



**YAMAHA**

**YFZ450S**

**SERVICE MANUAL**

# HOW TO USE THIS MANUAL

## MANUAL ORGANIZATION

This manual consists of chapters for the main categories of subjects. (See “symbols”)

1st title ①: This is the title of the chapter with its symbol in the upper right corner of each page.

2nd title ②: This title indicates the section of the chapter and only appears on the first page of each section. It is located in the upper left corner of the page.

3rd title ③: This title indicates a sub-section that is followed by step-by-step procedures accompanied by corresponding illustrations.

## EXPLODED DIAGRAMS

To help identify parts and clarify procedure steps, there are exploded diagrams at the start of each removal and disassembly section.

1. An easy-to-see exploded diagram ④ is provided for removal and disassembly jobs.
2. Numbers ⑤ are given in the order of the jobs in the exploded diagram. A number that is enclosed by a circle indicates a disassembly step.
3. An explanation of jobs and notes is presented in an easy-to-read way by the use of symbol marks ⑥. The meanings of the symbol marks are given on the next page.
4. A job instruction chart ⑦ accompanies the exploded diagram, providing the order of jobs, names of parts, notes in jobs, etc.
5. For jobs requiring more information, the step-by-step format supplements ⑧ are given in addition to the exploded diagram and the job instruction chart.

② CLUTCH      ① ENG

**EXPLODED DIAGRAM**

**CLUTCH**

**⑦**

Order	Job/Part	Q'ty	Remarks
<b>Removing the clutch</b>			
	Engine oil		Remove the parts in the order listed.
	Clutch cable		Drain.
			Refer to "LEADS, CABLES AND HOSES".
1	Clutch cover	1	Refer to "REMOVING THE CLUTCH" and "INSTALLING THE CLUTCH".
2	Gasket	2	
3	Dowel pin	1	
4	Clutch spring	6	
5	Pressure plate	1	Refer to "INSTALLING THE CLUTCH".
6	Push rod 1	1	
7	Circlip	1	
8	Plain washer	1	
9	Bearing	1	
10	Ball	1	

CLUTCH      ENG

**REMOVING THE CLUTCH**

1. Remove:

- clutch cover ①

**NOTE:**  
Loosen each bolt 1/4 of a turn at a time, in stages and in a crisscross pattern. After all of the bolts are fully loosened, remove them.

2. Straighten the lock washer tab.

3. Loosen:

- clutch boss nut ①

**NOTE:**  
While holding the clutch boss ② with the universal clutch holder ③, loosen the clutch boss nut.

**Universal clutch holder**  
P/N, YM-91042, 90890-04086

**CHECKING THE FRICTION PLATES**  
The following procedure applies to all of the friction plates.

1. Check:

- friction plate 1
- friction plate 2

Damage/wear → Replace the friction plates as a set.

2. Measure:

- friction plate 1 thickness
- friction plate 2 thickness

Out of specification → Replace the friction plates as a set.








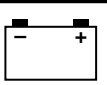















**NOTE:**  
Measure the friction plate at four places.

**Friction plate 1 thickness**  
2.9 - 3.1 mm (0.114 - 0.122 in)  
Limit: 2.8 mm (0.110 in)

**Friction plate 2 thickness**  
2.9 - 3.1 mm (0.114 - 0.122 in)  
Limit: 2.8 mm (0.110 in)

4 - 48

4 - 50

①	GEN INFO		
②	SPEC		
③	CHK ADJ		
④	ENG		
⑤	COOL		
⑥	CARB		
⑦	CHAS		
⑧	ELEC		
⑨	TRBL SHTG		?
⑩			
⑪			
⑫			
⑬			
⑭			
⑮			
⑯			
⑰			
⑱			
⑲			
⑳			
㉑			
㉒			
㉓			
㉔			
㉕	New		

EBS00006

## SYMBOLS

The following symbols are not relevant to every machine.

Symbols ① to ⑨ indicate the subject of each chapter.

