PRO RACE
PERFORMANCE PRODUCTS

Harmonic Dampers

Ultimate Dampers @ Value For Money

PRO RACER

The Ultimate SFI Spec 18.1 Harmonic Damper. Spin tested to 18,000 rpm.

PRO SPORT

The Best Value SFI Spec 18.1 Harmonic Damper.

PRO STREET

The Superior Nodular Iron OE Style Harmonic Damper.

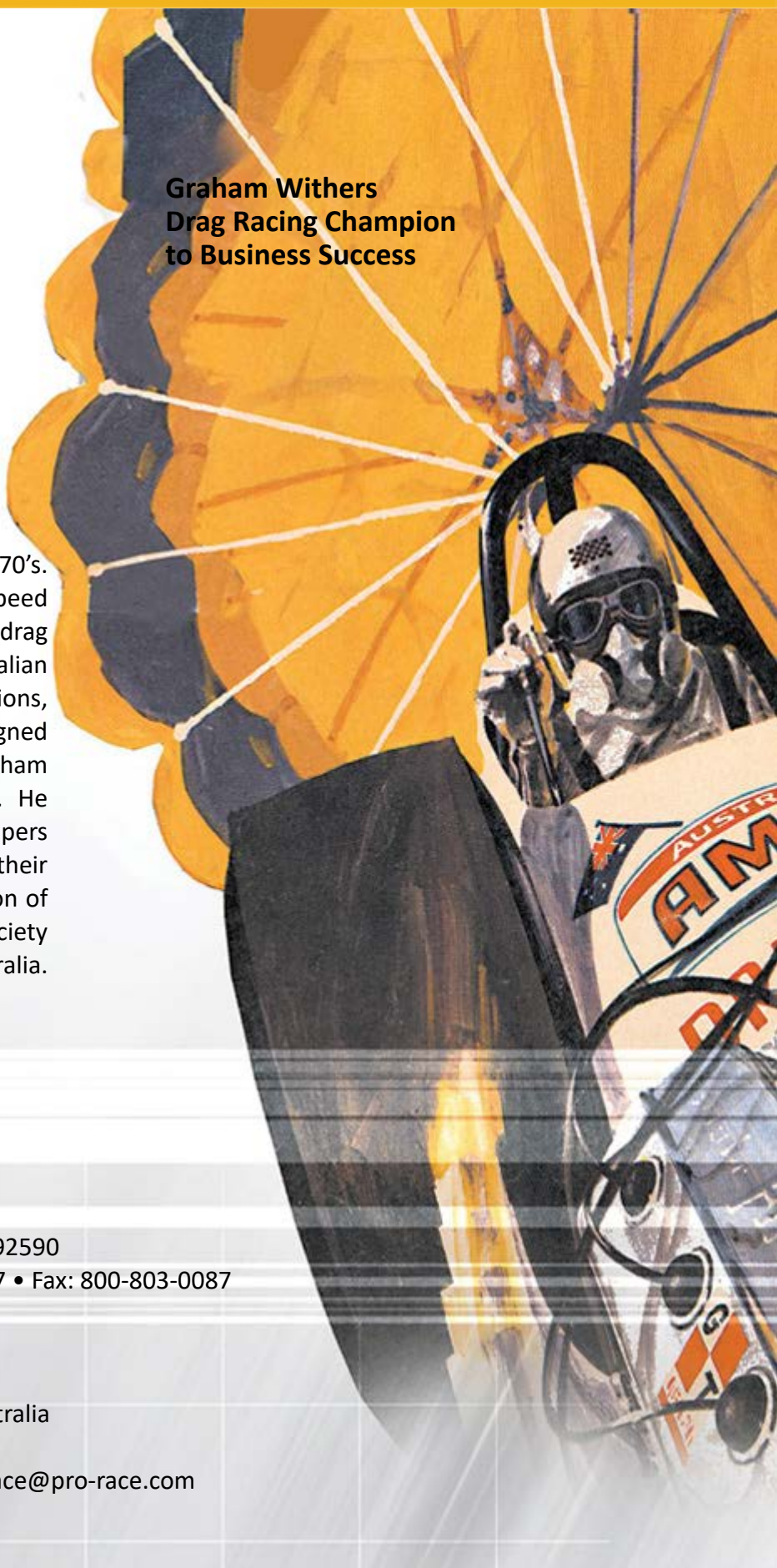
30 YEARS
1986 GRAHAM WITHERS SPEED SHOP 2017

www.pro-race.com

GRAHAM WITHERS - ERA 1970

President of PRO/RACE Performance Products Graham Withers was Australia's premier Drag Racing Champi-on from the 1960's and 1970's. During his racing career, Graham held every speed outright and elapsed time record at every drag racing strip across Australia. He was Australian National Drag Racing Champion on three occasions, in a front engine race car that he self-designed and built. After retiring from the sport Graham em-barked on a successful business career. He developed one the first SFI Spec Harmonic Dampers in the late 1980's. These products have proven their durability and quality. He has also held position of International Ad-visor representing the Society of Automotive Engineers USA and Australia.

Graham Withers
Drag Racing Champion
to Business Success



PERFORMANCE PRODUCTS

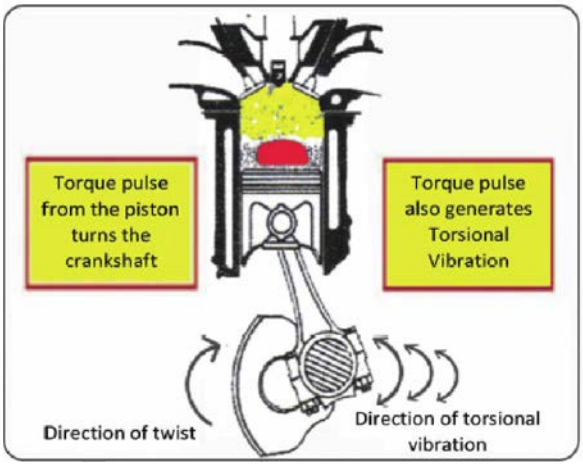
North American Operations - Sally Austin
Tel: +1 888-497-2231
North American Warehouse - Jill Hardy
42295 Avenida Alvarado, Unit 3 Temecula, CA 92590
Contact: Tel: 800-977-0767 • Tel: 951-719-1137 • Fax: 800-803-0087
Tech Advisor - Ed Lyons
734-740-0922 • Email: tech@pro-race.com
HQ Australia - Glenn Paine
59 Shearson Cres. Mentone, Victoria 3194 Australia
Tel: +613 9584 3522 • Fax: +613 9584 5194
E-Mail: australia@pro-race.com • E-Mail: prorace@pro-race.com
Web: www.pro-race.com

See page 16 (back page) for more details

PRO/RACE PRODUCES HIGH PERFORMANCE TORSIONAL VIBRATION DAMPERS FOR A WIDE RANGE OF ENGINES

WHAT IS TORSIONAL VIBRATION?

