INNOVATION PROFESSOR IN MOTORCYCLE TECHNOLOGY

250T-3(V3)

OWNER'S MANUAL

IMPORTANT SAFETY INFORMATION

DRIVER AND PASSENGER

250T-3 (V3) is designed only for one driver and one passenger. The total load must be within the limit specified on the specification label.

ROAD CONDITION

The motorcycle is designed only for driving on highway.

READ THIS MANUAL CAREFULLY

Pay special attention to all the sentences or paragraphs marked with WARNING in this manual.

WARNING:

Means failure to follow the instructions will cause serious injury or death.

NOTICE:

Means that if the instructions in this manual are not observed, product damage or body injury may occur.

NOTE:

Provides you with the effective method of operation.

As the manual is considered as indispensable, it should be always kept with the driver for consultation.

TO OUR CUSTOMER

Thanks for choosing the motorcycle 250T-3 (V3). For safer and more pleasant driving, a complete understanding for all the instructions in this manual is necessary. Your safety is not only ensured by your own alertness and your understanding of all operations but also related to your understanding of the mechanic performance of the motorcycle. Making inspections before driving and performing periodical maintenance are basic conditions for your safety.

When periodic maintenance or repair is necessary, please consult with our local dealer.

Wish you a pleasant drive.

The manufacturer reserves the rights to make improvement of the product at any time without prior notice and without any obligation whatever.

CONTENTS

Traffic safety	Audio control system·····l
Important information for safe driving2	Tape recorder·····1
Load 3	Panel and controller ······1
Parts and controls4	Main performance parameter · · · · · · · · 1
Operation guide······7	Output line functioning drawing1
Main switch·····7	Important information for audio control system ······· 1-
Temperature indicator ······8	Inspection before driving······
Fuel gauge·····8	Fuel level1
Side stand parking indicator8	Fuel tank capacity 1.
Warning switch ·····8	Checking engine oil level······1
Digital clock·····8	Brake·····1
Headlight illumination switch9	Tire1
Turning light switch ·····9	Starting the engine ······2
Horn switch button ·····9	Driving the motorcycle·····2
Ignition button·····9	Driving2
Headlight switch9	Braking······2
Kill switch·····9	Parking·····2
Overtake light switch ·····9	Anti-theft·····2
Turning lock	Maintenance interval······2
Rear foot pedal·····10	Maintenance interval table2

Maintenance······27	Engine oil capacity ······31
Air cleaner · · · · · · 27	Replace engine oil······31
Cooling system maintenance·····28	Replace gearbox oil······32
Radiator28	Spark plug
Water inlet port·····28	Battery33
Coolant type28	Replace the fuse 34
Checking coolant capacity29	Tools35
Engine oil · · · · · · 30	VIN number36
Recommend engine oil······30	Guideline for storage ······37
Viscosity30	Technical parameter ······39
Replacing engine oil and cleaning oil screen ······31	Electrical diagram······41

TRAFFIC SAFETY

SAFETY CAN BE ENSURED ONLY BY DRIVER HIMSELF.

NOTICES:

A driver will always spend much time on learning driving methods and technique before driving on the highway in less traffic area.

1. Many motorcycle accidents occur due to that automobile driver cannot see the motorcycle driver. Therefore, the motorcycle driver should make all his effort to be seen clearly by automobile driver.

For example:

- Wear noticeable clothing.
- Avoid driving carelessly.
- 2. Many accidents occur at the crossroad entrance or exit of parking lot and driveway. Therefore pay attention to the above places.
- 3. Over speed is one of the main causes for many motorcycle accidents. Please obey the traffic rules and drive within the speed limit.
- 4. Many motorcycle accidents occur due to insufficient experience. A new driver shall comprehend each performance of motorcycle before riding on the highway. Never lend motorcycle to inexperienced drivers.
- 5. Most injuries of motorcycle accidents are on head. Therefore please wear helmet and other protections, e.g. dust-tight glasses, boots and thick coat.
- 6. Do not ride on the expressways. If inevitable, please be careful and drive safely.
- $7.\,A void\,driving\,on\,bump\,road, which\,will\,result\,in\,losing\,control\,or\,damaging\,machine.$

IMPORTANT INFORMATION FOR SAFE DRIVING

- 1. Before starting the engine, please carefully inspect the motorcycle. (Refer to Page 14).
- 2. For safety, please wear helmet as well as boots, gloves, dust-tight glasses and noticeable clothing;
- 3. The rear box or cargo box mounted by customer himself is for lightweight things only. If mounting cargo boxes on two sides of motorcycles, please load equally on both and hold tightly in order not to move around when driving. For detail, refer to page 3.
- 4. When driving, please hold the steering handlebars and step on the footrest.
- 5. Please exercise on road in less traffic area and get familiar with motorcycle performance before driving on the roadway.
- 6. Turn on winkers when turning or changing lane.
- 7. Do not drive on the road shoulder.

WARNING: • This is a motorcycle of CVT transmission. Increase throttle ONLY after you are ready to drive.

