# USER GUIDE MOUNTING INSTRUCTIONS



Manufacturer:





TLF. +45 86770303 - FAX +45 86770097 www.ajstole.dk - E-mail: ajstole@ajstole.dk Skavholmvej 8, DK-8520 Lystrup With your new AJ chair you are assured of optimum comfort, built in a nice neutral design with many customization options. The many possibilities for adaptation of the AJ chair, makes it possible to make the chair fit.

The AJ chair is Danish-produced and handmade by skilled craftsmen. The company AJ Stole A / S has developed and manufactured chairs for disabled since 1978 and today we offer standard and customized components of the highest quality.

In this User Guide / Installation Guide, you will find answers to most questions about adjustment, care and maintenance of your chair.

AJ Stole A / S

# <u>Content</u>

Chair type 1,2 and 3	2
Angle of backrest top	2
Chair type 4,5 and 6	3
Adjustment of seatdept	3
Fixed sidesupports	3
Adjustable sidesupports	3
Chair type powerbelt and location of belt	4
Seatcushions	4
Armrests CLASSIC standard	5
Armrests CLASSIC "swing out"	5
Armrests CLASSIC "angle fixed"	5
Armrests CLASSIC manual lowerable	6
Armrests CLASSIC power lowerable	6
Armrests 2001 and 2004	6
Armrest cushions	6
Headrest brackets	7
Headrest cushions	7
Thigh support	8
Table	8
Power-legrest with embedded length-	
adjustment	8
Power-legrest with power length adjustment	9
Lumbar support	9
Correction of imballance in the hip	9
Bag on armrest	9
Incontinence cover	10
Aerosleep	10
Power back rest	10
Maintenance	11
AJ PC-board	12
EU-Declaration of conformity	12
Fabric	13
Artificial leather	13
Foam	13



When the plastic cover is removed, it is easy to alter the lumbar support.

	Type 1, 2 and 4	
ne	Seatwidth [cm]	Heigth
		backrest [cm]
	38	50
	40	48-60
	45	47 or 60
	50	47 or 60
	55	60

# <u>Chair - type 2</u>

The backrest has fixed side supports. When the cushion is removed, it is possible to alter the lumbar support. The backrest is avaliable with power belt.

Type 3, 5 and 6		
Seatwidt [cm]	Heigth backrest [cm]	
40	48-60	
45	60	
50	60	
55	60	

All backrests are prepared for head-rest.

All backrests are avaliable with standard- or Supersoft foam.

# Chair - type 3

# Angle of backrest top

The backrest has fixed side supports. When the plastic cover is removed, it is easy to alter the lumbar support.

> On the backrest of type 3, 5 and 6, the top can be angled forward  $(0 - 30^{\circ})$ . This is done by loosening the bolt (A). Once the correct possition is found - WHILE the backrest is shaken sligthly the bolt (A) is tigthned again.



# Chair - type 4



When the cushion is removed, it is possible to alter the lumbar support. The backrest is avaliable with power belt.

# <u>Chair - type 5</u>



The backrest has fixed side supports. When the plastic cover is removed, it is easy to alter the lumbar support.

# Fixed sidesupports

On the backrests type 2, 3 and 5, the sidesupports can be shaped to fit the shape of the users body. By use of moderate physical force it is possible to bend the sidesupports.

The upper part of the sidesupports in type 5, is a seperate bendable area.

# Chair - type 6



When the cushion is removed, it is possible to alter the lumbar support.

### Adjustment of seatdept



# Adjustable sidesupports



Fig. 3

Backrest type 2, 4, powerbelt and 6 can be fitted with adjustable sidesupports. Type 6 is "born" with a mounting plate. The mountingplate is an option for type 2, 4 and powerbelt.

The bracket for the side-

supports is avaliable in 2

lenscrews in the 4 sliding-

The standardbracket (Fig.

horisontal possition of the

sidesupport, that tools are

used. (Allenkey size. 4).

The mountingbracket

for the sidesupports are

3) requires, to alter the

nuts A (Fig. 2).



Fig. 2



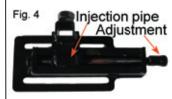
The sidesupports are mounted to in the injection pipe (Fig. 3 and Fig. 4). The sidesupport is manufactured by metal, which means that its shape can be modified (bendable). The sidesupports are covered with foam and leather. The vertical slope can be altered by loosening the 4 screws holding the bracket to the mounting plate (See Fig. 2).

