



## Audi B8 380mm RS5 Big Brake Kit Installation Guide



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.

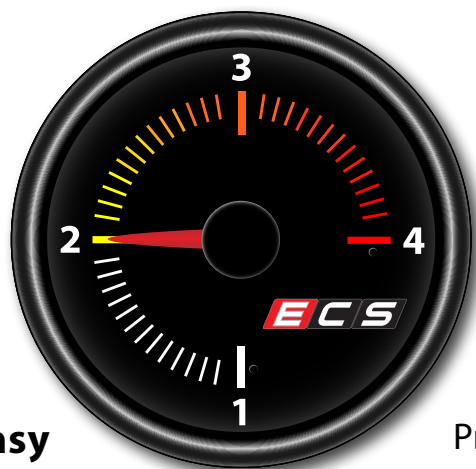
## INTRODUCTION

# ECS Tuning Audi B8 380mm RS5 Big Brake Kits

ECS Tuning Audi B8 380mm RS5 Big Brake Kits offer the following features:

- Allow for installation of 380mm front rotors on any B8 in conjunction with RS5 front brake calipers
- Superior braking performance
- Caliper bracket engineered in house to exacting specifications
- ECS Tuning lightweight two piece cross-drilled and slotted rotors
- High Performance Brake Pads
- ECS Tuning DOT approved stainless steel brake hoses
- Complete with all necessary installation hardware

## ECS Difficulty Gauge



**1 - Easy**

2 - Moderate

Pro - 4

Advanced - 3

Installing an ECS Tuning Big Brake Kit is an afternoon project that you can complete with relative ease. The following pages, however, are intended as a general installation guide for someone with previous brake experience. They are not intended as a comprehensive step by step set of instructions. If you need additional reference, be sure to have the proper service manuals available before beginning.

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## REQUIRED TOOLS

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

### Standard Automotive Tools

### Required For This Install

### Available On Our Website

- **Protecta-Sockets (for lug nuts)** ..... [ES#2221243](#)
- **3/8" Drive Ratchet** ..... [ES#2765902](#)
- **3/8" Drive Torque Wrench** ..... [ES#2221245](#)
- **3/8" Drive Deep and Shallow Sockets** ..... [ES#2763772](#)
- **3/8" Drive Extensions** ..... [ES#2804822](#)
- **Torx Drivers and Sockets** ..... [ES#11417/8](#)
- **1/2" Drive Breaker Bar** ..... [ES#2776653](#)
- **1/2" Drive Ratchet**
- **1/2" Drive Torque Wrench** ..... [ES#2221244](#)
- **1/2" Drive Deep and Shallow Sockets** ..... [ES#2839106](#)
- **1/2" Drive Extensions**
- **Triple Square Socket Set** ..... [ES#1910125](#)
- Crows Foot Wrenches
- Hook and Pick Tool Set ..... [ES#2778980](#)
- **Hex Bit (Allen) Wrenches and Sockets** ..... [ES#11420](#)

- **1/4" Drive Ratchet** ..... [ES#2823235](#)
- **1/4" Drive Deep and Shallow Sockets** ..... [ES#2823235](#)
- **1/4" Drive Extensions** ..... [ES#2823235](#)
- Plier and Cutter Set ..... [ES#2804496](#)
- **Flat and Phillips Screwdrivers** ..... [ES#2225921](#)
- **Hydraulic Floor Jack** ..... [ES#240941](#)
- **Jack Stands** ..... [ES#2763355](#)
- **Ball Pein Hammer**
- Pry Bar Set ..... [ES#1899378](#)
- 14x1.25 Wheel Hanger ..... [ES#2678092](#)
- **1/2" Drive Pneumatic Impact**
- Line Wrenches
- **Punch and Chisel Set**
- Thread Repair Tools ..... [ES#1306824](#)
- **Open/Boxed End Wrench Set** ..... [ES#2765907](#)



## SHOP SUPPLIES AND MATERIALS

**Standard Shop Supply Recommendations:** We recommend that you have a standard inventory of automotive shop supplies before beginning this or any automotive repair procedure. The following list outlines the basic shop supplies that we like to keep on hand. Shop supplies with a hyperlink are available on our website.

