

Converting Rear Drum-style Brakes to Discs on an EA82 Subaru

Written and Compiled by [Matt Alexander](#)

Photos Courtesy of [TheSubaruJunkie](#)

So, there's a wealth of information on the internet about different modifications that you can do to your late '80s EA82-series Subaru. I've done many of them, and think this is one of the most basic, and best. So I thought I would compile all the information out there about this modification into one, easy-to-use and -read guide to get you a good start into the world of auto modification

OK, So you've decided that the brakes on your EA82 are just too weak. You want something stronger, more reliable, and easier to control, not to mention easier to work on. Well, any EA82 turbo subaru will have rear disc brakes, and the conversion is easy. You may have to pull the parts yourself from a Junkyard (if so, read this, maybe even print it, and bring it with you), so I'm going to start with a list of all the tools you might need to remove the parts, aswell as a picture of all the parts.

sockets

- 14mm
- 36mm
- 19mm (or tire wrench)
- short 3/8" socket extension
- 3/8" drive ratchet
- 1/2" drive ratchet

wrenches

- 14mm
- 10mm

other

- Hammer (anything from 8oz, to 2lb will work)
- Pliers (needlenose will work best)
- Flat Head Screwdriver
- Breaker Bar (or just a pipe for leverage)
- Jack and Jack Stand

Now for the parts you'll need to collect

- Backing Plate
- Rotor/Hub (Remember, this piece must match your drivetrain. i.e. you're is 4WD, donor car must be 4WD)
- Caliper
- As much brake line as can be easily removed (at least the rubber piece, and the fitting on the end)



Let's get started!

- 1. With the car still on the ground, remove the cotter pin that slips through the nut on the axle nut. Your hammer and needlenose plyers should make easy work of this.**
- 2. Use your 36mm socket and 1/2" drive ratchet/breaker bar to break loose the axle nut (don't remove it, but take the initial tension of it, you'll take it the rest of the way off after you get the car up in the air)**
- 3. Break the Lug nuts loose (again, don't remove them...they're holding on the wheel!)**
- 4. Jack up the rear of the car (from the rear diff), and place it securely on a jack stand (if one at a time, otherwise just use 2)**
- 5. Remove the axle nut, and tapered washer behind it (if it's being difficult, put your screwdriver in the seam, and tap it with your hammer, it should pop right out)**

you should see something like this:



6. now you can pull off the brake drum (you may need to use your hammer, and/or screwdriver to pry/force it off)

Now it should look like this:



7. use your 10mm wrench to remove the brake line from the back of the brake cylinder (you can try to plug it, or just pull it up, and put something under it to catch the spillage, it won't be much)
8. Now you can see the 3 14mm bolt heads behind the brake shoes (you can see 2 of them in the picture above). These hold the rest of the brake to the suspension arm. Remove them, you'll probably need your socket extension here(They're probably pretty rusted on, don't be afraid to put some elbow grease into it)

- 9. Pull the brake assembly off the suspension arm, don't be afraid to beat it with your hammer....this piece isn't worth anything....feel free to bend and mangle it! as long as you have the three bolts out**

once you get it off you'll see something like this:



- 10. Now, clean up the trailing arm where the new backing plate will slip over it (this just makes it easier to put on....WD-40 and a wire-brush are plenty)**
- 11. Slip your new backing plate over the trailing arm, lining up the three bolt holes, keeping in mind the bracket for the caliper will be angled up and back. If it's not, you've got the sides mixed up.**
- 12. Thread the three bolts back into the holes, and tighten them down.**

like this:



- 13. inspect the splines on the axle stub, and hub. They should be square on the tops, if they're**

pointed, they're worn, and will give you problems...replace the part

- 14. Slip the hub over the splines**
- 15. put the cone washer (narrow side in) over the stub, followed by the flat washer, and Nut (don't worry about getting it tight, you can do that after the car's on the ground)**

you should be here:



- 16. Then slip your brake caliper over the rotor, with the bracket going between the backing plate, and rotor**
- 17. put the 2 14mm bolts through the backing plate, into the caliper bracket (you did save those bolts didn't you?), and tighten them**
- 18. Now use your 10mm wrench and pliers to tighten the rubber brake line on the caliper to the steel line on the car.**
- 19. Put the wheel on, thread the lug nuts on**
- 20. Remove the Jack Stands, and lower the car**
- 21. Tighten the lug nuts, and the Axle nut, and Replace the cotter pin.**

Information Compiled from various posts on the [Ultimate Subaru Message Board](#)

written for CS1011