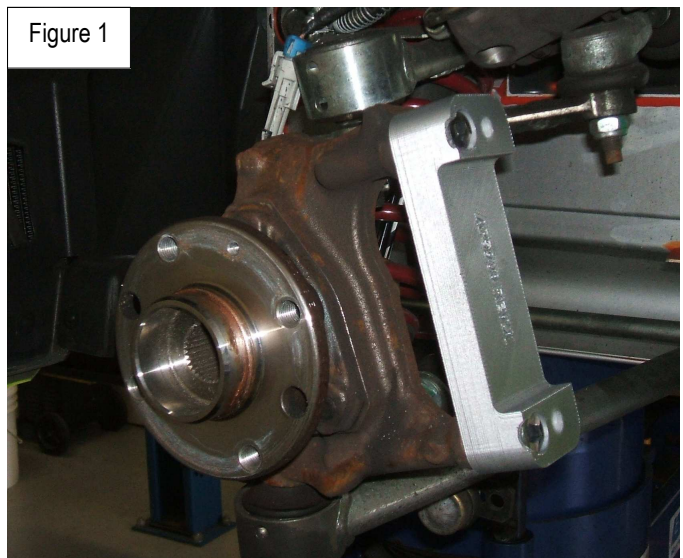


Brake Pros/AP Racing Performance Brake System Installation instructions for kit # AP5900/AP5920 LOTUS ELISE

Please read the instructions and enclosed installation notes completely prior to installation.

1. Raise the front of the vehicle and support with jack stands. (Refer to the owners' manual for proper jack points.) Be sure to block the rear wheels to prevent vehicle from rolling.
2. Remove the front wheels.
3. Remove the mounting bolts for the stock caliper and hang caliper out of the way. Do not let it hang by the brake line. Use a wire or zip-tie to hold it up. Unscrew the retaining bolt to remove your stock rotor.
4. Remove rubber OEM brake line and caliper, cap hard-line with vacuum cap to help prevent draining of brake fluid from the reservoir.
5. Install the new caliper bracket, using the M10 x 35mm bolts, directly on top of the mounting points. Use blue Loctite and torque to **45 ft-lbs.**
6. Install new rotors.
7. Place caliper over rotor and secure to the caliper bracket with the M10 x 40mm bolts and washers. Use red Loctite and torque to **40 ft-lbs.**
8. Attach the new stainless steel brake lines to the caliper with a banjo bolt and two crush washers. Route through the brake line bracket and attach to the OE hard brake line. Torque to **10 ft-lbs.** Turn steering lock to lock and verify routing of brake line and ABS sensor line does not interfere with anything.
9. Refill the brake master cylinder and bleed the brakes.
10. Check the rotor and caliper for any obstructions. Recheck installation.
11. Install wheels. **Important!** Hand tighten the lug nuts, then progressively in a crisscross pattern torque to **90 ft-lbs (or to the torque recommended by your wheel manufacturer)**. 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 they do not rub on the wheel under full steering lock both directions.



12. Road Test the car and follow the bed in procedure.

All cast iron brake discs need to be bedded-in to ensure heat stabilization and improve resistance to cracking. Cracks or even disc failure can occur during the first few heavy stops if careful bedding is not carried out. AP Racing recommends the following procedure...

ROAD CAR DISC BRAKE BEDDING IN PROCEDURE

Bedding the disc from new or stress relieving the cast iron disc after it has been is of paramount importance if premature warping is to be avoided after the brakes are used to their full potential.

AP Racing discs are produced from the same castings as the full race discs, but when used in the controlled area of motor sport it is easy to instruct a 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 assess the disc visually or by temperature readings.

For road car installations the following process needs to be as follows: -

For the first 10 miles, light braking from 50/60 mph down to 30 mph if possible in blocks of 5.

Do not attempt any high-speed stops down to zero at this point, as only the faces will heat up with the 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 above 70 mph. For the next 100 miles gradually increase the braking effort after this full power stops can be used. This process **must** be completed before any race circuit use. Failure to properly and adequately **HEAT CYCLE** the discs can lead to premature warping, wear, and failure.

If used at a Track day, the following points must be adhered to so as not to warp the disc.

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.

Use at least one cooling down lap at the end of the session and if possible stay off the brakes.

Do **not** leave your foot on the brake when parked in the paddock after a track 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 car installations, race circuit use can be more exacting on the brake system than a fully prepared race car due to the following...

None or minimal cooling, increased chassis weight, longer braking distances due to driving technique or tire grip. Therefore it is very important to check your brake system thoroughly 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 PADS ARE USED TO REPLACE THE ORIGINAL FAST ROAD TYPES SUPPLIED WITH THE KIT.

DISCS ALONG WITH PADS ARE CONSUMABLE ITEMS.