TWO STROKE

SUZUKI
TWO STROKE
Service Bulletin

Bulletin No.: SPECS-17J
Date: 6/5/81
Read and Initial

Manager _____
Parts Mgr. _____
Service Mgr. _____
Mechanics _____

MODEL: RM250X

SUBJECT: SPECIFICATIONS

ITEM	STANDARD	LIMIT
VALVE SPECS		
Valve Lift	IN:	
	EX:	
Tappet Clearance or Valve Clearance	IN:	
	EX:	
Valve Guide--Valve Stem Clearance	IN:	
	EX:	
Valve Guide I.D. (IN/EX)		
Valve Stem O.D.		
Valve Stem Deflection (IN & EX)		
Valve Head Thickness (IN & EX)		
Valve Seat Width (IN/EX)		
Valve Head Radial Runout (IN & EX)		
Valve Spring Free Length	INN:	
	OUT:	
Valve Spring Tension	INN:	
	OUT:	
Rocker Arm I.D. (IN & EX)		
Rocker Arm Shaft O.D. (IN & EX)		
CAMSHAFT		
Cam Height	IN:	
	EX:	
Camshaft--Journal Clearance (IN & EX)		
Camshaft Journal I.D. (IN & EX)		
Camshaft Journal O.D. (IN & EX)		
Camshaft Deflection (IN & EX)		
Cam Chain 20 Pitch Length		
PISTON/RING/CYLINDER		
Compression Pressure		
Max. Difference Between Cylinders		
Piston--Cylinder Clearance	0.060-0.070mm	0.120mm
Cylinder Bore	67.000-67.015mm	67.070mm
Piston Dia./Measuring Point	66.935-66.950mm @ 23mm	66.880mm
Cylinder Warpage		0.05
Piston ring free end gap	1st approx. R 7.5mm N 6.5mm	5.2mm 6.0mm
Piston ring End Gap	0.20-0.40mm	0.85mm
Piston ring--Grove Clearance	0.010-0.050mm	---
Piston Pin Bore I.D.	18.002-18.010mm	18.030mm
Piston Pin O.D.	17.995-18.000mm	17.980mm
CRANKSHAFT		
Con-rod Small End Hole	22.003-22.011mm	22.040mm
Big End Side Clearance		
Con-rod Big End Wear		
Crankshaft Runout	---	0.05mm
Crankshaft Web to Web Width	58.0 ± 0.1mm	---
OIL PUMP		
Oil Pressure		
Tip Clearance		
Outer Rotor Clearance		
Side Clearance		
Oil Pump Reduction Ratio		
CCI Pump Discharge Rate		
CLUTCH		
Drive Plate Thickness	2.9-3.1mm	2.6mm
Drive Plate Warpage		
Driven Plate Thickness	2.0 ± 0.1mm	---
Driven Plate Warpage	---	0.1mm
Drive Plate Claw Width	15.8 16.0mm	15.0 mm
Clutch Spring Free Length	---	38.6mm
Pri. Drive--Driven Gear Backlash		
TRANSMISSION		
Primary Reduction	2.727 (60/22)	
Final Reduction	3.571 (50/14)	
Gear Ratios, Low/2nd	2.076(27/13), 1.750(28/16)	
3rd/4th	1.352(23/17), 1.105(21/19)	
5th/Top	0.913 (21/23)	
Gear Backlash 1st/2nd		
3rd/4th		
5th/6th		
Shift Fork--Grove Clearance	#1 0.40-0.60mm	0.80mm
	#2,3 0.20-0.40mm	0.60mm
Shift Fork Groove Width	#1 4.45-4.55mm	
	#2,3 4.25-4.35mm	
Shift Fork Thickness	#1,2,3 3.95-4.05mm	---
Drive Chain Size	DID520TR, or Takasago RK520SM	
21 Pin Length	---	318mm

ITEM	STANDARD	LIMIT
CARBURETOR		
Idle RPM		
Carburetor Type	Mikuni VM38SS	
I.D. No.	14200	
Bore Size	38mm	
Float Height	10.7 ± 0.5mm	
Fuel Level		
Air Screw	1½	
Pilot Screw		
Pilot Air Jet		
Pilot Jet	#50	
Cut Away	2.0	
Jet Needle	6FJ37-3	
Needle Jet	R-8	
Secondary Air Jet		
Pilot Outlet	0.6	
Main Jet	#320	
ELECTRICAL		
Ignition	SUZUKI PEI	
Ignition Timing	8° + 2° BTDC @ 8,500rpm	
Firing Order		
Spark Plug	NKG B9EGV/Champion N-2G	
Spark Plug Gap	0.5-0.6mm	
Contact Point Gap		
Dwell Angle		
Spark Performance	over 8mm	
Condensor Capacity		
Ignition Coil Resistance (Pri.)	approx B-W/B1 0-1 ohm	
Ignition Coil Resistance (Sec.)	approx Plug Cap - B 12-14 ohms	
Pri. Ignition Coil Resistance		
Magneto Coil Resistance	B-B/R approx 350-450 ohms B/R-B/W approx 25-35 ohms	
Exciter Coil Resistance		
Pulser Coil Resistance		
Charging Coil Resistance		
Lighting Coil Output		
Battery		
Specific Gravity		
Regulated Amperage		
Regulated Voltage		
Fuse Capacity		

ITEM	STANDARD	LIMIT
Headlight (Low/High)		
Instrument Bulbs (Speedo/ Tach/Hi Beam/Turn Signal Oil Pressure		
Tail light/Stop light		
Turn Signal Bulbs		
CHASSIS		
Axle Runout (Front/Rear)	---	0.25mm
Brake Drum I.D.	Front: --- Rear: ---	150.7mm 120.7mm
Brake Lining Thickness	Front: --- Rear: ---	1.5mm 1.5mm
Brake Disc Thickness (Front & Rear)		
Master Cylinder Cylinder Bore	Front: Rear:	
Master Cylinder Piston Diameter	Front: Rear:	
Brake Caliper Cylinder Bore	Front: Rear:	
Brake Caliper Piston Dia.	Front: Rear:	
Wheel Rim Runout (Radial & Axial)		2.0mm
Tire Size	Front: 3.00-21 4PR Rear: 5.10-18 4PR	--- ---
Tire Tread Depth	Front: --- Rear: ---	4.0mm 4.0mm
Tire Pressure	FRONT: SOLO / DUAL; REAR: SOLO / DUAL	
Normal Riding	10-16psi	10-16psi
Continuous High Speed Riding		
Fork Spring Free Length	---	544mm
Swinging Arm Pivot Shaft Runout	---	0.3mm
FUEL & OILS		
Fuel Type	Premium	
Engine Oil Type	Suzuki CCI Super 2	
Engine Oil Capacity		
Transmission Oil Type/Cap	SAE 20W-40/chg 800ml/ovhl 850ml	
Front Fork Air Pressure		
Fork Oil Type/Cap./Level	SAE 5W-20 or ATF 430ml/167mm	
Rear Shock Air Pressure	142 psi	
Rear Shock Spring Pre-Set Length	280mm	

TWO STROKE

SUZUKI
TWO STROKE
Service Bulletin

Bulletin No.: SPECS-17K
Date: 6/5/81
Read and Initial

Manager _____
Parts Mgr. _____
Service Mgr. _____
Mechanics _____

MODEL: RM465X

SUBJECT: SPECIFICATIONS

ITEM	STANDARD	LIMIT
CARBURETOR		
Idle RPM		
Carburetor Type	Mikuni VM38SS	
I.D. No.	14210	
Bore Size	38mm	
Float Height	10.7 ± 0.5	
Fuel Level		
Air Screw	1 1/2	
Pilot Screw		
Pilot Air Jet		
Pilot Jet	#50	
Cut Away	2.0	
Jet Needle	6FJ37-3	
Needle Jet	R-8	
Secondary Air Jet		
Pilot Outlet	0.6	
Main Jet	#310	
ELECTRICAL		
Ignition	SUZUKI "PEI"	
Ignition Timing	15° + 2° BTDC @ 6,000rpm	
Firing Order		
Spark Plug	NGK B8EGV	
Spark Plug Gap	0.5-0.6mm	
Contact Point Gap		
Dwell Angle		
Spark Performance	over 8mm	
Condensor Capacity		
Ignition Coil Resistance (Pri.)	approx W/B1-B/W 0-1 ohm	
Ignition Coil Resistance (Sec.)	approx Plug Cap-B/W or W/B1: 10-11K ohms	
Pri. Ignition Coil Resistance		
Magneto Coil Resistance	R/W-B/W approx 230-350 ohms	
	B/R-B/W approx 370-560 ohms	
	R/W-B/R approx 140-210 ohms	
Pulser Coil Resistance		
Charging Coil Resistance		
Lighting Coil Output		
Battery		
Specific Gravity		
Regulated Amperage		
Regulated Voltage		
Fuse Capacity		

