

MOTOR  
CYCLE  
INTERNATIONAL

# RUNNING & RIDING



# HONDA CB250/400N

66 AUGUST 1988

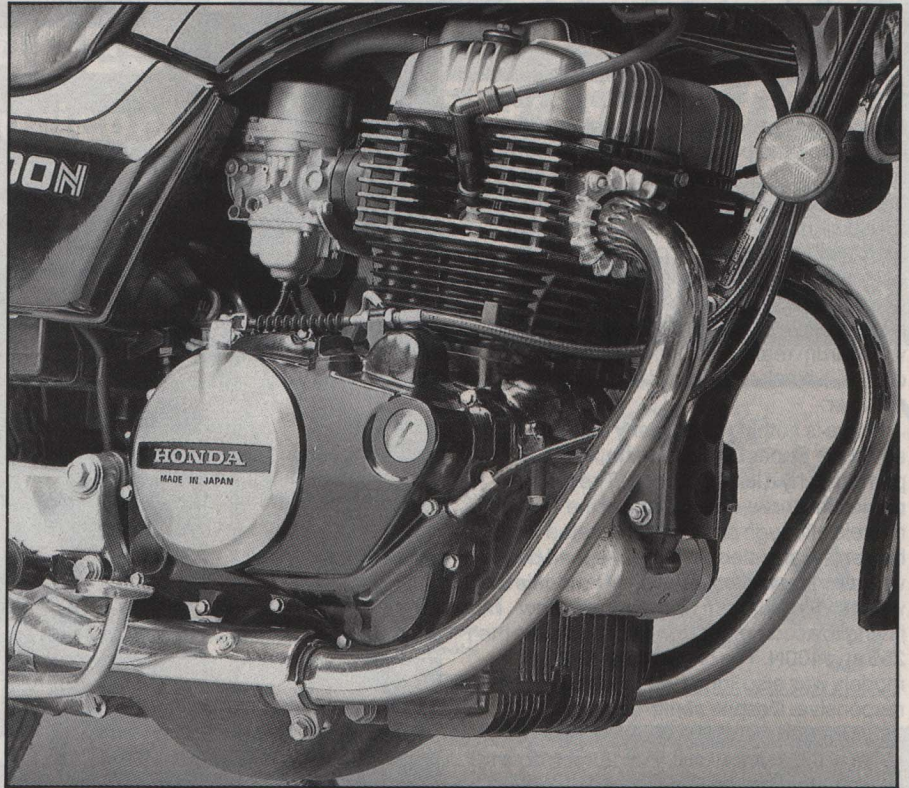


I must firstly admit that I've long harboured a Pavlovian aversion to what Honda laughably named the 'Super' Dream on its inception in 1978. You see a colleague of mine actually used to love the things and had a front garden full of ageing, or mercifully dismantled Honda twins. Worse still, he once turned up unannounced and insisted that I sit and steer a Superdream that had expired all too near me, while he towed it down a notoriously twisty hill to his place using nothing more than two waxed cotton belts. Experiences like this are definitely isolated but can put you off certain bikes (and their owners) for life. Despite this unfortunate incident there's nothing fundamentally wrong with Super Dreams that aversion therapy couldn't sort out. Really.

The Super Dream appears to be dogged by a reputation comparable only with Honda's deeply unloved CX500 and yet Honda have sold a phenomenal amount of them over the years: 70,000 Derribooted owners can't be wrong, surely?

The Honda 250 and 400N superseded the bulbous T-models in 1978 with the expedient of little more than a new set of 'Eurosport' clothing, as featured on most of Honda's bikes with any sporting pretensions in the late '70s.

In Britain, with its 250cc learner law, the 250N became this country's best selling learner bike for a while, presumably because people were attracted to the Honda's big bike appearance. This was created by using the 250cc engine to power what was to all intents and purposes a 400cc sized chassis. It's scarcely surprising therefore that the CB250N gained a



Late model 400NC engine. Black bulge below exhaust clamp is rot-prone collector box. NC model has external oil-line running to cylinder head

reputation for being somewhat porkey and underpowered. At 367lb the 250N is only ten pounds lighter than the 400N. A shame really, because in its day the 250 twin engine was no worse than its four-stroke competition but had to lug enough excess weight to slow it down to a dawdling 85mph

or so top speed. Staked against, say, Yamaha's ubiquitous RD250 which was a good ten mph faster, it was a real yawn.

