FUEL DOCTOR FD-47

Test on 12-Dec'08

TESTING REPORT

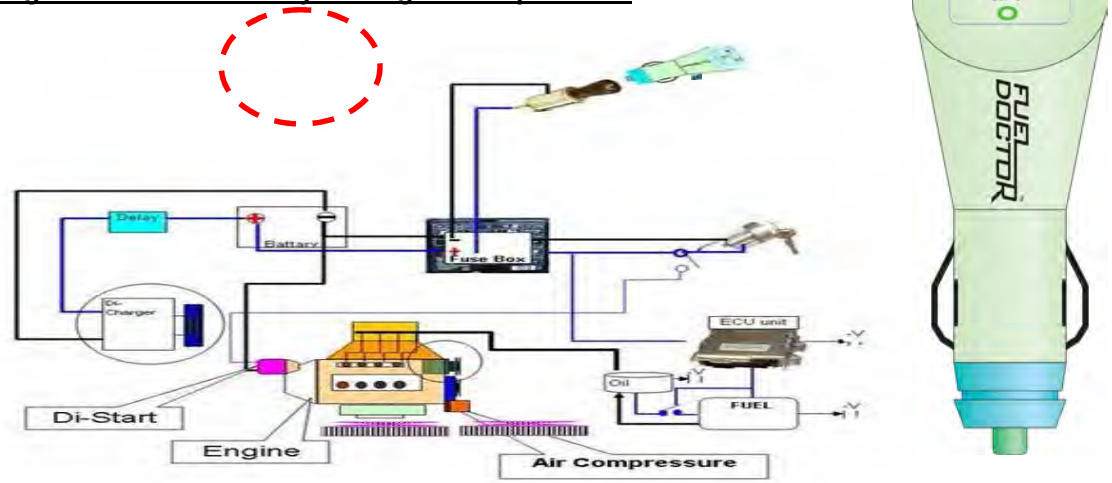
Test by : ***Mr.Somsak Unjai***
Mr.Pairat Meesakul
Mr.Banchop

Definition

The FD-47 reduces noisy signals that have a detrimental impact on the functionality of the ECU preventing fuel consumption from reaching its optimal state.

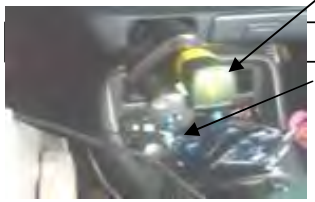
Fuel Doctors Patent Pending FD-47 is a Fuel Consumption Regulator that stabilizes the voltages running through the Electronic Control Unit (brains to most functions of the engine).

Diagram of FD-47 inside your engine compartment



Test #1 Direct Current Voltage (DCV) and Magnetic Test

Test using Digital Oscillascope

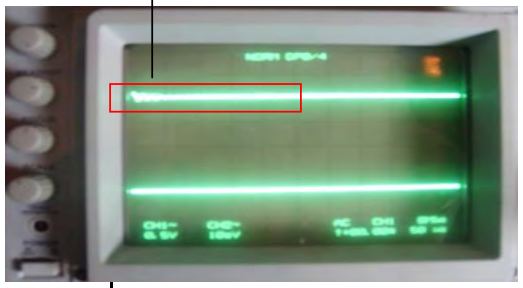


FD-47

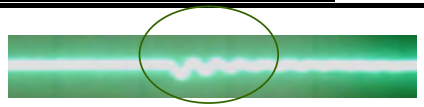
FD-47 is ready to test current and noise

Step-1 Test Result (For comparison of Direct Current Voltage(DCV)and Noise.

DC wave condition



No load on car.
Without FD-47



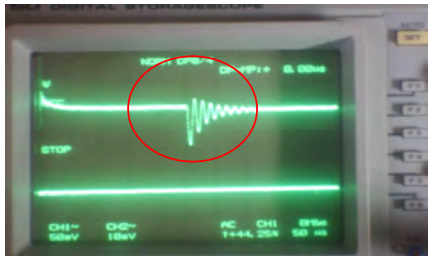
Test with Fan on
Without FD-47
“Have noise and current DC Drop 0.4~0.8 DCV”

Test with fan on.
Insert FD-47
“Have less noise and current DCV Drop 0.2 DCV”

Current DCV drop when attaching FD-47 around 0.2 DCV impact to ECU operation.

Step-2 Test Result For comparison of Direct Current Voltage(DCV)and Noise.

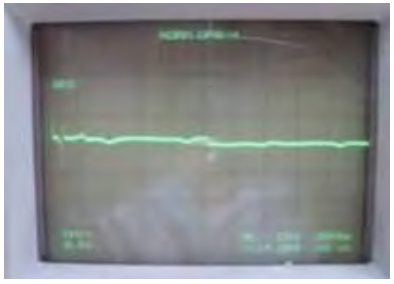
1) Wave shows current and noise Before insertion of FD-47


Display shows unstable wave effect under engine air compressure operation.

2) Wave shows current and noise After insertion of FD-47




Display shows stable currrent after inserting FD-47

Test Results

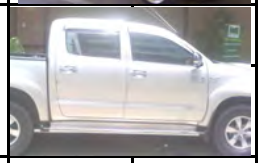
The FD-47 reduces the variance in electrical voltage sent to the Electronic Control Unit(ECU); and reduces the magnetic field from 25G (Gauss) to 12-16 G after insertion of the FD-47

Data comparison of FD-47

Before	After

TEST #2 FUEL DOCTOR FD-47 Dynamometer Tests

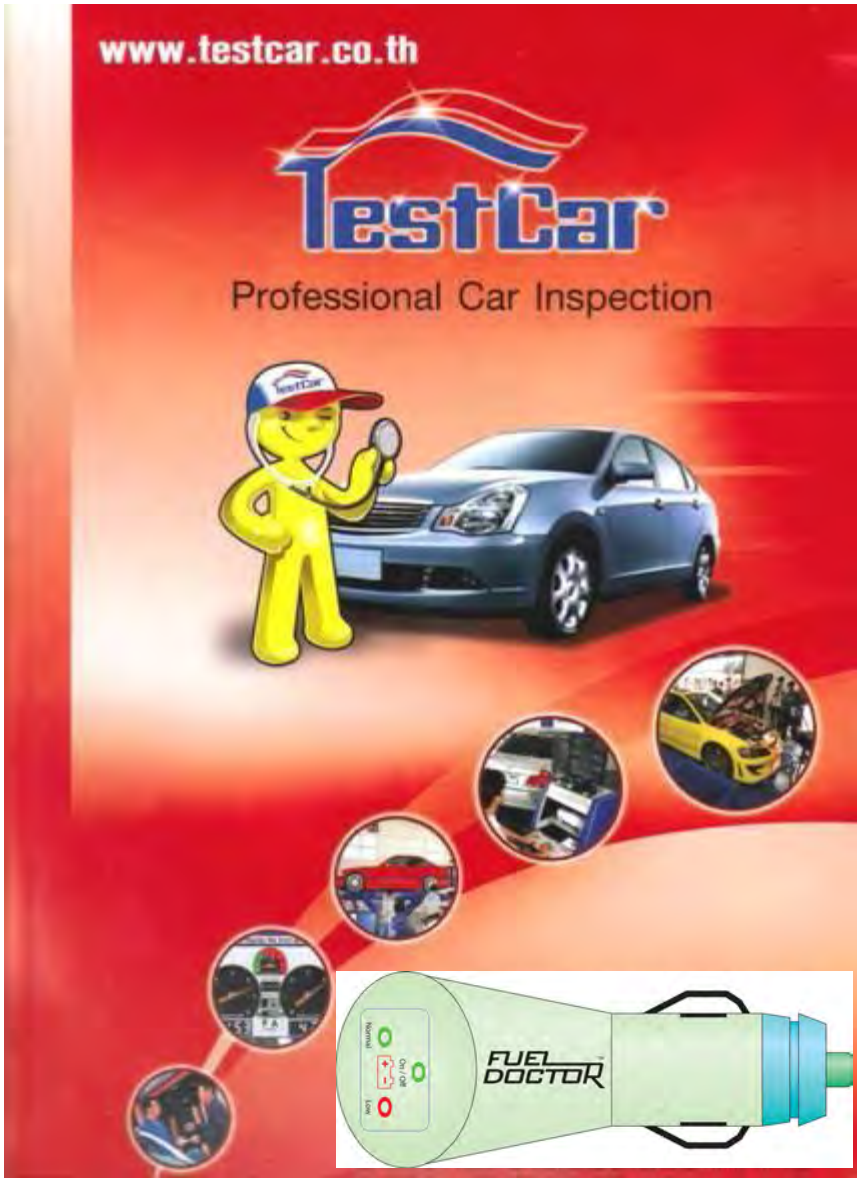
Branch	Car Type	Model	Photo	Gasoline Type	Year	Before		After		Result	
						Kilomtrs.	K/M / Ltr.	Kilomtrs.	K/M / Ltr.	K/M / Ltr.	Up %
Toyota	4 x4 (truck)	2500 cc.		Diesel	2003	100	13	100	14.5	1.5	11.5%
Honda	Car	1600 cc		Octane 91	1996	100	12	100	14.5	2.5	20.8%
SUBARU	Legacy GT	2500 cc.		LPG	1996	130	6	130	7.9	1.9	31.7%
HONDA	CITY	1500 cc.		Octane 91	2000	100	15.5	100	18.67	3.17	20.5%

