



Clinical Practice Procedures: Trauma/Orthopaedic splinting – EasyFIX PLUS vacuum mattress

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Date	February, 2021
Purpose	To ensure a consistent procedural approach to orthopaedic splinting – EasyFIX PLUS vacuum mattress
Scope	Applies to Queensland Ambulance Service (QAS) clinical staff.
Health care setting	Pre-hospital assessment and treatment.
Population	Applies to all ages unless stated otherwise.
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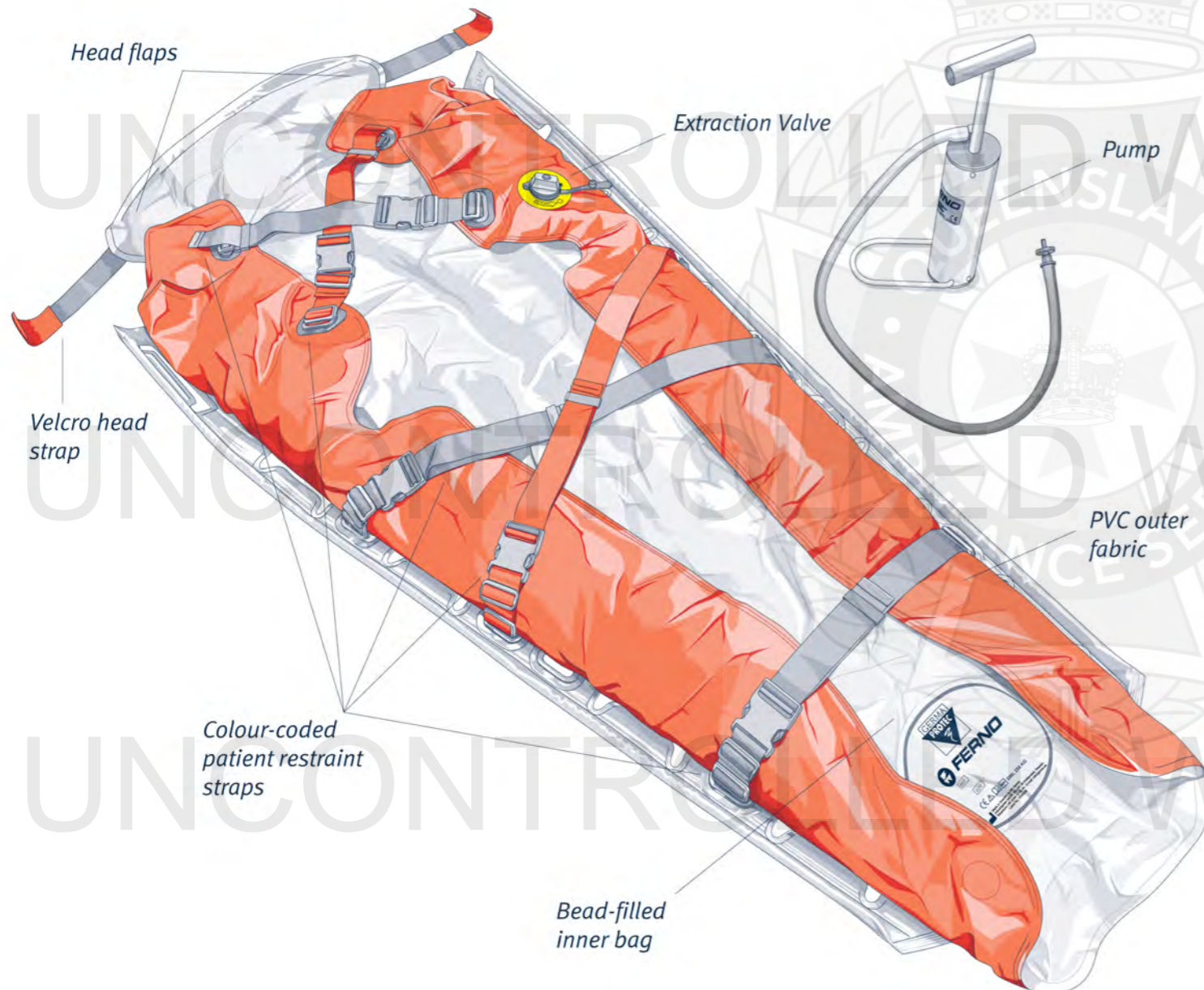
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Orthopaedic splinting – EasyFIX PLUS vacuum mattress

February, 2021

The EasyFIX PLUS vacuum mattress is an orthopaedic splinting device suitable for spinal motion restriction or full body splinting. When the splint is correctly applied it provides immobilisation, support and comfort necessary to enable the safe transfer of the patient with known or suspected injuries.

