

hipGRIP II™

POSITIONING SYSTEM

**Design Rational
Technical Instructions**

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hipGRIP II™

Description

The **hipGRIP II™** is a system to hold a surgery patient on the operating room table in the lateral position also referred to as the lateral decubitus position. The principle is to use **boney prominences** to support the pelvis and the chest in the lateral decubitus position. The supportive surfaces are covered with a closed cell foam that conforms to the boney prominences. The foam surfaces are covered with disposable cotton fabric.

Anteriorly, the **hipGRIP II™** supports the symphysis pubis and the down side anterior superior iliac spine. The posterior pelvis support is placed over the sacral area and the two posterior superior iliac spines.

The anterior pelvis support has an improved design for use in obese patients. An improved angle bar can be used to position the patient for anterior hip surgery techniques. The anterior and posterior chest supports keep the trunk/upper body in the lateral position and allows the table to be rolled without loss of position relative to the operating table.

The **hipGRIP II™** allows firm support without pressure over vital organs.



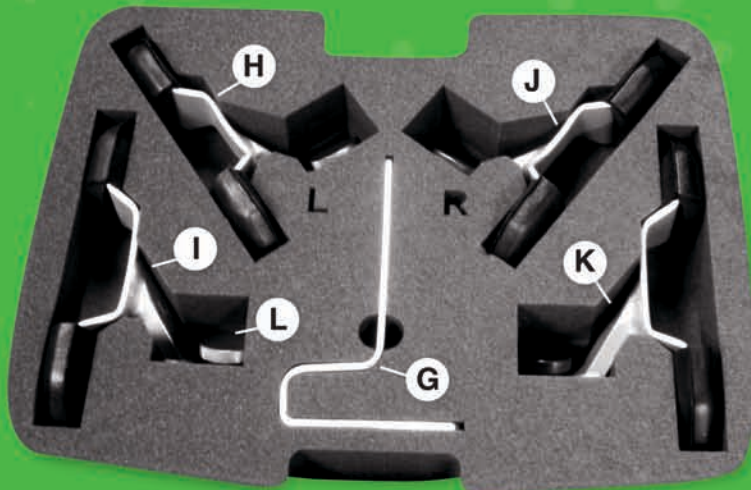


hipGRIP II™

CARRYING CASE & PARTS DIAGRAM

BOTTOM LEVEL

- A** Thumb Screws (4 total)
- B** Angle Bars (2 Small, 2 Medium & 2 Large)
- C** 10" Upright Supports (2 total) + Foam Pads
- D** 8" Upright Support + Foam Pad
- E** 7" Upright Support + Foam Pad
- F** Coversets (6 "Set-Ups")



TOP LEVEL

- G** Anterior Pelvic Support Bar
- H** Small Anterior Pelvic Support "Left" + Foam Pads
- I** Large Anterior Pelvic Support "Left" + Foam Pads
- J** Small Anterior Pelvic Support "Right" + Foam Pads
- K** Large Anterior Pelvic Support "Right" + Foam Pads
- L** Thumb Screws (4 total)

Indications

The **hipGRIP II™** system is designed to hold a patient on an operating room table in the lateral decubitus position for hip, pelvis, flank, bariatric or shoulder surgery.

Contraindications

The **hipGRIP II™** 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.

The system relies on a relatively normal relationship between the chest and the pelvis.

The **hipGRIP II™** may not work well if there is significant pelvis, chest or spinal deformities.

Precautions

Application of the **hipGRIP II™** system requires a working knowledge of anatomy, especially the bony pelvis and the vital structures about the pelvis. The **hipGRIP II™** must be placed over 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, spine and chest anatomy.

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

Disclaimer

SunMedica is not responsible for injury or harm as a result of misuse or abuse of this product.

Call SunMedica for any questions regarding proper use at **1-800-995-8715** or visit **www.sunmedica.com** to view additional information.

DIRECTIONS FOR USE

Patient Position:

The patient is placed on their side in the direct lateral decubitis position. Appropriate padding is placed under the proximal down chest such as an axillary gel pad to prevent pressure on the axillary structures. The down side of the lower extremity should also be padded to prevent pressure over structures such as the peroneal nerve and the lateral malleolus.

Positioner Preparation:

The **hipGRIP II™** 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 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 desired surgical technique (usually anterior or posterior).

