



INSTRUCTIONS FOR THE FRONT ROAD SPRING COMPRESSOR (RH8809P)

1. Make sure car is on level ground and place a trolley jack under the lower ball joint of the triangle lever on the front side being worked on. Make sure not to damage the grease fitting.
2. Raise the corner just high enough for the tire to clear the ground and place a jack stand under the frame. Remove the wheel.
3. Leave the trolley jack in place or place another jack stand under the triangle lever to keep the spring compressed.

The spring compressor plate will not be able to be installed if the spindle/hub is hanging in a relaxed/extended state. The full weight of the car must be sitting on a jack stand placed under the lower triangle lever.

4. Slide the compressor plate around the lower spring perch and insert the 4 threaded rods down through holes in the top spring plate. Early cars with front hydraulic rams will only be able to use 2 rods. Remove the rams first by following the specific procedure in the workshop manual. Rolls-Royce factory manuals can be accessed for free at rrtechnical.info. Later cars without the front rams should use all 4 rods.

5. Screw the rods down into threaded holes in the compressor plate.

6. Place a washer and a nut on the bottom of each threaded rod and firmly lock the rods in place. ***It is critical that the rods cannot unscrew from the compressor plate when the spring is being decompressed later.***

7. On the top of the rods, place a thick washer, a thin bearing washer, the radial bearing, another thin bearing washer, another thick washer and finally the nut. Do this on all four rods. Make sure to use anti-seize on the portion of the threaded rods that will contact the nut to prevent galling.

8. Run the nuts down finger-tight. Do not compress the spring any further. The spring is now captured.

9. Lower the trolley jack and rest the frame on the jack stand. Remove the trolley jack.

10. Undo the bottom of the damper (shock absorber) from the damper ball-joint or release the bottom of the ball joint from the lower triangle lever. ***Do not remove the damper from the captured spring assembly.*** It will contain the spring in the event of a failure during decompression.

11. It may be necessary to secure the top spring plate to the spring tower with C-clamps to before removing the fasteners. Residual pressure in the damper may try to push the assembly out before all of the hardware is removed.

12. Remove the nuts and bolts securing the top spring plate to the spring tower. Make note of where the bolts come from – they are not all the same length.
13. The assembly can now be lifted up and out.
14. Make note of the length of the compressed spring assembly. It will be easier to compress the new spring to the same length.
15. Decompress the spring by ***evenly*** unscrewing the top nuts. ***It is very important that the nuts be undone evenly to make sure the top spring plate does not bind on the threaded rods. Be very certain that the threaded rods are locked tightly to the bottom spring compressor plate and the rods are not rotating with the upper nuts.***
16. Assemble the new spring and damper to the compressor and compress it evenly to the earlier noted dimension. Do not compress the new spring any more than necessary.
17. Reverse the disassembly procedure to assemble.