# PREFACE No: IB28A

Thank you for selecting a Hero MotoCorp **XPULSE 200T.** We wish you many miles of continued riding pleasure in the years ahead.

We, at Hero MotoCorp, are committed to demonstrate excellence in our environment performance on a continual basis, as an intrinsic element of our corporate philosophy. To achieve this we commit ourselves to continue product innovations to improve environment compatibility and strengthen the green supply chain. We are also using non asbestos brake shoes and engine gaskets which are environment friendly in nature.

This booklet is your guide to the basic operation and maintenance of your new Hero MotoCorp **XPULSE 200T**. Please take time to read it carefully. As with any fine machine, proper care and maintenance are essential for trouble–free operation and optimum performance.

Authorised Distributor or dealer(s) of the Distributor ("**Pealer**") will be glad to provide you further information or assistance and to handle your future service needs.

Let us make this world a safer, healthier and more environment friendly place.

# NOTE

ALL INFORMATION, ILLUSTRATION, PHOTOGRAPH, DIRECTIONS, SPECIFICATIONS AND OTHER CONTENTS COVERED IN THIS OWNER'S MANUAL ARE BASED ON THE LATEST PRODUCT INFORMATION AVAILABLE AT THE TIME OF ITS PRINTING APPROVAL, AND THE ACCURACY OR CORRECTNESS OF THE SAME IS NOT UNDERTAKEN OR GUARANTEED. Hero MotoCorp Ltd RESERVES THE RIGHT TO MAKE CHANGES IN ITS CONTENTS AT ANY TIME WITHOUT NOTICE AND/OR INCURRING ANY OBLIGATION, WHATSOEVER. NO ONE IS ALLOWED TO REPRODUCE ANY PART OF THIS PUBLICATION WITHOUT OBTAINING PRIOR WRITTEN PERMISSION FROM Hero MotoCorp Ltd.

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### VEHICLE IDENTIFICATION



Vehicle Identification Number (VIN)

steering head tube.



Engine No.

Location: Stamped on the right side of the Location: Stamped on the lower side of the left crankcase.

VIN: MBLLDU01#######

MBL	LDU01	#	#	#	#	#####
Manufacturer code	Vehicle Description	Check Digit	Model Year	Plant Code	Month of Manufacturing	Production Serial Number

Engine No.: MC20AE#######

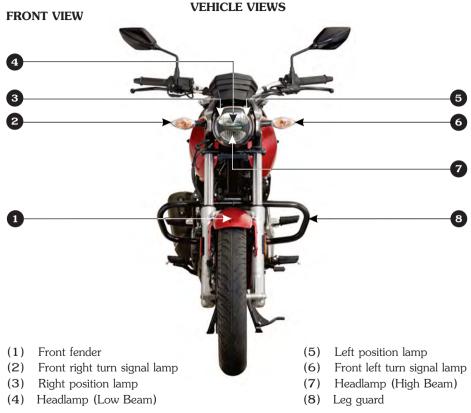
MC20AE	#	#	#	#####
Engine Description	Year of Manufacturing	Assembly Plant	Month of Manufacturing	Serial Number

Model: XPULSE 200T

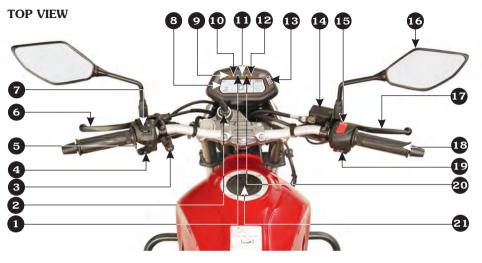
Variants	VIN	Engine
Electric start/Front disc with ABS/Rear disc/Cast wheel	LDU01	MC20AE

# VIN and Engine No. may be required:

- During registration of the vehicle.
- For dealing with legal & insurance departments.







- (1) High beam indicator
- (2) Ignition switch with key
- (3) Bystarter knob
- (4) Horn switch
- (5) Turn signal switch
- (6) Clutch lever
- (7) Pass lamp switch
- (8) LCD panel of Meter console. Refer instruments and indicators (page 15) for fuel gauge, speedometer and other features of console
- (9) Side stand indicator

- (10) Left turn signal indicator
- (11) Neutral indicator
- (12) Right turn signal indicator
- (13) Mode (M) and Set (S) buttons
- (14) Front brake master cylinder/Reservoir
- (15) Engine stop switch
- (16) Rear view mirrors
- (17) Front brake lever
- (18) Throttle grip
- (19) Electric starter switch
- (20) ABS indicator
- (21) Fuel tank cap



- Side reflex reflector
- (2)Fuel valve
- Bash plate
- (4)Starter motor
- (5)
- (6) Rider foot rest
- (10) Saree guard Gear shift pedal
  - (11) Rear grip

(8)

(9)

- (12) Seat lock
- (13) Left side cover
- (14) Battery compartment (inside)
- (15) Side stand switch
- (16) Air suction valve (inside)

\*Accessories and features shown may not be part of standard fitment.

Side stand

Pillion foot rest



- (1) Rear master cylinder
- (2) Brake pedal
- (3) Kick starter pedal
- (4) Oil level dipstick
- (5) Front caliper assembly
- (6) Front disc
- (7) Carburetor
- (8) Seat

- (9) Tool kit compartment (inside)
- (10) Fuse box (inside)
- (11) USB charger compartment (inside)
- (12) Air cleaner assembly (inside)
- (13) Rear caliper assembly
- (14) Exhaust muffler
- (15) Rear disc

# **VEHICLE SPECIFICATION**

ITEM		SPECIFICATIONS	
Dimensions			
Overall length		2118 mm	
Overall width		806 mm	
Overall height		1089 mm	
Wheelbase		1393 mm	
Saddle height		799 mm	
Ground clearance		178 mm	
Weight			
Kerb weight		150 kg	
Payload		130 kg	
Capacities			
Engine oil		1200 ml at disassembly and 1070 ml at draining	
Fuel tank capacity		13.0 litres	
Fuel reserve capacity		2.0 litres (Usable)	
Front fork oil at disassembly		340 cc (Per leg)	
Hydraulic brake fluid		DoT-4/DoT-3	
Engine			
Maximum power		[ 13.5 kW @ 8000 rpm	
Maximum torque		17.1 N-m @ 6500 rpm	
Bore and stroke		66.5x57.5 mm	
Compression ratio		10:01	
Displacement		199.6 cc	
Spark plug		NGK-CPR 8 EA9, BOSCH UR5DC	
Spark plug gap		0.8-0.9 mm	
Valve clearance	Intake (cold)	0.07 mm +0.01/-0.02	
	Exhaust (cold)	0.09 mm +0.01/-0.02	
Idle speed		1400±100 rpm	
Chassis and suspension			
Front suspension		Telescopic front forks (dia 37 mm)	
•		with anti friction bush	
Rear suspension		Rectangular swingarm with mono shock	
Caster angle		25.5°	
Trail length		80.5 mm	

# **VEHICLE SPECIFICATION**

VEHICLE SI	LCITICATION		CDECIFICATIONS	
	ITEM		SPECIFICATIONS	
Tyre size	Fre		100/80 x 17-52 P (Tubeless tyre)	
Tyre size	Re		130/70 x R17-62 P (Radial tubeless tyre)	
Tyre pressure			1.75 kgf/cm² (25 psi)/1.75 kgf/cm² (25 psi)	
Tyre pressure			1.96 kgf/cm² (28 psi)/2.1kgf/cm² (30 psi)	
Brakes	Front (Disc		Dia. 276 mm	
Diakes	Rear (Disc	type)	Dia. 220 mm	
Transmission				
Primary reduction	1		3.350 (67/20)	
Final reduction			2.846 (37/13)	
Transmission			5 Speed constant mesh	
Gear ratio, 1 <sup>st</sup>			3.0769 (40/13)	
2 <sup>nd</sup>			1.7895 (34/19)	
3 <sup>rd</sup>			1.500 (30/20)	
4 <sup>th</sup>			1.100 (22/20)	
5 <sup>th</sup>			0.9583 (23/24)	
Electricals				
Battery			[12V-4 Ah, (ETZ-5) *MF Battery	
Alternator			110 W @ 5000 rpm	
Headlamp			12V-5.6W/9.3W (LED)	
Position lamp			12V-0.9W (LED)	
Tail/Stop lamp			12V-0.2/2.1W (LED)	
Turn signal lamp			12V-10Wx4 nos. **MFR (Amber bulb-clear lens)	
Meter illumination	า		LED	
Neutral indicator			LED	
Turn signal indicator (RH/LH)			LEDx2 nos.	
Hi beam indicator			LED	
ABS indicator			LED	
Service reminder indicator			LCD display	
Licence plate lamp			12V-5W	
Side stand indicator			LED	
Fuse			20A, 15A, 10A, 10A	

<sup>\*</sup>MF stands for Maintenance Free

<sup>\*\*</sup>MFR stands for Multi-Focal Reflector type

### **ACCESSORIES & MODIFICATIONS**

Modifying your vehicle or using non-Hero MotoCorp accessories can make your vehicle unsafe. Before you consider making any modifications or adding an accessory, be sure to read the following information.

# /! WARNING

- Improper accessories or modifications can cause a crash in which you can be seriously hurt or killed.
- Follow all instructions in this owner's manual regarding accessories and modifications.

### Accessories

- Make sure that the accessory does not obscure any lamps, reduce ground clearance, limit suspension travel or steering travel, affect your riding position or interfere with operating any controls.
- Be sure electrical equipment does not exceed the vehicle's electrical system capacity (page 8). A blown fuse can cause a loss of lights.
- Do not pull a trailer or sidecar with your vehicle. This vehicle was not designed for M these attachments, and their use can seriously impair your vehicle's handling.

### **Modifications**

We strongly advise you not to remove any original equipment or modify your vehicle in any way that would change its design or r

operation. Such changes could seriously impair your vehicle's handling, stability and braking, making it unsafe to ride. Removing or modifying your lamps, mufflers, emission control system or other equipment can also make your vehicle illegal.

### **ANTI-THEFT TIPS**

- Always lock the steering and never leave the key in the ignition switch. This sounds simple but people do forgets.
- Be sure the registration information for your vehicle is accurate and correct.
- Park your vehicle in a locked garage whenever possible.
- Make sure that the accessory does not Use an additional anti-theft device of good obscure any lamps reduce ground quality.
  - Never park your vehicle in an isolated area.
     Park as far as possible in a designated area.
  - Enter your name, address and phone number in this Owner's Manual and keep it in your vehicle at all times. Many times stolen vehicles are identified by information in the Owner's Manuals that are still with them

NAME:	
ADDRESS:	
PHONE NO:	

# Hero RideSafe

## VEHICLE SAFETY IMPORTANT SAFETY INFORMATION

Your vehicle can provide many years of Always pay due attention to other vehicles service and pleasure if you take responsibility around you, and do not assume that other for your own safety and understand the drivers see you. Be prepared to stop quickly or challenges you can meet on the road.

There is much that you can do to protect Make yourself easily visible vourself when you ride. You will find many Some drivers do not see vehicles because they most important.

### Always wear a helmet

the number and severity of head injuries. So Ride within your limits always wear a helmet and make sure your Pushing the limits is another major cause of

## Before riding your vehicle

Make sure that you are physically fit, mentally to make good judgements and ride safely. focused and free of alcohol and drugs. Check Do not drink and ride that you and your pillion are both wearing an Riding under the influence of alcohol or drugs the grab rail or your waist, leaning with you in the reaction time. Do not drink and ride. turns, and keeping their feet on the footrest, Keep your vehicle in safe condition even when the vehicle is stopped.

# vehicle

familiar with how this vehicle works and handles, and to become accustomed to the vehicle's size and weight.

# Ride defensively

perform an evasive maneuver.

helpful recommendations through out this are not looking for them. To make yourself manual. Following are a few that we consider more visible, wear bright reflective clothing, position vourself so that others can see you. signal before turning or changing lanes, and It is a proven fact, helmet significantly reduces use horn which will help others to notice you.

pillion rider does the same. We also vehicle accidents. Never ride beyond your recommend that you wear eye protection, personal abilities or faster than conditions sturdy boots, gloves and other protective gear. demand. Remember that fatigue and negligence can significantly reduce your ability

approved vehicle helmet and protective is dangerous. Alcohol can reduce your ability apparel. Instruct your pillion on holding onto to respond to changing conditions and reduce

For safe riding, its important to inspect your Take time to learn & practice your vehicle before every ride and perform all recommended maintenance. Never exceed Even if you have ridden other vehicles, load limits (page 7), and only use accessories practice riding in a safe area to become that have been approved by Hero MotoCorp for this vehicle.

### If you are involved in a crash

Personal safety is your first priority. If you or anyone else has been injured, take time to assess the severity of the injuries and whether it is safe to continue riding. Call for emergency assistance if needed. Also follow applicable laws and regulations if another person or vehicle is involved in the crash.

If you decide to continue riding, first evaluate Your helmet is your most important piece of and check the handlebar, brake levers, brakes. A bright coloured helmet can make you more and wheels, Ride slowly and cautiously. Your noticeable in traffic, as can reflective strips. vehicle may have suffered damage that is not An open-face helmet offers some protection, immediately apparent. Have your vehicle but a full-face helmet offers more. Always thoroughly checked at a qualified service were face shield or googles to protect your facility as soon as possible.

