

HINO

Global Brand for all Customers

Cares



Opening Report: HINO TOTAL SUPPORT CUSTOMER CENTER

In this issue we introduce Hino's permanent seminar facility in Malaysia, opened as part of the company's efforts to enhance HINO TOTAL SUPPORT.

Also in this issue, we announce the winners of our first photo contest, "My Favorite Road."

Illustration: Mr. Sugio Utomo, Owner of Harapan Jaya, Indonesia





Drivers learn eco-driving techniques by actually driving a truck on the test track.



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In July 2015, the HINO Cares crew was in Seremban, Malaysia to look in on the Hino Total Support Customer Center (HTSCC) of Hino Motors Sales (Malaysia) Sdn. Bhd. (HMSM). This facility opened in February 2015 in order to enhance TOTAL SUPPORT, and is Hino's first permanent overseas facility where customers can attend seminars and test drive vehicles.

"While Hino had been offering outcall services for safe-driving and eco-driving seminars on an ongoing basis to our customers in Malaysia as part of our customer support activities, the number of customer requests for driving seminars on accident prevention and eco-driving had been increasing in recent years," explains Mr. Mohamad Zaki, Senior Training Executive of the HTSCC. "So we concluded that, in order to respond to these requests, we would need a special facility that we could use at any time, and decided to open this facility as a one-stop location where we could offer seminars and practical driving exercises."

The HTSCC, which Hino customers in Malaysia are welcome to use free of charge, features a special 1-kilometer test drive track, seminar rooms and permanent exhibit rooms that showcase Hino's philosophy, history and technological achievements. The various seminars offered here also incorporate tours of Hino's vehicle assembly plant, made possible due to its location adjacent to Hino Motors Manufacturing (Malaysia) Sdn. Bhd. The Center offers these functions as a result of the company's determination to not

only offer seminar opportunities, but also a chance to experience the Hino's philosophy, including everything from the meticulous attention that goes into product manufacturing to its after-sale services and beyond.

On the day of our visit, eight drivers from Radifleet Sdn. Bhd. were at the Center taking part in safe-driving and eco-driving seminars. As for the specifics of the seminars, many of our readers may recall the article on the Customer Technical Center in Hamura, Tokyo, in the previous issue. To give a brief overview, these programs consist of a seminar in the classroom where participants learn the basics, including correct driving posture, the characteristics of truck behavior and the importance of headway distance, which is then followed by practical lessons behind the wheel of actual trucks where participants learn a variety of eco-driving techniques.

We asked Mr. Hafizan, Training Executive about some of the characteristics of these seminars. "In our practical seminars, we prepare trucks that have been fitted with special equipment for measuring fuel consumption, and the participants drive these trucks on the test track as they usually would. Next, they receive one-on-one eco-driving instruction, after which they drive the test track again, utilizing the skills and knowledge they have just learned. And by comparing the fuel consumption data before and after their eco-driving lesson, participants are able to confirm for themselves the effects of what they have learned right there in the data."

Hino Total Support Customer Center opens in Malaysia. New center addresses customers' needs.

1&2: The mini gallery showcases Hino's technologies, philosophy and history, as well as information on its products.

3: Drivers are keen to learn at the safety and eco-driving seminar.

4: One of the day's participants, Mr. Zahar, says, "I drive a HINO500 Series truck about 150 kilometers every day."

5: "Hino trucks have great performance," says Mr. Samsul. "They're easy to drive, and are comfortable and smooth to ride in. I like them very much."

Fig. 1 shows the data for a driver who actually took part in the seminar the day we were there. You can see the fuel consumption value when he drove the way he routinely did, or 14.08 l/100km, improved to 10.1 l/100km after the eco-driving lecture. Assuming this driver drives 50,000 kilometers per year, the difference in fuel consumption between driving at 14.08 l/100km and 10.1 l/100km will add up to 1,990 liters a year. At a company that operated tens of trucks, for example, one could expect to see huge annual cost savings if all of the drivers were to practice eco-driving on an ongoing basis.