ITEM	STANDARD	LIMIT
Headlight (Low/High)		
Instrument Bulbs (Speedo/Tach/Hi Beam/Turn Signal Oil Pressure		
Tail light/Stop light		
Turn Signal Bulbs		
CHASSIS		
Axle Runout (Front/Rear)		0.25mm
Brake Drum I.D.	Front:	150.7mm
	Rear:	130.7mm
Brake Lining Thickness	Front:	1.5mm
	Rear:	1.5mm
Brake Disc Thickness (Front & Rear)		
Master Cylinder Cylinder Bore	Front:	
	Rear:	
Master Cylinder Piston Diameter	Front:	
	Rear:	
Brake Caliper Cylinder Bore	Front:	
	Rear:	
Brake Caliper Piston Dia.	Front:	
	Rear:	
Wheel Rim Runout (Radial & Axial)		2.0mm
Tire Size	Front: 3.00-21 4PR	--
	Rear: 5.10-18 4PR	--
Tire Tread Depth	Front: ---	4.0mm
	Rear: ---	4.0mm
Tire Pressure	FRONT: SOLO / DUAL	REAR: SOLO / DUAL
Normal Riding	10-16 psi	10-16 psi
Continuous High Speed Riding		
Fork Spring Free Length	---	482mm
Swinging Arm Pivot Shaft Runout	---	0.3mm
FUEL & OILS		
Fuel Type	premium	
Engine Oil Type	SUZUKI CCI Super 2	
Engine Oil Capacity		
Transmission Oil Type/Cap	SAE 20W/40 chg 1000ml/ovhl	1100ml
Front Fork Air Pressure	0 psi	
Fork Oil Type/Cap./Level	SAE 5W/20 or ATF 595ml/172mm	
Rear Shock Air Pressure	142 psi	
Rear Shock Spring Pre-Set Length	280mm	

ITEM	STANDARD	LIMIT
VALVE SPECS		
Valve Lift	IN:	
	EX:	
Tappet Clearance or Valve Clearance	IN:	
	EX:	
Valve Guide--Valve Stem Clearance	IN:	
	EX:	
Valve Guide I.D. (IN/EX)		
Valve Stem O.D.		
Valve Stem Deflection (IN & EX)		
Valve Head Thickness (IN & EX)		
Valve Seat Width (IN/EX)		
Valve Head Radial Runout (IN & EX)		
Valve Spring Free Length	INN:	
	OUT:	
Valve Spring Tension	INN:	
	OUT:	
Rocker Arm I.D. (IN & EX)		
Rocker Arm Shaft O.D. (IN & EX)		
CAMSHAFT		
Cam Height	IN:	
	EX:	
Camshaft--Journal Clearance (IN & EX)		
Camshaft Journal I.D. (IN & EX)		
Camshaft Journal O.D. (IN & EX)		
Camshaft Deflection (IN & EX)		
Cam Chain 20 Pitch Length		
PISTON/RING/CLYINDER		
Compression Pressure		
Max. Difference Between Cylinders		
Piston--Cylinder Clearance	0.070-0.080mm	0.120mm
Cylinder Bore	86.000-86.015mm	86.060mm
Piston Dia./ Measuring Point	85.935-85.940mm @27.5	85.880mm
Cylinder Warpage	--	0.05
Piston ring free end gap	1st approx. 8.5mm	6.8mm
Piston ring End Gap	0.30-0.50mm	0.85mm
Piston ring--Grove Clearance	0.020-0.060mm	---

ITEM	STANDARD	LIMIT
Piston Pin Bore I.D.	18.002-18.010mm	18.030mm
Piston Pin O.D.	17.995-18.000mm	17.980mm
CRANKSHAFT		
Con-rod Small End Hole	23.003-23.011mm	23.040mm
Big End Side Clearance		
Con-rod Big End Wear		
Crankshaft Runout	---	0.05
Crankshaft Web to Web Width	70.0 ± 0.1	
OIL PUMP		
Oil Pressure		
Tip Clearance		
Outer Rotor Clearance		
Side Clearance		
Oil Pump Reduction Ratio		
CCI Pump Discharge Rate		
CLUTCH		
Drive Plate Thickness	2.9-3.1mm	2.6mm
Drive Plate Warpage		
Driven Plate Thickness	1.6mm ± 0.06mm	--
Driven Plate Warpage	---	0.15mm
Drive Plate Claw Width	16.0-16.2mm	15.5mm
Clutch Spring Free Length	---	38.5mm
Pri. Drive--Driven Gear Backlash		
TRANSMISSION		
Primary Reduction	2.384 (62/26)	
Final Reduction	3.500 (49/14)	
Gear Ratios, Low/2nd	2.000(28/14)1.625(26/16)	
3rd/4th	1.263(24/19)1.000(21/21)	
5th/Top	0.869 (20/23)	
Gear Backlash 1st/2nd		
3rd/4th		
5th/6th		
Shift Fork--Grove Clearance	#1, 3 0.20-0.40mm	0.60mm
	#2 0.30-0.60mm	0.80mm
Shift Fork Groove Width	#1, 3 4.25-4.35mm	---
	#2 4.45-5.55mm	
Shift Fork Thickness	#1, 2, 3 3.95-4.05mm	---
Drive Chain Size	DID 520TR, or Takasago TRK520SM 112 links	
21 Pin Length	---	318mm

TWO STROKE

SUZUKI
TWO STROKE
Service Bulletin

Bulletin No.: SPECS-17L
Date: 6-12-81
Read and Initial

Manager _____
Parts Mgr. _____
Service Mgr. _____
Mechanics _____

MODEL: PE175X
SUBJECT: SPECIFICATIONS

ITEM	STANDARD	LIMIT
Piston Pin Bore I.D.	16.002-16.010mm	16.030mm
Piston Pin O.D.	15.995-16.000mm	15.980mm
CRANKSHAFT		
Con-rod Small End Hole	21.003-21.011mm	21.040mm
Big End Side Clearance		
Con-rod Big End Wear		
Crankshaft Runout	---	0.05mm
Crankshaft Web to Web Width	56 ± 0.1mm	---
OIL PUMP		
Oil Pressure		
Tip Clearance		
Outer Rotor Clearance		
Side Clearance		
Oil Pump Reduction Ratio		
CCI Pump Discharge Rate		
CLUTCH		
Drive Plate Thickness	2.9-3.1mm	2.6mm
Drive Plate Warpage		
Driven Plate Thickness	1.6 ± 0.1mm	---
Driven Plate Warpage	---	0.1mm
Drive Plate Claw Width	11.8-12.0mm	11.0mm
Clutch Spring Free Length		32.6mm
Pri. Drive--Driven Gear Backlash		
TRANSMISSION		
Primary Reduction	2.671 (58/21)	
Final Reduction	4.000 (48/12)	
Gear Ratios, Low/2nd	3.090 (34/11)	2.214 (31/14)
3rd/4th	1.647 (28/17)	1.300 (26/20)
5th/Top	1.045 (23/22)	0.875 (21/24)
Gear Backlash 1st/2nd	---	---
3rd/4th		
5th/6th		
Shift Fork--Groove Clearance	1,2,3 0.05-0.25mm	0.45mm
Shift Fork Groove Width	1,2,3 4.45-4.55mm	---
Shift Fork Thickness	1,2,3 4.30-4.40mm	---
Drive Chain Size	DID 520DB 106 links	---
21 Pin Length		324mm

VALVE SPECS	STANDARD	LIMIT
Valve Lift	IN:	
	EX:	
Tappet Clearance or Valve Clearance	IN:	
	EX:	
Valve Guide--Valve Stem Clearance	IN:	
	EX:	
Valve Guide I.D. (IN/EX)		
Valve Stem O.D.		
Valve Stem Deflection (IN & EX)		
Valve Head Thickness (IN & EX)		
Valve Seat Width (IN/EX)		
Valve Head Radial Runout (IN & EX)		
Valve Spring Free Length	INN:	
	OUT:	
Valve Spring Tension	INN:	
	OUT:	
Rocker Arm I.D. (IN & EX)		
Rocker Arm Shaft O.D. (IN & EX)		
CAMSHAFT		
Cam Height	IN:	
	EX:	
Camshaft--Journal Clearance (IN & EX)		
Camshaft Journal I.D. (IN & EX)		
Camshaft Journal O.D. (IN & EX)		
Camshaft Deflection (IN & EX)		
Cam Chain 20 Pitch Length		
PISTON/RING/CLYINDER		
Compression Pressure		
Max. Difference Between Cylinders		
Piston--Cylinder Clearance	0.060-0.070mm	0.120mm
Cylinder Bore	62.000-62.015mm	62.070mm
Piston Dia./ Measuring Point	61.935-61.950mm	61.880mm
Cylinder Warpage	---	0.05mm
Piston ring free end gap	1st & 2nd Approx. 4.5mm	3.6mm
Piston ring End Gap	0.20-0.35mm @22mm	0.85mm
Piston ring--Grove Clearance	1st & 2nd 0.02-0.06mm	---