### PROTECTIVE APPAREL

For your safety, we strongly recommend that In addition to a helmet and eye protection, we you always wear a helmet which should also recommend: conform as per your country standards, in . Sturdy boots with non-slip soles to help addition to eye protection, boots, gloves, long pants and a long sleeve shirt or jacket. whenever you ride. Take care of loose/ hanging clothes while solo/pillion riding. Although complete protection is not possible, . wearing proper gear can reduce the chance of injury when you ride.

Following are suggestions to help you choose proper riding gear.

# / WARNING

- Not wearing a helmet increases the chance of serious injury or death in a crash.
- · Be sure you and your pillion always wear a helmet, eve protection and other protective apparel when you ride.

### Helmets and eve protection

the condition of your vehicle. If the engine is riding gear because it offers the best still running, turn it off. Inspect for fluid leaks, protection against head injuries. A helmet check the tightness of critical nuts and bolts, should fit your head comfortably and securely.

eyes and help your vision.

# Additional riding gear

- protect your feet and ankles.
- Leather gloves to keep your hands warm and help prevent blisters, cuts, burns, and bruises.
- A two wheeler riding suit or jacket for comfort as well as protection. Bright coloured reflective clothing can help make you more noticeable in traffic. Be sure to avoid loose clothes that could get caught on any part of your vehicle.

### SAFE RIDING TIPS



### Do's:

- Always conduct simple pre-ride inspection Never use cell phone while riding the vehicle. (page 32).
- Always wear a helmet with chinstrap securely fastened and insist on a helmet for your pillion rider. • Never shift gears without disengaging the clutch Helmet should conform as per safety standards applicable in your country.
- While riding, sit in a comfortable position with your legs close to fuel tank.
- Ride defensively and at a steady speed (between 40-50 km/hr).
- For stopping vehicle, use both brakes simultaneously, keeping throttle in the close position.
- During night time, dip headlamps of your vehicle for oncoming traffic, or when following another vehicle
- · Give way to others on the road and signal before vou make a turn.
- To make yourself more visible, wear bright reflective clothing that fits well.
- Take care of loose/hanging clothes while solo/pillion riding.
- Get your vehicle serviced regularly by the Authorised Distributor/Dealer.
- Before riding make sure that engine stop switch is in "ON"  $(\Omega)$  position.
- · Keep checking the ABS indicator. At any point if indicator remains on, then ABS is not working . (page 28).
- Keep checking speedometer. In case of ABS . malfunction, speed display may go to zero.
- It is suggested to go through the do's & dont's of ABS (page 36) and practice your ABS vehicle initially in low-traffic condition unless you are thoroughly familiar with your vehicle and its controls.

### Don'ts

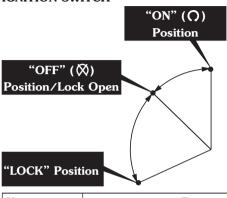
- Avoid sudden acceleration, braking and turning of vour vehicle.
- and closing the throttle.
- Never touch any part of the hot exhaust system like muffler.
- Never ride under the influence of alcohol or drugs.
- · Concentrate on the road and avoid talking to the pillion rider or others on the road.
- Do not litter the road
- Do not cross the continuous white/vellow line in the center of the road, while overtaking.
- · Do not attach large or heavy items to the handlebars, front forks, or fenders.
- Never take your hands off the steering handle while riding.
- Do not attempt to apply the front brake lever intermittently for ABS vehicle.
- Do not panic by mechanical noises or slight pedal pulses while applying the brake in vehicle. These conditions are normal and indicates that ABS is working.
- Do not apply the hard braking in wet or rainy conditions.
- Do not switch off the engine stop switch while riding the vehicle (page 28).
- Navigation system assists you to reach your destination, don't be distracted while driving. Drive safely and always obey traffic rules.

### TIPS FOR HEALTHY ENVIRONMENT

The following tips shall ensure a healthy vehicle, healthy environment, and a healthy you.

- **Healthy engine:** The engine is the lifeline of every vehicle. To keep it healthy, it should be tuned regularly, which will also help reduce pollution and improve vehicle performance & fuel efficiency.
- **Regular servicing:** Get your vehicle serviced at an Authorised Distributor/Dealer, as per the service schedule, for an optimum performance and keep the emission level under check.
- Genuine spares: Always insist on Hero MotoCorp genuine parts as spurious or incompatible spares and accessories can upset or deteriorate your vehicle's running condition.
- Genuine engine oil: Hero 4T Plus SAE 10W 30 SL grade (JASO MA2) engine oil
  recommended by Hero MotoCorp and make sure you change it every 6000 km. (with top
  up every 3000 kilometres) to keep the engine fit and environment healthy.
- Noise pollution: Noise beyond a certain decibel is pollution. Whether it is from horns or defective mufflers, excessive noise will cause headaches and discomfort.
- Fuel saving & reduce pollution: Switch "OFF" the engine while waiting at traffic signal points to save fuel and reduce pollution, if the waiting period is long.

# PARTS FUNCTION IGNITION SWITCH



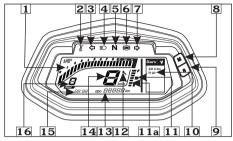


- 1. Ignition switch
- 2. Ignition key
- 3. "OFF" (♥) position
- 4. Steering lock position
- 5. "ON" (**O**) position

Key position	Function	Key removal
"ON" (O)	The LCD panel illuminates & initial display of multi function digital segments are displayed. The tachometer segment and the fuel gauge segment will swing to the maximum scale once and back to its normal position. The engine can be started. Turn signal lamp, horn, tail/stop lamp, fuel gauge, pass lamp, position lamp & neutral indicator will be functional.	Key cannot be removed.
"OFF" (⋈)	Engine cannot be started and no electrical system will be functional.	Key can be removed.
"LOCK"	Steering can be locked.	Key can be removed.

### **INSTRUMENTS AND INDICATORS**

The indicators are in the speedometer panel above the headlamp. The functions are as below.



Sl. No.	Description	Function
1	Tachometer	Shows engine revolution per minute. The tachometer digital segments will swing to maximum scale on the meter console once the ignition switch is turned "ON".
2	Side stand indicator	Light glows when the vehicle is parked on the side stand.
3	Turn signal indicator (L)	Flashes when left turn signal switch is operated.
4	High beam indicator	Light glows when headlamp is in high beam.
5	Neutral indicator	Light glows when vehicle is in neutral.
6	Anti-lock braking system (ABS) indicator	This indicator normally comes on for approx 1.8 seconds when the ignition switch is turned "ON" ( $\Omega$ ) & then keeps blinking until the vehicle attains speed of 5 km/h. If there is a problem with the anti-lock brake system, ABS indicator turns "ON" (page 28).
7	Turn signal indicator (R)	Flashes when right turn signal switch is operated.
8	Mode button	Switches display between odometer, tripmeter-1 & 2, clock, eco mode & bluetooth connectivity.

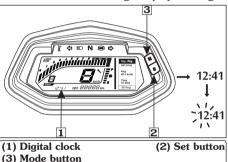
Sl. No.	Description	Function
9	Set button	To adjust clock, date & tripmeter. When long pressed resets tripmeter to zero.
10	Next service distance	Indicates how many kilometers are left before the next service is due. It appears for few seconds when the ignition switch is turned "ON" ( $\Omega$ ) (page 20).
11	Fuel gauge	Indicates approximate fuel available in the form of digital segments. The digital segments (11a) will swing to maximum scale on the meter console once the ignition switch is turned "ON" ( <b>O</b> ). If all the segments (11a) are displayed it means fuel quantity in the fuel tank is 13 litres. If only one segment is displayed and blinks, this indicates the fuel quantity is low and the fuel tank should be refilled as soon as possible.
12	Service reminder indicator	Displays when the next service is due (page 20).
13	Odometer	Shows accumulated distance travelled (page 18).
14	Speedometer	Indicates riding speed.
15	Digital clock	Indicates hours & minutes (page 17).
16	Gear indicator	Displays the selected gear while riding (page 21).

### LCD PANEL

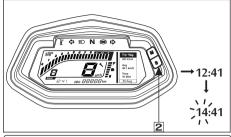
# (a) Digital clock

Digital clock (1) shows hour and minute. To adjust the time, proceed as follows:

- Turn the ignition switch "ON" (**Q**).
- Press and hold set button (2) and mode button (3) simultaneously for more than 2 seconds. The clock will be set in the adjust mode with the hour's digit display blinking.

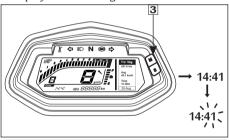


- To set the hour, press set button (2) until the desired hour is displayed.
  - The time is advanced by 1 hour each time the button is pressed.
  - The time advances fast when the button is pressed and held.



## (2) Set button

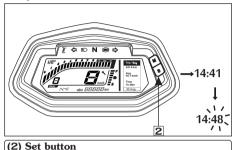
• Press the mode button (3). The minutes display starts blinking.



# (3) Mode button

- To set the minute press set button (2) until the desired minute is displayed. The minute display will return to "00" after "60" is reached without affecting the hour display.
  - The time advances by 1 minute, each time the button is pressed.

• The time advances fast when the button is Tripmeter displays following parameters: pressed and held.



· To end the adjustment press the mode button (2) until clock display stops blinking.

# NOTE

The clock will reset to "1:00" if the battery is disconnected.

# (b) Odometer/Tripmeter

The odometer (1) shows accumulated distance travelled.

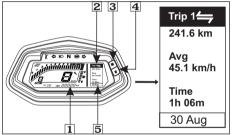
The tripmeter shows distance travelled since trip meter was reset last time. There are two tripmeters, "Trip-1" and "Trip-2".

Push the mode button (3) to select "Trip-1" and "Trip-2". "Trip-1" and "Trip-2" can be displayed upto "999.9" km.

If the tripmeter exceeds "999.9" km it will return to "0.0" km automatically.

- **Distance**: distance covered in a trip.
- Avg speed: average speed at which vehicle completes a trip
- **Trip time**: time taken to complete a trip.
- Date: it shows the current date.

When tripmeter is selected, long press (more than 2 seconds) the set button to reset tripmeter to zero. The odometer can be displayed from "0 to 99999" km.



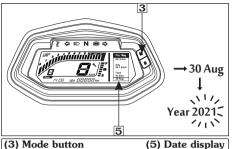
- (1) Odometer
- (3) Mode button

(2) Tripmeter (4) Set button

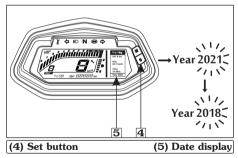
(5) Date

To update the date proceed as follows:

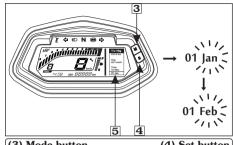
- Turn the ignition switch "ON" (Q).
- Press and hold set button (4) and mode button (3) simultaneously for more than 2 seconds. The clock display will start blinking (page 17).
- Keep pressing and releasing mode button (3) until date display (5) starts blinking.



 Now to set year, press set button (4) until the desired year is displayed.

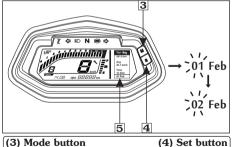


 To set month, press the mode button (3) to switch from year to month display. Now press the set button (4) until the desired month is displayed.



(3) Mode button (4) Set button (5) Date display

 To set day, press the mode button (3) to switch from month to day display. Now press the set button (4) until the desired day is displayed.



 To end the adjustment press the mode button until date display stops blinking.

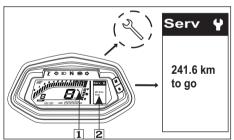
(5) Date display

### (c) Service reminder indicator

The service reminder indicator (1) is to indicate the user to bring the vehicle to an Authorised Distributor/Dealer for service. The indicator shall start blinking when the vehicle covers kilometers as specified in the **FEATURES** maintenance schedule. The indicator will keep on blinking throughout the kilometer interval for a particular service and will stay "ON" thereafter.

Meter console also displays the next service distance (2). It indicates how many kilometers are left before the next service is due. It appears for few seconds when the ignition switch is turned "ON"  $(\mathbf{O})$ .

The service reminder indicator "\" can only he reset at an Authorised Distributor/Dealer.



- (1) Service reminder indicator
- (2) Next service distance

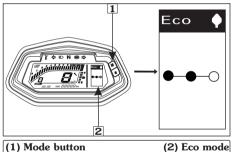
# NOTE

After getting the vehicle serviced, make sure that the Service Reminder Indicator has been reset.

# (a) ECO mode

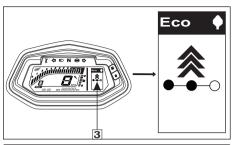
ECO mode assists the rider to achieve optimum fuel efficiency.

Press the mode button (1) until ECO mode (2) is displayed.



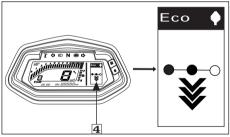
It displays following riding instructions:

• Shift up indicator: it recommends for shifting to high gear.



### (3) Shift up indicator

 Shift down indicator: it recommends for shifting to low gear.



