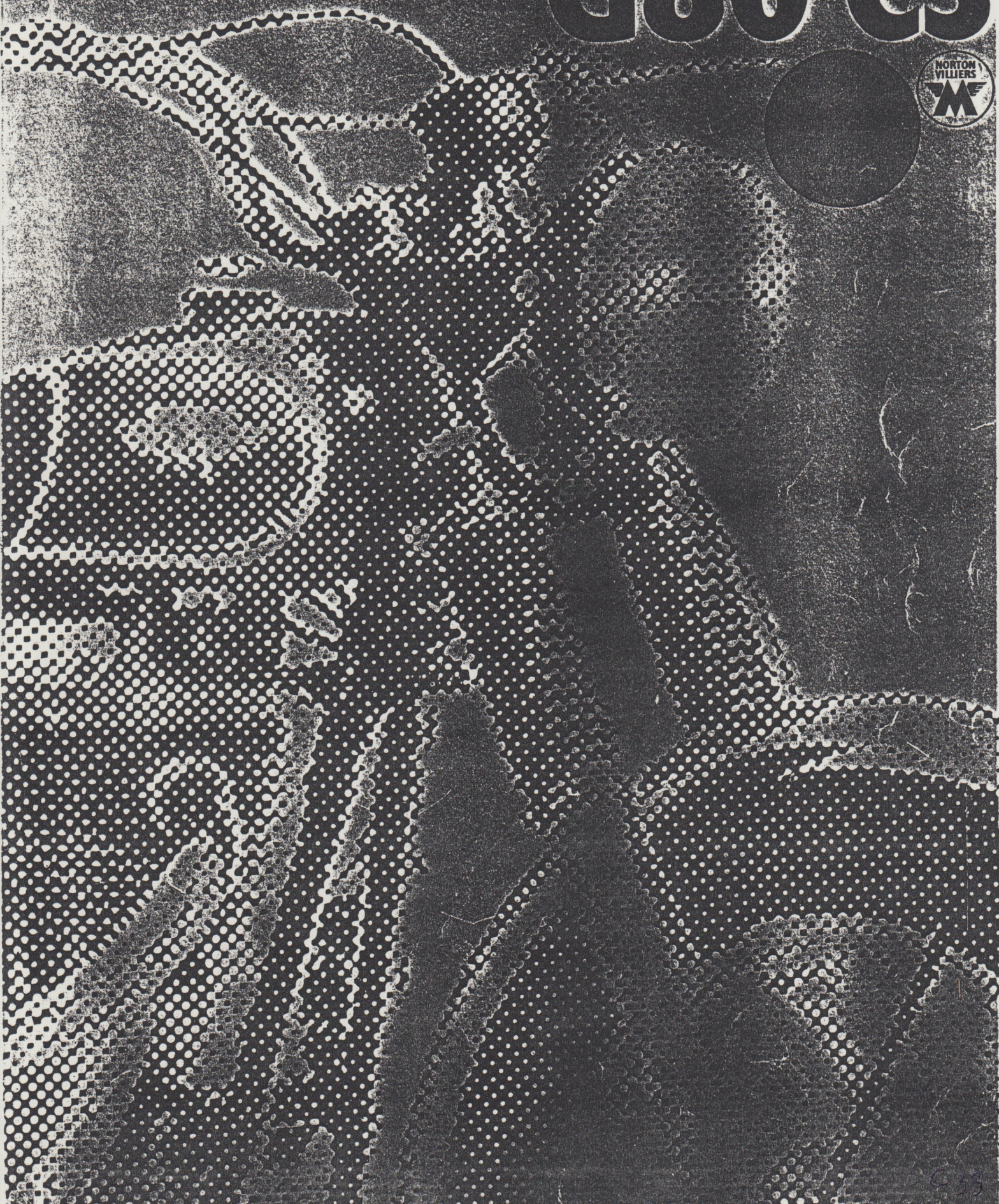


# MATCHLESS G80 CS



<b>Model</b>	<b>G-80 CS</b>
<b>Engine</b>	O.H.V. single cylinder
<b>Capacity</b>	4.97 gals (30.4 cu. in.)
<b>Bore and stroke</b>	86 x 85.5 mm (3.42 x 3.40 in.)
<b>Compression ratio</b>	8.7:1
<b>Carburettor</b>	Amal Concentric
<b>Gear ratios:</b>	
Top	5.8:1
Third	7.08:1
Second	9.85:1
First	14.85:1
<b>Electrics</b>	Lucas
<b>Chains (front)</b>	1" x 805"
<b>Chains (rear)</b>	1" x 380"
<b>Tyres (front)</b>	3.50" x 19"
<b>Tyres (rear)</b>	4.00" x 19"
<b>Brake diameter (front)</b>	7" x 1 1/2"
<b>Brake diameter (rear)</b>	7" x 1 1/2"
<b>Fuel tank (gallons)</b>	2 Imperial (2.4 U.S.A.)
<b>Oil tank (pints)</b>	4.5 Imperial (5.4 U.S.A.)
<b>Seat height</b>	33"
<b>Wheel base</b>	56"
<b>Ground clearance</b>	8 1/2"
<b>Weight (lb.)</b>	381 (173 kg.)

**Norton Villiers Limited**  
 Norton Matchless Division  
 44 Plumstead Road  
 London S.E.18

**Engine.**

497 c.c. (86 mm x 85.5 mm) all alloy o.h.v. single cylinder four-stroke engine. Alloy cylinder head with cast-in valve seats, and central plug:  $1\frac{3}{4}$ " diameter open exhaust pipe: chrome plated, stellite tipped valves: exhaust valve lifter fitted: racing duplex hairpin valve springs: built-up rockers housed in detachable light alloy rocker box: separate inspection cover: hiduminium push-rods with hardened steel end cups: mushroom type cam followers: special high lift cams (type HS) on separate pinions: built-up crankshaft (individually balanced) with steel flywheels and two piece crankpin (alloy steel centre pin with hardened steel sleeve) supported by two-ball journal, one roller and one plain, main bearings: duralumin caged single row roller big-end bearing: forged steel connecting rod with pressed in hardened liner: alloy piston (standard compression ratio 8.7 : 1): alloy cylinder barrel with low friction iron liner: gear-type oil pump driven by timing side of crankshaft: Amal concentric carburettor: Lucas competition magneto (breather pipe terminates under petrol tank), driven by chain: alloy timing chest: high level exhaust pipe.

**Gearbox.**

Separate medium-close ratio four-speed gearbox: alloy shell: wide tooth heavy duty pinions: special multi-plate clutch: single primary chain housed in cast alloy oil bath: rubber vane shock absorber integral with clutch: foot operated gear pedal: folding kickstarter.

