









TVS

iQUBE ELECTRIC

FOREWORD

Hello!

You are now a proud owner of the iQUBE ELECTRIC SMARTXONNECT 09 scooter from the house of TVS Motor Company.

The iQUBE ELECTRIC SMARTXONNECT 09 is an electric scooter like no other. It gives you the unmatched combination of performance, connected technology and practicality of use. So now you can ride in style and comfort, with all the savings benefits of an electric vehicle.

For getting the best out of your iQUBE ELECTRIC SMARTXONNECT 09, please read the manual carefully and understand all features and operations of your vehicle. Follow the instructions and enjoy a smart and convenient experience that comes with your iQUBE ELECTRIC SMARTXONNECT 09 .

To ensure a worry free journey on your TVS iQUBE ELECTRIC SMARTXONNECT 09 , we urge you to get your vehicle serviced only at TVS Motor Company Authorized Dealers.

We hope you enjoy every aspect of being a proud owner of TVS iQUBE ELECTRIC SMARTXONNECT 09 and being a part of our community of smart, next-gen and sustainable riders.

Happy riding!

TVS MOTOR COMPANY LIMITED

TVSM Green Initiative

Congratulations on buying your TVSM electric vehicle! By choosing an Electric Vehicle you are not only embracing cutting edge technology but also demonstrating your commitment towards environmental sustainability.
Your choice to drive an electric vehicle significantly reduces the stress on our environment, helping to combat climate change and preserve our planet for future generations.

Thank you for your contribution to a cleaner, greener world!

With zero tailpipe emissions, the vehicle will reduce the amount of greenhouse gases in the environment. This avoidance of emission of greenhouse gases translates into Verified Carbon Units (VCUs).

TVS, in a step towards our Corporate Responsibility and to show our dedication towards the environment, is pooling these VCUs.

As a customer of TVS electric vehicle (EV), you hereby consent to transfer the VCUs, or any other similar benefits associated with your TVS EV to TVSz Motor Company Limited (TVSM). By using the vehicle, you acknowledge and agree to the following terms and conditions:

Ownership of VCUs:

(i) TVSM shall have the sole and absolute rights on the VCUs, or any other similar benefits generated, based on the use / operation of your TVS EV, from the date of purchase until the lifetime of the vehicle.
(ii) TVSM shall also be entitled to use such VCUs or any similar benefits, for any lawful purpose, at its sole discretion and as it deems fit, including but not limited to carbon offsetting.

You can ask any query related to this program by writing to us on sustainability@tvsmotor.com

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CONTACTS FOR SUPPORT

TAMILNADU-1

1. **TVS Motor Company Limited**
   V Floor, Gee Gee Universal,
   No. 2, MC Nichols Road,
   Chetpet, Chennai - 600 031.
   Phone : 044-28361651/28361654
   Email : AO.Chennai@tvsmotor.com

TAMILNADU-2

2. **TVS Motor Company Limited**
   No. 10, 2nd floor,
   Shree Shanmugapriya Towers,
   Kannuswamy Street,
   Behind Hotel Annapoorna,
   R S Puram, Coimbatore - 641 002.
   Phone : 0422-4350060/2541035
   Email : AO.Coimbatore@tvsmotor.com

TAMILNADU-3

3. **TVS Motor Company Limited**
   Sastha Square, 2nd Floor,
   No. 46/4,5, 46/6A6,
   Bypass Road, Kalavasal,
   Next to Bharat Petroleum, Ponmeni,
   Chandragandhi Nagar,
   Madurai - 625 016.
   Email : AO.Madurai@tvsmotor.com

KERALA

4. **TVS Motor Company Limited**
   Ambady Towers, Second Floor,
   Door No. 27/631, A6,
   Edappally-Pookkattupady Road,
   Edappally PO., Cochin - 682 024.
   Phone : 0484-2544578/2556938
   Email : AO.Cochin@tvsmotor.com

KARNATAKA-1

5. **TVS Motor Company Limited**
   TVS Focus Towers, Plot No. 25 and 23,
   Konappana Agrahara Village,
   Begur Hobli, Electronics City phase 1,
   26A, 1st Main Rd,
   Bengaluru - 560 100.
   Email : AO.Bangalore@tvsmotor.com

KARNATAKA-2

6. **TVS Motor Company Limited**
   5th Floor, Marvel Ecron building.
   CTS No-4784/A1/B2
   Gokul Road, Hubballi - 580 030.

TELANGANA

7. **TVS Motor Company Limited**
   Pranava One, 4th Floor,
   Unit No. 2, 3, 4A, 4B & 4C,
   Ho 6-5-654, Punjagutta Road,
   Somajiguda, Hyderabad - 500 082.
   Email : AO.Hyderabad@tvsmotor.com

ANDHRA PRADESH

8. **TVS Motor Company Limited**
   1st Floor, Passport Office Building,
   Sri Venkateswara Theatre,
   D.No. 38-8-45, MG road, Punnammathota,
   Vijayawada - 520 010.
   Email : AO.Vijayawada@tvsmotor.com

MAHARASHTRA-1 & 2

9. **TVS Motor Company Limited**
   Poloroche Business Avenue, #302,
   3rd Floor, CTS No. 218/3, Airport Road,
   Opposite Symbiosis Law School,
   Lohegaon,
   Pune - 411 047.
   Email : AO.Pune@tvsmotor.com

MAHARASHTRA-3

10. **TVS Motor Company Limited**
    No. 502B, 6th Floor, B Wing,
    Shriram Shyam Towers,
    Near LIC Square, Sardar,
    Nagpur - 440 001.
    Phone : 0712-2569932
    Email : Service.Nagpur@tvsmotor.com

CHATTISGARH

11. **TVS Motor Company Limited**
    Office No. B518-B527, 5th Floor,
    Currency Tower, VIP Road Corner,
    Raipur - 492 001.
    Phone : 0771-4260006
    Email : AO.Raipur@tvsmotor.com

GUJARAT

12. TVS Motor Company Limited
101-08, 11th Floor, Solitaire Connect,
Near Gallops Motors,
S G Highway, Makarba,
Ahmedabad – 380 051.
Phone : 0755-65443748
Email : AO.Ahmedabad@tvsmotor.com

MADHYA PRADESH-1

13. TVS Motor Company Limited
No. 211-212, 2nd Floor,
Chinar Incube Business Centre,
Chinar Fortune City,
Near Brindhavan Dhaba,
Hosangabad Road,
Bhopal - 462 026.
Phone : 0755-2499406/2499306
Email : AO.Bhopal@tvsmotor.com

MADHYA PRADESH-2

14. TVS Motor Company Limited
501, N R K Tech Park,
5th floor, Plot No. 9-C-C-A,
Scheme No. 94, Ring Road,
Indore - 452 010.
Phone : 9685558301
Email : AO.Indore@tvsmotor.com

RAJASTHAN-1

15. TVS Motor Company Limited
Plot No. 17-18,
2nd Floor of National Motors Building,
Jhotwara Industrial Area,
Jaipur - 302 012.
Phone : 0141-5150901/5150902
Email : AO.Jaipur@tvsmotor.com

RAJASTHAN-2

16. TVS Motor Company Limited
4th Floor, Kanhaiya Tower,
5, ABC Mahaveer Colony,
Ashok Nagar Main Road,
Udaipur - 313 001.
Email : AO.Udaipur@tvsmotor.com

DELHI, HARYANA, UTTAR PRADESH WEST & UTTAR PRADESH HILLS

17. TVS Motor Company Limited
Block D & E, Third Floor, “Golden-I”,
Plot No. 11, Sector-Techzone - 4,
Gr. Noida West - 201 318.
Phone : 011-29834640/29834773
Email : AO.Delhi@tvsmotor.com

PUNJAB & CHANDIGARH

18. TVS Motor Company Limited
4th Floor, Royal Business Park,
Chandigarh Ambala Highway,
Zirkapur - 140 603.
Phone : 01762-464777/465777
Email : AO.Chandigarh@tvsmotor.com

UTTAR PRADESH CENTRAL & EAST

19. TVS Motor Company Limited
1st Floor, Cyber Tower, TC-34/V-2,
Vibhuti Khand, Gomti Nagar,
Lucknow - 226 010.
Phone : 0522-4918300/4918301
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WEST BENGAL

20. TVS Motor Company Limited
Mediasiti, 6th Floor, Plot No. XI-4,
Salt Lake City, Electronic Complex,
Sector-V, PE & GP block, PO-Sech,
Bhawan, P S - Electronics Complex,
Kolkata - 700 091.
Email : AO.Kolkatta@tvsmotor.com

BIHAR

21. TVS Motor Company Limited
Sai Corporate Park, Block-A, 4th Floor,
Bailey Road, Rukanpura,
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Email : AO.BNJ@tvsmotor.com

ORISSA

22. TVS Motor Company Limited
No. 303, 3rd Floor,
Creative Plaza, Rasulgarh,
Bhubaneshwar - 751 010.
Phone : 0674-2580019
Email : AO.Bhubaneshwar@tvsmotor.com

JHARKHAND

23. TVS Motor Company Limited
Second floor, Lucas Service Building,
Argora Byepass Road,
Ranchi - 834 002.
Phone : 0651-2244715
Email : AO.Ranchi@tvsmotor.com

NORTH EAST STATES

23. TVS Motor Company Limited
147, Udayan, Ganesh Guri,
Near Hotel D Courtyard,
R G B. Road, Guwahati - 781005.
Phone : 0361-2202030/2202031
Email : AO.Guwahati@tvsmotor.com

Or
Toll Free Number Relationship Manager : 1800-572-1818 (Mon - Fri: 9am to 6pm)
Toll Free Number Roadside Assistance : 1800-258-7111 (Available 24 x 7)
Email: customercare@tvsmotor.com

SAFETY INFORMATION

Operating this vehicle safely is an important responsibility of the rider. To help you make safe decisions while operating the vehicle, we have provided necessary operating procedures and other information in this manual. This information alerts you on potential hazards that could cause injury to you or others. Since it is not possible to warn you about all the 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:

Note

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

Caution

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

Warning

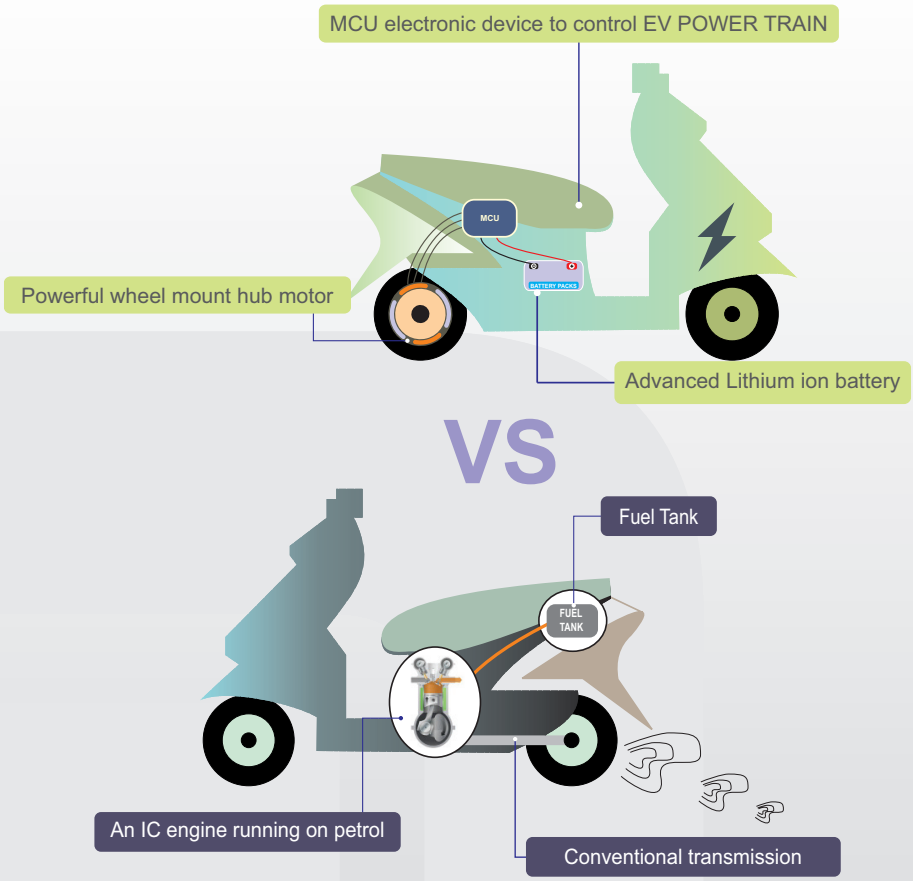
Disregarding this message might result in **accidents or injury to the rider**.

Note

- All information, illustrations, photographs and specifications contained in this owners 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 User's manual does not apply to your vehicle.
- Prior permission of TVS Motor Company Limited is required for quoting, copying or reproducing any part of the User's manual.
- Accessories shown in the picture may not be part of the standard equipment.
- Pictures shown in this manual are of TVS iQUBE ELECTRIC SMARTXONNECT 09 Drum Brake version unless specified.

INTRODUCTION

One of the finest and modern technology products of TVS Motor is waiting to be unveiled; an electric scooter which is futuristic and contains plenty of features and technological advancements. However, before delving further into this manual, let us first have a glimpse of what your electric two wheeler is and how it is different from an internal combustion engine powered vehicle. The below info-graphic provides a broad idea about an electric two wheeler;



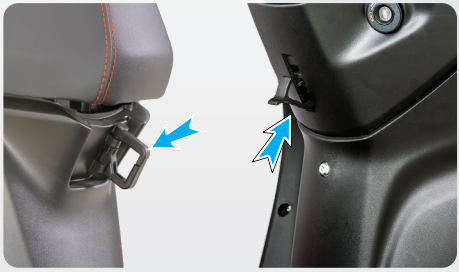
UNIQUE FEATURES OF TVS iQUBE ELECTRIC SMARTXONNECT 09

LED INSTRUMENT CLUSTER



Unlike conventional scooters this vehicle is having a digital instrument cluster which ensures brighter display and allows ease of interaction between vehicle and the rider.

RETRACTABLE BAG HOOKS



Your scooter has two retractable Bag Hooks to carry light luggage like carry bags weighing upto 3 kg.

One hook is located below the handle bar on the rear panel and the other one is located on the cover front below the front end of seat Refer page No. 25 for details

TELESCOPIC FRONT FORK



Your Scooter has Motorcycle-like ‘Telescopic Front Suspension’ for extreme comfort for excellent riding comfort even on bad roads.

TUBELESS TYRES



Another important unique feature in your scooter is ‘Tubeless Tyres’. Tubeless tyres reduce the chances of getting punctured. Even if there is a puncture, sudden leakage of air is avoided, thereby providing better safety and convenience. It is also very easy to repair the punctured tyres.

ALL BLACK LARGER ALLOY WHEELS



All ‘Black Larger Alloy Wheels’ with high mechanical advantage gives progressive braking of your scooter, results in best-in-class ‘shortest distance’ braking. It also provide superior comfort in bad road conditions.

PARKING BRAKE (BRAKE LOCK LEVER)



‘Parking Brake’ is another unique safety feature which protects your scooter from falling due to wheel rotation when it is parked with the side stand on a slope. Refer page No. 20 for details.

SYNCHRONISED BRAKE TECHNOLOGY (SBT)



Taking technological innovation to next level, your scooter comes with ‘Synchronised Brake Technology (SBT)’. This feature enhances the safety by avoiding skidding during sudden braking.

UNDER-SEAT STORAGE (UTILITY BOX)



Your scooter has a large under-seat storage space to carry your luggage belongings. Refer page No. 25 for details.

ALL LED ILLUMINATION





Your Scooter comes in with premium LED lamps. Efficient and bright, this gives TVS iQUBE ELECTRIC SMARTXONNECT 09 a totally upgraded Look and Style with better visibility for night rides. LED lamps consume less power with increased luminous intensity.

SIDE STAND INDICATION



Vehicle will be immobile and side stand indication will be shown in the instrument cluster if the vehicle is on side stand.

⚠ Caution

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

MALFUNCTION INDICATION AND SERVICE REMINDER

Malfunction indicator Service reminder



Malfunction indication notifies you if there is an **impending warning or if there is a fault** to take the vehicle for diagnosis and troubleshooting. Whereas service reminder recalls you to take the vehicle for periodic maintenance (care) at Authorised Service station based on the alert.

PLEASANT HORN TONE

A newly designed horn produces a pleasant tone when pressed by user.

TEXTURED FLOORBOARD



Your scooter comes with a stylish textured floor board.

TEXTURED FLOOR MAT



Your scooter comes with a stylish textures floor mat.

ACCESSORIES FOR YOUR SCOOTER

SMART PHONE CHARGER



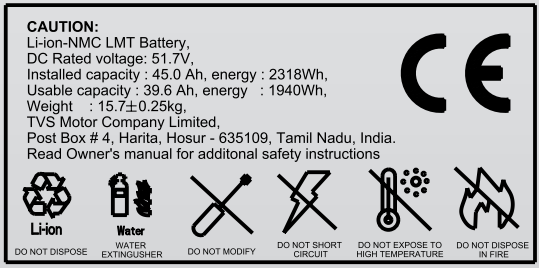
Your TVS iQUBE ELECTRIC SMARTXONNECT 09 is provided with a socket for charging your smart phone even while you are traveling and it is located in the utility box below the seat assembly. Refer page No. 26 for usage details.

Caution

1. Leaving the ignition cum steering lock in ‘ON’ position for a prolonged time will drain the battery when the vehicle is not in use. Switch OFF and take the key out when the vehicle is not in use.
2. Always lock the steering while parking for safety.
3. It is recommended to use the tool kit in case of emergency only. It is always advisable to take your vehicle to TVS Motor Company Authorized Main Dealer.
4. Never sit on vehicle when it is supported by stands.
5. Utility box can be used to carry a load of maximum 10 kg.
6. Do not carry perishable items inside the utility box. It is not fully sealed. Do not allow / spray water inside the utility box. Take care not to spill liquid into the utility box.
7. Care should be taken not to attach the luggage which hangs out of your scooter. Please note that the luggage attached to your scooter should not interfere with your feet movement.
8. The charging time of the vehicle may vary, depending on the vehicle’s battery state of charge.
9. The flap has been designed to prevent water entry inside the charging port and is not replaceable. No warranty for charger is applicable in case of flap damage.
10. Always release the side stand to its full up position before moving the vehicle.
11. Be aware of reverse park assist mode. In this mode, the vehicle will move in reverse when throttle is given.
12. Always park the vehicle on a flat, firm surface, in shaded area and away from flood, fire and other unsafe environments.
13. Do not park the vehicle in direct sunlight or water logged areas for long time.
14. Do not ride the vehicle in flooded roads.
15. While charging vehicle always switch on AC supply, only after plugging in both end of the charging cord at their respective positions.

Warning

1. Never attempt to move the vehicle when the steering is locked, you may lose balance.
2. Use appropriate head lamp beam ‘high / low’ as per the traffic and road conditions for your safety and avoid inconvenience to other riders.
3. Operating the TVS iQUBE ELECTRIC SMARTXONNECT 09 overloaded will hamper riding stability and may lead to loss of control. Hence, it is advisable to carry the recommended amount of load only.
4. Don’t touch any open cables or terminals.
5. Do not leave your vehicle without charging for a long period of time (Vehicles should be charged to 30% SOC atleast once in 15 days).



Vehicle Performance Variation

We at TVS, value your safety and comfort and hence have taken certain measures to ensure the best riding experience of your TVS iQUBE ELECTRIC SMARTXONNECT 09.

In line with this, we have deployed a safety measure for critical vehicle parts like the motor, battery and the MCU.

To ensue the safety of you and your TVS iQUBE ELECTRIC SMARTXONNECT 09, in high temperature conditions, overloaded condition or continuous peak performance usage whenever the temperature of vehicle components reaches a critical point, as a safety measure performance of some systems are deliberately reduced to optimize the temperature. This is indicated by the MIL on your dashboard glowing after sometime accompanied by a message.

Your vehicle is equipped with an intelligent State of Charge (SOC) based performance variation, it is a critical control strategy that dynamically limits vehicle performance at different battery levels to protect battery health, ensures safe operation, and helps you achieve optimal riding range.

For example, if you have accelerated the scooter with brakes applied, the temperature of the motor and the MCU starts increasing. Once it reaches a critical point, the Motor Controller Unit starts “derating” the vehicle to control the increase in temperature beyond critical point, thus slowing the vehicle down a little. This may result in loss of vehicle performance to a certain extent, and you may experience some drop in performance.

In extreme conditions, for example; when ambient temperature is extremely high and vehicle is being driven continuously in overloaded condition, even after the MIL indication on your cluster is on, it may result in the vehicle coming to a complete stop.