HONDA	CR-V	2000 CC		Octane 91	2001	100	10.5	100	11.8	1.3	12.4%
				LPG		100	8.9	100	10	1.1	12.4%
Toyota	Vios	1500 cc.		LPG	2005	100	11	100	14.4	3.4	30.9%
Toyota	Truck D4D Comonral	2500 cc.		Diesel	2000	100	15	100	17	2	13.3%
Isuzu	Truck Gold series	3000 cc		Diesel	2006	100	13.5	100	14.5	1	7.4%
Toyota	Camry	2000 cc		Octane 95		100	11	100	15	4	36.4%
Honda	Car	1600 cc		Octane 91	1996	100	12	100	14.5	2.5	20.8%
Toyota	4 x4 (truck)	2500 cc.		Diesel	2003	100	13	100	14.5	1.5	11.5%
HONDA	CR-V	2000 CC		Octane 91	2001	100	10.5	100	11.8	1.3	12.4%
				LPG		100	8.9	100	10	1.1	12.4%
Toyota	Camry	2400 cc		Octane 95	2008	120	11	120	13.5	2.5	22.7%
Isuzu	D-Max (SX)	2500 cc		Diesel	2006	120	12.5	120	15	2.5	20.0%
Honda	Car	1600 cc		Octane 91	1996	110	11	110	13.36	2.4	21.5%

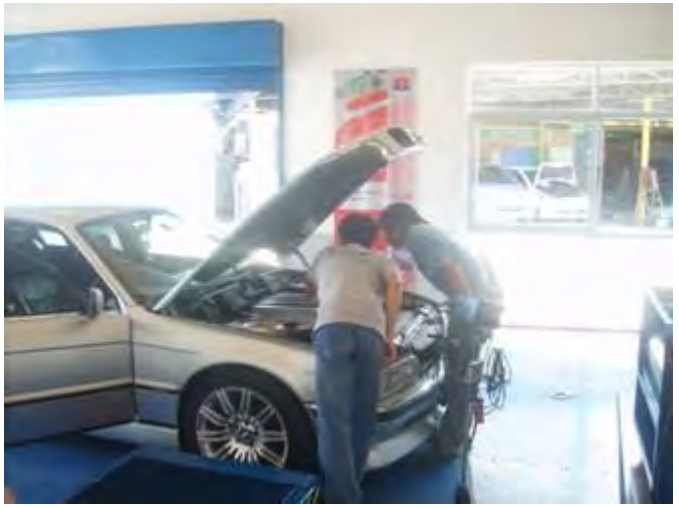
Test Result for FD-47

(Compare with and without FD-47)

Test Result for FD-47



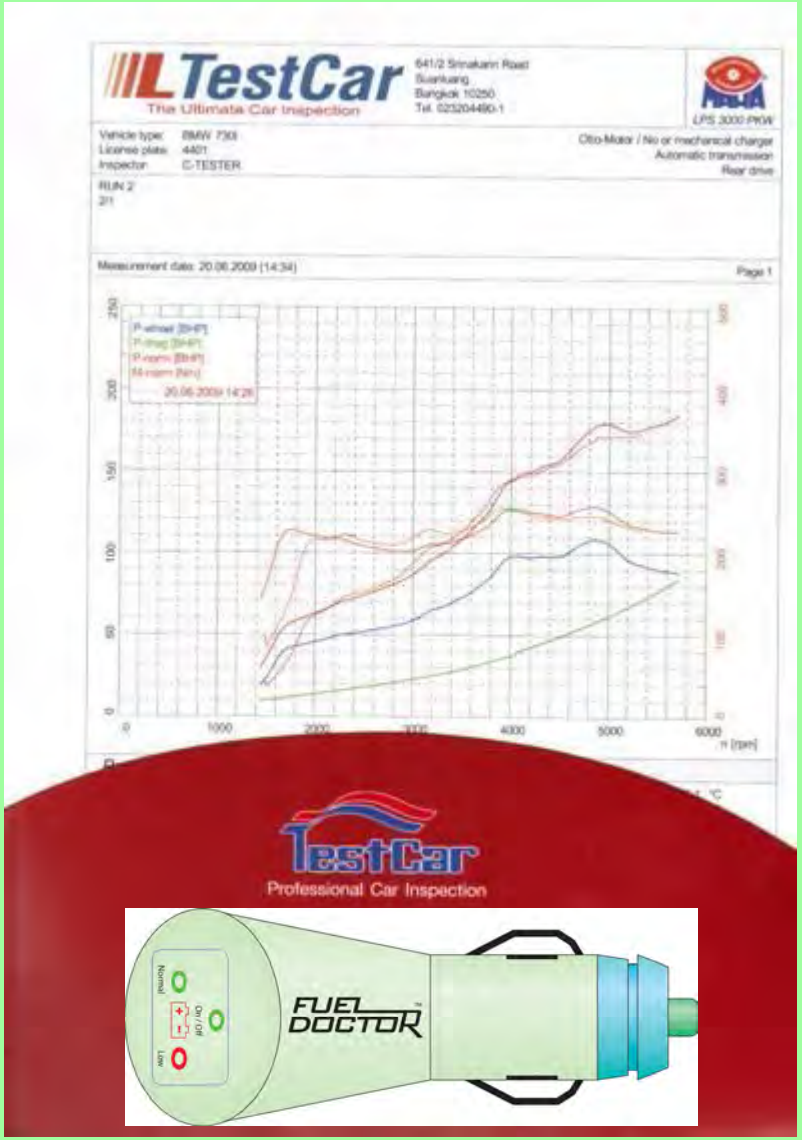
Test Result for FD-47



Test Result for FD-47

BMW 730 I

2001



Test Result for FD-47

(without plug)

Test Result for FD-47

(with plug)


