

Wabco Air Suspension Compressor Piston Ring Seal Replacement Repair

Introduction





It is very common that the piston ring seal within the Wabco compressor wears down reducing compressor performance leading to noisy, slow rising or even inactive air suspension.

This affects all models using this Wabco compressor including:

Audi allroad C5 models 2000-2005 C6 model 2006-2011

Audi A8, D3, 4E models between 2002-2010

Audi Q7 2005-2013

BMW X5, E53 2000-2006

BMW 5 Series E39 1997-2008

BMW 7 series, E65 chassis 2002-2006

Jaguar XJ series models between 2003-2010

Landrover Discovery II models between 1998-2004

Land Rover Range Rover MK 3 - L322 between 2002-2005

Mercedes S Class 1998-2005 (w220)

Mercedes E Class 2002-2009 (w211)

Porsche Cayenne models between 2002-2010

VW Touareg 2002-2010

The following guide explains how to resolve these problems by installing our piston seal replacement kit available from X8R Ltd. For instructions guiding removal of the compressor from your vehicle please check out our other Instructables.

Step 1: Remove head



Clean the outside of the compressor to stop any debris entering the internals of the compressor.

Using a T30 Torx remove head bolts and remove head. If the bolts are seized or appear rusty apply WD40 to the bolts and threads, allow time to work then remove bolts. On some vehicles there is a temperature sensor fitted on one of the head bolts; remove this and remember to refit when refitting head later on.

Step 2: Replace seal



Remove old seal from inside of head, clean groove and mating surfaces and replace with the correct seal from our kit, please note some compressors use an O-ring seal others use a shaped seal, we include both in our set, you only need to use one of these. Check cylinder for any damage; the cylinder is tapered, check for dents or scratches these can significantly reduce the life of replacement piston seals.

Step 3: Fit new piston seal



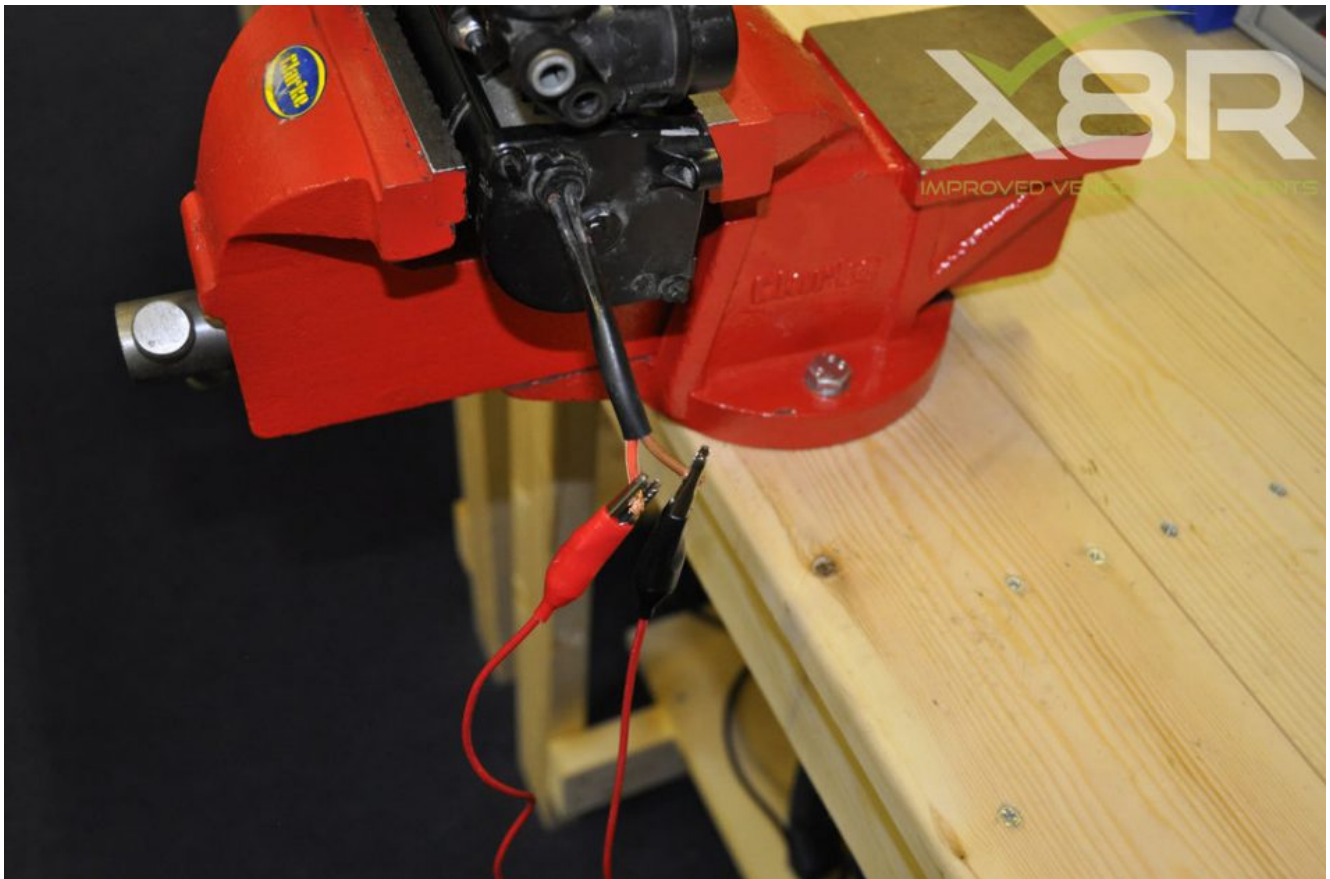
Note position of existing piston ring and fitment around timing pin and remove ring. Clean piston and piston ring groove and fit new piston ring in the same position as the old ring; fitting around the timing pin, compress ring in hand to ensure correct operation.

Step 4: Refit compressor head



Clean all mating surfaces and refit head. Install our new bolts applying a little lock tight to the threads. Refit temperature sensor if one was fitted.

Step 5: Test compressor output



It is good practice to bench test the compressor before refitting to the vehicle. From the compressor you will see two wires One Red and White and One Brown. Connect the Red and White wire to the positive terminal of a 12v car battery and the Brown wire to the negative terminal. This will allow the compressor to run, check output of compressor if producing good output install has been a success and you can now proceed to refit to your vehicle.

If you need any further guidance on this install or would like to purchase the parts shown please call us on +44 01843 446643 or email us at sales@x8r.co.uk.

Please also check out our instruction guide on YouTube.

www.x8r.co.uk

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