



## Salsa Flip-Offs™ Quick Release

### WARNING

**Incorrect installation of quick release wheels can result in serious bodily injury or death. Please read these instructions. If you are at all unsure, ask a professional for assistance. Always check wheels for proper installation before riding your bicycle. Salsa does not recommend the use of Titanium skewers for front or rear suspension applications.**

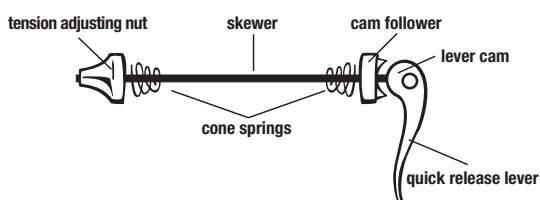
### WARNING

1. This quick release mechanism is designed for use on bicycles with correctly aligned and spaced fork and frame dropouts. If the dropouts are not correctly aligned and are not correctly spaced for the hubs being used, the cam action of the quick release may not provide sufficient clamping force to retain the wheel in the frame under all conditions. Have your dropout alignment and spacing checked by an experienced bicycle mechanic.
2. Salsa Flip-Off skewers are made in one length which will accommodate most axle and dropout widths. If, after you have correctly installed the Flip-Offs, there is more than 2 mm of skewer protruding beyond the tension adjusting nut, the skewer must be trimmed flush with the outside face of the tension adjusting nut (see Operating Instructions 2.g.). Trimming requires skill and must be done with great care. If the skewer is cut too short for its end to be flush with the outer face of the tension adjusting nut when the wheel is correctly installed on the bike, there may not be sufficient thread engagement for safe wheel retention. A skewer cut too short is destroyed and must be replaced.
3. Secondary wheel retention devices are designed to prevent the wheel from coming out of the fork dropouts even if the quick release lever is in the fully open position. If your bicycle's front fork is equipped with secondary wheel retention devices, the quick release mechanism may have to be disassembled to remove the wheel. When reinstalling the wheel in a fork with secondary wheel retention devices, the quick release mechanism may have to be reassembled and adjusted each time.
4. If for any reason the skewer of the quick release mechanism should become bent, do not try to straighten it. Instead, send the entire quick release mechanism back to Salsa Cycles, who will replace the skewer with a new one at a nominal charge.
5. Most bikes require the brake quick release to be opened before the wheel can be removed. Always check that the brake quick release is returned to the closed position after reinstalling a wheel.
6. Always close the skewer lever completely. Do not allow a frame or fork tube or any other member to inhibit full lever travel when closing. Failure to close the lever completely will limit cam engagement and the skewer's ability to hold the wheel in place.
7. Salsa Flip-Off skewers should not be used except as set forth in the Operating Instructions.

### Assembly

Figure 1 shows the component parts of the Salsa Flip-Off and the assembly sequence for the parts. Before installing, lubricate the skewer, its threads, the quick release lever pivot and the face of the cam follower with light oil.

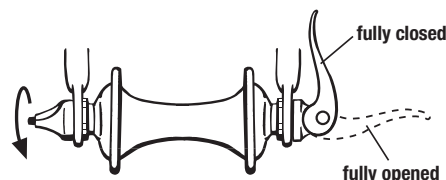
Figure 1



### 2. Operating Instructions

- a. Remove the tension adjusting nut and left cone spring.
- b. Pass the skewer through the hollow axle of the wheel hub so that the quick release lever will be on the left side of the bike when the wheel is installed. The left side of the bike is your left side when in riding position.
- c. Slip the cone spring over the threaded end of the shaft, with the narrow end of the spring facing the hub.
- d. Thread the adjusting nut on to the skewer with a few turns.
- e. Place the wheel into the bike frame with the quick release lever on the left side, and seat the wheel axle all the way into the dropouts.
- f. Seat the lever's cam in the cam follower and, with the lever in the open position (Figure 2), rotate the lever arm so that it will point to the rear of the bike once it is closed. Tighten the tension adjusting nut by turning it clockwise until you feel it touch the frame dropout.

Figure 2



- g. Swing the lever into the fully closed position (Figure 2), making sure that it is pointing towards the rear of the bike. The last 30 to 40 degrees of lever movement should require considerable force (between 24-30 lbs.) if the resistance is less than this, open the quick release lever and turn the tension adjusting nut clockwise 1/8 of a turn at a time, until the closing action of the lever requires the recommended amount of force. The wheel is now firmly locked in place.
- h. Check to see if the skewer extends more than one to two millimeters beyond the outer face of the tension adjusting nut. If it does, the skewer must be trimmed. Before proceeding, read Paragraph #2 under WARNING. To trim the skewer, first carefully mark the correct length; then remove the wheel from the bike (see i. below) and the tension adjusting nut from the skewer. Use a hacksaw or grinding wheel to shorten the skewer to the marked length; then carefully deburr and bevel the end with a file or grinder. Replace the tension adjusting nut and reinstall the wheel. Make sure that the skewer was cut to the correct length (read Paragraph #2 under WARNING).
- i. To remove the wheel, simply swing the lever into the open position and knock the wheel out of the dropouts. To reinstall it, simply reinstall the wheel in the dropouts and swing the lever into the closed position. If your bicycle is equipped with secondary wheel retention devices, see Paragraph #3 under WARNING. A correctly adjusted quick release requires regular checking, and may need occasional adjustment.

## Salsa Cycles Limited Lifetime Warranty

---

This Salsa® product is warranted against defects in materials and workmanship for the lifetime of the product subject to the limitations detailed below. This limited warranty is expressly limited to the repair or replacement of the original product, at the option of Salsa Cycles, and is the sole remedy of the warranty. This limited warranty applies only to the original purchaser of the Salsa® product and is not transferable.

In no event shall Salsa Cycles be liable for any loss, inconvenience or damage, whether direct, incidental or consequential or otherwise resulting from breach of any express or implied warranty or condition, of merchantability, fitness for a particular purpose, or otherwise with respect to this product except as set forth herein.

This warranty does not cover the following:

- damage due to improper assembly or follow-up maintenance or lack of skill, competence or experience of the user or assembler
- products that have been modified, neglected, used in competition or for commercial purposes, misused or abused, involved in accidents or anything other than normal use
- damage or deterioration to the surface finish, aesthetics or appearance of the product
- normal wear and tear
- labor required to remove and/or refit and re-adjust the product within the bicycle assembly

This warranty gives the consumer specific legal rights, and those rights and other rights may vary from state to state.

