

Illustration: Mr. Ekachai Nitikornwarakul, President of Kittipat Concrete Company, Limited, Thailand. Story on page 6. Aiming for continuous customer satisfaction. That is the driving force behind Hino's Total Support.



To ensure that a brand is valued by its customers for years to come, it is essential to provide high-quality services in addition to high-quality products. For trucks and buses that operate under harsh conditions day in and day out, it goes without saying that quick, careful, precise and high-quality services are all the more vital.

As a manufacturer of production assets—i.e., commercial vehicles—Hino sees itself as not simply the maker of a set of products, but as a brand that is in constant pursuit of customer satisfaction. And one of its utmost objectives is to contribute to its customers' profitability. In order to achieve this goal, Hino has made efforts to offer products with the high quality its customers need for real-world situations, and constantly enhanced its Total Support operations aiming at ensuring that its customers are able to operate Hino products with peace of mind for years to come.

As defined by Hino, Total Support includes all service activities geared toward contributing to customers' businesses. Within this concept, Hino maintains two central goals.

The first is to maximize operations, or to reduce customers' down times to as close to zero as possible. This encompasses everything from assisting customers in choosing the best Hino vehicle for their businesses to offering free inspections for new vehicles and regular ongoing inspections thereafter, as well as quick and precise maintenance work, a rapid supply of genuine parts, and readiness to respond to the unforeseen problems customers may encounter. In other words, the purpose of these support services is to ensure that customers are able to use their vehicles when they need them so their business operations can continue smoothly and without interruption.

The second goal is to minimize life cycle costs. Here Hino aims toward ensuring that its customers are able to effectively make use of their commercial vehicles—their production assets—by reducing depreciation costs and running costs, all while taking into account the resale value of their vehicles. One such service is Hino's Eco Driving seminars, which are widely popular the world over. Eco Driving practices



(which is another way to say proper driving practices) not only let operators enhance fuel economy through fuel-saving driving techniques, but also extend the service lives of different parts—for example, by reducing the wear on clutch disks—in effect reducing the running costs associated with parts replacements.

In addition to these seminars, Hino also offers seminars on daily inspections and on how to make transportation cost calculations. Moreover, Hino is actively engaged in offering support to address the other challenges its customers might face, such as providing time- and distance-based analysis on improving distribution route efficiency.

What is the ultimate joy at Hino?

In a single sentence, "Making its customers happy." The goal at Hino is to gain its customers' confidence and become a truly trusted partner so they will choose to come back to Hino for their future purchases.

What can Hino do to ensure this? What must Hino do?

Since Hino doesn't settle for "good enough," you can expect great things from Hino as it continues to ask these questions of itself and strives to improve the quality of its products and services.

Hino's Technology

"Our aim is to always be the frontrunner in commercial vehicles in the areas of quality, reliability and safety."



Mr. Takeshi lwasaki General Manager Chassis Component & System Engineering Div.

Driving, turning and stopping: these are not only the most basic functions of motor vehicles, but also the most important. Is the vehicle able to maintain its normal driving stability in a diverse range of weather and road conditions? Will the driver be able to control the vehicle and safely evade hazardous situations? Is the vehicle able to stop properly and safely even during hard braking? No matter how advanced a vehicle may be in terms of fuel economy or innovative technology, if these basic functions—driving, turning and stopping—are not up to par, the vehicle cannot be relied upon. This is even truer for commercial vehicles, such as trucks that operate under harsh conditions day in and day out, and buses that must not only transport passengers but also contribute to their safety.

So what are some of the specific technological innovations Hino is developing to enhancing these basic functions? To find out, we spoke with Mr. Takeshi Iwasaki, general manager of the Chassis Component & System Engineering Division

"We've been actively engaged in various areas of safety, starting with the introduction of ABS as a standard feature on heavy-duty vehicles, as well as becoming one of the earliest developers of a variety of other safety functions and actively pushing to provide these as standard features to increase their application across our model range.

