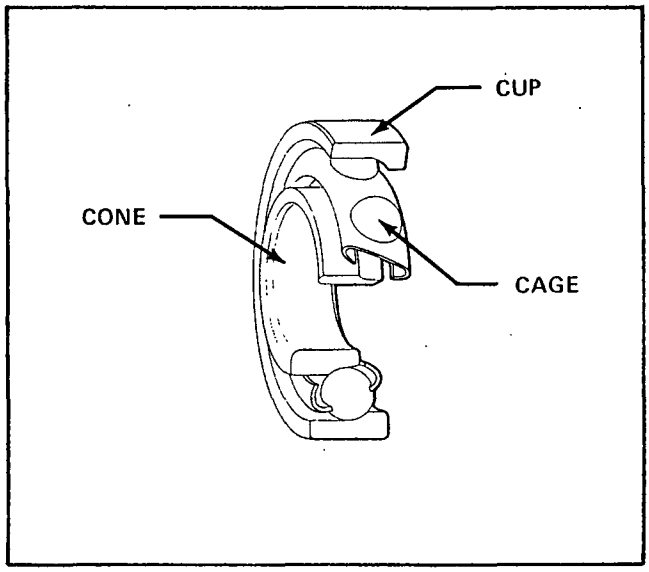
WHEEL BEARINGS

The purpose of the wheel bearings is to allow free rotation of the wheels, to support the vehicle's weight and withstand cornering loads.

Wheel bearings can be either ball or tapered roller design. Both have the same general characteristics.

Front wheel bearings consist of three pieces:



Outer Ring (Cup)– Being pressed into the brake drum or disc.

Inner Ring (Cone)– Fits over the spindle and against its shoulder.

Cage– Retainer of ball or tapered rollers rotating between inner and outer rings.

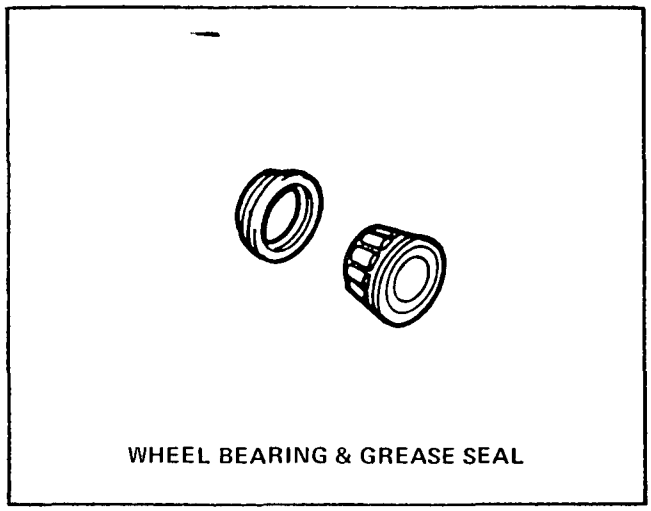
Adjustment of front wheel and resultant bearing tightness is accomplished by a nut and spindle thread.

Care must be taken by the installer to assure correct tightness of the adjusting nut - as excessive tightness or looseness will seriously affect vehicle safety and service life of bearings, seals, brake drum, spindle, and other related parts.

In no case should partial replacement be made of a wheel bearing - new cups and cones should be installed together! If new cones are allowed to run within old cups, normal service life will most certainly be affected.

Rear wheel bearings consist of the same parts as the front bearings, but are completely assembled. The inner ring is pressed over the shoulder at the outer end of the axle shaft. The outer ring of the bearing assembly is pressed into the housing at the outer end of the axle tube.

Wheel Bearing Seals



WHEEL BEARING & GREASE SEAL

Wheel seals, as the name implies, perform a sealing function. Front wheel seals are located inside the front wheel hub, directly behind the inner wheel bearing, and rotate about the spindle shoulder.

Rear wheel seals are located within the housing at outer end of the axle tube. The seal is found either before or after the rear axle bearings. The axle rotates inside this seal.

Wheel seals simply keep lubricants in and dirt out of the wheel bearings. The sealing action occurs with the wheels in motion and under all road and weather conditions.