

Tipi Pitching Guide



Chart A – ROPES, STAKES & LACING PINS

TIPI SIZE	POLES		TRIPOD ROPE	SMOKE FLAP ROPE		LINER ROPE		STAKES	LACING PINS
	QTY	LG		6'	9'				
12'	14	16'	28'	2	12'	84'	-	14	6
14'	17	16'	32'	2	13'	98'	-	16	8
16'	17	20'	35'	2	14'	111'	-	18	9
18'	17	24'	40'	2	15'	125'	158'	20	11
20'	17	27'	45'	2	16'	139'	175'	23	13
22'	17	30'	48'	2	17'	153'	191'	25	15
22'	17	27' stubbies	48'	2	17'	153'	191'	25	15
24'	17	32'	50'	2	18'	167'	208'	28	17
24'	20	27' stubbies	50'	2	18'	167'	208'	28	17
26'	20	32'	55'	2	19'	183'	224'	31	19
28'	20	36'	58'	2	20'	198'	241'	35	21
30'	23	36'	65'	2	21'	128'	260'	39	23
32'	23	40'	70'	2	22'	144'	275'	43	25

REQUIRED MATERIALS AND TOOLS

If you are providing your own accessories, we recommend the following:

Quantities are listed in Chart A

- ½" diameter rope for the tripod and smoke flap ropes. Use manila rope or a long lasting synthetic, such as twisted polypropylene.
- ¼" manila or a solid braid synthetic for the liner rope.
- Lacing pins: wooden sticks about 3/8" dia. x 14". Willow or traditional chokecherry branches work well. Wooden dowels may be used.
- 16" wood or steel stakes. The peg loops on your tipi will accept 1" diameter stakes; larger diameter stakes must be tied to the peg loops.

YOU WILL ALSO NEED

A heavy hammer for driving stakes.

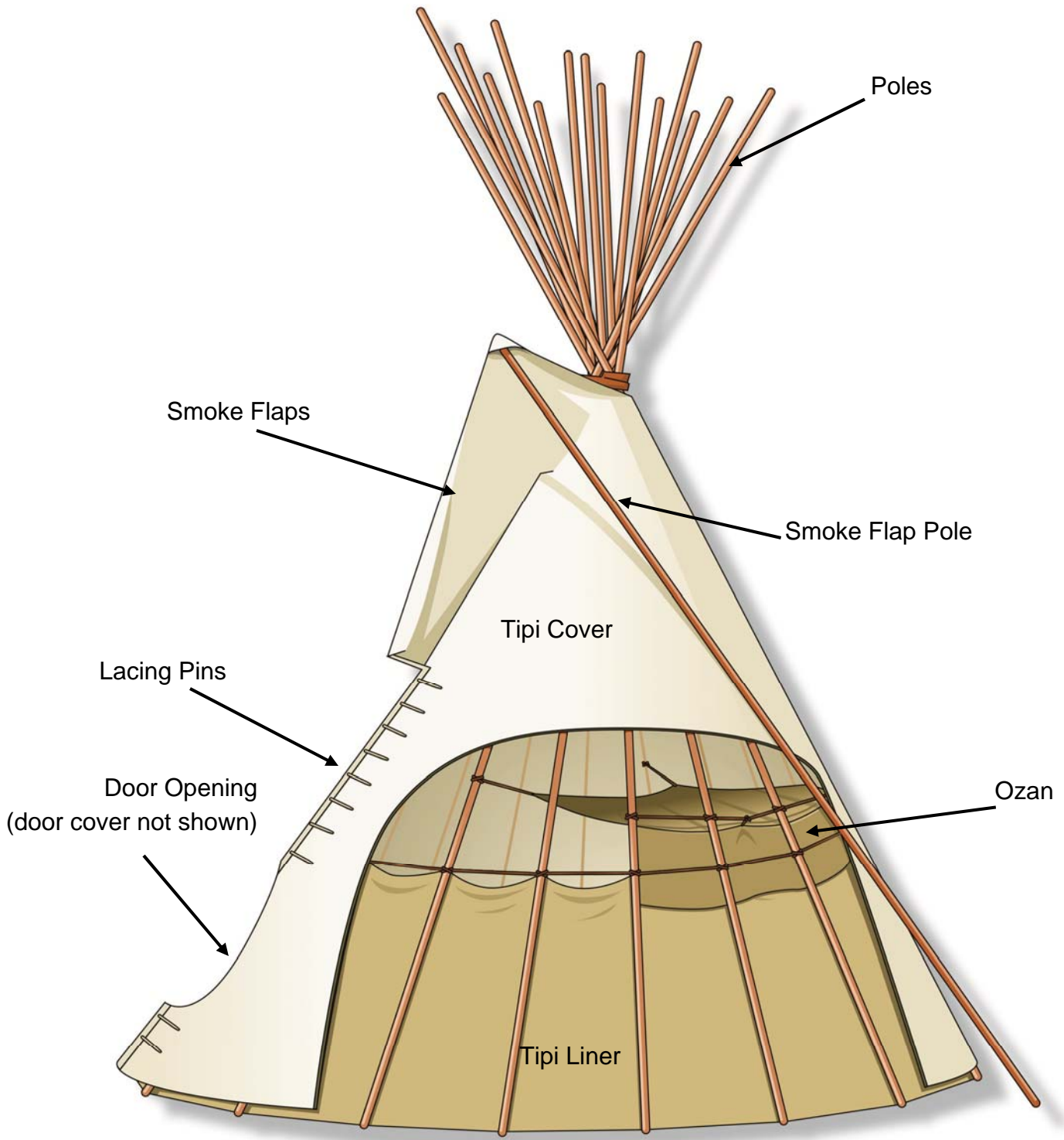
A measuring tape.

A knife or scissors for cutting rope.

A small wood saw to cut a small notch in the lifting pole.

A step ladder (6' to 10' depending on tipi size).

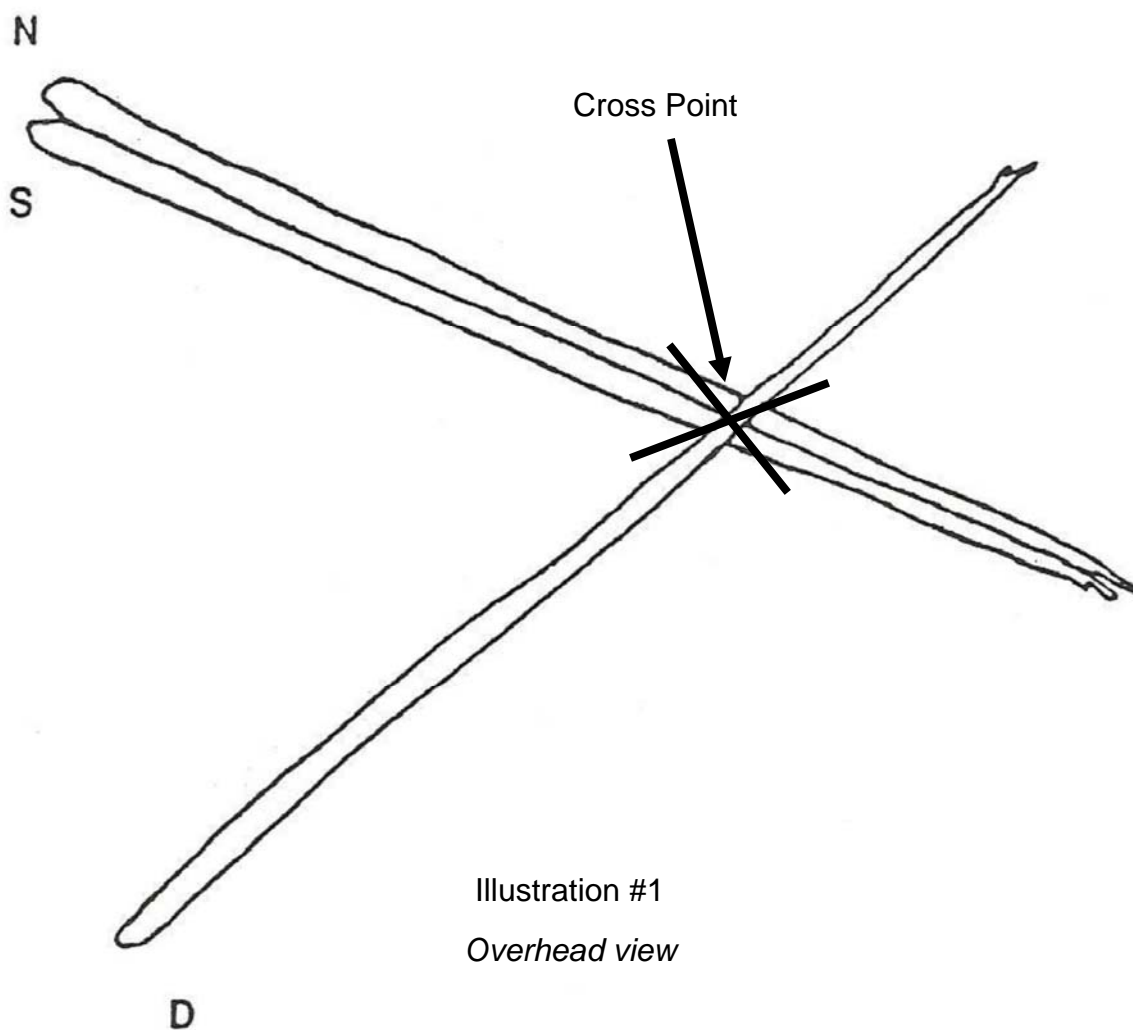
A pencil.



Tipi Components Cutaway View

PITCHING THE TIPI

1. Select a good spot. The tipi should be pitched on level ground, and if possible, a little higher than the surrounding area for good drainage. Traditionally, tipis face east, so that away from the prevailing wind. In these instructions the tipi faces east.
2. Choose your three largest poles. Designate one the "door pole" (D), one the "north pole" (N), and one the "south pole" (S). These will form the tripod poles. Choose another large pole to be the "lifting pole" (L). You may also want to set aside the 2 smallest straight poles to use for "smoke flap poles".
3. Lay out the tripod poles as shown in illustration #1. The D pole is laid on top of the N and S poles.



4. Now that the tripod poles are laid out on the ground, refer to Chart B below for your size tipi to measure these three poles for where to tie the tripod knot.

NOTE: MEASURING AND TYING THE TRIPOD KNOT AT THE CORRECT POINT IS THE MOST IMPORTANT STEP WHEN PITCHING A TIPI. THE TRIPOD IS THE FOUNDATION FOR THE REST OF THE TIPI FRAME AND MUST BE TIED AND RAISED CORRECTLY.

Chart B – TYING THE TRIPOD.

Measure the pole lengths with the tripod lying on the ground. See illustration #1.

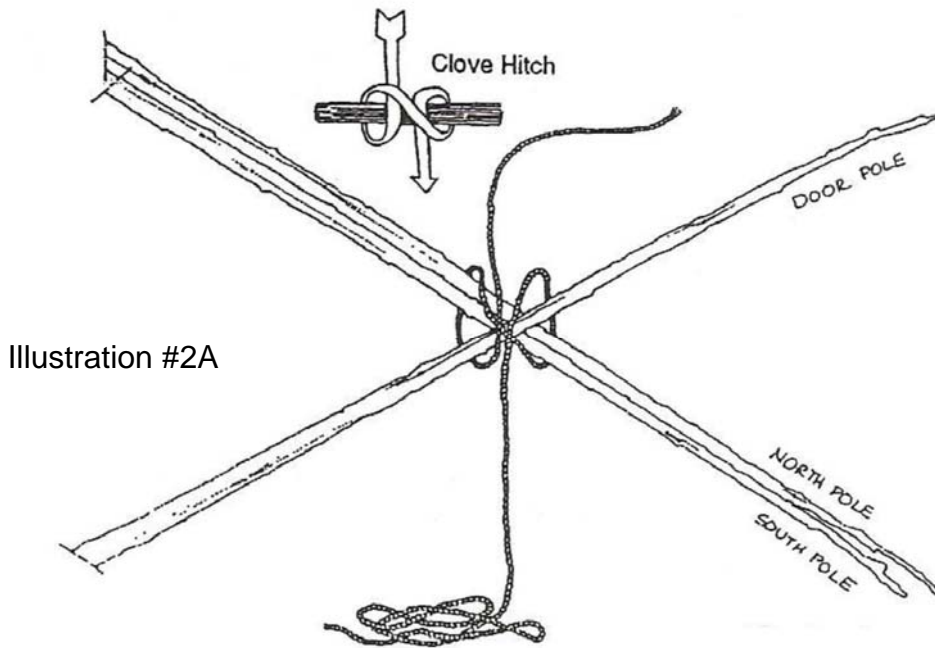
TIPI SIZE	NORTH AND SOUTH POLES (“NS”) BASE TO CROSSPOINT	DOOR POLE (“D”) BASE TO CROSSPOINT
12’	10’-6”	12’-2”
14’	12’-6”	14’-2”
16’	14’-6”	15’-9”
18’	16’-6”	17’-9”
20’	18’-6”	19’-9”
22’	20’-6”	21’-9”
24’	22’-6”	23’-9”
26’	24’-6”	25’-9”
28’	26’-6”	27’-9”
30’	28’-6”	29’-9”
32’	30’-6”	31’-9”



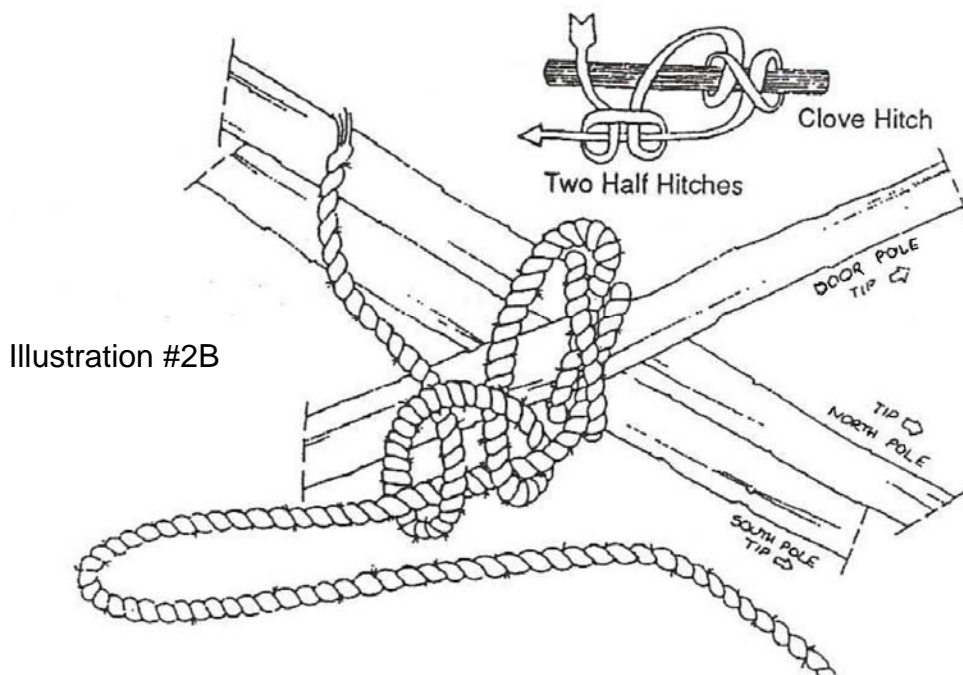
Hint—

Attaching streamers to the pole tips adds a decorative touch, provides a telltale for wind direction and prevents birds from perching on your poles.

