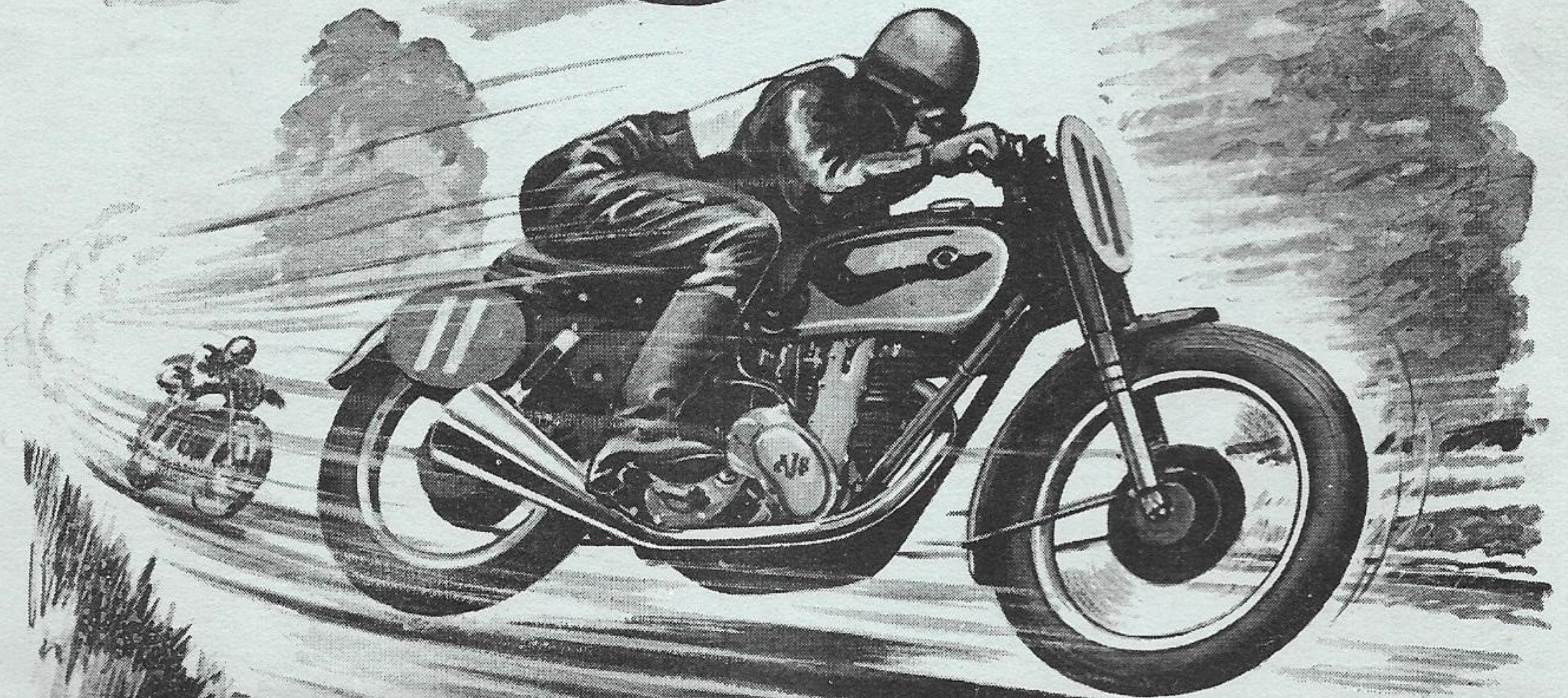


1953 A J S 7R

Instructions

AJS



*The Race-bred
Motor Cycle*

1953M O D E L 7RINSTRUCTIONS AND TECHNICAL DATA

The 1953 Model 7R has been designed for use in International Road Races and conforms to the current F.I.M. Regulations in every respect:

ENGINE

Single cylinder with chain-driven O.H.C.
 Bore 74 m.m. Stroke 81 m.m. Capacity 349 c.c.
 Standard compression ratio 10:1.

VALVE TIMING

Inlet opens 49° B.T.D.C. Closes 71° A.B.D.C.
 Exhaust opens 70° B.B.D.S. Closes 47° A.T.D.C.

