

FOREWORD

This manual contains an introductory description on the SUZUKI LT-Z90 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 vehicle 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 vehicle 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 vehicle.*

** Illustrations in this manual are used to show the basic principles of operation and work procedures. They may not represent the actual vehicle exactly in detail.*

** This manual is written for persons who have enough knowledge, skills and tools, including special tools, for servicing SUZUKI vehicles. If you do not have the proper knowledge and tools, ask your authorized SUZUKI motorcycle dealer to help you.*

⚠ 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 vehicle unsafe for the rider.

GROUP INDEX

GENERAL INFORMATION

1

PERIODIC MAINTENANCE

2

ENGINE

3

FUEL SYSTEM

4

CHASSIS

5

ELECTRICAL SYSTEM

6

SERVICING INFORMATION

7

SUZUKI MOTOR CORPORATION

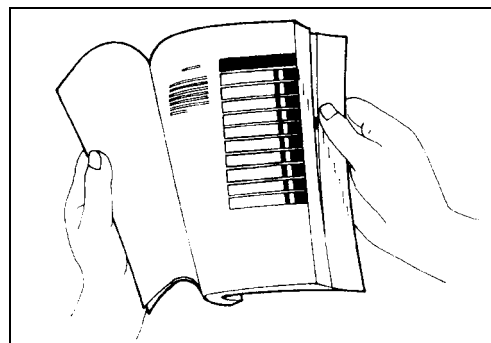
SUPPLEMENTS

LT-Z90K9 ('09-MODEL)

8

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

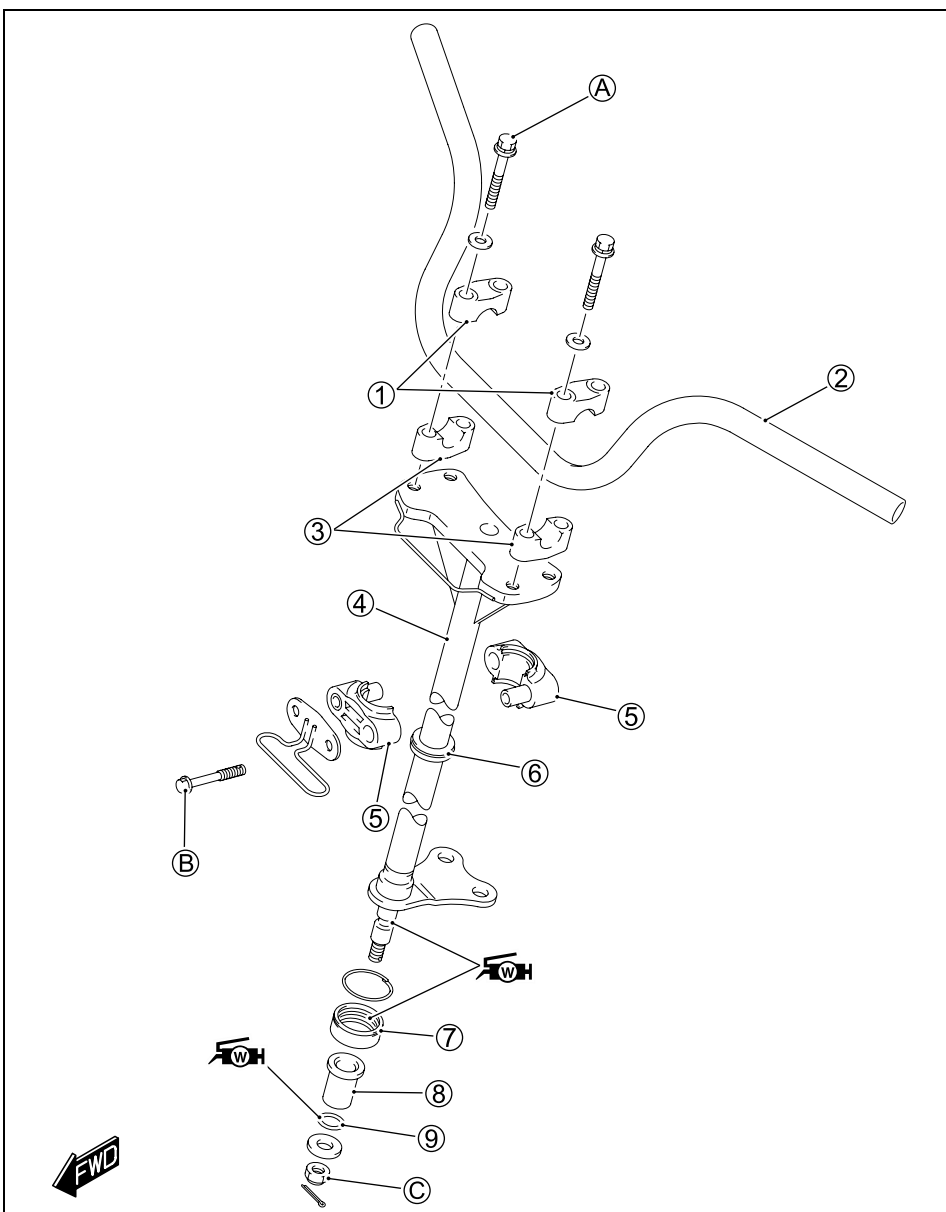
Under the name of each system or unit, is its exploded view. Work instructions and other service information such as the tightening torque, lubricating points and locking agent points, are provided.

