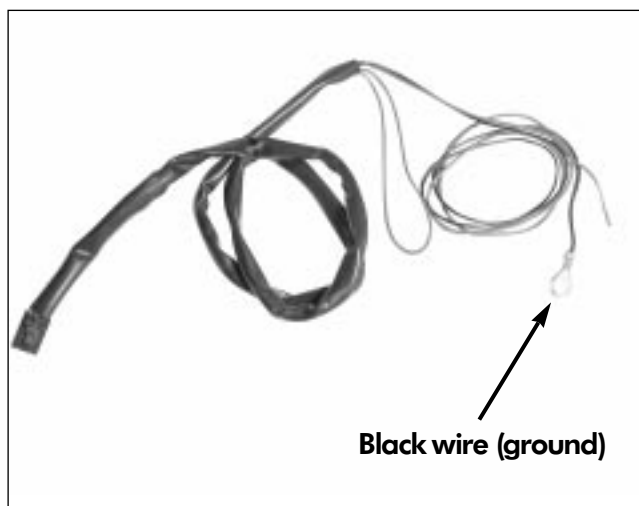
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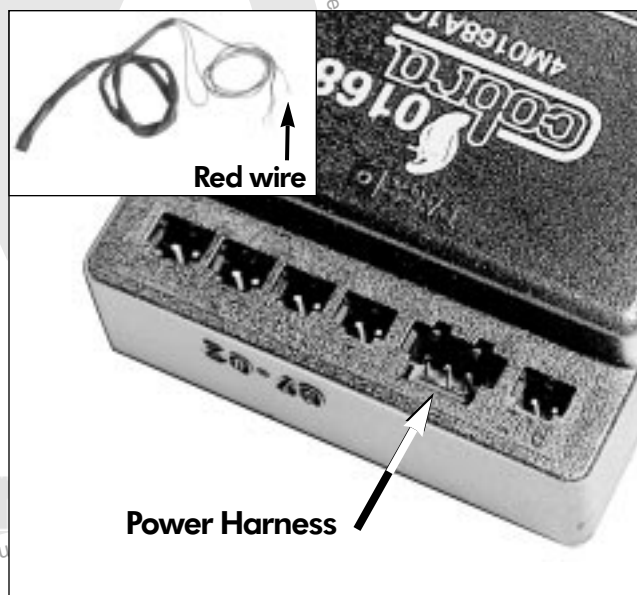
Step#13 Connect the sensor wires to the Control Module

The Control Module connection points are numbered. Match the sensor wire number to the control module number and connect the wires.



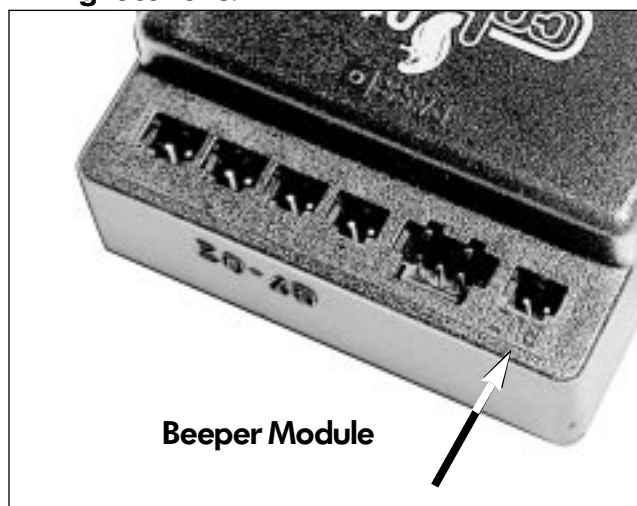
Step#15

Use a splice connector to connect the black wire of the power harness to a suitable ground wire on the vehicle. See VESIS, Current flow diagrams, Electrical fault finding and Fitting locations.



Step#14 Connect the power harness to the Control Module

Connect the power harness terminal to the control module. Use a splice connector to connect the red wire of the control module power harness to the vehicle's right back-up light power supply wire. See VESIS; Current flow diagrams, Electrical fault finding and Fitting locations.



Step#16 Connect the beeper module

Connect the beeper module wire to the control module. Route beeper module harness to inside upper rear seatback frame. Re-install the luggage compartment trim panel.



