



# Audi B5S4 Big Brake Kit

installation  
instructions

ES3653

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*best viewed in Acrobat® Reader®*

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.

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## ES3653

**The ECS Tuning Rear Big Brake Kit for Audi B5S4 comes with:**

- (2) two-piece over-sized (12.1 inch) semi-floating rotors
- (2) caliper carrier mounting brackets.
- (2) ECS Tuning Exact Fit brake lines
- (2) 10 x 1.25 x 20 hex head bolts
- (2) 6 x 1 x 10 hand brake cable bracket bolts
- (1) tube thread locking compound
- (1) liter Ate Super Blue brake fluid

In this tutorial, we will show you how to mount the caliper carrier mounting brackets and modify the hand brake cable mounting bracket to accommodate the new, larger diameter of the ECS Tuning two-piece rotors.

You will use your existing calipers with longer ECS Tuning Exact Fit brake lines.



## Remove the Old Brakes

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### Step 1

We will demonstrate the procedure using the left rear caliper.

Raise and support the car.

Remove the wheels.



### Step 2

Release the hand brake.



## Remove the Old Brakes

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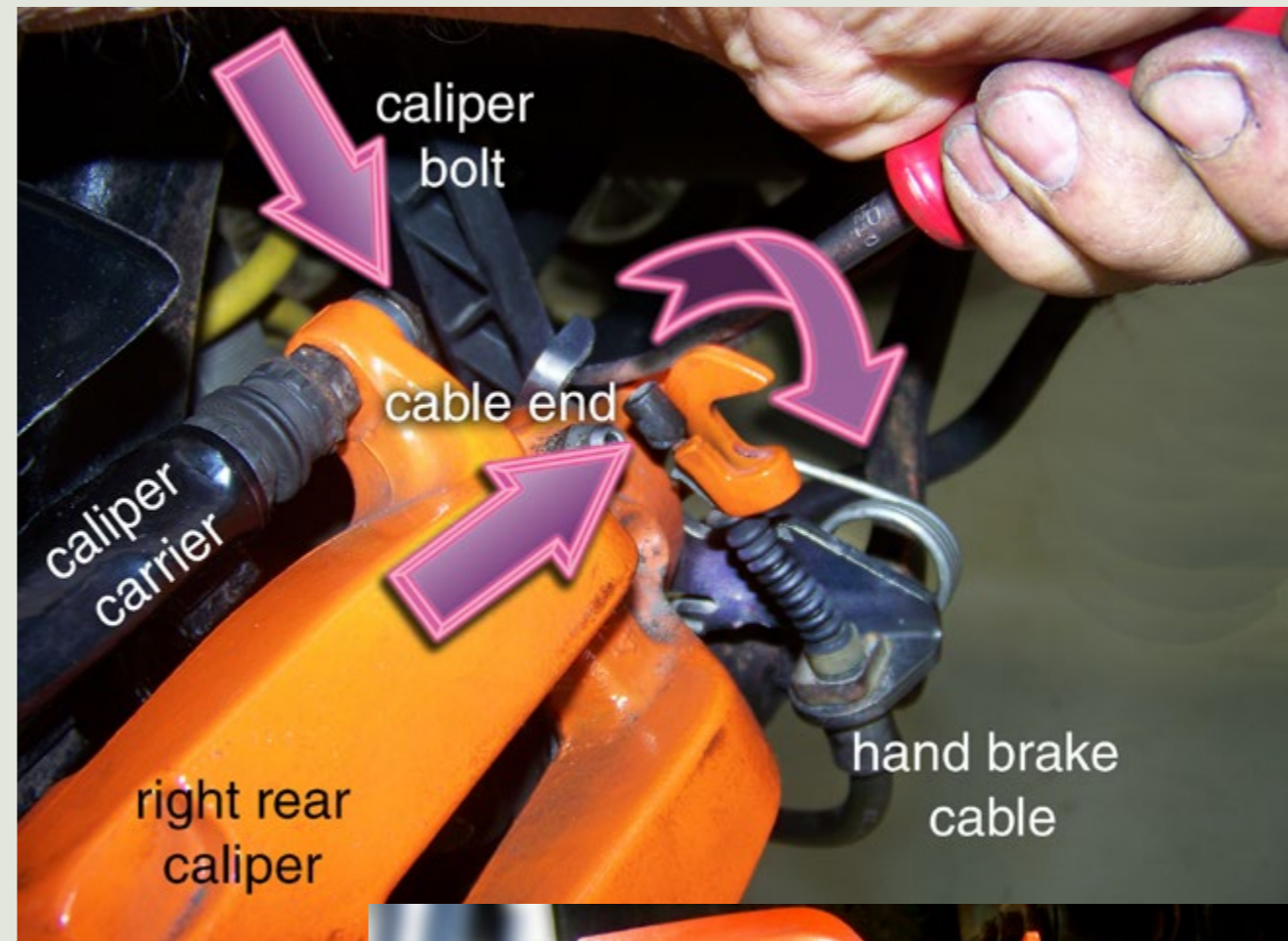
### Step 3

