

NEWS SNIPPET

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LEXUS 2IS BRAKE UPGRADE

I have always wanted to upgrade my brake setup to a big brake kit. Having an 2011 2IS F-Sport, my desire set up is

BBK, IS250, IS350,
F-Sport, 2IS,
StopTech, Club
Lexus, Big Brake
Kit, Team RPM

the F-Sport brake upgrade. The cost of the front brake calipers and rotors usually runs around \$3,000. Although it's expensive, it is not quite as expensive of a Brembo Big Brake Kit, which can run \$5-7k for front/rear. Recently my teammate from Team RPM was involved in a front end collision and totaled her 2019 GS350 F-Sport. She agreed for me to remove her brakes for my upgrade. Several members from Club Lexus have mentioned about doing this upgrade, but I have not encounter anyone that actually did it. Since the rear knuckles and calipers changed in 2012, I did not upgrade the rear brakes/rotors. It was nerveing to switch out the brakes not knowing for sure if it would fit. But I'm happy to say that it does. Here's a write up to share with you guys.

PARTS NEEDED:

2013+ GS350 F-Sport calipers

2013+ GS350 F-Sport 2-pc 14-inch rotors

(GS350 dust shield will not mount as it has different mounting points)

TOOLS NEEDED:

Floor Jack

Jack Stand (4)

Wheel Chocks

Wrench: 10mm, 14mm, 15mm

Socket: 10mm socket, 14mm, 17mm

Ratchet

Breaker Bar

M8-1.25 bolt or 12mm head bolt

Brake cleaner

WD-40

Toyota DOT3 Brake Fluid (5 bottles)

Tim Steinbeck



Tim is a local photographer that frequent many Cars&Coffee events in NC. We had a chance to sit down and chat with him, discussing about his hobby, camera equipment, post production work and much more...

STEP 1: REMOVE WHEEL



Loosen lug nuts on the wheels but don't remove it completely.

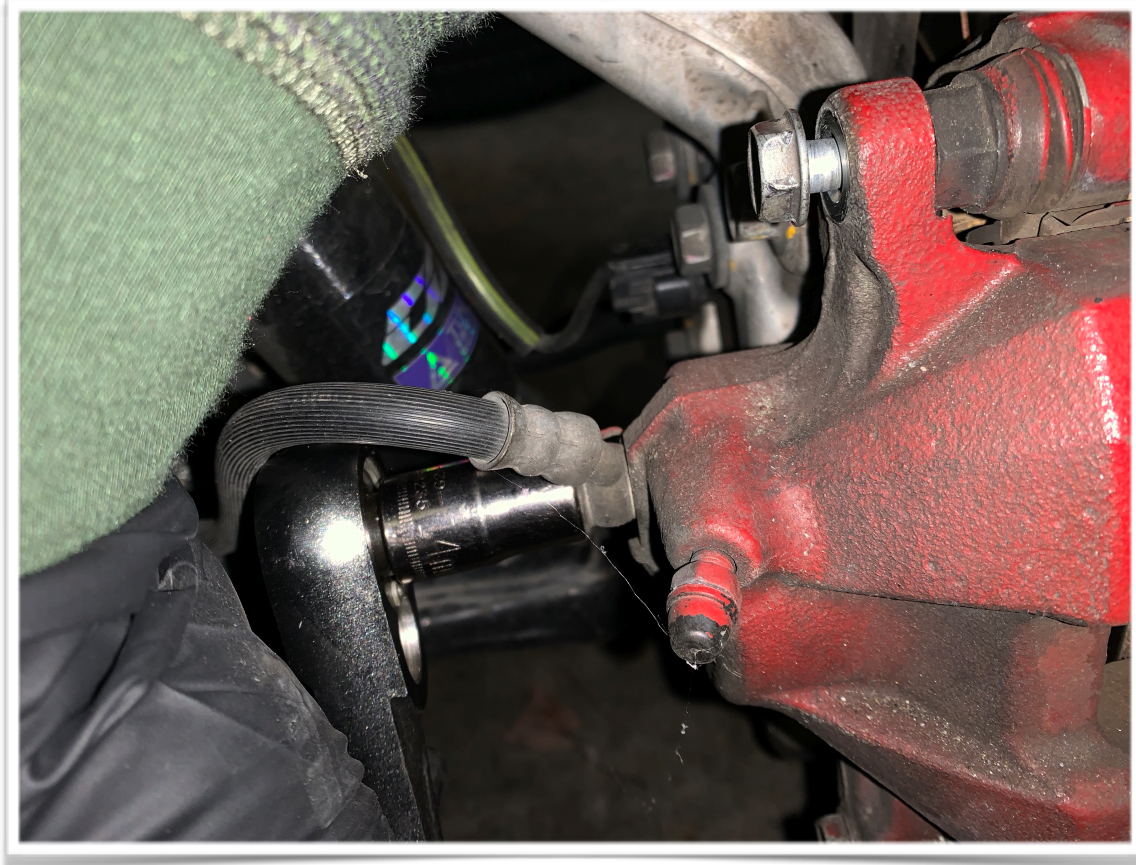
Jack the front using appropriate jack point and allow car to rest on jack stands.

