

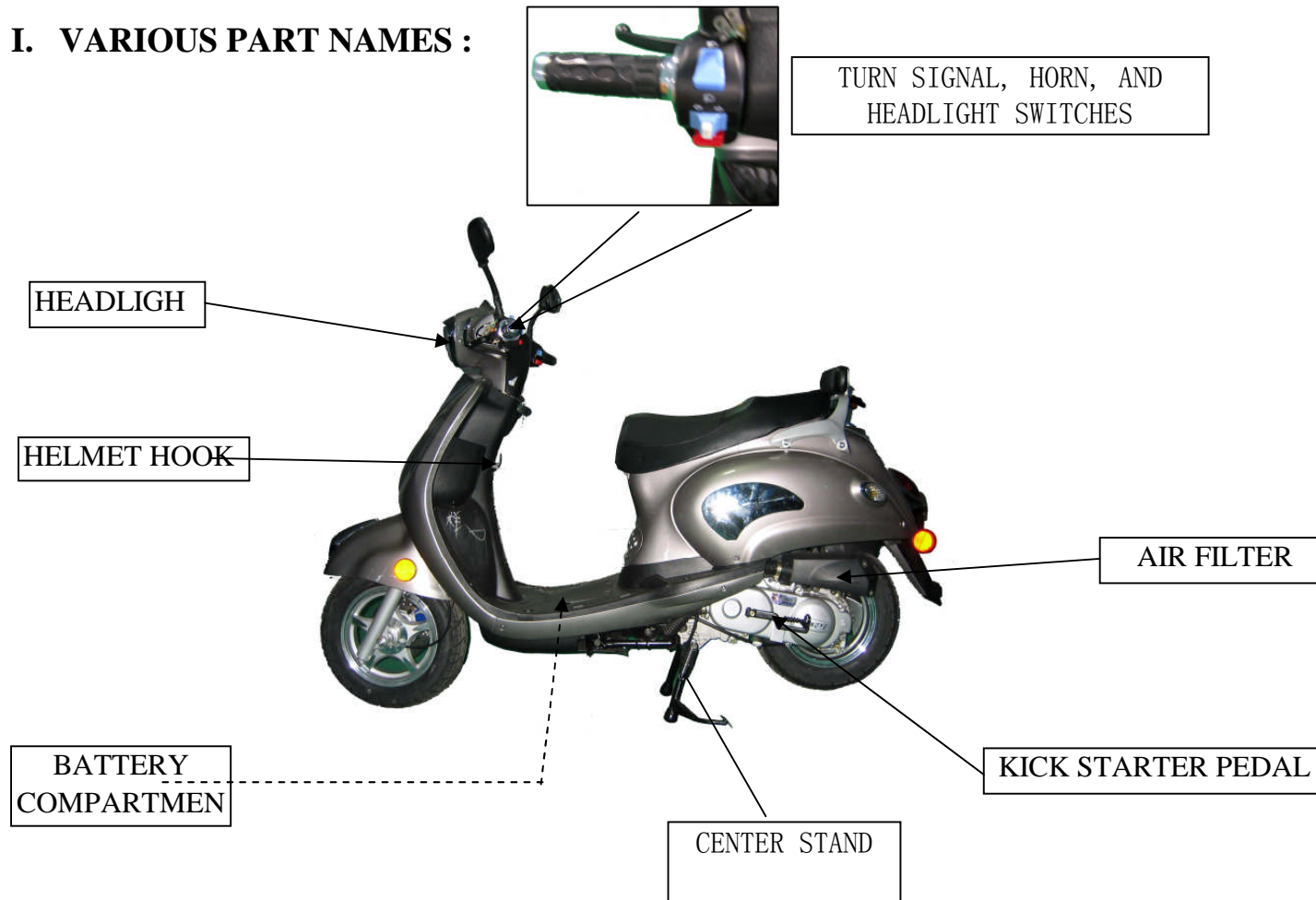
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