

YAMAHA XS400



The middleweight motorcycle

Already hailed by the world's motorcycle press as one of the best "middleweight" machines on the market, Yamaha's XS400 goes one better this year by growing from its former 358 cc capacity to the more-beefy 400 cc range.

With 38.0 horsepower (27.9 kW) there at the rider's command, the XS400 packs a heavyweight punch in an eminently-handleable middleweight package. It is one of the very best of what people today have come to call "urbo-bikes" or "commuter bikes". These are machines which will happily serve as a workhorse during the week, taking the rider in perfect safety and comfort to and from the office or factory. Then they are capable of abruptly changing character when the weekend comes around. Of turning into the type of sporting or long-distance touring motorcycle that signifies "real motorcycling" to most enthusiasts.

For those weekends on the open road, the combination of the XS400's twin cylinder engine and six speed gearbox will whistle the rider along at over 90 mph. And for those trips through town to the office there are such welcome features as a three-phase electromagnetic field coil system that will keep the battery fully charged even in "stop-go" traffic and on short runs. Electric starting and an automatic "no-flooding" fuel tap takes the drudgery out of bringing the XS400 power unit to life while a single adjustment screw synchronises both carburetors.

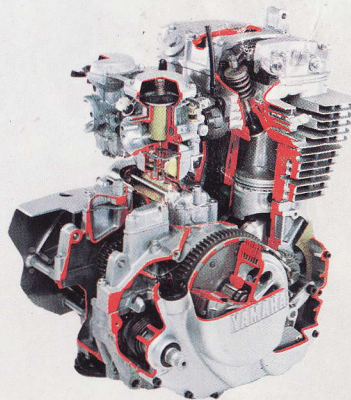
The buyer of a motorcycle in today's world doesn't want to waste time on constant service. He wants a machine that he can ride without any maintenance worries.

The XS400 fills that requirement and does so while still being capable of over 90 mph on the open road or covering literally thousands of inner-city commuter runs between services.

If there was ever a bike for "everyman", that bike is Yamaha's XS400.

Engine

The 391 cc power unit has a bore and stroke of 69.0 x 52.4 mm and puts out 38.0 horsepower (27.9 kW) with a tractable torque curve to match. Pressure-lubricated big-end bearings are of the shell type and a gear on the centre of 180 degree crankshaft drives the single overhead-camshaft.



Frame

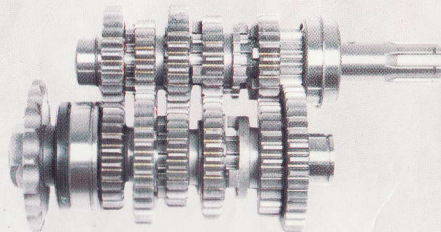
Yamaha have learned a great deal about frame design from their super-successful efforts in Grand Prix road racing and the XS400 chassis is obviously based on these lessons. It is full duplex cradle, with the engine mounted low down for maximum handleability. A low centre of gravity means that a rider can swing the Yamaha XS400 from lock to lock much easier when negotiating traffic... and that the whole machine will be much more stable at higher speeds.

Transmission

The choice of a six-speed transmission means that the rider can make full use of the added punch of the new 400 cc version of the XS four-stroke power plant.

The lower five gears have ratios specifically designed with vivid acceleration in mind. The sixth (top) gear has a different purpose. It is an "overdrive" that allows a rider to cruise at lower engine revolutions once he has got up to a good cruising speed.

The benefits of this "overdrive" gear are two-fold. First, it means improved fuel economy without decreasing actual cruising speeds. Secondly, the lower engine revolutions needed to attain any given speed will result in longer engine life and more time between services.



Carburetors

The twin 34 mm Mikuni carburetors are pre-set at the assembly stage to the demands of the XS400 power unit and operate on the vacuum principle. This means that the carburetors never deliver more gas to the engine than it actually requires and results in much better fuel-economy. Setting the carburetors is simplicity itself (one screw synchronises them!) and they require minimum attention while delivering maximum efficiency.

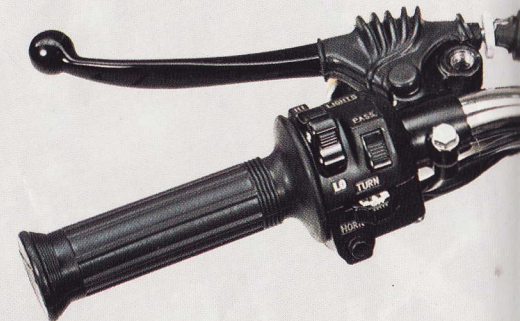
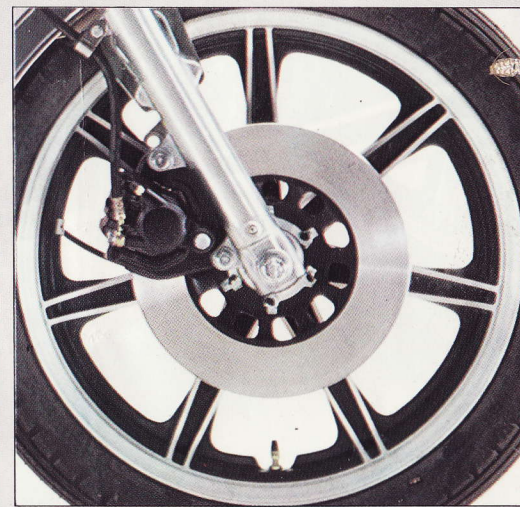
Front Forks, Rear Suspension

Though well-controlled in their action and giving good, firm steering, the front forks are softly-sprung for maximum comfort. This aim is also aided by the 140 mm of fork travel and by the smooth fork action that results from the use of anti-friction Teflon special fork bushings.

