



YZF-R6T YZF-R6TC

SUPPLEMENTARY SERVICE MANUAL

FOREWORD

This Supplementary Service Manual has been prepared to introduce new service and data for the YZF-R6T/YZF-R6TC. For complete service information procedures it is necessary to use this Supplementary Service Manual together with the following manual.

YZF-R6R/YZF-R6SR/YZF-R6RC/YZF-R6SRC SERVICE MANUAL:

LIT-11616-16-45 (5SL-28197-10)

YZF-R6S/YZF-R6SC SUPPLEMENTARY SERVICE MANUAL: LIT-11616-17-46 (5SL-28197-11)

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**YZF-R6T/YZF-R6TC
SUPPLEMENTARY
SERVICE MANUAL**

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P/N LIT-11616-18-45

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!



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.


②

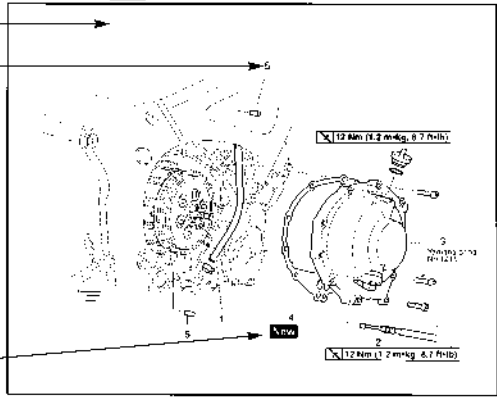
CLUTCH

①

ENG 

CLUTCH 


CLUTCH COVER 




④ → 1
⑤ → 2
⑥ → 3
⑦ → 4
⑧ → 5

Order	Job/Part	Qty	Remarks
Removing the clutch cover			
	Bottom cooling		Refer to "COOLINGS" in chapter 3
	Right side cooling		Refer to "CHANGING THE ENGINE OIL" in chapter 3
	Engine oil		Refer to "CHANGING THE COOLANT" in chapter 3
	Coolant		Disconnect.
1	Coolant hose	1	Disconnect.
2	Clutch cable	1	Disconnect.
3	Clutch cover	1	
4	Clutch cover gasket	1	
5	Dowel pin	2	

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CLUTCH 

ENG 

REMOVING THE CLUTCH

1. Remove:

- clutch cover ①
- gasket

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

2. Remove:


- compression spring bolts ①
- compression springs
- pressure plate ②
- pull rod ③
- friction plates
- clutch plates

3. Straighten the fork washer tab.

4. Loosen:

- clutch boss nut ①

NOTE:
While holding the clutch boss ② with the universal clutch holder, loosen the clutch boss nut.

 Universal clutch holder
93890-04086, YM-91042

5. Remove:

- clutch boss nut ①
- fork washer ②
- clutch boss ③
- thrust plate ④

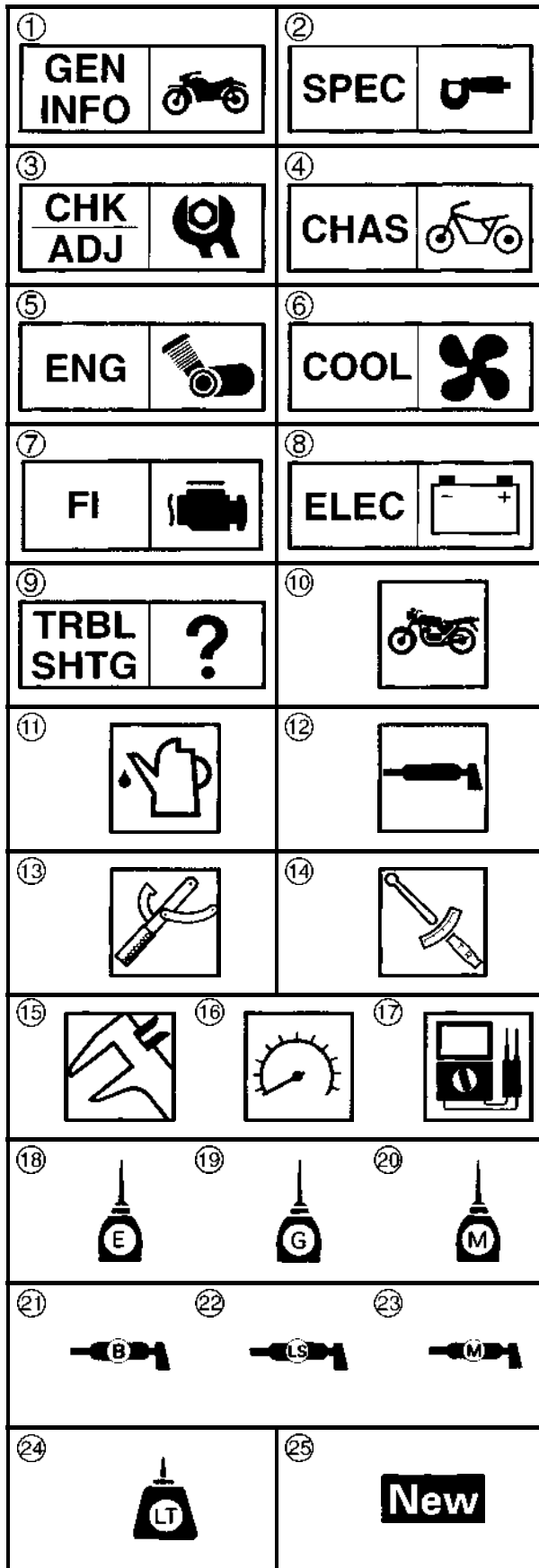
CHECKING THE FRICTION PLATES
The following procedure applies to all of the friction plates.

