

Honda 400 Four

Once you passed your motorcycle test in the mid-1970s you probably bought one of these. If not, this is what all the fuss was about.

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"This was genesis, the point where the Japanese proved they could build a Europeanstandard sportbike."





Otherwise you might look on the CB400F as a cramped little buzz-bomb, which is what most Americans thought. For while the British lapped up imaginary race tracks on the compact Four, US buyers ignored the little Honda, even when it was updated with incongruously high bars and more forward-set footrests.

Testing the Japanese 400s, one American magazine described the Yamaha RD400 as 'perfection,' while the CB400F found itself squeezed between the faster two-stroke and the lazier Kawasaki Z400 twin. Unsurprisingly, the Honda was also the most expensive 400 on offer. So after just three years in production, the lithe Super Sport (as Honda proclaimed on the fuel tank) was cuckolded by a chubby twin, dubbed the Hawk in its target US market, but almost spitefully sold as the Dream in the UK. Road testers claimed the Dream was objectively an improvement on its predecessor, but where's the fun in choosing a motorcycle objectively?

Critics of the 400F pointed out it was actually rather heavy, and not as quick as the Yamaha two-stroke. Those critics might have been happy to Hawkishly (sorry) point out the Dream's virtues, but then they didn't share the dreams of 400F fans: Phil Read on the MV Agusta at Clermont-Ferrand, Godier and Genoud's Kawasaki racing through the night at the Bol d'Or, or black and white photos of Hailwood aboard the RC181 works Honda. In short, 400F groupies dreamt of racing four-cylinder motorcycles, and the cosy comforts of a bigger Four just didn't hit the spot.

Most Honda CB500 Fours had racks or even top-boxes, a carry over from the bike-as-transport postwar baby boomers. The Honda 400F generation started their biking life as part of the infamous sports moped phenomenon, which from 1972 until July 1977 limited 16-year-olds to 50cc mopeds that could be as fast as manufacturers dared make them. At first this wasn't very fast, but soon the Italian marques upped their game, rapidly followed by an aftermarket industry. Shunned as a comedy sideshow by most 'real' motorcyclists, the sixteeners took to just riding around in groups and finding ways to make their 'peds go and look faster. So when they finally graduated to 'big biking' at 17 they already had their own community that was quite separate from the traditional motorcycle clubs, which were disappearing as fast as the British bike industry.

The new breed of riders wanted an agile, sporting motorcycle that would look as at-home in the pits of Imola or Daytona as outside the chip shop. In 1974 this meant a four-cylinder, four-stroke with six-gears, a four-into-one exhaust, humped seat and low handlebars.

At Earl's Court that year Honda showed a wowed crowd just that.

The scales might have said the 400F was heavy, but sitting on one proved that scales aren't as clever as people think, and compared to the lardy CB750F1 and the almost invisible CB550F (even when painted orange) Honda somehow hit the nail right on the head with the 400. It looked exactly like the racer-on-the-road the sports moped brigade had been dreaming of and, what's more, they could afford it! At under £700 new, the 400 cost less than two-thirds the 750's list price.

The 400F was a development of the Honda CB350 Four, a model not officially imported into the UK. Never a strong seller, although more than 70,000 were built, it was actually outperformed by Honda's own 350cc twin, and clearly just part of Honda's strategy to be seen as the owner of the four-cylinder brand.

Gerald Davison was head of Honda in the UK at the time, and remembers seeing the 400F for the first time: "I wasn't surprised at its success. It was such a complete package from the off. I just thought the styling was a bit bland, apart from the iconic exhaust. I don't remember there ever being a discussion about bringing the 350 Four to the UK. It was always aimed at the US market. The 500 Four had been outstanding but a 350 version would have been rather expensive and that segment was already served well by our twin."

Increasing the 350's bores by 4mm saw the original undersquare 347cc Four grow to an over-square 408cc for most markets, although licensing restrictions capped that to 398cc for France and Japan. Handily this would make the 400Fs a success in the Isle of Man, when the new TT Formula 3 class allowed sub-400cc four-strokes to compete against 250 twostrokes. Acknowledging the inevitably rev-hungry nature of a small-bore Four, the gearbox gained a sixth ratio – a first for Honda. Despite losing the 350's four exhaust pipes, the new 400 actually gained weight over the earlier bike, perhaps reflecting Honda's boast that the 350's pipes had been especially designed to be as light as possible.

