YAMAHA

OWNER'S SERVICE MANUAL

YZ250T1

LIT-11626-18-34

1P8-28199-10

EC090000

INDEX

EC0A0000

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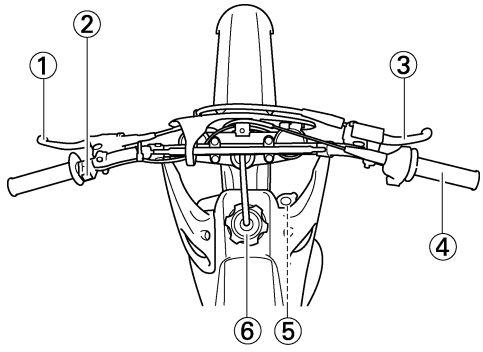
EC100000
GENERAL INFORMATION

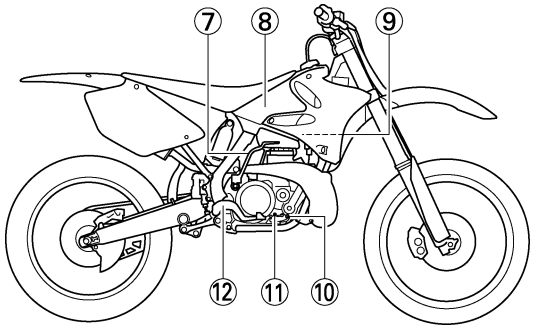
EC110000
DESCRIPTION

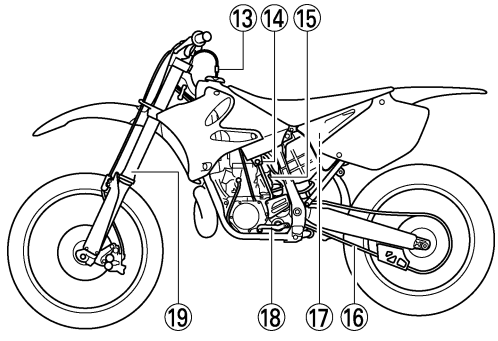
① Clutch lever
② “ENGINE STOP” button
③ Front brake lever
④ Throttle grip
⑤ Radiator cap
⑥ Fuel tank cap
⑦ Kick starter
⑧ Fuel tank
⑨ Radiator
⑩ Coolant drain bolt
⑪ Check bolt (Transmission oil level)
⑫ Rear brake pedal
⑬ Valve joint
⑭ Fuel cock
⑮ Starter knob
⑯ Drive chain
⑰ Air cleaner
⑱ Shift pedal
⑲ Front fork

NOTE:

- The machine you have purchased may differ slightly from those shown in the following.
- Designs and specifications are subject to change without notice.



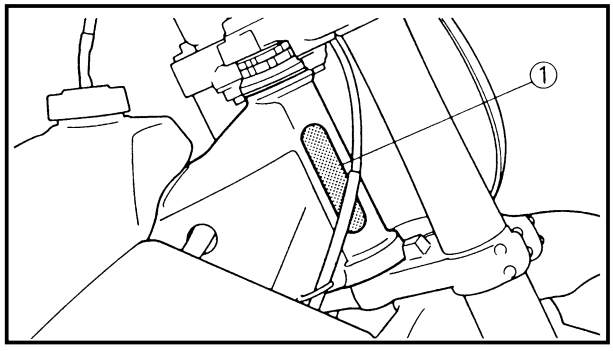




EC120001
MACHINE IDENTIFICATION

There are two significant reasons for knowing the serial number of your machine:

1. When ordering parts, you can give the number to your Yamaha dealer for positive identification of the model you own.
2. If your machine is stolen, the authorities will need the number to search for and identify your machine.

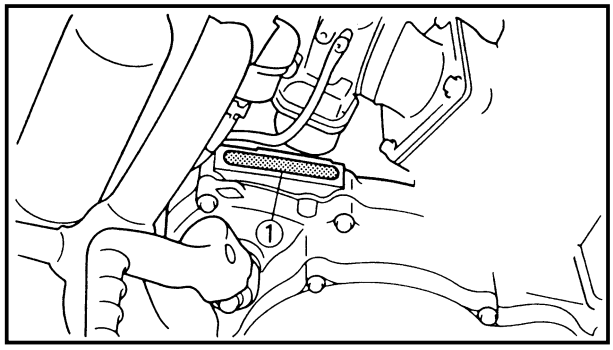


EC121001
VEHICLE IDENTIFICATION NUMBER
(For USA, CDN, AUS, NZ and E)

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

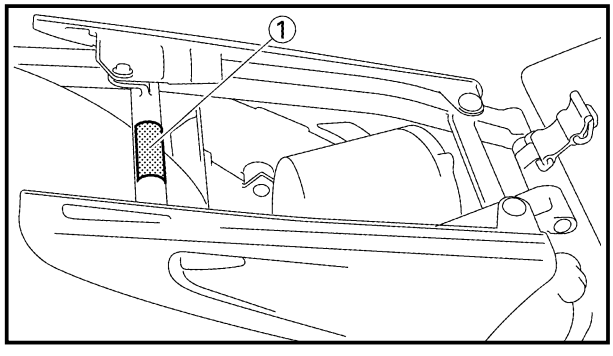
EC122001
FRAME SERIAL NUMBER
(For F, D, GB, I and ZA)

The frame serial number ① is stamped on the right of the steering head pipe.



EC123001
ENGINE SERIAL NUMBER

The engine serial number ① is stamped into the elevated part of the right-side of the engine.



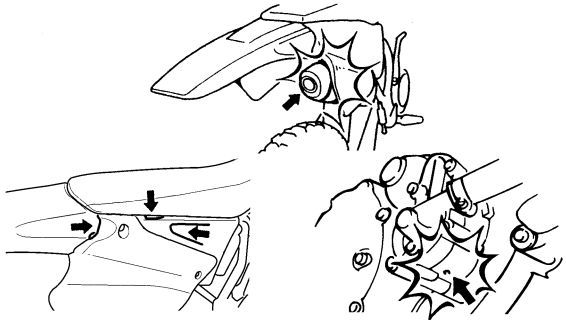
EC124000
MODEL LABEL

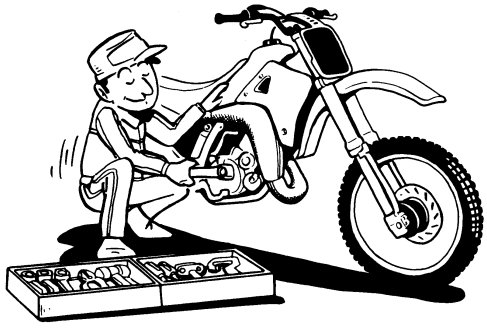
The model label ① is affixed to the frame under the rider's seat. This information will be needed to order spare parts.

EC130000
IMPORTANT INFORMATION

EC131010
PREPARATION FOR REMOVAL AND DIS ASSEMBLY

1. Remove all dirt, mud, dust, and foreign material before removal and disassembly.
   When washing the machine with high pressured water, cover the parts as follows.
   - Silencer exhaust port
   - Side cover air intake port
   - Water pump housing hole at the bottom





2. Use proper tools and cleaning equipment. Refer to “SPECIAL TOOLS” section.

3. When disassembling the machine, keep mated parts together. They include gears, cylinders, pistons, and other mated parts that have been “mated” through normal wear. Mated parts must be reused as an assembly or replaced.

4. During the machine disassembly, clean all parts and place them in trays in the order of disassembly. This will speed up assembly time and help assure that all parts are correctly reinstalled.

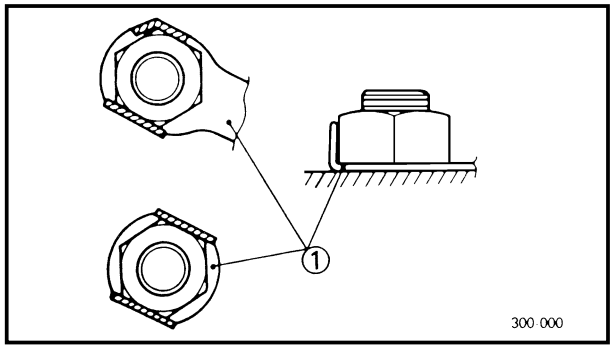
5. Keep away from fire.

EC132000
ALL REPLACEMENT PARTS

1. We recommend to use Yamaha genuine parts for all replacements. Use oil and/or grease recommended by Yamaha for assembly and adjustment.

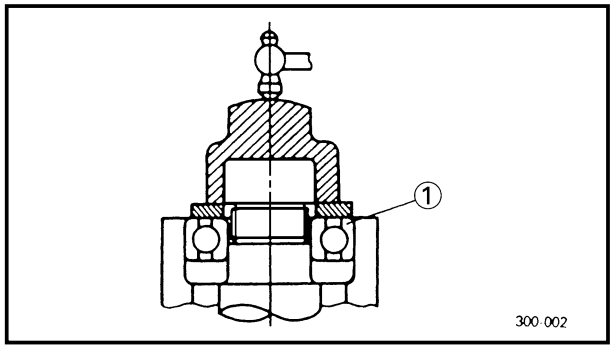
EC133000
GASKETS, OIL SEALS AND O-RINGS

1. All gaskets, oil seals, and O-rings should be replaced when an engine is overhauled. All gasket surfaces, oil seal lips, and O-rings must be cleaned.
2. Properly oil all mating parts and bearings during reassembly. Apply grease to the oil seal lips.



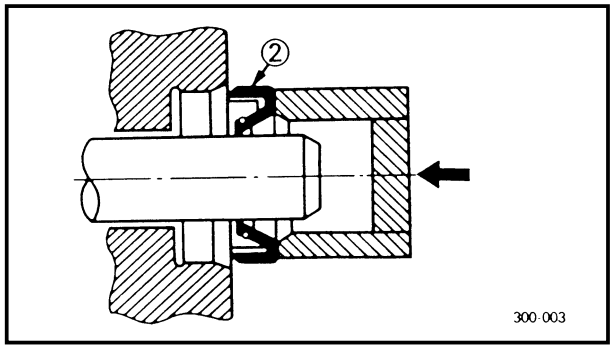
EC134000
LOCK WASHERS/PLATES AND COTTER PINS

1. All lock washers/plates ① and cotter pins must be replaced when they are removed. Lock tab(s) should be bent along the bolt or nut flat(s) after the bolt or nut has been properly tightened.



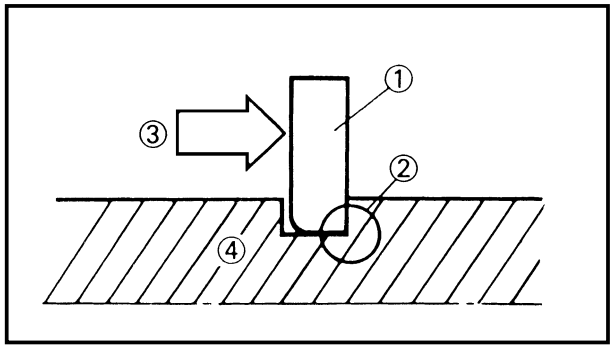
EC135001
BEARINGS AND OIL SEALS

1. Install the bearing (s) ① and oil seal (s) ② with their manufacturer's marks or numbers facing outward. (In other words, the stamped letters must be on the side exposed to view.) When installing oil seal(s), apply a light coating of light-weight lithium base grease to the seal lip(s). Oil the bearings liberally when installing.



