

TRAINING HAND BOOK

NOTICE

All information including in this publication is based on the latest product information available at the time of approval from printing

All the illustrations given in this manual may vary from the actual vehicles

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TVS NTORQ 125

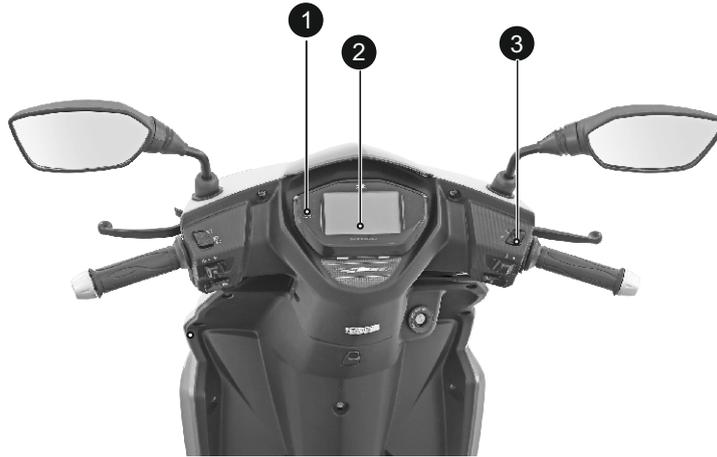


RIGHT SIDE VIEW



LEFT SIDE VIEW

FEATURES OF TVS NTORQ 125



1) FULLY DIGITAL SPEEDOMETER - SMART CONNECT - BLUETOOTH CONNECTIVITY

The scooter is fitted with full digital speedometer. This first in class speedometer housing of your scooter. The speedometer of scooter has a inbuilt bluetooth connectivity through which you can connect your android smart phone to access features like CALLER ID and SMS notification on speedometer and ride status share last parked location on your android smart phone.

2) ECONOMETER

Your scooter's speedometer has an 'ECONOMETER' witch indicates weather you are riding in economy mode or power mode. This is an unique feature of your scooter which guides you to ride your scooter fuel efficiently

3) ENGINE KILL SWITCH

Engine kill switch is an another unique feature whichh allows to shut the engine without switching OFF the ignition.



HEADLAMP WITH DRL

Your scooter has a brightest Headlamp with multi Focal reflector and halogen bulb for better visibility. It also has a stylish 'Day Running Lamp' Day -DRL at the bottom

LOW FUEL INDICATOR

'LOW FUEL INDICATOR' is yet another unique feature of scooter which indicates you to refill the fuel when the fuel in tank goes below the minimum safe level



PETAL DISC BRAKE

Your scooter is fitted with '220 mm Roto - Petal Disc' at the front for effective braking and safe riding even at higher speeds.



FEATURES OF TVS NTORQ 125



1) DIAMOND - CUT ALLOY WHEELS

The scooter has sporty diamond cut alloy wheels

2) PATENTED E-Z CENTRE STAND

'E-Z Centre Stand' of your scooter reduces the effort required to place the scooter on stand.

3) TEXTURED FLOORBOARD

Your scooter comes with a stylish textured floor board.

AUTO-CHOKE

The auto-choke helps your scooter start effortlessly even in cold weather



LED TAIL LAMP-CUM -BRAKE LAMP

Your scooter has a 'LED Tail lamp-cum-brake lamp' for better visibility and stylish looks.

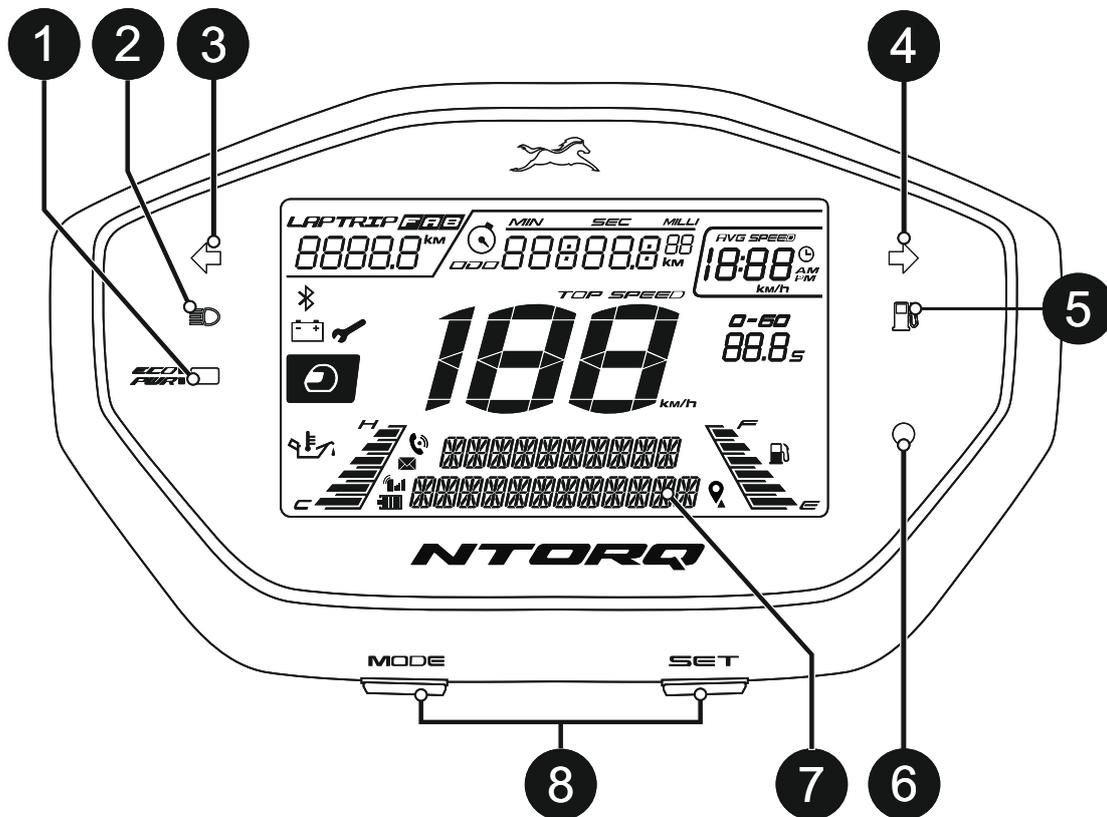


SMART PHONE CHARGER AND UTILITY BOX LIGHT

Your scooter has a 'Smart Phone Charger' enable to charge your mobile phone when you are travelling. The 'Utility Box Light' which lights up the utility box whenever the seat is open.

FEATURES OF TVS NTOURQ 125

Digital speedometer :



1. Economy and power indicator

Eco indicator (green lamp) indicates that the vehicle is running in economy mode which gives better fuel economy. Power indicator (amber lamp) indicates that the vehicle is running in power mode which results in reduced fuel economy. This indicator glows only when the engine is ON.

2. High beam indicator lamp ()

Glowes when the head lamp is activated in high beam.

3. Turn signal indicator left ()

Flashes when the 'left' side turn signal indication is activated.

4. Turn signal indicator right ()

Flashes when the 'right' side turn signal indication is activated.

5. Low fuel indication ()

The low fuel indicator glows when the fuel level reaches to reserve fuel level and a message 'FUEL ON RESERVE' If the fuel level reaches empty level, the low fuel indicator continues to glow and a message 'FUEL EMPTY'

6. Smart-connect Notification LED

A **green colour LED** indicator glows and indicates whenever there is an incoming call or message received by the 'Smart Phone' paired with your **TVS NTOURQ 125**.speedometer

7. Alpha numeric display

The customized alpha-numeric display indicates different modes of instrument cluster, vehicle information and smart-connect related messages, when the ignition key is turned **ON**.

