

## DYAD DS Clutch Information Form

<b>Part Number:</b>	<b>04214810</b>
<b>Serial Number / WO Number:</b>	013252941
<b>Date:</b>	1/21/2016
<b>Inspected By:</b>	MV

Pressure @ Compression Depth:	Press.	C.D.
Point 01:	2,395	0.070
Point 02:	2,506	0.080
Point 03:	2,579	0.090
Point 04:	2,612	0.100
Point 05:	2,604	0.110
Point 06:	2,557	0.120
Point 07:	2,470	0.130
Point 08:	2,349	0.140
Average:	2,509	

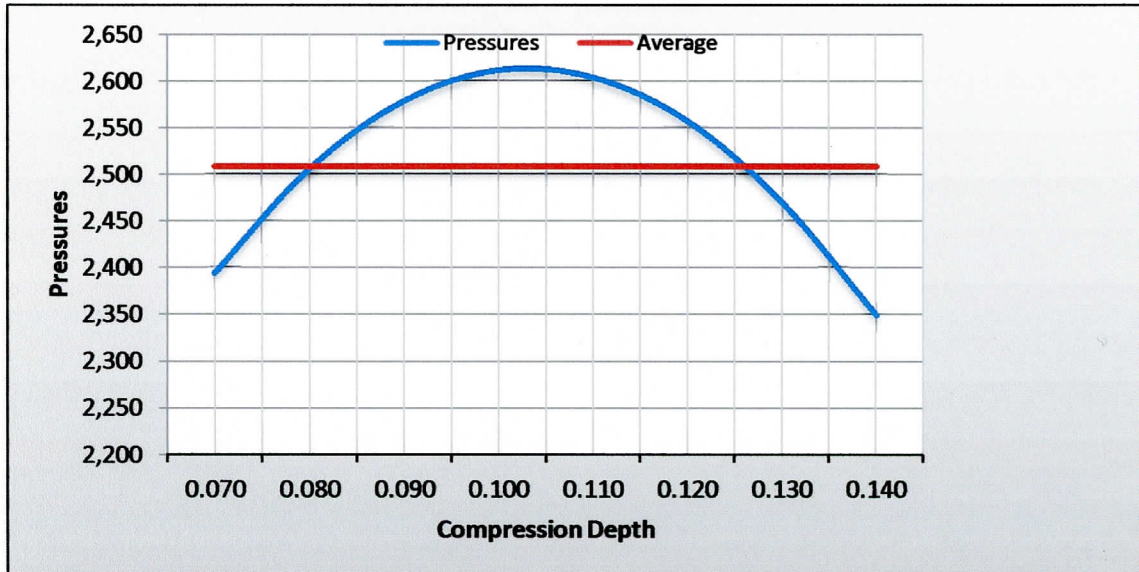
Floating Disc Thickness:	0.343;;FREE 0.328"COM
Floater Thickness:	0.276"
Drive Disc Thickness:	0.376"

Compression Depth:	1.140"
Deck Height (Crank to Fingers) NEW:	2.935"
Deck Height (Crank to Fingers) WORN:	3.335"
Balance (Inch/ounce):	0.05IN/OZ
Travel for Release with a .025" Air Gap:	0.294"
Release Bearing (T.O.B.) Load:	376LBS

**Notes:**

Part Number: 04214810

Serial Number 013252941



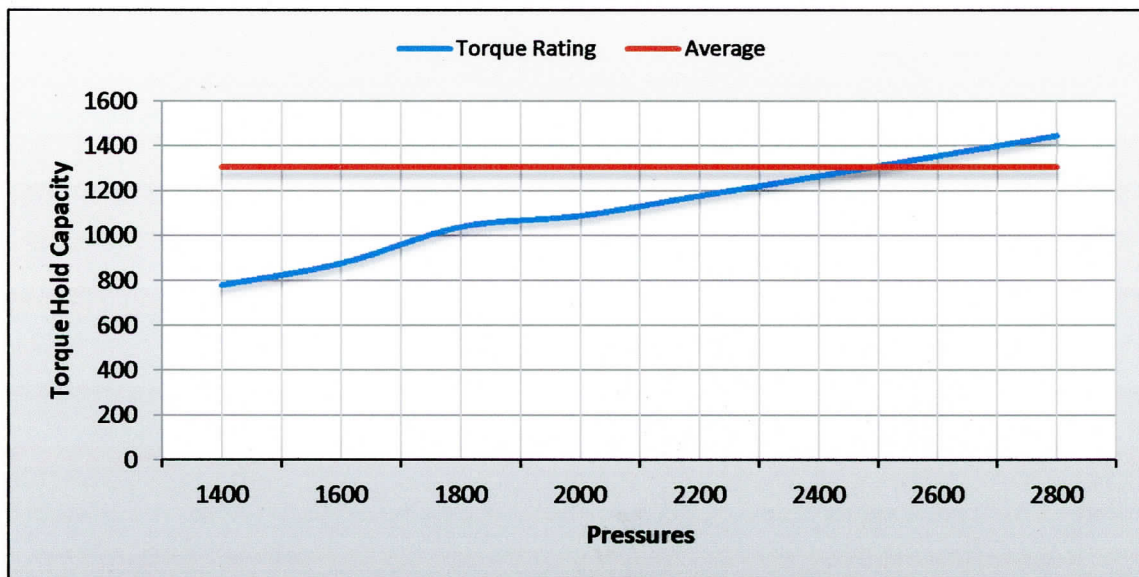
Compression Depth: 1.140"