_		
	Side support are avaliable	
ļir	n 3 sizes:	
C	Child	H=6cm
N	/ledium	H=10cm
þ	Adult	H=11,5cm

editions. Both types are mounted to the mounting plate (Fig. 2) with the 4 al-

Standardbracket

Injection pipe



By turning the screw A (Fig. 4) the distance to the center of the chair is either reduced or increased.

also avaliable in an edition where the horisontal possition is adjustable without tools. The bracket is mounted where the end of the adjustment screw is aligned with the dorsal edge of the backrest. For this to be done, the upholstery on the backrest must be refitted.

# Chair - type powerbelt







Velcro fastning is sewed on both ends of the belt. The belt is closed in front of the user. Then the belt is pulled by use of the built-in motor. The powerbelt is activated from the joystik - or external switches.



Powerbelt Type 2 and 4	
Seatwidth [cm]	Heigth backrest [cm]
38	50
45	48 - 60

<u>Altering the location of the belt</u>

The 3 screws (Fig. 1 A, B and C) are unscrewed, and the mountingplate (D) is removed.



The 2 screws (Fig. 2 E and F) are unscrewed. The location of the belt is altered up or down, then E and F is reinstalled in new holes. The mountingplate (Fig. 1 D) and the 3 screws (Fig. 1 A, B and C) are reinstalled.

# IMPORTANT:

The clutch and PC-board has to be adjusted by qualified personel. This has to take place once every year.

# Plus seatcushion

Plus-cushion has a positiv slope (high front). Plus-cushion has 4 cm protrushion.



# <u>Minus seatcushion</u>

Minus-cushion has a negativ slope (low front). Minuscushion has no protrusion.



# Paraplegi seatcushion

Paraplegi-cushion has a positiv slope, 4 cm protrusion, abduction and lowering for thighs.



as a positiv All seatcu it). Plus-cush- Stole is at otrushion. with veloce

All seatcushions from AJ Stole is attatched to the base with velcro.

All seatcushions can be supplied in standard- or Bonded foam.

# Sizes

The declared sizes are measured under the cushion !

Seatwidth [cm]	Seatdepth [cm]
38	max. 40 & 45
40	max. 50 & 55
45	max. 50 & 55
50	max. 50 & 55
55	max. 50 & 55

# Front-cushion

Paraplegi-front or Plus-front is used in combination with alternative seat cushions. the front-cushion is bolted to the baseplate of the seat.



Alternative cushion

# Armrest: CLASSIC standard







# Montage:

The threaded brick (Fig. Fig. 2 2 A) is inserted into the C-profile (Fig. 1). The rear vertical leg (Fig. 2 B) is inserted in the tube (Fig. 1 C). The bolts (Fig. 2 D and E) mounted through the holes in the clamp (Fig. 2 F) in the threads of the threaded brick (Fig. 2 A). The lock (Fig. 2 G) is possitioned on the bobbin. (Fig. 2 H).

<u>Heigth adjustment:</u> The heigth and slope of the armrest is adjusted when the 4 bolts (Fig. 3 G) are loosened.

# <u>"Swing up":</u>

By pulling the release handle (Fig. 3 H), the armrests can be raised to vertical possition (Fig 5)

Location of the cushion: By loosening the 2 bolts (Fig. 4 J), the armrest cushion is adjustable forward / reverse and in / out.

Length horizontal tube [cm]	Length vertical tube [cm]
25	21 or 31
30	21 or 31
35	21 or 31
40	21 or 31

Fig. 5

# Armrest CLASSIC "Swing out"



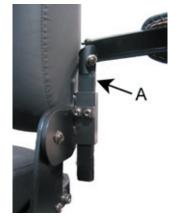
# Fig. 1



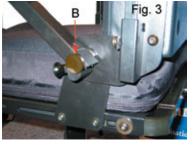


3.

# By replacing the rear vetical tube (A), to "Swing out" edition, the armrest can swing up and out.



By moving the armrests front stands, back to the center of the hinge (Fig. 3 B), the function of the armrests is modified. The angle between the backrest and the armrest is now constant, regardless the angle of the backrest. (Fig. 1 and 2).



NOTE: The functions "Swing out" and "angle fixed" can be combined.

Changing the function of the armrestsfrom standard to "Angle fixed" is done as follows:

- 1. The bolt (A) Fig. 4, is unscrewed.
- 2. The bobbin Fig. 3 B, is mounted instead. Remember to apply screw-lock, before mounting it.
  - The length of the armrests front vertical leg, now has to be adjusted. (see "heigth adjust ment).

