

dodson[®]

INSTALLATION INSTRUCTIONS

GR6 SUPERSTOCK CLUTCH

DMS-00-0001 REV 005

24 MAY 2023

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DATE: 24MAY2023**

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DATE: 24MAY2023**

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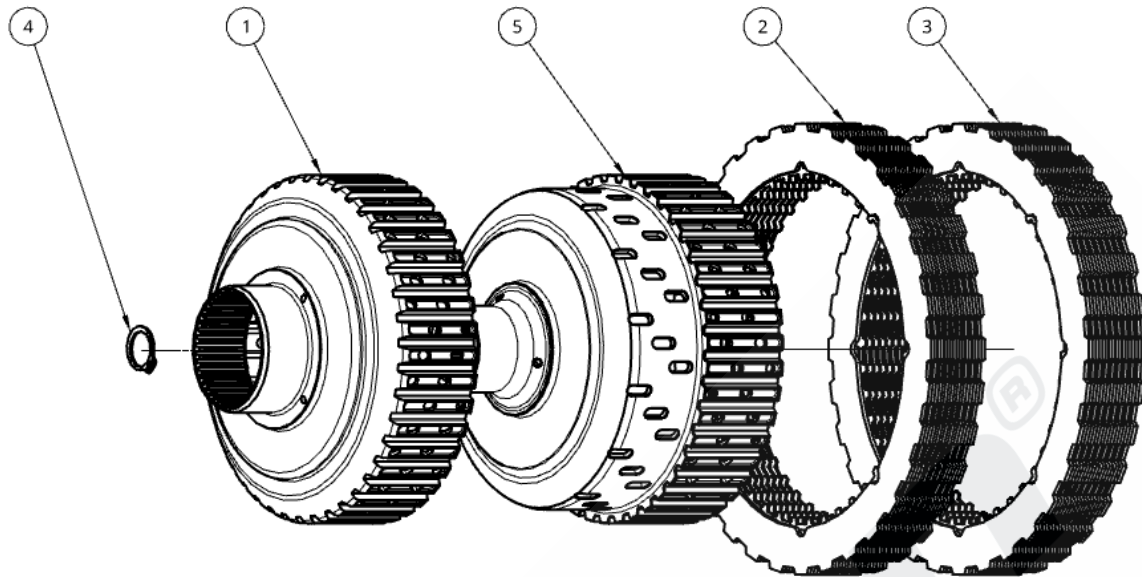
REVISION UPDATE NOTES:

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

Revision	Date	Description
REV.005	24MAY2023	<ul style="list-style-type: none">- Revised formatting.- Page 3&7: Updated important notes referencing Clutch Center machining
REV.004	21SEP2021	<ul style="list-style-type: none">- Modified formatting, added document number
REV.003	14SEP2021	<ul style="list-style-type: none">- Edited in new format, updated BOM table and diagrams

GR6 SUPERSTOCK CLUTCH KIT CONTENTS



Item Number	Part Name	DMS Code	Qty
1**	Clutch A Forged Basket	DMS-3212	1
2	Clutch A Stack	DMS-*	1
3	Clutch B Stack	DMS-*	1
4	Clutch Center Circlip	DMS-0948	1
5**	Clutch B Forged Basket w/Bearing	DMS-8092	1

* Clutch stack DMS codes depend on the version of the clutch.
Please contact sales@dodsonmotorsport if you require a replacement or upgraded clutch stack.

**** ONLY AVAILABLE WITH SUPERSTOCK 8-PLATE (DMS-8041)
AND SUPERSTOCK 9-PLATE (DMS-8081)**

If Dodson Baskets are being fitted, the clutch center will require machining. Please refer to the Clutch center machining instructions DMS-00-0031 for this process.

READ FIRST

These instructions must be followed exactly. New fluid and filters must be used when installing a Dodson Motorsport clutch. Once the clutch is installed and the calibration is successful, take the car for a quick test drive and ensure the correct operation of the transmission. After 5 kms, perform the calibration again. It is strongly recommended to drive the next 50-100 km on several trips.

