

In case you need any clarification or service assistance, please feel free to call us.

Toll free no. :- 18004252077

Dear friend,

Thank you for choosing the all new **TVS StaR City+**, the StaR of Style.

As a proud owner of **TVS StaR City+**, you are now a part of a family of millions of satisfied TVS customers.

Your StaR City+ comes with all new urban designer styling which makes it much more chiseled, muscular and exudes definitive road presence that signals your arrival in Style, because great Style never goes out of Style!

The all new styling, coupled with never before features and an all new advanced 110cc EcoThrust engine makes your StaR City+ stand out and gives it a definitive edge.

This manual explains the features and operations of your **TVS StaR City+**. Please read it carefully and follow the instructions to enjoy years of safe riding.

To ensure reliable performance, we urge you to get your **TVS StaR City+** serviced only at TVS Motor Company Authorised Main Dealers / Authorised Dealers at specified regular intervals.

Happy Riding!

#### TVS MOTOR COMPANY LIMITED

This manual should be considered as a permanent part of the motorcycle and should remain with the motorcycle when resold or transferred to a new owner.

All information, illustrations, photographs and specifications contained in this owner's manual are based on the latest product information available at the time of this publication. TVS Motor Company Limited may, however, incorporate modifications or improvements on its vehicles at any time without notice, and therefore, in such events it is possible that the relevant part of the owner's manual does not apply to your vehicle.

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Accessories shown in the picture may not be part of the standard equipment.

Pictures shown in this manual are of TVS StaR City+ Electric Start version



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Operating this vehicle safely is an important responsibility of the rider. To help you make decisions about safety, we have provided operating procedure and other information in this manual. This information alerts you on potential hazards that could hurt you or others. Since it is not possible to warn you about all hazards associated with operating or maintaining the vehicle, you must use your own judgement.

You will find important safety information in following form in this manual. These words carry the following connotations:



#### Warning

Disregarding this message might result in **injury to the rider**.



#### Caution

This message indicates special procedures or precautions to be followed to avoid damage to the vehicle.



#### Note

This message provides further clarification for clear understanding of any particular information.



The first 1000 km is a crucial part of your motorcycle. Proper running-in operation during this period helps in ensuring a **maximum life** and **smooth performance** of your motorcycle.

The reliability and performance of your motorcycle depends on the special care and restrain exercised during the running-in period. It is especially important that you avoid operating the engine in high speed (RPM), which could expose the engine parts to excessive stress. Maximum recommended speed during the running-in is:

Maximum 50 kmph speed upto 1000 km (vary the engine speed for better mating of parts).

The first free service at  $500 \sim 750$  km is most important. During running-in period all the engine components and other parts will have set in. All adjustments to be restored, all fasteners to be tightened. Engine cum transmission oil to be replaced. Timely performance of the first free service will ensure optimum service life and performance from the engine.



Replacing the engine cum transmission oil during first free service is most important for better life of engine. Always use TVS TRU4 PREMIUM oil (SAE 10W30 SL-JASO MA2) for better performance and life.



#### SAFE RIDING RECOMMENDATIONS

Any two wheeler riding requires some precautions to be taken to ensure the safety of the rider, pillion and other road users. These precautions are:

#### Familiarise yourself with new TVS StaR City+

Riding skill and your mechanical knowledge form the foundation of safe riding practices. We suggest you to practice riding TVS StaR City+ in a low-traffic condition until you are thoroughly familiar with your vehicle and its controls. Remember practice makes you perfect.

#### Riding apparel

Loose, fancy clothing can be uncomfortable and unsafe when riding a two-wheeler. Choose good quality two wheeler riding apparel.

#### Know your limits

Ride within the boundaries of your own skill at all times. Knowing these limits and staying within them will help you to avoid accidents.

## **A**

#### Warning

**Two wheeler safety equipment starts with a safety helmet of good quality.** One of the most serious injuries that can happen is a head injury. Always wear ISI approved helmet. You should also have good suitable eye protection.



#### Posture

Proper vehicle riding starts with proper posture.

- 1. Sit erect on the seat at the position which you feel most comfortable.
- 2. Keep your arms relaxed to give extra cushion for body on uneven road surfaces.
- 3. Keep right arm and foot close to the brake lever and pedal, so as to enable fast action during panic braking.
- 4. Look widely instead of gazing at one point.
- 5. Alter your sitting location/posture slightly at intervals during long rides. This will reduce fatigue.

#### Cornering

When cornering, centrifugal force works in a direction perpendicular to the direction in which the vehicle is moving. Centrifugal force increases in proportion with speed and the radius of the corner.

During cornering, reduce speed so as to lessen the effects of centrifugal force. By all means, avoid abrupt application of brake or sudden steering.

## A

#### Warning

**One-hand riding is dangerous.** Keep both hands firmly on the handle bar and both feet securely on the foot rest. Under no circumstances should both the hands be removed from the handle bar, as it is very dangerous.

## Avoid use of mobile phones while riding as it could lead to fatal accident.

Do not downshift the gear in the midst of cornering. Slow down to a safe speed before negotiating a corner. If this is the first time that you are riding a vehicle of this type, we suggest that you practice on a safe, open area to become thoroughly familiar with the operation of the vehicle.



#### Braking

For safe riding, it is very important to master the braking techniques.

- 1. Close / release the throttle.
- 2. Hold the vehicle upright as you apply the brake.
- 3. Progressive application of brake is safer.
- 4. Never depress the clutch lever while braking at higher speeds.
- 5. Apply both the brakes.
- Riding down hills, while cornering and wet roads, close the throttle and down shift the gear to take advantage of gearbox and engine which acts as an additional brake. This will avoid the loss of control over the vehicle due to over speed.

#### Causes for poor braking

 If the brake shoes / pads or drum / disc are worn out or if there is water or oil on them, sufficient friction does not develop and brakes do not work well.

- Even when the brake works normally, if the road surface is wet or the tyre surface is worn-out, tyres do not take a firm hold on the surface, increasing the stopping distance.
- Approximately 60% braking effect is from front brake. Non-usage of front brake causes poor braking.



### Warning

As the vehicle speed increases, the stopping distance also increases progressively. Be sure that, you have sufficient distance between you and the vehicle or obstruction ahead of you.

Using only the front or rear brake is dangerous and can cause skidding and loss of control. **Apply both the brakes together and with great care on a wet road or other slippery surfaces.** Any abrupt braking on slippery or irregular roads can cause loss of rider control.



## ACCESSORY INSTALLATION AND SAFETYTIPS

Use extreme caution while selecting and installing the accessories for your motorcycle.

The addition of **unsuitable accessories can lead to unsafe operating conditions.** Your friendly Dealer will assist you in selecting quality accessories and installing them correctly.

While selecting the accessories, make sure the accessories **should not obstruct lighting**, **steerability**, **suspension level and ground clearance**. Please ensure that, if the tank cover is used, it is not getting en-trapped between fuel tank and fuel tank cap.

Additional electrical equipments and controls should not exceed the specified electrical system load of the vehicle (capacity of battery and magneto)

#### **EMISSION CONTROL**

All the TVS vehicles are tested in the factory for optimum fuel efficiency and lowest possible CO levels.

# Do not disturb the Carburettor settings as this may lead to higher fuel consumption and also higher CO levels.

If the vehicle needs any adjustments, please consult nearest TVS Motor Company Authorised Main Dealer or Authorised Dealer.

While adequate care is exercised at the factory to ensure that the emissions are within the limits, it is essential for the owner to always maintain the motorcycle in good condition by getting it periodically checked and serviced by TVS Motor Company Authorised Main Dealer or Authorised Dealer so that the emission and fuel consumption levels are maintained as per norms.



#### Note

Get your vehicle certified by the Government authorised emission testing stations at specified intervals.



#### VEHICLE IDENTIFICATION NUMBER

Serial numbers of both frame and engine are required for vehicle identification. They are also required to assist your Dealer for operating parts or referring to special information.



The frame serial number is stamped on the left side of the steering head tube.

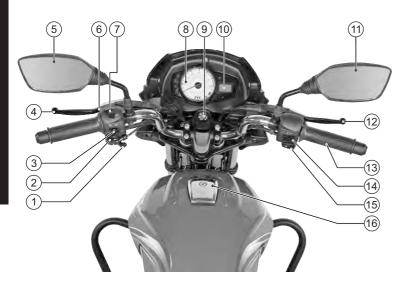


Engine serial number is stamped on the top surface of left side crankcase assembly near cylinder block.

