

--- Test Details ---

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DOUGLAS L29/2 Army serial number C20518

Report no. 293(a) date: 8.12.31

| Milages:   | Road   | Cross-country | Total  |
|------------|--------|---------------|--------|
| Motorcycle | 10,999 | 3,865         | 14,864 |
| Cylinders  | 2,009  | 1,801         | 3,810  |
| Pistons    | 472    | 153           | 625    |

Cylinders and pistons replaced by Douglas in April 1931.

Pistons, valves and bushes replaced by M.W.E.E. in October 1931.

Report no. 293(g)

| Milages | Road   | Cross-country | Total  |
|---------|--------|---------------|--------|
|         | 11,538 | 3,891         | 15,429 |

Now on third set of cylinders and pistons (!) - not durable enough.

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MATCHLESS SILVER ARROW

Report no. 293(k) date: 26.7.33

| Milages | Road  | Cross-country | Total |
|---------|-------|---------------|-------|
|         | 4,244 | 2,543         | 6,787 |

Destroyed in a fire.

Gave a good road and cross country performance ~~performance~~, but not as good as 500cc B.S.A., with a good fuel consumption. Its construction was very light and poor materials were used. It is not sufficiently robust for service use.

The engine needed frequent overhauls;-

- 915 miles Crankshaft end float shimmed and new magneto coupling fitted.
- 1,072 New little end bushes and pins fitted.
- 1,656 New pistons and rings. Crankshaft and camshaft end floats taken up.
- 3,032 New cylinder block, pistons with rings, valve springs, big end assembly with rods, bushes and gudgeon pins, tappet heads and magneto drive coupling.
- 4,025 Camshaft float taken up.
- 5,007 New piston rings. Air filter gauze replaced.
- 5,047 Pistons expanded to take up slap.
- 6,011 New pistons and rings.

Oil system failed frequently due to non-return of oil; system cleaned five times.

Silencer; baffle plates loose by 4,025 miles.

Clutch; impossible to obtain satisfactory adjustment.

Gearbox overhauled at 2132 miles, broken pinion replaced at

find neutral.

New primary chain at 5007 miles. Rear sprocket worn by 2385 miles. Rear chain broke and repaired at 1969 miles.

Throttle sticking at 991 miles due to ingress of mud.

Brakes were ineffective at 1072. - rear drum stiffened and linings replaced. Replaced again at 5007 miles and roughened up on several occasions. Larger brake pedal fitted at 2297 miles.

Rear wheel buckled at 1372 miles - repaired.

Frame was distorted by 1372 miles. Front forks overhauled completely at 5007 miles.

Electrical system suffered frequent damage. Speedometer failed at 2840 miles.

General condition at 6744 miles; Engine ran very badly with no power, gearbox - as above, electrical wiring frayed and insulation perished.

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B.S.A. 500cc V-twin

1. Serial number Ex146 (B.S.A.'s property)

Report no, 293(j)

| Milages | Road  | Cross-country | Total  |
|---------|-------|---------------|--------|
|         | 7,032 | 3,214         | 10,246 |

Much the most reliable and easy to use of the machines tested (Matchless, Douglas & B.S.A.). However there was considerable wear on pistons and cylinders.

Recommended for service use.

2. *Army* Serial numbers C33278 & C33290

Report no. 293(m) date: 6.12.33

| Milages | Road | Cross-country | Total |
|---------|------|---------------|-------|
| C33278  |      |               | 3,058 |
| C33290  |      |               | 4,065 |

Heavy big end and front cylinder wear, probably due to lubrication failure. This had happened before.

3. *Army* Serial number C34594

Report no. B18/5 date: 24.4.35

| Milages | Road  | Cross-country | Total |
|---------|-------|---------------|-------|
|         | 3,338 | 2,331         | 5,669 |

Excessive wear in cylinders, back - 0.007" front - 0.010", and gudgeon pin, 0.002" to 0.005". Front exhaust valve seat badly pitted. Small failure in big end case hardening. All but the valve seat pitting probably due to leakage past oil pump.

Oil pump and magneto parts taken by B.S.A.