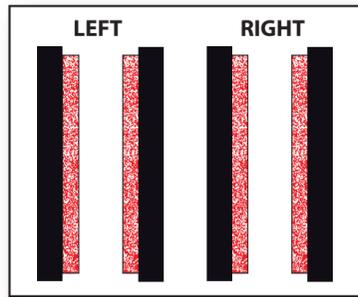


# The Six Most Common Brake Conditions

## Condition 1



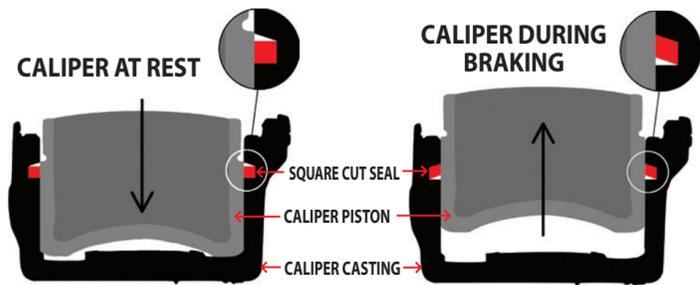
**NORMAL WEAR**  
All Pads Worn Evenly  
Both Wheels

### THE FIX

- Replace Pads
- Service Rotor

## PREVENTIVE MAINTENANCE ALERT FOR VEHICLE OWNER

While replacing the pads and servicing the rotor will address this condition, to ensure full pad life, we urge our customers to consider our **COMPLETE BRAKE JOB**, which includes replacing your brake calipers.

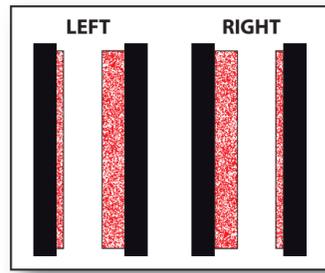


The **square-cut seal** is responsible for removing the piston and pad from the rotor. Because the seal is inside the caliper, it cannot be inspected.



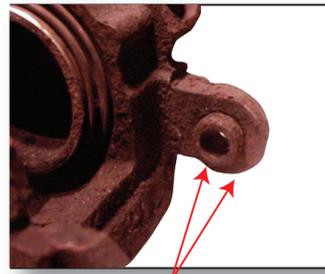
Heat and time dry out the **square-cut seal** and reduce the amount of pull-back as the seal ages. A new seal will pull back the piston about 0.015 inch. In comparison, an old seal may only pull back 0.010 inch or less. If the piston does not retract, it can cause the pads to drag, wearing the pads prematurely.

## Condition 2



**Outboard Pads Worn**  
**Inboard Pads Normal**

### What's Happening?



Rust on the caliper and/or bushings prevents free movement.

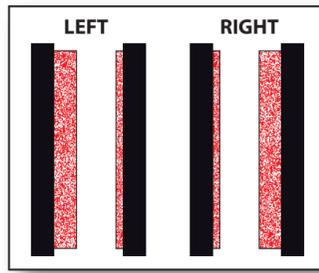


No lubrication on bushings and/or pins prevents free movement.

### THE FIX

- Complete Brake Job

## Condition 3



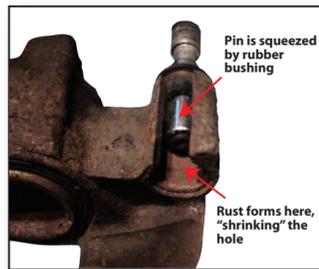
**Inboard Pads Worn**  
**Outboard Pads Normal**

### What's Happening?



Chrome plating is rust pitted

Bushings are pitted and rusted, causing the caliper housing to "freeze" and not move.



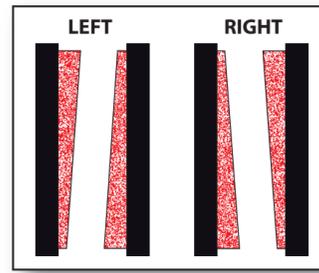
Pin is squeezed by rubber bushing

Rust on the caliper housing "squeezes" the bushings or pins causing the caliper housing to "freeze" and not move.

### THE FIX

- Complete Brake Job

## Condition 4



**Tapered Pad Wear**

### What's Happening?



Sliding pins and bushings must be lubed with the proper lube if they are to operate properly.

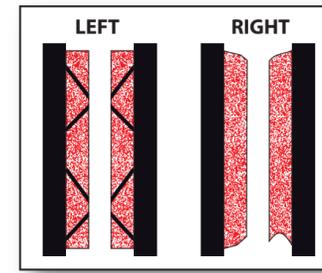


Damaged or improperly installed bushings or sleeves cause uneven movement of the caliper housing.