- Hand Cleaner/Degreaser - [Click Here](#)
- Pig Mats - for protecting your garage floor and work area from spills and stains - [Click Here](#)
- Spray detailer - for rapid cleaning of anything that comes into contact with your paint such as brake fluid - [Click Here](#)
- Micro Fiber Towels - for cleaning the paint on your car - [Click Here](#)
- Latex Gloves - for the extra oily and dirty jobs - [Click Here](#)
- Medium and High Strength Loctite Thread lock compound - to prevent bolts from backing out - [Click Here](#)
- Anti-Seize Compound - to prevent seizing, galling, and corrosion of fasteners - [Click Here](#)
- Aerosol Brake/Parts Cleaner - for cleaning and degreasing parts
- Shop Rags - used for wiping hands, tools, and parts
- Penetrating oil - for helping to free rusted or stuck bolts and nuts
- Mechanics wire - for securing components out of the way
- Silicone spray lube - for rubber components such as exhaust hangers
- Paint Marker - for marking installation positions or bolts during a torquing sequence
- Plastic Wire Ties/Zip Ties - for routing and securing wiring harnesses or vacuum hoses
- Electrical tape - for wrapping wiring harnesses or temporary securing of small components

## 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.



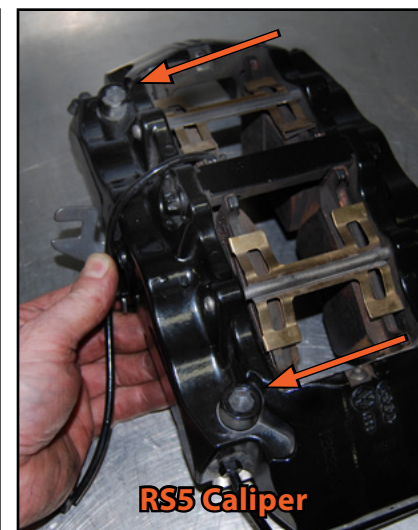
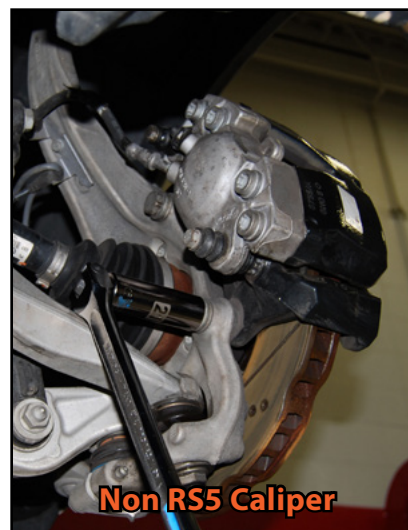
**NEVER get underneath a vehicle that is supported only by a jack, and ALWAYS make sure that the vehicle is securely supported on jack stands.**

## B8 RS5 BIG BRAKE KIT INSTALLATION

### Step 1:

Remove the front brake calipers and brackets on your car.

- **With original single piston calipers:**
  - Disconnect each front brake hose where it meets the line.
  - Use a 21mm socket to remove the caliper bracket bolts and remove both calipers and hoses.
- **With existing RS5 calipers:**
  - Remove the front brake hoses from the car.
  - Use an 8mm allen socket to remove the caliper bolts (arrows), and remove the calipers.
  - Use a 21mm socket to remove the original RS5 caliper brackets.



