

# GILLY'S JAP

1939 JAP DTZ  
1323CC SIDEVALVE  
60-DEGREE  
V-TWIN



In last month's Editorial I mentioned how, after years without setting eyes upon one, I'd come across two custom JAPs in the space of a few weeks. Many people will have seen one of those bikes at the ProCustom Bike Show, the Rock and Blues Custom Show or the Farmyard Party in the shape of Richard Millard's entry for this year's television series, 'The British Biker Build-Off. But, without a bit of serendipity and the Suffolk grapevine, I might never have come across the second JAP at all (and thank you to Andy Cook for telling me about it).

**G**ilbert Sills lives in the wilds of Suffolk, which is a strange and uncharted place. His home village is only fourteen miles from where I grew up, but I'd never been there and I suspect that Mr Cook, my navigator (who had been there before), found it more through luck than judgement. Yet this area of the county has been an enclave of motoring lunacy for over forty years. Back in the mid-Sixties, with his close friend, artist John Western, and two other friends, Gilly was a founding member of the Cretingham Crank Company, named after the village where John then lived. You won't find the Cretingham Crank Company in the Yellow Pages; it has never been a proper business, but a cross between a race team, a custom firm and the Merry

Pranksters. In short, a group of mates with a mutual interest in bikes, cars and the odd pint, and who, when they weren't building bikes, were thrashing them around the countryside (and often through hedges in John's case, as his riding style could, by all accounts, be best described in the phrase 'he had no fear'). The fact that that group of mates contained some very talented people – whether artists, racers or mechanics – served to make the products of the CCC all the more interesting.

Having now retired (somewhat early, it must be said), Gilly now devotes some of his time to an annual exhibition of the work of John Western, who drowned in 1993, and the rest to building motorcycles. He'd always wanted a Brough, so he decided to build one and, as I couldn't be torn away from gazing at the Brough all afternoon at the photo shoot, I'd better allow the man himself to tell you all about it.



"During the 1920s and 1930s, George Brough of Nottingham was responsible for producing some of the finest motorcycles in the world. The Brough Superior has often been called the world's first superbike – and super it certainly was. George chose the very best components of the day – engines from JA Prestwick of Tottenham, gearboxes from Sturmev Archer, Enfield brakes and forks made by Brough and trademarked 'Castle' – and assembled them with a keen stylist's eye to create something with which no other manufacturer could compete.

"I'd always wanted a Brough, but I could never find the sixty or eighty thousand pounds necessary to buy one (in 1924, a new SS100 cost £170 at a time when the price of an average house was £300), so the only option was to build my own. The heart of the beast had to be a large British V-twin. Roger Lye of Lyco Engineering near Diss, Norfolk, had just such an engine, and after eighteen months of pestering and persuading, he eventually sold it to me. The engine in question was a 1323cc sidevalve V-twin. Designated the JAP DTZ, it was originally designed to power a Wickham rail trolley that was used as a gangers' maintenance wagon on the railways. My engine came from a British Army rail trolley which was used to tow targets for artillery units and aircraft to shoot at.

"On stripping the engine, I found that it was virtually brand new. Although built in 1939, it had been run but hardly ever used, and the only things that needed replacing were two 'O' rings behind the oil pump. The crankshaft – with its two nine-inch diameter flywheels – is massive, and the shaft on the drive side is a whopping one-and-three-eighths of an inch in diameter. A very neat set of roller followers on the camshafts minimise wear to the cam lobes. The head and barrel is cast in one unit, so there'll be no head gasket failures on this engine, while two large screw-in plugs on the head enable the valves to be removed. The camshaft for the front cylinder drives the Lucas magneto via a ninety-degree bevel gear, and a lever on the handlebars controls the advance and retard for the ignition.

"To cope with the vast amount of torque produced by this engine, a suitably large gearbox was needed; it's of North American origin and is certainly beefy in construction, though the gear ratios leave something to be desired. First and second gear are very closely spaced, then there's a huge gap up to third and top. This doesn't trouble



the big twin on the up changes, but on changing down from third to second, one has to remember to let the revs come right down, or stand the risk of locking up the rear wheel when the clutch is let out.

