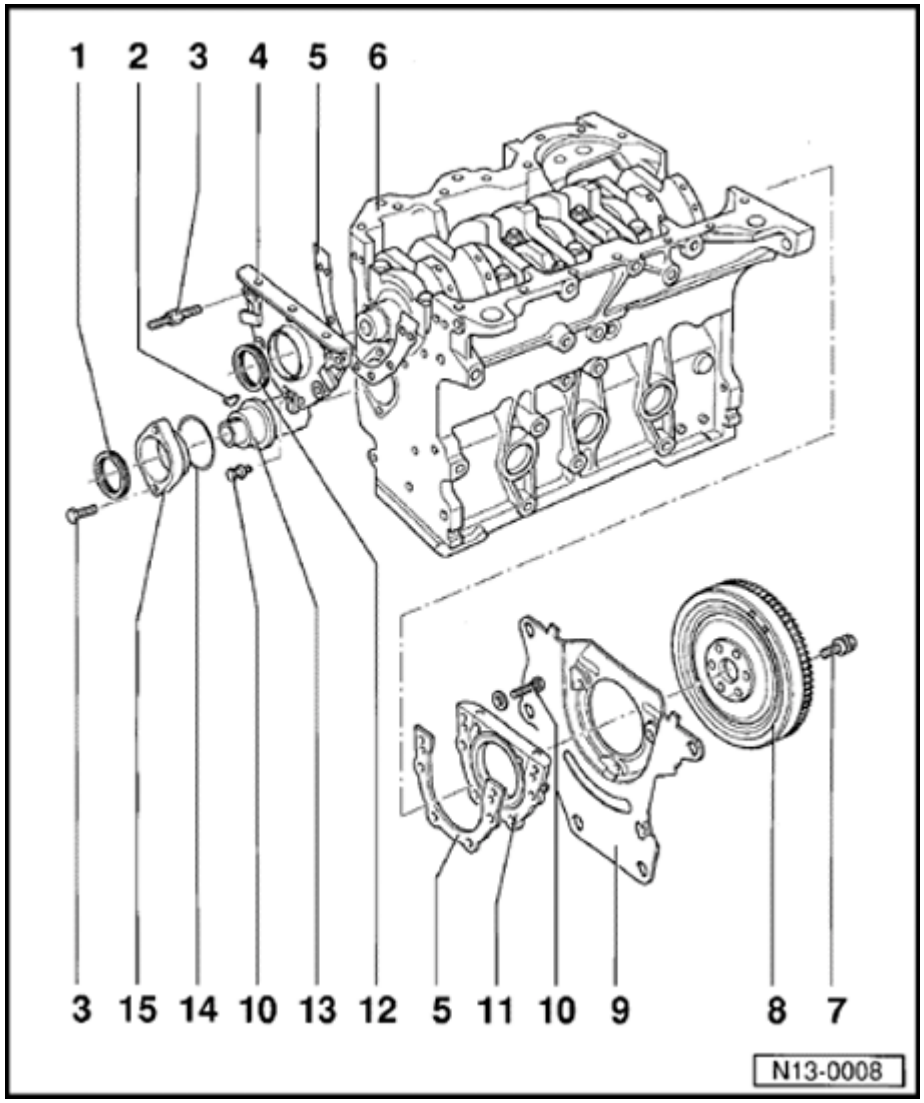
13-36



Sealing flange and flywheel/drive plate, removing and installing

Note:

Servicing clutch:

- ⇒ *Repair Manual, 5 Spd. Manual Transmission 012/01W Front Wheel Drive, Repair Group 30*
- ⇒ *Repair Manual, 5 Spd. Manual Transmission 01A All Wheel Drive, Repair Group 30*

1 - Oil seal

- To remove, remove oil seal carrier, item - 15 -
- Install using 10-203
- Lightly oil lip of seal