"We were the first manufacturer in the Japanese market to offer PCS (Pre-Crash Safety brakes) and VSC (Vehicle Stability Control) as

> In order to provide axle modules suited to specific market countries and vehicle categories. Hino carries out development evaluations on each module for criteria such as reliability, durability and weight reduction. These evaluations are based on a variety of different driving conditions to ensure these modules are able to meet the needs of their customers

standard features on heavy-duty trucks and buses-a clear reflection of our effort to lead the industry in terms of promoting the widespread incorporation of safety functions. In February 2006, we became the first manufacture in the world to introduce PCS on a commercial vehicle when we included the system on a heavy-duty truck model for the Japanese market. Since July 2010, this system has been provided as a standard feature on all our heavy-duty trucks and buses for the Japanese market. We're currently working to further expand the system's functionality and enhance its performance, and are also planning to extend its application to other models, including exports."

Stress(P1 (major), Z1) Analysis sys mple Average -4.601E+03 -2.500E+02 1.786E+02 -1.071E+02 3.571E+01 -3.571E+01 -1.071E+02 1.786E+02 -2.500E+02 -1 132E+03 Max = 4.601E+03 Node 86727329 Min = -1.132E+03 ode 8672744

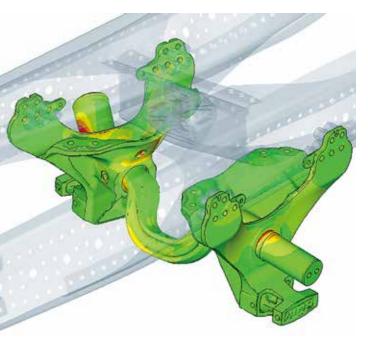
Trucks are subject to a wide range of conditions depending on the nation, area and mode in which they operate. Hino's

"market best-fit vehicle" vision is the company's answer to its customers' varying needs, which differ from market to market. With this in mind, how does Hino approach the enhancement of the aforementioned basic functions—driving, turning and stopping—to suit the various conditions in different markets?

"At the Chassis Component & System Engineering Division, we're responsible for critical mechanisms and systems that form the foundations of driving, turning and stopping. Our specialty is in designing and evaluating the service lives of our vehicles, excluding expendable and replacement parts.

"Before we introduce a new product in a new market, in some cases we actually visit the market and measure the various stresses on different parts under the actual operating conditions in which the customers will be using the truck. Based on this data, we make design evaluations using CAE (computer-aided engineering), define conditions for bench tests and carry out durability evaluations. We also carry out evaluations that take into account individual product variances, evaluations under harsher conditions, and 'test till it breaks' evaluations to determine the parts' limits to grasp their safety factors, margins for enhancement of safety and how they will actually break. In this process, we work to optimize the materials, shape and construction of chassis components such as axles and suspensions to simultaneously achieve both light weight and durability-characteristics that are critical for these components.

"As we now make our transition from full vehicle development to module development, we're working to understand the various markets in which these modules will operate and the many models they'll be used on, and also to determine the required variations and guality targets so we can carry out verifications on modules as units in shorter periods of time, more precisely and with higher levels of reliability." For example, when developing a new vehicle for a new market or market category, such as mining, the designers themselves might actually visit the market countries to carry out hands-on studies on how the vehicles are used, and reflect their findings in design and evaluations to ensure the required levels of quality are met.



These illustrations are from strength evaluations for trunnion suspensions used in Hino's Heavy-Duty Trucks (HDTs) for the construction and mining markets. The illustrations show conditions when the trucks are driven on undulating roads.

- Additionally, advanced technologies will be used to evaluate the designs of the PCS, VSC, and other innovations.
- Mr. Iwasaki added: "In the area of developing control systems—such as VSC, which contributes to stabilizing a vehicle by reducing lateral sliding and turnovers as it drives through a bend-we must evaluate the design under limit conditions that are too dangerous to test on actual vehicles. To this end, we've introduced a simulated evaluation system to determine these limits and the effects of operating under these conditions.
- "Because trucks present a multitude of variables, including different wheel bases and cargo loads, it's extremely difficult to evaluate trucks using actual vehicles, since the tests will necessarily require a large number of vehicles and commensurately more hours to perform. But with these simulated evaluations, we're able to carry out checks at the design stage. Coupled with final tests performed on actual vehicles, we believe we're able to ensure a high degree of reliability. Moving forward, we plan to incorporate simulated evaluations not only into the development of control systems, but also into vehicle performance designs, including handling stability."
- Founded on the untiring effort and passion of developers such as those introduced here, the reliability of Hino vehicles enables the company's customers around the world to continue to use Hino products with confidence.
- At the end of our interview, we asked Mr. Iwasaki if he had anything that he wanted to convey to global customers.
- "We're engaged in development day in and day out, with the goal of offering all our customers vehicles that excel in their basic functions of driving, turning and stopping-in other words, vehicles in which they can always have confidence. We're also committed to focusing our energies on developing new technologies aimed at reducing accidents so customers around the world can be sure they're operating the safe vehicles."



