LAND CRUISER/ LAND CRUISER PRADO

OUTLINE OF NEW FEATURES

The following changes are made for the new Land Cruiser/ Land Cruiser Prado.

1. Model Line-up

- The 3RZ-FE engine model has been discontinued.
- The 1KD-FTV and 1GR-FE engine models with the previous 5-speed manual transmission or 4-speed automatic transmission have been discontinued.
- The 2TR-FE engine model has been added on the new Land Cruiser Prado. See page 92 for model line-up.
- The A750F 5-speed automatic transmission has been adopted for the 1GR-FE and 1KD-FTV engine models. See page 92 for model line-up.
- The RA61F 6-speed manual transmission has been adopted for the 1GR-FE and 1KD-FTV engine models. See page 92 for model line-up.

2. Exterior

- The design of the side stripes, which are available as optional equipment, has been changed.
- The color of the door glass has been changed from green to green UV.

3. Interior

- Along with the provision of a 5-speed automatic transmission, a new bezel has been provided on the console.
- Along with the provision of a 6-speed manual transmission, the shape of the lever opening at the upper console panel has been changed.

4. 2TR-FE Engine

The 2TR-FE engine has been newly added.

5. 1GR-FE Engine

VVT sensor has been changed from pick-up type to MRE (Magnetic Resistance Element) type.

6. 1KD-FTV Engine

- The maximum torque has been changed.
- The shape of the combustion chamber on the piston has been changed.
- The balance shaft bearing uses lead-free material due to environmental concerns.
- SCVs (Swirl Control Valves) have been newly added in the intake manifold.
- A valve lift position sensor has been added to the EGR valve.
- The EGR cooler has been changed.
- A variable nozzle vane type turbocharger, which is driven by a DC motor, has been adopted.
- The components of the common-rail system have been changed.
- A 32-bit engine ECU has been adopted.

7. Clutch

- The 2TR-FE engine model has adopted the same clutch as the previous 3RZ-FE engine model.
- On the 1GR-FE and 1KD-FTV engine models, the clutch performance and the clutch pedal operation feel have been optimized, along with the increased mounting load of the clutch cover.
- On the 1GR-FE and 1KD-FTV engine models, the wear life of the damper has been improved.

8. Manual Transmission

- A newly developed RA61F 6-speed manual transmission has been adopted for the 1GR-FE and 1KD-FTV engine models.
- On a newly developed 2TR-FE engine model, the carryover R150F 5-speed manual transmission has been adopted.

9. Automatic Transmission

- The A750F 5-speed automatic transmission [Super ECT (Electronically Controlled Transmission)] has been newly adopted for the 1GR-FE and 1KD-FTV engine models.
- On a newly developed 2TR-FE engine model, the carryover A343F 4-speed automatic transmission has been adopted.

10. Propeller Shaft

- Along with the adoption of the A750F 5-speed automatic transmission, propeller shafts of different lengths have been newly provided.
- On the models equipped with the 2TR-FE engine, a propeller shaft with an intermediate slide that is shorter than the previous model has been adopted to increase rigidity.

11. Differential

- The new models with 2TR-FE, 1GR-FE and 1KD-FTV engines have the front and rear differentials with the following equipment:

Destination	Engine	Transmission	Transfer	Front Diff.	Rear Diff.	Equipment
G. C. C. Countries/ General Countries	2TR-FE	R150F 5MT/ A343F 4AT	VF4B	S20SNF	B20P (LSD)	STD
					B20P (LSD)	STD
					B20N (Diff. Lock)	OPT
Europe/ G. C. C. Countries/ General Countries	1GR-FE	RA61F 6MT/ A750F 5AT	VF4B (STD)/ VF4BM (OPT)		B200A (Normal)	STD
					B20P (LSD)	OPT
					B20N (Diff. Lock)	OPT
Australia					B20P (LSD)	STD
					B200A (Normal)	OPT
					B20N (Diff. Lock)	OPT
Europe	1KD-FTV	RA61F 6MT/ A750F 5AT/ A343F 4AT			B200A (Normal)	STD
					B20P (LSD)	OPT
					B20N (Diff. Lock)	OPT

- The differential gear ratios of the 2TR-FE, 1GR-FE and 1KD-FTV engine models are as follows:

Engine	Transmission	Differential Gear Ratio
2TR-FE	R150F 5MT/ A343F 4AT	4.555
1GR-FE	RA61F 6MT/ A750F 5AT	3.727
1KD-FTV	RA61F 6MT/ A750F 5AT	3.909
	A343F 4AT	4.100

12. Brake

A newly developed hydraulic brake booster with a built-in skid control ECU has been adopted for the brake control system with VSC (Vehicle Stability Control) on the 1GR-FE and 1KD-FTV engine models as optional equipment.

13. Power Steering Vane Pump

A new power steering vane pump has been adopted for the 2TR-FE engine model.

14. Multiplex Communication

The CAN (Controlled Area Network) communication has been adopted in the brake control system [ABS with EBD (Electronic Brake Control), Brake Assist, A-TRC (Active-Traction Control), VSC, DAC (Downhill Assist Control) and HAC (Hill-start Assist Control)].

15. Combination Meter

- On the models for General Countries and the Middle East, a combination meter for the 2TR-FE engine has been newly provided.
- On the models for Australia, a front fog indicator has been added.
- On the left-hand drive models for Europe, a position indicator light has been added to the analog meter.
- On the models for Europe, the combination meter has been changed so that the position indicator light illuminates when the daytime running lights are operating.

16. Multi Display

- On the models for Europe, the multi display contains an updated navigation system in which new functions have been added.
- On the models for Europe, an RDS-TMC (Radio Data System-Traffic Message Channel) has been added to the multi display.

17. Cruise Control System

On the models equipped with the 1GR-FE engine, in terms of the low speed limit, the system memorizes the set speed if the vehicle speed drops below 40 km/h (25 mph) while running in the cruise control mode. Thus, even if the speed drops below 40 km/h (25 mph) while running in the cruise control mode, this system can resume the speed in memory, thus effecting constant acceleration control, provided that the driver presses the RES/+ switch.