### Step 2:

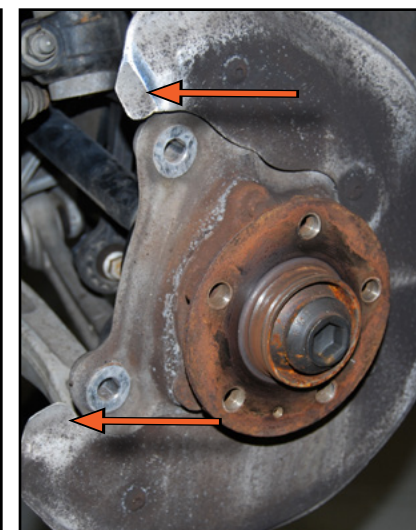
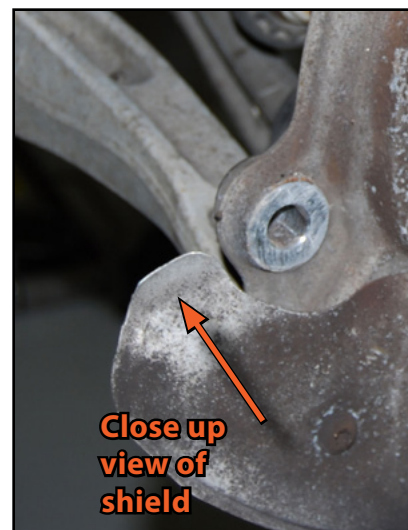
Use a T30 Torx bit to remove the rotor screws and remove the original brake rotors.



## B8 RS5 BIG BRAKE KIT INSTALLATION

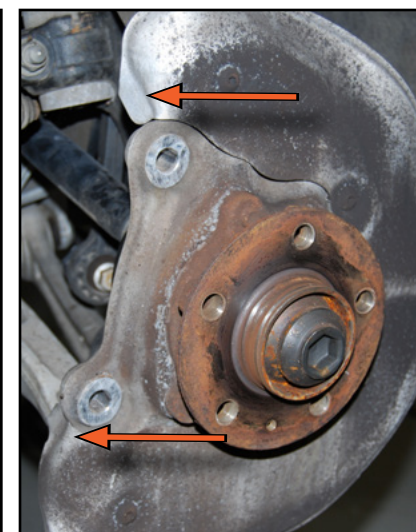
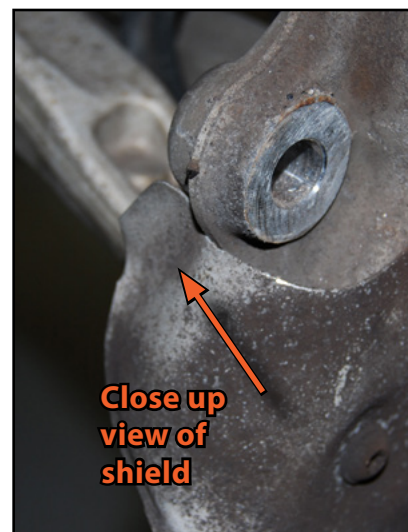
### Step 3:

For A4/5 and S4/5 models, the ears of each front brake shield will require a slight bend to clear the caliper brackets. This picture shows the original position of the ears (arrows).



### Step 4:

Bend both of the shield ears in slightly as shown in the pictures on the right.





## B8 RS5 BIG BRAKE KIT INSTALLATION

### Step 5:

Install the new caliper brackets using the new bolts supplied with the kit and torque them to 196 Nm (145 Ft-lbs).



### Step 6:

Install the 380mm rotors and torque the rotor screws to 5 Nm (3.7 Ft-lbs). Be sure to thoroughly clean the surface of the rotors with brake cleaner.



## B8 RS5 BIG BRAKE KIT INSTALLATION

### Step 7:

#### With existing RS5 calipers:

- Remove the original brake pads then proceed with this step.

Sparingly apply brake lubricant to all of the brake pad contact points (it is only necessary to apply a thin layer). The highlighted areas on the brake pad shown in the picture indicate where to apply the lubricant. If in question, hold a pad in place in the caliper to identify the contact points.



