

'75MODEL TR500

SPECIFICATIONS and
MAINTENANCE



SUZUKI MOTOR CO., LTD.

SPECIFICATION

Dimensions and Weight

Overall length	1,999 mm (78.7 in)
Overall width	553 mm (21.8 in)
Overall height	1,192 mm (46.9 in)
Wheelbase	1,373 mm (54.1 in)
Road clearance	195 mm (7.7 in)
Tyres, Front	3.25 - 18
Rear	3.50/5.20 - 18
Dry weight	135 kg (297 lb)

Engine

Maximum horse power	Over 75 ps at 9,000 rpm
Maximum torque	6.05 kg-m (43.7 ft-lb) at 8,750 rpm
Engine type	2 cycle, water cooled gasoline engine
Cylinder	Twin alloy cyl. SCEM plating
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 mutli-disc type
Primary reduction ratio	1.882 (64/34)
Final reduction ratio	2.333 (35/15)
Gear ratio low	2.417 (29/12)
2nd	1.706 (29/17)
3rd	1.368 (26/19)
4th	1.211 (23/19)
5th	1.105 (21/19)
6th	1.043 (24/23)
Overall reduction ratio	4.579 (at 6 speed)

Fuel

Carburetor	VM38SC
Fuel tank capacity	24 ltr (6.3/5.3 US/Imp gal)

Lubrication

Engine	Mixed fuel 20 : 1
Gear box	Oil bath 1,200 cc (2.5/2.1 US/Imp pt)

Ignition

Ignition system	C.D.I.
Ignition timing	20° 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	135 mm (5.3 in) (on rear axle)

Drive Chain

DAIDO 530 TR
(5/8" x 3/8")

MAINTENANCE

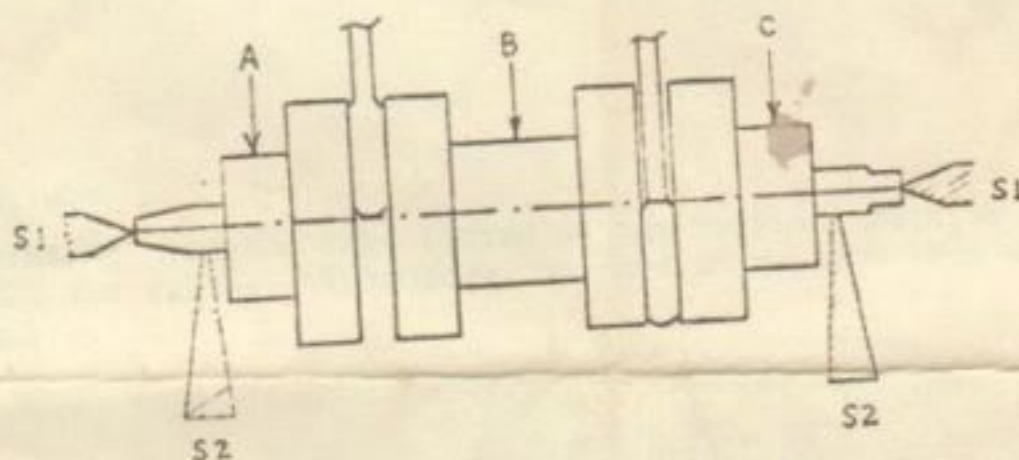
Cylinder Dimension

Exhaust Port	:	32 mm (1.26 in) from cylinder top surface
Transfer Port	:	49 mm (1.93 in) from cylinder top surface
3rd Transfer Port	:	50 mm (1.97 in) from cylinder top surface
Intake Port	:	110 mm (4.33 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 (8,750 to 9,000 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.

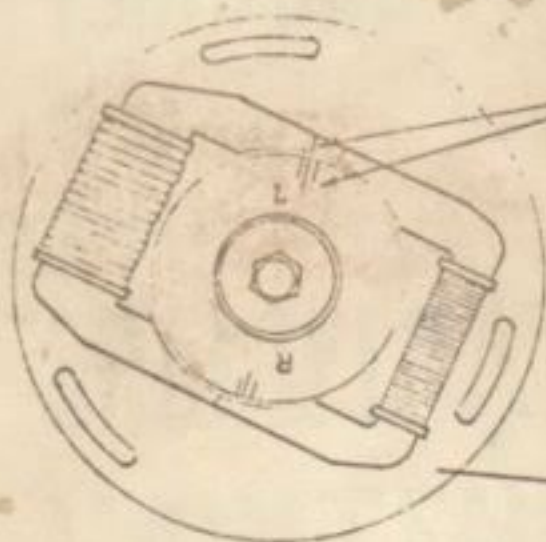
Fuel

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



Timing
marks

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 2.3 mm (20°) before top dead center.

Stator

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 KR84/KR97 or 105 (Front/Rear)

Size Front 3.25 - 18
Rear 3.50/5.25 - 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.