Subject: Grooving on inboard rotor surface with severe discoloration and possible rotor hat separation on rear disc brakes.

Vehicle Involved: 2002-2012 Nissan Altima

Condition: Improperly installed rear caliper bracket bolts may cause bolt to contact inside the rotor surface. This will create a groove just above the center of the rotor and may cause extreme overheating (Fig. 5 and 6) with the potential for rotor hat separation.

Repair Procedure: On this application take NOTE on how the caliper bracket bolts are removed. One bolt (bottom) has a washer and one bolt (top) does not (Fig. 1). The top bolt without the washer uses the ABS sensor bracket as the washer (Fig. 2). If the bolts are installed incorrectly, the bolt without the washer will contact the rotor (Fig. 3 and 4) and cause the rotor to fail. If this occurs replace rotor and pads and inspect calipers and brake fluid due to the overheating.

![Fig. 1](image1.png)
![Fig. 2](image2.png)
![Fig. 3](image3.png)
![Fig. 4](image4.png)
![Fig. 5](image5.png)
![Fig. 6](image6.png)