

CLUTCH FITTING TECHNICAL NOTE

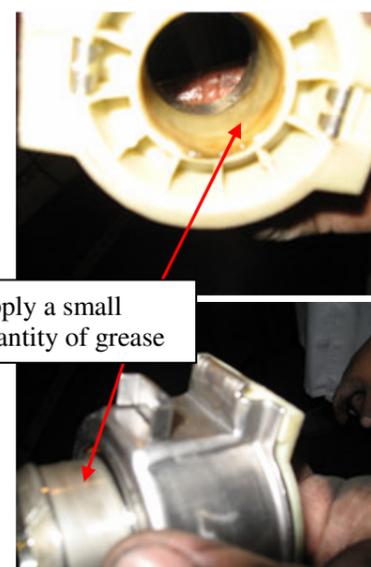
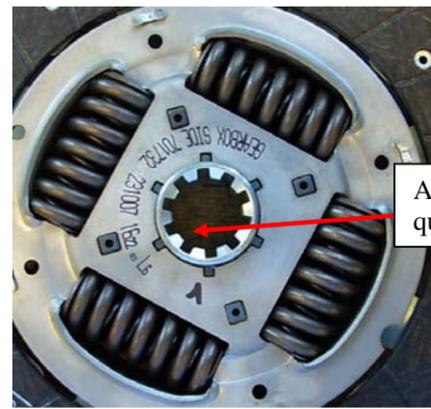


2 Prepare the clutch for assembly :

- 1- Apply a small quantity of grease in the hub splines approximately 5 mm from the hub extremity
- 2- Apply a small quantity of grease to the release bearing (internal diameter and contact area with the fork) and in the fulcrum fork.

1 After disassembling the gearbox from the engine :

- 1- Check engine crankshaft seal : Verify that there is no oil contaminating the flywheel . If an oil leak is detected, after removing the flywheel, change the crankshaft seal.
- 2- Check gearbox input shaft splines, checking that there is no damage or excessive wear along the spline length.
- 3- Prevent the flywheel from rotating and remove the flywheel fixing bolts.
- 4- Check the gearbox input shaft seal : Verify that there is no oil coming from the gearbox. If an oil leak is present repair the gearbox by changing the input shaft seal.
- 5- Check the clutch release system
 - a.- Check the guide tube surface: Checking there are no marks or excessive wear.
 - b.- Check the clutch fork: check for excessive wear at connecting and pivot points.
- 6- Check that the push rod connected to the slave cylinder can move, sliding smoothly when it is pushed and it doesn't leak oil.



Apply a small quantity of grease

3 Fasten the flywheel and the clutch :

30 Nm + 90°

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Position the new Valeo flywheel carefully on the crankshaft centre and tighten the bolts (M12x1.25-6h, hexagonal head) with a progressive torque following a star sequence, taking care not to apply excessive torque. Tightening torque: 30 Nm + apply a torque angle of 90° over each bolt.

4 Fasten the clutch and release bearing :

25 Nm

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- 1- Position the driven plate in the flywheel using an alignment tool (see the photo)
- 2- Fasten the cover assy. centering it on the dowels and hand tightening 3 bolts at 120° and checking that the drive plate remains stable and well centered with the alignment tool.
- 3- Carefully Tighten each bolt using a star-like sequence similar to that used for the flywheel. The diaphragm fingers must move as uniformly as possible to prevent distortion. Repeat the complete sequence approximately 3 times. Use the M8x1,25x15,5 bolts with a internal hexagonal (Allen) head.
- 4- Complete the installation apply a torque of 25Nm using a torque wrench following the previous sequence.
- 5- Assemble the release bearing on the guide tube and check that it slides correctly.

5 Re-assemble the gearbox

1. Check that the dowel pins are present and they are not damaged.
2. Position the gearbox in line with the engine crankshaft, supporting the gearbox weight with the appropriate tools.
3. Introduce the gearbox input shaft into the driven plate hub spline.
4. Take care that the input shaft is introduced without force onto the drive plate splines. If necessary rotate the crankshaft to make input shaft entry easier.

Avoid supporting the weight of the gearbox on the drive plate during the assembly.

5. Check that the gearbox is in full contact with the engine block and that the centering pins are well fitted
6. Finally fasten the gearbox to the engine block tightening the bolts with the appropriate torque.
7. To connect the bearing to the cover assembly, the release lever must be moved in the opposite direction to its normal travel until a positive 'click' is heard and felt.

6 After the assembly

Verify that the clutch is well working:

- disengage and re-engage the clutch shifting through each gear ratio (including reverse)
- check that there is no abnormal noise during the engaging and disengaging operation
- in neutral raise the engine speed up to 4000 rpm and check that there's no abnormal vibration or noises.
- check there is no abnormal clutch slip in driving conditions.