

Ford Racing SVT Front Brake Upgrade Kit (05-12 GT, V6):

TOOLS REQUIRED:

- ✓ 13mm wrench
- ✓ 10mm socket
- ✓ 12mm socket
- ✓ 13mm socket
- ✓ 14mm socket
- ✓ 15mm socket
- ✓ Socket wrench/ratchet
- ✓ Jack(s)
- ✓ Jack stands
- ✓ Brake bleeding kit
- ✓ Brake fluid (DOT3)



TOOLS RECOMMENDED:

- ✓ Gloves
- ✓ Silicone synthetic brake lubricant
- ✓ WD-40 or similar
- ✓ Emery cloth or very fine sandpaper
- ✓ Rags
- ✓ Bucket
- ✓ Slotted screwdriver
- ✓ Assistant (to help with brake bleeding)

Installation Time: Approximately 2-4 hours (depending on skill and ease of removal of old parts)

NOTES:

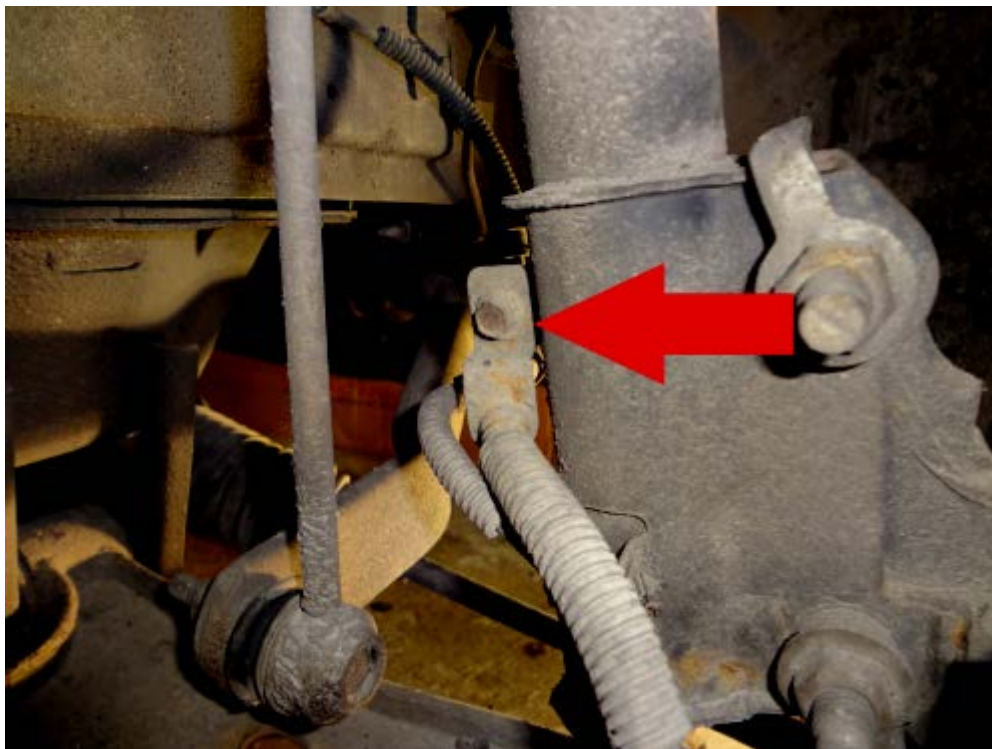
- **In this installation guide, instructions will come first, then a picture (if applicable). Pictures will always be below the instruction line.**
- **Brake fluid will quickly strip the paint off your car and is not very friendly to your skin so it's a good idea to consider gloves of some kind.**

INSTALLATION:

1. You can do this one wheel at a time or all at once. However you decide to do it, jack up your car and remove the wheel(s). It is MUCH easier to remove all four wheels at a time as you need to bleed the brakes when you're done anyway. Ensure that your car is supported by jack stands before carrying out any work.
2. After removing the front wheel, you should get a view like the picture below of your old brake system.



3. Using a 10mm socket or wrench, remove the bolt that holds the brake line to the strut (see picture below). Keep the bolt for re-use later.