Use a large screwdriver or similar lever to pivot the hand brake arm on the caliper in the direction shown by the curved arrow. You will be prying against the hand brake arm return spring.

When the tension on the hand brake cable is relieved, pry the barrel end of the hand brake cable from its notch in the hand brake arm (bottom arrow).

Loosen the top bolt that attaches the caliper body to the caliper carrier with a 13mm box wrench (top arrow).

**Note:** You may need to hold the hex head on the caliper slide pin with a 15mm open end to keep it from turning as you loosen the bolt.



### Step 4

- At the bottom of the caliper, disconnect the brake hose from the rigid brake line on the control arm. (Leave the hose attached to the caliper for now.) Cap the end of the rigid brake line to prevent brake fluid from leaking on the floor.
- Remove the bolt from the lower slide pin, using the same wrenches used in the previous step. Remove the caliper from the knuckle.



## Remove the Old Brakes

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### Step 5

Using a large screwdriver, pry out the u-shaped retainer clip securing the brake cable bowden tube to the cable bracket.

Pull the cable from the bracket.

Remove the caliper.



### Step 6

Remove the brake pads from the caliper carrier.



## Remove the Old Brakes

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### Step 7

Using an 8mm hex driver and long-handled ratchet for leverage, unbolt the top caliper carrier bolt from the rear of the knuckle.



### Step 8

Unbolt the lower caliper carrier bolt.

Remove the caliper carrier.



