



# INTRODUCTION

For over 30 years, Bel-Ray has been a leader in the motorcycle lubrication industry and our relentless dedication to innovative technology continues to produce the finest line of powersports lubrication products.

Like any great athlete, competitor or good corporate citizen, we're proud of our legacy. It's with this sense of pride and accomplishment; we look to the future of the powersports lubrication.

We've taken our long-standing tradition of total performance, built upon it with advanced product formulations and new packaging to provide customers with the highest quality products available.

Bel-Ray continues its tradition of race-driven development. Staying true to its roots, we're introducing new technology to meet the changing demands of engine designs and the challenging performance standards of today's racers.

Since we engineer Bel-Ray total performance lubricants to professional racing standards, weekend racers and amateur riders everywhere can trust they have the best technology available protecting their machines too.

Bel-Ray offers a unique product for every lubricant application to bring power, protection and performance for the demanding needs of today's sport machines. From fork oils and chain lubes, to engine oils and brake fluids, all Bel-Ray products undergo rigorous laboratory and field testing to meet and exceed the highest industry standards.

Whether it's your motorcycle, scooter, quad or watercraft, you can be confident it will perform better, last longer, and protect equipment against lubricant-related failures and costly repairs.

Check out our new products and packaging in the pages ahead. We've made it easier to select the correct product for all of your lubricant applications, plus made them easier to find on retail shelves. And because everyone needs to care about the environment, we have chosen to use recycled materials in all of our packaging.

With our new packaging, product formulations and other aggressive marketing initiatives—which you'll be sure to see more and more of soon—Bel-Ray's most impressive powersports days are squarely in front of us. Come along and enjoy the ride!













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# PRODUCT SPOTLIGHT



#### BEL-RAY FRICTION MODIFIED THUMPER RACING 4T ENGINE OIL

SAE Grades: 10W-30 , 10W-40

Available Size: 1 liter bottle

Bel-Ray® Friction Modified Thumper Racing 4T Engine Oil is formulated specifically for motorcycle applications using separate engines and transmissions. Friction modifiers reduce engine temperature, increase horsepower and extend engine life. Meets API SM and JASO MB requirements. Suitable for air-cooled/liquidcooled 4-stroke engines. Not for use in wet clutches.

API SM, JASO MB



#### BEL-RAY THUMPER GEAR SAVER TRANSMISSION OIL

SAE Grade: 80W-85

Available Size: 1 liter bottle, pail

Bel-Ray® Thumper Gear Saver Transmission Oil has been developed for the unique demands of 4-stroke motorcycles equipped with separate engines and transmissions. Formulated with extra protection for gears and bearings subject to high torque loads of today's powerful 4-stroke Thumper engines.

This multi-viscosity formula flows freely for better clutch cooling and provides positive clutch engagement for better starts and longer clutch life while protecting highlyloaded gears from wear, ensuring smooth shifts for more positive action.



#### BEL-RAY WORKS THUMPER RACING FULL SYNTHETIC ESTER 4T ENGINE OIL

SAE Grade: 10W-50

Available Sizes: 1 and 4 liter bottles

Bel-Ray® Works Thumper® Racing Full Synthetic Ester 4T Engine Oil has been developed for full works competition use and is designed to withstand extreme racing conditions. Full synthetic ester base oils withstand the highest temperatures and stresses which provide the ultimate 4-stroke Thumper engine oil. Meets API SM and JASO MA2 requirements. Suitable for air-cooled/liquid-cooled 4-stroke engines and wet clutches.

API SM, JASO MA2



# BEL-RAY MOTO CHILL RACING COOLANT

Available Sizes: 1 and 4 liter bottle, drum

Bel-Ray® Moto Chill Racing Coolant uses a special non-toxic propylene glycol formula designed for better heat transfer and cooler running engines. Protects from corrosion and extends the life of all motorcycle cooling systems including those using magnesium and aluminum components. The ultimate highperformance engine coolant especially suited for racing conditions. Ready to use.

