## **UNDERSTANDING** A TIRE SIDEWALL



# Tire Size: ST 205 / 75 R 15

D. Construction Type (R = Radial, D = Bias)

LOAD RANGE C

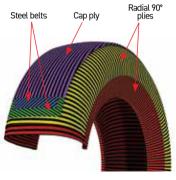
М

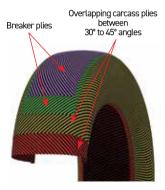
- (ST = Special Trailer) B. Width of tire in millimeters
- C. Aspect Ratio (Ratio of height to width)

A. Tire Type

- E. Wheel diameter in inches
- F. Load index
- G. Speed rating

# **UNDERSTANDING TIRE CONSTRUCTION**





Radial Tire Construction

Bias Tire Construction

- · A radial tire has steel belts that are oriented at a significantly different angle than the 90 degree radial plys. This allows the sidewall and tread to function as two independent features of the tire.
- · A bias tire consists of multiple rubber plies over lapping each other at a 30-45 degree angle. The tread and sidewalls are interdependent because all plys have a consistent angle. The overlapped plies form a thick layer that is less flexible which makes it able to carry a heavier load and less trailer sway.
- · Bias tires are typically used for local use: construction, agriculture or utility. Radial tires are often seen on longer distance trailers like RVs, marine and livestock trailers.

### WHEEL MATCHING

The diameters listed below represent the recommended sizes for wheel mounting faces. The dimensions indicated are for the flat contact that interface with the hub.

BOLT PATTERN	HUB DIAMETER	WHEEL DIAMETER	VALVE HOLE	STUD SIZE	WHEEL BOLT TORQUE
4 on 4.0"	5.50"	12" & 13"	.45	1/2" -20 -60*	50-75 LB/FT
5 on 4.5"	6.50"	12" & 13"	.45	1/2" -20 -60*	50-75 LB/FT
5 on 4.5"	6.50"	14" & 15"	.45	1/2" -20 -60*	90-120 LB/FT
5 on 5"	6.50"	15"	.45	1/2" -20 -60*	90-120 LB/FT
6 on 5.5"	7.4"	14.5" & 15"	.45	1/2" -20 60*	90-120 LB/FT
6 on 5.5"	7.4"	16" & 16.5"	.625	1/2" -20 60*	90-120 LB/FT
6 on 5.5"	7.4"	16" & 16.5"	.625	9/16" -18 60*	175-225 LB/FT
8 on 6.5"	8.25"	14.5"	.45	5/8" -18 90*	175-225 LB/FT
8 on 6.5"	8.25"	16" & 16.5"	.625	1/2" -20 60*	90-120 LB/FT
8 on 6.5"	8.25"	16" & 16.5"	.625	9/16" -18 60*	175-225 LB/FT
8 on 6.5"	8.25"	16" & 16.5"	.625	5/8" -18 90*	175-225 LB/FT
8 on 6.5"	Hub Piloted	14.5"	.45	5/8" -18 Flange	275-325 LB/FT
8 on 6.5"	Hub Piloted	16", 16.5" & 17.5"	.625	5/8" -18 Flange	275-325 LB/FT

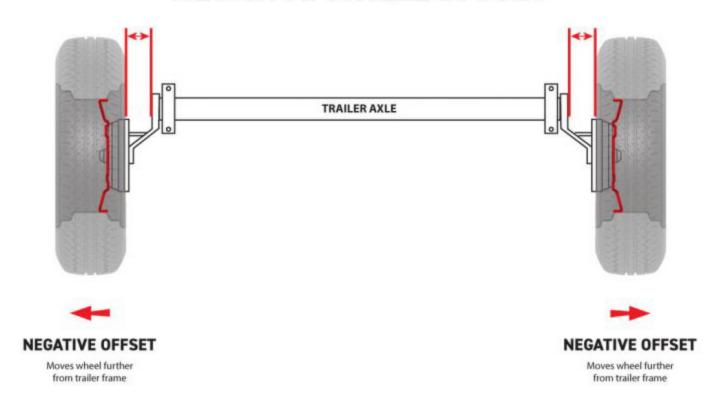
#### TIRE SPEED **RATING CHART**

J	62mph
L	75mph
М	81mph
N	87mph
Q	100mph

Always follow posted speed limit

LOAD RANGE	PLY RATING
В	4
С	6
D	8
E	10
F	12
G	14
Н	16
J	18

# **NEGATIVE WHEEL OFFSET**



# **POSITIVE WHEEL OFFSET**



Moves wheel closer to trailer frame

POSITIVE OFFSET

Moves wheel closer to trailer frame

POSITIVE OFFSET