

## **Yamaha 2002 Yzfr1 Servicemanual**

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# **YZF-R1P YZF-R1PC**

# **SERVICE MANUAL**



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**YZF-R1P/YZF-R1PC  
SERVICE MANUAL**

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## NOTICE

This manual was produced by the Yamaha Motor Company, Ltd. primarily for use by Yamaha dealers and their qualified mechanics. It is not possible to include all the knowledge of a mechanic in one manual. Therefore, anyone who uses this book to perform maintenance and repairs on Yamaha vehicles should have a basic understanding of mechanics and the techniques to repair these types of vehicles. Repair and maintenance work attempted by anyone without this knowledge is likely to render the vehicle unsafe and unfit for use.

This model has been designed and manufactured to perform within certain specifications in regard to performance and emissions. Proper service with the correct tools is necessary to ensure that the vehicle will operate as designed. If there is any question about a service procedure, it is imperative that you contact a Yamaha dealer for any service information changes that apply to this model. This policy is intended to provide the customer with the most satisfaction from his vehicle and to conform to federal environmental quality objectives.

Yamaha Motor Company, Ltd. is continually striving to improve all of its models. Modifications and significant changes in specifications or procedures will be forwarded to all authorized Yamaha dealers and will appear in future editions of this manual where applicable.

**NOTE:**

- This Service Manual contains information regarding periodic maintenance to the emission control system. Please read this material carefully.
  - Designs and specifications are subject to change without notice.
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## IMPORTANT MANUAL INFORMATION

Particularly important information is distinguished in this manual by the following.



The Safety Alert Symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

**WARNING**

Failure to follow WARNING instructions could result in severe injury or death to the motorcycle operator, a bystander or a person checking or repairing the motorcycle.

**CAUTION:**

A CAUTION indicates special precautions that must be taken to avoid damage to the motorcycle.

**NOTE:**

A NOTE provides key information to make procedures easier or clearer.

## HOW TO USE THIS MANUAL

This manual is intended as a handy, easy-to-read reference book for the mechanic. Comprehensive explanations of all installation, removal, disassembly, assembly, repair and check procedures are laid out with the individual steps in sequential order.

- ① The manual is divided into chapters. An abbreviation and symbol in the upper right corner of each page indicate the current chapter.  
Refer to "SYMBOLS".
- ② Each chapter is divided into sections. The current section title is shown at the top of each page, except in chapter 3 ("PERIODIC CHECKS AND ADJUSTMENTS"), where the sub-section title(s) appears.
- ③ Sub-section titles appear in smaller print than the section title.
- ④ To help identify parts and clarify procedure steps, there are exploded diagrams at the start of each removal and disassembly section.
- ⑤ Numbers are given in the order of the jobs in the exploded diagram. A circled number indicates a disassembly step.
- ⑥ Symbols indicate parts to be lubricated or replaced.  
Refer to "SYMBOLS".
- ⑦ A job instruction chart accompanies the exploded diagram, providing the order of jobs, names of parts, notes in jobs, etc.
- ⑧ Jobs requiring more information (such as special tools and technical data) are described sequentially.

⑥    ②    ①

CLUTCH    ENG

**CLUTCH**

**CLUTCH COVER**

④

⑤

⑦

Order	Job/Part	Q'ty	Remarks
<b>Removing the clutch cover</b>			
Bottom cowling and right side cowling			
Engine oil			
1	Clutch cable	1	Remove the parts in the order listed. Refer to "COWLINGS" in chapter 3. Drain. Refer to "CHANGING THE ENGINE OIL" in chapter 3.
2	Clutch cover	1	
3	Clutch cover gasket	1	
4	Dowel pin	2	
For installation, reverse the removal procedure.			

5-40

CLUTCH    ENG

**CLUTCH**

**REMOVING THE CLUTCH**    ←

1. Straighten the lock washer tab.
2. 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**  
90890-04085

3. Remove:
  - clutch boss nut ①
  - lock washer ②
  - clutch boss assembly ③
  - thrust washer

**NOTE:**  
There is a built-in damper between the clutch boss and the clutch plate. It is not necessary to remove the wire circlip ④ and disassemble the built-in damper unless there is serious clutch chattering.

