# TVS KING 225 LC DURAMAX

# TVS KING 225 LC DURAMAX PLUS

(4 Stroke Petrol)

Owner's manual / 4S Petrol Liquid Cool / English / Rev.1 / Aug 2021

## CUSTOMER DATA

NAME : .....

Address : .....

.....

.....

PIN Code :

Tel. No : ..... Mobile No : .....

Booklet No : ..... Date of sale : .....

Vehicle Chassis No : ..... Engine No : .....

# FOREWORD

Dear customer,

We at TVS Motor Company congratulate you for choosing TVS King. We wish you many miles of enjoyable riding and better earnings in the years ahead.

TVS King is manufactured at the world class manufacturing facility of TVS Motor Company with best quality of material and workmanship .We hope it will fulfill your dreams and ambitions.

This booklet is your guide to maintain and operate your TVS King. So please read and follow the manual carefully to enjoy years of pleasurable riding and increased earnings. As with any good machine, proper care and maintenance are essential for trouble free operation and optimum performance of your vehicle.

Our dealerships are well equipped with the required diagnostic equipment and a dedicated company trained service team for professional care of your vehicle so that you can be rest assured of our support in the unlikely event of any trouble with the vehicle's performance. Hence we urge you to get your vehicle serviced only at Authorized TVS Motor Company Distributor or Dealers / Authorized Service Centers.

For any problem or further clarification, you can contact our Help Line Number or write to TVS Motor Company quoting your Engine. No & Chassis .no .

You are requested to fill the user information coupon provided in this booklet.

Wishing you pleasant riding and increased earnings for years to come.

With warm regards,
TVS Motor Company.

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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# NOTICE

**NOTE**

**Pictures illustrated in this manual are of TVS King Duramax / Duramax Plus**

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

Part Number :- G4210670

Revision 1, Aug 2021

# ACCESSORIES DETAILS

| Sl.No. | DESCRIPTION | Quantity |
|---|---|---|
| 1 | Tool kit | 1 set 6 tools |
| 2 | Spare wheel | 1 number |
| 3 | Keys | 2 numbers |

In case of critical problems during the course of product usage, servicing or any technical assistance you may contact us at

TVS MOTOR COMPANY TVS

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Tamil Nadu, India. Tel: +91(4344) 276780.
Website: www.tvsmotor.com/ib/home

Your safety and safety of others is very important while operating this vehicle .

To help you make informed decision about safety, we have provided operating procedure and other information on labels in this manual. This information alerts you on potential hazards that could hurt you or others.

We are providing the following safety labels and safety messages in the manual

# SAFETY INFORMATION

**WARNING** Disregarding this message might result in injury to the driver and passenger.

**CAUTION** This message indicates special procedure or precaution to be followed to avoid damages to the vehicle

**NOTE** This message provides further clarification for better understanding of any particular information

# CONTENTS

| | Page.No. |
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| Useful information | 06 |
| Vehicle Identification Number | 07 |
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## USEFUL INFORMATION

- Periodic maintenance helps good performance of an automobile and our services are planned to keep your vehicle performing good.
- Carrying out the services at the specified intervals.
- To avail the eight periodic services take your vehicle along with your Owner's manual to any authorised TVS distributor or dealer ship or authorised service center across the country.
- Always use choke for cold starting.
- Drive at optimum speeds of 35 to 40 kmph.
- Use clutch only while shifting gears. Do not engage and dis-engage the clutch suddenly.
- Do not run the vehicle at full throttle for long periods and in stationary condition.
- Check and top up engine oil every day and replace the differential and transmission oil at every 10000kms
- Always use recommended grade of lubricants and Genuine TVS Motor spare parts.
- Maintain recommended tyre pressure and rotate tyres at every 5000 kms.
- Reduce the speed while taking sharp turns. Do not apply the brakes while turning

### Running-in information

The first 2000 km is a crucial part of TVS King. Proper running in operation during this period helps in ensuring a longer life and smooth performance of your vehicle. During running in period do not exceed following speed limits .

| Km. | 1st Gear | 2nd Gear | 3rd Gear | 4th Gear |
|---|---|---|---|---|
| 0 - 750 | 10 km/h | 15 km/h | 25 km/h | 40 km/h |

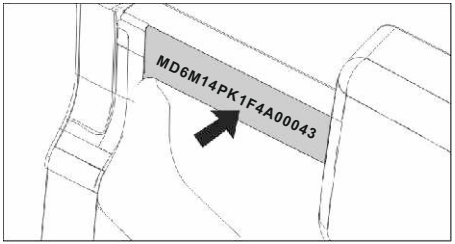
Always keep within specified speed limit

Do not operate the engine in a manner that could expose the engine to excessive stress.

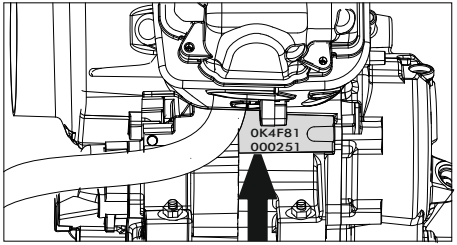
## VEHICLE IDENTIFICATION NUMBER

Engine and chassis number of your vehicle are very important data. It is essential for vehicle registration. They are also required to assist your Distributor or Dealers for ordering parts or referring to special information..

Know your vehicle




Chassis number can be located on the right side of 'B' pillar partition on the driver side as shown in the above figure.



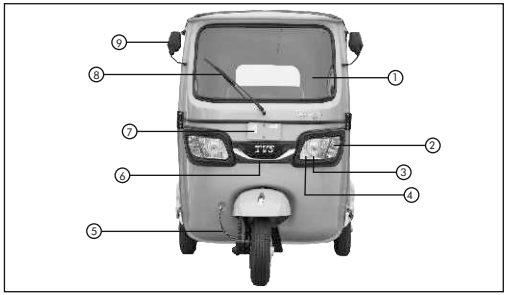

Engine number can be located on crank case RH near the rear mounting as shown in the above figure.

