"PRACTICAL MOTORIST" DATA SHEETS No. 6. - MORRIS "EIGHT" SERIES I

[Others in the series are: 1937 Austin "Seven" (Sept. 18th 1937); Standard "Flying Ten" (Oct. 2nd, 1937); 1937 Singer "Bantam" (Oct. 9th, 1937); 1937 Hillman "Minx" (Nov. 6th, 1937); 1937 Riley "Nine" (Jan. 22nd, 1938)]

ENGINE. – Four cylinder; bore, 57mm.; stroke, 90mm.; capacity. 918cc.; R.A.C. rating, 8 h.p.; 23.5 b.h.p. at 3,900 r.p.m.; engine lubrication by gear pump, skew-driven camshaft; side valves; three-bearing crankshaft; coil ignition; electric pump petrol feed from $5\frac{1}{2}$ gallon rear tank; compression ratio. 5.8 to 1.

Capacity of sump: ½ gallon Water capacity: 14¾ pints

Tappet clearances: .019in. when hot; .020in when cold.

Contact-breaker gap: .010 in. to .012in.

Recommended sparking plugs: 14mm. Champion L10.

Sparking plug gap: .022in. – .025in. Oil pressure: 60lb. when engine warm.

GEARBOX. – Three speed synchromesh. Ratios: top, 5.375 to 1; second 9.729 to 1; first, 17.13 to 1; reverse 22.84 to 1. Capacity: ¾ pint.

TRANSMISSION. – Dry, single plate clutch. Three quarter floating rear axle. Minimum clearance between clutch withdrawal lever plate and face of thrust bearing is 1/16in. This gives ½ in. free movement at clutch pedal. An adjustment is provided at base of clutch pedal. Clutch thrust bearing requires no lubrication.

Capacity of rear axle: 14 pints.

WHEELS. – Wire, 2.50 W.B. \times 17. Tyre sizes, 4.50 \times 17. Tyre pressures: 28 lb.; two seater, 24 lb. Toe-in, 1/8in.

ELECTRICAL. – Lucas 6-volt, 51 ampere-hour battery. Equipment includes: dynamo, cut-out, starter distributor and coil, petrol gauge, direction indicators, horn, screen wiper, fuses and battery. Fuse box contains two fuses, a 5 amp. Fuse in the dynamo field circuit, and one 25 amp. in the auxiliaries circuit. Bulb types: headlamps, Lucas 624DV.; side, tail and dash, B.A.S. No. 85; ignition warning lamp No. 252 M.E.S.; trafficators, T.63F (festoon).

TIMING. – Set No. 1 piston to T.D.C. or firing stroke (both valves closed). Small hole in rear flange of fan belt pulley registers with arrow on timing case cover, directly over crankshaft centre. Slacken clamp bolt of plate locating distributor to cylinder head, and also bolt fastening clamp plate to head. Set clamp plate so that mark on its quadrant coincides with the mark "O" on the head. Tighten the bolt. Electrode of the rotating arm should then be pointing toward the stud for the lead to No.1 plug, on the distributor cover. Set contact points. Then move distributor in anti-clockwise direction until .002in. feeler can be inserted between contact points. Tighten up the clamp plate bolt.

RECOMMENDED LUBRICANTS. – Engine: Morrisol "Sirrom." Gearbox: Morrisol "Sirrom" Synchromesh Oil. Rear axle, steering and chassis: Morrisol "Sirrom" Transmission Oil. Also recommended: Suitable grades and types of Shell, Adcol, Mobiloil, Castrol, Filtrate, Motorine, Sternol and Essolube.

REGULAR ATTENTION. – *Every 250 miles*: Check engine-oil level, and water in radiator. *Every 500 miles*: Check acid level in battery. Oil gun to steering gearbox, shackles, front axle knuckles, steering track link and drag link, brake pedal. *Every 1,000 miles*: Drain and refill sump, Check oil level in gearbox and rear axle. Check level in Lockheed brake supply tank. Thin film of vaseline to distributor rotating cam. Few drops of thin oil to dynamo spring oilers and distributor oiler. Remove wheel covers, and apply grease gun to nipples. Oil can to door-lock bolts and hinges. Thin smear of oil on sliding roof channels and seat slide runners. *Every 3,000 miles*: Withdraw distributor rotating arm and two drops of thin machine oil in aperature. Vaseline on distributor cam. *Every 5,000 miles*: Clean carburettor and petrol-pump filters. Drain and refill gearbox and rear axle. Tighten door hinge fixing screws. Check sparking plug gap. Treat road springs with penetrating oil. *Every 10,000*: Examine valves and valve seatings. Remove carbon from pistons and head. Remove sump, clean and refill. Check fluid level in shock absorbers, and replenish with Armstrong fluid if necessary.

GENERAL. – Wheel base, 7ft. 6in.; track 3ft. 9in.; width, 4ft, 61/2 in.; length, 11ft. 9in.; ground clearance, 67/8 in.; turning circle, 37ft.