hipGRIP®

20-PIECE SURGICAL LATERAL POSITIONING SYSTEM

Design Rational
Technical Instructions

www.sunmedica.com
1800-995-8715
The hipGRIP® is a system to hold the patient on the operating room table in the lateral decubitis position. Anteriorly, the hipGRIP® supports the symphysis pubis and the down side anterior superior iliac spine. The posterior pelvis support is placed over the iliac crest/sacral area. The anterior and posterior chest supports keep the trunk/upper body in position and allows the table to be rolled without loss of position of the pelvis relative to the operating room table. THE hipGRIP® ALLOWS FIRM SUPPORT WITHOUT PRESSURE OVER VITAL STRUCTURES!

The hipGRIP® support system has closed cell foam surfaces. Disposable Cotton/Lycra® Coversets conduct body moisture away from contact areas.

The case has a molded foam insert to organize the hipGRIP® and help protect the parts from damage.
CARRYING CASE & PARTS DIAGRAM

A Anterior Pelvic Supports (Small, Medium & Large)
B Thumb Nut (1 Total)
C Anterior Pelvic Support Foam Pads
(Same size for Small, Medium & Large)
D Anterior Pelvic Support Bracket
E Thumb Screw (5 Total)
F Upright Supports (1-7”, 1-8” & 2-10”)
G Upright Support Foam Pads (7”, 8” & 10”)
H Angle Bars (2 Small, 2 Medium & 2 Large)
I Carrying Case
J Coversets (6 Come in each set)
   Also sold in Cases of 25 Set-ups. Each disposable Set-up is a ziploc baggie that contains enough covers for one surgery.
Indications
The hipGRIP® system is designed to hold a patient in the lateral decubitis position for hip or pelvis surgery.

Contraindications
The hipGRIP® system relies on good skin integrity and normal circulation over the contact areas. This device should not be used where the skin is abnormal, fragile, where there is compromised circulation or where skin lesions or disease are present at the contact areas.

Precautions
Application of the hipGRIP® system requires a working knowledge of anatomy, especially the bony pelvis and the vital structures about the pelvis. The hipGRIP® must be placed on the appropriate bony anatomy in order to avoid injury to vital structures. Therefore, this device should only be used by an experienced surgeon trained in pelvic anatomy.

The device should be supportive and firm but should not be placed tightly. For long cases, the positioner should be periodically loosened to decrease skin pressure, as would be required for normal skin care of an immobilized patient.

Disclaimer
SunMedica is not responsible for injury as a result of misuse or abuse of this product. Call SunMedica for any questions regarding proper use.
DIRECTIONS FOR USE

Patient Position:
The patient is placed in the direct lateral decubitis position. Appropriate padding is placed under the proximal down chest to prevent pressure on the axillary structures. The down side of the lower extremity should also be padded to prevent pressure over bony prominences or neurovascular structures.

Positioner Preparation:
The hipGRIP® positioning system should be cleaned between cases as described below. The pads should be cleaned also, but the damage and soiling of the pads can be minimized with Coversets. These inexpensive white cotton stretch covers are single use and disposable after a surgery. The Coversets also conduct perspiration away from the skin contact area to minimize skin problems. See Figure 1. The pads are designed for multiple use, but inspect them prior to use and replace if damaged. Place new Coversets over the foam pads prior to placement of the supports.

Sequence of Placing Positioner:

STEP 1
Justify the patient on the operating table for the posterior surgical technique.

STEP 2
Posterior Pelvis Upright Support

STEP 3
Anterior Pelvic Support

STEP 4
Chest Supports: Posterior Chest Upright Support

STEP 5
Chest Supports: Anterior Chest Upright Support

STEP 6
Slide the Posterior Pelvis Support toward the patient to tighten the grip on the pelvis.
STEP 1:
Justify the Patient
Justify the patient on the operating table for the posterior surgical technique.

STEP 2:
Posterior Pelvis Upright Support
The appropriate size Upright Support (F) is chosen. The small size (7") is most commonly used. See Figure 2.