Date Manufactured: 1/21/2016

Travel To Release: 0.294"

Inspected By: MV

Average Clamp Load: 2,509



Average Torque Holding Capacity: 1,305 ft/lbs



# 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.

**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**



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

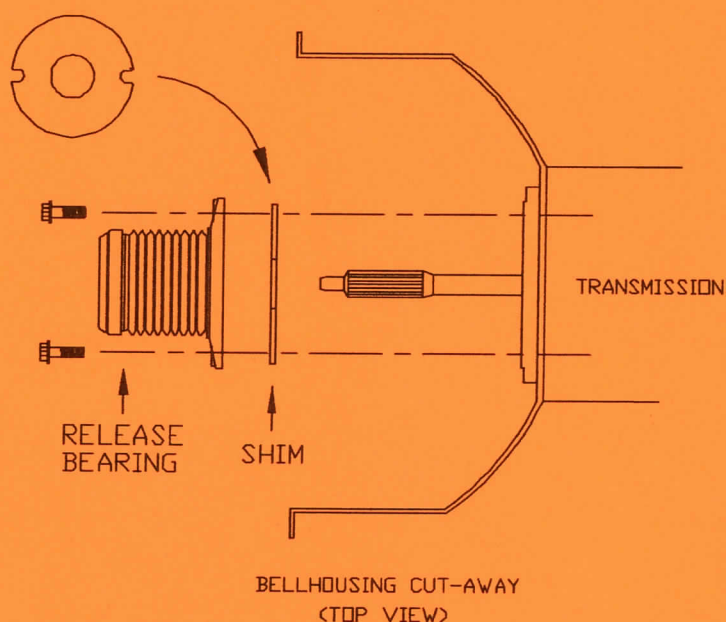


# IMPORTANT

## 2005-15 Ford Mustang 4.6L, 5.0L, 5.4L & 5.8L Hydraulic Release Bearing Shim

On 2005-15 Ford Mustang 4.6L, 5.0L, 5.4L & 5.8L applications, the enclosed Release Bearing Spacer **MUST** be installed between the hydraulic slave/ bearing assembly and transmission bellhousing as shown:

**Note:** Your new Centerforce clutch requires only one spacer. Should your vehicle have any type of spacer, please discard and use only the included spacer from Centerforce.



Centerforce recommends installing a new Ford Release Bearing/Slave assembly each time a new clutch is installed.

**NOTE:** you may re-use the Original Equipment Bearing/Slave bolts (tighten to 18 – 22 ft/lbs. 2 places) with the new Bearing/Slave assembly and Centerforce shim.

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



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

# IMPORTANT



# IMPORTANT

## DYAD DS Installation:

Your new DYAD DS Twin Disc clutch set is like no other high-performance clutch on the market. Take a moment to read the following instructions. Also, see the enclosed component diagram to familiarize yourself with the various unique parts of your new DYAD DS clutch system. Lastly, find your enclosed clutch specification card. Please keep this and all DYAD DS clutch related paper work in a safe place for future reference.



Note that your new DYAD DS twin disc clutch assembly has already been precision balanced. See the enclosed specification card for the exact balance results. During final assembly be sure the corresponding pressure plate, floater and flywheel balance markings (located on the outer diameter of the clutch assembly) are all in alignment.

Although an SFI approved aftermarket bellhousing is recommended, your DYAD DS Twin Disc clutch has been designed to work in conjunction with most factory O.E. bell housings and clutch release mechanisms without modification. However, installing a new clutch release bearing is always recommended during every new clutch install.