CAUTION:

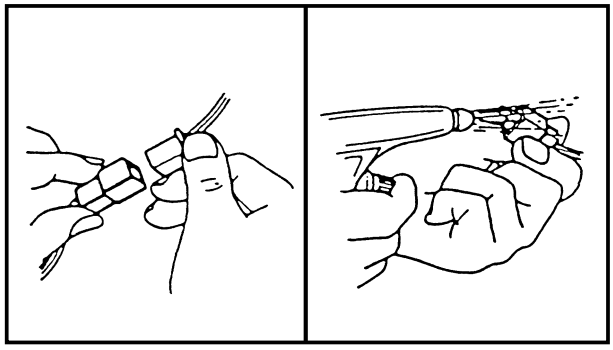
Do not use compressed air to spin the bearings dry. This causes damage to the bearing surfaces.



EC136000
CIRCLIPS

1. All circlips should be inspected carefully before reassembly. Always replace piston pin clips after one use. Replace distorted circlips. When installing a circlip ①, make sure that the sharp-edged corner ② is positioned opposite to the thrust ③ it receives. See the sectional view.

④ Shaft

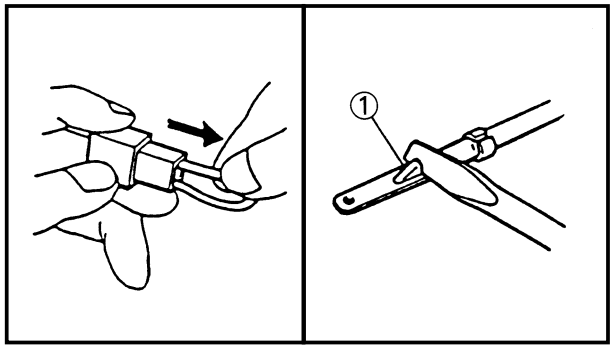


EC1C0001

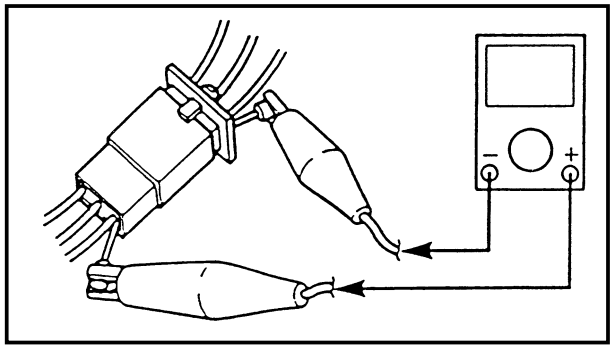
CHECKING OF CONNECTION

Dealing with stains, rust, moisture, etc. on the connector.

1. Disconnect:
   - Connector
2. Dry each terminal with an air blower.



3. Connect and disconnect the connector two or three times.
4. Pull the lead to check that it will not come off.
5. If the terminal comes off, bend up the pin ① and reinsert the terminal into the connector.

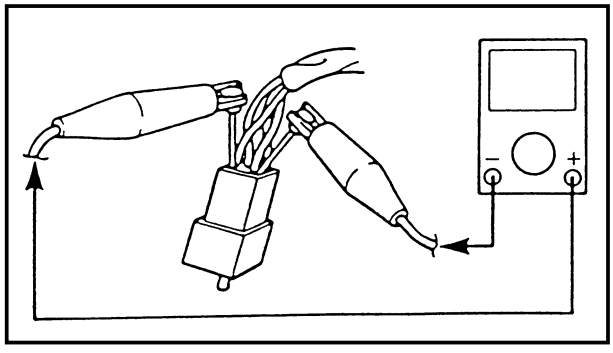


6. Connect:
   - Connector

NOTE:

The two connectors “click” together.

7. Check for continuity with a tester.



NOTE:

- If there in no continuity, clean the terminals.
- Be sure to perform the steps 1 to 7 listed above when checking the wireharness.
- For a field remedy, use a contact revitalizer available on the market.
- Use the tester on the connector as shown.

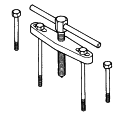
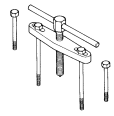
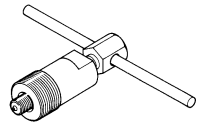
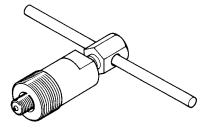
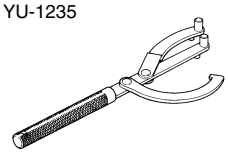
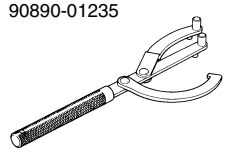
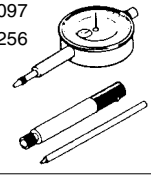
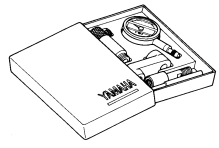
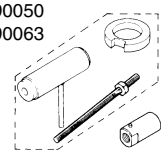
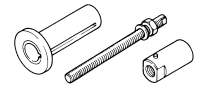
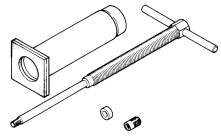
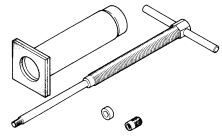
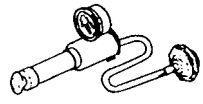
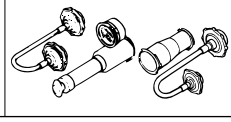
EC140002

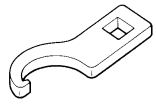
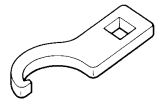
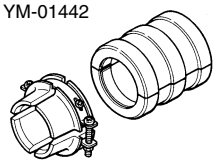
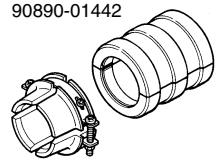
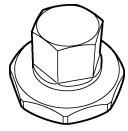
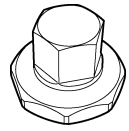
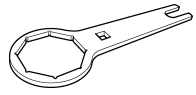
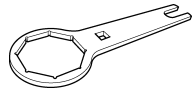
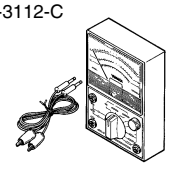
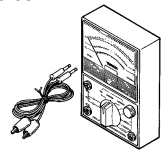
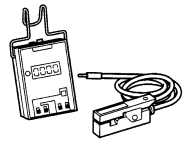
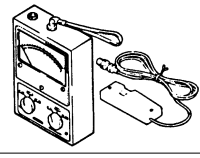
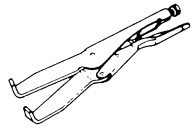
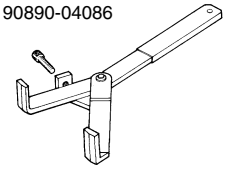
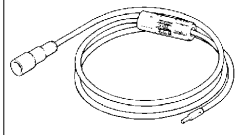
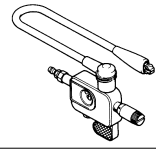
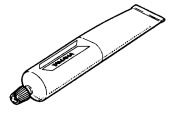
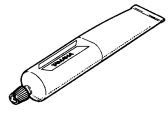
SPECIAL TOOLS

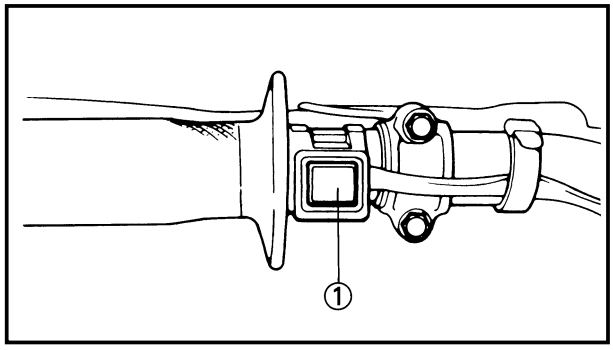
The proper special tools are necessary for complete and accurate tune-up and assembly. Using the correct special tool will help prevent damage caused by the use of improper tools or improvised techniques. The shape and part number used for the special tool differ by country, so two types are provided. Refer to the list provided to avoid errors when placing an order.

NOTE:

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

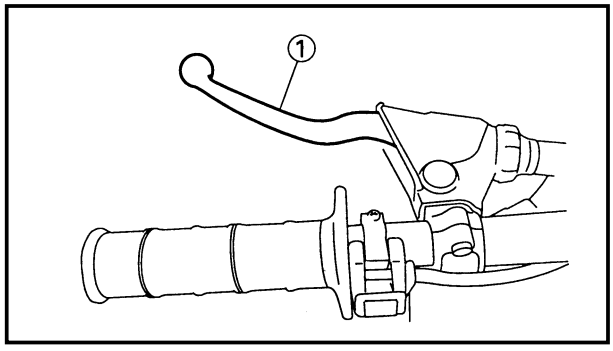
Part number	Tool name / How to use	Illustration	
YU-1135-A, 90890-01135	Crankcase separating tool This tool is used to split the crankcase as well as remove the crankshaft from either case.	YU-1135-A 	90890-01135 
YM-1189, 90890-01189	Flywheel puller This tool is used to remove the flywheel magneto.	YM-1189 	90890-01189 
YU-1235, 90890-01235	Rotor holding tool This tool is used when loosening or tightening the flywheel magneto securing nut.	YU-1235 	90890-01235 
YU-3097, 90890-01252 YU-1256	Dial gauge and stand Spark plug hole dial stand These tools are used to set the ignition timing.	YU-3097 YU-1256 	90890-01252 
YU-90050, 90890-01274 YU-90050, 90890-01275 YU-90063, 90890-01278	Crankcase installing tool Pot Bolt Adapter These tools are used to install the crankshaft.	YU-90050 YU-90063 	90890-01274 90890-01275 90890-01278 
YU-1304, 90890-01304	Piston pin puller This tool is used to remove the piston pin.	YU-1304 	90890-01304 
YU-24460-01,90890-01325 YU-33984, 90890-01352	Radiator cap tester Adapter These tools are used for checking the cooling system.	YU-24460-01 YU-33984 	90890-01325 90890-01352 

Part number	Tool name / How to use	Illustration	
YU-33975, 90890-01403	Ring nut wrench This tool is used when tighten the steering ring nut to specification.	YU-33975 	90890-01403 
YM-01442, 90890-01442	Fork seal driver This tool is used when install the fork oil seal.	YM-01442 	90890-01442 
YM-01500, 90890-01500	Cap bolt wrench This tool is used to loosen or tighten the base valve.	YM-01500 	90890-01500 
YM-01501, 90890-01501	Cap bolt ring wrench This tool is used to loosen or tighten the damper assembly.	YM-01501 	90890-01501 
YU-3112-C, 90890-03112	Yamaha pocket tester Use this tool to inspect the coil resistance, output voltage and amperage.	YM-3112-C 	90890-03112 
YU-8036-B 90890-03113	Inductive tachometer Engine tachometer This tool is needed for observing engine rpm.	YU-8036-B 	90890-03113 
YM-91042, 90890-04086	Clutch holding tool This tool is used to hold the clutch when removing or installing the clutch boss securing nut.	YM-91042 	90890-04086 
YM-34487 90890-06754	Dynamic spark tester Ignition checker This instrument is necessary for checking the ignition system components.	YM-34487 	90890-06754 
ACC-QUICK-GS-KT 90890-85505	Quick gasket ® YAMAHA Bond No. 1215 This sealant (Bond) is used for crankcase mating surface, etc.	ACC-QUICK-GS-KT 	90890-85505 