In any such situation that you may face, **it is recommend to allow the vehicle to cool down by riding it in slow speed in Eco Mode or stop the vehicle for some time till the MIL indicator on your connected instrument cluster goes away.** Usually this should only take a few minutes. This will ensure the safety of you as well as life of electric components in the scooter.

Incase if the MIL indicator is glowing continuously even when vehicle is in cold condition, take your vehicle to TVS Motor Company Authorised Main Dealer for rectification.

Note

Real world performance may vary with road, load, and driving patterns. All parameters at TVSM are tested under ideal conditions. Refer specifications sheet.

It is not suitable to ride uphill when the vehicle is under performance optimisation.

VEHICLE IDENTIFICATION NUMBER

The frame and traction motor serial numbers are the only means of identifying your vehicle from others of the same type. They are also required to assist your Dealer for ordering parts or referring to special information.



The frame serial number is stamped on the frame, at the rear end below the seat assembly. Open the seat assembly and remove the VIN cover to read the frame number.



The traction motor serial number is stamped on the hub of the rear wheel assembly. Rotate the rear wheel assembly to read the motor number.

VEHICLE LEFT SIDE

1. Front brake adjusting nuts
2. Side stand
3. Pillion foot rest L
4. Pillion handle



VEHICLE RIGHT SIDE

1. Seat assembly
2. Crash Guard
3. Pillion foot rest R
4. Cover front
5. Bag hook (rear)
6. Front wheel axle nut



VEHICLE FRONT SIDE

1. Front Position Lamp
2. Integrated LED Head Lamp (AHO) and Turn Signal Lamps (TSL)Headlamp (AHO)
3. Front fender



VEHICLE REAR SIDE

1. Integrated LED Tail/Brake Lamp and Rear Turn Signal Lamps (TSL)
2. License plate lamp
3. Pillion handle



VEHICLE TOP SIDE



1. Instrument cluster
2. Rear view mirror R
3. Hazard switch
4. Front brake lever
5. Throttle grip
6. Park assist switch
7. Mode switch
8. Ignition cum steering lock
9. Bag hook (front)
10. Charging socket
11. Horn switch
12. Turn signal lamp switch
13. Rear brake lever
14. High/low beam switch
15. Rear view mirror L
16. Rear brake lever lock

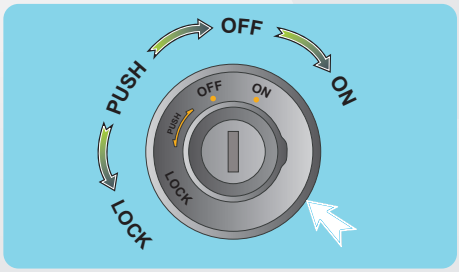
CONTROLS

Your TVS iQUBE ELECTRIC SMARTXONNECT 09 comes with a pair of identical control keys. These keys are to operate ignition cum steering lock and seat lock.

IGNITION CUM STEERING LOCK

The ignition switch enables and disables the electrical circuit and steering lock. The three positions of the switch are described below.





1. ‘OFF’ position
   All electrical circuits are deactivated. The key can be removed from the lock.
2. ‘ON’ position
   All electrical circuits are activated. Vehicle’s instrument cluster will wake up and the vehicle can be shifted to drive mode.
   Control key cannot be taken out from the lock in this position.
3. ‘LOCK’ position
   Your TVS iQUBE ELECTRIC SMARTXONNECT 09 steering can be locked in both ‘left’ and ‘right’ directions. Turn the handlebar to the ‘left’ or ‘right’. Press the key IN and rotate it to the ‘LOCK’ position from ‘OFF’ position.

   All electrical circuits are deactivated and the steering is locked. Control key can be removed from the lock.

   Insert the key into the lock and press the key IN and turn it to ‘OFF’ or ‘ON’ position to unlock the steering.

Note

Instrument cluster background illumination, front position lamp, automatic headlamp on (AHO) and tail lamp glow automatically once the ignition key is turned ‘ON’ without activating any other switches.

Caution

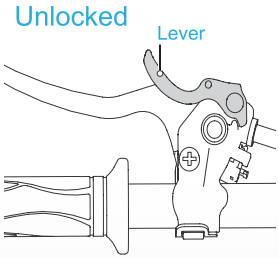
Leaving the ignition cum steering lock in ‘ON’ position for a prolonged time will drain the battery when the vehicle is not in use. Switch OFF and take the key out when the vehicle is not in use.
Always lock the steering while parking for safety.

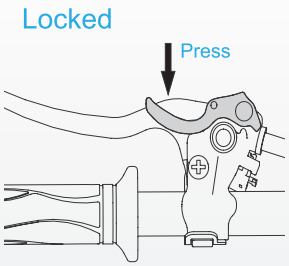
Warning

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

HANDLE BAR LEFT SIDE







1. Horn switch
   Press the switch ‘ ’ to operate the horn.
2. Turn signal lamp switch
   Slide the turn signal lamp switch to left ‘ ’ or right side ‘ ’ to operate respective turn signal lamps (LH / RH). Press the center button of the switch to turn ‘OFF’.
3. Rear brake lever
   The rear brake is applied by squeezing the left hand brake lever gently towards the handle grip. The brake lamp glows on application of rear brake.
4. Rear brake lever lock
   The brake lever lock is useful when your scooter is parked with side stand on a slope to avoid falling.

   To apply the brake lever lock, squeeze the left hand brake lever fully towards the grip. Hold the brake lever at the same position, press and hold the left hand brake lever lock. Now release the brake lever and ensure that the brake is locked properly.

   To release the left hand brake lever lock, squeeze the left hand brake lever further in and the lock will release automatically, release the brake lever upon releasing the brake lever lock.
5. High/low beam switch
   With the head lamp ‘ON’, press the switch towards ‘ ’ to operate head lamp high beam or press it towards ‘ ’ to operate head lamp low beam.

Note

Ensure that the brake lever lock is released (if applied) before riding the vehicle.

Caution

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

HANDLE BAR RIGHT SIDE



6. Hazard Switch
   Whenever it is necessary to park TVS iQUBE ELECTRIC SMARTXONNECT 09 in a hazardous location, press the hazard switch in ignition 'ON' condition to start simultaneously flashing of all turn signal lamps, so as to make others aware of your vehicle presence. Press the switch again to turn-off the lamps.
7. Front brake lever
   The brake lever controls a hydraulic circuit while squeezing and the hydraulic circuit operates the front brake system. The brake lamp glows on application of front brake.
8. Throttle grip
   Vehicle speed is controlled by the rotation of the throttle grip. Twist it towards you to increase the vehicle speed and twist it away from you or release it to decrease the vehicle speed.
9. Park assist switch
   Park assist switch activates park assist mode and allows vehicle to roll forward or backward in restricted speed thereby to reduce the effort of parking by yourself.
10. Mode switch
    Mode switch allows to switch between following modes;
    1. Economy mode
    2. Power mode

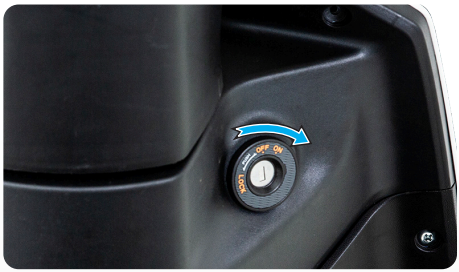
AUTOMATIC HEAD LAMP ON (AHO)



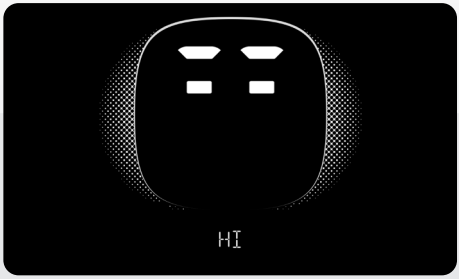
TVS iQUBE ELECTRIC SMARTXONNECT 09 comes with a Automatic Headlamp ON (AHO) LED lamp which glows automatically once the ignition is turned 'ON'.

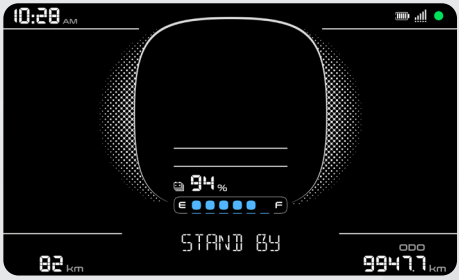
DRIVING THE VEHICLE

- Switch on the vehicle by turning the key clockwise.



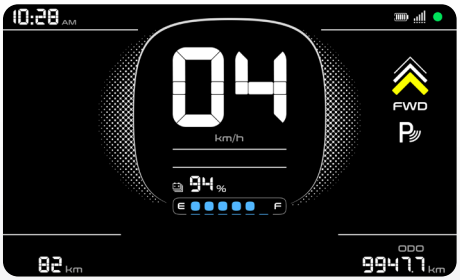
- The instrument cluster will display welcome screen as shown below and it will enter into idle mode.



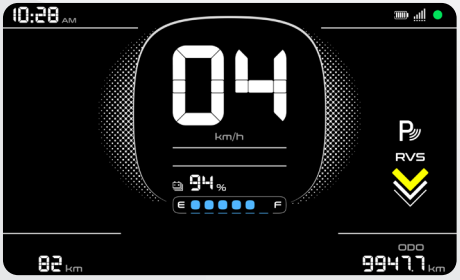


PARKING THE VEHICLE

- User can select Park assistance while parking, by pressing park assist switch (9) & either of the brake switch [(3) / (7)] simultaneously.
- The cluster will enter into park assist forward mode as shown, apply throttle to move.



- Press park assist switch once again, for shifting to reverse mode as shown, apply throttle to move.



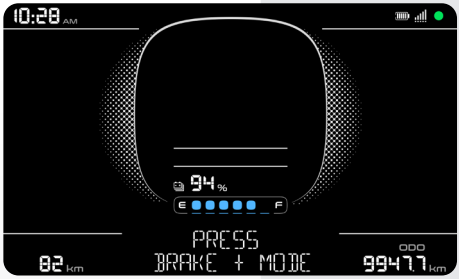
- During forward movement the speed is limited to 10 km/h and during reverse speed is limited to 5 km/h.

⚠ Caution

Park assist will be activated only when vehicle speed is 0 km/h.