Please be aware that vehicles with **HYDRAULIC** clutch release systems **MAY HAVE** an aftermarket shim or spacer installed between the release bearing and transmission – **PLEASE CHECK!** Your DYAD DS clutch system **WILL NOT WORK** in conjunction with **ANY** aftermarket shim or spacer between the release bearing and transmission.

1. Carefully unpack your DYAD DS twin disc clutch system. Your new clutch assembly has been shipped from the factory exactly as it should be installed in your vehicle. Remove the pressure plate assembly from the flywheel and take careful note of the placement of each component.
2. Please take special care of the three anti-rattle pins located on the outer diameter of the clutch floater, facing toward the flywheel (see component diagram). Use caution and DO NOT bend or alter these pins.
3. Also, please take note of the six spacers located on the pressure plate studs between the clutch pressure plate and flywheel. Please be sure these spacers remain in place exactly as they were shipped.
4. Install the new clutch pilot bearing supplied (where applicable).
5. Install the flywheel to your engine; USE ONLY the flywheel to crankshaft bolts supplied with this clutch assembly. Torque the flywheel to crankshaft bolts to the supplied specifications.
6. Install the drive disc as marked ("Flywheel Side" decal toward the flywheel). Note: the six disc drive pins will face toward the transmission. Hold the drive disc in place and align with the enclosed disc alignment tool. Keep the disc alignment tool centered and in place until the clutch Pressure Plate is fully bolted to the flywheel.
7. Be sure to align the balance index mark on the floater to the balance index mark on the flywheel then, install the floater over the three floater drive spools located within the flywheel. The floater ant-rattle pins will locate within the flywheel slots, 3 places. Note: the floater drive spools are secured to the flywheel with threadlocking compound and have been pre-torqued to the flywheel from the factory. Please do not remove or further tighten the three socket head (Allen head) bolts retaining the floater drive spools.
8. Install the floating disc as marked ("Floater Side" decal toward the floater) and engage over the six drive pins from the drive disc.
9. During assembly, be sure to align the balance index mark on the pressure plate to the balance marks on the flywheel/floater.
10. Install the clutch pressure plate over the pressure plate studs located within the flywheel. (Note: the clutch pressure plate studs are secured to the flywheel with threadlocking compound from the factory. Please do not remove or further tighten the six clutch pressure plate studs).
11. Threadlocking compound may be used to secure the pressure plate nuts to the flywheel studs if so desired. If using threadlocker on the pressure plate nuts, use only a SMALL amount of MEDIUM (blue) threadlocking compound. Tighten all six pressure plate nuts, ¼ turn at a time in a criss-cross pattern until the pressure plate is completely drawn-up to the spacers against the flywheel. Torque all six nuts to 35 – 38 ft/lbs.
12. Remove the disc alignment tool and install the transmission.