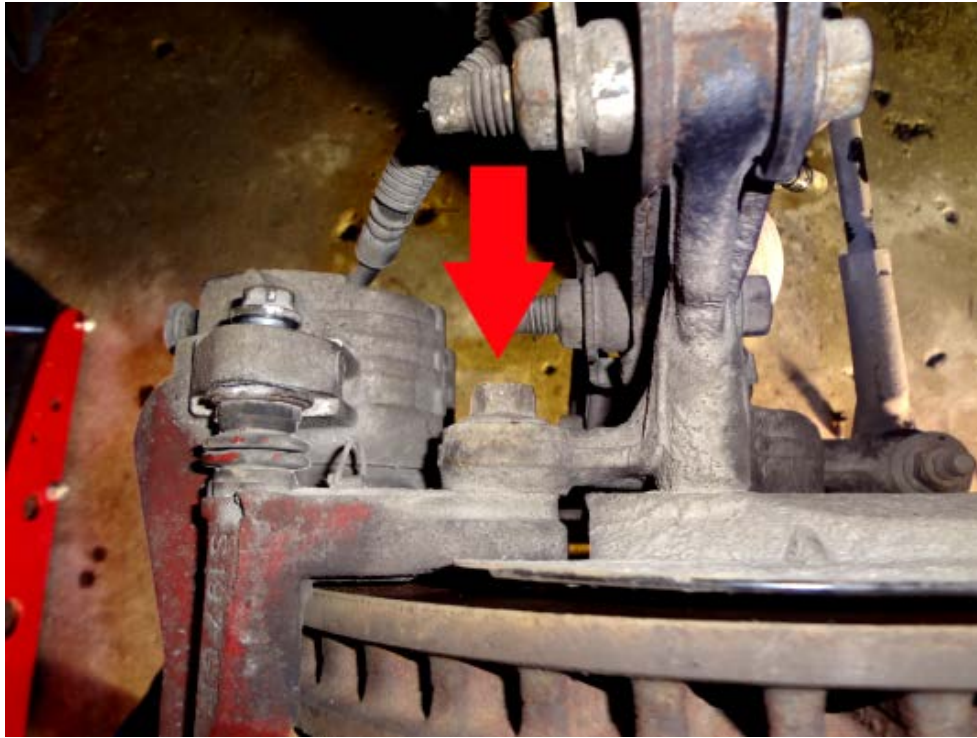
4. Unclip the wheel speed sensor clips from the brake line (may require a bit of effort).



5. Using a 13mm wrench, disconnect the hard brake line from the bracket (bolted to the frame). Brake fluid will leak out, so be prepared with a rag and/or a bucket to capture it. I didn't seal off the brake line, but you may wish to while you work. After removing the brake line, use a 10mm socket or wrench to remove the bolt fastening the bracket to the frame. Keep the bolt for re-use.



6. Using a 15mm socket or wrench, remove the bolts attaching the caliper. There are (2) bolts, one at the top and one at the bottom. If seized, spray with WD-40 or similar and let it sit for a bit.



7. Once the (2) bolts are removed, carefully remove the caliper assembly and brake line. More brake fluid will probably leak out at this stage, so have a rag handy.



8. Next, it's time to remove the old rotor. First, use a screw driver or pliers to remove the retaining clip off one of the wheel studs; there should be only one. Be cautious not to damage the threading on the wheel stud.



9. The rotor should now slide free. Pull it off carefully and set it aside.

10. Using a 12mm socket or wrench, remove the (3) bolts from the dust shield and remove the dust shield (see below). There is (1) bolt at the top and (2) at the bottom.



11. Now that you have removed everything, you should be looking at something like the picture below. Clean this off a bit so you have a smooth, clean surface to set the rotor against. Applying some anti-seize compound doesn't hurt either.



12. Now you're ready to start the installation! Take the new dust shield and install it using the (3) new bolts that came with your kit and a 12mm socket.



13. Install the new rotor. You may want to use one of the wheel lugs on the bottom stud to hold the rotor in place temporarily.
14. Take the new Brembo caliper (with pads) and slide it over the rotor. Pay attention to which caliper goes on the left and which goes on the right (there should be a sticker on them).
15. Fasten the new caliper assembly with (2) new provided bolts using a 15mm socket or wrench. The bolts screw in the same place you removed the old one in Step 6.



16. Get out the new screws for the brake line and associated washers. Make sure they stay free of dust and dirt.



17. Find the new stainless steel brake line (again, check the tag to make sure you have the one for the right location) and using (1) of the bolts and (2) copper washers from Step 16, install the brake line onto the caliper. One copper washer goes on each side of the brake line. Use a 14mm socket and do not over tighten.



18. Find the new bracket that attaches to the frame. It should look identical to the one you removed, just much cleaner and brand new. Using a 10mm socket or wrench, install the new bracket to the frame.



19. Clip the new brake line into the hole on the bracket and reattach the hard brake line from the vehicle to your new stainless steel line using a 13mm wrench. Do not over tighten.



20. Next, attach the bracket hanging off the middle of your new brake line to the strut using the 10mm bolt you previously set aside.

