



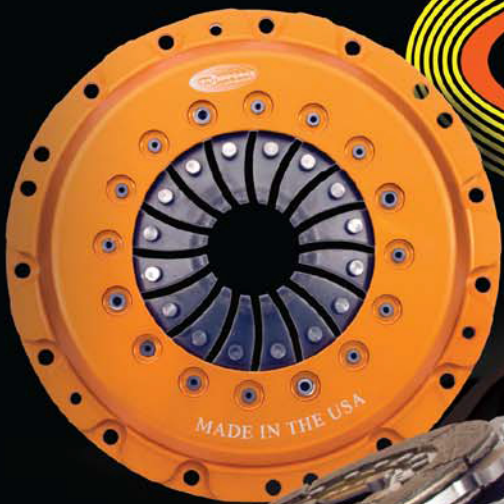
# CENTERFORCE

THE PERFORMANCE CLUTCH®

# 2017

CENTERFORCE  
PRODUCT GUIDE

DOMESTIC & IMPORTS  
CARS & TRUCKS  
CLUTCHES, FLYWHEELS  
& ACCESSORIES



Proud to be an  
American Company  
Since 1982



OVER 1500 DIFFERENT APPLICATIONS  
THE RIGHT CLUTCH DESIGN FOR YOU  
MULTIPLE CLUTCH RELATED PATENTS



# Choose the Ideal Clutch or Flywheel

Centerforce makes a range of clutch and flywheel products to suit your needs. From OEM/Street Replacement clutches, to off-road, drag and circle track racing, we've got you covered!

It's important to us to help you choose the best clutch or flywheel for your vehicle and your usage. So to help you find the ideal clutch or flywheel, we've provided the following comparison and recommendations chart. You can see how the attributes of each product compare, followed by our recommendation on their suitability for various driving styles and racing uses.

If you have any questions, or need help choosing the right clutch, contact us, and we'll be happy to answer all of your clutch and flywheel questions!

	Centerforce I Clutches	Centerforce II Clutches	Dual Friction Clutches	DFX Clutches	LMC (Light Metal Clutch)	DYAD DS (Drive System)	DYAD XDS (Extreme Drive System)	DYAD RS (Race System)	TRIAD RS (Race System)	Iron Flywheels	Steel Flywheels	Aluminum Flywheels
<b>Centerforce Recommendations based on Clutch &amp; Flywheel Performance Attributes</b>												
Smooth Engagement	██████	██████	██████	██	████	██████	██████	██████	██████	██████	██████	██████
Light Pedal Effort	██████	██████	██████	██████	████	██████	██████	██████	██████	N/A	N/A	N/A
Holding Capacity	██	██	████	██████	████	██████	██████	██████	██████	N/A	N/A	N/A
Longevity	██████	██████	██████	██████	████	██████	██████	██	██	████	████	████
<b>Centerforce Recommendations based on Intended Usage and Driving Style</b>												
Street/OEM Replacement	██████	██████	██████	██████	████	██████	██████	██	██	██████	██████	████
Street / Strip	██	██	████	██████	██████	██████	██████	██	██	██	██████	██████
Off-road / Towing	██	██████	██████	██████	██	██	██	██	██	████	██████	██
Drag Racing	██	██	████	██████	██████	██████	██████	██████	██████	██	██████	██████
Road Racing	██	██	████	██████	██████	██████	██████	██████	██████	██	████	██████
Circle Track	██	██	████	██████	██████	██████	██████	██████	██████	██	████	██████

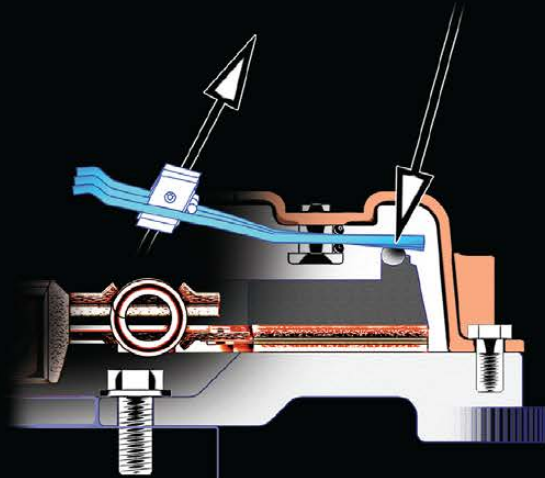
Disclaimer: The Centerforce Clutch and Flywheel Driving Style Comparison Chart is for informational purposes only. Centerforce makes no representations as to accuracy, completeness, currentness, suitability, or validity of any information in this chart. All information is provided on an as-is basis. Contact us to speak to a Centerforce representative to discuss your specific clutch or flywheel application.



