



DRIVEN

DRIVEN TO WIN RACING OIL®



Innovations In Lubrication Technology



WHY CHOOSE DRIVEN?

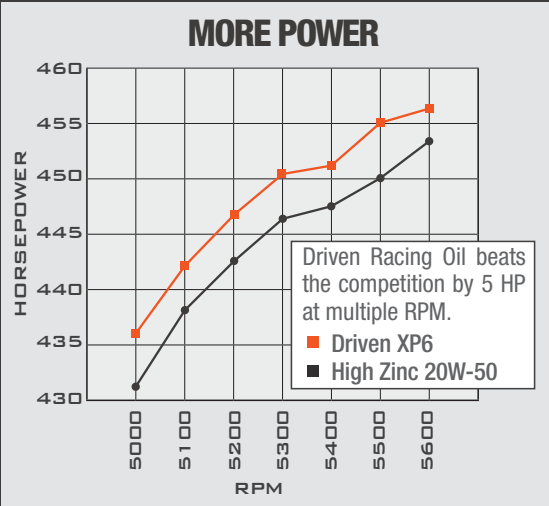
Competition drives innovation. The Driven Racing Oil brand was originally created to advance engine and driveline lubricant performance in professional racing. Today our innovations extend beyond the racetrack to include street performance and so much more. **But what makes our products different?**

Driven Racing Oil delivers specialty lubricants designed to meet the requirements of your specialty application. For example, Driven pioneered the development of break-in oils, which provide the chemistry needed for initial break-in of a new engine. All of our products provide unique formulas developed with the application in mind first. Because we always put the “motor ahead of the molecule”, Driven keeps things in the proper order. Motor oil is for the motor, not the other way around. Our product development team looks at the engine and how it is used; then we design application specific products using a “zero compromise” approach that delivers a measurable performance advantage. The results are more horsepower and less wear.

In contrast, the API licensed oils on the shelf at the local parts store are designed to be one-size-fits-all. Also, while federal EPA requirements have reduced the quantities of anti-wear chemistries like Zinc, Phosphorus and Sulfur in API licensed oils, Driven provides oils featuring boosted levels of these critical additives.

You wouldn't use a stock cam in a race engine, and the same goes for oil. And that's where Driven excels – we formulate oils that maximize performance and protection for specialty applications such as racing, vintage automobiles, autocross and high performance vehicles.

Racing is in the DNA of our company, and every product we develop is proven to perform. From full synthetic race oils to engine break-in oils, Driven offers a wide range of race winning products that deliver enhanced performance, protection and value. So whether you need gear oil for your race car or motor oil for your hot rod, put your trust in lubricants engineered, tested and proven to perform. Put your trust in the innovator of high performance lubricants – Driven Racing Oil.



Leading camshaft companies and engine component manufacturers endorse and recommend Driven Racing Oil.



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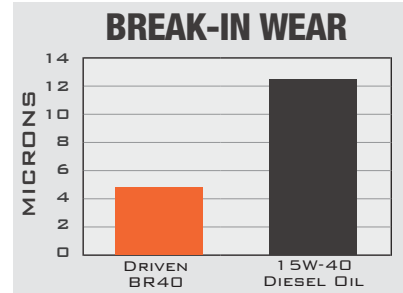
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WHAT IS DRIVEN?

“We developed Driven Racing Oil to fix our flat tappet camshaft problems. Just changing to the BR Break-In Oil from off-the-shelf products, we virtually eliminated break-in failures. Next, we began to develop qualifying oils and race oils, and that is where we found significant power gains. Every engine we build uses Driven Racing Oil because it delivers power and durability.”

- MARK CRONQUIST, Head Engine Builder, Joe Gibbs Racing

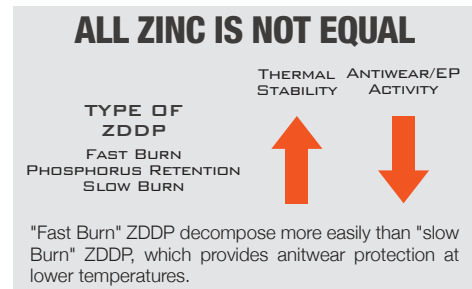
Why did the Driven BR break-in oil solve the camshaft wear problems for Mark Cronquist? Not because of “magic molecules” or “proprietary technology”. Instead, the secret to solving the problem was as simple as tailoring the chemistry to meet the application. You see, all oils lubricate, but the real question is how long will the oil lubricate and under what conditions? A gear oil is a terrible motor oil. Why? Because gear oils are designed for gears and differentials and motor oils are designed for engines. Different applications require different chemistries. Think about shoes. You could wear boots to run a marathon, but they won't work very well. Shoes are designed for the application, and so are lubricants. That is why break-in oil works better for engine break-in than Diesel engine oil – application specific chemistry.



Driven specializes in application specific chemistry. We provide oils for specialty applications that can benefit from specialty oils that go beyond the API licensed oils on the shelf at the local parts store. These “stock” motor oils work for stock engines, but when you install a higher lift cam and stronger valve springs, you need a better oil. High performance engines see more RPM, higher loads and increased temperatures compared to stock engines, so a high performance engine requires higher levels of Zinc, Phosphorus, Sulfur and other additives to prevent increased wear. This is especially true in flat tappet engines.

ALL ZINC IS NOT THE SAME

Today, many oils claim to be “High Zinc,” but the real question is not about how much Zinc is in the oil. The better question is, “What type of Zinc is in your oil?” There are more than four different families of Zinc (ZDDP) compounds that are used to reduce wear in motor oils, and not all of them provide the same level of protection. The oil additive Zinc Dialkyldithiophosphate (ZDDP) works because it is a polar molecule, so it is attracted to metal surfaces. ZDDP reacts under heat and load to create a sacrificial film that allows ZDDP to protect flat tappet camshafts and other highly loaded engine parts. The Society of Automotive Engineers’ Automotive Lubricants Reference Book states, “ZDDP is the predominant anti-wear additive used in crankcase oils, although it is a class of additive rather than one particular chemical.” Some Zinc additives have slower “burn” rates that require more heat and more load to activate than other Zinc additives. As a result, not all “High Zinc” oils have the same activation rate. High speed valve trains require a “fast burn” ZDDP that activates quickly.



However, these “fast burn” ZDDP additives tend to reduce catalytic converter performance. As a result, API licensed motor oils have changed from traditional ZDDP additives in the range of 1,000 to 1,200 ppm back in the 1990s down to a minimum of 600 ppm and a maximum of 800 ppm of “Phosphorus Retention” ZDDP today (for API SN Plus and ILSAC GF-5 motor oils). These new “Phosphorus Retention” ZDDPs are slower burning ZDDPs. This is a direct result of EPA requirements to reduce vehicle emissions. While this has been beneficial for reducing emissions in modern engines, it has been very detrimental to classic and high performance engines. Since the reduction of ZDDP in motor oils, every camshaft manufacturer has seen flat tappet and high performance valve train failures skyrocket as a direct consequence. Fortunately, specialty oils like Driven’s line of products deliver the correct chemistry for these applications. Every Driven motor oil is fortified with “fast burn” ZDDP, and we don’t stop at Zinc. Driven addresses the entire formula to maximize protection and performance.

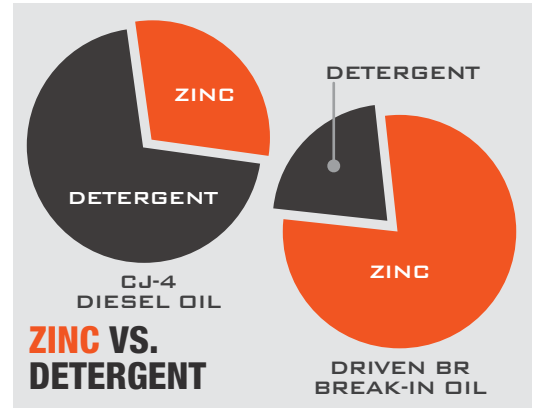
THE CRITICAL BALANCE OF DETERGENTS TO ZINC

ZDDP isn't the only additive in your motor oil. Detergents, dispersants, anti-oxidants, friction modifiers, viscosity modifiers, corrosion inhibitors and anti-foam additives combine with the ZDDP to form the additive package in motor oil. All of these chemicals interact with each other and complicate the situation.

THE SYSTEM APPROACH

Detergent and dispersant additives compete against Zinc in the engine because they are also polar molecules. Detergents and dispersants clean the engine, but they don't distinguish between sludge, varnish and Zinc – they clean all three away. Modern API certified oils contain high levels of detergents and dispersants. The old school theory on engine break-in was to run non-detergent oils, and this allowed for greater activation of the Zinc additive in the oil.

Driven BR Break-In Oils utilize the correct balance of high levels of “fast burn” Zinc anti-wear additives and low levels of detergents, so you don't need to buy expensive additives to correct a low Zinc (ZDDP) oil. Over the last 20 years, Driven has spent countless hours testing and perfecting the balance between these additives to provide the highest levels of protection for break-in, race, street performance and vintage applications.



A SYSTEM APPROACH TO PROTECTION

Over those 20 years of testing, we found that one oil alone can't work as well as a system of lubricants. Just like using primer before you paint, the Driven system of lubricants provides layers of ZDDP protection for your performance engine and flat tappet camshaft.

It begins with the Driven Engine Assembly Grease that places tenacious extreme pressure, anti-wear additives on the critical wear surfaces of your engine. Next, Driven BR Break-In Oil feeds your engine the “fast burn” ZDDP it craves during initial break-in, providing proven protection for flat tappet and aggressive roller cam set-ups. The unique formula of BR Break-In Oil utilizes low levels of detergent and dispersant additives in order to quickly establish the critical anti-wear film throughout your engine. Building this foundational anti-wear film in the engine lowers break-in wear, which extends engine life.

Once the anti-wear film has been established and the break-in process completed, the XP racing oils add proven friction modifiers to lower engine temperatures and increase horsepower. The HR oils for vintage cars and hot rods provides extra storage protection additives as well as flat tappet cam protection. Driven also provides a line of synthetic high performance street oils designed to protect modern engines with variable valve timing technology. Driven even offers a dedicated line of Direct Injection engine oils designed to prevent Low Speed Pre-Ignition (LSPi) and reduce soot related wear.

Whether you have a high performance or vintage engine, Driven has a system of oils tailored to protect your specialty engine from break-in to full throttle.



WEAR TEST RESULTS

We hired an independent engine builder to test a National Brand “High Zinc” oil versus Driven in a flat tappet, 383 c.i. engine to determine the wear results. Each lifter pictured was broken-in for 30 minutes and then run for 3 hours - cycling between 3,000 and 6,000 RPM. The pictures tell the story. The lifter using the national brand “High Zinc” oil already shows wear while the lifter using Driven does not.



ENGINE BREAK-IN & ASSEMBLY



BR BREAK-IN 15W-50

Recommended by multiple cam manufacturers, this unique petroleum oil provides optimum levels of Zinc and Phosphorus for flat tappet and aggressive roller valve trains, and the additive package promotes ring seal. Provides the maximum protection available for cams and lifters during initial break-in. Does not require additional ZDDP additives. Good for full power pulls on the dyno, one night of racing or up to 400 miles on the street. Viscosity typical of 15W-50.

BR40 BREAK-IN 10W-40

The same high Zinc and Phosphorus formula as our original break-in oil, now in SAE 10W-40 viscosity. Well suited for classic muscle car, European sports car and motorcycle engines. Ideal for flat tappet and aggressive roller valve trains, as well as Ethanol-blended, pure Methanol and oxygenated race fuels. Does not require additional ZDDP additives. Good for dyno testing, one night of racing or up to 400 miles on the street. Viscosity typical of 10W-40.

BR30 BREAK-IN 5W-30

The same high Zinc and Phosphorus formula as our original break-in oil, now in an SAE 5W-30 viscosity for modern OEM rebuilds and hydraulic lifter engines. Provides excellent ring sealing. Does not require additional ZDDP additives. Good for full power pulls on the dyno, one night of racing or up to 400 miles on the street. Viscosity typical of 5W-30.

DBR BREAK-IN OIL 15W-40

Provides better break-in protection than CJ-4 or CK-4 diesel oils, which extends engine life while promoting proper surface mating of internal engine components. Low detergent levels allow the "Fast Burn" ZDDP additive to adhere directly to all ferrous metal wear surfaces for maximum scuffing protection. Proprietary anti-wear formulation chemically assists piston ring sealing without relying on conventional friction modifiers. Viscosity typical of 15W-40.

	Qt. Bottle	1 Gal. Bottle	54 Gal. Drum
BR Break-In Oil 15W-50	00106	N/A	00120
BR40 Break-In Oil 10W-40	03706	N/A	03720
BR30 Break-In Oil 5W-30	01806	N/A	01820
DBR Break-In Oil 15W-40	N/A	05308	05320

ENGINE BREAK-IN & ASSEMBLY

ENGINE ASSEMBLY GREASE

Recommended by leading camshaft manufacturers, this unique extreme pressure lube dissolves completely in oil without clogging oil passageways or plugging oil filters. Proven to cling to and protect surfaces during initial start-up, Driven Engine Assembly Grease delivers protection you can count on. Apply to cams and lifters for break-in protection. It can also be used on distributor gears, rocker shafts, rocker tips, pushrod tips, wrist pins and valve guides. Combining with BR series break-in oils provides proven protection during break-in.



