



How do you build a burnout motor to last? John Pilla knows

OT everyone loves burnouts but the huge prize money on offer is evidence that there's never been such overwhelming enthusiasm for the sport as there is now.

While there are many good machine shops and engine builders in Australia, the guys at Powerhouse Engines in Victoria do it all in-house and have their logo on some of the biggest hitters – the likes of Peter Grmusa's EVILXA, Mick Brasher's ULEGAL and Steve Loader's UCSMOKE and UNLOAD.

Not only are the cars tough performers but when you take a look at the big-cube, hard-revving combinations, it's hard not to be impressed with how well they run given the torture tests they are repeatedly subjected to.

Building a 500ci, high-revving big-block that can sing at full noise for three minutes without any load on it is one hell of an accomplishment – it's easier to junk an engine that's revving without load than one that's loaded to the eyeballs.

Powerhouse chief engine builder John Pilla is the small guy behind some big cars and we

caught up with him recently, and asked how Powerhouse got started.

"In 2006, after 12 years of working at various machine shops, I decided to do my own thing. We started small and rapidly grew through word of mouth. I have never had a sign outside the factory and I don't think I ever will.

"The burnout thing started off with Leroy Rees and the BIGV8 Statesman. I became best mates with his son, James, who had been doing the work on his dad's car, and gave them a hand with the freshen-up of the old engine.

"James taught me what he had learnt about blown-alcohol stuff on BIGV8 and also his own car, ITS253 [a Commodore wagon with an aspirated 253] and I just went from there. A short time later, I started doing the engines for Steve Loader on IJCSMOKE and it went from there.

"You can't build this kind of motor for just anybody; I need to choose the customer – one with a good car, who knows how to maintain the engine."

So what are the rules for using an engine like this? "They need to heat the oil and I'd prefer that the engine has a rev limiter. Steve Loader didn't have

a rev limiter in his motor for years and if you have good throttle control you don't need one. Some say it's not good to have this type of engine bouncing off the limiter but Leroy glues his foot to the floor for the whole burnout and hasn't hurt it.

"I like to see them back at the shop after 50 burnouts. In the interim the owner needs to look at the filter, run the tappets and, on a blown motor, tighten the intake manifold bolts regularly."

As for warranty: "If one ever lunched on the dyno before the customer got it, I'd wear it. But once the customer has it, I can't control the way the motor is



## BINGO!

A RECENT private track hire in Sydney saw the Bingo 10.5 car run a 6.48@220mph off the trailer. While the 6.48 was impressive, Sam Fenech was beaming about the eighth-mile numbers – 4.26@176mph. The other standout of the day was Victorian Steve Athans, who managed a personal best 7.1@201.5mph, smashing his previous best of 7.39sec. The 572ci, twin-turbo Mustang recently got a new transmission, and TCE modded the Yankee converter before the car hit the track with 29lb of boost. With a good handle on the engine tune now, it's shouldn't be long before we see this car closer to the 6.80s.



## **FAB & DANDY**

DANDY Engines has recently taken delivery of a new XW Falcon that has previously been extensively overhauled by Profab Engineering in Wollongong. The 429ci, CHI-headed motor is currently being built with twin Pro Mod 88 turbos, while Eric Gillard, owner of Proline Engines in the USA, will be heading Down Under later this year to have a steer in what is potentially the fastest radial car in Australia.



### TRULY MAD!

THE MRMAD Torana of Sydneysider Ivan
Tesic is undergoing a major refit at Street Car
Fabrications. Formerly running a twin-turbo SBC
that pushed the car into the 6.70s, it's getting
a Moran-built 640ci big-block Chev with twin
91mm Precision turbos. "The small-block was
quite fragile," Craig Burns says, "and the manual
trans needed to be cooled down between
rounds. This new deal with the auto, should
make the power with ease, and need minimal
maintenance." The old motor made around
2000hp; these big-blocks are good for 3000hp,
so the car should make 6.40-6.50s at a jog.

160 STREET MACHINE



used so it's difficult to put warranty on that. It's the same for any race-style engine.

"The oiling system – especially on a wet sump motor turning to 9000rpm – will never live without attention. I recommend a quality 20-50 multigrade mineral oil with plenty of bearing clearance, rather than tight clearances like a Japanese engine.

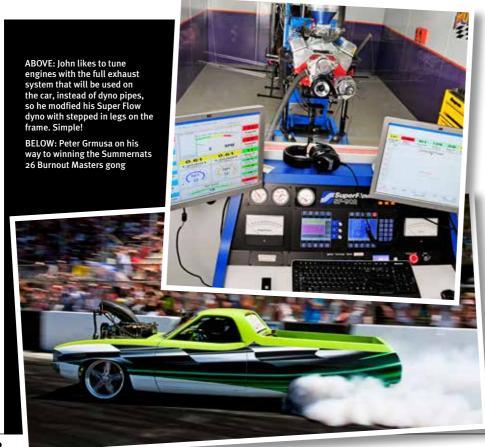
"Engine oil temperature is another big one; no engine will live if the oil is 400 degrees.

"Valvetrain is everything; the engine is under no load so it's critical to match the valve springs, retainers, locks and pushrods to the cam profile and revs. We also modify the barrel valve on the injected cars as you can often have the motor at 8000rpm with the butterflies shut, so the motor isn't getting any air. "Boost also equates to heat. I try to keep the motors at 12-16lb, though they rarely make boost during a burnout as they are never under any load.

"Components don't need to be the best that money can buy but they do need to be quality."

