

eco-shot

LPG for Diesels



eCo-shot delivers

- ✓ Improved Fuel Economy
- ✓ More Power
- ✓ Reduced Emissions
- ✓ Cleaner Oils

eCo-shot is uncomplicated

- ✓ It Is Boost Pressure Controlled
- ✓ There Are No Computers
- ✓ No Interfering With The Engine Management
- ✓ No Interfering With The Fuel Management
- ✓ We Will Train Your Mechanics To Tune It
- ✓ Vapour Withdrawal Tank System

eCo-shot is a proven system

- ✓ Proven Track Record in Australia & the US
- ✓ Patented in the US in 1961

eCo-shot gives you peace of mind

- ✓ 3 Year / 750,000 Kilometre Warranty

The benefits of a shot of gas.

A reduction in your diesel cost by as much as 20%.

Mixing a shot of LPG with the air through the turbo improves the burn efficiency of the diesel in the combustion chamber. Your everyday diesel combustion burns approximately 75% of the diesel in the chamber; by adding a shot LPG into the combustion chamber it increases that efficiency to 95%. You now have a more efficient combustion process that is using less diesel fuel thereby saving you money.

Extended service intervals.

Cleaner oils. With the improved combustion created by eCo-shot's shot of LPG you now don't have the excess diesel dropping into the sump and dirtying up your oil. In the case of the C12 CAT within 8 weeks the oil change went from 20,000 to 30,000 k's.

The benefits of a shot of gas.

Improved pulling power

With the improved combustion created by eCo-shot's shot of LPG you now have a better combustion in the chamber giving your increased horsepower and torque.

Reduced greenhouse gas emissions.

The improved combustion also means a reduction in CO₂ by as much as 10%, harmful NO_x by as much as 50% and black smoke emissions.

You are also reducing carbon emissions through the fuel you have not used 2.7kg for every litre of diesel you do not burn.

eCo-shot has been available in Australia since March 2007 it is installed on over 1000 vehicles across Australia.

Has been sold in the US market for 12 years and is well and truly tried and tested.

(US brand name – Powershot)

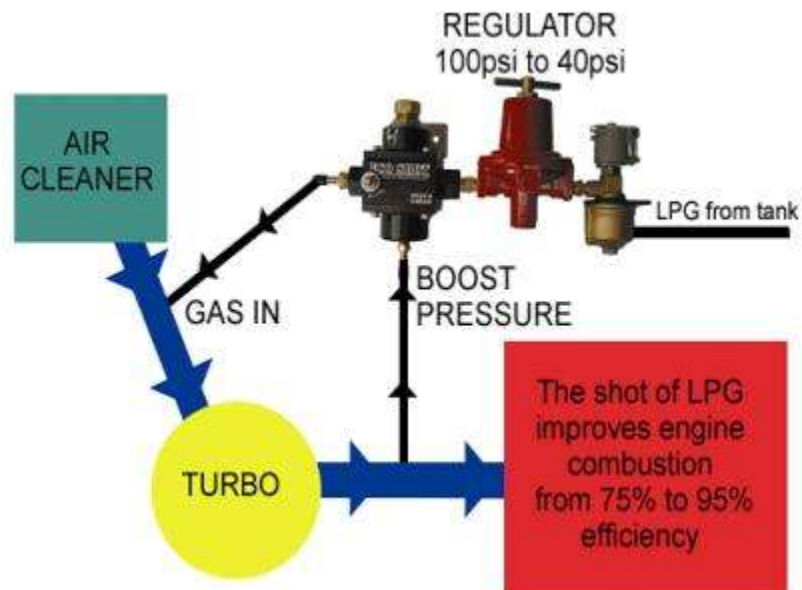
Has been trialing for 8 years in Australia on a 1983 Mercedes Benz truck and has proven itself with power increases and fuel savings AS MUCH AS 30%.

How does the eCo-shot System work?