Frame number										
Engine number										
Control key num	nbe	r								

## TVS 🛰

#### LOCATION OF PARTS - HANDLE BAR



- Choke lever
- 2. Horn switch
- 3. Turn signal lamp switch
- 4. Clutch lever
- 5. Rear view mirror L
- 6. Pass by switch
- 7. High / low beam switch
- 8. Speedometer
- 9. Ignition cum steering lock
- 10. Fuel gauge / ODO meter
- 11. Rear view mirror R
- 12. Front brake lever
- 13. Throttle grip
- 14. Head lamp switch
- 15. Electric starter switch\*
- 16. Fuel tank cap

<sup>\*</sup> Applicable for electric start model only



#### LOCATION OF PARTS - VEHICLE LEFT SIDE



- 1. Front brake adjuster
- 2. Front wheel axle
- 3. Fuel cock
- 4. Gear shift lever
- 5. Rider foot rest L
- 6. Centre stand
- 7. Side stand
- 8. Chain inspection window
- 9. Pillion foot rest L
- 10. Rear shock absorber L
- 11. Rear wheel axle
- 12. Lady foot rest
- 13. Saree guard
- 14. Seat lock

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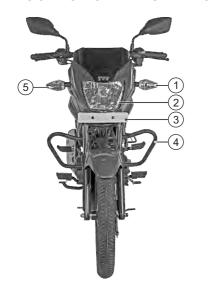
#### LOCATION OF PARTS - VEHICLE RIGHT SIDE

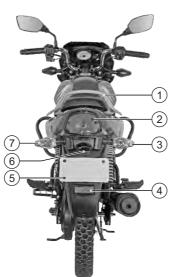


- 1. Front wheel axle nut
- 2. Spark plug
- 3. Gauge oil level
- 1. Rear brake pedal
- 5. Kick starter lever
- 6. Rider foot rest R
- 7. Pillion foot rest R
- 8. Rear shock absorber R
- 9. Muffler assembly
- 10. Rear brake adjuster
- 11. Pillion handle



#### LOCATION OF PARTS - VEHICLE FRONT AND REAR





#### **FRONT**

- Turn signal lamp front L
- 2. Head lamp assembly
- License plate front\*
- . Crash guard
- . Turn signal lamp front R

#### **REAR**

- Pillion handle
- 2. Tail lamp assembly
- . Turn signal lamp rear R
- 4. Reflex reflector
- 5. License plate rear\*
- 6. License plate lamp
- 7. Turn signal lamp rear L

<sup>\*</sup> Optional accessory will be charged extra



#### **CONTROLKEY**

TVS StaR City+ comes with pair of identical control keys. These keys are to operate ignition cum steering lock, fuel tank cap and seat lock.

#### IGNITION CUM STEERING LOCK

There are three positions in the ignition cum steering lock. They are:

#### 1. 'OFF' position

All the electrical circuits are turned 'OFF' in this position. Engine will not start. Key can be taken out.

#### 2. 'ON' position

In this position, all the electrical circuits are turned 'ON' and the engine can be started now. Key cannot be removed in this position.

#### 3. 'LOCK' position

TVS StaR City+ steering can be locked in both 'left' and 'right' directions. To lock the steering, turn the handle bar all the way to the 'left' or 'right'. Push the key in and turn it to the 'LOCK' position and take out. All the electrical circuits are turned 'OFF' in this position.



Insert the key into the lock and turn it to 'OFF' or 'ON' Position to unlock the steering.

## A

#### Warning

Never attempt to move the vehicle when the steering is locked, you may lose balance.



#### Caution

Leaving the ignition cum steering lock in 'ON' position will drain battery when the vehicle is not in use . So "Switch off" and take the key out when the vehicle is not in use.





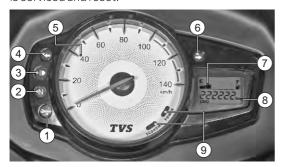
#### Note

When the ignition switch is turned 'ON' the speedometer performs self test. Wait till self test cycle of speedometer gets over.

#### SPEEDOMETER ASSEMBLY

1. Service reminder ( >--- )

If the service is due, whenever the ignition switch is turned 'ON', an icon with spanner symbol blinks for 10 seconds after the self test cycle of speedometer and continues to glow till the vehicle is serviced and reset.



Get the vehicle serviced at TVS Motor Company Authorised Main Dealer / Authorised Dealer

2. Neutral indicator lamp (N)

Glows when the vehicle is in neutral and goes 'OFF' if the gear is shifted from neutral.

- 3. High beam indicator lamp ( D) Glows when the head lamp high beam is activated.
- 4. Turn signal indicator lamp left (<) Flashes when the left side turn signal indication is activated.
- 5. Speedometer

Indicates the vehicle speed in kilometers per hour.

6. Turn signal indicator lamp right (□>) Flashes when the right side turn signal indication is activated.



#### Note

Service reminder indicator lamp works only based on the distance (km) covered by the vehicle. This is only a reminder indicator. Customers are advised to keep track and follow the service schedule.



#### 7. Fuel gauge

Digital bars indicates the approximate fuel quantity available in fuel tank. There are six bars to indicate the quantity of fuel available in the fuel tank.



All the six bars will be displayed when the fuel in the tank reaches above 9 liters approximately (full tank). When the fuel reaches half tank (5 liters approx.) the fuel gauge displays only four bars as shown.



The fuel gauge shows only single bar when the fuel reaches reserve level (2.0 liters approx.).



This single bar starts blinking when the fuel reaches to the safe level of approximately 1.0 liter. Refill the fuel immediately.

#### 8. Odometer

Registers and displays the total distance covered by the vehicle in kilometers.



#### 9. Economy and power indicators

Economy indicator (green lamp) indicates that the vehicle is running in economy mode which gives better fuel economy.

Power indicator (red lamp) indicates that the vehicle is running in power mode which results in reduced fuel economy. Power indicator will start blinking when engine is in idling for more than 20 seconds



Always ride the vehicle in economy mode (green lamp) for better fuel efficiency.



#### HANDLE BAR LEFT SIDE

#### 1 Choke lever

Pull the choke lever towards left to apply choke. During cold start, apply the choke and start the vehicle using electric starter or kicklever without opening / with less opening of throttle. Once the engine is started and running in stable RPM, release the choke and ride the vehicle.

#### 2. Horn switch

Press the switch ' ' to operate the horn.



#### 3. Turn signal lamp switch

Slide the turn signal lamp switch to left ' \( \sqrt{} \) ' or right side ' \( \sqrt{} \sqrt{} \)' to operate the respective turn signal lamps (LH/RH). Press the switch to turn 'OFF'.

#### 4. Clutch lever

Use the clutch lever to disengage the drive to the rear wheel while shifting the gears. Squeezing the lever towards grip disengages the drive.



### Warning

Always use the appropriate turn signal lamps when you intend to change lanes or take turns. Be sure to switch 'OFF' the turn signal lamps after negotiating the turns or lanes.



#### Caution

Always use choke for starting the cold engine. Never open the throttle fully when the choke is applied. It may lead to flooding of engine and difficulty in starting.



#### 5. Pass by switch

When the pass by switch is pressed intermittently while the engine is running, the head lamp high / low beam flashes (based on the switch position) and signals the approaching vehicle. This pass by signal can be used while overtaking during day time.

#### 6. Head lamp high/low beam switch

With the head lamp switch in 'ON' condition, press the beam control switch towards ' $\equiv$ D' to turn-on the head lamp high beam. Press the switch towards ' $\equiv$ D' to turn-on the head lamp low beam.

## A

#### Warning

Use appropriate head lamp beam 'high/low' as per the traffic and road conditions for your safety and to avoid inconvenience to other riders.

#### HANDLE BAR RIGHT SIDE

#### 1. Front brake lever

The front brake is applied by squeezing the front brake lever gently towards the throttle grip. The brake lamp glows on application of front brake.

#### 2. Throttle grip

Engine speed is controlled by the rotation of the throttle grip. Twist it towards you to increase the engine speed and away from you or release it to decrease the engine speed.





#### 3. Head lamp switch

Head lamp switch has two positions. Working of switch at these two positions are as follows:

OFF: All the lamps are turned 'OFF' when the switch is positioned at ' • ' even though the engine is running.

