

**BGS 8320** 

# **Duplex Clutch Repair Kit for VAG DSG Transmissions**

#### **TOOLS**

- 1 Thrust piece, to be used as OEM T10376
- 2 Slip gauge, to be used as OEM T10374
- 3 Puller, to be used as OEM T10373
- **4** Support bridge, to be used as OEM T10323



#### **INTENDED USE**

This repair kit is needed for servicing clutches in the following car types: VW Golf (since 2004), Golf Plus (since 2005) with 7-drive transmission (Code 0AM), Audi A3 (since 2004) with 7-drive transmission (Code 0AM) and Touareg (since 2003) with 6-drive transmission (Code 08D).

#### **SAFETY INFORMATIONS**

- Do not use the tool if parts are missing or damaged.
- Use the tool for the intended purpose only.
- Never place the tool on the vehicle battery. There is a risk of a short circuit.
- Be careful when working with the engine running. Loose clothing, tools and other objects can be caught by rotating parts and cause serious injury.
- Keep children and other unauthorized persons away from the work area.
- Do not allow children to play with the tool or its packaging.
- Be careful when working on hot engines because of the risk of burn injuries.
- If you remove the ignition key before repairing, you can prevent the engine from being started accidentally and resulting in engine damage.
- This manual serves as a brief guide and does not replace a workshop manual. Always refer to the vehicle-specific service literature, particularly the technical data such as torque values and instructions for disassembly/assembly, etc..

Tel.: 02196 720480

Fax.: 02196 7204820

mail@bgs-technic.de



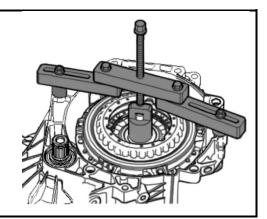
# INSTRUCTION

# Support bridge

Remove clutch hub.

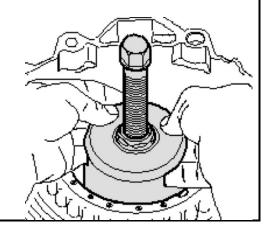
Disassemble lock ring of the clutch (this might be difficult because the clutch is under strong tension

Release the clutch by using the support bridge as shown in the picture.



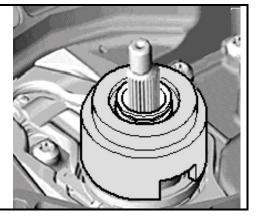
#### **Puller**

After the disassembly of the lock ring you can attach the puller as shown and disassemble the clutch by turning the puller spindle.



# Slip gauge

You can adjust the position of the engaging bearings by using the slip gauge. Use a depth gauge for measuring. For exact dimensions and detailed information about how to do it, consult the manufacturer's handbook.



# **ADJUSTMENT**

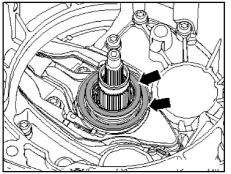
Adjust position of the engaging bearings.

It is necessary to adjust the position of the engaging bearings after replacing the engaging bearings, the starting lever or the starting lever seating.

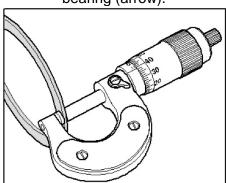
The locating face (gearbox/motor) has to be completely level in order to make sure for a good rest for the ruler.



Installation of the two starting levers and their engaging bearings.



Place the 1.4 millimeter thick dial on each bearing (arrow).



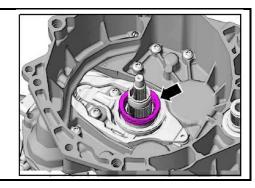
As there are 2 clutches, there will be 2 steps of adjusting them.

You will be doing several measurements while carrying out this operation.

Each measurement requires different preparations and a few simple calculations.

Please strictly follow these operating sequences.

You will start with the big engaging bearing for clutch 1 (K1).

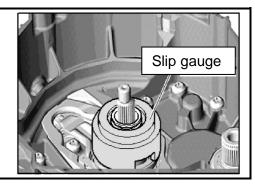


# First measurement for (K1)

Remove the small engaging bearing with the 1.4 millimeter thick dial.

Place the slip gauge on the big engaging bearing.

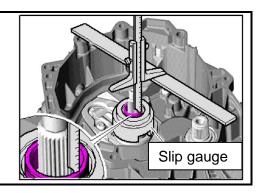
Exert some pressure on the slip gauge and rotate it to make sure for the correct seating of the slip gauge on the bearing.



Place the ruler on the gearbox flange and use the depth gauge for your measurement of the depth down to the gear shaft.

Note down the measured value as (B).

Example: B= 62.3 mm





# Second measurement for (K1)

Measure the distance from the ruler down to the slip gauge. Make this measurement as precisely as possible by taking readings from two opposite positions.

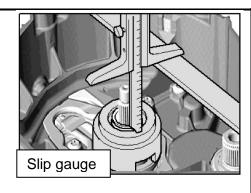
Thus, the determined value will be more precise, and any inaccuracy caused by a "tilting" on the engaging bearing will be minimized.