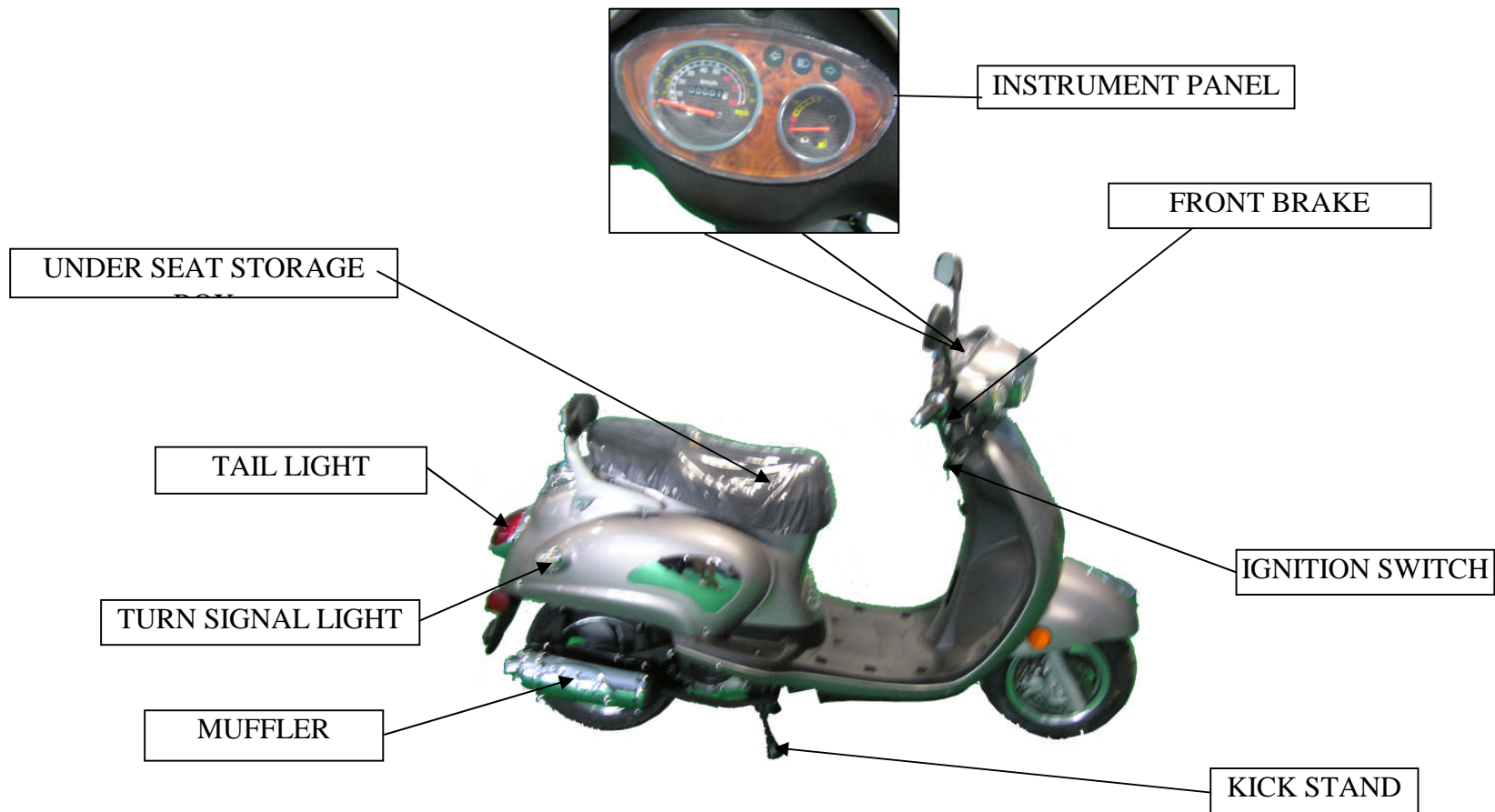
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## I. VARIOUS PART NAMES :

