

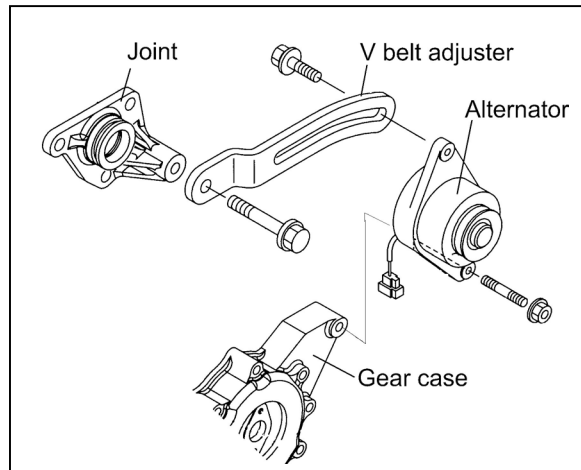
10. ALTERNATOR

As a representative example of alternator, the alternator of 40A is shown in this chapter.

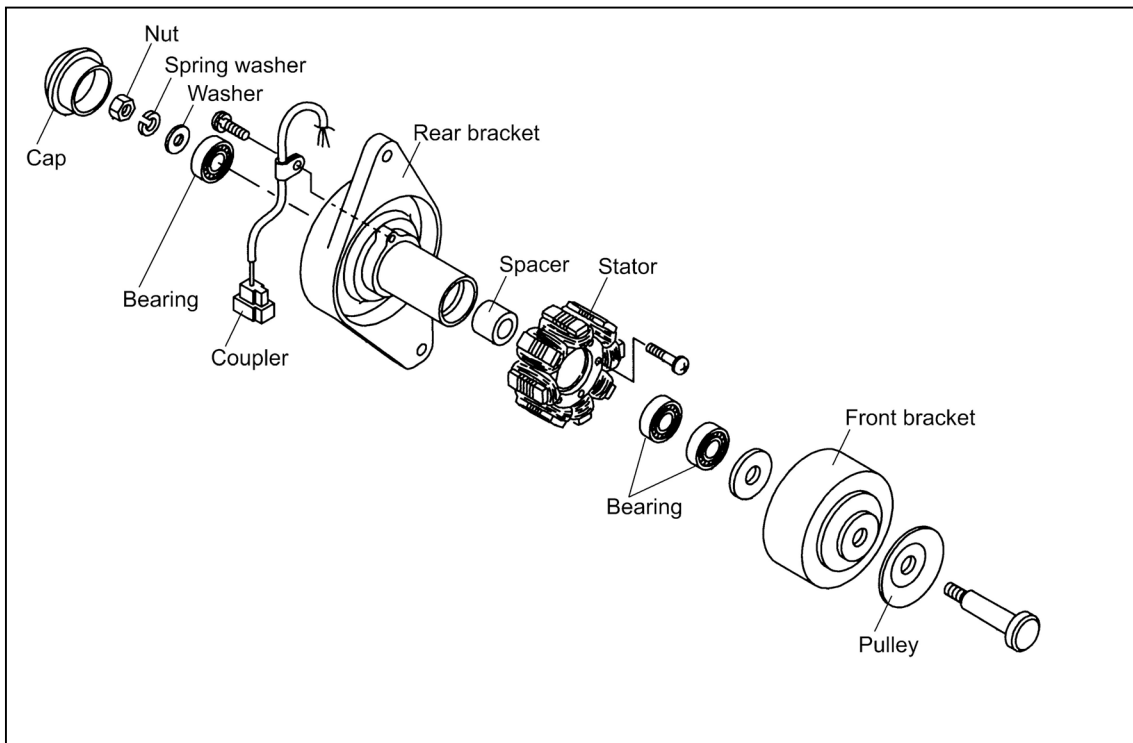
10.1 The 40A Alternator for 3TNV84 and other models

10.1.1 Components

(1) Parts related to the alternator



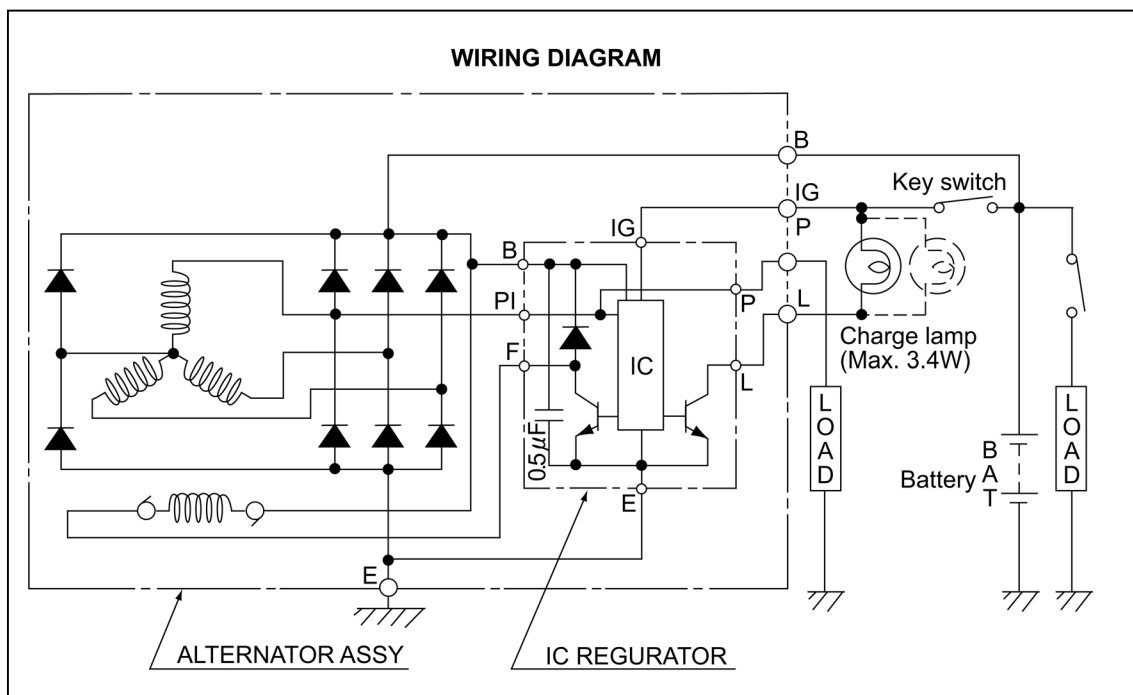
(2) Alternator components of the disassembly and assembly



