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YAMAHA

YZFR6V(C)

SERVICE MANUAL

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**YZFR6V(C)
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!**



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 “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

3
→

4
→

5
→

6
→

CLUTCH

CAUTION

Removing the clutch cover

Order	Job/Parts to remove	Q'ty	Remarks
	Right bottom cowling		Refer to "GENERAL CHASSIS" on page 4-1.
	Engine oil		Drain. Refer to "CHANGING THE ENGINE OIL" on page 3-11.
	Coolant		Drain. Refer to "CHANGING THE COOLANT" on page 3-19.
1	Water pump breather hose	1	Disconnect.
2	Clutch cable	1	Disconnect.
3	Full lever	1	
4	Pull lever spring	1	
5	Clutch cover	1	
6	Clutch cover gasket	1	
7	Dowel pin	2	

For installation, reverse the removal procedure.

7
←

2
←

CLUTCH

CAUTION

REMOVING THE CLUTCH

1. Remove:

- Friction plates
- Clutch plates

NOTE:

Be sure to mark the friction plates and clutch plates or note the position of each part so that they are installed in their original positions.

2. Loosen:

- Clutch boss nut "1"

NOTE:

While holding the clutch boss "2" with the universal clutch holder "3", loosen the clutch boss nut.

Universal clutch holder
 90890-04086
 YM-91042

3. Remove:

- Spacer "1"
- Bearing
- Clutch housing "2"
- Oil pump drive chain

NOTE:

Remove the spacer and bearing from the main axle, then remove the oil pump drive chain from the oil pump driven sprocket, and then remove the clutch housing and oil pump drive chain from the main axle.

CAUTION

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
 2.92-3.08 mm (0.115-0.121 in)
 Wear limit
 2.80 mm (0.1102 in)

CAUTION

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.

Thickness gauge
 90890-03180
 Feeler gauge set
 YU-26900-9

Clutch plate thickness
 1.90-2.10 mm (0.075-0.083 in)
 Warpage limit
 0.10 mm (0.0039 in)

5-37

5-41

SYMBOLS

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

NOTE: _____

The following symbols are not relevant to every vehicle.

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. Wheel bearing grease
13. Lithium-soap-based grease
14. Molybdenum disulfide grease
15. Apply locking agent (LOCTITE®).
16. Replace the part with a new one.

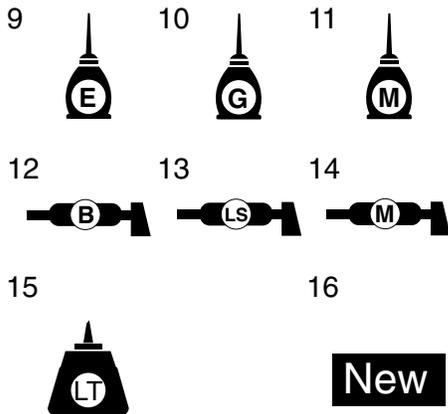
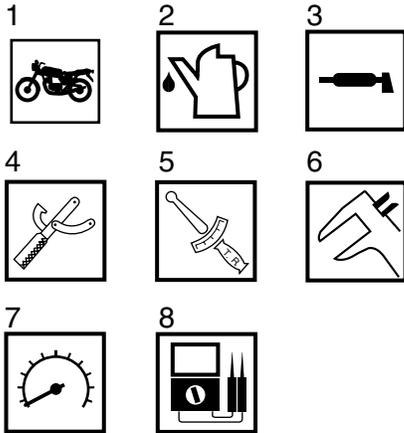




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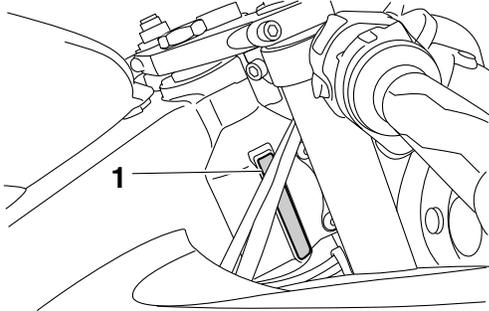
EAS20130

IDENTIFICATION

EAS20140

VEHICLE IDENTIFICATION NUMBER

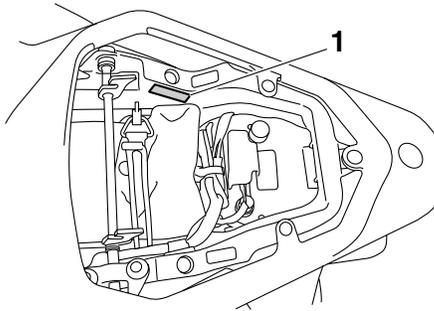
The vehicle identification number "1" is stamped on the right side of the steering head pipe.



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MODEL LABEL

The model label "1" is affixed to the frame under the passenger seat. This information will be needed to order spare parts.



EAS20170

FEATURES

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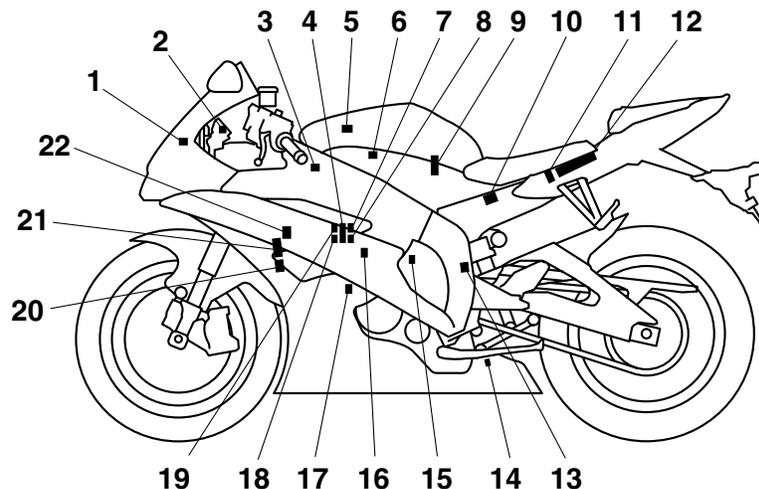
OUTLINE OF THE FI SYSTEM

The main function of a fuel supply system is to provide fuel to the combustion chamber at the optimum air-fuel ratio in accordance with the engine operating conditions and the atmospheric temperature. In the conventional carburetor system, the air-fuel ratio of the mixture that is supplied to the combustion chamber is created by the volume of the intake air and the fuel that is metered by the jet used in the respective carburetor.

Despite the same volume of intake air, the fuel volume requirement varies by the engine operating conditions, such as acceleration, deceleration, or operating under a heavy load. Carburetors that meter the fuel through the use of jets have been provided with various auxiliary devices, so that an optimum air-fuel ratio can be achieved to accommodate the constant changes in the operating conditions of the engine.