Tie or staple streamers to the tips of your poles before standing the tripod.



- Use the tripod rope. Tie a clove hitch around all three poles. See Illustration #2A and #2B. Lock the clove hitch by tying two half hitches with the short end of the rope around the long end. Tighten the two half hitches against the clove hitch. MAKE SURE THE KNOT IS TIGHT SO IT WON'T SLIP. Don't cut off the leftover tripod rope after tying the knot; you'll use it later.

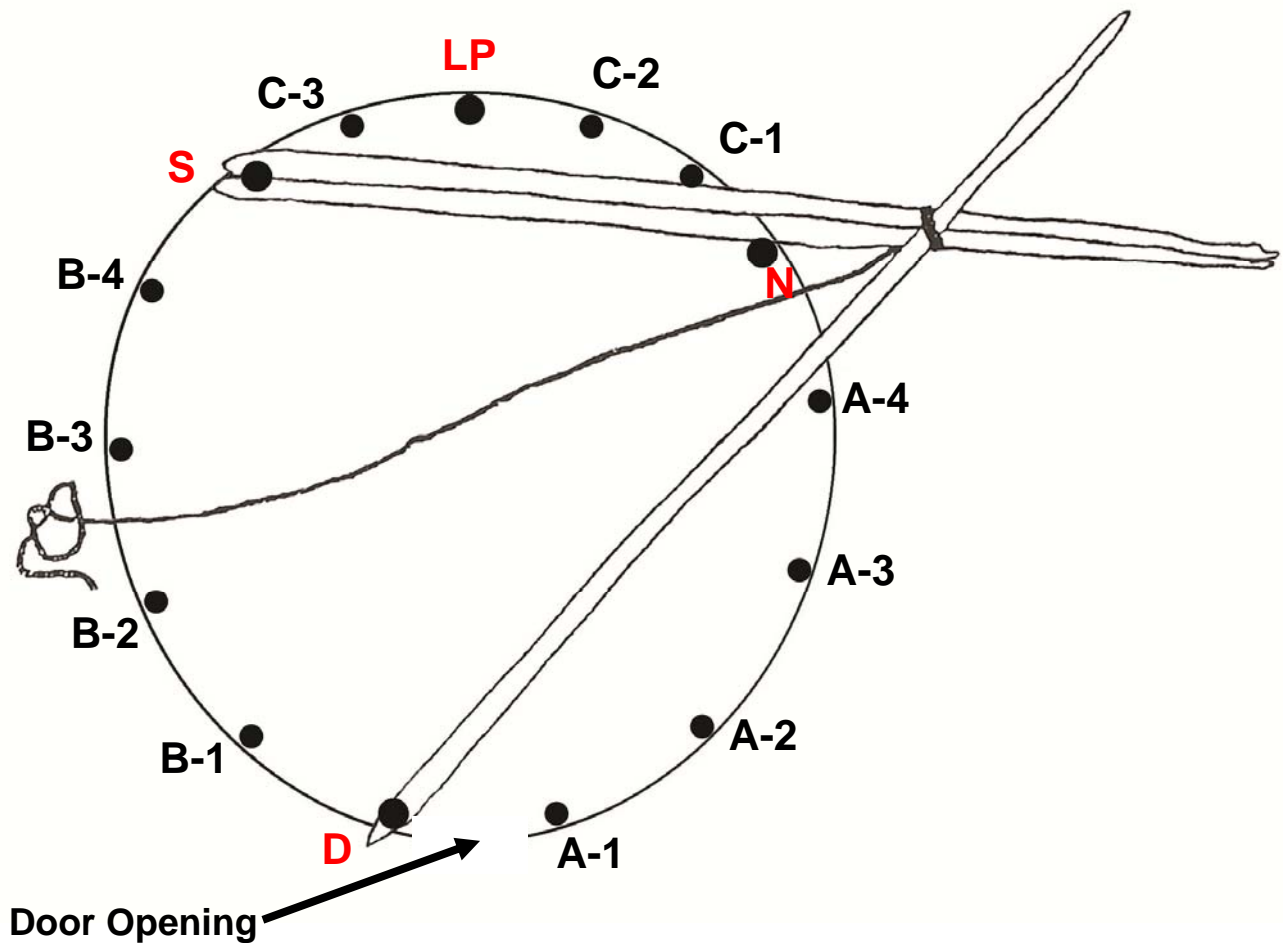


HINT—especially for large tipis—to prevent your tripod knot from slipping: After measuring for your tripod (Chart B) drill a ¼" hole (no larger!) through all three tripod poles and lace through it with a 5' piece of ¼" liner rope. Wrap it around the tripod a few times and tie it off.



6. Position the tripod on your tipi site (see Illustration #3). The bases of the N and S poles should both be placed on the S pole spot. The base of the D pole should be placed a few feet south of where you want the door opening.

Illustration #3



7. To raise the tripod, one person should place his feet against the bases of the N and S poles to keep them from "kicking out". A second person lifts the N and S poles together starting at the tips and walks them up. When the tripod is almost vertical, swing the N pole across to its proper spot (Illustration #4) and let the tripod rest on all three poles.

NOTE FOR LARGE TIPIS: Have two or more people lift the N and S poles. Another person places a foot against the base of the D pole. And yet another can help by pulling on the tripod rope.

DO NOT ALLOW THE TRIPOD ROPE TO SLIP WHEN RAISING THE TRIPOD. IF THE TRIPOD ROPE SLIPS, THE DIMENSIONS IN CHART C WILL CHANGE AND TIPI WILL NOT PITCH CORRECTLY.

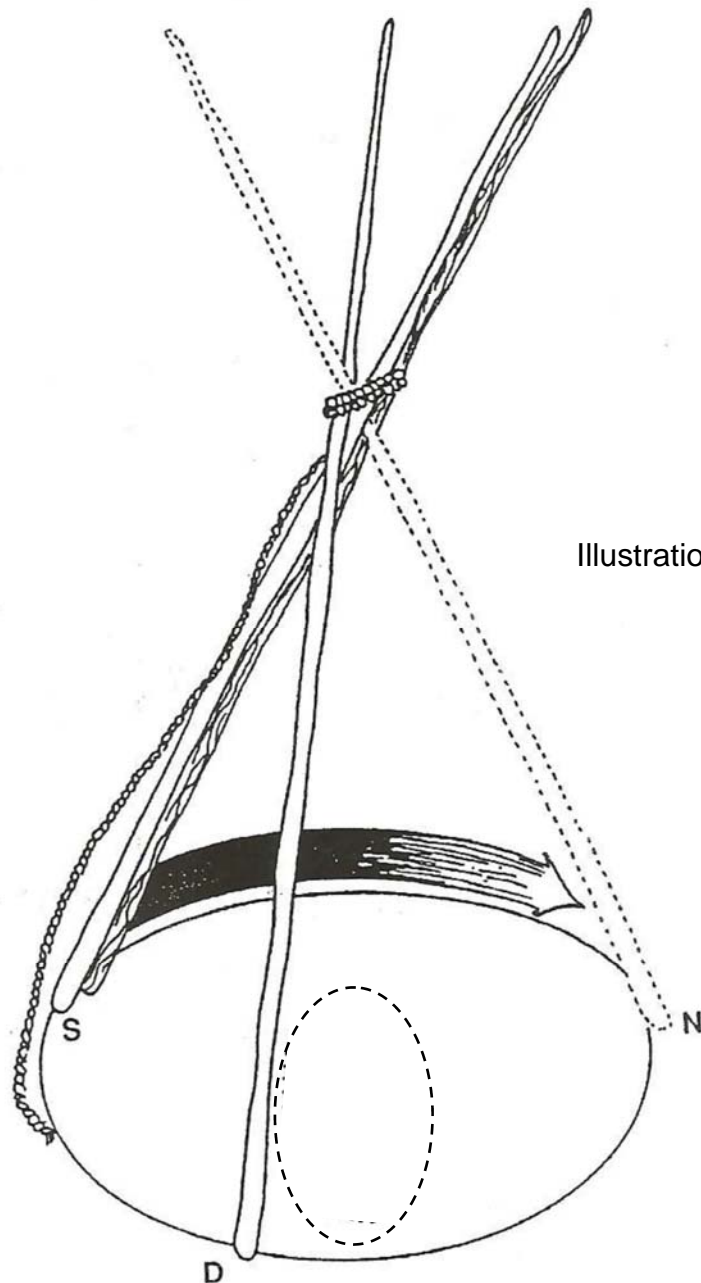


Illustration #4

8. Refer to Chart C and Illustration #5 to adjust the distances between the bases of the tripod poles. Measure from inside-of-base to inside-of-base at ground level. Keep adjusting the poles until all three dimensions are correct.

Now take a look at the tripod from the side of the tipi. The D pole should be less vertical than the N and S poles. This tilts the tripod toward the back, away from the door.



Side View of Tripod from South

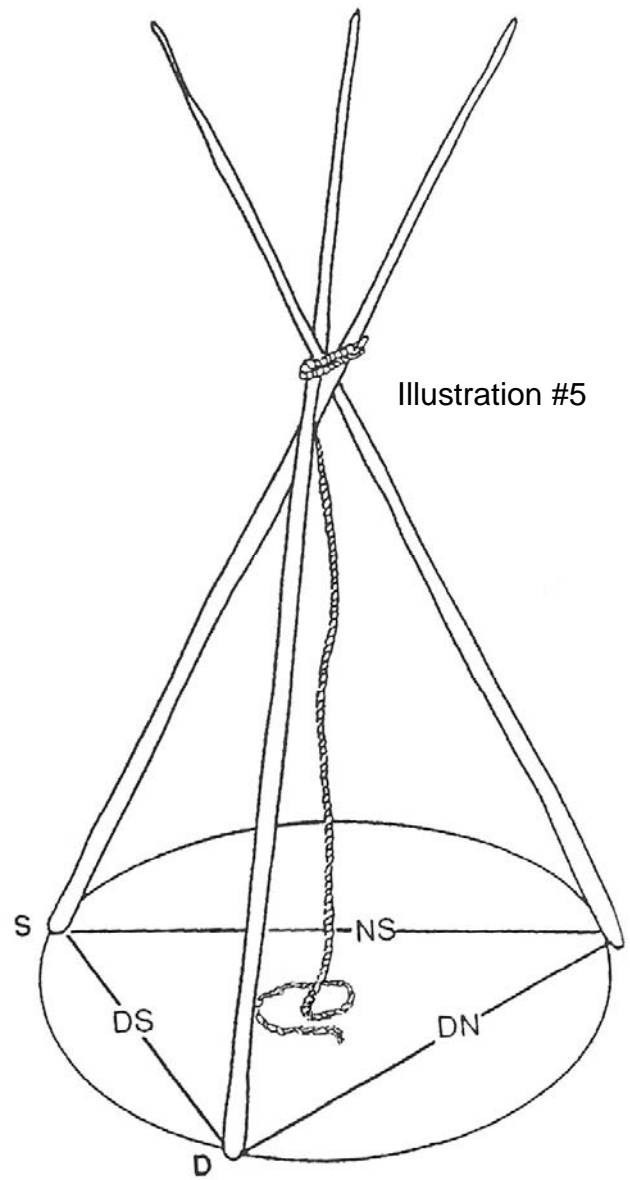


Illustration #5

Chart C – PLACING THE TRIPOD POLES.

Measure between the poles, with the tripod standing. See illustration #5.