The visually-exciting look of the XS400 is enhanced by the use of exposed chrome springs on the rear suspension units. Additionally, these units have five load settings to compensate for any weight changes or unusual usage conditions.

Disc Brakes

The XS400 has stopping power to match its forward motion! Positive-acting 267 mm disc brakes, hydraulically-operated on both front and rear wheels.

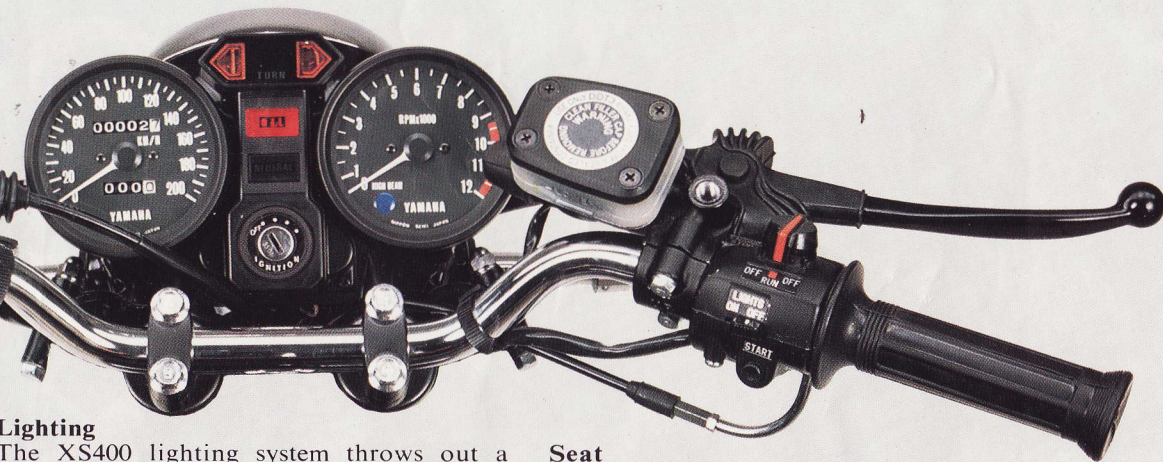


Cast-Alloy Wheels

Though it is an ultra-reliable mode of transportation, the XS400 is also an exciting motorcycle... and looks it. This look is emphasised by the use of seven-spoke cast alloy wheels which other manufacturers may offer as "options" but which Yamaha fit to the XS400 as standard equipment! Easy to clean, easily balanced after tyre changes (Yamaha dynamically balance both wheels at the assembly stage) and visually superb, the cast wheel is the coming thing in motorcycle design. On the XS400 you have the wheel of the future... now!



gets a heavyweight punch !



