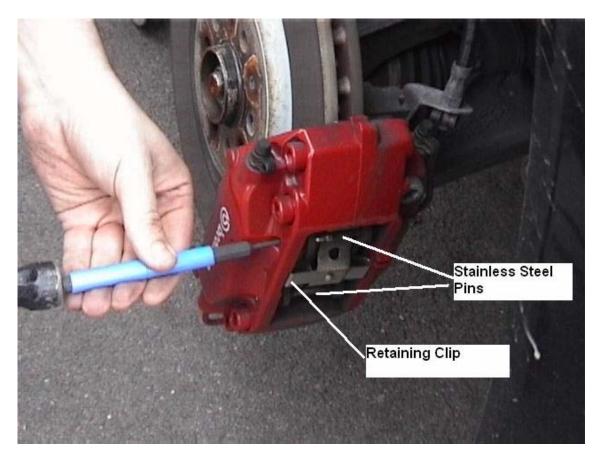
Part One - Brake Disk installation

- 1.LCR wheels have colour coded wheel nut covers, or they should have, if not get back to your dealers they have forgotten them. There should be a plastic set of tweezers in the glove box or in the boot with the spare wheel to aid removal. Don't use a screwdriver the finish on the alloys is very, very soft (you have been warned). Once removed Loosen front wheel nuts while car is on ground.
- 2. Jack up the car ideally use a trolley jack rather than the hand jack from the boot.
- 3.Once the car is in the air remove the wheel nuts and remove the wheel. If you used the hand jack from the boot I would lay the removed wheel under the side sill of the car. The hand jack should be fine but it the car does fall it may help save you from injury.
- 4. Another reason for suggesting the trolley jack is that the side skirts have covers which need to be removed if you use the hand jack, these are sometimes difficult to clip back in.



5.Starting with the brake pads first (they need to be removed for the disk replacement anyway) locate the two stainless steel pins in the Picture below. Now make a mental note before you start of how much of the pin is visible at the face of the calliper. The two pins run through the calliper (front to back i.e, from the face of the calliper back towards the engine) and need to be driven out with a punch. Be careful not to chip the paint on the face of the calliper. The pins should come out fairly easily.



6.Make sure you do the top pin first and do it slowly, the retaining clip is effectively a spring retained by the pins. You will need to hold the retaining clip while you remove the pin from the rear of the calliper.

7.Once the top pin is removed the retaining clip will be loose and can be pulled out, follow the same procedure and drive out the bottom pin.



- 8. Keep both the pins and the retaining clip safe as you will need them later.
- 9. Now you can slide the pads out the front of the calliper as the picture below, you may need to encourage them with some pliers or similar (Two other punches seemed to work a treat as per the picture).



- 10.On one particular LCR the pads were very difficult to remove due to the disks having heavy scoring and a big lip on the edge, if the above fails and you cannot remove the pads then try the following but be very gentle (you have been warned). Using a standard screwdriver, put the blade between the pad and the face of the disk and twist the screwdriver gently (you are effectively pushing back the brake pistons back so be gentle, take your time, and don't score the disks either). Seriously, take a bit of time and care here.
- 11. The near side (only) pads have a wear indicator which needs to be unclipped.
- 12. Clean the calliper and remove all the muck and rubbish, old brake dust etc
- 13. The new pads will be a lot thicker so you need to push back the pistons into the calliper, see picture below, my tip is to use one of the old pads and re-insert into the calliper, then using a standard screwdriver, put the blade between the pad and the face of the disk and twist the screwdriver gently. DO NOT rush, do this gently the pistons and the seals are delicate, do not mark the disks either. Rushing this part of the process can damage you brakes so be gentle and you will be fine. Besides rushing it will just push the other piston out and you make no progress.
- 14. Repeat for all four pistons, two in each side of each calliper
- 15. If you are replacing the Disks as well skip to the Disk Guide (below) at this point



16. Apply copper grease to the back of the pad ONLY, do one at a time and put plenty on. I didn't put quite enough on in the picture below and they squeak so a bit more than this.