ON: Speedometer lamp, license plate lamp and tail lamp glows when the switch is positioned at '- with ignition 'ON' condition. Head lamp also glows along with above lamps when the engine is running.

#### 4. Electric starter switch

Press the electric starter switch '(\$\forall ' to start the engine electrically with the transmission is in neutral or by depressing the clutch lever when the transmission is in gear.

#### Caution

For cold starts, avoid using electric starter. Use kickstarter. A typical example is early morning start. This would reduce load on the battery and prevents quick drain.

#### FUFI TANK\* CAP

To open the fuel tank cap, insert the control key into the fuel tank cap lock and turn it in clockwise direction and lift the cap.



## Warning

Avoid spilling of fuel on the hot engine. Never refill fuel near open flame. Do not smoke while refueling. Do not use cell phones while refueling.

\* The fuel tank is not a measuring instrument and the capacity of the fuel tank may slightly vary from the indicated capacity.

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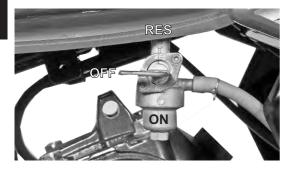
To close, press the cap back to its original position and take out the key.



#### Note

Whenever refueling the bike, fill upto the bottom of neck portion of the fuel tank. Filling above the neck may result in improper breathing of fuel tank and seepage of fuel.

#### **FUEL COCK**



Fuel cock has the following three positions:

ON: Fuel flows in this position when the fuel is above the reserve level in the tank.

RES: Switch over the fuel cock lever to this position when the fuel stops flowing in 'ON' position.

OFF: Fuel flow cuts off from the tank to carburettor.



#### Note

Leaving the fuel cock in 'ON' or 'RESERVE' position may cause the fuel tank to completely drain out, incase any malfunctioning of carburettor float system.

Similarly, if the fuel cock is positioned between 'ON' and 'OFF' may drain off entire fuel while riding the vehicle.



#### KICKSTARTER LEVER

The kickstarter lever is located on the right side of the vehicle.

To start the vehicle, keep the ignition in 'ON' condition and transmission in neutral. Keep your foot on the lever extension and kick from top and stroke to bottom with rapid motion





Please note that the engine can be started with the kickstarter lever only when the vehicle is in neutral.

#### **GEAR SHIFT LEVER**

TVS StaR City+ has a heel and toe gear shift lever. To shift the gear from neutral to higher, press the rear end of gear shift lever by heel once for each gear after applying the clutch.

Similarly, to down shift to lower gears, press the front end of the lever by toe once for each gear after applying the clutch.





#### REAR BRAKE PEDAL



Rear brake pedal is located on the right side of the vehicle. Press the rear brake pedal with your right foot to apply the rear brake. The brake lamp glows on application of brake.



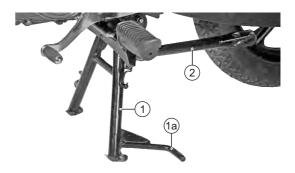
#### Warning

Brakes are items of personal safety and should always be maintained in proper condition.

#### CENTRE STAND AND SIDE STAND

TVS StaR City+ is equipped with a centre (1) and side stand (2). To place the vehicle on the centre stand, hold the handle bar left grip with left hand and pillion handle with right hand.

Place your foot firmly on the centre stand extension (1a) and press with adequate effort. Ensure both the legs of centre stand are touching the ground before placing the vehicle on the stand. Side stand can be operated by sitting on the vehicle with your left foot by pushing it away from the vehicle till it stops.







#### Warning

Always release the side stand to its full up position before moving the vehicle.



#### Caution

Never sit on the vehicle when it is supported by side stand. Always park the vehicle on a flat, firm surface.

#### **SEATLOCK**



Seat lock is provided at the tail end of the vehicle for the removal of seat assembly and there by accessing the tool kit and first aid kit. Follow the procedure given below for removing and re-fixing the seat assembly.

#### For removing:

- 1. Insert the control key into the seat lock and rotate it in clockwise direction.
- 2. Take out the seat assembly by lifting it from the rear end and gently tapping it on the front end.

#### For reassembling:

- Assemble the seat assembly in the frame and push it forward.
- 2. Gently press at the rear end until you hear a click sound and take out the control key.



#### Note

Ensure the proper seating of seat assembly in the frame after reassembling.

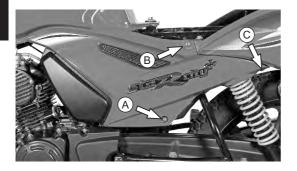


#### COVER FRAME L

To access the battery assembly and the fuse, the cover frame L need to be removed. Follow the procedure given below for removing and re-fixing cover frame:

#### For removing:

- 1. Open the seat as explained earlier. Remove the mounting screws (A, B & C) of cover frame.
- 2. Gently dislocate the cover frame lug from the fuel tank and take out the cover.



#### For reassembling:

- 1. Locate the cover frame lug into the fuel tank hole and gently press the cover.
- 2. Assemble the screws (three) and tighten them while ensuring the proper seating of cover.



#### Note

While re-fixing the cover frame, ensure the availability of rubber cushion in the fuel tank hole.

#### TOOL KIT AND FIRST AID KIT



To assist you in performing certain aspects of periodic maintenance and emergency repairs, a tool kit is supplied along with the vehicle. A first aid kit is also available along with the tool kit and located below the seat assembly. Remove the seat as explained earlier (page no. 21).

Tool kit consists one number each of the following:

- 1. 14x17 mm open end spanner
- 2. 10x12 mm open end spanner
- 3. Combination screw driver bit
- 4. Screw driver handle
- 5. Tool bag

## Note

It is recommended to use the tool kit in case of any emergency only. It is always advisable to take your vehicle to TVS Motor Company Authorised Main Dealer / Authorised Dealer.



#### 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. 36)
Fuel	Enough fuel for the planned distance of running
Tyres	Correct pressure (page no. 41) Adequate tread depth / No cracks or cuts
Battery	Proper working of speedometer lamp, tail lamp, license plate lamp, brake lamp, turn signal lamps, neutral lamp and electric starter*.  Electrolyte level (page no. 33)
Speedometer	Performing self check
Lighting	Proper working of head lamp high beam / low beam and high beam indicator.
Steering	Smooth movement / No play or looseness
Throttle	Correct free play of cable / Smooth operation
Clutch	Correct free play of cable (page no. 37) Smooth and progressive action
Brakes	Proper working of brake. Correct lever and pedal play (page no.39)
Wheels	Free rotation

<sup>\*</sup> Applicable for electric start model only



#### STARTING THE ENGINE

Turn the fuel cock lever to the 'ON' or 'RESERVE' position based on the availability of fuel in the tank. Insert the control key into the ignition cum steering lock and turn it to the 'ON' position.

Keep the transmission in neutral and press the electric starter switch\* to start the engine electrically or kick start.

#### When the engine is cold

- Pull the choke lever and start the engine using kick starter with no opening / very less opening of throttle.
- Once the engine is started and running stable, release the choke lever and ride the vehicle (when the engine is worm / hot do not use choke).

## Caution

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

\* Applicable for electric start model only

## **Marning**

Do not run the engine indoors where little or no ventilation available. Exhaust gases are extremely poisonous.

#### SETTING THE VEHICLE IN MOTION

- 1. Depress the clutch lever and engage the first gear by pressing rear end of gear shift lever.
- 2. Open the throttle slowly and simultaneously release the clutch lever gently and gradually. The vehicle starts moving forward.
- 3. As the vehicle picks up speed, shift to the next higher gear by closing the throttle, applying the clutch and pressing the gear shift lever rear end once again.
- Release the clutch lever and open the throttle smoothly. Select the required gear in similar manner.

#### Using the transmission

The transmission is provided to keep the engine to run smoothly in its normal operating speed range. The gear ratios have been carefully chosen to meet the characteristics of the engine.

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#### RIDING YOUR TVS StaR City+



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 the brakes simultaneously.
- 2. Down shift the gears as the road speed decreases. Bring the engine to neutral position just before the vehicle stops.

## **Marning**

Reduce speed to a safe limit before turning / cornering. Do not apply brake while turning / cornering. Do not disengage clutch before braking.

- 3. Turn the ignition 'OFF'.
- 4. Park the vehicle on a firm, flat surface.
- 5. Lock the steering and turn 'OFF' the fuel cock.

