Impreza WRX STi

Intro

Good afternoon, and welcome to the 2004 Subaru Impreza WRX STi product presentation. In just about every major car magazine, the big story this year is Subaru Impreza WRX STi versus Mitsubishi Lancer Evolution – or "Evo." (By the way, Mitsubishi seems to have changed its mind about the name and is now calling it the same as in other markets – Evolution VIII.)

That kind of attention used to go toward cars like Mustang and Camaro. But the market for performance cars has changed, and you are selling one of the new icons. All the media attention helps to charge up the customer base.

As you've already experienced with WRX, these customers really know their cars. So today, we're going to look at Impreza WRX STi in depth and do a little comparison to Lancer Evo. We'll especially be taking a close look at the technical aspects of this car. For many features that we look at, you'll find greater detail in your Sales Consultant's Guide and WRX STi video guide. We also encourage you to read magazine articles on both models so you get an idea about market perception.

One of the most important facts about Impreza WRX STi is that it is not just a reworked WRX modified with add-on performance equipment. WRX STi shares little more than basic vehicle architecture and some interior trim with WRX. Every major mechanical system in WRX STi is unique to this model. That includes the:

300-horsepower intercooled turbocharged boxer engine

6-speed manual transmission

DCCD All-Wheel Drive system

Inverted-strut suspension

Brembo Performance Braking system

BBS wheels

High-Intensity Discharge lowbeam headlights ...

All those features and more are exclusive to WRX STi.

Lancer Evo is the only direct competitor for WRX STi. However, in terms of acceleration, performance, handling and braking, WRX STi can be compared to some of the world's best sports cars, including BMW M3 and Porsche 911 Carrera 4S.

Subaru designed WRX STi as a "no compromise" performance car. That means everything was done to maximize performance. In some cases, you and the customers may notice things you haven't seen or heard in other cars. As we go through the presentation, I'll point out several areas of the car that bear special cautionary notes. It is advisable to point out these things to the customer, but don't look at them as negative features. In the 1960s, some special drag-race edition musclecars came with cautionary notes, and today these add to the legendary nature of those cars.

Let's begin. I'll start with the logo on the front doors – "Subaru Tecnica International." That's the high-performance and motorsports subsidiary of Fuji Heavy Industries Ltd., the Subaru parent company. BMW has M-Power and Mercedes has AMG. The idea with STI is the same – high-performance production cars that apply expertise and technology from racing. WRX STi draws the most direct connection yet to the Subaru World Rally Championship competition car. Both cars were developed at the same time to maximize idea sharing between the rally car and the road car.

Exterior (front)

WRX STi has the look that captivates performance buyers today – and it's all functional. Subaru STI engineers consulted with the Subaru World Rally Team (SWRT) on the front end design to improve air resistance, optimize lift force balance and maximize engine cooling. All Impreza models for 2004 share elements of this bold new design.

Notice the side spoilers integrated into the front bumper and the STI design aerodynamic side ground effects. The engineers designed them to help manage airflow around the car. Customers will just love the look.

The bumpers are designed for 5-MPH impacts. That's a higher standard than the federal requirement of 2.5 MPH and can help to reduce repair costs after a minor collision. Lancer Evo uses 2.5 MPH impact bumpers.

The aluminum-alloy hood is one of the weight-saving measures in WRX STi. The integrated scoop is larger than the one on WRX. It directs outside air to the engine-mounted intercooler, which we'll talk about shortly. A couple of notes on the hood:

When driving, you may notice the hood vibrating due to the lightweight aluminum-alloy material. This is normal and does not affect durability.

The hood can be deformed easily, so it is important not to push down when closing it. Simply release the hood from approx. 10 inches above the closing position and it will close by its own weight.

The four-beam headlights feature High-Intensity Discharge low beams. They're brighter than conventional bulbs and give the car even better night lighting. There's a control knob on the dash to adjust the beam leveling depending on load in the car. Some customers also like the blue-cast appearance that HID lights produce at night. The distinctive STI fog light insert covers add to the no-nonsense look. Fog lights are available as an optional accessory. Daytime Running Lights <u>are not</u> used on the WRX STi.

