Appendix 1.17 Model profile

T20SC & T20SR Scrambler Comp. & Road - 1962 to 1965


Bore & Stroke: 63mm (2.480in) x 64mm (2.526in).
Compression ratio: 9.5:1 (but the USA west coast models had a 7.1:1 piston for 1965).
Camshaft: Sports 'R' type. Valve clearances - Inlet 0.002in. Exhaust 0.004in, (cold).
Ignition type: Lucas Energy Transfer. RM 19 alternator. (The 1965 west coast T20SR - RM18 AC/DC alternator and battery).
Ignition timing: 20° BTDC. (+ 10° fully advanced). Rotor on keyway no. 1 (3° clockwise).
Points gap: 0.014in - 0.016in.
Spark plug: Champion LT. Cap 0.020in for ET models, 0.025in for battery models.
Carburettor: Monobloc 376/2727. (Or 376/314 for T20SR USA west coast 1963). Both are 1/2in choke size.

Wheel & Tyre sizes: T20SC
Front: 3.00 x 19 on WM4 rim, except - T20SC - 4.00 x 19 on WM3 rim, 1964/5.
Rear: 3.50 x 18 on WM2 rim, except - T20SC - 4.00 x 18 on WM3 rim, 1964/5.
Tyres: Dunlop. T20SC used Trials Universl. T20SR used K70 Gold Seal.

Sprocket & Chains: T20SC
Engine 19T.
Gearbox 17T.
Rear wheel 54T.
Primary chain 1/4in x 1/4in x 52 links, duplex.
T20SR
Front wheel 48T.
Rear wheel 48T.
Primary chain 1/4in x 1/4in x 52 links, duplex.

Capacities: T20SC
Petrol. 2.1/2 gallons (11.92 litres). T15 'Teddybear' shape tank.
OIL.
2/3 pint (+ 1.56 litres). Froth cover on tank.
Gearbox.
1/2 pint (+ 200cc).
Primary Chain.
1/2 pint (+ 200cc).
Front fork.
1/2 pint (+ 15cc) 1962/4.
1/2 pint (+ 200cc) 1965.

Exhaust system: T20SC - High level with silencer or extension pipe. T20SR - Low level with silencer.

Colours:
1962 - Both models - First colour - Burgundy.
1963 - Both models - First colour - Plummet Blue.
1964 - Both models - First colour - Kensington Green/Hi Fi Scarlet.
1965 - T20SC - First colour - Pacific Blue.
1965 - T20SC - Hunting Yellow and black.

Petrol Tank -
Top half - First colour or Hunting Yellow in 1965.
Lower half - Second colour or Hunting Yellow in 1965.

Mudguards - Second colour, with first colour centre stripe lined in gold.
Polished alloy, T20SC for 1964/5.

Oil Tank & Toolbox - Black.

Front Brakes - 1962/4 -
T20SC - Black. T20SR - Silver Sheen.
T20SC - T20SR - Silver Sheen on both models.

Tank Badges - Black lettering on gold & chrome backing.

Other painted parts - Black.

Twinseats:
Two level, T20SR - grey top cover with black sides and grey lower styling band. T20SC - all black.

Notes:
These models were for the sporing rider. The T20SR was a 'race' machine with all the high performance parts - high compression piston, sports cam, CR or ECR gears, sports valve springs, large inlet valve, a large bore Monobloc carburettor, low level exhaust and road tyres. The T20SC was much the same but more suited for cross-country, on/off road use. The T20SC had a high level exhaust, SR or WR gears and trials tyres.
Both models had a crankcase undershield, heavy weight front forks (externally sprung for 1965), high rise handlebars with bolt-on levers, Energy Transfer ignition with detachable leads and a speedometer. For 1965 only there was a heavily cranked, pivoting kickstart lever. The T20SR also had the option of a taillight and neither model had a centre stand. For 1962 both models came with a distributor motor, but from 1963 the side panel engine was used. All were fitted with the 'Oval' head and barrel. The rear light unit was a Lucas L364 except for the east coast USA models in 1965, which used the L679 type. Adjustable ear suspension units were fitted for 1965. These machines were sold in export markets only and almost entirely to the east coast of the USA, except for 1965 when about two-thirds of the production went west coast dealers. A few were sold to other countries (but not the UK). The T20SC was the east coast equivalent of the west coast T20SS and it later became the basis for the T20SM Mountain Cub.

Number of machines built - 1962 - no. 81890 to no. 88366
1963 - no. 88347 to no. 94599
1964 - no. 94600 to no. 99732
1965 - no. 99733 to no. 100013 & no. 101 on
Total -

Parts List No.8 and Supplement cover 1962/3 models. No.9 deals with 1964 models. No.10 is for 1965. However, the T20SR and SC have only a passing mention in any of these publications.

Analysis of sales:

<table>
<thead>
<tr>
<th>Year</th>
<th>T20SC</th>
<th>T20SR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962</td>
<td>USA = 100%</td>
<td>USA = 100%</td>
</tr>
<tr>
<td>1963</td>
<td>USA = 100%</td>
<td>USA = 100%</td>
</tr>
<tr>
<td>1964</td>
<td>USA = 96.1%</td>
<td>USA = 94.7%</td>
</tr>
<tr>
<td>1965</td>
<td>USA = 100%</td>
<td>USA = 99.3%</td>
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