- ✓ The eCo-shot LPG Injection System is boost pressure activated.
- ✓ It is controlled, activated and proportionate to the boost pressure of the engine.
- ✓ The eCo-shot comes on slow and steady and as the boost increases, so does the flow of gas.
- ✓ This innovative design is only activated when the vehicle ignition is on and the engine is running, a distinct safety advantage.
- ✓ The system installs under bonnet and requires no permanent modifications to the vehicle or engine.

Its innovative and patented design and method of LPG delivery, is what makes this system unique to other systems on the market and has overcome many of the drawbacks encountered with earlier designed injection systems.

No boost pressure no LPG flows, it will only inject LPG when boost reaches our pre-set poundage (this will vary for each engine and usage).



No computers.

No tapping into your vehicles cooling system.

No remapping your vehicles fuel system.

Will LPG damage my engine long term?

not from what these examples show



The eCo-shot Ute was purchased and fitted with gas in March 2007 with 190,000k's on it. It has now done another 190,000k's on gas and has not missed a beat.



The 1983 Benz has had an eCo-shot on it for over 8 years with over 1 million k's and has now driven over 800,000k's on gas.

It has not missed a beat.

Sterling

Regular Trip - Melbourne / Taree / Melbourne



Engine	= 60 Series Detroit (DDEC5)
Horsepower	= 430 – 470hp
**Horsepower increase with eCo-shot	= 140hp
Average gross tonnes	= 38 tonnes
Average gross tonnes return trip	= 24 tonnes
Round Trip distance	= appr. 3,000 km's
Average kilometres per litre	= 2.2 km's
**Average kilometres per litre with eCo-shot	= 3.05 km's
Diesel consumption per trip	= 1363 litres
	@ ave. \$1.18 = \$1608.00
**Diesel consumption per trip with eCo-shot	= 983 litres
	@ ave. \$1.18 = \$1159.00
Average LPG usage per trip	= 115 litres
	@ ave. \$0.50 = \$58.50
<u>Average saving per trip</u>	<u>= \$390.50</u>

Annual saving on average 4,500 kilometres per week = \$30,459

Payback time for installation @ \$9,900 = 16 weeks

International S-line

Fitted with eCo-shot and also trialling the new
FUEL PREPATOR system.



Engine	= 60 Series Detroit (DDEC3)
Horsepower	= 490hp
**Horsepower increase with eCo-shot	= 150hp
Average gross tonnes	= 41 tonnes
Average gross tonnes return trip	= 18 tonnes
Weekly kilometres	= 3,000 km's
Average kilometres per litre	= 2.2 km's
**Average kilometres per litre with eco-shot	= 3.3km's
Diesel consumption per trip	= 1363 litres
	@ ave. \$1.18 = \$1608.00
**Diesel consumption per trip with eCo-shot	= 909 litres
	@ ave. \$1.18 = \$1072.00
Average LPG usage per trip	= 110 litres
	@ ave. \$0.50 = \$55.00
<u>Average saving per week</u>	<u>= \$481.00</u>

Annual saving @ 3,000 per week = **\$25012**
Payback time for installation @ \$9,900 = **20 weeks**

Kenworth K104 – C15 CAT



Subject: K104

Hi Les

Just letting you know how happy we at FLOURTRANS are with our Eco-shot gas system.

Prior to purchasing eCo-shot our Kenworth K104 powered by a 550 hp C-15 cat was on average returning 1.9 Klms per litre. Cost to us \$384.20 per day . With eCo-shot the truck is returning on average 2.6 klms per litre. Cost to us \$280.77 per day for diesel and \$9.80 per day for gas.

Total per day saving \$93.63.

On the above figures to say we are happy would be an under statement the vehicle has increased pulling power and more responsive on the throttle .

We are very pleased with our eCo-Shot system.