### (4) Shift down indicator

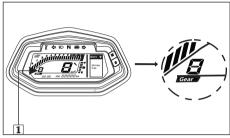
# NOTE

ECO mode assists the rider to achieve optimum fuel efficiency based on your vehicle's engine performance.

It is recommended to ride your vehicle as per road and traffic conditions.

## (b) Gear indicator

Gear indicator (1) indicates current gear condition of your vehicle in which it is running.



### (1) Gear indicator

# NOTE

- Gear indicator displays "0" when your vehicle is in neutral.
- Gear indicator displays "-" when it delays in displaying the gear indication or when you change gears in vehicle static condition (vehicle is in main stand and ignition switch is in "ON" position).

# (c) Hero ride guide/Navigation Application:

Hero navigation application (1) is available in the google play store (for androids) or App Store (for iOS), which can be installed in your device to access bluetooth, incoming calls alerts, mobile low battery alert, and navigation features.

# NOTE

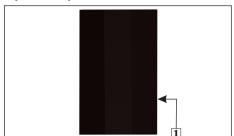
- Compatibility and performance of hero ride guide application may very based on your device and software version.
- Application needs GPS signal, internet and bluetooth connectivity to perform the desired navigation functionality.

### Bluetooth:

Your vehicle is equipped with bluetooth connectivity feature by which you can pair your smartphone with the meter console of vour **XPULSE 200T** vehicle through Hero navigation application.

To connect your device proceed as follows:

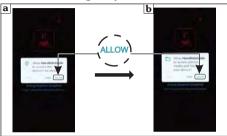
- Turn the ignition switch "ON".
- Open hero navigation application (1) on your smartphone.

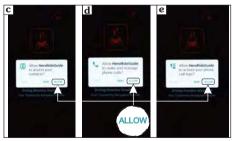


(1) Hero navigation application

• For first time pairing, allow the application • Application also asks you to accept (3) the to access:

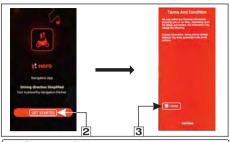
- a. Device's location if GPS is not enabled in your device
- b. Photos, media, files
- c. Contacts
- d. Make & manage phone calls
- e. Phone call logs on your device



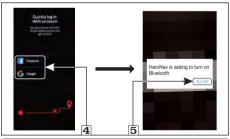


- Now select "GET STARTED" (2) to proceed.
- terms and conditions to proceed.

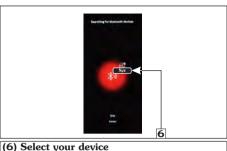




- (2) Get started
- (3) Accept terms and condition
- Now login your app using facebook or google (4) account and get started.
- Allow (5) the application to turn on bluetooth if it is not enabled in your device.

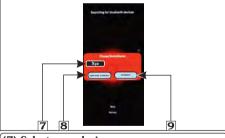


- (4) Log in through Facebook or Google (5) Turn on bluetooth
- The application searches for a while and displays all nearby devices. Select the device with your name (6).

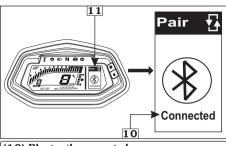


(6) Select your device

 Update your name (7) (if required) and select either save and connect (8) or connect (9) to proceed.



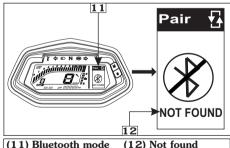
- (7) Select your device
- (8) Save and connect
- (9) Connect
  - On pairing, meter console displays "connected" (10) below bluetooth symbol in bluetooth mode (11).



# (10) Bluetooth connected

# (11) Bluetooth mode

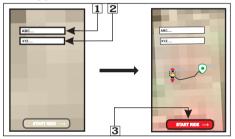
 If any error occurs during the course of pairing process, then meter console will display "Not found" (12) below bluetooth symbol. Repeat the above steps and keep your smartphone closer to the vehicle to reconnect.



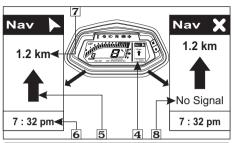
### Navigation:

To use navigation feature proceed as follows:

- Connect your vehicle with your hero ride guide/navigation application via bluetooth (page 22).
- After successful connection, the application and meter console display will automatically switch to navigation mode (4). It will also update your current location (1) through GPS system.
- Now choose your destination (2) through the application and select "start ride" (3).



- (1) Current location (2) Choose destination (3) Start ride
- After processing for a while, meter console will display the direction (5), distance for next move (7) and estimated time of arrival (ETA) (6). Estimated time of arrival will be displayed in "am" or "pm". Hero navigation app and meter console of your vehicle will display step by step navigation guidance/direction through navigation signs (page 73).



(4) Navigation mode (5) Direction (6) ETA (7) Distance for next move (8) No signal

# NOTE

At any point, if navigation system loses signal, then it displays "No Signal" (8) on meter console when vehicle is in navigation mode.

# / WARNING

Navigation system assists you to reach your destination, don't be distracted while driving. Drive safely and always obey traffic rules.

### **Autopairing:**

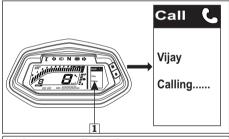
Your vehicle is equipped with autopairing feature by which if you turn "OFF" vehicle's ignition switch after successful pairing with hero navigation application, it will reconnect automatically once ignition switch is turned "ON".

## NOTE

Always keep your smartphone close to your vehicle during the course of pairing, autopairing and navigation.

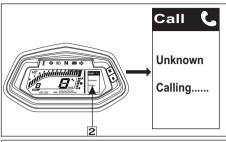
## Incoming call alert:

If your smartphone is paired with the meterconsole of your vehicle via bluetooth (page 22), then you will get all the incoming calls alerts on the meter console. It will display the name of the caller if it is stored in your compatible smartphone. For example: If caller's number is stored in your compatible smartphone by name of Vijay, then your meter console will display Vijay calling (1).



(1) Incoming call alert by name

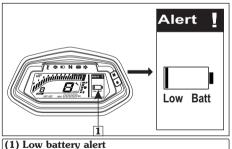
If the number is not saved in your device by name or your device is an iOS, then it will display "unknown calling" (2).



(2) Incoming call alert by unknown number

# Low battery alert:

A symbol of low battery alert (1) appears for few seconds on the meter console if the battery of your paired smartphone is too low.



## (d) Steering lock

Steering lock is with the ignition switch, turn the key (1) to "OFF" (\*\overline{\Omega}) position & turn the handle bar towards left or right & push the key downwards & turn towards "Lock" position. After locking take out the key.



(1) Ignition key

## HANDLEBAR SWITCHES CONTROL Left handlebar controls

### 1. Headlamp dimmer switch/ Pass switch

The headlamp operates only when the engine is running.

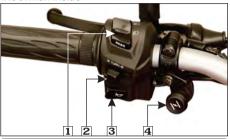
Press the switch (1) upwards for high beam " ownwards for low beam " ...".

Press the pass switch to "PASS" position to operate the pass lamp.

# 2. Turn signal lamp switch ( )

Shift the turn signal switch (2) sideways for right/left indications and leave it to come back to its normal position on its own.

**IMPORTANT:** To switch "OFF" the turn signal after completing the turn, gently push the switch inside.



- (1) Headlamp dimmer switch/Pass switch
- (2) Turn signal switch (3) Horn switch
- (4) Bystarter knob

## 3. Horn switch (►)

Press the switch to operate the horn (3).

# 4. Bystarter knob (|\sigma|)

To apply bystarter, pull the knob (4) towards the rider.

# NOTE

Do not accelerate during starting when the bystarter is on.

### 5. Clutch switch

There is a clutch switch (5) provided for the safety of the rider. The vehicle cannot be started by electric starter switch until the clutch lever is operated when the vehicle is engaged in gear.



(5) Clutch switch

# Right handlebar controls

# 1. Electric starter switch (1)

Ensure starter switch (1) is operated when the vehicle transmission is in neutral. If the vehicle is engaged in gear, press the clutch lever before operating the starter switch. Release starter switch after the engine has started.



(1) Electric starter switch

### ( CAUTION

Never hold electric starter switch continuously more than 5 seconds as continuous cranking of engine will discharge the battery.

### 2. Engine stop switch

The engine stop switch (2) is provided next to throttle grip. The switch has two positions. In "ON" ( $\Omega$ ) position, engine will operate and in "OFF" ( $\infty$ ) position, engine will not operate. The prime function of switch is to stop the engine during emergency (Vehicle tip over, throttle cable stuck etc.). The switch should normally remain in "ON" ( $\Omega$ ) position. During emergency, put the switch to "OFF" ( $\infty$ ) position.



### (2) Engine stop switch

### **WARNING**

While riding the vehicle in normal condition, do not switch off the "Engine stop switch" to avoid any damage (Wheel locking leading to accident, part damage, battery discharge etc.).

### **ABS INDICATOR**

The ABS indicator (1) on speedometer come "ON" for approx 1.8 seconds when the ignition switch is turned "ON" ( $\Omega$ ) & then keeps blinking until the vehicle attains a speed of 5 km/h.

When the system functions normally indicator goes "OFF" ((\*\*)) once vehicle speed exceeds 5 km/h.

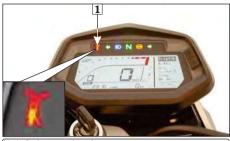
At any point if ABS indicator remains "ON" then ABS is not working, but the brakes still work normally. Reduce your vehicle speed and visit your Authorised Distributor/Dealer.



(1) ABS indicator

### SIDE STAND INDICATOR/SWITCH

For the safety of the customer a side stand indicator (1) is provided.



(1) Side stand indicator

(2) Side stand switch

A side stand switch (2) is provided in the side stand, when the side stand is down (Ignition switch "ON" ( $\Omega$ )), the switch enables the side stand indicator lamp to glow on the speedometer panel.



 Check the side stand for proper function and the spring (3) for damage or loss of tension and the side stand assembly for free movement.

(3) Side stand spring

- Check whether the side stand indicator (1) glows when the side stand is down.
- While the vehicle is removed from side stand, the side stand indicator (1) should not glow.
- If the side stand indicator (1) does not operate as described in above steps, please visit your Authorised Distributor/Dealer.

# CAUTION

Ensure that adequate care should be taken while cleaning the side stand switch.

### **FUEL TANK**

Fuel tank capacity is 13.0 litres including usable reserve supply of 2.0 litres (Usable).

• To unlock fuel tank cap, lift the key hole cover (1), insert key (2) turn it clockwise and lift open the cap (3).



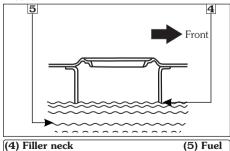
(1) Key hole cover (2) Ignition key



### (3) Fuel tank cap

(4) Filler neck

- Do not overfill the tank. There should be no fuel in filler neck (4). Fill the tank with fuel (5) as shown.
- To lock fuel tank cap, close the cap back on the opening and press gently. The key springs back to the normal position and cap At "OFF" position (1), fuel cannot flow from gets locked.
- cover.



# **CAUTION**

Do not park the vehicle under direct sunlight as it causes evaporation of petrol due to heat and deterioration of paint gloss due to ultra violet ravs.

# **WARNING**

Petrol is extremely flammable and is explosive under certain conditions. Refill in a well ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where the vehicle is refilled or where petrol is stored.

### FUEL VALVE

The three way fuel valve is on the left side of the carburetor.

# "OFF" (O) position

the tank to the carburetor. Turn the valve • Remove the key and put back the keyhole "OFF" whenever the vehicle is not in use.



(1) "OFF" (O) position

"ON" ( $\mbox{$\mbox{$\mbox{$\square$}$}}$ ) position At "ON" position (2), fuel will flow from the tank to the carburetor.



(2) "ON" (☐) position

# "RES" (⊣) position

At "RES" position (3), fuel will flow from the reserve fuel supply to the carburetor.

Use the reserve fuel only when the main supply is exhausted. Refill the tank as soon as possible after switching to "RES". The reserve fuel

supply is 2.0 litres (usable reserve).



(3) "RES" (日) position

# NOTE

- Do not operate the vehicle with the fuel valve in the "RES" (ℍ) position after refilling. You may run out of fuel, with no reserve.
- Do not keep the fuel valve between "ON" (□) and "OFF" (()) position while driving, since this may drain reserve fuel from the tank.

### SEAT LOCK

**Location**: On the left side of the rear cowl. ahove rear wheel

**Operation:** Insert the ignition key (1) and turn is clockwise to unlock the seat. To install, engage the hook on the underside of the seat with the frame and slide the seat to the front until the lock clicks.



(1) Seat lock

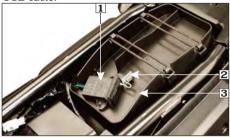
### **USB CHARGER**

A USB charger (1) with a cap (2) located inside the USB charger compartment (3) is provided in your vehicle under the seat to charge your mobile phone safely while riding. To connect a mobile phone charger, first remove the cap from the USB charger and

then plug in the charger cable to it.

Use of non-standard USB cable may cause damage to the mobile phones.

Hero MotoCorp will not be responsible for damages caused due to use of non standard USB cable.



