

# panthera®

## Manual



S2



S2 Swing



U2



U2 Light

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## **INTRODUCTION**

We congratulate you on your choice of a Panthera wheelchair. We hope that you will be satisfied with this product and have many pleasant years together.

All wheelchairs from Panthera AB are designed and assembled in Spånga outside Stockholm. They are designed to be market leading regarding quality, low weight and easy to drive.

### **Intended use:**

The Panthera wheelchair is designed for those who need an everyday chair that is easy to drive and provides a comfortable and ergonomic sitting posture. The chair is designed to allow you to lift it easily in and out of your car. The chassis has narrow outer dimensions in the most lightweight design currently available. We have also designed the framework tubing of the chassis to provide you with a balanced and ergonomically correct grip when lifting the chair in and out of the car. To be able to make best use of your Panthera you, or an authorized professional, should adapt it to ensure that you sit correctly, have optimum mobility and balance the chair according to your capacity.

**Therefor we want you to read through this manual carefully.**

## **CONTACT**

If you have questions or need help with your product you should primarily contact your local dealer. To get in touch with the manufacturer, see info below:

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# DESCRIPTION

## Panthera S2

Panthera S2 is our new standard model. Panthera S2 replaces the previous model Panthera Standard. S2 has a full frame width at the front and is 5 cm shorter than Panthera Standard. The front wheels are placed further out, which provides plenty of room for the feet and prevents the castor wheels from catching on your heels. We have also remoulded the tubing of the chassis to allow for free space behind the legs, an improvement especially designed for users with a kick technique. The new moulding also makes it easier to assemble alternative foot rests as required.

S2 is also available as **S2 short**, **S2 short-low** and **S2 Large**.

## Panthera S2 Swing

Panthera S2 Swing is intended for those who need an easy to drive wheelchair with good seating, driving and lifting properties combined with movable leg supports. This wheelchair has all the positive attributes of an active wheelchair with a stable construction in lightweight class, along with discreetly and compactly designed movable leg supports. Panthera S2 Swing has a seat angle of 4 degrees which also allows new options for finding a good seating position also for those who kick drive or need a flatter sitting position for other reasons

S2 Swing is also available as **S2 Swing-short**.

## Panthera U2

Panthera U2 is a modern active chair. The slimline front and ergonomic design makes it wonderfully smooth to drive and many people discover a better sitting position. This is the most easy wheelchair to manoeuvre on the market. To drive: With a chassis of chrome molybdenum and a footrest and pushrims of titanium, the chair is naturally very light and extremely easy to handle.

## Panthera U2 Light

The U2 light is a wheelchair designed for the experienced active-user who can handle a "tippy" wheelchair without anti-tips. (Anti-tips are not an option) . The construction is optimized for easy handling in and out of cars and extremely good driving characteristics. The very clean and minimalistic construction gives the experienced active-user a big opportunity for improvements in his or her daily life.

The U2 light exists in two different set-ups. "U2 light" with normal balance, and "U2 light L" with a more "tippy" balance. On the "U2 light L" the rear axle has been moved forward an additional 22 mm. It's possible to adjust the position of the backrest by +/- 10mm, forward or backward, to calibrate the balance.

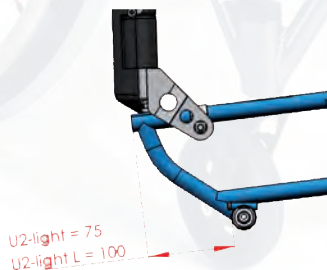


Fig. 1

## SAFETY

### Make sure you receive the chair you ordered:

- Check the width of the chair.
- Check the height of the backrest.
- Check that you have received the accessories you ordered.

### Conduct a technical inspection of the chair. Check that:

- The rear wheel axles should move smoothly in and out of the casing.
- The button at the centre of the hub should spring out when the rear wheels have been inserted.
- All four wheels should touch the ground.
- The castor fork can be easily rotated.
- The backrest folds down easily.
- The footrests works properly (Swing)

### Balance and tipping capacity

The position of the rear wheels, the angle and the adjustment of the backrest upholstery are the most significant factors affecting the wheelchair's tendency to tip. After adapting your chair you should check that you feel safe with the balance of the chair. If you feel unsure, you should use anti-tips or move the rear wheels further back. The tipping capacity of the chair is also affected by: hanging a bag on the backrest, leaning / stretching backwards, worn tyres, poorly pumped tyres and unforeseen changes in the surface you are driving on.

