



Light quantum energy  
光量子エネルギー®

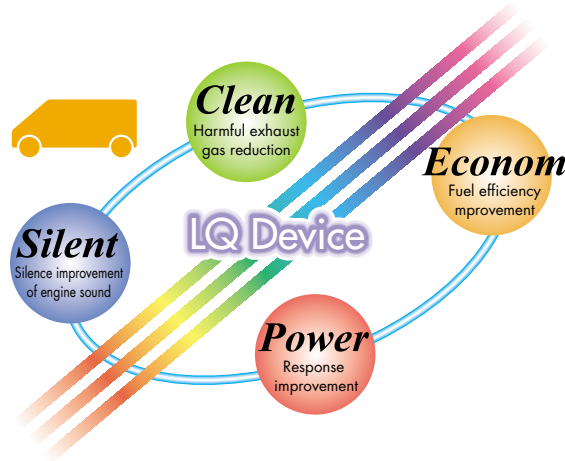
HUMAN LIFE SOLUTION

# Fuel efficiency improvement of a car · Exhaust reduction!!

The light quantum energy non-contact high performance catalyst equipment **LQ Device**

Developed for a natural environment and the global future.

The combustion efficiency of the engine improves by attachment of the LQ device, reduction of black smoke and smell of exhaust by complete combustion. Improvement of output, reduction of harmful exhaust gas, reduction of smell of exhaust gas, preventing carbon removal and adhesion in the engine, and makes an engine last long by complete combustion.



DPF (Diesel Particulate Filter) is the mainstream for the present PM (Particulate Matter) reduction equipment, and the effect is shown more by a LQ device.

What is PM?

PM is suspended particulate substance which occurs by a complete combustion. It stays long in the atmosphere and exert a harmful influence to respiratory organ by depositing in a lung and trachea with high concentration. Furthermore, fear of carcinogenicity is pointed out.

## The product feature

- 1 Very easy installation**  
It can be installed without removing an engine parts.
- 2 As it is loaded on an air intake airline between the air cleaner and the engine**  
It isn't necessary to add remodeling to an engine, and technical knowledge isn't also necessary.
- 3 Excellent safety after installation, easy maintenance.**  
The used material has excellent heat-resistance and safe.
- 4 Small and thin shape.**  
To install it, an engine movement isn't obstructed.
- 5 Hasten a chemical reaction of burning itself progressively and reduces harmful exhaust.**  
Harmful exhaust is reduced by after treatment in an exit of exhaust by existing technology but LQ device in case of reduces harmful exhaust in improving combustion phenomenon itself.
- 6 It'll fit any kind of cars.**  
Gas-powered car / Diesel-powered automobile / Truck / Bus / It can be used for all cars.

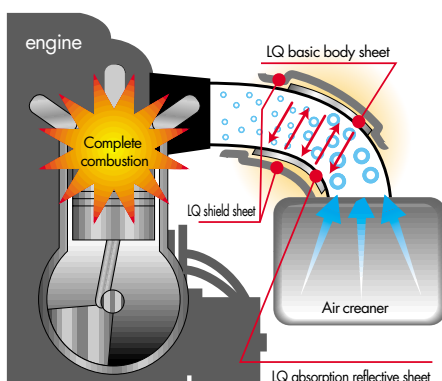
gasoline car



diesel engine car



## Mechanism



The air and fuel will be the state of fineness, and the burning velocity becomes speedy and unwasted and burns efficiency.

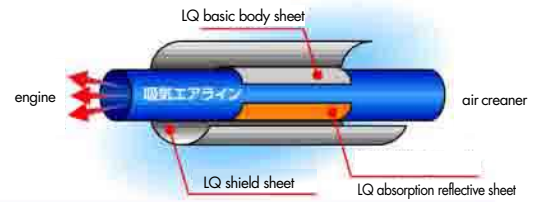
- Activation of oxygen(O<sub>2</sub>) for combustion**  
The oxygen which is being sent from an air cleaner is microfiness, reacts to a hydrocarbon and increases in the burning velocity.
- Activation of hydrocarbon(H<sub>2</sub>O) molecule for fuel**  
Combination of C-C atom and H-C atom becomes easy to break and will be the state that a chemical reaction tends to happen, and fuel is activated. The effect of the combustion improvement and the exhaust gas reduction are obtained with increase of combustion efficiency by oxygen and fuel are being activated together.

