



## The H-Factor™

What is the H-Factor™? It means you can have it all.

Our company believes in pushing the boundaries and challenging conventional thinking. Our very name, "Hyundai", stands for modernity in the Korean language and it is this one word that helps represent everything we stand for. We don't approach vehicle development in a traditional way. Our company is structured differently. We think differently. We find the modern way. It's our mission to offer top quality, feature-rich vehicles at an affordable price.

We offer elite quality through meticulous design and painstaking craftsmanship. Our three design centres in Korea, the U.S. and Europe compete against each other to bring you cutting-edge designs — designs that not only look stunning but are also aerodynamic and fuel efficient.

We are the only global automaker to manufacture our own Advanced High-Strength Steel because, simply put, we just weren't satisfied with what was available.

We test our vehicles in areas like the Arctic, our proving grounds in the Mojave Desert and on Germany's world-famous Nürburgring circuit to deliver the durability and reliability you demand. And not only do we package our vehicles with advanced safety and technology, we back all our vehicles with one of the best automotive warranties in the industry. This means you really can have it all, quality and value together.

That's the H-Factor.™





# Sophisticated beauty, intelligent technology.

The undeniably stylish design of the Sonata is only the beginning. Inside, you'll be impressed by the wealth of features that make your drive better. Standard Apple CarPlay™ and Android Auto™, along with our available BlueLink® connected car system with remote start, seamlessly keep you connected. You'll also feel added peace of mind with a wealth of available Hyundai SmartSense™ safety technologies that actively monitor your surroundings, including standard Blind-Spot Collision Warning and available Forward Collision-Avoidance Assist with pedestrian detection.



## Refined style, with a sporty twist.



## Signature design cues:

The refined styling of the Sonata features our signature hexagonal front grille framed by standard LED daytime running lights and available LED headlights.

## Sport enhanced design cues:

A unique cross-hatched design is available when you opt for the Essential model with available Sport Package or 2.0T Ultimate model. Sportier LED daytime running lights accent along the sides.



Available LED headlights



Available hands-free Smart Trunk



Available LED tail lights



Available 18" alloy wheels.



## Signature design cues:

Dynamic lines of the rear profile feature a unique hidden trunk release button within the Hyundai badge.

## Sport enhanced design cues:

More aggressive design elements include dual exhaust outlets set in a sporty rear diffuser with the Essential model with Sport Package and 2.0T Ultimate model.

## Power and control.

Tested on Germany's Nürburgring racing circuit, the Sonata delivers an ideal balance of handling, performance and ride comfort. At its heart is the standard 2.4L GDI 4-cylinder engine delivering 185 horsepower. If you're seeking greater power, opt for the available twin-scroll Turbocharged 2.0L GDI engine producing 245 horsepower and 260 lb-ft of torque.



Standard 2.4L GDI engine with 6-speed automatic transmission

185 horsepower178 lb-ft torque

Available 2.0L Twin-scroll Turbocharged GDI engine with 8-speed automatic transmission

245 horsepower260 lb-ft torque



## Designed around you.

The Sonata was designed with you in mind, so when it comes to the interior your comfort is paramount. Consider the driver-oriented centre console that is optimally positioned to help you keep your eyes on the road.

The spacious cabin offers ultimate driver comfort with standard heated front seats, available ventilated front seats and an available Integrated Memory System that will memorize seating and side mirror preferences for two drivers. Rear-seat passengers will enjoy the available heated rear seats and sunshade blinds to help block the sun. And everyone can enjoy the view offered by the available panoramic sunroof.



Standard heated front seats and available heated rear seats



Available ventilated front seats



Available panoramic sunroof



Available rear sunshade blinds

## Connectivity at your fingertips.



Apple CarPlay<sup>™∆</sup> and Android Auto<sup>™⋄</sup>

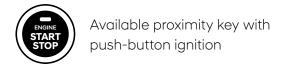
Standard Apple CarPlay™ and Android Auto™ let you interact with your favourite apps safely via the standard 7.0" touch-screen display. Once your compatible smartphone is connected, you can access apps to provide directions, use voice command to send text messages and stream your favourite music from your playlists.



## 8.0" touch-screen with navigation system

The available 8.0" touch-screen navigation system not only helps guide you from point A to point B, but can also be used to search for gas stations, ATMs and restaurants. Enjoy up to two free map updates per year for five years with the Hyundai Map Care system. See dealer for full details.