In the internal combustion piston engine, each power impulse imparts a torque, or rotating force to the crankshaft. Because one end of the crankshaft resists this rotation, full-power torque impulses can overcome the inherent stiffness of the crankshaft causing it to twist. As the power pulse ceases, the crankshaft springs back in the opposite direction to "undo" the twist it springs back past its at-rest position and a twisting stress or torsion is briefly present in the opposite direction. Each crankshaft has a natural frequency, If a crankshaft is held stationary at one end and a rotating load is applied to the other end, a twisting stress is created in the crankshaft. If the rotating load is released, the crankshaft again springs back past its at-rest position and this oscillation continues in reducing amounts until the crankshaft stops oscillating. The speed of the oscillation is referred to as the crankshaft's natural frequency.



This oscillation is referred to as torsional vibration and it generally occurs in the engine's RPM range where the torque impulses are greatest. The torsional vibration occurs during the engine's rotation, although it is independent of the rotation. At certain engine speeds the frequency of the torsional vibration can match the natural frequency of the crankshaft, creating a resonant (or harmonic) state, leading to massive increases in the magnitude of the torsional vibrations, generally with catastropic results, including damage to the camshaft drive train, damage to belt-driven accessories and fatigue failure of the crankshaft.

HOW DO TORSIONAL VIBRATION DAMPERS WORK?

The torsional vibration damper has been developed to prevent resonance developing between these two frequencies. It is fitted to the front of the crankshaft. This is where most of the torsional vibrations arrive, due to the fact that the rear of the crankshaft has a heavy flywheel and a large load from its connection to the road. The basis of the torsional vibration damper is an inertia ring, coupled to the front of the crankshaft via an elastomer ring and a metal hub. At times of extreme torsion in the crankshaft, the inertia ring is accelerated in one direction by this torsion. The elastomer allows the inertia ring to continue rotating when the front of the crankshaft reverses its direction of twist. The inertia ring reaches the elastic limit of the elastomer and reverses its direction of rotation, meeting the crankshaft and hub coming in the opposite direction. These opposing torsional impacts between the inertia ring and the crankshaft hub continue, thereby reducing the magnitude of the torsional vibration in the crankshaft.

CRANKSHAFT TORSIONAL VIBRATION IS THE "HIDDEN ENEMY" OF ENGINE DURABILITY AND RELIABILITY.

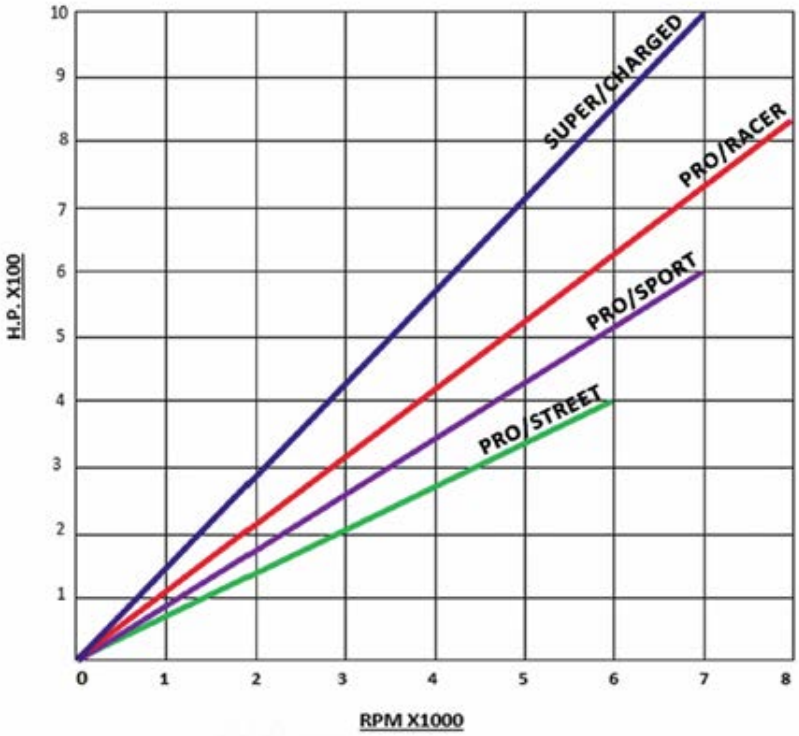
NEW!

SUPER/CHARGED
74K SERIES MODELS

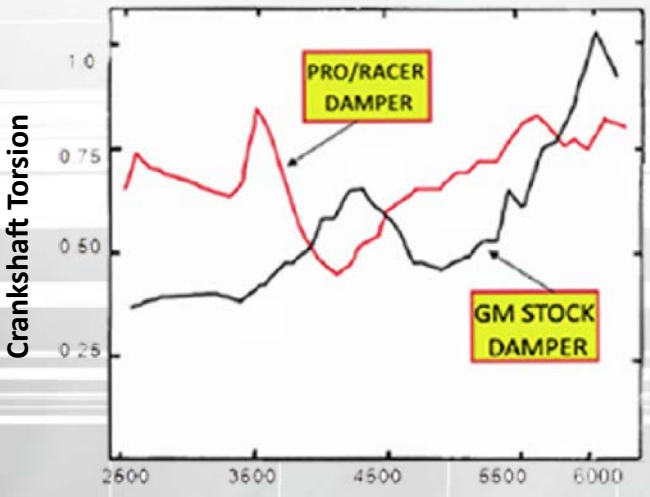
PRO/RACER
64K/73K SERIES MODELS

PRO/SPORT
34K/35K SERIES MODELS

PRO/STREET
23K/25K SERIES MODELS



Note. This graph is a guide only. Modifications as simple as a change in the compression ratio will alter the amplitude of the crankshaft torsional vibration, therefore variables such as valve timing, crankshaft design, number of counterweights and main bearing journal diameter will also effect the amplitude of torsional vibration. A lightweight (lower inertia value) damper will have less "absorption" performance and will overheat the elastomer should the engine be used outside of its parameters. It is better to be over damped than under damped.



NOTE: GM 8 inch stock damper compared to PRO/RACER 6.61 inch damper

Engine Dynamometer testing is used by leading damper manufacturers to ensure that their dampers are correctly tuned for each engine. The graph shows crankshaft torsional vibration across the full RPM range for a GM SB 385 HP, 350 cubic inch V8 engine. With the GM 8 inch stock damper, a large amount of torsion occurs at approximately 6,000 RPM it should be mentioned that OE stock dampers don't address vibrations at high RPM's, because most street engines rarely see the high RPM range. For racing applications, however, this vibration could do serious engine damage, so PRO/RACER damper is tuned to drastically reduce this high RPM Torsion AC vibration, at the expense of a smaller vibrational peak occurring at about 3,500 RPM. This lower peak RPM is well below the speed relevant to the crankshafts natural frequency.

PRO/RACER DAMPERS

"ALL-STEEL" dampers are a direct replacement for the cast iron stock damper which is no longer permitted by most racing sanctioning bodies due to the danger of fracture and high speed disintegration or separation of the inertia ring from the hub. This problem is eliminated with a PRO/RACER Damper.