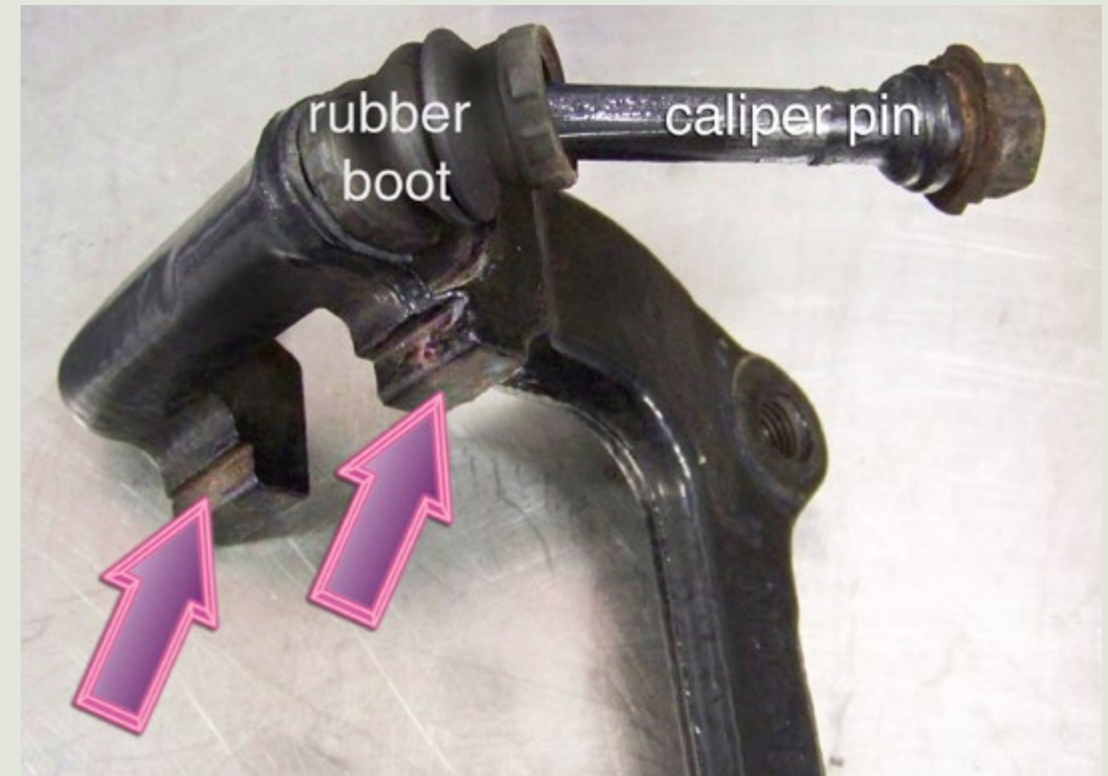
## Clean the Carrier and Hub

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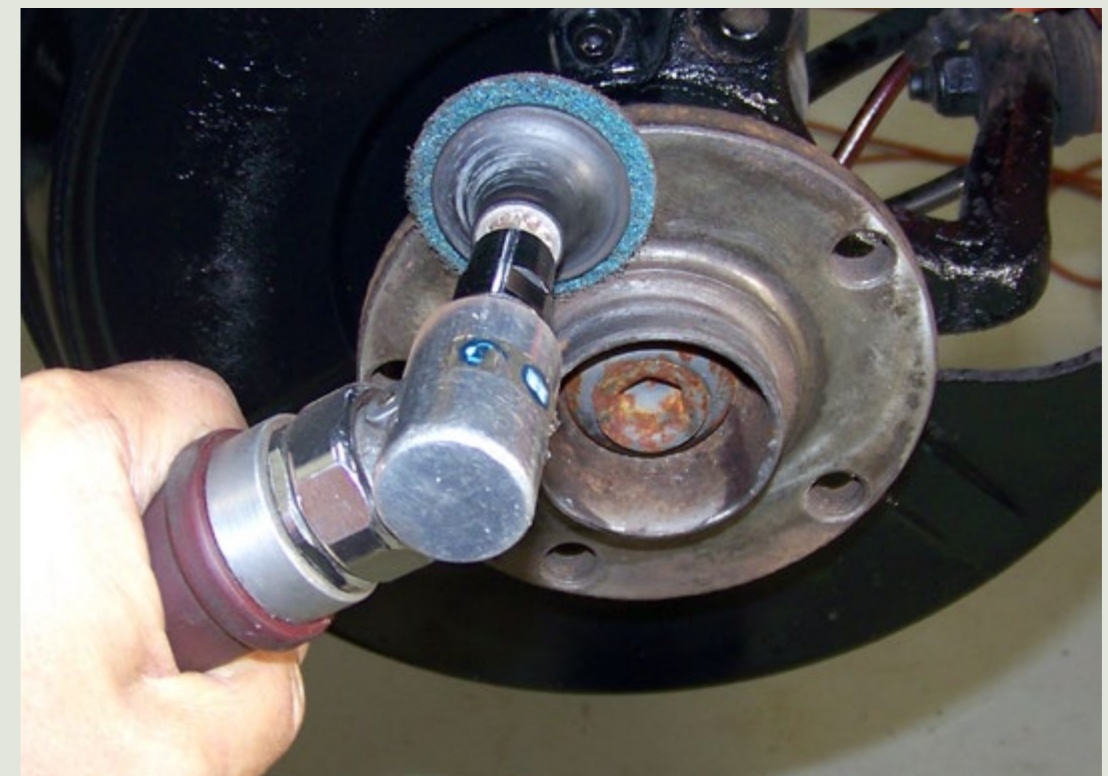
### Step 9

- Pull both caliper carrier slide pins out of the carrier. Check the pins for wear or corrosion. Replace damaged pins.
- Check the slide pin rubber boots for tears. Replace torn boots.
- Clean the brake pad contact areas (arrows). Remove rust or scale and polish the surfaces with emery cloth or medium sandpaper, and apply a thin film of high-temp brake lube.
- Lube the slide pins with high temp brake lube. Reinsert them and slide the boots in place over the pins to make a waterproof seal.



### Step 10

Remove the old rotors. Use a Roloc disc or similar abrasive cleaning disc attached to a die grinder or electric drill to clean the hub face.



## Modify the Brake Cable Bracket

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### Step 11

Mount the caliper in a soft-jawed vise to protect the caliper finish.

Pry the return spring out of the cable support bracket, as shown.

Remove the spring and set it aside.



### Step 12

Using a Torx® driver, remove the retaining screw from the hand brake cable support bracket.