Loosen lug nuts entirely to remove wheel. Be sure to have a wheel chocks in place to prevent your car from roll-back.



STEP 2: REMOVE BRAKE LINE AND CALIPER

spill. Use brake cleaner to aid with the cleanup of brake fluid.



Use 14mm socket to loosen banjo bolt and remove it from caliper. Be sure to have a catch bottle to catch brake fluid. Brake fluid is caustic and can eat up your paint or cement so make sure to wipe off any excess

There are 2 mounting bolts in the back of the caliper. Remove it using 17mm socket. At this time your caliper is completely off and the brake line is draining fluid into a bottle. Time to remove the rotor.



STEP 3: REMOVE ROTOR

Either try to pull the rotor off by hand or tap it with a hammer to get it loose. However, it is not uncommon for the brake rotor to seize to the flange, usually due to rust and corrosion on the inside hat of the rotor and the flange that prevents removal.

If it is stuck then use a M8-1.25 x30mm bolt and insert in the holes on the rotor in order to break it loose. What it does is it pushes the rotor

away from the hub. You should be able to see two holes close to the center of the hub.

It is important to make sure the bolt does thread in properly since some rotors have different thread pitch. Use a 13mm socket for your ratchet to tighten it down.



STEP 4: INSTALL GS350 ROTORS AND CALIPERS

The GS350 F-Sport rotors are 14", 3" larger than the original rotor, therefore you will have to make sure your wheels can accommodate the upgrade.



Torque the bolts to spec. Front caliper to bracket is 25ft-lbs. Front bracket to steering knuckle is 58ft-lbs. If you were to do the rear caliper, then rear caliper



Reattach the caliper using the same mounting bolts and reattach the banjo bolt from the brake line to the caliper reservoir.



slider bolt to bracket is 18ft-lbs and rear bracket to rear knuckle is 40ft-lbs. Test fit your wheel. In my case, the caliper did not clear the wheel, therefore I made some measurement



in order to incorporate spacer for clearance. be sure to check if your wheel can accommodate spacer. You can determine that by inspecting the

back of the wheel hub for the presence of hub space. If not you may have to order shorter studs or grind down your studs.



STEP 5: BLEED THE BRAKE AND REPLACE BRAKE FLUID

Bleed out the old brake fluid and replace it with TOYOTA DOT3 fluid. Approximately 3-5 bottles.

You will need a 3/16 inner diameter PVC tubing and a bottle. Drill the cap of the bottle and fit the hose through, make sure it's touching the bottom of the bottle.

Jack car up on all 4 jacks and remove all 4 wheels. You will bleed each line starting from the one farthest to the master cylinder (Driver Rear, Passenger Rear, Driver Front, Passenger Front) in that order. First, use a turkey baster and extract the old brake fluid from the reservoir and deposit it into your plastic bottle. This will prevent air from entering your tubing while you are doing the



bleeding process. It is helpful to have someone to help pump the



brake while you use a 8mm wrench

to open the bleeder valve allowing fluid and air to flow into your bottle.

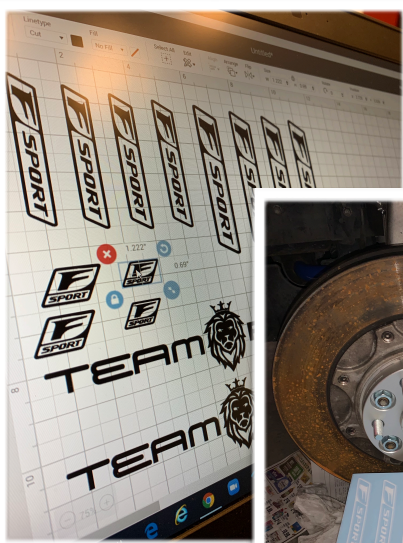
While the valve is in the close position, have your partner pump the brake 3-5 times, then hold the brake while depressed. You open the bleeder and watch the fluid flow. Close the bleeder when fluid stop flowing. Let your partner know to when to release the pedal. Repeat this process until all of the bubbles are purged. Be sure to stop periodically to top of the brake fluid off to prevent it from running low. Not doing so can introduce air back into the system and you will have to repeat the entire process again.



Finally, this is a picture of the F-Sport Brake setup that I saved on my laptop a while back. I can't believe I now have something comparable on

my car.

Shoutout to my brother



who worked on custom decals for the calipers. -Bowie

