

**WARNUNG**

Gefahr des Verlusts der Text-Bild-Zuordnung beim Ausdruck.

- **Aus technischen Gründen kann derzeit nicht ausgeschlossen werden, dass trotz einwandfreier Darstellung auf dem Bildschirm beim Ausdruck der Zusammenhang von Text und zugehörigem Bild verloren geht.**
- **Wird der Fehler nicht bemerkt, besteht die Gefahr, daß Arbeiten nicht korrekt durchgeführt werden und es dadurch zu Personen- und Sachschäden kommt.**

→ Vergleichen Sie deshalb nach dem Druckvorgang unbedingt die Ausdrücke mit der Bildschirmdarstellung. Korrigieren Sie die Ausdrücke im Fehlerfall so, daß der Inhalt der Bildschirmdarstellung zutreffend wiedergegeben wird.

**WARNING**

Danger of losing text-figure correspondence when printing out.

- **For technical reasons, it can currently not be ruled out that the correspondence between text and associated figure can be lost when it is printed out, even though the display on the screen is correct.**
- **If the fault is not noticed, there is the danger that work will not be performed correctly which can cause injury and damage.**

→ Therefore, always compare printouts with the screen display after printing them out. Correct the printouts if they are faulty so that the content of the screen display matches that on the printouts.

**AVERTISSEMENT**

Risque de perte de la correspondance texte-illustration lors de l'impression papier.

- **Pour des raisons techniques, il ne peut pas être exclu à l'heure actuelle que, même en cas d'affichage correct à l'écran, la correspondance entre le texte et l'illustration puisse être erronée sur l'impression papier.**
- **Si l'erreur passe inaperçue, on court le risque d'exécuter certaines opérations de manière incorrecte pouvant conduire à des dommages corporels et matériels.**

→ Comparez impérativement pour cette raison les impressions papier avec l'affichage à l'écran.

Corrigez-les en cas d'erreur de manière à reproduire correctement l'affichage à l'écran.



ATTENZIONE

Pericolo di perdita dell'abbinamento testo-immagine nella stampa.

- **Per motivi tecnici non è escluso che, nonostante la rappresentazione sullo schermo risulti perfetta, durante la stampa venga persa la corrispondenza fra testo e relativa immagine.**
- **Se tale difetto non viene rilevato vi è il pericolo che i lavori non siano eseguiti correttamente; ciò può avere come conseguenza lesioni e danneggiamenti.**

→ Per questo motivo, dopo la stampa è assolutamente necessario confrontare le stampe con la rappresentazione sullo schermo. In caso di errore si prega di correggere le stampe, così da garantire la riproduzione esatta della rappresentazione sullo schermo.



ADVERTENCIA

Al imprimir se corre el riesgo de perder la correcta asignación de las figuras al texto.

- **Por motivos técnicos, por el momento no se puede descartar que, aun siendo correcta la imagen que aparezca en la pantalla, al imprimir se pierda la correlación entre el texto y la figura correspondiente.**
- **Si este error pasara desapercibido, existe el riesgo de que los trabajos no se ejecuten de forma correcta y, por tanto, se produzcan daños personales y materiales.**

→ Por ello le rogamos que tras el proceso de impresión compare siempre las copias impresas con la imagen de la pantalla. En caso de error, corrija las copias impresas de forma que se correspondan con el contenido de la imagen de la pantalla.

87 20 19 Removing and installing servo motor - as of MY 2003

- [Preliminary work](#)
- [Removing servo motor](#)
- [Installing servo motor](#)
- [Subsequent work](#)

Preliminary work

Preliminary work

1. Remove trim under dashboard on left. → 701919 Removing and installing trim under dashboard - "Removing" section
2. Remove KESSY/immobiliser control unit. → 966619 Removing and installing KESSY/immobiliser control unit - "Removing" section
3. Remove vehicle electrical system control unit. → 971019 Removing and installing vehicle electrical system control unit - chapter on "Removing" [9PAAD1 9PAAD7 9PAAE1 9PAAE7 9PAAF1] → 971019 21 Removing and installing vehicle electrical system control unit - chapter on "Removing" [9PAAJ1]
4. Remove relay carrier. Remove relay carrier holder. → 9790 Relay carrier