## Wireless charging pad\*

Located in the centre console, an available wireless charging pad lets you easily charge a compatible smartphone without the use of messy and unsightly cables.



### BlueLink®2

Once set up, our available BlueLink® connected car system conveniently enables you to locate your vehicle, remotely start the engine for advanced warming or cooling, unlock or lock the doors and, in the event of an accident, can automatically call emergency services. Please see your dealer for full service-level details.

## Learn more about Hyundai SmartSense™

The 2019 Sonata offers a suite of available Hyundai SmartSense™ safety technologies to help alert you to, and help even avoid, unexpected dangers on the road.



## Forward Collision-Avoidance Assist with Pedestrian Detection<sup>1</sup>

This safety feature uses a forward camera and radar sensors to detect rapidly closing speeds to the vehicle ahead or a pedestrian in your path. If a potential forward collision is detected, audible and visual warning notifications alert the driver. If the driver does not react to avoid the impact, the system can provide full braking assistance.



Blind-Spot Collision Warning with Lane Change Assist<sup>2</sup>

The standard Blind-Spot Collision Warning system lets you know if a vehicle is in your blind spot. Plus, our innovative system also senses the speed of the vehicle in the adjacent lane. If it's approaching faster than you can safely make the lane change, it will signal an alarm.



**High Beam Assist** 

High Beam Assist provides added convenience when driving at night by detecting oncoming vehicles and automatically switching high beams on and off.



### **Driver Attention Warning<sup>3</sup>**

This safety feature is designed to detect the onset of driver fatigue. The system will monitor driver input and issue a visual and audible alert if fatigue is sensed, suggesting a driving break.



## Lane Departure Warning with Lane Keeping Assist<sup>4</sup>

Drift outside your lane without signaling and this system will alert you with audible and visual cues. If no action is taken, Lane Keeping Assist can apply corrective steering assistance to help you remain within your lane markings.



### Adaptive Cruise Control with traffic stop and go<sup>5</sup>

The Adaptive Cruise Control (ACC) system takes basic cruise control to the next level of convenience. Set your pre-determined speed and distance to the vehicle ahead, and ACC will automatically adjust the vehicle speed to maintain the set distance. The system will even operate in stop-and-go traffic, bringing the vehicle to a complete stop when necessary and then resuming automatically.



## Rear Cross-Traffic Collision Warning<sup>6</sup>

Activated during reverse driving, the standard Rear Cross-Traffic Collision Warning uses radar to help identify and warn the driver of vehicles approaching from the side, even before they come into view of the standard rearview camera.

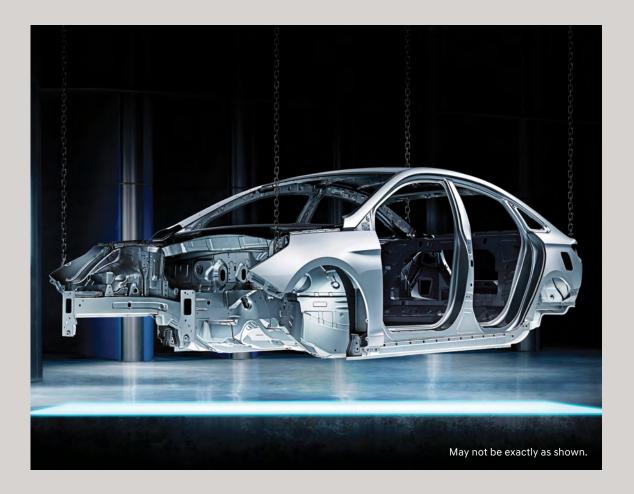


## Parking Distance Warning — Reverse

The Parking Distance Warning system provides added assistance when reversing. Sensors mounted in the rear bumper will provide audible alerts, with increasing frequency, to notify the driver of objects behind them.

## The SUPERSTRUCTURE.

Constructed using Advanced High-Strength Steel forged in our own steel mill, at the core of the Sonata is a SUPERSTRUCTURE™, engineered for exceptional stiffness and rigidity to deliver enhanced driving dynamics and occupant protection. In the event of a collision, the SUPERSTRUCTURE™ helps protect occupants inside the vehicle by absorbing harmful energy and redirecting it away from the passenger compartment.