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

1. Check:
  - friction plate
  - Damage/wear → Replace the friction plates as a set.
2. Measure:
  - friction plate thickness
  - Out of specification → Replace the friction plates as a set.

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

**Friction plate thickness**  
2.9 - 3.1 mm  
<Limits> 2.8 mm

③

⑧

5-44

**SYMBOLS**

The following symbols are not relevant to every vehicle.

Symbols ① to ⑨ indicate the subject of each chapter.

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

Symbols ⑩ to ⑰ indicate the following.

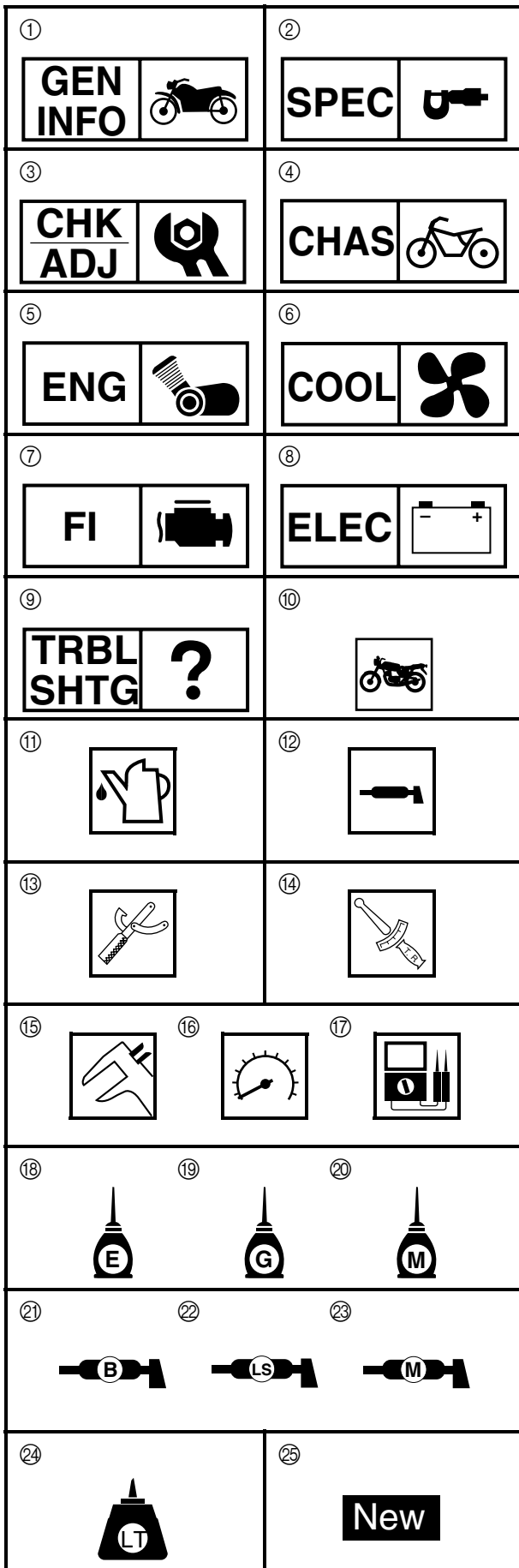
- ⑩ Serviceable with engine mounted
- ⑪ Filling fluid
- ⑫ Lubricant
- ⑬ Special tool
- ⑭ Tightening torque
- ⑮ Wear limit, clearance
- ⑯ Engine speed
- ⑰ Electrical data

Symbols ⑱ to ⑳ in the exploded diagrams indicate the types of lubricants and lubrication points.

- ⑱ Engine oil
- ⑲ Gear oil
- ⑳ Molybdenum-disulfide oil
- ㉑ Wheel-bearing grease
- ㉒ Lithium-soap-base grease
- ㉓ Molybdenum-disulfide grease

Symbols ㉔ to ㉕ in the exploded diagrams indicate the following.