LOAD

WARNING:

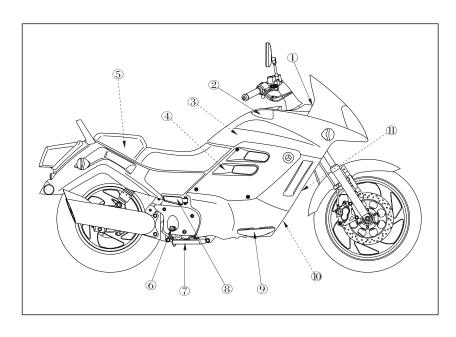
Trunk or storage equipment etc., are for lightweight loads only.

- ■Max. Load capacity: 150kg.
- Overload will affect the stability and controllability.
- All the loads should be hold firmly.
- Child or pets shall not be carried on the bracket or trunk, e.g. dog or cat.
- All the loads shall not be oversized.

PARTS AND CONTROLS

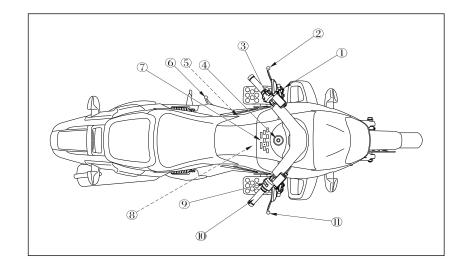
THE ASSEMBLING POSITIONS OF CONTROLS

- (1) Panel and indicator
- (2) Fuel tank cover
- ③ Fuel tank
- (4) Reservoir tank
- (5) Tool box
- 6 Oil hole/Oil dip rod
- (7) Main stand
- ® Floor pedal
- 10 Battery
- ① Radiator



The position marked withrepresents the invisible parts.

- ① Rear Brake locking device
- ② Brake lever (R)
- ③ Operation switch (LH)
- 4 Main switch
- (5) Air cleaner
- 6 Side stand
- 7 Audio control system
- ® Tape recorder
- Operation switch (RH)
- 10 Throttle grip
- ① Brake lever (Front)



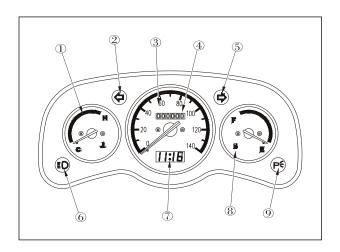
The position marked with ·····represents the invisible parts.

PANEL AND INDICATOR

The controls of each indicator light and alarming light are integrated in the panel.

All the functions are instructed in following pages.

- ① Temperature indicator
- 2 Left turning indicator
- ③ Speedometer
- 4 Odometer
- ⑤ Right turning indicator
- 6 High beam
- 7 Digital clock
- ® Fuel gauge
- 9 Side stand parking indicator

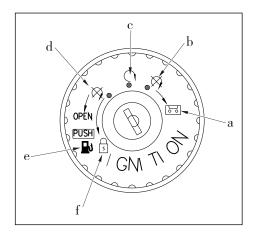


OPERATION GUIDE

MAIN SWITCH

- a) When at this position, the cover of tape recorder will be open, and tape or flash memory stick can be removed.
- b) When at this position, the engine will be stopped, and the key cannot be taken out.
- c) When at this position, the engine and all indicators will be turned on, and the key cannot be taken out.
- d) When at this position, the engine will be stopped, and the key can be taken out.
 - e) When at this position, fuel tank cover will be open.
- f) Turn the handle to the utmost left, press the key and turn to "LOCK" and then take out the key.

The handle cannot be moved, and the engine or lights cannot be turned on.

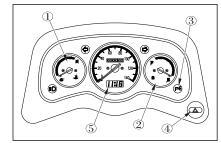


TEMPERATURE INDICATOR

When the temperature indicator 1 is in the white area of side C, it means that the temperature is normal. The red area of side H indicates that the temperature is high. In that case please shut down the engine until the coolant temperature goes down.

In case the temperature frequently goes high, check coolant capacity or consult the local dealer.

NOTE: If the engine runs idle in extremely hot weather for a long time the engine may be overheated. Then shut down the engine for cooling.



FUEL GAUGE

Fuel gauge ②indicates the remaining amount of the gasoline in the fuel tank.

"F" indicates the total amount of fuel is 12L. When the indicator reaches the first point of Red mark, fuel should be refilled as soon as possible.

The Red mark indicates that the remaining fuel is only about 2.0L.

SIDE STAND PARKING INDICATOR

When sides stand is down, parking indicator 3 will be on, and engine will be stopped.

When sides stand returns, parking indicator will be off, and engine can be started.

WARNING SWITCH

Press warning switch 4, all four turning indicators (F&R) will be winking, to remind pedestrians or vehicle to keep away.

DIGITAL CLOCK

Digital clock indicates the time. Insert the key and turn to the " book indicates the time. Insert the key and turn to the book indicates the book indicates the time. Insert the key and turn to the book indicates the book in

Long pressing to adjust the minute indicate, while short pressing to adjust the hour indicate.

HEADLIGHT ILLUMINATION SWITCH 1

Press ≣○ button, and the high beam is on.

Press D button, and the low beam is on.

TURNING LIGHT SWITCH 2

Press the switch to $\langle - \rangle$, and left turning light is on.

