

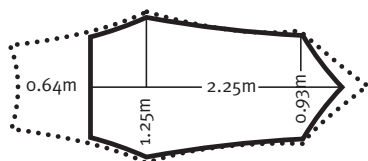
HUMMINGBIRD 2

This booklet tells you how to prepare, assemble, and maintain your new tent; please keep it for future reference. Set up your tent at home before your first trip; this will allow you to inspect it for any manufacturing defects, check that all parts are present, and learn the assembly procedure with minimal stress on the tent and on you.



Your Hummingbird 2 tent package includes:

- Tent body
- Tent fly
- 2 aluminum poles
- Tent pegs and two nylon guylines
- Aluminum pole repair sleeve
- Tent sack and pole sack



HUMMINGBIRD 2 Height inside .940m

 **MOUNTAIN
EQUIPMENT
CO-OP**

SEAM SEALING

The seams of your tent have been waterproof taped on all exposed seams. All features, such as Velcro® pole anchors and door tiebacks, have been welded onto the inside of the fly to avoid any small leak points. However, for extremely wet and windy conditions, you may want to re-seal selected parts of your tent. These include parts of the inner tent where condensation or windblown rain could potentially wick through, such as lantern loops or pole clip suspension points. You may also wish to seal the “in” side of any untaped floor seams exposed to ground moisture or rainfall. For seam sealing and tent repairs, we recommend a quality after-market polyurethane sealer such as McNett Seam Grip®.

SITE PREPARATION

Remove sharp objects that might puncture the tent floor.

A ground sheet beneath the tent is not necessary for waterproofness, but it will reduce long-term wear on the tent floor. A ground sheet should be cut or folded smaller than the tent floor to prevent water pooling between the floor and the ground sheet. Another light and convenient option is MEC's custom-made, coated nylon Footprint.

In winter conditions, we recommend digging out a platform with surrounding walls. To avoid melting depressions in the snow under the tent, pack the snow down solidly by ski or foot.



SET-UP

A note about shock-corded poles

Shockcord (bungee cord) is meant to keep pole sections in the proper order—not as an automatic assembly mechanism for poles. Do not hold one section while whipping the rest of the pole back and forth, or toss the poles into the air; either procedure excessively stresses the pole joints and shockcord. Instead, fit poles together section by section, making sure that each piece slides completely into the next. Forcing an improperly assembled pole into place can damage the pole and/or the tent body and fly.

Assembling the Tent

1 *Assemble both poles carefully as described in the previous paragraph. You will have two poles: a long front one and a shorter rear one.*

2 *Lay the inner tent out flat, with the mesh panels on top.* In windy conditions, you may wish to peg out the back end (the one without the door) before proceeding. Pegging the back end into the wind will make setting up the tent easier and make the assembled tent stronger.

3 *Lay the longer pole on top of the inner tent at the front end (the end with the door), running side to side. Plug the ends of the poles into the grommets at the corners of the tent floor.* There is more than one grommet on each webbing tab so that you can increase or decrease the tautness of the tent to compensate for fabric slackening or tightening caused by changes in humidity. When first erecting the tent, it is best to use the outermost (loosest) grommet on each tab.

4 *Clip the black plastic clips on to the pole, ensuring that the webbing holding the clips is not twisted.*

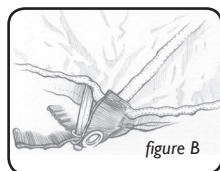
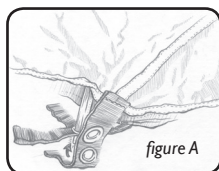
5 *Repeat steps 3 and 4 at the rear of the tent body, using the shorter pole.*

Attaching the Fly

If needed in rainy, snowy, windy, or cold conditions.

1 *If you have not already done so, peg out the tent's back end. Then peg out the two front points of the inner tent to lift the inner tent into shape. Spread the fly out over the tent with the door zipper/vent matching the door over the inner tent. If wind is likely, fasten the six Velcro® attachment loops on the underside of the fly to the poles (see Rigging for bad weather).*

2 Pop the four grommet tabs around the base of the fly onto the appropriate pole-ends, folding the tabs "out and over," as shown in figures A and B.



