Application Quick Reference GUIDE

Please refer to detailed Instructions for Use provided with the device.
Since its introduction, V.A.C.® Therapy has changed the way wounds are healed. V.A.C.® Therapy promotes wound healing through Negative Pressure Wound Therapy (NPWT). Delivering negative pressure at the wound site through a proprietary dressing helps draw wound edges together, remove infectious materials, and actively promote granulation at the cellular level.

The Vacuum Assisted Closure® (V.A.C.®) Therapy System can help heal many wound types, including:

- Degloving
- Severe abscess
- Traumatic wounds
- Infected lacerations
- Chronic wounds
- Incisions with risk of complications
- Ulcers
- Flaps and grafts

**Important:** For additional information and detailed instructions for use, please refer to the V.A.C.® Therapy for Veterinary Use User Guidelines.

**US Customers:** For questions or to schedule an in-service, please call or visit:
877-KCI-4VET (877-524-4838) | www.kcianimalhealth.com

*Bibliography available on request at pubsmgt@kci1.com*
1. Closely clip hair using a #40 clipper blade (or equivalent) to provide a minimum 5-7 cm margin of skin around the wound (Fig. A).

2. Surgically prep periwound area and dry completely (Fig. B). Note: Use of skin prep and skin adhesive is highly recommended to ensure dressing seal integrity (e.g.: Benzoine Tincture + Hollister Spray Adhesive for companion animals, Benzoine Tincture + Nasco Tag Cement for large animals)

3. Debride wound and perform thorough wound and periwound area cleaning (Fig. C).

4. Ensure adequate hemostasis has been achieved.

5. Protect vessels or organs (if applicable). Note: Use of a thick layer of natural tissue should provide the most effective protection. If a thick layer of natural tissue is not available or is not surgically possible, multiple layers of fine-meshed, non-adherent material (Adaptic® [Systagenix] or Mepitel® [Mölnlycke Health Care]) may be considered as an alternative, if deemed by the treating veterinarian to provide a complete protective barrier.

6. Apply adhesive for film dressing (Fig. D).
1. Cut V.A.C.® Foam Dressing to size that will allow foam to fit wound without overlapping intact skin. Do not cut foam over the wound, as fragments may fall into the wound (Fig. A).

2. Gently place foam into wound cavity, ensuring contact with all wound surfaces (Fig. B). Record the number of foam pieces on dressing or in patient chart.

3. Trim as necessary and apply V.A.C.® Drape over the V.A.C.® Foam Dressing and periwound area (Fig. C–G). Ensure a minimum of 5-7 cm from wound edges is covered with V.A.C.® Drape.

4. Choose pad application site. Choose a placement that will allow for optimal fluid flow/reduce chances of kinking tubing. Avoid placement of pad over bony prominences or within creases in tissue.

5. Pinch drape and cut 2.5 cm hole (approximately size of a US quarter) through the drape (Fig. H–I).

6. Apply SensaT.R.A.C.™ / T.R.A.C.™ Pad over the 2.5 cm hole and remove support backings (Fig. J–L).
Apply:

STEP 2: Multiple Wounds – Foam Bridge

1. Place foam dressing in both wounds (Fig. A).

2. Cover both wounds and intact skin between the two wounds with a piece of V.A.C.® Drape or other transparent film or a vapor-permeable adhesive film dressing (Fig. B).

3. Cut holes in drape (approximately 2.5 cm) centered over each dressing (Fig. C).

4. With an additional piece of foam, form the bridge. All foam pieces must be in direct contact with each other (Fig. D).

5. Apply upper drape over bridge foam (Fig. E).

6. Cut hole (approximately 2.5 cm) in upper drape, centered between dressings (Fig. F). It is important to place the hole in a central location to ensure that exudate from one wound is not drawn across the other wound.

7. Place the SensaT.R.A.C.™ / T.R.A.C.™ Pad (Fig. G) over the 2.5 cm hole. Consider orientation of the canister tubing in terms of therapy unit location or patient mobility.
STEP 2: Apply

Multiple Wounds – Y-Connector

1. Place foam dressing in both wounds (Fig. A).

2. Cover both wounds with a piece of V.A.C.® Drape or other transparent film or a vapor-permeable adhesive film dressing (Fig. B).

3. Cut hole (approximately 2.5 cm) in each drape, centered between dressings (Fig. C). It is important to place the hole in a central location to ensure that exudate from one wound is not drawn across the other wound.

4. Place a SensaT.R.A.C.™ / T.R.A.C.™ Pad over each 2.5 cm hole (Fig. D). Consider orientation of the canister tubing in terms of therapy unit location or patient mobility.

