



Fitting Instructions for Brake Conversion - Austin Healey 3000 to BJ8 (Standard brake disc)

IMPORTANT - When working under a car ensure it is supported in a safe and secure manner

Your new uprated brake calipers will transform the braking of your classic car. You will benefit from improved stopping power and a better, more modern pedal feel. Please remember to take time to accustom yourself with the performance of your new brakes once they are fitted.

Please ensure that you follow these instructions carefully.

Before you start...

This installation involves working on your vehicle's hydraulic brake system and brake discs. If you are not competent to perform these operations the installation should be entrusted to someone who is.

Brake fluid can badly affect paint - clean up any splashes and spills immediately.

Following the installation of your new brake calipers you will need to bleed the brakes to remove any air that is in the system. Ensure you have an adequate supply of the correct brake fluid and a suitable brake bleeding device to perform this.

When removing your front hubs to install the new brake discs it is good practice to fit new split pins and renew the grease. Ensure you have suitable supplies of both.

Check you have all the following items in your kit:

- Two front calipers complete with pad-retaining pins (x4), retaining pin spring clips (x4) and anti-rattle springs (x4)
- 16x0.5mm shims
- One set of brake pads
- Two front braided brake hoses with lock nuts (if required)
- M10 banjo bolts (x2) and copper washers (x4)

Installation

Raise the front of the vehicle and support it securely in a manner that permits the suspension to extend to its full travel and remove the front wheels

To avoid excessive fluid loss you should clamp the flexible brake pipe from the brake reservoir used for both your front and rear brakes. Use a suitable clamp and take care not to damage the brake hose.

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Erhalten, was bewegt.

Limora Zentrallager

Industriepark Nord 21
D - 53567 Buchholz
Tel: +49 (0) 26 83 - 97 99 0
E-Mail: Limora@Limora.com
Internet: www.Limora.com

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Consult your workshop manual and follow the procedure for the removal of the following items:

- Front brake hoses
- Rigid brake lines and associated brackets on the front suspension upright if relevant
- Front brake calipers (Make a note of the number / location of any shims used on the original caliper installation and retain the shims for use later)
- Brake back plates / dust shields if fitted - These must be trimmed around the new caliper if you intend to refit them or they can be left off the vehicle

Thoroughly clean the mounting faces and threads of the caliper mounting lugs

Clean and inspect the caliper mounting bolts. If these are damaged or corroded they should be replaced.

Assemble the new caliper and pads as follows:

Mount the new caliper using the upper mounting bolt (finger tight) installing the estimated number of shims indicated below:

- Standard disc - 3 to 4 shims per bolt

Please note that the calipers are handed so ensure you have the correct one - the bleed nipples need to be at the top. Fit the bottom caliper mounting bolt and shims (finger tight)

- Follow the instructions included with the brake pads for guidance on how to apply any shims and piston lubricant (requirements will vary according to the pads supplied)
- Fit the anti-rattle springs to the pads. See Fig 1.
- Insert the pads into the caliper and place the anti-rattle spring clips over the top of the pads in such a way that their arms will be held down by the pad retaining pins. See Fig 2.
- Insert the pad retaining pins through the caliper body and pads.
- If the inboard pad will not insert sufficiently to allow the pad pins to pass through the mounting holes a small amount of material (approx. 1mm) can be ground / filed off the bottom corners of the inboard pads. This will not affect the performance of the brakes and will relieve any interference between the bottom of the pad and the caliper mounting lug on the upright which can occur due to uneven forging marks on the mounting lugs



Fig 1.

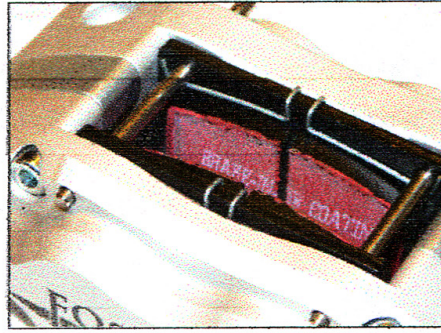


Fig 2.

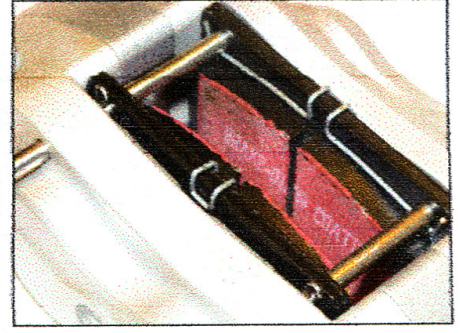


Fig 3.

- Locate the pad retaining pins with the small "R" clips. These pass through the small hole, drilled in the pad retaining pins and should be between the back of the inboard pad and the caliper body. See Fig 3.

Note - Check the alignment of the caliper with the disc. The clearance between the caliper body and the disc should be equal on either side. Use the shims provided between the caliper and upright to centralise the caliper on the brake disc. Inserting shims will increase the clearance on the inside of the disc and reduce the clearance on the outside.

Once the caliper is positioned to your satisfaction ensure that all the mounting bolts are tightened to the manufacturer's recommended torque setting and not less than 88 Nm (65 lbs ft). Reinstall the mounting bolt lock wire.

Attach the braided brake hose to the caliper with the banjo bolt and washers provided. Make sure you have a copper washer on either side of the banjo fitting. Tighten the banjo bolt - finger tight only to allow for minor repositioning.

Insert the bulkhead fitting end of the braided brake hose through the mounting bracket on the body of the vehicle. Fit the lock nut and washer and tighten finger tight to allow for minor repositioning.

Adjust the routing of the braided brake hose to ensure it will not rub on the brake disc or foul / catch on the suspension and steering. Once you are happy that the brake hose is in the correct location tighten the banjo fitting and bulkhead fitting lock nut to hold the brake hose securely. Install the "P" clips to hold the brake hose if required.

Clean and inspect the rigid brake lines on the vehicle. If these are corroded or damaged they should be replaced. Reconnect the rigid brake line to the new braided brake hose.

Repeat the procedure for the other brake caliper.

Fit the replacement rear brake hose if applicable - making sure that the rigid brake lines are in good serviceable order

Check all torque settings and ensure that all the hydraulic pipe connections are tight.

Bleed the brakes and check for fluid leaks

Remove the clamps from the brake fluid reservoir pipes and top up the reservoir with a suitable brake fluid.

Bleed each caliper starting with inner bleed nipple followed by the outer bleed nipple. Remember to top up the brake fluid reservoir to ensure air is not drawn into the system.

Bleed the rear brakes.

Continue bleeding the brakes until the brake fluid exiting the system is free from air. Now check for fluid leaks around the connections on the caliper and the rigid brake line and resolve as required.

Replace the front wheels and check for clearance by gently rotating the wheel

Lower the car to the ground. Tighten the wheel nuts / spinners as required

Top up the brake fluid reservoir and replace the cap securely.

Operating your Upgraded Brake Calipers

Your upgraded brake calipers require no special attention but like any new installation, the brakes pads should be allowed to bed in.

Acquaint yourself with the new brakes and drive appropriately.