PRO/RACER FEATURES:

- "All steel" construction.
- Exceeds SFI Spec. 18.1 Spin tested to 18,000RPM.
- Specially formulated bonded* elastomer.
- 100% CNC machined.
- Billet steel inertial ring and hub.
- Splined inertia ring and hub.

Note. splines on hub and ring.
The cutaway above shows internal splines which doubles the contact area, eliminating any possible movement of the outer ring. The outside diameter of the inner hub is splined as is the inner diameter of the outer ring. The elastomer is chemically bonded to the splined areas on Race units. This forms a very positive bond between the elastomer and the steel with double the contact.

PRO/RACER PART NO. #74267 for supercharged applications

PRO/RACER SUPERCHARGED DAMPERS

The PRO/RACER "ALL-STEEL" harmonic damper is also a must for all belt driven supercharger applications due to the additional torque loads on the damper hub and key way which results in failure in many blower installations with a stock damper. PRO/RACER now offers specific models for Supercharged small block #74265 and #74270 and big block Chevy #74267 and #74268 engines. These dampers include dual keyways and a more robust hub to increase the "hoop strength" of the damper. They also feature six tapped holes to accept most blower pulleys. The SB Ford #74269 version is internally balanced engines and features 3 and 4 pulley bolt pattern and extra 1/4" keyway.

PRO/SPORT DAMPERS

The PRO/SPORT range of harmonic dampers provides race quality, HIGH performance dampers at near replacement part price and are the Ideal dampers for all Street Machines and Hot Rods that look good whilst also meet the tough SFI Spec #18.1, so it is legal to race at most racing Sanctioning Bodies in the World. The SFI #18.1 requires PRO/SPORT dampers to be spin Tested to 12500 RPM for one hour and are made from high quality carbon steel, so the PRO/SPORT harmonic damper is ready for the Race track, Performance or Street Applications.

Refer to page 9

PRO/RACER HARMONIC DAMPER RANGE

- Billet steel construction.
- Precision CNC machined.
- Exceeds SFI Spec #18.1
- Molded high temperature chemically bonded elastomer
- Bolt-in counterweight on all externally balanced models.
- Counterweights also sold individually.
- 60 degree engraved timing marks (Chev Models) and two sets of 40 degree (Ford Models).

PRO/RACER
PART NO. #64270
SB-Ford 5.0L

PRO/SPORT PART
NO. #34264
BB-Chevy 454

Refer to page 11

PRO/SPORT HARMONIC DAMPER RANGE

- Billet steel construction.
- New design but with similar features to PRO/RACER dampers.
- Exceeds SFI Spec #18.1
- Significantly lower price than competitors dampers.
- SB ford has 3 sets of 40 degree timing marks.
- PRO/SPORT Under Drive applications including 25% under drive models for Ford 4.6L/5.4L, Chevrolet LS1/LS2/LS3, GM truck 4.8L/5.3L/6.0L and under-drive models for Chrysler Hemi 5.7L/6.1L

Refer to page 14

PRO/STREET HARMONIC DAMPER RANGE

- Cast from nodular iron, 30% stronger than standard Grey iron.
- Bonded rubber construction.
- External balanced models include bolt-in counterweights.
- SB Ford feature 3 sets of 40 degree rolled in timing marks, pulley spacer kits included.

PRO/STREET
PART NO. #24262
SB-Chevy 283-350

PRO RACER

For part numbers refer to page 9

PRO/RACER DAMPER
#64270 SB-Ford 5.0L

PRO/RACER DAMPER
#64265 SB-Chevy 283-350

PRO/RACER DAMPER
#74267 BB-Chevy 396-427

PRO/RACER DAMPER
#64278 SB-Chrysler 318-360

PRO SPORT

For part numbers refer to page 11

PRO/SPORT DAMPER
#34270 SB-Ford 5.0L

PRO/SPORT DAMPER
#34277 SB-Chrysler

PRO/SPORT DAMPER
#34265 SB-Chevy 283-350

PRO/SPORT UNDER-DRIVE
SFI SPEC DAMPER
25% Under Drive Pulley
Kit

PRO STREET

For part numbers refer to page 14

PRO/STREET DAMPER
#24262 SB-Chevy 283-350

PRO/STREET DAMPER
#24263 - BB Chevy 454-502

PRO/STREET DAMPER
#24272 BB-Ford 429-460

PRO/STREET DAMPER
#24278 SB-Chrysler 318-360

FOR THE FULL RANGE OF MODELS VISIT WWW.PRO-RACE.COM

REMOVABLE COUNTERWEIGHTS

PRO/RACER Harmonic dampers are supplied in two styles, those for internally balanced engines and those for externally balanced engines. Externally balanced engines have a counterweight bolted into the hub of the damper. The advantage of having a removable counterweight in the hub eliminates the possibility of having the counterweight mass move from its position. The PRO/RACER damper for internally and externally balanced small block and big block Chevys and for small block Chryslers are identical, except the counterweight. For example, if you have a PRO/RACER damper for 400 small block Chevy you can remove the counterweight and the damper will work perfectly for a 350 Chevy. Conversely if you have the 350 damper and want to use it on a 400 you can now purchase the proper PRO/RACER counterweight and bolt it into your 350 damper and its now a 400 damper. All SB Ford dampers are externally balanced with a counterweight. This counterweight can be removed for use on internally balanced engines.

BALANCING

All PRO/RACER Harmonic dampers are sold correctly balanced from our factory. If you have your engine or crank balanced, it is not necessary to re-balance the damper. If you are just making a straight swap from a stock damper to PRO/RACER as long as the factory balance of your original damper has not been changed, it will directly interchange.

EXTREMELY HIGH QUALITY STANDARDS

PRO/RACER dampers are manufactured to extremely high quality standards that are constantly monitored and checked at every step of the manufacturing process. Our quality levels in bore tolerance and the finish of the machined surfaces, in particular the critical oil seal area far exceed OE standards and those competitive models. 60 degrees of computer generated timing marks (40 degrees on Ford units) are accurately laser engraved. PRO/RACER Harmonic dampers also feature engraved timing marks at 0, 90, 180 and 270 degrees (except Ford models) Once assembly of the damper is complete, the entire damper is highly polished and then treated with clear protective coating providing an extremely attractive appearance. Our instruction sheets make installation a snap. PRO/RACER dampers are designed for direct replacement of the stock damper, spacer kits are included where required for accessory pulley alignment. PRO/RACER harmonic dampers will accept most crank trigger wheels.

EXTREMELY LOW WARRANTY RATE

PRO/RACE harmonic dampers are so well made that we proudly claim the lowest warranty rate for any high performance harmonic damper. You can buy a PRO/RACER damper with the utmost confidence that it will provide many, many years of reliable, trouble-free performance.

EXCEEDS SFI SPECIFICATION #18.1

This specification is enforced by most racing sanctioning bodies to assure that the dampers conform to specified standards. While the SFI test is quite stringent and requires the Damper to be spin tested at a speed of 12,000 rpm for a period of one hour, the PRO/RACER Damper has been tested at a speed of 18,000 rpm, substantially exceeding SFI requirements.

