Valeo Dual Dry Clutch actuator calibration

Part Number: 855101

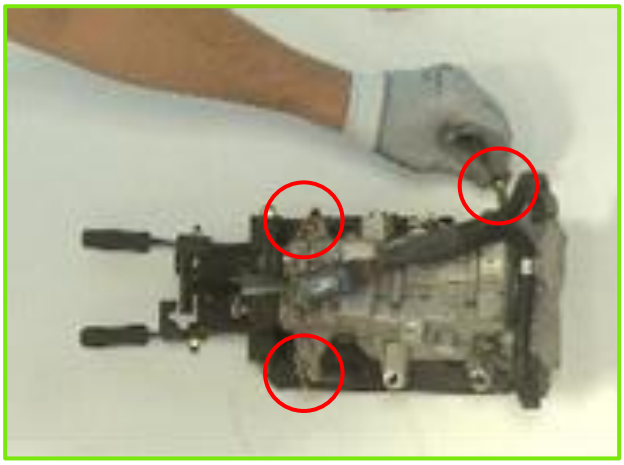
Vehicle: Hyundai / Kia with DCT-7 transmission

The Dual Dry Clutch actuator assembly fitted to the DCT-7 transmission requires calibration to reset the actuator cylinder push rods to the correct specific dimension for a new clutch. This will ensure the correct operation of the new clutch as failure to perform the calibration will result in poor or no clutch operation due to incorrect movement of the clutch release mechanism.

This procedure should be carried out prior to the installation of the new release mechanism, release bearings and clutch assembly into the gearbox, and requires the use of the mandatory actuator adjustment rig DDCT-03 and adjustment tool DDCT-04. Once the actuator has been removed from the transmission, it can be mounted into the adjustment rig.

The actuator cylinder rod dimension must first be checked and recorded. This data is then used to calculate the exact adjustment required to reset the cylinder rod dimension to the correct specific length, this being 72mm.

Step 1



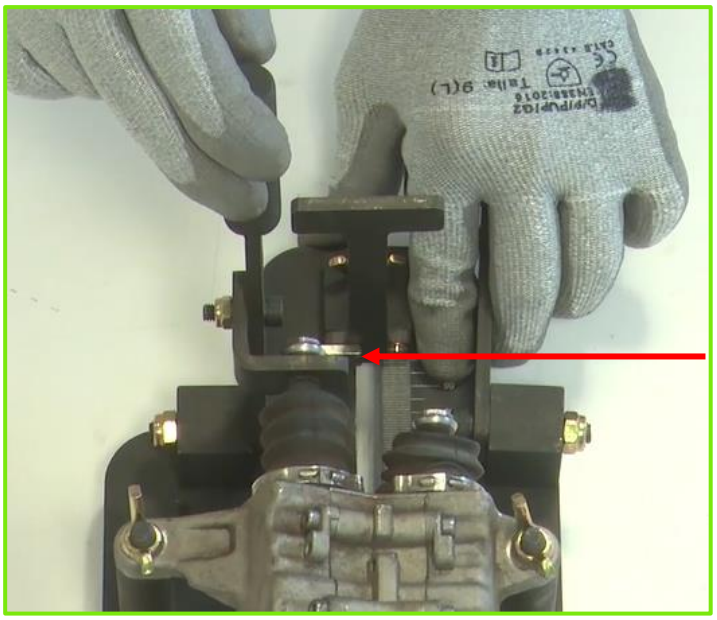
Ensure the actuator is seated into the adjustment rig DDCT-03 correctly, and the 3 thumb screws are tightened.

valeo tech centre

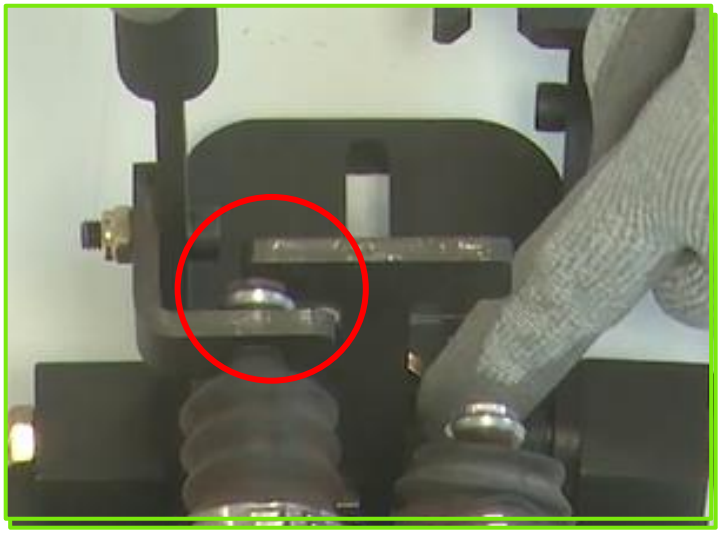
www.valeoservice.co.uk
Valeo Service UK Ltd
Heming Road – Washford, REDDITCH, Worcestershire, B98 0DZ, ENGLAND
Tel.: (+44) 01527 838 300, Fax: (+44) 0800 035 8324

Valeo Service

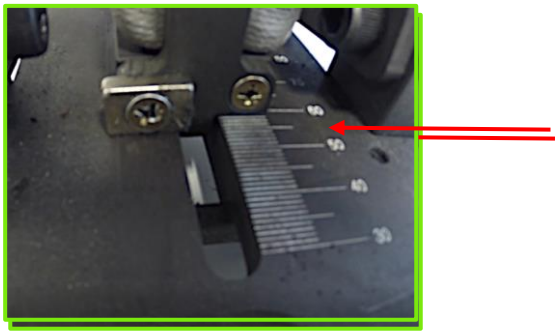
Step 2



Connect the rig lever to the first cylinder rod and *GENTLY* move outward until a stop is felt (no exertion will be required)



