



# DT125RE<sup>2005</sup>

1D01-AE1

# DT125X

# SERVICE MANUAL

EAS00001

**DT125RE/X  
1D01-1D02/2C81  
SERVICE MANUAL**  
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## NOTICE

This manual was produced by the Yamaha Motor España S.A. 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.

Yamaha Motor España S.A 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:** 

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Designs and specifications are subject to change without notice.

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TECHNICAL PUBLICATIONS  
YAMAHA MOTOR ESPAÑA, S.A.

## IMPORTANT MANUAL INFORMATION

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



The Safety Alert Symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

**! WARNING**

Failure to follow WARNING instructions could result in severe injury or death to the motorcycle operator, a bystander or a person checking or repairing the motorcycle.

**CAUTION**

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

**NOTE :**

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

# HOW TO USE THIS MANUAL

This manual is intended as a handy, easy-to-read reference book for the mechanic. Comprehensive explanations of all installation, removal, disassembly, assembly, repair and check procedures are laid out with the individual steps in sequential order.

- ① The manual is divided into chapters. An abbreviation and symbol in the upper right corner of each page indicate the current chapter. Refer to "SYMBOLS".
- ② Each chapter is divided into sections. The current section title is shown at the top of each page, except in Chapter 3 ("PERIODIC CHECKS AND ADJUSTMENTS"), where the sub-section title(s) appears.
- ③ Sub-section titles appear in smaller print than the section title.
- ④ To help identify parts and clarify procedure steps, there are exploded diagrams at the start of each removal and disassembly section.
- ⑤ Numbers are given in the order of the jobs in the exploded diagram. A circled number indicates a disassembly step.
- ⑥ Symbols indicate parts to be lubricated or replaced. Refer to "SYMBOLS".
- ⑦ A job instruction chart accompanies the exploded diagram, providing the order of jobs, names of parts, notes in jobs, etc.
- ⑧ Jobs requiring more information (such as special tools and technical data) are described sequentially.

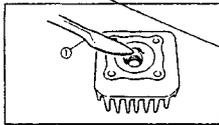
**INSPECTION AND REPAIR** MOT

**INSPECTION AND REPAIR**

**CYLINDER HEAD**

1. Eliminate:

- Carbon deposits
- Use a rounded scraper ①



2. Inspect:

- Warping of cylinder head
- Out of specification → Correct

**Steps for measuring and correcting warp:**

- Place a straight edge ① and a thickness gauge ② against the head
- Measure the warp limit.

Warp limit:  
0.02 mm

- If warp is out of specification, straighten the head.

**NOTE:**

Rotate the head several times to avoid removing too much material from one side.

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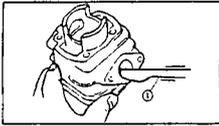
**CYLINDER AND PISTON**

1. Eliminate:

- Carbon deposits
- Use a rounded file ①

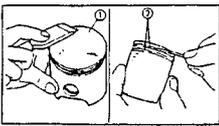
2. Inspect:

- Cylinder wall
- Wear/Scratches → Rectify or replace



3. Eliminate:

- Carbon deposits ① ②
- From the crown of the piston and ring slots.



**SIGNAL SYSTEM** ELEC

• Turn the main switch to "ON".

• Place the "↔" switch at "→" or "←".

• Check the voltage (12 V) on the "Chocolate" or "Dark Green" wire from the socket connector

**OUT OF SPECIFICATION**

The connection circuit of the "TURN" switch at the socket connector is defective, replace it.

↓

**MEETS SPECIFICATION**  
(12V)

The circuit is in good condition.

4. The "OIL" indicator light does not light up.

1. Bulb and socket

- Check the bulb and socket to see if there is continuity.

**NO CONTINUITY**

Change the bulb and/or socket.

↓

**CONTINUITY**

2. Oil level switch

- Remove the oil level switch from the oil tank.
- Connect the pocket tester (Lx1) to the oil level switch.

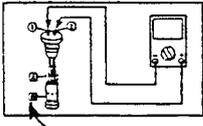
Tester cable (+) → Terminal ①  
Tester cable (-) → Terminal ②

- Check the oil level gauge for continuity.

Position of switch	Good condition	Poor condition
A Position straight upward	x	o x o
B Position backwards	o	x x o
x: Continuity	x: No continuity	

**POOR CONDITION**

Change the oil level switch.



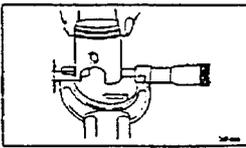
⑧

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• If it is out of specification, rectify or replace the cylinder. Replace the piston and piston rings together.

Second case:

- Measure the diameter of the skirt of piston "P" with a micrometer.
- ③ 5.0 mm (0.20 in.) from the lower edge of the piston.



⑦

**SYMBOLS**

The following symbols are not relevant to every vehicle.

Symbols ① to ⑨ indicate the subject of each chapter.

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

Symbols ⑩ to ⑰ indicate the following.

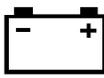
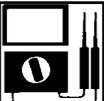
- ⑩ Serviceable with engine mounted
- ⑪ Filling fluid
- ⑫ Lubricant
- ⑬ Special tool
- ⑭ Tightening torque
- ⑮ Wear limit, clearance
- ⑯ Engine speed
- ⑰ Electrical data

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

- ⑱ Engine oil
- ⑲ Gear oil
- ⑳ Molybdenum-disulfide oil
- ㉑ Wheel-bearing grease
- ㉒ Lithium-soap-based grease
- ㉓ Molybdenum-disulfide grease