"A three-inch wide primary belt transfers the drive from engine to gearbox, and some subtle machining and shimming of the clutch diaphragm was carried out to make it a shade more user-friendly for the left hand. A great deal of time was spent in ensuring that the Primo clutch and the engine pulley would run absolutely true with each other, a rose-jointed turnbuckle helps to keep the belt tension correct under load and the fabricated aluminium cover keeps stones and road dirt off of the belt.

"The frame started life in a 1953 Sunbeam S8. The original plunger rear suspension was disposed of and the rear tubes cut, sleeved and welded to form the rigid rear end. The two front downtubes had to be moved 70mm closer together to clear the magneto mounting platform, and the top tube tweaked to accommodate the rear cylinder, the V-twin being rather taller and more bulky than the original Sunbeam inline 500cc twin. The very



novel Sunbeam seat has a large spring that runs up inside the top tube, with a system of linkages to adjust for different weights of riders.

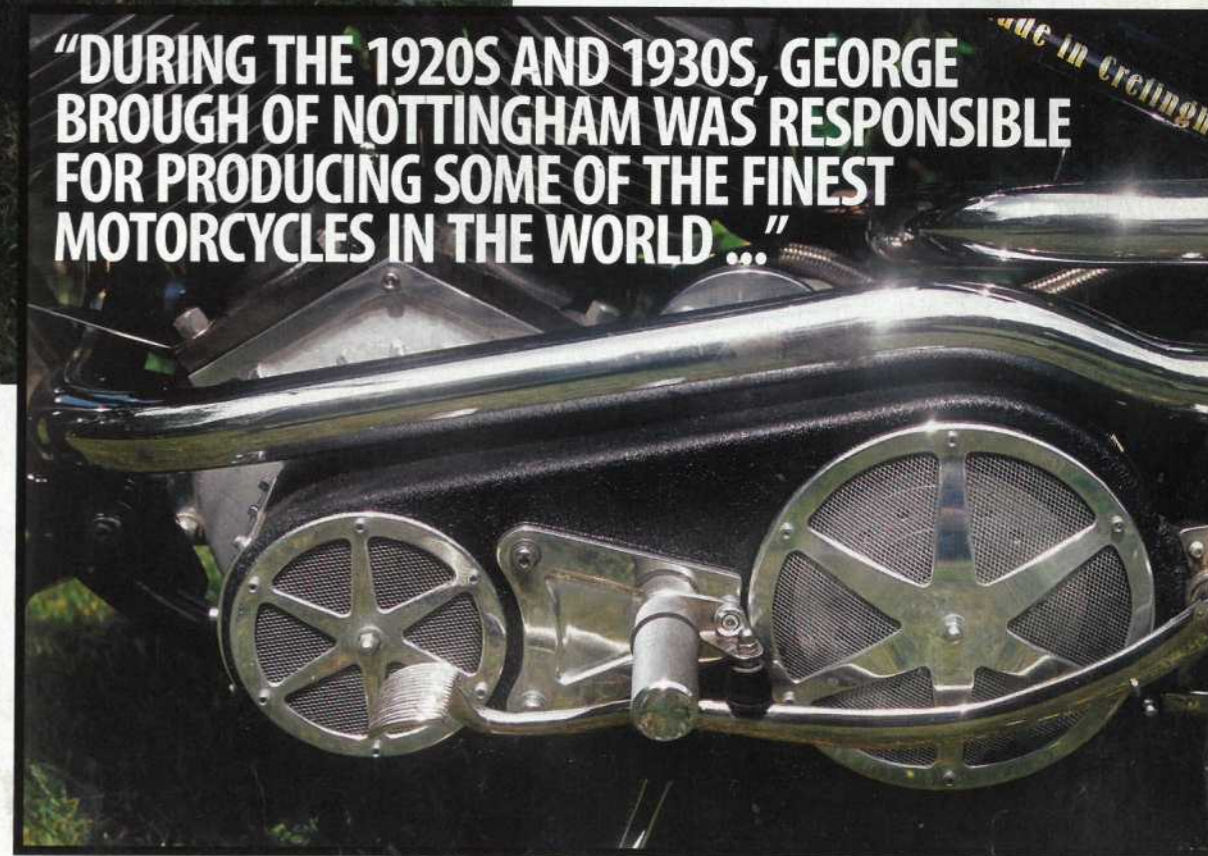
"Making of the yokes and girder forks took an enormous amount of time in order to produce the best geometry and ride quality possible. The fuel tank, with its separate but integral oil tank, is an absolute work of art – a replica of a Brough tank, but with a slightly larger capacity. It was made by Ritchie Bensley at Competition Fabrications of Attleborough, Norfolk. I have enormous respect for the abilities of this young man; there isn't a mark or a ripple on the tank, it's absolutely symmetrical and there's obviously been no use of filler or lead loading – a masterpiece. Nick Parravani, the boss at Competition Fabrications, made the one-off exhaust system, the rear pipe being a particularly fine example of his expertise.

