tilton

WINNING HERITAGE • QUALITY • VALUE • SUPPORT

CHOSEN BY WINNERS SINCE 1972

History

In 1972, McLane (Mac) and Adelle Tilton founded Tilton Engineering in El Segundo, California. Their mission was to supply innovative, high-quality products at fair prices and with sound advice. Mac utilized his vast racing and machining experience, most notably as Crew Chief for the 1971 & 1972 Trans Am championship winning Brock Racing Enterprises (BRE) team, to develop some of the most innovative products of their time. Adelle's excellent business sense and experience helped to insure the long-term future of Tilton Engineering.

As Tilton Engineering's reputation grew, demand for its products increased. Tilton relocated in 1979 to Buellton, California where it is still located today. A new custom-built headquarters was completed in 2017, which includes the full machine shop, assembly area, warehouse, office space and a fully integrated quality assurance department.

Products

Tilton produces a wide range of driveline and brake components, in-cockpit controls and starter motors. Driveline components include clutches, flywheels, bellhousings and hydraulic release bearings. Brake components and in-cockpit controls include pedal assemblies, master cylinders, balance bars, proportioning valves and related accessories. Super Starters by Tilton were introduced in 1981 as the first high torque mini-starter for racing applications.

Tilton products are primarily designed for racing use and can be found worldwide in nearly every form of racing, winning numerous major races and championships each year. Tilton continues to expand its offerings to includes products for the high-performance street market, such as with their ST-246 line of twin plate clutches and 6000-Series hydraulic release bearings.

Innovation

Of the numerous innovations Tilton has brought to the racing world, most recognized is the carbon/carbon racing clutch. Tilton's was the first carbon/carbon clutch to be used in F1, winning its first race at the 1987 Detroit Grand Prix in Aryton Senna's Lotus-Honda. The technology developed by Tilton can be found in most carbon/carbon racing clutches of today. Tilton Engineering was awarded a US Patent and the Louis Schwitzer Award. Today, Tilton continues to introduce innovative products to the racing industry each year.

Engineering/Manufacturing/Quality Control

Tilton Engineering believes that having Engineering, Manufacturing and Quality Control within the same building is the best way to insure the highest quality products are delivered to customers. Our products are designed by experienced engineers, who understand the needs of racers, using the latest solid modeling CAD and Finite Element Analysis (FEA) software. 90% of our machined components are manufactured at our facility in Buellton, California using top-level equipment, including a Toyoda Horizontal Milling Center (HMC) and Mori Seike lathes. After machining, products are quality checked using Browne and Sharpe Coordinate Measuring Machines (CMM) and tested using proprietary equipment.

Service

A great product is nothing without great service behind it and Tilton prides itself in providing excellent customer service. Experienced Tilton employees, most who have been at Tilton for many years, are readily available to assist customers in selecting the most appropriate products and providing technical support. Tilton is supported by a worldwide network of dealers, who are the very best in the industry. These dealers know their customer's and make significant investments in inventory to service them quickly. They, along with Tilton's employees, are there to provide the customer with top-level service and the best purchase experience possible.

No. 10 Konica Minolta Cadillac DPi-V.R

Contents

CLUTCH TYPES

There are many considerations when choosing a clutch that best meets your needs. The selection of clutches on the market is quite large, with a wide range of diameters, friction materials and disc counts. The general rule in selecting a racing clutch is to choose the smallest clutch diameter allowed by sanctioning body rules, determine how many discs it takes to meet your engine's torque capacity, and add one additional plate for heat capacity and durability reasons. For street use, larger diameter clutch such as Tilton's ST-246 range of clutches are recommended. The following is a list of factors to consider when selecting the right clutch for your application.

Metallic Racing Clutches: Lug-type clutch design that feature discs with a thin specialized metallic friction material sintered to the core plate. The thin (.104") friction disc offers low weight & inertia, has excellent wear resistance and withstands fairly high temperatures. Metallic clutches are the most commonly used clutch type in circle track and road racing. Tilton offers metallic clutches in their OT-Series 5.5" & 7.25", Sport 5.5 and 5.5 Ultra clutch models.

5.5 ULTRA
Racing Clutch

Cerametallic Racing Clutches: Lug-type clutch design that features discs with a thick ceramic and metallic friction material blend sintered to the core plate. Compared to the metallic clutch of the same number of discs, the thicker (.283") friction material provides increased heat capacity. In addition, the engagement characteristics are less aggressive than metallic clutches. Cerametallic clutches are commonly used in rally, short track off-road, club racing/track day and import drag racing.

7.25" OT-II Cerametallic
Racing Clutch

Carbon/Carbon Clutches: Tilton Engineering designed and patented (4,846,326) the first carbon/carbon clutch in 1989. Features driven and floater plate that are 100% carbon matrix. Tilton carbon/carbon clutches offer many advantages over other friction materials. They are by far the lightest of the clutch types, superior at withstanding high temperatures (will not warp from heat) and have the smoothest engagement characteristics. Although the initial purchase price is higher, their cost per mile is lower, especially when you consider that their smooth engagement can help increase the life of the transmission and other driveline components. Carbon/Carbon clutches are commonly used in road racing, endurance racing, open wheel/formula, rally, short course off-road, 1/2-mile racing, and higher power street/strip applications

7.25" OT-II Carbon
Racing Clutch

ST-246 Performance Street Clutches: Designed specifically for high performance street/strip use. Features a machined aluminum clutch cover that incorporates straps that are attached to the high-mass pressure plate and floater plate to minimum noise. ST-246 clutches are available with either sprung-hub organic discs for street use or solid-hub cerametallic discs for street/strip use. Designed from the ground up as performance twin disc clutch using Tilton 45+ years of experience in racing clutches, ST-246 clutches are competitively priced and are a far superior option to the stamped steel cover "performance" clutches on the market.

ST-246 Twin Disc
Street Clutch

Sanctioning Body Rules: If you are selecting a clutch for use in a sanctioned racing series, you will want to start by checking the clutch rule of the sanctioning body. Most sanctioning body rules specify a minimum clutch diameter. The minimum clutch diameter rule is based on the diameter of the friction/driven discs, not the diameter of the entire clutch. This rule keeps the mass moment-of-inertia to a minimum. In addition, rules typically specify acceptable clutch friction materials. Racing clutch friction materials, as far as racing sanctioning body rules are concerned, are divided into two categories: metallic and carbon/carbon.

Clutch Performance Limits

Torque Capacity: Torque capacity refers to the engine torque that the clutch will hold before slippage occurs. Torque capacity ratings among clutch manufacturers cannot be directly compared. Clutch manufactures do not have an industry standard with which they set clutch torque ratings. Generally, a Tilton OT-Series clutch does not slip until the torque is 50% above the rated torque capacity, making the rating rather conservative. On the other hand, another clutch manufacture may rate a clutch at the torque level it starts to slip in an effort to provide a more impressive rating. One can usually use the torque ratings to compare clutches from the same manufacturer, but not from different manufacturers.

Heat Capacity: Heat capacity refers to the amount of heat the clutch can withstand before damage or failure occurs. Heat is generated every time the clutch is engaged (slipped/modulated). The heat generated during engagement is mostly absorbed by the clutch's pressure plate, floater plates and discs. Some heat is also absorbed by the flywheel. The more mass a clutch has, the more heat/temperature it can absorb. As with brakes and tires, higher temperatures do more damage. Same is true with clutches. A clutch with an extra disc will have better heat capacity due to the increased mass, exposing the clutch to lower overall temperatures. Due to it's stability under heat, carbon/carbon has the ability to withstand the highest temperatures before being damaged. The racetrack is usually easy on the clutch. It is the paddock (or street) where the clutch must be slipped, raising clutch temperature and causing the most damage. In addition, even if horsepower levels are equal, a heavier car will require more material (to absorb heat) than a lighter car.

Durability: Refers to the service life of the clutch. A smaller diameter clutch, or removing a plate from the clutch, will offer increased performance through a lower inertia. Adding a plate to the clutch, or increasing the diameter of the clutch, will increase the life of the clutch due an increased surface area to wear against. In summary, there is a trade-off to be made between clutch weight and maintenance intervals.

Release Load: Force required on the diaphragm spring to disengage the clutch. Lower release loads put less stress on the engine's thrust bearings and reduces pedal effort.

Clamp Load: Force applied by the clutch's diaphragm spring onto the driven plates.

Diaphragm Spring: The Belleville spring located in the clutch cover.

Driven Plate(s): The plate(s) within the clutch assembly that drive the transmission's input shaft.

Pressure Plate: The plate directly under the clutch's diaphragm spring, containing the fulcrum point where clamp load is placed onto the driven plates. Many Tilton OT-Series clutches are available with two pressure plate ratio options, High or Ultra-High.

Floater Plate: The plate(s) that separate the driven discs on multi-plate clutches.

ST-246 CLUTCH/FLYWHEEL KITS

Tilton has applied their nearly 50 years of experience in racing clutches to develop the ST-246 line of 246mm (9.7") twin disc clutch kits for the high-performance street market. Unlike many of the "performance clutches" on the market, ST-246 clutches were engineered from the ground up as a true performance twin disc clutch and not an OEM-type stamped steel pressure plate with a floater plate added. ST-246 clutches are designed to provide high torque capacity, low wear rate, smooth shifting and good drivability. All ST-246 twin disc clutch kits include a billet chromoly steel flywheel and are available with either sprung-hub organic discs **(850 lb-ft capacity)** or solid-hub cerametallic discs **(1250 lb-ft capacity)**.

Features

- Precision machined aluminum clutch cover provides high-strength, stiffness and better dynamic balance than OE-type stamped steel covers.
- High-mass main pressure plate and floater plate, machined from the same proprietary material as used in Tilton's racing clutches, provides high heat capacity and resists.
- Heavy-duty straps attach pressure plate and floater plate to the clutch cover, minimizing noise and providing fast & clean release between shifts.
- Chromoly steel flywheel provides high-strength and long-term durability. Features a precision register to locate the clutch and provide optimal balance (as opposed to loose fitting bolts & dowels used with stamped steel clutches).
- Weight and inertia engineered to provide a good balance of performance and drivability.
- 246mm sprung-hub organic disc **(850 lb-ft)** and solid-hub cerametallic disc **(1250 lb-ft)** options.

Car Specific Applications

Includes: Clutch, discs, flywheel, clutch & flywheel bolts, alignment tool and spline grease.

Application	Weight (lbs)	Organic Disc Kits	Cerametallic Disc Kit
Chevy Camaro GEN6	48.3	**55-1000**	**55-2000**
Chevy Camaro GEN5	46.4	**55-1005***	**55-2005***
Chevy Corvette C7	48.3	**55-1000**	**55-2000**
Chevy Corvette C6	46.4	**55-1009***	**55-2009***
Chevy Corvette C5	46.4	**55-1004**	**55-2004**

** Includes 6000-Series hydraulic release bearing*

Engine/Transmission Applications

Engine	Transmission	Weight (lbs)	Organic Disc Kits	Cerametallic Disc Kit
Chevy LS (6-Bolt)	Tremec T56 6-spd/ TKO 5-spd (26-spline)	46.4	**55-1004**	**55-2004**
Chevy LSA/LSX (8-Bolt)	Tremec T56 6-spd/ TKO 5-spd (26-spline)	46.4	**55-1008**	**55-2008**
Chevy LT1/LT4	Tremec T56 6-spd/ TKO 5-spd (26-spline)	46.4	**55-1008**	**55-2008**
Chevy V8 (early)*	Tremec T56 6-spd/ TKO 5-spd (26-spline)	43.4	**55-1002**	**55-2002**
Ford Coyote	Tremec T56 6-spd/ TKO 5-spd (26-spline)	47.7	**55-1001**	**55-2001**
Ford Small Block*	Tremec T56 6-spd/ TKO 5-spd (26-spline)	44.0	**55-1003**	**55-2003**

** Internal Balance*

Features

- Tilton's value-oriented 5.5" racing clutch
- Rigid clutch cover design resists deflection
- Hardened steel thrust buttons in clutch cover legs provide long term durability
- Accepts Tilton and QM 110-tooth cover -mount ring gears
- Direct replacement for QM 8-leg 5.5" Clutches
- 750 lb-ft capacity for a 3-plate clutch. 500 lb-ft capacity for 2-plate clutch

Typical Applications

- Circle Track
- Road Racing

SPORT 5.5 Button Clutch Assemblies

Includes: Clutch, discs, button flywheel, clutch bolts and flywheel bolts

Description	Chevy Early	Chevy Crate	Chevy LS	Ford Small Block
2-disc, 26 spline	57-2136	57-2336	57-2436	57-2536
3-disc, 26-spline	57-1136	57-1336	57-1436	57-1536

SPORT 5.5 Service Parts

Clutch Assemblies

Includes: Clutch and disc pack

Description	Part Number
SPORT 5.5 clutch, 2 disc, 26-spline	**67-902HG-36**
SPORT 5.5 clutch, 3 disc, 26-spline	**67-903HG-36**

Button Flywheel

Description	Part Number
Button, 8-leg 5.5", Chevy Early	**19002**
Button, 8-leg 5.5", Chevy Crate, balanced	**19023**
Button, 8-leg 5.5", Chevy LS	**19044**
Button, 8-leg 5.5", Ford Small Block	**19045**

Disc Packs

Description	Part Number
Disc pack, 2-disc, 26-spline	**64140-1-AA-36**
Disc pack, 3-disc, 26-spline	**64140-1-ABA-36**

Clutch Service Parts

Description	Part Number
Pressure Plate	**67-118HR**
Floater Plate	**67-119**
Clutch Bolt Kit (3 or 2 disc with RG spacer)	**95-035**

ULTRA 5.5 CLUTCH ASSEMBLIES

Features

- Tilton's lightest 5.5" racing clutch
- Rigid clutch cover design resists deflection
- Hardened steel thrust buttons in clutch cover legs provide long-term durability
- Accepts Tilton and QM 99 tooth & 110-tooth cover mount ring gears
- Direct replacement fir QM 6-leg 5.5" clutches
- 750lb-ft capacity for 3-plate clutch. 500 lb-ft capacity for 2-plate clutch

Typical Applications

- Circle Track
- Road Racing

ULTRA 5.5 Button Clutch Assemblies

Includes: Clutch, discs, button flywheel, clutch bolts and flywheel bolts

Description	Chevy Early	Chevy Crate	Chevy LS	Ford Small Block
2-disc, 26 spline	57-4136	57-4336	57-4436	57-4536
3-disc, 26-spline	57-3136	57-3336	57-3436	57-3536

ULTRA 5.5 Service Parts

Clutch Assemblies

Includes: Clutch and disc pack

Description	Part Number
ULTRA 5.5 clutch, 2 disc, 26-spline	**67-202HG-36**
ULTRA 5.5 clutch, 3 disc, 26-spline	**67-203HG-36**

Button Flywheel

Description	Part Number
Button, 8-leg 5.5", Chevy Early	**19038**
Button, 8-leg 5.5", Chevy Crate, balanced	**19042**
Button, 8-leg 5.5", Chevy LS	**19041**
Button, 8-leg 5.5", Ford Small Block	**19043**

Disc Packs

Description	Part Number
Disc pack, 2-disc, 26-spline	**64140-1-AA-36**
Disc pack, 3-disc, 26-spline	**64140-1-ABA-36**

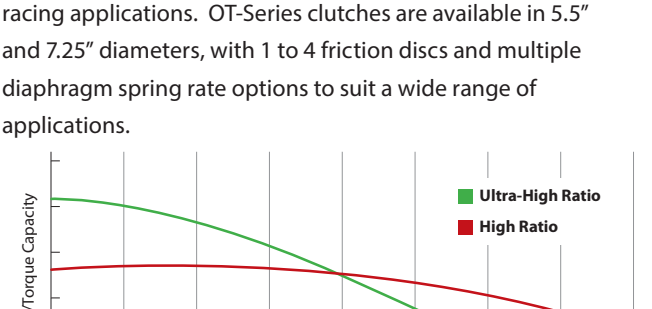
Clutch Service Parts

Description	Part Number
Pressure Plate	**67-118HR**
Floater Plate	**67-119**
Clutch Bolt Kit (3 or 2 disc with RG spacer)	**95-036**

In 1986, Tilton Engineering introduced its first OT-Series clutch. The “open type” design of OT-Series clutches provided lower operating temperatures and cleaner operation when compared to the “closed type” clutches that were the standard at the time.

Today, Tilton OT-Series clutches have grown to become some of the most widely used and successful clutches in racing. On any given weekend, Tilton OT-Series clutches can be found winning races, from the local racetrack to world renowned racing circuits. They have earned a reputation for providing the level quality, performance and reliability needed to win championships.

OT-Series metallic clutches offer the low weight, low inertia, torque capacity and strength needed for the most demanding racing applications. OT-Series clutches are available in 5.5” and 7.25” diameters, with 1 to 4 friction discs and multiple diaphragm spring rate options to suit a wide range of applications.



High Ratio Pressure Plate

- Standard pressure plate ratio for 5.5" & 7.25" clutches
- Short release travel for quick engagement and shifting
- Flat clamp load curve for longest wear range

Ultra-High Ratio Pressure Plate

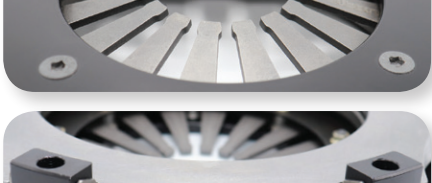
- Optional pressure plate ratio for 7.25" clutches
- 20% more release travel than High Ratio for improved modulation
- 20% more clamp load than High Ratio for higher peak torque capacity
- Clamp load drops more quickly with wear than High Ratio

Features

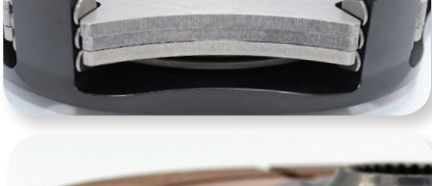
Open, one-piece clutch cover design provides lower operating temperature, high strength and minimal deflection for quick shifting.

Chrome vanadium diaphragm springs and an engineered pressure plate geometry provide a high clamp load-to-wear ratio, low release load and quick shifting.

High-strength steel is used in both the pressure plates and the floater plates.



.104”-thick friction disc withstands elevated temperatures while providing low inertia and excellent wear resistance.



Hardened steel thrust buttons provide smooth and durable surface for pressure and floater plates.

Every Tilton OT clutch is dynamically balanced to ensure the highest level of performance.

Each OT clutch is individually inspected for proper assembly and balance, and initialed by the quality personnel as confirmation.

OT-II 7.25" METALLIC CLUTCHES

Features

- Disc Diameter: 7.25" (185mm)
- Disc Count: 1, 2, 3, 4-disc
- Pressure Plate Ratios: High, Ultra-High
- Diaphragm Spring Rates: W, BF, ORA, G, GG, GGG
- Option: Heavy Duty model features high-mass pressure plate that provides additional heat capacity for severe applications

Typical Applications

- Circle Track
- Road Racing
- Open Wheel/Formula
- Drifting
- Off-Road

Weight & Inertia

Clutch	Weight *(lbs/kg)*	Inertia ($lb\text{-}in^2/kg\text{-}m^2$)
1 Disc	5.1/2.3	44.1/.0130
2 Disc	7.5/3.4	66.3/.0195
3 Disc	9.9/4.5	87.6/.0258
4 Disc	10.6/4.8	94.6/.0278

Clutch Service Parts

Description	Part Number
Pressure Plate, High Ratio	**66-118HR**
Pressure Plate, Ultra High Ratio	**66-118UHR**
Pressure Plate, High Ratio, Heavy Duty	**66-158HR**
Floater Plate	**66-119**

See page 19-20 for available clutch disc packs options

Installation drawing for OT-II 7.25" Metallic Clutches is available at www.tiltonracing.com/technical/installation-drawings

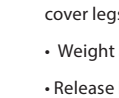
	Pressure Plate	Diaphragm Spring	Torque Capacity *(lb-ft/Nm)*	Release Load *(lb/daN)*	Part Number
1-Disc	High	W	200/272	400/180	**66-001HW**
	High	BF	240/326	480/211	**66-001HBF**
	High	ORA	280/381	560/247	**66-001HORA**
	High	G	340/462	680/299	**66-001HG**
	High	GG	380/517	760/334	**66-001HGG**
	Ultra High	W	240/326	400/180	**66-001UW**
	Ultra High	BF	285/388	480/211	**66-001UBF**
	Ultra High	ORA	335/456	560/247	**66-001UORA**
	Ultra High	G	380/517	680/299	**66-001UG**
	Ultra High	GG	455/619	760/334	**66-001UGG**
2-Disc	**Pressure Plate**	**Diaphragm Spring**	**Torque Capacity** *(lb-ft/Nm)*	**Release Load** *(lb/daN)*	**Part Number**
	High	W	400/544	400/180	**66-002HW**
	High	BF	480/652	480/211	**66-002HBF**
	High	ORA	560/762	560/247	**66-002HORA**
	High	G	680/925	680/299	**66-002HG**
	High	GG	760/925	760/334	**66-002HGG**
	Ultra High	W	480/652	400/180	**66-002UW**
	Ultra High	BF	570/775	480/211	**66-002UBF**
	Ultra High	ORA	670/911	560/247	**66-002UORA**
	Ultra High	G	820/1115	680/299	**66-002UG**
	Ultra High	GG	910/1238	760/334	**66-002UGG**
3-Disc	**Pressure Plate**	**Diaphragm Spring**	**Torque Capacity** *(lb-ft/Nm)*	**Release Load** *(lb/daN)*	**Part Number**
	High	W	600/816	400/180	**66-003HW**
	High	BF	720/979	480/211	**66-003HBF**
	High	ORA	840/1142	560/247	**66-003HORA**
	High	G	1020/1387	680/299	**66-003HG**
	High	GG	1140/1550	760/334	**66-003HGG**
	High	GGG	1245/1693	800/330	**66-003HGGG**
	Ultra High	W	720/978	400/180	**66-003UW**
	Ultra High	BF	855/1164	480/211	**66-003UBF**
	Ultra High	ORA	1005/1368	560/247	**66-003UORA**
	Ultra High	G	1140/1551	680/299	**66-003UG**
	Ultra High	GG	1365/1857	760/334	**66-003UGG**
3-Disc Heavy Duty	**Pressure Plate**	**Diaphragm Spring**	**Torque Capacity** *(lb-ft/Nm)*	**Release Load** *(lb/daN)*	**Part Number**
	High	ORA	840/1142	560/247	**66-503HORA**
	High	G	1020/1387	680/299	**66-503HG**
	High	GG	1140/1550	760/334	**66-503HGG**
	High	GGG	1245/1693	800/352	**66-503HGGG**
4-Disc Heavy Duty	**Pressure Plate**	**Diaphragm Spring**	**Torque Capacity** *(lb-ft/Nm)*	**Release Load** *(lb/daN)*	**Part Number**
	High	ORA	1120/1523	560/247	**66-504HORA**
	High	G	1360/1850	680/299	**66-504HG**
	High	GG	1520/2067	760/334	**66-504HGG**
	High	GGG	1660/2257	800/352	**66-504HGGG**

Notes:

• Unless noted, clutches are designed for the use with flywheels that have a .100" (2.54mm) step for the friction surface to register the clutch by the ID of the clutch cover legs. Contact Tilton for options available for "pot type" flywheels.