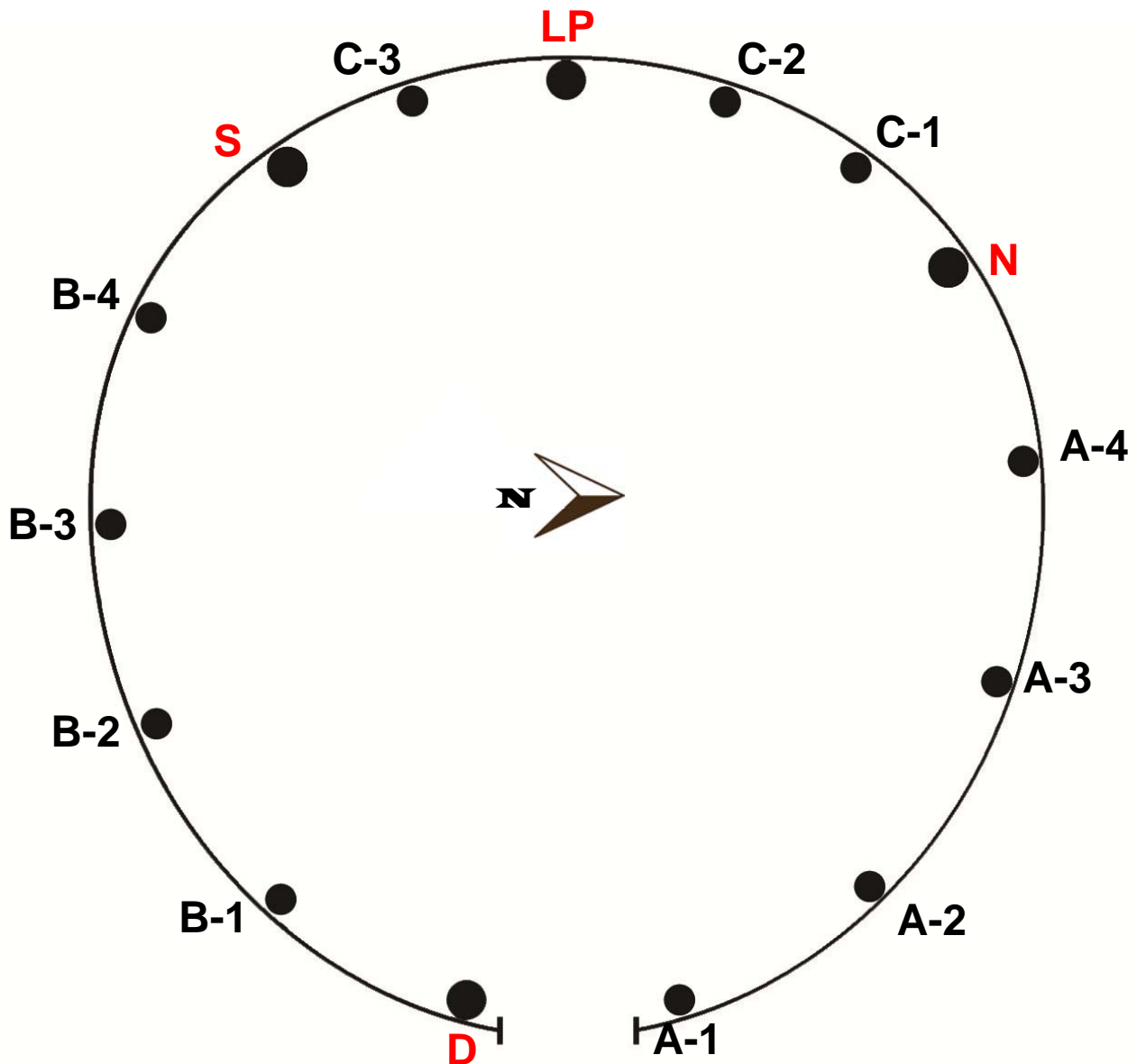
TIPI SIZE	DOOR POLE TO SOUTH POLE ("DS")	DOOR POLE TO NORTH POLE ("DN")	NORTH POLE TO SOUTH POLE ("NS")
12'	10'-3"	11'	7'-6"
14'	12'-3"	13'	9'-6"
16'	14'	14'-9"	10'-4"
18'	16'	16'-9"	12'-4"
20'	18'	18'-9"	14'-4"
22'	20'	20'-9"	16'-4"
24'	22'	22'-9"	18'-4"
26'	24'	24'-9"	20'-4"
28'	26'	26'-9"	22'-4"
30'	28'	28'-9"	24'-4"
32'	30'	30'-9"	26'-4"

9. On mid-size tipis (14'-24') you will have twelve more interior poles after the tripod is up, plus two smoke flap poles. On a 12' tipi you will have nine more interior poles, plus two smoke flap poles. Tipis 26' and larger will have fifteen more interior poles plus the two smoke flap poles.

The number of interior poles is always divisible by three. For simplicity's sake, these instructions refer to a mid-size tipi with twelve interior poles left after the tripod is erected.

The interior poles will be placed in the tripod framework in a specific order, three groups of four poles: Groups A, B & C. If you are pitching a tipi that is 26' or larger add a pole to each group to make three groups of five poles (A1 – A5). For a 12' tipi, you'll set three groups of three poles.

Illustration #6



10. The four poles in Group A are placed with the base ends spaced between the D and N poles. Place A-1 a few feet north of the D pole and lean it into the cluster of poles at the top, specifically in the crotch formed by the N and S poles, which stick out over the front.

The space between the D pole and A-1 is where the door opening of the tipi goes.

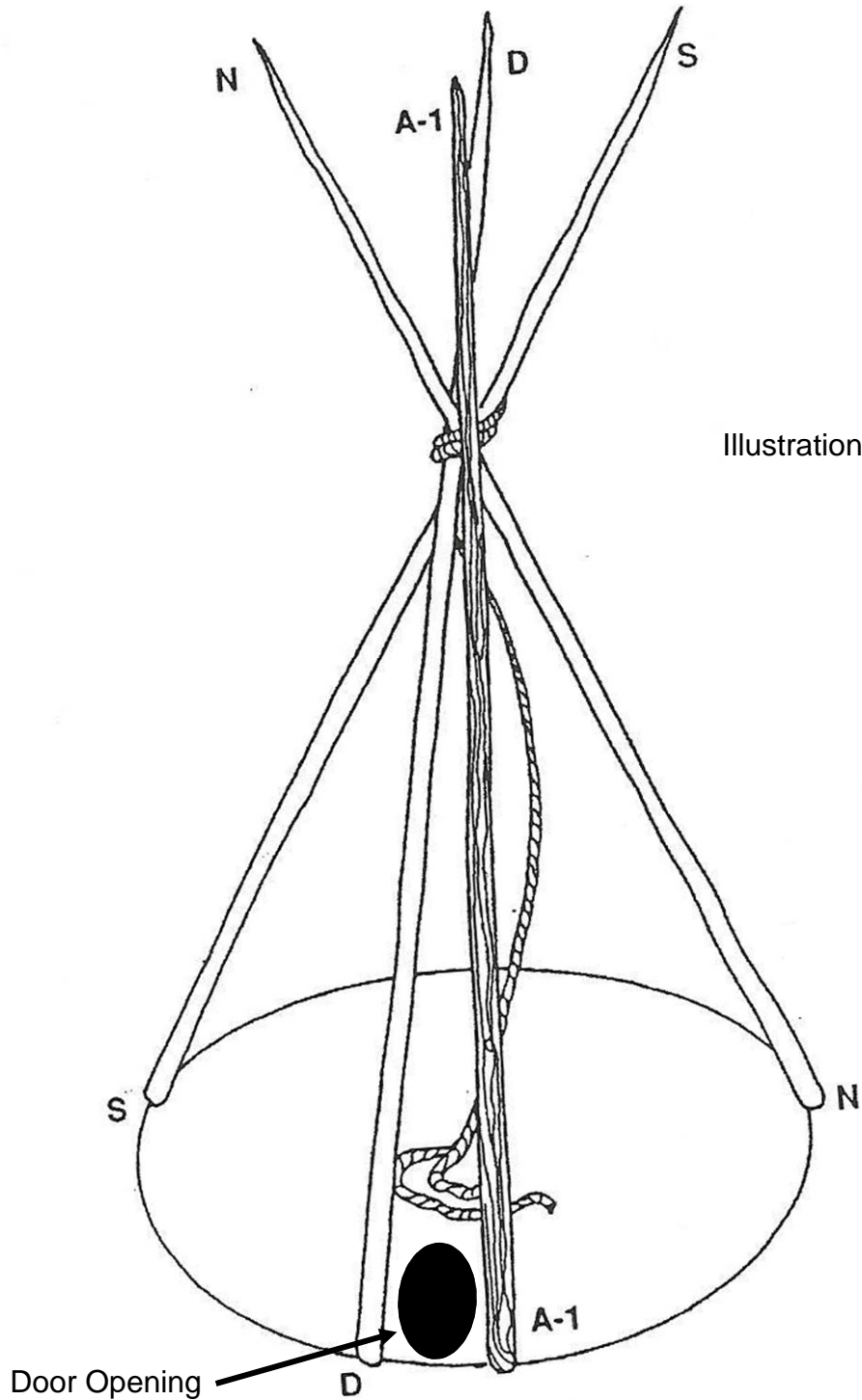


Illustration #7

11. Now place the base end of A-2 three or four feet from A-1 around the circle of the floorplan toward the N pole. Lean A-2 into the same crotch formed by the N and S poles; place it in the cluster on top of A-1.

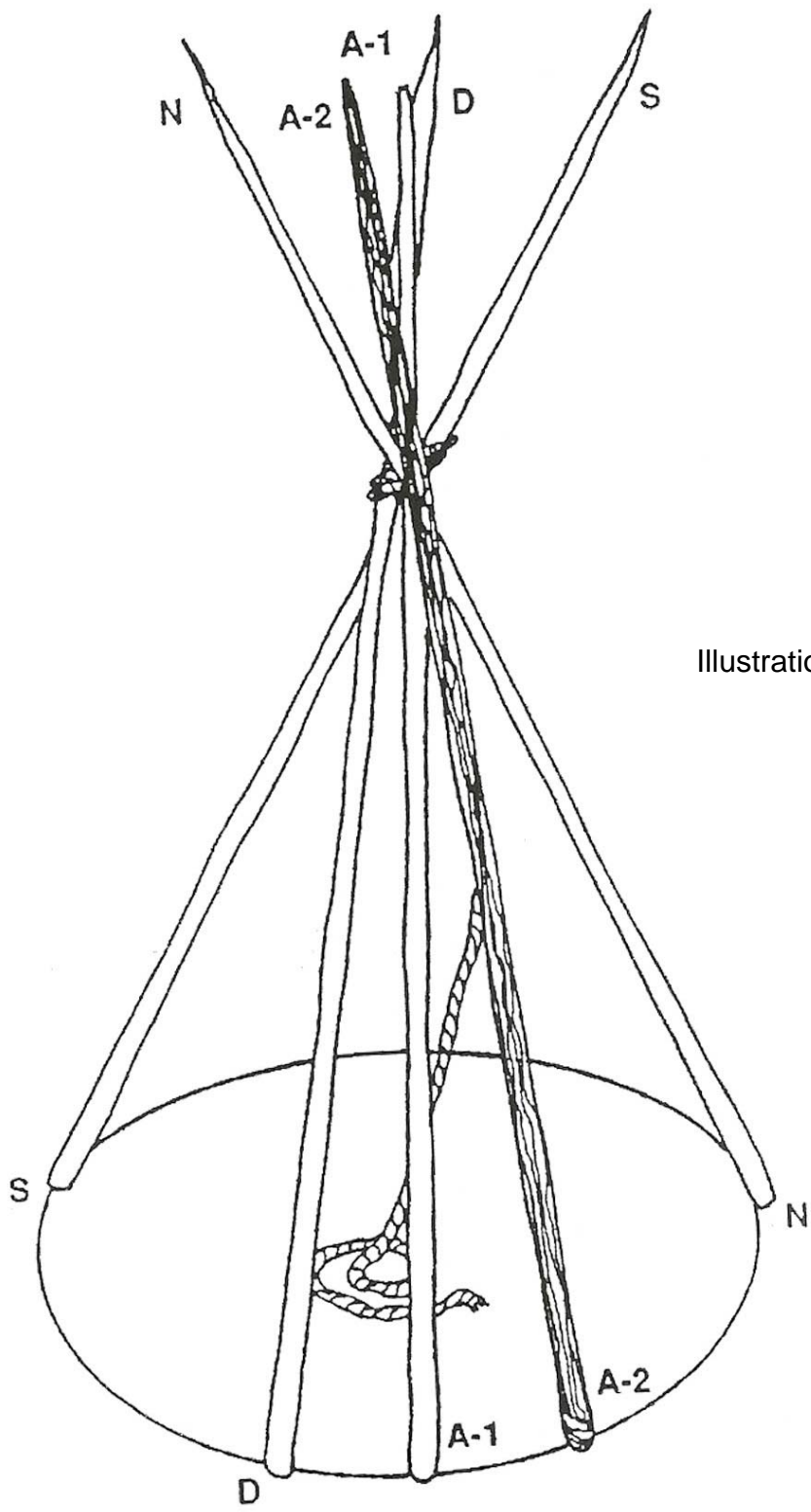
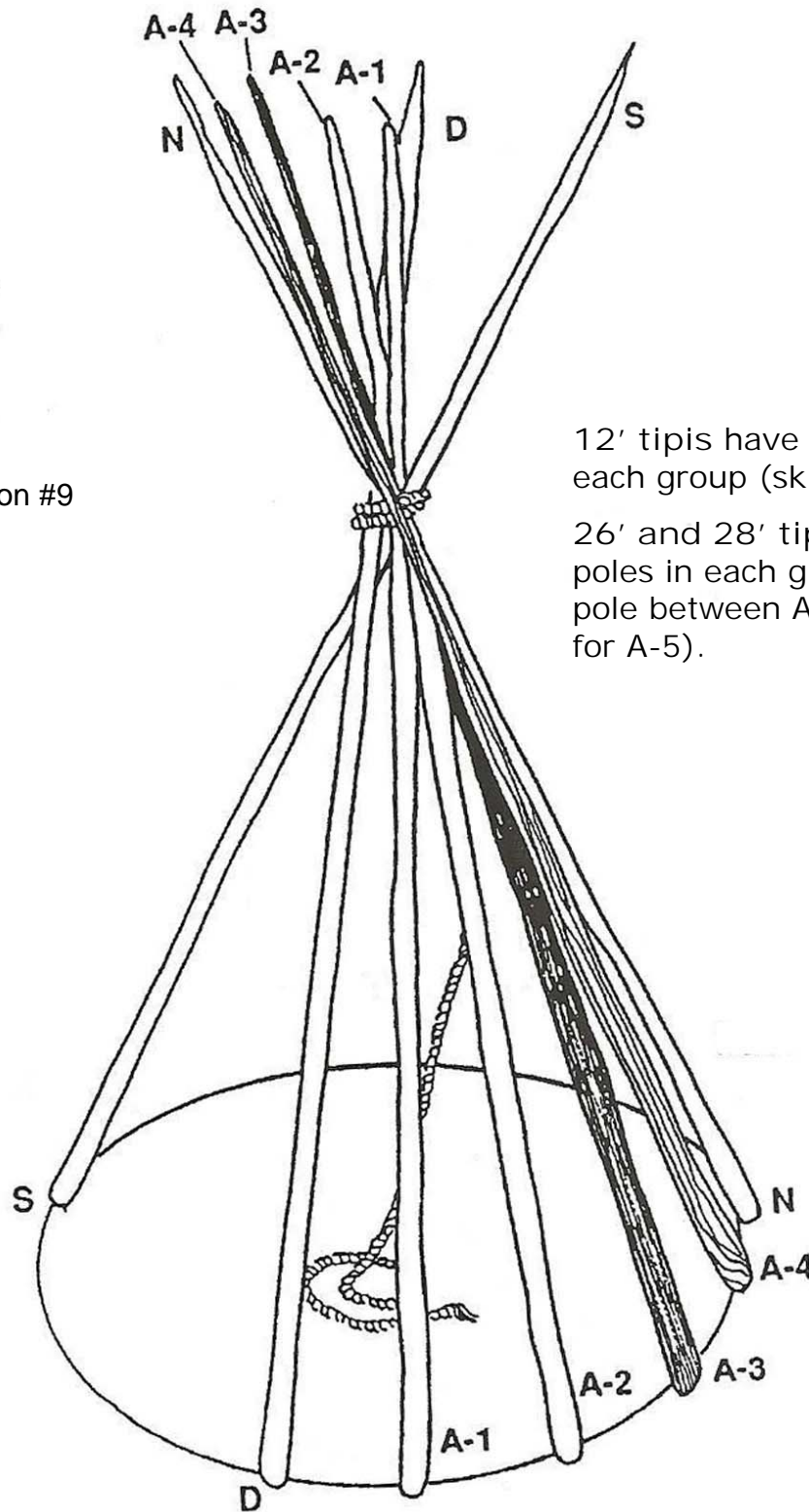


