



Sedan Range

DATE 4/97

11-08

SERVICE

TECHNICAL BULLETIN

Vibration Diagnosis – Wheel & Tire Balance

MODEL 1995-97 MY
Sedan Range
VIN 720001-ON

ISSUE:

This bulletin outlines recommendations to be followed when wheel and tire balance is found to be the cause of a customer complaint of vehicle vibration after using the process outlined in Technical Bulletin 09-01, dated 4/96.

ACTION:

Perform a general inspection:

- Check that the wheels and tires are the correct specification for the vehicle.
- Check for any damage to the wheels and tires.
- Check that the tire inflation pressures are set according to the specification.
- Check that the tires do not have any flat spots, caused by temporary deformation, see Temporary Flat Spots section.
- Check that the tires are centered on the wheels by raising the vehicle so that the wheels can be rotated by hand to check for 'run out', see Run Out section.
- Check that the tires do not have any flat spots, caused by excessive brake application.
- Check for any excessive movement in the hub bearings.
- Check the wheel and tire balance, see Wheel Balancing section.
- Record all findings for the vehicle record.

TEMPORARY FLAT SPOTS

Temporary flat spots can be caused by the vehicle being parked immediately after a period of high speed driving that has resulted high tire temperature. Without a period of low speed driving to allow the tires to cool while still rolling, temporary flat spots may develop.

The temporary flat spots can be removed by driving for a distance of 15 miles (25 km) at a minimum speed of 55 mph (90 km/h) to heat up the tires.

If the wheel and tire assemblies are to be balanced, it is important that the driving session ends with a period of slower driving to allow the tires to cool down while still rolling. Remove the wheel and tire assemblies immediately for balancing, to avoid developing flat spots.

RUN OUT

If excessive wheel and/or tire run out is suspected, remove the wheel and tire assembly from the vehicle. Clean the wheel bore and mounting faces thoroughly. Mount the wheel and tire on a properly maintained and calibrated wheel balancing machine.

Once the wheel and tire assembly is mounted on the correct centering cone and the wheel clamped securely, rotate the assembly slowly to check for eccentricity. If the tire shows eccentric movement on the wheel, remove it from the wheel. Lubricate the tire bead and the rim and remount the tire on the wheel.

Inflate the tire to 3.5 bar, (51 psi.), to fully seat it on the rim. Deflate the tire and then reinflate it to the recommended pressure.

Recheck the position of the tire on the wheel by again rotating the wheel slowly to check for eccentricity.

If the tire and wheel are concentric, then complete the balancing process. If not, the tire must be removed, remounted and checked again.

WHEEL BALANCING

Balance all wheels and tires on a stationary balancing machine.

Residual imbalance should be as low as possible, (8g. per plane maximum), and static imbalance below 10g.

There must not be any more than 60g. of additional weight applied to each side of the wheel.

WARRANTY POLICY:

Wheel mounting/balance is covered under warranty for a period of 1 year/ 12,000 miles.