

WHEELS AND TIRES

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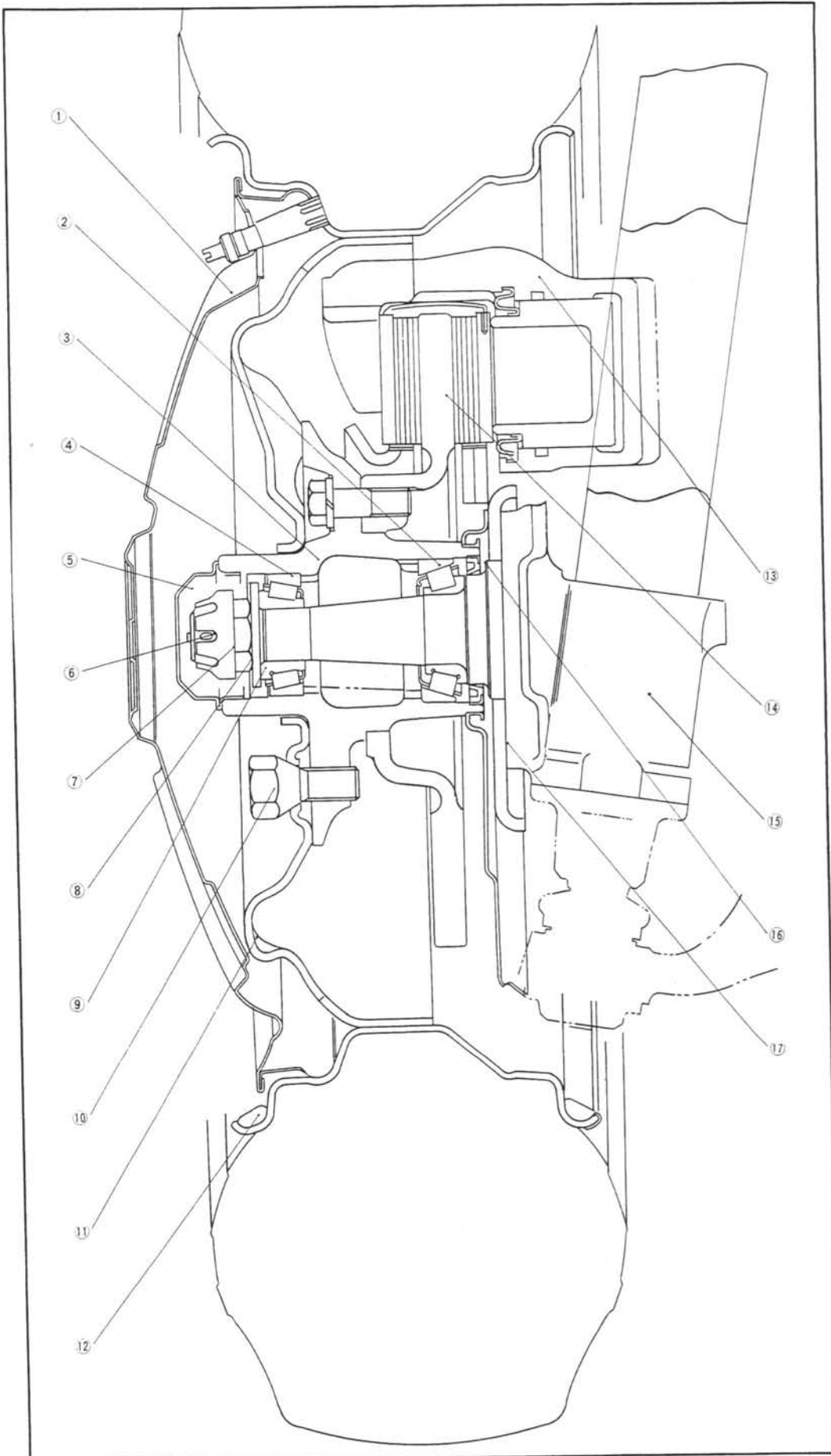


Fig. 12-1

Front wheel

1. Wheel cap
2. Bearing (inner)
3. Wheel hub
4. Bearing (outer)
5. Hub cap
6. Split pin
7. Set cover
8. Nut
9. Washer
10. Wheel bolt
11. Disk wheel
12. Balance weight
13. Caliper
14. Disk plate
15. Front damper
16. Oil seal
17. Mounting adapter