## NEW PACKAGE COLOR CODING



#### BEL-RAY THUMPER RACING SYNTHETIC ESTER BLEND 4T ENGINE OIL

SAE Grades: 10W-40, 15W-50

Available Sizes: 1 and 4 liter bottles, drum, keg

Bel-Ray® Thumper Racing Synthetic Ester Blend 4T Engine Oil combines the finest quality synthetic esters and highly-refined mineral base oils specifically engineered for today's 4-stroke single cylinder, multi-valve racing engines. Provides maximum anti-wear protection for valve-trains, rings, cylinders and pistons. Delivers maximum horsepower while providing consistent clutch performance. Meets API SM and JASO MA2 requirements. Suitable for air-cooled/liquid-cooled 4-stroke engines and wet clutches.

API SM, JASO MA2



# BEL-RAY 4-STROKE MOTOR OILS



#### **BEL-RAY EXS FULL SYNTHETIC ESTER 4T ENGINE OIL**

SAE Grades: 5W-40, 10W-50

Available Sizes: 1 and 4 liter bottles, drum, keg

Bel-Ray® EXS Full Synthetic Ester 4T Engine Oil uses the finest quality synthetic hydrocarbon and ester base fluids combined with unique Extreme Pressure, anti-wear additives and shear resistant VI improvers to meet the demands of high-performance applications. Lowers engine temperatures and increases horsepower. Meets the performance requirements of API SM and JASO MA2. Suitable for air-cooled/liquid-cooled 4-stroke engines and wet clutches.

API SM, JASO MA2



#### BEL-RAY EXP SYNTHETIC ESTER BLEND 4T ENGINE OIL

SAE Grades: 10W-30, 10W-40, 15W-50 Available Sizes: 1 and 4 liter bottles, drum, kea

Bel-Ray® EXP Synthetic Ester Blend 4T Engine Oil combines the finest quality synthetic fluids with select mineral base oils ensuring the highest level of protection for all 4-stroke motorcycles. Contains shear resistant VI improvers to resist viscosity breakdown. Meets the performance requirements of API SM and JASO MA2. Suitable for air-cooled/liquidcooled 4-stroke engines and wet clutches.

API SM, JASO MA2



#### BEL-RAY EXL MINERAL 4T ENGINE OIL

SAE Grades: 10W-40, 20W-50

Available Sizes: 1 and 4 liter bottles, drum, keg

Bel-Ray® EXL Mineral 4T Engine Oil is a premium multi-grade engine oil for 4-stroke motorcycle engines. Meets the performance requirements of API SM and JASO MA2. Suitable for air-cooled/liquid-cooled 4-stroke engines and wet clutches.

API SM, JASO MA2



#### BEL-RAY ATV TRAIL MINERAL 4T ENGINE OIL

SAE Grades: 10W-30, 10W-40 Available Sizes: 1 and 4 liter bottles, drum

Bel-Ray® ATV Trail Mineral 4T Engine Oil with Rust Defense System is a premium multi-grade mineral engine oil for the unique demands of all 4-stroke ATVs, Quads, and UTVs. Equally suitable for air-cooled/ liquid-cooled 4-stroke engines. The specially developed Rust Defense System coats internal engine components providing unsurpassed rust and corrosion protection. Unbeatable anti-wear chemistry eliminates wear, extending engine life.



#### BEL-RAY SCOOTER SYNTHETIC ESTER BLEND 4T ENGINE OIL

SAE Grades: 10W-30

Available Size: 1 and 4 liter bottles, drum

Bel-Ray® Scooter Synthetic Ester Blend 4T Engine Oil combines the finest quality synthetic fluids with select mineral base oils ensuring the highest level of protection for all 4-stroke scooters. Contains shear resistant VI improvers to resist viscosity breakdown. Meets the performance requirements of API SM and JASO MA2. Suitable for aircooled/liquid-cooled 4-stroke engines and wet clutches.

API SM, JASO MA2

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#### BEL-RAY V-TWIN SYNTHETIC MOTOR OIL

SAE Grade: 10W-50 Available Size: 1 quart bottle

Bel-Ray V-Twin Synthetic Motor Oil is a fully synthetic, multi-grade engine oil. It is formulated to provide the ultimate performance and protection for large displacement V-Twin engines. Unique anti-wear additives reduce valve-train wear, piston and ring scuffing and bearing wear. Outstanding oxidation, shear- and temperature stability ensure the optimum level of protection at the extreme temperatures that can be generated in V-Twin engines.



