03/30/06 08:18

# 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.

IMPORTANT

101MI006 CENTERFORCE TECH. LINE (928) 771-8422 WWW.CENTERFORCE.COM

#### 10/6/12 10:55

# IMPORTANT

### 2005-10 FORD MUSTANG, GT, COBRA & SHELBY

### Hydraulic Clutch System Instructions:

### You will need the following before starting:

- a) New Ford Release Bearing and Slave Cylinder assembly.
- b) 12 oz. Motorcraft DOT 3, High-Performance clutch/brake fluid.
- c) A hand-type vacuum pump and rubber seal or plug.

## **IMPORTANT**: When changing your clutch the hydraulic release system must be serviced in the following manner:

- DO NOT depress the clutch pedal while the hydraulic clutch lines are disconnected. We recommend that you
  place a suitable spacer (IE; block of wood or rolled towel) under the clutch pedal to keep the pedal in its most
  upward position and to prevent any movement during the clutch installation process.
- Replace your hydraulic slave cylinder and release bearing as a matched set. Use only a new Original Equipment clutch release bearing and slave cylinder available from your local Ford Dealer.
- Important note: once the hydraulic line has been disconnected from the old Slave Cylinder assembly at the transmission bellhousing, the clutch line will continue to leak fluid <u>have ready the enclosed black plastic plug to</u> temporally stop the fluid flow during the clutch installation process.
- 4) The 2005-09 Ford Mustang clutch fluid reservoir is shared with the brake reservoir – use <u>only</u> Ford Motorcraft approved DOT 3, High-Performance fluid when servicing your hydraulic clutch or brake system. The use of any other fluid may cause clutch and/or brake problems!



Centerforce Supplied Plug

- Upon re-installation of your transmission, make sure all of the clutch hydraulic lines and bleed screws (when applicable) are correctly seated and tight.
- 6) Make sure the clutch pedal is in the most upward position.
- 7) Remove reservoir cap and fill the brake/clutch reservoir with the specified fluid to the MAX mark.
- 8) In order to properly bleed this hydraulic system, you must use a hand-type vacuum pump available from most auto parts stores or specialty tool stores.
- Use a round rubber stopper (50mm in diameter) or suitable flat rubber cap to seal against the fluid reservoir opening – either type of seal requires a hole in the center in which the vacuum will be applied.
- 10) Holding the vacuum cap seal in place on the reservoir, operate the vacuum pump to draw 20 inches of vacuum. Hold this vacuum for one minute then, quickly relieve the vacuum.
- 11) Check and fill the brake/clutch reservoir with the specified fluid to the MAX mark as needed. Install the reservoir cap.
- 12) Depress and release the clutch pedal 10 to 15 times.

Repeat Steps 6 through 12 two additional times or until the clutch pedal effort is consistent and

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

I06FO018 CENTERFORCE TECH. LINE (928) 771-8422 WWW.CENTERFORCE.COM

### 2011-UP FORD MUSTANG with 5.0L Engine.

The enclosed Centerforce pressure plate assembly is designed to be used on late model Ford 5.0L engines. Please note that the Original Equipment (O.E.) Ford factory flywheel may utilize EITHER SIX or NINE pressure plate bolts. If you are using an O.E. flywheel that has provisions for NINE pressure plate bolts, your new Centerforce pressure plate will only be using SIX of the flywheel bolt holes. Specific instructions as follows:

**For O.E. flywheels with NINE pressure plate bolts:** in order to properly mount the Centerforce pressure plate to your flywheel, you **MUST use the THREE stepped** dowel pins (disregard the three straight side dowel pins enclosed) and SIX special pressure plate bolts enclosed. Remove the factory straight dowel pins and replace with the 3 supplied stepped dowel pins (large end of the pin will press fit into the flywheel). Centerforce recommends a small amount of thread locking compound to be used on the enclosed pressure plate bolts – locate your pressure plate over the 3 stepped dowel pins, then using the pressure plate bolts, draw the pressure plate up evenly to the flywheel by turning each bolt 1/4 turn at a time in a crisscross pattern. Once the pressure plate is completely drawn to the flywheel, torque all SIX bolts: **48 to 50 ft/lbs.** 