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







# TABLE OF CONTENTS

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

---

# CHAPTER 1

## GENERAL INFORMATION

<b>MOTORCYCLE IDENTIFICATION</b> .....	1-1
VEHICLE IDENTIFICATION NUMBER .....	1-1
MODEL LABEL .....	1-1
<b>FEATURES</b> .....	1-2
OUTLINE OF FI SYSTEM .....	1-2
FI SYSTEM .....	1-3
COMPONENTS .....	1-5
FUEL INJECTION SYSTEM .....	1-16
THREE-WAY CATALYTIC CONVERTER SYSTEM .....	1-19
INSTRUMENT FUNCTION .....	1-20
<b>IMPORTANT INFORMATION</b> .....	1-23
PREPARATION FOR REMOVAL AND DISASSEMBLY .....	1-23
REPLACEMENT PARTS .....	1-23
GASKETS, OIL SEALS AND O-RINGS .....	1-23
LOCK WASHERS/PLATES AND COTTER PINS .....	1-24
BEARINGS AND OIL SEALS .....	1-24
CIRCLIPS .....	1-24
<b>CHECKING THE CONNECTIONS</b> .....	1-25
<b>SPECIAL TOOLS</b> .....	1-26

# CHAPTER 2

## SPECIFICATIONS

<b>GENERAL SPECIFICATIONS</b> .....	2-1
<b>ENGINE SPECIFICATIONS</b> .....	2-2
<b>CHASSIS SPECIFICATIONS</b> .....	2-11
<b>ELECTRICAL SPECIFICATIONS</b> .....	2-15
<b>CONVERSION TABLE</b> .....	2-17

---

<b>TIGHTENING TORQUES</b> .....	2-17
GENERAL TIGHTENING TORQUE SPECIFICATIONS .....	2-17
ENGINE TIGHTENING TORQUES .....	2-18
CHASSIS TIGHTENING TORQUES .....	2-21
<b>LUBRICATION POINTS AND LUBRICANT TYPES</b> .....	2-23
ENGINE .....	2-23
CHASSIS .....	2-24
<b>COOLING SYSTEM DIAGRAMS</b> .....	2-25
<b>ENGINE OIL LUBRICATION CHART</b> .....	2-29
<b>LUBRICATION DIAGRAMS</b> .....	2-30
<b>CABLE ROUTING</b> .....	2-35

## **CHAPTER 3**

### **PERIODIC CHECKS AND ADJUSTMENTS**

<b>INTRODUCTION</b> .....	3-1
<b>PERIODIC MAINTENANCE CHART FOR THE EMISSION CONTROL SYSTEM</b> .....	3-1
<b>GENERAL MAINTENANCE AND LUBRICATION CHART</b> .....	3-1
<b>SEATS</b> .....	3-3
<b>FUEL TANK</b> .....	3-4
REMOVING THE FUEL TANK .....	3-5
REMOVING THE FUEL PUMP .....	3-5
INSTALLING THE FUEL PUMP .....	3-6
INSTALLING THE FUEL HOSE .....	3-6
<b>COWLINGS</b> .....	3-7
<b>AIR FILTER CASE</b> .....	3-8