- ① General information
- ② Specifications
- ③ Periodic checks and adjustments
- ④ Engine
- ⑤ Cooling system
- ⑥ Carburetor
- ⑦ Chassis
- ⑧ Electrical
- ⑨ Troubleshooting

Symbols ⑩ to ⑰ indicate the following

- ⑩ Serviceable with engine mounted
- ⑪ Filling fluid
- ⑫ Lubricant
- ⑬ Special tool
- ⑭ Torque
- ⑮ Wear limit, clearance
- ⑯ Engine speed
- ⑰ Electrical data ( $\Omega$ , V, A)










Symbols ⑱ to ㉔ in the exploded diagrams indicate the types of lubricants and lubrication points.

- ⑱ Apply engine oil
- ⑲ Apply gear oil
- ㉑ Apply molybdenum disulfide oil
- ㉒ Apply wheel bearing grease
- ㉓ Apply lithium-soap-based grease
- ㉔ Apply molybdenum disulfide grease

Symbols ㉔ to ㉕ in the exploded diagrams indicate where to apply a locking agent ㉔ and when to install a new part ㉕.

- ㉔ Apply the locking agent (LOCTITE®)
- ㉕ Replace

# TABLE OF CONTENTS

GENERAL INFORMATION	
	GEN INFO <b>1</b>
SPECIFICATIONS	
	SPEC <b>2</b>
PERIODIC CHECKS AND ADJUSTMENTS	
	CHK ADJ <b>3</b>
ENGINE	
	ENG <b>4</b>
COOLING SYSTEM	
	COOL <b>5</b>
CARBURETOR	
	CARB <b>6</b>
CHASSIS	
	CHAS <b>7</b>
ELECTRICAL	
	ELEC <b>8</b>
TROUBLESHOOTING	
	TRBL SHTG <b>9</b>

---

## **CHAPTER 1**

### **GENERAL INFORMATION**

<b>MACHINE IDENTIFICATION</b> .....	1-1
VEHICLE IDENTIFICATION NUMBER .....	1-1
MODEL LABEL.....	1-1
<b>IMPORTANT INFORMATION</b> .....	1-2
PREPARATION FOR REMOVAL AND DISASSEMBLY.....	1-2
REPLACEMENT PARTS.....	1-2
GASKETS, OIL SEALS AND O-RINGS .....	1-2
LOCK WASHERS/PLATES AND COTTER PINS .....	1-3
BEARINGS AND OIL SEALS .....	1-3
CIRCLIPS .....	1-3
CHECKING THE CONNECTIONS.....	1-4
<b>SPECIAL TOOLS</b> .....	1-5

## **CHAPTER 2**

### **SPECIFICATIONS**

<b>GENERAL SPECIFICATIONS</b> .....	2-1
<b>ENGINE SPECIFICATIONS</b> .....	2-4
<b>CHASSIS SPECIFICATIONS</b> .....	2-12
<b>ELECTRICAL SPECIFICATIONS</b> .....	2-14
<b>TIGHTENING TORQUES</b> .....	2-16
ENGINE TIGHTENING TORQUES .....	2-16
CHASSIS TIGHTENING TORQUES .....	2-19
<b>HOW TO USE THE CONVERSION TABLE</b> .....	2-21
<b>GENERAL TIGHTENING TORQUE SPECIFICATIONS</b> .....	2-21
<b>LUBRICATION POINTS AND LUBRICANT TYPES</b> .....	2-22
ENGINE.....	2-22
<b>COOLANT FLOW DIAGRAMS</b> .....	2-24
<b>OIL FLOW DIAGRAMS</b> .....	2-26
<b>CABLE ROUTING</b> .....	2-28