### THE FIX

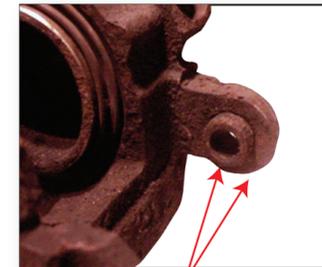
- Complete Brake Job

## Condition 5

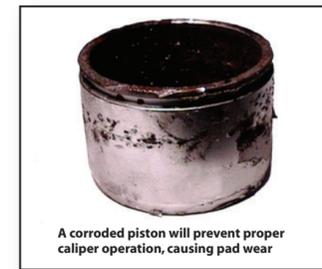


**Cracked or Chipped Pads**

### What's Happening?



Rust on the housing or bushings/pins prevents the caliper from releasing from the rotor, resulting in excessive heat.



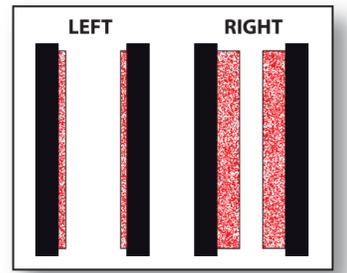
A corroded piston will prevent proper caliper operation, causing pad wear

Rust in the caliper bore or on the piston prevents the caliper from releasing from the rotor, resulting in excessive heat.

### THE FIX

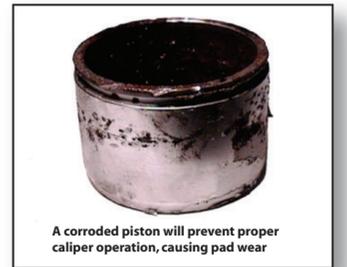
- Complete Brake Job

## Condition 6



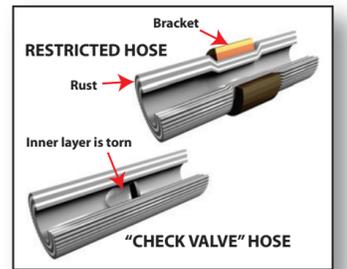
**Pad Wear Abnormal**  
**One Wheel Only**

### What's Happening?



A corroded piston will prevent proper caliper operation, causing pad wear

Rust in the caliper bore or on the piston causes ONE caliper to "freeze".

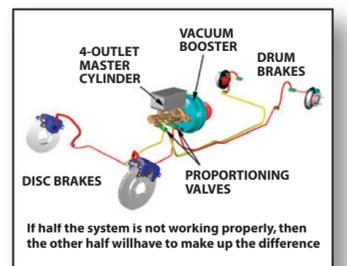


RESTRICTED HOSE  
Rust  
Inner layer is torn  
"CHECK VALVE" HOSE

The brake hose is damaged or restricted in some way, causing one caliper to do more braking than the other.

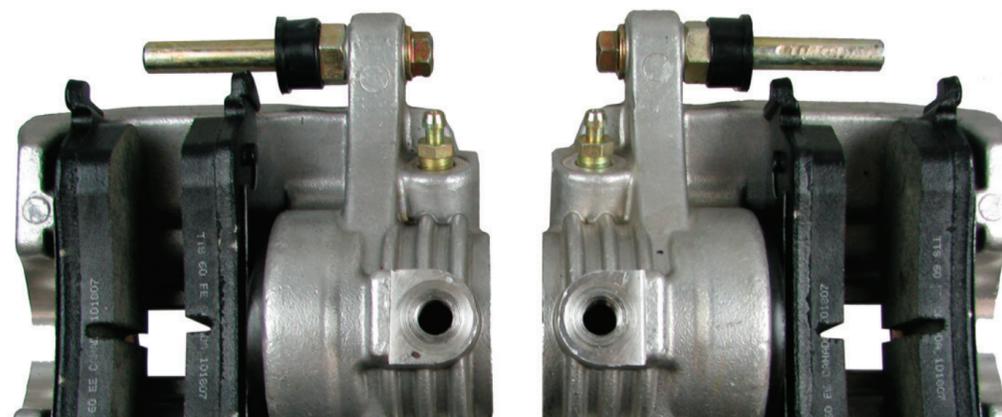
### THE FIX

- Complete Brake Job and/or Replace Master Cylinder



4-OUTLET MASTER CYLINDER  
VACUUM BOOSTER  
DISC BRAKES  
DRUM BRAKES  
PROPORTIONING VALVES

If half the system is not working properly, then the other half will have to make up the difference.  
On diagonal split brake systems, a restriction at the master cylinder can cause an imbalance in the system.



Look through our comprehensive collection of replacement brake parts right away.