# Armrest CLASSIC manual lowerable



CLASSIC armrests can. in every edition. - standard. "swing out" and "angle fixed" - be lowered in the front. This is done by pulling the release handle (Fig. 5 H). Now the front vertical leg can be lifted ftom the bobbin and the armrest can be lowered. See Fig. 6.



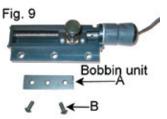
# Armrest CLASSIC power lowerable





CLASSIC armrests can - in every edition - be lowered electrically, by use of the joystick.

- 1. The threaded brick (Fig. 9A) is placed in the C-profile.
- 2. The 2 bolts (Fig. 9 B) is fitted through the holes of the unit into the threads of the brick.
- 3. With the bobbin in the rear possition, the unit is possitioned with the front vertical leg in a vertical possition (see Fig. 7).
- 4. The unit is connected to electronic of the wheelchair.
- 5. When the bobbin is mooving forwards, the front of the armrests the is lowered (see Fig. 8).



# Armrest 2001/2004



Adjustment of angle in armrets

Adjustment of angle armrests (Fig.10): The Allen screw (A) is loosened. Now the armrests angle can be altered. When the desired angle is achieved, the Allen screw is tigthned again.

# Armrest cushions





able in length: 25, 30, 35 and 40 cm.

Standard cushions for

armrests are avalio-

Armrests for seat type

2001 and 2004 are. in the

standard edition "swing up

armrests" (see Fig. 5 page

5). However, there is no re-

lease lever to be operated.

The 2 Allen screws (A and

B) behind the plastic-cover,

can be loosened through

the slot (C) in the plastic-

to to alter the heigth of the

cover. It is now possible

armrest. Then tigten the

Adjustment of armrest

heigth (Fig. 11):

screws again.

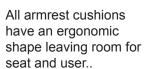
Standard armrest cushions are avaliable with elbow support.

The U-shaped (Hemiplegi) armrest cushion is avaliable in length: 35 and 40 cm.

### Backrest rearview:

Fig. 11





All armrest cushions are upholstered in leather, under the leather is soft foam.

# Headrest bracket #2



# <u>Headrest bracket #3</u>



# <u>Headrest bracket #5</u>



Headrest bracket #2 is adjustable in the following way:

<u>Right / Left</u>: The screws A & B (Fig. 1) is loosened, whereby the cushion is adjustable 3 cm to each side.

<u>Depth:</u> The adjustment screw C (Fig. 1) is loosened, whereby the cushion can be adjusted 4,5 cm forward.

<u>Heigth:</u> By loosening the grip D (Fig. 1) the heigth of the headrest can be altered.

Headrest bracket #3 is adjustable in the following way:

<u>Right / Left</u>: The 2 screws A (Fig. 2) is loosened, whereby the cushion is adjustable 3 cm to each side.

<u>Depth:</u> The 8 screws B, C, E og F (Fig. 2) is loosened, whereby the cushion can be adjusted 8,5 cm forward.

<u>Angle:</u> The 8 screws B, C, E og F (Fig. 2) is loosened, whereby the angle of the cushion is adjustable.

<u>Heigth:</u> By loosening the grip D (Fig. 2) the heigth of the headrest can be altered.

Headrest bracket #5 is adjustable in the following way:

<u>Right / Left</u>: The 2 screws A (Fig. 3) is loosened, whereby the cushion is adjustable 3 cm to each side.

<u>Depth:</u> The screw B (Fig. 3) is loosened, whereby the cushion can be adjusted 8 cm forward. <u>Angle:</u> The screw C (Fig. 3) is loosened, whereby the angle and the direction of the cushion is adjustable.

<u>Heigth:</u> By loosening the grip D (Fig. 3) the heigth of the headrest can be altered.

# Headrest cushion # Standard



# Headrest cushion # 3



# Headrest cushion # 4



The standard cushion is mountable on every type of headrest bracket.

The cushion is fittet to the bracket with 4 schrews through the holes in the bracket.

Standard fabric = same colour as the seat. Genuine leather is optional.

Headrest cushion #3 is mountable on every type of headrest bracket.

The 2 sidesupports of the cushion are bendable.

The cushion is fittet to the bracket with 4 schrews through the holes in the bracket.

Standard fabric = Genuine leather

Headrest cushion #4 is mountable on every type of headrest bracket.

The cushion has a hollow shape and a ledge to give support to the neck.

