# Norlon 1970 Commandos were designed for a very good reason-

to give you what you want!



### Isolastic -Norton's revolutionary answer to vibration

One of the World's foremost motorcycle magazines, "CYCLE" of America, called the Norton Commando Isolastic construction "ingenious" and "revolutionary". Why? Because Norton have with Isolastic construction eliminated that most hated of motorcycle faults-vibration. By mounting the engine, gearbox and rear wheel on the same rubber cushioned plane they have given you for the first time a velvet smooth ride on a high performance big twin.

This new Norton Isolastic principle built into the Commando couples the engine and gearbox directly to the rear wheel (red in the illustration). The frame (blue) supports the engine gearbox-rear wheel unit on rubber mounts (orange). These mounts are specially designed to retain rigidity where it matters. This unique principle has two great advantages. First, it insulates the frame and the rider from engine vibration allowing you to get a vibration-free ride while using a high performance vertical twin engine, with its simple construction, proved reliability, low maintenance costs and light weight-the famous Commando ride. Secondly, because it is isolated from the frame the engine torque transmitted through the chain cannot put the rear wheel out of alignment.

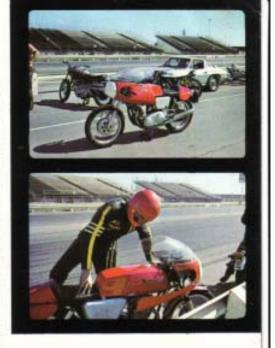


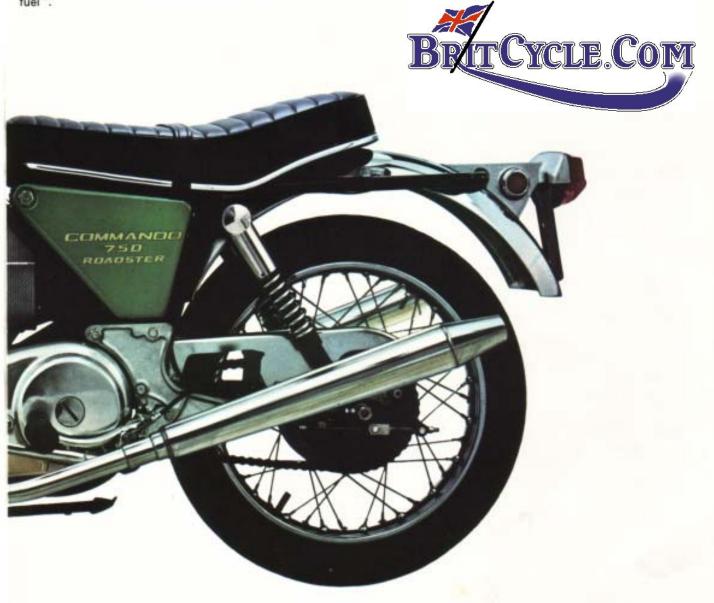
## Norton Commandos

The Norton Commando, chosen by Britain's "Motor Cycle News" readers' free poll as "Machine of the Year" for 1968 and again for 1969. The Norton Commando hailed by America's "Cycle" as "the first modern Superbike". These lucky guys get to ride every bike going; if they say "Superbike", you can bet they have experienced something very special. Ask a skier, a skydiver or a track racer why they do it and you get a stack of answers. It gives them another dimension of experience, individuality in its purest form, sheer undiluted excitement, they kick the slow shuffle of modern living clear out of sight. Get astride a Commando and you're there with them. With its uncanny smoothness, shattering performance-well over 100 m.p.h. at the end of a standing quarter in 12.6 secs, or less, superb roadholding, super-precision steering, tremendous brake power and almost arrogant good looks, it is not surprising the motorcycle press call this 750 c.c. masterpiece one of the greatest motorcycles ever. Super they said and Super they meant. As "Cycle" put it, "That Commando is so much fun you won't want to stop even for fuel".

## Commando 750 Roadster

Guised in the style for the street, it has the sports appeal of a flat-tracker, and with a top speed of 125 m.p.h. in standard trim it's not surprising. It has, of course, all the unique Commando range features: the revolutionary Isolastic construction, the new light but stronger than ever frame, utterly predictable steering with the famous "Roadholder" forks, adjustable rear shocks, a race-bred and race-proved 750 c.c. big twin pushing out 60 b.h.p. at 6,800 r.p.m., the wonderfully light yet positive multi-disc clutch, double leading shoe airscoop front brake, and a wide tooth four-speed medium-close ratio gearbox. In particular, it has twin downswept pipes with full flow mufflers and a new strong glass fibre sports tank in a wide range of self-color plain and metal flake finishes. A rolled and pleated buddyseat, chrome fenders and a re-styled centre stand for fast low angle cornering. The Commando Roadster with its light weight gives terrific power from the start line which multi-complicated machines cannot match. It's a bit of a smooth brute but then again we don't believe in making





# Specification:

#### Construction

Isolastic anti-vibration principle more fully illustrated and described in this leaflet.

#### Frame

Entirely new in concept and design, the patented Commando frame combines lightness with strength, giving exceptional torsional rigidity. It is constructed of high quality steel tube with large diameter backbone supporting the steering head, twin downtubes anchoring the engine cradle.

#### Front Suspension

Famous roadholder forks with progressive two-way oil damping and long single rate springs housed in high quality steel stanchions in new slim-line profile. Three-way adjustable Girling rear shocks with chrome springs and covers. Light aluminum sliders to reduce unsprung weight for high-speed roadholding.