## Modify the Brake Cable Bracket

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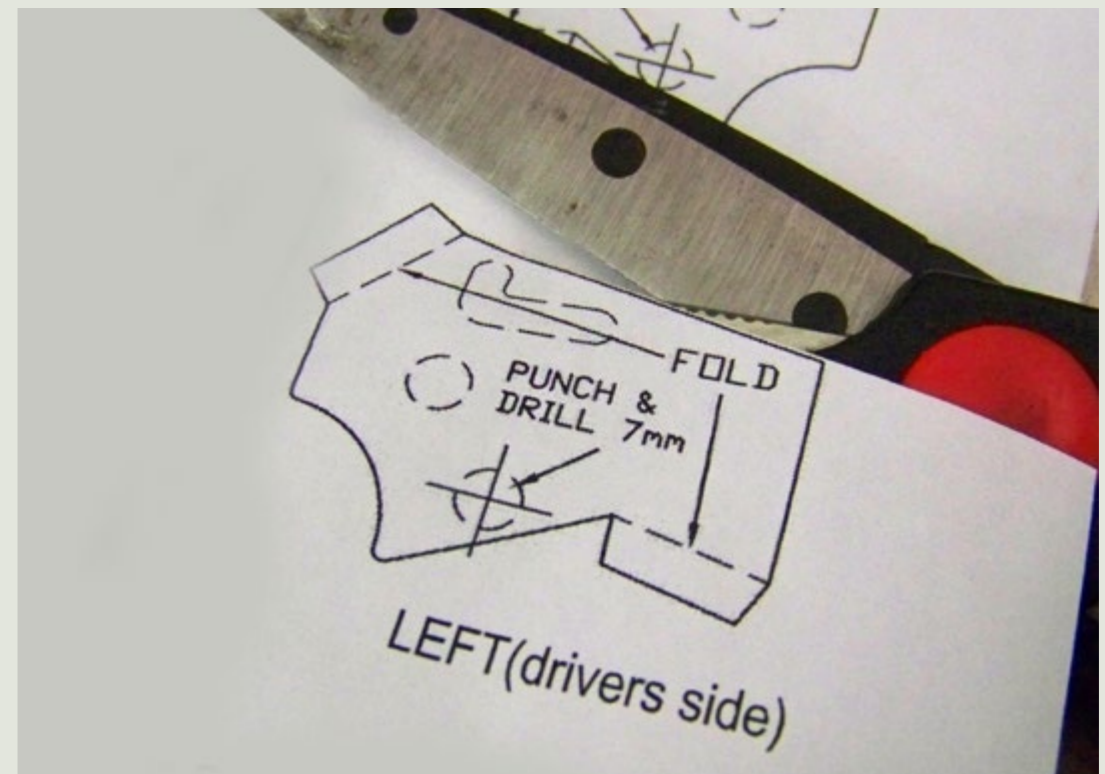
### Step 13

Remove the cable support bracket.



### Step 14

- Print the template on the last page of this pdf with printer scaling set to 100 percent.
- Use scissors to cut out the pattern.



## Modify the Brake Cable Bracket

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### Step 15

Mount the bracket in a vise. Lay the pattern on top of the bracket, using the fold-over tabs to position it correctly.



### Step 16

Center punch the exact location for the new screw hole.



## Modify the Brake Cable Bracket

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### Step 17

Using a 7mm bit, drill a through-hole in the bracket (arrow).



### Step 18

Using a hardened 6 x 1.0 bolt from the kit, attach the bracket to the caliper, then reinstall the return spring.



## Prepare the Caliper

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### Step 19

Use a 14mm wrench to disconnect and remove the old brake hose.



### Step 20

Your new rotors are probably thicker than the old ones and, if you're installing new pads, you'll need even more room to slide the caliper over the brake pads when they are installed in the caliper carrier.

While the caliper is still in the vise, use a caliper piston retractor tool to screw the brake piston in until it bottoms.

We're using the Schwaben brake piston retractor tool [ES2153340](#).



## Install the Carrier Bracket

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### Step 21

The larger diameter of the new rotors requires repositioning the calipers. The kit includes two steel support brackets that bolt to the knuckle using the original caliper bolts and mounting holes in the knuckle.

- Bolt the bracket to the knuckle as shown here.  
**Note:** The distance between the two lower holes is slightly greater than the distance between the upper holes.
- Place a few drops of thread locking compound on the threads of the original bolts and tighten them to 60Nm (44 ft-lb) using an M8 hex driver socket and torque wrench.