#### **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. Petrol mixed with ethanol will have impact on engine components. Contact your TVS Motor Company Authorised Main Dealer / Authorised Dealer for usage.



#### Caution

Never mix oil in petrol in the fuel tank. Always fill fuel from the reputed and reliable fuel stations.



#### 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. 30 and 31).

Regular maintenance checks will save fuel and ensure 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. Clean and adjust the spark plug only if necessary. **Replace the spark plug every 12000 kms (1 year)**. **Always use recommended spark plug only**.

#### Air cleaner element

A dirty air cleaner element restricts airflow and increases fuel consumption. **Replace the element every 12000 kms.** 

Since paper filter is used in your motorcycle it is not recommended to clean the filter. Replace the filter incase of any abnormalities.

#### Clutch

Increase in engine rpm during acceleration, without increase in road speed indicates the clutch slip. A slipping clutch will cause high fuel consumption and engine over heat.

If the condition persists even after adjusting the clutch lever play, immediately have the clutch checked by TVS Motor Company Authorised Main Dealer or Authorised Dealer.

#### Engine cum transmission oil

Dirty or less engine cum transmission oil increases the friction between various parts of engine and reduces the engine life, thereby increases the fuel consumption.

Regularly inspect the engine cum transmission oil for correct level and top-up if necessary. Get it replaced at regular intervals as per the maintenance schedule.



#### Caution

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



#### Fuel leak

Check and arrest fuel leak if any, from tank, carburettor and fuel lines. Loss of fuel due to leak may drain the fuel tank completely.

#### Evaporation

Vehicle parked in the hot sun leads to wastage of fuel through evaporation. Also, lower fuel levels in the tank will have increased evaporation and condensation of moisture inside, which may result in rusting of the tank.

Ensure to close fuel tank cap after every filling. If the fuel tank cap kept open for long time it leads to safety and fuel loss.

#### Tyres

Low tyre pressure has adverse effect on the vehicle. The **drag on the vehicle** increases resulting decreased fuel economy. Further more, handling may be adversely affected.

Inspect the tyre pressure regularly (weekly) and inflate it to the recommended pressure (refer page no. 41). Never use tyres which are worn beyond the permissible limit.

#### Chain slackness

Check and ensure the drive chain slackness. Excess slackness leads to higher fuel consumption (refer page no. 42).

#### Wheel freeness

Inspect and ensure the wheel freeness by rotating the wheels at least once in a week to avoid wastage of fuel.

#### 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 and frequent braking will reduce the fuel economy.** 



#### MAINTENANCE SCHEDULE

The maintenance schedule indicates the intervals between periodic services. At the end of each interval, be sure to inspect, check, replace, adjust, lubricate and service as instructed. If the maintenance is not done periodically, it will result in rapid wear and severe damage to the vehicle. If the vehicle is used under high stress conditions such as continuous full throttle operation or if used / operated in dusty climate, certain jobs should be performed more often to ensure reliability of the vehicle. Cylinder head, steering components, suspension, chain and wheel components etc., are key items and require very special and careful servicing. TVS Motor Company Limited strongly recommends that the jobs as per the maintenance schedule be performed by your TVS Motor Company Authorised Main Dealer / Authorised Dealer.

Periodic inspections may reveal one or more parts that may need replacement. Whenever replacing parts on TVS StaR City+, it is recommended that you use only the **TVS Motor Company Genuine** parts.



#### Caution

Proper running-in and maintenance are mandatory for making certain that your vehicle is reliable and gives optimum performance at all times. Be sure that the periodic maintenance is performed thoroughly in accordance with the instructions given in this owner's manual.

In more dusty areas, the air filter element may required early replacement than the mentioned kilometers to avoid costly damages to the engine.



#### PERIODIC MAINTENANCE SCHEDULE

Item			In free serv	rice	After fre	e service		
Service km Period from the date of sale	1st 500-750 1 month	2nd 2500-3000 3 months			5th 11500-12000 12 months	Every 3000 km	Every 6000 km	Remarks
Engine cum transmission oil	R	1&T	R	1&T	R	1&T	R	
Oil filter (strainer)	С	-	С	-	С	-	С	
Centrifugal filter	-	-	С	-	С	-	С	
Spark plug	C & A	-	-	-	R	-	-	Replace every 12000 km
Air cleaner element	-	-	-	-	R	-	-	Replace every 12000 km
SAI filter	_	-	-	-	R	-	-	Replace every 12000 km
PCV filter element	_	_	-	-	R	-	-	Replace every 12000 km
Carburettor assembly	C & A	-	-	-	C & A	-	-	C & A every 12000 km
Tappet clearance	1 & A	-	1 & A	-	1 & A	-	1 & A	Adjust if necessary
Fuel cock sediment bowl	С	С	С	С	С	С	-	
Hose fuel	- 1	1	1	I	I	I	-	Replace every three years
All control cables <sup>1</sup>	I, A & L	I, A & L	I, A & L	I, A & L	I, A & L	I, A & L	-	
Throttle grip	-	-	L	-	L	-	L	Lubricate using grease
Choke operation	I	1	I	- 1	I	I	-	
Steering smooth operation / play	1 & A	1 & A	1 & A	1 & A	C, L & A	1 & A	-	C & L with fresh Bechem premium grade 3 grease every 12000 km
Front fork oil	-	-	-	-	_	-	_	Replace every 18000 km
Front and rear suspension	Ī	I	I	Ī		Ī	-	Inspect for proper functioning
All fasteners	I & TI	I & TI	I & TI	I & TI	I & TI	1 & TI	-	

#### **MAINTENANCE**



Item		Ir	n free servi	е	r free ser	vice		
Service km Period from the date of sale	1st 500-750 1 month			4th 8500-9000 9 months	5th 11500-12000 12 months	Every 3000 km	Every 6000 km	Remarks
Drive chain	C, L & A	C, L & A	C, L & A	C, L & A	C, L & A	C, L & A	_	Adjust if necessary
All bulbs, horn and switches	- 1	1	1		I	1	-	Inspect for proper functioning
Head lamp beam	1 & A	1 & A	1 & A	1 & A	1 & A	1 & A	-	
Battery electrolyte level	1&T	1 & T	1&T	1 & T	1&T	1 & T	-	
Specific gravity and voltage <sup>2</sup>	1	I	I	I	I	I	-	
Brake effectiveness / play <sup>3</sup>	1 & A	1 & A	1 & A	1 & A	1 & A	1 & A	-	
Brake cams	-	-	C & L	_	C&L	-	C & L	Lubricate using grease
Wheel freeness	- 1	1	1		I		-	
Tyre pressure at cold condition	1 & S	1 & S	1 & S	1 & S	1 & S	1 & S	-	
Engine idling RPM	1 & S	1 & S	1 & S	1 & S	1 & S	1 & S	-	
Idling CO%4	1 & S	-	-	-	-	-	-	
Centre / side stand pivot	L	L	L	L	L	L	-	Lubricate using TRU4 oil
Kick starter pedal pivot	L	L	L	L	L	L	-	Lubricate using TRU4 oil
Swing arm bearings	-	_	_	-	-	-	-	Lubricate using grease every two years

R - Replace; I - Inspect; T - Top up; C - Clean; A - Adjust; L - Lubricate; TI - Tighten; S - Set

<sup>&</sup>lt;sup>1</sup> Inspect for proper operation and adjust play. Lubricate ends using grease.

<sup>&</sup>lt;sup>2</sup> Recharge if necessary

<sup>&</sup>lt;sup>3</sup> Lubricate brake pedal shaft every service using TRU4 oil

<sup>&</sup>lt;sup>4</sup> Idling CO% should be set with the help of exhaust gas analyser and tachometer only



#### **RECOMMENDED LUBRICANTS**

Application	Qty	Manufacturer	Brand		
Engine cum transmission oil	1000 ml	TVS Motor Company	TVS TRU4 PREMIUM oil (SAE 10W30 SL-JASO MA2)		
Front fork oil	155 ± 2 ml / leg (GIL make) 140 ± 2.5 ml / leg (TOP make)	IOC / Castrol	Teleshockab oil		
Grease	-	Bharath petroleum IOC Bechem	MP Grease no. 3 Servo Gem no. 3 Bechem premium grade 3		
Chain lubricant	-	TVS Motor Company	TRU SPRAY		
Fuel additives	As recommended		IFTEX		



# SELF-MAINTENANCE PROCEDURES BATTERY

Battery is located below the cover frame L. The electrolyte level of the battery must be maintained to avoid damages to the battery. To check the electrolyte level, follow the procedure:

- 1. Place the vehicle on centre stand on a flat surface and open the cover frame L as explained in page no. 22.
- 2. Inspect the battery electrolyte level. It should be between the upper and lower level.



