



ES7366
red calipers

ES7370
black calipers

ES7324
jazz blue calipers

Stage 5 BBK Installation Guide for MKV - MKVI Golf, Jetta, Eos, and A3

best viewed in Acrobat® Reader®

This tutorial is provided as a courtesy by ECS Tuning.

Proper service and repair procedures are vital to the safe, reliable operation of all engine 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.

Although this material has been prepared with the intent to provide reliable information, no warranty (express or implied) is made as to its accuracy or completeness. Neither is any liability assumed for loss or damage resulting from reliance on this material. SPECIFICALLY, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY IS MADE OR TO BE IMPLIED WITH RESPECT TO THIS MATERIAL. In no event will ECS Tuning, Incorporated or its affiliates be liable for any damages, direct or indirect, consequential or compensatory, arising out of the use of this material.

Stage 5 Big Brake Kit

- **ES7366** (red calipers)
- **ES7370** (black calipers)
- **ES7324** (jazz blue calipers)

MKV/VI Stage 5 BBK Installation



Kit Contents - VW MKV/MKVI Stage 5 Big Brake Kit

- 2-piece 352x32mm rotors - machined and assembled (2)
- ECS Tuning Exact-Fit stainless steel reinforced brake lines (2)
- ECS Tuning 955/Cayenne calipers and hardware (2)
- Caliper-to-bearing holder bolts (4)
- Hawk Performance brake pads (2 pairs)
- Stainless steel rotor set screws (2)
- 1 liter ATE Super Blue brake fluid

Tools

- 3/8-inch ratchet
- 3 inch long, 3/8-inch extension
- T30 Torx© driver
- 10mm wrench
- 11mm brake line wrench
- 13mm socket
- 14mm socket
- 19mm socket
- 21mm socket
- 21mm combination wrench
- 10-150 ft lb torque wrench (**ES2221244**)
- inch-pound torque wrench (for banjo bolt)
- impact driver with Phillips driver (**ES11416**) or Phillips screwdriver
- common screwdriver



Note! This kit requires *at least* 18" diameter wheels. Offset and spoke clearance also vary between wheels. A wheel clearance template is available for download on the ECSTuning.com **Stage 5 BBK webpage.**

Stage 5 Big Brake Kit

- **ES7366** (red calipers)
- **ES7370** (black calipers)
- **ES7324** (jazz blue calipers)

MKV/VI Stage 5 BBK Installation



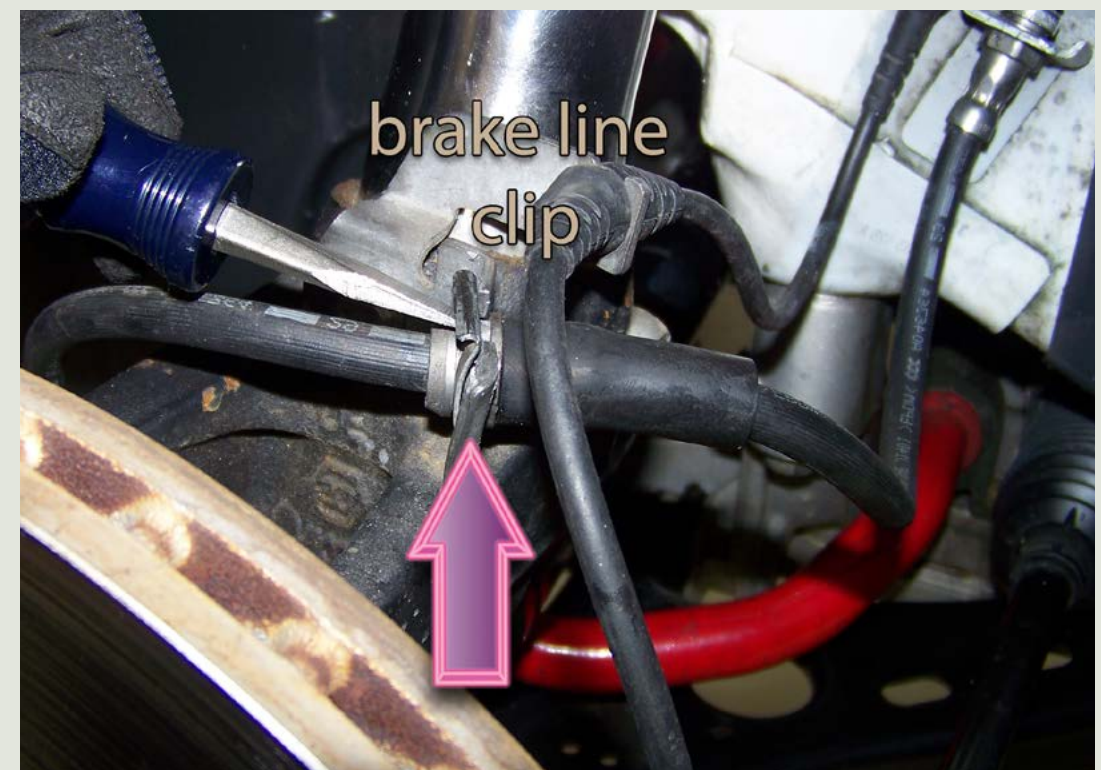
Step 1

- Safely raise and support the car.
- Remove the wheel bolt trim caps.
- Loosen the wheel bolts and remove the wheel and tire.