2 - Woodruff key

- Check for proper installation

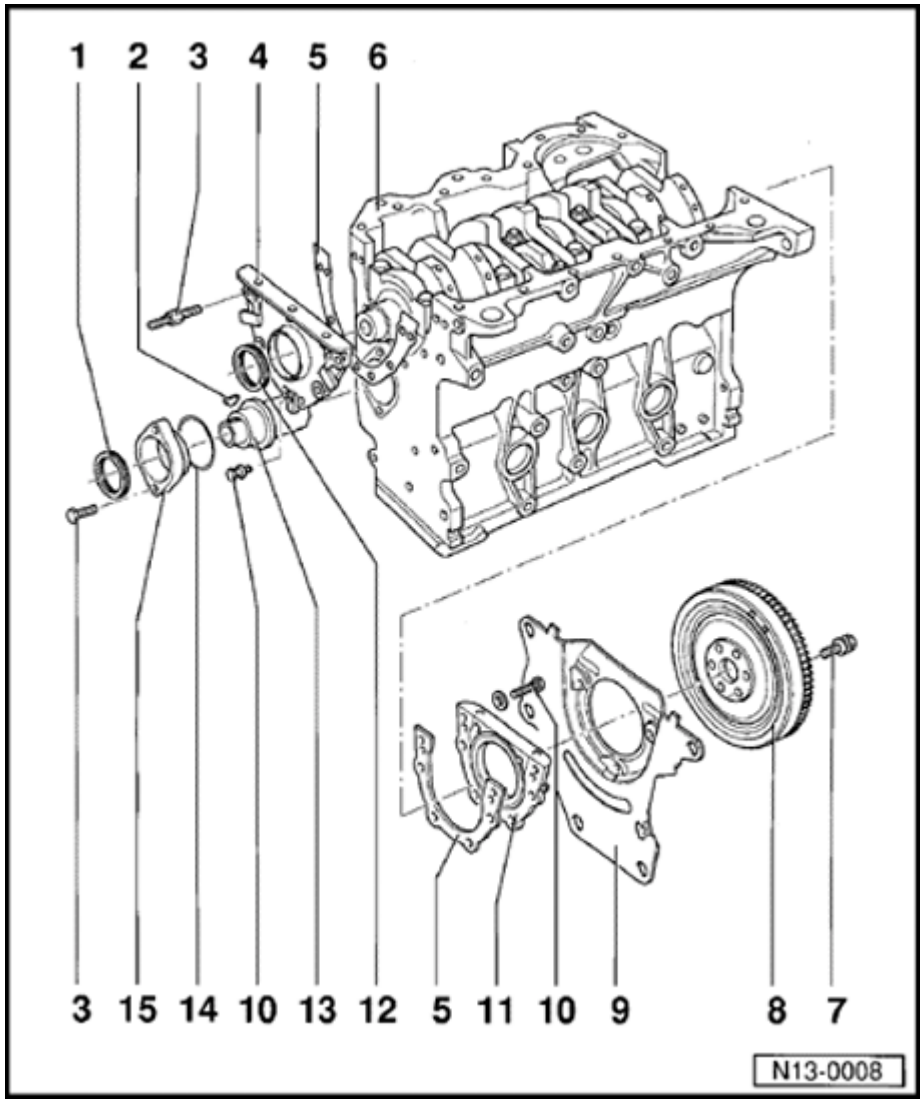
3 - Connecting bolt

- 25 Nm (18 ft lb)

4 - Front oil seal flange

- Before installing oil pan, spread sealant AMV174 004 01 on joint between oil seal flange and cylinder block.

13-37



5 - Gasket

- Always replace

6 - Cylinder block

- Crankshaft, removing and installing ⇒ Page 13-46
- Pistons and connecting rods, disassembling and assembling ⇒ Page 13-53

7 - Mounting bolt for dual-mass flywheel/drive plate

- Always replace
- Tightening torque for dual-mass flywheel: 60 Nm (44 ft lb) + additional 1/2 turn (180 °)
- Tightening torque for drive plate (vehicles with automatic transmission): 60 Nm (44 ft lb) + additional 1/4 turn (90 °)