### WARNING!

A Panthera wheelchair is designed to be as easy to drive as possible and because of this it reacts quickly to the actions you perform. If you perform the wrong actions, the chair can tip backwards if you do not have anti-tips. The chair can potentially tip up and it is not possible to issue a warning for all the circumstances in which that might occur. The most important safety measures you can take include ensuring that you have tested the chair thoroughly and spend time practicing your wheelchair technique. If you have any questions about wheelchair technique you should contact the person who prescribed the chair/your therapist. If they are unable to help you, please do not hesitate to contact us at Panthera AB.

### Brakes

If you use the single hand brake and are able to stand up, you should be careful not to open the brakes by mistake with the back of your leg. Remember that the brakes do not work as effectively on tyres with poor air pressure or on worn tyres. The brakes are designed as parking brakes and not for braking when in motion.

**Note! For the brakes to work properly the tyres need the correct air pressure. See technical facts.**

# SAFETY

## Leg support (Panthera Swing)

Make sure the leg supports lock securely into position at the front when you replace them, ensuring that they will not move when you need them in a fixed position

## Sitting posture

The wrong sitting posture can cause pressure sores. If you are unsure, you should contact your prescriber straight away. Check that the side guards do not exert too much pressure on your thighs since this can cause pressure sores. If the side guards exert too much pressure, the chair is either too narrow or the side guards need to be adjusted. The seat is designed to be used with a cushion.

## Driving

If the distance between the lowest point of the footrest and the surface is small (less than 40 mm) the footrest can get caught on bumps in the surface and cause you to fall forwards.

## Transfers / lifting chair and user (Fig. 2 and 3)

The chair is lightweight and for this reason it can move sideways when the brakes are on and you transfer from the side. If you are unsure, you should practice this activity with your prescriber. If the wheelchair is lifted with you sitting in it, the chair should always be lifted holding the frame and not the backrest, the push handles, the wheels or any other parts. See **Fig 2**; S2, U2, U2 light, **Fig 3**; S2 swing



Fig. 2



Fig. 3

## OVERVIEW - S2 (short, short-low, large) (Fig. 4)

1. Backrest
2. Air valve
3. Rear wheel
4. Seat - cushion
5. Castor fork
6. Tyre
7. Footrest
8. Castor wheel
9. Chassis
10. Rear axle
11. Quickrelease hub
12. Backrest release
13. Push rim
14. Brake



Fig. 4

## OVERVIEW - S2 Swing (Swing short) (Fig. 5)

1. Backrest
2. Air valve
3. Rear wheel
4. Seat - cushion
5. Castor fork
6. Tyre
7. Footrest
8. Castor wheel
9. Chassis
10. Rear axle
11. Quickrelease hub
12. Backrest release
13. Push rim
14. Brake
15. Foot plates
16. Footrest release



Fig. 5

## OVERVIEW - U2 (Fig. 6)

1. Backrest
2. Air valve
3. Rear wheel
4. Seat - cushion
5. Castor fork
6. Tyre
7. Footrest
8. Castor wheel
9. Chassis
10. Rear axle
11. Quickrelease hub
12. Backrest release
13. Push rim



Fig. 6

## OVERVIEW - U2 Light (Fig. 7)

1. Backrest
2. Air valve
3. Rear wheel
4. Seat - cushion
5. Castor fork
6. Tyre
7. Footrest
8. Castor wheel
9. Chassis
10. Rear axle
11. Quickrelease hub
12. Brake
13. Push rim



Fig. 7

## ADJUSTMENTS

When adapting the chair to suit your sitting position and provide the mobility you require, it is important that you make the following adjustments in the correct order. First, adjust the sitting position and after that, adjust the balance of the chair according to your mobility requirements. The sequence is important since changing your sitting position also changes the balance of the chair. You should make the following adjustments in this order:

- 1) The tension of the seat upholstery
- 2) The height of the footrest
- 3) The tension of the calf band
- 4) The angle of the backrest
- 5) The tension of the backrest upholstery
- 6) The balance of the wheelchair

### 1) Tension of the seat upholstery (Fig. 8)

The rear section of the seat upholstery can be tightened or loosened by adjusting the Velcro band underneath the seat as shown in fig. 8. This allows you to vary your sitting height by about 2 cm up or down.

