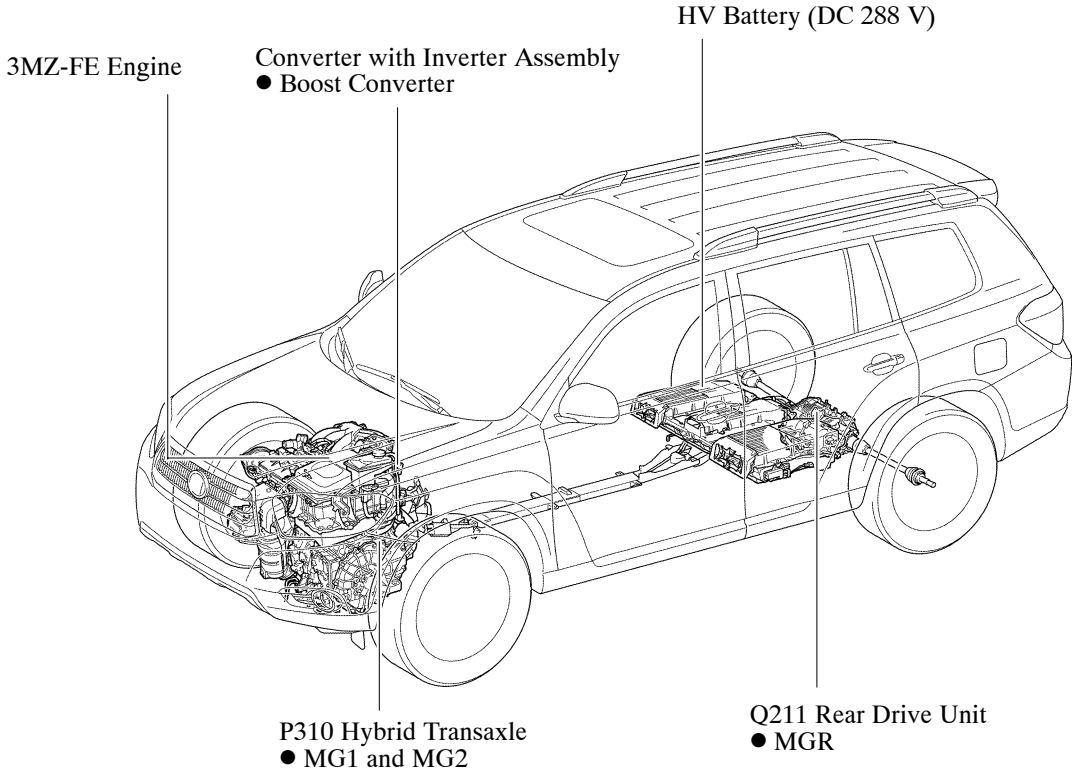
PERFORMANCE

Power Train

THS-II

THS-II (TOYOTA Hybrid System-II) optimally effects cooperative control of a high-output 3MZ-FE engine and a high-speed, high-output MG2 (Motor Generator 2) through a P310 hybrid transaxle and MGR (Motor Generator Rear) through a Q211 rear drive unit that provides excellent transmission performance.

- Furthermore, it uses a variable-voltage system consisting of a high-output HV battery with a nominal voltage of DC 288V, and a boost converter that boosts the operating voltage of the system to a maximum voltage of DC 650V.



07V0MO13Z

Maximum System Output*	201 kW (270 HP)

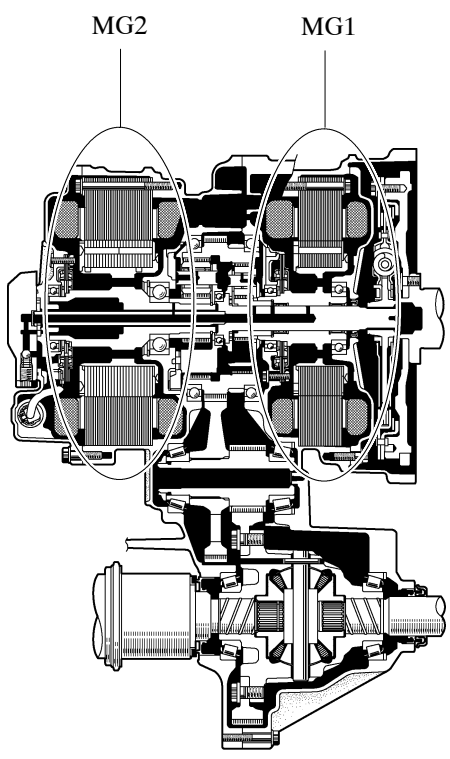
*: Maximum output is engine output and MG2 output controlled by THS-II. MG2 output depends on power supplied by the HV battery.

3MZ-FE Engine

No. of Cyls. & Arrangement	6-cylinder, V-type
Valve Mechanism	24-valve DOHC with VVT-i
Fuel System	SFI
Displacement	3311 cm^3 (202.1 cu. in.)
Max. Output	156 kW@5600 rpm (208 HP@5600 rpm)
Max. Torque	288 N·m@4400 rpm (212 ft·lbf@4400 rpm)

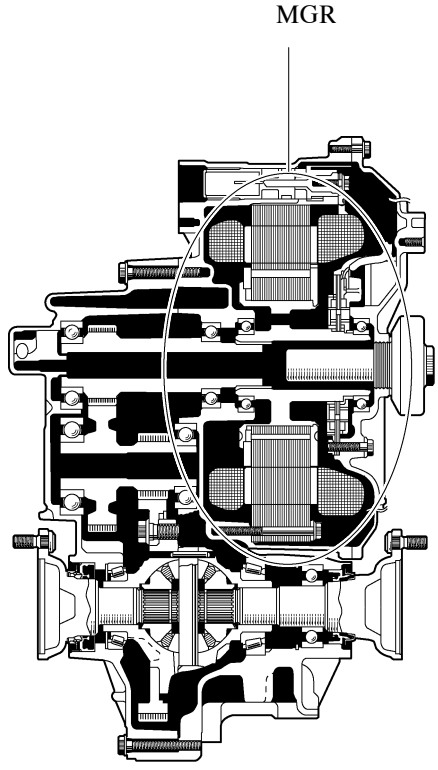
Hybrid Transaxle & Rear Drive Unit

MG1 and MG2 are located in the P310 hybrid transaxle, and MGR is located in the Q211 rear drive unit.



07V0CH06C

P310 Hybrid Transaxle



07V0MO16C

Q211 Rear Drive Unit

Type	P310 Hybrid Transaxle (Front)		Q211 Rear Drive Unit (Rear)
Motor Generator	MG1 (Motor Generator 1)	MG2 (Motor Generator 2)	MGR (Motor Generator Rear)
Motor Type	Permanent Magnet Motor	Permanent Magnet Motor	Permanent Magnet Motor
Function	Generate, Engine Start	Generate, Drive Front Wheels	Generate, Drive Rear Wheels
Cooling System	Water-cooled	Water-cooled	Air-cooled