

Visible Three-way Catalytic Cleaning Machine

---from Okay Energy

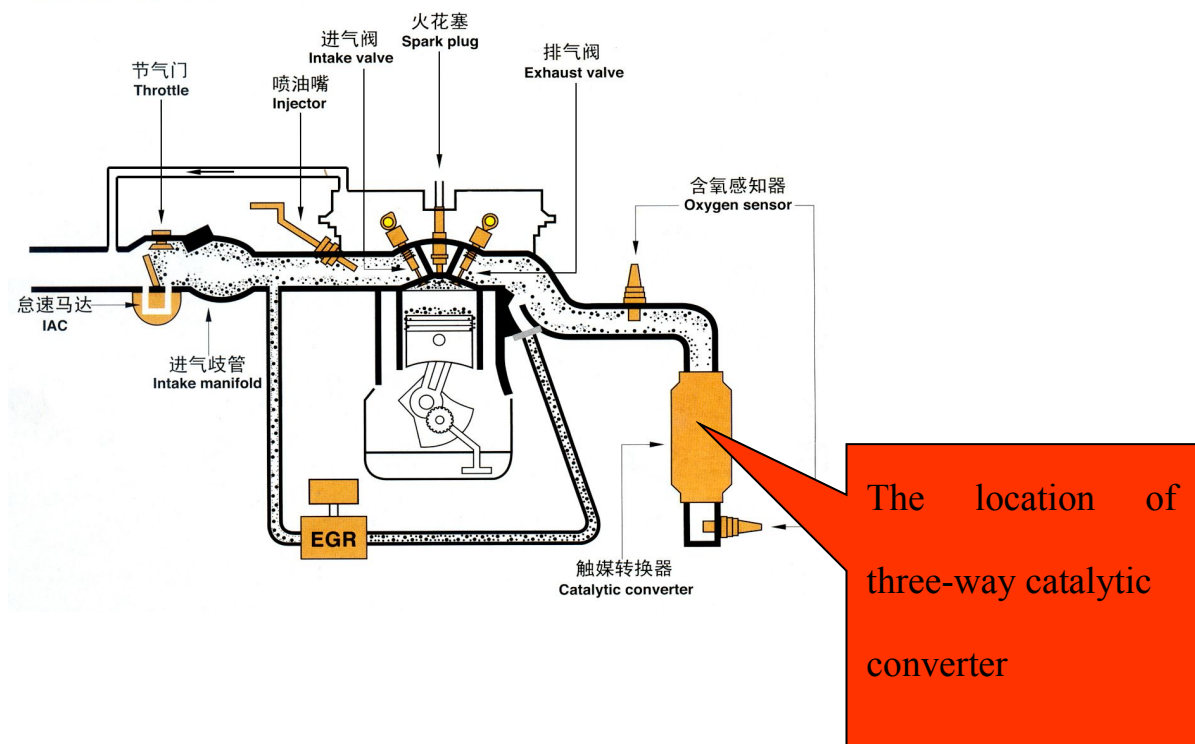


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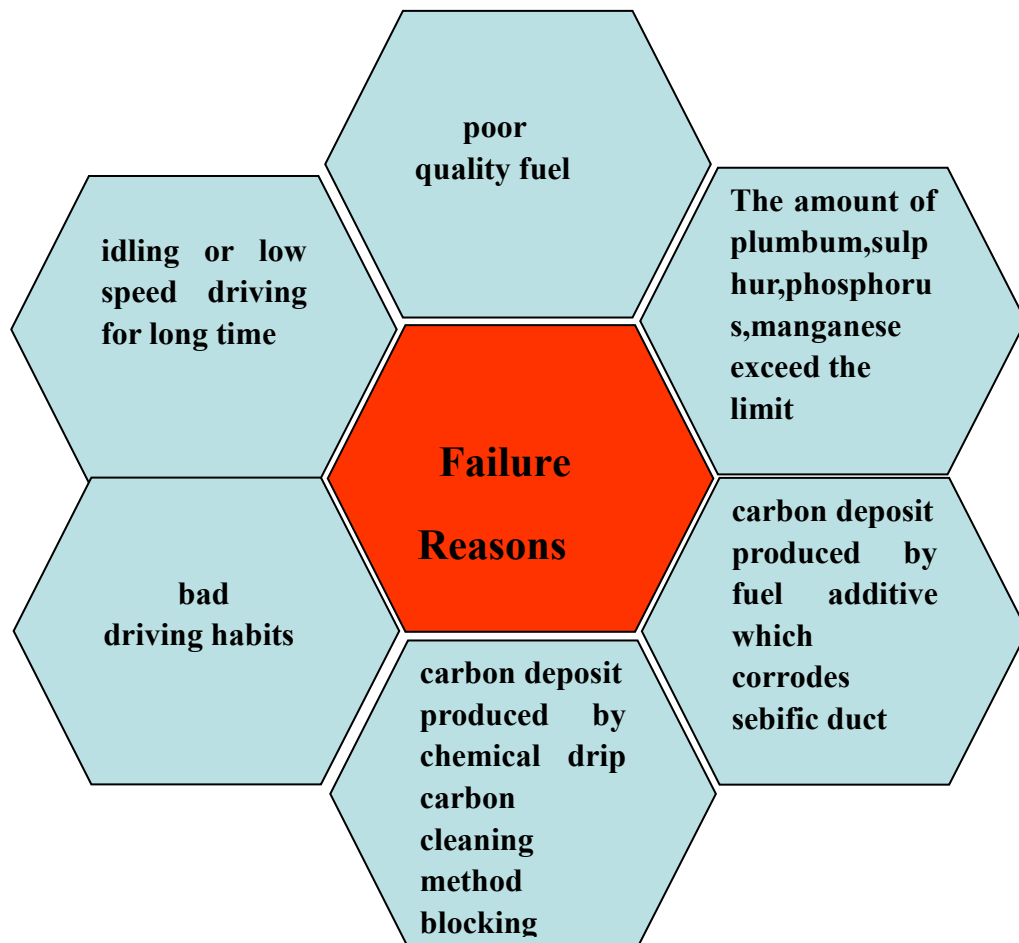
1. What is Three-way Catalyst?

Three-way catalytic converter is a part of automobile exhaust system, and can transform toxic CO, HC, NO_x into nontoxic CO₂, H₂O, N₂ through oxidation-reduction, thus can reduce the exhaust of car.