Step 2

- Using a common screwdriver, pry the u-shaped retainer clip from the brake hose bracket at the strut knuckle.



Stage 5 Big Brake Kit

- **ES7366** (red calipers)
- **ES7370** (black calipers)
- **ES7324** (jazz blue calipers)

MKV/VI Stage 5 BBK Installation



Step 3

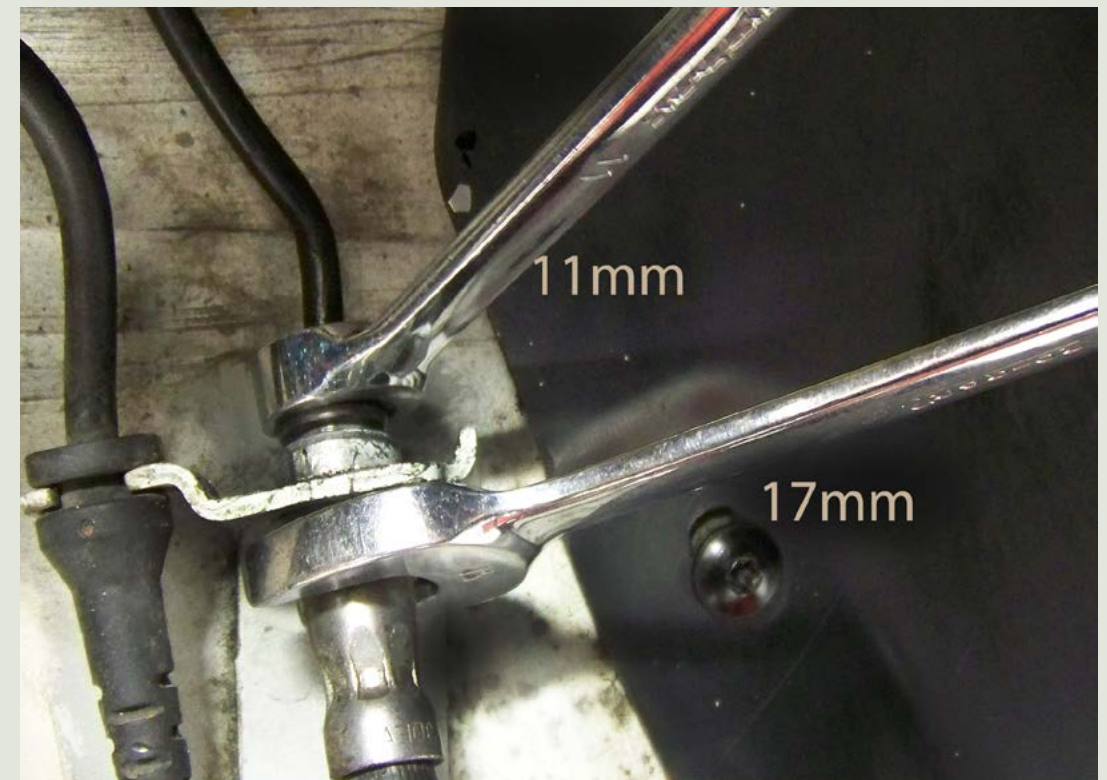
- Follow the brake hose to the chassis. Using the same common screwdriver or similar tool, pry the u-shaped retainer clip from the chassis support bracket.



Step 4

- Using an 11mm brake line wrench and a 17mm backing wrench, loosen and disconnect the brake hose from the rigid brake line.

Tip: Transfer the rubber cap from the caliper brake bleeder screw to the end of the disconnected rigid brake line. This will keep brake fluid from draining onto the floor.



Stage 5 Big Brake Kit

- **ES7366** (red calipers)
- **ES7370** (black calipers)
- **ES7324** (jazz blue calipers)