As the requirements for the engine to deliver more performance and cleaner exhaust gases increase, it becomes necessary to control the air-fuel ratio in a more precise and finely tuned manner. To accommodate this need, this model has adopted an electronically controlled fuel injection (FI) system, in place of the conventional carburetor system. This system can achieve an optimum air-fuel ratio required by the engine at all times by using a microprocessor that regulates the fuel injection volume according to the engine operating conditions detected by various sensors.

The adoption of the FI system has resulted in a highly precise fuel supply, improved engine response, better fuel economy, and reduced exhaust emissions.



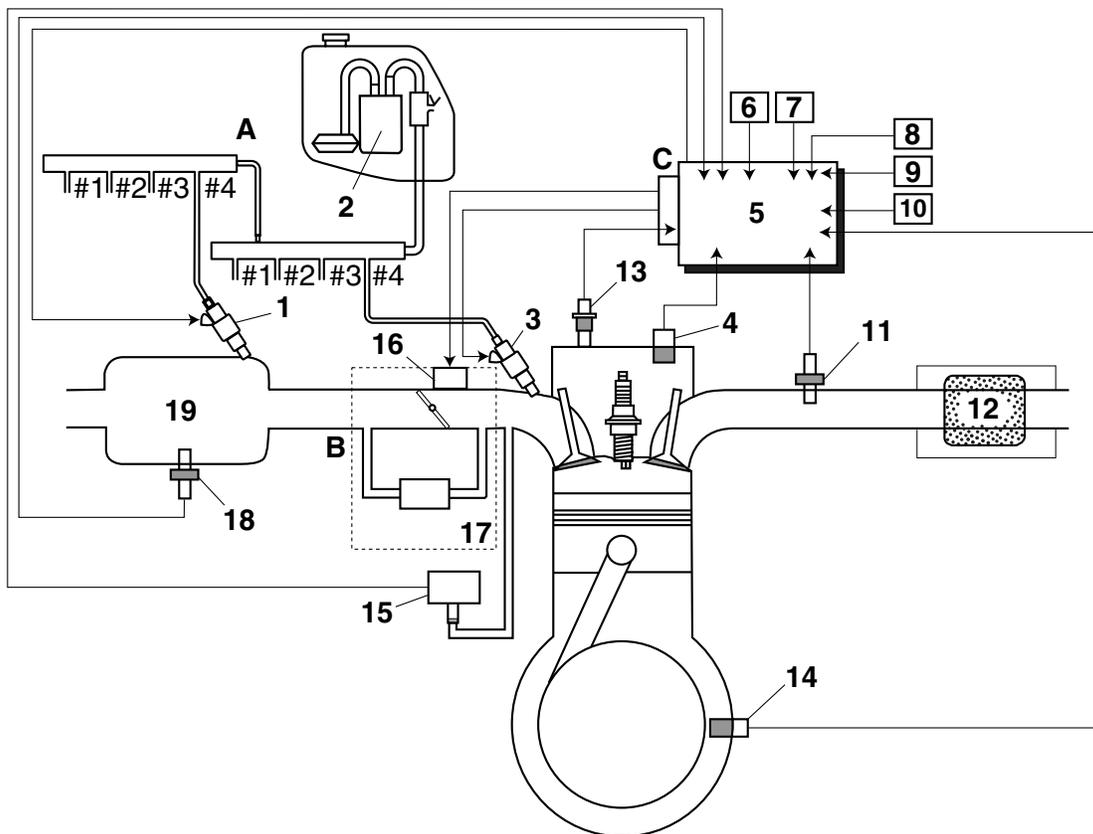
- | | |
|----------------------------------|--|
| 1. Air temperature sensor | 15. Speed sensor |
| 2. Engine trouble warning light | 16. Coolant temperature sensor |
| 3. Air induction system solenoid | 17. Crankshaft position sensor |
| 4. Throttle servo motor | 18. Throttle position sensor (for throttle cable pulley) |
| 5. Atmospheric pressure sensor | 19. Throttle position sensor (for throttle valves) |
| 6. Secondary injectors | 20. Spark plug |
| 7. Primary injectors | 21. Ignition coil |
| 8. Intake air pressure sensor | 22. Cylinder identification sensor |
| 9. Fuel pump | |
| 10. Relay unit (fuel pump relay) | |
| 11. Lean angle sensor | |
| 12. ECU (engine control unit) | |
| 13. EXUP servo motor | |
| 14. O ₂ sensor | |

ET2C01019

FI SYSTEM

The fuel pump delivers fuel to the fuel injector via the fuel filter. The pressure regulator maintains the fuel pressure that is applied to the fuel injector at only 324 kPa (3.24 kg/cm², 46.1 psi). Accordingly, when the energizing signal from the ECU energizes the fuel injector, the fuel passage opens, causing the fuel to be injected into the intake manifold only during the time the passage remains open. Therefore, the longer the length of time the fuel injector is energized (injection duration), the greater the volume of fuel that is supplied. Conversely, the shorter the length of time the fuel injector is energized (injection duration), the lesser the volume of fuel that is supplied.

The injection duration and the injection timing are controlled by the ECU. Signals that are input from the throttle position sensor (for throttle cable pulley), throttle position sensor (for throttle valves), coolant temperature sensor, atmospheric pressure sensor, cylinder identification sensor, lean angle sensor, crankshaft position sensor, intake air pressure sensor, air temperature sensor, speed sensor and O₂ sensor enable the ECU to determine the injection duration. The injection timing is determined through the signals from the crankshaft position sensor. As a result, the volume of fuel that is required by the engine can be supplied at all times in accordance with the driving conditions.



1. Secondary injector
2. Fuel pump
3. Primary injector
4. Cylinder identification sensor
5. ECU (engine control unit)
6. Throttle position sensor (for throttle cable pulley)
7. Throttle position sensor (for throttle valves)
8. Speed sensor
9. Air temperature sensor
10. Lean angle sensor
11. O₂ sensor

12. Catalytic converter
 13. Coolant temperature sensor
 14. Crankshaft position sensor
 15. Intake air pressure sensor
 16. Throttle servo motor
 17. Throttle body
 18. Atmospheric pressure sensor
 19. Air filter case
- A. Fuel system
 B. Air system
 C. Control system

ET2C01026

YCC-T (Yamaha Chip Controlled Throttle)

Mechanism characteristics

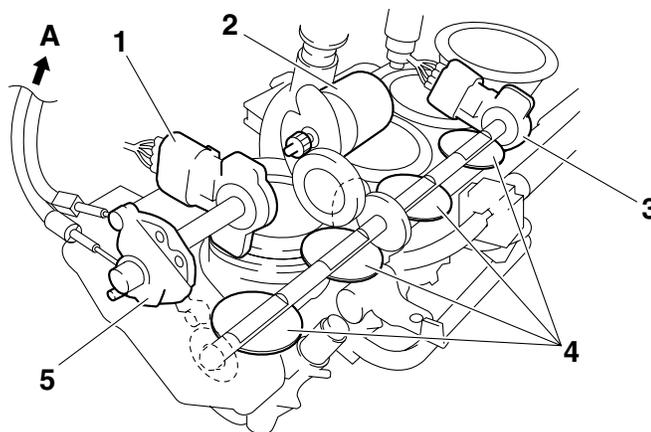
Yamaha developed the YCC-T system employing the most advanced electronic control technologies. Electronic control throttle systems have been used on automobiles, but Yamaha has developed a faster, more compact system specifically for the needs of a sports motorcycle. The Yamaha-developed system has a high-speed calculating capacity that produces computations of running conditions every 1/1000th of a second.

