

VZ800 SERVICE MANUAL



FOREWORD

This manual contains an introductory description on the SUZUKI VZ800 and procedures for its inspection/service and overhaul of its main components. Other information considered as generally known is not included.

Read the GENERAL INFORMATION section to familiarize yourself with the motorcycle and its maintenance. Use this section as well as other sections to use as a guide for proper inspection and service. This manual will help you know the motorcycle better so that you can assure your customers of fast and reliable service.

- * This manual has been prepared on the basis of the latest specifications at the time of publication. If modifications have been made since then, differences may exist between the content of this manual and the actual motorcycle.
- * Illustrations in this manual are used to show the basic principles of operation and work procedures. They may not represent the actual motorcycle exactly in detail.
- * This manual is written for persons who have enough knowledge, skills and tools, including special tools, for servicing SVZUKI motorcycles. If you do not have the proper knowledge and tools, ask your authorized SUZUKI motorcycle dealer to help you.

A WARNING

Inexperienced mechanics or mechanics without the proper tools and equipment may not be able to properly perform the services described in this manual. Improper repair may result in injury to the

mechanic and may render the motorcycle unsafe for the rider and passenger.

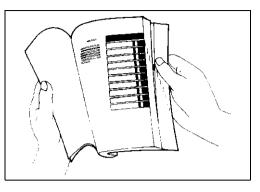
GROUP INDEX

GENERAL INFORMATION	1
PERIODIC MAINTENANCE	2
ENGINE	3
SHAFT DRIVE	4
FISYSTEM	5
FUEL SYSTEM AND THROTTLE BODY	6
COOLING AND LUBRICATION SYSTEM	7
CHASSIS	8
ELECTRICAL SYSTEM	9
SERVICING INFORMATION	10
EMISSION CONTROL INFORMATION	11
WIRING DIAGRAM	12

SUZUKI MOTOR CORPORATION

HOW TO USE THIS MANUAL TO LOCATE WHAT YOU ARE LOOKING FOR:

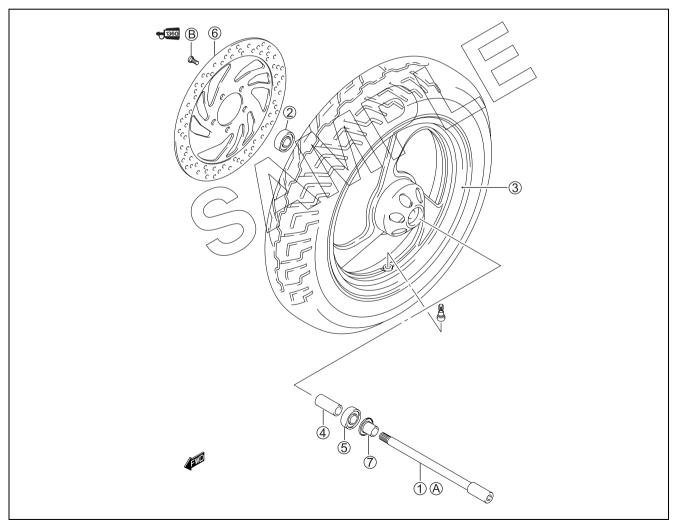
- 1. The text of this manual is divided into sections.
- 2. The section titles are listed in the GROUP INDEX.
- 3. Holding the manual as shown at the right will allow you to find the first page of the section easily.
- 4. The contents are listed on the first page of each section to help you find the item and page you need.



COMPONENT PARTS AND WORK TO BE DONE

Under the name of each system or unit, is its exploded view. Work instructions and other service information such as the tightening torque, lubricating points and locking agent points, are provided.

Example: Front wheel



1	Front axle	6	Brake disc
2	Bearing (R)	$\overline{\mathcal{O}}$	Spacer
3	Front wheel		
4	Spacer	A	Front axle
(5)	Bearing (L)	₿	Brake disc mounting bolt

ITEM	N∙m	kgf-m	lb-ft
A	65	6.5	47.0
B	23	2.3	16.5

SYMBOL

Listed in the table below are the symbols indicating instructions and other information necessary for servicing. The meaning of each symbol is also included in the table.