HVL – HIGH VISCOSITY LUBRICANT

High viscosity assembly lubricant (HVL) provides a tenacious yet fluid film to protect reciprocating and rotating components during assembly and initial break-in. This non-foaming product mixes with the break-in oil and extends the oil film thickness during the critical break-in process. Fortified with ZDDP. Apply to engine bearings, piston skirts, bushings, timing chains and gears, as well as oil pump gears. HVL will not harden or cause parts to become “sticky.”



SPEED CLEAN FOAMING CLEANER

Speed Clean's foaming action lifts away honing residue from cylinder bores and cleans away greasy films. Excellent for cleaning away Cosmoline and microscopic dirt and debris from new engine parts prior to assembly. Prepares the surface for full adhesion of the assembly lubricant. Simply spray on, let soak and then wipe off.



BRAKE & PARTS CLEANER

Powerful and quick cleaning performance makes Driven Brake & Parts Cleaner a must for every shop and toolbox. Non-chlorinated formula prevents chemical etching that can lead to part fractures. Dries quickly and does not leave an oily film. Meets all United States VOC requirements.

	Size	Part #
Engine Assembly Grease	5/8 oz. Packet	00734
Engine Assembly Grease	1 oz. Tube	00732
Engine Assembly Grease	1 lb. Tub	00728
HVL - High Viscosity Lubricant	8 oz. Bottle	50050
Speed Clean Foaming Cleaner	18 oz. Can	50010
Brake & Parts Cleaner	14 oz. Can	50020

WARNING: Cancer and Reproductive Harm
P65Warnings

HOT ROD

“Ed Pink Racing Engines uses BR30 Break-In Oil in every engine that we run on our dynos, and I use Driven HR3 Synthetic 15W-50 in my '29 Highboy Roadster. I recommend this oil to anyone who has a vintage performance car. It is the best insurance for long engine life that you can get.”

- **ED PINK**, Ed Pink Racing Engines

Photo Credit: Ed Pink Racing

WHY USE HOT ROD OIL?

Modern API certified oils are designed to protect catalytic converters. Driven Hot Rod Oil is designed to protect your camshaft. With high levels of ZDDP to protect your engine, it delivers the chemistry that classic cars, muscle cars and historic cars need. Because these cars are not daily drivers, Driven Hot Rod Oil also delivers storage protection additives to guard your engine from rust and corrosion. These additives also prevent dry starts. Developed specifically for older cars, no other oil provides this unique combination of lubricant chemistry.

Modern engine designs and oils have done a great job of reducing emissions and protecting emissions control equipment. However, modern oils have wreaked havoc on older engines. The reduction in emissions in modern cars has coincided with a reduction in traditional anti-wear additives (i.e. ZDDP) in modern oils, and that is bad news for your flat tappet camshaft.

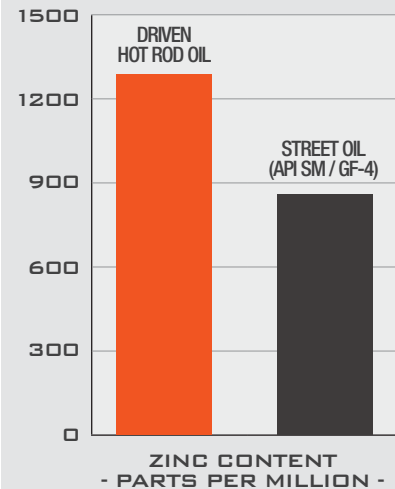
As stated in the book Lubrication Fundamentals, “In heavily loaded applications, flat tappet cam followers operate on partial oil films at least part of the time. Lubricants with anti-wear additives are necessary if rapid wear and surface distress are to be avoided. The oil additive Zinc dithiophosphate (ZDDP) is to provide anti-wear activity for the camshaft and lifters.”

Simply put, you shouldn't use oil designed for modern engines in older style engines.

Because Driven Hot Rod Oil is designed specifically for older style historic car and hot rod engines, it also features US military specification rust and corrosion inhibitors. These unique additives fight the formation of rust and defend against corrosion while your car is in the garage or storage. Pictured to the right are the results of a 1,000 hour severe storage simulation test. The surface treated with Driven Hot Rod Oil showed NO rust or corrosion.

When your car sits in the garage over the winter, Driven Hot Rod Oil fights corrosive wear and rust. When you fire the engine up, it protects your engine from excessive cold start wear. And when you put the pedal to the floor, Driven Hot Rod Oil protects your camshaft from scuffing. No other oil provides this level of protection in the garage, at start-up and on the road.

ANTI-WEAR PROTECTION



PREVENTS RUST & CORROSION DURING STORAGE!



**DRIVEN HR1
CONVENTIONAL 15W-50**



BRAND X 20W-50

Results of 1,000 hour
severe storage simulation

CONVENTIONAL

HR1 15W-50

Well suited for a variety of hot rods, muscle cars and vintage vehicles. This oil is an excellent choice for big block muscle cars, blown street rods and engines with original seals. Features storage protection additives that guard against rust and corrosion during winter storage. Good for flat tappet, overhead and roller cam engines. No additional ZDDP or additives required. Viscosity typical of 15W-50.

HR5 10W-40

Well suited for a variety of hot rods and vintage vehicles and is appropriate to use in any engine that calls for a 10W-40 grade motor oil. Features storage protection additives that guard against rust and corrosion during winter storage. This oil is an excellent choice for muscle cars and rotary engines. No additional ZDDP or additives required. Viscosity typical of 10W-40.

HR2 10W-30

Great for small block and crate engines. Features storage protection additives that guard against rust and corrosion during winter storage. 10W Multi-grade formula provides excellent start-up protection for flat tappet, overhead and roller cam engines. No additional ZDDP or additives required. Viscosity typical of 10W-30.

SYNTHETIC

HR3 15W-50

Excellent protection for supercharged, big block and looser clearance engines. Ideal for long stroke and/or high compression engines. Safe for O₂ sensors and vehicles equipped with catalytic converters. No additional ZDDP or additives required. Viscosity typical of 15W-50.

HR6 10W-40

Perfect choice for muscle cars, European vintage sports cars and classic motorcycles. Safe for O₂ sensors and catalytic converters. Features storage protection additives that guard against rust and corrosion during winter storage. No additional ZDDP or additives required. Viscosity typical of 10W-40.

HR4 10W-30

Excellent start-up protection with the high temperature stability of a synthetic. Provides fuel economy gains compared to heavier conventional oils. Great choice for street rods with crate engines. Compliant with OBDII and can be used in all emissions equipped vehicles. No additional ZDDP or additives required. Viscosity typical of 10W-30.



	Qt. Bottle
HR1 Conventional 15W-50	02106
HR5 Conventional 10W-40	03806
HR2 Conventional 10W-30	02006
HR3 Synthetic 15W-50	01606
HR6 Synthetic 10W-40	03906
HR4 Synthetic 10W-30	01506

STREET PERFORMANCE



Not every performance engine lives in a race car. In fact, modern high performance street engines place demands on a motor oil that a racing oil can't meet. Idling, Ethanol fuels and extended periods of storage can cause corrosive wear problems that racing oils are not equipped to solve. Engines like these need oil that can protect on the road, on the track and in the garage.

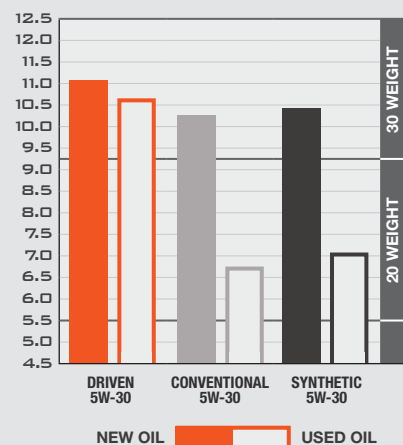
Modern performance engines often utilize variable valve timing and hydraulic cam followers, so maintaining viscosity is critical to the performance of these valve trains. The Driven Street Performance Oils are specifically designed to resist shear thinning and maintain hydraulic force. Driven uses advanced mPAO sythetic base oils which improves air release for excellent anti-foam performance, and the high viscosity index of the mPAO delivers shear stable viscosity for the best in street performance lubrication.

THE DRIVEN LINE OF STREET PERFORMANCE OILS PROVIDES:

- **HIGH ZINC CONTENT:** Higher levels of Zinc (ZDDP) deliver proper anti-wear protection for high output engines and aggressive valve train designs.
- **BOOSTED WITH MOLYBDENUM** Molybdenum works synergistically with ZDDP to reduce friction and wear in your engine. Every Driven street performance oil features boosted levels of Molybdenum to enhance protection and performance when the vehicle is on the track.
- **SHEAR STABLE, SYNTHETIC FORMULAS:** Our advanced synthetic formula provides improved cold start protection, lower volatility and increased high temperature high shear protection. No other oil provides the shear stable viscosity that Driven delivers.

VISCOSITY BREAKDOWN

% Viscosity Loss In KRL Shear Test



You never want the viscosity of your oil breaking down. Motor oils that shear down and lose viscosity cause excessive wear, increase oil temperatures and rob power from your engine. See how Driven's shear stable motor oils maintain their viscosity even under extreme loads and high RPM as compared to other brands.

STREET PERFORMANCE

SYNTHETIC

FR50 5W-50

FR50 utilizes next generation synthetic oil technology to provide unmatched performance and protection in high temperature, high shear environments. FR50 provides the required viscosity for Ford Coyote oiling and variable valve timing systems while delivering the wear protection needed for performance cams. It also utilizes a low volatility formula that guards against oil vaporization and foaming. Eliminating this problem reduces oil consumption and prevents inconsistent cam phaser system performance. Ideal for crate up to supercharged Ford Coyote engines. Viscosity typical of 5W-50.



LS30 5W-30

Designed for high performance LS series engines, LS30 reduces oil consumption by limiting oil vaporization and foaming. It utilizes advanced mPAO synthetic base oils to reduce valve train noise and to provide high temperature and high shear protection for GM LS based engines with and without variable valve timing. LS30 delivers industry leading shear stability and HTHS bearing oil film thickness. Ideal for LS based crate engines and supercharged LS performance engines as well as any performance engine that calls for a 5W-30 viscosity. Viscosity typical of 5W-30.



FR20 5W-20

Designed specifically for high performance Ford Modular and Chrysler 5.7L Hemi engines, FR20 reduces oil consumption by limiting oil vaporization and foaming. FR20 utilizes advanced mPAO synthetic base oils to provide high temperature and high shear protection for Ford Modular and Chrysler 5.7L Hemi based engines with and without variable valve timing. FR20 delivers industry leading shear stability and HTHS bearing oil film thickness. Ideal for naturally aspirated, supercharged and turbocharged engines that call for a 5W-20 viscosity. Viscosity typical of 5W-20.



DT50 15W-50

DT50 utilizes advanced mPAO synthetic base oils to provide protection for high operating temperature turbocharged engines. Also ideal for Porsche and Volkswagen air-cooled engines. Compatible with E85 and water/Methanol injection. Viscosity typical of 15W-50.



DT40 5W-40

DT40 utilizes advanced synthetic base oils to provide high temperature and high shear protection for both turbocharged, and European sports car engines with and without variable valve timing. DT40 reduces oil consumption by limiting oil vaporization and foaming. Ideal for modern German, Italian and British sports car engines, as well as Chrysler 6.4L Hemis. Compatible with E85 and water/Methanol injection. Viscosity typical of 5W-40.

	Qt. Bottle	54 Gal. Drum
FR50 5W-50	04106	N/A
LS30 5W-30	02906	02920
FR20 5W-20	03006	N/A
DT50 15W-50	02806	02820
DT40 5W-40	02406	02420

DIRECT INJECTION

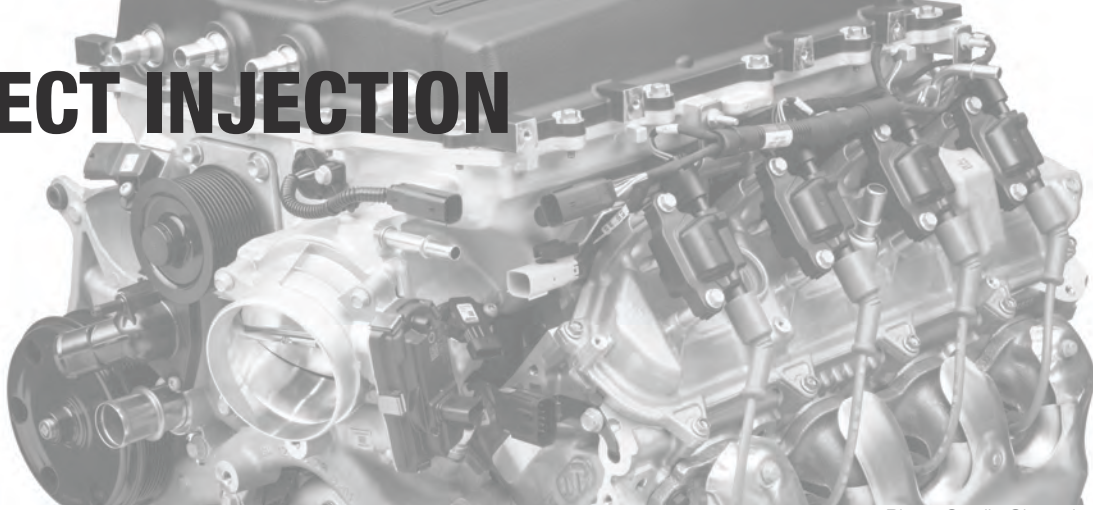


Photo Credit: Chevrolet Performance

THE RIGHT SOLUTION FOR DIRECT INJECTION ENGINES

Direct injection and superchargers or turbochargers make for a powerful combo, but delivering high torque at low speed can lead to abnormal combustion that not only degrades performance but can also cause catastrophic engine damage.