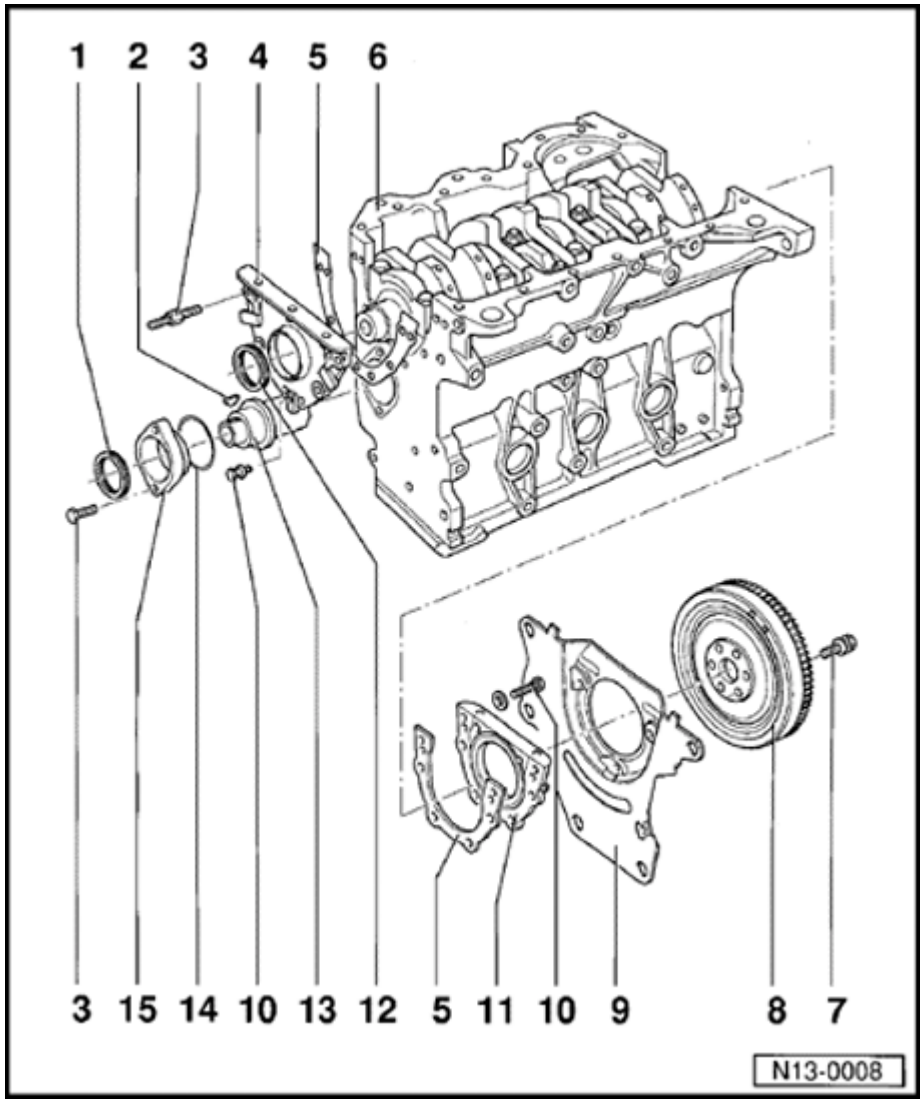
8 - Dual-mass flywheel or drive plate

- Removing and installing ⇒ Page 13-43

9 - Intermediate plate

- Must fit on bushings
- Do not damage or bend while performing repairs

13-38



10 - Bolt

- 10 Nm (7 ft lb)

11 - Rear oil seal flange

- With oil seal
- Replace as complete unit
- Lightly oil lip of seal
- Before installing oil pan, spread sealant AMV 174 004 01 on joint between oil seal flange and cylinder block

12 - Oil seal

- Replacing ⇒ Page 13-39

13 - Intermediate shaft

- Axial play, max: 0.25 mm (0.010 in.)

14 - O-ring

- Always replace

15 - Oil seal carrier for intermediate shaft

13-39

Crankshaft oil seal (toothed belt side), replacing

- Engine installed
- Lock carrier in service position ⇒ Page 13-1

Special tools and equipment

- 2085 seal puller
- 3083 arbor
- 3099 spur belt spreading

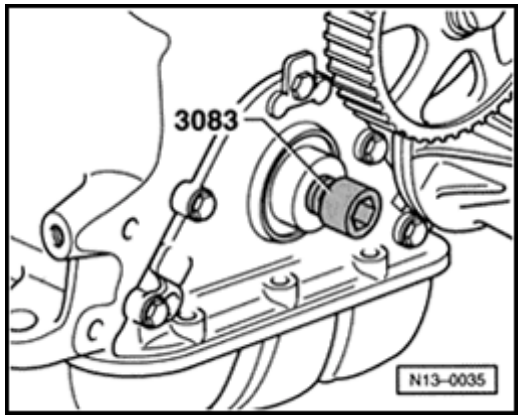
Removing

- Remove ribbed belt and ribbed belt tensioner ⇒ Page 13-15 .
- Remove toothed belt ⇒ Page 13-29 .
- Remove mounting bracket for torque arm ⇒ Page 17-2 , item - 5 -.

