## Adjusting vacuum unit for turbocharger

Turbocharger removed



## Special tools and workshop equipment required

- Universal dial gauge bracket -VW 387-
- Hand vacuum pump -VAS 6213-
- Pressure control valve -VAS 6342-
- Turbocharger tester -V.A.G 1397A-
- Dial gauge set, 4 pieces -VAS 6341-
- Torque wrench -V.A.G 1783-

Open-end spanner insert AF 10 -V.A.G 1783/1-

## Adjusting



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*It is only necessary to adjust the vacuum unit if the vacuum unit has been removed.* 

• Tightening torques → Anchor



 Pre-adjust bypass flap -1- via nut arrow- so that bypass flap can still just be turned by hand.



 Secure universal dial gauge bracket -VW 387- to turbocharger -arrow-.



- The dial gauge values (mm) listed here include the 1 mm preload that is initially set on the gauge.
- Dial gauge -VAS 6341/1- with dial gauge extension, 30 mm -VAS 6341/3must align with linkage of vacuum unit.
- Attach dial gauge -VAS 6341/1- with extension, 30 mm -VAS 6341/3- and flat probe -VAS 6341/4- to universal dial gauge bracket -VW 387-.
- Set dial gauge -VAS 6341/1- to 1 mm preload.
- Set scale of dial gauge -VAS 6341/1- to 0.
- Make sure that dial gauge can move freely.
- Turn nut -1- approx. 7 turns in direction of -arrow-.
- Turn nut -2- in direction of -arrowuntil dial gauge displays 7 mm.
- Hand-tighten nut -1-.
- Set dial gauge -VAS 6341/1- to 1 mm preload.
- Set scale of dial gauge -VAS 6341/1to 0.





- Connect up hand vacuum pump -VAS 6213-, turbocharger tester -V.A.G 1397A- (connection II) and pressure control valve -VAS 6342- as shown in illustration.
- Switch on turbocharger tester -V.A.G 1397A- and set sliding switch to position II.
- Close pressure control valve -VAS 6342- at lever -1-.

 Move adjuster ring -1- on hand vacuum pump -VAS 6213- to position -B- to select "pressure".



The following measurements must be performed in continuous sequence. Do not allow the pressure to drop to 0 between measurements.

 Operate hand vacuum pump -VAS 6213- until turbocharger tester -V.A.G 1397A- indicates 460 +/- 5 mbar.



*If value exceeds 460 +/-5 mbar, repeat entire measurement.* 

- Read off and note value indicated on dial gauge -VAS 6341/1-.
- Operate hand vacuum pump -VAS 6213- until turbocharger tester -V.A.G 1397A- indicates 650 to 700 mbar.
- Vent system via pressure control valve -VAS 6342- so that pressure reading drops to 460 +/- 5 mbar.







*If value does not reach 460 +/- 5 mbar, repeat entire measurement.* 

- Read off and note value indicated on dial gauge -VAS 6341/1-.
- Add values 1 and 2 together and divide by 2.
- The result (mean value) should be 5 +/-0.5 mm.
- If value is higher, relieve pressure until it is 0 bar, loosen nut -1- and turn nut -2- half a turn in direction of arrow and hand-tighten nut -1-.
- Set dial gauge -VAS 6341/1- to 1 mm preload.
- Set scale of dial gauge -VAS 6341/1to 0 and repeat measurement.
- If result (mean value) is 5 +/- 0.5 mm, tighten lock nut and repeat measurement.
- If result (mean value) is 5 +/- 0.5 mm, secure nuts with sealing paint. Sealing paint → Electronic parts catalogue.
- Secure new locking plate -1- on linkage of vacuum unit.