- 3. If the electrolyte level is below the lower level, add only distilled water upto the upper level by removing the filler caps.
- 4. Reinstall the filler caps and clean the battery thoroughly, apply petroleum jelly to the battery terminals to protect it from corrosion.

Incase of any abnormality or for removal of battery from the vehicle, contact TVS Motor Company Authorised Main Dealer or Authorised Dealer.



# Caution

Once the battery is charged initially, never add diluted sulphuric acid. Use only distilled water for topping up. Never add tap water.

Never check the battery charge by shorting terminals. Always connect the positive terminal first and then negative to avoid sparking.

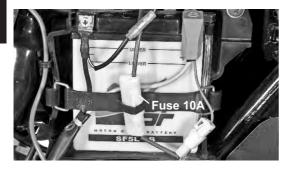
Do not obstruct, bend or change the routing of battery air vent tube. Make sure that the vent tube is firmly attached to the battery and the other end is open and clear.

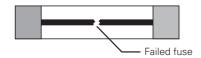


# **FUSE REPLACEMENT**

Non-working of electrical systems may be due to safety fuse failure. Short circuit or overload in the electrical system are the main causes for fuse failure. Follow the procedure given below for inspecting and replacing the fuse.

- Open the cover frame L as explained earlier (refer page no. 22).
- 2. The fuse case fitted on the battery band contains a 10 A fuse.
- 3. Pull out the fuse case from battery band.
- 4. Open the fuse case and slide out blown fuse.





- 5. Replace the fuse with a new (extra fuse is provided inside the fuse case itself).
- 6. Close the fuse case and re-fix it into the battery band.
- Turn 'ON' the ignition switch and check for proper functioning of electrical systems. Incase the fuse fails again, consult the nearest TVS Motor Company Authorised Main Dealer / Authorised Dealer.

# •

# Caution

Do not use vehicle by **shorting the wires without a fuse.** This may result in overheating of electrical/wiring and may result in fire.

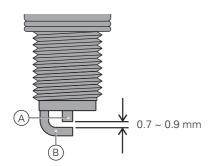
Do not use fuse of higher amperage than specified for the safety of electrical system.



# SPARK PLUG

- 1. Clean the dust and mud around the spark plug mounting to avoid falling inside the cylinder.
- 2. Pullout the suppressor cap from spark plug. Using spark plug spanner, remove the spark plug.

A spark plug with heavy carbon deposits will not produce strong sparks. Hence, only if necessary, remove the carbon deposits from the spark plug with a small wire brush or spark plug cleaning tool.



Inspect the spark plug electrodes (A) and (B) for any corrosion. If found any replace the spark plug with new.

Inspect the spark plug gap with a wire gauge / feeler gauge. Readjust the spark plug gap to **0.7 ~ 0.9 mm** if required.

After cleaning and adjusting the gap, reinstall the spark plug and tighten by hand to avoid cross threading. Finally tighten using the spanner. Do not over tight or cross thread the spark plug.



# Caution

Always use only recommended make and type of spark plug. **Replace spark plug every 12000 km.** 

Cover the spark plug hole with cloth when the plug is removed to prevent dust/water entry.

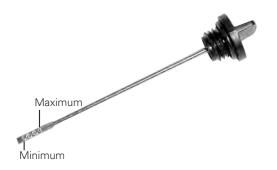
It is advisable to tight the new spark plug by hand till the end and then loose and again re-tight the spark plug by 1/8 of rotation after sealing by using only the hand tool.



# ENGINE CUM TRANSMISSION OIL

Check the engine cum transmission oil level periodically.

- Place the vehicle on centre stand on a flat surface. Wipe-off the surroundings of gauge oil level.
- 2. Remove the gauge oil level and wipe it clean.
- 3. Fix the gauge back to its mounting hole. Do not thread in.
- 4. Take out the gauge and check the oil level.



- 5. The oil level should be between minimum and maximum level marks of the gauge as shown in the figure.
- If the oil level is less than the minimum level, add TVS TRU4 PREMIUM oil (SAE 10W30 SL-JASO MA2) upto the maximum level mark.
- 7. Wipe out the oil traces with a clean cloth to prevent dust accumulation and assemble back the gauge oil level.

# •

# Caution

If the vehicle is driven with less engine cum transmission oil, the engine components will be severely damaged. Check the oil level as per the schedule to avoid costly damage.

Do not fill excess oil may cause oil leak. Always use 'TVS TRU4 PREMIUM oil (SAE 10W30 SL-JASO MA2) only.

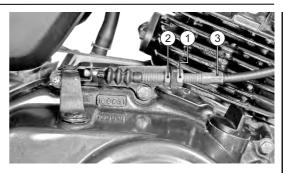
## **CLUTCH ADJUSTMENT**

Clutch lever free play is one of the most important adjustment which you may need to check in-between services for better life of the clutch plates. The free play of the clutch lever should be 8 ~ 15 mm as measured at the clutch lever end before the clutch begins to disengage.

Adjust the clutch lever free play periodically by means of clutch cable adjuster at arm clutch release if the free play is not within the specified limit.

1. Ensure that the engine is cold.





- 2. Loosen the lock nut (2) while holding the clutch cable adjuster (3). Adjust the clutch cable adjusting nut (1) 'in' or 'out' to give sufficient play in the clutch lever.
- 3. After adjusting the play, hold the adjuster nut in the same position, tighten the lock nut.



# Caution

Too much or too less clutch lever free play will damage the clutch plates, thereby affecting the performance of the vehicle. Adjust the clutch lever free play only when the engine is cold.

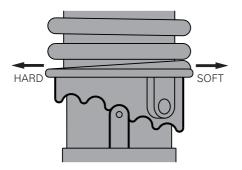


# REAR SHOCK ABSORBERS

TVS StaR City+ is provided with 5 step adjustable rear shock absorbers to meet different road and load. There are 5 notches for adjusting spring load.

If the spring is adjusted to the minimum notch, then the shock absorber will be softer which is good for light loads. If the spring is adjusted to maximum notch, then it will be stiffer which is good for heavy loads.

Adjust the spring pre-load by shifting the adjuster to the required notch according to the different load conditions.



The more you compress the spring, the suspension becomes more stiff.





# Caution

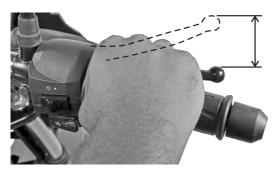
Keep both left and right shock absorbers spring adjusters in the same position.



## **BRAKES**

## Front brake

- 1. Measure the free play of the front brake lever at the lever end as shown in the figure.
- 2. The free play of the brake lever before the engagement of brake should be between  $15 \sim 20$  mm.



# **Marning**

Brakes are items of personal safety and should always be maintained in proper condition.



- 3. If the measured free play is more than the limit, adjust the nut provided at the front wheel end to obtain the correct play.
- 4. Turn the adjuster nut in clockwise direction for reducing free play or in anti-clockwise direction for increasing the free play.

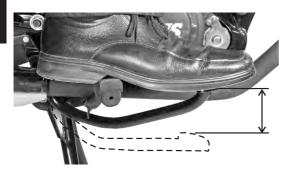
# **M** Warning

Check both the brake play periodically. However the brake play needs to be adjusted more frequently depending upon the usage.



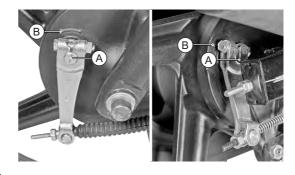
## Rear brake

- 1. Measure the free play of the rear brake pedal at the pedal end as shown in the figure.
- 2. The free play of the brake pedal before the engagement of brake should be between  $15 \sim 20 \text{ mm}$ .
- 3. If the measured free play is more than the limit, adjust the nut provided at the rear wheel end to obtain the correct play.
- 4. Turn the adjuster nut clockwise to reduce the free play or turn it in anti-clockwise direction to increase the free play.