VALVE ROCKER CLEARANCE

For Timing and Racing - Inlet .012" Exhaust .016"

IGNITION TIMING

40° B.T.D.C. fully advanced.

CARBURETTOR

Type G.P. Choke 1-5/32" Throttle Slide 7.
 Main Jet 230. Needle Jet 109. (Set at Sea level in dry atmosphere)

NOTE: Where a jet of different size is fitted, tests have shown that it is best suited to the particular engine for maximum power output.

FUEL CONSUMPTION

35 to 40 m.p.h. under I.O.M. conditions.

SPARKING PLUGS

K.L.G. Type FE.300/4.

OIL

Castor base racing oil.

MAGNETO

Lucas Type N.T.T.I.

ENGINE SPEED

Maximum power is developed at 7,200 - 7,400 R.P.M.
 Under no circumstances should 7,800 R.P.M. be exceeded.

CHAIN LUBRICATION

Oil is contained in the frame top tube which is filled through a small nozzle located at the steering head on the L.H. side. Lubrication is controlled by a tap on the R.H. side adjacent to the seat nose and then via a Y piece and a 65 Jet to the primary chain and a 35 Jet to the rear chain. Mineral oil of S.A.E.30 grade is recommended. Under very hot climatic conditions smaller jets may prove necessary and under cold conditions an increase in size may prove desirable. Care must be exercised to ensure that the jets are not interchanged.

FRAME

The welded duplex cradle frame and patented Teledraulic suspension system has been specially designed and developed for racing and attention to the forks and rear suspension units as follows will provide the best results:

continued ..

MODEL 7R:

FRAME - Continued:

Forks 200 c.c. (7 fluid ozs) in each leg.
Rear Units .. 90 c.c. (3.17 fluid ozs) per unit.

GEAR BOX LUBRICATION

Approximately 1 pint. S.A.E.50 Mineral Oil.

TYRE PRESSURES

Front 19" x 2.75" - 22 lbs.
Rear 19" x 3.25" - 21 lbs.

GEAR BOX INTERNAL RATIOS

1:1, 1.09:1, 1.35:1, and 1.87:1.

STANDARD SPROCKETS

Engine 22, Clutch 42, Gear Box 21, Rear Wheel 55.

STANDARD GEAR RATIOS

Top 5:1. Third 5.45:1. Second 6.75:1. First 9.35:1.

TOP GEAR R.P.M. AT 100 M.P.H.

6,620 R.P.M.

WEIGHT (Dry)

294-lbs. 134 kilos.

TANK CAPACITIES

Petrol 5.3 galls. 24 Litres.
Oil ... 1 gallon . 4.5 Litres.

BRAKES

The front brake is of the double leading shoe type and the rear is operated by a conventional single cam. The front brake link rods should be adjusted only after re-lining.

Important:

The leading ends of the brake liners must be kept well 'backed off' and this relief must be maintained at all times. The rider must bear in mind that as the liners wear, so the relief becomes less.

The A.J.S. Racing type brakes are exceedingly powerful and light in operation and care should be taken before employing the full braking which is available. The rider is strongly advised to learn the 'feel' of the brakes before taking part in serious racing.

June, 1953.

ALTERNATIVE SPROCKETS AND GEAR RATIOS

MODEL 7R

The following is a list of the gear ratios that can be obtained with the alternative Sprockets that are available:

<u>ENGINE SPROCKET</u>	<u>REAR SPROCKET</u>	<u>GEAR RATIO</u>	<u>R.P.M. AT 100 M.P.H.</u>
20-T	54-T	5.4	7,150
20-T	55-T	5.5	7,280
20-T	56-T	5.6	7,420
20-T	57-T	5.7	7,550
20-T	58-T	5.8	7,680
21-T	54-T	5.14	6,810
21-T	55-T	5.24	6,940
21-T	56-T	5.33	7,060
21-T	57-T	5.43	7,190
21-T	58-T	5.52	7,310
22-T	54-T	4.9	6,500
22-T	55-T	5.0	6,620
22-T	56-T	5.09	6,740
22-T	57-T	5.18	6,860
22-T	58-T	5.27	6,980