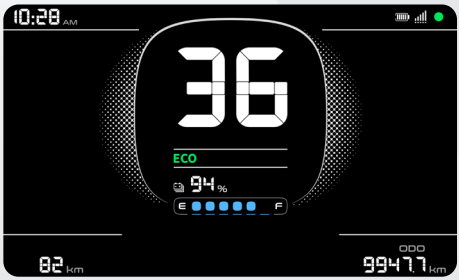
To activate the drive mode of the vehicle

- Press mode switch (10) and either one of the brake lever [(3) / (7)] simultaneously until you hear a beep sound. Once the vehicle is activated, it will enter into economy mode-



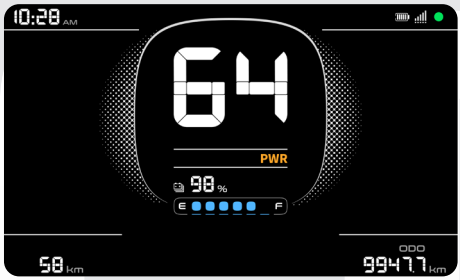
- Give throttle to start the vehicle in economy mode or press mode switch again to drive in power mode.

ECONOMY MODE



- While in power mode, press mode switch (10) to come in economy mode.
- In this mode the vehicle speed reaches up to 41 km/h.
- We can attain more range as compared to power mode.

POWER MODE



- While in economy mode, press mode switch (10) to enter in power mode.
- In this mode the vehicle speed reaches up to 68 km/h.
- This mode will provide better acceleration than economy mode.

Note

User can change the mode from economy to power, while the vehicle is running by pressing mode switch (not applicable during re-generation mode).

Switch over from Power to Eco is possible only when speed is below 40 kmph. Power to Eco mode change is not allowed when speed > 40 kmph

Caution

Do not apply brakes while accelerating. Doing so reduces your achievable range, increases motor temperature and wear of your brake shoe.

SIDE STAND



Side stand can be operated by sitting on vehicle with your left foot by pushing it away from the vehicle till it stops.

Note

Mandatory accessory will be charged extra.

Caution

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

Warning

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

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 and it is located inside the utility box. To access the tool kit, insert the control key into seat lock and rotate it in clockwise direction. Lift and open the seat.



The tool kit consists one number each of the following. Ensure the contents of the tool kit.

1. 10x12 mm spanner
2. Tool bag
3. Screw driver handle
4. Combination screw driver bit

Caution

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.

UTILITY BOX



Utility box is located below the seat. Lift the seat by unlocking the seat lock as explained in the previous section, to access the utility box.

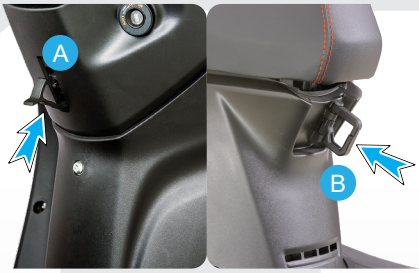
⚠ Caution

- Utility box can be used to carry a load of maximum 10 kg.
- Do not carry perishable items inside the utility box. It is not fully sealed. Do not allow / spray water inside the utility box.
- Do not keep heat-sensitive items inside as it may get hot on long rides.
- Do not keep valuable items inside the utility box when leaving the vehicle unattended.

⚠ Warning

Operating the TVS iQUBE ELECTRIC SMARTXONNECT 09 in an overloaded condition will reduce range and hamper riding stability and may lead to loss of control. Hence, it is advisable to carry the recommended amount of load only.

BAG HOOKS



There are two bag hooks provided with your scooter to carry light luggage like carry bags weighing upto 3 kg. One hook is located below handle bar on the rear panel.

Just pull out the hook from the top (A) to hang your luggage. Push back the hook once it is free.

Similarly, the other one (B) is located on the cover front below front end of the seat assembly. Pull out the hook from its position. Open the top lid and hang your cargo. Lid will get close automatically. Push back the hook to its original position once it is free.

⚠ Caution

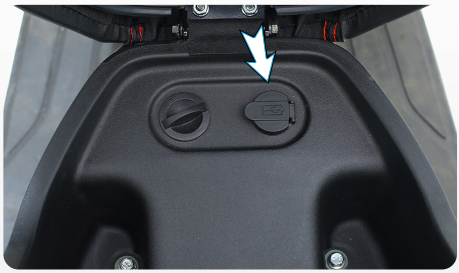
Care should be taken not to attach the luggage which hangs out of your scooter. Please note that the luggage attached to your scooter should not interfere with your feet movement.

SMART PHONE CHARGER

All new smart phone charger has been provided in the utility box of your vehicle. This will allow to charge your mobile phone as long as the vehicle key is turned on, Please follow the guidelines mentioned below for using it properly:

DO's

1. Ensure that no water enters into the unit, by closing the USB flap properly.



2. Use approved, standard USB cable for charging mobile phones.
3. Do make sure the flap is not damaged while opening / inserting the USB cable.

DON'Ts

1. Do not leave the USB charging flap open / partially closed.
2. Do not attempt to use / charge any other device, other than mobile phones. Only one mobile phone should be charged at a given time.
3. Do not try to force the USB connector in, check whether it is inserted in the appropriate direction, to prevent the damage to the charger.

⚠ Caution

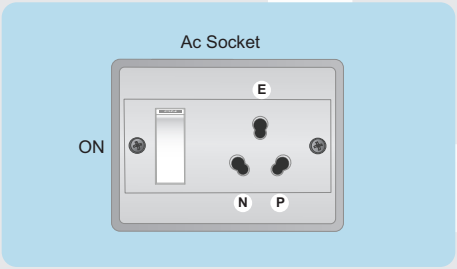
The charging time of the mobile may vary, depending on the mobile's battery state of charge. The rubber flap in the unit has been designed to prevent water entry and is not replaceable. No warranty will be applicable for charger in case of Cover flap damaged.

CHARGING THE VEHICLE CHARGER SOCKET

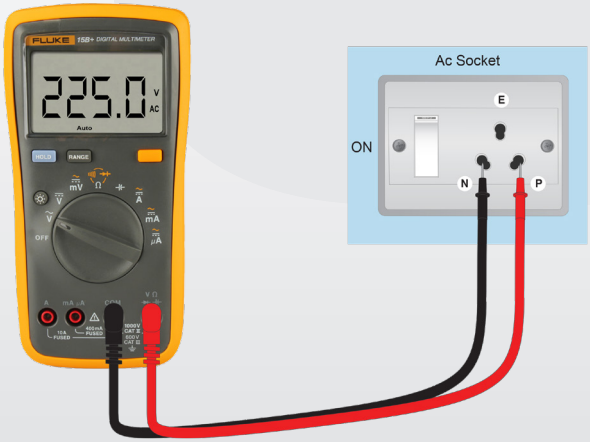
- The Phase, Neutral & Earth terminals should be placed as per the image.
- Use the Tester to find out the Phase line.

Caution

Any electrical work should be performed by authorized electrician only. Failure to do so might result in sever injury or risk to life.



Multimeter



- As shown in this picture, you can check the input voltage of the available socket.
- Normally the reading would be 230 ± 5V.

Note

- Multimeter selector should be as shown in the picture for measuring AC voltage of domestic power socket.
- The selector position will vary in each multimeter brand.
- Red & Black couplers need to be connected as shown in the picture with Multimeter as well as the domestic power socket.

⚠ Caution

- You should adhere to the electric tester usage guidelines.
- Input AC voltage should be within the range of 220 to 240V.
- Need to ensure proper earth connection in the AC domestic power socket.
- Do not use extension cable or box to charge the vehicle for safety purpose.
- Plug the charger in Single phase AC domestic socket only.
- Proper installation of power socket /board along with separate MCB and fuse should be ensured.
- Cables utilized for socket connection, should be free of tapping and cuts.
- Power socket cables should be properly routed without any hanging cables and must be enclosed in a conduit.
- The charging location should be separate and away from other vehicles or combustible materials and in well-ventilated areas.
- Unattended charging of the vehicles should be avoided.
- The charger should be stored in a clean, dry, and ventilated place.
- Charger should be placed away from the vehicle while charging.
- The charger fan and side vents should not obstruct and fan should be upward facing while charging.
- Never spray water or any liquid directly on the charger.

VEHICLE CHARGING

Charger



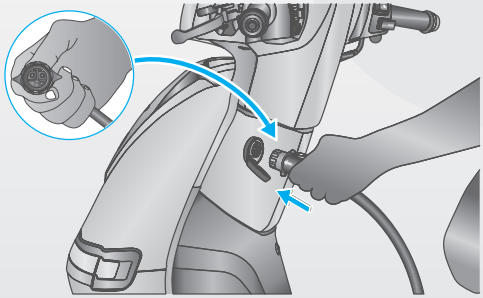


AC 3 Pin plug with Residual Current Device (RCD).

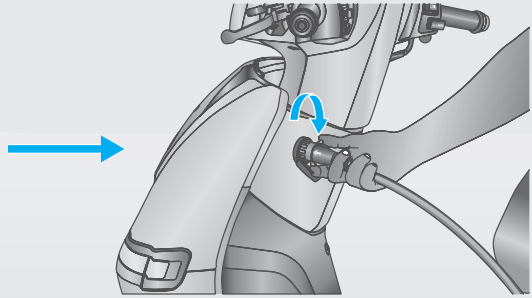
Note

The charger shown is for representative purposes and might be different to that supplied. Depending on charger variant or rated power of charger, a 15A plug might be required for charging.

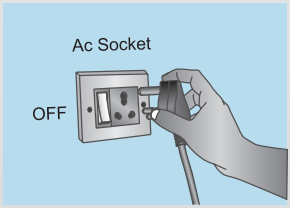
CONNECTING FOR CHARGING*



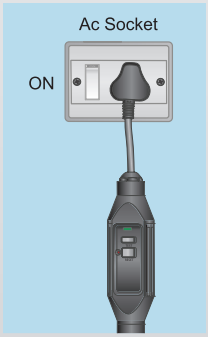
Plug in cable to vehicle charging socket



Rotate clock wise



Plug in cable AC end to AC socket

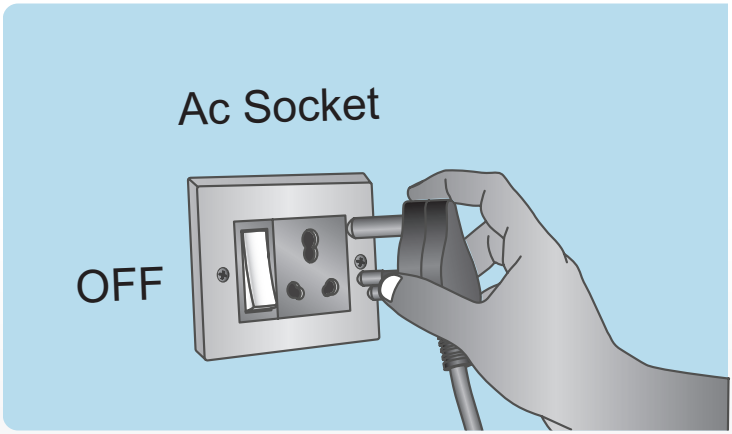


RCD Power LED will glow once the switch in AC Domestic socket is turned ON.