**For O.E. flywheels with SIX pressure plate bolts:** in order to properly mount the Centerforce pressure plate to your flywheel, you **MUST use the THREE straight side** dowel pins (disregard the three stepped dowel pins enclosed) and use the SIX special pressure plate bolts enclosed. Install dowel pins into the flywheel (either end will press fit into the flywheel). Centerforce recommends a small amount of thread locking compound to be used on the enclosed pressure plate bolts – locate your pressure plate over the 3 dowel pins, then using the pressure plate bolts, draw the pressure plate up evenly to the flywheel by turning each bolt 1/4 turn at a time in a crisscross pattern. Once the pressure plate is completely drawn to the flywheel, torque all SIX bolts: **48 to 50 ft/lbs.** 

For more information please contact our Tech Line at: (800) 932-5882





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## IMPORTANT

I11F0024 CENTERFORCE TECH. LINE (928) 771-8422 WWW.CENTERFORCE.COM

### 2011-17 Ford Mustang 5.0L engine w/ 23 Spline input shaft transmission

If your Original Equipment transmission included a spacer behind the release bearing, please re-use this spacer. Some OE transmissions did not require a release bearing spacer, and therefore your vehicle may not have one.

2-3/8"

Upon replacing your release bearing, please verify the bellhousing face to release bearing (fully extended) dimension as shown to the right. This dimension can be obtained by using a long straight edge or yard stick across the mouth of (+/- 1/16)the bellhousing and then measuring to the face of the release bearing (DO NOT include the thickness of the straight edge in your measurement).

Regardless of transmission type (with or without the OE bearing spacer) your measurement should be 2-3/8" (+/- 1/16") as shown. If you obtain a measurement outside of this tolerance, please contact our Technical Department for additional information.

If your bellhousing to release bearing measurements meets the 2-3/8" depth specification, proceed with the clutch/ transmission installation as normal.

Should you have questions or require further information,

please contact our Tech Line at: (928) 771-8422





BELLHOUSING

SIDE VIEW CUT-A-WAY

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### **IMPORTANT**

117FO026 CENTERFORCE TECH. LINE (928) 771-8422 WWW.CENTERFORCE.COM



## Customers requiring 24-month SFI activation.



8/10/20 12:10

Thank you for purchasing clutch components certified by Centerforce to SFI Specification 1.1. Some competition sanctioning bodies require clutch components to be SFI certified every 24 months. The enclosed clutch component(s) contain the official SFI decal and corresponding serial number etched into the part. Please note that the component SFI ACTIVATION DATE is also etched near the SFI serial number. SFI 24-month certification STARTS from this SFI ACTIVATION DATE. Centerforce clutch components have an indefinite shelf life, however, due to the chain of commerce, the enclosed components may arrive to customers beyond this initial SFI ACTIVATION DATE. If you need full 24 months SFI certification to conform to competition rules, Centerforce can issue a new SFI serial number and SFI ACTIVATION DATE free of charge. To request a fresh SFI ACTIVATION DATE from Centerforce, you MUST contact Centerforce prior to installation and supply a copy of your proof of purchase. This request MUST be submitted within 30 days of purchase. If you require this service, please completely fill out the enclosed SFI activation form and return to Centerforce with a copy of your proof of purchase. Forms and receipts can be sent via Mail, Fax, or Email. If needed, SFI activation forms can also be obtained from our website: www.centerforce.com. Should you have questions or if you require further information please contact Centerforce customer service at (800) 932-5882. Information specifically about SFI certification can be found at www.sfifoundation.com (Reference SFI Clutch/Flywheel Specification 1.1).

IMPORTANT! This activation service is ONLY applicable to new components within 30 days of purchase. Centerforce components that have been SFI certified and used in competition MAY be eligible for re-certification but ONLY after the component(s) have been returned to Centerforce for inspection. Please obtain a Return Merchandise Authorization (RMA) number for inspection and re-certifications. Fee for this service may vary.

If you are NOT competing under specific sanctioning body rules, then the SFI activation date is not relevant to your application or your vehicle use. In this case feel free to use your Centerforce product regardless of the SFI activation date.