Move the slide rule upto the end of the rod and record the dimension. In this example the dimension reads 59mm



www.valeoservice.co.uk
Valeo Service UK Ltd
Heming Road – Washford, REDDITCH, Worcestershire, B98 0DZ, ENGLAND
Tel.: (+44) 01527 838 300, Fax: (+44) 0800 035 8324

Valeo Service

Step 3



Repeat the process for the second cylinder rod and again record the dimension. In this example the dimension reads 32mm

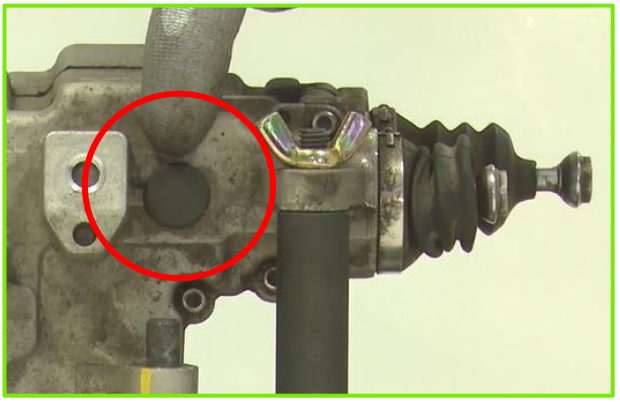
Step 4

Before the calibration can be made, the calculation is required in order to ascertain the amount of adjustment necessary to each cylinder rod.

The calibrated measurement for each rod ***must*** be set to **72mm**

Calculation to first cylinder rod:
72mm minus the reading taken of 59mm = 13mm
4 rotations of the adjustment tool equals 1 mm, therefore the number of rotations required to achieve the dimension of 72mm will be 13 multiplied by 4. Number of rotations required is 52
Repeat the calculation for the second cylinder:
72mm - 32mm = 40mm
Rotations required: 40 x 4 = 160 turns

The adjustment is made by using the DDCT-04 adjustment tool which is inserted into each side of the actuator body via an access bung



www.valeoservice.co.uk
Valeo Service UK Ltd
Heming Road – Washford, REDDITCH, Worcestershire, B98 0DZ, ENGLAND
Tel.: (+44) 01527 838 300, Fax: (+44) 0800 035 8324

Valeo Service

Step 4 (cont.)



With the access bung removed, compress the cylinder rod back into the actuator until a stop is felt.



Insert the adjusting tool DDCT-04 into the actuator body ensuring it is fully home. It is advisable to mark the start position to enable easy counting of turns required.

Step 5

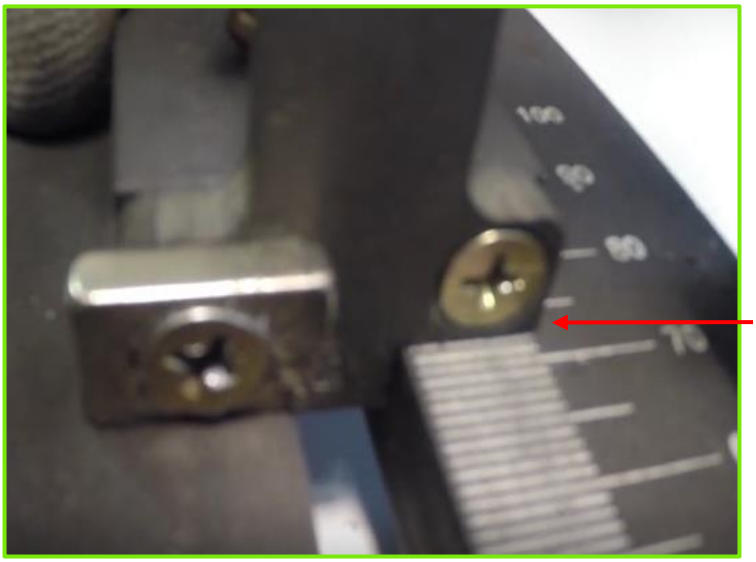


Rotate the adjustment tool the required amount of revolutions for each cylinder rod. Ensure the correct direction of rotation in order to extend the cylinder rod outward from the actuator body. Complete this process for both cylinder rods -
First cylinder rod required 52 rotations
Second cylinder rod required 160 rotations

www.valeoservice.co.uk
Valeo Service UK Ltd
Heming Road – Washford, REDDITCH, Worcestershire, B98 0DZ, ENGLAND
Tel.: (+44) 01527 838 300, Fax: (+44) 0800 035 8324

Valeo Service

Step 6



Repeating Steps 2 and 3, re-check each cylinder rod length - they should now both be calibrated to 72mm

Precautions

If the post calibration measurement check reveals the cylinder rod lengths are not in compliance with the mandatory measurement of 72mm, the checks in Steps 2 & 3 will need to be repeated. The appropriate adjustments should be made to ensure the mandatory calibration is completed accurately.
Once the required measurement has been confirmed, replace the cylinder rod adjustment access bungs and remove the actuator from the adjustment rig ready for refitting onto the transmission.

www.valeoservice.co.uk
Valeo Service UK Ltd
Heming Road – Washford, REDDITCH, Worcestershire, B98 0DZ, ENGLAND
Tel.: (+44) 01527 838 300, Fax: (+44) 0800 035 8324

Valeo Service