### 2) Height of the footrest (Fig. 9 and 10)

The footrest can be adjusted up or down. Remove the two screws supporting the footrest on the front of the frame as shown in fig. 9 and 10, unscrew using a 3 mm socket head key. Push the end plug down by placing key 19 around the tubing above and tapping down with a hammer. You will then be able to move the footrest up or down to fit into one of the five alternative height positions. You should adjust the footrest at a height where your thighs are supported by the seat at the same time as your feet are supported by the footrest.

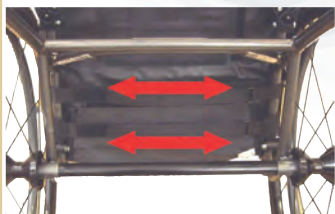


Fig. 8



Fig. 9



Fig. 10



## ADJUSTMENTS

### 3) Tension of the calf / heel band (Fig. 11 and 12)

The tension of the calf / heel band can be adjusted and will affect how far forward you place your feet on the footrest. The appropriate tension depends largely on how long or short your legs are.

### 4) Angle of the backrest (except U2 light) (Fig. 13).

The angle of the backrest can be adjusted by first twisting the backrest lock eccentric out of the way so that the lock does not get in your way, and then adjusting the screws to adjust the angle.

- 1) Dismantle the back locking function by pulling the wire (1) and folding the backrest forward.
- 2) Loosen the lock screws (2) and unscrew them a few rotations using socket head key no. 5.
- 3) Twist the backrest lock eccentrics (3) downwards so that the lock faucet does not fix the backrest in place. Use cap key no. 19. Do this on both sides.
- 4) Adjust the angle of the backrest by first loosening the lock nuts (4) using cap key no. 13, and then screw the adjustment screws in or out (5) using the 5 mm socket head key. If you unscrew the adjustment screws the backrest will tilt forward. If you tighten the adjustment screws the backrest will tilt backwards. It is important to adjust both sides equally to avoid the backrest tubing becoming crooked. Test this by putting the backrest in the upright position and checking that both adjustment screws are touching the frame. Try out suitable backrest angles and tighten the lock nuts once you are satisfied.
- 5) To reengage the back locking function, pull the backrest into the upright position and twist the backrest lock eccentrics so that the lock faucets spring out into their tracks. Then tighten the lock screws. Do this on both sides.



Fig. 11



Fig. 12

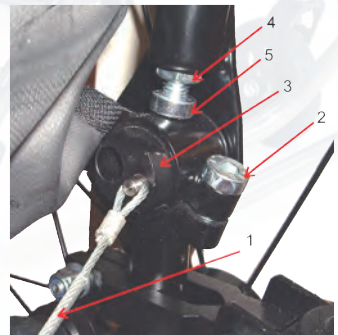


Fig. 13

## ADJUSTMENTS

### 4) Angle of the backrest, (only U2 light) (Fig. 14).

1) Adjust the angle of the backrest by first loosening the lock nuts (4), using cap key no. 13,

2) Screw the adjustment screws in or out (5) using the 5mm socket head key. If you unscrew the adjustment screws the backrest will tilt forward. If you tighten the adjustment screws the backrest will tilt backwards. It is important to adjust both sides equally to avoid the backrest tubing becoming crooked. Test this by putting the backrest in upright position and checking that both adjustment screws are touching the frame.

3) Try out suitable backrest angle and tighten the lock nuts (4) once you are satisfied..

### 5) Tension of the back upholstery. (Fig. 15)

The back upholstery can be tightened or loosened by adjusting the Velcro band at the back.

Lift the flap (1). By adjusting these you can form the lower part of the back upholstery to suit the shape of your back and obtain good support for your lower back. The back upholstery also has a flap fastened with Velcro under the seat upholstery (2). This can be moved backwards or forwards to obtain the required tension in the lower section of the back upholstery (known as the seat bucket). Start by loosening the band and sit as far back in the chair as you can. Then tighten the band to give you good support. If it feels as though you are not sitting far back enough in the chair it may be because the back upholstery flap is fastened too far forward under the seat. Undo or loosen this flap and move it back.

### 6) Balancing the wheelchair (Fig. 16) (except U2 light)

The balance of the wheelchair can be adjusted by moving the rear axle backwards or forwards depending on how much 'rear balance' you require. The chair will be lighter at the front with more weight over the rear wheels. This makes the chair easier to manoeuvre and it will also be easier to tip up onto the rear wheels, for instance, when negotiating curbs, thresholds and so on. The chair should not be balanced too far to the rear because this will increase the risk of tipping backwards. It is important that you take time trying out a balance that suits your body and driving techniques so that you adapt the chair to be as easy to drive as possible, without increasing the risk of tipping backwards too much. You should always have someone standing behind you when you try out the chair after adjusting the balance. If you still feel unsure about the balance of your chair having tested it thoroughly you should use anti-tips (accessory). The anti-tips eliminate the danger of tipping backwards and they are easily removed when you no longer need them.