ITEM	STANDARD	LIMIT
CARBURETOR		
Idle RPM		
Carburetor Type	Mikuni VM34SS	
I.D. No.	41550	
Bore Size	34mm	
Float Height	29.2 $\pm$ 1.0	
Fuel Level		
Air Screw	1	
Pilot Screw		
Pilot Air Jet		
Pilot Jet	#25	
Cut Away	2.0	
Jet Needle	6DP17-3	
Needle Jet	R-3	
Secondary Air Jet		
Pilot Outlet	0.8	
Main Jet	#250	
ELECTRICAL		
Ignition	Suzuki "PEI"	
Ignition Timing	17.5° $\pm$ 2° BTDC @8000rpm	
Firing Order		
Spark Plug	NGK - B10EGV Champion N-59G	
Spark Plug Gap	0.5-0.6mm	
Contact Point Gap		
Dwell Angle		
Spark Performance	Over 8mm	
Condensor Capacity		
Ignition Coil Resistance (Pri.)	B/W-W/B1 Approx. 0-1ohm	
Ignition Coil Resistance (Sec.)	PlugCap-B/W or W/B1 10-11 K ohm	
Pri. Ignition Coil Resistance		
High Speed Coil Resistance		
Low Speed Coil Resistance		
Exciter Coil Resistance	B/R-R/W 20-30 ohm	
Pulser Coil Resistance	R/W-B/W 200-260 ohm	
Charging Coil Resistance	Y/R-B/W 0.5-1.5 ohm	
Lighting Coil Output	Above 5.5V@ 2500rpm Below 8.0V@ 8000rpm	
Battery		
Specific Gravity		
Regulated Amperage		
Regulated Voltage		
Fuse Capacity		

ITEM	STANDARD	LIMIT
Headlight (Low/High)		
Instrument Bulbs (Speedo/ Tach/Hi Beam/Turn Signal Oil Pressure		
Tail light/Stop light		
Turn Signal Bulbs		
CHASSIS		
Axle Runout (Front/Rear)	---	0.25mm
Brake Drum I.D.	Front: --- Rear: ---	130.7mm 130.7mm
Brake Lining Thickness	Front: --- Rear: ---	1.5mm 1.5mm
Brake Disc Thickness (Front & Rear)		
Master Cylinder Cylinder Bore	Front: Rear:	
Master Cylinder Piston Diameter	Front: Rear:	
Brake Caliper Cylinder Bore	Front: Rear:	
Brake Caliper Piston Dia.	Front: Rear:	
Wheel Rim Runout (Radial & Axial)	---	2.0mm
Tire Size	Front: 3.00-21 4PR Rear: 4.00-18 4PR	
Tire Tread Depth	Front: --- Rear: ---	4.0mm 4.0mm
Tire Pressure	FRONT: SOLO / DUAL; REAR: SOLO / DUAL	
Normal Riding	14psi / 14psi	
Continuous High Speed Riding		
Fork Spring Free Length		
Swinging Arm Pivot Shaft Runout	---	0.3mm
FUEL & OILS		
Fuel Type	Premium	
Engine Oil Type	Suzuki CCl Super 2	
Engine Oil Capacity	---	
Transmission Oil Type/Cap	SAE10W-40/chg800ml/ovrhl 900 ml	
Front Fork Air Pressure	8.5 psi	
Fork Oil Type/Cap./Level	SAE5W-20 or ATF 308ml/180mm	

TWO STROKE

SUZUKI
TWO STROKE
Service Bulletin

Bulletin No: SPECS-17M
Date: 6-12-81
Read and Initial

Manager _____
Parts Mgr. _____
Service Mgr. _____
Mechanics _____

MODEL: PE250X

SUBJECT: SPECIFICATIONS

ITEM		LIMIT
VALVE SPECS		
Valve Lift	IN:	
	EX:	
Tappet Clearance or Valve Clearance	IN:	
	EX:	
Valve Guide--Valve Stem Clearance	IN:	
	EX:	
Valve Guide I.D. (IN/EX)		
Valve Stem O.D.		
Valve Stem Deflection (IN & EX)		
Valve Head Thickness (IN & EX)		
Valve Seat Width (IN/EX)		
Valve Head Radial Runout (IN & EX)		
Valve Spring Free Length	INN:	
	OUT:	
Valve Spring Tension	INN:	
	OUT:	
Rocker Arm I.D. (IN & EX)		
Rocker Arm Shaft O.D. (IN & EX)		
CAMSHAFT	IN:	
Cam Height	EX:	
Camshaft--Journal Clearance (IN & EX)		
Camshaft Journal I.D. (IN & EX)		
Camshaft Journal O.D. (IN & EX)		
Camshaft Deflection (IN & EX)		
Cam Chain 20 Pitch Length		
PISTON/RING/CLYINDER		
Compression Pressure		
Max. Difference Between Cylinders		
Piston--Cylinder Clearance	0.60-0.70mm	0.120mm
Cylinder Bore	67.000-67.015mm	67.070mm
Piston Dia./Measuring Point	66.935-66.950mm @20mm	66.380mm
Cylinder Warpage	---	0.05mm
Piston ring free end gap	Approx. 6.5mm	5.2mm
Piston ring End Gap	0.20-0.40mm	0.85mm
Piston ring--Grove Clearance	1st and 2nd '0.01-0.05mm	---

ITEM	STANDARD	LIMIT
Piston Pin Bore I.D.	18.002-18.010mm	18.030mm
Piston Pin O.D.	17.995-18.000mm	17.980mm
CRANKSHAFT		
Con-rod Small End Hole	23.003-23.011mm	23.040mm
Big End Side Clearance		
Con-rod Big End Wear		
Crankshaft Runout	---	0.05mm
Crankshaft Web to Web Width	62.0 ± 0.1	---
OIL PUMP		
Oil Pressure		
Tip Clearance		
Outer Rotor Clearance		
Side Clearance		
Oil Pump Reduction Ratio		
CCI Pump Discharge Rate		
CLUTCH		
Drive Plate Thickness	2.9-3.1mm	2.6mm
Drive Plate Warpage		
Driven Plate Thickness	2.0 ± 0.06mm	---
Driven Plate Warpage	---	0.1mm
Drive Plate Claw Width	15.8-16.0mm	15.0mm
Clutch Spring Free Length	---	38.5mm
Pri. Drive--Driven Gear Backlash		
TRANSMISSION		
Primary Reduction	2.727 (60/22)	
Final Reduction	4.000 (52/13)	
Gear Ratios, Low/2nd	2.384(31/13)	1.750(28/16)
3rd/4th	1.352(23/17)	1.095(23/21)
5th/Top	0.904(19/21)	0.760(19/25)
Gear Backlash 1st/2nd		
3rd/4th		
5th/6th		
Shift Fork--Grove Clearance	0.2-0.4mm	0.6mm
Shift Fork Groove Width	4.25-4.35mm	---
Shift Fork Thickness	3.95-4.05mm	---
Drive Chain Size	TAKASAGO RK520SU	110 links
21 Pin Length	---	324mm

ITEM	STANDARD	LIMIT
CARBURETOR		
Idle RPM		
Carburetor Type	Mikuni VM36SS	
I.D. No.	40620	
Bore Size	36mm	
Float Height	10.7 ± 0.5	
Fuel Level		
Air Screw	1½	
Pilot Screw		
Pilot Air Jet		
Pilot Jet	#37.5	
Cut Away	2.5	
Jet Needle	6DH20-2	
Needle Jet	Q-0	
Secondary Air Jet		
Pilot Outlet	0.6	
Main Jet	#250	
ELECTRICAL		
Ignition	Suzuki "PEI"	
Ignition Timing	13.5° BTDC @6000rpm	
Firing Order		
Spark Plug	NGK BIOEGV CHAMPION N-59G	
Spark Plug Gap	0.5-0.6	
Contact Point Gap		
Dwell Angle		
Spark Performance	Over 8mm	
Condensor Capacity		
Ignition Coil Resistance (Pri.)	B/W-W/B1 Approx. 0-1ohm	
Ignition Coil Resistance (Sec.)	PlugCap-B/W or W/B1 Approx10-11k ohm	
Pri. Ignition Coil Resistance		
High Speed Coil Resistance		
Low Speed Coil Resistance		
Exciter Coil Resistance	B/R-R/W Approx 38-48ohm	
Pulser Coil Resistance	R/W-B/W Approx215-270oh	
Charging Coil Resistance	Y/R-B/W Approx. 1-2 ohm	
Lighting Coil Output	Above 5.5 V at 2500rpm Below 8.0 V at 8000rpm	
Battery		
Specific Gravity		
Regulated Amperage		
Regulated Voltage		
Fuse Capacity		