Independent research and testing has found that reducing the amount of Calcium detergent and eliminating the Sodium detergent in the motor oil formula reduces the frequency and severity of LSPI and other abnormal combustion events. Testing also revealed that increasing the level of Molybdenum reduces the tendency of these abnormal combustion events.

WHAT IS LSPI?

Low Speed Pre-Ignition (LSPI) is an abnormal combustion event that can lead to catastrophic engine damage, and LSPI is common to Turbocharged Direct Injection Engines. Normally, combustion follows the spark event as controlled by the engine management system. In a LSPI event, the combustion event begins prior to the spark event, which causes abnormally high pressures within the cylinder. These high pressures can damage the piston. Research indicates the formula of the motor oil has a direct link to the frequency and severity of LSPI.

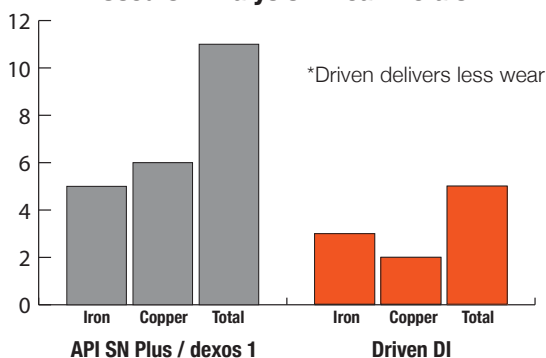
WHY?

Calcium based detergents are the most widely used detergents in off-the-shelf motor oils, and they are typically used in high concentrations. To avoid potentially catastrophic damage, motor oils must be formulated specifically for direct injection engines to ensure engine durability. Driven Racing Oil's own research has confirmed an oil's detergent chemistry impacts LSPI, with Calcium and Sodium increasing and Molybdenum compounds decreasing frequency. Lab testing confirmed that high levels of Sodium and Calcium tend to promote mixing of the oil and fuel that contributes to LSPI events in direct injection engines.

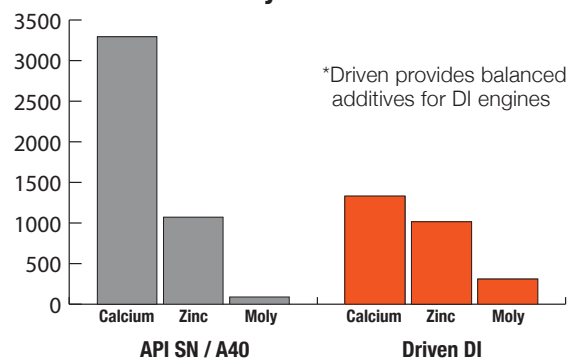
From that research and engine testing, Driven developed a new line of motor oils that provide a right-now solution for direct injection engines. Driven's DI Synthetic Motor Oils are ahead of the curve when it comes to the new 2018 API SN+ Engine Oil spec. Each Driven DI formula features lower levels of Calcium and boosted levels of Molybdenum to combat LSPI, reduce abnormal combustion, and protect against soot related wear. The DI line of motor oils also features a lower volatility base oil, reducing crankcase vapors and carbon buildup on intake valves. The results below show how Driven's DI formula delivers a different additive package compared to current European specs and the previous API spec, and Driven's DI formula reduces wear compared to the new API SN+ oil spec in a high performance DI engine.

Driven is at the forefront of LSPI research, and the Driven DI product line delivers right now performance and protection for high performance DI engines.

Used Oil Analysis - Wear Metals



New Oil Analysis - Additive Levels



DIRECT INJECTION



DI20 0W-20

DI20 delivers cutting-edge lubricant technology specifically developed for direct injection engines and utilizes an advanced additive package designed to reduce abnormal combustion, such as low speed pre-ignition issues, and protects against soot related wear. A lower volatility base oil also reduces crankcase vapors and carbon buildup on intake valves. DI20 also reduces turbocharger deposits as evidenced by exceptional performance in the TEOST turbocharger deposit test. Viscosity typical of 0W-20.

DI30 5W-30

Sharing the same advantages as Driven's DI20 Oil, DI30 should be used in any direct injection engine that calls for 5W-30 motor oil, such as the Ford EcoBoost engines and the GM LT1 and LT4 engines. Viscosity typical of 5W-30.

DI40 0W-40

Containing a proprietary additive package to combat abnormal combustion issues, as well as soot related problems, Driven's DI40 should be used in any direct injection engine that calls for 0W-40 motor oil, such as the GM LT5 and Porsche DFI engines. Viscosity typical of 0W-40.

DI50 15W-50

Featuring Driven's DI-specific additive package containing increased levels of molybdenum for reduced abnormal combustion events, DI50 is recommended for racing, track days and other extreme applications. Viscosity typical of 15W-50.

DI60 10W-60

With all of the same advanced features as the other products in the Driven DI line of products, DI60 should be used in any direct injection engine that calls for 10W-60 motor oil, such as the BMW M series. Viscosity typical of 10W-60.

	Qt. Bottle
DI20 Synthetic 0W-20	18206
DI30 Synthetic 5W-30	18306
DI40 Synthetic 0W-40	18406
DI50 Synthetic 15W-50	18506
DI60 Synthetic 10W-60	18606

DRIVEN RACING OIL CHANGE KITS



Oil Change Kits from Driven Racing Oil take the guesswork out of picking the best oil and filter combination for your high-performance late model GM engine.

All kits conveniently match premium quality Driven Racing Oil with WIX XP Filters to provide optimum protection for high-performance GM applications. Kits are available for GM LS engines requiring 5W-30 viscosity, as well as GM Gen V direct injection engines requiring 0W-20, 5W-30, 0W-40, & 15W-50 viscosities.

	Capacity	Kit Components	Part #
LS30 Oil Change Kit for Gen III GM Engines (1997-2006)	6 Qts	LS30 Synthetic 5W-30 Performance Motor Oil & 51042XP WIX Filter	20633K
LS30 Oil Change Kit for Gen IV GM Engines (2007-Present)	6 Qts	LS30 Synthetic 5W-30 Performance Motor Oil & 57060XP WIX Filter	20634K
LS30 Oil Change Kit for Gen IV GM L77, L99, LS3, LS7 & LSA Engines (2007-Present)	8 Qts	LS30 Synthetic 5W-30 Performance Motor Oil & 57060XP WIX Filter	20834K
DI30 Oil Change Kit for Gen V GM LT1 & LT4 Engines (2014- Present)	10 Qts	DI30 Synthetic 5W-30 Direct Injection Motor Oil & WL10290XP WIX Filter	21035K
DI40 Oil Change Kit for 2019 Gen V GM LT1, LT4, & LT5 Engines	10 Qts	DI40 Synthetic 0W-40 Direct Injection Motor Oil & WL10290XP WIX Filter	21045K
DI50 Track Pack Oil Change Kit for GM GEN V LT1/LT4	10 Qts	DI50 Synthetic 15W-50 Direct Injection Motor Oil & WL10290XP WIX Filter	21055K
DI20 Oil Change Kit for Gen V GM Direct Injection Truck Engines (2014- Present)	8 Qts	DI20 Synthetic 0W-20 Direct Injection Motor Oil & WL10255XP WIX Filter	20825K
DI30 Oil Change Kit for Corvette Stingray LT1 (2014-2018)	7 Qts	DI30 Synthetic 5W-30 Direct Injection Motor Oil & WL10290XP WIX Filter	20735K

WIX FILTERS



WIX FILTERS

WIX Filters are also sold separately for use with synthetic oils in the present day's extreme driving environments.

XP FILTERS

Height	OD Top	Thread Size	By-Pass Valve Setting-PSI	Anti-Drainback Valve	Max Flow Rate	Part #
3.404"	2.921"	13/16-16	None	Yes	9-11 GPM	51042XP
3.45"	2.921"	22 x 1.5mm	12	Yes	10-12 GPM	57060XP
3.45"	2.921"	22 x 1.5mm	22	Yes	-	WL10290XP
4.776"	2.921"	22 x 1.5mm	22	Yes	-	WL10255XP
4.828"	2.939"	22 x 1.5mm	12-15	Yes	-	57045XP

RACING FILTERS

Height	OD Top	Thread Size	By-Pass Valve Setting-PSI	Anti-Drainback Valve	Max Flow Rate	Nominal Micron Rating	Part #
4.33"	3.6"	13/16-16	None	No	28 GPM	-	51069R
5.17"	3.6"	3/4-16	8-11	Yes	28 GPM	61	51515R
5.17"	3.6"	13/16-16	None	Yes	28 GPM	61	51060R
5.178"	3.66"	13/16-16	None	No	28 GPM	61	51061R
6.21"	4.6"	1 1/2-12	18-22	No	28 GPM	-	51222R

COMPETITION/RACE - SYNTHETIC



Competition pushes engines to the edge, and your motor oil provides that thin film of lubricant that keeps your race engine from going over that edge. Driven Racing Oil was developed to deliver the ultimate in horsepower and protection. Formulated with more Zinc, Moly and proprietary friction modifiers, the XP Series of Driven Racing Oil delivers championship winning performance and protection.

For more information on your specific racing format and the best oil for your application, see page 19 of this catalog.

SYNTHETIC

XP6 15W-50

Provides excellent bearing oil film thickness for aluminum blocks and looser clearance engines. Utilizes select synthetic base oils for increased durability at high operating temperatures. Recommended for Methanol fueled engines. Formulated with proprietary anti-wear and friction reducing additives to fight valve train wear and increase horsepower. Compatible with Methanol and high octane race fuels. Viscosity typical of 15W-50.

XP9 10W-40

Reduces wear and lowers temperatures compared to conventional 20W-50 racing oils. Provides increased high temperature and high shear protection for wet sump and high compression applications. XP9 utilizes select synthetic base oils for increased durability at high temperatures. Compatible with Methanol and high octane race fuels. Formulated with proprietary anti-wear and friction reducing additives to fight valve train wear and increase horsepower. Ideal for high output steel block engines. Viscosity typical of 10W-40.

XP3 10W-30

Provides outstanding high temperature and high shear protection. Utilizes select synthetic base oils for increased durability at high temperatures. Formulated with proprietary anti-wear and friction reducing additives to fight valve train wear and increase horsepower. Ideal for crate, spec and custom built engines with clearances under .002". Compatible with Methanol and high octane race fuels. Viscosity typical of 10W-30.

COMPETITION/RACE - SYNTHETIC

SYNTHETIC *CONTINUED*

XP1 5W-20

Proven to handle 500 miles of competition at over 9500 RPM, XP1 utilizes multiple synthetic base oils for increased durability under higher loads. Formulated with proprietary anti-wear and friction reducing additives to fight valve train wear and increase horsepower. Ideal for high RPM and high output engines with tight clearances. Perfect track car oil for naturally aspirated Honda, Scion and Subaru engines. Ideal for Briggs & Stratton Animal and Flathead engines running Methanol. Also great for V-Twin style racing engines. Compatible with Methanol and high octane race fuels. Viscosity typical of 5W-20.



XP2 0W-20

Utilizes low viscosity synthetic base oils for increased horsepower without decreased durability. Formulated with proprietary anti-wear and friction reducing additives to fight valve train wear and increase horsepower. Ideal for wet sump drag race engines and restricted airflow applications with tight clearances. Compatible with Methanol and high octane race fuels. Viscosity typical of 0W-20.



XP10 0W-10

Utilizes multiple low viscosity synthetic base oils to fine tune for increased horsepower and improved ring seal. Ideal for wet sump drag race engines and restricted airflow engines with tight clearances. Formulated with proprietary anti-wear and friction reducing additives to fight valve train wear and increase horsepower. Compatible with Methanol, E85 and high octane race fuels. Viscosity typical of 0W-10.



XP0 0W

Utilizes ultra low viscosity synthetic base oils for maximum horsepower during circle track qualifying. Formulated with proprietary anti-wear and friction reducing additives to fight valve train wear and increase horsepower. Compatible with Methanol, E85 and high octane racing fuels. Also ideal for low temperature drag race applications. Viscosity typical of 0W.

KRT – 4 STROKE KARTING 0W-20

Formulated with select synthetic base oils for increased horsepower and durability at high temperatures. Utilizes proprietary anti-wear and friction reducing additives to fight valve train wear and increase horsepower. Compatible with pump gas and race fuels. Ideal for Clone and Honda engines. Proven to increase horsepower up to .4 horsepower in Clone engines and KRT reduces cam and lifter wear. Viscosity typical of 0W-20.

