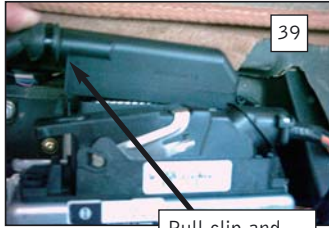


Two Self Tapping Screws



Pull clip and unplug



Spring clips must be pushed in to release switch.

38. Under the left hand seat is the air suspension ECU, this is accessed by removing the four clips from the trim and undoing the two self tappers that hold the black cover.
39. The air suspension ECU is the lowest ECU. This should now be unplugged to prevent any new fault codes registering to the ECU if it was ever to be reactivated.
40. The LH seat trim can now be refitted
41. It is necessary to remove the plug for the levelling switch located in the middle of the dash. The switch can be removed without disturbing the dash but can be a tedious procedure. Two thin metal blades are required to push up the springs, while the switch is being pulled out.
42. Disconnect the plug from the rear of the switch and refit the switch.
43. Reconnect the battery.
44. When the ignition is switched on the message display will say EAS manual.
45. The windows and sunroof will need to be reset this is done by cycling each window in time, i.e. open the fully the window and close it fully, the message display will say XXXX SET.
46. The keys may need to be resynchronised
47. The installation is now complete, Check all systems are working correctly, and then refit the RH seat trim. **If any electrical faults appear on the message display this is most probably from the multiplug connections. Disconnect the multiplugs and ensure all the pins are in a satisfactory condition. Please ensure that the multiplug has been connected to the correct part of the BECM.**

WARNING/DISCLAIMER

Fitting of this kit may alter the on/off road handling characteristics of the vehicle. Please note there is no longer any headlight levelling, and headlights may need to be readjusted. Also before fitting ensure that it does not contravene any legislation in your state or country.



HEAD OFFICE:

Bearmach Limited, Bearmach House,
Unit 8, Pantglas Industrial Estate, Bedwas,
Caerphilly, CF83 8GE, South Wales, U.K.

Tel: +44 (0)29 20 856 550

Fax: +44 (0)29 20 865 586

E-mail: bearmach@bearmach.com

Be sure to regularly check out our website for up-to-date news and special offers

www.bearmach.com



BA 2227 AIR SPRING TO COIL SPRING CONVERSION KIT FOR RANGE ROVER P38

FITTING INSTRUCTIONS

Kit Contents

1 x Pair Front Blue Springs BA 2106	1 x Pair Rear Blue Springs BA 2104
4 x Aluminium Spring Seat Adapters	16 x M10 Washers
8 x M10 Nuts	4 x Spring Seats
4 x Spring Retainers	2 x Spring Isolators Rear
2 x Spring Isolators Front (Conical)	8 x M8 Nuts
4 x Air Pipe Dust Caps	10 x Cable Ties
1 x Electrical Harness	

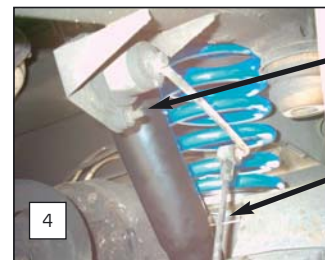
Please Read ALL Instructions Prior To Fitting and Accept Disclaimer

Installation Procedure.

1. Lower the vehicle to access height to expel as much air from the springs as possible.
2. Disconnect the battery, noting any codes for radios or other battery dependant devices. It is recommended that a ramp is used for the installation of the springs for ease of access. The installation can be done on the floor, but the suspension must be allowed to travel fully while the vehicle is supported. Coil spring compressors may be required, especially when fitting some of the taller combinations of springs. Please ensure that all the holes are clear of swarf, especially the holes for the retaining clips in the spring seat adapters.

Fitting of Rear Springs.

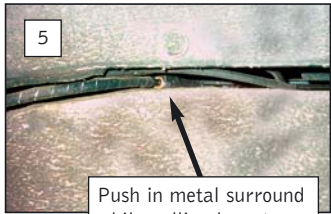
3. Remove the road wheels.
4. Disconnect the rear height sensors from the wiring loom and remove them from the vehicle. The connector is found by tracing the wire for the height sensor, clipped on the chassis.



