



# 2013 Ram 1500 OVERVIEW

# Chrysler Canada: Canada's Longest-Lasting Line of Pickups Delivers Best-in-class Fuel Efficiency, Class-Leading Technology and Outstanding Capability

- Best-in-class fuel economy of 11.4 L/100km (25 mpg) city and 7.8 L/100km (36 mpg) highway:
  - New 3.6-litre Pentastar<sup>™</sup> VVT V6 engine (one of Ward's Automotive 10 Best Engines) features 42 per cent more horsepower, up to 13 per cent more torque and up to 22 per cent better overall fuel economy when compared to the previous 3.7-litre V6 powertrain
- 5.7-litre HEMI<sup>®</sup> V8 with Fuel Saver Technology and variable-valve timing provides 395 horsepower, 407 lb.-ft. of torque and best-in-class fuel economy for V8 trucks, beating competitive turbo V6 engines
- Class-exclusive eight-speed automatic transmission, standard equipment with 3.6-litre V6 Pentastar (TorqueFlite 8), doubles the amount of gears compared to previously available fourspeed automatic transmission to greatly improve fuel economy and contribute to best-in-class standard V6 towing
- New eight-speed also available with the 5.7-litre V8 HEMI the Company's first application with a V8 (TorqueFlite 8 with 5.7L V8 is late availability)
- New dash-mounted rotary E-Shift dial for the new transmission increases storage volume by replacing the centre console shifter
- First-in-segment Fuel Saving Technology: eight-speed automatic transmission, stop-start, thermal management system, pulse-width modulation and active aerodynamics, including grille shutters and air suspension
- Starting Canadian MSRP of \$26,995
- Class-exclusive air suspension enhances fuel economy, improves ride control and off-road capability along with improved ingress/egress and loading, and features automatic load leveling
- 2013 Ram 1500 offers best-in-class cargo versatility
- Next-generation Uconnect<sup>™</sup> debuts on the 2013 Ram 1500
- Ram 1500 now available with a premium, customizable, full-colour 7-inch vehicle information centre
- Addition of Powernet vehicle architecture system allows new content with improved data speeds
- New remote central locking RamBox<sup>®</sup> cargo management system and tailgate combined with door locks



Ram 1500 – Canada's longest-lasting line and one of the most recognizable pickup trucks on the road delivers best-in-class fuel economy of 11.4 L/100km (25mpg) city and 7.8 L/100km (36 mpg) highway with a truckload of pioneering, fuel-saving systems including a more fuel efficient and more powerful 3.6-litre Pentastar<sup>™</sup> VVT V6 engine and first-in-segment technologies like: eight-speed automatic transmission, stop-start system, thermal management system, pulse-width modulation and active aerodynamics, including grille shutters and air suspension. These all-new features are further reasons why more pickup owners are switching to Ram 1500 than any other pickup.

Pricing for the 2013 Ram 1500 will include a starting Canadian Manufacturer's Suggested Retail Price (MSRP) at \$26,995.

## Powertrain

The new 3.6-litre Pentastar VVT V6 engine (a Ward's 10 Best Engines award winner two years in a row) with variable-valve timing (VVT) offers best-in-class standard 305 horsepower, with 269 lb.-ft. of torque and best-in-class standard fuel economy. The new V6 features 42 per cent more horsepower, 13 per cent more torque and 22 per cent better fuel economy when compared to the previous 3.7-litre V6 powertrain. Also, the standard V6 delivers best-in-class towing – 6500 pounds (2948 kilograms).

Canada's best-selling V8 truck engine, the legendary 5.7-litre HEMI<sup>®</sup> V8 with fuel-saving cylinder shutoff and VVT provides 395 horsepower, 407 lb.-ft. of torque and best-in-class fuel economy for V8 trucks.

The class-exclusive eight-speed automatic transmission, standard equipment with 3.6-litre V6 Pentastar (TorqueFlite 8), doubles the amount of gears compared to previously available four-speed automatic transmissions, which improves drivability and enhances fuel efficiency. The new eight-speed also is available with the 5.7-litre HEMI V8 – the Company's first application with a V8 (TorqueFlite 8 with 5.7L V8 is late availability).