SYMBOL	DEFINITION	SYMBOL	DEFINITION
	Torque control required. Data beside it indicates specified torque.	1360	Apply THREAD LOCK SUPER "1360". 99000-32130
P	Apply oil. Use engine oil unless other- wise specified.	LLC	Use engine coolant. 99000-99032-11X
M/O	Apply molybdenum oil solution. (Mixture of engine oil and SUZUKI MOLY PASTE in a ratio of 1 : 1)	FORK	Use fork oil. 99000-99044-L01
Æ.	Apply SUZUKI SUPER GREASE "A". 99000-25030 (USA) 99000-25010 (Others)	BF	Apply or use brake fluid.
FMH	Apply SUZUKI MOLY PASTE. 99000-25140		Measure in voltage range.
FGH	Apply SUZUKI SILICONE GREASE: 99000-25100		Measure in resistance range.
1207B	Apply SUZUKI BOND "1207B". 99000-31140		Measure in current range.
1216B	Apply SUZUKI BOND "1216B". 99000-31230		Measure in diode test range.
1303	Apply THREAD LOCK SUPER "1303". 99000-32030		Measure in continuity test range.
1322	Apply THREAD LOCK SUPER "1322". 99000-32110 (Except USA)	TOOL	Use special tool.
1342	Apply THREAD LOCK "1342". 99000-32050	DATA	Indication of service data.

ABBREVIATIONS USED IN THIS MANUAL

Α

ABDC	: After Bottom Dead Center	ECM	: Engine Control Module
AC	: Alternating Current		Engine Control Unit (EC
ACL	: Air Cleaner, Air Cleaner Box		(FI Control Unit)
API	: American Petroleum Institute	EOT Sens	or : Engine Oil Temperature
ATDC	: After Top Dead Center		Sensor (EOTS), Oil Tem
ATM Press	ure: Atmospheric Pressure		Sensor
	Atmospheric Pressure Sensor	EVAP	: Evaporative Emission
	(APS)	EVAP Can	ister: Evaporative Emission
A/F	: Air Fuel Mixture		Canister (Canister)

В

BBDC	: Before Bottom Dead Center	FI	: Fuel Injection, Fuel Injector
BTDC	: Before Top Dead Center	FP	: Fuel Pump
B+	: Battery Positive Voltage	FPR	: Fuel Pressure Regulator
		FP Relay	: Fuel Pressure Regulator : Fuel Pump Relay

(

		TT TICIUY	
С		•	
CKP Sensor	: Crankshaft Position Sensor	G	
	(CKPS)	(GEN) \ \	Generator
CKT	: Circuit	\GND \	Ground
CLP Switch	: Clutch Lever Position Switch	GP Switch	: Gear Position Switch
	(Clutch Switch)		
CO		H ~	
CPU	: Central Processing Unit	HC	: Hydrocarbons
		HO2 Sensor	: Heated Oxygen Sensor (HO2S)
D			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
DC	: Direct Current	I	
DMC	: Dealer Mode Coupler	IAP Sensor	: Intake Air Pressure Sensor (IAPS)
DOHC	: Double Over Head Camshaft	IAT Sensor	: Intake Air Temperature Sensor
DRL	: Daytime Running Light		(IATS)
		IG	: Ignition
			-
		L	

LCD	: Liquid Crystal Display
LED	: Light Emitting Diode
	(Malfunction Indicator Lamp)
LH	: Left Hand

: Engine Control Module Engine Control Unit (ECU)

Sensor (EOTS), Oil Temp.

Е

F

Μ

MAL-Code	: Malfunction Code
	(Diagnostic Code)
Max	: Maximum
MIL	: Malfunction Indicator Lamp (LED)
	()
Min	: Minimum

Ν

NOx	: Nitrogen Oxides

0

OHC	: Over Head Camshaft
OPS	: Oil Pressure Switch

Ρ

PCV	: Positive Crankcase
	Ventilation (Crankcase Breather)

R

RH	: Right Hand
ROM	: Read Only Memory

S

•	
SAE	: Society of Automotive Engineers
SDS	: Suzuki Diagnosis System
STC System	: Secondary Throttle Control
	System (STCS)
STP Sensor	: Secondary Throttle Position
	Sensor (STPS)
ST Valve	: Secondary Throttle Valve (STV)
STV Actuator	: Secondary Throttle Valve Actuator
	(STVA)

