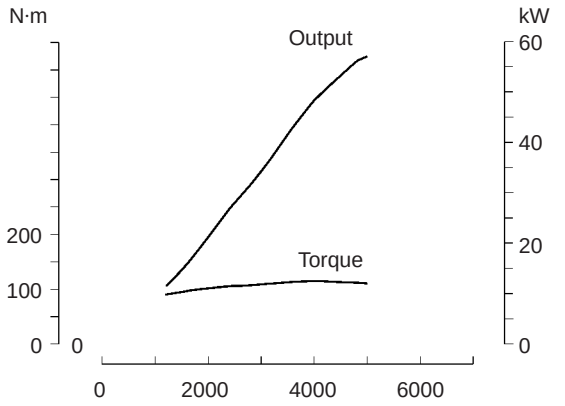
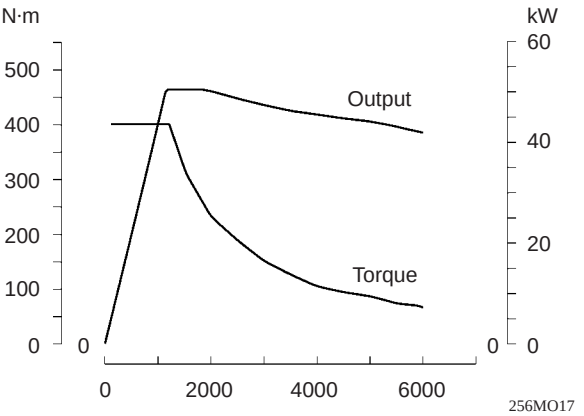
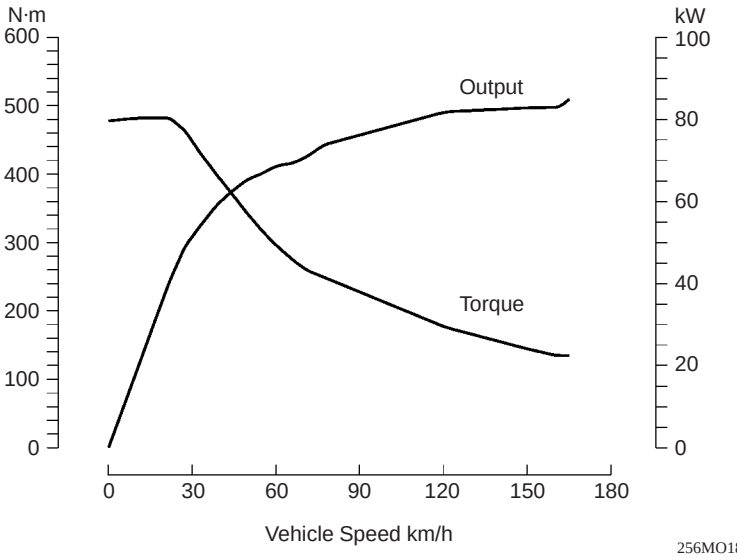


Engine Performance Curve



256MO17

Motor Performance Curve



256MO18

System Performance Curve

Fuel Economy

- The New Prius has achieved 15% reduction in fuel consumption, comparing with the previous models, to be in top level of the world. It is due to the adoption of THS-II and load reduction on the vehicle.
- Improvement Items in THS-II:
  (1) A high-voltage power circuit has been adopted between the motor and the generator, in order to greatly reduce the energy loss during power transmission and deliver optimal energy in an efficient manner.
  (2) As a result of increasing the power output of the motor 1.5 times, the THS-II significantly increases the use of the electrical motor. Under conditions in which the efficiency level of the engine is low, this system stops the engine, allowing the vehicle to run using only the power provided by the electric motor.
  (3) The amount of energy regenerated during deceleration and braking has been significantly increased in order to increase energy efficiency.
- Load Reduction Items on Vehicle:
  (1) Reduction of air resistance
  (2) Reduction of friction at various components: Examples: Engine, transaxle oil, etc.
  (3) Reduction of electrical loads: Example: Adoption of LED stoplight
  (4) Adoption of electric inverter air conditioning system