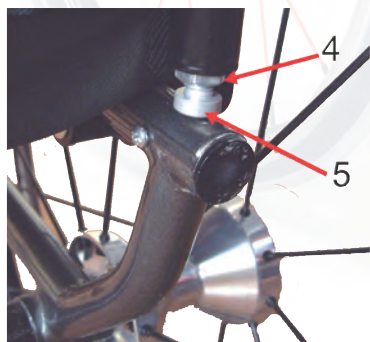


Fig. 14



Fig. 15

# ADJUSTMENTS

## How to move the rear axle: (Fig. 16)

- 1) Remove the rear wheels
- 2) Loosen the nut casings (1) with the 22 mm cap key.
- 3) You will now be able to push the wheel attachment forward or back along the horizontal frame tubing. It is important that you have the wheel attachment in the same forward position on both sides of the chair. You can check this by measuring the distance between the forward section of the vertical tubing and the rear section of the wheel attachment as shown in fig. 16 using a tape measure or ruler, and check that the distance is the same on both sides.
- 4) Tighten the screws (1) on both sides.

## 6) Balancing the wheelchair (Fig. 17) (only U2 light)

The U2 Light has a fixed rear axle so balancing is achieved by moving the body position in relation to the rear axle. This can be done by moving the backrest, which can be fixed in 3 different positions. The further back you place the backrest, the more 'rear balanced' the chair will be. This means that the chair is light at the front and you have more weight over the rear wheels. The chair is easier to drive and it is also easier to tip up onto the rear wheels to negotiate kerbs and steps. The chair should not be balanced too far back, however, because of the danger of tipping backwards..

### How to change the balance of the wheelchair:

- 1) Remove the rearwheels.
- 2) Loosen the stop screw (1) using a cape chisel, on both sides of the chair.
- 3) Loosen the bolt through the clamp and the back attachment (2).
- 4) Knock the clamp backwards or forwards (backwards if you want a more lightly balanced chair, forwards if you prefer a more heavily balanced chair).
- 5) Replace the stop screws in one of the three alternative holes in the back frame.(3)
- 6) Knock the clamp so that the back of the clamp touches the stop screw.
- 7) Tighten the bolt (2) through the clamp



Fig. 16

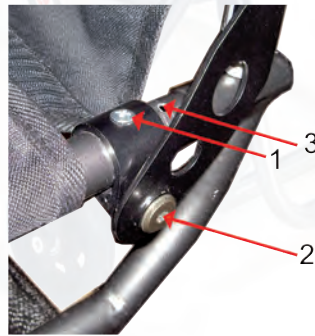


Fig. 17

# ADJUSTMENTS

## 7) Brakes

### Single hand brake (accessory) (Fig. 18)

This brake is mounted under the seat frame. The brake should be adjusted to go 4 mm into the tyre when in locked position. This is done by loosening the attachment of the brake with cap key no 10 and allen key 4 mm, and then moving the brake along the seat frame. Adjust to the desired position and then tighten the attachment. It is important that it is adjusted equally on both sides of the frame.

NB! When the air pressure is low, the tyre is worn or changing to another type of tyre the function of the brake will change. Check the function of the brake regularly .

### High brake (Fig. 19)

The brake should be adjusted to go 3-4 mm into the tyre when in locked position. If a slight adjustment is required this can be done by rotating the locking arm adjustment, so that the brake goes further in/out on the tyre depending on the direction in which you rotate. If a major adjustment is needed, loosen the bolt on the inside of the brake using the 5mm socket key. The brake can then be pushed forward or backwards into the desired position and the clamp is then tightened again.

NB! The bolt on the inside of the clamp (under the seat) should be opened to move the clamp, not the bolt on the outside of the clamp.



Fig. 18



Fig. 19

## ACCESSORIES

### Anti-tip (Fig. 20)

The anti-tip device is a very important accessory that has to be adjusted correctly to prevent the chair from tipping backwards.

When the anti-tip devices are folded out you adjust (5) the ground clearance (6) by setting the wheel tube in one of the four positions. (4). The anti-tip can be swung away by pushing down (1) the anti-tip and turning (2) it in under the seat. When folding out the anti-tip make sure it locks in the slots (3). To practice balancing on the rear wheels you should set the anti-tip device so it is possible to balance the chair.

