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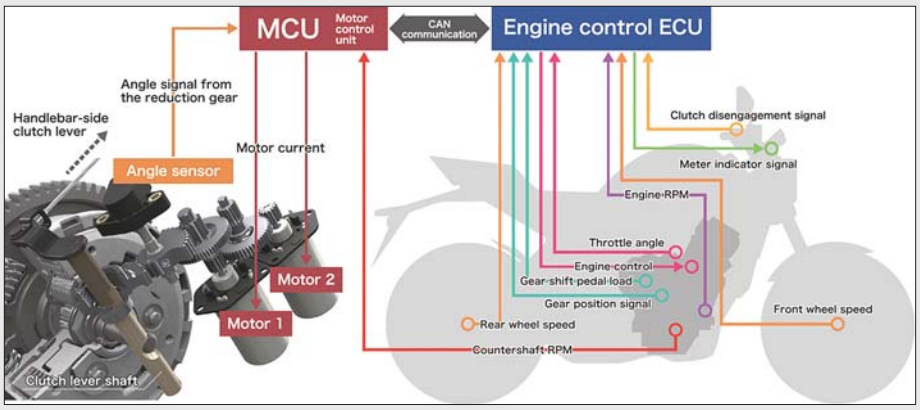
Honda E-Clutch comes to the US on CB650R and CBR650R



Previously unveiled in Europe, Honda E-Clutch technology will now be offered to US customers on the 2024 CB650R and CBR650R.

The cutting-edge feature delivers several benefits, making the riding experience easier, sportier and less fatiguing. It appeals to riders with a wide range of skill and experience levels, enabling them to focus on the fun of riding more comfortably.

Honda E-Clutch lets riders choose for themselves whether or not to operate the clutch lever on manual transmissions, thereby expanding the potential for riders while maintaining the special fun of riding motorcycles.

Honda's range of large, fun motorcycle models employs a unique dual clutch transmission (DCT) for motorcycles—an automated gear shifting system that automatically changes gears without the rider having to operate the clutch lever. By comparison, Honda E-Clutch only automates the clutch operation, with the rider always in control of gear shifting. In this way, the clutch and transmission mechanisms are the same as on conventional manual transmission motorcycles.

At the heart of the Honda E-Clutch system is a drive unit and motor control unit (MCU) comprising two small motors and gears, and a three-part clutch lever shaft for moving the clutch lifter piece. The system itself is made up of an engine control electronic control unit (ECU) that operates in conjunction with the MCU in response to data sent from various sensors.

Automatic clutch control parameters use many signals, including engine RPM (crankshaft), throttle angle, gear position, gear shift pedal load, clutch disengagement, meter indicators, and front and rear wheel speed. Referencing and cooperating with computations from the engine control ECU, the system then applies appropriate clutch control.

This design leads to a light, compact system unit suited to motorcycles; faster clutch control than via human operation; clutch control appropriate to the riding state (starting, shifting and stopping); with manual operation of the clutch available even during automatic control, to switch the system on or off, according to rider preferences.

When the system is on, it automatically controls clutch operation and no clutch lever operation is required from the rider. Only throttle operation is required when starting, only gear shift pedal operation is required for gear shifting, and clutch lever operation is not required when stopping. When riding, however, hand operation of the clutch lever can move the system into manual mode temporarily, which requires the same clutch lever operation as a normal manual transmission.

In regular usage, Honda E-Clutch lets a rider choose a higher level of peace of mind and comfort in city riding, or the fun of allowing the rider to concentrate on sports riding. Bringing great versatility to motorcycles, this simple and compact system is expected to be included in a wide and varied range of models going forward. ■


Honda CB650R
Color: Pearl Smoky Gray
MSRP: $9,399

Honda CBR650R
Color: Grand Prix Red
MSRP: $9,899
(shown prepped for track)