BACKPACKS

External Frame

This is the traditional backpack that features an H - shaped exposed frame, thickly padded shoulder straps, a stretch backband (often mesh fabric), and a load bearing hip-belt. Straps or wired clevis pins attach pack bag to the frame

Carries best with the weight positioned high over your shoulders and supported largely by the hip-belt.

Offers good ventilation, even when against your back, a relatively straight-up stance, and a heavy load-hauling capacity.

High center of gravity makes an external shaky in the balance department. Causes swaying during active movements like skiing, bush-whacking and boulder hopping.

Easy gear organization with pockets and compartments. External come in simple top loading and panel loading models. Panel loading is the easiest to access gear.

Look for:

1. strong bag to frame attachments
2. comfortable initial fit on your hips - bears 95% of the weight
3. adequate shoulder - strap padding
4. easy - to - get - to pockets
5. reasonable amount of headroom

Externals are typically half the cost of internal packs. Cost rarely exceeds $200.00.

Fitting:

1. Hipbelt rests on your hip bones. Padded section wraps around your hips but does not meet in the front.
2. Shoulder strap's upper anchor points should be even with the crest of your shoulders. Straps are far enough apart so they don't pinch your neck but not wide enough so they don't fall off your shoulders.
3. Shoulder straps with load lifters join the pack just below your shoulder crest and join the frame at ear level.
4. Pack is too small when:
    a. you run out of headroom
    b. shoulder straps and waistbelt aren't far enough apart
    c. can't let shoulder straps out far enough
5. Pack is too big when:
    a. top flops around
    b. shoulder straps bottom out against their adjustment buckles

Internal Frame

One must look at the internal frame pack as one very large stuff sack !! When you accept this fact of an internal, the logic and gaining popularity of the internal frame becomes obvious.

Internal frames use flexible aluminum stays, usually two, to transmit weight onto a padded, stiffened hipbelt. Flexible plastic frame sheet adds support and guards your spine from cargo poking into your back. Sheet has enough "give" to match your body as it moves.

Internals hug tighter to your body and carries the load lower so its more stable for climbing and boulder hopping. Streamline shape offers better arm clearance for climbing and slipping through tight spots.

Internal have drawbacks. Must lean farther forward than externals to keep balance. Proper cargo loading is critical because the cargo helps stabilize the whole pack.

Cargo access and organization can be difficult since your dealing with one large sack or at best, two compartments. Side pockets are purchased separately. Loading plan must include easy access to quickly needed items such as pack covers, rain gear, maps and compass, water filters and first aid kits.

Cost can range from $200.00 up to $400.00 plus.

Pack fits correctly when:

a. hipbelt centers over your hip bones

b. upper end of shoulder straps attach to the frame 2 to 3 inches below shoulder level

c. top of frame stays extend 2 inches above shoulder level. No more than 5 inches.

d. all gear, including tents and sleeping bags, fit inside

e. heavier items are placed low in the bag and close to your back.