SECTION 3E

TIRES AND WHEELS

NOTICE: All wheel bolt and nut fasteners are important attaching parts in that they could affect the performance of vital components and systems, and/or could result in major repair expense. They must be replaced with one of the same part number or with an equivalent part if replacement becomes necessary. Do not use a replacement part of lesser quality or substitute design. Torque values must be used as specified during reassembly to assure proper retention of parts.

CONTENTS

Diagnosis ..... Section 3
General Information 3E-1
Replacement Tires 3E-1
All Seasons Tires 3E-1
P-Metric Tires 3E-2
Tire Placard 3E-2
Wheels 3E-2
Maintenance and Adjustments 3E-2
Wheel Repair 3E-2
Metric Wheel Nuts and Studs 3E-3
Inflation of Tires 3E-3
Tire Rotation 3E-3
Tire Chain Usage 3E-3
Service Operations 3E-4
Wheel Removal 3E-4
Tire Mounting and Dismounting 3E-5
Tire Repair 3E-5
Waddle 3E-5
Measuring Wheel Runout 3E-5
Puncture Sealing Tires 3E-6
Spare Tire 3E-6
Match Mounting 3E-6
Balancing Tire and Wheel 3E-7
General Balance Precautions 3E-7
Off-Car Balancing 3E-8
On-Car Balancing 3E-8
Wheel Weights 3E-8
Correcting Non-Uniform Tires 3E-8
Aluminum Wheel Cleaning 3E-9
Aluminum Wheel Hub Cap 3E-9
Aluminum Wheel Porosity Repair 3E-9
Aluminum Wheel Refinishing 3E-9
Wheel Nut Torque 3E-10

GENERAL INFORMATION

The factory installed tires and wheels are designed to operate satisfactorily with loads up to and including the full rated load capacity when inflated to the recommended inflation pressures.

Correct tire pressures, wheel alignment and driving techniques have an important influence on tire life. Heavy cornering, excessive rapid acceleration, and heavy braking will increase tire wear.

REPLACEMENT TIRES

See Figure 1

A Tire Performance Criteria (TPC) specification number is molded in the sidewall near the tire size of all original equipment tires. This specification number assures that the tire meets GM's performance standards for traction, endurance, dimensions, noise, handling, rolling resistance, and others. Usually, a specific TPC number is assigned to each tire size.

When replacing tires, only the size, load range, and construction as originally on the car are recommended. This can best be accomplished by replacing with tires of the same TPC specification number. Use of any other tire size or construction type may seriously affect ride, handling, peedometer/odometer calibration, car ground clearance and tire clearance to the body and chassis. This does not apply to the spare furnished with the car.

It is recommended that new tires be installed in pairs on the same axle. If it is necessary to replace only one tire, it should be paired with the tire having the most tread, to equalize braking traction.

Although they may appear different in tread design, tires built by different manufacturers with identical TPC specification numbers, can be intermixed on the same car.

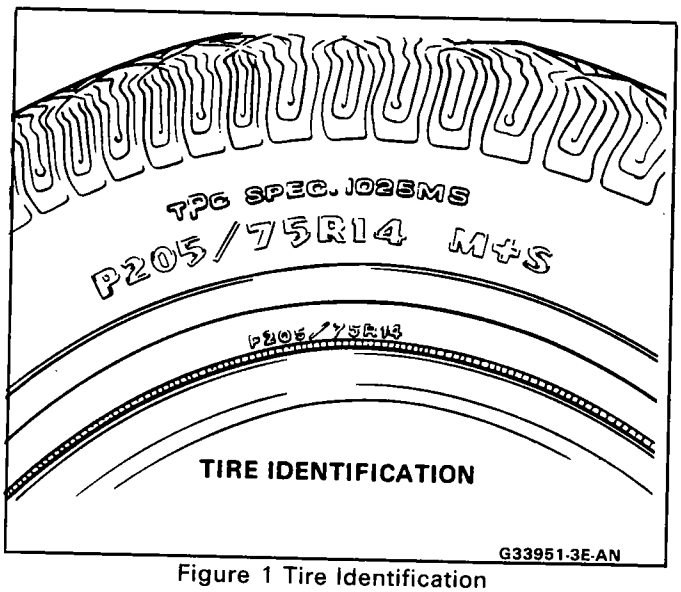

Figure 1 Tire Identification

ALL SEASONS TIRES

See Figure 1

Most GM cars are now equipped with steel belted All Seasons radial tires as standard equipment. These

tires qualify as snow tires, with a 37% higher average rating for snow traction than the non-All Seasons radial tires previously used. Other performance areas, such as wet traction, rolling resistance, tread life, and air retention, were also improved slightly. This was done by improvements in both tread design and tread compounds. These tires are identified by an "M + S" molding in the tire sidewall following the size. The suffix "MS" is also molded in the sidewall after the TPC specification number.

The optional handling tires used on some cars are not All Seasons tires. These will not have the "MS" marking after the tire size or TPC specification number.

P-METRIC SIZED TIRES

See Figures 1 thru 4

All GM cars now use P-metric sized tires. P-metric tires are available in two load ranges, standard load (35 psi max) and extra load (41 psi max). Most passenger car tires are standard load.

Most P-metric tire sizes do not have exact corresponding alpha-numeric tire sizes. For example, a P205/75R15 is not exactly equal in size and load carrying capacity to an FR78-15. For this reason, replacement tires should be of the same TPC specification number (same size, load range, construction) as those originally on the car. If P-metric tires must be replaced with other sizes, a tire dealer should be consulted. Tire companies can best recommend the closest match of alpha-numeric to P-metric sizes within their own tire lines.

The metric term for tire inflation pressure is the kilopascal (kPa). Tire pressure may be printed in both kPa and psi. One psi equals 6.9 kPa.

See the tire placard or Section 0B for tire inflation specifications.

TIRE PLACARD

See Figure 4

The tire placard is permanently located on the rear face of the driver's door, and should be referred to for tire information. The placard lists the maximum car load, tire size (including spare), and cold inflation pressure (including spare).

WHEELS

Wheels must be replaced if they are bent, dented, have excessive lateral or radial runout, leak air through welds, have elongated bolt holes, if wheel nuts won't stay tight, or if they are heavily rusted. Wheels with excessive runout may cause objectional vibrations.

