TIRES/WHEELS

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TIRES/WHEELS

DIAGNOSIS AND TESTING - TIRE AND WHEEL RUNOUT

Radial runout is the difference between the high and low points on the tire or wheel (Fig. 1).

Lateral runout is the **wobble** of the tire or wheel.

Radial runout of more than 1.5 mm (.060 inch) measured at the center line of the tread may cause the vehicle to shake.

Lateral runout of more than 2.0 mm (.080 inch) measured near the shoulder of the tire may cause the vehicle to shake.

Sometimes radial runout can be reduced. Relocate the wheel and tire assembly on the mounting studs (See Method 1). If this does not reduce runout to an acceptable level, the tire can be rotated on the wheel. (See Method 2).

METHOD 1 (RELOCATE WHEEL ON HUB)

(1) Drive vehicle a short distance to eliminate tire flat spotting from a parked position.

(2) Check wheel bearings and adjust if adjustable or replace if necessary.

(3) Check the wheel mounting surface.

(4) Relocate wheel on the mounting, two studs over from the original position.

(5) Tighten wheel nuts until all are properly torqued, to eliminate brake distortion.

(6) Check radial runout. If still excessive, mark tire sidewall, wheel, and stud at point of maximum runout and proceed to Method 2.

TIRES/WHEELS (Continued)

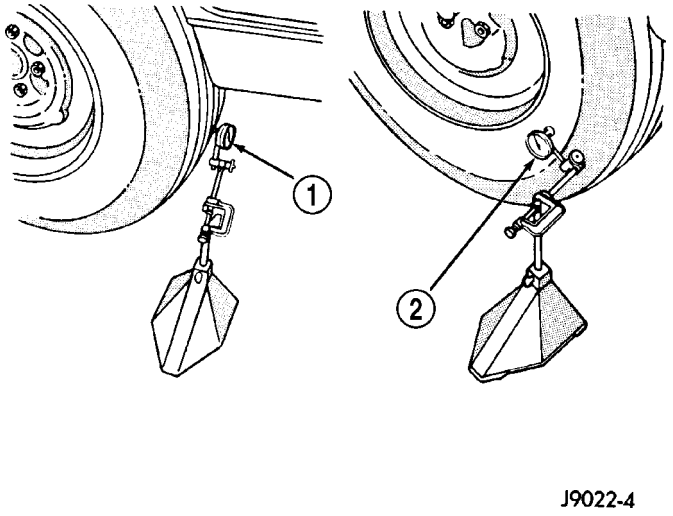

Fig. 1 Checking Tire/Wheel/Hub Runout

1 - RADIAL RUNOUT
2 - LATERAL RUNOUT

METHOD 2 (RELOCATE TIRE ON WHEEL)

NOTE: Rotating the tire on wheel is particularly effective when there is runout in both tire and wheel.

(1) Remove tire from wheel and mount wheel on service dynamic balance machine.

(2) Check wheel radial runout (Fig. 2) and lateral runout (Fig. 3).

- STEEL WHEELS: Radial runout 0.031 in., Lateral runout 0.031 in. (maximum)
- ALUMINUM WHEELS: Radial runout 0.020 in., Lateral runout 0.025 in. (maximum)

(3) If point of greatest wheel lateral runout is near original chalk mark, remount tire 180 degrees. Recheck runout, Refer to match mounting procedure.

STANDARD PROCEDURE

STANDARD PROCEDURE - TIRE ROTATION

Tires on the front and rear axles operate at different loads and perform different steering, driving, and braking functions. For these reasons, the tires wear at unequal rates. They may also develop irregular wear patterns. These effects can be reduced by rotating the tires according to the maintenance schedule in the Owners Manual. This will improve tread life, traction and maintain a smooth quiet ride.

The recommended method of tire rotation is (Fig. 4) & (Fig. 5). Other methods can be used, but may not provide the same tire longevity benefits.

CAUTION: 3500 Dual rear tires have a new tire rotation pattern. This is to accommodate the asymmetrical design of the ON/OFF road tires and the use of the outlined white letter (OWL) tires. When replacing a flat, the spare tire may have to be remounted on the rim or installed at a different location to maintain the correct placement of the asymmetrical design or the (OWL).

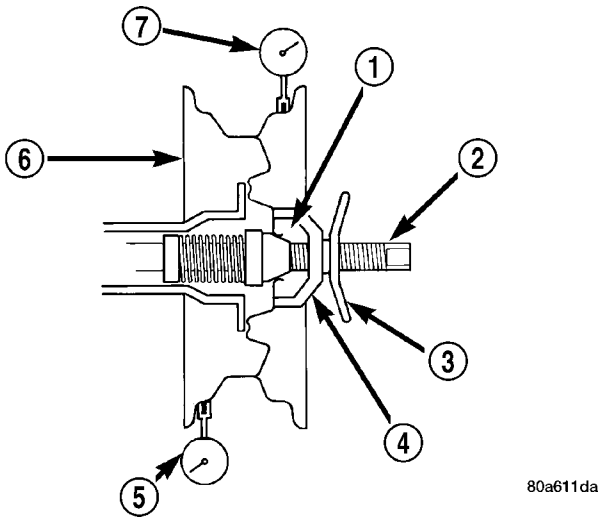

Fig. 2 Radial Runout

1 - MOUNTING CONE
2 - SPINDLE SHAFT
3 - WING NUT
4 - PLASTIC CUP
5 - DIAL INDICATOR
6 - WHEEL
7 - DIAL INDICATOR

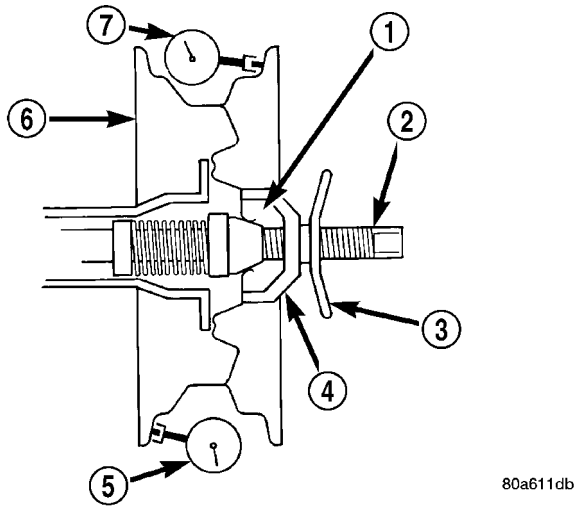

Fig. 3 Lateral Runout

1 - MOUNTING CONE
2 - SPINDLE SHAFT
3 - WING NUT
4 - PLASTIC CUP
5 - DIAL INDICATOR
6 - WHEEL
7 - DIAL INDICATOR

TIRES/WHEELS (Continued)

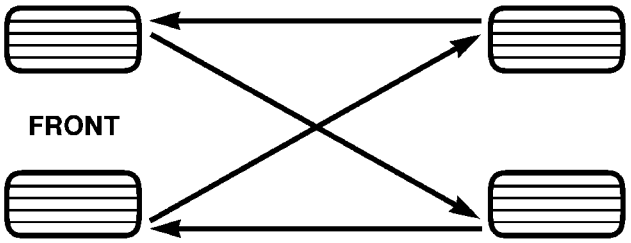

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Fig. 4 TIRE ROTATION PATTERN - SINGLE REAR WHEEL (SRW)