## Colours and wheels

## **Exterior colours**<sup>1</sup>



Ice White



Phantom Black



Stormy Cloud



Platinum Silver



Coast Blue



Fiery Red



Marina Blue

Available on Essential model with Sport Package and 2.0T Ultimate model only

## Interior colours'



Black cloth
Standard on Essential model



Black cloth/leatherette Standard on Essential model with Sport Package



Black leather
Standard on Preferred and Luxury models



Black leather sport seats with grey piping Standard on 2.0T Ultimate model

## Wheels



16" alloy wheel Standard on Essential model



17" alloy wheel
Standard on Essential model with Sport Package
and Preferred and Luxury models



18" alloy wheel Standard on 2.0T Ultimate model

<sup>\*</sup>Exterior and interior colour options and/or availability by model may change without notice. Choice of interior colour is dependent on model and/or exterior colour selection. Colours shown are for reference only and may vary from the actual hue. Visit hyundaicanada.com or see your dealer for details.

## **Dimensions**

Overall width (excluding side mirrors)



1,865 mm

Overall length



4,855 mm

Overall height



## **Accessories**



### **Accessory Frame**

An accessory frame makes it quick and easy to attach hitch-mounted cargo equipment, such as bikes and ski racks. Frame not intended for towing.



## **Remote Engine Starter**

Leaving the house on winter mornings doesn't have to be an unpleasant experience. Equip your Hyundai with a remote engine starter and get on the road in comfort.



### **Premium All-Weather Floor Liners**

Premium all-weather floor liners were designed to cover the interior carpet providing maximum protection against the elements that other mats cannot offer. Their unique and durable design features a non-slip surface for added comfort and a long lasting premium look. Remove carpet mats prior to installation.



### **Multimedia Device Holder**

This multimedia device holder allows your backseat passengers to have in-seat entertainment using a mobile phone or a tablet device. Features 360° rotation to allow use in portrait or landscape layout, hands-free. The included mounting bracket easily fits to the headrest and the device holder is removable when not in use.

## **Model summary**

### **Essential**

#### Standard equipment includes:

- 2.4L GDI 4-cylinder engine
- · 6-speed automatic transmission
- · Drive Mode Select
- 16" aluminum alloy wheels
- · Automatic headlights
- · Body-colour door handles and mirrors
- · Heated, power-adjustable side mirrors
- · LED daytime running lights
- LED integrated side mirror turn signal repeaters
- · Projection headlights
- 7 airbags
- Blind-Spot Collision Warning
- Rear Cross-Traffic Collision Warning
- Remote keyless entry system with alarm
- · Temporary spare tire
- Vehicle Stability Management, Electronic Stability Control, Traction Control System, Anti-lock Braking System
- 3.5" instrument cluster display
- · 6-way manually adjustable passenger's seat
- 7.0" touch-screen display
- 60/40 split-fold rear seatbacks
- · AM/FM/MP3 audio system with 6 speakers
- Android Auto<sup>™</sup> and Apple CarPlay<sup>™</sup>
- · Bluetooth® hands-free phone system
- · Cloth seating surfaces
- · Cruise control
- · Heated front seats
- · Leather-wrapped steering wheel and gear shift knob

- · Manual temperature control with air conditioning
- Power windows with driver and front passenger auto-up/down
- Rearview camera with dynamic guidelines
- Second-row USB port
- Solar control glass
- Steering wheel-mounted audio and telephone controls
- · Tilt-and-telescopic steering wheel
- · USB/auxiliary connectivity

#### **Optional Sport Package:**

- Sport-tuned suspension
- 17" aluminum alloy wheels
- · Dark chrome cross-hatched grille
- · Dark chrome exterior accents and door handles
- · Dual exhaust outlets
- · LED tail lights
- Sport unique front and rear fascia
- 8-way power-adjustable driver's seat with lumbar support
- Aluminum pedals
- D-cut sport steering wheel with paddle shifters
- · Power sunroof
- Proximity keyless entry with push-button ignition
- Sport seats with cloth seating surfaces and leatherette bolsters
- Sport-type "Supervision" instrument cluster with 4.2" TFT LCD display

### Luxury

### Includes Preferred standard equipment plus:

- · Electronic Parking Brake with Auto Hold
- LED headlights with Adaptive Cornerning System
- LED tail lights
- Adaptive Cruise Control with traffic stop and go
- Driver Attention Warning
- Forward Collision-Avoidance Assist with Pedestrian Detection
- · High Beam Assist
- Lane Departure Warning with Lane Keeping Assist
- Parking Distance Warning Reverse
- 6-way power-adjustable front passenger seat
- 8.0" touch-screen navigation system (includes Map Care: two updates per year for five years, free of charge — see dealer for details)

