

The dry double clutch

Special tools



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Audi, SEAT, ŠKODA, Volkswagen, 0AM 7-speed transmission Renault, DC4 6-speed transmission Ford, DPS6 6-speed transmission





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LuK special tools All-round solutions for successful repairs

Schaeffler Automotive Aftermarket and its brands LuK, INA, FAG and Ruville embody technology leadership and OE quality. We continue to be a step ahead of the competition in terms of working with our customers for the mutual benefit of both parties: more innovations, more service, more support. Such as with our unique LuK RepSet[®] 2CT repair solution and the special tools that have been developed for it.

To date, it has not been possible for garages to exploit the total repair potential of all vehicles, due to the large number of different double clutch systems. The acquisition costs of the special tools alone were totally disproportionate to the profits from the repair.

Schaeffler Automotive Aftermarket offers garages an efficient solution in the form of its modular tool system: The innovative tool system consists of individual modular units, which can be combined with each other — tailored specifically to professional repairs of current and future LuK double clutch systems.

The basic tool kit forms the centrepiece of the system, containing all parts of the tools that are needed for all double clutch repairs. The modules then form a complete kit when combined with the relevant manufacturerspecific tool kit. This modular system enables garages to make clear savings in acquisition costs.

We demand ultimate quality — and this also applies to our special tools. Our LuK clutch experts ensure that tools are subjected to strict test criteria during development and therefore comply with the Schaeffler quality standards. The rust-free coating plus delivery in a high-quality tool box ensures that you can rely on the tool systems remaining fully functional in the long term. What's more: The special tools have already been designed for all future developments in the sector of dry double clutches and will therefore remain useful in future.

The tools, which have been specially developed for use in independent garages, can be reordered individually at any time if they are lost. In addition, Schaeffler Automotive Aftermarket provides detailed information on the correct use and application of the special tools at www.schaeffler-aftermarket.com and www.repxpert.com. Modular in design and perfectly suited to the major vehicle manufacturers, tool systems from Schaeffler Automotive Aftermarket are simply essential for professional repair and assembly. Special tools for specialists: ultimate quality — perfectly conceived.

1 Description and contents of the LuK special tools

Work on the dry double clutch system must always be carried out using appropriate special tools. This ensures professional repairs and prevents damage to the clutch and transmission.

Schaeffler Automotive Aftermarket offers a future-proof tool system for correct assembly/disassembly. It has a modular design and consists of a basic tool kit and several vehicle-specific tool kits. The range of tools can be easily adapted to new and future double clutch systems. This enables tools to be put together as required.

Note:

The basic tool kit and the corresponding vehiclespecific tool kit must always be used for repairs.

The following tool kits are currently available:

- Basic tool kit
- Volkswagen tool kit (Audi, SEAT, ŠKODA, Volkswagen)
- Renault tool kit
- Ford tool kit
- Reset tool kit (Renault, Ford)
- Supplementary tool kit (for previous LuK double clutch special tool, part no.: 400 0240 10)

Note:

If you have any questions about the special tool case or diagnostics and repairs, please call our Service Centre on +49 6103 753-333.

1.1 Basic tool kit

The basic tool kit (part no. 400 0418 10) forms the basis of the modular tool system. It contains those tools that are generally required for all repairs to double clutches. Together with a vehicle-specific tool kit, they form a complete kit for professional repairs. This is based on all dry double clutch systems currently available from LuK.



- 1 Puller with spindle and pressure piece
- 2 3 thumb screws
- 3 3 M10 threaded bolts, 100 mm long
- 4 3 M10 threaded bolts, 160 mm long
- 5 Circlip pliers, angled
- 6 Magnet
- 7 Transmission support with height adjustment
- 8 2 plugs for driveshaft holes
- 9 DMF reset tool
- 10 Unlocking key
- 11 Special open-end wrench
- 12 DVD with assembly/disassembly instructions and training video

1.2 Volkswagen tool kit

This vehicle-specific tool kit (part no. 400 0419 10) must be combined with the basic tool kit. It can be used to disassemble, assemble and adjust both first generation dry double clutches (up to May 2011) and second generation dry double clutches (from June 2011) in vehicles manufactured by Audi, SEAT, ŠKODA and Volkswagen with a OAM transmission.



