

STARTING & CHARGING

031E6-07

SERVICE DATA

STARTER:

Magnetic switch resistance	Terminal 50 – C Terminal 50 – Switch body	Below 1 Ω Below 1.5 Ω
Starter armature resistance	Segments Commutator – Armature coil	Below 1 Ω 10 k Ω or higher
Starter armature assy Circle runout	Standard Maximum	0.02 mm (0.0008 in.) 0.05 mm (0.0020 in.)
Commutator diameter	Standard Minimum	29 mm (1.142 in.) 28 mm (1.102 in.)
Starter brush holder assy Brush length	Standard Minimum	15.5 mm (0.610 in.) 9.0 mm (0.354 in.)
Resistance (See page 19-2)	Standard A – B A – C A – D B – C B – D C – D	10 k Ω or higher 10 k Ω or higher Below 1 Ω Below 1 Ω 10 k Ω or higher 10 k Ω or higher

GENERATOR (DENSO MADE):

Generator regulator assy Resistance	B and F E and F	When the positive and negative poles of terminals F and B are switched over, there is a resistance of below 1 Ω in one direction but 10 k Ω or higher in the other direction When the positive and negative poles of terminals F and E are switched over, there is a resistance of below 1 Ω in one direction but 10 k Ω or higher in the other direction
Generator holder w/ rectifier Resistance	Positive (+) and each rectifier terminal Negative (–) and each rectifier terminal	When the positive and negative poles of the positive (+) terminal and each rectifier terminal are switched over, there is a resistance of below 1 Ω in one direction but 10 k Ω or higher in the other direction When the positive and negative poles of the negative (–) terminal and each rectifier terminal are switched over, there is a resistance of below 1 Ω in one direction but 10 k Ω or higher in the other direction
Generator rotor assy Resistance	Slip rings Slip ring and rotor	2.55 to 2.95 Ω at 20°C (68°F) 10 k Ω or higher
Slip ring diameter	Standard Minimum	14.2 to 14.4 mm (0.559 to 0.567 in.) 14 mm (0.551 in.)
Generator drive end frame Resistance	Coil wires Coil wire and body	Below 1 Ω 10 k Ω or higher

GENERATOR (BOSCH MADE):

Generator rotor assy		
Rotor coil resistance	at 20°C (68°F)	2.27 to 2.53 Ω
Slip ring diameter	Standard	15.3 to 15.5 mm (0.602 to 0.610 in.)
	Minimum	14.3 mm (0.561 in.)
Stator sub-assy generator with rectifier		
Positive rectifier	Positive (+) tester probe – Positive (+) terminal	Below 1 Ω
	Negative (–) tester probe – Rectifier terminal	
Negative rectifier	Negative (–) tester probe – Positive (+) terminal	10 k Ω or higher
	Positive (+) tester probe – Rectifier terminal	
	Positive (+) tester probe – Negative (–) terminal	10 k Ω or higher
	Negative (–) tester probe – Rectifier terminal	
Stator for open circuit	Negative (–) tester probe – Negative (–) terminal	Below 1 Ω
	Positive (+) tester probe – Rectifier terminal	
Between rectifier terminals		Below 1 Ω
Generator brush holder assy		
Brush exposed length	Standard	11.0 to 13.6 mm (0.433 to 0.535 in.)
	Minimum	6.0 mm (0.236 in.)