# dodson®

## INSTALLATION INSTRUCTIONS

## **DO250 STREET PLUS CLUTCH**

### DMS-00-0086 REV 001

**05 FEBRUARY 2024** 

RELEASED BY:

PREPARED BY: JAN PISL DATE: 05FEB2024



#### **REVISION UPDATE NOTES:**

The following table indicates the changes we have made in either the disassembly or assembly of the product you have received. All changes are indicated by a revision bar in the margin.

If you have any questions email us at technical@dodsonmotorsport.com

Revision	Date	Description	
REV.001	05DEC2024	- Initial release.	

#### **READ FIRST**

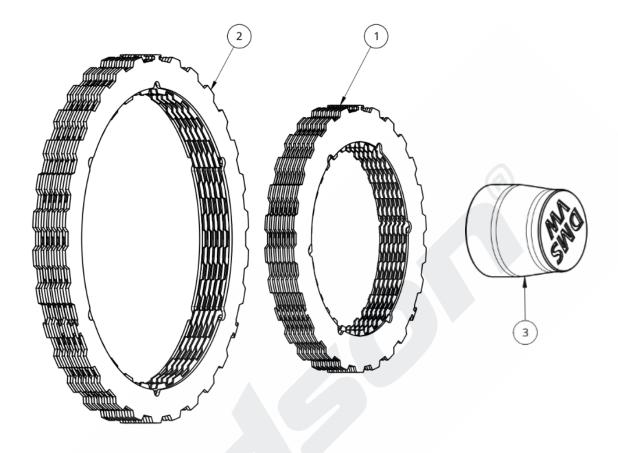
For best results, we recommend only using Manual (M) or Sport (S) transmission modes.

We have seen great results when using our clutch kits with a suitable transmission tune, however it is not necessary to be used with the Dodson Street Plus range.

This kit requires the reuse of the OE circlips and clutch kit top plates.



#### **DQ250 STREET PLUS CLUTCH KIT CONTENTS (DMS-8580)**



Item Number	Part Name	DMS Code	Ωty
1	Small Clutch Stack	DMS-8578	1
2	Large Clutch Stack	DMS-8579	1
3	Seal Guide	DMS-2409	1



#### DQ250 STREET PLUS CLUTCH KIT INSTRUCTIONS DISASSEMBLY

#### **STEP 1**

Turn the gearbox on its end so that the clutch cover is facing up. Remember to either have the oil drained first or block off the breather so it doesn't spill out. Remove the large clutch cover circlip.



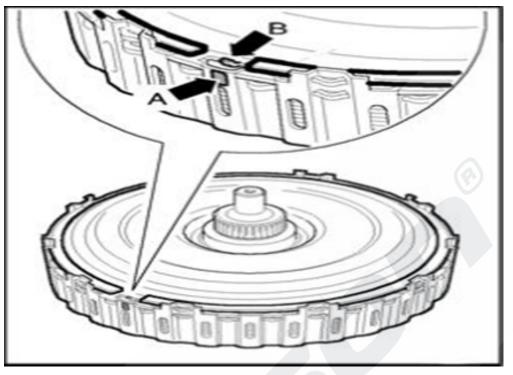
#### STEP 2

Remove the clutch cover, being careful not to damage the inner lip seal. Avoid touching the seal.





Remove circlip and mark position as shown in the diagram. Remove the drive plate and set aside.



#### STEP 4

Remove the clutch retaining circlip from the center.





Hold the clutch unit firmly and lift it straight upwards. When setting the clutch unit down be careful of the seals on the underside of the clutch core. These can be damaged easily if dropped.



#### **STEP** 6

Remove the oil pump drive shaft.





Remove Large and Small baskets.



#### **STEP 8**

Remove Small and Large circlips.



#### **STEP 9**

Carefully flip the entire assembly upside down to tip out all of the frictions and steels.





#### ASSEMBLY

#### **IMPORTANT NOTE**

The frictions have a specific direction, ensure the friction grooves have the same orientation as the photo when installed. SOAK THE FRICTIONS IN TRANSMISSION FLUID BEFORE FINAL INSTAL.



#### STEP 1

Fit the small basket to help with assembly of the small stack. The stack should be installed in the same order as supplied.





