



KOBELCO

ELV Dismantling Carried Out by Multi-Dismantling Machine

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Company Profile of KOBELCO



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ELV & Engine Dismantling Carried Out
by Multi-Dismantling Machine



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Company Profile



Founded October, 1999 (Split-off from Kobe Steel)

Capital 16 billion yen (US\$200 million)

Stockholders Kobe Steel(80%) & CNH(20%)

President & CEO Jun FUJIOKA

Sales 313 billion yen (US\$ 3,914 million)

Business Operations Manufacture, sale and service of excavators

Product Line-up

ACERA
GEOSPEC



The First Car Dismantling Machine in the World



“Nibbler” developed

Clamp Arm installed

To hold cars stabled

**Developed
in 1979**

Advantage of Multi-Dismantling Machine

- Various Work Carried Out by One Machine
- The Machine Works Wherever
Without utility such as electricity, water, gas or compressed, inside or outside. Construction, installment or test run not required.
- Operators Safety
Operators inside cabin protected by safety guard, 3 –5 m away from the object.
- Benefit from Mass Production, Excavators
Main body and major part is the same as hydraulic excavators, produced more than 20,000 units annually worldwide. Bringing low production cost and availability of repairmen, parts and consumables.
- Manual Operation
Controlled manually by human operator depending on various types, models and conditions of ELV.

ELV Dismantling



ELV Dismantling



Hold the car by the clamp arm



Removed the bonnet

ELV Dismantling



Side chassis frame removed

ELV Dismantling



Lights removed



Electric wire and harness removed by fork pointed tooth



ELV Dismantling



Radiator removed



**Electric wire and harness
pulled out from the front**

ELV Dismantling



Wiper motor removed



Bumper taken off

ELV Dismantling



Windshield cut round and taken out

ELV Dismantling



Steering wheel and dashboard panel removed



Panel separated by fork pointed tooth

ELV Dismantling



Roof pulled off



Lining materials peeled

ELV Dismantling



Seats taken out



Electric wire and harness under seats pulled off

ELV Dismantling



Door lining material pulled off



**Window mechanisms
in doors removed**

ELV Dismantling



Car body turned upside down

ELV Dismantling



Car body secured in clamp arm



Cover removed

ELV Dismantling



Muffler pulled out



Catalyst removed

ELV Dismantling



Member frame removed



Suspensions removed

ELV Dismantling



**Oil drained and gas drawn off
from shock absorbers**



Main frame opened

ELV Dismantling



Engine removed

ELV Dismantling



Fuel tank removed



Rear suspension removed

ELV Dismantling Video



Engine Dismantling



Engine Dismantling



Engine firmly secured by bowl-shaped grips of clamp arm

Hoses, pipes and electric wire and harness removed

Engine Dismantling



Dynamo removed

Compressor removed

Starter-motor removed

Engine Dismantling



Transmissions block separated from engine body

Engine Dismantling



Remaining electric wire and harness and pipes removed

Engine Dismantling Video



Contribution to Recycling Industry



Kobelco Recycling Conference



New Environmental Exposition



Automotive Recyclers Association



Asia Automotive Environmental Forum



ELV Dismantling Skill Competition



Operator training

Kobelco Recycling Conference

May 2010



Lecture and Panel Discussions

Kobelco Recycling Conference



At the party participants exchange information

KOBELCO

New Environmental Exposition and others



New Environmental Exposition

Osaka Motor Show 2007

Asian Automotive Environmental Forum



Sponsored Gala Party in 2010

ELV Dismantling Skill Competition at AAEF 2010



**Five operators from Japan, Korea and Taiwan showed skill
In front of more than 200 audiences in Wuxi, China in 2010**

Operators Training at Recyclers Factory



Opening Ceremony



Operators Training by Japanese Operator