---

## CHAPTER 3

### PERIODIC CHECKS AND ADJUSTMENTS

<b>INTRODUCTION.....</b>	<b>3-1</b>
<b>PERIODIC MAINTENANCE/LUBRICATION .....</b>	<b>3-1</b>
<b>SEAT, FENDERS AND FUEL TANK .....</b>	<b>3-3</b>
SEAT, FUEL TANK COVER AND SIDE COVERS .....	3-3
FOOT PROTECTORS AND ENGINE SKID PLATE .....	3-4
HEADLIGHTS AND FRONT FENDER.....	3-5
REAR FENDER.....	3-6
FUEL TANK.....	3-7
<b>ENGINE .....</b>	<b>3-8</b>
ADJUSTING THE VALVE CLEARANCE .....	3-8
ADJUSTING THE ENGINE IDLING SPEED .....	3-13
ADJUSTING THE THROTTLE LEVER FREE PLAY .....	3-14
ADJUSTING THE SPEED LIMITER.....	3-16
CHECKING THE SPARK PLUG .....	3-17
CHECKING THE IGNITION TIMING.....	3-18
CHECKING THE ENGINE OIL LEVEL.....	3-19
CHANGING THE ENGINE OIL .....	3-21
ADJUSTING THE CLUTCH CABLE.....	3-24
CLEANING THE AIR FILTER ELEMENT.....	3-26
CHECKING THE COOLANT LEVEL.....	3-28
CHANGING THE COOLANT.....	3-28
CHECKING THE COOLANT TEMPERATURE WARNING LIGHT .....	3-32
CLEANING THE SPARK ARRESTER .....	3-33
<b>CHASSIS .....</b>	<b>3-34</b>
ADJUSTING THE FRONT BRAKE .....	3-34
ADJUSTING THE BRAKE LEVER .....	3-34
ADJUSTING THE REAR BRAKE.....	3-34
ADJUSTING THE PARKING BRAKE.....	3-35
CHECKING THE BRAKE FLUID LEVEL.....	3-36
CHECKING THE FRONT BRAKE PADS .....	3-37
CHECKING THE REAR BRAKE PADS .....	3-38
ADJUSTING THE REAR BRAKE LIGHT SWITCH .....	3-39
CHECKING THE BRAKE HOSES.....	3-39
BLEEDING THE HYDRAULIC BRAKE SYSTEM .....	3-40
ADJUSTING THE SHIFT PEDAL.....	3-42
ADJUSTING THE DRIVE CHAIN SLACK .....	3-43
CHECKING THE STEERING SYSTEM .....	3-44
ADJUSTING THE TOE-IN.....	3-45
CHECKING THE FRONT AND REAR SHOCK ABSORBERS .....	3-46
ADJUSTING THE FRONT SHOCK ABSORBERS .....	3-47
ADJUSTING THE REAR SHOCK ABSORBER .....	3-49
CHECKING THE TIRES.....	3-53

---

CHECKING THE WHEELS .....	3-55
CHECKING AND LUBRICATING THE CABLES .....	3-55
LUBRICATING THE LEVERS AND PEDALS .....	3-56
<b>ELECTRICAL SYSTEM</b> .....	3-57
CHECKING AND CHARGING THE BATTERY .....	3-57
CHECKING THE FUSES .....	3-64
ADJUSTING THE HEADLIGHT BEAM .....	3-65
REPLACING A HEADLIGHT BULB .....	3-66

