

eebrake installation & service instructions

General Safety Information

Warning - To avoid serious injuries: Improper use of your bike's brakes may result in loss of control and an accident, resulting in serious injury. Learn to control and use your brakes safely by practicing riding and braking techniques in a safe place. Read and follow the instructions found in the service instructions.

Obtain and read the service instructions thoroughly prior to installing the brakes. Keep these instructions for later use.

Tighten brake bolts and nuts to specified tightening torque. Use grease provided to lubricate all the parts as indicated. Titanium brake parts require lubrication where they contact other parts or galling and/or corrosion may occur. All plastic bushings are self lubricating and require no oiling or grease.

Brake mounting nuts must be long enough to provide at least 6 turns of engagement when screwed on the main mounting bolt when installed on the frame or fork. If a nut comes loose and falls off, brake failure may result in an accident and serious injury.

Always check your brakes to make sure they are working properly and make sure the quick release is closed before riding your bike.

Check your brake cables routinely for rust and fraying. Replace cables immediately if these or other problems are found.

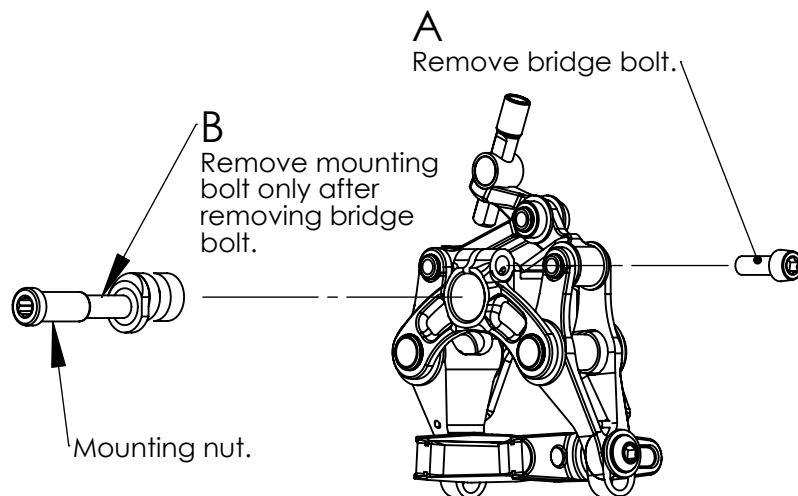
Never ride your bike with loose, worn or damaged brakes. Never ride your bike with brakes improperly installed or adjusted. This may result in an accident and serious injury. Always replace worn parts and pads.

Do not allow oil or grease to get on the brake pads as this will result in poor brake performance and may lead to an accident.

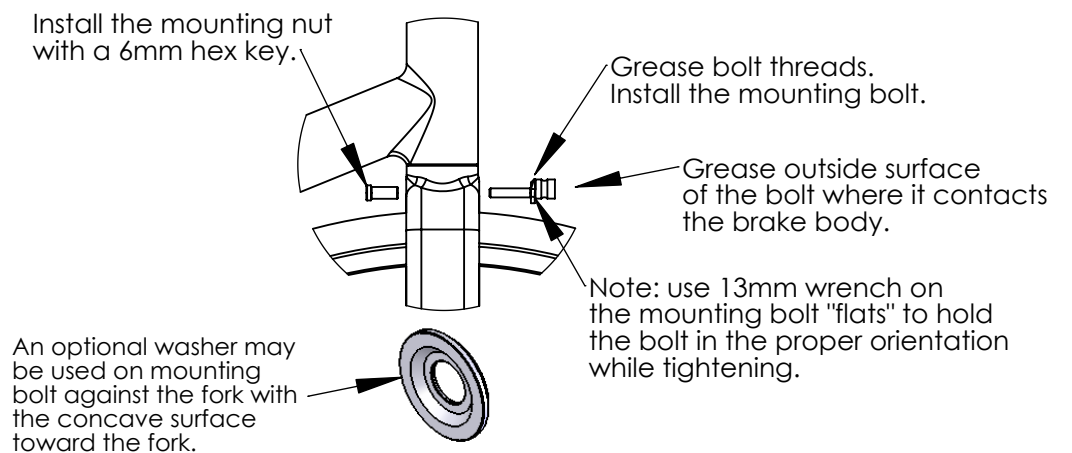
Use caution when riding in wet weather as tire traction is reduced and stopping distances are greater in these conditions. Ride at reduced speeds, apply the brakes gently and allow greater distances to stop.