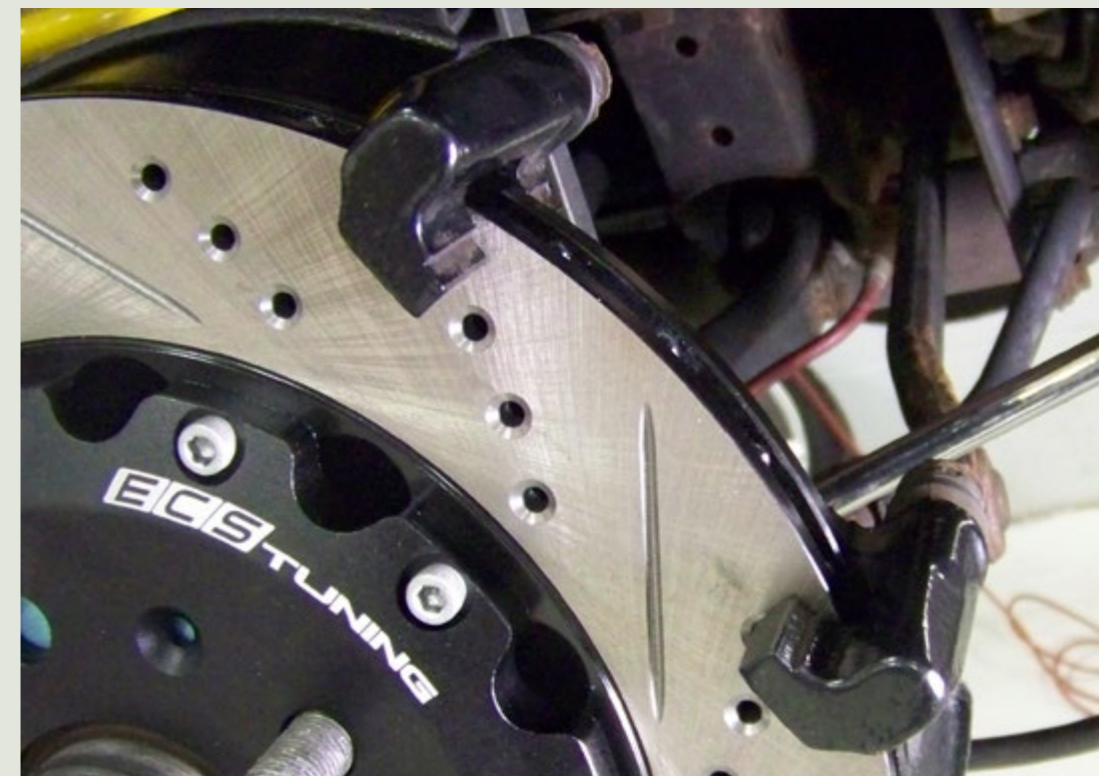


### Step 22

Install the rotor.

**Hint:** Thread one lug bolt into the rotor by hand to hold it snug against the hub to keep it in place while you work.

Bolt the caliper carrier to the bracket using the new 10mm hex head bolts included in the kit. Apply a few drops of thread locker to the bolts, and torque them to 60Nm (44 ft-lb).