3 Slip the three fly anchor loops over the same pegs as used for the inner tent, then tension them all to adjust the "pitch" of the tent for the ground it's on. For best ventilation and dryness in damp weather, peg out the two short guypoints at the base of the fly sidewalls (adding short lengths of line to these points may make pegging easier).

Rigging for bad weather

The Hummingbird 2 has a number of guyline attachment points so you can rig it increasingly securely in response to actual or anticipated winds. Two guylines are supplied with the tent. Carry additional guylines if you anticipate using the tent in bad weather.

- If you have not already done so, fasten the fly directly to the poles using the six Velcro® loops on the inside of the fly (see Attaching the Fly, Step 1). Guy out the two black rubberized attachment points at the front of the tent and the attachment point at the top of the rear pole. To minimize the sidewalls flapping, guy out the attachment points that are half-way up each side of the fly. If the vestibule is facing into the wind, run a guyline from the attachment loop on the vent lip to brace it. Whichever attachment points you use should counter-balance one another for maximum stability and minimum stress on the tent. With extra pegs, you can peg the four bases of the poles, though this is necessary only in strong winds.
- The Hummingbird 2 is designed to offer three-season performance and extraordinary room at absolute minimum weight and packed bulk. To achieve this, it gives up some of the strength, snow-bearing ability, and wind-handling capacity of lower profile, heavier tents. Keep this in mind when selecting and preparing a tent site. (As with any tent, a little shelter provided by trees, rock, or snow walls will make for a quieter night's sleep under windy conditions.) Pitch the tent with the foot end into the wind for maximum stability.

Customizing the door arrangement

There is a peg loop on either side of the vestibule door zipper where it reaches the ground; by staking out one loop or the other, you can make the door centre-opening or side-opening to adapt it to the prevailing wind or local landscape features. The centre opening will provide best ventilation; the side opening provides maximum sheltered storage space, though it does require more crouching to enter or exit the tent.

Anchoring the Tent

The #7001-T6 aluminum stakes included with the tent are suitable for general use on relatively soft ground. However, in very hard-packed ground you will need stronger (and heavier!) stakes that can withstand the force needed to drive them in. On snow, sand, or other loose-packed surfaces, wider T-Stakes or aluminum snow stakes will hold better; these stakes hold best buried horizontally. You can also improvise with other "stakes" (hiking staffs, ice axes, branches, rocks, trees), using the tent's stake loops or cord as required.

When packing for your trip, consider the conditions you'll likely encounter and what sort of anchors you'll require. You can often leave several of the supplied pegs at home and replace them with improvised anchors, thereby saving weight and space in your pack.

Ventilating the Tent

Proper ventilation is the key to minimizing condensation in any tent. Keep fabric doors open as widely as the prevailing weather permits. If bugs or drafts aren't a problem, leave mesh doors open too. Crack each door open from the top down; warm, moist air rises and will escape through high openings. If the design of your tent allows for it, have openings at both ends or both sides of the tent to allow air to flow through for best ventilation. On very hot nights, when you are confident there will be no rain or dewfall, you can leave the flysheet off and use the inner tent alone as a "bug tent."

Disassembling the Tent

The most important consideration in taking down a tent is not to stress the poles and fabrics. First, disconnect guylines and release the tension from the tent. Next, release all the poles. If your tent has pole sleeves, push the poles out of the sleeves instead of pulling them out. To minimize the stress on the bungee cord in the poles and to speed disassembly, fold each pole in half first, and then fold down towards the outsides, two sections at a time.

Packing the Tent

If possible, fold and roll the tent rather than stuffing it into its sack—rolling makes a smaller package, and causes fewer creases in the polyurethane coating. The tent and poles may be carried separately for easier packing or load sharing. There are two drawcords on the tent sack. Use the lower one when carrying the tent separately from the poles; this makes a shorter package that fits sideways into a pack. If carrying the pole sack on the outside of a pack, securely attach the drawcord to the pack to avoid loss.



CARE AND MAINTENANCE

Protecting the Tent

Ultraviolet damage is the single largest hazard your tent faces in its lifetime. Fabrics should not be exposed to sunlight for extended periods of time; this will eventually result in colour fading and fabric failure. The uncoated fabrics of the tent canopy are most susceptible to damage from UV and should be covered by the more durable fly. If extended exposure is unavoidable, cover the tent with a tarp or a sheet of nylon.

