



YAMAHA

2008

SERVICE MANUAL

FZ1-N(X)

FZ1-S(X)

FZ1-SA

FZ1-NA



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**FZ1-N(X)/FZ1-S(X)/FZ1-SA/FZ1-NA
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.

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 vehicle operator, a bystander or a person checking or repairing the vehicle.

CAUTION:

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

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.

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

1
↓
CLUTCH

CLUTCH

Removing the clutch cover

5, 12 Nm (11.2 mkg, 8.7 ft-lb)

12 Nm (11.2 mkg, 8.7 ft-lb)

6

Order	Job/Parts to remove	Qty	Remarks
	Engine oil		Drain Refer to
1	Clutch cable	1	
2	Clutch cover	1	
3	Clutch cover gasket	1	
4	Cover pin	2	
5	Oil filler cap	1	
			For installation, reverse the removal procedure.

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CLUTCH

10 Remove

- Clutch damper spring "1"
- Clutch damper spring seat "2"

NOTES

CHECKING THE CLUTCH PLATES
The following procedure applies to all of the clutch plates.

1. Check:
 - Clutch plate
Damage → Replace the clutch plates as a set.
2. Measure:
 - Clutch plate warpage
(with a surface plate and thickness gauge "1")
Out of specification → Replace the clutch plates as a set.

Clutch plate warpage limit
0.1 mm (0.0039 in)

NOTES

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 (0.114 - 0.122 in)
Limit:
2.8 mm (0.110 in)

NOTES

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.

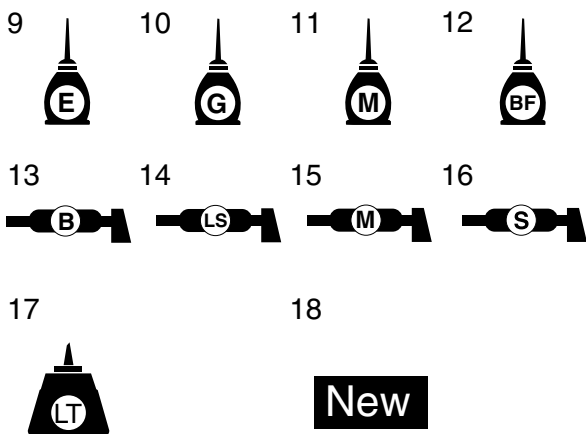
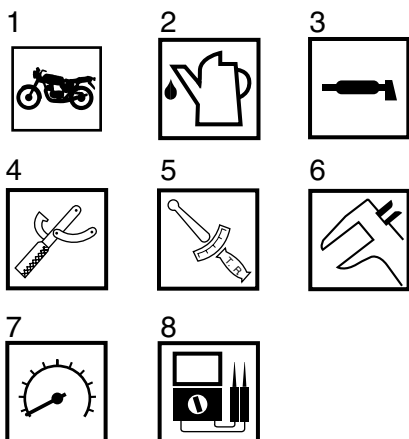
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SYMBOLS

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

NOTE:

The following symbols are not relevant to every vehicle.



- 15. Molybdenum-disulfide grease
- 16. Silicon grease
- 17. Apply locking agent (LOCTITE®)
- 18. Replace the part

- 1. Serviceable with engine mounted
- 2. Filling fluid
- 3. Lubricant
- 4. Special tool
- 5. Tightening torque
- 6. Wear limit, clearance
- 7. Engine speed
- 8. Electrical data
- 9. Engine oil
- 10. Gear oil
- 11. Molybdenum-disulfide oil
- 12. Brake fluid
- 13. Wheel-bearing grease
- 14. Lithium-soap-based grease

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