17. Slide the pads in and line up the holes



18.Slide the bottom of the two stainless pins in from the back to the front (reverse of before) as picture below. The pin goes in the back hole of the calliper, through both holes in the pads and through the front hole in the calliper. If you can't push it through all the way with your hands use the drive punch and a little tap with the hammer



19.Remember the retaining clip you saved earlier, put in back in behind the bottom stainless steel pin, make sure the clip in the right way up. Then insert the top pin. It's a bit awkward and you need three hands. See picture below (without three hands) sorry it's a bit fuzzy but you should get the right idea. When you have finished use the drive punch and hammer and tap the pins home. Remember I said make a mental note before you start of how much of the pin is visible at the face of the calliper, this is how far the pins need to be driven back in using your punch and hammer.

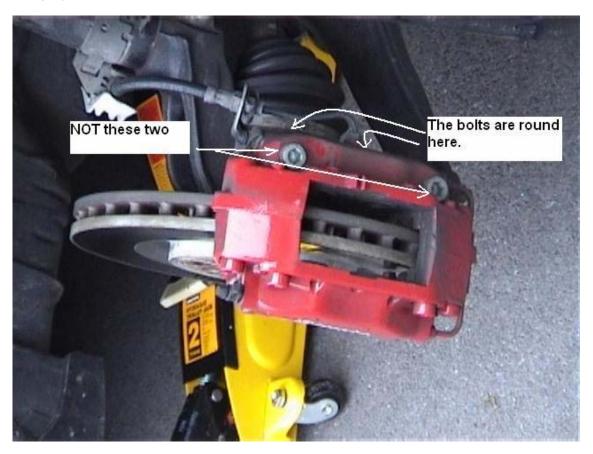


- 20. Plug in the wear indicator if applicable, and have a recheck everything is secure / looks right.
- 21. Refit the wheel and hand tighten the bolts only, lower the car to the ground and then do the nuts up tight.
- 22. Repeat for other side of the car.
- 23. When you have done both sides get into the car and start the engine, gently pump the brake pedal, it will sink to the floor and you will panic at first but it will firm up after a few pumps.
- 24.Go drive the car and be gentle, follow the brake manufacturers instructions for new pads and bed them in properly.
- 25. Final tip, if you removed the jack point cover from the sill, it clips in at the top and use the heal of your hand to hit upwards into the underside of the sill. It should snap back in. They are a b1tch to do sometimes.

Part Two -Brake Disk installation

1. First you need to remove the brake pads and there is a thorough guide with photographs on this, you need to follow that guide up to number #15 before following this guide

2. The calliper needs to be removed out of the way before the disk is removed, it is secured in place with two bolts which are 18 mm on the back of the calliper. Note, not the grey hex bolts on the side



- 3. These bolts are tight as a nuns bits and you will need a squirt of WD40, a spanner that fits perfectly and a bar for leverage. There are two bolts and as I say they will be tight!
- 4.Once removed give the calliper a tug away from the brackets they are mounted on, they should come free easily. The question is what to do with them?, don't let them dangle on the brake hose, tie them up with cable ties or support in some other way.
- 5. The disk is secured to the car with a single screw, no I'm not kidding, it's the wheel that keeps the disk on See Picture below. Loosen the screw, remove and save, the disk then simply pulls off.



6. While you have the disk off you may want to clean up the area, use a wire brush if necessary and then wipe down with a cloth to remove the bits of brake dust and any rust etc.

7.Offer the new disk up in place and make a mental note of how it fits on, then remove and apply copper grease to the new disk or the contact areas. Bit of overkill and overspray on this picture but you get the idea.



8. Put the new disk in place and put in the retaining screw

- 9. New disks contain a protective layer to stop them rusting in transit, this needs to be removed. You will need to use something like white spirit/methulated spirit etc on a cloth and thoroughly clean the front and rear of the disk. Make sure this is a thorough job.
- 10.Next job is to re-fix the calliper, swing the calliper back into position on the disk and relocate the two bolts previously removed. The bolts need to be tightened and although there is probably a torque wrench setting I am unaware of what this might be, so my advise is pretty bloody tight.
- 11. Then continue with the brake pad fitting (or refitting of old ones if applicable), following the brake pad fitting guide from number #16 onwards.
- 12. Remember to check everything is tight! And remember to run the pads and disks in as per manufacturers recommendations.

Happy motoring and smile.....you just saved about £80-£120 in labour costs.

Esta claro ¿no? 😡