

SUZUKI 500 COBRA

BIG BITING STROKER

The 500/Five will reach just on 110mph in top gear and will go a shade over the ton in fourth!

Bruce Cox, MCN tester

LOOKING like an enlarged version of the very successful 250cc Super Six, Suzuki's 500cc Cobra two-stroke twin bared its teeth in 1967.

It was a fascinating object. Everyone thought of two-strokes as lightweight runabouts, except devotees of the watercooled 500 and 600cc Scott two-stroke twins.

The Cobra was looked upon as being indecently large for a two-stroke by a buying public conditioned to thinking of 250cc as the arbitrary limit for strokers.

The Cobra mesmerised many, but converted few. It was expensive — £424 compared to £355 for a 650cc Triumph Bonneville — but it sold well in America. This ensured its continued survival, and gradually sales began to pick up in Britain.

Unleashing this rip-snorting ring-dinger was a bold move by Suzuki. Though not an instant hit the Cobra broke new ground and helped Kawasaki to make up their minds that there was room in the world for a new breed of mass produced big, high performance two-stroke.

It's interesting to note that like the Cobra the Kawasaki Mach III debut model was the most powerful of the strain, successive models being effectively detuned.

"Leaves 650s gasping," said Suzuki adverts claiming 46hp at 7000rpm for the biggest machine on their books.

Like the Super Six the Cobra

had a twin leading shoe front brake, Suzuki Posi-force lubrication end 12 volt lights. Where the Super Six had a six speed gearbox, the much torquier 500 only required the services of five speeds. Fed by two 34mm carburetors the motor was claimed to be good for between 110-120mph top speed and 13.2 secs for the standing quarter-mile.

Available in "glittering gold, ruby red or sapphire blue" the Cobra featured its carbs placed close to the alloy barrels for good top speed performance. Subsequent models have smaller carbs set further back to improve mid-range power at the expense of top end.

British enthusiasts began to think more deeply about the advantages and disadvantages of owning a two-stroke 500 Suzuki when it began to score victory after victory in road racing.

At the TT, 500 Suzukis won the production 500 event in 1970, and 1972. Rising star Barry Sheene rode one for this first and only TT attempt, retiring after a crash.



SPECIFICATION IN 1968

ENGINE

Type	2-cycle, air cooled petrol engine
Cylinders	Sleeved aluminium twin forward inclined
Piston displacement	492cc 30.01 cu in
Bore and stroke	70 x 61mm (2.75 x 2.52in)
Compression ratio	6.6:1
Maximum power	46hp 7,000rpm
Starter	Kick

FUEL SYSTEM

Carburettors	Two VM 34 SC
Air cleaner	Resin processed paper filter
Fuel tank capacity	14 litres (3.1 gallons including reserve) 2 litres (3.6 pints including reserve)

LUBRICATION SYSTEM

Engine	Suzuki Posi-force
Gearbox	Oil bath 1.2 litres
Oil tank capacity	2.5 litres

IGNITION SYSTEM

Ignition	Battery
Ignition timing	3.4mm before top dead centre
Spark plugs	NGK B-77HC

TRANSMISSION SYSTEM

Clutch	Wet multi-disc
Gearbox	5-speed, constant mesh
Gear shifting	Left foot, lever operated return change

SUSPENSION SYSTEM

Front	Hydraulically damped telescopic fork
Rear	Hydraulically damped swinging arm

BRAKES

Front	R.H. internal expanding, twin leading shoe
Rear	R. foot, internal expanding

Below: The name Crooks became synonymous with race converted Suzuki roadsters. Here Dennis Brew gets his whispering T500. Crooks Suzuki on the gas at the 1972 TT. Winner was Stan Woods, also on a T500.

PERFORMANCE

Actual top speed recorded:	110mph
Speeds in gears (at 7,000rpm):	5th (theoretical) 117mph; 4th 102mph; 3rd 84mph; 2nd 63mph; 1st 37mph.
Acceleration	0-60mph 5 secs; 0-70mph 7.2 secs; 0-80mph 9.1 secs; 0-100mph 18.1 secs.
Standing quarter-mile:	13.8 secs
Terminal speed at quarter-mile:	95mph

But on the short circuits using a 500 Suzuki powered road racer the Cockney flier raked in the silverware. For instance he set the 500cc lap record at 99.42mph at Oulton Park in 1973, and in the same year won the 40-lap 351-1000cc Mellano Trophy race at Brands Hatch.

Other successes for the 500 Suzuki that year included Roger Sutcliffe's victory in the Southern 100 750cc race on the Isle of Man riding a version prepared by dealer Eddie Crooks.

Charlie Sanby on a Hi-Tac watercooled version was third in the '73 Senior TT, and this machine was later speed tested by *Motor Cycle News* at 134.3mph.

Ironically while the race successes were rolling in, the 500 Suzuki took on more of a budget workhorse role rather than that of a performance mount.