Owners will appreciate an innovative rotary e-shift dial for trucks equipped with the new TorqueFlite 8speed transmission that replaces both column and floor shifters. The exclusive rotary e-shift dial enables intuitive operation with a direct and confident feel, even with gloves on. The convenient, dashmounted, easy-to-understand and operate system provides total control of the sophisticated eightspeed transmission and is Ram Truck's innovative approach to electronic shifters, already used in Class 6-8 trucks. This new design allows quick blind-shift transitions from "Reverse" to "Drive" when towing or navigating out of mud, snow or busy parking lots and crowded worksites. The new rotary eshift dial also yields space for more functional and usable storage in the console.



Another segment exclusive with the eight-speed transmission is a new thermal management system that is designed to quickly raise engine and transmission fluid temperatures. By raising fluid temperatures, parasitic losses resulting from high-viscosity transmission fluid can be reduced, improving fuel efficiency by 1.7 per cent. As the engine temperature increases to pre-determined levels, warm engine coolant is circulated through a thermal exchange unit, which also contains dedicated pathways for transmission fluid. As the thermal exchange unit heats up, it also heats up the transmission fluid. This action dramatically reduces warm up time for the transmission, improving fuel economy, drivability and shift quality. In most powertrain configurations, the transmission heats up independently of the engine, delaying warm-up time and reducing efficiency.

Adding to industry firsts in a pickup truck is the application of stop-start, another fuel saving feature available on select 2013 Ram 1500 models. This new system improves fuel economy by up to 3.3 per cent, an increase of about 3.78 L/100 km to the truck's city drive cycle.

Stop-start increases fuel efficiency by shutting the engine off when the truck comes to a complete stop. Amenities (radio, gauges, heating or air conditioning, etc.) continue to operate, making the operation transparent to the driver. The engine restarts automatically when the driver releases the brake, allowing seamless acceleration.

Enabling components have been upgraded for heavy-duty operation on models equipped with the stopstart feature.

# Engineering

Although the new 2013 Ram 1500 boasts numerous segment-exclusive features, most aren't readily visible, but work together to deliver best-in-class fuel efficiency and exceptional ride and handling.

#### Aerodynamics

The new 2013 Ram 1500 continues to maintain its ruggedly handsome appearance with new exterior design elements. Extensive wind-tunnel testing honed the 2013 Ram 1500 exterior shape, resulting in continued best-in-class aerodynamics. Also, the cooperative application of active aerodynamics and modern styling led to a six per cent aerodynamic improvement on the new truck. The 2013 Ram 1500 Regular Cab 4x2 coefficient of drag (Cd) is .363 – compared with a (Cd) of .386 for a 2012 Ram 1500 Regular Cab 4x2.

#### Air Suspension

The 2013 Ram 1500 is now available with an all-new air suspension system featuring five height settings for optimum ride and aerodynamic performance. The feature automatically changes vehicle height at speed, and is manually controlled via console or key fob controls:



**Normal Ride Height (NRH):** 220.9 millimetres (mm) (8.7 inches) of clearance (measured from the base of the door sill) is the default, load-leveled ride height

**Aero Mode:** Lowers the vehicle 15.24 mm (.6 inches) from NRH. Aero Mode improves fuel efficiency by up to one per cent and is activated by vehicle speed, adjusting for optimal performance and fuel economy

Off-road 1: Lifts the truck 30.4 mm (1.2 inches) from NRH for added height in clearing obstacles

**Off-road 2**: Delivers more off-road capability, increasing ground clearance by 50.8 mm (2 inches) over NRH

**Park Mode**: Lowers the vehicle 50.8 mm (2 inches) from NRH for easy ingress/egress and cargo loading

The new air suspension system adds up to 101.6 mm (4 inches) of lift span, offering best-in-class stepin height of 533.4 mm (21 inches), best-in-class ground clearance of 271.7 mm (10.7 inches), best-inclass departure angle of 27.8 degrees, and best-in-class breakover angle of 24.2 degrees supported by four-corner air springs that provide a cushioned and premium ride.