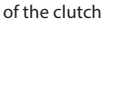
• Weight and inertia values listed include friction discs (sold separately)

• Release load values listed are based on the use of a release bearing with 44mm contact diameter. Larger contact diameter will increase release load.



See page 19-20 for available clutch disc packs options

Installation drawing for OT-II 7.25" Metallic Clutches is available at www.tiltonracing.com/technical/installation-drawings



OT-III 5.5" METALLIC CLUTCHES

Features

- Disc Diameter: 5.5" (140mm)
- Disc Count: 1, 2, 3, 4-disc
- Pressure Plate Ratios: High
- High Diaphragm Spring Rates: W, ORA, G
- Option: Heavy Duty model features high-mass pressure plate that provides additional heat capacity for severe applications.

Typical Applications

- Road Racing
- Open Wheel/Formula
- Circle Track
- Endurance

Weight & Inertia

Clutch	Weight *(lbs/kg)*	Inertia ($lb\text{-}in^2/kg\text{-}m^2$)
1 Disc	4.1/1.9	19.5/.0057
2 Disc	5.7/2.6	29.8/.0087
3 Disc	7.3/3.3	40.1/.0118
3 Disc Heavy Duty	7.7/3.5	42.4/.0125
4 Disc	8.9/4.0	50.4/.0148
4 Disc Heavy Duty	9.3/4.2	52.7/.0154

Clutch Service Parts

Description	Part Number
Pressure Plate, High Ratio	**67-118HR**
Pressure Plate, High Ratio, Heavy Duty	**67-158HR***
Floater Plate	**67-119**
Floater Plate, Heavy Duty	**67-159***

**Only fits Heavy Duty version of 5.5" clutches. Cannot be installed into standard 5.5" clutches.*

See page 21-22 for available clutch disc packs options

Installation drawing for OT-III 5.5" Metallic Clutches is available at www.tiltonracing.com/technical/installation-drawings

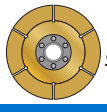
	Pressure Plate	Diaphragm Spring	Flywheel Type	Torque Capacity (lb-ft/Nm)	Release Load (lb/daN)	Part Number
1-Disc	High	W	Step	150/204	480/211	**67-001HW**
	High	ORA	Step	200/272	510/225	**67-001HORA**
	High	G	Step	250/340	850/375	**66-001HG**
2-Disc	**Pressure Plate**	**Diaphragm Spring**	**Flywheel Type**	**Torque Capacity (lb-ft/Nm)**	**Release Load (lb/daN)**	**Part Number**
	High	W	Step	300/408	480/211	**67-002HW**
	High	ORA	Step	400/544	510/225	**67-002HORA**
	High	G	Step	500/680	850/375	**66-002HG**
3-Disc	**Pressure Plate**	**Diaphragm Spring**	**Flywheel Type**	**Torque Capacity (lb-ft/Nm)**	**Release Load (lb/daN)**	**Part Number**
	High	W	Step	450/612	480/211	**67-003HW**
	High	W	Pot	450/612	480/211	**67-013HW**
	High	ORA	Step	600/816	600/816	**67-003HORA**
	High	ORA	Pot	600/816	600/816	**67-013HORA**
	High	G	Step	750/1020	850/375	**67-003HG**
	High	G	Pot	750/1020	850/375	**67-013HG**
3-Disc Heavy Duty	**Pressure Plate**	**Diaphragm Spring**	**Flywheel Type**	**Torque Capacity (lb-ft/Nm)**	**Release Load (lb/daN)**	**Part Number**
	High	W	Step	450/612	480/211	**67-503HW**
	High	W	Pot	450/612	480/211	**67-513HW**
	High	ORA	Step	600/816	510/225	**67-503HORA**
	High	ORA	Pot	600/816	510/225	**67-513HORA**
	High	G	Step	750/1020	850/375	**67-503HG**
	High	G	Pot	750/1020	850/375	**67-513HG**
4-Disc	**Pressure Plate**	**Diaphragm Spring**	**Flywheel Type**	**Torque Capacity (lb-ft/Nm)**	**Release Load (lb/daN)**	**Part Number**
	High	ORA	Step	800/1088	510/225	**67-004HORA**
	High	ORA	Pot	800/1088	510/225	**67-014HORA**
	High	G	Step	1000/1360	850/375	**67-004HG**
	High	G	Pot	1000/1360	850/375	**67-014HG**
4-Disc Heavy Duty	**Pressure Plate**	**Diaphragm Spring**	**Flywheel Type**	**Torque Capacity (lb-ft/Nm)**	**Release Load (lb/daN)**	**Part Number**
	High	ORA	Step	800/1088	510/225	**67-504HORA**
	High	ORA	Pot	800/1088	510/225	**67-514HORA**
	High	G	Step	1000/1360	850/375	**67-504HG**
	High	G	Pot	1000/1360	850/375	**67-514HG**

Notes:

• Unless noted, clutches are designed for the use with flywheels that have a .100" (2.54mm) step for the friction surface to register the clutch by the ID of the clutch cover legs. Contact Tilton for options available for "pot type" flywheels.

• Weight and inertia values listed include friction discs (sold separately)

• Release load values listed are based on the use of a release bearing with 38mm contact diameter. Larger contact diameter will increase release load.



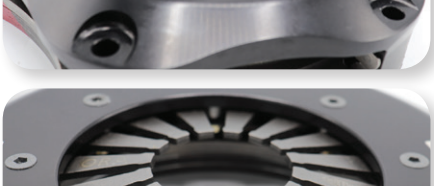
See page 21-22 for available clutch disc packs options

Installation drawing for OT-III 5.5" Metallic Clutches is available at www.tiltonracing.com/technical/installation-drawings

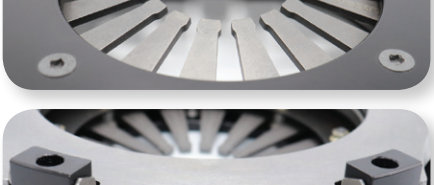
OT-SERIES CERAMETALLIC CLUTCHES

Features

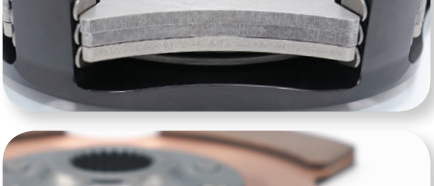
Open, one-piece clutch cover design provides lower operating temperature, high strength and minimal deflection for quick shifting.



Chrome vanadium diaphragm springs and an engineered pressure plate geometry provide a high clamp load-to-wear ratio, low release load and quick shifting.



High-strength steel is used in both the pressure plates and the floater plates.



.283"-thick friction disc withstands elevated temperatures while providing low inertia and excellent wear resistance.

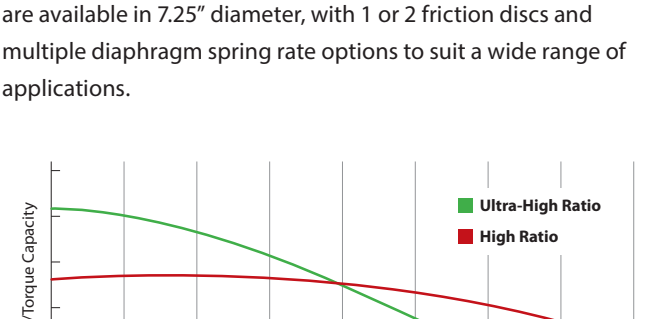
Hardened steel thrust buttons provide smooth and durable surface for pressure and floater plates.

Every Tilton OT clutch is dynamically balanced to ensure the highest level of performance.

Each OT clutch is individually inspected for proper assembly and balance, and initialed by the quality personnel as confirmation.

Tilton OT-Series cerametallic clutches share many of the same features with OT-Series metallic clutches, but feature thicker friction discs that utilize a unique blend of ceramic and metallic materials. The engagement characteristics of the cerametallic discs provide smoother engagement characteristics than metallic discs, making them a good choice for applications that require some clutch modulation (such as rally, hill climb and autocross). In addition, the thicker friction discs provide a higher heat capacity than metallic discs due to the increased mass they provide.

OT-Series cerametallic clutches offer the low weight, low inertia, torque capacity and the strength needed for the most demanding racing applications. OT-Series cerametallic clutches are available in 7.25" diameter, with 1 or 2 friction discs and multiple diaphragm spring rate options to suit a wide range of applications.



High Ratio Pressure Plate

- Short release travel for quick engagement and shifting
- Flat clamp load curve for longest wear range

Ultra-High Ratio Pressure Plate

- 20% more release travel than High Ratio for improved modulation
- 20% more clamp load than High Ratio for higher peak torque capacity
- Clamp load drops more quickly with wear than High Ratio

Features

- Disc Diameter: 7.25" (185mm)
- Disc Count: 1, 2-disc
- Pressure Plate Ratios: High, Ultra-High
- Diaphragm Spring Rates: W, BF, ORA, G, GG, GGG

Weight & Inertia

Clutch	Weight *(lbs/kg)*	Inertia (lb-in^2/kg-m^2)
1 Disc	5.6/2.5	52.4/.0154
2 Disc	8.2/3.7	76.3/.0225

Clutch Service Parts

Description	Part Number
Pressure Plate, High Ratio	**66-118HR-R**
Pressure Plate, Ultra High Ratio	**66-118UHR-R**
Floater Plate	**66-119**

Typical Applications

- Rally
- Club Racing
- Road Racing
- Import Drag Racing
- Off-Road

	Pressure Plate	Diaphragm Spring	Torque Capacity *(lb-ft/Nm)*	Release Load *(lb/daN)*	Part Number
1-Disc	High	W	200/272	400/180	**66-301HW**
	High	BF	240/326	480/211	**66-301HBF**
	High	ORA	280/381	560/247	**66-301HORA**
	High	G	340/462	680/299	**66-301HG**
	High	GG	380/517	760/334	**66-301HGG**
	Ultra High	W	240/326	400/180	**66-301UW**
	Ultra High	BF	285/388	480/211	**66-301UBF**
	Ultra High	ORA	335/456	560/247	**66-301UORA**
	Ultra High	G	380/517	680/299	**66-301UG**
	Ultra High	GG	455/619	760/334	**66-301UGG**
	Pressure Plate	**Diaphragm Spring**	**Torque Capacity *(lb-ft/Nm)***	**Release Load *(lb/daN)***	**Part Number**
2-Disc	High	W	400/544	400/180	**66-302HW**
	High	BF	480/652	480/211	**66-302HBF**
	High	ORA	560/762	560/247	**66-302HORA**
	High	G	680/925	680/299	**66-302HG**
	High	GG	760/925	760/334	**66-302HGG**
	Ultra High	W	480/652	400/180	**66-302UW**
	Ultra High	BF	570/775	480/211	**66-302UBF**
	Ultra High	ORA	670/911	560/247	**66-302UORA**
	Ultra High	G	820/1115	680/299	**66-302UG**
	Ultra High	GG	910/1238	760/334	**66-302UGG**

Notes:

• Unless noted, clutches are designed for the use with flywheels that have a .100" (2.54mm) step for the friction surface to register the clutch by the ID of the clutch cover legs. Contact Tilton for options available for "pot type" flywheels.

• Weight and inertia values listed include friction discs (sold separately)

• Release load values listed are based on the use of a release bearing with 44mm contact diameter. Larger contact diameter will increase release load.

See page 18 for available clutch disc packs options

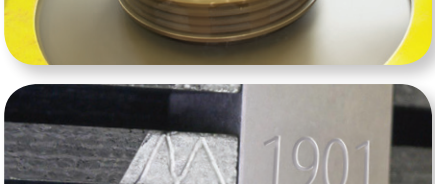
Installation drawing for OT-II 7.25" Cerametallic Clutches is available at www.tiltonracing.com/technical/installation-drawings

OT-SERIES CARBON/CARBON CLUTCHES

Features

Open, one-piece clutch cover design provides lower operating temperature, high strength and minimal deflection for quick shifting.

Individually clamp-load and dyno-tested before shipping.



Each clutch is assigned a unique serial number to clutch history through the Tilton database.

Steel pressure plate/shims are available in varying thicknesses, enabling customers to service clutches as carbon stack wears.

Pressure Plate Options

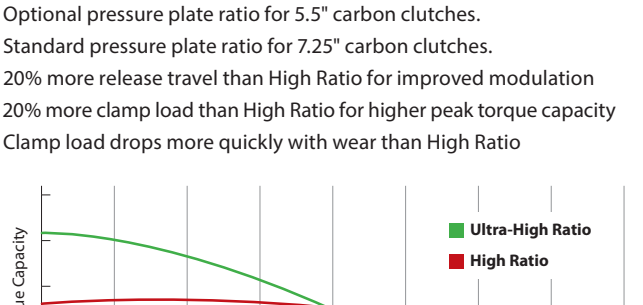
OT-Series carbon/carbon clutches are available in 4.5", 5.5" & 7.25" diameters, with 1 to 4 discs and multiple diaphragm spring rate options to suit a wide range of applications.

High Ratio Pressure Plate

- Standard pressure plate ratio for 4.5"/5.5" carbon clutches
- Short release travel for quick engagement and shifting
- Flat clamp load curve for longest wear range

Ultra-High Ratio Pressure Plate

- Optional pressure plate ratio for 5.5" carbon clutches.
- Standard pressure plate ratio for 7.25" carbon clutches.
- 20% more release travel than High Ratio for improved modulation
- 20% more clamp load than High Ratio for higher peak torque capacity
- Clamp load drops more quickly with wear than High Ratio



Tilton Engineering invented the carbon/carbon racing clutch and patented the drive system in the mid-80's. It was the first carbon/carbon clutch ever to win a Formula One Grand Prix (Ayrton Senna's Lotus-Honda at the 1987 US Grand Prix in Detroit). Since then, Tilton OT-Series carbon clutches have been continually refined to be the best on the market.

Utilizing the experience Tilton has gained over the 40 plus years, OT-Series carbon/carbon clutches have evolved to be second to none in quality. Each is built using the finest materials and the latest manufacturing processes while holding to strict quality control standards. As part of their build process, OT-Series carbon clutches are rigorously tested and documented before being delivered to the customer.

Tilton OT-Series carbon clutches offer a unique combination of an extremely low inertia, high torque capacity, high heat capacity and smooth engagement characteristics. Because of these features, they can be found used in road racing, endurance racing, off-road and high-performance street applications.

The carbon matrix plates (driven & floater) do not warp from heat, providing consistent shifting and minimizing heat-related clutch failures. The smooth engagement characteristics of the carbon plates provide good drivability and reduce "shock" to other driveline components. Through the use of additional pressure plates (shims) and periodic rebuilds, OT-Series carbon/carbon clutches offer long life under extreme-performance conditions.

Features

- Disc Diameter: 7.25" (185mm)
- Disc Count: 2, 3, 4-disc
- Pressure Plate Ratios: Ultra-High
- Diaphragm Spring Rates: ORA, G, GG, GGG

Weight & Inertia

Clutch	Weight *(lbs/kg)*	Inertia (lb-in^2/kg-m^2)
2 Disc	6.2/2.8	52.8/.0155
3 Disc	7.6/3.4	63.7/.0186
4 Disc	9.1/4.1	74.9/.0219

Typical Applications

- Road Racing
- Endurance
- Rally/Rallycross
- Extreme Street
- Hill Climb
- Short Course Off-Road

	Diaphragm Spring	Torque Capacity *(lb-ft/Nm)*	Release Load *(lb/daN)*	Part Number *(Step-type Flywheel)*	Part Number *(Pot-type Flywheel)*
2-Disc	ORA	670/911	560/247	**6572USORA-S**	**6572USORA-P**
	G	820/1115	680/299	**6572USG-S**	**6572USG-P**
	GG	910/1238	760/334	**6572USGG-S**	**6572USGG-P**
	GGG	990/1347	800/352	**6572USGGG-S**	**6572USGGG-P**
	Diaphragm Spring	**Torque Capacity** *(lb-ft/Nm)*	**Release Load** *(lb/daN)*	**Part Number** *(Step-type Flywheel)*	**Part Number** *(Pot-type Flywheel)*
3-Disc	ORA	1005/1367	560/247	**6573USORA-S**	**6573USORA-P**
	G	1230/1673	680/299	**6573USG-S**	**6573USG-P**
	GG	1365/1856	760/334	**6573USGG-S**	**6573USGG-P**
	GGG	1485/2020	800/352	**6573USGGG-S**	**6573USGGG-P**
	Diaphragm Spring	**Torque Capacity** *(lb-ft/Nm)*	**Release Load** *(lb/daN)*	**Part Number** *(Step-type Flywheel)*	**Part Number** *(Pot-type Flywheel)*
4-Disc	ORA	1340/1823	560/247	**6574USORA-S**	**6574USORA-P**
	G	1640/2230	680/299	**6574USG-S**	**6574USG-P**
	GG	1820/2475	760/334	**6574USGG-S**	**6574USGG-P**
	GGG	1980/2693	800/352	**6574USGGG-S**	**6574USGGG-P**

Notes:

• Clutch includes .360" pressure plate and drive hub (designate spline size when ordering)

• Release load values listed are based on the use of a release bearing with 44mm contact diameter. Larger contact diameter will increase release load.

Pressure Plates (wear compensating shims)

Tilton offers a range of pressure plate thickness that are designed to compensate for carbon stack wear and maintain optimal clutch torque capacity. Pressure plates are available in .010" increments, .360" to .500" thick. For a list of parts numbers, please visit www.tiltonracing.com/product/7-25-inch-carbon-clutch-pressure-plates.

Installation drawing for OT-II 7.25" Carbon/Carbon Clutches is available at www.tiltonracing.com/technical/installation-drawings

OT-III 5.5" CARBON/CARBON CLUTCHES

Features

- Disc Diameter: 5.5" (185mm)
- Disc Count: 2, 3, 4-Disc
- Pressure Plate Ratios: High, Ultra-High
- Diaphragm Spring Rates: ORA, G

Weight & Inertia

Clutch	Weight *(lbs/kg)*	Inertia (lb-in^2/kg-m^2)
2 Disc	3.7/1.7	17.8/.0052
3 Disc	4.4/2.0	22.0/.0065
4 Disc	5.2/2.3	25.3/.0074

Typical Applications

- Road Racing
- Endurance
- Open Wheel/Formula

	Diaphragm Spring	Pressure Plate Ratio	Torque Capacity *(lb-ft/Nm)*	Release Load *(lb/daN)*	Part Number *(Step-type Flywheel)*	Part Number *(Pot-type Flywheel)*
2-Disc	ORA	High	400/272	480/211	**6552HSORA-S**	**6552HSORA-P**
	G	High	500/680	850/375	**6552HSG-S**	**6552HSG-P**
	ORA	Ultra High	480/652	480/211	**6552USORA-S**	**6552USORA-P**
	G	Ultra High	600/816	850/375	**6552USG-S**	**6552USG-P**
	Diaphragm Spring	**Pressure Plate Ratio**	**Torque Capacity** *(lb-ft/Nm)*	**Release Load** *(lb/daN)*	**Part Number** *(Step-type Flywheel)*	**Part Number** *(Pot-type Flywheel)*
3-Disc	ORA	High	600/816	480/211	**6553HSORA-S**	**6553HSORA-P**
	G	High	750/928	850/375	**6553HSG-S**	**6553HSG-P**
	ORA	Ultra High	720/928	480/211	**6553USORA-S**	**6553USORA-P**
	G	Ultra High	900/1224	850/375	**6553USG-S**	**6553USG-P**
	Diaphragm Spring	**Pressure Plate Ratio**	**Torque Capacity** *(lb-ft/Nm)*	**Release Load** *(lb/daN)*	**Part Number** *(Step-type Flywheel)*	**Part Number** *(Pot-type Flywheel)*
4-Disc	ORA	High	800/1088	480/211	**6554HSORA-S**	**6554HSORA-P**
	G	High	1000/1360	850/375	**6554HSG-S**	**6554HSG-P**
	ORA	Ultra High	960/1324	480/211	**6554USORA-S**	**6554USORA-P**
	G	Ultra High	1200/1632	850/375	**6554USG-S**	**6554USG-P**

Notes:

• Clutch includes .187" pressure plate and drive hub (designate spline size when ordering)

• Release load values listed are based on the use of a release bearing with 38mm contact diameter. Larger contact diameter will increase release load.

Pressure Plates (wear compensating shims)

Tilton offers a range of pressure plate thickness that are designed to compensate for carbon stack wear and maintain optimal clutch torque capacity. Pressure plates are available in .010" increments, .187" to .307" thick. For a list of parts numbers, please visit www.tiltonracing.com/product/5-5-inch-carbon-clutch-pressure-plates.