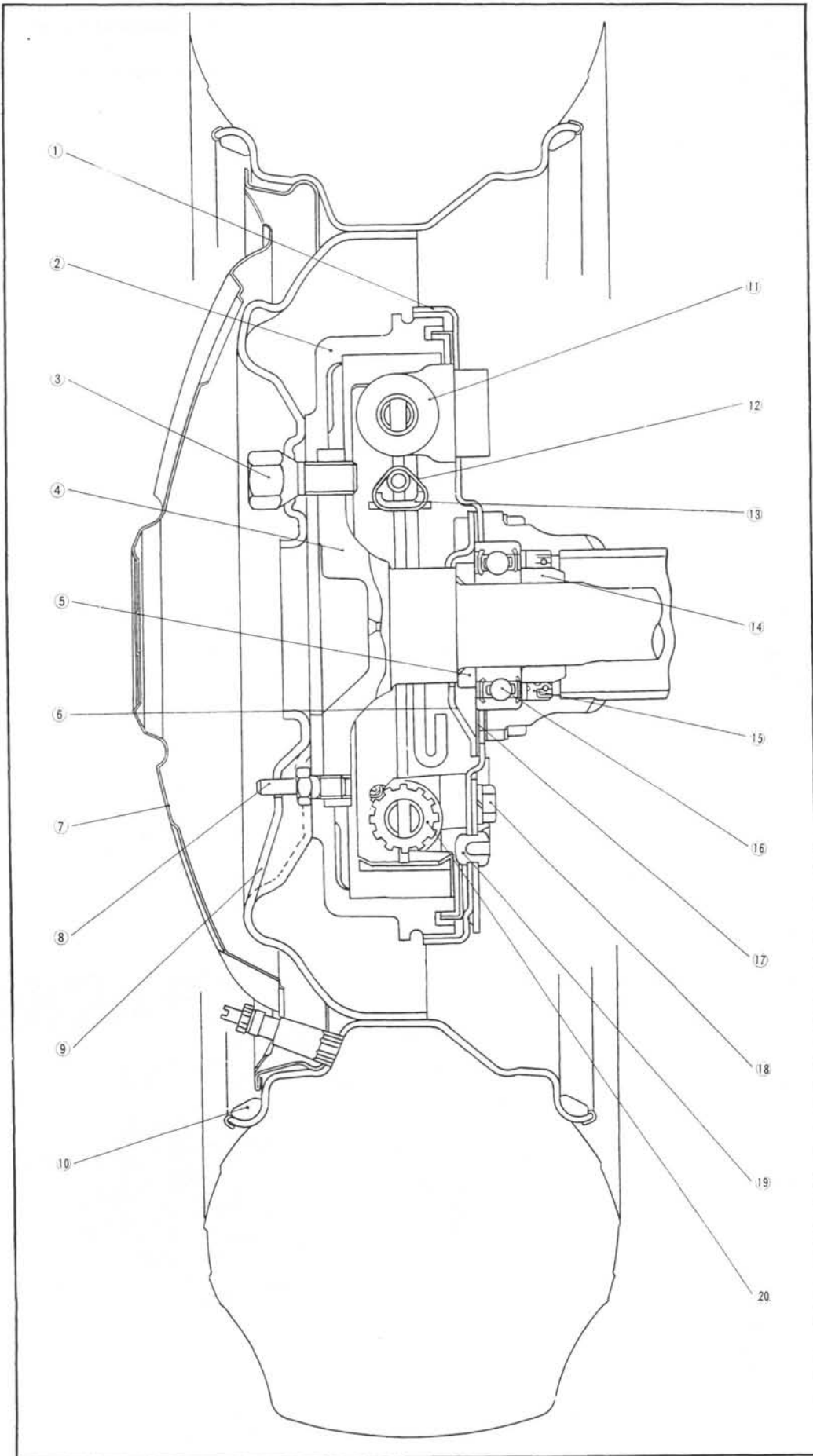


Fig. 12-2

Rear wheel

1. Backing plate
2. Brake drum
3. Wheel bolt
4. Rear axle shaft
5. Bearing spacer
6. Bearing retainer
7. Wheel cap
8. Bolt
9. Disk wheel
10. Balance weight
11. Wheel cylinder
12. Holder
13. Operation strut
14. Bearing collar
15. Oil seal
16. Bearing
17. Adjusting shim
18. Bolt
19. Cover
20. Adjuster

WHEELS AND TIRES

12-A. INFLATION OF TIRES

Maintenance of correct inflation pressure is one of the most important elements of tire care.

Excessive inflation pressure will cause:

1. Hard rides
2. Damage to tire carcass
3. Poor traction
4. Premature tread wear in center of tire

Low inflation pressure will cause:

1. Hard steering
2. Rapid and uneven wear on the edges of tire tread
3. Increased cord fatigue or broken tire cords
4. High tire temperature
5. Blow outs

Check the inflation pressure with a reliable gauge when the tires are cold.