The YCC-T system is designed to respond to the throttle action of the rider by having the ECU instantaneously calculate the ideal throttle valve opening and generate signals to operate the motor-driven throttle valves and thus actively control the intake air volume.

The ECU contains three CPUs with a capacity about five times that of conventional units, making it possible for the system to respond extremely quickly to the slightest adjustments made by the rider. In particular, optimized control of the throttle valve opening provides the optimum volume of intake air for easy-to-use torque, even in a high-revving engine.

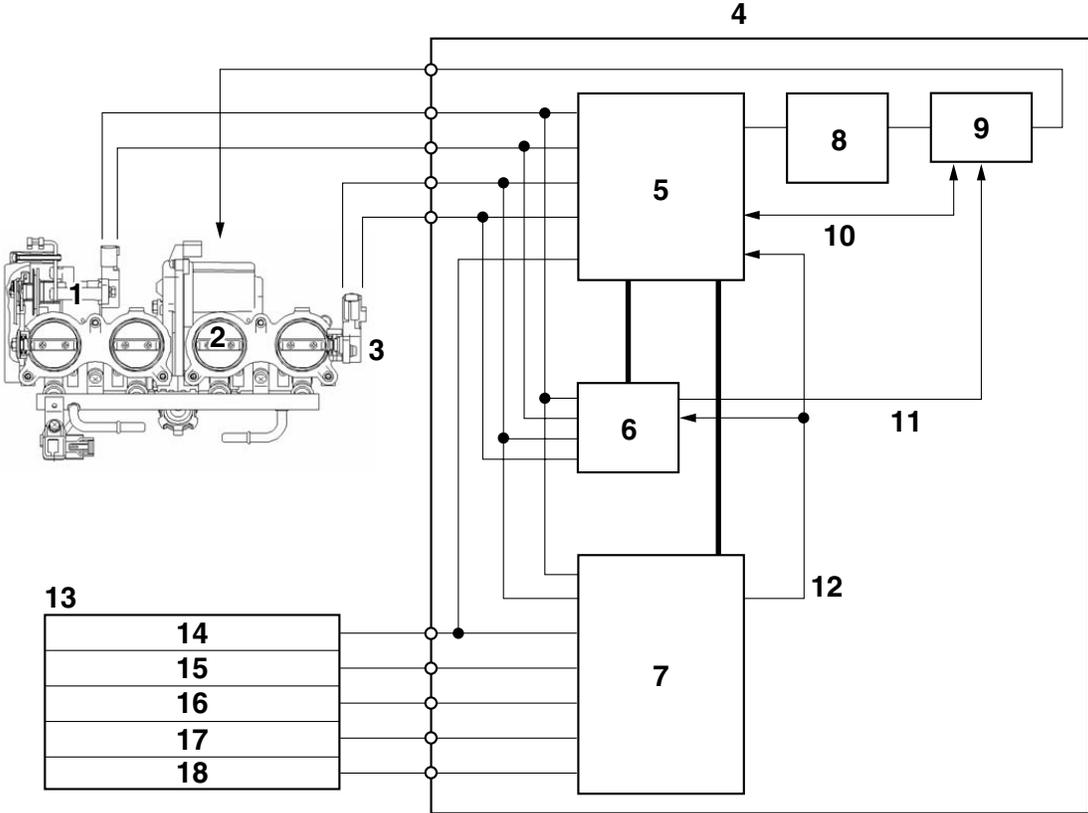
Aims and advantages of using YCC-T

- Increased engine power
By shortening the air intake path, higher engine speed is possible → Increased engine power.
- Improved driveability
Air intake volume is controlled according to the operating conditions → Improved throttle response to meet engine requirement.
Driving force is controlled at the optimal level according to the transmission gear position and engine speed → Improved throttle control.
- Engine braking control
Due to the throttle control, optimal engine braking is made possible.
- Simplified idle speed control (ISC) mechanism
The bypass mechanism and ISC actuator are eliminated → A simple mechanism is used to maintain a steady idle speed.
- Reduced weight
Compared to using a sub-throttle mechanism, weight is reduced.



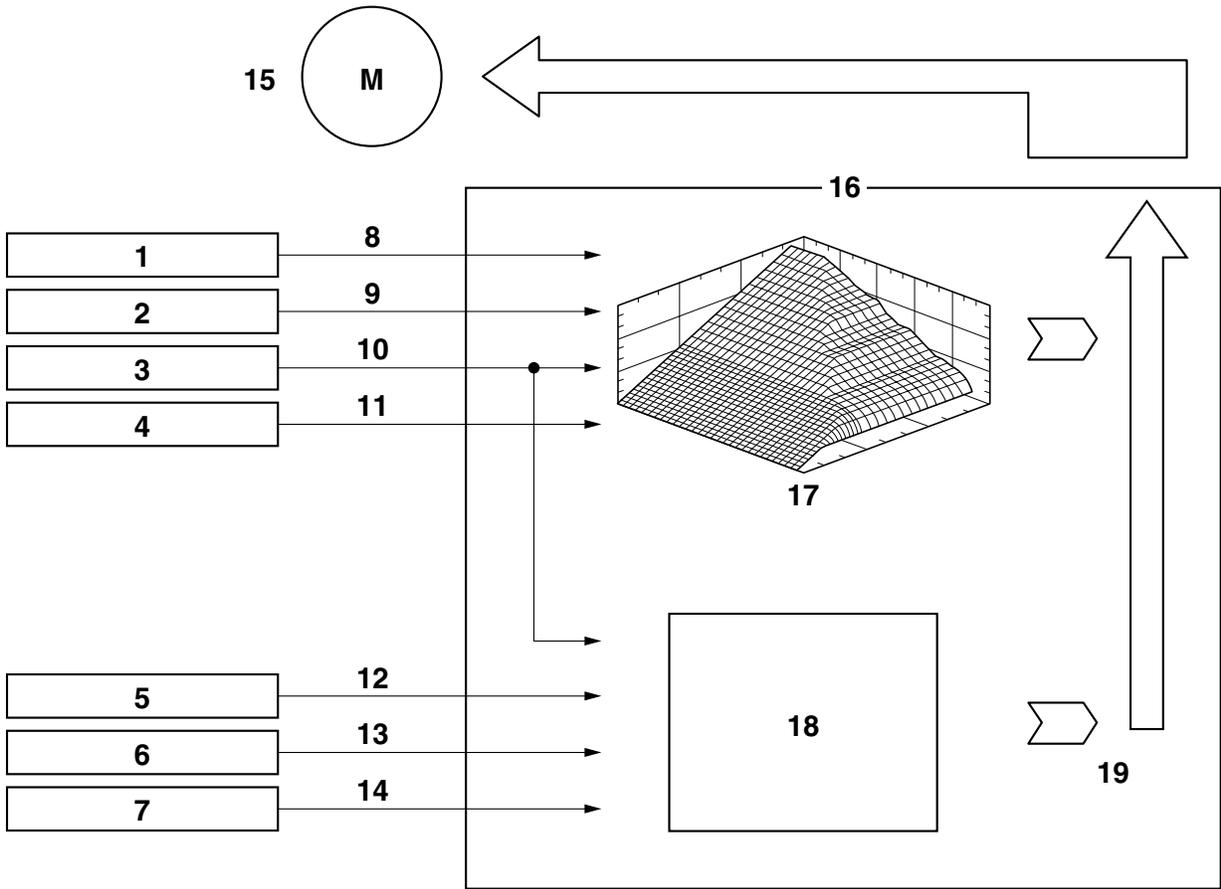
1. Throttle position sensor (for throttle cable pulley)
2. Throttle servo motor
3. Throttle position sensor (for throttle valves)
4. Throttle valves
5. Throttle cable pulley with linkage guard
- A. To throttle grip

