

# GENERAL DESCRIPTION

Starting/Charging Systems

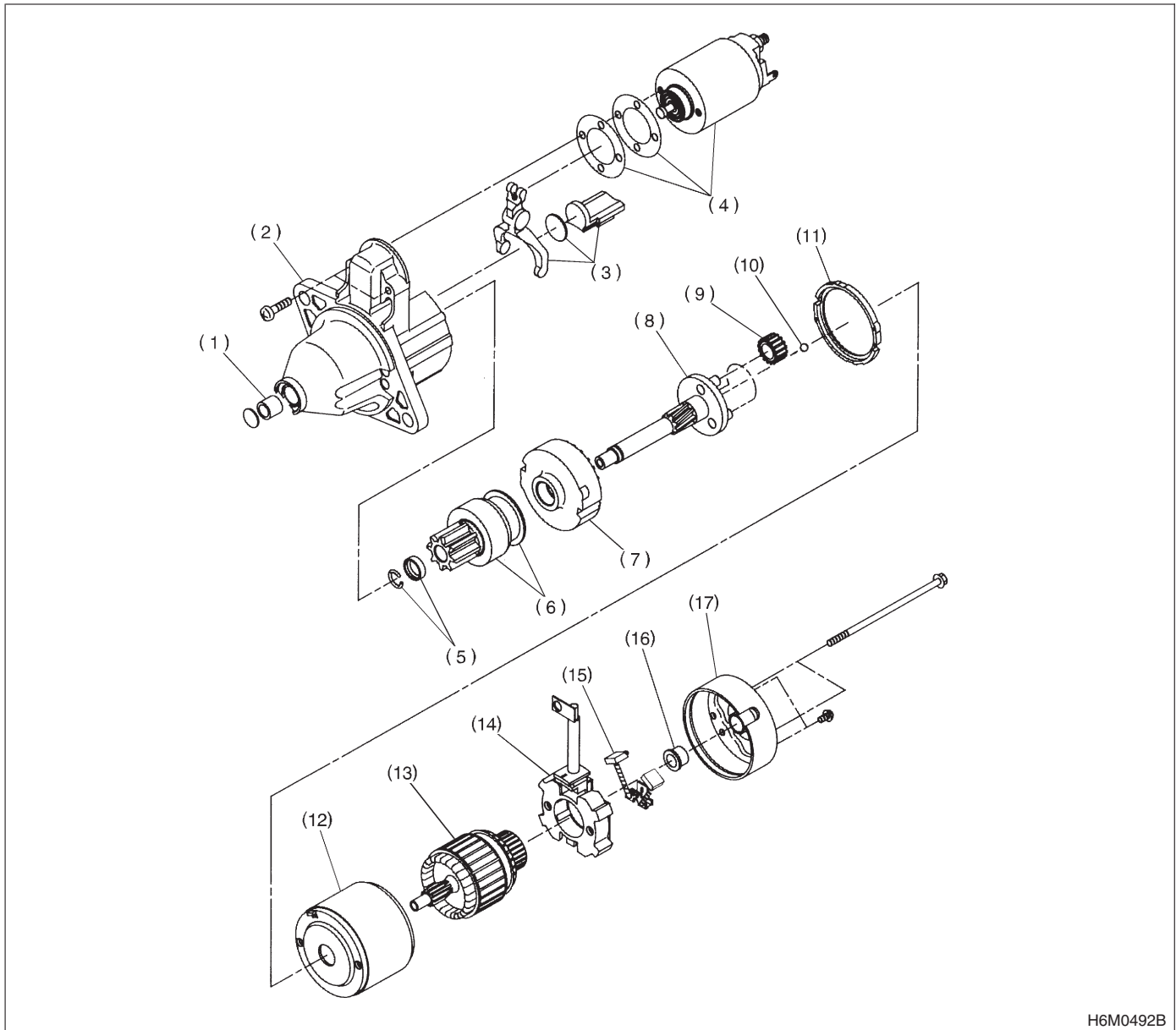
## 1. General Description S109001

### A: SPECIFICATIONS S109001E49

Item		Designation	
Starter	Type	Reduction type	
	Model	MT M000T81681	AT M001T84481
	Manufacturer	MITSUBISHI	
	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
	Load characteristics	Voltage	8 V
		Current	280 A or less
		Torque	8.5 N·m (0.87 kgf-m, 6.27 ft-lb)
		Rotating speed	980 rpm or more
	Lock characteristics	Voltage	4 V
		Current	780 A or less
		Torque	17.6 N·m (1.80 kgf-m, 13.0 ft-lb) or more
Generator	Type	Rotating-field three-phase type, Voltage regulator built-in type	
	Model	A2TB2991	
	Manufacturer	MITSUBISHI	
	Voltage and output	12 V — 75 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 — 30 A or more	
		2,500 rpm — 64 A or more	
		5,000 rpm — 76 A or more	
	Regulated voltage	14.5 <sup>+0.3</sup> / <sub>-0.4</sub> V [20°C (68°F)]	

