

2001 LEXUS IS300 Automatic Brake Rotor/Pad Replacement DIY

DISCLAIMER: The procedures, methods and products written up here was for my circumstances only and were performed on a 2001 Automatic. I make no promises that your results will be the same nor do I claim that this is the best way to do it. USE AT YOUR OWN RISK!

WARNING on working under a raised vehicle: This procedure requires that the vehicle be raised. Do not depend on the jack alone. Use jack stands and place them under the lift points as described in the owner's manual.

Pad Replacement

Time Required: 1 to 1.5 hours

Rotor/Pad Replacement

Time Required: 2 to 2.5 hours

Tools Needed:

Pad Replacement

- torque wrench capable of up to 100 ft lbs
- 14mm box wrench
- 14mm 3/8" socket
- 17mm combination wrench
- dead-blow hammer (rubber hammer filled with buck shot)
- small wood block
- 6" c-clamp or very large channel locks
- Needle Nose Pliers
- metal pry bar or back of crescent wrench.
- masking Tape
- High quality grease.
- Small bungee cord or bent coat hanger.
- Turkey baster

Additional Tools Needed for Rotor/Pad Replacement.

- 12mm offset box wrench
- 17mm deep 3/8" socket
- 2" 3/8" extension
- 12mm bolt (I lost my thread gauge, but it should be a standard 12mm bolt)
- 220 grit sand paper

FRONT Pad/Rotor Replacement

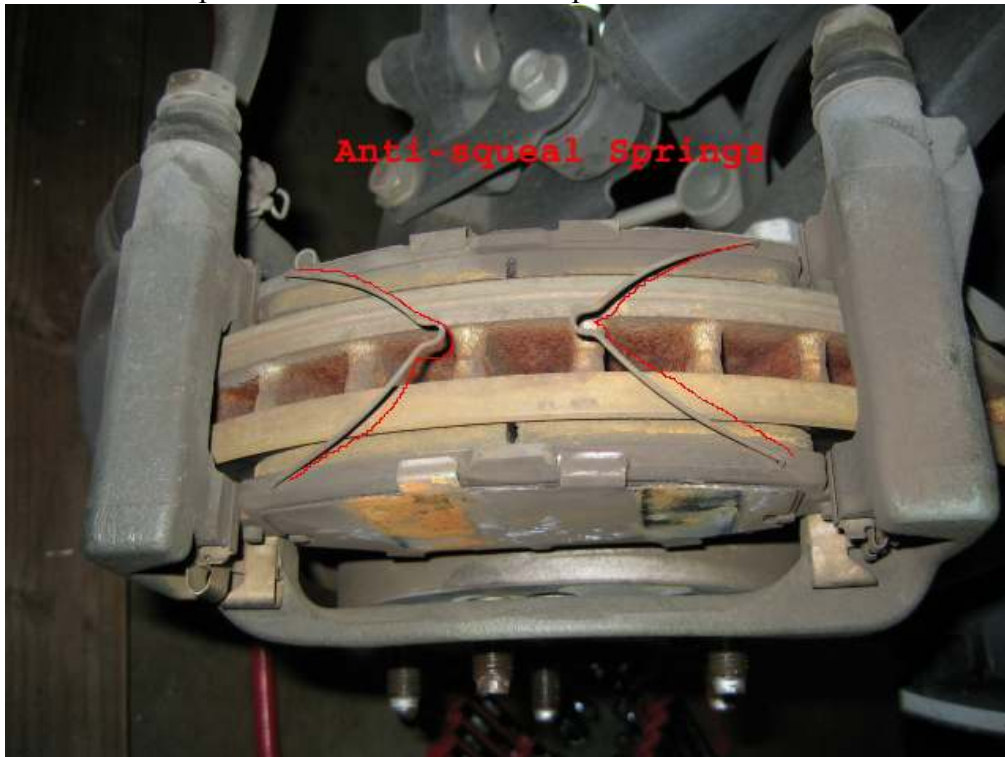
Step 1. Jack up the car.

Step 2. Remove wheels

Step 3. Remove (2) 14mm caliber bolts. Use the dead blow hammer and gently tap the bolts off. If the bolt turn w/o loosening, use the 17mm open end wrench to hold down the sliding pin.



Step 4. Hang caliper with bungee cord or bent hanger. Remove Anti-Squeal springs. Remove brake pads. Minimum thickness of pad is 1mm.



Step 5. Remove 2 anti-squeal shims from old pads, do not discard. Note that inner pads have arrows that point in the direction of forward movement. Clean shims and reinstall onto new pads.