YCC-T system outline



- 1. Throttle position sensor (for throttle cable pulley)
- 2. Throttle servo motor
- 3. Throttle position sensor (for throttle valves)
- 4. ECU (engine control unit)
- 5. ETV main CPU (32 bit)
- 6. ETV sub CPU (16 bit)
- 7. FI CPU (32 bit)
- 8. Throttle servo motor driver
- 9. Throttle servo motor driver operation sensing/shut off circuit
- 10. Throttle servo motor driver operation sensing feedback/emergency stop
- 11. Emergency stop
- 12. Engine revolution (pulse signal)
- 13. Sensor input
- 14. Neutral switch
- 15. Crankshaft position sensor
- 16. Speed sensor
- 17. Coolant temperature sensor
- 18. Atmospheric pressure sensor

YCC-T control outline



- 1. Throttle position sensor (for throttle cable pulley)
- 2. Throttle position sensor (for throttle valves)
- 3. Crankshaft position sensor
- 4. Speed sensor
- 5. Coolant temperature sensor
- 6. Neutral switch
- 7. Atmospheric pressure sensor
- 8. Throttle position (for throttle cable pulley) (two signals)
- 9. Throttle position (for throttle valves) (two signals)
- 10. Engine revolution
- 11. Vehicle speed
- 12. Coolant temperature
- 13. Neutral/In gear
- 14. Atmospheric pressure
- 15. Throttle servo motor
- 16. ECU (engine control unit)
- 17. Base map
- 18. Idle speed control
- 19. Calculated throttle valve opening angle

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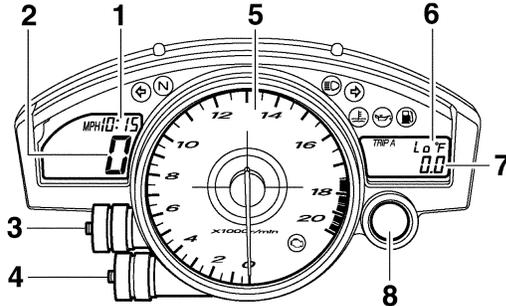
INSTRUMENT FUNCTIONS

Multi-function meter unit

EW2C01003



Be sure to stop the vehicle before making any setting changes to the multi-function meter unit.



1. Clock
2. Speedometer
3. "SELECT" button
4. "RESET" button
5. Tachometer
6. Coolant temperature display/air intake temperature display
7. Odometer/tripmeters/fuel reserve tripmeter/stopwatch
8. Shift timing indicator light

The multi-function meter unit is equipped with the following:

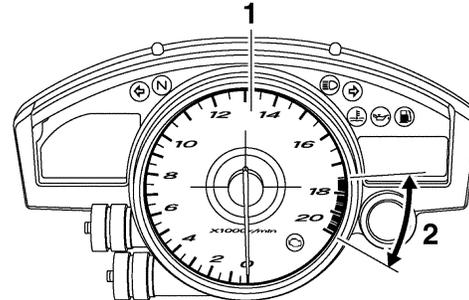
- a speedometer (which shows the riding speed)
- a tachometer (which shows engine speed)
- an odometer (which shows the total distance traveled)
- two tripmeters (which show the distance traveled since they were last set to zero)
- a fuel reserve tripmeter (which shows the distance traveled since the fuel level warning light came on)
- a stopwatch
- a clock
- a coolant temperature display
- an air intake temperature display
- a self-diagnosis device
- a display brightness and shift timing indicator light control mode

NOTE:

- Be sure to turn the key to "ON" before using the "SELECT" and "RESET" buttons.

- To switch the speedometer and odometer/tripmeter displays between kilometers and miles, press the "SELECT" button for at least one second.

Tachometer



1. Tachometer
2. Tachometer red zone

The electric tachometer allows the rider to monitor the engine speed and keep it within the ideal power range.

When the key is turned to "ON", the tachometer needle will sweep once across the r/min range and then return to zero r/min in order to test the electrical circuit.

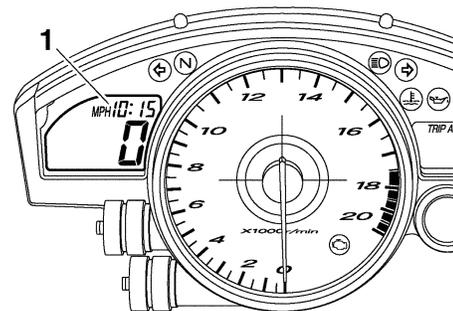
EC2C01020

CAUTION:

Do not operate the engine in the tachometer red zone.

Red zone: 17500 r/min and above

Clock mode



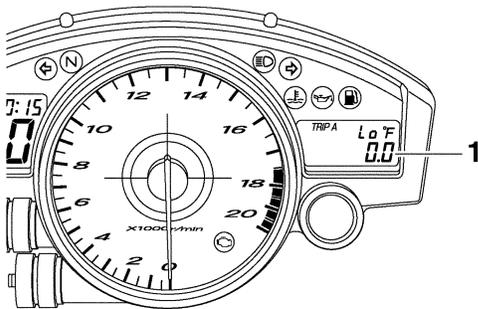
1. Clock

Turn the key to "ON".

To set the clock:

1. Push the “SELECT” button and “RESET” button together for at least two seconds.
2. When the hour digits start flashing, push the “RESET” button to set the hours.
3. Push the “SELECT” button, and the minute digits will start flashing.
4. Push the “RESET” button to set the minutes.
5. Push the “SELECT” button and then release it to start the clock.

