



THE LINCOLN MOTOR COMPANY

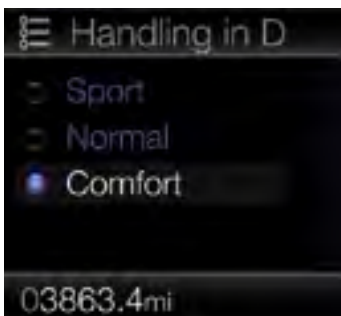
# LINCOLN DRIVE CONTROL

Delivering the occasion of driving in milliseconds

Lincoln Drive Control is an automatic system that delivers an ideal balance of a smooth ride with confident handling, intuitively responding to driver commands and the road.

Always on, Lincoln Drive Control orchestrates the performance of the continuously controlled damping (CCD) adjustable suspension, electric power-assisted steering (EPAS), engine, transmission, active noise control (ANC), traction control and stability control systems.

The result is an unsurpassed combination of a refined ride and engaging driving dynamics.



## **ELECTRIC POWER-ASSISTED STEERING**

EPAS improves overall feel by using sensors to constantly measure driver input, speed and road conditions, then calculating adjustments that need to be made. At low speeds, more assist is delivered. Once the vehicle is moving, EPAS delivers less assist to provide optimum road feel.

- Because EPAS uses an electric motor instead of a hydraulic pump, its control can be precisely programmed to enable technologies that help manage steering. It also enables advanced park-assist technology
- The system assists the steering effort to help the driver maintain a straighter path, and helps the driver manage unwanted drifting and pulls
- EPAS contributes to fuel efficiency because the electric motor operates only when steering assistance is required, which is a more efficient way of managing energy than traditional hydraulic systems, which run continuously
- EPAS constantly measures steering input, adapts to changing road conditions, and helps compensate for slight directional shifts caused by factors such as crowned roads and strong, steady crosswinds

## **CONTINUOUSLY CONTROLLED DAMPING**

CCD offers three modes (sport, normal, comfort) that are accessible using MyLincoln Touch™ or controls on the steering wheel.

CCD provides an agile, smooth and confident ride by quickly adjusting the shocks to any road. It uses an advanced suite of sensors that constantly monitor the vehicle's suspension motion, body movement, steering and braking. The algorithm uses data from these sensors to adjust the suspension damping in milliseconds to help keep the body of the vehicle quiet and smoothly on track.

- CCD system monitors 46 inputs that provide real-time data
- CCD suspension reads 46 inputs every two milliseconds
- CCD suspension reacts on average within 20 milliseconds
- CCD has 12 sensors that speed-read the road and adjust the suspension faster than the blink of an eye
- Each wheel/shock responds independently of the other three, allowing it to tailor its action to the specific condition it's dealing with
- The system allows for near-infinite variability of suspension response
- CCD slows sudden changes in motion, CD helps to reduce roll, pitch and vertical velocities
- CCD noticeably enhances driving comfort and dynamics by adjusting damping force for each individual wheel
- CCD helps isolate vehicle from undesired road harshness

For more information, contact Sam Locricchio at 248.622.8242 or slocri1@lincoln.com