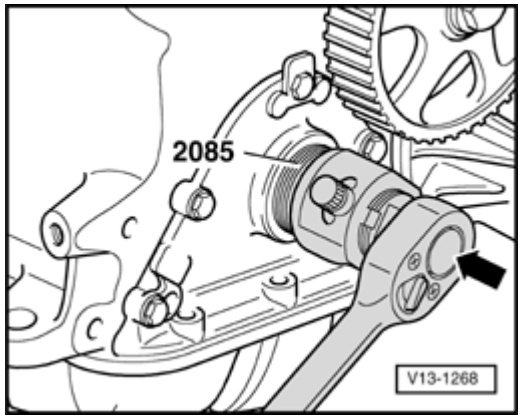
- Remove crankshaft toothed belt gear. Secure toothed belt gear using 3099 spur belt spreading.

Note:

3415 special tool can also be used.



- Before attaching seal puller, insert socket head cap bolt from 3083 arbor into crankshaft to stop.
- Unscrew inner part of 2085 seal puller two turns (approx. 3 mm 0.118 in.) and secure using knurled bolt.

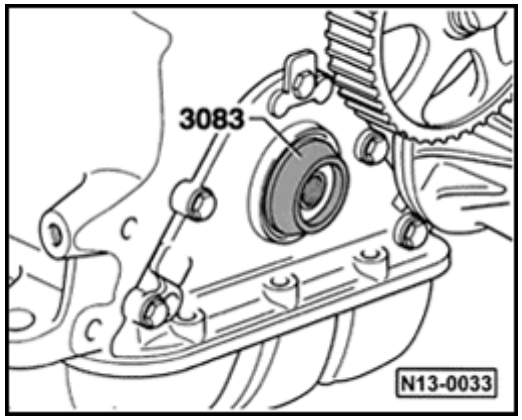


- Grease threaded head of 2085 seal puller, position and with forced pressure screw into oil seal as far as possible.
- Loosen knurled bolt and turn inner part against crankshaft until oil seal is removed.

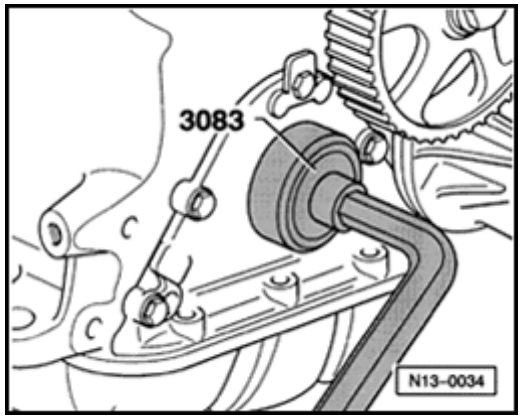
13-41

Installing

- Lightly oil lip of oil seal.



- Place guide sleeve from 3083 arbor on crankshaft.
- Slide oil seal over guide sleeve.



- Press in oil seal to stop together with pressure bushing and bolt from 3083 arbor.
- Replace bolt for toothed belt gear.
- Install toothed belt gear for crankshaft and secure using 3099 spur belt spreading.

Note:

- *Contact surface between toothed belt gear and crankshaft must be free of oil.*
- *Do not grease crankshaft bolt for toothed belt gear.*

- Install toothed belt (adjust valve timing) ⇒ Page 13-32 .

- Place torque arm on rubber buffer for torque arm and tighten bolts to 25 Nm (18 ft lb).

- Install ribbed belt and ribbed belt tensioner ⇒ Page 13-15 .

Note:

When installing the ribbed belt, make sure it is seated correctly on the pulley.

Tightening torque

Component	Tightening torque
Toothed belt gear to crankshaft	90 Nm (66 ft lb) + 90° 1)2)
1) Replace bolt.	
2) 90° are equivalent to 1/4 turn.	

