



YAMAHA

2012

SERVICE MANUAL

YZF-R1(B)



1KB-28197-E0

EAS20040

**YZF-R1(B)
SERVICE MANUAL
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First edition, July 2011
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IMPORTANT

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.

TIP

Designs and specifications are subject to change without notice.

IMPORTANT MANUAL INFORMATION

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

	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
	A WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	A NOTICE indicates special precautions that must be taken to avoid damage to the vehicle or other property.
TIP	A TIP 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.

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

1
↓
CLUTCH

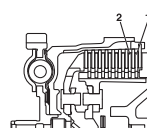
EAS20091
CLUTCH
Removing the clutch cover

3 → **4** → **5** → **6**

Order	Job/Parts to remove	Q'ty	Remarks
1	Engine oil	1	Drain.
2	Clutch cable	1	Disconnect.
3	Clutch cover	1	
4	Clutch cover gasket	1	
5	Dowel pin	3	
6	Oil filler cap	1	For installation, reverse the removal procedure.

5-58

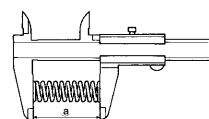
TIP
When adjusting the clutch assembly width [by replacing the clutch plate(s)], be sure to replace the clutch plate “1” first. After replacing the clutch plate “1”, if specifications cannot be met, replace the clutch plate “2”.



EAS20114
CHECKING THE CLUTCH SPRINGS
The following procedure applies to all of the clutch springs.

1. Check:
 - Clutch spring
Damage → Replace the clutch springs as a set.
2. Measure:
 - Clutch spring free length “a”
Out of specification → Replace the clutch springs as a set.

Clutch spring free length
43.80 mm (1.72 in)
Limit
41.61 mm (1.64 in)



EAS20100 **CHECKING THE CLUTCH HOUSING**

1. Check:
 - Clutch housing dogs
Damage/pitting/wear → Deburr the clutch housing dogs or replace the clutch housing.

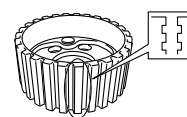
TIP
Pitting on the clutch housing dogs will cause erratic clutch operation.

2. Check:
 - Bearing
Damage/wear → Replace the bearing and clutch housing.

EAS20100 **CHECKING THE CLUTCH BOSS**

1. Check:
 - Clutch boss splines
Damage/pitting/wear → Replace the clutch boss.

TIP
Pitting on the clutch boss splines will cause erratic clutch operation.



EAS20110 **CHECKING THE PRESSURE PLATE**

1. Check:
 - Pressure plate 1 “1”
• Pressure plate 2 “2”
Cracks/damage → Replace.

SYMBOLS

The following symbols are used in this manual for easier understanding.

TIP

The following symbols are not relevant to every vehicle.

SYMBOL	DEFINITION	SYMBOL	DEFINITION
	Serviceable with engine mounted		Gear oil
	Filling fluid		Molybdenum disulfide oil
	Lubricant		Brake fluid
	Special tool		Wheel bearing grease
	Tightening torque		Lithium-soap-based grease
	Wear limit, clearance		Molybdenum disulfide grease
	Engine speed		Silicone grease
	Electrical data		Apply locking agent (LOCTITE®).
	Engine oil		Replace the part with a new one.

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