

Your Ultimate Source for OEM Repair Manuals

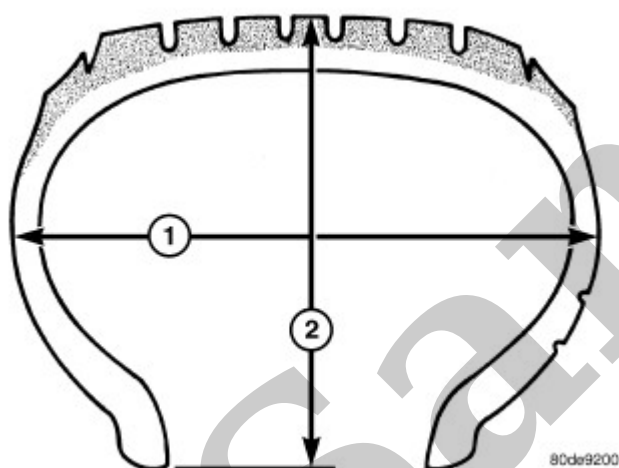
FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2016 Jeep Renegade Service and Repair Manual

[Go to manual page](#)

Reading Tire Codes

45	ASPECT RATIO	SHOWN IN PERCENTAGE*
R	CONSTRUCTION TYPE	R - RADIAL
		B - BIAS BELTED
		D - DIAGONAL (BIAS)
22	WHEEL DIAMETER	SHOWN IN INCHES
114	LOAD INDEX	**
H	SPEED RATING	**



NOTE

* Height (2) ÷ Width (1) = Aspect Ratio.

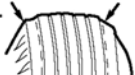
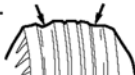
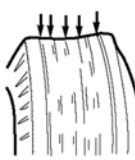


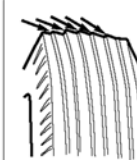
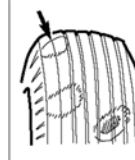

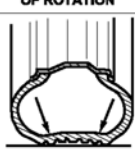
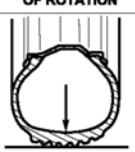
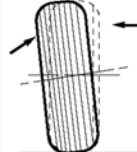
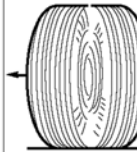
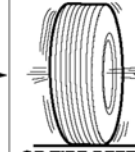
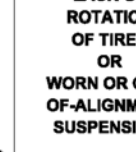
NOTE

** Consult the tire manufacturer regarding any questions on tire specifications or capabilities.

TIRE CHAINS

Refer to the owners manual supplied with the vehicle to determine whether the use of tire chains is permitted on this vehicle.

TIRE WEAR PATTERNS

CONDITION	RAPID WEAR AT SHOULDERS	RAPID WEAR AT CENTER	CRACKED TREADS	WEAR ON ONE SIDE	FEATHERED EDGE	BALD SPOTS	SCALLOPED WEAR
EFFECT	<div>1. </div> <div>2. </div>						
CAUSE	UNDER-INFLATION OR LACK OF ROTATION 	OVER-INFLATION OR LACK OF ROTATION 	UNDER-INFLATION OR EXCESSIVE SPEED*	EXCESSIVE CAMBER 	INCORRECT TOE 	UNBALANCED WHEEL 	LACK OF ROTATION OF TIRES OR WORN OR OUT-OF-ALIGNMENT SUSPENSION. 
CORRECTION	ADJUST PRESSURE TO SPECIFICATIONS WHEN TIRES ARE COOL ROTATE TIRES			ADJUST CAMBER TO SPECIFICATIONS	ADJUST TOE-IN TO SPECIFICATIONS	DYNAMIC OR STATIC BALANCE WHEELS	

* HAVE TIRE INSPECTED FOR FUTURE USE.

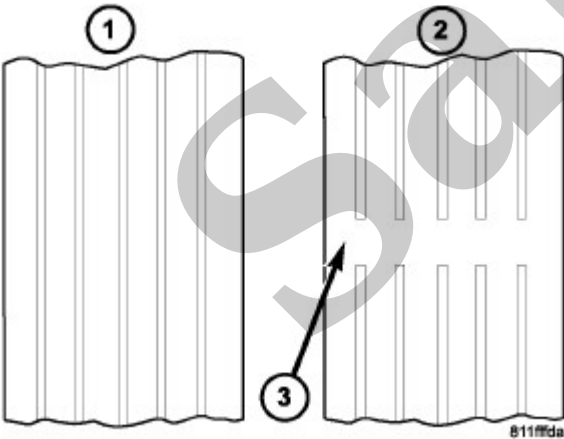
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Under inflation will cause wear on the shoulders of tire. Over inflation will cause wear at the center of tire.