## B: COMPONENT S109001A05

### 1. STARTER S109001A0501



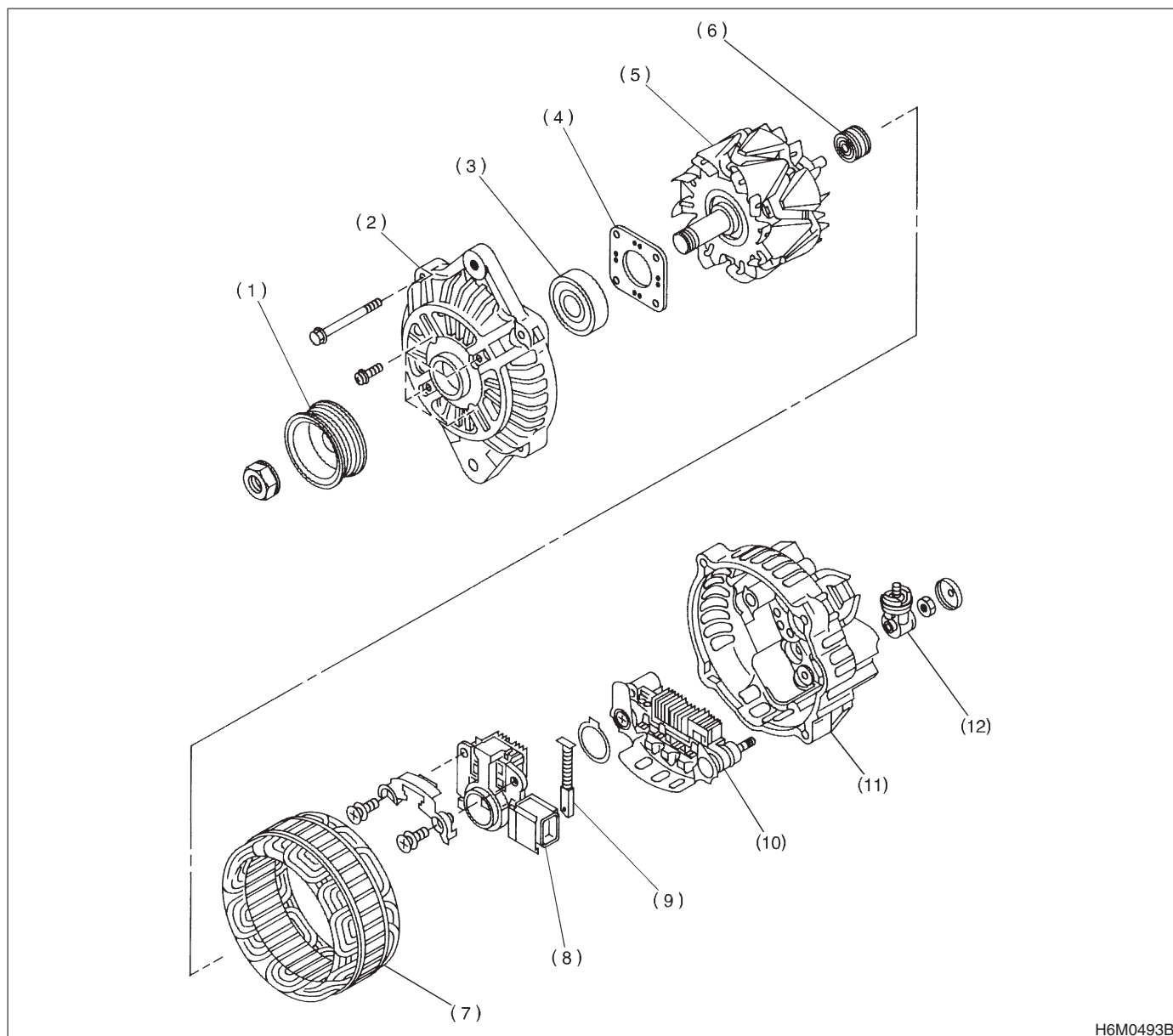
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- |                         |                        |                     |
|-------------------------|------------------------|---------------------|
| (1) Sleeve bearing      | (7) Internal gear ASSY | (13) Armature       |
| (2) Front bracket       | (8) Shaft ASSY         | (14) Brush holder   |
| (3) Lever set           | (9) Gear ASSY          | (15) Brush          |
| (4) Magnet switch ASSY  | (10) Ball              | (16) Sleeve bearing |
| (5) Stopper set         | (11) Packing           | (17) Rear bracket   |
| (6) Over running clutch | (12) Yoke              |                     |

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## 2. GENERATOR S109001A0502



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- |                      |                             |                 |
|----------------------|-----------------------------|-----------------|
| (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 S109001A03

- Wear working clothing, including a cap, protective goggles, and protective shoes during operation.
- Remove contamination including dirt and corrosion before removal, installation or disassembly.
- Keep the disassembled parts in order and protect them from dust or dirt.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary

removal, installation, disassembly, and replacement.

- Be careful not to burn your hands, because each part in the vehicle is hot after running.
- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Place shop jacks or safety stands at the specified points.
- Before disconnecting electrical connectors of sensors or units, be sure to disconnect negative terminal from battery.