M. MODEL

'73MODEL TR500 II

SPECIFICATIONS and MAINTENANCE

HEADS 25lb

18lb

25
12
50
25

18
12
36
18

300 inch/lb

216 " "

SUZUKI MOTOR CO., LTD.

PRINTED IN JAPAN

SPECIFICATION

Dimensions And Weight	
Overall length	2,001 mm (78.8 in)
Overall width	631 mm (24.8 in)
Overall height	1,189 mm (46.8 in)
Wheelbase	1,373 mm (54.1 in)
Road clearance	178 mm (7.0 in)
Tyres, Front	3.00 or 3.25 - 18
Rear	3.25 or 3.50 - 18
Dry weight	138 kg (304 lb)
Engine	
Maximum horse power	70 ps at 8,000 rpm
Maximum torque	6.5 kg-m (47.0 ft-lb) at 7,500 rpm
Engine Type	2 cycle, water cooled gasoline engine
Cylinder	sleeved aluminum twin
Bore x Stroke	70 x 64 mm (2.76 x 2.52 in)
Piston displacement	492 cc (30.0 cu in)
Corrected compression ratio	6.4
Transmission And Clutch	
Transmission	6 speed constant-mesh
Gear shifting	left foot lever operated return change
Clutch	dry multi-disc type
Primary reduction ratio	1.8 (63/35)
Final reduction ratio	2.27 (34/15)
Gear ratio low	2.42 (29/12)
2nd	1.71 (29/17)
3rd	1.35 (23/17)
4th	1.16 (22/19)
5th	1.04 (24/23)
6th	0.96 (23/24)
Overall reduction ratio	3.91 (at 6 speed)
Fuel	
Carburetor	VM36SC
Fuel tank capacity	31 ltr (8.2/6.9US/Imp gal)
Lubrication	
Engine	mixed fuel 20 : 1
Gear box	oil bath 1,200 cc (2.5/2.1US/Imp pt)
Ignition	
Ignition system	P.E.I.
Ignition timing	23° at 8,000 rpm B.T.D.C.
Spark plug	NGK B-10EP or B-10.5EP
Frame And Suspension	
Frame	tubular
Brake, Front	double disc brake
Rear	single disc brake
Suspension Maximum stroke	
Front	125 mm (4.9 in)
Rear	70 mm (2.8 in)
Drive Chain	DAIDO 530TR (5/8" x 3/8")