Exterior (side)

The wide flare front fenders and rear quarter panels and body color power mirrors are the same as the standard WRX. Yet, see how the STI body-color aerodynamics and the dual-plane rear spoiler give WRX STi a noticeably different profile than WRX. Looking between the spokes of the 17-inch lightweight alloy BBS wheels, you can clearly see the calipers and rotors for the Brembo Performance Brake System. BBS and Brembo are top-tier suppliers to some of the world's best performance and racecars. Impreza WRX STi is offered as a single model, but with a choice of wheel color specified by the vehicle option code: DG for Gold painted wheels, HG for Silver painted wheels.

The tires are 225/45R17 Bridgestone Potenza RE070 directional performance summer tires. It's important to remind customers that these tires were optimized for handling performance. There are a couple of cautionary notes:

These are "summer" tires. Even with All-Wheel Drive, Subaru recommends installing winter tires for driving in snow.

These tires were designed with optimal grip as a priority, and tread wear will occur more quickly than with all-season tires.

The dual-plane rear spoiler looks right off the Subaru World Rally Car. It helps to reduce lift and improve stability at track speeds. And of course it fits right in with current street design trends. There are a few cautionary notes on the spoiler.

You may notice the fin of the rear spoiler vibrating while driving. This is normal and does not affect durability.

Some automatic car-wash machines can damage the large rear spoiler and/or the body. Customers should follow the instructions of the car-wash.

If pushing the car, do not push the top end of the rear spoiler or it could be damaged.

Also in the rear, WRX STi shares the revised taillight design with Impreza WRX and 2.5 RS. It's more distinctive than before, and the overall look is smoother in the rear.

Finally, WRX STi is distinguished by a large, single-outlet tailpipe with STi logo.

Engine

The engine is the heart of any great performance car. The WRX STi is powered by an intercooled and turbocharged 2.5-liter double overhead cam 4-cylinder boxer engine. It produces 300 horsepower at 6,000 RPM and 300 lb.-ft. of peak torque at 4,000 RPM. The 4.6-liter V8 in Mustang GT produces 260 horsepower and 302 lb.-ft. of torque – times have really changed.

Some customers may know that in other markets, WRX STi uses a 2.0-liter engine. Only the U.S. market version gets the larger 2.5-liter engine. The reason is that American driving enthusiasts generally prefer greater torque, especially at lower engine speeds. The extra displacement accomplishes that goal.

WRX STi has a clear edge over Lancer Evo, which uses a 2.0-liter in-line 4-cylinder engine that produces 271 horsepower at 6,500 RPM and 273 lb.-ft. of torque at 3,500 RPM. Both the WRX STi and Lancer Evo weigh 3,263 lbs. Of course, the Subaru engine is a horizontally opposed boxer design. It comes with the same advantages as other Subaru boxer engines – light weight, low vibration and compact packaging. Because a boxer engine carries the majority of its mass down low, that contributes to a lower center of gravity in the car, which enhances steering response and overall handling.

Specially Designed Engine

It's important to know that the WRX STi engine is not simply the engine used in Impreza 2.5 RS and other Subaru models with a turbocharger and intercooler installed. The WRX STi engine has been specifically designed to allow high-performance driving while providing traditional Subaru durability. The engine is a special performance version throughout, with reinforced parts and new technology.

It starts with a specially reinforced semi-closed deck engine block. "Semi-closed deck" means it's a stiffer block design that's able to withstand higher internal pressures. The non-turbo 2.5 engine is an open deck design, and so is the standard WRX 2.0-liter intercooled turbo engine. WRX STi internal engine parts have been designed for higher performance levels, too – including aluminum-alloy pistons and forged high-carbon steel connecting rods.

Active Valve Control System (AVCS)

The cylinder heads use a double overhead-camshaft configuration with four valves per cylinder. This engine utilizes Subaru Active Valve Control System – or AVCS. It's a variable valve timing technology that optimizes performance at all speeds. Lancer Evo does not have a variable valve timing system.

AVCS continually changes the position of the intake camshaft to alter valve timing for maximum performance throughout the RPM range. You can think of AVCS this way: Car enthusiasts who modify their cars' engines will often swap the camshafts to versions that change an engine's power characteristics – producing more low-end torque or more high-end power, for example. It's usually one or the other. AVCS is like having a technician constantly change camshafts while you drive, optimizing power depending on the driving situation.