8. Mode and Set buttons

Mode button is used to change the connected instrument cluster display to various modes like '**Street mode**', '**Sport mode**', '**Ride stats mode**' etc.

Set button is used to '**set**' or '**erase the stored value**' in various modes.

MODE AND SET BUTTONS :



TVS Ntorq 125's connected instrument cluster having five modes and their selection and their work explained below.

1. Street mode

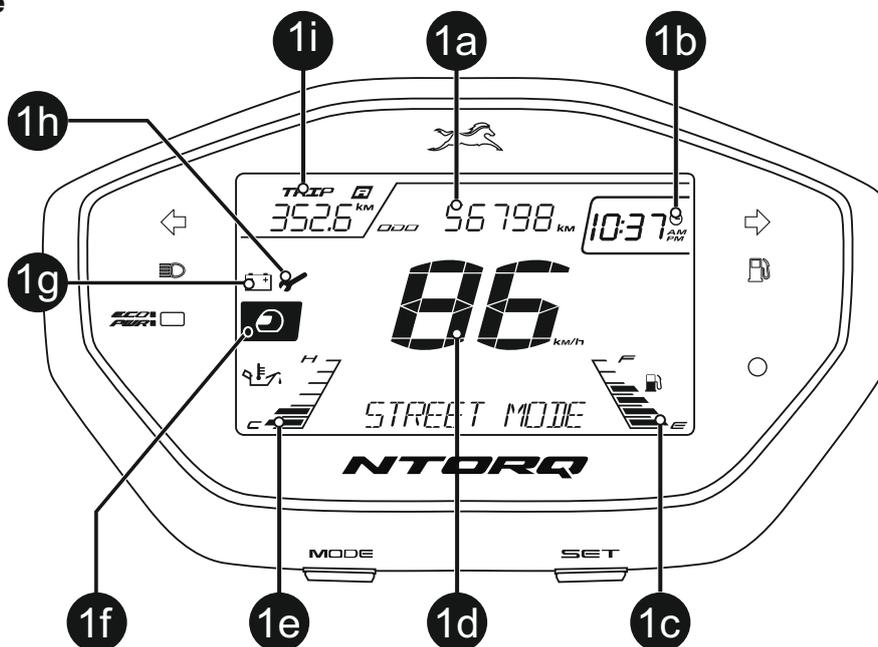
2. Sport mode

3. Ride stats mode

4. BT pair mode

5. Set clock mode

1. Street mode



In street mode, the following features will be displayed on the connected instrument cluster :

- 1a. Odometer
- 1b. Clock
- 1c. Fuel gauge
- 1d. Speedometer
- 1e. Engine temperature gauge
- 1f. Helmet icon
- 1g. Low battery indicator
- 1h. Service reminder
- 1i. Trip A, B and F

1a. Odometer

Odometer registers the total distance covered by the vehicle in kilometer.



1b. Digital clock

Indicates the time in 12 hour format (AM or PM).



1c. Fuel gauge

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

If all six bar shows means fuel in the tank reaches above 5 litre approximately (Full tank)



When the fuel reaches half tank (3.3 liters approx.) the fuel gauge displays only three bars as shown.



When the fuel reaches minimum safe level (1.5 liters approx.), the last bar of the fuel gauge starts blinking and low fuel indicator starts glowing. When the fuel reaches minimum safe level (1.5 liters approx.), the last bar of the fuel gauge starts blinking and low fuel indicator starts glowing. The message 'FUEL ON RESERVE' will be displayed at alpha numeric display



If the fuel level goes below minimum safe level (1.1 liters approx.) 'FUEL EMPTY' message will be displayed at alpha numeric display as shown.



1d. Speedometer

Indicates the vehicle speed in kilometer per hour by default when the ignition is turned **ON**.

**1e. Engine temperature gauge**

The temperature gauge displays the engine temperature in digital bars. There are six bars to indicate the engine temperature. If the engine temperature raises beyond normal operating temperature then six bar will indication and a diagnostic message show as '**ENGINE WARNING**' in alpha numerical display

**1f. Helmet icon**

With every ignition '**ON**', Helmet icon '' blinks for **10 seconds** on the left side of the connected instrument cluster to remind the rider to wear a helmet.

1g. Low battery indicator

An icon with battery symbol '' glows when the battery charge is too low.

1h. Service reminder

If the service is due, whenever the ignition is turned '**ON**', a icon with spanner symbol '' blinks for **10 seconds** after the self-check cycle of connected instrument cluster and continues to glow till the vehicle is serviced and the reminder is reset.

1i. Trip A and B

In street mode, '**TRIP A**' will be displayed by default. Press mode button once to enter '**TRIP B**'. To reset any of the **trips (A or B)**, press the '**SET**' button more than **3 seconds** while display is in the respective trip in vehicle static condition only

**Trip F**

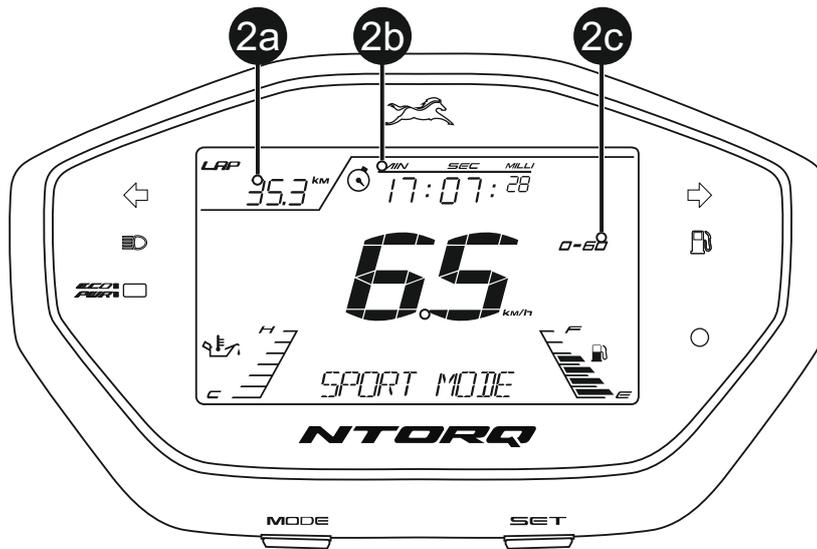
This function shows the distance traveled after the low fuel indication symbol () is '**ON**' and '**FUEL ON RESERVE**' message displayed at alpha numeric display.

The display switches automatically to '**TRIP F**' once the low fuel indication is 'ON' and starts counting from 0.0 km.



2. Sport mode

To enter into sport mode, short press the 'Mode' button in street mode while 'Trip B' in display.



In sport mode, the following features will be displayed on the connected instrument cluster :

- 2a. Lap distance**
- 2b. Lap timer**
- 2c. Shortest time indicator**

2a. Lap distance

LAP 32.0^{km}

The total distance covered by the vehicle in a particular lap will get captured in 'Lap distance' counter. Once the vehicle speed crosses **2 km/h**, the lap distance counter starts counting distance automatically and stops when the speed goes below **2 km/h**. If the speed increases again, the counter continues the distance counting. The lap distance counter ends when the ignition is turned 'OFF'.

2b. Lap timer

MIN SEC MILLI
18: 78: 05

Lap timer is the total time taken by the vehicle for completing a single lap.