The standard pressure is as follows:

	Less than 100 km/h (60 mile/h)	More than 100 km/h (60 mile/h)
Front	1.5 kg/cm ² (21 lb/in ²)	1.7 kg/cm ² (24 lb/in ²)
Rear	1.5 kg/cm ² (21 lb/in ²)	1.7 kg/cm ² (24 lb/in ²)

After checking or inflating the pressure, place the valve cap back on and tighten by hand. It helps to maintain the air pressure in the tires in case of any valve leak and keeps dust and water out of the valve.

12-B. TIRE ROTATION

To equalize wear and make a set of tires last longer, it is recommended that the tires be rotated, as shown in Fig. 12-3, every 6,000 km (4,000 miles).

When rotating the tires, check for signs of abnormal wear and bulging and any stone, nail, glass, etc. should be removed.

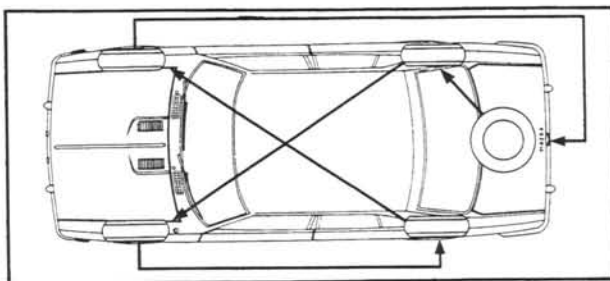


Fig. 12-3 Tire rotation

12-C. CHANGING OF WHEELS

1. Remove the wheel cap and loosen the wheel attaching bolts. All bolts are right handed screws which are loosened by turning counter-clockwise.
2. Jack up the vehicle until the wheel clears the ground.
3. Remove the wheel attaching bolts and change the wheel.

4. Install the wheel attaching bolts and alternately tighten the diametrically opposite bolts until the wheel closely touches the hub flange.

5. Lower the vehicle and firmly tighten the bolts to a torque of **9.5 m-kg (70 ft-lb)**.

6. Refit the wheel cap.

12-D. WHEEL AND TIRE RUN-OUT

Wheel and tire should be measured for both radial and lateral run-out. The radial run-out is the difference between the high and low points on the tread of tire; while the lateral run-out is the wobble of the wheel.

To measure the radial run-out, apply a dial indicator against the center rib of the tire tread and rotate the wheel slowly. This measurement should not exceed 2.0 mm (0.08 in).

To measure the lateral run-out, position a dial indicator against the side of the tire. The reading of the indicator should be within 2.5 mm (0.10 in).

12-E. WHEEL BALANCING

The allowable unbalance is 360 cm-gr (5.0 in-oz), which is less than 20 gr (0.7 oz) at the rim.

Excessive wheel unbalance causes shimmy at high speed. If unbalance exceeds 360 cm-gr (5.0 in-oz) or when a tire is disassembled for repair, the tire and wheel assembly should be statically and dynamically balanced with a wheel balancer in accordance with the manufacturer's instructions.

12-F. FRONT WHEEL BEARING**12-F-1. Checking of Front Wheel Bearing**

To check the front wheel bearings, raise the vehicle with a jack until the wheels clear the ground.

Grip the tire and shake it sideways. If considerable play is noticed, this indicates that the bearings are rough.

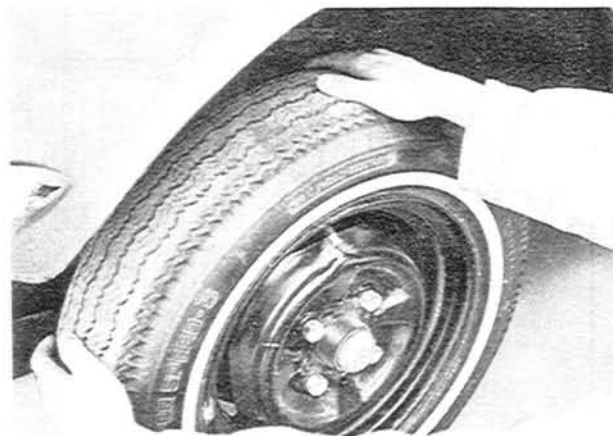


Fig. 12-4 Checking of front wheel bearing

When disassembled, check the wheel bearings for pits, brinell marks or any damage. If any of above conditions exists, replace with new bearings.

12-F-2. Removing of Front Wheel Bearing

1. Raise the vehicle until the front wheels are free of the ground.
2. Remove the wheel cap and wheel.
3. Remove the bolts attaching the caliper assembly and remove the caliper assembly from the brake disk.
4. Remove the grease cap, split pin and bearing adjusting nut.
5. Remove the thrust washer and outer bearing from the hub.
6. Slide the hub and brake disk assembly off the spindle.
7. Remove the oil seal and inner bearing from the wheel hub.
8. Drive out the bearing outer races, using a brass drift in the slots provided for this purpose.

