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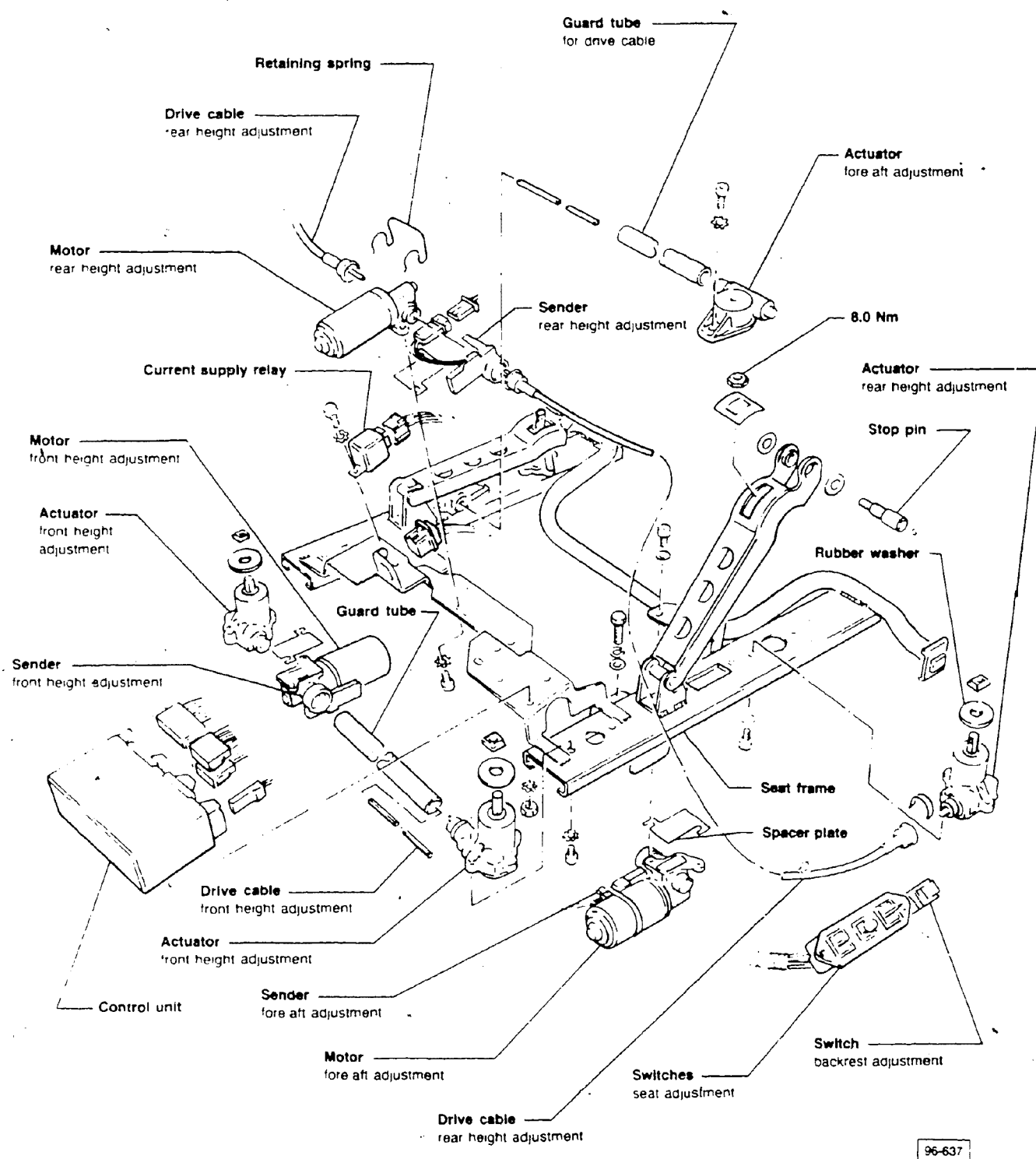
Power seat

- assembly 72.2
- backrest, assembly 72.3
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Power seat with memory