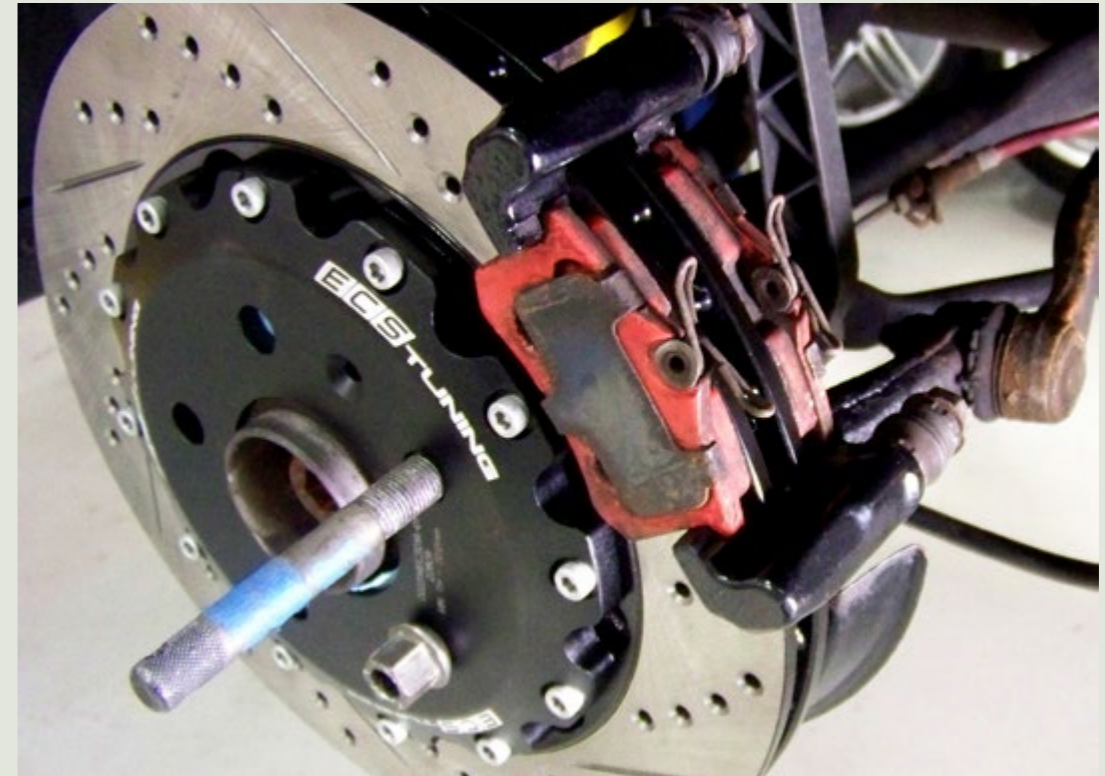
## Install the New Rotors and Caliper

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### Step 23

Install the brake pads. Make sure they fit easily in the carrier and slide freely from side to side.



### Step 24

Slide the caliper over the brake pads.

Apply a few drops of thread locking compound to the threads of the two caliper bolts, and thread them into the slide pins.

Torque the caliper bolts to 35Nm (25 ft-lb).

**Hint:** Press in against the caliper to compress the brake pad springs as you start the caliper bolts.



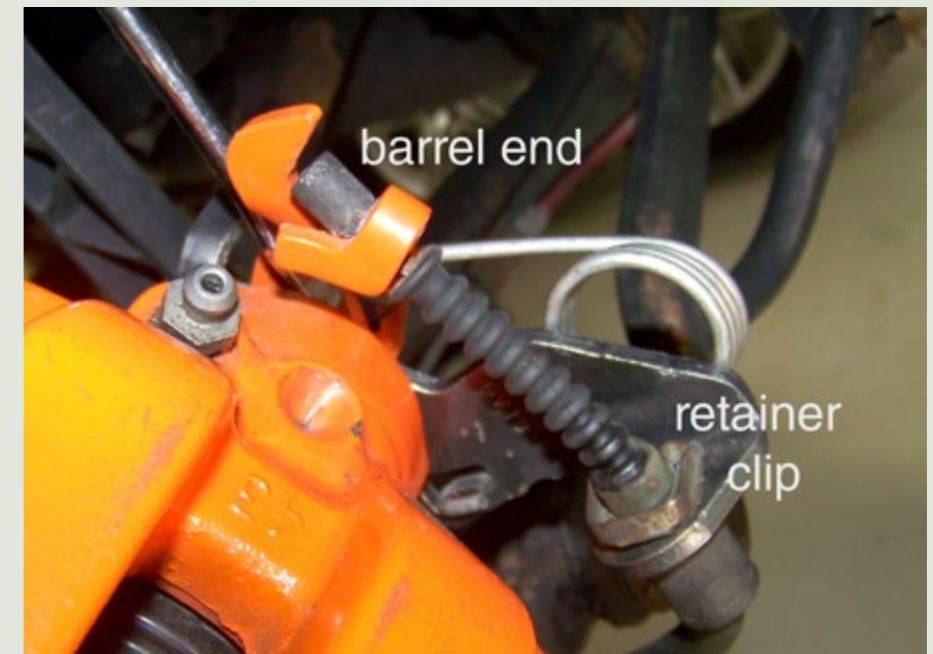
## Install the New Rotors and Caliper

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### Step 25

Reattach the hand brake cable in reverse order of removal. Make sure the brake cable retainer clip engages the groove in the bowden tube and slides all the way in to secure the cable in the bracket.