## CHAPTER 4

### ENGINE

<b>ENGINE REMOVAL</b> .....	4-1
MUFFLER AND EXHAUST PIPE .....	4-1
INSTALLING THE EXHAUST PIPE AND MUFFLER.....	4-2
LEADS, CABLES AND HOSES .....	4-4
ENGINE MOUNTING BOLTS .....	4-6
INSTALLING THE ENGINE.....	4-8
<b>CAMSHAFTS</b> .....	4-9
CYLINDER HEAD COVER.....	4-9
CAMSHAFTS .....	4-10
REMOVING THE CAMSHAFTS.....	4-11
CHECKING THE CAMSHAFTS .....	4-12
CHECKING THE CAMSHAFT SPROCKETS .....	4-14
CHECKING THE DECOMPRESSION SYSTEM.....	4-14
CHECKING THE TIMING CHAIN GUIDE .....	4-14
CHECKING THE TIMING CHAIN TENSIONER.....	4-15
INSTALLING THE CAMSHAFTS .....	4-15
<b>CYLINDER HEAD</b> .....	4-18
REMOVING THE CYLINDER HEAD.....	4-20
CHECKING THE CYLINDER HEAD .....	4-20
CHECKING THE OIL DELIVERY PIPE.....	4-21
CHECKING THE TIMING CHAIN GUIDE .....	4-21
INSTALLING THE CYLINDER HEAD .....	4-21
<b>VALVES AND VALVE SPRINGS</b> .....	4-24
REMOVING THE VALVES AND VALVE SPRINGS .....	4-26
CHECKING THE VALVES AND VALVE SPRINGS .....	4-27
CHECKING THE VALVE LIFTERS .....	4-32
INSTALLING THE VALVES AND VALVE SPRINGS .....	4-32

---

<b>CYLINDER AND PISTON</b> .....	4-34
REMOVING THE PISTON .....	4-35
CHECKING THE CYLINDER AND PISTON .....	4-35
CHECKING THE PISTON RINGS.....	4-37
CHECKING THE PISTON PIN .....	4-38
INSTALLING THE PISTON .....	4-40
INSTALLING THE CYLINDER .....	4-41
 <b>A.C. MAGNETO</b> .....	4-42
REMOVING THE A.C. MAGNETO ROTOR.....	4-44
CHECKING THE STATOR COIL AND PICKUP COIL .....	4-44
CHECKING THE STARTER CLUTCH .....	4-45
CHECKING THE TORQUE LIMITER.....	4-46
INSTALLING THE A.C. MAGNETO ROTOR .....	4-46
 <b>CLUTCH</b> .....	4-48
REMOVING THE CLUTCH .....	4-50
CHECKING THE FRICTION PLATES.....	4-50
CHECKING THE CLUTCH PLATES .....	4-51
CHECKING THE CLUTCH SPRINGS.....	4-51
CHECKING THE CLUTCH HOUSING .....	4-51
CHECKING THE CLUTCH BOSS.....	4-52
CHECKING THE PRESSURE PLATE .....	4-52
CHECKING THE PUSH RODS .....	4-52
CHECKING THE PUSH LEVER.....	4-52
CHECKING THE PRIMARY DRIVEN GEAR .....	4-52
INSTALLING THE CLUTCH.....	4-53
 <b>BALANCER</b> .....	4-55
REMOVING THE BALANCER DRIVE GEAR AND BALANCER DRIVEN GEAR .....	4-56
CHECKING THE PRIMARY DRIVE GEAR, BALANCER DRIVE GEAR AND BALANCER DRIVEN GEAR .....	4-56
CHECKING THE BALANCER.....	4-56
INSTALLING THE BALANCER DRIVE GEAR AND BALANCER DRIVEN GEAR .....	4-57
 <b>OIL PUMP</b> .....	4-58
CHECKING THE OIL PUMP .....	4-60
 <b>SHIFT SHAFT</b> .....	4-61
CHECKING THE SHIFT SHAFT .....	4-63
CHECKING THE STOPPER LEVER .....	4-63
CHECKING THE SHIFT GUIDE AND SHIFT LEVER.....	4-63
CHECKING THE SHIFT DRUM SEGMENT .....	4-63
INSTALLING THE SHIFT LEVER .....	4-63
INSTALLING THE SHIFT SHAFT .....	4-64



