

Ton-up temptation

Suzuki's X7 was the first out-of-the-crate 250 to be radar timed at 100mph. 30 years on it's fast becoming THE air-cooled 250 classic

Dossier by **Brian Crichton** Pictures **Mark Manning**

SPECIFICATION

'78 SUZUKI GT250 X7

ENGINE/TRANSMISSION

Type	air-cooled parallel two-stroke twin
Capacity	247cc
Bore x stroke	54 x 54mm
Compression ratio	6.7:1
Carburation	2 x 26mm Mikuni
Primary/final drive	gear/chain
Clutch/gearbox	wet multiplate/six-speed
Electrics	12v, PEI electronic ignition

CHASSIS

Frame	tubular steel single downtube frame
Front suspension	telescopic forks
Rear suspension	swingarm, twin shocks
Brakes front/rear	1 x 10in disc with single pot caliper, 1 x 7in drum
Wheels	five spoke cast alloy
Tyres front/rear	3.00 x 18, 3.50 x 18

DIMENSIONS

Dry weight	282lbs/128kg
Wheelbase	51.6in/1310mm
Seat height	30in/762mm
Fuel capacity	3.3 gals/14.8 litres

PERFORMANCE

Top speed	101mph *
Max power	28.5bhp@8300rpm*
Fuel consumption	35mpg *
Price new	£763

* MCM, Aug 1978

Suzuki's GT250 X7 was the first 250 to be radar timed at a genuine 100mph. Back in 1978, the X7's ton-up credentials made it the most desirable quarter-litre sports bike on the market.

And if the bike's performance was not enough to guarantee its popularity Suzuki put it all together in a snazzily styled package which, in its day, looked ultra sporty. Kawasaki's KH250 and Yamaha's RD250 looked dated next to the dazzling X7. In the late Seventies being the fastest and best looking quarter-litre machine mattered because impressionable 17-year-old UK learners were allowed to ride bikes of up to 250cc. No wonder X7s were strong sellers.

The new model was the first Suzuki road bike to feature a dual intake system (piston port and reed valve), and electronic ignition. And it was the first UK-bound Suzuki to use cast alloy wheels.

Riding an X7 back then was a thrill, especially for those on L-plates. Now, 30 years on, this compact twin has lost none of its appeal. The bike's combination of light weight (282lb dry), compact dimensions and crisp two-stroke performance is perfect for tickling one's adrenal glands into action.

Acceleration is strong, especially in the lower gears, and its midrange performance is much healthier than that of the X7's predecessor, the GT250C, which was very peaky. Even so the X7 needs at least 5500rpm before it wants to get a move on, as I rediscover

aboard Ian Finch's restored '78 machine. It will rev beyond its 8500rpm redline in the lower gears, but the sixth ratio is almost an overdrive – you need favourable conditions to redline it in top.

When riding an X7 you have to bear in mind that the speedometer reads fast. To be doing a genuine 100mph you need to see 110mph on the dial. And they won't all do it now and didn't all do it back then, despite the hype. No two X7s ever seemed to perform exactly the same. Or feel the same.

The seat height on Ian's bike feels higher than I remember, the steering lock seems more restrictive, and when on the go this X7 feels undergeared. The seat height is explained by the rear shock absorbers, which are longer pattern replacements for an unknown model. The tighter lock is due to the fact that Ian has fitted lock-stop extensions to prevent the headlight struts touching the fuel tank on full lock. And the gearing? Ian says that it's standard, so I put the difference in feel down to my failing memory. Or could it be that this rebored engine is a very good example? I'd like to think so.

X7s can feel quite flighty when ridden to the limit, but riding this example at sensible speeds I was surprised at how nicely it steered, holding a steady line through corners accompanied by an urgent, crisp two-stroke exhaust note through its stylish silencers.

X7s are tyre sensitive. Ian's bike, which looks marvellous in white, is fitted with mismatched rubber and an incorrectly sized rear (Continental City 3.00 front, Avon AM21 110/80 18 rear), and it doesn't like them. It can get into a real dance from an indicated 75mph. So much so that I didn't try to ride through the wobble. I've ridden tuned X7s at almost 120mph and know that, though nervous in a straight line at speed, they will hold a line when fitted with suitable rubber. Ian has tried riding through the wobble but couldn't and has deduced that skinnier tyres are the answer. On the plus side the modern rubber makes this X7 feel very secure and progressive through corners at sub-weave speeds.

It also has excellent brakes. Better than original. Ian has sensibly fitted braided hose to the front disc, EBC green pads, and has had a piston made from stainless steel to replace the corroded original. It is far more effective than it was when new. He has also modified the rear drum brake cam to give improved actuation. It too is more effective than original.