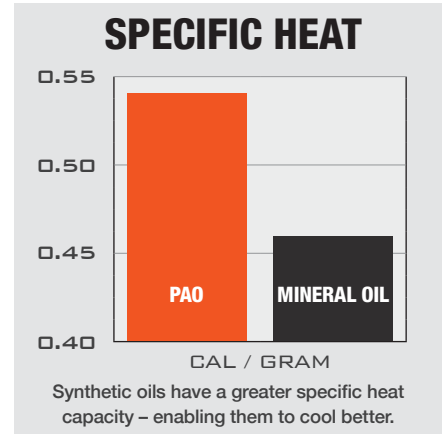
	Qt. Bottle	5 Gal. Pail	54 Gal. Drum
XP6 15W-50	01006	N/A	01020
XP9 10W-40	03206	N/A	03220
XP3 10W-30	00306	00317	00320
XP1 5W-20	00006	N/A	N/A
XP2 0W-20	00206	N/A	N/A
XP10 0W-10	03306	N/A	N/A
XP0 0W	00406	N/A	N/A
KRT – 4 Stroke Karting 0W-20	03406	N/A	03420

WHY SYNTHETIC?

Oil does more than just reduce friction and wear – it provides vital cooling in an engine. Cool, well lubricated parts last longer, and synthetic oils have a greater specific heat capacity than mineral oils, which means synthetics can absorb more heat from the part. This enables synthetic oils to cool better than conventional oils, and better cooling means lower oil temperatures.

Also, the high temperatures on the valve springs, camshafts and pistons cause conventional oils to break down much faster than synthetic oil. Mineral-based oils begin to break down at 240° F, but synthetic oils can handle up to 320° F before they begin to break down. The improved thermal stability of synthetic oil provides increased oil life, and the greater heat capacity of synthetic oil lowers oil temperatures.

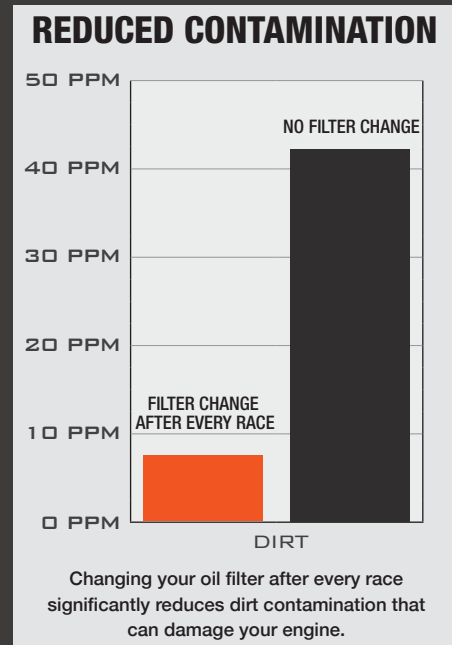
Using the correct viscosity synthetic oil provides extra “insurance” against heat related engine wear and damage. To choose the correct viscosity for your race application, see the chart on page 35 of this catalog.



GET MORE FROM YOUR OIL

While synthetic oil does cost more per quart, it can actually save you money in the long run. Because synthetic oil is more durable and lasts longer than mineral oil, you don't have to change it as often. Fewer oil changes means big savings! The most cost effective approach is to use synthetic oil and frequently change the oil filter. Because more than 50% of machine failures are related to contamination, it is important to keep the oil clean. Changing the oil filter removes contaminants from the oil system, which keeps the oil cleaner.

Good, clean oil provides better protection, so following this maintenance program reduces engine wear and oil purchases. Instead of changing a mineral based oil after each race, use a synthetic based oil and just change the filter after each race. Not only does this approach reduce contamination, it saves you money. If you don't believe us, see the cost analysis below.



BETTER SYNTHETIC

[mPAO] IS A GAME CHANGER

AND YOUR ENGINE'S PERFORMANCE & DURABILITY STAND TO BENEFIT

Driven Racing Oil has made a major technological leap by incorporating mPAO, the most innovative synthetic base oil available, into all of its synthetic oils.

Oil is the lifeblood of any engine. When it comes to highly complex performance engines, it's critical to choose the oil that meets your engine's specific needs. While it is often difficult to separate "fact from fiction" regarding engine oils, rest assured that lubricant technology is constantly evolving at the highest levels of motorsports, and Driven Racing Oil is a major player in those developments. One such breakthrough that Driven has recently incorporated into all its synthetic options is mPAO – a next generation synthetic base lubricant. While you may never have heard this name before, what this stuff does is impressive. By using an mPAO base for creating its performance lubricants, Driven is able to create synthetic motor oils that retains a high HTHS (High Temperature High Shear) viscosity to give you the best lubricant possible – an oil that's less sensitive to heat, doesn't break down under extreme friction and increases power output.

HIGHER VISCOSITY INDEX = HIGHER PERFORMANCE

Consider that lubrication scientists use something called "viscosity index" to compare the properties of different base oils. The preferred synthetic base oil until now has been PAO, which features a viscosity index of 135. In comparison, the mPAO features a viscosity index of 200 – solid evidence of its enhanced lubrication properties!

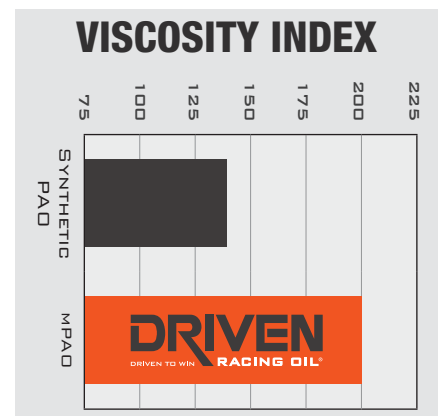
Dyno tests show that engines consistently gain horsepower with the new formulations containing mPAO. As you can see, this is a huge advance in oil technology, and Driven includes it in all of its synthetic oils. The high viscosity index mPAO delivers allows the formulation of lower viscosity oils that deliver the bearing protection of a higher viscosity conventional oil. Despite being a 10W-40, Driven's XP9 delivers the same bearing oil film thickness of a conventional 20W-50. That is better all around protection and performance.

Winning championships at the highest level of motorsports is the primary goal of Driven Racing Oil, so while other brands may claim to be performance oils, only Driven backs it up by actually racing the same stuff you can buy off the shelf. Only Driven Racing Oil, puts the very same oil it sells to you in every Joe Gibbs Racing engine.

Driven's mPAO formulas provide 40% greater viscosity index, allowing it to thrive in grueling environments.



RACE PROVEN NASCAR LEVEL TECHNOLOGY FOR YOUR ENGINE



COMPETITION/RACE

Different applications require different chemistries, and Driven Racing Oil delivers formulas tailored to meet the requirements of many different applications – the motor always comes before the molecule. While full synthetic oils provide distinct advantages over mineral based oil, some applications actually work better with semi-synthetic or conventional/mineral based oils.

Engines equipped with bushing-style roller lifters work better with semi-synthetic due the unique pressure/viscosity curve of these oils. Also, some operating environments are so dirty that the oil must be changed on a frequent basis. Fuel dilution from Methanol and/or Nitromethane requires more frequent oil changes, and conventional oils are preferred in high horsepower Nitrous applications. As such, Driven Racing Oil provides a variety of semi-synthetic and mineral based oils.

SEMI-SYNTHETIC

XP5 20W-50

A semi-synthetic based on our original formula race oil, XP5 provides excellent roller lifter and roller rocker arm protection. XP5 delivers improved high temperature shear and oxidation stability compared to mineral oil without the higher cost of a full synthetic. For use in high compression engines. Viscosity typical of 20W-50.

XP7 10W-40

A semi-synthetic 10W-40 racing oil based on our proven XP5 racing oil. Ideal for desert and off-road engines, IMCA Modified engines, spec engines, flat tappet camshafts and hydraulic lifter engines. Designed for clearances under .0030". Viscosity typical of 10W-40.



	Qt. Bottle	54 Gal. Drum
XP5 20W-50	00906	00920
XP7 10W-40	01706	N/A

CONVENTIONAL

XP4 15W-50

High Zinc, Petroleum formula racing oil, XP4 offers low cost protection for racers who want to use non-synthetic oil. Excellent protection for dirt and nitrous racers who need to change their oil frequently. Recommended applications include big block, flat tappet camshaft, nitrous and alcohol fueled drag engines. Viscosity typical of 15W-50.

XP8 5W-30

Excellent low cost drag and circle track racing oil. A high Zinc, Petroleum formula racing oil, XP8 offers low cost protection for racers who want to use non-synthetic oil. Recommended applications include small block, flat tappet camshaft engines and tight clearance nitrous engines (under .0027"). Perfect for bracket racers. Viscosity typical of 5W-30.



	Qt. Bottle	54 Gal. Drum
XP4 15W-50	00506	N/A
XP8 5W-30	01906	N/A

COMPETITION/RACE TECH

DRAG RACING

Drag race engines don't typically run long enough to build adequate oil temperature to evaporate off fuel dilution and moisture, so we offer products specifically designed for nitrous, bracket racing and naturally aspirated engines. Higher levels of moisture from chilling the engine prior to a run and excessive fuel dilution will shorten the life of the oil.

- **NITROUS: XP4** – The high ZDDP, mineral-based formula is perfect for big cubic inch nitrous engines. The 15W-50 viscosity handles the high loads from the added power, and **XP4** provides excellent ring sealing to put that power to use.
- **BRACKET RACING: XP4** and **XP8** – Consistency and Protection – these oils deliver both. When you are dialing an index, you don't need extra power. You just need consistent performance and protection. The high ZDDP formula of **XP8** provides the protection, and the 5W-30 viscosity provides consistent performance. The **XP8** does not thin out too much as you run rounds, so the engine stays consistent.
- **HEADS UP & QUALIFYING: XP0, XP10, XP2** – When you need to go as fast as you can, Driven Racing Oil provides full synthetic qualifying oils that deliver HP. Plus, these oils can be blended to fine tune the viscosity in order to achieve optimum engine performance.
- **ALCOHOL** – Without enough oil temperature to evaporate off the Methanol and related moisture, use the **XP** series of semi-synthetic oils to not only protect against wear but also defend against fuel dilution and moisture. Both the **XP5** and **XP7** will allow the moisture and methanol to separate from the oil.

CIRCLE TRACK & ROAD RACING

Endurance racing engines see high oil temperatures, so the oil must be able to resist thermal breakdown while allowing moisture from cooling the engine and fuel dilution to evaporate out of the oil system. We recommend changing the oil filter after each race weekend.

- **SYNTHETIC: XP9** delivers a performance upgrade in endurance applications compared to conventional 20W-50 racing oil. **XP9** lowers oil temperatures and increases horsepower compared to off-the-shelf 20W-50 racing oils. Also, the dial-in viscosity of **XP9** reduces engine wear by providing better oil flow at start-up without sacrificing high temperature bearing protection.
- **RACE GAS:** Formulated with special additives to protect against corrosion when using leaded race fuels, Driven Racing Oil provides a wide variety of viscosities to dial in the performance of your engine. The mPAO base oil can handle the high loads and high oil temperatures without breaking down. The proprietary formula of friction modifiers delivers proven horsepower gains without compromising durability. **XP1, XP2, XP3, XP6, XP9**
- **SPEC RACING: Extra Advantage** – When you race in a spec engine class, you need every advantage you can muster. Driven Racing Oil delivers mPAO based synthetic formulas that deliver a horsepower edge and lower foaming tendency for improved hydraulic lifter response. **XP2 – FORD FOCUS; XP1 – GM 602 CRATE, SPEC MIATA, FORMULA FORD; XP3 – GM 604 CRATE, LEGENDS; XP9 – NASCAR SPEC ENGINE, FORD CRATE ENGINES**
- **QUALIFYING: XP0, XP10, XP2** – When you need to go as fast as you can, Driven Racing Oil provides full synthetic qualifying oils that deliver horsepower. Plus, these oils can be blended to fine tune the viscosity in order to achieve optimum engine performance.

OFF-ROAD & DIRT TRACK RACING

Endurance racing in desert and dirt track environments calls for frequent oil changes to remove dirt ingested into the engine during competition. Driven's semi-synthetic and petroleum formula oils deliver outstanding wear protection at a price that allows for frequent oil changes.

- **SEMI-SYNTHETIC: XP5** and **XP7** – These semi-synthetic, mPAO based formulas are perfect for desert off-road and dirt track engines. The addition of some mPAO base oil increases the ability to handle high loads and high oil temperatures without breaking down. This increases the durability of the oil while maintaining a semi-synthetic price. The 20W-50 viscosity of the **XP5** is perfect for aluminum block engines, and the 10W-40 viscosity of the **XP7** is perfect for iron block engines.
- **PETROLEUM: XP4** – In very dirty and very high fuel dilution environments, the best plan of action is to change the oil frequently. The all mineral formula of **XP4** delivers high Zinc protection for valve train durability, and the 15W-50 viscosity provides bearing oil film thickness.

