

***dodson***<sup>®</sup>

**INSTALLATION  
INSTRUCTIONS**

**DQ381 SPORTSMAN'S CLUTCH**

**DMS-00-0041 REV 002**

**10 JULY 2023**

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DATE: 19JUN2023**

**RELEASED BY: J.PISL  
DATE: 10JUL2023**

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## 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](mailto:technical@dodsonmotorsport.com)

Revision	Date	Description
REV.002	10JUL2023	- Added Trans tune recommendation
REV.001	24MAY2022	- Document creation.

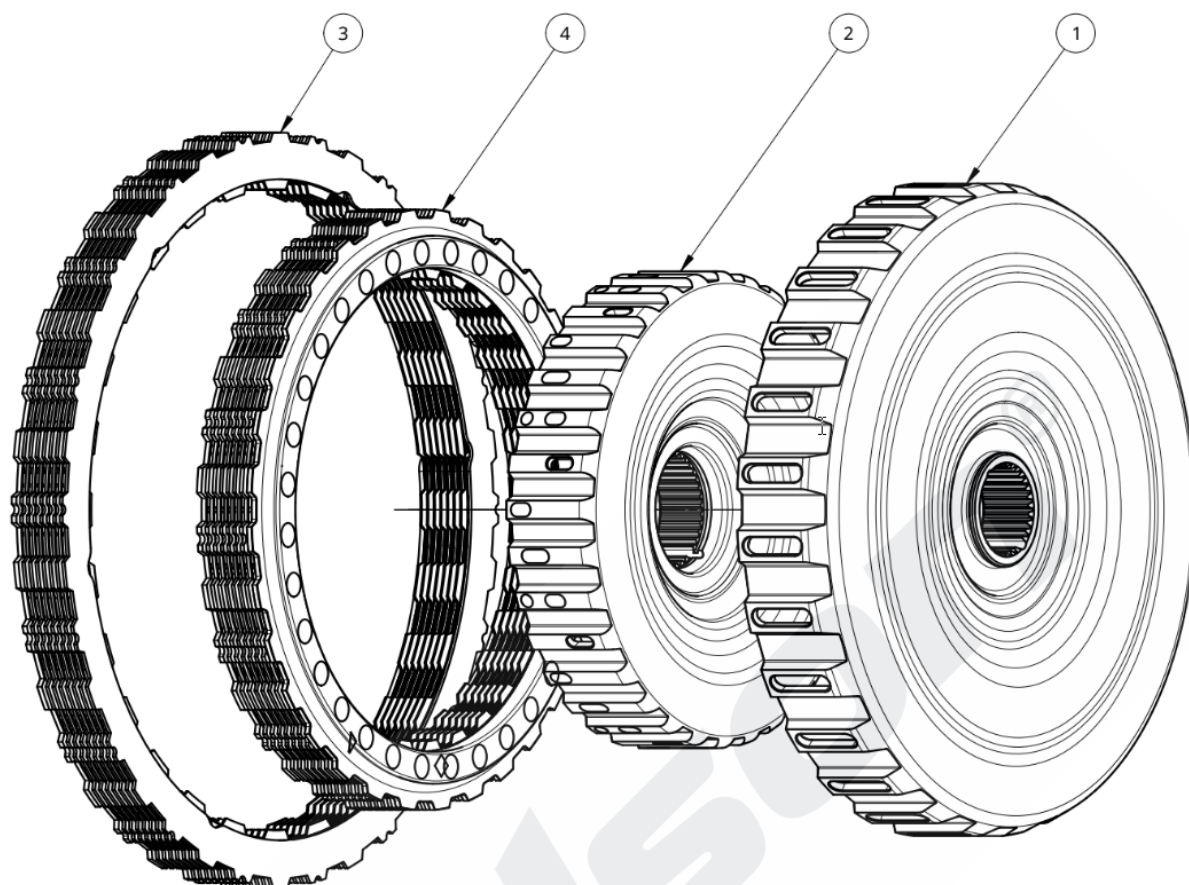
## READ FIRST

### A TRANSMISSION TUNE IS RECOMMENDED TO PREVENT DAMAGE TO THE CLUTCH AND TO GET THE BEST BENEFITS FROM IT.

We have seen great results when using our clutch kits with a suitable transmission tune. When choosing an aftermarket tune, the important aspects that need to be considered are:

- Increasing clutch pressure to ensure that the clutch is fully clamped when power is applied.
- Modifying the torque tables, as a modified car will be applying far more torque at lower RPM than the TCU is tuned for. The TCU may also intentionally slip the clutch at low RPM for a more comfortable drive, but with engine and transmission modifications, this can burn the clutch.
- Since the "comfort mode" allows the clutch to slip, it is important to make sure this isn't a default setting on start up, if possible.
- Moving the shift points so the car doesn't hold 2nd gear at low RPM (or even at a stop). Heavy torque applied in 2nd gear at low RPM can burn the small stack.
- Not every off-the-shelf transmission tune will resolve this, and so it's important that the aspects mentioned above have been considered and that they have been discussed with your tuner.

For best results, we recommend only using **Manual (M)** or **Sport (S)** transmission modes. In some cases manually shifting into 1st gear before coming to a stop may be required to prevent "bumping". (which can be caused by the larger clutch and its increased coefficient of friction)

**DQ381 SPORTSMAN'S CLUTCH KIT CONTENTS (DMS-8087)**

<b>Item Number</b>	<b>Part Name</b>	<b>DMS Code</b>	<b>Qty</b>
1	Large Clutch Basket	DMS-3246	1
2	Small Clutch Basket	DMS-3247	1
3	Large Clutch Stack	DMS-8147	1
4	Small Clutch Stack	DMS-8148	1

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## DQ381 SPORTSMAN'S INSTALLATION INSTRUCTIONS DISASSEMBLY

### STEP 1

To remove the clutch from the car you must remove the large circlip retaining the lid. You must then remove the lid and small circlip holding the large basket. **We recommend marking the lid to keep it in the same position during reassembly.**



### STEP 2

Pull the clutch unit out of the transmission.



## **STEP 3**

Remove both clutch baskets.



## **STEP 4**

Remove the small clutch circlip using a small screwdriver or a pick.





## **STEP 5**

Remove the clutch stacks. This can be done by flipping the whole assembly.

**Be careful not to damage the sealing rings on the underside of the clutch core.**



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## ASSEMBLY

### STEP 1

Start the assembly by installing the clutch stacks. These should be installed in the same order as supplied.

**Note: The frictions have a specific direction, ensuring the grooves have the same orientation as the photo when installed.**





## **STEP 2**

For easier installation, fit the Dodson small basket and then insert the small clutch stack.



## **STEP 3**

Please keep the cut-outs on the steel plates inline with each other while installing the plates into the core.