TestCar
The Ultimate Car Inspection

841/2 Srinakarin Road
Suanluang
Bangkok 10250
Tel. 023204490-1

LPS 3000 PKW

Vehicle type: BMW 730i
License plate: 4401
Inspector: C-TESTER

Otto-Motor / No or mechanical charge
Automatic transmission
Rear drive

RUN 2

Measurement date: 20.06.2009 (14:34)

Page 1

P-wheel [BHP]
P-drag [BHP]
P-norm [BHP]
M-norm [Nm]

n [rpm]

Power data

Corrected power 1)	P_{Norm}	184.3 BHP	/ 135.6 kW
Engine power	P_{Eng}	172.6 BHP	/ 126.9 kW
Wheel power	P_{Wheel}	88.5 BHP	/ 65.1 kW
Drag power	P_{Drag}	84.1 BHP	/ 61.9 kW
Max. power at		5710 rpm	/ 223.6 km/h
Torque 1)	M_{Norm}	256.7 Nm	
Max. Torque at		4850 rpm	/ 189.7 km/h
Max. attained RPM		5715 rpm	/ 223.8 km/h

1) Correction acc. to DIN 70020
Correction factors: Q_V = 0.00 %, P_{VA} = 0.00 BHP

Ambient data

Ambient temperature	$T_{Ambient}$	35.1 °C
Intake air temperature	$T_{Intake\ air}$	55.7 °C
Relative humidity	H_{Rel}	55.4 %
Air pressure	p_{Air}	1004.5 hPa
Steam pressure	p_{Steam}	31.3 hPa
Oil temperature	T_{Oil}	—.— °C
Fuel temperature	T_{Fuel}	—.— °C

Slip

Speed no load	$v_{n,load}$	—.— km/h
RPM no load	$n_{n,load}$	—.— rpm
Speed full load	$v_{full\ load}$	—.— km/h
RPM full load	$n_{full\ load}$	—.— rpm
Slip		—.— %

Rotating mass

Average delay run down 1	a_1	—.— m/s²
Average Brake force run down 1	F_1	—.— N
Average delay run down 2	a_2	—.— m/s²
Average brake force run down 2	F_2	—.— N
Force of the rotating mass	$F_{rot\ mass}$	—.— N
Rotating total mass	$m_{rot\ mass}$	330.0 kg
Rotating test stand mass	$m_{rot\ dyno}$	250.0 kg
Rotating vehicle mass	$m_{rot\ vehicle}$	80.0 kg

(without plug)

TestCar
The Ultimate Car Inspection

641/2 Srinakarin Road
Suanluang
Bangkok 10250
Tel. 023204490-1

LPS 3000 PKW

Vehicle type: BMW 730
License plate: 4401
Inspector: C-TESTER

Otto-Motor / No or mechanical charger
Automatic transmission
Rear drive

RUN 1 OK

Measurement date: 20.06.2009 (14:26)

Page 1

P-wheel [BHP]
P-drag [BHP]
P-norm [BHP]
M-norm [Nm]

n [rpm]

Power data

Corrected power *)	P_{corr}	172.5 BHP	/ 126.9 kW
Engine power	P_{Eng}	162.1 BHP	/ 119.2 kW
Wheel power	P_{wheel}	92.7 BHP	/ 68.1 kW
Drag power	P_{Drag}	69.4 BHP	/ 51.1 kW
Max. power at		5352 rpm	/ 207.7 km/h
Torque *)	M_{corr}	254.5 Nm	
Max. Torque at		3363 rpm	/ 154.3 km/h
Max. attained RPM		5346 rpm	/ 207.9 km/h

*) Correction acc. to DIN 70020
Correction factors: C_x = 0.00 %, P_{Cor} = 0.00 BHP

Ambient data

Ambient temperature	$T_{Ambient}$	35.3 °C
Intake air temperature	$T_{Intake\ air}$	53.5 °C
Relative humidity	H_{Air}	55.5 %
Air pressure	p_{Air}	1004.5 hPa
Steam pressure	p_{Steam}	31.7 hPa
Oil temperature	T_{Oil}	—.- °C
Fuel temperature	T_{Fuel}	—.- °C

Slip

Speed no load	$v_{n0\ load}$	—.- km/h
RPM no load	$n_{n0\ load}$	— rpm
Speed full load	$v_{full\ load}$	—.- km/h
RPM full load	$n_{full\ load}$	— rpm
Slip		—.- %

Rotating mass

Average delay run down 1	a_1	—.— m/s²
Average Brake force run down 1	F_1	—.- N
Average delay run down 2	a_2	—.— m/s²
Average brake force run down 2	F_2	—.- N
Force of the rotating mass	$F_{rot\ mass}$	—.- N
Rotating total mass	$m_{rot\ total}$	330.0 kg
Rotating test stand mass	$m_{rot\ dyno}$	250.0 kg
Rotating vehicle mass	$m_{rot\ vehicle}$	80.0 kg

(with plug)

TestCar
The Ultimate Car Inspection

641/2 Srinakarin Road
Suanluang
Bangkok 10250
Tel. 023204490-1

LPS 3000 PKW

Vehicle type: BMW 730i
License plate: 4401
Inspector: C-TESTER

Otto-Motor / No or mechanical charger
Automatic transmission
Rear drive

RUN 2

Measurement date: 20.06.2009 (14:34)

Page 1

P-wheel [BHP]
P-drag [BHP]
P-norm [BHP]
M-norm [Nm]

n [rpm]

Power data

Corrected power *)	P_{corr}	184.3 BHP	/ 135.6 kW
Engine power	P_{Eng}	172.6 BHP	/ 126.9 kW
Wheel power	P_{wheel}	88.5 BHP	/ 65.1 kW
Drag power	P_{Drag}	84.1 BHP	/ 61.9 kW
Max. power at		5711 rpm	/ 223.6 km/h
Torque *)	M_{corr}	256.7 Nm	
Max. Torque at		4850 rpm	/ 189.7 km/h
Max. attained RPM		5715 rpm	/ 223.8 km/h

*) Correction acc. to DIN 70020
Correction factors: C_x = 0.00 %, P_{Cor} = 0.00 BHP

Ambient data

Ambient temperature	$T_{Ambient}$	35.1 °C
Intake air temperature	$T_{Intake\ air}$	55.7 °C
Relative humidity	H_{Air}	55.4 %
Air pressure	p_{Air}	1004.5 hPa
Steam pressure	p_{Steam}	31.3 hPa
Oil temperature	T_{Oil}	—.- °C
Fuel temperature	T_{Fuel}	—.- °C

