

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.

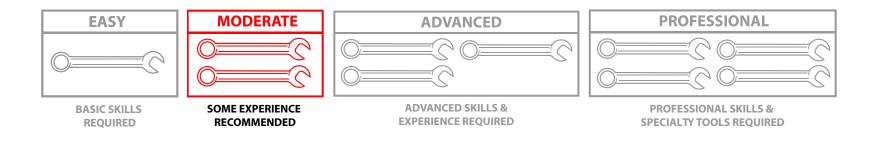


INTRODUCTION

ECS Tuning Audi B8 380mm RS5 Big Brake Kits ES#2793048, ES#2739887, ES#2785042

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



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	We recommend that you have a complete selection of tools and the necessary equipment for automotive repair. Below is a list of some of the specific tools that will be required to install your ECS Tuning big brake kit. Additional tools may be required for any issues that arise during installation such as rust, corrosion, or broken and stripped fasteners.	These tools are available at ecstuning.com	
•	17r	nm Protecta-Socket (for lug nuts)	<u>ES#2221243</u>	
•	3/8	" Drive Torque Wrench	<u>ES#2221245</u>	
• 1/2" Drive Torque Wrench				
•	14	x 1.25 Wheel Hanger	<u>ES#2678092</u>	
•	Flat	Blade Screwdriver(s)	<u>ES#2225921</u>	
•	Tor	x Drivers: T30	<u>ES#11417</u>	

- 1/2" Drive Impact
- 3/8" Drive Ratchet
- 1/2" Drive Ratchet
- 1/2" Drive Sockets: 21mm
- 3/8 Drive Allen Sockets: 8mm
- Line Wrenches
- Flat Punch
- Ball Pein Hammer

SHOP SUPPLIES AND MATERIALS

Hand Cleaner/Degreaser	Available at ecstuning.com
Brake Lubricant	Available at ecstuning.com
• Shop Rags	Available at your local auto parts store
Aerosol Spray Lubricant/Penetrating Oil	Available at your local auto parts store
Aerosol Brake Parts Cleaner	Available at your local auto parts store



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.

PREPARATION AND SAFETY

- 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.

Step 1:

Remove the front brake calipers and brackets on your car.

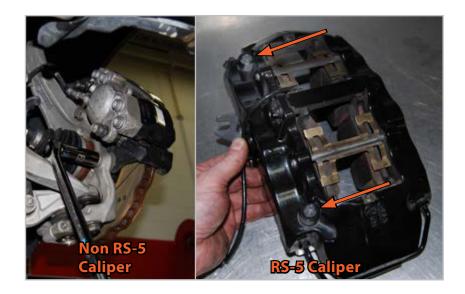
- With original single piston calipers:
 - Disconnect each front brake hose where it meets the line.
 - Use a 21mm socket to remove the caliper bracket bolts and remove both calipers and hoses.

• With existing RS-5 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:

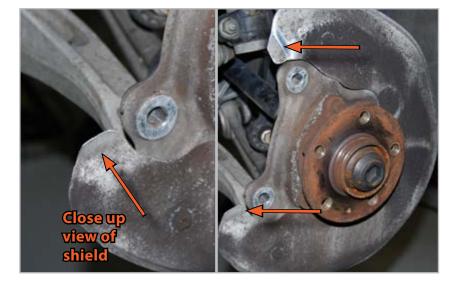
Use a T30 Torx bit to remove the rotor screws and remove the original brake rotors.

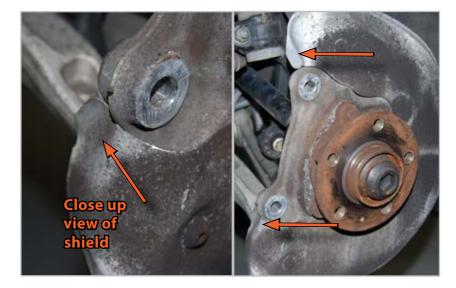




Step 3:

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.

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 clean the surface of the rotors with brake cleaner.



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 you have existing RS5 calipers on your car 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.

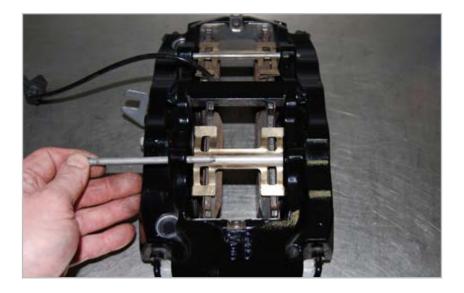
Step 8:

Insert the brake pads into place in the calipers.



Step 9:

Install the new caliper pad springs and pins.



Step 10:

Install and tighten a new brake hose on each front caliper.



Step 11:

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).

If you have purchased a 380mm big brake kit that comes with new RS5 calipers, the brackets that come on the calipers must be removed prior to installation. (These are stock brackets that will not work with the 380mm rotors). Remove them using an 8mm allen socket.



Final Installation

Connect and tighten the new brake hoses at the lines.

Bleed the brake system.

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



After completion, if the brake pedal is not quite as firm as expected, bleed the brakes a second time. 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.





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: <u>Stage One</u> - torque them to the Nm or Ft-lb specification. <u>Stage Two</u> - tighten each one the additional specified number of degrees. To prevent over torquing it is important to mark each fastener with paint <u>immediately</u> 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. Relubricate 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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