Prescott, AZ 86301
Date Purchased:
Part #:
Current SFI #:
Note: A copy of your receipt/proof
of purchase is required to obtain an
updated SFI Activation Date and SFI
Number.
ne, completed by Centerforce!
Keep this for your records once the SFI Label is affixed.

## Please follow these instructions in regards to the installation and use of your new Centerforce DFX

**Flywheels:** Be sure to install your new Centerforce DFX clutch on a clean and properly resurfaced or brand new flywheel. Centerforce recommends DFX to be used in conjunction with an aftermarket Billet Steel or Billet Aluminum (with steel insert) flywheel. Nodular Cast Iron OE flywheels are also approved. Gray Cast Iron OE flywheels are NOT recommended for use with Centerforce DFX (If you are unsure of what type of cast flywheel you have please call the tech office).

**Break-In:** The Centerforce DFX series clutch will perform best after a minimum 100mile break-in period. Stop and go type driving is best for this procedure. Please do not apply full engine power or excessively slip the clutch during the break-in period. This period is required to properly seat the disc with the pressure plate and flywheel friction surfaces.

**Centrifugal Weight System:** If your new Centerforce DFX clutch is equipped with the patented Centerforce centrifugal weight system, do not remove the ring, weights or retaining spring wire that attaches the weight system to the clutch diaphragm fingers. If your Centerforce DFX clutch does not include the centrifugal weight system, it is because there is not sufficient clearance for Centerforce to safely and effectively install the centrifugal weight system for your application. In these cases Centerforce has made other, internal modifications to improve the clutch holding capacity.

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.

Due to its positive engagement characteristics, the Centerforce DFX clutch is designed primarily for competition use. However, DFX can also be used in high-powered street or dual-purpose vehicles with excellent results. Please be advised that the increased holding capacity of this clutch can contribute to clutch chatter and/or cause an audible noise during operation.

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





08/10/15 11:45

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## IMPORTANT

107MI010 CENTERFORCE TECH. LINE (928) 771-8422 WWW.CENTERFORCE.COM

03/30/06 08:18

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IMPORTANT

101MI006 CENTERFORCE TECH. LINE (928) 771-8422 WWW.CENTERFORCE.COM

#### 10/6/12 10:55

# IMPORTANT

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Centerforce Supplied Plug

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- 7) Remove reservoir cap and fill the brake/clutch reservoir with the specified fluid to the MAX mark.
- 8) In order to properly bleed this hydraulic system, you must use a hand-type vacuum pump available from most auto parts stores or specialty tool stores.
- Use a round rubber stopper (50mm in diameter) or suitable flat rubber cap to seal against the fluid reservoir opening – either type of seal requires a hole in the center in which the vacuum will be applied.
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I06FO018 CENTERFORCE TECH. LINE (928) 771-8422 WWW.CENTERFORCE.COM

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## IMPORTANT

I11F0024 CENTERFORCE TECH. LINE (928) 771-8422 WWW.CENTERFORCE.COM

### 2011-17 Ford Mustang 5.0L engine w/ 23 Spline input shaft transmission

If your Original Equipment transmission included a spacer behind the release bearing, please re-use this spacer. Some OE transmissions did not require a release bearing spacer, and therefore your vehicle may not have one.

2-3/8"

Upon replacing your release bearing, please verify the bellhousing face to release bearing (fully extended) dimension as shown to the right. This dimension can be obtained by using a long straight edge or yard stick across the mouth of (+/- 1/16)the bellhousing and then measuring to the face of the release bearing (DO NOT include the thickness of the straight edge in your measurement).

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BELLHOUSING

SIDE VIEW CUT-A-WAY

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### **IMPORTANT**

117FO026 CENTERFORCE TECH. LINE (928) 771-8422 WWW.CENTERFORCE.COM



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8/10/20 12:10

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If you are NOT competing under specific sanctioning body rules, then the SFI activation date is not relevant to your application or your vehicle use. In this case feel free to use your Centerforce product regardless of the SFI activation date.

Prescott, AZ 86301
Date Purchased:
Part #:
Current SFI #:
Note: A copy of your receipt/proof
of purchase is required to obtain an
updated SFI Activation Date and SFI
Number.
ne, completed by Centerforce!
Keep this for your records once the SFI Label is affixed.