

CV TROUBLE TRACER - BRAKE PADS AND DISCS



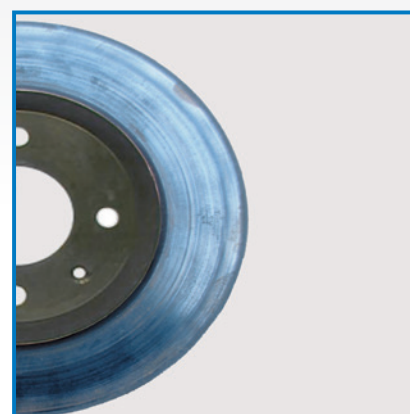
APPEARANCE Disc featuring scored surface

CAUSE Pads fitted with friction material too harsh for the disc or new pads assembled on excessively worn out discs

EFFECT Reduction in braking performance and possible imbalance on the affected axle during braking

REMEDY

- Replace the pads
- Check disc condition and minimum thickness.
- If necessary, replace the disc
- Check for the quality of the spare parts used



APPEARANCE Blue stripes on the disc indicating a physical change due to overheating

CAUSE Intensive use of brakes for prolonged braking or improper downhill braking

EFFECT Brake disc overheating which may result in contact surface distortion and cracks

REMEDY

- Compulsory replacement of brake discs and pads.
- During the first 250 km after replacement, sharp braking should be avoided in order to allow for the correct bedding-in of the newly fitted components



APPEARANCE Disc surface features 1st and 2nd degree crack

CAUSE Too intensive use of brakes due to the track features or to the carried load

EFFECT Possible unexpected disc mechanical collapse, particularly with 2nd degree crack

REMEDY

- Compulsory replacement of brake discs and pads, particularly with 2nd degree crack, when one of the cracks is travelling from OD to ID
- Brake calipers shall be checked



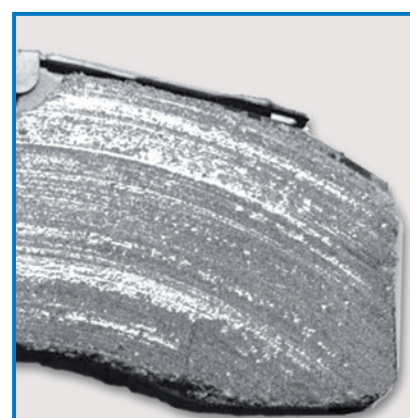
APPEARANCE Contaminated pad friction material

CAUSE Contamination by an oily substance or solvent

EFFECT Reduction in braking performance and possible imbalance during braking

REMEDY

- Replace the pads
- Check the discs on the axle
- Identify any fluid leaks from the hubs or other nearby components



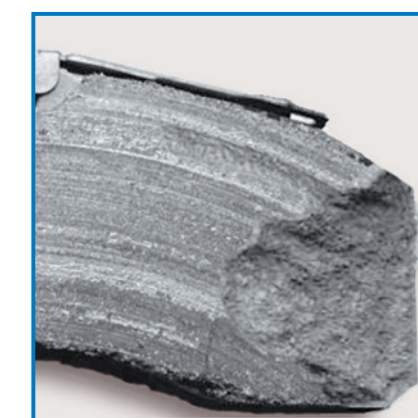
APPEARANCE Glazed pad friction material

CAUSE Very low duty applied on the brakes, i.e. brake applications with low speed and low pressure

EFFECT Reduction in braking performance and typical noise (squeal) while braking

REMEDY

- If glazing is not too heavy can try to recondition the surface by some mileage of medium/hard brake duty, otherwise replace the pads
- Check the disc condition and minimum thickness



APPEARANCE Detached friction material

CAUSE Possible excessive load or heavy braking, along with the choice of unsuitable parts

EFFECT Reduction in braking performance and typical noise (squeal) while braking

REMEDY

- Replace the pads
- Check the disc condition and minimum thickness.
- Despite having a wear indicator, it is necessary to check the pad condition every normal garage brake control visit and/or every six months



APPEARANCE Uneven brake pad wear

CAUSE One of the calipers has become stuck or does not return correctly to the rest position

EFFECT Reduction in braking performance and possible imbalance on the involved axle, during braking

REMEDY

- Replace the pads
- Brake calipers should be checked



APPEARANCE Friction includes metal pick-up

CAUSE High temperature generated between brake pad and disc in wet conditions

EFFECT Wear of the affected brake disc with typical metal rubbing noise during braking

REMEDY

- Replace the pads
- Check disc condition and minimum thickness
- If necessary, replace both discs on the axle



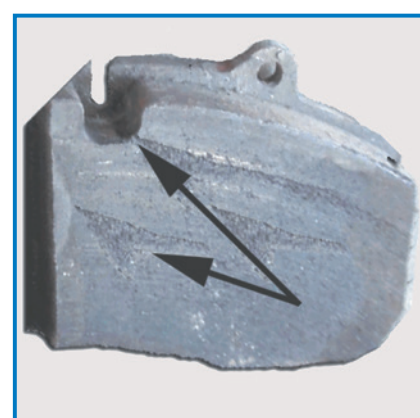
APPEARANCE Pad with surface cracks

CAUSE Excessive load or high friction material temperature

EFFECT Possible detachment of friction material resulting in a reduction in braking performance

REMEDY

- Replace the pads
- Check for correct caliper operation
- Check disc condition and minimum thickness
- If necessary, replace both discs on the axle



APPEARANCE Excessively worn out discs and pads

CAUSE Possible contamination of the friction material by sand, mud or earth or incomplete return of the caliper gear

EFFECT Excessive wear of one or more brake pads, resulting in damage where the pad has not been fitted with a wear indicator

REMEDY

- Replace the pads
- Check disc condition and minimum thickness
- If necessary, replace both discs on the axle



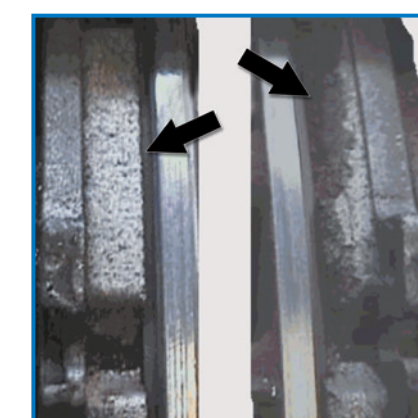
APPEARANCE Pads on the same axle featuring uneven wear

CAUSE Incorrect return of one caliper on the same axle

EFFECT If the axle involved is the directional one, this fault may result in vehicle instability during brake release

REMEDY

- Replace the pads
- Check for the proper caliper operation
- Check disc condition and minimum thickness
- If necessary, replace both discs on the axle



APPEARANCE Damaged edges to the friction material (edge-crumbling)

CAUSE Brake pad has become stuck in the caliper. The parts used do not comply with the correct sizes and specifications

EFFECT Early pad deterioration and uneven disc wear

REMEDY

- Replace the pads
- Check for correct caliper operation
- Check disc condition and minimum thickness
- If necessary, replace both discs on the axle