Installation drawing for OT-III 5.5" Carbon/Carbon Clutches is available at www.tiltonracing.com/technical/installation-drawings

Features

- Disc Diameter: 4.5" (114mm)
- Disc Count: 3, 4-disc
- Pressure Plate Ratios: High
- Diaphragm Spring Rates: G

Weight & Inertia

Clutch	Weight *(lbs/kg)*	Inertia (lb-in^2/kg-m^2)
3 Disc	3.2/1.5	12.3/.0036
4 Disc	3.8/1.8	13.0/.0038

Typical Applications

- Road Racing
- Open Wheel/Formula

	Flywheel Type	Pressure Plate Ratio	Torque Capacity *(lb-ft/Nm)*	Release Load *(lb/daN)*	Part Number
3-Disc	Pot-type	High	690/938	800/352	**6513HSG-P**
	Step-type	High	690/938	800/352	**6513HSG-S**
	Flywheel Type	**Pressure Plate Ratio**	**Torque Capacity *(lb-ft/Nm)***	**Release Load *(lb/daN)***	**Part Number**
4-Disc	Pot-type	High	920/1251	800/352	**6514HSG-P**
	Step-type	High	920/1251	800/352	**6514HSG-S**

Notes:

• Clutch includes .160" pressure plate and drive hub (designate spline size when ordering)

• Release load values listed are based on the use of a release bearing with 38mm contact diameter. Larger contact diameter will increase release load.

Pressure Plates (wear compensating shims)

Tilton offers a range of pressure plate thickness that are designed to compensate for carbon stack wear and maintain optimal clutch torque capacity. Pressure plates are available in .010" increments, .160" to .310" thick.

Thickness	Part Number	Thickness	Part Number
.160"	651-118H-160S	.240"	651-118H-240S
.170"	651-118H-170S	.250"	651-118H-250S
.180"	651-118H-180S	.260"	651-118H-260S
.190"	651-118H-190S	.270"	651-118H-270S
.200"	651-118H-200S	.280"	651-118H-280S
.210"	651-118H-210S	.290"	651-118H-290S
.220"	651-118H-220S	.300"	651-118H-300S
.230"	651-118H-230S	.310"	651-118H-310S

Installation drawing for OT-V 4.5" Carbon/Carbon Clutches is available at www.tiltonracing.com/technical/installation-drawings

CLUTCH DISC PACKS

Tilton Engineering offers a large selection of disc packs for OT-Series clutches. Every Tilton disc pack benefits from over 30 years of experience in friction material testing and development. The result is disc packs that offer the highest levels of performance and durability.

The proceeding pages contains information on disc packs for popular applications. Due to the wide variety of transmission input fast size and lengths, disc pack configurations can vary significantly with multi-plate clutches. If you do not see your application listed, please contact Tilton Engineering for information and part numbers.

Part Number System

Example:

64185-2-ABA-36

Product Class	Disc Diameter	Material Type	Hub Configuration	Spline Size

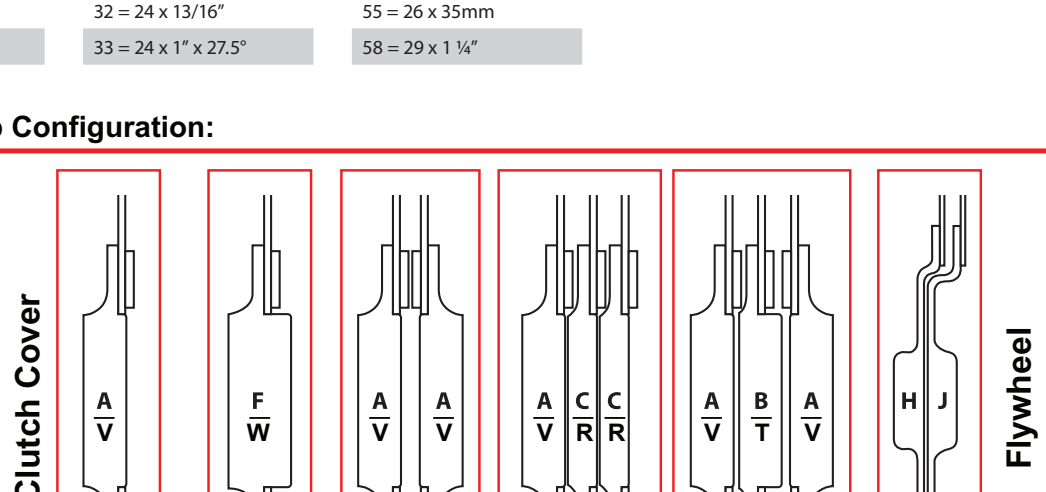
Disc Diameter:
140 = 140mm (5.5")
185 = 185mm (7.25")

Friction Material/Type:
2 = 7.25" sintered metallic full-circle disc (6-rivet hub)
3 = 5.5" & 7.25" sintered metallic paddle-type disc
4 = 7.25" sintered ,metallic full circle disc (8-rivet hub)
8 = 7.25" cerametallic paddle-type disc
9 = 5.5" sintered metallic full-circle disc

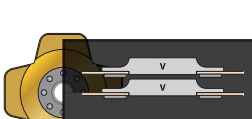
Hub Type:
A = Outer hub, 6-rivet, .375" thick
B = Inner hub, 6-rivet, .375" thick
C = Inner hub, rivet, .250" thick
F = Long hub, 6-rivet, .550" thick (1-disc clutches only)
H = Outer hub, nested 12-rivet
J = Inner hub, nested, 12-rivet
R = Inner hub, 8-rivet, .250" thick
T = Inner Hub, 8-rivet, .375" thick
V = Outer hub, 8-rivet, .375" thick
W = Long hub, 8-rivet, .550" thick (1-disc clutches only)

Spline Size (# teeth x diameter)		
03 = 10 x 7/8"	18 = 18 x 25/32"	36 = 24 x 1" x 30°
04 = 10 x 1"	19 = 18 x 1 3⁄16"	38 = 24 x 26mm
05 = 10 x 1 1⁄16"	25 = 20 x 7/8"	39 = 28 x 7/8"
06 = 10 x 1 1⁄8"	26 = 21 x 29/32"	41 = 23 x 24mm x 25°
07 = 10 x 1 1⁄4"	27 = 21 x 24mm	42 = 22 x 15/16"
08 = 10 x 1 3⁄8"	28 = 21 x 29mm	47 = 24 x 15/16"
10 = 10 x 29mm	29 = 22 x 1"	51 = 22 x 29.4mm
12 = 14x 25mm	30 = 23 x 1" x 30°	52 = 10 x 35mm
14 = 14 x 30.8"	32 = 24 x 13/16"	55 = 26 x 35mm
17 = 18 x 21mm	33 = 24 x 1" x 27.5°	58 = 29 x 1 1⁄4"

Hub Configuration:



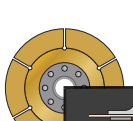
PADDLE | 8-rivet



"Back-to-Back" Hub Configuration

Input Shaft Size (# of teeth x diameter)	*1-plate*	*2-plate*
10 x 7/8"	64185-8-V-03	64185-8-VV-03
10 x 1"	64185-8-V-04	64185-8-VV-04
10 x 1 1/16"	64185-8-V-05	64185-8-VV-05
10 x 1 1/8"	64185-8-V-06	64185-8-VV-06
10 x 1 3/8"	64185-8-V-08	64185-8-VV-08
10 x 29mm	64185-8-V-10	64185-8-VV-10
10 x 35mm	64185-8-V-52	64185-8-VV-52
14 x 25mm	64185-8-V-12	64185-8-VV-12
14 x 30.8mm	64185-8-V-14	64185-8-VV-14
18 x 1 3/16"	64185-8-V-19	64185-8-VV-19
20 x 7/8"	64185-8-W-25	64185-8-VV-25
21 x 29/32"	64185-8-V-26	64185-8-VV-26
21 x 24mm	64185-8-V-27	64185-8-VV-27
21 x 29mm	64185-8-V-28	64185-8-VV-28
22 x 15/16"	64185-8-V-42	64185-8-VV-42
22 x 1"	64185-8-V-29	64185-8-VV-29
22 x 29.4mm	64185-8-V-51	64185-8-VV-51
23 x 1" x 30 degree	64185-8-W-30	64185-8-VV-30
23 x 24mm x 25 degree	64185-8-V-41	64185-8-VV-41
24 x 13/16"	64185-8-V-32	64185-8-VV-32
24 x 15/16"	64185-8-V-47	64185-8-VV-47
24 x 1 x 27.5 degree (early Nissan)	64185-8-V-33	64185-8-VV-33
24 x 1 x 30 degree (late Nissan)	64185-8-V-57	64185-8-VV-57
24 x 26mm	64185-8-V-38	64185-8-VV-38
26 x 1 5/32"	64185-8-W-36	64185-8-VV-36
26 x 35mm	64185-8-V-55	64185-8-VV-55
29 x 1 1/4"	64185-8-V-58	64185-8-VV-58

7.25" METALLIC DISC PACKS



Standard disc that is suitable for most applications.
Six friction pads provide maximum surface area for low wear rate and high heat capacity

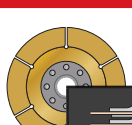
FULL CIRCLE | 6-rivet

"Back-to-Back" Hub Configuration

Input Shaft Size (# of teeth x diameter)	*1-plate*	*2-plate*	*3-plate*
10 x 7/8"	64185-2-A-03	64185-2-AA-03	N/A
10 x 1"	64185-2-A-04	64185-2-AA-04	N/A
10 x 1 1/4"	64185-2-A-07	64185-2-AA-07	N/A
10 x 1 1/8"	64185-2-A-06	64185-2-AA-06	64185-2-ABA-06
10 x 1 3/8"	64185-2-A-08	64185-2-AA-08	64185-2-ABA-08
10 x 29mm	64185-2-A-10	64185-2-AA-10	64185-2-ABA-10
10 x 35mm	64185-2-A-52	64185-2-AA-52	64185-2-ABA-52
14 x 25mm	64185-2-A-12	64185-2-AA-12	N/A
14 x 30.8mm	64185-2-A-14	64185-2-AA-14	64185-2-ABA-14
18 x 21mm	64185-2-A-17	64185-2-AA-17	N/A
18 x 1 3/16"	64185-2-A-19	64185-2-AA-19	64185-2-ABA-19
20 x 7/8"	64185-2-F-25	64185-2-AA-25	64185-2-ABA-25
21 x 29/32"	64185-2-A-26	64185-2-AA-26	64185-2-ABA-26
21 x 24mm	64185-2-A-27	64185-2-AA-27	N/A
21 x 29mm	64185-2-A-28	64185-2-AA-28	64185-2-ABA-28
22 x 15/16"	64185-2-A-42	64185-2-AA-42	N/A
22 x 1"	64185-2-A-29	64185-2-AA-29	64185-2-ABA-29
22 x 29.4mm	64185-2-A-51	64185-2-AA-51	64185-2-ABA-51
23 x 1" x 30 degree	64185-2-F-30	64185-2-AA-30	64185-2-ABA-30
23 x 24mm x 25 degree	64185-2-A-41	64185-2-AA-41	64185-2-ABA-41
24 x 13/16"	64185-2-A-32	64185-2-AA-32	N/A
24 x 15/16"	64185-2-A-47	64185-2-AA-47	N/A
24 x 1 x 27.5 degree (early Nissan)	64185-2-A-33	64185-2-AA-33	64185-2-ABA-33
24 x 1 x 30 degree (late Nissan)	64185-2-A-57	64185-2-AA-57	64185-2-ABA-57
24 x 26mm	64185-2-A-38	64185-2-AA-38	N/A
26 x 1 5/32"	64185-2-A-36	64185-2-AA-36	64185-2-ABA-36
26 x 35mm	64185-2-A-55	64185-2-AA-55	64185-2-ABA-55
28 x 7/8"	64185-2-A-39	64185-2-AA-39	N/A
29 x 1 1/4"	64185-2-A-58	64185-2-AA-58	64185-2-ABA-58

"Stacked" Hub Configuration

Input Shaft Size (# of teeth x diameter)	*1-plate*	*2-plate*	*3-plate*
10 x 1 1/16"	64185-2-A-05	64185-2-AC-05	64185-2-ACC-05
10 x 35 mm	64185-2-A-52	64185-2-AC-52	64185-2-ACC-52
10 x 29mm	64185-2-A-10	64185-2-AC-10	64185-2-ACC-10
18 x 25/32"	64185-2-A-18	64185-2-AC-18	64185-2-ACC-18
20 x 7/8"	64185-2-F-25	64185-2-AC-25	64185-2-ACC-25
21 x 29/32"	64185-2-A-26	64185-2-AC-26	64185-2-ACC-26
23 x 1" x 30 degree	64185-2-F-30	64185-2-AC-30	64185-2-ACC-30
23 x 24mm x 25 degree	64185-2-A-41	64185-2-AC-41	64185-2-ACC-41
24 x 13/16"	64185-2-A-32	64185-2-AC-32	64185-2-ACC-32
24 x 1" (late Nissan)	64185-2-A-57	64185-2-AC-57	64185-2-ACC-57
26 x 22mm	64185-2-A-35	64185-2-AC-35	64185-2-ACC-35
26 x 1 5/32"	64185-2-A-36	64185-2-AC-36	64185-2-ACC-36
26 x 35mm	64185-2-A-55	64185-2-AC-55	64185-2-ACC-55



Feature 8-rivet hubs on a larger BCD for additional attachment strength for the most demanding applications.

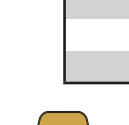
FULL CIRCLE | 8-rivet

"Back-to-Back" Hub Configuration

Input Shaft Size (# of teeth x diameter)	*1-plate*	*2-plate*	*3-plate*	*4-plate*
10 x 1 1/8"	64185-4-V-06	64185-4-VV-06	64185-4-VTV-06	N/A
10 x 29mm	64185-4-V-10	64185-4-VV-10	64185-4-VTV-10	N/A
10 x 35mm	64185-4-V-52	64185-4-VV-52	64185-4-VTV-52	N/A
20 x 7/8"	64185-4-V-25	64185-4-VV-25	64185-4-VTV-25	N/A
23 x 1" x 30 degree	64185-4-W-30	64185-4-VV-30	64185-4-VTV-30	N/A
23 x 24mm x 25 degree	64185-4-V-41	64185-4-VV-41	N/A	N/A
26 x 1 5/32"	64185-4-V-36	64185-4-VV-36	64185-4-VTV-36	N/A
26 x 35mm	64185-4-V-55	64185-4-VV-55	64185-4-VTV-55	N/A
29 x 1 1/4"	64185-4-V-58	64185-4-VV-58	64185-4-VTV-58	N/A

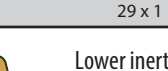
"Stacked" Hub Configuration

Input Shaft Size (# of teeth x diameter)	*1-plate*	*2-plate*	*3-plate*	*4-plate*
10 x 1 1/8"	64185-4-V-06	64185-4-VR-06	64185-4-VRR-06	N/A
10 x 29mm	64185-4-V-10	64185-4-VR-10	64185-4-VRR-10	N/A
14 X 30.8mm	64185-4-V-14	64185-4-VR-14	64185-4-VRR-14	64185-4-VRRR-14
23 x 1" x 30 degree	64185-4-W-30	64185-4-VR-30	64185-4-VRR-30	64185-4-VRRR-30
23 x 24mm x 25 degree	64185-4-V-41	64185-4-VR-41	64185-4-VRR-41	N/A
26 x 1 5/32"	64185-4-V-36	64185-4-VR-36	64185-4-VRR-36	64185-4-VRRR-36
29 x 1 1/4"	64185-4-V-58	64185-4-VR-58	64185-4-VRR-58	64185-4-VRRR-58



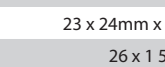
Lower inertia than full-circle discs, but have a slightly higher wear rate. Smooth radius between the friction segments also lowers core plate stress cause by misalignment between engine & transmission and/or engine harmonics, resisting core plate cracking.

PADDLE | 8-rivet



"Back-to-Back" Hub Configuration

Input Shaft Size (# of teeth x diameter)	*1-plate*	*2-plate*	*3-plate*	*4-plate*
10 x 1 1/8"	64185-3-V-06	64185-3-VV-06	64185-3-VTV-06	N/A
10 x 29mm	64185-3-V-10	64185-3-VV-10	64185-3-VTV-10	N/A
10 x 35mm	64185-3-V-52	64185-3-VV-52	64185-3-VTV-52	N/A
20 x 7/8"	64185-3-W-25	64185-3-VV-25	64185-3-VTV-25	N/A
23 x 1" x 30 degree	64185-3-V-30	64185-3-VV-30	64185-3-VTV-30	N/A
23 x 24mm x 25 degree	64185-3-V-41	64185-3-VV-41	N/A	N/A
26 x 1 5/32"	64185-3-V-36	64185-3-VV-36	64185-3-VTV-36	N/A
26 x 35mm	64185-3-V-55	64185-3-VV-55	64185-3-VTV-55	N/A
29 x 1 1/4"	64185-3-V-58	64185-3-VV-58	64185-3-VTV-58	N/A

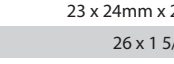


"Stacked" Hub Configuration

Input Shaft Size (# of teeth x diameter)	*1-plate*	*2-plate*	*3-plate*	*4-plate*
10 x 1 1/8"	64185-3-V-06	64185-3-VR-06	64185-3-VRR-06	N/A
10 x 29mm	64185-3-V-10	64185-3-VR-10	64185-3-VRR-10	N/A
23 x 1" x 30 degree	64185-3-W-30	64185-3-VR-30	64185-3-VRR-30	64185-3-VRRR-30
23 x 24mm x 25 degree	64185-3-V-41	64185-3-VR-41	64185-3-VRR-41	N/A
26 x 1 5/32"	64185-3-V-36	64185-3-VR-36	64185-3-VRR-36	64185-3-VRRR-36
29 x 1 1/4"	64185-3-V-58	64185-3-VR-58	64185-3-VRR-58	64185-3-VRRR-58

FULL CIRCLE NESTED | 12-rivet

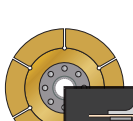
Offset hubs designed to engage short splines on some input shafts.



"Nested" Hub Configuration for crank bolt clearance

Input Shaft Size (# of teeth x diameter)	*1-plate*	*2-plate*	*3-plate*	*4-plate*
20 x 7/8"	64185-2-H-25	64185-2-HJ-25	N/A	N/A
23 x 1" x 30 degree	64185-2-H-30	64185-2-HJ-30	N/A	N/A

5.5" METALLIC DISC PACKS



Standard disc that is suitable for most applications.
Six friction pads provide maximum surface area for low wear rate and high heat capacity

FULL CIRCLE | 6-rivet

"Back-to-Back" Hub Configuration

Input Shaft Size (# of teeth x diameter)	*1-plate*	*2-plate*	*3-plate*
10 x 7/8"	64140-9-A-03	64140-9-AA-03	N/A
10 x 1"	64140-9-A-04	64140-9-AA-04	N/A
10 x 1 1/4"	64140-9-A-07	64140-9-AA-07	N/A
10 x 1 1/8"	64140-9-A-06	64140-9-AA-06	64140-9-ABA-06
10 x 1 3/8"	64140-9-A-08	64140-9-AA-08	64140-9-ABA-08
10 x 29mm	64140-9-A-10	64140-9-AA-10	64140-9-ABA-10
10 x 35mm	64140-9-A-52	64140-9-AA-52	64140-9-ABA-52
14 x 25mm	64140-9-A-12	64140-9-AA-12	N/A
14 x 30.8mm	64140-9-A-14	64140-9-AA-14	64140-9-ABA-14
18 x 21mm	64140-9-A-17	64140-9-AA-17	N/A
18 x 1 3/16"	64140-9-A-19	64140-9-AA-19	64140-9-ABA-19
20 x 7/8"	64140-9-F-25	64140-9-AA-25	64140-9-ABA-25
21 x 29/32"	64140-9-A-26	64140-9-AA-26	64140-9-ABA-26
21 x 24mm	64140-9-A-27	64140-9-AA-27	N/A
21 x 29mm	64140-9-A-28	64140-9-AA-28	64140-9-ABA-28
22 x 15/16"	64140-9-A-42	64140-9-AA-42	N/A
22 x 1"	64140-9-A-29	64140-9-AA-29	64140-9-ABA-29
22 x 29.4mm	64140-9-A-51	64140-9-AA-51	64140-9-ABA-51
23 x 1" x 30 degree	64140-9-F-30	64140-9-AA-30	64140-9-ABA-30
23 x 24mm x 25 degree	64140-9-A-41	64140-9-AA-41	64140-9-ABA-41
24 x 13/16"	64140-9-A-32	64140-9-AA-32	N/A
24 x 15/16"	64140-9-A-47	64140-9-AA-47	N/A
24 x 1 x 27.5 degree (early Nissan)	64140-9-A-33	64140-9-AA-33	64140-9-ABA-33
24 x 1 x 30 degree (late Nissan)	64140-9-A-57	64140-9-AA-57	64140-9-ABA-57
24 x 26mm	64140-9-A-38	64140-9-AA-38	N/A
26 x 1 5/32"	64140-9-A-36	64140-9-AA-36	64140-9-ABA-36
26 x 35mm	64140-9-A-55	64140-9-AA-55	64140-9-ABA-55
28 x 7/8"	64140-9-A-39	64140-9-AA-39	N/A
29 x 1 1/4"	64140-9-A-58	64140-9-AA-58	64140-9-ABA-58

"Stacked" Hub Configuration

Input Shaft Size (# of teeth x diameter)	*1-plate*	*2-plate*	*3-plate*	*4-plate*
10 x 1 1/16"	64140-9-A-05	64140-9-AC-05	64140-9-ACC-05	N/A
10 x 35 mm	64140-9-A-52	64140-9-AC-52	64140-9-ACC-52	N/A
10 x 29mm	64140-9-A-10	64140-9-AC-10	64140-9-ACC-10	N/A
18 x 25/32"	64140-9-A-18	64140-9-AC-18	64140-9-ACC-18	N/A
20 x 7/8"	64140-9-F-25	64140-9-AC-25	64140-9-ACC-25	N/A
21 x 29/32"	64140-9-A-26	64140-9-AC-26	64140-9-ACC-26	N/A
23 x 1" x 30 degree	64140-9-F-30	64140-9-AC-30	64140-9-ACC-30	64140-9-ACCC-30
23 x 24mm x 25 degree	64140-9-A-41	64140-9-AC-41	64140-9-ACC-41	N/A
24 x 13/16"	64140-9-A-32	64140-9-AC-32	64140-9-ACC-32	N/A
24 x 1" (late Nissan)	64140-9-A-57	64140-9-AC-57	64140-9-ACC-57	N/A
26 x 22mm	64140-9-A-35	64140-9-AC-35	64140-9-ACC-35	N/A
26 x 1 5/32"	64140-9-A-36	64140-9-AC-36	64140-9-ACC-36	64140-9-ACCC-36
26 x 35mm	64140-9-A-55	64140-9-AC-55	64140-9-ACC-55	N/A

PADDLE | 8-rivet

Lower inertia than full-circle discs, but have a slightly higher wear rate. Smooth radius between the friction segments also lowers core plate stress cause by misalignment between engine & transmission and/or engine harmonics, resisting core plate cracking.