---

<b>ENGINE</b> .....	3-9
ADJUSTING THE VALVE CLEARANCE .....	3-9
SYNCHRONIZING THE THROTTLE BODIES .....	3-14
ADJUSTING THE ENGINE IDLING SPEED .....	3-16
ADJUSTING THE THROTTLE CABLE FREE PLAY .....	3-17
CHECKING THE SPARK PLUGS .....	3-19
MEASURING THE COMPRESSION PRESSURE .....	3-20
CHECKING THE ENGINE OIL LEVEL .....	3-23
CHANGING THE ENGINE OIL .....	3-24
ADJUSTING THE CLUTCH CABLE FREE PLAY .....	3-26
REPLACING THE AIR FILTER ELEMENT .....	3-28
CHECKING THE FUEL AND BREATHER HOSES .....	3-29
CHECKING THE CRANKCASE BREATHER HOSE .....	3-29
CHECKING THE EXHAUST SYSTEM .....	3-30
ADJUSTING THE EXUP CABLES .....	3-31
CHECKING THE COOLANT LEVEL .....	3-32
CHECKING THE COOLING SYSTEM .....	3-33
CHANGING THE COOLANT .....	3-34
<b>CHASSIS</b> .....	3-37
ADJUSTING THE FRONT BRAKE .....	3-37
ADJUSTING THE REAR BRAKE .....	3-38
CHECKING THE BRAKE FLUID LEVEL .....	3-39
CHECKING THE FRONT AND REAR BRAKE PADS .....	3-40
ADJUSTING THE REAR BRAKE LIGHT SWITCH .....	3-40
CHECKING THE FRONT AND REAR BRAKE HOSES .....	3-41
BLEEDING THE HYDRAULIC BRAKE SYSTEM .....	3-41
ADJUSTING THE SHIFT PEDAL .....	3-43
ADJUSTING THE DRIVE CHAIN SLACK .....	3-43
LUBRICATING THE DRIVE CHAIN .....	3-45
CHECKING AND ADJUSTING THE STEERING HEAD .....	3-45
CHECKING THE FRONT FORK .....	3-48
ADJUSTING THE FRONT FORK LEGS .....	3-49
ADJUSTING THE REAR SHOCK ABSORBER ASSEMBLY .....	3-51
CHECKING THE TIRES .....	3-53
CHECKING THE WHEELS .....	3-56
CHECKING AND LUBRICATING THE CABLES .....	3-57
LUBRICATING THE LEVERS AND PEDALS .....	3-57
LUBRICATING THE SIDESTAND .....	3-57
LUBRICATING THE REAR SUSPENSION .....	3-57
<b>ELECTRICAL SYSTEM</b> .....	3-58
CHECKING AND CHARGING THE BATTERY .....	3-58
CHECKING THE FUSES .....	3-63
REPLACING THE HEADLIGHT BULBS .....	3-65
ADJUSTING THE HEADLIGHT BEAM .....	3-66

---

## CHAPTER 4

### CHASSIS

<b>FRONT WHEEL AND BRAKE DISCS</b> .....	4-1
FRONT WHEEL .....	4-2
REMOVING THE FRONT WHEEL .....	4-3
CHECKING THE FRONT WHEEL .....	4-3
CHECKING THE BRAKE DISCS .....	4-5
INSTALLING THE FRONT WHEEL .....	4-6
ADJUSTING THE FRONT WHEEL STATIC BALANCE .....	4-7
<b>REAR WHEEL AND BRAKE DISC</b> .....	4-9
REAR WHEEL .....	4-10
REMOVING THE REAR WHEEL .....	4-12
CHECKING THE REAR WHEEL .....	4-13
CHECKING THE REAR WHEEL DRIVE HUB .....	4-13
CHECKING AND REPLACING THE REAR WHEEL SPROCKET .....	4-14
INSTALLING THE REAR WHEEL .....	4-14
ADJUSTING THE REAR WHEEL STATIC BALANCE .....	4-15
<b>FRONT AND REAR BRAKES</b> .....	4-16
FRONT BRAKE PADS .....	4-16
REAR BRAKE PADS .....	4-17
REPLACING THE FRONT BRAKE PADS .....	4-18
REPLACING THE REAR BRAKE PADS .....	4-21
FRONT BRAKE MASTER CYLINDER .....	4-23
REAR BRAKE MASTER CYLINDER .....	4-26
DISASSEMBLING THE FRONT BRAKE MASTER CYLINDER .....	4-28
DISASSEMBLING THE REAR BRAKE MASTER CYLINDER .....	4-28
CHECKING THE FRONT AND REAR BRAKE MASTER CYLINDERS .....	4-29
ASSEMBLING AND INSTALLING THE FRONT BRAKE MASTER CYLINDER .....	4-30
ASSEMBLING THE REAR BRAKE MASTER CYLINDER .....	4-32
FRONT BRAKE CALIPERS .....	4-34
REAR BRAKE CALIPER .....	4-36
DISASSEMBLING THE FRONT BRAKE CALIPERS .....	4-38
DISASSEMBLING THE REAR BRAKE CALIPER .....	4-39
CHECKING THE FRONT AND REAR BRAKE CALIPERS .....	4-40
ASSEMBLING AND INSTALLING THE FRONT BRAKE CALIPERS .....	4-41
ASSEMBLING AND INSTALLING THE REAR BRAKE CALIPER .....	4-43
<b>FRONT FORK</b> .....	4-45
REMOVING THE FRONT FORK LEGS .....	4-48
DISASSEMBLING THE FRONT FORK LEGS .....	4-48
CHECKING THE FRONT FORK LEGS .....	4-50
ASSEMBLING THE FRONT FORK LEGS .....	4-51
INSTALLING THE FRONT FORK LEGS .....	4-55

