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This file was not scanned to deprive Mazda of any money – it was scanned due to the rareness of the original manuals and the overwhelming need of the RX-7 owner to have this information so that they can accurately troubleshoot problems. Perhaps if Mazda's dealerships could support the Rotary Engine it wouldn't be so necessary for the owners to do so.



Many thanks to Anh Diep for scanning this file.

WHEELS AND TIRES

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12 OUTLINE, TROUBLESHOOTING GUIDE

OUTLINE

SPECIFICATIONS

Wheels					Tires	
Size	Offset	Diameter of pitch circle	Number of fixing holes	Material	Size	Tire pressure
Standard tire						
*7-JJx16 RH *7-JJx16 LH	40 mm (1.57 in)	114.3 mm (4.5 in)	5	Aluminum	*205/55 VR16 (Directional)	216 kPa (2.2 kg/cm ² , 32 psi)
6-JJx15 RH 6-JJx15 LH					205/60 VR 15 (Directional)	
5.5-JJx14			4	Steel or Aluminum	185/70 HR 14 185/70 R14 87H	
Temporary spare tire						
4-Tx16 4-Tx15	*30 mm (1.18 in) 40 mm (1.57 in)	114.3 mm (4.5 in)	5	*Aluminum Steel	T135/70 D16	415 kPa (4.2 kg/cm ² , 60 psi)
			4	Aluminum	T135/70 D15	

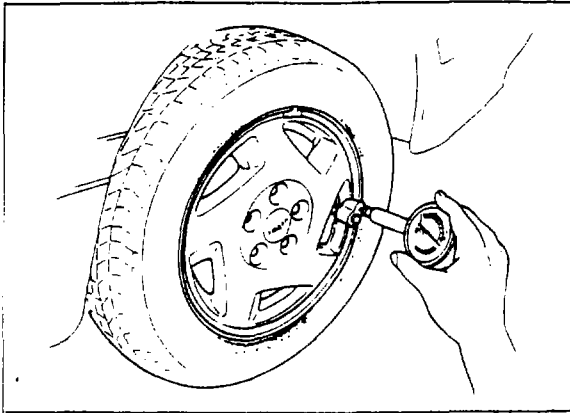
*For turbo model

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TROUBLESHOOTING GUIDE

Problem	Possible Cause	Remedy	Page
Excessive or Irregular tire wear	Incorrect tire pressure	Adjust	12— 4
	Unbalanced wheel(s)	Adjust	12— 3
	Tires not rotated correctly	Rotate properly	12— 3
	Severe driving	Advise driver	—
	Improper toe-in adjustment	Adjust	—
Premature tire wear	Incorrect tire pressure	Adjust	12— 4
Tire squeal	Incorrect tire pressure	Adjust	12— 4
	Tire deterioration	Replace	—
Road noise or body vibration	Insufficient tire pressure	Adjust	12— 4
	Unbalanced wheel(s)	Adjust	12— 3
	Deformed wheel(s) or tire(s)	Repair or replace	—
	Irregular tire wear	Replace	—
Steering wheel vibration	Irregular tire wear	Replace	—
	Right and left tread depths different	Replace	—
	Deformed or unbalanced wheel(s)	Replace or adjust	12— 3
	Deformed tire(s)	Replace	—
	Unequal tire pressures	Adjust	12— 4
Loose lug nuts		Tighten	12— 5
Uneven (one-sided) braking	Unequal tire pressures	Adjust	12— 4
Steering wheel doesn't return properly, or pulls to one side (pulls to one side while vehicle is moving on a level road surface)	Incorrect tire pressure	Adjust	12— 4
	Irregular tire wear (left and right are different)	Replace	—
	Unequal tire pressures	Adjust	12— 4
	Different types or brands of tires mixed (right/left)	Replace	—
	Improperly tightened lug nuts	Tighten	12— 5
General driving instability	Unequal tire pressures	Adjust	12— 4
	Deformed or unbalanced wheel(s)	Replace	—
	Loose lug nuts	Tighten	12— 5
Excessive steering wheel play	Loose lug nuts	Tighten	12— 5
	Improperly adjusted front wheel bearing preload	Adjust	—

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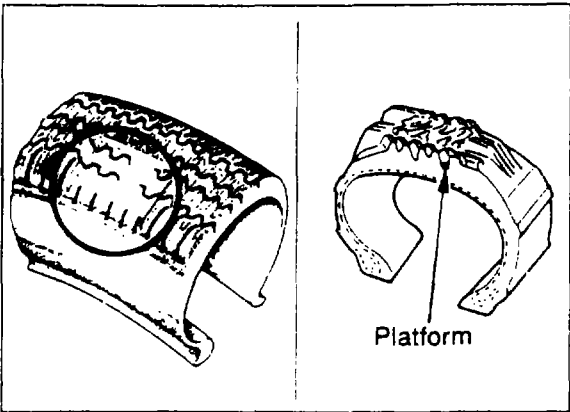
WHEELS AND TIRES

INSPECTION AND ADJUSTMENTS

Check the following and adjust or replace as necessary.

