Why Jatco CVT-XS took first place in IQS Part 2

The Jatco CVT-XS (hereinafter referred to as CVT-XS) installed in the Nissan SENTRA has been ranked first in the drivetrain category of the Automobile Initial Quality Study (IQS), a ranking in which customers evaluate the quality of initial vehicles.
In the first episode, we spoke with the development managers, and in the second episode, members of the testing department accompanied us to Motegi, where the test course is located, where the development team and the My JATCO editorial team test drove a vehicle equipped with CVT-XS. What was it like actually riding it?

JATCO Camera's first foray into Motegi.

Motegi members and those involved in the development

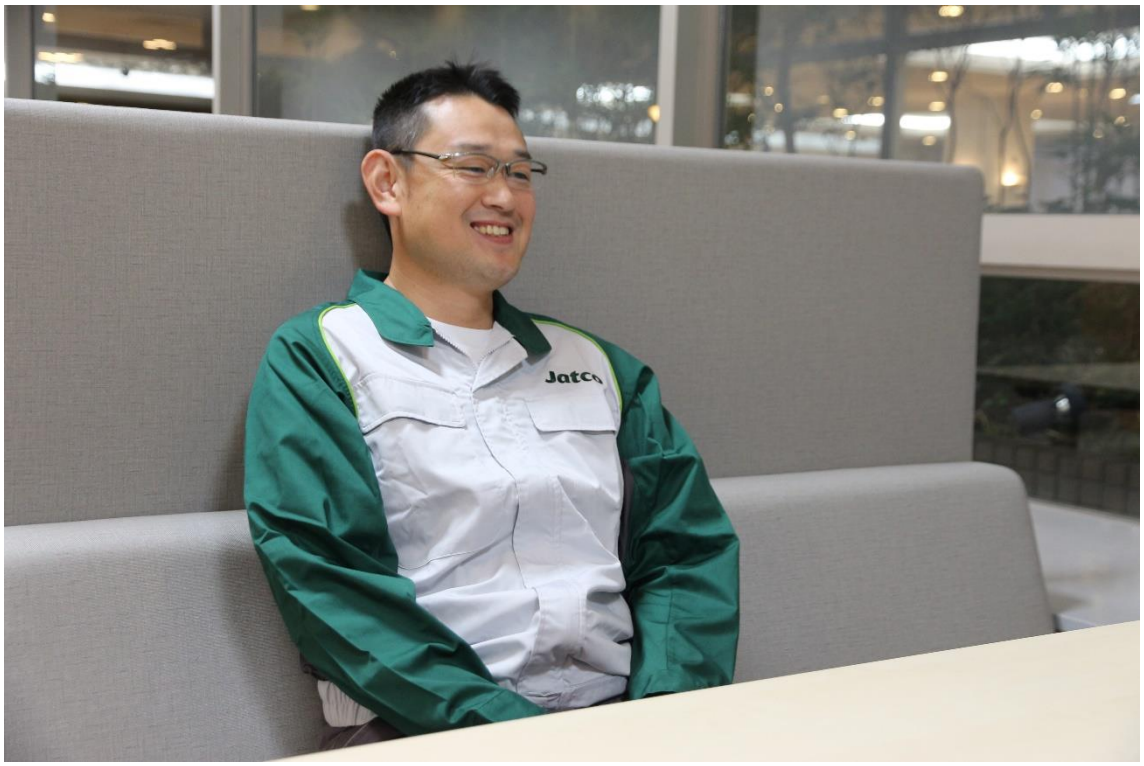
Before we take you on the test drive, could you tell us about the work of the testing team and the reasons for the No. 1 IQS ranking?

Ogino: I usually work on car control experiments. We run the car, observe its performance, and then change the control - repeating this process through experiments to improve performance.
Rather than feeling happy about getting first place on the IQS, I felt a sense of relief that it had been launched and was more surprised that it had gotten first place. Rather than being happy, I was surprised and relieved that nothing happened.

Koyama: My main job is to change the constants planned by the first experimental group to the constants of the CVT installed in the car and evaluate them.
I have been involved with CVT-XS since it was first installed in cars, so for about 22 and a half years I have been working based on the advice of various people to "pay attention to and evaluate these points" to avoid any issues with driving performance or quality. However, we went a step further and tried to communicate as much as possible about things that only the market or we, who drive the car, could understand. Before mass production began, I visited the factory in Mexico to check the quality, and my honest opinion is that there's nothing wrong with it. Most people who have test driven it have said, "It goes as far as you push the pedal, and it's a really pleasant ride," so I think we can release it with confidence, both as a JATCO vehicle and as a Nissan vehicle.

Ishida: I have been involved with the CVT-XS from the very beginning of its development right through to mass production. Since it was said to be the last CVT, we proceeded with development without compromising on quality. New cars will be released in the future, and the rankings will continue after that, so I hope that other car models will also be able to achieve this number one spot.

Ogino (left) and Koyama(right) from the Experimental Department



Ishida from the Experiment Department

Please tell us about any difficulties you faced.

Ogino: We had a lot of difficulties with the Jatco CVT8, so we took great care in developing this one.
CVT-XS was originally developed by the Unit System Development Department, but was transferred to JATCO Engineering midway through, which caused some difficulties at first, but with the cooperation of everyone involved we were able to get the project up and running without any problems. In addition to the experimental department, we also had a team from JATCO USA work on the fleet, which helped us to refine the system. Quality reports came in from the site every week, so I made sure to check them every time. Because of the time difference with the United States, my daily routine for a while was to first check the incoming calls in the morning, and if there was no bad news, I would relax and get to work. We still work in close contact with them, with them telling us to contact them immediately if any problems arise, so we try to keep a close eye on market trends.

Ishida: It incorporates new controls, so we repeatedly ran it under the same conditions to refine those. I was really sweating while running. Even with the CVT control, when it had to stop suddenly, it really did feel like the computer would fly out, so it was quite difficult to support it.

Furuyama: Sometimes we went to Nissan's test course in Hokkaido to evaluate the car on snowy roads, and sometimes we used the Motegi course to check its performance under high temperatures. I have experience driving in temperatures as low as minus 25 degrees, and I think I have driven a total of 20,000 to 30,000 km by myself. In total, I think all the vehicles equipped with CVT-XS could travel around the Earth four or five times. At first, I felt so sick I couldn't eat lunch, and I thought my vestibular canals were going to be damaged. Therefore, I think we can provide you with a comfortable ride today, so I hope you enjoy your ride!

Now, you're ready to take it for a test drive!

Now, let's ask Watanabe and Otaki, members of the CVT-XS development team, to take it for a test drive!

Watabe taking the car for a test drive.

Otaki taking a test drive

My JATCO editorial staff member Yamada taking a test drive.

(From left) Otaki, Watabe, and Yamada from the My JATCO editorial department

Otaki-san: It was extremely easy to use. The way the CVT revs up and changes gears feels smooth, making the car really easy to drive and handle. Since it will be

installed in new car models, we will continue to work to make it an even better product.

Watabe: I thought the SENTRA had good acceleration and was a great car. The new CVT makes mid-range acceleration especially pleasant.
I started the project in 2015, and although we had some difficulties getting it off the ground, I think we have produced a good CVT. The Nissan Sentra received quite good reviews in the IQS, so I hope the Kicks will also receive good reviews in the IQS.

Yamada: I was nervous because it was my first time driving a left-hand drive car, so I ended up turning on the wipers without doing anything.
When accelerating, there was no clang, and the speed increased smoothly all at once, allowing me to drive without stress.

Thank you to everyone at Mogi for all your preparations!
Next time will be the final episode! Stay tuned!