Similar to lap distance, the lap timer also starts once the vehicle speed crosses **2 km/h** and stops when the speed goes below **2 km/h** indicated by blinking of lap timer '🕒' icon. The lap timer ends when the ignition is turned 'OFF'

2c. Shortest time indicator

0-60
10.7_s

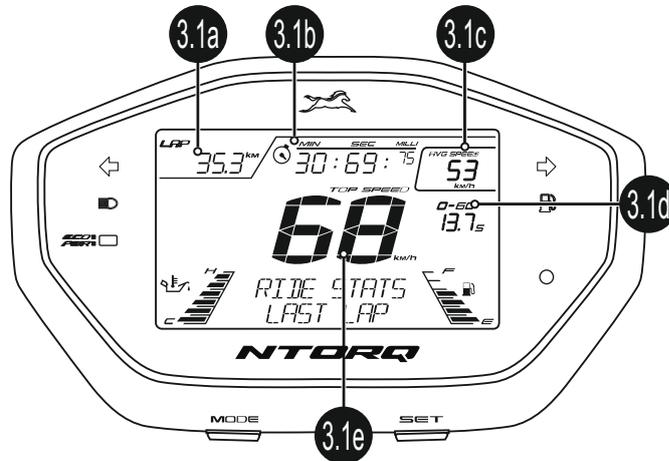
Shortest time indicator records the minimum time taken to reach **60 km/h** from start. The timer starts once the vehicle speed crosses **2 km/h** and the time will be displayed on crossing **60 km/h** speed.

3. Ride stats mode

To enter into ride stats mode, short press the '**Mode**' button in sport mode when the vehicle is static. Following two features are available in ride stats mode.

3.1. Ride stats last lap

3.2. Ride stats best lap



3.1. Ride stats last lap

'**RIDE STATS LAST LAP**' appears by default on entering ride stats mode. The details displayed in this mode are as given below :

- 3.1.a. Previous lap distance
- 3.1.b. Previous lap timer
- 3.1.c. Previous lap average speed
- 3.1.d. Previous lap shortest time
- 3.1.e. Previous lap top speed

3.1.a. Previous race lap distance

Previous race lap distance is the total distance covered by the vehicle in the last lap.

3.1.b. Previous race lap timer

Previous race lap timer is the total time taken by the vehicle to complete the last lap.

3.1.c. Previous race average speed

Previous race average speed is the average speed of vehicle traveled during last lap.

3.1.d. Previous race shortest time

Previous race shortest time is the shortest time taken to reach **0 to 60 km/h** in the last lap. If there are more than one record in the same lap, the best value will be displayed.

3.1.e. Previous race top speed

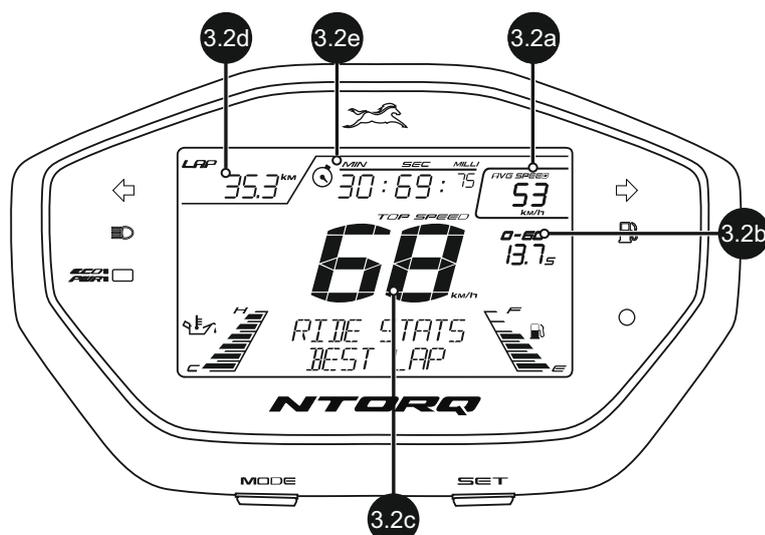
Previous race top speed is the top speed that the vehicle has achieved during last lap.

3.2. Ride stats best lap

To enter '**RIDE STATS BEST LAP**' mode, press '**MODE**' button once in '**RIDE STATS LAST LAP**'. The details in this mode are as given below :

- 3.2.a. Best average speed
- 3.2.b. Best lap timer
- 3.2.c. Best lap distance
- 3.2.d. Best top speed
- 3.2.e. Best shortest time

3.2. Ride stats best lap



3.2a. Best average speed

'Best average speed' is the best average speed amongst the previously concluded laps.

3.2b. Best shortest time

'Best shortest time' is the shortest time taken ever to reach 0 to 60 km/h speed since the time of vehicle purchase or since last reset.

3.2c. Best top speed

'Best top speed' is the highest speed that the vehicle has reached since the time of vehicle purchase or since last reset.

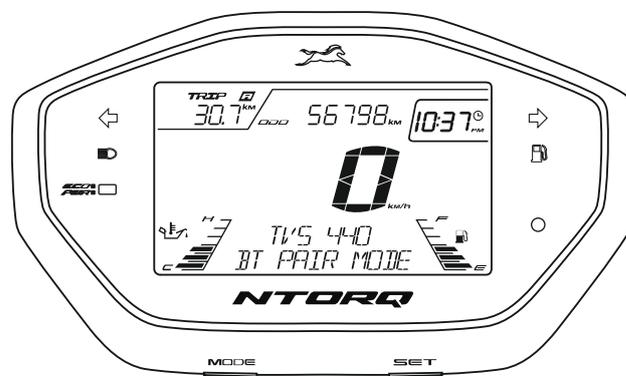
3.2d. Best lap distance

'Best lap distance' is the total distance covered by the vehicle corresponding to the best ever average speed.

3.2e. Best lap timer

'Best lap timer' is the total time taken by the vehicle corresponding to the best ever average speed.

4. BT pair mode



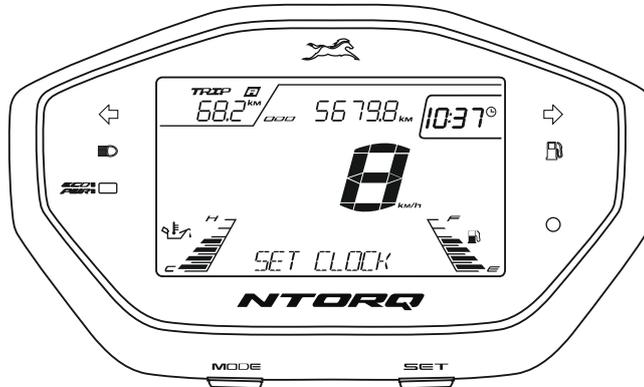
This mode can be entered by pressing 'MODE' button for 5 secs from STREET / SPORT mode.

The connected instrument cluster of your TVS Ntorq 125 can be connected to your Android™ smart phone via Bluetooth® through a **TVS Ntorq** app which can be downloaded from Google Play.

5. Set clock mode

To enter the set clock mode, press 'Mode' button for more than 5 secs in Bluetooth pairing mode. The digital clock starts blinking once the connected instrument cluster enters the set clock mode.

- Press the '**Mode**' button while the digital clock is blinking. The hour digits of clock starts blinking and enables you to change the hours.
- Press the '**Set**' button to increase the hours while hour digits are blinking.



- On pressing the 'Mode' button again the hours gets set and the minute digits starts blinking.
- Now, press the 'Set' button to increase the minutes while minute digits are blinking.
- Once again press the 'Mode' button so the minutes of the clock is set and the hours format 'AM' or 'PM' starts blinking.
- Press the 'Set' button to change the hour format either to set 'AM' or 'PM'.
- Press the 'Mode' button once again to set clock and wait for 5 sec to come out of set clock mode.