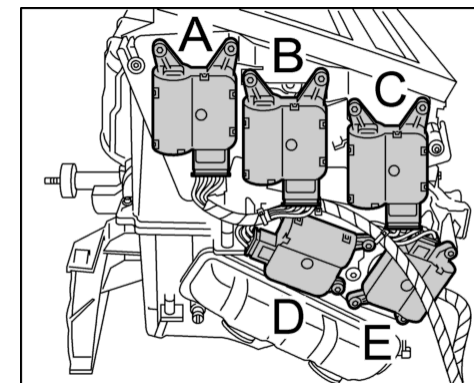
Removing servo motor

Removing servomotor



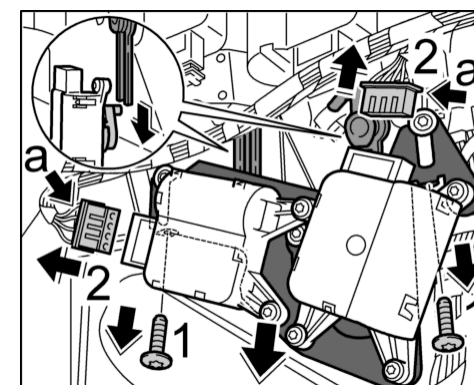
Note

- The air conditioner servo motor **-B-** - outer unit aimed at persons on left - is located on the left air conditioning unit.
- The air conditioner servo motor **-C-** - centre unit aimed at persons on left - is located on the left air conditioning unit.
- The individual servo motors **-B und C-** are not installed on both sides of the air conditioning unit in vehicles with a manual air conditioner. These are replaced by just one air conditioner servo motor, which is installed on the left side of the air conditioning unit at the servo motor position **-B-**.
- Switch ignition off and remove ignition key before starting work.



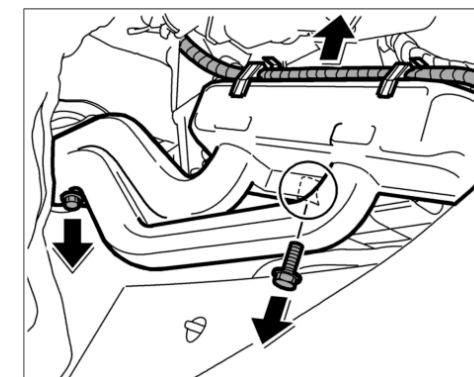
Servo motors

1. Unscrew the fastening screws **-arrows 1-** of the retainer plate with motors **-D and E-**.
2. Press electrical connectors **-Arrows 2- -Arrows a-** and unplug the connectors.
3. Pull out the retainer plate with the motors **-D and E-** downwards from the guide.



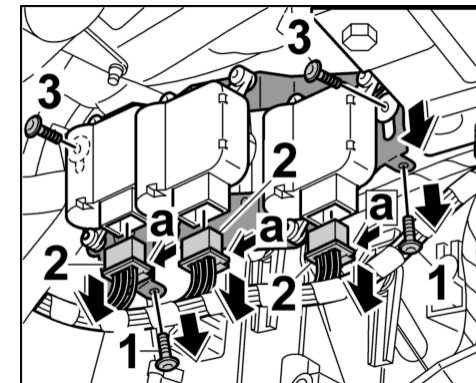
Loosening retainer plate, unplugging connector and removing retainer plate

4. Unclip wiring harness on the left heat exchanger cover.
5. Unscrew both fastening screws on the left heat exchanger cover and unclip the cover.



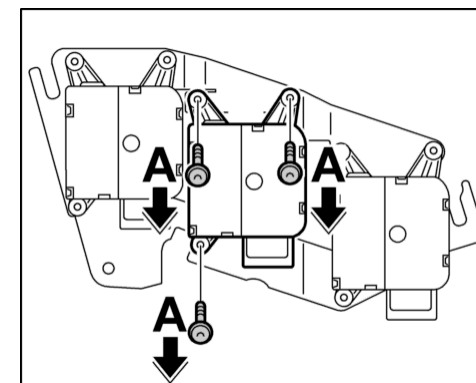
Unclipping wire harness and removing cover

6. Unscrew both fastening screws **-Arrows 1-** of the top retainer plate with the servo motors **-A, B and C-**.
7. Press in plug **-2- -a-** and pull apart plug connection.
8. Pull out retainer plate downwards. If necessary, loosen the guide screws **-3-** of the retainer plate.