Based as it is on Hino's track record of giving similar seminars over the years, this seminar, which concludes in as short as half a day, can be said to be a thorough program for imparting eco-driving techniques in the most efficient way possible. Eco-driving, which results in lower CO₂ emissions, is also very effective in raising environmental awareness among drivers, and the skills and techniques learned here also help ensure safe, economical driving.

[Fig. 1]

ECO Driving Seminar <Individual Result> **Date: 30/7/2015** | **Model: 300Series** | **Distance: 2.0 Km**

Improvement Result of ECO Driving

		Result	Saved Quantity	Improved Ratio
Normal Drive [1st]	Consumed Fuel	564 cc	-157 cc	27.8%
	Fuel Consumption	14.08 L/100km		
Eco Drive [Final]	Consumed Fuel	407 cc		
	Fuel Consumption	10.1 L/100km		

(*1) Threshold value

Over Speed (Vehicle speed)	60Km /h
Over Acc. (Acceleration)	60%
OverRPM (Engine revolution)	1,600 rpm
Acc. Off (Running without fuel)	-

Results of each Lap

Lap	Duration	Average Speed	Consumed Fuel	Fuel Consumption (L / 100km)	Improvement		Driving habit (*1)			
					Q'ty	%	Over Speed	Over Acc.	Over RPM	Acc Off
1st	5'22"	22.0 Km /h	564 cc	14.08	-	-	0.0%	0.9%	24.7%	0%
Final	4'44"	24.9 Km /h	407 cc	10.1	-157 cc	27.8%	0.0%	1.6%	21.7%	0%

Mr. Hafizan continues: "At HTSCC, we also offer a Driver Familiarization Training program where participants can acquire skills and knowledge on daily inspections that help ensure that their vehicles are maintained in optimum condition. Moving forward, we plan to continue to upgrade our facilities and seminar programs so we will able to meet the needs of even more of our customers."

"As a brand of commercial vehicles, what can we do to contribute to our customers' businesses?" This is the question that everyone at Hino asks themselves as they strive to increase the quality levels of their products, as well as focus on reinforcing and enhancing their TOTAL SUPPORT program to address their customers' needs.

The driving force behind all of these activities is the company's determination to continue to be the brand of choice for customers around the world. The HTSCC is a shining example of this determination.



Hino Owners' Voice



Radifleet Sdn. Bhd. / Malaysia | **Mr. Ir. Zuhairi Yusoff / General Manager**

"Our company provides medical waste disposal and hospital linen laundry services, as well as vehicle management services for medical vehicles such as ambulances.

"We use trucks mainly for transporting medical waste and for our linen and laundry services. We have operated trucks from a broad range of brands over the years since our company was founded, but we hadn't used a Hino until two years ago. We were too busy running our business and didn't have the time to evaluate or review our trucks' performance.

"So a few years ago, we initiated a thorough study of what different brands of trucks had to offer, including their performance, equipment and reliability, as well as dealership support and other added values. The conclusion we reached based on our six-month study was that we should narrow the range of trucks we operate down to a single brand, and that brand should be Hino.

"We immediately decided to purchase Hino trucks, and have been adding to our fleet every year since. At this pace, our fleet should be entirely made up of Hino trucks by around 2020. If our business continues to grow at this rate, we may be operating over 100 trucks by then.

"What Hino Motors Sales (Malaysia) Sdn. Bhd. assured us when we decided to go with Hino was that they would provide training for our mechanics and drivers. Other brands were open to providing driver training, but Hino was the only

company that agreed to provide training for our mechanics as well.

"In addition to this, the large number of Hino service outlets in Malaysia was another factor in our decision. This gave us assurance that should any of our trucks break down in some nondescript location, they would still be able to receive Hino's services.

"Since our company's motto is 'Fast, Reliable, and Consistent' we want to partner with a truck brand that is also fast, reliable, and consistent. Of course, when we say 'Fast,' we mean fast with an emphasis on safety."



Mr. Yusoff (center) with Ms. Nirwanzah Jamaludin (Manager, Transport, right) and a member of her staff (left).



About 100 tons of linen is washed daily at the company's linen and laundry services.