Lighting

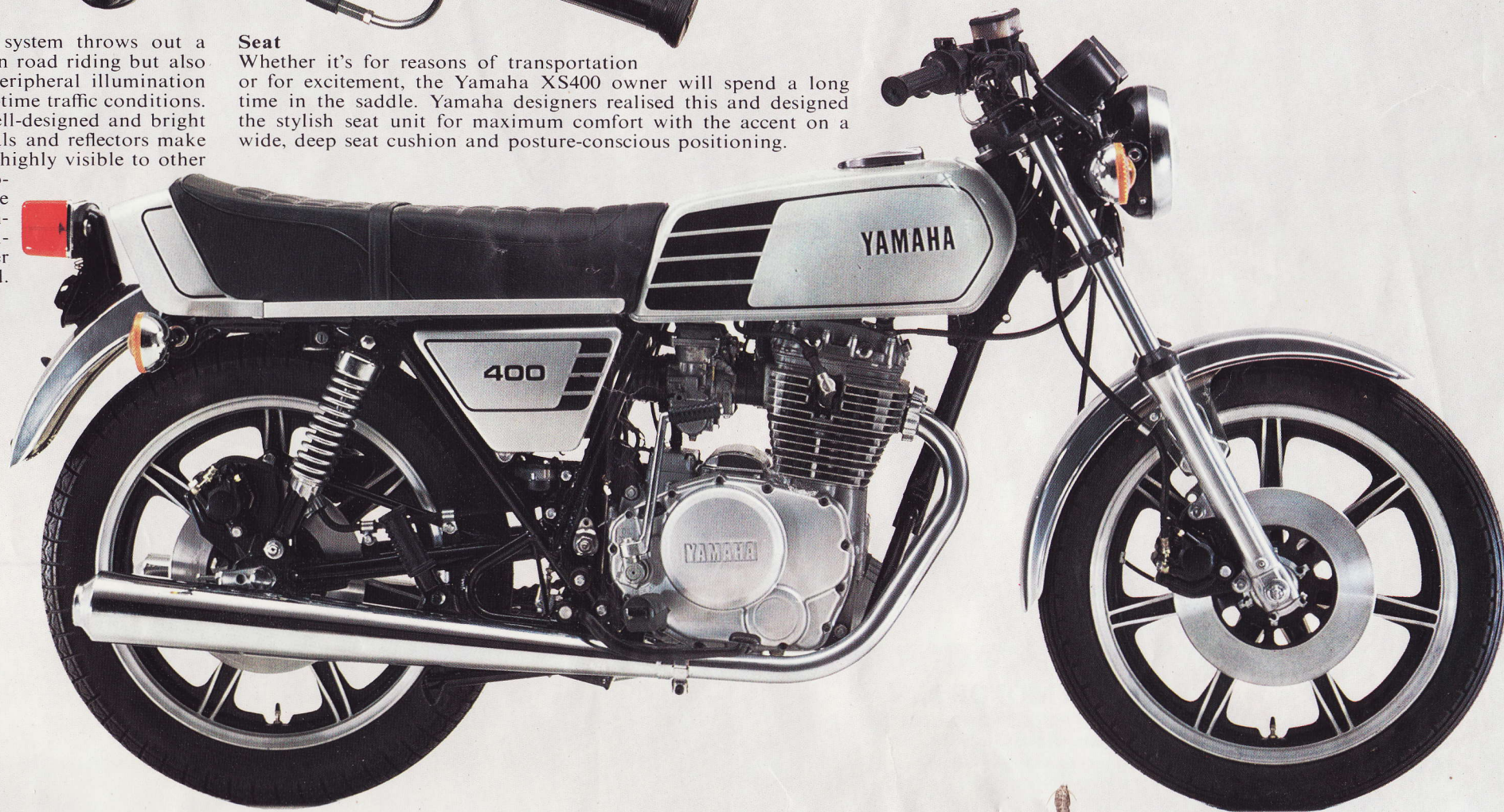
The XS400 lighting system throws out a lengthy beam for open road riding but also provides maximum peripheral illumination to cope with all night-time traffic conditions. Just as important; well-designed and bright rear lights, turn signals and reflectors make sure that the rider is highly visible to other traffic. An exclusive-to-Yamaha feature is the self-cancelling turn indicators that automatically switch off after the turn is completed.

Seat

Whether it's for reasons of transportation or for excitement, the Yamaha XS400 owner will spend a long time in the saddle. Yamaha designers realised this and designed the stylish seat unit for maximum comfort with the accent on a wide, deep seat cushion and posture-conscious positioning.

Handlebar

The "control panel" of the Yamaha XS400 gives an immediate clue to the lengths to which Yamaha have gone to make the mechanics of riding so easy that the rider can perform the necessary functions almost automatically. At the rider's fingertips are the main light switches, the dipswitch, headlamp flash switch, electric start button, engine stop switch, and the controls for Yamaha's unique self-cancelling turn indicators. These are timed to automatically switch themselves off after the rider has completed his turn! Handlebar levers are of the new "Bell-crank" type for easy operation via their extra-leverage capabilities. In the central instrument console are the speedometer and smooth-operating tachometer, low oil pressure warning light and neutral indicator.



XS400

SPECIFICATIONS

ENGINE

Type	4-stroke, Twin, OHC
Displacement ...	391 cc
Bore & Stroke ...	69.0 × 52.4 mm
Compression ratio	9.4 : 1
Max. horsepower	38.0 HP (27.9 kW) @ 8,800 rev/min
Max. torque	3.3 kg-m (32.4 Nm) @ 8,000 rev/min
Lubrication system	Pressure-fed wet sump
Starting system	Electric & Kick starter
Primary transmission	Gear
Final transmission	Chain
Gearbox	6-speed
Carburettor	Mikuni, BS34 (×2)
Clutch	Multi-plate, wet
Battery	12 V, 12 AH
Charging system	A.C. Generator
Ignition type	Battery, CB/Coil

DIMENSIONS

Overall length	2,020 mm
Overall width	730 mm
Overall height	1,070 mm
Wheelbase	1,335 mm
Seat height	815 mm
Weight (net)	164 kg
Fuel tank capacity	11.0 lit.
Oil capacity	2.6 lit.
Tire front	3.00S-18-4PR
rear	3.50S-18-4PR
Brakes front	Hyd. disc, diam. 267 mm
rear	Hyd. disc, diam. 267 mm

* Specifications subject to change without notice.



YAMAHA MOTOR N. V.

Postbus 7829 PROF. E..M. Meyerslaan 3
Amstelveen (Amsterdam), Holland

LIT-3MC-0107144-78E-BK/52.10×359.5 Printed in Japan (ヨロロッパ)