The 400's angular fuel tank and four-into-one exhaust were less curvaceous than its bigger siblings to make it easier and cheaper to manufacture. Inevitably Honda needed to make the 400 more cheaply than the 550, which ▶





proves more cash doesn't always make for a better outcome.

At the time Honda's motorcycle development was desperately under-resourced as the company expanded into other arenas, notably car manufacture. As Gerald Davison lamented: "When Kawasaki launched the Z1 what we really needed was a double overhead cam 1000cc greyhound. What we got was the CB750F.

"The lack of research and development for motorcycles started, I think, in 1973 when Honda was really committed to developing cars with the first Civic and so on. During that time any improvements to our motorcycle range had to be made on the manufacturing side, which meant we were limited (to just developing existing models, rather than introducing new designs). Once two separate R&D divisions were created, things improved quite quickly for motorcycles with completely new bikes, like the Gold Wing, CX500, CBX1000 and the 'Hawk' 250/350 twins. In the meantime

HONDA CB400 FOUR SPECIFICATION

ENGINE: Single overhead cam four-cylinder four-stroke BORE & STROKE: 51 x 50mm CAPACITY: 408cc. COMPRESSION RATIO: 9.4:1 CARBURATION: Four 20mm Keibins.
GEARBOX: Six speed FRAME: Tubular WHEELBASE: 1360mm/53.5in
FUEL CAPACITY: 3.1 gallons/14 litres WEIGHT: 179kg/393lb wet.
TYRES: 3.00 x 18 front, 3.50 x 18 rear. FRONT BRAKE: 267mm /10.5in single piston front disc

REAR BRAKE: 160mm/6.3in drum PRICE: new £669 (1975 launch) – £895 (1978)

the F1 was a quick response to update the ageing 750. The F2 was a much better step forward but we still lacked the DOHC ingredient."

So, ironically, the 400F was a quick fix and, if Honda hadn't been keen to expand its car range, might never have existed.

When the first production 400Fs arrived at the offices of motorcycle magazines in 1975 the reviews, even in those don't-rock-the-boat days, could tell you more about the tester than the Honda. Those who thought sub-500cc motorcycles should be capable all-rounders couldn't quite get the hang of the diminutive multi's lack of low down shove, especially when combined with a surprisingly heavy throttle. Surely the 20mm Keihins' four slides weren't that heavy?

The Honda's stylishly pert seat and rear footpegs bolted to the swinging arm also made pillion duties tricky. But those who got it, who understood that this was a sporting motorcycle par excellence, that lived for revs, corners and riding as fast as you damn well liked on roads you loved, were smitten. This was genesis, the point where the Japanese proved they could build a European-standard sportbike. Maybe this was even the point at which some brave souls inside Honda R&D decided to follow a path that would lead to today's Fireblade. Far fetched?

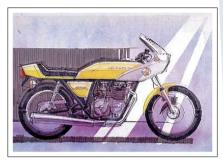
When the Isle of Man started running the Formula TT races in 1977 the 400F was the bike to be seen on. Not















only did it dominate the sub-400cc Formula 3 class. When a certain Pops Yoshimura started selling his tuning parts via David Dixon Racing tweaked 400s stretched to 458cc and even 492cc the Honda ruled the sub-500cc four-stroke/350cc two-stroke Formula 2 class. Even at this level, providing the con rods were replaced with Carrillo versions, the Honda remained reliable to 14,000rpm and delivered 100mph-plus laps.

This led to London dealer Mocheck offering the Harrier, a 400 Four with the Yoshimura 458cc conversion and road and track cam, electronic ignition, Piper exhaust and open bellmouths. The chassis was treated to Koni shocks, CMA cast alloy wheels, and a slotted front disc. White paint, a solo seat, glass fibre front mudguard and a tiny handlebar fairing, told the world that you could have had a 750 for the money, but chose this little racer instead. Measured horsepower was a full-fat 40 precious bhp – although Honda already claimed 37bhp, in truth it was nearer 32 on a dynamometer – which gave an electronically timed 112mph, just two shy of what Honda's own CB750F1 could manage.