DIESEL



THE BEST DIESEL PRODUCTS ON THE MARKET, WHETHER YOU HAVE A TOW RIG OR A HIGH PERFORMANCE MACHINE

Driven now offers a full line up of diesel specific products. We've got you covered from that critical first start-up, all the way through long-term maintenance.

- Increase Cetane for more power
- Clean deposits to improve efficiency
- High lubricity for increased longevity
- Will not harm after treatment devices & EGR systems
- High levels of Zinc (ZDDP) for proper anti-wear protection in high output engines and flat tappet cams
- Defend against turbo coking & oil consumption
- mPAO for maximum high temp shear-stable viscosity

INJECTOR DEFENDER FUEL ADDITIVES

DIESEL

Diesel Injector Defender Diesel features a detergent that prevents injector deposits by dispersing particles and contaminants in fuel, allowing them to pass through without clogging. Not only does it provide protection against new deposits, it can clean up current ones and restore diesel engine performance and improve fuel mileage. All of this adds up to improved overall performance, decreased maintenance costs and less engine down time.

- Improves Lubricity
- Increases Cetane
- Cleans Deposits
- Restores Power

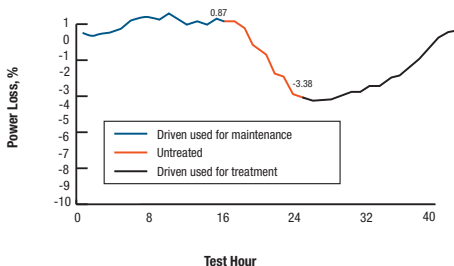
10 oz. Bottle

Injector Defender Diesel – Treats Up To 50 Gallons

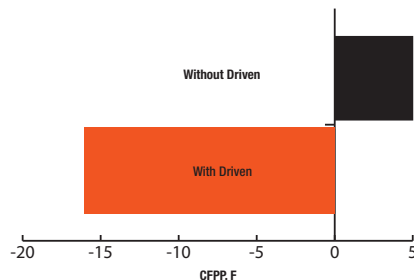
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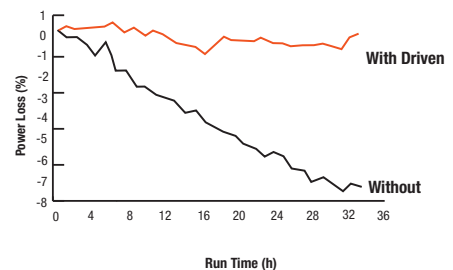
Protection Against ULSD Internal Deposits



Average in Ten Regional Diesel Fuels



Reduced Power Loss in DW-10 Test





BREAK-IN

DBR DIESEL BREAK-IN 15W-40

DBR promotes proper surface mating during the critical break-in process and chemically assists with piston ring sealing. A low detergent level allows the “fast burn” ZDDP additive to adhere directly to all ferrous metal wear surfaces for maximum scuffing protection of flat tappet cams, bushing lifters, cam driven fuel pumps, turbocharger bearings and cylinder bores. Can be used in naturally aspirated and turbo diesel engines and is also safe for engines fitted with exhaust after-treatment devices. Viscosity typical of 15W-40.

SYNTHETIC

DP40 5W-40

Not every high performance engine burns gasoline. Turbocharged diesel engines require robust anti-wear protection. These high output engines need defense against high temperatures. Driven DP40 delivers enhanced film thickness originally developed for the U.S. military, as well as increased anti-wear additives. Ideal for diesel-equipped tow vehicles. Viscosity typical of 5W-40.

SEMI-SYNTHETIC

DR40 15W-40

DR40 is a semi-synthetic that combines conventional 15W-40 viscosity with advanced mPAO technology to provide enhanced wear protection and shear stability. It is compatible with all exhaust after-treatment devices and is compliant with OEM performance specifications while exceeding the API requirements of the CJ-4 specification and the performance criteria of API CI-4 PLUS, CI, CH-4, CG-4 and CF-4. Viscosity typical of 15W-40.

	1 Gal. Bottle	54 Gal. Drum
DBR Diesel Break-In 15W-40	05308	05320
DP40 Semi-Synthetic 5W-40	02508	N/A
DR40 Semi-Synthetic 15W-40	05408	05420

WARNING: Cancer and Reproductive Harm
P65Warnings

SPECIALTY FLUIDS



Marine, motorcycle and karting engines place very unique demands upon the lubricant. As a result, these engines require special formulations that can protect air cooled engines and wet clutch engines. Utilizing mPAO based oil technology, Driven's formulas deliver the exceptional thermal stability these unique engines demand.

MR50 – MARINE MOTOR OIL 15W-50

Loaded with ZDDP for added protection, MR50 offers an application specific product designed for this demanding performance environment. Driven's certified lubrication engineers have worked with marine engine builders to develop a first-in-class synthetic product that delivers performance and value. Excellent protection for high performance marine engines. Ideal for flat tappet cams, big blocks and blown marine engines. MR50 contains rust inhibitors for winter storage and defense against ethanol blended fuel. Viscosity typical of 15W-50.

HD50 – AIR COOLED MOTORCYCLE 15W-50

Excellent protection for air cooled motorcycle engines. Ideal for flat tappet and aggressive roller cams, V-Twins and high performance motorcycle engines. Includes rust inhibitors for winter storage and defense against Ethanol-blended fuel. Viscosity typical of 15W-50.

KRT – 4 STROKE KARTING 0W-20

Formulated with select synthetic base oils for increased horsepower and durability at high temperatures. Utilizes proprietary anti-wear and friction reducing additives to fight valve train wear and increase horsepower. Compatible with pump gas and race fuels. Ideal for Clone and Honda engines. Proven to increase horsepower up to .4 horsepower in Clone engines and KRT reduces cam and lifter wear. Viscosity typical of 0W-20.

	Qt. Bottle	54 Gal. Drum
MR50 - Marine Motor Oil 15W-50	02606	02620
HD50 – Air-Cooled Motorcycle 15W-50	02706	N/A
KRT – 4 Stroke Karting 0W-20	03406	03420

CARB DEFENDER SMALL ENGINE

Carb Defender protects your small engine from Ethanol corrosion and induction deposits. A 1 oz. packet treats up to 5 gallons of Ethanol-blended fuel.

1 oz. Packet

70042



SPECIALTY FLUIDS

POWER STEERING FLUID

Reduces temperatures and delivers consistent steering response. Exceptional low temperature flow reduces initial drag on the pump, and the fully synthetic formula provides improved thermal stability for less pressure drop as temperatures rise. Offers high temperature foam resistance for better cooling and improved steering precision.

CSP – COOLANT SYSTEM PROTECTOR

Protect your engine block, cylinder heads, water pump and radiator from deposits and corrosion that reduce the effectiveness of your cooling system. Don't put your engine at risk from the corrosive effects of coolants mixed with non-distilled water. The minerals in regular water and well water cause corrosion and degrade the performance of the coolant. CSP neutralizes these minerals and prevents damage due to hard water. This is especially important when you add make-up water to the coolant system. CSP prevents corrosion in modern "orange" OAT coolants, traditional "green" anti-freeze and straight water. Keeps engine coolant passages clean and lubricates water pumps. Do not mix with other coolant additives.

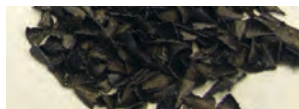
- Adds corrosion resistance to modern "orange" OAT coolants
- Better "wetting" than traditional coolant additives
- Improves engine cooling by improving surface wetting and lowering surface tension
- Stabilizes hard water



	Qt. Bottle
Power Steering Fluid	01306
Coolant System Protector	50030



The Competition

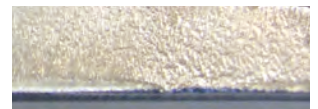


DRIVEN CSP

CAST IRON PROTECTION



The Competition



DRIVEN CSP

ALUMINUM PROTECTION

TRANSMISSION FLUIDS



STF SYNCHROMESH TRANSMISSION FLUID

STF protects gears, bearings and internal clutches in extreme heat environments such as those experienced by track day cars and race vehicles. By reducing friction, heat and wear, it improves shifting characteristics and lowers operating temperatures. Designed to exceed performance requirements for GM, Chrysler, Honda and Mini Cooper synchronized transmissions, STF features advanced synthetic base stocks, multifunctional performance additives, corrosion inhibitors, a foam suppressor and a shear stable viscosity index improver additive to provide excellent synchronizer performance and compatibility with yellow metals found in manual transaxles and transmissions. Recommended for manual transmissions that require automatic transmission fluids, multi-viscosity or straight grade motor oils. It is also ideal for 2-cycle gear boxes.

DCT DUAL CLUTCH TRANSMISSION FLUID

Driven's Synthetic Dual Clutch Transmission Fluid provides the utmost track protection in wet- and dry-style dual clutch transmissions. Like all Driven transmission fluids, it is formulated with advanced synthetic base oils and provides for lower operating temperature, reduced parasitic drag and smooth shifting in high shear racing applications.

AT3 SYNTHETIC DEX/MERC AUTOMATIC TRANSMISSION FLUID

Driven's AT3 features multifunctional additives, corrosion inhibitors and foam suppressors. It also features high temperature protection and shear stability while offering improved low temperature flow and seal protection. AT3 is recommended for use in Toyota T-III and T-IV, Honda ATF-Z1, NissanMatic D, J & K, Diamond SP-II, SP-III, Mazda ATF M-V, most BMW, Audi, VW automatic transmissions. AT3 can also be used in manual transmissions and transaxles like T-5, T-45, T-56 and late model BMWs that call for DEXRON III or multi-vehicle ATF.

AT6 SYNTHETIC DEX 6 AUTOMATIC TRANSMISSION FLUID

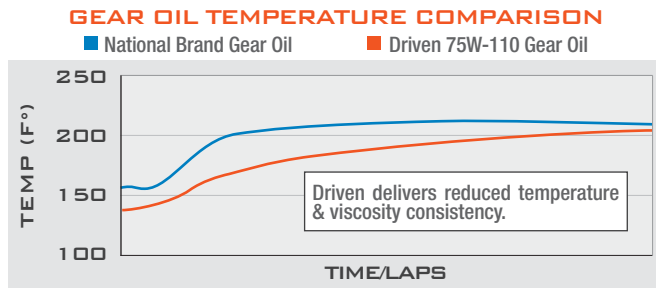
AT6 is a full synthetic ATF that features mPAO, the most innovative synthetic base oil available. This fluid is designed for use in Toyota Type T-III and T-IV, Honda ATF-Z1, NissanMatic D, J, & K, Diamond SP-II, SP-III, Mazda ATF M-V, most BMW, Audi, automatic VW transmissions and all manual transmissions that specify Dexron VI® and Mercon LV® ATF.

	Qt. Bottle
Synchromesh Transmission Fluid	04006
DCT (Dual Clutch Transmission) Fluid	04606
AT3 Synthetic DEX/MERC Automatic Transmission Fluid	04706
AT6 Synthetic DEX 6 Automatic Transmission Fluid	04806

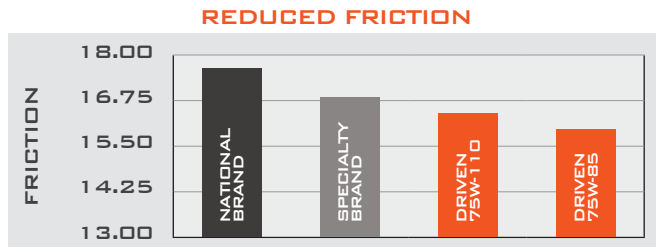
MORE THAN MOTOR OIL

The pursuit of increased power output and durability does not end at the flywheel. The engineering staff at Driven Racing Oil looks for every possible advantage, and Driven products deliver measurable performance gains in transmissions, rear gears and power steering.

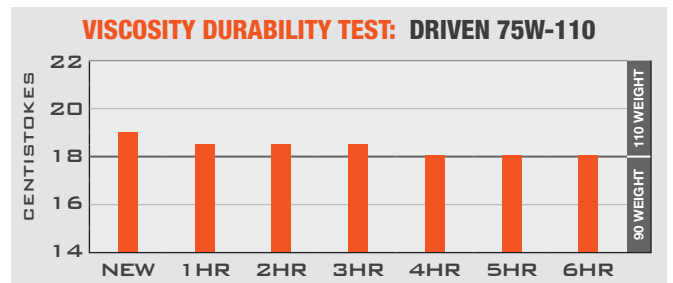
TEMPERATURE REDUCTION: Our synthetic gear oils and transmission fluids reduce operating temperatures by more than 15° F compared to others on the market.



REDUCED FRICTION: For reduced friction and 500 mile durability, choose Driven Racing Gear Oil 75W-85 to provide race proven durability in 9" and quick change rear gears.



SHEAR STABILITY: Driven Gear Oils provide shear stable viscosity for outstanding gear durability. Even after six hours of running, Driven Gear Oils maintain their viscosity. Providing increased durability and reduced temperature and friction – Driven products deliver proven performance gains, and our selection of gear oils allows you to optimize your qualifying and race performance just by swapping gear oils. Short qualifying sessions do not allow oils to reach normal operating temperatures. As a result, fluid drag is much higher, and that slows your qualifying lap. These low engine, transmission and rear end temperatures during qualifying permit the use of lower viscosity engine, transmission and rear gear oils to improve lap time and gain valuable starting positions.



