PRO-ACTIVE™ 2
Seating System

PRO-ACTIVE 2 Seating System. The versatile dynamic seating system for the prevention and therapy of pressure sores.

The PRO-ACTIVE 2 Seating System is suitable for the seated patient in a wheelchair. Clinically proven benefits include prevention of pressure sores and therapy of existing tissue damage in the very highest risk patients.

The dynamic action of PRO-ACTIVE 2 Seating System is designed to regularly reduce pressure on the vulnerable pressure areas with the resulting flow of blood and lymph providing protection against the trauma of pressure sores.

NOTE: Optimal performance is, in part, dependent on attaining a good seated position (chair height and posture) see Section G.
# PRO-ACTIVE 2

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SECTION A – GETTING STARTED

Check that all parts are present before attempting to assemble.

TOOLS REQUIRED

1. Allen key (supplied) for mounting plate hooks.

2. Flat or Phillips head screwdriver for removal of wheelchair standard seat.

LIST OF PARTS

- Cushion Assembly with Mounting Plate
- Strap Set
- Power Unit and Bag Assembly Complete
- Seat Mounting Plate Hooks x 2
- Screw for Mounting Plate x 4, Wing Clamps x 2
- Extension Air Pipe
- Battery Charger
SECTION B – SETTING UP

FITTING TO A DOMESTIC/HOSPITAL CHAIR

The PRO-ACTIVE 2 Seating System may be used with a domestic or hospital chair. The power unit can be laid either on the floor alongside the chair or hung from the back of the chair. For convenience, the extension airpipe supplied with the PRO-ACTIVE 2 Seating System may be used to increase the length of the airpipe between the cushion and power unit.

Follow these easy steps:

1. Remove the mounting plate from the cushion. (The plate is not required.) Fit the Daychair Securing Strap to the cushion as shown.

2. Remove the chair seat cushion to leave either the canvas or solid chair seat base exposed. Check that the seat base is in good condition and will adequately support the patient. Place the seat cushion, solid base down onto the chair seat base and feed the airpipe out to behind the chair, making sure that it is not kinked or squashed and cannot come in contact with the user. Fasten the Daychair Securing Strap behind or under the chair.

3. If hanging the power unit from the chair then loosen the two straps on the bag and hang the bag over the back of the chair. Adjust the straps so the power unit is as low as possible (at or below seat level) and held horizontally. Secure the power unit bag to the rear legs of the chair using the double clip mounting strap provided. Check the stability of the chair. If this has been compromised, fit the unit lower, or place on the floor.
Using the extension airpipe if required, connect the airpipe from the cushion to the power unit ensuring the connectors are fully pushed home. Close the velcro flap on the bag. Check that airpipe is not kinked or trapped, and check that the airpipe and all straps are safely placed so as not to cause any problems.

The **PRO-ACTIVE 2** Seating System is now ready for use. Please refer to ‘Switching On’, Page 9.

**INITIAL FITTING INTO A 16" TO 20" (400-500mm) WHEELCHAIR**

The **PRO-ACTIVE 2** Seating System is designed to fit 16" to 20" wheelchairs. Depending on the size of the wheelchair, alternative cushion and hook sizes may be required, but the method of fitting is the same for all sizes unless otherwise stated.

**Fitting the Cushion**

(Follow the steps shown in the diagrams)

**NOTE:** When fitting system cushions into wheelchairs, care should be taken to ensure that removal of original seat fittings does not leave any other part of the wheel frame loose. If the wheelchair frame is loose and replacement of the original seat screws prior to fitting the **PRO-ACTIVE 2** Seating System is not possible, then the system should not be fitted without referral to the local responsible rehabilitation engineer or your local supplier.
NOTE: Ensure wheelchair remains fully open during fitting.

4. Place hooks in positions shown (approximately) ensuring rear hook is behind wing

5. Close up both hooks and tighten 4 securing screws with Allen key provided

6. Fit plate with tabs uppermost at front of wheelchair

7. Insert securing screws ensuring front and rear pairs of screws are in opposing slots. Do not fully tighten

8. Position chassis plate and hooks ensuring rear edge is aligned with front of backrest tubes

9. Using a measuring scale, centralise the plate on the chair frame

10. Fully tighten 4 plate securing screws
WARNINGS: When used in larger wheelchairs the cushion base MUST extend outside the seat support centre lines by a minimum of 1/8 in (3mm) on both sides at all times.

Check a minimum of 1/8 in (3mm) is obtained even with the slight sideways movement of the seat.

