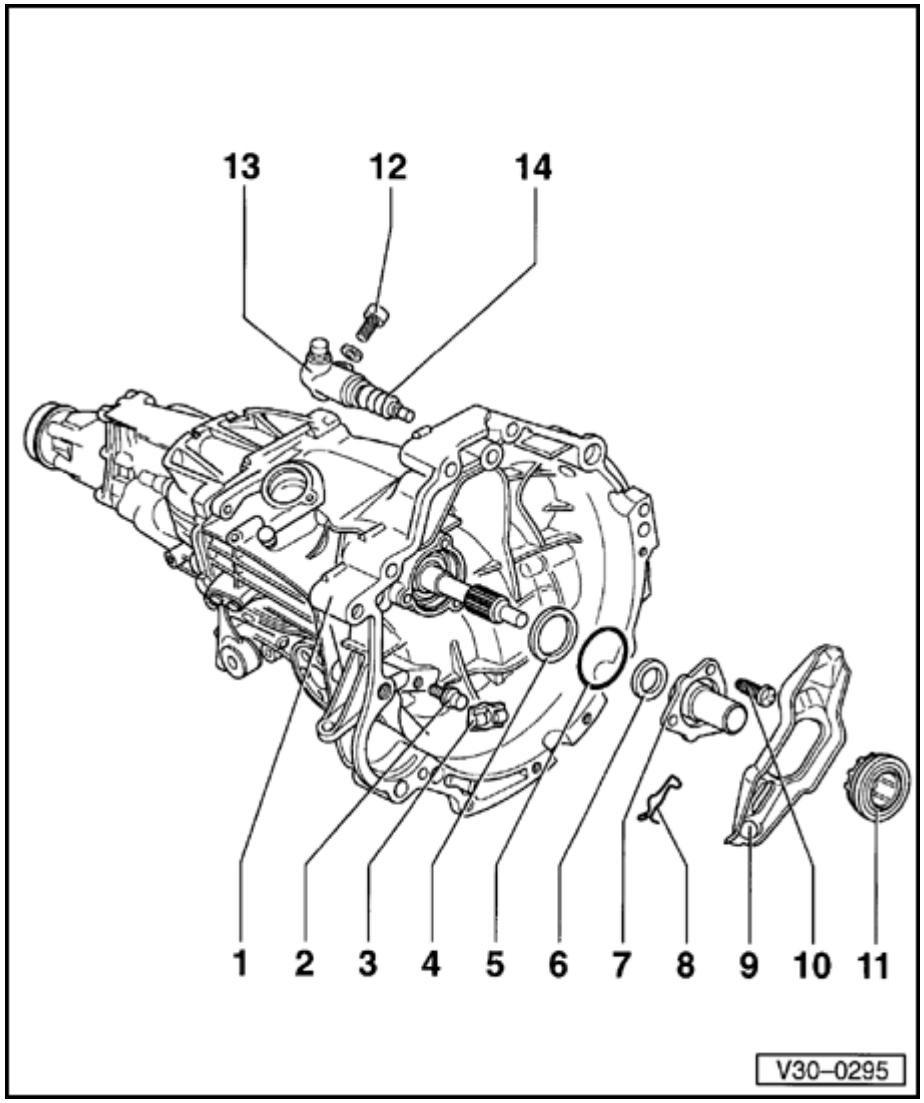
30-20



Clutch release mechanism, servicing

1 - Transmission

2 - Ball pivot pin

- 25 Nm (18 ft lb)
- Lubricate with MoS2 grease

3 - Intermediate piece

4 - Dished washer

- Smaller diameter (rounded side) faces guide sleeve

5 - O-ring

- Always replace

6 - Seal for input shaft

- Pull out of guide sleeve using VW681 extractor lever
- Drive in onto stop using VW192 fitting sleeve