---

<b>CRANKCASE</b> .....	4-65
OIL SEAL AND BEARING .....	4-67
SEPARATING THE CRANKCASE .....	4-68
CHECKING THE OIL STRAINER AND OIL DELIVERY PIPE 2 .....	4-68
CHECKING THE TIMING CHAIN AND GUIDE .....	4-69
CHECKING THE BEARINGS AND OIL SEALS .....	4-69
CHECKING THE CRANKCASE .....	4-69
ASSEMBLING THE CRANKCASE .....	4-70
 <b>CRANKSHAFT</b> .....	4-72
REMOVING THE CRANKSHAFT .....	4-73
CHECKING THE CRANKSHAFT .....	4-73
INSTALLING THE CRANKSHAFT .....	4-74
 <b>TRANSMISSION</b> .....	4-75
MAIN AXLE .....	4-76
DRIVE AXLE .....	4-77
CHECKING THE SHIFT FORKS .....	4-78
CHECKING THE SHIFT DRUM .....	4-78
CHECKING THE TRANSMISSION .....	4-78
ASSEMBLING THE MAIN AXLE AND DRIVE AXLE .....	4-79
INSTALLING THE TRANSMISSION .....	4-80

## **CHAPTER 5**

### **COOLING SYSTEM**

<b>RADIATOR</b> .....	5-1
CHECKING THE RADIATOR .....	5-3
INSTALLING THE RADIATOR .....	5-4
 <b>WATER PUMP</b> .....	5-5
CHECKING THE WATER PUMP .....	5-7

## **CHAPTER 6**

### **CARBURETOR**

<b>CARBURETOR</b> .....	6-1
DISASSEMBLING THE CARBURETOR .....	6-5
CHECKING THE CARBURETOR .....	6-5
ASSEMBLING THE CARBURETOR .....	6-7
ADJUSTING THE ACCELERATOR PUMP TIMING .....	6-8
INSTALLING THE CARBURETOR JOINT .....	6-8
INSTALLING THE CARBURETOR .....	6-9
CHECKING AND ADJUSTING THE THROTTLE POSITION SENSOR ...	6-9

---

## CHAPTER 7

### CHASSIS

<b>FRONT AND REAR WHEELS .....</b>	<b>7-1</b>
FRONT WHEELS .....	7-1
REAR WHEELS .....	7-3
CHECKING THE WHEELS .....	7-4
CHECKING THE WHEEL HUBS .....	7-4
CHECKING THE BRAKE DISCS .....	7-5
INSTALLING THE FRONT WHEEL HUB BEARINGS .....	7-6
INSTALLING THE FRONT BRAKE DISCS .....	7-6
INSTALLING THE FRONT WHEELS .....	7-6
INSTALLING THE WHEEL HUBS .....	7-7
 <b>REAR AXLE AND REAR AXLE HUB .....</b>	<b>7-8</b>
REMOVING THE REAR AXLE .....	7-10
CHECKING THE REAR AXLE .....	7-11
CHECKING THE DRIVEN SPROCKET .....	7-11
CHECKING THE BRAKE DISC .....	7-11
INSTALLING THE DRIVEN SPROCKET .....	7-12
INSTALLING THE REAR AXLE .....	7-12
 <b>FRONT AND REAR BRAKES .....</b>	<b>7-13</b>
FRONT BRAKE PADS .....	7-13
REAR BRAKE PADS .....	7-14
REPLACING THE FRONT BRAKE PADS .....	7-15
REPLACING THE REAR BRAKE PADS .....	7-17
FRONT BRAKE MASTER CYLINDER .....	7-19
REAR BRAKE MASTER CYLINDER .....	7-21
CHECKING THE MASTER CYLINDERS .....	7-24
ASSEMBLING THE FRONT BRAKE MASTER CYLINDER .....	7-25
ASSEMBLING THE REAR BRAKE MASTER CYLINDER .....	7-25
INSTALLING THE FRONT BRAKE MASTER CYLINDER .....	7-26
INSTALLING THE REAR BRAKE MASTER CYLINDER .....	7-27
FRONT BRAKE CALIPERS .....	7-29
REAR BRAKE CALIPER .....	7-31
REMOVING THE PARKING BRAKE CABLE .....	7-34
DISASSEMBLING THE FRONT AND REAR BRAKE CALIPERS .....	7-34
CHECKING THE FRONT AND REAR BRAKE CALIPERS .....	7-35
ASSEMBLING THE FRONT BRAKE CALIPERS .....	7-36
ASSEMBLING THE REAR BRAKE CALIPER .....	7-36
INSTALLING THE FRONT BRAKE CALIPERS .....	7-38
INSTALLING THE REAR BRAKE CALIPER .....	7-39
 <b>STEERING SYSTEM .....</b>	<b>7-41</b>
HANDLEBAR .....	7-41
REMOVING THE FRONT BRAKE LIGHT SWITCH AND CLUTCH SWITCH .....	7-43
REMOVING THE HANDLEBAR GRIPS .....	7-43
CHECKING THE HANDLEBAR .....	7-43

