Lug Bolts & Locks

O.E.M. design & safety PLUS Beauty, Style, Precision & Durability! The floating seat (2-piece) design provides optimum safety and performance. This protects against galling and helps prevent seized/ difficult to remove bolts. Precision manufacturing exceeds 0.E.M. requirements.

Bright chrome & beautiful black finish enhances the look of any wheel. The black & chrome plating is quaranteed for life not to chip, peel or rust.

Available in Wheel Installation Kits that include wheel locks and bulk boxes of 50.

CHROME PLATING

The best in the industry. Our process includes several layers of nickel and one layer of microporous chrome. The layers of nickel are for corrosion resistance, luster and interaction with the microporous chrome layer to disperse nature's corrosive action (rust).

IDENTIFICATION

We roll mark our name into the surface of every lug bolt. This is your assurance that you are getting genuine McGard quality and safety.

PRECISE BEARING SURFACE

McGard's floating seat design allows for precision concentricity of the bearing surface to the pitch diameter. This ensures even distribution of the clamp load and uniform seating of the lug bolt to the wheel hub assembly.



The Convenient Way to Order Wheel Locks and Lug Bolts.

Our stringent standards ensure the structural integrity of each and every McGard lug bolt.

FLOATING SEAT

The floating seat design provides precision control of the torque tension characteristics between the fastener and wheel hub assembly.

THROUGH-HARDENED STEEL

Every lug bolt is through-hardened and tempered, reaching the depth of hardness needed for its unsurpassed level of safety (unlike case hardening which is only a surface treatment).

PRECISION COATED THREADS

Core integrity provides the highest strength in the industry. McGard lug bolts exceed the highest O.E.M. proof load and tensile load standards. The unique process of applying multiple proprietary coatings helps prevent seized or difficult to remove lug bolts.

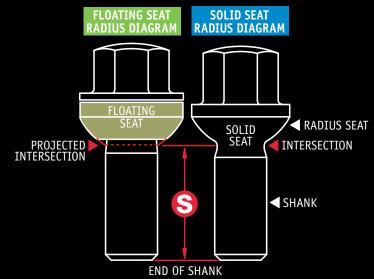
CHOOSING THE CORRECT Lug Bolt





WARNING: Lug Bolts are critical wheel fasteners. Read the following quidelines to ensure that you choose the correct lug bolt. Failure to comply with quidelines & warnings could cause an unsafe condition and result in serious injury or death. Do not use: a bolt with a different seat style (cone, radius, flat); or a bolt shorter or longer than the lug bolt specified for your wheel.

SOLID SEAT CONE DIAGRAM CONE SEAT PROJECTED INTERSECTION INTERSECTION < SHANK **END OF SHANK**



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 style 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.

If you are unsure of which part number to use or have installation questions, contact your local McGard installer or McGard at 800-669-6887

> 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.

Cone Seat Lug Bolt Installation Kits & Bulk Boxes

60° Cone seat Installation Kits include lug bolts, 4 wheel lock bolts, key tool, key tool storage pouch and ID card. Chrome unless noted otherwise. Contact your local dealership with your VIN# to find out the O.E.M. lug bolt part number that fits your vehicle.

VOLVO bolt p/n's: 31362432, 31373474,

Hex does not match O.E.M. lug wrench.

INSTALLATION KIT
5 LUG

67205

M14x1.5

THREAD SIZE

M14x1.5 black 67205BK

M14x1.25 black 67226BK

31323735, 31439230, 31362432, 31423735

For BMW/MINI M14x1.25 applications using

69705

BMW/MINI bolt p/n's: 36-13-6-781-151, 36-13-6-890-324

69726

69726BK





When choosing the proper lug bolt check for:



Correct thread size.

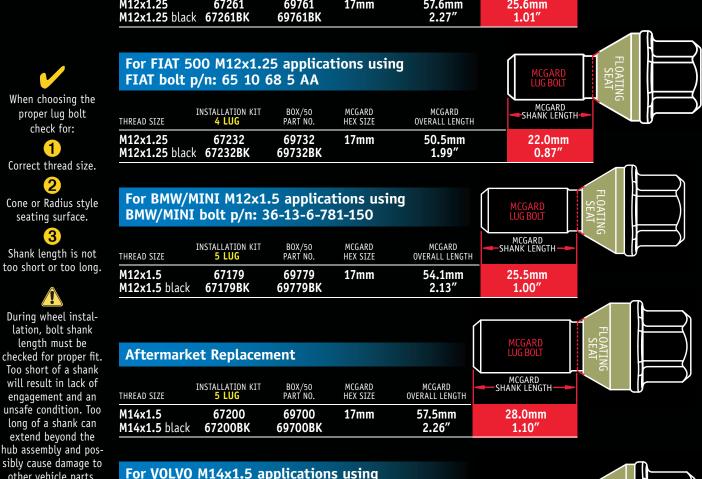


Shank length is not



During wheel installation, bolt shank lenath 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/dimensions should not be used to cross reference/ determine lug bolt applications.