Brake shoe wear indicator





When the brake is applied, wear limit index mark (A) on both front and rear brake cam should be within the range of wear limit indicator (B) on both the front and rear brake panel assemblies. Incase the index mark (A) is going beyond the wear limit (B), index the lever to next slot with the help of Dealer to extend shoe life.



# Caution

Replace the brake shoes as a set, if the wear limit indicator shows beyond the wear limit even after indexing the lever.

# **TYRES**

# Tyre pressure:

Check the tyre pressure atleast once in a week if not more frequently. Insufficient air pressure in the tyres not only hasten tyre wear, but also seriously affects the stability of the vehicle.

Under inflated tyres make smooth cornering difficult and over inflated tyres decreases the tyre contact with the ground which can lead to skidding and loss of control. **Lower tyre pressure consumes more fuel.** 

Be sure that the tyre pressure is within the specified limit at all times.

	Solo	Pillion
Front	1.75 kg/cm² (25 PSI)	1.75 kg/cm² (25 PSI)
Rear	2.25 kg/cm <sup>2</sup> (32 PSI)	2.53 kg/cm <sup>2</sup> (36 PSI)

# Tyre tread condition

Operating the vehicle with excessively worn tyres will decrease riding stability and can lead to loss of control. It is recommended to replace the tyre when the tyre wears off to the tyre wear indicator level (indicated by TWI (A) on the tyre).





# Tyre rotation direction

While reassembling the tyres, after removing from the wheel rim, ensure that the arrow mark (A) on the tyre facing the direction of wheel rotation.



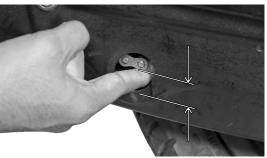
# Warning

The tyre inflation pressure in cold condition and the tyre tread condition are extremely important for the performance and safety of the rider. Check the tyres frequently for inflation pressure as well as the wear pattern on it.

Use of a tyre other than the standard may cause instability.

# **DRIVE CHAIN**

Proper lubrication and adjustment of drive chain gives long service life of chain. Poor maintenance of chain causes premature wear or damage to the drive chain and sprockets. Poor chain maintenance also affects mileage of the vehicle. The drive chain must be cleaned, checked, lubricated and adjusted at specified intervals mentioned in the maintenance schedule. If the vehicle is used under severe conditions and more dusty area, the drive chain must be attended more frequently. Check, clean, lubricate and adjust the drive chain in the following manner:



- Place the vehicle on centre stand with the transmission in neutral
- 2. Remove the dust seal chain cover.
- 3. Inspect the drive chain slackness (vertical movement) using the finger as shown in the figure.
- 4. The slackness of the drive chain should not exceed the limit (20 ~ 30 mm).
- If the slackness is found more, contact TVS Motor Company Authorised Main Dealer / Authorised Dealer for adjustment.
- If the slackness found is within the limit, clean the chain with dry cloth and lubricate using TRU SPRAY/TRU4 oil.
- 7. Refit the dust seal chain cover.

# FRONT WHEEL REMOVAL AND REASSEMBLY

- 1. Remove the axle nut (1) along with a washer.
- 2. Pull out the axle (2) along with a washer.
- 3. Take out a spacer from right side of the wheel.
- 4. Place a support below the frame to prevent the vehicle from falling and lift the vehicle up.



TVS

- Dislocate the wheel assembly along with brake panel from the front fork. Separate the brake panel from the wheel and take out the wheel.
- 6. Reverse the procedure for reassembling. While reassembling ensure to locate the lug on fork leg L to the slot in the brake panel.

# A

# Warning

Always make sure that whenever the wheel is removed, axle nut is properly re-tightened to the specified torque.



# REAR WHEEL REMOVAL AND REASSEMBLY

- 1. Remove the rear brake adjuster nut (1) and disconnect the brake rod.
- 2. Remove the split pin (2) and the nut (3) from torque link mounting with the brake panel and disconnect the torque link.







# Caution

Once the split pins are removed, replace them with new ones.

- 3. Remove the axle nut (4).
- 4. Pull out the axle (5) and take out the spacer bush from the rear wheel assembly.
- 5. Tilt the vehicle to the left and take out the wheel along with the brake panel. Separate the brake panel from the wheel.
- 6. For locating and reassembling the rear wheel easily, engage the gear. This will arrest the free movement of the drum sprocket.
- 7. Reverse the procedure for reassembly.

# STORAGE PROCEDURES

For storage of your motorcycle for longer period of over a month and above, we recommend to carry out the following steps:

 Clean the vehicle thoroughly. Park the vehicle on centre stand.

# A

# Warning

The exhaust system becomes hot after a run. Park the vehicle in a place where pedestrians or children are not likely to touch the vehicle.

MAINTENANCE

- 2. Warm up the engine and drain engine cum transmission oil. Store the oil, if new, in a dust free container.
- 3. Empty the fuel tank. Turn the fuel cock lever to 'OFF' position.
- 4. Drain the petrol from carburettor.
- 5. Remove the spark plug and feed in several drops of engine cum transmission oil through spark plug hole. Crank the engine few times and reinstall the spark plug.
- 6. Remove the battery, store it away from direct sunlight and freezing temperatures.
- 7. Place a suitable support at the bottom of the frame so that both the tyres are off the ground. This will ensure better tyre life.

# Caution

Do not park the vehicle on a slope or soft ground or else it may fall down.

During storage, the battery must be recharged on a constant current battery charger at recommended amperage atleast once in a month.

 Cover up the vehicle completely with a clean tarpaulin or any other suitable cover. Store the vehicle inside a garage or similar area to avoid damage due to dust and rain. Make sure that the storage area is well ventilated and free from any source of flame or spark.

# TAKING THE VEHICLE OUT OF STORAGEFOR REGULARUSE

- 1. Take the vehicle out of the garage and clean it thoroughly.
- Remount the battery after bench charging if required.
- 3. Fill the engine cum transmission oil [TVS TRU4 PREMIUM oil (SAE 10W30 SL-JASO MA2)] and check the oil level using gauge oil level.
- 4. Lubricate the parts as instructed in the periodic maintenance schedule.

# Caution

Avoid using alkaline solution like detergent soaps for washing the vehicle. This may damage head lamp and other lamp assemblies.



- 5. Fill up fresh petrol in the fuel tank.
- Check and inflate the tyres to the specified tyre pressure.
- 7. Check and correct the points mentioned in page no. 24.
- 8. Turn the ignition switch to 'ON' position. Start the engine with choke 'ON' for a few minutes and ride out.

# RECOMMENDED TIPS WHEN TAKING A LONG TRIP OF MORE THAN 500 KM:

- A) Please keep the following items for use in case of emergency:
  - Tool kit complete.
  - 2. Recommended spark plug one number.
  - 3. Head lamp, tail lamp and turn signal lamp bulb one each.
  - 4. Throttle, clutch and front brake cable one each.



Long journey are to be taken only after the running-in period of 1000 km.

- 5. Drive chain lock one number.
- 6. First aid kit.
- B) Precautions to be taken for the journey:
  - Ensure engine cum transmission oil is up to the level
  - 2. Adequate fuel in fuel tank.
- C) Check your motorcycle for the following:
  - 1. Tightness of all bolts and nuts with correct torque value.
  - 2. Fitness of tyres / tyre pressure / tread depth.
  - 3. All bulbs, indicators and horn functioning.
  - 4. Smooth functioning of all cables and their free play.
  - 5. Smoothness of steering operation.
  - 6. Drive chain and sprocket condition. Chain adjustment.
  - 7. Front / rear brake functioning and rear brake lamp switch adjustment.
  - 8. Front fork for any abnormality.
  - 9. Fuel cock bowl filter cleanliness.
  - 10. Spark plug gap and condition of spark plug.



- 11. Air filter element cleanliness.
- 12. Correct idling speed.
- 13. Lubrication of all items mentioned in the periodic maintenance schedule.
- 14. Any other job as necessary.
- Have your vehicle checked at any TVS Motor Company Authorised Main Dealer or Authorised Dealer.



# TVS Motor Company Limited ('the Company') give this warranty with respect to the TVS StaR City+motorcycle manufactured by the Company.

The Company has taken every care to maintain quality in the manufacture of the TVS StaR City+ motorcycle, subject to other terms of warranty:

During 24 months from the date of purchase or during the first 30,000 km of run for the vehicle in the hands of original retail purchaser, whichever is earlier, all parts of the vehicle which prove to the satisfaction of the Company to have a manufacturing defect will be repaired or replaced free of cost.