ITEM	STANDARD	LIMIT
Headlight (Low/High)	15w/15w	
Instrument Bulbs (Speedo/ Tach/Hi Beam/Turn Signal Oil Pressure		
Tail light/Stop light	5w/--	
Turn Signal Bulbs		
CHASSIS		
Axle Runout (Front/Rear)		0.25mm
Brake Drum I.D.	Front:	150.7mm
	Rear:	150.7mm
Brake Lining Thickness	Front:	1.5mm
	Rear:	1.5mm
Brake Disc Thickness (Front & Rear)		
Master Cylinder Cylinder Bore	Front:	
	Rear:	
Master Cylinder Piston Diameter	Front:	
	Rear:	
Brake Caliper Cylinder Bore	Front:	
	Rear:	
Brake Caliper Piston Dia.	Front:	
	Rear:	
Wheel Rim Runout (Radial & Axial)		2.0mm
Tire Size	Front: 3.00-21 4PR	---
	Rear: 5.10-18 4PR	---
Tire Tread Depth	Front: ---	4.0mm
	Rear: ---	4.0mm
Tire Pressure	FRONT: SOLO / DUAL; REAR: SOLO / DUAL	
Normal Riding	14psi / 14psi	
Continuous High Speed Riding		
Fork Spring Free Length		571mm
Swinging Arm Pivot Shaft Runout		0.3mm
FUEL & OILS		
Fuel Type	Premium	
Engine Oil Type	Suzuki CC1 Super 2	
Engine Oil Capacity		
Transmission Oil Type/Cap	SAE20W-40/chg800ml/ovhl 900ml	
Front Fork Air Pressure	8.5 psi	
Fork Oil Type/Cap./Level	SAE 5W-20 or ATF 308ml/180mm	

TWO STROKE

SUZUKI
TWO STROKE
Service Bulletin

Bulletin No.: SPECS-17N
Date: 6-12-81

Read and Initial

Manager _____
Parts Mgr. _____
Service Mgr. _____
Mechanics _____

MODEL: PE400X

SUBJECT: SPECIFICATIONS

ITEM	STANDARD	LIMIT
VALVE SPECS		
Valve Lift	IN:	
	EX:	
Tappet Clearance or Valve Clearance	IN:	
	EX:	
Valve Guide--Valve Stem Clearance	IN:	
	EX:	
Valve Guide I.D. (IN/EX)		
Valve Stem O.D.		
Valve Stem Deflection (IN & EX)		
Valve Head Thickness (IN & EX)		
Valve Seat Width (IN/EX)		
Valve Head Radial Runout (IN & EX)		
Valve Spring Free Length	INN:	
	OUT:	
Valve Spring Tension	INN:	
	OUT:	
Rocker Arm I.D. (IN & EX)		
Rocker Arm Shaft O.D. (IN & EX)		
CAMSHAFT		
Cam Height	IN:	
	EX:	
Camshaft--Journal Clearance (IN & EX)		
Camshaft Journal I.D. (IN & EX)		
Camshaft Journal O.D. (IN & EX)		
Camshaft Deflection (IN & EX)		
Cam Chain 20 Pitch Length		
PISTON/RING/CLYINDER		
Compression Pressure		
Max. Difference Between Cylinders		
Piston--Cylinder Clearance	0.060-0.070mm	0.120mm
Cylinder Bore	85.000-85.015mm	85.070mm
Piston Dia./ Measuring Point	84.935-84.950mm @26mm	84.880mm
Cylinder Warpage		0.05mm
Piston ring free end gap	1st and 2nd approx 9.5mm	7.6mm
Piston ring End Gap	0.30-0.50mm	0.90mm
Piston ring--Grove Clearance	1st and 2nd 0.03-0.07	---
Piston Pin Bore I.D.	20.002-20.010mm	20.030mm
Piston Pin O.D.	19.995-19.998mm	19.980mm
CRANKSHAFT		
Con-rod Small End Hole	25.003-25.011mm	25.040mm
Big End Side Clearance		
Con-rod Big End Wear		
Crankshaft Runout	---	0.05mm
Crankshaft Web to Web Width	70.0 ± 0.1 mm	---
OIL PUMP		
Oil Pressure		
Tip Clearance		
Outer Rotor Clearance		
Side Clearance		
Oil Pump Reduction Ratio		
CCI Pump Discharge Rate		
CLUTCH		
Drive Plate Thickness	2.9-3.1mm	2.6mm
Drive Plate Warpage		
Driven Plate Thickness	$2.0^{+}_{-}0.06$mm	---
Driven Plate Warpage	---	0.1mm
Drive Plate Claw Width	15.8-16.0mm	15.0mm
Clutch Spring Free Length	---	38.4mm
Pri. Drive--Driven Gear Backlash		
TRANSMISSION		
Primary Reduction	2.280 (57/25)	
Final Reduction	3.066 (46/15)	
Gear Ratios, Low/2nd	2.636 (29/11) 2.000 (26/13)	
3rd/4th	1.562 (25/16) 1.222 (22/18)	
5th/Top	1.000 (20/20)	
Gear Backlash 1st/2nd		
3rd/4th		
5th/6th		
Shift Fork--Grove Clearance	1,2,3 0.2-0.4mm	0.6mm
	3 4.25-4.35mm	
Shift Fork Groove Width	1,2 5.25-5.35mm	---
	3 3.95-4.05	
Shift Fork Thickness	1,3 4.85-5.05	---
	2	
Drive Chain Size	DID 520 UB or Takasago RK520SU 108 links	
21 Pin Length	---	323mm

ITEM	STANDARD	LIMIT
CARBURETOR		
Idle RPM		
Carburetor Type	Mikuni VM36SS	
I.D. No.	40900	
Bore Size	36mm	
Float Height	10.7±0.5	
Fuel Level		
Air Screw	1½	
Pilot Screw		
Pilot Air Jet		
Pilot Jet	#45	
Cut Away	2.0	
Jet Needle	6DH20-2	
Needle Jet	P-9	
Secondary Air Jet		
Pilot Outlet	0.6	
Main Jet	#300	
ELECTRICAL		
Ignition	SUZUKI PEI	
Ignition Timing	17°BTDC @6000rpm	
Firing Order		
Spark Plug	NGK B9EGV Champion	
Spark Plug Gap	0.5-0.6mm	
Contact Point Gap		
Dwell Angle		
Spark Performance	over 8mm	
Condensor Capacity		
Ignition Coil Resistance (Pri.)	B/W-W/Bl approx 0-1 ohm	
Ignition Coil Resistance (Sec.)	Plug Cap-B/W or W/Bl approx10-11kohm	
Pri. Ignition Coil Resistance		
High Speed Coil Resistance		
Low Speed Coil Resistance		
Exciter Coil Resistance	B/R-R/ 38-48 ohms	
Pulser Coil Resistance	R/W-B/W 260-325 ohms	
Lighting Coil Resistance	Y/R - B/W 1-2 ohms	
Lighting Coil Output		
Battery		
Specific Gravity		
Regulated Amperage		
Regulated Voltage		
Fuse Capacity		

ITEM	STANDARD	LIMIT
Headlight (Low/High)		
Instrument Bulbs (Speedo/ Tach/Hi Beam/Turn Signal Oil Pressure		
Tail light/Stop light		
Turn Signal Bulbs		
CHASSIS		
Axle Runout (Front/Rear)	---	0.25mm
Brake Drum I.D.	Front: ---	150.7mm
	Rear: ---	150.7mm
Brake Lining Thickness	Front: ---	1.5mm
	Rear: ---	1.5mm
Brake Disc Thickness (Front & Rear)		
Master Cylinder Cylinder Bore	Front:	
	Rear:	
Master Cylinder Piston Diameter	Front:	
	Rear:	
Brake Caliper Cylinder Bore	Front:	
	Rear:	
Brake Caliper Piston Dia.	Front:	
	Rear:	
Wheel Rim Runout (Radial & Axial)	---	2.0mm
Tire Size	Front:3.00-21 4P	---
	Rear: 5.10-18 4PR	---
Tire Tread Depth	Front: ---	4.0mm
	Rear: ---	4.0mm
Tire Pressure	FRONT: SOLO / DUAL; REAR: SOLO / DUAL	
Normal Riding	14psi / 14psi	
Continuous High Speed Riding		
Fork Spring Free Length		571mm
Swinging Arm Pivot Shaft Runout		0.3mm
FUEL & OILS		
Fuel Type	PREMIUM	
Engine Oil Type	Suzuki CC1 Super 2	
Engine Oil Capacity	---	
Transmission Oil Type/Cap	SAE 20W-40/chg 800ml/ovrhl 900ml	
Front Fork Air Pressure	8.5 psi	
Fork Oil Type/Cap./Level	SAE 5W-20 or ATF 308ml/180mm	