Brake installation and operation

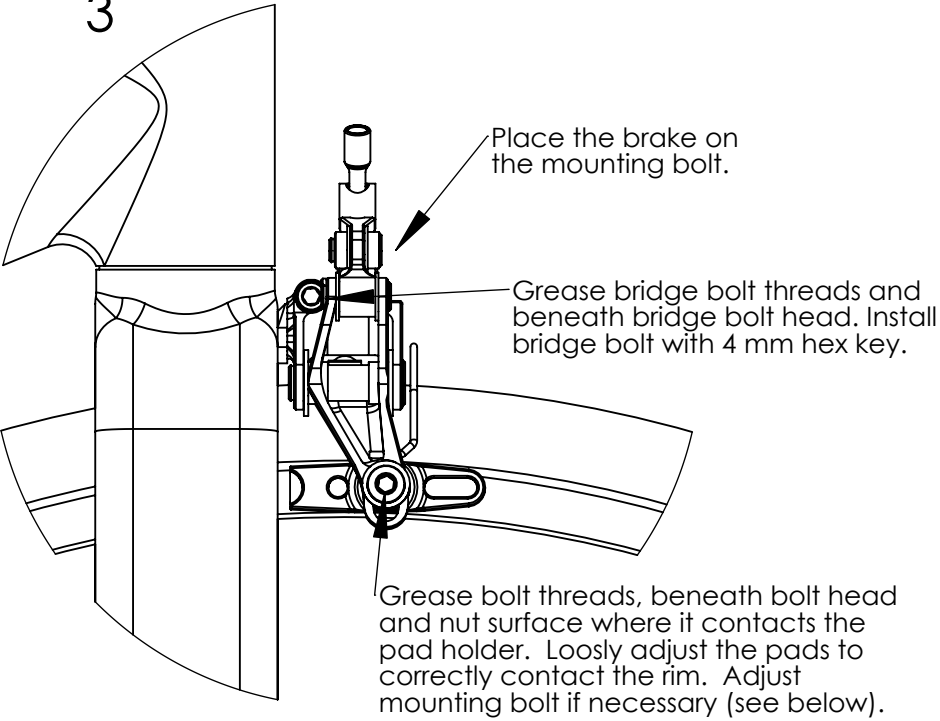
- 1 Remove the main brake body from mounting bolt.
Note: the brake body can only be removed and replaced by **FIRST REMOVING THE BRIDGE BOLT.**



- 2 Install the mounting bolt in the frame or fork. Loosely tighten the mounting nut on the mounting bolt. Make sure the nut has at least 6 turns of engagement on the bolt. Use a longer nut if needed.



