

The Peter Principle

The best method of rod insertion is called the “Peter Principle.” It requires the least amount of strength and upper body flexibility and is the quickest. Once learned, it should take between eleven and fifteen seconds. A twenty-run day of skiing will therefore require but five minutes of attention to becoming CADS-ready.



For the left side boot, hold the CADS rod in your right hand, about half way along its length. Hold the left side cord in your left hand. Bring the rod across the front of your body to string the rod pulley on the cord. Then...

Drop the cord with your left hand (it is retained by the pulley.) With your left hand grab the rod, about a third of its length from the pulley, and let go of the rod with the right hand.

Stand up straight with your shoulders back and level. Bend your knees forward a little, so you are resting your shins against the front of your boots. Position your skis in a slight snow plow. Drop your right hand as low behind the small of your back as possible, with palm facing out, such that your knuckles touch the spine.

With the pulley continuing to retain the cord, your left hand should move to angle the rod toward your waiting right hand, and you should grasp it so that you gather in the rising and descending strings. The best grip is achieved by taking advantage of the diameter reduction in the transition from pulley to rod.



See picture two.



Press your the knuckles of the hand holding the pulley against your back, and, a) straighten your knees as you, b) rotate your hips counterclockwise so you view the rod pointing toward the socket.

Use your left hand only to guide, not to lift, the rod. You will see that the rod has been elevated, and the elastic elongated, without much exertion.

Be sure that the rod and the Power Unit are sufficiently lined up that the rod slides in and seats.

Now do the other side, and then ski. Try this indoors with no distractions before you use the technique on the slopes.



Instructions for Installation of Harness

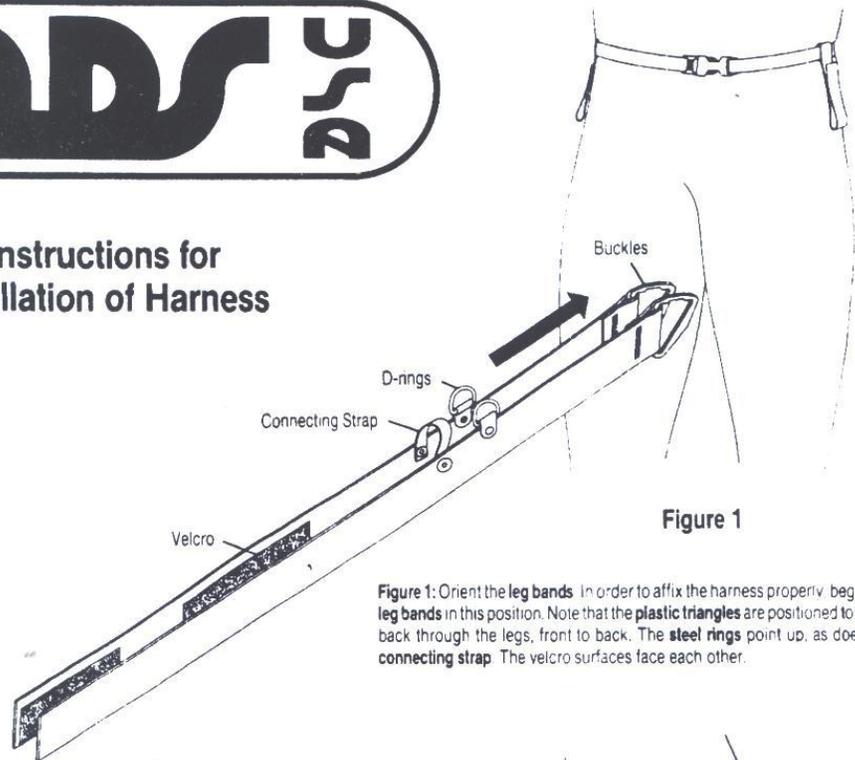


Figure 1

Figure 1: Orient the leg bands. In order to affix the harness properly, begin with the leg bands in this position. Note that the plastic triangles are positioned to be passed back through the legs, front to back. The steel rings point up, as does the thin connecting strap. The velcro surfaces face each other.

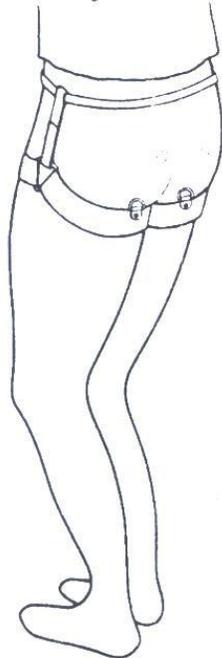


Figure 2

Figure 2: Harness in place. The waist belt has been adjusted so that it fits snugly on the hips. The side straps are well supported by the snug waist belt. The side straps are used to cinch up the leg bands. When the leg bands are correctly positioned, they are all the way at the top of the leg in the crotch, and the two of them should form a "V" in frontal view.

Note that the broad red straps have been passed through the plastic triangles, and folded back onto themselves, engaging the velcro. There should be enough slack in the red straps so you can comfortably fit three fingers under the leg bands.