## **STEP 4**

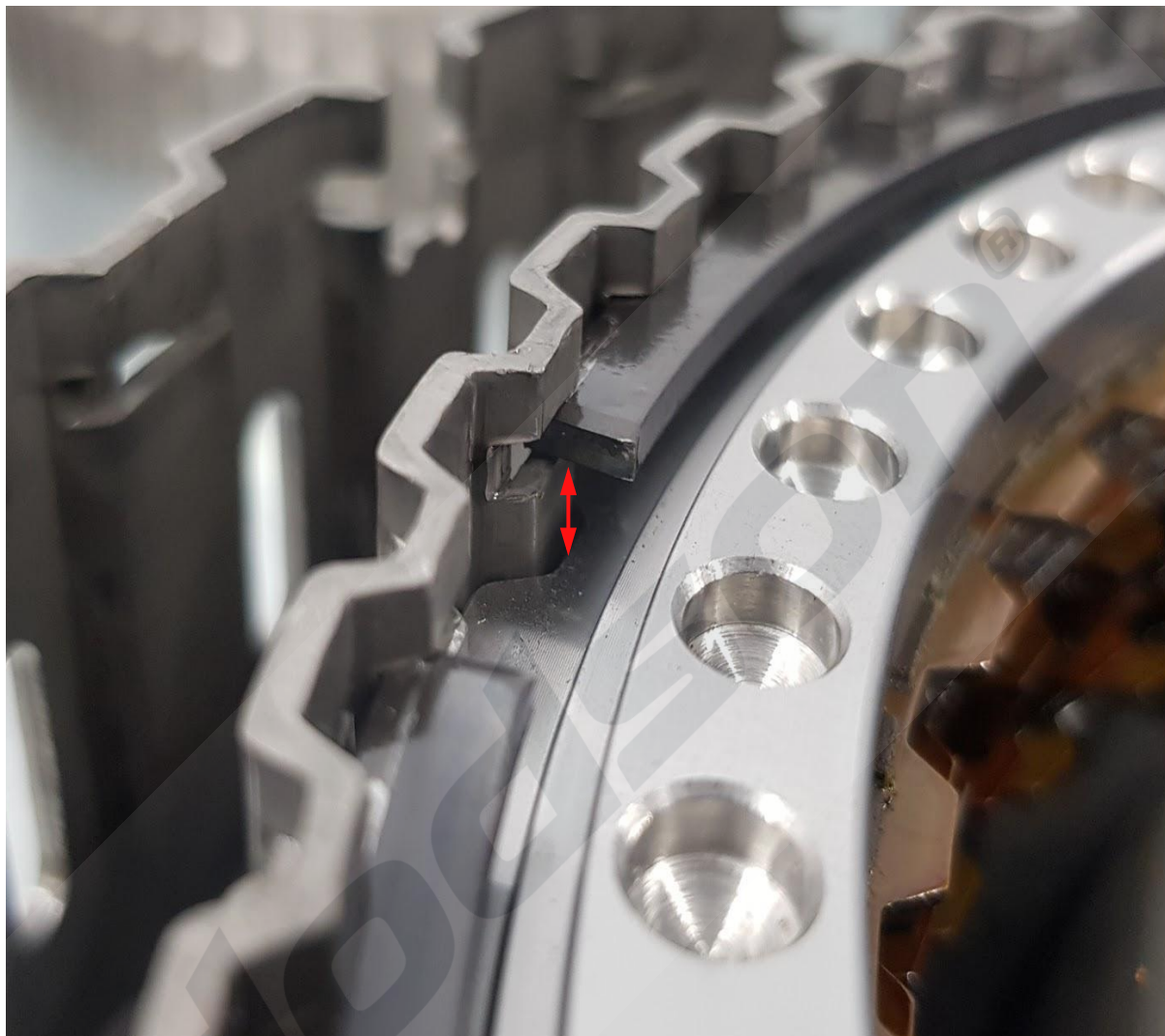
Finish off the small clutch stack with the Dodson top plate and fit the small clutch circlip.



**STEP 5**

Check the clearance of the small clutch by measuring the distance between the top plate and the bottom of the circlip. **This value should be 1.8 +/- 0.2mm.**

If reaching this clearance is not possible, please contact us at [technical@dodsonmotorsport.com](mailto:technical@dodsonmotorsport.com)



## **STEP 6**

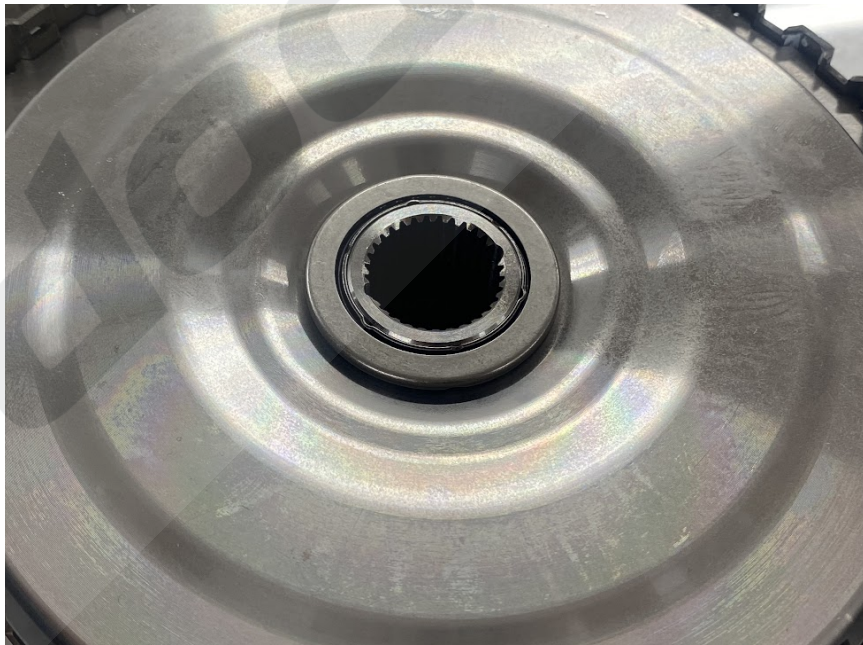
Transfer the OE large basket thrust bearing onto the Dodson large clutch basket.

