

# Isuzu Developments



## Meeting new emissions rules

Isuzu is developing trucks that fulfill both environmental and economical requirements to the highest standards. One of the first manufacturers to introduce diesel engines that comply with the latest emissions regulations, we are striving to make a contribution towards preventing global warming and combat air pollution in urban areas.



In June 2005 we introduced new FORWARD medium-duty trucks. Developed in line with the concept “economy for the customer, and harmony with the earth and society,” the new trucks are equipped with a newly developed 4HK1 engine. With this engine, Isuzu has not only met Japan’s new long-term (2005) emissions standards, but even achieved NOx and PM emissions levels—2.0g/kWh and 0.027g/kWh, respectively—that almost clear the EU’s far-stricter Euro V automobile emissions targets scheduled to take effect in 2008 or later.

In developing the new engine, we employed our own electronic control technology for overall control of performance features including the electronic common rail system, VGS turbo, DPD system and twin EGR cooler to enhance its potential. The environmental performance of the new trucks was enhanced without relying on post-treatment of emissions—they offer 5% improvement in fuel economy and weigh 50kg less than previous models. The Smoother-F advanced semi-automatic transmission has been adapted to high output (240hp and 260hp) engines, and is now available with all models in the FORWARD series

**Large ERGA route bus added to new model lineup**

Isuzu added a new model to the ERGA large route bus series that complies with Japan’s new short-term (2003–2004) emissions regulations and also qualifies for designation as “three star-rated ultra-low-PM-emissions diesel vehicles” by the Ministry of Land, Infrastructure and Transport (MLIT), with 75% reduced particulate matter (PM) emissions. The ERGA Non-Step went on sale nationwide on December 21, 2004. Combining eco-friendly features with concern for passenger welfare, it also qualifies for the Ministry of Land Infrastructure and Transport’s Non-Step Bus designation. Equipped with a smaller, more lightweight new 6HK1-TCC



engine, the new ERGA is designated a “good low-pollution vehicle” by eight prefectures in the Tokyo area and a “low-pollution vehicle” by six prefectures in the Kyoto–Osaka–Hyogo region. Maximum capacity has been increased by four to 86 passengers in one model. It also boasts 5% better fuel economy than previous models.

**CV Telematics system upgraded**

On February 28, 2005, we expanded both the reporting system and the range of vehicles covered by the Mimamori-kun Online Service, a real-time vehicle diagnostics system initially provided for the GIGA series of heavy-duty trucks. As a result of the upgrade, the service is now available for the ELF Series of light duty and FORWARD Series of medium duty trucks. Customers are mainly logistics companies that use the service to monitor vehicle information including fuel consumption, emissions levels, and driver habits such as gear shifting, acceleration, and braking behavior. In addition to providing valuable new information, the upgraded reporting system now alerts customers to delivery vehicles that are running late and suggests maintenance procedures based on data analysis for each vehicle. The initial cost has come down because of lower component prices, and a flat-rate monthly charge has replaced the previous structure of a basic fee plus communications charge.

**The Mimamori-kun Online Service**