"Back-to-Back" Hub Configuration

Input Shaft Size (# of teeth x diameter)	*1-plate*	*2-plate*	*3-plate*
10 x 7/8"	64140-3-A-03	64140-3-AA-03	N/A
10 x 1"	64140-3-A-04	64140-3-AA-04	N/A
10 x 1 1/4"	64140-3-A-07	64140-3-AA-07	N/A
10 x 1 1/8"	64140-3-A-06	64140-3-AA-06	64140-3-ABA-06
10 x 1 3/8"	64140-3-A-08	64140-3-AA-08	64140-3-ABA-08
10 x 29mm	64140-3-A-10	64140-3-AA-10	64140-3-ABA-10
10 x 35mm	64140-3-A-52	64140-3-AA-52	64140-3-ABA-52
14 x 25mm	64140-3-A-12	64140-3-AA-12	N/A
14 x 30.8mm	64140-3-A-14	64140-3-AA-14	64140-3-ABA-14
18 x 21mm	64140-3-A-17	64140-3-AA-17	N/A
18 x 1 3/16"	64140-3-A-19	64140-3-AA-19	64140-3-ABA-19
20 x 7/8"	64140-3-F-25	64140-3-AA-25	64140-3-ABA-25
21 x 29/32"	64140-3-A-26	64140-3-AA-26	64140-3-ABA-26
21 x 24mm	64140-3-A-27	64140-3-AA-27	N/A
21 x 29mm	64140-3-A-28	64140-3-AA-28	64140-3-ABA-28
22 x 15/16"	64140-3-A-42	64140-3-AA-42	N/A
22 x 1"	64140-3-A-29	64140-3-AA-29	64140-3-ABA-29
22 x 29.4mm	64140-3-A-51	64140-3-AA-51	64140-3-ABA-51
23 x 1" x 30 degree	64140-3-F-30	64140-3-AA-30	64140-3-ABA-30
23 x 24mm x 25 degree	64140-3-A-41	64140-3-AA-41	64140-3-ABA-41
24 x 13/16"	64140-3-A-32	64140-3-AA-32	N/A
24 x 15/16"	64140-3-A-47	64140-3-AA-47	N/A
24 x 1" (early Nissan)	64140-3-A-33	64140-3-AA-33	64140-3-ABA-33
24 x 1" (late Nissan)	64140-3-A-57	64140-3-AA-57	64140-3-ABA-57
24 x 26mm	64140-3-A-38	64140-3-AA-38	N/A
26 x 1 5/32"	64140-3-A-36	64140-3-AA-36	64140-3-ABA-36
26 x 35mm	64140-3-A-55	64140-3-AA-55	64140-3-ABA-55
28 x 7/8"	64140-3-A-39	64140-3-AA-39	N/A
29 x 1 1/4"	64140-3-A-58	64140-3-AA-58	64140-3-ABA-58

"Stacked" Hub Configuration

Input Shaft Size (# of teeth x diameter)	*1-plate*	*2-plate*	*3-plate*	*4-plate*
10 x 1 1/16"	64140-3-A-05	64140-3-AC-05	64140-3-ACC-05	N/A
10 x 35 mm	64140-3-A-52	64140-3-AC-52	64140-3-ACC-52	N/A
10 x 29mm	64140-3-A-10	64140-3-AC-10	64140-3-ACC-10	N/A
18 x 25/32"	64140-3-A-18	64140-3-AC-18	64140-3-ACC-18	N/A
20 x 7/8"	64140-3-F-25	64140-3-AC-25	64140-3-ACC-25	N/A
21 x 29/32"	64140-3-A-26	64140-3-AC-26	64140-3-ACC-26	N/A
23 x 1" x 30 degree	64140-3-F-30	64140-3-AC-30	64140-3-ACC-30	64140-3-ACCC-30
23 x 24mm x 25 degree	64140-3-A-41	64140-3-AC-41	64140-3-ACC-41	N/A
24 x 13/16"	64140-3-A-32	64140-3-AC-32	64140-3-ACC-32	N/A
24 x 1" (late Nissan)	64140-3-A-57	64140-3-AC-57	64140-3-ACC-57	N/A
26 x 22mm	64140-3-A-35	64140-3-AC-35	64140-3-ACC-35	N/A
26 x 1 5/32"	64140-3-A-36	64140-3-AC-36	64140-3-ACC-36	64140-3-ACCC-36
26 x 35mm	64140-3-A-55	64140-3-AC-55	64140-3-ACC-55	N/A

CLUTCH-FLYWHEEL-ASSEMBLIES

Tilton OT-Series Clutch-Flywheel-Assemblies are designed to be a direct replacement for OEM clutch/flywheels assemblies, retaining the same diameter (ring gear size) as originally equipped with the car.

Assemblies include a Tilton OT-Series clutch, billet steel flywheel and hardware. Some assemblies also include a Tilton hydraulic release bearing that is designed to replace the OEM release bearing system.

Clutch-Flywheel-Assemblies are available with either an OT-Series metallic clutch, cerametallic clutch or carbon/carbon clutch.

OT-Series Metallic Clutch-Flywheel-Assembly

P/N 57-813

OT-Series Cerametallic Clutch-Flywheel-Assembly

P/N 56-821

OT-Series Carbon/Carbon Clutch-Flywheel-Assembly

P/N 57-814

Features

- OT-series metallic clutch (5.5" or 7.25")
- Clutch disc pack
- Billet steel flywheel
- Hydraulic release bearing (most applications)
- Aircraft-grade clutch bolt kit

Application	Clutch	Torque Capacity *(lb-ft)*	Weight *(lbs)*	Part Number
BMW E36/E46	7.25" 3-disc	840	17.8	**56-823**
BMW E46 M3	7.25" 3-disc	840	17.8	**56-824**
Chevy Camaro Gen 5	7.25" 3-disc	1020	18.0	**56-816**
Chevy Corvette C5	7.25" 3-disc	1020	18.0	**56-804**
Chevy Corvette C6	7.25" 3-disc	1020	18.0	**56-807**
Chevy Corvette C7	7.25" 3-disc	1020	21.6	**56-809**
Mitsubishi EVO 7-9	7.25" 3-disc	1005	20.8	**56-358**
Mitsubishi EVO 10	7.25" 3-disc	1005	22.1	**56-357**
Porsche 993/996/997	5.5" 3-disc	750	14.5	**57-813**
Porsche 993/996/997	7.25" 2-disc	560	15.4	**56-813**
Porsche 993/996/997 (light FW)	7.25" 3-disc	1020	17.8	**56-815**
Porsche 993/996/997 (heavy FW)	7.25" 3-disc	1020	28.4	**56-815H**

Service Parts

CFA	Clutch	Disc Pack	Flywheel	Release Bearing	Clutch Bolt Kits
56-823	66-003HORA	64185-2-ABA-10	51-3568	62-021	95-011
56-824	66-003HORA	64185-2-ABA-52	51-3568	62-022	95-011
56-357	66-003HORA	64185-2-ACC-30	51-4335	61-9012	95-011
56-358	66-003HORA	64185-2-ACC-30	51-4334	61-9012	95-011
56-804	66-003HG	64185-2-ACC-36	51-4452	60-8270	95-006
56-807	66-003HG	64185-2-ACC-36	51-4552	60-8270	95-006
56-809	66-003HG	64185-2-ACC-36	51-4558	60-8290	95-011
56-813	66-012HORA	64185-3-VR-30	51-4008	60-8270	95-070
56-815	66-013HG	64185-3-VRR-30	51-4008	60-8250	95-074
56-815H	66-013HG	64185-3-VRR-30	51-4012	60-8250	95-074
56-816	66-003HG	64185-2-ACC-36	51-4452	60-8260	95-006
57-813	67-013HG	64140-3-ACC-30	51-4011	60-8340	95-071

CERAMETALLIC CLUTCH-FLYWHEEL-ASSEMBLIES

Features

- OT-II 7.25" cerametallic clutch
- Clutch disc pack
- Billet steel flywheel
- Hydraulic release bearing (most applications)
- Aircraft-grade clutch bolt kit

Application	Clutch	Torque Capacity *(lb-ft)*	Weight *(lbs)*	Part Number
BMW E36/E46	7.25" 1-disc	335	13.5	**56-820**
BMW E46 M3	7.25" 2-disc	570	16.1	**56-821**
BMW E46 M3	7.25" 2-disc	570	16.1	**56-822**
Honda B16A/B18	7.25" 2-disc	910	18.6	**56-300H**
Honda B16A/B18	7.25" 2-disc	910	18.6	**56-300H-KIT***
Honda K20/K24	7.25" 2-disc	910	14.9	**56-309**
Honda K20/K24	7.25" 2-disc	910	14.9	**56-309H-KIT***
Mitsubishi EVO 7-9	7.25" 2-disc	910	19.1	**56-353**
Mitsubishi EVO 10	7.25" 2-disc	910	20.4	**56-356**
Porsche 993/996/997	7.25" 2-disc	680	16.1	**56-812**
Subaru WRX/STI (2002-on)	7.25" 2-disc	840	19.8	**56-371**

*Includes hydraulic release bearing/master kit (P/N 61-7770)

Service Parts

CFA	Clutch	Disc Pack	Flywheel	Release Bearing	Clutch Bolt Kits
56-300H	66-302UGG	64185-8-VV-38	51-1166	62-010	95-011
56-300H-KIT	66-302UGG	64185-8-VV-38	51-1166	61-777	95-011
56-309	66-302UGG	64185-8-VV-38	51-1180	62-010	95-011
56-309-KIT	66-302UGG	64185-8-VV-38	51-1180	61-777	95-011
56-353	66-302UGG	64185-8-VW-30H	51-4334	61-9012	95-011
56-356	66-302UGG	64185-8-VW-30H	51-4335	61-9012	95-011
56-371	66-302UG	64185-8-VV-47	51-4122	61-742	95-011
56-812	66-312 HG	64185-8-VV-30	51-4008	60-8250	95-074
56-820	66-301 UORA	64185-8-W-10	51-3568	62-020	95-010
56-821	66-302UBF	64185-8-VV-10	51-3568	62-021	95-011
56-822	66-302UBF	64185-8-VV-52	51-3568	62-022	95-011

Features

- OT-series carbon/carbon clutch (5.5" or 7.25")
- Billet steel flywheel
- Hydraulic release bearing (most applications)
- Aircraft-grade clutch bolt kit

Application	Clutch	Torque Capacity *(lb-ft)*	Weight *(lbs)*	Part Number
Chevy Camaro Gen 5	7.25" 3-disc	1230	15.6	**56-816C**
Chevy Corvette C5	7.25" 3-disc	1230	15.6	**56-805**
Chevy Corvette C6	7.25" 3-disc	1230	15.6	**56-808**
Chevy Corvette C7	7.25" 3-disc	1230	19.2	**56-810**
Honda B16A/B18	7.25" 2-disc	910	16.0	**56-302H**
Honda K20/K24	7.25" 2-disc	910	12.5	**56-311**
Mitsubishi EVO 7-9	7.25" 2-disc	910	17.1	**56-352**
Mitsubishi EVO 10	7.25" 2-disc	910	18.4	**56-355**
Porsche 993/996/997	5.5" 3-disc	750	11.6	**57-814**
Porsche 993/996/997 (light FW)	7.25" 3-disc	1365	14.3	**56-814**
Porsche 993/996/997 (heavy FW)	7.25" 3-disc	1365	24.9	**56-814H**
Subaru WRX/STI (2002-on)	7.25" 2-disc	840	17.8	**56-372**

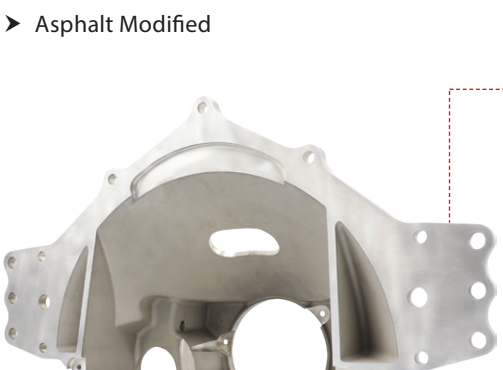
Service Parts

CFA	Clutch	Flywheel	Release Bearing	Clutch Bolt Kits
56-302H	6572USGG-S-SDR	51-1166	62-010	95-063
56-311	6572USGG-S-SDR	51-1180	62-010	95-063
56-352	6572USGG-S-SDR	51-4334	61-9002	95-063
56-355	6572USGG-S-SDR	51-4335	61-9002	95-063
56-372	6572USGG-S	51-4122	61-732	95-063
56-805	6573USGG-S	51-4452	60-8220	95-016
56-808	6573USGG-S	51-4452	60-8220	95-016
56-810	6573USGG-S	51-4558	60-8250	95-016
56-814	6573USGG-P	51-4008	60-8200	95-073
56-814H	6573USGG-P	51-4012	60-8200	95-073
56-816C	6573USGG-S	51-4452	60-8210	95-016
57-814	6553HSG-P	51-4011	60-8330	95-072

99T 5.5" BELLHOUSING KITS

Typical Applications

- Late Model
- Super Late Model
- Asphalt Modified



Features

- **Bellhousing**
  - Magnesium rear-mount starter bellhousing designed for maximum weight savings
  - Compact design provides increase ground clearance and exhaust header clearance. Distance from centerline of crankshaft to bottom of bellhousing is only 4.5"
  - Integral mounting ears for use as rear engine mount
  - Accepts transmissions with Chevy 4-bolt mounting pattern and 4.68" register diameter
  - Blueprinted for parallelism and concentricity
  - Weighs 7.6 lbs
- **Clutch-Flywheel-Assembly**
  - 5.5 ULTRA metallic clutch. 2-disc and 3-disc options
  - Billet steel 99-tooth (8.42") ring gear
  - Button Flywheel
  - 26-Spline clutch disc pack
  - Aircraft-grade clutch bolts
  - High-strength ARP flywheel bolts
- **Hydraulic Release Bearing**
  - 2300-Series hydraulic release bearing
  - 38mm contact diameter bearing
  - 3-bolt bellhousing mounted
- **Starter**
  - 40000-Series 3.0HP high-torque gear reduction mini starter
  - Rear-mounts on bellhousing
  - Side-bolt mounting design provides secure mounting to bellhousing and easy access for service

Clutch Type*	Chevy Early	Chevy Crate	Chevy LS	Ford Small Block
5.5 ULTRA 2-disc	52-61620	52-64620	52-63620	52-62620
5.5 ULTRA 3-disc	52-61630	52-64630	52-63630	52-62630

*Fits 1 5⁄32" x 26 spline input shaft. Contact Tilton for other spline options.

Service Parts

Bellhousings

Description	Part Number
Bellhousing, Chevy, magnesium	52-571
Bellhousing, Ford, magnesium	52-572

Flywheel

Description	Part Number
Button flywheel, Chevy Early	19038
Button flywheel, Chevy Crate, balanced	19042
Button flywheel, Chevy LS	19041
Button flywheel, Ford Small Block	19043
Ring gear, 99-tooth	51-099-2
Ring gear spacer, ULTRA 5.5 2-disc	51-001

Clutch & Disc Packs

Description	Part Number
5.5 ULTRA, 2-disc metallic	67-202HG
Disc pack, 2 discs, 26 spline	64140-1-AA-36
5.5 ULTRA, 3-disc metallic	67-203HG
Disc pack, 3 disc, 26-spline	64140-1-ABA-36

Hydraulic Release Bearing

Description	Part Number
HRB, 5.5 ULTRA 2-disc clutch	60-2340
HRB, 5.5 ULTRA 3-disc clutch	60-2310

Starter

Description	Part Number
Super Starter, bellhousing mount	54-41072

Bolt Kits

Description	Part Number
Clutch bolt kit	95-036
Flywheel bolt kit, all except Chevy LS	95-952-6
Flywheel bolt kit, Chevy LS	95-940-6

102T 5.5"BELLHOUSING KITS

Typical Applications

- Trans Am (TA, TA2)
- GT1
- Late Model
- Super Late Model
- Asphalt Modified

Features

- **Bellhousing**
  - Rigid aluminum rear-mount starter bellhousing designed to resist flexing
  - Compact design provides increase ground clearance and exhaust header clearance. Distance from centerline of crankshaft to bottom of bellhousing is only 4.7”
  - Accepts transmissions with Chevy 4-bolt mounting pattern and 4.68” register diameter
  - Blueprinted for parallelism and concentricity
  - Weighs 12.5 lbs
- **Clutch-Flywheel-Assembly**
  - OT-III 5.5” metallic or carbon/carbon clutch. 3-disc and 4-disc options
  - Billet steel 102-tooth (8.64”) flywheel
  - 26-spline clutch disc pack
  - Aircraft-grade clutch bolts
  - High-strength ARP flywheel bolts
  -
- **Hydraulic Release Bearing**
  - 5300-Series hydraulic release bearing
  - 38mm contact diameter bearing
  - 4-bolt bellhousing mounted
- **Starter**
  - 40000-Series 3.0HP high-torque gear reduction mini starter
  - Rear-mounts on bellhousing

Clutch Type*	Chevy Early	Chevy Crate	Chevy LS	Ford Small Block
5.5” 2-disc metallic	52-31120	52-41120	52-33120	52-32120
5.5” 3-disc metallic	52-31130	52-41130	52-33130	52-32130
5.5” 4-disc metallic	52-31140	NA	52-33140	52-32140
5.5” 3-disc carbon	52-31230	NA	52-33230	52-32230
5.5” 4-disc carbon	52-31240	NA	52-33240	52-32240

*Fits 1 5⁄32” x 26 spline input shaft. Contact Tilton for other spline options.

Service Parts

Bellhousings

Description	Part Number
Bellhousing, Chevy, aluminum	**52-601**
Bellhousing, Ford, aluminum	**52-602**

Flywheel

Description	Part Number
Flywheel, Chevy Early, 102-tooth	**51-651**
Flywheel, Chevy Crate, 102-tooth, balanced	**51-604**
Flywheel, Chevy LS, 102-tooth	**51-659**
Flywheel, Ford, 102-tooth	**51-653**

Clutch & Disc Packs

Description	Part Number
Clutch, 5.5" 2-disc metallic	**67-002HG**
Disc pack, 2 discs, 26-spline	**64140-9-AA-36**
Clutch, 5.5" 3-disc metallic	**67-003HG**
Disc pack, 3-disc, 26-spline	**64140-9-ABA-36**
Clutch , 5.5" 4-Disc metallic	**67-004HG**
Disc pack 4-discs, 26-spline	**64140-9-ACCC-36**
Clutch, 5.5" 3-disc carbon	**6553HSG-S**
Clutch, 5.5" 4-disc carbon	**6554HSG-S**

Hydraulic Release Bearing

Description	Part Number
HRB, 5.5" 2-disc metallic clutch	**60-5370**
HRB, 5.5" 3-disc metallic clutch	**60-5340**
HRB, 5.5" 4-disc metallic clutch	**60-5310**
HRB, 5.5" 3-disc carbon clutch	**60-5330**
HRB, 5.5" 4-disc carbon clutch	**60-5300**

Starter

Description	Part Number
Super Starter, bellhousing mount	**54-41062**

Bolt Kits

Description	Part Number
Clutch bolt kit, 5.5" 2-disc metallic	**95-002-5**
Clutch bolt kit, 5.5" 3-disc metallic	**95-003-5**
Clutch bolt kit, 5.5" 4-disc metallic	**95-004-5**
Clutch bolt kit, 5.5" 3-disc carbon	**95-061**
Clutch bolt kit, 5.5" 4-disc carbon	**95-060**
Flywheel bolt kit, Chevy Early & Ford	**95-952-6**
Flywheel bolt kit, Chevy LS	**95-940-6**
Flywheel bolt kit, Chevy Crate	**95-975-6**

OE Diameter Flywheels

OE Diameter flywheels are designed to be a direct replacement for the stock flywheels of specific car/engine applications, retaining the same diameter (ring gear size) as originally equipped with the car. *Unless noted, flywheels are neutral balance and have a .100" step for the clutch's friction surface.*

Application	Clutch Type	Ring Gear Teeth	Weight *(lbs)*	Part Number
BMW M50/M52/S50/S52/S54	7.25" 6/12-leg	113	7.9	**51-3568**
Chevy V8 2-pc Rear Main Seal	7.25" 6/12-leg	153	8.3	**51-021-1**
Chevy V8 2-pc Rear Main Seal	Tilton ST-246	153	16.6	**55-1002**
Chevy LS (6-Bolt Crank)	7.25" 6/12-leg	168	8.0	**51-4452**
Chevy LS (6-Bolt Crank)	Tilton ST-246	168	19.6	**51-1004**
Chevy LSX/LT (8-Bolt Crank)	7.25" 6/12-leg	168	11.7	**51-4558**
Chevy LSX/LT (8-Bolt Crank)	Tilton ST-246	168	19.6	**51-1008**
Chevy Camaro GEN6/Corvette C7	Tilton ST-246	168	21.5	**51-1000**
Ford Coyote	Tilton ST-246	164	20.9	**51-1001**
Ford Small Block (Internal Balance)	Tilton ST-246	157	17.2	**51-1003**
Honda B16A/B18	7.25" 6/12-leg	112	9.8	**51-1166**
Honda K20/24	7.25" 6/12-leg	120	6.3	**51-1180**
Mitsubishi EVO-7-9	7.25" 6/12-leg	114	10.9	**51-4334**
Mitsubishi EVO 10	7.25" 6/12-leg	114	9.4	**51-4335**
Porsche 993/996/997	7.25" 6/12-leg	132	7.9	**51-4008***
Porsche 993/996/997	7.25" 6/12-leg	132	18.5	**51-4012***
Porsche 993/996/997	5.5" 8-leg	132	7.2	**51-4011***
Subaru WRX (EJ20/25)	7.25" 6/12-leg	124	11.6	**51-4122**
Toyota 2JZ	7.25" 6/12-leg	115	12	**51-5021**

*Pot-type flywheel

Reduced Diameter Flywheels

Smaller diameter than OEM type flywheels to provide addition ground clearance and a lower weight & inertia. Requires the use of specialize Tilton Super Starter that mounts in the stock location but is designed to work with the smaller diameter ring gear. *Unless noted, flywheels are neutral balance and have a .100" step for the clutch's friction surface.*

Application	Clutch Type	Ring Gear Teeth	Weight *(lbs)*	Part Number
Chevy V8 2-pc Rear Main Seal	7.25" 6/12-leg	104	5.7	**51-052-1***
Chevy LS (6-bolt crank)	7.25" 6/12-leg	153	9.4	**51-4478****
Chevy LSX/LT (8-bolt crank)	7.25" 6/12-leg	153	9.4	**51-4479****

*Requires starter P/N 54-40005
**Requires starter P/N 54-40012

110-Tooth 7.25" Flywheels

Designed for use in Tilton 52-7xx Series rear-mount starter bellhousings and 7.25" clutches. *Unless noted, flywheels are neutral balance and have a .100" step for the clutch's friction surface.*

Application	Clutch Type	Ring Gear Teeth	Weight *(lbs)*	Part Number
Chevy V8 2-pc Rear Main Seal	7.25" 6-leg	110	4.7	**51-6300**
Chevy LS (6-Bolt Crank)	7.25" 6/12-leg	110	5.7	**51-6341**
Ford Small Block (Internal Balance)	7.25" 6/12-leg	110	4.9	**51-6320**

102-Tooth 5.5" Flywheels

Designed for use in Tilton 52-6xx Series rear-mount starter bellhousings and 5.5" clutches.
Unless noted, flywheels are neutral balance and have a .100" step for the clutch's friction surface.