Replacement wheels must be equivalent to the original equipment wheels in load capacity, diameter, rim width, offset, and mounting configuration. A wheel of improper size or type may affect wheel and bearing life, brake cooling, speedometer/odometer calibration, car ground clearance, and tire clearance to the body and chassis.

Steel wheels can be identified by a two or three-letter code stamped into the rim near the valve stem. Aluminum wheels have the code, part number, and manufacturer ID cast into their back side.

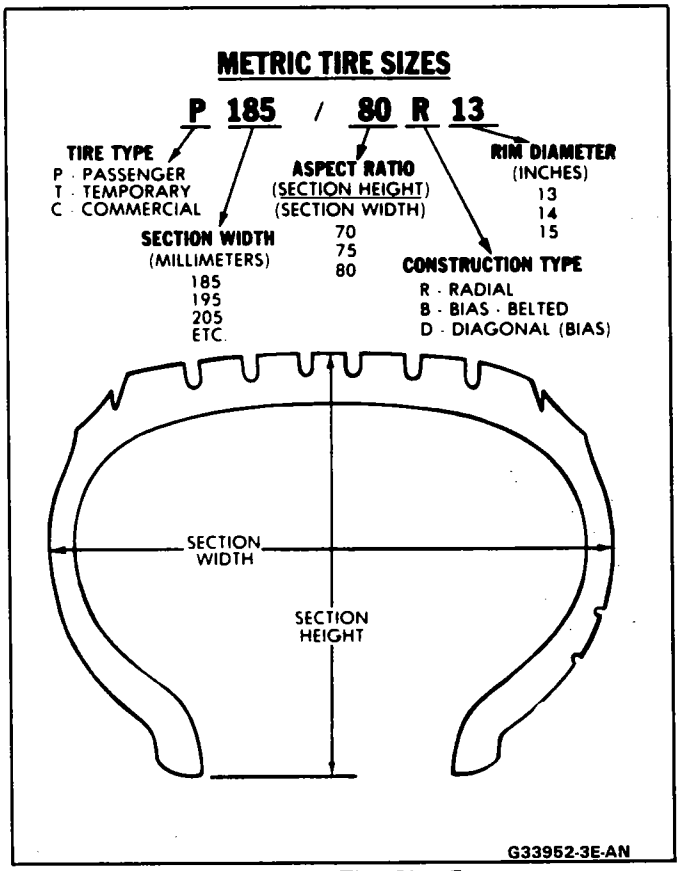

Figure 2 Metric Tire Size Format

INFLATION PRESSURE CONVERSION CHART (KILOPASCALS TO PSI)

kPa	psi	kPa	psi
140	20	215	31
145	21	220	32
155	22	230	33
160	23	235	34
165	24	240	35
170	25	250	36
180	26	275	40
185	27	310	45
190	28	345	50
200	29	380	55
205	30	415	60

Conversion: 6.9 kPa = 1 psi

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Figure 3 Inflation Pressure Conversion

MAINTENANCE AND ADJUSTMENTS

WHEEL REPAIR

Wheel repairs that use welding, heating, or peening are not approved. An inner tube is not an acceptable repair for leaky wheels or tires. Porosity in aluminum wheels can be repaired, see Aluminum Wheel Porosity Repair.

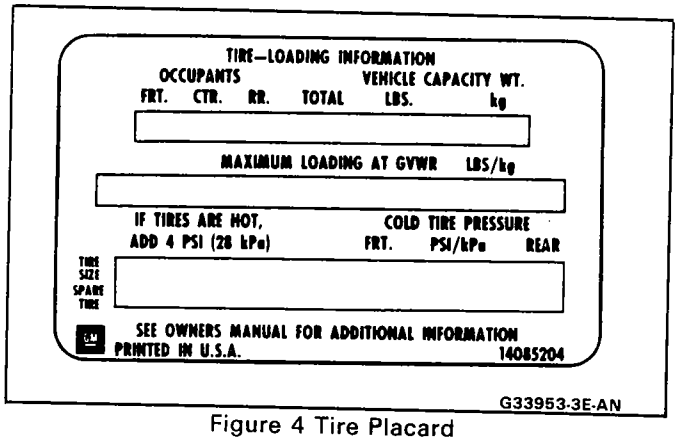

Figure 4 Tire Placard

METRIC WHEEL NUTS AND STUDS

Some models use metric wheel nuts and wheel studs. The nut will have the word "metric" stamped on it's face and the stud will have the letter "M" stamped into the threaded end. The word "metric" is stamped on it's head.

The thread size of the metric wheel nuts and wheel studs are "M12 x 1.5". These stand for:

M = Metric
12 = Diameter in millimeters
1.5 = Millimeters per thread

If a broken stud is found, see Section 3C (Front Suspension) or Section 3D (Rear Suspension) for replacement procedure.

INFLATION OF TIRES

The pressure recommended for any model is carefully calculated to give a satisfactory ride, handling, tread life and load carrying capacity.

Tire pressure, with tires cold, (after car has set for three hours or more, or driven less than one mile) should be checked monthly or before any extended trip and set to the specifications on the tire placard located on rear face of driver's door. Tire inflation pressure is also given in Section 0B.

Valve caps or extensions should be on the valves to keep dust and water out.

1. **For sustained driving at speeds up to 85 mph (140 km/h),** in countries where such speeds are allowed by law, your tires should be set at the pressures recommended on your tire placard. **Sustained driving at speeds faster than 85 mph (140 km/h), where permitted by law, is not advised** unless your car has special high speed tires available from many tire dealers.
2. Tire pressures may increase as much as 6 psi when hot.
3. Higher than recommended pressure can cause:
   - Hard ride
   - Tire bruising or carcass damage
   - Rapid tread wear at center of tire
4. Lower than recommended pressure can cause:
   - Tire squeal on turns
   - Hard steering
   - Rapid and uneven wear on the edges of the tread
   - Tire rim bruises and rupture
   - Tire cord breakage
   - High tire temperatures
   - Reduced handling
   - High fuel consumption
5. Unequal pressure on same axle can cause:
   - Uneven braking
   - Steering lead
   - Reduced handling
   - Swerve on acceleration

TIRE ROTATION

Figures 5 and 6

To equalize wear, rotate tire and wheel assemblies at 7,500 miles and every 15,000 miles thereafter. In addition to scheduled rotation, the tire and wheel assemblies should also be rotated whenever uneven tire wear is noticed.