TVS Ntorq APP

This smart phone app is available in the Google Play for your TVS Ntorq 125 and it can be installed in your Android smart phone. This dedicated mobile app of your TVS Ntorq 125 can be downloaded from the Google Play by searching the key word '**TVS Ntorq**'.

Note

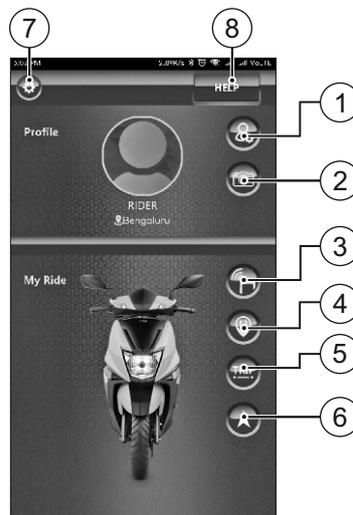
This smart phone app is compatible only for the smart phones with Android OS version Kitkat (4.4) and above and the Bluetooth version 4.0 and above.

Android and Google Play are trademarks of Google LLC.

Home screen

The home screen of your TVS Ntorq 125's mobile app has the following icons in it.

- | | | | | |
|--|-----------------------|-------------------|--------------------------------|-----------------------|
| 1. Profile setting | 2. Camera | 3. Connect | 4. Last parked location | 5. Trip report |
| 6. Turn by turn Navigation assist | 7. App setting | 8. Help | | |



1. Profile setting

By clicking profile setting '  ' icon in app, you can customize the profile name in the app. This name will be automatically synced with your vehicle's connected instrument cluster on pairing your mobile. The welcome message will change from 'HELLO RIDER' to 'HELLO (your profile name)'.

Your current location will be updated automatically by third party Map provider when your GPS and mobile data connection is good or it can be fed in-case of no Internet or GPS connection.

2. Camera

By clicking camera '  ' icon in app. your smart phone's camera opens and you can click a picture and set as a profile picture of your app.

3. Connect

By clicking the connect '  ' icon in app, you can connect the smart phone with the vehicle's connected instrument cluster via Bluetooth.

First time Bluetooth pairing

To pair your Android smart phone with your TVS NTORQ 125's via Bluetooth, for the first time, follow the procedure as described below :

1. Switch 'ON' the vehicle.
2. Change the connected instrument cluster mode to 'BT pair mode
3. Open the app and long press connect '  ' icon, ensure the smart phone is near to the vehicle and open the app.
4. A confirmation dialogue box opens in the app and asks if connection to a new vehicle is to be initiated. Press 'YES' to search.
5. The app searches for all Bluetooth devices nearby and displays the list of devices available.
6. The connected instrument cluster's Bluetooth name is prefixed by TVS and followed by minimum one and maximum six alpha-numeric digits. Ex: 'TVS440'
7. Now, select the 'TVS440' in app to initiate the pairing process. The Bluetooth icon '  ' is connected with instrument cluster and starts blinking and the alpha-numeric display will display the name of paired mobile device Ex: 'PAIRING PHONE'.

*PAIRING
PHONE*

8. A Bluetooth pair key will be generated and displayed in your smart phone's screen. Now accept the request in app to complete the pairing procedure. On pairing, the alpha-numeric display of connected instrument cluster displays 'CONNECTION SUCCESSFUL' message for 3 secs . Additionally phone's battery icon and signal strength icon will be displayed on connected instrument cluster. After successful connection, inside the app the connect icon color will also illuminate to indicate that you are connected .

Conditions to re-initiate first time pairing:

First time pairing to be repeated if any of bellow conditions occurs:

1. Whenever the battery of the vehicle is disconnected or when the fuse is blown and replaced.
2. When the Bluetooth settings of your smart phone are reset or when the vehicle's Bluetooth is manually modified or when 'factory reset' is done on your smart phone.
3. Whenever the app is uninstalled or if storage settings of the app is modified or cleared.
4. If the first pair key is missed (consequent pair key requests will appear in your phone within few seconds).
5. When master reset is done on the smart phone.

Auto pairing

Once the first time pairing is done between vehicle’s connected instrument cluster and your smart phone, the phone will automatically pair 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.

Every time auto-pairing happens, app will open automatically and connect with the Instrument cluster. The connected instrument cluster shows ‘CONNECTION SUCCESSFUL’.



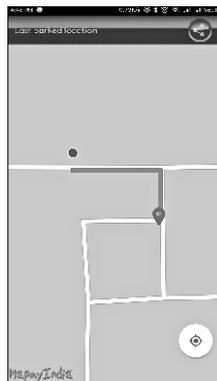
If your smart phone is disconnected from the vehicle’s connected instrument cluster then Ex: ‘PHONE DISCONNECTED’ message will be displayed on the alpha-numeric display of connected instrument cluster.



4. Last parked location

The last parked location of the vehicle, the current location of the user and a route is plotted for user guidance in the map on clicking the last parked location icon ‘📍’ of the app, provided the GPS and internet connection is turned ‘ON’; in your smart phone.

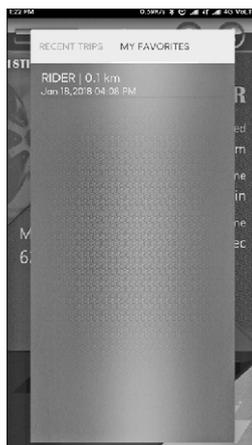
The last parked location can be shared by clicking the share icon ‘🔗’.



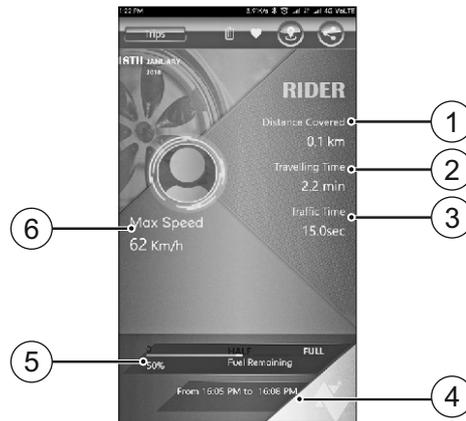
5. Ride report

By clicking the ride report ‘📄’ icon, the app opens a screen with ‘Recent trips’ and ‘My favorites’ report.

User can save maximum 10 ride reports in ‘Recent trips’ tab and 10 ride reports in ‘My favorites’ tab. On saving the 11th ride report, the 1st report gets deleted automatically (only in recent ride reports). Click on the ‘last ride details’ tab to view the ride details of your TVS NTORQ 125. Click on a particular ride to view the ride report details like



Click on the 'last ride details' tab to view the ride details of your TVS NTOQ 125. Click on a particular ride to view the ride report details like



1. Distance covered

Total distance covered by the vehicle in that selected trip.

2. Traveling time

Total time taken by the vehicle to complete the trip.

3. Traffic time

Traffic time is recorded whenever the vehicle speed is less than 2km/h.

4. Time of travel

Time of travel is the start time to end time of the selected trip.

5. Fuel remaining

Fuel remaining in the vehicle at the end the selected trip.

6. Maximum speed

Maximum speed that the vehicle has reached in the selected ride.