## Centerforce 2017 Product Guide

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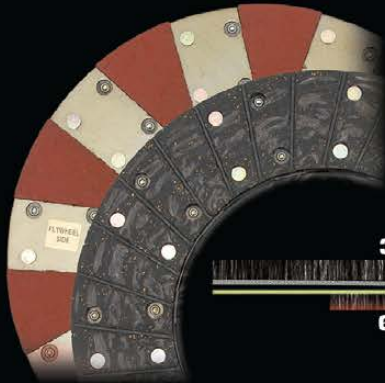
## CENTERFORCE WEIGHT SYSTEM



NOTE: Clutch finger movement has been exaggerated for demonstration purposes.

As the clutch spins, centrifugal force is applied to the weights, transferring through the diaphragm to the pressure plate. This is how the Centerforce weight system increases clamp load with RPM.

## DUAL FRICTION

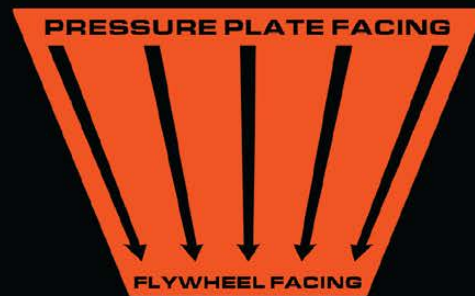


3000 PSI

6000 PSI

## PRESSURE

PRESSURE PLATE FACING



FLYWHEEL FACING

PSI INCREASES WHEN  
CONDENSED TO A SMALLER  
AREA!

The patented Centerforce Dual-Friction disc system uses a single disc that distributes pressure plate clamping force evenly over a 360-degree friction-facing on one side of the clutch disc, while the opposing side uses a segmented friction-facing to concentrate clamping pressure and maximize clutch holding-capacity. This combination of dual configured friction-facings on one disc, coupled with our performance pressure plate, creates the ultimate clutch system that is engineered for smooth drivability, maximum longevity and awesome grip!

## BALL BEARING PRESSURE PLATES



The patented ball bearing design allows us to increase clamp load, maintain stock dimension, and lighten pedal effort. This technology allows us to develop great stock like feel with increased performance.

## DYAD DRIVE SYSTEM WITH ANTI-RATTLE



Anti-Rattle System

DYAD Coupling System

Centerforce provides innovative leadership in clutch technology by creating patented processes like their DYAD multi-disc coupling system. Centerforce looked to allow multi-disc clutches with a fully dampened package. The DYAD system allows for a compact, strong, performance design that does just that. By developing this new design Centerforce can offer something seldom found in multi-disc clutches; drivability. Now you can have your cake and, you know.



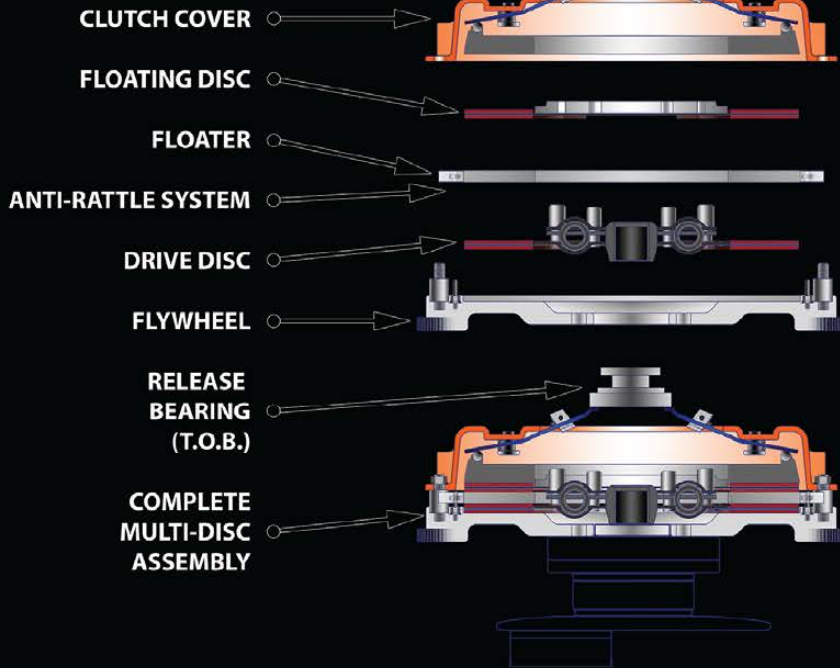
**DYAD**  
QUALITY ENGINEERED MULTI-DISC CLUTCH SYSTEMS



