

# Fitting Your Pack – Liberator™

## A guide to fitting Macpac's Liberator™ load-carrying system

### 1. Set-Up

Load the pack with approximately 8kg of weight. Use stuffing that provides enough mass to fill the pack out and make sure the weight is centred close to your back.

Before putting the pack on *always* loosen the following straps and buckles on the harness:

- The main hip belt strap ①
- Shoulder pad adjustment straps and buckles ②
- Load transfer straps on the side of the hip belt (FreeLoad™) ③
- Load stabiliser straps ④

### 2. Putting on your pack

For a personalised fitting and the best possible load-carry follow the following steps, maximising the Liberator™ harness performance.

- Lift the pack onto your back.
- Position the hip belt so the hip belt nodules (the widest part at the front of each half) cup over the iliac crest/hip crest (high point on your hip bone). *Having the hip belt correctly positioned is the key to achieving the most efficient load-carrying comfort.*
- Make sure the iliac crest is more or less centred top to bottom under the hip belt.
- Tighten the main hip belt strap ① firmly, keeping the buckle centred.
- Tighten each of the main shoulder pad straps ② to draw the pack towards your back.
- Tighten the load transfer straps ③ on the sides of the hip belt to maximise load transfer onto your hips.
- Tighten each of the load stabiliser straps ④ located on the top of each shoulder to stabilise the top of your pack – do not over tighten.

### 3. Harness length adjustment

- Stand side on to a mirror or get another person to look at the curvature of the shoulder straps. The straps need to follow your shoulders nicely without leaving any large gaps.
- If there isn't enough curvature, remove the pack from your back and adjust the height of the shoulder straps.
- Adjusting the effective back length is easy. If you want to move the shoulder straps up, undo the adjustment tension lock buckle ⑤ and slide the shoulder straps up to the desired position. Then tighten the adjustment strap and make sure there's no slack in the strap anymore – the shoulder straps are now locked in place.
- If you need to lower the shoulder straps simply slide them down to the required position and tighten the adjustment strap ⑤
- Make sure you lock the tension lock buckle ⑤ by doubling back the webbing.
- Put the pack back on your back (follow steps 1 and 2) and check the curvature around your shoulders again. If more adjustment is required repeat the above steps until you obtain the best possible fit.
- The back length of the harness has now been established and the harness is ready to be fine tuned.

### 4. Fine tuning load transfer straps/FreeLoad™

- Tighten each of the load transfer straps ③. These provide lateral tension to the load at the base of the pack and aid in transferring maximum load onto your hips.
- On the Liberator™ FL models the load transfer straps ③ are attached to a flexible load transfer rod and a ratcheting motion, (pulling the strap forward, backward and forward again) is required to engage the FreeLoad™ transfer system fully.
- Tightening the straps will increase load transfer onto your hips, while releasing the straps will allow more hip belt movement.
- Check the position of the hip belt (crucial to the load carrying comfort of the harness) to ensure it is positioned over the hip bone and secured firmly.

### 5. Fine tuning load stabiliser straps

- Stand side on to a mirror or get another person to look at the angle of the load stabiliser strap ④ and at the position of the tri-glide buckle.
- The load stabiliser straps ④ should roughly exit the shoulder straps at an angle between 30° to 60°.
- The point at which the stabiliser strap ④ leaves the shoulder can be altered by sliding the tri-glide buckle to a new position. Ideally the buckle is located on the highest point of your shoulder or slightly forward.
- If the load stabiliser straps are pulled too tight, increased pressure on the front of your shoulders can be noticed. Minimum tension will be enough for optimum performance.

### 6. Fine tuning sternum strap

- Position the sternum strap ⑥ in the upper area of the chest to take some lateral tension off the shoulders.