The cushion is fittet to the bracket with 4 schrews through the holes in the bracket.

Standard fabric = same colour as the seat. Genuine leather is optional.

# Thigh Support





Table



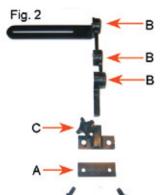
When the handle (Fig. 5 B) is loosened, the table is removeable.

The threaded brick (Fig. 2 A) is fittet to the C-profile of the seatframe. (See Fig. 1). When the 6 bolts (Fig. 2 B) are loosened, the bracket can be adjusted in heigth, depth and angle. When the handle (Fig. 2 C) is loosened, the bracket is removeable.

The cushion for the thigh support is upholstered with genuine leather. The cushion is fitted to the bracket with 2 schrews (Fig. 3 A). The horrisontal possition of the cushion can be altered when the 2 screws (Fig. 3 A) are loosened.

The cushion is avaliable in 2 sizes: Big: H=8cm W=24cm Small: H=7cm W=20cm

The threaded brick (Fig. 5) is fitted into the C-profile. When the handle (Fig.5 C) is loosened, the table kan be placed in a vertical possition. When the schrews (Fig. 5 D) C-profile are loosened, the heigth of the table is adjustable. When the schrews (Fig. 5 E) are loosened, the angle of the table is adjustable. When the schrews (Fig. 4 B) are loosened, the forward / backward possition of the table is adjustable.



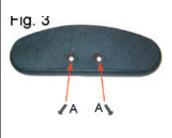


Fig. 4

When the schrews (Fig. 4 A) are loosened, the right / left possition of the table is adjustable.

Power-legrest with embedded length adjustment Fittina:



The 2 horrizontal tubes (Fig. 2 A) are fitted into the C-profile of the seat. the legrest is pushed towards the baseplate of the seat (Fig. 1). The 2 threadded bricks (Fig. 2 B) is fitted with the 4 bolts (Fig. 2 C).

Fig.

Connecting: The learest is connected to the output of the wheelchair.

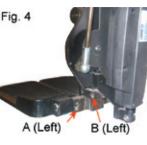
### How it works:

When the legrest is elevated, the length is extended and the calfsupports mooves forward, to ensure that the comfort isn't decreased.



# Adjustment possibilities:

Footplates: The footplates are individually collapsible (Fig. 3). The angle of the footplates is individually adjustable. See (Fig. 4 A - left and right) The heigth of the footplates is individually adjustable. See (Fig. 4 B - left and right)



# Calf support:

The depth of the calf support is adjustable, when the 2 bolts (Fig. 5 A) are loosened. the heigth of the calf support is adjustable, when the 2 bolts (Fig. 1 A) is loosened.



# Operation:

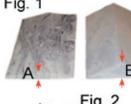
The legrest is operated by use of the joystick.

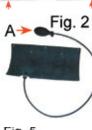


# Power-legrest with manual length adjustment



<u>Lændestøtte</u> Fig. 1







Access back rest #2, 4, 6 and power belt: Where the backrest has a detatchable cushion, The cushion is removed, and the zipper is opened (Fig. 5 A) after which the lumbar support can be added, reduced or moved. Fitting: See fitting page 8.

<u>Connecting:</u> See connecting page 8.

Adjustment possibilities:the angle of the legrest.See adjustment possibilitiesOperation of this facility is<br/>done, either by use of the

<u>Operation:</u> See operation page 8.

It is possible to change or move the lumbar support in every type of seat from AJ Stole A/S.

The lumbar support is either a foam-wedge (Fig. 1) or an inflateable cushion (Fig. 2). The foam-wedges are avaliable in 2 sizes (Heigth (A) = 2,5 or (B) = 5 cm). By use of the hand pump (Fig. 2 A), the thickness of lumbar support is adjustable.

Access back rest #1, 3 og 5: The rear plastic cover and the top bracket of the actuator is detatched. This is possible when the 8 bolts (Fig. 3 A og B) are removed.

When the foam block (Fig. 4 A) is loose in either right or legt hand side, it is possible to add, reduce or move the lumbar support.

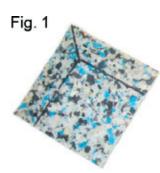


When the legrest is elevated, the distance from the seat to the foot plates alteres. This distance is adjustable independant of the angle of the legrest. Operation of this facility is done, either by use of the joystick or another controlbox.





# Correction of imballance in the pelvic



Correction of imballance in the pelvic, can be corrected by use of granular wedges (See Fig. 1). The gralular wedge is possitioned within the cover of the seatcushion (See Fig. 2). It is important that the wedge is oriented correctly.