Kittipat Concrete Company Limited, Thailand | Mr. Ekachai Nitikornwarakul, President

I'm not running this business alone, but moving forward together with Hino.

"I've been using Hino trucks since the days when I ran a sugar cane farm. However, due to a combination of labor shortages and the small size of my individual fields making it impossible to use large harvesting machinery, I reluctantly decided to downsize my farm.

"As a result, I had to find other uses for the Hino trucks I owned. I spoke with a representative at our Hino dealer, Hino Kanchanaburi, regarding how I might make good use of them.

"They advised me that, based on their market research, it might be a good idea to start a concrete company. And this is how our company came to be.

"We refitted our older vehicles as mixer trucks and purchased new ones as well. We were also able to acquire a contract for a large-scale project, and thanks to all of this, our cement business is growing rapidly. It's going steady, and we're making a profit.



"Our relationship with Hino Kanchanaburi goes beyond that of a business partner. I never dreamed they would give me an idea for a new business and even offer hands-on support in launching the company. I now tell people I know that they're my top business consultant.

"We receive sincere and reliable support from Hino Kanchanaburi. I've often had the feeling that I'm not running this business alone, but moving forward together with Hino Kanchanaburi."



We began purchasing Hino buses based on what we heard from other companies.

"Our company operates long-distance buses. We offer a daily round-trip route between Malang and Surabaya, the second-largest city in Indonesia, located on East Java. The longest daily route traveled by our buses is 620 kilometers round-trip. Our company started out with just one bus in 1985, and we have grown to the point where we currently operate over 200 vehicles counting the Hino buses alone.

"We first began purchasing Hino buses around 1990. We made our purchase based on what we had been hearing from another bus company: that they were sturdy and reliable machines.



PO Restu, Indonesia | Mr. Christian Hadi Wijaya, Owner





"We first purchased four Hinos. We were very happy with how easy they were to maintain and the support we got from our dealer, so we've been purchasing Hinos ever since.

"Our dealer provides us with services that go beyond the regular scope of support. Let me give you an example: There was one instance when we were in urgent need of a certain part-a part that was not available in East Java. The dealer then sent someone to Jakarta to get the part for us. Thanks to these kinds of experiences, we've been patronizing Hino for 25 years."

Hino trucks are wonderful tools for our work—we have confidence in them.

"We're a transport company with a focus on transporting wooden pallets and coils. The first truck we purchased when we started up the company was a Hino.

"We currently own five Hino trucks. We later purchased trucks from other manufacturers, but that actually served to drive home how good the Hinos were-so we plan to purchase the new FM this year. As part of our preliminary purchase review process, we asked our drivers what they thought, and almost all of them voted for Hino.

"Another clincher for us was that it's easier to transport large cargo on Hinos. Hino trucks have powerful engines, so they can go over hills easily. They have large cargo spaces and provide good fuel economy. We also like the great service we receive from Hino.

"Hino trucks are wonderful tools for our work-we have confidence in them. I'm sure more and more business owners will begin to take note of their strength and start purchasing Hino trucks.

"My belief is that business success comes from putting our hearts into taking good care of our trucks. Every morning, I say a prayer for each of our trucks. At all times, we value putting in our best effort, putting our hearts into what we do, and helping each other. We're a small team, but I believe there's nothing we cannot do."



TFátima, Peru Ms. Rosa Maria Huaytan, Owner and Administrative Manager

Transcosise SAC, Peru | Mr. Immer Miguel Palacios Yauri, Administrative Manager









Hino trucks never let us down.

"We transport toilet paper and other mass consumer products throughout Peru, with a focus on the Lima area. We currently operate twenty HINO500 Series trucks.

"We'd been hearing about Hino trucks from our dealer since around 2003. We felt they were competitively priced, with large loading capacities that would help us improve our profit margins. What we realized after actually purchasing these trucks was that not only were they comfortable to drive, but they also provided large cargo spaces that allowed us to carry more than we ever had in the past.