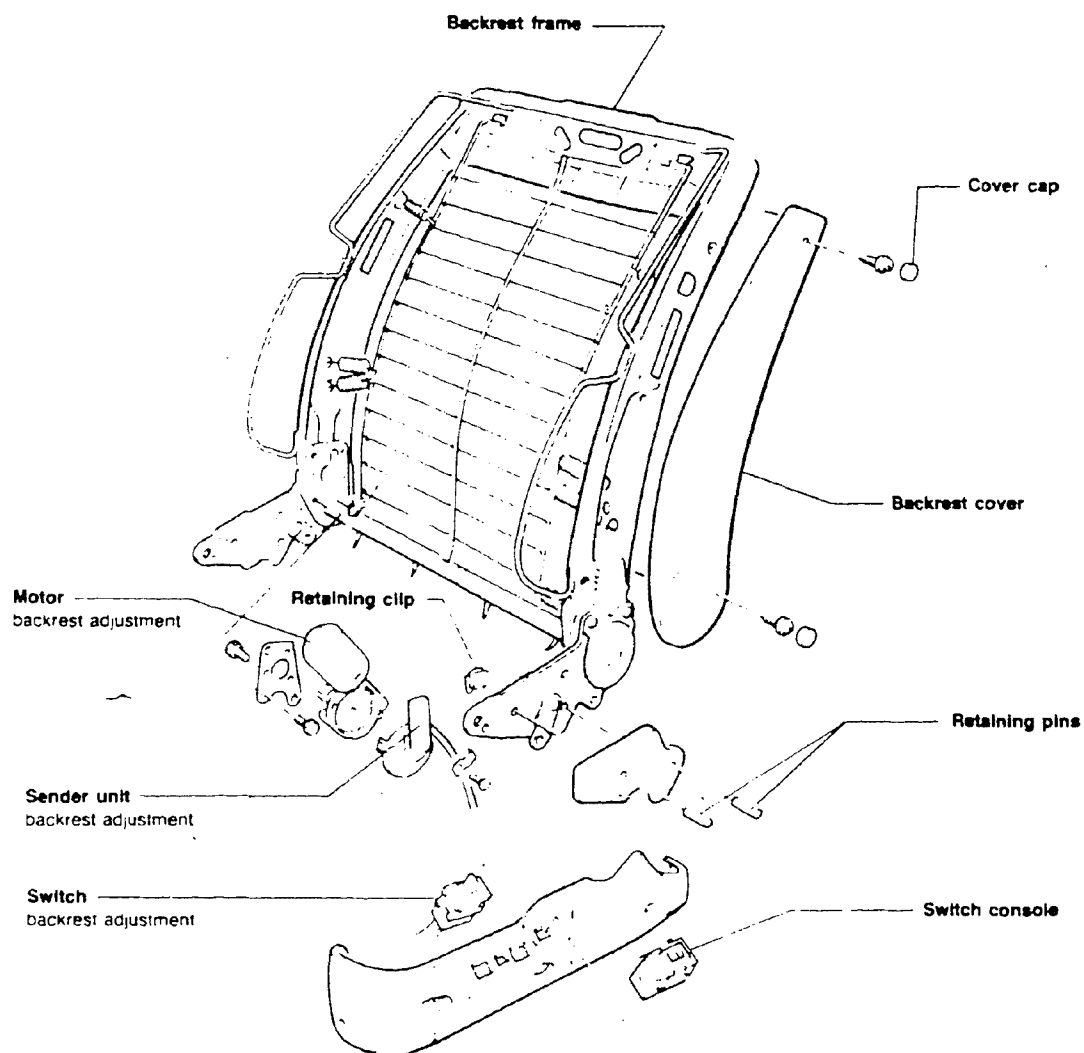
- troubleshooting 72.4

Body – Seats



96-637

Body – Seats



96-639

CAUTION

DO NOT damage, enlarge or bend connector terminals or cavities by forcing probes into them when performing electrical checks. Use Connector Test Kit **VW 1594** to make the necessary electrical connections.

Troubleshooting, power seat with memory

Test conditions

- battery is fully charged
- fuse **S25** OK
- fuse **S26** OK
- circuit breaker 20 A in auxiliary relay panel OK
- use multimeter **US 1119** and connector test kit **VW 1594** for electrical checks
- always refer to appropriate wiring diagrams when troubleshooting

Driver's seat will not adjust

Circuit breaker for seat memory defective or voltage supply for driver's seat interrupted

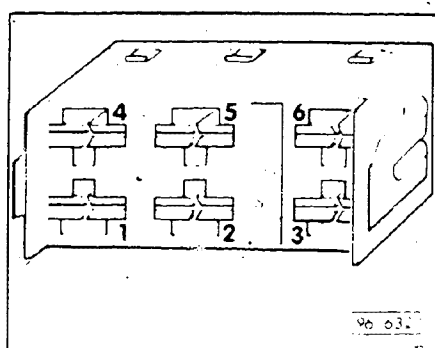
- remove circuit breaker 20 A from auxiliary relay panel
- using **US 1119** set to volt range
- alternately measure voltage supply between each circuit breaker terminal in the auxiliary relay panel and ground
 - must alternate between approximately 12.0 V and 0.0 V
- set **US 1119** to ohm range
- measure resistance of circuit breaker
 - must be 0.0 ohm (continuity)