CAUTION: PRO/STREET OR PRO/SPORT Counterweights are not interchangeable with PRO/RACER Counterweights

Note. PRO/RACER counterweight fitted to #64266 Chevrolet V8-400

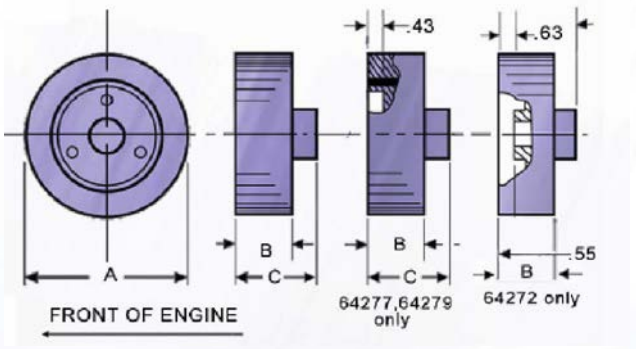
Damper will NOT clear the Milodon cast aluminium front timing cover.

*Counterweights will fit PRO/RACER and supercharger models

**To fit 61-68 requires 69 model timing chain cover, water pump.

***Fits Chrysler 440 forged crank, 361-383 "B" engine forged cranks ('62-'72) and 413-426.

Also Fits Race and Street 426 Hemi with slight TDC adjustment as detailed in Instructions supplied with Damper.



*NOTE. Weights are in POUNDS. Dimensions are in INCHES

PRO/RACER ALL STEEL SFI SPEC HARMONIC DAMPERS

Part No.	Application	Type	Weight	Dimensions A	B	C
64265	Chevrolet V8 - 283-350	Int	10.37	6.61	1.54	2.38
64266	Chevrolet V8 - 400*	Ext.	11.56	6.61	1.54	2.38
64267	Chevrolet V8 - 396-427	Int.	13.21	7.01	1.73	2.68
64268	Chevrolet V8 - 454-502	Ext.	14.53	7.01	1.73	2.68
64269	Ford SB V8 289-351 except late 5.0L (28 in.oz.)	Ext.	11.80	6.61	1.54	3.00
64270	Ford SB V8 - 5.0L - 1981 & later only (50 in.oz.)	Ext.	12.10	6.61	1.54	3.00
64271	Ford 4.6L 2V/4V V8 '96 & later	Int.	10.25	6.61	1.54	2.17
64272	Ford V8 492-460	Int./Ext.	10.25	6.61	1.54	2.20
64275	Pontiac V8 '61-'79**	Int.	9.83	6.61	1.38	3.00
64276	Oldsmobile V8 350-403-455	Ext.	11.14	6.61	1.54	3.00
64277	Chrysler V8 - 273-360	Int.	11.34	7.01	1.54	2.81
64278	Chrysler V8 318-360	Ext.	12.26	7.01	1.54	2.81
64279	Chrysler V8 383-440 including late model Hemi***	Int.	11.03	7.01	1.54	2.22
64280	Chrysler V8 331-354-329 Hemi	Int.	11.03	7.01	1.54	2.48
64290	Holden V8 253/308 including 4.9L EFI	Int.	9.59	6.61	1.54	2.91
64291	Holden 6 186/202 etc	Int.	9.59	6.61	1.54	2.17
64295	Austin Healy 100-4/100-6/3000	Int.	8.86	8.61	1.66	2.22
64296	Jaguar 6 cyl. 3.4, 3.8 & 4.2L engines****	Int.	10.66	6.61	1.54	1.78
65266	Counterweight for Chevrolet V8 - 400*	-	1.19	N/A	N/A	N/A
65268	Counterweight for Chevrolet V8 - 454*	-	1.32	N/A	N/A	N/A
65269	Counterweight for Ford SB V8 28.4 in.oz.	-	1.13	N/A	N/A	N/A
65270	Counterweight for Ford SB V8 50 in.oz.	-	1.39	N/A	N/A	N/A
65278	Counterweight for Chrysler V8 - 360	-	0.92	N/A	N/A	N/A
65278-05	Counterweight for Chrysler 340 Cast (suits 64277)	Int.	0.14	N/A	N/A	N/A
74265	Chevrolet V8 283-350 64265 for Supercharger use	Int.	10.37	6.61	1.54	2.38
74267	Chevrolet V8 396-427 64267 for Supercharger use	Int.	13.21	7.01	1.73	2.68
74268	Chevrolet V8 454-502 64268 for Supercharger use	Ext.	14.53	7.01	1.73	2.68
74269	Ford SB V8 - 289-351 for Supercharger use (28. in.oz)	Ext.	11.80	6.61	1.54	3.00
74270	Ford SB V8 - 5.0L - 1981 & later only (50 in.oz.)	Ext.	12.10	6.61	1.54	2.99
75270	Counterweight for Ford SB V8 50 in.oz. Supercharger	Ext.	1.75	N/A	N/A	N/A

CHEV SB, BB AND V8 ENGINES

TIMING MARKS AND TIMING TABS:

Both small and big block Chev have had two different positions for TDC. PRO/RACE and PRO/SPORT dampers are designed to use the after-market bolt-on timing tab indicator. Because our SB Damper is a different diameter than stock dampers, you may want to consider an after-market timing pointer. Please refer to SummitRacing.com online catalog for timing pointers

COUNTERWEIGHTS:

400 small blocks and 454-502 big blocks are externally balanced engines. This means the Damper has a counterweight attached to it to provide proper balance. The counterweight can be removed and the Damper can be used on internally (neutral) balanced engines.

PONTIAC V8 ENGINES

#64275 - Installation of this Damper on '65-'68 engines requires the use of a timing chain cover, water pump, pulleys, etc, from a '69 or later engine. These parts are available from wrecking yards or may be purchased from Year One at 1-800-932-7663 or www.yearone.com

FORD V8 ENGINES

All PRO/RACER SB Ford Dampers use removable counterweights. If you are building a neutral balanced engine you may simply unbolt the counterweight and retain for future use. Note. Some Cast Iron OEM Water Pumps have a Casting Lug which must be ground off to clear Damper. **#64269, #34269 & #24269** - These dampers are designed to be used with Ford Engines requiring a 28.4 in.oz. Damper imbalance. Each PRO/RACE damper has bolt patterns for both three bolt and four bolt pulleys. Most early three bolt pulleys bolt directly to the damper and line up correctly. Four bolt pulleys of various types and styles are accommodated by the included sleeve and spacers. Note. that the supplied pulley spacers are only suitable for accessory belt pulleys, not supercharger drives. Note. that the **#64269** damper has two sets of timing marks to work with the various timing positions from Ford. Ford used a third position on some early engines which is not accommodated by this damper.