Press the switch to \implies , and right turning light is on.

Press down the button, and turning light will be off.

HORN SWITCH BUTTON ③

Press the button, and the horn will sound.

IGNITION BUTTON (4)

Press this button, and engine can be started (Refer to P20 for details).

HEADLIGHT SWITCH (5)

The headlight switch consists of three positions: -, > 00; and •;

: when the switch is at this position, headlight, the front pilot light, the rear pilot light and instrument light are on.

₹00€: when the switch is at this position, the front pilot light, the rear pilot light and instrument light are on.

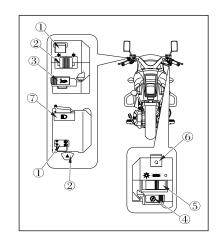
• : when the switch is at this position, headlight, the front pilot light, the rear pilot light and instrument light are off.

KILL SWITCH 6

Press button, and engine can be stopped. Press button, and engine can be started.

OVERTAKE LIGHT SWITCH 7

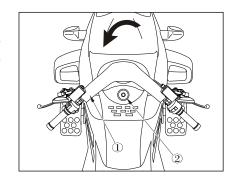
Press this button, and headlight high beam will be on, which indicates the signal of overtaking to the vehicle in front.



STEERING LOCK

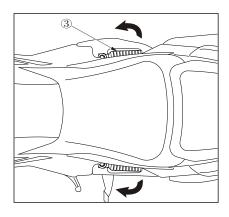
Turn the handlebar 1 to the upmost left. Press down the ignition switch 2 and turn it to LOCK (Refer to P7), the handlebar will be locked. Reserve the above procedure for unlocking.

NOTE: Before turning the key to LOCK, make sure to turn the handle to the upmost left, or key may be damage.



REAR FOOT PEDAL

The rear pedals can be unfolded for passengers. For safety reason, please fold the rear pedals when there is no passenger.



AUDIO CONTROL SYSTEM

TAPE RECORDER

Insert the key, and turn to " \[\begin{aligned} \begin{aligne

- ① Press the button to take out the tape.
- 2 This USB plug for flash memory stick.
- ③ Press the button for fast forward.
- 4 Press the button for fast backward.

Press both for shifting the tape.

PANEL AND CONTROLLER

- 1. POWER: Red light is on when audio system is switched on.
- 2. FM/AM: Press this button for shifting TAPE or MP3 to radio. Green light indicates FM/frequency modulation, while blue light AM/ amplitude modulation.

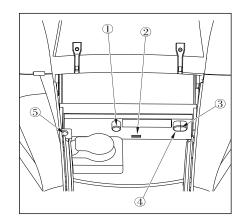
FM consists of three wave bands, while AM two, and Continuous pressing for shifting bands.

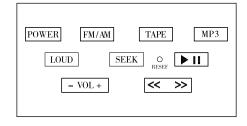
No light for this button, when TAPE or MP3 is on.

3. SEEK: Press this button for seeking channels. When finding a channel, the light winks, and the channel will be stored in "<" and ">>".

6 channels can be stored, and can be shifted by pressing "<<" and ">>" button.

The button is invalid when the TAPE or MP3 is on.





- 4. TAPE: Press the button for playing the tape, and green light will be on. If no tape, there is no function and no light indicator.
- 5. RESET: Press this button for initial setting from the factory.
- 6. When playing the MP3, press this button for pause, and pressing again for resuming. When playing the MP3, green light winks. When pause, green light will be on but not wink. The button will be not functioning, if it is not MP3 mode. When there is flash memory stick, there is light winking with long interval.
- 7. MP3: Insert the USB disk and press this button, the MP3 player will be on pause. Press " > 11" button to play MP3 and green light winks. If no USB disk, there is no function and no light indicator.
- 8. ">>": Next button. When MP3 is on, press this button for next song When radio is on, press this button for next stored channel. When tape is on, the button is not functioning and no light indicates.
- 9. "<<": Previous button. When MP3 is on, press this button for previous song When radio is on, press this button for previous stored channel. When tape is on, the button is not functioning and no light indicates.
 - 10. LOUD: Press this button to tone up the bass effect. Press again to cancel this function.
 - 11. VOL "_": Press this button to reduce the volume.
 - 12. VOL "+": Press this button to increase the volume.

MAIN PERFORMANCE PARAMETER

Radio:	FM	AM
Frequency range	87.5~108.0kHz	522~1620kHz
Noise limited sensitivity	<15dB	<15dB
SNR	>50dB	>50dB
Distortion degree	<1%	<1%

В

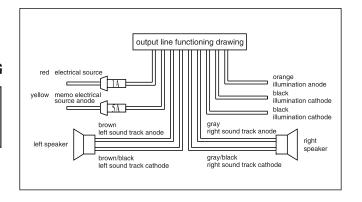
TAPE

Tape speed 2970~3050Hz

Fluttering degree <0.4% Cross talk >35dB SNR >40dB

OUTPUT LINE FUNCTIONING DRAWING

NOTE: Never contact cathode line of sound track (LH&RH) with earth, or sound system may be damaged.