Measurements OK

Measurements not OK

End

- replace circuit breaker or
- repair open circuit in wiring



Driver's seat voltage supply interrupted

- disconnect 6-point connector (brown) from driver's seat
- using multimeter **US 1119** set to volt range
- measure voltage between terminals 1 and 4 then 2 and 5 alternately
 - must be approximately 12.0 V in both cases

One or both voltages not OK

Voltages OK

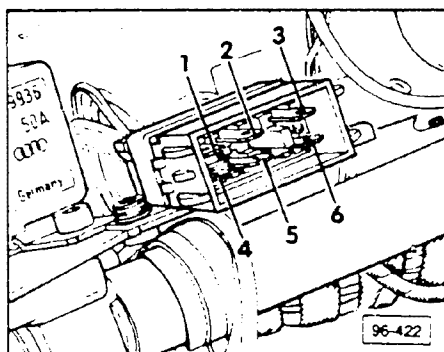
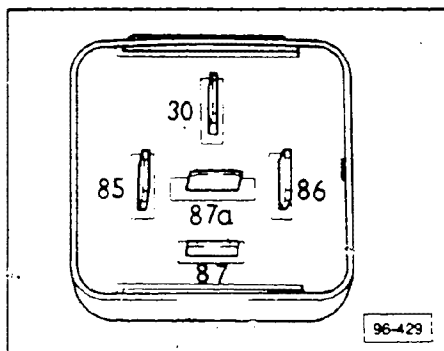
End

- repair open circuit in wiring

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(A)
next page

CAUTION

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Power supply relay for seat adjustment defective

- remove power supply relay
- using multimeter **US 1119** set to ohm range, measure resistance between relay terminals **30** and **87a**
 - must be 0.0 ohm (continuity)
- measure resistance between relay terminals **85** and **86**
 - must be approximately 40.0 ohms

Measurement not OK or only one OK	Measurements OK
--	------------------------

■ replace power supply relay

End

Perform functional test of driver's power seat

- disconnect memory unit from power seat
- connect a fused (30 A) external voltage supply to brown (6-point) connector on power seat as follows:
 - positive (+) to terminal **2**
 - negative (-) to terminal **5**
- operate driver's seat in all positions with switches

Operation not correct or only certain servo motors work	Operation correct
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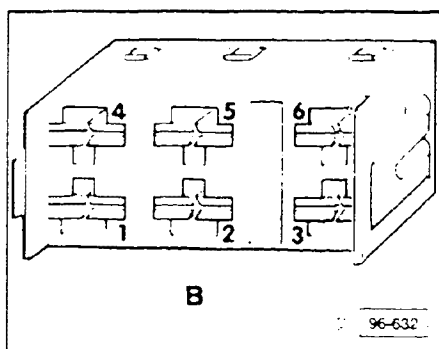
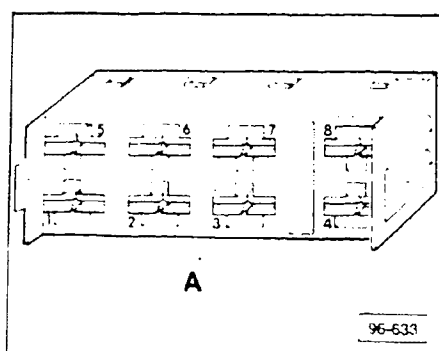
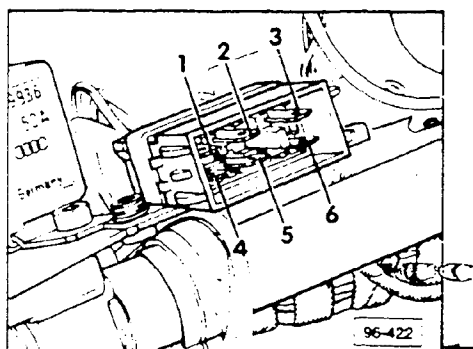
■ disconnect external voltage supply from brown (6-point) connector on driver's power seat

Go to **(B)**
next page

■ disconnect external voltage supply from brown (6-point) connector on driver's power seat

■ remove driver's seat

Go to **(D)**
three pages following



CAUTION

DO NOT damage, enlarge or bend connector terminals or cavities by forcing probes into them when performing electrical checks. Use Connector Test Kit **VW 1594** to make the necessary electrical connections.