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

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

TREAD WEAR INDICATORS

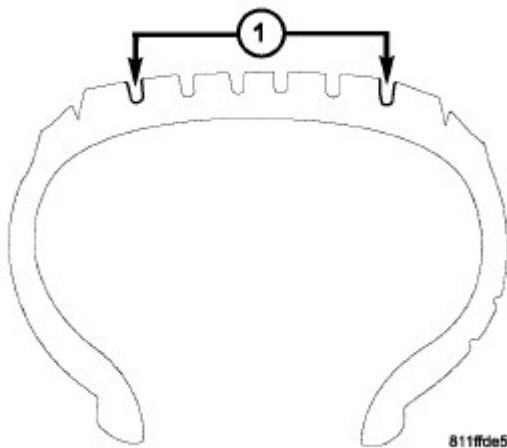


- 1 - Normal Tire Tread
- 2 - Worn Tire Tread
- 3 - Tread Wear Indicator

YOUR CURRENT VEHICLE

Tire Leak Repairing

TIRE LEAK REPAIRING



1 - Tread Area

For proper repairing, a radial tire must be removed from the wheel. Repairs should only be made if the issue, or puncture, is in the tread area (1). The tire should be replaced if the puncture is located in the sidewall.

Deflate tire completely before attempting to dismount the tire from the wheel. **Use a lubricant 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 the tire on the wheel, make sure all rust is removed from the rim bead and repaint if necessary.

Install the wheel on the vehicle.

Cleaning

CLEANING

CAUTION

Avoid products or automatic car washes that use acidic solutions or strong alkaline additives or harsh brushes. These products and automatic car washes may damage the wheel's protective finish. Such damage is not covered by the New Vehicle Limited Warranty. Only car wash soap, MOPAR Wheel Cleaner or equivalent is recommended.

All wheels and wheel trim, especially aluminum and chrome plated wheels, should be cleaned regularly using mild (neutral Ph) soap and water to maintain their luster and to prevent corrosion. Wash wheels with the same soap solution recommended for the body of the vehicle. Your wheels are susceptible to deterioration caused by salt, sodium chloride, magnesium chloride, calcium chloride, and others, and other road chemicals used to melt ice or control dust on dirt roads. Use a soft cloth or sponge and mild soap to wipe away promptly. Do not use harsh chemicals or a stiff brush. They can damage the wheel's protective coating that helps keep them from corroding and tarnishing.

CAUTION

Do not use scouring pads, steel wool, a bristle brush, metal polishes or oven cleaner. These products may damage the wheel's protective finish. Such damage is not covered by the New Vehicle Limited Warranty. Only car wash soap, MOPAR Wheel Cleaner or equivalent is recommended.

NOTE

Many aftermarket wheel cleaners contain strong acids or strong alkaline additives that can harm the wheel surface.

When cleaning extremely dirty wheels, including those with excessive brake dust, care must be taken in the selection of tire and wheel cleaning chemicals and equipment to prevent damage to the wheels. Mopar Wheel Treatment or Mopar Chrome Cleaner or their equivalent is recommended or select a non-abrasive, non-acidic

- Damaged wheel stud (lug) holes
- Air leaks

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.

DESCRIPTION	SPECIFICATION	COMMENT
Bell-housing to Engine Stud Bolts	48 N·m (35 Ft. Lbs.)	-
Engine to Bellhousing Bolts	45 N·m (33 Ft. Lbs.)	-
Flexplate to Crankshaft Bolts	110 N·m (81 Ft. Lbs.)	Tighten in a crisscross pattern Do not reuse these fasteners. If removed, a NEW fastener must be installed and tightened to specifications.
Hydraulic Impulse Solenoid (HIS) Bolts	8 N·m (71 In. Lbs.)	-
Manual Park Release Cable Bracket to Transmission Bolts	20 N·m (15 Ft. Lbs.)	-
Manual Park Release Lever Shaft Nut	20 N·m (15 Ft. Lbs.)	-
Manual Park Release Handle to Body Nuts	9 N·m (80 In. Lbs.)	-
Output Speed Sensor Bolt	8 N·m (71 In. Lbs.)	-
Park Lock Solenoid Bolt	8 N·m (71 In. Lbs.)	-
Park Pawl Lock Rod Guide Plate Bolt	10 N·m (89 In. Lbs.)	-
Park Pawl Shaft Plug	35 N·m (26 Ft. Lbs.)	-
Reaction Shaft Support Bolts	12 N·m (9 Ft. Lbs.)	-

