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TOYOTA INTRODUCES FULL-MODEL CHANGE TO DYNA TRUCK
— Series Strengthened with Additional Power and Greatly Improved Fuel Economy —

TOYOTA MOTOR CORPORATION today announced the first full-model change in seven years for the Dyna truck series. Initially introduced in 1956, the Dyna has enjoyed a consistently high reputation in the small-truck market.

Behind the decision to remodel the Dyna series are several developments in the marketplace. In general, cab-over type small trucks have gradually come to account for a higher percentage of the overall Japanese truck market, mainly because of greater activity in the market for picking up and delivering small packages, and increased short-distance hauling. Also, customer demands have grown more diversified and sophisticated regarding economy — especially fuel economy, comfort, maneuverability, and performance.

The new Dyna series boasts of innovative new technology and materials, making it especially fitting to meet the needs of our times. Available for it are a newly developed direct injection type diesel engine, and a world's first for a truck, a 4-speed automatic transmission fitted with 2-way overdrive. Another first in the world for a cab-tilt type truck is the "full just-low" model.

Four main points marked development of the new Dyna series:

1. Upgrading of basic performance features such as better fuel economy, reduced noise, improved power, operability and comfort
2. Fuller model line-up to meet customer needs
3. Advanced, functional styling
4. Active implementation of new technology, materials, and mechanisms



DYNA STANDARD CAB, FULL JUST-LOW LONG-DECK 2-TON DIESEL MODEL

Principal Features

1. Engines

The Dyna series has six types of engines available. The direct injection, newly developed 13B type diesel engine (4-cylinder, 3431cc) provides the most outstanding fuel economy in its class: 15.5 km/L (for 5-speed manual transmission, on set course at 60 km/h, values reported to Ministry of Transport).

The direct injection, newly developed 13B-T type diesel turbo-charged engine has a maximum output of 130 ps, the best in the 3.3 - 3.5-liter class, realized by using Toyota's unique and highly reliable water-cooled turbo, and pistons made of a new ceramic fiber alloy (FRM; fiber reinforced metal.)

Gasoline engines available include the 3Y type engine (4-cylinder, 1,998cc), which provides better fuel efficiency and improved power characteristics.

Also added, for the first time in this class of truck, is a highly fuel efficient, high-performance 3Y-P type LPG engine (4-cylinder, 1,998cc).

Engine noise is remarkably low, through use of a oil pan made of laminated steel sheet, a new material.

Specifications for Engines Available in New Dyna Series

	Engine	Displacement (cc)	Max. Output (ps/rpm)	Max. Torque (kg-m/rpm)
Diesel	Direct injection 13B	3,431	100/3,400	24.0/2,200
	Direct injection turbo 13B-T	3,431	130/3,400	30.0/2,000
	Direct injection 1W	4,009	115/3,200	28.0/2,000
	B	2,977	85/3,600	20.0/2,200
Gasoline	3Y	1,998	105/5,200	17.0/3,000
LPG	3Y-P	1,998	90/5,000	16.0/3,000

2. Drive Train, Chassis

The 4-speed automatic transmission fitted with 2-way overdrive (passenger car type, floor shift), provides improved mobility and maneuverability for city driving, better fuel economy, less noise, and improved power performance at medium speeds. Through use of a lock-up operation system in third and fourth speed (when used with the direct injection 13B type engine), this transmission provides fuel economy on a par with manual transmissions (15.1 km/L, on set course at 60 km/h, values reported to Ministry of Transport).

Maneuverability is also improved by using passenger car type floor shifts, and by matching the manual transmissions with the most appropriate engines.

Reliability and serviceability have been improved by the new or expanded use of a large-size differential (12 inches), and brake and clutch auto adjusters.

A "one-touch, super-shift" mechanism, which makes it possible to switch from economy to power drive, is available in models mounted with the direct injection 1W type engine.

Model Line-Up

The wide range of 53 standard and 185 special-purpose models responds effectively to the greater diversification of market demands.

- World's first "full just-low" (completely flat deck) model for cab-tilt trucks

This model was developed as the ideal truck for making pick-ups and deliveries in the city. Although this model can carry two-ton loads, its cab floor is extremely low (580 mm), on a par with 1-ton trucks. Its minimum turning radius is extremely small (4.6 meters), moreover, about the same as commercial vans, making it ideal overall for pick-ups and deliveries in the city, and giving ease of boarding and alighting, mobility, and loading.

A cab-tilt mechanism fitted to this model gives it especially good servicing characteristics.

- Bolstered dump truck series

Newly designed power train and suspension mechanisms increase the reliability of the Dyna dump trucks. Use of a closed cross-sectional box frame and a new dump mechanism greatly increases the raising capabilities and the vehicle's torsional rigidity.

The 3.1-meter-long bed is tops in its class, and the 1-meter height increases its utility.

- Fuller line-up of special-purpose vehicles

Among the new special vehicles available are a freezer chassis, fire engine chassis, and others.

Styling

Curved door windows and a sharper front windshield angle have improved the Dyna's aerodynamic characteristics, thus contributing to better fuel economy and less wind noise.

Visibility on both sides near the ground has been improved by using large-size corner windows.

The interior is roomier and its design has been improved. The wider glass area, lower instrument panel, and use of shadow grey as the main interior color combine to make the interior more comfortable and give it a feeling of openness.

Greater utility is provided with a larger carrying deck and improved latch handles that require less effort to operate.

New Technology, New Mechanisms, New Materials

To make the new Dyna series sufficiently attractive for the current age, new technology and new mechanisms have been made available either as standard or optional equipment. As an indication of the efforts made in developing the new Dyna, the number of patents and utility ideas applied for totaled 164.

The following are some of the many innovations:

- A sliding door on the passenger side makes boarding and alighting easier on narrow roads.
- A "suspension seat" reduces fatigue and improves riding comfort for the driver.
- A shower duct provides sufficient warm air for the driver's right foot, and a multi-air-flow air conditioning system provides interior comfort through a central vent that continually lets cool air circulate.

- By moving a switch a roof ventilator brings in air from the outside, and allows the removal of stale inside air.
- A wireless door lock control, the first in the world for a truck, locks the door automatically when it is closed, and a remote control switch unlocks the door from the outside.
- An air-cleaner device carries air from the cabin to prevent ground water from reaching the engine. In this mechanism, the driver operates an air cleaner inlet from inside the vehicle when the road is wet so that air is carried from the cabin and keeps water away from the engine.
- A warning lamp informs the driver when the air cleaner is dirty, so that it can be checked to prevent a drop in the engine's performance.
- A back sonar device warns the driver when there is something in back of the truck blocking the way.

New Materials

- Pistons made of ceramic fiber alloy (FRM; fiber reinforced metal) make the engines much more durable.
- Engine noise is remarkably low, through use of an oil pan made of laminated steel sheet, a new material.
- Anti-corrosion steel sheet is used widely in the cabin and deck. In particular, the rear pillar section of the cabin uses "Excelite" anti-corrosion steel sheet.