

2015 Mini Hardtop: The Nuts And Bolts



The 2015 Mini retains the brand's iconic bulldog stance and wide grille, but the nose is a bit more boxy and the headlights look like big, buggy eyes.

At 98.2 inches, the Mini's wheelbase has been extended by 1.1 inches. It is also 4.5 inches longer, 1.7 inches wider, and 0.3 inches taller. Overall, the car is 151.1 inches long (Mini Cooper S, 151.9 inches), 68 inches wide, and 55.7 inches high. This results in more interior space, more shoulder room, and three more cubic feet of luggage space. Wider tracks, 1.7 inches in front and 1.3 inches in the rear, mean better handling.

The 2015 Mini will be available with two new engines. Both use turbocharging, direct fuel injection, double VANOS variable camshaft control, and Valvetronic variable-valve intakes. We will not get the Mini Cooper D with its 1.5-liter, three-cylinder diesel engine.

The Mini Cooper's 1.5-liter three-cylinder engine makes 134 horsepower between 4,500 and 6,000 rpm, with maximum torque of 162 pound-feet at 1,250. Torque can briefly be increased to 170 pound-feet via overboost. The two-liter four in the Mini Cooper S has 189 horsepower between 4,700 and 6,000 rpm and maximum torque of 207 pound-feet at 1,250 rpm, with 221 pound-feet on overboost.

Both come with a standard six-speed manual transmission; a six-speed automatic is optional, and both are newly developed for improved fuel economy. An optional six-speed sport automatic transmission in the Cooper S enables even quicker shift times, and can be operated manually using steering-wheel paddles.

The Mini Cooper can accelerate from 0 to 60 mph in 7.4 seconds, 7.3 seconds with the automatic.

The Mini Cooper S can accelerate from 0 to 60 mph in just 6.5 seconds, 6.4 seconds with the automatic. Top speeds are 130 and 145 mph, respectively.

Fuel is saved through demand-oriented control of the fuel pump, coolant pump, oil pump, and other ancillary units. Electromechanical power steering, which also helps, has been further developed to compensate for torque-steer, and steering precision has been optimized for sudden-avoidance swerves—and for taking curves a bit more aggressively. The Servotronic speed-related steering assistance system is standard.

Gauges are still circular, but more user-friendly. The speedometer and tachometer are in front of the driver. The central unit with four-line TFT display—or an optional color display of up to 8.8 inches—provides information on vehicle operation, infotainment and communication, navigation maps, and route directions, as well as graphics for Mini Connected Services. Selection and adjustment are managed by a new controller in the center console that is based on BMW's iDrive.

LED units around the outer edge of the circular instrument—available in six colors—respond to the current situation. For example,



when Park Distance Control is activated, the remaining distance to obstacles is shown via a ring of light that changes from green to yellow to red to supplement the graphic display. A change in interior temperature is confirmed by LED lights in blue or red. In conjunction with



The 60:40 split rear seat has several folding options; the tilt angle can be adjusted as well.



Lighting surrounding the central display provides visual information on driving, navigation, and comfort conditions.



The optional white LED headlights provide both low and high beam and are surrounded by LED daytime-driving rings.



The Mini Cooper S (right) looks a bit more aggressive than the Mini Cooper.

the navigation system, the closer you get to the turn-off point, the smaller the lit-up area at the edge of the central instruments.

You can start the engine by pressing the toggle-type start/stop button as long as the key is inside the car. Window controls have been moved from the center of the car to the door panels. The Mini Head-Up Display shows information on an extendible monitor in the upper section of the dashboard, directly in the driver's line of sight under all lighting conditions. Information includes speed, navigation directions, collision warnings, speed-limit information, Check Control messages, and entertainment functions like radio channels and digital track titles.

The new Mini Driving Modes—Mid, Sport, and Green—are selected via a rotary switch at the base of the gear or selector lever to provide a comfortable, very sporty, or best-fuel-economy driving style. In addition to tailoring the characteristic curve of the accelerator, steering response, and engine acoustics, it also influences the ambient lighting, the shift characteristics of the automatic transmission, and the Dynamic Damper Control configuration in the Mini Cooper S. Dynamic Damper Control, optional for the first time, provides either a more comfort-oriented or a direct, sporty response to road surfaces. Compression and rebound are adjusted by electrical control of the EDC valves.

The Green mode reduces energy use by electrically powering functions like air-conditioning and exterior-mirror heating. There is a coasting function in cars fitted with automatic transmissions; here the drivetrain is decoupled at speeds between 31 and 99 mph when the driver lets up on the accelerator pedal, providing minimal fuel consumption.

The optional white LED headlights provide both low and high beams and are surrounded by an LED daytime-driving ring. Optional adaptive light distribution ensures optimum illumination of both road and roadside, and includes a turning light.

The new Mini's suspension has been further refined to reduce weight and provide even more of that go-kart feeling. This includes a new front axle with aluminum swivel bearings as well as high-strength steel axle supports and wishbones; that high-strength steel is also used in the rear axle. Tube-shaped stabilizers at the front and rear contribute to weight optimization.

The Dynamic Stability Control (DSC) in the new Mini includes a drive-off assistant, a brake-dry function that makes driving in wet weather safer, and a Dynamic Traction Control (DTC) mode. When the driving-stability system is deactivated (DSC Off mode), Electronic Differential Lock Control (EDLC) for the front-axle differential selectively and appropriately brakes a spinning drive wheel on tight corners and redirects torque to the other wheel. The new Mini Cooper S also features the Performance Control system. This counteracts any tendency to understeer prior to reaching the threshold level for an agile, yet neutral, driving response in curves.

There are many options to personalize 2015 Minis. Light-alloy wheels up to a size of eighteen inches are available. The standard sport seats on the Cooper S are optional extras on the Cooper. Other options include two-zone air conditioning, driver and front-passenger seat heating, panoramic glass roof, rain sensor, automatic light control, roof rails, and electrically heated and folding exterior mirrors with automatic anti-dazzle, Harman/Kardon hi-fi speakers, a sport leather steering wheel, and rear spoiler in John Cooper Works design.—*Bill Siuru*