Switches on driver's seat frame defective

- remove driver's seat
- disconnect yellow connector **A** (8-point) and red connector **B** (6-point) from control unit
- operate seat switch in appropriate direction while performing following resistance checks
- using multimeter **US 1119** set to ohm scale
- measure resistance between terminal 5 of brown connector (6-point) on driver's seat and terminals 2, 3, 5, and 6 of red connector **B** (6-point) one after the other
 - must be 0.0 ohm (continuity)
- measure resistance between terminal 5 of brown connector (6-point) on driver's seat and terminals 2, 4, 6 and 8 of yellow connector **A** (8-point) one after the other
 - must be 0.0 ohm (continuity)

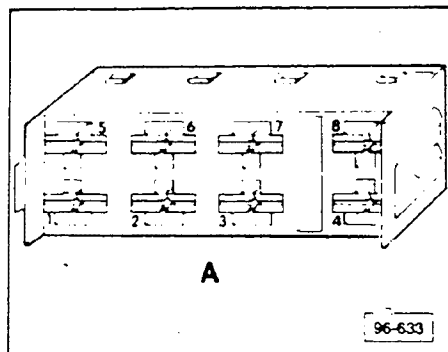
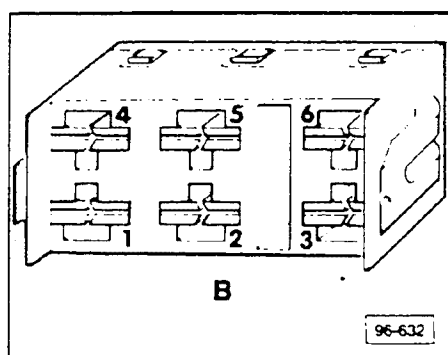
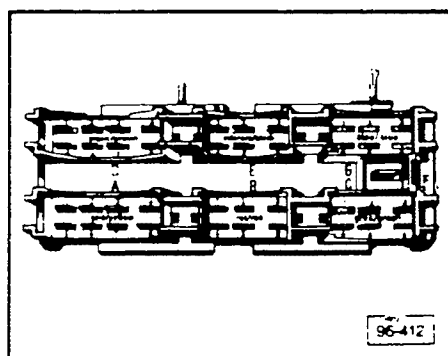
Resistance measurements **not OK**

All resistance measurements **OK**

- replace defective switch(es) or
- repair open circuit in wiring

End

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©
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Servo motors defective

- disconnect yellow connector **A**, red connector **B**, green connector **C** and black connector **E** from control unit
- check servo units individually with fused (30A) external power supply

Front height adjustment servo motor

- connect power supply to terminals 1 and 4 of red (6-point) connector **B**, then repeat with reversed polarity

Rear height adjustment servo motor

- connect power supply to terminals 3 and 7 of yellow (8-point) connector **A**, then repeat with reversed polarity

Fore/aft adjustment servo motor

- connect power supply to terminals 1 and 5 of yellow (8-point) connector **A**, then repeat with reversed polarity

Backrest adjustment servo motor

- connect power supply to terminals 2 and 4 of green (6-point) connector **C**, then repeat with reversed polarity

One or more servo motors do not work

Servo motors work

- replace defective servo

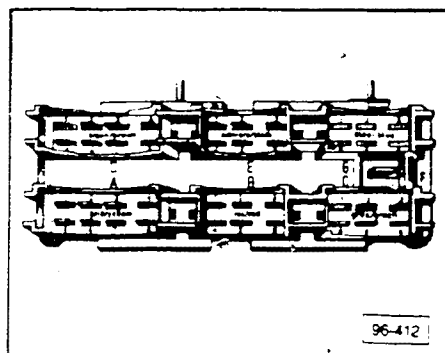
End

- repair open circuit to or from control unit or
- replace control unit

End

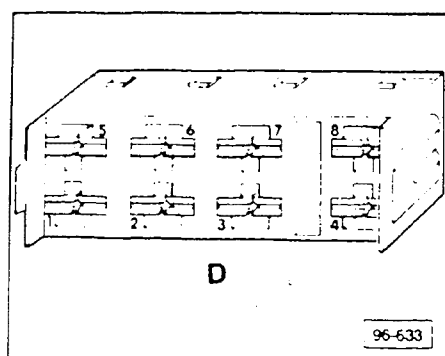
CAUTION

DO NOT damage, enlarge or bend connector terminals or cavities by forcing probes into them when performing electrical checks. Use Connector Test Kit **VW 1594** to make the necessary electrical connections.



