

Information About the  
**Use of an Airback Brace**

# Use Of An Airback Brace Following Damage To The Spine Without Nerve Damage

Following a thoracic (upper) or lumbar (lower) spinal injury , or surgery we need to prevent excess movement of the spine. This can be achieved with a non-surgical approach (bed rest) , surgical internal fixation or a combination. All are followed by a period of time using a spinal brace. The brace is fitted 2-3 days after surgery, or when the problem is considered stable after a period of bed rest (anything from a few days up to 8 weeks). The brace is usually worn for a minimum of 3 months from the day of surgery or from the day the damage to your spine is considered stable. On occasions your Consultant may extend this time. The type of brace most commonly used is the Airback Brace.

## **Aim of the Airback Brace:**

The brace is worn as an external splint to protect the spine against excessive flexion (bending forward) and rotation (twisting) while the fracture or damage is healing.

## **When do you start wearing the brace?**

After your operation or bed rest an experienced orthotist will measure and order the correct size of brace. A date will have been set for when it is safe for you to sit up with the brace on and get out of bed.

## **When the brace should be worn?**

The brace should be worn at all times when you are **not** lying in bed. It should be put on and taken off while lying down. A cotton T-shirt or vest should always be worn under the brace for comfort. The brace does not need to be worn in bed at night.

## **When do you stop wearing the brace?**

You will need to continue to wear the brace until it is clear that the fracture or damage is healed. Your Consultant will give you exact dates depending on your injury. Most patients have to wear the brace for a minimum of three months from the time of surgery or end of bedrest.

It is best that you gradually wean yourself off using the brace at the end of treatment by spending one to two hours without it in the morning and afternoon. Some days you may need to use it all day.

Most people take around two weeks to feel comfortable without the brace completely.

## Diagram Of Airback Brace Identifying Component Parts



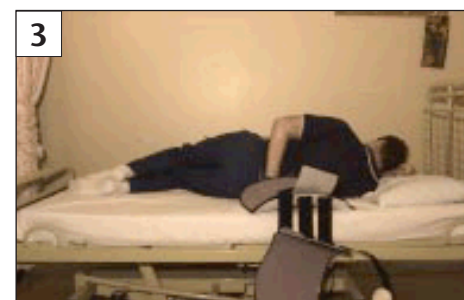
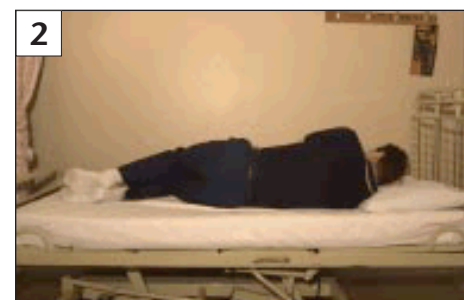
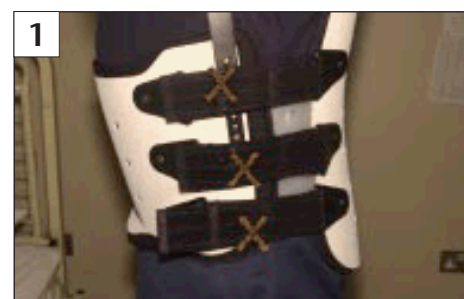
### How To Put The Airback Brace On/Off:

Do not touch or adjust the straps on the left hand side of the brace as these act as a hinge for the brace and adjusting them will alter the fit of the brace. (1)

These straps should only be altered by your orthotist or therapist.

Roll onto your right side while keeping your spine straight.

Slip the straps and the back section under your right side as far as possible.



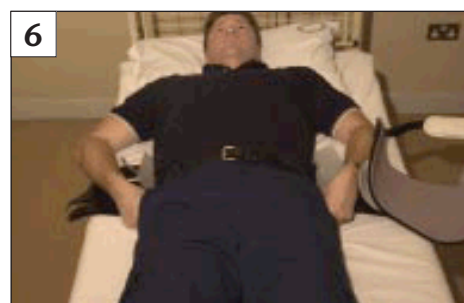
Roll back onto your back and the back section. Arrange the 3 straps in parallel to each other at your right side. The back section should be in a central position underneath you.(4)



If you have difficulty positioning the back section you may bend your knees up, lift your bottom off of the bed and reposition the back section.(5) Please take care to keep your spine straight and do not twist.



The bottom of the back section should sit in line with the bottom of your spine.(6)



With the back section positioned correctly, flip the Front section of the brace over your chest at the front, ensuring the chest pad is on the breast bone(7) and ensure the plastic section shaped for the hips is positioned over the hip bones.



Fasten the straps on the right hand side (8) by clipping the black plastic clip over the stud, pull tight until you feel the brace fitting firmly (9) and fasten onto the velcro.

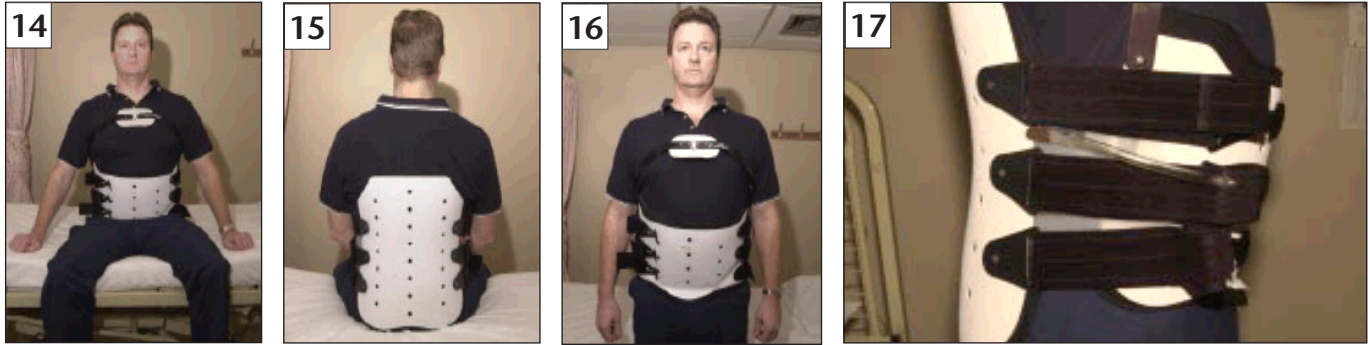
You should not be able to slip your hand down the front of the brace too easily. (10)



