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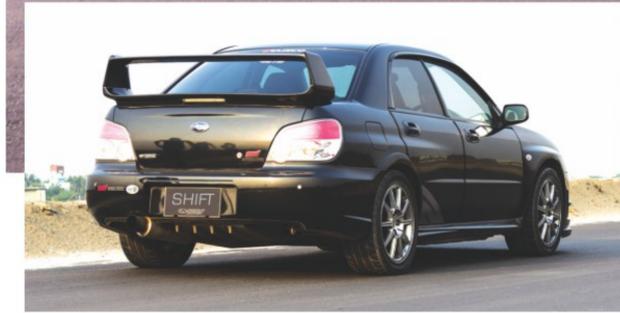
Kick Boxer

2007 Subaru Impreza WRX STI

The roads are empty, thankfully, as we wait in the searing heat for Joy to show up. Aadnan's Allion has its AC turned up to full blast, but its barely coping. This STI, lauded as the fastest Impreza in the country, better be worth it.

The muscular black beast is so loud, when Joy arrives, we can hear him from miles away. With a thick burble punctuated by periodic whistles from the blow-off valve, the

accelerates. I can only glance at the speedometer in a helpless, binding terror, as the needle makes a supersonic jump from 60 km/h to 140. 160. 180. Before we can even tap into the middle reaches of this car's capabilities in terms of speed (on a long enough stretch of road, Joy says the Impreza can do 320 km/h), the myriad spread of CNGs and buses ahead of us forces the brakes and the car is held to a very



STI grabs so much attention from onlookers, it promises quite a lot. Time to find out if it delivers.

Climbing in, it's evident the STI is driven quite often. There's a thin layer of dust on the hard, plastic dashboard, and the carpets would drive any mom crazy if it was stationed in a living room instead of a blistering rocket high on horsepower.

As we move away and head out of Gulshan towards Airport road, the STI feels restrained, composed, and with tame upshifts at low RPM, the car feels more like a really loud Corolla cruising about town than the insane machine everyone says it is. Its confusing, to say the least, to my otherwise mentally unprepared mind.

As we take a slow right turn onto one of the only stretches of road which offer any sort of relief for speed-nuts like Joy Alam, I'm thinking this will be a rather uneventful joyride.

Joy downshifts, then slams on the accelerator, and in a split second, I lose all the adjectives I had prepared for this review to describe the rate at which this phenomenal machine

limiting 120 km/h.

It's a violent car at full throttle, and it physically bruises you and leaves a mental impression that is hard to shake off once you're back on solid ground. Your legs shake, its difficult to breathe, and if you aren't careful, the seatbelt digs into your chest and your head is slammed against the headrest every single time the car accelerates. I'm writing this two days after the most incredible ride of my life, and I'm still a little shaken.

The incredible magicians at Autosmith Ltd. have fettled with the engine, and almost every major part of the EJ20 2.0 liter boxer turbo (stroked to 2.2 liters) has been replaced with high-performance, high-quality parts. A bigger turbo, forged crankshaft, pistons, and reworked engine block give the Impreza its ballistic performance. On the dyno, the Impreza put out an incredible 500+ horsepower at the wheels, making it one of the fastest cars in the country.

Best part? We drove to the new road being built at Purbachal, and to get there, we had to cross dirt roads, massive potholes, and climb

over random bumps in the road, and the Asymmetric All-Wheel Drive equipped Subaru bounded over all of these like a faithful and extremely capable workhorse. It's brilliant, how usable and malleable the Impreza is, despite the amount of power it generates. The stability at high speeds is very assuring, and despite having stock discs and pistons, the braking system is capable enough at reigning in all that power. The power split is not even between the front and rear wheels, and most of the time, the Subaru's boxer engine powers the rear wheel, which makes for a more "eventful" driving experience, to say the least. The dual clutch rattles and hums, but Joy says its normal and nothing that needs fixing.

Why not an Evo? He shakes his head and says Evos are nice and extremely capable, but they lack the edgy, raw muscle of the Impreza STI. Given the chance he would own both, but for him, the STI takes home the crown in the AWD Japanese turbo rockets championship.

What's next for the Impreza? Joy says the braking needs an upgrade

because it restricts his ability to push the car to its limits. Oh, and of course, more power, as he wants to reach at least the 700 hp mark. His engine's internals can easily handle 1000 hp, so its all about finding all the nooks and crannies where the horsepower can be squeezed out some more.

More power? When I look incredulously at Joy, he gives a wry smile and says "Why not? There's that itch to get more and more out of your car, and 700 hp is my current goal."

Exterior wise, other than some stickers and a front lip, the car is bone stock, including the rims. "I have no interest in aesthetics. I don't want to make the car look good, it's all about the performance for me."

We can't even imagine what 700 hp is going to feel like in this kick-boxer of a machine. But what we do know, is that more people should think like Joy Alam and his mantra of performance over looks. This is definitely one car that was "built, not bought."