- Deluxe door scuff plates (aluminum)
- Driver's Integrated Memory System for seat and side mirror positions
- Electrochromic auto-dimming rearview mirror with integrated HomeLink® transceiver and compass
- Infinity® audio system with 9 speakers and external amplifier (400 watts)
- Manual rear sunshade blinds
- · Panoramic sunroof
- Rear seat HVAC ducts (mounted in centre console)
- "Supervision" instrument cluster with 4.2" TFT LCD display
- · Ventilated front seats
- · Wireless charging pad

### Ultimate

### Includes Luxury standard equipment plus:

- 2.0L Twin-scroll turbocharged GDI 4-cylinder engine
- · 8-speed automatic transmission
- Sport-tuned suspension
- 18" aluminum alloy wheels
- Dark chrome cross-hatched grille
- Dark chrome exterior accents and door handles
- · Dual exhaust outlets
- Michelin all-season tires
- Sport-type "Supervision" instrument cluster with 4.2" TFT LCD display
- D-cut sport steering wheel with paddle shifters
- · Sport seats with leather seating surfaces, embossed "Turbo" logo and grey contrast piping

## Preferred

### Includes Essential standard equipment plus:

- 17" aluminum alloy wheels
- · Bright chrome door handles
- · Power sunroof
- Proximity-activated hands-free trunk opening
- 8-way power-adjustable driver's seat with lumbar
  support
- AM/FM/SiriusXM™/MP3 audio system with 6 speakers
- · BlueLink® connected car system
- Bluetooth® hands-free phone system with voice recognition

- · Dual-zone automatic temperature control
- · Heated rear seats
- · Heated steering wheel
- · Leather seating surfaces
- LED interior lighting
- Proximity keyless entry with push-button ignition
- Stitched artificial leather door trim inserts

<b>Specifications</b>	
Performance	

Essential	Preferred	Luxury	2.0T Ultimate
-----------	-----------	--------	------------------

<del>-</del>	ш	Δ		0,□
Performance				
Engine				
2.4L 4-cylinder Gasoline Direct Injection (GDI) engine (185 horsepower, 178 lb-ft torque)	•	•	•	-
2.0L Twin-scroll Turbocharged 4-cylinder GDI engine (245 horsepower, 260 lb-ft torque)	-	-	-	•
Transmission				
6-speed automatic with SHIFTRONIC® manual mode	•	•	•	-
8-speed automatic with SHIFTRONIC® manual mode	-	-	-	•
Other				
Drive Mode Select (controlling steering, engine and transmission response)	•	•	•	•
Column-mounted Motor Driven Power Steering	•	•	•	-
Sport suspension calibration	0	-	-	•
Rack-mounted Motor Driven Power Steering with dual-pinion steering rack	-	-	-	•
Exterior				
Wheels				
Temporary spare tire	•	•	•	•
16" x 6.5J aluminum alloy wheels	•	-	-	-
17" x 7.0J aluminum alloy wheels	0	•	•	-
18" x 7.5J aluminum alloy wheels	-	-	-	•
Exterior lighting				
Automatic headlights	•	•	•	•
LED daytime running lights	•	•	•	•
LED integrated side mirror turn signal repeaters	•	•	•	•
LED tail lights	0	-	•	•
LED headlights with Adaptive Cornering System	-	-	•	•
Outside mirrors				
Power-adjustable, heated	•	•	•	•
Exterior trim				
Chrome door handles	0	•	•	•
SiriusXM™ sharkfin antenna	-	•	•	•
Dark chrome cross-hatched grille	0	-	-	•
Deluxe extended rocker panels with dark chrome inserts	0	-	-	•
Dual exhaust outlets and rear diffuser	0	-	-	•
Glass	•			
Solar control glass Power tilt-and-slide sunroof	0		_	Ť
Panoramic sunroof			-	-
			•	Ė
Interior				
Seating				
60/40 split-fold rear seatbacks	•	•	•	•
Heated front seats	•	•	•	•
6-way manually adjustable front passenger's seat, including height adjustment	•	•	-	-
6-way manually adjustable driver's seat, including height adjustment	•	-	-	-
Cloth seating surfaces	•	-	-	-
8-way power-adjustable driver's seat with lumbar support	0	•	•	•
Sport seats with cloth seating surfaces and leatherette bolsters	0	-	-	-
Heated rear seats	-	•	•	•
Leather seating surfaces	-	•	•	-
6-way power-adjustable front passenger seat	-	-	•	•
Driver's Integrated Memory System for seat and side mirror positions	_	-	•	•
Ventilated front seats	-	-	•	•
Sport seats with leather seating surfaces and embossed "Turbo" logo	-	-	-	•