**DYAD**  
QUALITY ENGINEERED MULTI-DISC CLUTCH SYSTEMS



**DYAD**  
QUALITY ENGINEERED MULTI-DISC CLUTCH SYSTEMS



**DYAD DS Clutch Information Form**

Part Number:	64114805
Serial Number / PO Number:	03062104
Date:	10/20/17
Inspector By:	03062104

Pressure @ Compression Cycle:	
Pin In:	0.00
Pin Out:	0.00
Pin In:	0.00
Pin Out:	0.00
Pin In:	0.00
Pin Out:	0.00
Pin In:	0.00
Pin Out:	0.00
Pin In:	0.00
Pin Out:	0.00
Average:	0.00

Floating Disc Thickness:	
Pin In:	0.00
Pin Out:	0.00
Compression Range:	
Pin In:	0.00
Pin Out:	0.00
Clutch Weight (Clutch to Flywheel):	
Pin In:	0.00
Pin Out:	0.00
Torque to Release with 100% Clutch:	
Pin In:	0.00
Pin Out:	0.00
Release Bearing T.O.B. / Load:	
Pin In:	0.00
Pin Out:	0.00

Notes:

Average Torque Holding Capacity: 1,300 ft/lbs

**DYAD DS  
(DRIVE SYSTEM)**

- No complicated setup or adjustments required
- Fully dampened clutch system developed for vehicles with extreme power levels
- Patented ball bearing pressure plate
- Patented multi-disc floating disc and drive disc design
- Quiet, positive drive floater
- Smooth engagement and light pedal effort
- Holds up to 1300 ft/lbs of torque at the flywheel
- Precision balanced
- Greater longevity
- ARP fasteners
- Excellent driver control
- Comes preassembled for your convenience
- Specification card included!

**DYAD**  
QUALITY ENGINEERED MULTI-DISC CLUTCH SYSTEMS



The DYAD Drive System (DS) multi-disc clutch design has been developed to meet the needs of modern high-end vehicles. Today's technology has allowed for engine torque levels up to 1300 ft/lbs and still be driven every day. Drivers need a clutch that can offer; smooth engagement, quiet operation, light pedal, and high-end holding capacity. The DYAD DS offers that and more!



**1300FT/LBS**



**STREET PERFORMANCE**

## DYAD XDS (EXTREME DRIVE SYSTEM)

- No complicated setup or adjustments required
- Fully dampened clutch system developed for vehicles with extreme power levels
- Patented ball bearing pressure plate
- Patented multi-disc floating disc and drive disc design
- Race proven paddle style discs
- Quiet, positive drive floater
- Great drivability and light pedal effort
- Holds up to 1600 ft/lbs of torque at the flywheel
- Precision balanced
- Greater longevity
- ARP fasteners
- Excellent driver control
- Comes preassembled for your convenience
- Specification card included!



The DYAD eXtreme Drive System (XDS) multi-disc clutch design has been developed to meet the needs of modern extreme street vehicles. New technology is pushing engine torque levels up to 1600 ft/lbs and being driven on both the street and the track. Drivers need a clutch that can offer; drivability, quiet operation, light pedal, and eXtreme holding capacity. The DYAD XDS hits the mark!



## DYAD RS (RACE SYSTEM)

- No complicated setup or adjustments required
- 8.75" Diameter designed to lower inertia for track heavy use
- Centrifugally assisted diaphragm to increase holding capacity with RPM.
- Fully dampened clutch system developed for vehicles with extreme power levels
- Patented multi-disc floating disc and drive disc design
- No complicated setup or adjustments required
- Holds up to 800 ft/lbs of torque at the flywheel
- Patented ball bearing pressure plate
- Specification card included!
- Excellent driver control
- Positive drive floater
- Precision balanced
- ARP fasteners



The DYAD Race System (RS) multi-disc clutch design has been developed to meet the needs of pro-touring, auto crossing, and road racing vehicles. For the drivers that need a smaller and lighter system for quick revving vehicles with engine torque levels up to 800 ft/lbs. Drivers need a clutch that can offer; good drivability, great racing characteristics, and remain drivable. The DYAD RS meets their needs!