If the size of the wheelchair is such that this criteria cannot be met, an alternative set of hooks is available which supports the cushion in larger wheelchairs.
**Fitting the Power Unit**

**CAUTION:** When fitting the power unit as described below, ensure the power unit is placed as low as possible to maintain wheelchair stability.

**NOTE:** Prior to initial strap fitting, it may be convenient to remove the seat chassis from the wheelchair. Replace seat chassis after fitting straps.

16. REMOVE THE TOP BACK SUPPORT SCREW AND WASHER (IF FITTED) AND REFIT THROUGH SUSPENSION STRAP EYELET - TIGHTEN FIRMLY. ENSURE BACK SUPPORT IS SECURED CORRECTLY

17. FIT PLAIN MOUNTING STRAP AS SHOWN IMMEDIATELY ABOVE AXLES OR A CONVENIENT LOW POINT. ADJUST SO THERE IS NO SLACK WHEN WHEELCHAIR IS FULLY OPENED.

18. WRAP THE CENTRE STRAP AROUND THE WHEELCHAIR CROSS FRAME, FEEDING THE HOOK END THROUGH THE STRAP LOOP. HOOK WILL FACE TO THE REAR OF THE WHEELCHAIR.
NOTE: The suspension strap, plain mounting strap, centre strap and wing clamps will remain in place once fitted and do not have to be removed when folding the wheelchair.

19. CLIP THE POWER UNIT BAG TO THE SUSPENSION STRAPS AND ADJUST THE BAG STRAPS SO THE POWER UNIT IS AS LOW AS POSSIBLE, IS HORIZONTAL AND RESTS AGAINST THE PLAIN MOUNTING STRAP.

20. CLIP THE CENTRE STRAP TO THE POWER UNIT BAG AND TIGHTEN BY PULLING THE FREE END OF THE STRAP SO THE POWER UNIT IS PULLED AGAINST THE PLAIN MOUNTING STRAP SECURED AROUND THE WHEELCHAIR FRAME.

21. CONNECT THE AIRPIPE FROM THE CUSHION TO THE POWER UNIT ENSURING THE CONNECTOR IS PUSHED FULLY HOME. CLOSE THE VELCRO FLAP ON THE BAG.

CHECK THAT THE AIRPIPE IS NOT KINKED OR BENT SUCH AS TO RESTRICT AIRFLOW AND ENSURE THAT NEITHER THE AIRPIPE OR STRAPS WILL INTERFERE WITH THE USER OR WHEELCHAIR OPERATION.

The PRO-ACTIVE 2 seating system is now ready for use. Please refer to the Section ‘SWITCHING ON’. 
SWITCHING ON

After fitting your PRO-ACTIVE 2 Seating System, the unit should be switched on as follows:

1. Check that the airpipe connector is fully pushed home and that the pipe is not folded or kinked in a way that may restrict airflow to the cushion.

2. Turn the power unit on (Position 1) using the power switch on the unit control panel.

3. The battery state light will flash once (green) then come on permanently (green). The unit will also emit a single audible tone to indicate that the unit is functional.

4. The cushion will now inflate and is ready for use within 4 minutes.

NOTE: The cushion should be fully inflated before the patient sits upon it.

If the PRO-ACTIVE 2 Seating System does not perform as described above please refer to the ‘ALARM SYSTEM’ section of this guide.
FITTING AND REMOVAL DURING DAILY USE

WARNING: The chassis plate is designed to positively locate the PRO-ACTIVE or PRO-ACTIVE 2 Seating Systems and is not to be used for any other purpose. The plate is not a seat in its own right and is not to be used as such, nor is it to be used with any other form of cushion or seating system.

Initial fitting instructions

For initial fitting instructions refer to the appropriate section of this manual.

Fitting during daily use

The arms of the wheelchair may be removed, if possible, to ease fitting.

1. Close up the wheelchair slightly.

2. Drop the locating plate over the seat tubes ensuring the hooks locate around the tubes. The rear hooks must be behind the wing clamps.

3. Place the cushion onto the plate as shown on page 6 and secure using the centre screw knob.

4. Fit the power unit bag by clipping on the suspension straps and the centre strap and tighten this strap as required.

5. Connect the airpipe to the power unit and replace the chair arms if they have been removed, turn the power unit on.

Fitting is now complete.