STEP 2

Posterior Pelvis Upright Support

STEP 3

Anterior Pelvis Support

STEP 4

Chest Supports: Posterior Chest Support

STEP 5

Chest Supports: Anterior Chest Support

STEP 6

Then, slide the Posterior Pelvis Support toward the patient to tighten the grip on the pelvis.



Figure 1

STEP 1:

Justify the Patient

Justify the patient on the operating table for the desired surgical technique (*Usually Anterior or Posterior*) See Figure 1.



Figure 1

Patient positioned in the Anterior or Posterior approach seen above.

STEP 2:

Posterior Pelvis Upright Support

The appropriate size Upright Support is chosen. The small size (7") is most commonly used.

Small Angle Bar - 4" x 8": is used for the patient that is justified to have the posterior of the patient close to the surgeon (such as in a *posterior approach* to a hip replacement). See Figure 2.

Large Angle Bar - 6" x 8": is used for a patient that is justified to have the anterior aspect of the pelvis close to the surgeon (such as in an *anterior approach* to a hip replacement). See Figure 3.

Figure 2



Figure 3



STEP 2: *(Continued)*

Posterior Pelvis Upright Support

The “?” bar can be used to bring the patient to the edge of the operating room table.
See Figure 4.

The **Upright Support** is placed to contact the bony prominences of **both** of the posterior superior iliac spines and the sacrum. See Figure 5. Even though the support is to contact the up side 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**.

Figure 4

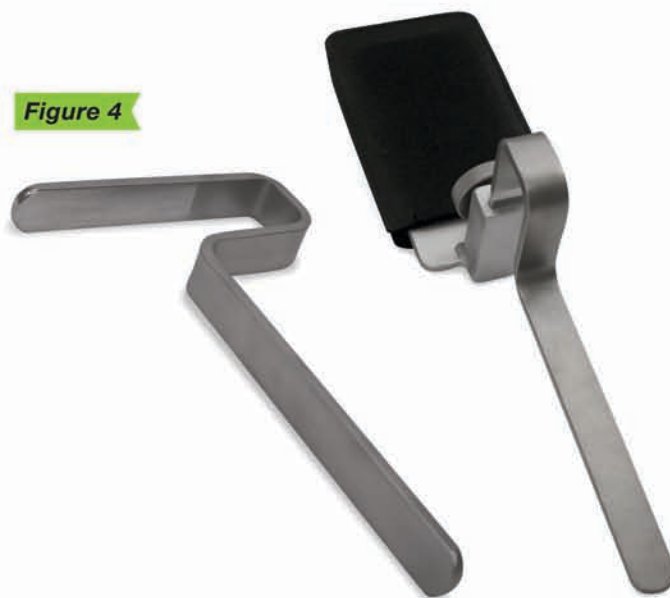


Figure 5



STEP 2: *(Continued)*

Posterior Pelvis Upright Support

After appropriate positioning of the posterior pelvis **Upright Support** (See Figure 6), fix the **Angle Bar** to the operating table using a bar clamp (not provided). See Figure 7.

Tighten the **Thumb Screw** that holds the **Upright Support** to the Angle Bar. See Figure 8. The **Thumb Screw** on the **Upright Support** is left loose at this time. This will be readjusted (firmed up) after the Anterior Pelvis Support is placed.



STEP 3:

Anterior Pelvis Support

The **Anterior Pelvis Support** (See figure 9) has an angled shape that is designed to support the bony prominences of the **DOWN** side anterior superior iliac spine and the symphysis pubis. The design also angles away from the patient and has a low profile to allow space for the neurovascular structures of the down side groin and the protuberant abdomen. See Figure 10.



Figure 9

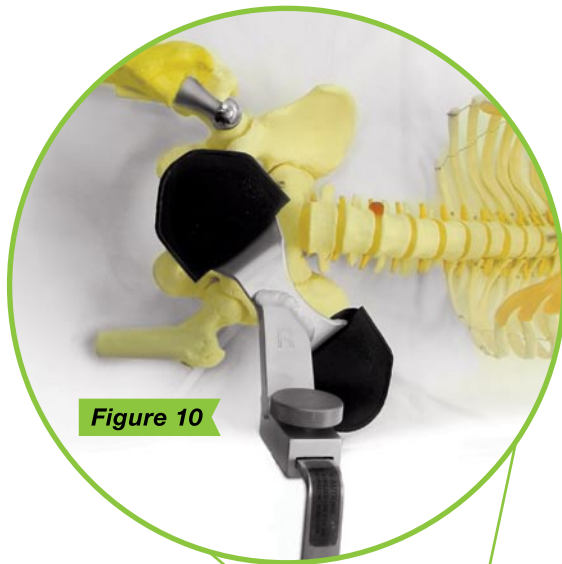


Figure 10



STEP 3: (Continued)

Anterior Pelvis Support

This device has right and left anterior pelvis supports. Make sure that the correct support is selected. The designation on the support (R or L) indicates the up side i.e. the side to be operated. See Figure 11.