**NEW!**

**TRIAD RS  
(RACE SYSTEM)**

- No complicated setup or adjustments required
- 8.75" Diameter designed to lower inertia for track heavy use
- Centrifugally assisted diaphragm to increase holding capacity with RPM.
- Solid hub design for light weight and quick shifts.
- Patented multi-disc floating disc and drive disc design
- Holds up to 1100 ft/lbs of torque at the flywheel
- Patented ball bearing pressure plate
- Specification card included!
- Excellent driver control
- Positive drive floater
- Precision balanced
- ARP fasteners

**NEW FOR 2017!**

**TRIAD™**  
CENTERFORCE TRIPLE DISC CLUTCH SYSTEMS



**1100 FT/LBS**

THE  
CLUTCH  
WITH...  
**BALLS!**

**LOW  
INERTIA**



**ARP**  
automotive *Racing* products

To expand the on the DYAD RS Centerforce has developed the new TRIAD Race System (RS). This triple disc version of the 8.75" Dia. clutch design has been developed to meet the needs of extreme pro-touring, auto crossing, and road racing vehicles. For the drivers that need a smaller and lighter system for quick revving vehicles and engine torque levels up to 1100 ft/lbs. This is the clutch that just works! The Triad RS uses solid hub discs to keep the weight down and increase shift speed. Including the same Centerforce centrifugally assisted curved diaphragm as the DYAD RS and a coupling system similar to the DYAD for easy installation and operation. The TRIAD RS is taking the RS (Race System) further, with better driving characteristics, and at a lower cost than many traditional triple discs.



**NEW!**



The expansion of the RS options in twin or tripple now allows Centerforce to develop more applications. Not only the domestic market will benefit, but the sport compact and european market as well.

This inovative design advances with a new generation of Centerforce's Centrifugal assit. Multiple friction styles and holding capacities in a smaller 8.75" package. The 8.75" diameter design still offers great low inertia characteristics and better driveability then some of the smaller 7" or 5" diameter options for racing.





## LMC (LIGHT METAL CLUTCH)

- Lightweight aircraft grade aluminum
- Replaceable friction surface
- Patented centrifugal weight design (where applicable)
- Patented ball bearing pressure plate
- High quality friction material
- Light pedal effort
- Increased holding capacity
- Smooth engagement
- SFI approved

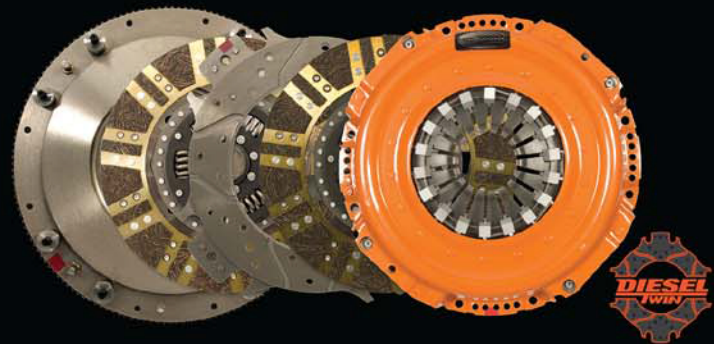


The Centerforce® LMC Clutch Series are machined from high-strength aircraft-grade billet aluminum and then a special heat-treated replaceable friction surface is attached for a low inertia performance clutch that reduces engine rotating mass. These lightweight, SFI approved competition clutches are intended for most road racing and circle track applications. The LMC Clutch Series utilize a disc with dual-segmented carbon composite lining for improved cooling and excellent torque capacity, patented 'Ball Bearing' actuated diaphragm, and centrifugal weight system for maximum grip while keeping a comfortable and controllable clutch pedal.



## STREET TWIN (DIESEL TRUCKS)

- Rated up to 1700 ft/lbs holding capacity.
- Factory set-up. Easy install, no adjustments.... Ever!
- TWO multi-stage dampened discs with top quality organic friction material.
- Vented positive drive Floater plate with patented anti-rattle technology.
- Patented Ball Bearing pressure plate for smooth engagement and easy pedal effort.
- Complete precision balanced assembly.
- ARP pressure plate and crankshaft fasteners.
- Hand built, serialized and includes owner specification card.