---

INSTALLING THE HANDLEBAR .....	7-44
INSTALLING THE HANDLEBAR GRIPS .....	7-44
INSTALLING THE CLUTCH LEVER .....	7-45
INSTALLING THE BRAKE MASTER CYLINDER .....	7-45
STEERING STEM .....	7-46
REMOVING THE BEARING RETAINER .....	7-48
CHECKING THE STEERING STEM .....	7-48
INSTALLING THE BEARING RETAINER .....	7-48
INSTALLING THE STEERING STEM .....	7-48
INSTALLING THE LOCK WASHER .....	7-49
INSTALLING THE PITMAN ARM .....	7-49
TIE-RODS AND STEERING KNUCKLES .....	7-50
REMOVING THE STEERING KNUCKLES .....	7-51
CHECKING THE TIE-RODS .....	7-51
CHECKING THE STEERING KNUCKLES .....	7-51
INSTALLING THE TIE-RODS .....	7-51
 <b>FRONT ARMS AND FRONT SHOCK ABSORBER ASSEMBLIES</b> .....	 7-52
REMOVING THE FRONT ARMS .....	7-54
CHECKING THE FRONT ARMS .....	7-54
HANDLING THE FRONT SHOCK ABSORBER AND GAS CYLINDER .....	7-54
DISPOSING OF A FRONT SHOCK ABSORBER AND GAS CYLINDER .....	7-55
CHECKING THE FRONT SHOCK ABSORBERS .....	7-55
CHECKING THE BALL JOINTS .....	7-56
INSTALLING THE FRONT ARMS .....	7-57
 <b>REAR SHOCK ABSORBER AND RELAY ARM</b> .....	 7-58
HANDLING THE REAR SHOCK ABSORBER AND GAS CYLINDER .....	7-60
DISPOSING OF A REAR SHOCK ABSORBER AND GAS CYLINDER .....	7-60
REMOVING THE REAR SHOCK ABSORBER .....	7-61
CHECKING THE REAR SHOCK ABSORBER .....	7-61
CHECKING THE RELAY ARM AND CONNECTING ARM .....	7-61
INSTALLING THE RELAY ARM AND CONNECTING ARM .....	7-62
INSTALLING THE REAR SHOCK ABSORBER .....	7-62
 <b>SWINGARM AND DRIVE CHAIN</b> .....	 7-63
REMOVING THE SWINGARM .....	7-65
CHECKING THE SWINGARM .....	7-65
CHECKING THE DRIVE CHAIN .....	7-67
INSTALLING THE SWINGARM .....	7-68
INSTALLING THE DRIVE SPROCKET .....	7-69