Chassis number

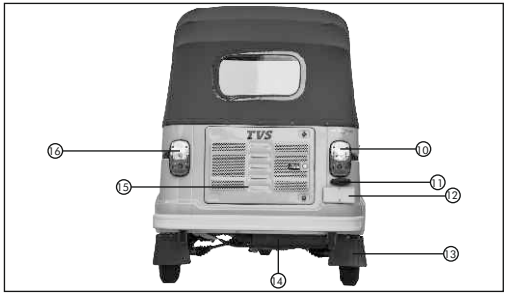
Engine number

Control key number

**FRONT VIEW**




**REAR VIEW**



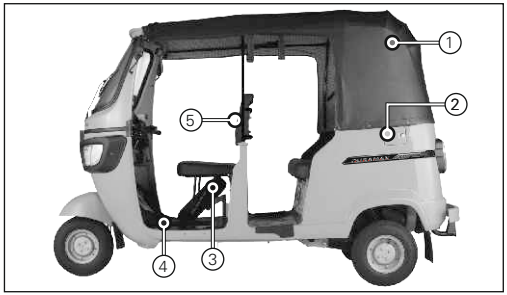

**FRONT VIEW**

1. Wind shield glass
2. Turn signal lamp
3. Head lamp
4. Position lamp
5. Front brake fluid hose
6. Logo grill
7. Number plate front
8. Wiper blade
9. Rear view mirror

**REAR VIEW**

10. Rear combination lamp RH
11. Number plate lamp
12. Number plate
13. Mud flap
14. Muffler assembly
15. Tail door
16. Rear combination lamp LH

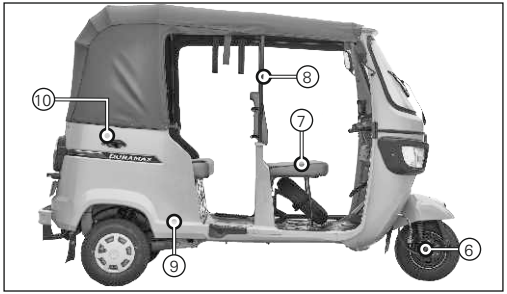
**SIDE VIEW LH - DURAMAX****




**SIDE VIEW - LH**

1. Soft top assembly
2. Fuel lid
3. Spare wheel
4. Hand starter lever
5. Driver back rest

**SIDE VIEW RH - DURAMAX****



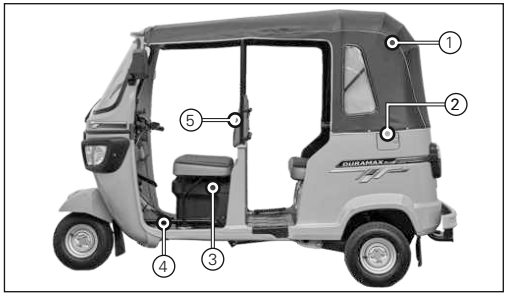

**SIDE VIEW - RH**

6. Speedo hub
7. Driver seat
8. ‘B’ Pillar assembly
9. Passenger cabin
10. Air intake

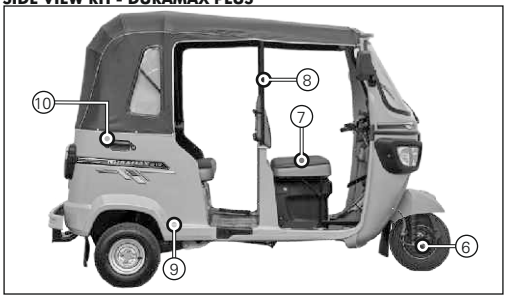
** Please select respective model

* Accessories shown may not be a part of standard equipment

**SIDE VIEW LH - DURAMAX PLUS#**




**SIDE VIEW RH - DURAMAX PLUS#**




**SIDE VIEW - LH**

1. Soft top assembly
2. Fuel lid
3. Cover petrol
4. Hand starter lever
5. Driver back rest

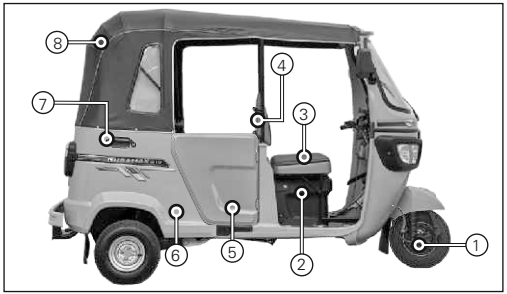
**SIDE VIEW - RH**

6. Speedo hub
7. Driver seat
8. ‘B’ Pillar assembly
9. Passenger cabin
10. Air intake

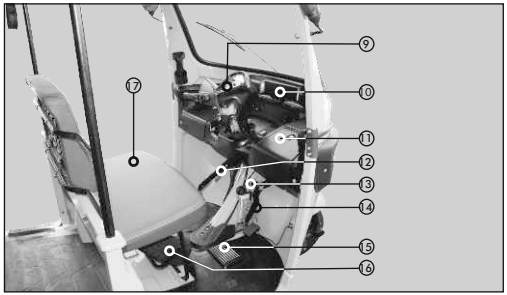
# Please select respective model

* Accessories shown may not be a part of standard equipment

**SIDE VIEW RH - DURAMAX PLUS WITH SIDE DOOR ***




**DRIVER CABIN - RH**




**SIDE VIEW - RH**

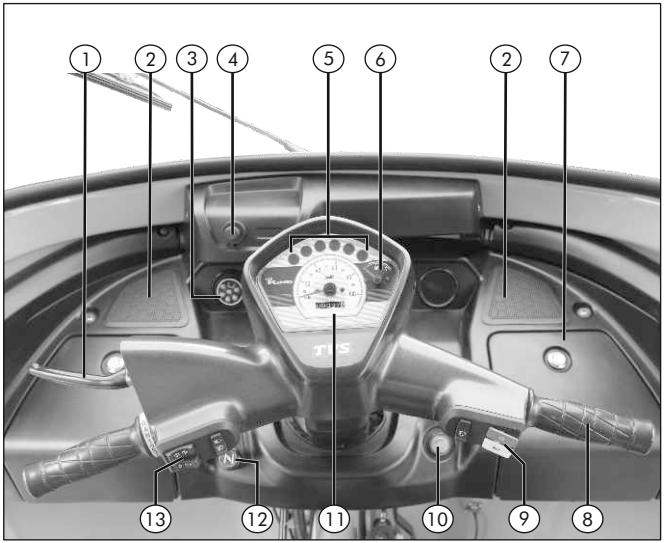
1. Speedo hub
2. Cover petrol
3. Driver seat
4. Driver back rest
5. Passenger side door RH *
6. Passenger cabin
7. Air intake
8. Soft top assembly

