



## Wheel Stud Conversion Kit Installation Instructions



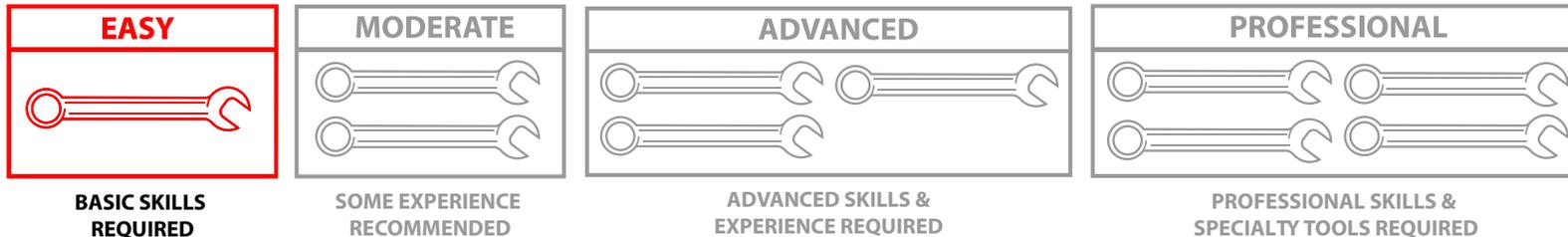
Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

## INTRODUCTION

### Wheel Stud Conversion Kit

Our wheel stud conversion kits offer the following features and benefits:

- Faster wheel installation as the studs make it easy to line up the wheel on the hub
- Peace of mind knowing that studs are a safer way to ensure proper wheel-to-hub contact
- No more need for a wheel hanger to mount wheels
- You can easily add wheel spacers within the range of the stud length
- Avoid costly repairs to the bolt holes in the hubs from constant removal and installation of lug studs
- Simple kit installation



Converting your vehicle to wheel studs and lug nuts is a rewarding project that can be completed in an afternoon. Say goodbye to threading wheel hangers in and out and fighting to line up the lug holes. Before you begin, please read and familiarize yourself with these instructions and make sure you have all the required tools on hand. Thank you for purchasing our wheel stud conversion kit. We appreciate your business!

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# WHEEL STUD CONVERSION KIT CONTENTS

Ball Seat Stud Conversion Kits



Cone Seat Stud Conversion Kits



## REQUIRED TOOLS

Note: The tools required for each step will be listed by the step number throughout these instructions.

NOTE: These instructions are meant to be used as a general guide for installing a Wheel Stud Conversion Kit on all makes and models. Below is a list of the tools we offer at ECS Tuning which may be required during this install. Please consult your Owner's Manual or service information to confirm your lug size, thread pitch, and other information before beginning the installation.

- Protecta-Sockets - 17mm, 19mm & 21mm..... Available at [ecstuning.com](http://ecstuning.com)..... [ES#2221243](#)
- 3/8" Drive Torque Wrench ..... Available at [ecstuning.com](http://ecstuning.com)..... [ES#2221245](#)
- 1/2" Drive Torque Wrench ..... Available at [ecstuning.com](http://ecstuning.com)..... [ES#2221244](#)
- Wheel Hanger - M12x1.5 ..... Available at [ecstuning.com](http://ecstuning.com)..... [ES#2636265](#)
- Wheel Hanger - M14x1.25..... Available at [ecstuning.com](http://ecstuning.com)..... [ES#2678092](#)
- Wheel Hanger - M14x1.5 ..... Available at [ecstuning.com](http://ecstuning.com)..... [ES#2636260](#)
- Hex Head Allen Bit Socket: 5mm..... Available at [ecstuning.com](http://ecstuning.com)..... [ES#11420](#)
- 3/8" Drive Ratchet, Extensions
- 1/2" Breaker Bar

## SHOP SUPPLIES AND MATERIALS

- Hand Cleaner/Degreaser..... Available at [ecstuning.com](http://ecstuning.com)..... [ES#2167336](#)
- Low Boy Lightweight Aluminum Jack..... Available at [ecstuning.com](http://ecstuning.com)..... [ES#240941](#)
- Aluminum 3-Ton Jack Stands..... Available at [ecstuning.com](http://ecstuning.com)..... [ES#2763355](#)

## INSTALLATION NOTES

- RH refers to the passenger side of the vehicle.
- LH refers to the driver side of the vehicle.
- Always use the proper torque specifications.
- If applicable to this installation, torque specifications will be listed throughout the document and at the end as well.
- Please read all of these instructions and familiarize yourself with the complete process before you begin.

## GENERAL PREPARATION AND SAFETY INFORMATION

ECS Tuning cares about your health and safety. Please read the following safety information. This information pertains to automotive service in general, and while it may not pertain to every job you do, please remember and share these important safety tips.

- Park your car in a safe, well lit, level area.
- Shut the engine off and remove the key from the ignition switch.
- Make sure any remote start devices are properly disabled.
- Always wear safety glasses.
- Make sure the parking brake is applied until the vehicle is safely lifted and supported.
- If using an automotive lift, be sure and utilize the factory specified lift points. Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear.
- When lifting a vehicle using a jack, always utilize the factory specified lift points. Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear. Always support the vehicle with jack stands.
- Always read and follow all safety information and warnings for the equipment you are using.



Never get underneath a vehicle that is supported only by a jack. Always make sure that the vehicle is securely supported on jack stands.

## CONVERSION KIT INSTALLATION

### Step 1: 19mm Socket, 1/2" Breaker Bar

Prepare to raise the vehicle, but leave the wheels in contact with the ground. If you are removing lightweight aluminum lug bolts as we are doing here, we prefer to break them loose by hand. An impact wrench can be used for removal of steel lug bolts, but if you do not have one, break them loose by hand before raising the vehicle.