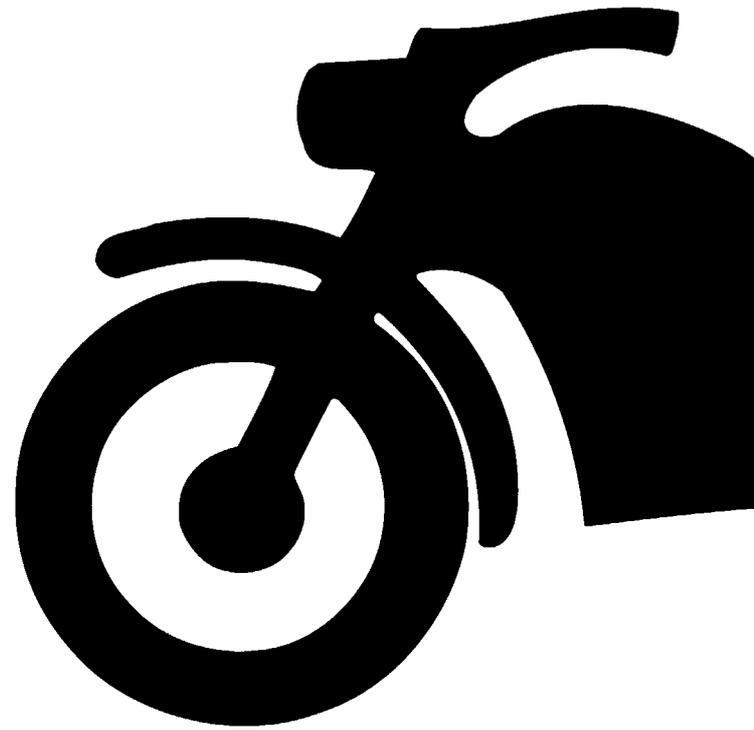
Symbols ㉔ to ㉕ in the exploded diagrams indicate the following.

- ㉔ Apply locking agent (LOCTITE®)
- ㉕ Replace the part

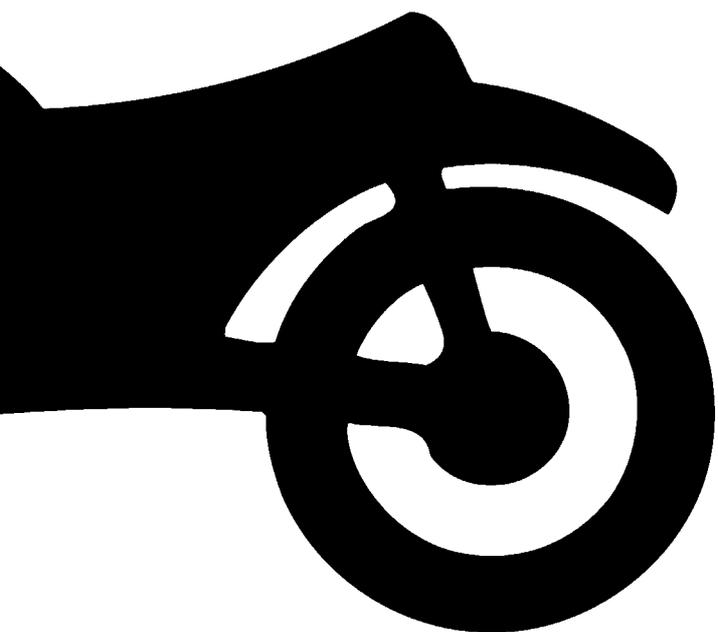
① GEN INFO 	② SPEC 	
③ CHK ADJ 	④ CHAS 	
⑤ ENG 	⑥ COOL 	
⑦ CARB 	⑧ ELEC 	
⑨ TRBL SHTG ?	⑩ 	
⑪ 	⑫ 	
⑬ 	⑭ 	
⑮ 	⑯ 	⑰ 
⑱ 	⑲ 	⑳ 
㉑ 	㉒ 	㉓ 
㉔ 	㉕ New	

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**GEN**  
**INFO**

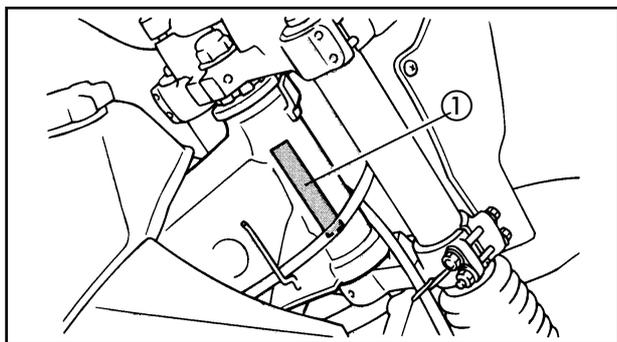


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## CHAPTER 1 GENERAL INFORMATION

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## GENERAL INFORMATION MOTORCYCLE IDENTIFICATION

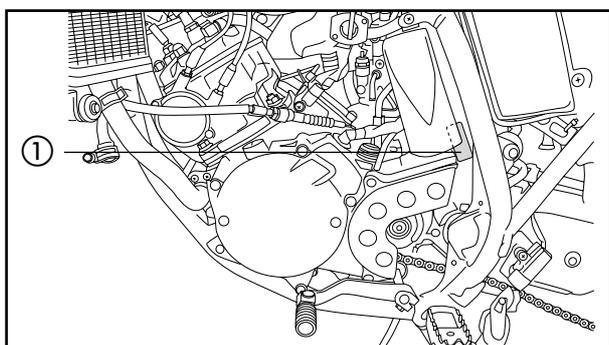
### FRAME SERIAL NUMBER

The frame IDENTIFICATION number ① is stamped onto the steering head pipe.

**NOTE:** \_\_\_\_\_

The frame serial number is used to identify the motorcycle and therefore it can be used for the enrollment in the face of the competent authority.

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### ENGINE SERIAL NUMBER

The engine serial number ① is stamped onto the left side of the crankcase.