In handling terms there was no comparison, and in the US racer and tuner Kaz Yoshima built a 400F that could beat Z1s. Despite the obvious capability of the original chassis, plenty of people offered upgrades: Dave Degens sold a twin disc Dresda version, and Australian educated, English engineer Tony Foale offered a complete monoshock

Graphics are original Honda sketches from early planning stages of the 400-4. Source: Honda Design Motorcycle Part 1 1957-1984. Used copies available at www.amazon.co.jp



frame using his famed spine layout. At the other end of the spectrum, engineer Jock Kerr offered a kit to sleeve the 400 down to 250cc, allowing it to be ridden on a provisional UK driving licence.

The biggest proof of the 400 Four's magic is that nothing really took its place in the British bike buyer's imagination when it disappeared, despite some notable attempts: Kawasaki openly paraded its new Z500 as a 400F replacement in 1979, and a sporting 500 Four with double overhead cams, twin discs and cast wheels should have ticked the boxes. But it was slightly too expensive, and slightly too samey, to create the following that the 400F had managed. In fact, the next Japanese motorcycle to take on the Honda's mantel as everyman's sportbike was arguably Yamaha's 1980 RD350LC.

Honda changed very little on the 400 Four during its production run. There were those higher bars for Americans, and pillion footrests eventually got their own brackets to stop the passenger's feet bob-bob-bobbing along. Other detail changes added a locking fuel cap and allegedly altered clock faces. An occasionally weeping head gasket was eventually cured with longer cylinder studs, but that took nearly three years and came after the inevitable cosmetic update. For the final year of production, in 1978 pinstripes combined with new colours somehow made the Honda look older rather than newer. And that was it.

Some 105,000 400 Fours were sold, which sounds a lot, ▶

"The wonderfully sinuous original exhaust systems with a bolt-on silencer have all long gone, replaced by a version which has the silencer welded to the collector box"

but by Japanese standards it wasn't. The 400F was comprehensively trounced in the important North American market by the Kawasaki twin, which in the end was built at three factories and continuously updated until the final custom model rolled off the line in 1984. The public gets what the (American) public wants, and Honda built them a

The other 400 Four 'problems' some grumbled about were more connected with us pesky Brits insisting on riding in all weathers: the camchain tensioning bolt, along with the oil filter holt were on the front of the engine and could seize; deal with the former by pushing the adjuster blade on to its next ratchet with a screwdriver and the later (if it's not already been done) by replacing the 12mm bolt with a 17mm item. The forward facing coil leads under the tank would suck in the rain and then cut power, usually during questionable overtaking manoeuvres: WD-40 and silicone sealant should sort this. Owners also found that the front brake gradually lost power as the caliper slider seized, even though stripping and greasing it was a 15-minute job. Braided brake hoses also help, especially if you want to keep the period ace-bars that set the master cylinder at the perfect angle for letting air into the brake fluid. Many questioned the overhead camshaft running directly in the alloy head, but this was standard Honda practice and one reason Honda made much of the need to use a quality oil and change it regularly. Oil pressure switches could blow on tuned engines, but again replacement is just 15 minutes of your time. Electronic ignition saves the hassle of setting twin sets of points; ET-style fingers help setting the tappets through the eight small, circular covers.

These days, besides the usual old bike caveats, there are a couple of other things to look for. The wonderfully sinuous original exhaust systems with a bolt-on silencer have all long gone, replaced by a version which has the silencer welded to the collector box: not helpful if your original item was replaced with a Dunstall Power Silencer back in period. Primary chains don't last forever, and some wicked





HONDA 400 FOUR TIMELINE

1972

1974 CB400F appears at shows

1975 CB400F available in

arnish blue or ruby red. US models gain higher handlebars and more forward set front footpegs mid-season as a reaction to poor sales.

