





CARRYING AND SHOULDERING

If an obstacle is too slippery or steep to ride and too long to efficiently run using the standard carry, it is often best to shoulder the bike. Shouldering takes a little longer to set up, but you can cover longer distances faster using this method.

As you approach the obstacle but before dismounting, make sure you are in an appropriate gear for your remount. Finding which gear is appropriate is something you should address during your warm up laps. Experiment with different gearing options pre-race. Dismount using similar technique as the standard dismount, placing the right hand on the toptube or downtube. Maintain the three points of contact: right hand on toptube/hip on saddle, with

the right forearm between the nose of the saddle and your body, left hand on left shifter hood, and unclipped left shoe on left pedal.

You can lift the bike in two primary ways, by the toptube or by the downtube. Generally, when shouldering on flat ground at higher speed, the toptube lift is most natural and is often the easiest for riders with longer arms as the forearm/elbow fit through the frame triangle easier using a toptube lift. The downtube lift becomes a smoother option when shouldering on an incline or at slower speed, although some find that the elbow hits the seat-tube on smaller frames. Practice both techniques to see which works best for you.

Toptube Lift

To lift by the toptube, start with your hand in the standard dismount position, grasping the toptube with your knuckles on top (image 1).

As your left foot strikes the ground, flip your right hand and grab the toptube by the underside (knuckles on bottom). This allows you to hoist the bike to your shoulder (image 2).

Lift the bike up and onto your shoulder using your bicep as your elbow slides inside the frame triangle (image 3). The weight will transfer from your palm to your thumb as this rotation progresses (image 4).

Place the toptube onto your shoulder; don't drop the bike (image 5). Then release your right hand and move your right arm to complete the arm wrap (discussed later) (image 6).





Downtube Lift

To lift the bike using the downtube, prepare just as you would for a standard dismount, except keep your right arm between your body and the bike. Open the right hand and reach straight down to grab the downtube. The point at which you grab the downtube depends on the balance-point of your bike (see page 10), and the length of your forearm compared to the geometry of your frame triangle. Ideally, you will grab the downtube where the bike is in perfect balance with just your right hand holding it; sometimes this point is closer toward the bottom bracket, causing your elbow to hit the seat-tube when lifting. Find this ideal lifting point when you are standing stationary next to your bike. When learning this skill for the first time, some like to put a piece of black electrical tape at the grab spot to help guide their



hand placement. After a little practice, it becomes muscle memory to grab in the correct location.

As you begin the lift, initially your back will be slightly bent at the waist and your right arm will be fully extended (image 1). Begin to straighten your back and use the strength in your legs and arms to lift the bike upward (image 2). Note that the forearm is also used to help stabilize the bike during the lift, and for some with less hand/wrist strength, this can become a greater asset in the lift (image 3).

As the bike begins to fully lift, your elbow will slot into the frame triangle and the toptube will naturally start to slide up to the shoulder (images 1 and 2, page 32). Again, place the bike gently onto the shoulder and release your right hand so your



right arm can perform the arm wrap (images 3 and 4, page 32).

As your right hand grabs the bars, your left hand releases and is slightly bent at your left side in a running position. When running, keep the body upright and loose. Keep your head up to see where you are going.

Arm Wrap

Once the bike is on your shoulder—either via the toptube lift—or the downtube lift, your right arm will wrap around the outside of the frame to further provide stability. There are generally three types of arm wraps used: headtube wrap, downtube wrap, and the “bro” wrap, which is not recommended.





Headtube Wrap

For riders with longer arms—and many of the elite men—the headtube wrap is preferred. It allows riders who can perform it to carry the bike in a more parallel way, such that the weight of the toptube is distributed more evenly across the back and both shoulders. The nose of the saddle tends to be farther away from the back of your helmet with this carry, which means it can't hit your head or move your helmet.

To perform the headtube wrap, bring your right arm around the outside of the headtube, just under the handlebars (image 1). Reach through with your right arm and grasp the hood of the left shifter, where your left hand is currently holding. Once the left hand transfers the shifter hood to the right hand, release the left hand and use your right hand to gently pull the bike slightly in and parallel across your back (image 2). Pulling the bike in slightly moves the saddle away from the back of your helmet, and allows you to stand upright instead of running hunched over. The type of front brake you use, and the routing of cables in front of the headtube on your bike may make the headtube wrap difficult.



With the bike securely on your back, stabilized by your right arm wrapped around the headtube, you can run naturally upright. Use your left arm as a counter-balance or to protect you from an errant bike swung wildly by your less skilled competition.