

Advanced 4x4 System

The Advanced 4x4 System on Bronco Sport features electronically controlled on-demand torque delivery, which can help provide outstanding traction and grip when cornering and on uneven terrain. Here are benefits of the 4x4 system:

- Rear drive unit with variable torque delivery capability
- Twin-clutch rear drive unit with locking differential can divert up to 100% of the rear axle torque to either rear wheel
- 4x4 hardware is compact and lightweight to help maximize vehicle performance
- Water-cooled power transfer unit (PTU) with disconnect rear axle



REAR DRIVE UNIT (RDU)

- During cornering the rear drive unit (RDU) pre-emptively diverts torque to the rear wheels based on inputs such as steering wheel angle, lateral acceleration, yaw and speed
 - Monitors multiple vehicle sensors 100 times per second
 - Twin electronically controlled clutch packs on each side of the RDU manage the front/rear torque split as well as the side-to-side torque distribution on the rear axle
 - Independent RDU control unit continuously varies the front/rear and side-to-side torque distribution to suit current driving conditions
 - A maximum of 100% of the drive torque can be diverted to the rear axle; up to 100% of the torque at the rear axle can be sent to each rear wheel

G.O.A.T. MODES

This system is tuned to offer 7 different G.O.A.T. modes:

- Normal:
 - For everyday driving
 - Perfect balance of excitement, comfort and convenience
 - This is the default mode after each ignition cycle
- Eco:
 - For efficient and responsible driving
- Sport:
 - For aggressive on-road driving
 - This mode increases throttle response, provides a sportier exhaust sound and steering feel, along with quicker shifting
 - The transmission holds gears longer, helping the vehicle accelerate faster when shifting gears
- Slippery:
 - For less-than-ideal road conditions, such as snow- or ice-covered roads
 - Can be used for crossing terrain where a firm surface is covered with loose, wet or slippery material
 - Lowers throttle response and optimizes shifting for slippery surfaces
- Sand
 - For off-road driving
 - For soft, dry sand
 - May help get vehicle unstuck from deep snow or sand
 - Sand mode engages 4x4 Lock
- Mud/Ruts
 - For off-road driving
 - Enhances vehicle performance to navigating muddy, rutted or uneven terrain
 - Mud/Ruts Mode engages the 4x4 Lock
- Rock Crawl
 - For off-road driving
 - For optimum rock-climbing ability
 - Rock Crawl Mode engages 4x4 Lock and rear differential lock feature
 - Rock Crawl Mode optimizes the throttle and transmission response to provide additional control of the vehicle
- Sand Mode is tuned to work with the torque vectoring system in sand to optimize handling and stability

4x4 LOCK

- 4x4 Lock helps increase four-wheel-drive performance by preventing the front and rear axles from disconnecting
- 4x4 Lock switch provides control to driver to prevent the front and rear axles from disconnecting
- Lock as desired and override auto disconnect rear-axle feature

REAR DIFFERENTIAL LOCK

- Provides additional traction should the vehicle become stuck
- Can be activated and deactivated on the fly within the operating speed range by pressing the button on the drive mode control
- Automatically disengages when the vehicle speed exceeds a set value and it reengages when the vehicle speed goes below a set value
- Also engages based on certain selected drive modes
- For use in mud, rocks, sand or off-road conditions where maximum traction is needed
- Not available in all drive modes
- Provides an indicator light in the information display when in use
 - While the feature is in standby mode, the light will display gray
 - While the feature is active, the light will become colored
- For off-road use only and is not for use on dry pavement
 - Using the rear differential lock feature on dry pavement can produce excessive noise, and increase tire and vehicle wear
 - Operating the vehicle in these conditions could subject the vehicle to excessive stress, which may result in damage

NOTE: For availability of product features, please see Availability by Model and/or the [Dealer Ordering Guide](#).