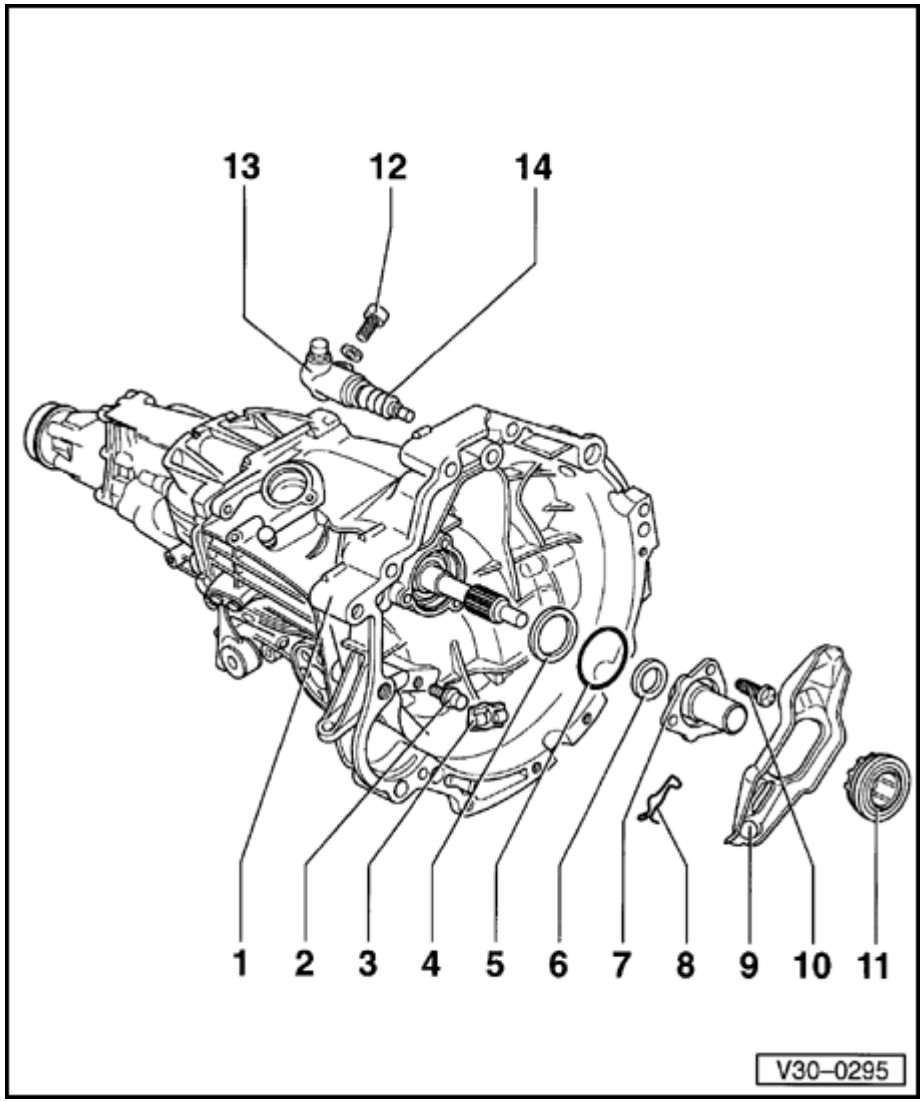
7 - Guide sleeve

- Before removing and installing, cover input shaft splines with shrink-tube to protect seal

8 - Retaining spring

- Secure to clutch release lever

30-21



9 - Clutch release lever

- Before installing, coat contact surface of clutch slave cylinder plunger with thin layer of copper grease, e.g. 381 351 TE

10 - Torx® bolt

- Always replace
- 35 Nm (26 ft lb)
- Self-locking

11 - Release bearing

- Do not wash-out bearing, wipe clean only
- Replace noisy bearings

12 - Bolt

➢ 8DVA 000 504 socket-head bolt

- 25 Nm (18 ft lb)

8DVA 000 505 ➢ socket-head bolt

- 20 Nm (15 ft lb)