Т

TO Sensor: Tip Over Sensor (TOS)TP Sensor: Throttle Position Sensor (TPS)

WIRE COLOR

B : Black Bl : Blue Br : Brown

Dq

G

B/BI

- Gr : Gray
- Lbl : Light blue
- Lg : Light green
- O : Orange
- P : Pink

- R : Red W : White Y : Yellow
- B/Br : Black with Brown tracer
- B/Lg : Black with Light green tracer
- B/W : Black with White tracer
- BI/B : Blue with Black tracer
- BI/R : Blue with Red tracer
- BI/Y : Blue with Yellow tracer
- Br/W : Brown with White tracer
- G/W : Green with White tracer
- Gr/B : Gray with Black tracer
- Gr/W : Gray with White tracer
- O/B : Orange with Black tracer
- O/G : Orange with Green tracer
- O/W : Orange with White tracer
- $\mathbb{P}/\mathbb{W} \setminus :$ Pink with White tracer
- R/BI . Red with Blue tracer
- W/BI : White with Blue tracer
- Y/B : Yellow with Black tracer
- Ý/G : Yellow with Green tracer
- Y/W : Yellow with White tracer

B/G : Black with Green tracer

: Black with Blue tracer

: Dark green

: Green

- B/R : Black with Red tracer
- B/Y : Black with Yellow tracer
- BI/G : Blue with Green tracer
- BI/W : Blue with White tracer
- Br/B : Brown with Black tracer
- G/B : Green with Black tracer
- G/Y : Green with Yellow tracer
- Gr/R : Gray with Red tracer
- Lg/G : Light green with Green tracer
- O/BI : Orange with Blue tracer
- O/R : Orange with Red tracer
- O/Y : Orange with Yellow tracer
- R/B : Red with Black tracer
- W/B : White with Black tracer
- W/R : White with Red tracer
- Y/BI : Yellow with Blue tracer
- Y/R : Yellow with Red tracer

GENERAL INFORMATION

- CONTENTS -

WARNING/CAUTION/NOTE		
GENERAL PRECAUTIONS		
SUZUKI VZ800K5 ('05-MODEL)		
SERIAL NUMBER LOCATION		
FUEL, OIL AND ENGINE COOLANT RECOMMENDATION		
FUEL (FOR USA AND CANADA)		
FUEL (FOR OTHER COUNTRIES)1- 4		
ENGINE OIL1- 5		
BRAKE FLUID1-		
FRONT FORK OIL1- 5		
ENGINE COOLANT	_	
WATER FOR MIXING1- 5		
	1- 5	
LIQUID AMOUNT OF WATER/ENGINE COOLANT	1- 5	
	1- 6	
CYLINDER IDENTIFICATION	1- 6	
INFORMATION LABELS	1- 7	
SPECIFICATIONS		

COUNTRY AND AREA CODES

The following codes stand for the applicable country(-ies) and area(-s).

CODE	COUNTRY or AREA	EFFECTIVE FRAME NO.
E-02	U.K.	JS1B4111200100001 –
E-03	U.S.A. (Except for California)	JS1VS56A 52100001 –
E-19 (VZ800)	E.U.	JS1B4111100100001 –
E-19 (VZ800U)	E.U.	JS1B4211100100001 –
E-24	Australia	JS1B4111300100001 –
E-28	Canada	JS1VS56A 52100001 –
E-33	California (U.S.A.)	JS1VS56A 52100001 –

WARNING/CAUTION/NOTE

Please read this manual and follow its instructions carefully. To emphasize special information, the symbol and the words WARNING, CAUTION and NOTE have special meanings. Pay special attention to the messages highlighted by these signal words.

WARNING

Indicates a potential hazard that could result in death or injury.

CAUTION

Indicates a potential hazard that could result in motorcycle damage.

NOTE:

Indicates special information to make maintenance easier or instructions clearer.

Please note, however, that the warnings and cautions contained in this manual cannot possibly cover all potential hazards relating to the servicing, or lack of servicing, of the motorcycle. In addition to the WARN-INGS and CAUTIONS stated, you must use good judgement and basic mechanical safety principles. If you are unsure about how to perform a particular service operation, ask a more experienced mechanic for advice.