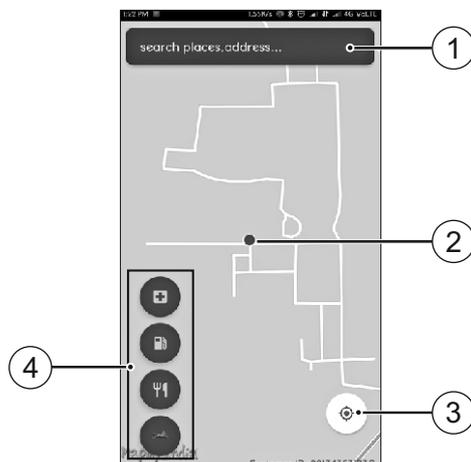
If these ride details are your favorite you can move these details to favorite ride details by clicking the heart symbol (♥) on the top the screen. By clicking the 'My favorite' tab you can view these details again.

Your ride also route also can be viewed in the map by clicking to map '📍' icon on the top of to screen and can be shared to others by clicking share '🔗' icon

6. Turn by turn navigation assist

Ensure that your smart phone is connected with your vehicle's connected instrument cluster. Press the navigation '📍' icon in the app to open a map screen.

On the map screen following icons are displayed.



1. Search box

Search box lets you search for a destination. The search box displays results when more than three characters are typed. These results are sorted based on the aerial distance.

2. Map screen

In map screen your current location and destination location will be displayed. The app allows the user to zoom, pan and rotate the vector map. Also the user can ping any destination on the map screen itself.

3 Locate me

By clicking the locate me icon the map shows the GPS location of the user.

4. One touch icons

One touch icons lets the user to search for near by hospitals, fuel pumps, restaurants and TVS Motor Company Authorised Main Dealer.

Once the map screen is opened in the app the vehicle’s connected instrument cluster will display ‘NAVIGATION ASSIST ON’.

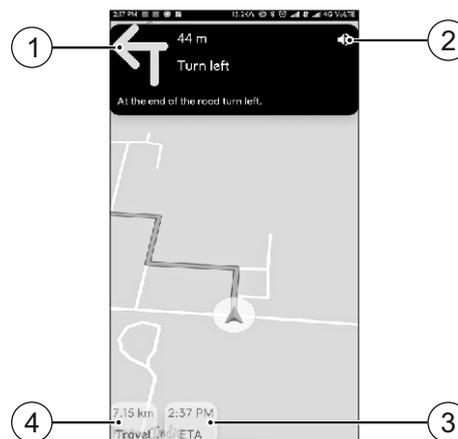
NAVIGATION ASSIST ON

A navigation plan screen is shown in the app after selecting the destination. Press ‘START NAVIGATION’ button to start the Turn by Turn Navigation.



Ensure smart phone is connected to the vehicle before pressing ‘START NAVIGATION’. On clicking ‘START NAVIGATION’ icon following navigation details will be displayed :

- 1. Turn by turn directional assist information**
- 2. Voice guidance**
- 3. Estimated time of arrival**
- 4. Remaining distance to reach destination**



Navigation display on connected instrument cluster :

Once rider starts the navigation then turn instruction will shown the connected in instrument cluster. When the rider is approaching a turn connected instrument cluster displays the distance along with instruction Ex: 'AFTER 900m TAKE RIGHT'.

AFTER 900m
TAKE RIGHT

When distance is more than 1 km the displays assists the rider to stay in the same road. Ex '10km 700m STAY SAME RD' is displayed on the connected instrument cluster.

10k m 700m
STAY SAME RD

when the distance is lesser than 1km the directional assist information is updated on the connected instrument cluster display Expected time to reach the destination and the distance remaining features are also available in the connected instrument cluster. To get these information, press 'SET' button during navigation once. Time and distance remaining information will be available for 3 seconds each

10k m 400m
DISTANCE REM
50 MINS
TIME REM

If the route shown in the maps is not followed, auto-re-routing will happen within some distance and 'RE-ROUTING' will be displayed on connected instrument clusters alpha numeric display.

RE-ROUTING

Recalculation of route by the Map always prefers the quickest route. After re-routing, If there is a new route from the current place to destination, it will be plotted in maps and new instructions will be loaded in both app and connected instrument cluster.

But if the new route taken is completely opposite to the destination, the app and connected instrument cluster will instruct 'Take U-turn'.

TAKE U-TURN

During navigation, if GPS signal is not available, then the navigation assist will be temporarily unavailable and the connected instrument cluster display 'SEARCHING GPS SIGNAL'.

SEARCHING
GPS SIGNAL

If data is not available in your smart phone (if there is any problem with mobile internet), then the navigation assist will be temporarily unavailable and the connected instrument cluster displays 'FETCHING MOBILE DATA'.

FETCHING
MOBILE DATA

On reaching to desired destination within 100m radius the connected instrument cluster displays the message 'YOU ARRIVED'

YOU ARRIVED

The message 'CROSSED DESTINATION' will be displayed in the connected instrument cluster after crossing the destination.

*CROSSED
DESTINATION*

If you ride further more after crossing the destination then the navigation ends and the map is closed automatically in the app.

7. App setting

By pressing the app setting  icon, the following setting will be displayed.

- 1. Do not disturb 2. Auto reply SMS 3. Auto sync clock 4. Over speed alert 5. Save route**



Do not disturb

When the do not disturb is enabled, all incoming calls are disconnected both in smart phone and the connected instrument cluster while you are connected.

Auto reply SMS

On enabling the 'Auto reply SMS', the app automatically replies to the caller with a pre-set message (for example : I'm driving please call me later). You can alter this pre-set message as you wish by clicking the edit icon  in the app.

Over speed alert

When over speed alert is enabled, the vehicle's connected instrument cluster will display 'HIGH SPEED ALERT' if the current speed is crossing the speed limit set by the user in the app.

*HIGH SPEED
ALERT*

This alert can be customized by tapping the over speed alert text in the app, A pop - up will appear on screen where you can set the high speed limit.

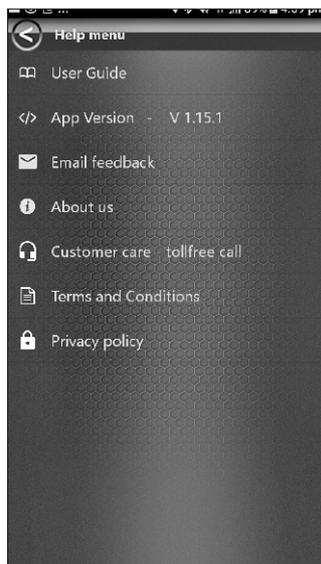
Save route

When save route is enabled, the app will save the last traveled route which can be viewed along with the trip report. If any changes are made from the default setting, the setting must be saved by clicking the 'APPLY' icon.

8. Help menu

On clicking the 'HELP' menu, the app screen displays the following tabs :

- | | | | |
|---|--------------------------------|--------------------------|-------------------|
| 1. User guide | 2.App version | 3. Email feedback | 4.About us |
| 5. Customer care - tollfree call | 6. Terms and Conditions | 7. Privacy policy | |



1. User guide

On clicking the 'User guide' the app will display the following.

- a. How to connect my TVS Ntorq?
 - b. Points to take care!
 - c. How to see the report?
 - d. Navigation and maps
- a. 'How to connect my TVS Ntorq?' is a step by step procedure of connecting smart phone with the vehicles connected instrument cluster. refer to page no : 16.
 - b. 'Points to take care !' is the troubleshooting guide of the app. Incase if any issue is faced in the app regarding app permissions, app management and Bluetooth pairing, refer this procedure.
 - c. 'How to see the report ?' is the step by step procedure about generating and accessing the report in the app. Refer page No. 22 and 23 for detailed procedure.
 - d. Navigation and maps lists out the settings to be done in the smart phone for better experience of navigation and maps in the TVS Ntorq app.
2. 'App version' displays the current version of the installed app.
 3. 'Email feedback' enables the user to send their valuable feedback to TVS Motor Company Limited.
 4. 'About us' will take the user to a TVS Motor Company Website (www.tvsmotor.com).
 5. 'Customer care' - is a tollfree call, which automatically dial to TVSM customer care. Use this facility if you require any assistance to your TVS Ntorq 125.