Due to their design, radial tires tend to wear faster in the shoulder area particularly in front positions. Radial tires in non-drive locations may develop an irregular wear pattern that can increase tire noise if not rotated. This makes regular rotation especially necessary.

After rotation, be sure to check wheel nuts for specified torque.

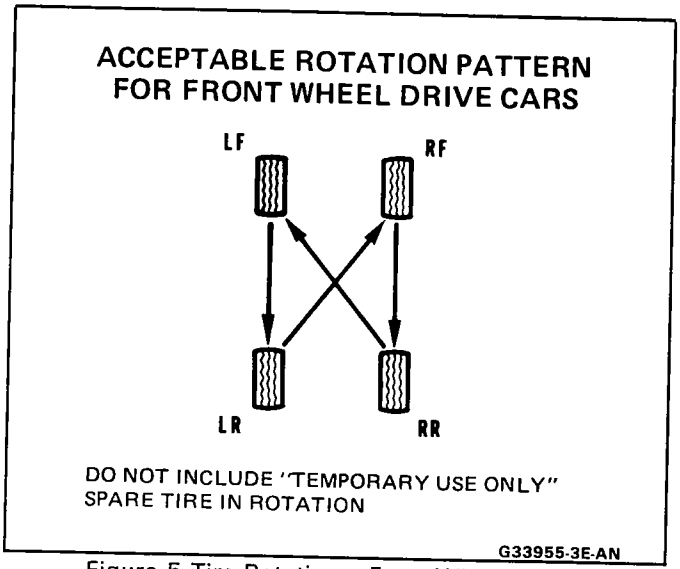

Figure 5 Tire Rotation – Front-Wheel Drive

TIRE CHAIN USAGE

See Figure 7

Due to limited tire-to-body clearance on certain cars, tire chain usage recommendations have been published in the Owner's Manual. When chains are to be used, most current GM cars require SAE Class "S" tire chains. These may also be designated as 1100 Series, Type PL tire chains. These chains are specially designed to limit the "fly off" effect that occurs when the wheel rotates.

Manufacturers of tire chains have a specific chain size for each tire size to ensure proper fit when

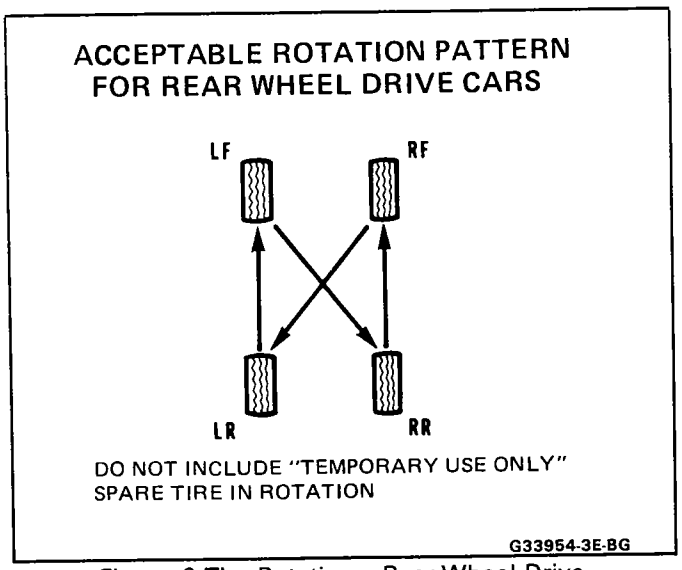

Figure 6 Tire Rotation – Rear-Wheel Drive

installed. Therefore, be sure to purchase the correct chains for the tires on which they are to be used. Rubber adjusters should not be used to take up slack or clearance in chains which are loose due to incorrect size. Always follow the chain manufacturers installation instructions.

Use of chains may adversely affect car handling. When using chains:

- Adjust speed to road conditions
- Avoid sharp turns
- Avoid locked-wheel braking

In general, to help prevent chain damage to your car:

- Install the chains on the drive tires as tightly as possible, then tighten them again after driving 1/4 to 1/2 mile (0.4 to 0.8 kilometer). The use of chains on the non-drive tires is not recommended; the chains may contact and possibly damage the car. If you intend to use chains on the non-drive tires, be sure there is enough clearance.
- Do not exceed 45 mph (70 km/h), or the chain manufacturer's speed limit, if lower.
- Drive in a restrained manner and avoid large bumps, potholes, severe turns and other maneuvers which could cause the tires to bounce up and down.
- Follow any other instructions of the chain manufacturer which do not disagree with the above.

Additional specific information is published in the Owner's Manual.

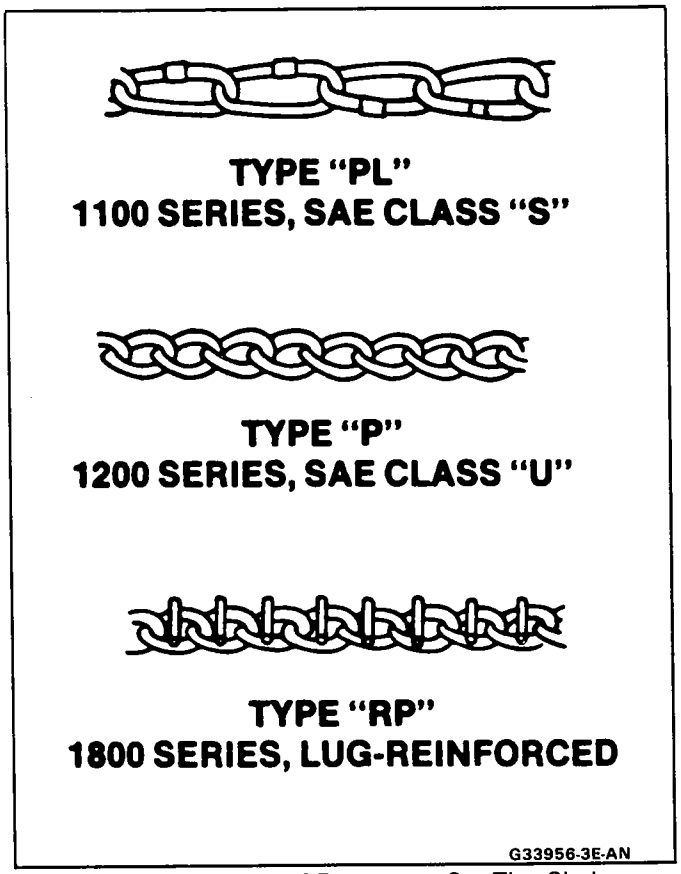

Figure 7 Examples of Passenger Car Tire Chains

SERVICE OPERATIONS

WHEEL REMOVAL

See Figure 8

Sometimes wheels can be difficult to remove from the car due to foreign material or a tight fit between the wheel center hole and the hub or rotor. These wheels can be removed without damage as follows:

1. Tighten all wheel nuts on the affected wheel, then loosen each wheel nut two turns.
2. Lower car onto floor.
3. Rock the car from side to side as hard as possible using one or more person's body weight to loosen the wheel, and/or rock the car from "Drive" to "Reverse" allowing car to move several feet in each direction. Apply quick, hard jabs on the brake pedal to loosen the wheel.
4. Raise the car. Remove the wheel nuts and the wheel.

Penetrating oil has not been found to be effective in removing tight wheels, however, if it is used, it should be applied sparingly to the wheels center hole area only. **Do not** allow the penetrating oil to get on the vertical surfaces between the wheel and the drum (or rotor) because penetrating oil in this area could cause the wheel to work loose as the car is driven causing loss of control.

NEVER use heat to loosen a tight wheel because the application of heat to the wheel can shorten the life of the wheel, wheel bolts and/or wheel bearings.

Excessive force such as hammering the wheel or tire can also cause damage and is not recommended. Slight tapping of the tire side wall, such as with one's hand or a rubber mallet, is normally acceptable.

Before installing wheels, remove any build up of corrosion on the wheel mounting surface and brake drum or rotor mounting surface by scraping and wire brushing. Installing wheels without good metal-to-metal contact at the mounting surfaces can cause wheel nuts to loosen, which can later allow the wheel to come off causing loss of control.

Wheel nuts must be tightened in sequence and to proper torque to avoid bending wheel or brake drum or rotor.

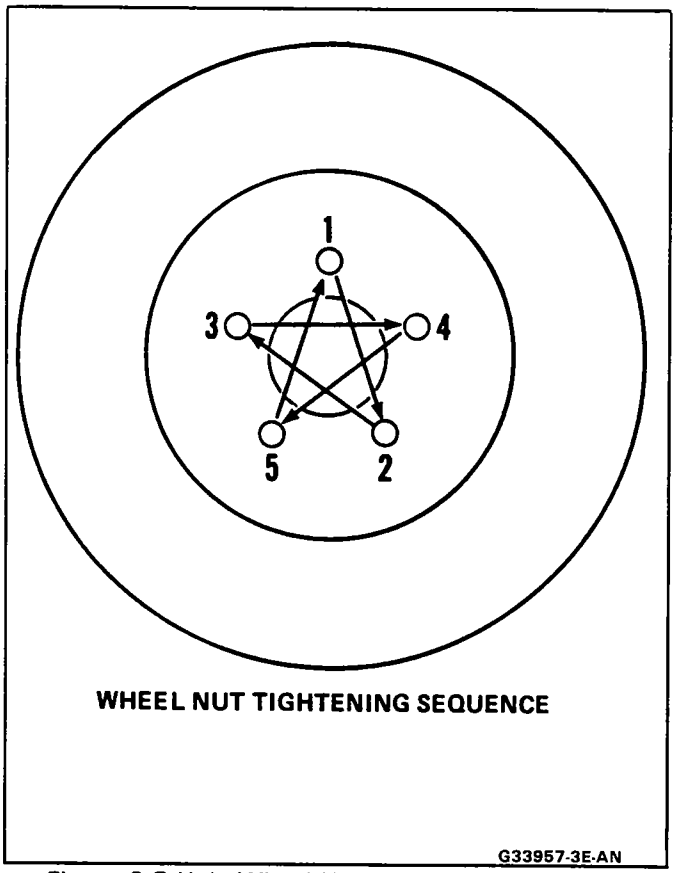

Figure 8 5 Hole Wheel Nut Tightening Sequence

TIRE MOUNTING AND DISMOUNTING

See Figure 9

Use a tire changing machine to mount or dismount tires. Follow the equipment manufacturer's instructions. Do not use hand tools or tire irons to change tires as they may damage the tires bead or wheel rim.

Rim bead seats should be cleaned with a wire brush or coarse steel wool to remove lubricants, old rubber, and light rust. Before mounting or dismounting a tire, the bead area should be well lubricated with an approved tire lubricant.

After mounting, inflate until beads are seated, but never exceed 275 kPa (40 psi) to seat the beads.

CAUTION: To avoid serious personal injury, do not stand over tire when inflating. Bead may break when bead snaps over safety hump. Do not exceed 275 kPa (40 psi) pressure when inflating any tire if beads are not seated. If 275 kPa (40 psi) pressure will not seat beads, deflate, relubricate the beads and reinflate. Overinflation may cause the bead to break and cause serious personal injury.

Install valve core and inflate to proper pressure. Check the locating ring of the tire to be sure it shows around the rim flanges on both sides.

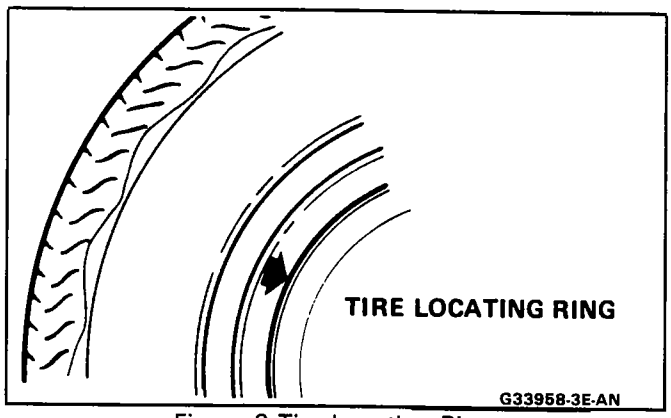

Figure 9 Tire Locating Ring

TIRE REPAIR

There are many different materials and techniques on the market to repair tires. Tire manufacturers have published detailed instructions on how and when to repair their tires. These instructions can be obtained from the tire manufacturer.