Graham Withers "Wheel Stand"

#34269 and **#24269** dampers are marked with the three sets of timing marks used by ford. **#64270, #34270 & #24270 -**These dampers are designed for '81 and later 5.0 engines requiring a 50 in. oz. damper counterweight. Note. that the stock damper is 6.38" in diameter while our dampermodels are 6.61" in diameter. As a result, there are some instances where the lower water pump bolt contacts the damper and some instances where the damper may contact the pump housing and/or timing chain cover. This is usually found on '95 covers. Spot facing the bolt pad on the water pump and some minor grinding of the boss on the water pump will alleviate the interference. Each damper includes a sleeve and pulley spacers. See notes under #64269 for specifics. #64272, #34272 - These Dampers fit 429-460 engines which have used several different timing pointer locations. Most applications have the timing pointer at the "10 o'clock" position. PRO/RACER dampers have two key ways, 1/4" and 3/16". Using the 1/4" key way will correctly position the damper on a production crank or custom crank with the crank post machined to “10 o'clock" pointer lines up correctly with 0 TDC on the damper. use the 3/16" key way with Ford Racing M6303-A600 & B600 crankshaft or a component of the M-6011-A600 & B600 short block kit. The "10 o'clock" timing pointer should align with zero-mark TDC on the harmonic damper. Note. When using these dampers with a Ford M-6303-AG00/B600 crank, use a Ford Racing spacer M-6359-B460 for internally balanced engines and for externally balanced engines the stock spacer (Ford Racing M-6359-D460) will need to be machined for the pulleys to line up correctly. These dampers have the stock four bolt pulley pattern along with the big block Chevy three bolt pattern which permits the use of most crank trigger setups. Pulley alignment must be checked and adjusted by machining the crankshaft spacer.

Australian National Drag Racing Championships won by Graham Withers 1966-1967-1968

CHRYSLER V8 ENGINES

#64277, #34277 & #24277 - These dampers are for internally balanced engines, fitting all 318 V8 Standard and Magnum, all 273 and 340 engines with forged cranks. Does not suit '72-'73 cast crank engines. #64278, #34278 & #24278 - These dampers are for externally balanced engines only with a cast crank (71-92). They will not work on a '93-'97 5.9 Magnum engine. (Refer to listings above) #64279, #34279 & #24279 - For 383-440 internally balanced engines. They fit the 440 forged crank, 361-383 "B" and "RB" engine forged cranks ('62-'70), and 413-426W. Each damper has six bolt holes. Note. some Chrysler pulleys have an offset bolt patterns with one bolt hole out of alignment. We suggest using a rat tail file to elongate the pulley bolt hole. These dampers cannot be used on a 400-cast crank engine or a 440 6-bbl (1970-71 4-bbl) with heavy rods. These dampers can be used on a 426 Hemi with slight TDC modification. #64280 - Dampers for 331-354-392 Chrysler Hemi engines.

PRO/SPORT DAMPER

Harmonic Dampers play a vital role to ensure longevity of engines and crankshafts, and are arguably the most important external component of an engine. Harmonic Dampers protect against harmful engine harmonic vibrations that can lead to valve train damage, rapid bearing and timing chain wear or ultimately crankshaft breakage. Why trust dampers from any other manufacturer, when PRO/SPORT harmonic dampers are engineered with more than 20 years of SFI damper manufacturing experience. The PRO/SPORT range of harmonic dampers provides race quality performance dampers at near replacement part prices and are available to suit most popular V8 engines.

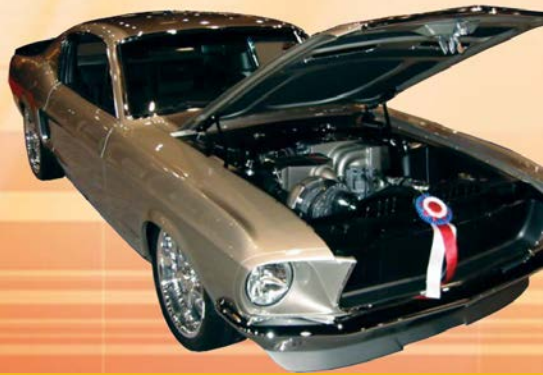
The PRO/SPORT harmonic damper is designed as a direct replacement of your OE damper and has many features which exceed OE requirements, manufactured to the quality standards you have come to expect from a specialist damper manufacturer, the new PRO/SPORT SFI harmonic dampers are produced from quality carbon steel, with mechanical properties exceeding the stringent SFI Spec. #18.1 requirements! Spin tested to 12,500 rpm for one hour to comply with SFI Spec. #18.1, so when your racing needs require SFI certification, the PRO/SPORT harmonic damper is ready for the track. Machined to exacting tolerances and assembled using pressure bonded elastomer technology of tried and proven design for optimum damping performance The outer inertia ring is retained by a robust retention plate secured by 6 high tensile bolts to ensure maximum safety of the product. Extremely accurate and easy to read permanently engraved timing marks make engine timing easy.

Unlike many other SFI dampers which are not bonded, the PRO/SPORT range features a bonded elastomer! The elastomer is injected at high temperature and under extreme pressure and is cured against a specially prepared surface on the inside of the ring and outside of the hub. The result is a bond similar to that of a motor mount which makes it almost impossible to separate the damper hub from ring! in fact during the manufacturing process of EACH and EVERY PRO/SPORT damper is subjected to elastomer bond test of 3000lbs separation force. if there is any sign of bond degradation the the damper is scrapped.

REMOVABLE COUNTERWEIGHTS

All externally balanced dampers feature accurately machined counterweights which bolt into the hub of PRO/SPORT damper. This not only provides extremely accurate engine balance due to the precision of the counter-weight mass, but also allows for easy conversion to neutral balance by unbolting the counterweight should that ever be required. Counterweights are available separately which enable internally balanced dampers to be converted for use in their externally balanced variation, or vise versa. e.g. a 400 Chevrolet counterweight can be bolted into the #34265 (350 Chevrolet damper) which would make it suitable for 400 Chevrolet applications.

Ford SB V8 dampers #34269 and #34270 are drilled to suit both 3 or 4 bolt pulleys, come with a pulley alignment kit and have been engraved with 3 sets of 40 degree timing marks to accommodate most of the timing pointer locations which Ford has used over the years. The Ford BB V8 Damper #34272 is drilled to suit both Chevrolet BB 3 bolt and Ford 4 bolt pulleys. Note. that the Ford BB V8 damper is suitable for internally and externally balanced engines and does NOT require a counterweight, as the production OE spacer fitted to the crankshaft prior to damper installation is counterweighted to provide the correct engine balance.



PRO/SPORT dampers come attractively packaged, are highly polished and finished in a durable baked enamel finish to preserve the damper that looks as good as it performs!

PRO/SPORT HARMONIC DAMPERS FEATURE:

- Meets SFI Spec. #18.1.
- Spin tested to 12,500 rpm.
- Fully machined from high quality carbon steel.
- Retained outer inertia ring.
- 60 degrees of permanently engraved timing marks. (40 degrees on SB Ford models)
- Pressure bonded elastomer.
- Accurately balanced.
- Removable counterweights on externally balanced models.

CAUTION: PRO/SPORT counterweights are not interchangeable with PRO/RACER or PRO/STREET counterweights.

Note. The PRO/SPORT counterweight fitted to #34266 Chevrolet V8-400 damper will NOT clear the Milodon cast aluminium front timing cover.