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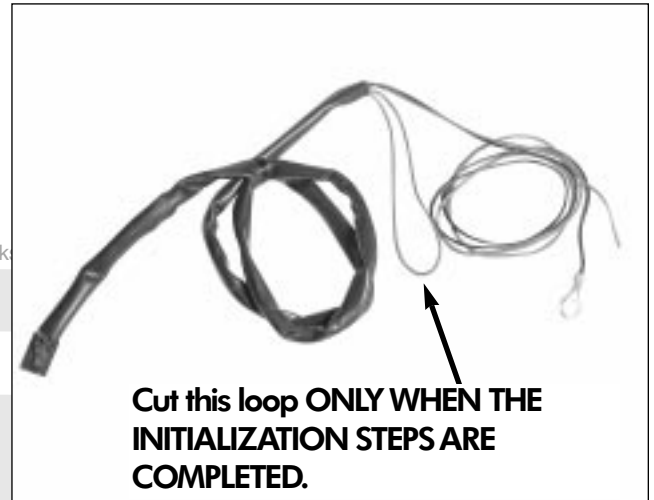
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Step#17 Mount the beeper module

Position the beeper module so that the sound port is facing toward the front. Mount the beeper module inside upper seatback frame with the small double-sided adhesive patch. Note: Do not cover the beeper module sound port with the adhesive patch. Secure excess wire with tie-straps.



Step#18 System initialization

Park vehicle so that rear bumper is 20 inches from a large, flat obstruction, such as a wall or a garage door. Turn on the ignition, but do not start the engine. Shift the transmission into reverse.

The beeper module should beep twice to indicate it has initialized.

Within 100 seconds (1 minute, 40 seconds), a steady tone should be heard. Note: If anything other than a steady tone is heard, or if the beeping stops completely, check all connections and sensor wire sequencing.

Turn off the ignition.

Cut the loop in the calibration wire in the Parking Aid control module harness. Secure excess wire with tie-straps.

Leave the Parking Aid customer literature in the vehicle.

Cautions & Warnings

Please read these WARNINGS and CAUTIONS before proceeding with maintenance and repair work. You must answer that you have read and you understand these WARNINGS and CAUTIONS before you will be allowed to view this information.

- If you lack the skills, tools and equipment, or a suitable workshop for any procedure described in this manual, we suggest you leave such repairs to an authorized Volkswagen retailer or other qualified shop. We especially urge you to consult an authorized Volkswagen retailer before beginning repairs on any vehicle that may still be covered wholly or in part by any of the extensive warranties issued by Volkswagen.
- Disconnect the battery negative terminal (ground strap) whenever you work on the fuel system or the electrical system. Do not smoke or work near heaters or other fire hazards. Keep an approved fire extinguisher handy.
- Volkswagen is constantly improving its vehicles and sometimes these changes, both in parts and specifications, are made applicable to earlier models. Therefore, part numbers listed in this manual are for reference only. Always check with your authorized Volkswagen retailer parts department for the latest information.
- Any time the battery has been disconnected on an automatic transmission vehicle, it will be necessary to reestablish Transmission Control Module (TCM) basic settings using the VAG 1551 Scan Tool (ST).
- Never work under a lifted vehicle unless it is solidly supported on stands designed for the purpose. Do not support a vehicle on cinder blocks, hollow tiles or other props that may crumble under continuous load. Never work under a vehicle that is supported solely by a jack. Never work under the vehicle while the engine is running.
- For vehicles equipped with an anti-theft radio, be sure of the correct radio activation code before disconnecting the battery or removing the radio. If the wrong code is entered when the power is restored, the radio may lock up and become inoperable, even if the correct code is used in a later attempt.
- If you are going to work under a vehicle on the ground, make sure that the ground is level. Block the wheels to keep the vehicle from rolling. Disconnect the battery negative terminal (ground strap) to prevent others from starting the vehicle while you are under it.
- Do not attempt to work on your vehicle if you do not feel well. You increase the danger of injury to yourself and others if you are tired, upset or have taken medicine or any other substances that may impair you or keep you from being fully alert.
- Never run the engine unless the work area is well ventilated. Carbon monoxide (CO) kills.
- Always observe good workshop practices. Wear goggles when you operate machine tools or work with acid. Wear goggles, gloves and other protective clothing whenever the job requires working with harmful substances.
- Tie long hair behind your head. Do not wear a necktie, a scarf, loose clothing, or a necklace when you work near machine tools or running engines. If your hair, clothing, or jewelry were to get caught in the machinery, severe injury could result.
- Do not re-use any fasteners that are worn or deformed in normal use. Some fasteners are designed to be used only once and are unreliable and may fail if used a second time. This includes, but is not limited to, nuts, bolts, washers, circlips and cotter pins. Always follow the recommendations in this manual - replace these fasteners with new parts where indicated, and any other time it is deemed necessary by inspection.