### BEL-RAY V-TWIN SEMI-SYNTHETIC MOTOR OIL

SAE Grade: 20W-50 Available Size: 1 quart bottle

Bel-Ray V-Twin Semi-Synthetic Motor Oil is a multi-grade engine oil formulated to meet the specific demands of large displacement V-Twin engines. It combines the benefits of fully-synthetic oils with the lower cost of petroleum oils.

#### LUBRICANT REFERENCE GUIDE FOR HARLEY-DAVIDSON MOTORCYCLES\*



\*This chart shows the products recommended by Bel-Ray Company, Inc. Harley-Davidson<sup>®</sup> Motor Company does not license, endorse nor recommend Bel-Ray products.

SAE Grade: 85W-140

protection.

**BEL-RAY BIG TWIN** 

**TRANSMISSION OIL** 

Available Size: 1 quart bottle

A multi-grade transmission oil formulated for

sliding contacts of spiral bevel gears in differentials

and shaft drive transmissions. It provides superior anti-wear, added power, smooth shifting and gear



### BEL-RAY V-TWIN MOTOR OIL

SAE Grade: 20W-50 Available Size: 1 quart bottle

Bel-Ray V-Twin Motor Oil is a value priced, multigrade petroleum engine oil formulated for V-Twin engines with high Viscosity Index and low volatility petroleum base oils.





#### BEL-RAY SPORT TRANSMISSION FLUID

SAE Gear Oil Grade: 85W Available Size: 1 quart bottle

A high-quality lubricant specially formulated for the transmission and primary of Sportster<sup>®</sup> motorcycles. It offers superior lubricity for maximum power, resists oxidation and viscosity breakdown for extended performance, and prevents clutch slipping and chatter for consistent engagement. Distinctive red color makes it easier to detect leaks in multiple lubrication cavity engines.



## BEL-RAY PRIMARY CHAINCASE LUBRICANT

SAE Gear Oil Grade: 80W Available Size: 1 quart bottle

A high-quality lubricant specially formulated for the primary chaincase of all Big Twin motorcycles. Ideally suited to stand up to high pressures, its exclusive Bel-Ray anti-wear chemistry ensures long service life for the primary chain. Superior oxidation protection for extended performance prevents clutch slipping and chatter for consistent engagement. Distinctive red color makes it easier to detect leaks in multiple lubrication cavity engines.

# BEL-RAY 2-STROKE MOTOR OILS







#### BEL-RAY SI-7 FULL SYNTHETIC 2T ENGINE OIL

Available Size: 1 liter bottle, drum, keg Bel-Ray® Si-7 Full Synthetic 2T Engine Oil is specifically formulated for use in injector/autolube systems and can be used as pre-mix. Formulated to reduce smoke and carbon residue while providing the highest level of protection for all 2-stroke engines. Bel-Ray Si-7 meets the JASO FD and ISO-L-EGD ratings ensuring the highest level of detergency for better performing, longer running engines.

API TC, JASO FD, ISO-L-EGD

# BEL-RAY H1-R RACING 100% SYNTHETIC ESTER 2T ENGINE OIL

Power Valve Formula

Available Sizes: 379 ml bottle, 1 and 4 liter bottles, drum

Bel-Ray® H1-R Racing 100% Synthetic Ester 2T Engine Oil is the ultimate 2-stroke racing engine oil formulated for all power valve 2-stroke engines. Advanced 100% synthetic ester base oils cling to metal, preventing wear in all 2-stroke applications. Clean burning to prevent carbon build-up in combustion chambers and power valve mechanisms. H1-R keeps engines clean and responsive even under the most severe racing conditions. Not suitable for methanol fuel.

**Application:** Pre-mix only for air-cooled and liquid-cooled 2-stroke motorcycles where high-performance, cleanliness and high anti-wear protection is desired.