**DRIVER CABIN - RH**

9. Handle bar
10. Wiper Motor
11. Dash board
12. Hand brake control lever
13. Master cylinder
14. Brake Pedal
15. Footrest
16. Spare wheel
17. Driver seat

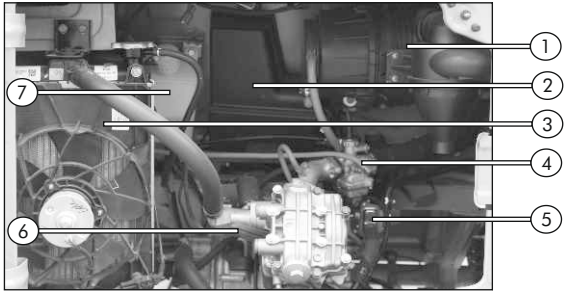
* Passenger side door only for accessory and applicable countries

## CONTROL PANEL

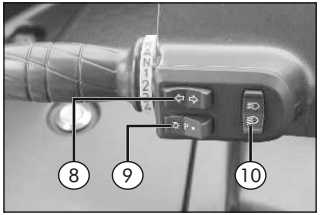



1. Clutch operating lever
2. Speaker grill
3. Music System
4. Mobile charger unit
5. Cluster assembly tell tale lamp
6. Fuel level gauge
7. Glove box
8. Throttle grip
9. Control switch assembly RH
10. Ignition switch
11. Speedometer
12. Choke knob
13. Control switch assembly LH

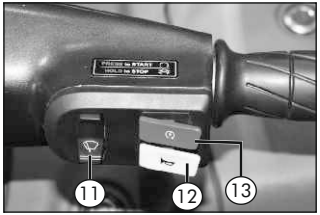
**ENGINE COMPARTMENT**




**CONTROL SWITCH - LH**




**CONTROL SWITCH - RH**




* ISG System applicable only for Duramax Plus with ISG variant

**ENGINE COMPARTMENT**

1. Rear combination Lamp RH
2. Rear number plate lamp
3. Rear number plate
4. Mud Flap
5. Exhaust assembly
6. Rear Tail Door
7. Rear combination Lamp LH

**CONTROL SWITCH - LH**

8. Turn signal lamp switch
9. Head lamp ON / PARK / OFF switch
10. Head lamp High / Low beam switch

**CONTROL SWITCH - RH**

11. Wiper switch
12. Horn switch
13. Electrical starter switch

# FEATURES IN YOUR VEHICLE

Here you can familiarize yourself with operation of features provided in your vehicle.

1. Control Key operations

2. Safety Features

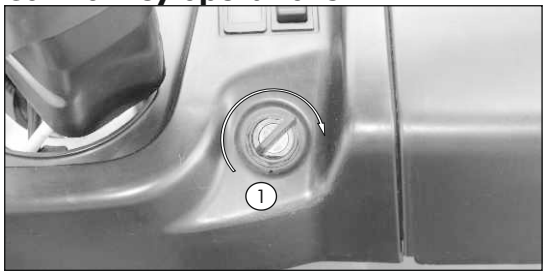
3. Operating Features

Accessories provided with the vehicle

1. Tool Kit

2. Owner's Manual

# Control key operations




Ignition switch

TVS Auto comes with a set of two control keys.

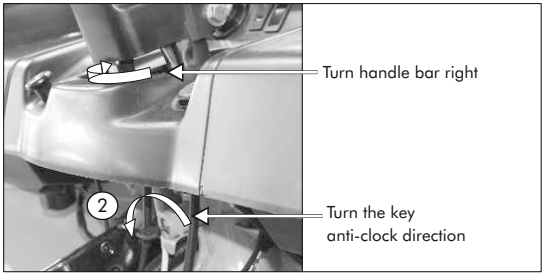
This key is used to operate ignition switch, steering lock, glove box, rear tail door and fuel lid.

**1. Ignition switch**

The ignition switch has two positions.

**OFF:** All electrical circuits are turned OFF in this position. Key can be taken out in this position

**ON:** In this position the engine can be started. Horn, turn signal wiper motor and tell tale lamp, can be operated. Key cannot be taken out in this position

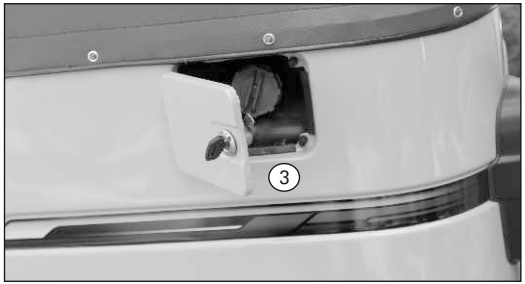



**2. Steering lock.**

To protect your vehicle from theft, steering lock is provided in your TVS King. It is positioned on the steering column, below the dash board.

To lock the steering,

- Turn the handle bar to extreme right.
- Turn the key in anti-clock direction
- Take out the key




Fuel lid lock

### 3. Fuel lid lock

Fuel lid is provided on the LH side of the vehicle.

To fill the fuel open the fuel lid by inserting key and turn it in anti-clock wise direction and pull outwards.

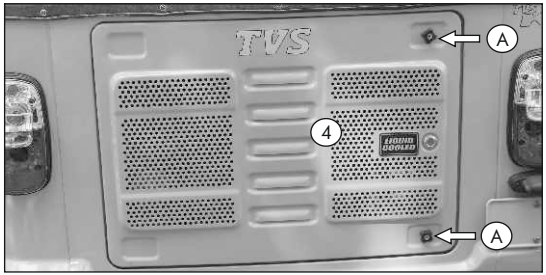
Key cannot be taken out in this position.