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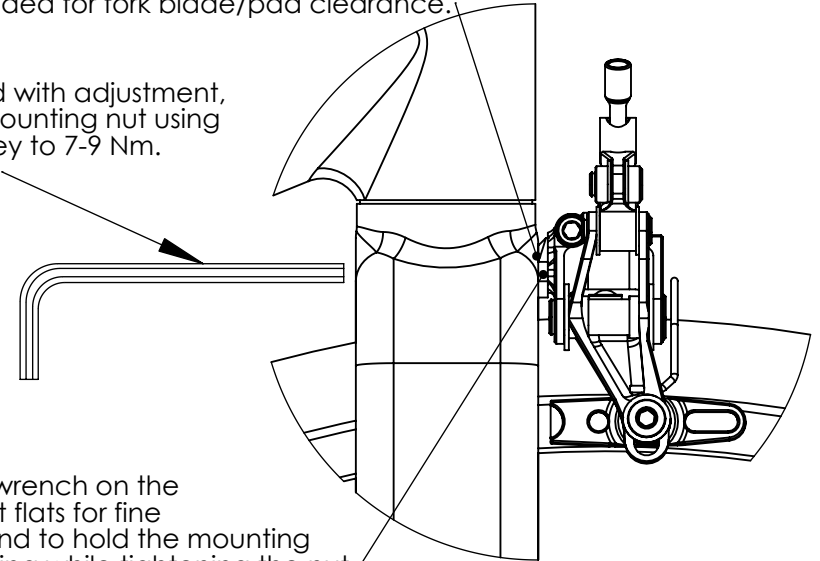


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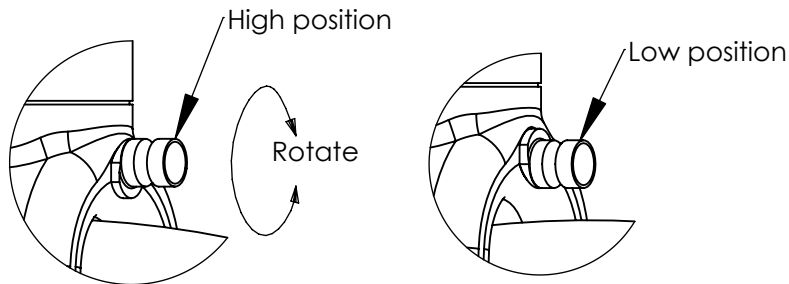
Check that the mounting bolt flange fits flush on the frame/fork or optional washer (if used). A washer may be needed for fork blade/pad clearance.

When finished with adjustment, tighten the mounting nut using a 5mm hex key to 7-9 Nm. (62-80 in. lbs.)

Use a 13mm wrench on the mounting bolt flats for fine adjustment and to hold the mounting bolt from turning while tightening the nut.

