



YFM660RN YFM660RNC

SERVICE MANUAL

NOTICE

This manual was produced by the Yamaha Motor Company 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, so it is assumed that anyone who uses this book to perform maintenance and repairs on Yamaha machine has a basic understanding of the mechanical ideas and the procedures of machine repair. Repairs attempted by anyone without this knowledge are likely to render the machine unsafe and unfit for use.

Yamaha Motor Company, Ltd. is continually striving to improve all 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 INFORMATION

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



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 machine operator, a bystander or a person inspecting or repairing the machine.

CAUTION:

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

NOTE:

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

HOW TO USE THIS MANUAL

MANUAL ORGANIZATION

This manual consists of chapters for the main categories of subjects. (See “Illustrated 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

④

⑤

⑥

⑦

Order	Job name/Part name	Qty	Remarks
Removing the clutch cover			
	Engine assembly		Remove the parts in the order below. Refer to "ENGINE REMOVAL".
1	Oil filter bolt	1	
2	Union bolt	2	
3	Copper washer	4	
4	Oil delivery pipe 1	1	
5	Union bolt	2	
6	Copper washer	4	
7	Oil delivery pipe 2	1	
8	Clutch cover	1	Refer to "REMOVING/INSTALLING THE CLUTCH".
9	Clutch cover gasket	1	
10	Dowel pin	2	For installation, reverse the removal procedure.

③

CLUTCH ENG

REMOVING THE CLUTCH

1. Remove:

- Clutch cover

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 clutch holding tool ③, loosen the clutch boss nut.

Clutch holding tool:
P/N. YM-91042, 90890-04086

REMOVING THE PRIMARY DRIVE GEAR AND BALANCER DRIVEN GEAR

1. Straighten the lock washer tabs.

2. Loosen:

- Primary drive gear nut ①
- Balancer driven gear nut ②

NOTE:

Place an aluminum plate ④ between the teeth of the balancer drive gear ④ and balancer driven gear ⑤.

5 - 43

5 - 47

ILLUSTRATED SYMBOLS

Illustrated symbols ① to ⑨ are printed on the top right of each page and indicate the subject of each chapter.

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

Illustrated symbols ⑩ to ⑰ are used to identify the specifications appearing in the text.

- ⑩ Can be serviced with engine mounted
- ⑪ Filling fluid
- ⑫ Lubricant
- ⑬ Special tool
- ⑭ Torque
- ⑮ Wear limit, clearance
- ⑯ Engine speed
- ⑰ Ω , V, A

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

- ⑱ Apply engine oil
- ⑲ Apply gear oil
- ⑳ Apply molybdenum disulfide oil
- ㉑ Apply wheel bearing grease
- ㉒ Apply lightweight lithium soap base grease
- ㉓ Apply molybdenum disulfide grease
- ㉔ Apply silicon grease

Illustrated symbols ㉕ to ㉖ in the exploded diagrams indicate where to apply a locking agent ㉕ and when to install a new part ㉖.

- ㉕ Apply the locking agent (LOCTITE®)
- ㉖ Replace

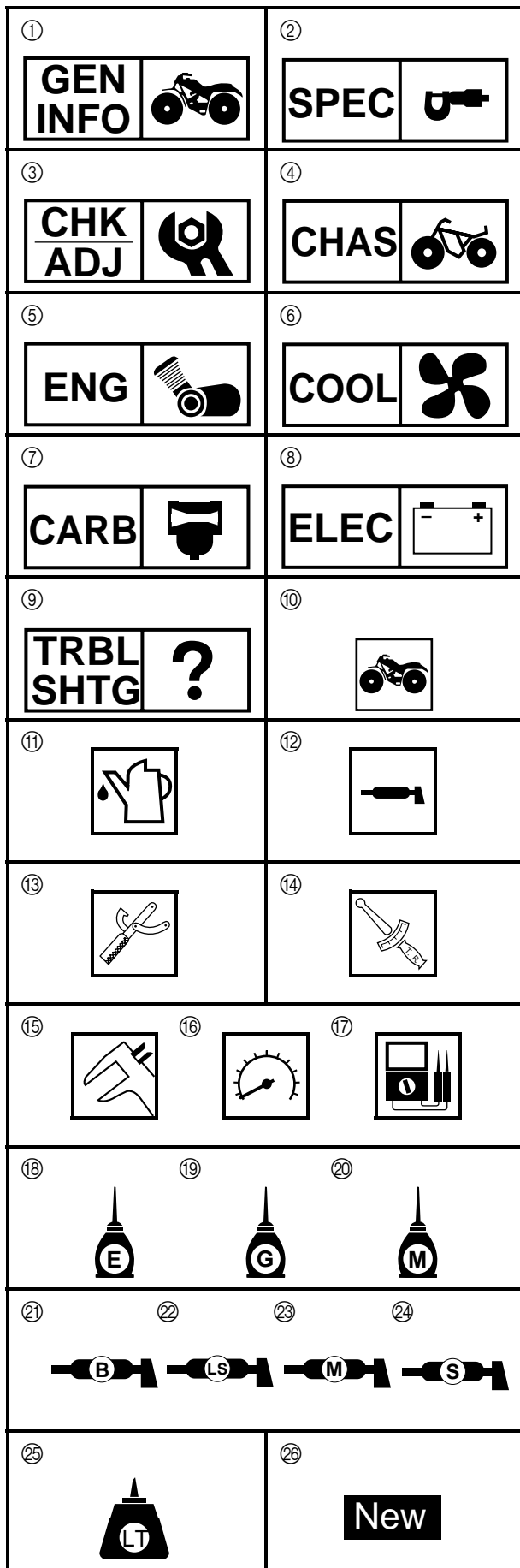











TABLE OF CONTENTS

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

CHAPTER 1. GENERAL INFORMATION

MACHINE IDENTIFICATION	1-1
VEHICLE IDENTIFICATION NUMBER	1-1
MODEL LABEL	1-1
IMPORTANT INFORMATION	1-2
PREPARATION FOR REMOVAL PROCEDURES	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 OF CONNECTIONS	1-4
SPECIAL TOOLS	1-5

CHAPTER 2. SPECIFICATIONS

GENERAL SPECIFICATIONS	2-1
MAINTENANCE SPECIFICATIONS	2-4
ENGINE	2-4
CHASSIS	2-14
ELECTRICAL	2-18
HOW TO USE THE CONVERSION TABLE	2-20
GENERAL TORQUE SPECIFICATIONS	2-20
LUBRICATION POINTS AND LUBRICANT TYPES	2-21
ENGINE	2-21
COOLANT FLOW DIAGRAMS	2-22
OIL FLOW DIAGRAMS	2-23
CABLE ROUTING	2-27

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