Open the petrol tank cap to fill the fuel.

To lock the lid close the lid and turn the key in clock wise direction

**CAUTION**

Use only unleaded petrol. Do not mix 2T oil with petrol.




Rear tail door

### 4. Rear tail door

To open the rear tail door insert the key and turn it in anti-clock wise direction.

Key cannot be taken out in this position.

Loosen the two knobs ( A ) and open the engine door

To lock the rear tail door close the door and turn the key in clock wise direction.

Tighten the door knobs.

**NOTE**

Your TVS petrol vehicles petrol tank capacity is 8 ltrs.

Glove box

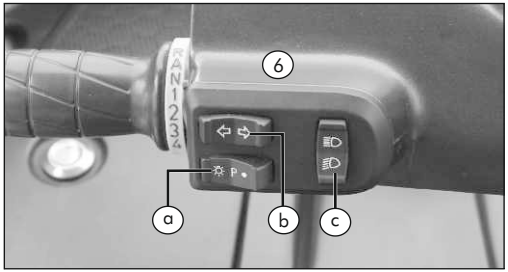
**5. Glove box**

It is provided on the left hand side and right hand side of the dash board

To open the glove box turn the key anti clockwise. Key cannot be taken out in this position. To lock the utility box close the lid, turn the key in clock wise direction and take out key.

**Safety features**

These features are provided to assist you in safe driving.




Switch assembly LH

**6. Switch assembly LH**

It is positioned on dashboard LH

**a) Head Lamp Switch**

It has three positions explained as follows

● : Head lamp, position lamps, speedometer lamp, tail lamp and number plate lamp will not glow with switch in this position though ignition switch may be in 'ON' position. and engine is in running condition.

**P** : Position Lamp, tail lamp and speedometer lamp and number plate lamp will glow when switch is in this position with ignition switch in 'ON' though engine is not running.

TVS King comes with DC headlamp. In this switch position, ' ☼ 'head lamp also will glow along with speedometer lamps, tail lamps, number plate lamp and position lamp when engine is in running condition.

**b) Turn signal lamp switch (Left & Right)**

On pushing the turn signal switch in left or right ' ⇦⇨ 'the respective indicator lamps will glow in both front and rear. It gives an indication in which direction you are turning.

To turn off turn signal lamp bring the switch to central position.

**WARNING**

Always use the appropriate turn signal lamps when you take a turn.

Switch off turn signal lamp after negotiating turn.

**c) Head Lamp high/low beam switch**

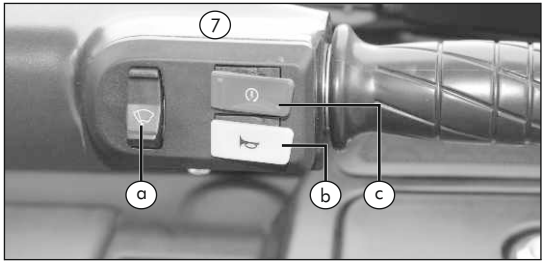
Press the knob towards ' ≡D ' to operate in high beam of the headlamp and towards ' ≡D ' to operate in low beam.

**WARNING**

Use appropriate beam (High / Low) as per the traffic and road condition for safety and comfortable riding.

**7. Switch assembly RH**

It is located on the handlebar RH




**a) Wiper motor Switch**

It has two positions

**ON** : Wiper motor operates in this position.

**OFF** : Wiper motor stops operating in this position.

**CAUTION**

Do not operate the wiper motor on the dry wind shield glass. During washing please ensure that the wiper motor is wrapped with polythene sheet to prevent water entry.

**b) Horn Switch:**

Press the button ' ' provided on the RH switch assembly to operate the horn.

**c) Self Starter Switch**

Press the' ' switch to start the engine electrically with ignition switch in 'ON' condition and transmission in neutral.

**CAUTION**

Do not operate the starter motor for more than 2 sec.

**8. SSS : Single Start Stop Switch***

Switch assembly RH

*** Applicable only for Duramax Plus with ISG variant**

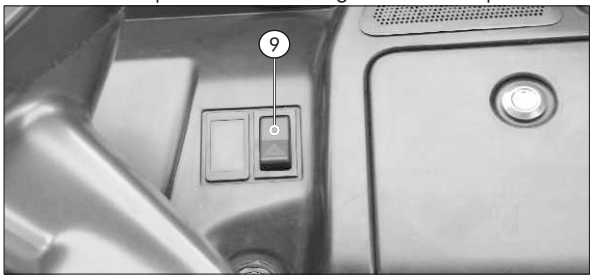
**SSS : Single Start Stop Switch***

It is positioned on handle bar RH.

It is used to switch off the engine by giving Long Press (3 seconds) and engine rpm also less than 1500 rpm, also to keep other DC system active. The ignition circuit is disabled, preventing the engine from being restarted. Before restarting the engine, vehicle has to be in neutral condition, To restart the engine, again short Press the switch

**9. Hazard switch**

Press this switch ' ' to operate warning lamps in case of vehicle breakdown on road for repair or emergency. This switch can be operated even when ignition is in OFF position.



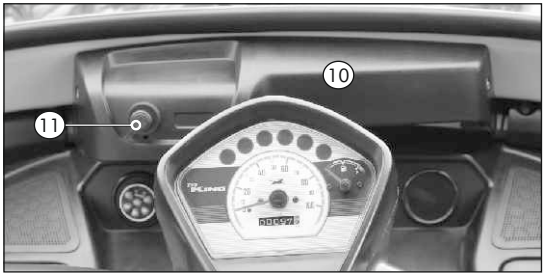

Switch assembly center

**10. Wiper motor.**

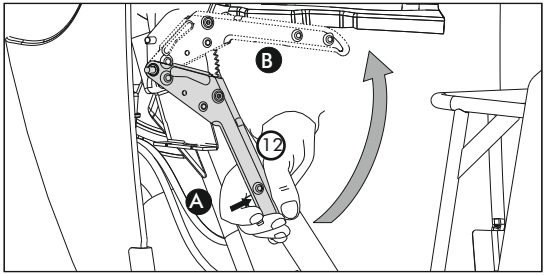
It is located on the wind shield frame above dash board.