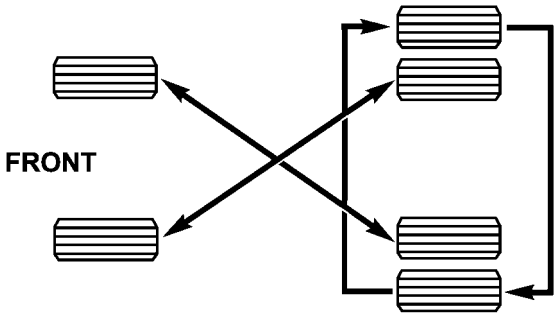

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Fig. 5 TIRE ROTATION PATTERN - DUAL REAR WHEELS (DRW)

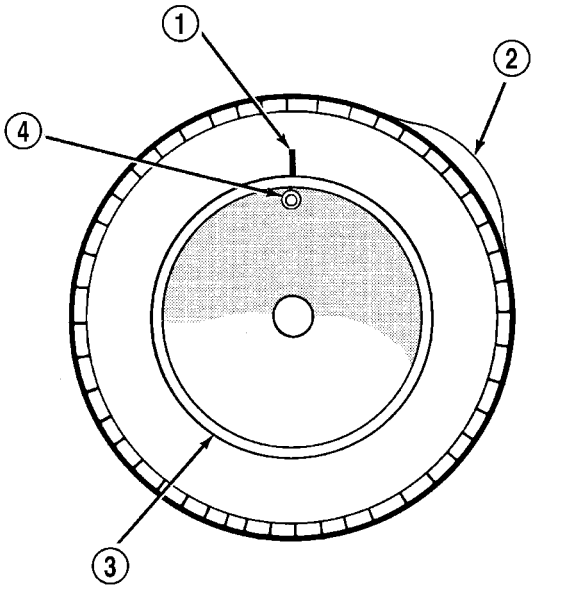
STANDARD PROCEDURE - MATCH MOUNTING

Wheels and tires are match mounted at the factory. This means that the high spot of the tire is matched to the low spot on the wheel rim. Each are marked with a bright colored temporary label on the outboard surface for alignment. The wheel is also marked permanently on the inside of the rim in the tire well. This permanent mark may be a paint dot or line, a permanent label or a stamped impression such as an X. An optional location mark is a small spherical indentation on the vertical face of the outboard flange on some non styled base steel wheels. The tire must be removed to locate the permanent mark on the inside of the wheel.

Before dismounting a tire from its wheel, a reference mark should be placed on the tire at the valve stem location. This reference will ensure that it is remounted in the original position on the wheel.

(1) Remove the tire and wheel assembly from the vehicle and mount on a service dynamic balance machine.

(2) Measure the total runout on the center of the tire tread rib with a dial indicator. Record the indicator reading. Mark the tire to indicate the high spot. Place a mark on the tire at the valve stem location (Fig. 6).



J9322-3

Fig. 6 First Measurement On Tire

1 - REFERENCE MARK
2 - 1ST MEASUREMENT HIGH SPOT MARK TIRE AND RIM
3 - WHEEL
4 - VALVE STEM

(3) Break down the tire and remount it 180 degrees on the rim (Fig. 7).

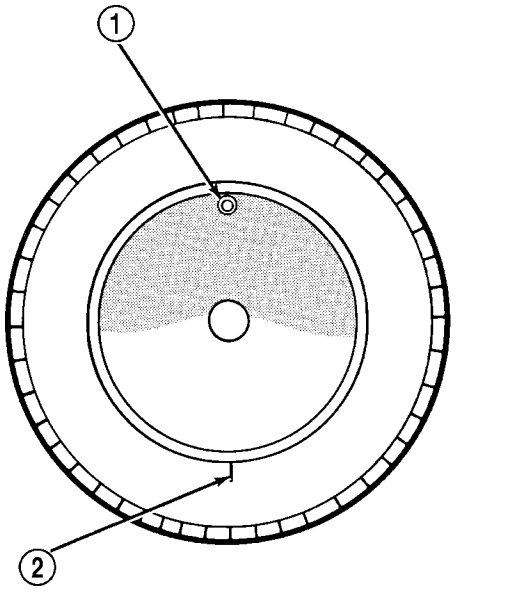


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Fig. 7 Remount Tire 180 Degrees

1 - VALVE STEM
2 - REFERENCE MARK

(4) Measure the total indicator runout again. Mark the tire to indicate the high spot.

(5) If runout is still excessive, the following procedures must be done.

TIRES/WHEELS (Continued)

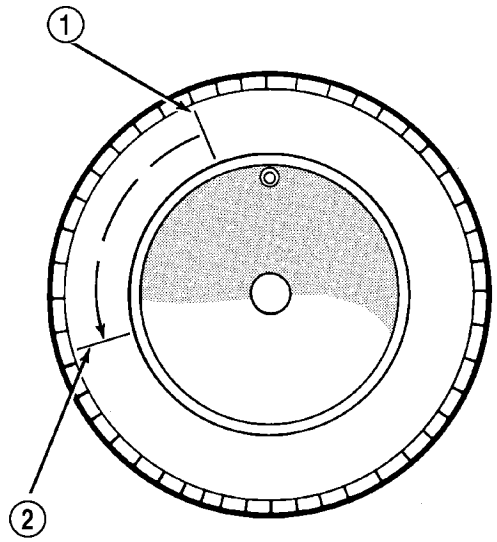

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Fig. 8 Remount Tire 90 Degrees In Direction of Arrow

1 - 2ND HIGH SPOT ON TIRE
2 - 1ST HIGH SPOT ON TIRE

- If the high spot is within 101.6 mm (4.0 in.) of the first spot and is still excessive, replace the tire.
- If the high spot is within 101.6 mm (4.0 in.) of the first spot on the wheel, the wheel may be out of specifications. Refer to Wheel and Tire Runout.
- If the high spot is NOT within 101.6 mm (4.0 in.) of either high spot, draw an arrow on the tread from second high spot to first. Break down the tire and remount it 90 degrees on rim in that direction (Fig. 8).

This procedure will normally reduce the runout to an acceptable amount, if not replace the rim.

STANDARD PROCEDURE - TIRE AND WHEEL BALANCE

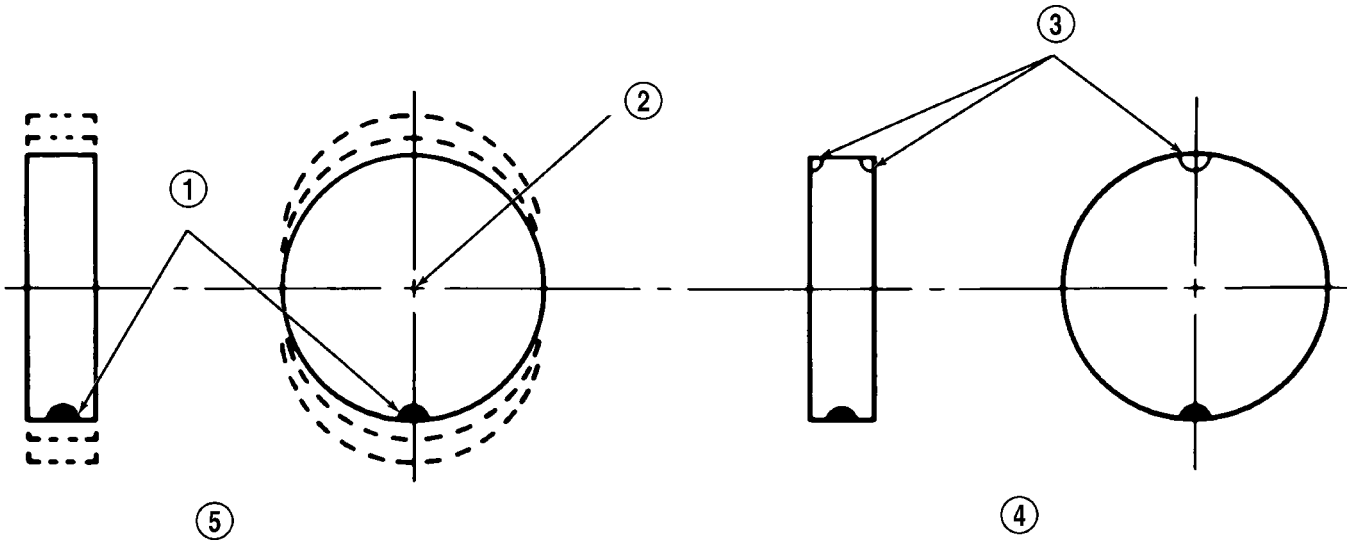
It is recommended that a two plane service dynamic balancer be used when a tire and wheel assembly require balancing. Refer to balancer operation instructions for proper cone mounting procedures. Typically use front cone mounting method for steel wheels. For aluminum wheel use back cone mounting method without cone spring.