Illustration #8

12. Poles A-3 and A-4 follow the same order, all in the same crotch, one on top of the other. Set the bases of the A group of poles so they are evenly spaced between the D pole and the N pole.

Remember that on 26' and larger tipis there are five poles in each group; and a 12' tipi has three poles in each group.

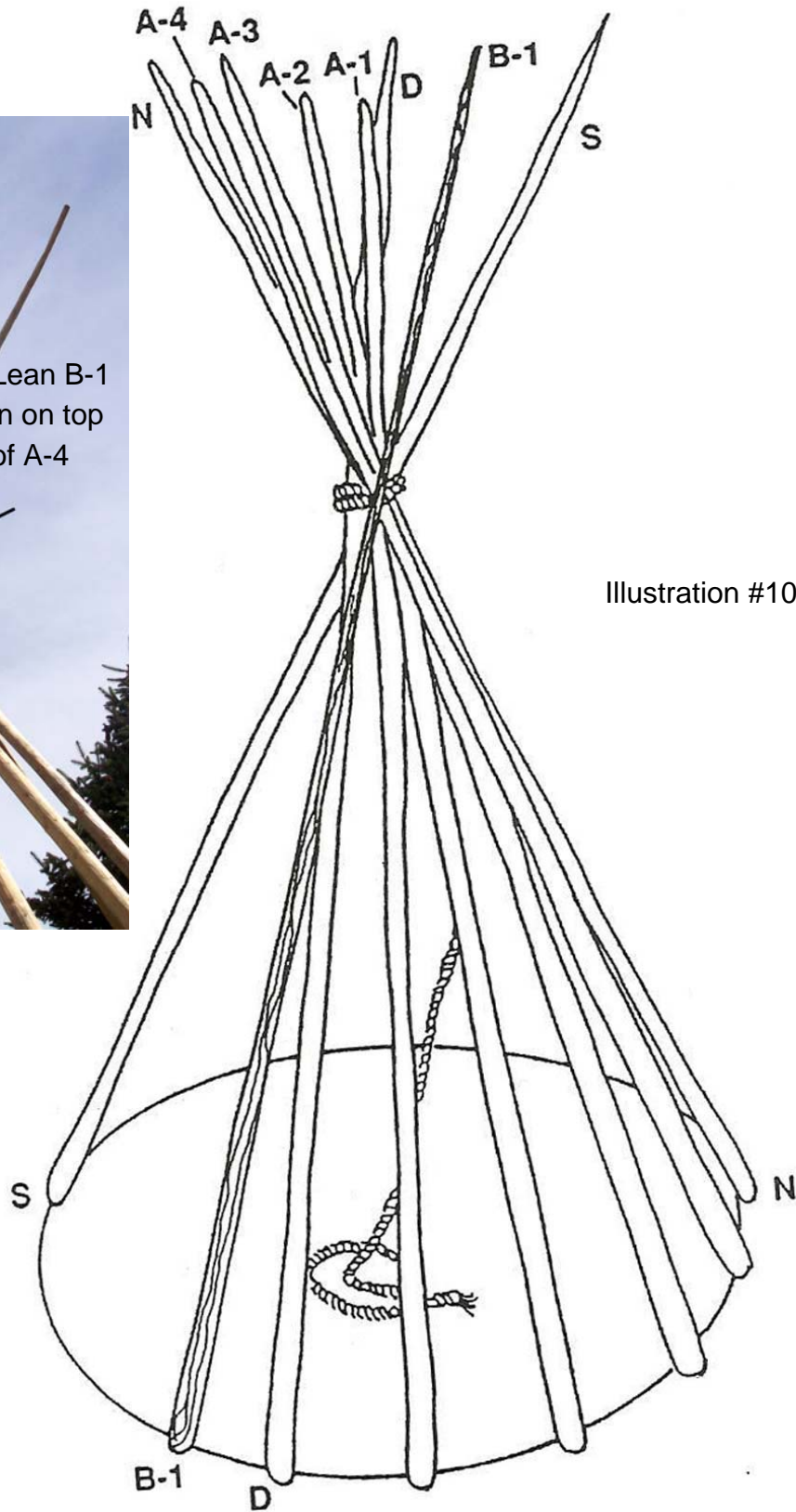
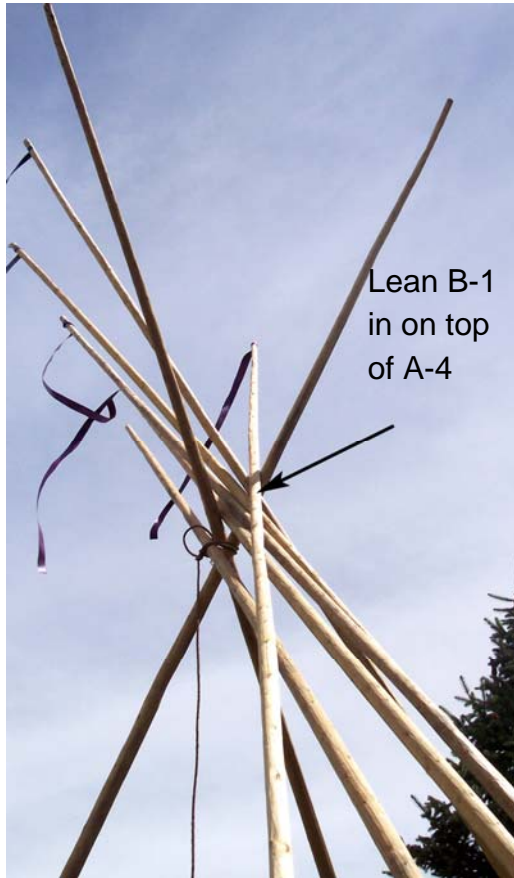
Illustration #9



12' tipis have 3 poles in each group (skip A-4).

26' and 28' tipis have 5 poles in each group (add a pole between A-4 and N for A-5).

13. The base ends of the four poles in group B go between the D pole and the S pole. Begin by placing the base end of B-1 a few feet south of the D pole; lean it into the crotch formed by A-4 (or A-5) and the S pole. Lean it in on top of A-4.



14. Place the base end of B-2 a few feet around the circle from B-1 and lean it into the cluster on top of B-1.

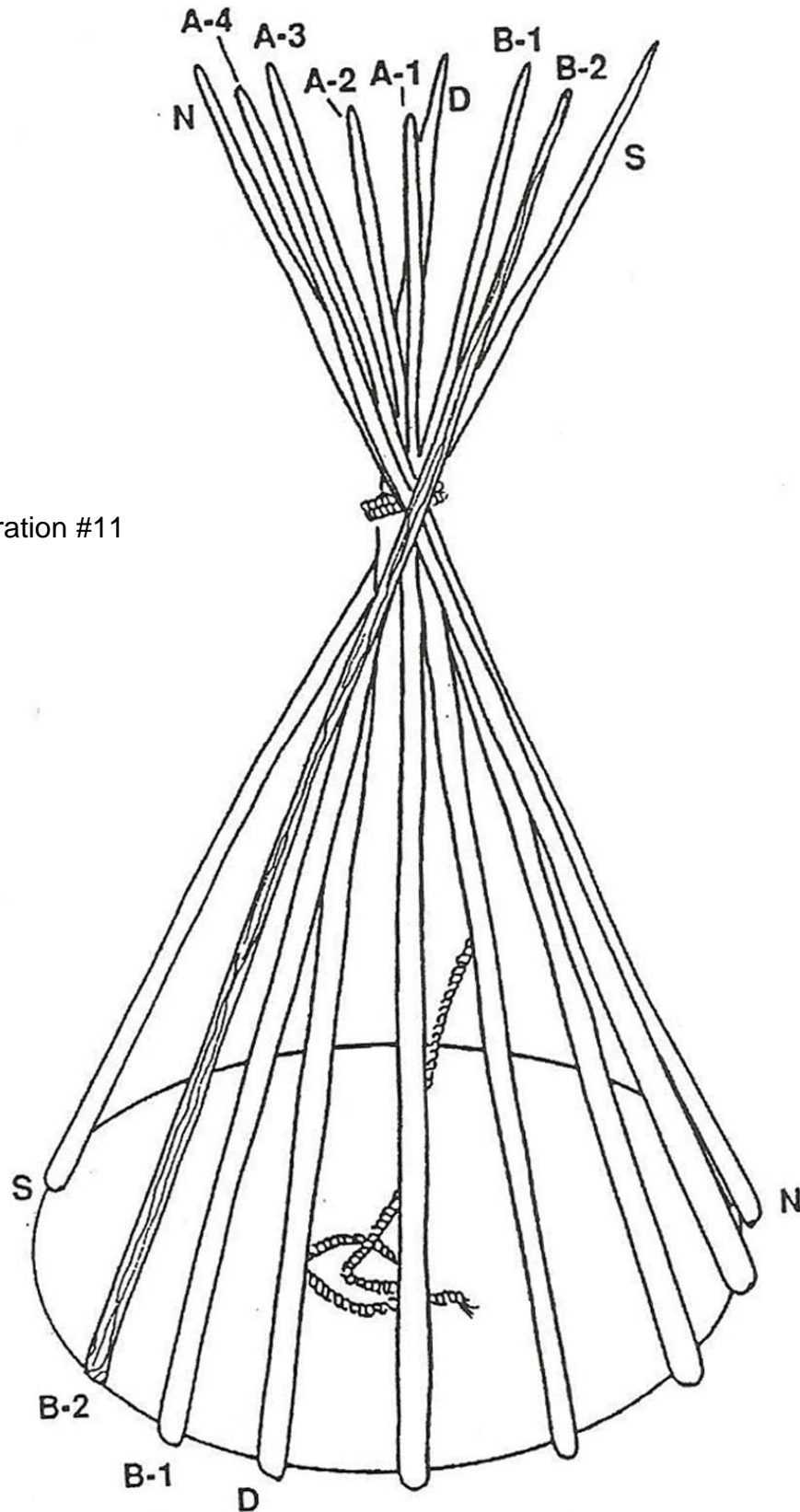
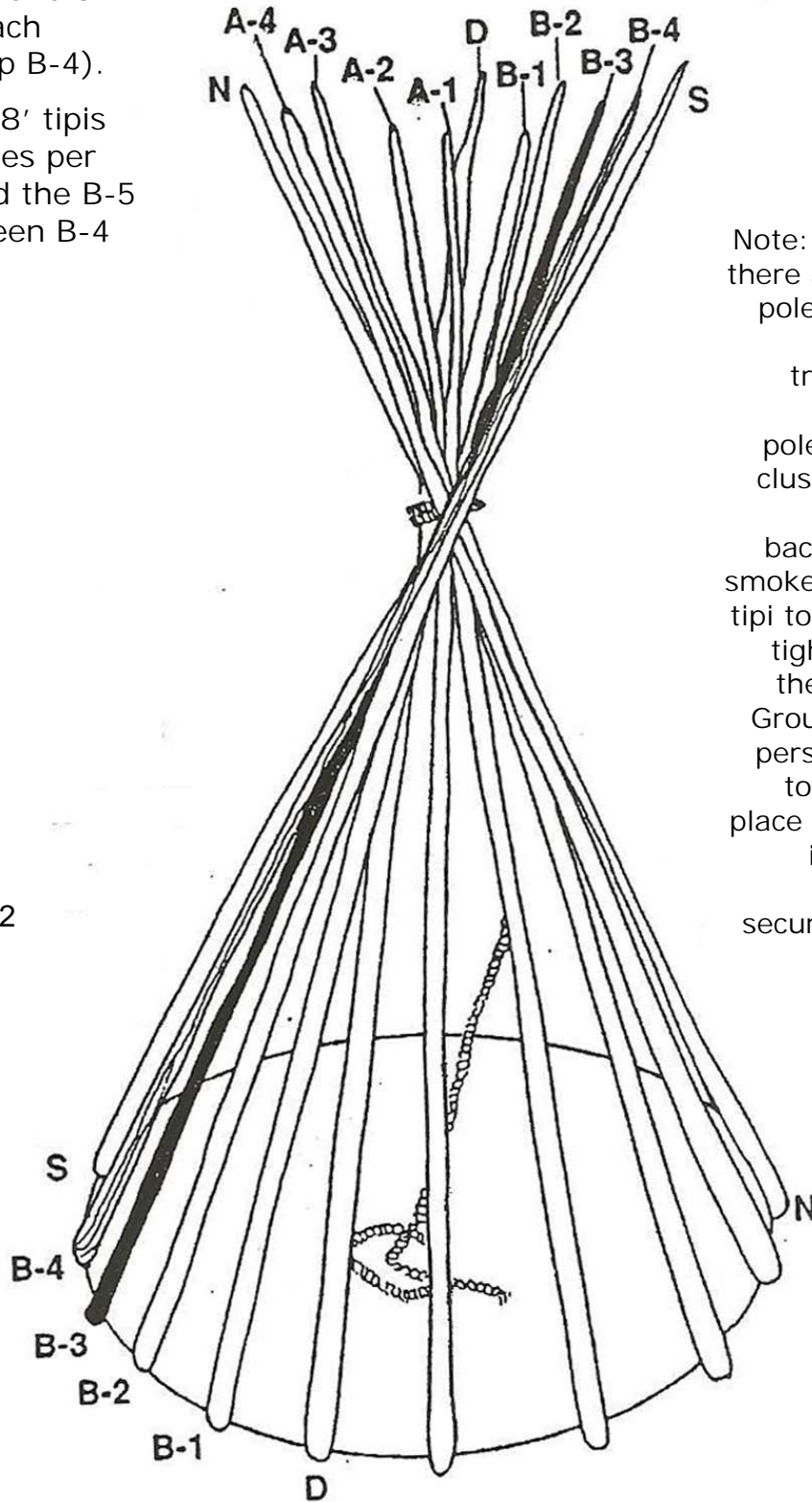