 $\underline{Correct}$  = The camfered edges should be towards the center of the seatcushion AND the largest area against the seatcushion.

Size and heigth of granular wedges can be combined.



# <u>Bag for armrest</u>



The bag is made of genuine leather. The bag may be mounted under the armrest (See Fig. 3).

Article describtion

Wedge small, Heigth=1cm

Wedge small, Heigth=2cm

Wedge medium, Heigth=1cm

Wedge medium, Heigth=2cm

Wedge large, Heigth=2cm

Wedge large, Heigth=3cm

The bag has 2 rooms. The rear compartment without a zipper, the front compartment with a zipper. Access to the rear compartment is closed by the front compartment.



15 x 15 cm

15 x 15 cm

20 x 20 cm

20 x 20 cm

27 x 27 cm

27 x 27 cm

### Incontinence cover



Incontinence cover for the seat cushion is shaped like a "shower cap". It is easy to mount on the existing seat cushion. Incontinence cover is avaliable for the back rest.



### <u>Aerosleep</u>



Aerosleep is a cover which allows air to circulate between the body and the cushion. Aerosleep is a woven net with a carrying capacity of 3000 kg pr. 1m<sup>2</sup>. The user is lifted 6mm above the seat cushion, thereby reducing the risk of allergy and pressure wounds. Aerosleep is avaliable for seatcushion and backrest.

Aerosleep can be combined with incontinence cover. An incontinent user doesn't have to be wet, due to a wet incontinence cover.





Power back rest is available in 2 editions. Edition #1 (Fig. 1) is exclusively designed for baseframe of tubes (Base-frame of tubes: see Fig. 2)

Edition #2 (Fig. 1 page 11) is usable on both base-frame of tubes and base-frame of plate (Base-frame of plate: see Fig. 2 page 11).

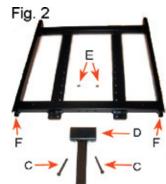


Fig. 3

### Fitting power backrest on base-frame of tubes:

The 2 bolts (Fig. 1 and 2, C) are removed, The fork (Fig. 1 and 2, D) is mounted on top of the rear tube on the base-frame, after which the bolts (Fig. 1 and 2, C) is mounted through the 2 holes, and the 2 safety-nuts (Fig. 2 E) are tigthned.

### Fitting power backrest to the backrest:

Power backrest for base-frame of tubes, has an adjustable top bracket (Fig. 1 B). The top bracket is fastened to the backrest with 4 pieces M6x30 bolts (See Fig. 3)

The slider in the top bracket (Fig. 1 B) is inserted to the top bracket from the bottom of the C-profile and the bolt (Fig. 1 E) is tigthned. The vertical possition of the slider, is determinative for the starting point of the backrests migration. The slider on the lower bracket (Fig. 1 G) is mounted on the lower bracket (Fig. 1 H) and the bolt (Fig. 1 F) is tightened. The location of the lower-slider (Fig. 1 G) is, in combination with the location of the top-slider, determinating how far back the backrest can recline.

OBS: it is important - after possitioning the lower bracket - to make sure that the actuator doesn't make a collision with the base of the lower bracket, or the plastic cover on the backrest.



# Power-back rest

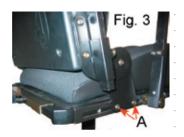


Power back rest is available in 2 editions. Edition #2 (Fig. 1) can be used for both base-frame of tubes and base-frame of plate (Base-frame of tube: see page 10 Fig. 2). (Base-frame of plate: See Fig. 2)



# Fitting power backrest on base-frame of plate:

The 2 tubes (Fig. 1 A) is inserted into the C-profiles of the base-frame (Fig. 2 A or Fig. 2 F page 10). The backrest is fitted to the C-profile with 2 bolts that are mounted through the 2 holes in the hinge and into the treads in the tubes (See Fig. 3 A).





### Fitting on backrest:

Power backrest has an adjustable top-bracket (Fig. 1 B page 10). the top-bracket is fitted to the backrest with 4 bolts (M6x30) (See Fig. 4)

The slider in the top bracket (Fig. 1 B page 10) is inserted to the top bracket from the bottom of the C-profile and the bolt (Fig. 1 E) is tigthned. The vertical possition of the slider, is determinative for the starting point of the backrests migration.

# Maintenance

# Seatcushion:

To get the longest lifetime from the cushion, it is important the the foam is ventilated during unused time.

