(i) Tech Tips

Troubleshooting Brake Pads

A thorough inspection of brake pads is very important to their proper operation and should be included with every brake service. In this Tech Tip, Juratek identifies common problems that may be encountered during brake servicing and the proper remedy.



Tapered Pads

A tapered pad will cause uneven braking pressure and noise. This is usually caused by a distorted or sticking caliper, or by excessive caliper clearance. The pads should be replaced and the caliper checked and serviced.



Uneven Wear

A pad that is unevenly worn across the surface is indicated by deep grooves. This will usually cause squeal and brake judder. The disc will also show corresponding grooves across the braking surface. Identify and remove the cause of the uneven wear, then replace pads and discs if damaged.



Denaturing

A denatured pad will show partially charred friction material, evident by the white outer edges. This is caused by prolonged excessive temperatures, due to intensive use, dragging or a faulty caliper. This causes a reduction in the braking efficiency and the material

becomes brittle and breaks up. If this occurs the pads must be replaced.



Surface Contamination

If the surface of the friction material becomes contaminated with oil, grease or brake fluid, it can cause a vast reduction in braking performance on one side of the vehicle. This can cause the vehicle to pull to one side when braking. Remove the contaminants, and their source, and replace the pads.



Damaged Pads

A damaged pad is usually caused by excessive heat which causes the friction material to become brittle and begin to break up. If this problem occurs, it is important to determine the cause of the excessive heat. This is usually a result of an improperly balanced braking system, or a faulty caliper. Service the caliper and replace the pads.



Uneven Wear Within a Set

If one pad is more worn than its corresponding

one, this is caused by one side of the caliper sticking and may pull the vehicle to one side. It will accelerate pad wear to one side of the set. If this problem occurs, it is important to service the caliper and replace the pads.



Cracked Pads

Small cracks in the brake pad are usually caused by incorrect flexing of the pad due to a sticking caliper. The piston bends the backplate, causing the friction material to crack. If this occurs, it is important to service the caliper and replace the pads.



Glazina

A glazed pad emits a reflective surface and can cause a reduction in the braking performance. Glazing is usually caused by excessive temperatures or excessive harsh braking during the bedding in period. If braking performance is impaired, then the pads must be replaced.