“Driven Gear Oil is a product that the customer can depend on from day one. It is test proven for extended ring & pinion life and lower operating temperatures. I recommend this oil to all my customers knowing they will not be disappointed with its performance. Protect your investment!”

- KERRY HENNE, Frankland Racing

DRIVELINE

BREAK-IN

BREAK-IN GEAR OIL 80W-90

Petroleum based Break-In Gear Oil allows gear teeth to break in quickly while improving their surface finish. By polishing the gear teeth, micro-pitting is eliminated to improve gear durability. A smooth gear surface can carry more load and last longer. The Break-In Gear Oil can be run for the normal break-in cycle, and then a synthetic racing gear oil may be used to get the most protection and efficiency from the rear gear and transmission. Viscosity typical of 80W-90.



	Qt. Bottle
Break-In Gear Oil 80W-90	02330

STREET/TRACK

GL-4 GEAR OIL 80W-90

A classic, mineral-based gear oil, Driven's GL-4 protects yellow metals and provides proper synchronization to prevent clashing in synochronized manual transmissions. Containing high-quality base oils for high shear race protection and extended change intervals, it is recommended for any race or street performance application where GL-4 gear oil is required. Viscosity typical of 80W-90.

LIMITED SLIP GEAR OIL 75W-140

Synthetic 75W-140 Limited Slip Gear Oil utilizes next generation synthetic oil technology to provide consistent limited slip differential performance. Popular for cars and light trucks such as the Ford Mustang, Ford F-150, Dodge Ram and others, it is engineered to provide the highest degree of protection and improvement of differential efficiency for improved fuel mileage, longer drain intervals, and less wear and tear. It provides superior lubrication under extreme conditions and maintains a relatively constant viscosity with temperature variations. Exceeds the performance requirements of API GL-5. Recommended for limited slip differential applications. Viscosity typical of 75W-140.

LIMITED SLIP GEAR OIL 75W-90

Ideal for both clutch type and torsion type differentials, this competition proven formulation utilizes a proprietary additive package that reduces drag, resists foaming and maintains its viscosity under extreme heat and high loads. It delivers outstanding performance in extreme environments like autocross, off-road trucks, UTVs, track day cars and race vehicles. Exceeds the performance requirements of API GL-5. Recommended for limited slip differential applications. Viscosity typical of 75W-90.



	Qt. Bottle
GL-4 Gear Oil 80W-90	04530
Limited Slip Gear Oil 75W-140	04430
Limited Slip Gear Oil 75W-90	04230



Photo Credit: Larsen Racing Products, Inc.

RACE

RACING GEAR OIL 75W-140

By reducing friction and providing shear-stable viscosity for outstanding gear durability, this oil eliminates the pitting and scratching of gear sets and does not increase drag or reduce horsepower. Even after six hours of competition it maintains its viscosity, and extended change intervals allow it to be used race after race, while reducing temperatures by up to 15°F more than other brands. Viscosity typical of 75W-140.

RACING GEAR OIL 75W-110

Used by top race teams in rear ends, differentials and transmissions, this unique synthetic gear oil reduces operating temperatures by up to 15°F compared to other brand gear oils. Proven durability on short tracks and road courses. Viscosity typical of 75W-110. Formerly referred to as Synthetic Gear Oil.

RACING GEAR OIL 75W-90

Designed to offer maximum protection in a wide range of race and street performance applications, it contains high viscosity index synthetic base oils that help lower operating temperature and reduce friction and drag in hypoid gears, spiral gear boxes and transmissions that call for GL-5 gear oil. It also provides race grade protection and performance in all limited slip differentials and synchronized manual transmissions. Viscosity typical of 75W-90.

RACING GEAR OIL 75W-85

This 75W-85 synthetic gear oil provides race proven durability and dyno proven power gains from reduced friction and parasitic drag. It can be used in quick change style rear ends and drag race applications. Viscosity typical of 75W-85. Formerly referred to as Super Speedway Gear Oil.

	Qt. Bottle	5 Gal. Pail
Racing Gear Oil 75W-140	04330	N/A
Racing Gear Oil 75W-110	00630	00617
Racing Gear Oil 75W-90	05530	N/A
Racing Gear Oil 75W-85	00830	N/A

"After dozens of pulls on the dyno making over 600 HP at the wheels, the rear end oil looks as fresh as when we put it in."

- PAT MCGUE, Hancock & Lane

Today's Fuels Destroy Engines

DRIVEN FUEL ADDITIVES OFFER PROVEN PROTECTION.

GASOLINE CONCERNS

The growing use of Ethanol in modern pump fuel significantly increases the risk of carburetor and fuel system corrosion. Ethanol is added to fuel as an "oxygenate" for emissions purposes. But Ethanol is hygroscopic, meaning it absorbs moisture, which causes corrosion in the fuel system and inside the engine. Plus, high levels of Ethanol dilution in the motor oil can lead to increased moisture in the crankcase, thereby causing rust and other corrosion problems.

Ethanol by itself is corrosive to components made of Aluminum and Zinc, while gasoline-oxygenate blends can corrode other materials such as Magnesium and Steel. Problems caused by Ethanol in gasoline and oil are then compounded by long periods of storage between uses.

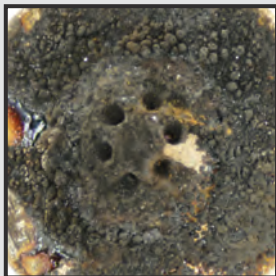
DIESEL CONCERNS

In recent years, the HPCR (high pressure common rail) direct injection diesel engine has been introduced as a way to improve fuel economy and lower emissions. Shortly after came ULSD (ultra low sulfur diesel) fuel. After the introduction of the ULSD, diesel drivers started to report poor starts, misfires, rough running, engine shut off and black smoke, all of which were attributed to deposits of sodium carboxylate salts in the injectors, as well as reduced lubricity and a low cetane rating in the fuel.

HPCR injectors have extremely tight or fine tolerances, and the ULSD fuel is not soluble so this creates excessive waxy build up that can't be filtered out of these engines. Initially, an injector replacement was the only solution but that's extremely expensive and requires major engine downtime.

Reduced lubricity means an increase in friction and wear on engine components while the low cetane rating indicates a longer delay in the ignition period. So these increased equipment and maintenance costs related to injector replacements, as well as the decreased production and fuel economy caused by the reduced lubricity and low cetane rates, led to the introduction of Injector Defender for Diesel engines.

See the images below for examples of issues in both gasoline and diesel engines caused by fuel deposits.



FUEL ADDITIVES

CARB DEFENDER FUEL ADDITIVES

Driven Carb Defender Fuel Additive is specifically formulated to protect against Ethanol corrosion and induction deposits. Special corrosion inhibitors work to prevent expensive repairs and diminished performance caused by Ethanol-blended pump gasoline and the moisture it attracts. These additives control combustion chamber residue, plus they clean and protect surfaces of the fuel system and intake tract. One of Carb Defender's most important functions is that of a fuel stabilizer that extends fuel storage life. The additives treat up to 25 gallons of Ethanol-blended gas. Carb Defender should be used with each and every fill-up for a 54% improvement in cleanliness and sustained benefits for 3,000 miles.

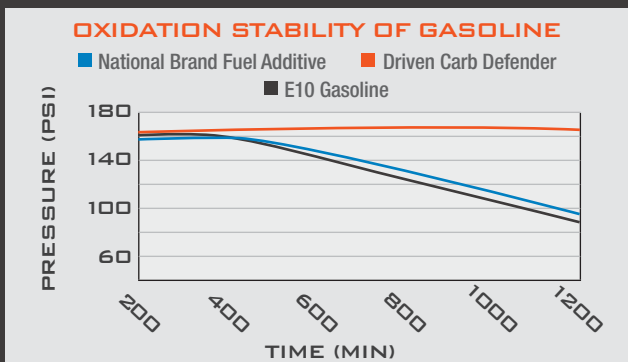
- Preserves & Extends Storage Life
- Prevents Ethanol Corrosion
- Cleans Entire Fuel System
- Restores Power
- Improves Fuel Economy
- Lowers Emissions

	Size	Part #
Carb Defender – Treats Up To 25 Gallons	10 oz. Bottle	70040▲
Small Engine – Treats Up To 5 Gallons	1 oz. Packet	70042▲
Race Concentrate – Treats Up To 55 Gallons	6 oz. Bottle	70044▲



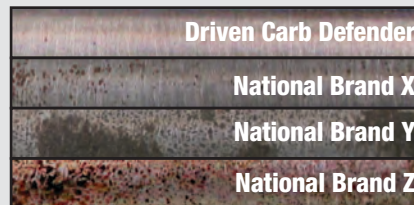
FUEL PROTECTION TECHNOLOGY

The graphics below display the results of Ethanol based fuels on metals found in your engine. Several Driven Fuel Additives include the corrosion inhibitor and anti-oxidant fuel stabilizer that these tests included.



Oxidation in fuel ultimately causes fuel degradation/break-down that results in gum formations and varnishes. The fuel's molecular makeup actually changes, octane rating goes down and fuel performance lessens. This graph shows the oxidation stability of gasoline - one is the base E10 fuel that has no additive, one has been treated with a national brand fuel stabilizer and one has been treated with Driven Carb Defender. Driven Carb Defender, as well as Injector Defender and Defender + Booster all contain a specially formulated fuel stabilizer than features an anti-oxidant that inhibits gum formation and extends storage life.

Corrosion Test Results*



*Not ASTM verified. Testing was conducted by an independent lab using steel.

Corrosion is a direct result of Ethanol in gasoline. See the four samples of corrosion found on steel after being treated with three national brands of corrosion inhibitors, as well as Driven Carb Defender. It's easy to see that the metal treated with Driven Carb Defender shows almost no corrosion. The corrosion inhibitor used in Carb Defender is also used in Driven Injector Defender and Defender + Booster.

FUEL ADDITIVES

INJECTOR DEFENDER FUEL ADDITIVES

GASOLINE

Gasoline Injector Defender Gasoline prevents harmful corrosion due to today's ethanol blended and poor quality gasoline. Not only does Injector Defender restore performance and protect fuel injection systems from performance-robbing deposits, it also provides fuel stabilization and preservation. This additive provides a pour-in solution that will not harm sensors for all fuel injection vehicles, motorcycles and marine engines.

- Cleans Deposits
- Restores Power
- Preserves Fuel
- Prevents Corrosion

DIESEL

Diesel Injector Defender Diesel features a detergent that prevents injector deposits by dispersing particles and contaminants in fuel, allowing them to pass through without clogging. Not only does it provide protection against new deposits, it can clean up current ones and restore diesel engine performance and improve fuel mileage. All of this adds up to improved overall performance, decreased maintenance costs and less engine down time.

- Improves Lubricity
- Increases Cetane
- Cleans Deposits
- Restores Power



10 oz. Bottle

Injector Defender Gasoline – Treats Up To 25 Gallons

70048▲

Injector Defender Diesel – Treats Up To 50 Gallons

70080▲

DEFENDER + BOOSTER FUEL ADDITIVE

There are numerous products on the market that claim to be “octane boosters.” What makes Driven Defender + Booster so special is that while it raises the octane in unleaded fuels, it also reduces valve seat wear and protects against the corrosion/deposits common with today's gasoline.

Like our Driven Carb Defender and Injector Defender Fuel Additives, this product features corrosion inhibitors that control combustion chamber residue, as well as clean and preserve surfaces of the fuel system. By cleaning and controlling combustion chamber and intake valve deposits, Defender + Booster protects against detonation and improves fuel economy.

- Increase Octane Rating
- Cleans & Prevents Deposits
- Improves Valve Seat Wear
- Restores Power
- Stops Engine Knocks & Pings
- Enhances Fuel Stabilization
- Regular Use Lowers Emissions
- Prevents Detonation



10 oz. Bottle

Defender + Booster – Treats Up To 25 Gallons

70056▲

WINTERTIME STORAGE PROTECTION



STORAGE DEFENDER – FUEL ADDITIVE & OIL ADDITIVE

Before you put your engine in storage for the winter off-season, it's crucial to make sure it has the correct protection. This ensures it will be in proper running condition when it's time to take your ride back out on the road next year.

Driven offers two versions of Storage Defender – one formulated for fuel and one for oil. Both are designed for all gasoline engines and will save you the hassle of costly post-storage repairs resulting from corrosion that occurs at an accelerated pace over the winter due to temperature swings. Because they are specifically formulated to protect against Ethanol corrosion and induction deposits, both Driven Storage Defenders and their special corrosion inhibitors work to counteract the damaging moisture buildup resulting from the hygroscopic characteristics of Ethanol-blended fuel. Over the winter months, the Ethanol in your fuel tank absorbs moisture, which if left unprotected will lead to rust, corrosion and other costly problems. In addition, this additive stabilizes the fuel as well as cleans existing deposits in the combustion chamber.

With Driven Fuel and Oil Storage Defenders, you can rest assured that once it's spring and you're ready to bring your ride back out, its performance will remain the same.