• Standard • Optional - Not Available	Essential	Preferred	Luxury	2.0T Ultimate
Multimedia				
Android Auto™ and Apple CarPlay™	•	•	•	•
Rearview camera with dynamic guidelines	•	•	•	•
USB/auxiliary connectivity (mounted in centre console)	•	•	•	•
7.0" touch-screen display	•	•	-	
AM/FM/MP3 audio system with 6 speakers Bluetooth® hands-free phone system	•		_	
AM/FM/SiriusXM™/MP3 audio system with 6 speakers	_	•	_	_
BlueLink® connected car system	-	•	•	•
Bluetooth® hands-free phone system with voice recognition	-	•	•	•
8.0" high-resolution touch-screen with navigation system	-	-	•	•
Infinity® AM/FM/SiriusXM™/MP3 audio system with 9 speakers and external amplifier (400 watts)	-	-	•	•
Wireless charging pad*	-	-	•	•
Interior trim				
Aluminum pedals	0	-	-	•
Stitched artificial leather door trim inserts	-	•	•	•
HVAC				
Manual temperature control with air conditioning	•	-	-	-
Dual-zone automatic temperature control	_	•	•	•
Rear seat HVAC ducts (mounted in centre console)  Steering wheel	_	_	•	•
Audio (Volume, Mode, Seek) and Bluetooth® hands-free telephone controls				•
Leather-wrapped steering wheel	•	•	•	•
Manual tilt-and-telescopic steering column adjustment	•	•	•	•
Heated steering wheel	-	•	•	•
D-cut sport steering wheel with paddle shifters	0	-	-	•
Instrumentation				
"Supervision" instrument cluster with 4.2" TFT LCD display	-	-	•	-
Sport-type "Supervision" instrument cluster with 4.2" TFT LCD display	0	-	-	•
Convenience features				
Power door locks and power windows with driver/front passenger auto-up/down	•	•	•	•
and pinch protection				
Cruise control	•	•	-	-
Proximity keyless entry with push-button ignition	0	•	•	•
Proximity-activated hands-free trunk opening	_	•	•	•
Remote engine start (via BlueLink® smartphone app)  Adaptive Cruise Control with traffic stop and go	_			•
Electrochromic auto-dimming rearview mirror with integrated HomeLink® transceiver				
and compass	-	-	•	•
Electronic Parking Brake with Auto Hold	-	_	•	•
Manual rear sunshade blinds	-	_	•	•
Safety				
Airbags (7) — driver's knee (1), front impact (2), front seat-mounted side impact (2),	•	•	•	•
front/rear side impact curtains (2)	•	•	•	-
Anti-lock Braking System with Electronic Brake-force Distribution and Brake Assist  Blind Spot-Collision Warning with Lane Change Assist	•	•	•	•
Electronic Stability Control with Traction Control System	•	•	•	•
Vehicle Stability Management	•	•	•	•
Rear Cross-Traffic Collision Warning	•	•	•	•
Driver Attention Warning	-	-	•	•
Forward Collision-Avoidance Assist with Pedestrian Detection	-	-	•	•
Lane Departure Warning with Lane Keeping Assist	-	-	•	•
Parking Distance Warning — Reverse	-	-	•	•
Fuel economy (litres/100km) <sup>^</sup>				
	0	.2 / 6	8/9	1
2.4L with 16" alloy wheels – City / Highway / Combined 2.4L with 17" alloy wheels – City / Highway / Combined		.2 / 0		
2.0L with 18" alloy wheels – City / Highway / Combined		0.4/7		





## One of the best-backed warranties in Canada.

You will see that a number of our vehicles have received multiple awards from the most reputable third-party organizations, so you can take their word when it comes to the quality of our vehicles. This quality is equally matched by the quality of our warranty. We stand confidently behind our products to give you ultimate peace of mind with a 5-year/100,000 kilometre Comprehensive Limited Warranty<sup>†</sup>. We also provide a 5-year/Unlimited kilometre Roadside Assistance Program<sup>11</sup> featuring flat tire changing, lockout service and more. Just one toll-free call away, 24 hours a day.



