

dodson[®]

INSTALLATION INSTRUCTIONS

DQ500 SUPERSTOCK CLUTCH

DMS-00-0073 REV 003

04 DECEMBER 2023

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DATE: 24NOV2023**

**RELEASED BY: 
DATE: 04DEC2023**

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.003	04DEC2023	<ul style="list-style-type: none">- PAGE 3: Added Superstock with Lid option to the contents list.- PAGE 5: Clarified "Important Note".- PAGE 8: Rewrote Step 6 for clarity & added Lid Upgrade instructions references.
REV.002	10JUL2023	<ul style="list-style-type: none">- Added Trans tune recommendation.- PAGE 9: Added important note.
REV.001	23MAY2023	<ul style="list-style-type: none">- Initial release.

READ FIRST

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

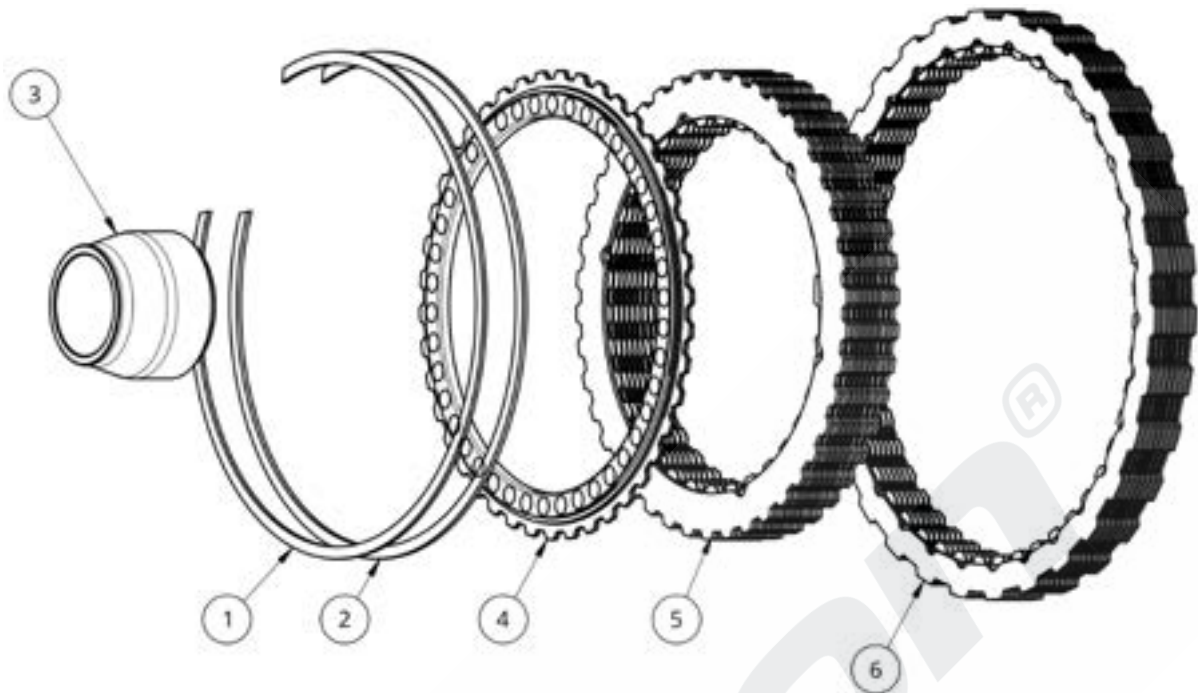
We have seen great results when using our clutch kits with a suitable transmission tune. When choosing an aftermarket tune, the important aspects that need to be considered are:

- 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)

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DQ500 SUPERSTOCK 7/8 CONTENTS (DMS-8504)



Item Number	Part Name	DMS Code	Qty
1	Small Circlip - 1.6mm	DMS-1009	1
2	Small Circlip - 1.8mm	DMS-1010	1
3	Seal Guide	DMS-2412	1
4	Small Endplate - 1.6mm	DMS-4424	1
5	Small Clutch Stack	DMS-8502	1
6*	Large Clutch Stack	DMS-8503*	1

DQ500 SUPERSTOCK 7/8 WITH LID (DMS-8530) additional items:

6*	Large Clutch Stack	DMS-8531*	1
7	Clutch Basket Lid	DMS-3024	1
8	Lid End Float Shim	DMS-1025	1
9	Clutch Pack Steel Large 1.2mm	DMS-4420	2

***NOTE:** The large clutch stacks differ between the “with” and “without” lid versions.

DQ500 SUPERSTOCK INSTALLATION INSTRUCTIONS DISASSEMBLY

STEP 1

To remove the clutch from the car you must first remove the large circlip retaining the lid. Mark the lid in respect to the clutch core and remove. With the lid removed, remove the small circlip holding the large basket. Once complete the whole clutch can now be taken out from the transmission.

STEP 2

Under the small circlip that held the large basket, there is a small shim. Ensure to put this aside.

It will be reused in the assembly of the Dodson clutch.



STEP 3

Continue to disassemble the clutch. Both baskets need to be removed along with both stacks.