**NOTE:** \_\_\_\_\_

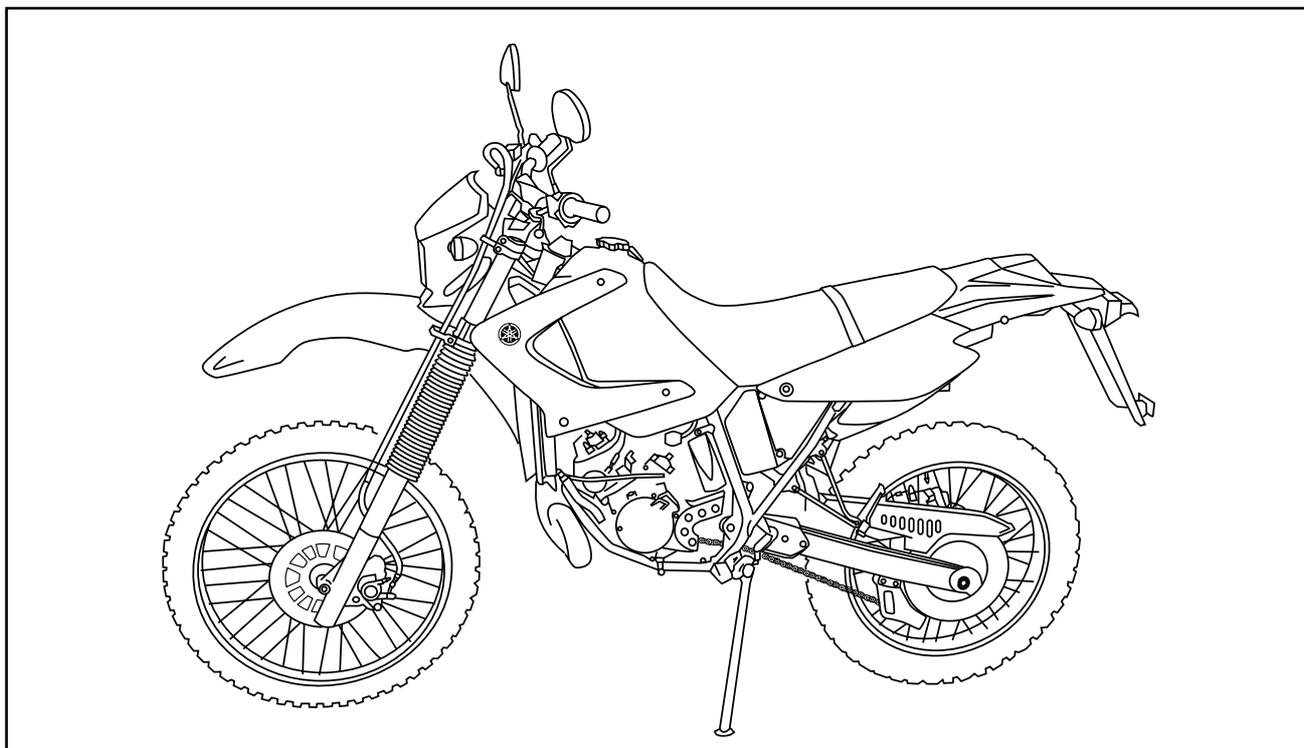
The first three digits of this number identifies “the model; the other digits indicate the number” of production of the unit.

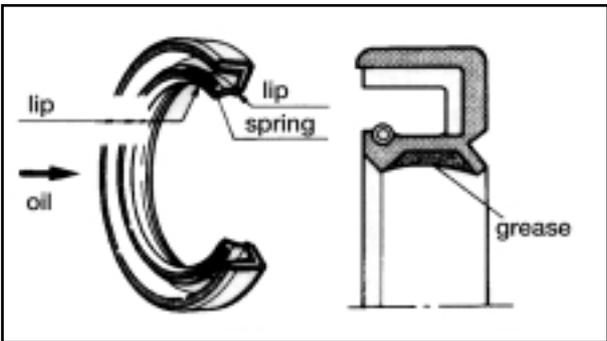
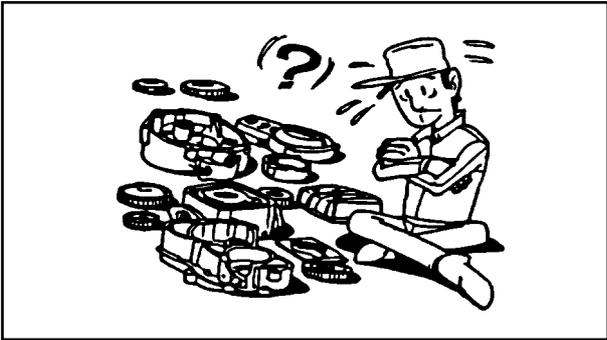
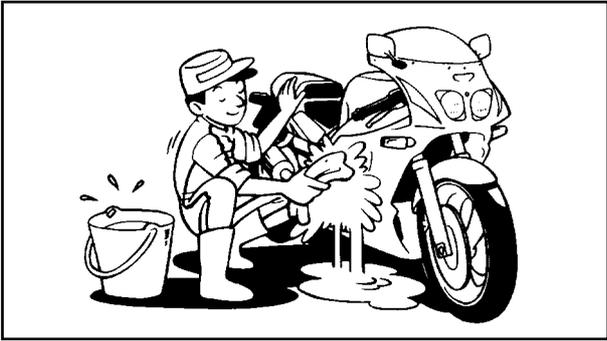
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**NOTE:** \_\_\_\_\_

Design and specifications may change without notice.

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## IMPORTANT INFORMATION

### 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 the "SPECIAL TOOLS".
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.

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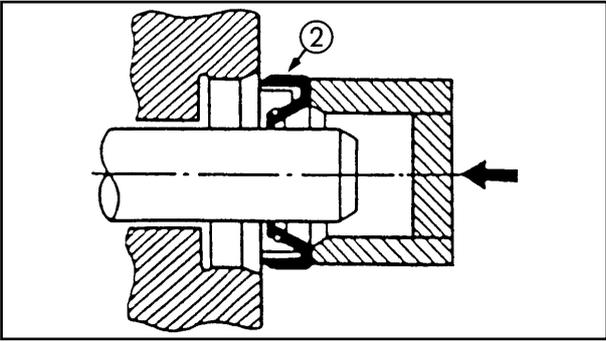
### REPLACEMENT PARTS

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.