(1) USB charger

(2) Cap

(3) USB charger compartment

# 1 CAUTION

- Always place the device in a soft clean cloth/towel to avoid any damage due to road shocks while riding.
- This port is for charging compatible USB devices.
- Multiple charging of USB devices have to be avoided, simultaneous charging may lead to slow or no charging.
- Do not leave the USB device and USB cable in the USB charger compartment when the vehicle is parked.
- Charge your device only when the engine is operational/while riding. Charging the USB device when the engine is "OFF" would lead to early discharge of battery.

# NOTE

- Do not apply any soap solution, oil or grease inside the USB charger.
- Any personal belongings have to be removed before water washing to avoid damage.
- Always keep the USB port cap closed after use to prevent dust or water entry during rains/water wash.
- Do not direct water jet towards the port even with cap closed to avoid any short circuit. Always dry the area using a dry cloth or moisture free compressed air before use.

### PRE-RIDE INSPECTION

You should conduct pre ride inspection before riding the vehicle to enhance riding comfort and safety.

Clean your vehicle regularly. It protects the surface finish. Avoid cleaning with products that are not specifically designed for vehicle surfaces.

Inspect your vehicle every day before you start the engine. The items listed here will only take a few minutes, and in the long run they can save time, expense, and possibly your life. Please follow the tips as given below:

- Engine oil level-Check and top up engine oil if required (page 44). Check for leaks.
- Fuel level-Ensure sufficient fuel is available in the fuel tank for your journey (page 29). Check for leaks.

- level in master cylinder/reservoir (page 56).
- proper functioning of ABS (page 28).
- Rear brake-Check for correct brake fluid level in the reservoir (page 57).
- Tures-Check condition and pressure (page 62).
- · Clutch-Check for smooth operation. Adjust free play if necessary (page 50).
- · Drive chain-Check condition and slackness (page 52). Lubricate if necessary.
- Throttle-Check for smooth opening and closing in all steering positions (page 51).
- Lamps & Horn-Check that headlamp. position lamps, tail/stop lamp, turn signal lamps, indicators and horn function properly.
- Rear view mirror-Ensure that the rear view mirror gives a good rear view when you are sitting on the vehicle.

- Front brake-Check for correct brake fluid Engine stop switch-Check for proper function (page 28).
- ABS indicator-Check ABS indicator for Air suction valve-Make sure all tube connections are secured properly (page 69).
  - Fitting & Fasteners-Check & tighten if necessary.
  - Steering-Check for smooth action and for easy maneuverability.
  - · Side stand indicator-Make sure that the side stand is up. If it is in down position the side stand indicator (page 28) will glow on the speedometer panel.

#### STARTING THE ENGINE



Turn the ignition switch "ON" (\(\mathbf{O}\)).



Turn the fuel value "ON (H).



Select neutral position & check (N) indicator glows on instrument cluster with ignition "ON" (\(\O\)).



Make sure that the engine stop switch is at "ON" (O) position.



Pull the bystarter knob outwards to "ON" position as indicated (Use bustarter during cold conditions).



Press the starter switch to start the vehicle. (Alternatively, kick start pedal can be used for starting).



Push the bystarter knob inwards to "OFF", position as indicated, after the engine gets sufficiently warmed up to have a stable throttle response.



### **WARNING**

Never run the engine in a closed area, the exhaust contains poisonous gases.

## NOTE

- To start the engine in any gear position using the electric starter, press the clutch lever and push the starter switch.
- Kick starting will not be possible when the transmission gears are engaged unless you press clutch lever. Press the clutch lever or shift the transmission to neutral before kick starting.
- Never attempt to kick start while vehicle is moving forward or backward. This may lead to damage to the product and is not safe as well.

### Flooded engine

If the engine fails to start after repeated attempts, it may be flooded with excess fuel. To clear a flooded engine, turn the ignition switch "OFF" (\*) and push the bystarter knob to "OFF". Close the throttle fully and crank the engine several times with the kick starter. Turn the ignition switch "ON" (Q) and start the engine without using bystarter.

### Running in

Help assure your vehicle's future reliability and performance by paying extra attention to how you ride during the first 500 km.

During this period, avoid full-throttle starts and rapid acceleration.

### RIDING

- After the engine has been warmed up, the **BRAKING** vehicle is ready for riding.
- While the engine is idling, press the clutch lever and depress the gearshift pedal downwards using the toe to shift into 1st gear.
- · Slowly release the clutch lever and at the same time, gradually increase engine speed by opening the throttle. Coordination of the throttle and clutch lever will assure a smooth positive start.
- When the vehicle attains a moderate speed, close the throttle, press the clutch lever and shift to 2<sup>nd</sup> gear by placing the toe on the underside of gear pedal and lift upwards.
- This sequence is repeated progressively to shift to  $3^{\text{rd}}$ .  $4^{\text{th}}$  and  $5^{\text{fh}}$  gear.



### **CAUTION**

Do not shift gears without operation of clutch and without closing the throttle otherwise this would lead to damage of gears.

### Anti-lock braking system (ABS)

This model is equipped with Anti-lock braking sustem (ABS). ABS enhances active safety by helping to prevent the wheels from locking under braking.

ABS is designed to meet two essential requirements during every brake application:

- To help provide vehicle stability.
- To help maintain steering control and manoeuvrability-on road surfaces.

The ABS system is self-regulating and always active once vehicle speed exceeds 5 km/h.

• The ABS computer acts on the basis of the comparative speeds of the front wheel. The use of non-approved tyres can affect the speed of the wheels and supply incorrect information to the ABS computer.

The system has a wheel speed sensor (1). hydraulic electronic control unit (HECU) (2). and an ABS indicator lamp (3) on meter console.





(1) Wheel speed sensor (2) Hydraulic electronic control unit (HECU)

Whenever you ride your vehicle, Wheel speed sensor monitors the speed of the wheel and sends the input to Hydraulic Electronic control unit (HECU). Then **HECU** monitors your bike and takes control when vehicle speed exceeds 5 km/h.

Now whenever you will apply front brake, ABS will come into picture and based on the input from wheel speed sensor, HECU will modulate the pressure at front caliper thus avoiding wheel to lock and in turn resulting safe stop of the vehicle.



(3) ABS indicator

### Do's and Dont's Do's

- · Check your brake pads and be sure you have clean brake fluid. ABS systems can also fail due to worn brake pads or air or dirt in brake fluid.
- Use the recommended brake fluid.
- If brake gets wet, apply the brake while riding at low speed to help them dry.
- ABS should be serviced only at Authorised Distributor/Dealer.
- Read your owner's manual for additional riding instructions.
- · Carefully remove the wheel during the puncture/tyre replacement to prevent the Sensing ring damage/bend.
- Use only the recommended make, type and size of tyre (page 64).
- · Keep checking speedometer. In case of ABS malfunction, speed display may go to zero.

#### Don't's

- indicates that ABS is working.
- Don't apply the hard braking in wet or rainy Kit consists of following tool: conditions and while taking a turn.
- Do not adjust the wheel speed sensor air + , -Driver No.2 gap vourself.
- Do not attempt to correct the encoder teeth
   Box wrench P16 x 14 by bending manually or by using any other • Handle pin spanner mode.
- Do not insert any metallic part near wheel No.3 cross point screw driver speed sensor.
- Don't tru to service HECU or open to separate the parts.
- Don't use the non-genuine spares like pads, discs, tyres etc.

#### PARKING

After stopping the vehicle, shift the transmission to neutral, turn the fuel valve "OFF" (O), turn the ignition switch "OFF" (♥), park the vehicle on main stand, lock the steering and remove the key.

### **CAUTION**

- Park the vehicle on firm level ground to prevent overturning.
- While parking on side stand engage the first gear.

#### TOOL KIT

• Don't panic by mechanical noises or slight The tool kit (1) is located under the seat. pedal pulses while applying the brake in Some emergency repairs, minor adjustment vehicle. These conditions are normal and and parts replacement can be performed with the tools contained in the kit.

- Tool bag
- Grip

- Pin spanner



(1) Tool kit

#### CLEANING AND WASHING OF VEHICLE MAINTENANCE

Follow the below mentioned steps for washing The importance of maintenance the vehicle.

- directing water to meter console, muffler help reduce pollution. outlets and electrical parts.
- parts using a cloth or sponge dampened with a solution of mild detergent and water.
- Rub the soiled area gently rinsing it frequently with fresh water.
- After cleaning spray water thoroughly.
- Dry the vehicle by wiping with dry soft cloth.

### NOTE

- · We at dealership take all above mentioned precautions like recommended detergents and usage of muffler caps/plugs during wash to ensure quality wash.
- Do not use high pressure water (or air). It can damage certain parts of the vehicle.

A well-maintained vehicle is essential for safe • Wet the vehicle with light water spray. Avoid economical and trouble-free riding. It will also

To help you, take proper care of your vehicle, · Clean the headlamp lens and other plastic the following pages include a maintenance schedule and a maintenance record for regular scheduled maintenance.

> These instructions are based on the assumption that the vehicle will be used exclusively for its designed purpose. Sustained high speed operation or operation in unusually wet or dusty conditions will require more frequent service than specified in the maintenance schedule. Consult vour Authorised Distributor/Dealer for recommendation applicable to your individual needs and use. If your vehicle overturns or is involved in a crash, be sure your Authorised Distributor/Dealer inspects all major parts. even if you are able to make some repairs.

### **WARNING**

- Improperly maintaining this vehicle or failing to correct a problem before you ride can cause a crash in which you can be seriously hurt or killed.
- Always follow the inspection and maintenance recommendations and schedules in this owner's manual.

### Maintenance safety

This section includes instructions on some important maintenance tasks. You can perform some of these tasks with the tools provided (if you have basic mechanical skills).

Other tasks that are more difficult and require special tools are best performed by professionals. Wheel removal should normally be handled only by a Authorised Distributor/Dealer skilled technician or other qualified technician; instructions are included in this manual only to assist in emergency service.

You will come across some of the most important safety precautions in the following pages of this manual.

However, we cannot warn you of every conceivable hazard that can arise in performing maintenance. Only you can decide whether or not you should perform a given task.

### **WARNING**

- Failure to follow maintenance instructions and precautions properly can seriously injure you.
- Always follow the procedures and precautions in this owner's manual.

### **SAFETY PRECAUTIONS**

- Make sure the engine is "OFF" before you begin any maintenance or repair. This will help to eliminate several potential hazards:
  - Carbon monoxide poisoning from engine exhaust.

Be sure there is adequate ventilation whenever you operate the engine.

- Burns from hot parts.
  Let the engine and exhaust system cool before touching.
- Injury from moving parts.
   Do not run the engine unless instructed to do so.
- Read the instruction before you begin and make sure you have the tools and skills required.
- To help prevent the vehicle from falling over, park it on a firm, level surface on the main stand.
- To reduce the possibility of a fire or explosion, be careful when working around petrol or batteries. Use only nonflammable solvent, not petrol, to clean parts. Keep cigarettes, sparks and flames away from the battery and all fuel-related parts.

Remember that your Authorised Distributor/ Dealer knows your vehicle best and is fully equipped to maintain and repair it.

To ensure best quality and reliability, use only new Hero MotoCorp genuine parts for repair and replacement.

#### MAINTENANCE SCHEDULE

Perform the pre-ride inspection (page 32) at each scheduled maintenance period.

# I: INSPECT C: CLEAN R: REPLACE A: ADJUST L: LUBRICATE O: OIL CHANGE T: TOP UP E: EMISSION CHECK

The following maintenance schedule specifies all maintenance required to keep your vehicle in peak operating condition. Maintenance work should be performed in accordance with standards and specifications of Hero MotoCorp by properly trained and equipped technicians. Your Authorised Distributor/Dealer meets all of these requirements.

Ensure that each paid service is availed within 90 days or 3000 km from the date of previous service, whichever is earlier.

- To be serviced by your Authorised Distributor/Dealer unless the owner has the relevant tools, technical information and is technically qualified.
- In the interest of safety, we recommend that these jobs are carried out only by your Authorised Distributor/Dealer.
- **Note-1**: At higher odometer readings, repeat the frequency interval established here.
- Note-2 : Replace air cleaner element once in every 15000 km or early replacement may be required when riding in dusty areas.
- Note-3 : Replace engine oil once in every 6000 km. Top up if the oil level is at or near the lower level mark.
- **Note-4**: Visit Authorised Distributor/Dealer for inspection, cleaning, lubrication and adjustment of drive chain at every 1000 km.
- **Note-5**: Replace brake fluid once in every two years or 30000 km, whichever is earlier.
- **Note-6**: Inspect & maintain specified torque.
- **Note-7**: Inspect the bearings free play, replace if necessary.
- **Note-8** : Replace front fork oil once in a every 2 years or  $30000 \, \text{km}$ , whichever is earlier.
- Note-9: Inspect rear suspension mounting bushes play, replace rear shock absorber if necessary.
- **Note-10:** Check idle CO emission along with idle rpm/idle CO adjustment (if required).
- **Note-11:** Inspect the canister hoses for deterioration, damage or loose connections and canister for cracks or other damages.

**Note:** Always wipe the water from the vehicle after washing. Use clean soft cloth or pressurized air for completely drying the water.

### MAINTENANCE SCHEDULE

Dear Customer,

We would strongly recommend the following schedule, to keep your vehicle in perfect running condition and healthy environment. Vehicle subjected to severe use or ridden in dusty area will require more frequent servicing.