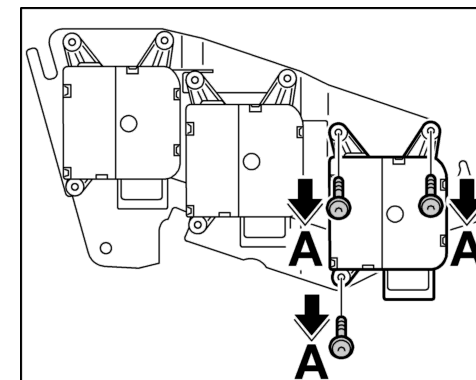
Loosening top retainer plate and unplugging connectors

9. Unscrew fastening screws **-Arrows A-** and remove servo motor.



Air conditioning servo motor - outer unit aimed at persons on left

10. Unscrew fastening screws **-Arrows A-** and remove servo motor.



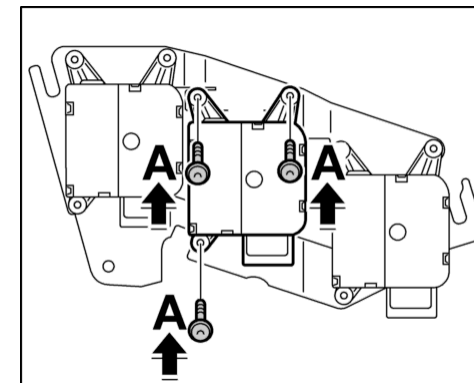
Air conditioning servo motor - centre

unit aimed at persons on left

Installing servo motor

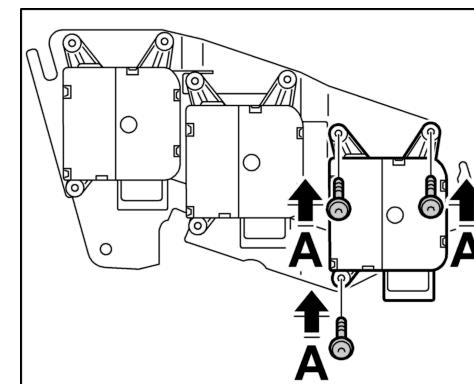
Installing servomotor

1. Place the servo motor on the retainer plate and screw down using the fastening screws **-Arrows A-** . → **Tightening torque: 1.0 ftlb.**



Air conditioning servo motor - outer unit aimed at persons on left

2. Place the servo motor on the retainer plate and screw down using the fastening screws **-Arrows A-** . → **Tightening torque: 1.0 ftlb.**



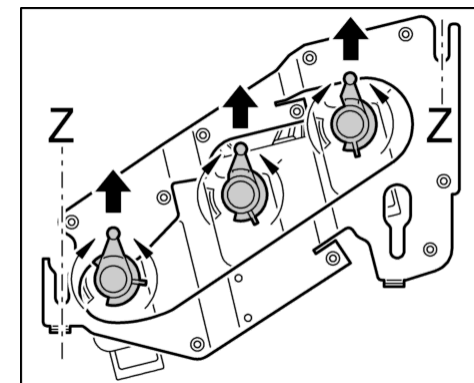
Air conditioning servo motor - centre unit aimed at persons on left

3. Move the servo motors with the Porsche System Tester to the service position. The drives must be parallel to the guides **-Z-** .



Note

- Switch on ignition and carry out the service position menu, Drive links menu with the Porsche System Tester in the Climatronic.
 - As an alternative, the servo motors can also be powered with 12 volts until they have reached the correct position. Always use the circuit diagram for this.
4. Connect the electrical plug connections to the servo motors.
 5. Switch off ignition and remove ignition key.
 6. Press in plug again and pull apart plug connection.

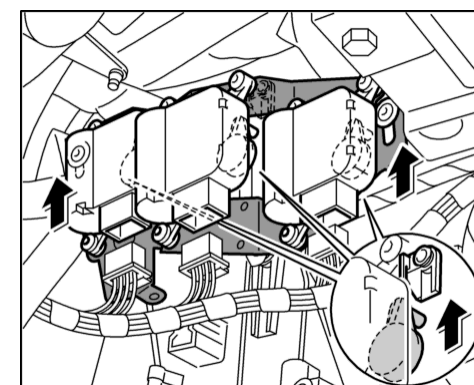


Servo motors in service position



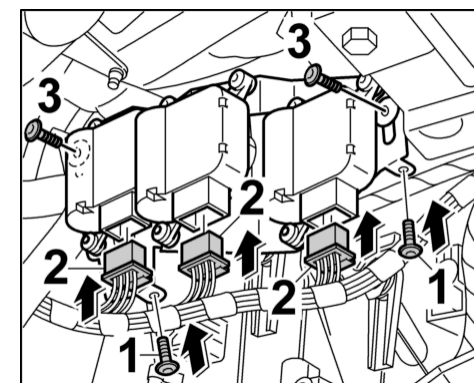
Note

- Make sure that the drivers of the servo motors are pushed into the mountings.
7. Insert retainer plate with the three servo motors from below into the guides on the air conditioning unit as far as it will go.