"What stood out for us-and drove home the peace of mind of operating Hino trucks—was when one of our drivers in a Hino truck came across difficult road conditions that had held other manufacturers' trucks at bay. but he was able to drive on.

"Hino trucks are powered by excellent engines. They're able to drive in a variety of road conditions, and they can load a significant amount of cargo. These features have allowed us to improve the profitability of our operations.

"We also have a great relationship with our Hino dealer. They explain all of the trucks' benefits to us, and our rep is always ready to help us out. I was surprised when they even helped us arrange photos for our company marketing.

"Our competitors are watching what we're doing, and those who've come to realize the benefits of Hino trucks are beginning to buy them en masse. Good things have a way of spreading guickly.

"Hino trucks fulfill our needs, and they never let us down."



Cool Japan: Hino's Birthplace

File4: Wagashi

What are some of the sweet treats that are representative of your home country? Japan, Hino's birthplace, is home to treats called wagashi, which are confections made using traditional methods centuries old.

Wagashi get their sweetness from a range of ingredients other than sugar, including starch syrup and honey. They're low in calorific content because almost no oil or fat is used, and they're predominantly made of natural foods, including red beans (such as adzuki), wheat, rice, sugar and agar.

As a form of confection that places an emphasis on artistic expression, wagashi are also infused with the sensibilities of Japanese culture, with master wagashi makers using their expertise to bring both aesthetics and flavor to the fore.

"Wagashi" is actually a catchall term. Wagashi come in a wide range of variations, and can be categorized into three groups based on water content: Those with a water content of 20% or less are called higashi (dry wagashi); those with 40% or more water are called namagashi (fresh, moist watashi); and those in between are called han-namagashi (soft, semi-baked wagashi). There are, of course, further divisions within these categories, but there aren't enough pages in this magazines to introduce them all.

The reason wagashi branched into so many different variations has much to do with how they developed over the centuries, based on a keen sense of their connection with the four seasons and the various events that punctuate people's lives. For example, when the cherry blossoms bloom in spring, stores may offer sakura mochi and other wagashi shaped in the form of cherry blossoms. In the summer, we might



be treated to wagashi that mimic flowing water; in autumn, the mountains with their changing colors; and in winter, chilly and crisp snowscapes, or the warmth of sun rays shining down through the bare trees.

Wagashi also play an important role in special occasions throughout our personal lives, such as birthdays, enrollment in and graduation from school, coming-of-age ceremonies, weddings and the arrival of a new baby, as well as at funerals, memorial services and other ceremonies dedicated to our ancestors.

Wagashi have a long history of being nurtured in Japan's unique culture and traditions, as well as through the ingenuity of their makers. You might say the elements of wagashi-not only their texture and taste, but also their color, shape and aesthetics, as well as details such as the feelings that go into themreflect the temperament and creativity of the Japanese people. This is a spirit that Hino developers share in their strict discernment for quality, no matter how small the component or part.

If you have the opportunity to spend some time in Japan, be sure to stop by a wagashi shop. You'll notice that the sweets on display will change within a relatively short period of time with the changing seasons. Their diversity and rich sensibility are treats in themselves.

In the next section, we would like to introduce a small sample of the diverse range of wagashi with ties to the different seasons.

Spring







1. Sakura mochi

Consisting of sweet adzuki bean paste covered with shiroyaki wheat and wrapped in a salted leaf from a cherry tree, this has been a springtime favorite for generations.

2. Kimi shigure

The powdered green-tea foundation of this very popular wagashi shows through the cracks of its yellow dough, resembling the buds of shrubs and trees.

3. Kashiwa mochi

This wagashi is made of a roll of flat mochi (pounded rice) wrapped in an oak leaf. Since the oak tree only sheds its old leaves after new buds appear, its leaves are believed to be a symbol of good fortune for our children, and is a popular treat during the Children's Day festival.



1. Hoshigaki

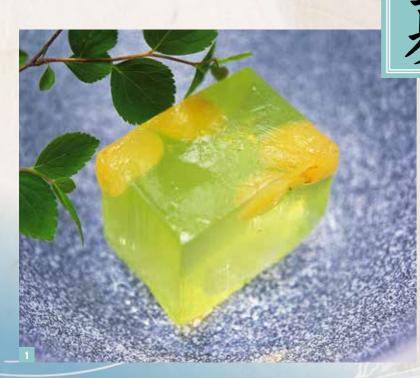
This is a dried fruit confection consisting of dried persimmons.