Step 5a. Put anti-squeal goop on pads prior to installation of inner and outer shims. Probably not necessary but I use it anyway.



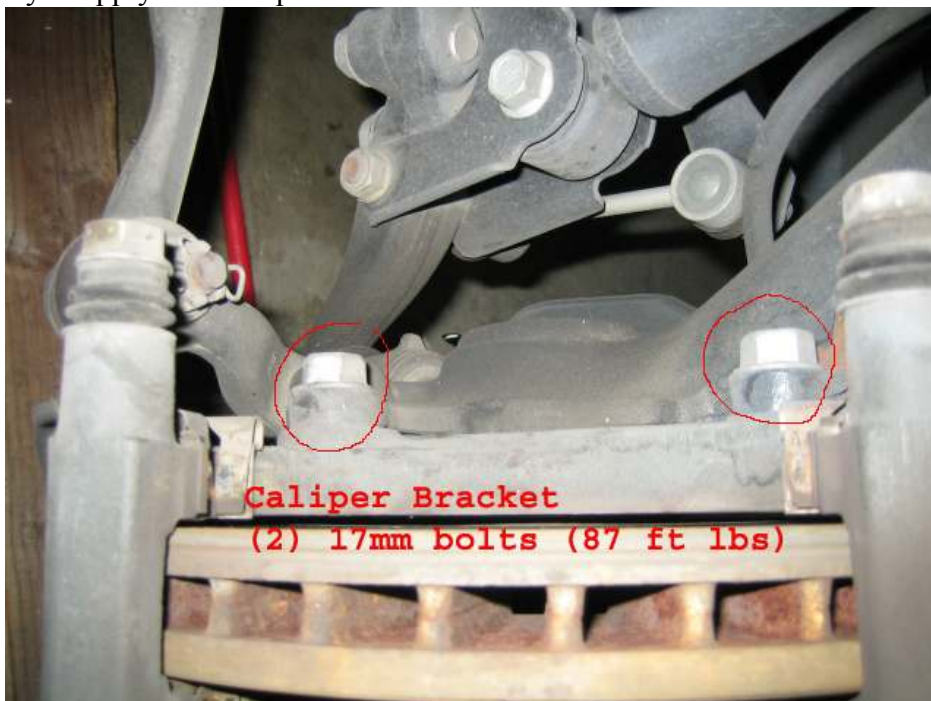
Step 6. Remove a small amount of brake fluid from reservoir using turkey baster.

Step 7. Use wood block and c-clamp to compress both pistons fully back into caliper. Be careful not to scratch or mar the piston. Also pay attention to the piston boot. If torn consult with your dealer on a replacement.



Installation is in the reverse order. The following steps are for rotor replacement:

Step 8. Remove caliper bracket by removing (2) 17mm bolts. Use 17mm box wrench and the dead blow hammer. These are tight (87 ft lbs) so it is better to snap them loose than to try to apply constant pressure.



Step 9. Use 12mm bolt and grease well. Screw into 1 of 2 threaded holes in the old rotor. This will pry the rotor off the hub as it is likely rusted on. Use 12mm offset wrench or ratchet to slowly break the rotor loose from the hub. It will probably have a loud pop, once you hear that the rotor is loose and can be removed.





Step 10. Remove surface rust from hub with 220 grit sand paper.





After rust has been sanded off.

Step 11. Retrieve caliper bracket and carefully remove sliding pins by pinching the rubber gasket and twisting the pin out. Clean the pin. Liberally apply grease and reinstall by twisting the pin back into the caliper bracket.



Remove both sliding pins and clean off old grease. Re-grease and install.

