



Formerly  
**Rehab Systems**

427 N. Curtis Road ■ Boise ■ Idaho ■ 83706  
P (208) 342-4104 ■ F (208) 342-4106

542 Addison Ave. W. ■ Twin Falls ■ Idaho ■ 83301  
P (208) 736-7330 ■ F (208) 736-7332

## **Wear and care of a Prosthesis – Vacuum**

---

The prosthesis requires proper care and maintenance in order to prevent breakdown or faulty performance. The following are general guidelines and suggestions to help you care for your prosthesis daily.

**Wearing time** - The patient should wear the prosthesis at home, approximately \_\_\_\_\_ times per day, for \_\_\_\_\_ hour/s, each time for the next two weeks. This time should consist primarily of sitting and some standing. Gradually increase this time.

**Skin Checks** - Check the condition of the skin on the residual limb frequently. The patient should be sitting comfortably, with the residual limb relaxed (and prosthesis removed). Check for redness or sock marks, especially on boney areas. Some redness is normal. If redness does not dissipate in less than thirty minutes then closely watch the area and contact your Prosthetist if needed. If you can't see the end or back of your residual limb to check the skin, use a mirror.

If you have reduced or no sensation in your residual limb, check your limb more frequently during the day and don't put it in hot water, or expose it to the sun, as this can cause it to burn and blister.

\*Note redness may occur and could possibly be due to the patient wearing too many socks, and in some cases patient may need a re-assessment by the Prosthetist.

**Skin Care** – The skin on the residual limb must be cared for to prevent irritation, skin breakdown, and infection. Daily cleansing of your residual limb with mild soap is suggested. Pat your skin dry with a soft towel. Allow your limb to dry completely before donning your prosthesis. This will reduce risk of infection and abrasion. Be sure to rinse your liner thoroughly after cleansing to prevent any soapy residue. Shaving hair on the residual limb is discouraged because it can lead to ingrown hairs.

Skin breakdown is often the first sign that your prosthesis needs an adjustment. Sometimes it can be remedied by applying lubricant to your residual limb or adding or removing a prosthetic sock. Anything unusual, persistent, or painful should be promptly evaluated by a health care professional.

**Transtibial (Below Knee) Amputation** – Never sit or sleep with a pillow under your knee, as this will lead to a contracture (inability to straighten the knee.) Do stretching exercises daily to make sure that you can straighten your knee; this makes walking, and lying in bed, more comfortable.

**Transfemoral (Above Knee) Amputation** – Do NOT sleep with your limb resting on a pillow, as this promotes a hip flexion contracture (inability to completely straighten you hip). Do NOT sleep with a pillow between your legs, as this lengthens the inner thigh muscle that helps you keep your legs together when you walk, and shortens the outer thigh muscles so that you walk and stand with your feet apart. Do stretching exercises daily to make sure that you can straighten your hip; this makes walking, and lying in bed, more comfortable.

**Socks** - You will probably need to increase or decrease the number depending on the following: atrophy, edema, systemic fluid change, weight gain/loss, and/or wearing time or activity level. The number of socks worn may vary during the day or even during one physical therapy session, as swelling changes throughout the day as well as on a daily basis. This means your limb will be different sizes at different times of the day, and may be bigger or smaller the following day. Your prosthesis does not change, therefore, you must use socks to take up the space inside your socket. Socks have different thickness levels: 1, 2, 3, 5 and 6 ply. Any combination of socks can work. You can wear more than one at a time if your limb is less swollen. It is okay to wear just the liner and no socks. Remember that over time prosthetic socks will compress, so thickness will not remain the same. Improper sock ply can cause sores and discomfort on your limb. Make sure not to pull the socks up to high, to where the vacuum system is prevented from sealing due to the sock. Make sure the top of the sock is below the level where the vacuum seals off on the liner. Sometimes your Prosthetist will need to make an adjustment by adding a pad in a certain area to tighten the fit of your prosthesis.

If you use prosthetic socks wear fresh socks frequently. Wash the prosthetic socks regularly in mild soap and lukewarm water. Rinse thoroughly. Do NOT place wool socks in the dryer. Dry flat.