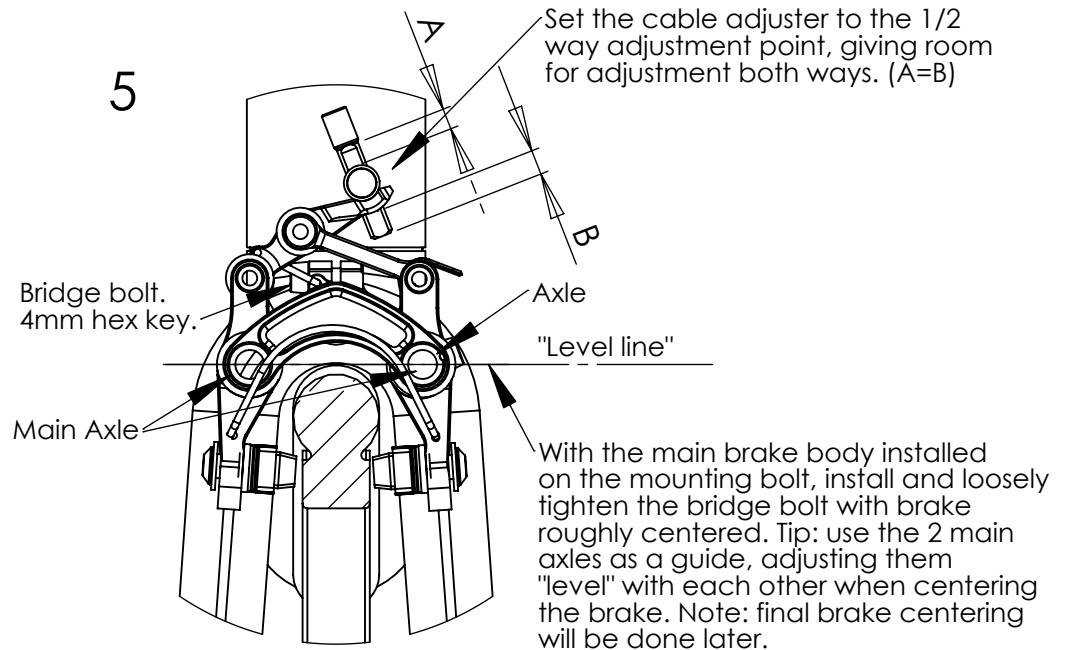


The mounting bolt is an eccentric design which has a high and low brake height setting and off-center brake alignment adjustment. The high, low, and off center settings are set by rotating the bolt in the frame/fork. Rotate the mounting bolt to the high or low position to allow correct pad height adjustment on the rim. Also, rotate the mounting bolt to align the brake over the center of wheels which are not centered (properly dished).

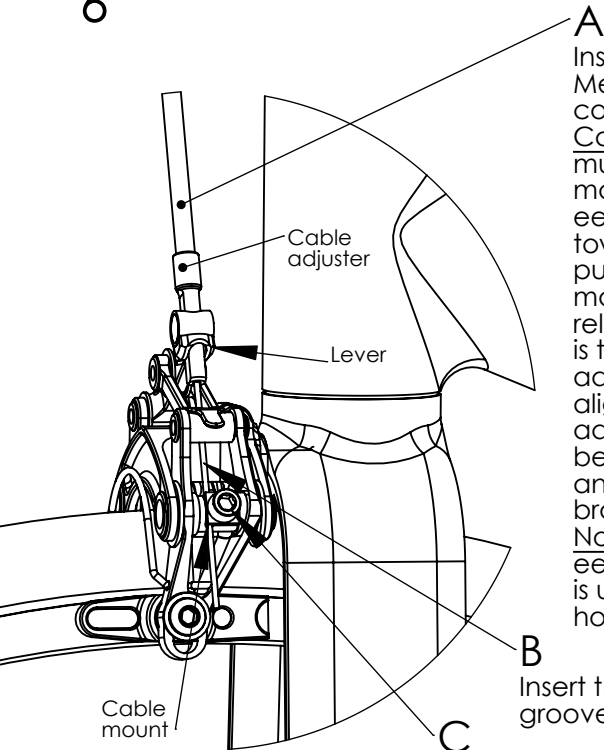


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Set the cable adjuster to the 1/2 way adjustment point, giving room for adjustment both ways. (A=B)



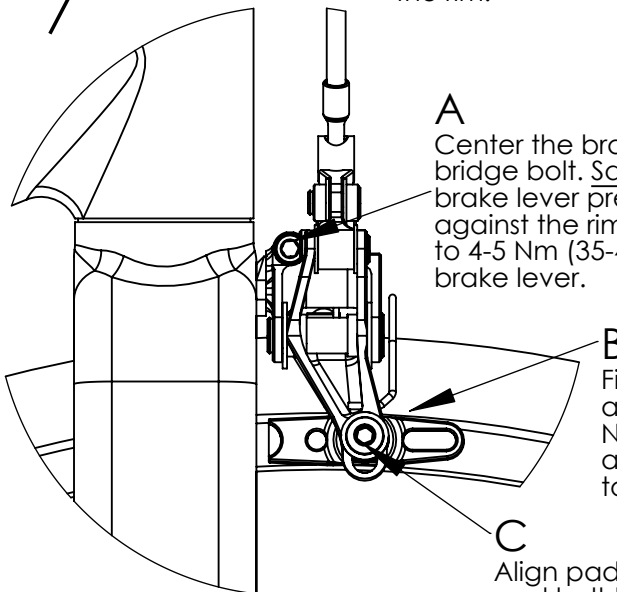
With the main brake body installed on the mounting bolt, install and loosely tighten the bridge bolt with brake roughly centered. Tip: use the 2 main axles as a guide, adjusting them "level" with each other when centering the brake. Note: final brake centering will be done later.



