

General Description

STARTING/CHARGING SYSTEMS

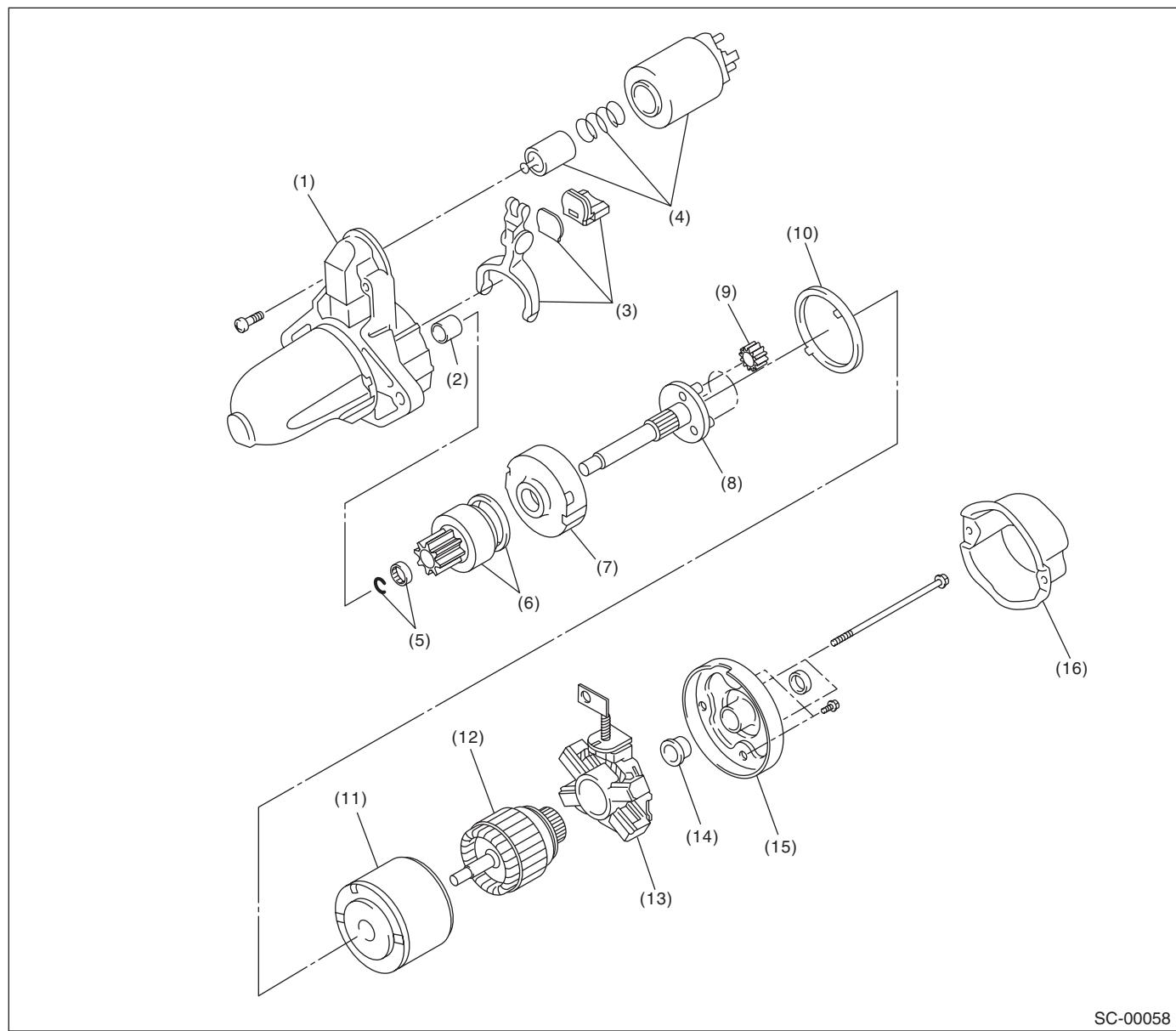
1. General Description

A: SPECIFICATION

Item		Specification	
Vehicle model		MT	AT
Starter	Type	Reduction type	
	Model	M000T30471	M000T20171
	Manufacturer	Mitsubishi Electric	
	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	95 A or less
		Rotating speed	More than 2,500 rpm
	Load characteristics	Voltage	7.5 V
		Current	300 A
		Torque	8.84 N·m (0.90 kgf-m, 6.5 ft-lb) or more
		Rotating speed	More than 870 rpm
	Lock characteristics	Voltage	4 V
		Current	680 A or less
		Torque	17 N·m (1.70 kgf-m, 12.5 ft-lb) or more
Generator	Type	Rotating-field three-phase type, voltage regulator built-in type, with load response control system	
	Model	Non-turbo	A2TG0391
		Turbo	A3TG0491
	Manufacturer	Mitsubishi Electric	
	Voltage and output	Non-turbo	12 V — 90 A
		Turbo	12 V — 110 A
	Polarity on ground side	Negative	
	Direction of rotation	Clockwise (when observed from pulley side)	
	Armature connection	3-phase Y-type	
	Output current	Non-turbo	1,500 rpm — 40 A or more 2,500 rpm — 74 A or more 5,000 rpm — 84 A or more
		Turbo	1,500 rpm — 50 A or more 2,500 rpm — 91 A or more 5,000 rpm — 105 A or more
	Regulated voltage	14.1 — 14.8 V [20°C (68°F)]	
Battery	Voltage and capacity	12V-48AH (55D23L)	12V-52AH (75D23L)

