IMPORTANT

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

CENTERFORCE THE PERFORMANCE CLUTCH®

CENTERFORCE DUAL FRICTION®

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

IMPORTANT

2005.5 to 2016 Dodge Ram
Cummins Turbo Diesel 5.9L or 6.7L Eng.
With the G56 6-Spd Transmission

PLEASE NOTE: This Centerforce clutch set is an upgraded replacement for the Factory Original Equipment clutch. Please be sure to use all of the components (bearings, fasteners, etc.) included with this clutch set. The Factory Original Equipment clutch components are **NOT** compatible with your new Centerforce clutch.

PLEASE NOTE: This clutch set is designed to operate with the engine starter in the STOCK LOCATION. If you are replacing an aftermarket clutch there may be a spacer between the engine block and starter. If you find a spacer in this location, please remove the spacer and use shorter (stock) starter bolts.

IMPORTANT: For proper operation, you must use the enclosed hydraulic clutch activation system This hydraulic system comes fully assembled and pre-bled with the proper factory clutch fluid.

BOLT SPECIFCATIONS: Please apply a small amount thread-locking compound to all clutch fastener threads and then use a high quality Torque Wrench to secure the clutch fasteners (by hand) to the following specifications:

5/16” diameter Pressure Plate Bolts = 25 ft/lbs. each bolt

12mm diameter Flywheel Bolts = 87 to 91 ft/lbs. each bolt.

Should you have questions or require further information, please contact Centerforce tech line directly at: (928) 771-8422

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See Back for Flywheel Removal Tips

IMPORTANT

FLYWHEEL REMOVAL TIPS

FOR TRUCKS EQUIPED WITH THE G56 TRANSMISSION

1. Remove Transmission.
2. Remove OE Clutch Pressure Plate and Disc from Flywheel.
3. Remove the Flywheel Bolt Access Cover (two 10mm bolts) from Engine side of the Flywheel Housing located on the passenger side of the vehicle.
4. From this access hole, remove eight 15mm Flexplate-to-Flywheel bolts. You will need to use a ring gear tool or a socket wrench from the front of the Engine in order to rotate the Engine and Flywheel to each bolt for removal. **Caution, the OE Flywheel is very heavy** – be sure to properly support the Flywheel before removing the Flexplate to Flywheel bolts. Remove Flywheel assembly from the Flexplate.
5. Remove the Flexplate bolts and Flexplate assembly from the engine crankshaft – these components WILL NOT be used with your new Centerforce Clutch assembly.
6. Re-install the Flywheel Bolt Access Cover from engine side of the Flywheel housing (from step 3 above).

PLEASE CALL THE CENTERFORCE TECHLINE AT
(928) 771-8422
IF YOU HAVE ANY QUESTIONS

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IMPORTANT

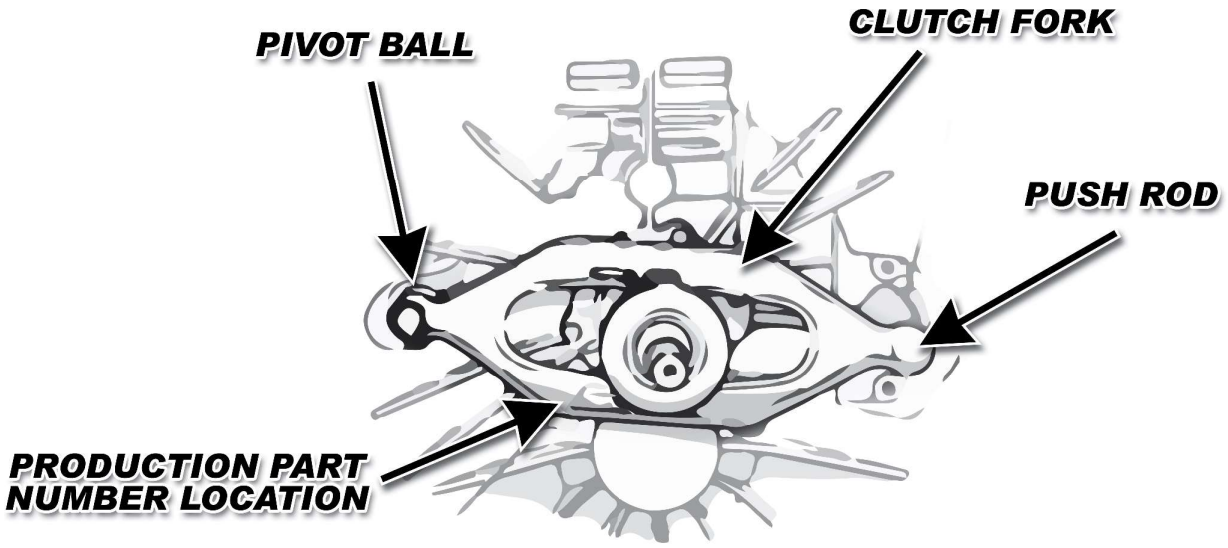
Dodge Trucks

When converting 1988-93 diesel trucks from the OEM 13'' clutch to Centerforce® P/N DF989966 or 315989966, use the supplied pressure plate mounting hardware.

On 1994-04, diesel trucks reuse the stock pressure plate bolts.

Note: 5.9L/6.7L Cummins Turbo diesel & 8.0L gas trucks. When servicing the release fork, be sure to install the clutch release fork properly. To ensure proper installation, the clutch fork production part number should be near the pivot ball (see diagram).

Failure to properly install the clutch release fork may cause a growling sound coming through the clutch pedal when depressed.