Due to the thin 3.2 mm (4/32") tread depth on temporary spare tires, tire repair is not recommended.

WADDLE

Waddle is side-to-side movement at the front and/or rear of the car. It can be caused by the steel belt not being straight within the tire, or by excessive lateral runout of the tire or wheel. Use a dial indicator on the tire's sidewall and on the rim's flange to determine if excessive lateral runout.

MEASURING WHEEL RUNOUT

See Figure 10

Wheel runout should be measured with an accurate dial indicator. Measurements may be taken with the wheel installed on the car or off the car using an accurate mounting surface such as on a wheel balancer. Measurements may also be taken with or without the tire mounted on the wheel.

Radial runout and lateral runout should be measured on both the inboard and outboard rim flanges. With the dial indicator firmly in position, slowly rotate the wheel one revolution and record the total indicator reading. If any measurement exceeds specifications, and there is a vibration that wheel balancing will not correct, the wheel should be replaced. Disregard any indicator readings due to welds, paint runs, scratches, etc.

- STEEL WHEELS
  Radial runout .040"
  Lateral runout .045"
- ALUMINUM WHEELS
  Radial runout .030"
  Lateral runout .030"

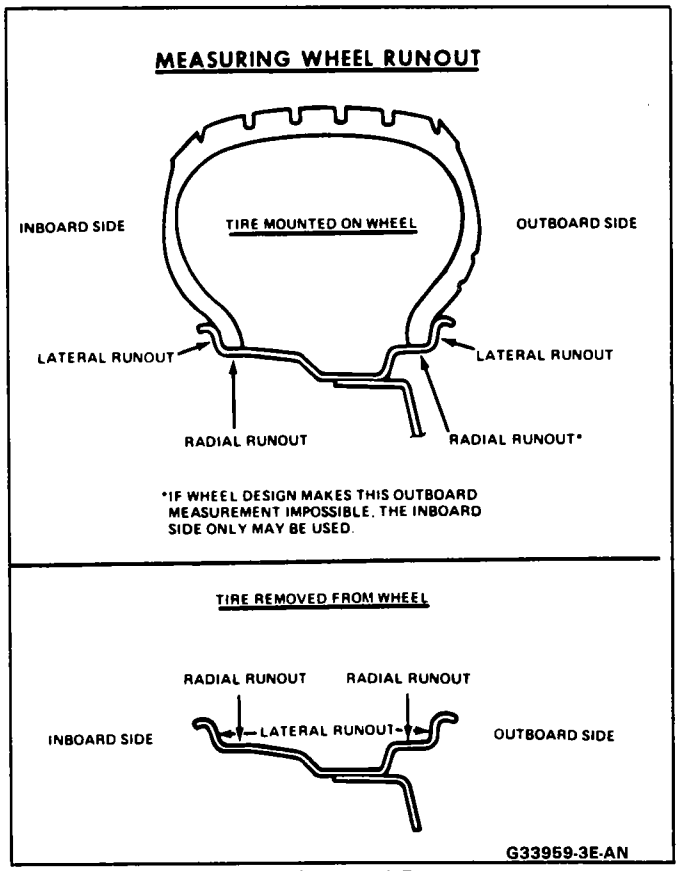

Figure 10 Wheel Runout

PUNCTURE SEALING TIRES

See Figure 11

The puncture sealing tire is designed to permanently seal most of the tread punctures up to 3/16 inch in diameter, so that the tire remains inflated. The actual sealant is made of a special rubber compound which is applied to the tire in the tire manufacturing plant. The sealant only covers the inside of the tire under the tread area. The sealant is designed to surround the embedded object and seal the puncture at the inner surface of the tire below the tread. If a nail or other puncturing object 3/16 inch in diameter or less penetrates the tire tread into the sealant layer, it picks up a coating of the sealant. As the puncturing object is either removed or thrown from the tire by centrifugal force, the sealant adheres to it, and is pulled onto the puncture opening in the tread. When the object is completely removed, the sealant fills the entire puncture opening, keeping the tire inflated, and forming a permanent seal.

Puncture sealing tires can be identified by a distinctive marking on the sidewall, and carry a special warranty. Puncture sealing tires can be serviced with current tire changing and wheel balancing equipment.

SPARE TIRE

Compact Spare

See Figure 12

All models will be equipped with a high pressure compact spare. The compact spare uses a narrow

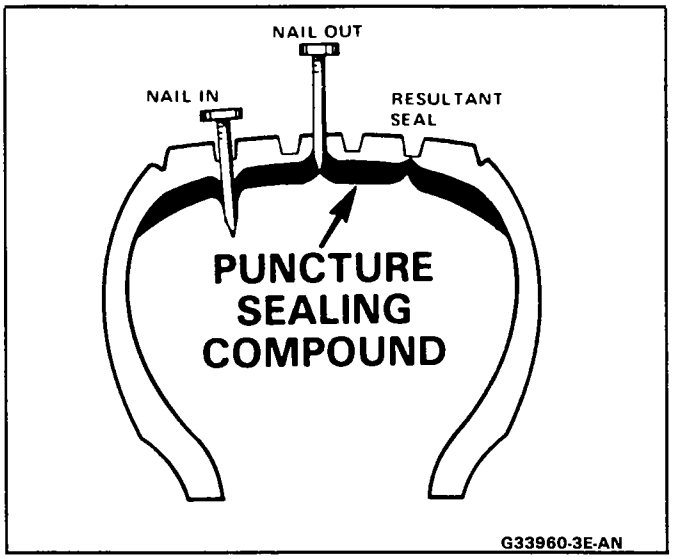

Figure 11 Puncture Sealing Tire

4-inch wide rim, although the wheel diameter is usually one inch larger than the road wheels.

The compact spare wheel should not be used with standard tires, snow tires, wheel covers or trim rings. If such use is attempted, damage to these items or other parts of the car may occur. The compact spare should be used only on cars which offered it as original equipment.