NOTE: Static should be used only when a two plane balancer is not available.

NOTE: Cast aluminum and forged aluminum wheels require coated balance weights and special alignment equipment.

Wheel balancing can be accomplished with either on or off vehicle equipment. When using on-vehicle balancing equipment, remove the opposite wheel/tire. Off-vehicle balancing is recommended.

For static balancing, find the location of the heavy spot causing the imbalance. Counter balance wheel directly opposite the heavy spot. Determine weight required to counter balance the area of imbalance. Place half of this weight on the **inner** rim flange and the other half on the **outer** rim flange (Fig. 9).



J8922-8

Fig. 9 Static Unbalance & Balance

1 - HEAVY SPOT
2 - CENTER LINE OF SPINDLE
3 - ADD BALANCE WEIGHTS HERE
4 - CORRECTIVE WEIGHT LOCATION
5 - TIRE OR WHEEL TRAMP, OR WHEEL HOP

TIRES/WHEELS (Continued)

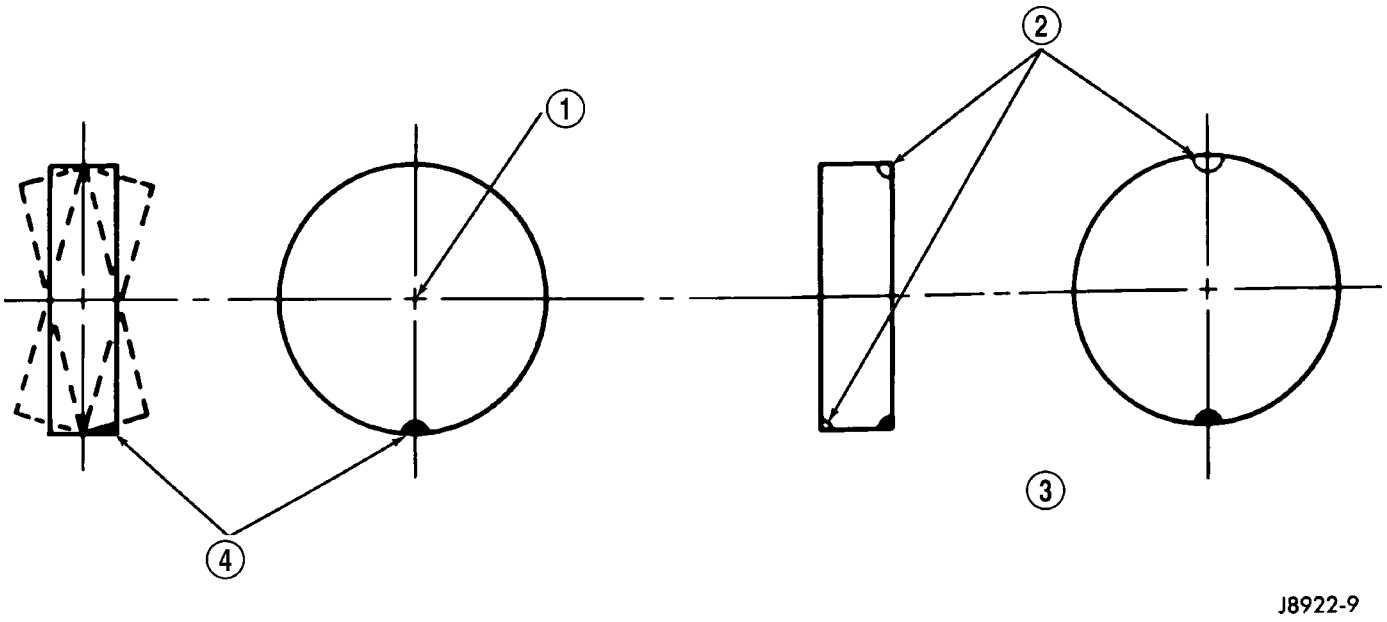


Fig. 10 Dynamic Unbalance & Balance

1 - CENTER LINE OF SPINDLE
2 - ADD BALANCE WEIGHTS HERE
3 - CORRECTIVE WEIGHT LOCATION
4 - HEAVY SPOT WHEEL SHIMMY AND VIBRATION

For dynamic balancing, the balancing equipment is designed to locate the amount of weight to be applied to both the inner and outer rim flange (Fig. 10).

TIRES

DESCRIPTION

DESCRIPTION - SPARE TIRE / TEMPORARY

The temporary spare tire is designed for emergency use only. The original tire should be repaired or replaced at the first opportunity, then reinstalled. Do not exceed speeds of 50 M.P.H. when using the temporary spare tire. Refer to Owner's Manual for complete details.

DESCRIPTION - TIRES

Tires are designed and engineered for each specific vehicle. They provide the best overall performance for normal operation. The ride and handling characteristics match the vehicle's requirements. With proper care they will give excellent reliability, traction, skid resistance, and tread life.

Driving habits have more effect on tire life than any other factor. Careful drivers will obtain in most cases, much greater mileage than severe use or careless drivers. A few of the driving habits which will shorten the life of any tire are:

- Rapid acceleration
- Severe brake applications
- High speed driving
- Excessive speeds on turns
- Striking curbs and other obstacles

Radial-ply tires are more prone to irregular tread wear. It is important to follow the tire rotation interval shown in the section on Tire Rotation, (Refer to 22 - TIRES/WHEELS - STANDARD PROCEDURE). This will help to achieve a greater tread life.

TIRE IDENTIFICATION

Tire type, size, aspect ratio and speed rating are encoded in the letters and numbers imprinted on the side wall of the tire. Refer to the chart to decipher the tire identification code (Fig. 11).

Performance tires have a speed rating letter after the aspect ratio number. The speed rating is not always printed on the tire sidewall. These ratings are:

- **Q** up to 100 mph
- **R** up to 106 mph
- **S** up to 112 mph
- **T** up to 118 mph
- **U** up to 124 mph
- **H** up to 130 mph
- **V** up to 149 mph
- **Z** more than 149 mph (consult the tire manufacturer for the specific speed rating)

An All Season type tire will have either **M + S, M & S or M–S** (indicating mud and snow traction) imprinted on the side wall.