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IMPORTANT

IMPORTANT

The enclosed Hydraulic clutch actuation system MUST be used in conjunction with your new Centerforce clutch.

Dodge RAM Hydraulic Clutch system removal/installation:

NOTE: DO NOT disassemble the clutch master cylinder, hydraulic line and/or the slave cylinder system. The entire hydraulic clutch system will be removed and re-installed as a complete assembly.

1) From under the dashboard; pull UP (hard) on the clutch pedal to release the clutch rod from the clutch master cylinder. With force, the clutch rod will “POP” out of the clutch master cylinder.
2) Remove clutch rod and clip from the clutch pedal (save clip for re-installation).
3) Take note of the clutch safety switch position as located on the clutch rod. Lift the white safety switch retention clip and slide the safety switch off the clutch rod and set aside for re-installation (no need to disconnect the safety switch from the wire harness).
4) From under truck; Remove clutch slave from Bellhousing and save the mounting hardware for re-installation.
5) Remove two plastic line retention clips from the underbody. Take note of the hydraulic line routing for re-installation.
6) From under dash; Remove 2 nuts from the clutch master cylinder bracket (save the nuts for re-installation) and remove the clutch master cylinder from under hood.
7) If possible, drop the master cylinder down to the drivers side wheel well opening. Feed the entire hydraulic assembly out of the wheel well. Having a second person available for this step is helpful.
8) Reverse this procedure for installation of the new hydraulic clutch system.
9) Important note: DO NOT cut the white plastic retention straps on the new slave cylinder push-rod. These straps will automatically “POP” off once installation is complete and the clutch pedal is depressed for the first time. DO NOT depress the clutch pedal or otherwise "cycle" the hydraulic release system until the transmission has been installed and the hydraulic slave cylinder attached to the bellhousing.
10) Cycle the clutch pedal several times and then check the clutch master cylinder reservoir. The clutch fluid should be at normal level as marked. If needed, add a small amount of high quality DOT 3 fluid.
11) Once the hydraulic clutch system installation procedure is complete, the clutch should engage and start to move the truck at approximately half of the clutch pedal travel up from the floor. NOTE: there is no conventional hydraulic bleeder within this system. It SHOULD NOT be necessary to bleed this sealed system. However, should any air be introduced into the clutch hydraulic system, you will need to vacuum bleed the system from the clutch reservoir.

5/16" 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.
DO NOT use a washer with this pressure plate bolt.
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 to: 25 - 28 ft/lbs.

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

I01MI008 **CENTERFORCE TECH. LINE (928) 771-8422**

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IMPORTANT

Hydraulic clutch system vacuum bleed procedure

NOTE: You will need a hand held vacuum pump and fresh high quality DOT 3 or 4 brake fluid for this procedure.

1) Remove clutch fluid reservoir cap. Be sure the fluid level is at normal as marked.
2) Use athe enclosed round rubber reservoir gasket to create a temporary seal against the clutch master cylinder reservoir.
3) Using the enclosed vacuum line cup, attach the vacuum hand pump to the rubber gasket and introduce 10 to 15 in/Hg negative pressure to the clutch hydraulic system. IMPORTANT: you will be drawing a vacuum from the air gap above the fluid within the reservoir… DO NOT draw any fluid into the vacuum pump! If the system is sealed and done correctly, the negative pressure should hold for several minutes. This procedure will draw out any air contained within the hydraulic system. DO NOT depress the clutch pedal while there is a vacuum applied to the hydraulic clutch system.

4) Release vacuum pressure from the system and top off fluid as needed. Repeat step 3 several times. Then remove the vacuum pump and rubber reservoir gasket.
5) Top off the fluid reservoir as needed and check the hydraulic system for leaks.
6) Replace the reservoir cap.
7) Once the clutch hydraulic vacuum bleed procedure is complete, the clutch should engage and start to move the vehicle at approximately half of the clutch pedal travel up from the floor.

<u>Note</u>: It's common for small air bubbles to remain aerated within the clutch fluid for several hours. The clutch vacuum bleed procedure may need to be repeated after the vehicle sits overnight.

IMPORTANT

Dodge Truck Clutch Sets

Intermittent transmission issues are known to exist on some Dodge trucks. Hard shifting may occur from Neutral to 1st, 2nd or reverse gears. This is primarily due to the large diameter and heavy-duty nature of the transmission and clutch components. Normal operation calls for a 3 to 4 second “spin down time” in which the clutch pedal needs to be depressed and held before attempting to shift the transmission out of Neutral and into gear. This spin down time is NOT usually necessary when the vehicle is in motion (shifting from gear to gear). In order to minimize this hard shifting issue, we recommend customers to check/do following during the clutch change procedure:

1. Always install a new release bearing and new pilot bearing.
2. Properly resurface or replace the flywheel.
3. Check the transmission input shaft spline and pilot bearing surfaces – replace the input shaft if it is questionable.
4. Check the transmission input shaft for excessive “play” or wobble – this could signal a worn input shaft bearing.
5. Inspect the transmission release bearing collar, release bearing arm and pivot ball stud. Replace any questionable items.
6. Use only O.E. approved transmission and hydraulic clutch fluid.
7. Follow all other Centerforce supplied tech sheets and suggested procedures.

Also, please be advised; when upgrading from an O.E. Dual-Mass type flywheel and/or to a heavy-duty clutch set, it is not uncommon to experience increased transmission gear rattle (or “roll over noise”) when idling in Neutral.

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IMPORTANT