Incinerator for processing medical waste. Medical waste is incinerated shortly after being transported here, and what cannot be quickly incinerated is stored in a refrigerated warehouse.





This Hino bus operates on the 772-kilometer Tulungagung-Jakarta route, which takes 17 hours one way.

I look forward to Hino establishing its position as the top name in bus brands.

Harapan Jaya / Indonesia | Mr. Sugio Utomo / Owner



"Our company started operating buses in 1971, and I took over from my father-in-law in 1991. At the time, our buses weren't Hinos, but mainly came from another maker.

"When Hino came out with the air-suspension-equipped RN285, we decided to purchase one to see how it would perform on long-distance routes. What we realized after actually operating a Hino bus was how easy it was to maintain. Compared to Hinos, we found that vehicles from other makers were quite difficult to keep in optimal condition. Even piston replacement would be an ordeal, since we had to go to the dealer just to find out what size we needed. You don't encounter that kind of complication with Hino vehicles.

"I'd also like to point out that Hino's engines are very robust. I believe Hino vehicles have brought a great deal of efficiency to our operations.

"The longest route traveled by our buses stretches for 772 kilometers, which takes about 17 hours one way. Since it would be excruciating for our customers to ride on a coil-suspension vehicle over such a distance, we operate RN285 buses on this route. Hino's air suspension is crucial for serving our customers on night routes, and the power and comfort of these buses are why we've chosen Hino.

"Of the 280 buses were presently own, 159 are Hinos. I look forward to Hino establishing its position as the top name in bus brands."

The company's buses are adorned with eight horses, a symbol of good luck.



"Eight out of the twelve trucks our company currently owns are Hinos. We purchased our first Hino truck in 2007, immediately after we learned about their excellent braking performance.

"Our company sells and transports liquefied petroleum gas (LPG). LPG tanks are not light by any means, and require special attention as they contain gas. While all of our drivers are well-versed in the points to keep in mind when transporting LPG tanks, these tanks inevitably move around to some extent during transport. So drivers must be particularly careful when going around bends or corners. And if the cargo bed is wet and slippery from rain, they take even more care. For this reason alone, safety—and braking performance in particular—is a critical factor in our choice of trucks.

"We also place importance on quality of service. There's a Hino service center (Soon Heng Motor & Commercial Truck Sdn. Bhd.)

about 20 minutes from us where we take our trucks for all of our servicing needs, including oil changes. They provide quick and reliable servicing work.

"We believe that having our trucks serviced by Hino experts makes a big difference. This is because, by working with an authorized dealer of Hino Malaysia, I don't have to worry about whether or not they're using genuine parts or the correct type of oil.

"Although we're responsible for our designated area as a sales dealer of an energy company, we will travel the extra distance if our customers ask us to. This is because we believe service is key to establishing a good trust-based relationship with our customers. Personal ties are critical for business, and the same applies to our relationship with our Hino dealer. The reason we continue to operate Hino trucks is that we have confidence in Mr. Chia Kok Keng of our Hino dealership."



All gas tanks shown here are empty. They are filled at a designated filling facility.

NK Gas (NKS Subang SDN BHD) / Malaysia | Mr. Ng Guan Huat / Manager

We continue to operate Hino trucks because we place an emphasis on safety—and braking performance in particular.



All new trucks the company purchases include the number 9363 on their license plates. This is because the license plate on the first car Mr. Ng Guan Huat's beloved wife purchased included the same number.

The seeds of ideas for real technical innovation can be found in our customers' needs.



Mr. Hidehiko Enomoto
General Manager, Technical Research Center

Innovative technologies, no matter how revolutionary or astonishing to the world they may be, have no meaning unless they match what people want and feel they can afford. Real, innovative technologies can proliferate only if they are genuinely welcomed by customers. This is the vision that drives Hino in its development of new technologies for its commercial vehicles.

"Our section's mission is to develop new technologies for trucks and buses that make positive contributions to the environment and societies around the world," explains Hidehiko Enomoto, general manager of Hino's Technical Research Center. "Every division at Hino involved with development is responsible for the research and advanced development of technologies that will be needed in the future."

