INTRODUCTION

OUTLINE OF NEW FEATURES

1. Model Line-up

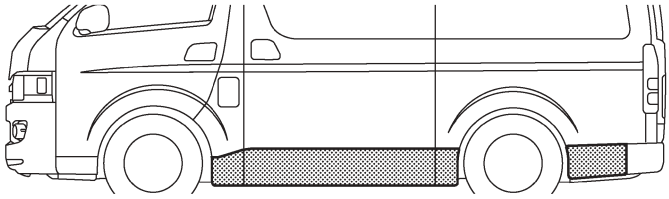
- The 2KD-FTV engine on the models for Australia, New Zealand, Hong Kong, and Singapore has been changed to the 1KD-FTV engine.
- The following models have been added.

Destination	Model Code
G.C.C. Countries	TRH213L-JEMDKV, KDH212L-JEMDYV
South Africa	TRH201R-RBMDKN, TRH221R-MBMDKN, TRH213R-JEMDKN, TRH213R-JDMNKN, TRH223R-LEMNKN, KDH200R-RBMDYN, KDH220R-MBMDYN, KDH212R-JEMDYN, KDH212R-JDMNYN, KDH222R-LEMNYN
Thailand	TRH223R-LEMDKT
Philippines	KDH212L-KDPNY
General Countries	TRH213$^{R}/_{L}$-JEMDK, KDH212$^{R}/_{L}$-JEMDY, LH212$^{R}/_{L}$-JEMDE KDH220L-MBMDY

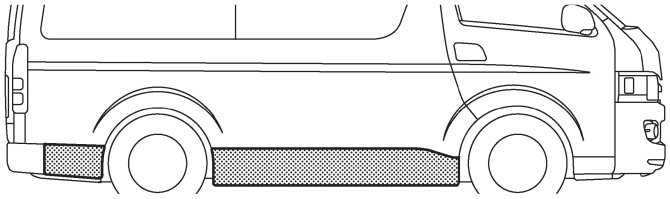
2. Exterior

- A tape is newly available as an option on the 4-door models for South Africa to make the exterior appear to have a two-tone color.

: Tape Area



LH Side



RH Side

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- Front and rear mud guards are provided as standard equipment on the models for China.
- Front mud guards are provided as standard equipment on the models for Australia.
- Front and rear mud guards are available as optional equipment.
  (For the models for China, Australia, Russia, Ukraine, Thailand, and Hong Kong: standard equipment)
- A rear under mirror is available as optional equipment on the van models for Australia.

3. Interior

A center console is provided as standard equipment on the commuter models for Australia.

4. Engine

- The 2TR-FE engine for Australia, New Zealand, and Hong Kong complies with the EURO IV emission regulation by optimizing its TWC (Three-Way Catalytic converter) and EFI system.
- The 2KD-FTV engine for Australia, New Zealand, Hong Kong, and Singapore has been changed to the 1KD-FTV engine, which complies with the EURO IV emission regulation. For details, see page 16.

5. Clutch (1KD-FTV Engine Model)

The 1KD-FTV engine models use the following clutch system.

Engine Type			1KD-FTV
Transmission Type			R351
Clutch	Type		Dry Type Single Plate Clutch Diaphragm Spring
	Operation		Hydraulic
Clutch Cover	Type		DST*1
	Size	mm (in.)	275 (10.83)
	Installed Load	N	6370
Clutch Disc	Facing Size*2	mm (in.)	275 x 175 x 3.5 (10.85 x 6.89 x 0.14)
	Facing Area	cm^2 ($in.^2$)	353 (54.8)
Master Cylinder	Type		Plunger
	Cylinder Diameter	mm (in.)	15.87 (0.62)
Release Cylinder	Type		Non-adjustable
	Cylinder Diameter	mm (in.)	19.05 (0.75)
Clutch Accumulator			With
Clutch Pedal			Turnover

*1: DST (Diaphragm Spring Turnover)
*2: Outer Diameter x Inner Diameter x Thickness

6. Manual Transmission (1KD-FTV Engine Model)

The 1KD-FTV engine models use the R351 5-speed manual transmission, which is used on the previous models.

▶ Specifications ◀

Transmission Type		R351
Engine Type		1KD-FTV
Gear Ratio	1st	4.313
	2nd	2.330
	3rd	1.436
	4th	1.000
	5th	0.838
	Reverse	4.220
Oil Capacity	Liters (US qts, Imp.qts)	2.6 (2.8, 2.3)
Oil Viscosity		SAE 75W-90
Oil Grade		API GL-4 or GL-5
Weight (Reference)*	kg (lb)	52.2 (114.8)

*: Weight shows the figure with the oil fully filled.