So how come he hasn't been able to talk more guys out of the big-cube motors and into smaller, higher-revving combinations?

"Everyone thinks bigger is better. Mick Brasher is the only guy who listens to me on that. His new motor is 3.750in stroke and 4.5in bore – perfect!" What direction do you see the sport taking? "LS1-style motors are flooding the scene but the direction is 10,000-plus rpm. People all have different budgets but this and wilder driving is where it's heading, without a doubt."



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# **APSA TOP 10 LISTS**

TO GET on the Australian Pro Street Association Top 10 lists fax your time card to Simon Kryger on (02) 9651 4041. See www.austprostassc.com.au.

# PRO STREET BLOWN

I HU UIHLLI	DECAMIA
<b>Domenic Luppino</b>	6.72/217.25
Mathew Bosanovic	6.97/200.00
Peter Pisalidis	7.09/201.25
Kristian Kalaitzakis	7.18/192.25
Karl Wicht	7.26/189.55
Travis Connor	7.33/200.17
Tristan Ockers	7.40/184.02
Paolo Todarello	7.51/186.95
Bill Perkovski	7.60/188.07
Peter Papioannou	7.69/177.56

#### 440ci Ford T Mustang

632ci Chev N Capri 440ci Chev T Camaro 180ci Toyota 2JZ T Supra 555ci Chev B LX Torana 540ci Chev B LC Torana 362ci Ford B Capri 400ci Ford T Cortina 370ci Chev T LX Torana 632ci Chev N LX Torana

# PRO STREET UNBLOWN

ldris Demaj	7.98/173.32
J Soma/F Soleiman	7.99/167.76
Tony Nicolaci	8.01/156.57
Michael Haimandos	8.13/168.30
Paul Beauchamp	8.30/156.75
Chris Stevermer	8.50/158.69
Darren Edwards	8.72/152.92
Darryl Dando	8.91/151.85
George Leiriao	8.92/151.94
Matt Marsh	9.14/146.93

#### 632ci Ford Mazda RX-4

440ci Ford Cortina 602ci Chev LX Torana 440ci Ford Cortina 350ci Chev '87 Pontiac 505ci Chev LJ Torana 540ci Chev HT Monaro 611ci Ford XT Falcon 514ci Ford Capri 400ci Chev LJ Torana

# **MODIFIED STREET BLOWN**

Joe Gauci	7.17/202.27
Stuart Henry	7.38/190.30
Mick Voase	7.54/194.27
Michael Arnold	7.79/183.69
Brett Benz	7.87/179.42
Jake Edwards	7.88/179.97
Paul Cibotto	8.02/166.68
Greg Tsakiridis	8.17/167.99
Joe Geri	8.20/166.56
Guy Hall	8.36/163.41

#### 372ci Ford T Cortina

622ci Chay Canri

615ci Chev N Capri 555ci Chev N LX Torana 378ci Chev B HT ute 400ci Chev T VL Calais 496ci Holden T LH Torana 347ci Ford T Mustang 430ci Ford N RX4 Mazda 240ci Toyota T Capri 427ci Chev B Mercedes 280S

# **MODIFIED STREET UNBLOWN**

Danny Snarban	7.07/179.04	632CI Chev Capri
Mick Brody	7.86/172.39	622ci Chev LX Torana
Peter Pronesti	7.87/174.89	638ci Chev LJ Torana
Tony Cusolito	7.88/178.00	638ci Chev Capri
Kon Michaloudakis	8.29/163.24	582ci Chev Capri
John Habib	8.47/160.73	632ci Chev Torana
Leo Vangelovski	8.49/159.80	485ci Chev LH Torana
Andrew Halstead	8.55/163.55	622ci Chev HQ Monaro
Wayne Lear	8.56/157.30	582ci Chev LX Torana
Mark Drew	8.64/157.03	622ci Chev LX Torana

# TRUE STREET

Janelle Scott	8.96/150.68
Greg Benz	9.26/148.72
Andrew Searle	9.32/144.83
Greg Aitken	9.40/143.52
Bonikos/Cusolito	9.43/146.56
Peter Haravitsidis	9.64/137.76
Dean McMahon	9.71/141.34
Grant Hughes	9.82/137.74
Fausto Felice	9.91/138.37
Carolyn Tzortzas	10.22/130.89

#### 420ci Chev LX Torana

427ci Chev VL Calais 427ci 1967 Ford Fairlane 434ci Chev LX Torana 460ci Chev HX Holden 411ci Ford XY GT Falcon 440ci Ford XF Falcon 455ci 1969 Pontiac Firebird 509ci Chev '69 Camaro 427ci Chev LX Torana

# RADIAL OUTLAW

Daniel Nunziante	7.00/220.66
J Barnett/F Marchese	7.37/199.26
Perry Bullivant	7.44/191.38
Khain Mackey	7.65/182.55
James Horan	7.81/177.30
Nathan Farrugia	7.83/178.97
Jamie Farmer	7.95/181.06
Scott Hoffman	7.97/178.12
Drago Nikodisevic	8.00/173.41
Steve Bezzina	8.08/171.53

#### 600ci Ford T Cortina

420ci Ford T '97 Mustang 400ci Chev T LX Torana 400ci Chev T HR Holden 240ci Toyota T Hilux 427ci Chev T Mazda MX-3 565ci Chev T Mustang 2JZ Toyota T KE20 Corolla 406ci Chev T IROC Camaro 435ci Ford T XW Fairmont