■ replace door contact switch or repair open circuit in wiring

End



CAUTION

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Contact switch in driver's door defective

- remove brown connector **D** (8-point) from control unit
- using multimeter **US 1119** set to ohm range
- measure resistance between terminal **4** and ground
 - must be 0.0 ohm (continuity) with door open
 - must be ∞ ohm (no continuity) with door closed

Resistance **not OK**

Resistance **OK**

Control button for memory function defective

- using multimeter **US 1119** set to volt range
- check voltage between terminals **1** and **8** of brown connector **D** (8-point)
 - must be approximately 12.0 V
- switch memory control **ON**
- connect **US 1119** between brown connector **D** terminal **1** (ground) and terminal **5**
- push memory control buttons **1, 2, 3, 4** in order
- read voltage after pushing each button
 - must be approximately 12.0 V
- repeat sequence by checking voltage between brown connector **D** terminal **1** (ground) and terminals **2, 6, 7** and **3** in order
 - must be approximately 12.0 V in each case

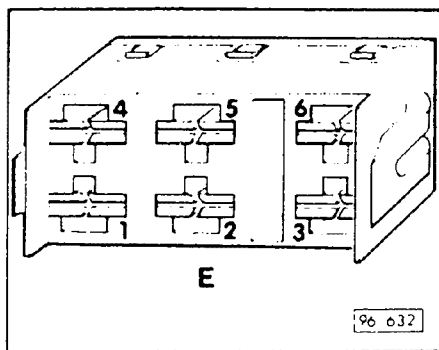
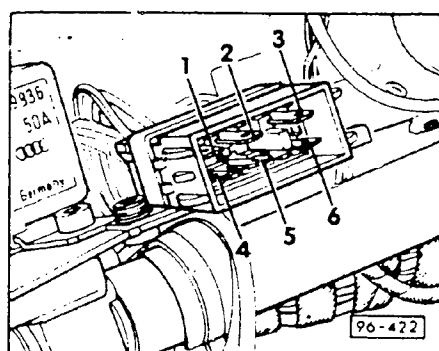
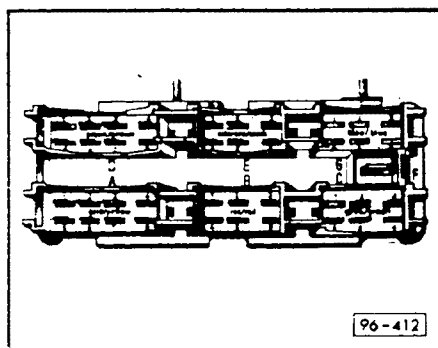
Voltage measurements **not OK**

Voltage measurements **OK**

- repair open circuit in wiring or
- replace defective memory control buttons (panel)

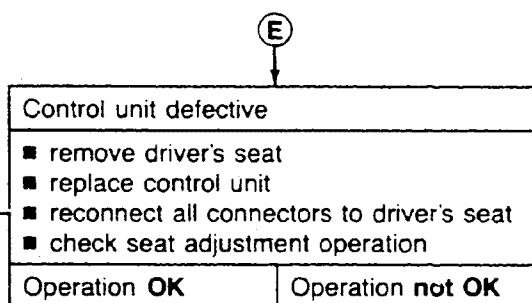
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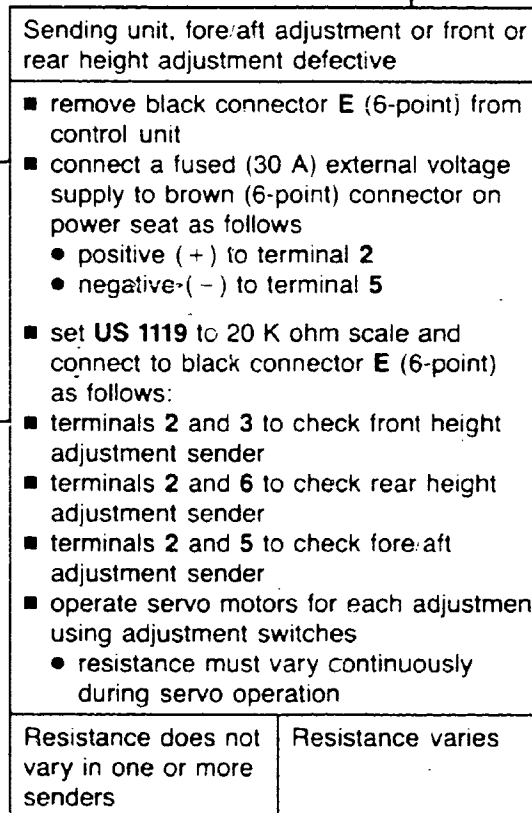