Another benefit to the new air suspension is load-leveling capability, which automatically detects load on the suspension from a trailer or payload. The air pressure increases until the vehicle reaches normal ride height, leveling the truck and improving the loaded ride.

Additionally, a separate button on the key fob gives the operator the ability to manually lower the truck, allowing for ease of passenger entry and reduced tailgate lift-over height.

# **Electric Power Steering**

The 2013 Ram 1500 features electric power steering (EPS). By using an electric motor to power the truck's rack and pinion steering system, the engine is relieved from the task of constantly turning a hydraulic pump, improving fuel efficiency up to 1.8 per cent and adding five horsepower. Also, the introduction of EPS reduces complexity by removing the previous hydraulic pump, high-pressure hydraulic hoses and cooling apparatus.

#### Weight Reduction

Weight reduction is an important variable in the fuel economy equation. Reducing the weight of components improves fuel economy and allows for more content without affecting payload or towing capability.



A newly redesigned frame benefits from a weight reduction of up to 13.6 kilograms (30 pounds) by using advanced high-strength steels. Also benefitting from advanced metal, new box floor crossmembers in the bed eliminates 3.2 kilograms (7 pounds) and a new front bumper design removes 1.8 kilograms (4 pounds). Additionally, aluminum upper and lower control arms in the front suspension contribute to additional weight reduction and handling. The Ram 1500 also features an aluminum hood saving an additional 11.8 kilograms (26 pounds).

Underneath the hood, the combination of the new Pentastar VVT V6 and new TorqueFlite 8 transmission reduces the weight by approximately 34.5 kilograms (76 pounds). The V8 and TorqueFlite 8 together reduce weight by more than 13.6 kilograms (30 pounds).

The weight reductions not only allow for more convenience, comfort and entertainment features but also best-in-class fuel saving technology such as thermal management, stop-start and active aerodynamics.

## **Pulse-width Modulation**

Pulse-width modulation (PWM) is a new fuel-saving technology for the Ram 1500, which reduces parasitic electrical load. The technology not only eliminates unnecessary load on the alternator but also improves the durability of benefitting systems. Fuel delivery and the forward cooling fan are two systems that take advantage of PWM, adding a 0.4 per cent improvement in fuel efficiency.

#### Low rolling-resistance Tires

The 2013 Ram 1500 features standard low rolling-resistance tires to minimize wasted energy and decrease required rolling effort. Tread patterns, advanced materials and millions of kilometres of testing result in greater fuel efficiency.

#### Chassis

The 2013 Ram 1500 uses a newly designed frame with improved, low torsion (stiffness) attributes that increase stability and handling precision while decreasing noise, vibration and harshness (NVH) up to 30 per cent, depending on drive cycle. Front rails feature 20 per cent increased yield strength from the use of high-strength steel. Among other features, the new frame design incorporates a new powertrain, new air suspension and new body-mounting technology.

Portions of the frame are hydroformed for dimensional accuracy (hydroforming reduces the amount of welding that leads to distortion), and side rails are fully boxed. The front frame section incorporates advanced, high-strength steel that maintains overall strength and durability while saving approximately



13.6 kilograms (30 pounds). To further improve NVH, new larger body mounts are located on the front frame rails and at the C-pillar.

New standard front independent suspension combines new aluminum upper control arms and retuned geometry with coil springs for improved responsiveness and handling. New, more robust ball joints on the front suspension yield greater durability and are engineered with improved sealing methods.

#### Design

The new 2013 Ram 1500 retains its ruggedly handsome appearance with all-new interior and exterior design aesthetics, improved aerodynamics and all-new, segment-leading technology — and every Ram 1500 truck benefits from new content specifically designed to match each model's unique style.

## Exterior

Ram Truck brand designers started with the Ram grille making it not only larger – with the same overall width, but approximately 25 millimetres (one inch) taller – saddled within the new upper fascia panel for a more integrated appearance. The classic Ram crosshair horizontal and vertical grille bars are now flush at the top and bottom of the grille surround.