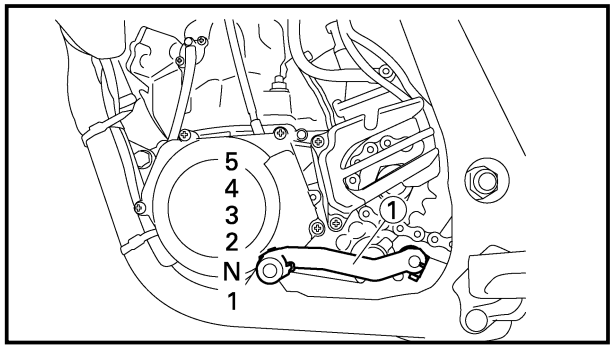


EC150000
CONTROL FUNCTIONS

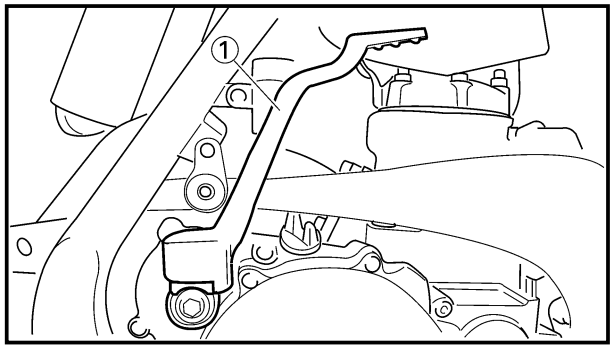
EC151000
"ENGINE STOP" BUTTON
The "ENGINE STOP" button ① is located on the left handlebar. Continue pushing the "ENGINE STOP" button till the engine comes to a stop.



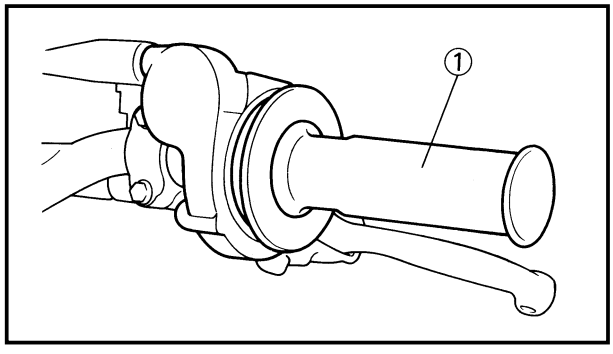
EC152000
CLUTCH LEVER
The clutch lever ① is located on the left handlebar; it disengages or engages the clutch. Pull the clutch lever to the handlebar to disengage the clutch, and release the lever to engage the clutch. The lever should be pulled rapidly and released slowly for smooth starts.



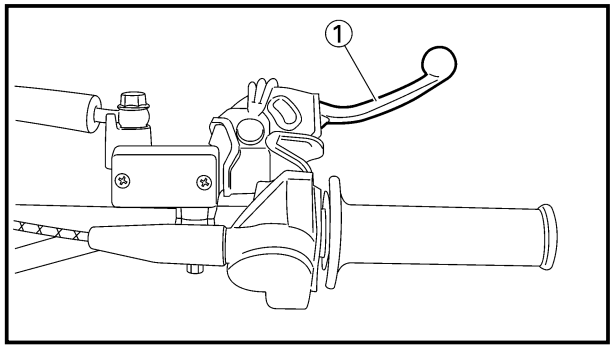
EC153000
SHIFT PEDAL
The gear ratios of the constant-mesh 5 speed transmission are ideally spaced. The gears can be shifted by using the shift pedal ① on the left side of the engine.



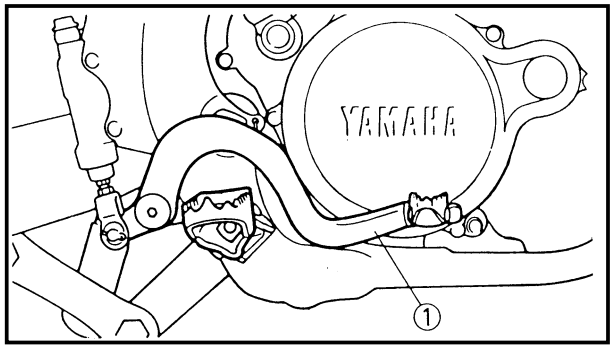
EC154000
KICK STARTER
Rotate the kick starter ① away from the engine. Push the starter down lightly with your foot until the gears engage, then kick smoothly and forcefully to start the engine. This model has a primary kick starter so the engine can be started in any gear if the clutch is disengaged. In normal practices, however, shift to neutral before starting.



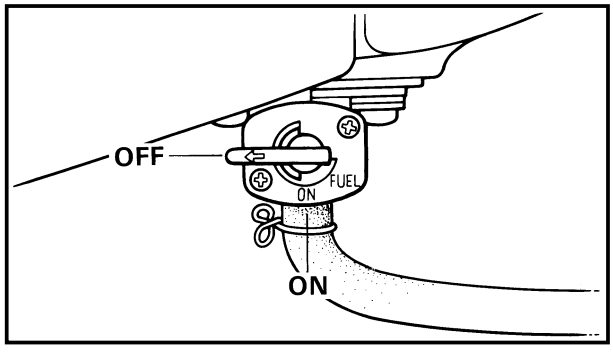
EC155001
THROTTLE GRIP
The throttle grip ① is located on the right handlebar; it accelerates or decelerates the engine. For acceleration, turn the grip toward you; for deceleration, turn it away from you.



EC156000
FRONT BRAKE LEVER
The front brake lever ① is located on the right handlebar. Pull it toward the handlebar to activate the front brake.



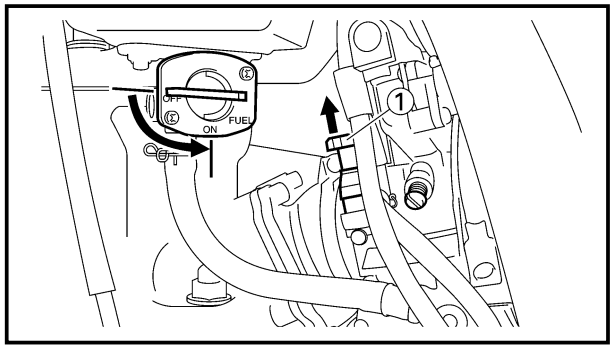
EC157000
REAR BRAKE PEDAL
The rear brake pedal ① is located on the right side of the machine. Press down on the brake pedal to activate the rear brake.



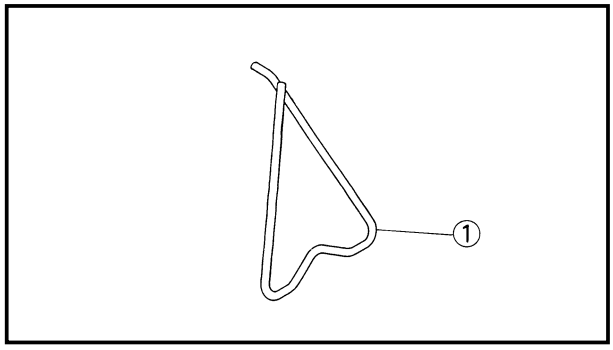
EC158001
FUEL COCK
The fuel cock supplies fuel from the tank to carburetor while filtering the fuel. The fuel cock has the two positions:

OFF: With the lever in this position, fuel will not flow. Always return the lever to this position when the engine is not running.

ON: With the lever in this position, fuel flows to the carburetor. Normal riding is done with the lever in this position.



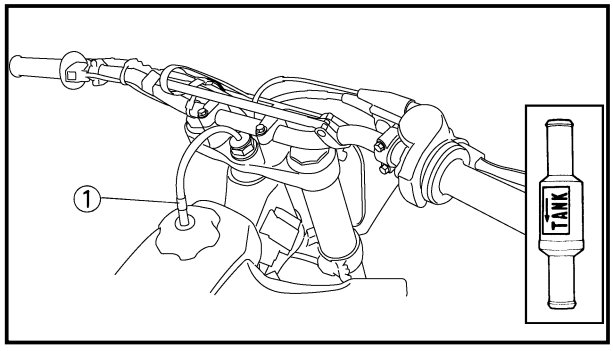
EC159000
STARTER KNOB (CHOKE)
When cold, the engine requires a richer air-fuel mixture for starting. A separate starter circuit, which is controlled by the starter knob ①, supplies this mixture. Pull the starter knob out to open the circuit for starting. When the engine has warmed up, push it in to close the circuit.



EC15R001
DETACHABLE SIDESTAND
This sidestand ① is used to support only the machine when standing or transporting it.

⚠WARNING

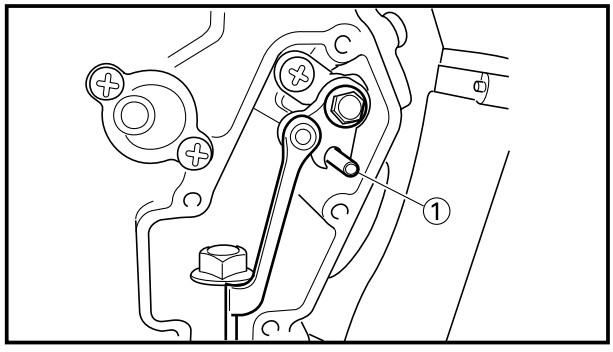
- **Never apply additional force to the sidestand.**
- **Remove this sidestand before starting out.**



EC15F000
VALVE JOINT
This valve joint ① prevents fuel from flowing out and is installed to the fuel tank breather hose.

CAUTION:

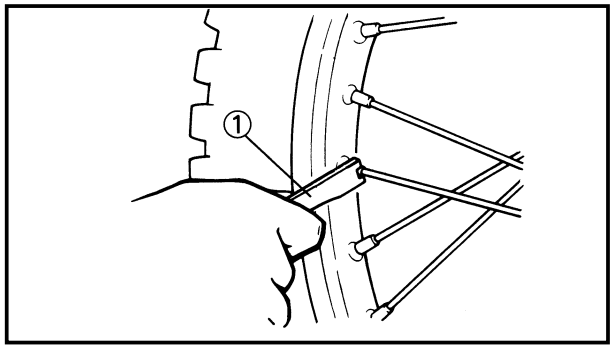
In this installation, make sure the arrow faces the fuel tank and also downward.



EC15f000
SET PIN
This set pin ① is used to remove and install the push rod of the engine.

CAUTION:

Be sure to use the set pin. If the set pin is not used, the power valve constituent parts will result in damage.



EC15e000
NIPPLE WRENCH
This nipple wrench ① is used to tighten the spoke.

