



APIKOL BIG BRAKE KIT INSTALLATION INSTRUCTIONS (B6 A4 / A3)



Only work underneath your vehicle after properly supporting it with adequate jack stands on a flat surface.

NEVER work under a vehicle only supported with a jack.

Estimated Installation Time: Approximately 2 hours

This is a general guide that can be used with multiple big brake kits. The installation steps are very similar between cars but be sure to read the instructions carefully for different instructions specific to your car.

Tools Required:

- 17mm Socket
- 18mm or 21mm Socket (Earlier models have 18mm head bolts holding the stock caliper on)
- 14mm Socket
- T55 Torx head socket
- 11mm Box End Wrench
- 14mm Box End Wrench
- 11mm Flare Wrench
- Wire cutters and strippers
- Soldering Iron or Butt Splice with crimping pliers
- Heat Shrink or Electrical Tape
- Small flathead screwdriver
- Rubber Mallet
- Torque Wrench Capable of 14 lb-ft to 148 lb-ft

Installation Instructions:

- 1) Break the lug nuts loose on the front wheels using a 17mm socket and a breaker bar. Jack the front of the car up in the air and set down on jack-stands. Remove the front wheels. If you have an Apikol Magic Stick thread it into one of the top wheel bolt holes. This will help later on preventing the rotor from falling off when you remove the caliper.
- 2) If your car has a brake pad wear sensor you will need to unplug the connector to get the stock caliper out. Using a small screwdriver can help to detach the connector. Later in the installation process you will splice the wires together to prevent the warnings from appearing.
- 3) Remove the stock brake line from the hard line using an 11mm flare wrench and a 14mm wrench to break it loose. Use a flare wrench if possible since the brake lines fittings are prone to rounding. Place a rag under the hard line to catch any brake fluid. Brake fluid can cause damage to any painted surfaces so be careful during this step. Keeping the brake fluid reservoir cap on during this step can help prevent fluid leaking out. (Note: Our A3 brake kit reuses the stock lines so you can just remove the brake line on the caliper side so it can be removed)
- 4) Remove the stock brake caliper by taking out the two bolts that attach it to the strut with either an 18mm or 21mm socket (depending on the year of your car). These bolts might be very tight so use care when loosening them. You will reuse these bolts with the Apikol brake bracket. Once the bolts are taken out, remove the stock caliper

from the car. Wrap a rag around the end of the brake line to prevent fluid dripping when taking the caliper out.

- 5) Now that the stock caliper has been removed, the stock rotor should slide off. If the rotor is stuck in place you can tap it from the back side with a rubber mallet to break it loose. If you have a buildup of rust/corrosion on the hub it is a good idea to clean this off to make sure the new rotor seats correctly. Scotchbrite pads work well for this task. (Note: Our A3 brake kit uses the same rotor so you can skip this step and keep the stock rotor in place unless you are replacing them)
- 6) With the stock brakes out of the way, now is a good time to modify the brake pad wear sensor wires. Cut the wires just before the connector. To join the wires strip about 1/2" of insulation off of each wire. You can twist them together and solder or use a butt splice to join them. Make sure to cover the exposed section with heat shrink or electrical tape. Once you have the new brake line installed you can use a couple zip ties to secure the wires. (Note: You do not have to complete this step but it is worth your time to stop the unnecessary warnings)
- 7) Install the Apikol brake bracket onto the strut reusing the stock bolts with either an 18mm or 21mm socket. To center the caliper on the rotor you will need to place a 1mm shim between the strut and the bracket. These shims will be included in your shipment. Refer to the figure at the end of the instructions for correct bracket orientation and shim location. Torque the bracket to strut bolts to 148 lb-ft. Make sure to follow this torque spec to prevent the bolts from coming loose.
- 8) Before installing your new rotors, clean them off with soap and water. If you have an Apikol magic stick you can use this to hold the rotor in place until the caliper is installed. If not, you can thread a wheel bolt in place to hold the rotor.
- 9) You are now ready to install the calipers. To determine which caliper is right and left, make sure that the bleed screw will be pointed up when installed. Some Porsche calipers require the bleed screws and crossover tubes be swapped end for end. The purpose is to insure the small and large pistons are in the correction orientation. As the rotor turns in the forward direction, the rotor should "see" the small piston before the large piston. Once you are sure of the caliper piston/bleed screw orientation you can install the calipers. Slide the caliper over the rotor and tighten the two caliper to bracket bolts to 55 lb-ft using a T55 Torx head socket.
- 10) If required, install any anti vibration clips (Note: 993 and 928 calipers use round pads that clip into the piston. Some 996 calipers use a larger flat rectangular plate that clips into position.) The protective paper is then removed and the pad is slid into the caliper. Slide the brake pads into place from the back. Once the pads are in the correct position, install either the retaining clip and pin or in some cases the spring clip to hold them in place.

- 11) Install the new stainless steel brake line next. Start by attaching the brake line to the hard line on the car. Again, use an 11mm flare wrench and 14mm wrench to secure the fitting. After the new brake line is attached to the hard line you can attach the other end to the caliper. Make sure that you place one of the provided copper crush washers on either side of the banjo fitting. Once you have the line oriented in the right direction you can tighten the banjo fitting with a 14mm socket to 14 lb-ft. This torque spec is just a guide. Be careful to not over tighten the bolt as you could damage the soft aluminum threads in the caliper. Most click-type torque wrenches should NOT be used for tightening. To ensure that the brake line is oriented in the right direction and will not run into anything turn the wheel from lock to lock. Use a couple zip ties to secure the brake pad wear sensor wires to the new brake line. (Note: Our A3 Brake Kit reuses the stock brake lines so you will just need to attach the caliper side. Be sure to use new crush washers though)
- 12) Once you have completed steps 1-11 on both sides of the car you can bleed the brakes using an 11mm box end wrench. Porsche recommends that their calipers be bled outboard-inboard-outboard. This means that you should bleed the outboard screw until there are no bubbles, switch to the inside and then one last time on the outside. When bleeding the brakes make sure to check the reservoir every now and then and top it off with new brake fluid. If the fluid runs too low and air gets into the system you will have to start over.
- 13) Install the wheels and rotate by hand to ensure that you do not have any interference. Put the car back on the ground and torque the wheels. Drive around for a couple minutes in a safe area to make sure everything is working correctly.
- 14) You need to bed in the new brake pads for them to work correctly. To do this brake hard from 60 to 40 mph ten times in a row. Drive around for 5-10 minutes using minimal braking to allow everything to cool down. Most importantly, do not come to a stop and hold your foot on the brake pedal. While bedding in the pads, they get very hot (you will often smell the brakes), if you stop and hold the brakes on it is possible to warp the brake rotors.
- 15) Enjoy your Apikol Big Brake Kit.



1mm Spacer

Spacer Location for B6 A4
and A3 brake brackets

Add 1mm spacer between
brake bracket and upright
like shown in the picture

Torque Caliper Bolts to 55 lb-ft

Torque Bolts to 148 lb-ft

