



## LuK: Skoda 2006 1.6 Petrol



A full replacement guide for the 2006 1.6 petrol model. Recommended fitting time: 3 hours LuK P/N: 622333200

Skoda introduced the Octavia in 1996, before releasing the the generation 3 in 2013. The Octavia has been a popular car since it was launched. This model shares the same platform as other VAG group 'A' models with a transverse engine/transmission construction, so there is a good chance this will look quite familiar when the bonnet is raised.

In this guide we're changing the clutch on a 2006 Skoda Octavia 1.6 petrol that had covered over 95,000 miles and the clutch had started slipping under full load. We used a two-post ramp and two transmission jacks for the repair.

### Step-by-step procedure

#### On the ramp

With the vehicle positioned on the ramp, disconnect the air temperature sensor and breather pipe from the engine cover/air box assembly and remove the assembly. Now remove the battery covers, battery and battery tray to gain access to the top of the gearbox. Remove the two "C" clips that secure the gear linkage cables to the linkage (see Fig 1).

Remove the three mounting plate bolts before removing the gear cable assembly and stowing by the ABS unit.

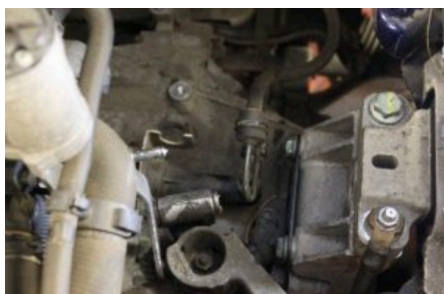


Fig 2.

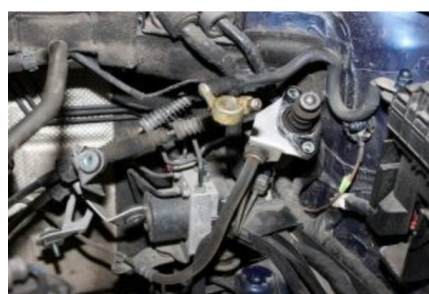


Fig 3.

Now remove the clutch slave cylinder (the hydraulics don't have to be disconnected) and unclip the flexible hydraulic pipe from the retaining bracket and swivel up (see Fig 2) – this will give better access to the two bolts. Remove the bolts, then the cylinder and then stow by the ABS unit (see Fig 3).



Now disconnect the wiring from the starter motor, pull back the rubber cover, release the red tab from the solenoid multi-plug and then release the multi-plug. Now remove the main battery live cable from the starter motor. The top starter motor bolt can also be removed at this point as well as the two top bell housing bolts.

With the car still on the floor, slacken the N/S/F hub bolt, raise the car and remove the engine under tray. Lower the car to waist height, remove the N/S/F wheel and then the lower section of the wheel arch liner. Now unbolt the N/S driveshaft flange (we used a long extension operating through the wheel arch area), disconnect the driveshaft from the gearbox and raise it above the gearbox casing.

Then remove the hub bolt and slide it out from the hub before removing the driveshaft. Raise the car and unbolt the O/S inner driveshaft flange. Now disconnect the reverse light switch multi-plug and remove the bottom starter bolt and bracket. Remove the bottom gearbox mounting/stabiliser assembly and then the two bolts at the bottom of the bell housing (see Fig 4); these bolts can't be fully removed (as the exhaust is in the way), but the final threads can be released as the gearbox is being removed.



Fig 4.

## Engine support

We now need to support the engine and gearbox assembly. The problem we have with this vehicle (and we'll probably see more of it) is that there is no inner wing to locate an engine support beam on. The tool of choice would be an engine support that locates on the front subframe but this was not available to us so we instead supported the engine with a transmission jack and used a second transmission jack for the gearbox. Now remove the gearbox mounting and lower the engine and gearbox until clearance is available for gearbox removal. Remove the final two bell housing bolts and ease the gearbox out, remembering to release the two bottom bell housing bolts. With the gearbox removed, the clutch can now be removed.

The solid flywheel was inspected and the glaze removed from the surface with an emery cloth. Remove the clutch release fork, bearing and snout from the gearbox bell housing and clean the bell housing. Replace the gearbox snout, release fork and bearing, applying a smear of high melting point grease to the pivot points of the release fork and the input shaft splines.

## Clutch assembly

Check the clutch plate fits the input shaft splines correctly. This will also give even distribution of the lubrication and then allow you to wipe off any excess (see Fig 5).



Fig 5.

Fit the new clutch assembly with a clutch alignment tool and torque to the manufacturer's specification. Refit the gearbox, starting with the bottom two bell housing bolts during installation and, once bolted tight on the bell housing, refit the gearbox mounting and secure.

At this point we can check whether there is slight 'freeplay' on the release fork to confirm correct installation. Refit all components in reverse order and torque to the manufacturer's specifications. You also need to ensure all electrical items are reset and working correctly as the battery has been disconnected. On start-up the ABS, ESP and electric steering warning lights were illuminated but, by turning the steering lock-to-lock we were able to reset the steering. We could then reset the ABS and ESP by taking the vehicle for a short road test.





## Clutches

Remove the front bumper and then the intercooler support bracket, before removing the bolts from the front panel and replacing with two long bolts to act as guides. Also support the panel and slide the panel forward to gain more room for gearbox removal.

Remove the bell housing bolts, leaving two to support the gearbox that can easily be removed when the engine and gearbox are supported, then support the engine and gearbox, remove the gearbox mountings and lower the gearbox to a position that it is ready to be removed. Now remove the final two bell housing bolts and ease the gearbox out (note: the gearbox will be heavy as the double clutch is retained on the gearbox and not on the engine). With the gearbox removed we're now in a position to replace the clutch.



LuK trained and certified technicians can replace the double clutch assembly and engagement mechanism. Release the transport locks and adjust the clutch with the LuK special tools 400 0418 10 and 400 0423 10. Check the DMF anti-back lash ring for damage; our customer requested that we change the dual DMF whilst the gearbox was removed.

With the DMF replaced and the new double clutch fitted to the gearbox we can now refit the gearbox in reverse order of removal; always check for correct position and alignment of mountings and bolts and torque to the manufacturer's specification.

Refill the gearbox with the correct quantity and quality of oil and, once the car is running, carry out basic settings and then adaptations on the gearbox control unit with a compatible diagnostic machine, always remembering to reset the electrical consumers after the battery has been disconnected i.e. clock, radio, electric windows, etc.