EC160051

FUEL AND ENGINE MIXING OIL

Mix oil with the gas at the ratio specified below. Always use fresh, name-brand gasoline, and mix the oil and gas the day of the race. Do not use premix that is more than a few hours old.

Recommended fuel:
Premium unleaded gasoline only with a research octane number of 95 or higher.

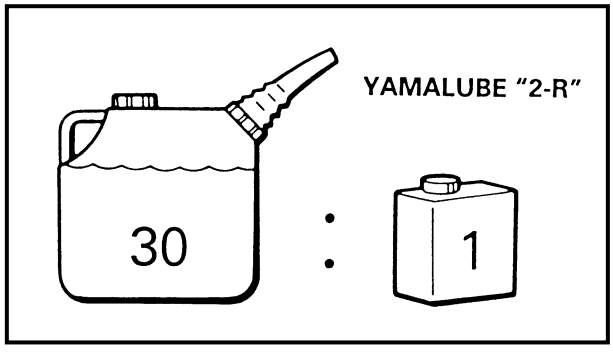
NOTE:

If knocking or pinging occurs, use a different brand of gasoline or higher octane grade.

CAUTION:

Never mix two types of oil in the same batch; clotting of the oil could result. If you wish to change oil types, be sure to drain the fuel tank and the carburetor float bowl of old premix prior to filling with the new type.

Fuel tank capacity:
8.0 L (1.76 Imp gal, 2.11 US gal)



Mixing oil
Recommended oil:
Yamalube "2-R"
(Yamalube racing 2-cycle oil)
Mixing ratio: 30 : 1
If unavailable, use an equivalent type of oil.

EC190000
STARTING AND BREAK-IN

CAUTION:

Before starting the machine, perform the checks in the pre-operation check list.

⚠WARNING

Never start or run the engine in a closed area. The exhaust fumes are poisonous; they can cause loss of consciousness and death in a very short time. Always operate the machine in a well-ventilated area.

EC191001
STARTING A COLD ENGINE

1. Shift the transmission into neutral.
2. Turn the fuel cock to “ON” and full open the starter knob (CHOKE).
3. With the throttle completely closed start the engine by kicking the kick starter forcefully with firm stroke.
4. Run the engine at idle or slightly higher until it warms up: this usually takes about one or two minutes.
5. The engine is warmed up when it responds normally to the throttle with the starter knob (CHOKE) turned off.

CAUTION:

Do not warm up the engine for extended periods.

EC193001
STARTING A WARM ENGINE

Do not operate the starter knob (CHOKE). Open the throttle slightly and start the engine by kicking the kick starter forcefully with firm stroke.

CAUTION:

Observe the following break-in procedures during initial operation to ensure optimum performance and avoid engine damage.

EC194001
BREAK-IN PROCEDURES

1. Before starting the engine, fill the fuel tank with a break-in oil-fuel mixture as follows.

Mixing oil:	Mixing ratio:
Yamalube “2-R”	15:1

2. Perform the pre-operation checks on the machine.
3. Start and warm up the engine. Check the idle speed, and check the operation of the controls and the “ENGINE STOP” button.
4. Operate the machine in the lower gears at moderate throttle openings for five to eight minutes. Stop and check the spark plug condition; it will show a rich condition during break-in.
5. Allow the engine to cool. Restart the engine and operate the machine as in the step above for five minutes. Then, very briefly shift to the higher gears and check full-throttle response. Stop and check the spark plug.
6. After again allowing the engine to cool, restart and run the machine for five more minutes. Full throttle and the higher gears may be used, but sustained full-throttle operation should be avoided. Check the spark plug condition.
7. Allow the engine to cool, remove the top end, and inspect the piston and cylinder. Remove any high spots on the piston with #600 grit wet sandpaper. Clean all components and carefully reassemble the top end.
8. Drain the break-in oil-fuel mixture from the fuel tank and refill with the specified mix.
9. Restart the engine and check the operation of the machine throughout its entire operating range. Stop and check the spark plug condition. Restart the machine and operate it for about 10 to 15 more minutes. The machine will now be ready to race.

CAUTION:

- **After the break-in or before each race, you must check the entire machine for loose fittings and fasteners as per "TORQUE-CHECK POINTS".**
  Tighten all such fasteners as required.
- **When any of the following parts have been replaced, they must be broken in.**
  CYLINDER AND CRANKSHAFT:
  About one hour of break-in operation is necessary.
  PISTON, RING AND GEARS:
  These parts require about 30 minutes of break-in operation at half-throttle or less. Observe the condition of the engine carefully during operation.

EC1A0013

TORQUE-CHECK POINTS

- Frame construction
  - Frame to rear frame
  - Combined seat and tank
    - Fuel tank to frame
- Engine mounting
  - Frame to engine
  - Engine bracket to engine
  - Engine bracket to frame
- Steering
  - Steering shaft to handlebar
    - Steering shaft to frame
    - Steering shaft to handle crown
    - Handle crown to handlebar
- Suspension
  - Front
    - Steering shaft to front fork
      - Front fork to handle crown
      - Front fork to under bracket
  - Rear
    - For link type
      - Assembly of links
      - Link to frame
      - Link to shock absorber
      - Link to swingarm
  - Rear
    - Installation of shock absorber
      - Shock absorber to frame
  - Rear
    - Installation of swingarm
      - Tightening of pivot shaft
- Wheel
  - Installation of wheel
    - Front
      - Tightening of front axle
      - Tightening of axle holder
    - Rear
      - Tightening of rear axle
      - Wheel to sprocket
- Brake
  - Front
    - Caliper to front fork
    - Brake disc to wheel
    - Tightening of union bolt
    - Master cylinder to handlebar
    - Tightening of air bleeder
    - Tightening of brake hose holder
  - Rear
    - Brake pedal to frame
    - Brake disc to wheel
    - Tighening of union bolt
    - Master cylinder to frame
    - Tightening of air bleeder
    - Tightening of brake hose holder
- Fuel system
  - Fuel tank to fuel cock

NOTE:

Concerning the tightening torque, refer to " MAINTENANCE SPECIFICATIONS" section in the CHAPTER 2.

EC1B0000
CLEANING AND STORAGE

EC1B1000
CLEANING

Frequent cleaning of your machine will enhance its appearance, maintain good overall performance, and extend the life of many components.

1. Before washing the machine, block off the end of the exhaust pipe to prevent water from entering. A plastic bag secured with a rubber band may be used for this purpose.
2. If the engine is excessively greasy, apply some degreaser to it with a paint brush. Do not apply degreaser to the chain, sprockets, or wheel axles.
3. Rinse the dirt and degreaser off with a garden hose; use only enough pressure to do the job.

CAUTION:

Excessive hose pressure may cause water seepage and contamination of wheel bearings, front forks, brakes and transmission seals. Many expensive repair bills have resulted from improper high pressure detergent applications such as those available in coin-operated car washers.

4. After the majority of the dirt has been hosed off, wash all surfaces with warm water and a mild detergent. Use an old toothbrush to clean hard-to-reach places.
5. Rinse the machine off immediately with clean water, and dry all surfaces with a soft towel or cloth.
6. Immediately after washing, remove excess water from the chain with a paper towel and lubricate the chain to prevent rust.
7. Clean the seat with a vinyl upholstery cleaner to keep the cover pliable and glossy.
8. Automotive wax may be applied to all painted or chromed surfaces. Avoid combination cleaner-waxes, as they may contain abrasives.
9. After completing the above, start the engine and allow it to idle for several minutes.

EC1B2001
STORAGE

If your machine is to be stored for 60 days or more, some preventive measures must be taken to avoid deterioration. After cleaning the machine thoroughly, prepare it for storage as follows:

1. Drain the fuel tank, fuel lines, and the carburetor float bowl.
2. Remove the spark plug, pour a tablespoon of SAE 10W-30 motor oil in the spark plug hole, and reinstall the plug. With the engine stop switch pushed in, kick the engine over several times to coat the cylinder walls with oil.
3. Remove the drive chain, clean it thoroughly with solvent, and lubricate it. Reinstall the chain or store it in a plastic bag tied to the frame.
4. Lubricate all control cables.
5. Block the frame up to raise the wheels off the ground.
6. Tie a plastic bag over the exhaust pipe outlet to prevent moisture from entering.
7. If the machine is to be stored in a humid or salt-air environment, coat all exposed metal surfaces with a film of light oil. Do not apply oil to rubber parts or the seat cover.

NOTE:

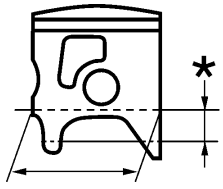
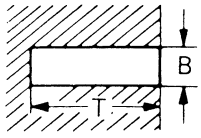
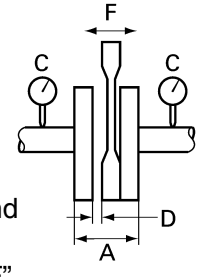
Make any necessary repairs before the machine is stored.

EC200000
SPECIFICATIONS
EC211000
GENERAL SPECIFICATIONS

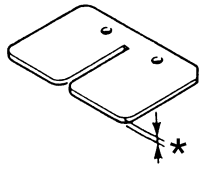
Model name:	YZ250T1 (USA, CDN) YZ250 (EUROPE, ZA) YZ250T (AUS, NZ)			
Model code number:	1P81 (USA, CDN, ZA) 1P82 (EUROPE) 1P84 (AUS, NZ)			
Dimensions:	USA, ZA	AUS, NZ	EUROPE	CDN
Overall length	2,179 mm (85.8 in)	←	2,188 mm (86.1 in)	2,186 mm (86.1 in)
Overall width	827 mm (32.6 in)	←	←	←
Overall height	1,306 mm (51.4 in)	←	1,310 mm (51.6 in)	1,309 mm (51.5 in)
Seat height	989 mm (38.9 in)	←	992 mm (39.1 in)	←
Wheelbase	1,481 mm (58.3 in)	←	1,485 mm (58.5 in)	←
Minimum ground clearance	383 mm (15.1 in)	←	386 mm (15.2 in)	←
Dry weight: Without oil and fuel	96.0 kg (211.6 lb)			
Engine: Engine type Cylinder arrangement Displacement Bore × Stroke Compression ratio Starting system	 Liquid cooled 2-stroke, gasoline Single cylinder, forward inclined 249 cm^3 (8.76 Imp oz, 8.42 US oz) 66.4 × 72 mm (2.614 × 2.835 in) 9.1~10.9 : 1 (Expect for EUROPE) 9.0~10.6 : 1 (For EUROPE) Kick starter			
Lubrication system:	Premix (30 : 1)(Yamalube 2-R)			
Oil type or grade (2-Cycle): Transmission oil Periodic oil change Total amount	 Yamalube 4 (10W-30) or SAE 10W-30 type SE motor oil 0.75 L (0.66 Imp qt, 0.79 US qt) 0.80 L (0.70 Imp qt, 0.85 US qt)			
Coolant capacity (including all routes):	1.20 L (1.06 Imp qt, 1.27 US qt)			
Air filter:	Wet type element			
Fuel: Type Tank capacity	 Premium unleaded gasoline only with a research octane number of 95 or higher 8.0 L (1.76 Imp gal, 2.11 US gal)			