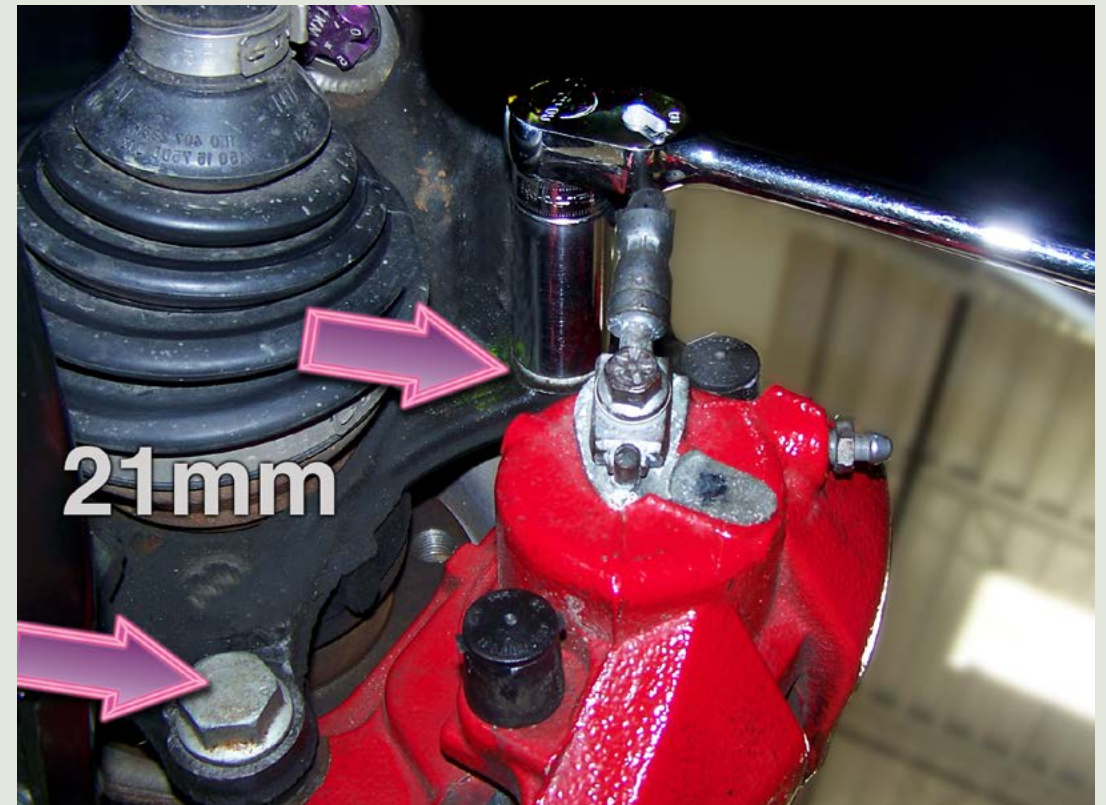
MKV/VI Stage 5 BBK Installation



Step 5

- Using an 21mm socket and ratchet, loosen and remove the caliper retaining bolts from the knuckle.

Note: Keep the bolts handy; we'll need them to attach the new caliper carrier.



Step 6

- Slide the caliper forward, off the rotor.
- Remove the caliper and flexible hose.



Stage 5 Big Brake Kit

- **ES7366** (red calipers)
- **ES7370** (black calipers)
- **ES7324** (jazz blue calipers)

MKV/VI Stage 5 BBK Installation



Step 7

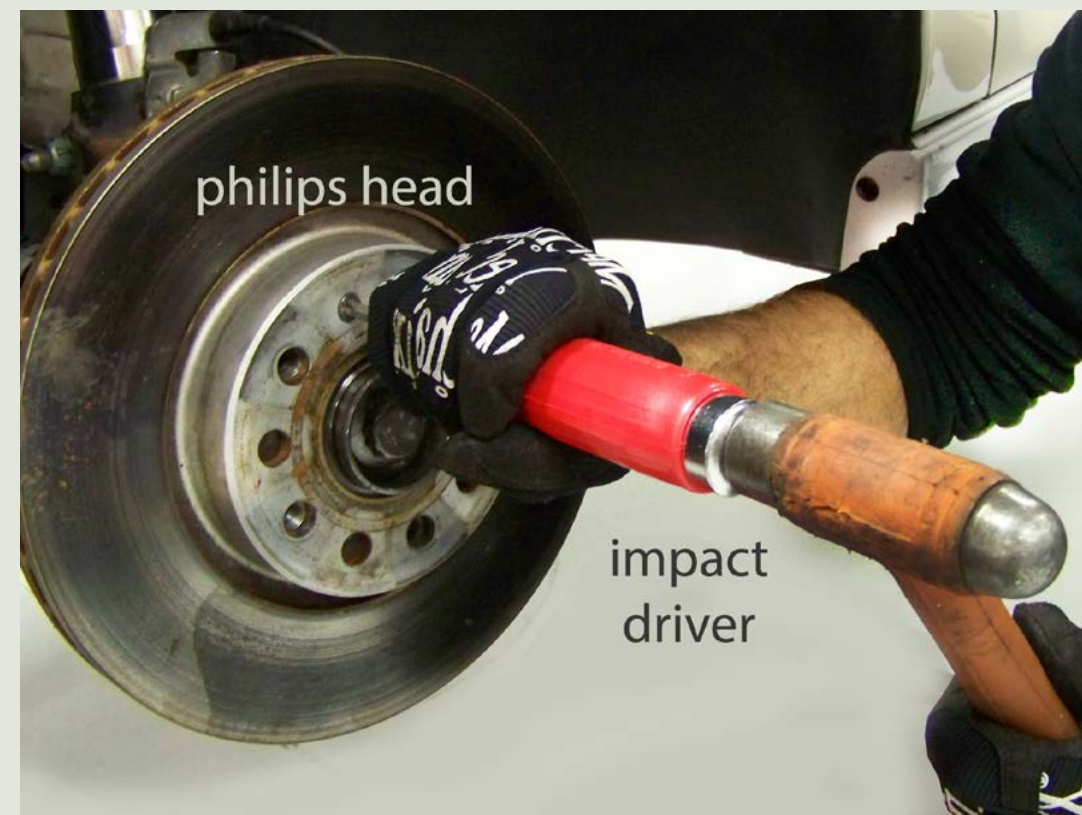
- Remove the Philips-head rotor set screw (arrow).