Its price hardly went up, it earned a reputation for

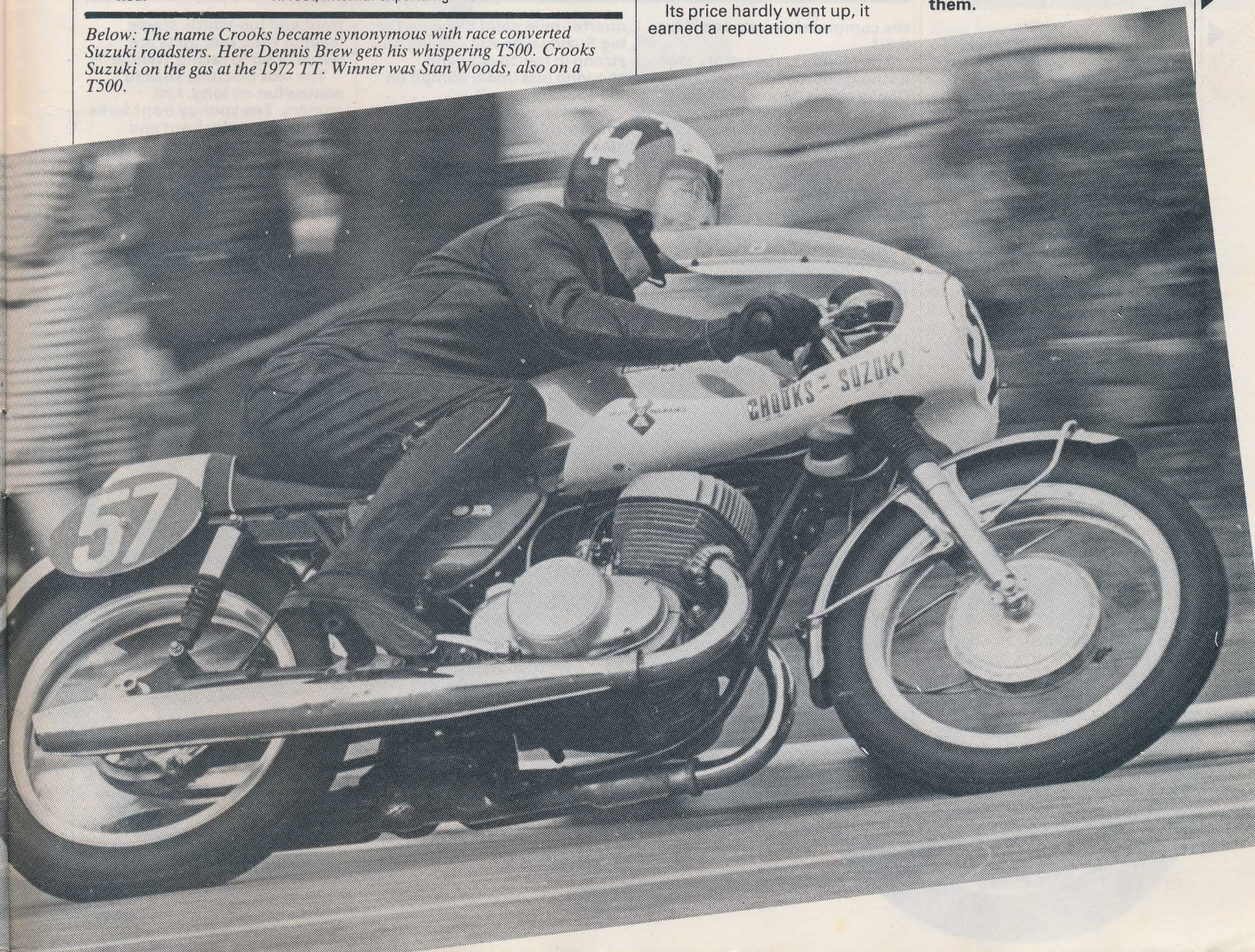
reliability and fair fuel consumption, and in consequence it endured as a model for over ten years. That's a lengthy reign by modern standards.

An interesting feature of the Cobra was a gear shaft permitting right or left foot change. This was retained on later models.

Indicators were an optional extra at £18. Standard equipment included a handpump, one rear view mirror, vacuum fuel tap, "altitude compensating carbs" steering damper, and three-way adjustable rear shocks.

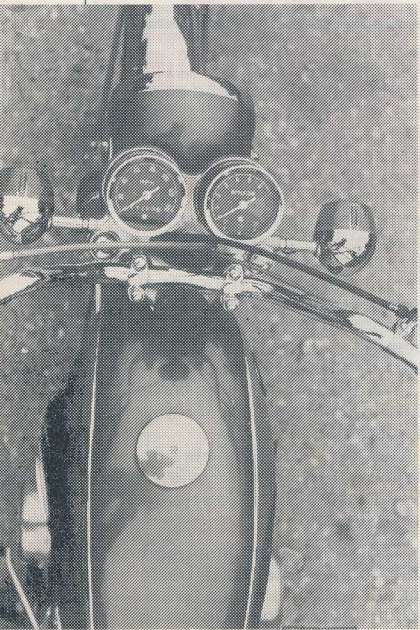
Writing about the Cobra in January 1968 *Motor Cycle News* tester Bruce Cox reported the following —

The all-alloy, engine/gearbox unit follows the same basic layout as the smaller twins — albeit huge in proportion to them.