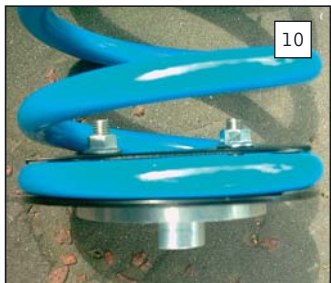
Undo two bolts that attach height sensor to chassis

Remove link from trailing arm

4



5
Push in metal surround while pulling hose to release from air spring.



5. While supporting the axle and the body at the same time disconnect the air pipe going into the rear springs.

If the system has not been depressurised via a testbook or equivalent machine, be very cautious as there is still a high pressure within the air springs.

6. Place the dust caps over the air pipes and cable tie the air pipes away from the spring seat.
7. Remove the retaining R-clips from the top and bottom of each air spring.
8. Remove the air springs
9. Undo the bottom shock absorber mounting to enable the axle to fully travel. (Remove the whole shock absorber at this point if they are going to be replaced).
10. Assemble the lower spring seats (all the same) on to the springs as shown in the diagram using the retaining plates and spring seat adapters, with the M10 nuts. Tighten these bolts up so they are secure to the spring.
11. Cable tie the top spring locating plate to the spring using two cable ties per spring. The spring is now ready to be fitted.
12. The standard springs can be fitted without coil spring compressors only if the suspension is allowed to fully articulate. It may be necessary to disconnect the rear flexible brake hose mounting on the axle to allow this.
13. Seat the springs at the top and then locate them into the axle.
14. The rear shock absorbers can now be reconnected. (Or Replaced)
15. The wheels can be refitted and the vehicle let down onto the wheels.
16. Once on the wheels refit the R-Clip to the spring seat adapter

Fitting of Front Springs

This is a similar procedure to the rear springs.

17. Remove the road wheels.
18. Disconnect the front height sensors from the wiring loom and remove them from the vehicle. The connector is found by tracing the wire for the height sensor, clipped on the inner wheel arch behind the plastic mudguard (it can just about be accessed by pulling the mudguard forward).
19. While supporting the axle and the body at the same time disconnect the air pipe going into the front springs (done under bonnet). **If the system has not been depressurised via a testbook or equivalent machine, be very cautious as there is still a high pressure within the air springs.**
20. Place the dust caps over the air pipes and cable tie the air pipes away from the spring seat.
21. Remove the retaining clips secured by the M8 bolt at the bottom of each air spring.

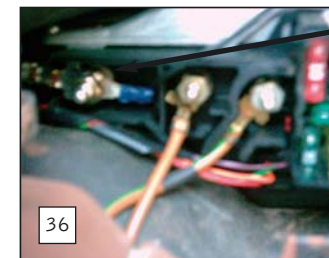
22. Remove the two clips on the top of each spring.
23. Remove the air springs
24. Undo the bottom shock absorber mounting to enable the axle to fully travel. (Remove the whole shock absorber at this point if they are going to be replaced).
25. Assemble the lower spring seats (all the same) on to the springs as shown in the diagram using the retaining plates and spring seat adapters, with the M10 nuts. Tighten these bolts up so they are secure to the spring.
26. The front isolators are bolted to the top spring seat using the M8 nuts provided.
27. The standard springs can be fitted without coil spring compressors only if the suspension is allowed to fully articulate.
28. Seat the springs at the top and then locate them into the axle.
29. The front shock absorbers can now be reconnected. (Or Replaced)
30. The wheels can be refitted and the vehicle let down onto the wheels.
31. Refit the retaining clips with the M8 bolt.



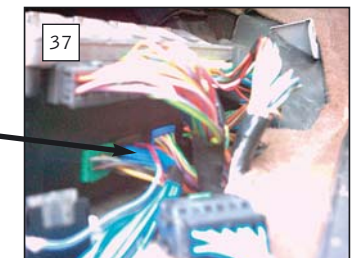
33
3 Clips and 1 screw



35
RH Terminal Post (Positive)



36
LH Terminal Post (Negative)



37
Second plug in from left on front of Body Electric Control Module (BECM)

The Mechanical Aspect of the installation is now complete

32. Under the bonnet open the EAS box located on the right of the engine bay from the front of the vehicle. Disconnect the multiplugs for the compressor and valve block.
33. Under the RH seat of the vehicle is the BECM. This is accessed by removing the 3 clips and one screw located behind the fuse box cover .
34. Locate the electrical posts either side of the fuse box.
35. Remove the nut attached to the post immediately right of the fuse box and add the red wire to this post.
36. Locate the post to the far left of the fuse box (there are 3 to the left of the fuse box), remove the nut and attach the black wire.
37. At the front of the module; Unplug the connection second from the left on the bottom row. Plug this into the harness and plug the harness in turn into the module. DO NOT reattach the trim at this point.