#### **BEL-RAY MC-1 RACING FULL SYNTHETIC 2T ENGINE OIL**

#### Available Size: 12.8 oz bottle, drum

Bel-Ray® MC-1 Racing Full Synthetic 2T Engine Oil was developed in the 1970s specifically as a high dilution ratio pre-mix racing 2-stroke engine oil and continues to offer riders of historic off-road motorcycles the quality engine oil that they have been using for years. It is a true icon in the off-road motorcycle industry. MC-1 is recommended for use in air-cooled, non-power valve 2-stroke racing engines and is intended as a premix — not designed for injection/autolube systems. MC-1 continues to provide the absolute best in early off-road engine lubrication. Not suitable for methanol fuel.

**Application:** Pre-mix only for air-cooled and liquid-cooled 2-stroke motorcycles operating over a wide temperature range under high rpm and high loads. Recommended ratio is 50:1 (2% oil or 2.6 oz. per U.S. Gallon)



### BEL-RAY SL2 SEMI-SYNTHETIC 2T ENGINE OIL

#### Available Size: 1 liter bottle, drum, keg

Bel-Ray® SL-2 Semi-Synthetic 2T Engine Oil provides outstanding performance in 2-stroke motorcycle engines. Reduces exhaust smoke and prevents the build-up of carbon deposits to ensure longer lasting, better performing engines. Meets the JASO FD and ISO-L-EGD ratings ensuring the highest level of detergency for better performing, longer running engines. Recommended for both autolube and pre-mix applications.

API TC, JASO FD, ISO-L-EGD



#### BEL-RAY SCOOTER SEMI-SYNTHETIC 2T ENGINE OIL

#### Available Size: 1 liter bottle, drum

Bel-Ray® Scooter Semi-Synthetic 2T Engine Oil is formulated from highquality synthetic blend base stocks to provide clean burning performance and a high level of wear protection for all aircooled/liquid-cooled scooter engines. Prevents ring sticking and spark plug fouling.

API TC, JASO FD, ISO-L-EGD



#### BEL-RAY GK-2 RACING KART 100% SYNTHETIC ESTER 2T ENGINE OIL

#### Available Size: 1 and 4 liter bottles

Bel-Ray® GK-2 Racing Kart 100% Synthetic Ester 2T Engine Oil is uniquely formulated to meet the high RPM demands of world championship kart racing; delivering more horsepower, superior engine protection. Keeps power valves clean and lubricated for "instant" throttle response. Suitable for use in all 2-stroke racing kart engines. Not suitable for methanol fuel.



#### BEL-RAY 2T MINERAL ENGINE OIL

#### Available Size: 1 liter bottle, drum

Bel-Ray® 2T Mineral Engine Oil is specially formulated for pre-mix and injector systems for small 2-stroke engines allowing clean burn that reduces deposits, smoke and engine wear, providing added power and improved reliability.

# BEL-RAY GEAR DILS



#### BEL-RAY GEAR SAVER TRANSMISSION OIL

SAE Grades: 75W. 80W

Available Size: 1 liter bottle, drum, keg, pail

Bel-Ray® Gear Saver Transmission Oil has been developed for the unique demands of all motorcycle transmissions equipped with wet clutches.

Bel-Ray Gear Saver Transmission Oil flows freely for better clutch cooling and provides positive clutch engagement for better starts and longer clutch life while protecting highly-loaded gears from wear, ensuring smooth shifts for more positive action.



### BEL-RAY GEAR SAVER HYPOID GEAR OIL

SAE Grades: 80W-90, 85W-140

Available Size: 1 liter bottle, drum, keg, pail

Bel-Ray® Gear Saver Hypoid Gear Oil features Bel-Ray's state-of-the-art Extreme Pressure chemistry to give unsurpassed protection for heavily-loaded shaft drive and final drive units including limited slip differentials.

- Meets or exceeds API GL-4 and GL-5 requirements.
- Not recommended for wet clutches.