The Technical Research Center is responsible for the research and development of the elemental technologies that make up those real, innovative technologies on which the future of Hino's products is founded. "Broadly speaking, the two pillars of safety and environmental friendliness constitute the areas of R&D that we conduct at our Technical Research Center," Enomoto says. "Our job is to discover the 'buds' of new Hino technologies relating to the environment and safety. To do this, everything starts with a careful review of our customers' demands to uncover the 'seeds' of their needs."

Take, for example, the Pre-Crash Safety (PCS) system, which detects the possibility of a rear-end collision by means of sensors that trigger an alarm and brake the vehicle to help reduce the damage that can result from accidents. This technology, which Hino was the first to implement in commercial vehicles in Japan, is an example of the technologies that could not have been born had it not been for the needs of the company's customers.

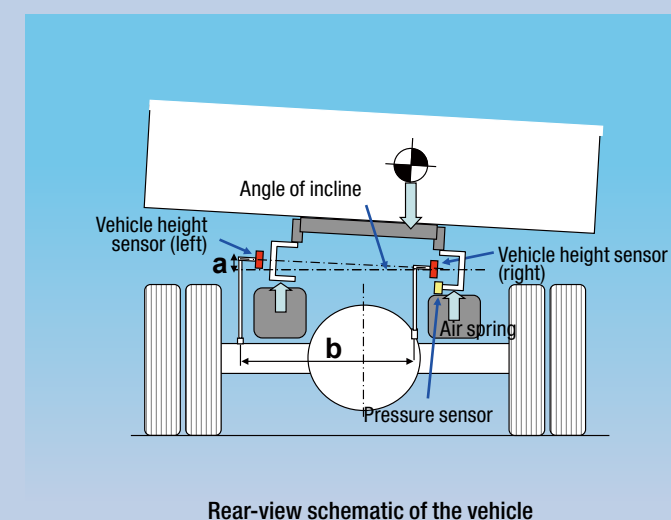
Other technologies that have been highly praised by many of Hino's customers include the EGIS cab, a cabin construction that helps to reduce the risk of driver injury in the event of a collision; the Lane Departure Warning System, which detects increased wavering in steering wheel movement and then sounds an alarm to encourage the driver to take a rest; and the New DPR, the world's first technology for simultaneously reducing NOx and PM without using urea solution, a system the company has equipped on its light- and medium-duty commercial vehicles since 2010-2011. The list goes on.

We asked Enomoto about some of the technologies developed at the Center that left the greatest impression on him.

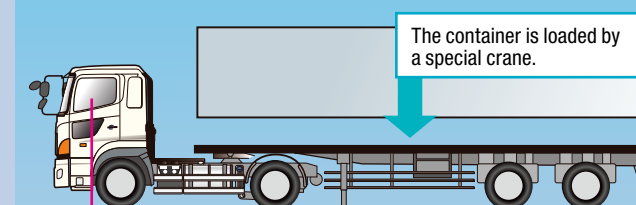
"There's a system called the Left & Right Balance Monitor that's equipped on shipping container tractors we market in Japan. One of the causes of accidents involving the tipping over of shipping container tractors is the eccentricity of the cargo inside the containers they haul. So by detecting such eccentricity and alerting the driver, we may be able to reduce the risk of accidents before they occur. We started developing this technology in response to keen demand from customers engaged in shipping container transport."

Enomoto says the Center faced a variety of issues and challenges during development. "First of all, container yards have strict entry restrictions, and we had no information, for example, on how containers were actually loaded onto trailers, or at what point the tractors would begin to move once they were loaded. So we started out by working with the customer who'd given us this request to obtain cooperation from the company running the yard so that we could study their container loading procedures.

"We were able to uncover a variety of issues during these low-key investigations. For example, in order to precisely determine the balance of cargo in shipping containers, we needed to have some means of measuring the container itself, but this was not practical in light of the work going on at the container yard. So we looked into a system that would begin measuring automatically as the container was being loaded onto the trailer, and function without disrupting the loading work flow.



