Changing the Piston ring on the Wabco compressor: This is a guide based working on a 2000 C5 Audi Allroad, other models may differ. I cannot be held responsible for any damage or issues caused by working on any of these parts.

Basic Steps to Removing the compressor from the Audi Allroad Only:

- Put car in jacking mode (press and hold both up and down level buttons for >5 seconds.)
- Lift the rear of the car in a suitable manor using ramps or axle stands.
- Remove the 10mm nuts holding on compressor protective cover plate (if it has not already fallen off!!).
- Unhook (lift upwards) & Unplug all 3 electrical connections (Motor, Temp sensor & solenoid Valve). Cut Cable ties where required to ease the removal, new ones provided in kit.
- Remove the black 4mm air pipe from the end of the compressor by unscrewing the brass fitting (Do not loose the brass fitting, seal & tapered sleeve on the end of the pipe!!)
- Undo the soft rubber intake pipe going to the compressor, this can be done at various places. If you wish to remove the stiffer plastic hoses at this time pull gently on the pipe while pushing the collar inwards.
- Undo 3 X 10mm nuts on which the compressor is mounted, carefully remove the mounting springs, sleeves and washers and note there order of fitting.
- Remove the compressor from the car.

Basic steps Replacing the piston ring (all models):

- Clean the area to be stripped, to prevent debris falling into the unit. Then if not removed yet remove the plastic intake hose by pulling gently on the pipe while pushing the collar inwards. (Leaving the T-Piece attached to the compressor) See Photo A reference the Blue Arrow
- Note the position of the temperature sensor fitted on one of the torx (or allen) bolts, then remove the 2 x torx bolts. See Photo A reference the red arrow (bolts) Green arrow, Temp sensor
- Lift the compressor assembly off the motor, (use gentle leverage if required), Note: the rubber seal. See Photo B
- Note the orientation of the old piston ring & the timing pin. See Photo C
- Remove the old piston ring by stretching it over the top of the piston.
- Fit the new piston ring by stretching it over the piston, making sure it is in its correct orientation fitting around the small timing pin, (The pin should be visible and the ring should be free to move slightly). See Photo D1 & D2
- IMPORTANT: Clean mating surfaces & cylinder bore making sure it is clean from any dirt then Refit the compressor on top of the piston & motor ensuring the rubber o-ring seal is fitted correctly. (use the new rubber O-Ring provided if it is compatible) See Photo E1 & E2
- Refit Using the 2 new bolts provided, Refitting the temperature sensor back on the same bolt as it was removed. See Photo F
- Refit back on to the car following steps above in reverse. Use cable ties to tidy cables in place.

I found that best performance was after the compressor has been used for a few times, the piston ring then finds its shape as it has been stretched during fitment.