---

## CHAPTER 8

### ELECTRICAL

<b>ELECTRICAL COMPONENTS.....</b>	<b>8-1</b>
<b>CHECKING SWITCH CONTINUITY.....</b>	<b>8-2</b>
<b>CHECKING THE SWITCHES.....</b>	<b>8-4</b>
<b>CHECKING THE BULBS AND BULB SOCKETS .....</b>	<b>8-6</b>
TYPES OF BULBS .....	8-6
CHECKING THE CONDITION OF THE BULBS .....	8-6
CHECKING THE CONDITION OF THE BULB SOCKETS .....	8-8
<b>IGNITION SYSTEM .....</b>	<b>8-9</b>
CIRCUIT DIAGRAM .....	8-9
THROTTLE OVERRIDE SYSTEM (T.O.R.S.) OPERATION .....	8-10
TROUBLESHOOTING .....	8-11
CHECKING THE THROTTLE OVERRIDE SYSTEM.....	8-14
<b>ELECTRIC STARTING SYSTEM.....</b>	<b>8-16</b>
CIRCUIT DIAGRAM .....	8-16
STARTING CIRCUIT CUT-OFF SYSTEM OPERATION .....	8-17
TROUBLESHOOTING .....	8-18
<b>STARTER MOTOR.....</b>	<b>8-22</b>
CHECKING THE STARTER MOTOR .....	8-24
ASSEMBLING THE STARTER MOTOR.....	8-25
<b>CHARGING SYSTEM.....</b>	<b>8-26</b>
CIRCUIT DIAGRAM .....	8-26
TROUBLESHOOTING .....	8-27
<b>LIGHTING SYSTEM .....</b>	<b>8-29</b>
CIRCUIT DIAGRAM .....	8-29
TROUBLESHOOTING .....	8-30
CHECKING THE LIGHTING SYSTEM.....	8-31
<b>SIGNAL SYSTEM.....</b>	<b>8-33</b>
CIRCUIT DIAGRAM .....	8-33
TROUBLESHOOTING .....	8-34
CHECKING THE SIGNALING SYSTEM .....	8-35
<b>COOLING SYSTEM.....</b>	<b>8-39</b>
CIRCUIT DIAGRAM .....	8-39
TROUBLESHOOTING .....	8-40

---

## CHAPTER 9

### TROUBLESHOOTING

<b>STARTING FAILURE/HARD STARTING .....</b>	<b>9-1</b>
FUEL SYSTEM.....	9-1
ELECTRICAL SYSTEM.....	9-1
COMPRESSION SYSTEM.....	9-2
 <b>POOR IDLE SPEED PERFORMANCE .....</b>	 <b>9-2</b>
POOR IDLE SPEED PERFORMANCE .....	9-2
 <b>POOR MEDIUM AND HIGH-SPEED PERFORMANCE.....</b>	 <b>9-2</b>
POOR MEDIUM AND HIGH-SPEED PERFORMANCE .....	9-2
 <b>FAULTY GEAR SHIFTING.....</b>	 <b>9-3</b>
HARD SHIFTING.....	9-3
SHIFT PEDAL DOES NOT MOVE .....	9-3
JUMPS OUT GEAR.....	9-3
 <b>CLUTCH SLIPPING/Dragging.....</b>	 <b>9-3</b>
CLUTCH SLIPPING .....	9-3
CLUTCH DRAGGING .....	9-3
 <b>OVERHEATING.....</b>	 <b>9-4</b>
OVERHEATING .....	9-4
 <b>FAULTY BRAKE .....</b>	 <b>9-4</b>
POOR BRAKING EFFECT .....	9-4
 <b>SHOCK ABSORBER MALFUNCTION .....</b>	 <b>9-4</b>
MALFUNCTION.....	9-4
 <b>UNSTABLE HANDLING.....</b>	 <b>9-5</b>
UNSTABLE HANDLING .....	9-5
 <b>LIGHTING SYSTEM .....</b>	 <b>9-5</b>
HEADLIGHT DOES NOT COME ON .....	9-5
TAIL/BRAKE LIGHT DOES NOT LIGHT .....	9-5
BULB BURNT OUT .....	9-5
TAIL/BRAKE LIGHT BULB BURNT OUT .....	9-5

**Thank you very much  
for your reading.**

**Please click here and go  
back to the website.**

**Then, you can  
download the complete  
manual instantly.**

**No waiting.**