**Frame.**

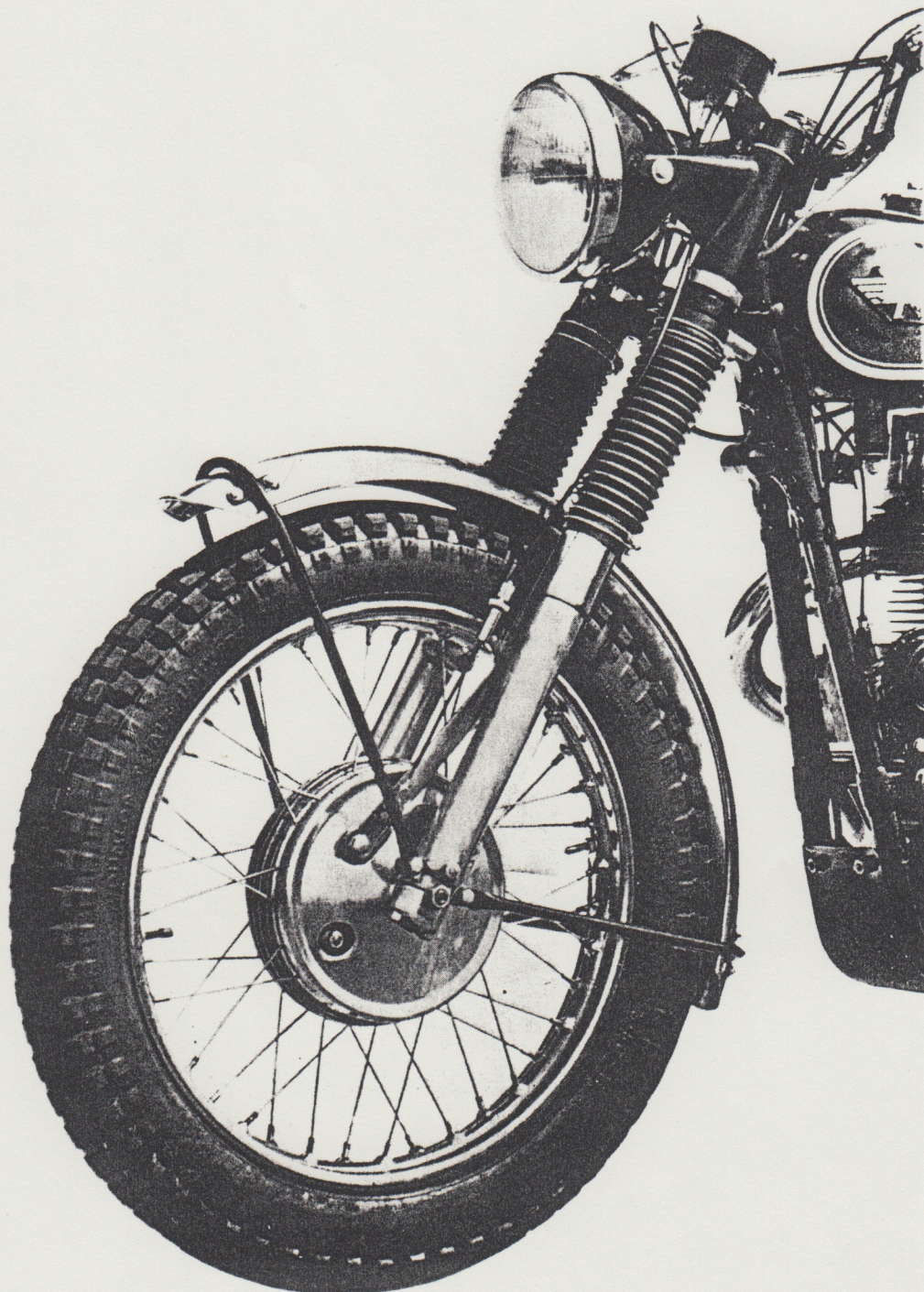
Brazed and bolted construction: twin tube duplex cradle: single top and saddle tubes: two large diameter looped tubes, welded together by cross-bracing struts, form rear sub-frame: large robust lug at base of seat tube houses self lubricating pivot bush for rear swinging fork.

**Rear Suspension.**

Large braced malleable lug into which two heavy-duty large diameter tubes are brazed, form a very rigid swinging fork assembly: large diameter heat-treated steel pivot shaft pressed into lug: fork movement controlled by fully adjustable oil damped units.

**Forks.**

Heavy duty 'Teledraulic' forks, designed specially



for scrambling give extra long movement and precise progressive two-way damping: multi-rate springs: large diameter heat-treated tubular steel stanchions: alloy sliders: rubber gaiters: forged steel handlebar lug and fork crown: crown pinch bolts act as steering lock stops.

#### **Mudguards.**

Polished alloy blades, with tubular steel stays.

#### **Wheels.**

19" diameter chrome plated steel rims fitted with 3.50" front and 4.00" rear tyres: heavy gauge spokes.

#### **Hubs and Brakes.**

Slim alloy front hub with cast-in 7" diameter brake drum: wider shoes and linings mounted on webbed light alloy back plate: two ball journals support hub on high tensile steel spindle. Alloy rear hub mounted on taper roller bearings: one piece brake drum and rear sprocket bolted up to hub.

#### **Twinsat.**

Single level competition seat: pressed steel base: foam rubber filling: waterproof Vynide covering.

#### **Petrol Tank.**

Two gallon pressed steel completely rubber mounted: mounting at front by expanding rubber bushes: at rear by rubber bands: tank rests on foam rubber pads.

#### **Oil Tank.**

4.5 pint pressed steel tank bolted up to rear sub-frame.

#### **Air Filter.**

(Standard fitting) Flat 'works' pattern mounted on offside, and up to rear sub-frame. Concertina shaped felt and gauze element.

#### **Handlebars.**

Fully adjustable with adjustable ball ended controls

#### **Dimensions.**

Seat height 32": wheelbase 55.25": ground clearance 6½": handlebar width 32": weight 345 lb.

#### **Colour Finish.**

All black with Cherry Red tank and all usual parts chrome plated.