**11. Mobile charger**

Your TVS King comes with mobile charger on idol stand as shown in the below fig.




Wiper motor & Mobile charger




Parking brake lever

**12.Parking brake lever.**

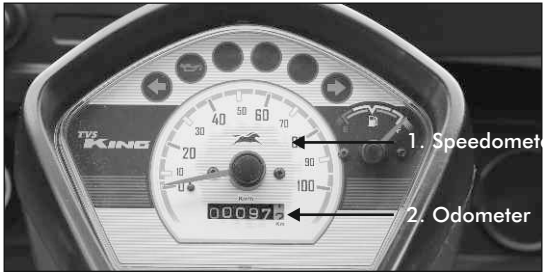
It is provided below the dash board. Use the parking brake while parking the vehicle especially on gradient to prevent vehicle rolling.

Press the lock button ' A ' and pull the lever ' B ' upward to apply the brake. To release brake again press the lock button and push the lever downwards.

**WARNING**

Ensure that hand brake is released before driving the vehicle

## Control features




Speedometer & Odometer

### 1. Speedometer

Indicates the vehicle on- road speed in kilometer per hour.

### 2. Odometer

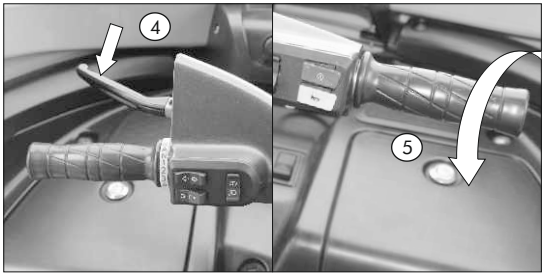
It registers the total distance covered by the vehicle.

**NOTE**

Check kilometer readings carefully to service your vehicle at the recommended kilometers mentioned in service coupons.

### 3.Tell tale lamp

| Symbols | Description | Glow indication | Action to be taken | Colour |
|---|---|---|---|---|
| | Turn signal indicator lamp | Left or right indicator is in 'ON' | Switch off after taking turn | Green |
| N | Neutral indicator lamp | Vehicle is in neutral gear condition | Safe to start engine | Green |
| | High beam indicator lamp | Head lamp high beam is in 'ON' | An indication signal | Blue |
| | Engine oil pressure indicator | Low engine oil pressure | Take the vehicle to dealer | Red |
| | High temp warning lamp | Indicates high coolant temperature | To be reported at service center immediately | Orange |




Clutch lever & Tube complete throttle.

**4. Clutch lever.**

Use the clutch lever to disengage/engage the drive, from the engine to transmission while shifting gears. Depress the lever towards your side to dis-engage and release the lever to engage the clutch

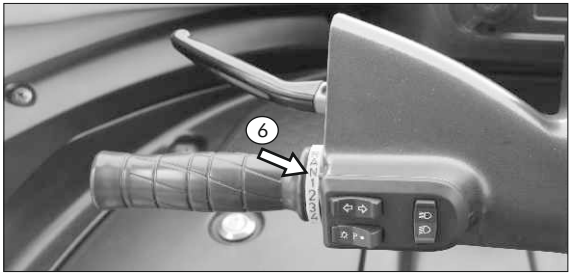
**CAUTION**

Always use clutch lever while changing gears to ensure smoother gear shifting

**5.Tube complete throttle**

Engine rpm is controlled by the position of the throttle grip. Rotate it in anti-clockwise to increase the engine rpm. Rotate it clockwise or release it to decrease the engine speed.

**6. Tube complete gear shift**




Tube complete gear shift

To shift gears depress the clutch lever and rotate the gear shift twist grip downwards to engage forward and up wards to engage the reverse gear.

In between the neutral ‘ N’ and reverse ‘R’ there is an alert ‘ A ’ position

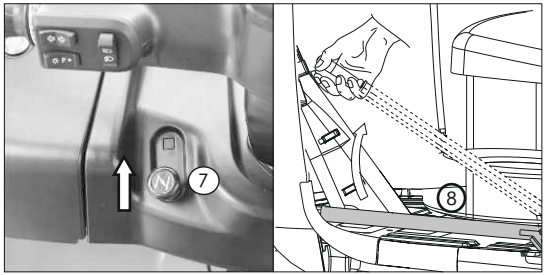
**7. Choke lever**

It is positioned on the dash board. Pull the choke lever towards up-wards to operate the choke. It will get locked in that position.

To release the choke press it down to original position.

**CAUTION**

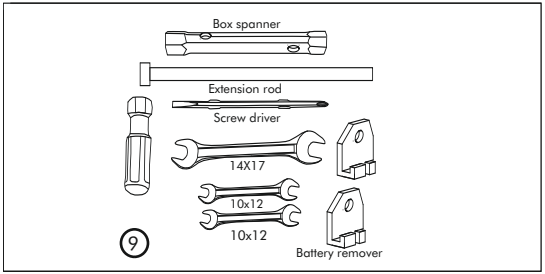
Don't forget to release the choke after starting vehicle




Hand starter lever & choke knob

**8. Hand starter lever**

Pull the hand starter lever upward to start the engine.




Tool kit

**9. Tool Kit**

Tool kit is located in the lockable glove box on the right hand side of the dashboard

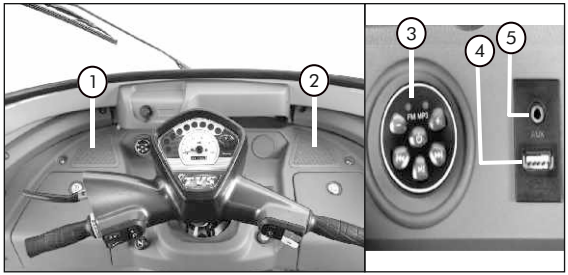
**CAUTION**

Always follow the procedures given in self maintenance section while using tools provided in the tool kit.