Note

If RCD LED indication is not observed while power is available in the domestic AC socket, please press ‘Reset’ button and the LED would glow.

DISCONNECTING CHARGER



CHARGER DO's & DON'Ts

- Never use the charger with damaged housing or cable.
- Never modify a charger or open its housing.
- Connect the charger to a regular outlet only.
- Never carry the charger by its electrical cable or pull at the cable.
- For charging always connect the charger input plug into the power socket and charger connected to the vehicle before switching on the power supply.
- For disconnection of the charger, remove it through the plug and not by pulling the cable.
- Use original TVSM recommended spares & accessories only.
- Don't use the charger in the rooms and areas with high intensity of electromagnetic disturbances (Eg: Surgical equipment room, RF shielded room etc.).
- Never immerse in water or any other liquids.
- Don't use chemical cleaning agents.
- Use dry cloth only to clean the surface.
- Disconnect the charger before cleaning the charger. Do not leave the connector on the ground to avoid damage through dust and water ingress.
- The charger is maintenance free. In case of any faults, kindly contact the nearest dealer.
- The charger should be stored in clean, dry environment only. It should not be stored in corrosive, or with other fluids which might be harmful to it.

⚠ Caution

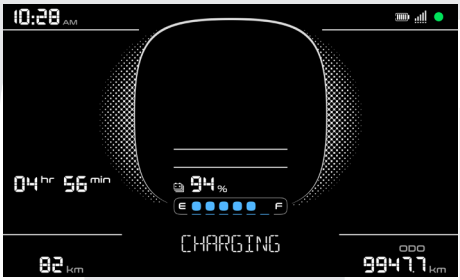
Sole responsibility of adhering to safe charging guidelines lies with the user. Any consequences due to non-adherence to guidelines or external factors have to be bourne by user.

LED INSTRUMENT CLUSTER



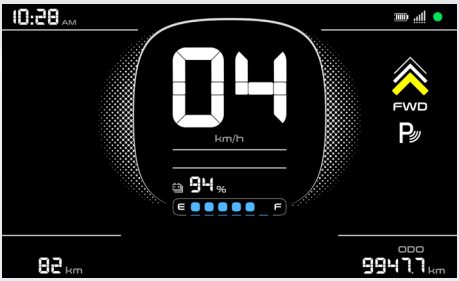
Unlike conventional scooters this vehicle is having a digital instrument cluster which ensures brighter display and allows ease of interaction between vehicle and customer.

PLUG IN CHARGING



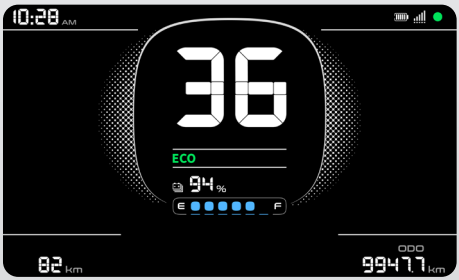
Plug in charging helps user to charge the vehicle battery with the help of included charger.

PARKING / REVERSE ASSIST

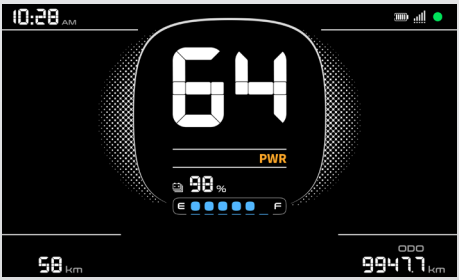


It reduces the effort of parking for customer by allowing controlled movement of the vehicle in forward or reverse direction with minimal speed.

CUSTOMER SELECTABLE RIDING MODES

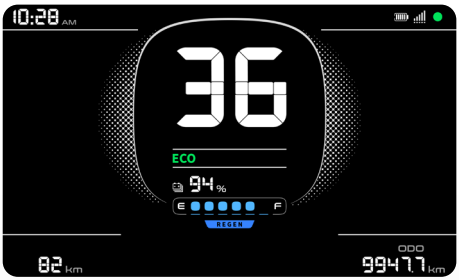


ECONOMY MODE



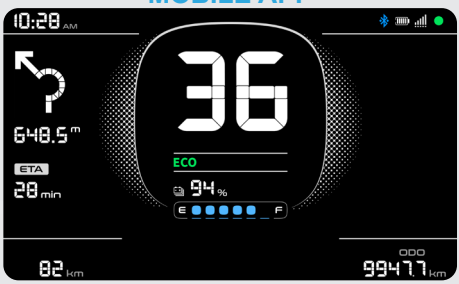
POWER MODE

REGENERATIVE BRAKING



It recuperates energy lost during braking / deceleration of traction motor under specified conditions and charges the battery. Regen is a natural phenomena, it does not require to select any mode and screen changes to Regen as shown above automatically and reverts back to drive mode screen when regen deactivates.

BLUETOOTH CONNECTED INSTRUMENT CLUSTER, TELEMATICS AND MOBILE APP



Connect with instrument cluster using mobile app to get access through various features like message notification call accept / reject options etc. on the go.

Telematic unit is used for identifying the vehicle location.

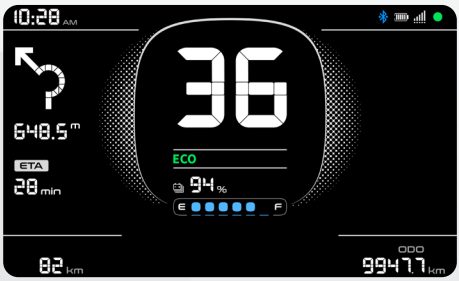
Ride Data Sync (optional) helps customer to know about their ride data and many other functions on the mobile app.

CALL ALERT



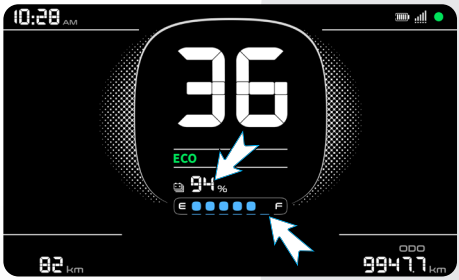
Once Mobile phone is connected with vehicle instrument cluster, incoming call options and messages will be shown in instrument cluster while customer is riding the vehicle as shown above.

TURN BY TURN NAVIGATION



Instrument cluster displays navigation instructions of your desired destination while connected with your smart phone app, just connect and get turn by turn navigation directly on your display.

BATTERY CHARGE LEVEL & DTE



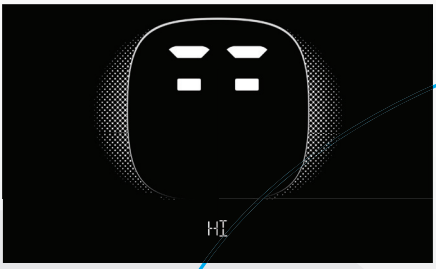
Battery level indication helps customer to know how much battery charge is left in the vehicle by displaying percentage of SOC (Stage of Charge).

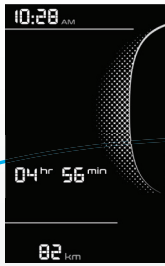
Distance to Empty (DTE) helps the user to know how much distance can be traveled with the remaining battery charge.

Note

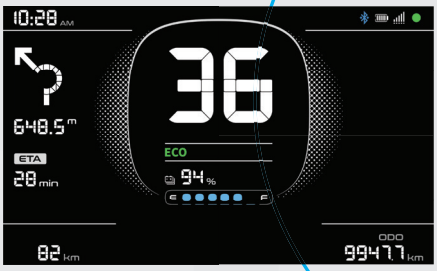
Distance to Empty (DTE) varies as per the energy consumption pattern of the previous ride. Hence, DTE is variable and is only an approximation.

Your TVS iQUBE ELECTRIC SMARTXONNECT 09 is provided with a fully digital connected instrument cluster with lots of feature and modes like Economy, Power, Parking, navigation assist, Bluetooth connected app for mobile devices, etc. Morever your vehicle's instrument cluster is provided with several tell tales & alerts to inform you about the vehicles current condition, lets have a glimpse of them.



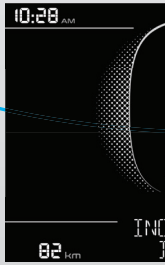


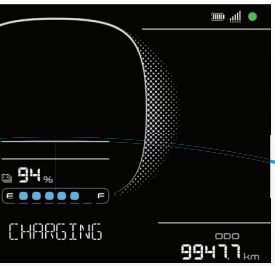
1. LEFT INDICATOR ON
2. HIGH BEAM ON
3. MIL ON



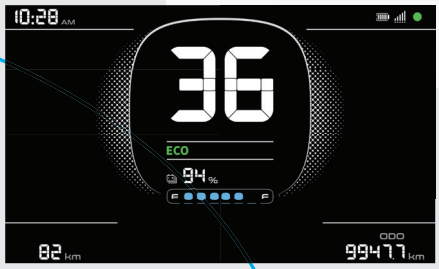




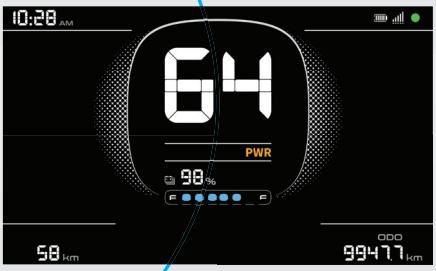


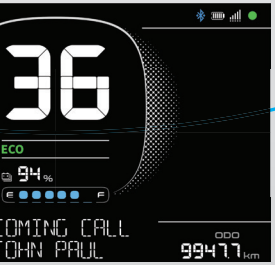


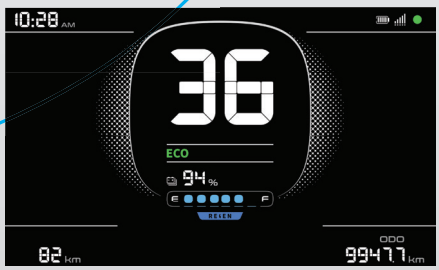
4. RIGHT INDICATOR ON
5. SIDE STAND
6. LOW BATTTERY ON



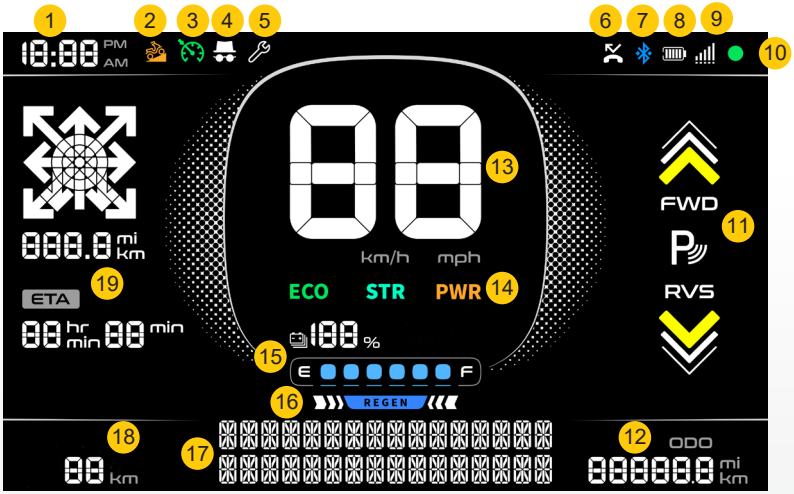








POWER / ECONOMY MODE DISPLAY



1. **Digital clock**

   Indicates the time in 12 hour time format (AM or PM). Clock is set automatically through the telematics unit on your vehicle. Time availability on the instrument cluster depends on connectivity to GPS satellites and network strength.