## Use method

Developed for a natural environment and the global future.

It's loaded on an air intake airline between the air cleaner and the engine.

Set a LQ basic sheet in one side of a part or a pipe of an air intake airline inside the engine, set a LQ absorption reflective sheet in the other side and cover outer circumference with a LQ shield sheet.



## Use example Demonstration data

Inspection by diesel engine car



Test place : Japan Automobile Research Institute  
 Subject : N company / A diesel / 9000cc / 10 tons truck / 1989 year car  
 Loaded on the truck which has run 740,000km, and run 30,000km.  
 Examination contents : The numeric number of the black smoke and particulate matter are measured with the state which LQ device is loaded.

LQ device



Inspection by gasoline car



Subject : T company / Generic sedan / 2500cc / 2004 year car  
 Examination contents : The mileage is measured while the car is running with the state which LQ device is loaded.

LQ device



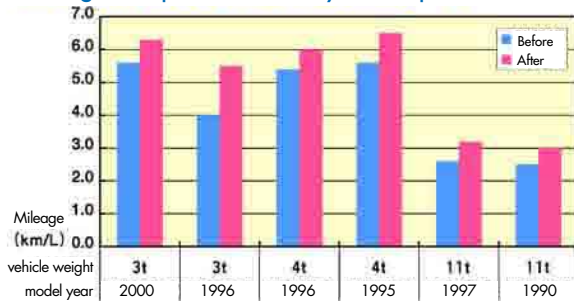
### Test outcome

Both of PM and black smoke fell below the regulation value of the Tokyo, and the reduction effect was obtained. Black smoke could confirm that even watch is reduced clearly.

	Tokyo gas emission regulation	Examination enforcement car
PM substance	0.25 / kwh	0.222g / kwh
Black smoke*	Less than 25%	20%

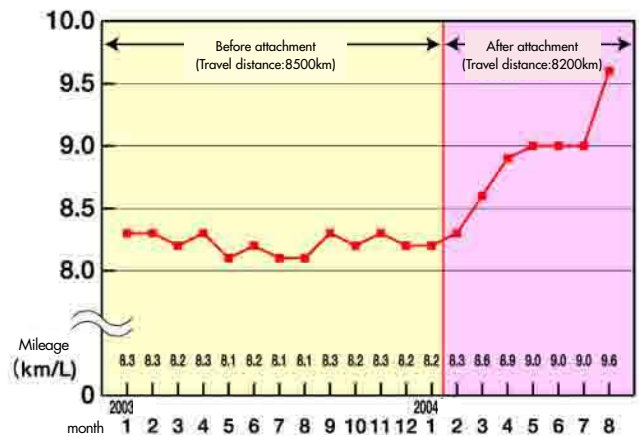
\*The black smoke density after the loaded of the reduction equipment on a car. (Pollution degree%)

### Mileage comparison data by diesel powered truck



Before attachment(Measurement period:1 month from April 1,2004 to April 30,2004)  
 After attachment(Measurement period:1 month from May 1,2004 to May 30,2004)

### Test outcome



## Use example Demonstration data

Name : LQ Device

Application : Combustion improvement equipment

Material : Heat-resistant aluminum sheet, Special sheet multiple sticking, Sheet cooper.

Size : LQ basic body sheet 5\_12\_5cm

LQ absorption reflective sheet 3\_15cm

LQ shield sheet 15\_40cm

Attachment quantity :

Engine displacement to 3000cc 1 sheet

Engine displacement from 3001 to 6000cc 2 sheet  
 1 sheet is added every 3000cc or later

### What is light quantum energy?

This is a kind of wavelength which can't feel by the human five senses, and has characteristic that prompt objects to activate in the atomic level. This wavelength which occurs by making colour energy what a natural are and sunlight have catalyze it in highly functional, does beneficial work to human body because its different from radiation, has slow action. Application technology of which use to environment problem solving such as soil improvement, water quality improvement, emission gas purification and organic agriculture is expected.