A
Install the cable housing and cable. Measure and cut the cable housing to the correct length.
Cable housing length keys: 1) The housing must be long enough to allow for free movement as the brake is operated (As the eebreak is operated, the cable housing moves toward the brake). Too short of housing will pull against the brake when operated and/or may not allow the brake to fully open when released. 2) The housing alignment/length is to allow straight alignment of the cable adjuster to the cable mount. Improper alignment/length will 'rack' the cable adjuster in the lever and result in the cable bending between the cable adjuster and cable mount. This hinders smooth brake operation.
Note: When replacing other brakes with eebreaks, the correct cable housing length is usually 1/4" +/- longer than the existing housing (especially on the rear brake).

B
Insert the brake cable into the cable groove under the cable bolt/washer.

C
Tighten the cable bolt to 4-5 Nm (35-44 in. lbs.) while holding the brake arms with the pads loosely against the rim.



A
Center the brake by loosening the bridge bolt. Squeeze and hold the brake lever pressing the pads lightly against the rim and tighten the bolt to 4-5 Nm (35-44 in. lbs.) Release the brake lever.

B
Finally, adjust pads for correct alignment and contact to the rim. **Note:** the eebreak pad holder allows the "toe-in" and "camber" to be adjusted.

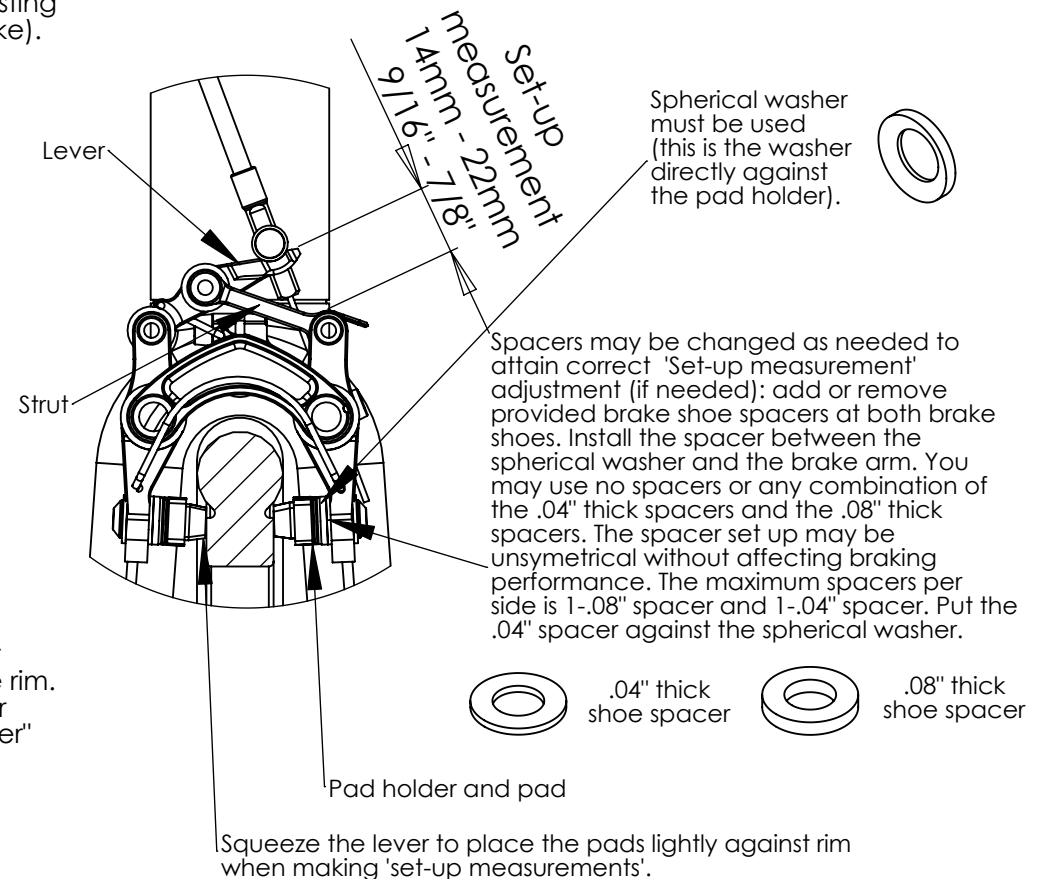
C
Align pads correctly and tighten the pad bolt to 4-5 Nm (35-44 in. lbs.).