Application	Clutch Type	Ring Gear Teeth	Weight *(lbs)*	Part Number
Chevy V8 2-pc Rear Main Seal	5.5" 8-leg	102	3.1	**51-651**
Chevy V8 1-pc Rear Main Seal	5.5" 8-leg	102	4.2	**51-604***
Chevy LS (6-Bolt)	5.5" 8-leg	102	4.3	**51-659**
Ford Small Block (Internal Balance)	5.5" 8-leg	102	3.6	**51-653**

*Externally balanced

Button Flywheels

Designed to serve as the clutch's friction surface when used in conjunction with flexplate or clutch cover-mounted ring gear. Unless noted, flywheels are neutral balance and have .100" step for the clutch's friction surface.

Application	Clutch Type	Flywheel Offset	Weight *(lbs)*	Part Number
Chevy V8 2-pc Rear Main Seal	5.5" 8-leg	.840"	2.3	**19002**
Chevy V8 2-pc Rear Main Seal	5.5" 6-leg	.840"	2.1	**19038**
Chevy V8 2-pc Rear Main Seal	7.25" 6-leg	.660"	3.7	**19003**
Chevy V8 1-pc Rear Main Seal	5.5" 8-leg	.820"	2.5	**19010**
Chevy V8 1-pc Rear Main Seal	5.5" 8-leg	.840"	2.9	**19023***
Chevy V8 1-pc Rear Main Seal	5.5" 6-leg	.840"	3.0	**19042***
Chevy V8 1-pc Rear Main Seal	7.25" 6-leg	.700"	3.8	**19011**
Chevy V8 1-pc Rear Main Seal	7.25" 6-leg	.660"	4.0	**19046***
Chevy LS (6-Bolt Crank)	5.5" 8-leg	1.240"	2.9	**19044**
Chevy LS (6-Bolt Crank)	5.5" 6-leg	1.240"	2.7	**19041**
Chevy LS (6-Bolt Crank)	7.25" 6-leg	1.060"	4.3	**19040**
Ford Small Block	5.5" 8-leg	1.280"	3.0	**19045**
Ford Small Block	5.5" 6-leg	1.280"	2.8	**19043**
Ford Small Block	7.25" 6-leg	1.110"	4.2	**19039**

*Externally balanced

Clutch Cover-Mount Ring Gears

Designed to mount onto the clutch cover of select Tilton and QM clutches.

Clutch Type	Ring Gear Teeth	Weight *(lbs)*	Part Number
5.5" 6/8-leg	110	1.7	**51-110-1**
5.5" 6-leg	99	1.3	**51-099-2**
7.25" 6-leg	110	1.1	**51-110-3**

Metallic Clutch Bolt Kits

	Clutch Diameter (inches)	Plate Count (number)	Flywheel (type)	Mounting Hole (type)	Size (inches)	Length (under head)	Length (grip)	Part Number
5.5" Clutches	5.5"	1	Step	Through	5/16"-24	1.72"	1.19"	**95-001-5**
	5.5"	1	Step	Threaded	5/16"-24	1.47"	.938"	**95-015**
	5.5"	2	Step/Pot	Through	5/16"-24	1.97"	1.44"	**95-002-5**
	5.5"	2	Step	Threaded	5/16"-24	1.84"	1.31"	**95-009-5**
	5.5"	2	Pot	Threaded	5/16"-24	1.72"	1.19"	**95-010-5**
	5.5"	3	Step	Through	5/16"-24	2.34"	1.81"	**95-019**
	5.5"	3	Pot	Through	5/16"-24	2.22"	1.69"	**95-003-5**
	5.5"	3	Step	Threaded	5/16"-24	2.09"	1.56"	**95-018**
	5.5"	3	Pot	Threaded	5/16"-24	1.97"	1.44"	**95-002-5**
	5.5"	4	Step	Through	5/16"-24	2.59"	2.06"	**95-004-5**
	5.5"	4	Pot	Through	5/16"-24	2.47"	1.94"	**95-061**
	5.5"	4	Step	Threaded	5/16"-24	2.34"	1.81"	**95-019**
	5.5"	4	Pot	Threaded	5/16"-24	2.22"	1.69"	**95-003-5**
7.25" Clutches	7.25"	1	Step	Through	5/16"-24	1.47"	.938"	**95-026**
	7.25"	1	Step	Threaded	5/16"-24	1.34"	.813"	**95-009**
	7.25"	2	Step	Through	5/16"-24	1.84"	1.31"	**95-017**
	7.25"	2	Pot	Through	5/16"-24	1.72"	1.19"	**95-005**
	7.25"	2	Step	Threaded	5/16"-24	1.59"	1.06"	**95-028**
	7.25"	2	Pot	Threaded	5/16"-24	1.47"	.938"	**95-010**
	7.25"	3	Step	Through	5/16"-24	2.09"	1.56"	**95-018**
	7.25"	3	Pot	Through	5/16"-24	1.97"	1.44"	**95-006**
	7.25"	3	Step	Threaded	5/16"-24	1.84"	1.31"	**95-011**
	7.25"	3	Pot	Threaded	5/16"-24	1.72"	1.19"	**95-014**
	7.25"	4	Step	Through	5/16"-24	2.34"	1.81"	**95-008**
	7.25"	4	Pot	Through	5/16"-24	2.22"	1.69"	**95-003-5**
	7.25"	4	Step/Pot	Threaded	5/16"-24	2.09"	1.56"	**95-012**

Cerametallic Clutch Bolt Kits

	Clutch Diameter (inches)	Plate Count (number)	Flywheel (type)	Mounting Hole (type)	Size (inches)	Length (under head)	Length (grip)	Part Numbers
7.25" Clutches	7.25"	1	Step	Through	5/16"-24	1.59"	1.06"	**95-028**
	7.25"	1	Step	Threaded	5/16"-24	1.47"	.938"	**95-010**
	7.25"	2	Step	Through	5/16"-24	2.09"	1.56"	**95-018**
	7.25"	2	Step	Threaded	5/16"-24	1.84"	1.31"	**95-011**

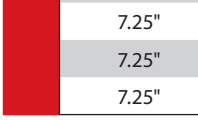
Note for all bolt kits:

Step-type Flywheel: Clutch friction surface is .100" above clutch mounting surface.

Pot-type Flywheel: Clutch friction surface is equal to clutch mounting surface.

Carbon/Carbon Clutch Bolt Kits

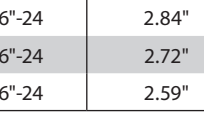
	Clutch Diameter (inches)	Plate Count (number)	Flywheel (type)	Mounting Hole (type)	Size (inches)	Length (under head)	Length (grip)	Part Numbers
5.5" Clutches	5.5"	1	Step/Pot	Through	5/16"-24	1.72"	1.19"	**95-001-5**
	5.5"	1	Step	Threaded	5/16"-24	1.59"	1.06"	**95-029**
	5.5"	1	Pot	Threaded	5/16"-24	1.47"	.938"	**95-015**
	5.5"	2	Step	Through	5/16"-24	2.09"	1.56"	**95-018**
	5.5"	2	Pot	Through	5/16"-24	1.97"	1.44"	**95-002-5**
	5.5"	2	Step	Threaded	5/16"-24	1.84"	1.31"	**95-009-5**
	5.5"	2	Pot	Threaded	5/16"-24	1.72"	1.19"	**95-010-5**
	5.5"	3	Step	Through	5/16"-24	2.47"	1.94"	**95-061**
	5.5"	3	Pot	Through	5/16"-24	2.34"	1.81"	**95-019**
	5.5"	3	Step	Threaded	5/16"-24	2.22"	1.69"	**95-003-5**
	5.5"	3	Pot	Threaded	5/16"-24	2.09"	1.56"	**95-018**
	5.5"	4	Step	Through	5/16"-24	2.72"	2.19"	**95-060**
	5.5"	4	Pot	Through	5/16"-24	2.59"	2.06"	**95-004-5**
	5.5"	4	Step	Threaded	5/16"-24	2.47"	1.94"	**95-061**
	5.5"	4	Pot	Threaded	5/16"-24	2.34"	1.81"	**95-019**
7.25" Clutches	7.25"	1	Step/Pot	Through	5/16"-24	1.72"	1.19"	**95-020**
	7.25"	1	Step/Pot	Threaded	5/16"-24	1.47"	.938"	**95-041**
	7.25"	2	Step	Through	5/16"-24	2.09"	1.56"	**95-027**
	7.25"	2	Pot	Through	5/16"-24	1.97"	1.44"	**95-023**
	7.25"	2	Step/Pot	Threaded	5/16"-24	1.84"	1.31"	**95-063**
	7.25"	3	Step/Pot	Through	5/16"-24	2.47"	1.94"	**95-016**
	7.25"	3	Step/Pot	Threaded	5/16"-24	2.22"	1.69"	**95-025**
	7.25"	4	Pot	Through	5/16"-24	2.84"	2.31"	**95-065**
	7.25"	4	Step	Threaded	5/16"-24	2.72"	2.19"	**95-064**
	7.25"	4	Pot	Threaded	5/16"-24	2.59"	2.06"	**95-042**



Flywheel Bolt Kits

Bolt kit for mounting Tilton flywheels to the engine crank shaft.

Size (inches)	Length (under head)	Socket Size (inches)	Bolts in Kit (number)	Part Numbers
7/16"-20	.875"	1/2" 12-pt	6	**95-952-6**
7/16"-20	.875"	1/2" 12-pt	8	**95-952-8**
7/16"-20	.800"	3/4" 12-pt	6	**95-975-6**
7/16"-20	.800"	3/4" 12-pt	8	**95-975-8**
11mm x 1.5	.880"	1/2" 12-pt	6	**95-940-6**



Clutch-to-Flywheel Stud Kits

Clutch-to-Flywheel Stud Kits are designed to press fit into specific Tilton flywheels, such as the 110-tooth flywheel supplied in 52-Series 7.25" Rear-mount Starter Packages.

Clutch Diameter (inches)	Plate Count (number)	Part Numbers
7.25"	3	**95-100-6**
7.25"	2	**95-101-6**

HYDRAULIC RELEASE BEARINGS

Tilton offers an extensive range of hydraulic release bearings, also know as concentric slave cylinders, for use with push-type clutches. Hydraulic release bearings are designed to eliminate the need for mechanical linkages, pivot balls, spacer and external slave cylinders. Tilton hydraulic release bearings are available with a flat-face bearing for use bent-finger diaphragm 8.5" – 11" OE-type clutches and with radius-face bearings for small diameter racing clutches (4.5", 5.5", 7.25" & 8.5").

Features

- High-temperature mono-seal features a quad tensioner to insure proper seal tension for the highest level of reliability. Seals have been tested to more than a million actuations without failure
- Wiper seal (most models) provides protection from debris entering bore.
- Aluminum body and piston are plated with a proprietary low-friction coating that provides smooth operation and longevity.
- High quality bearings packed with high-speed grease provide long term service life.
- Constant contact design provides for quick clutch release and self-adjusts for clutch wear.
- 1.215 in^2 piston area (except 9000-Series)

700-Series
Pilot tube mount

1000-Series
Saab 9000 type mount

2000-Series
3-Leg QM-type bellhousing mount

3000-Series
3-leg bulkhead mount

4000-Series
4-bolt bellhousing mount

5000-Series
4-bolt bellhousing mount (low profile)

6000-Series
Adjustable height transmission mount

8000-Series
2-bolt bulkhead mount

9000-Series
2-bolt bulkhead mount (reduced piston area)

Typical Applications

- Transmissions and transaxles designed to accept "Saab 9000-type" release bearings

Features

- **Mount Type:** 3-Bolt "Saab 9000-Type" pattern
- **Piston Area:** 1.215in^2 (784mm^2)
- **Max Stroke:** .600" (15.24mm)
- **Ports:** AN3 (3/8"-24 thread)
- **Weight:** .70 - .95 lbs (varies by model)

1000-Series

Bearing Type: Radius-face
Contact Diameter: 2.05" (52mm)

Part Number	Height	Replacement Bearing	Replacement Piston	Seal Kit
60-1000	2.04" (51.8mm)	62-002	62-612	62-905

1100-Series

Bearing Type: Flat-face
Contact Diameter: 1.71" - 2.83" (43.4mm - 71.9mm)

Part Number	Height	Replacement Bearing	Replacement Piston	Seal Kit
60-1100	1.79" (45.5mm)	62-618	62-6100	62-905

1200-Series

Bearing Type: Radius-face
Contact Diameter: 1.75" (44mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-1200	1.87" (47.5mm)	62-031	62-6000	62-905
60-1210	1.97" (50.0mm)	62-031	62-6001	62-905
60-1220	2.07" (52.3mm)	62-031	62-6002	62-905
60-1230	2.17" (55.1mm)	62-031	62-6003	62-905
60-1240	2.27" (57.7mm)	62-031	62-6004	62-905
60-1250	2.37" (60.2mm)	62-031	62-6005	62-905
60-1260	2.47" (62.7mm)	62-031	62-6006	62-905
60-1270	2.57" (65.3mm)	62-031	62-6007	62-905
60-1280	2.67" (67.8mm)	62-031	62-6008	62-905
60-1290	2.77" (70.4mm)	62-031	62-6009	62-905

**Height can be reduced by .050" (1.27mm) by removing the shim that is located under bearing within the piston*

1300-Series

Bearing Type: Radius-face
Contact Diameter: 1.50" (38mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-1300	1.87" (47.5mm)	62-008	62-6000	62-905
60-1310	1.97" (50.0mm)	62-008	62-6001	62-905
60-1320	2.07" (52.3mm)	62-008	62-6002	62-905
60-1330	2.17" (55.1mm)	62-008	62-6003	62-905
60-1340	2.27" (57.7mm)	62-008	62-6004	62-905
60-1350	2.37" (60.2mm)	62-008	62-6005	62-905
60-1360	2.47" (62.7mm)	62-008	62-6006	62-905
60-1370	2.57" (65.3mm)	62-008	62-6007	62-905
60-1380	2.67" (67.8mm)	62-008	62-6008	62-905
60-1390	2.77" (70.4mm)	62-008	62-6009	62-905

**Height can be reduced by .050" (1.27mm) by removing the shim that is located under bearing within the piston*

Installation drawing for 1000-Series HRBs is available at www.tiltonracing.com/technical/installation-drawings

2000-SERIES HRBS

Typical Applications

- Mounts inside select Tilton and QM rear-mount starter bellhousings

Features

- **Mount Type:** 3-Bolt "QM-type" pattern
- **Piston Area:** 1.215in^2 (784mm^2)
- **Max Stroke:** .600" (15.24mm)
- **Ports:** AN3 (3/8"-24 thread)
- **Weight:** .75- .85 lbs (varies by model)

2200-Series

Bearing Type: Radius-face
Contact Diameter: 1.75" (44mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-2200	2.90" (73.7mm)	62-031	62-6000	62-905
60-2210	3.00" (76.2mm)	62-031	62-6001	62-905
60-2220	3.10" (78.7mm)	62-031	62-6002	62-905
60-2230	3.20" (81.3mm)	62-031	62-6003	62-905
60-2240	3.30" (83.8mm)	62-031	62-6004	62-905
60-2250	3.40" (86.4mm)	62-031	62-6005	62-905
60-2260	3.50" (88.9mm)	62-031	62-6006	62-905
60-2270	3.60" (91.4mm)	62-031	62-6007	62-905
60-2280	3.70" (94.0mm)	62-031	62-6008	62-905
60-2290	3.80" (96.5mm)	62-031	62-6009	62-905

**Height can be reduced by .050" (1.27mm) by removing the shim that is located under bearing within the piston*

2300-Series

Bearing Type: Radius-face
Contact Diameter: 1.50" (38mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-2300	2.90" (73.7mm)	62-008	62-6000	62-905
60-2310	3.00" (76.2mm)	62-008	62-6001	62-905
60-2320	3.10" (78.7mm)	62-008	62-6002	62-905
60-2330	3.20" (81.3mm)	62-008	62-6003	62-905
60-2340	3.30" (83.8mm)	62-008	62-6004	62-905
60-2350	3.40" (86.4mm)	62-008	62-6005	62-905
60-2360	3.50" (88.9mm)	62-008	62-6006	62-905
60-2370	3.60" (91.4mm)	62-008	62-6007	62-905
60-2380	3.70" (94.0mm)	62-008	62-6008	62-905
60-2390	3.80" (96.5mm)	62-008	62-6009	62-905

**Height can be reduced by .050" (1.27mm) by removing the shim that is located under bearing within the piston*

Installation drawing for 2000-Series HRBs is available at www.tiltonracing.com/technical/installation-drawings

Typical Applications

- Bulkhead mount inside transmissions or bellhousings

Features

- **Mount Type:** 3-Bolt pattern
- **Piston Area:** 1.215in^2 (784mm^2)
- **Max Stroke:** .600" (15.24mm)
- **Ports:** AN 3 (3/8"-24 thread)
- **Weight:** .75 - 1.0 lbs (varies by model)

3000-Series

Bearing Type: Radius-face
Contact Diameter: 2.05" (52mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-3000	3.00" (76.2mm)	62-002	62-612	62-905

3100-Series

Bearing Type: Flat-face
Contact Diameter: 1.71" - 2.83" (43.4mm - 71.9mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-3100	2.74" (69.6mm)	62-618	62-6100	62-905

3200-Series

Bearing Type: Radius-face
Contact Diameter: 1.75" (44mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-3200	2.82" (71.6mm)	62-031	62-6000	62-905
60-3210	2.92" (74.2mm)	62-031	62-6001	62-905
60-3220	3.02" (76.7mm)	62-031	62-6002	62-905
60-3230	3.12" (79.2mm)	62-031	62-6003	62-905
60-3240	3.22" (81.8mm)	62-031	62-6004	62-905
60-3250	3.32" (84.3mm)	62-031	62-6005	62-905
60-3260	3.42" (86.9mm)	62-031	62-6006	62-905
60-3270	3.52" (89.4mm)	62-031	62-6007	62-905
60-3280	3.62" (91.9mm)	62-031	62-6008	62-905
60-3290	3.72" (94.5mm)	62-031	62-6009	62-905

**Height can be reduced by .050" (1.27mm) by removing the shim that is located under bearing within the piston*

3300-Series

Bearing Type: Radius-face
Contact Diameter: 1.50" (38mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-3300	2.82" (71.6mm)	62-008	62-6000	62-905
60-3310	2.92" (74.2mm)	62-008	62-6001	62-905
60-3320	3.02" (76.7mm)	62-008	62-6002	62-905
60-3330	3.12" (79.2mm)	62-008	62-6003	62-905
60-3340	3.22" (81.8mm)	62-008	62-6004	62-905
60-3350	3.32" (84.3mm)	62-008	62-6005	62-905
60-3360	3.42" (86.9mm)	62-008	62-6006	62-905
60-3370	3.52" (89.4mm)	62-008	62-6007	62-905
60-3380	3.62" (91.9mm)	62-008	62-6008	62-905
60-3390	3.72" (94.5mm)	62-008	62-6009	62-905

**Height can be reduced by .050" (1.27mm) by removing the shim that is located under bearing within the piston*

Installation drawing for 3000-Series HRBs is available at www.tiltonracing.com/technical/installation-drawings

4000-SERIES HRBS

Typical Applications

- Mounts inside select Tilton and Quicktime bellhousings

Features

- **Mount Type:** 4-Bolt pattern
- **Piston Area:** 1.215in^2 (784mm^2)
- **Max Stroke:** .600" (15.24mm)
- **Ports:** AN3 (3/8"-24 thread)
- **Weight:** 1.15 - 1.45 lbs (varies by model)

4000-Series

Bearing Type: Radius-face
Contact Diameter: 2.05" (52mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-4000	2.80" (71.0mm)	62-002	62-612	62-905

4100-Series

Bearing Type: Flat-face
Contact Diameter: 1.71" - 2.83" (43.4mm - 71.9mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-4100	2.54" (64.5mm)	62-618	62-6100	62-905

4200-Series

Bearing Type: Radius-face
Contact Diameter: 1.75" (44mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-4200	2.62" (66.5mm)	62-031	62-6000	62-905
60-4210	2.72" (69.0mm)	62-031	62-6001	62-905
60-4220	2.82" (71.6mm)	62-031	62-6002	62-905
60-4230	2.92" (74.2mm)	62-031	62-6003	62-905
60-4240	3.02" (76.7mm)	62-031	62-6004	62-905
60-4250	3.12" (79.2mm)	62-031	62-6005	62-905
60-4260	3.22" (81.8mm)	62-031	62-6006	62-905
60-4270	3.32" (84.3mm)	62-031	62-6007	62-905
60-4280	3.42" (86.9mm)	62-031	62-6008	62-905
60-4290	3.52" (89.4mm)	62-031	62-6009	62-905