It is imperative that this positioner be applied over the bony prominences to avoid pressure over vital structures. Do not apply the supportive pads directly over the abdomen.

Select the **Anterior Pelvis Support** to best fit the patient. The padded portions of the support should be squarely over the bony prominences of the down side anterior superior iliac spine and the symphysis pubis as described above. A majority of patients will utilize the small Anterior Pelvis Support, even if they are obese. The sizing of the Anterior Pelvis Support can be accomplished with the patient supine (on their back) prior to turning into the decubitus position (up on their side). An AP pelvis x-ray can also be used if the magnification is close to 100%.

Assemble the Anterior Pelvic Support with the correct angle bar. If the patient has been justified for the posterior hip approach, then use a large angle bar. This places the posterior aspect of the pelvis close the edge of the operating table (close to the surgeon). See Figure 12.



Figure 11

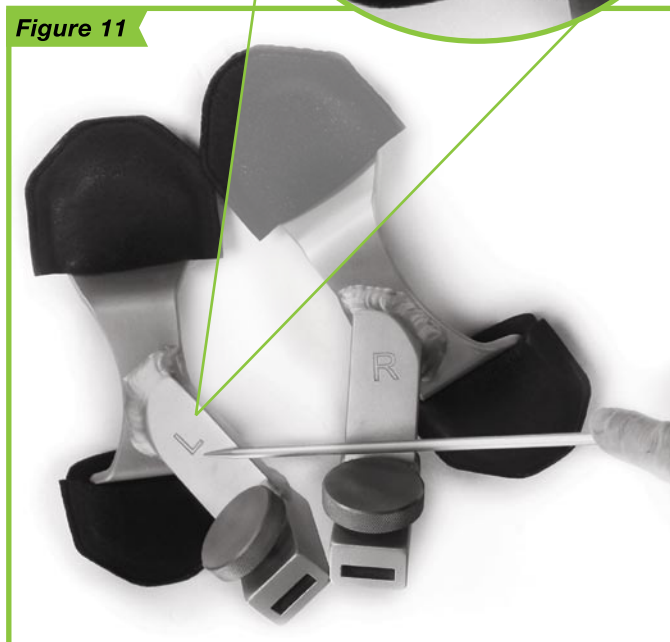


Figure 12





Figure 13

Featuring the “? Bar”
attached to table

STEP 3: *(Continued)* **Anterior Pelvis Support**

If the patient has been justified for the anterior hip approach, then use a small Angle bar (or even the “?” bar). This places the anterior pelvis close to the edge of the operating table (close to the surgeon). See Figure 13.

Place the Angle Bar through the slot of the Anterior Pelvis Support, then place the Angle Bar into the bar clamp of the operating room table (not provided).

Palpate the bony prominences of the down side anterior superior iliac spine and the symphysis pubis. Adjust the height of the Anterior Pelvis Support so that it squarely engages these bony prominences. See Figure 14.