Pushing in retainer plate

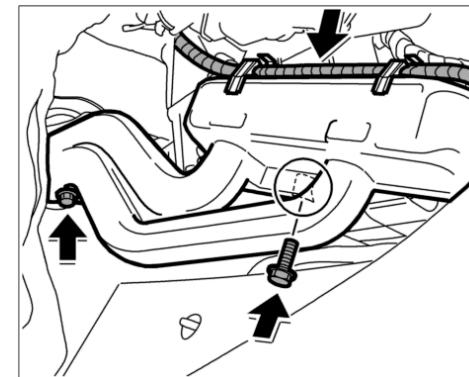
8. Push on electric plug connection **-Arrows 2-** until connectors are felt to engage.
9. Screw in both fastening screws **-1-**. → **Tightening torque: 1.0 ftlb.** If necessary, screw down the guide screws **-3-** of the retainer plate. → **Tightening torque: 1.0 ftlb.**



Push on the electric plug connection and screw down the retainer plate

10. Clip left cover into place and secure with the fastening screws. → **Tightening torque: 1.0 ftlb.**

11. Clip in wiring harness on the left heat exchanger cover.



Installing the cover and clipping in the wire harness

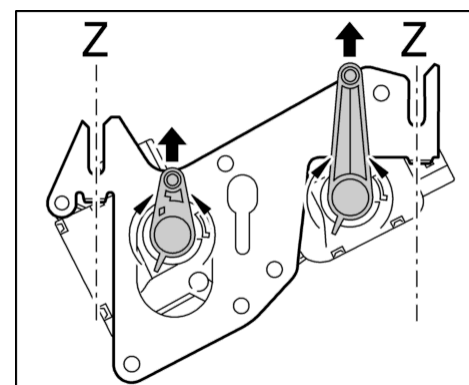
12. Move the servo motors with the Porsche System Tester to the service position. The drives must be parallel to the guides **-Z-**.

13. Push the electric plug connections onto the servo motors.



Note

- Switch on ignition and carry out the service position menu, Drive links menu with the Porsche System Tester in the Climatronic.
- As an alternative, the servo motors can also be powered with 12 volts until they have reached the correct position. Always use the circuit diagram for this.



Servo motors in service position (2)

14. Switch off ignition and remove ignition key.

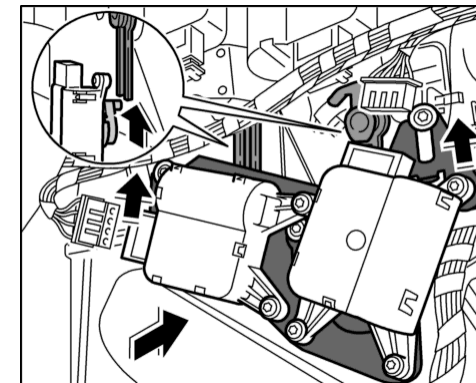
15. Press in plug again and pull apart plug connection.



Note

- Make sure that the drivers of the servo motors are pushed into the mountings.

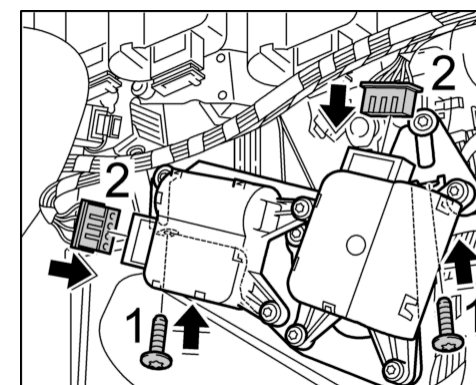
16. Insert retainer plate with the two servo motors from below into the guides on the air conditioning unit as far as it will go.



Pushing in the retainer plate with two servo motors

17. Connect the electrical plug, pressing on until it audibly clicks into place **-Arrows 2-** .

18. Screw in both fastening screws **-Arrows 1-** . → **Tightening torque: 1.0 ftlb.**



Pushing on plug connection and screwing in fastening screws

Subsequent work

Subsequent work

1. Install relay carrier. Install relay carrier holder. → 9790 *Relay carrier*
2. Install vehicle electrical system control unit. → 971019 Removing and installing vehicle electrical system control unit - "Installing" section [9PAAD1 9PAAD7 9PAAE1 9PAAE7 9PAAF1] → 971019 23 Removing and installing vehicle electrical system control unit - "Installing" section [9PAAJ1]
3. Install KESSY/immobiliser control unit. → 966619 Removing and installing KESSY/immobiliser control unit - "Installing" section.

4. Install trim under left dashboard. → 701919 Removing and installing trim under dashboard - "Installing" section
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9PAAD1, 9PAAD7, 9PAAE1, 9PAAE7, 9PAAF1, 9PAAJ1

as of MY 2003

Country C00, C02, C05, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C32, C33, C34, C35, C36, C37, C38, C39, C45, C46, C98, C99