

## 1. Engine Electrical

## A: SPECIFICATIONS

## 1. EXCEPT 2200 cc MODEL

Item		Designation		
Starter	Type	Reduction type		
	Model	MT TN128000-8311	AT TN128000-8321	
	Manufacturer	NIPPONDENSO TENNESSEE		
	Voltage and output	12 V — 1.0 kW	12 V — 1.4 kW	
	Direction of rotation	Counterclockwise (when observed from pinion)		
	Number of pinion teeth	8	9	
	No-load characteristics	Voltage	11 V	
		Current	90 A or less	
		Rotating speed	3,000 rpm or more	2,900 rpm or more
	Load characteristics	Voltage	8 V	
		Current	280 A or less	370 A or less
		Torque	9.8 N·m (1.0 kg-m, 7.2 ft-lb)	13.7 N·m (1.4 kg-m, 10.1 ft-lb)
		Rotating speed	900 rpm or more	880 rpm or more
	Lock characteristics	Voltage	5 V	
Current		800 A or less	1,050 A or less	
Torque		27.5 N·m (2.8 kg-m, 20.3 ft-lb) or more		
Generator	Type	Rotating-field three-phase type, Voltage regulator built-in type		
	Model	LR185-701H		
	Manufacturer	HITACHI AUTOMOTIVE PRODUCTS		
	Voltage and output	12 V — 85 A		
	Polarity on ground side	Negative		
	Rotating direction	Clockwise (when observed from pulley side)		
	Armature connection	3-phase Y-type		
	Output current	1,500 rpm — 35 A or more 2,500 rpm — 62 A or more 5,000 rpm — 82 A or more		
	Regulated voltage	14.5 <sup>+0.3</sup> <sub>-0.4</sub> V [20°C (68°F)]		
Ignition coil	Model	F-569-01R		
	Manufacturer	Diamond		
	Primary coil resistance	0.69 Ω±10%		
	Secondary coil resistance	21.0 kΩ±15%		
	Insulation resistance between primary terminal and case	More than 10 MΩ		
Spark plug	Type and manufacturer	RC10YC4 ..... CHAMPION Alternate ( BKR6E-11 ..... NGK K20PR-U11 ..... NIPPONDENSO )		
	Thread size mm	14, P = 1.25		
	Spark gap mm (in)	1.0 — 1.1 (0.039 — 0.043)		

**2. 2200 cc MODEL**

Item		Designation		
Starter	Type	Reduction type		
	Model	MT TN128000-8311	AT TN128000-8321	
	Manufacturer	NIPPONDENSO TENNESSEE		
	Voltage and output	12 V — 1.0 kW	12 V — 1.4 kW	
	Direction of rotation	Counterclockwise (when observed from pinion)		
	Number of pinion teeth	8	9	
	No-load characteristics	Voltage	11 V	
		Current	90 A or less	
		Rotating speed	3,000 rpm or more	2,900 rpm or more
	Load characteristics	Voltage	8 V	
		Current	280 A or less	370 A or less
		Torque	9.8 N·m (1.0 kg-m, 7.2 ft-lb)	13.7 N·m (1.4 kg-m, 10.1 ft-lb)
		Rotating speed	900 rpm or more	880 rpm or more
	Lock characteristics	Voltage	5 V	
		Current	800 A or less	1,050 A or less
Torque		27.5 N·m (2.8 kg-m, 20.3 ft-lb) or more		
Generator	Type	Rotating-field three-phase type, Voltage regulator built-in type		
	Model	LR185-701H		
	Manufacturer	HITACHI AUTOMOTIVE PRODUCTS		
	Voltage and output	12 V — 85 A		
	Polarity on ground side	Negative		
	Rotating direction	Clockwise (when observed from pulley side)		
	Armature connection	3-phase Y-type		
	Output current	1,500 rpm — 35 A or more 2,500 rpm — 62 A or more 5,000 rpm — 82 A or more		
	Regulated voltage	14.5 <sup>+0.3</sup> <sub>-0.4</sub> V [20°C (68°F)]		
Ignition coil	Model	FH0047-01R		
	Manufacturer	DEMCO		
	Primary coil resistance	0.73 Ω±10%		
	Secondary coil resistance	12.8 kΩ±15%		
	Insulation resistance between primary terminal and case	More than 10 MΩ		
Spark plug	Type and manufacturer	RC10YC4 ..... CHAMPION Alternate ( BKR6E-11 ..... NGK K20PR-U11 ..... NIPPONDENSO )		
	Thread size	mm	14, P = 1.25	
	Spark gap	mm (in)	1.0 — 1.1 (0.039 — 0.043)	