### Side guards (Fig. 21)

Side guards are a common accessory available in number of variations. The image shows a side guard with armrest. The side guard prevents clothing or similar from becoming stuck in the spokes and also stops dirt from the wheels getting onto the clothes.

To remove the side guard, e.g. during transport, just pull it straight up so so it detaches from the bracket.

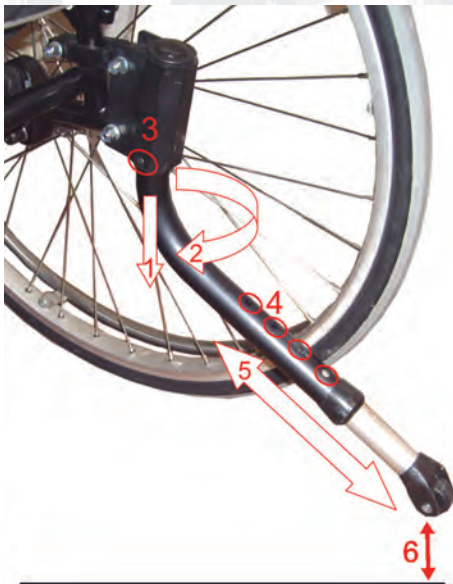


Fig. 20



Fig. 21

# TRANSPORT

We would like to make it quite clear that the best alternative for transportation in a vehicle is to transfer from the wheelchair into a regular passenger seat with a seatbelt. If this is not possible, you may have to remain seated in your **crashtested wheelchair, S2, U2 and S2 Swing**, which will be attached with the approved attachment facilities and a seatbelt, although Panthera AB does not recommend this. See pages 15-16 for more information about how to attach the wheelchair in a transport vehicle when remaining seated in the wheelchair.

## Assembly / dismantling (Fig. 24, 25 and 26)

When transporting the chair you can remove the rear wheels and fold down the backrest.

- 1) Remove any side guards by pulling them straight up.
- 2) Remove any cushions and fold the backrest forward by pulling wire (1) see **Fig. 26**.
- 3) U2-light has no backrest lock, just remove any cushions and fold the backrest forward.
- 4) S2 Swing has removable footrest, push the button and swing the footrest sideways and then lift straight up. **Fig 25**
- 4) Disengage the rear wheels by pushing the button in the centre of the hub, see **Fig.24**. Then pull the wheel straight out.

To insert the wheels, press in the button and push the axle into the hole in the casing. Then push the wheel all the way in, release the button and pull out to check that the wheel is securely in place and the button springs back out.

## Transfers / lifting (Fig. 22 and 23)

If the wheelchair is lifted with you sitting in it, the chair should always be lifted holding the frame and not the backrest, the push handles, the wheels or any other parts. See **Fig 22; S2, U2, U2 light, Fig 23; S2 swing**.



Fig. 22



Fig. 23



Fig. 24



Fig. 25

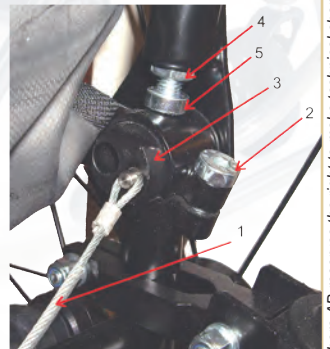


Fig. 26

# TRANSPORT

## Attaching the wheelchair in the vehicle (Fig. 27 and 28)

When the user remains seated in the chair during transportation, the wheelchair should always face the direction in which the vehicle is driving. The wheelchair should always be attached in the vehicle using a 4-point belt. The front of the wheelchair is attached with the belts around the frame at the bearing casings for the castor wheels See Fig. 27 . The rear of the wheelchair is attached with the belt around the rear axle.

**Note!** Do not use snap hooks on the rear axle! See Fig. 28

Pull the wheelchair backwards and pull the belts tight so that the wheelchair is fastened securely and cannot roll forwards or backwards. When the chair has been securely fastened, apply the wheelchair brakes if the chair is equipped with them. We also recommend that the anti-tips should be folded out if the chair is equipped with anti-tips. Ensure that all the belts are securely attached and fastened to the profile rail on the floor of the vehicle and that all the belts are pulled tight.