WORDS: SHAER REAZ
PHOTOS: AADNAN ZAMAN

SPECS

2007 Subaru WRX STI A-line

Engine: EJ207 2.0 liter engine, bored and stroked to 2.2 liters.
Engine modifications: Blouch 3.0 XTR twin scroll turbo, ETS top mount intercooler, AMR BMI cold air intake (74mm), Wiseco HD 1400 pistons (93 mm), Wiseco piston rings, Manley connecting rods (balanced < 2g), ARP 2000 rod bolts, Cosworth 2.5 litre crankshaft, Subaru 11mm oil pump, ACL Racing main bearings and rod bearings, Power Enterprise gaskets, ARP head studs, ARP main studs, Gates timing belt, Tomei timing belt guide, Beatrush alternator cover, Beatrush alternator pulley, Beatrush crank pulley, HKS V-belt AC, HKS V-belt P/S and Alternator.
Fuel system: WALBRO 255lph Fuel pump, SARD 800CC Injectors, SARD Fuel Rail Aluminium, SARD Fuel regulator set, SARD stainless steel fuel Lines.
Cooling: Blitz Racing radiator, Perrin coolant overflow tank, Mishimoto thermostat, HKS high pressure radiator cap, Cusco aluminum radiator cover.
Exhaust: Tomei Extreme exhaust downpipe, Kakimoto GT10Z (catback + midpipe) exhaust.
Transmission: 6 speed manual gearbox, Exedy Hyper Carbon D twin clutch system.
Suspension: Cusco Link rods, Ultra Racing strut tower bar, Ultra Racing front and rear sway bars/anti roll bars.
Brakes: Stock Brembo disc brakes, Project_Mu Hyper Carbon front and rear brake pads, AMS stainless steel brake lines.
Tires: Bridgestone Potenza RE11.

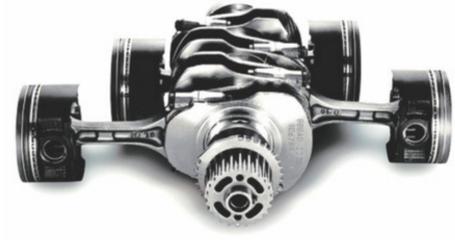
Flat Engined Marvels

First patented in 1896 by the father of the modern internal combustion engine, Karl Benz, the concept of a "flat" engine has been around since the concept of a powered four-wheeled automobile. Over the course of automotive history, there have been numerous instances where a flat engine has been used, either for performance, handling, or space saving reasons. While it's not exactly the mainstream engine of choice for manufacturers, those who have stuck to it, have perfected the design over the years, with manufacturers like Subaru and Porsche claiming the flat engine to be their respective specialties.

There is a slight distinction between flat engines and "Boxer" engines, and the difference lies in how the pistons move.

punching their gloves together before a fight. Subaru loves the boxer engine so much, it's a permanent feature on every single model in their lineup, and its this uniqueness which sets Subaru owners apart from the rest of the crowd.

Why is the flat engine cool? Well, there's the immensely low center of gravity, because flat engines are hunkered down and less top heavy than other engine layouts, which makes a flat-engined car a force to be reckoned with in the corners. The Boxer engine saves weight because the it is inherently balanced by the laws of physics, so the internals don't require counterweights to keep opposing moments (turning forces) in check. The infamous Boxer burble is enough to wet the pants of hormonal teenagers and turn them into lifelong



If the pistons in a flat engine move alternate to each other and are connected to the crankshaft by shared crankpins, it is a regular flat engine, as used in the early, air-cooled Volkswagen Beetles, as well as the Porsche 911. Interesting fact, the Chevrolet Corvair (one of the most misunderstood American cars in history, despite being brilliantly engineered) used a flat engine placed at the back of the car, which was unheard of in the muscle car heyday in America. Unsurprisingly, Chevrolet went to rear placed flat engine maestros Porsche to engineer the car.

Boxer engines have pistons which move outward and inward simultaneously, and have individual crank pins connecting each piston to the crankshaft. The name "boxer" is derived from this simultaneous motion, because the pistons look like a couple of boxers

Subaru fanatics, and beyond all of that, the strength and durability of the engine makes it a favourite of aftermarket tuners. A Subaru Boxer engine is rumoured to last a lifetime if you treat it right.

Why don't more manufacturers take on the flat engine if it offers so many benefits? Well, these engines tend to be thirsty, and there are massive costs involved in developing a Boxer from scratch. This is probably why Toyota partnered up with Subaru when they decided to equip their GT86/Scion FR5/Subaru BRZ with a boxer, to make use of the superior performance of the Boxer.

Here's to a lovely engine and properly engineered vehicles. Much respect.

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Bangladesh Motorsports is all set to give Bangladesh the taste of all kinds of motorsport events and take the country to the international motorsport scenario. Bangladesh Motorsports will organize various events like Rallycross, Inter-city Rallying, Autocross, etc. On the other hand, BMS also looks forward to organizing other events like 'Motorkhana', testing driving skills; 'Treasure Hunt', involving all members of a family in the car for a fun-filled day, and adventurous multi-day 'Great Escape' events, taking the participants to places of Great interest / Tourist Destinations.

For the very first time in Bangladesh, we will be organizing a "Nitol Tata Rallycross Championship 2014", a one day event which involves a closed off-road circuit. Each car is set off to run (alone) and cars are timed to the second by an automatic wireless timing system. A co-driver will be allowed per car. Every driver/car is given a maximum of 3 runs in a day at an interval and the best time of the 3 runs is registered for the final result.

The event will be held on 19th April, 2014, at PWD Ground Agargaon, Dhaka. This is one event automobile enthusiasts should not miss out on.

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