The Company's obligation under this warranty is limited to repairing or replacing, free of cost, those parts of the vehicle which upon examination by the Company may prove to the Company's satisfaction to have a manufacturing defect, and in such cases the Company's decision either to repair or replace the affected parts will be final. In the event of replacement of parts, the Company also reserves the right to use parts of the same brand as the affected parts or any other brand which is used by the Company in the course of manufacture. All parts replaced under this warranty will become the property of the Company and must be returned to the Company. Limitations of Warranty:

- 1. This warranty shall not apply to:
  - Normal maintenance operations such as engine tune-up, decarbonising, fuel system cleaning, oil
    changes, head light focusing, fastener retightening, adjustments of carburettor, ignition timing, clutch and
    brakes as well as other normal adjustments.
  - Insignificant factors which do not affect the function of the vehicle, including without limitation, sound, vibration and fluid seep.
  - Replacement of normal service items or wear and tear items, including without limitation, bulbs, electrical
    wiring, filters, spark plugs, chain, sprockets, clutch and brake linings, fasteners, shims, washers, oil seals,
    gaskets, rubber, plastic and rexine components (including hoses / pipes etc..) disc / pads and spokes etc..



- Proprietary parts such as tyres, tubes and battery etc,.
- Any natural wear and tear, including without limitation, aging.
- Parts suffering damage or resultant damage by accident, misuse, negligent treatment, use of bad quality lubricants or impure fuel or by omission to follow the guidance and instructions contained in this owner's manual.
- Parts which are used in conjunction with parts not made or recommended by the Company.
- Parts of the vehicle which have been tampered with, altered, repaired or replaced by persons not authorised by the Company and which in the sole judgement of the Company affect the performance of the vehicle.
- Parts of the vehicle getting affected due to atmospheric effect/environmental factors.
- Vehicles, on which engine number or chassis number is deleted, defaced or altered.

- Vehicles on which any warranty (periodic) service is not availed when it falls due.
- Vehicles sold or transferred by original retail purchaser.
- Vehicles used for racing or any competition or used otherwise than for ordinary personal transportation. Vehicles attached with side cars etc..
- Vehicles which have been taken out of India
- Warranty claims on proprietary items such as tyres, tubes and battery etc,. should be preferred by the user directly on the respective manufacturer, as per their warranty terms and the Company shall not be liable in any manner in respect to the same.

# A

# Warning

Modifications to this vehicle not approved by the TVS Motor Company may cause loss of performance and render it unsafe for use and disqualifies for warranty coverage also.



- 3. Parts repaired or replaced under this warranty are warranted only throughout the remainder of the original warranty period.
- The Company is not liable for any delay in servicing due to reasons beyond the control of the Company or any of its Authorised Main Dealers/Authorised Dealers.
- In any event, the Company is not liable for indirect, remote, incidental or consequential damages.
- The Company may make any modification or improvement to vehicles in future production at any time without prior notice and without any obligation to install the same on vehicles previously despatched for sale.
- 7. Any claim under this warranty will lie only when the customer:
  - (I) takes his vehicle to an Authorised Main Dealer / Authorised Dealer of the Company and reports the problem he / she felt in the vehicle to enable the Authorised Main Dealer / Authorised Dealer to inspect the same and assess the cause for the reported problems.

- (ii) produces to such Authorised Main Dealer / Authorised Dealer the owner's manual for the concerned vehicle for verification of relevant details
- 8. This is the only warranty given by the Company for the TVS StaR City+ motorcycle. No employee, Dealer or other person is authorised to extend or enlarge this warranty.



Customer's Name and address
Frame number
Engine number
Key number
Service coupon no
Colour
Date of sale
Km
Registration number
Selling dealer's code, name, address and
phone number:

## SERVICE INFORMATION

There are eleven services for TVS StaR City+ during warranty period. Of these, the first five are free services for which labour charges are free. In addition to these five free services, we have a scheme of six pay services. Coupons for the free services are attached with this owner's manual. For keeping maintenance track of your vehicle, a pay service record sheet is also attached. Please have the record sheet filled by the Dealer who is carrying out the maintenance service.

Before you avail your first free service, please enter the particulars of your vehicle on the left side of this page. This will be useful for any reference.

For availing any of the eleven warranty services, please take your vehicle and your owner's manual to any of our Authorised Main Dealer or any of our Authorised Dealer. After effecting the service the Authorised Main Dealer or the Authorised Dealer will take out the detachable portion of the relevant service coupon from your owner's manual for their records and will obtain your acknowledgment on the same for having the service done to your satisfaction. For your record, the Authorised Main Dealer or the Authorised Dealer will affix their stamp on the stub of the relevant service coupon or the last column of the record sheet whenever they carry out any service.



Periodic maintenance always helps good performance of an automobile and our services are planned to keep your TVS StaR City+ performing good. **Please note that carrying out the services for your vehicle at scheduled intervals is necessary for availing of warranty.** And please also remember that, after the services are over, periodic servicing of your vehicle at appropriate intervals, depending upon its extent of use, will keep your vehicle at its best level of performance.

In case you need any clarification or assistance, please feel free to write to us mentioning the frame number, engine number and the date of purchase of your vehicle also the name and place of the Authorised Main Dealer / Authorised Dealer from whom you bought the vehicle and getting it serviced.

Service Department
TVS MOTOR COMPANY LIMITED
P.O.Box No. 4, Harita, Hosur - 635 109,
TAMILNADU, INDIA.
Toll free no.: - 18004252077



# PART (B) DELIVERY CERTIFICATE

(To be given by the customer to TVS Motor Company authorised dealer at the time of taking possession of new vehicle)

Certified that I have taken possession of the TVS StaR bearing engine no. and frame no. as mentioned along from M/s	g side
today in good condition.	Frame No.:
I have understood operations, controls and ge	
maintenance instructions including rear wheel removengine oil specifications. The terms of warranty have	I Dealer Stattly.
explained to me and I agree to abide by the same.	Date of delivery :
I have also received the following items along wit TVS StaR City+ without extra charge.	, colour.
☐ Tool kit and first aid kit	Mode of purchase by customer
☐ Mirror (2 nos)	☐ Show room - cash sales
☐ Owners manual	☐ Show room - hire purchase sales
☐ Set of two keys	☐ Institutional sales  Dealer to get the Customer information coupon filled by the
The location of the tool kit in the vehicle has been sho me	
Dealer's signature : Custo	omer signature : Date :



# भाग (ब) डिलिवरी प्रमाण पत्र

(उपभोक्ता के द्वारा TVS StaR City+ अधिग्रहण करने के समय टी.वी.एस डीलर को प्रेषित किया जाये)

प्रमाणित कि मैने TVS StaR City+ का अधिग्रहण उचित अवस्था मे मेसर्स	डीलर के द्वारा भरा जाये	
	फ्रेमनं०:	
से आज कर लिया है, जिसका फ्रे म नम्बर और इंजिन नम्बर साथ मे संलग्न है।	इंजन नं० :	
मैने इसके सारे ऑपरेशन, कंटो-ल और सामान्य-रख-रखाव के अंतर्गत पिछला पहिया निकालना, इंजन आयल जॉचना इत्यादि का ज्ञान प्राप्त कर लिया है। वॉरंटी के सभी नियम मुझेअवगत है, और मैं उनका पालन करने के लिये सहमत हूँ।	कोड : डीलर सील : डिलिवरी की तिथि : रंग :	
TVS StaR City+ के साथ बिना किसी अतिरिक्त कीमत के निम्नलिखित वस्तुएँ प्राप्त हुईं.		
	वाहन खरीदने का मुख्य प्रारूप.  शोरूम - नगद  शोरूम - ऋण सुविधा से।  इनस्टिट - युशनल सेल्स  डीलर इस कूपन को उपभोकता से भरवा कर टी. वी. एस. सर्विस इंजिनियर को दें।	
डीलर हस्ताक्षर : उपभोक्ता हस्ताक्षर :	तिथि :	





# Extended Assurance. Guaranteed Smiles.

- ★ Peace of mind for 5 years
- Trouble free ownership experience
- ★ Valid at all India TVSM Authorized network
- **★** TVSM Genuine Parts Guaranteed
- ★ Higher Resale Value of Vehicle.
- ★ Optional feature, can be availed at nominal charges.