Do not constantly use light throttle.

Do not use full power during this drive.

A moderate amount of throttle is recommended. After these kilometres have been logged, it is recommended to perform the calibration procedure again.

Any use of a traction control system or launch system will accelerate wear or even damage the clutch and transmission.

IMPORTANT NOTES

- **THOROUGHLY CLEAN ALL PARTS**
- **MAKE SURE THAT THE CENTER HOUSING IS TIGHT**
- **CHECKING 'A' PACK CLEARANCE, SUBTRACT 'A' FRICTION THICKNESS FROM MEASUREMENT**
- **CHECKING 'B' PACK CLEARANCE, SUBTRACT 'B' FRICTION THICKNESS FROM MEASUREMENT**

SUPERSTOCK CLUTCH INSTALLATION INSTRUCTIONS DISASSEMBLY

Make sure you have all the necessary tools to carry out this task and that you have read the instructions fully. If you require any assistance or information, please contact us before performing a procedure not set out in this manual.

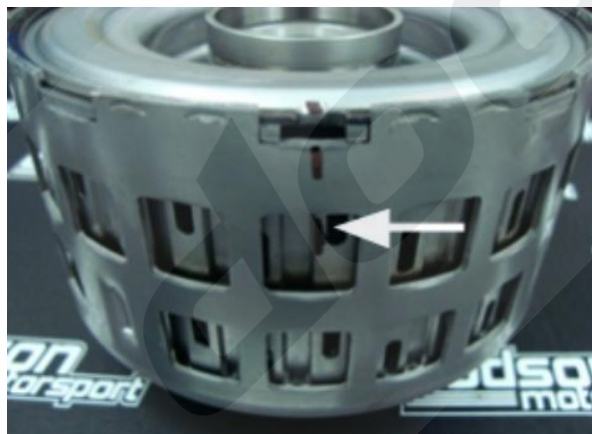
STEP 1

Using the appropriate tool, press the return spring on the A-piston side down and remove the circlip from the clutch center. Release the press and remove the seal plate and the return spring.



STEP 2

Mark A piston and gear plate in respect to the outer cage and inner basket.



STEP 3

Remove the factory circlip. You can now remove the factory **A-piston** from the clutch center.



STEP 4

Remove the outer basket from the clutch unit. Once this is removed you may remove the circlip on top of the gear plate and remove the gear plate from the clutch.



STEP 5

Remove both clutch baskets from the clutch housing. Remove all Torrington bearings from the baskets and clutch center and put them aside. You are now free to remove the **Clutch A clutch pack**.



STEP 6

Flip the unit over. Remove the **OEM 1.15mm circlip** from the top of the clutch inner basket and then remove the clutch center assembly from the basket. You can now remove the **OEM 2.45mm circlip** and remove the **Clutch B clutch pack**.



STEP 7

Using the appropriate tool remove the return spring circlip, spring plate and seal plate from the B-piston. You can now remove the **B-piston** from the clutch center.



IMPORTANT NOTE

If Dodson Baskets are being fitted with the Superstock kit, refer to the Clutch center machining instructions **DMS-00-0031** for the appropriate action.

ASSEMBLY

IMPORTANT - SOAK FRICTIONS IN OIL BEFORE FINAL INSTALLATION

STEP 1

Install **clutch B pack** and the **2.45mm circlip**. Line up the teeth on the frictions to ease basket fitment later.



STEP 2

Reinstall the clutch center, tap the upper **1.15mm circlip** into the groove to ensure it is seated and the center housing has **NO FREEPLAY**.



Now is a good time to measure your clutch B clearance. Turn the assembly on its side and measure the distance between two steel plates of the clutch (you can measure through the holes on the steel outer basket). Take multiple measurements around the assembly as it can differ slightly and take an average. With this measurement, subtract the thickness of the friction in the clutch pack, and you are left with the clearance. For example, if we have measured 4.25mm free play in between two steel plates, and our frictions are 1.55mm thick. $4.25 - 1.55 = 2.6\text{mm}$ clearance.

