Service Information

TREK MADONE 7-SERIES BRAKE ASSEMBLY

These instructions explain the unique assembly requirements of a Trek Madone 7-Series integrated brakes: installation, adjustment, and cable routing.

These instructions are written for an experienced mechanic, so they do not explain basic assembly or procedures that might be critical to the product or the safety of the rider. If you need further assistance, consult a mechanic's manual or contact Trek Customer Service.

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Mounting screws

The new Madone integrated brakes are a dual-pivot design, but instead of pivoting on a bracket mounted to the frame with a single bolt, the brake arms pivot on their mounting screws, which thread directly into the frame. If the mounting screws are tightened incorrectly, the brake arms may not pivot smoothly. See page 3 for full installation instructions.

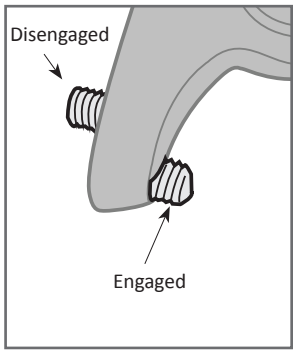
Cable pull setting

On each brake there are two set, or centering, screws, marked 'H' and 'L'. Fully engaging one screw (and fully disengaging the other) sets the amount, or ratio, of cable pull.

There are two cable-pull ratios: the H centering screw is for Shimano, and the L centering screw is for SRAM and Campagnolo.

For your brake lever of choice, engage that centering screw. Back out the other screw until it no longer protrudes past the surface of the brake arm (disengaged). This setting is not an 'adjustment'; choose one of the other.

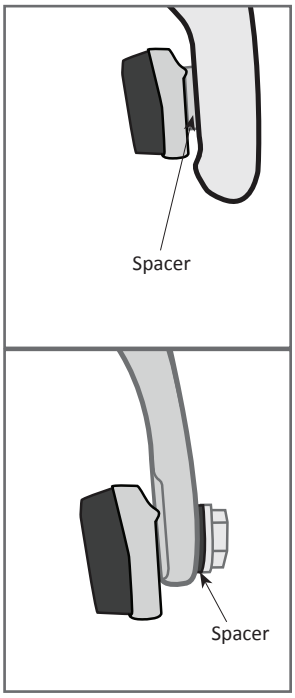
Brake lever brand	Use set screw
Shimano	H
SRAM / Campagnolo	L



Centering

The cable-pull screw also centers the brake.

The centering screws are held in place with thread locker. If a centering screw is adjusted repeatedly, it could lose its thread locker and thus lose adjustment. Re-apply thread locker as needed.



Rim spacing

Some riders will want to use both standard-width rims and wider rims. To accommodate different rim widths, simply move the two 1mm spacers from the inside or outside of the brake arm (see Table below). It is necessary to have both spacers in the stack.

Any further adjustment, including aligning the arms with the fork crown, can be accomplished with the cable barrel adjuster.

Table of spacer locations for rim widths

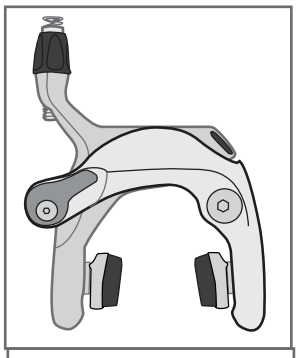
Rim width (mm)	Spacer location
19-21	Two between pad and arm
22-24	One spacer on each side of arm
25-27	Two outside arm

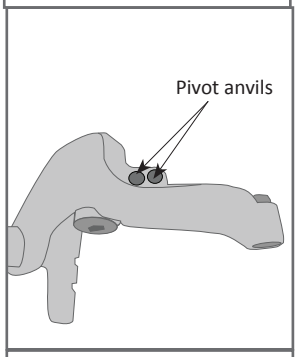
FRONT BRAKE

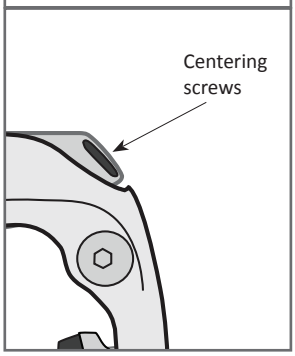
Installing a brake

This section explains how to install a brake on the new Madone. Follow this procedure for a front or rear brake.