---

<b>HANDLEBARS</b> .....	4-56
REMOVING THE HANDLEBARS .....	4-58
CHECKING THE HANDLEBARS .....	4-58
INSTALLING THE HANDLEBARS .....	4-58
<b>STEERING HEAD</b> .....	4-61
REMOVING THE LOWER BRACKET .....	4-63
CHECKING THE STEERING HEAD .....	4-63
INSTALLING THE STEERING HEAD .....	4-64
<b>REAR SHOCK ABSORBER ASSEMBLY</b> .....	4-65
HANDLING THE REAR SHOCK ABSORBER AND GAS CYLINDER .....	4-66
DISPOSING OF A REAR SHOCK ABSORBER AND GAS CYLINDER .....	4-66
REMOVING THE REAR SHOCK ABSORBER ASSEMBLY .....	4-67
CHECKING THE REAR SHOCK ABSORBER ASSEMBLY .....	4-68
INSTALLING THE REAR SHOCK ABSORBER ASSEMBLY .....	4-68
<b>SWINGARM AND DRIVE CHAIN</b> .....	4-69
REMOVING THE SWINGARM .....	4-71
REMOVING THE DRIVE CHAIN .....	4-72
CHECKING THE SWINGARM .....	4-72
CHECKING THE DRIVE CHAIN .....	4-73
INSTALLING THE SWINGARM .....	4-75

## CHAPTER 5

### OVERHAULING THE ENGINE

<b>ENGINE</b> .....	5-1
DRIVE SPROCKET .....	5-1
EXHAUST PIPE .....	5-2
LEADS AND HOSES .....	5-4
ENGINE .....	5-6
INSTALLING THE ENGINE .....	5-7
<b>CAMSHAFT</b> .....	5-8
CYLINDER HEAD COVERS .....	5-8
CAMSHAFTS .....	5-9
REMOVING THE CAMSHAFTS .....	5-11
CHECKING THE CAMSHAFTS .....	5-12
CHECKING THE TIMING CHAIN, CAMSHAFT SPROCKETS, AND TIMING CHAIN GUIDES .....	5-14
CHECKING THE TIMING CHAIN TENSIONER .....	5-15
INSTALLING THE CAMSHAFTS .....	5-15

---

<b>CYLINDER HEAD</b> .....	5-19
REMOVING THE CYLINDER HEAD .....	5-20
CHECKING THE CYLINDER HEAD .....	5-20
INSTALLING THE CYLINDER HEAD .....	5-21
<b>VALVES AND VALVE SPRINGS</b> .....	5-22
REMOVING THE VALVES .....	5-24
CHECKING THE VALVES AND VALVE GUIDES .....	5-25
CHECKING THE VALVE SEATS .....	5-27
CHECKING THE VALVE SPRINGS .....	5-28
CHECKING THE VALVE LIFTERS .....	5-29
INSTALLING THE VALVES .....	5-29
<b>GENERATOR</b> .....	5-32
REMOVING THE GENERATOR .....	5-33
INSTALLING THE GENERATOR .....	5-33
<b>PICKUP COIL</b> .....	5-36
REMOVING THE PICKUP COIL ROTOR .....	5-38
INSTALLING THE PICKUP COIL ROTOR .....	5-38
<b>CLUTCH</b> .....	5-40
CLUTCH COVER .....	5-40
PULL LEVER SHAFT .....	5-41
CLUTCH .....	5-42
REMOVING THE CLUTCH .....	5-44
CHECKING THE FRICTION PLATES .....	5-44
CHECKING THE CLUTCH PLATES .....	5-45
CHECKING THE CLUTCH HOUSING .....	5-45
CHECKING THE CLUTCH BOSS .....	5-45
CHECKING THE PRESSURE PLATE .....	5-46
CHECKING THE PULL LEVER SHAFT AND PULL ROD .....	5-46
CHECKING THE STARTER CLUTCH .....	5-46
INSTALLING THE CLUTCH .....	5-47
<b>SHIFT SHAFT</b> .....	5-49
SHIFT SHAFT AND STOPPER LEVER .....	5-49
CHECKING THE SHIFT SHAFT .....	5-50
CHECKING THE STOPPER LEVER .....	5-50
INSTALLING THE SHIFT SHAFT .....	5-50