CAUTION

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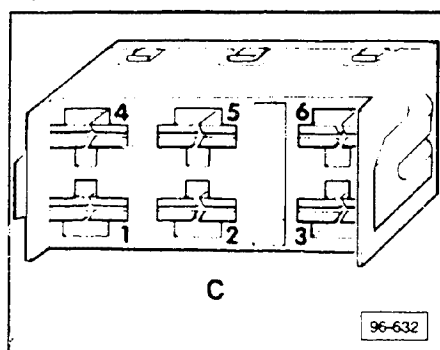
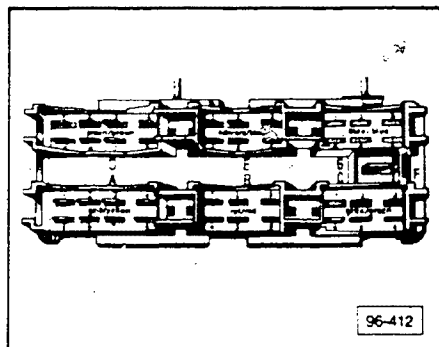
End



Replace defective sender

End

Go to **F** next page



Backrest does not adjust

Sender unit for backrest adjustment defective

- remove backrest cover
- disconnect green connector C (6-point) from control unit
- connect US 1119 set to ohm scale between terminals 5 and 3 of green connector C
- connect a fused (30 A) external voltage supply alternately (reversing polarity) between terminals 2 and 4 of green connector C — do not recline seat more than 35° rearward
 - resistance must vary continuously during backrest operation

Resistance **does not** vary

Resistance varies

- replace sender unit for backrest adjustment

End

End

CAUTION

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CAUTION

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Note

Test all sender units before replacing a defective sender unit.

Backrest must not be reclined more than 35° to rear when checking sender unit for backrest adjustment.

The driver's door must be open when testing the memory function of the power driver's seat.

Driver's seat does not return exactly to memorized position

Fore/aft adjustment sending unit defective

- switch memory control to **ON**
- open driver's door
- press button 1 on memory control switches
 - driver's seat moves to position stored in memory
- move seat forward or back to new position
- press memory selector button 4 and memory bar at same time
- alternately press memory buttons 1 and 4
 - driver's seat must move to stored memory positions

Seat adjustment does not work properly

Seat adjustment works properly

- repair open circuit from sender to control unit
- or
- replace sender

End

Front height adjustment sender defective

- press button 1 on memory control switches
 - driver's seat moves to position stored in memory
- change front height adjustment
- press memory selector button 4 and memory bar at same time
- alternately press memory buttons 1 and 4
 - driver's seat must move to stored memory positions

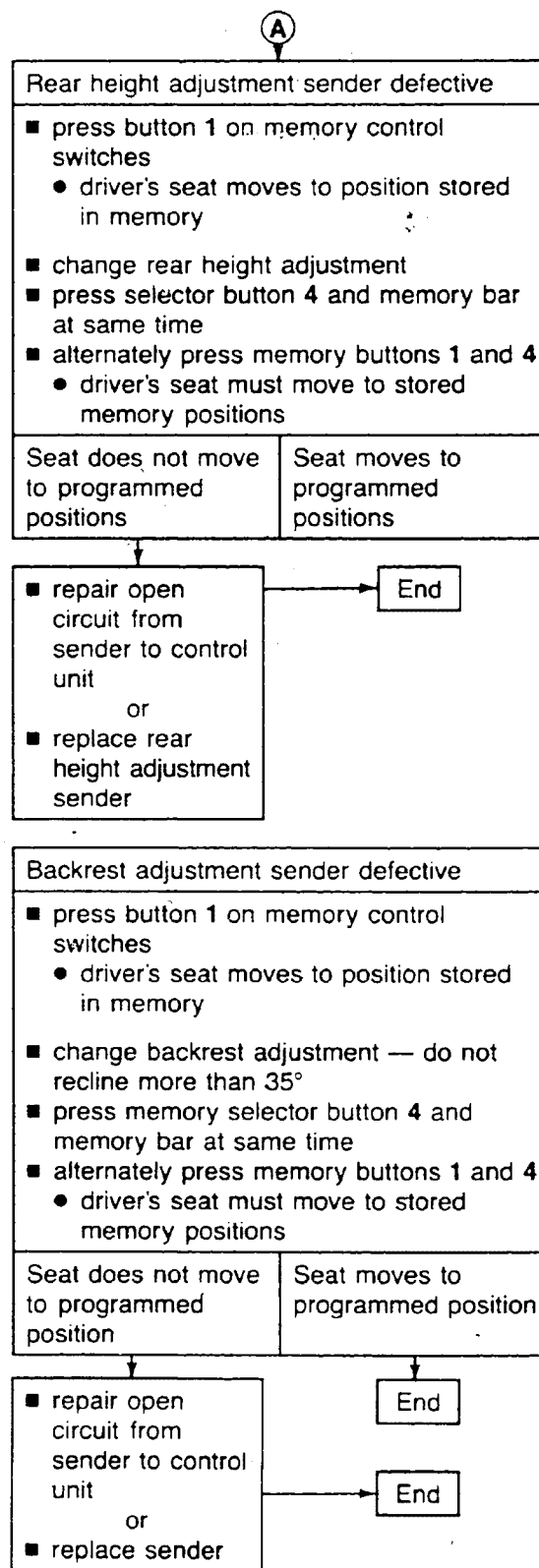
Seat does not move to programmed positions