5. Connect SensaT.R.A.C.™ / T.R.A.C.™ Pad to Y-connector (Fig. E).

6. Initiate therapy by connecting Y-connector to unit (Fig. F).

- Do not connect infected wounds with non-infected wounds through a Y-connector.
- Do not connect wounds with different etiology in which cross-contamination may occur.
- Avoid using a Y-connector to connect wounds that would be optimally treated with differing pressure settings.
- Consider the Y-connector as an extension of canister tubing.
- It is not recommended to use more than one Y-connector or to use on grafts and/or flaps.
- Make sure to verify that the dressings on both sides of the Y-connector are collapsed and wrinkled after negative pressure is applied.
- Please be advised that when using a Y-Connector, pressure is only measured at one of the wound sites.
1. Place drape under extremity with adhesive side up (Fig. A).

2. Place foam dressing in the wound (Fig. B).

3. Overlay a separate piece of V.A.C.® Drape with adhesive side down over the wound, intact skin, and existing drape from Step 1 (Fig. C).

4. Pinch drape and cut a hole (approximately 2.5 cm) in the drape over the V.A.C.® Foam (Fig. D).

5. Place the SensaT.R.A.C.™ / T.R.A.C.™ Pad (Fig. E) over the 2.5 cm hole. Consider orientation of the canister tubing in terms of therapy unit location or patient mobility.

6. Trim excess V.A.C.® Drape as necessary (Fig. E).
1. Protect intact epithelium on both sides of the suture line with V.A.C.® Drape or other transparent film ("picture frame" the suture or staple line), leaving the suture line exposed. Ensure adhesive does not contact the surgical closure (Fig. A–B).

2. Lay a single layer of a wide-meshed, non-adherent material over the exposed sutures or staples (Adaptec® or Mepitel® may be considered as an alternative) (Fig. C).

3. Cut a strip of V.A.C.® GranuFoam™ Dressing and gently place on top of the non-adherent material (Fig. D).

4. Cover the foam with V.A.C.® Drape, ensuring drape covers at least a 3 cm to 5 cm border of periwound tissue (Fig. E).

5. Pinch drape and cut a 2.5 cm hole, not a slit, through the drape (Fig. F). The hole should be large enough to allow for removal of fluid and/or exudate. It is not necessary to cut into the foam.

6. Apply the SensaT.R.A.C.™ / T.R.A.C.™ Pad over the 2.5 cm hole and connect to canister tubing (Fig. G).
Apply: Flaps

1. Suture the flap in place using about a third fewer sutures than usual. The greater spacing will allow V.A.C.® Therapy to remove fluid through the suture line.

2. Place a single layer of V.A.C.® Drape or other semi-occlusive barrier, dressing, or vapor-permeable adhesive film dressing over the intact epidermis on top of the flap and on the opposite side of the suture line (Fig. A).

3. Place a single layer of wide-meshed, non-adherent dressing over the exposed suture line (Fig. B).

4. Select an appropriate size of V.A.C.® GranuFoam™ Dressing to cover the entire flap (Fig. C), including the suture line, and 2 cm to 3 cm beyond the flap. Ensure the area covered by the foam is protected, intact skin.

5. Prepare and apply the V.A.C.® Drape over the foam (Fig. D).

6. Pinch drape and cut a 2.5 cm hole, not a slit, through the drape (Fig. E). The hole should be large enough to allow for removal of fluid and/or exudate. It is not necessary to cut into the foam.

7. Apply a SensaT.R.A.C.™ / T.R.A.C.™ Pad over the 2.5 cm hole and connect to canister tubing (Fig. F).

• Only use continuous mode on negative pressure setting.
• Dressing change interval can increase to every 5 days.
1. Select a single layer of wide-meshed, non-adherent material (Fig. A).

2. Cut the non-adherent material to the size of the grafted area, plus a 1 cm border (i.e., so it extends about 1 cm outside the staple line) and place over the graft (Fig. B).

3. Cut the V.A.C.® GranuFoam™ Dressing to the same size as the non-adherent material and place it gently on top of the non-adherent layer (Fig. C).

4. Prepare and apply the V.A.C.® Drape over the foam (Fig. D).

5. Pinch drape and cut a 2.5 cm hole, not a slit, through the drape (Fig. E). The hole should be large enough to allow for removal of fluid and/or exudate. It is not necessary to cut into the foam.

6. Apply a SensaT.R.A.C.™ / T.R.A.C.™ Pad over the 2.5 cm hole and connect to canister tubing (Fig. F).

- Only use continuous mode on negative pressure setting.
- Dressing change interval can increase to every 5 days.
STEP 2: Apply Orthopedic Hardware

1. Place appropriate V.A.C.® Dressing in the wound (Fig. A–C).

2. Cut V.A.C.® Drape or other transparent film to appropriate size and place over wound and around pins. Wrap the V.A.C.® Drape around pins approximately 1 cm to 2 cm above the level of the wound, ensuring a snug fit. Apply additional V.A.C.® Drape vertically up and around pins and onto V.A.C.® Drape surrounding the pin. Do this from both sides of the pin (Fig. D–F).

3. Pinch drape and cut a 2.5 cm hole, not a slit, through the drape (Fig. G). The hole should be large enough to allow for removal of fluid and/or exudate.