Odometer, tripmeter, and stopwatch modes



1. Odometer/tripmeters/fuel reserve tripmeter/stopwatch

Push the “SELECT” button to switch the display between the odometer mode “ODO”, the tripmeter modes “TRIP A” and “TRIP B” and the stopwatch mode in the following order:

TRIP A → TRIP B → ODO → Stopwatch → TRIP A

If the fuel level warning light comes on, the odometer display will automatically change to the fuel reserve tripmeter mode “F-TRIP” and start counting the distance traveled from that point. In that case, push the “SELECT” button to switch the display between the various tripmeter, odometer, and stopwatch modes in the following order:

F-TRIP → Stopwatch → TRIP A → TRIP B → ODO → F-TRIP

To reset a tripmeter, select it by pushing the “SELECT” button, and then push the “RESET” button for at least one second. If you do not reset the fuel reserve tripmeter manually, it will reset itself automatically and the display will return to the prior mode after refueling and traveling 5 km (3 mi).

Stopwatch mode

To change the display to the stopwatch mode, select it by pushing the “SELECT” button. (The stopwatch digits will start flashing.) Release the

“SELECT” button, and then push it again for a few seconds until the stopwatch digits stop flashing.

Standard measurement:

1. Push the “RESET” button to start the stopwatch.
2. Push the “SELECT” button to stop the stopwatch.
3. Push the “SELECT” button again to reset the stopwatch.

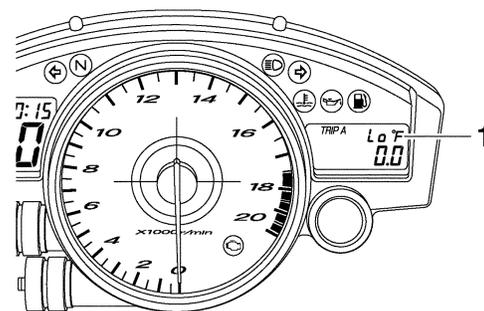
Split-time measurement:

1. Push the “RESET” button to start the stopwatch.
2. Push the “RESET” button or start switch “⊗” to measure split-times. (The colon “:” will start flashing.)
3. Push the “RESET” button or start switch “⊗” to display the final split-time or push the “SELECT” button to stop the stopwatch and display total elapsed time.
4. Push the “SELECT” button to reset the stopwatch.

NOTE:

To change the display back to the prior mode, push the “SELECT” button for a few seconds.

Coolant temperature display



1. Coolant temperature display

The coolant temperature display indicates the temperature of the coolant. Push the “RESET” button to switch the coolant temperature display to the air intake temperature display.

NOTE:

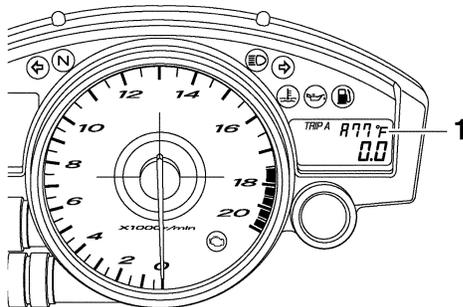
When the coolant temperature display is selected, “C” is displayed for one second, and then the coolant temperature is displayed.

EC2C01021

CAUTION:

Do not operate the engine if it is overheated.

Air intake temperature display



1. Air intake temperature display

The air intake temperature display indicates the temperature of the air drawn into the air filter case. Push the “RESET” button to switch the coolant temperature display to the air intake temperature display.

NOTE:

- Even if the air intake temperature is set to be displayed, the coolant temperature warning light comes on when the engine overheats.
- When the key is turned to “ON”, the coolant temperature is automatically displayed, even if the air intake temperature was displayed prior to turning the key to “OFF”.
- When the air intake temperature display is selected, “A” is displayed before the temperature.

Self-diagnosis device

This model is equipped with a self-diagnosis device for various electrical circuits.

If any of those circuits are defective, the engine trouble warning light will come on, and then the odometer/trip meter/fuel reserve trip meter/stopwatch display will indicate a two-digit error code (e.g., 11, 12, 13).

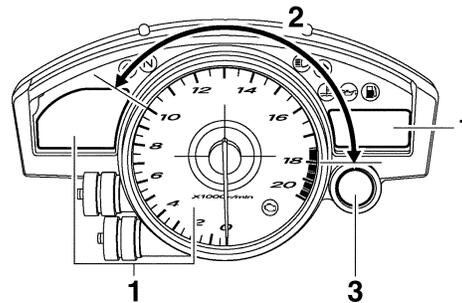
If the display indicates an error code, note the code number, and then check the vehicle. Refer to “FUEL INJECTION SYSTEM” on page 8-33.

EC2C01022

CAUTION:

If the display indicates an error code, the vehicle should be checked as soon as possible in order to avoid engine damage.

Display brightness and shift timing indicator light control mode



1. Display brightness
2. Shift timing indicator light activation/deactivation
3. Shift timing indicator light

This mode cycles through five control functions, allowing you to make the following settings in the order listed below.

- **Display brightness:**
This function allows you to adjust the brightness of the displays and tachometer to suit the outside lighting conditions.
- **Shift timing indicator light activity:**
This function allows you to choose whether or not the indicator light should be activated and whether it should flash or stay on when activated.
- **Shift timing indicator light activation:**
This function allows you to select the engine speed at which the indicator light will be activated.
- **Shift timing indicator light deactivation:**
This function allows you to select the engine speed at which the indicator light will be deactivated.
- **Shift timing indicator light brightness:**
This function allows you to adjust the brightness of the indicator light to suit your preference.

NOTE:

In this mode, the odometer/trip meter/fuel reserve trip meter/stopwatch display shows the current setting for each function (except the shift timing indicator light activity function).

To adjust the brightness of the multi-function meter displays and tachometer:

1. Turn the key to "OFF".
2. Push and hold the "SELECT" button.
3. Turn the key to "ON", and then release the "SELECT" button after five seconds.
4. Push the "RESET" button to select the desired brightness level.
5. Push the "SELECT" button to confirm the selected brightness level. The control mode changes to the shift timing indicator light activity function.

To set the shift timing indicator light activity function:

1. Push the "RESET" button to select one of the following indicator light activity settings:
 - The indicator light will stay on when activated. (This setting is selected when the indicator light stays on.)
 - The indicator light will flash when activated. (This setting is selected when the indicator light flashes four times per second.)
 - The indicator light is deactivated; in other words, it will not come on or flash. (This setting is selected when the indicator light flashes once every two seconds.)
2. Push the "SELECT" button to confirm the selected indicator light activity. The control mode changes to the shift timing indicator light activation function.

To set the shift timing indicator light activation function:

NOTE:

The shift timing indicator light activation function can be set between 10000 r/min and 18000 r/min. From 10000 r/min to 13000 r/min, the indicator light can be set in increments of 500 r/min. From 13000 r/min to 18000 r/min, the indicator light can be set in increments of 200 r/min.

1. Push the "RESET" button to select the desired engine speed for activating the indicator light.
2. Push the "SELECT" button to confirm the selected engine speed. The control mode changes to the shift timing indicator light deactivation function.