Removal during daily use

1. Switch power unit off.

2. Disconnect the airpipe from the unit.

3. Loosen the centre strap by lifting the adjusting buckle as shown on page 8 and unclipping from the bag.

4. Unclip the bag from the suspension straps and remove from the wheelchair.

5. Fold the wheelchair slightly to release the cushion and locating plate.

6. Lift the cushion and locating plate off the wheelchair seat rails.

NOTE: The suspension strap, plain mounting strap, centre strap and wing clamps will remain in place once fitted and do not have to be removed when folding the wheelchair.
SECTION C – POWER UNIT

CHARGING

To ensure effective use of the PRO-ACTIVE 2 Seating System, it is recommended the battery is recharged each night. Use only the purpose designed PEGASUS charger to ensure that your battery cannot be overcharged.

Follow these easy steps:

1. Turn the power unit off and plug the charger lead into the power unit charger socket (refer to illustration on page 9).

2. Place the charger on a firm surface and plug into a convenient mains socket (the charger comes fitted with a 3 amp fused plug).

3. Turn the mains supply on. The red ‘Charging’ light on the charger and power unit will now come on to indicate the battery is charging. Leave for a minimum of 12 hours to ensure a full charge.

4. The battery will be fully charged when the ‘Battery State’ light on the power unit shows green with the charger lead unplugged from the power unit and the power unit turned on. Check this by disconnecting the charger by reversing steps 1-3.

NOTE: The battery can safely be left on charge indefinitely.

CHANGING THE BATTERY

It is recommended that the battery is replaced annually regardless of the amount of use.

When the battery does need to be changed, the following procedure should be followed:

NOTE: Care should be taken at all times to ensure that the battery terminals are not shorted together during removal or storage.

1. Ensure the patient is not using the system, turn off the power unit and remove the power unit bag from the chair/wheelchair.

2. Remove the power unit from the bag by undoing the lid straps and opening the velcro flaps.

3. Using a cross-head screwdriver, unscrew the panel on the power unit next to the airpipe connection.

4. Slide forward the battery approximately 1 in and disconnect the leads, then slide the battery the rest of the way out of the power unit. A replacement battery can be obtained from Pegasus Ltd.
5. Fit the replacement battery by reversing steps 1-4, making sure that the ‘blue’ battery connector fitted to the white wire (+) is connected to the (RED) battery terminal. Do not use the power unit until the battery cover (panel) has been replaced.

ALARM SYSTEM

The PRO-ACTIVE Seating System is equipped with a sophisticated set of alarm functions to alert the user to the battery condition and to any defect in the cushion which would put the user at risk.

Battery condition

1. Fully charged battery:
   a. No audible alarm.
   b. Battery state light will be green.

2. Battery at 50% charge:
   a. Battery state light will turn amber.
   b. Audible alarm will give a single beep every five minutes until either the battery is recharged or the unit switched off.

3. Battery at 25% charge:
   a. Battery state light will turn red.
   b. Audible alarm will beep once every minute. If no action is taken to recharge the battery within five minutes, the alarm will beep every second for ten seconds, the system will then shut down until the battery is recharged.

Cushion condition

To protect the user from failure of the alternating action of the cushion, or to alert the user to the point that the cushion is not inflating to the correct pressure, an additional alarm giving a triple beep will sound every second until the fault condition is rectified or the system switched off then on again to reset the alarm. If the alarm persists, contact your carer or Pegasus Service Department for advice.

In circumstances where the battery requires charging but the PRO-ACTIVE is still required for use, the system may temporarily be operated through the charger from the mains as follows:

1. Plug the charger lead into the power unit charger socket.
2. Plug the charger into a convenient mains point.
3. Turn the mains supply on. The green light on the unit should now come on together with the red charging lights on the power unit and charger. If the green light on the unit does not come on and the unit fails to operate, the battery is too far discharged and will require full recharge before further use.

It should be noted that although the power unit will operate in this way, the battery will not charge. It is recommended that at the first convenient moment the power unit should be switched off and the charging routine performed. While the system is being used in this way the wheelchair must remain static.

NOTE: Leaving a battery in a discharged state for long periods will drastically shorten its useful life.
SECTION D – CLEANING

CAUTION: Do not immerse the cushion or power unit whilst cleaning.

The cushion cover consists of a waterproof, vapour permeable outer cover and inner platilon which can be washed using hot water to ensure they are clean. Spare covers and platilons can be obtained as optional extras. To remove the cover and platilon, turn the power unit off, disconnect airpipe from the power unit and remove the cushion from its mounting plate. The cushion can now be removed from the wheelchair and the cover and platilon removed.

Replacement is the reverse of this procedure. When replacing, ensure the platilon fully covers the inner foam and the elasticated edge around the cover is located in the groove between the cushion and mounting plate.