1. Check:

- friction plate

Damage/wear → Replace the friction plates as a set.

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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 ㉓ in the exploded diagrams indicate the types of lubricants and lubrication points.

- ⑱ Engine oil
- ⑲ Gear oil
- ㉑ Molybdenum-disulfide oil
- ㉒ Wheel-bearing grease
- ㉓ Lithium-soap-based grease
- ㉔ Molybdenum-disulfide grease

Symbols ㉕ to ㉖ in the exploded diagrams indicate the following.

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

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CHASSIS

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YZF-R6T/YZF-R6TC WIRING DIAGRAM



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GENERAL INFORMATION

SPECIAL TOOLS

The following special tools are necessary for complete and accurate tune-up and assembly. Use only the appropriate special tools as this will help prevent damage caused by the use of inappropriate tools or improvised techniques. Special tools, part numbers or both may differ depending on the country. When placing an order, refer to the list provided below to avoid any mistakes.

NOTE:

- For U.S.A. and Canada, use part number starting with "YM-", "YU-", or "ACC-".
- For others, use part number starting with "90890-".

Tool No.	Tool name/Function	Illustration
90890-01423 YM-01423	Damper rod holder This tool is used to hold the damper rod assembly when loosening or tightening the damper rod assembly bolt.	
90890-01434 YM-01434	Rod holder This tool is used to support the damper adjusting rod.	
90890-01441 YM-01441	Fork spring compressor This tool is used to disassemble or assemble the front fork legs.	
90890-01442 YM-01442	Fork seal driver This tool is used to install the front fork's oil seal and dust seal.	



SPECIFICATIONS

GENERAL SPECIFICATIONS

Item	Standard	Limit
Model code	5SLR (USA except for CAL) 5SLS (CAL)	...
Dimensions		
Overall length	2,045 mm (80.5 in)	...
Overall width	690 mm (27.2 in)	...
Overall height	1,105 mm (43.5 in)	...
Seat height	830 mm (32.7 in)	...
Wheelbase	1,385 mm (54.5 in)	...
Minimum ground clearance	145 mm (5.7 in)	...
Minimum turning radius	3,800 mm (149.6 in)	...
Weight		
Wet (with oil and a full fuel tank)	183 kg (404 lb) (USA except for CAL) 184 kg (406 lb) (CAL)	...
Maximum load (except motorcycle)	192 kg (423 lb) (USA except for CAL) 191 kg (421 lb) (CAL)	...

ENGINE SPECIFICATIONS

Item	Standard	Limit
Throttle bodies		
Model (manufacturer) × quantity	40EIS (MIKUNI) × 4	...
ID mark	5SLM 30 (5SLR), 5SLS 40 (5SLS)	...



CHASSIS SPECIFICATIONS

Item	Standard	Limit
Frame		
Caster angle	24.5°	...
Trail	95 mm (3.74 in)	...
Front tire		
Size	120/70 ZR17 M/C (55W)	...
Model (manufacturer)	Pilot POWER C (MICHELIN) D218FM (DUNLOP)	...
Rear tire		
Model (manufacturer)	Pilot POWER (MICHELIN) D218M (DUNLOP)	...
Tire pressure (cold)		
0 ~ 90 kg (0 ~ 198 lb)	290 kPa (2.9 kgf/cm ² , 2.9 bar, 41.3 psi)	...
90 ~ 192 kg (198 ~ 426 lb) (USA except for CAL)	290 kPa (2.9 kgf/cm ² , 2.9 bar, 41.3 psi)	...
90 ~ 191 kg (198 ~ 423 lb) (CAL)	290 kPa (2.9 kgf/cm ² , 2.9 bar, 41.3 psi)	...
High-speed riding	290 kPa (2.9 kgf/cm ² , 2.9 bar, 41.3 psi)	...
Front brakes		
Brake lever free play	6.7 ~ 18.1 mm (0.26 ~ 0.71 in)	...
Brake discs		
Diameter × thickness	310 × 4.5 mm (12.20 × 0.18 in)	...
Min. thickness	...	4.0 mm (0.16 in)
Master cylinder inside diameter	16 mm (0.63 in)	...
Rear brake		
Brake pedal freeplay	4.3 ~ 9.0 mm (0.17 ~ 0.35 in)	...