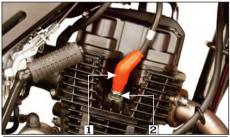
	ITEMS	SERVICE	1**	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	<b>7</b> <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>
		DAYS	1st 60	Next 90	Next 90	Next 90	Next 90	Next 90	Next 90	Next 90	Next 90	Next 90	Next 90
		KM Note-1	500- 750	3000- 3500	6000- 6500	9000- 9500	12000- 12500	15000- 15500	18000- 18500	21000- 21500	24000- 24500	27000- 27500	30000- 30500
Г	Fuel Line		I	I	I	I	I	I	I	I	I	I	I
1	Throttle Operation		I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A
	Bystarter Operation		I	I	I	I	I	I	I	I	I	I	I
1	Engine Idle Speed/ Carburetor		C, A	А	C, A	А	C, A	А	А	C, A	Α	C, A	А
	Air Cleaner Element	Note-2	Do 1		air clean a drivab			R					R
	Spark Plug		I, C, A	I, C, A	I, C, A	I, C, A	R	I, C, A	I, C, A	I, C, A	R	I, C, A	I, C, A
×	Valve Clearance		I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A
	Engine Oil	Note-3	0	I, T	0	I, T	0	I, T	I, T	0	I, T	0	I, T
×	Engine Oil Strainer Screen		С		С		С		С		С		С
×	Engine Oil Centrifugal Filter		С		С		С		С		С		С
	Electric Starter		I	I	I	I	I	I	I	I	I	I	I
	Oil Circulation		I	I	I	I	I	I	I	I	I	I	I
×	Drive Chain	Note-4		I,C,L,A at every 1000 km				I,C,L,A at every 1000 km					
	Drive Chain Slider			I	I	I	I	I	I	I	I	I	I

	ITEMS	SERVICE	1*	2 <sup>nd</sup>	3 <sup>rd</sup>	<b>4</b> <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	<b>7</b> <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>
112.10		DAYS	1st 60	Next 90	Next 90	Next 90	Next 90	Next 90	Next 90	Next 90	Next 90	Next 90	Next 90
		KM Note-1	500- 750	3000- 3500	6000- 6500	9000- 9500	12000- 12500	15000- 15500	18000- 18500	21000- 21500	24000- 24500	27000- 27500	30000- 30500
	Battery Voltage		I	I	I	I	I	I	I	I	I	I	I
	Brake Pads Wear		I	I	I	I	I	I	I	I	I	I	I
	Brake Fluid	Note-5	I	I	I	I	I	I	I	I	I	I	I
	Brake System (Brake Pedal)			C, L		C, L		C, L		C, L		C, L	
•	Stop Lamp Switch		I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A
1	Headlamp Focus		I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A
	Clutch Lever Free Play		I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A	I, A
	Side Stand/Main Stand		L	L	L	L	L	L	L	L	L	L	L
	Side Stand Switch		I, C	I, C	I, C	I, C	I, C	I, C	I, C	I, C	I, C	I, C	I, C
1	Nut, Bolts & Fasteners	Note-6	I	I	I	I	I	I	I	I	I	I	I
Ж	Wheels Bearings	Note-7	I	I	I	I	I	I	I	I	I	I	I
Ж	Wheels/Tyres		I	I	I	I	I	I	I	I	I	I	I
×	Steering Head Bearing		I	I, A	I	I, A	I, L, A	I	I	I, A	I, L, A	I	I, A
Ж	Front Suspension/Oil	Note-8	I	I	I	I	I	I	I	I	I	I	I
1	Rear Suspension	Note-9	I	I	I	I	I	I	I	I	I	I	I
	Secondary Air Injection				I		I		I		I		I
*	Muffler (Catalytic Converter)	Note-10			I, E		I, E		I, E		I, E		I, E
`	Evaporative Emission Control System	Note-11	I	I	I	I	I	I	I	I	I	I	I

### SPARK PLUG INSPECTION Recommended plugs: NGK-CPR 8 EA9, BOSCH UR5DC

For most riding conditions this spark plug heat range number is satisfactory. However, if the vehicle is going to be operated for extended periods at high speeds or near maximum power in hot climates, the spark plug should be changed to a cold heat range number, consult Authorised Distributor/Dealer on this if required.

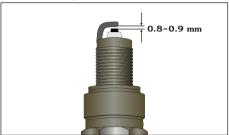
- · Clean dirt around the spark plug base.
- Disconnect the noise suppressor cap (1) and remove the spark plug (2) with the help of spark plug box wrench provided in the tool bag.



(1) Noise suppressor cap

(2) Spark plug

 Visually inspect the spark plug electrodes for wear. The center electrode should have square edges and the side electrode should not be eroded. Discard the spark plug if there is apparent wear or if the insulator is cracked or chipped. Make sure that the spark plug gap is
 0.8-0.9 mm using a wire-type feeler gauge. If adjustment is necessary, bend the side electrode carefully. Make sure the plug washer is in good conditions.



- With the plug washer attached, thread the spark plug in by hand to prevent crossthreading.
- Tighten a new spark plug 1/2 turn after the plug seats, with a spark plug box wrench to compress the washer. If you are reusing a plug, it should only take 1/8-1/4 turn after the plug seats.

#### **ENGINE OIL**

Use only hero genuine engine oil.

BRAND: Hero 4T plus

GRADE: SAE 10W 30 SL Grade (JASO MA2).

Manufactured by:

- Tide Water Oil Co. (India) Ltd.
- Savita Oil Technologies Limited.
- Bharat Petroleum Corporation Limited.

OIL CAPACITY: 1200 ml

### Engine oil level inspection/ Top up process

Check engine oil level each day before operating the vehicle. The oil level dipstick (1) is on the right crankcase cover for measuring oil level. Oil level must be maintained between the upper (2) and lower (3) level marks on the oil level dipstick.



- (1) Oil level dipstick (2) Upper level mark (3) Lower level mark
- Do top up if oil level reaches towards the lower level mark or every 3000 km whichever is earlier.
- Park the vehicle on its main stand.
- Start the engine & let it idle for 3-5 minutes.
- Slightly loosen the engine oil check bolt (4) and check the engine oil entry into the culinder head cover.



### (4) Engine oil check bolt

- After checking the oil circulation, tighten the engine oil check bolt.
- Stop the engine and wait for 2-3 minutes.
- · Remove the oil level dipstick, wipe it clean and insert without screwing it in.
- · Remove the oil level dipstick and check the oil level
- If required, add the specified oil up to the upper level mark. Do not overfill.
- Quantity of oil to be filled is 1070 ml (approx.) during oil change (when right crankcase cover is not removed).
- · Reinstall the oil level dipstick with new O-ring and check for oil leaks.

### Engine oil replacement/ Oil circulation inspection

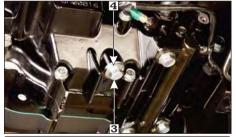
- Start the engine, warm it up for several minutes and then turn it off.
- Wait a few minute until the oil settles down.
- Remove the bash plate bolts (1) and bash plate (2).



#### (1) Bash plate bolts

(2) Bash plate

 To drain the oil, remove the oil level dipstick, drain bolt (3) and sealing washer (4).



(3) Drain bolt

(4) Sealing washer

- After the oil has completely drained, reinstall the drain bolt (3) with a new sealing washer (4).
- Fill the crankcase through the oil filler hole with 1070 ml (approximately) of recommended grade oil during oil change

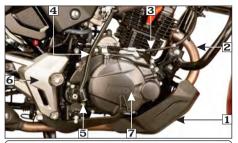
- when right crankcase cover is not removed.
- Reinstall the oil level dipstick with a new O-ring.
- Start the engine and allow it to idle for few minutes.
- Stop the engine and let the engine oil settle down.
- Recheck the oil level.
- Make sure that oil level is at the "UPPER" level mark of the oil level dipstick with the vehicle in an upright position and that there are no oil leaks.

### CAUTION

- Running the engine with insufficient oil can cause serious engine damage.
- Running the engine with excessive oil can cause spark plug fouling & loss in performance.
- Engine oil is a major factor affecting the performance and service life of the engine. Non-detergent, vegetable or castor based racing oils are not recommended.

## OIL FILTER SCREEN & CENTRIFUGAL FILTER CLEANING

- Drain the engine oil thoroughly.
- Remove the bash plate (1) and exhaust muffler (2).
- Disconnect the clutch cable (3) from crankcase cover, remove the kick start pedal (4).
- Remove the kick stopper (5), position aside the pillion step holder bracket (6) and remove the right crankcase cover (7).



- (1) Bash plate
- (2) Exhaust muffler
- (3) Clutch cable (4) Kick start pedal
- (5) Kick stopper
- (6) Pillion step holder bracket
- (7) Right crankcase cover
- Remove the dowel pins (8) and gasket (9).
- Remove the oil filter screen (10) and wash it in clean non flammable or high flash point solvent (kerosene).



(8) Dowel pins (9) Gasket (10) Oil filter screen (11) Centrifugal filter cover

- Reinstall the filter screen with the tapered end facing in.
- Remove centrifugal filter cover with gasket (11) & clean the centrifugal filter (12) with non flammable or high flash point solvent (kerosene).



(12) Centrifugal filter

- Install the dowel pins and gasket.
- Reinstall the centrifugal filter cover with gasket, right crankcase cover and connect the clutch cable. Install the pillion step holder bracket, kick stopper, kick start pedal, exhaust muffler and bash plate.
- Fill the crankcase with clean engine oil as per specification (page 43).

### NOTE

- Clean filters as specified in the maintenance schedule.
- Ensure to replace dowel pin and gasket with new one once removed

#### AIR CLEANER

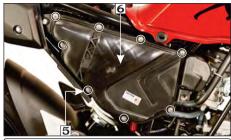
### Air cleaner element inspection

The air cleaner is wet paper pleated type filter which has enhances filtering efficiency. The air cleaner should be replaced at regular intervals (page 40). When riding in dusty areas, more frequent replacement may be necessary.

- Remove the seat (page 31).
- Remove the right side cover screws (1), side cover (2) by releasing the lug from the grommet (3) and slide as per the direction to release tab from the slot (4).



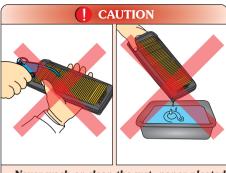
- (1) Right side cover screws
  (3) Lug/Grommet
- (2) Side cover (4) Tab/Slot
- Remove the air cleaner cover screws (5) and the cover (6).



- (5) Air cleaner cover screws (6) Air cleaner cover
- Remove the air cleaner element (7) from air cleaner housing (8).



- (7) Air cleaner element
- (8) Air cleaner housing

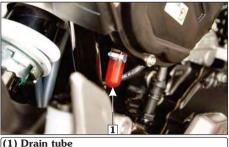


- Never wash or clean the wet, paper pleated tupe filter. Replace filter element once in every 15000 km.
- Replace it earlier if it becomes very dirty, damage on surface or on the sealing area.
- Clean the air cleaner housing (8) using a shop towel.
- Install the new air cleaner element.
- Install the air cleaner element cover.
- Install the right side cover.
- Install the seat (page 31).

### Air cleaner drain tube cleaning

Remove the drain tube (1) and drain the deposit into a container.

Follow the above process more frequently when riding in rain or at full throttle.



### NOTE

Always ensure to reinstall the drain tube after draining the deposit.

#### CARBURETOR

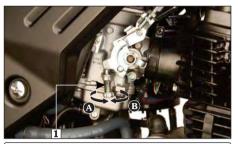
#### Idle speed adjustment

The carburetor is factory preset in order to achieve optimum performance and meet emission standards.

However in case of specific requirement of tuning due to engine stalling in idle speed. please follow the instructions given here under:

- Park the vehicle on the main stand.
- Start the engine and let it idle for few minutes.
- Adjust idle speed with the throttle stop screw (1).

IDLE SPEED: 1400+100 RPM



(1) Throttle stop screw (A) Increase rpm

(B) Decrease rpm

### ( CAUTION

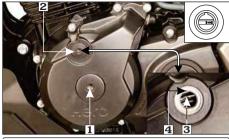
Do not attempt to compensate for faults in other systems by adjusting idle speed. Visit your Authorised Distributor/Dealer for scheduled carburetor adjustment.

#### VALVE CLEARANCE ADJUSTMENT

Excessive valve clearance will cause noise, and little or no clearance will prevent the valve from closing and cause valve damage and power loss. Check valve clearance at the specified intervals (page 40).

### NOTE

The checking or adjustment of valve clearance should be performed while the engine is cold. The clearance will change as the engine temperature rises.



(1) Crankshaft hole cap (3) 'T' mark

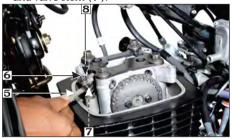
(2) Timing hole cap (4) Index mark

- · Remove the fuel tank.
- Remove the crankshaft hole cap (1) and timing hole cap (2).
- Remove the cylinder head cover.
- Rotate the flywheel anticlockwise until the "T" mark (3) on the flywheel coincides with the index mark (4) on the left crankcase cover. In this position the piston will either be on the compression or exhaust stroke.

The adjustment must be made when the piston is at top dead center and both the inlet and exhaust valves are closed.