13 - Clutch slave cylinder

- Tension clutch slave cylinder enough, so that mounting bolts can be easily installed.
- Do not operate after clutch pedal has been removed

14 - Plunger

- Lubricate end of plunger with copper grease, e.g. 381 351 TE

30-22

Clutch, servicing

Special tools and equipment

- 3067 flywheel retainer
- 3176 centering mandrel

Notes:

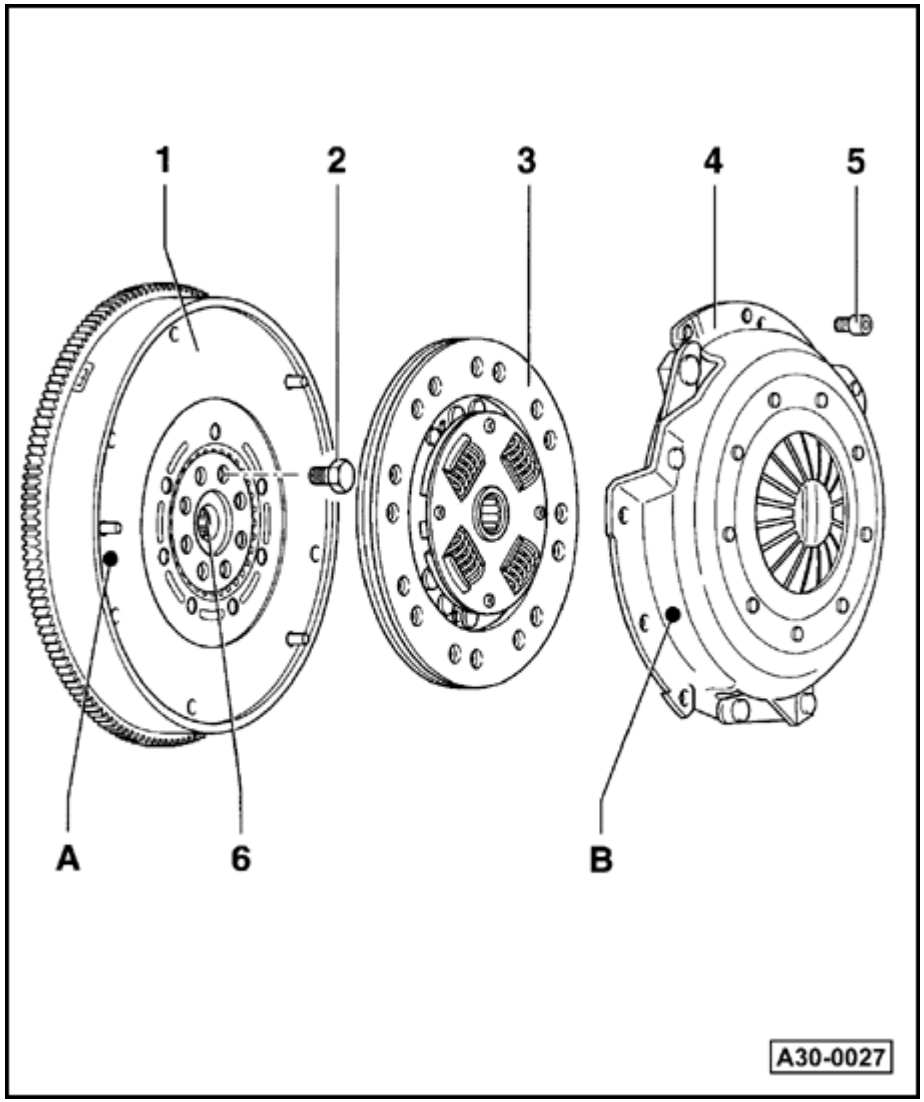
- *Observe general repair instructions ⇒ Page 00-14 .*
- *Replace clutch plates and pressure plates which have damaged or loose rivets.*
- *Select the correct clutch plate and pressure plate according to the engine code ⇒ Parts catalog*
- *Clean input shaft splines and (in the case of used clutch plates) the hub splines. Remove corrosion and apply only a very thin coating of lubricant G 000 100 to the splines. Then move clutch plate back and forth on input shaft until hub moves freely on shaft. Excess grease must be removed.*

