

BSA NC 250

BIRMINGHAM-BARCELONA BEAUTY

By Roy Ryan
Photography by Bill Ferzyth

Honda's bombshell launch of the original CR250M Elsinore overshadowed all but the most major events in the motocross world in 1973. BSA's long-awaited demise was just one more apparently insignificant chapter in history at that time.

There were few mourners for BSA's staid four-stroke singles, the 250cc B25 and 500cc B50, when they were finally laid to rest after lingering as Gold Star SS (road), and Victor trail models. There was also the Victor 500 motocrosser and BSA itself had also dabbled in a 250cc Victor racer that never reached full scale production.

If the arrival of 97kg (214lbs) Elsinore revolutionised the motocross marketplace, stamping it as two-stroke territory, then the new breed of lightweight two-strokes which followed from Japan were the final nails in the coffin of all heavyweight British four-stroke singles. While BSA had achieved limited motocross success with the 500cc Victor motor, that had not been the case with the smaller B25. Handicapped by weight and dismal performance, the 250cc four-stroke only achieved limited success after extensive performance development and the like addition of an aftermarket frame. Proof that the B25 could be salvaged by dollars and imagination lay in specialist bikes like Dick Mann's custom-framed 110kg (242lbs) 250 BSA (VMX#16) but even they were far from genuinely competitive. In the cut and thrust world of dirt racing, the 250 single was also way out of its depth. U.S. BSA team racer, Don Emde, once said, "That BSA 250 was the slowest bike I ever raced", when recalling his own Trackmaster-framed single for author, Lindsay Brooke.



In production trim, whether badge engineered as a Triumph Trophy 250 or BSA, the road-trail British singles nudged 160kg (over 350lbs) with much of the weight attributed to hefty hub, road-derived suspension components and a frame alone that weighed 16kg (35.2lbs) without the swingarm.

Owing to these genetic limitations, Australian vintage racer Shane Corney was convinced that there was still scope to resurrect a BSA B25 as a viable Pre-'75 250cc race bike. The decision to do so was driven as much by Shane's unique circumstances as a rider, who by his own admission was "at the pointy end of the field in B grade competition but not quite up the with the A graders on race days", as it was by the array of components which sat around his workshop. Shane's vintage experience lay in Bultaco restorations as well as building a host of competitive and cleverly modified British machines, including a Triumph Heslop 500, a BSA 441 GP Victor and a B50MX BSA fitted with Bultaco Pursang forks and wheels.



Pursang chassis was stretched to accommodate longer and taller BSA four stroke by relocating swingarm pivot point 20mm to the rear and adding chassis rally tube rear engine mounts

The B50 gave him a taste of what a lighter and better suspended BSA could deliver on the track and inspired him to build a four stroke 250 that would perfectly suit his own riding ability. "As much as I love my B50, I realised that there was no point in modifying it any further. Even with more horsepower I wouldn't be capable of mixing it with the A graders in the 500c class, so a lightweight four stroke 250 really appealed to me. I felt that I'd be able to ride it hard and that I'd get lot more satisfaction out of wringing the neck of a smaller four stroke than riding out of my depth with a tricked up 500".

Shane's B50 provided a few lessons and an obvious starting point, even though it was restricted by the inherently heavy BSA chassis. A custom or aftermarket frame was out of the question, so Shane ran his tape measure over a spare Bulaco Mk7 Pursang rolling chassis which he'd earlier acquired as a source of spares. Shane recalls, "It had already been chopped around to accept laid forward rear shocks and the bike was incomplete, so I had no reservations about using it as a donor frame for my new BSA project. Fortunately when we measured it up and checked out the dimensions of the BSA B25 motor, it looked as though they were almost made for each other".

As well as possessing one of the best chrome moly chassis in vintage motocross, the Mk7 Bulaco Pursang also has some of the best ancillary components available prior to

1975. Shane warned his bike to "look right", so in his mind that meant no Yamaha hubs and forks, or other Japanese donor components. Everything at least had to be European and the

Bully had no apparent shortcomings.

"The Beca forks and alloy triple clamps are about as good they get and the Pursang wheels have beautifully finished lightweight hubs with strapped-on cast iron braking surfaces. The seat and fibreglass components are all top class and are readily available today as replacements, so there was nothing I could see that ruled out the Pursang as my donor rolling chassis. The fact that the original 250cc Mk7 only weighed 97kg (214lbs) also suggested that my target weight of around 100kg (220lbs) was realistic and affordable".