1. Air pressure.

Check the air pressure of all tires, including the spare tire, with an air pressure gauge.
(See specifications on page 12-2)



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2. Tire wear

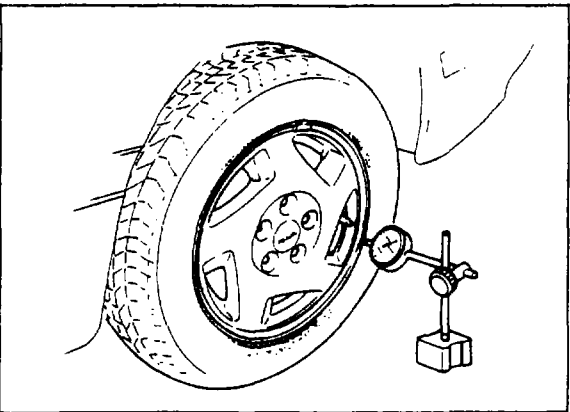
Wear Limit

Ordinary tires: 1.6 mm (0.063 in) min.

(Tire should be replaced if wear-indicators are exposed.)

Snow tires: 50% of tread

(Tire should be replaced if platform is exposed.)



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3. Wheel runout.

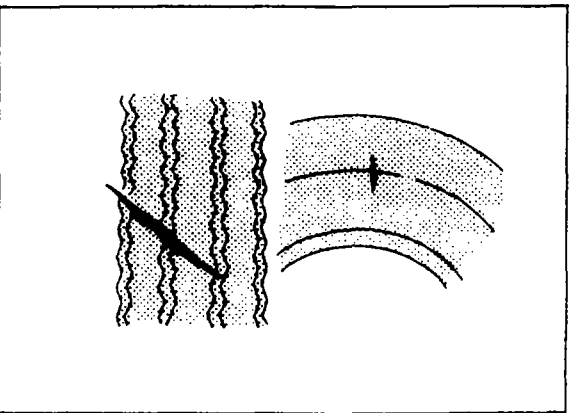
Wheel Runout

Horizontal: 2.0 mm (0.079 in) max.

Vertical: 2.0 mm (0.079 in) max.

Note

Measure the runout while turning the tire and wheel.



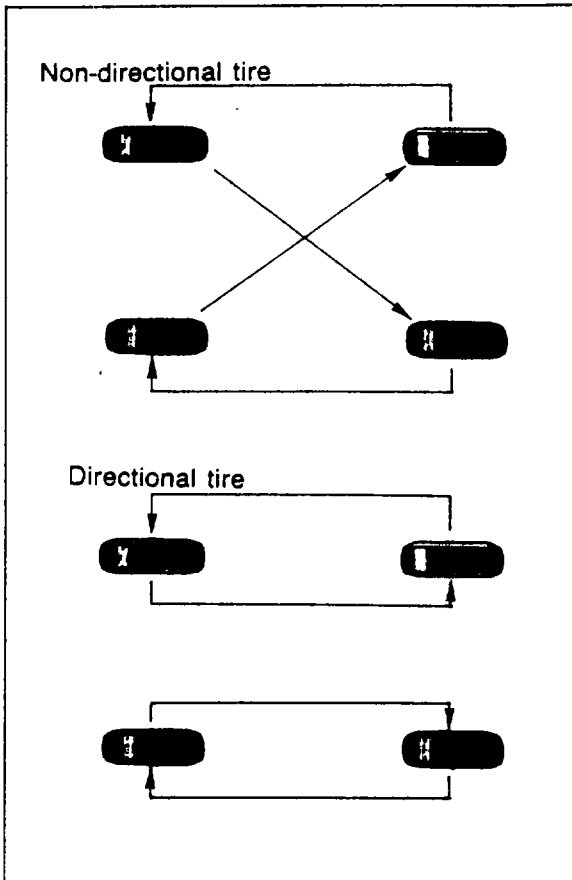
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4. Cracks, damage, or foreign matter (metal pieces, nails, stones, etc.) in the tire, and cracks, deformation, or damage to the wheel.