TWO STROKE

SUZUKI
TWO STROKE
Service Bulletin

Bulletin No.: SPECS-170
Date: 6-12-81
Read and Initial

Manager _____
Parts Mgr. _____
Service Mgr. _____
Mechanics _____

MODEL: RS175X

SUBJECT: SPECIFICATIONS

ITEM	STANDARD	LIMIT
VALVE SPECS		
Valve Lift	IN: ___ EX: ___	
Tappet Clearance or Valve Clearance	IN: ___ EX: ___	
Valve Guide--Valve Stem Clearance	IN: ___ EX: ___	
Valve Guide I.D. (IN/EX)		
Valve Stem O.D.		
Valve Stem Deflection (IN & EX)		
Valve Head Thickness (IN & EX)		
Valve Seat Width (IN/EX)		
Valve Head Radial Runout (IN & EX)		
Valve Spring Free Length	INN: ___ OUT: ___	
Valve Spring Tension	INN: ___ OUT: ___	
Rocker Arm I.D. (IN & EX)		
Rocker Arm Shaft O.D. (IN & EX)		
CAMSHAFT	IN: ___ EX: ___	
Cam Height		
Camshaft--Journal Clearance (IN & EX)		
Camshaft Journal I.D. (IN & EX)		
Camshaft Journal O.D. (IN & EX)		
Camshaft Deflection (IN & EX)		
Cam Chain 20 Pitch Length		
PISTON/RING/CLYINDER		
Compression Pressure		
Max. Difference Between Cylinders		
Piston--Cylinder Clearance	0.06-0.07mm	0.120mm
Cylinder Boze	62.000-62.015mm	62.070mm
Piston Dia./Measuring Point	61.935-61.950mm@26mm	61.880mm
Cylinder Warpage	---	0.05mm
Piston ring free end gap	Approx. 6.5mm	5.2mm
Piston ring End Gap	0.20-0.35mm	0.85mm
Piston ring--Grove Clearance	0.02-0.06mm	---
Piston Pin Bore I.D.	15.998-16.006mm	16.030mm
Piston Pin O.D.	15.995-16.000mm	15.980mm
CRANKSHAFT		
Con-rod Small End Hole	21.003-21.011mm	21.040mm
Big End Side Clearance		
Con-rod Big End Wear		
Crankshaft Runout	---	0.05mm
Crankshaft Web to Web Width	56.0 ± 0.1mm	---
OIL PUMP		
Oil Pressure		
Tip Clearance		
Outer Rotor Clearance		
Side Clearance		
Oil Pump Reduction Ratio		
CCI Pump Discharge Rate		
CLUTCH		
Drive Plate Thickness	2.0-3.1mm	2.6mm
Drive Plate Warpage	---	0.2mm
Driven Plate Thickness	1.6 ± 0.06mm	---
Driven Plate Warpage	---	0.1mm
Drive Plate Claw Width	11.8-12.0mm	11.0mm
Clutch Spring Free Length	29.3mm	30.7mm
Pri. Drive--Driven Gear Backlash	0.02-0.07mm	0.10mm
TRANSMISSION		
Primary Reduction	2.761 (58/21)	
Final Reduction	3.833 (46/12)	
Gear Ratios, Low/2nd	3.090 (34/11)	2.214(31/14)
3rd/4th	1.647(28/17)	1.300(26/20)
5th/Top	1.045(23/22)	0.875(21/24)
Gear Backlash 1st/2nd		
3rd/4th		
5th/6th		
Shift Fork--Grove Clearance	0.05-0.25mm	0.45mm
Shift Fork Groove Width	4.45-4.55mm	---
Shift Fork Thickness	4.30-4.40mm	---
Drive Chain Size	D.I.D. 520UB 106 Links	
21 Pin Length		324mm

ITEM	STANDARD	LIMIT
CARBURETOR		
Idle RPM	1500 ± 150 RPM	
Carburetor Type	MIKUNI VM3055	
I.D. No.	41530	
Bore Size	30mm	
Float Height	7.8 ± 0.5mm	
Fuel Level		
Air Screw	1½	
Pilot Screw		
Pilot Air Jet		
Pilot Jet	#30	
Cut Away	2.5	
Jet Needle	5DP74-2	
Needle Jet	R-4	
Secondary Air Jet	2.5	
Pilot Outlet	0.8	
Main Jet	#150	
ELECTRICAL		
Ignition	SUZUKI "PEI"	
Ignition Timing	$17.5^{0} \pm 2^{0}$ BTDC@8000RPM	
Firing Order		
Spark Plug	NGK B9ES OR ND W27ES	
Spark Plug Gap	0.6-0.8mm	
Contact Point Gap		
Dwell Angle		
Spark Performance	Over 8mm	
Condensor Capacity		
Ignition Coil Resistance (Pri.)	B/W to W/B1Approx.0-1ohm	
Ignition Coil Resistance (Sec.)	Plug Cap to B/W or W/B1 approx 10-11k ohms	
MAGNETO COIL RESISTANCE	R/W-B/W Approx. 180-240 ohms	
	R/W-B/R Approx. 20-30 ohms	
	Y/R-B/W Approx. 0-1 ohm	
Exciter Coil Resistance		
Pulser Coil Resistance		
Charging Coil Resistance		
Lighting Coil Output	Over 5.5V @2500 RPM Under 8.0V @8000 RPM	
Battery		
Specific Gravity		
Regulated Amperage		
Regulated Voltage		
Fuse Capacity		

ITEM	STANDARD	LIMIT
Headlight (Low/High)	6V 15w/15w	
Instrument Bulbs (Speedo/ Tach/Hi Beam/Turn Signal Oil Pressure		
Tail light/Stop light	6V 5w/---	
Turn Signal Bulbs		
CHASSIS		
Axle Runout (Front/Rear)	---	0.25mm
Brake Drum I.D.	Front: ---	130.7mm
	Rear: ---	120.7mm
Brake Lining Thickness	Front: ---	1.5mm
	Rear: ---	1.5mm
Brake Disc Thickness (Front & Rear)		
Master Cylinder Cylinder Bore	Front:	
	Rear:	
Master Cylinder Piston Diameter	Front:	
	Rear:	
Brake Caliper Cylinder Bore	Front:	
	Rear:	
Brake Caliper Piston Dia.	Front:	
	Rear:	
Wheel Rim Runout (Radial & Axial)	---	2.0mm
Tire Size	Front: 3.00-21 4PR	---
	Rear: 4.10-18 4PR	---
Tire Tread Depth	Front:	4mm
	Rear:	4mm
Tire Pressure	FRONT: SOLO / DUAL; REAR: SOLO / DUAL	
Normal Riding	14PSI / / 14PSI /	
Continuous High Speed Riding	/ / /	
Fork Spring Free Length	---	571mm
Swinging Arm Pivot Shaft Runout	---	0.3mm
FUEL & OILS		
Fuel Type	Premium	
Engine Oil Type	Suzuki CCI Super 2	
Engine Oil Capacity		
Transmission Oil Type/Cap	SAE 20W/40 Change:800 ml Overhaul:	900ml
Front Fork Air Pressure		
Fork Oil Type/Cap./Level	High Quality SAE #10 Fork Oil 248 ml /240mm	

TWO STROKE

SUZUKI
TWO STROKE
Service Bulletin

Bulletin No.: SPECS-17P
Date: 6-12-81

Read and Initial

Manager _____
Parts Mgr. _____
Service Mgr. _____
Mechanics _____

MODEL: RS250X

SUBJECT: SPECIFICATIONS

ITEM	STANDARD	LIMIT
VALVE SPECS		
Valve Lift	IN: _____ EX: _____	
Tappet Clearance or Valve Clearance	IN: _____ EX: _____	
Valve Guide--Valve Stem Clearance	IN: _____ EX: _____	
Valve Guide I.D. (IN/EX)		
Valve Stem O.D.		
Valve Stem Deflection (IN & EX)		
Valve Head Thickness (IN & EX)		
Valve Seat Width (IN/EX)		
Valve Head Radial Runout (IN & EX)		
Valve Spring Free Length	INN: _____ OUT: _____	
Valve Spring Tension	INN: _____ OUT: _____	
Rocker Arm I.D. (IN & EX)		
Rocker Arm Shaft O.D. (IN & EX)		
CAMSHAFT		
Cam Height	IN: _____ EX: _____	
Camshaft--Journal Clearance (IN & EX)		
Camshaft Journal I.D. (IN & EX)		
Camshaft Journal O.D. (IN & EX)		
Camshaft Deflection (IN & EX)		
Cam Chain 20 Pitch Length		
PISTON/RING/CLYINDER		
Compression Pressure		
Max. Difference Between Cylinders		
Piston--Cylinder Clearance	0.060-0.070mm	0.120mm
Cylinder Bore	67.000-67.015mm	67.070mm
Piston Dia./Measuring Point	66.935-66.950mm @22mm	66.880mm
Cylinder Warpage	---	0.05mm
Piston ring free end gap	Approx. 6.5mm	5.2mm
Piston ring End Gap	0.2-0.4mm	0.85mm
Piston ring--Grove Clearance	0.01-0.05mm	---
Piston Pin Bore I.D.	17.998-18.006mm	18.030mm
Piston Pin O.D.	17.995-18.000mm	17.980mm
CRANKSHAFT		
Con-rod Small End Hole	23.003-23.011mm	23.040mm
Big End Side Clearance		
Con-rod Big End Wear		
Crankshaft Runout		0.05mm
Crankshaft Web to Web Width	62.0 ± 0.1mm	
OIL PUMP		
Oil Pressure		
Tip Clearance		
Outer Rotor Clearance		
Side Clearance		
Oil Pump Reduction Ratio		
CCI Pump Discharge Rate		
CLUTCH		
Drive Plate Thickness	2.9-3.1mm	2.6mm
Drive Plate Warpage	---	0.2mm
Driven Plate Thickness	2.0 ± 0.6mm	---
Driven Plate Warpage	---	0.1mm
Drive Plate Claw Width	15.8-16.0mm	15.0mm
Clutch Spring Free Length	40.5mm	38.5mm
Pri. Drive--Driven Gear Backlash	0.02-0.07mm	0.10mm
TRANSMISSION		
Primary Reduction	2.727(60/22)	
Final Reduction	4.000(52/13)	
Gear Ratios, Low/2nd	2.384(31/13)	1.750(28/16)
3rd/4th	1.352(23/17)	1.095(23/21)
5th/Top	0.904(19/21)	0.760(19/25)
Gear Backlash 1st/2nd		
3rd/4th		
5th/6th		
Shift Fork--Grove Clearance	0.2-0.4mm	0.6mm
Shift Fork Groove Width	4.25-4.35mm	
Shift Fork Thickness	3.95-4.05mm	
Drive Chain Size	D.I.D. 520UB 110 Links	
21 Pin Length		324mm