The 400N with its extra disc and more realistic power-to-weight ratio had an achievable top speed of 100mph, scarcely thrilling today, but par for the course



250N Deluxe displays big bike 'Eurosport' style

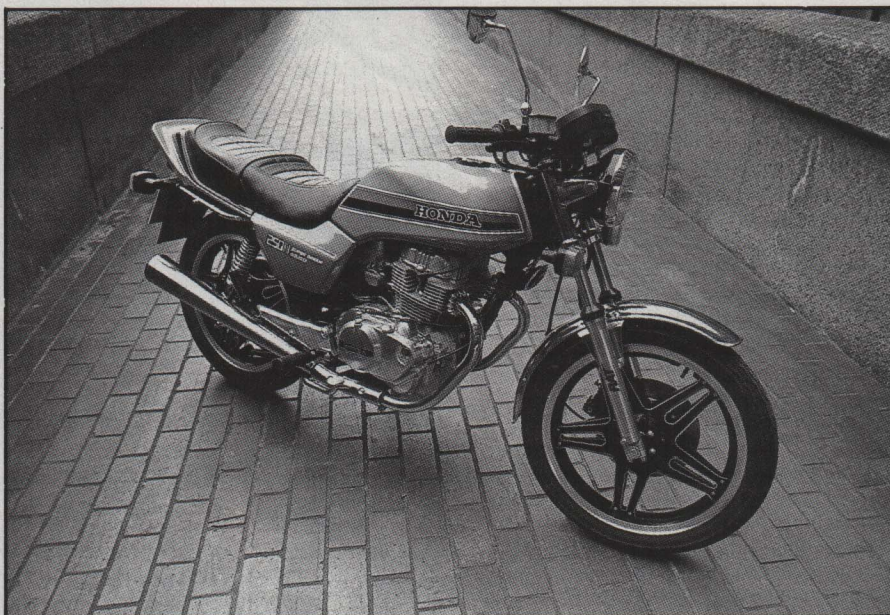


(definitely no pun intended) and competitive in 1978.

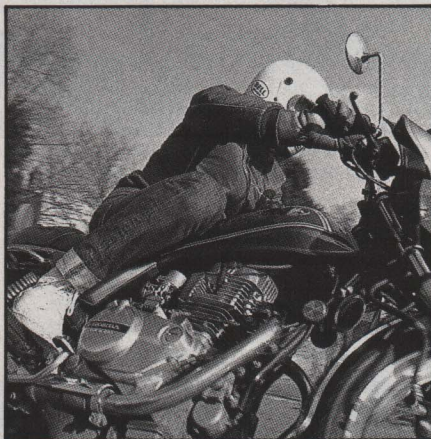
When introduced in '78, the 250N retailed for £799 and the 400N sold for £949. A year later the NA models were introduced with a hundred pound price hike and no kickstart. Between 1978 and 1982, Honda updated these models with very little more than revised pinstriping. But in 1982, a sudden rush of blood to Honda's corporate head bestowed the Super Dream with tubeless tyres on wider rims, an O-ring chain, twin-piston calipers on the front to complement a wider drum rear brake, as well as natty gold details, a black engine and a 'Deluxe' moniker.

There is nothing particularly remarkable about the Super Dream engine, which is perhaps why it lasted so long. The engine retains the three-valve heads of the T-models although porting was uprated and a higher lift cam fitted. A new six-speed box was also incorporated into the N-models as well as 28 and 32mm CV carbs with new jetting to accommodate inlet changes on the 250 and 400N. The crank of the 400N models was also lightened to make it more responsive. Despite compression on the 250N model being slightly higher than the 400N at 9.4:1, it was still 15 to 20mph down on top speed and over two seconds slower over the quarter mile, despite both models sharing the same gear ratios.

Honda's revamped Dream engine cured some of the bugbears that afflicted the T-models. Gone was the expensive habit of dropping valves, camchain life was improved and to reduce wear on the engine balancer chain, an inspection window was added to the right hand side cover. The 360° parallel twin engine is remarkably simple to service with screw and locknut tappets, a cleanable air filter and forgettable CDI ignition unit. However, it is not unusual for owners to neglect the adjustment of the balancer bobweight chain leading to an excessively noisy motor. Thankfully the replacement of this chain requires only the side cover to be removed and is well within the capabilities of the average Super Dream owner (and what else could he be but 'average'?).