Inflation pressure of the compact spare must be periodically checked and maintained at 415 kPa (60 psi). It can be mounted and dismounted from it's wheel using present tire changing equipment and procedures. As with other tires, the beads should completely seat at 275 kPa (40 psi). The tire may then be safely inflated to 415 kPa (60 psi).

CAUTION: To avoid serious personal injury, do not stand over tire when inflating. Bead may break when bead snaps over safety hump. Do not exceed 275 kPa (40 psi) pressure when inflating any tire if beads are not seated. If 275 kPa (40 psi) pressure will not seat beads, deflate, relubricate the beads and reinflate. Overinflation may cause the bead to break and cause serious personal injury.

MATCH MOUNTING

See Figure 13

Tires and wheels are "match-mounted" at the assembly plant. This means that the radially stiffest part of the tire, or "high spot", is matched to the smallest radius or "low spot" of the wheel.

The "high spot" of the tire is originally marked by a yellow paint mark or adhesive label on the outboard sidewall.

The "low spot" of the wheel will be at the location of the valve stem.

Before dismounting a tire from it's wheel, a line should be scribed on the tire at the valve stem to assure that it is remounted in the same position.

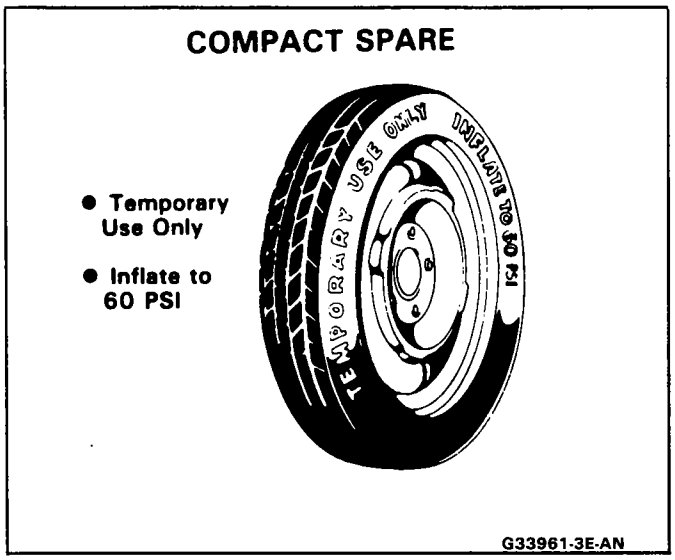

Figure 12 Compact Spare

Replacement tires and wheels that are of original equipment quality will have their "high and low spot" marked in the same manner.

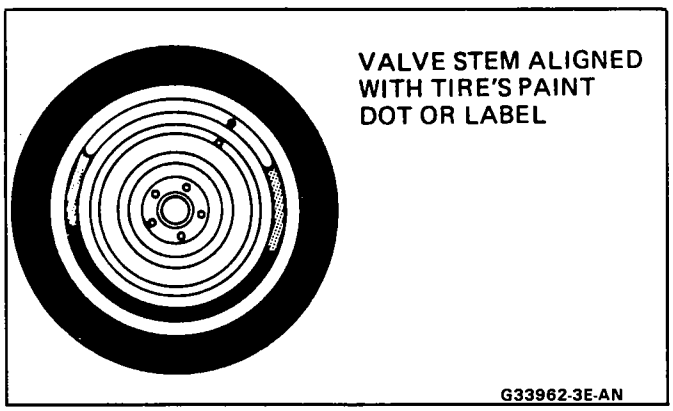

Figure 13 Matched Tires and Wheels

BALANCING TIRE AND WHEEL

See Figures 14 and 15

There are two types of tire and wheel balancing, static and dynamic. Static balance is the equal distribution of weight around the wheel. Assemblies that are statically unbalanced cause a bouncing action called wheel tramp. This condition will eventually cause uneven tire wear.

Dynamic balance is the equal distribution of weight on each side of the centerline so that when the assembly spins there is no tendency for it to move from side to side. Assemblies that are dynamically unbalanced may cause wheel shimmy.

General Balance Precautions

Deposits of foreign material must be cleaned from the inside of the wheel. Stones should be removed from the tread in order to avoid operator injury during spin balancing and to obtain a good balance. The tire should be inspected for any damage, then balanced according to the equipment manufacturer's recommendations.

Whenever a heavier, solid locking wheel nut is used to replace a standard nut, it should be installed