10.1.2 Specifications

Manufacturer's model (Hitachi)	-	ACFA68
Code	-	129423-77200
Rating	-	Continuous
Battery voltage	V	12
Nominal output (13.5V heat)	A	40
Rated revolution	min ⁻¹	5,000
Operating revolution	min ⁻¹	1,350~18,000
Grounding characteristics	-	Minus side grounding
Direction of revolution (viewed from pulley)	-	Clockwise
Integrated regulator		IC regulator
Weight	kg	2.8
Pulley (outside diameter)	mm	69.2
Belt shape	-	Type A

10.1.3 Wiring diagram

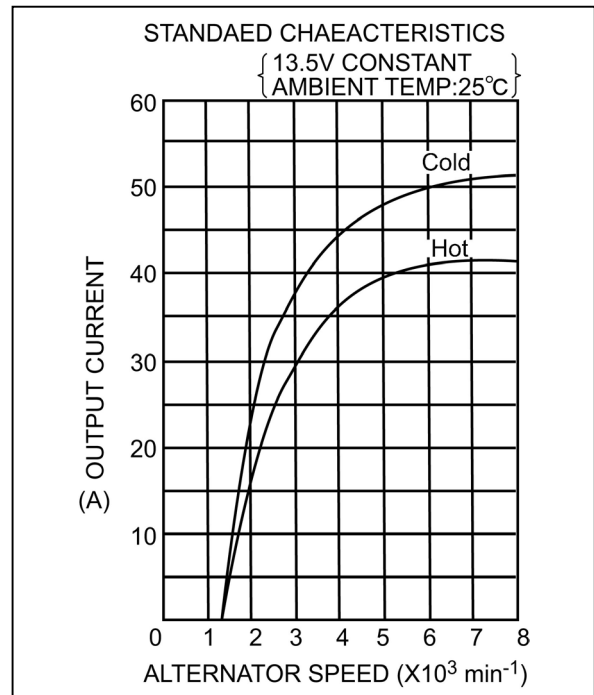


[NOTICE]

- 1) Don't do miss-wiring and short-circuit of each terminal.
- 2) Don't short-circuit between IG and L. (Connect it through the charge lamp.)
- 3) Don't connect a load between L and E.
- 4) Don't remove a battery terminal and a B terminal when rotating.
- 5) Shut out a battery switch during the alternator stop.
- 6) Tightening torque of each terminal: 1.7-2.3N·m (17-23kgf·cm)

10.1.4 Standard output characteristics

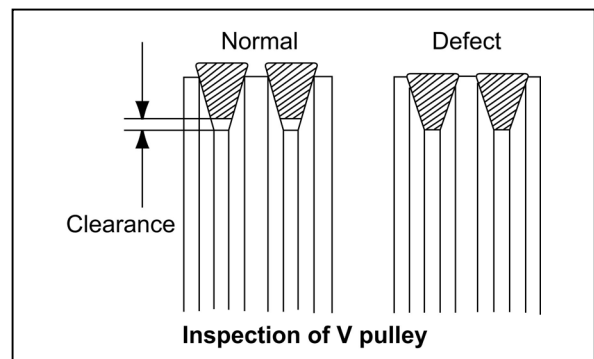
The standard output characteristics of this alternator are shown as the right figure.



10.1.5 Inspection

(1) V belt inspection

- 1) Inspect the matter whether there are not crack, stickiness and wear on the belt visually. Check that a belt doesn't touch the bottom part of the pulley groove. If necessary, replace the V belt set.
- 2) V belt tension: (Refer to 2.2.2 in Chapter 2.)



(2) Visual check of wiring and check of unusual sound

- 1) Confirm whether wiring is right or there is no looseness of the terminal part.
- 2) Confirm that there is no unusual sound from the alternator during the engine operation.

(3) Inspection of charge lamp circuit

- 1) Move a start switch to the position of on. Confirm lighting of the charge lamp.
- 2) Start an engine, and confirm the lights-out of the lamp. Repair a charge lamp circuit when a lamp doesn't work.

10.1.6 Troubleshooting