Slip

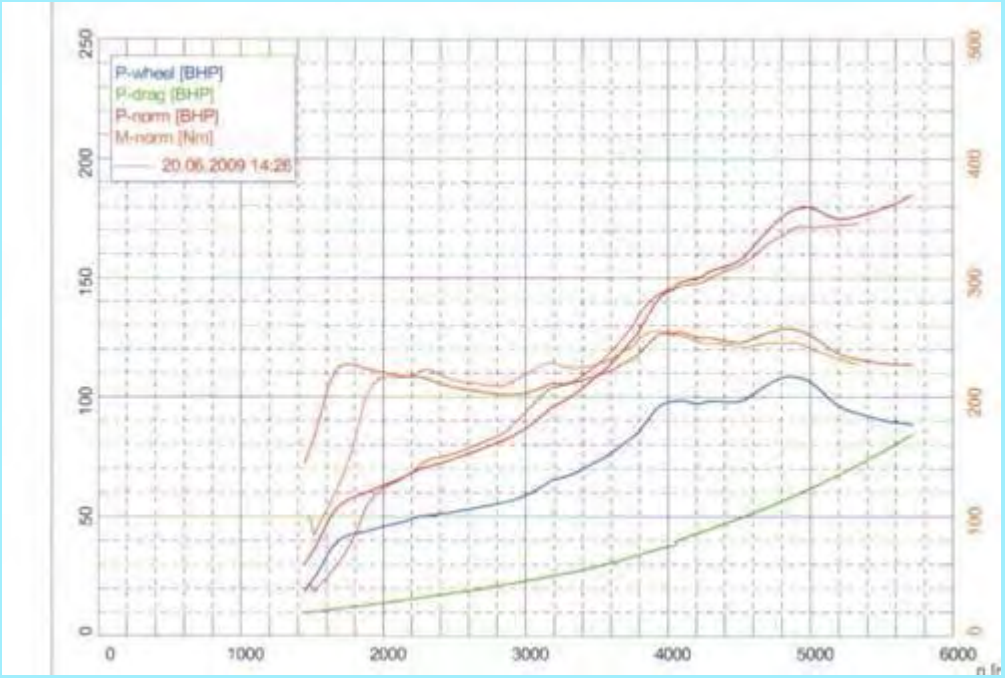
Speed no load	$v_{n0\ load}$	—.- km/h
RPM no load	$n_{n0\ load}$	— rpm
Speed full load	$v_{full\ load}$	—.- km/h
RPM full load	$n_{full\ load}$	— rpm
Slip		—.- %

Rotating mass

Average delay run down 1	a_1	—.— m/s²
Average Brake force run down 1	F_1	—.- N
Average delay run down 2	a_2	—.— m/s²
Average brake force run down 2	F_2	—.- N
Force of the rotating mass	$F_{rot\ mass}$	—.- N
Rotating total mass	$m_{rot\ total}$	330.0 kg
Rotating test stand mass	$m_{rot\ dyno}$	250.0 kg
Rotating vehicle mass	$m_{rot\ vehicle}$	80.0 kg

Test Result for FD-47

(Compare without and with plug fuel save)

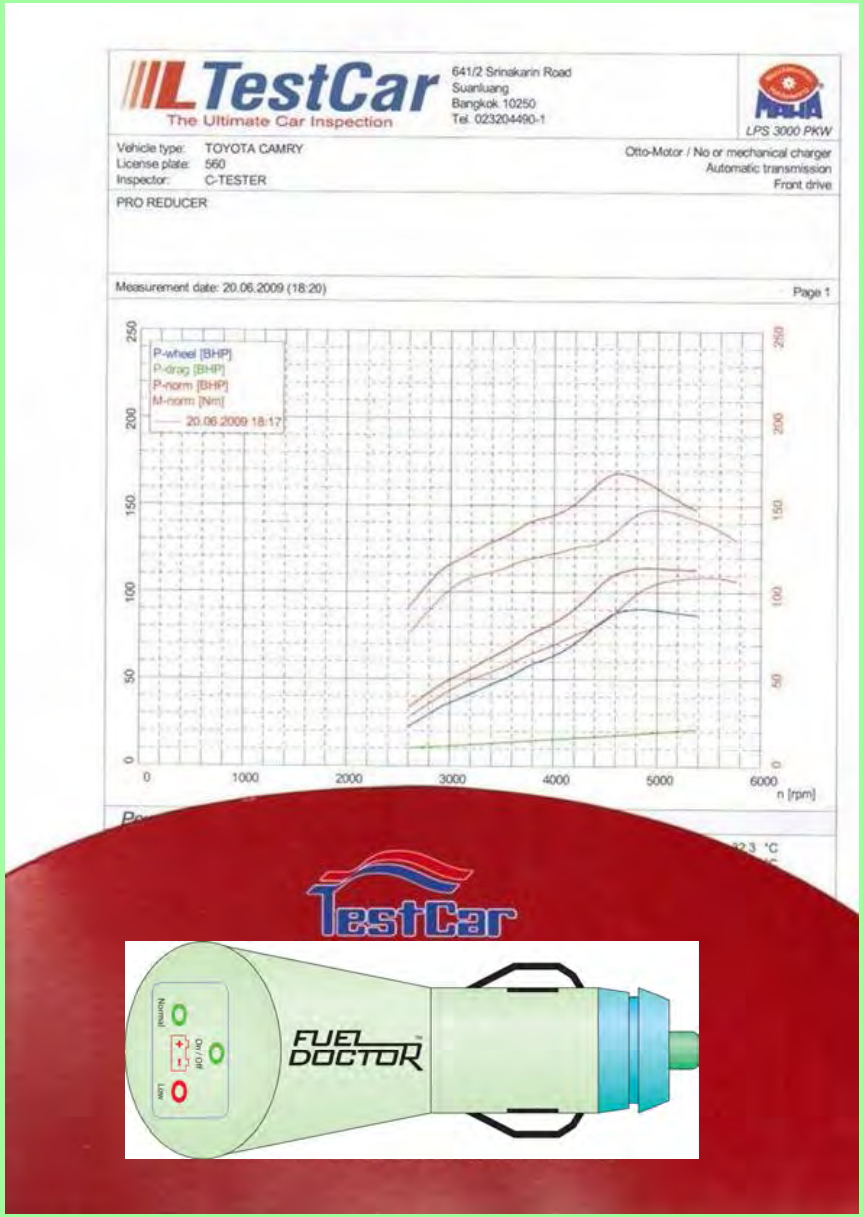


	(Decr.)	(without)	(with)	(%)
Corrected power P_{Norm}		172.5 BHP	184.3	6.84
Engine power P_{Eng}		162.1 BHP	172.6	6.47
Wheel power P_{Wheel}		88.5 BHP	88.5	-
Max power at		5340 rpm/207.7 km/h	5710 rpm/223.6km/h	
Torque 1) M_{morn}		254.5 Nm	256.7 Nm	0.86
Max Torque at		3965 rpm/154.3km/h	4850 rpm/189.7km/h	

Test Result for FD-47

TOYOTA CAMRY

2003



Test Result for FD-47

(without plug)

TestCar
The Ultimate Car Inspection

641/2 Srinakarin Road
Suanluang
Bangkok 10250
Tel. 023204490-1

LPS 3000 PROW

Vehicle type: TOYOTA CAMRY
License plate: 560
Inspector: C-TESTER

Otto-Motor / No or mechanical charger
Automatic transmission
Front drive

WITHOUT PRO REDUCER

Measurement date: 20.06.2009 (16:17)

Page 1

P-wheel [BHP]
P-drag [BHP]
P-norm [BHP]
M-norm [Nm]

n [rpm]

Power data

Corrected power 1)	P_{Norm}	108.4	BHP	/ 79.8	kW
Engine power	P_{Eng}	103.6	BHP	/ 76.2	kW
Wheel power	P_{Wheel}	83.3	BHP	/ 61.3	kW
Drag power	P_{Drag}	20.3	BHP	/ 14.9	kW
Max. power at		5475	rpm	/ 103.7	km/h
Torque 1)	M_{Morm}	147.3	Nm		
Max. Torque at		4995	rpm	/ 94.7	km/h
Max. attained RPM		5760	rpm	/ 109.2	km/h

1) Correction acc. to SAE J 1349
Correction factors: Q_V = 0.00 %, P_{VA} = 0.00 BHP

Ambient data

Ambient temperature	$T_{Ambient}$	32.5	°C
Brake air temperature	$T_{Brake\ air}$	38.7	°C
Relative humidity	H_{Air}	66.1	%
Air pressure	P_{Air}	1004.1	hPa
Steam pressure	P_{Steam}	32.3	hPa
Oil temperature	T_{Oil}	---.-	°C
Fuel temperature	T_{Fuel}	---.-	°C