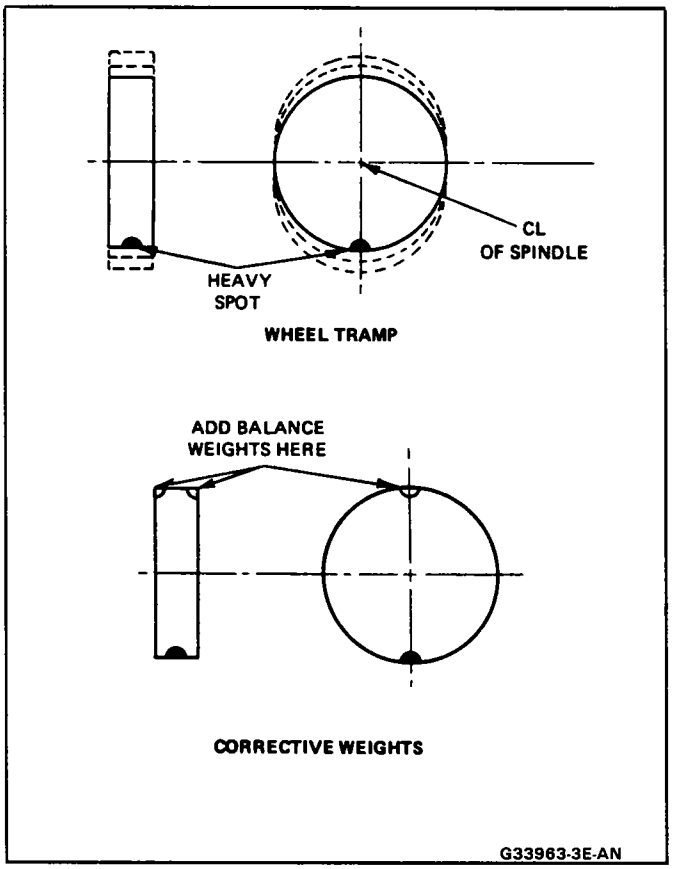

Figure 14 Static Unbalance Correction

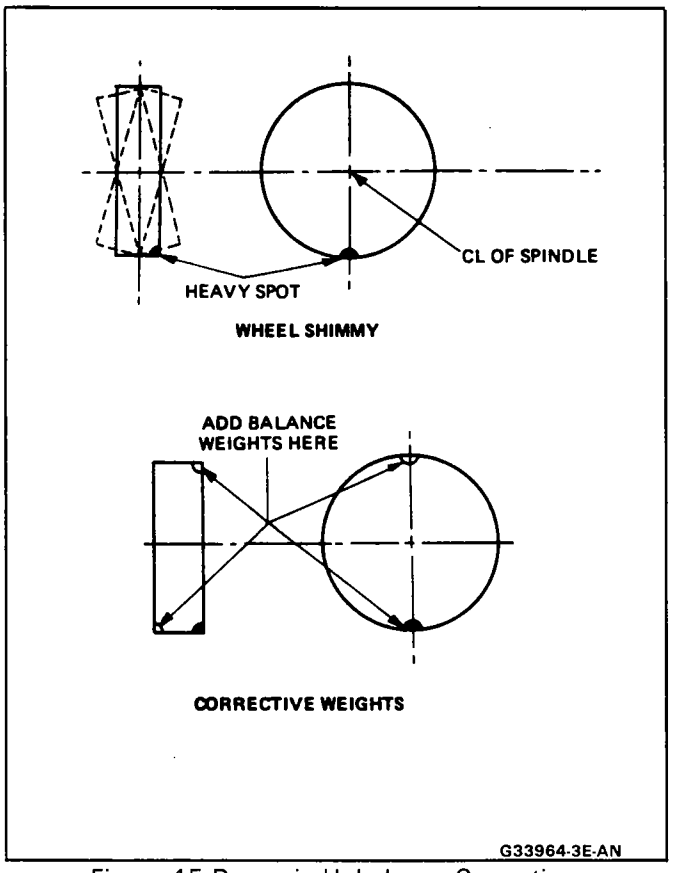

Figure 15 Dynamic Unbalance Correction

nearest the valve stem, and a 1/2 ounce balance weight should be added 180° opposite the locking nut on the wheel's inboard side.

When rotating tires, always re-install the locking nut nearest the tire valve stem so that it remains opposite the 1/2 ounce balance weight. This procedure will improve the on-car wheel balance by compensating for the heavy locking wheel nut.

Off-Car Balancing

Most electronic off-car balancers are more accurate than the on-car spin balancers. They are easy to use and give a dynamic (two plane) balance. Although they do not correct for drum or rotor unbalance as does on-car spin balancing, this is overcome by their accuracy (usually to within 1/8 ounce). When balancing off-car, the wheel should locate on the balancer with a cone through the back side of the center pilot hole (not by the wheel stud holes).

On-Car Balancing

When needed, on-car balancing will help correct vibrations due to brake drum, rotor, and wheel cover imbalance.

On front-wheel-drive cars the front suspension should not be allowed to hang free. When the CV joint is run at a very high angle, extra vibrations can occur, as can damage to seals and joints. Always follow the equipment manufacturer's instructions.

When balancing on car, do not remove the balance weights from the off-car dynamic balance. If more than one ounce of additional weight is required, it should be split between the inner and outer rim flange.

NOTICE: The driven tire and wheel assemblies should be spun using the engine. Limit speed as stated in the following Caution.

CAUTION: Do not spin the drive wheels faster than 35 mph (55 km/h) as indicated by the speedometer. This limit is necessary because the speedometer indicates only one-half of the actual wheel speed when one drive wheel is spinning and the other drive wheel is stopped. Personal injury and damage may result from high speed spinning.

CAUTION: On cars equipped with limited slip rear axles, do not attempt to balance a tire on a drive wheel with the other drive wheel on the ground. The car may drive through this wheel and cause the car to move unexpectedly, resulting in personal injury and property damage.

To distinguish between standard rear axle and limited slip, raise rear of car so both tires are clear of ground. With the transmission in park (in gear with manual transmission), attempt to turn one wheel by hand. If the wheel can be turned, it is a standard rear axle; if the wheel cannot be turned, it is a limited slip rear axle. Also, check for Limited Slip (G80) on Service Parts Identification label.

Wheel Weights

See Figure 16

If more than 85 grams (3.0 oz.) are needed, the wheel weights should be split as equal as possible between the inboard and outboard flanges.

Balancing of assemblies with factory aluminum wheels requires the use of special nylon coated clip-on type wheel weights. These weights are designed to fit over the thicker rim flange of the aluminum wheel.

Adhesive wheel weights are also available. Use the following procedure to install adhesive wheel weights.

Adhesive Wheel Weight Installation

1. Clean wheel by sanding to bare aluminum where wheel weight is to be located.
2. Wipe wheel weight attachment area with a mixture of half Isopropyl alcohol and half water. A clean cloth or paper towel must be used for this operation.
3. Dry the attachment area with hot air. Surface of wheel should be warm to the touch.
4. The adhesive backing on wheel weights must be warmed to room temperature.
5. Remove tape from back of weights. Do not touch the adhesive surface.
6. Apply wheel weight and press on with hand pressure.
7. Secure wheel weight with a 70-110 N (16-25 lb) force applied with a roller.

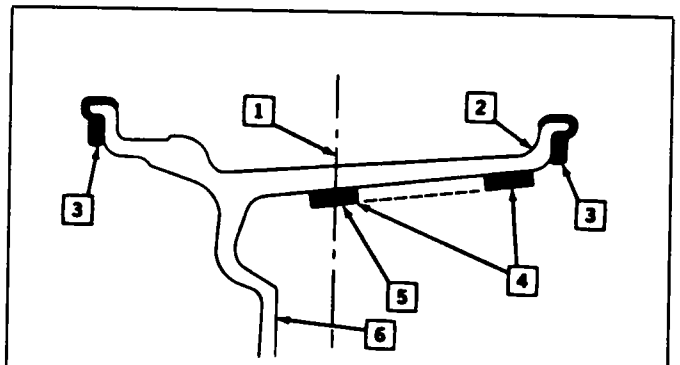

Figure 16 Aluminum Wheel Weight Placement

CORRECTING NON-UNIFORM TIRES

There are two ways to correct tires which cause a vibration even though they are properly balanced. One method uses an automatic machine which loads the tire and buffs small amounts of rubber from high spots on the outer two tread rows. Correction by this method is usually permanent and, if done properly,

does not significantly affect the appearance or tire tread life. Tire truing with a blade-type machine is not recommended as this reduces the tread life substantially and often does not permanently correct the problem.

