

### **HOW TO FIT A RUCKSACK:**

- 1) Get the hipbelt in the right place. The majority of the weight from a rucksack should be transmitted via the hipbelt, straight onto your hips – one way to view modern rucksacks is as humungous bumbags, with shoulder straps to stop them falling over. The hipbelt should be fastened firmly (not crushingly tightly) onto your hip-bone with no sideways movement; it should not be around your waist.
- 2) Adjust the shoulder straps. Once the hipbelt is comfortably sat on your hips, the next step is to tighten the shoulder straps (having first ensured that any load adjusters are fully loosened) so the pack pulls into your back; don't over-tighten them though, or you may lift the hipbelt off your hips. Swing your arms and you shouldn't feel constricted.
- 3) Tweak the back length. Many rucksacks (especially larger ones) have adjustable back systems on them; you may need to alter the back length to achieve a precise fit. As a rough guide, when the back is set to the correct length, the angle described between the pack and the shoulder straps should be about 30 degrees.
- 4) Tension the load-adjusters. These should be taught (to stabilise the top of the pack), but not tight; too tight and they tend to lift the shoulder straps off your shoulders. If they are correctly tightened the pack will remain stable against your back and move with your body.
- 5) Tension any other load-stabilising straps. Many modern rucksacks include other straps to stabilise the load; the commonest run between the base of the rucksack and the hipbelt. These should be tensioned, to stabilise the load.
- 6) Adjust and do up the chest strap. This is done vertically and horizontally on most 25-litre packs and above. It should sit on the pectoral muscles on men and just above the bust on women. Correctly fitted it will pull the shoulder straps slightly together to prevent chafing around the shoulders/armpits and makes for an easier and more comfortable carry.
- 7) Finally, when walking ensure any compression and lid straps are pulled in tightly to stop your pack contents moving around too much

### **GETTING THE PERFECT FIT**

Once you have identified the type and size of rucksack you need the next stage is to get the correct fit. This is the single most important thing about any rucksack and will make all the difference between a fantastic trip and a painful one!

It is very important to test out the rucksack yourself before you take it out into the hills. What works for one person is by no means guaranteed to work for another. However most of the larger packs are easily adjusted to fit your shape and back length with Karrimor's excellent Self-Adjusting back system.

You will get a better picture of how the pack will carry if you actually load it up with some weight; this ensures you will notice if there are any trouble areas. A heavy pack will obviously weigh you down but definitely shouldn't make you feel as though you are being bent double. The vast majority of the weight should be on your hips rather than your shoulders so the first important area to look at is the hipbelt.

The hipbelt should sit directly on your hips with the padding centred over your hipbones so there are no sore spots. The fastening should also be easy to use and adjust as needed. Many larger rucksacks also have a lumbar pad, which should sit snugly in the small of your back to keep your posture correct. Once this feels comfy it is time to move on to the back length and shoulder straps.

The length of the back should be adjusted so that the shoulder straps curve snugly around your shoulders without pinching. The length of the back is very important so it is worth taking the time to make sure that this is correct and the hipbelt isn't being pulled up off your hips by a too-short back length. You should also watch out for shoulder straps being worn too tight as this can cause chafing under the arms and restriction of movement, although most contoured shoulder straps help to reduce this.

You should try walking around with the weighted pack to see how it feels moving and play with all the adjustments until the pack feels stable and comfortable on your back. Just remember that if it isn't right now, it will just get worse out on the trail! Karrimor's self-adjusting back system should make this process relatively simple for you to do.

### **WOMEN'S FIT RUCKSACKS**

I also have some models available in specific women's fit and they vary in many important ways from standard unisex versions. Generally the main differences are a shorter back length, narrower and closer shoulder straps and a more shaped hipbelt to account for differences in anatomy. These differences can be very subtle but are very noticeable in terms of comfort levels for female users! The fitting of a ladies rucksack is slightly different to the men's range, it should sit slightly higher on the hips but not so high you cannot breathe.

Therefore, generally speaking men will fit a male specific rucksack more comfortably, whilst women will fit a female specific rucksack more comfortably. Having said that, don't automatically rule out the 'wrong' sex of rucksack e.g. narrow-shouldered or shorter men often fit a 'female' rucksack better, whilst very tall women can often be better off with a 'male' rucksack and this is particularly true with Karrimor's self-adjusting back system which can adjust to various back lengths.

### **PACKING TIPS**

How you pack your rucksack will affect your comfort when wearing the pack.

The basic law of packing is to make sure that the heaviest, densest items of gear are closest to your back, and therefore your own centre of gravity to maximise stability. Another golden rule is to ensure items you may need during your journey (like water bottles, jacket or hats & gloves) are easy to hand. Store them in the side pockets or close to the top of the main compartment.

# Fitting Instructions

Before putting on the Rucksack:

1. Shape the Aluminium bars to suit your back.

After loading the Rucksack:

2. Loosen all the straps.

3. Put the sack on and slightly tighten the shoulder harness.

4. Tighten the shoulder straps so that the black or red tab on the shoulders is on the highest point on your shoulders.

5. Tighten the back length adjuster straps so that the load is pulled in towards the back and straps.

6. Tighten the top tension straps so that the load is pulled towards the back and correctly balanced.

7. You can adjust the Rucksack whilst you are using it so that you can move weight between your shoulders and your hips to ease strain.



# Fitting the SA Back System

*For Rucksacks which utilise the SA (Super Adjustable) Back System.*



1. Loosen off all of the straps. This will allow for the maximum size to be attained as a starting point.

2. Put the rucksack on. Take special care putting the pack on at this point if it is fully weighed out (as the straps are loosened). Make sure the pack is centred on your back for an accurate start to the fitting. It may help to lean slightly forward to ensure proper placement of the lumbar pad against your back.



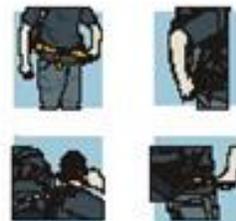
3. Fasten the hip belt. When fastening the belt make sure that the sides of the belt are resting on the iliac crest (pelvic bone). This will ensure a good load transfer when walking. A quick way to ensure this fit is to fasten the buckle so that it is resting one and a half to two inches below your superficial fascia (belly button).

4. Position the high spot on the shoulder. This will normally be where the clavical bone meets the shoulder joint. Tighten the shoulder harness straps so that the red flag indicators are at the high point of the shoulder. This will deliver the best top tension strap stabilisation relationship (the relationship is dependent on the angle at which the strap pulls on the shoulder).



5. Adjust the back length using the size adjusters (along the back system). The object is to bring the shoulder harness into the best contact with your body, whilst keeping the red flag positioned at the top of your shoulder. This will ensure a good fit relationship between the scapular pads, and the lumbar pad on your back. It will also help the pack to distribute the load evenly along your back.

6. Adjust the load balance straps. Take special care to ensure that the straps are tightened enough to help stabilise the balance of the sack, but not so much as they distort the shape of the hip belt or shoulder straps. The lower side stabilisers are responsible for keeping the load in balance with your back during motion, whilst the top tension straps keep the load balance around the top of the pack as even as possible.



7. Tune, Tune, Tune. Review steps 3 to 6 to gain optimum comfort and fit throughout your activity. The Self Adjust system (SA) allows users the unique ability to change the load transfer throughout their activity. If your shoulders feel tired, loosen the SA to allow the hips to take more weight and vice versa. No other system on the market offers this level of flexibility and comfort, whilst delivering such a high performance load transfer.