This condition can be determined by moving the rocker arms. If they are free, it is an indication that the valves are closed and the piston is in compression stroke. If they are tight, the valves are open, rotate the flywheel  $360^{\circ}$  anticlockwise and realign the "T" mark with the index mark.

• Check the clearance by inserting the feeler gauge (5) between the adjusting screw (6) and valve stem (7).



(5) Feeler gauge (7) Valve stem

(6) Adjusting screw (8) Lock nut



Standard clearance (cold condition) Intake: 0.07 mm +0.01/-0.02 Exhaust: 0.09 mm +0.01/-0.02

If adjustment is required, adjust by loosening the lock nut (8) and turning the adjusting screw until there is a slight drag on the feeler gauge.

- After tightening the lock nut, check the clearance again.
- Installation is in the reverse order of removal.

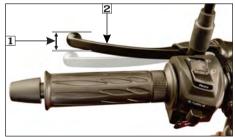
### NOTE

Before inserting the feeler gauge, smear a bit of engine oil on the feeler gauge to avoid damage to the feeler gauge.

# CLUTCH LEVER FREE PLAY Adjustment

Clutch adjustment may be required if the vehicle stalls when shifting into gear or tends to creep or if the clutch slips, causing acceleration to lag behind engine speed.

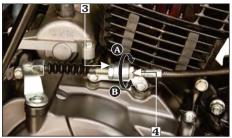
Normal clutch lever free play (1) is 10-20 mm at the lever (2).



(1) Free play: 10-20 mm (2

(2) Clutch lever

 To adjust the free play, loosen the lock nut (3). Turn the adjusting nut (4) to obtain the specified free play. Tighten the lock nut and check the adjustment.



(3) Lock nut (4) Clutch cable adjusting nut (A) Decrease free play (B) Increase free play

 Start the engine, press the clutch lever and shift into gear. Make sure the engine does not stall, and the vehicle does not creep. Gradually release the clutch lever and open the throttle. The vehicle should start smoothly and accelerate.

### NOTE

If proper adjustment cannot be obtained or the clutch does not work correctly, visit your Authorised Distributor/Dealer.

#### Other checks

- Check the clutch cable for kinks or signs of wear that could cause sticking or failure.
- Check for clutch cable model. Use genuine clutch cables.

• Check for clutch cable routing.

# THROTTLE OPERATION Cable inspection

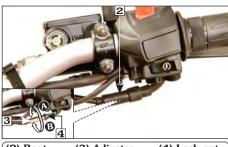
Check for smooth rotation of the throttle grip from the fully open to the fully closed position. Check at full left and full right steering positions. Inspect the condition of the throttle cable from the throttle grip down to the carburetor. If the cable is kinked, chafed or improperly routed, it should be replaced or rerouted. Standard throttle grip free play (1) is approximately 2-6 mm of grip rotation.



(1) Free play: 2-6 mm

#### Free play adjustment

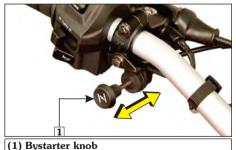
To adjust the free play, slide the boot (2), then loosen the lock nut (4). Turn the adjuster (3) to adjust free play. After adjustment, tighten the lock nut and slide the boot on the adjuster and locknut securely.



(2) Boot (3) Adjuster (4) Lock nut (A) Decrease free play (B) Increase free play

#### **BYSTARTER OPERATION**

To apply bystarter, pull the knob (1) outwards (towards the rider) for smooth operation. After checking the operation, push it back to "OFF" position (as shown in the picture).



### NOTE

Do not accelerate during starting when the bystarter is "ON".

#### DRIVE CHAIN SLACKNESS

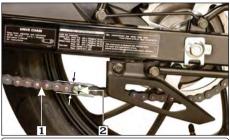
The service life of the drive chain depends upon proper lubrication and adjustment.

Poor maintenance can cause premature wear or damage to the drive chain and sprockets.

The drive chain (1) should be checked and lubricated as part of the pre-ride inspection (page 32). Under severe usage, or when the vehicle is ridden in unusually dusty areas, more frequent maintenance will be necessary.

### Inspection

- Turn the engine "OFF", park the vehicle on its main stand and shift the transmission to neutral.
- Drive chain slack (2) should be checked in the lower run midway between the sprockets. Move the drive chain up and down by hand and chain slack should be adjusted to 20-25 mm vertical movement by hand.
- Rotate the wheel and check the drive chain slack. Repeat this procedure several times. Drive chain slack should remain constant (20-25 mm). If the chain is slack only in certain sections, some links are kinked or binding. Binding and kinking can be eliminated by frequent lubrication.



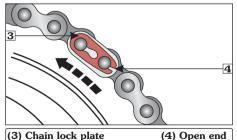
(1) Drive chain

(2) Drive chain slack: 20-25 mm

### NOTE

Drive chain slack should be adjusted at your Authorised Distributor/Dealer as per the specification.

Turn the chain to view chain lock plate (3).
 Ensure that the chain lock plate open end (4) is installed in the opposite direction of the chain rotation.



 Rotate the rear wheel slowly and inspect the drive chain and sprockets for any of the following conditions.

#### **Drive** chain

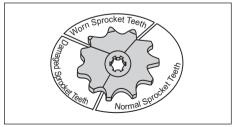
- Damaged rollers
- Loose pins
- Dry or rusted links
- Kinked or binding links
- · Excessive wear
- Improper adjustment
- Damaged or missing O-rings.

### **Sprockets**

- · Excessively worn teeth
- · Broken or damaged teeth.

If the drive chain has damaged rollers, loose links or missing O-rings, replace it. If the chain is dry or rusted, it should be lubricated. Lubricate the chain if the links are kinked or binding. If the problem is not solved after lubrication, replace the chain.

If the drive chain or sprockets are excessively worn or damaged, they should be replaced.



### ( CAUTION

Always replace the drive chain and sprockets as a set. Otherwise the new part will wear prematurely.

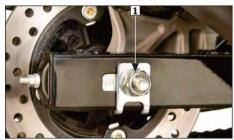
### Adjustment

Drive chain slack should be checked and adjusted, if necessary at every 1000 km.

When operated at sustained high speeds or under conditions of frequent rapid acceleration, the chain may require more frequent adjustments.

If the drive chain requires adjustment, follow the procedures below:

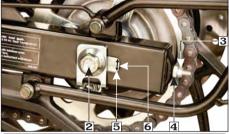
- Park the vehicle on its main stand with the transmission in neutral and the ignition switch in "OFF" position.
- Loosen the rear axle nut (1).



(1) Rear axle nut

- Loosen the drive chain lock nut (3).
- Turn the adjusting nut (4) in an equal number of turns until the correct drive chain

- slack is obtained. Turn the adjusting nut clockwise to decrease the slack or anticlockwise to increase the slack of the chain.
- Align the chain adjuster index mark (5) with the rear edge (6) of the adjusting slots on both sides of the swingarm equally.



(2) Axle

- (3) Drive chain lock nut
- (4) Drive chain adjusting nut (5) Index mark
- (6) Rear edge of adjusting slot
- Tighten the rear axle nut.

Torque: 68 N-m (6.8 kgf-m)

- Check the drive chain slack again.
- If after adjustment of drive chain slack, axle
   (2) touches to the rear edge of adjustment slot (6). Chain kit has to be replaced.

## / WARNING

If a torque wrench is not used for installation, see your Authorised Distributor/Dealer as soon as possible to check for proper assembly.

#### **Cleaning and Lubrication**

Lubricate every 1000 km or sooner if the chain appears dry.

- Turn the engine off, park the vehicle on its main stand and shift the transmission into neutral. Open side stand to facilitate cleaning.
- Spray a commercially available chain cleaner for cleaning the drive chain over its entire length.

### NOTE

Ensure that the chain cleaner and lubricant used is the one recommended for use on an O-ring chain, otherwise the O-rings may deteriorate, fail and lose their sealing properties.

- Rotate the rear wheel backwards to expose the next section of the drive chain and repeat second step until all of the drive chain is cleaned.
- Let the spray dry for about five minutes.
- To remove stubborn dirt, scrub the rollers and side plates with soft nylon brush.
- Apply SAE 90 grade oil on the hanger side of the entire length of the chain using an oil can.
- Wait for **7-10** minutes for penetration of lubricant inside the bush and roller wipe the excessive lubricant from the chain and nearby parts using a clean rag.

### NOTE

Excessive lubricant if not wiped off, will aid in accumulation of dust, sand and dirt on the drive chain, increasing its wear and will also be sprayed on the vehicle as well due to chain movement.

### ( CAUTION

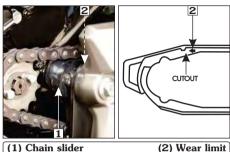
- Steam cleaning, high pressure washers and certain solvents can damage the drive chain O-rings.
- While lubricating and cleaning hold the rear wheel with one hand to prevent the possibility of your finger being trapped between the chain and sprocket.
- Clean and lubricate the chain, whenever possible, after riding the vehicle under rain or in terrain with excessive dust, mud or sand.
- The drive chain is fitted with O-rings between the link plates. These O-rings retain grease inside the chain to improve its service life. However, special precautions must be taken when adjusting, lubricating, washing and replacing the chain.
- If the chain is excessively dirty, it should be removed and cleaned before lubrication. For your own safety, we recommend that service be performed by an Authorised Distributor/ Dealer.

#### **DRIVE CHAIN SLIDER INSPECTION**

(Refer to "Maintenance Schedule" on page 40).

Check the chain slider (1) for wear, The chain

slider must be replaced if wear limit is reached. For replacement, see your Authorised Distributor/Dealer.



### BRAKES

Refer to the safety precautions on (page 39).

### (a) Front brake

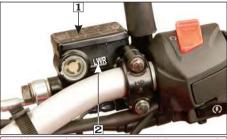
Master Cylinder/Reservoir (1)

**Location**: Right handlebar.

Brake fluid recommended:

DoT-4/DoT-3.

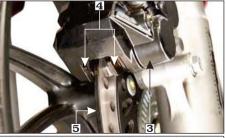
Fluid level - Ensure that the brake fluid level does not fall below "LWR" (lower) mark (2) on master cylinder, when checked with the master cylinder parallel to the ground. The level decreases gradually due to piston movement to compensate pad wear. If the level decreases abruptly, check for the leakages in the brake system and consult your Authorised Distributor/Dealer



(1) Master cylinder/Reservoir (2) Lower mark

### NOTE

- Clean the dirt and mud accumulation between the front brake caliper (3), brake pads (4), and the disc (5) by using a water jet.
- Always contact your Authorised Distributor
  / Dealer for refilling of master cylinder/
  reservoir when necessary. Do not mix DoT 3
  and DoT 4 brake fluid.
- Always use recommended tyres (page 64) for better braking performance.



(3) Front brake caliper (4) Brake pad (5) Disc

### (b) Rear brake

Refer to the safety precautions on (page 39).

### Reservoir (1)

**Location:** Behind right side rider/pillion footrest bracket.

### Brake fluid recommended:

DoT-4/DoT-3.

Fluid level - Ensure that the brake fluid level does not fall below "LOWER" mark (2) on the reservoir parallel to the ground. The level decreases gradually due to piston movement to compensate pad wear. If the level decreases abruptly, check for the leakages in the brake system and consult your Authorised Distributor/Dealer.

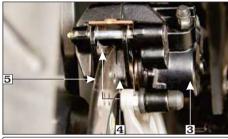


(1) Reservoir

(2) "LOWER" mark

### NOTE

 Clean the dirt and mud accumulation between the rear brake caliper (3), brake pads (4) and the disc (5) by using a water jet.  Always contact your Authorised Distributor /Dealer for refilling of reservoir when necessary. Do not mix DoT 3 and DoT 4 brake fluid.



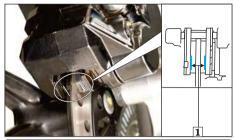
(3) Rear brake caliper (4) Brake pads (5) Disc

### (c) Brake pad wear

Brake pad wear depends upon the severity of usage, type of riding & road conditions. Generally, the pads will wear faster on wet & dirty roads. Inspect the pads at each regular maintenance interval.

#### Front brake

- Check the brake pads for wear by examining the wear indicator groove (1) on each pad.
- If either pad is worn to the bottom of the grooves replace both pads as a set. Visit your Authorised Distributor/Dealer for this service.

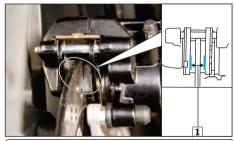


(1) Wear indicator groove

#### Rear brake

Check the wear indicator groove (1) in each pad.

If either pad is worn to the bottom of the groove, replace both as a set. Visit your Authorised Distributor/Dealer for this service.



(1) Wear indicator groove

### /I WARNING

Always apply front and rear brakes simultaneously to avoid skidding of vehicle.

#### SUSPENSION

### Front and rear suspension inspection

 Check the front forks by locking the front brake and pumping the front fork up and down vigorously. The suspension action should be smooth and there should be no oil leakage.



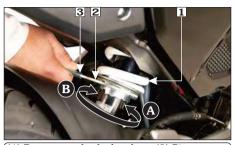


 Check the rear mono shock absorber by pushing hard downwards on rear grip while the vehicle is not parked on stand. The suspension action should be smooth and there should be no oil leakage.