Step 8

- For rusted set screws, an impact driver (**ES11416**) with a Phillips-head bit is far more effective than a Phillips screwdriver.

Note: If you round out the screw head, you will have to drill out the old screw.



Stage 5 Big Brake Kit

- **ES7366** (red calipers)
- **ES7370** (black calipers)
- **ES7324** (jazz blue calipers)

MKV/VI Stage 5 BBK Installation



Step 9

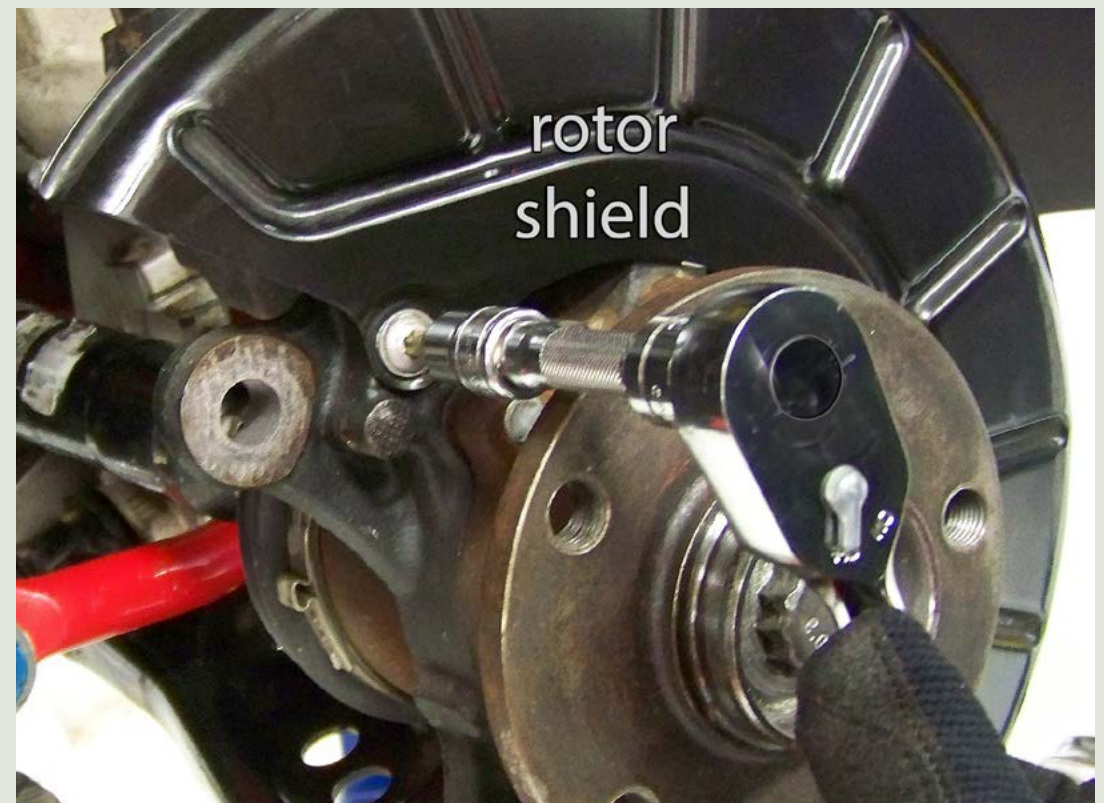
- Remove the old rotor.
- Clean away any rust from the face of the rotor hub. A drill or die grinder with a mild abrasive disk works well.



Step 10

- Remove the three T30 Torx head screws from the brake rotor shield.
- Remove the shield.

Note: If you live in an area where the car is exposed to road salt or ocean spray, you may wish to reinstall the rotor shield bolts in their holes with a dab of anti-seize compound. Doing so will keep the threaded holes in the knuckle clean, should you need them in the future.



Stage 5 Big Brake Kit

- **ES7366** (red calipers)
- **ES7370** (black calipers)
- **ES7324** (jazz blue calipers)

MKV/VI Stage 5 BBK Installation



Step 11

- Install the 2-piece rotor onto the hub using the stainless steel set screw.

Note: Make certain each rotor is on the correct side of the car (they are directional). The slots/holes should sweep backwards at the 12 o'clock position.