EAS00022

### 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.



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**BEARINGS AND OIL SEALS**

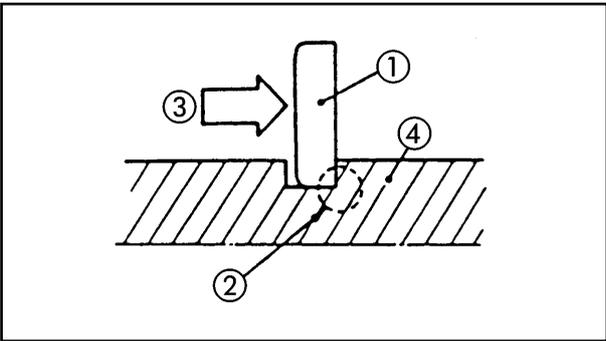
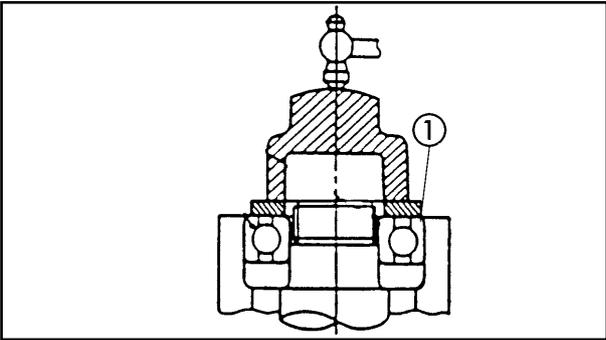
Install bearings and oil seals so that the manufacturer's marks or numbers are visible. When installing oil seals, lubricate the oil seal lips with a light coat of lithium-soap-based grease. Oil bearings liberally when installing, if appropriate.

② Oil seal

**CAUTION**

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

① Bearing



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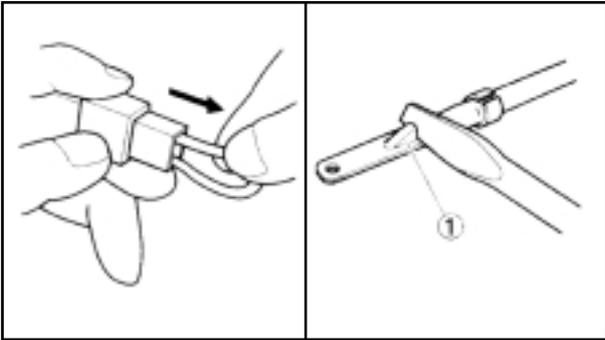
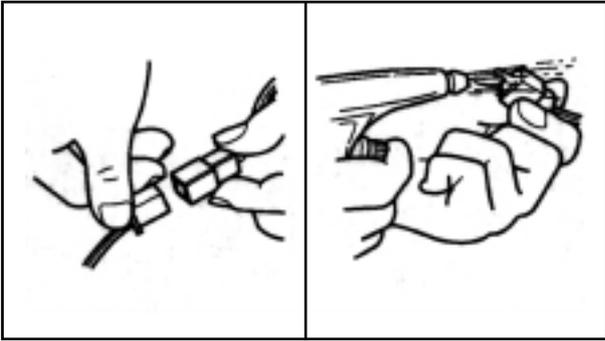
**CIRCLIPS**

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.

④ Shaft

## CHECKING THE CONNECTIONS

**GEN  
INFO**



EAS00026

### 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:** \_\_\_\_\_

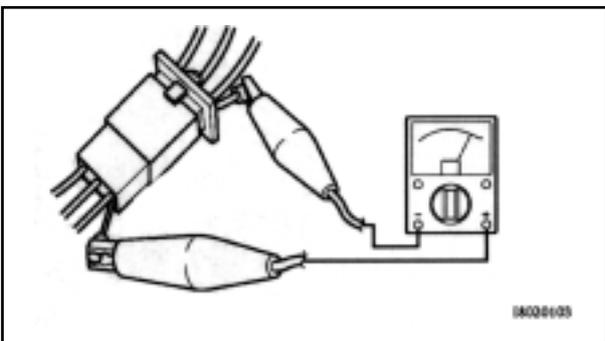
If the pin ① on the terminal is flattened, bend it up.

4. Connect:

- lead
- coupler
- connector

**NOTE:** \_\_\_\_\_

Make sure all connections are tight.



3A028103

5. Check:

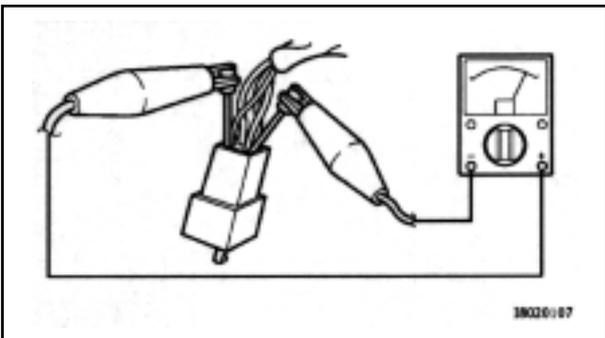
- continuity  
(with the pocket tester)



**Pocket tester**  
90890-03112, YU-3112

**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.



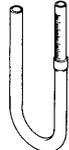
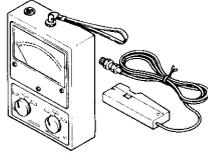
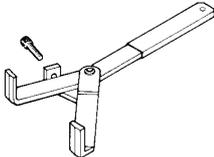
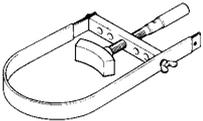
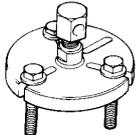
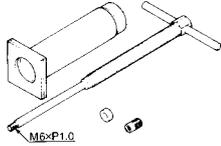
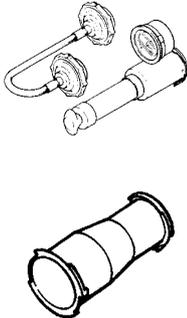
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## SPECIAL TOOLS