"Several days were spent polishing the tank before it was sent to JD Wyatt in Thetford, Norfolk, for nickel plating. Then Terry Potter at Precision Motorcycle Paintwork – another true craftsman – took on the painting, pinstriping and fitting of the transfers.

"Out here in the depths of Suffolk, we need our bikes to both go round corners and stop. As this is probably the heaviest bike I have ever built, it needed to be fitted with some serious brakes. A nine-inch diameter, double-sided, twin leading shoe Grimeca unit was purchased from AJS Motorcycles in Andover, and it certainly works well in a nicely progressive manner, with no grabbing at low speeds. Having ridden many older model Triumphs, it took me a while to get used to this stopping ability because it's such a novelty. The rear brake is of Oriental origin and has a cush drive built into it to smooth out the thumping gouts of power generated by the big JAP motor. Lengthening the ex-Norton brake lever has resulted in very little pressure from the left foot being required to slow the bike down.

"Modern tyres make such a difference to older classic bikes, and as I'm a firm believer in keeping the rubber side down and shiny side up, a pair of Avon Super Venoms were fitted to stainless

**"DURING THE 1920S AND 1930S, GEORGE BROUGH OF NOTTINGHAM WAS RESPONSIBLE FOR PRODUCING SOME OF THE FINEST MOTORCYCLES IN THE WORLD ..."**



## GILLY'S 1939 JAP DTZ 1323CC

rims, the wheels having been built with stainless spokes by Carl Squirrel at Fram Motorcycles of Framlingham, Suffolk. The shiny black paint was applied by Webbey at JAS Enterprises Inc at Besthorpe, Norfolk.

"The Smiths chromometric rev counter and speedo were rebuilt by Ashley Pope at Speedo Repairs of Frimley Green, Surrey. The rev counter was originally a 0-8000 rpm unit running a 4:1 reduction from the crank, but the dial was re-calibrated to read 0 to 4000 rpm, while running a 2:1 reduction from the crank, as the engine will only rev to 2800! Revs cost money!

"The very rare brass Amal carburettor of 1920s vintage was sent to Chris at Autocycle Engineering to bore out the side aperture and make a new slide, needles and jets. Chris also supplied me with lots of useful information to help me get the engine starting easily and running smoothly. Chris is certainly someone who knows his stuff when it comes to Amal carbs.

"After nine months of work, the big V-twin was finally finished. The only problem I encountered was a small induction leak that was cured by machining

the inlet manifold to accept a pair of rubber 'O' rings. The engine does like its

fuel, it has to be said. If you run it lean, it gets very hot indeed, which is quite surprising when you consider that it only has a 4:1 compression ratio. And successfully kick-starting it requires a certain technique. Being a sixty-degree V-twin, it fires on the rear cylinder, then the crank rotates 420 degrees before it fires on the front cylinder, and then, 300 degrees later, it'll fire on the rear again. So the trick is getting it to fire on the front cylinder first, so that it only has to rotate 300 degrees before firing again. Once you've established which stroke it's on, a good hefty kick is all that's required.