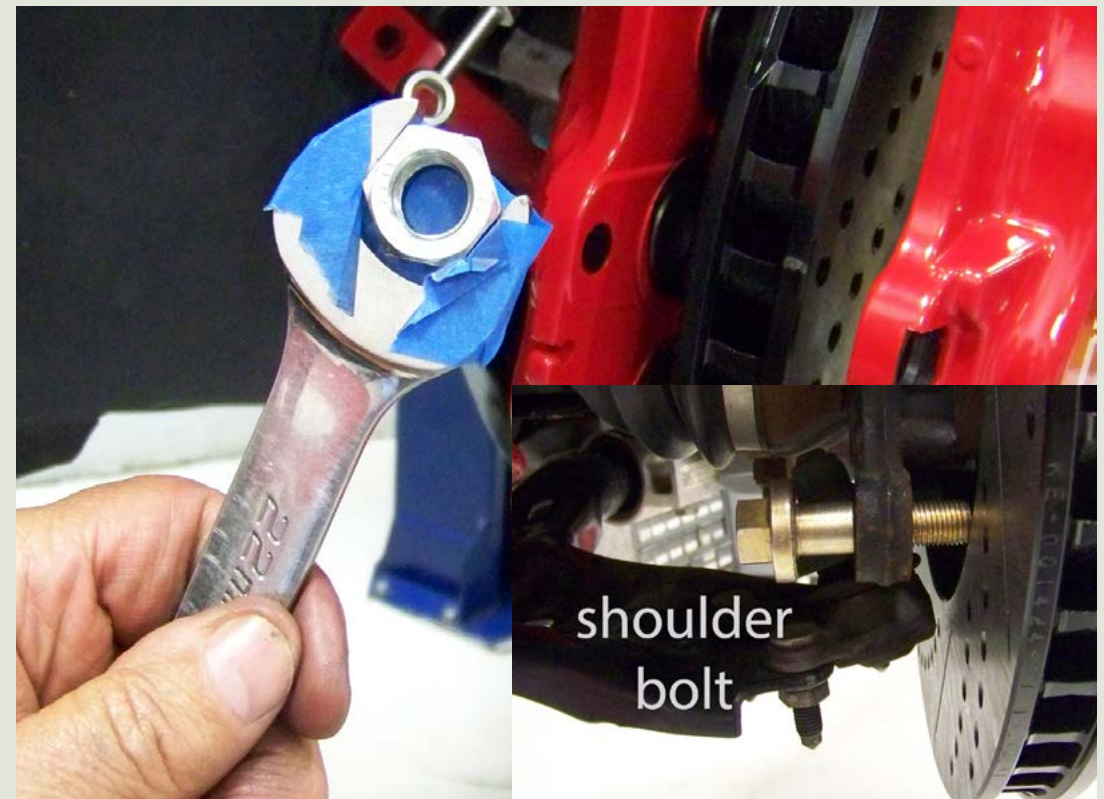


Step 12

- Using a 21mm open-ended wrench and a 19mm socket, install the new 6-piston calipers.

Note: The provided shoulder bolts only go in one way; from the back of the bearing holder. This means you will have to hold the nylock nut in place.

A simple solution is to tape the nut into the 21mm wrench using masking tape or similar. Then tighten the bolt into the nut using the 19mm socket and a ratchet. Don't torque the bolts just yet.



Stage 5 Big Brake Kit

- **ES7366** (red calipers)
- **ES7370** (black calipers)
- **ES7324** (jazz blue calipers)

MKV/VI Stage 5 BBK Installation



Notes on brake pad sensors

The brake pad sensors on your MKV/VI are a single-use item; once they warn of low pad depth, they need to be replaced.

You have four options for installing the brake pad sensors and eliminating the warning lamp.

Option 1: Modify your brake pads to support the sensors. Simply drill a hole in the top of the pad, centered on the notch in the backing plate. Cut the old pad off the pad sensor harness (leave some wire). Splice in the new pad sensor (or existing, undamaged sensor), and install the sensor into the hole you drilled. Then plug into your cars' wiring harness.



Option 2: IF YOU ARE DILIGENT ABOUT INSPECTING YOUR PADS, simply cut the connector from the stock pad and solder the two wires together. This completes the circuit and turns off the warning lamp on the instrument cluster. Alternatively, buy a pre-made harness from **ECS Tuning (ES8014)**.



Option 3 : Using a VAG-COM or similar tool, recode the instrument cluster to ignore the pad sensor circuit. You will need to reference your vehicles service manual for the proper coding.

Stage 5 Big Brake Kit

- **ES7366** (red calipers)
- **ES7370** (black calipers)
- **ES7324** (jazz blue calipers)

MKV/VI Stage 5 BBK Installation



Step 13

- When you have determined a brake pad sensor solution, load the pads into the calipers.

Note: Your Hawk Performance brake pads are packaged with a 7 gram packet of brake paste. This paste is used to reduce pad noise, when applied properly.