Carburetor:			
Type/Manufacturer	PWK38S/KEIHIN		
Spark plug:			
Type/Manufacturer	BR8EG/NGK (resistance type)		
Gap	0.5~0.6 mm (0.020~0.024 in)		
Clutch type:	Wet, multiple-disc		
Transmission:	USA, ZA, AUS, NZ	EUROPE, CDN	
Primary reduction system	Gear	←	
Primary reduction ratio	63/21 (3.000)	←	
Secondary reduction system	Chain drive	←	
Secondary reduction ratio	50/14 (3.571)	49/14 (3.500)	
Transmission type	Constant mesh, 5-speed	←	
Operation	Left foot operation	←	
Gear ratio: 1st	27/14 (1.929)	←	
2nd	23/15 (1.533)	←	
3rd	23/18 (1.278)	←	
4th	24/22 (1.091)	←	
5th	20/21 (0.952)	←	
Chassis:	USA, ZA, AUS, NZ	EUROPE	CDN
Frame type	Semi double cradle	←	←
Caster angle	26.9°	27.0°	26.9°
Trail	115 mm (4.53 in)	117 mm (4.61 in)	116 mm (4.57 in)
Tire:			
Type	With tube		
Size (front)	80/100-21 51M		
Size (rear)	110/90-19 62M		
Tire pressure (front and rear)	100 kPa (1.0 kgf/cm^2, 15 psi)		
Brake:			
Front brake type	Single disc brake		
Operation	Right hand operation		
Rear brake type	Single disc brake		
Operation	Right foot operation		
Suspension:			
Front suspension	Telescopic fork		
Rear suspension	Swingarm (link type monocross suspension)		
Shock absorber:			
Front shock absorber	Coil spring/oil damper		
Rear shock absorber	Coil spring/Gas, oil damper		
Wheel travel:			
Front wheel travel	300 mm (11.8 in)		
Rear wheel travel	315 mm (12.4 in)		
Electrical:			
Ignition system	CDI magneto		

EC212000
MAINTENANCE SPECIFICATIONS
EC212100
ENGINE

Item	Standard		Limit
Cylinder head:	USA, CDN, ZA, AUS, NZ	EUROPE	
Combustion chamber capacity	21.0 cm³ (0.739 Imp oz, 0.710 US oz)	21.5 cm³ (0.757 Imp oz, 0.727 US oz)	…
Warp limit	…	…	0.03 mm (0.0012 in)
Cylinder:			
Bore size	66.400~66.414 mm (2.6142~2.6147 in)		66.5 mm (2.618 in)
Taper limit	…		0.05 mm (0.0020 in)
Out of round limit	…		0.01 mm (0.0004 in)
Piston:			
Piston size/ 	66.352~66.367 mm (2.6120~2.6129 in)		…
Measuring point*	17.5 mm (0.69 in)		…
Piston clearance	0.045~0.050 mm (0.0018~0.0020 in)		0.1 mm (0.004 in)
Piston offset	1.5 mm (0.059 in)/EX-side		…
Piston pin:			
Piston pin outside diameter	17.995~18.000 mm (0.7085~0.7087 in)		17.975 mm (0.7077 in)
Piston ring:			
Sectional sketch 	Plain		…
	B=1.0 mm (0.039 in)		…
	T=2.55 mm (0.100 in)		…
End gap (installed)	0.40~0.55 mm (0.016~0.022 in)		0.95 mm (0.037 in)
Side clearance (installed) : 1st	0.030~0.065 mm (0.0012~0.0026 in)		0.1 mm (0.004 in)
: 2nd	0.030~0.065 mm (0.0012~0.0026 in)		0.1 mm (0.004 in)
Crankshaft: 			
Crank width “A”	59.95~60.00 mm (2.360~2.362 in)		…
Runout limit “C”	0.03 mm (0.0012 in)		0.05 mm (0.0020 in)
Connecting rod big end side clearance “D”	0.25~0.75 mm (0.010~0.030 in)		…
Small end free play “F”	0.4~1.0 mm (0.016~0.039 in)		2.0 mm (0.08 in)
Clutch:			
Friction plate thickness	2.9~3.1 mm (0.114~0.122 in)		2.8 mm (0.110 in)
Quantity	8		…
Clutch plate thickness	1.5~1.7 mm (0.059~0.067 in)		…
Quantity	7		…
Warp limit	…		0.2 mm (0.008 in)
Clutch spring free length	50.0 mm (1.969 in)		48.0 mm (1.890 in)
Quantity	6		…

Item		Standard		Limit
Clutch housing thrust clearance		0.17~0.23 mm (0.007~0.009 in)		…
Clutch housing radial clearance		0.030~0.055 mm (0.001~0.002 in)		…
Clutch release method		Inner push, cam push		…
Transmission:				
Main axle deflection limit		…		0.01 mm (0.0004 in)
Drive axle deflection limit		…		0.01 mm (0.0004 in)
Shifter:				
Shifting type		Cam drum and guide bar		…
Guide bar bending limit		…		0.05 mm (0.0020 in)
Kick starter type:		Kick and ratchet type		…
Air filter oil grade (oiled filter):		Foam-air-filter oil or equivalent oil		…
Carburetor:		USA, CDN, ZA, AUS, NZ	EUROPE	
Type/Manufacturer		PWK38S/KEIHIN	←	…
I.D. mark		1P81 00	1P82 10	…
Main jet	(M.J.)	#178	#180	…
Main air jet	(M.A.J)	#200	←	…
Jet needle-clip position	(J.N.)	N3EJ-2	N3EW-3	…
Main nozzle	(N.J.)	ø2.9	←	…
Cutaway	(C.A.)	#7	←	…
Pilot jet	(P.J.)	#50	#52	…
Pilot air screw (for reference only)	(P.A.S.)	1	7/8	…
Valve seat size	(V.S.)	ø3.8 mm (0.15 in)	←	…
Starter jet	(G.S.)	#85	←	…
Power jet	(P.W.J.)	#50	←	…
Float arm height	(F.H.)	5.5~7.5 mm (0.22~030 in)	←	…
Reed valve:				
Thickness*		0.42 mm (0.017 in)		…
Valve stopper height		10.3~10.7 mm (0.406~0.421 in)		…
Valve bending limit		…		0.2 mm (0.008 in)
Cooling:				
Radiator core size:				
Width		107.8 mm (4.24 in)		…
Height		240 mm (9.45 in)		…
Thickness		32 mm (1.26 in)		…
Radiator cap opening pressure		95~125 kPa (0.95~1.25 kg/cm^2, 13.5~17.8 psi)		…
Radiator capacity (total)		0.63 L (0.55 Imp qt, 0.67 US qt)		…
Water pump:				
Type		Single-suction centrifugal pump		…



	Part to be tightened	Thread size	Q'ty	Tightening torque		
				Nm	m•kg	ft•lb
	Spark plug	M14S × 1.25	1	20	2.0	14
	Cylinder head (nut)	M 8 × 1.25	6	25	2.5	18
	(stud)	M 8 × 1.25	6	13	1.3	9.4
	Cylinder (nut)	M10 × 1.25	4	42	4.2	30
	(stud)	M10 × 1.25	4	13	1.3	9.4
	Power valve :					
	Holder	M 5 × 0.8	2	6	0.6	4.3
	Link rod	M 5 × 0.8	2	6	0.6	4.3
	Push rod	M 5 × 0.8	1	5	0.5	3.6
	Thrust plate	M 5 × 0.8	1	6	0.6	4.3
	Side holder	M 5 × 0.8	4	4	0.4	2.9
	Link lever	M 4 × 0.7	1	4	0.4	2.9
	Pulley	M 4 × 0.7	2	4	0.4	2.9
	Cover	M 5 × 0.8	4	4	0.4	2.9
	Governor fork	M 4 × 0.7	2	5	0.5	3.6
	Housing	M 5 × 0.8	4	5	0.5	3.6
	Impeller	M 8 × 1.25	1	14	1.4	10
	Water pump housing cover	M 6 × 1.0	4	10	1.0	7.2
	Coolant drain bolt	M 6 × 1.0	1	10	1.0	7.2
	Radiator	M 6 × 1.0	6	10	1.0	7.2
	Radiator panel	M 6 × 1.0	2	10	1.0	7.2
	Radiator hose clamp	M 6 × 1.0	8	1	0.1	0.7
	Air filter element	M 6 × 1.0	1	2	0.2	1.4
	Carburetor joint	M 6 × 1.0	5	10	1.0	7.2
△	Air filter case	M 6 × 1.0	4	8	0.8	5.8
	Air filter guide clamp	M 5 × 0.8	1	1	0.1	0.7
	Reed valve	M 3 × 0.5	4	1	0.1	0.7
	Throttle cable adjust bolt and locknut	M 8 × 1.25	1	7	0.7	5.1
	Throttle cable	M 6 × 0.75	1	4	0.4	2.9
△	Exhaust pipe (front)	M 6 × 1.0	1	14	1.4	10
△	Exhaust pipe (rear)	M 6 × 1.0	1	12	1.2	8.7
△	Exhaust pipe stay (front)	M 8 × 1.25	1	25	2.5	18
△	Exhaust pipe stay (rear)	M 6 × 1.0	1	12	1.2	8.7
△	Silencer	M 6 × 1.0	2	12	1.2	8.7
	Fiber (silencer)	M 6 × 1.0	2	10	1.0	7.2
	Crankcase	M 6 × 1.0	11	14	1.4	10
	Crankcase cover (left)	M 6 × 1.0	5	8	0.8	5.8
	Chain cover	M 6 × 1.0	2	8	0.8	5.8
	Crankcase cover (right)	M 6 × 1.0	9	10	1.0	7.2
	Bearing plate cover (drive axle left)	M 6 × 1.0	2	10	1.0	7.2
	Bearing plate cover (main axle right)	M 6 × 1.0	2	10	1.0	7.2
	Holder	M 6 × 1.0	2	10	1.0	7.2
	Oil drain bolt	M12 × 1.5	1	20	2.0	14
	Oil check bolt	M 6 × 1.0	1	10	1.0	7.2
	Kick starter	M 8 × 1.25	1	30	3.0	22
	Ratchet wheel stopper	M 6 × 1.0	2	10	1.0	7.2
	Clutch cover	M 6 × 1.0	6	10	1.0	7.2

Part to be tightened	Thread size	Q'ty	Tightening torque		
			Nm	m•kg	ft•lb
Primary drive gear	M10 × 1.25	1	55	5.5	40
Clutch boss	M20 × 1.0	1	75	7.5	54
Clutch spring	M 6 × 1.0	6	10	1.0	7.2
Clutch cable adjust bolt and locknut	M 6 × 0.75	1	4	0.4	2.9
Push lever axle	M 5 × 0.8	1	6	0.6	4.3
Drive sprocket	M20 × 1.0	1	75	7.5	54
Shift guide	M 6 × 1.0	2	10	1.0	7.2
Stopper lever	M 6 × 1.0	1	10	1.0	7.2
Torsion spring (shift shaft) stopper bolt	M 8 × 1.25	1	22	2.2	16
Segment	M 8 × 1.25	1	30	3.0	22
Bearing plate cover (shift cam right)	M 6 × 1.0	2	10	1.0	7.2
Shift pedal	M 6 × 1.0	1	10	1.0	7.2

NOTE:

△ - marked portion shall be checked for torque tightening after break-in or before each race.