To set the shift timing indicator light deactivation function:

NOTE:

- The shift timing indicator light deactivation function can be set between 10000 r/min and 18000 r/min. From 10000 r/min to 13000 r/min, the indicator light can be set in increments of 500 r/min. From 13000 r/min to 18000 r/min, the indicator light can be set in increments of 200 r/min.
- Be sure to set the deactivation function to a higher engine speed than for the activation function, otherwise the shift timing indicator light will remain deactivated.

1. Push the "RESET" button to select the desired engine speed for deactivating the indicator light.
2. Push the "SELECT" button to confirm the selected engine speed. The control mode changes to the shift timing indicator light brightness function.

To adjust the shift timing indicator light brightness:

1. Push the "RESET" button to select the desired indicator light brightness level.
2. Push the "SELECT" button to confirm the selected indicator light brightness level. The display will return to the odometer or tripmeter mode.

EAS20180

IMPORTANT INFORMATION

EAS20190

PREPARATION FOR REMOVAL AND DISASSEMBLY

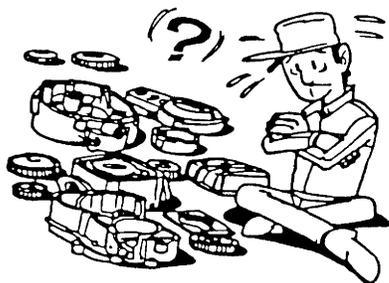
1. Before removal and disassembly, remove all dirt, mud, dust and foreign material.



2. Use only the proper tools and cleaning equipment.

Refer to "SPECIAL TOOLS" on page 1-14.

3. When disassembling, always keep mated parts together. This includes gears, cylinders, pistons and other parts that have been "mated" through normal wear. Mated parts must always be reused or replaced as an assembly.

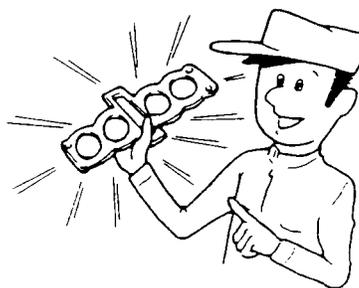


4. During disassembly, clean all of the parts and place them in trays in the order of disassembly. This will speed up assembly and allow for the correct installation of all parts.
5. Keep all parts away from any source of fire.

EAS20200

REPLACEMENT PARTS

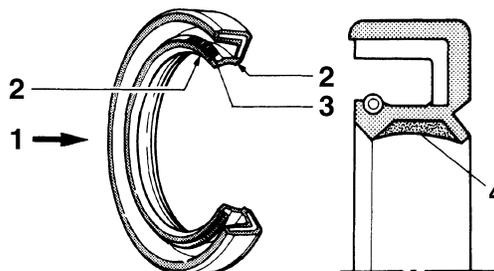
Use only genuine Yamaha parts for all replacements. Use oil and grease recommended by Yamaha for all lubrication jobs. Other brands may be similar in function and appearance, but inferior in quality.



EAS20210

GASKETS, OIL SEALS AND O-RINGS

1. When overhauling the engine, replace all gaskets, seals and O-rings. All gasket surfaces, oil seal lips and O-rings must be cleaned.
2. During reassembly, properly oil all mating parts and bearings and lubricate the oil seal lips with grease.

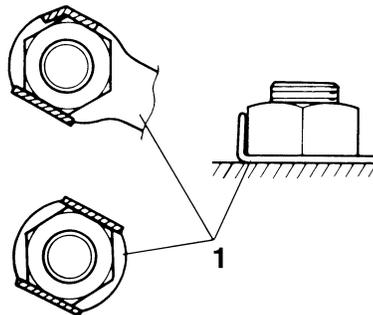


1. Oil
2. Lip
3. Spring
4. Grease

EAS20220

LOCK WASHERS/PLATES AND COTTER PINS

After removal, replace all lock washers/plates "1" and cotter pins. After the bolt or nut has been tightened to specification, bend the lock tabs along a flat of the bolt or nut.



EAS20230

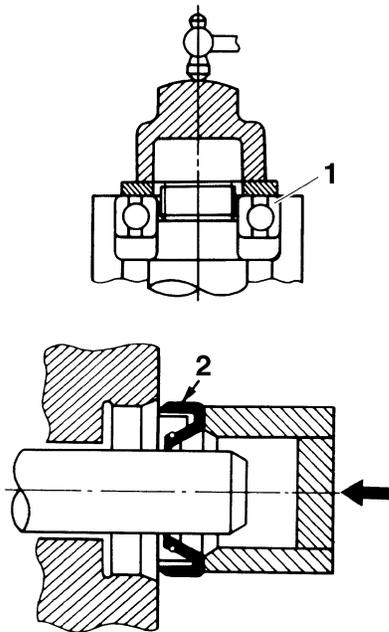
BEARINGS AND OIL SEALS

Install bearings "1" and oil seals "2" so that the manufacturer's marks or numbers are visible. When installing oil seals, lubricate the oil seal lips with a light coat of lithium-soap-based grease. Oil bearings liberally when installing, if appropriate.

ECA13300

CAUTION:

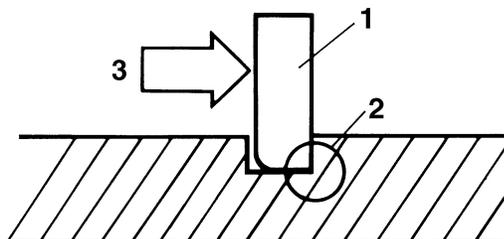
Do not spin the bearing with compressed air because this will damage the bearing surfaces.



EAS20240

CIRCLIPS

Before reassembly, check all circlips carefully and replace damaged or distorted circlips. Always replace piston pin clips after one use. When installing a circlip "1", make sure the sharp-edged corner "2" is positioned opposite the thrust "3" that the circlip receives.



CHECKING THE CONNECTIONS

EAS20250

CHECKING THE CONNECTIONS

Check the leads, couplers, and connectors for stains, rust, moisture, etc.

1. Disconnect:

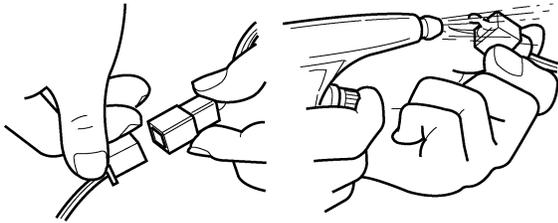
- Lead
- Coupler
- Connector

2. Check:

- Lead
- Coupler
- Connector

Moisture → Dry with an air blower.

Rust/stains → Connect and disconnect several times.



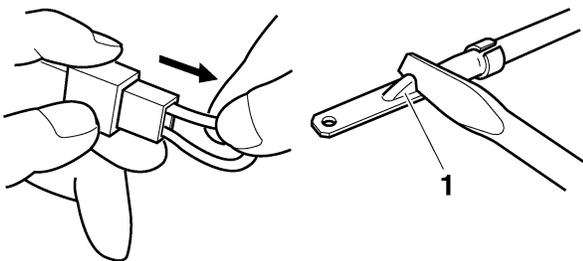
3. Check:

- All connections

Loose connection → Connect properly.

