

Tires are one of the most important safety features you can have on your Air Cooled Volkswagen. Our friends Rob and Dave provided this overview of tVW Tire Basics, giving you all the knowledge you need to ensure smooth cruising on the miles ahead.

# **Metric Tire Designations**

The code on your tires is more than just a sequence of letters and numbers. It's actually a key to ensure that you're putting the right tires on your VW.

Example: P 185 / 80 R 13

P = Tire Type

• P - Passenger, T - Temporary, C - Commercial

185 = Section Width (millimeters)

• Options are 155, 165, 175, 185, etc.

80 = Aspect Ratio (section height/section width)

• Options are 70, 75, 80

R = Construction Type

• R - Radial, B - Bias-belted, D - Diagonal (bias)

13 = Rim Diameter (inches)

• Options are 13, 14, 15

1954-1979 Beetles and Karmann Ghias are equipped with metric-sized fiberglass or steel belted radial tires. Use of other types of tires may affect the ride and handling of the vehicle. Don't mix different types of tires, such as radials and bias belted on the same vehicle, as handling may be seriously affected. Tires should be replaced in pairs on the same axle, but if only one tire is being replaced, make sure it's the same size, structure and tread design as the other.





#### **Tire Size**

Dave has slightly oversized tires on his 1973 Super Beetle. They are 165 x 15 (6.5-inch width); the standard size is 155 x 15 (6.0-inch width) if I recall correctly. He likes them; he has always thought the standard VW tires were too narrow. The problem is, the spare tire won't lay down flat in the spare tire well in the trunk. The tire binds up at the point where it has to slip just a little ways under the gas tank, so it sticks up a couple of inches in the front. It can't need more than about another 1/4" of clearance. I could probably force it, but then we'd never get it out!

**NOTE:** Dave later found that the difficulty with the spare tire in the trunk was due to the front apron being pushed in as a result of an accident. Dave replaced the front apron, which solved the problem.

### Rob's Response

VW went to 165 widths as a normal feature in about 1971. The Bentley Manual (p. 5-31) says "All models built before March 1972, including Karmann Ghias, are equipped with 5.60 x 15 tires. Those built after that date have 6.00 x 15 tires." So at a width of 165mm (6.5 inches), yours would indeed be slightly oversize.

It's important to note that the Type 2 is a load carrying vehicle, so it should NOT be fitted with passenger car tires. It will sit on the road better with light truck tires, which have stiffer sidewalls. The passenger tires have softer sidewalls that will roll under when cornering if used on the Type 2, making the Kombi/Bus feel like it's wallowing in corners.

# **Tire Quality**

**Good Pavement Performance** – Regardless of the type of car you drive, your tire should deliver a comfortable ride on dry pavement. If it's your primary vehicle, you will most likely drive primarily on paved roads.

**Good Grip** – The best tires will grip well in any conditions: gravel, wet pavement or mud.

**Low Rolling Resistance** – If long-term price or gas mileage is a top priority, look for low rolling resistance, which cuts down a bit on traction, but boosts your miles per gallon.

**Traction vs. Treadwear** – Tire manufacturers use different combinations of materials, depending on whether they are striving for longevity or traction. Softer compounds (common in summer and high-performance tires) provide extra grip for faster speeds and better cornering, with lower treadwear grades. Hard compound tires, like most all-season tires, are more durable. They typically have treadwear grades above 500 and can log more miles than soft compound tires.



Correct tire pressure adds miles to the lifespan of the tires, improves mileage and enhances overall ride quality. Tire pressure cannot be accurately estimated by looking at a tire, particularly if it is a radial. A tire pressure gauge is therefore essential. Keep an accurate gauge in the glove box. The pressure gauges fitted to the nozzles of air hoses at gas stations are often inaccurate.

Always check tire pressure when the tires are cold. "Cold," in this case, means the vehicle has not been driven over a mile in the three hours preceding a tire pressure check. A pressure rise of four to eight pounds is not uncommon once the tires are warm.

Unscrew the valve cap protruding from the wheel and push the gauge firmly onto the valve. Note the reading on the gauge. Because tire pressure has a substantial effect on handling and wear, the pressure on all tires should be checked at least once a month or before any extended trips.

Specific tire pressures are as follows:

• Bias ply (with 1-2 persons)

Front - 16 psi (17 psi fully loaded; 18 psi after Jan. 1973); Rear • 24 psi (26 psi fully loaded; 29 psi after Jan. 1973)





# Radial

Front - 18 psi (both with 1-2 persons and fully loaded); Rear - 27 psi (both with 1-2 persons and fully loaded; 29 psi after Jan. 1973)

Rob and Dave have found that for radial tires, 20 psi in the front and 28 psi in the rear gives the best combination of handling and mileage. With 18 psi in front they tend to roll a little in corners and seem to wear just a little more on the outsides.

### **Winter Tires**

For those who use their classic VW as a daily driver, it's a good idea to consider winter tires. Although inferior to regular tires for dry-road wear and handling, winter (mud and snow) tires can greatly improve operation on snowy or slushy roads. Studded winter tires improve traction on icy surfaces, but can be damaged by fast driving on dry roads. They may also damage some road surfaces. Studded winter tires should be used only if icy conditions predominate through the winter months. Also, check your local motor vehicle laws. The use of studded tires may be restricted in your area.

For more VW articles from Rob and Dave, visit www.vw-resource.com

