TIRE BASICS

WHAT’S INSIDE A TIRE?

The tire’s INNERLINER – keeps air inside the tire.

The tire’s BEAD – assures an airtight fit with the wheel.

BEAD FILLER – reduces flex and aids in deflection.

A Tire’s BODY PLIES – give the tire strength and flexibility.

The SIDEWALL – protects the side of the tire from road and curb damage.

A tire’s BELTS – stabilize and strengthen the tread.

Its BELT EDGE INSULATION – helps to reduce friction.

The NYLON CAP PLIES – help maintain the tire’s structural integrity.

The TREAD – provides traction and cornering grip.
WHAT’S INSIDE A TIRE?

TREAD ELEMENTS

Lugs are the sections of rubber that make contact with the terrain.

Tread blocks are raised rubber compound segments on the outside visible part of a tire.

Sipes are small lateral cuts made in the surface of the tread to improve traction.

Kerfs are shallow slits molded into the tire tread for added traction – often used interchangeably with sipes.

Grooves are circumferential channels between adjacent tread ribs or tread blocks.

Shoulder blocks are raised rubber compound segments on the part of the tire tread nearest the sidewall.

Voids are the spaces that are located between the lugs.

Asymmetric Tread

This tread pattern optimizes each side of the tread for excellent handling and outstanding traction.

*NOTE: Asymmetrical tires ALWAYS indicate on the sidewall which side of the tire should be mounted to the inside or the outside.
TIRE BASICS

WHAT’S INSIDE A TIRE?

Directional

Arrangement of bars, grooves and ribs in any manner that gives most effective traction when the tire revolves in only one direction. Typically v-shaped.

*NOTE: Directional tires ALWAYS have an arrow on the sidewall indicating the proper rotation direction.

Symmetric or Non-Directional

Arrangement of bars, grooves and ribs in a manner that gives equal performance in the forward or reverse direction.

Self-Cleaning

This tread design allows for the easy release of mud or material from the voids of the tread — for better traction, especially with off-road or all-terrain tires.