---

<b>OIL PAN AND OIL PUMP</b> .....	5-51
OIL PUMP .....	5-53
REMOVING THE OIL PAN .....	5-54
CHECKING THE OIL PUMP .....	5-54
CHECKING THE RELIEF VALVE .....	5-55
CHECKING THE OIL DELIVERY PIPES .....	5-55
CHECKING THE OIL STRAINER .....	5-55
ASSEMBLING THE OIL PUMP .....	5-56
INSTALLING THE OIL PUMP .....	5-56
INSTALLING THE OIL STRAINER .....	5-57
INSTALLING THE OIL PAN .....	5-57
<b>CRANKCASE</b> .....	5-58
DISASSEMBLING THE CRANKCASE .....	5-60
CHECKING THE CRANKCASE .....	5-61
CHECKING THE BEARINGS AND OIL SEALS .....	5-61
CHECKING THE SPROCKET AND CHAINS .....	5-61
ASSEMBLING THE CRANKCASE .....	5-62
<b>CONNECTING RODS AND PISTONS</b> .....	5-64
REMOVING THE CONNECTING RODS AND PISTONS .....	5-65
REMOVING THE CRANKSHAFT ASSEMBLY .....	5-66
CHECKING THE CYLINDER AND PISTONS .....	5-66
CHECKING THE PISTON RINGS .....	5-68
CHECKING THE PISTON PINS .....	5-69
CHECKING THE BIG END BEARINGS .....	5-69
INSTALLING THE CONNECTING ROD AND PISTON .....	5-72
<b>CRANKSHAFT</b> .....	5-76
CHECKING THE CRANKSHAFT .....	5-77
CHECKING THE CRANKSHAFT JOURNAL BEARINGS .....	5-77
INSTALLING THE CRANKSHAFT .....	5-80
<b>TRANSMISSION</b> .....	5-81
REMOVING THE TRANSMISSION .....	5-87
CHECKING THE SHIFT FORKS .....	5-87
CHECKING THE SHIFT DRUM ASSEMBLY .....	5-88
CHECKING THE TRANSMISSION .....	5-88
INSTALLING THE TRANSMISSION .....	5-89

---

## CHAPTER 6

### COOLING SYSTEM

<b>RADIATOR</b> .....	6-1
CHECKING THE RADIATOR .....	6-3
INSTALLING THE RADIATOR .....	6-4
<b>OIL COOLER</b> .....	6-5
CHECKING THE OIL COOLER .....	6-6
INSTALLING THE OIL COOLER .....	6-6
<b>THERMOSTAT</b> .....	6-7
CHECKING THE THERMOSTAT .....	6-10
ASSEMBLING THE THERMOSTAT ASSEMBLY .....	6-11
INSTALLING THE THERMOSTAT ASSEMBLY .....	6-11
<b>WATER PUMP</b> .....	6-12
DISASSEMBLING THE WATER PUMP .....	6-14
CHECKING THE WATER PUMP .....	6-14
ASSEMBLING THE WATER PUMP .....	6-15

## CHAPTER 7

### FUEL INJECTION SYSTEM

<b>FUEL INJECTION SYSTEM</b> .....	7-1
WIRING DIAGRAM .....	7-2
ECU'S SELF-DIAGNOSTIC FUNCTION .....	7-3
SUBSTITUTE CHARACTERISTICS OPERATION CONTROL (FAIL-SAFE ACTION) .....	7-4
FAIL-SAFE ACTIONS TABLE .....	7-4
TROUBLESHOOTING CHART .....	7-5
DIAGNOSTIC MODE .....	7-6
TROUBLESHOOTING DETAILS .....	7-12
<b>THROTTLE BODIES</b> .....	7-29
CHECKING THE INJECTOR .....	7-33
CHECKING THE THROTTLE BODY .....	7-33
CHECKING THE PRESSURE REGULATOR .....	7-34
CHECKING THE FUEL PUMP AND PRESSURE REGULATOR OPERATION .....	7-34
CHECKING AND ADJUSTING THE THROTTLE POSITION SENSOR .....	7-35