NOTE:

If the pin "1" on the terminal is flattened, bend it up.



4. Connect:

- Lead
- Coupler
- Connector

NOTE:

Make sure all connections are tight.

5. Check:

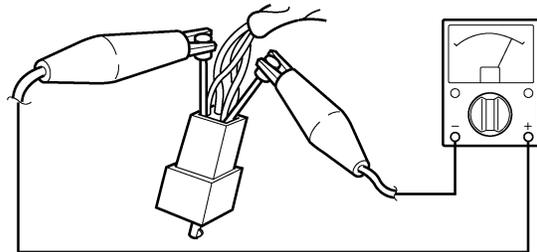
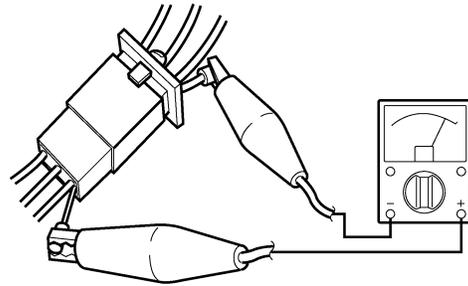
- Continuity
(with the pocket tester)



Pocket tester
90890-03112
Analog pocket tester
YU-03112-C

NOTE:

- If there is no continuity, clean the terminals.
- When checking the wire harness, perform steps (1) to (3).
- As a quick remedy, use a contact revitalizer available at most part stores.



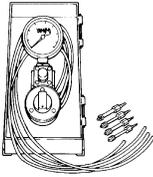
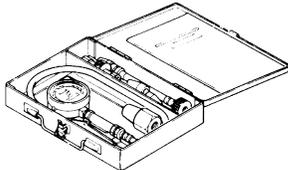
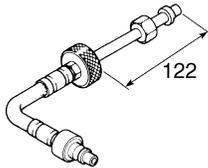
EAS20260

SPECIAL TOOLS

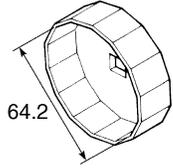
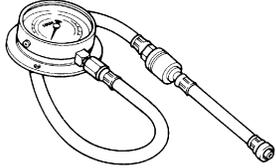
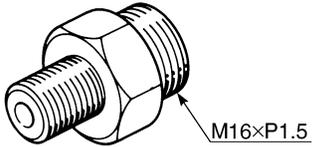
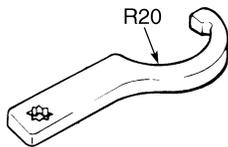
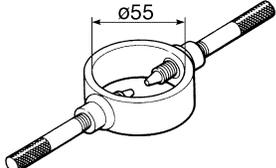
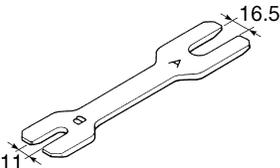
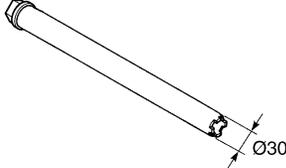
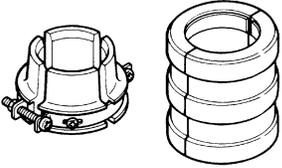
The following special tools are necessary for complete and accurate tune-up and assembly. Use only the appropriate special tools as this will help prevent damage caused by the use of inappropriate tools or improvised techniques. Special tools, part numbers or both may differ depending on the country.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

NOTE:

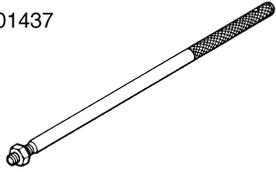
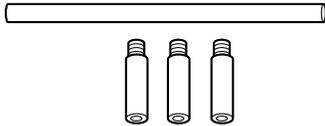
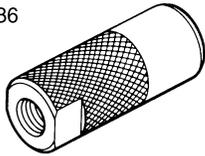
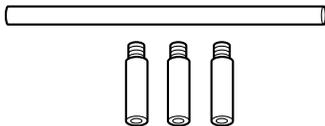
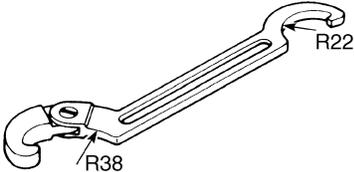
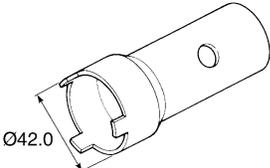
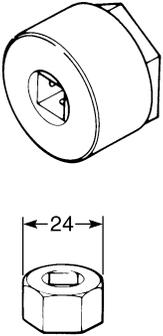
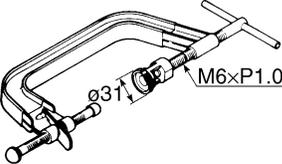
- For U.S.A. and Canada, use part number starting with “YM-”, “YU-”, or “ACC-”.
- For others, use part number starting with “90890-”.

Tool name/Tool No.	Illustration	Reference pages
Pocket tester 90890-03112 Analog pocket tester YU-03112-C		1-13, 5-35, 8-83, 8-84, 8-85, 8-89, 8-90, 8-91, 8-92, 8-93, 8-94, 8-95, 8-96, 8-97, 8-98, 8-99, 8-100, 8-101
Valve lapper 90890-04101 Valve lapping tool YM-A8998		3-5
Vacuum gauge 90890-03094 Carburetor synchronizer YU-44456	90890-03094  YU-44456 	3-7
Compression gauge 90890-03081 Engine compression tester YU-33223		3-10
Extension 90890-04136		3-10

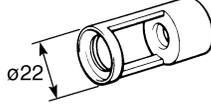
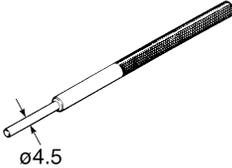
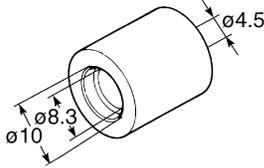
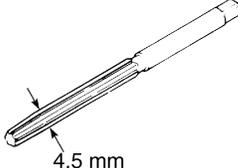
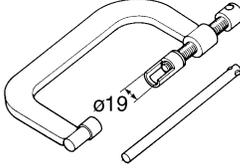
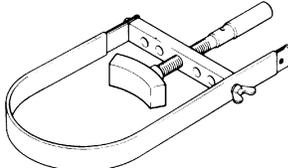
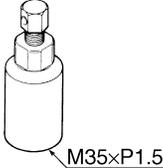
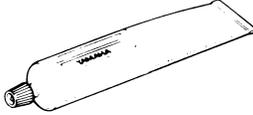
SPECIAL TOOLS