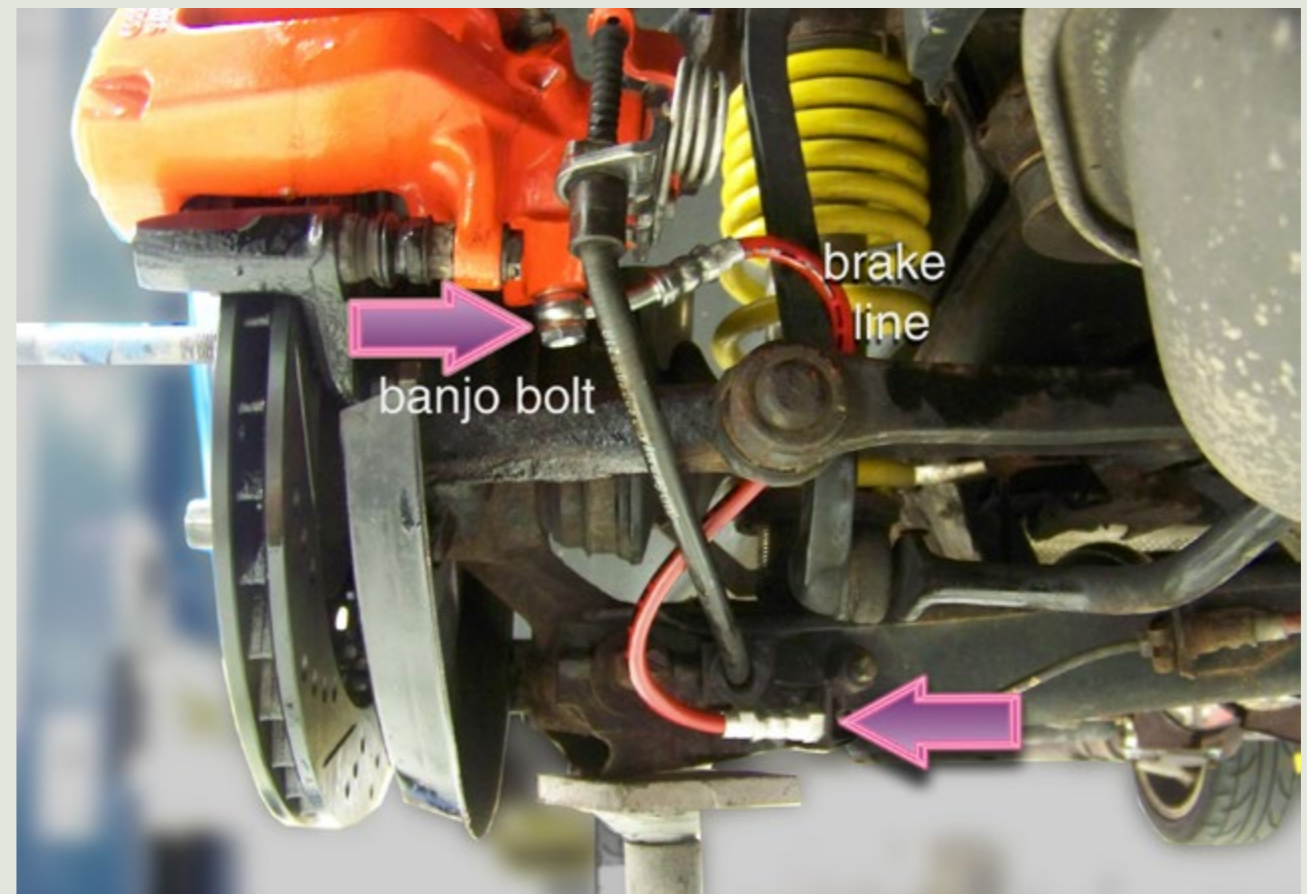
### Step 26

Attach the banjo bolt end of the brake line to the caliper. Use one copper washer on each side of the banjo bolt, and hand tighten the bolt.

Route the hose down to the rigid steel brake line at the control arm and connect it.

With the chassis supported, use a jack to raise and lower the control arm as you watch for interference between the line and any other component.

Reposition the line as need to provide safe clearance.



