

INSTRUCTIONS FOR USE IN TRUCK TRANSMISSIONS, GEARBOXES AND REAR AXLES

CERAMIZER® is recommended for the reconditioning of and protection against heavy duty service, for regeneration of transmissions, gear boxes, rear axles as well as surfaces of metal parts which are subjected to friction.

The proper use of Ceramizer® will result in improvements of vehicle's performance, reducing oil and fuel consumption, reducing vibration and noises, extending the gearbox's/reducer's life as well as the oil change intervals, stops and prevents gearbox pitting. Reconditioning of metal parts through the use of Ceramizer® takes place in normal operating conditions without the need to disassemble them. The metal-ceramic coating (which has unique properties) covers worn down surfaces, leading to restoration of ideal geometry of the surfaces that are subjected to friction.

Ceramizer® does not block oil channels, as its particles are extremely small in diameter, so they can be freely transferred to gearbox.

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

INDICATIONS:

1. Ceramizer® can be used with all types of gear oil and for all types of transmissions and reducers.
2. Smaller doses of Ceramizer® than recommended will not give the expected results.
3. Increased doses do not cause any side effects, they only lengthen the process of cermet creation.
4. The ceramic layer lasts up to 2 years (under normal operating conditions) or up to 100 000 km / 60 000 miles, depending on the operating conditions of the mechanism.
5. Ceramization of worn down surfaces can be repeated many times with Ceramizer®.
6. Ceramizer® can be used for any devices (including industrial devices) after consulting the Producer of Ceramizer®.

DOSAGING:

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

Gearbox Oil Capacity [L]	10-20 L	20-30 L	30-40 L	>40 L
Mileage: 5 000-200 000 km / 3 100-124 200 miles	1 package (4 disp.)	2 packages (8 disp.)	3 packages (12 disp.)	4 packages (16 disp.)
Mileage: 200 000-800 000 km / 124 200-497 000 miles	2 packages (8 disp.)	3 packages (12 disp.)	4 packages (16 disp.)	5 packages (20 disp.)
Mileage: 800 000-1 500 000 km / 497 000-937 500 miles	3 packages (12 disp.)	4 packages (16 disp.)	5 packages (20 disp.)	6 packages (24 disp.)

PACKAGE CONTAINS:

1. Four dispensers of oil additive, each of 4.5g net mass.
2. The user manual.

DIRECTIONS FOR USE FOR GEARBOX, REAR AXLE:

1. **WARM UP THE GEARBOX, REAR AXLE BY MAKING 10 km/ 6 miles**



2. **TURN OFF THE ENGINE AND APPLY CERAMIZER**



3. **DRIVE THE VEHICLE FOR 10 km/ 6 miles AT SPEED UP TO 90 km/ 56 miles PER HOUR**



4. **DRIVE THE VEHICLE FOR 200-300 m (218-327 yards) ON REVERSE GEAR**



5. **FOLLOWING MAKING THAT DISTANCE, DRIVE AT ANY SPEED**



1. Warm up rear axle and transmission oil by making a few kilometers.
2. Turn off the engine.
3. Remove the gearbox filler plug or rear axle filler plug and pour the dispenser(s) content through the filler plug. In case of filler with a long neck, it is recommended to apply some oil through filler plug before application of Ceramizer®, then apply Ceramizer® and finally pour some oil again. This procedure ensures proper circulation of additive in the engine lubrication system. In case of strainer filler, it is recommended to mix Ceramizer® with some oil (e.g. 200ml), and then apply the mixture through oil filler plug.
4. Put the filler plug back on.
5. Make a single drive of minimum 10 km at speed of up to 90 km/h and 100 - 300 m on reverse gear.
6. The process of ceramic-metal coating formation follows throughout 1500km. Do not change oil within this period.

REDUCER CERAMIZER APPLICATION INSTRUCTIONS:

1. Warm reducer oil- switch on the reducer, for at least 30 min.
2. Stop the reducer.
3. Remove the reducer filler plug and apply dispenser(s) content through the filler plug (according to the oil level marking).
4. Put the filler plug back on.
5. The process of ceramic-metal coating forming follows up to 60 working hours of reducer in normal working conditions. Do not change oil within this period.

NOTES:

1. 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 lengthened.
2. In case of any mechanical damages to the transmission e.g. broken cog, deep scratches or significant wear, they should be repaired before adding Ceramizer®.
3. Ceramizer® does not recondition any places where friction of rubber or plastic with metal parts occurs.
4. Do not change oil during the whole period of ceramization (1500 km / 930 miles or 25 mth). Oil change should be carried out according to maintenance schedule.
5. Apply along with fuel and engine Ceramizer® additives for optimal effect.

WARNING:

1. Do not use in automatic transmissions.
2. Do not use in the screw compressors.
3. Do not use in differentials containing Slips or LSD - these are mechanisms of increased internal friction.

RESEARCH

This product is safe and produced in accordance with the EU (91/155/EEC) norm.

Effectiveness confirmed in 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 either molybdenum or Teflon.

Keep away from children.

Producer: CERAMIZER D. Kosiorek Sp. K., Bartycka 116 Street, 00-716 Warsaw, Poland
Phone: +48 22 498 0908, e-mail: office@ceramizer.com , website: www.ceramizer.com

PRODUCT MADE IN POLAND