YOUR CURRENT VEHICLE

4WD

4WD

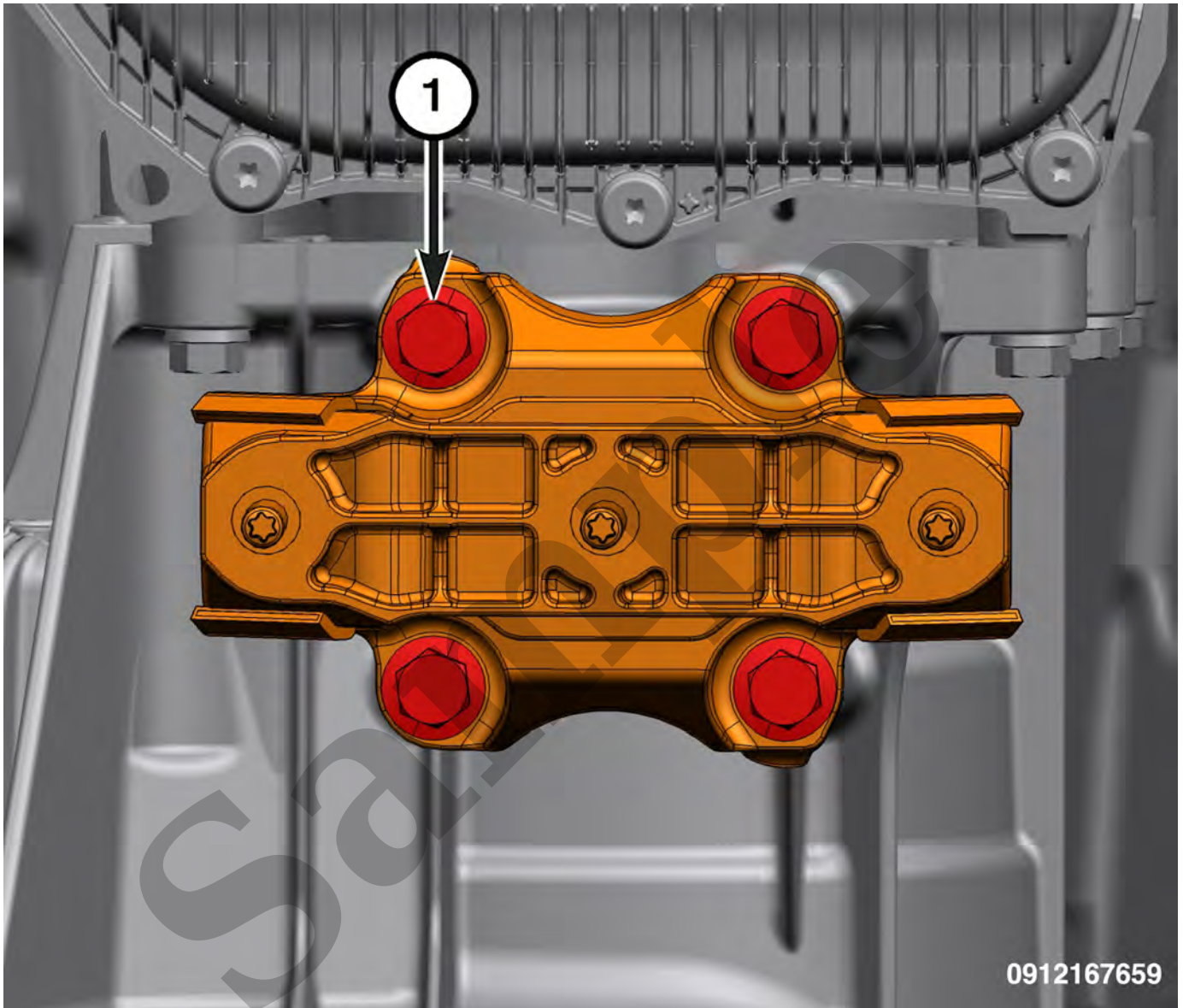
REMOVAL

1. Raise and support the vehicle ([Refer to Vehicle Quick Reference/Hoisting/Standard Procedure](#)).
2. Remove the skid plate ([Refer to Frame and Bumpers/Under Body Protection/PLATE, Skid, Front/Removal and Installation](#))(Refer To List 1).

DESCRIPTION	SPECIFICATION	COMMENT
Shifter Control Support Nuts	10 N·m (89 In. Lbs.)	–
Torque Converter Bolts	42 N·m (31 Ft. Lbs.)	–
Transmission Dust Cover Bolt	54 N·m (40 Ft. Lbs.)	–
Transmission Oil Cooler Line Bolt	48 N·m (35 Ft. Lbs.)	–
Transmission Oil Line Bracket to Engine Bolt	30 N·m (22 Ft. Lbs.)	–
Transmission Oil Fill Plug	39 N·m (29 Ft. Lbs.)	–
Transmission Oil Heater Mounting Bolts	28 N·m (21 Ft. Lbs.)	–
Transmission Oil Pan Bolt	11 N·m (8 Ft. Lbs.)	<p>Tightening Sequence</p> 
Transmission Oil Pan Drain Plug	9 N·m (80 In. Lbs.)	–

1 - Transmission Mount to Transmission Crossmember Nuts

3. Remove the transmission mount to crossmember nuts.
4. Using a suitable jack, raise the transmission off of the crossmember.



1 - Transmission Mount Bolts

5. Remove the transmission mount to transfer case bolts and the rear mount.
6. Remove the transmission mount from the vehicle.

INSTALLATION

Follow the removal procedure in reverse for general reassembly of the components on the vehicle.