Kind regards

Mark Myers

Managing Director

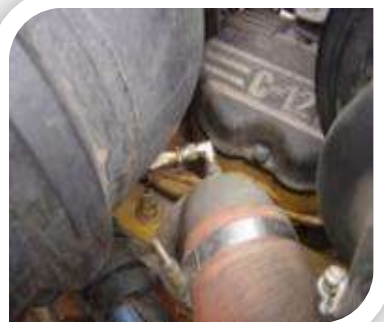
FLOURTRANS LOGISTICS AUSTRALIA

Kenworth T904 Cummins Signature

Improvement = from 1.6k's litre
now getting 2.1k's per litre



Kenworth T401 C12 CAT



Kenworth T604 Cummins Signature



1983 Mercedes Benz

eCo-shot fitted for 7 years = 700,000k's



Fuel Saving

Diesel only 1.9km's per litre
eCo-shot switched on - 2.45km's per litre
Approximately a 30% fuel saving.

Increased Power

Diesel only - 287 horsepower at the rear wheels.
eCo-shot switched on - 375 horsepower at the rear wheels.
An increase of 30% in horsepower with eCo-shot set on economy.



Scania eCo-shot installed for 2 years



BEFORE eCo-shot

2 Kilometres per Litre

Total fuel cost per km for trip
= \$0.62

NOW with eCo-shot

2.5 Kilometres per Litre

Total fuel cost per km for trip
= \$0.52

**Extra pulling power—around 60
more horsepower**

**Martin's Scania has nearly double
its profit margin from 10 cents a
km to 19.4 cents**



Kenworth N14 Cummins eCo-shot installed for 2 years



BEFORE eCo-shot

1.7 Kilometres per Litre

NOW with eCo-shot

2.37 Kilometres per Litre

Extra pulling power—around
100 more horsepower

Now saving around \$40 each
way Bairnsdale / Melbourne



Freightliner - C15 CAT eCo-shot installed for 2 years



VOLVO FH12



NEW Flat Tanks

Height 1.35m x Width .75m x depth x 9 inches



Tank Install Options



What a difference a shot of GAS makes to fuel economy.

Another very happy eCo-shot customer

TANKS – 140 litres diesel & 110 litres LPG

Before eCo-shot – 550 kilometres per tank of diesel.

With eCo-shot – 900 kilometres per tank of diesel / LPG usage – 50 litres.

Running cost - from 47 cents a kilometres to 33 cents a kilometre includes LPG.