Please bring your vehicle to the Authorized distributor or dealers / Authorized Service center in case of any major repairs.

## INTEGRATED MUSIC SYSTEM

TVS King brings you most exciting distinct feature of " Music System" in its all models which accompany you all the way, gives you a joyful ride and always ensures your every trip is entertained. Factory fitted USB drive allows you to enjoy your favorite music. Set of Speakers not only gives you a pleasant journey but also entertains your passenger. Stay tuned to FM channels with TVS King FM stereo system.



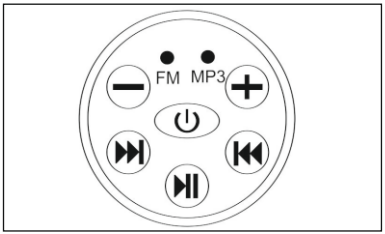

### Description

1. Speaker LH
2. Speaker RH
3. Switch cluster
4. USB port
5. Aux Port

| | |
|---|---|
| Music player | : Automotive qualified music player capable of playing from common flash drives in MP3 format and FM radio. |
| Power wattage | : 10 +10 Watts Stereo Amplifier - Class AB |
| Dimensions of Music Player | : 76mm x 120mm x 31.5mm |
| Weight of Music Player | : 196 grams |
| Operating Temperature | : 0 - 80º C |
| Recommended usagefully charged battery | : Maximum 2 hours continuous run on vehicle with 'ON' stand condition (from fully charged battery) |
| Auto battery Cutoff | : Music player discontinues it self when battery voltage is less than 8.5 V DC in order to save power for subsequent normal operation of vehicle. |

| | |
|---|---|
| Aux Port | : 3.5 mm Stereo. |
| USB Socket | : 1 no. of USB socket for interface with common flash drives. |
| Speakers | : 2 nos. of 15+15 Watts speakers with water & dust protection. |
| FM Radio | : PLL based auto tuning capability in frequency range of 88-108 MHZ. |
| Volume Controls | : 8 steps digital "UP - DOWN" volume control. |
| Switch Cluster | : Water & dust proof switches with soft touch and ease convenience. |
| LED indicators | : FM and MP3 indication, brighter LED's for day time visibility. |

The various switch cluster operations of music system are listed as follows:




**⚠ CAUTION**

Switch cluster has a waterproof sticker on its top, replace this sticker without fail whenever it peels off.

| SYMBOLS | BUTTONS | OPERATIONS |
|---|---|---|
| ⏻ | ON / OFF | To switch ON & OFF the system |
| + | Volume Up | To increase volume |
| – | Volume Down | To decrease volume |
| ⏯ | Play / Pause | In Bluetooth mode and MP3 mode:<br>To Play or Pause the tracks<br>Not function in FM mode |
| ⏭ | Forward | In Bluetooth mode and MP3 mode:<br>To Play next track<br>For fast forward press this switch continuously after reaching the last song use reverse to reach the first song<br><br>In FM mode:<br>Tune to Next channel. Once highest frequency is reached use reverse button to reach lower frequency |
| ⏮ | Reverse | In Bluetooth mode and MP3 mode:<br>To Play previous track<br>For fast reverse press this switch continuously after reaching the first song use forward to reach the last song<br><br>In FM mode:<br>Tune to Previous channel. Once lowest frequency is reached use forward button to reach higher frequency |

**Switching operations ( ⏻ ):**

Power on switch has 4 position toggle mode operations (refer drawn flow chart).

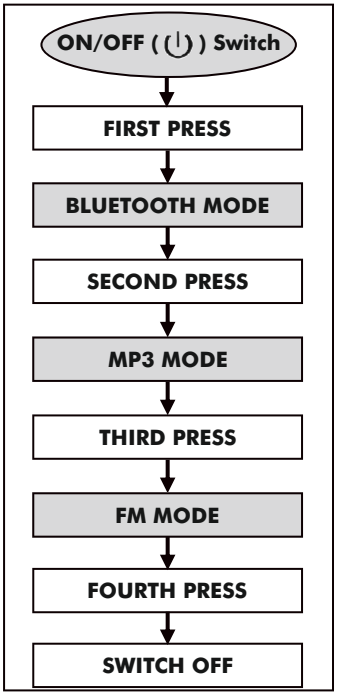
After switching on ignition key, press once ' ⏻ ', music system starts automatically on Bluetooth mode. At this position indicator provided for Bluetooth will start glowing continuously. To change the mode from Bluetooth to MP3 press once the button ' ⏻ '. At this position continuously glowing the same indicator. Then next to change the mode from Mp3 to FM press once the button ' ⏻ '. At this position continuously glowing indicator also shifts towards FM indicator.

Flash drive with MP3 songs stored in it shall be inserted before switching 'ON' music system or after switching 'ON' ignition key and removal of flash drive can be done both in ignition 'ON' and 'OFF' condition.

To switch off music system press button ' ⏻ ' once.

**NOTE**

This music system is designed to play only MP3 files stored in Flash drive.
It searches MP3 files automatically and starts playing once the external source is connected.



**Volume Control**

This system has 8 steps of volume control. To increase the volume by one step press ' + ' button once, keep pressing ' + ' to get required volume level.

To decrease volume use button '—' accordingly.

During switch 'ON' the system starts with default of 50% volume.

**⚠ CAUTION**

Always maintain pleasant sound level in public places in order to have healthy atmosphere with co riders.

**Forward / Reverse**

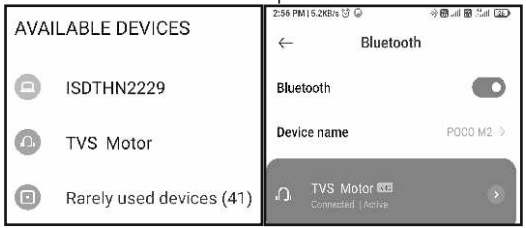
**In Bluetooth Mode:**

Press( ⏻ ) button to switch on the Music system.

Music system will enter into "Bluetooth" mode.

Mp3 LED will start blink and FM mode continuously on for Bluetooth mode.

