Choosing The Correct Lug Bolt

In many cases McGard lug bolts are designed to be a direct replacement for O.E.M. lug bolts. On the following pages you will find O.E.M. lug bolt part numbers that cross reference to McGard part numbers. If you can identify your O.E.M. part number then you can easily identify the proper McGard part.

If you can’t identify your O.E.M. lug bolts or have aftermarket lug bolts you will have to check for the following: correct thread size; cone or radius seating surface; the shank length is not too short or too long. Refer to this diagram for information on correctly measuring your lug bolt.

Shank Length Verification

For Solid Seat (1-piece) bolt designs, the shank length S is measured from the end of the shank to the INTERSECTION (narrowest point of the seat). See the solid seat diagrams captioned in blue.

For Floating Seat (2-piece) bolt designs, the shank length S is measured from the end of the shank to the PROJECTED INTERSECTION (red dotted line). See the floating seat diagrams captioned in green.

The PROJECTED INTERSECTION on a floating seat (2-piece) bolt corresponds with the INTERSECTION on a solid seat (1-piece) bolt.

Lock bolt applications/dimensions should not be used to cross reference/determine lug bolt applications.

DISCLAIMER: The information on the following pages is believed to be accurate, but is intended for reference purposes only, and not meant to be an application guide. You must test fit lug bolts on each wheel to ensure proper fit. It is your responsibility to double check that the correct bolt is used and correctly installed. McGard is not responsible for use of an incorrect bolt or incorrect installation.
hub assembly and position checked for proper fit.

Incorrect thread size.

Cone or Radius style seating surface.

Shank length is not too short or too long.

During wheel installation, bolt shank length must be checked for proper fit. Too short of a Shank will result in lack of engagement and an unsafe condition. Too long of a Shank can extend beyond the hub assembly and possibly cause damage to other vehicle parts. Lock bolt applications should not be used to cross reference/determine lug bolt applications.

Correct thread size.

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60° Cone seat applications using Volvo bolt p/n’s: 31360792, 31360793, 31360795

Audi & Volkswagen M14x1.5 (13mm) radius seat applications using Audi/Volkswagen bolt p/n’s: WH-002-437, WH-002-438, WH-001-912, 801-601-295

Porsche M14x1.5 (14mm) radius seat applications using Porsche bolt p/n’s: 997-361-203-01, WH-006-978

Porsche, Audi & Volkswagen M14x1.5 (14mm) radius seat applications using bolt p/n’s: WH-001-693, WH-002-529, WH-001-964-A, WH-006-875, WH-001-986-A

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Due to the superior 2-piece design & construction of McGard lug bolts, the Shank length measurement is measured from the end of the Shank to the PROJECTED INTERSECTION (red dotted line). See pages 98-99 for information on choosing the correct lug bolt and verifying Shank length. Bolt diagrams are shown at actual size.

When choosing the proper lug bolt check for:

1. Correct thread size.
2. Cone or Radius style seating surface.
3. Shank length is not too short or too long.

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Verification for Cone & Radius Seat Lock Bolt or Lug Bolt:

**WARNING:** Lug Bolts are critical wheel fasteners. Read the following guidelines to ensure that you choose and install the correct lug bolt. Failure to comply with guidelines & warnings could cause an unsafe condition and result in serious injury or death.

1. Remove one lug bolt from both a front wheel and rear wheel.
2. Visually verify that the seating surface of your current fasteners match the McGard fasteners. Verify that the thread size and shank measurement of your current fasteners match the McGard fasteners. See pages 98-101 for details.
3. Install one McGard lug or lock bolt on each wheel from step one. Tighten to normal installation torque. Minimum thread engagement into hub assembly must be 5½ complete 360° revolutions of bolt (5½ full bolt rotations).
4. Upon verification of proper application, complete installation per McGard’s installation instructions on page 108.

**Note:** If your spare tire is a steel wheel and your road wheels are aluminum, you must also verify the application for your spare tire/wheel. If you do not wish to verify the application now, you should keep enough of your original fasteners in your vehicle for use with the spare tire/wheel.