

# IMPORTANT

**YOUR NEW CENTERFORCE® CLUTCH ASSEMBLY AND FLYWHEEL HAVE BEEN DESIGNED TO BE USED WITH LOCATING DOWEL PINS.**

**THE ALIGNMENT DOWEL PINS ARE USED TO PROPERLY LOCATE THE PRESSURE PLATE TO THE FLYWHEEL FOR BALANCE PURPOSES AS WELL AS TO ADD PRESSURE PLATE TO FLYWHEEL SHEAR STRENGTH. THE ALIGNMENT DOWEL PINS SHOULD ALWAYS BE REPLACED IF THEY ARE DAMAGED, BROKEN OFF, OR MISSING FROM THE FLYWHEEL.**

**FAILURE TO INSTALL OR REPLACE THE DOWEL PINS AS REQUIRED MAY RESULT IN CLUTCH VIBRATION, IMPROPER CLUTCH OPERATION, AND POSSIBLE CLUTCH FAILURE WHICH MAY VOID THE WARRANTY!**



**"NOTE" Centerforce tip sheets are for general reference only. Please refer to your owners manual for vehicle specifications.**

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## ***CENTERFORCE FLYWHEELS***

### **ALL FLYWHEELS**

All CENTERFORCE flywheels have a preservative on them to help prevent rust. We recommend that you use BRAKE CLEAN to remove all traces of the preservative prior to installing the clutch assembly.

**Failure to do so may cause slippage and premature clutch failure**

**NOTE:** Replacement of any Dual-Mass flywheel with a Single-Mass Flywheel may result in unwanted gear noise from the transmission.



CENTERFORCE  
**DUAL** FRICTION



**DYAD**  
QUALITY ENGINEERED MULTI DISC CLUTCH SYSTEMS



**LMC**  
SERIES

**CENTERFORCE FLYWHEELS**

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***Please follow these instructions to maintain the warranty of your Centerforce® product!***

**Flywheels:** All Centerforce® clutches need to be installed on a clean, properly resurfaced or brand new flywheel. Flywheels must be within original equipment specifications. Centerforce clutches are designed to be used on flywheels made of cast iron, steel, or aluminum with steel inserts.

**Break-In:** All Centerforce clutches require a break-in period of 450-500 miles of stop-and-go street driving before applying full engine power. This period is required to properly seat the disc with the pressure plate and flywheel.

**Balance:** All Centerforce clutches are balanced from the factory to meet or exceed Original Equipment (O.E.) specifications. Balancing with the Centerforce weights installed on the clutch assembly may cause an out-of-balance condition. Removing the weights without permission from Centerforce may void the warranty.

**Centrifugal Weight System:** If your new Centerforce clutch is equipped with the patented centrifugal weight system, do not remove the ring, weights, or spring wire retaining the weight system to the diaphragm fingers. If your Centerforce clutch does not include the centrifugal weight system, it is because there is not sufficient clearance for Centerforce to safely & effectively install the centrifugal weight system.

**Aftermarket Hydraulic Release Bearings:** When using an aftermarket hydraulic release bearing it is important to check for proper clearance between the bearing and the centrifugal weight system. Some aftermarket hydraulic bearings have an anti-rotator pin that may come into contact with the centrifugal weight system.

**Failure to follow the above procedures will void your warranty and may result in decreased performance and/or premature wear!**

**Questions? Please contact the Tech Department at Centerforce**



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## Attention Jeep Owners!

### Diagnosing possible causes of clutch noise: Squeaky clutch fork, bad bearing retainer collar and/or damaged throw out bearing clips

Inspect your transmission bearing retainer collar prior to installing your new clutch assembly. A worn bearing retainer collar will cause excessive wear to the diaphragm fingers of your pressure plate, heavy clutch pedal effort, squeaky clutch pedal and premature throw out bearing failure. To help prevent this from occurring ensure you have sufficient grease applied to the bearing retainer collar and fill the grease groove in your new throw out bearing.

Inspect your clutch fork for wear. A worn clutch fork will allow the throw out bearing to move side to side within the clutch fork causing noise. Your clutch fork should hold the throw out bearing securely in place.

Inspect the throw out bearing retainer clips when attaching to the clutch fork. Make sure the clips are not bent upward away from the throw out bearing ears/tabs. If the clips are bent, the clips will not secure the throw out bearing properly to the clutch fork allowing the throw out bearing to move freely causing noise.

Inspect your pivot ball for any signs of wear. A worn pivot ball will allow the clutch fork to move freely on the pivot ball which could result in noise.

Replace all worn parts as needed.



Should you have questions or require further information, please contact our Tech Line at: (928) 771-8422



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# IMPORTANT

Bearing Retainer Collar



Worn

Pivot Ball



New



Worn

Throw Out Bearing

Correct



New

Incorrect



Worn

Clutch Fork



New



Worn



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## **8mm - Pressure Plate Bolts**

Centerforce does not require you to use any type of thread locking compound for the Pressure Plate bolts. If you decide to use a thread locking compound on the Pressure Plate bolts, just one SINGLE drop is adequate.

These bolts are to be used in conjunction with dowel pins for proper Pressure Plate retention.

Tighten all bolts evenly, ¼ turn at a time in a crisscross pattern until pressure plate is completely drawn-up to the flywheel.

**Final torque all 6 bolts to: 23 - 25 ft/lbs.**

**Note:** These specifications apply only to the fasteners supplied by Centerforce.

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102MI009 **CENTERFORCE TECH. LINE (928) 771-8422**

## **Jeep Flywheel Installation Tips**

- 1) The crankshaft to flywheel bolt pattern is not symmetrical. The flywheel bolt holes will only line up in ONE position. It is helpful to measure and mark the one offset bolt hole within the crankshaft and the flywheel prior to installation.
- 2) Your new Centerforce flywheel is designed to fit tightly over the crankshaft register. It may be necessary to "draw-up" the flywheel to the crankshaft using the 8 enclosed flywheel bolts. Install the flywheel in the proper position and then tighten the bolts, using hand tools, 1/4 turn at a time in a crisscross pattern until the flywheel is fully seated on the crankshaft flange. NOTE: A small amount of Threadlocking compound is recommended on the enclosed flywheel bolts. DO NOT use a washer with this flywheel bolt.
- 3) Once the flywheel is fully drawn-up to the crankshaft flange, torque all 8 bolts in 3 steps.

**First to 25 ft/lbs, then to 50 ft/lbs**

**FINAL TORQUE to 70-72 ft/lbs**

**Note: M10 x 1.00 Threads**