Seat moves to programmed positions

- repair open circuit from sender to control unit
- or
- replace sender

Go to
Ⓐ
next page

End



CAUTION

DO NOT damage, enlarge or bend connector terminals or cavities by forcing probes into them when performing electrical checks. Use Connector Test Kit **VW 1594** to make the necessary electrical connections.

Front passenger's seat will not adjust with switches

Troubleshooting preparations

- circuit breaker **20A** in auxiliary relay panel **OK**

Note

Use a fused **30A** external power supply when supplying 12.0 V for tests.

Passenger seat power supply interrupted

- disconnect, 2-point connector (brown) on passenger seat
- measure voltage between connector terminals
 - must be approximately 12.0V

Voltage **not OK**

Voltage **OK**

- check wiring according to wiring diagram, repair open circuit

End

- remove passenger seat

Servo motors defective

- disconnect connectors from all servo motors
- using a fused **30A** external power supply, apply voltage briefly to each servo motor, then repeat with reversed polarity

Servo motors do not work

Servo motors work

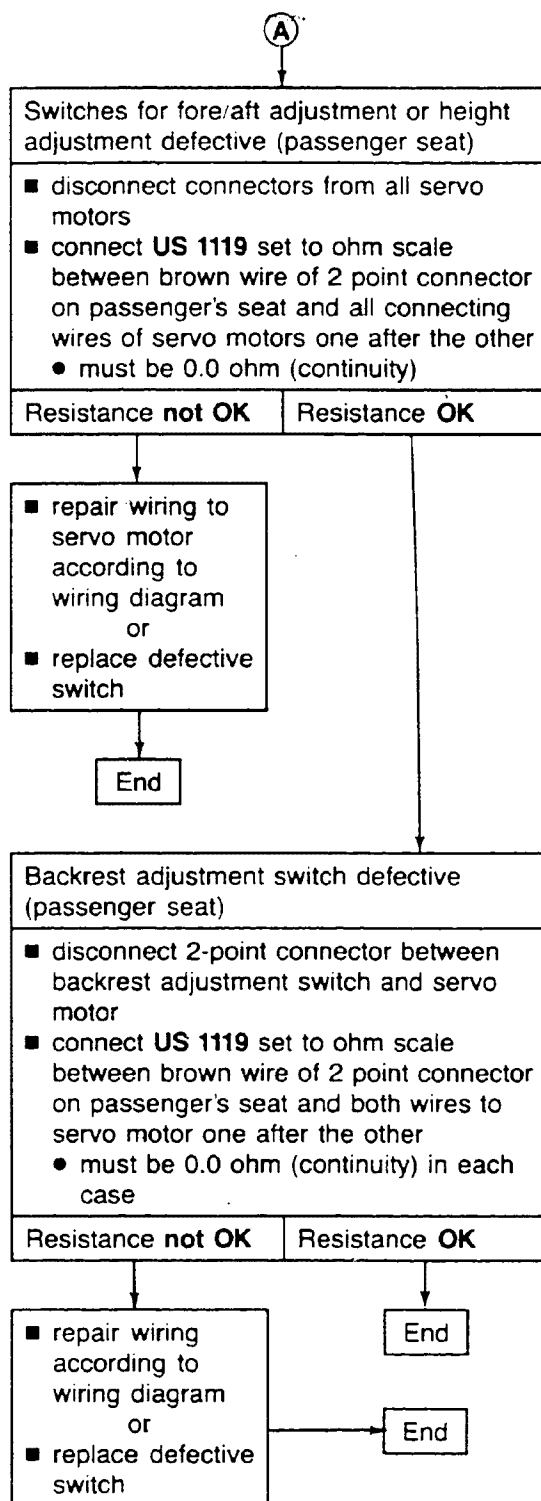
- replace defective servo motor

End

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Ⓐ
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CAUTION

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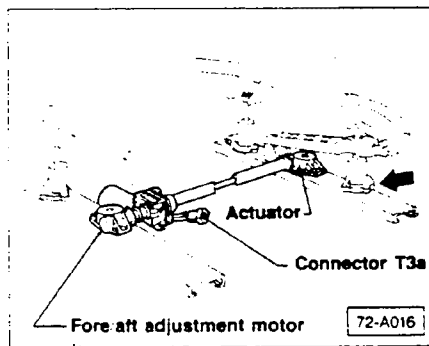


Sender units, adjusting

Sender units can only be adjusted when removed from motors. Sender units should only be adjusted when replacing motors or sender units.