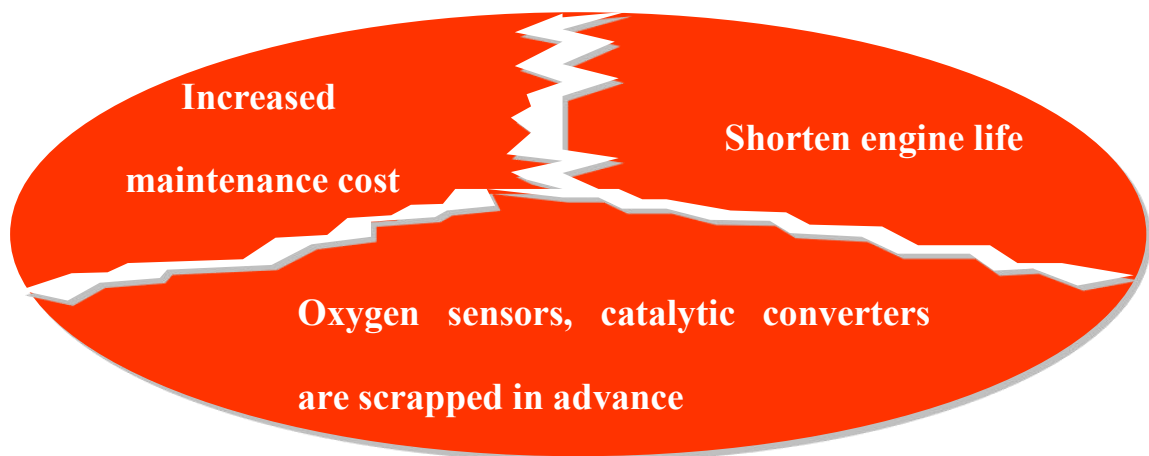
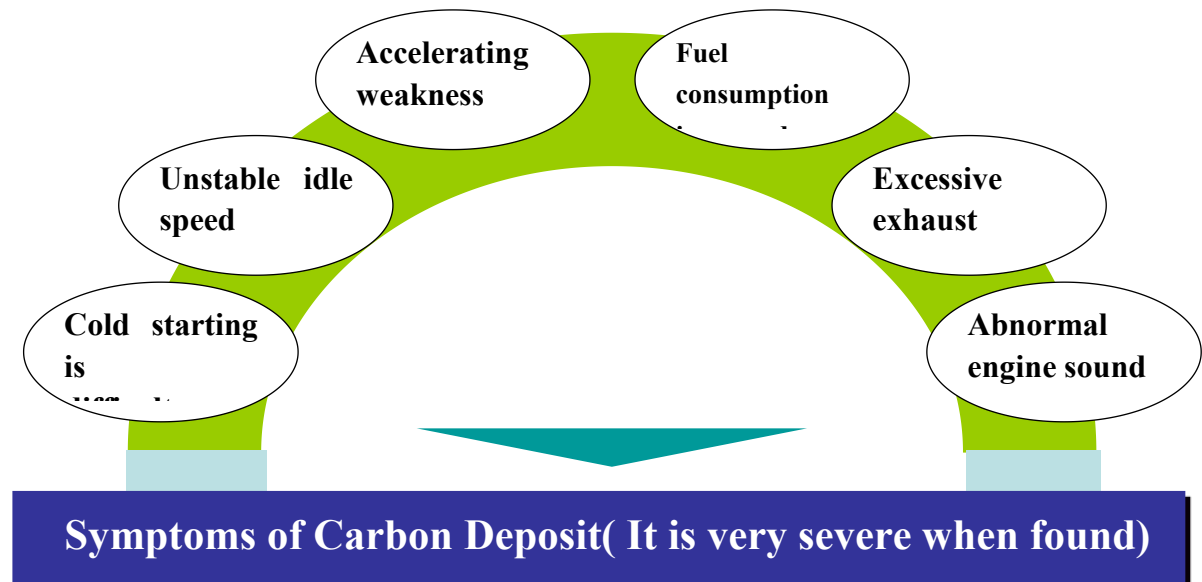
Carbon deposits in intake manifold and combustion chambers



2. Reasons of forming carbon deposit in the three-way catalytic converter



3.Problems Caused by of Carbon Deposit



4.Traditional Methods to clean three way catalytic converter

Chemical Drip Method



Traditional Disassembling Method



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New Method---Our Visible Three-way Catalytic Cleaning Machine



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5.Comparison among three-way catalytic cleaning machine and traditional methods