   10:07 AM

2. **Hill hold**

   To enable / disable the hill hold function refer page no. “HILL HOLD ASSIST” on page 26.

3. **Cruise control**

   Not applicable.

4. **Incognito Mode ‘ ’**

   Indicates that the incognito mode is ON. Incognito mode can be switched ON or OFF through TVS Connect app.

5. **Service reminder ‘ ’**

   If the service is due, whenever the ignition is turned ‘ON’, an icon with spanner symbol ‘ ’ turns on after the self-test cycle of connected cluster and continue to glow till the vehicle is serviced and the reminder is reset. An information message also will be popped-up in the notification area as shown:

6. **Missed Call Notification ‘ ’**

   The connected instrument cluster displays the missed calls from the smart phone via Bluetooth.

7. **Bluetooth ‘ ’**

   Indicates vehicle is connected with rider’s mobile via mobile app.

8. **Mobile battery level indicator ‘ ’**

   Indicates rider’s mobile battery level once connected with vehicle via bluetooth.

9. **Network signal ‘ ’**

   Indicates mobile signal once connected with vehicle via bluetooth.

10. **Over The Air (OTA) notification ‘ ’**

    A green colour LED indicator glows and indicates whether a vehicle software update is available.

11. **Park assist mode**

    Indicates that vehicle in forward or reverse.

12. Odometer

Odometer registers the total distance covered by the vehicle in kilometer. The digit after the dot mark denotes one tenth of a kilometer.



13. Speedometer

Indicates the vehicle speed in kilometer per hour by default.



14. Mode Display

Indicates whether the vehicle in economy or power mode.



15. Battery level indicator (SOC) -

Indicates battery charge in percentage as well as bars;

Full SOC – F

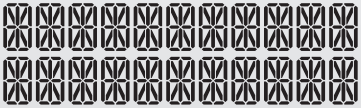
Low SOC – E (Blinking)

16. Regenerative braking

It recuperates energy lost during braking / deceleration of traction motor under specified conditions and charges the battery. Regen might not be active when the state of charge is high (higher the remaining range, lesser the regen) or when the battery temperature is high.

17. Notification area

This is a general purpose notification area where the greeting message, various informations and warnings are displayed.



18. DTE

Distance to Empty (DTE) indicates the distance that the vehicle can go with current level of battery charge and riding pattern. DTE varies as per the energy consumption pattern of the vehicle. Hence, DTE is variable and is only an approximation.



19. Navigation window

Once the vehicle is connected to app and navigation has been started on the app, the display of your TVS Orbiter connected cluster enters into navigation window and displays the turn by turn navigation instruction with a simple and elegant graphical representation.



Mobile phones can be connected with vehicle instrument cluster using Bluetooth, which helps you to know about your ride data and many other functions. Once Bluetooth connection is established between instrument cluster and mobile phone, Bluetooth symbol will glow.

Your vehicle also comes with a Telematic unit. This Telematic unit is under the concept of TVS SMARTXONNECT and it is equipped with electronics to monitor and transmit various vehicle data such as battery, motor and other electrical systems. The vehicle data allows for various remote function services, some them are following.

- Remote monitoring of charging status – The charging status of the vehicle can be checked using your internet enabled smart phone (TVS connect app) even if you are not near to vehicle.
- Live tracking – The live status of the vehicle can be checked remotely at any time using TVS mobile app prescribed for this vehicle.
- Geo-fencing – The telematics system can be set to provide alerts if your vehicle is moved out of a set geographical boundary (can be defined through mobile app).
- Theft notifications – The telematic system can be used to track unauthorised usage but cannot prevent it. The system will notify the unauthorized movement of a vehicle with live location status. The notifications can be checked on the mobile app.
- Voice assist - The voice assist can be use your voice to control or know status of various functions like what is the total drive time, what is the charging status etc.

Scan QR codes for downloading the mobile app and then follow on screen instructions.

Android

iOS

Note

"TVS Motor Company Ltd. does not recommend usage of any type of Mobile Hand Held Devices, and applications / features whether installed or associated with the vehicle which deprives the rider's attention and focus while riding the Two Wheeler. The customers and riders are strictly advised to understand the applicable laws, road safety Rules and the local laws on usage of electronic devices while operating the vehicle. Usage of any Mobile or hand held devices, and /or applications / features while riding the vehicle is on move is totally at customer's / rider's risk. The product and features have technical limitations and are for general overview only."

Bluetooth pairing

First time Bluetooth pairing

To pair your Android smart phone or iPhone with your TVS iQUBE ELECTRIC SMARTXONNECT 09 connected instrument cluster, via Bluetooth, for the first time, follow the procedure as described below :

1. Switch 'ON' the vehicle.
2. Instrument cluster can be in any mode for first time pairing.
3. Open the app and press the **'CONNECT'** tab,ensure the smart phone is near to the vehicle.
4. The app searches for all Bluetooth devices near by and displays the list of devices available.
5. The connected instrument cluster's Bluetooth name is prefixed by TVS IQUBE and followed by alpha-numeric digits. Ex : 'TVS IQUBE DEC3574'. This Bluetooth name can be found by changing the cluster mode into BT pair mode.
6. Now, select the 'TVS IQUBE DEC3574' in app to initiate the pairing process.
7. On pairing, a Bluetooth icon ', phone's battery icon ' ' and signal strength icon ' ' will be displayed on the speedometer's TFT display. In Addition to this icons, will be displayed on connected instrument cluster TFT display.
8. For initiating first time pairing, logout from the app, login again using your login credentials and then press 'CONNECT'.

Note

During the course of pairing process, if there is any occurrence of error, the connected instrument cluster should be turned 'OFF' and 'ON', and the application also need to be restarted.

Please remember that all the smart phones are not compatible for pairing with the TVS iQUBE connected instrument cluster.

During the search of Bluetooth devices in app, if the vehicle connected instrument cluster's Bluetooth device ID is not visible, try for one or two more iterations.

Note

Any number of Android phones can be auto-paired with the instrument cluster, but only one at any point of time will be in actively connected with the speedometer.

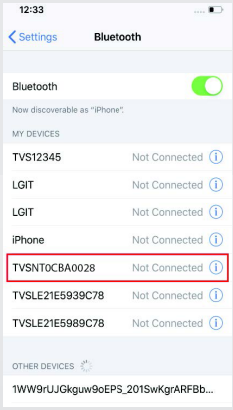
Only one iPhone can be auto-paired with a single instrument cluster at a time. If the user need to connect multiple iPhones with the single instrument cluster, the previous connected iPhone has to be forgotten by clicking, 'Forget This Device' from Bluetooth settings in the iPhone.

If the vehicle battery is reset or fuse is blown, then 'Forget This Device' from Bluetooth settings.

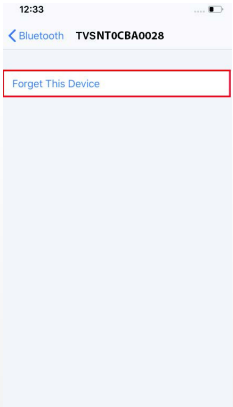
Steps to "Forget This Device" in iPhone:

If the user needs to connect multiple iPhones with the single instrument cluster, the previous iPhone has to be forgotten using "Forget This Device" from Bluetooth settings in the following manner:





1. In the previous connected iPhone, open the SETTINGS -> BLUETOOTH.
2. Select the instrument cluster, which was connected previously.
3. Click on the “Forget this device”.



Auto pairing

Once the first time pairing is done between vehicle’s instrument cluster and your smart phone, the phone will automatically connect with the vehicle when the following conditions are met:

1. Vehicle is switched ‘ON’ and vehicle is near to the smart phone.
2. Smart phone’s Bluetooth is turned ‘ON’
3. First time pairing is ensured.
4. In case of iPhone, the ‘TVS iQUBE’ app should be open or be open in background for auto-pairing to happen.

Every time auto-pairing happens, app will open automatically and connect with the Instrument cluster. The connected instrument cluster’s display shows ‘iQube is now connected’.

Note

If the phone enters battery saver mode, auto-pairing might not happen. It takes maximum of five minutes for auto-pairing and it can happen in vehicle running or in idle condition.

Auto-pairing happens only if the application is locked in the RAM in multitasking screen of the phone which has customized OS (Ex : MI, Vivo etc.)

In case of Android phones with Android OS version above 8.0, for App to work seamlessly, any battery optimization setting to be removed in the TVS Connect App and GPS shall be allowed to run in background in high accuracy mode.

Even if your phone’s Bluetooth is already paired to other gadgets like smart watch, health band or helmet, the auto-paring works with your TVS iQube’s connected instrument cluster.

If the application unfortunately stops due to unforeseen circumstances, close and reopen the application and do the manual pairing for the first time, then auto pairing will happen subsequently.

For first time pairing, logout from the app, login again with your login credential and press ‘CONNECT’ tab.

Once the connected instrument cluster of your TVS iQube is connected with your smart phone, the connected instrument cluster displays Bluetooth icon, your mobiles battery level icon and network providers signal strength icon.