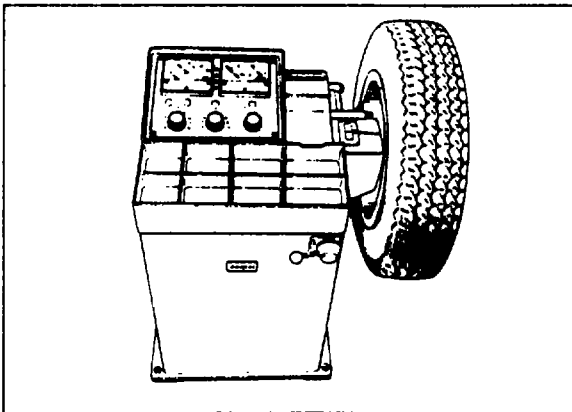
5. Loose wheel lug nut(s).

6. Air leaking from the valve stem.

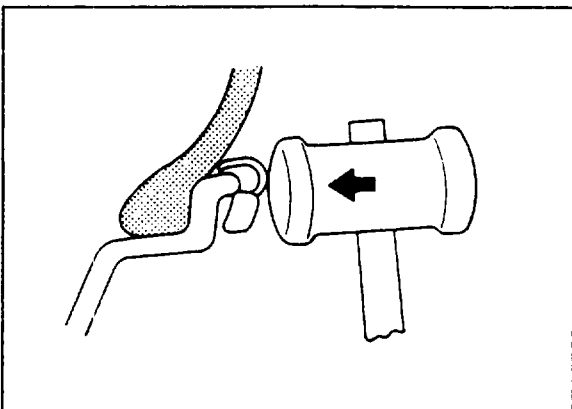
12 WHEELS AND TIRES



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TIRE ROTATION

In order to prolong tire life and to assure uniform wear, the tires should be rotated after every 3.750 miles (6.000 km).

Caution

Do not include "TEMPORARY USE ONLY" spare tire in rotation.

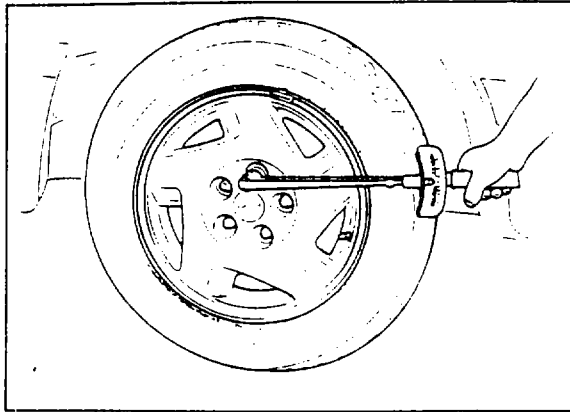
WHEEL BALANCE

If a wheel becomes unbalanced, or if a tire is replaced or repaired, the wheel must once again be balanced to specification.

**Amount of allowable unbalance (at rim edge):
10 g(0.35 oz) or less**

Note the following points when balancing a wheel.

1. Do not use more than two balance weights on one side. If the total weight exceeds 100g (3.5oz), re-balance after moving the tire around on the rim.
2. Attach the balance weights tightly so that they don't protrude more than 3 mm (0.12 in) out beyond the wheel surface.



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WHEELS

Lug nut tightening torque:

90—120 N·m (9.0—12.0 m·kg, 65—87 ft·lb)

Note

1. Wheel-to-hub contact surfaces must be clean.
2. Never apply oil to the nuts, bolts, or wheels; doing so might cause looseness or seizure of the lug nuts.

Special Notes About Wheels and Tires

Do not use wheels or tires other than the specified types.

Notes Regarding Tire Replacement

Note the following points when tires are to be removed from or mounted onto the wheels.

1. Be careful not to scratch the tire bead.
2. Remove any pebbles, glass, nails, etc., embedded in the tire tread.
3. Be sure the air valve is installed correctly.
4. Apply a soapy solution to the tire bead and the edge of the rim.
5. After mounting a tire onto a wheel, inflate the tire to 245—294 Kpa (2.5—3.0 kg/cm², 36—43 psi). Check that the bead is seated correctly onto the rim, and that there are no air leaks; then reduce the pressure to specification.

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