Harley-Davidson Motor Company 3700 W. Juneau Ave., P.O. Box 653, Milwaukee WI 53201

**NEWS**



Contact: Paul James, [Paul.James@harley-davidson.com](mailto:Paul.James@harley-davidson.com)

414-343-8735

**H-D REVELATION ELECTRIC POWERTRAIN SIGNALS A NEW ERA OF HARLEY-DAVIDSON PERFORMANCE**

***Advanced Battery Technology and Charging Options Deliver Exhilarating Performance***

MILWAUKEE (July 11, 2019) – The Harley-Davidson® LiveWire™ motorcycle features an all-new, all-electric powertrain utilizing contemporary motor and energy-storage technology.

**The H-D Revelation™ Electric Motor**

The LiveWire motorcycle is powered by the all-new H-D Revelation™ permanent-magnet electric motor rated at 105 horsepower (78 kW) and producing 86 ft. lbs (116 Nm) of torque. Unlike an internal combustion engine (ICE), the H-D Revelation can produce 100 percent of its rated torque the instant the throttle is twisted, and 100 percent of that torque is always available, resulting in incredible, seamless acceleration for an exhilarating ride. The LiveWire can accelerate from 0-60 mph in 3.0 seconds, and 60-80 mph in 1.9 seconds. And the high-voltage battery provides 146 miles (235 km) of city range or 95 miles (152 km) of combined stop-and-go and highway range as measured using the MIC City and MIC Combined tests\*\* and 98 miles (158 km) using World Motorcycle Test Cycle (WMTC)\*\*\*

The H-D Revelation motor is cooled by a water jacket, with coolant circulated through a small radiator, and is positioned longitudinally and low in the chassis to lower the motorcycle’s center of gravity, and aid maneuverability.

Because there is no traditional transmission, and no clutch; riding the LiveWire motorcycle is an accessible and thrilling “twist-and-go” proposition. A gearset is required to turn the output 90 degrees to align the drive belt sprocket with the rear wheel which contributes to LiveWire’s distinctive sound. The motor output shaft mates to a gearbox containing a 9.71:1 gear reduction running in an oil bath. A final-drive belt transfers power from the gearbox output pulley to the rear wheel, with a 3:1 ratio between the output pulley and the wheel pulley. The gearset is designed to produce a signature Harley-Davidson sound as the LiveWire motorcycle accelerates and gains speed; a new sound that represents the smooth, electric power of the LiveWire motorcycle.

**LiveWire Motorcycle Power Storage**

The LiveWire motorcycle is powered by a 15.5kWh high-voltage battery (or RESS; Rechargeable Energy Storage System) composed of lithium-ion cells, positioned in the center of the motorcycle and surrounded by the motorcycle’s cast-aluminum frame. The RESS is enclosed in a cast-aluminum housing which also acts as a heat-sink to help cool the cells. The sides of the RESS housing are finned and exposed to the air and are visible within the motorcycle frame. Small air scoops on the motorcycle bodywork duct cooling air to the upper portion of the RESS housing. The RESS housing is attached to the frame at several points and contributes to the over-all rigidity of the chassis. The LiveWire motorcycle is also equipped with a 12-volt lithium-ion accessory battery that provides power for start-up and key fob recognition.

Power regeneration is accomplished through the drivetrain when the LiveWire motorcycle is coasting “off-throttle,” as the motor becomes a generator putting charge back into the RESS. The rider will feel the regeneration process as an engine-braking effect. The level of regeneration is programmed as an element of each of the four Ride Modes, and the regeneration setting can also be adjusted by the rider as an element of multiple custom Ride Modes.

The RESS has a five-year, unlimited-mileage warranty.

**LiveWire Motorcycle Charging Options**

The LiveWire motorcycle is equipped with an on-board Level 1 charger that plugs into a standard 120-volt (or 240-volt) household outlet with a special power cord that stores below the motorcycle seat. Level 1 RPH (range per hour) of charging time is 13 miles for each hour of charging; and the LiveWire motorcycle will get a full charge overnight with Level 1 charging.

The latest in DC Fast Charge (DCFC) technology is standard on the LiveWire, and may be used to charge the motorcycle through a SAE J1772 connector (or CCS2 – IEC type 2 charging connector in European and some other international markets). DC Fast Charge RPH (range per hour) of charging time is 192 miles for each hour of charging. That is 0-80 percent DC Fast Charge in 40 minutes. 0-100 percent DC Fast Charge in 60 minutes.

The LiveWire motorcycle may be charged with a Level 2 charging station, but it will charge at the Level 1 rate. The charging port is located below a cap in the bodywork forward of the motorcycle seat.

All participating authorized Harley-Davidson dealers selling the LiveWire model will offer a DCFC charging station at their dealership

*\*\*Riding range estimates provided following SAE J2982 Riding Range Test Procedure and are based on expected performance of a fully-charged battery when operated under specified conditions. Actual range will vary depending on riding habits, ambient weather and equipment conditions.*

*\*\*\*Test per WMTC Per EEC 134/2014 Annex VII Appendix 3.3*

**About Harley-Davidson Motor Company**

Since 1903, Harley-Davidson has fulfilled dreams of personal freedom by leading the innovation of two-wheeled mobility. The company offers an expanding range of leading-edge, distinctive and customizable motorcycles and brings the brand to life through Harley-Davidson riding experiences and exceptional motorcycle parts, accessories, riding gear and apparel. For more information, visit [h-d.com](http://www.harley-davidson.com/).

**Editors:** For more information regarding the LiveWire model and other Harley-Davidson motorcycles and products visit: [h-dmediakit.com](http://www.h-dmediakit.com)

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