250 and 400N models are distinguishable by black reversed Comstar wheels and OE O-ring chain



The 400N was a passable sports bike in its day

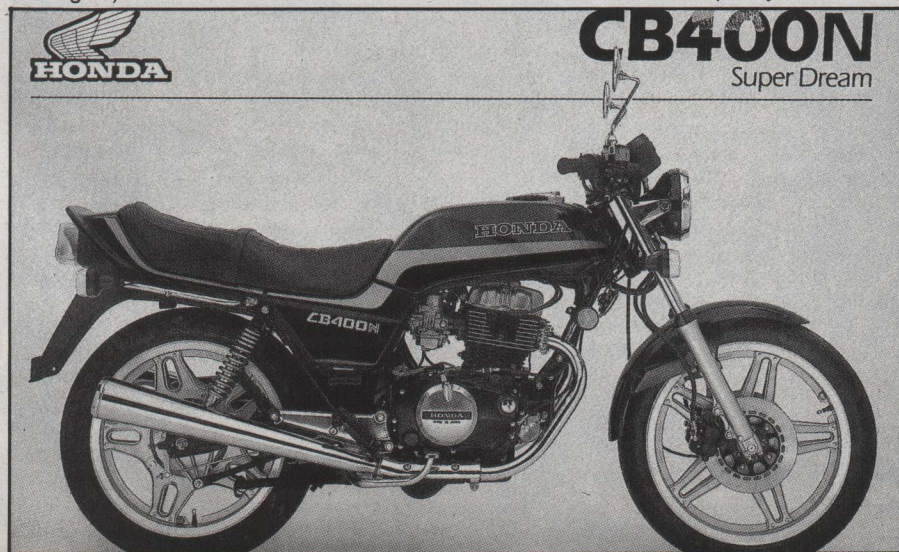
Like so many other engines built to fine tolerances, an established service history of a prospective Super Dream purchase is invaluable. Infrequent oil changes can ruin the SOHC twin engine in a very short space of time. The through-barrel oilway has a pressure restrictor jet built into it and its small diameter bore can quickly become

blocked by the swarf and general detritus that results from infrequent oil changes. Inaccurately cut base gaskets, and this particularly affects pattern parts, can release particles of fibre into the oil flow which will also block the oil jet. The net result is a destroyed head, cam and followers. Needless to say, mileage is no accurate safeguard against this mishap. Oil seepage up through the engine studs is not unknown on these models and may account for leaking head and base gaskets. Honda clearly saw the oil circulatory problems on their Super Dream range for in their 1982 revamp they added an extra external oil line to the front of the cylinder head and revised internal head oilways to give more predictable top-end oiling.

Mechanically speaking, there are few other horrors to watch out for as camchains last a minimum of 20,000 miles and steering head bearings will not usually need replacing for 25,000 miles. Having said this, however, improved taper rollers are available for around £15 from dealers.

The uprated twin-piston calipers fitted to the later Super Dreams tend to show up the inadequately braced forks. This problem is exacerbated by the front mudguard which is steel on all but the last models. When this rots, and rot it surely will, the forks lose much of their rigidity. This is definitely a haggling point on a prospective secondhand purchase as breaker's yard replacements are likely to be as bad and holey mudguards mean an MoT failure. Another victim of our wonderful weather is (surprise, surprise) the exhaust and in particular the collector box tucked discreetly away under the engine. However, there are many suitably stifled exhausts on the market as well as replacement stainless collector boxes to fit the Honda system. The single piston calipers fitted to pre '82 Super Dreams can also suffer from years of crud and salt and require the occasional tedious chore of dismantling and greasing to stop them binding.

While late Hondas were fitted with O-ring chains to extend their serviceable life and



Final incarnation of the Dream for 1982: Gold wheels, twin piston calipers, black engine and fibreglass front guard



reduce maintenance, pattern sprockets have been known to have been inaccurately machined where they fit onto the wheel. This can give pronounced chain wear, and more seriously, can ruin the back wheel.

There are various inexpensive and irritating electrical faults that can dog SuperDreams. Worst first: The alternator's ignition bobbin is constructed using remarkably fine windings, which can fail at virtually any mileage. Whilst a new unit costs in the region of £150, many of the specialist electrical firms offer a rewinding service for around £35 and this is an option that even dealers resort to in many cases.

Other problems are related to our climate. For instance the ignition and kill switch can cause misfiring or cutting out in bad weather. The rear mudguard is so shaped that muck can be sprayed along the left hand side of the bike. Directly in line is an electrical connector block behind the left side cover. This should be red and black but is likely to turn a putrid green colour, signalling all sorts of problems. Once it rots it should be replaced with separate male/female connections.