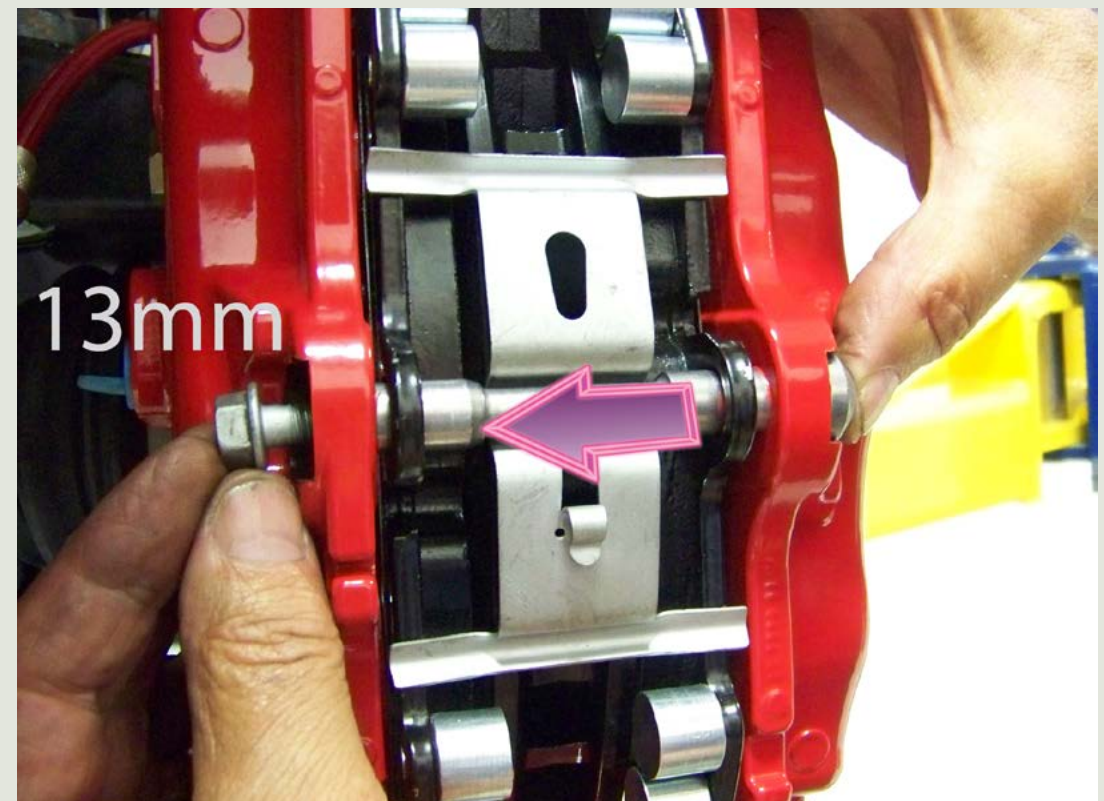
Apply a thin film of brake paste to each brake pad metal backing plate. Concentrating on where pad will contact caliper pistons.

CAUTION: Do not apply too much paste. **Never get the paste on the friction surface.**



Step 14

- Install the brake pad shim as shown.
- Make sure the bolt head is aligned with the slot on the front side of the caliper. Align the bolt with the hole on the back side of the caliper, and let the hole guide it into place as you tap it gently into place with a rubber mallet.
- Using a 13mm socket, hand tighten the provided retaining screw into the bolt.



Stage 5 Big Brake Kit

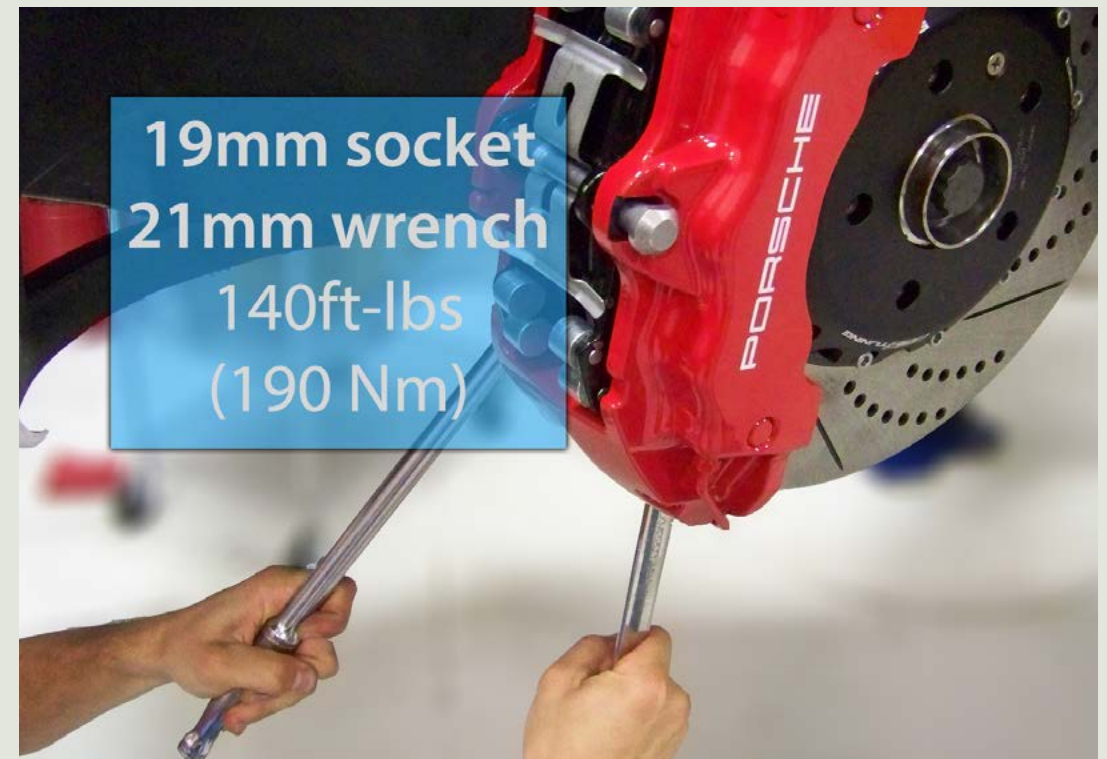
- **ES7366** (red calipers)
- **ES7370** (black calipers)
- **ES7324** (jazz blue calipers)