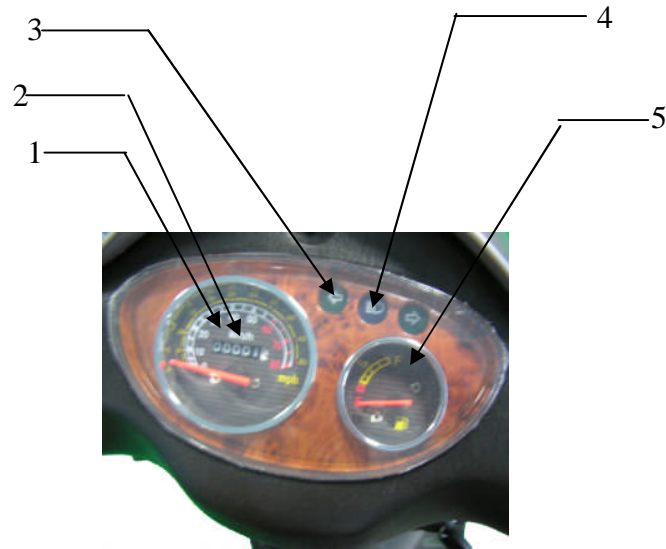




## II. Operation Descriptions of Systems

### A. Instrument panel components :

Typical dashboard display



#### 1. Speedometer:

- MPH and / or KPH (miles and kilometers per hour)

#### 2. Odometer :

- Total forward distance is indicated in miles  
The black number with white background indicates tenth of miles.

#### 3. Turn signal indicator:

- Turn signal indicator will blink if turn signal switch is in operation

#### 4. High beam indicator:

- When headlights are bright dashboard indicator will glow

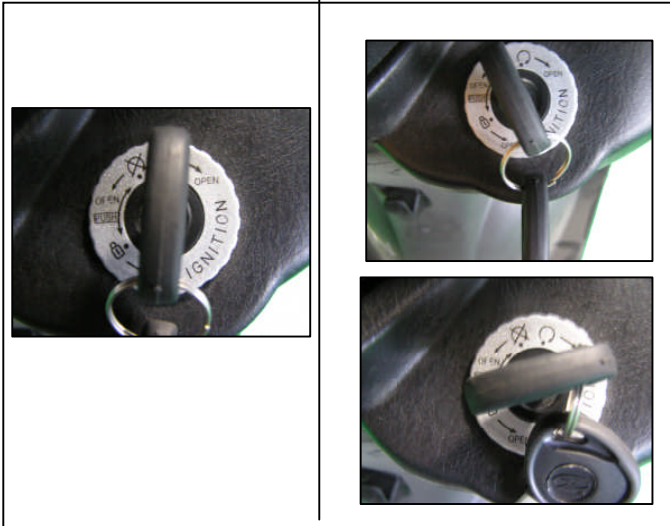
#### 5. Fuel Gage:

- Indicates the fuel volume in the fuel tank.  
(ignition switch must be on)
- If the needle points at the red section, it indicates that the remaining fuel is about 0.25 gallons.

Fill with gasoline as soon as possible. (91 octane or above.)

UNLEADED FUEL ONLY

## B. MAIN SWITCH:



### 1.OFF:

- All systems are off.
- Remove or insert key in this position.

### 2.ON:

- The electric power is connected
- Starter switch is functional.
- You cannot remove the key.

### 3.LOCK:

- The handle bars are locked.
- You can remove the key.

#### HINT:

- After locking, turn handle bars gently to make sure handle bars are locked.
- Turning handle bars gently will facilitate unlocking also

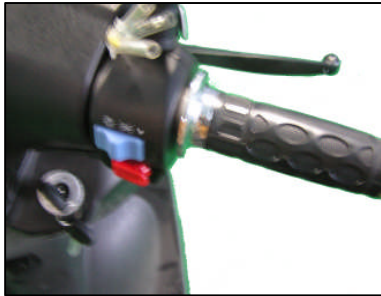
### 4. Unlocking under seat storage box

- Turn key far right to open position.

#### HINT:

- Applying gentle pressure (up and down) to seat will facilitate opening.

### **C.STARTER SWITCH BUTTON:**



### **ELECTRIC STARTER INSTRUCTIONS:**

- Hold brake and press starter switch to engage electric starter.
- Do not engage the starter for more than 4 seconds at a time.
- After engine starts, release the starter button at once.

### **WARNING:**

- When engine is in operation, do not press the starter button .  
Doing so will damage the electric starter.



#### D. HEADLIGHT SWITCH:



**Headlights and Tail Lights Switch**

1. Headlights should remain in the on position at all times while operating your scooter.
2. Headlight switch has three positions to accommodate optional lighting features. Please take time to familiarize yourself with this switch.

