

Tire Size Designation

A tire's sidewall is marked with a tire size designation. You will need this information when selecting replacement tires for your car. The following explains what the letters and numbers in the tire size designation mean.

(Example tire size designation)
P215/60R16 94V

P — Applicable vehicle type (tires marked with the prefix "P" are intended for use on passenger cars; however, not all tires have this marking).

215 — Tire width in millimeters.

60 — Aspect ratio. The tire's section height as a percentage of its width.

R — Tire construction code (Radial).

16 — Rim diameter in inches.

94 — Load Index, a numerical code associated with the maximum load the tire can carry.

V — Speed Rating Symbol See the speed rating chart in this section for additional information.

Wheel Size Designation

Wheels are also marked with important information that you need if you ever have to replace one. The following explains what the letters and numbers in the wheel size designation mean.

(Example wheel size designation)
16 x 6-1/2 JJ

16 — Rim diameter in inches.

6-1/2 — Rim width in inches.

JJ — Rim contour designation.

Tire Speed Ratings

The chart below shows many of the different speed ratings currently being used for passenger car tires. The speed rating symbol is part of the tire size designation on the sidewall of the tire. This symbol corresponds to that tire's designed maximum safe operating speed.

Speed Rating Symbol	Maximum Speed
S	112 mph (180 km/h)
T	118 mph (190 km/h)
H	130 mph (210 km/h)
V	149 mph (240 km/h)
Z	Above 149 mph (240 km/h)

Tire Information

DOT Tire Quality Grading (U.S. Cars)

The tires on your car meet all U.S. Federal Safety Requirements. All tires are also graded for treadwear, traction, and temperature performance according to Department of Transportation (DOT) standards. The following explains these gradings.

Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and one half (1-1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

Traction

The traction grades, from highest to lowest, are A, B, and C, and they represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

Warning: The traction grade assigned to this tire is based on braking (straight ahead) traction tests and does not include cornering (turning) traction.

Temperature

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

Warning: The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading either separately or in combination, can cause heat build-up and possible tire failure.

Emission Controls

The burning of gasoline in your car's engine produces several byproducts. Some of these are carbon monoxide (CO), oxides of nitrogen (NOx) and hydrocarbons (HC). Gasoline evaporating from the tank also produces hydrocarbons. Controlling the production of NOx, CO, and HC is important to the environment. Under certain conditions of sunlight and climate, NOx and HC react to form photochemical "smog." Carbon monoxide does not contribute to smog creation, but it is a poisonous gas.

The Clean Air Act

The United States Clean Air Act* sets standards for automobile emissions. It also requires that automobile manufacturers explain to owners how their emission controls work and what to do to maintain them. This section summarizes how the emission controls work. Scheduled maintenance is on page [158](#).

* In Canada, Acura vehicles comply with the Canadian Motor Vehicle Safety Standards (CMVSS) for Emissions valid at the time they are manufactured.

Crankcase Emission Control System

Your car has a Positive Crankcase Ventilation System. This keeps gasses that build up in the engine's crankcase from going into the atmosphere. The Positive Crankcase Ventilation valve routes them from the crankcase back to the intake manifold. They are then drawn into the engine and burned.

Evaporative Emission Control System

As gasoline evaporates in the fuel tank, an evaporative emission control canister filled with charcoal adsorbs the vapor. It is stored in this canister while the engine is off. After the engine is started and warmed up, the vapor is drawn into the engine and burned during driving.

Exhaust Emission Controls

The exhaust emission controls include four systems: PGM-FI, Ignition Timing Control, Exhaust Gas Recirculation and Three Way Catalytic Converter. These four systems work together to control the engine's combustion and minimize the amount of HC, CO, and NOx that comes out the tailpipe. The exhaust emission control systems are separate from the crankcase and evaporative emission control systems.

PGM-FI System

The PGM-FI System uses sequential multiport fuel injection. It has three subsystems: Air Intake, Engine Control, and Fuel Control. The Powertrain Control Module (PCM) uses various sensors to determine how much air is going into the engine. It then controls how much fuel to inject under all operating conditions.

Ignition Timing Control System

This system constantly adjusts the ignition timing, reducing the amount of HC, CO and NOx produced.

Exhaust Gas Recirculation (EGR) System

The Exhaust Gas Recirculation (EGR) system takes some of the exhaust gas and routes it back into the intake manifold. Adding exhaust gas to the air/fuel mixture reduces the amount of NOx produced when the fuel is burned.

Three Way Catalytic Converter

The three way catalytic converter is in the exhaust system. Through chemical reactions, it converts HC, CO, and NOx in the engine's exhaust to carbon dioxide (CO₂), dinitrogen (N₂), and water vapor.

Replacement Parts

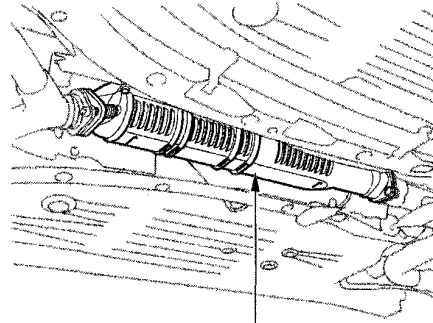
The emission control systems are designed and certified to work together in reducing emissions to levels that comply with the Clean Air Act. To make sure the emissions remain low, you should use only new Genuine Acura replacement parts or their equivalent for repairs. Using lower quality parts may increase the emissions from your car.

The emissions control systems are covered by warranties separate from the rest of your car. Read your warranty manual for more information.

Three Way Catalytic Converter

The three way catalytic converter contains precious metals that serve as catalysts, promoting chemical reactions to convert the exhaust gasses without affecting the metals. The catalytic converter is referred to as a three-way catalyst, since it acts on HC, CO, and NOx. A replacement unit must be an original Acura part or its equivalent.

The three way catalytic converter must operate at a high temperature for the chemical reactions to take place. It can set on fire any combustible materials that come near it. Park your car away from high grass, dry leaves, or other flammables.



THREE WAY CATALYTIC CONVERTER

A defective three way catalytic converter contributes to air pollution, and can impair your engine's performance. Follow these guidelines to protect your car's three way catalytic converter.

- Always use unleaded gasoline. Even a small amount of leaded gasoline can contaminate the catalyst metals, making the three way catalytic converter ineffective.

- Keep the engine tuned-up.
- Have your car diagnosed and repaired if it is misfiring, backfiring, stalling, or otherwise not running properly.