



LINCE 150
RY-150LC



USER MANUAL

PREFACE

Thank you for Choosing Raybar LINCE 150/RV-150LC motorcycle. We wish you a happy and reliable riding.

We are committed to customer satisfaction. We strive to provide great user experience by product innovation and excellent after sales support.

This user manual is guide for you to understand function of various parts, riding operation, maintenance schedule and basic maintenance of your new Raybar motorcycle. Please go through this manual to understand your motorcycle before using it.

Please contact your dealer for detailed information about the product and for after sale services.

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MOTORCYCLE IDENTIFICATION



Engine Number

Engine serial number is engraved on crankcase assembly.



VIN number

Vehicle identification number (VIN) is stamped near main stand.



Frame number

Frame number is engraved on main tube of frame.

Note - Frame number and engine number is usually required for vehicle registration and insurance purpose.

FRONT TOP VIEW



1. Rear view Mirror
2. Left handle bar switches

3. Speedometer
4. Right handle bar switches
5. Ignition switch

RIGHT SIDE VIEW



1. Rear grip
2. Tail lamp
3. Rear fender
4. Muffler
5. Rear tyre

6. Head lamp
7. Front fender
8. Front suspension
9. Front tyre

LEFT SIDE VIEW




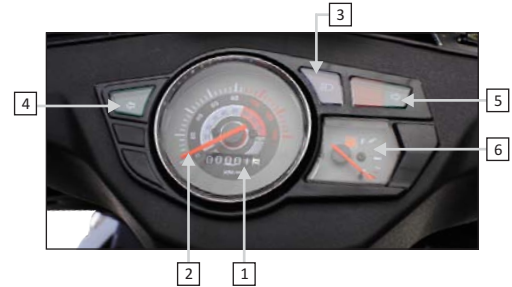
1. Indicator
2. Front disc brake
3. Front wheel

4. Seat
5. Rear wheel
6. Side stand
7. Main stand

PARTS FUNCTION

Meters and indicators

1. Odometer – Records accumulated riding distance.
2. Speedometer – Displays riding speed of motorcycle.
3. “” High beam indicator – Indicator turns ON when head lamp is in high beam.
4. Turn signal indicator left – Flashes when left turn signal switch is operated.
5. Turn signal indicator right – Flashes when right turn signal switch is operated.
6. Fuel Gauge – It indicates level of fuel contained in fuel tank.
7. Ignition switch –
 - (a) OFF position – All electrical circuits are cut off. The engine cannot be started. The key can be removed in this position.
 - (b) ON position – The ignition circuit is completed. Engine can now be started. The key cannot be removed in this position.
 - (c) LOCK position – To lock the steering, turn the handlebar all the way to the left. Push down the key and rotate to “LOCK” position, let the key come up and now remove the key.



Left handlebar control switches

1. Headlamp dimmer switch- This switch is used to change headlamp position from low beam to high beam or vice versa.
2. Horn switch – Press the switch to operate the horn.
3. Turn signal switch – Operate the switch when turning right or left by pushing the switch towards right or left.
 - (a) Turn right position – The right turning lamp and right turn signal Indicator on instrument panel flashes.
 - (b) Turn left position–The left turning lamp & left turn signal indicator on instrument panel flashes.



Right handlebar control switches

1. Headlamp switch –
 - (a) “☀” position – The headlamp , front parking light and tail lamp are turned ON.
 - (b) “●” position – All lamps are turned OFF.
 - (c) “☞” position – Front parking lamp and tail lamp are turned ON.
2. Electric starter switch – When this switch is pressed, starter motor cranks the engine. This switch should not be pressed over 5 seconds continuously.

Seat

To open the seat insert the ignition key into seat lock and rotate. Then hold the seat and lift it up. To lock the seat put it down and press downwards.

Fuel tank & Fuel tank cap

The capacity of the fuel tank is 5.5L.

- (a) Position of the fuel tank – Fuel tank is mounted beneath the seat.
- (b) Opening fuel tank cap –First you need to open the seat, then rotate the fuel tank cap in anti-clockwise direction.
- (c) Closing fuel tank cap - To close fuel tank cap, place the cap on fuel filling neck of fuel tank and rotate it in clockwise direction.

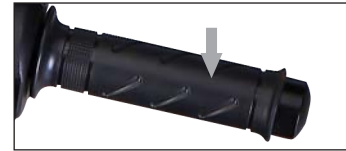


Fuel filter

A fuel filter is a filter in the fuel line that screens out dirt and rust particles from the fuel. From fuel tank, fuel goes to carburettor after passing through fuel filter.

**Throttle**

It controls the fuel air mixture flow from carburettor to engine. To increase the speed of the vehicle, rotate throttle in backward direction and to decrease the speed of the vehicle, rotate throttle in forward direction.

**Tyre**

Proper tyre pressure will provide maximum stability, mileage, riding comfort and tyre life. Check tyre pressure frequently and adjust, if necessary. Select the right replacement tyres in accordance with the tyre sizes given in table below -

Tyre Size Front	120/70-12
Tyre Size Rear	120/70-12

Starting lever or Kick

This is used to start the engine manually. To start the engine by kick, you need to place your foot on the lever and push it downwards quickly.



Front brake lever

This is used to apply braking force on front wheels. When you want to stop the vehicle or reduce speed, you need to pull front brake lever towards yourself. Always apply front and rear brake together.



Rear brake lever

This is used to apply braking force on rear wheel. When you want to stop the vehicle or reduce speed, you need to pull rear brake lever towards yourself. Always apply front and rear brake together.



Inspection before riding

In order to ensure your safety, make a general inspection before riding according to the table given below –

No.	Item	Inspection	Remark
1	Fuel system	Check fuel capacity and fuel leakage	For the vehicles with different riding miles and performance, please adopt different maintenance. 1. Elementary maintenance: 1000km~2000km riding, please lubricate & check tyre pressure. 2. Secondary maintenance: 3000km~6000km riding, please check wear and tear of parts and tighten fasteners. 3. Advanced maintenance: 6000km~10000km riding, please disassemble, inspect and do troubleshooting. 4. Inspect and maintain your motorcycle at professional maintenance station or service centre.
2	Carburetor	Check carburettor for fuel leakage and idle speed for stability and proper acceleration.	
3	Lubrication oil	Check lubeoil for quality and whether level is lower than the low scale mark.	
4	Electrical system	Check electrical system for proper functioning.	
5	Battery	Check battery for any leakage or spillage and acidic corrosion.	
6	Front brake lever	Check whether free stroke is appropriate	
7	Rear brake lever	Check whether free stroke is appropriate	
8	Throttle lever	Check throttle lever for flexibility and stroke of 2~6 mm.	
9	Steering mechanism	Check steering mechanism for flexibility and stability	
10	Tyre/Wheel	Check tyres for pressure and abrasion	
11	Headlamp/Tail lamp/ Turning lamps	Check Headlamp/Tail lamp/turning lamps for proper functioning.	
12	Brake	Check brake disc/ brake pad/brake shoe for abrasion and proper functioning.	
13	Main/Side stand	Check whether main stand and side stand are bended or deformed and whether they can return well.	
14	Fasteners	Check fasteners for looseness and possibility of falling.	

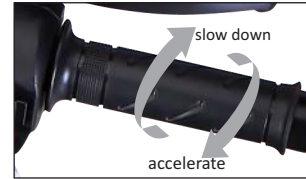
Starting engine & riding operation

Starting Engine - Follow below mentioned steps to start the vehicle:

1. Unlock steering, and turn ignition key to “ON” position.
2. Grip front brake lever or rear brake lever.
3. Press kick downwards powerfully with foot or press electric starter switch with right thumb.
4. Rotate throttle backwards to add proper volume of fuel to start motorcycle. Once motorcycle has started, return kick lever. Preheat 3~5 minutes at idle speed (1500±100)r/min.

Riding Operation –

1. After starting and preheating, return main and side stand.
2. Release the brake lever.
3. Rotate throttle slowly to accelerate.



Maintenance schedule

Perform maintenance according to the odometer reading or time interval, whichever comes first.

Item	Interval	Km	Initial 1000 km	Every 4000 km	Every 8000 km
		Miles	600	2400	4800
		Months	5	20	40
Battery (Specific gravity of electrolyte)			I	I	-
Cylinder head nuts & exhaust pipe bolts			T	T	-
Camshaft drive chain			I	I	-
Air cleaner			Clean every 3,000km Replace every 12,000km		
Valve clearance			I	I	-
Spark plug			I	C	R
Fuel hose			I	I	-
			Replace every four years		
Engine oil and oil filter			R	R	-
Carburetor			I	I	-
Fuel strainer cup			C	-	C
Brake			I	I	-
Tyres			I	I	-
Steering			I	I	-
Front fork and rear suspension			-	I	I
Chassis bolts and nuts			I	T	-

NOTE : Inspect and clean, adjust, replace or lubricate as necessary,I=Inspect,C=Clean, R=Replace, T=Tighten.

TOOLS - To assist you in the performance of periodic maintenance, a tool kit is supplied.

General inspection & repair

Check and replacement of engine oil

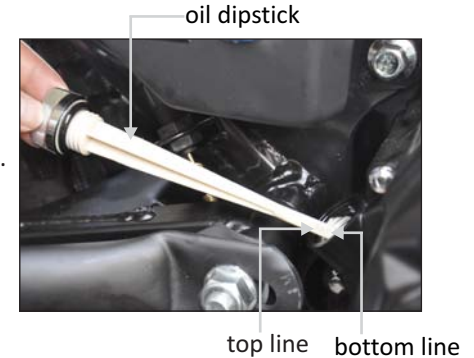
Engine oil level check

- (1) Stop the engine and park the motorcycle with main stand vertically in flat surface.
- (2) Wait for one minute and then check the oil level through the engine oil level sight glass.

Replacement of engine oil

Following procedure needs to be followed to replace oil -

- (1) Park the motorcycle vertically with main stand in flat surface.
- (2) Remove the oil filler cap.
- (3) Drain the oil by removing the drain plug located on the bottom of the engine.
- (4) Once used oil is drained completely tighten the drain plug, fill engine with new engine oil. Tighten the filler cap. Do not over tight the filler cap.
- (5) Start engine in idle speed for 2~3 minutes.
- (6) Stop the engine and wait for a minute. Inspect the engine oil level through the engine oil level sight glass. Make sure that oil level is appropriate.

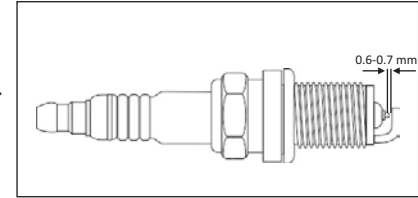


General inspection & repair

Spark plug

Check and replace

1. Disconnect the spark plug cap from the spark plug.
2. Clean any dirt from around the spark plug base. Remove the spark plug by using the plug wrench.
3. Inspect the electrodes for erosion or carbon deposit. If the erosion or deposit is heavy, replace the plug. If there is small carbon deposit, clean carbon deposit with a plug cleaner or use a wire brush.
4. Check the spark plug gap using a wire-type feeler gauge. The spark plug gap should be 0.6-0.7mm. If adjustment is required, bend the side electrode carefully. Make sure the plug washer is in good condition.
5. With the plug washer attached, tighten the spark plug initially by hand to prevent cross threading and then tighten it by spark plug wrench.
6. Reconnect the spark plug cap.



Clean the air cleaner

At least once after every 4000Km, clean and immerse the air cleaner element into engine oil. If you drive your motorcycle in a dusty condition, more frequent cleaning will be required.

Carburetor idle speed adjustment

Start up the engine and let the engine run until it warms up fully. After engine has warmed up, close the throttle and turn the idle speed adjuster screw clockwise or anti-clockwise so that the engine may run at 1500r/min. The idle speed increases when the bolt is turned clockwise and the idle speed decreases when the bolt is turned anti-clockwise. Idle speed of the carburetor should always be optimum. If the idle speed is not appropriate, make sure to adjust the idle speed bolt once again.

Technical specification

Engine Specification	
Cooling	Air cooled
No. of cylinders	1
Type (CG or CB)	CB
Balanced or Non balanced	Non balanced
Displacement/Capacity	150 CC
Max. Power	6.7 kw/7500r/min
Max. Torque	9.2N.m/6000r/min
Bore x Stroke	57.4x57.8
Compression Ratio	9.5:1
Starting	Electric/ Kick start
Top speed	95 KM/H
Mileage (Litres/100 kms)	1.1L/100km
Carburetor	PD24J/18
Transmission & Chassis	
Clutch	Automatic
Suspension	
Front	Telescopic
Rear	Spring coil type
Brakes	
Front Brake	Disc
Rear Brake	Disc


Technical specification

Wheels & Tyres	
Wheel Size Front	3.5x12
Wheel Size Rear	3.5x12
Tyre Size Front	120/70-12
Tyre Size Rear	120/70-12
Tyre Type (Tubeless or with Tube)	Tubeless
Electrical/Control System	
Battery	MF-12V7AH
Head Lamp	12V/35W
Head Lamp Type (Normal/LED)	Normal
Tail/Stop Lamp	12V/3W
Tail Lamp Type (Normal/LED)	LED
Turn Signal Lamp	Front 12V/1.8W, Rear 12V/2W
Turn Signal Lamp Type (Normal/LED)	LED
Ignition system	A/C CDI
Speedometer	Mechanical
Dimension	
Length (mm)	1825
Width (mm)	675
Height (mm)	1173
Wheelbase (mm)	1293
Ground Clearance (mm)	147
Fuel Tank Capacity (Litres)	5.5
Kerb Weight (kg)	117



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Electrical circuit diagram