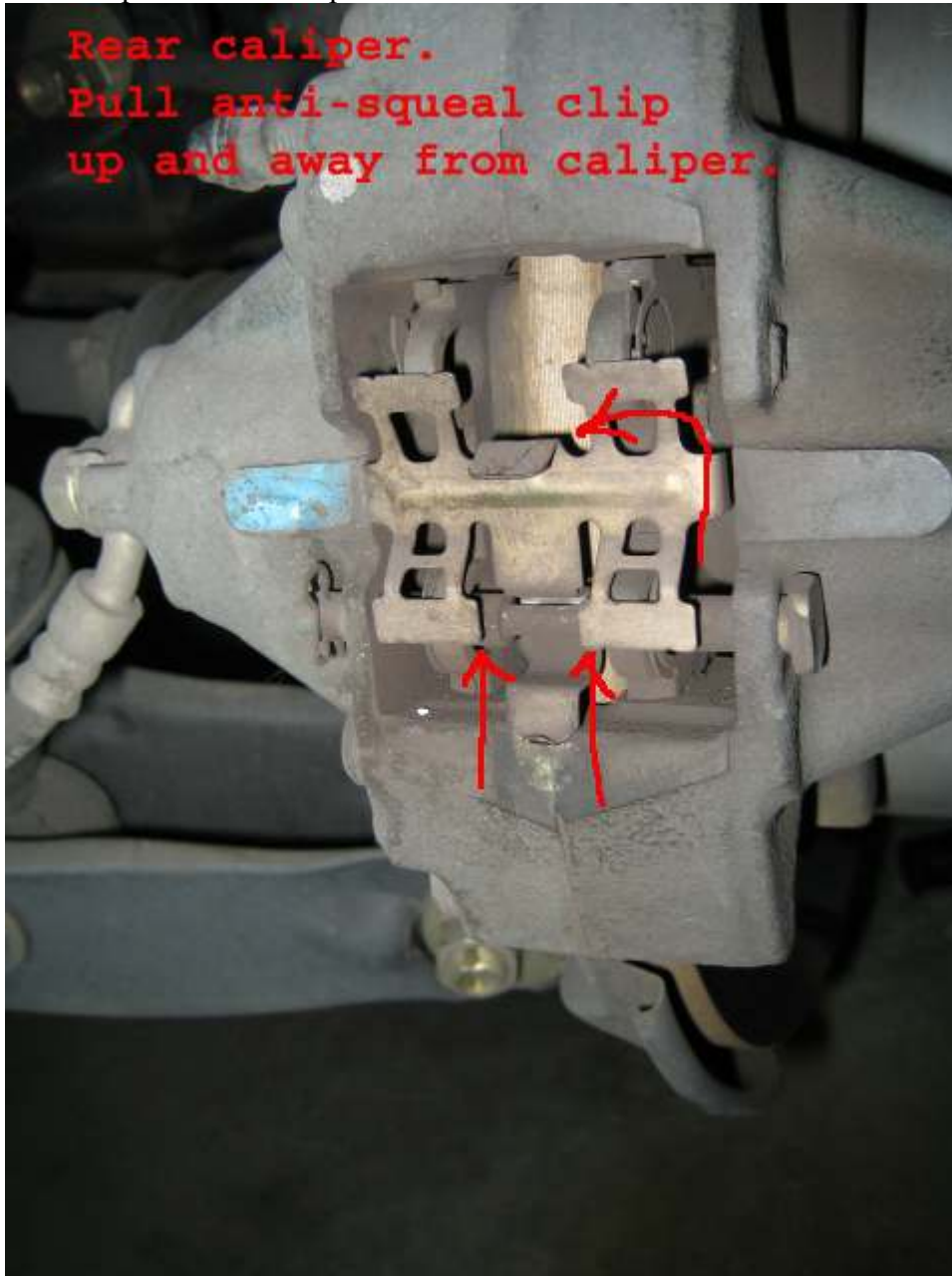
Installation is in reverse order.

Notes:

- Torqueing the caliper bracket bolts will be tricky as there is not much space. Use 17mm deep socket to gain clearance. Torque to 87 ft lbs.
- Use 2" 3/8" extension and std 14mm socket to torque caliper bolts to gain proper clearance. Torque to 25 ft lbs.