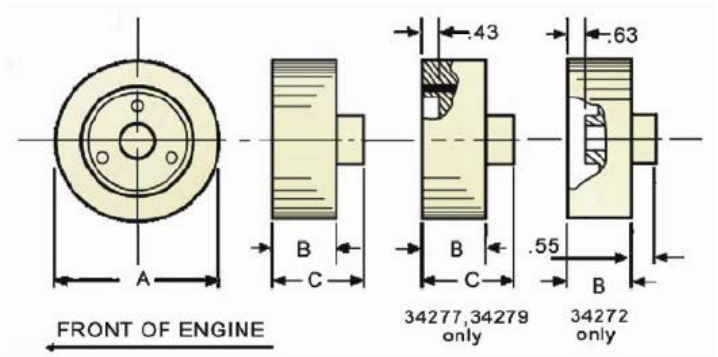
#34262 is not drilled to accept 400 Chevy counterweight #35266.

*Fits Chrysler 440 forged crank 361-383 "B" engine forged cranks 62-70 and 413-426.

Also fits race and street Hemi with slight TDC adjustments as detailed in instructions supplied.

Will not fit 392 Hemi.

For 331-345-392 Chrysler Hemi use part #64280



*NOTE. Weights are in POUNDS. Dimensions are in INCHES

PRO/SPORT SFI HARMONIC DAMPERS

Part No.	Application	Balance	Weight	Dimensions A	B	C
31262	Chevrolet V8 - 283-350 6.1" 5.4 lbs	Int. Only	5.40	6.10	1.52	2.38
34260	GM LS1 Camaro & Firebird LS2 GTO	Int.	12.40	7.25	2.31	3.70
34261	GM LS1, LS2, Camaro LS3, LS6 Corvette	Int.	12.70	7.25	2.47	2,86
34262	Chevrolet V8 - 283-350#	Int. Only	10.15	6.61	1.52	2.38
34263	Chevrolet V8 - 396-427	Int.	12.79	7.01	1.73	2.68
34264	Chevrolet V8 - 454-502	Ext.	14.13	7.01	1.73	2.68
34265	Chevrolet V8 - 283-350	Int.	10.14	6.61	1.52	2.38
34266	Chevrolet V8 - 400	Ext.	11.29	6.61	1.52	2.38
34269	Ford V8 289-351 Except late 5.0L	Ext. (28.4in.oz.)	11.01	6.61	1.52	3.00
34270	Ford V8 - 5.0L 1981 & later V8	Ext. (50in.oz.)	11.81	6.61	1.52	3.00
34271	Ford V8 4.6L 1996 & later	Int.	9.24	6.61	1.52	2.17
34272	Ford V8 429-460	Int./Ext.	9.96	6.61	1.52	2.19
34277	Chrysler V8 273-360	Int.	11.14	7.01	1.52	2.85
34278	Chrysler V8 318-360	Ext.	11.93	7.01	1.52	2.85
34279	Chrysler V8 383-440 (inc late model Hemi)*	Int.	10.80	7.01	1.52	2.20
34297	MG B, MG A	Int.	3.99	5.20	1.07	0.49
35264	Counterweight for Chevrolet V8 - 454-502 (for 34263 or 34264)	-	1.32	N/A	N/A	N/A
35266	Counterweight for Chevrolet V8 - 400 (for 34265 or 34266)	-	1.10	N/A	N/A	N/A
35269	Counterweight for Ford SB V8 - 28.4in.oz. (for 34269 or 34270)	-	1.13	N/A	N/A	N/A
35270	Counterweight for Ford SB V8 - 50 in.oz. (for 34269 or 34270)	-	1.91	N/A	N/A	N/A
35278	Counterweight for Chrysler V8 - 360 (for 34277 or 34278)	-	0.92	N/A	N/A	N/A

PRO/SPORT UNDER DRIVE DAMPERS & PULLEY KITS REFER TO PAGE 13

PRO/SPORT UNDER DRIVE DAMPERS & PULLEY KIT FEATURES:

- 25% Underdrive.
- SFI Spec. 18.1 Bonded Harmonic Damper.
- High quality All Steel construction.
- Robust outer ring retention design.
- Spin tested to 12,500 rpm.
- 60 degree precision engraved timing marks.
- Clear baked paint finish

PRO/SPORT UNDER DRIVE DAMPERS

Accessory drive systems have been made more compact on late model V8 engines like the Ford 4.6L and the GM LSI by machining serpentine belt grooves on the OD of the crankshaft damper. The crankshaft damper functions as a combination crank damper and crank pulley on these engines. Under drive dampers are smaller in diameter than stock production crank dampers which slows the speed of the accessories and reduces the HP required to drive them. Since performance and racing engine applications generally run at higher RPM, the water pump, alternator and power steering pump speeds can be reduced to save HP and still meet engine cooling, electrical and vehicle steering requirements. The trick is to reduce the crank damper diameter without losing the torsion control required to prevent engine vibration and possible damage. The PRO/SPORT Under Drive dampers have been specially tuned to control crankshaft torsional vibration to stock production levels. Dynamometer tests of the PRO/ SPORT 25% under drive damper on a 2005 Mustang 4.6L 3V engine at Livernois Motorsport in Dearborn Heights, Michigan produced a 13HP gain over a stock production damper. Warning: Engine cooling and battery charging will be reduced and may not be adequate for city driving.

1996 - 2006 FORD MUSTANG 4.6L VS ENGINES

- Available in damper or damper & pulley kit configuration.
- 25% Under Driven Poly-V groove design.
- All Steel water pump pulley is finished in black powder coat.
- Steel Alternator pulley finished in black powder coat (where supplied).
- Kit contains new crank bolt, installation bolt & alternator bracket bolt.

GM LSI, LS2 & LS6 VS ENGINES

- 25% Under Driven front Poly-V groove accessory drive.
- 22% Under Driven rear A/C Poly-V groove on 98-05 Camaro & Firebird & 04-06 GTO LSI & LS2 models.
- 7% Under Driven rear A/C Poly-V groove on 97-06 LSI, LS2 & L56 Corvette models.
- Keyway.

PRO/SPORT UNDER DRIVE DAMPERS & PULLEY KITS

Part No.	Application	Configuration	Weight	Dimensions A	B	C
32068	Dodge Hemi Car V8 - 5.7L 20% Under Drive	Damper Only	Ref. Note #1	7.63	5.86	3.84
32088	Dodge Hemi Truck V8 - 5.7L 20% Under Drive	Damper Only	Ref. Note #2	8.68	5.86	4.75
32560	GM V8 25% Under Drive LS1 Camaro & Firebird LS2 GTO	Damper Only	Ref. Note #3	11.07	6.14	3.88
32561	GM V8 25% Under Drive LS1,2,3 & 6 Corvette Pontiac G8, L98, LS3	Damper Only	Ref. Note #4	11.76	6.75	3.03
32571	Ford V8 4.6L 25% Under Drive 1996 & Later 2V, 3V & 4V	Damper Only	Ref. Note #7	7.71	6.14	2.52
32581	Ford V8 5.0L 2011 & Later - 25% Under Drive	Damper Only	Ref. Note #1	9.59	5.36	3.53
32584	GM Truck V8 - 4.8, 5.3, 6.0L - 25% Under Drive	Damper Only	Ref. Note #5	11.97	5.86	4.54
34303	Honda/Acura 4 cyl. B Series Engines - 20% Under Drive	Damper Only	-	3.66	4.53	1.41
34305	Ford Focus 2.0L Zetec Engine 13% Under Drive	Damper Only	-	3.89	4.53	1.52
42571	Ford V8 4.6L 25% Under Drive Kit 1996-2000 2V & 4V	Kit	Ref. Note #7	For damper specs see 32571		
42584	GM Truck V8 - 4.8, 5.3, 3.6L - 25% Under Drive	Kit	Ref. Note #8	For damper specs see 32584		
42671	Ford V8 4.6L 25% Under Drive Kit 2001-2004 2V & 4V	Kit	Ref. Note #9	For damper specs see 32571		
42771	Ford V8 4.6L 25% Under Drive 2005 & Later 3V	Kit	Ref. Note #10	For damper specs see 32571		

Note #1 This a damper only. A shorter serpentine belt is required for installation.