ITEM	STANDARD	LIMIT
CARBURETOR		
Idle RPM	1500 ± 150 RPM	
Carburetor Type	MIKUNI VM36SS	
I.D. No.	40610	
Bore Size	36mm	
Float Height	10.7 ± 0.5mm	
Fuel Level		
Air Screw	1½	
Pilot Screw		
Pilot Air Jet		
Pilot Jet	#37.5	
Cut Away	2.0	
Jet Needle	6DH20-2	
Needle Jet	P-8	
Secondary Air Jet	2.5	
Pilot Outlet	0.6	
Main Jet	#260	
ELECTRICAL		
Ignition	SUZUKI "PEI"	
Ignition Timing	13° ± 2° BTDC @6000RPM	
Firing Order		
Spark Plug	NGK B9ES OR ND W27ES	
Spark Plug Gap	0.6-0.8mm	
Contact Point Gap		
Dwell Angle		
Spark Performance	Over 8mm	
Condensor Capacity		
Ignition Coil Resistance (Pri.)	B/W-W/Bl Approx. 0-1ohm	
Ignition Coil Resistance (Sec.)	PlugCap-B/W or W/Bl approx 10-11k ohms	
MAGNETO COIL RESISTANCE	B/R-B/N Approx. 195-245ohm	
	R/W-B/R Approx. 35-45ohm	
	Y/R-B/W Approx. 0-2 ohm	
Exciter Coil Resistance		
Pulser Coil Resistance		
Charging Coil Resistance		
Lighting Coil Output	Over 5.5V @2500 RPM Under 8.0V @8000 RPM	
Battery		
Specific Gravity		
Regulated Amperage		
Regulated Voltage		
Fuse Capacity		

ITEM	STANDARD	LIMIT
Headlight (Low/High)	6V 15w/15w	
Instrument Bulbs (Speedo/ Tach/Hi Beam/Turn Signal Oil Pressure		
Tail light/Stop light	6V5W/---	
Turn Signal Bulbs		
CHASSIS		
Axle Runout (Front/Rear)	---	0.25mm
Brake Drum I.D.	Front: --- Rear: ---	130.7mm 150.7mm
Brake Lining Thickness	Front: --- Rear: ---	1.5mm 1.5mm
Brake Disc Thickness (Front & Rear)		
Master Cylinder Cylinder Bore	Front: Rear:	
Master Cylinder Piston Diameter	Front: Rear:	
Brake Caliper Cylinder Bore	Front: Rear:	
Brake Caliper Piston Dia.	Front: Rear:	
Wheel Rim Runout (Radial & Axial)	---	2.0mm
Tire Size	Front: 3.00-21 4 PR Rear: 5.10-18 4 PR	--- ---
Tire Tread Depth	Front: --- Rear: ---	4.0mm 4.0mm
Tire Pressure	FRONT: SOLO / DUAL; REAR: SOLO / DUAL	
Normal Riding	14 PSI / 14 PSI	
Continuous High Speed Riding		
Fork Spring Free Length	---	571mm
Swinging Arm Pivot Shaft Runout	---	0.3mm
FUEL & OILS		
Fuel Type	Premium	
Engine Oil Type	Suzuki CCl Super 2	
Engine Oil Capacity		
Transmission Oil Type/Cap	SAE20W/40, chg. 800ml	
Front Fork Air Pressure		
Fork Oil Type/Cap./Level	HIGH QUALITY SAE #10 248ml/220mm	

TWO STROKE

SUZUKI
TWO STROKE
Service Bulletin

Bulletin No.: SPECS-17Q
Date: 6-19-81

Read and Initial

Manager _____
Parts Mgr. _____
Service Mgr. _____
Mechanics _____

MODEL: DS80X

SUBJECT: SPECIFICATIONS

ITEM		STANDARD	LIMIT
VALVE SPECS			
Valve Lift	IN:		
	EX:		
Tappet Clearance or Valve Clearance	IN:		
	EX:		
Valve Guide--Valve Stem Clearance	IN:		
	EX:		
Valve Guide I.D. (IN/EX)			
Valve Stem O.D.			
Valve Stem Deflection (IN & EX)			
Valve Head Thickness (IN & EX)			
Valve Seat Width (IN/EX)			
Valve Head Radial Runout (IN & EX)			
Valve Spring Free Length	INN:		
	OUT:		
Valve Spring Tension	INN:		
	OUT:		
Rocker Arm I.D. (IN & EX)			
Rocker Arm Shaft O.D. (IN & EX)			
CAMSHAFT			
Cam Height	IN:		
	EX:		
Camshaft--Journal Clearance (IN & EX)			
Camshaft Journal I.D. (IN & EX)			
Camshaft Journal O.D. (IN & EX)			
Camshaft Deflection (IN & EX)			
Cam Chain 20 Pitch Length			
PISTON/RING/CLYINDER			
Compression Pressure			
Max. Difference Between Cylinders			
Piston--Cylinder Clearance		0.040-0.050mm	0.120mm
Cylinder Bore		49.000-49.015mm	49.090mm
Piston Dia./Measuring Point		48.955-48.970mm@18mm	48.880mm
Cylinder Warpage		---	0.05mm
Piston ring free end gap		APPROX. 4.5mm	3.6mm
Piston ring End Gap		0.15-0.35mm	0.80mm
Piston ring--Grove Clearance		0.01-0.05mm	---

ITEM	STANDARD	LIMIT
Piston Pin Bore I.D.	11.998-12.006mm	12.030mm
Piston Pin O.D.	11.995-12.000mm	11.980mm
CRANKSHAFT		
Con-rod Small End Hole	16.003-16.011mm	16.040mm
Big End Side Clearance		
Con-rod Big End Wear		
Crankshaft Runout	---	0.05mm
Crankshaft Web to Web Width	40.0 ± 0.1mm	---
OIL PUMP		
Oil Pressure		
Tip Clearance		
Outer Rotor Clearance		
Side Clearance		
Oil Pump Reduction Ratio	6.461 (73/19 x 37/22)	
CCI Pump Discharge Rate	0.65-0.79ml for 2 min. @2000 RPM	
CLUTCH		
Drive Plate Thickness	2.9-3.1mm	2.6mm
Drive Plate Warpage		
Driven Plate Thickness	1.6 ± 0.06mm	---
Driven Plate Warpage	---	0.1mm
Drive Plate Claw Width	11.8-12.0mm	11.3mm
Clutch Spring Free Length	---	33.7mm
Pri. Drive--Driven Gear Backlash		
TRANSMISSION		
Primary Reduction	3.842 (73/19)	
Final Reduction	2.333 (34/12)	
Gear Ratios, Low/2nd	2.333(35/15)1.684(32/19)	
3rd/4th	1.318(29/22)1.083(26/24)	
5th/Top	0.923 (24/26)	
Gear Backlash 1st/2nd		
3rd/4th		
5th/6th		
Shift Fork--Grove Clearance	0.10-0.30mm	0.60mm
Shift Fork Groove Width	4.45-4.55mm	---
Shift Fork Thickness	4.25-4.35mm	---
Drive Chain Size	DID428 or TAKASAGO RK428B	88 links
21 Pin Length	---	259mm

