



YZF-R1(M) 2000

4XV1-AE2

SUPPLEMENTARY SERVICE MANUAL

FOREWORD

This Supplementary Service Manual has been prepared to introduce new service and data for the YZF-R1 2000. For complete service information procedures it is necessary to use this Supplementary Service Manual together with the following manual.

YZF-R1 SERVICE MANUAL: 4XV1-AE1
--

<p>YZF-R1 2000 SUPPLEMENTARY SERVICE MANUAL</p>
--

<p>©1999 by Yamaha Motor Co., Ltd.</p>

<p>First Edition, December 1999</p>
--

<p>Any reproduction or unauthorized use without the written permission of Yamaha Motor Co., Ltd. is expressly prohibited.</p>
--

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.

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:

Designs and specifications are subject to change without notice.

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 ENG

④

⑤

⑦

Order	Job Part	Qty	Remarks
Removing the clutch cover			
Bottom cover and right side cover			
Engine oil			
1	Clutch cable	1	Remove the parts in the order listed. Refer to "TIGHTENING" in chapter 3. Then Refer to "CLUTCHING 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.			

REMOVING THE CLUTCH

1. Remove:

- Clutch cover

NOTE:

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

2. Straighten the lock washer tab.

3. Loosen

- Clutch boss nut

NOTE:

While holding the clutch boss 2 with the clutch holding tool 3, loosen the clutch boss nut.

Clutch holding tool
90880-0468

4. Remove:

- Clutch boss nut 1
- Lock washer 2
- Clutch boss assembly 3

NOTE:

There is a built-in damper between the clutch boss and the friction plate. It is not necessary to remove the wire clip 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
<Limit> 2.8 mm

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	

EB004000

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 Engine
- ⑤ Cooling system
- ⑥ Carburetor(-s)
- ⑦ Chassis
- 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 ㉓ in the exploded diagrams indicate the types of lubricants and lubrication points.

- ⑱ Engine oil
- ⑲ Gear oil
- ㉒ 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

CONTENTS

SPECIFICATIONS

GENERAL SPECIFICATIONS	1
ENGINE SPECIFICATIONS	2
CHASSIS SPECIFICATIONS	6
ELECTRICAL SPECIFICATIONS	9
TIGHTENING TORQUES	11
ENGINE TIGHTENING TORQUES	11
CHASSIS TIGHTENING TORQUES	12
LUBRICATION POINTS AND LUBRICANT TYPES	13
ENGINE LUBRICATION POINTS AND LUBRICANT TYPES ..	13
OIL FLOW DIAGRAMS	14
COOLANT FLOW DIAGRAMS	17
CABLE ROUTING	20

PERIODIC CHECKS AND ADJUSTMENTS

INTRODUCTION	33
PERIODIC MAINTENANCE AND LUBRICATION INTERVALS ...	33
COWLINGS	35
AIR FILTER CASE AND IGNITION COIL PLATE	36

OVERHAULING THE ENGINE

AIR INDUCTION SYSTEM	37
ENGINE	38
INSTALLING THE ENGINE	39
CYLINDER HEAD	40
CRANKCASE	41
ASSEMBLING THE CRANKCASE	43

COOLING SYSTEM

RADIATOR	45
----------------	----

CARBURETORS

AIR INDUCTION SYSTEM	47
AIR INJECTION	47
AIR CUTOFF VALVE	47
AIR INDUCTION SYSTEM DIAGRAMS	48
CHECKING THE AIR INDUCTION SYSTEM	49

CHASSIS

FRONT WHEEL AND BRAKE DISCS	50
INSTALLING THE FRONT WHEEL	51
FRONT AND REAR BRAKES	52
REAR BRAKE MASTER CYLINDER AND BRAKE FLUID RESERVOIR	52

ELECTRICAL

INSTRUMENT FUNCTIONS	53
INDICATOR LIGHTS	53
COOLANT TEMPERATURE WARNING LIGHT	54
SPEEDOMETER UNIT	55
ELECTRIC STARTING SYSTEM	57
STARTER MOTOR	57
COOLING SYSTEM	62
CIRCUIT DIAGRAM	62
TROUBLESHOOTING	63
SELF-DIAGNOSIS	66
TROUBLESHOOTING	67

YZF-R1 WIRING DIAGRAM (For EUR)

YZF-R1 WIRING DIAGRAM (For OCE)



SPECIFICATIONS

GENERAL SPECIFICATIONS

Item	Standard	Limit
Dimensions		
Overall length	2,035 mm	...
	2,095 mm (for AUS)	...
Overall width	695 mm	...
Overall height	1,105 mm	...
Seat height	815 mm	...
Wheelbase	1,395 mm	...
Minimum ground clearance	140 mm	...
Minimum turning radius	3,400 mm	...
Weight		
Wet (with oil and a full fuel tank)	194 kg	...
Dry (without oil and fuel)	175 kg	...
Maximum load (total of cargo, rider, passenger, and accessories)	201 kg	...