Slip

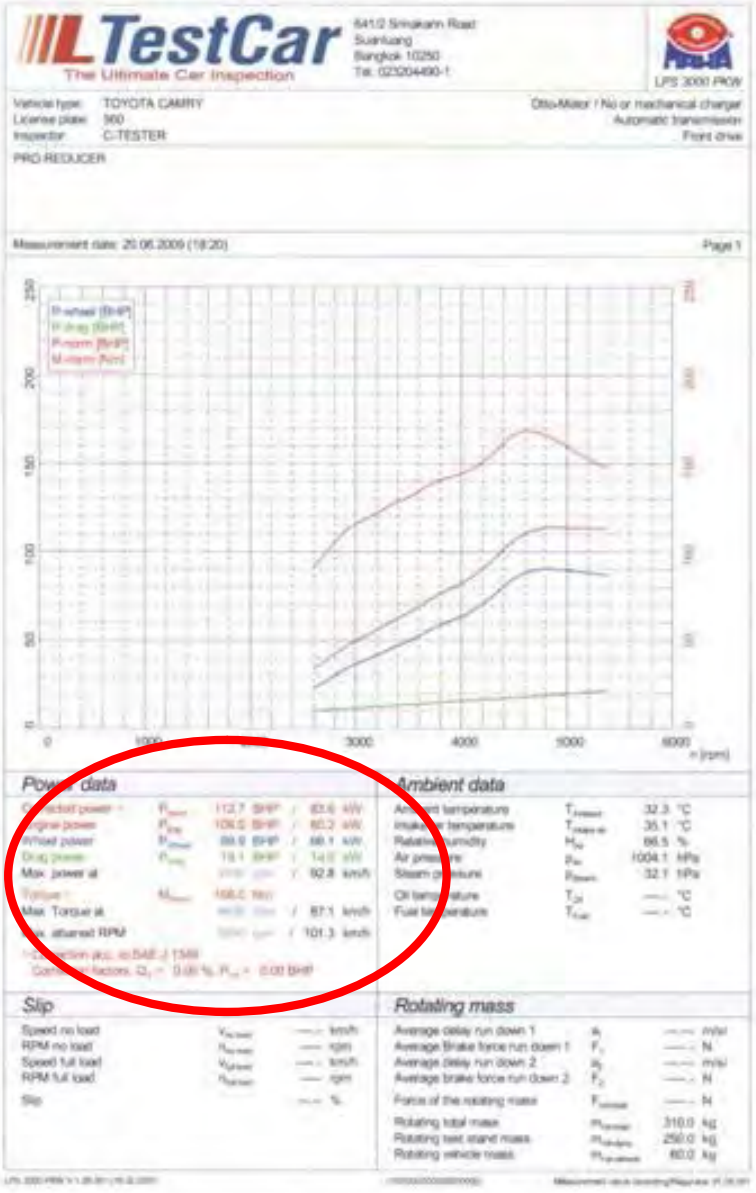
Speed no load	$v_{no\ load}$	---.-	km/h
RPM no load	$n_{no\ load}$	----	rpm
Speed full load	$v_{full\ load}$	---.-	km/h
RPM full load	$n_{full\ load}$	----	rpm
Slip		---.-	%

Rotating mass

Average delay run down 1	a_1	---.-	m/s²
Average Brake force run down 1	F_1	---.-	N
Average delay run down 2	a_2	---.-	m/s²
Average brake force run down 2	F_2	---.-	N
Force of the rotating mass	$F_{rot\ mass}$	---.-	N
Rotating total mass	$m_{rot\ total}$	310.0	kg
Rotating test stand mass	$m_{rot\ dyno}$	250.0	kg
Rotating vehicle mass	$m_{rot\ vehicle}$	60.0	kg

Test Result for FD-47

(with plug)


TestCar
The Ultimate Car Inspection

641/2 Srinakarin Road
Suanluang
Bangkok 10250
Tel. 02320490-1

LPS 3000 PRW

Vehicle type: TOYOTA CAMRY
License plate: 360
Inspector: C-TESTER

Otto-Motor / No or mechanical charger
Automatic transmission
Front drive

PRO REDUCER

Measurement date: 20.06.2009 (18:20)