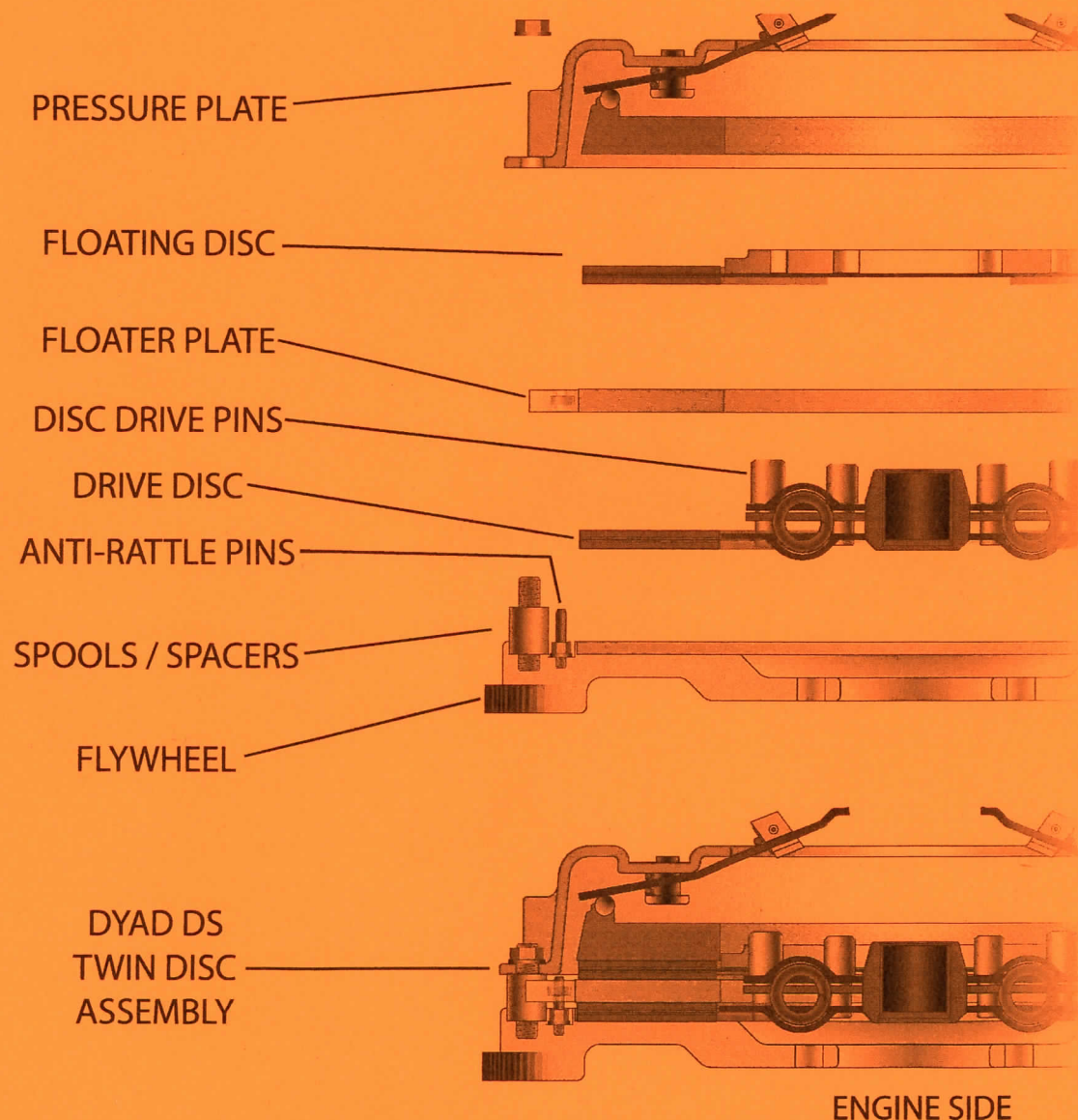
### "NOTE"

Should you have questions or if you require further information in regards to your new Centerforce DYAD clutch system please contact our tech line below.



# IMPORTANT

## DYAD DS COMPONENT DIAGRAM



### "NOTE"

Please observe the critical 500 mile clutch break-in period as described within the enclosed tip sheet.

Centerforce tip sheets are for general reference only.

Please refer to your owners manual for vehicle specifications.

Should you have questions or if you require further information in regards to your new Centerforce DYAD clutch system please contact our tech line.





## **Limited Warranty**

Your CENTERFORCE® product is covered by the Limited Warranty explained below that gives you specific legal rights. This limited warranty is the only warranty Midway Industries, Inc. (hereafter "Midway" -the distributor/warrantor of these products) makes in connection with your purchase. Midway neither assumes nor authorizes any vendor, retailer or other person or entity to assume for it any other obligation or liability in connection with its products or this Limited Warranty.

**What Is Covered?** Subject to the terms, exclusions and limitations herein Midway warrants to the initial retail purchaser ("purchaser") only that when installed and used on purchaser's vehicle according to supplied product installation instructions, OE vehicle installation instructions, and/or warnings. The CENTERFORCE® product shall be free of defects in material and workmanship for NINETY (90 days) as measured from the date of initial retail purchase. This Limited Warranty is not transferable. ALL OTHER EXPRESS OR IMPLIED WARRANTIES ARE HEREBY DISCLAIMED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Your warrantor for these parts is Midway Industries, Inc., 2266 Crosswind Dr., Prescott, AZ 86301. Midway reserves the right to: (a.) require proof of purchase as a condition of this Limited Warranty-please use warranty registration card, (b.) make future revisions to this product or its Limited Warranty without obligation to conform existing product or provide purchaser with prior notice.

**What Is Not Covered?** Your CENTERFORCE® Limited Warranty does not cover damage or claims to any component, vehicle or person other than the CENTERFORCE® product purchased. Your Limited Warranty does not cover damage or claims to any component, vehicle or person CENTERFORCE® determines to have been damaged by or subjected to:

- Installation or use not in accordance with CENTERFORCE® instructions or warnings, OEM installation and maintenance instructions, or accepted ASE guidelines.
- Damage in any part attributable to vehicle systems or components (including electronic stability control) or combination with non- CENTERFORCE® products.
- Normal wear and tear/product deterioration.
- Accidents, theft, vandalism or other negligent or intentional damage.