The valves themselves use a trick also found on racecars – sodium cooled valve stems. Solid sodium in the valve stems melt at high engine temperatures, and, as a liquid, it conducts heat away from the valves.

Because AVCS helps to enhance torque at lower engine speeds, Subaru engineers were able to use a turbocharger that's optimized for high-end power. The high-boost turbocharger in the WRX STi 2.5-liter engine produces a maximum of 14.5 PSI of boost, compared to 13.5 PSI in the WRX 2.0-liter engine.

The turbocharger in Lancer Evo produces 19 PSI of maximum boost. That's more than WRX STi and higher than a Porsche 911 Turbo, too. Why is that? Mainly, Evo uses a cast-iron engine block, which can handle higher boost. However, cast iron adds extra weight to the front of the vehicle as compared to the aluminum-alloy block in WRX STi. Both vehicles weigh the same, but the Evo carries a bit more of its weight over the front wheels. Don't let your customers fixate

on turbo boost. Remember, the WRX STi engine has greater displacement, the advantage of variable valve timing and ultimately produces more horsepower and torque than Evo.

Large-Type Intercooler

Let's go back to the hood scoop. It looks like something from the musclecar era. On WRX STi, the scoop directs outside air to the intercooler that's mounted on top of the engine. An intercooler helps to make the turbo operate more efficiently. Here's how: A turbocharger increases performance by compressing intake air. In effect, it forces more air into the engine, which allows the engine to produce more power. However, compressing air also heats it, and heated intake air is thinner with less oxygen, reducing the power potential. As the compressed intake air goes through the intercooler, it releases its excess heat, becoming denser with more oxygen and enters the engine at a lower temperature, increasing power.

The intercooler in the WRX STi is larger than the one used in the WRX and can cool a greater volume of intake air. See your Sales Consultant's <u>G</u>uide for intercooler dimensions and a comparison to WRX. The intercooler features a manually operated water spray system to provide additional cooling. Under high-performance driving conditions, the driver can press a dash-mounted button to send water spray in two-second bursts over the intercooler. Placing the water reservoir in the trunk to keeps it away from engine compartment heat and also helps to enhance weight distribution. Evo has a similar feature but also with an automatic mode. Evo's water tank is under the hood where high engine temperatures heat the water in the tank.

Electronic Throttle Control System (ETC)

Another important detail in the 2.5-liter intercooled turbocharged engine is the Electronic Throttle Control system (ETC). Instead of a mechanical cable linkage connecting the accelerator pedal to the fuel injection throttle body, it's connected to a sensor that sends a signal to the Engine Control Module telling it how much to open the throttle plate. It's sophisticated, yet with fewer moving parts than a conventional throttle system. ETC provides more precise throttle control and improved fuel economy.

Even the sparkplugs in the WRX STi engine are special – they're iridium-tipped to ensure consistent spark under high temperatures. For best performance in WRX STi, Subaru recommends using super-premium gasoline with a minimum octane rating of 93. An octane rating

of 91 is acceptable. The 2004 Impreza WRX STi is certified as a Low Emission Vehicle (LEV).

Drivetrain

Exclusive 6-Speed Transmission

Like most of the world's best performance cars, WRX STi features a 6-speed manual transmission. In contrast, the Lancer Evo uses a 5-speed manual transmission in the U.S. market but a 6-speed in other markets ... so American customers don't get the "full" Evo. Neither WRX STi or Evo offers an automatic transmission. We don't think an automatic matches the car's character, and given the low sales volume, we don't expect that to hurt sales.

A 6-speed allows the driver to extract the most performance from the engine. Generally speaking, the more gears, the easier it is to keep the engine in the "sweet spot" of its power band. If you ride a mountain bike or road bike, you know that with more gears available, you can more easily manage your own power according to conditions and the performance you want.

In WRX STi, 5th and 6th are "overdrive" gears, useful for achieving optimal fuel efficiency during highway cruising. That still leaves four gears for maximum acceleration.

A short-throw shifter provides quick, precise shifts. There's a reverse-lockout feature for safety. The driver must pull up a ring on the shift lever before reverse can be engaged – and you should only pull up this ring when shifting into reverse.

The transmission has been designed to handle high-torque capacity, and it has its own oil pump and an oil cooler for durability. The WRX STi clutch is larger than the one in the WRX, with higher clamping force.