EC212201
CHASSIS

Item	Standard		Limit
Steering system:			
Steering bearing type	Taper roller bearing		…
Front suspension:			
Front fork travel	300 mm (11.8 in)		…
Fork spring free length	465 mm (18.3 in)		460 mm (18.1 in)
Spring rate, STD	K=4.3 N/mm (0.438 kg/mm, 24.5 lb/in)		…
Optional spring/Spacer	Yes		…
Oil capacity	430 cm^3 (15.1 Imp oz, 14.5 US oz)		…
Oil grade	Suspension oil "S1"		…
Inner tube outer diameter	48 mm (1.89 in)		…
Front fork top end	Zero mm (Zero in)		…
Rear suspension:	USA, CDN, ZA, AUS,NZ	EUROPE	
Shock absorber travel	132 mm (5.20 in)	←	…
Spring free length	260 mm (10.24 in)	←	…
Fitting length	251 mm (9.88 in)	253 mm (9.96 in)	…
<Min.~Max.>	240.5~258.5 mm (9.47~10.18 in)	←	…
Spring rate, STD	K=48 N/mm (4.9 kg/mm, 274.4 lb/in)	←	…
Optional spring	Yes	←	…
Enclosed gas pressure	1,000 kPa (10 kg/cm^2, 142 psi)	←	…
Swingarm:			
Swingarm free play limit			
End	…		1.0 mm (0.04 in)
Side clearance	…		0.2~0.9 mm (0.008~0.035 in)

Item	Standard	Limit
Wheel:		
Front wheel type	Spoke wheel	…
Rear wheel type	Spoke wheel	…
Front rim size/Material	21 × 1.60/Aluminum	…
Rear rim size/Material	19 × 2.15/Aluminum	…
Rim runout limit:		
Radial	…	2.0 mm (0.08 in)
Lateral	…	2.0 mm (0.08 in)
Drive chain		
Type/Manufacturer	DID520DMA2 SDH/DAIDO	…
Number of links	113 links + joint	…
Chain slack	48~58 mm (1.9~2.3 in)	…
Chain length (15 links)	…	242.9 mm (9.563 in)
Front disc brake:		
Disc outside dia. × Thickness	250 × 3.0 mm (9.84 × 0.12 in)	250 × 2.5 mm (9.84 × 0.10 in)
Pad thickness	4.4 mm (0.17 in)	1.0 mm (0.04 in)
Master cylinder inside dia.	11.0 mm (0.433 in)	…
Caliper cylinder inside dia.	27.0 mm (1.063 in) × 2	…
Brake fluid type	DOT #4	…
Rear disc brake:		
Disc outside dia. × Thickness	245 × 4.0 mm (9.65 × 0.16 in)	245 × 3.5 mm (9.65 × 0.14 in)
Deflection limit	…	0.15 mm (0.006 in)
Pad thickness	6.4 mm (0.25 in)	1.0 mm (0.04 in)
Master cylinder inside dia.	11.0 mm (0.433 in)	…
Caliper cylinder insdie dia.	25.4 mm (1.000 in)	…
Brake fluid type	DOT #4	…
Brake lever & brake pedal:		
Brake lever position	95 mm (3.74 in)	…
Brake pedal height (vertical height above footrest top)	Zero mm (Zero in)	…
Clutch lever free play (lever end)	8~13 mm (0.31~0.51 in)	…
Throttle grip free play	3~5 mm (0.12~0.20 in)	…

	Part to be tightened	Thread size	Q'ty	Tightening torque		
				Nm	m•kg	ft•lb
△	Handle crown and outer tube	M 8 × 1.25	4	23	2.3	17
△	Under bracket and outer tube	M 8 × 1.25	4	20	2.0	14
△	Handle crown and steering shaft	M24 × 1.0	1	145	14.5	105
△	Handlebar holder (upper)	M 8 × 1.25	4	28	2.8	20
△	Steering ring nut	M28 × 1.0	1	Refer to NOTE.		
	Front fork and damper assembly	M51 × 1.5	2	30	3.0	22
	Front fork and adjuster	M22 × 1.25	2	55	5.5	40
	Damper assembly and base valve	M42 × 1.5	2	29	2.9	21
	Adjuster and damper assembly	M12 × 1.25	2	29	2.9	21
	Bleed screw (front fork) and base valve	M 5 × 0.8	2	1	0.1	0.7
△	Front fork and protector	M 6 × 1.0	6	10	1.0	7.2
△	Protector and brake hose holder	M 6 × 1.0	2	7	0.7	5.1
	Throttle cable cap	M 4 × 0.7	2	1	0.1	0.7
	Grip cap upper and lower	M 6 × 1.0	2	4	0.4	2.9
	Clutch lever (nut)	M 6 × 1.0	1	4	0.4	2.9
	Clutch lever holder	M 5 × 0.8	2	4	0.4	2.9
△	Front brake master cylinder and bracket	M 6 × 1.0	2	9	0.9	6.5
	Front brake master cylinder cap	M 4 × 0.7	2	2	0.2	1.4
	Brake lever mounting (bolt)	M 6 × 1.0	1	6	0.6	4.3
	Brake lever mounting (nut)	M 6 × 1.0	1	6	0.6	4.3
	Brake lever position locknut	M 6 × 1.0	1	5	0.5	3.6
△	Cable guide (front brake hose) and under bracket	M 6 × 1.0	1	4	0.4	2.9
△	Front brake hose union bolt (master cylinder)	M10 × 1.25	1	30	3.0	22
△	Front brake hose union bolt (caliper)	M10 × 1.25	1	30	3.0	22
△	Front brake caliper and front fork	M 8 × 1.25	2	23	2.3	17
△	Front brake caliper and brake hose holder	M 6 × 1.0	1	10	1.0	7.2
	Brake caliper (front and rear) and pad pin plug	M10 × 1.0	2	3	0.3	2.2
△	Brake caliper (front and rear) and pad pin	M10 × 1.0	2	18	1.8	13
△	Brake caliper (front and rear) and bleed screw	M 8 × 1.25	2	6	0.6	4.3
△	Front wheel axle and nut	M16 × 1.5	1	105	10.5	75
△	Front wheel axle holder	M 8 × 1.25	4	23	2.3	17
△	Front brake disc and wheel hub	M 6 × 1.0	6	12	1.2	8.7
△	Rear brake disc and wheel hub	M 6 × 1.0	6	14	1.4	10
△	Footrest bracket and frame	M10 × 1.25	4	55	5.5	40
△	Brake pedal mounting	M 8 × 1.25	1	26	2.6	19
△	Rear brake master cylinder and frame	M 6 × 1.0	2	10	1.0	7.2

NOTE:

1. First, tighten the ring nut approximately 38 Nm (3.8 m•kg, 27 ft•lb) by using the ring nut wrench, then loosen the ring nut one turn.
2. Retighten the ring nut 7 Nm (0.7 m•kg, 5.1 ft•lb).

	Part to be tightened	Thread size	Q'ty	Tightening torque		
				Nm	m•kg	ft•lb
	Rear brake master cylinder cap	M 4 × 0.7	2	2	0.2	1.4
△	Rear brake hose union bolt (caliper)	M10 × 1.25	1	30	3.0	22
△	Rear brake hose union bolt (master cylinder)	M10 × 1.25	1	30	3.0	22
△	Rear wheel axle and nut	M20 × 1.5	1	125	12.5	90
△	Driven sprocket and wheel hub	M 8 × 1.25	6	42	4.2	30
△	Nipple (spoke)	–	72	3	0.3	2.2
△	Disc cover and rear brake caliper	M 6 × 1.0	2	7	0.7	5.1
△	Protector and rear brake caliper	M 6 × 1.0	2	7	0.7	5.1
	Chain puller adjust bolt and locknut	M 8 × 1.25	2	16	1.6	11
	Engine mounting:					
△	Engine bracket and frame	M 8 × 1.25	2	34	3.4	24
△	Engine and frame (front)	M10 × 1.25	1	64	6.4	46
△	Engine and frame (upper)	M10 × 1.25	1	64	6.4	46
△	Engine and frame (lower)	M10 × 1.25	1	64	6.4	46
△	Pivot shaft and nut	M16 × 1.5	1	85	8.5	61
△	Relay arm and swingarm	M14 × 1.5	1	80	8.0	58
△	Relay arm and connecting rod	M14 × 1.5	1	80	8.0	58
△	Connecting rod and frame	M14 × 1.5	1	80	8.0	58
△	Rear shock absorber and frame	M10 × 1.25	1	56	5.6	40
△	Rear shock absorber and relay arm	M10 × 1.25	1	53	5.3	38
△	Rear frame and frame (upper)	M 8 × 1.25	1	32	3.2	23
△	Rear frame and frame (lower)	M 8 × 1.25	2	29	2.9	21
△	Swingarm and brake hose holder	M 5 × 0.8	4	1	0.1	0.7
	Swingarm and patch	M 4 × 0.7	4	2	0.2	1.4
	Drive chain tensioner mounting	M 8 × 1.25	2	19	1.9	13
	Chain support and swingarm	M 6 × 1.0	3	7	0.7	5.1
	Seal guard and swingarm	M 5 × 0.8	4	5	0.5	3.6
	Cable guide and frame	M 5 × 0.8	2	4	0.4	2.9
△	Fuel tank mounting boss and frame	M10 × 1.25	2	20	2.0	14
△	Fuel tank mounting	M 6 × 1.0	2	10	1.0	7.2
△	Fuel tank and fuel cock	M 6 × 1.0	2	7	0.7	5.1
	Fuel tank and seat set bracket	M 6 × 1.0	1	7	0.7	5.1
	Fuel tank and hooking screw (fitting band)	M 6 × 1.0	1	7	0.7	5.1
	Fuel tank and fuel tank bracket	M 6 × 1.0	4	7	0.7	5.1
	Seat mounting	M 8 × 1.25	2	19	1.9	13
△	Side cover mounting	M 6 × 1.0	2	7	0.7	5.1
△	Air scoop and fuel tank	M 6 × 1.0	4	7	0.7	5.1
△	Air scoop and panel	M 6 × 1.0	2	6	0.6	4.3
△	Front fender mounting	M 6 × 1.0	4	7	0.7	5.1
△	Rear fender mounting (front)	M 6 × 1.0	2	7	0.7	5.1
△	Rear fender mounting (rear)	M 6 × 1.0	2	12	1.2	8.7
△	Number plate	M 6 × 1.0	1	7	0.7	5.1

NOTE:

△ - marked portion shall be checked for torque tightening after break-in or before each race.