  Pressure plates have an anti-corrosion coating

- *and are greased. Only the contact surface may be cleaned, otherwise the service life of the clutch will be considerably reduced.*

- *If the clutch has been burned out, thoroughly clean the bellhousing, flywheel and parts of the engine facing the transmission to reduce the smell of burnt clutch.*

30-23



- Remove transmission to work on clutch ⇒ Page 34-18 .

CAUTION!

Clutch plates or pressure plates with loose or damaged rivets must be replaced.

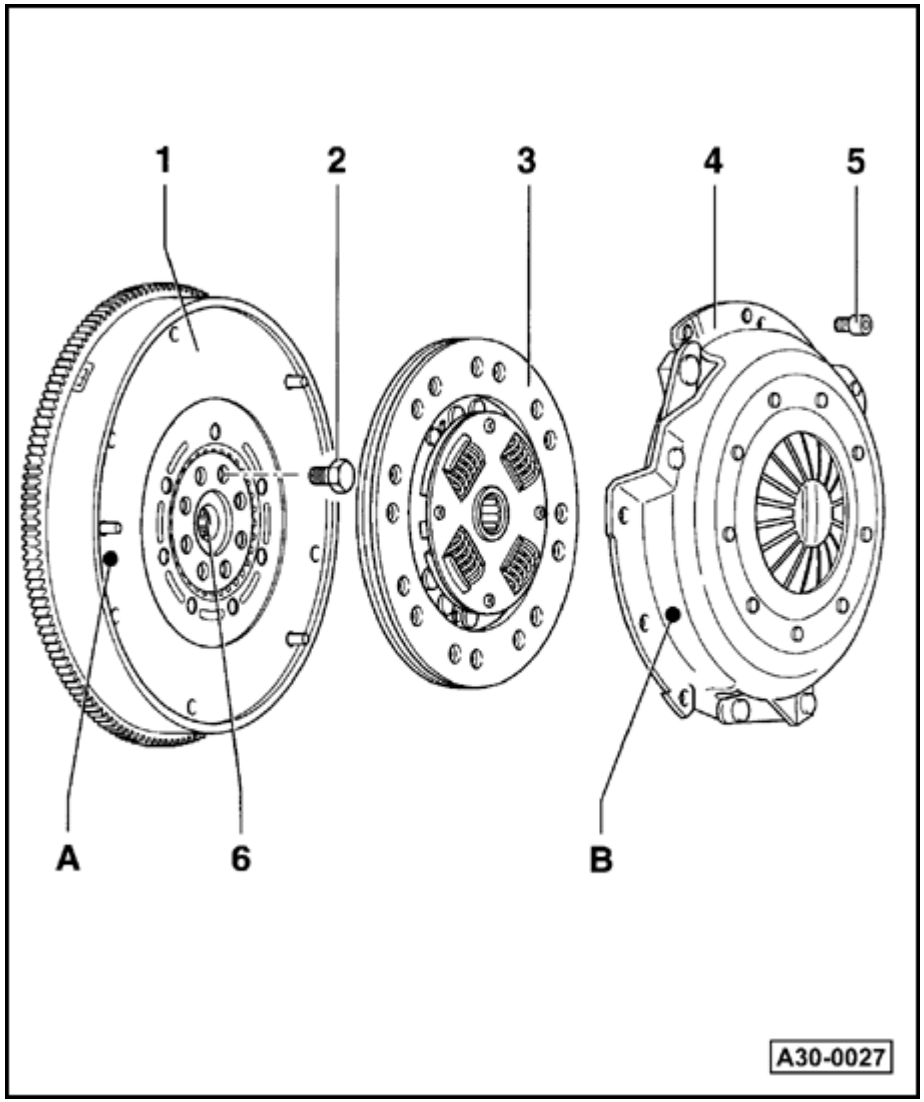
A - Color marking on dual-mass flywheel

- White color marking -A- on dual-mass flywheel must line up with white color marking -B- on pressure plate