While both 250N and 400N models were altered very little throughout their four year production run, the external oil-line, twin-

piston caliper Deluxe model is probably the one to go for, should you be worried about previous owners' neglect. On the whole, however, condition is a greater indicator of price than any spurious model changes and suffixes. Prices are difficult to gauge as a scruffy but running 250N could be picked up for around 100 notes, whereas a late model 400N fitted with useful accessories like a full fairing or panniers from a reputable accessories manufacturer is certainly worth the best part of a grand.

The adjective 'sensible' was invented for the Super Dream range—just don't expect any heads to turn, that's all.

## HONDA CB250/400N

### SERVICE CHART

#### Every week

Lubricate and adjust final drive chain as necessary  
Check all bulbs  
Check tyre pressures  
Check fasteners for security  
Check engine oil level  
Check battery electrolyte level  
Check brake fluid level

#### Every 2000 miles

As every week plus:  
Change engine oil

#### Every 4000 miles

As 2000 miles plus:  
Check and adjust carbs  
Check and adjust cam-chain  
Clean air filter element  
Clean and gap spark plugs  
Check valve clearances  
Replace oil filter  
Check brake pad/shoe wear  
Check and adjust balancer chain  
Check and adjust clutch

#### Every 8,000 miles

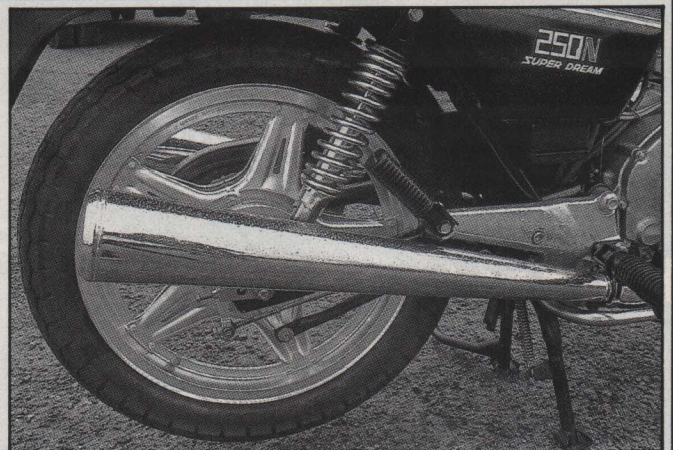
As for 4000 miles plus:  
Replace spark plugs  
Replace brake fluid  
Lubricate and adjust steering head bearings

### DATA

Valve clearances		
inlet	0.1mm	(0.12mm)
	250NDX	(Model)
exhaust	0.14mm	(0.16mm)
	250NDX	(Model)
Spark plugs	NGK DR8ES	
Plug gap	0.6–0.7mm	
Engine oil capacity	2.3 litres	

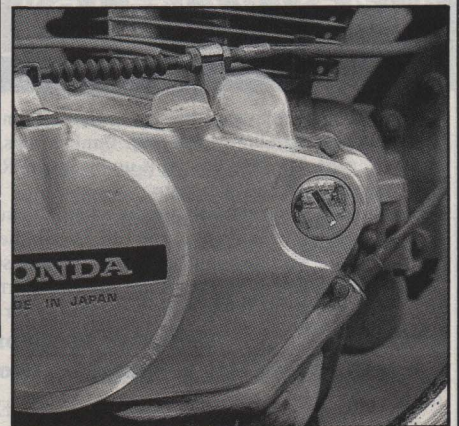
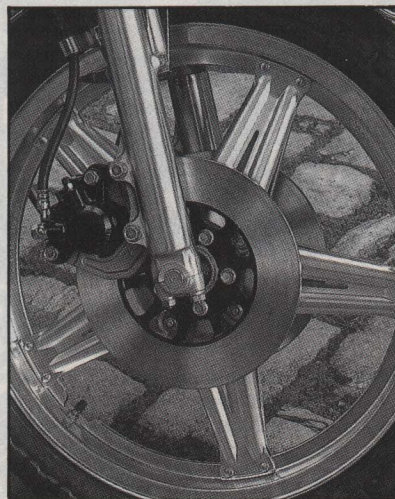
**Right:** Nissin-calipered twin disc front end of 400N

**Below:** Pattern sprockets can wear out rear hub. Check for side play



**Above:** Silencers and FVQ shocks wear out quickly. These alone could add £100 to purchase price

**Below:** Balancer bobweights reside behind right side cover. Slotted plug is for inspection and adjustment



**Below:** Simple but comprehensive instrumentation