API GL-4, API GL-5

# BEL-RAY BRAKE FLUIDS



#### BEL-RAY SUPER DOT 4 BRAKE FLUID

Available Size: 355 ml bottle

Bel-Ray® Super DOT 4 Brake Fluid exceeds FMVSS Sec. 571.116 DOT 4 motor vehicle brake fluid, SAE J1703 and ISO 4925 specifications. Mixes with all fluids meeting DOT 4 specifications. For use in all drum or disc brake systems and hydraulic clutches, except systems using mineral-based fluids (LHM). Boiling Point: Dry 446°F, Wet 311°F.



#### BEL-RAY SILICONE DOT 5 BRAKE FLUID

Available Size: 355 ml bottle

Bel-Ray® Silicone DOT 5 Brake Fluid exceeds FMVSS Sec. 571.116 DOT 5 silicone base motor vehicle brake fluid specifications. Mixes with all fluids meeting such specifications. DOT 5 Brake Fluid may not be mixed with DOT 3 and DOT 4. DOT 5 may be used if a complete system flush is done. For use in all drum or disc hydraulic brake systems, except systems using mineral-based fluids (LHM). Boiling Point: Dry 500°F, Wet 365°F.

# BEL-RAY SUSPENSION FLUIDS



#### BEL-RAY HIGH PERFORMANCE FORK OIL

SAE Grades: 2.5W, 5W, 7W, 10W, 15W, 20W, 30W Available Size: 1 liter bottle, drum, pail

Bel-Ray® High Performance Fork Oil is formulated for use in all suspension forks including those using cartridge and duel chamber systems. Through the use of carefully selected high-viscosity base oils, fade is reduced providing smooth operation over a wide temperature range.

Bel-Ray High Performance Fork Oil eliminates stiction and drag while greatly improving fork action.



#### BEL-RAY HVI RACING SUSPENSION FLUID

SAE Grades: 3W, 5W, 10W,15W Available Size: 1 liter bottle, drum, pail

Bel-Ray® HVI Racing Suspension Fluid is formulated specifically for use in gas pressurized shocks. Formula fortified with Extreme Pressure additives to reduce component wear in all highly loaded racing applications. This high Viscosity Index oil provides all racing shocks with precise and consistent viscosity control while insuring maximum wear protection. For use in shocks only.

#### TECH TALK ON... BEL-RAY SUSPENSION FLUIDS

Forks and shocks have completely different designs, therefore, Bel-Ray makes two very different lubricants to maximize the benefits of each.

Bel-Ray HVI Racing Suspension Fluid is best suited for rear shocks which are sealed and pressurized with nitrogen. HVI stands for High Viscosity Index. That means it can handle extreme heat and you will get consistent damping throughout your moto as the shock heats up. HVI can take the high temperatures and will not lose its viscosity and, hence, you won't lose your damping.

Bel-Ray High Performance Fork Oil is formulated for forks in which high temperatures are not the problem. The problem with forks is air entrapment. Since the forks are not charged and sealed like the shock, you have air mixing with the oil. This creates air bubbles in the oil and foam on top of the oil and that will cause a loss of consistent damping. Bel-Ray Fork Oil addresses those problems by releasing the air through the body of the oil quickly (air-release) and once it reaches the top, the bubbles break immediately (anti-foam) so no foam or froth develops.

We recommend Bel-Ray High Performance Fork Oil in your forks and Bel-Ray HVI Racing Suspension Fluid in your shocks to experience the benefits each has to offer.

# BEL-RAY SERVICE PRODUCTS



#### **BEL-RAY WATERPROOF GREASE**

Available Sizes: 16 oz (454 g) tub, pail

The legendary high-performance, general purpose grease. Superior water resistance, even in salt water, will ensure continued sealing and protection. Perfect for wheel bearings, headsets, shock linkages, swing arm pivots and other motorcycle, ATV, snowmobile and marine chassis lubrication points. Due to its aluminum complex formula, it won't melt or run out. Enhanced mechanical stability and special anti-wear additives protect and lubricate bearings for improved performance.



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### **BEL-RAY BLUE TAC** CHAIN LUBE

Available Sizes: 175 ml, 400 ml aerosol cans

Bel-Ray® Blue Tac Chain Lube is the ultimate chain lubricant for all street, off-road and racing motorcycle chain applications including 'O' and 'X' ring units. Uniquely designed to resist fling-off even in high speed applications while providing outstanding chain and sprocket life by reducing wear. Contains anti-rust agents to protect chains even in wet conditions.