Lever set-up Adjustment

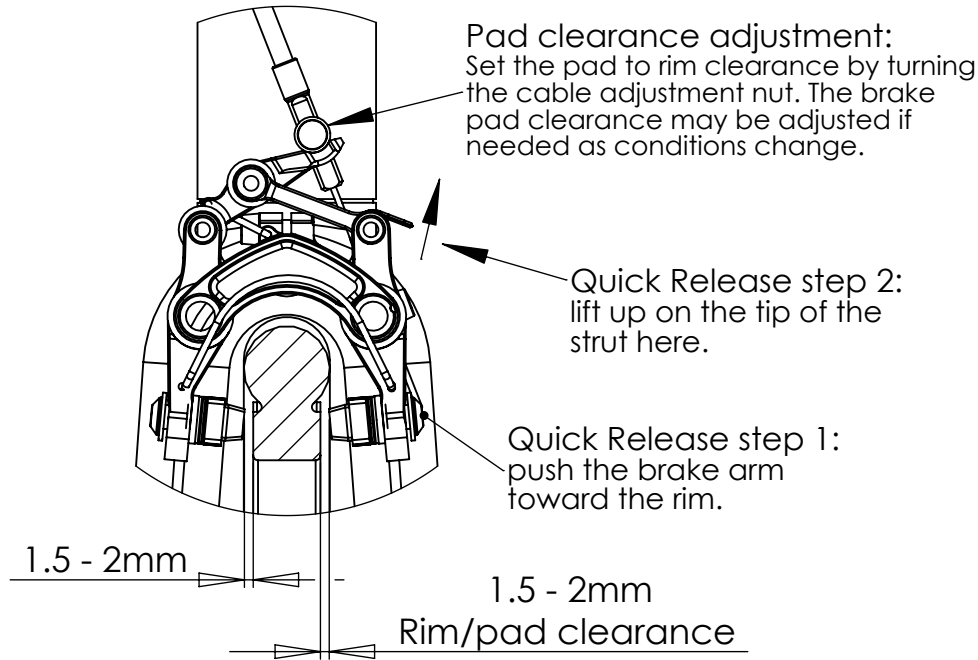
The eebreak has been set up to work with most rim and pad combinations with the factory setting (.04" thick spacer installed). Changing the pad holder spacer configuration may be needed to attain correct adjustment with extra narrow/wide rims and or worn (short) pads. Wider rims and taller pads require fewer/thinner spacers and narrower rims and shorter pads require more/thicker spacers. Additionally, using this adjustment, the brake leverage may be altered as desired. The brake leverage is increased as the 'set-up measurement' decreases. The leverage is to be adjusted only within the correct 'set-up measurement' range.

For use with Shimano 7900 levers, use a shorter 'set-up measurement' giving the eebreak more power to compensate for the less powerful lever.

With the brake lever squeezed so the pads are lightly touching the rim, the correct distance between the tip of the lever to the top of the strut is in the range shown below.