Example: Front and rear wheel

①	Handlebar upper holder
②	Handlebars
③	Handlebar lower holder
④	Steering shaft
⑤	Steering shaft holder
⑥	Dust seal
⑦	Steering shaft lower dust seal
⑧	Steering shaft bush
⑨	O-ring
A	Handlebar clamp bolt
B	Steering shaft holder bolt
C	Steering shaft lower nut




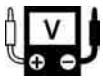

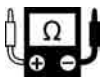













ITEM	N-m	kgf-m	lb-ft
A	25	2.5	18.0
B	23	2.3	17.0
C	35	3.5	25.5



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.		Apply THREAD LOCK “1342”. 99000-32050
	Apply oil. Use engine oil unless otherwise specified.		Measure in voltage range.
	Apply molybdenum oil solution. (mixture of engine oil and SUZUKI MOLY PASTE in a ratio of 1 : 1)		Measure in resistance range.
	Apply SUZUKI SUPER GREASE “A” or equivalent grease. 99000-25010		Measure in current range.
	Apply SUZUKI MOLY PASTE. 99000-25140		Measure in diode test range.
	Apply SUZUKI RESISTANCE GREASE. 99000-25160		Measure in continuity test range.
	Apply SUZUKI BOND “1215” or equivalent bond. 99000-31110		Use special tool.
	Apply THREAD LOCK SUPER “1303”. 99000-32030		Indicates service data.
	Apply THREAD LOCK SUPER “1322” or equivalent thread lock. 99000-32110		

GENERAL INFORMATION

1

CONTENTS

WARNING/CAUTION/NOTE	1- 2
GENERAL PRECAUTIONS.....	1- 2
SUZUKI LT-Z90K7 ('07-MODEL).....	1- 4
SERIAL NUMBER LOCATION.....	1- 4
FUEL AND OIL RECOMMENDATION	1- 5
FUEL (FOR USA AND CANADA).....	1- 5
FUEL (FOR OTHER COUNTRIES).....	1- 5
ENGINE OIL AND FINAL REDUCTION GEAR BOX OIL	
(FOR USA)	1- 5
ENGINE OIL AND FINAL REDUCTION GEAR BOX OIL	
(FOR OTHER COUNTRIES)	1- 5
BREAK-IN PROCEDURES	1- 6
INFORMATION LABELS.....	1- 7
SPECIFICATIONS	1- 8
DIMENSIONS AND DRY MASS	1- 8
ENGINE	1- 8
DRIVE TRAIN.....	1- 8
CHASSIS.....	1- 9
ELECTRICAL	1- 9
CAPACITIES	1- 9

COUNTRY AND AREA CODES

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

MODEL	CODE	COUNTRY or AREA	EFFECTIVE FRAME NO.
LT-Z90K7	P-19	E.U.	LM4AD41A71100001-
	P-28	Canada	
	P-33	California (U.S.A.)	