MKV/VI Stage 5 BBK Installation



Step 15

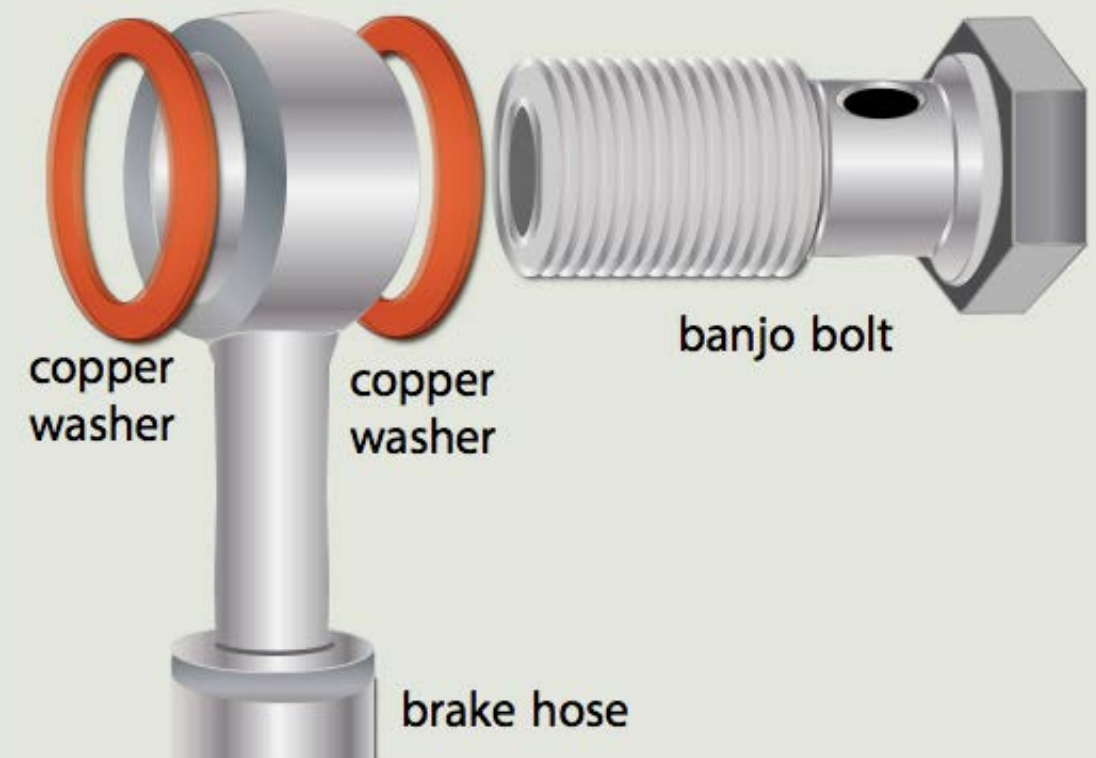
- Now torque the caliper mounting bolts. Using the 21mm wrench to hold the bolt in place and a 19mm socket, torque to 140ft-lbs (190Nm). This will likely require a helper.



Step 16

Your new ECS Tuning Exact-Fit brake lines come complete with a banjo bolt and two new copper sealing washers.

Make sure you have one copper washer on either side of the hose fitting, as shown.