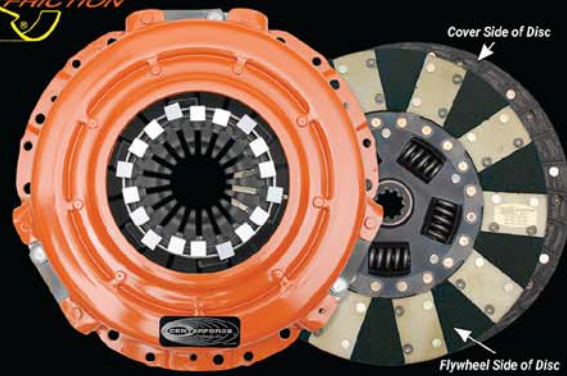
Available for Dodge Cummins Diesel equipped 2500-5500 trucks. Centerforce announces their NEW Twin Disc clutch set for Heavy-Duty street and towing use. Truck owners pushing power levels up to 1700 ft/lbs will enjoy the smooth and quiet operation this unique clutch set offers. All components are match balanced and ready for installation.



## DUAL FRICTION®

- Patented centrifugal weight design (where applicable)
- Patented Dual Friction® design
- Patented Ball bearing pressure plate
- Light pedal effort
- High quality friction material
- Increased holding capacity
- Smooth engagement

CENTERFORCE  
**DUAL FRICTION**



The Centerforce Dual Friction® Clutch Series is a performance matched pressure plate & disc combination featuring the patented Centerforce centrifugal weight system (where applicable) and specialized machining processes to provide a performance clutch that offers exceptional street characteristics, while offering outstanding holding-capacity and durability. Furthermore, the Centerforce Dual Friction disc has a full facing on the pressure plate side for drivability and longevity, while a carbon composite puc-style (segmented) facing is used on the flywheel side for a positive engagement and increased holding-capacity.



INCREASED GRIP



THE CLUTCH WITH...  
**BALLS!**

STREET  
PERFORMANCE

## DFX®

- Added Durability
- Light Pedal Effort
- Added Durability
- Patented Centrifugal Weight System (Where Applicable)
- Patented Ball Bearing Pressure Plate
- High Holding Capacity
- Heavy Duty Design
- Dampened Paddle Style Disc
- SFI Approved



The Centerforce DFX® Clutch Series is for high-end applications that continually demand increased integrity and holding-capacity. DFX has great holding-capacity and strength, but also provides some of the best drivability from a race-inspired single disc clutch. DFX retains an easy pedal effort from a patented ball bearing actuated diaphragm, for smooth engagements without detriment to the vehicle's release components. The DFX series is SFI approved for competition use with Nodular Iron pressure plate rings and reinforcements designed to help safety and prevent drive strap breakage. The DFX series is aggressive and may cause some chatter.



THE CLUTCH WITH...  
**BALLS!**

STREET  
PERFORMANCE

## STREET PERFORMANCE CLUTCHES



### CENTERFORCE® I

- Patented centrifugal weight design (where applicable)
- High quality friction material
- Light pedal effort
- Smooth engagement



The Centerforce® I Clutch Series is designed as a high-quality entry-level performance clutch for those in need of a superior stock replacement. Using the patented Centerforce centrifugal weights (where applicable) and premium friction materials, the Centerforce Stage 1 clutch system is perfect for applications with stock engines or mild power increases from minor bolt-on modifications.

NOTE: Centerforce I and Centerforce II will be in matched sets for some applications and single items in other applications. Please make sure to check what is included with each part number.

STREET PERFORMANCE **OEM**

### CENTERFORCE® II

- Patented centrifugal weight design (where applicable)
- Patented ball bearing pressure plate (where applicable)
- High quality friction material
- Light pedal effort
- Smooth engagement



The Centerforce® II Clutch Series utilizes a full facing disc with premium friction materials and a pressure plate with patented centrifugal weights (where applicable). Furthermore, static clamp load is increased via our patented machining processes; this combination allows superb holding power and maximum clutch life, making this clutch ideal for selected street/strip, off-road and towing applications. Pressure plate and disc sold separately on some applications.

NOTE: Centerforce I and Centerforce II will be in matched sets for some applications and single items in other applications. Please make sure to check what is included with each part number.