- Improve Storage Stability
- Prevents Gums & Varnish
- Combats Deposits & Oxidation
- Preserves & Stabilizes Gasoline

HOW IT WORKS

The storage additives are pour-in top treatments that provide rust and corrosion protection for engines that see seasonal storage. By following the simple steps below, these products provide excellent storage protection for any engine.

1. Perform an oil change.
2. Add both additives.
3. Run the engine for 5 minutes.
4. Put your vehicle in storage.

6 oz. Bottle

Storage Defender Fuel – Treats Up to 25 Gallons

70060▲

Storage Defender Oil – Treats 5 to 10 Quarts

70052▲

WARNING: Cancer and Reproductive Harm
P65Warnings

CLEANERS/WAXES



SPEED CLEAN FOAMING CLEANER

This powerful multi-surface cleaner is a mechanic's best friend. Speed Clean wipes away tire rubber, bugs, dirt and grime without harming paint, metal or plastic. Foaming action lifts residue and cleans away greasy films. Excellent for cleaning cars, tools and fabric. Simply spray on, let soak and then wipe off.

BRAKE & PARTS CLEANER

Powerful & quick cleaning performance makes Driven Brake & Parts Cleaner a must for every shop and toolbox. Non-chlorinated formula prevents chemical etching that can lead to part fractures. Dries quickly and does not leave an oily film. Meets all United States VOC requirements.

SPEED SHIELD

Speed Shield is a spray-and-shine protectant that sheds dirt, dust and mud while providing a glossy protective film that isn't wet or oily. It does so through the use of advanced surfactant technology to provide a durable, lasting polish that helps prevent mud and dirt from sticking to surfaces. Ideal for off-road, powersports and dirt racing vehicles, this fast-drying, water-resistant product works great on plastic, paint, decals and fiberglass. Driven Speed Shield comes in an aerosol can that utilizes a powerful spraying action to displace dirt. With no wiping required, it makes all clean-ups easier.

RACE WAX SPRAY DETAILER

Race Wax leaves a smooth, glossy finish that helps shed tire rubber, dirt and bugs. Race Wax cleans and shines glass, chrome, paint, plastic, tires and vinyl. It is a perfect product for fiberglass cars, decal wrapped race cars and hot rods. Perfect for a quick touch up clean and shine at the car show or race track, Race Wax can be used in direct sunlight and on cars that have not been washed. The clean and shine from Race Wax makes your car look sharp, and it makes clean up quick and easy without damaging the paint, windows, chrome or decal graphics.

	Size	Part #
Speed Clean Foaming Cleaner	18 oz. Can	50010
Brake & Parts Cleaner	14 oz. Can	50020
Speed Shield	12 oz. Can	50070
Race Wax	24 oz. Spray Bottle	50060

GREASES/LUBES

SPEED LUBE

Utilizing technology derived from Driven's championship-proven race oils, Speed Lube is a powerful penetrating and foaming spray lubricant for all types of chains, linkages, heim joints and bearings. These parts are often left uncleaned, leading to harmful buildup. It utilizes a proprietary additive package that features a variety of adhesion and anti-wear properties, as well corrosion protection in hostile environments and is designed for extended intervals between applications.



SPLINE GREASE

Designed specifically to extend the durability of high speed sliding spline teeth in racing applications, Spline Grease utilizes a high viscosity synthetic base to create enhanced thermal stability and oxidation resistance, while a proprietary anti-wear additive package is fortified with Moly for excellent wear protection. Perfect for Sprint Car drivelines, cambered rear housing axles and drive plates.



EPC CHASSIS GREASE

A premium extreme pressure grease with greater load carrying and a higher dropping point than traditional lithium greases. EPC delivers exceptional mechanical stability for improved protection. Designed for high temperature and high load applications.



EPG EXTREME PRESSURE GREASE

Designed for high temperature and high load applications, EPG provides protection against scuffing, scoring, and galling. Its unique chemistry prevents melting and breakdown of the grease at temperatures up to 500°F, and the calcium sulfonate chemistry also provides unmatched extreme pressure protection compared to conventional lithium greases.



ENGINE ASSEMBLY GREASE

Recommended by leading camshaft manufacturers, this unique extreme pressure lube dissolves completely in oil without clogging oil passageways or plugging oil filters. Proven to cling to and protect surfaces during initial start-up, Driven Engine Assembly Grease delivers protection you can count on. Apply to cams and lifters for break-in protection. It can also be used on distributor gears, rocker shafts, rocker tips, pushrod tips, wrist pins and valve guides. Combining with BR series break-in oils provides proven protection during break-in.



	Size	Part #
Speed Lube	8 oz. Can	50090
Spline Grease	1/2 lb. Tub	70070
EPC Chassis Grease	14 oz. Cartridge	70030
EPG Extreme Pressure Grease	4 oz. Tube	00738
Engine Assembly Grease	1 oz. Tube	00732
Engine Assembly Grease	1 lb. Tub	00728

WARNING: Cancer and Reproductive Harm
P65Warnings

MERCHANDISE



FRONT



BACK

T-SHIRT

Screenprinted logo on 100% Gildan Heavy Cotton, this black shirt won't show dirt or grease, making it perfect to wear at the track or in the shop. Available in sizes Small-3XL.

Small	90001	Large	90003	2XL	90005
Medium	90002	XL	90004	3XL	90006

HAT

All black cotton twill, adjustable hat is perfect for wearing to outdoor racing events or around the shop.

Hat - Adjustable	90007-H
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DECAL & BANNER

Decal	DR100-19M	3x5 Fabric Banner	DR100-20
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DISPLAY RACK

This sturdy, all steel display rack holds up to 60 quart-sized bottles and features a built-in catalog holder and official Driven Racing Oil sign. The compact design allows for easy placement in high traffic locations. Dimensions: 10.5" W x 17.5" L x 65.5" H

Display Rack	80001
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CHOOSING THE RIGHT VISCOSITY

Viscosity is the most important property of a lubricant. Using too high of a viscosity oil can result in excessive oil temperature and increased drag. Using too low of a viscosity oil can lead to excessive metal-to-metal-contact of moving parts. Using the correct viscosity oil reduces friction and wear. However, viscosity changes with temperature. Oil gets thinner as it gets hotter, and the colder the oil gets, the thicker it is.

To select the correct viscosity for an application you need to know the operating temperature of the oil. Engines that run high operating oil temperatures require higher viscosity oil. Engines that run low oil temps require lower viscosity oil.

As you can see, the operating temperature of the oil plays a major role in the selection of the proper viscosity oil. For example, look at an NHRA Pro Stock engine, a NASCAR Cup engine and a World of Outlaws 410 Sprint engine. Each engine has a very different operating oil temperature – 100°F, 220°F and 300°F, respectively. As a result, all three engines run very different viscosity oils – SAE 0W-5, SAE 5W-20 and SAE 15W-50. The lower the oil temperature is, the lower the SAE you can run, and vice versa.

It is important to keep bearing clearances in mind. Looser clearances in the engine require higher viscosity oil to maintain oil pressure. Tighter clearances need lower viscosity oil, which provides better cooling and improved horsepower. The following page presents a chart that shows which viscosity oil is recommended for different combinations of bearing clearance and oil temperature.

Driven's synthetic racing oils are engineered to allow the use of lower viscosity oils without compromising wear. Follow the chart below to select the appropriate oil for your application.

WHAT IS A MULTI-GRADE OIL?

Many years ago, you had winter grades for cold weather and summer grades for hot weather. A typical winter grade was 10W. A typical summer grade was 30. We often refer to these oils as straight grade oils. A 10W flows well in cold weather, so it protects the engine at start-up in cold weather. That is why it has the "W" after the 10. "W" stands for winter, but a 10W is too thin for use in the heat of the summer. So, you would change to a 30 summer grade oil that was thick enough to protect in the heat. That is why multi-grade oils were invented. A 10W-30 has both the winter cold start up flow properties of a 10W and the summer high temperature thickness of a 30 grade. A multi-grade oil allows the oil to stay as close to the optimum viscosity over a range of temperatures – not too thick when it is cold and not too thin when it is hot. Today, advanced synthetic, multi-grade oils like Driven's 0W-20 provide engine protection in temperatures as low as -40°F and as hot as 340°F.

ENGINE POWER OUTPUT (Measured in Horsepower)

	Under 100	100-200	200-400	400-600	600-800	800-1000	1000-1200	1200-1400	1400-1600	1600-1800	1800-2000
300° F	XP3	XP3	XP9	XP9	XP9	XP6	XP6	XP6	XP6	XP6	XP6
280° F	XP1	XP3	XP3	XP9	XP9	XP9	XP6	XP6	XP6	XP6	XP6
260° F	XP1	XP1	XP3	XP3	XP3	XP9	XP9	XP9	XP6	XP6	XP6
240° F	XP1	XP1	XP1	XP3	XP3	XP3	XP9	XP9	XP9	XP6	XP6
220° F	XP2	XP2	XP1	XP1	XP1	XP1	XP3	XP3	XP9	XP9	XP9
200° F	XP10	XP2	XP2	XP1	XP1	XP1	XP3	XP3	XP3	XP9	XP9
180° F	XP10	XP10	XP2	XP2	XP2	XP1	XP1	XP3	XP3	XP3	XP3
160° F	XP0	XP0	XP10	XP2	XP2	XP2	XP1	XP1	XP1	XP1	XP1
140° F	XP0	XP0	XP10	XP10	XP10	XP2	XP2	XP2	XP2	XP2	XP2
120° F	XP0	XP0	XP0	XP0	XP0	XP10	XP10	XP10	XP10	XP10	XP10
100° F	XP0	XP0	XP0	XP0	XP0	XP0	XP0	XP0	XP0	XP0	XP10
80° F	XP0	XP0	XP0	XP0	XP0	XP0	XP0	XP0	XP0	XP0	XP0

WANT TO SPEAK WITH US?

Driven sends certified lubrication specialists and representatives to a number of trade shows, races and car shows all over the United States and even some international events. We also host seminars at a number of locations throughout the year these offer both a history lesson as to how oil has evolved along with advances in engineering and provide a wealth of technical information. Make sure to stop by our display area at an event or attend a seminar with your questions and comments or to purchase Driven products.



BEARING CLEARANCE & OIL VISCOSITY RECOMMENDATIONS

Engine bearings and motor oil go hand in hand. An oil film protects and cools the engine bearings, and that oil film is formed by a combination of crankshaft speed, oil viscosity and engine load. Because all motor oils get thinner as they get hotter, it is important to choose the correct viscosity grade motor oil for the operating temperature of the engine. Specific bearing clearances require a specific viscosity motor oil to support oil film formation and proper cooling. The chart below provides recommendations on combinations of bearing clearances (both rod and main bearings) and motor oil viscosity grades. When a combination of main and rod bearing clearances call for two different motor oil viscosity grades, go with the heavier of the two viscosity grade recommendations. Also, this chart is based on naturally aspirated engines using gasoline. Because Methanol/E85 fuels call for a richer air/fuel ratio, it is important to go up one viscosity grade to compensate for the increased fuel dilution. The same applies for boosted applications. For turbocharged or supercharged engines, go up one viscosity grade from what is listed below. For boosted engines running Methanol or E85, go up two viscosity grades. If you have any questions, feel free to contact our tech department.



IRON BLOCK			
(RECOMMENDED VISCOSITY GRADE)			
Main Bearing Clearance	Under 160F Oil Temp	160F to 220F Oil Temp	Over 220F Oil Temp
.0034 to .0039	10W-40 or 15W-40	15W-50 or 20W-50	20W-60 or Straight 60
.0028 to .0033	5W-30 or 10W-30	10W-40 or 15W-40	15W-50 or 20W-50
.0022 to .0027	0W-20 or 5W-20	5W-30 or 10W-30	10W-40 or 15W-40
.0016 to .0021	0W-10	0W-20 or 5W-20	5W-30 or 10W-30
.0010 to .0015	0W-5	0W-10	0W-20 or 5W-20

ALUMINUM BLOCK			
(RECOMMENDED VISCOSITY GRADE)			
Main Bearing Clearance	Under 160F Oil Temp	160F to 220F Oil Temp	Over 220F Oil Temp
.0029 to .0034	10W-40 or 15W-40	15W-50 or 20W-50	20W-60 or Straight 60
.0023 to .0028	5W-30 or 10W-30	10W-40 or 15W-40	15W-50 or 20W-50
.0018 to .0022	0W-20 or 5W-20	5W-30 or 10W-30	10W-40 or 15W-40
.0012 to .0017	0W-10	0W-20 or 5W-20	5W-30 or 10W-30
.0006 to .0011	0W-5	0W-10	0W-20 or 5W-20