### Rear mono shock absorber adjustment

Rear mono shock absorber adjustment can be made according to the load/road conditions.

- In direction A: Softer
- In direction B: Stiffer



- (1) Rear mono shock absorber (2) Pin spanner
- (3) Pin spanner handle (A) Softer
- (B) Stiffer

### NOTE

To adjust the rear mono shock absorber (1), use the rear shock absorber adjustment tool [Pin spanner (2) with handle (3)] available in the tool kit.

#### WHEEL.

### (a) Front wheel

#### Removal

Refer to the safety precautions on (page 39).

- Support the vehicle securely on the main stand and raise the front wheel off the ground.
- Remove the wheel speed sensor bolt (1) from right fork leg and disconnect the wheel speed sensor (2).



- (1) Wheel speed sensor bolt (2) Wheel speed sensor
- Remove the front axle nut (3), remove the axle (4) and wheel.



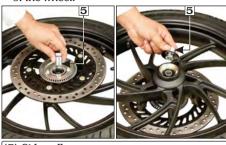
(3) Front axle nut

(4) Axle

## CAUTION

Do not operate front brake lever when the wheel is removed.

 Remove the side collars (5) from both sides of the wheel.



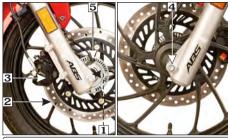
(5) Side collars

### Installation

- Install the side collars (1) to both sides of the wheel hub.
- Insert the disc (2) between the pads in the caliper assembly (3). When installing the wheel, carefully fit the brake disc between the brake pads to avoid damage to the pads.
- Tighten the front axle nut (4) to the specified torque.

### TORQUE: 5.9 kgf-m

- Install the wheel speed sensor (5).
- After installing the wheel apply the brake several times and then check if the wheel rotates freely. Recheck the wheel if the brake drags or if the wheel does not rotate freely.

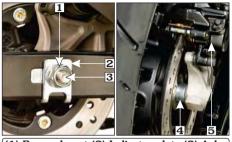


- (1) Side collar
- (2) Disc
- (3) Caliper (4) Front axle nut (5) Wheel speed sensor
- (b) Doomyybaal

### (b) Rear wheel Removal

Refer safety precautions on (page 39).

- Support the vehicle securely on the main stand and raise the rear wheel off the ground.
- Remove the rear axle nut (1) and indicator plate (2).
- Remove the axle (3) and the right side collar (4).
- Move the caliper assembly (5) upwards.
- · Remove the wheel.



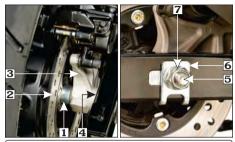
(1) Rear axle nut (2) Indicator plate (3) Axle (4) Side collar (5) Caliper assembly

#### Installation

- Install the side collar (1) to the right side of the wheel hub.
- Tilt the vehicle and position the rear wheel between the swingarm.
- Insert the disc (2) between the pads in the caliper assembly. When installing the wheel, carefully fit the brake disc between the brake pads to avoid damage to the pads.
- Align the rear caliper holder (3) with the swingarm (4).
- Insert the axle (5) from the left side through the swingarm, wheel hub, collar and rear caliper holder.
- Install the indicator plate (6) and tighten the rear axle nut (7) to the specified torque.

### TORQUE: 6.8 kgf-m

• Adjust the drive chain slack (page 52).



- (1) Side collar (2) Disc (3) Caliper holder
- (4) Swingarm (5) Rear axle
- (6) Indicator plate (7) Rear axle nut

#### MAIN/SIDE STAND LUBRICATION

- Park the vehicle on the level surface.
- Check the main/side stand return spring for damage or loss of tension.
- Check the main stand (1)/side stand (2) for freedom of movement.



(1) Main stand

(2) Side stand

- Lubricate the side stand.
- Make sure the main/side stand is not bent.

#### **TUBELESS TYRES**

The tyres fitted on your vehicle are of TUBELESS type.

To safely operate your vehicle, your tyres must be of the proper type and size, in good condition with adequate tread, and correctly inflated for the load you are carrying.

The following pages give more detailed information on how and when to check the air pressure, how to inspect your tyres for damage, and what to do when your tyres need to be repaired or replaced.

### / WARNING

- Using tyres that are excessively worn or improperly inflated can cause a crash in which you can be seriously hurt or killed.
- Follow all instructions in this owner's manual regarding tyres inflation and maintenance.

### Air pressure

Keeping your tyres properly inflated provides the best combination of handling, tread life and riding comfort.

Generally, under-inflated tyres wear unevenly, adversely affect handling and are more likely to fail from being overheated.

Under inflated tyres can also cause wheel damage in rocky terrain.

Over-inflated tyres make your vehicle ride harshly, are more prone to damage from road hazards, and wear unevenly.

We recommend that you visually check your tyres before every ride and use a gauge to measure air pressure at least once a month or any time you think the tyres pressure might be low. Tubeless tyres have some self-sealing ability if they are punctured. However, because leakage is often very slow, you should look closely for punctures whenever a tyre is not fully inflated.

Always check air pressure when your tyres are "cold"—when the vehicle has been parked for at least three hours. If you check air pressure when your tyres are "warm"—when the vehicle has been ridden for even a few km—the readings will be higher than if the tyres were "cold". This is normal, so do not let air out of the tyres to match the recommended cold air pressures given below. If you do, the tyres will be under—inflated.

The recommended "cold" tyre pressures are:



(1) Air pressure gauge

	Rider only	Rider and Pillion
Front	1.75 kgf/cm² (25 psi)	1.75 kgf/cm² (25 psi)
Rear	1.96 kgf/cm² (28 psi)	2.10 kgf/cm² (30 psi)

### ( CAUTION

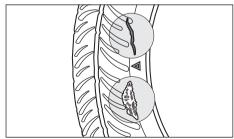
Over inflation/Under inflation will affect the performance.

### Inspection

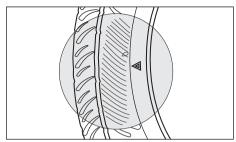
Whenever you check the tyre pressure, you should also examine tyre treads & side walls for wear, damage & foreign objects.

Look for:

- Bumps or bulges in the side of the tyre or the tread. Replace the tyre if you find any bumps or bulges.
- Cuts, splits or cracks in the tyre. Replace the tyre if you can see fabric or cord.



· Excessive tread wear.



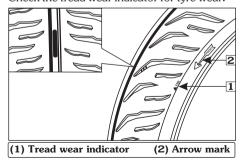
• Carefully inspect the tyres for any damage, if the vehicle hits a pothole or hard object.

#### Tread wear

Replace tyres immediately when the wear indicator (1) appears on the tyre. The tread limits are:

### **MINIMUM TREAD DEPTH:**

Front: 0.8 mm Rear: 1.0 mm Check the tread wear indicator for tyre wear.



### **Unidirectional tyres**

Whenever the tyre is removed and put back in case of puncture, ensure the arrow mark (2) on the tyre is in the same direction as that of forward rotation of wheel.

### Tyre repair

If a tyre is punctured or damaged, you should replace it, not repair it. As mentioned below, a tyre that is repaired either temporarily or permanently, will have lower speed and performance limits than a new tyre.

A temporarily repaired, such as an external tubeless tyre plug, may not be safe for normal speeds and riding conditions. If a temporary or emergency repair is made to a tyre, you should ride slowly cautiously to your Authorised Distributor/Dealer and have the tyre replaced. If possible you should not carry a pillion or load until a new tyre is installed.

Even if a tyre is professionally repaired with a permanent internal patch plug, it will not be as good as a new tyre.

You should not exceed 70 km/hour for the 1st 24 hours or 105 km/hour at any time thereafter. In addition you may not be able to safely carry as much load as with a new tyre. Therefore, we strongly recommend that you replace a damaged tyre.

If you decide to have a tyre replace be sure the wheel is balanced before you ride.

### Tyre replacement

The tyres that were installed on your vehicle were designed to match the performance capabilities of your vehicle and provide the best combination of handling, braking, durability and comfort.

The recommended tyre for your vehicle are:

Front	100/80 x 17-52 P (Tubeless tyre)
Rear	130/70 x R17-62 P (Tubeless tyre)

### **WARNING**

- Operation with excessively worn tyres is hazardous and will adversely affect traction and handling.
- Under-inflation may result in the tyre slipping on or tyre coming off the rim.
- Always use the size and type of tyres recommended in this owner's manual.

### NOTE

For repair and replacement of tyre it is advised to visit your Authorised Distributor/Dealer.

### Important safety reminders

- Do not install a tube inside a tubeless tyre on this vehicle. Excessive heat buildup can cause the tube to burst.
- Use only tubeless tyres on this vehicle. The rims are designed for tubeless tyres, and during hard acceleration or braking, a tubetype tyre could slip on the rim and cause the tyre to rapidly deflate.

#### **NUTS. BOLTS & FASTENERS**

- Tighten bolts and nuts at regular interval shown in the maintenance schedule.
- Check that all chassis nuts and bolts are tightened to correct torque values.
- Check that all cotter pins, safety clips, hose clamps and cable stays are in place.



#### **BATTERY**

Refer to the safety precautions on **(page 39)**.

#### Location

The battery is located behind the left side cover.

### **Specification**

12V-4 Ah, (ETZ-5) \*MF Battery

It is not necessary to check the battery electrolyte level or add distilled water as the battery is a **Maintenance-Free** (sealed) type. If your battery seems weak and/or electrolyte is leaking (causing hard starting or other electrical troubles), contact your Authorised Distributor/Dealer.

### NOTE



This symbol on the battery means that this product must not be treated as household waste.



This symbol on the battery means the old battery must be returned to your Authorised Distributor/Dealer as it must be treated as recyclable material.

- Battery is a maintenance-free (sealed) type and can be permanently damaged if the sealing strip is removed.
- An improperly disposed battery can be harmful to the environment and human health. Always confirm local regulations for battery disposal.

### **WARNING**

- The battery gives off explosive hydrogen gas during normal operation.
- A spark or flame can cause the battery to explode with enough force to seriously hurt you.
- Wear protective clothing and a face shield, or have skilled technician do the battery maintenance.

### **Battery charging**

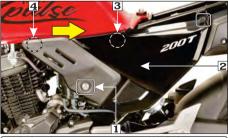
Always visit your Authorised Distributor/ Dealer if you see any symptom of battery discharge as earliest as possible to get the battery charged. The battery has a tendency to discharge rapidly if additional electrical accessories are fitted on the vehicle.

#### **Battery storage**

- If in case your vehicle is not used for more than a month remove the battery, fully charge and store in a cool and dry place.
- If the battery is expected to be stored for more than two months, ensure to fully charge the battery once in a month.
- Always ensure the battery is fully charged before installation.
- Ensure the battery leads are properly connected to the battery terminals during installation.

### **Battery removal**

- Make sure the ignition switch is "OFF" (♥).
- Remove the seat (page 31).
- Remove the left side cover screws (1), side cover (2) by releasing the lug from the grommet (3) and slide the cover as per the direction to release tab from the slot (4).

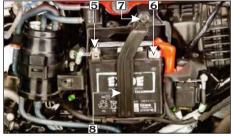


- (1) Left side cover screws
- (2) Side cover

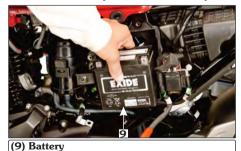
(3) Lug/Grommet

(4) Tab/Slot

- Disconnect the (-)ve terminal lead (5) from the battery first, then disconnect the (+)ve terminal lead (6).
- Remove the battery clamp bolt (7) and the battery clamp (8).



- (5) (-)ve terminal (7) Battery clamp bolt
- (6) (+)ve terminal (8) Battery clamp
- Pullout the battery (9) from the battery box.



### **Battery installation**

- Reinstall in the reverse order of removal. Be sure to connect the (+)ve terminal first, then the (-)ve terminal.
- Check all bolt and other fasteners are secured properly.

#### **FUSE REPLACEMENT**

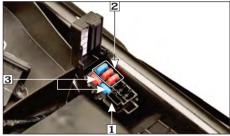
Refer to the safety precautions on (page 39).

Fuse box (1)

**Location:** Below the seat. **Fuse type: Blade fuse** 

Main fuse (2) : (15A, 10A, 10A)

Spare fuse (3) : (15A, 10A)



- (1) Fuse box
- (2) Main fuse (15A, 10A, 10A)
- (3) Spare fuse (15A, 10A)

### Starter magnetic switch (4)

**Location**: Inside left side cover, below the starter magnetic switch.

### Fuse type: Blade fuse

Main fuse (5) : (20A) Spare fuse (6) : (20A)



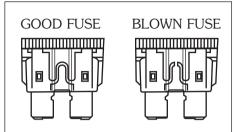
- (4) Starter magnetic switch
- (5) Main fuse (20A) (6) Spare fuse (20A)

### / WARNING

- Never use a fuse with a different rating from that specified. It may lead to serious damage to the electrical system or a fire due to short circuit.
- Battery gives off explosive gases. Keep sparks, flames & cigarettes away.