If you've ever driven a manual-transmission performance car hard, you know that the clutch can sometimes "shudder" when it gets hot from repeated usage. It can make fast takeoffs a bit sloppy, sometimes with sudden, jerky engagement. WRX STi addresses this issue with a temperature-compensating hydraulic damper. Clutch operation should remain smooth even after repeated usage.

Driver Controlled Center Differential (DCCD) All-Wheel Drive

Now, let's talk about how WRX STi gets all that power to the road. If you've driven a high-power Front- or Rear-Wheel Drive vehicle, you know how power can be wasted through wheelspin. Some manufacturers try to compensate by using traction control. That's just not acceptable to Subaru. Naturally, WRX STi had to be All-Wheel Drive – it's in the Subaru DNA.

We've equipped WRX STi with our most performance-directed Full-Time All-Wheel Drive system. It's called Driver-Controlled Center Differential All-Wheel Drive (DCCD). It's more sophisticated than the All-Wheel Drive system used in Lancer Evo – or Porsche Carrera 4S for that matter. Evo uses an All-Wheel Drive system that is similar to the Continuous All-Wheel Drive system featured in the standard WRX and other Subaru models with the 5-speed manual transmission.

With DCCD, a planetary center differential splits engine torque 65 percent to the rear wheels and 35 percent to the front wheels under normal driving conditions. Sending more power to the rear wheels helps to increase handling agility and provide more of a performance-driving feel.

The system features Automatic and Manual modes. In Automatic mode, DCCD actively responds to the driver's inputs. An electronically controlled multi-plate transfer clutch continually sets the ideal torque distribution depending on acceleration, deceleration, cornering force and wheel slippage. And that's the real beauty of this system.

So why the name, "Driver Control?" It goes back to a system used on earlier models in Japan which offered only manual-mode control of the center differential to adjust torque distribution.

In WRX STi, the driver can select Manual mode to adjust the car to various conditions, including weather, pavement surface or even just the driver's personal style. Using a thumbwheel on the center console, you can select from among six levels of center differential locking. From a 35-to-65 front to rear split, you can adjust all the way to 50/50. But bear in mind that maximum locking would only be desirable on a slippery surface.

Even race drivers who have tested WRX STi have pointed out that Automatic mode provides the best all-around performance. So why offer Manual mode at all? We believe there will be some

enthusiasts who are experienced enough to use this feature under specific conditions, and they can only get this feature in the WRX STi. There are cautionary notes for DCCD Manual mode:

When DCCD is in manual mode and the manual control dial is set close to or at the "lock" position, turning the car tightly and slowly -- such as in a parking lot -- may cause powertrain noise or vibration due to a condition called "torque binding." This is normal.

If the oil temperature of the rear differential gears exceeds a certain level, DCCD will temporarily cancel the manually selected locking level and default to the 35-to-65 normal system torque split. (Your Sales Consultant's Guide and WRX STi Video Guide have more details on this caution.)

Limited-Slip Differentials

WRX STi was designed for very high cornering performance. WRX STi features front and rear limited-slip differentials that help to ensure power goes to the outside wheel in turns, because the outside wheel has the most grip.

The Suretrac limited-slip front differential doesn't wait for wheelslip before going into action. Suretrac senses a left-to-right torque difference and helps prevent the inside wheel from spinning in a tight corner. It works quickly without impeding steering response.

The rear wheels of course don't have to steer the vehicle. WRX STi features a fast-acting mechanical limited-slip rear differential to send the most grip to the outside wheel under hard cornering. The bottom line is that the power goes to the road, not up in tire smoke. Both of these limited-slip differentials also benefit handling on slippery road surfaces by ensuring that the wheel with the most grip gets the most power.

The standard WRX and other Subaru models use a viscous limited-slip rear differential, which is quiet in operation. However, there are a couple of cautionary notes for WRX STi:

Due to the design of the mechanical limited-slip rear differential, the customer can expect to hear some noise or feel some vibration when making turns. "LSD-only" gear oil must be used for the rear differential.

Chassis

When we talk about the chassis in WRX STi, we're talking about the whole body structure as well as the suspension, steering and brakes. Here we find some striking differences between

WRX STi and Lancer Evo, with many advantages for the Subaru.