Four new grille designs are available on the 2013 Ram 1500. ST, SLT and R/T have a new moulded in Black "Hex-Link" design.

The new front bumper design supports the "saddled" Ram grille theme with new vertically oriented fog lamps for improved light spread, distance and more lumens. Larger openings around the front tow hooks (four-wheel drive models) allow for easy access to the hooks.

The 2013 Ram 1500 quad headlamp design has improved light spread, pattern consistency, distance and 30 per cent more lumens. An all-new premium headlamp lighting system is a bi-functional halogen projector design with 15 amber LEDs for park/turn/position lamp and three amber LEDs for the side marker.

For 2013, the Ram 1500 offers 12 different colours, including five new shades. Black Gold Pearl Coat, Copperhead Pearl Coat, Maximum Steel Metallic, Prairie Pearl Coat and Western Brown are available in a monotone and/or two-tone depending on the model.

The new, polished stainless steel running boards have a sturdy-looking box cross-section design. Also, the new wheel-to-wheel running board design offers aerodynamic improvements over the current version and provides customers with improved access to the forward portion of the truck bed.



A new 6-ft.-4-in. bed option is now available on Crew Cab models giving customers the ability to combine Ram 1500's largest available cab with a larger bed. All-new premium tail lamps are standard and consist of 15 red LEDs with three red LEDs for the side marker.

#### Interior

For 2013, new features and technologies create opportunity for a redesigned interior with material upgrades; improved fit and finish; all-new interior themes with different colours and materials; all-new HVAC controls and new multimedia systems. The 2013 Ram 1500 also features an exclusive eight-speed transmission with a new rotary E-Shift dial design.

Rear occupants can enjoy the same quality, fit and finish as the driver. With points-of-contact a priority, new premium materials, colours and designs are now found on all four doors. Soft-touch materials enhance armrests and upper bolsters with expanded use of premium surfaces.

The 2013 Ram 1500 features the new 8.4-inch Uconnect Touch system with background screens tailormade to specific Ram models and themes. To make room for the new big screen, the centre stack is upgraded with matching materials found throughout the interior. To complement the range of Ram 1500 models, the interior design team created new, individualized themes with different colours and materials. For the Laramie Longhorn, the Ram design team sought out a very rare Walnut veneer with a unique burl that was unintentionally created by ranchers using existing trees as fence posts for barbed wire. Eventually, the trees grew over the rusting metal wire, creating a swirl colouring pattern and tone that is not found anywhere else.

The all-new HVAC controls take lessons learned from other Chrysler Group Uconnect applications and feature simple, improved function, meeting the highest Human Machine Interface (HMI) standards. The HVAC system includes a redundant architecture allowing the operator to use either the 8.4-inch touchscreen or manual controls to alter the truck's environment. Below the upgraded HVAC arrangement is a new switch bank with relocated, easy-to-use controls for a number of features depending on vehicle models and options. All buttons in the comfort bank also are redundant on the Uconnect system. Contiguous to the switch bank is a prominently placed, adjustable integrated trailer brake control allowing the driver to add or reduce trailer brake function on the fly.

The Ram 1500's new, exclusive eight-speed transmission created the need for an innovative rotary E-Shift dial in the cockpit to replace the centre console gate shifter – a first for pickups. The new shifter works in a multitude of seating configurations and will replace floor and column shifters for use in the eight-speed transmission. Realizing this is a dramatic change in the way trucks have historically shifted gears, the interior design team accepted the challenge with a new shift knob, naturally and prominently placed to the driver's right, at the lower left-hand side of the centre stack, in place of the previous



transfer case shift knob. The rotary dial enables intuitive blind-shift transactions between "Drive" and "Reverse" with a direct and confident feel. The transfer case retains full capability with push buttons located directly under the e-shift dial.

New technology also moves to the gauge cluster. Previously only available on premium models, the 3.5-inch vehicle information screen is now standard on ST and SLT and displays vehicle operating functions. The new thin film transistor (TFT), 7-inch screen is now available on SLT, standard on Sport, Laramie and Laramie Longhorn models. The 7-inch screen features fully customizable function and configurability. Similar to the 8.4-inch Uconnect screen, select 7-inch cluster background screens are tailor-made to specific Ram models, with designs that match the truck's theme.