Pad clearance adjustment & quick release



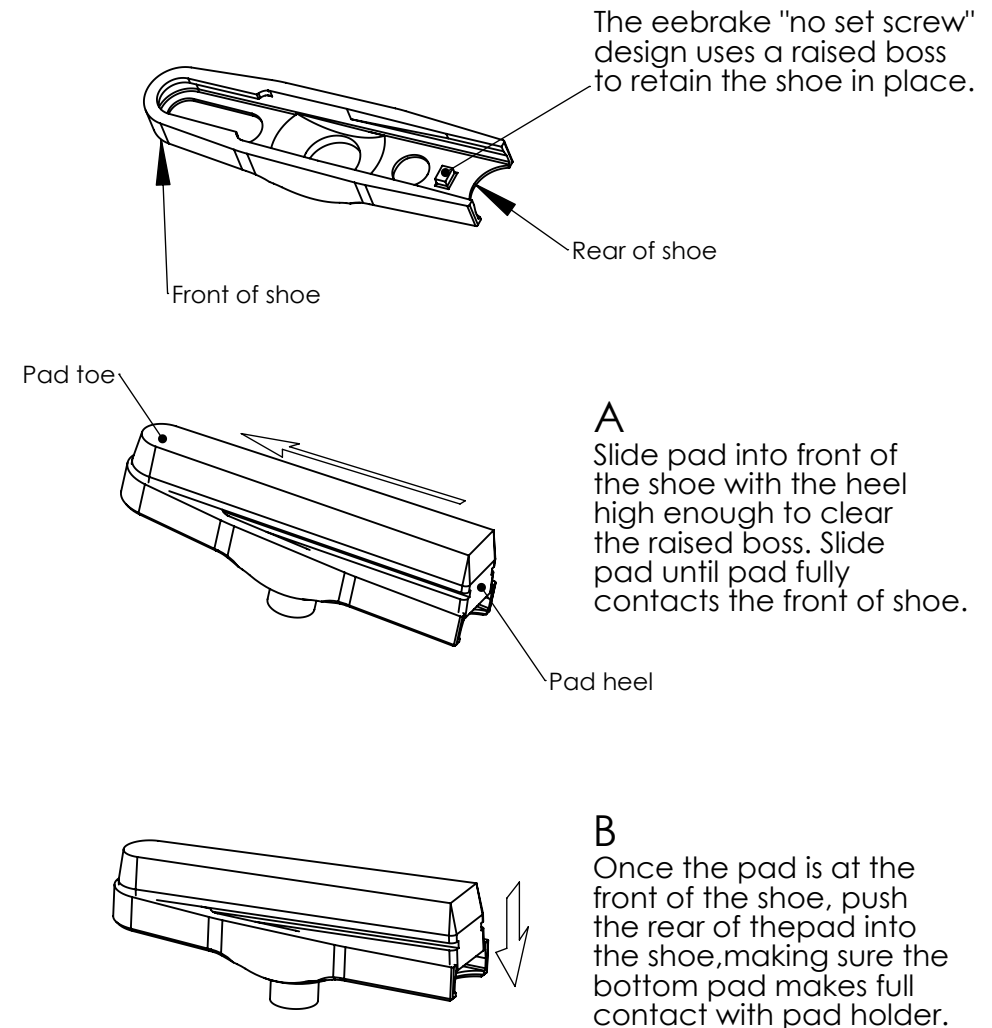
Quick Release:

The "quick release" is operated by first lightly pressing the lower part of the left brake arm toward the rim and then lifting up on the tip of the strut. This allows the left brake arm to rotate away from the rim for wheel removal and installation. The lever is replaced into the normal position by pushing the left arm back toward the rim and replacing the strut back to its normal position. (Note: only the left arm moves in the quick release mode, but allows room to clear even 28mm tires!)

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Check the brake by squeezing the brake lever 10 times firmly. Recheck the pad clearance and the bolts/nut for tightness.

Pad Installation:



Pad Removal:

Lift/pry the "heel" of the pad out of shoe until it clears the retention stud. Then slide the pad out toward the rear of the shoe until the pad is free.