Shane turned to Peter Lawson, owner of Legends Exhausts and a fellow vintage racer with considerable British bike experience. Peter's fabrication expertise was called in to modify the Pursang chassis around a dummy B25 motor while Shane's original \$800 motor was shipped to Stewart Young at Avon Motorcycles in Victoria for an extensive rebuild. Stewart has a well deserved reputation as Australia's foremost BSA single rebuilder and had some cards up his sleeve which he was anxious to play out on Shane's modified B25. He started by replacing the B25's stock conrod with a stronger aftermarket item which has already proven itself in road race B25s which he built. His main development was to then achieve a better overall balance factor and to work on the gas flow for better breathing.

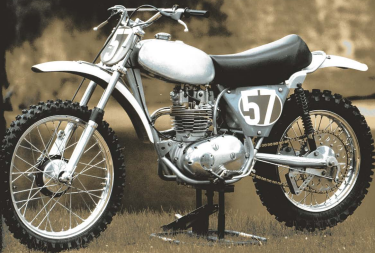


The process included installing a marginally larger than standard inlet valve, modifying the valve guides and replacing the 'soft' cam with a reground profile similar in timing to that of the B50MX, but with slightly different overlap. A forged piston running at around 11:1 compression, along with a lightened clutch assembly and distinctive CCM-style machining of the engine fins completed the package.

"Even though we can achieve more horsepower from the B25, this motor is exactly what Shane had asked for and it was really built with reliability in mind", Stewart said.

He added, "That finning treatment is more than just cosmetic and it trims a lot of weight

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Shane Correy's Boang near the Swan River at Guildford, Western Australia by Bill Forsyth

from the engine, which is precisely why CCM originally used it. The B25 is a very underrated motor and I'd say they're as good as a B44 when they're put together properly. One thing they need is good, clean oil and I know that Shane's extremely meticulous with his bikes, so that shouldn't be a problem with this little motor."

While Stewart worked on the B25 engine, Peter Lawson subtly redesigned the Pursang chassis to accommodate the longer and taller BSA four stroke. That entailed relocating the swingarm pivot point 20mm to the rear of the frame to make room for the longer BSA primary cases, adding chrome moly tubes to accept the rear engine mounts and machining lightweight alloy engine plates to suit. In the



"Each time I race it, this bike gets a little better and faster... sorting shovels takes time"... Shane Correy

process, Peter also converted the Pursang frame back to its original Mk7 "vintage legal" shock mounts, allowing Shane to recycle a pair of stock Buellco Telesco shocks on the new bike.

Right from the start, Shane had a clear vision of how his lightweight hybrid should look; simple, clean and in sympathy with the classic looks of the BSA single and the uncluttered Pursang chassis. Every component was to look as though it had rolled out of a factory in the 1970s, not a new millennium racer's workshop.

He opted for a British B50MX / Triumph TR5T style alloy fuel tank over a conventional Pursing fibreglass form, thereby branding his creation as individual and distinctive. All other

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rolling chassis components are pure Buellco - from the folding serrated footpegs to the replica front and rear guards. Pursing seat and tailgate rear wheel axle can adjusters. One modification from the original Pursing brake component is the use of a marginally larger 140mm diameter Frontiers front brake. The original Pursing air box was also given a new role in life.

Not only does it now house a simple UniFilter pod but it is also home to some of the Boyer electronic ignition components plus a custom aluminium oil tank fabricated by Peter Lawson. Tucked away out of sight and out of mind, the tiny tank overcomes the major shortcoming of adapting a two stroke to a four stroke engine.

What sets Shane's Btang apart from many other hybrids is the seamless flow of the donor parts to create a bike which simply "feels right". Climb on board and close your eyes and the controls fall just where they should be for any guy who is the same height as Shane.

And the weight! Not only is the final dry weight of around 97kg (214lb) almost



Weight concentration is down low. Pursing chassis just clears BSA oil drain plugs for easy service



Slim lines and 97kg dry weight make a four stroke race bike that Shane describes as "chuckable".



Shane Corvey's vintage passion ran to Buellcos and BSAs, so a hybrid project was only ever a matter of time



Buellco wheels and hubs are amongst the lightest and best available for a Pro 75 style project racer



Compact oil tank overcomes the major problem in adopting a two stroke chassis to a four stroke - embarrassingly light for any four stroke, it also emphasises the slim, compact lines of a bike that is best described as "chuckable".

Shane doesn't disagree. What already endears his earlier Pursings and his B50MX to him are exactly the same traits of the Btang



Custom alloy air box is home to oil tank, filter and Boyer ignition

250 - a featherweight, easy riding racer that neither taxes its rider nor demands expert class riding skill. To Shane that's just about perfect and is precisely what he set out to achieve, when he first sat down and pondered... "Now, what if..."

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