Note #2 This a damper only, but requires a new serpentine belt Gates K060988 or Dayco 5060988. BELTS ARE NOT INCLUDED

Note #3 This is a damper only, LS1 F-Bodies require 2 new belts, Gates #K060763 & #K040378. GTO requires 2 new belts Dayco #760K6 & #405K4. BELTS ARE NOT INCLUDED. A new OEM crankshaft Damper bolt GM #12557840 is also required when installing damper.

Note #4 This a damper only, but requires a new serpentine belt Dayco #5060780. BELTS ARE NOT INCLUDED. A new OEM crankshaft Damper bolt GM #12557840 is also required when installing damper.

Note #5 This a damper only, but requires new serpentine belts. For Accessory belt use Gates K060895, for A/C Belt use Gates K040345 (A/C Belt for SS Truck Gates K040335). BELTS ARE NOT INCLUDED. A new OEM crankshaft Damper bolt GM #12557840 is also required when installing damper.

Note #6 This kit includes a damper and alternator pulley kit with a 1.75" overdrive alternator pulley for improved charging. New serpentine belts are required: For Accessory belt use Gates K060888 for A/C Belt use Gates K040345 (A/C Belt for SS Truck Gates K040335). BELTS ARE NOT INCLUDED. A new OEM crankshaft Damper bolt GM #12557840 is also required when installing damper.

Note #7 This is a damper only, 1996 & later Ford 4.6L V8 2V, 3V & 4V.

Note #8 This Kit includes a Damper, a pulley for the long shaft water pump, alternator pulley, new crank bolt, alternator bracket bolt and an installation bobolt. OE Belts to be used.

Note #9 This Kit includes a Damper, a pulley for the short shaft water pump, alternator pulley, new crank bolt, alternator bracket bolt and an installation bobolt. OE Belts to be used.

Note #10 This Kit includes a Damper, a pulley for the long shaft water pump, new crank bolt, alternator bracket bolt and an installation bolt.

PRO/STREET HARMONIC DAMPERS FEATURE:

• Nodular iron construction - most cast dampers are manufactured from gray iron castings. Nodular iron is over 30% stronger than gray iron.

• Bonded Elastomer - outer ring and inner hub are bonded (vulcanized) to the elastomer. this minimizes the potential for the outer ring to move on the hub, losing true TDC position.

• Removable counterweights - externally balanced models feature bolt-in counterweights, making it easy to switch from an externally balanced engine to a internally balanced engine.

• 60 degrees of permanent easy to read timing marks (40 degrees on SB Ford models)

MACHINED TO TOLERANCES EXCEEDING OEM SPECIFICATIONS!

The PRO/STREET dampers have been machined to tolerances far exceeding those used by OEM's. Just look at the overall surface finish and oil seal and bore of the damper! Permanent rolled-in timing marks are very visible and will never fade or become less visible!

HEAVY DUTY APPLICATIONS

While PRO/STREET dampers are not intended for racing, the fact that they are cast of nodular iron, as opposed to ordinary gray iron, means that they are suitable for higher RPMs than most competitive models. (Note: The PRO/STREET nodular iron harmonic dampers are NOT SFI certified). However, to prove the integrity of the PRO/STREET dampers, we had the SFI test lab run some spin tests. The PRO/STREET damper was subjected to 8,000 RPM for one hour, and then 12,500 RPM for 15 minutes with no sign of degradation.

BONDED ELASTOMER

Unlike many OE dampers, or other replacement style dampers, the PRO/STREET range feature a bonded elastomer! The elastomer is injected at high temperature and under extreme pressure. In fact, during the manufacturing process EACH AND EVERY PRO/STREET damper is subjected to elastomer bond test of 3000lbs separation force. If there is any sign of bond degradation, then the damper is scrapped. Many OEM dampers are not bonded at all.

REMOVABLE COUNTERWEIGHTS

PRO/STREET Harmonic dampers are supplied in two styles; those for Internally Balanced Engines and those for externally balanced engines. Externally balanced engines have a counterweight bolted into the hub of the damper. The advantage of having a removable counterweight in the hub is that it eliminates the possibility of having the counterweight mass move from its position plus it provides an extremely accurate external balance mass. The PRO/STREET Damper for internally and externally balanced small block and big block Chevy and for small block Chryslers is identical except for the counterweight. This means, for example, if you have a PRO/STREET damper for a 400 small block Chevy you can remove the counterweight and the damper will work perfectly for a 350 Chevy. Conversely, if you have a 350 Damper and want to use it on a 400 you can now purchase the proper PRO/STREET counterweight and bolt it into your 350 Chevy dampers, and it is now a 400 Chevy damper. All SB Ford dampers are externally balanced with a counterweight. This counterweight can be removed for internally balanced engines.

ABOUT NODULAR IRON

Nodular iron, also referred to as ductile iron, is typically the material used for heavy duty applications of cast iron products. It is approximately 30% stronger than gray iron. So, it was only natural that when PRO/STREET developed the heavy-duty OE replacement PRO/STREET dampers, high strength nodular iron was the material of choice.

BRAND NAME YOU CAN TRUST

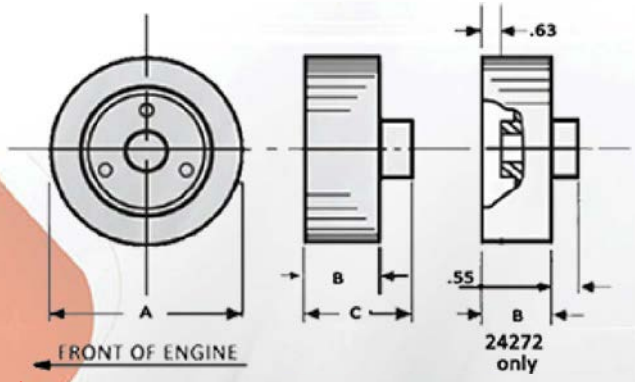
These dampers are from PRO/RACE Performance Products, a leading manufacturer of racing SFI Spec. dampers, so you know they are a high quality, yet affordable, damper for heavy duty replacement applications. Note. Externally balanced models are supplied with the necessary counterweights. Counterweights are also sold separately.