1976

UK models continue as 1975, except pillion footrests move from swinging arm on to new brackets; American markets get the F1 with ruby red or parakeet vellow tanks and black side panels

1977

1978

F2 version is just new paint - candy antares red (named after a giant red star; they do think about these odd names) or parakeet yellow (or maybe they don't), both with pinstripes; American bikes retain black sidepanels – and from engine number 1084315 longer cylinder head studs



souls could hide this, along with a slack camchain, by setting the tick-over high. Replacing the primary chain is a full strip, and almost the same in true for the camchain unless you feel brave enough to replace the endless original with a linked item. Rear mudguards rot where they brace the rear frame and theoretically that's an MoT failure. The weeping head gasket issue was largely ignored by Honda, and unless the oil spraying on to your Dunlop Green Flash trainers is upsetting you, take a page out of the Big H's book. Sorting out sticking floats or gummed up carburettors is a faff simply because everything is so tightly tucked in, so get into the habit of turning petrol taps off and running the float bowls dry at the end of a run. You might also find the kick-start cracked where someone's tried to use it without folding the footrest up first.

Parts availability is good-to-fair, or very good if you're happy with pattern parts. Inevitably, with a cult bike, it can be the little things that make inappropriate money on eBay: the handle for lifting the bike on to the centrestand often went when a rack was fitted, and for some reason the wire clutch-cable guide also falls into this category. Those Yoshimura tuning bits too are highly prized, unusual given that most classic bike restorers obsess over that factoryfresh look. But then the 400 Four attracted a new type of rider when new, so it would be fitting if it attracted a new breed of classic enthusiasts. Hopefully there's a suitable class for a full Monty Yoshimura kitted Honda 400 Four in this August's new Classic TT. >

HONDA CB400 FOUR PERFORMANCE

TOP SPEED: 103mph
STANDING START: 14.6 standing quarter-mile (period test)
HORSEPOWER: 37bhp @ 8500rpm TORQUE: 24lb-ft @ 7500rpm (claimed)



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Silver's dream machines

If anyone has the 400 Four bug, it's David Silver. From his eponymous Honda spares business, he is a guy who just can't say no. If there's a part that's getting hard to find, or just unreasonably expensive, David gets it made: like the front mudguard that Honda still list as a spare. Remember that, the next time you grumble about Japanese built-in obsolescence. Currently being prototyped in China is a pattern kickstart lever. So why, 35 years later, is he still obsessed about the 400

"The styling, that slabsided fuel tank and the four-into-one exhaust. It's the classic cafe racer look. It was the first Japanese bike designed for the European market, and the start of all the 400cc fourcylinder bikes that followed.

"Funnily enough, the 400 Four was also really popular in Japan, and it still is. We send plenty of spares there today. We've just had three carburettors sell on eBay for £500-odd, going to Japan. I could understand a bank of four original carburettors making good money, but just three? And we're also sending a lot of spares to the US. The 400 Four's really taking off there."

Amazing that it's taken three decades for the Americans to finally get the Honda café racer theme.

David's range of spares has become so complete that they've got a quasi-production line of restored 400Fs coming through – and there's a waiting list. The most popular colour is blue, apparently.

"It's the James May thing," David confirms, after the Top Gear presenter had him prepare an as-new 400 Four for his own garage. "James has been really good for motorcycling, Tweeting and keeping motorcycling in the public eye."



"If you just want something to ride and be admired £2500 will still secure a nice, useable classic 400."

So how much to buy into the 400 Four celebrity lifestyle? "We've got one that will be just under £5000, but it's really special with all the original parts; it's a red F model (the earlier, original model). But it you don't mind a few replica parts (and by the sound of it you'd never know the difference) £4000 will get you something that looks very similar."

If you just want something to ride and be admired £2500 will still secure a nice, useable classic 400 You'll also have the comfort of knowing the motorcycle has been prepared by one of the world's marque specialists with no nasty surprises waiting to catch you out. Oddly, David doesn't feel there's any discernible price difference between an original F and the later, pinstriped F2.

David got into this when he started out buying unwanted old stock from Hondas dealers and distributors back in 1986, with the purchase of a couple of hundred pounds worth of obsolete petrol tanks and mudguards.

The business now carries a mountain of spares for over a thousand different models. Think about that – a thousand different Hondas – that's some cannon of innovation. Despite having the most comprehensive range in Europe, David is still friendly and helpful on the phone, and clearly a Honda fan through and through.

When I dare to cast aspersion of the Honda 750s ability to be hustled like a 400 Four, he quietly, but firmly disagrees. "We had a restored one here that rode every bit as nicely as a 400."

Maybe I need a new pair of rose-tinted spectacles...