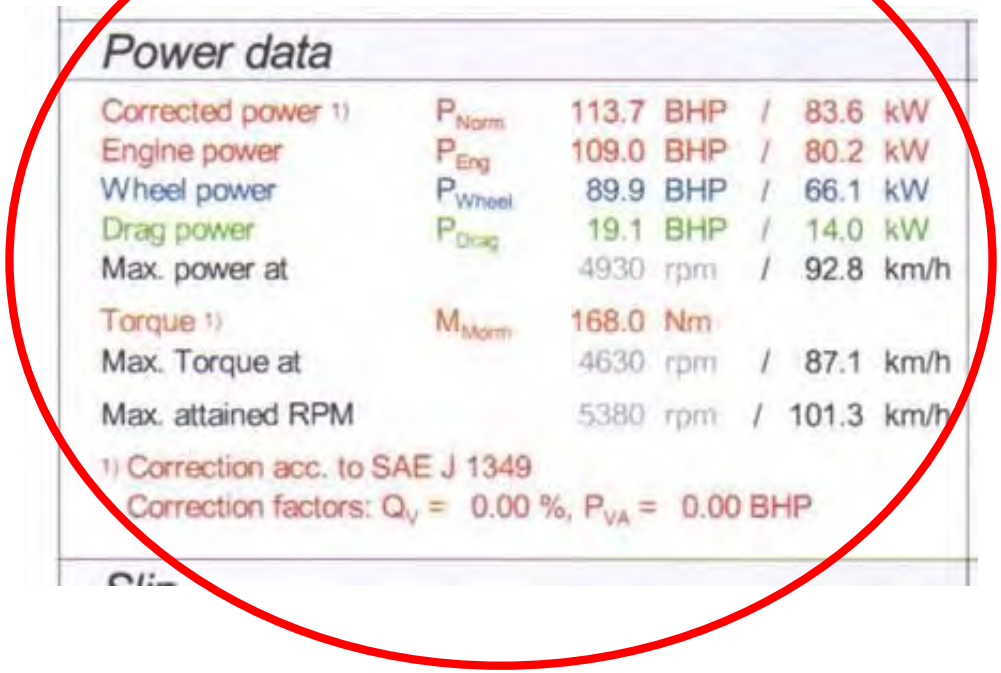
Page 1

Power data

Ambient data

Slip

Rotating mass


Power data

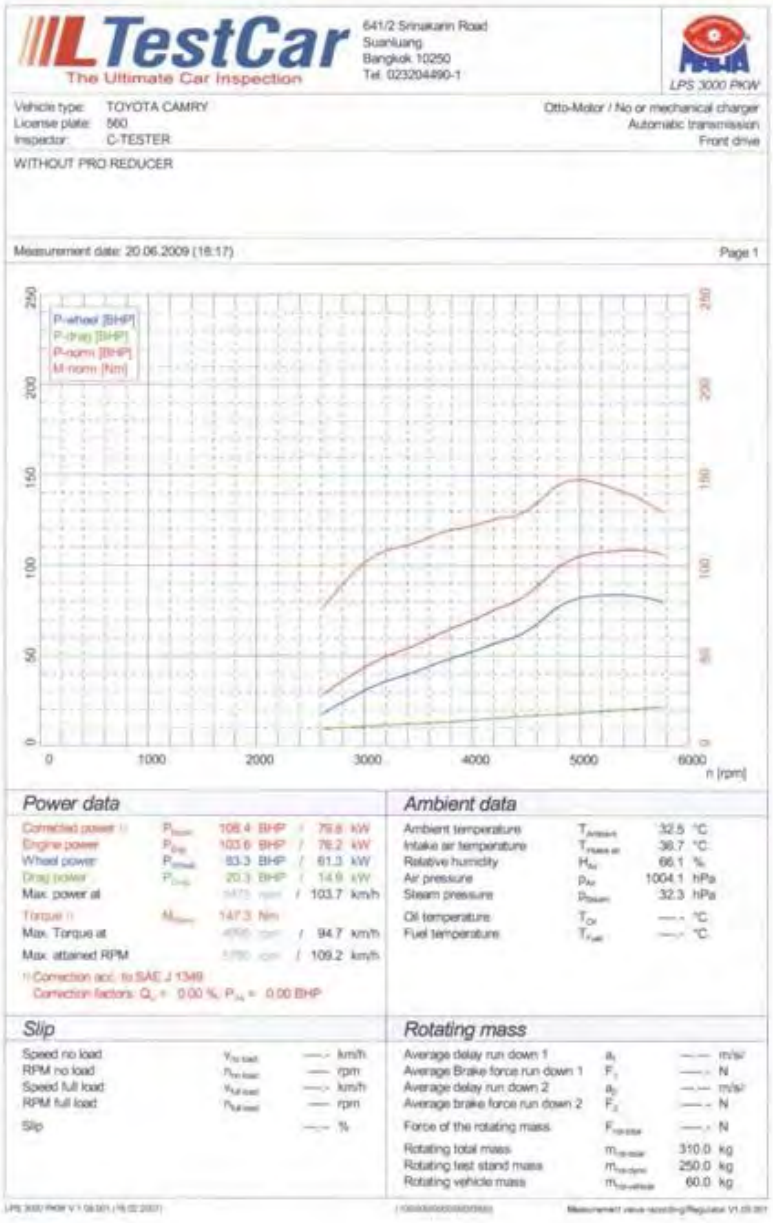
Corrected power 1)	P_{Norm}	113.7	BHP	/	83.6	kW
Engine power	P_{Eng}	109.0	BHP	/	80.2	kW
Wheel power	P_{Wheel}	89.9	BHP	/	66.1	kW
Drag power	P_{Drag}	19.1	BHP	/	14.0	kW
Max. power at		4930	rpm	/	92.8	km/h
Torque 1)	M_{Norm}	168.0	Nm			
Max. Torque at		4630	rpm	/	87.1	km/h
Max. attained RPM		5380	rpm	/	101.3	km/h

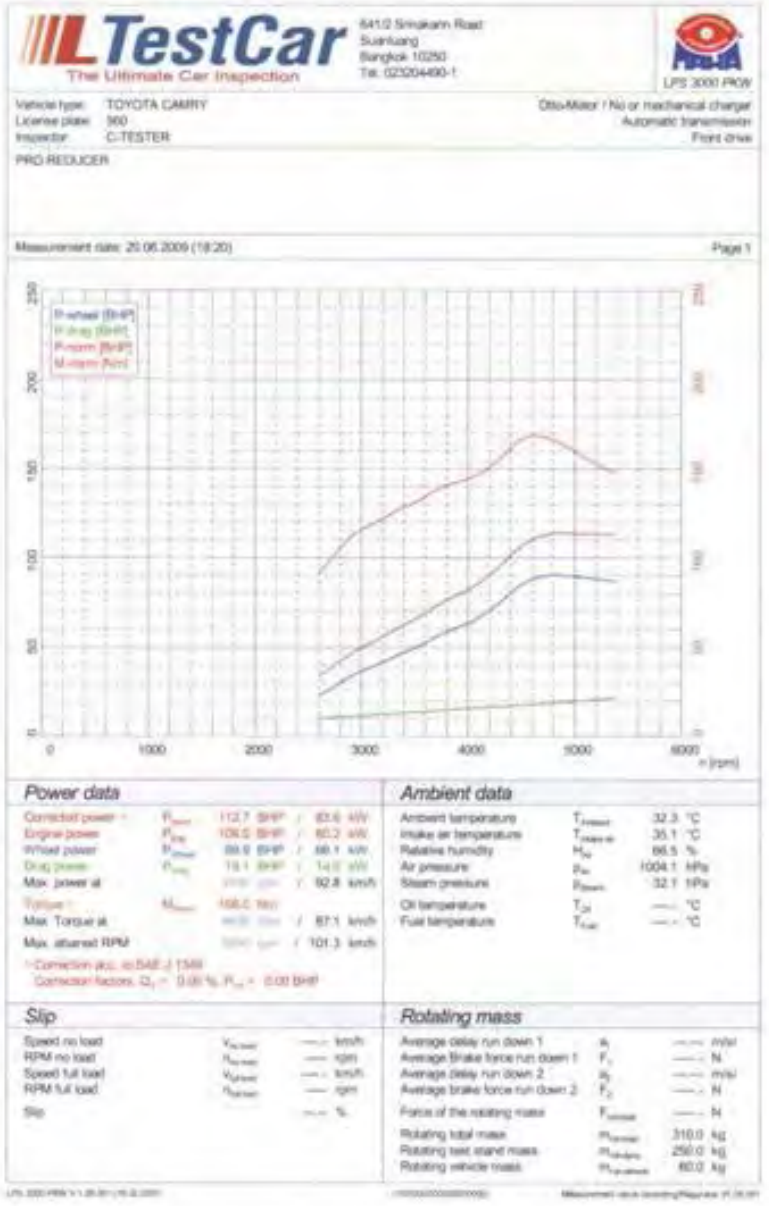
1) Correction acc. to SAE J 1349
Correction factors: Q_v = 0.00 %, P_{VA} = 0.00 BHP

Test Result for FD-47

(without plug)

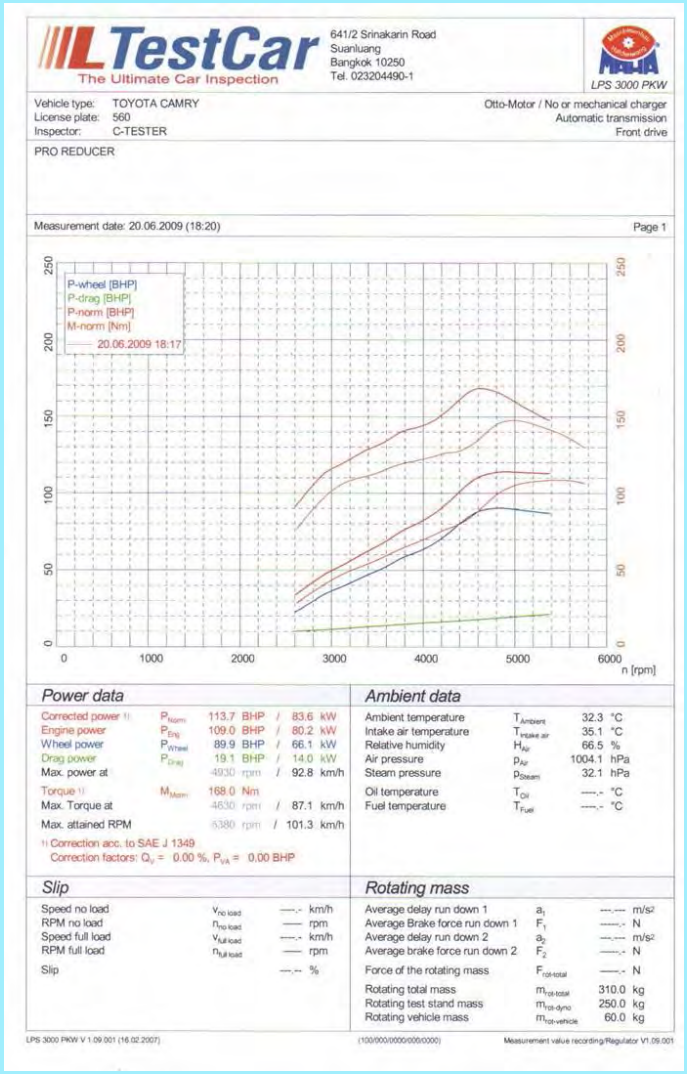
(with plug)