Switch on the Bluetooth in smart phone and scan the device.




Select TVS MOTOR and pair the device.

After pairing, you can play the songs from smart phone.

Press (+) button to increase the volume and Press (-) button to decrease the volume

**NOTE**

In Bluetooth mode, song selection is through smart phone only.

**In Mp3 Mode:**

To play next song press button ' ⏭ ' once. To play previous song press button ' ⏮ ' once. Keep pressing above buttons continuously to get desired songs.

To fast forward press and hold button ' ⏭ ' continuously for more than 2 seconds.

To fast reverse press and hold button ' ⏮ ' continuously for more than 2 seconds.

**In FM Mode:**

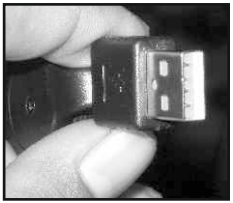
To tune to next channel press button ' ⏭ ' once. To tune to previous channel press button ' ⏮ ' once.

**Play / Pause:**

It is a toggle mode switch. To pause song press button ' ⏯ ' once. To resume press button ' ⏯ ' once again.

This function will not work in FM mode.

**USB Drive :**



USB socket provided in the system which can directly interface with commonly available Flash drives.

Ensure the polarity of Flash drive while assembling by confirming the plastic base always at the bottom side.
Wrong forcible insertion may resultin damaging the socket or drive or both.
This system has 70 mm length USB adopter cable which is part of factory fitment.
Any mobile with Flash disc emulation mode with suitable songs stored in it can be played back using suitable connecting cable.

**NOTE**

We recommend you to switch OFF music system while starting the vehicle using electric starter.

**Aux Port :**

TVS King music systemisfittedof3.5mmstereoauxport.
If you want to listen music fromyourmusicplayer or smart phone, use aux cable andconnect your player to aux port.

**CAUTION**

We recommend not to use music system while it is raining, take care that no water is entering inside USB socket and headphone socket.

TVS King music system is designed to work with input battery voltage of minimum 8.5 V DC. If battery voltage is less than 8.5 V, music system will not function.

Any attention grabbing activity like listening to good music while driving a high powered machine like “TVS King” need to be done with adequate precautions for one's own safety and other road user's safety.

To avoid battery dropped when starting the engine using electric starter. Suggested only 30 minutes maximum for listening music when engine not in running condition.

## SAFE RIDING TIPS

### Importance

Your safety and safety of others is very important. Operating this vehicle safely is a big responsibility on you.

### For safe driving

Always make a pre ride inspection before you start the vehicle. We suggest that you practice driving your vehicle in a non traffic situation until you are thoroughly familiar with your vehicle operation and its control.

**Daily checks before riding**

| Location | What to check for | Reference Page |
|---|---|---|
| Engine cum transmission & Differential oil | Check the availability up to required level | 38,39,40,41 |
| Fuel | Enough fuel for the planned distance of running | 22 |
| Brakes | Check for effectiveness, Brake pedal free play, dragging of brakes, brake sponginess. | |
| Tyres | Correct tyre pressure, Adequate tread depth, No crack or cut | 43 |
| Battery | Ensure the working of Horn, Brake lamp, Head lamp high beam & Low beam. All indicator lamp etc | 17,18,19,46 |
| Steering & suspension | Check for smoothness, any play or looseness. | |
| Controls (Clutch, Brake and Throttle etc.) | Check the free play, smooth operation, positive return to original position. | 46,47,48,49 |
| Tell tale lamps | Inspect all the tell tale lamps for any warning. | 22 |
| Propeller shaft, Flange, Slider block and pin. | Sufficient quantity of grease | 45 |
| Differential & gearbox breather tube | Check if both gear box and differential breather tube are blocked with mud or any dirt | |

## OPERATING YOUR VEHICLE

### Starting the vehicle

-Insert the ignition key in the ignition switch and turn it clockwise to ON position. (Ref page no.15, fig No.1)

-Bring the transmission to neutral. Confirm by checking if the neutral indicator lamp on dash board is lit.

-Apply choke if vehicle is in cold condition or starting in the morning. (Ref page no 24, fig No.7)

-Pull the starting lever up-wards or use electric start switch (ES model) to start the engine. (Ref page no 24, fig No.8)

-Wait for some minute and let the engine to warm up before engaging the gears and moving on.

**CAUTION**

Do not open the throttle while the choke is applied, it will cause flooding of engine and difficulty in starting.

**Setting the vehicle in motion** ( Ref fig.)

-When the engine has started release the parking brake.--

-Dis-engage the clutch by depressing the clutch lever.

-Rotate the gear shift twist grip downward to engage the first gear.

- Open the throttle a little by rotating the throttle grip in the clock wise direction; 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. Select the required gears in similar manner.

### Setting the vehicle in motion

| Km. | 1st Gear | 2nd Gear | 3rd Gear | 4th Gear |
|---|---|---|---|---|
| Speed | 0-12km/h | 10-25km/h | 20-40km/h | 25-50km/h |

**CAUTION**

While shifting to each gear close the throttle fully and depress the clutch with out fail.

Ensure that the hand brake is released before moving the vehicle after parking.

**Stopping and parking**

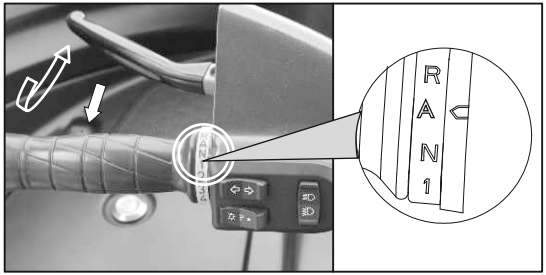
- Close the throttle completely and apply the brake.
- As the vehicle speed reduces depress the clutch lever and down shift the gears.
- Bring the transmission to neutral position just before vehicle stops.
- Turn ignition switch to OFF position and take out the key.
- Apply parking brake. (Ref Page No.20, fig No.12) Lock the steering by turning the handle bar to the left.(Refer page no.15, fig No.2)

**WARNING**

Do not depress the clutch while braking at high speeds.
Always apply the parking brake while parking on gradient.