MCGARD OVERALL LENGTH

57.5mm

MCGARD OVERALL LENGTH

54.2mm

2.13"

MCGARD HEX SIZE

17mm

MCGARD HEX SIZE

17mm

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.



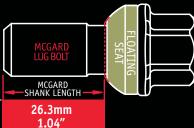


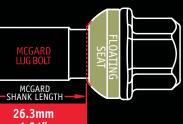
Radius Seat Lug Bolts Installation Kits and Bulk Boxes

Radius seat Installation Kits include lug bolts, 4 wheel lock bolts, key tool, key tool storage pouch and ID card. Chrome unless noted otherwise. Contact your local dealership with your VIN# to find out the O.E.M. lug bolt part number that fits your vehicle.

AUDI & VOLKSWAGEN M14x1.5 (13mm) radius seat applications using AUDI/VOLKSWAGEN bolt p/n's: WHT-002-437, WHT-002-438, WHT-001-812,

THREAD SIZE	INSTALLATION KIT 5 LUG	BOX/50 PART NO.	MCGARD HEX SIZE	SEAT RADIUS	MCGARD OVERALL LENGTH
M14x1.5 M14x1.5 blace	68018 k 68018BK	69818 69818BK	17mm	13mm	51.4mm 2.02"





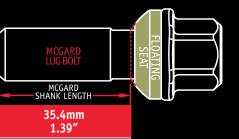


	INSTALLATION KIT 5 LUG	•	MCGARD HEX SIZE	SEAT RADIUS	OVERALL LENGTH	
M14x1.5 M14x1.5 black		69820 69820BK	17mm	14mm	57.5mm 2.26"	



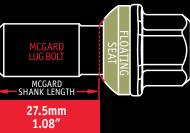
PORSCHE, AUDI & VOLKSWAGEN M14x1.5 (14mm) radius seat applications using bolt p/n's: WHT-001-693, WHT-002-529, WHT-001-964-A, WHT-004-676, WHT-004-676-A

THREAD SIZE M14x1.5	NSTALLATION KIT 5 LUG 68032	PART NO.		OVERALL LENGTH 59.2mm
M14x1.5 black	68032BK	69832BK		2.33"



INFINITI, MERCEDES-BENZ M14x1.5 (14mm) ra	adius
seat applications using bolt p/n's: 000-990-49-0	7,
000-990-51-07 (fluted hex), 000-990-83-07, 005-990-25-	00,
001-990-06-07	

M14x1.5 M14x1.5 black	68174 68174BK	69874 69874BK	17mm	14mm	51.4mm 2.02"
THREAD SIZE	NSTALLATION KIT 5 LUG	BOX/50 PART NO.	MCGARD HEX SIZE	SEAT RADIUS	MCGARD OVERALL LENGTH



When choosing the proper lug bolt check for:





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

30.5mm

1.20

27.5mm

1.08

BOLT APPLICATION

Verification

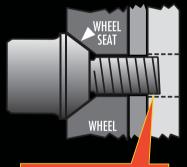




Warnings: When installing wheel lock bolts and lug bolts, verify that it is the correct thread size, seating surface (cone seat, radius seat) and style as recommended by the wheel manufacturer.

Minimum thread engagement into hub assembly must be 5½ complete 360° revolutions of bolt (5½ full bolt rotations).

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



Misapplication: insufficient thread engagement into the hub assembly.

ILLUSTRATION #1



Possible misapplication: shank has passed through hub assembly, which could result in vehicle damage. TYPICAL LUG BOLT

60° CONE

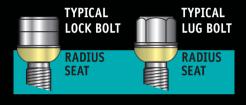
60° CONE

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

1 Remove one lug bolt from both a front wheel and rear wheel.

result in serious injury or death.

- 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. Too short of a shank will result in lack of engagement and an unsafe condition (see illustration #1). Too long of a shank can extend beyond the hub assembly and possibly cause damage to other vehicle parts (see illustration #2).

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.