Fig. 27



Fig. 28

## Securing the user in a vehicle (Fig. 29 and 30)

If the user remains in the wheelchair during transport, we recommend that the backrest should be level with the users shoulders. The user should be secured in the vehicle with a 3-point safety belt. This is to minimize injuries to the head and / or the chest in the event of a collision or when braking.

**The vehicle's safety belt should be in contact with the body and must not be held away from the body by any part of the wheelchair.** See fig. 29 and 30. Loose accessories on the chair should be removed to reduce the risk of injury to the user or other passengers.

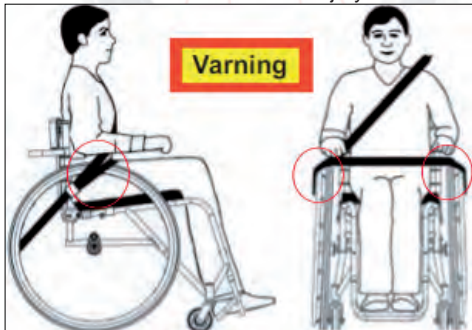


Fig. 29



Fig. 30

# CRASH TEST

## Wheelchairs that are crash tested and approved

**Panthera wheelchairs S2, U2 and S2 Swing have been approved** for use in vehicles employed by the Swedish disabled transportation service in accordance with the following. Below we present details of how to attach the chair in an approved way and list the materials used in the tests. The following wheelchair models and materials were used and approved in the tests mentioned above. This report is based on the results of crash tests conducted on Panthera wheelchairs in accordance with ISO-7178-19:2001 and ISO-10542:2000. Crash testing has been performed by: The Technical Research Institute of Sweden (SP). Test dates: 20-02-2003 and 12-11-2008

### **Panthera S2:**

Attachment equipment: Unwin Belt 4-point with snap hook  
User seatbelt: Unwin 3-point seatbelt, high deflector  
Fastening: Unwin low profile rail  
Test dummy: Hybrid III dummy (weight 76.3 kg)

### **Panthera U2:**

Attachment equipment: Unwin Belt 4-point with snap hook  
User seatbelt: Unwin 3-point seatbelt, high deflector  
Fastening: Unwin low profile rail  
Test dummy: Hybrid III dummy (weight 76.3 kg)

### **Panthera S2 Swing:**

Attachment equipment: Unwin Belt 4-point with snap hook  
User seatbelt: Unwin 3-point seatbelt, high deflector  
Fastening: Unwin low profile rail  
Test dummy: Hybrid III dummy (weight 75 kg)

This crash test was conducted in cooperation with Unwin, which produces attachment equipment for wheelchairs. For further information about the belts please contact Unwin.

## Wheelchair configuration during crash test

The wheelchairs crash tested from Panthera were the following models and dimensions:

### **Panthera S2:**

Chassis S2 complete, width 45, Back complete, width 45, height 40, Footrest, width 45, Rearwheel std 24" with titanium pushrim, High brake, Anti-tip, Sideguards, Cushion, width 45, 2.5 cm

### **Panthera U2:**

Chassis U2 complete, width 45, Back complete, width 45, height 40, Footrest, width 45, Rearwheel std 24" with titanium pushrim, High brake, move forward, Anti-tip, Sideguards, Cushion, width 45, 2.5 cm

### **Panthera S2 Swing:**

Chassis S2 swing complete, width 42, Back complete, width 42, height 40, Footrest, Rearwheel std 24" with titanium pushrim, High brake, Anti-tip, Sideguards with armrest, Cushion, width 42, 2.5 cm.

Departures from these results may occur if the chair is of a different model and dimensions. The height of the back of the chair affects the results significantly.



# MAINTENANCE

Your Panthera is constructed to be virtually maintenance free. A few parts do require regular checking however. (Naturally you should clean and check the chair more often if you use it in more extreme environments such as in sand or salt water.)

## Once a month you should:

- Wipe the chair chassis over with car shampoo or washing-up liquid and a damp cloth. If very dirty you can use a degreasing agent. Lubricate all moveable parts with a universal lubricant (5-56, WD-40) after cleaning.
- Clean the castor fork casing (between the wheel and the fork). Hair and dust collect here which can damage the bearing. Loosen the nut using key no. 10 while holding the bolt with key no. 10. Remove the bolt and then the wheel. Clean the washers between the wheel and the fork and wipe the outside of the wheel bearing with a cloth. Drop some oil into each bearing. Reassemble the parts.
- Lubricate the rear wheel axles. Remove the wheel and distribute some drops of oil over the axle. You should do this more often if you drive in rain, sand, salt and slush or if you rarely remove the wheels.
- Pump up the tyres. The tyres can be pumped by screwing the top off the valve and filling with air using an appropriate valve adapter. The tyre can take 8 kg of pressure.
- Check that all the screws and nuts are securely fastened.
- Check that the chair has not been damaged. If damage has occurred, contact us immediately at Panthera AB.