1. With the shorter mounting bolt, install the Y-arm of the brake. Tighten the mounting bolt to 6-8Nm.
   The bolt head should be flush with the surface of the brake arm, not proud.
2. Apply a small amount of grease to the pivot anvil, the place on the Y-arm where the centering screw contacts the C-arm.
3. Disengage both centering screws (new brakes are shipped this way).
3. With the longer mounting bolt, install the C-arm of the brake. Tighten the mounting bolt to 6-8Nm.
   Again, the bolt head should be flush.
4. With a 2mm hex wrench, engage the correct centering screw (see page 2).
5. Tighten the centering screw until both brake arms travel smoothly through a full range of motion and the brake is roughly centered.
6. For the rear brake, install the housing stop quick-release on the head tube (see page 4).







7. Install the brake housing and cable (before installing the rear brake, see the next sections).
8. Adjust the brake spacing with the pad spacers (see page 2) and fine-tune with the barrel adjuster.

REAR BRAKE

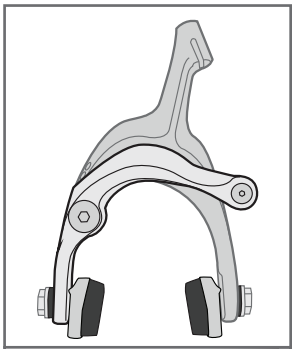
The rear brake should be installed by following the same procedure as the front brake. This section explains special considerations for the rear brake.

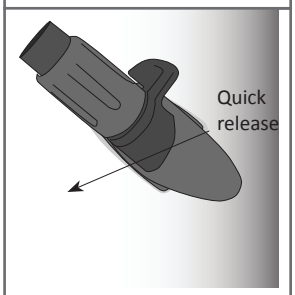
Quick-release

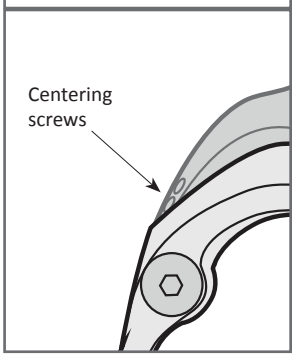
Because the rear brake is mounted under the chainstays, the quick-release opener for the rear brake is located on the head tube. This allows the rider to open the brake for a fast wheel change.

Centering screws

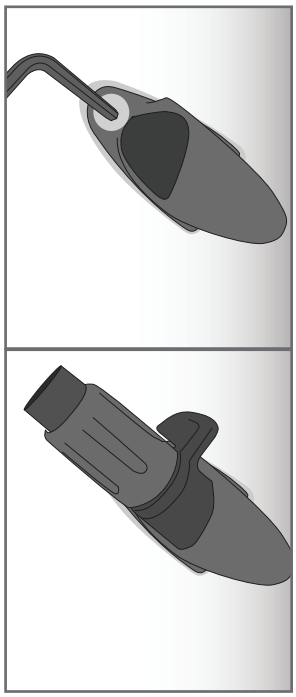
The centering screws on the rear brake are less accessible than those on the front brake. If the screws are not accessible through the cut-outs of the chain rings, it may be convenient to cut off a standard allen wrench to make this adjustment easier.







This section explains how to install the rear brake cable.



Housing stop quick-release

The housing stop incorporates a brake quick-release to open the brake for quick wheel changes.

1. Place the housing stop in the head tube of the frame and install the countersunk bolt. Tighten the bolt to 0.7Nm.
2. Pass the barrel adjuster through the quick-release lever and thread into the housing stop.
4. Install the rear brake cable and housing.

Cable routing

1. Thread the cable through the housing stop on the head tube and out the bottom bracket.
2. Slide ‘cable donuts’ onto the cable.
   Note: Cable donuts prevent rattling from cable movement inside the frame.
3. Prepare the brake cable housing for the bottom bracket. The rear brake centers best with a housing length of 180mm.
4. Pass the cable through the brake housing at the bottom bracket and attach to the brake.
   Note: Take care to not cross the cables.
   Tip: Place a light in the bottom bracket or head tube to illuminate the inside of the down tube.
   Note: Use brake housing ferrules on all housing ends.
5. Follow normal adjustment procedures.