JURID®

QUALITY IS IN DETAILS

TROUBLE TRACER – BRAKE PADS

PAD CONTAMINATION

APPEARANCE Friction material is contaminated with either oil, grease or brake fluid

CAUSE Spillage during maintenance, or fluid that has leaked from the caliper

EFFECT
- The vehicle pulls to one side during braking
- Reduction in braking performance

REMEDY
- Identify and repair cause of contamination
- Replace the brake pad set

RUSTY PADS

APPEARANCE Rust between the friction material and back plate

CAUSE A brake pad sticking in the caliper bracket when braking flexes the back plate, cracking the friction material. Corrosion worsens this, separating the friction material and back plate

EFFECT
- Noise and soft pedal feel
- Once material has separated, brakes will not work

REMEDY
- Replace brake pad set
- Clean and maintain caliper to ensure the pad fits freely into the caliper during installation

CRACKED PADS

APPEARANCE Small cracks in the centre of the pad

CAUSE The cracks indicate that the caliper is sticking. The piston bends the back plate causing the back plate to flex, cracking the friction material

EFFECT
- Noise while braking
- Uneven pad wear
- Vehicle pulling to one side during braking
- Overheating on 1 side of the vehicle

REMEDY
- Maintain and service the caliper
- Replace the brake pad set

GLAZING

APPEARANCE The brake pad friction material is glazed

CAUSE
- High intermittent pad temperature over short time periods
- Overly harsh braking during the bedding-in period

EFFECT Temporary reductions in brake performance

REMEDY
- If light glazing is evident, no action is required
- If heavy glazing is evident, replace brake pad set
- Check the disc condition

TAPERED PADS

APPEARANCE Uneven wear or tapered pads

CAUSE
- The caliper is distorted and the caliper slides are sticking
- Excessive caliper clearance

EFFECT
- Premature pad wear and noise while braking
- Uneven braking pressure

REMEDY Replace pad set and maintain & service caliper
Note: Some vehicles use pads that are tapered by design. Refer to vehicle application to determine if they are outside normal degree of taper

EDGE CRUMBLING

APPEARANCE Uneven wear pattern on the pad

CAUSE Brake pad is sticking within the caliper causing the brake pad to stay in contact with the disc with associated excessive pad temperature

EFFECT Pad surface may glaze reducing brake performance

REMEDY
- Investigate cause of caliper sticking
- Maintain the caliper
- Replace the brake pad set

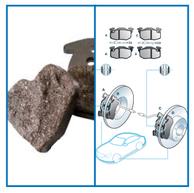
UNEVEN WEAR – WEAR LIP

APPEARANCE Uneven wear on the pad surface

CAUSE An irregularly worn brake disc or “wear lip” on the disc will cause this pattern of wear on the brake pad

EFFECT
- Squeal and Judder
- Premature pad wear

SOLUTION Replace pads and discs



INCORRECT PAD FITTING BENDIX IV OFFSET CALIPER TYPE

APPEARANCE Damaged pads

CAUSE
- These “handed” pads are not identical to each other within the set, and need to be fitted to either the inner or outer side of the caliper
- When fitted incorrectly, the pads will be damaged

EFFECT
- Damaged pads
- Reduced brake performance

SOLUTION Replace pad set to manufacturers instructions as per the inserted diagram

WORN OUT PADS

APPEARANCE The friction material is completely worn out

CAUSE There has been no regular check of pad wear or proper brake maintenance

EFFECT
- The vehicle pulls to one side during braking
- Damage to the disc
- High squeal and other brake noise

SOLUTION
- Check the disc for damage
- Replace pad set and the disc if it has suffered damage

BACK PLATE DAMAGE

APPEARANCE Damaged back plate

CAUSE Incorrect assembly, or excessive force used during fitting

EFFECT
- Braking efficiency
- Irregular pad wear
- Noise & judder

SOLUTION Replace the brake pad set

UNEVEN WEAR – DISC SCORING

APPEARANCE Uneven wear pattern on the pad

CAUSE
- Incomplete contact between brake pad and disc
- Disc scoring due to dust or excessive wear
- New pads fitted to a worn disc may also cause this

EFFECT
- Squeal and judder
- Braking efficiency

SOLUTION Replace both brake pads and brake discs

METAL PICK UP

APPEARANCE Metal pick-up (or ingrained metal) on the friction surface

CAUSE During normal braking small particles of the disc surface break off. Typically these are burnt off by the intense heat as dust. During extremely wet conditions these are quenched, cooled fast to solid material, and adhere to the brake pad surface

EFFECT This generally has no detrimental effect on braking performance, however in extreme cases, it can cause disc damage or brake squeal

SOLUTION In extreme cases, replace discs and pads

UNEVEN WEAR WITHIN A SET

APPEARANCE One or more brake pads within an axle set is excessively worn

CAUSE The caliper guide pins or piston is sticking

EFFECT
- The brake pulls to one side
- Uneven & overly rapid pad wear

SOLUTION
- Maintain all caliper slides and pistons
- Replace pads and check replace discs if necessary

DENATURING

APPEARANCE Partially charred or burnt friction material (will show whitish outer edges)

CAUSE Prolonged excessive pad temperature due to intensive use or dragging of the brake pad on the disc

EFFECT
- Reduction in initial brake efficiency
- Excessive material deterioration and abnormal wear
- Material becomes brittle, chips and cracks

SOLUTION
- Investigate cause for overheating of brake pad
- If damage is not excessive, pads will be effective under normal use
- If the damage is extensive replace brake pad set

It is recommended that when replacing brake pads it is necessary to always check the thickness and the aspect of the brake discs too.

PRMJUI622-EN