### (I) CAUTION

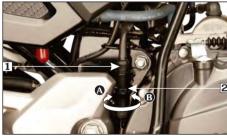
- Do not attempt to start or ride the vehicle without a charged battery, it can cause fusing of the bulbs and permanent damage to certain electrical components.
- Turn the ignition switch "OFF" before checking or replacing the fuse to prevent accidental short-circuiting.



#### STOP LAMP SWITCH

The stop lamp switch (1) must be adjusted so that stop lamp glows when rear brake is applied. The procedure for adjusting stop lamp is as follows:

• Turn the ignition switch to the "ON"  $(\Omega)$  position.



(1) Stop lamp switch (2) Adjusting nut

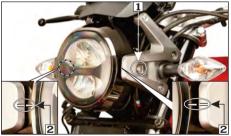
(A) Advance (B) Retard

• Turn the adjusting nut (2) to position stop lamp switch at a point where the stop lamp glows once the brake pedal is depressed. Turn the adjusting nut in direction (A) to advance switch timing or in direction (B) to retard switch timing.

### **HEADLAMP FOCUS ADJUSTMENT**

Headlamp is factory pre-set. However in case of adjustment required, please follow the steps as given below:

 Headlamp adjustment is done by loosening the bolts (1) located on both the sides of the headlamp assembly.



(1) Adjusting bolts

(2) Index marks

- Park the vehicle on it main stand on level ground.
- Adjust the headlamp by loosening the bolts

   (1) and moving the headlamp assembly up and down for correct focus adjustment.
- Align the headlamp casing index marks (2) to the index mark on the headlamp assembly cover.

• After adjusting the headlamp, tighten the headlamp adjusting bolt.

#### / WARNING

An improperly adjust headlamp may blind oncoming rider/driver or it may fail to light the road for a safe distance.

#### CATALYTIC CONVERTER

This vehicle is equipped with a catalytic converter (1) in the muffler to meet the emission norms.



(1) Catalytic converter

The catalytic converter contains noble metals that serve as catalyst, promoting chemical reactions to convert CO and HC in the exhaust to  $CO_2$  and  $H_2O$  (water vapour).

A defective catalytic converter contributes to air pollution and can impair your engine's performance.

Follow these guidelines to protect your vehicle's catalytic converter.

- Always use unleaded petrol. Even a small amount of leaded petrol can contaminate the catalyst metals, making the catalytic converter ineffective.
- Keep the engine tuned up.

# AIR SUCTION VALVE (ASV) (SECONDARY AIR INJECTION SYSTEM)

Further to meet emission standards this vehicle is provided with the air suction valve. Air suction valve (1) supplies fresh air from the air filter to the exhaust manifold to convert carbon monoxide to carbon dioxide. This reduces the CO% in the vehicle's exhaust.



(1) Air suction valve

# EVAPORATIVE EMISSION CONTROL SYSTEM

This vehicle is equipped with an evaporative emission control system to meet emission standards. During warm weather, the petrol vapours which contain HC evaporates easily into the atmosphere from the fuel tank, if the fuel system is unsealed or open.

The evaporative emission control system is used to prevent petrol vapours from escaping into the atmosphere from fuel tank.

The canister (1) collects the fuel vapour from the fuel tank and then the fuel vapour is drawn into the engine for re-burning to avoid pollution caused by the fuel vapour diffused into the air.



(1) Canister

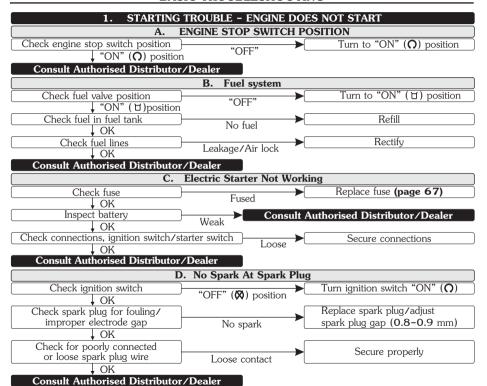
#### POLISHING OF VEHICLE

After washing your vehicle, wax all painted surfaces (except matte painted surfaces) using a commercially available polish/quality liquid or paste wax to finish the job. Use only a non abrasive polish or wax made specifically for automobiles. Apply the polish or wax according to the instructions on the container.

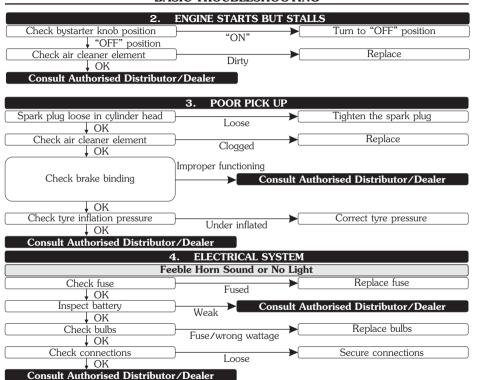
#### NOTE

Polishing or waxing is not applicable for models having matte paint.

#### BASIC TROUBLESHOOTING

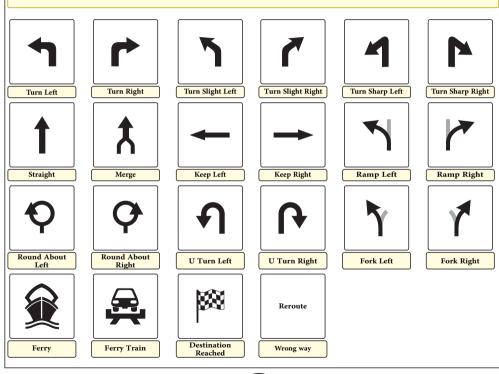


#### BASIC TROUBLESHOOTING



#### **NAVIGATION SIGNS**

**Navigation signs:** Hero navigation app. and meter console of your vehicle will display step by step navigation guidance/direction through below navigation signs when your vehicle is in navigation mode with your smartphone.





CISTONER'S CONT

#### **DELIVERY CERTIFICATE**

No.: IB28A

I certify having taken delivery of one Hero MotoCorp **XPULSE 200T** Vehicle bearing the following particulars:-

Engine No.	
VIN	
Colour/Model	Key No.
Allotment No	Date of Sale
Customer's Name	

I have been explained by the dealer about correct and safe driving habits, warranty terms and conditions, service schedules and maintenance tips.

Customer's Copy





#### Alongwith the vehicle I have also received the following:-

1.	Owner's Manual					
2.	2 Nos. Keys					
3.	1 Set of tools (for details see below)					
4.	Standa	ard Acces	sories			
5.	Batter	У	Make	Sr. No		
6.	Tyre	Front	Make	Sr. No		
		Rear	Make	Sr. No		
have	e unders	tood all ter	ms and condition	ry fresh conditions to my satisfaction & last of warranty and shall abide by them.		
			re			
				me		
Aut	horised	Distribu	tor/Dealer Ad	dress		
Det	ails of 7	Tool kit				

Tool bag, +, - No. 2 Driver, Grip, Box wrench P16 x 14, Handle pin spanner, Pin spanner, No. 3 Cross point screw driver.





ALTHORNOOD CO

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5.	Batter	У	Make	Sr. No		
6.	Tyre	Front	Make	Sr. No		
		Rear	Make	Sr. No		
have	e unders	tood all ter	ms and condition	ry fresh conditions to my satisfaction & last of warranty and shall abide by them.		
			re			
				me		
Aut	horised	Distribu	tor/Dealer Ad	dress		
Det	ails of 7	Tool kit				

Tool bag, +, - No. 2 Driver, Grip, Box wrench P16 x 14, Handle pin spanner, Pin spanner, No. 3 Cross point screw driver.



### WHAT ARE THE BENEFITS OF HETO MOTOCOTO GENUINE SPARE PARTS ?

- · Assures long life
- · Ensures economy for a long time
- · Safety of vehicle and rider
- · Peace of mind
- Value for money
- · Assured quality

#### CONSEQUENTIAL DAMAGES ON USING NON-GENUINE PARTS

Clutch Plate	<ul> <li>Material used is inferior</li> <li>Damages other parts of clutch like, clutch center and outer clutch</li> <li>Affects fuel efficiency</li> <li>Poor acceleration</li> </ul>		
Cam Chain Kit	Poor performance     Reduced life		
Gasket Cylinder Head	<ul> <li>Improper sealing</li> <li>Engine knocking</li> <li>Leads to leakage and smoky exhaust</li> <li>Higher emission level</li> </ul>		



#### CONSEQUENTIAL DAMAGES ON USING NON-GENUINE PARTS

Element Air Cleaner	<ul> <li>Improper air filtration resulting in premature engine failure</li> <li>Affects fuel efficiency</li> <li>Poor engine performance</li> </ul>	
Spark Plug	<ul> <li>Frequent stalling of engine</li> <li>Higher emission level</li> <li>Poor engine performance</li> <li>Affects fuel efficiency</li> </ul>	
Brake Pads/Shoes	<ul> <li>Poor braking efficiency</li> <li>Rider safety-an issue</li> <li>Discs/Drum wear out, resulting in subsequent repair cost</li> </ul>	
Chain Sprocket Kit	Noisy Operation     Failure of chain can cause fatal accident	





#### JOBS APPLICABLE TO PERIODIC SERVICES

- Test drive the vehicle if required for reported troubles, if any.
- Wash the vehicle, blow dry with air at every service.
- Fuel line inspection at every service.
- Inspect throttle free play and operation at every service, adjust if necessary.
- Inspect bustarter operation at every service.
- Clean carburetor at first service then every 6000 km., adjust if necessary.
- Replace air cleaner element at every 15000 km.
- Inspect, clean the spark plug at every service, adjust if necessary, (replace at every 12000 km).
- Inspect the valve clearance at every service, adjust if necessary.
- Engine oil top up or change as per the maintenance schedule.
- Clean engine oil strainer screen at first service then every 6000 km.
- Clean engine oil centrifugal filter at first service then every 6000 km.
- Inspect oil circulation at every service.
- Inspect electric starter operation at every service.
- Inspect, clean, lubricate and adjust the drive chain at every 1000 km.
- · Inspect the drive chain slider.
- Inspect battery voltage at every service and charge if required.
- Inspect brake pad and brake fluid level at every service, adjust brake pad if necessary.
- Clean and lubricate brake pedal at second service, then every 6000 km.
- Inspect all lamps, horn and switches at every service, adjust if necessary.
- Inspect headlamp focus at every service, adjust if necessary.
- Inspect clutch lever free play at every service, adjust if necessary.
- Lubricate the side stand and main stand at every service.
- Inspect and clean the side stand switch at every service.
- Inspect fasteners and tighten to the specified torque (if required).
- Inspect the bearings free play, replace if necessary.
- Inspect wheels/tyres. Inflate tyre to specified pressure at every service.
- Inspect steering for smooth operation, adjust (if necessary) in every alternate service and lubricate at every 12000 km.
- Inspect front suspension at every service, replace oil once in every 2 year or 30000 km whichever is earlier.
- Inspect rear suspension mounting bushes play, replace if necessary.
- Inspect secondary air injection system at every 6000 km.
- Inspect the canister hoses for deterioration, damage or loose connections and canister for cracks or other damages at every service.
- Test drive the vehicle for repair of problems reported.
- Polish entire vehicle.

# SERVICE RECORD SHEET To be Filled in by Supervisor

Free/Paid Service	Km. Range	Date	Km. Reading	Job Card No.	Engine Oil Top-up/ Replace	Authorised Distributor/Dealer (Sig. & Stamp)
I	500 - 750					
II	3000 - 3500					
III	6000 - 6500					
IV	9000 - 9500					
V	12000 - 12500					
VI	15000 - 15500					
VII	18000 - 18500					
VIII	21000 - 21500					
IX	24000 - 24500					
X	27000 - 27500					
XI	30000 - 30500					
XII	33000 - 33500					
XIII	36000 - 36500					
XIV	39000 - 39500					
XV	42000 - 42500					
XVI	45000 - 45500					
XVII	48000 - 48500					

### NOTE

It is mandatory to avail all free and paid services as per the recommended schedule to be eligible for the warranty benefits. Please ensure that each paid service is availed within 90 days from the date of previous service or as per the recommended schedule, whichever is earlier.

# SERVICE RECORD SHEET To be Filled in by Supervisor

Free/Paid Service	Km. Range	Date	Km. Reading	Job Card No.	Engine Oil Top-up/ Replace	Authorised Distributor/Dealer (Sig. & Stamp)
XVIII	51000 - 51500					
XIX	54000 - 54500					
XX	57000 - 57500					
XXI	60000 - 60500					
XXII	63000 - 63500					
XXIII	66000 - 66500					
XXIV	69000 - 69500					
XXV	72000 - 72500					

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#### **SERVICE ADVICE SHEET**

### Normal wear and tear components replacement advice

Date	Kms	Advice	Authorised Distributor/Dealer	Completion Dt.
Dute	Job Card No.	Auvice	(Sig. & Stamp)	Job Card No.





#### OWNERSHIP RECORD AND DATA

NAME	
ADDRESS	
MODEL	REGN. NO.
ENGINE NO	VIN
DATE OF PURCHASE	KM. READING
AUTHORISED DISTRIBUTOR/DEALE	R NAME
ADDRESS	
BATTERY MAKE	SERIAL NO.

AUTHORISED DISTRIBUTOR/DEALER STAMP AND SIGNATURE