**Before eCo-shot
3.57 kilometres
per litre
With eCo-shot
fitted 6.4
kilometres per
litre**



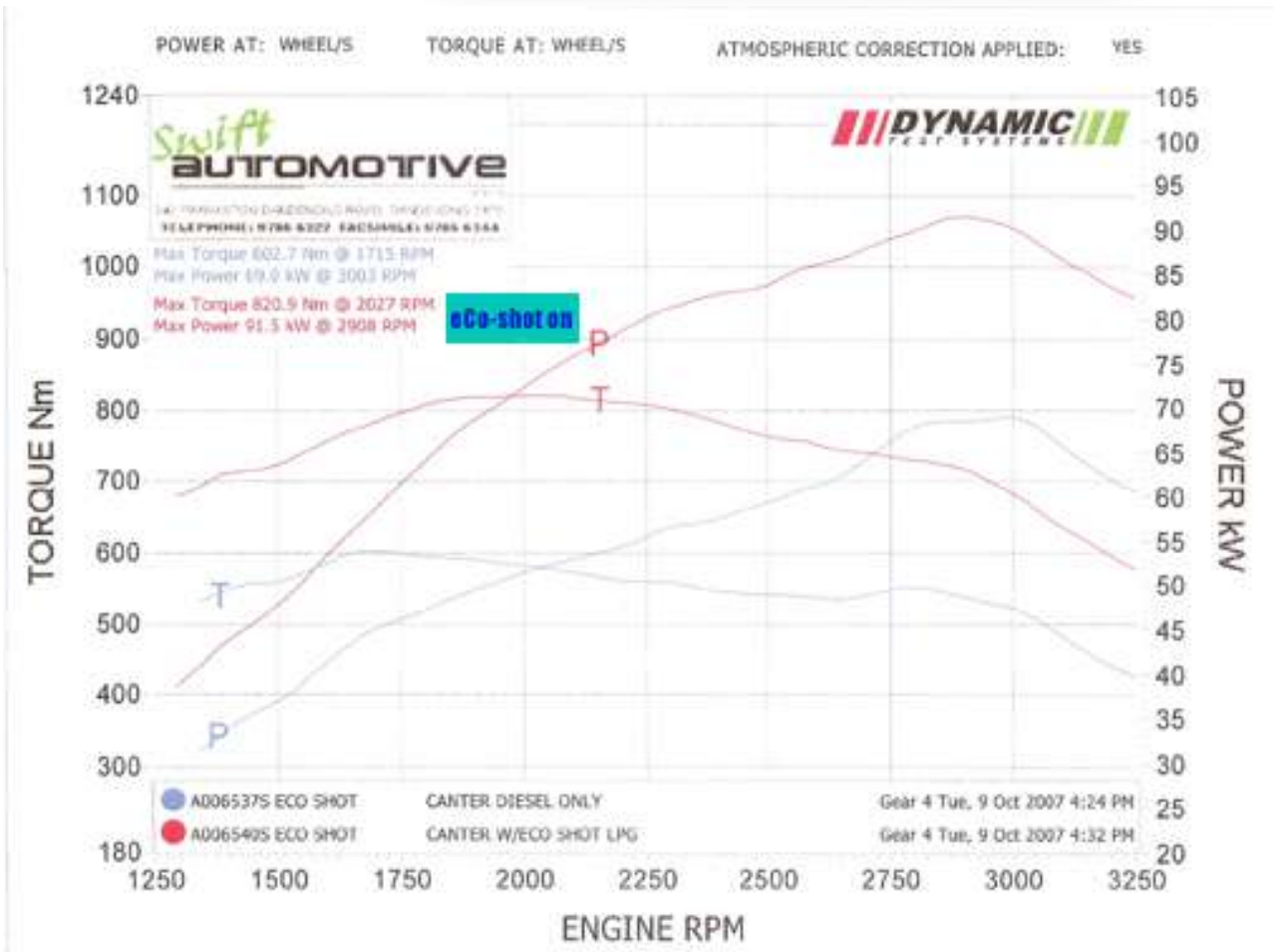
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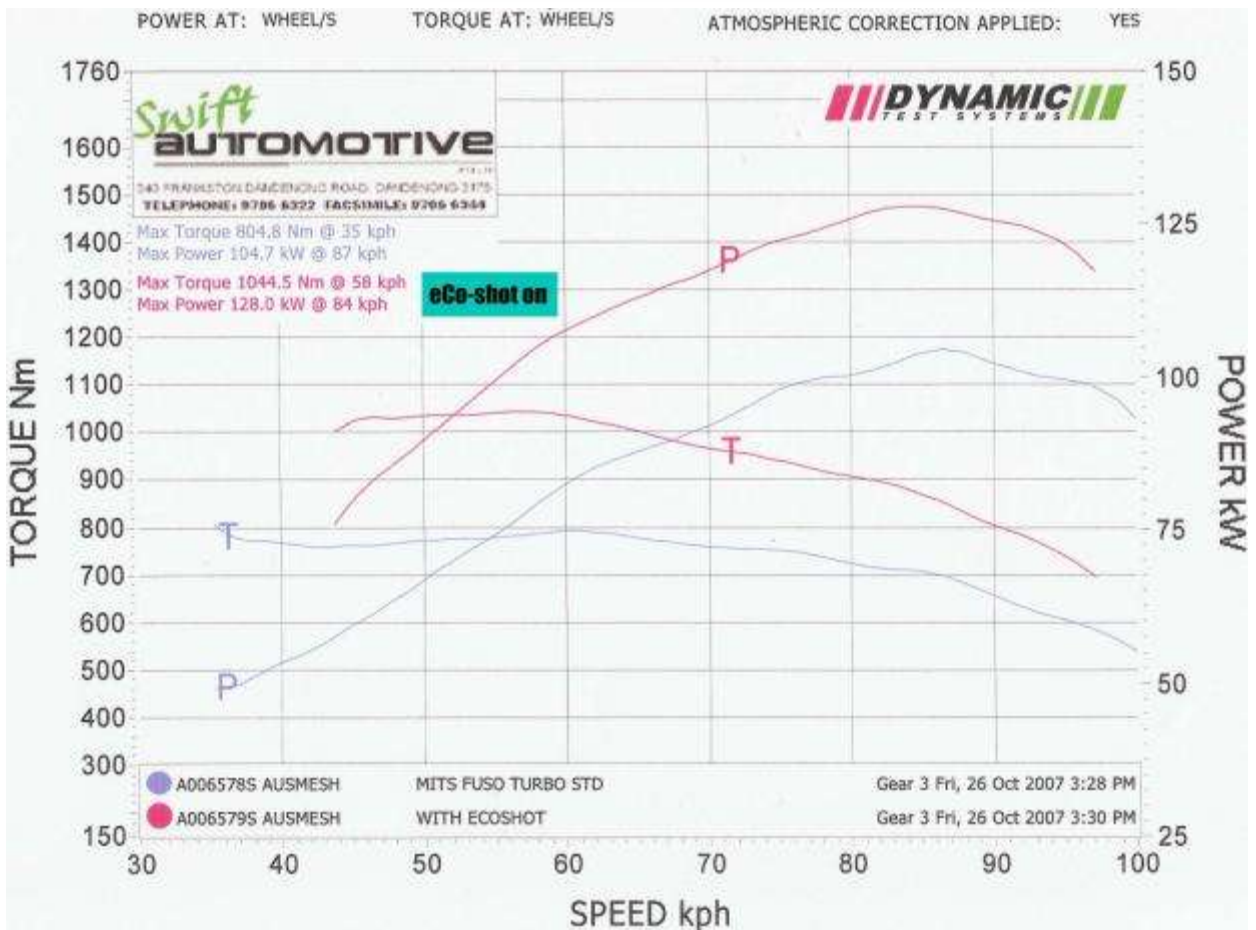
HINO Outro