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 vehicle 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 vehicle. In addition to the WARNINGS 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

WARNING

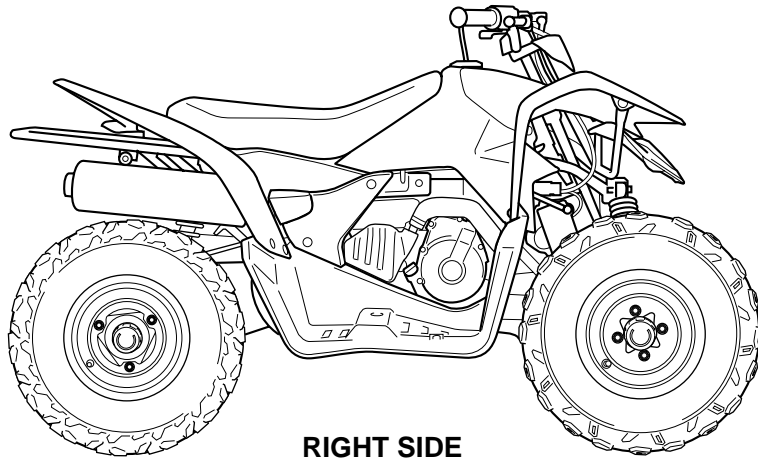
- * Proper service and repair procedures are important for the safety of the service mechanic and the safety and reliability of the vehicle.
- * When 2 or more persons work together, pay attention to the safety of each other.
- * When it is necessary to run the engine indoors, make sure that exhaust gas is forced outdoors.
- * When working with toxic or flammable materials, make sure that the area you work in is well-ventilated 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, final reduction gear box oil and exhaust system until they have cooled.
- * After servicing the fuel or exhaust systems, check all lines and fittings related to the system for leaks.

CAUTION

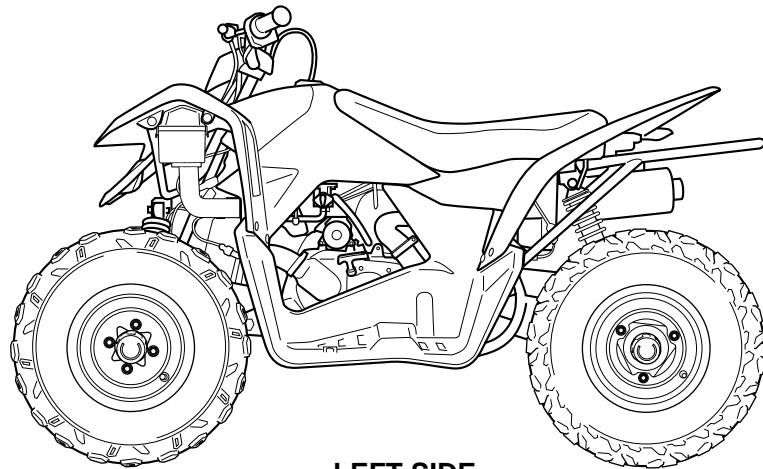
- * If parts replacement is necessary, replace the parts with Suzuki Genuine Parts or their equivalent.
- * When removing parts that are to be reused, keep them arranged in an orderly manner so that they may be reinstalled in the proper order and orientation.
- * Be sure to use special tools when instructed.
- * 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 or case bolts and 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: batteries and tires.
- * To protect Earth's natural resources, properly dispose of used vehicle and parts.

SUZUKI LT-Z90K7 ('07-MODEL)



RIGHT SIDE



LEFT SIDE

- Difference between illustration and actual vehicle 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 left side of the rear frame pipe. The engine serial number ② is located on the right side of the generator case. These numbers are required especially for registering the machine and ordering spare parts.



