

Tips from the ATE Brake Specialist Correct Fitting of the Brake Disc.



Tip 1: Wheel/Tyre



- Perfectly balanced.
- No radial/lateral runout.
- Rim true and lateral running OK.
- Tighten only to specified tightening torque in correct sequence (evenly, crosswise).

Tip 2: Calipers



- Good general condition.
- Protective caps undamaged.
- Piston moving without obstruction.
- Guide elements OK (guide bushing, guide bolts and guide channels).
- Good movement of new brake pads in caliper/bracket guide.

Tip 3: Brake Pads



- Use only new ATE Original or approved brake pads.
- Select correct pads according to vehicle/year.
- Break in brake pads as gently as possible; avoid unnecessary heavy braking in first 200 km or 125 miles.

Tip 4: Brake Discs

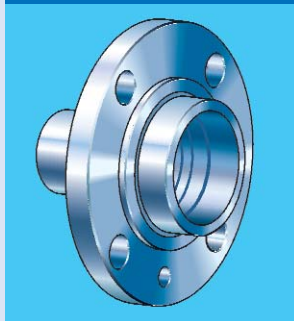


- Replace only in axle pairs; discs should both come from one pack.
- Completely remove corrosion protection with suitable cleaner.
- Flange surface/centering – depending on inside or outside design configuration – must be clean, free

of burrs and undamaged.

- With internally ventilated disc brakes pay attention to direction of rotation; do not remove balancing clamps.
- Center precisely; tighten to specified tightening torque in correct sequence. Manufacturer's instructions usually crosswise, but in practice often in two stages clockwise.
- On replacement of brake discs, also fit new ATE original or approved brake pads in axle pairs.
- On problem vehicles fit brake discs with specified tightening torque. Check lateral runout 10 mm from outer edge of friction surface with a dial gauge.
- If lateral runout is too high, where possible move brake disc with bolt-hole circle in stages and recheck lateral runout.

Tip 5: Wheel Hub



- Clean off flange surface/centering with abrasive cloth; must be bright metal.
- Do not apply lubricant (e.g. copper-based lubricant).

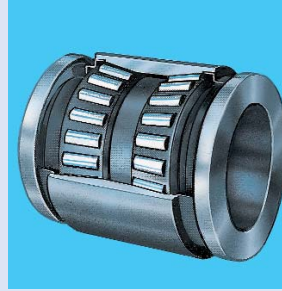
- No rust or dirt must be present.
- The flange surface/ centering must not be distorted or damaged.
- Check flange surface/centering for runout and evenness. Caution: hub runout causes approx. double the amount of lateral runout.
- When fitting brake disc: Observe tightening torque and correct sequence (evenly, crosswise).

Tip 6: Wheel Suspension



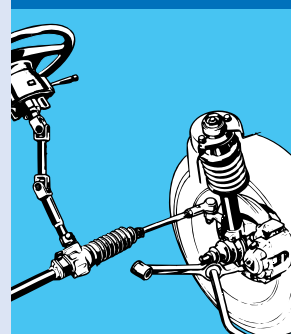
- Steering bushes/silent blocks must not be softened or worn.
- If necessary, replace with harder specification.
- Stabilizer rubber bushes must not be softened or worn.
- Shock absorber/spring strut must be in perfect working order.
- Front axle alignment must meet manufacturer's specifications.

Tip 7: Wheel Bearings

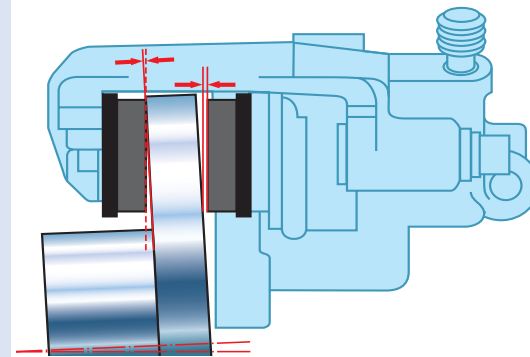


- Check for wear or damage.
- Set and secure correctly.

Tip 8: Steering Transmission Components



- Check steering gear for wear.
- Steering and suspension joints must not be worn out.
- Steering damper in perfect working order.



Problem: Juddering!

The safety and correct operation of original ATE brake discs are only safeguarded in the long term if the specified fitting instructions are observed. The effects of faulty or worn peripheral components often lead to uneven disc travel which leads to juddering. For this reason we have devised 8 tips for you, to ensure that our brake discs always function perfectly and no brake disc juddering occurs.