#### Uconnect

The Ram 1500's new Uconnect system features smart and user-friendly functionality, integrating new entertainment content to its customers. Ram customers also will have access to SiriusXM<sup>™</sup> Satellite Radio, hands-free mobile phone operation, hands-free navigation, hands-free texting with compatible phones and hands-free control of music. Uconnect is designed to provide drivers and passengers with relevant, focused and contextual information that is not distracting, but it's easy to use, allowing drivers to remain focused on the road.

Also enhancing driver convenience, Uconnect features one-step voice command of navigation, and the ability to listen and respond to text messages, combined with familiar knobs for climate and comfort controls.

# A Variety of Ways to Control Your Content

Uconnect controls are placed on the steering wheel. Customer research has shown a preference towards audio controls located at the rear of the steering wheel and Ram was the first truck manufacturer to integrate these rocker switches for ease of use. Audio system controls, including next station, radio preset and previous station or track, are located on the left. Volume up or down and change audio source are located on the right. This means Ram truck drivers can keep their hands on the wheel while they enjoy a variety of entertainment content sources.

# Media Console Offers a Variety of Options

Neatly integrated within the upper storage tier of the centre console, a new multimedia input includes USB, SD card and auxiliary connections. The USB allows control of iPod or other media device through the large touchscreen displays and steering-wheel-mounted audio controls. A more powerful 2.5 amp, USB port and 12-volt outlet also provide mobile recharging for electronic devices. In addition, MP3 and WMA audio files on a USB memory device may also be played and controlled via the Uconnect system.



#### **New 7-inch Vehicle Information Centre**

Filling the gauge cluster in front of the driver is an available 7-inch, colour, premium vehicle information screen, featuring a new customizable function that enables Ram 1500 customers to personalize information inside the instrument cluster. Similar to the premium Uconnect Systems, select 7-inch instrument cluster background screens are branded with a Ram theme. Ram's new information display is designed to visually communicate information, using graphics and text, quickly and easily.

The multiview display offers drivers a wide range of customization options, from a basic digital speed read out to specific vehicle status information. Operation of the display is clearly communicated to users with easy-to-understand icons and instructions. Using buttons on the steering wheel, drivers can customize the screen with as much or as little information as they desire. The system is intuitive and can be arranged for a variety of views. Up to three analog vehicle status gauges can be added to the display. The main screens found inside the instrument cluster menu are: digital speed, fuel economy, trip A information, trip B information, trailer-tow information, audio, stored messages and screen customization. Additionally, the four corners of the display can be customized to show information at a glance, including current fuel economy, outside temperature, time and compass direction.

## **All-new Powernet Electrical Architecture**

As the Ram 1500 continues to offer more feature content, it created the need for a technology that allows more information to be electronically communicated within the truck. The new Powernet system, used for the first time on a Ram 1500, allows both high- and low-speed data networks to be equipped with as many as 40 individual modules, all designed to improve vehicle performance and enhance the comfort and safety of driver and passengers. Within the Powernet high-speed network, each module (e.g., electronic stability control) processes its individual data and transmits the appropriate commands within the vehicle to activate any additional systems (e.g. anti-lock brake system and cruise control). Uconnect leverages Powernet to deliver fast response time, and share critical information between the 8.4-inch touchscreen and the7-inch multiview display.

#### Safety and Security

On the safety and security front, the Ram 1500 offers more than 45 active and passive safety and security features, including standard front air bags, front and rear side-curtain air bags and seat-mounted side pelvic-thorax air bags with Enhanced Accident Response System, knee bolsters, seat-belt pretensioners, BeltAlert® System; and available adjustable pedals, ParkSense® rear park assist and ParkView® rear back-up camera. The 2013 Ram 1500 also includes standard electronic stability control (ESC), hosting a number of technologies including all-speed traction control, trailer-sway control, hill-start assist and anti-lock brake system (ABS).