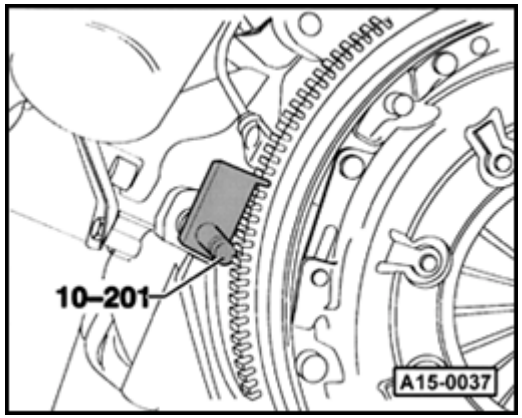
13-43

Dual-mass flywheel/drive plate, removing and installing

Special tools and equipment

10-201 flywheel retainer

Dual-mass flywheel



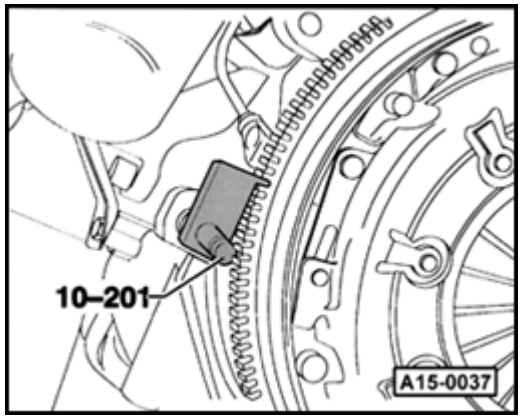
- Relocate 10-201 flywheel retainer to loosen and tighten bolts.
- Mark installed position (flywheel to crankshaft) to reinstall in same position.
- Always replace bolts.

Tightening torque

Component	Tightening torque
Dual-mass flywheel to crankshaft	60 Nm (44 ft lb) + 180° 1)
1) 180° are equivalent to 1/2 turn.	

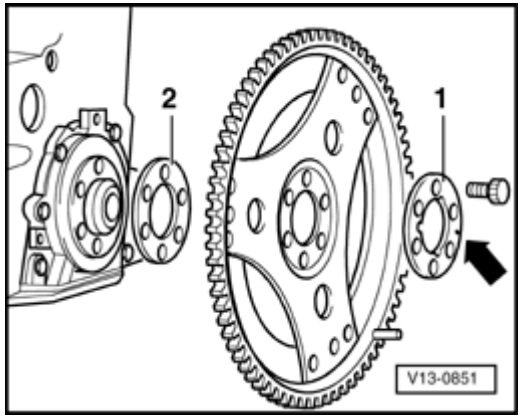
Drive plate

Removing



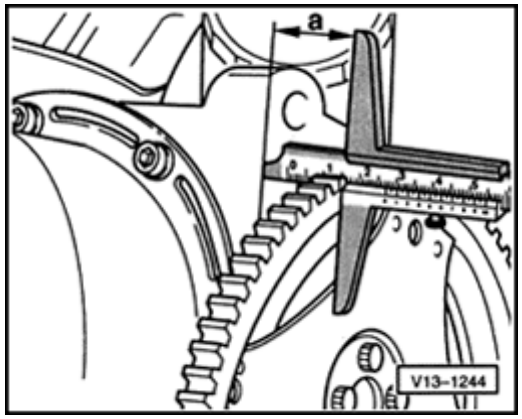
- Relocate 10-201 flywheel retainer to loosen and tighten bolts.
- Mark drive plate to engine.

Installing



- Install drive plate with shim -2- and mounting washer -1-. Lug (arrow) must point toward torque converter.
- Insert at least three used mounting bolts and tighten.

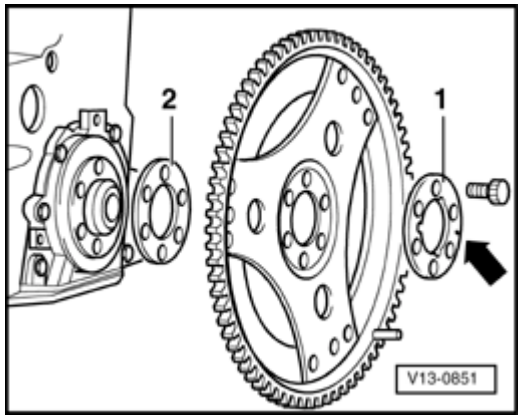
  Tightening torque: 30 Nm (22 ft lb)



- Measure distance -a- at three places and calculate average.

  Specification for Automatic Transmission 01V: 26-28 mm (1.024-1.102 in.).

If the specified value is exceeded:



- Remove drive plate and reinstall without shim -2-.
- Re-tighten bolts to 30 Nm (22 ft lb).
- Repeat measurement procedure.

If specified value is obtained:

- Replace bolts and tighten.

Tightening torque

Component	Tightening torque
Drive plate to crankshaft	60 Nm (44 ft lb) + 90° 1)
1) 90° are equivalent to 1/4 turn.	