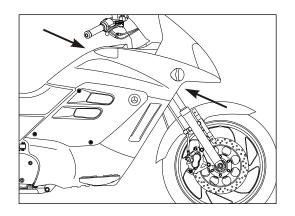


IMPORTANT INFORMATION FOR AUDIO CONTROL SYSTEM

This audio control system is waterproof, which can meet the requirement of normal operation.

To ensure reliability & durability, follow the instructions below:

- 1. DO NOT flush with high-pressure water in the direction of the arrowhead. (Refer to drawing)
- 2. DO NOT flush the motorcycles when the covers of fuel filling port, coolant filling port or tape recorder are open.
- 3. DO NOT operate the audio control system within half an hour after the motorcycle has just been washed clean.
- 4. DO NOT run the audio system for a long time while the motorcycle is parked & engine stopped to avoid battery loss & hard starting.
- 5. ONLY use flash memory stick produced by professional manufactures.



INSPECTION BEFORE DRIVING

To ensure the performance and safety, a routine inspection shall be performed before daily drive.

FUEL LEVEL

Once the fuel is insufficient, please insert the key into the main switch and turn to the position " (Refer to P7.) Open the fuel tank cover ①, turn the fuel tank cap ②, and then refill gasoline.

Meanwhile, check the leakage of fuel tank.

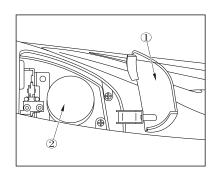
FUEL TANK CAPACITY: 12.0L.

Tighten fuel tank cap after refilling.

NOTICE: Do not mix gasoline with engine oil.

NOTES: • Use fuel with octane number over 93.

 Be careful not to allow any dust, water or other pollutants into fuel tank when refilling.



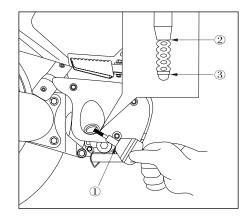
WARNING: • Gasoline is flammable and it may be exploded under certain conditions, therefore refilling shall be done in a well–ventilated area after the engine has been stopped. No smoking or lighting of spark is permitted in gas station or fuel storage area.

- Do not over fill the tank. The amount of refilled fuel shall be kept below the fuel mark. Tighten the cap after refilling.
- Gasoline is poisonous. Faint or death may occur if gasoline is swallowed. Do keep your skin away from gasoline. Do not breathe in the vapor of gasoline. Do keep it away from children. If gasoline is swallowed, do not try to induce vomit, consult a doctor immediately.

CHECKING ENGINE OIL LEVEL

CHECKING ENGINE OIL LEVEL

- 1. Park the motorcycle on a level surface and support it with its main stand. Remove oil dip rod 1, wipe it clean and insert it. Do not screw in.
- 2. If the oil level is at the lower limit ③, fill the crankcase with SAE15W-40/SF engine oil till the oil level is up to the upper limit mark ②. Then install oil dip rod. Check for any leakage.

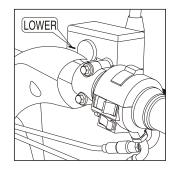


BRAKE

FRONT & REAR BRAKES

Check the brake fluid level: Brake fluid should be above the LOWER ① mark.

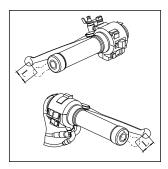
NOTICE: Use only DOT3 or DOT 4 brake fluid



FREE PLAY OF THE BRAKE LEVERS

Brake lever free play: 10~20mm (at brake lever end)

NOTE: The free play of the brake lever should be 10 to 20 mm. If the free is out of this range, please consult the local dealer.



THE BRAKE LEVER SPAN

Push off the brake lever ③, and separate the wrist pin ① from brake lever. Adjust the adjusting pin ②.

Choose position 1, 2, 3, or 4 to adjust the best brake lever span for driver's hand.



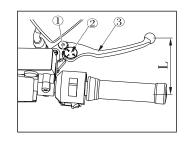
Replace the front and rear brake disk if the thickness is less than 3mm.

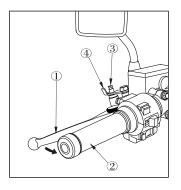
REAR BRAKE LOCK DEVICE

Hold the rear brake lever 1 as close to the left grip 2, press the pin 3, set the yoke 4 outward and clip it in the pin groove.

Release rear brake lever. Rear brake will be locked.

To release rear wheel, set the yoke inward, and separate it from the pin groove. Pull the rear brake lever, then release it, and rear wheel lock will be released.





TIRE

This motorcycle is assembled with tubeless tires. Only tires marked with "TUBELESS TIRE APPLICABLE" can be used.

Proper tire pressure will provide you maximum stability, comfort riding and longer tire life. Please check the tire pressure periodically and adjust if necessary.

NOTE: • Check the tire pressure while the tire is cool.

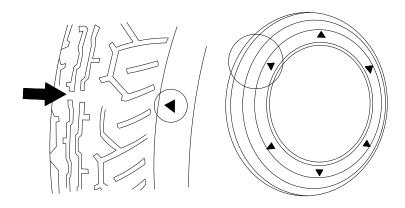
● Tubeless tire has a certain self–sealing function. If the tire is punctured, it will leak slowly. Check the tire frequently if the tire is punctured especially when the tire cannot be inflated properly.

