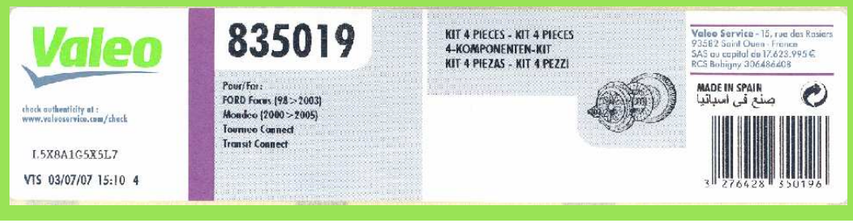
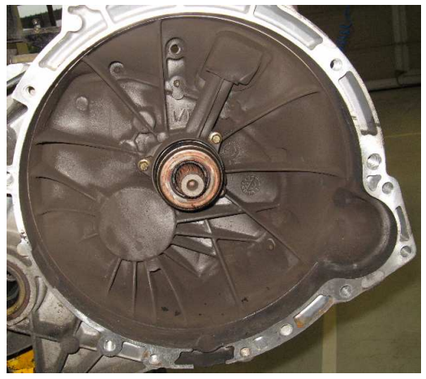


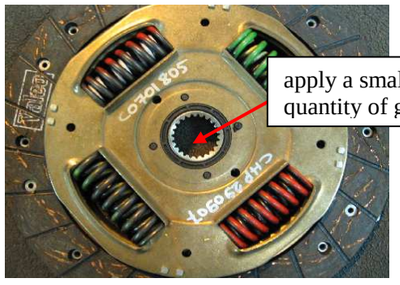
CLUTCH FITTING TECHNICAL NOTE



1

After disassembling the gearbox from the engine :

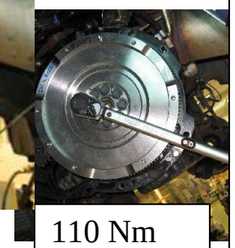
1. Check engine crankshaft seal : Verify that there is no oil contaminating the flywheel. In case of presence of oil leak, after removing the flywheel, change the crankshaft seal.
2. Check gearbox input shaft splines checking that there is no damage or show of excessive wear along the spline length.
3. Block the flywheel in rotation and remove the flywheel fixing bolts.
4. Check the gear box input shaft seal : Verify that there is no oil coming from the gear box. In case of presence of oil repair the gear box changing the input shaft seal.
5. Check the hydraulic bearing:
   a. Check that the bearing is rotating well under axial hand load: smooth rotation without hard points
   b. check the wear on the bearing contact ring with the diaphragm. The marks of contact have to not be excessive (less than 0,5mm)
   c. check that there is no oil coming from the interior of the hydraulic bearing
6. Check that the spring for preload is not broken and given a correct preload (50 N as minimum at working position). If necessary replace the hydraulic bearing.

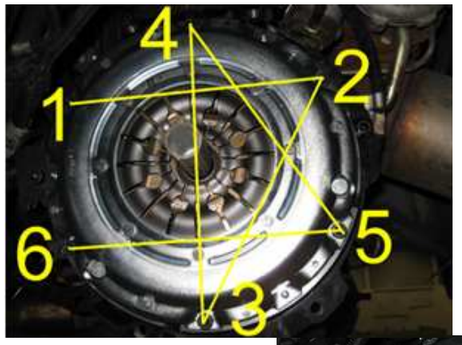


2

Prepare the clutch for assembly :

1. Prepare the clutch and verify that the kit part number matches with the part number indicated in the catalogue.
2. Check that the driven plate is well sliding and fitting over the input shaft. Do not apply any grease in the hub splines .
3. Position the driven plate in the flywheel thanks to the centering tool (see the photo)
4. Fasten the cover assy centering it with the pins and hand thightening 3 screws at 120º and checking that the driven plate remains stable and well centered with the centering tool.
5. Use screws M8x1,25x16 with a internal hexagonal (Allen) head.





3

Fasten the flywheel and the clutch :

1. Position carfully the new Valeo flywheel on the crankshaft centre and tighten the bolts (M10x1x19,5 hexagonal head) with a progessive torque following a star sequence: a bolt each 120º avoiding to apply excessive torque on this one. Tightening torque: 110 Nm.
2. Position the clutch on the flywheel and tighten smoothly each screw respecting a star-like sequence as per the tightening of the flywheel. The diaphragm fingers have to move as uniformly as possible. Repeat the complete sequence approximately 3 times.
3. Complete the fastening applying a torque of 25Nm thanks to a torque wrench respecting the previous sequence.

4

Re-assemble the gearbox

1. Check that the block pins are existing and that they are not damaged.
2. Position the gearbox coaxially 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 be introduced without shock. If necessary rotate the crankshaft to make easier the input shaft fitting.

Avoid that the weight of the gearbox be supported by the driven plate of the clutch 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 screws with the appropriate torque

5

After the assembly

Verify that the clutch is well working:

- disengage and re-engage the clutch shifting each gear ratio (including reverse)
- check that there is no abnormal noise when engaging and disengaging operation
- in neutral, speed up to 4000 rpm and check that there is no abnormal vibration or noises.
- check there is no abnormal clutch sliding in driving conditions.

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