Test Result for FD-47

(Compare without and with plug fuel save)



TestCar
The Ultimate Car Inspection

641/2 Srinakarin Road
Suanluang
Bangkok 10250
Tel. 023204490-1

LPS 3000 PKW

Vehicle type: TOYOTA CAMRY
License plate: 560
Inspector: C-TESTER

Otto-Motor / No or mechanical charger
Automatic transmission
Front drive

PRO REDUCER

Measurement date: 20.06.2009 (18:20) Page 1

P-wheel [BHP]
P-drag [BHP]
P-norm [BHP]
M-norm [Nm]
20.06.2009 18:17

n [rpm]

Power data

Corrected power 1)	P_{Norm}	113.7 BHP / 83.6 kW	
Engine power	P_{Eng}	109.0 BHP / 80.2 kW	
Wheel power	P_{Wheel}	89.9 BHP / 66.1 kW	
Drag power	P_{Drag}	19.1 BHP / 14.0 kW	
Max. power at		4930 rpm / 92.8 km/h	
Torque 1)	M_{Morn}	168.0 Nm	
Max. Torque at		4630 rpm / 87.1 km/h	
Max. attained RPM		5380 rpm / 101.3 km/h	

1) Correction acc. to SAE J 1349
Correction factors: Q_v = 0.00 %, P_{VA} = 0.00 BHP

Ambient data

Ambient temperature	$T_{Ambient}$	32.3 °C
Intake air temperature	$T_{Intake\ air}$	35.1 °C
Relative humidity	H_{Air}	66.5 %
Air pressure	p_{Air}	1004.1 hPa
Steam pressure	p_{Steam}	32.1 hPa
Oil temperature	T_{Oil}	---.- °C
Fuel temperature	T_{Fuel}	---.- °C

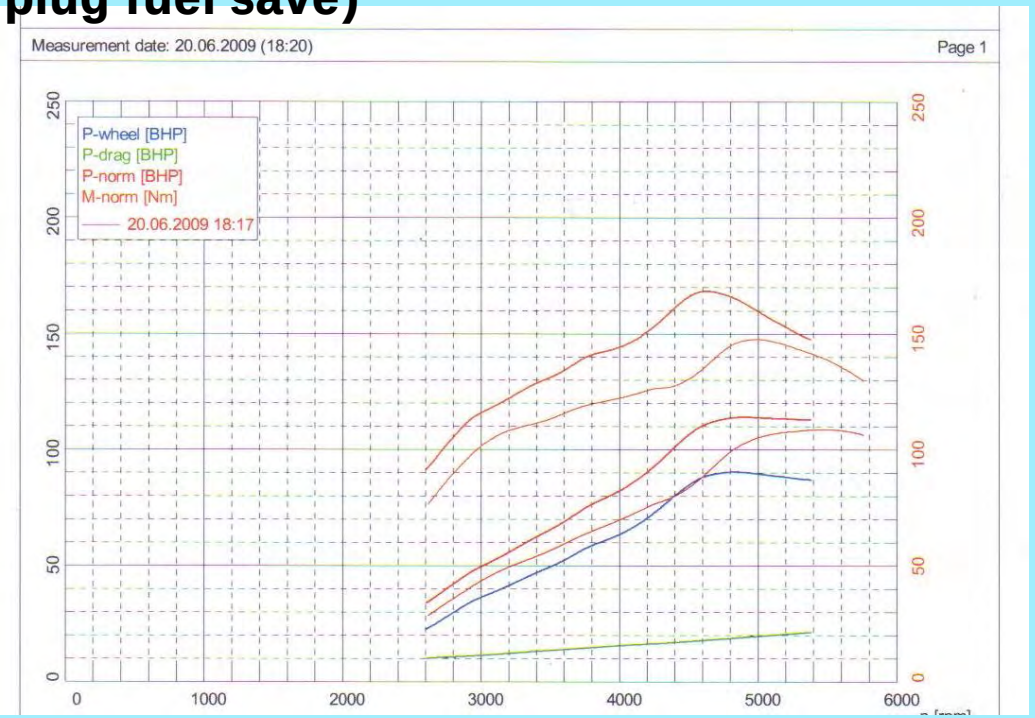
Slip

Speed no load	$v_{no\ load}$	---.- km/h
RPM no load	$n_{no\ load}$	---- rpm
Speed full load	$v_{full\ load}$	---.- km/h
RPM full load	$n_{full\ load}$	---- rpm
Slip		---.- %

Rotating mass

Average delay run down 1	a_1	---.--- m/s²
Average Brake force run down 1	F_1	---.- N
Average delay run down 2	a_2	---.--- m/s²
Average brake force run down 2	F_2	---.- N
Force of the rotating mass	$F_{rot\text{-}total}$	---.- N
Rotating total mass	$m_{rot\text{-}total}$	310.0 kg
Rotating test stand mass	$m_{rot\text{-}dyno}$	250.0 kg
Rotating vehicle mass	$m_{rot\text{-}vehicle}$	60.0 kg

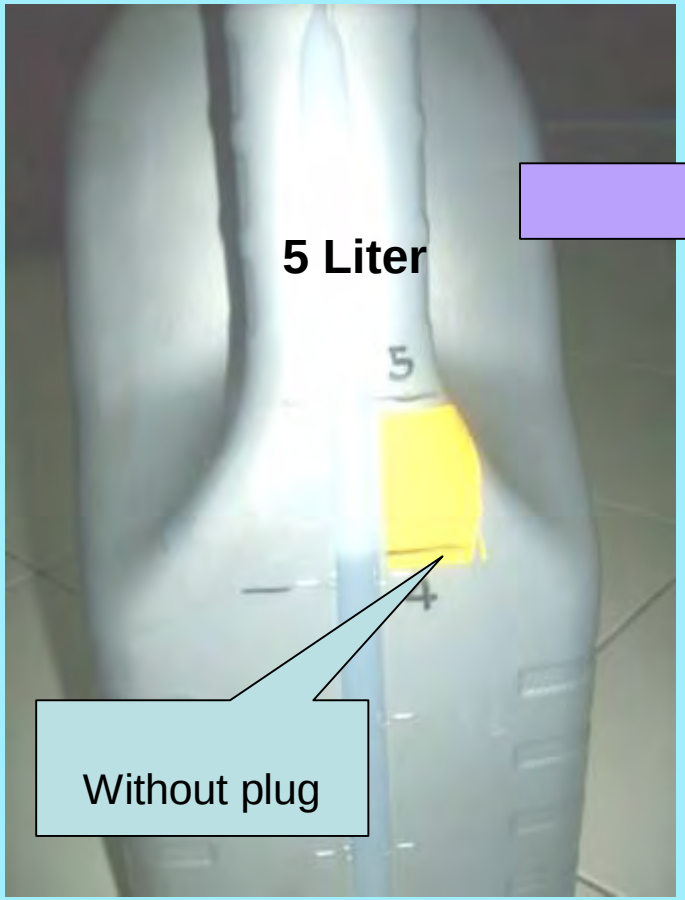
LPS 3000 PKW V 1.09.001 (16.02.2007) (100/000/0000/000/0000) Measurement value recording/Regulator V1.09.001