#### NOTE

We are performing this installation on a Porsche 996 equipped with OEM Porsche 997 wheels, some details such as lug nut size and torque specifications will vary from vehicle to vehicle.

### Step 2: Wheel Hanger

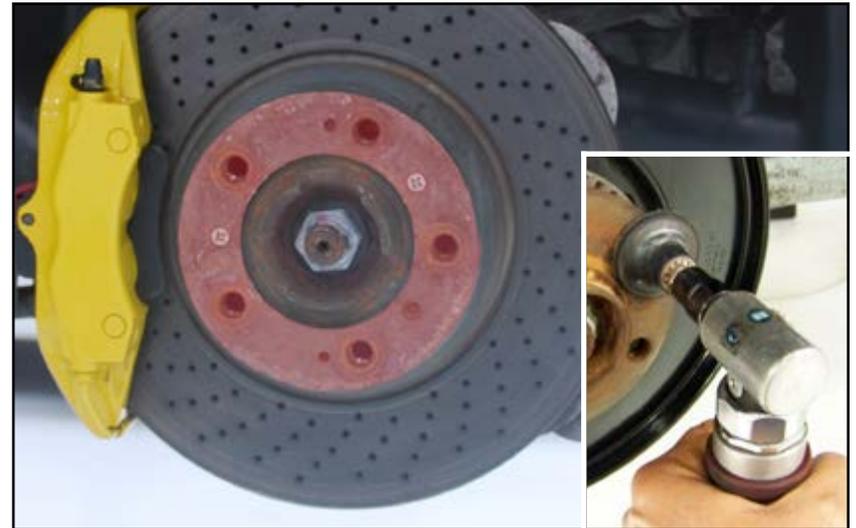
Raise and support the vehicle and remove the wheels. We are using a wheel hanger here to prevent the risk damage, but if you do not have one, don't worry you will never need one again after this installation.



## CONVERSION KIT INSTALLATION

### Step 3:

This is the perfect time to clean any corrosion from where the wheel meets the hub (this area is highlighted RED in the photo). An abrasive disc attached to a drill or die grinder can be the fastest way to remove all of the heavy scale from the hub, but a brush can also be used by hand if power tools are not available.



### Step 4: Blue Loctite

Install all of the new studs on one wheel at a time. Start by applying Blue Loctite to the short threads on the stud as shown in the photo.

#### NOTE

Only apply the Blue Loctite to the short side of the stud which is threaded into the hub, this keeps the stud in place when loosening the lug nuts. **DO NOT** apply Loctite to the long side of the stud or the lug nuts will be extremely difficult to remove.



## CONVERSION KIT INSTALLATION

### Step 5:

Thread all of the studs in by hand, making sure the stud threads easily through the lug holes in the rotor hat.

#### NOTE

If the shoulder on the stud does not clear the lug holes in the rotor hat, or binds up before it is completely installed, please make sure your application is correct.



### Step 6: 5mm Allen Socket, Torque Wrench

Tighten all of the studs to 30 Ft-lbs.

#### NOTE

This step may require another person to push down on the brake pedal while you are torquing the studs.



## CONVERSION KIT INSTALLATION

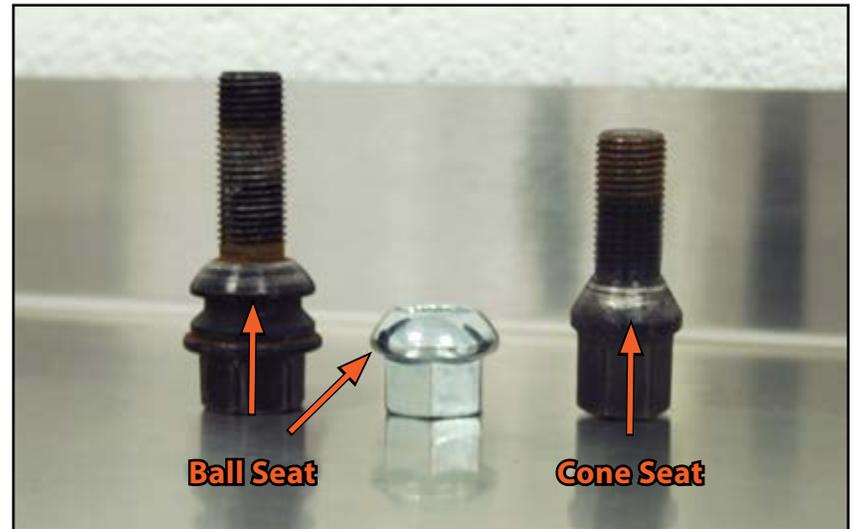
### Step 7:

Repeat steps four, five & six on the remaining wheels.



### Step 8:

Please note: There are several different types of lug nuts as shown in the photo. The lug bolt on the left and the lug nut in the middle have a "ball seat", and the lug bolt on the right has a "cone seat" (or "tapered seat"). Please inspect your lug bolts closely to be sure you select the correct lug nuts for your wheel application.



## CONVERSION KIT INSTALLATION

**Step 9:** 19mm Socket, Torque Wrench

Install all four wheels onto the vehicle and torque all of the lug nuts to the proper torque specification (refer to page 12 for more information).



**Step 10:**



*Your Wheel Stud Conversion Kit installation is now complete!*

## TORQUE SPECIFICATIONS

Lug Studs..... 40 Nm (30 Ft-lbs) .....(Page 9)



Always torque the lug nuts. Consult your owners manual or the specific service information for your vehicle to obtain the proper lug nut torque specification.

Your Wheel Stud Conversion Kit installation is complete!



These instructions are provided as a courtesy by ECS Tuning.

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