FREQUENTLY ASKED QUESTIONS
RISLONE® HY-PER LUBE™ ZDDP SUPPLEMENT
P/N 4405

What is Rislone Hy-per Lube ZDDP Supplement?
Rislone Hy-per Lube Engine Oil ZDDP Supplement is a petroleum oil performance supplement "booster" containing high levels of ZDDP (zinc dialkyldithiophosphate) Zinc and Phosphorus additives along with mixed esters to help better protect internal engine components including pistons, flat tappet camshafts, lifters and the valvetrain. This is especially important at engine start up, when most wear is done. That is why they say one of the worst things you can do is start your engine.

What is ZDDP?
ZDDP, also called ZDP, is short for zinc dialkyldithiophosphate, is basically a combination of zinc and phosphorus. When put under pressure, like between a flat tappet camshaft and a lifter, it attaches to the metal surface and becomes a sacrificial wear material. Beyond being an anti-wear additive, it also is a corrosion inhibitor.

Why do I need ZDDP?
Over the years motor oils have been updated to meet the needs of changing engine designs. In the past the oil companies were able to do this and keep the engine oil backward compatible, meaning this engine oil worked on new and old engines. However, now with the reduction of Zinc in the oil, these oils sold today do not offer the protection needed for older engines.

How does Rislone Hy-per Lube ZDDP Supplement work?
The common element between all of the engine components is the oil. Oil is the life-blood of the engine and is pumped under pressure to the internal parts. Engine oils are generally used to reduce friction between moving parts. In addition to lubricating, motor oil must cool, provide corrosion protection and a method of removing contaminants. The main parts needing oil for lubrication is the valvetrain including the camshaft & lifters, bearings and pistons. When installed, Rislone Hy-per Lube ZDDP Supplement cools and lubricates these moving parts better then oil alone. The clinging properties hold the oil to metal parts preventing wear and dry starts. Special additives also prevent oil thinning at high temperatures where normal oil fails. The ZDDP creates the sacrificial (disposable) layer on any component where metal to metal contact happens preventing the metal itself from being worn away.

What are the benefits of Rislone Hy-per Lube ZDDP Supplement over other engine additives?
Some additives are designed for break-in use only. Other additives make wild claims about coating the inside of the engine with Teflon type additives, but no real proof has been established to back up these claims. Rislone Hy-per Lube ZDDP Supplement uses proven ZDDP technology along with our 90 plus years of oil additive knowledge to protect the moving parts of your engine to be used after break-in.

Can I use Rislone Hy-per Lube ZDDP Supplement in my newer vehicle?
No, you should not use ZDDP Supplement in 2005 and newer gasoline and 2007 and later diesel engines. Current oils have enough Zinc to protect moving parts inside newer engines. However, to help prevent sludge and keep that engine clean, it is recommended to use Rislone Hy-per Lube Oil Supplement p/n HPL201 on all newer engines.

How is Rislone Hy-per Lube ZDDP Supplement different than break in additives?
Break in additives contain extremely high concentrations of ZDDP and are only designed to be left in the engine for a short period of time. Many of these additives don't contain detergents or other lubricity additives important to keeping your engine clean and lubricated for thousands of miles. Rislone Hy-per Lube ZDDP Supplement not only contains the correct amount of ZDDP, but also the other additives important to protecting your engine. Do not use as a break in additive.

How can the Rislone Hy-per Lube ZDDP Supplement help prevent dry starts?
Rislone Hy-per Lube ZDDP Supplement contains copolymer esters (Tackifier) and mixed esters that have an affinity (attraction) for metal surfaces. This allows the oil to hold onto the metal surface instead of just running off like normal motor oil does over time. This along with the ZDDP creates a double layer of protection.

Will it work in synthetic oil?
Yes, Rislone Hy-per Lube works with all petroleum-based motor oils including conventional, high mileage and synthetic formulas.

How much Rislone Hy-per Lube do I install?
(Do not overfill)
GASOLINE ENGINES *(Cars & Light Trucks)*
1996 and older – Add one bottle to engine crankcase.
1997 to 2004 – Add approximately ½ bottle (5.5 ounces) to engine.

DIESEL ENGINES *(Light, Medium & Heavy-Duty)*
2006 and older – Add one bottle to engine crankcase for every 5.5 quarts of oil capacity.

OTHER APPLICATIONS
For 4-stroke marine & motorcycles (non-wet clutch), agricultural, industrial and racing applications add 2 ounces for every quart of capacity.

When should I add to my engine?
For best protection, use Rislone Hy-per Lube ZDDP Supplement with every oil change. Also, can be used to top off oil as needed to improve engine protection between oil changes.

How long does Rislone Hy-per Lube ZDDP Supplement last?
When used in combination with a good quality motor oil, Rislone Hy-per Lube ZDDP Supplement will last until your next oil change. Follow the manufacturers recommended oil change intervals for your particular vehicle and make sure to add with each oil change.

Can I use Rislone Hy-per Lube ZDDP Supplement in my diesel engine?
Yes, it is recommended to use at a 7% ratio for all 2006 and older diesel engines.