"The gearing is deliberately high due to the lack of top end revs, but the torque it produces is awesome. 2500 rpm in top will see a nice cruising speed of 75mph, and it will cope well with modern-day traffic, loping along without any fuss or effort. Mind you, the exhaust is rather loud and ear plugs are a must on a long trip. It doesn't feel like a big bike once it's rolling, there's no headshaking or other undesirable behaviour when cornering at speed and it's very stable in a straight line. The trail may have to be slightly reduced to help the bike turn into corners a bit quicker, because at the moment, you have to be very precise when attacking a corner in a hurry - miss the apex and you soon start running out of road!

"Having almost run the engine in, it now feels as though it definitely wants to go a bit, which isn't bad for a 67-year-old! The only criticism I have is of the gearbox, with its very slow changing cogs rather than notchy and clunky. The Cretingham Crank Company's policy is one of continuous development, so this bike will continue to progress. I haven't dared to tot up how much it has cost in parts and time, but I bet it's considerably less than you'd have to pay for a Brough Superior SS100!

words: **GILBERT SILLS**  
photos: **BLUE**

## SPEC:

### ENGINE:

1939 JAP DTZ 1323cc sidevalve 60-degree V-twin, 4:1 compression ratio, maximum 2800rpm, bored and re-jetted 1920s brass Amal carburettor, Lucas magneto ignition, one-off exhaust system by Nick Parravani at Competition Fabrications (01953 454573), modified Primo clutch and 3" primary belt drive.

### FRAME:

1953 Sunbeam 58, twin downtubes narrowed by 70mm, plunger rear end converted to rigid, top tube modified to accommodate rear cylinder.

### FRONT END:

One-off home-made girder forks by owner with Hagon spring damper unit, stainless wheel rim and spokes built by Fram Motorcycles (01728 723339), black paint by Webbey at JAS Enterprises Inc, Avon Super Venom tyre, Grimeca 9" double-sided twin leading shoe drum brake, 1" diameter stainless steel handlebars, re-calibrated Smiths chromometric speedo and rev counter.