Photo A below, Note position of temperature sensor (green arrow), remove 2 bolts

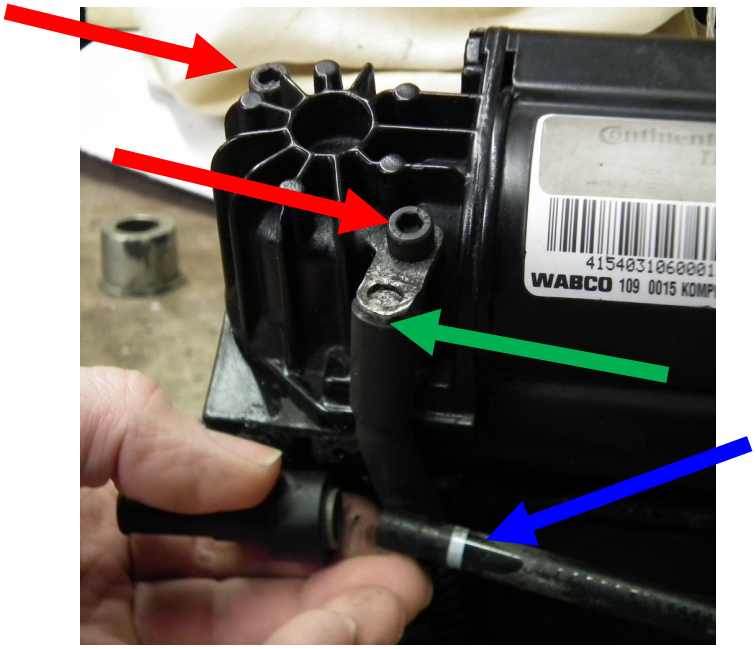


Photo B Below: Removing compressor unit

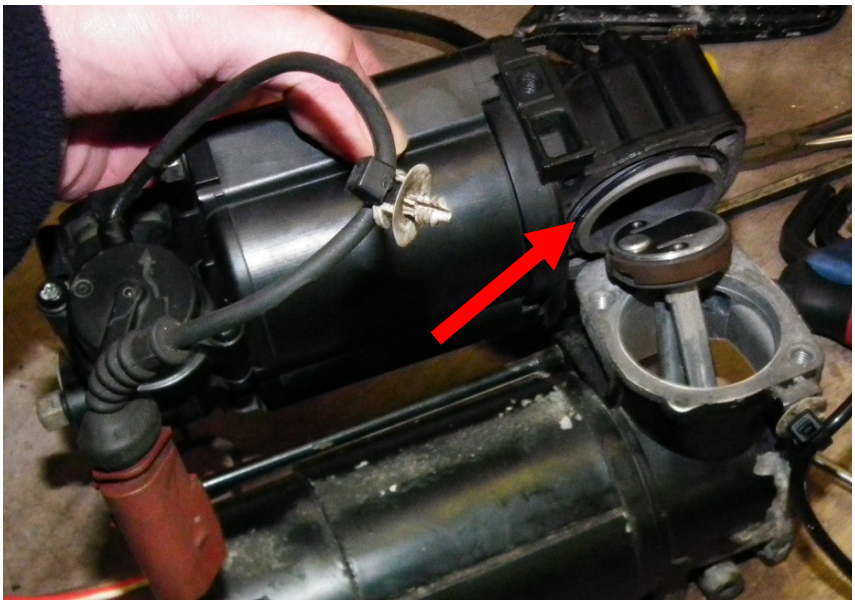


Photo C below, Note old Piston ring fitment, and location pin:

Photo D1 & D2 below, fitting the new piston ring

Note The piston ring should only be fitted one way, Once fitted, squeeze it closed slightly with fingers, & ensure there is free movement around the location pin arrowed below.

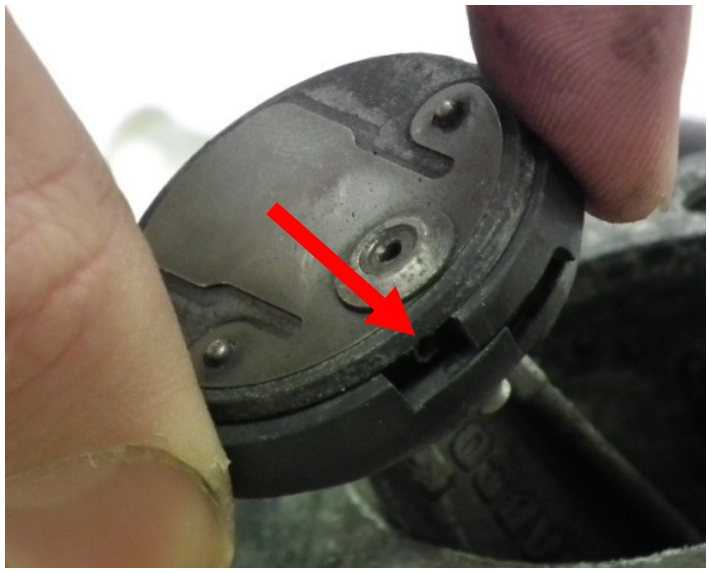
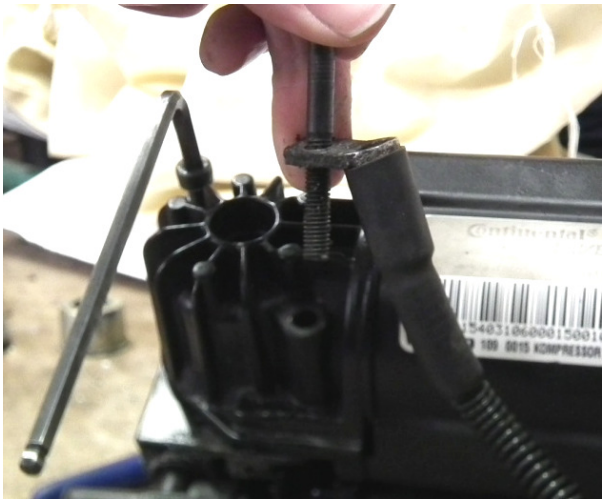


