

Changing Brake Pads

Changing brake pads is a relatively easy task but proper brake service includes lubricating the pins on which the calipers float. Doing so is a bit more involved so I'll leave it to another article.

For those of you who don't understand how disc brakes work here's an explanation. The brake caliper is a bit "C" shaped and it straddles the rotor like a C clamp. Brake pads are fastened to each side of the C. One side of the caliper contains one or more pistons. When the brakes are engaged, the pistons are pushed out pushing the pads on that side of the caliper against the rotor. This action pulls the other side of the caliper toward the rotor, squeezing the rotor between the brake pads. This action is the same as screwing down a C clamp. The caliper is mounted to the fork (in the front) or to the frame (in the rear) but floats on pin(s) that allow it to move. These pins must remain lubricated or the caliper won't be able to squeeze the rotor. When frozen, only the piston side of the caliper pushes the pads against the rotor. Thus half of the stopping power is lost and the pads on the piston side wear much faster than those on the other side.

To check the wear on the brake pads, since the pads have a 1 mm wear limit, I slide a 1 mm feeler gauge between the rotor and the pad's backing plate. If there is room for the gauge on both sides they are not yet at their wear limit. Front pads can last about 30,000 miles. If you use Honda brake pads on the rear they should last as long or more, depending on how much you use the rear brake.

To change the pads in the front first push on the caliper to retract the pistons. This is necessary to make room for the new pads. If it is difficult to do it is probably because there is not enough head space in the brake reservoir so remove the cover from the brake reservoir. Make sure that brake fluid doesn't overflow the reservoir. And protect your paint.

At the bottom of the caliper is a pin that holds the pads in place. The outboard end of the pin is covered by a rubber dust boot. Remove the boot. Remove the pin using a 5 mm Allen wrench. The pads will fall out.

Clean the pin and put a dab of silicone grease on the tip.

Slide the new outboard pad in place. Make sure that the tab on the top of the pad engages the notch at the top of the caliper. Slide the pin into the caliper and through the hole in the pad.

Holding the pin in place so the pad you just inserted doesn't fall out, slide the inboard pad in place like you did with the outboard pad. Slide the pin the rest of the way through the hole in the inboard pad into inboard side of the caliper. Screw the pin in torqued to 13 lb-ft and replace the dust boot.

Repeat on the other side.

Squeeze the brake lever a few times to seat the pads against the rotor.

Replace the cover on the brake reservoir if you removed it.

The procedure is the same for the rear brake caliper.

As usual, follow these instructions at your own risk.