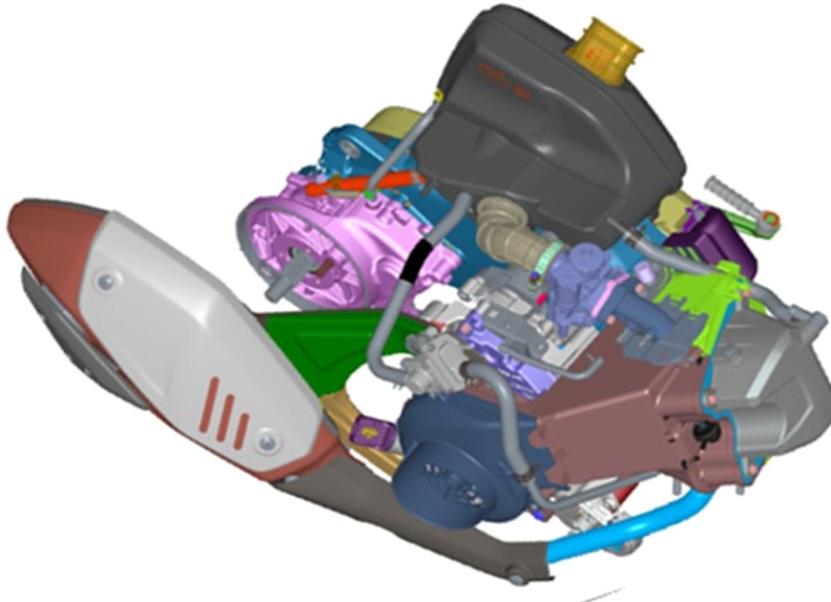
Priority Ranking

Since the alpha-numeric display in the connected instrument cluster is used to display several customized message, a priority is allocated for each message depending on which in times of multiple interrupt, only the high priority message will be displayed first and followed by the next message based on priority ranking.

Priority	Message	Time upto which they are displayed
1	Self-check animation	3±1 seconds
2	Bluetooth pairing, pairing successful or disconnected	Each - 3 seconds
3	Incoming call	Till the call lasts
4	Incoming SMS	3 seconds
5	Number of missed calls	For 10 seconds after an incoming call is missed.
6	Over-speed Alert	Till the condition exists
7	Hello 'Rider name'	5 seconds after self-check and 5 seconds after Bluetooth is connected.
8	Mode Name	Once the speedometer enters any mode for 3 seconds. Bluetooth pairing mode and set clock mode display to last till the condition exists
9	'Phone battery Low'	5 seconds every 1 minute
10	AN1 and AN2 data	As long as the condition exists
11	Navigation input	As long as the connected instrument cluster is in navigation mode
12	'Engine Warning'	As long as the condition exists
13	'Check Fuel Sensor', 'Fuel on reserve' and 'Fuel empty'	As long as the condition exists
14	'Location and temperature"	For 5 seconds after Bluetooth is connected if speed is less than 5kmph

FEATURES OF TVS NTORQ 125

NEW ADVANCE CVTi-Revv ENGINE



Beneficial of new advance CVTi-Revv ENGINE

- Increase of compression ratio - 10:1
- long reach spark plug , gap - 0.8~0.9 (BOSCH -UR4KE)
- It consist of 3 valve engine
- Low friction components used – Moly coated Piston, Roller cam follower, Low friction cam chain guide
- Low friction Tru4 Premium Engine oil
- Advantage of Dry paper filter with dry form air filters

TECHNICAL SPECIFICATION

DIMENSION AND WEIGHT

Overall length	1856 mm
Overall width	710 mm
Overall height	1160 mm
Wheel base	1285 mm
ground clearance	155 mm (unladed)
Kerb weight (with toolkit and 90% of fuel)	116 kg
Pay load	130 kg
maximum laden weight	246 kg

ENGINE

Type	single cylinder OHC , 4 stroke, air cooled,
Cylinder bore	53.5 mm
Stroke	55.5 mm
Piston displacement	124.79 CC
Compression ratio	9.8 : 1
Carburettor	KEIHIN Ct5 (VM 20)
Air filter	Dry paper filter with Dry form
Lubrication system	Force wet sump
Maximum power in kW	6.9 @ 7500 rpm
Starting system	Electric starter / kick starter
Maximum torque in Nm	10.5 @ 5000 rpm
Maximum speed	95 Kmph
Engine idling rpm	1600±100 rpm

TRANSMISSION

Clutch	Automatic - centrifugal clutch
Primary transmission	CVT (continuos variable transmission)
Primary reduction	26 to 0.85
Secondary reduction	9.085

CHASSIS

Frame	Under bone tubular frame
Front suspension	Telescopic hydraulic
Rear suspension	Toggle link, Gas filled Hydraulic type coil spring shockabsorber
Brakes	1, Front (Disc) 220 mm dia (Hand operated)
	2, Rear (Drum) 130 mm dia (Hand operated)
Tyre	1, Front 100/80 - 12 56L Tubeless
	2, Rear 110/80 - 12 61L Tubeless
Tyre pressure	1, Front 1.69 KG/cm ² (24 PSI)
	2, Rear solo 1.97 KG/cm ² (28 PSI)
	pillion 2.53 KG/cm ² (36 PSI)

TECHNICAL SPECIFICATION

• ELECTRICAL

Type	AC generator
Ignition system	IDI - ignition
Spark plug	BOSCH UR4KE
Spark plug gap	0.8~0.9
Battery type	12V,4AH maintenance free battery
Body earthing	Negative Terminal
Generator	Fly wheel magneto 12V, 100w
Head lamp	Halogen HS1 12V, 35/35W
Tail / Brake lamp	12V, LED
Turning signal lamp	12V , 10Wx 4
Position lamp / DRL	12V, LED
Number plate lamp	12V , 5W
speedometer lamp	LCD / LED
Turn signal indicator lamp	12V,10W
Horn	12V , 2.5 A DC
Fuse	12V , 10A

CAPACITY

Fuel tank capacity including reserve	5±0.2 litres
Fuel	Unleaded petrol / BSIV
Engine oil grade	TVS TRU4 SKUUTA (SAE 10w30 API- SL , JASO MB)
Engine oil capacity	880 in regular service and 930 incase of disassembly
Transmission oil grade	NA
Transmission oil capacity	120 ml during regular service and 130 ml incase of disassembly
Front fork oil grade	Gabriel front fork fluid
Front fork oil capacity	91±1 cc/leg
Brake fluid	TVS DOT 3/ DOT4