GENERAL PRECAUTIONS

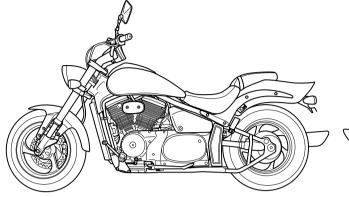
A WARNING

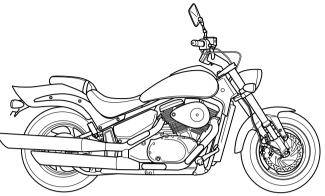
- * Proper service and repair procedures are important for the safety of the service mechanic and the safety and reliability of the motorcycle.
- * When 2 or more persons work together, pay attention to the safety of each other.
- * When it is necessary to run the engine indoors, make sure that exhaust gas is forced outdoors.
- * When working with toxic or flammable materials, make sure that the area you work in is wellventilated and that you follow all of the material manufacturer's instructions.
- * Never use gasoline as a cleaning solvent.
- * To avoid getting burned, do not touch the engine, engine oil, radiator and exhaust system until they have cooled.
- * After servicing the fuel, oil, water, exhaust or brake systems, check all lines and fittings related to the system for leaks.

CAUTION

- * If parts replacement is necessary, replace the parts with Suzuki Genuine Parts or their equivalent.
- * When removing parts that are to be reused, keep them arranged in an orderly manner so that they may be reinstalled in the proper order and orientation.
- * Be sure to use special tools when instructed.
- * Make sure that all parts used in reassembly are clean. Lubricate them when specified.
- * Use the specified lubricant, bond or sealant.
- * When removing the battery, disconnect the negative cable first and then the positive cable.
- * When reconnecting the battery, connect the positive cable first and then the negative cable, and replace the terminal cover on the positive terminal.
- * When performing service to electrical parts, if the service procedures do not require use of battery power, disconnect the negative cable from the battery.
- * When tightening the cylinder head and case bolts or nuts, tighten the larger sizes first. Always tighten the bolts and nuts diagonally from the inside toward outside and to the specified tightening torque.
- * Whenever you remove oil seals, gaskets, packing, O-rings, locking washers, self-locking nuts, cotter pins, circlips and certain other parts as specified, be sure to replace them with new ones. Also, before installing these new parts, be sure to remove any left over material from the mating surfaces.
- * Never reuse a circlip. When installing a new circlip, take care not to expand the end gap larger than required to slip the circlip over the shaft. After installing a circlip, always ensure that it is completely seated in its groove and securely fitted.
- * Use a torque wrench to tighten fasteners to the specified torque. Wipe off grease and oil if a thread is smeared with them.
- * After reassembling, check parts for tightness and proper operation.
- * To protect the environment, do not unlawfully dispose of used motor oil, engine coolant and other fluids: batteries and tires.
- * To protect Earth's natural resources, properly dispose of used motorcycle and parts.

SUZUKI VZ800K5 ('05-MODEL)





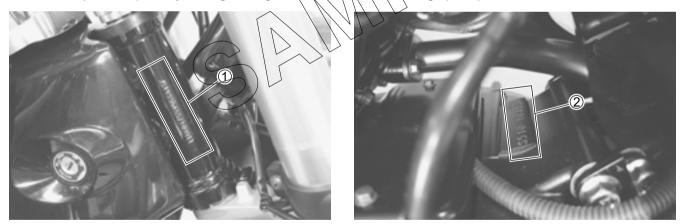
RIGHT SIDE

LEFT SIDE

* Difference between illustration and actual motorcycle may exist depending on the markets.

SERIAL NUMBER LOCATION

The frame serial number or V.I.N. (Vehicle Identification Number) 1 is stamped on the right side of the steering head pipe. The engine serial number 2 is located on the right side of the crankcase. These numbers are required especially for registering the machine and ordering spare parts.



FUEL, OIL AND ENGINE COOLANT RECOMMENDATION FUEL (FOR USA AND CANADA)

Use only unleaded gasoline of at least 87 pump octane (R/2 + M/2) or 91 octane or higher rated by the research method.

Gasoline containing MTBE (Methyl Tertiary Butyl Ether), less than 10% ethanol, or less than 5% methanol with appropriate cosolvents and corrosion inhibitor is permissible.

FUEL (FOR OTHER COUNTRIES)

Gasoline used should be graded 91 octane (Research Method) or higher. Unleaded gasoline is recommended.