**Height can be reduced by .050" (1.27mm) by removing the shim that is located under bearing within the piston*

4300-Series

Bearing Type: Radius-face
Contact Diameter: 1.50" (38mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-4300	2.62" (66.5mm)	62-008	62-6000	62-905
60-4310	2.72" (69.0mm)	62-008	62-6001	62-905
60-4320	2.82" (71.6mm)	62-008	62-6002	62-905
60-4330	2.92" (74.2mm)	62-008	62-6003	62-905
60-4340	3.02" (76.7mm)	62-008	62-6004	62-905
60-4350	3.12" (79.2mm)	62-008	62-6005	62-905
60-4360	3.22" (81.8mm)	62-008	62-6006	62-905
60-4370	3.32" (84.3mm)	62-008	62-6007	62-905
60-4380	3.42" (86.9mm)	62-008	62-6008	62-905
60-4390	3.52" (89.4mm)	62-008	62-6009	62-905

**Height can be reduced by .050" (1.27mm) by removing the shim that is located under bearing within the piston*

Installation drawing for 4000-Series HRBs is available at www.tiltonracing.com/technical/installation-drawings

Typical Applications

- Mounts inside select Tilton and Quicktime bellhousings

Features

- **Mount Type:** Low Profile 4-Bolt Pattern
- **Piston Area:** 1.215in^2 (784mm^2)
- **Max Stroke:** .600" (15.24mm)
- **Ports:** AN3 (3/8"-24 thread)
- **Weight:** .90 - 1.25 lbs (varies by model)

5000-Series

Bearing Type: Radius-face
Contact Diameter: 2.05" (52mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-5000	2.10" (53.3mm)	62-002	62-612	62-905

5100-Series

Bearing Type: Flat-face
Contact Diameter: 1.71" - 2.83" (43.4mm - 71.9mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-5100	1.84" (64.7mm)	62-618	62-6100	62-905

5200-Series

Bearing Type: Radius-face
Contact Diameter: 1.75" (44mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-5200	1.92" (48.8mm)	62-031	62-6000	62-905
60-5210	2.02" (51.3mm)	62-031	62-6001	62-905
60-5220	2.12" (53.8mm)	62-031	62-6002	62-905
60-5230	2.22" (56.4mm)	62-031	62-6003	62-905
60-5240	2.32" (58.9mm)	62-031	62-6004	62-905
60-5250	2.42" (61.5mm)	62-031	62-6005	62-905
60-5260	2.52" (64.0mm)	62-031	62-6006	62-905
60-5270	2.62" (66.5mm)	62-031	62-6007	62-905
60-5280	2.72" (69.1mm)	62-031	62-6008	62-905
60-5290	2.82" (71.6mm)	62-031	62-6009	62-905

**Height can be reduced by .050" (1.27mm) by removing the shim that is located under bearing within the piston*

5300-Series

Bearing Type: Radius-face
Contact Diameter: 1.50" (38mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-5300	1.92" (48.8mm)	62-008	62-6000	62-905
60-5310	2.02" (51.3mm)	62-008	62-6001	62-905
60-5320	2.12" (53.8mm)	62-008	62-6002	62-905
60-5330	2.22" (56.4mm)	62-008	62-6003	62-905
60-5340	2.32" (58.9mm)	62-008	62-6004	62-905
60-5350	2.42" (61.5mm)	62-008	62-6005	62-905
60-5360	2.52" (64.0mm)	62-008	62-6006	62-905
60-5370	2.62" (66.5mm)	62-008	62-6007	62-905
60-5380	2.72" (69.1mm)	62-008	62-6008	62-905
60-5390	2.82" (71.6mm)	62-008	62-6009	62-905

**Height can be reduced by .050" (1.27mm) by removing the shim that is located under bearing within the piston*

Installation drawing for 5000-Series HRBs is available at www.tiltonracing.com/technical/installation-drawings

6000-SERIES HRBS

Typical Applications

- Mounts directly onto the front of transmission

Features

- **Mount Type:** Transmission
- **Piston Area:** 1.215in^2 (784mm^2)
- **Max Stroke:** .700" (17.8mm) for 6100-Series HRBs
  .600" (15.24mm) for 6000/6200 6300-Series HRBs
- **Ports:** Double o-ring swivel fittings

Description:

Height adjustable hydraulic release bearing designed to mount onto the front of transmissions. Most applications provide 1.25" of height adjustment with the provided stainless steel adjustment sleeve or mounting base that incorporates adjustment sleeve. Includes AN4 stainless braided for supply and bleed lines, bleed fitting and anti-rotation stud.

Car Specific Hydraulic Release Bearing Kits

Designed for direct fitments into specific car applications. Heights preset at Tilton factory (minor adjustment may be necessary) for use with OEM clutches or Tilton ST-246 clutches. Includes adapter fitting to connect HRB to factory clutch line.

Application	Part Number
Chevy Camaro GEN5	**60-6107**
Chevy Camaro GEN6	**60-6108**
Chevy Corvette C6	**60-6109**
Chevy Corvette C7	**60-6110**

6100-Series

Bearing Type: Flat-face
Contact Diameter: 1.71"-2.83" (43.4mm-71.9mm)

Application	Transmission	Height Adjustment (inches)	Part Number
Chevy SB/BB	Tremec TKO/500/600	2.50 - 2.75**	**60-6106**
Chevy LS/LT	Tremec TKO/500/600	1.77 - 3.00*	**60-6101**
Chevy	Tremec T56 Magnum	2.16 - 3.13**	**60-6105**
Chevy	Tremec TR6060	2.66 - 3.63**	**60-6111**
Chevy	Borg-Warner/Tremec T5	1.77 - 3.00*	**60-6103**
Ford	Tremec TKO/500/600	1.77 - 3.00*	**60-6102**
Ford	Tremec T56 Magnum (Pilot tube mount)	1.77 - 3.00*	**60-6104**
Ford	Tremec T56 Magnum (2-bolt plate mount)	2.16 - 3.13**	**60-6105**
Ford	Top Loader (1 1/16 x 10 spline)	1.77 - 3.00*	**60-6102**
Ford	Borg-Warner /Tremec T5	1.77 - 3.00*	**60-6104**

**Height adjustment on included sleeve that fits onto tube of input shaft bearing retainer. Does not include height of retainer base.*

*** Height adjustment on included mounting base. Dimension is form mating face of transmission to top of bearing.*

Installation drawing for 6000-Series HRBs is available at www.tiltonracing.com/technical/installation-drawings

6000-Series

Bearing Type: Radius-face
Contact Diameter: 2.00" (52mm)

Application	Transmission	Height Adjustment (inches)	Part Number
Chevy SB/BB	Tremec TKO/500/600	2.75 - 3.00**	60-6036
Chevy LS/LT	Tremec TKO/500/600	2.02 - 3.25*	60-6031
Chevy	Tremec T56 Magnum	2.41 - 3.38**	60-6035
Chevy	Tremec TR6060	2.91 - 3.88 **	60-6041
Chevy	Borg-Warner/Tremec T5	2.02 - 3.25*	60-6033
Ford	Tremec TKO/500/600	2.02 - 3.25*	60-6032
Ford	Tremec T56 Magnum (Pilot tube mount)	2.02 - 3.25*	60-6034
Ford	Tremec T56 Magnum (2-bolt plate mount)	2.54 - 3.51**	60-6035
Ford	Top Loader (1 1/16 x 10 spline)	2.02 - 3.25*	60-6032
Ford	Borg-Warner/Tremec T5	2.02 - 3.25*	60-6034

**Height adjustment on included sleeve that fits onto tube of input shaft bearing retainer. Does not include height of retainer base.*

*** Height adjustment on included mounting base. Dimension is form mating face of transmission to top of bearing.*

6200-Series

Bearing Type: Radius-face
Contact Diameter: 1.75" (44mm)

Application	Transmission	Height Adjustment (inches)	Part Number
Chevy SB/BB	Tremec TKO/500/600	2.88 - 3.13**	60-6236
Chevy LS/LT	Tremec TKO/500/600	2.15 - 3.38*	60-6231
Chevy	Tremec T56 Magnum	2.54 - 3.51**	60-6235
Chevy	Tremec TR6060	2.66 - 3.63**	60-6241
Chevy	Borg-Warner/Tremec T5	2.15 - 3.38*	60-6233
Ford	Tremec TKO/500/600	2.15 - 3.38*	60-6232
Ford	Tremec T56 Magnum (Pilot tube mount)	2.15 - 3.38*	60-6234
Ford	Tremec T56 Magnum (2-bolt plate mount)	2.54 - 3.51*	60-6235
Ford	Top Loader (1 1/16 x 10 spline)	2.15 - 3.38*	60-6232
Ford	Borg-Warner/Tremec T5	2.15 - 3.38*	60-6234

**Height adjustment on included sleeve that fits onto tube of input shaft bearing retainer. Does not include height of retainer base.*

*** Height adjustment on included mounting base. Dimension is form mating face of transmission to top of bearing.*

6300-Series

Bearing Type: Radius-face
Contact Diameter: 1.50" (38mm)

Application	Transmission	Height Adjustment (inches)	Part Number
Chevy SB/BB	Tremec TKO/500/600	2.88 - 3.13**	60-6336
Chevy LS/LT	Tremec TKO/500/600	2.15 - 3.38*	60-6331
Chevy	Tremec T56 Magnum	2.54 - 3.51**	60-6335
Chevy	Tremec TR6060	3.04 - 4.01**	60-6341
Chevy	Borg-Warner/Tremec T5	2.15 - 3.38*	60-6333
Ford	Tremec TKO/500/600	2.15 - 3.38*	60-6332
Ford	Tremec T56 Magnum (Pilot tube mount)	2.15 - 3.38*	60-6334
Ford	Tremec T56 Magnum (2-bolt plate mount)	2.54 - 3.51*	60-6335
Ford	Top Loader (1 1/16 x 10 spline)	2.15 - 3.38*	60-6332
Ford	Borg-Warner/Tremec T5	2.15 - 3.38*	60-6334

**Height adjustment on included sleeve that fits onto tube of input shaft bearing retainer. Does not include height of retainer base.*

*** Height adjustment on included mounting base. Dimension is form mating face of transmission to top of bearing.*

Installation drawing for 6000-Series HRBs is available at www.tiltonracing.com/technical/installation-drawings

8000-SERIES HRBS

Typical Applications

- Bulkhead-mounted inside transmission or bellhousing with adapter plate

Features

- **Mount Type:** 2-Bolt pattern
- **Piston Area:** 1.215in^2 (784mm^2)
- **Max Stroke:** .600" (15.24mm)
- **Ports:** AN3 (3/8"-24 thread)
- **Weight:** .70 - .95 lbs (varies by model)

8000-Series

Bearing Type: Radius-face
Contact Diameter: 2.05" (52mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-8000	2.05" (52.0mm)	62-002	62-612	62-905

8100-Series

Bearing Type: Flat-face
Contact Diameter: 1.71" - 2.83" (43.4mm - 71.9mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-8100	1.79" (45.5mm)	62-618	62-6100	62-905

8200-Series

Bearing Type: Radius-face
Contact Diameter: 1.75" (44mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-8200	1.87" (47.5mm)	62-031	62-6000	62-905
60-8210	1.97" (50.0mm)	62-031	62-6001	62-905
60-8220	2.07" (52.3mm)	62-031	62-6002	62-905
60-8230	2.17" (55.1mm)	62-031	62-6003	62-905
60-8240	2.27" (57.7mm)	62-031	62-6004	62-905
60-8250	2.37" (60.2mm)	62-031	62-6005	62-905
60-8260	2.47" (62.7mm)	62-031	62-6006	62-905
60-8270	2.57" (65.3mm)	62-031	62-6007	62-905
60-8280	2.67" (67.8mm)	62-031	62-6008	62-905
60-8290	2.77" (70.4mm)	62-031	62-6009	62-905

**Height can be reduced by .050" (1.27mm) by removing the shim that is located under bearing within the piston*

8300-Series

Bearing Type: Radius-face
Contact Diameter: 1.50" (38mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
60-8300	1.87" (47.5mm)	62-008	62-6000	62-905
60-8310	1.97" (50.0mm)	62-008	62-6001	62-905
60-8320	2.07" (52.3mm)	62-008	62-6002	62-905
60-8330	2.17" (55.1mm)	62-008	62-6003	62-905
60-8340	2.27" (57.7mm)	62-008	62-6004	62-905
60-8350	2.37" (60.2mm)	62-008	62-6005	62-905
60-8360	2.47" (62.7mm)	62-008	62-6006	62-905
60-8370	2.57" (65.3mm)	62-008	62-6007	62-905
60-8380	2.67" (67.8mm)	62-008	62-6008	62-905
60-8390	2.77" (70.4mm)	62-008	62-6009	62-905

**Height can be reduced by .050" (1.27mm) by removing the shim that is located under bearing within the piston*

Installation drawing for 8000-Series HRBs is available at www.tiltonracing.com/technical/installation-drawings

Typical Applications

- Bulkhead-mounted inside transmission or bellhousing with adapter plate

Features

- **Mount Type:** 2-Bolt Pattern
- **Piston Area:** 0.93in^2 (600mm^2
- **Max Stroke:** .600" (15.24mm)
- **Ports:** AN3 (3/8"-24 thread)
- **Weight:** .60 lbs

9000-Series

Bearing Type: Radius-face
Contact Diameter: 1.75" (44mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
61-9002	1.95" (49.5mm)	62-031	62-9800	62-9980
61-9012	2.02" (51.3mm)	62-031	62-9801	62-9980

Typical Applications

- Slip fit over release bearing pilot tube

Features

- **Mount Type:** Slip fit onto 1.375" (35mm) pilot tube
- **Piston Area:** 1.215in^2 (784mm^2
- **Max Stroke:** .500" (12.7mm)
- **Ports:** AN3 (3/8"-24 thread)
- **Weight:** .70 lbs

700-Series

Bearing Type: Radius-face
Contact Diameter: 1.75" (44mm)

Part Number	Height*	Replacement Bearing	Replacement Piston	Seal Kit
61-772	1.64" (41.7mm)	62-031	62-6204	62-614
61-777	1.70" (43.2mm)	62-031	62-6205	62-614

700-Series Honda B/K-Series Release Bearing Kits

Release bearing kits designed for work with Tilton 7.25" 2-plate clutch-flywheel-assemblies (CFA) for Honda B-Series and K-Series applications. Includes 700-Series HRB, 75-Series 3/4" bore master cylinder, master cylinder mount adapter, steel braided hose fittings.

Application	Part Number
Tilton 7.25" 2-plate cerametallic CFA, Honda B/K-Series	**61-7770**
Tilton 7.25" 2-plate carbon CFA, Honda B/K-Series	**61-7720**

Installation drawing for 9000 & 700-Series HRBs is available at www.tiltonracing.com/technical/installation-drawings

HRB MOUNT ADAPTERS & MECHANHICAL RELEASE BEARINGS

6000-Series HRB Mount Adapters

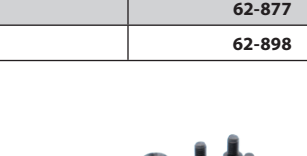
Mount adapters and collars designed to mount 6000-Series HRBs to transmission or bellhousing.

Description	Part Number
Adjustment sleeve, Chevy LS/LT, Tremec TKO/500/600	**61-628**
Adjustment sleeve, Ford, Tremec TKO500/600, T56 (pilot tube mount)	**61-627**
Adjustment sleeve, Universal (1.00" bore)	**61-629**
Mount adapter, adjustable height , Chevy, Tremec TKO 500/600	**62-693**
Mount adapter, adjustable height, Tremec T56 (2-bolt mount)	**62-899**
Mount Adapter, adjustable height, Tremec TR6060	**62-900**

8000-Series HRB Mount Adapters

Mount adapters and collars designed to mount 8000-Series HRBs to transmission or bellhousing.

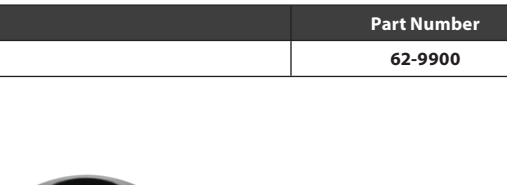
Description	Part Number
Mount adapter, Porsche 993/996/997, G-50-type transmission, .200"	**62-880**
Mount adapter, Porsche 993/996/997, G-50-type transmission, .285"	**62-882**
Mount adapter, Tremec T56, .590"	**62-874**
Mount adapter, Tremec T56, 1.34"	**62-877**
Mount adapter, Tremec T56, 1.92"	**62-898**



9000-Series HRB Mount Adapters

Mount adapters and collars designed to mount 9000-Series HRBs to transmission or bellhousing.

Description	Part Number
Mount adapter, Mitsubishi EVO7/8/9/10	**62-9900**



Mechanical Release Bearings

Release bearings designed to work with OEM release bearings systems and Tilton 7.25" clutches.

Description	Part Number
Release bearing, BMW E36/E46 5-spd, Tilton 7.25" 1-plate cerametallic clutch/flywheel	**62-020**
Release bearing, BMW E36/E46 5-spd, Tilton 7.25" 2-plate cerametallic clutch/flywheel	**62-021**
Release bearing, BMW E36/E46 6-spd, Tilton 7.25" 2-plate cerametallic clutch/flywheel	**62-022**
Release bearing, Ford Mustang (1979-2004), Tilton 7.25" 2/3-plate clutch/flywheel	**62-063**
Release bearing, Honda B/K-Series, Tilton 2-Plate cerametallic & carbon clutch/flywheel	**62-010**

Replacement Bearings

Bearing Type	Applications	Part Number
38mm Radius-face	60-13xx, 60-23xx,60-33xx, 60-43xx, 60-53xx, 60-63xx, 60-83xx HRBs	**62-008**
44mm Radius-face	60-12xx, 60-22xx, 60-32xx, 60-42xx, 60-52xx, 60-62xx, 60-82xx, HRBs	**62-031**
52mm Radius-face	60-1000, 60-3000, 60-3000, 60-4000, 60-5000. 60-60xx, 60-8000 HRBs	**62-002**
Flat-face	60-1100, 60-3100, 60-4100, 60-5100, 60-61xx, 60-8100 HRBs	**62-618**

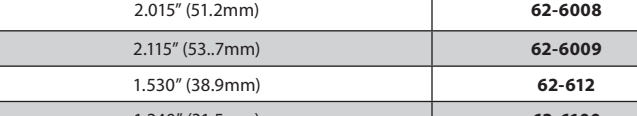
Seal Kits

Applications	Part Number
60-1xxx, 60-2xxx,60-33xxx, 60-4xxx, 60-5xxx, 60-6xxx, 60-8xxx HRBs	**62-905**
60-9002, 61-9012 HRBs	**62-9980**
61-772, 61-777	**62-614**

Pistons

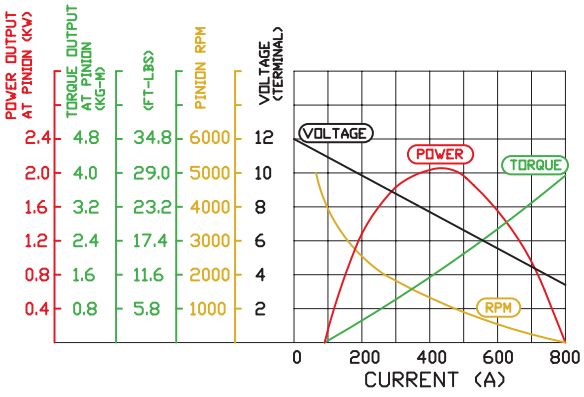
Bearing Type	Length	Part Number
38mm & 44mm Radius-face bearings	1.215" (30.9mm)	**62-6000**
38mm & 44mm Radius-face bearings	1.315" (33.4mm)	**62-6001**
38mm & 44mm Radius-face bearings	1.415" (35.9mm)	**62-6002**
38mm & 44mm Radius-face bearings	1.515" (38.5mm)	**62-6003**
38mm & 44mm Radius-face bearings	1.615" (41.0mm)	**62-6004**
38mm & 44mm Radius-face bearings	1.715" (43.6mm)	**62-6005**
38mm & 44mm Radius-face bearings	1.815" (46.1mm)	**62-6006**
38mm & 44mm Radius-face bearings	1.915" (48.6mm)	**62-6007**
38mm & 44mm Radius-face bearings	2.015" (51.2mm)	**62-6008**
38mm & 44mm Radius-face bearings	2.115" (53..7mm)	**62-6009**
52mm Radius-face bearing	1.530" (38.9mm)	**62-612**
Flat-face bearing	1.240" (31.5mm)	**62-6100**

Hoses & Fittings



Description	Part Number
Steel braided hose, 6000-Series HRB, swivel-type	**62-521**
Snap ring for 62-521	**5100-43**
Bleed fitting assembly for 6000-Series HRB	**62-522**
AN3 union fitting	**73-820**

40000-SERIES SUPER STARTERS



Features

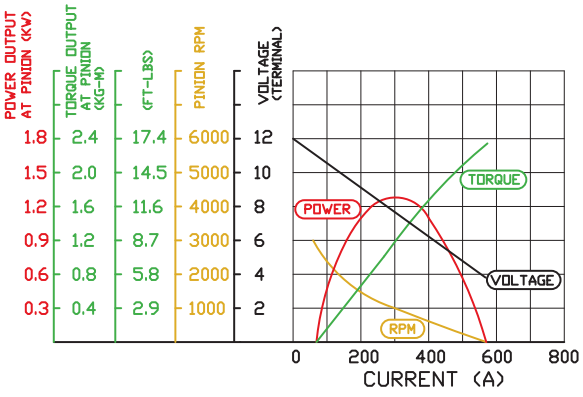
- Powerful 3.0 HP motor and gear reduction provides high torque to start large, high compression engines.
- Precision machined components are held to critical tolerances, ensuring high performance and a perfect fit.
- Internal vibration damping and electrical insulation provide longevity and maximum performance.
- High-strength (grade 10.9) socket head fasteners ensure rigid assembly and easy access for hex keys.
- Serrated belleville lock washers are used to ensure fasteners stay in place through severe vibrations and heat cycles.
- Thread locking compound is used on all fasteners and are secured to precise torque specifications.