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The crankcase splits horizontally and the crankshaft, with full-circle flywheels, is carried on three large roller bearings. The large centre main bearing on the 500/Five is lubricated from a reservoir in the transmission compartment.

Needle-roller bearings are used at both ends of the sturdy connecting rods and the pistons have full-circumference skirts. Port timing is achieved by "windows" in the piston skirts, rather than by the more conventional cutaways.

Though it revs to 7,000rpm and pushes out no less than 46bhp, there is still plenty of scope for tuning the 500. Port timing is relatively "soft" and

AN OWNER'S THOUGHTS

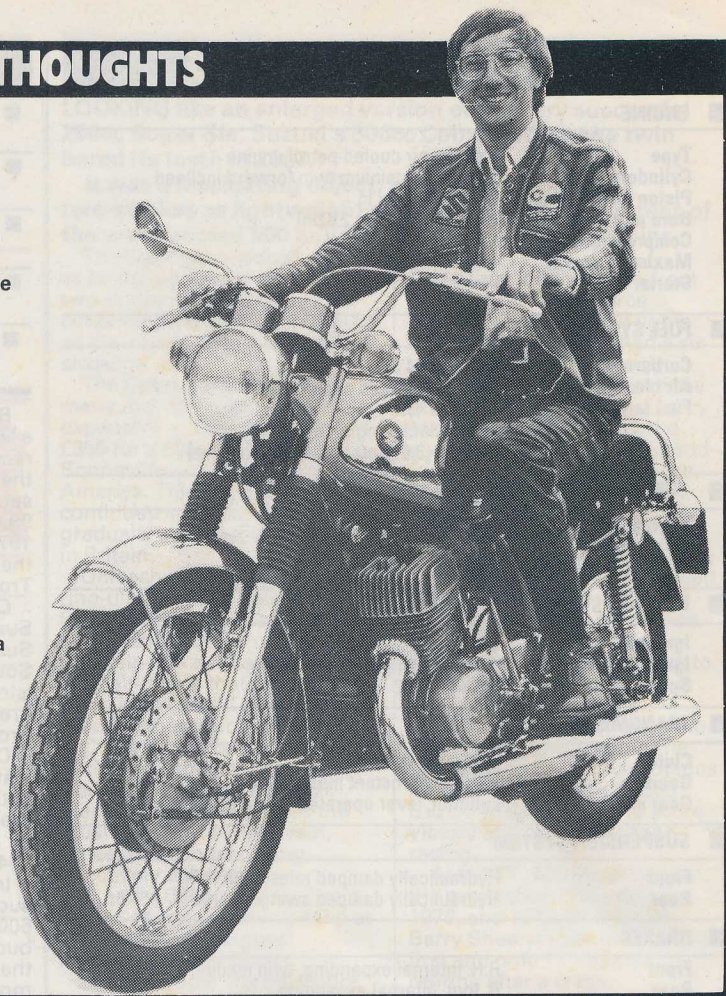
BANK computer operator Don Leeson with his 1968 Cobra. Not yet A1 original the bike, also shown in the colour photograph, has some parts from later T500s fitted. The black and white side view (below) should be followed by any owner or potential buyer intent on restoring to original.

Don, from Bollington, Cheshire, owns "two dozen" Suzukis. He started on Suzuki as a youth and has remained loyal to the marque. His ride-to-work machine is a Super Six with no less than 160,000 miles on the clock.

The Cobra was obtained earlier this year ('83). "I always wanted a Cobra. I used to drool over them as a lad," he said.

"Only 40 of this model were imported. The next model was the 1969 T500 Mk II with painted tank. I only ever remember seeing three on the road. Many of them were converted for racing."

Don is the Suzuki expert of the Vintage Japanese Motorcycle Club. His Cobra was voted best Suzuki at the club's first ('83) rally.



the compression ratio is a mere 6.6:1.

The Mikuni carburetors are nothing short of monstrous! Choke size is 34mm but despite this the motor shows no sign of choking up... even at traffic-trickling speeds. Aware of the fact that vibration at high rpm could induce fuel-frothing, the Suzuki engineers decided to mount the carbs on rubber intake manifolds.

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Standing-quarter test runs produced consistent elapsed times in the high 13 or low 14 second brackets. When the

quarter-mile point came up the big Suzuki was still coming on strong in fourth gear and showing just under 95mph on the speedo!

Suzuki haven't just concentrated on power and all-out performance. The engine is tractable and the beautiful alloy brakes are just great. The twin leading shoe

front and full-width, single leading shoe rear units are virtually up to racing standards.

The test machine snaked somewhat on long, fast corners. Too spongy front forks were making the front end pitch and weave about causing the entire bike to snake. But this was virtually cured by putting heavier damping oil in the front forks. □

