

SUPER ENGINE OIL ADDITIVE:

Probably the most important, yet least understood ingredient of most modern engine oils are the additives that are included in the oil itself. Most additives fall into one of two main categories. One category of detergent-type additives contains phosphorus, sulfur or chlorine derivatives and the other contains proportions of heavy oil. Omega 909 is unique in that it does not fall into either category but instead uses a completely new and advanced chemical action that is superior to both.

ORDINARY OIL ADDITIVES:

At present, the major oil companies market their engine oils under a multitude of types but all of them fall into one of the two above categories. Their marketing people make up scientific sounding terms to describe what are basically detergent-type additives or heavy oil additives.

Although the phosphorus, sulfur and chlorine containing additives do keep crankcases free of gumming and carbon deposits through their detergent action, during their breakdown immediately afterwards, they form highly corrosive elements that in turn attack the internal engine part metals, causing premature failure of pistons, valves and rings.

The second category of engine oil additives is nothing more than the addition of a heavier grade of low viscosity oil, which is included in the belief that 'a heavy oil in the engine oil is a good thing'. However, no scientific proof exists to substantiate such an unscientific second guess.

OMEGA 909 SUPER ACTING ADDITIVES:

Many of the better engine oils include three or four useful additives. Omega 909 super engine oil additive contains twenty-two. Six of the more important ones are:-

- 1. Viscosity Index Improvers: The Omega 909 V.I. (Viscosity Improver) consists of a carefully balanced synthetic oligomer which displays all the advantages of both monomer and polymer V.I.'s, with none of the disadvantages. The Omega 909 oligomer spreads out the viscosity capability of the parent engine oil over a wider operating range that is inherent in the parent oil viscosity. This improves the cold start engine protection of the parent oil while at the same time, keeping the parent oil from thinning out when the engine temperature rises to operating temperature. What this means to the user is less initial start wear on cold engine parts and better lubrication when the engine reaches its normal operating range.
- 2. Detergency Modifiers: Most engine oil additives use metal soaps to impart detergency to the oil and, to break up oil oxidation by-products, which form a grimy sludge in engine crankcases. However, these same detergent additives also form an acidic by-product, which in turn corrodes the engine parts. Omega 909 employs a non-metal, ashless type of detergent composed of polymerized olefins. This metal-free additive is also effective in maintaining cleanliness in the ring zone thereby eliminating ring and valve sticking problems. The 'free ring action' and proper piston ring operation at all times, ensures lowered oil consumption and eliminates combustion stroke blow-by, thereby giving maximum engine power.
- 3. Superior Dispersants: In stop and start engine operations, the detergents in ordinary engine oils do not do a very good job of dispersing the oxidation by-products in the oil (that are part of the engine wear characteristics). These tend to accumulate and hence form a sticky residue that tends to be heat-lacquered to form a varnish coating on engine parts. This action in turn causes engine hotspots and gradually leads to engine failure due to localized overheating. Omega 909



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employs a polymer in which a nitrogen-containing monomer is present, having a surface action conducive to the attraction of polar constituents of the sludge-forming products. This keeps metallic wear residues in suspension, to be easily flushed away with an oil change. In turn, Omega 909 protects all engine parts from the high wear rates inherent to stop and start engine operations.

- 4. Oxidation Inhibitors: Omega 909 contains an advanced antioxidant that acts in the dual role of an inhibitor and metal deactivator. In a normal engine, a chemical reaction occurs when petroleum lubricating oils are exposed to oxygen-bearing materials such as air and water. This oxidation is accelerated by an increase in temperature, aeration and the presence of catalytic metals. A by-product known as hydroperoxide is produced by the combination of oxygen and hydrocarbons (as in petroleum products). They form a chain reaction which ultimately produces sludge, gum, varnish, lacquer, carbon deposits and acidic compounds. Omega 909's antioxidant agents (a) decompose the peroxides, (b) act as a metal deactivator, (c) inhibit oil oxidation (d) inhibit corrosion and (e) reduce wear.
- 5. Corrosion Inhibitors: Corrosion of engine parts is caused by the acids formed during the process of oil oxidation and hydrocarbon combustion. Omega 909 contains a coating lubricant that displays an affinity to metal and thereby plates all metal parts coming into contact with the engine oil to protect the parts from acid action.
- 6. Friction Modifiers: Omega 909 contains an advanced saponifiable oil that forms a super oily film over treated parts. This imparts super wettability (or oiliness) to the engine parts, reducing frictional drag and therefore lessening the initial starting torque required in stop and go city driving. This in turn improves engine fuel consumption and lessens engine parts wear.

SUPERIOR ADDITIVES MEAN SUPERIOR PERFORMANCE:

Motor oils are only as good as the ingredients that go into their make-up. Many engine oils today use inferior quality additives or minimal amounts of costly additives to ensure their product is competitive with other ordinary engine oils. These low cost/low performance additives cause the oil to deteriorate the moment they are called on to operate in an engine.

Omega 909 gives engine oils the expensive, high performance additives that they need in order to give superior engine performance. However, even the superior quality additives in Omega 909 can only go to work effectively when added to a good motor oil. It cannot be expected to perform its additive function in an oil of inferior or low grade quality.

HOW TO APPLY:

Omega 909 can be added directly to the existing motor oil although it is preferable for use with either a new or only slightly used oil. It should never be introduced for use with an engine oil that is nearing the end of its useful service life.

For All Vehicles: Add Omega 909 in the ratio 1 part Omega 909 to 20 parts engine oil.

Replenishment: Since most vehicles burn off some of the engine oil in the sump, the engine oil may have to be topped up occasionally. Omega 909 should be added in the same proportion as the topping up engine oil to maintain its performance. If 1-litre of engine oil is added to top up, then 50-ml (1:20) of Omega 909 should also be added to the engine sump.

It is advisable to premix Omega 909 with the correct quantity of engine oil before adding to the engine. If adding directly to an engine, Omega 909 must be added slowly while the engine is idling.



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