TIRES (Continued)

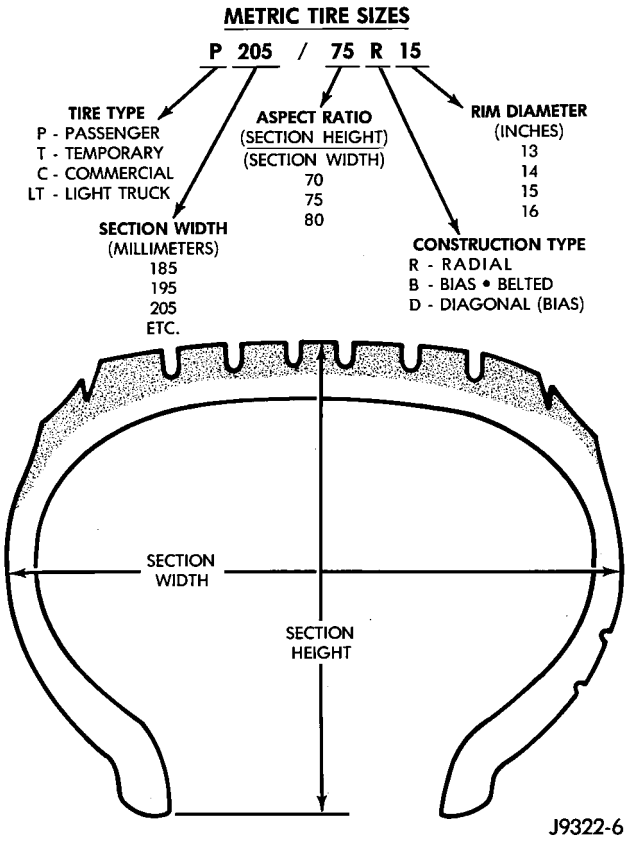


Fig. 11 Tire Identification

TIRE CHAINS

Tire snow chains may be used on **certain** models. Refer to the Owner's Manual for more information.

DESCRIPTION - RADIAL – PLY TIRES

Radial-ply tires improve handling, tread life and ride quality, and decrease rolling resistance.

Radial-ply tires must always be used in sets of four. Under no circumstances should they be used on the front only. They may be mixed with temporary spare tires when necessary. A maximum speed of 50 MPH is recommended while a temporary spare is in use.

Radial-ply tires have the same load-carrying capacity as other types of tires of the same size. They also use the same recommended inflation pressures.

The use of oversized tires, either in the front or rear of the vehicle, can cause vehicle drive train failure. This could also cause inaccurate wheel speed signals when the vehicle is equipped with Anti-Lock Brakes.

The use of tires from different manufactures on the same vehicle is NOT recommended. The proper tire pressure should be maintained on all four tires.

DESCRIPTION - TIRE PRESSURE FOR HIGH SPEEDS

Where speed limits allow the vehicle to be driven at high speeds, correct tire inflation pressure is very important. For speeds up to and including 120 km/h (75 mph), tires must be inflated to the pressures shown on the tire placard. For continuous speeds in excess of 120 km/h (75 mph), tires must be inflated to the maximum pressure specified on the tire sidewall.

Vehicles loaded to the maximum capacity should not be driven at continuous speeds above 75 mph (120 km/h).

For emergency vehicles that are driven at speeds over 90 mph (144 km/h), special high speed tires must be used. Consult tire manufacturer for correct inflation pressure recommendations.

DESCRIPTION - REPLACEMENT TIRES

The original equipment tires provide a proper balance of many characteristics such as:

- Ride
- Noise
- Handling
- Durability
- Tread life
- Traction
- Rolling resistance
- Speed capability

It is recommended that tires equivalent to the original equipment tires be used when replacement is needed.

Failure to use equivalent replacement tires may adversely affect the safety and handling of the vehicle.

The use of oversize tires may cause interference with vehicle components. Under extremes of suspension and steering travel, interference with vehicle components may cause tire damage.

WARNING: FAILURE TO EQUIP THE VEHICLE WITH TIRES HAVING ADEQUATE SPEED CAPABILITY CAN RESULT IN SUDDEN TIRE FAILURE.

DESCRIPTION - TIRE INFLATION PRESSURES

Under inflation will cause rapid shoulder wear, tire flexing, and possible tire failure (Fig. 12).

Over inflation will cause rapid center wear and loss of the tire's ability to cushion shocks (Fig. 13).

Improper inflation can cause:

- Uneven wear patterns
- Reduced tread life
- Reduced fuel economy
- Unsatisfactory ride
- Vehicle drift

For proper tire pressure specification refer to the Tire Inflation Pressure Chart provided with the vehicles

TIRES (Continued)

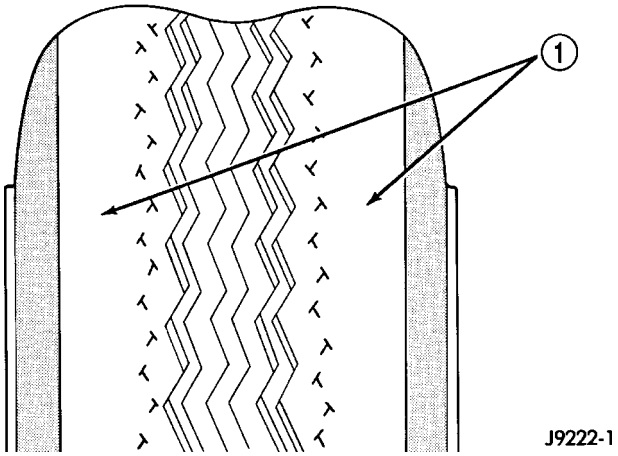


Fig. 12 Under Inflation Wear

1 - THIN TIRE THREAD AREAS

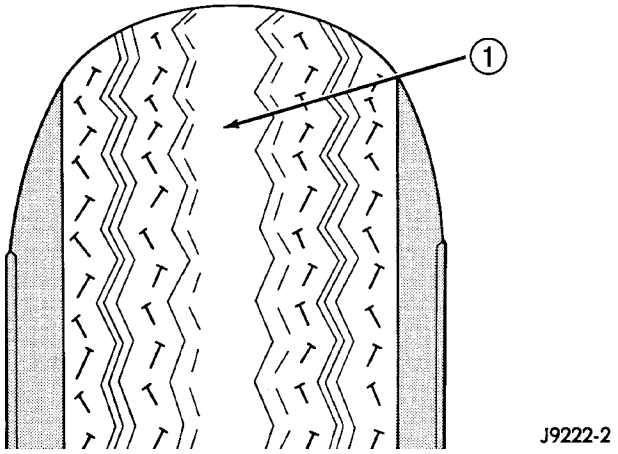


Fig. 13 Over Inflation Wear

1 - THIN TIRE THREAD AREA

Owners Manual. A Certification Label on the drivers side door pillar provides the minimum tire and rim size for the vehicle. The label also list the cold inflation pressure for these tires at full load operation

Tire pressures have been chosen to provide safe operation, vehicle stability, and a smooth ride. Tire pressure should be checked cold once a month. Tire pressure decreases as the ambient temperature drops. Check tire pressure frequently when ambient temperature varies widely.

Tire inflation pressures are cold inflation pressure. The vehicle must sit for at least 3 hours to obtain the correct cold inflation pressure reading. Or be driven less than one mile after sitting for 3 hours. Tire inflation pressures may increase from 2 to 6 pounds per square inch (psi) during operation. Do not reduce this normal pressure build-up.

WARNING: OVER OR UNDER INFLATED TIRES CAN AFFECT VEHICLE HANDLING AND TREAD WEAR. THIS MAY CAUSE THE TIRE TO FAIL SUDDENLY, RESULTING IN LOSS OF VEHICLE CONTROL.