B - Color marking on pressure plate

- White color marking -A- on dual-mass flywheel must line up with white color marking -B- on pressure plate

30-24



1 - Dual-mass flywheel

- Make sure centering pins are in place and seated correctly
- Contact surface for clutch lining must be free of dirt, oil and grease

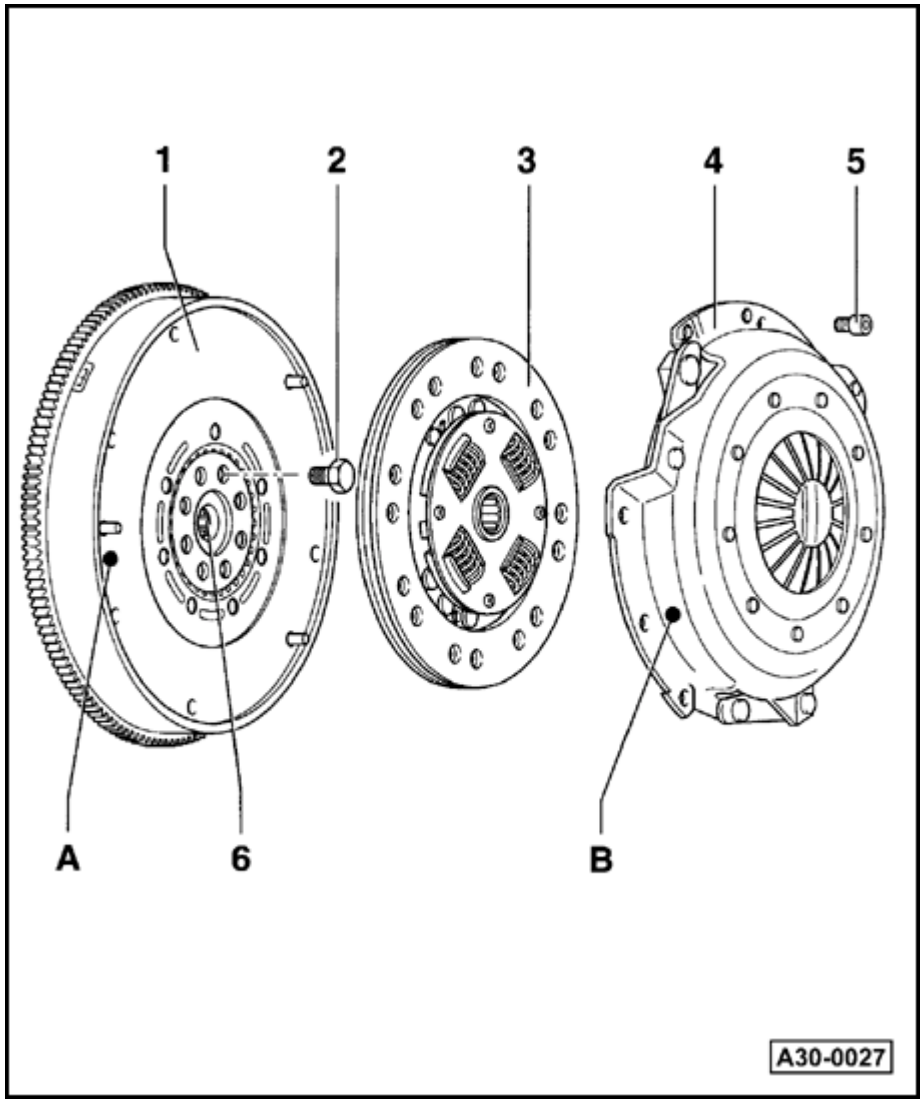
Removing and installing

⇒ Repair Manual, Engine Mechanical, Repair Group 13

2 - Bolt

- Always replace
- With dual-mass flywheel: 60 Nm (44 ft lb) + 1/2 turn (180°)
- Without dual-mass flywheel: 60 Nm (44 ft lb) + 1/4-turn (90°)