Illustration #11

15. B-3 and B-4 go one on top of the other poles in the same crotch. Proceeding around the circle toward the S pole, set the base of B-3 and lean it in on top of B-2; then B-4 on top of B-3, keeping the bases of Group B evenly spaced between the D pole and the S poles.

12' tipis have 3 poles in each group (skip B-4).

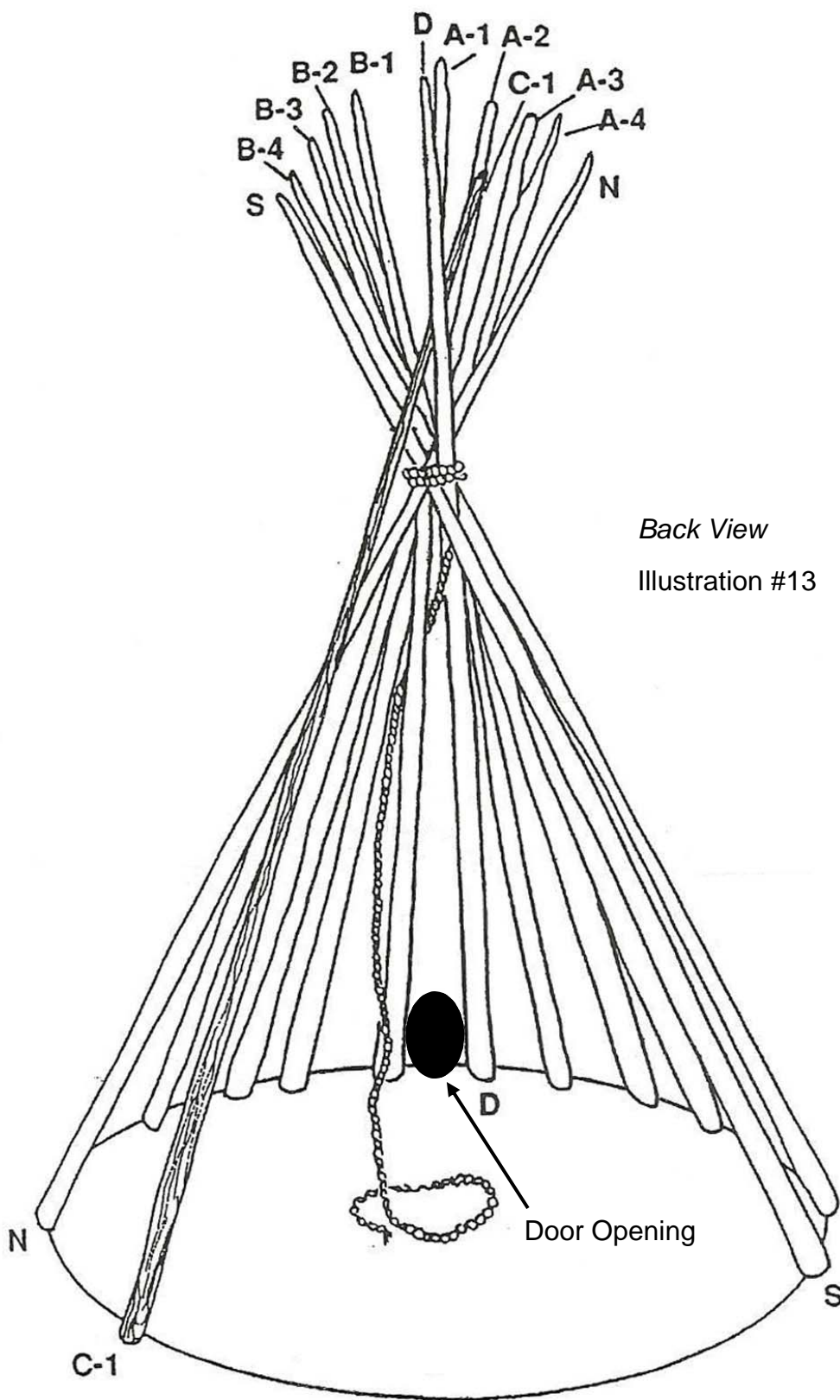
26' and 28' tipis have 5 poles per group (add the B-5 pole between B-4 and S).



Note: It may seem there are too many poles in the front crotch of the tripod, but this formation of poles—forming a cluster elongated from front to back—allows the smokes flaps of the tipi to wrap around tightly. Don't let the last poles in Group B slip. One person may need to hold them in place until Group C is set and the tripod rope is securely wrapped.

Illustration #12

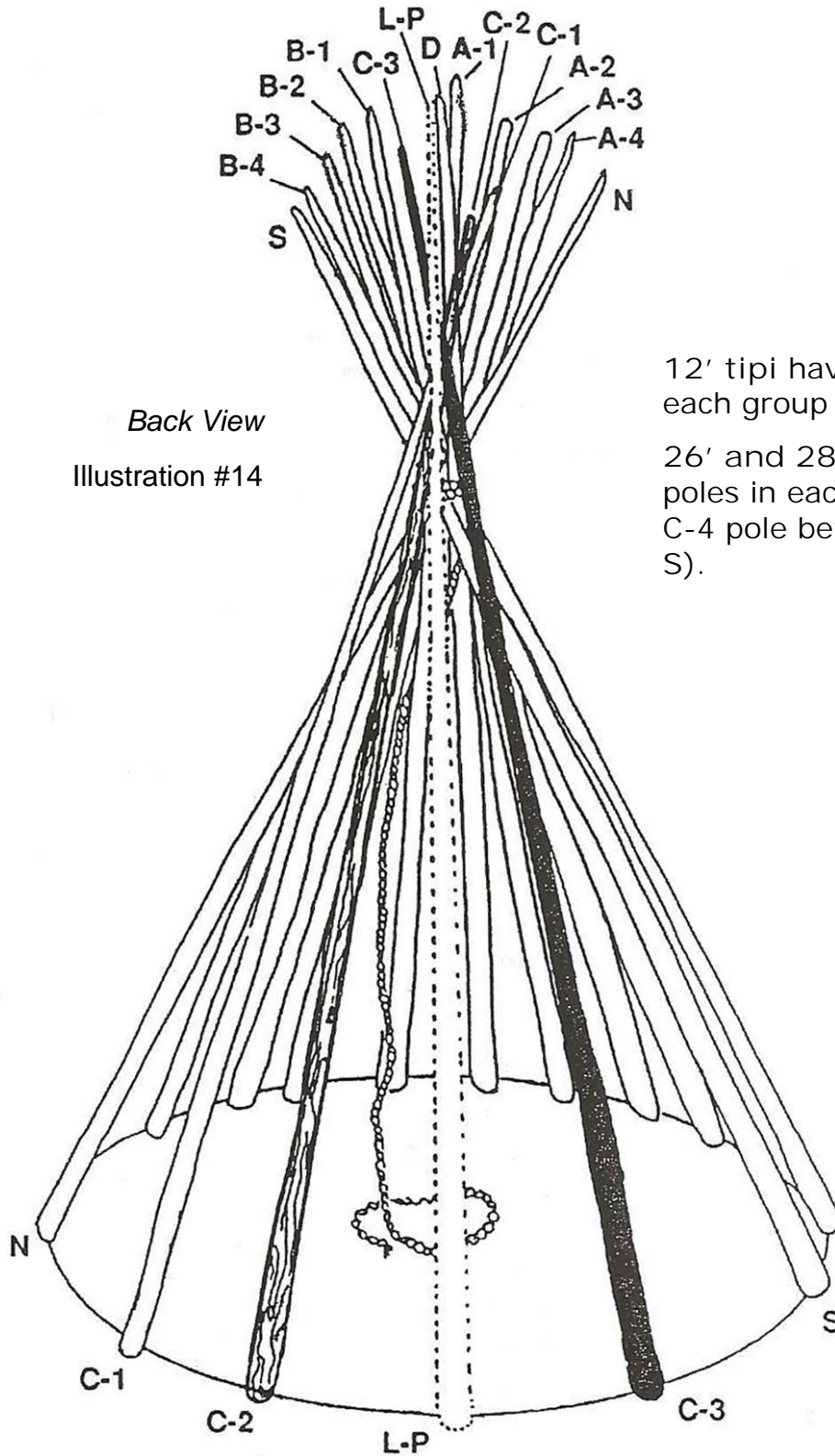
16. The poles in group C, including the Lifting pole, go at the back of the tipi. Start by placing the base end of C-1 a few feet south of the N pole, and lean it into the back crotch of the tipi in the slot formed by Groups A & B.



17. Next place the base of C-2 a few feet around the circle from C-1 and lean it in on top of C-1.
18. Skip a space between C-2 and C-3 so the Lifting (L) pole can go between them. Place the base of C-3 a few feet north of the S pole and lean it on top of C-2.

On 26' and larger tipis, leave a space for the Lifting pole between C-2 and C-3. Set C-4 between C-3 and the S pole.

For a 12' tipis the Lifting pole goes between C1 and C2.



Back View
Illustration #14

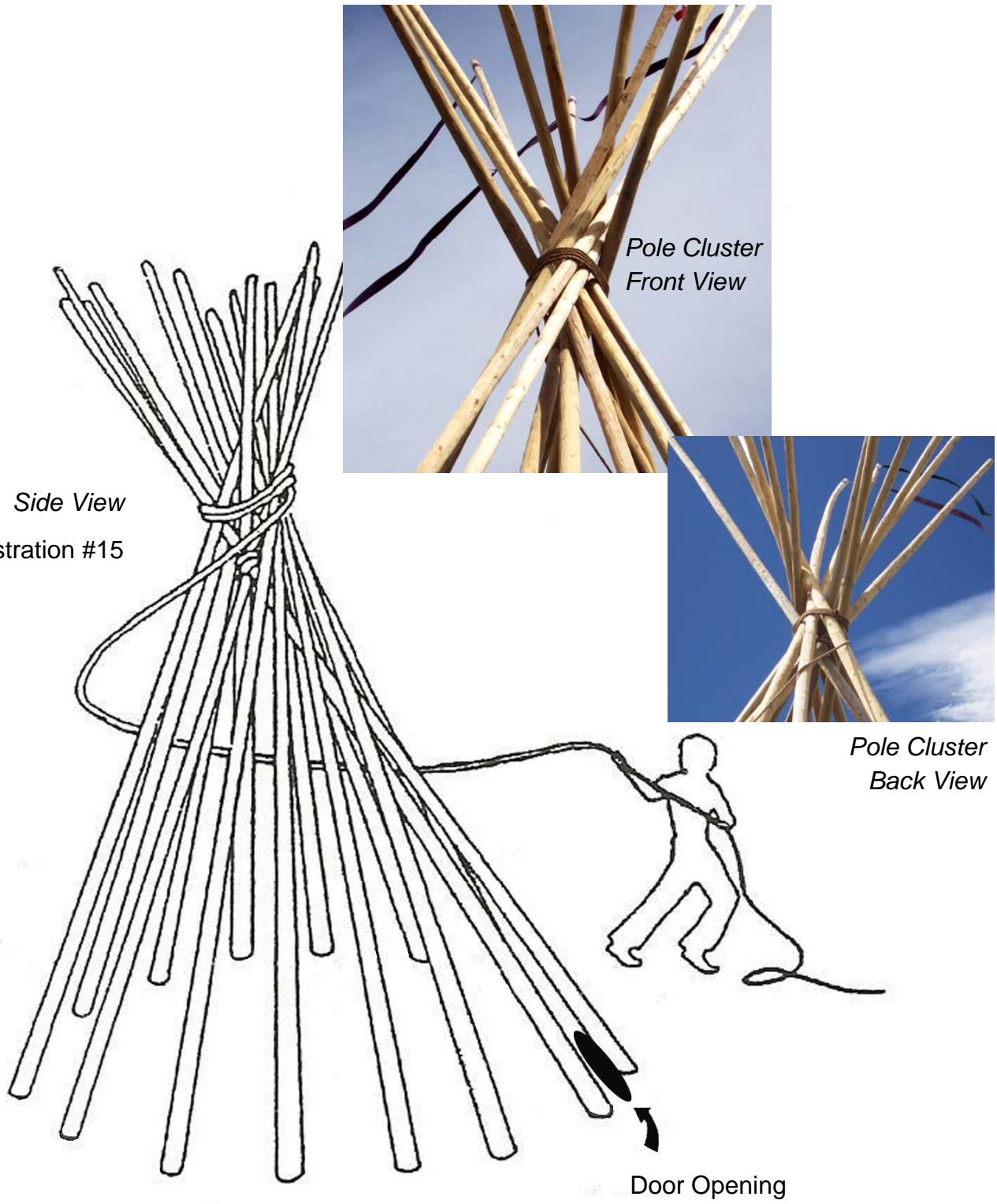
12' tipi have 3 poles in each group (skip C-2).

