

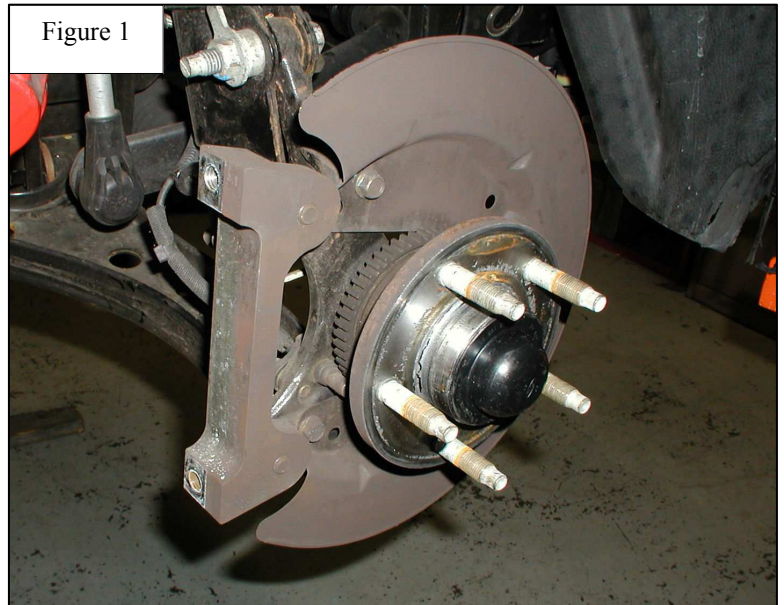
Brake Pros

Performance Braking Systems

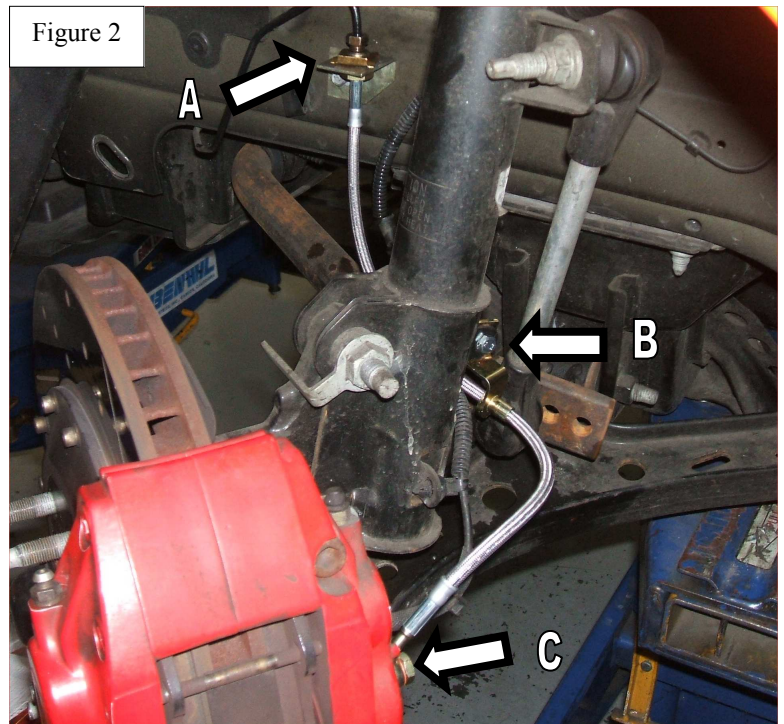
Brake Pros/AP Racing Performance Brake System Instructions for Kit # AP4100 '05+ Mustang

Please read the instructions completely prior to installation.

1. Raise front of vehicle and support with jack stands. (Refer to the owner's manual for proper jack points.) Be sure to block the rear wheels to prevent the vehicle from rolling.
2. Remove wheels.
3. Remove the mounting bolts for the stock caliper and set caliper out of the way. Do not let it hang by the brake line.
4. Remove the stock rotor and dust shield.
5. Test fit caliper bracket (see step 6). Casting variations may require filing or grinding of the casting ridge on the outside edge of the spindle ears (usually the top hole only). This is so the caliper bracket will sit flush to the spindle. Be sure to cover the ABS sensor to protect it from the metal shavings.