**BEL-RAY** 

Available Size:

400 ml aerosol can

**FIBER FILTER OIL** 

Bel-Ray® Fiber Filter Oil was

specifically developed for

superior performance with

superior trapping element

needed to obtain maximum

efficiency from today's fiber/

gauze type air filters. It traps

and holds contaminants, will

not restrict air flow. Bel-Ray

resistant and will not run off.

not gum or clog, and does

Fiber Filter Oil is water

all fiber/gauze type air filters.

Bel-Ray Fiber Filter Oil is the



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# **BEL-RAY 6 IN 1**

Available Sizes: 175 ml, 400ml aerosol cans Bel-Ray® 6 in 1 contains

anti-wear additives that provide high film strength to this exceptional penetrating and lubricating fluid. Bel-Rav 6 in 1 cleans as it lubricates, protects against rust and corrosion, displaces water, and reduces friction. Bel-Ray 6 in 1 will not harm electrical contacts, vinyl, wood or paint.

#### **BEL-RAY FOAM FILTER CLEANER AND** DEGREASER

Available Size: 400 ml aerosol can

Bel-Ray® Foam Filter Cleaner & Degreaser is specially designed for cleaning foam air filters. Removes oil and dirt from the filter while also preventing deterioration of the foam cells — maximizing filter life. Bel-Ray Foam Filter Cleaner & Degreaser can also be used as an engine and general purpose degreaser. and is phosphate free.

#### **BEL-RAY FOAM FILTER OIL**

Available Size: 1 and 4 liter bottles, 400 ml aerosol can. drum

Bel-Ray® Foam Filter Oil is for all street, offroad, and racing foam air filter applications. Innovative Bel-Ray technology has produced a foam filter oil unlike any other. It is easy to apply and improves airflow. Ultraviscous formula forms an oil barrier to trap micron-sized particles that can cause engine damage. Waterproof formula prevents clogging when wet.

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rings.

## 175 ml, 400ml aerosol cans Bel-Ray® Super Clean Chain Lube

**BEL-RAY SUPER CLEAN** 

**BEL-RAY SUPER TAC KART CHAIN LUBE** 

Bel-Ray® Super Tac Kart Chain Lube keeps the

lubricant bonded to the chain preventing fling off

into the clutch hub on TAG engines. Developed

Super Tac Kart Chain Lube provides outstanding

anti-wear protection against extreme loads and

high RPM stresses encountered by kart racing

chains. Safe for all chains including 'O' and 'X'

**CHAIN LUBE** 

Available Sizes:

for world championship kart racing, Bel-Ray

Available Size: 400 ml aerosol can

is the latest innovation in chain lubricant technology, combining unsurpassed anti-wear protection for long chain and sprocket life with an outer protective coating that will not attract dirt, sand, or grit and ABSOLUTELY WILL NOT FLING OFF when used as directed. Suitable for all 'O' 'X' and 'Z' ring and roller type chains for street, off-road, and racing use.

#### **BEL-RAY BRAKE & PARTS** CLEANER

Available Size: 400 ml aerosol can

Bel-Ray® Brake & Parts Cleaner is a unique low VOC product specifically designed to clean and degrease all metal surfaces. This unique product will clean brake components and remove carbon and oil build-up. It dries in seconds leaving no residue.

Bel-Ray Brake & Parts Cleaner can be used to clean fouled spark plugs, carburetor parts, gear boxes, and other engine parts, as well as other areas that require a quick-drying spray.

#### BEL-RAY ASSEMBLY LUBE

Available Size: 10 oz (284 g) brush top cans

A high molybdenum disulfide content assembly lubricant which prevents galling and seizing at the highest temperatures and pressures. Clings to all metal surfaces and is ideal for providing start-up lubrication of newly assembled engine parts such as camshaft lobes. Helps prevent thread strippinng and allows accurate torquing.



PARTS LEANER

BEL+RAY

BREISER

EL-IN

LUBE