### REAR END:

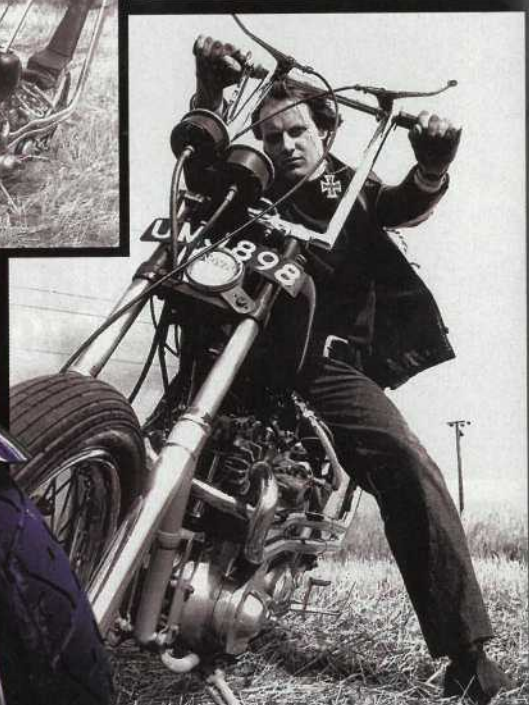
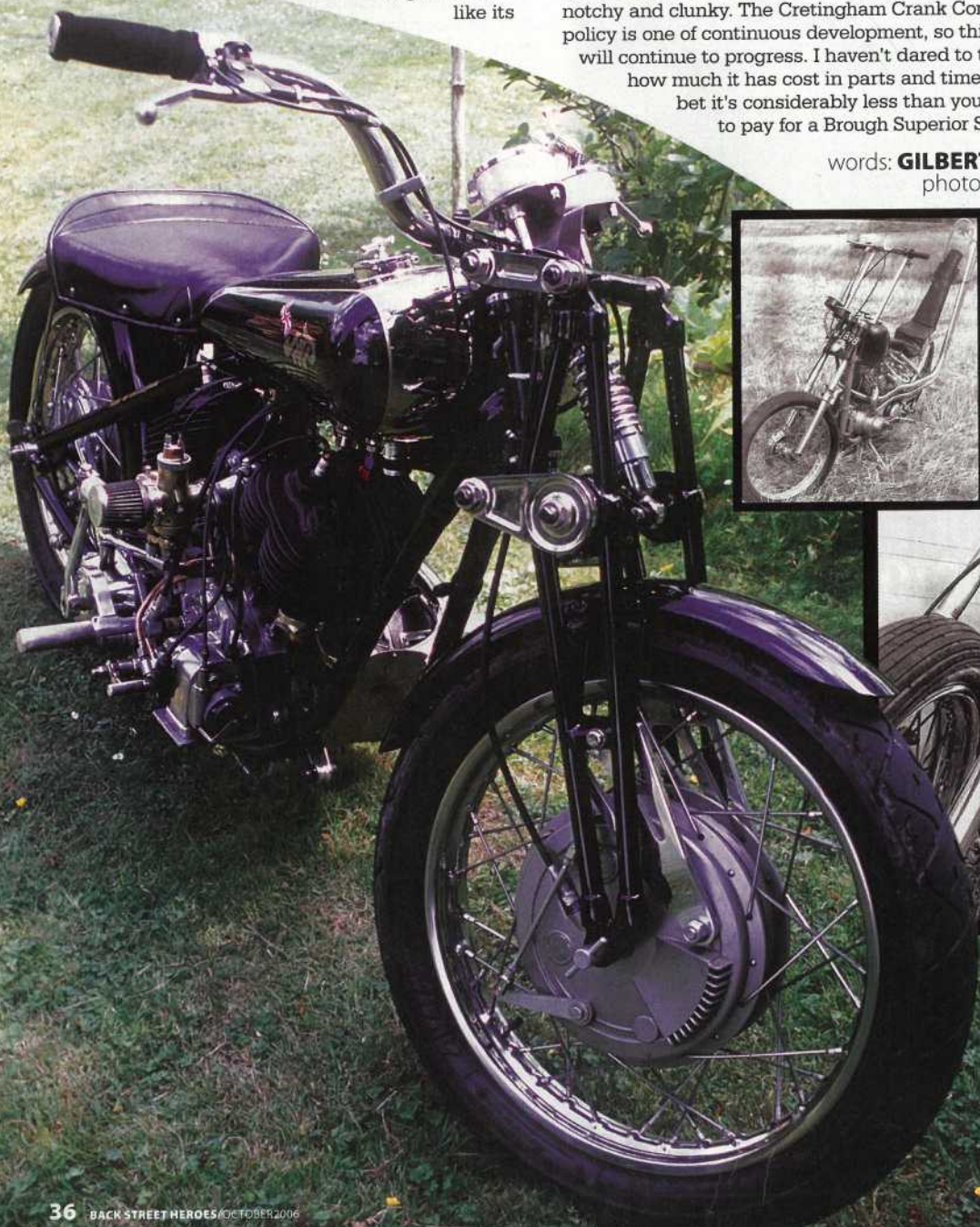
Wheel built with stainless rim and spokes by Fram Motorcycles, black paint by Webbey at JAS Enterprises Inc, anonymous brake of Oriental origin, extended Norton brake lever, aftermarket mudguard.

### STUFF:

One-off Brough-styled fuel tank with integral oil tank by Ritchie Bensley at Competition Fabrications, adjustable Sunbeam 57 sprung solo saddle, all aftermarket American parts obtained from Crazy Horse Customs of Bury St Edmunds (01284 749645).

### PAINT AND FINISH:

Black paintwork, pinstriping and transfers by Terry Potter at Precision Motorcycle Paintwork (01234 391002). Plating by JD Wyatt (01842 766770).



This Triumph chopper was the first product of the Cretingham Crank Company. They might have been good ol' country boys from Suffolk, but they were way ahead of their time. 'Hog Rod' had been featured in hot rod magazines and the local newspaper long before 'Easy Rider' was released in 1969. At weekends, the CCC would change the exhausts, handlebars and seat, and then go drag racing at Santa Pod...