PERIODIC MAINTANCE

ITEM	service Months km	In free service			After free service		
		1st 2 month 500 - 750	2st 4 month 2500 - 3000	3st 8 month 5000 - 6000	4st 12 month 8500 - 9000	Every 3000 km	Every 6000 km
Engine oil		R	I & T	R	I & T	I & T	R
Oil strainer (stainer)		C	-	-	-	-	C
Transmission oil		R	I & T	R	I & T	I & T	R
Spark plug		C & A	-	-	-	-	-
Air cleaner (from element)		I & C	I & C	I & C	I & C	I & C	-
Air cleaner (paper element)		I	I	I	I	I	-
Air cleaner oil collection tubes		-	I & DR	I & DR	I & DR	I & DR	-
CVT filter element		-	-	I & C	-	-	I & C
Tappet clearance		I & A	-	I & A	-	-	I & A
Carburettor assembly ²		C & A	-	-	-	-	-
Carburettor breather hose		I	I	I	I	I	-
Drive belt and CVT rollers		-	-	-	-	-	-
Cover variator ³		-	-	L,C&L	-	-	L,C&L
Clutch shoe		I, A & L	-	-	-	-	-
Fuel hoses		I	I	I	I	I	-
Front and rear suspension		I	I	I	I	I	I
All cable controls ⁴		I, A & L	I, A & L	I, A & L	I, A & L	I, A & L	I, A & L
Throttle grip		-	-	-	-	-	L
Steering smooth operation / play		I & A	-	-	-	-	-
Front fork oil		-	-	-	-	-	-
All fasteners		L&TI	L&TI	L&TI	L&TI	L&TI	-
All bulbs, horn and switches working		I	I	I	I	I	-
Head lamp beam		I & A	I & A	I & A	I & A	I & A	-
Battery voltage		I	I	I	I	I	-
Battery effectiveness / play		I & A	I & A	I & A	I & A	I & A	-
Battery cam		-	-	C & L	-	-	C & L
Brakes pad wear*		I	I	I	I	I	-
Brakes fluid*		L & T	L & T	L & T	L & T	L & T	-
Brake hose*		I	I	I	I	I	-
master cylinder cups*		-	-	-	-	-	-
wheel freeness		I	I	I	I	I	-
Front wheel bearing		-	-	-	-	-	-
Tyre pressure at cold condition		I & S	I & S	I & S	I & S	I & S	-
Engine idling RPM		I & S	I & S	I & S	I & S	I & S	-
Idling CO %		I & S	-	-	-	-	-
Centre / side stand pivot		L	L	L	L	L	-

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

* Applicable only for disc brake version

¹ Inspect from damage ² Clean and adjust every 12000 km after first service

³ Clean the cover with air. Lubricate kick starter with Bechem grease

⁴ Inspect for proper operation and adjust play. Lubrication ends using grease ⁵ Recharge if necessary

⁶ Idling CO% should be adjusted with the help of tachometer and exhaust gas analyser only

LUBRICATION SCHEDULE

Application	Qty	Manufacture	Brand
Engine oil	880 ml (during service) 930 ml (increase of disassemble)	TVS motor company	TVS TRU4 PREMIUM OIL
Transmission oil	120 ml (during service) 130 ml (increase of disassembly)	-do-	-do-
Front fork oil	91 ± 1 cc/ leg	IOC / HPCL	Gabriel premium front fork oil
Disc brake fluid	-	TVS Girling	DOT 3 /DOT 4
Grease	-	Bharat petroleum IOC Bechem Kluber lubrication	MP Grease no 3 Service gem no 3 Bechem premium 3 Kluber centoplex 2
Fuel additives	As per recommended		IFTEX

SERVICE SCHEDULE

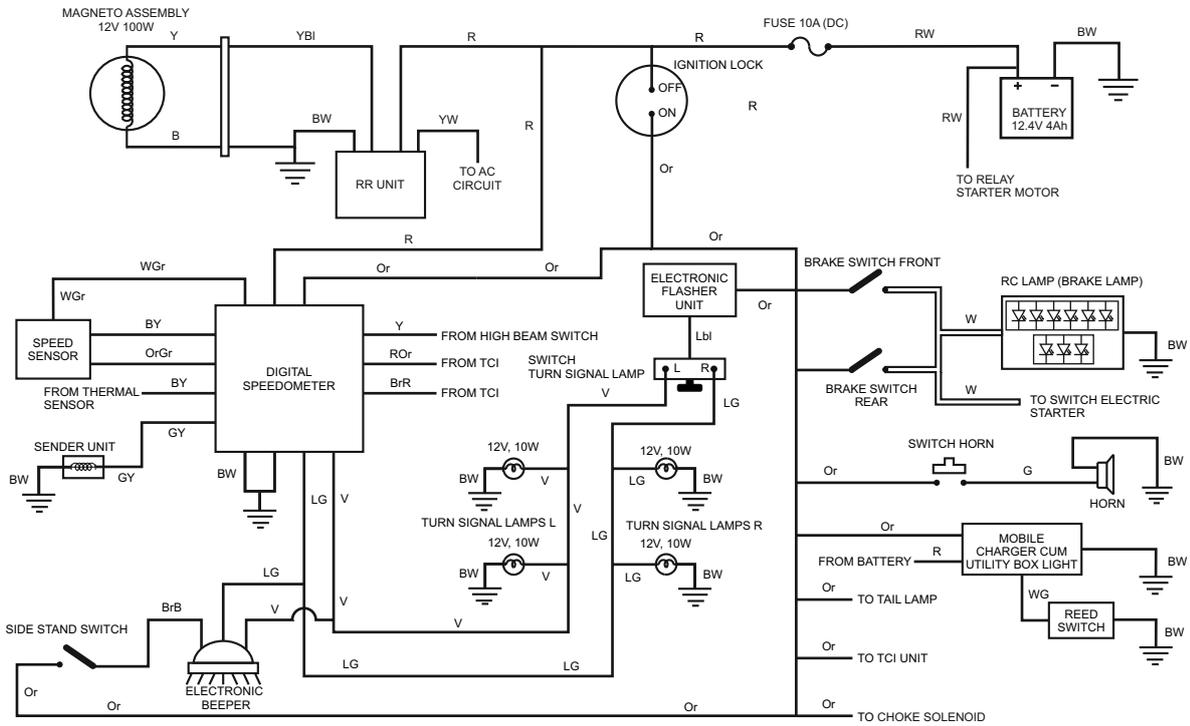
SERVICE	Kms	MONTH	FREE/PAY
I	500 - 700	2MONTH	FREE
II	2500 - 3000	4 MONTH	
III	5000 - 6000	8 MONTH	
IV	8500 - 9000	12MONTH	
I	11500 - 12000	16 MONTH	PAID
II	14500 - 15000	20 MONTH	
III	17500 - 18000	24 MONTH	
IV	20500 - 21000	28 MONTH	
V	23500 - 24000	32 MONTH	
VI	26500 - 27000	36 MONTH	
VII	29500 - 30000	40 MONTH	
VIII	32500 - 33000	44 MONTH	
IX	35500 - 36000	48 MONTH	
X	38500 - 39000	51 MONTH	
XI	41500 - 42000	54 MONTH	
XII	44500 - 45000	57 MONTH	
XIII	47500 - 48000	60 MONTH	