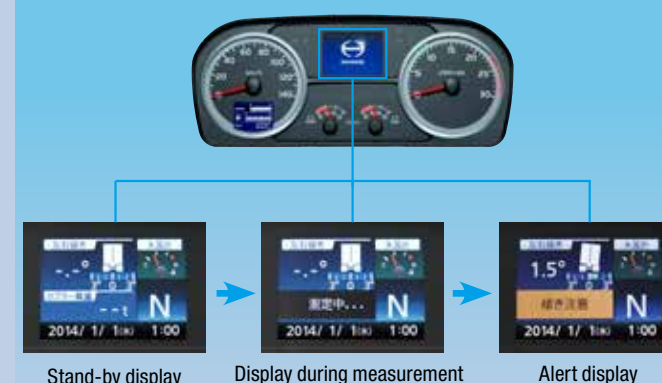
The air suspension's pressure gauges and the vehicle height sensors automatically measure the weight on the couplers and the lateral incline, respectively.



Measurements are displayed immediately after the container is loaded.

- The system cannot take measurements if the coupled trailer already has a container loaded onto it. It also cannot take measurements if cargo-handling work is performed with the container coupled.
- The system is not capable of detecting all load imbalances.

The display refreshes automatically once measurement is complete.



Results are displayed on the multi-information system display.

"In the end, we developed a system consisting of vehicle height sensors fitted to the right and left of the tractor's coupler to detect the angle of incline based on the difference in right and left vehicle heights. The measurement would begin when the container was loaded, this being detected from the changes in pressure in the air springs." This is an excellent example of the kind of technology that was born from listening to what Hino customers had to say and working closely with them.

The seeds of ideas for real technical innovation can be found in our customers' needs. "In our line of work, the choice of what area to research is extremely important. And we believe the key to uncovering these 'whats' is to know the customer, know the market, and know technology. Our motto at the Technical Research Center is, 'Challenge, challenge, and challenge.' We are committed to developing new technologies for 10 to 20 years into the future in the areas of environmental friendliness, safety, and QDR (Quality, Durability and Reliability) by setting ambitious targets, believing in ourselves, and continuing to take on these challenges."

File5:
神社・仏閣

Shrines and temples

There are countless places of worship that people visit to ease their hearts and minds in all countries of the world. In Japan, our places of worship are known as shrines and temples. Shrines are places that enshrine Shinto gods, while temples enshrine Buddhas. Currently, there are roughly 85,000 shrines and more than 76,000 temples in Japan, some of which trace their origins back to the fourth or fifth century. The architecture of many of these shrines and temples has important historic, architectural, academic and artistic value.

By way of example, let’s take a look at Itsukushima-jinja Shrine on Miyajima Island in Hiroshima. This shrine was founded in 593, and was renovated to its current form in 1168. This is one of the most prominent shrines in Japan, known for its architectural beauty, which incorporates the shinden-zukuri architectural style used in the residences of high-ranking nobility during the 12th century.

The most prominent characteristic of Itsukushima-jinja is its position on a crescent-shaped shoal beach. At low tide, visitors can walk out to the shrine’s large torii gate, while at high tide the shrine’s pavilions and corridors appear as if they are floating on the water. The extraordinary setting of this shrine—right on the water, where the scenery can change dramatically between low and high tides—is said to be a rarity among places of worship in the world.



清水寺
Kiyomizu-dera Temple

Speaking of shrines and temples in interesting locations, we mustn’t forget Kiyomizu-dera Temple in Kyoto. Jutting out from the side of a large hill, the main temple building is supported by about 140 pillars, each with a maximum length 12 meters and made from the trunk of a zelkova tree. Its sublime beauty continues to fascinate all who visit, and many are visibly surprised when they learn that not a single nail is used in the pillars or support structure of its timberwork.