- 1 Dial gauge with tripod
- 2 Reference gauge 32.92 mm (1st generation, K2)
- 3 Reference gauge 48.63 mm (1st generation, K1)
- 4 Reference gauge 32.12 mm (2nd generation, K2)
- 5 Reference gauge 48.42 mm (2nd generation, K1)
- 6 3 thrust pieces
- 7 Support sleeve for disassembly
- 8 Pressure sleeve for assembly

- 9 Plugs
- 10 3 hooks
- 11 Setting gauge for reference gauge
- 12 Coupling hooks
- 13 Weight, 3.5 kg
- 14 DVD with assembly/disassembly instructions and training video

1.3 Renault tool kit

This tool kit (part no. 400 0423 10) contains all tools that are required to carry out professional repairs on a dry double clutch on a Renault vehicle (DC4 6-speed transmission). It must be used together with the basic tool kit.



- 1 3 hooks
- 2 Pressure sleeve for assembly
- 3 Support sleeve for disassembly
- 4 Locking piece
- 5 DVD with assembly/disassembly instructions and training video

1.4 Ford tool kit

This tool kit (part no. 400 0427 10) contains all tools that are required to carry out professional repairs on a dry double clutch on a Ford DPS6 6-speed transmission. It must be used together with the basic tool kit.



- 1 3 hooks
- 2 3 thrust pieces
- 3 Support sleeve for disassembly
- 4 Pressure sleeve for assembly
- 5 2 handles

- 6 Template KL-0500-8341 for 1.6-litre engines
- 7 Template KL-0500-8342 for 2.0-litre engines
- 8 DVD with assembly/disassembly instructions and training video

1.5 Reset tool kit

New double clutches for Renault vehicles with a DC4 transmission and for Ford vehicles with a DPS6 transmission are in principle fitted with a transport fastener. This means that no additional work is necessary prior to assembly.

The transport fastener must be put back in place if the double clutch is used again after disassembly, e.g. because work has been carried out on the transmission seals. The reset tool kit (part no. 400 0425 10) must be used for this type of work.



- 1 Base plate with spindle
- 2 Pressure nut
- 3 Adapter
- 4 2 fixing pins
- 5 2 knurled nuts
- 6 K2 pressure piece, Ø 115 mm
- 7 K2 pressure piece, Ø 131 mm

- 8 K1 pressure ring, Ø 85 mm
- 9 K1 pressure ring, Ø 105 mm
- 10 K1 return ring
- 11 K2 return ring
- 12 3 K1 fixing pieces
- 13 DVD with assembly/disassembly instructions and training video

1.6 Supplementary tool kit

The previous LuK double clutch special tool (part no. 400 0240 10) can be adapted to the new, modular tool system range with the supplementary tool kit (part no. 400 0420 10). Together, the contents of the two tool kits correspond to the basic tool kit and the Volkswagen tool kit.



- 1 Transmission support with height adjustment
- 2 Plugs for driveshaft holes
- 3 Special open-end wrench
- 4 Reference gauge 32.12 mm (2nd generation, K2)
- 5 Reference gauge 48.42 mm (2nd generation, K1)
- 6 DMF reset tool
- 7 Unlocking key
- 8 DVD with assembly/disassembly instructions and training video

1.7 Overview of tool kit applications

The table below shows which tool kits need to be combined if no LuK special tool is available yet.

Application		Audi, SEAT, ŠKODA, VW 1st generation	Audi, SEAT, ŠKODA, VW 2nd generation	Renault	Ford
	Basic tool kit Part no. 400 0418 10	×	X	×	X
Tool kit	Volkswagen tool kit Part no. 400 0419 10	×	X		
	Renault tool kit Part no. 400 0423 10			X	
	Ford tool kit Part no. 400 0427 10				X

This table illustrates how the tool systems are combined if the LuK double clutch special tool part no. 400 0240 10 is already available.

Application		Audi, SEAT, ŠKODA, VW 1st generation	Audi, SEAT, ŠKODA, VW 2nd generation	Renault	Ford
Tool kit	Previous LuK special tool Part no. 400 0240 10	×	×	X	X
	Supplementary tool kit Part no. 400 0420 10		X	X	X
	Renault tool kit Part no. 400 0423 10			X	
	Ford tool kit Part no. 400 0427 10				X

If a Ford or Renault double clutch already in use is reassembled, the transport fasteners must be reset using the specified tool.

Application	Audi, SEAT, ŠKODA, VW 1st generation	Audi, SEAT, ŠKODA, VW 2nd generation	Renault	Ford
Reset tool kit Part no. 400 0425 10			×	×

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