A point of pride for Subaru is that the Impreza platform was designed with the strength and integrity to be the basis for the Impreza WRC rally car. Therefore, it did not require any special structural reinforcements to handle the power and performance of the 300-horsepower engine of the WRX STi model.

In contrast, Mitsubishi must give the Lancer body shell extensive reinforcements and extra welds before it can be made into an Evo model. Evo uses a front strut tower brace, but WRX STi doesn't need one. What this also tells you is that <u>every</u> Impreza model is made with high strength built into it. And Forester, too, since it's based on the Impreza platform.

Suspension Details

The suspension system in WRX STi is based on Impreza architecture but uses rally-derived technology. First, it's lowered by 0.4-inch compared to the standard WRX for increased handling. Forged aluminum-alloy front lower L-arms help reduce unsprung weight. Reducing unsprung weight helps enhance handling and steering response. Front and rear crossmembers are reinforced to resist bending at high cornering speeds.

WRX STi uses inverted struts at all four wheels. What is an "inverted strut?" This variation on the MacPherson-type strut essentially functions like a conventional shock absorber set upsidedown and covered by another steel tube. The extra tube makes the strut stronger, which allows higher cornering forces. And the inverted design allows the strut piston to ride in the tube more efficiently and smoothly. It means WRX STi can take high cornering forces over and over and still maintain the ideal tire-to-road surface contact for optimal traction and cornering grip.

The Evo uses inverted struts in front, but a multi-link setup in the rear. Subaru has had much rally experience and success with the all-inverted strut setup, so we stayed with it for WRX STi.

No question, WRX STi gives a firm ride that's not for everyone. But in early road tests, we're seeing some negative remarks about ride harshness in the Evo. Comparing WRX STi to Evo, *Motor Trend* said: "The STi is obviously a handler, but more supple, more tossable and easier to live with on nasty road surfaces. The Subaru is better for high-speed work – less nibbling at uneven road surfaces – and sixth gear makes cruising much more relaxed." End quote.

Many customers may not care about ride quality. But anyone who compares these rival cars will discover what *Motor Trend* did -- that WRX STi is a more fully thought-out package. Anyone who's ever driven a top-tier performance car like a BMW or Porsche is going to want a more polished feel to a car – and they'll get it in WRX STi.

Here again I'll mention the tires -- WRX STi comes standard with lightweight 17 x 7.5-inch BBS aluminum-alloy wheels and 225/45 R17 Bridgestone Potenza RE070 summer-tread directional performance tires. Evo features Enkei lightweight aluminum-alloy wheels with slightly wider tires – 235/45 R17 Yokohama ADVANs.

Brembo Brakes with Super Sport ABS

Braking Systems on both WRX STi and Lancer Evo are very similar. It's a Brembo Performance Braking System with four-piston calipers in front and dual-piston calipers in the back. The most obvious difference is the color of the brake calipers. They're painted gold on WRX STi and red on Evo. The rear brake rotors are slightly larger on WRX STi, too. Magazine road tests are praising the braking performance of both cars – it's clearly among the best in the world regardless of price or brand.

Like every Subaru we offer, WRX STi is equipped with a standard 4-channel / 4-sensor Anti-lock Brake System, or ABS. For 2004, all Impreza models also feature Electronic Brake-force Distribution (EBD). EBD enhances braking performance and stability by actively optimizing braking force between the front and rear wheels depending on driving conditions and load in the car. Lancer Evo has this technology, as well.

Both WRX STi and Evo use a similar system to enhance handling under braking. We call it Super Sport ABS; Mitsubishi calls it Sports ABS. Here's what it does:

Conventional systems control brake pressure at both rear wheels together. Super Sports ABS controls brake pressure at the rear wheels individually. So, under simultaneous hard cornering and braking, Super Sport ABS can provide fine-tune control at each rear wheel to help maintain stability through a curve. By using the rear brakes more efficiently and effectively, the system can reduce brake force at the front wheels. That in turn provides more available traction for cornering,

reduced understeer and shorter stopping distances when cornering.

Quick-Ratio Steering

The power rack-and-pinion steering system in Impreza WRX STi uses a quicker steering ratio, 15.2:1, than the WRX model, which uses 16.5:1. The steering is 2.7 turns lock-to-lock compared to 3.0 turns for the WRX. Here again, don't get fixated on numbers. Lancer Evo steering is just 2.1 turns lock to lock. On the track, it feels like a go-kart. On the street, it can make the car feel darty, because just a tiny movement of the wheel can have a big change on direction.