12-F-3. Installing of Front Wheel Bearing

Install the wheel bearings in the reverse order of removing, with care taken on the following points:

1. Clean the bearings thoroughly and repack them with lithium grease. **Do not** overpack.
2. Fill the hub cavity with lithium grease.
3. Adjust the bearing preload as instructed in the following paragraph.

12-F-4. Adjusting of Front Wheel Bearing

The wheel bearing preload is adjusted by the adjusting nut. Adjusting procedure is as follows:

1. Check the bearing preload by hooking a spring scale in the wheel bolt hole on the hub.

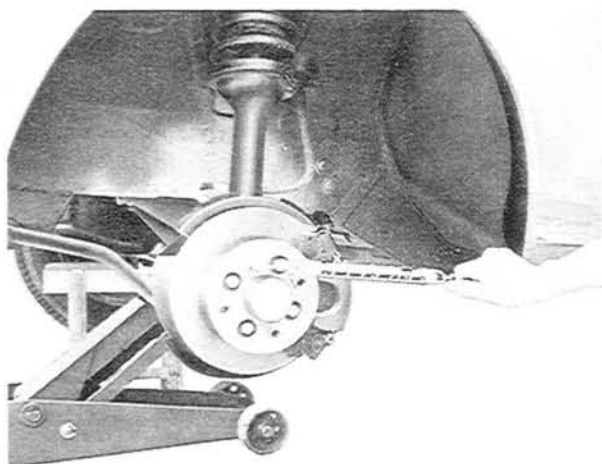


Fig. 12-5 Checking of bearing preload

2. Pull the spring scale squarely and take a reading on the scale when the hub starts to turn. This reading should be **0.4 to 0.9 kg (0.9 to 2.0 lb)**.
3. Tighten the adjusting nut until the correct reading is obtained.
4. Fit the set cover onto the adjusting nut and align the slots of the set cover with the hole of the spindle. Install the split pin.

12-G. REAR WHEEL BEARING

Servicing the rear wheel bearings is explained in Par. 9-A.

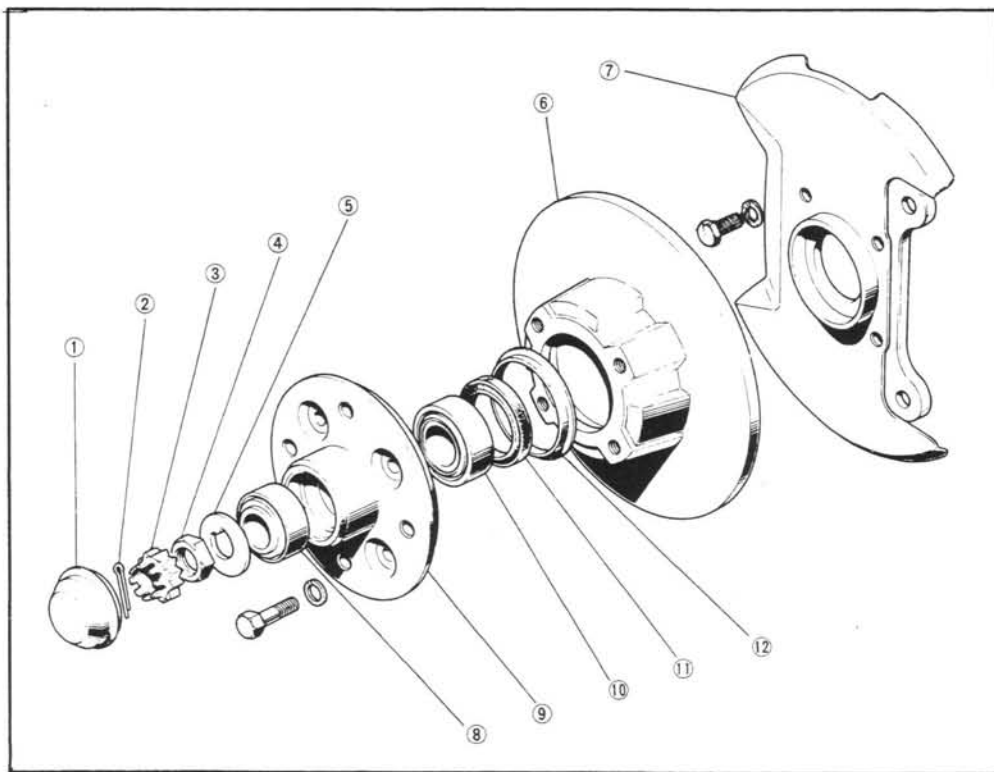


Fig. 12-6

Front wheel hub assembly

1. Grease cap
2. Split pin
3. Set cover
4. Adjusting nut
5. Washer
6. Disk plate
7. Dust plate
8. Outer bearing
9. Wheel hub
10. Inner bearing
11. Oil seal
12. Dust cover