hyundaicanada.com/customercare

Hyundai Auto Canada Corp. hyundaicanada.com









TM/®The Hyundai name, logos, product names, feature names, images and slogans are trademarks owned or licensed by Hyundai Auto Canada Corp.. Specifications, features, illustrations, accessories, materials and equipment and all other information shown in this brochure are based on the latest information available at the time of publication. Although descriptions are believed to be correct, accuracy cannot be guaranteed. Hyundai Auto Canada Corp. reserves the right to make any changes or modifications at any time, without notice or obligation, including, without limitation, in colour, specifications, features, accessories, materials, equipment and models. Some vehicles are shown with optional equipment. All Hyundai warranties have no deductible. 'Hyundai's Comprehensive Limited Warranty coverage covers most vehicle components against defects in workmanship under normal use and maintenance conditions. \*Hyundai's 24-Hour Roadside Assistance Program is a limited service and does not cover certain costs or expenses. Roadside Assistance is not a warranty. ^Fuel economy figures are based on manufacturer's testing and are used for comparison purposes only. Actual fuel efficiency may vary based on driving conditions and the addition of certain vehicle accessories. Apple CarPlay works with iPhone 5s, iPhone 5s, iPhone 5 and later models running the latest version of iOS 7 and above. Apple CarPlay may not be available on all devices and may not be available in all countries or regions. Visit www.apple.com for further details and any applicable limitations. Subject to app compatibility. Apple and Apple CarPlay are trademarks of Apple Inc.. °Android Auto™ is compatible with Android phones running Android Lollipop or newer. Android Auto may not be available on all devices and is not available in all countries or regions. Additional apps may be required. Visit www.android.com for further details and any applicable limitations. Subject to app compatibility, Android and Android Auto are trademarks of Google Inc., Vot all devices will be compatible. See Owner's Manual for further details. Available on select models only, BlueLink® includes 5 vears of service without charge. The BlueLink® service is available for new vehicle purchases and leases subject to the BlueLink® subscription terms and conditions. Only use BlueLink® and corresponding devices when safe to do so. Cellular and GPS coverage is required. Features, specifications and fees may vary by models and are subject to change. For more on details and limitations, visit hyundaicanada.com or your authorized Hyundai dealer, Forward Collision-Avoidance Assist (FCA) is designed to detect vehicles that are directly in front of the vehicle. FCA will not detect all vehicles and objects. FCA may not work on winding or hilly roads, during certain weather conditions such as rain, snow, fog and any other times of limited visibility. FCA initiates full braking at speeds between 8 and 80 km/h (vehicle detection) or 8 to 65 km/h (pedestrian detection). FCA will not detect all pedestrians under certain conditions. See Owner's Manual for detailed descriptions of example conditions in which FCA may not detect a pedestrian. FCA is not a substitute for safe driving. Always check your surroundings when driving. See Owner's Manual for further details and limitations. 2 Never rely completely on Blind-Spot Collision Warning (BCW) and be sure to use proper lane changing procedures. BCW will not detect every object or vehicle and will not prevent accidents. Always look over your shoulder and use your mirrors to confirm clearance. See Owner's Manual for further details and limitations. 3 Driver Attention Warning (DAW) is only a notification system and will not influence the direction or speed of the vehicle. DAW will not prevent accidents. DAW does not replace attentive and safe driving. Always ensure that you pay careful attention while driving. See Owner's Manual for further details and limitations. The Lane Departure Warning with Lane Keeping Assist operates when vehicle speed exceeds 64 km/h and only when the lane markings are clearly visible on the road and detected by the system. It will not prevent loss of control. See Owner's Manual for further details and limitations. SAdaptive Cruise Control (ACC) with traffic stop and go capability is not a collision avoidance or warning device. ACC is for highway use only and should not be used in poor weather, heavy or varying traffic, or on winding or slippery roads. Driver remains responsible to slow or stop the vehicle to avoid a collision. Acceleration after the vehicle comes to a complete stop will only occur when the vehicle has been stopped for less than three seconds. See Owner's Manual for further details and limitations. Never rely exclusively on the Rear Cross-Traffic Collision Warning, Always look over your shoulder and use your mirrors to confirm rear clearance. There are limitations to the function, detection, range and clarity of the system. The system may not detect every vehicle. This system does not detect stationary objects. Vehicle must be in reverse and has to be travelling at 10 km/h or less. See Owner's Manual for further details and limitations. The SiriusXM name is a trademark of SiriusXM Satellite Radio Inc.. Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc.. HomeLink® is a registered trademark of Johnson Controls Inc.. Infinity® is a registered trademark of Harman International, Inc.. All other trademarks and trade names are those of their respective owners