B: COMPONENT

1. STARTER



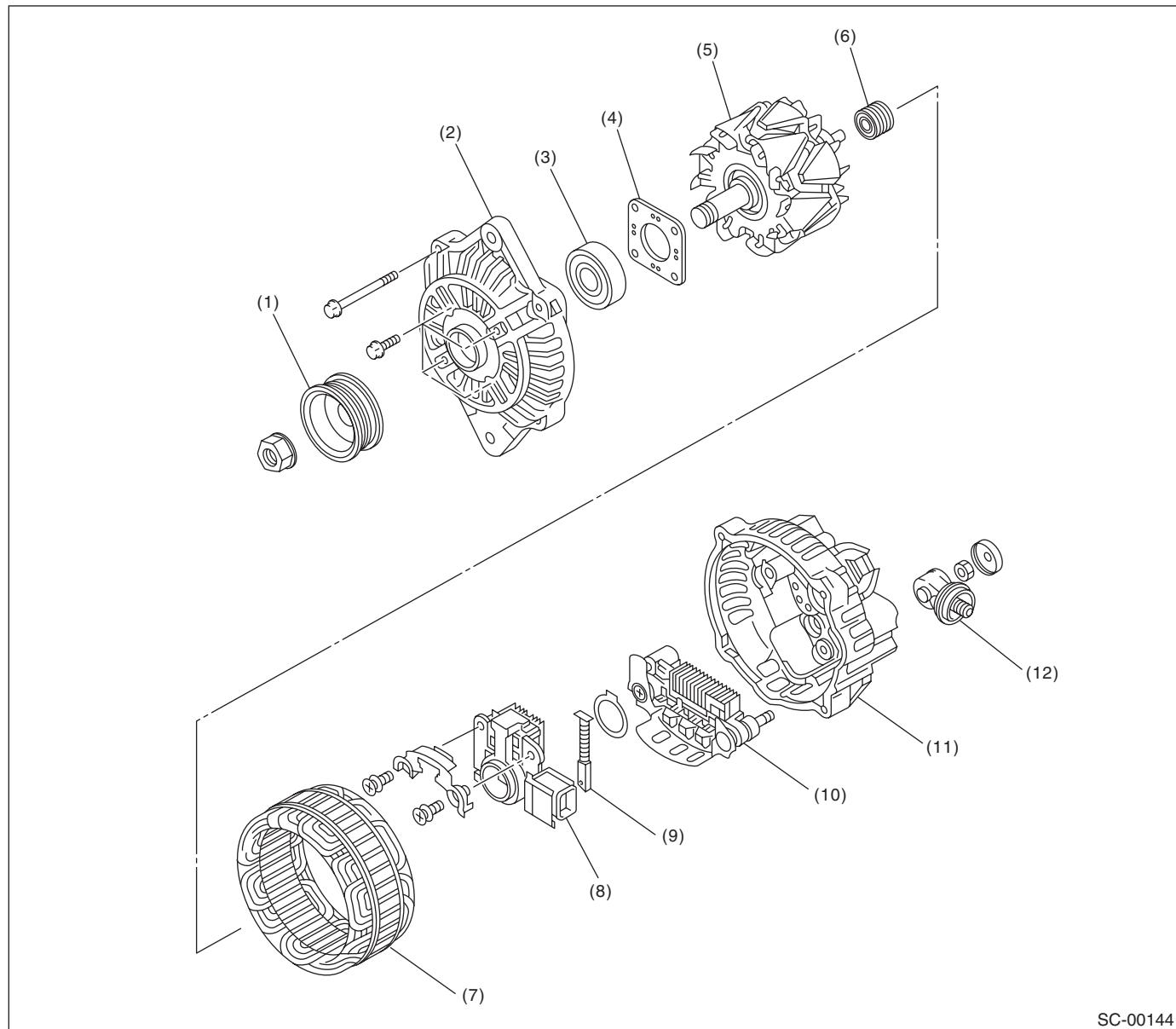
SC-00058

(1) Front bracket	(7) Internal gear ASSY	(12) Armature
(2) Sleeve bearing	(8) Shaft ASSY	(13) Brush holder ASSY
(3) Lever set	(9) Gear ASSY	(14) Sleeve bearing
(4) Switch ASSY	(10) Packing	(15) Rear cover
(5) Stopper set	(11) Yoke ASSY	(16) Rear cover set
(6) Overrunning clutch		

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2. GENERATOR



SC-00144

(1) Pulley	(5) Rotor	(9) Brush
(2) Front cover	(6) Bearing	(10) Rectifier
(3) Ball bearing	(7) Stator coil	(11) Rear cover
(4) Bearing retainer	(8) IC regulator with brush	(12) Terminal

C: CAUTION

- Wear appropriate work clothing, including a cap, protective goggles and protective shoes when performing any work.
- Remove contamination including dirt and corrosion before removal, installation or disassembly.
- Keep the disassembled parts in order and protect them from dust and dirt.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly and replacement.
- Vehicle components are extremely hot after driving. Be wary of receiving burns from heated parts.
- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Place shop jacks or rigid racks at the specified points.
- Before disconnecting connectors of sensors or units, be sure to disconnect the ground cable from the battery.