7. Automatic Transmission (1KD-FTV Engine Model)

The 1KD-FTV engine models use the A340E 4-speed automatic transmission, which is used on the previous models.

▶ Specifications ◀

Model			New	Previous
Transmission Type			A340E	←
Engine Type			1KD-FTV	2KD-FTV
Gear Ratio		1st	2.804	←
		2nd	1.531	←
		3rd	1.000	←
		4th	0.705	←
		Reverse	2.393	←
Fluid Capacity		Liters (US qts, Imp. qts)	8.3 (8.8, 7.3)	←
Fluid Type			Toyota Genuine ATF Type T-IV	←
Weight (Reference)*		kg (lb)	79.5 (174.9)	←
C_0	OD Direct Clutch	No. of Discs	2	←
C_1	Forward Clutch		6	5
C_2	Direct Clutch		4	←
B_0	OD Brake		4	3
B_1	2nd Coast Brake	Band Width mm (in.)	40 (1.57)	←
B_2	2nd Brake	No. of Discs	5	←
B_3	1st & Reverse Brake		7	6
F_0	OD One-way Clutch		24	20
F_1	No. 1 One-way Clutch		22	18
F_2	No. 2 One-way Clutch		28	←
Front Planetary Gear		No. of Sun Gear Teeth	42	←
		No. of Pinion Gear Teeth	19	←
		No. of Ring Gear Teeth	79	←
Rear Planetary Gear		No. of Sun Gear Teeth	33	←
		No. of Pinion Gear Teeth	23	←
		No. of Ring Gear Teeth	79	←
OD Planetary Gear		No. of Sun Gear Teeth	33	←
		No. of Pinion Gear Teeth	23	←
		No. of Ring Gear Teeth	79	←
Torque Converter		Stall Torque Ratio	1.85	1.90

*: Weight shows the figure with the fluid fully filled.

8. Differential (1KD-FTV Engine Model)

The 1KD-FTV engine models are provided with the following differential.

Differential Type		B200A	←
Transmission Type		R351	A340E
Engine Type		1KD-FTV	←
Gear Ratio		3.909	4.100
No. of Teeth	Drive Pinion	11	10
	Ring Gear	43	41
Ring Gear Size mm (in.)		205.0 (8.0)	←
Oil Capacity Liters (US qts, Imp. qts)	Standard Body Type	3.10 (3.28, 2.73)	←
	Wide Body Type	3.25 (3.43, 2.86)	←
Oil Viscosity		SAE 85W-90	←
Oil Grade		API GL-5	←
Oil Type		Hypoid	←

9. Suspension (1KD-FTV Engine Model)

The 1KD-FTV engine models use the following suspension. The basic construction is the same as that of the previous models.

- A double-wishbone type suspension with upper torsion bar is used in the front.
- A rigid axle suspension with leaf spring is used in the rear.

10. Brake (1KD-FTV Engine Model)

The 1KD-FTV engine models use the following brake system.

Engine Type	1KD-FTV
Front Brake Type	Ventilated Disc
Rear Brake Type	Leading-trailing Drum (Dual Mode Drum)
Brake Control Valve	LSP & BV
Parking Brake Lever Type	Stick
Brake Control System	ABS*

*: Option

▶ Specifications ◀

Engine Type			1KD-FTV
Master Cylinder	Type		Tandem
	Diameter	mm (in.)	20.64 (0.81)
Brake Booster	Type		Single/Single with Brake Assist Mechanism*1
	Size	in.	10
Front Brake	Pad Area	cm^2 ($in.^2$)	53 (8.5)
	Wheel Cylinder Diameter	mm (in.)	66.7 (2.6)
	Rotor Size (D x T)*2	mm (in.)	285 x 28 (11.22 x 1.10)
Rear Brake	Lining Area	cm^2 ($in.^2$)	121 (19.36) x 2
	Wheel Cylinder Diameter	mm (in.)	22.22 (0.87)
	Drum Inner Diameter	mm (in.)	254 (10.0)
Parking Brake	Type		Drum
	Drum Inner Diameter	mm (in.)	254 (10.0)
Brake Actuator Manufacturer*1			ADVICS

*1: Only for Models with ABS

*2: (Diameter x Thickness)

11. Steering (1KD-FTV Engine Model)

The 1KD-FTV engine models use the following steering.

- A rack and pinion type steering gear with an engine revolution sensing type power steering is used.
- A manual tilt mechanism in the steering column is used on all models.