Mitsubishi Canter



Mitsubishi Fighter



Fuel Saving - C15 CAT - 'B' Double				
Average Weekly Kilometres	Diesel only kilometres per litre	Total Weekly Litres	Average Diesel Price	Total Weekly Diesel Cost
3000	1.9	1578.95	1.26	\$1,989.47
Average Weekly Kilometres	Gas ON Diesel kilometres per litre	Total Weekly Litres	Average Diesel Price	Total Weekly Diesel Cost
3000	2.4	1250.00	1.26	\$1,575.00
Weekly Diesel Saving				\$414.47
Annual Diesel Saving				\$21,552.63
Average Weekly Kilometres	LPG kilometres per litre	Total Weekly Litres	Average Diesel Price	Total Weekly Diesel Cost
3000	32.78	91.52	0.55	\$50.34
Annual Cost				\$2,617.45
Total Annual Saving				\$18,935.18

Emissions Reduction - C15 CAT - 'B' Double				
Average Weekly Kilometres	Diesel only kilometres per litre	Total Weekly Litres	Kilograms of CO2 Emission per litre	Total Weekly CO2 Emissions per week - KILOGRAMS
3000	1.9	1578.95	2.7	4.26
Average Weekly Kilometres	Gas ON Diesel kilometres per litre	Total Weekly Litres	Kilograms of CO2 Emission per litre	Total Weekly CO2 Emissions per week - TONNES
3000	2.6	1153.85	2.7	3.12
WEEKLY CO2 Savings UNBURNT fuel				1.15
CO2 Emissions Reduction with <u>GAS ON</u> 10%				0.43
TOTAL WEEKLY CO2 SAVINGS				1.57
ANNUAL CO2 EMISSIONS REDUCTION				81.85