Fun to ride and capable of dealing with modern traffic, so long as you have the right jetting(!), the X7 is Suzuki's last hurrah in terms of air-cooled quarter-litre strokers and it closed that chapter of Suzuki's history on a real high. No wonder this flighty little twin is enjoying a renaissance nearly 30 years on.

Wheelbase is less than 52in, so rubber choice is important for straight line stability



1978-1982 • 247cc • Air-cooled • Parallel-twin • £100-£2250
RIDING >> DEVELOPMENT >> NOSTALGIA >> BUYING >> OWNING

“Bear in mind that the speedo reads fast. To do a genuine 100mph you need to see 110mph on the dial”

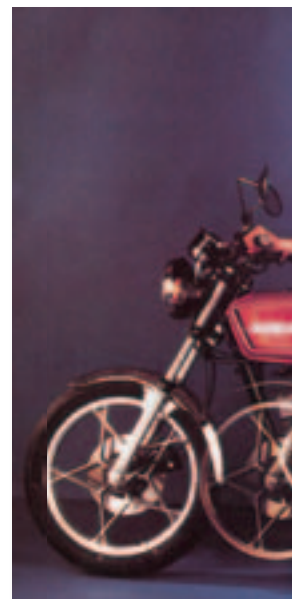
the
20s
issue



You can just see the blue haze that accompanies the X7 when given full bore. This shining white example was restored by owner Ian Finch



▲ **1978** Suzuki unveiled the X7 to UK dealers at a glitzy reception at the Carlton Towers Hotel, London. Barry Sheene was Suzuki's star turn, lending a cheeky smile and a dash of charm. Note the pre-production bike's GT250 side panel stickers. Production bikes had X7 badges



I OWNED ONE...

Sue Maddex, 50

"I bought my X7 new in 1979, when I was 22, and have had it ever since. I still have the HP agreement! The bikes of the Seventies seemed really exciting. The X7 was my first 'big' bike. I hadn't passed my test when I bought it. Initially I was scared of the performance. The acceleration was fantastic. I couldn't believe it. I still think it's an amazing machine. I'm now working to get it back on the road. In fact I can't wait to ride it again."



Even after 27 years Sue can't wait to ride her X7



▲ **1982** York raceway. Dave Walker works on Badger's (right) modified X7 (The Micron) which recorded 13.25s/101mph over the SS quarter using 271cc barrels. Using this bike and another modified 250cc X7 (Sidewinder 1) Brian took five ACU/Elvington 'Pro-street' records (four 250, one 350). The fastest one-way speed he recorded was 118.7mph. Brian still owns 'The Micron'. Anyone know what happened to Sidewinder 1 (CNV495T)?



Ton-up' Suzuki GT250X7 has never looked so good



▲ **1978** Would it really crack the genuine ton? Suzuki wouldn't be drawn, preferring to state top speed was 'around 100mph'



◀ **1980** MCM's 118.7mph X7 on display. It featured as part of a shoot-out tuning series against a 1977 RD250 that did 112.64mph

► **1978** Barbara makes light work of modelling the essential X7 accessory, a Team Heron Suzuki jacket



▲ **1980** If your X7's got the shakes it is probably on over-sized tyres or, as in this case, on Suzuki's 1980 range brochure

▼ **1978** MCN's Paul Fowler buries his head in the X7's clocks and makes himself as small as possible in an attempt to crack the magical ton. His reward was 99.34mph



PERIOD ROAD TESTS

“The X7 weighs an astonishing 282lb dry – 40lb lighter than the bike it replaces”

MCN, Aug 1978



“Not since the passing of the long-lamented Super Six have Suzuki built a 250 which has stood head and shoulders above its competitors... Now Suzuki are back in the hunt with their X7

model, a sporting 250 if ever there was one, with its claimed top speed of 100mph and styling to match... The Suzuki looks considerably smaller than other 250s but this can't all be put down to clever styling for there is a lot less of it. In fact the X7 weighs in at an astonishing 282lb dry – exactly 40lb lighter than the bike it replaces... It is able to match machines in the 400cc class.”

Colin Mayo

“At 99.34mph the GT250 is the fastest 250 MCN has tested”

MCN, April 1978



“On our test track the fantastic red devil of a bike went through the speed trap just one thousandth of a second outside a 100mph time. With another 100 yards of track the first ton would have been

easily possible. But even at 99.34mph the GT250 is the fastest 250 MCN has tested and on acceleration it was nearly half a second quicker over a standing quarter than its granddaddy, the GT250A. It went through the traps in 14.76 seconds – over a second faster than its nearest rival, Yamaha's RD250.”

Paul Fowler

PRICES

SUZUKI GT250 X7

CONCOURS	£1800-£2250
GOOD	£650-£1500
RATTY	£250-£450
BASKET CASE	£100-£250

ENGINE/FRAME

Note that X7 engine and frame numbers do not match. Years given are approximate. The frame number is on the headstock offside. The engine number is on the nearside crankcase top behind the cylinder.

