

INTRODUCTION

OUTLINE OF NEW FEATURES

1. Model Line-up

The following 4 models with the 1GR-FE engine have been added.

- GRN210L-GKPGKA
- GRN210L-GKPZKA
- GRN215L-GKPGKA
- GRN215L-GKPZKA

2. 1GR-FE Engine

The 1GR-FE engine on the '03 4Runner is a newly developed V6, 4.0-liter, 24-valve DOHC engine. This engine has adopted the VVT-i (Variable Valve Timing-intelligent) system, ACIS (Acoustic Control Induction System), and ETCS-i (Electronic Throttle Control System-intelligent). These control functions have been optimized to further improve engine performance, fuel economy, and reduce exhaust emissions.

3. A340E and A340F Automatic Transmission

- On the '03 4Runner with the 1GR-FE engine, the A340E (for 2WD) and A340F (for 4WD) automatic transmissions have been carried over from the '02 4Runner.
- A gate type shift lever is used in conjunction with the installation of the 4-speed automatic transmission.

4. Transfer

- '03 4Runner with 1GR-FE x A340F (for 4WD) uses the multi-mode VF4AM transfer.
- The VF4AM transfer has been newly developed. Its main feature is the adoption of the TORSEN LSD in the center differential.
- The VF4AM transfer is a multi-mode 4WD transfer that offers the advantages of a part-time 4WD that switches between 4WD and 2WD mode as necessary, and of a full-time 4WD that excels in driving performance.
- The basic construction and operation of the VF4AM transfer are the same as those of the VF4BM that is provided on the '03 4Runner with the 2UZ-FE x A750F (for 4WD). However, the VF4AM is equipped with a mechanism to switch from the 2WD to the 4WD mode.

5. Propeller Shaft

As in the '03 4Runner with 2UZ-FE engine, the '03 4Runner with 1GR-FE engine uses 2-joint type front and rear propeller shaft.

6. Front Drive Shaft

As in the '03 4Runner with 2UZ-FE engine, the '03 4Runner with 1GR-FE engine uses the Rzeppa (wheel side) and tripod (differential side) type CVJs (Constant Velocity Joints).

7. Differential

- The 4WD model uses the S20DNFM type front differential. It is equipped with the A.D.D. (Automatic Disconnecting Differential) mechanism that uses an electric actuator, which is the same type that is used on the '02 4Runner.
- As in the '03 4Runner with 2UZ-FE engine, the rear differential uses the B200A type.

8. Suspension and Axle

- As on the '03 4Runner with the 2UZ-FE engine, the double-wishbone independent suspension for the front and the 4-link coil spring with the lateral rod type rigid suspension for the rear are used on the '03 4Runner with the 1GR-FE engine. Similarly, the reciprocal shock absorber system called the “X-REAS” (Relative Absorber System), which enhances drivability by effective comprehensive 4-wheel control, is provided as optional equipment on all models.
- The suspension specifications (tread and wheel alignment) of the '03 4Runner with the 1GR-FE engine are the same as those of the '03 4Runner with the 2UZ-FE engine.
- The same maintenance-free ball joints and unit-type double-row tapered bearings are used for the upper and lower ball joints and hub bearings of the front axle as on the '03 4Runner with the 2UZ-FE engine.
- The same semi-floating rear axle is used as on the '03 4Runner with the 2UZ-FE engine.

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9. Brake

The '03 4Runner with 1GR-FE engine uses the same brake system as the '03 4Runner with 2UZ-FE engine.

10. Steering

- As in the '03 4Runner with 2UZ-FE engine, a rack and pinion type steering gear and an engine revolution sensing type power steering are used on all models.
- A compact and lightweight vane pump with a die-cast aluminum housing, is used. A plastic vane pump pulley has been newly adopted to further reduce the weight of the vane pump assembly.

11. Meter

Oil replacement reminder light has been established in the combination meter, which will light or flash to remind the driver to change the engine oil depending on the vehicle driving distance.