#### E. DIMMER SWITCH:

1. High

2. Low Beam



- When the high beam is on, indicator on instrument panel will light.

#### F. HORN SWITCH BUTTON



- When key is on, pressing button will sound horn.

#### G. TURN SIGNAL SWITCH



1.L. ←

Turning switch to the left will cause left signals to illuminate

2.R. →

Turning switch to the right will cause right signals to illuminate

When signals are on, symbol on instrument panel will illuminate

3. Press center (white) to cancel turn signals.

Signals will not cancel automatically.

## H. Under Seat Storage Box



### **Unlocking under seat storage box:**

- Turn key (on main switch) to far right. (Open position.)

### **HINT:**

- Applying gentle pressure (up and down) to seat will facilitate opening.

### **NOTICE:**

Carrying capacity should not exceed 6 pounds.

### **CAUTION:**

Interior of box can be very hot. DO NOT  
put flammable objects inside case.  
Storage box is not waterproof.

## **I. STEERING HANDLE LOCK:**

- To prevent theft, a locking handle bar has been installed.



### **1. Locking**

- Turn handle bars to full left and turn key counter clock-wise to the lock position.

### **2. Unlocking:**

- Turn the key clock-wise to unlock.

### **NOTICE:**

Park in legal parking spaces only.

### **HINTS:**

- After locking, turn handle bars gently to make sure handle bars are locked.
- Turning handle bars gently will facilitate unlocking al

### III. HOW TO START ENGINE

There are two ways to start your engine.

#### A. STARTING ENGINE USING ELECTRIC STARTER:

- Turn main switch to "ON".
- Turn secondary emergency cut off switch to the run/on position.
- Hold brake and press starter switch to engage electric start.
- Do not turn throttle grip, just press starter switch button to start engine.
- Do not engage the starter for more than 4 seconds at a time.
- After engine starts, release the starter button at once.
- When engine is in operation, do not press the starter button. Doing so will damage electric starter.

\*\* Most models have a switch with a circle meaning on and a circle with an X and/or a line through it meaning off.

- If motorcycle has not been used for a long time it may be difficult to start, turn throttle grip 1/8-1/4 turn and start engine again.
- Warm up engine for 2-3 minutes before operation.



## B. STARTING ENGINE WITH KICK STARTER:



- Place scooter/motorcycle on center stand.
- Turn main switch to "ON".
- Turn secondary emergency cut off switch to the run/on position.
- Hold brake and kick down on starter pedal.
- If motorcycle has not been used for a long time it may be difficult to start, turn throttle grip 1/8-1/4 turn and start engine again.
- Warm up engine for 2-3 minutes before operation.

\*\* Most models have a switch with a circle meaning on and a circle with an X and/or a line in it meaning off.

## REMINDER:

- After using kick starter pedal, fold it back to its original position.
- Carbon dioxide exhaust from engine is harmful. Vehicle is for exterior use only.



#### **IV. BASIC MOTORCYCLE OPERATIONS:**

**e recommend all beginners take lessons from experienced ride**

**Some States have motorcycle schools.**

**ontact your local State Department of Vehicle and Motor safe**

##### **A. TO START RIDING:**

- Inspect vehicle before operation.
- Turn on turn lights before moving.
- Make sure it is safe behind and ahead before moving forward.



- Release brake levers.
- Add throttle slowly by twisting throttle grip towards you and then motorcycle will move forward.

##### **B. SPEED ADJUSTMENT:**



- Speed is adjusted by turning the throttle grip.
- Speed is increased by rolling the throttle towards yourself
- Speed is decreased by rolling the throttle away from your:
- Always accelerate slowly.

**PROPER BREAK IN AND RIDING WILL LENGTHEN THE  
LIFE OF THE MOTORCYCLE:**



**WARNING:**

- Release throttle before applying brakes.
- Failure to use both brakes may cause skidding.
- Hard and sudden stops cause premature brake wearing.
- Always check brakes for proper function before accelerating to high speeds.

- During the initial 250 miles refrain from top speed.
- Do not accelerate abruptly.
- Do not operate engine at high RPM while on center stand.
- Change engine oil after the first 250 miles and every 700 miles thereafter.
- We recommend Castrol 10W-40 synthetic blend oil.
- Use unleaded 91 octane or above gasoline.