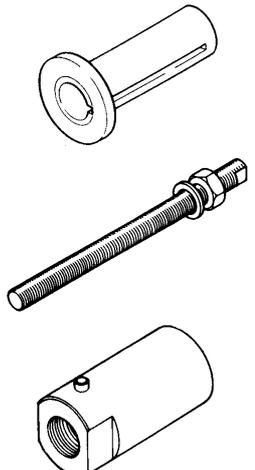
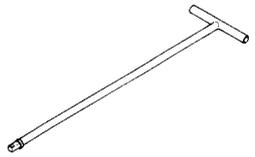
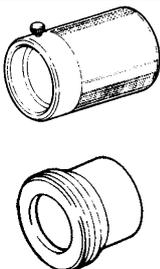
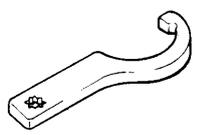
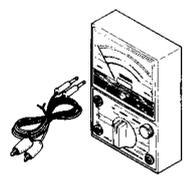
The following special tools are necessary for complete and accurate tune-up and assembly. Use only the appropriate special tools as this will help prevent damage caused by the use of inappropriate tools or improvised techniques. Special tools, part numbers or both may differ depending on the country.

When placing an order, refer to the list provided below to avoid any mistakes.

Tool No.	Tool name / Usage	Illustration
90890-01312	Fuel level gauge  This gauge is used to measure the fuel level in the float chamber.	
90890-03113	Engine tachometer  This tool is needed for detecting engine rpm.	
90890-04086	Universal tool of subjection of the clutch  This tool is used to immobilize the clutch during the assembly or disassembly of the blockade nut of the clutch.	
90890-01701	Sheave holder  This tool is used for holding the secondary sheave.	
90890-01362	Flywheel puller  For removing the flywheel.	
90890-01304	Piston pin puller  This tool is used to remove the piston pin.	
90890-01325 90890-01352	Radiator cap tester Adaptor  These tools are used for checking the cooling system.	

## SPECIAL TOOLS

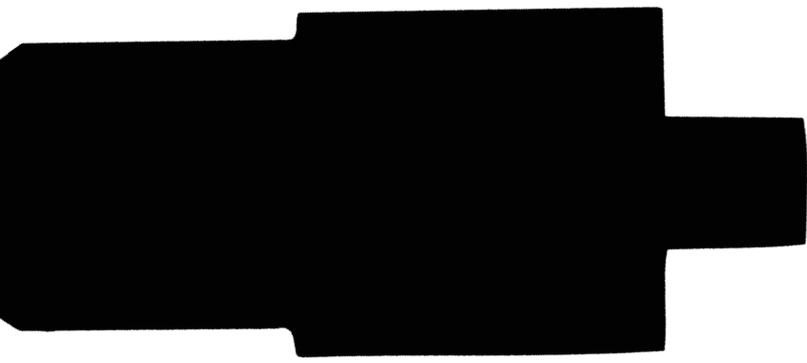


Tool No.	Tool name / Usage	Illustration
90890-01135	<p>Crankcase separation tool</p> <p>This tool is used to remove the crankshaft or separate the crankcase.</p>	
90890-01274 (1) -01275 (2) -01278 (3)	<p>Crankshaft installing tool</p> <p>Crankshaft pin</p> <p>Adapter(M12)</p>	
90890-01326	<p>T-Handle</p> <p>This tool is used for holding the damper rod holder when removing or installing the damper rod holder.</p>	
90890-01367 -01381	<p>Fork seal driver weight</p> <p>Fork seal driver attachment</p> <p>This tool is used when installing the fork seal.</p>	
90890-01403	<p>Ring nut wrench</p> <p>This tool is used to loosen and tighten the steering ring nut.</p>	
90890-03112	<p>Pocket tester</p> <p>These instruments are invaluable for checking the electrical system.</p>	



**U**

**SPEC**



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## CHAPTER 2 SPECIFICATIONS

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# GENERAL SPECIFICATIONS

SPEC



## SPECIFICATIONS

### GENERAL SPECIFICATIONS

Model	DT125RE	DT125X
<b>Model code</b>	1D01/1D02	2C81
<b>Dimensions:</b>		
Overall length	2210mm	2139mm
Overall width	795mm	1121mm
Overall height	1200mm	1200mm
Seat height	900mm	886mm
Wheelbase	1415mm	1396mm
Minimum ground clearance	300mm	271 mm
Minimum turning radius	2100mm	2016mm
<b>Basic weight:</b>		
With oil and full fuel tank	126kg	134 kg
<b>Engine:</b>		
Engine type:	2 strokes, liquid cooled	
Induction system	Reed valve	
Cylinder arrangement	Forward-inclined single cylinder	
Displacement	124cm <sup>3</sup>	
BorexStroke	56,0x50,7	
Compression ratio	6,7:1	
Maximum power	11kW /8000rpm	
Maximum torque	13Nm/8000rpm	
Idle speed	1250~1450r/min	
Starting system	Electric starter	
Lubrication system	Yamaha Autolube	
<b>Oil type or grade:</b>		
Engine oil	2T motor oil (JASO grade FC)	
Total amount	1,3L	
Transmission oil	Type SE motor oil	
Periodic oil change	0,75L (0,79 us. qt.)	
Total amount	0,8L (0,85 us.qt.)	
<b>Radiator capacity:</b>		
Total amount (including all routes)	0,92L	
Coolant reservoir capacity	0,30L	
<b>Air filter:</b>	Wet type element	
<b>Fuel</b>		
Type	Regular unleaded gasoline	
<b>Fuel tank capacity:</b>		
Reserve	10,7L	
	1,8L	
<b>Carburetor:</b>		
Type/quantity	TM28-92 / 1	
Manufacturer:	MIKUNI	