Motor Power:	**3.0 HP (2.2 kW)**
Weight:	**12.0 lbs**
Rec. Engine Size:	**Up to 600 C.I.D.**
Rec. Compression Ratio:	**Up to 18.0 : 1**

40000-Series Super Starter

Application	Part Number	Replacement Solenoid	Replacement Drive Assembly	Replacement Pinion Kit
Bert/Brinn bellhousing	**54-40040**	54-422HD	54-043-044	54-043
Chevy V8, 153/168T RG	**54-40001**	54-422HD	54-421	54-442
Chevy V8, 153 /168T RG, reverse rotation	**54-41004**	54-422HD	54-421R	54-042R
Chevy LS/LSX/LT, 168T RG	**54-40011**	54-422HD	54-421	54-442
Chevy LS/LSX/LT, 153T RG	**54-40012**	54-422HD	54-421	54-442
Ford 289/302/351/390/427/428 (1967-up)	**54-40013**	54-422HD	54-421	54-442
Ford 351M/400/429/460	**54-40014**	54-422HD	54-421	54-442
Formula Ford, Hewland MK5/MK8, 110T RG	**54-40030**	54-422HD	54-020	54-443
Porsche 911/914/930 (pre-1989)	**54-41061**	54-422HD	54-421R	54-042R
QM Bellhousing, rear-mount, 110T RG	**54-41052**	54-422HD	54-421R	54-042R
Tilton 5.5" Bellhousing, rear-mount, 102T RG	**52-41062**	54-422HD	54-021R-13	54-042R-13
Tilton 5.5" Bellhousing, Rear-Mount, 99T RG	**54-41072**	54-422HD	54-421R	54-042R
Tilton 7.25" Bellhousing, rear-mount, 110T RG, 4 o' clock solenoid position	**54-41547**	54-422HD	Contact Tilton	Contact Tilton
Tilton 7.25" Bellhousing, rear-mount, 110T RG, 6 o' clock solenoid position	**54-41047**	54-422HD	Contact Tilton	Contact Tilton
Tilton 7.25" Bellhousing, rear-mount, 110T RG, 11 o' clock solenoid position	**54-41647**	54-422HD	Contact Tilton	Contact Tilton
VW-Type transaxle	**54-41053**	54-422HD	54-421R	54-042R

Installation drawing for 40000-Series Super Starter is available at www.tiltonracing.com/technical/installation-drawings



Features

- Lightweight yet powerful, the 1.6 HP motor provides fast torque to start high performance engines.
- Precision machined components are held to critical tolerances, ensuring high performance and a perfect fit.
- Internal vibration damping and electrical insulation provide longevity and maximum performance.
- High-strength (grade 10.9) socket head fasteners ensure rigid assembly and easy access for hex keys.
- Thread locking compound is used on all fasteners and are secured to precise torque specifications.

Motor Power:	**1.6 HP (1.2 kW)**
Weight:	**7.0 lbs**
Rec. Engine Size:	**Up to 400 C.I.D.**
Rec. Compression Ratio:	**Up to 10.5 : 1**

XLT-Series Super Starter

Application	Part Number	Replacement Solenoid	Replacement Drive Assembly	Replacement Mounting Hose
Cosworth BDA, FT transaxle	**54-50086**	54-422PM	54-5410	54-586
Formula Ford, Hewland MK5/MK8, 110T RG	**54-50030**	54-422PM	54-5410	54-530
Tilton 7.25" bellhousing, rear-mount, 110T RG	**54-61048**	54-422PM	Contact Tilton	54-6016A
Universal, no mount nose, 9T, 10-Pitch	**54-5110**	54-422PM	54-5410	NA
Universal, no mount nose, 10T, 12-Pitch	**54-5100**	54-422PM	54-5400	NA

Installation drawing for XLT Super Starters is available at www.tiltonracing.com/technical/installation-drawings

COOLER PUMPS

Intermittent Use Pumps

Pump Motor Duty Cycle: 1-2 hr with 15 minute cool down

P/N: 40-524 (Buna) | P/N: 40-525 (Viton)

Designed for applications where pump does not need to be used continuously, such as being turned on/off by the driver or by a relay at an established temperature. Options include Buna or Viton rubber diaphragm and check valve.

Continuous Duty Pumps

Pump Motor Duty Cycle: Up to 1000 hours continuous

P/N: 40-527 (Buna)

Designed for applications where the pump needs to operate continuously for longer than 2 hours at a time without cool down.

P/Ns:	**See List**
Pump head ports:	**3/8" NPT**
Recommended line size:	**AN-8**
Smallest line size:	**AN-4**
Flow Rate:	**1-2 GPM (varies by load)**
Maximum Pressure:	**50 PSI**
Continuous Duty Temp:	**40° – 160° F (4° – 71° C)**
Intermittent Use Max Temp:	**265° F (130° C)**
Power:	**12-Volt DC**
Dimensions (L x W x H):	
Intermittent Use Models:	**7.63" x 3.93" x 3.62"**
Continuous Duty Model:	**8.57" x 3.93" x 3.62"**
Weights:	
Intermittent Use Models:	**3.5 lbs. (1.6 kg)**
Continuous Duty Model:	**5.5 lbs. (2.5 kg)**

Typical Applications

- Transmission Cooler
- Differential Cooler
- Coolant Distribution
- Fuel Tank/Line Flush

Tilton cooler pumps are ideal for pumping oil through transmission and differential coolers. They can also be used for many other applications, such as emptying fuel tanks or circulating coolant. Each pump features an internal bypass valve and is self-priming up to 8-ft above the source from which it draws. Tilton cooler pumps are a positive displacement type of pump, so their output is directly proportional to the motor speed. For example, if a lighter load increases the motor speed by 25%, then the flow rate increases by 25%.

Buna model

Designed for use with standard oils and coolants.

Viton model

Designed for use with corrosive fluids such as alcohol.

Cooler Pumps	
Intermittent duty, Buna diaphragm	40-524
Intermittent duty, Viton diaphragm	40-525
Continuous duty, Buna diaphragm	40-527

Service Parts	*Part Numbers*
Diaphragm kit	
Buna	40-902
Viton	40-912
Check valve assembly	
Buna	40-934
Viton	40-935

600 series

Tilton 600-Series pedal assemblies are the benchmark for pedal assemblies of their type, offering great performance and value. 600-Series pedal assemblies are the categorized by the use of a traditional spherical bearing type balance bar and flange mounted master cylinders.

600-Series pedal assemblies are available in **Firewall-mount**, **Floor-mount**, **Overhung** and **Underfoot** configurations.

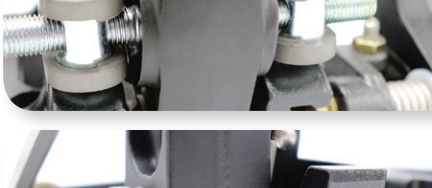
Features

Lightweight forged aluminum pedals provide high-strength and rigidity.

Lightweight permanent mold cast aluminum frame feature guide ramps that minimizing balance bar "tipping" for improved performance.

7/16" diameter spherical bearing type balance bar minimizes flex and provides solid pedal feel. Aluminum clevises feature low friction coating for durability and smooth action.

Pedal pivots feature wave washers to reduce lateral pedal movement and oil-impregnated bronze bushings for smoother operation and long service life.



Adjustable pedal ratio.

Adjustable pedal pad positions.

Adjustable clutch and/or throttle stops limit pedal travel (most models).

600-SERIES UNDERFOOT (2 & 3-PEDAL)

2-Pedal Underfoot
(Clutch, Brake & Throttle)

Pedal Ratio:	**5.4:1 – 6.9:1**
Pedal Pad Adjustment:	**Horizontal, Vertical, Angle**
Weight*:	**6.4 lbs (2.9 kg)**
Part Number:	**72-616**

2-Pedal Underfoot
(Clutch & Brake)

Pedal Ratio:	**5.4:1 – 6.9:1**
Pedal Pad Adjustment:	**Horizontal, Vertical, Angle**
Weight*:	**5.0 lbs (2.3 kg)**
Part Number:	**72-617**

2-Pedal Underfoot
(Brake & Throttle)

Pedal Ratio:	**5.0:1 - 6.2:1**
Pedal Pad Adjustment:	**Horizontal, Vertical , Angle**
Weight*:	**4.6 lbs (2.2 kg)**
Part Number:	**72-618**

**Does not include master cylinders*

Accessories

Description	Part Number
Throttle linkage kit, drive-by-wire (sensor not included)	**72-794**
Throttle linkage kit, mechanical type	**72-793**
Clevis, for use with throttle cables with 10-32 threaded end	**72-797**
Master cylinder, 76-Series	**See page 62 for options**
Remote brake bias adjuster	**See page 66 for options**
Replacement pedal pad with anti-slip tape, narrow	**72-6035**
Replacement pedal pad with anti-slip tape, wide	**72-6034**
Replacement anti-slip tape, narrow	**72-9014**
Replacement anti-slip tape, wide	**72-9026**

Installation drawing for 600-Series Underfoot Pedal Assembly is available at www.tiltonracing.com/technical/installation-drawings

3-Pedal Floor-mount
(Clutch, Brake & Throttle)

Pedal Ratio:	**5.3:1 - 5.8:1**
Pedal Pad Adjustment:	**Horizontal, Vertical**
Weight*:	**5.5 lbs (2.5 kg)**
Part Number:	**72-603**

2-Pedal Underfoot
(Clutch & Brake)

Pedal Ratio:	**5.3:1 - 5.8:1**
Pedal Pad Adjustment:	**Horizontal, Vertical**
Weight*:	**4.6 lbs (2.1 kg)**
Part Number:	**72-604**

**Does not include master cylinders*

Accessories

Description	Part Number
Throttle linkage kit, drive-by-wire (sensor not included)	**72-794**
Throttle linkage kit, mechanical type	**72-793**
Clevis, for use with throttle cables with 10-32 threaded end	**72-797**
Master cylinder, 76-Series	**See page 62 for options**
Master cylinder, 75-Series	**See page 62 for options**
Master cylinder, 74-Series	**See page 63 for options**
Master cylinder, 73-Series	**See page 63 for options**
Reservoir brake bias adjuster	**See page 66 for options**
Reservoir	**See page 65 for options**
Replacement pedal pad with anti-slip tape, narrow	**72-6035**
Replacement pedal pad with anti-slip tape, wide	**72-6034**
Replacement anti-slip tape, narrow	**72-9014**
Replacement anti-slip tape, wide	**72-9026**

Installation drawing for 600-Series Floor-mount Pedal Assembly is available at www.tiltonracing.com/technical/installation-drawings

600-SERIES OVERHUNG, FIREWALL & THROTTLE

**Does not include master cylinders*

2-Pedal Firewall-mount

(Clutch & Brake)

Pedal Ratio:	**5.0:1 – 6.2:1**
Pedal Pad Adjustment:	**Horizontal, Vertical, Angle**
Weight*:	**4.8 lbs (2.2 kg)**
Part Number:	**72-607**

2-Pedal Overhung

(Clutch & Brake)

Pedal Ratio:	**5.0:1 - 6.2:1**
Pedal Pad Adjustment:	**Horizontal, Vertical, Angle**
Weight*:	**4.8 lbs (2.2 kg)**
Part Number:	**72-608**

Throttle Pedal

Shown with optional P/N 72-791 throttle linkage kit

Pedal Ratio:	**5.0:1 - 6.2:1**
Pedal Pad Adjustment:	**Horizontal, Vertical , Angle**
Weight*:	**1.7 lbs (0.8 kg)**
Part Number:	**72-615**

Accessories

Description	Part Number
Throttle linkage kit, drive-by-wire (sensor not included)	**72-792**
Throttle linkage kit, mechanical type	**72-791**
Clevis, for use with throttle cables with 10-32 threaded end	**72-797**
Master cylinder, 76-Series	**See page 62 for options**
Master cylinder, 75-Series	**See page 62 for options**
Master cylinder, 74-Series	**See page 63 for options**
Master cylinder, 73-Series	**See page 63 for options**
Remote brake bias adjuster	**See page 66 for options**
Reservoir	**See page 65 for options**
Replacement pedal pad with anti-slip tape, narrow	**72-9035**
Replacement pedal pad with anti-slip tape, wide	**72-9034**
Replacement anti-slip tape, narrow	**72-9014**
Replacement anti-slip tape, wide	**72-9026**

Installation drawing for 600-Series Overhung/Firewall/Throttle Pedal Assembly is available at www.tiltonracing.com/technical/installation-drawings

800 series

Tilton 800-Series pedal assemblies merge the performance of Tilton's 900-Series pedal assemblies with the renowned value of Tilton's 600-Series pedal assemblies. 800-Series pedal assemblies are categorized by use of a high-efficiency spherical bearing type balance bar, combined with pivot-mount master cylinders for the brakes, limits balance bar motion to the horizontal plane to reduce brake pressure migration issues. All 800-Series pedal assemblies, except for Underfoot assemblies, utilize a traditional flange-mount master cylinder to help reduce costs.

800-Series pedal assemblies are available in **Firewall-mount**, **Floor-mount**, **Overhung** and **Underfoot** configurations. Underfoot configurations are also available with an optional slide system for quick pedal assembly position changes.

Features

Lightweight forged aluminum pedals provide high-strength and rigidity.

Lightweight permanent mold cast aluminum frame.

High-efficiency 7/16" balance bar, combined with pivot-mount master cylinders, limits motion to the horizontal plane to reduce brake pressure migration issues.

Pedal pivots feature wave washers to reduce lateral pedal movement and oil-impregnated bronze bushings for smoother operation and long service life.

Adjustable pedal ratio.

Adjustable pedal pad positions.

Adjustable clutch and/or throttle stops limit pedal travel (most models).

850-SERIES UNDERFOOT (NON-SLIDER, 2 & 3-PEDAL)

3-Pedal Underfoot
(Clutch, Brake & Throttle)

Pedal Ratio:	**4.8:1 - 6.1:1**
Pedal Pad Adjustment:	**Horizontal, Vertical, Angle**
Weight*:	**7.6 lbs (3.5 kg)**
Part Number:	**72-856**

2-Pedal Underfoot
(Clutch & Throttle)

Pedal Ratio:	**4.8:1 - 6.1:1**
Pedal Pad Adjustment:	**Horizontal, Vertical**
Weight*:	**6.2 lbs (2.8 kg)**
Part Number:	**72-857**

**Does not include master cylinders*

Optional false floor kit (72-853-FF)

Accessories

Description	Part Number
False floor kit	**72-853-FF**
Throttle linkage kit, drive-by-wire (sensor not included)	**72-794**
Throttle linkage kit, mechanical type	**72-793**
Clevis, for use with throttle cables with 10-32 threaded end	**72-797**
Master cylinder, 78-Series pivot mount	**See page 61 for options**
Master cylinder, 79-Series pivot mount , ABS compatible	**See page 61 for options**
Remote brake bias adjuster	**See page 66 for options**
Reservoir	**See page 65 for options**
Replacement pedal pad with anti-slip tape, narrow	**72-9035**
Replacement pedal pad with anti-slip tape, wide	**72-9034**
Replacement anti-slip tape, narrow	**72-9014**
Replacement anti-slip tape, wide	**72-9026**

Installation drawing for 850-Series Underfoot (non-slider) Pedal Assembly is available at www.tiltonracing.com/technical/installation-drawings

3-Pedal Underfoot
(Clutch, Brake & Throttle)

Pedal Ratio:	**4.8:1 - 6.1:1**
Pedal Pad Adjustment:	**Horizontal, Vertical, Angle**
Pedal Assembly Adjustment:	**14-position (7" total travel; 1/2" increments)**
Weight*:	**14.4 lbs (6.5 kg)**
Part Number:	**72-850**

2-Pedal Underfoot
(Clutch & Brake)

Pedal Ratio:	**4.8:1 - 6.1:1**
Pedal Pad Adjustment:	**Horizontal, Vertical, Angle**
Pedal Assembly Adjustment:	**14-position (7" total travel; 1/2" increments)**
Weight*:	**13.0 lbs (5.9 kg)**
Part Number:	**72-851**

**Does not include master cylinders*

72-850 included false floor

Accessories

Description	Part Number
Throttle linkage kit, drive-by-wire (sensor not included)	**72-794**
Throttle linkage kit, mechanical type	**72-793**
Clevis, for use with throttle cables with 10-32 threaded end	**72-797**
Master cylinder, 78-Series pivot mount	**See page 61 for options**
Master cylinder, 79-Series pivot mount , ABS compatible	**See page 61 for options**
Remote brake bias adjuster	**See page 66 for options**
Reservoir	**See page 65 for options**
Replacement pedal pad with anti-slip tape, narrow	**72-6035**
Replacement pedal pad with anti-slip tape, wide	**72-6034**
Replacement anti-slip tape, narrow	**72-9014**
Replacement anti-slip tape, wide	**72-9026**

Installation drawing for 850-Series Underfoot (slider) Pedal Assembly is available at www.tiltonracing.com/technical/installation-drawings

800-SERIES FLOOR-MOUNT (2 & 3-PEDAL)

3-Pedal Floor-mount
(Clutch, Brake & Throttle)

Pedal Ratio:	**5.3:1 - 6.8:1**
Pedal Pad Adjustment:	**Horizontal, Vertical**
Weight*:	**6.3 lbs (2.8 kg)**
Part Number:	**72-803**

2-Pedal Underfoot
(Clutch & Brake)

Pedal Ratio:	**5.3:1 - 5.8:1**
Pedal Pad Adjustment:	**Horizontal, Vertical**
Weight*:	**5.3 lbs (2.4 kg)**
Part Number:	**72-804**

**Does not include master cylinders*

Accessories

Description	Part Number
Throttle linkage kit, drive-by-wire (sensor not included)	**72-792**
Throttle linkage kit, mechanical type	**72-791**
Clevis, for use with throttle cables with 10-32 threaded end	**72-797**
Master cylinder, 76-Series (clutch)	**See page 62 for options**
Master cylinder, 78-Series pivot mount (brakes)	**See page 61 for options**
Master cylinder, 79-Series pivot mount, ABS compatible (brakes)	**See page 61 for options**
Remote brake bias adjuster	**See page 66 for options**
Reservoir	**See page 65 for options**
Replacement pedal pad with anti-slip tape, narrow	**72-6035**
Replacement pedal pad with anti-slip tape, wide	**72-6034**
Replacement anti-slip tape, narrow	**72-9014**
Replacement anti-slip tape, wide	**72-9026**

Installation drawing for 800-Series Floor-Mount Pedal Assembly is available at www.tiltonracing.com/technical/installation-drawings

2-Pedal Firewall-mount
(Clutch, Brake & Throttle)

Pedal Ratio:	**5.0:1 - 6.2:1**
Pedal Pad Adjustment:	**Horizontal, Vertical, Angle**
Weight*:	**5.5 lbs (2.5 kg)**
Part Number:	**72-807**

2-Pedal Overhung
(Clutch & Brake)

Pedal Ratio:	**5.0:1 - 6.2:1**
Pedal Pad Adjustment:	**Horizontal, Vertical, Angle**
Weight*:	**5.5 lbs (2.5 kg)**
Part Number:	**72-808**

Throttle Pedal
Shown with optional P/N 72-791 throttle linkage kit

Pedal Ratio:	**5.0:1 - 6.2:1**
Pedal Pad Adjustment:	**Horizontal, Vertical , Angle**
Weight*:	**1.7 lbs (0.8 kg)**
Part Number:	**72-615**

**Does not include master cylinders*

Accessories

Description	Part Number
Throttle linkage kit, drive-by-wire (sensor not included)	**72-792**
Throttle linkage kit, mechanical type	**72-791**
Clevis, for use with throttle cables with 10-32 threaded end	**72-797**
Master cylinder, 76-Series (clutch)	**See page 62 for options**
Master cylinder, 78-Series pivot mount (brakes)	**See page 61 for options**
Master cylinder, 79-Series pivot mount , ABS compatible (brakes)	**See page 61 for options**
Remote brake bias adjuster	**See page 66 for options**
Reservoir	**See page 65 for options**
Replacement pedal pad with anti-slip tape, narrow	**72-6035**
Replacement pedal pad with anti-slip tape, wide	**72-6034**
Replacement anti-slip tape, narrow	**72-9014**
Replacement anti-slip tape, wide	**72-9026**

Installation drawing for 800-Series Overhung/Firewall Pedal Assembly is available at www.tiltonracing.com/technical/installation-drawings

900-SERIES PEDAL ASSEMBLIES

900 series

Tilton 900-Series pedal assemblies provide the ultimate in racing pedal assembly technology, optimized to provide maximum braking performance and weigh savings. 900-Series pedal assemblies are the categorized by the use of an ultra-efficient trunnion type balance bar, combined with pivot-mount brake master cylinders, to virtually eliminate brake pressure migration issues. In addition, pedal frame and pedals are machined from billet aluminum for maximum weight savings.

900-Series pedal assemblies are available in **Firewall-mount**, **Floor-mount**, and **Overhung** configurations.

Features

Lightweight billet aluminum pedals provide high-strength and rigidity.

Lightweight one-piece billet aluminum frame.

Trunnion-type balance bar features needle bearings at all pivots, providing the highest level of efficiency and smooth operation.

Pedal pivots feature needle bearing and/or ball bearings for the ultimate in smooth operation and service life.

Adjustable pedal ratio.

Adjustable pedal pad positions.

Adjustable clutch and/or throttle stops limit pedal travel (most models).