4. Apply a SensaT.R.A.C.™ / T.R.A.C.™ Pad and connect to canister tubing (Fig. H).
STEP 3: Initiate

1. Connect SensaT.R.A.C.™ / T.R.A.C.™ Pad tubing to canister tubing and ensure clamp on each tube is open. Position clamps away from patient and ensure canister is securely attached to therapy unit (Fig. A). If you’re bridging with a Y-connector, see Fig. B.

2. Turn on power and select prescribed therapy setting.

3. Initiate V.A.C.® Therapy. Assess dressing to ensure seal integrity.
Troubleshoot

Maintaining a Seal:
Maintaining a seal around the dressing is key to successful V.A.C.® Therapy. Recommendations to maintain the integrity of the seal:
1. Use Benzoin Tincture or Hollister Medical Adhesive Spray.
2. Dry the periwound area thoroughly after cleansing. A protective skin barrier preparation may be used to prepare the skin for drape application.
3. For delicate periwound tissue or in areas that are difficult to dress, apply protective skin preparation and frame the wound with V.A.C.® Drape or other transparent film.
4. Ensure V.A.C.® GranuFoam™ is appropriate for the depth of the wound by either cutting or beveling it, or use specific thinner V.A.C.® GranuFoam™ Dressings where indicated.
5. Position the dressing tubing on flat surfaces and away from the perineal area, bony prominences, or pressure areas.
6. Secure or anchor the tubing with an additional piece of drape or tape, positioning the anchor several centimeters away from the dressing or wound. This prevents tension on the tubing from pulling on the dressing. If secured directly to the dressing, tension on the tubing may interrupt the dressing seal.

Ensuring Dressing Integrity:
It is recommended that the dressing be checked every two hours to ensure that the foam is firm and collapsed in the wound bed while therapy is active. If it is not:
1. Make sure the therapy unit display screen reads THERAPY ON.
2. Confirm the clamps are open and the tubing is not kinked.
3. Identify air leaks by listening with a stethoscope or moving your hand around the edges of the dressing while applying light pressure.
4. If the seal is broken and the V.A.C.® Drape has become loose, trim away any loose or moist edges, ensure the skin is dry, and then patch with additional drape to ensure seal integrity.

Dressing Change Interval:
Wounds being treated with the V.A.C.® Therapy System should be monitored on a regular basis. In a monitored, non-infected wound, V.A.C.® Dressings should be changed every 48 - 72 hours maximum, but no less than 3 times/week, with frequency adjusted by the veterinarian as appropriate. First dressing application should be maximum 48 hours to assess granulation rate. Subsequent dressing applications should be at the veterinarian’s discretion, but no longer than 72 hours. For infected wounds, dressing may need to be changed more frequently. For flaps and grafts, the dressing can be changed every 5 days.
**Alarm Troubleshooting:**
Review the device-specific instructions for troubleshooting system alarms. The device’s Quick Reference Guide can be found in the front pocket of the carrying case.

<table>
<thead>
<tr>
<th>Alarm Type</th>
<th>Notification</th>
<th>Remedy</th>
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<tbody>
<tr>
<td><strong>Canister full or tubing blocked</strong></td>
<td>V.A.C. Simplicity™ System: Visual indicator accompanied by an audible alarm.</td>
<td>Ensure tubing clamps are open. Check that tubing is kinked or pinched. Replace canister if full. Ensure canister is not in the upright position. V.A.C. Freedom® System: If foaming or bubbling in the canister is observed, insert a new canister, turn on therapy and allow the system to pull ~10ccs of an anti-foaming agent into the canister via the open nozzle in the canister tubing.</td>
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<tr>
<td><strong>Canister missing or tubing/dressing has leaks</strong></td>
<td>V.A.C. Simplicity™ System: Visual indicator accompanied by an audible alarm. V.A.C. Freedom® System: Visual indicator accompanied by an audible alarm. The initial audible alarm is 3 short beeps.</td>
<td>Pat around drape to check for leaks. If leak is identified, patch the leak with extra drape. Ensure T.R.A.C.™ Connector is properly locked. Ensure V.A.C.® Canister is fully engaged.</td>
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<tr>
<td><strong>Therapy is not active</strong></td>
<td>Visual indicator accompanied by an audible alarm.</td>
<td>Turn Therapy ON</td>
</tr>
<tr>
<td><strong>Battery is low</strong></td>
<td>Visual indicator accompanied by an audible alarm.</td>
<td>Connect unit to an AC power source to recharge the internal battery.</td>
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<tr>
<td><strong>Internal device error or internal memory error</strong></td>
<td>Visual indicator accompanied by an audible alarm.</td>
<td>Device is not operable. Disconnect device, remove dressing, and contact KCI.</td>
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Please reference the V.A.C.® Therapy for Veterinary Use User Manual for specific indications, contraindications, safety information, and detailed instructions for use.

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