ITEM	STANDARD	LIMIT
CARBURETOR		
Idle RPM	1300 ± 150rpm	
Carburetor Type	MIKUNI VM20SS	
I.D. No.	46410	
Bore Size	20mm	
Float Height	26.0 ± 1.0mm	
Fuel Level		
Air Screw	1 1/8	
Pilot Screw		
Pilot Air Jet		
Pilot Jet	#22.5	
Cut Away	1.5	
Jet Needle	4F22-4	
Needle Jet	O-4	
Secondary Air Jet		
Pilot Outlet	0.6	
Main Jet	#65	
ELECTRICAL		
Ignition	MAGNETO	
Ignition Timing	$23^{0} \pm 2^{0}$ BTDC @4000RPM	
Firing Order		
Spark Plug	NGK B7ES or ND W22ES	
Spark Plug Gap	0.6-0.8mm	
Contact Point Gap		
Dwell Angle		
Spark Performance	Over 8mm	
Condensor Capacity	0.18 ± 0.02 μF	
Ignition Coil Resistance (Pri.)	B/Y-Ground Approx.0-1	
Ignition Coil Resistance (Sec.)	PlugCap-Ground Approx. 15-20	
Pri. Ignition Coil Resistance		
Magneto Coil Resistance	B/Y-Ground Approx.2-3 ohms Y/R-Ground Approx.0-1 ohm	
Exciter Coil Resistance		
Pulser Coil Resistance		
Charging Coil Resistance		
Lighting Coil Output	Above 6V at 2500 RPM Below 9V at 8000 RPM	
Battery		
Specific Gravity		
Regulated Amperage		
Regulated Voltage		
Fuse Capacity		

ITEM	STANDARD	LIMIT
Headlight (Low/High)	6V15W/15W	
Instrument Bulbs (Speedo/ Tach/Hi Beam/Turn Signal Oil Pressure		
Tail light/Stop light	6V15W/---	
Turn Signal Bulbs		
CHASSIS		
Axle Runout (Front/Rear)	---	0.25mm
Brake Drum I.D.	Front: --- Rear: ---	110.7mm 110.7mm
Brake Lining Thickness	Front: --- Rear: ---	1.5mm 1.5mm
Brake Disc Thickness (Front & Rear)		
Master Cylinder Cylinder Bore	Front: Rear:	
Master Cylinder Piston Diameter	Front: Rear:	
Brake Caliper Cylinder Bore	Front: Rear:	
Brake Caliper Piston Dia.	Front: Rear:	
Wheel Rim Runout (Radial & Axial)	---	2.0mm
Tire Size	Front: 2.50-14 4PR Rear: 3.00-12 4PR	--- ---
Tire Tread Depth	Front: --- Rear: ---	4.0mm 4.0mm
Tire Pressure	FRONT: SOLO / DUAL; REAR: SOLO / DUAL	
Normal Riding	14 PSI / / 14 PSI /	
Continuous High Speed Riding	/ / /	
Fork Spring Free Length	---	306.0mm
Swinging Arm Pivot Shaft Runout	---	0.6mm
FUEL & OILS		
Fuel Type	Unleaded or Low Lead	
Engine Oil Type	Suzuki CCI Super 2	
Engine Oil Capacity	CCI TANK: 0.9L	
Transmission Oil Type/Cap	SAE20w/40, chg650ml/ovrhl 700ml	
Front Fork Air Pressure		
Fork Oil Type/Cap./Level	High Quality SAE #10 80 ml/110.5mm	

TWO STROKE

SUZUKI
TWO STROKE
Service Bulletin

Bulletin No.: SPECS-17R
Date: 6-19-81

Read and Initial

Manager _____
Parts Mgr. _____
Service Mgr. _____
Mechanics _____

MODEL: DS100X

SUBJECT: SPECIFICATIONS

ITEM	STANDARD	LIMIT
VALVE SPECS		
Valve Lift	IN: _____ EX: _____	
Tappet Clearance or Valve Clearance	IN: _____ EX: _____	
Valve Guide--Valve Stem Clearance	IN: _____ EX: _____	
Valve Guide I.D. (IN/EX)		
Valve Stem O.D.		
Valve Stem Deflection (IN & EX)		
Valve Head Thickness (IN & EX)		
Valve Seat Width (IN/EX)		
Valve Head Radial Runout (IN & EX)		
Valve Spring Free Length	INN: _____ OUT: _____	
Valve Spring Tension	INN: _____ OUT: _____	
Rocker Arm I.D. (IN & EX)		
Rocker Arm Shaft O.D. (IN & EX)		
CAMSHAFT	IN: _____ EX: _____	
Cam Height		
Camshaft--Journal Clearance (IN & EX)		
Camshaft Journal I.D. (IN & EX)		
Camshaft Journal O.D. (IN & EX)		
Camshaft Deflection (IN & EX)		
Cam Chain 20 Pitch Length		
PISTON/RING/CLYINDER		
Compression Pressure		
Max. Difference Between Cylinders		
Piston--Cylinder Clearance	0.040-0.050mm	0.120mm
Cylinder Boze	50.000-50.015	50.090mm
Piston Dia./ Measuring Point	49.955-49.970mm @23mm	49.880mm
Cylinder Warpage	---	0.05mm
Piston ring free end gap	1st & 2nd "T" approx 4.5mm 1st & 2nd "N" approx 5.0mm	3.6mm 4.0mm
Piston ring End Gap	0.15-0.35mm	0.80mm
Piston ring--Grove Clearance	0.02-0.06mm	---

ITEM	STANDARD	LIMIT
Piston Pin Bore I.D.	13.998-14.006mm	14.030mm
Piston Pin O.D.	13.995-14.000mm	13.980mm
CRANKSHAFT		
Con-rod Small End Hole	18.003-18.011mm	18.040mm
Big End Side Clearance		
Con-rod Big End Wear		
Crankshaft Runout	---	0.05mm
Crankshaft Web to Web Width	56.0 ± 0.1mm	---
OIL PUMP		
Oil Pressure		
Tip Clearance		
Outer Rotor Clearance		
Side Clearance		
Oil Pump Reduction Ratio	3.562 (57/16 x 29/17 x 17/29)	
CCI Pump Discharge Rate	1.28-1.58ml @2000rpm for 2 minutes	
CLUTCH		
Drive Plate Thickness	2.9-3.1mm	2.6mm
Drive Plate Warpage		
Driven Plate Thickness	1.6 ± 0.06	---
Driven Plate Warpage	---	0.1mm
Drive Plate Claw Width	11.8-12.0mm	11.3mm
Clutch Spring Free Length	---	32.6mm
Pri. Drive--Driven Gear Backlash		
TRANSMISSION		
Primary Reduction	3.562 (57/16)	
Final Reduction	3.142 (44/14)	
Gear Ratios, Low/2nd	3.090 (34/11) 2.000 (30/15)	
3rd/4th	1.368 (26/19) 1.095 (23/21)	
5th/Top	0.875 (21/24)	
Gear Backlash 1st/2nd		
3rd/4th		
5th/6th		
Shift Fork--Grove Clearance	0.05-0.25mm	0.45mm
Shift Fork Groove Width	#1:4.45-4.55mm #2:5.45-5.55mm	
Shift Fork Thickness	#1:4.30-4.40mm #2:5.30-5.40mm	
Drive Chain Size	DID 428D 114 links	
21 Pin Length	---	259mm

ITEM	STANDARD	LIMIT
CARBURETOR		
Idle RPM	1300 ± 100rpm	
Carburetor Type	Mikuni VM24SH	
I.D. No.	48111	
Bore Size	24mm	
Float Height	25.8 ± 1.0mm	
Fuel Level	5.0 ± 0.5mm	
Air Screw	1.0	
Pilot Screw		
Pilot Air Jet		
Pilot Jet	#30	
Cut Away	1.5	
Jet Needle	4DH7-2	
Needle Jet	N-8	
Secondary Air Jet		
Pilot Outlet	1.4	
Main Jet	#85	
ELECTRICAL		
Ignition	SUZUKI "PEI"	
Ignition Timing	20° ± 2° BTDC @6000rpm	
Firing Order		
Spark Plug	NGK B8ES or ND W24ES	
Spark Plug Gap	0.6-0.8mm	
Contact Point Gap		
Dwell Angle		
Spark Performance	over 8mm	
Condensor Capacity		
Ignition Coil Resistance (Pri.)	B/Y-Ground approx 650-800 ohms	
Ignition Coil Resistance (Sec.)	Plug Cap-Ground 15-17k ohms	
Pri. Ignition Coil Resistance		
High Speed Coil Resistance		
Low Speed Coil Resistance		
Exciter Coil Resistance	B/Y - Ground 1.5-2 ohms	
Pulser Coil Resistance	R/W - Ground 25-30 ohms	
Lighting Coil Resistance	Y/R - Ground 0-1 ohm	
Lighting Coil Output	above 6v at 2500rpm below 8.5v at 8000rpm	
Battery		
Specific Gravity		
Regulated Amperage		
Regulated Voltage		
Fuse Capacity		