	Front tire	Rear tire
Tire size	100/90-18	150/80-15
Tire pressure under cool condition	250	280

Check the tires for any cut, nail or other sharp objects, and the rim for any indentation or deformation. In case of any damage, consult the local dealer for repairing, replacing and adjustment of the wheel balance.

- **WARNING:** Over inflate will cause irregular wear of the thread, which may result in accident while low inflate pressure may cause the trip and make the tire come off the rim.
 - Driving with excessively worn-out tire may cause danger due to decreased adhesion and steering stability.

When the tread height of the tire reaches the mark " \triangle ", the tire should be replaced.

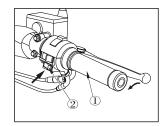


STARTING THE ENGINE

• Hold the rear brake lever to lock the rear wheel.

WARNING: ● Rear wheel may run if it is not braked. A running wheel may cause injury.

- Insert the key into main switch, and turn to "\(\tilde{\Omega}\)".
- Turn kill switch to " ?".
- Return side stand.
- Turn the throttle ① by 1/8 to 1/4 round.
- Press start button ② to start the engine.



NOTE:

- Release the start button as soon as the engine is started. Do not press the start button while the engine is running, otherwise the engine may be damaged.
 - Only when the sides stand returns and brake lever is held, the engine can be started.
- The start button must not be pressed for longer than 3 to 4 seconds. If the engine can't be started, release the start button for 10 seconds.
 - Add a bit throttle and start again.
- If the motorcycle has been suspended from service for a long time or there is no fuel in the fuel tank, the starting time will be longer.

NOTE: Do not release the rear brake lever before the motorcycle starts to run.

DRIVING THE MOTORCYCLE

WARNING:

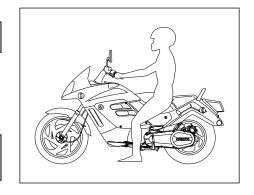
- During driving or after the engine has just stopped, the muffler is very hot. Contacting the muffler may cause serious burn. Therefore please wear trousers, avoid contracting the uncovered part of the muffler.
- Do not wear slack cloths, which may result in the sleeves or trousers getting caught with pedals, wheels and tires.
 - Any attachments installed on the motorcycle must be in accordance with the regulations of the local authorities.
 - Any attempt to refit or disassemble the original parts to or from the motorcycle is illegal and may cause danger.

DRIVING

NOTE: Do not keep the engine running at idle for a long time.

- 1) Sit on the seat with right foot on the footrest and left foot on the ground.
- 2) Release rear brake lever.

NOTE: Don't increase throttle so quickly before starting the motorcycle.



- 3) Increase throttle forwards slowly, and the motorcycle will start to run.
- 4) Turn throttle backwards for acceleration and release for deceleration.

WARNING:

Body injury may occur by contacting the running wheel. Do not accelerate the motorcycle sharply, which may result in losing control.

BRAKING

1) Throttle down

Throttle down to lower the speed, and it is important to engage the front and rear brake simultaneously.

WARNING: • When driving on wet or soft ground or in rain, take care when making a turn, acceleration or braking.

2) Engage the front and rear brake simultaneously.

When driving down a steep slope, close the throttle, and engage the front and rear brake simultaneously.

Don't brake continuously; otherwise the brake will be overheated which will result in lower brake efficiency.

WARNING: • The front and rear brake should be engaged simultaneously. The brake efficiency may be decreased if only one brake is applied. Engaging brake frequently will seize the wheel, as well as decreasing the performance of motorcycle.

PARKING

When you want to park the motorcycle, release the throttle, then engage the front and rear brakes simultaneously till the motorcycle is stopped. Turn the start key to " \nearrow ", stop the engine.

Step on the main stand with right foot, lift the motorcycle by holding the rear bracket and park the motorcycle.

Lock the handlebar and pull out the key. (Refer to page 10)

WARNING: • Park the motorcycle on solid or level ground to avoid injury or damage to the motorcycle.

ANTI-THEFT

- 1) Lock the handlebar and never leave the key in the main switch.
- 2) Check the registration if it is correct or expired.
- 3) If possible, park the motorcycle in the garage.
- 4) Use high quality anti-theft device.

MAINTENANCE INTERVAL

The maintenance interval is based on the accumulated mileage and is the guideline for maintenance and lubrication of the motorcycle. The maintenance interval shall be shorter if the motorcycle always works in foul conditions at high speed.

Please consult our local dealer for maintenance. If the motorcycle has been overhauled or collided, please consult technicians of the local dealer to check the main parts such as the frame, steering part, and suspension.

If necessary to adjust the emission, consult a specialized center.

NOTICE: To maintain the reliability and safety of the motorcycle, never refit it.

WARNING: • To avoid injury, maintenance shall be performed after the engine has been stopped and the motorcycle has been properly parked.

NOTICE: If the motorcycle shall be suspended from service for more than one month or in winter, maintenance shall be carried out to prevent the fuel, the tire, and the battery from deteriorated or eroded.

