

'75 MODEL TR 500

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 multi-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	125 mm (4.9 in)
Front	135 mm (5.3 in) (on rear axle)
Rear	
Drive Chain	
	DAIDO 530 TR
	(5/8" x 3/8")

## MAINTENANCE

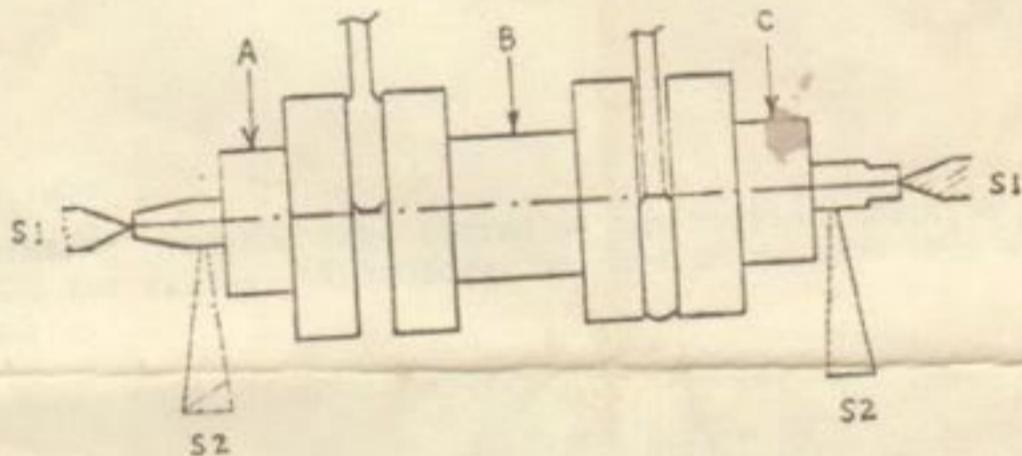
### Cylinder Dimension

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.

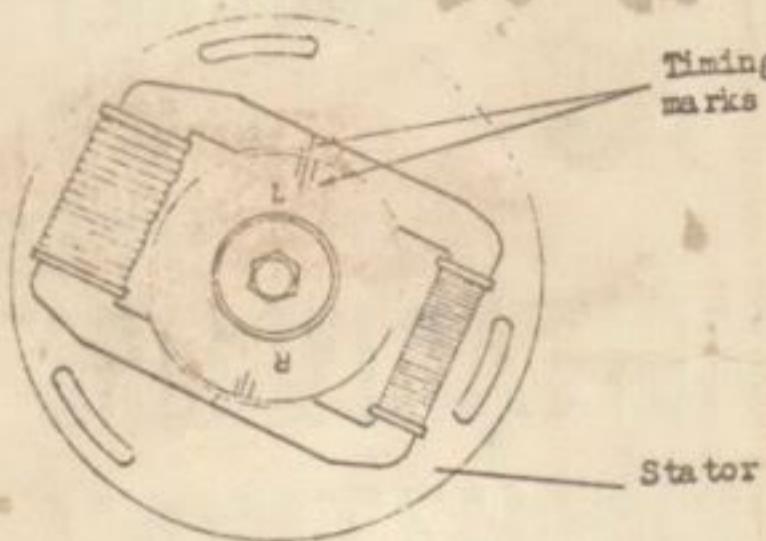
### Fuel

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

Stator

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.

## 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.