	Comparison among operation	Comparison among products
Chemical Drip Method	<ol style="list-style-type: none"> 1. Dump the three-way catalytic solution into the reservoir bottle. 2. Hang the three-way catalytic device on the car cover, and disassemble the intake manifold(10 minutes). 3.Put the suction nozzle into the intake manifold, start to cleaning the three-way catalyst when car is idling.(30 minutes) 4.After cleaning, restore vehicle.(10minutes) 	<ol style="list-style-type: none"> 1. It takes about 40 minutes; 2. Difficult to deal with waste; 3. Cleaning process is unsafe, and produce water in the combustion chamber and pass through the exhaust system, and it has no remarkable effect; 4. No remarkable effects and no difference before and after cleaning;
Traditional Disassembli ng Method	<ol style="list-style-type: none"> 1.Disassemble the three way catalyst (one hour) 2.Spray potion on the inner surface of the three-way catalyst with a spray gun, and clean it several times.(30-40 minutes) 3.Dry the inner surface with an air gun(15 minutes) 4.Install and restore the three-way catalyst to its original(one hour) 	<ol style="list-style-type: none"> 1.Disassemble the three-way catalyst(one hour) 2.Spray potion on the inner surface of the three-way catalyst with a spray gun, and clean it several times.(30-40 minutes) 3.Dry the inner surface with an air gun(15 minutes) 4.Install and restore the three-way catalyst to its original(one hour)
Visible Three-way Catalytic Cleaning Machine	<ol style="list-style-type: none"> 1.Remove the oxygen sensor with a special tool.(5 minutes) 2.Visible through the whole cleaning process at normal temperature.(3 minutes) 3.High temperature steam cleaning. (3 minutes) 4.After cleaning, install and restore the oxygen sensor(5 minutes) 5.Discharge waste.(2 minutes) 	<ol style="list-style-type: none"> 1.It takes time no more than 20 minutes for the whole cleaning process. 2.Environmentally friendly cleaning and harmless. 3.Concentrate on cleaning three-way catalyst to reach the exhaust standard, restore power and reduce the fuel consumption, and effect is remarkable. 4.Time is short and effect is visible through the whole process, customers can see the difference between before cleaning and after cleaning.

6. The Principle of Three-way Catalytic Cleaning Machine

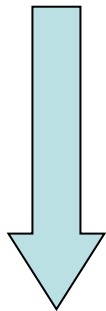
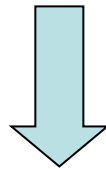
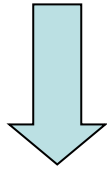
Visible Three-way Catalytic Cleaning Machine is used in concert with special cleaning fluid, it renews the three-way catalyst through two steps, first normal temperature sweeping cleaning, and then high temperature steam cleaning. After the two steps, the efficiency of three-way can be restored to the original factory state, so as to reduce the vehicle exhaust.

7. The Effects of Visible Three-way Catalytic Cleaning Machine

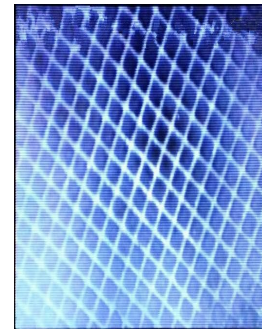
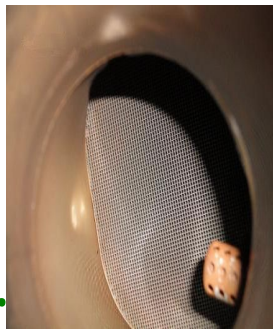
1. Specialized cleaning three-way catalyst, also the oxygen sensor;
2. Special cleaning fluid which cleans the carbon deposit is environmental friendly and will react with precious metals to produce harmless gas which can be discharged;
3. Effect is visible;
4. Three-way catalyst conversion rate has been improved more than 50%;
5. Restore power;
6. Save fuel from 8% to 10%;
7. Reduce vehicle exhaust emission and save back pressure;

8. Remarkable Effects After Using Our Visible Three-way Catalytic Cleaning Machine

Before





After



9. Before and After Comparison Table of Visible Three-way Catalytic Cleaning Machine

Mileage Number	Less than 50,000 km	5-10 ten thousand kilometers	10-16 ten thousand kilometers
Conversion rate before cleaning	70%	50%	20%
Conversion rate after cleaning	90%	85%	70%
<p>The conversion rate has been improved after cleaning more than 50%</p> <p>Reduce vehicle exhaust, save back pressure, restore power and save fuel</p>			

10. Parameters of Visible Three-way Catalytic Cleaning Machine

Model No.	VCS2000A	VCS2000B
		
Input Power	220v	220v
Power Consumption	3.5kw	3.5kw
Input air pressure	≤0.8Mpa	≤0.8Mpa
Steam pressure	≤0.4Mpa	≤0.4Mpa
Steam temperature	150℃	150℃
Dimensions - L*W*H (mm)	900*560*950	1070*670*870
Net Weight	80kg	120kg