Tool name/Tool No.	Illustration	Reference pages
Oil filter wrench 90890-01426 YU-38411		3-11
Oil pressure gauge set 90890-03120		3-13
Oil pressure adapter H 90890-03139		3-13
Steering nut wrench 90890-01403 Spanner wrench YU-33975		3-27, 4-58
Fork spring compressor 90890-01441 YM-01441		4-47, 4-52
Rod holder 90890-01434 Damper rod holder double ended YM-01434		4-47, 4-52
Damper rod holder 90890-01506 YM-01506		4-48, 4-49
Fork seal driver 90890-01442 Adjustable fork seal driver (36–46 mm) YM-01442		4-50

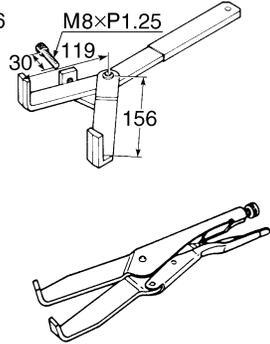
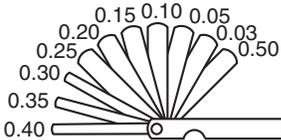
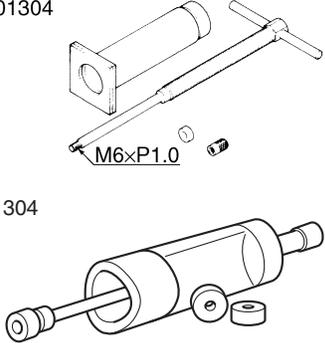
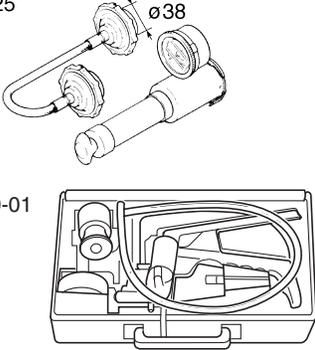
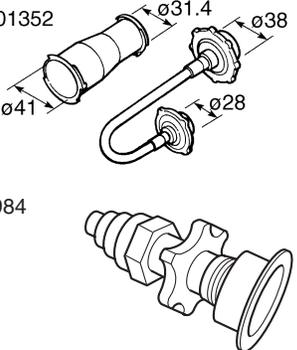
SPECIAL TOOLS

Tool name/Tool No.	Illustration	Reference pages
Rod puller 90890-01437 Universal damping rod bleeding tool set YM-A8703	90890-01437  YM-A8703 	4-51, 4-52
Rod puller attachment (M10) 90890-01436 Universal damping rod bleeding tool set YM-A8703	90890-01436  YM-A8703 	4-51, 4-52
Ring nut wrench 90890-01268 Spanner wrench YU-01268		4-58
Ring nut wrench 90890-01507 YM-01507		4-67, 4-69
Damper rod holder (24 mm) 90890-01328 YM-01328	90890-01328 	4-67, 4-68
Valve spring compressor 90890-04019 YM-04019		5-19, 5-24

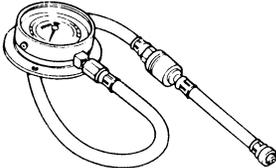
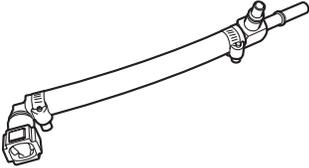
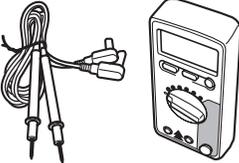
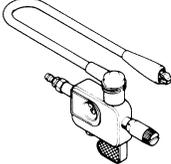
SPECIAL TOOLS

Tool name/Tool No.	Illustration	Reference pages
Valve spring compressor attachment 90890-04108 Valve spring compressor adapter 22 mm YM-04108		5-19, 5-24
Valve guide remover (ø4.5) 90890-04116 Valve guide remover (4.5 mm) YM-04116		5-21
Valve guide installer (ø4.5) 90890-04117 Valve guide installer (4.5 mm) YM-04117		5-21
Valve guide reamer (ø4.5) 90890-04118 Valve guide reamer (4.5 mm) YM-04118		5-21
Valve spring compressor 90890-04109		5-24
Sheave holder 90890-01701 Primary clutch holder YS-01880-A		5-28, 5-29, 5-31
Flywheel puller 90890-01404 Flywheel puller YM-01404		5-28
Yamaha bond No. 1215 90890-85505 (Three Bond No.1215®)		5-29, 5-31, 5-57

SPECIAL TOOLS

Tool name/Tool No.	Illustration	Reference pages
Universal clutch holder 90890-04086 YM-91042	 <p>90890-04086</p> <p>M8xP1.25</p> <p>30°</p> <p>119</p> <p>156</p> <p>YM-91042</p>	5-41, 5-45
Thickness gauge 90890-03180 Feeler gauge set YU-26900-9	 <p>0.15 0.10 0.05</p> <p>0.20 0.25 0.30 0.35 0.40 0.50</p>	5-41
Piston pin puller set 90890-01304 Piston pin puller YU-01304	 <p>90890-01304</p> <p>M6xP1.0</p> <p>YU-01304</p>	5-60
Radiator cap tester 90890-01325 Radiator pressure tester YU-24460-01	 <p>90890-01325</p> <p>38</p> <p>YU-24460-01</p>	6-3
Radiator cap tester adapter 90890-01352 Radiator pressure tester adapter YU-33984	 <p>90890-01352</p> <p>31.4 38</p> <p>41 28</p> <p>YU-33984</p>	6-3

SPECIAL TOOLS

Tool name/Tool No.	Illustration	Reference pages
Pressure gauge 90890-03153 Pressure gauge YU-03153		7-12
Fuel pressure adapter 90890-03176 YM-03176		7-12
Digital circuit tester 90890-03174 Model 88 Multimeter with tachometer YU-A1927		7-13
Ignition checker 90890-06754 Opama pet-4000 spark checker YM-34487		8-92

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CHASSIS SPECIFICATIONS	2-10
ELECTRICAL SPECIFICATIONS	2-13
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CABLE ROUTING	2-47

GENERAL SPECIFICATIONS

Product: 2007 Yamaha YZFR6V(C) Motorcycle Service Repair Workshop Manual

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GENERAL SPECIFICATIONS

Model

Model	2C05/2C08 (USA) 2C06 (California)
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Dimensions

Overall length	2040 mm (80.3 in)
Overall width	700 mm (27.6 in)
Overall height	1100 mm (43.3 in)
Seat height	850 mm (33.5 in)
Wheelbase	1380 mm (54.3 in)
Ground clearance	130 mm (5.12 in)
Minimum turning radius	3600 mm (141.7 in)

Weight

With oil and fuel	182.0 kg (401 lb) (USA) 183.0 kg (403 lb) (California)
Maximum load	193 kg (425 lb) (USA) 192 kg (423 lb) (California)

Sample of manual. Download All 434 pages at:

<https://www.aresairmanual.com/downloads/2007-yamaha-yzfr6vc-motorcycle-service-repair-workshop-manual/>