Numbers run from...

1978 GT250N	
frame	GT2502-10001
1979 GT250EN	
frame	GT2502-500001
1980 GT250X	
frame	GT2502-115097
1981 GT250EX	
frame	GT2502-519409



IS IT DODGY?

Walk away when...

- You intend to restore to original but are faced with a box of bits that doesn't include original exhausts, airbox, tank, seat and front mudguard. It could become an expensive proposition.
- The runner you are contemplating doesn't have a log book, won't pull the skin off a rice pudding or rattles and rumbles – that's a total engine rebuild on the cards. Your effort would be better spent finding a better example.



● DISC BRAKE

Efficiency of the front sliding-type caliper is compromised by rusty and worn pins, or a rusted piston. Replacing the OE hose with a braided hose improves braking power.

● FORKS

Check that the drain screw threads in the bottom of the sliders have not been stripped. The chromed stanchions corrode easily and pit if not cared for, tearing seals as a result.

● ENGINE

The engine should start readily and rev willingly. Get a test ride. X7 engines usually need a rebuild at least every 20,000 miles if used hard. Budget around £250 for a rebuild.



THE X5

Suzuki's 200 twin

Although similarly styled to the X7, the CT200 X5 (1979-'81) is a completely different machine. Powered by a 196cc two-stroke twin the X5 has both electric and kick start. Good examples usually go for between £350 to £850. Suzuki also made a budget 200 alongside the X5, the almost forgotten SB200.



● TANK

Rusts internally and externally, and can split at the seams. Use Petseal to stop leaks. Fuel taps can seize if unused. Check that the filler cap lock hasn't been damaged.

● PAINT FINISH

Steel and chrome parts are susceptible to rust. Inspect the frame carefully to make sure it and the swinging arm are not weakened by corrosion.

● SWINGING ARM

The swing arm pivots on needle-roller bearings which can rust and seize. Check for sideways play. Be prepared to fit replacement bearings. At £12 a pair they're not too expensive.

I SPECIALISE IN THEM



Pat Daly

*X7 Racing, Northfleet, Kent.
 01474 745232*

● **If the engine won't run fit new plugs: NGK B8ES for normal riding, B9ES for hard riding, B10EV for racing. If it still won't start check for blocked exhausts.**

● For best on-road handling fit matched tyres 3.00 x 18 front, 3.50 x 18 rear, no bigger. Over-sized tyres affect stability.

● **Jetting is crucial to prevent holed pistons. Standard main is 87.5. Without an airbox it's 105. With airbox but minus internal sponge try 97.5 jets.**

● Use genuine Suzuki pistons – they have a high silicon content. This gives greater durability. Most pattern pistons look shiny because they're nearly all aluminium. High silicon content makes them grey.

● **The ignition switch can wear and allow the key to come loose. M&P supply a pattern type. Suzuki GP100 ignition switches fit too.**

● Check the brake light switch regularly. It operates via the rear pedal only and the return spring can easily break.

● **I use semi-synthetic oil. It's cheaper than fully-synth, keeps the silencers clean and cuts down on smoke haze.**

● Many X7s have been tuned. Some more than a little. If the clutch can't hold the power, fit stronger springs or an extra steel plate. The extra plate gives a more powerful clutch without making the lever too heavy.

● **If the original seat cover hasn't torn you have the only one! Attend to it quickly or water will get in, rusting the seat base all the faster.**

● When stripping an engine you only usually need to replace the outer seals. Replacing the inners requires the crank to be pressed apart.

● **Be wary of pattern gaskets. Some packs have extra thick head gaskets which reduce compression.**

● Gear lever oil seals can go hard over time and cause gearbox oil leaks.

Owners' tips

REPKO LAP

Holland

Owens: 1979 GT250EN.

Top tip: "Use Castrol Super TT oil and fit a quality seat cover. The original tears. My model is Dutch spec with a different headlight and different carb settings, so when ordering parts make sure the appropriate microfiche is being used."

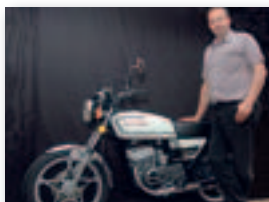


IAN FINCH

Lincolnshire

Owens: 1978 GT250N.

Top tip: "Use eBay to scour the world for parts. If you want your X7 to continue to look good use stainless steel fasteners and spacers. I spent more than £300 on them when I was restoring mine."

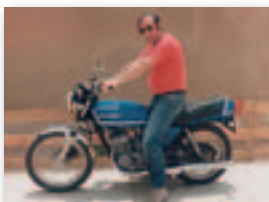


NEIL HORGAN

Lancashire

Owens: 1979 GT250EN.

