INTRODUCTION

OUTLINE OF NEW FEATURES

1. Model Line-up

A newly developed 1GR-FE engine has been adopted on the current Land Cruiser/Land Cruiser Prado. As a result, the following models have been newly added:

Europe	Australia	G.C.C Countries	General Countries
• GRJ120R-GKPEKW • GRJ120L-GKPEKW • GRJ125L-GJPEKW	• GRJ120R-GKMEKQ • GRJ120R-GKPEKQ • GRJ120R-GKPGKQ	• GRJ120L-GKMGKV • GRJ120L-GKPGKV • GRJ125L-GJPGKV	• GRJ120L-GKMGK • GRJ120L-GKPGK • GRJ125L-GJPGK

2. 1GR-FE Engine

A newly developed V-type, 6-cylinder, 4.0-liter, 24-valve DOHC 1GR-FE engine has been adopted on the current Land Cruiser/Land Cruiser Prado. In addition, the VVT-i (Variable Valve Timing-intelligent) system, ACIS (Acoustic Control Induction System), and the ETCS-i (Electronic Throttle Control System-intelligent) have been adopted on this engine.

3. Transmission

- 1GR-FE engine model is equipped with R150F 5-speed manual transmission that is the same manual transmission as the current model.
- The A340F automatic transmission has been adopted for automatic transmission of the 1GR-FE engine model.

4. Transfer

On the 1GR–FE engine model, the VF4B transfer is standard equipment. As optional equipment, the VF4BM transfer is available*. The VF4BM activates the actuator and then provides automatic diff. lock by pushing the center diff. lock switch button.

*: This is a set option with the VSC (Vehicle Stability Control)

5. Differential

- The model with 1GR-FE engine has the front and rear differential with the following equipment:

Destination	Transmission	Transfer	Front Diff.	Rear Diff.	
Europe	A340F AT	VF4B	S20SNF	B200A (Normal)	STD
				B200A (LSD)	OPT
				B20N (Diff. Lock)	OPT
		VF4BM	S20SNF	B200A (Normal)	STD
Australia	R150F MT/ A340F AT	VF4B	S20SNF	B200A (LSD)	STD
				B20N (Diff. Lock)	OPT
		VF4BM	S20SNF	B200A (Normal)	STD
G.C.C. Countries	R150F MT/ A340F AT	VF4B	S20SNF	B200A (Normal)	STD
				B200A (LSD)	OPT
		VF4BM	S20SNF	B200A (Normal)	STD
General Countries	R150F MT/ A340F AT	VF4B	S20SNF	B200A (Normal)	STD
				B200A (LSD)	OPT
				B20N (Diff. Lock)	OPT
		VF4BM	S20SNF	B200A (Normal)	STD

- The differential gear ratio of the 1GR-FE engine model is as follows:

Transmission Type	R150F MT	A340F AT
Differential Gear Ratio	4.100	3.909

6. Brake

- The newly adopted 1GR-FE engine is equipped with the ETCS-i. Therefore engine power controls for VSC and A-TRC is regulated by the ETCS-i.
- For 1GR-FE engine model, optional brake control systems (ABS with EBD and Brake Assist), (ABS with EBD and Brake Assist, A-TRC, VSC) (ABS with EBD and Brake Assist, A-TRC, VSC, DAC and HAC) is available.

Destination		Europe	Australia	G.C.C. Countries	General Countries
Brake Control Systems	Without	STD	STD	STD	STD
	ABS with EBD and Brake Assist	OPT	OPT	OPT	OPT
	ABS with EBD and Brake Assist, A-TRC, VSC, DAC*1 and HAC*1	OPT*2	OPT*2	OPT*2	OPT*2

*1: Only for Automatic Transmission Model
*2: This is a set option with the VF4BM transfer.

7. Steering

A newly developed, compact and lightweight vane pump with a die-cast aluminum housing has been adopted on the 1GR-FE engine model.

8. Cruise Control System

The newly adopted 1GR-FE engine is equipped with the ETCS-i. Therefore engine power controls for cruise control system is regulated by the ETCS-i. However, basic operation of this system is the same as the current model with 1KZ-TE and 1KD-FTV engines.