Contact your nearest Dealership for details\*





Drive In. Drive Out.



Say bye-bye to waiting time for servicing your bike.

Get your vehicle serviced in 1 hour at no additional cost. Contact your nearest Dealership for details.\*





# Busy Life? Easy Servicing!

Now, service your bike anywhere, anytime.

- ★ Service the vehicle at your door step.
- ★ Available for regular maintenance or breakdown service only.
- ★ Offered at nominal convenience charges.

Contact your nearest Dealership for details.\*





# Busy Life? Easy Servicing!

Now, Avail Pickup & Drop of your vehicle for service.

- ★ Vehicle picked up & delivered from/to your office or residence at prefixed appointed time.
- ★ Offered at nominal convenience charges.

Contact your nearest Dealership for details.\*



# FREE SERVICE COUPON

Coupon no.:-
Frame number
Engine number
Registration no
Due on
At km
Serviced on
At km
Servicing Dealer's stamp and signature

<b>st</b>	FREE SERVICE	Coupon No.:-
		Model code :- STRCT+201

"This coupon is valid if used (a) between **500 - 750 km** or (b) **1 month** from the date of purchase, whichever of the two occurs earlier"

This coupon entitles the	Servicing Dealer's nam	ne & address (stamp)
Signature of the customer	Servicing Dealer's signa	ture
Job card number and date		
certify that the jobs mentioned or my satisfaction.	verleaf have been carried o	out on my vehicle to
Servicing Dealer code		
Selling Dealer code	Date of sale	
Engine number		
Frame number		

detailed overleaf at free of labour charges. Cost of oils and materials for this service is

chargeable.

# **TECHNICAL SPECIFICATIONS**



MANUFACTURER : TVS MOTOR COMPANY LIMITED

P.B. No. 4, Harita, Hosur - 635 109, India.

**ENGINE** 

Maximum speed

Type : Single Cylinder, 4 stroke, air cooled spark ignition engine

Cylinder bore : 53.5 mm Stroke : 48.8 mm Piston displacement : 109.7 cc

Compression ratio : 9.2:1

Carburettor : Keihin AV1

Air filter : Paper filter element
Lubrication system : Positive lubrication
Maximum power in PS : 8.4 PS @ 7000 rpm
Maximum torque in Nm : 8.7 Nm @ 5000 rpm

Engine idling rpm :  $1400 \pm 100 \text{ rpm}$  (under warm

condition)

· Around 90 km / hr

Starting system : Electric starter\* / Kick starter

TRANSMISSION

Clutch : Wet-Multi plate type

Primary transmission : Spur gears

Secondary transmission : Chain and sprockets

**GEAR RATIOS** 

 I Gear
 : 3.273

 II Gear
 : 1.765

 III gear
 : 1.238

 IV gear
 : 0.958

 Primary reduction
 : 3.722

 Final reduction
 : 2.857

## **TECHNICAL SPECIFICATIONS**



**CHASSIS** 

Overall length : 1980 mm
Overall width : 750 mm
Overall height : 1080 mm
Ground clearance : 172 mm
Wheel base : 1260 mm

Kerb weight

(with tool kit & 90% of fuel): 109 kg (ES alloy)

: 105 kg (KS alloy)

Pay load : 130 kg

Maximum laden weight : 239 kg (ES alloy)

: 235 kg (KS alloy)

Steering angle : 84° Caster angle : 25.6°

Frame : Single cradle tubular frame
Front suspension : Telescopic oil damped
Rear suspension : 5 step adjustable hydraulic

shocks with swing arm

Trail length : 83 mm

**TYRE** 

Front tyre : 2.75x17-4 Ply rating Rear tyre : 3.00x17-6 Ply rating

Tyre pressure

Front : 1.75 kg/cm² (25 PSI) Rear - Solo : 2.25 kg/cm² (32 PSI) Rear - Pillion : 2.53 kg/cm² (36 PSI)

**BRAKES** 

Front : 130 mm dia (hand operated)
Rear : 110 mm dia (foot operated)

**ELECTRICAL** 

Ignition system : DC - Digital ignition (IDI) : TCI

Spark plug : BOSCH UR4KC Spark plug gap : 0.7 ~ 0.9 mm

Magneto : 12V, 110W (fly wheel magneto)
Battery : 12V, 2.5 Ah (for kick start model)

: 12V, 5 Ah (for electric start model)

Head lamp : 12V, 35/35W x 1 (Halogen)

Tail / brake lamp : 12V, 5/21W x 1
Turn signal lamps : 12V, 10W x 4

## **TECHNICAL SPECIFICATIONS**



#### **ELECTRICAL**

Instrument panel : LCD/ LED indicators

Number plate lamp : 12V, 4W x 1 Horn : 12V, DC Fuse : 10A x 1

#### CAPACITIES

Fuel tank including reserve \* : 10.0 litres (reserve 2 litres)

Fuel : Unleaded Petrol

Engine cum transmission oil: TVS TRU4 PREMIUM oil (SAE

10W30 SL-JASO MA2)

Engine cum transmission oil: 1000 ml

capacity

Front fork oil grade : IOC / Castrol teleshockab oil Front fork oil capacity : 155 ± 2 ml per leg (GIL make)

140 ± 2.5 ml per leg (TOP make)

# Caution

Using the bulb other than the specified rating can result in overloading of the electrical system or premature failure of the bulb.



Specifications are subjected to change without notice.

\* The fuel tank is not a measuring instrument and the capacity of fuel tank may slightly vary from the indicated capacity.



# CONTACT AT OUR AREA OFFICES

#### 1. TVS Motor Company Limited

1st Floor, SPL - Sriram Nivas, No. 38, Venkatakrishna Road, Mandaveli, Chennai - 600 028. Phone: 044-24951652/24950018 Email: AO.Chennai@tvsmotor.com

#### 2. TVS Motor Company Limited

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#### 5. TVS Motor Company Limited

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Email: AO.Bangalore@tvsmotor.com

7. TVS Motor Company Limited

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## 8. TVS Motor Company Limited

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# **11. TVS Motor Company Limited**Plot No. 206. House No. 241.

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Email: AO.Raipur@tvsmotor.com
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#### 12. TVS Motor Company Limited

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Phone: 0771-4260006

Email: AO.Raipur@tvsmotor.com



# CONTACT AT OUR AREA OFFICES

#### 13. TVS Motor Company Limited

211-212, 2nd floor. Chinar Incube Business centre,

Chinar Fortune City.

Near Brindavan Dhaba.

Hoshangabad Road, Bhopal - 462 026.

Phone: 0755-2499406/2499306 Email: AO.Bhopal@tvsmotor.com

#### 14. TVS Motor Company Limited

301, 3rd Floor, Shagun Arcade, Vijay Nagar, Indore - 452 010. Phone: 9826388896

Fmail: AO.Indore@tvsmotor.com

## 15. TVS Motor Company Limited

109. Avana Complex.

Opp: Suvarna Villa Bungalows, 100 ft Thaltej Hebatpur road, Off: S.G. highway, Thaltei, Ahmedahad - 380 054 Phone: 079-65443748

Fmail · AO.Ahmedhabad@tvsmotor.com

#### 16. TVS Motor Company Limited

K-23, 1st floor, Laipat nagar, Part II, New Delhi - 110 024. Phone: 011-29834773/29834640

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#### 21. TVS Motor Company Limited

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#### 22. TVS Motor Company Limited

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#### 23. TVS Motor Company Limited

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#### 24. TVS Motor Company Limited

9/2, Dover lane, Ground floor, Gariahat, Kolkata - 700 029. Phone: 033-24617092/24617096 Email: AO.Kolkata@tvsmotor.com

#### 25. TVS Motor Company Limited 147, Udavan, Ganesh Guri,

Opp. Puniab National Bank, R G B Road, Guwahati - 781 005. Phone: 0361-2202030/2202031 Email: AO.Guwahati@tvsmotor.com



Dear Customer,

It is mandatory under the Motor Vehicles Act to insure all motor vehicles. No motor vehicle can be used in a public place without a valid policy of insurance issued by an authorised insurer. Driving a motor vehicle without any such insurance is an offense under Motor Vehicles Act.

To assist our customers on their insurance requirements such as the prompt issue and renewal of policies as well as expeditious settlement of claims if any, our preferred insurers are:









Website: www.orientalinsurance.nic.in