LuK Clutch Academy

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Audi A6 2.0TDi

The Audi A6, launched in 1994, is still a popular executive vehicle on the road today. The technical team at LuK take a closer look at the Audi A6 2.0TDi saloon for a clutch and flywheel replacement, and offer a few handy hints that should prove useful to any workshop looking to undertake the repair.

The vehicle maybe fitted with alloy wheels, so before starting the repair, make sure that the locking wheel nut key is available. For safety, disconnect the battery, which is found in the boot. For this repair we used a two post ramp, a long axle stand and a transmission stand and cradle.

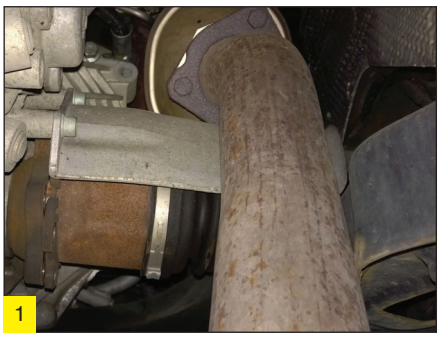
Open the bonnet and disconnect the battery. The remainder of the work is from underneath the vehicle. Raise the vehicle and remove both under tray sections. Using the long axle stand, support the front of the engine and then remove the front engine mount .

Remove both of the drive shafts from the transmission side, and stow the shafts out of the way using a couple of bungee ties. The offside drive shaft also has a heat shield that should be removed (fig 1). At this stage, it is possible to loosen the bottom four bell housing bolts, keeping in mind one of them is a nut and bolt arrangement.

Remove the gearbox stabiliser bar and body stabiliser bar. Remove the bolts that hold the exhaust to the main gearbox support bracket and disconnect the exhaust system from the clamping sleeve. Carefully split the exhaust and support using a bungee tie. Support the gearbox with the transmission jack and remove the main gearbox support bracket.

Disconnect the reverse light connecter (fig 2) and remove the gear link stabiliser bolt (fig 3. Remove the upper gear link stabiliser bolt, which is a captive bolt and washer from the top of the gearbox. Remove the bolt that holds the pushrod in place, and remove the pushrod. Remove the selector shaft nut and disconnect the lever from the selector shaft (fig 4).

Clamp the hydraulic line at the rubber pipe section and disconnect the external slave cylinder (fig 5), keeping the line connected, and stow safely. The remaining bell housing bolts can now be loosened, and all of them can be removed. Keep in mind that the bell



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housing bolts are all different sizes, so pay attention to the location of each one of them. Carefully detach the gearbox from the engine and lower the gearbox to the floor.

With the clutch removed, check the Dual Mass Flywheel (DMF) for signs of heat stress and evidence of grease loss. The DMF should also be tested for freeplay and rock between the primary and secondary masses, LuK tool number 400 0080 10 is specifically designed for this purpose on all LuK manufactured DMF's. Full instructions and tolerance data for all LuK DMFs are contained on a CD which comes with this special tool.

Clean the first motion shaft splines and any debris from the bell housing (especially important when a release bearing has failed). Its important to ensure that the release bearing is always replaced if the clutch and/or DMF are worn out. Put a small dab of high melting point grease (not a copper based product) on the first motion shaft splines, and make sure the new driven plate slides freely back and forth. This not only spreads the grease evenly, it also makes sure you have the correct kit. Wipe any excess grease off the shaft and driven plate hub. Using a universal alignment tool and checking that the driven plate is the correct way round (note "Getriebe Seite" is German for "Gearbox Side") the clutch can be bolted to the flywheel evenly and sequentially.

Before fitting the gearbox, make sure the locating dowels are in place and are not damaged. Refit any that have become dislodged and refit the gearbox. Make sure the gearbox bell housing bolts are secured before lowering the jack. Refitting is the reverse of the removal.

For technical support and repair installation tips, go to www.RepXpert.com or you can call the LuK technical hotline on 0044-143-226-4264

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