Workshop Manual **ElsaPro transaction no.: 22623**

DMS order no.: **undefined**

VIN: **WV1ZZZ2KZ5X032749**	Model year: **2005**
Sales code: **2KAAA2**	Model description: **Caddy del.vanBasic 55 SI 5-s**
Engine code: **BCA**	Gearbox code: **GXZ**
Registration number:	Final drive code:
Username: **Finnbogason**	Service advisor name:

Assembly overview

1 - Locking ring

2 - Piston pin

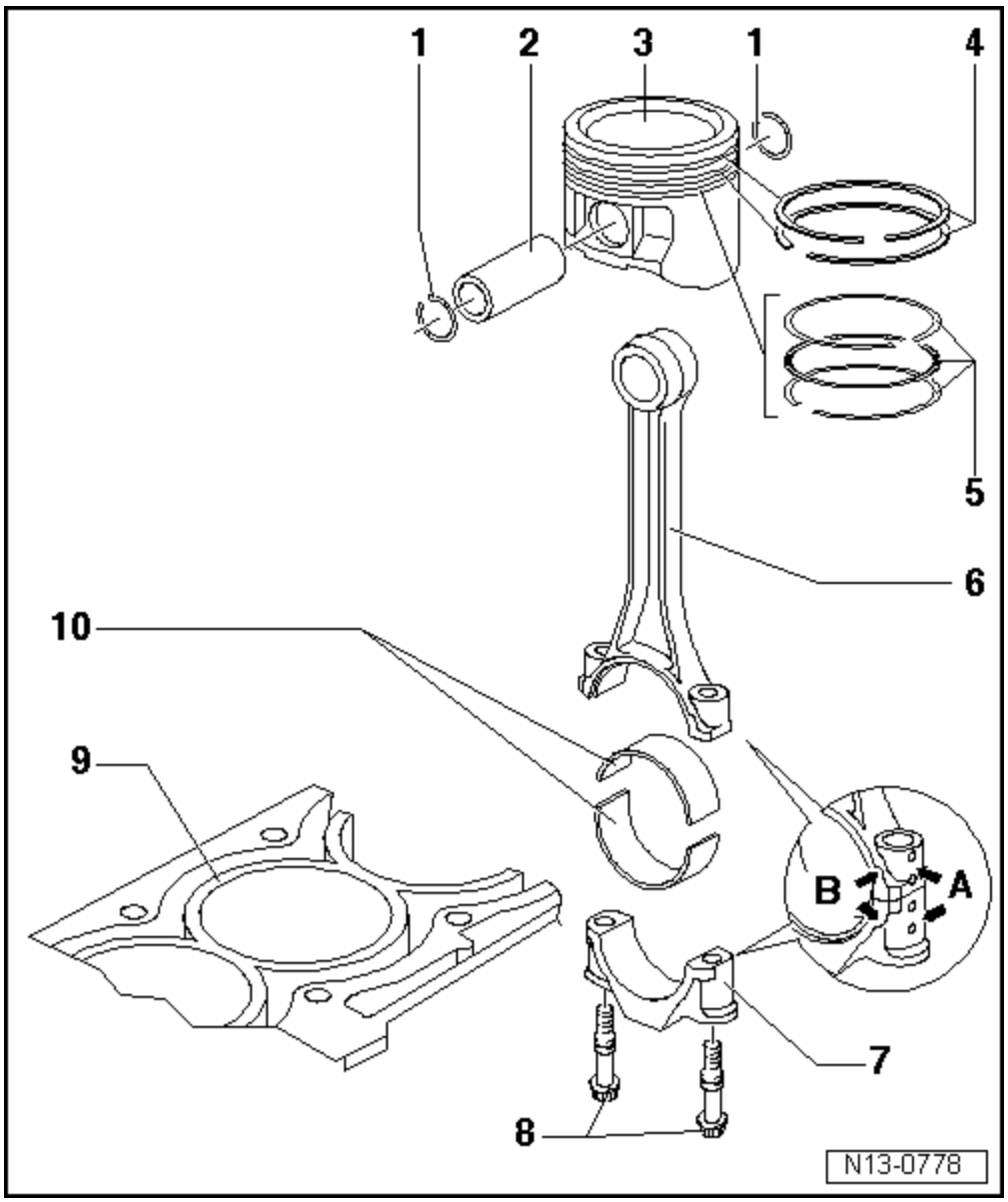
- If difficult to remove, heat piston to 60 ° C.
- Remove and install using drift -10-14-.