2. Kuri yokan

This wagashi features plenty of chestnuts, which come into season in the fall. To make it, chestnuts cooked in honey are enclosed in a base of kneaded adzuki yokan, or sweet bean jelly.

3. Tsukimi dango

These dango (mochi balls) are offered during the full moons of the 15th night of August and the 13th night of September based on the lunar calendar. They're said to have originated with the practice of rolling rice powder into balls to represent the moon in thanks for a good harvest.





1. Kingyoku

This is made by adding sugar to an agar solution. This technique is widely used in summer namagashi, as the beautiful quality is ideal for representing flickering sunlight or the coolness of a breeze by the water.

2. Mizu yokan

This wagashi is made by melting agar over heat, adding adzuki bean paste and sugar, pouring the mixture into a container, and then chilling to set.



1. Uguisu mochi

This is a wagashi for early spring that symbolizes the Japanese nightingale (uguisu), which is said to be a herald of spring. Strained bean paste is wrapped in gyuhi, which is then dusted with dried green soybean powder.

2. Hanabira mochi

This is a traditional confection that's only offered during the New Year's holiday to celebrate the coming spring. It's made by wrapping soft mochi together with white miso paste and burdock root in a dough of gyuhi (similar to Turkish delight.)





Seminars at Customer Technical Center Am to Support Customers Businesses

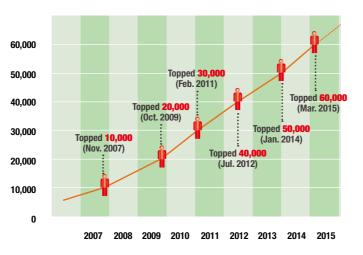
Many of our readers may be familiar with Hino's Customer Technical Center located next to Hino's Hamura plant in Hamura City, Tokyo, which has been featured in previous issues of Hino Cares.

The Center opened its doors in June 2005 as part of Hino's efforts to enhance its Total Support operations—a facility for providing free seminars on Eco Driving and Safe Driving, as well as opportunities to test-drive new vehicles, low-emission vehicles and other vehicles that feature Hino's latest technologies. The Center garnered significant publicity as the first permanent customer seminar facility directly run by an automobile manufacturer.

Bolstered by increasing awareness among customers regarding safety and the environment, the number of seminar participants has continued to grow annually, drawing a cumulative total of over 62,000 people as of end of April 2015. A significant percentage of these participants is made up of international customers, as well as representatives from Hino dealers and distributors in various parts of the world who are looking to train trainers who will then be responsible for carrying out seminars in their respective countries.

The Center offers two programs—Eco Driving and Safe Driving based on a vision of providing a wide range of seminars to help support customers' businesses, realizing a low-carbon-emission world and reducing traffic accidents, built on the principles, "Be convinced by driving, learning and testing for yourself." Optional programs give participants the opportunity to test-drive hybrid vehicles and new models, as well as experience the PCS (Pre-Crash Safety) system. With extensive facilities and programs—including a circuit track that mimics driving conditions on regular roads, a special track for Safe Driving, a total of 38 vehicles (from light-duty trucks to large buses) that are used exclusively for these seminars, and integrated training sessions ranging from classroom sessions to practical driving skill training carried out by former test drivers and other specialized staff members with a wealth of experience—the seminars offered at the Center have become widely popular among participants, known for being both informative and very easy to understand. This appears to be one of the reasons the Center is increasingly seeing repeat participants who return to join the programs again and again.

Cumulative number of participants





The Hino Cares crew visited the Center for a news gathering and photo shoot one day, when several dozen drivers from Daiwakankojidousha Co., Ltd. and Meitetsu Unyu Co., Ltd. were taking part in seminars on-site. Many of the drivers from Daiwakankojidousha had taken this seminar three years earlier. Meitetsu Unyu has been sending their drivers to these seminars from different company divisions over the years, and this year it was the drivers from the moving and forwarding division who were present at the Center.

The program started out by having the drivers drive on the circuit track as they do in day-to-day driving, Daiwakankojidousha using large buses and Meitetsu Unyu using light-duty trucks, after which their fuel economy was measured. This was followed by a classroom lecture on Eco Driving, after which the drivers were invited to drive the vehicles on the same course again, accompanied by an instructor and using the Eco Driving techniques that they had just learned. After the second drive, their fuel economy was measured and compared to their measurements from before the lecture.