12. Seat

- The new GL grade of the super long wheel base models for South Africa uses 14 (2 + 2 + 3 + 3 + 4) seat layout. For details, see page 82.
- The new GL grade of the standard wheel base models for South Africa uses 10 (2 + 2 + 3 + 3) seat layout. For details, see page 82.
- The new DX grade of the standard wheel base models for South Africa uses 15 (2 + 3 + 3 + 3 + 4) seat layout. For details, see page 83.
- The front three-seater with all separate seats LHD models use L-shaped headrests to achieve excellent rearward visibility. For details, see page 84.
- A recliner is provided on the front passenger seat (except for the models for Thailand). For details, see page 84.

- The seat slide function is available as optional equipment for the front passenger seat on all LHD models. The seat slide function is provided as optional equipment for the front passenger seat on the commuter models for Australia.

13. Seat Belt

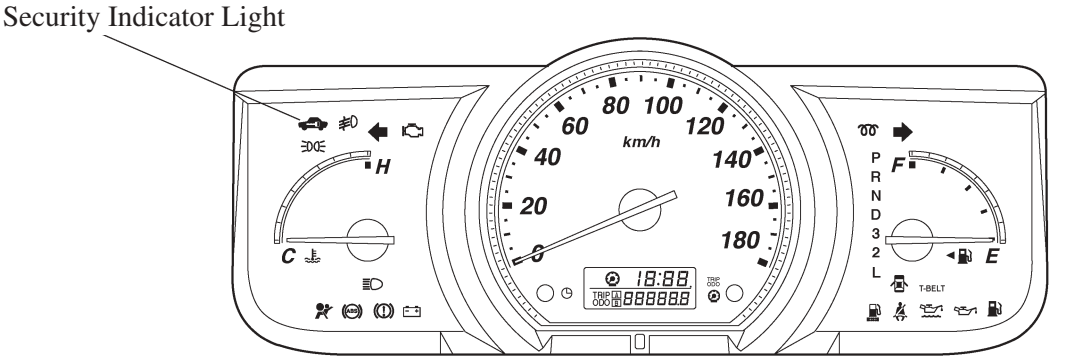
Rear seat belts are provided as standard equipment on the half-panel van models for Hong Kong.

14. Body

- A silencer, which ensures quietness, is provided on the vertical wall of the step of the following models: the 1KD-FTV engine van models for Australia, New Zealand, Hong Kong, and Singapore; and the 1KD-FTV engine commuter models for Singapore.
- A silencer, which ensures quietness, is provided on the back of the plastic scuff plate of the 1KD-FTV engine commuter models for Australia, New Zealand, and Hong Kong.
- A silencer, which ensures quietness, is provided on the back of the center pillar lower garnish and quarter trim of the 1KD-FTV engine models for Australia, New Zealand, Hong Kong, and Singapore.
- The 1KD-FTV engine models are provided with a dash panel outer silencer to help reduce the amount of engine noise entering the cabin.

15. Combination Meter

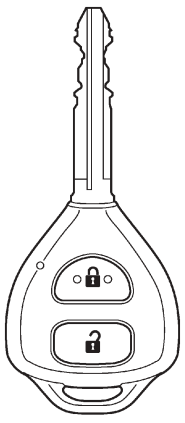
On the models with the engine immobilizer system, a security indicator light is provided in the combination meter.



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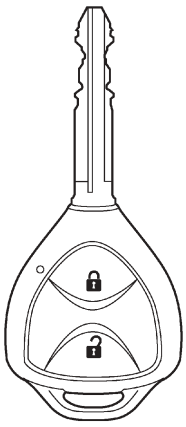
16. Wireless Door Lock Remote Control System

The design of the transmitter has been changed as follows.



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New Model



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Previous Model

17. Power Slide Door System

A power slide door system is newly available as optional equipment for the 5-door, middle-roof, wide type models for Thailand. For details, see page 85.

18. Engine Immobilizer System

- The engine immobilizer system is newly provided as standard equipment on the models for Australia, South Africa, New Zealand, Mexico, and China.
- The engine immobilizer system compares the ID code that is registered in the transponder key ECU with the ID code of the transponder chip that is embedded in the ignition key. The system unsets if these ID codes match. Thus, the transponder key ECU and the engine ECU communicate with each other to authorize fuel injection and ignition*, enabling the engine to start.
  *: 2TR-FE Engine Models

Service Tip

When the transponder key ECU is replaced or making a new ignition key is made, the key's recognition code must be registered.

- When the transponder key ECU has been replaced, the intelligent tester II is necessary for the key registration. At this time, the total number of keys that can be registered is three (master key: two, sub key: one).
- The recognition code of additional keys must be registered. At this time, the total number of keys that can be registered is eight (master key: five, sub key: three).

For details, see the Hiace Repair Manual (Pub. No. RM04Z0E).