3-Pedal Floor-mount
(Clutch & Brake Throttle)

Pedal Ratio:	**4.5:1 - 5.8:1**
Pedal Pad Adjustment:	**Horizontal, Vertical**
Weight*:	**5.0 lbs (2.3 kg)**
Part Number:	**72-903**

2- Pedal Overhung
(Clutch & Brake)

Pedal Ratio:	**4.5:1 - 5.8:1**
Pedal Pad Adjustment:	**Horizontal, Vertical**
Weight*:	**4.4 lbs (2.0 kg)**
Part Number:	**72-902**

2-Pedal Firewall-mount
(Clutch & Brake)

Pedal Ratio:	**5.0:1 - 6.2:1**
Pedal Pad Adjustment:	**Horizontal, Vertical**
Weight*:	**4.9 lbs (2.2 kg)**
Part Number:	**72-901**

**Does not include master cylinders*

Accessories

Description	Part Number
Throttle linkage kit for 72-903, drive-by-wire (sensor not included)	**72-792**
Throttle linkage kit for 72-903, mechanical type	**72-791**
Clevis, for use with throttle cables with 10-32 threaded end	**72-797**
Firewall Plate Kit for use with 72-901	**72-799**
Master cylinder, 78-Series pivot mount (clutch or brakes)	**See page 61 for options**
Master cylinder, 79-Series pivot mount , ABS compatible (brakes)	**See page 61 for options**
Remote brake bias adjuster	**See page 66 for options**
Reservoir	**See page 65 for options**

Installation drawing for 900-Series Floor-mount/Overhung/Firewall Assembly is available at www.tiltonracing.com/technical/installation-drawings

79-SERIES & 78-SERIES MASTER CYLINDER

79-Series Master Cylinder

Spherical bearing-mount master cylinder specifically designed for use with ABS systems. Unlike traditional master cylinders, 79-Series master cylinders do not utilize a conventional cut-off port, and instead, feature a unique port strategy with a mechanically opened cut-off/compensation path. This design greatly reduces the chance of seal damage caused by high pressure pulsations sent back to the master cylinder by the ABS system.

Features

- ABS compatible
- Spherical bearing mount with one-piece pushrod/piston eliminates side thrust loads on bore to provide long service life and consistent braking
- Billet aluminum body with low-friction coating
- Hand-built and blueprinted for cutoff port travel
- 1.1" stroke
- AN3 outlet port
- AN4 o-ring seal inlet port swivel fitting (sold separately)
- Fits Tilton 800-Series and 900-Series pedal assemblies/balance bars

Description	Part Number
79-Series master cylinder, 5/8" (15.88mm) bore	**79-625**
79-Series master cylinder, 7/10" (17.78mm) bore	**79-700**
79-Series master cylinder, 3/4" (19.05mm) bore	**79-750**
79-Series master cylinder, 13/16" (20.64mm) bore	**79-812**
79-Series master cylinder, 7/8" (22.23mm) bore	**79-875**
Inlet adapter, swivel type AN4 male end	**79-523**

78-Series Master Cylinder

Lightweight and compact spherical bearing-mount master cylinder. Direct replacement to Tilton 77-Series master cylinders

Features

- Spherical bearing mount with one-piece pushrod/piston eliminates side thrust loads on bore to provide long service life and consistent braking
- Billet aluminum body with low-friction coating
- Hand-built and blueprinted for cutoff port travel
- 1.1" stroke
- AN3 outlet port
- 9/16"-18 inlet port
- Fits Tilton 800-Series and 900-Series pedal assemblies/balance bars

Description	Part Number
78-Series master cylinder, 5/8" (15.88mm) bore	**78-625**
78-Series master cylinder, 7/10" (17.78mm) bore	**78-700**
78-Series master cylinder, 3/4" (19.05mm) bore	**78-750**
78-Series master cylinder, 13/16" (20.64mm) bore	**78-812**
78-Series master cylinder, 7/8" (22.23mm) bore	**78-875**
78-Series master cylinder, 15/16" (23.81mm) bore	**78-937**
78-Series master cylinder, 1" (25.40mm) bore	**78-1000**
Inlet adapter, straight, 9/16"-18 to AN4 male	**77-015**
Inlet adapter, banjo type, 9/16"-18 to AN4 male	**78-3400**

Installation drawing for 79-Series and 78-Series Master Cylinder is available at www.tiltonracing.com/technical/installation-drawings

76-Series Master Cylinder

Compact flange-mount master cylinder features dual outlet port options and a 7/16"-20 inlet port. Inlet port adapter can be removed to fit Tilton direct-mount reservoir (P/N 74-240)

Features

- Flange-mount onto pedal assemblies with 2.25" center-to-center mounting studs
- Aluminum alloy body is black anodized for corrosion resistance
- 1.1" stroke
- Dual AN3 outlet port options (rear & top). Top outlet port is deep for use with most banjo fittings. Rear outlet port is standard depth AN3 spec.
- 7/16"-20 inlet port
- Fits Tilton 600-Series and 800-Series (clutch only) pedal assemblies/balance bars

Description	Part Number
76-Series master cylinder, 5/8" (15.88mm) bore	**76-625**
76-Series master cylinder, 7/10" (17.78mm) bore	**76-700**
76-Series master cylinder, 3/4" (19.05mm) bore	**76-750**
76-Series master cylinder, 13/16" (20.64mm) bore	**76-812**
76-Series master cylinder, 7/8" (22.23mm) bore	**76-875**
76-Series master cylinder, 1" (25.40mm) bore	**76-1000**
Direct mount reservoir, 5.3 oz (158ml)	**74-240**

75-Series Master Cylinder

Compact flange-mount universal master cylinder kit. Universal kit includes 6.8 oz reservoir, remote mount reservoir components and fittings.

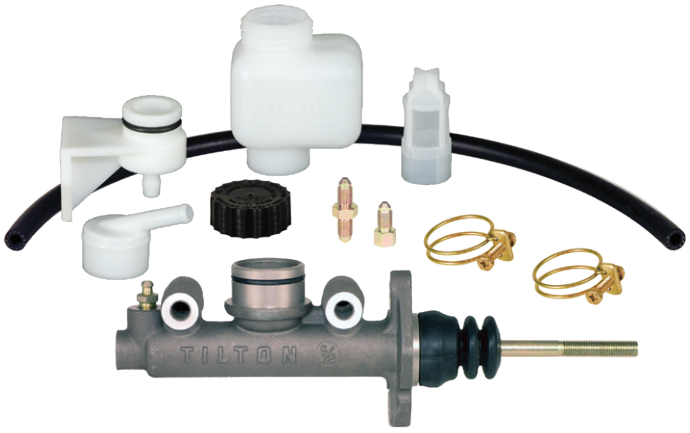
Features

- Flange-mount onto pedal assemblies with 2.25" center-to-center mounting studs
- Aluminum alloy body is black anodized for corrosion resistance
- 1.1" stroke
- AN3 outlet port
- Direct mount or remote-mount reservoir options
- Fits Tilton 600-Series and 800-Series (clutch only) pedal assemblies/balance bars

Description	Universal Master Cylinder Kit	Master Cylinder Only
75-Series master cylinder, 5/8" (15.88mm) bore	**75-625U**	**75-625**
75-Series master cylinder, 7/10" (17.78mm) bore	**75-700U**	**75-700**
75-Series master cylinder, 3/4" (19.05mm) bore	**75-750U**	**75-750**
75-Series master cylinder, 13/16" (20.64mm) bore	**75-812U**	**75-812**
75-Series master cylinder, 7/8" (22.23mm) bore	**75-875U**	**75-875**
75-Series master cylinder, 1" (25.40mm) bore	**75-1000U**	**75-1000**

Installation drawing for 76-Series and 75-Series Master Cylinder is available at www.tiltonracing.com/technical/installation-drawings

74-SERIES & 73-SERIES MASTER CYLINDERS



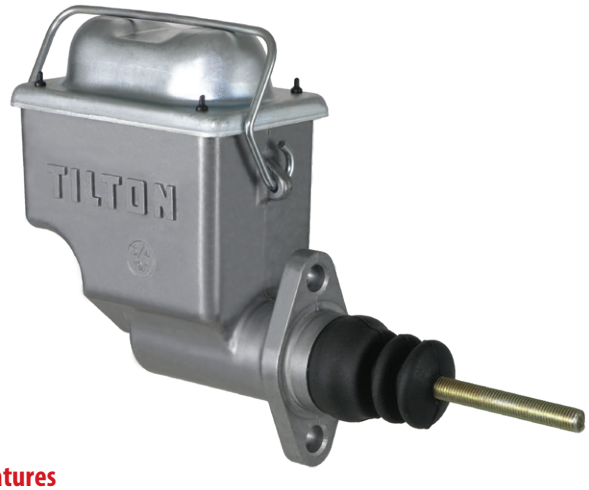
74-Series Master Cylinder

Continuously improved since their introduction in 1986, the venerable 74-Series universal master cylinder kits have become a trusted favorite of car builders and race teams due to the their reliability and value. Universal kit includes 6.8 oz reservoir, remote mount reservoir components and fittings.

Features

- Flange-mount onto pedal assemblies with 2.25" center-to-center mounting studs
- 3.00" center-to-center side mount option
- Aluminum alloy body is clear anodized for corrosion resistance
- 1.1" stroke
- Dual AN3 outlet port options. Includes bleed screw installed into top port.
- Direct mount or remote-mount reservoir options
- Fits Tilton 600-Series pedal assemblies/balance bars

Description	Universal Master Cylinder Kit	Master Cylinder Only
74-Series master cylinder, 5/8" (15.88mm) bore	**74-625U**	**74-625**
74-Series master cylinder, 7/10" (17.78mm) bore	**74-700U**	**74-700**
74-Series master cylinder, 3/4" (19.05mm) bore	**74-750U**	**74-750**
74-Series master cylinder, 13/16" (20.64mm) bore	**74-812U**	**74-812**
74-Series master cylinder, 7/8" (22.23mm) bore	**74-875U**	**74-875**
74-Series master cylinder, 1" (25.40mm) bore	**74-1000U**	**74-1000**
74-Series master cylinder, 1 1/8" (28.58mm) bore	**74-1125U**	**74-1125**



73-Series Master Cylinder

Designed for applications that require large fluid capacity in a leak-proof integral reservoir. 10 oz fluid chamber is completely sealed from the outside environment while still allowing fluid level changes.

Features

- Flange-mount onto pedal assemblies with 2.25" center-to-center mounting studs
- High pressure die-cast aluminum alloy body provides machined-look finish
- Integral 10 oz reservoir feature an expanding bellow to keep elements away from brake fluid
- 1.1" stroke
- 1/8" NPT outlet port
- Fits Tilton 600-Series pedal assemblies/balance bars

Description	Part Number
73-Series master cylinder, 3/4" (19.05mm) bore	**73-750**
73-Series master cylinder, 7/8" (22.23mm) bore	**73-875**
73-Series master cylinder, 1" (25.40mm) bore	**73-1000**

Installation drawing for 74-Series and 73-Series Master Cylinder is available at www.tiltonracing.com/technical/installation-drawings

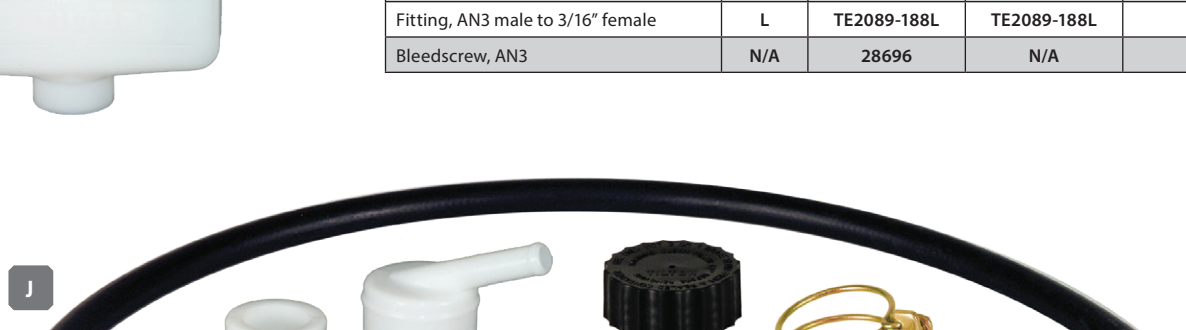
Master Cylinder Rebuild Kits

Includes master cylinder internals and dust boot

Bore Size	74-Series	75-Series	76-Series	78-Series	79-Series
5/8" (15.88mm)	74-625RK	75-625RK	76-625RK	78-625RK	79-625RK
7/10" (17.78mm)	74-700RK	75-700RK	76-700RK	78-700RK	79-700RK
3/4" (19.05mm)	74-750RK	75-750RK	76-750RK	78-750RK	79-750RK
13/16" (20.64mm)	74-812RK	75-812RK	76-812RK	78-812RK	79-812RK
7/8" (22.23mm(	74-875RK	75-875RK	76-875RK	78-875RK	79-875RK
15/16" (23.81mm)	N/A	N/A	N/A	78-937RK	N/A
1" (25.40mm)	74-1000RK	75-1000RK	76-1000RK	78-1000RK	N/A
1 1/8" (28.58mm)	74-1125RK	75-1125RK	N/A	N/A	N/A

Master Cylinder Service Parts

Description	Label	74-Series	75-Series	76-Series
Reservoir, 4.0 oz	A	74-202	74-202	N/A
Reservoir, 6.8 oz	B	74-203	74-203	N/A
Reservoir, 10.7 oz	C	74-204	74-204	N/A
Filter, 4.0 and 6.8 oz reservoirs	D	74-210	74-210	N/A
Filter, 10.7 oz reservoirs	E	74-211	74-211	N/A
Cap, reservoir	F	74-207	74-207	N/A
Clamp, reservoir	G	74-208	74-208	N/A
O-ring, master cylinder/reservoir	N/A	74-212-B	74-212-A	N/A
Pushrod	N/A	74-400	75-030	75-030
Remote reservoir mount bracket with o-ring	H	74-212	74-212	N/A
Remote inlet adapter	I	74-200	74-200	N/A
O-ring, remote mount bracket	N/A	74-212-A	74-212-A	N/A
Hose kit, 96", incl. 6 clamps	N/A	74-221	74-221	N/A
Hose 24"	J	74-214	74-214	N/A
Hose, bulk, sold by the foot	N/A	72-502	72-502	N/A
Fitting, union, AN3 male/male	K	73-820	73-820	73-820
Fitting, AN3 male to 3/16" female	L	TE2089-188L	TE2089-188L	N/A
Bleedscrew, AN3	N/A	28696	N/A	N/A



RESERVOIRS (3-CHAMBER & 1-CHAMBER)

Features

- Fiberglass reinforced nylon body
- Gasket-sealed removable lid allows for easy cleaning
- Reservoir lid features safety screens to prevent foreign objects from falling into chambers
- Leak-proof baffle design insures that fluid remains in reservoir
- Standard capacity and low profile options available for AN4 type reservoirs

3-Chamber Reservoirs

Incorporates the clutch, front brake and rear brake fluid reservoirs into one convenient package. 2-hole mount provides simple installation onto firewall/bulkhead. The three separate internal chambers allow for complete evacuation of one chamber without affecting the remaining two chambers. Standard capacity reservoirs are available with either hose-barb or AN4 fitting connection. Low profile reservoirs is only available with AN4 fitting connection.

Reservoir Type	Rear Brake Chamber	Front Brake Chamber	Clutch Chamber
Standard Capacity	8.9 oz (263ml)	10.3 oz (313 ml)	4.6 oz (136 ml)
Low Profile	4.0 oz (117ml)	6.1 oz (182 ml)	2.0 oz (59ml)

Description	Part Number
3-chamber reservoir, standard capacity, hose barb connection	**72-576**
3-chamber reservoir, standard capacity, AN4 connection	**72-577**
3-chamber reservoir, low profile, AN4 connection	**72-578**
Hose kit for 72-576 reservoir, includes 96" of hose and 6 hose clamps	**72-221**
Replacement cap, less baffle	**72-576-6**
Replacement baffle for cap, funnel type	**72-576-4**
Replacement lid gasket	**72-576-3**

Single Chamber Reservoirs

Single chamber reservoirs with 5.3 oz (158 ml) fluid capacity. Available with AN4 fitting for remote-mount applications or with a 15/16"-20 adapter for direct mounting onto Tilton 76-Series master cylinders. Includes filter.

Description	Part Number
3-chamber reservoir, standard capacity, hose barb connection	**74-230**
3-chamber reservoir, standard capacity, AN4 connection	**74-240**
Replacement cap	**72-207**
Replacement filter	**74-211**

Remote Brake Bias Adjuster

Designed to enable remote front & rear brake bias adjustments by driver during competition. Standard model feature a plastic adjustment knob (red or yellow) with two spring-loaded nylon plungers on a stamped detent plate. Premium model features a billet aluminum knob and bulkhead-mount housing which incorporates dual detent system, with spring loaded steel ball bearings, for smooth and precise action. All models a high-quality 6-foot cable housed in a "wind up" resistant tubing. Includes couplers to fit 3/8"-24 and 7/16"-20 balance bars.

Description	Part Number
Remote brake bias adjuster, standard model, yellow knob	**72-508**
Remote brake bias adjuster, standard model, red knob	**72-509**
Remote brake bias adjuster, premium model, black	**72-408**

90 Degree Couplers

Designed to connect remote brake bias adjusters to balance bars at a 90 degree angle. This enables the adjuster's cable to be routed from the rear so it does not interfere with the clutch or throttle pedal.

Description	Part Number
90 degree coupler, 3/8"-24 balance bars	**72-560**
90 degree coupler, 7/16"-20 balance bars	**72-561**

Brake Proportioning Valves

Designed to reduce brake line pressure to a particular wheel or wheels. Maximum line pressure decrease is approximately 60%. Features a billet aluminum body that can either bulkhead or panel mounted. Lever-type proportioning valves features 7 per-determined pressure reduction settings. Screw-type proportioning valves provide fine pressure reduction adjustments. Available with AN3 ports or 10mm x 1.0 ports.

Description	Part Number
Proportioning valve, lever-type, AN3 ports	**90-1000**
Proportioning valve, lever-type, 10mm x 1.0 ports	**90-1003**
Proportioning valve, screw-type, AN3 ports	**90-2000**
Portioning valve, screw-type, 10mm x 1.0 ports	**90-2003**
Rebuild kit for portioning valve	**90-1100**

Flow Control Valve

Designed to reduce shock to the driveline by allowing the clutch to slip slightly during engagement. Fluid flow is not restricted during clutch disengagement. Therefore, shift times are still quick and pedal feel does not change. Includes three office sizes (.021, .028" & .040") that enables clutch engagement to be tuned.

Description	Part Number
Flow control valve, AN3 fittings	**90-5000**
Replacement orifice, .021"	**90-5100-021**
Replacement orifice, .028"	**90-5100-028**
Replacement orifice, .040"	**90-5100-040**

Master Cylinder Bore Sizing Form

Please provide all the information listed on the form below. Email or fax the completed form to Tilton. This information will be used for calculation purposes so that we can make the best suggestion for master cylinder bore sizing. For best results, the most accurate information needs to be provided.

Note: *Please note that the master cylinder suggestions provided by Tilton are predictions based upon calculations and should be taken as an estimated starting point only. They are not guaranteed. The vehicle should be tested at slow speeds in a controlled environment to confirm braking performance. If needed after testing, further suggestions can then be given based upon your feedback.*

CONTACT

Name:

Company:

Telephone number:

Email address:

BRAKE SYSTEM

Vehicle Make/Model:

Front Brake Details

Number of pistons within each front caliper:

Are pistons on one side or both sides of caliper:

Diameter of pistons on one side of caliper (list all):

Piston 1: Piston 2:

Piston 3: Piston 4:

Front rotor diameter:

ABS (Yes or No):

Rear Brake Details:

Number of pistons within each rear caliper:

Are pistons on one side or both sides of caliper:

Diameter of pistons on one side of caliper (list all):

Piston 1: Piston 2:

Piston 3: Piston 4:

Rear rotor diameter:

ABS Manufacturer:

GENERAL INFO

What is the motion ratio of your brake pedal (5.5:1, 6.2:1, etc)**?**

OR **If using a Tilton pedal assembly, please provide part number:**

Vehicle weight (with driver and fuel)**:**

Vehicle Weight Distribution (with driver and fuel)**: Front %** **Rear %**

Vehicle wheelbase:

Preferred pedal effort (85, 100 or 110 lbs)**:**

Front tire diameter (outer)**:**

Rear tire diameter (outer)**:**

Type of tire (brand, model/compound)**:**

What is the vehicle being used for (street, road racing, circle track, drag, etc)**?:**

FAX: 805.688.2745 // ***EMAIL:*** sales@tiltonracing.com

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Where to Buy?

Tilton products are sold through a worldwide network of dealers. For information on where to buy Tilton products, or for a list of Tilton dealers, please contact us: ***web:*** *www.tiltonracing.com* ***email:*** *sales@tiltonracing.com* ***phone:*** *805.688.2353*.
We can direct you to a dealer that is near you and/or stocks the product you are looking for.

Note: Tilton will sell service parts or replacements parts not typically stocked by Tilton dealers directly to customers.

Technical Support

Tilton offers top-level technical support to customers, before and after the sale. Our technical support staff is very experienced, most with 20+ years at Tilton. For technical support, please contact us: ***email:*** *technical@tiltonracing.com* ***phone:*** *805.688.2353*

Custom Parts

Tilton does make custom parts on a made-to-order basis. These parts are sold directly through Tilton.
For further information on custom part orders, please contact us: ***email:*** *sales@tiltonracing.com* ***phone:*** *805.688.2353*

Service

Tilton offers rebuild services on most of their products. We require that a Return Merchandise Authorization (RMA) number be obtained prior to sending products to Tilton for service. To obtain an RMA number, please contact us: ***email:*** *sales@tiltonracing.com* ***phone:*** *805.688.2353*

Limited Warranty

There is no warranty stated or implied, due the unusual stresses placed on racing/performance parts and because we have no control over how they are used. This warranty is in lieu of all other warranties expressed or implied, including the warranty of merchantability and fitness for use and all other obligations or liabilities on the Company's part. The obligation of TILTON ENGINEERING under this warranty shall be limited to the part or parts shown to be defective and the Company will not be responsible for any damage or loss caused by delays, failures or any consequential damage arising from any cause whatsoever, nor for labor, transportation or any other charges incurred in the replacement or repair of said defective part or parts.

This warranty to repair or replace is the only warranty expressed, implied or statutory on which the buyer purchases the Company's products. All other damages and warranties, statutory or otherwise, being expressly waived by the buyer.

TILTON ENGINEERING's warranty will not be in force for any merchandise which has not been paid for in full to the Company, or which has been subject to accident, negligence, alteration, abuse or misuse. The Company makes no warranty whatsoever with respect to accessories or parts not supplied by TILTON ENGINEERING.

TILTON ENGINEERING neither assumes, nor authorizes any person to assume for it, any other liability except as otherwise expressly provided for herein, in connection with the sale of TILTON ENGINEERING parts, products or services.

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