26' and 28' tipis have 5 poles in each group (add a C-4 pole between C-3 and S).

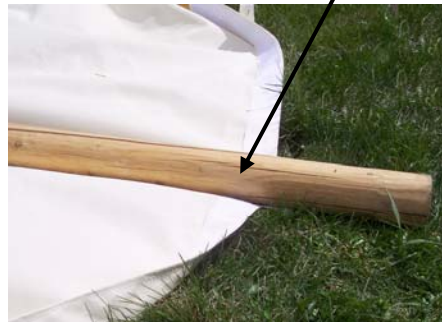
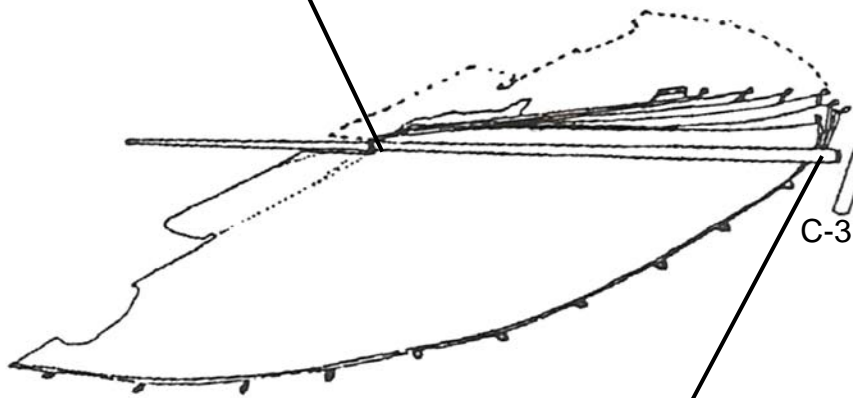
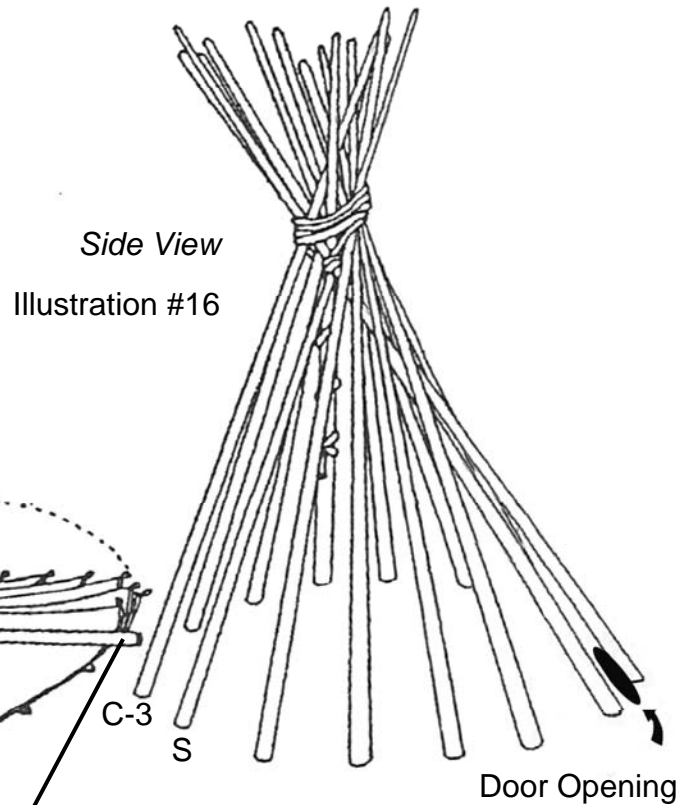
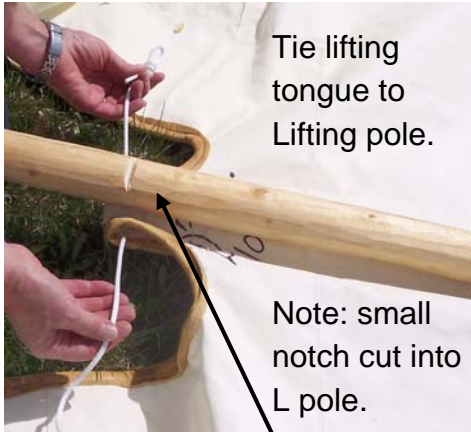
Now all the interior tipi poles—except the Lifting pole—are in place. You're ready to wrap the dangling tripod rope around them.

19. Walk the rope out between B-4 and the S pole. Walk clockwise around the back of poles toward the N pole then around toward the D pole. When you are completely around the tipi one time, whip the rope into place around the cluster of poles and pull it tight. Wrap the rope around the cluster four times, whipping it into place and tightening it as you go.

You should have enough tripod rope left to tie off to the N pole after the fourth wrap.



20. Spread the tipi cover out on the ground behind the poles. Be sure that the tipi is inside up. The inside of the tipi has 2" webbing exposed around the bottom hem.
21. The spread out tipi cover is roughly a semicircle. Lay the Lifting pole across the cover so it bisects it. Stretch the canvas tightly under the L pole and extend the base of the pole 9" beyond the hem of the tipi canvas. You can cut a small notch in the Lifting pole to prevent the cord holding the canvas from slipping. Use the cord provided to tie the lifting tongue (at the top, between the smoke flaps) to the Lifting pole.



22. Tie a smoke flap rope to loop at the bottom of each smoke flap.



23. Now “accordion fold” each side of the cover toward the L pole. Keep the buttonholes, smoke flaps and door opening details outside the folds.

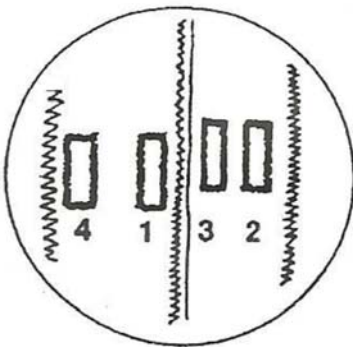
NOTE FOR LARGE TIPIS: Bind the canvas to the Lifting pole by wrapping a cord around the canvas a few times. Wrap from the bottom to about 7' up the pole.

24. When the cover is folded in close to the L pole, set the base of the L pole between C-2 and C-3. Have one person foot the base of the L pole and two more people lift and walk up under the whole bundle. Gently lean the Lifting pole with the tipi cover into the notch in back of the pole cluster. Make sure the cover is to the outside of the poles as you unfurl it and wrap it around the poles—as you would wrap a blanket around your shoulders. If a smoke flap gets caught down in between the poles, you can use a Smoke Flap pole to free it.

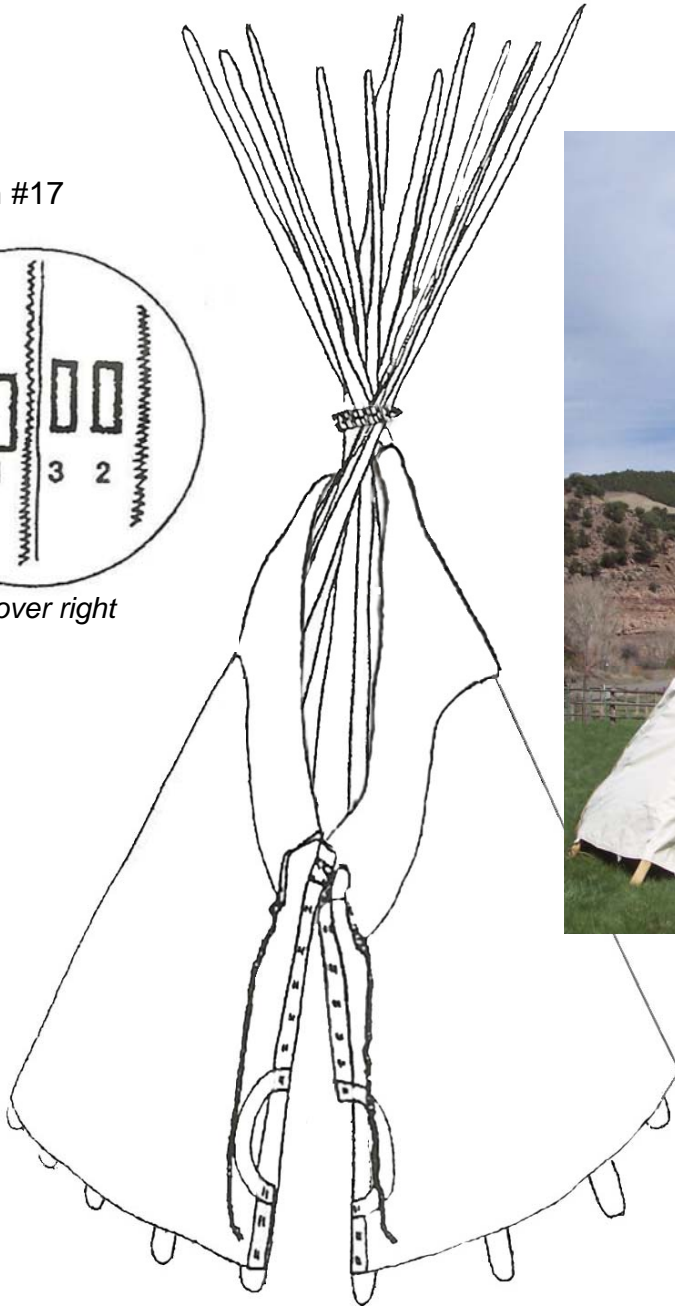
NOTE FOR LARGE TIPIS: Have more people help raise the Lifting pole. Be sure to foot the base of the L pole securely, so it does not kick out.

25. When the cover is around the poles the front can be laced. You'll need a stepladder to put in the lacing pins. Use a six-foot stepladder for 16', 18' and 20' tipis—a taller stepladder for bigger tipis.
26. Starting at the top of the lacing pins, just below the smoke flaps, lay the left side over the right and tie the 1" webbing ties in a bow.
27. Now thread a lacing pin through the top set of buttonholes in the sequence shown (Illustration #17) left side over right. Buttonholes 2 and 3 are underneath and not actually visible. Continue lacing down the front of the tipi, including the two lacing pins below the door.

Illustration #17



Left over right



28. Before the tipi cover is staked it may hang about 8" from the ground. You can move the non-tripod poles in or out to give the tipi its correct shape. From inside the tipi, push or pull the poles through the cluster to move them in or out. Try to make the hem of the tipi an even distance to the ground all the way around. Don't push the poles too tightly against the cover until it's staked.

29. Now stake your tipi. Slip a stake through a peg loop (tie oversized stakes to the loops). Pull the cover out as far as you can and drive the stake down, tighten the cover as you go. Start by driving one or two stakes near each tripod pole. Then work from front to back alternating from north to south every few stakes. Don't be afraid to make your tipi cover drum tight. Go back inside the tipi and push the poles out again so they are tight against the cover.



30. Now insert your Smoke Flap poles into the pockets provided at the top of the smoke flaps. You may need to cut your Smoke Flap poles to the correct length. A good rule thumb is to make your Smoke Flap poles three-feet longer than the size of your tipi (e.g. 21' Smoke Flap poles for an 18' tipi). Blunt the ends of your Smoke Flap poles to prevent unnecessary pressure on the pole pockets.

NOTE FOR LARGE TIPIS: With long, heavy Smoke Flap poles it can be difficult to get the poles into the pole pockets. One person standing on a stepladder, guiding the pole tip while another person handles the base makes this easier.



Your tipi should now be pitched without wrinkles and stretched tightly over the poles.

HANGING THE LINER



North section of liner overlapping the Back section, with ozan above

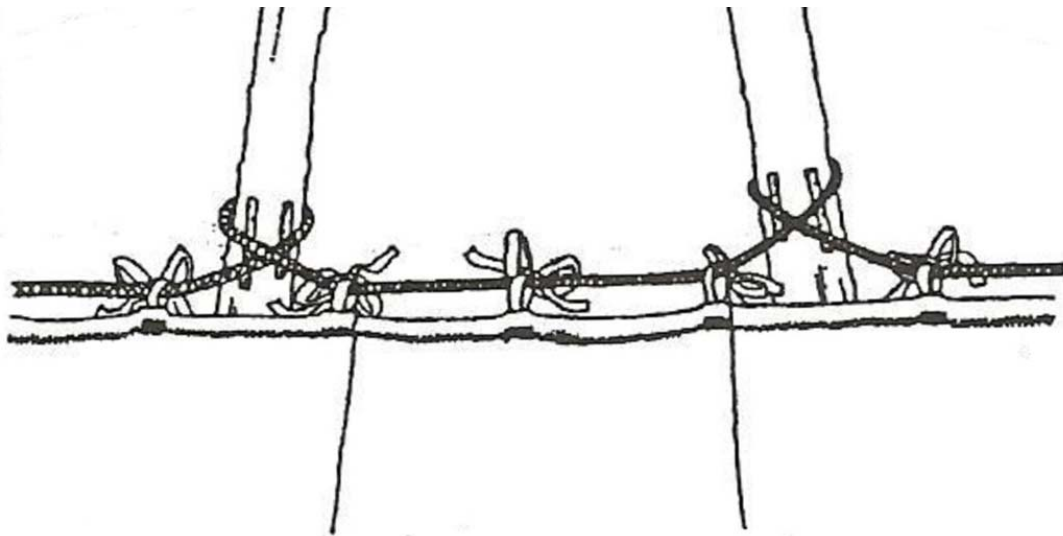
Note: All liners are comprised of three sections: Back, North and South.

