

INSTRUCTIONS FOR USE IN 4-STROKE MOTORCYCLE ENGINES WITH WET CLUTCH

CERAMIZER® is recommended for the reconditioning of four-stroke combustion motorcycle engines, through regeneration of the surfaces of metal parts which are subjected to friction.

The proper use of Ceramizer® will result in improvement of the vehicle's performance, increasing the compression level in all cylinders, reducing oil and fuel consumption, reducing vibration and noise, decreasing toxic emissions and extending the motorcycle engines life as well as the oil change intervals. Ceramizer® neither clogs filters nor block oil channels, as its particles are extremely small in diameter, so they can be freely transferred through filters.

Ceramizer® does not affect oil at all. Its viscosity and composition remain unchanged. The oil is used as a means of delivering active nano particles into the internal parts of the engine prone to friction.

Recondition of metal parts through the use of Ceramizer® takes place in normal operating conditions without the need to disassemble them. The ceramic-metal coating (which has unique properties) covers worn down surfaces, leading to the restoration of ideal geometry of the surfaces that are subjected to friction.

INDICATIONS

1. Ceramizer® is suitable for all types of oil and for 4-stroke combustion motorcycle engines.
2. Ceramizer® can be used for combustion engines of any machinery and factory units after consulting the Producer.
3. Lowered dose of Ceramizer® than recommended will not provide the expected results.
4. Increased dose doesn't cause any side effects, it only lengthens the process of cermet layer creation.
5. Ceramizer® can be used at every stage of utilization, but at best just after oil exchange.
6. During the whole process of ceramization (1000 km /625 miles) oil should not be changed. The next oil change should be carried out according to maintenance schedule.
7. Use Ceramizer® as a preventive measure to protect the engine against friction and to extend it's operating life.

DOSAGING

The below presented table specifies the QUANTITY OF CERAMIZERS (qty of dispensers) required for ceramization of surfaces subjected to friction.

1 dose = one syringe with preparation of a net weight of 4 g.

Engine Oil Capacity (L)	1-5	5-10
Mileage: 3 000 – 35 000 km or 1 800 – 21 000 miles	1 dose	2 doses
Mileage: 35 000 – 90 000 km or 21 000 – 56 000 miles	2 doses	3 doses
Mileage: over 90 000 km Or 56 000 miles	3 doses	4 doses

• We recommend to double the dose of Ceramizer® presented in the table for engines used in sports and in extreme operating conditions.

DIRECTIONS FOR USE

APPLICATION:

1. WARM UP THE ENGINE



2. SWITCH OFF THE ENGINE AND APPLY CERAMIZER® TO THE ENGINE OIL



3. START THE ENGINE



4. AVOID DYNAMIC DRIVING FOR THE FIRST 100 km / 62 miles



5. DO NOT CHANGE THE OIL BEFORE MAKING THE FIRST 1 000 km / 620 miles



1. Warm the engine up to working temperature of 80-90 °C, (e.g. after drive or engine operation at idle gear for at least 10 minutes).
2. Turn the engine off.
3. Turn off the oil filler plug and inject the dispenser(s) content through the filler plug.
4. Put the oil filler plug back on.
5. Start the engine and run on idle gear for 15 minutes.
6. Cover the distance of 100 km /63 miles (not necessarily in one-time) with care, with the lowest possible engine rotational speed (if the lower rpm is, the higher engine's friction than more effective creation of the cermet coating will be achieve).
7. Ceramizer® doesn't change the lubricating parameters of the oil so it doesn't change the parameters of friction of a wet clutch either.
8. Following making 100 km /620 miles you may drive at any speed. The process of forming of ceramic-metal coating follows during 1000 km /630 miles, but in normal working conditions. Do not change oil within this period!
9. If you need to use a double dose of Ceramizer®, application of dispensers in 2 phases is recommended. Firstly apply a half of the required dosage of dispensers according to attached user manual, and then after making ca. 300 km / 190 miles, apply remaining dispensers in the same manner. This procedure ensures optimum ceramic-metal coating of surfaces subjected to friction.

NOTES

1. **We don't recommend to use Ceramizer®** in case of having wet clutch constructed with metal coverings only. This concerns about 5 % of engine constructions.
2. When wet clutch covers are non-metal or alternately metal with non-metal, **Ceramizer® can be used**. This concerns about 95 % of engine constructions.
3. If any Teflon or molybdenum components have been added to the oil before, we recommend changing this oil and cleaning the mechanism before applying Ceramizer®. Otherwise its effectiveness will be reduced and the process of cermet creation will be longer.
4. In case of any mechanical damages of engine e.g. cracked or scorched piston ring, leaky valve, deep scratches on the cylinder etc., they should be repaired before adding Ceramizer®.
5. Ceramizer® does not recondition any places where friction of rubber or plastic with metal parts occurs.
6. In case of engines without automatic valve clearance adjustment, after Ceramizer® treatment for 1000 km / 625 miles, an adjustment should be done if necessary (if valve clattering is heard).

EFFECTIVENESS

Provides protection against wear and tear for a minimum of 30 000 km / 18 600 miles. Ceramizer® can be used again after this time.

RESEARCH

This product is safe in accordance with the UE (91/155/EEC) norm. Effectiveness confirmed by tests.

Store at a temperature below +40 °C. If the storage temperature exceeds 40° C the product can sedimentate. In such case product should be shaken and cooled to a temperature below 40° C in order to make it ready to use.

Does not contain molybdenum or teflon.

Keep away from children.

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