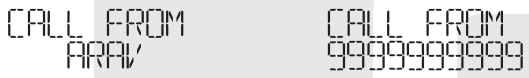
Note

Incase multiple SIM cards are used in smart phone, by default, SIM 1’s network provider’s signal strength is shown in the display of connected instrument cluster.

Signal strength displayed in the connected instrument cluster might vary from the display in smart phone as the former is referred from telephonic standards.

Incoming call alert display

The connected cluster's LED will display the incoming calls alerts from the smart phone via Bluetooth. Ex. 'CALL FROM ARAV', will be displayed if the contact is stored in the smart phone otherwise number will be displayed. Ex. 'CALL FROM 9999999999'.



Incase if the incoming call is missed, the number of missed calls will be displayed as shown below for 10 seconds.



Navigation assist

Once the navigation option is enabled on the mobile app, the cluster enters the navigation mode and displays the below message:



Once the Turn-by-Turn navigation route is synchronized with mobile app, the same will be indicated by the cluster to the user using the alpha-numeric display as shown below:



If the route suggested by the app is not followed by you, re-routing will be done by the app and the same will be displayed by connected cluster:



Similarly, when you reached your destination, the connected cluster displays arrival message as shown below:

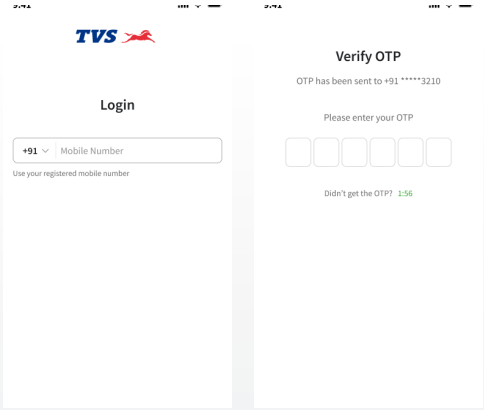


Note

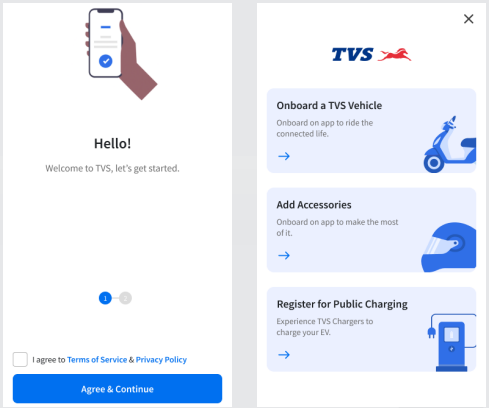
The time remaining and distance remaining to reach the destination will be displayed for 5 seconds when the mode button on the cluster is pressed and when the navigation assist is enabled.

Onboard a TVS Vehicle

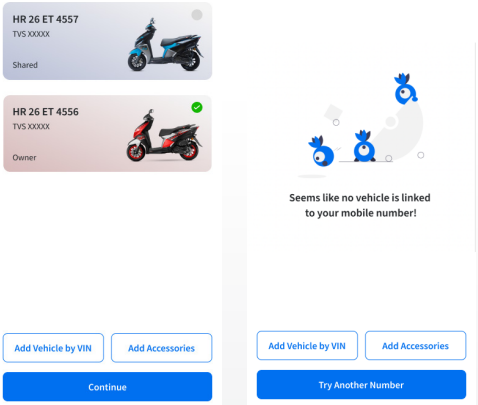
On opening the **TVS Connect** app for the first time you have to login using your mobile number. Then enter the OTP which is received from TVS Motor Company Limited.



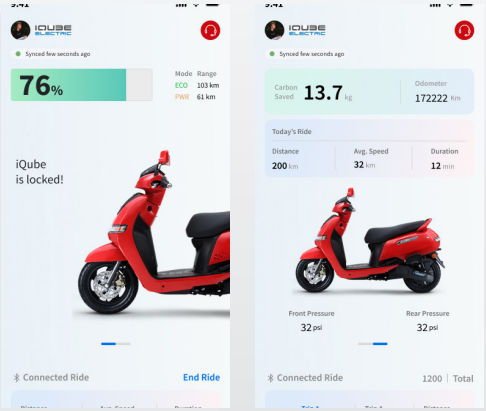
On submitting the OTP. You need to agree to terms of service and privacy policy and click agree and continue. Now click onboard a TVS Vehicle.



Select your vehicle that need to be linked to your App. If no vheicle linked with your mobile number. A vehicle can be added using VIN / chassis number, of the vehicle.



After successful verification of your chassis number, the Home screen of the app opens.



Note

Please remember that the Navigation License has to be renewed after 5 years of vehicle purchase and renewal can be done by contacting near by Dealer end.

TVSM has developed internet / mobile application (TVS Connect) in order to provide navigation services. TVSM may use the personal driving data details to provide assistance to locate and track the vehicle on good effort basis.

By purchasing TVS iQube, Customer acknowledges and consent to the collection and utilization of vehicle telematics data, including but not limited to battery performance, number of kilometers the vehicle has run, for the use of connected features for TVS Connect app by the Customer.

The information relating to the vehicle collected by TVSM does not include any personal information provided by you, shall be deemed to be TVSM proprietary information and shall be solely owned by TVSM. TVSM may use such information in the manner deems fit and necessary.

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 is operated in dusty area, certain jobs should be performed more often to ensure reliability of the vehicle. Steering components, suspension 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 Authorized Main Dealer / Authorized dealer.

Periodic inspections may reveal one or more parts that may need replacement. Whenever replacing parts of TVS iQUBE ELECTRIC SMARTXONNECT 09, it is recommended that you use only the TVS Motor Company Genuine parts.

⚠ Caution

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

"PAY SERVICE INTERVALS (months or km which ever occurs earlier)"	SERVICE	1st	2nd	3rd	4th	5th
LIST OF OPERATIONS / SCHEDULE	MONTHS	6	12	24	36	48
	km x 1000	4	8	12	16	20
• Vehicle software version		I & U	I & U	I & U	I & U	I & U
• Steering operation		I & A	I & A	I & A	I & A	I & A
• Front and rear axle nut tightness		I & A	I & A	I & A	I & A	I & A
• Swing arm bolt tightness		I & A	I & A	I & A	I & A	I & A
• Center and side stand pivot (optional)		-	C, L & A	-	C, L & A	-
• All electrical indication and cluster functions		I	I	I	I	I
• Side stand switch mounting bolt tightness		I & A	I & A	I & A	I & A	I & A
• Tyre pressure front and rear at cold condition		I & S	I & S	I & S	I & S	I & S
• Brake cam and shoe wear rear		I & A	C, L & A	I & A	C, L & A	I & A
• Brake effectiveness / free play		I & A	I & A	I & A	I & A	I & A
• Charger and charging operation		I	I	I	I	I
• Rear wheel noise and smooth rotation		-	I & C	-	I & C	-
• Fork oil**		-	-	-	-	-
• Controller cable bolt tightness		I & TO	I & TO	I & TO	I & TO	I & TO

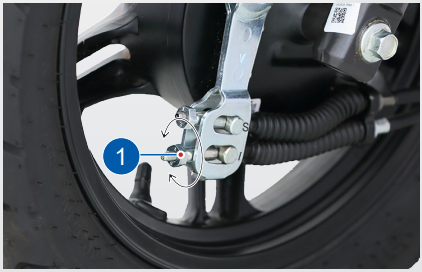
- *After 2nd service, each service interval will be at 4000 Km or 1 year which ever is earlier.*
- *R - Replace; I - Inspect; T - Top up; C - Clean; A - Adjust; U - Update; L - Lubricate; TI - Tighten; S - Set; To - Torque*
- *Reset service reminder and check for DTC's using diagnostic tool and correct it if any at every service.*
- *Test drive the vehicle and ascertain smooth functioning of all controls and parts.*
- *Clean the vehicle before delivery.*
- **Check the rear brake play periodically. However the brake play needs to be adjusted more frequently depending upon the usage.*
- ***Fork oil has to be replaced at every 24000 km.*
- *Tyre replacement has to be done based on the assessment of tyre wear as specified in* *page No. 46.*

FRONT BRAKE

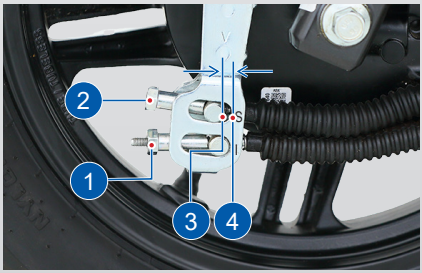
1. Measure the free play of the front brake lever at the lever end as shown in the figure.
2. The free play of the brake lever before the engagement of brake should be between 10 ~ 15 mm.



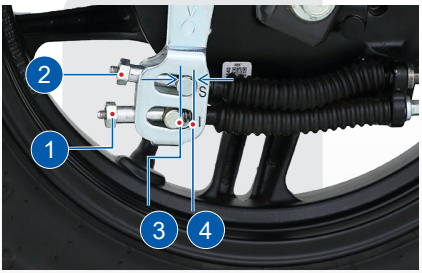
3. If the free play measured is not within the specified limit, turn the adjuster nut (1) fixed at the bottom side slot (marked as 'I') in clockwise direction to reduce the free play or in anticlockwise direction to increase the free play.



4. After obtaining the necessary free play, inspect for the clearance between the bullet (3) and slot end (4) marked as 'S' as shown in the figure.



5. If any clearance is found, turn the adjuster nut (2) at the top side in the slot marked as 'S' in clockwise direction until there is no clearance between the bullet top (3) and the slot top (4).



6. After adjusting the adjuster nut top, If any clearance is observed in between the bullet bottom (5) and the slot bottom (6) marked as 'I' as shown, then turn the adjuster nut (2) in anticlockwise until there is no clearance.
7. Once again check and confirm the brake play at the lever end.

Warning

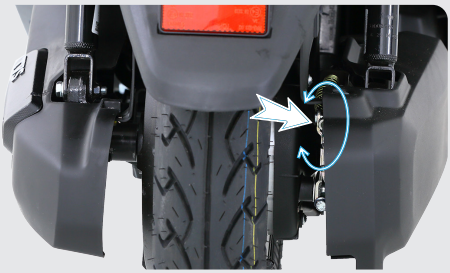
Since the vehicle is fitted with Synchronised Braking Technology (SBT) adjust the brakes with additional care. If not it may result in brakes not working properly. Please contact TVS Motor Company Authorised Dealers for further assistance.

REAR BRAKE

1. Measure the free play of the rear brake lever at the lever end as shown in the figure.
2. Free play of brake lever before the engagement of brake should be between 10 -15 mm.



3. If the measured distance is more than the limit, adjust the nut provided at the rear 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.

Warning

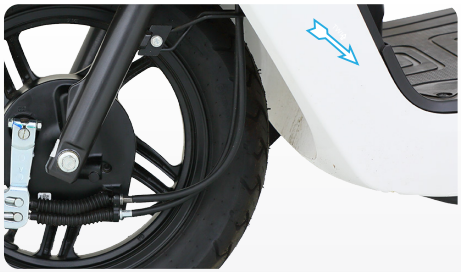
Check the front brake and the rear brake play periodically band adjust if required. However the brake play needs to be adjusted more frequently depending upon the usage.

Caution

Ensure rear wheel can be rotated freely by hand after adjusting brake. If brakes are overtightened, range will be reduced due to excess energy consumption. Replace the brake shoes as a set, if the wear limit indicator shows beyond the wear limit even after indexing the lever.

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 facing the direction of wheel rotation while fixing the tyre on the wheel rim.

TYRE PUNCTURE

Your scooter is fitted with a tubeless tyre on both front and rear wheel. Incase of any puncture / tyre damage, it is advised to visit the nearest tyre manufacturer Dealer or the tyre repair shops who knows the repairing method of tubeless tyre.

It is not necessary to remove the tyre from wheel rim always to attend a puncture.

If there is need of tyre removal, it is strongly recommended to use a tyre removal / fitment machine.

If at all, tyre levers needs to be used, the levers should be free from sharp edges. Care should be taken not to damage the tyres and rims.

If there is a need to replace rear tyre, the same should be done at TVS Authorised Dealers equipped to service electric vehilces. This is must to avoid damage to the rear hub motor and ensure safety. Any damage caused to motor by servicing rear tyre in unauthorised location may lead to your traction motor warranty being voided.

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, affect range of the vehicle and overall life of the tyres.

Caution

The side walls of the tubeless tyre which in contact with the wheel rim are only seals the air inside the wheel assembly. Hence care should be taken not to damage the side walls of the tyres during removal / reassembly.

Note

Tyre pressure is a very important parameter in the daily operation of the vehicle. In order to extract the best possible range and performance.

WARRANTY INFORMATION

TVS Motor Company Limited ('the Company') give this warranty with respect to the TVS iQUBE ELECTRIC SMARTXONNECT 09 manufactured by the Company.

While the Company has taken every care to maintain quality in the manufacture of the iQUBE ELECTRIC SMARTXONNECT 09, the above said warranty is subject to other terms of warranty :

Warranty is applicable during 3 years from the date of purchase or during first 30,000 km run of the vehicle, battery, motor, controller and charger, whichever is earlier, the parts of the vehicle covered under warranty which prove to the satisfaction of the Company to have a manufacturing defect will be repaired or replaced free of cost. In the event of a change in the vehicle ownership, the remaining warranty period is effective for the new owner.

The Company's obligation under this warranty is limited to repairing or replacing, with new or equivalent of the affected parts at no cost to customer for part or labour. The affected parts must be proven to Company's satisfaction to have manufacturing defect due to faulty material or workmanship 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 :

The warranty does not cover damage or defects arising from the following conditions:

1. Misuse, abuse, or neglect of the Vehicle or the Battery, such as but not limited to:
    - The original serial number on the frame, motor or Battery being removed, distorted or altered.
    - The Battery cover is damaged or broken.
    - Battery cover is opened or attempted to open by force.
    - Short circuit due to misuse or wrongful testing.
    - Uneven charging of all the Batteries in a Vehicle.
    - Leaving battery under fully discharged condition for a long time. (Vehicles should be charged to 30% SOC atleast once in 15 days).
    - Replacing/swapping of the Battery associated with a given Vehicle, with that from another vehicle.
    - Not using Manufacturer recommended charger for charging of the Battery along with or in exclusion of the Vehicle.
    - The Vehicle not being at rest for at least 3 hours in a day
    - Exposure of Battery to direct sunlight or radiation of heat (above 25°C). Any natural wear and tear, including without limitation, aging.
2. Warranty claims on proprietary items such as tyres, tubes 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.
3. Parts repaired or replaced under this warranty are warranted only throughout the remainder of the original warranty period.

4. 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.
5. In any event, the Company is not liable for indirect, remote, incidental or consequential damages.
6. 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 dispatched for sale.
7. Any claim under this warranty will be valid only when the customer:
    - Takes his vehicle to an Authorised Main Dealer of the Company and reports the problem he / she felt in the vehicle to enable the Authorised Main Dealer to inspect the same and assess the cause for the reported problems.
8. This is the only warranty given by the Company for the TVS iQUBE ELECTRIC SMARTXONNECT 09. No employee, Dealer or other persons authorised to extend or enlarge this warranty.

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.

LIST OF PARTS NOT COVERED UNDER WARRANTY

ITEM	WHAT TO CHECK FOR
Normal Maintenance operations	Fastener re-tightening, brakes as well as other normal adjustments.
Wear and tear items	Brake linings, fasteners, shims, washers, etc.
Electrical	Bulbs and fuses.
Service Maintenance Parts	Brake fluid, fork oil etc.
Rubber, rexine & plastic items	All hoses , pipes and plastic aesthetics
Proprietary Items	Tires and tubes (the warranty terms are subject to our agreement with proprietary OEM).
Other Factors	✦ Parts of the vehicle getting affected due to atmospheric effect / environmental factors (rusting, paint peel off etc.). However, depending on the vehicle usage condition, warranty would be accepted up to 2 years from the date of purchase. ✦ 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 which are used in conjunction with parts not made or recommended by the Company. ✦ 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 User's manual. ✦ Vehicles on which motor number or chassis number is deleted, defaced or altered. ✦ Vehicles on which any warranty service including scheduled paid service is not availed when it falls due (at TVS Motor Company Authorised Main Dealer / Authorised Dealer). ✦ 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. ✦ Vehicles affected by natural calamities like flood, earthquake, tsunami, storm etc.

WARRANTY OF GPS DEVICE

Please note that the warranty on GPS device is offered by the manufacturer of GPS device and the same shall be available independently to the customer who owns this vehicle. All or any defects or issues with the GPS device shall be governed by and subjected to the warranty terms offered by the GPS device manufacturer. TVS Motor Company Limited shall not provide warranty to the GPS device independently and shall not be liable in any manner in respect to the same. In order to facilitate you to avail any warranty support from the GPS device Manufacturer, you may please contact Service department, TVS Motor Company Ltd, Harita, PB No. 4, Hosur-635 109, Tamilnadu. Email: customercare@tvsmotor.com

Contact information of such manufacturer of GPS device to avail warranty related support or queries shall be provided to you on your request.

Please refer to product website for further details on terms and conditions of the GPS device.

Periodic maintenance always helps good performance of an automobile and our services are planned to keep your TVS iQUBE ELECTRIC SMARTXONNECT 09 performing good. **Please note that carrying out the services for your vehicle at scheduled intervals at any of the TVS Motor Company Authorised Main Dealer / Authorised Dealer 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 serial number, traction motor serial number and 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:- 1800-572-1818

TECHNICAL SPECIFICATIONS

MANUFACTURER : **TVS MOTOR COMPANY LIMITED**
P. B. No.4, Harita, Hosur - 635 109, India.

TVS EPR NUMBER – 7243668063601701385

POWER TRAIN

Type	:	Plug in EV
Battery type	:	Li-ion
No. of batteries	:	1 Pack
Rated voltage	:	52V
Charging time **	:	80% SOC - 2.45 hrs. (Approx)
Motor type	:	BLDC
Motor output power	:	3.0 kW(Rated) 4.4 kW (Peak)#
Motor output torque	:	33 Nm (Rated) / 140 Nm (Peak)

CHASSIS

Overall length	:	1805 mm
Overall width	:	645 mm
Overall height	:	1140 mm
Ground clearance	:	157 mm
Wheel base	:	1301 mm
Kerb weight	:	109 kg
Pay load	:	140 kg
Maximum laden weight	:	249 kg
Frame	:	Duplex tubular frame
Front suspension	:	Telescopic hydraulic type
Rear suspension	:	Hydraulic Twin tube shock absorber

TYRE

Tyre size :		
Front	:	90/90-12 54J (Tubeless)
Rear	:	90/90-12 54J (Tubeless)
Tyre pressure :		
Front	:	1.69 kg/cm² (24 psi)
Rear (Solo)	:	2.25 kg/cm² (32 psi)
Rear (Dual)	:	2.54 kg/cm² (36 psi)

BRAKES

Front Drum	:	Hand operated internally expanding shoe type, 130 mm dia drum
Rear	:	Hand operated internally expanding shoe type, 130 mm dia drum

ILLUMINATION & TELL - TALES

Head lamp (High / Low)	:	13.5V, 13W / 8.5W LED
Position lamp	:	13.5V, 5.5W LED
Tail / brake lamp	:	13.5V, 0.4W / 2.1W LED
Turn signal lamp (F/ R)	:	13.5V, 2.5W / 1.6W LED
Number plate lamp	:	5V, 2A
Horn	:	12V, 2.5A

* Included charger specification/rating might vary. This is indicative of a typical offering.

** The charging duration might be higher or lower depending on the power rating, input (220V 50Hz) voltage and battery capacity of the vehicle.

At component level.

INSTRUMENT CLUSTER

Power rating	:	13.5V, 10W TFT
Display	:	800 x 480
Display type	:	TFT
Luminous emittance	:	1000 Lux

FUSES

DC-DC fuse	:	58V, 5A
Charger fuse	:	58V, 40A
Load fuse before Ignition lock	:	32V, 10A
Load fuse after Ignition lock	:	32V, 7.5A

CAPACITIES

Range per charge (ECO)	:	85 km at full charge[$]
Front fork oil grade	:	Gabriel front fork fluid
Front fork oil capacity	:	91 ± 1 cc
Brake fluid	:	TVS (DOT 3 / DOT 4)
Top Speed	:	Around 68 km/h

Note

Specifications are subject to change without notice.

Warning

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

[$] Real world range may vary with road, load, driving patterns and ageing of battery packs. The real range for the iQube model is 85km under standard riding conditions, which consists of a solo rider of average weight (between 70 - 80kg, might be mentioned only if queried) riding on city roads in Eco mode without any extra payload in a continuous or single day ride. The standard conditions also involve the vehicle being used without brake and accelerator being applied together and the recommended tyre pressure being filled up. (cold tyre air pressure of 26 PSI for Front and 34 PSI for Rear tyre)

GENERAL INFORMATION

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:

Oriental insurance

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