Top tip: "Get a manual (the Haynes manual is good, the factory manual is even better) and service it yourself. X7s are simple to work on. For engine rebuilds I use Grampian Motors for parts. I use a Metzeler ME33 front tyre and an Avon AM21 rear."



STUART ATTRILL

Northamptonshire

Owens: 1981 GT250EX.

Top tip: "If the engine starts well from cold and revs up cleanly that is a good sign. Be wary of examples that have no air box, and don't be taken in by appearances. My X7 looked good but it quickly ended up in bits for a total engine rebuild and welding to the crankcase."



BRIAN CRICHTON

Northamptonshire

Owens: 1978 GT250N.

Top tip: "Don't be afraid to run different main jets in each cylinder, eg a 90 in one and 87.5 in the other. One cylinder can run a touch hotter than the other. But deviating more than one or two sizes means there's something wrong."



FAST FACTS

SERVICE DATA Suzuki GT250 X7

Recommended plug type	NGK B8ES/B9ES/B10E
Plug gap	0.6-0.8mm
Ignition timing	20deg BTDC @ 6000rpm
Gearbox oil volume/type	800cc/SAE 20W40
Fork oil volume/type	154cc/10W20
Cylinder head bolt torque	14.5-22lb-ft
Clutch sleeve hub nut torque	29-43.5lb-ft
Oversize stages	0.5, 1, 1.5, 2mm
Head bearing type	ball and race
Tyre pressures front/rear	21psi/25psi
Headlamp bulb	12v 35/35w
Projected crankshaft life	20,000 miles
Projected piston life	15,000 miles
Projected piston ring life	10,000 miles
Min clutch plate thickness	2.6mm
Recommended chain play	15-20mm
Min brake pad thickness	marked by red line on pad
Carburettor float height	25mm
Standard main jet	87.5
Standard needle position	3
Air filter life	3000m/2 years

SPARE PARTS

SUZUKI GT SUPPLIES www.suzuki-gt.co.uk

Front wheel bearings (pair)	£8.58
Rear wheel bearings (pair)	£7.78
Seat/seat cover	£131.50/£17.28
Clutch cable (OE)	£15.25
Gearshaft seal (OE)	£1.48
Exhaust downpipe (OE)	£44
Fork dust seal	£3.60
Swinging arm bearing (OE pair)	£11.50

GRAMPIAN MOTORS

Crank rebuild, inc rods	0151 931 5009
Piston kit (OE/pattern)	up to £124.99
Piston rings (OE/pattern)	£27.20/£15.22
Gasket top end/full (pattern)	£9.00/£4.41
Clutch plates friction x 6 (OE)	£7.35/£10.50
Crank seals (outer pair)	£18.90
	£8.75

FURTHER INFO

CONTACTS

● **Suzuki GB** 01293 766000

UK Suzuki importers

● **Crooks Suzuki** 01229 822342/822120

Suzuki spares specialists

● **Spares Direct** 0208 969 0741

London based Suzuki spares stockists

● **Straightline Racing** 01553 811855

Tuning, spares and parts specialists

● **Slinger Motorcycles** 01772 727213

Official Suzuki dealer and parts stockists

CLUBS

● **Suzuki X7 Owners' Club**

Sue Maddex 0115 953 2469.

Email: sue.maddex@ntlworld.com

● **Suzuki Owners' Club**

Dave Gray 01480 387880. Email:

membership@suzuki-club.co.uk

● **Vintage Japanese Motorcycle Club**

Anne Beer 01324 410519.

Email: membership_vjmc@yahoo.co.uk

USEFUL BOOKS

● **Suzuki GT250X7, GT200 X5 & SB200**

Workshop manual. By Haynes Publishing

ISBN: 0 85696 469 7

● **Suzuki GT250X7 Service Manual**

Factory manual. Part number: 99500-1210-

01E. Price £30.50

WEBSITES

● **www.suzukisimon.co.uk**

● **www.suzuki-x7.org.uk**

● **www.suzuki-gt.co.uk**

● **www.suzukiownersclub.co.uk**

MISSED A DOSSIER?

PREVIOUSLY FEATURED:

● Hesketh V1000 ● Morini 3½ Sport
● Yamaha XT500 ● Triumph pre-unit 650
twins ● Kawasaki GPZ900R ● Indian
Enfield Bullet ● Silk 700S ● Moto Guzzi
V7 ● Yamaha RD400 ● Suzuki Katana
● Ducati 750GT/Sport ● BSA Bantams
● Honda CB400/Four ● BSA Road Rocket
● Laverda Jota ● Triumph Daytona
● Kawasaki Z1 ● BSA Singles ● Ducati
Singles ● AMC Twins ● BSA A65
● Triumph T140 ● Yamaha RD350LC
● Suzuki GT750 ● Norton Dominator
● Honda CB750 ● Triumph Trident
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● Norton Commando

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(year), mileage, how long owned and
your top tip relating to your bike.
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