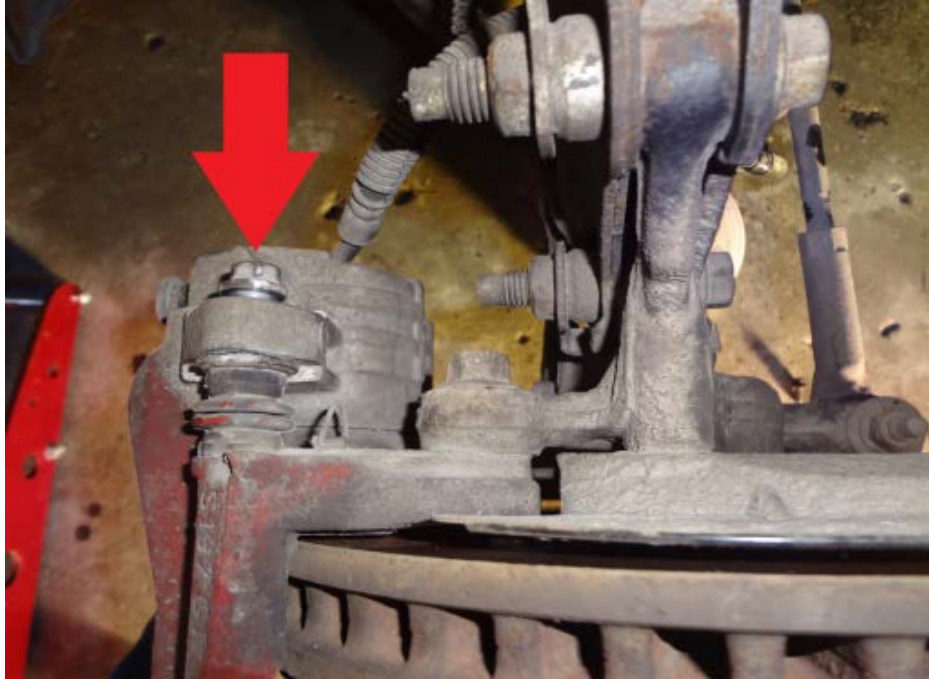


21. If necessary, use the included zip ties to attach the wheel speed sensor lines back to the brake line. Make sure there is enough room to allow movement when turning.

22. Repeat Steps 1-21 for the other front wheel.

23. Remove your rear wheels (if you haven't already).

24. Using a 13mm socket or wrench, remove the (2) bolts attaching the caliper (picture below shows the top bolt; there is an identical bolt on the bottom).



25. Slide the caliper out and remove the (2) existing brake pads. At this point, the brake line and parking brake cable are still attached, so ensure you rest it on something (don't let it hang suspended by the brake lines).

26. Remove the old brake pads. Using an emery cloth or rag, clean up the sliders where the brake pads rest. Apply some silicone brake lubricant to all sliders.



27. Before putting the new pads in, you'll need to compress/retract the piston. This requires a special tool which you'll either need to buy, borrow OR see if your local auto parts store will loan you. This is required on both rear brakes.

28. Before putting anything back together, make sure your rear rotors are still in good condition. You MAY wish to replace your rotors now too, but if they still have lots of life on them, just leave them.
29. Next, install your new pads and slide the caliper assembly back over the rotor.
30. Reinstall the (2) 10mm bolts on the back (one on the top, one on the bottom).
31. Now, it's time to replace the rear brake line. At the bottom of the rear caliper assembly, remove the bolt attaching the brake line to the caliper assembly. Brake fluid will spill out, so be prepared with a bucket or rag.
32. The rest of the replacement is identical to the process on the front: Steps 17-20. By the time you've done both lines on the front, you should be able to do it in your sleep.
33. Before reinstalling your wheels and testing out your brakes, read the [final notes](#) below.

FINAL NOTES (IMPORTANT):

- You're going to need to bleed your brakes before reinstalling your wheels. Since you're bleeding the brakes anyway, you should consider replacing your brake fluid at the same time. Bleed RR, LR, RF, LF.
- Note that unlike your stock front calipers, these have TWO bleeding screws on each side. One that you should see right in front of you on the top of the caliper and another on the back side. You'll need to bleed both of these. Start with the inside, then the outside.
- When reinstalling your wheel, do it CAREFULLY. You may find that there is not enough clearance (even if you have 18"+ rims) as the new calipers stick out almost an inch farther than the stock ones. If you find yourself in this situation, then you'll either need to get new wheels or invest in wheel spacers (like I had to). American Muscle sells a variety of wheel spacers that work well.



Installation Instructions written by AmericanMuscle customer Michael Touw 2.24.12