3 - Piston

- Checking → Fig.
- Mark installation position and cylinder number.
- Arrow on piston crown points to poly V-belt pulley end
- Install using piston ring clamp.

4 - Compression rings

- Offset gaps by 120°
- Remove and install compression rings with piston ring pliers.



- "TOP" faces towards piston crown.
- Checking ring gap → Fig..
- Checking ring-to-groove clearance → Fig..

5 - Oil scraper rings

- Carefully remove and install 3-part oil scraper rings by hand.
- Checking ring gap → Fig..
- Ring-to-groove clearance not measurable.

6 - Conrod

- Renew as set only.
- Mark with cylinder number -A-.
- Installation position: Markings -B- face towards poly V-belt pulley end.
- Guided axially by piston.

7 - Conrod bearing cap

- Due to the cracking method used to separate the bearing cap from the conrod in manufacture, the caps only fit in one position and only on the appropriate conrod.

8 - Conrod bolt

- M7×0.75: 20 Nm + $^{1}/_{4}$ turn (90°) further.
- M8×1: 30 Nm + $^{1}/_{4}$ turn (90°) further.
- Renew
- Oil threads and contact surface.
- To measure radial clearance, tighten to corresponding specified torque but not further.

9 - Cylinder block

- Checking cylinder bores → Fig..
- Piston and cylinder dimensions → Chapter.

10 - Bearing shell

- Do not interchange used bearing shells.
- Insert bearing shells centrally.
- Check radial clearance with Plastigage
- New: 0.020 … 0.061 mm
- Wear limit: 0.091 mm
- Do not rotate crankshaft when checking radial clearance.

Checking piston ring gap

Special tools and workshop equipment required

- Feeler gauge

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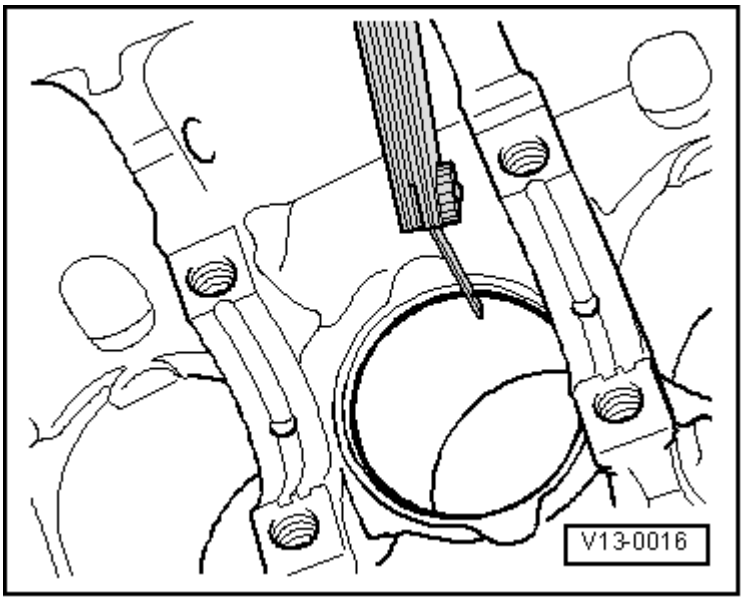
Push ring squarely from above down into cylinder bore to approx. 15 mm from bottom end of cylinder.



Piston ring dimensions in mm	New	Wear limit
1st compression ring	0.20 … 0.50	1.0
2nd compression ring	0.40 … 0.70	1.0
Oil scraper ring	0.40 … 1.40	--- → Remark