The airsac that is positioned between the white plastic back shell and the grey felt pad (11) can be adjusted with the pump provided. (12) The black valve on the pump lets air out and the clear valve puts air in. You can adjust the amount of air in the back to suit yourself for the optimum level of comfort. (13)



When sitting up the brace should fit as follows.



After 1/2 hour wearing the brace check your skin for any area of excessive redness. If any red marks do not disappear after 20-30 minutes consult your therapist/orthotist who will adjust the brace as necessary.

To remove brace, reverse the above procedure and unfasten the velcro on the right hand side and remove clips (8&9).

Roll onto right side and remove brace storing it close by and within easy reach to be reapplied when getting out of bed again.

## **Airback Brace Care : Do And Don'ts**

### **Do:**

- Wear a t-shirt or vest beneath the brace for maximum comfort
- Follow your instructions about wearing the brace.
- Tighten the brace to maintain comfortable snugness. This ensures the effectiveness of your brace.
- Take care when bending, stretching, sitting or standing.
- Keep your brace clean. The white plastic sections of the brace can be cleaned using a soft cloth and warm soapy water.

### **Don't:**

- Remove the brace unless instructed to do so.
- Put anything inside your brace.
- Take part in active sports.
- Engage in any physical activity that causes excessive pain.
- Cut, file or damage your brace. However, should you experience any discomfort, please contact your therapist or orthotist.
- Use any solvents or abrasive cleaning agents on your brace.
- Put the brace close to a direct source of heat.

## **Any Problems?**

If you notice any of the following problems, consult your orthotist/therapist immediately on "Insert Dept details here", where an appointment with the orthotist can be made to have the brace reviewed.

- Brace is loose, cracked or broken.
- Brace rubs, presses or pinches, causing irritation.
- Brace is loose and cannot be easily adjusted.
- Brace is tight and cannot be easily adjusted.
- Moderate discomfort changes to severe and constant pain.
- Skin or wound problems such as offensive odour develops or excessive itching develops beneath the brace.

If in doubt remain in bed until you are able to contact the department where your brace was supplied or the problem with your brace is resolved.

# Commonly Asked Questions By Patients Using An Airback Brace Following Spinal Damage or Surgery

All injuries are different. These are the common answers to the commonly asked questions. If you have similar or specific questions please do not hesitate to check with your therapist or consultant.

## How long do I need to wear the brace for?

The brace is generally worn for 12 weeks after mobilisation, after surgery or bedrest . Removal of the brace will be advised by your consultant at a clinic review.

## How do I dress myself?

Put a T-shirt on while lying in bed before putting the brace on and thereafter dress as you would normally. Taking care not to twist your body

## How do I bath/shower?

Your Occupational Therapist will demonstrate this before you go home. We advise you to sit while you shower and if you are allowed to take the brace off that you avoid bending or twisting.

## When can I lift objects and what weight is OK?

Avoid lifting and trying to bend when wearing the brace. Simple domestic objects are OK but heavy weights should be avoided.

## When can I return to physical activities?

Avoid impact sports for one year after any serious spinal injury. Regular exercise is beneficial to a rapid recovery. Some discomfort can be expected after you start exercising due to lack of fitness.

Rhythmic and low impact stamina and strength exercises should commence as soon as comfortable for upper and lower limbs e.g. Exercise bike, walking.

## What sport can I do and when can I start?

No sporting activities can be done safely in a brace. Regular walking while in the brace is recommended. Progressive exercise can commence after the brace is removed e.g. Swimming, cycling etc.

## How far can I walk?

Frequent short walks are recommended but pay attention not to cause yourself pain. Most patients experience some muscle discomfort when they start regular activities. This should settle within 24 hours. If it continues check with your therapist or doctor.

## When can I start driving?

Fitness to drive is primarily the responsibility of the individual who should comply with the law and insurance requirements. In general driving should be avoided when wearing the brace. Journeys as a passenger should be limited to one hour. If longer distances are unavoidable then regular breaks should be taken to give yourself a chance to stretch and go for a short walk.



### **When can I travel/fly?**

There are no medical restrictions in travelling or flying in an airback jacket. The length of time sitting or standing should be limited to one hour with regular changes of position to ease discomfort and stiffness. Regular trips to the toilet are helpful in long plane or train journeys. If flying by plane you will set off security alarms. This may result in a body search. A letter from your doctor or a copy of your X-rays will not prevent this as they can easily be forged.

### **When can I return to work?**

This will depend on the nature of your injury and job. As a rough guide light manual workers usually return to work around 6 months and heavy manual workers around 1 year.

### **When can I have sexual intercourse?**

Sexual relations can commence whenever the level of discomfort permits. Anxiety and apprehension for both partners at first is normal.

### **What positions should I avoid during intercourse?**

The spine is protected when you are lying on your back or side. It is best to avoid bending and twisting your spine for the first two months.