MAINTENANCE INTERVAL TABLE

Perform the instructions in the Inspection Before Driving section (Refer to P14) prior to each periodical maintenance.

I : Inspecting, cleaning, adjusting, lubricating or replacing when necessary.

C: Cleaning R: Replacing
A: Adjusting L: Lubricating

NOTE:

- * Consult the local dealer for maintenance or repairing unless the driver or the owner has the full set of special tools or is a qualified technician.
- ** We recommend that the maintenance of the items be done by the technicians of the local dealers.

Remarks:

- (1) If the odometer reading reaches is more than specified, repeat the periodical maintenance.
- (2) If environment is humid or dusty, the maintenance interval shall be shorter
- (3) If riding frequently on bumpy road, maintenance must be performed.
- (4) To be replaced every 2 years by experienced technicians.

	Interval	Odomet	er reading	(KMS)/montl	ı (1) which oc	curs first
Item		1000	4000/6	8000/12	12000/18	Page
*	Fuel pipe		I	I	I	
*	Throttle		I	I	I	
	Air cleaner (2)	I	R	R	R	26
	Spark plug		I	R	I	32
*	Valve clearance	I	I	I	I	
	Engine oil	R	R	for every 3	000km	30
*	Oil screen				C	
*	Carburetor idle speed	I	I	I	I	
	Coolant (4)			I		
*	Cooling system			I		
	Riving belt	I	R for every 16000km			
*	Gearbox lubricant (4)	R	I	I	I	31
	Brake shoe		I	I	I	
	Brake system	I	I	I	I	
	Brake light switch		I	I	I	
*	Brake lock	I	I	I	I	
*	Head lights		I	I	I	
**	Clutch shoe			I		
	Main/ side stand		I	I	I	
*	Suspension		I	I	I	
*	Bolts, nuts, fasteners (3)	I		I		
**	Wheel and tire		I	I	I	
**	Steering fork bearing	I			I	
*	Battery			I for ever	y 3000km	

MAINTENANCE

AIR CLEANER

1. Insert a flat screwdriver into the gap below the label ①.

Turn by 90° , separate the clip of label from plastic part, and remove label.

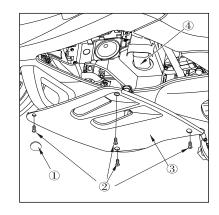
- 2. Remove 4 screws ②, left speaker cover ③, and air cleaner ④can be seen.
- 3. Remove 5 screws ⑤ of air cleaner box cover, box cover⑥.
- 4. Remove 2 screws (a), filter element screen (9)
- 5. Take out air cleaner filter element (7).
- $6. \ \ Clean \ filter \ element \ with \ solvent. Dry \ the \ solvent \ from \ filter \ element.$

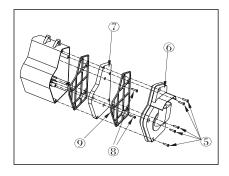
Dip the filter element with engine oil, and then dry it. Replace the element if damaged.

Put the element into the air cleaner casing.

7. Assemble the element and air cleaner box cover; tighten 5 screws, and assemble left speaker cover and label.

WARNING: • Never clean the filter element with gasoline or low flash point solvent.





COOLING SYSTEM MAINTENANCE

RADIATOR

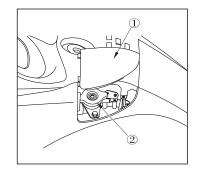
Radiator is located below the front top cover. Clean dust and mud from the radiator periodically according to the road condition.

WATER INLET PORT

Check coolant amount or leakage if water temperature indicates high frequently.

When adding or replacing coolant, open the lock of tape recorder cover (Refer to P11). Use a screwdriver to pull the buckle on the left of tape recorder outward, and inlet cover ①will be open.

Open water inlet port cap 2 to add coolant.



WARNING: • Open water inlet body cap, when coolant is in cold condition, or hot coolant will spray out.

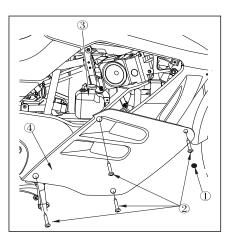
COOLANT TYPE

Only use the high quality Ethylene Glycol based antifreeze with erosion inhibitor, which is special for aluminum engines. This motorcycle has been filled with coolant contains 50% anti-freezer and 50% water.

NOTE: Coolant should not be substituted with water or other liquid to avoid damage to the engine.

CHECKING COOLANT CAPACITY

- ullet Open label oxdot (Refer to P26), remove 4 screws oxdot and right cover ,and check the coolant storage capacity in reservoir tank oxdot.
- If the coolant level is at the LOWER mark, remove the auxiliary tank cover to add coolant until the coolant level is up to the UPPER mark.
 - The UPPER and LOWER capacity will be 180mL and 340mL.



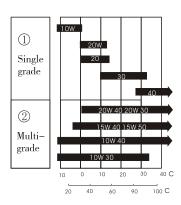
ENGINE OIL

RECOMMEND ENGINE OIL

SE Grade	SAE10W-30
SF Grade	SAE15W-40 SAE20W-50

VISCOSITY

The viscosity of the engine oil shall be in accordance with the local climate condition. The figure on the right provided a guideline for selecting the engine oil viscosity for different atmospheric temperatures.