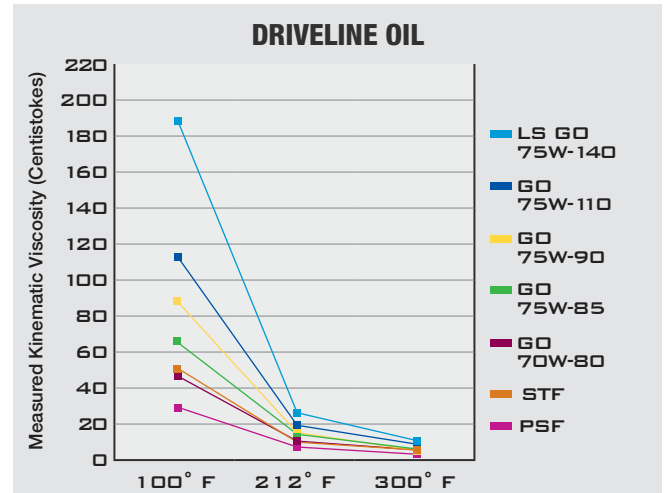
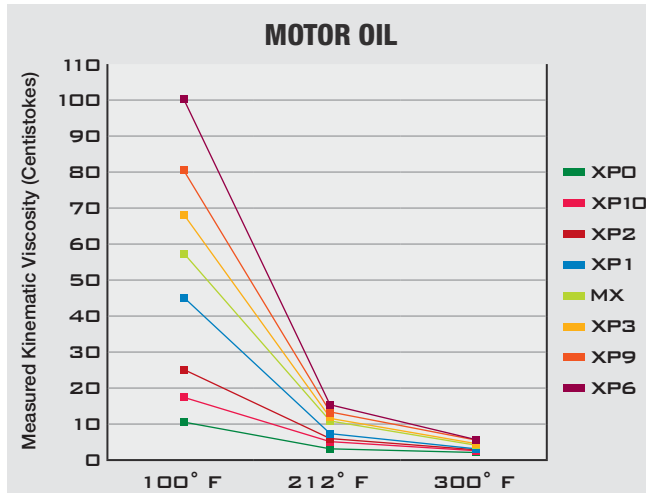
STEEL ROD			
(RECOMMENDED VISCOSITY GRADE)			
ROD Bearing Clearance	Under 160F Oil Temp	160F to 220F Oil Temp	Over 220F Oil Temp
.0028 to .0033	5W-30 or 10W-30	10W-40 or 15W-40	15W-50 or 20W-50
.0022 to .0027	0W-20 or 5W-20	5W-30 or 10W-30	10W-40 or 15W-40
.0016 to .0021	0W-10	0W-20 or 5W-20	5W-30 or 10W-30
.0010 to .0015	0W-5	0W-10	0W-20 or 5W-20

ALUMINUM ROD			
(RECOMMENDED VISCOSITY GRADE)			
ROD Bearing Clearance	Under 160F Oil Temp	160F to 220F Oil Temp	Over 220F Oil Temp
.0023 to .0028	5W-30 or 10W-30	15W-50 or 20W-50	20W-60 or Straight 60
.0018 to .0022	0W-20 or 5W-20	10W-40 or 15W-40	15W-50 or 20W-50
.0012 to .0017	0W-10	5W-30 or 10W-30	10W-40 or 15W-40

VISCOSITY

VISCOSITY CHANGE WITH TEMPERATURE

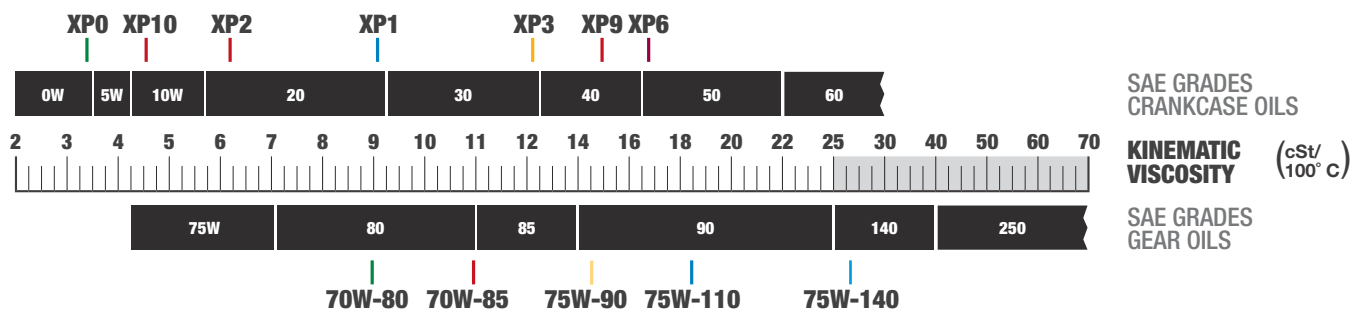
Since all oils get thinner as they get hotter (and get thicker as they get colder), the charts below show the viscosity change from 100° F to 300° F. You can use these charts to select the best viscosity for the operating temperature of your application (not too thick nor too thin).



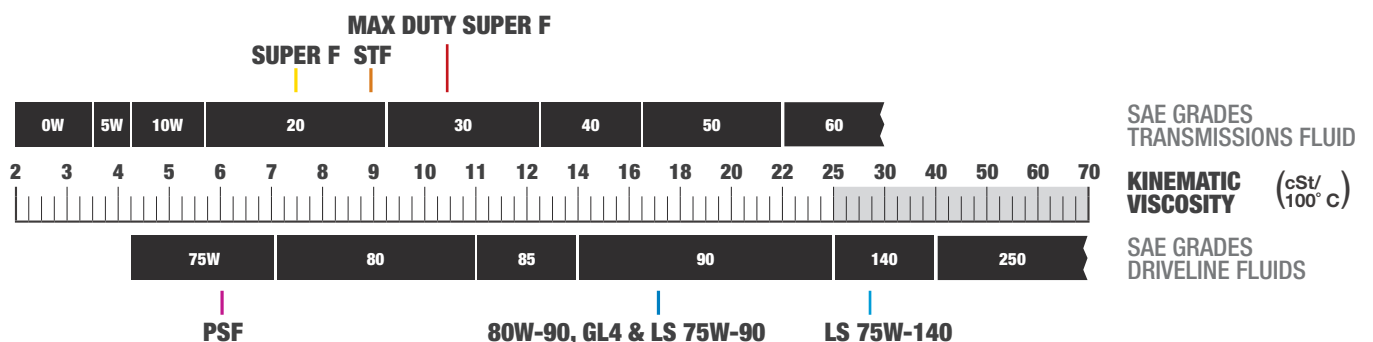
RELATIVE VISCOSITIES

The first two charts below display the relative viscosities of the Driven line of synthetic race and driveline oils. Most people assume that a 70W-80 gear oil is thicker than 15W-50 motor oil, but that is NOT the case. SAE viscosity grades for gear oils are not thicker than SAE viscosity grades for motor oils. The charts explain how the Kinematic Viscosity (measured in Centistokes) of each product compares to the others at 212° F.

SYNTHETIC RACING OILS



DRIVELINE FLUIDS



TECH BULLETIN

STAMPED STEEL ROCKER ARM BREAK-IN & OPERATION

Many classes of racing require the use of stamped steel rocker arms, and many budget crate engines utilize stamped steel rocker arms. Because stamped steel rocker arms do not feature a roller bearing pivot, stamped steel rocker arms generate more friction. As a result, improper break-in and operation can dramatically shorten the life of stamped steel rocker arms. This technical bulletin provides recommended steps and products to prevent failures and extend the life of engines utilizing stamped steel rocker arms.

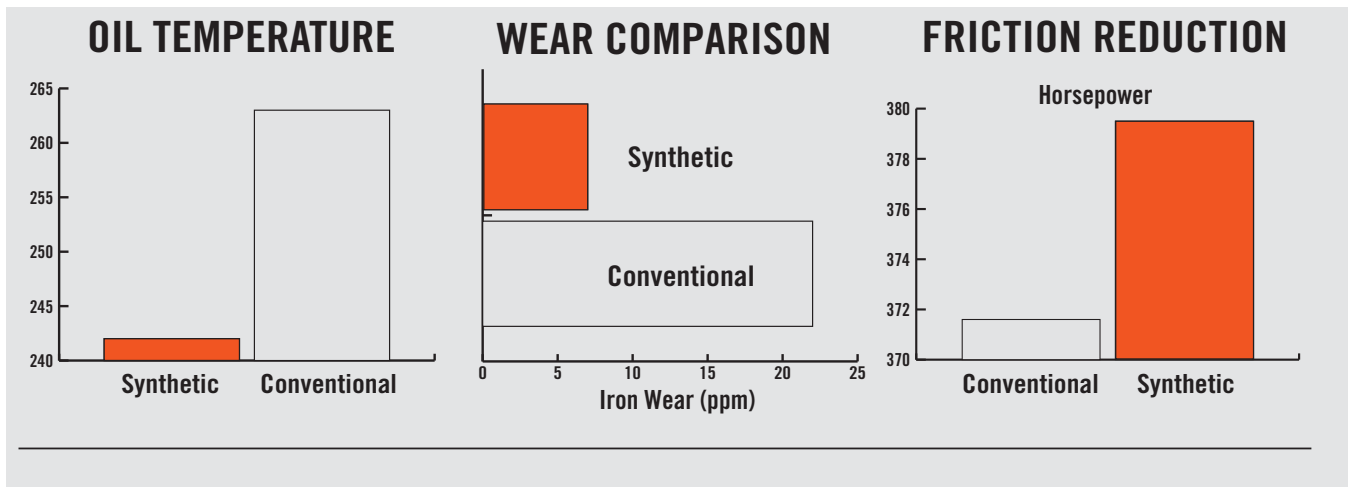


PROPER PROTECTION



INADEQUATE PROTECTION

It is recommended to pre-lube the inside cup of the rocker arm with Engine Assembly Grease (Driven Part #00732). After installing the rocker arms and setting the valve lash, pour break-in oil (Driven Part #03706) over the rocker arm assembly (16 oz per side on V8 or V6 engines). Upon start-up, bring the engine speed up to 2,800 RPM and hold steady for 10 minutes. After 10 minutes, shut down the engine, and allow the engine to cool down for 10 minutes. Restart the engine, and bring the engine speed back to 2,800 RPM for 10 more minutes. The rocker arms are now properly broken-in. If the engine features flat tappet lifters, this same procedure is recommended. To maintain proper protection, it is recommended to use synthetic motor oil (Driven Part# 03206). Conventional motor oils, even high zinc racing oils, DO NOT provide the required friction reduction needed to properly protect stamped steel rocker arms. Endurance testing shows that synthetic motor oil reduces oil temperature, wear and friction.



OIL MYTHS FACT VS. FICTION

FICTION

Synthetic motor oil is too slippery. It causes roller bearings to slide instead of roll, which causes the bearings to fail.

The roots of this myth are based in the misapplication of passenger car motor oil in motorcycles. The power density of motorcycle engines places greater shear forces on the motor oil than passenger car engines do, and as a result, most passenger car motor oils are not appropriate for use in a motorcycle. The myth began when synthetic passenger car brand motor oils were used in motorcycle engines. The resulting failures were blamed on the synthetic oil. However, the problem wasn't the synthetic base oil, it was the fact that synthetic oil was not formulated for the needs of a motorcycle engine. A properly formulated synthetic motorcycle oil will provide superior performance in the engine it was designed for. Likewise, a properly formulated synthetic passenger car motor oil will provide superior performance in a passenger car engine as well.

FICTION

Flat tappet engines can't use synthetic oil because the lifters won't rotate – the synthetic oil is too slippery.

This is a variation on the first myth that has become popular since flat tappet camshaft failures began to increase about a decade ago. Like the first myth, the origin relates to the misapplication of passenger car motor oil. Twenty years ago it was common for racers to use off-the-shelf motor oils in their racing engines because the oils contained enough ZDDP (Zinc) to protect aggressive camshaft designs. Over time though, the ZDDP levels in synthetic off-the-shelf oils were reduced due to EPA regulations for passenger cars. This reduction caused these formulations to be insufficient for protecting flat tappet camshafts. This implied that the problem was with the synthetic oil rather than the lack of ZDDP. However, choosing a synthetic motor oil with special formulation that includes more ZDDP will protect your flat tappet camshaft.

FICTION

Once you use synthetic motor oil, you can never change back to conventional oil.

An engine running conventional motor oil can change to synthetic motor oil, and vice versa. However, it is not a good idea to switch back and forth between different BRANDS of oil. But more importantly than brand, use the correct **TYPE** of oil for your engine. Most high performance and racing engines are actually broken in initially on conventional oil (specially formulated for engine break-in) and then switched to a properly formulated synthetic oil for use after break-in. The key is to select an oil formulated for the specific needs of your application, and then stick with that product.

FACT

Synthetic oils are bad for engines with old seals.

This myth turns out to be true in MOST (but not all) applications. "Old" refers to engines built before 1992. Synthetic base oils are not compatible with many of the traditional seal materials, and even with "seal conditioner" additives, synthetic oils are harder on traditional seal materials than conventional oils. To avoid leaking seals, avoid very light synthetic motor oils in older engines. The low viscosity and resulting free flowing nature of the synthetic makes it easier for the oil to find a leak path. Higher viscosity oils tend to leak less.

DRIVEN MAINTAINS A FULL LIBRARY OF TECHNICAL ARTICLES & HOW-TO GUIDES.

- CHOOSING THE RIGHT VISCOSITY
- CHOOSING THE PROPER OIL TYPE
- HIGH TEMPERATURE HIGH SHEAR
- ETHANOL CORROSION KILLS CARBS
- AND MANY MORE

Learn more about motorcycle oils and chemicals we have.