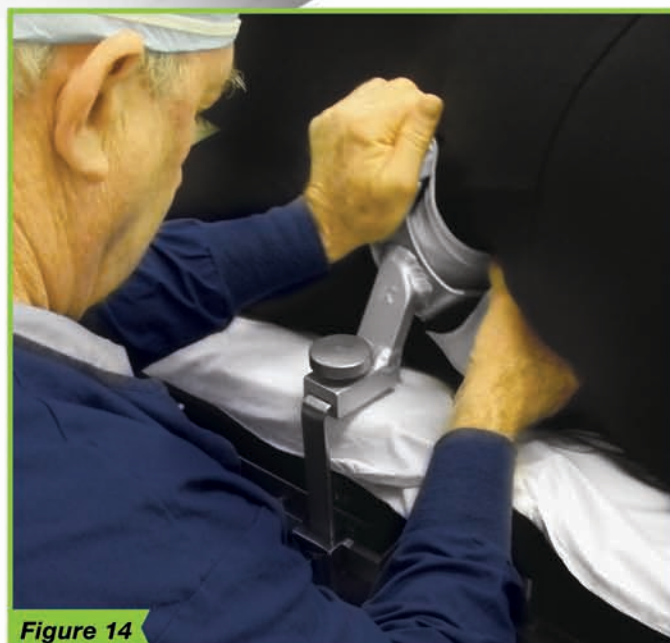


Figure 14

Featuring the “Angle Bar” attached to table

STEP 3: *(Continued)*

Anterior Pelvis Support

Make sure that the support does not rest on any soft tissue structures such as the bladder, the neurovascular structures of the groin or the penis in male patients. **In obese patients the pendulous abdomen will need to be lifted up and then the Anterior Pelvis Support placed.** If the abdomen “drapes” over the Anterior Pelvis Support, then place a towel or padding so that the skin doesn’t touch the metal of 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. See Figure 15.

Tighten the bar clamp firmly to the operating room table and then tighten the thumb screw on the support. Final pelvis tightening is generally done using the **Posterior Pelvis Support** as described below.

STEP 4:

Chest Supports:

Posterior Chest Support

The **Posterior Chest Support** 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 16.

STEP 5:

Chest Supports:

Anterior Chest Support

The **Anterior Chest Support** 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 17.

Figure 15

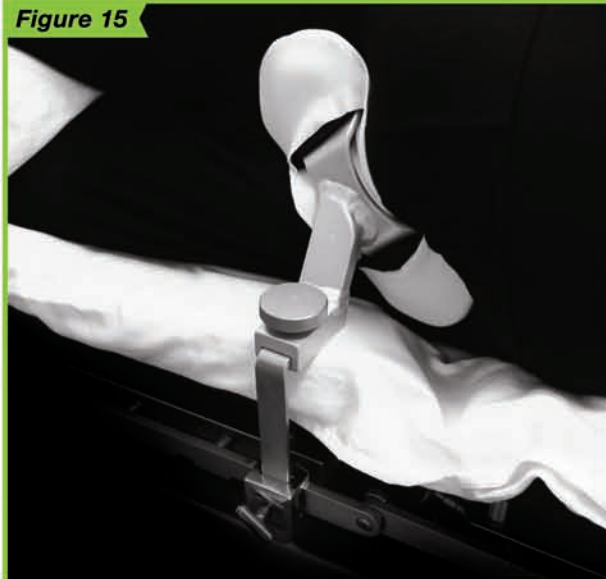


Figure 16



Figure 17



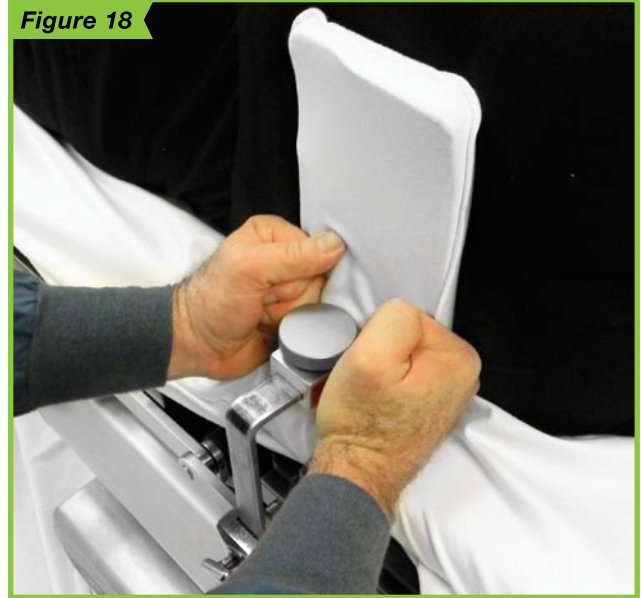
STEP 6:

Final Tightening

Check the position of the pelvis and chest. If satisfactory, then slide the **Posterior Pelvis Support** inward by pushing with both hands low on the upright to firm the grip on the pelvis. See Figure 18. Tighten the thumb screw to secure the **Posterior Pelvis 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.

Figure 18



Note

The pelvis in some female patients is relatively larger than the chest and the pelvis tends to rotate in the coronal plane. If this occurs the upper body (chest) can be supported a few inches higher than the pelvis (such as on a folded blanket). This will allow the spine to straighten and the pelvis to be at right angles to the table in the coronal plane. The positioners may not work well with abnormal pelvis or spine anatomy and discretion is advised.