1. Start at the Lifting pole; run a rope around the bottom perimeter of the tipi at ground level; loop it around the back of each pole, be sure it's tight between poles. Continue under the door opening and back to the L pole. The forms rope a continuous circle around the inside of the tipi. Catch the loop under each pole so it can't ride up when the liner is tied to it.
2. Spread out the Back section (it is labelled) on the ground at the back of the tipi. Make sure the inside (the side that faces the living area) of the liner is on the ground. The outside, with the webbing 6" up from the bottom, is face up. Orient the Back section so the bottom ties are close to the bottom liner rope.
3. Count the panels in the Back liner section and find the webbing tie at the center, bottom. Tie it onto the bottom liner rope at ground level, exactly opposite the door opening and close to the Lifting pole.
4. Attach all the ties of the Back section, working out from the center toward the north and south sides of the tipi. Continue tying the Back section to the bottom rope. Keep the canvas taut between the ties, without slack or wrinkles.
5. When the bottom of the Back liner section is completely tied to the bottom liner rope, proceed to tie the North and South liner sections to the bottom liner rope. Spread the South section out on the ground, inside down, outside up, and with the vertical edge marked "Door" close to the tipi door.
6. Note that on both lower corners of the Back liner section there is a leather-reinforced buttonhole. Begin with the first tie on the bottom of the South liner section closest to the Back panel and poke it through the buttonhole in the Back section and tie it onto the liner rope.
7. Proceed to tie all the South liner section ties to the bottom liner rope, keeping the canvas taut and wrinkle free between the ties.

8. Repeat this process with the North liner section; start by poking the lower tie nearest the Back section through the buttonhole and continue tying the North section, working toward the door.
9. When you get to the space immediately below the door opening of the tipi, tie the remaining ties right next to one another on both the North and South sections so they can later be drawn across the door opening like a curtain.

NOTE: Before proceeding to install the rest of liner determine whether you have a 6' or 9' liner. Nine foot liners have ties midway between the bottom and the top of the liner. Use the same procedure for the both the middle and upper ties on a 9' liner.

10. To mark for the upper liner rope (or the middle rope for a 9' liner) raise the liner at each pole, hold it taut and make a light pencil mark about 5" higher than the top of the liner. The top of the liner will be noticeably lower near the door.

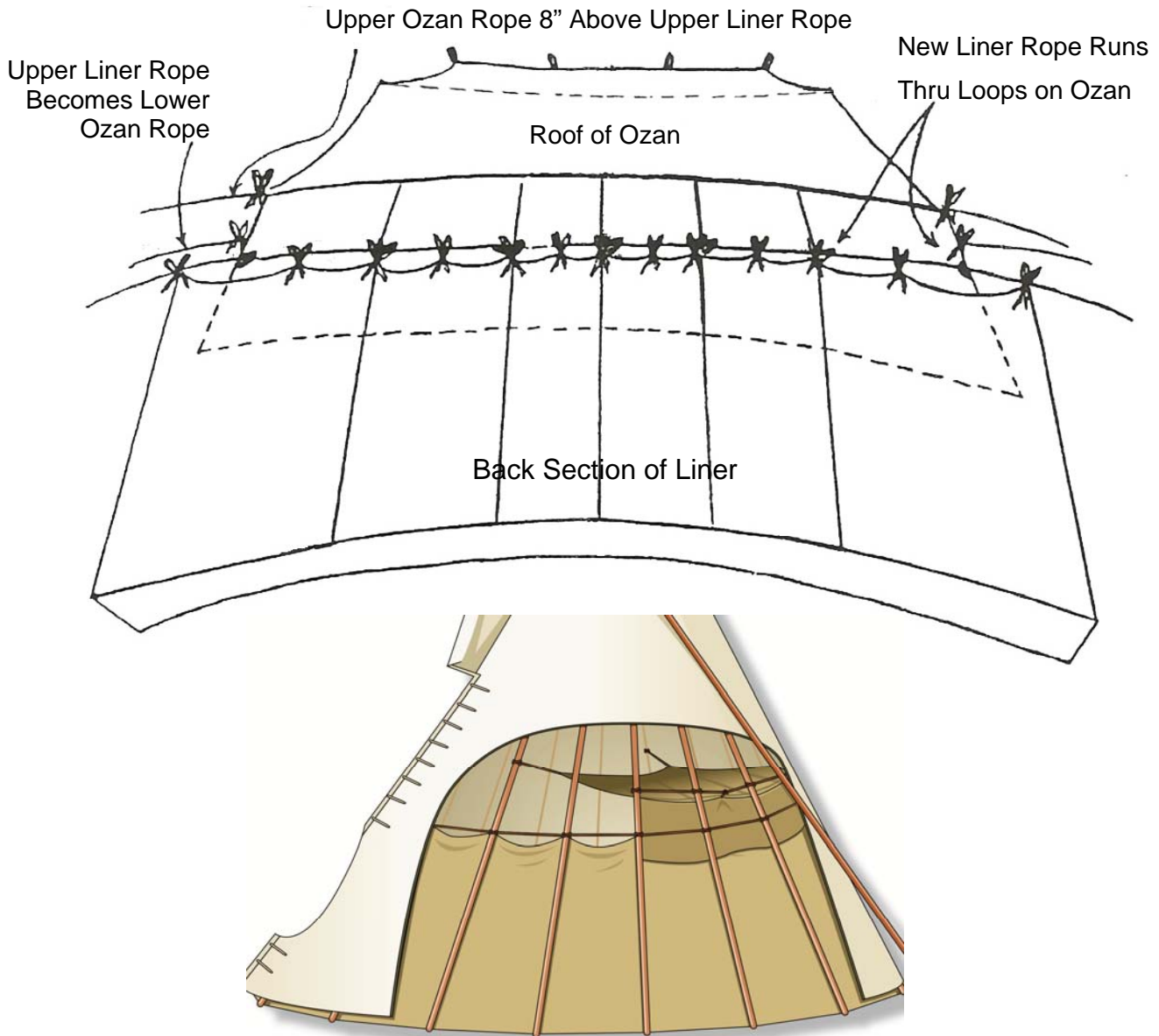


11. For the upper rope of a 6' liner start at the Lifting pole (for the middle rope of a 9' liner start at the D pole and end at A-1). Loop the liner rope around each pole at your pencil mark making a continuous circle around the inside of the tipi, keeping the rope taut between poles—as you did for the bottom rope.
12. Now lift the liner and tie each tie to the upper liner rope. Draw the rope down to the ties so that the liner is taut vertically. You may have to adjust the ties to the left or right, retying some, to minimize any slack in the canvas.
13. For a 9' liner repeat the process for the upper liner rope, holding the canvas up taut and marking 5" above the top of the canvas for the top rope. You'll need a small stepladder for a 9' liner.
14. When you get to the space immediately above the door opening of the tipi, tie the remaining ties right next to one another on both the North and South sections so they can later be drawn across the door opening like a curtain.

Tip—two small sticks placed vertically between the upper liner rope and each pole creates a channel where rain water can run down the poles and behind the liner (See Liner Illustration).

Note: Each liner is made to fit when the tipi cover is pitched about 2" off the ground. If your tipi is pitched higher off the ground or is improperly pitched, the liner may seem too small or too big.

HANGING THE OZAN

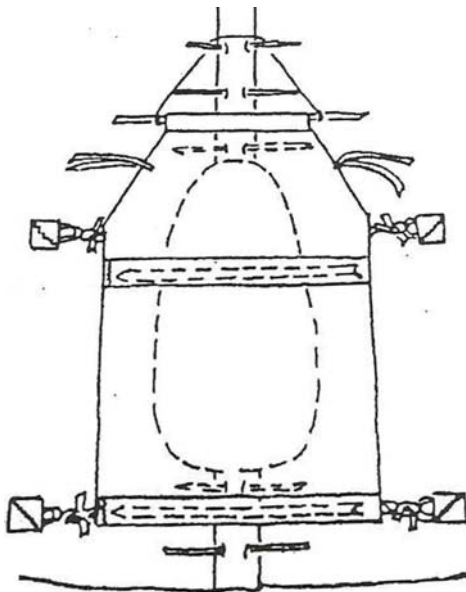


1. Untie the top liner ties on the Back Liner Section and let the section lay down. Tie a new rope 8" above the upper liner rope at the back so that you have two parallel ropes at the back of the tipi 8" apart, one above the other. Tie the upper ozan ties to the higher rope and the lower ozan ties to the lower rope (original Upper Liner rope).
2. Before you re-hang the Back Liner Section, tie guy ropes from the front edge of the roof of the ozan to poles at the front of the tipi. You can adjust the height and angle of the ozan by tying it higher or lower on each pole.
3. Now run another piece of rope through the "belt loops" provided near the bottom of the ozan. Keep the rope taut and tie off each end to a poles on either side of the ozan. Now re-tie the Back section of the liner to the rope that runs through the belt loops.



*The Ozan is Designed to Fit Behind the Top of the Back Liner Section
(Optional Extended Ozan Shown Here)*

THE DOOR COVER



1. Hang the Door Cover from an appropriate lacing pin above the door opening. Adjust the height so the ties on each side correspond to the hold downs sewn onto the tipi cover.
2. Find the inside ties sewn to the body of the door cover. These ties correspond to loops sewn near the bottom of the door opening, and allow the Door to be tied shut from inside the tipi.
3. Stow Door Cover in the open position by rolling it up and securing it with the top two ties on the Door Cover.

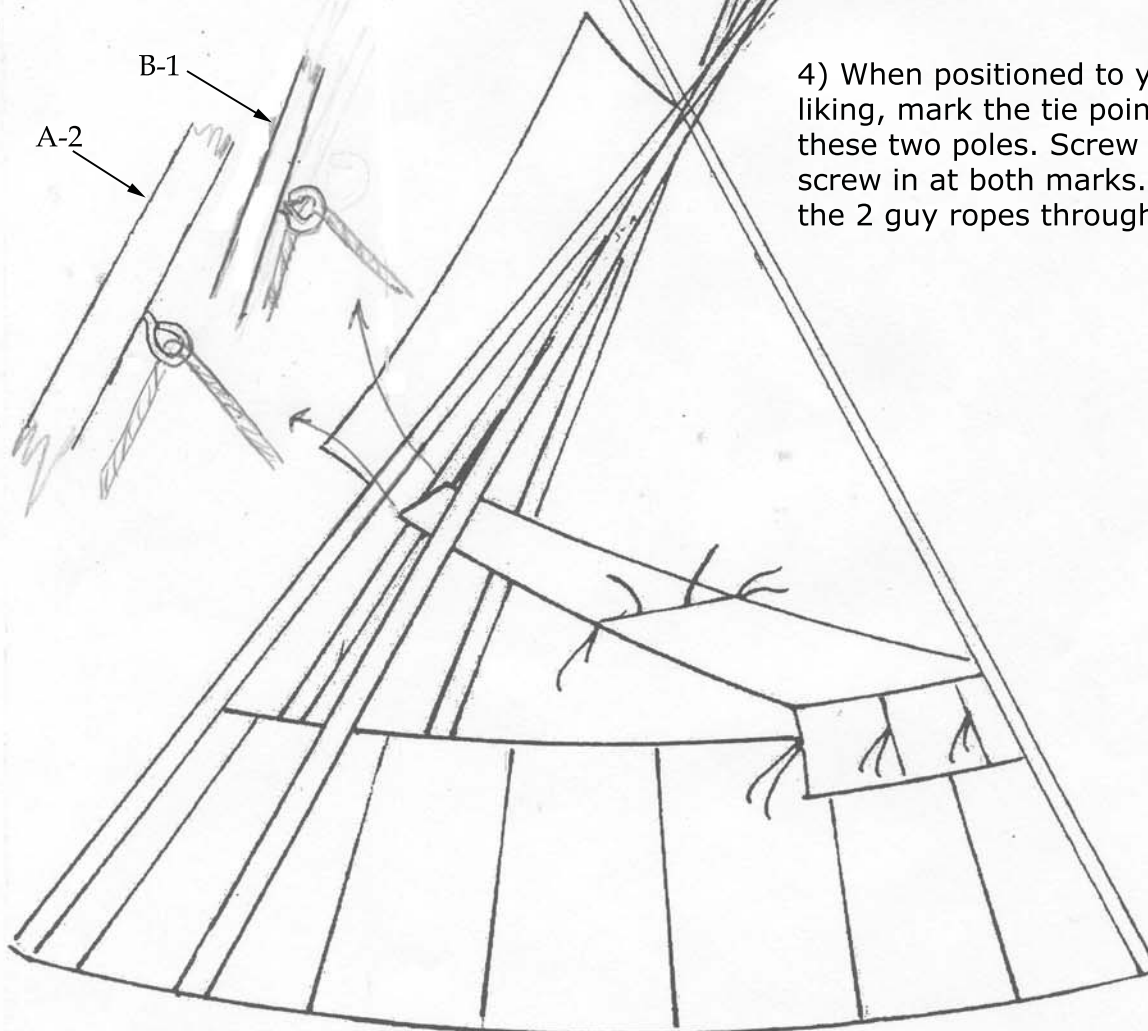
Hanging the Extended Ozan

Helpful tools: 6' step ladder, pencil, pocket knife, lighter

1) Follow step 1. in the tipi pitching booklet for "Hanging the Ozan".

2) Tie a snap hook to one end of each of the two shorter ropes. Hook these to the rings at the leading edge of the ozan roof extension.