厳島神社
Itsukushima-jinja Shrine



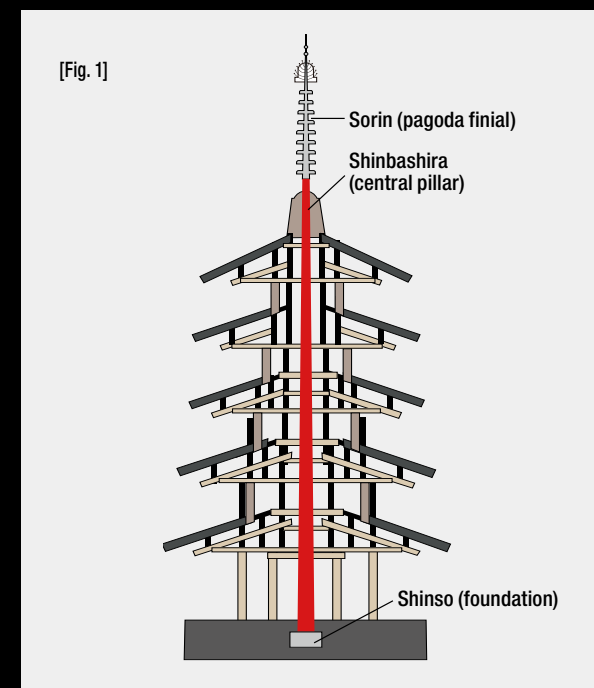
五重の塔
Goju-no-to

While all of these temples are recognized as UNESCO World Heritage Sites, they are not being spotlighted simply for their historic value. In addition to Itsukushima-jinja and Kiyomizu-dera, a great many of the shrines and temples in Japan embody the wisdom and skill of our ancestors—wisdom and skill that clearly indicate these structures were not built with a sole emphasis on dignified appearance or aesthetic appeal.

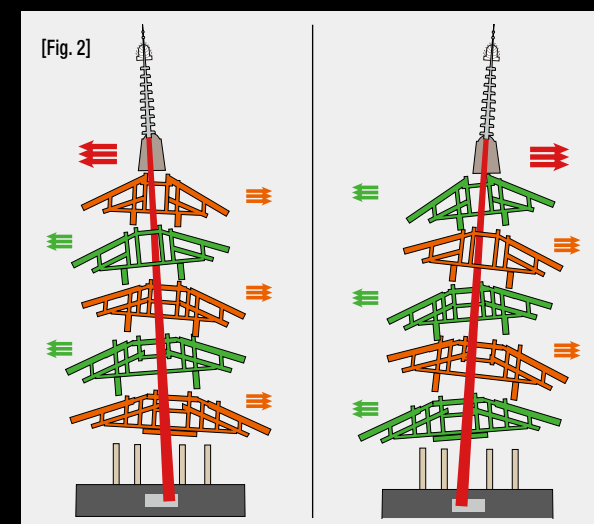
Take for example Japan's various goju-no-to, or five-level pagodas. There are many wooden goju-no-to found in temples and shrines around Japan, the oldest standing example being 1,300 years old. Of the 500-plus wooden pagodas in the country, including three-level pagodas, almost none have sustained levels of damage in an earthquake that would have required rebuilding. For example, during the seismic intensity 7 earthquake that struck southern Hyogo prefecture in 1995 (the Great Hanshin-Awaji Earthquake), none of the 15 wooden pagodas in the prefecture collapsed. Remember, we're not talking about modern buildings that were constructed with state-of-the-art seismic-resistant designs. How is it possible that these wooden pagodas built centuries ago continue to stand in earthquake-prone Japan?

Any goju-no-to has a pillar that stands at its center, called the shinbashira, or central pillar (Fig. 1). This pillar supports only a part of the top of the pagoda, the sorin (also known as the pagoda finial, the ringed vertical shaft at the top), and does not support the pagoda itself. Each of the levels is simply stacked on top of the others—you could say the pagoda consists of five boxes stacked on top of one another like building blocks.

The levels are joined together in such a way that they have relative freedom of movement, so when an earthquake strikes, the pagoda makes a gentle swaying motion instead of shaking. As the pagoda sways, the central pillar functions as a damper which, when the pagoda tilts in one direction, moves in the opposite direction due to inertia. This helps keep the pagoda upright and reduce the shaking that can be caused by an earthquake.