REPLACING ENGINE OIL AND CLEANING OIL SCREEN

ENGINE OIL CAPACITY

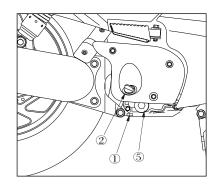
First filling: 1.0L Replacing: 0.8L

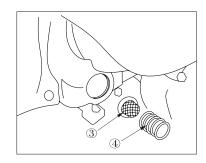
REPLACING ENGINE OIL

- Replacing interval: first time at 1000kms, then every 3000kms.
- Park the motorcycle with main stand and replace oil when the engine is still warm for complete drainage of the used oil.
- (1) Remove the oil dip rod 2, and drain bolt 1.

NOTE: When the screen cover ⑤ is removed, the oil screen ③ and spring ④ can be taken out.

- (2) Clean the oil screen with solvent.
- (3) Assemble oil screen, spring, and oil screen cover and drain bolt.
- (4) Fill the crankcase with qualified engine oil till it reaches the UPPER mark. When checking the oil level, do not screw in the oil dip rod.
- (5) Install oil dip rod.

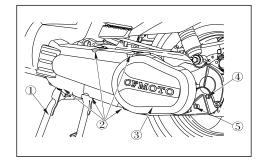




REPLACING GEARBOX OIL

Recommended gearbox oil type: SAE10W-30/SE

- 1. Park motorcycle with main stand 1. Remove 5 bolts 2, remove engine left side cover 3.
 - 2. Remove the filling bolt ④ and drain bolt ⑤.Drain the gearbox oil.
 - 3. Clean drain bolt, install and tighten it.
 - 4. Fill gear oil through the filling hole till it overflows.
 - 5. Install the filling bolt.

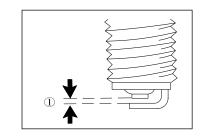


NOTE: Park motorcycle with main stand and drain the oil while the engine is still warm to ensure fast and clean drainage.

SPARK PLUG

TYPE OF SPARK PLUG: DP8EA(NGK), D7RTC

- (1) Remove cap and remove spark plug with wrench.
- (2) Check the electrode and the central ceramic point for carbon deposit, or wearing. If necessary, replace the spark plug. Clean off the deposit with spark plug cleaning detergent or brush.
- (3) Measure the spark plug gap 1 with a feeler gauge. Bend the side electrode to adjust the gap to 0.8mm \sim 0.9mm. The gap should not be too small.

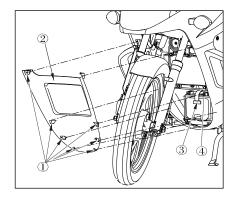


BATTERY

Battery type: 12V10Ah

Remove 8 screws ①, remove front ventilation plate ②. Loosen the belt ③ and the \pm -screws to take out the battery ④.

NOTE: When replacing battery, connect the red wire with + electrode and the black wire to - electrode, or cable and battery will be damaged.



REPLACING THE FUSE

The main fuse is located on the starter relay under the seat on front right side, with rated current capacity of 20A.

Remove starter relay coupler, and you will see it.

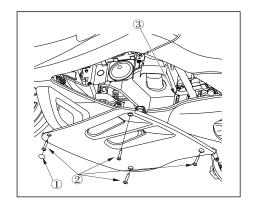
Remove 6 screws ① on front ventilation plate ③.

Remove front ventilation plate, fuse box ② will be seen.

Rated current capacity of fuse: 10A&5A.

If the fuse is burnt frequently, it indicates short circuit or overload in the electrical system; you should consult the local dealer.

NOTE: Turn the main switch to "OFF" when checking or replacing fuse to avoid short circuit.



Replace the fuse: Remove the used fuse and install a new one.

WARNING: • Only use the fuse of specified current capacity. Using incorrect fuse may result in damage to the electrical system, or cause fire. Incorrect fuse may also cause illumination failure or engine failure during night driving.

-34-

TOOLS

Insert the key to seat lock hole 1, turn the key clockwise, and the seat lock will be open.

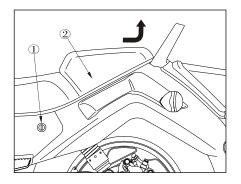
Lift and push back the small seat 2, lift upward, and tool kit 3 can be seen.

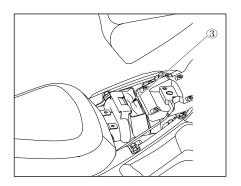
The tools are in the compartment below the seat. These tools are enough for minor repairing, adjusting or part replacing.

The tool kit includes:

- \bullet 8 × 10mm open end wrench
- \bullet 14 × 17mm open end wrench
- Double-end screwdriver
- 16 × 18mm socket wrench
- S=5 internal hex wrench

- \bullet 12 × 10mm open end wrench
- S=6 internal hex wrench
- Screwdriver handle
- Tools kit





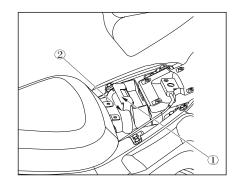
VIN NUMBER

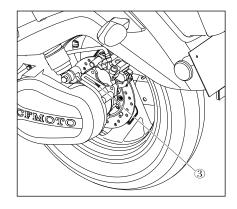
The serial number of the frame and the engine are used for registration, applying driving license and ordering parts.