The new 2013 Ram 1500 now features available Keyless Enter 'n Go technology, which allows the doors to be unlocked and the vehicle ignition to be started without having to touch the key fob. Also new for 2013, remote central locking includes the RamBox cargo management system and tailgate power locks, creating a convenient solution for locking down the truck with the push of a button. An available remote start feature allows a driver to start their vehicle from up to 90 metres away. Door controls, illuminated entry, engine immobilizer and panic alert are standard features with the Keyless Enter 'n Go system. Auto rain-sensing wipers and SmartBeam<sup>®</sup> also find their way into the feature availability list, adding to a truckload of content offered in the new 2013 Ram 1500.

## **Additional New Features**

For 2013, Ram 1500 customers can enjoy the convenience of power folding mirrors and a combination power and rear-sliding window with defrost. Already offering consumers best-in-class cargo versatility, also available is a new six-foot-four-inch bed option on the Crew Cab model, allowing for maximum passenger and bed hauling capability.

## Exceptional Powertrain Warranty - 5 years / 100,000-Kilometres

The 2013 Ram 1500 is backed with a 5-year / 100,000-Kilometre Powertrain Limited Warranty. The Powertrain Limited Warranty covers the cost of all parts and labour needed to repair a covered powertrain component – engine, transmission and drive system. Coverage also includes free towing to the nearest Ram dealer, if necessary. The warranty also is transferable allowing customers who sell their truck during the warranty period, to pass the coverage onto the new owner.

The standard 3-year / 60,000-Kilometre Basic Limited Warranty provides bumper-to-bumper coverage for the Ram 1500, from the body to the electrical system.

#### Quality

To ensure durability, the Ram development team is putting the 2013 Ram 1500 to the test – actually thousands of checks and over 9.6 million customer equivalent testing kilometres – to validate its performance and reliability for the long haul.

The 2013 Ram 1500's quality is scrutinized at the company's Chrysler Technology Centre's state-ofthe-art scientific labs in Auburn Hills, Michigan, (U.S.A.) including the Noise/Vibration/Harshness Lab, the Electromagnetic Compatibility Facility, Wind Tunnel and the Road Test Simulator (RTS).

For example, the RTS recreates the abuse a truck endures at the hands of a 95<sup>th</sup> per centile driver – meaning someone who drives the vehicle in more severe conditions than 95 per cent of all customers. The RTS can put a lifetime of wear and tear on a truck in about one month's time. The Ram development team is committed to finding and fixing any issues before the customer does.





#### Manufacturing

The 2013 Ram 1500 is built at the Warren Truck Assembly Plant (Warren, Michigan, U.S.A.), which has built more than 12.5 million trucks since it started operations in 1938. Regular Cab models of the 2013 Ram 1500 are built at the Saltillo Truck Assembly Plant in Saltillo, Mexico.

For more information on Ram trucks, please visit <u>www.ramtruck.ca</u>.

#### About Chrysler Canada Inc.

Founded as the Chrysler Corporation in 1925, Chrysler Canada Inc. is based in Windsor, Ontario, and celebrates its 87th anniversary in 2012. Chrysler Canada's product lineup features some of the world's most recognizable vehicles, including the Dodge Grand Caravan, Jeep<sub>®</sub> Wrangler, Chrysler 300 and Ram trucks.

Chrysler Canada is a wholly owned subsidiary of Chrysler Group LLC, one of the world's leading automotive companies. Chrysler Group LLC, formed in 2009 from a global strategic alliance with Fiat Group, produces Chrysler, Jeep<sub>®</sub>, Dodge, Ram Truck, SRT<sup>®</sup>, FIAT<sup>®</sup> and Mopar<sub>®</sub> vehicles and products. With the resources, technology and worldwide distribution network required to compete on a global scale, the alliance builds on Chrysler's culture of innovation – first established by Walter P. Chrysler in 1925 – and Fiat's complementary technology – from a company whose heritage dates back to 1899. Fiat will contribute world-class technology, platforms and powertrains for small- and medium-sized cars, allowing Chrysler Group to offer an expanded product line including environmentally friendly vehicles.

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