In a large earthquake, the pillar collides with the floor structures of the pagoda's different levels to reduce the severity of lateral motion, thus keeping the entire pagoda from collapsing. This is what causes the pagoda itself to move in a waving fashion, in effect enabling the entire structure to absorb the force of an earthquake (Fig. 2).



This method of using the movement of the building itself to absorb the energy of an earthquake is similar to that of flexible structure designs that are used in today's high rises. It's quite amazing that the builders of this pagoda arrived at this same idea many centuries ago.

It was only because of the timeless wisdom and skill of our ancestors—as embodied in the goju-no-to, for example—that these buildings have been able to retain their original beauty to this day. The creative spirit of Japanese craftsmen of days long past is exemplified in the way they placed importance on harmony with their natural surroundings in their pursuit of formative beauty, as well as in their obsessive attention to the durability of their constructions, which has enabled them to endure for centuries. There's much in common between this creative spirit and the way Hino develops its technologies as the company strives to deliver products with unparalleled quality and durability.



Results are in for the first “My Favorite Road” Photo Contest!

We would like to take this opportunity to thank the many Hino Cares readers from around the world who sent in photos in response to our invitation for the “My Favorite Road” Photo Contest. These photos are alive with the emotions of their photographers, and give us a sense of the drama and circumstances under which they were shot. It would be an understatement to say that, for the staff at Hino HQ who work closely with international markets and the editorial staff of Hino Cares, the process of selecting this year's winners was a very meaningful one. We would like to introduce you to the winners, their photographs, and their comments.



First Place

Mr. Jamie Calderon (Chile)

“I love natural scenery. My favorite road is a straight stretch running through the wonderful natural scenery on one of the routes I frequently travel. It's quite rare not to see a single car or truck on the road, so I took this photo as a memento. I was very happy to hear that I won first place. I'm amazed at the performance of the camera I received as a prize from HML. Maybe I can become a professional photographer with this camera.”



Second Place

Mr. Byron Tapia Freire (Ecuador)



“I think Hino is synonymous with reliability. I drove the first KY I owned for 20 years and racked up 1.5 million kilometers on the odometer, but we didn't have to do a single engine overhaul. My newest truck is the GH, and even though it has 400,000 kilometers on the meter, we haven't had to do a clutch replacement yet. I should add that I have all of my maintenance done at our Hino agent. I'm very satisfied and feel quite attached to my Hino truck.”



Third Place

Mr. Belly Leonard (Indonesia)



“For me, this road is not just any ordinary unpaved road. This road will soon be paved and developed, so this symbolizes Indonesia's growth, as well as the growth of my business and myself as a person. I was surprised to learn that I won this prize. I am very happy to have received such a wonderful gift as well. Thank you very much.”



Second “My Favorite Road” Photo Contest coming up!

As this first photo contest proved so popular among many of our readers, we would now like to invite readers to send in photos for our second contest!

The theme remains the same: **“My Favorite Road II.”** Please send us your **photos** along with a **note describing why you like that particular road and the story of your relationship with Hino.**

When you do, also be sure to include :

- your name
- company name
- address
- phone number
- email address

Contest Deadline: May 31, 2016

☐ Please send your photo submissions to marketing@hino.co.jp

Your file should be more than 2MB but less than 10MB.

☐ If you wish to make a submission by postal mail, please send your photos to the address below:

**HINO Cares Photo Contest /
Marketing Group, Overseas Planning Div.,
Hino Motors, Ltd.
3-1-1, Hino-dai, Hino-shi, Tokyo 191-8660, Japan**