In WRX STi, the steering system provides increased boost at low speeds for easy maneuvering and parking. Steering boost is reduced at high speeds for better feel.

Reducing Weight

To Subaru, "no compromise" meant keeping WRX STi as light as possible. To reduce weight, we deleted the standard audio system, floormats and the rear seat center armrest with trunk pass-through. In addition, the rear window uses lightweight glass.

Deleting items to reduce weight and using lightweight body parts also hearkens back to the musclecar's glory days, when special performance models came with as little as possible to be as fast as possible.

WRX STi is pre-wired for an audio system, and you can offer one to your customers as an optional accessory.

Safety

Even with the sharp focus on high performance in WRX STi, this model provides the safety that for which Subaru is known. I've already discussed the braking system. Here are other major safety features in WRX STi:

A Ring-Shaped Reinforcement Frame body structure with a front sub-frame and front and rear crumple zones provide a safety cage to help protect the passenger compartment in a collision.

Passive safety equipment includes dual front airbags, including a dual-stage deployment passenger front airbag.

Front seat head / chest side-impact airbags are integrated into the performance-design front seats, which also feature integrated head restraints.

All airbags are part of the Supplemental Restraint System SRS, which also includes front seatbelts with pretensioners and belt force limiters, plus 3-point seatbelts for all three rear seating positions.

Rear seat <u>Lower Anchors</u> and <u>Tethers for CHildren</u> – the LATCH system is for securing compatible child seats independently from the seatbelts. ("See honey, it can be a family car!")

All 2004 Impreza models are equipped with a safety brake pedal system that is designed to yield during a serious frontal impact in order to help reduce injury to the driver's lower limbs.

Interior

We'll finish up with a look inside the cockpit. Here too WRX STi has many advantages over Lancer Evo. Some road tests have expressed a complaint about the econo-car interior in Evo. Evo does have sporty Recaro front seats and a MOMO brand steering wheel, plus some titanium-color trim. But that's about it. The rest is standard Lancer.

WRX STi was designed to feel like a special car from the moment you pick up the key. The STI key resembles the kill switch-type key used on the Impreza WRC rally car. Look what happens when you turn the key in the ignition. All the gauge needles light up swing to their maximum positions, then return to their starting positions -- just to give the driver a hint at the performance potential, and to send a message: all systems GO.

The STI instrument cluster puts a 9,000-RPM tachometer in the center of the gauge panel, directly in the driver's line of sight. The gauge panel features a 160-mph speedometer on the left and a DCCD mode display and fuel and temperature gauges on the right. All three primary gauges are trimmed with aluminum rings. Red LED gauge indicators and an illuminated STi logo in the tachometer reinforce the sporty feeling.

Here's another trick feature. The tachometer features an adjustable RPM indicator with warning buzzer and light. It allows the driver to set an engine RPM for preferred shift points and then shift at the light or buzzer without having to watch the tach as closely.

The performance design front seats resemble competition-type seats. The driver's seat is height-adjustable. Notice the front seats are perforated with substantial side bolsters, integrated head restraints and an embroidered STi logo. The seats are upholstered in unique blue Ecsaine fabric. and the side bolsters are contrasting black cloth. The grippy Ecsaine fabric and side bolsters help to hold the driver and front passenger firmly in place during cornering.

Exclusive blue carpeting and chrome inner door handles add a distinctive touch to further separate WRX STi from other Impreza models.

The steering wheel is special, too. It's a Subaru World Rally Team (SWRT) 3-spoke design, STI brand. It's a smaller diameter than the standard WRX to complement the quicker steering ratio.

The steering wheel is black leather-wrapped with black upper stitching and red lower stitching. Just to give you an idea of the level of detailing in this car, even the parking brake handle is black leather wrapped with red stitching. Aluminum pedal covers are standard. Evo offers "sport pedals" as an accessory.

The bezels for the semi-automatic climate control system and vents are trimmed with a dark gray metallic finish

Even though WRX STi has been optimized for light_weight, it still comes well equipped. That makes it an excellent "everyday supercar."

