

New Products in 2002

Working to reduce the environmental impacts of all our commercial vehicles.

● GIGA Heavy-Duty Truck Series

- On June 2, 2003, Isuzu launched the new GIGA series heavy-duty trucks equipped with the Smoother-G (see page 14), a fully automatic mechanical transmission that enables energy-efficient shifting. It offers better fuel economy and high economic performance.
- Non-aspirated engines were completely replaced with an intercooler turbo engine that offers high fuel efficiency and low CO₂ emissions. The new engine produces high low-end torque, resulting in significantly improved fuel efficiency and high performance that has not been achieved in conventional turbo engines.
- Basic specifications for the chassis and suspensions have been improved to ensure better rough road performance, reliability and body installation.
- As a result of addition of sound-insulation plates to the engine and transmission and the adoption of a large muffler, the new GIGA series trucks comply with the 2001 noise regulations. The standard speed limiter improves safety.
- Exhaust emissions have been cleaned by introducing a new oxidization catalytic converter and other equipment, clearing the regulated level of 0.18 g/kWh in the new short-term regulations.



GIGA

● FORWARD CNG Trucks

- On May 6, 2003, we introduced the FORWARD CNG medium-duty truck series with further improved environmental performance, following the ELF CNG.
- CNG-powered vehicles emit almost no particulate matter or black smoke and are suitable for such purposes as cargo deliveries and garbage collection in cities suffering air pollution.
- By precisely controlling the air-fuel ratio of the 6HA1 engine to maximize the performance of three-way catalytic converter in the engine, the new FORWARD CNG trucks meet the exhaust emissions requirements equivalent to the "super-low exhaust emissions ☆☆☆ (in-house test values)," the strictest of the low exhaust emissions vehicle designation standards of Japan's Ministry of Land and Traffic.
- The FORWARD CNG offers remarkably improved environmental performance with reductions of about 95% in nitrogen oxide (NO_x), about 70% in carbon monoxide (CO), and about 95% in hydrocarbons (HC), compared to the 1998/99 exhaust emissions regulation standards (NO_x is reduced by about 80%, CO, by about 40%, and HC, by about 80%, compared to existing CNG-powered vehicles).



FORWARD CNG-Powered Truck

● FORWARD Medium-Duty Truck Series

- On December 24, 2002, we introduced the FORWARD medium-duty truck, featuring significantly reduced particulates matter as well as improved driving economy and safety.
- Models equipped with the 6HL1 or 6HH1 non-aspirated engine, which are expected to serve well in urban transport, were equipped with the oxidization catalytic converter to clear the regulated particulate matter (PM) level of 0.18 g/kWh in the new short-term regulations. Use of the converter as standard equipment reduced costs compared to aftertreatment equipment.
- Isuzu's oxidization catalytic converter has been certified by local governments to reduce particulate matter. The new FORWARD series trucks will continue to operate in central Tokyo even after the stricter regulations of the Tokyo Metropolitan Ordinance on Environmental Preservation take effect in 2005.
- For models equipped with non-aspirated engines, an idling stop/start system was made available as optional equipment.
- The 6HK1 turbo-charged engine, which is suitable for medium-distance transport, cleared the regulated particulate matter (PM) level of 0.18 g/kWh in the new short-term regulations.
- The models mounted with the 6HL1 engine were equipped with the new "Smoother-F" clutch pedal-free mechanical transmission as standard equipment to improve driving economy and safety.
- Compliance with the 2001 noise regulations was achieved for all models of this series.



FORWARD

● ELF-KR Light-Duty Truck Series

- On June 5, 2002, Isuzu launched the ELF-KR series, the first generation of environmentally friendly trucks in Japan which comply with the new short-term exhaust emission regulations taking effect in 2003 for the first time in Japan.
- Developed with the aim of taking first rank in environmental performance and equipped with a standard oxidization catalytic converter, all new models of the ELF-KR (equipped with newly developed 4HL1 or 4HL1N engine or improved 4HJ1 engine) have been designated as low-pollution vehicles by eight Tokyo-area local governments (including the Tokyo Metropolitan Government) and six Kansai-area local governments (including Osaka.)
- The ELF-KR series is also in compliance with the stricter regulations of the Tokyo Metropolitan Ordinance on Environmental Preservation, which take effect in 2005. Thanks to the adoption of a common rail super high-pressure fuel injection system and additional sound-insulation plates, external noise, which is a characteristic of diesel engine due to combustion, was significantly reduced.



ELF-KR