If your vehicle already has RS5 calipers we strongly recommend using the new pads that come with the kit. If you choose to use your old pads and save the new ones for future use, it is a good idea to remove the pads, clean the caliper, and lubricate the contact points as shown.



### Step 8:

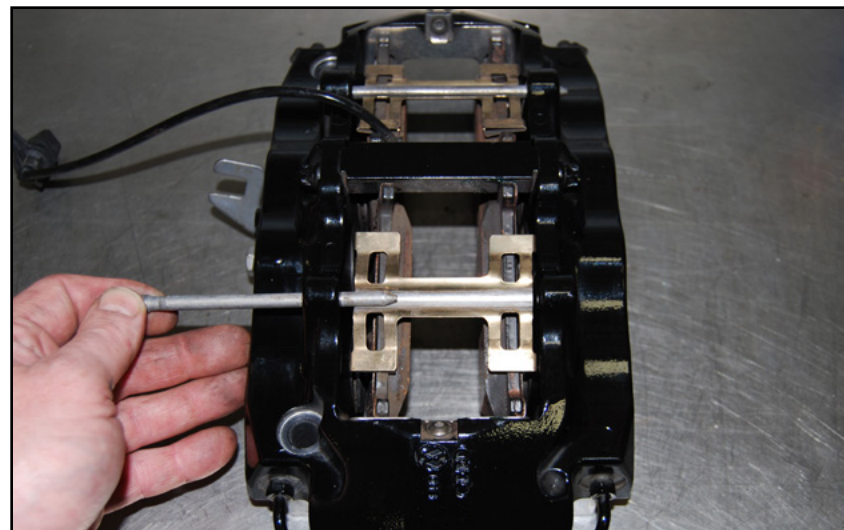
Insert the brake pads into place in the calipers.



## B8 RS5 BIG BRAKE KIT INSTALLATION

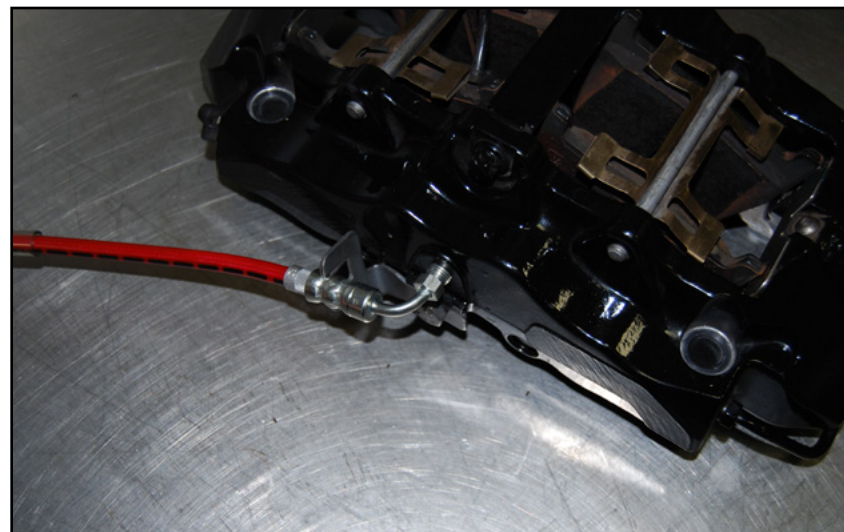
### Step 9:

Install the new caliper pad springs and pins.



### Step 10:

Install a new brake hose into each caliper, being sure to align the hose with the bracket as shown in the photo. Thread the hose fitting into the caliper by hand, then tighten it until it is snug.