Lighting your Tent

Using a candle lantern in a tent carries definite risks. Never leave a candle lantern burning unattended; always watch for fire hazard from overheating fabrics or spilling wax. Spilling wax can be dangerous, particularly to eyes and other sensitive areas. It is your responsibility to use candle lanterns wisely and with extreme caution: we do not endorse the use of any flame or heat source in a tent. Cooking in a tent is strongly discouraged because of fire hazards and carbon monoxide inhalation risks. Unlike campfire smoke and other fumes, which cause you to gasp for air, **carbon monoxide can render you unconscious without any warning.** 

Food in Tents

Mop up spills promptly with water. Many foods, particularly acidic ones like fruit or juices, can weaken synthetic fabrics over time. In any case it is best to eat and store food away from a tent to avoid attracting animals.

Cleaning

Clean the tent by hand while it is set up, using a sponge, a mild non-detergent soap, and warm water. Rinse thoroughly. Do not dry clean, machine wash, or machine dry. Stubborn stains like tar can be left in place and dusted with talcum powder to prevent transfer to other areas of the tent in storage. After cleaning, a spray-on water repellent designed for synthetic fabrics may be applied to the flysheet if surface water repellency is weakening. (This is apparent when water droplets no longer bead up on the fabric.)

If the poles are exposed to salt or salt water, rinse them in fresh water and allow them to dry before storing. (While aluminum does not rust, it can become brittle through unseen corrosion over time.)

Lubricating the Poles

Occasionally apply a light coating of a silicone-based lubricant like 303™ protectant to the tent pole connections. If the poles are used extensively in marine environments, treat them more frequently.

Storing your Tent

Dry the tent and poles completely before storage to avoid mildew or hidden pole corrosion. Store in a cool, dry place out of direct light.

Mildewed tents can be cleaned as described above, but there is no way to remove the dark stains without damaging the fabric. Mildew will probably take some time to affect the waterproof coatings, so the tent should still be usable.

REPAIRING YOUR TENT

Fabric Tears

Watertight repairs to rips can be made with seam sealant such as McNett Freesole™, Aquaseal™, or Seam Grip®. For tears shorter than about 1.5cm (1/2in.), apply duct tape to one side and sealant to the other. On longer tears, apply duct tape to one side of the tear and, on the other side, a patch of no-see-um netting that extends about 6-12mm (1/4-1/2in.) beyond each edge of the tear. Use oval or circular patches (rounded edges are less likely to peel away than sharp corners). Cover the patch thoroughly in sealant. Once the sealant is completely dry, the duct tape can be removed from small and large repairs alike.

For longer trips, we recommend taking an expedition sewing kit and extra nylon, webbing, a spare pole section, and narrow-diameter (2.5mm) tent pole shockcord. Coghlan's Seam Saturant or the like will prevent wicking through a tent fly via seams or webbing.

Fixing a Pole in the Field

Slip the pole repair sleeve over one pole end. Slide the sleeve along until it is centred over the break in the pole, then wrap it into place with duct tape. Be careful not to damage the tent fabrics when removing the damaged pole.

Replacing a Broken Pole Section

The MEC Grip-Tip™ pole tips are press-fitted into place. Carefully tug out the pole end tip nearest to the broken section. Being mindful of how to retie it later, untie the end tip. Slide pole sections off the cord until you reach the damaged section. Remove the broken piece, being careful not to damage the shockcord. Thread on a new section of appropriate length and diameter, followed by the other sections, then re-tie the end tip knot.

Zippers

A worn slider is the cause of most zipper problems. An occasional application of 303 Protectant or a silicone-based lubricant will help reduce wear. Grit accelerates slider wear. Keep zippers clean by rinsing them under water after use in windy/sandy environments. Sometimes, carefully squeezing the top ends of the slider with a pair of pliers will restore some life. If an inner door slider fails, run it as far as possible toward one end of the zipper, and use only the other slider for the duration of the trip. A sewing repair shop can replace inoperable sliders.