## Bleed the System

### B5S4 Rear Big Brake Kit Installation ES3653



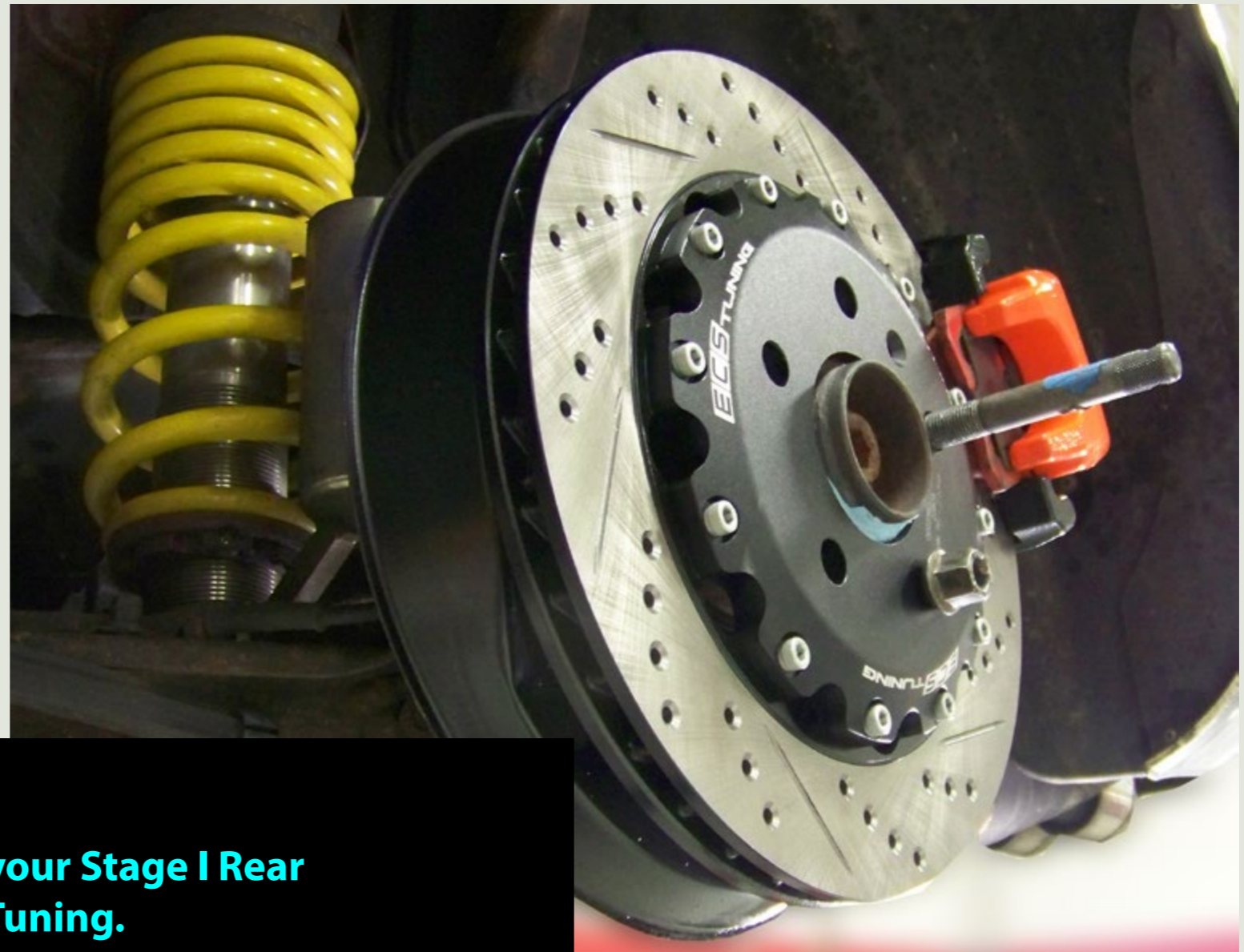
#### Step 27

Finish up by bleeding the brakes.

**Service Tip:** While you're at it, this is a good time to flush the entire brake hydraulic system. Our [online video](#) shows you how.

After bleeding the brakes, torque the wheel bolts in a star pattern to 120Nm (88 ft-lb). No impacts, please.

Repeat these steps on the opposite side to complete the installation of your rear Big Brake kit for Audi B5S4.



**Thanks for purchasing your Stage I Rear Big Brake Kit from ECS Tuning.**

We appreciate your business, and hope this tutorial has been helpful.

**ES3653**



## Hand Brake Templates

- Print this template at 100%.
- Cut with scissors.
- Lay template on bracket.
- Follow directions in steps 12-15 to modify bracket.