6. Install the caliper bracket ("L" pointing to the inboard side) to the outboard side of the spindle using the caliper mounting holes with the OEM M12 bolts. Torque to 55 ft-lbs. (Fig.1)
7. Install the new rotor.
8. Install the AP caliper onto the caliper bracket and over the rotor. Brake line mount should be to the inside and bleeder valve to the top. Use the M12 SHCS, washers and loctite to mount to the bracket. Torque to 35 ft-lbs.
9. Disconnect the end fitting of the stock brake line and remove the brake line mounting bracket. Attach the new mounting bracket using the factory bolt and align in the same direction of the factory bracket, attach the adapter end to the bracket using the new clips. See (Fig.2)(A). Use the provided M6 bolt, nut, and washers to attach the locating bracket on the brake line onto the vehicle, see (Fig.2)(B). The banjo fitting will need to be clocked upwards as shown, use the crush washers and banjo bolt to install it onto the caliper, see (Fig.2)(C). Be sure not to allow the master cylinder to drain completely. Turn the wheels to check for any binding or rubbing. (Fig.2)
10. Repeat the procedure on the other side.



11. Bleed the brakes. Check brake line fittings for leaks. Retighten if necessary.
12. Recheck installation.
13. Install wheels. **Important!** Hand tighten the lug nuts, then progressively in a crisscross pattern torque to 78-85 lbs/ft. Check for wheel clearance to the caliper by rotating the wheel by hand slowly. If a wheel spacer is being used to provide clearance to the caliper, be sure to use longer wheel stud bolts to properly secure the wheel. Check the brake lines to make sure they are indexed correctly so do not rub on the wheel under full steering lock both directions.
14. Road Test the car follow the bed in procedure.

* The Brake Pros/AP Racing Performance Brake System is designed for aggressive street performance use. Please note the following comments:

A change in pad material will affect the braking abilities, the rotor wear of this system and possibly affect the ABS system. The pad material chosen is the best for its' intended use. For pure race use there are other pad materials available.

Brake Pros/AP RACING BRAKE UPGRADE BREAK- IN PROCEDURE

Bedding of the new brake disc (stress relieving the cast iron disc after it has been bolted to the mounting bell) is of extreme importance if premature warping is to be avoided. This important but often overlooked procedure can keep the brakes from being used to their full potential. The Brake Pros/AP Racing discs are produced from the same castings as the full race discs. When used in the controlled arena of motorsports it is easy to instruct the driver to gradually bring the disc up to working temperature with some moderate braking over a small amount of measured laps, progressively increasing his braking effort until an engineer accesses the disc visually or by temperature readings.

Road car installations, the process needs to be as follows.

For the first 10 miles, light braking from 50 to 60 mph down to 30mph if possible in blocks of five. Do not attempt any high speed stops down to zero at this point, as only the outside face of the disc will heat up with the inside mass remaining cool along with the mounting area. For the next 100 miles increase the braking pressures similar to stopping in traffic, again avoiding if possible full stops from 70+ mph. By now, the area around the mounting bolts should be a light blue temper color. This is a good indication that the correct heat soak has been achieved. For the next 100 miles gradually increase the braking effort, only after this can full power stops be used.

Do not leave your foot on the brake when parked after a high speed run. If you do the hot spot created by the pad can distort the disc in that localized area causing a high spot resulting in vibration under braking.

If used at a racetrack the following points must be adhered to as to not warp the disc.

1. At the start of a session use a minimum of one warming up lap for the brakes i.e. gradually increase the effort at each corner and do not drag the brakes under power as in left foot braking.
2. Use at least one cooling down lap at the end of the session and if possible stay off the brakes.
3. Do not leave your foot on the brake when parked in the paddock after a session. If you do the hot spot created by, the pad can distort the disc in that localized area causing a high spot resulting in vibration under braking.

On the majority of road car installations, race circuit use can be more exacting on the brake system than a fully prepared racecar due to the following. None or minimal cooling, higher chassis weights longer braking distances due to driving technique or tire grip. Therefore, it is very important to check your brake system thoroughly before and after such use. Bear in mind race cars on average cover less than 50 laps of a circuit before being serviced.

PLEASE BE AWARE THAT DISCS USED ON RACETRACKS WILL BE SUBJECT TO HIGHER TEMPERATURES AND WEAR RATES THAN ACHIEVED WITH NORMAL ROAD USE. THIS CAN HAVE AN EFFECT ON THE LIFE OF THE DISC, ESPECIALLY IF HIGH TORQUE COMPETITION BRAKE PADS ARE USED TO REPLACE THE ORIGINAL FAST ROAD BRAKE PADS SUPPLIED WITH THE KIT.

DISC ALONG WITH PADS ARE CONSUMABLE ITEMS.