This may require a small amount of force to get it to snap into place - **ensure it is seated flat against the basket and once installed check the bearing still spins freely.**



## **STEP 7**

Fit the large basket and fit the second OE thrust bearing on the top of the Dodson basket.





## STEP 8

Fit the large basket into the core and install the large clutch stack.

**Note the correct orientation of the friction plates as indicated in step 1.**



## STEP 9

Once again, keep the cut-outs in the steel plates inline with each other while installing the plates.



## STEP 10

Fit the clutch lid. Make sure to line up the marks made during disassembly.



## STEP 11

Fit the clutch lid circlip.

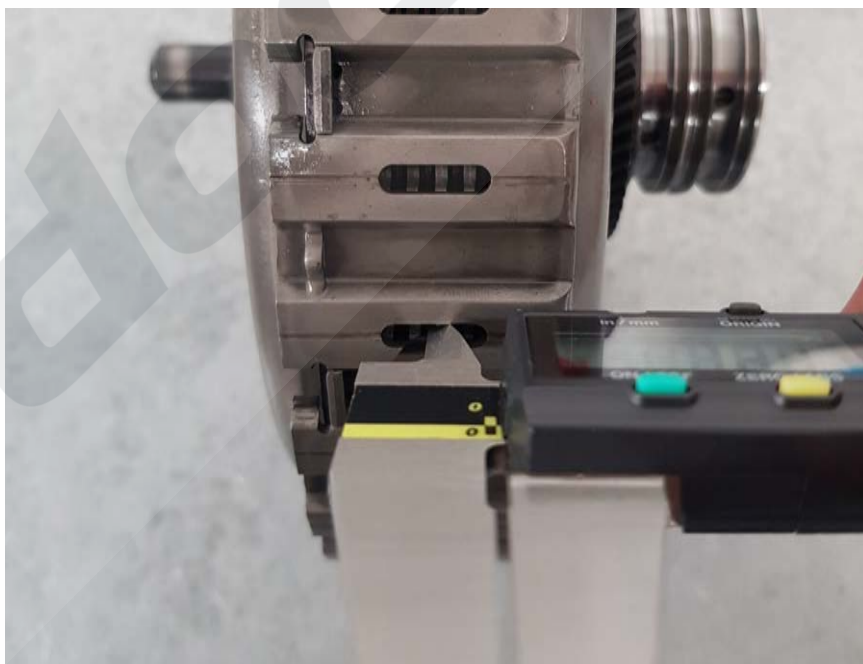


## STEP 12

Check the clearance of the large clutch by measuring in between the oiling holes on the exterior of the clutch core. (The clutch lid and circlip have to be installed)

Take the measurement between 2 x steel plates and subtract 1.35mm (the thickness of the friction).

**This value should be 2.2 +/- 0.2mm.**





## STEP 13

The clutch unit is ready to be reassembled into the transmission.



## STEP 14

Once in the transmission, remove the clutch lid again to install the circlip holding the large basket. Re-fit the clutch lid and circlip, please make sure the friction plates do not fall out of alignment with the basket.

Fit the clutch cover - **it is helpful to use the provided Dodson seal guide**. Once seated correctly fit the OE clutch cover 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.**

If you have any questions email us at [technical@dodsonmotorsport.com](mailto:technical@dodsonmotorsport.com)