- When braking, use both brake levers.
- Increase pressure evenly, as needed.
- Avoid sudden, abrupt stops.

#### **D. DO NOT APPLY BRAKES AND MAKE SHARP TURNS**

##### **● WARNING:**

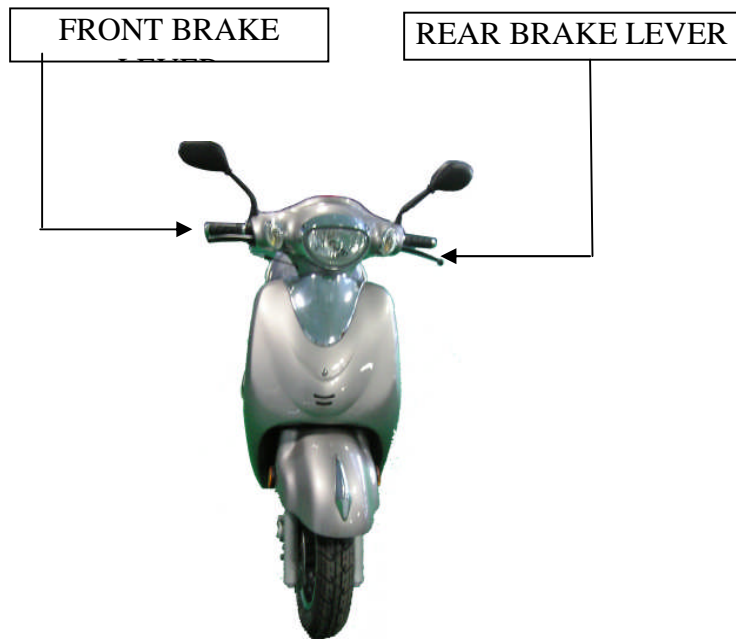
Turning while braking can cause falls, skidding, and serious injury.

#### **E. Be Extremely Cautious on Wet Surfaces.**

- The road surface in rain is different from dry surfaces.
- Increase braking distance and reduce speeds.
- Drive Cautiously.

#### **V. HOW TO STOP:**

- Be aware of vehicles behind and in front of you.
- Never make sudden stops.
- Return throttle grip to idle position.
- Apply pressure on brake levers evenly.



#### A. PARKING THE SCOTER.

- Turn the signal switch off.
- Turn main switch to "OFF".



#### **WARNING:**

- Turn off main switch only when vehicle is not in use.
- Turning off switch will turn off all lights making it difficult to see.

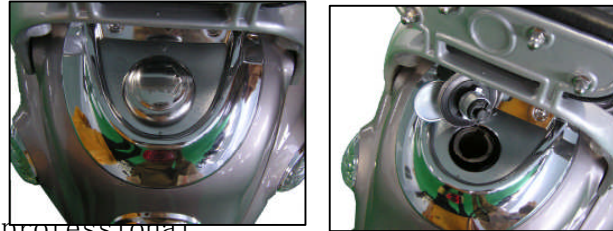
#### B. CHOOSE A FLAT PLACE:

- Choose a flat surface not blocking traffic and push down the center stand. Scooter will fall d or tip over if placed on unlevel ground.
- Grasp left handle with left hand to make scooter straight. Hold side handrail below seat with right hand. Step down on main stand. Push with right foot and pull back on scooter with right hand with strength.
- To prevent stealing, lock the steering handle when parked and take out the keys.



## VI. INSPECTION BEFORE RIDING:

- Always inspect before riding.
- Turn main switch to "OFF".  
a pre-check up is necessary before each ride.
- Periodic Inspections every 1,000 miles by a trained professional or Service Center is recommended.



### NOTICE:

- Check oil and brake fluid before each operation.

#### A. GASOLINE:

##### 1. CHECK FUEL:

- When the pointer on the gas gage is close to the red section, the effective residual gasoline is about .25 gallons.

### NOTICE:

- Turn off engine when refilling with gasoline.
- Use unleaded 91 octaine and above.
- Turn off the key from main switch and insert it into fuel tank cap. Turn the key clock-wise and open fuel tank cap.

