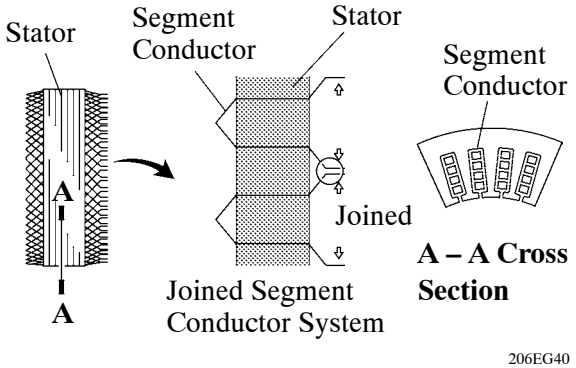
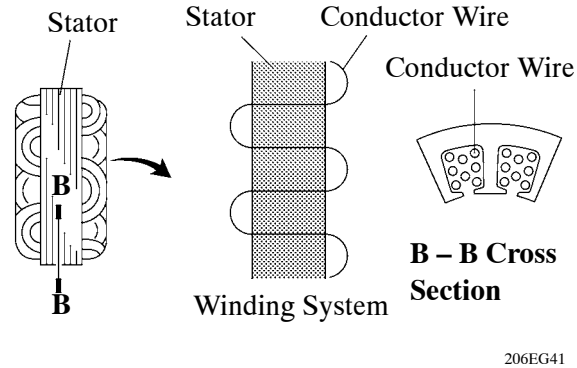
10. Charging System

General

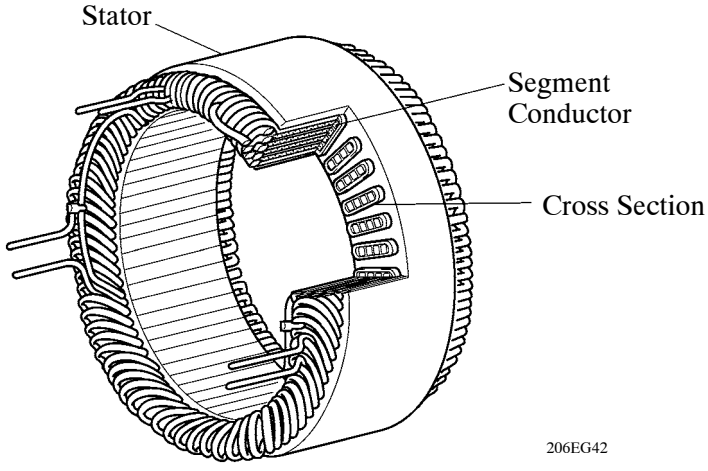
- A compact and lightweight segment conductor type generator that generates high amperage output in a highly efficient manner is provided as standard equipment.
- This generator has a joined segment conductor system in which multiple segment conductors are welded together to form the stator. Compared to the conventional winding system, the electrical resistance is lower due to the shape of the segment conductors, and their arrangement helps to make the generator compact.



Segment Conductor Type Generator



Conventional Type Generator



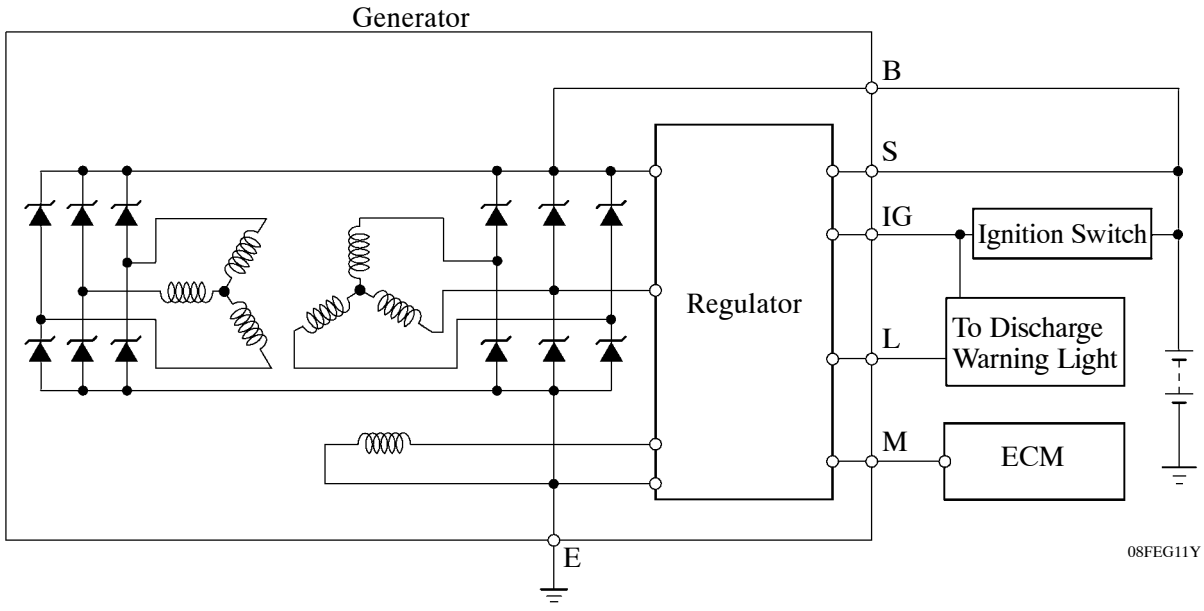
Stator of Segment Conductor Type Generator

▶ Specifications ◀

Type	SC1*1	SC2*2	SC6L*3
Rated Voltage	12 V	←	←
Rated Output	130 A	150 A	180 A
Initial Output Starting Speed	Max. 1500 rpm	←	Max. 1000 rpm

*1: Standard for SR5 grade
*2: Models with Rear Seat Entertainment System (RSES) or seat heater (without towing package)
*3: Models with towing package

▶ Wiring Diagram ◀



Dual Winding System

A dual winding system is used. This system consists of 2 sets of 3-phase windings whose phases are staggered by 30°. This system results in the reduction of both electrical noises (ripple and spike) and magnetic noise (a hum heard as generator load is increased). This system significantly suppresses noise at the source (generator). Since the waves that the respective windings generate have opposite polarities, magnetic noise is reduced. However, the electrical power generated does not cancel itself out due to the use of separate rectifiers. The opposite polarities generated are shown below:

