



#### **FOREWORD**

#### Hello!

You are now a proud owner of the iQube Electric SmartXonnect scooter from the house of TVS Motor Company.

The iQube Electric SmartXonnect 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 TVS iQube Electric SmartXonnect, 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.

To ensure a worry free journey on your TVS iQube Electric SmartXonnect, 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 and being a part of our community of smart, next-gen and sustainable riders.

**Happy riding!** 

TVS MOTOR COMPANY LIMITED

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#### CONTACTS FOR SUPPORT

Under any circumstances, TVS Motor Company Limited will be glad to provide any additional information or service assistance you require. Please feel free to contact us at our area offices:

#### TAMILNADU-1,3&4

#### 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 AO.Madurai@tvsmotor.com

#### **TAMILNADU-2**

#### 2. TVS Motor Company Limited

No. 10, 2nd floor, Shree Shanmugapriya Towers, Kannuswamy Street, Behind Hotel Annapoorna, RS Puram, Coimbatore - 641 002. Phone: 0422-4350060/2541035 Email: AO.Coimbatore@tvsmotor.com

#### **KERALA**

#### 3. 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-1.2 & GOA**

#### 4. TVS Motor Company Limited

No. 600. Anand Surva. 2nd Floor. 15th Cross, 6th Phase, JP Nagar, Opp. BMTC Bus Stop. Bangalore - 560 078.

Email: AO.Bangalore@tvsmotor.com AO.Hubli@tvsmotor.com

#### **ANDHRAPRADESH-1&2**

#### 5. TVS Motor Company Limited

Phone: 080-26653433

Rukumani Towers, First Floor, No. 3-11-30, Plot No. 11, Paigha Colony, Behind Anand Theater, Secunderabad - 500 003.

Phone: 040-27840590/27844419 Email: AO.Hyderabad@tvsmotor.com AO.Vijayawada@tvsmotor.com

#### MAHARASHTRA-1&2

#### 6. TVS Motor Company Limited

Plot No. 4/12/3. Near Ganapati Chowk. Viman Nagar, Pune - 411 014. Phone: 020-26632111/26632110 Email: Service.pune@tvsmotor.com

No. 401. 4th Floor. The Chambers.

#### **MAHARASHTRA-3 & CHATTISGARH**

#### 7. 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 AO.Raipur@tvsmotor.com

#### **GUJARATH**

#### 8. TVS Motor Company Limited

109, Ayna Complex, Opp. Suvarna Villa Bungalows, 100 ft Thaltej Hebbatpur Road, Off: S.G. Highway, Thaltej, Ahmedabad - 380 054. Phone: 079-65443748

Email: AO.Ahmedabad@tvsmotor.com

#### MADHYA PRADESH-1 & 2

#### 9. 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

AO.Indore@tvsmotor.com

#### **RAJASTHAN-1&2**

#### 10. 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 AO.Udaipur@tvsmotor.com

#### **DELHI & HARYANA**

#### 11. TVS Motor Company Limited

D-3 & D-4, 2nd Floor, Sector - 10, Noida,

Uttar Pradesh - 201 301.

Phone: 011-29834640/29834773
Email: AO.Delhi@tvsmotor.com
AO.Harvana@tvsmotor.com

#### **PUNJAB & CHANDIGARH**

#### 12. 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 WEST**

#### 13. TVS Motor Company Limited

D-3 & D-4, 2nd Floor, Sector - 10, Noida, Uttar Pradesh - 201 301.

Phone: 011-29834640/29834773 Email: AO.Upw@tvsmotor.com

#### **UTTAR PRADESH CENTRAL & EAST**

#### 14. TVS Motor Company Limited

1st Floor, Cyber Tower, TC-34/V-2, Vibhuti Khand, Gomti Nagar, Lucknow - 226 010.

Phone: 0522-4918300/4918301 Email: AO.Upe@tvsmotor.com AO.Upc@tvsmotor.com

#### **WEST BENGAL**

#### 15. TVS Motor Company Limited

Ground Floor & First Floor, 133 A. S. P. Mukherjee Road, Opp. Tollygunge Police Station,

Kolkatta - 700 026.

Phone: 033-24617096/24617092 Email: AO.Kolkatta@tvsmotor.com

#### **BIHAR**

#### 16. TVS Motor Company Limited

N-Plaza, Jamal Road, P.S. Kotwali.

P.S. Kotwall,

Patna - 800 001.

Phone: 0612-2200068/2200069 Email: AO.BNJ@tvsmotor.com

#### **ORISSA & JHARKHAND**

#### 17. TVS Motor Company Limited

No. 303, 3rd Floor, Creative Plaza, Rasulgarh, Bhubaneshwar - 751 010.

Phone: 0674-2580019

Email: AO.Bhubaneshwar@tvsmotor.com

#### NORTH EAST STATES

#### 18. TVS Motor Company Limited

147, Udayan, Ganesh Guri, Opp. Punjab National Bank, R G B. Road, Guwahati - 781 005. Phone: 0361-2202030/2202031

Email: AO.Guwahati@tvsmotor.com

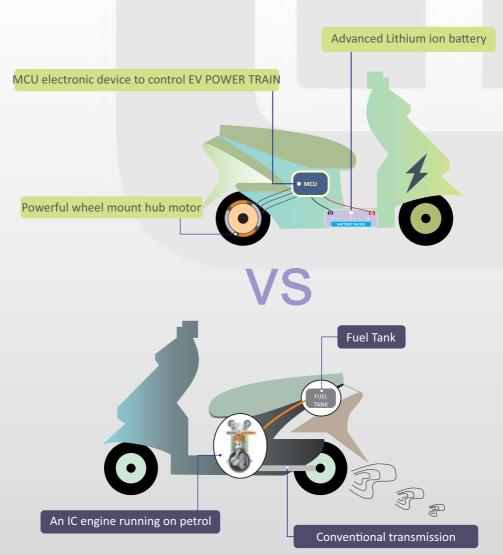
Or

**Toll Free Number Relationship Manager : 1800-572-1818** (Mon - Fri: 9 am to 6 pm) **Toll Free Number Roadside Assistance : 1800-258-7111** (Available 24 x 7)

Email: customercare@tvsmotor.com

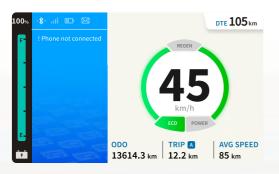
#### **INTRODUCTION**

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

#### **LCD / TFT 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. 22 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**



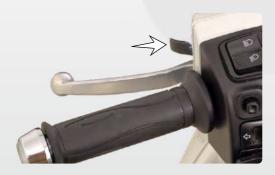
Another important unique feature in your scooter is 'Tubeless Tyres'. Tubeless tyres reduce the chances of getting punctured. Even if there is a puncture, sudden leakage of air is avoided, thereby providing better safety and convenience. It is also very easy to repair the punctured tyres.

#### 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. 17 for details.

# DISC 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.

#### **ALL LED ILLUMINATION**





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

#### **UNDER-SEAT STORAGE (UTILITY BOX)**



Your scooter has a 10 litre under-seat storage space to carry your luggage belongings. Refer page No. 22 for details.

#### 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 indication notifies you to take the vehicle for diagnostic and troubleshooting, whereas service reminder recalls you to take the vehicle for periodic maintenance (care) at Authorised Service station based on the alert.

#### **FLIPKEY WITH LED LIGHT**



Foldable key with LED light helps you to see ignition lock in dark.

#### **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 textured floor mat.

#### **ACCESSORIES FOR YOUR SCOOTER**

#### **SMART PHONE CHARGER**



Your TVS iQube Electric SmartXonnect 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. 23 for usage details.

#### 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:



This message provides further clarification for clear understanding of any particular



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

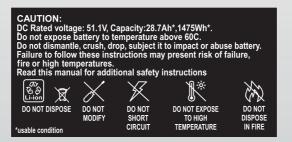
- All information, illustrations, photographs and specifications contained in this owners manual are based on the latest product information available at the time of this publication. TVS Motor Company Limited may, however, incorporate modifications or improvements on its vehicles at any time without notice and therefore, in such events it is possible that the relevant part of the owner'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 owner'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 disc brake version unless specified.

# **△** 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 is applicable for charger 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 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. 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 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.



# KNOW YOUR TVS IQUBE ELECTRIC SMARTXONNECT

#### **VEHICLE IDENTIFICATION NUMBER**

The frame and traction motor serial numbers are the only means of identifying your vehicle from others of the same and 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 traction motor number.

#### **VEHICLE LEFT SIDE**

- 1. Brake Disc
- 2. Front wheel axle
- 3. Side stand
- 4. Pillion foot rest L



#### **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. Turn signal lamp front L
- 3. Headlamp (AHO)
- 4. Turn signal lamp front R

#### **VEHICLE REAR SIDE**

- 1. Tail / brake lamp
- 2. Turn signal lamp rear R
- 3. License plate lamp
- 4. Turn signal lamp rear L
- 5. Pillion handle



#### **VEHICLE TOP SIDE**



- 1. Instrument cluster
- 2. Rear view mirror R
- 3. Hazard switch
- 4. Right hand 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. Left hand brake lever
- 14. Left hand brake lock lever
- 15. High/low beam switch
- 16. Rear view mirror L

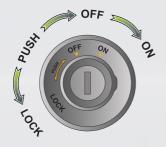
#### **CONTROLS**

Your TVS iQube Electric SmartXonnect 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. The connected 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 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, illuminating logo, 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**



# Unlocked Lever Locked Press

#### 11. Horn switch

Press the switch ' ' to operate the horn.

#### 12. 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'.

#### 13. Left hand brake lever

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

#### 14. Left hand brake lock lever

Left hand brake lever lock is useful when your scooter is parked with side stand on a slope to avoid falling.

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

To release the left hand brake lock, squeeze the left hand brake lock lever further in and the lock will release automatically, release the brake lever upon releasing the brake lock.

#### 15. High/low beam switch

With the head lamp 'ON', press the switch towards 'D' to operate head lamp high beam or press it towards 'D' to operate head lamp low beam.

# Note

Ensure that the brake lock lever is released (if applied) before start 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



#### 3. Hazard Switch

Whenever it is necessary to park TVS iQube Electric SmartXonnect 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 switch again to turn-off the lamps.

#### 4. Right hand 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.

#### 5. 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.

#### 6. 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.

#### 7. Mode switch

Mode switch allows to switch between following modes;

- 1. Economy mode
- 2. Power mode

#### **AUTOMATIC HEAD LAMP ON (AHO)**



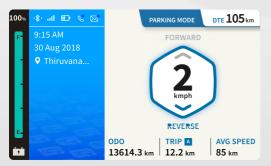
TVS iQube Electric SmartXonnect comes with a Automatic Headlamp ON (AHO) LED lamp which glows automatically once the ignition is turned 'ON'

#### PARKING THE VEHICLE

- User can select Park assistance while parking, by pressing park assist switch (6) & either of the brake switch [(4) / (13)] 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 3 km/h.

# **△** Caution

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

#### **DRIVING THE VEHICLE**

Switch on the vehicle by turning the key (8) clockwise.



 The instrument cluster will display TVSM logo as shown below and it will enter into idle mode;



- ◆ To activate the vehicle-
- ⇒ Press mode switch (6) and either one of the brake [(4) / (13)] simultaneously until you will hear a beep sound once it is activated and 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
   (6) to come in economy mode.
- ◆ In this mode the Electric two wheeler is operated with the traction motor and the vehicle speed reaches up to 45 km/h.
- ♦ We can attain more range as compared to power mode.

#### **POWER MODE**



- ♦ While in economy mode, press mode switch (6) to come in power mode.
- ◆ In this mode the Electric two wheeler is operated with the traction motor and the vehicle speed reaches up to 78 km/h.
- ◆ This mode will provide better acceleration than economy mode.

# Note

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

# **△** Caution

Don't give throttle and apply brake while vehicle is switching ON.

#### 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.



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 overloaded condition will 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 cargos. 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. 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 used for charging mobile.
- 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.
- Do not attempt to use / charge any other device, other than mobile phones. Only one mobile phone should be charged at a given time.
- 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.

### **A** 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 incase of rubber flap cut.

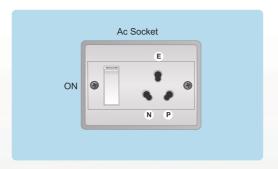
#### **ILLUMINATING LOGO**



Illuminating logo will display the vehicle type name as 'ELECTRIC' during the vehicle in zero speed conditions. During charging of the vehicle, illuminating logo will blink. The LED color of the illuminating logo is Blue. Illuminating logo is mounted on the swing arm cover as shown above.

#### **CHARGER SOCKET**

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



#### **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 5A 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.
- Plug the charger in Single phase AC domestic socket only.
- Do not use extension box to charge the vehicle for safety purpose.
- The charger should be stored in a clean, dry and ventilated place.
- The charger fan should be in upward direction while charging.
- Never spray water or any liquid directly on the charger.

#### **VEHICLE CHARGING**

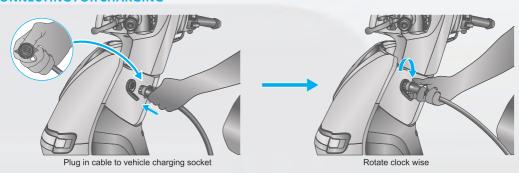
# Charger

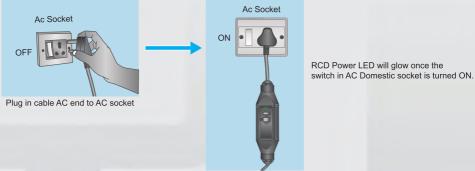




AC 3 Pin 5A plug with Residual Current Device (RCD).

#### **CONNECTING FOR CHARGING\***

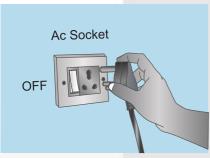




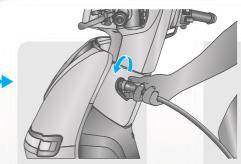


If RCD LED indication is not observed while power is available in the domestic AC socket, please press 'Reset' button and the LED would glow.

#### DISCONNECTING CHARGER



Turn off and take out cable AC end from AC socket



Rotate counter clock wise to plug out cable other end from vehicle charging socket & close vehicle charging socket cap

#### **CHARGER DO'S & DON'T'S**

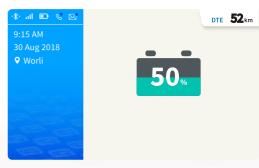
- Never use the charger with damaged housing or cable.
- Never modify a charger or open its housing.
- Connect the charger to a regular outlet only.
- Never carry the charger by its electrical cable or pull at the cable.
- For disconnection of the charger, remove it through the plug and not by pulling the cable.
- Cables for socket must be installed and dressed neatly to avoid tripping over.
- Use original TVSM recommended spares & accessories only.
- Never use in the oxygen enriched environments.
- Don't use flammable objects or anesthetics on or adjacent to the charger.
- 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 in conditions which has radical changes in environment.
- Don't use chemical cleaning agents.
- Use dry cloth only to clean the surface.
- Disconnect the charger before cleaning the charger.
- 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.

#### LCD / TFT INSTRUMENT CLUSTER

# TVS >

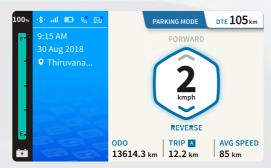
Unlike conventional scooters this vehicle is having a digital instrument cluster which ensures brighter display and allows ease of interaction between vehicle and customer.

#### PLUG IN CHARGING



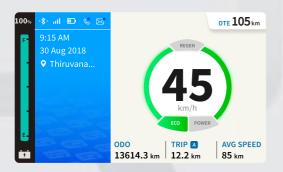
Plug in charging helps user to charge the vehicle battery with the help of included charger.

#### **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**

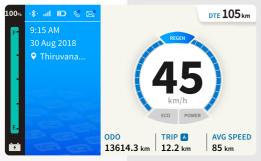


Economy



Power

#### REGENERATIVE BRAKING



It recuperates energy lost during braking / deceleration of traction motor under specified conditions and charges the battery.



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

# 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.

#### **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**



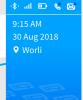
Battery level indication helps customer to know how much battery charge is left in the vehicle by displaying percentage of SOC (Stage of Charge).

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.

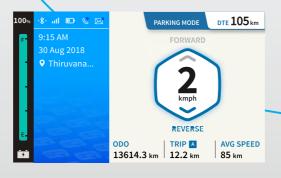
Your TVS iQube Electric SmartXonnect is provided with a fully digital connected instrument cluster with lots of feature and modes like **Economy, Power, Parking, navigation assist, Bluetooth connected app for mobile devices,** etc. Morever your vehicle's instrument cluster is provided with several tell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











9:15 AM
30 Aug 2018
• Thiruvana...

TELL - TA

- 1. LEFT INDICATOR ON
- 3. MIL ON

- 2. HIGH BEAM ON
- 4. RIGHT INDICATOR ON



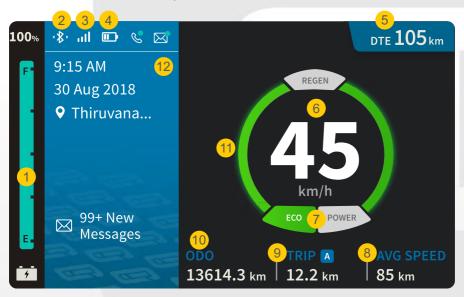
5. LOW BATTERY ON

7. SIDE STAND ON

6. PARKING ASSIST ON

8. AMBIENT LIGHT SENSOR

#### **POWER / ECONOMY MODE DISPLAY**



- 1. Battery level indicator (SOC) -Indicates battery charge in percentage as well as bars:
  - Full SOC-F
  - Low SOC E (Blinking)

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

- 3. Network signal ' 11 '-Indicates mobile signal once connected with vehicle via bluetooth.
- 4. Mobile battery level indicator ' L '-Indicates rider's mobile battery level once connected with vehicle via bluetooth.
- 5 DTF-

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.

6. Speedometer-Indicates vehicle current speed.

- 7. Mode Display -Indicates whether the vehicle in economy or power mode.
- 8. Average Speed -It indicates average speed in Kmph.
- 9. Trip A / Trip B -This instrument cluster comes with two trip options Trip A & Trip B to measure to & fro distance between two locations as per the customer requirement. The distance can only be reset using mobile app.
- 10. Odometer -Shows maximum distance covered by vehicle till now.
- 11. Power flow indication -Indicates following two condition of
  - vehicle; a. Driving condition:
  - Vehicle is driven by motor by consuming power from the battery.
  - b. Regeneration condition:
  - Indicates regeneration of power is happening.
- 12. Notification display -Shows current time, date & location.

#### **DAY / NIGHT MODE**





Day / Night mode change over based on the level of ambient light.

#### **INCOMING CALL AND MESSAGE ALERT**



Once Mobile app 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.



Mobile phones can be connected with vehicle instrument cluster using Bluetooth, which helps customer to know about their 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 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 (#TVSM APP name) 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.

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



Android



iOS



"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."

#### **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 Authorised Main Dealer.

Periodic inspections may reveal one or more parts that may need replacement. Whenever replacing parts of TVS iQube Electric SmartXonnect, it is recommended that you use only the TVS Motor Company Genuine parts.

# **△** Caution

Proper maintenance are 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 owner'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
Accelerator cable free play		I, L & A				
HBS cable free play		I, L & A				
Steering operation		1 & A	1 & A	1 & A	1 & A	1 & A
Front and rear axle nut tightness		1 & A	1 & A	1 & A	1 & A	1 & A
Swing arm bolt tightness		1 & A	1 & A	1 & A	1 & A	1 & A
Center and side stand pivot (optional)		-	C, L & A	-	C, L & A	-
All electrical indication and cluster functions		- 1	I	I	- 1	T I
Side stand switch mounting bolt tightness		1 & A	1 & A	1 & A	1 & A	1 & A
Tyre pressure front and rear at cold condition		1 & S	1 & S	1 & S	1 & S	1 & S
Brake cam and shoe wear rear		1 & A	C, L & A	I&A	C, L & A	1 & A
Brake rear free play*		1 & A	1 & A	1 & A	1 & A	1 & A
Brake pad wear		- 1	- 1	- 1	- 1	1
Brake fluid		1 & T	1 & T	1 & T	1 & T	R
Brake hose		- 1	I	1	I	R
Master cylinder cups		-	-	-	-	R
Charger and charging operation		- 1	I	1	- 1	1
Rear wheel noise and smooth rotation		-	1 & C	-	1 & C	-
Fork oil**		-	-	-	-	-
Controller cable bolt tightness		I & TO				
Vehicle software version		I & U	I&U	1 & U	I&U	1 & U

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.

Tyre replacement has to be done based on the assessment of tyre wear as specified in page No. 38.

<sup>\*\*</sup>Fork oil has to be replaced at every 24000 km.

#### **REAR BRAKE (DRUM BRAKE) - SELF MAINTENANCE**

- 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.





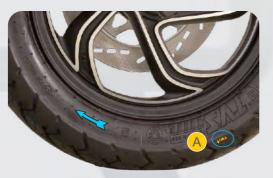
4. Turn the adjuster nut in clockwise direction for reducing free play or in anti-clockwise direction for increasing the free play.

## **△** Caution

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.

Even though, 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.



- 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.

# **△** 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.



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 manufactured by the Company.

While the Company has taken every care to maintain quality in the manufacture of the TVS iQube Electric SmartXonnect, the above said warranty is subject to other terms of warranty:

During 3 years from the date of purchase or during the first 50,000 km of run for the vehicle, battery, motor, controller and charger in the hands of original retail purchaser, 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.

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

parts or any other brand which is used by the Company in the course of manufacture. All parts replaced under this warranty will become the property of the Company and must be returned to the company.

### **Limitations of Warranty:**

This warranty shall not apply to following condition:

- 1. 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 lie 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.
  - produces to such Authorised Main Dealer the owner's manual for the concerned vehicle for verification of relevant details.
- 8. This is the only warranty given by the Company for the TVS iQube Electric SmartXonnect. No employee, Dealer or other persons authorised to extend or enlarge this warranty.



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

Wear and tear items
Electrical
Service Maintenance Parts
Rubber, rexine & plastic items
Proprietary Items

Fastener re-tightening, brakes as well as other normal adjustments.

Brake linings, fasteners, shims, washers, etc.

Bulbs and fuses.

Brake fluid, fork oil etc.

All hoses, pipes and plastic aesthetics

Tires and tubes (the warranty terms are subject to our agreement with proprietary OEM).

- 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 owner'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 sold or transferred by original retail purchaser.
- Vehicles used for racing or any competition or used otherwise than for ordinary personal transportation.
   Vehicles attached with side cars etc.
- Vehicles which have been taken out of India.
- Vehicles affected by natural calamities like flood, earthquake, tsunami, storm etc.

Others Factors

#### 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 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.

#### **POWER TRAIN**

Type : Plug in EV : Li-ion Battery type No. of batteries : 2 Packs Rated voltage : 52V

Charger specifications : 650W off Board charger Charging time : 80% SOC - 4.5 hrs. (Approx)

Motor type : BLDC

Motor output power : 3.0 kW (Rated) 4.0 kW

(Peak)\*

Motor output torque : 140 Nm (Peak)

#### **CHASSIS**

Overall length : 1835 mm Overall width : 690 mm Overall height : 1195 mm Ground clearance : 157 mm Wheel base : 1301 mm Kerb weight : 119 kg Pav load : 130 kg Maximum laden weight : 253 kg

Frame : Duplex tubular frame : Telescopic hydraulic type Front suspension Rear suspension : Hydraulic Twin tube shock absorber

#### **TYRE**

Tyre size:

Front : 90/90-12 54J (Tubeless) Rear : 90/90-12 54J (Tubeless)

Tyre pressure:

: 1.69 kg/cm<sup>2</sup> (24 psi) Front Rear (Solo) : 2.25 kg/cm<sup>2</sup> (32 psi) Rear (Dual) : 2.54 kg/cm<sup>2</sup> (36 psi)

#### **BRAKES**

Front Drum / Disc : 220 mm dia disc

: Hand operated internally Rear

expanding shoe type, 130 mm dia drum

#### **ILLUMINATION & TELL - TALES**

: 13.5V, 13W / 8.5W LED Head lamp (High / Low)

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

#### **INSTRUMENT CLUSTER**

Luminous emittance

Power rating : 13.5V. 10W TFT Display : 800 x 480 Display type : TFT

: 1000 Lux

#### **FUSES**

DC-DC fuse : 58V.5A Charger fuse : 58V, 40A Load fuse before : 32V. 10A

Ignition lock

Load fuse after : 32V, 7.5A

Ignition lock



\* At component level.

# Warning

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

#### **CAPACITIES**

 $\begin{array}{lll} \mbox{Range per charge (ECO)} & : 100 \mbox{ km at full charge**} \\ \mbox{Front fork oil grade} & : \mbox{Gabriel front fork fluid} \end{array}$ 

Front fork oil capacity :  $91 \pm 1$  cc

Brake fluid : TVS (DOT 3 / DOT 4)
Top Speed : Around 78 km/h

# Note

- Specifications are subject to change without notice.
- \*\* Real world range may vary with road, load, driving patterns and ageing of battery packs.

#### **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:

