### WARNING:

- Keep gasoline level a full inch and 1/2 from the top of fuel tank when refilling. If gasoline is overfilled it is easy to splash out and leak out which can be dangerous.

### **B. HANDLE BAR INSPECTION:**

- Check steering bar. Applying pressure up and down, forward
- Turn main switch to "OFF".
- Check steering functions. Check for rubbing or abnormal sounds
- If any abnormalities, take the scooter to the distributor or service center for inspection and repair.



### **C. BRAKE INSPECTION:**

#### **1.Drum brake series:**

- The brake levers should be properly adjusted. The free play\* is about 1/4 inches maximum.

\*Free play means the distance between loose and tight positions of brake levers.



**NOTICE:**

- Always check the free play of front and rear brakes. Make adjustments with adjusting nut when
- Turn main switch to "OFF".

**REAR WHEEL BRAKE ADJUSTMENT:**



*BRAKE ADJUSTMENTS*

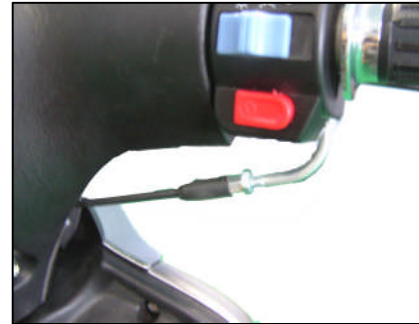
**NOTICE:**

- After brake adjustment match the concavity of the adjusting nut with the axle pin to prevent the change of free play during riding.
- Ride motorcycle in a short distance at slow speeds to make sure all front and rear brake adjustments are suitable.

**2. Disk brake series:**

**BRAKE OIL INSPECTION:**

- Normal fluid level is between "UPPER" and "LOWER".
- When the fluid level is near the lower level mark, check brake pads.
- If brake pads are in good condition, low fluid level could signal a problem.
- Have your brakes inspected by a professional.



**REMINDER:**

New brake shoes are cheaper than accidents.



#### **D. BRAKE LIGHT INSPECTION:**

- Turn main switch to "ON".
- Operate front and rear brakes one by one to make sure brake lights work.
- Clean brake and signal lights to make sure they can be seen well.
- Check for any damage to the lights.

#### **E. TURN SIGNAL LIGHT INSPECTION:**

- Turn main switch to "ON"
- Operate turn signal switch to make sure turn signal lights and turn signal indicators blink.
- Check turn signal lights for any dirt or damage.



#### **F. TIRE INSPECTION:**

- Check tire pressure while tires are cool before operation.
- Turn main switch to "OFF".  
grooves of tires.
- If there are any cracks or wearing replace the tire at once.
- A leading cause of accidents is unstable handling caused by worn or bare tires.
- Do not overload vehicle to avoid tire blowout.

#### **Normal Tire Pressure**

Please check tire pressure recommendations on the tires.

For 1 person front wheel :30 PSI

For 1 person rear wheel :32 PSI

#### **G. SHOCK ABSORBER INSPECTION:**

- Add weight on the handle and seat, swing motorcycle up and down and check the front and rear shock absorbers if work well.

#### **H. HEADLIGHT AND TAILLIGHT INSPECTION:**

- Turn main switch to "ON". Operate headlight switch to check if headlight and taillight light. Check the lights if any dirt or damage.

#### **I. HORN INSPECTION:**

- Turn main switch to "ON" and press down horn switch button to check if the horn sounds.

#### **J. INSPECT SPEEDOMETER:**

#### **K. INSPECT MIRRORS:**

- Turn main switch to "OFF".
- Sit on the seat and adjust mirrors.
- Keep mirrors clean.



#### **VII. PERIODICAL INSPECTION:**

- For safe and comfortable riding have periodic inspections made by a professional certified mechanic.
  - The following is a recommend partial list of maintenance times and inspections.
  - If the motorcycle has not been used for a long time, we recommend having a full inspection before use.
  - A full inspection as well as full maintenance must be done between 30 and 45 days or 250 miles after the initial purchase (Break in period)
- \*Failure to do so may void your warranty.**

## **A. OIL AND AIR FILTER:**

### **1.Air cleaner replacement:**

- Remove left side cover.
- Remove attaching screws and air cleaner cover.