Reverse gear operation

- Bring the vehicle in neutral position
- Let the vehicle to stop completely
- Depress the clutch lever.
- Turn the gear change twist grip upwards to move alert 'A' position, beeper sound can be hear. (Refer fig.)
- Turn the gear change twist grip upwards to reverse 'R' position to engage the reverse gear. (Refer fig.)
- Engage the clutch gradually to move the vehicle.




Reverse gear operation

Fuel saving tips

- Carry out the periodic maintenance services regularly at TVS authorised service stations.
- Perform daily checks as specified in page no 32
- Avoid sudden and frequent braking.
- Switch OFF the engine if you have to idle the vehicle for more than 2 minutes.
- Clean, check and adjust the sparkplug gap periodically. For service procedure see page no. 42
- Clean the air filter element as per schedule see page 50
- Lubricate propeller shaft, slider block, pin and flange as per lubrication schedule.

## PERIODIC MAINTENANCE SCHEDULE

| S.no | Sub activity | Activities | 750 | 5000 | 10000 | 15000 | 20000 | 25000 | 30000 | 35000 | 40000 | 45000 | 50000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Check & Top up | Engine oil | Check and top up every 5000 kms | | | | | | | | | | |
| 2 | | Brake fluid in brake fluid reservoir | • | • | • | • | • | • | • | • | • | • | • |
| 3 | | Coolant level | • | | • | | • | | • | | • | | • |
| 4 | Check & Adjust | Engine foundation bolt | • | • | • | • | • | • | • | • | • | • | • |
| 5 | | Exhaust pipe, silencer mounting fasteners | • | • | • | • | • | • | • | • | • | • | • |
| 6 | | Wheel nuts & brakes for effective working | • | | • | | • | | • | | • | | • |
| 7 | | Valve tappet clearance | • | | • | | • | | • | | • | | • |
| 8 | | Oil circulation at cylinder over head camshaft | • | • | • | • | • | • | • | • | • | • | • |
| 9 | | Carburetor - idle speed, CO%, HC | • | | • | | • | | • | | • | | • |
| 10 | | Control cables free play and adjust If required | • | • | • | • | • | • | • | • | • | • | • |
| 11 | | Tyre pressure | Once in a week / Every 1000 kms | | | | | | | | | | |
| 12 | | Radiator mounting screw adjustment | • | | • | | • | | • | | • | | • |
| 13 | Clean & adjust | Spark plug | • | • | • | • | • | • | • | • | • | • | • |
| 14 | | Decarbonize cylinder head and piston | | | | | • | | | | • | | |

## PERIODIC MAINTENANCE SCHEDULE

| S.no | Sub activity | Activities | 750 | 5000 | 10000 | 15000 | 20000 | 25000 | 30000 | 35000 | 40000 | 45000 | 50000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | | Engine Oil | • | | • | | • | | • | | • | | • |
| 16 | | Oil Filter | • | | • | | • | | • | | • | | • |
| 17 | | Differential oil | • | | • | | • | | • | | • | | • |
| 18 | | Spark plug and breather tubes | | | • | | • | | • | | • | | • |
| 19 | Replace | Coolant | 50,000 km | | | | | | | | | | |
| 20 | | Air filter element | 40,000 km | | | | | | | | | | |
| 21 | | Vehicle | • | • | • | • | • | • | • | • | • | • | • |
| 22 | | Air filter element | • | | • | | • | | • | | | | |
| 23 | Clean | fuel tap (strainer only) | | | • | | • | | • | | • | | • |
| 24 | | Petrol tank | Only in a year | | | | | | | | | | |
| 25 | | Oil strainer ( Replace if damaged ) | • | • | • | • | • | • | • | • | • | • | • |
| 26 | Inspect | Compression pressure | | | • | | • | | • | | • | | • |
| 27 | | Adjuster assembly chain tensioner spring | | • | • | • | • | • | • | • | • | • | • |
| 28 | Electrical | Check all lights, horn & switches functioning | | | • | | • | | • | | • | | • |

## PERIODIC MAINTENANCE SCHEDULE

| S.no | Sub activity | Activities | 750 | 5000 | 10000 | 15000 | 20000 | 25000 | 30000 | 35000 | 40000 | 45000 | 50000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 | Greasing | Steering races & balls | | | • | | • | | • | | • | | • |
| 30 | | Speedo gear & pinion | • | | • | | • | | • | | • | | • |
| 31 | | Speedo cable inner | | | • | | • | | • | | • | | • |
| 32 | | Muff cup ( Flange) | | | • | | • | | • | | • | | • |
| 33 | | Brake lever fulcrum point | | • | • | • | • | • | • | • | • | • | • |
| 34 | | Hand starter front & rear shaft | | | • | | • | | • | | • | | • |
| 35 | Others | Tyre rotation | | • | • | • | • | • | • | • | • | • | • |
| 36 | | Check battery voltage and charge if required | • | | • | | • | | • | | • | | • |
| 37 | | Apply petroleum jelly on battery terminals | | | • | | • | | • | | • | | • |

RECOMMENDED LUBRICANTS

| **Product** | **Recommended grade** | **Brand** | **Quantity** |
|---|---|---|---|
| Engine oil | SAE 20W50 API-SL, JASO MA2(or)<br>SAE 20W40 API-SL, JASO MA2 | TVS TRU4 DURALIFE oil | 1750 ml |
| Differential | SAE 20W50 API-SL, JASO MA2 (or)<br>SAE 20W40 API-SL, JASO MA2 | TVS TRU4 DURALIFE oil | 250 ml |
| Brake fluid | DOT 3 / DOT 4 | TVS Girling | 250ml |
| Grease (Muff cup) | IPOL IPLEX RR3 | IPOL | 120g |
| Grease (Steering) | BECHEM PREMIUM III | BECHEM | 30g |

The following maintenance can be done by your self to ensuring good performance of your vehicle.

CAUTION

Attending major maintenance work and repairs yourself can affect the performance of your vehicle. Approach TVS authorised Dealer or service center in the case of any major problem.

Engine oil level checking and topping up