Based on interviews with these drivers, we found that many couldn't hide their surprise at how convincingly they were able to improve their fuel economy simply by being mindful of how they drove and employing a few very simple techniques. Said one, "Before the lecture, my fuel economy was 2.83km/L, and this improved to 3.39km/L after the lecture. I'm going to put this into practice starting tomorrow." Taking this driver's case as an example, and presuming that he drives 70,000 kilometers in a year, the amount of fuel that he could save practicing Eco Driving comes to a whopping 4,083 liters annually. Supposing that each of his company's 43 trucks were able to save 4,083 liters a year, the company would be saving





175,569 liters of fuel per annum! Just think: How much money would this come to based on the fuel price in your country? Although it goes without saying that fuel economy is affected by various factors, including road conditions and cargo load, there's no doubt that we can all make major contributions to cost reduction by always keeping in mind and putting into practice these Eco Driving tips.

Reducing fuel consumption also translates into reducing carbon emissions. Further, Eco Driving practices innately involve fewer abrupt maneuvers such as quick take-off and acceleration, quick braking and abrupt handling. So Eco Driving may help drivers and operators reduce the number of accidents as well. We think you can see that Eco Driving is a way to have your cake and eat it too.

The Customer Technical Center is an embodiment of the "Customer First" spirit that runs through Hino's corporate culture. In addition to offering high-quality products, Hino will continue to provide and enhance its comprehensive 'Total Support' activities to address its customers' diverse range of needs.

Evasive Driving Techniques -Always keep in mind that there are many hazards on the road.

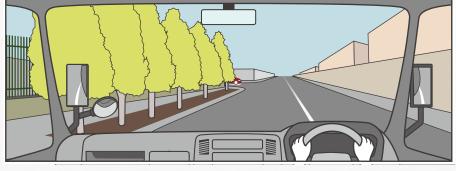
As part of our efforts to help you drive safely, we'd like to introduce the Basics of Safe Driving. Today we'll be discussing potential hazards on roads with light traffic.

Let's say you're driving your truck on a road with one lane in either direction. The road is straight and you see no oncoming traffic. Ahead of you, there's a T junction with another road coming in from the left. The intersection has no traffic light. The road is lined with trees that are obstructing your view, and you don't have a clear line of sight

Sere Driving echniques That driver might assume there's no other vehicle on the road and may decide to enter the intersection without stopping to check for safety (See illustrations). Additionally, motorcycles and bicycles may fail to stop even if there's a stop sign, in which case you may not notice them until the last moment, leading to a serious accident.

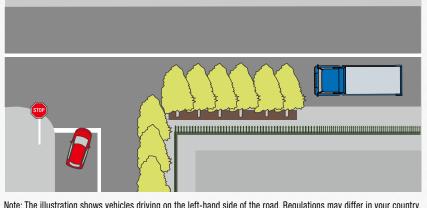
down the road coming in from the left. What are the potential hazards in this situation?

The fact that the trees are obstructing your view could mean that any driver coming down the other road won't be able to see you either.



Note: The illustration shows vehicles driving on the left-hand side of the road. Regulations may differ in your country.

When driving on roads with light traffic or during off-hours, it's important to never assume that there are no other vehicles around. Keep in mind that there are many potential hazards on the road, and stay alert as you drive.



Additionally, roads where traffic is light and where you have a clear line of sight may give you a false sense of speed, which can often cause you to drive over the speed limit. By driving at higher speeds, you increase your risk of being unable to respond to hazardous situations in time. Be sure not to base vour speed on the amount of traffic on the road but on whether or not you're able to appropriately respond to sudden hazards.

Note: The illustration shows vehicles driving on the left-hand side of the road. Regulations may differ in your country.

In our next issue...

We would like to thank all those who sent photos to the "My Favorite Road" photo contest. We will be announcing the winners in our next issue, so please stay posted!



Hino Motors, Ltd. 3-1-1 Hinodai, Hino-shi, Tokyo, 191-8660, Japan

Global Site: http://www.hino-global.com



To read HINO Cares magazines online, scan this QR code using your smartphone or access

http://www.hino-global.com/about us/hino magazines/

©Hino Motors, Ltd. All rights reserved. No part of this publication may be reproduced, copied or transmitted in any form or by any means.