Fuel Saving - C15 CAT - 'B' Double

Average Weekly Kilometres	Diesel only kilometres per litre	Total Weekly Litres	Average Diesel Price	Total Weekly Diesel Cost
5000	1.9	2631.58	1.26	\$3,315.79

Average Weekly Kilometres	Gas ON Diesel kilometres per litre	Total Weekly Litres	Average Diesel Price	Total Weekly Diesel Cost
5000	2.4	2083.33	1.26	\$2,625.00

Weekly Diesel Saving **\$690.79**

Annual Diesel Saving **\$35,921.05**

Average Weekly Kilometres	LPG kilometres per litre	Total Weekly Litres	Average Diesel Price	Total Weekly Diesel Cost
5000	32.78	152.53	0.55	\$83.89

Annual Cost **\$4,362.42**

Total Annual Saving **\$31,558.64**

Emissions Reduction - C15 CAT - 'B' Double

Average Weekly Kilometres	Diesel only kilometres per litre	Total Weekly Litres	Kilograms of CO2 Emission per litre	Total Weekly CO2 Emissions per week - KILOGRAMS
5000	1.9	2631.58	2.7	7.11

Average Weekly Kilometres	Gas ON Diesel kilometres per litre	Total Weekly Litres	Kilograms of CO2 Emission per litre	Total Weekly CO2 Emissions per week - TONNES
5000	2.6	1923.08	2.7	5.19

WEEKLY CO2 Savings UNBURNT fuel **1.91**

CO2 Emissions Reduction with GAS ON 10% **0.71**

TOTAL WEEKLY CO2 SAVINGS **2.62**

ANNUAK CO2 EMISSIONS REDUCTION **136.42**

Feature Story in US Industry Magazine 'BeverageWorld'

'Powershot' is the US brand name of 'eCo-shot'

County Beverage Talks Fuel

Thursday, 11 March 2010 10:47

In exploring opportunities for his fleet to improve vehicle performance and reduce costs, Ron Burkhart, fleet manager at [County Beverage Co., Inc.](#), Lees Summit, Mo., says the company recently tested and installed LPG (Propane) fumigation systems on a number of its trucks with positive results.

County Beverage chose the Powershot 2000/Diesel Fuel Saver fumigation system (eCo-shot in Australia), a system that is entirely mechanical and does not interfere with the engine management or fuel management system of the vehicle. The boost pressure of the engines turbocharger meters the LPG/gas flow to the engine; so as the engine comes under load and the boost pressure of the turbo increases, the flow of gas is then relative to the engines demand.

"The benefits of the system are many, however most important are the mileage gains. The trucks have improved by two to four miles per gallon and have seen significant cost per mile reductions," says Burkhart. "A 2006 570 International, was getting 3.28 mpg and went to 6.50. All four of my 570s have the same results. Over a 12-month period this is a huge savings for any business. While the savings are most important to the bottom line, the improved combustion of the diesel fuel also makes the fleet greener, by using less diesel and reducing black smoke. The trucks run smooth, with a bit more performance and there have been no maintenance issues at all."

County Beverage has 11 different trucks fitted with the Powershot/DFS LPG system and is on track to do their entire fleet, based on the results it has achieved.

County Beverage has a 10,000-gallon on-site filling station supplied by Amerigas/Missouri, which services the trucks and company forklifts.

"It makes it more efficient for the trucks to be able to fill at their own yard," says Burkart. "Also the price of LPG (Propane) is less expensive in bulk and also further reduced with the 50-cent per gallon alternative fuel tax credit."