30-25



3 - Clutch plate

- Installation position: Spring pack (coil springs) facing pressure plate. Clutch lining must make full contact with flywheel. Marking "Getriebeseite" (if provided) faces pressure plate
- Do not lubricate
- Clutch plate diameter ⇒ Page 00-3
- Centering ⇒ Fig. 1
- Lightly lubricate splines

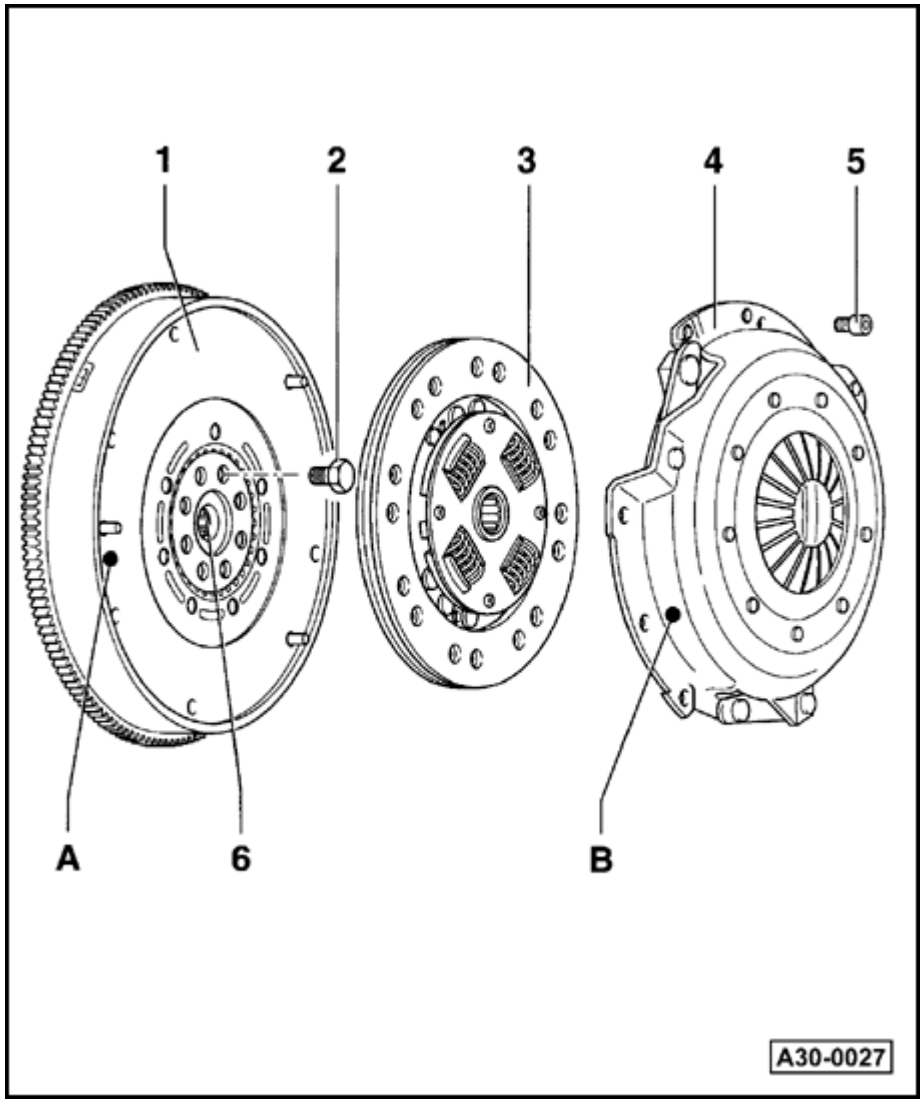
4 - Pressure plate

- Removing and installing ⇒ Fig. 1
- Checking ends of diaphragm spring
- Checking spring connection and rivets ⇒ Fig. 3

CAUTION!