EasyFIX PLUS vacuum mattress



The EasyFIX PLUS vacuum mattress consists of a hard-wearing PVC outer fabric with a unique bead-filled inner bag. It is fitted with 5 colour coded, criss-crossed patient restraint straps, each with a quick release plastic buckle for easy fastening. Handles are strategically positioned to assist clinicians with mattress repositioning.^[1]

Indications

- Spinal motion restriction or fully body splinting (from category 1, 2 or 3 stations with a transport time greater than 30 minutes)

Contraindications

- Nil

Complications

- Vacuum splints may require further extraction of air to maintain rigidity during aeromedical transport.

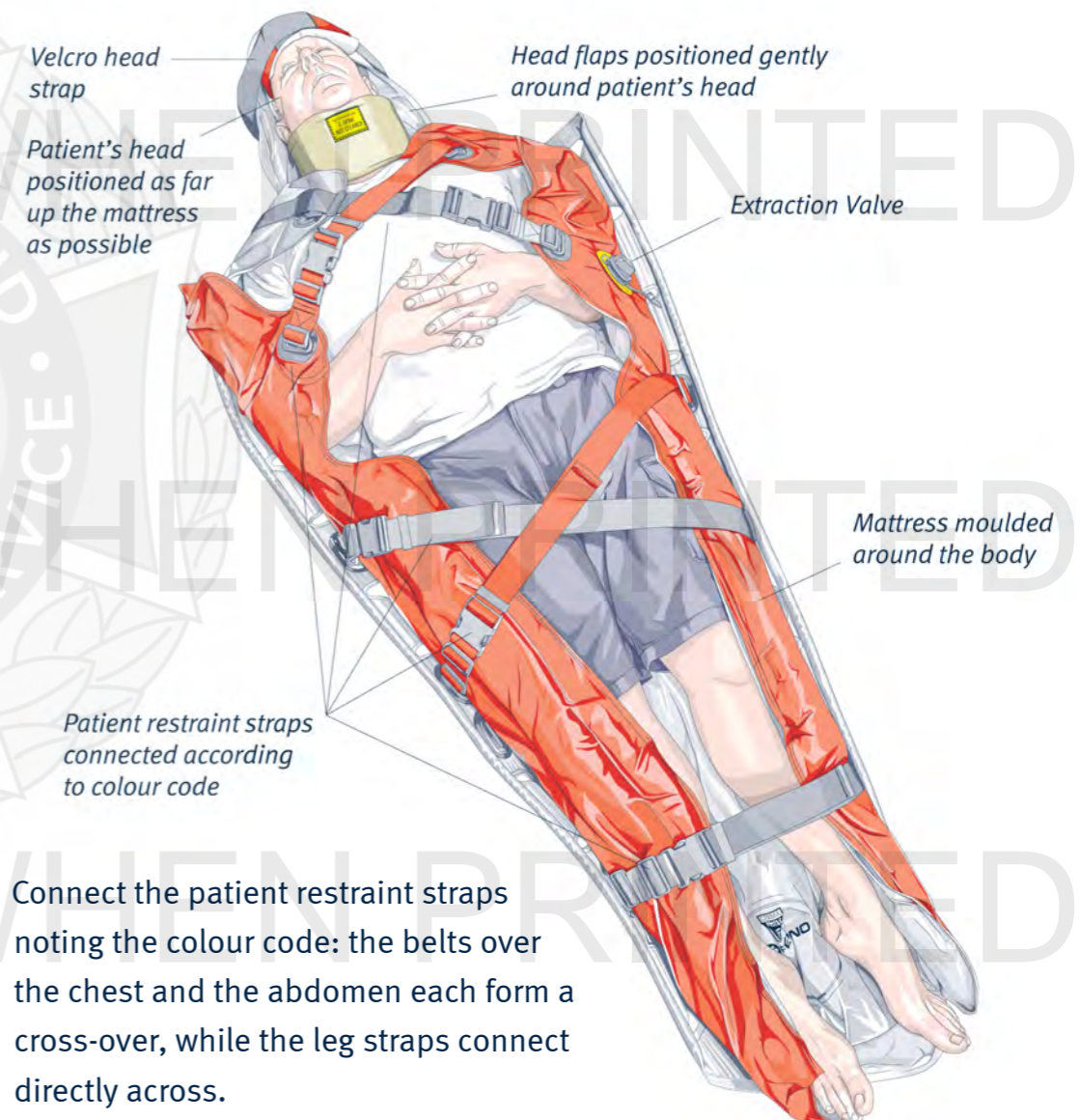
Procedure – Orthopaedic splinting – EasyFIX PLUS vacuum mattress

1. Consider the application of a cervical collar (see *CPP: Trauma/Cervical collar*).
2. Apply dressings to all wounds.
3. Lay the vacuum mattress down on a flat surface, with all restraint straps unbuckled and stretched outwards.