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IMPORTANT NOTE FOR CLUTCH KITS WITH THE CLUTCH BASKET LID UPGRADE:

PLEASE FOLLOW THE DODSON DQ500 LID UPGRADE INSTRUCTIONS (DMS-00-0051) WITH THE EXCEPTION OF "ASSEMBLY STEP 1".

ASSEMBLY

STEP 1

Start the assembly by installing the clutch stacks.

NOTE: The frictions have a specific direction, ensuring the grooves have the same orientation as the photo when installed. SOAK THE FRICTIONS IN OIL BEFORE FINAL ASSEMBLY.



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STEP 2

After the last plate in the small clutch. Install the **billet top plate** and the OEM Circlip for now.

**STEP 3**

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 3.2 +/- 0.2mm.**

If it is not within tolerance, swap out the OEM circlip for the appropriate circlip to reach this clearance. There is a range of circlips supplied in the Dodson clutch kit.

If reaching this clearance is not possible, please contact us at technical@dodsonmotorsport.com



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STEP 4

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 has to be installed)

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

This value should be 2.9 +/- 0.2mm.



STEP 5

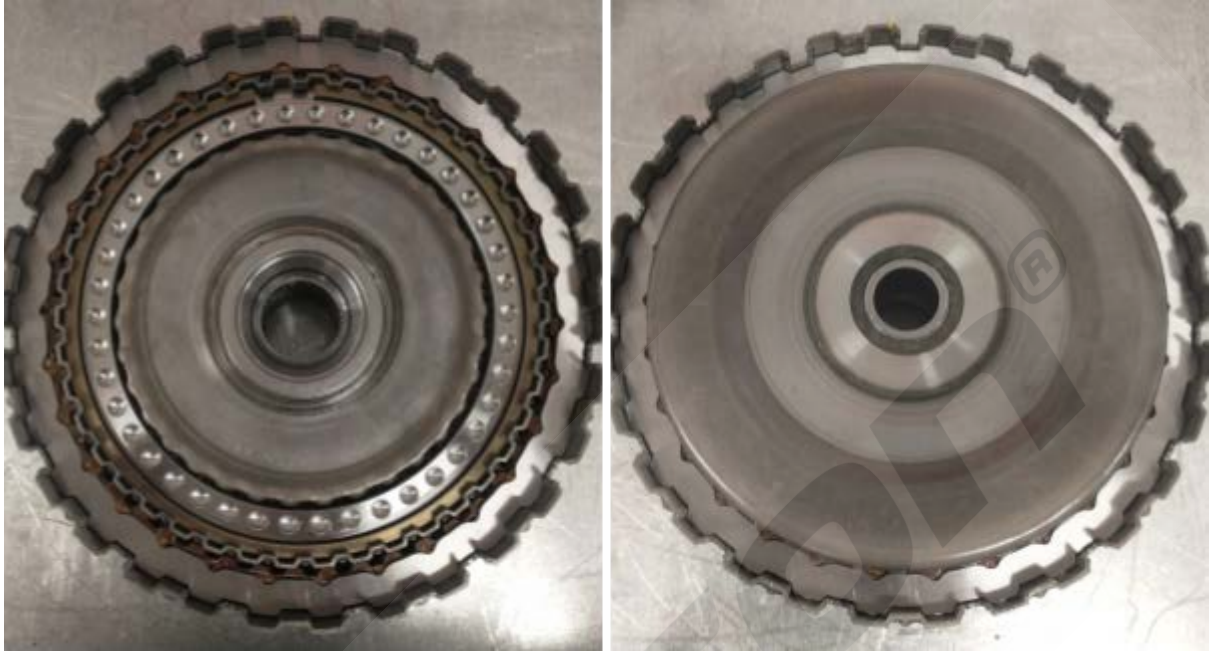
Make sure the **plastic thrust insert** is seated all the way down. If this is sitting up the clutch will not be able to be installed correctly. It has little locating lugs on the bottom and these can sometimes be sitting out of their dedicated grooves.



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STEP 6

Use a small pick or screwdriver to align the friction teeth to help with assembly. Insert the **small basket** in place, confirm that the **Torrington bearing** is located correctly on top of the basket. Then fit the **large basket**. Ensure the plastic thrust washer on top of the basket is still in place.



If fitting the **Dodson Clutch Basket Lid (DMS-3024)** please follow the **Dodson DQ500 Lid Upgrade Instructions (DMS-00-0051)** to identify the clutch version as per **Page 2**. Then for "8P" versions, follow **Steps 2&3** before continuing.

STEP 7

The clutch can now be installed in the gearbox. Retain the large basket with the **OEM circlip** on the shaft. Ensure the bottom friction of the large clutch stack doesn't fall off the bottom of the basket.

Remember to fit the OEM shim under the circlip retaining the large basket.



STEP 8

Install the lid and OEM large retaining circlip. The lid may be tight and may need a tap with a soft hammer to install. **Do Not use a hydraulic press!**

Please note that the clutch core may need to be lifted up to be able to fit the lid, if it's not possible, the bottom most friction on either clutch may have become misaligned with the basket.



STEP 9

Fit the clutch cover. It is helpful to use the provided Dodson seal guide. Once seated correctly fit the OEM 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