## GENERAL SPECIFICATIONS

**SPEC**



<b>Model code</b>	1D01/1D02	2C81
<b>Spark plug:</b> Type Manufacturer Spark plug gap	BR8ES NGK 0,7~0,8mm (0,0276~0,03315in)	
<b>Clutch type</b>	Wet, multiple disc	
<b>Transmission:</b> Primary reduction system Primary reduction ratio Secondary reduction system Secondary reduction ratio Transmission type Operation	Helical gear 71/22(3,227) chain drive 57/16(3,563) Constant mesh, 6 speed Left foot operation	
<b>Gear ratio:</b> 1 <sup>a</sup> 2 <sup>a</sup> 3 <sup>a</sup> 4 <sup>a</sup> 5 <sup>a</sup> 6 <sup>a</sup>	34/12(2.833) 30/16(1.875) 24/17(1.412) 24/21(1.143) 22/23(0.957) 18/22(0.818)	
<b>Chassis:</b> Frame type: Castor angle Trail	Semi double cradle 27° 107mm	Semi double cradle 24,5° 73,1 mm
<b>Tire:</b> Type Size Front Rear Manufacturer	With tube  80/90-21 48P 110/80-18 58P Michelin /T63	With tube  120/70-17 58H 140/70-17 66H Pirelli/ Sport Demon
<b>Cold tire pressure:</b> Front 0~90kg Rear 0~90kg Front 90~178kg Rear 90~178kg	150kPa (1.5kgf/cm <sup>2</sup> ) 175kPa (1.75kgf/cm <sup>2</sup> ) 175kPa (1.75kgf/cm <sup>2</sup> ) 200kPa (2.0kgf/cm <sup>2</sup> )	180kPa (1.8kgf/cm <sup>2</sup> ) 200kPa (2.0kgf/cm <sup>2</sup> ) 180kPa (1.8kgf/cm <sup>2</sup> ) 200kPa (2.0kgf/cm <sup>2</sup> )
<b>Off road riding:</b> Front Rear	150kPa (1.5kgf/cm <sup>2</sup> ) 175kPa(1.75kgf/cm <sup>2</sup> )	
<b>Brakes:</b> Front brake type  Front brake operation Rear brake type  Rear brake operation	Single disc brake 230mm diameter Right hand operation Single disc brake 220mm diameter Right foot operation	Single disc brake 298 mm diameter Right hand operation Single disc brake 220 mm diameter Right foot operation
<b>Suspensions:</b> Front Rear	Telescopic fork Swingarm (monocross suspension)	
<b>Shock absorber:</b> Front Rear	Coil-air spring/Oil damper Coil and gas spring/Oil damper	

## GENERAL SPECIFICATIONS

**SPEC**



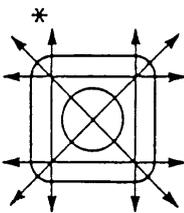
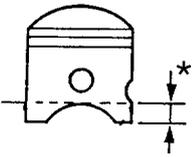
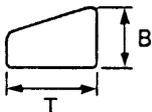
<b>Model code</b>	1D01/1D02	2C81
<b>Wheel travel:</b> Front wheel travel Rear wheel travel	270mm(10.63in) 260mm(10.24in)	200mm (7,87in) 230mm (9.05in)
<b>Electrical:</b> Ignition system Charging system Battery type Capacity	CDI AC Magneto GT6B-3 12V 6Ah	
<b>Headlight:</b>	bulb type	
<b>Bulb wattage x quantity:</b> Headlight Tail/Brake light Turn signal indicator light  Front Rear  Meter	12V60W/55W x 1 12V21W/5W x 1  12V10W x 1 12V10W x 1 LED	
<b>Control lights:</b> "OIL" "TURN" "NEUTRAL" "HIGH BEAM" "LOW BEAM"	12V3W X 1 12V3W X 1 12V3W X 1 12V3W X 1 12V3W X 1	
<b>Amperages:</b> Principal fuse	15A	

# GENERAL SPECIFICATIONS

SPEC



## ENGINE

Item	Standard	Limit
<b>Cylinder head:</b> Warp page limit 	* Lines indicate straightedge measurement.	0,03mm
<b>Cylinder:</b> Bore size Taper limit Out of round limit	56.00~56.02mm 0.05mm 0.01mm	*** *** ***
<b>Piston:</b> Piston size "D" Measurement point* Piston to cylinder clearance Piston Offset 	55.950~55.955 10mm 0.045~0.050mm 0.5mm	*** *** 0.10mm ***
<b>Piston ring:</b> Type Dimensions(BxT): Top ring 2nd ring End gap (installed): Top ring 2nd ring Side clearance: Top ring 2nd ring 	Keystone * 1.2x2.4mm 1.20x1.89mm * 0.30~0.45mm 0.30~0.45mm * 0.02~0.06mm 0.035~0.070mm	*** * *** *** * *** *** * *** ***
<b>Cooling system:</b> Radiator capacity (including all routes) Reservoir tank capacity Radiator cap opening pressure  Radiator core width Radiator core height Radiator core thickness Water pump type	0.92L 0.3L 75~105kPa (0.75~1.05kgf/cm2) 110mm 280mm 32mm Single-suction centrifugal pump	*** * ***  *** *** ***