CLEANING INSTRUCTIONS

The **hipGRIP II™** 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 II™** Coversets.

Clean the **hipGRIP II™** after each operative procedure and before returning parts to the storage case.

What are Coversets?

Coversets (Figure 19) are latex-free and are made of mostly 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 II™ Coversets Item# D-030-048:

Sold by the box/case. Includes 25 "Set-ups". Each "Set-up" 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.

Metal Parts

The metal parts can be cleaned with soapy water, alcohol, standard operating room cleaners or even steam cleaned.



Figure 19



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.



Figure 1

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.

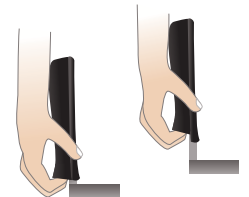


Figure 1

To Replace:

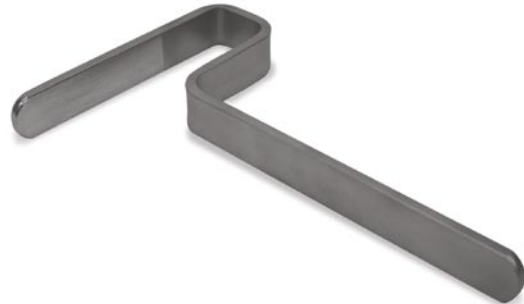
1. Rub SOAP OR WAX on the edges of the Upright Support.
2. Pull NEW FOAM PADS onto the Upright Support, like placing a stocking on a foot, ie; grasp open end and pull over support. See **Figure 1**. THICK PART OF THE PAD MUST BE ON THE SIDE CONTACTING THE PATIENT.
3. Clean any excess wax or soap from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

hipGRIP II™

Works Well With Obese Patients

ORDER #	REFERENCE	DESCRIPTION
D-030-200	A	hipGRIP II™ Complete Set (Includes hipGRIP® Parts) <ul style="list-style-type: none"> • 1-Small "Right" & "Left" Anterior Pelvic Support + Foam Pad • 1-Large "Right" & "Left" Anterior Pelvic Support + Foam Pad • 8-Thumb Screws • 1-7", 1-8", & 2-10" Upright Supports + Foam Pad for each • 2-Small, 2-Medium, 2-Large Angle Bars • Coversets (1 Case/25 Set-ups) Each Set-up includes 3-Upright Support covers and 1-Anterior Pelvic Support cover • 1-Carrying Case
D-030-041	B	hipGRIP II™ Small Anterior Pelvic Right Support (8") (Comes with pads)
D-030-042		hipGRIP II™ Small Anterior Pelvic Left Support (8") (Comes with pads)
D-030-043		hipGRIP II™ Large Anterior Pelvic Right Support (9") (Comes with pads)
D-030-044		hipGRIP II™ Large Anterior Pelvic Left Support (9") (Comes with pads)
D-030-006		hipGRIP® Anterior Pelvic Support Foam Pads (2)
D-030-011	C	hipGRIP® Thumb Screw
D-030-021	D	hipGRIP® 7" Upright Support (Comes with pad)
D-030-022		hipGRIP® 8" Upright Support (Comes with pad)
D-030-023		hipGRIP® 10" Upright Support (Comes with pad)
D-030-024		hipGRIP® 7" Upright Support Foam Pad
D-030-025		hipGRIP® 8" Upright Support Foam Pad
D-030-026		hipGRIP® 10" Upright Support Foam Pad
D-030-027		hipGRIP® Upright Support Foam Pad Set (4): (1-7", 1-8", & 2-10")
D-030-031	E	hipGRIP® Small Angle Bar (4" x 8")
D-030-032		hipGRIP® Medium Angle Bar (5" x 8")
D-030-033		hipGRIP® Large Angle Bar (6" x 8")
D-030-034		hipGRIP® XLarge Angle Bar (8" x 8") (Optional)
D-030-045	F	hipGRIP II™ Upright Support Bar - (? bar)
D-030-047	G	hipGRIP II™ Carrying Case <i>Featuring pull-out handle and rolling wheels</i>
D-030-048	H	hipGRIP II™ Coversets (1 Case/25 Set-ups) Each Set-up includes 3-Upright Support covers and 1-Anterior Pelvic Support cover (R or L)
D-030-061		hipGRIP® Anterior Pelvic Support (R or L) Coversets (1 Case/25 Set-ups) Each Set-up includes 1-Anterior Pelvic Support cover

View current pricing at www.sunmedica.com

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