CAUTION: PRO/STREET Counterweights are not interchangeable with PRO/RACER or PRO/SPORT Counterweights

Note. The PRO/STREET counterweight fitted to #24266 Chevrolet V8-400 damper will NOT clear the Milodon cast aluminum front timing cover.

* Fits Chrysler 440 forged crank 361-381 "B" engine forged cranks (62-70) and 413-426.

Also fits Race and Street 426 Hemi with slight TDC adjustment as detailed in instructions supplied with damper.



*NOTE. Weights are in POUNDS. Dimensions are in INCHES

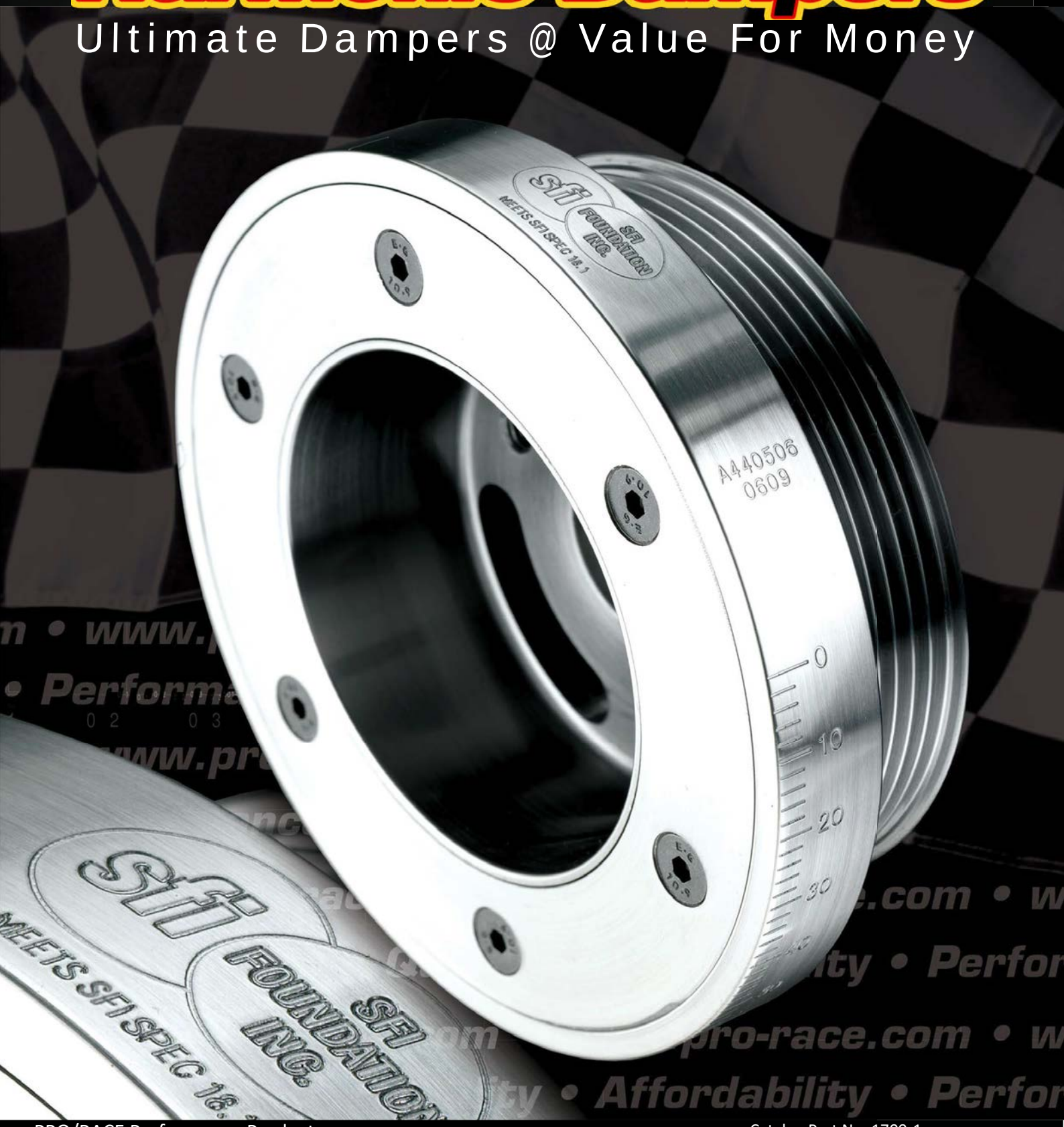
PRO/STREET BONDED NODULAR IRON HARMONIC DAMPERS

Dimensions

Part No.	Application	Style	Type	Weight	A	B	C
24262	Chevrolet V8 - 283-350	Street	Int.	8.60	6.75	1.32	2.33
24263	Chevrolet V8 - 396-427	Street	Int.	13.50	8.00	1.93	2.66
24264	Chevrolet V8 - 454	Street	Ext.	14.50	8.00	1.93	2.66
24265	Chevrolet V8 - 283-250	Street	Int.	10.60	8.00	1.47	2.33
24266	Chevrolet V8 - 400-502	Street	Ext.	11.40	8.00	1.47	2.33
24269	Ford V8 - 289-351 Except late 5.0L (28 in.oz.)	Street	Ext.	9.80	6.40	1.65	3.00
24270	Ford V8 - 5.0L 1981 & later only (50 in.oz.)	Street	Ext.	10.60	6.40	1.65	3.00
24272	Ford V8 - 429-460	Street	Ext.	9.25	6.61	1.54	2.20
24277	Chrysler V8 - 273-360	Street	Int.	8.50	7.30	1.00	2/47
24278	Chrysler V8 - 318-360	Street	Ext.	9.36	7.30	1.00	2.47
24279	Chrysler V8 - 383-440 Including Hemi*	Street	Int.	8.00	7.30	.94	1.80
25264	Counterweight for Chevrolet V8 - 454-502 Fits 8" Cast BB Damper 2423 only.						
25266	Counterweight for Chevrolet V8 - 400 Fits 8" Cast SB damper 24265 or #24266 only.						
25269	Counterweight for Ford V8 28 in.oz. - Fits 24269 or 24270 cast damper only.						
25270	Counterweight for Ford V8 - 50 in.oz. Fits 24269 or 24270 cast damper only.						
25278	Counterweight for Chrysler V8 - 360 Fits 24277 or 24278 only.						

Harmonic Dampers

Ultimate Dampers @ Value For Money



PRO/RACE Performance Products www.pro-race.com
North American Warehouse:
42295 Avenida Alvarado, Unit 3 • Temecula, CA 92590
Contact: Tel: 800-977-0767 • Tel: 951-719-1137 • Fax: 800-803-0087
TECH CONTACT: 734-740-0922
E-Mail: prorace@pro-race.com or Tech Email: tech@pro-race.com
HQ Australia:
59 Shearson Cres. Mentone, Victoria, 3194 Australia
Tel: +61 3 9584 3522 • Fax: +61 3 9584 5194

Catalog Part No. 1709-1