| RAPP AUSTRALIA PTY LTD | | |
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| | **LIFTING DEVICE APPLICATION OF THE NEANN IMMOBILISATION & EXTRACTION JACKET (NIEJ)** | SKILL SHEET<br>NIEJ<br>Version 2.0<br>27 October 2010 |
| EQUIPMENT REQUIRED:<br>2 x personnel (2 to apply NIEJ); NIEJ (including jacket, 1 x yellow lumber support, 2 x blue groin pads). | | |

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| Prepare patient. | 1. If appropriate, remove all bulky items from chest and pelvic pockets.<br>2. Inform and reassure patient of procedure. | Prevents discomfort of NIEJ. |
| Prepare NIEJ | 1. Remove NIEJ from storage bag.<br>2. Open NIEJ flat ready for use.<br>3. Ensure all straps are tightly in place. | Loose straps will come apart during insertion. |
| Insert NIEJ behind patient | 1. Slightly rotate seat back or alternatively lean patient slightly forward of seat.<br>2. Insert NIEJ at a 45 degree angle behind patient.<br>3. Once in behind back, straighten up and ensure NIEJ is centered behind patient. | Essential for proper stability of NIEJ. |
| Insert lumber padding | 1. Roll up lumbar support pad to remove all air<br>2. Insert deflated lumbar support in curve of lumber spine.<br>3. Lean patient back onto NIEJ. | Will assist to maintain natural curvature of lumber spine, and help prevent lower back pain. |
| Position NIEJ | 1. Ensure top of NIEJ is level with top of patients head. | |
| Position groin straps | 1. Release groin straps from back of NIEJ.<br>2. Hold both groin straps together ensuring straps are not twisted.<br>3. Pull groin straps down together between the patient and inside of the chest flap.<br>4. Slide groin straps under one leg, zig zagging straps under leg until straps are in the gluteal fold.<br>5. Pull groin straps full forward and leave. | Essential for proper stability of NIEJ and to prevent loosening of straps when leg position changes. |
| Position chest flaps into place. | 1. Raise arms to level with shoulders.<br>2. Wrap chest flaps around chest. | To avoid upper spinal movement, do not raise arms above shoulder height. |

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| Apply green shoulder straps (optional step): | 1. Bring left sided green strap over shoulder and connect to green strap buckle on right side of chest flap. Adjust to firm fit.<br>2. Bring right sided green strap over shoulder and connect to green strap buckle on left side of chest flap. Adjust to firm fit. | This step is optional and only necessary if patient may be inverted. |
| Apply yellow chest strap. | 1. Bring right sided yellow strap across chest and connect to yellow strap buckle.<br>2. Place hand between strap and patients chest. Adjust yellow strap until a firm sensation is felt on hand. | Overtightening will cause respiratory compromise by up to 25%. |
| Apply red chest strap. | 1. Bring right sided red strap across chest and connect to red strap buckle.<br>2. Place hand between strap and patients chest. Adjust red strap until a firm sensation is felt on hand. | Overtightening may place unnecessary pressure on the abdominal organs. |
| Connect groin straps. | 1. Slide a blue groin pad onto each black groin strap.<br>2. Slide blue groin pads along black straps, ensuring blue groin pads contact sub-pubic area.<br>3. Connect black groin straps to bottom black strap buckles on chest flap.<br>4. Adjust black groin straps until firm. | Padding prevents groin strap discomfort that may occur during the extrication. |
| Recheck all torso straps. | 1. Recheck green, yellow, red chest and black groin straps ensuring firm. | |
| Lift Patient | 1. Using the handles supplied, lift the patient. | |

# APPLICATION TIME APPROXIMATELY 2 MINUTES

**PLEASE NOTE**

The term "Lifting" is limited to manually carrying the patient by rescuers, and short distance vertical non dynamic patient lifts to a maximum of 2m only. The safe working load of the NIEJ is 130 kg. As all plastic side release buckles on CEDs are not rated for weight bearing by the manufacturers of such buckles, it is estimated that each side release buckle has a 65 kg non dynamic (static) load bearing limit. Whilst other CED manufactures may quote higher safe working loads, this is based on the stitching strength and not the weakest point of the CED which is the plastic side release buckle, and is therefore potentially misleading to the customer. The stitching strength and webbing design of the NIEJ is well in excess of other CEDs on the market, but the plastic side release buckles are this weight limiting factor in all CEDs. With the NIEJ using two groin straps secured by plastic side release buckles, the safe working load of the NIEJ and all other CEDs can only be rated to a safe working load of 130 kg. Lifts using the "handles only" should be limited to simplified controlled lifts to a maximum height of 2m as specified in the Australian Standards - Prevention Of Falls 2007. For technical rescue situations requiring vertical lifts above the 2 m as specified in the Australian Standards - Prevention Of Falls 2007, it is recommended that a twin rope system be used for such rescues with a second harness over the NIEJ that complies with the Australian Standard - Harness and Lifelines 1891.1.