The zipper (located under the cushion) is opened and the cushion is placed vertically

This is how you get the best flexibility, retains the comfort and longest lifetime from the foam.

Ventilation of the seat cushion could be done at night time.

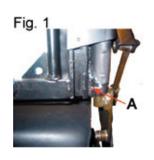
Alternatively, it is recommended that the user has 2 seat cushions. Neither the cover for the cushion or the foam filling in the cushion, is washable.

The cover can be dry cleaned.

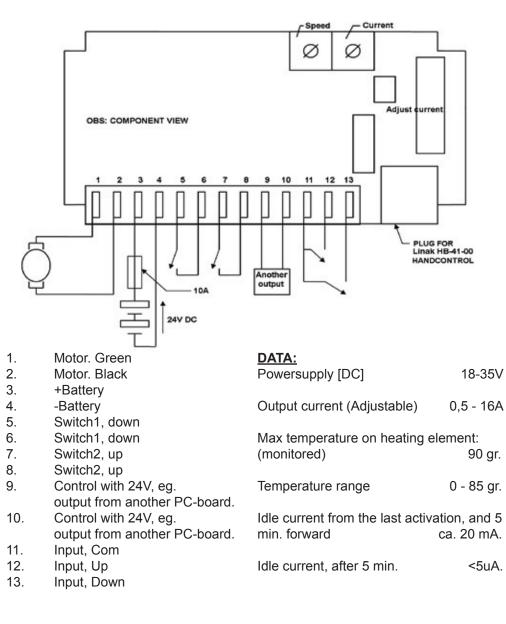
# Mechanical parts:

The moving parts in the seat has to have an inspection annually. Moving parts are to be lubricated and inspected for wear. All visible bolts has to be retightned.





ESPECIALLY FOR MODEL <u>2001 AND</u> <u>2004:</u> The plastic-cover at the back rest is removed, and it becomes possible to retighten the 2 screws - 1 RIGHT + 1 LEFT. They determines the dorsal mounting (See Fig.1).



# OBS !! Batteries must be mounted LAST !

EC – Declaration of Conformity



Manufacturer: AJ Stole A/S Skavholmvej 8 DK-8520 Lystrup 
 Tlf:
 +45 86770303

 Fax:
 +45 86770097

 E-mail:
 ajstole@ajstole.dk

It hereby declared that our OPTIMIST seat system meets the requirements of:

Directive 93/42/EEC of 14. june 1993 concerning medical devices, and national changes in direktive no. 98/79/EF of 27. October 1998, The products also fulfill the relevant national legislation, implementing directive 93/42/EØF.

The products are non-invasive, and kan not be connected to active medical devise in class II or higher.

The products are not intended for storage or channeling blood or other body fluids or storage of organs or tissue..

The products are not ment for changing the biological or chemical composition of blood, other body fluids or other fluids that are ment for infusion of the body. The products are not ment for wounds that passes through dermision and heals by secondary revision.

The products are not ment to regulate the micro-environment of wounds. **CONCLUTION: All products are classified as class 1.** 

### Products:

Optimist Classic CHAIR, all models and widths Optimist 2001 CHAIR, all models and widths Optimist 2004 CHAIR, all models and widths

### Accessories:

Seatcushion in shape: plus, minus and paraplegia Armrest (mechanical parts) Armrest cushions in shape: standard, standard w. elbowsupport and U-shaped Headrest (mechanical parts) in model 2, 3 and 5 Headrest cushion in shape: standard, standard with ledge and standard with sidesupport. Adjustable sidesupports. Thigh support, bracket and cushions Legrests, powered and manual Displacement of controlbox, manual and powered Lower clamp (powered) for f. CLASSIC armrests Aero sleep cover for cushions

# EC – Declaration of Conformity --- Continued

This declaration is given as an EEC-declaration of conformity to Annex VII.

Please also refer to the technical documentation.

Date: 20/12 2010

Man. Dir. Bent Nielsen

<u>Fabric</u>

Fire test GRIB 5 og ISO 7176-16 60 % Wool 20 % Elastic 14 % Viskose 6 % Nylon

<u>Artificial leather</u>

BS 5852 Part 1:1979 (NT fire 014) FMVSS 302 (ISO 3795) Burn rate =<100 mm/min

Fire test ISO 7176-16

25 % compressed

40 %

65 %

Backpressure from foam:

<u>Panterá-Foam</u>

Ver. 1/2010 Page: 13

190N

263N

526N