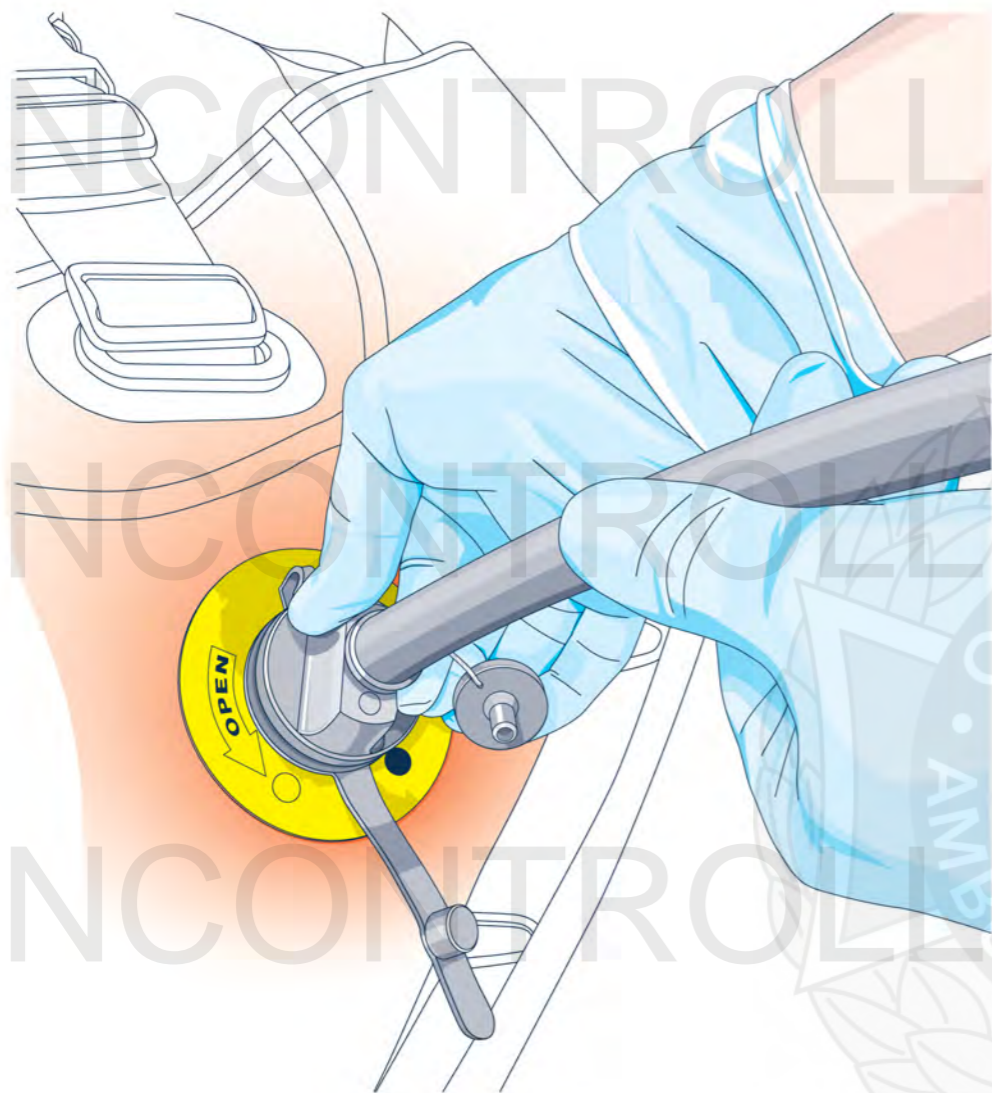
4. Check the extraction valve is closed by turning it fully clockwise, then manually distribute the beads evenly through-out the splint.

5. Applying appropriate QAS manual handling procedures, place the injured patient on the vacuum mattress, with the patient's head as far up the mattress as possible to ensure correct head strap positioning.
6. While maintaining appropriate spinal immobilisation, mould the mattress around the patient's body – ensure that some of the mattress with beads is positioned between the patient's legs.
7. Position the head flaps gently around the patient's head and attach the supplied velcro head strap (chin straps are not required).



8. Connect the patient restraint straps noting the colour code: the belts over the chest and the abdomen each form a cross-over, while the leg straps connect directly across.

9. Attach the pump to the closed valve.



+ Additional information

- The ambulance clinician should always balance the pre-hospital use of the EasyFIX PLUS vacuum mattress against the patient's overall clinical needs.
- Never mould the vacuum mattress on the top of the head or under the foot soles as it may cause undesirable pressure against the patient's spine.
- Consider using a combine under the head strap for increased patient comfort.
- The patient's comfort, mattress firmness, and the degree of support provided should be checked by the clinician at regular intervals.
- At frequent intervals, the vacuum mattress, valve and pump must be checked for any visible damage.

10. Evacuate the air using the supplied vacuum pump and continue to mould the mattress around the patient's body as the air is removed. Ensure no pressure is applied to the patient's head or under the feet.
11. Re-adjust the belt tightness as necessary, ensuring the patient's respiratory effort is not impeded.
12. Remove the pump and cap the valve.