ADJUSTMENT PROCEDURE

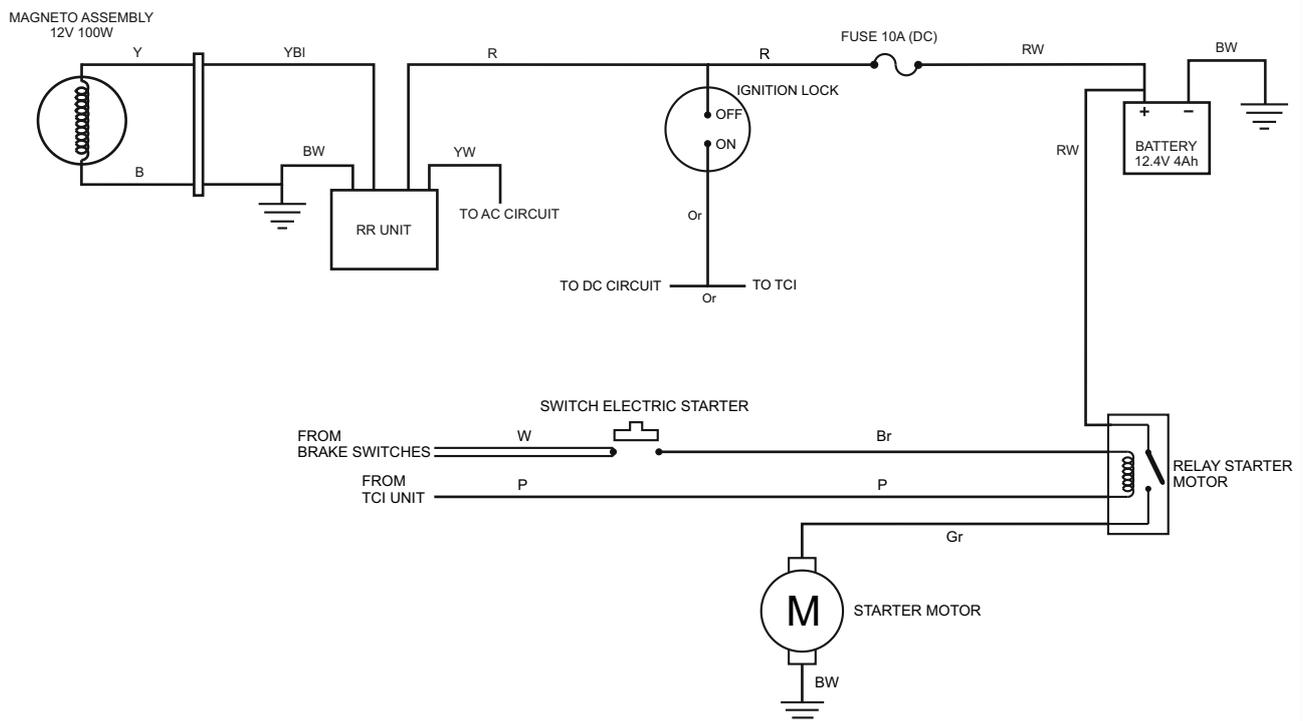
HEAD LAMP ADJUSTMENT PROCEDURE

- The requirement of the adjusting of head lamp is required when the light is not having focus properly
- There are two bolt under the head lamp
- By adjusting the bolts we can move the head lamp according the our requirement

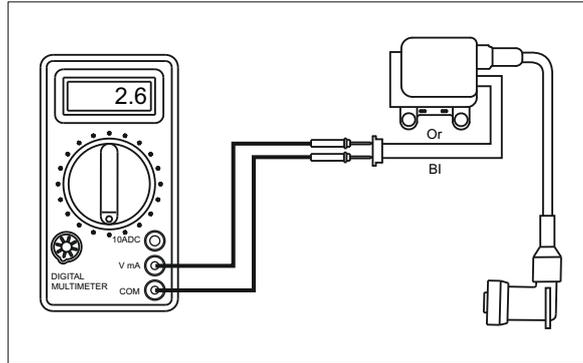
CHARGING AND DC CIRCUIT



ELECTRICAL STARTER CIRCUIT

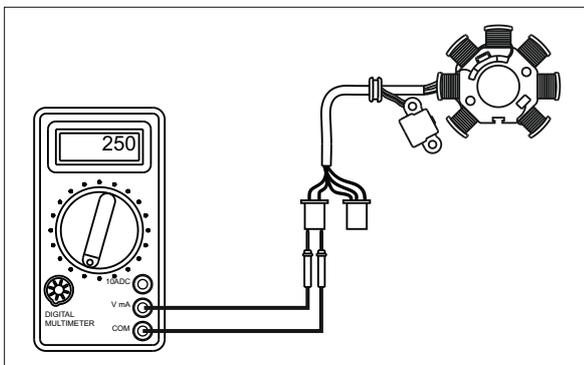


ELECTRICAL COMPONENT CHECKING



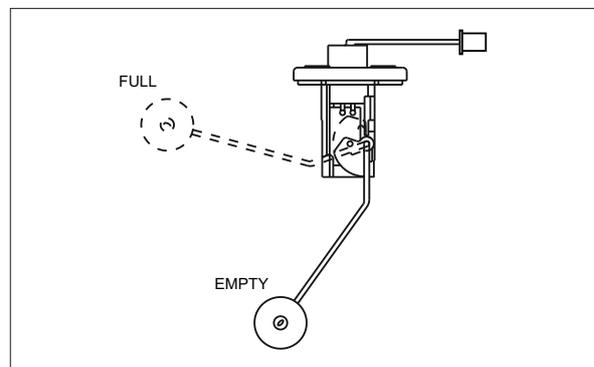
IGNITION COIL PRIMARY WINDING CHECK

RESISTANCE - 4~6 ohms



PULSAR COIL CHECK

RESISTANCE - 104 ~ 385 ohms



FUEL SENDER UNIT CHECK

RESISTANCE - FULL - 4 ~ 6 ohms
 EMPTY - 108 ~ 112 ohms

Mandatory job in LH & RH sequence

LH side jobs

- Air filter element cleaning
- Breather pipe hose inspection
- Transmission oil draining *
- Rear brake clean/ adjust
- Transmission oil refilling *
- CVT Filter cleaning *
- Main/side stand lubricate
- LH side bolt & nut inspection
- All light inspection

Common job

- Steering play adjustment **
- Compression inspection **
- Tappet adjustment **
- Battery inspection



RH side jobs

- Throttle play adjustment
- Engine oil draining*
- Engine oil re-filling *
- Front brake pad Inspection l/s
- RH side bolts & nuts inspection
- Tyre pressure inspection
- All locks lubrication

Off ramp jobs

- Idling CO inspection/ adjustment**

* Every alternate service
 ** Only if required

ACTIVITY :-

- 1) What is recommended oil quantity during service and overhaul ?
A) 1000/1200 ml B) 880/930 ml C) 900/1000ml
- 2) What is the Recommended spark plug for NATORQ 125 ?
A) UR4KE B) UR4KC C) UR5DC
- 3) What is the recommended spark plug gap for NATORQ 125 ?
A) 0.9~1.0 mm B) 0.8~0.9 mm C) 0.7~0.8 mm
- 4) What type of air filter used in NATORQ 125 ?
A) Paper filter B) Form filter C) Dry paper filter with Dry form
- 5) The carburettor used in NATORQ 125 in _____
A) Keihin CT5 (VM 20) B) Keihin PB18 C) Keihin CV 30 VE
- 6) What is the Fork oil replacement interval in NATORQ 125 ?
A) 12000 km B) 18000 km C) 24000 km
- 7) The Front fork oil capacity of NATORQ 125 is _____
A) 84±1 ml B) 152±1 ml C) 91±1 ml
- 8) The compression ratio for NATORQ 125 is _____
A) 9.8:1 B) 9.5:1 C) 9.7:1
- 9) The pulsar coil resistance for NATORQ 125 is _____
A) 135 - 265 ohm B) 104 - 385 ohm C) 360-400 ohm
- 10) What type of frame is used in NATORQ 125 ?
A) Duplex tubular frame B) Under born tubular frame C) Double cradle split Synchro STIFF
- 11) If pillion is there in the vechile what should be the tyre pressure for rear wheel ?
A) 1.97 kg/cm² (28 psi) B) 2.25 kg/cm² (32 psi) C) 2.53 kg/cm² (36psi)
- 12) How many inlet valve is there in NATORQ 125 ?
A) 2 B) 3 C) 4
- 13) What type of fuse is used in NATORQ 125 ?
A) 10A B) 13V, 15A C) 14V, 15A
- 14) At what kilometre and service the 51 month will comes?
A) 26500-27000 km and 10 service B) 47500-48000 km and 17 service c) 38500-39000km and 14 service