Stage 5 Big Brake Kit

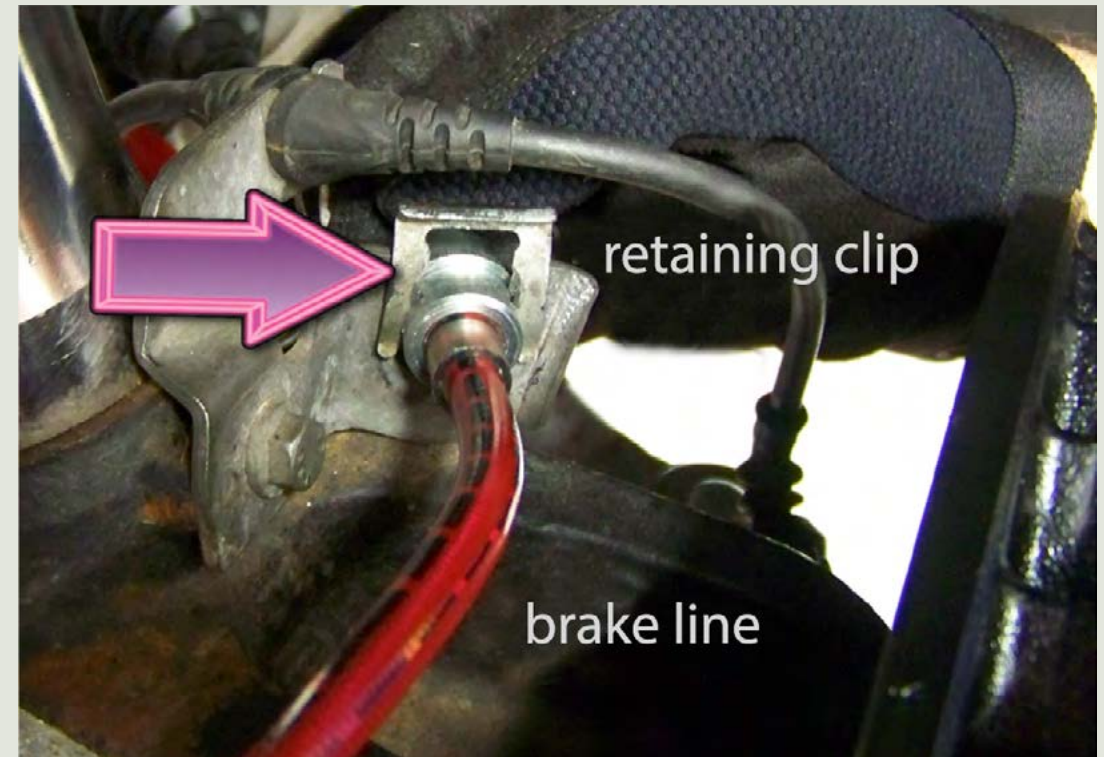
- **ES7366** (red calipers)
- **ES7370** (black calipers)
- **ES7324** (jazz blue calipers)

MKV/VI Stage 5 BBK Installation



Step 18

- Route the new brake hose over the knuckle and attach it to the support bracket with the u-shaped clip removed in Step 2.
- Make sure the clip straddles the groove in the hose collar.
- Push the clip all the way down until it snaps in place in the support bracket.



Step 19

- Using a 17mm wrench and 11mm brake line wrench, attach the Exact-Fit brake line into the the rigid brake line at the chassis. Hand tighten the fitting.
- Reinstall the u-shaped retainer clip.

Repeat all steps shown thus far to install the opposite side's Stage 5 Big Brake Kit.



Stage 5 Big Brake Kit

- **ES7366** (red calipers)
- **ES7370** (black calipers)
- **ES7324** (jazz blue calipers)

MKV/VI Stage 5 BBK Installation



Step 20

- Bleed the brake hydraulic system. Your kit includes a 1 liter container of brake fluid.
- Add fluid to the brake reservoir, then use a 10mm wrench to pedal or power bleed the system to remove all air. Be sure to bleed at both bleeder screws on each caliper.

(ECS Tuning has a [video](#) demonstrating general brake bleeding procedures, available online.)



Step 19

- After bleeding the system, top up the fluid level in the brake fluid reservoir. Pump the brake pedal several times. The pedal should be hard, and stay hard as you maintain pressure.
- Check for fluid leaks. Even if the pedal feels good, visually inspect all hose connections for leaks.
- Turn the steering from side to side one more time. Make sure the brake lines do not rub or contact any components.
- Reinstall the wheels. Tighten the wheel bolts on a star pattern to 89 ft-lb (120 Nm). Make sure your wheels spin freely and that they do not contact the brake caliper.



Stage 5 Big Brake Kit

- **ES7366** (red calipers)
- **ES7370** (black calipers)
- **ES7324** (jazz blue calipers)

MKV/VI Stage 5 BBK Installation



Your Stage 5 Big Brake Kit installation is not complete until you bed the brake pads. Bedding ensures normal pad wear and optimum braking performance. Use manufacturer instructions, or follow the steps below.

- 1) Test your brakes before going out on the highway. The pedal should feel firm and responsive. If it is soft or spongy, check that all air has been removed by the bleeding process, and that there are no fluid leaks.
- 2) Take the car out on the road. Do not ride the pedal. Either apply the brakes to slow the vehicle or fully release them.
- 3) At vehicle speeds of 50-60mph, gently apply the brakes several times to slow, but not stop, the vehicle. This warms the brakes.
- 4) Make 6-10 stops from 35 mph to 5 mph, applying moderate pedal pressure.
- 5) Cruise for several minutes without applying the brakes, allowing them to cool.
- 6) Make 2-3 moderately hard stops from 45 to 5 mph. Brake aggressively, but not hard enough to trigger the ABS.

Let the system cool for 10-15 minutes. Your pads are now bedded!

Be careful on public roadways!
Always wear a seatbelt and always be mindful of other drivers, both in front of and behind you.
ECS Tuning accepts no responsibility for your actions or their consequences as a result of following this guide.

Stage 5 Big Brake Kit

- **ES7366** (red calipers)
- **ES7370** (black calipers)
- **ES7324** (jazz blue calipers)

MKV/VI Stage 5 BBK Installation



This completes the installation of the ECS Tuning MKV/VI Stage 5 Big Brake Kit.

We hope this installation guide has been helpful and informative.

Thank you purchasing our Big Brake Kit!