The target clearance reading for the B clutch is between 2.6mm +/- 0.2mm.

STEP 3

Flip the assembly, re-check friction teeth alignment and fit the small Torrington bearing on the clutch core.

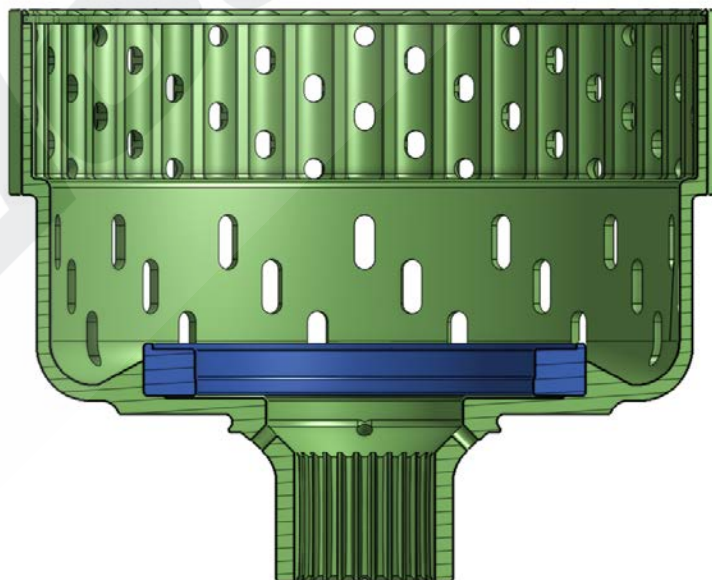


NOTE: If OEM baskets are being reused, please skip **Step 4** and continue with **Step 5**.

STEP 4

Install the B-basket bearing inside the B-basket.

NOTE: Ensure the bearing step, with the larger internal diameter is facing up.



STEP 5

Fit clutch **B** basket, make sure it slides overall frictions and is not sitting on the teeth of the last friction. You will hear the metal on metal noise as the basket touches the bearing. Make sure you have the medium-sized Torrington bearing on the B basket and it is fully clipped into place.



STEP 6

Fit clutch **A** basket with the large Torrington bearing.



STEP 7

IMPORTANT - SOAK FRICTIONS IN OIL BEFORE FINAL INSTALLATION

Install Clutch A pack.



STEP 8

Install gear plate and circlip.



STEP 9

Fit outer cage making sure the steel fingers are in the center of the gear plate holes.



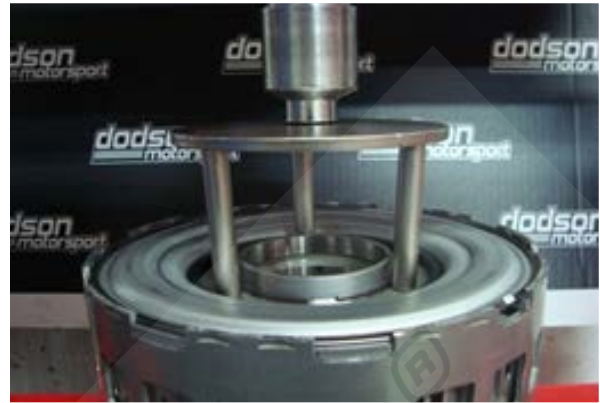
STEP 10

Reinstall **A** piston and circlip.



STEP 11

Install return springs, pour some oil on them then press the spring retainer on and reinstall the circlip.



STEP 12

Measure the clutch A clearance. Use the same procedure as **Step 2** (Clutch B can be rechecked as well).



The target clearance reading for the A clutch is between **2.6mm +/- 0.2mm**.

STEP 13

Fit clutch to housing and test how the clutch seals. Blow compressed air through the top and bottom holes of the 4 pipes. You must use an air nozzle with a rubber tip so that it cannot leak. After you have checked the sealing a few times, remove the clutch and re-check your clearance on both A & B clutch **(2.6mm +/- 0.2mm)**.



When the clutch is fitted for the final time, do not forget to fit the clutch center circlip.

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