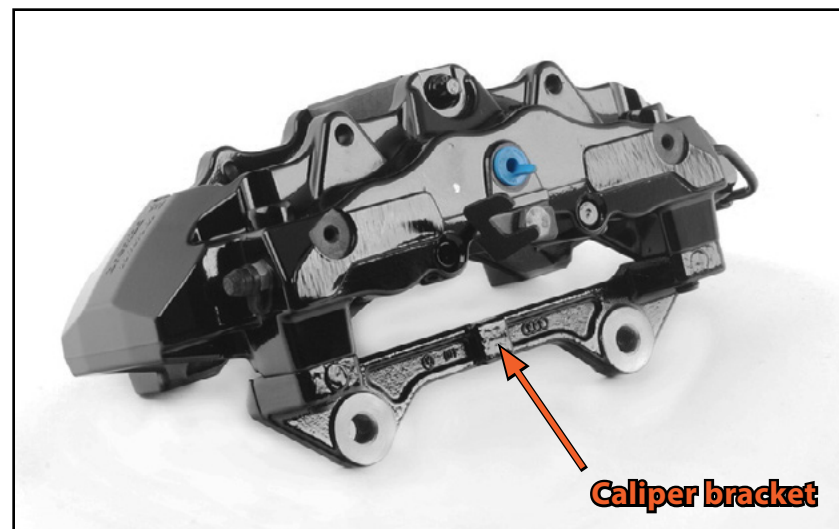




## B8 RS5 BIG BRAKE KIT INSTALLATION

### Step 11:

- **For kits with new RS5 calipers ONLY:**
  - If you have purchased one of the kits which come with new RS5 calipers, the original painted caliper bracket must be removed prior to installation (these are the stock RS5 brackets, and they will not fit with the 380mm rotors). Remove them using an 8mm allen socket, **we will be reusing these bolts to install the caliper onto your vehicle.**
- **For ALL kits:**
  - Install the RS5 calipers by holding them in place, sliding the bolts through the calipers and threading them into the bracket. Torque the bolts to 115 Nm (85 Ft-lbs).





## B8 RS5 BIG BRAKE KIT INSTALLATION

### Step 12:

Connect the new brake hoses to the brake lines on the chassis. Tighten the fittings until they are snug with a line wrench.



### Step 13:

Bleed the brake system. You may find that the brake pedal is not quite as firm as expected, this is common with these calipers. Tiny bubbles of air have a tendency to become trapped in these calipers due to the intricate design and the transfer pipe at the bottom. If this happens to you, simply bleed the brakes a second time.

Install the wheels and torque them to 120 Nm (89 Ft-lbs).



## TORQUE SPECIFICATIONS

Brake Caliper to Bracket .....	115 Nm (85 Ft-lbs).....	(Page 11)
Brake Rotor Screw .....	5 Nm (3.7 Ft-lbs).....	(Page 8)
Caliper Bracket to Steering Knuckle.....	196 Nm (145 Ft-lbs) .....	(Page 8)
Wheels.....	120 Nm (89 Ft-lbs) .....	(Page 11)

- A note about torque to yield or “stretch” bolts: Many bolts will have a torque specification listed in the format - xx Nm+xx degrees (xx Ft-lbs+xx degrees). These bolts are torque to yield bolts, commonly referred to as “stretch” bolts. The correct procedure for torquing these bolts is: **Stage One** - torque them to the Nm or Ft-lb specification. **Stage Two** - tighten each one the additional specified number of degrees. To prevent over torquing it is important to mark each fastener with paint **immediately** after performing the second stage or “stretching” of the bolts.

## PAD BREAK IN AND MAINTENANCE

- Be sure to read the pad break in procedure included with the pads in the kit. Performing this procedure as specified will guarantee the correct performance and wear from your brake pads.
- To ensure even wear, consistent performance, and long life of your brake pads, it is a good idea to remove the pads once a year and clean any rust, dirt, or debris from the brake pad and caliper. Re-lubricate the contact points as shown on page 9, step 7.

**Your 380mm RS5 Big Brake Kit installation is complete!**



**These instructions are provided as a courtesy by ECS Tuning**

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