#### Engine

One piece aluminum cylinder head and rocker box with splayed exhaust ports for maximum power. Overhead valve operation thru forged steel rocker arms. Barrel-shaped aluminum push-rods for precise operation. Large diameter tappets with hardened faces for long life. Sports camshaft with chain drive. Forged steel crank with central flywheel. Forged aluminum connecting rods with insert-type bearings.

Type	Air cooled o.h.v.
	vertical twin
Capacity	45 cu. in. (745 c.c.)
Bore	2.88 in. (73 mm.)
Stroke	3.5 in. (89 mm.)
Compression ratio	9:1
Maximum r.p.m.	7,000

B.H.P. 60 at 6,800 r.p.m. High efficiency tach drive direct from camshaft.

#### Carburetors

Twin Amal 30 mm. concentric with high efficiency air cleaner. Automotive type replacement element.

#### Average settings:

Main jet 220	Throttle valve 3
	Needle jet 0.107
These settings will	vary in extremes of
altitude and temper	erature. Check with
your dealer for your l	ocal settings.

Norton Villiers Limited, Walworth, Andover, Hants., England.

#### **Exhaust Systems**

"Roadster" and "Fastback"; twin downswept pipes with upswept tailpipes.

'S': twin high-level cross-over pipes. Protective leg guards.

All models: full flow mufflers to comply with all known official noise regulations.

#### Clutch

Automotive type multi-disc clutch with large diameter diaphragm spring designed to transmit up to 100 b.h.p. Unique design of spring allows very light hand operation.

#### Transmission

Wide tooth four-speed gearbox with medium-close ratios. Triple row heavy duty primary drive with streamlined aluminum housing.

#### Gear ratios:

Standard	(19 t	(19 tooth gearbox sprocket)	
	4th	4.84:1	
	3rd	5.9:1	
	2nd	8.25:1	
	1st	12.4:1	
Optional	(21 tooth gearbox sprocket)		
	4th	4.35:1	
	3rd	5.35:1	
	2nd	7.42:1	
	1st	11.18:1	

#### Electrics

High output alternator with Zener Diode regulator. Capacitor discharge auxiliary ignition system in event of battery failure. Ammeter. Big seven inch headlite with 40/50 watt rule. Powerful Alpine windtone horn for freeway use.

#### Gas Tank

Strong glass fibre sports tank with highcapacity racing style gascap.

Capacity: 'S' and "Roadster" 2.7 U.S. gallons. "Fastback" 3.9 U.S. gallons. Quick-fit rubber mounting. Reserve supply gastap.

#### Oil Tank

All steel construction for heat conduction. Special new flow design for maximum efficiency. Capacity 5 pints.

#### Seat

Deep padded tuck and roll pleated dual seat.

#### Wheels, Brakes and Tires

Chrome rims with plated steel spokes laced to large diameter aluminum hubs with racing style ventilated brakes. Twin leading shoe on the front with ribbed directional 3.00 × 19 tire giving hairline steering. On the rear, 4.10 × 19 low profile racing pattern tire designed for high speed. Recommended tire pressures for normal riding: front and rear 26 p.s.i. Consult your dealer or the tire chart for correct pressures for riding with heavy load or sustained high speed.

#### Other Equipment

Matching tachometer and speedometer, main stand, side stand, buddy pegs, tool kit, side reflectors.

#### Colors

Rear fairing (Fastback only), gas tank and side panels. Wide range of colors available. Consult your dealer.

#### Dimensions

Wheelbase	56.75 in.
Length	87.5 in.
Width	26 in.
Ground clearance	6 in.
Weight (dry)	415lb.

#### Performance

Standing quarter achieved by independent test of Commando 'S' in California December 1969.

Time 12.69 secs

Terminal speed 103.68 m.p.h.

Other figures dependent on conditions.

0-60 m.p.h. 4.8 secs Top speed 125 m.p.h.

Norton Villiers Limited reserves the right to alter specifications without notice.

Patents on the frame and on the construction principle have been applied for in the U.S.A., Canada and elsewhere, U.S.A. design patent D212404 and British registration design 923428 have been granted on the frame.





## Commando 750 'S'

Called a dazzler by the American "Cycle" Magazine, this super sport version of the Commando range is easily identified by its stylised twin upswept exhaust pipes and mufflers. Beautifully finished in a wide choice of plain and metal flake colors with all-chrome fittings, a new slimline gas tank complete with racing type quick action filler cap and a rolled and pleated buddyseat.

Even more powerful than the Roadster, the performance and almost unbelievable smoothness of the 'S' is staggering. Don't take our word for it, go to your nearest Norton dealer and test ride one. If you're not impressed, we recommend you try Cape Kennedy.

## Commando 750 Fastback

Identical mechanically to its two Commando brothers, the Fastback has been styled for the rider who requires a two-wheel Grand Tourer. A machine that has the grace and lines of an expensive sports car with exhilarating performance to match. With its effortless cruising speed of 110 m.p.h. upwards, the Commando Fastback will purr past its rivals with non-chalant ease. You have a choice of color finishes, in plain or metal flake self-color impregnated glass fibre. Gas tank capacity is increased to 3.9 gallons for the long distance mover. Full custom specification and super comfort contoured buddyseat are standard. The Fastback was called "The World's safest high performance motorcycle in the British press





