

### **Inspection before riding**

Check the following items before riding.

ITEM	WHAT TO CHECK FOR
Engine cum Transmission oil	Availability of oil upto the level. (page no. 34)
Fuel	Enough fuel for the planned distance of running.
Tyres	Correct pressure. (Page no. 39) Adequate tread depth / no cracks or cuts.
Battery	Proper working of horn, brake lamp, turn signal lamps and neutral lamp. Electrolyte level. (page no. 31)
Lighting	Head lamp high/low beam, high beam indicator, speedo lamps and tail lamp.
Steering	Smooth movement / no play or looseness
Throttle	Correct free play of cable / smooth operation
Clutch	Correct free play of cable. (page no. 34) Smooth and progressive action.
Brakes	Correct lever and pedal play. (page no. 37)
Wheels	Free rotation.

### Starting the engine

Turn the fuel cock lever to the 'ON' or 'RESERVE' position based on availability of fuel in fuel tank. Insert control key into the ignition switch cum steering lock and turn it to 'ON' position. Make sure that the transmission is in neutral position press the electric starter switch to start the engine electrically and kick start the engine.

### When the engine is cold

- Pull the choke lever towards left and start the engine. Let the engine to idle in choke applied condition.
- Once the engine is warm, release the choke lever to its original position.

### WARNING

*Do not run the engine indoors where little or no ventilation available. Exhaust gas is extremely poisonous.*

### CAUTION

*Do not keep the engine in idling rpm for long and do not open excessive throttle when engine is idling, it leads to overheating of the engine and damage to internal components.*

### Setting the vehicle in motion

Depress the clutch lever and engage first gear by pressing the rear end of the gearshift lever downward by heel. Twist the

throttle grip towards you and simultaneously release the clutch lever gently and gradually.

The vehicle will start moving forward. As the vehicle picks up speed, shift to the next higher gear by closing the throttle, pulling the clutch lever in and pressing the rear end of the gear shift lever downwards once again. Release the clutch lever and open the throttle again. Select the required gears in similar manner.

### Using the transmission

The transmission is provided to keep the engine run smoothly in its normal operating speed range. The gear ratios have been carefully chosen to meet the characteristics of the engine. The rider should always select the most suitable gear to achieve the necessary speed and pulling power smoothly.

### Riding on hills / gradients

When climbing steep hills, the motorcycle may begin to slow down and show lack of power. At this point you should shift to a lower gear so that the engine will again be operating in its normal power range. Shift gears rapidly to prevent the motorcycle from losing momentum.

When riding down a hill, the engine may be used as braking by shifting to a lower gear.

## Stopping and parking

1. Close the throttle completely and apply both brakes simultaneously.
2. Down shift the gears as road speed decreases. Bring the engine to neutral position just before the vehicle stops.
3. Turn the ignition 'OFF'.
4. Park the vehicle on a firm, flat surface.
5. Lock the steering and turn fuel cock to 'OFF' position.

### **WARNING**

*Reduce speed to a safe limit before turning / cornering. It is not advisable to apply brakes while turning / cornering. Do not disengage the clutch while braking.*

## FUEL RECOMMENDATION

Use unleaded petrol only.

The petrol should be 85 to 95 octane by research method. Use recommended fuel additives for longer life of engine components and lower maintenance.

### **CAUTION**

*Never mix oil in petrol in the fuel tank.*

### **NOTE**

*Use fuel additives in petrol as recommended by the respective manufacturer for low carbon deposition.*

## CHECKS AND TIPS FOR IMPROVING FUEL ECONOMY

### REGULAR CHECKS

Carry out the periodic maintenance checks as specified in this manual. (page no. 25 to 29)

Regular maintenance checks will save fuel and assure you of trouble-free, enjoyable and safe riding besides keeping environment clean.

### Spark plug

A dirty or defective spark plug leads to wastage of fuel due to incomplete combustion. Check, clean and readjust the gap periodically.

### Air cleaner element

A dirty air cleaner restricts airflow, increases fuel consumption. Clean the air cleaner elements periodically.

### Clutch

Increase of engine rpm during acceleration, without increasing the road speed indicates clutch slip. A slipping clutch will cause high fuel consumption.

If the condition persists even after adjusting the clutch lever play, immediately have the clutch checked by our TVS Motor Company Authorised Distributor/ Dealer or Authorised Service Centre.

### Engine cum transmission oil

Dirty or less engine cum transmission oil will increase friction

between various parts of the engine and reduce engine life, thereby increase fuel consumption.

Regularly check the oil for contamination and level. It should be between the minimum and maximum level on the gauge. Get it replaced at regular intervals as per maintenance schedule.

#### **CAUTION**

*Replace the sparkplug every 12000 km for better performance of the vehicle.*

*Never drive the vehicle with half clutch. This will reduce the life of clutch and affect the performance of the vehicle and fuel economy.*

#### **Fuel leak**

Check and arrest fuel leaks if any from tank, carburettor and fuel lines.

#### **Tyres**

Low tyre pressure has the same adverse effect on a vehicle as of loading the vehicle heavily. The drag on the vehicle will be increased resulting decreased fuel economy.

Further more, handling may be adversely affected. Check the tyre pressure regularly and inflate it to the recommended pressure. Never use tyres, which are worn beyond the permissible limit.

#### **Fast starting from rest wastes fuel**

A racing start from rest at full throttle can waste fuel and damage the engine. It also creates a potentially dangerous traffic situation.

#### **Fast acceleration wastes fuel**

Fuel is wasted whenever you suddenly accelerate or apply brake.

#### **Avoid unnecessary idling**

While waiting for someone or stopping in signals for long time, if the engine is kept running at idle speed, it causes unnecessary wastage of fuel.

#### **Avoid frequent braking**

Anticipate corners and slopes as well as the traffic conditions. Unnecessary frequent braking will reduce the fuel economy.

#### **NOTE**

*Switch 'OFF' the engine during long waits to protect environment and to reduce the fuel consumption.*