The pressure plate is treated against corrosion and greased. Only the friction surface should be cleaned, otherwise the service life of the clutch will be considerably reduced.

30-26



5 - Bolt

- 25 Nm (18 ft lb)
- Loosen and tighten in stages and in diagonal sequence

6 - Needle roller bearing

Removing and installing

- Repair Manual, Engine Mechanical, Repair Group 13

30-27

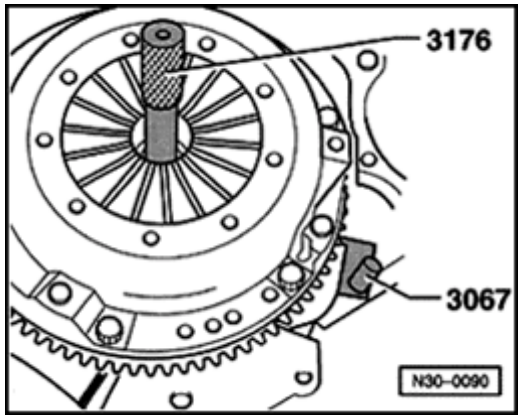


Fig. 1 Centering clutch plate and removing and installing pressure plate

Position of clutch plate: spring pack (coil springs) or marking "Getriebeseite" facing pressure plate and transmission.

CAUTION!

- ***Clutch lining and contact surface of pressure plate must make full contact with flywheel before bolts are inserted.***
- ***Tighten bolts evenly and in diagonal sequence to avoid damaging centering holes in the pressure plate and centering pins on the flywheel.***

- Make sure white color marking on dual-mass flywheel lines up with white color marking on pressure plate when assembling.
- Loosen and tighten bolts in stages and in diagonal sequence.

  Final tightening torque: 25 Nm (18 ft lb)
- Reverse position of 3067 flywheel retainer when removing.
- Use 3176 centering mandrel to center clutch plate.

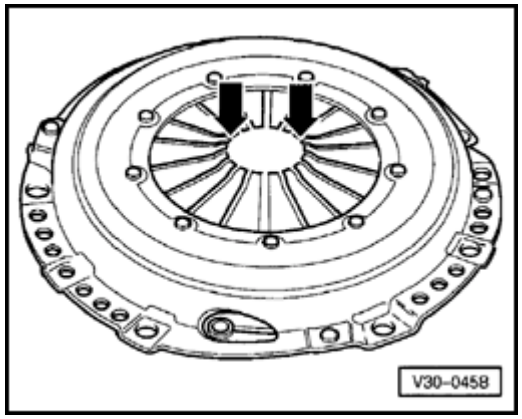


Fig. 2 Checking ends of the diaphragm spring

Wear up to half the thickness of the diaphragm spring is permitted

CAUTION!

For repairs, it is essential to match clutch pressure plate and clutch disc according to engine code letters using the Parts catalog microfiche.

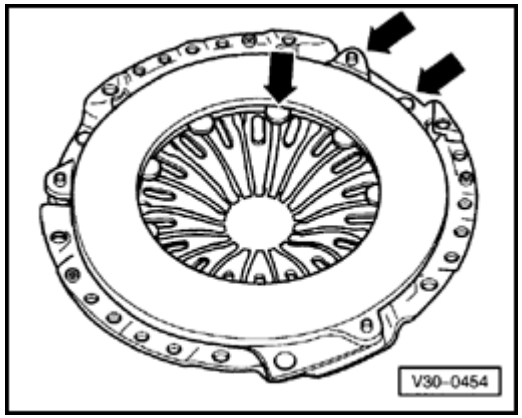


Fig. 3 Checking spring connection and rivets

- Check spring connection between pressure plate and cover for cracks and make sure rivets are seated tightly.
- Replace clutches with damaged springs or loose rivets (arrows).