#### **ATTENTION:**

- Dirty air filters cause premature engine wear, loss of engine power and wastes gas.
- If air cleaner is not replaced properly, dirt will be sucked into the cylinder causing excessive wear, low engine power, and shortening engine life.
- Do not let air filter get wet or starting problems may result.
- Keep Air Cleaner Box in good condition.
- Clean or replace air filter every 400 miles or more often in dusty environments.

## **2.Oil Change:**

- Change oil and clean filter every 750 miles.

**Oil Capacity:** 0.9 liters (almost 1 quart)

#### **WARNING:**

Do not over fill.

### **3.How to change oil and clean filter:**

When engine is warm-

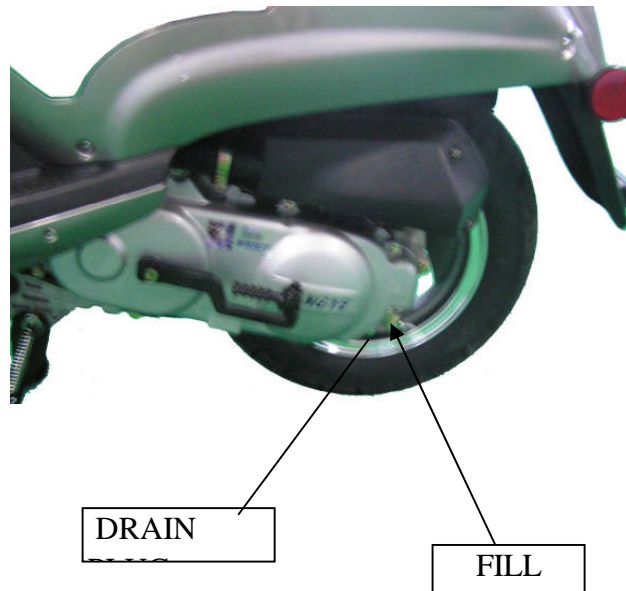
- Remove oil dip stick. Remove drain plug to remove all the oil.
- Remove oil filter cap.
- Take off spring.
- Use high pressure air to clean filter screen.
- Install oil filter screen and drain plug.
- Fill with new oil 0.9 liter. Castrol Semisynthetic. Check with oil gauge. (Do not screw in the dipstick)
- Tighten up dip stick.
- Start and warm engine for 2 - 3 minutes. Check pressure levels.

### **NOTICE:**

- Please use Castrol 10W-40 Semisynthetic oil.
- Operating in the following conditions will require oil being changed more frequently:
  - Frequent riding on gravel roads.
  - Riding short distances never reaching higher speeds.
  - Excessive stop and go traffic.
  - Riding in cold weather.
  - When refilling oil do not exceed the upper level on the dip stick. Doing so will damage seals.

### **B. GEAR OIL CHANGE:**

- Change gear oil at first 250 miles and each 3000 miles or every six months.
- Capacity of gear oil 110c.c.



### **1.How to change gear oil:**

- Remove drain plug to allow the oil to flow out. When engine is warm, it is easier to remove oil flow out.
- Re install drain plug.
- Fill with new gear oil. (110c.c.)
- Tighten up filler nut.
- Check for leaks.

#### **NOTICE:**

Riding in the following conditions will require more frequent gear oil changes:

- \* Always riding in dusty conditions. (Dirt and Gravel Roads.)
- \* Riding for long distances.
- \* Riding in areas with high humidity and damp areas.

### **C. REFILLING BRAKE OIL: (DISK BRAKE)**

- Turn the handle bars until the brake fluid level in brake fluid storage tank becomes horizontal.
- Remove the tank cover and seal.
- Fill with brake fluid a little above the "low" mark; then replace cover and screws.
- Reassemble the seal, tank cover, and upper handle bar cover.

#### **WARNING:**

- Use only the specified brake fluid, otherwise, the rubber seal can be distorted leading to oil leakage, and brake failure.
- Do not mix brake fluid with any other oil or fluid.
- It will cause chemical reaction and lead to brake failure.
- Do not let water penetrate the main cylinder otherwise brake failure could occur.
- The painted surfaces and plastic parts could be damaged by the brake fluid. In case of spills clean thoroughly and promptly.
- Constant loss of fluid should be checked by a trained professional

#### **D. SPARK PLUG INSPECTION:**

- Large gaps, thick deposits and electrode erosion will result in poor spark plug performance.

