

# MODEL YEAR 2023 | NIGHTSTER™

Dimensions	RH975 Nightster™	Notes
Length	89.4 in. (2,270 mm)	
Overall Width	33.1 in. (841 mm)	
Overall Height	43.6 in. (1,108 mm)	
Seat Height, Laden	27.1 in. (688 mm)	2
Seat Height, Unladen	27.8 in. (705 mm)	
Static Ground Clearance	4.5 in. (114 mm)	
Rake (steering head) (deg)	30	
Fork Angle (deg)	28	
Trail	5.4 in. (137 mm)	
Wheelbase	61.3 in. (1,556 mm)	
Tires, Type	Dunlop® Harley-Davidson Series Bias Blackwall	
Tires, Front Model	D401F	
Tires, Front Specification	100/90-19 57H	
Tires, Rear Model	D401T	
Tires, Rear Specification	150/80B16 77H	
Fuel Capacity	3.1 gal. (11.7 l)	
Reserve Fuel Capacity, Fuel Injection (warning light)	0.8 gal. (3 l)	
Oil Capacity (w/filter)	4.75 qt. (4.5 l)	
Transmission Capacity	N/A	
Primary Chain Case Capacity	N/A	
Coolant Capacity	2.22 qt. (2.1 l)	
Weight, As Shipped	462 lb. (210 kg)	
Weight, In Running Order	481 lb. (218 kg)	
Gross Vehicle Weight Rating	922 lb. (418 kg)	
Gross Axle Weight Rating, Front	353 lb. (160 kg)	
Gross Axle Weight Rating, Rear	595 lb. (270 kg)	
Luggage Capacity -Volume	N/A	

Engine	RH975 Nightster™	Notes
Engine	Revolution® Max 975T	
Valves	Chain-driven, DOHC, hydraulic self-adjusting lifters, intake VVT; four valves per cylinder	
Bore	3.82 in. (97 mm)	
Stroke	2.6 in. (66 mm)	
Displacement	59.5 cu in (975 cc)	
Compression Ratio	12:01	
Fuel System	Electronic Sequential Port Fuel Injection (ESPFI)	3
Air Cleaner	Downdraft intake, tuned velocity stacks, washable filter media	
Exhaust	2-into-1; catalyst in header	
Lubrication System	Semi-Dry Sump	

Drivetrain	RH975 Nightster™	Notes
Primary Drive	Gear, 49/89 ratio	
Final Drive	Belt, 34/80 ratio	
Clutch	Mechanical, 8 plate wet, assist & slip, 1090N	
Transmission	6-speed	
Gear Ratios	12.21	
Gear Ratios	9.022	
Gear Ratios	6.994	
Gear Ratios	5.641	
Gear Ratios	4.731	
Gear Ratios	4.131	

Chassis	RH975 Nightster™	Notes
Frame	Stressed-member, high strength low alloy steel trellis frame; stamped, cast, and forged junctions; MIG welded; aluminum forged mid-structure	
Swingarm	Mild steel, rectangular tube section, stamped x-member; MIG welded	

Front Fork	41 mm SHOWA® Dual Bending Valve conventional forks. Aluminum fork triple clamps.	
Rear Shocks	Rear suspension is dual outboard, direct-acting (no linkage) emulsion technology shock absorbers with coil springs and a threaded collar for pre-load adjustment.	
Wheels, Optional Style Type	N/A	4
Wheels, Front Type	Aluminum cast, satin black	4
Wheels, Front Width	2.5 in. (64 mm)	
Wheels, Front Height	19 in. (483 mm)	
Wheels, Rear Type	Aluminum cast, satin black	4
Wheels, Rear Width	4.25 in. (108 mm)	
Wheels, Rear Height	16 in. (406 mm)	
Brakes, Caliper Type	Front: axially mounted, 4-piston caliper; Rear: floating, single piston caliper	
Brakes, Rotor Type	Front: single rotor, floating, hub - mounted; Rear: solid uniform expansion rotor	
Brakes, Front Diameter	12.6 in. (320 mm)	
Brakes, Front Thickness	0.23 in. (5.8 mm)	
Brakes, Front is dual	No	
Brakes, Rear Diameter	10.2 in. (260 mm)	
Brakes, Rear Thickness	0.2 in. (5 mm)	
Brakes, Anti-Lock Braking System (ABS)	Standard	
Suspension Travel, Front	4.5 in. (114 mm)	
Suspension Travel, Rear	3 in. (76.2 mm)	

<b>Performance</b>	<b>RH975 Nightster™</b>	<b>Notes</b>
Engine Torque Testing Method	J1349	
Engine Torque	70 ft-lb (95 Nm)	5
Engine Torque	5,000	
Power	90 HP / 67 kW @ 7500 rpm	
Lean Angle Testing Method	J1168	
Lean Angle, Right (deg.)	32	
Lean Angle, Left (deg.)	32	
Fuel Economy Testing Method	Estimated City/Hwy	
Fuel Economy	52.4 mpg (4.5 l/100 km)	6
CO <sup>2</sup> Emissions Testing Method	N/A	

CO <sup>2</sup> Emissions	N/A	
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<b>Electric</b>	<b>RH975 Nightster™</b>	<b>Notes</b>
Battery	Sealed, maintenance-free, absorbed glass mat (AGM) battery, 12V, 12Ah, 225 CCA at 0°F	
Charging	Three-phase, 45 Amp system (300 Watts @13 Volts, 1200 rpm, 585 Watts max power @ 13 Volts, 2250 rpm)	
Starting	0.9 kW electric with direct drive starter motor engagement	
Lights (as per country regulation), Headlamp	All LED headlamp, low and high beam with signature position lighting	
Lights (as per country regulation), Tail/Stop	All LED rear lighting	
Lights (as per country regulation), Front Signal Lights	LED Bullet Turn Signals	
Lights, Rear Turn Signals	LED Bullet Turn Signals	
Gauges	4-inch viewable round gauge area analog display with, Speedometer, L/R turn Indication, Traction Control Indication, Coolant Temperature Alert, ABS alert, Fog Lamp Indication, Battery Voltage Alert, High Beam Indicator, Low Fuel Indication, Rear-ABS Disabled Indication, Failure-Indication Alert, Neutral Position Indication, Low Tire Pressure indication, Check Engine Light indication, Oil Pressure Alert, Service Indication.	
Auxiliary Lamps	N/A	
Electric Power Outlet	N/A	
GPS System	N/A	
Reverse Gear	N/A	

<b>Warranty And Service</b>	<b>RH975 Nightster™</b>	<b>Notes</b>
Warranty	24 months (unlimited mileage)	7
Service Interval	First 1,000 miles (1,600 km), every 5,000 miles (8,000 km) thereafter	8

<b>Footnotes</b>	<b>RH975 Nightster™</b>	

1	<p>Vehicles depicted may differ from vehicles manufactured and delivered. Specifications and prices listed may differ from specifications and prices of vehicles manufactured and delivered. All product descriptions (including depictions, specifications, dimensions, measurements, ratings and competitive comparisons) are based on available information at the time of publication. Although such descriptions are believed correct, errors and changes can occur and complete accuracy cannot be guaranteed. Harley-Davidson may make changes at any time to prices and specifications, and may change or discontinue models, without notice and without incurring any obligation. Attention: Vehicles in the configurations shown and many of the accessories described in this catalog may not be available for sale or use in some locations. Please check with your dealer for complete product details and the latest information. All models feature 6-speed transmission (VRSC™ models and Sportster® models are 5-speed) and carbon fiber belt final drive; multi-plate clutch with diaphragm spring in oil bath; and 2-year unlimited mileage warranty.</p>	
2	Measurement reflects 180 lb. (81.7 kg) operator weight.	
3	Recommended 91 octane or higher fuel (R+M)/2.	
4	Standard and optional wheels may vary by country and region.	
5	Values shown are nominal. Performance may vary by country and region.	
6	<p>The combined fuel economy numbers were derived using a combination of estimated city and highway values. Fuel economy estimates are derived from US EPA exhaust emission certification data on a sample motorcycle from the corresponding family under ideal laboratory conditions. Your actual fuel economy will vary depending on your personal riding habits, road and driving conditions, vehicle condition and maintenance, tire pressure, vehicle configuration (parts and accessories), and vehicle loading (cargo, rider and passenger weight). Break-in mileage may vary.</p>	
7	See motorcycle owner's manual for complete details.	
8	Inspections of certain systems and components are required at 2,500 mile (4,000 km) intervals. See Owner's Manual for full details.	

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