---

<b>AIR INDUCTION SYSTEM</b> .....	7-37
AIR INDUCTION .....	7-37
AIR CUT-OFF VALVE .....	7-37
AIR INDUCTION SYSTEM DIAGRAMS .....	7-38
CHECKING THE AIR INDUCTION SYSTEM .....	7-39

## **CHAPTER 8 ELECTRICAL**

<b>ELECTRICAL COMPONENTS</b> .....	8-1
<b>CHECKING SWITCH CONTINUITY</b> .....	8-3
<b>CHECKING THE SWITCHES</b> .....	8-4
<b>CHECKING THE BULBS AND BULB SOCKETS</b> .....	8-5
TYPES OF BULBS .....	8-5
CHECKING THE CONDITION OF THE BULBS .....	8-6
CHECKING THE CONDITION OF THE BULB SOCKETS .....	8-7
CHECKING THE LEDs .....	8-7
<b>IGNITION SYSTEM</b> .....	8-8
CIRCUIT DIAGRAM .....	8-8
TROUBLESHOOTING .....	8-9
<b>ELECTRIC STARTING SYSTEM</b> .....	8-13
CIRCUIT DIAGRAM .....	8-13
STARTING CIRCUIT CUT-OFF SYSTEM OPERATION .....	8-14
TROUBLESHOOTING .....	8-15
STARTER MOTOR .....	8-18
CHECKING THE STARTER MOTOR .....	8-20
ASSEMBLING THE STARTER MOTOR .....	8-21
<b>CHARGING SYSTEM</b> .....	8-22
CIRCUIT DIAGRAM .....	8-22
TROUBLESHOOTING .....	8-23
<b>LIGHTING SYSTEM</b> .....	8-25
CIRCUIT DIAGRAM .....	8-25
TROUBLESHOOTING .....	8-27
CHECKING THE LIGHTING SYSTEM .....	8-29
<b>SIGNALING SYSTEM</b> .....	8-32
CIRCUIT DIAGRAM .....	8-32
TROUBLESHOOTING .....	8-34
CHECKING THE SIGNALING SYSTEM .....	8-34

---

<b>COOLING SYSTEM</b> .....	8-41
CIRCUIT DIAGRAM .....	8-41
TROUBLESHOOTING .....	8-42
<b>FUEL PUMP SYSTEM</b> .....	8-45
CIRCUIT DIAGRAM .....	8-45
FUEL PUMP SYSTEM .....	8-46
TROUBLESHOOTING .....	8-47
CHECKING THE FUEL PUMP .....	8-49

## CHAPTER 9 TROUBLESHOOTING

<b>STARTING FAILURES</b> .....	9-1
ENGINE .....	9-1
FUEL SYSTEM .....	9-1
ELECTRICAL SYSTEMS .....	9-2
<b>INCORRECT ENGINE IDLING SPEED</b> .....	9-2
ENGINE .....	9-2
FUEL SYSTEM .....	9-2
ELECTRICAL SYSTEMS .....	9-2
<b>POOR MEDIUM-AND-HIGH-SPEED PERFORMANCE</b> .....	9-3
ENGINE .....	9-3
FUEL SYSTEM .....	9-3
<b>FAULTY GEAR SHIFTING</b> .....	9-3
SHIFTING IS DIFFICULT .....	9-3
SHIFT PEDAL DOES NOT MOVE .....	9-3
JUMPS OUT OF GEAR .....	9-3
<b>FAULTY CLUTCH</b> .....	9-3
CLUTCH SLIPS .....	9-3
CLUTCH DRAGS .....	9-3
<b>OVERHEATING</b> .....	9-4
ENGINE .....	9-4
COOLING SYSTEM .....	9-4
FUEL SYSTEM .....	9-4
CHASSIS .....	9-4
ELECTRICAL SYSTEMS .....	9-4
<b>OVERCOOLING</b> .....	9-4
COOLING SYSTEM .....	9-4
<b>POOR BRAKING PERFORMANCE</b> .....	9-4