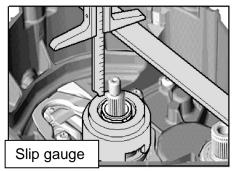
Take the mean value of both measurements on the slip gauge. Note down the value as (A).

Example: A= 64 mm

Calculate the difference of the 2 values A - B = ?

In our example the calculation is as follows: 64.0 mm - 62.3 mm = 1.7 mm





Refer to the below table for the required thickness of the dial.

Your reading for bearing K1		
from	to	required dial
0,71 mm	0,9 mm	0,8 mm
0,91 mm	1,1 mm	1,0 mm
1,11 mm	1,3 mm	1,2 mm
1,31 mm	1,5 mm	1,4 mm
1,51 mm	1,7 mm	1,6 mm
1,71 mm	1,9 mm	1,8 mm
1,91 mm	2,1 mm	2,0 mm
2,11 mm	2,3 mm	2,2 mm
2,31 mm	2,5 mm	2,4 mm
2,51 mm	2,7 mm	2,6 mm
2,71 mm	2,9 mm	2,8 mm

# In our example we need a 1.6 mm thick dial.

Never use more than a single dial. Never place 2 dials on top of each other to reach the required

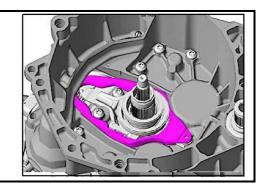
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Fax.: 02196 7204820

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Following this procedure, the position of the bearing K1 will be adjusted.

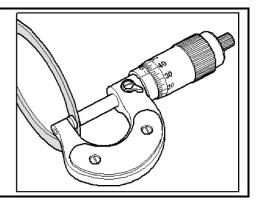
Remove again the bigger starting lever for the subsequent (K2) measurement.



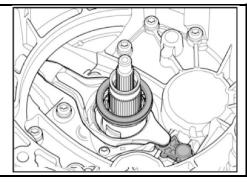


# First measurement for (K2)

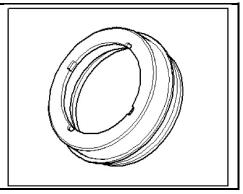
Use a 1.4 mm thick dial.



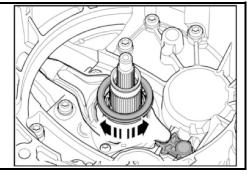
Install the small bearing only with a 1.4 mm thick dial.



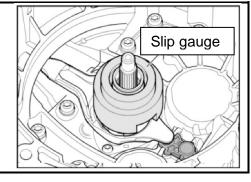
The small engaging bearing will only lock into one position because of the 4 grooves.



Rotate to check that the bearing is correctly installed with the grooves in their right position.



Place the slip gauge onto the small bearing.



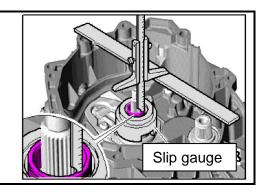
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Use the depth gauge to measure down to the gear shaft.

Note down this value as (B).

Example: B = 62.3 millimeters



# Second measurement for (K2)

Measure the distance from the ruler down to the slip gauge. Make this measurement as precisely as possible by taking readings from two opposite positions.

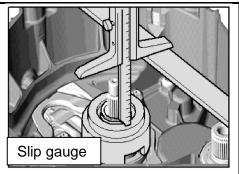
Thus, the determined value will be more precise, and any inaccuracy caused by a "tilting" on the engaging bearing will be minimized.

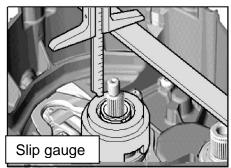
Take the mean value of both measurements on the slip gauge. Note down the value as (A).

Example: A= 63.5 mm

Calculate the difference of the 2 values A - B = ?

In our example the calculation is as follows: 63.5 mm - 62.3 mm = 1.2 mm





Refer to the below table for the required thickness of the dial.

Your reading for the bearing K2		
from	to	required dial
0,71 mm	0,9 mm	0,8 mm
0,91 mm	1,1 mm	1,0 mm
1,11 mm	<mark>1,3 mm</mark>	<mark>1,2 mm</mark>
1,31 mm	1,5 mm	1,4 mm
1,51 mm	1,7 mm	1,6 mm
1,71 mm	1,9 mm	1,8 mm
1,91 mm	2,1 mm	2,0 mm
2,11 mm	2,3 mm	2,2 mm
2,31 mm	2,5 mm	2,4 mm
2,51 mm	2,7 mm	2,6 mm
2,71 mm	2,9 mm	2,8 mm

# In our example we need a 1.2 mm thick dial.

Never use more than a single dial. Never place 2 dials on top of each other to reach the required thickness.

Following this procedure, the position of the bearing K2 will be adjusted.

Tel.: 02196 720480 Fax.: 02196 7204820 mail@bgs-technic.de