

Charging System Testing

Use the following procedures and specifications in place of the charging system tests in the service manuals.

NOTE: The alternator output amperage specifications on page 4 are lower than the alternator ratings and specifications in the service manuals. This takes into account the effects of temperature on alternator output, and the placement of the inductive pick-up, which only allows the tester to read the current available to charge the battery, not the current used to operate the ignition and fuel systems.

SYMPTOM

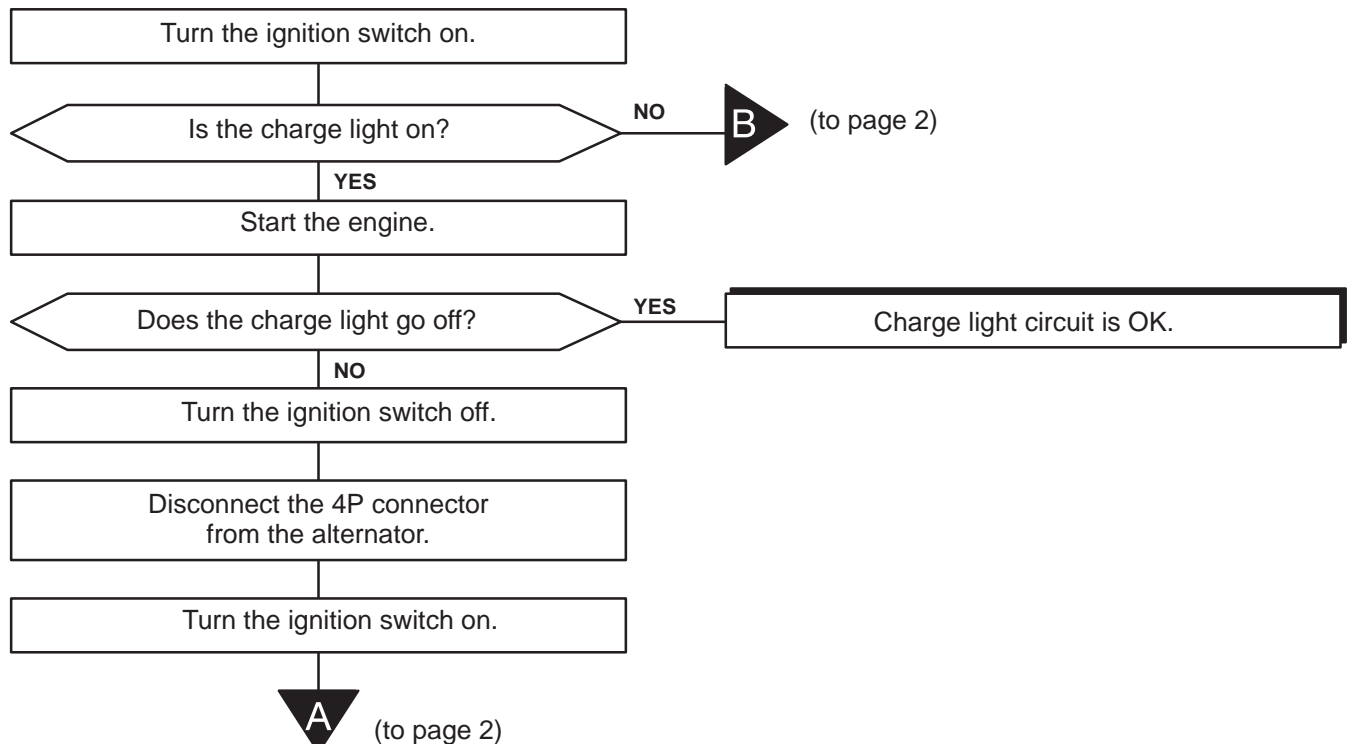
The charge system light is on, or the battery is dead or low.

