

SERVICE MANUAL

Datsun

MODEL 510 SERIES
CHASSIS and BODY



SECTION WT

WHEEL & TIRE

WT

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WHEEL AND TIRE

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INSPECTION AND ADJUSTMENT OF TIRE PRESSURE

1. Eliminate rust on the rim surface where the tire is fitted.

In the case that the rim is distorted, check it for lateral and radial run-out at the periphery in excess of 1.5 mm (0.591 in.), and correct and reshape it so that the run-out is within this limit.

2. Adjust tire pressure to the standard value, when the tire is cold or before starting.

Recommended tire inflation pressures;

Tire pressure kg/cm ² (lb/in ²)	Normal conditions		High speed driving conditions	
	front	rear	front	rear
Sedan & Wagon	1.7 (24)	1.7 (24)	2.0 (28)	2.0 (28)

This tire pressure will increase as the tire temperature increase during continuous driving.

The use of overinflated tire will reduce riding comfort and result in excessive uneven wear and damage of tire, poor braking action, and steering instability.

The use of underinflated tire will also result in excessive and uneven wear and damaged of the tire, power loss of poor fuel economy and so forth.

3. After adjustment of tire pressure, check for air leakage from the valve cap on it.

4. After driving, examine tire treads for pebbles, broken glass or nails embedded. Remove if any.

CHANGING WHEELS

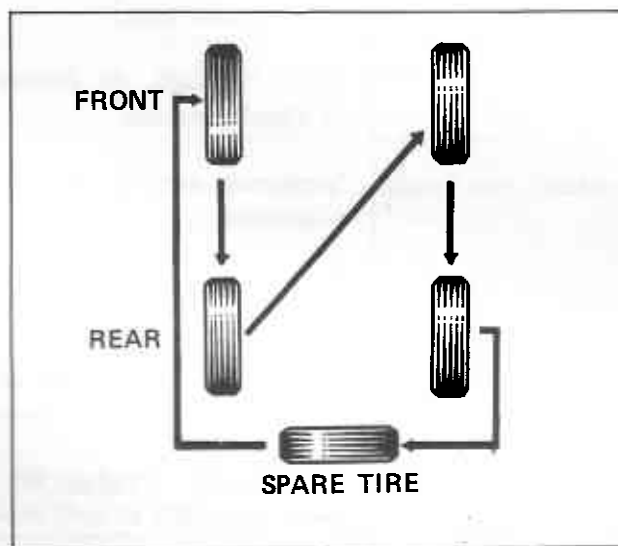


Fig. WT-1 Order of wheel changing

It is good practice for extension of tire life to interchange left and right wheels every 10,000 km (6,000 mile) by using all five wheels evenly including the spare as shown in Figure WT-1. The spare tire might rather deteriorate if not used, so it will be a good practice to use all five tires evenly.

Tighten wheel nuts to a torque of 8.0 to 9.0 kg-m (57.9 to 65.1 ft-lb).

After running 100 to 200 km (60 to 120 mile) retighten wheel nuts.

WHEEL BALANCE

Tire repairing and tire wear are apt to influence wheel balance. When the wheel is found to be unstable, or has been replaced, the dynamic balance of the wheel should be checked for. The static unbalance of the wheel should be kept within 165 gr-cm (2.3 in-oz), attaching not more than two balancing weight to each side of the road wheel.

CHASSIS

TROUBLE DIAGNOSES AND CORRECTIONS

Troubles	Possible causes	Remedies
Wheel wobble	<p>Incorrect tire pressure.</p> <p>Cracked tires or distorted wheel rims.</p> <p>Wheels out of balance.</p> <p>Loose wheel nuts.</p> <p>Wear, damage, or excessive play of wheel bearings.</p> <p>Incorrect setting of front wheel alignment.</p> <p>Wear and damage of ball joint and link bushes.</p> <p>Excessive play or wear of steering gear.</p> <p>Loose gear housing or steering idler assembly at body mountings.</p> <p>Loose steering linkage connections.</p> <p>Suspension spring broken.</p> <p>Loose shackle bolts and nuts.</p> <p>Loose or broken spring 'U' bolts.</p> <p>Distorted rear axle.</p> <p>Inoperative shock absorbers.</p>	<p>Check tire pressure and set them.</p> <p>Repair or replace them.</p> <p>Check and balance the wheels.</p> <p>Retighten them.</p> <p>Check and tighten or replace them.</p> <p>Check and adjust toe-in, camber and caster.</p> <p>Check and replace them if necessary.</p> <p>Adjust or replace steering gear.</p> <p>Tighten mounting bolts and nuts.</p> <p>Inspect, replace worn parts if any tighten nuts with recommended torque.</p> <p>Replace them.</p> <p>Tighten them.</p> <p>Tighten or replace them.</p> <p>Inspect and if distortions are slight, straighten parts affected. Otherwise, replace them.</p> <p>Inspect and replace them.</p>
Uneven or Excessive tire wear	<p>Incorrect wheel interchange.</p> <p>Incorrect tire pressure.</p>	<p>Interchange wheels every 10,000 km (6,000 mile) as recommended.</p> <p>Check pressures and set them to recommended value.</p>

WHEEL AND TIRE

	<p>Wheels out of balance.</p> <p>Misadjusted brakes.</p> <p>Incorrect wheel alignment.</p> <p>Excessive distortion or incorrect installation of suspension links.</p> <p>High speed on curves.</p> <p>Sudden start and sudden variations of speed due to rapid acceleration or improper brake application.</p>	<p>Balance wheels or replace them.</p> <p>Adjust brake correctly.</p> <p>Inspect and adjust alignment.</p> <p>Inspect, reshape and replace if necessary or install them correctly.</p> <p>Reduce speed.</p> <p>Avoid any unnecessary acceleration or brake application.</p>
Tire squeal	<p>Incorrect tire pressure.</p> <p>Incorrect front wheel alignment.</p> <p>Knuckles or suspension links distorted.</p>	<p>Check tire pressure and inflate correctly.</p> <p>Check and adjust correctly.</p> <p>Straighten or replace defective parts.</p>

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