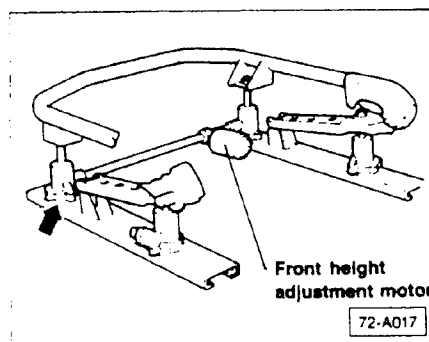
Fore/aft sender unit, adjusting

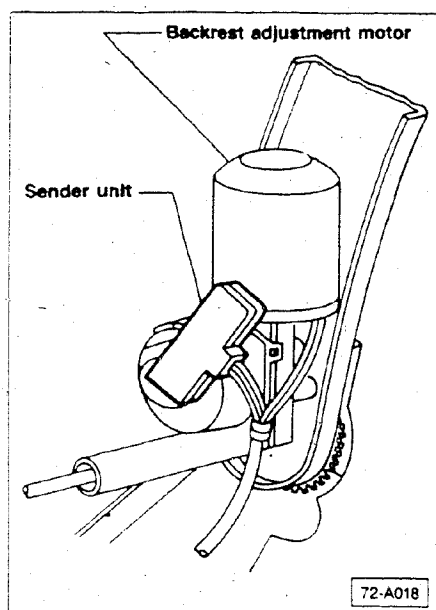
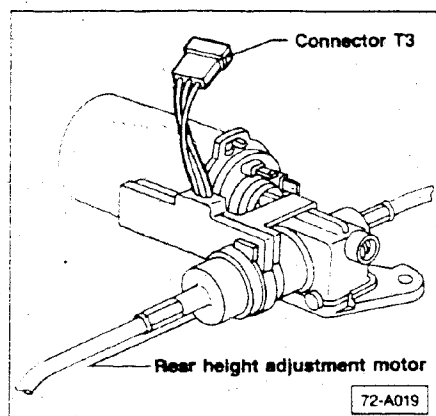
- unbolt seat from vehicle
- using seat adjustment switches, move seat to forward stop and rear height to upper stop
- remove seat from vehicle
- unbolt right rear seat height actuator from right seat frame rail (**arrow**)
- remove fore/aft adjustment actuator from right seat rail
- pull guard tube and driveshaft from fore/aft adjustment motor
- remove sender unit from motor
- connect ohmmeter between BL/G and R/BK wire of connector **T3a** (on sender)
- rotate inner part of sender until ohmmeter reads 9.0K ohms
- install sender on motor
- install driveshaft, guard tube and right seat actuator
- bolt rear height actuator to seat frame rail



Front height sender unit, adjusting

- unbolt seat from vehicle and tilt back
- using seat adjustment switch, raise front of seat to upper stop and forward to forward stop
- unbolt front height actuator from left frame rail (**arrow**)
- remove guard tube and driveshaft from front height adjustment motor
- remove sender from motor
- connect ohmmeter between BL/W and R/BK wires on connector **T3b** of sender
- rotate inner part of sender unit until ohmmeter reads 9.0K ohms
- install sender on motor
- install driveshaft and guard tube
- bolt front height actuator on left seat frame rail





Rear height sender unit, adjusting

- unbolt seat from vehicle and tilt back
- using seat adjustment switches, raise rear of seat to upper stop
- remove seat from vehicle
- remove seat memory control unit
- pry off driveshaft retaining clip and remove driveshaft from motor
- remove sender from motor
- connect ohmmeter between BL/Y and R/BK wires of connector **T3** (on sender)
- rotate inner part of sender until ohmmeter reads 9.0K ohms
- install sender on motor
- install driveshaft on motor
- install control unit

Backrest sender unit, adjusting

- using seat switch, tilt seatback to forward stop
- remove seat from vehicle
- remove seatback cover from seat (4 screws)
- remove sender from motor
- connect ohmmeter between contacts 5 (R/BK wire) and 3 (BK/BL wire) of green connector on control unit
- rotate inner part of sender until ohmmeter reads 9.0K ohms
- install sender on motor

Note

Install sender so drive pin and retaining lugs engage corresponding slots on adjustment motor.

- install seatback cover