Small Angle Bar - 4" x 8" (H): is used for the patient that is justified to have the posterior of the patient close to the surgeon. See Figure 2.

Figure 2
STEP 2: (Continued)
Posterior Pelvis Upright Support

The Upright Support (F) is placed to contact the bony prominences of both the posterior superior iliac spines and the sacrum. See Figure 3. Even though the support is to contact the upper posterior superior iliac spine, it should be kept low so that the posterior aspect of the operated hip is well exposed. The Upright Support should be over the pelvis/sacral area; not the lumbar spine. See Figure 4.

After appropriate positioning of the Posterior Pelvis Upright Support, fix the Angle Bar (H) to the operating table using a bar clamp (not provided). Loosely tighten the Thumb Screw (E) that holds the Upright Support to the Angle Bar. See Figure 5.

The Thumb Screw on the Upright Support is left loose at this time. This will be readjusted (firmed up) after the Anterior Pelvic Support is placed.
STEP 3: Anterior Pelvic Support

Select the Anterior Pelvic Support (A) to fit the patient. It should be the right length to center over the downside anterior superior iliac spine and the symphysis pubis. See Figure 6.

Assemble the Anterior Pelvic Support to the Anterior Pelvic Support Bracket by placing the Bolt of the Anterior Pelvic Support into the slot of the Anterior Pelvic Support Bracket. The Set Screw fits into the slot and fixes the rotation. The Set Screw is placed in the slot, superior (upside) to the Bolt to allow appropriate excursion of the support in the bracket. Place the Thumb Nut (B) over the Bolt and lightly tighten. See Figure 7.

Select the Angle Bar (H) that will allow the support to be firm against the pelvis. For small patients, use the long Angle Bar to allow the patient to be close to the surgeon.

The assembled Anterior Pelvic Support is then attached to the table with the Angle Bar and lightly tightened with the Thumb Screw (E). Operating room table bar clamps are not included. See Figure 8.
STEP 3: Anterior Pelvic Support (Continued)

Adjust the pelvis position so that the symphysis pubis and down side anterior superior spine are against the padding of the support. The pelvis should be at right angles to the operating room table. See Figure 9.

Center the Support pads over the pubis and down side anterior superior spine of the pelvis. Tighten the Thumb Nut (B) and Thumb Screw (E).

Make sure that the support does not rest on any soft structures such as the bladder, the neurovascular structures of the groin or the penis in male patients. In obese patients, the pendulous stomach will need to be lifted up, the positioner placed and then a towel placed between the pendulous stomach and the positioner as the obese abdomen may “drape” over the positioner. Do not place the positioner with the pendulous stomach interposed between the bony pelvis and the positioner as poor pelvis stability may result. Slide the Posterior Pelvis Upright Support toward the patient to firm up the grip on the pelvis and then tighten the Thumb Screw.

Figure 9
STEP 4: Chest Supports: Posterior Chest Upright Support

The Posterior Chest Upright Support (F) is placed just caudal to the tip of the scapula and should be in line with the Posterior Pelvis Support (the same distance from the edge of the table). This helps maintain the “anatomic position” of the chest relative to the pelvis. See Figure 10.

STEP 5: Chest Supports: Anterior Chest Upright Support

The Anterior Chest Upright Support (F) is placed caudal to the breasts at the bottom of the sternum. Do not place the support on any breast tissue. An axillary pad is often used to protect the axillary structures. The chest should be at right angles to the table so that the back is not twisted (anatomic position) and doesn’t put a torque on the pelvis. The chest Upright Supports are placed with modest firmness and the abdomen is left free to allow unrestricted diaphragm motion for respirations. See Figure 11.
STEP 6:  
Final Tightening

Check the position of the pelvis and chest. If satisfactory, then slide the Posterior Pelvis Upright Support (F) inward by pushing with both hands low on the upright to firm the grip on the pelvis. See Figure 12. Tighten the Thumb Screw (E) to secure the Posterior Pelvis Upright Support in place.