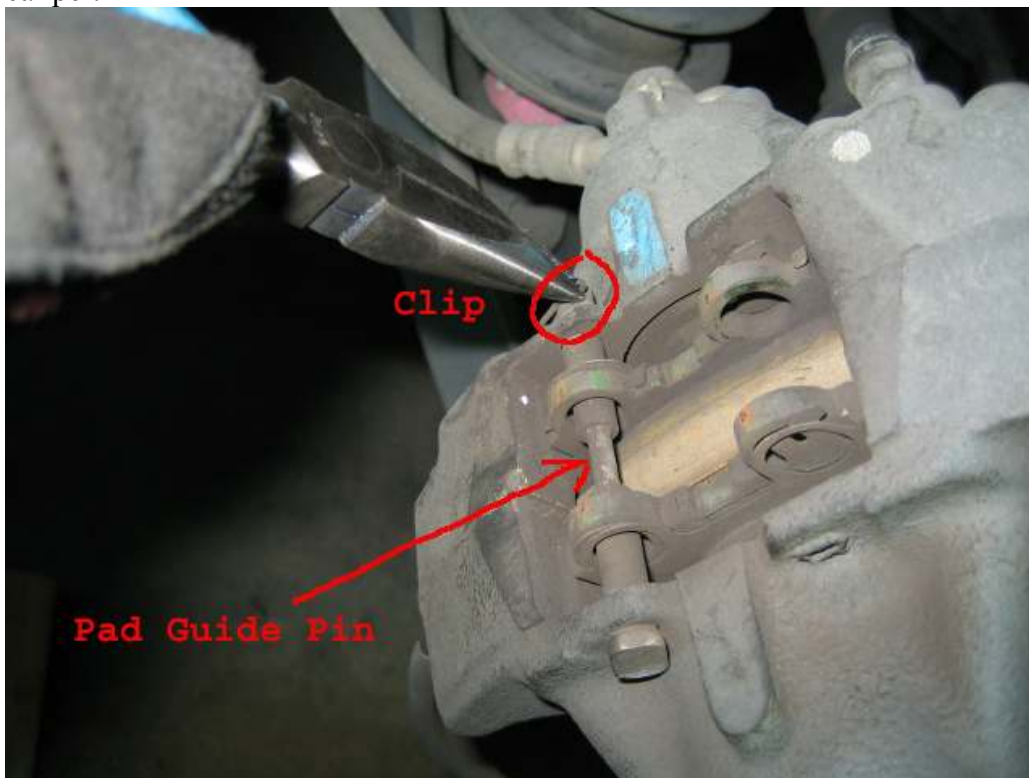
REAR Pad/Rotor Replacement

Step 1. Remove anti-squeal spring from rear of brake caliper. To remove, push and away from caliper as shown in picture.





Step 2. Using Needle nose pliers, remove clip from the pad guide pin. Remove pin from caliper.



Step 3. Both pads should now be accessible and can be removed by pulling the out toward the rear of the car.

Step 4. Draw a small amount of brake fluid from reservoir

Step 5. Wrap the metal pry bar or back of crescent wrench with masking tape to protect piston. Using lever, push piston back into the caliper. Note: If you remove both pads and push the piston in, the opposing piston will push back out. Start by pushing one of the pistons in. Once complete. Insert one of the new pads and then push the opposing piston in. At this point both pistons should be pushed in far enough to put in the new pads. Minimum thickness of pad is 1mm.



Step 6. Remove 2 anti-squeal shims from old pads, do not discard. Note that inner pads have arrows that point in the direction of forward movement. Clean shims and reinstall onto new pads.

Step 6a. Put anti-squeal goop on pads prior to installation of inner and outer shims. Probably not necessary but I use it anyway.

Installation is in the reverse order. The following steps are for rotor replacement:

Step 7. Remove caliper by removing (2) 17mm bolts. Use 17mm box wrench and the dead blow hammer. These are tight (77 ft lbs) so it is better to snap them loose than to try to apply constant pressure.