## Twice a year you should:

- Lubricate the ball bearings for the brakes with some drops of oil..
- Lubricate the bearings in the joints of the backrest. Remove the nut using cap key no. 10 and hold the bolt still with key no. 10. Lubricate the bearings with some drops of oil.
- Wash the seat upholstery, the back upholstery and the cushion cover in 40 degrees machine wash when necessary.

# GUARANTEE and LIFETIME

## Lifetime:

The life of a Panthera depends on how much wear and tear it is exposed to and how thorough you are with maintenance.

## Guarantee:

We offer a five year factory guarantee on the chassis. For other parts there is a guarantee of 12 months. Excluding wear parts.

- Applies to faults in the product resulting from defects in design, material or manufacturing.
- Does not apply to faults resulting from normal wear, inadequate maintenance, human error, improper storage or incorrect assembly on the part of the purchaser, modifications and the use of products from other manufacturers without Panthera AB's written consent, or faults resulting from repairs performed by the purchaser.

## TECHNICAL FACTS

### S2

Seat width (cm)	33	36	39	42	45	50
Total dimensions						
Total width	54	57	60	63	66	71
Total length	78-90	78-90	78-90	78-90	78-90	78-90
Total height	64-84	64-84	64-84	64-84	64-84	64-84
Seat						
Seat angle	7°	7°	7°	7°	7°	7°
Seat height rear	43	43	43	43	43	43
Seat height front	47	47	47	47	47	47
Seat depth	40	40	40	40	40	40
Back						
Backrest angle	7.3°-11.5°	7.3°-11.5°	7.3°-11.5°	7.3°-11.5°	7.3°-11.5°	7.3°-11.5°
Transport dimensions						
Width	46	49	52	55	59	64,6
Length	75	75	75	75	75	75
Height	38	38	38	38	38	38
Weight						
Total (g) *	8300	8360	8420	8480	8716	8776
Transport	4744	4804	4864	4924	5160	5220
User weight (kg)	100	100	100	100	150	150
Air pressure in tyre (bar)	8	8	8	8	8	8

\*Weights are measured with brake attached.

### S2 short

Seat width (cm)	30	33	36	39	42	45
Total dimensions						
Total width	51	54	57	60	63	66
Total length	73-85	73-85	73-85	73-85	73-85	73-85
Total height	64-84	64-84	64-84	64-84	64-84	64-84
Seat						
Seat angle	7°	7°	7°	7°	7°	7°
Seat height rear	43	43	43	43	43	43
Seat height front	47	47	47	47	47	47
Seat depth	27-33	27-33	35	35	35	35
Back						
Backrest angle	7.3°-11.5°	7.3°-11.5°	7.3°-11.5°	7.3°-11.5°	7.3°-11.5°	7.3°-11.5°
Transport dimensions						
Width	43	46	49	52	55	59,6
Length	71	71	71	71	71	71
Height	38	38	38	38	38	38
Weight						
Total (g) *	8160	8220	8280	8340	8400	8636
Transport	4720	4780	4840	4900	4960	5196
User weight (kg)	100	100	100	100	100	150
Air pressure in tyre (bar)	8	8	8	8	8	8

\*Weights are measured with brake attached.

## TECHNICAL FACTS

### S2 short-low

Seat width (cm)	33	36	39
Total dimensions			
Total width	54	57	60
Total length	73-85	73-85	73-85
Total height	61,5-81,5	61,5-81,5	61,5-81,5
Seat			
Seat angle	7°	7°	7°
Seat height rear	40,5	40,5	40,5
Seat height front	44,5	44,5	44,5
Seat depth	27-33	35	35
Back			
Backrest angle	7.3°-11.5°	7.3°-11.5°	7.3°-11.5°
Transport dimensions			
Width	46	49	52
Length	71	71	71
Height	38	38	38
Weight			
Total (g) *	8184	8244	8304
Transport	4584	4644	4704
User weight (kg)	100	100	100
Air pressure in tyre (bar)	8	8	8