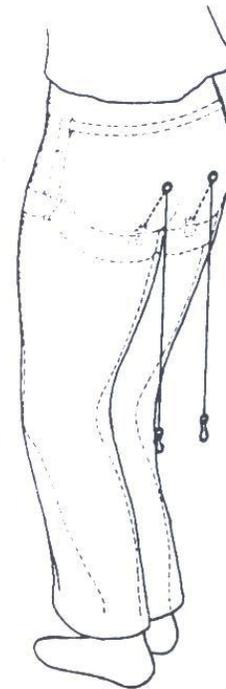


Figure 3

Figure 3: Pants on, cords, clips and rings ready for use. The cords are first attached to the "D" rings. Then, they are passed through the grommets. Finally, the clip rings are tied on with a girth hitch.

Special note: Be sure the "D" rings face up, not down. Be sure the cords pass directly up from the "D" rings to the grommets, and are neither wrapped around the leg bands, nor the connecting strap.

INSTRUCTIONS FOR SKIING WITH CADS

1. Ski with CADS as you normally would. It will take you a short while to get used to your CADS system. Many skiers find it awkward when they first try it. Some skiers adjust within one run; others take several runs or even half a day. If you don't get discouraged, you will adjust to it and you won't ever want to ski again without it.
2. Before boarding the ski lift, be sure to REMOVE your rods, placing them in your ski poles. Turn the Power Units on the back of your boot to the inside. When boarding the chair, be sure that your feet are out from under the lift. When getting off, be sure to do the same thing. During the chairlift ride, perform this cord check: stretch your legs straight out, skis perpendicular to the ground. If you are not wearing the harness on the outside, this should tension the cord enough so that if it is caught, you'll feel a tug. After you get off the lift reinsert the rods using the "Peter Principle." You are now ready to ski.
3. A crucial aspect of getting used to your CADS system is learning that the downward force on the skis is always present and that you are much stronger than that force is. So you won't be surprised by this while underway, pick up your skis repeatedly, one after another, before doing your first run with CADS.
4. Bumps take getting used to. Perhaps the key adjustment is relearning how much leg muscle force you need apply. The brain remembers prior experience and initially fails to take the added CADS force into account. The result is too much leg force and a failure to absorb. Take your first few runs slowly and make sure your legs are relaxed enough to absorb.

SAFETY TIPS

1. Before getting on a chairlift, be sure to **remove your rods**. On boarding the chairlift, be sure to keep your feet out from under the descending chair (a chair coming down on the back of the boot can knock the power unit off). While sitting on the chair, look underneath each leg to make sure that your cords are not caught on any part of the chair. As your chair approaches the exit point, straighten out your legs to make sure that your cords are free. When exiting the chair, make sure that your CADS units are well in front of the chair. If you are able, get off the chair early and push it away from you. This gives you time, if you are caught on the chair, to sit down. **IF YOU GET CAUGHT ON THE CHAIR, SIT BACK DOWN; DO NOT ATTEMPT TO UNSNAG YOUR CORD.** Remain on the chair until the lift is stopped.
2. When walking around, unsnap your cords from your CADS units and tuck them into your waistband or pockets to keep them out of the way.

CHECKLIST FOR PACKING YOUR CADS FOR YOUR SKI TRIP

Nothing is worse than arriving at a ski resort to discover that a critical element of your CADS gear is missing. Here's a packing list.

- Ski boots with power units attached.
- CADS Ski Poles
- Rods (store in pole)
- Harness with:
 - Leg Bands
 - Black Waist Belt
 - Black Side Straps (two)
 - Cords attached
 - Clips on each cord
- Extra Cord(s)
- Extra Clip(s)

Also remember that we must grommet additional ski suits or pants. Though these grommets may appear conventional, they remain secure in use as a result of significant research and innovation. No other grommets or grommetting equipment may be substituted without risking rapid cord breakage, or worse, a tear-out which could ruin the clothing.

END OF SKI SEASON CHECK LIST

When skiing is over for the season, we advise doing the following:

- Check cords for wear. This would be at the top where the cord passes through the grommet
- If the cords are worn, switch them end to end so the wear is on the clip end
- Put a baggie over the Power Units and try to seal as best as possible to minimize air exposure while in storage. This will help prevent chemical break down

CADS PARTS LIST

December 4, 2009

ITEM	PRICE
Cord (Each)	9.00
Clip (Each)	8.00
Power Unit Spring	8.50
Hinge (Each)	13.00
Grip Spring	7.50
Grip Strap	4.00
Clevis Pin (Each)	8.00
Grommet Pants (each)	20.00
Rod with Pulley (Each)	60.00
Power Unit (Each)	75.00
Harness, Complete	98.00
Boot Attachment Assembly, with Fasteners (pair)	54.00
Labor for Boots Mounted	50.00
Ski Poles (Pair)	160.00
DEER VALLEY Extra Harness: (so an extra pair of pants are CADS-ready) Includes complete harness, three cords, two clips <i>(at 15% off)</i>	120.00
POCKET KIT Includes: Hinge, clevis pin, cords (2), clips (2), power unit spring, ski pole spring, grip strap, boot assembly hardware (nylon lock-nut, copper berilium washer, stainless steel washer) for one boot <i>(at 15% off)</i>	65.00
INTERNATIONAL KIT Includes: Hinge, clevis pin, cords (2), clips (2), power unit spring, ski pole spring, grip strap, boot assembly hardware, one rod with pulley, one power unit <i>(at 20% off)</i>	175.00
SUPER KIT Includes: Hinge, smile plate, clevis pin, cords (4), clips (4), boot assembly hardware, one rod with pulley, one power unit, complete harness (wasit belt, side straps, leg bands), ski pole (1) <i>(at 20% off)</i>	335.00
Hand Pick-up or Delivery	12.50

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