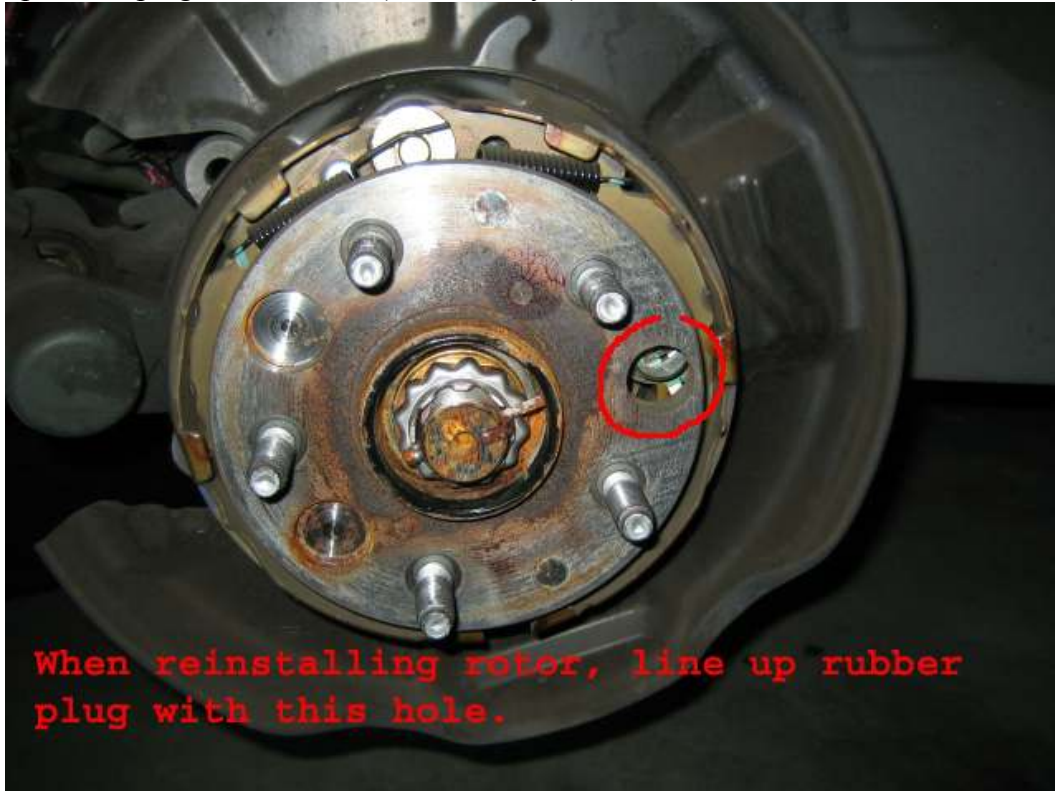


Step 8. Use 12mm bolt and grease well. Screw into 1 of 2 threaded holes in the old rotor. This will pry the rotor off the hub as it is likely rusted on. Use 12mm offset wrench or ratchet to slowly break the rotor loose from the hub. It will probably have a loud pop, once you hear that the rotor is loose and can be removed.



Step 9. Remove surface rust from hub with 220 grit sand paper.

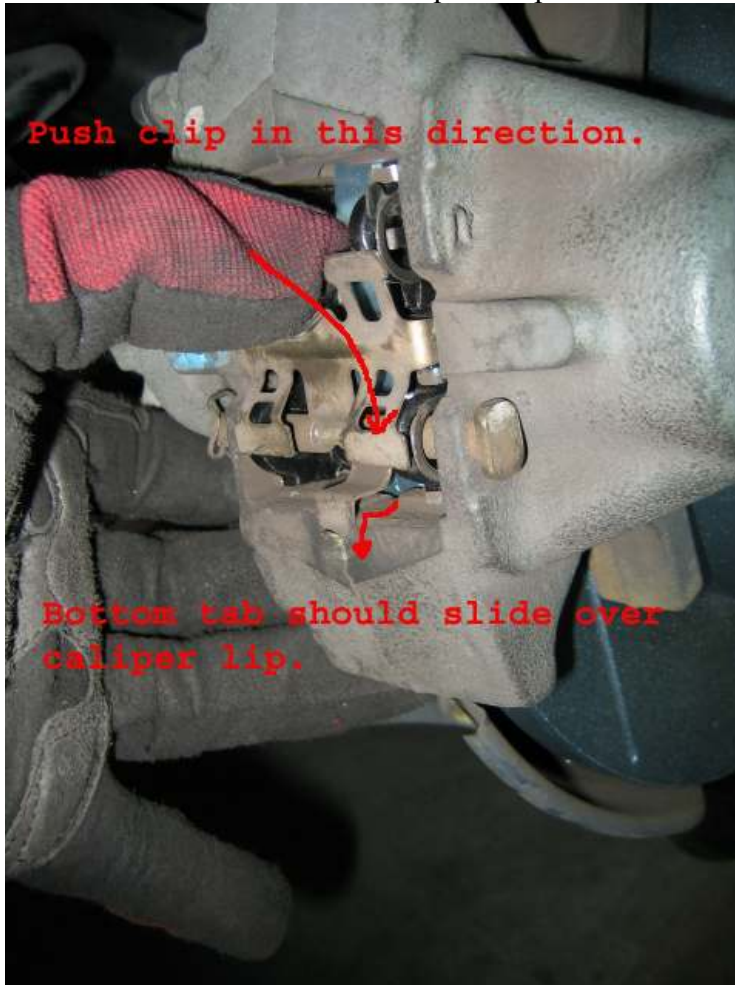
Step 10. Remove rubber plug on old rotor and install on new rotor. When installing, line up rubber plug with the hole (there is only 1) in the hub.



Step 11. I applied a small amount of grease to the hub/rotor mating surface because the new rotors don't have the threaded 12mm pry bolt holes. The CAD plating should help prevent the rotors from rusting to the hub, but I want to be sure I can get these off at a later date..

Installation is in reverse order.

Pic of how to re-install the anti-squeal clip:



Notes:

- Use 17mm deep socket to gain clearance when torquing the caliper. Torque to 77 ft lbs.

New rotor/pad break-in procedure:

[Warped Rotor Myth](#)

If your rear brakes squeal excessively after you have replaced the pads, see this thread.

Likely it means that the rear anti-squeal clip is worn out and needs to be bent out. See this thread:

[Brake Problem!!](#)