# GENERAL SPECIFICATIONS

SPEC



## CHASSIS

Item	Standard		Limit	
	1D0	2C81	1D0	2C81
<b>Model code</b>	1D0	2C81	1D0	2C81
<b>Front wheel:</b> Type Rim Size Rim Material Front wheel travel: Max. Radial wheel runout Max. Lateral wheel runout	Spoke wheels 21x1.60 Steel 270mm 1mm 0.5mm	Spoke wheels 17 x 3.00 Steel 270mm 1mm 0.5mm		
<b>Rear wheel:</b> Type Rim size Rim material Rear wheel travel Max. Radial wheel runout Max. Lateral wheel runout	Spoke wheels 18x1.85 Steel 260mm(10.24in) 1mm(0.04in) 0.5mm(0.02in)	Spoke wheels 17x3.50 Steel 260mm(10.24in) 1mm(0.04in) 0.5mm(0.02in)		
<b>Front disc brake:</b> Thickness Brake pad lining thickness-inner Brake pad lining thickness-outer Master cylinder inside diameter Caliper cylinder inside diameter Recommended fluid	230.0x3.5mm 6mm 6 mm 11mm 34.93mm DOT 4	230.0x3.5mm 4.1mm 6 mm 11mm 34.93mm DOT 4	0.8mm 0.8mm	0.5mm 0.8mm
<b>Rear disc brake:</b> Thickness Brake pad lining thickness-inner Brake pad lining thickness-outer Master cylinder inside diameter Caliper cylinder inside diameter Recommended fluid	220.0x4.5mm 5.6mm 5.6mm 12.7mm 30.16mm DOT 4		1.0mm 1.0mm	
<b>Steering system:</b> Steering type  Bearing size (quantity) Upper	Ball and taper roller bearing  22pcs (0.1875in)			
<b>Front suspension:</b> Front fork travel Fork free lenght Spring rate K1 Spring stroke K1 Optional spring available Recommended oil Quantity Level	270mm 503mm 3.1N/mm 0~270mm No Fork oil 10W 495cm <sup>3</sup> 165.5mm	200 mm 503mm 3.1N/mm 0~270mm No Fork oil 10W 495cm <sup>3</sup> 165.5mm		

## GENERAL SPECIFICATIONS

**SPEC**



Item	Standard		Limit	
Model code	1D0	2C81	1D0	2C81
<b>Rear suspension:</b> Type Rear shock absorber assembly travel Spring free length Installed length Spring preload (spring length) Spring rate K1 Spring stroke K1 Optional spring available Enclosed gas/air pressure (STD) Tightening torque spring preload	Swingarm (link suspension) 93mm 245mm 230mm Hard/Soft (220/235mm) 68.6N/mm 0~93mm No 150kPa (15kgf/cm <sup>2</sup> ) 20~25Nm	Swingarm (link suspension) 87 mm 250mm 244mm Hard/Soft (234/249mm) 117.80N/mm 0~87mm No 150kPa (15kgf/cm <sup>2</sup> ) 20~25Nm		
<b>Drive chain:</b> Type/Manufacturer Link quantity Drive chain slack	428V2/DAIDO 134 45~55mm (1.77~2.16in)	428V2/DAIDO 134 25~40mm (0.98~1.57in)		
<b>Front lever brake/Rear brake pedal:</b> Free play front lever brake Brake pedal free play	2~5mm 15mm			

## GENERAL SPECIFICATIONS

**GEN  
INFO**



### ELECTRICAL

Model	1D01/1D02	2C81
<b>System voltage</b>	12 V	
<b>Ignition system:</b> Ignition system type Ignition timing (B.T.D.C.) ((°)) Advancer type	C.D.I. 17 /1500r/min Digital	
<b>C.D.I.:</b> Magneto model/manufacture Pick up coil resistance((ohm)) Source coil resistance ((ohm)) Source coil resistance ((ohm)) CDI unit model/manufacture	F4FU/YAMAHA 310±20%W/R-W/L 730±20%B/R-G/W 600±20%G/L-G/W 1D0 /YAMAHA	
<b>Ignition coil:</b> Model/Manufacturer Primary coil resistance ((ohm)) Secondary coil resistance ((ohm))	3RW/YAMAHA 0.23±20% 7.9±20%	
<b>Spark plug cap:</b> Material Resistance ((k ohm))	Resin 5	
<b>A.C. Magneto:</b> Model/Manufacturer Standard output Coil resistance ((ohm))	F4FU/YAMAHA 14V170W5000r/min 0.6±20%W-W	
<b>Regulator:</b> Regulator type Model/Manufacturer No load regulated voltage	Semi conductor-short circuit SH629B-11/SHINDENGEN 14.1~14.9V	
<b>Rectifier:</b> Rectifier capacity Withstand voltage	25A 200V	
<b>Battery:</b> Battery type Battery voltage/Capacity	GT6B-3 12V6Ah	
<b>Bulbs (voltage/wattage x quantity)</b> Headlight type Headlight bulb type Headlight Auxiliary light Brake/tail light Front flasher light Rear flasher light Meter light	Bulb type Halogen H4 12V60W/55Wx1 12V5Wx1 12V21W/5Wx1 12V10Wx2 12V10Wx2 LED	

## GENERAL SPECIFICATIONS

**GEN  
INFO**



<b>Indicator light</b> Neutral indicator light Turn indicator light Oil level indicator light High beam indicator light	12V3Wx1 12V3Wx1 12V3Wx1 12V3Wx1
<b>Starting system:</b> System type	Electric starter
<b>Starter motor:</b> Model/Manufacturer Power output Armature coil resistance Brush overall length <Limit> Brush spring force <Limit> Commutator diameter <Limit> Mica undercut (depth)	3MB / Moric 0.2kW 0.0315~0.0385<ohm> 20°C 5X7X7 3,5 4.9N ±20% 3.92N 17.6mm 16.6mm 1.35mm
<b>Starter relay:</b> Model/Manufacturer Amperage Coil resistance	1D0/JIDECO 180A 4.2 - 4.6<ohm> 20°C
<b>Horn:</b> Horn type Quantity Model/Manufacturer Max. Amperage Performance	Plane 1 YF-12/NIKKO 3A 105~113db/2m
<b>Turn signal relay:</b> Relay type Model/Manufacturer Turn signal blinking frequency Wattage	Full transistor FE218BH/DENSO 75~95cyl/min 10Wx2+3.4W
<b>Oil level gauge:</b> Model/Manufacturer	3XP/ASTI
<b>Starting circuit cut-off relay:</b> Model/Manufacturer Coil resistance	25G/OMRON 100<ohm>±10%
<b>Headlight relay:</b> Model/Manufacturer Coil resistance	25G/OMRON 100<ohm>±10%
<b>Side stand relay:</b>	BUILT IN CUT OFF RELAY
<b>Thermostat switch:</b> Model/Manufacturer Temperature setting	4BA/DENSO 120±3<degree>
<b>Servo motor:</b> Model/Manufacturer	3XP/MATSUSHITA
<b>Amperage for fuses:</b> Main fuse Spare fuse	15A 15A

# CONVERSION TABLE / GENERAL TIGHTENING TORQUES SPECIFICATIONS



EAS00028

## CONVERSION TABLE

All specification data in this manual are listed in SI and METRIC UNITS. Use this table to convert METRIC unit data to IMPERIAL unit data.

