

FRONT BRAKE ASSEMBLY INSTRUCTIONS

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Step 1. Removing and Reinstalling the Pedal Assembly

- a. Unbolt brake pedal assembly from car.
- b. Remove master cylinder from pedal plate.
- c. Unscrew clevis from steel shaft (attached to the pedal).
- d. You will have to move your pedal pivot point to the inside of the pedal plate. **(Will require you to unscrew the pedal and reverse it so it screws in from other side)**
- e. Screw the bias bar on to the pedal's steel shaft, so that the clevis covers all the threads on the steel shaft.
- f. You will want to keep the knob of the bias bar to the inside of the chassis.
- g. Install the pedal assembly back to the position you had it in without mounting the master cylinders to the pedal plate.

Step 2. Installing the Master Cylinders

- a. To the outside of the pedal plate mount your original master cylinder and to the inside of the pedal plate mount the new master cylinder using the bolts and nuts provided. (Tighten bolts)
- b. Hook the remaining ends of the bias bar to the master cylinders. Make sure the bars are to the outside of the master cylinder connection points. Use hardware provided. Both rubber washers may not be needed. **ADJUST THE BIAS AFTER FULL INSTALLATION OF THE SYSTEM.**

Step 3. Installing the Calipers

- a. Remove anything that remains on spindle.
- b. Slide blue caliper onto spindle with pad facing out and so that the 2 bolts sticking out the back fit around your spindle. These bolt must remain in the caliper at all times to keep the caliper from rotating. Your brake line fitting should be to the rear of the car.
- c. Slide on the .005 shims on next (the amount of shims needed will be determined by how much gap you want between the pad and the rotor. Brake manufacturer recommends between .010 to .030 gap (on all brakes)).
- d. Slide on the bronze bushing.
- e. Slide on the modified hubs with the rotor mounted on them.
- f. Screw spindle nut on, tighten down (Now that you have modified hubs they have a spacer between the bearings that allow you to tighten more than just finger tight. (This assists holding the caliper in place)

Step 4. Installing the Brake Lines

- a. Screw the 24" line into bottom of the new master cylinder. (Tighten)
- b. Screw the 36" line into the new master cylinder. (Tighten)
- c. Drill a hole 24" back from the front of the chassis and 4 3/8" up from the bottom of the chassis. Make hole big enough so that the fitting can go through the hole. (We recommend a grommet to reduce the amount of friction on the brake lines.)
- d. Route lines so they are out of the way and through the holes you drilled.
- e. Screw the lines into the calipers.

Step 5. Bleeding and Setup

- a. Bleed brakes to get all the air out of the lines.
- b. Using the bias adjuster knob, adjust both the front and rear brakes to your racing satisfaction. Note: Some racers like to adjust the front brake calipers to close a little before the rear brake calipers. However, they're your brakes – adjust them for your racing requirements.

THANK YOU FOR PURCHASING ULTIMATE MOTORSPORTS FRONT BRAKE SYSTEM!