Cautions & Warnings

- Illuminate the work area adequately but safely. Use a portable safety light for working inside or under the vehicle. Make sure the bulb is enclosed by a wire cage. The hot filament of an accidentally broken bulb can ignite spilled fuel or oil.
- Friction materials such as brake pads and clutch discs may contain asbestos fibers. Do not create dust by grinding, sanding, or by cleaning with compressed air. Avoid breathing asbestos fibers and asbestos dust. Breathing asbestos can cause serious diseases such as asbestosis or cancer, and may result in death.
- Finger rings should be removed so that they cannot cause electrical shorts, get caught in running machinery, or be crushed by heavy parts.
- Before starting a job, make certain that you have all the necessary tools and parts on hand. Read all the instructions thoroughly; do not attempt shortcuts. Use tools that are appropriate to the work and use only replacement parts meeting Volkswagen specifications. Makeshift tools, parts and procedures will not make good repairs.
- Catch draining fuel, oil or brake fluid in suitable containers. Do not use empty food or beverage containers that might mislead someone into drinking from them. Store flammable fluids away from fire hazards. Wipe up spills at once, but do not store the oily rags, which can ignite and burn spontaneously.
- Use pneumatic and electric tools only to loosen threaded parts and fasteners. Never use these tools to tighten fasteners, especially on light alloy parts. Always use a torque wrench to tighten fasteners to the tightening torque listed.
- Keep sparks, lighted matches, and open flame away from the top of the battery. If escaping hydrogen gas is ignited, it will ignite gas trapped in the cells and cause the battery to explode.
- Be mindful of the environment and ecology. Before you drain the crankcase, find out the proper way to dispose of the oil. Do not pour oil onto the ground, down a drain, or into a stream, pond, or lake. Consult local ordinances that govern the disposal of wastes.
- The air-conditioning (A/C) system is filled with a chemical refrigerant that is hazardous. The A/C system should be serviced only by trained automotive service technicians using approved refrigerant recovery/recycling equipment, trained in related safety precautions, and familiar with regulations governing the discharging and disposal of automotive chemical refrigerants.
- Before doing any electrical welding on vehicles equipped with anti-lock brakes (ABS), disconnect the battery negative terminal (ground strap) and the ABS control module connector.
- Do not expose any part of the A/C system to high temperatures such as open flame. Excessive heat will increase system pressure and may cause the system to burst.
- When boost-charging the battery, first remove the fuses for the Engine Control Module (ECM), the Transmission Control Module (TCM), the ABS control module, and the trip computer. In cases where one or more of these components is not separately fused, disconnect the control module connector(s).
- Some of the vehicles covered by this manual are equipped with a supplemental restraint system (SRS), that automatically deploys an airbag in the event of a frontal impact. The airbag is operated by an explosive device. Handled improperly or without adequate safeguards, it can be accidentally activated and cause serious personal injury. To guard against personal injury or airbag system failure, only trained Volkswagen Service technicians should test, disassemble or service the airbag system.

Cautions & Warnings

- Do not quick-charge the battery (for boost starting) for longer than one minute, and do not exceed 16.5 volts at the battery with the boosting cables attached. Wait at least one minute before boosting the battery a second time.
- Never use a test light to conduct electrical tests of the airbag system. The system must only be tested by trained Volkswagen Service technicians using the VAG 1551 Scan Tool (ST) or an approved equivalent. The airbag unit must never be electrically tested while it is not installed in the vehicle.
- Some aerosol tire inflators are highly flammable. Be extremely cautious when repairing a tire that may have been inflated using an aerosol tire inflator. Keep sparks, open flame or other sources of ignition away from the tire repair area. Inflate and deflate the tire at least four times before breaking the bead from the rim. Completely remove the tire from the rim before attempting any repair.
- When driving or riding in an airbag-equipped vehicle, never hold test equipment in your hands or lap while the vehicle is in motion. Objects between you and the airbag can increase the risk of injury in an accident.

I have read and I understand these Cautions and Warnings.