3) Tie the other end of these 2 ropes to poles (about 9' up on A-2 and B-1) at the front of the tipi. You can adjust the height and pitch of the ozan by tying these higher or lower on each pole. And you can adjust the drape of the extension by tying to poles closer to or farther from the door.



4) When positioned to your liking, mark the tie points on these two poles. Screw an eye screw in at both marks. Thread the 2 guy ropes through.

5) For ease of handling, screw an eye screw lower down on these same poles--about 4' up from the ground. Thread the ropes through and tie off to the poles.

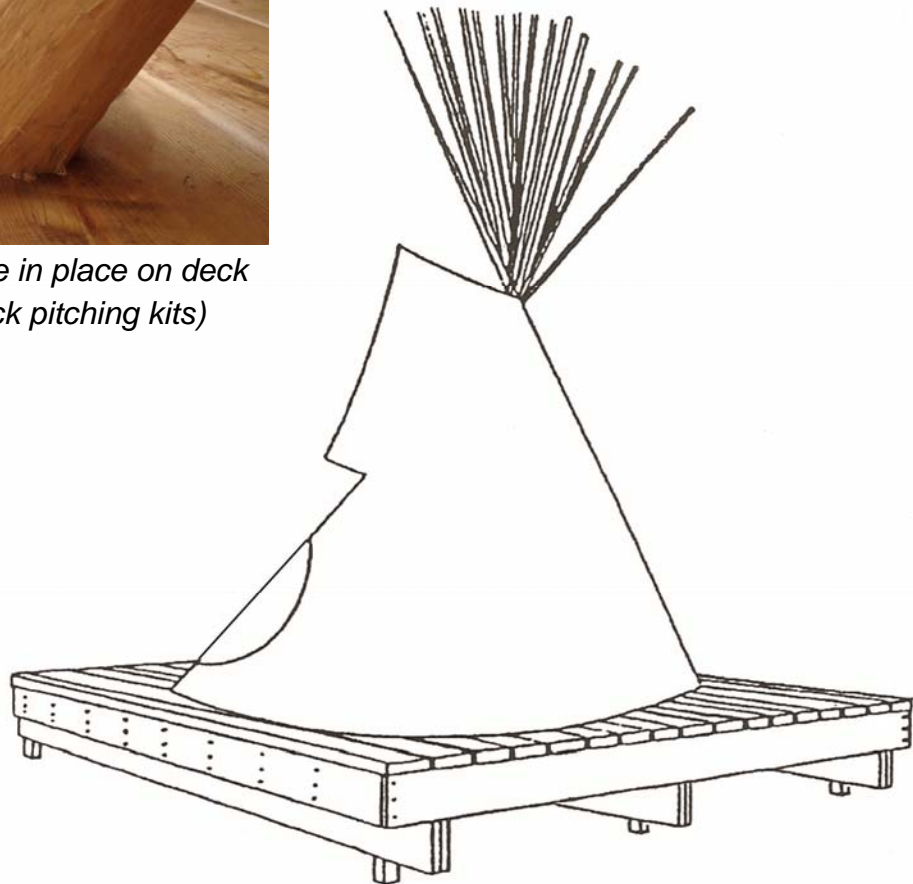
6) Proceed to step 3. in the tipi pitching booklet for "Hanging the Ozan".

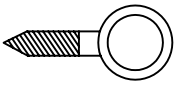
A DECK FOR A TIPI

- Use basic framing principles to determine lumber dimensions and spans for your beams, floor joists and decking materials.
- Set the beams on poured concrete footers, or pre-cast deck pads. If your footers or pads are not level, use 4 x 4 posts to "post-up" from the footers. Set your beams on top of the level posts using appropriate Strong-Tie connectors.
- Extra deck space around the tipi can be used for firewood storage, patio area, etc.

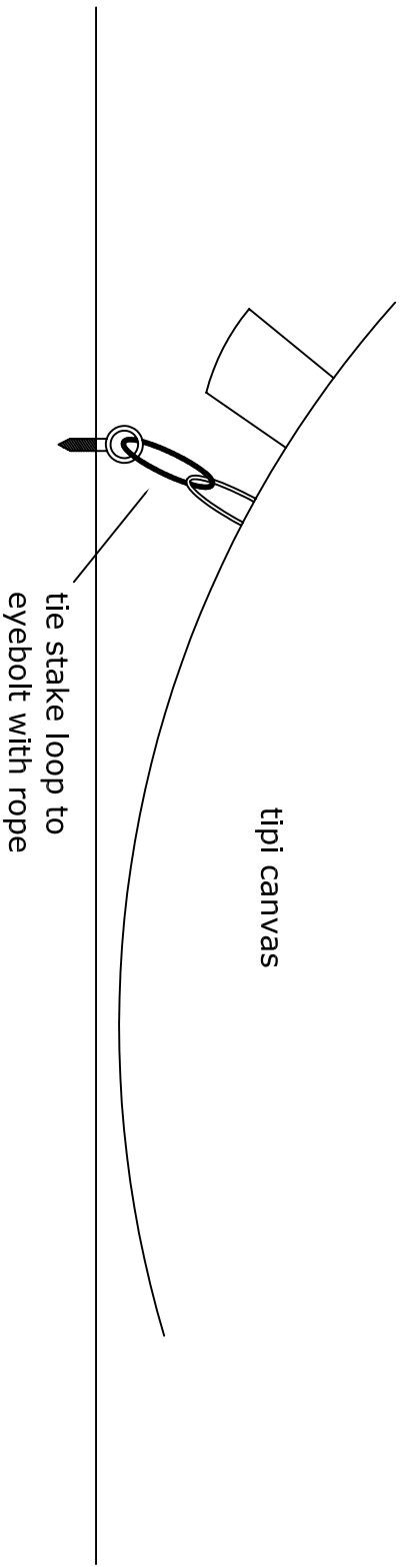


*Steel bracket holds pole in place on deck
(see price list for deck pitching kits)*

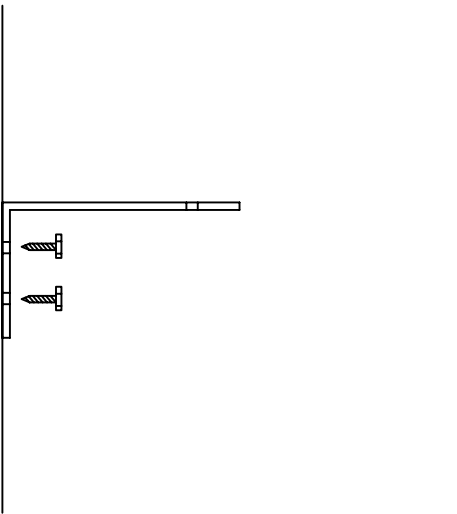




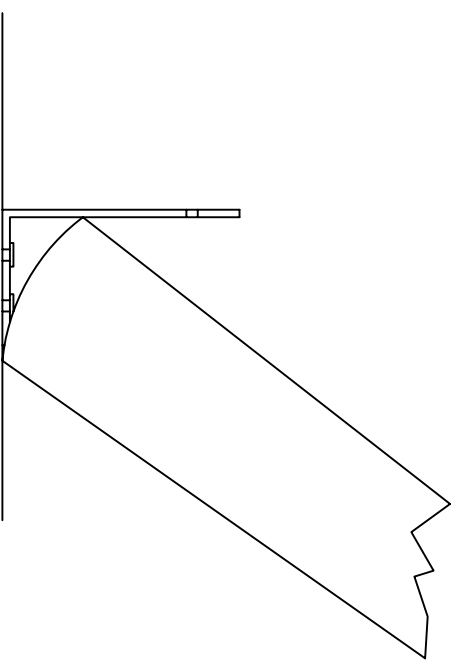
Eye bolt - one for each stake loop



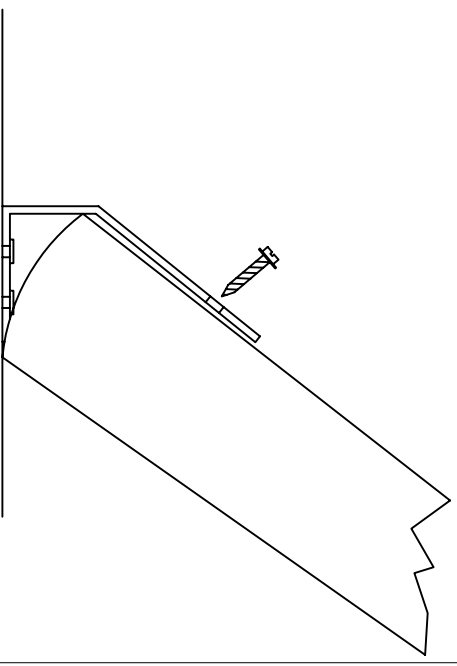
Attaching Tipi Canvas to Deck



"L" bracket to deck

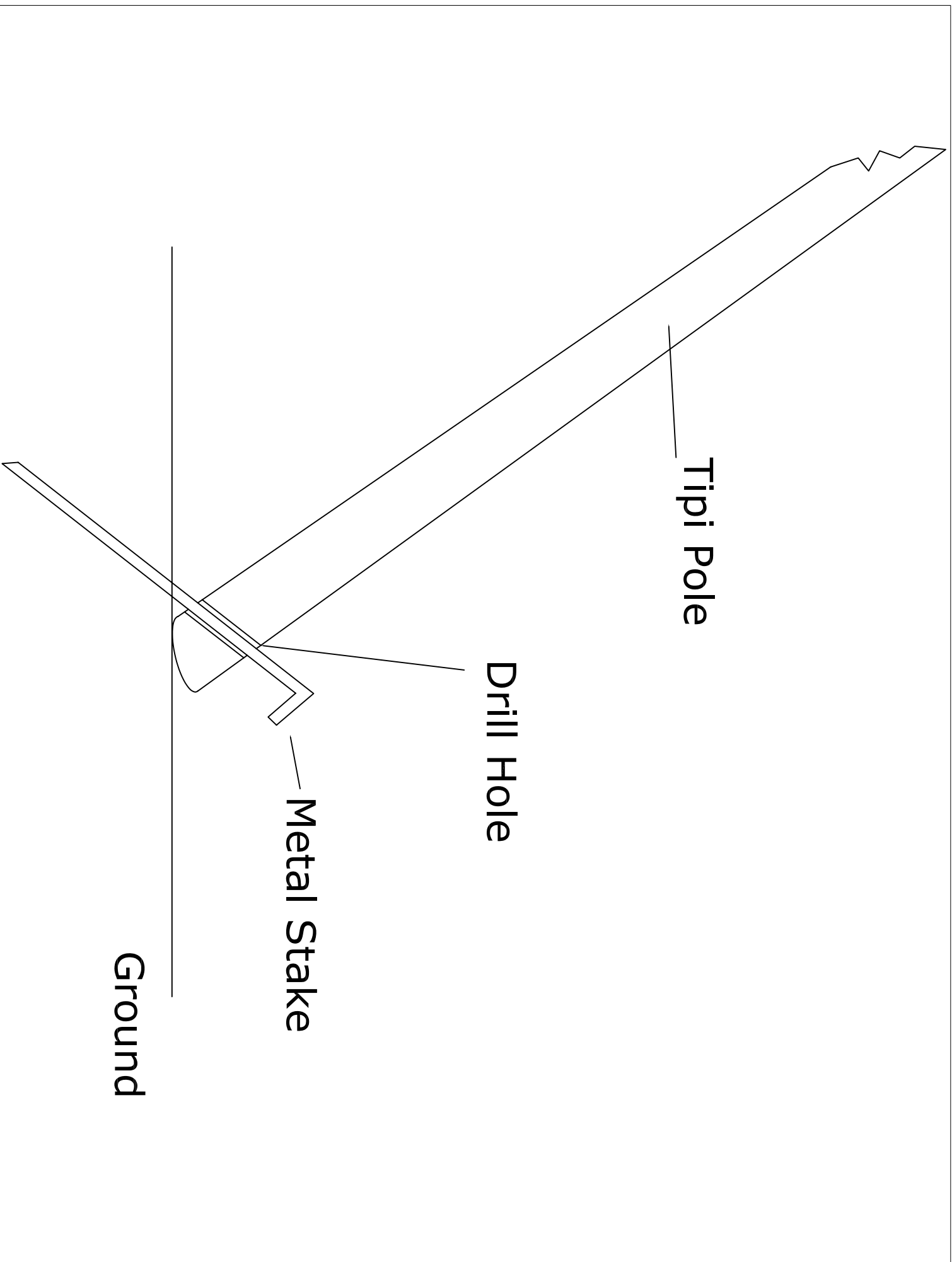


Set pole in "L" bracket



Bend bracket over to pole and secure with screw

Attaching Tipi Poles to a Deck



A FEW TIPS TO MAXIMIZE THE LIFE OF YOUR TIPI

Keep it clean

Your tipi has a durable water repellent and mildew retardant finish but it is not warranted against the occurrence of mildew. If mildew spores exist at the site where you pitch your tipi (in the plant life or the soil for example) mildew can grow on the fabric. In damp regions the best way to prevent or arrest the occurrence of mildew is to choose a site where the tipi can dry out as much possible with good air circulation and some exposure to the sun. If mildew does begin to occur it is important to clean and treat it as soon as possible.

- Always fold and store your tipi dry, not wet or damp.
- Mice and other rodents like to eat cotton canvas. Store your tipi in a plastic or metal garbage can to prevent damage by rodents.
- Never put anything mildew-prone against the tipi such as straw or sand.
- The leather on your tipi should be treated once a year with a bee's wax based leather treatment such as Sno-Seal™.
- If there is no mildew, but you wish to clean your tipi, it is best to brush it off with a medium soft bristle brush or use clean tap water with a soft brush. Some suggested cleaning agents:
 - [Iosso Mold & Mildew Cleaner](#)
 - [Meguiar's Canvas Cleaner](#)
 - [NAS-12 Mold & Mildew Remover](#)
 - [303 Cleaner](#)
 - [Simple Green](#)

ENJOY YOUR TIPI!