Fxit

INTRODUCTION FEATURES GENERAL PERFORMANCE

OUTLINE

a. 1GR-FE Engine

i. The 1GR-FE engine is a V-type, 6-cylinder, 4.0-liter, 24-valve DOHC engine. On this engine, the Variable Valve Timing-intelligent (VVT-i) system, Acoustic Control Induction System (ACIS), and the Electronic Throttle Control System-intelligent (ETCS-i) are used. These control functions have been optimized to further improve engine performance and fuel economy, and to reduce exhaust emissions.

| Engine Type | | 1GR-FE | |
|-------------|------------------------------|---|--|
| Item | No. of Cyls. and Arrangement | 6-cylinder, V-type | |
| | Valve Mechanism | 24-valve DOHC, Chain Drive (with VVT-i) | |
| | Displacement | 3956 cm3 (241.4 cu. in.) | |
| | Max. Output [SAE-NET] | 170 kW @ 5200 rpm | |
| | Max. Torque [SAE-NET] | 360 N*m @ 3800 rpm | |

b. 1HZ Engine

i. The 1HZ engine is an in-line 6-cylinder, 4.2-liter OHC 12-valve diesel engine, which is achieved for its combustion qualities of high performance and quiet operation.

| Engine Type | | 1HZ |
|-------------|------------------------------|--|
| Item | No. of Cyls. and Arrangement | 6-cylinder, In-line |
| | Valve Mechanism | 12-valve OHC, Gear and Belt Drive |
| | Displacement | 4164 cm3 (254.0 cu. in.) |
| | Max. Output [SAE-NET] | 94 kW @ 3800 rpm*1 96 kW @ 3800 rpm*2 |
| | Max. Torque [SAE-NET] | 280 N*m @ 2200 rpm*1 285 N*m @ 2200 rpm*2 |

HINT:

- *1: Models with EGR
- *2: Models without EGR

c. 1VD-FTV Engine

i. The 1VD-FTV engine is newly provided. The 1VD-FTV TOYOTA D-4D (Direct injection 4 stroke common-rail Diesel engine) is V8 4.5 liter, 32-valve DOHC, turbocharged diesel engine with intercooler. This engine uses direct injection system and common-rail system to realize high performance, clean emission, low noise and low vibration.

| Engine Type | | 1VD-FTV |
|-------------|------------------------------|--------------------------------------|
| Item | No. of Cyls. and Arrangement | 8-cylinder, V type |
| | Valve Mechanism | 32-valve, DOHC, Chain and Gear Drive |
| | Displacement | 4461 cm3 (272.2 cu. in.) |
| | Max. Output [SAE-NET] | 151 kW @ 3400 rpm |
| | Max. Torque [SAE-NET] | 430 N*m @ 1200 to 3200 rpm |

d. Manual Transmission

i. H150F and R151F 5-speed manual transmissions are used.

e. Suspension

- i. A coil spring type rigid axle front suspension is used for the front.
- ii. A leaf spring type rigid axle rear suspension is used for the rear.

f. Brake

i. On models without ABS, a ventilated disc brake is used for the front brake and a leading-trailing drum brake is used for the rear brake.

- ii. On models with ABS, a ventilated disc brake is used for the front and rear brake.
- iii. A Load Sensing Proportioning and Bypass Valve (LSP and BV) is used.
- iv. A brake control system [Anti-lock Brake System (ABS)] is provided.

- g. Steeringi. A recirculating ball type steering gear is used.
 - ii. Hydraulic power steering is used.
 - iii. A manual tilt and telescopic mechanism is used.

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