At this point (and prior to draping), palpate the pelvis to determine if the pelvis is secure and to determine that the position of the pelvis is well known relative to the table. If stability or position is unsatisfactory, then reapply starting from the beginning or use a different device to position the patient. A U-drape is recommended to protect the positioner from the solutions used in skin preparation and the fluids of surgery.
CLEANING INSTRUCTIONS
The hipGRIP® is a non-sterile device. The metal parts consist of both aluminium or stainless steel.

Foam Pads
The foam pads are closed-cell polyurethane foam. Before use, cover the foam pads with SunMedica’s disposable hipGRIP® Coversets.

Clean the hipGRIP® after each operative procedure and before returning parts to the storage case.

What are Coversets?
Coversets (Figure 13) are latex-free and are mostly made of cotton. They are specially designed to easily protect the foam pads as well as conduct body moisture away from the pad’s contact areas. This protects the patient’s skin from maceration. The Coversets DO NOT protect the foam pads. It is recommended that you use a U-drape to protect the pads from body fluids.

hipGRIP® Coversets Item# D-030-051:
Sold by the box/case. Includes 25 "Set-ups”. Each “Set-up” is a ziploc baggie that contains the appropriate number of covers per surgery.

The recommended method for cleaning the foam pads is to use soapy water and then rinse with clean water. Thoroughly dry the pads prior to use. Operating room cleaners can be used but test the cleaner on a small non-contact area of the pad prior to use. It is very important to rinse with clean water as no cleaner residue should be left on the pad surfaces.

Figure 13

SunMedica has coversets available for all positioning devices. Each ziploc baggie is a “set-up”.

Metal Parts
The metal parts can be cleaned with soapy water, alcohol, standard operating room cleaners or even steam cleaned.
IMPORTANT MESSAGE TO MAINTAIN SOIL-FREE POSITIONER PADS

The Following Precautions Are Recommended:
Use a U-Drape to protect the Positioner Pads from solutions used in skin preparation and body fluids. Use the Coversets to conduct body moisture and prevent skin irritation. (These covers do not protect the foam pads from body fluids or skin preparations). Clean the parts prior to placing in the storage case.

Save Replacement Costs
Save replacement costs by taking the above precautions to help avoid contamination of the foam pads from blood, body fluids or skin preparation solutions.

Replacement of Foam Pads is Necessary
Replacing the Foam Pads is necessary when they are contaminated with patient body fluids, become hardened or lose their resilience after extensive repeated use, or are damaged in any way that compromises the intended use.

INSTRUCTIONS ON REMOVING POSITIONER PADS
NEEDED: New Set of Pads • Spray adhesive (77 by 3m is recommended) • Adhesive Remover • Soap or Wax

ANTERIOR PELVIC SUPPORT
To Remove:
1. Pull Foam Pads off of the Anterior Pelvic Support.
2. Clean with adhesive remover.
3. LET DRY THOROUGHLY.

To Replace:
1. Spray adhesive on BOTH SIDES of the Anterior Pelvic Support
2. Push NEW Foam Pads onto the Anterior Pelvic Support. See Figure 1. THE THICK PART OF THE PAD MUST BE ON THE SIDE CONTACTING THE PATIENT.
3. Apply pressure on BOTH SIDES of the pad to ensure good contact between the surface of the support and the pads.
4. Clean any excess adhesive from the exposed surface of the support.

UPRIGHT SUPPORT
To Remove:
1. Pull Foam Pads off of the Upright Support.
2. Clean Upright Support with mild soap solution. (NO ADHESIVE IS USED ON UPRIGHT SUPPORTS)
3. LET DRY THOROUGHLY.

To Replace:
1. Rub SOAP OR WAX on the edges of the Upright Support.
2. Pull NEW FOAM PADS onto the Upright Support, like placing a stocking on a foot, ie; grasp open end and pull over support. See Figure 2. THICK PART OF THE PAD MUST BE ON THE SIDE CONTACTING THE PATIENT.
3. Clean any excess wax or soap from exposed area of the support.
4. Apply pressure on both sides of the pad to ensure good conduct between the surface of the support and the pads.