ITEM	STANDARD	LIMIT
Headlight (Low/High)	6v 15w/15w	
Instrument Bulbs (Speedo/ Tach/Hi Beam/Turn Signal Oil Pressure		
Tail light/Stop light	6v 5w	
Turn Signal Bulbs		
CHASSIS		
Axle Runout (Front/Rear)	---	0.25mm
Brake Drum I.D.	Front: ---	130.7mm
	Rear: ---	130.7mm
Brake Lining Thickness	Front: ---	1.5mm
	Rear: ---	1.5mm
Brake Disc Thickness (Front & Rear)		
Master Cylinder Cylinder Bore	Front:	
	Rear:	
Master Cylinder Piston Diameter	Front:	
	Rear:	
Brake Caliper Cylinder Bore	Front:	
	Rear:	
Brake Caliper Piston Dia.	Front:	
	Rear:	
Wheel Rim Runout (Radial & Axial)	---	2.0mm
Tire Size	Front: 2.75-19 4PR	---
	Rear: 3.00-18 4PR	---
Tire Tread Depth	Front: ---	4.0mm
	Rear: ---	4.0mm
Tire Pressure	FRONT: SOLO / DUAL; REAR: SOLO / DUAL	
Normal Riding	14 psi / 14 psi	
Continuous High Speed Riding		
Fork Spring Free Length	Upper: 206mm Lower: 283mm	
Swinging Arm Pivot Shaft Runout	---	0.6mm
FUEL & OILS		
Fuel Type	Low-lead or Unleaded	
Engine Oil Type	Suzuki CCI Super 2	
Engine Oil Capacity	CCI Tank: 1.2L (1.3 qt)	
Transmission Oil Type/Cap	SAE 20W-40/chg 800ml/ovrhl 850ml	
Front Fork Air Pressure		
Fork Oil Type/Cap./Level	SAE 20 or ATF/73ml/197mm	

TWO STROKE

SUZUKI
TWO STROKE
Service Bulletin

Bulletin No.: SPECS-17S
Date: 6-19-81

Read and Initial

Manager _____
Parts Mgr. _____
Service Mgr. _____
Mechanics _____

MODEL: DS125X

SUBJECT: SPECIFICATIONS

ITEM	STANDARD	LIMIT
VALVE SPECS		
Valve Lift	IN: EX:	
Tappet Clearance or Valve Clearance	IN: EX:	
Valve Guide--Valve Stem Clearance	IN: EX:	
Valve Guide I.D. (IN/EX)		
Valve Stem O.D.		
Valve Stem Deflection (IN & EX)		
Valve Head Thickness (IN & EX)		
Valve Seat Width (IN/EX)		
Valve Head Radial Runout (IN & EX)		
Valve Spring Free Length	INN: OUT:	
Valve Spring Tension	INN: OUT:	
Rocker Arm I.D. (IN & EX)		
Rocker Arm Shaft O.D. (IN & EX)		
CAMSHAFT		
Cam Height	IN: EX:	
Camshaft--Journal Clearance (IN & EX)		
Camshaft Journal I.D. (IN & EX)		
Camshaft Journal O.D. (IN & EX)		
Camshaft Deflection (IN & EX)		
Cam Chain 20 Pitch Length		
PISTON/RING/CYLINDER		
Compression Pressure		
Max. Difference Between Cylinders		
Piston--Cylinder Clearance	0.045-0.055mm	0.120mm
Cylinder Bore	56.000-56.015mm	56.085mm
Piston Dia./ Measuring Point	55.950-55.965mm @23mm	56.880mm
Cylinder Warpage	---	0.05mm
Piston ring free end gap	1,2 approx 7.5mm	6.0mm
Piston ring End Gap	0.15-0.35mm	0.80mm
Piston ring--Grove Clearance	1,2 0.01-0.05mm	---
Piston Pin Bore I.D.	13.998-14.006mm	14.030mm
Piston Pin O.D.	13.995-14.000mm	13.980mm
CRANKSHAFT		
Con-rod Small End Hole	18.003-18.011	18.040
Big End Side Clearance		
Con-rod Big End Wear		
Crankshaft Runout	---	0.05mm
Crankshaft Web to Web Width	56.0 ± 0.1	---
OIL PUMP		
Oil Pressure		
Tip Clearance		
Outer Rotor Clearance		
Side Clearance		
Oil Pump Reduction Ratio	3.562 (57/16 x 29/17 x 17/29)	
CCI Pump Discharge Rate	1.28-1.58ml @ 2,000 rpm for 2 minutes	
CLUTCH		
Drive Plate Thickness	2.9-3.1mm	2.6mm
Drive Plate Warpage		
Driven Plate Thickness	1.6 ± 0.06mm	---
Driven Plate Warpage	---	0.1mm
Drive Plate Claw Width	11.8-12.0mm	11.3mm
Clutch Spring Free Length	---	32.6mm
Pri. Drive--Driven Gear Backlash		
TRANSMISSION		
Primary Reduction	3.562 (57/16)	
Final Reduction	2.933 (44/15)	
Gear Ratios, Low/2nd	3.090 (34/11) 2.000 (30/15)	
3rd/4th	1.368 (26/19) 1.095 (23/21)	
5th/Top	0.875 (21/24)	
Gear Backlash 1st/2nd		
3rd/4th		
5th/6th		
Shift Fork--Grove Clearance	1,2 0.05-0.25mm	0.45
Shift Fork Groove Width	1,4.45-4.55 2,5.45-5.55	---
Shift Fork Thickness	1, 4.30-4.40 2, 5.30-5.40	---
Drive Chain Size	DID 428D 114 links	---
21 Pin Length		259mm

ITEM	STANDARD	LIMIT
CARBURETOR		
Idle RPM	1300 ± 100rpm	
Carburetor Type	Mikuni VM24SH	
I.D. No.		
Bore Size	24mm	
Float Height	25.8 ± 1.0	
Fuel Level	5.0 ± 0.5	
Air Screw	1	
Pilot Screw		
Pilot Air Jet		
Pilot Jet	#30	
Cut Away	1.5	
Jet Needle	4DH7-2	
Needle Jet	N-8	
Secondary Air Jet		
Pilot Outlet	1.4	
Main Jet	#85	
ELECTRICAL		
Ignition	SUZUKI "PEI"	
Ignition Timing	20° ± 2° BTDC @6000rpm	
Firing Order		
Spark Plug	NGK B8ES Nippon DENSO W24ES	
Spark Plug Gap	0.6-0.8mm	
Contact Point Gap		
Dwell Angle		
Spark Performance	over 8mm	
Condensor Capacity		
Ignition Coil Resistance (Pri.)	B/Y-Ground approx 650-800 ohms	
Ignition Coil Resistance (Sec.)	Plug Cap-Ground approx 15-17k ohms	
Pri. Ignition Coil Resistance		
High Speed Coil Resistance		
Low Speed Coil Resistance		
Magneto Coil Resistance	B/Y - Ground approx 1.5-2 ohms R/W-Ground approx 25-30 ohms Y/R-Ground approx 0-1 ohm	
Lighting Coil Output	above 5.7v @2500rpm below 9v @8000rpm	
Battery		
Specific Gravity		
Regulated Amperage		
Regulated Voltage		
Fuse Capacity		

ITEM	STANDARD	LIMIT
Headlight (Low/High)	6v 15w/15w	
Instrument Bulbs (Speedo/Tach/Hi Beam/Turn Signal Oil Pressure		
Tail light/Stop light	6v/5w	
Turn Signal Bulbs		
CHASSIS		
Axle Runout (Front/Rear)	---	0.25mm
Brake Drum I.D.	Front: ---	130.7mm
	Rear: ---	130.7mm
Brake Lining Thickness	Front: ---	1.5mm
	Rear: ---	1.5mm
Brake Disc Thickness (Front & Rear)		
Master Cylinder Cylinder Bore	Front:	
	Rear:	
Master Cylinder Piston Diameter	Front:	
	Rear:	
Brake Caliper Cylinder Bore	Front:	
	Rear:	
Brake Caliper Piston Dia.	Front:	
	Rear:	
Wheel Rim Runout (Radial & Axial)	---	2.0mm
Tire Size	Front: 2.75-21 4PR	---
	Rear: 3.25-18 4PR	---
Tire Tread Depth	Front: ---	4.0
	Rear: ---	4.0
Tire Pressure	FRONT: SOLO / DUAL; REAR: SOLO / DUAL	
Normal Riding	14psi / 14psi	
Continuous High Speed Riding		
Fork Spring Free Length	Upper Lower	146mm 337mm
Swinging Arm Pivot Shaft Runout	---	0.6mm
FUEL & OILS		
Fuel Type	Low-lead or Unleaded	
Engine Oil Type	Suzuki CCI Super 2	
Engine Oil Capacity	CCI Tank: 1.2L	
Transmission Oil Type/Cap	SAE 20W-40/chg 700ml/ovrhl 750ml	
Front Fork Air Pressure		
Fork Oil Type/Cap./Level	SAE 5W-20 or ATF 127mm/175mm	