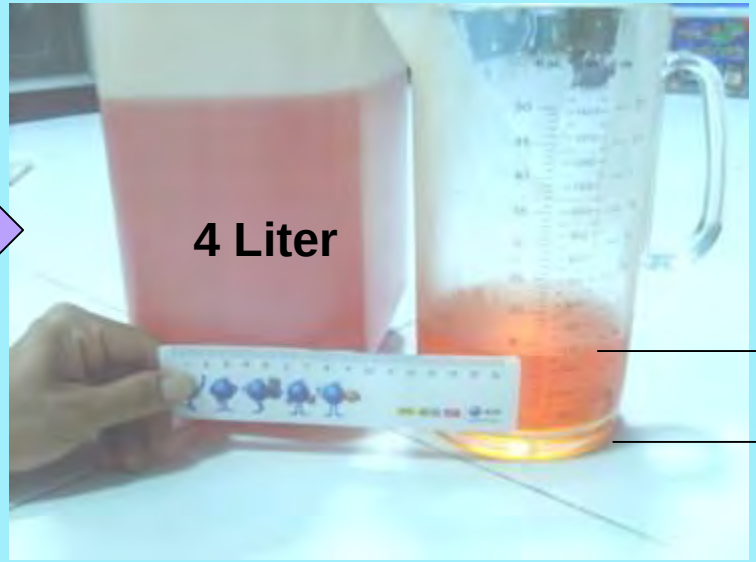


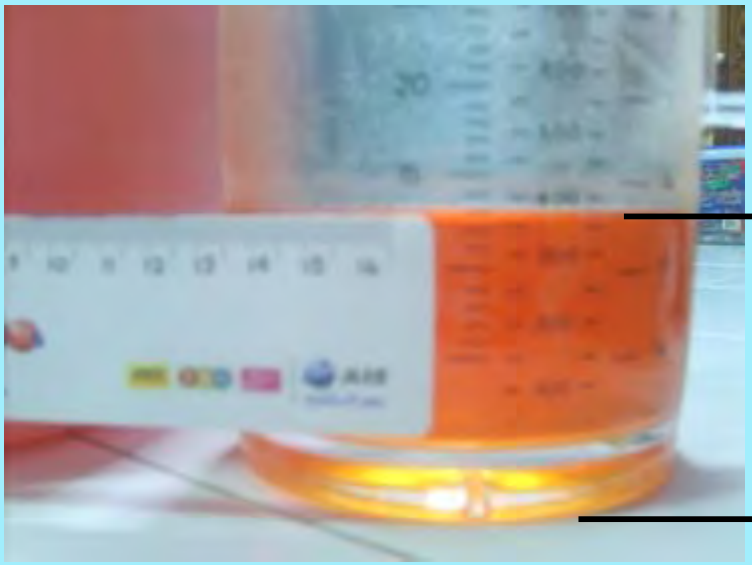
	(Decr.)	(without)	(with)	(%)
Corrected power P_{Norm}		108.4 BHP	113.7	4.88
Engine power P_{Eng}		103.6 BHP	109.0	5.21
Wheel power P_{Wheel}		83.3 BHP	89.9	-
Max power at		4930 rpm/92.8 km/h	5475 rpm/103.7km/h	
Torque 1) M_{morn}		147.3 Nm	168.0 Nm	14.05
Max Torque at		4630 rpm/87.1km/h	4995 rpm/94.7km/h	

Test Result for FD-47

(Compare without and with plug fuel save)





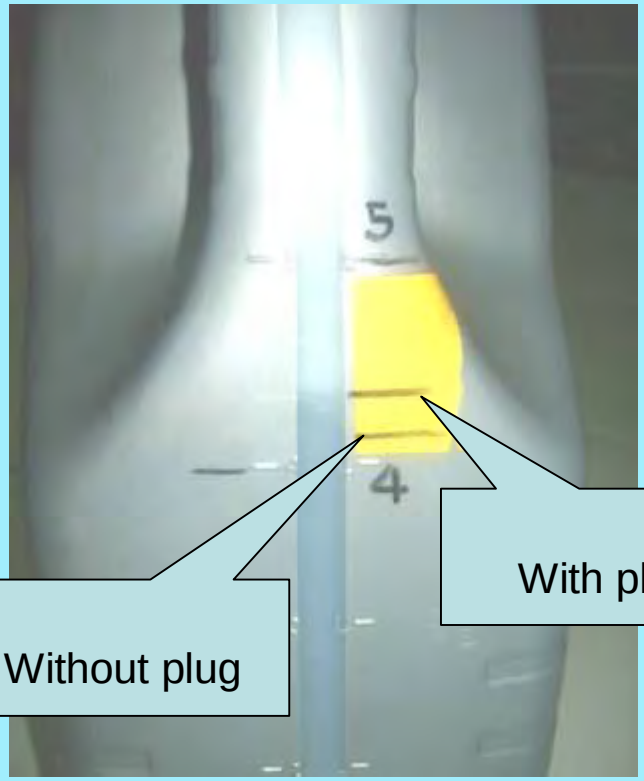


Test by lock speed 100km/h and run 40 km.

And without Fuel save plug

Test Result for FD-47

(Compare without and with plug fuel save)



Test by lock speed 100km/h and run 40 km.

And with Fuel save plug

Test Result for FD-47

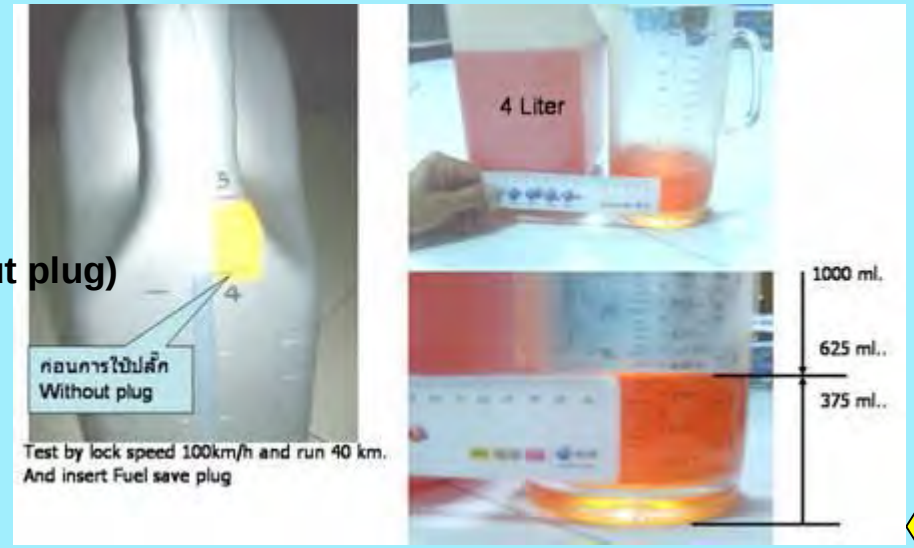
(Compare without and with plug fuel save)

Lock speed 100km/h,distance 40kms

100 km/h

40 km.

(Without plug)



(With plug)

Without FD-47
625 ml.

With FD-47
440 ml.

Save = 185 ml.

Save = 29.6 %