**Remedy Limited to Repair / Replacement.** The exclusive remedy provided for product covered under this Limited Warranty shall be, upon Midway's inspection and option, either repair or replacement (with CENTERFORCE® parts) of the defective part. Any parts repaired or replaced will be considered part of the original product and will not extend the term of Limited Warranty. Customers requesting warranty consideration should first contact Midway customer service (ph. 928/771-8422) to obtain a Returned Merchandise Authorization (RMA) number. All removal, shipping and installation costs are customer's responsibility.

### **Other Limitations - Exclusion of Damages - Your Rights Under State Law**

• In consideration of the purchase price paid, neither Midway nor any independent distributor are responsible for any loss of use or time, rental costs, or for any incidental, consequential, punitive or other damages (whether arising in tort, contract or otherwise) you may have or incur in connection with your vehicle, or your CENTERFORCE® product. Your exclusive remedy hereunder is at Midway's option repair or replacement as described above.

• This Limited Warranty gives you specific rights. You may also have other rights that vary from state to state. For example, while all implied warranties are disclaimed herein, any implied warranty required by law is limited to the duration and other enforceable terms of Limited Warranty described above. Some states do not allow limitations of how long an implied warranty lasts and /or do not allow the exclusion or limitation of incidental or consequential damages, so the limitations and exclusions herein may not apply to you.

© Midway Industries, Inc. 3.1.10. All rights reserved.

**Please call Centerforce at (928) 771-8422 with any questions.**





# Centerforce Clutches Clutch Installation Checklist

## Pre-Installation Checklist

- ☐ What is the reason for replacing the clutch assembly?
  - Did the clutch wear out?
  - Did you experience a clutch failure?
  - If a failure occurred, did you fix the cause of failure?
- ☐ Do you have a service manual for your vehicle to resource information regarding bolt torque specification, special tools that may be needed and installation instructions, etc.
- ☐ Do you have a non-petroleum cleaner such as, acetone or brake cleaner to clean the surface of the pressure plate and flywheel prior to installation?
- ☐ Do you have the proper bolts for the flywheel and pressure plate? (preferably new bolts)
- ☐ Do you have a torque wrench to properly torque the flywheel and pressure plate bolts?
- ☐ Do you have all of the fluids you will need? (Transmission oil, hydraulic clutch fluid)
- ☐ Do you have an alignment tool to properly line up the disc to the transmission?
- ☐ Do you have a replacement pilot bearing (preferred) or bushing? (If applicable)
- ☐ Do you have a pilot bearing removal tool or method? (If applicable)
- ☐ Do you have a safe method to lift and support your vehicle (Jack and at least 4 jack stands).
- ☐ Do you have someone to resurface your flywheel?
- ☐ Do you have a new throw-out bearing?
- ☐ Do you have an apparatus (Transmission jack or floor jack adapter) to support the weight of the transmission during installation to avoid damaging the disc?
- ☐ Pay close attention when removing components (linkage, bearing location and mounting, bolts and their length etc.). Make notes or take pictures for proper re-installation.

## Installation Checklist

- ☐ Have you inspected all clutch related parts (clutch fork, clevis, pins, hydraulics, etc.) for signs of wear or damage?
- ☐ Inspect the spline on your transmission input shaft for damage or wear? (Slide the disc on and off)
- ☐ Inspect the throw-out bearing guide tube for signs of wear or galling. (retaining collar/quill)
- ☐ Does the new Disc slide smoothly and spin straight on the input shaft of the transmission?
- ☐ Has your flywheel been properly resurfaced, balanced, and meets O.E.M. specifications?
- ☐ Are the dowel pins (if applicable) in the flywheel secure, straight and smooth?
- ☐ Lubricate the input shaft spline with a dry graphite lubricant or a light coat of lithium (white) grease.
- ☐ Did you check to make sure there is no grease or oil on any friction surfaces?
- ☐ Tighten all bolts to proper torque specifications.

## Post Installation Checklist

- ☐ If your vehicle is equipped with a clutch adjustment, refer to your (an) owners (service) manual for adjustment procedure.
- ☐ Did you complete your warranty card?

**If there any questions or concerns during or following your installation,  
Please feel free to contact CENTERFORCE® Clutches at 928-771-8422  
(7 am to 3:30 pm Arizona time M-F) and please ask for our Technical department.  
Or see our list of frequently asked questions at [www.centerforce.com](http://www.centerforce.com)**