DIAGNOSIS AND TESTING

DIAGNOSIS AND TESTING - PRESSURE GAUGES

A quality air pressure gauge is recommended to check tire pressure. After checking the air pressure, replace valve cap finger tight.

DIAGNOSIS AND TESTING - TIRE NOISE OR VIBRATION

Radial-ply tires are sensitive to force impulses caused by improper mounting, vibration, wheel defects, or possibly tire imbalance.

To find out if tires are causing the noise or vibration, drive the vehicle over a smooth road at varying speeds. Note the noise level during acceleration and deceleration. The engine, differential and exhaust noises will change as speed varies, while the tire noise will usually remain constant.

DIAGNOSIS AND TESTING - TREAD WEAR INDICATORS

Tread wear indicators are molded into the bottom of the tread grooves. When tread depth is 1.6 mm (1/16 in.), the tread wear indicators will appear as a 13 mm (1/2 in.) band (Fig. 14).

Tire replacement is necessary when indicators appear in two or more grooves or if localized balding occurs.

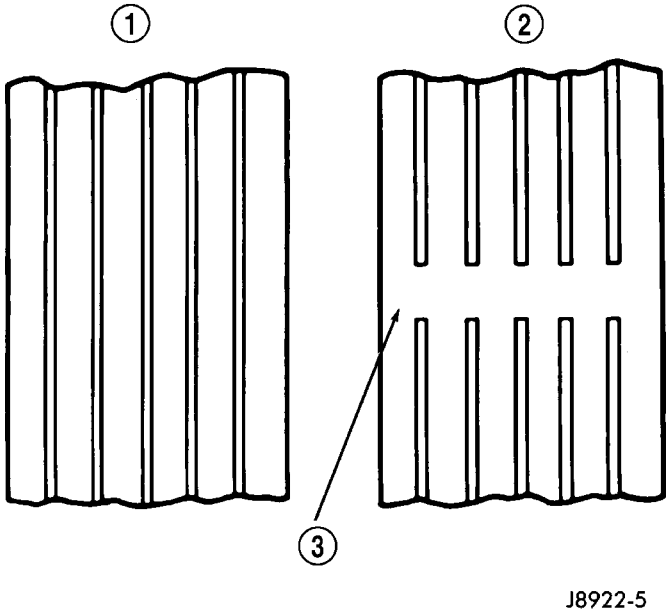


Fig. 14 Tread Wear Indicators

1 - TREAD ACCEPTABLE
2 - TREAD UNACCEPTABLE
3 - WEAR INDICATOR

TIRES (Continued)

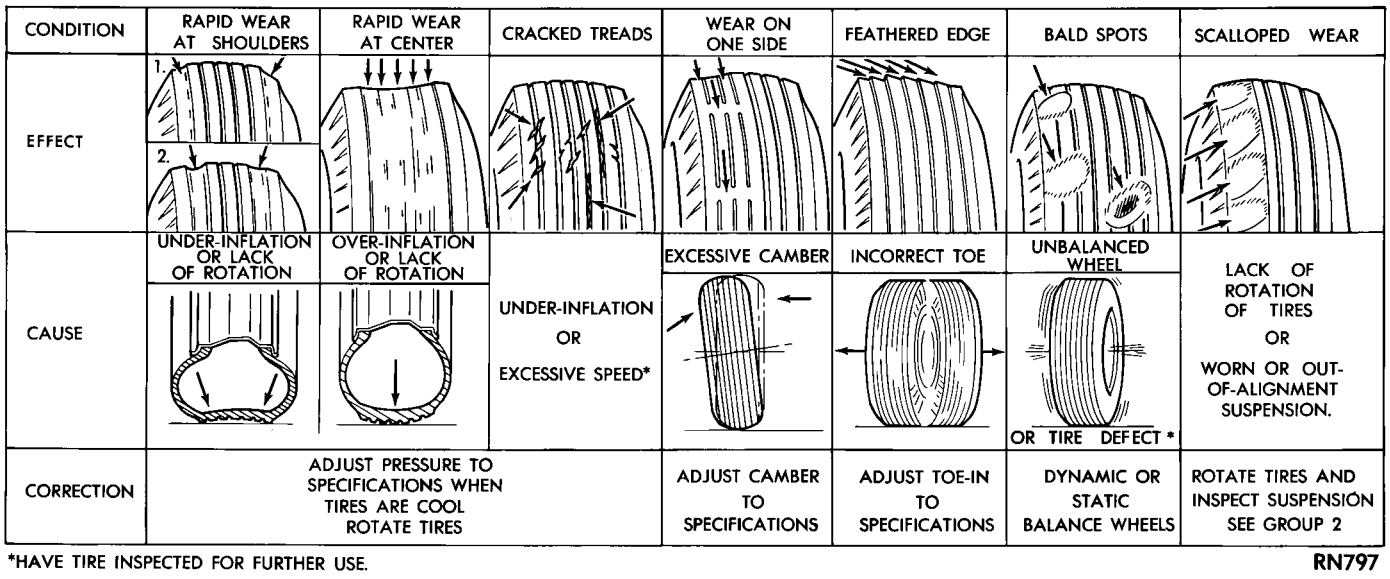


Fig. 15 Tire Wear Patterns

DIAGNOSIS AND TESTING - TIRE WEAR PATTERNS

Under inflation will cause wear on the shoulders of tire. Over inflation will cause wear at the center of tire.

Excessive camber causes the tire to run at an angle to the road. One side of tread is then worn more than the other (Fig. 15).

Excessive toe-in or toe-out causes wear on the tread edges and a feathered effect across the tread (Fig. 15).

DIAGNOSIS AND TESTING - TIRE/VEHICLE LEAD

Use the following Vehicle Lead Diagnosis And Correction Chart to diagnose and correct a vehicle lead or drift problem (Fig. 16).

TIRES (Continued)