Ex.

METRIC	MULTIPLIER	IMPERIAL
** mm	x 0.03937	= ** in
2 mm	x 0.03937	= 0.08 in

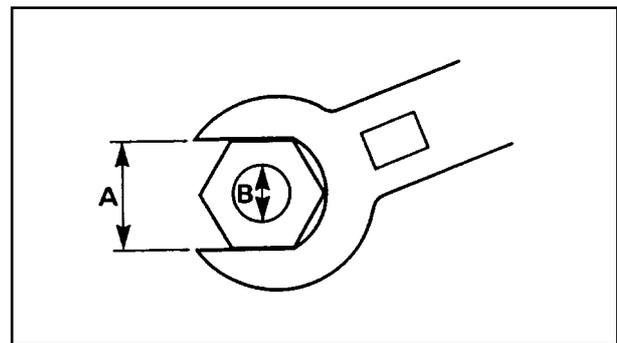
### CONVERSION TABLE

METRIC TO IMPERIAL			
	Metric unit	Multiplier	Imperial unit
Tightening Torque	m•kg	7.233	ft•lb
	m•kg	86.794	in•lb
	cm•kg	0.0723	ft•lb
	cm•kg	0.8679	in•lb
Weight	kg	2.205	lb
	g	0.03527	oz
Speed	km/hr	0.6214	mph
Distance	km	0.6214	mi
	m	3.281	ft
	m	1.094	yd
	cm	0.3937	in
	mm	0.03937	in
Volume, Capacity	cc (cm <sup>3</sup> )	0.03527	oz (IMP liq.)
	cc (cm <sup>3</sup> )	0.06102	cu•in
	lt (liter)	0.8799	qt (IMP liq.)
	lt (liter)	0.2199	gal (IMP liq.)
Misc.	kg/mm	55.997	lb/in
	kg/cm <sup>2</sup>	14.2234	psi (lb/in <sup>2</sup> )
	Centigrade (°C)	9/5 + 32	Fahrenheit (°F)

EAS00029

## GENERAL TIGHTENING TORQUE SPECIFICATIONS

This chart specifies tightening torques for standard fasteners with a standard ISO thread pitch. Tightening torque specifications for special components or assemblies are provided for each chapter of this manual. To avoid warpage, tighten multi-fastener assemblies in a crisscross pattern and progressive stages until the specified tightening torque is reached. Unless otherwise specified, tightening torque specifications require clean, dry threads. Components should be at room temperature.



**A:** Width across flats  
**B:** Thread diameter

A (nut)	B (bolt)	General tightening torques	
		Nm	m • kg
10 mm	6 mm	6	0.6
12 mm	8 mm	15	1.5
14 mm	10 mm	30	3.0
17 mm	12 mm	55	5.5
19 mm	14 mm	85	8.5
22 mm	16 mm	130	13.0



**TIGHTENING TORQUES**

**ENGINE**

Part to be tightened		Q'ty	Thread size	Tightening torque		Remarks
				Nm	m•kg	
Spark plug		1	M14x1.25	20	2,0	
Cylinder head	Nut	5	M8x1.25	22	2,2	
Cylinder	Stud bolt	9	M8X1.25	13	1,3	LOCTITE screw glue
	Nut	4	M8x1.25	28	2,8	
Power valve holder, Valve cover	Cap seal					
	Bolt	6	M5x0.8	7	0,7	
Power valve pulley	Bolt		M6x1.0	10	1,0	
Thermostat valve cover	Screw	3	M6x1.0	8	0,8	
Housing cover	Screw	2	M6x1.0	8	0,8	
	Drain bolt (Housing cover)	1	M6x1.0	10	1	
Radiator	Bolt	2	M6x1.0	8	0,8	
Radiator cap stopper	Screw	1	M5x0.8	5	0,5	
Oil pump	Screw	2	M5x0.8	5	0,5	
Carburetor joint	Bolt	4	M6x1.0	8	0,8	
Air filter	Screw	2	M6x1.0	5	0,5	
Exhaust pipe	Nut	2	M8x1.25	18	1,8	LOCTITE screw glue
	Stud bolt	2	M8x1.25	10	1	
	Bolt	3	M6x1.0	8	0,8	
Transmission Oil	Drain Bolt	1	M8x1.25	15	1,5	
Crankcase cover (left)	Screw	6	M6x1.0	5	0,5	
Crankcase cover (right)	Screw	6	M6x1.0	8	0,8	
Oil pump cover	Screw	3	M6x1.0	5	0,5	
Crankcase	Screw	12	M6x1.0	8	0,8	
Oil Seal Holder	Screw	1	M8x1.25	16	1,6	
Cover	Screw	2	M6x1.0	8	0,8	
Kick Crank Bass	Nut	1	M12X1.0	70	7	
Clutch Spring	Bolt	5	M5x0.8	6	0,6	
Plate cover	Screw	2	M6x1.0	10	1	
Drive Sprocket	Nut	1	M16X1.0	60	6	
Tachometer housing	Bolt	1	M6x1.0	5	0,5	
Stopper lever	Bolt	1	M6x1.0	14	1,4	LOCTITE screw glue 
Shift pedal	Bolt	1	M6x1.0	15	1,5	
Thermo unit						
Rotor	Nut	1	~	15	1,5	
		1	M12x1.25	80	8	