Fit the OE top plate and circlip to finish off the small stack.



#### **STEP 3**

Measure the small stack clearance. This can be done using the height gauge end of vernier calipers. Zero the calipers at the height between the top plate and the clutch core and then lift the top plate all the way up against the circlip using a small flat head screwdriver or a pick as shown below.



#### THE CLEARANCE SHOULD BE: 2.00 +/- 0.20mm



Fit the large basket to help with assembly of the large stack. The stack should be installed in the same order as supplied.



#### STEP 5

Fit the OE top plate and circlip to finish off the large stack.





Measure the large clutch clearance the same way as done on the small clutch. Alternatively the measurement can be done by measuring the gap between two steel plates through the openings on the side of the clutch core and then subtracting the thickness of the friction plate (1.80mm).



#### THE CLEARANCE SHOULD BE: 2.30 +/- 0.20mm



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Refit the oil pump drive, ensuring its correctly splined.



#### STEP 8

Place the Dodson or a VW clutch install tool into housing. Lower the clutch assembly into housing. **Do not drop into housing.** It is important to have a second technician hold the install tool in place as it can spin and let the clutch drop. If this happens you may have to disassemble the clutch and start again as the bottom friction can get misaligned from the basket.



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Refit the center circlip.



If a different clutch core is being used, please follow the "EXTRA STEPS" instructions on Page 15 before proceeding to STEP 10.

#### **STEP 10**

Reinstall the drive plate, ensuring to align the marks made previously. Fit the drive plate circlip. The clutch install tool can now be removed.



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Fit the seal guide provided and fit the clutch cover while avoiding touching the center lip seal. It may be necessary to tap the cover with a soft hammer to get it fully seated.

Fit the large circlip.



#### **IMPORTANT NOTE**

PLEASE MAKE SURE THAT THE **BASIC SETTING AND ADAPTION DRIVE** PROCEDURES ARE SUCCESSFULLY COMPLETED BEFORE USING THE FULL POWER OF THE VEHICLE.

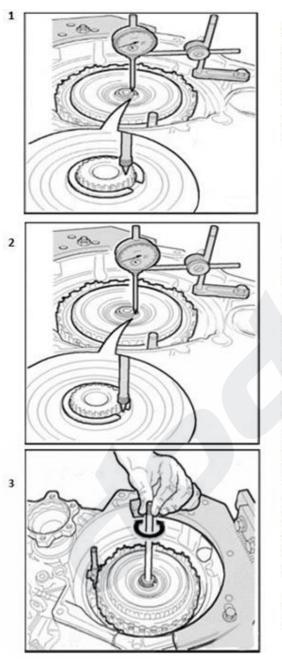
DODSON INSTRUCTIONS FOR THE PROCEDURE USING VCDS SOFTWARE ARE AVAILABLE IF NEEDED (DMS-00-0053).

If you have any questions email us at technical@dodsonmotorsport.com

#### **EXTRA STEPS**

These instructions are only for fitting the clutch to a different or new gearbox. If you are installing the clutch to the same gearbox it came from, ignore these steps.

Fit a **2.0mm** center circlip and follow the measurements and calculations below to determine the correct circlip thickness to achieve desired endfloat.



First measurement:

DMS VW Clutch Tool remains installed! Fit appropriate dial gauge Place plunger of dial gauge on to transmission input shaft. Set dial gauge to "0" with pre-load. Lift clutch upward until it stops and note the measurement result.

#### Second measurement:

DMS VW Clutch Tool remains installed!

Place gauge plunger onto tab of large clutch pack carrier. The plunger must not sit on the circlip.

Reset dial gauge to "0" with pre-load.

Lift clutch upward again to stop and note this result as well.

The calculation will be made to determine which of the remaining nine circlips will be finally installed:

- For this, use this formula:

Second measurement minus first measurement plus 1.85mm = thickness of circlip to be installed. note this result.

The nine remaining securing circlips are stepped in 0.1mm increments.

Measure all circlips then determine the circlip which matches your result.

Remove the 2mm thick circlip & replace with the determined circlip.

Install input shaft for transmission oil pump, turn slightly in direction of arrow - when doing this.

Once the correct circlip is fitted follow the rest of the assembly instructions from **Step 10**.