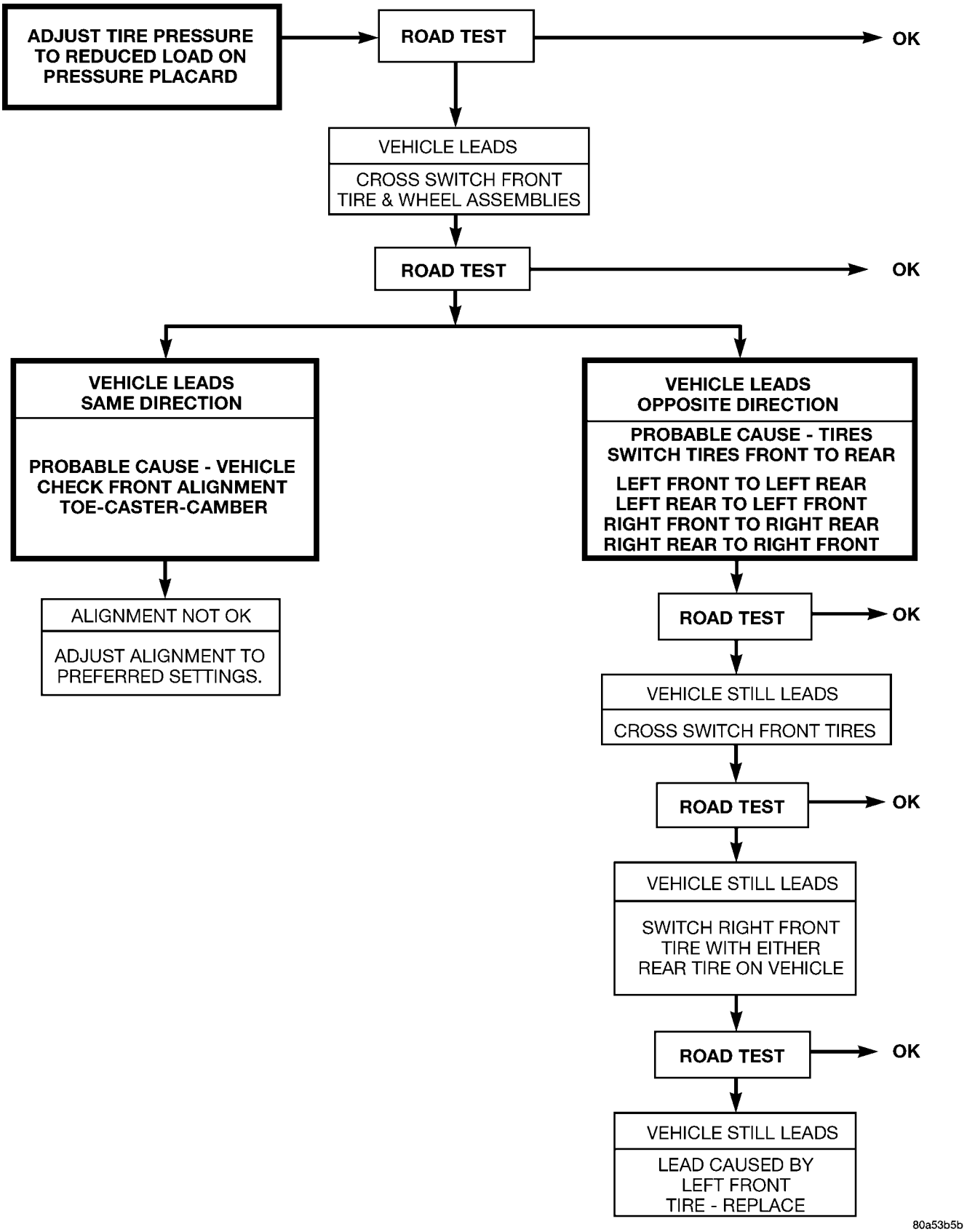


Fig. 16 VEHICLE LEAD DIAGNOSIS AND CORRECTION CHART

TIRES (Continued)

STANDARD PROCEDURE - REPAIRING LEAKS

For proper repairing, a radial tire must be removed from the wheel. Repairs should only be made if the defect, or puncture, is in the tread area (Fig. 17). The tire should be replaced if the puncture is located in the sidewall.

Deflate tire completely before removing the tire from the wheel. Use lubrication such as a mild soap solution when dismounting or mounting tire. Use tools free of burrs or sharp edges which could damage the tire or wheel rim.

Before mounting tire on wheel, make sure all rust is removed from the rim bead and repaint if necessary.

Install wheel on vehicle, and tighten to proper torque specification, (Refer to 22 - TIRES/WHEELS/ WHEELS - SPECIFICATIONS).

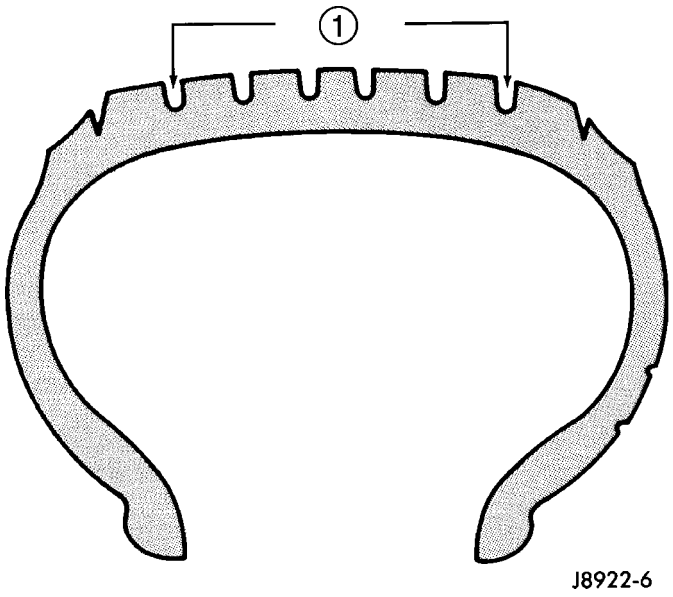


Fig. 17 TIRE REPAIR AREA

1 - TIRE REPAIR AREA

SPECIFICATIONS

TIRE REVOLUTIONS PER MILE

TIRE SIZE	SUPPLIER	REVOLUTIONS PER MILE
P245/70R17 LTX A/S	MICHELIN®	686
LT245/70R17 LTX A/S	MICHELIN®	675
LT265/70R17 LTX A/S	MICHELIN®	657
LT245/70R17 RUGGED TRAIL T/A	BF GOODRICH®	684
LT265/70R17 RUGGED TRAIL T/A	BF GOODRICH®	658
P265/70R17 WRANGLER SR/A	GOODYEAR®	656
P265/70R17 WRANGLER GS/A	GOODYEAR®	663
LT275/70R17 WRANGLER AT/S	GOODYEAR®	640
P275/55R20 EAGLE LS	GOODYEAR®	655
P275/60R20 WRANGLER HP	GOODYEAR®	636
LT235/80R17 WRANGLER SRA	GOODYEAR®	649
LT235/80R17 WRANGLER GSA	GOODYEAR®	649

WHEELS

DESCRIPTION

Original equipment wheels are designed for the specified Maximum Vehicle Capacity.

All models use steel or aluminum drop center wheels.

Aluminum wheels require special balance weights and alignment equipment.

(1) On vehicles equipped with dual rear wheels, The rim is an eight stud hole pattern wheel. The wheels have a flat mounting surface (Fig. 18). The slots in the wheel must be aligned to provide access to the valve stem (Fig. 19).

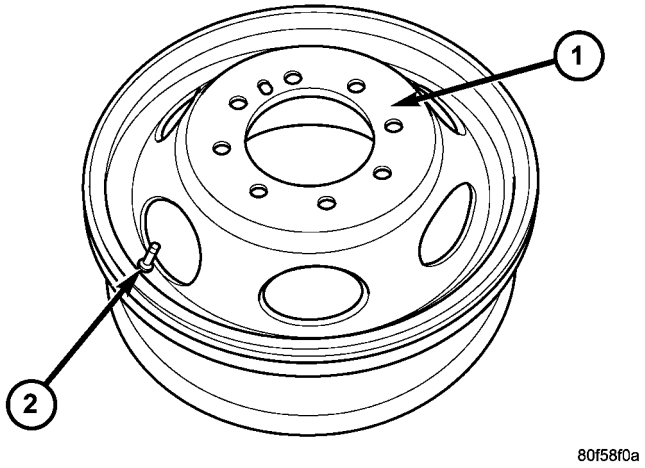


Fig. 18 FLAT FACE WHEEL

1 - FLAT FACE
2 - VALVE STEM

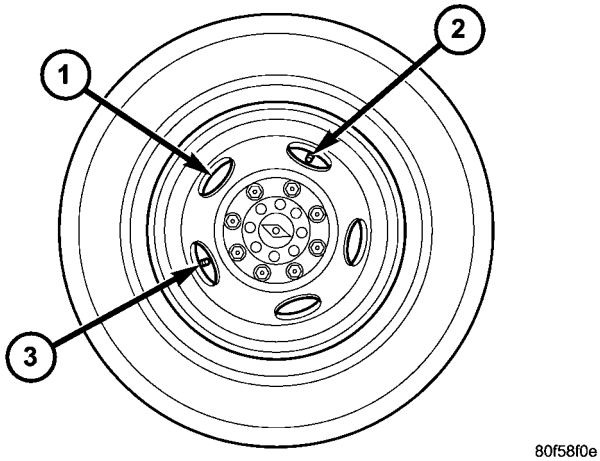


Fig. 19 DUAL REAR WHEELS

1 - WINDOW OPENINGS (5)
2 - INBOARD VALVE STEM
3 - OUTBOARD VALVE STEM

OPERATION

The wheel (Fig. 20) has raised sections between the rim flanges and the rim well. Initial inflation of the tire forces the bead over these raised sections. In case of tire failure, the raised sections hold the tire in position on the wheel until the vehicle can be brought to a safe stop.