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MAINTENANCE

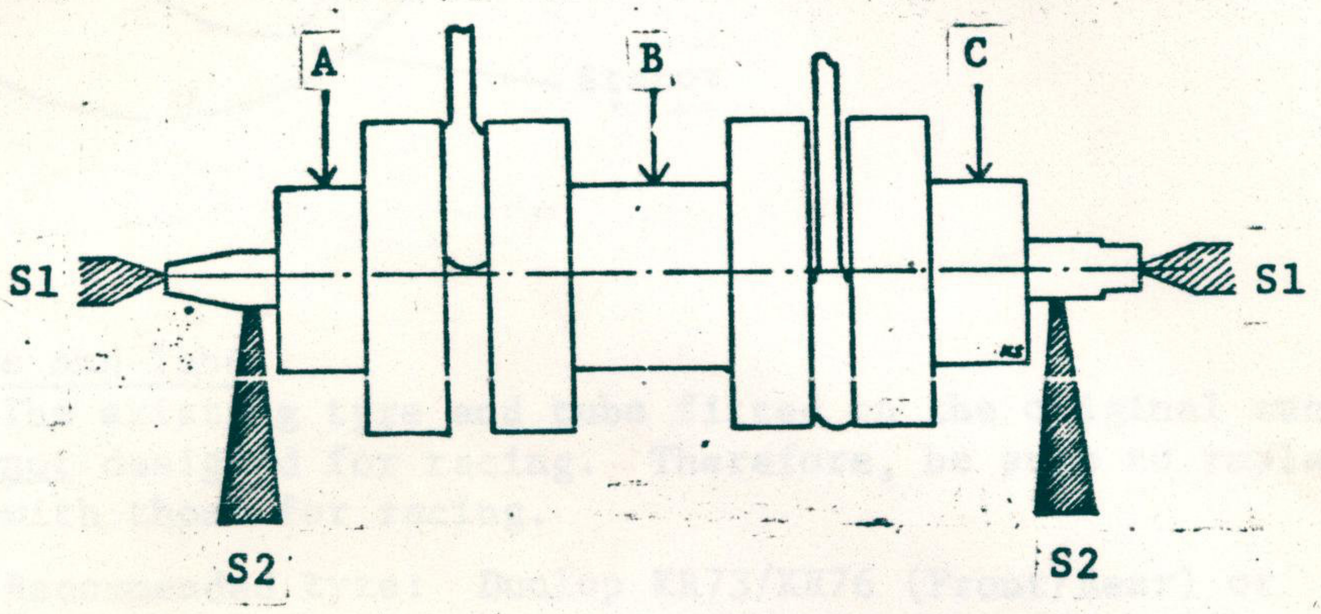
Cylinder Dimension

Exhaust Port	:	34 mm (1.34 in) from cylinder top surface
Transfer Port	:	49 mm (1.93 in) from cylinder top surface
Intake Port	:	108.5 mm (4.27 in) from cylinder top surface
Bore	:	70.20 to 70.35 mm (2.764 to 2.770 in)

Breaking-in For Cylinder And Piston

The engine has been run-in for half an hour at factory. In case of installing the new replacement cylinder or piston, perform the breaking-in for half an hour at 7,000 rpm and raise it afterward to the maximum (8,000 to 8,250 rpm).

Radial Runout Of Crankshaft



In overhauling the engine, check the crankshaft for radial runout at A, B and C points holding it at S1 or S2 points. The crankshaft must be maintained so that the runout is below 0.05 mm.

Crankcase Seal

For perfect sealing of the crank chamber, the water jacket and the gear box, use "Suzuki Bond No. 4 (99000-31010) when assembling the engine.

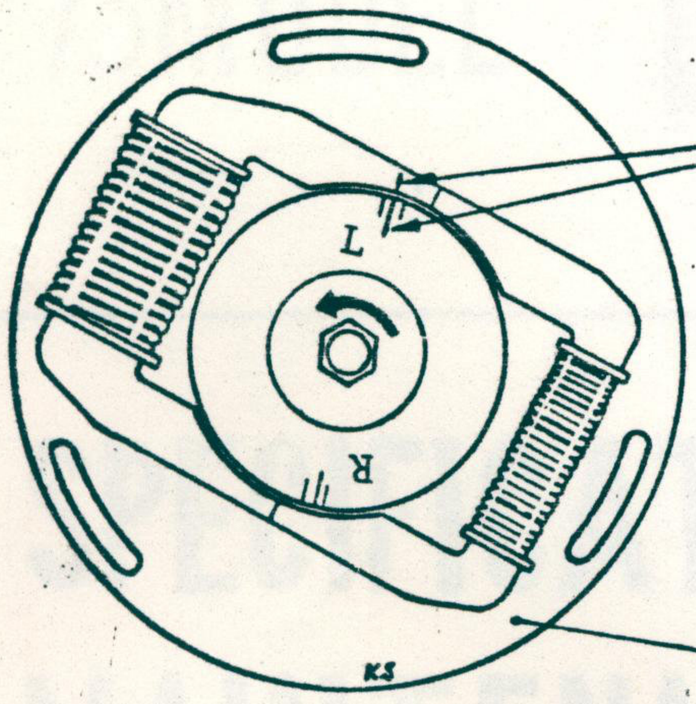
Fuel

Fuel oil mixture ratio	:	20 to 1
Recommended oil	:	Shell Super M or Castrol R-30

Transmission Oil

Shell Super M
Castrol R-30 or R-40

Ignition Timing



Set ignition timing by changing the position of the stator so that the timing marks are in line as shown in the drawing when the piston is at 3.1 mm (23°) before top dead center.

Tyre And Tube

The existing tyre and tube fitted on the original machine are not designed for racing. Therefore, be sure to replace them with those for racing.

Recommended tyre: Dunlop KR73/KR76 (Front/Rear) or
Dunlop KR83/KR84 (Front/Rear)

Size ---------- Front 3.00 - 18 or
3.25 - 18
Rear 3.25 - 18 or
3.50 - 18

Cooling Water

It is preferable to use the mixture of coolant and water.

Coolant : Golden Cruiser 1200 (99000-24120)
Water : Distilled water
Mixture Ratio : 70 (Water) to 1 (Coolant)

After filling the system with water, start engine and let it run till the water level lowers and becomes stable. Then, fill it up again.