**Winners will receive
a gift as a token of
our gratitude.**

Safe Driving Techniques

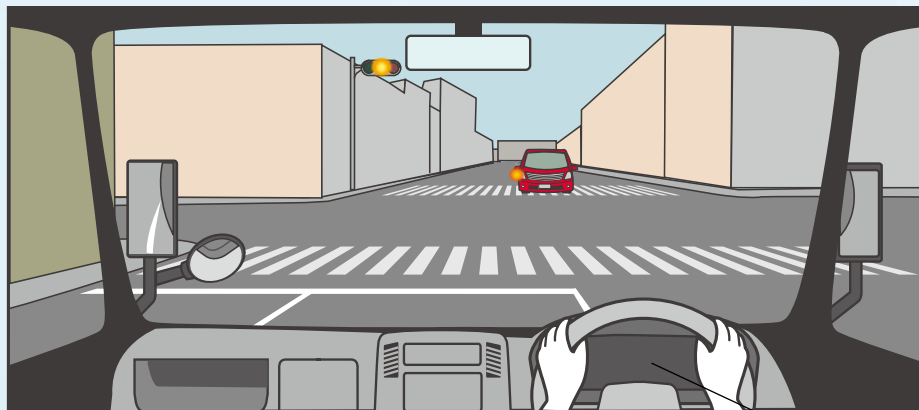
Avoiding Hazardous Situations

Always keep in mind that there are many potential hazards on the road.

We would like to describe what we term “The Basics of Safe Driving” as part of our contribution to driving safety. In this issue, we will be discussing hazards at intersections.

Let's say that you are driving your truck on a road with two lanes in either direction. The traffic light up ahead is green but you also see that the pedestrian lights have started to blink. At the intersection, you see a car that is waiting to make a right turn. Thirty meters before you reach the stop line, the traffic light turns to yellow. Your speedometer indicates 60km/h.

What are some of the potential hazards in this situation?

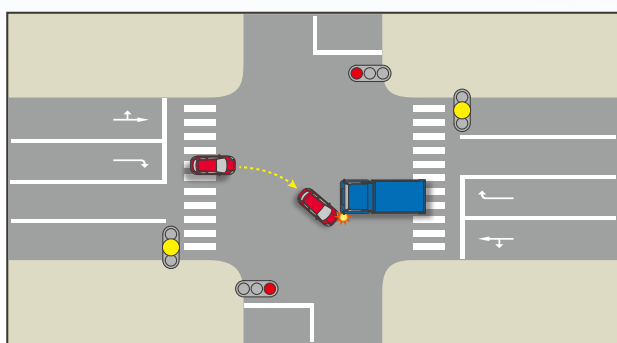


60km/h

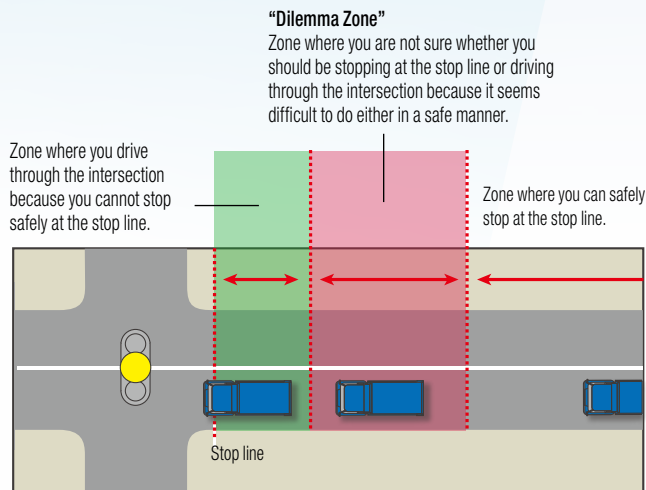
Once the driver of the oncoming car sees the traffic light change, he or she may begin to make a right turn, thinking that you will stop your truck. When you see the car begin to make its right turn, it may be too late even if you instantly depress your brake pedal, and you could end up hitting the other vehicle (Fig.1). If this happens on a rainy day, your truck may take an even longer distance to stop, making it impossible for you to make a safe stop.

First of all, it is generally against the law to enter an intersection after the light has turned yellow (Traffic light specifications and

rules vary by country). If you see the pedestrian light blinking and the traffic light is about to change to yellow, you should slow down and prepare to stop. Be sure to drive in a way that enables you to avoid the “dilemma zone” (Fig. 2), a zone where you might feel uncertain as to whether you should drive through the intersection or stop. The key to safe driving is to be consciously aware of this zone.



[Fig. 1]



[Fig. 2] Your vehicle's location when the light turns yellow.

Note: The illustrations are based on examples from countries where vehicles drive on the left side of the road.



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