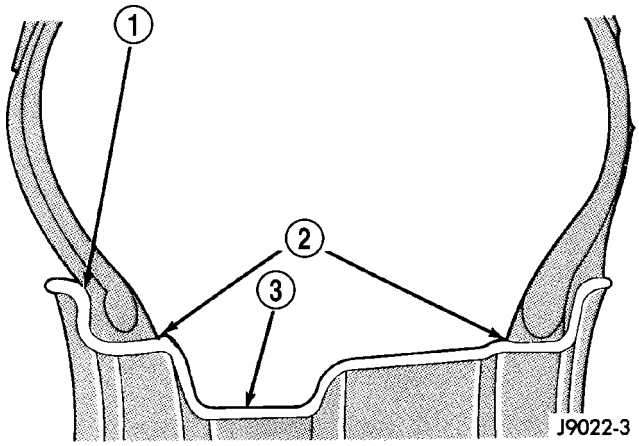


Fig. 20 Safety Rim

1 - FLANGE
2 - RIDGE
3 - WELL

DIAGNOSIS AND TESTING

WHEEL INSPECTION

Inspect wheels for:

- Excessive run out
- Dents or cracks
- Damaged wheel lug nut holes
- Air Leaks from any area or surface of the rim

NOTE: Do not attempt to repair a wheel by hammering, heating or welding.

If a wheel is damaged an original equipment replacement wheel should be used. When obtaining replacement wheels, they should be equivalent in load carrying capacity. The diameter, width, offset, pilot hole and bolt circle of the wheel should be the same as the original wheel.

WARNING: FAILURE TO USE EQUIVALENT REPLACEMENT WHEELS MAY ADVERSELY AFFECT THE SAFETY AND HANDLING OF THE VEHICLE. USED WHEELS ARE NOT RECOMMENDED. THE SERVICE HISTORY OF THE WHEEL MAY HAVE INCLUDED SEVERE TREATMENT OR VERY HIGH MILEAGE. THE RIM COULD FAIL WITHOUT WARNING.

WHEELS (Continued)

STANDARD PROCEDURE

STANDARD PROCEDURE - WHEEL REPLACEMENT

The wheel studs and nuts are designed for specific applications. They must be replaced with equivalent parts. Do not use replacement parts of lesser quality or a substitute design. All aluminum and some steel wheels have wheel stud nuts which feature an enlarged nose. This enlarged nose is necessary to ensure proper retention of the aluminum wheels.

NOTE: Do not use chrome plated lug nuts with chrome plated wheels.

Before installing the wheel, be sure to remove any build up of corrosion on the wheel mounting surfaces. Ensure wheels are installed with good metal-to-metal contact. Improper installation could cause loosening of wheel nuts (Fig. 21). This could affect the safety and handling of your vehicle.

To install the wheel, first position it properly on the mounting surface (Fig. 21). All wheel nuts should then be tightened just snug. Gradually tighten them in sequence to the proper torque specification, (Fig. 22) (Fig. 23). **Never use oil or grease on studs or nuts.**

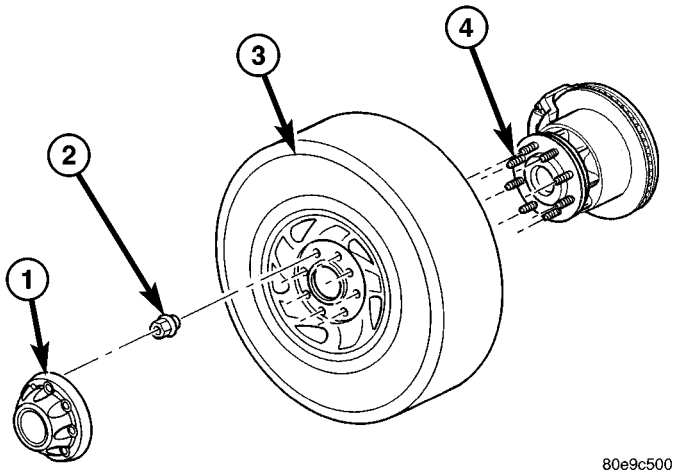


Fig. 21 WHEEL INSTALLATION 8-LUG SHOWN

1 - CENTER CAP
2 - LUG NUT
3 - TIRE/WHEEL ASSEMBLY
4 - WHEEL STUDS

Wheels must be replaced if they have:

- Excessive runout
- Bent or dented
- Leak air through welds
- Have damaged bolt holes

Wheel repairs employing hammering, heating, or welding are not allowed.

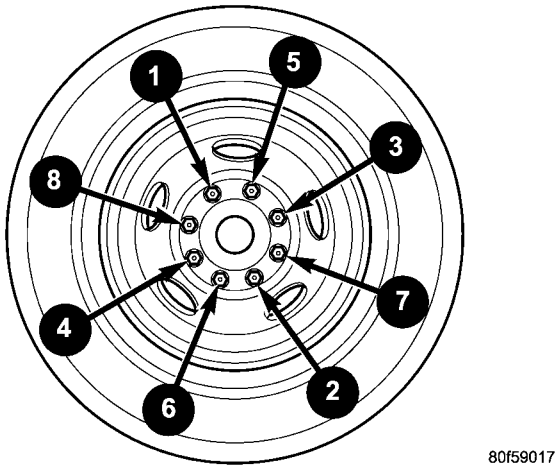


Fig. 22 8-LUG TIGHTENING PATTERN

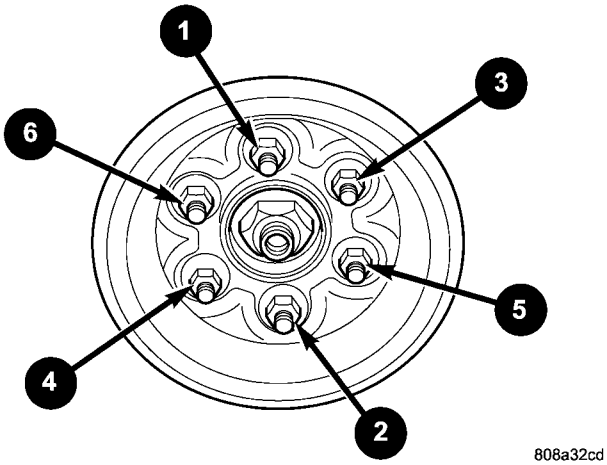


Fig. 23 TYPICAL 6 - LUG NUT TIGHTENING PATTERN

Original equipment wheels are available through your dealer. Replacement wheels from any other source should be equivalent in:

- Load carrying capacity
- Diameter
- Width
- Offset
- Mounting configuration

Failure to use equivalent replacement wheels may affect the safety and handling of your vehicle. Replacement with **used** wheels is not recommended. Their service history may have included severe treatment.