CORRECTIVE ACTION

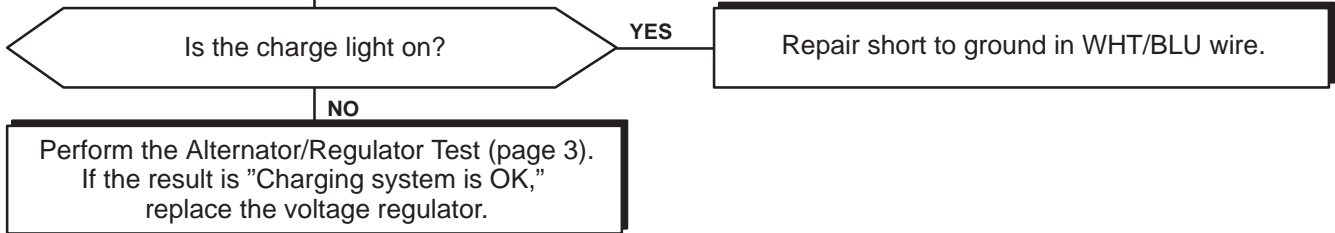
Perform the following tests in the order listed.

1. Battery Test (see S/B 88-023, "Battery Test Procedure")
2. Charge System Light Operation (below)
3. Alternator/Regulator Test (page 3)
4. Parasitic Draw Test (page 5)