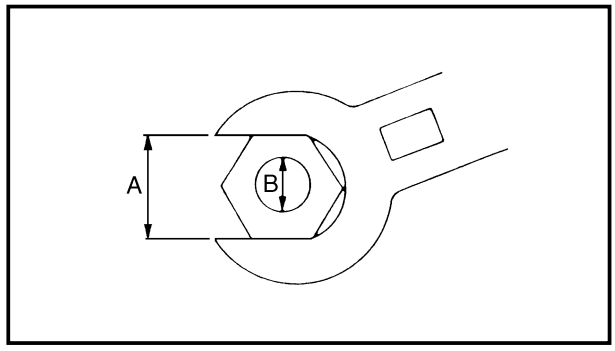
EC212300
ELECTRICAL

Item	Standard	Limit
Ignition system:		
Ignition timing (B.T.D.C.)	0.18 mm (0.007 in)	…
Advancer type	Electrical	…
CDI:		
Magneto-model (stator)/Manufacturer	5CU-10/YAMAHA	…
Source coil 1 resistance (color)	720~1,080 Ω at 20°C (68°F) (Black-Black/Red)	…
Source coil 2 resistance (color)	44~66 Ω at 20°C (68°F) (Green/Blue-Green/White)	…
Pickup coil resistance (color)	248~372 Ω at 20°C (68°F) (White/Blue-White/Red)	…
CDI unit-model/Manufacturer	5NX-01/YAMAHA	…
Ignition coil:		
Model/Manufacturer	1P8-00/YAMAHA	…
Minimum spark gap	6 mm (0.24 in)	…
Primary winding resistance	0.20~0.30 Ω at 20°C (68°F)	…
Secondary winding resistance	9.5~14.3 kΩ at 20°C (68°F)	…
Spark plug cap:		
Resistance	4~6 kΩ at 20°C (68°F)	…

Part to be tightened	Thread size	Q'ty	Tightening torque		
			Nm	m•kg	ft•lb
Stator	M 6 × 1.0	3	8	0.8	5.8
Rotor	M12 × 1.25	1	56	5.6	40
Ignition coil	M 6 × 1.0	2	7	0.7	5.1

EC220001
GENERAL TORQUE SPECIFICATIONS

This chart specifies torque for standard fasteners with standard I.S.O. pitch threads. Torque specifications for special components or assemblies are included in the applicable sections of this book. To avoid warpage, tighten multi-fastener assemblies in a crisscross fashion, in progressive stages, until full torque is reached. Unless otherwise specified, torque specifications call for clean, dry threads. Components should be at room temperature.



A: Distance across flats
B: Outside thread diameter

A (Nut)	B (Bolt)	TORQUE SPECIFICATION		
		Nm	m•kg	ft•lb
10 mm	6 mm	6	0.6	4.3
12 mm	8 mm	15	1.5	11
14 mm	10 mm	30	3.0	22
17 mm	12 mm	55	5.5	40
19 mm	14 mm	85	8.5	61
22 mm	16 mm	130	13	94

EC230000
DEFINITION OF UNITS

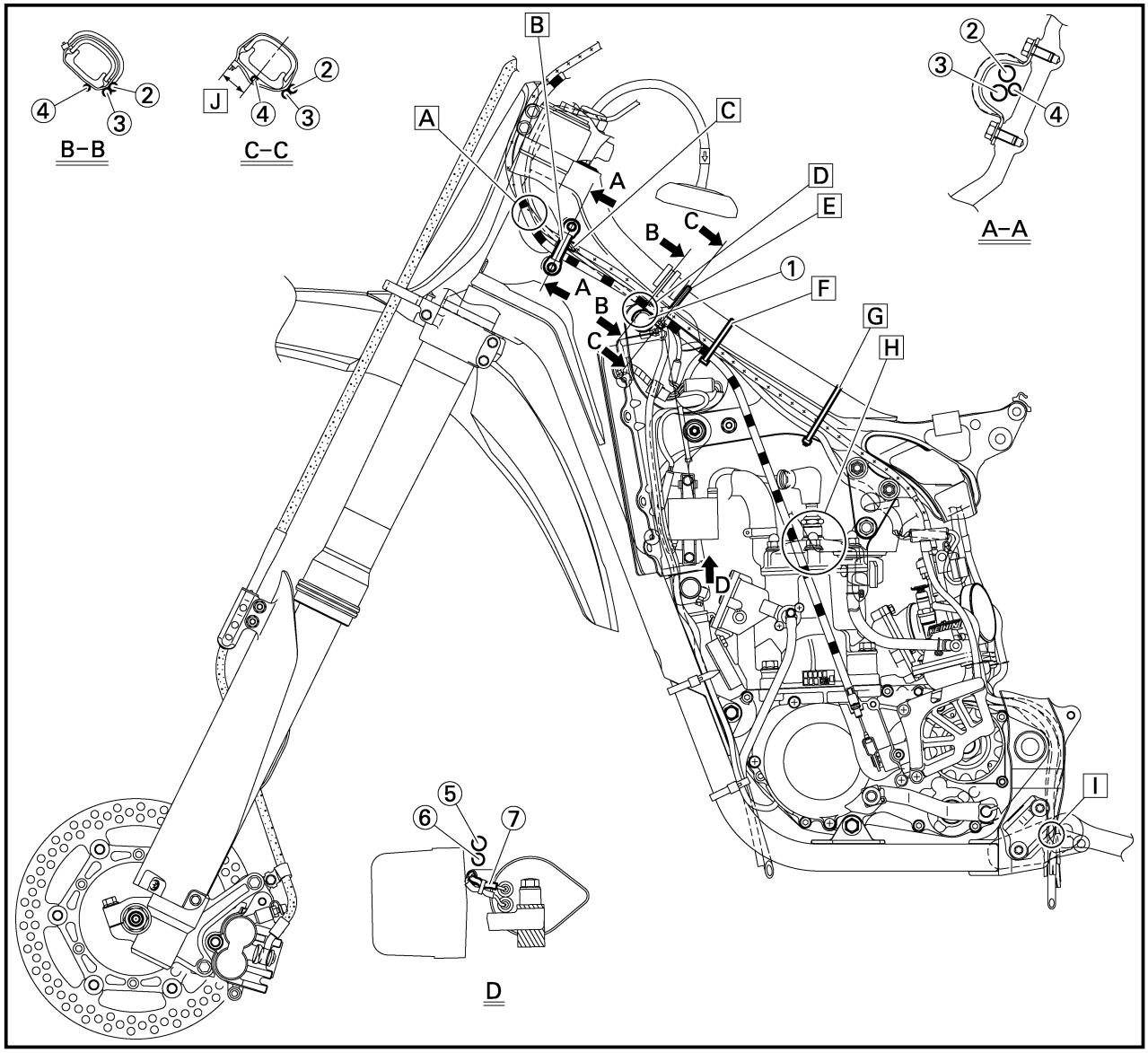
Unit	Read	Definition	Measure
mm	milimeter	10^{-3} meter	Length
cm	centimeter	10^{-2} meter	Length
kg	kilogram	10^{3} gram	Weight
N	Newton	1 kg $\times$ m/sec^2	Force
Nm	Newton meter	N $\times$ m	Torque
m•kg	Meter kilogrma	m $\times$ kg	Torque
Pa	Pascal	N/m^2	Pressure
N/mm	Newton per millimeter	N/mm	Spring rate
L	Liter	—	Volume or capacity
cm^3	Cubic centimeter	—	Volume or capacity
r/min	Revolution per minute	—	Engine speed

EC240000

CABLE ROUTING DIAGRAM

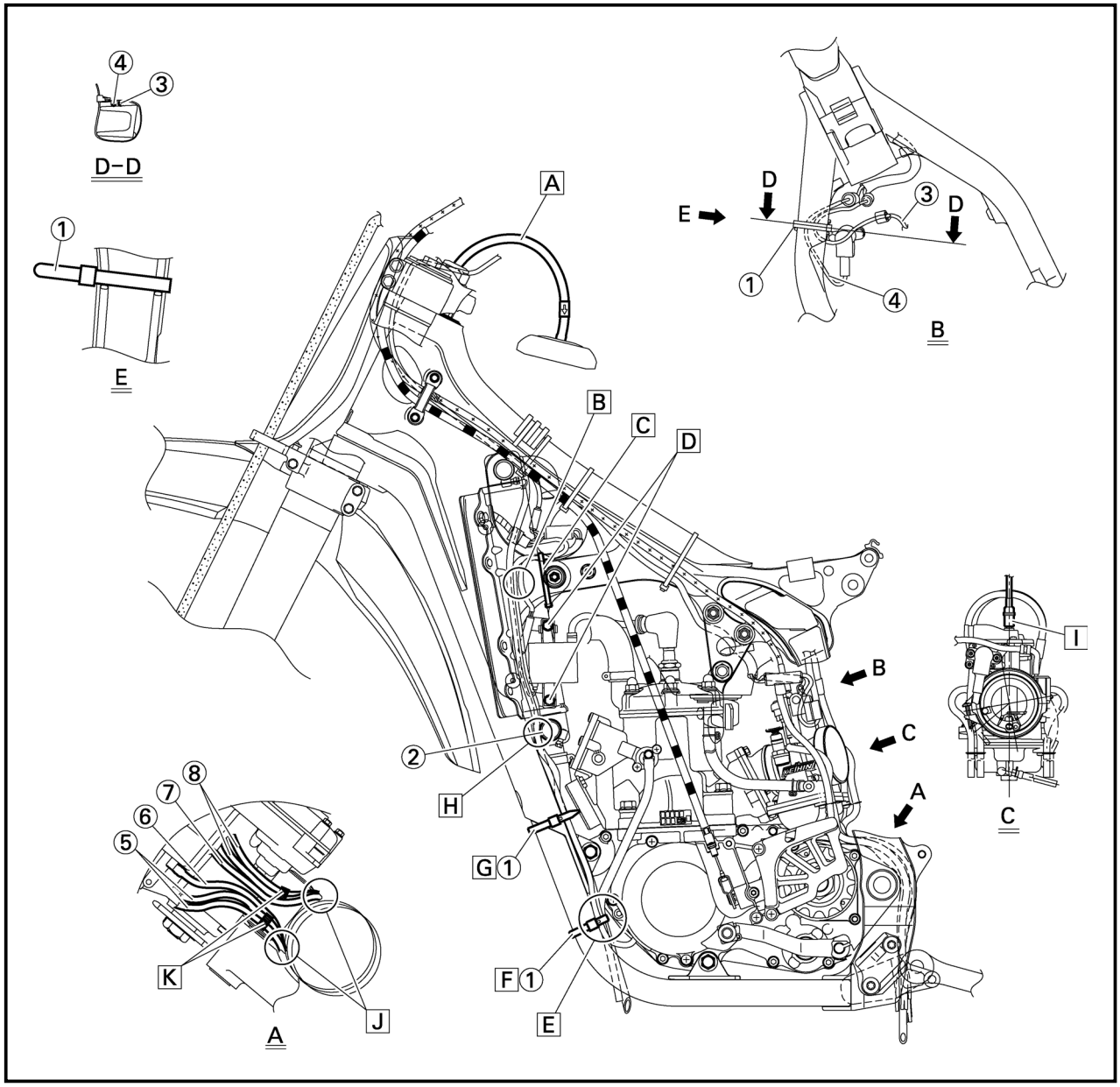
① Radiator hose
② Throttle cable
③ Clutch cable
④ "ENGINE STOP" button lead
⑤ Radiator breather hose
⑥ C.D.I. magneto lead
⑦ Ignition coil lead

[A] Pass the clutch cable on the outside of the throttle cable and "ENGINE STOP" button lead.
[B] Pass through the cable guide the throttle cable, "ENGINE STOP" button lead and clutch cable.
[C] Align the throttle cable locating tape with the cable guide.
[D] Pass above the radiator hose the throttle cable, "ENGINE STOP" button lead and clutch cable.
[E] Clamp the "ENGINE STOP" button lead to the frame.
[F] Clamp to the frame the throttle cable, clutch cable, TPS (throttle position sensor) lead and solenoid valve lead.
[G] Clamp to the frame the throttle cable, TPS (throttle position sensor) lead and solenoid valve lead.
[H] Pass the clutch cable in front of the center of the cylinder head tightening nut.
[I] Pass the air vent hose, overflow hose and crankcase breather hose between the frame and connecting rod.
[J] Locate the clamp ends in the arrowed range.