Semi-automatic climate control system with air filtration almost sounds luxurious. It allows you to set a temperature and leave it, so you can keep your eyes on the road and hands on the controls.

Also, it speaks to the value in this car. The MSRP is \$30,995 plus delivery, about \$2,000 more than Evo's MSRP. While the performance alone could account for the difference over WRX and Evo, Subaru believes every customer should always feel like he got a great value. Again, we designed WRX STi to appeal to more than just the tuner crowd.

Here are a few of the standard amenities:

Ambient temperature gauge Cruise control Digital clock in the dash center panel
Digital dual-mode trip odometer
Green-tinted glass all around
Height-adjustable driver's seat
Power door locks
Power windows with driver's side one-touch auto-down
Remote keyless entry system
Tilt-adjustable steering column
Windshield wipers with variable intermittent feature and driver's-side fin

Impreza WRX STi is backed by the same warranty coverage as all Subaru models, which of course includes 24-hour Roadside Assistance for the coverage period.

And that's it – the world's next great high-performance car.

Impreza WRX STi Caution Notes

Subaru engineered Impreza WRX STi first and foremost as a high-performance vehicle. Some comfort for daily-use has been sacrificed, such as the level of noise, vibration and harshness. Some brake noise is also normal, as the braking performance is prioritized. In addition, the customer should observe the following cautions when driving and maintaining a WRX STi:

Aluminum-Alloy Hood and Hood Scoop

When driving, you may notice the hood vibrating due to the lightweight aluminum-alloy material. This is normal and does not affect durability.

The hood can be deformed easily, so it is important not to push down when closing it. Simply release the hood from approx. 10 inches above the closing position and it will close by its own weight.

Driver Control Center Differential (DCCD) All-Wheel Drive

DCCD features manual and automatic modes. When DCCD is in manual mode and the manual control dial is set close to or at the "lock" position, turning tightly and slowly (such as in a parking lot) may cause powertrain noise or vibration due to a condition called "torque binding." This is normal.

If the oil temperature of the rear differential exceeds a certain level, the rear differential oil temperature warning light will come on. If this light comes on when the engine is running, it may indicate that the rear differential oil temperature is too hot. At this time, the Driver Control Center Differential will automatically cancel the current torque-distribution ratio setting and adopts its minimum ratio. If the light comes on while driving, reduce vehicle speed and stop the vehicle at the nearest safe place. Park the vehicle for several minutes. After the light goes out, you can start driving. If the light does not go out, contact the nearest Subaru dealer for service. Continued driving with this light on can damage the rear differential and other parts of the powertrain.

Large Rear Spoiler

You may notice the fin of the rear spoiler vibrating while driving. This is normal and does not affect durability.

Some automatic car-wash machines can damage the large rear spoiler and/or the body. Follow the instructions of the car-wash machine.

If pushing the car, do not push the top end of the rear spoiler or it could be damaged.

Limited Slip Rear Differential (LSD)

Due to the design of the mechanical limited-slip rear differential, the customer can expect to hear some noise or feel some vibration when making turns.

"LSD-only" gear oil must be used for the rear differential.

Recommended Fuel

The 2.5 Liter turbo engine is designed to operate using super-premium unleaded gasoline with an octane rating of 93 AKI or higher. If super-premium unleaded gasoline with an octane rating of 93 AKI or higher is not available, premium unleaded gasoline with an octane rating of 91 AKI or higher can be used. For optimum engine performance and driveability, it is recommended that you use super-premium grade unleaded gasoline with an octane rating of 93 AKI or higher.

Shifter Knob Pull-ring

Pull the shifter pull-ring only when shifting into reverse.

Tires

The original-equipment 225/45 R17 90W Bridgestone Potenza RE070 tires are "summer" tires. Even with All-Wheel Drive, Subaru recommends installing winter tires for driving in snow.

The tires were designed with optimal grip as a priority, and tread wear will occur more quickly than with all-season tires.

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IMPORTANT INFORMATION

The Supplemental Restraint System (SRS) (air bags) affords the driver and front passenger additional protection in a moderate to severe frontal or (when equipped with front seat head/chest side-impact air bags) a side-impact collision. This system provides supplemental protection only, and seatbelts must be worn in order to avoid injuries to out-of-position occupants upon bag deployment and to provide the best combined protection in a serious accident. Children should always be properly restrained in the rear seat.

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