When order or replace some parts, above numbers should be supplied. The frame number (VIN) 1 and label plate 2 are under small seat.

The engine number $\ensuremath{\mathfrak{D}}$ is marked on the rear upper part.

Frame No.:(VIN)		
Engine No.:		





GUIDELINE FOR STORAGE

STORAGE

If the motorcycle will be stored for a long time, such as in winter, necessary measures shall be taken to prevent damage or malfunction of parts. In addition, some repairing is necessary.

- (1) Replace the engine oil and the oil screen.
- (2) Drain the fuel tank and carburetor completely.

WARNING: • Gasoline is flammable or explosive. Do not smoke or use fire when draining fuel.

(3) Remove the spark plug; fill the cylinder with 15 to 20 ml engine oil. Start the engine for several times to spread the oil over the cylinder.

Install the spark plug.

NOTE: When cranking the engine, be sure to ground the spark plug with cap on.

- (4) Remove the battery, and store the battery in a place with no icing or direct sunlight. Charge the battery once a month.
- (5) Clean all surfaces of the motorcycle and wipe dry. All the painted surfaces shall be coated with wax and anti-rust oil.
- (6) Inflate the tires to the standard pressure. Park the motorcycle and support the tires with wooden blocks.
- (7) Cover the motorcycle with a cover made of non-plastic or non-glue-coated cloth, and place it in a dry, shady and cool environment without direct sunlight.

REUSE OF THE MOTORCYCLE

- 1. Remove the motorcycle cover and wipe it clean. If the motorcycle has been stored for more than 4 months, replace the engine oil.
 - 2. Check the electrolyte's level. Charge the battery, if necessary.
- 3. Perform the procedures specified in Inspection Before Driving (Page 14) and drive the motorcycle at lower in areas with less traffic.

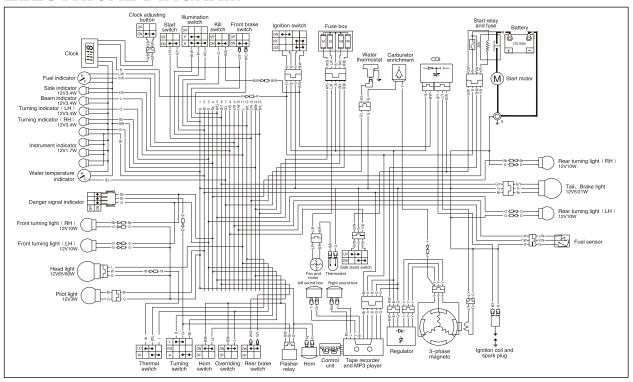
TECHNICAL PAMAMETER

DIMENSIONS	
Length	2200mm
Height	1120mm
Width	850mm
Wheel base	1480mm
Ground clearance	150mm
WEIGHT	
Wet weight	178kg
CAPACITY	
Crankcase/Gearbox	1.0L/0.18L
Fuel tank	12L
Max. Load	150kg
ENGINE	
Туре	Single cylinder, water cooled, 4 stroke, vertical

Bore×stroke	72×60mm	
Compression ratio	10:1	
Displacement	244ml	
SPARK PLUG		
Туре	DR8EA (NGK)/D7RTC	
Gap	0.8~0.9mm	
Idle speed	1500±150r/min	
TIRE		
Front	100/90-18	
Rear	150/80-15	
MAIN PERFORMANCE DATA		
Rated power	10.5kw/6000r/min	
Max. Speed	≥ 100Km/h	
Fuel consumption	≦3.1L/100km	

TRANSMISSION		
Final reduction ratio	8.63	
ELECTRICAL SYS	STEM	
Battery	12V-10Ah	
Alternator	AC magneto	
LIGHT		
Headlight	12V35W/35W	
Brake/Tail light	12V-21W/5W	
Fuse	20A/10A/5A	
Front turn light	12V 10W×2	
Rear turn light	12V 10W×2	
Pilot light	12V 3W	
Turning signal light	12V 3.4W×2	
High beam light	12V 3.4W	
Instrument indicator	12V 1.7W×4	
Side stand indicator	12V 3.4W	

ELECTRICAL DIAGRAM



R-Red B-Black G-Green L/R-Blue/Red G/Y-Green/Yellow Y/R-Yellow/Red Br-Brown Y-Yellow L-Blue W-White O-Orange B/Br-Black/Brown Br/L-Brown/Blue W/G-White/Green G/B-Green/Black B/L-Black/Blue B/W-Black/White B/Y-Black/Yellow Y/W-Yellow/White Lg-Light Green Gr-Grey G/L-Green/Blue G/R-Green/Red Sb-Sky Blue W/L-White/Blue R/W-Red/White B/R-Black/Red Y/B-Yellow/Black L/W-Blue/White L/Y-Blue/Yellow