**Care of liner** – Clean the liner daily by using warm water and a mild soap. Rinse well. Do NOT use soaps with perfumes or dyes. Do NOT use antibacterial soap. Air dry or pat dry with paper towel or lint free cloth, do not put liner in clothes drier. Liner should NOT be left inverted after cleaning. Dry with the fabric side out on liner stand provided so lint, hair, dust, etc. doesn't adhere to your liner. If you have 2 liners. Rotate use daily. Inspect periodically for signs of wear (i.e. fabric/gel separation, cracks, or holes). Notify Rehab Systems as soon as your liners start to show signs of wear.

**Donning of the liner** – Invert the liner so that the gel is facing out. Roll it onto the residual limb making sure no air is trapped in the liner, and that there are no wrinkles or folds in the liner. Proper placement of liner while donning should be discussed with your Prosthetist.

**Socket** – Clean with a sponge or soft cloth and a little mild soap. Dry completely before wearing. DO NOT use water or liquid on electric components!

**Valve** - If you have a valve: Clean the threads of the valve frequently with a damp toothbrush. Do not take the valve apart. Avoid using excessive powder when putting the prosthesis on, as this can clog the valve. If there should be any malfunction of the valve, take it to your Prosthetist. Do not attempt to repair the valve.

**Sleeves** – These may be hand washed and air dried. Inspect your suspension sleeves for holes. Holes can make your prosthesis function improperly. Sleeves tend to stretch out and wear out over time.

**Vacuum** - When air is removed the user will feel a pulling on the skin or tightness of the socket. Sometimes it is hard to tell if the feeling is caused by a void in the socket or too much pressure. If there is a void, water blisters may develop on your residual limb. First determine if you are wearing the correct prosthetic sock ply. If there is too much pressure on the bottom you may need to add socks. If there is a void you may need to reduce sock ply or have your Prosthetist add a pad.

If you experience loss of vacuum first check your sleeve. Make sure that it is sealing properly and does not have any holes. You may need to visit your Prosthetist for evaluation of your vacuum system to ensure that it is working appropriately.

**Footwear** - Don't vary the height of the heel of your shoes from the height which you were fitted with, this can disrupt the alignment of the prosthesis. Shoes should be kept in good repair, particularly the heels. Shoes may be changed as long as the soles have the same heel to toe difference. Using a shoe that is too flat or too tall can make your prosthesis function differently. This could lead to a fall if you have poor eyesight, poor balance, limited sensation, weakened muscles, etc. It is best for your Prosthetist to check out a new shoe before your wear it to make sure it is appropriate.

**Water** – In general, it is best not to get your prosthesis wet. Always check with your Prosthetist before using your prosthesis in or around water. For most prostheses, water will not damage the device, but it can cause the components to break down faster and corrode. If your prosthesis does get wet, be sure to use a towel and dry it off as much as possible, then leave it off in a well-ventilated area so it can air dry completely. If your prosthesis is exposed to salt-water, pools, or other “dirty” water, be sure to flush it completely with fresh water as soon as possible before drying it. This will help to prevent corrosion as much as possible. You may need to remove the foot shell and spectra sock off of the prosthetic foot to clean and dry it completely. **NEVER GET ELECTRIC COMPONENTS WET.** If you are concerned or you believe the prosthesis has had water damage contact your Prosthetist.

**Dirt/Sand** – Dirt and sand can be difficult to clean – especially from the foot shell. Turning the prosthesis upside down and knocking the debris out of the foot shell is easy to do at home. If you still notice a grinding or squeaking sound, it will be best to remove the foot shell and spectra sock for a full cleaning. Schedule an appointment and we can clean it for you, or your Prosthetist can walk you through the process so you can do it on your own. Your prosthetic foot should be inspected by your Prosthetist regularly.

Do not attempt to repair, adjust, or modify the prosthesis in any way. Contact your Prosthetist with any problems, concerns, or questions.

It is VERY important to keep all follow up appointments made by your Prosthetist. Schedule an appointment with your Prosthetist if any unexpected problems occur. If you are experiencing any pain or discomfort related to the fit of your prosthetic system we encourage you to contact our office immediately.

A prosthesis is a specialized mechanical device and as such requires regular maintenance and care. If there is any unusual sign (visible, audible, or functional) it should be inspected by a Prosthetist as soon as possible. You should inspect your prosthesis daily for any unusual wear, rough areas, cracks, tears, or other damage. These may be a sign of excessive wear or may indicate potential failure of the device, causing an unsafe situation. If any problems are noted, you should contact Rehab Systems immediately and stop using the device if you feel there is any chance it is unsafe.

---

Signature

---

Date