Another method is to dismount the tire and rotate it 180 degrees on the rim. It is important that this be done on tire and wheel assemblies which are known to be causing a vibration as it is just as likely to cause good assemblies to vibrate.

Refer to Section 3, "Vibration Diagnosis" for more details.

ALUMINUM WHEEL CLEANING

Aluminum wheels should be cleaned and waxed regularly. Do not use abrasive cleaners, as they could damage the protective coating.

ALUMINUM WHEEL HUB CAP

Remove or Disconnect

1. Tire and wheel assembly
2. Place a block of wood approximately 2" in diameter with a squared off end against the back surface of the cap. A sharp hammer blow on the block of wood will remove the cap.

Install or Connect

1. Place cap into position at wheel opening and place a block of wood at least three inches in diameter against cap face. Install cap by striking block of wood with hammer.
2. Tire and wheel assembly

NOTICE: Failure to hit cap squarely without the load distributed evenly could result in permanent damage to the cap.

ALUMINUM WHEEL POROSITY REPAIR

1. Remove tire and wheel assembly.
2. Locate leaking areas by inflating tire to 345 kPa (50 psi) and dipping tire and wheel assembly into a water bath.
3. Mark leak areas and remove tire from wheel.
4. Scuff inside surface at leak area with 80 grit sandpaper and clean area with general purpose cleaner such as 3M #08984 or equivalent.
5. Apply 1/8" thick layer of adhesive/sealant P/N 1052366 or equivalent to leak area and allow twelve hours of drying time.
6. Mount tire on wheel, pressurize to 345 kPa (50 psi) and check for leaks.

CAUTION: To avoid serious personal injury, do not stand over tire when inflating. Bead may break when bead snaps over safety hump. Do not exceed 275 kPa (40 psi) pressure when inflating any tire if beads are not seated. If 275 kPa (40 psi) pressure will not seat beads, deflate, relubricate the beads and reinflate. Overinflation may cause the bead to break and cause serious personal injury.

7. Adjust tire pressure to meet specifications.
8. Balance tire and wheel assembly.
9. Install tire and wheel assembly.

ALUMINUM WHEEL REFINISHING

A protective clear coating is applied to the surface of original equipment cast aluminum wheels. A surface degradation condition can begin to develop if frequent, repeated automatic car wash cleaning abrades or wears off the factory applied protective clear coating. This can happen at some automatic car wash facilities using agressive silicon carbide tipped tire brushes to clean white walls and tires. Once the protective clear coating is damaged, exposure to caustic cleaners and/or road salt further causes surface degradation. The following procedure details how to strip, clean and recoat aluminum wheels that are affected by these conditions.

Required Materials:

3M® Scotchbrite Cleaning Pad, Part No. 07445 or equivalent

3M® Brand Troubleshooter Chemical Stripper or equivalent

3M® Medium Buffing Compound, Part No. 05955 or equivalent

3M® Buffing Pad, Part No. 05701 or equivalent

R-M® Pre Kleno Cleaner or equivalent

R-M® Metal Conditioner, Part No. 801 or equivalent

R-M® 893 2K Enamel Clearcoat and 894 Catalyst Hardener

Service Procedure:

1. Remove tire and wheel assemblies from the car.
   - Reference mark tire for reinstallation of weight after recoating of wheel. Remove wheel weight and mask off tire.
2. Removal of original clear coating:
   - Apply a chemical stripper such as 3M® Brand Troubleshooter to wheel surface.
   - Wait 10-15 minutes, then wet scrub surface using a 3M® No. 98 Scotchbrite Cleaning Pad, Part No. 07455.
   - Rinse surface thoroughly with clean water.
3. Removal of surface oxidation:
   - Compound surface with 3M® Superbuff Buffing Pad, Part No. 05701 and medium type compound such as 3M® Part No. 05955 or No. 05931. This will remove any existing stain and oxidation from the wheel.
   - After compounding, clean wheel with water and scrub with small brush to remove excess compound and air blow dry.

CAUTION: Use of eye goggles is necessary to prevent personal injury.

4. Recoating procedure (R-M®):
   - Use Pre Kleno to clean surface of any surface contaminants.

- Apply No. 801 metal conditioner. It is recommended that rubber gloves be used for this application.
- Refer to label for specific directions. If No. 801 metal conditioner is used, make sure it is reduced one part metal conditioner with three parts water.
  a. Apply metal conditioner with clean rag, keeping surface wet.
  b. Wipe off carefully while still wet with clean, dry rag.
- After removing the original clear coating and preparing the surface, next apply R-M® 893 2K Clear with 894 Urethane Catalyst Hardener. Refer to label for specific directions.

CAUTION: To avoid serious personal injury when applying any two part component paint system, wear proper respiratory protection such as 3M® Paint Respirator, Part, No. 06984, or Easi-Air Respirator, Part No. 06986 or equivalent. Failure to wear a respirator may cause lung irritation and allergic respiratory reaction. Follow any additional precautions on product label.

Wheels should be allowed to air dry for a minimum of over night prior to installing on car.

WHEEL NUT TORQUE

A Series – M12X1.5	140 N·m (100 lbs. ft.)
C Series – M12X1.5	140 N·m (100 lbs. ft.)
H Series – M12X1.5	140 N·m (100 lbs. ft.)
J Series – M12X1.5	140 N·m (100 lbs. ft.)
N Series – M12X1.5	140 N·m (100 lbs. ft.)
B Series – 7/16 - 20	110 N·m (80 lbs. ft.)
B Series – 1/2 - 20	140 N·m (100 lbs. ft.)
G Series – M12X1.5	140 N·m (100 lbs. ft.)
E Series – M12X1.5	140 N·m (100 lbs. ft.)