STANDARD PROCEDURE - DUAL REAR WHEEL INSTALLATION

Dual rear wheels use a special heavy duty lug nut wrench. It is recommended to remove and install dual rear wheels only when the proper wrench is available. The wrench is also use to remove wheel

WHEELS (Continued)

center caps for more information refer to Owner's Manual.

The tires on both wheels must be completely raised off the ground when tightening the lug nuts. This will ensure correct wheel centering and maximum wheel clamping.

A two piece flat face lug nut with right-hand threads is used for retaining the wheels on the hubs (Fig. 24).

The dual rear wheel lug nuts should be tightened according to the following procedure:

- Place two drops of oil to the interface of the nut/ washer (Fig. 24) before installing on the wheel stud.

NOTE: Do not use more then two drops of oil on the nut/washer, since the center caps attach in this area.

- Tighten the wheel lug nuts in the numbered sequential pattern until they are snug tight. Then tighten lug nut to specified torque following same number sequence, (Refer to 22 - TIRES/WHEELS/ WHEELS - SPECIFICATIONS).
- Tighten lug nuts in same numbered sequence a second time to the specified torque. This will ensure that the wheels are thoroughly mated.

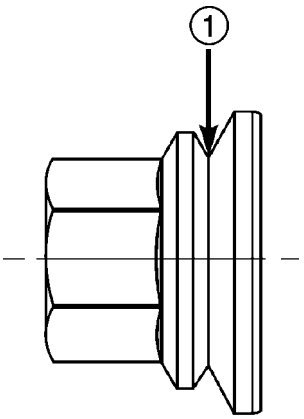


Fig. 24 Oil Location

1 - PLACE TWO DROPS OF OIL HERE

- Check lug nut specified torque after 100 miles (160 kilometers). Also after 500 miles (800 kilometers) of vehicle operation.

NOTE: Wheel lug nuts should be tightened to specified torque at every maintenance interval thereafter.

SPECIFICATIONS

TORQUE CHART

TORQUE SPECIFICATIONS

DESCRIPTION	N·m	Ft. Lbs.	In. Lbs.
1500 Series Lug Nut 9/16 X 18 with 60° Cone	180	135	—
2500 Series Lug Nut 9/16 X 18 with 60° Cone	180	135	—
3500 Series Lug Nut 9/16 X 18 with Flat Washer	195	145	—

STUDS

REMOVAL

(1) Raise and support the vehicle.
(2) Remove the wheel and tire assembly.
(3) Remove the brake caliper, caliper adapter and rotor, (Refer to 5 - BRAKES/HYDRAULIC/MECHANICAL/ROTORS - REMOVAL).
(4) Remove the stud from the hub with Remover C-4150A (Fig. 25).

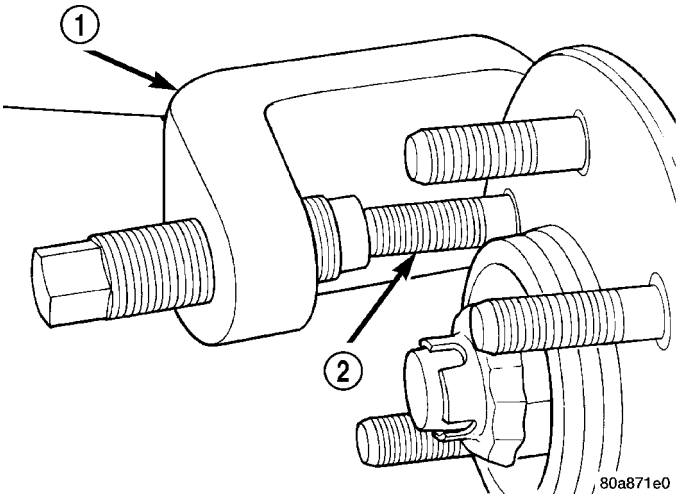


Fig. 25 Wheel Stud Removal

1 - REMOVER
2 - WHEEL STUD

INSTALLATION

(1) Install the new stud into the hub flange.
(2) Install the three washers onto the stud, then install the lug nut with the flat side of the nut against the washers.
(3) Tighten the lug nut until the stud is pulled into the hub flange. Verify that the stud is properly seated into the flange.
(4) Remove the lug nut and washers.
(5) Install the brake rotor, caliper adapter, and caliper, (Refer to 5 - BRAKES/HYDRAULIC/MECHANICAL/ROTORS - INSTALLATION).
(6) Install the wheel and tire assembly, (Refer to 22 - TIRES/WHEELS/WHEELS - STANDARD PROCEDURE), use new the lug nut on stud or studs that were replaced.
(7) Remove the support and lower vehicle.

WHEEL COVER

REMOVAL

NOTE: The hub caps must be removed before raising the vehicle off the ground.

NOTE: You must use the flat end of the hub/cap remover/installer combination tool to pry off the wheel skins. Insert the flat tip completely and using a back and forth motion, loosen the wheel skin. repeat this procedure around the tire until the wheel skin pops off.

(1) On 2500/3500 single rear wheel (SRW) models, insert a hub/cap remover/installer combination tool using the blade on the end of the tool to pry the cap off in a back and forth motion.
(2) On 3500 models with dual rear wheels (DRW), you must first remove the hub caps. The hub/cap remover/installer combination tool must be inserted in the pry off notch of the rear hub caps.
(3) Position the hub/cap remover/installer combination tool and pull out on the tool firmly. The cap should come off.
(4) The wheel skins can now be removed from the wheel.
(5) On 3500 models front hub caps use the hub/cap remover/installer combination tool to pry off the cap in a back and forth motion. The wheel skins can now be removed.

INSTALLATION

INSTALLATION - REAR

(1) Install one 1 1/2 in. valve stem extension on each rear inner wheel.

NOTE: A 3/8 in. drive 10mm deep wheel socket with a 10 in. or greater extension can be used to remove the existing valve stem cap and install the extension.

(2) Install one 1 in. valve stem extension on each outer wheel.
(3) Align the cooling windows of the wheel skin with the cooling windows of the wheel. Seat one side of the wheel skin's retainer onto the wheel. Using a rubber mallet, strike thew wheel skin on the outer circumference. Strike at several locations around the circumference until the skin is fully seated.

NOTE: The wheel skin and the hub cap are fully seated when there is a consistent gap between the skin/cap and the wheel.

WHEEL COVER (Continued)

(4) Tug on the hub/cap wheel skin to ensure that they are properly installed.

INSTALLATION - FRONT

(1) Align the valve stem with the notch in the wheel skin.

(2) Seat on side of the wheel skin's wire retainer on to the wheel.

(3) Using a rubber mallet, strike the opposite side of the wheel skin until the skin is properly seated.

NOTE: The wheel skin and the hub cap are fully seated when there is a consistant gap between the skin/ cap and the wheel.

(4) Tug on the hub cap/wheel skin to ensure that they are properly installed.

SPARE TIRE

DESCRIPTION

DESCRIPTION - SPARE / TEMPORARY TIRE

The temporary spare tire is designed for emergency use only. The original tire should be repaired or replaced at the first opportunity, then reinstalled. Do not exceed speeds of 50 M.P.H. when using the temporary spare tire. Refer to Owner's Manual for complete details.

DESCRIPTION - FULL SIZE, SPARE WHEEL WITH MATCHING TIRE

The spare is a full usage wheel with a matching tire, It can be used within the (posted legal) speed limits or distance limitations as of the rest of the vehicles four tires. Refer to Owner's Manual for complete details.