The PRO-ACTIVE 2 Seating System can be cleaned using the following simple procedures in accordance with your Local Control of Infection Policies.

It is recommended that the cover and platilon are cleaned between users.

1. Ensure the system is turned off and the battery charger disconnected before cleaning.

2. In many cases it will not be necessary to remove the cover from the cushion prior to cleaning. The cover can be cleaned by one of the following methods.
   a. Liberally swabbing with water at 60°C containing detergent – then drying.
   b. Swabbing with solution of hypochlorite or similar (up to 10,000 parts per million available chlorine) – then drying.
   c. The cover and platilon can also be machine washed at a temperature of 90°C maximum.
   d. Both items can be disinfected if necessary by using ETO or the Draeger System.

CAUTION: Do not autoclave or use phenolic based products for cleaning.

3. The power unit or its bag can be cleaned by wiping down with a cloth dampened with one of the solutions in ‘a.’ or ‘b.’ above, or by sterilising, using ETO or Draeger.
SECTION E – SERVICE

The PRO-ACTIVE 2 Seating System has been designed for ease of use and with the exception of cover cleaning and battery change, there are no user serviceable items. If you have any queries about the operation of your unit contact your local supplier:

If the system becomes defective during the warranty period of twelve months, it will be replaced with a loan unit within two working days and your defective system repaired free of charge.

For effective identification of your unit, when telephoning please refer to the unit serial number which you will find on the power unit label on the rear of the power unit or on the front panel which can be seen through the clear plastic window.

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PRO-ACTIVE™ 2
SEATING SYSTEM

MODEL No. 3103. SER No. 

MADE IN THE UNITED KINGDOM

12VOLTS DC ONLY ✔ ✔ ✔

USE SUPPLIED CHARGER ONLY

LID STRAP

VELCRO UNDER FLAPS

VELCRO

CHARGER SOCKET

FRONT PANEL

CLEAR PLASTIC WINDOW

POWER UNIT BAG

SERIAL NUMBER LABEL

POWER UNIT

VELCRO

LID STRAP
## SECTION F – TECHNICAL DATA

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<tr>
<th>Cycle Control</th>
<th>Purpose designed distributor valve supplying operating air to the inflatable cells</th>
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<tr>
<td>Cycle Time</td>
<td>12 minutes</td>
</tr>
<tr>
<td>Supply Voltage</td>
<td>12VDC</td>
</tr>
<tr>
<td>Nominal Dimensions (Cushion)</td>
<td>435mm long 370mm long 170mm wide 105mm high</td>
</tr>
<tr>
<td>Nominal Dimensions (Power Unit)</td>
<td>435mm wide 105mm high Weight 3.4kg Weight 2.5kg</td>
</tr>
<tr>
<td>Electrical Safety Standards</td>
<td>Conforms to BSEN 60601-1</td>
</tr>
<tr>
<td>Classification</td>
<td>Internally Powered Type B</td>
</tr>
<tr>
<td>Connected to Charger</td>
<td>Class 2, Type B (May be Class 1 if alternative charger supplied)</td>
</tr>
<tr>
<td>Run Time between Charges</td>
<td>18 hours plus</td>
</tr>
</tbody>
</table>

### Symbols

- Class 2
- Type B
- Power Unit Switch - 1 (On) Power connected to the mains supply
- 0 (Off) Power disconnected from mains supply

### Environment (Usage and Storage)

- Air Humidity: 30% to 75%
- Ambient Temperature: 0°C (32°F) to 40°C (104°F)

### EMC

This equipment complies with EMC requirements. If effects are noticed the affected equipments should be moved apart.

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This product carries the CE mark in accordance with EC Directive on Medical Devices (93/42/EEC).

Pegasus Limited cannot be held responsible for any damage caused to our products (by foreign objects – needles, sharps, eating utensils, etc) other than due to normal wear and tear as defined in the product warranty agreement. Nor for any injury or incident which relates to the use of cot sides, profiling or any other mechanical or electrical device used in conjunction with this product unless supplied and/or manufactured by Pegasus Limited.
SECTION G – USER POSTURE AND ACCESSORIES

USER POSTURE

To provide optimum protection and therapy, ensure the user is provided with a chair at the correct height to encourage a good seated posture.

NORMAL SITTING POSITION

For those who have difficulty with posture eg. muscular or skeletal abnormalities or those who have persistent lateral shift please contact your Pegasus representative or an appropriate Health Care Professional for advice.

PELVIC OBLIQUITY WITH RESULTANT SCOLIOSIS
ACCESSORIES

A range of postural aids (shown below) are available as accessories.
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