##### **1.Cleaning:**

- The best way to clean plugs is with spark plug cleaner.  
Purchase at any automotive shop.
- Use of a wire brush is okay if no cleaner is available.

##### **2.Adjustment:**

- Normally electrode gap is 0.025- 0.030. (as shown.)

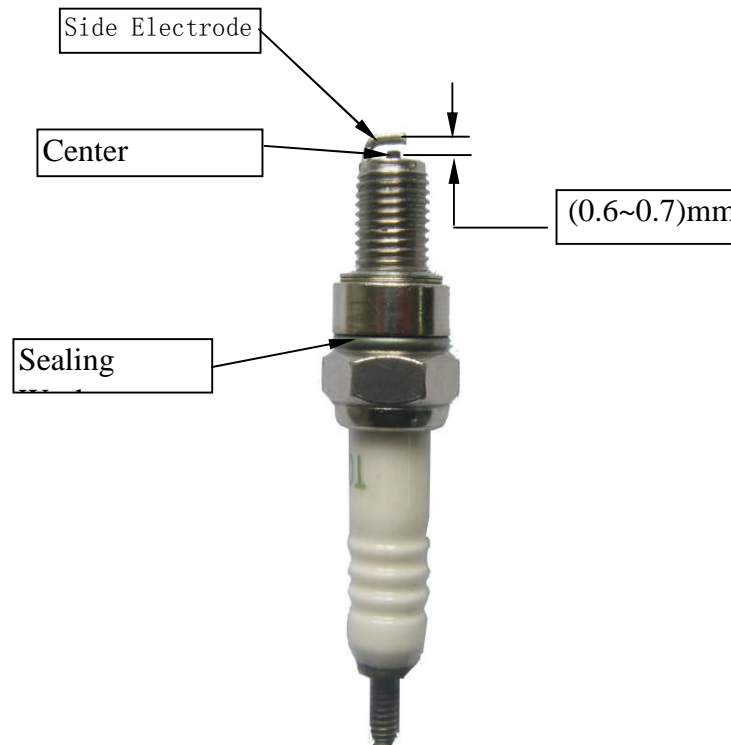
##### **3.Recommended spark plug:**

NGK-CR7HSA

- If failing problems occur use NGK-CR6HSA.
- Do not use spark plugs not recommended or cross referenced.

#### **WARNING:**

- Engine is still very hot after engine stops.  
Be careful not to burn yourself.
- Turn spark plug finger tight, then tighten with spark plug wrench. \*Do not over tighten.



## **E. BATTERY AND ELECTROLYTE**

### **INSPECTION:**

- This series uses a sealed battery so you do not have to inspect electrolytes.

### **NOTICE:**

- Absolutely do not open the lid of battery.
- Battery may produce flammable gas. Take care of sparks or : when changing or performing maintenance on batteries.
- When not used for a long time, battery may self-discharge. To prevent discharging place battery on a recharge and store in a cool place.  
If battery is stored on the motorcycle for a long period of time, disconnect the negative terminal.

## **F. FUSE REPLACEMENT:**

### **REMOVE:**

- Turn off the cap of the fuse case and take out the fuse.
- If fuse connection is not good, the fuse will overheat and breakdown.

### **INSTALL:**

- Install the fuse into fuse case and fasten the cap.
- Try to pull the fuse after installation. If loose, the fuse can overheat and breakdown.

### **WARNING:**

- Do not use any fuse larger than installed.  
Doing so can cause wire melt down and fire.
- Use approved electrical parts from your Motofino distributor or dealer.
- If cannot find out the reason, deliver the motorcycle to distributor or service center for inspection and repair.
- Do not use high pressured water to wash around the side cover.

## **VIII. WHEN ENGINE WILL NOT START:**

- Check gasoline fuel level.  
position.
- Check the starting procedures.
- Kick start several times
- Check battery hook ups.
- Check that "flooding" has not occurred.
- Have a trained professional look at your scooter.