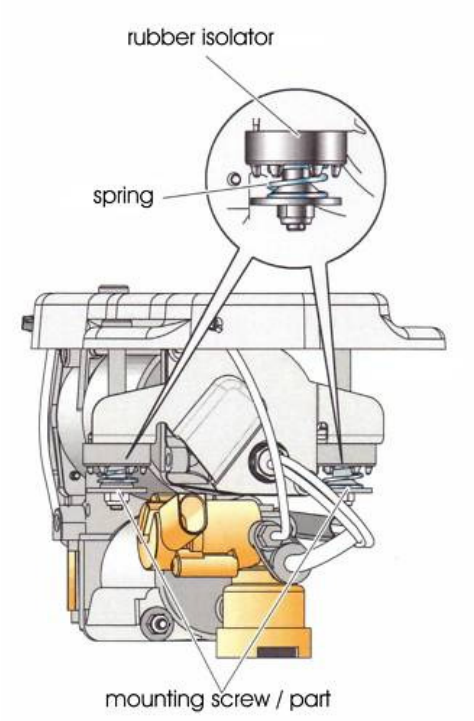
Photo E1 below, (re use this seal)

Photo E2 below, (renew using new seal provided in kit)

Photo F below, use the new bolts provided if required & Re fit temperature sensor,

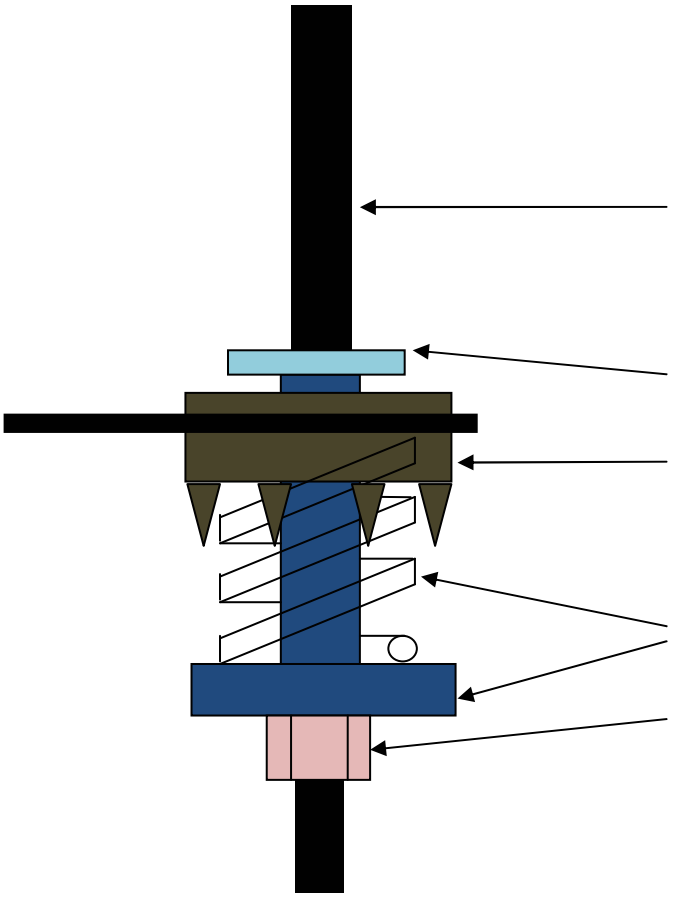


Sketches showing fitment of compressor onto an Audi Allroad only, Other models may differ:



View opposite shows the mounting of compressor to Audi Allroad car body, may be similar on other models

See a rough schematic below for the order of the components (Audi Allroad only):



1. Compressor Mounting Stud fixed to car body (shown in black) which steps down in diameter and then to a thread.
2. Washer on 1st (light blue)
3. Compressor next (rubber mount shown here)
4. Then Spring and sleeve (Sleeve shown in blue)
5. And finally the Nut, (do not over tighten it may crush the sleeve)

The Compressor's weight should sit on top of the springs to reduce any noise and vibration. The compressor should not touch any parts on the car body.