TOWING OFFROAD **THE CLUTCH WITH BALLS!** STREET PERFORMANCE

# CENTERFORCE FLYWHEELS



## BILLET ALUMINUM PERFORMANCE FLYWHEELS

- Aircraft grade billet aluminum
- Mechanically retained starter ring gear
- Replaceable steel friction surface
- Low inertia / Light weight
- CAD/CAM designed and CNC machined
- Precision Balanced
- No-hassle bolt-in
- Domestic and Import applications



CENTERFORCE FLYWHEELS



## BILLET STEEL PERFORMANCE FLYWHEELS

- High Quality Billet Steel
- CAD/CAM designed and CNC machined
- Precision Balanced
- No-hassle bolt-in
- Domestic and Import applications



CENTERFORCE FLYWHEELS

STREET PERFORMANCE sfi

## CAST IRON REPLACEMENT FLYWHEELS

- High quality nodular iron castings
- Built as OE replacements



CENTERFORCE FLYWHEELS

Fe **OEM**

# CENTERFORCE® ACCESSORIES



## ALIGNMENT TOOLS



## CLUTCH & FLYWHEEL BOLTS



OEM

## PILOT BEARINGS & BUSHINGS



OEM

## THROWOUT / RELEASE BEARINGS



OEM



## Company Bio

Midway Industries Centerforce® division is proud to be recognized as the leading manufacturer of performance clutch and pressure plate systems in the United States. Centerforce's reputation as the clutch system of choice stretches back to the early 1980's when legendary Hot Roder and SEMA Hall of Fame member, Bill Hays sought to cure problems with existing designs while developing a competition-rated clutch/pressure plate system suitable for use with non-asbestos friction facings. Bill's remarkable innovation was soon patented as the Centerforce Weighted Clutch System. The Centerforce design applies proven principles of weight and centrifugal force to develop the increased clamping loads modern clutch facings require while maintaining easy pedal effort and eliminating old-style diaphragm "over-center" problems disastrous to high-performance engines.

In 1982, the Hays family founded Midway Industries, Inc. to meet growing national demand for Centerforce products. Subsequent invention and patents covering the Centerforce II, Centerforce Dual Friction®, Centerforce® LMC Series and DFX® Series Clutch System, demonstrate our commitment to the continuous research, product development and improvement that propelled Centerforce products into the industry leaders they are today. Midway Industries has been a long time member and supporter of both SEMA and PWA. Representative awards include SEMA and Hot Rod magazines Best New Performance Street Award for the Centerforce Dual Friction Clutch System. Nominated several times for PWA's Manufacturer of the Year, Midway's Centerforce division won the prestigious award in 1998. Centerforce products have likewise collected numerous other new product and packaging awards while striving to continue that legacy.

Starting from a small speed shop in Midway City, California, the Centerforce brand has earned a well-deserved reputation for reliability and durability where ever superior clutch performance and easy operation are preferred. Midway Industries has always been responsive to customer demand, with continuous investment in state of the art technology, research and quality control. When expansion was needed, the Midway team sought out the ideal location for its employees and growth, eventually selecting Prescott, Arizona for construction of a new 48,000 square foot manufacturing facility. The move was nearly transparent, with over 90% of the Centerforce team moving to Prescott.

Continuous development and improvement of product offerings is reflected in the unique features of the Centerforce clutch line being protected under nine separate (9) U.S. patents. Today, Centerforce has over 1500 different non-asbestos clutch/pressure plate applications available to the automotive enthusiast. First and foremost, Midway Industries and Centerforce are proud to be a three-generation family owned business, World headquartered and manufacturing exclusively in Prescott, Arizona, committed to create the highest quality and most innovative products available. Centerforce clutch systems are the performance enthusiast's first choice and can be found on leading OEM and customized vehicles worldwide.

## Centerforce Mission Statement

It is the goal of the Centerforce clutches and flywheels division to produce products of the highest quality available to the marketplace. We continue to improve our products thru new product development and testing in real world, street, off road and race facilities. We insist our customer service personnel preserve their status as the best in the performance industry. With a knowledgeable and helpful staff we aim to provide the most on time delivery and shipping accuracy. Centerforce strives to meet consumer needs by offering affordable, reliable, and continuously improved products. Therefore, Centerforce rises to offer the broadest performance-based clutch assemblies, flywheels, and accessories without compromising drivability, quality, or integrity.