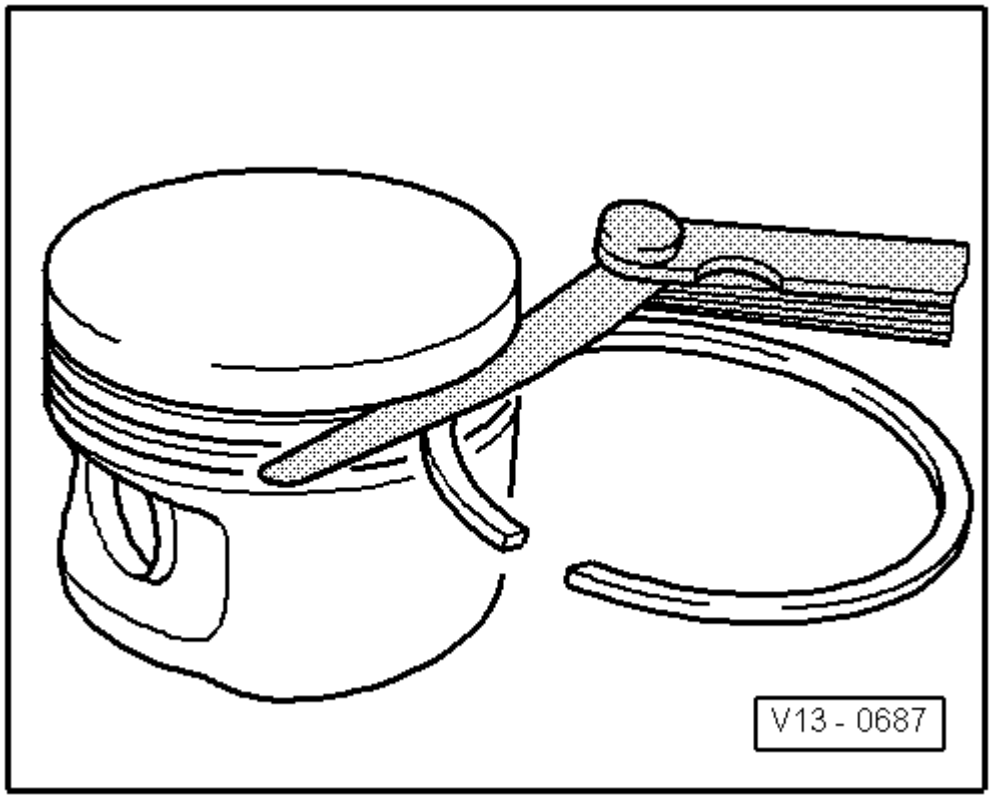
[1] No wear limit details

Checking ring-to-groove clearance

Special tools and workshop equipment required

- ♦ Feeler gauge

– Clean ring groove before checking.



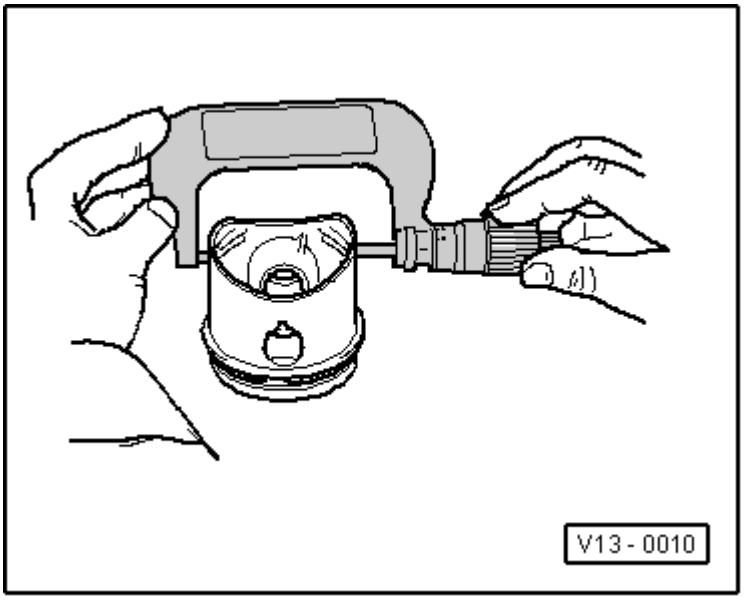
Piston ring dimensions in mm	New	Wear limit
1st compression ring	0.04 … 0.08	0.15
2nd compression ring	0.04 … 0.08	0.15
Oil scraper ring	Cannot be measured	

Checking piston

Special tools and workshop equipment required

- ♦ External micrometer 75…100 mm

– Measure pistons approx. 10 mm from bottom of skirt, at 90° to piston pin axis. Difference between actual and nominal diameter max. 0.04 mm. Nominal dimension → Chapter



Checking cylinder bores

Special tools and workshop equipment required

- ♦ Internal dial gauge 50…100 mm

– Take measurements at 3 positions in both lateral direction -A- and longitudinal direction -B-.

Deviations compared with nominal diameter max. 0.08 mm.

Nominal dimensions → Chapter: Piston and cylinder dimensions.

Note

Cylinder bores must not be measured when cylinder block is mounted on engine and gearbox support -VAS 6095-, as measurements may be incorrect.