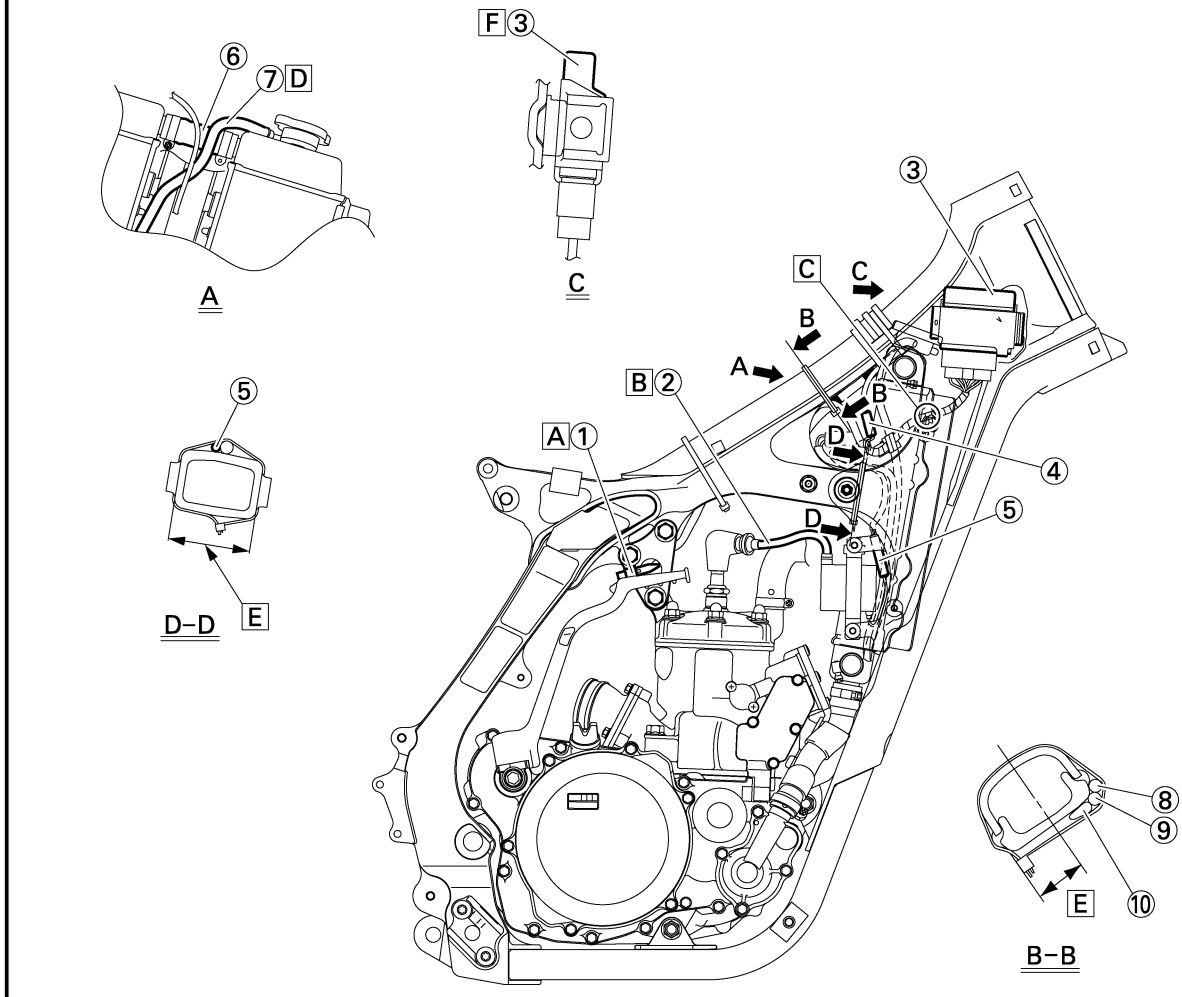
① Clamp
② Radiator hose
③ Solenoid valve lead
④ TPS (throttle position sensor) lead
⑤ Air vent hose (left)
⑥ Crankcase breather hose
⑦ Overflow hose
⑧ Air vent hose (right)

[A] Insert the tip of the fuel tank breather hose into the hole in the steering shaft cap.
[B] Pass the radiator breather hose, ignition coil lead and C.D.I. magneto lead between the frame and the left of the radiator.
[C] Clamp the C.D.I. magneto lead and ignition coil lead to the frame.
[D] Install the side core and ignition coil together to the frame.
[E] Pass the radiator breather hose from the outside of the engine bracket to the inside of the downtube. Pass the radiator breather hose on the inside of the C.D.I. magneto lead.
[F] Clamp the C.D.I. magneto lead, radiator breather hose and Y.P.V.S. breather hose.
[G] Clamp to the frame the radiator breather hose and C.D.I. magneto lead.
[H] Pass the C.D.I. magneto lead and radiator breather hose in front of the radiator hose.
[I] Pass the throttle cable behind the air vent hose.
[J] Pass the air vent hose, overflow hose and crankcase breather hose so that they do not contact the rear shock absorber.
[K] Clamp the air vent hoses.



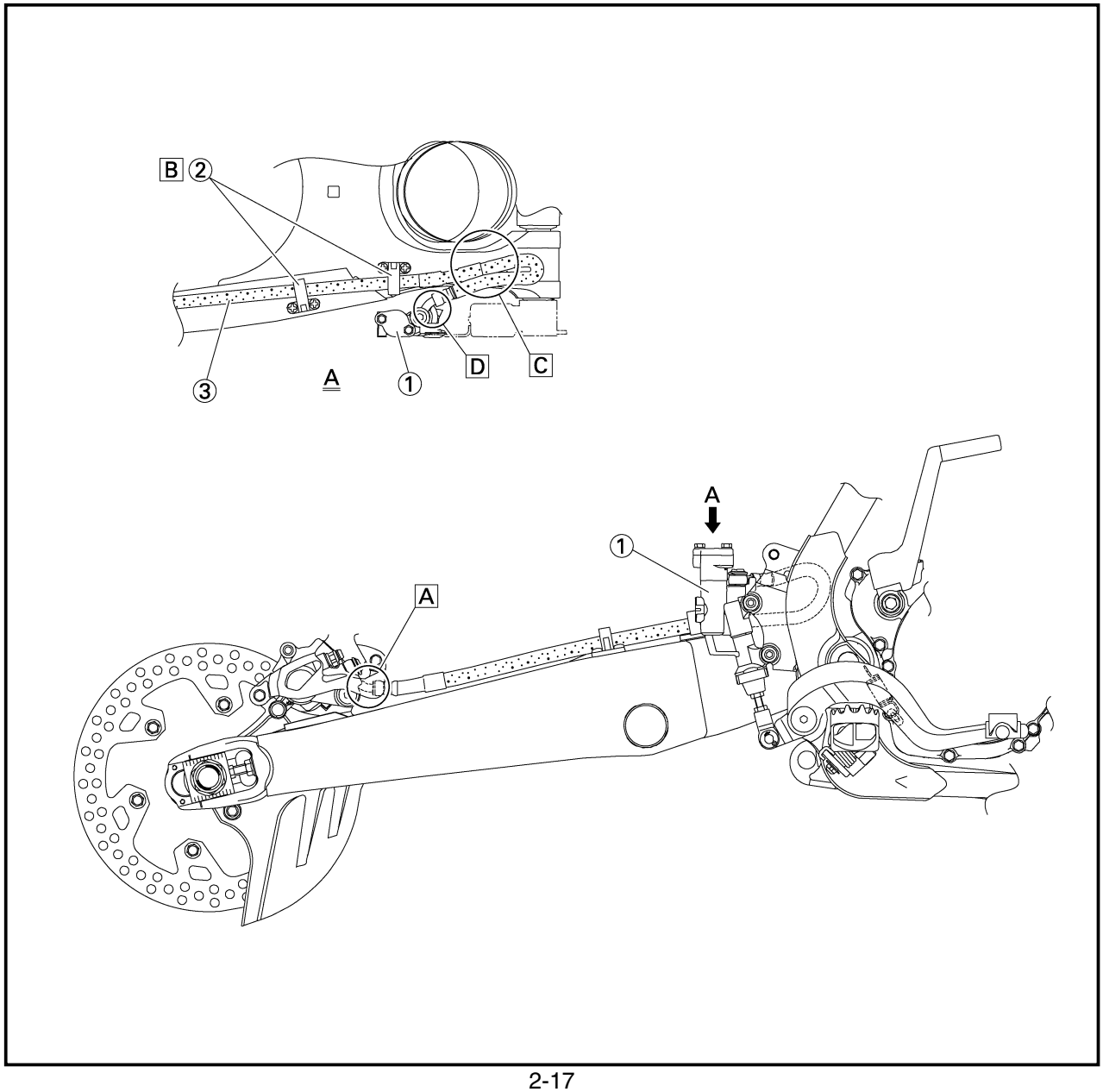
① Clamp
② High tension cord
③ C.D.I.unit
④ “ENGINE STOP” button lead
⑤ Ignition coil lead
⑥ Radiator hose
⑦ Radiator breather hose
⑧ Throttle cable
⑨ Clutch cable
⑩ Wireharness

[A] Clamp the wireharness to the right engine bracket.
[B] Pass the high tension cord to the right of the radiator hose.
[C] Pass the C.D.I. unit lead between the frame and the right side of the radiator and then above the radiator fitting boss.
[D] Pass the radiator breather hose behind the radiator hose.
[E] Locate the clamp ends in the arrowed range.
[F] Insert the C.D.I. unit band until it stops at the C.D.I. unit stay.



① Master cylinder
② Brake hose holder
③ Brake hose

A Install the brake hose so that its pipe portion directs as shown and lightly touches the projection on the caliper.
B Pass the brake hose into the brake hose holders.
C If the brake hose contacts the spring (rear shock absorber), correct its twist.
D Install the brake hose so that its pipe portion directs as shown and lightly touches the projection on the master cylinder.



① Brake hose
② Master cylinder
③ “ENGINE STOP” button lead
④ “ENGINE STOP” button
⑤ Throttle cable
⑥ Clutch cable
⑦ Clamp
⑧ Cable guide

A Install the brake hose so that its pipe portion directs as shown and lightly touches the projection on the master cylinder.
B Pass the “ENGINE STOP” button lead in the middle of the clutch holder.
C Clamp the “ENGINE STOP” button lead to the handlebar to 3 clicks.
D Pass the brake hose in front of the number plate and through the cable guide.