\*Weights are measured with brake attached

### S2 large

Seat width (cm)	39	42	45	50
Total dimensions				
Total width	60	63	66	71
Total length	83-95	83-95	83-95	83-95
Total height	66,5-86,5	66,5-86,5	66,5-86,5	66,5-86,5
Seat				
Seat angle	7°	7°	7°	7°
Seat height rear	45,5	45,5	45,5	45,5
Seat height front	49,5	49,5	49,5	49,5
Seat depth	45	45	45	45
Back				
Backrest angle	7.3°-11.5°	7.3°-11.5°	7.3°-11.5°	7.3°-11.5°
Transport dimensions				
Width	52	55	58	63
Length	80	80	80	80
Height	40,5	40,5	40,5	40,5
Weight				
Total (g) *	8384	8444	8504	8564
Transport	4884	4944	5004	5064
User weight (kg)	150	150	150	150
Air pressure in tyre (bar)	8	8	8	8

\*Weights are measured with brake attached.

## TECHNICAL FACTS

### S2 swing

Seat width (cm)	36	39	42	45
Total dimensions				
Total width	57	60	63	66
Total length	78-90	78-90	78-90	78-90
Total height	64-84	64-84	64-84	64-84
Seat				
Seat angle	4°	4°	4°	4°
Seat height rear	43	43	43	43
Seat height front	45	45	45	45
Seat depth	40	40	40	40
Back				
Backrest angle	7°-8.5°	7°-8.5°	7°-8.5°	7°-8.5°
Transport dimensions				
Width	49	52	55	58
Length	64	64	64	64
Height	38	38	38	38
Weight				
Total (g) *	9660	9720	9780	10016
Transport	6104	6164	6224	6460
User weight (kg)	100	100	100	150
Air pressure in tyre (bar)	8	8	8	8

\*Weights are measured with brake attached.

### S2 swing-short

Seat width (cm)	33	36	39
Total dimensions			
Total width	54	57	60
Total length	73-85	73-85	73-85
Total height	64-84	64-84	64-84
Seat			
Seat angle	4°	4°	4°
Seat height rear	43	43	43
Seat height front	45	45	45
Seat depth	35	35	35
Back			
Backrest angle	7°-8.5°	7°-8.5°	7°-8.5°
Transport dimensions			
Width	46	49	52
Length	59	59	59
Height	38	38	38
Weight			
Total (g) *	9460	9520	9580
Transport	5904	5964	6024
User weight (kg)	100	100	100
Air pressure in tyre (bar)	8	8	8

\*Weights are measured with brake attached.

## TECHNICAL FACTS

<b>U2</b>					
Seat width (cm)	33	36	39	42	45
Total dimensions					
Total width	54	57	60	63	66
Total length	75-87	75-87	75-87	75-87	75-87
Total height	64-84	64-84	64-84	64-84	64-84
Seat					
Seat angle	7°	7°	7°	7°	7°
Seat height rear	43	43	43	43	43
Seat height front	47	47	47	47	47
Seat depth	35-46	35-46	35-46	35-46	35-46
Back					
Backrest angle	7.3°-11.5°	7.3°-11.5°	7.3°-11.5°	7.3°-11.5°	7.3°-11.5°
Transport dimensions					
Width	41	44	47	50	53
Length	72	72	72	72	72
Height	38	38	38	38	38
Weight					
Total (g) *	8270	8330	8390	8450	8686
Transport	4714	4774	4834	4894	5130
User weight (kg)	100	100	100	100	150
Air pressure in tyre (bar)	8	8	8	8	8

\*Weights are measured with brake attached.

<b>U2 light</b>					
Seat width (cm)	33	36	39	42	45
Total dimensions					
Total width	53	56	59	62	65
Total length	82	82	82	82	82
Total height	69-79	69-79	69-79	69-79	69-79
Seat					
Seat angle	7°	7°	7°	7°	7°
Seat height rear	43	43	43	43	43
Seat height front	47	47	47	47	47
Seat depth	35-46	35-46	35-46	35-46	35-46
Back					
Backrest angle	4.5°-11.5°	4.5°-11.5°	4.5°-11.5°	4.5°-11.5°	4.5°-11.5°
Transport dimensions					
Width	41	44	47	50	53
Length	72	72	72	72	72
Height	38	38	38	38	38
Weight					
Total (g) *	6906	6986	7066	7172	7278
Transport	3918	3898	4078	4184	4290
User weight (kg)	100	100	100	100	100
Air pressure in tyre (bar)	8	8	8	8	8

\*Weights are measured with brake attached.

# NOTES



Panthera AB reserves the right to make technical changes



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