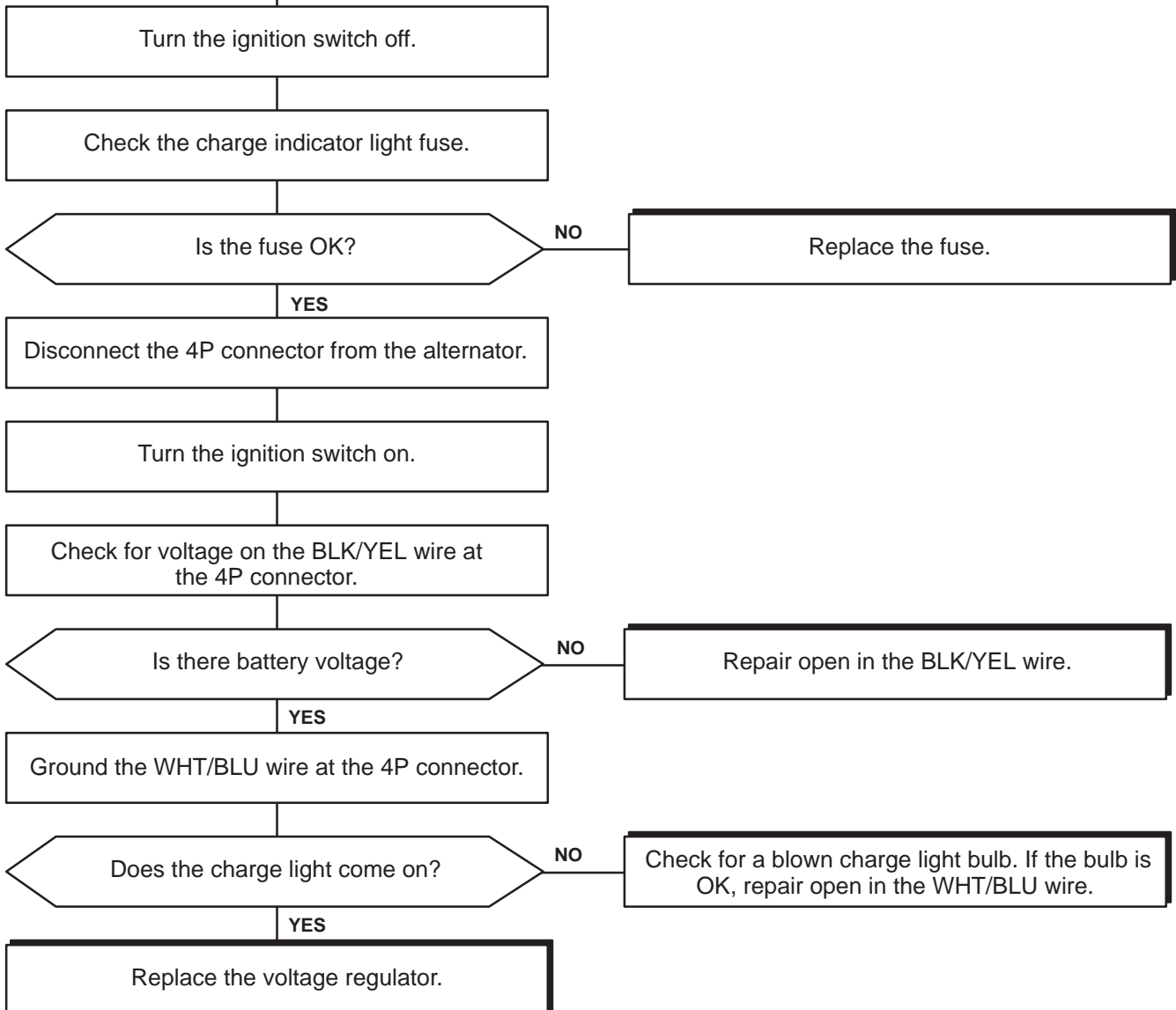
Charge System Light Operation



(from page 1)



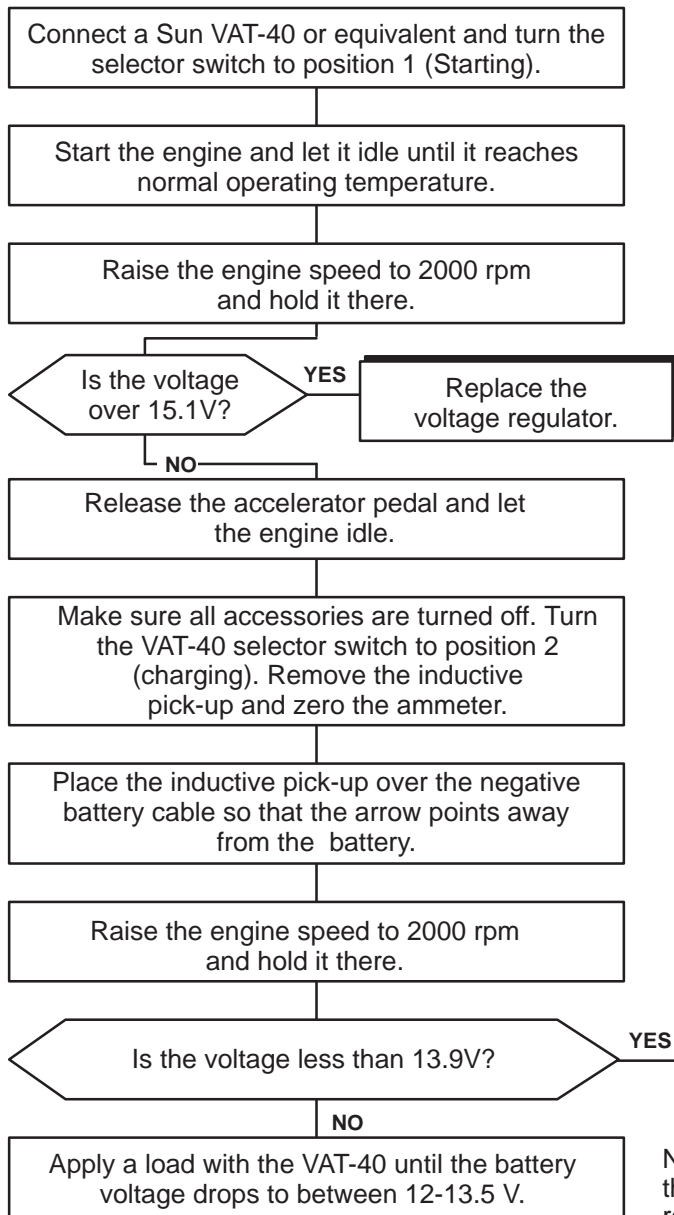
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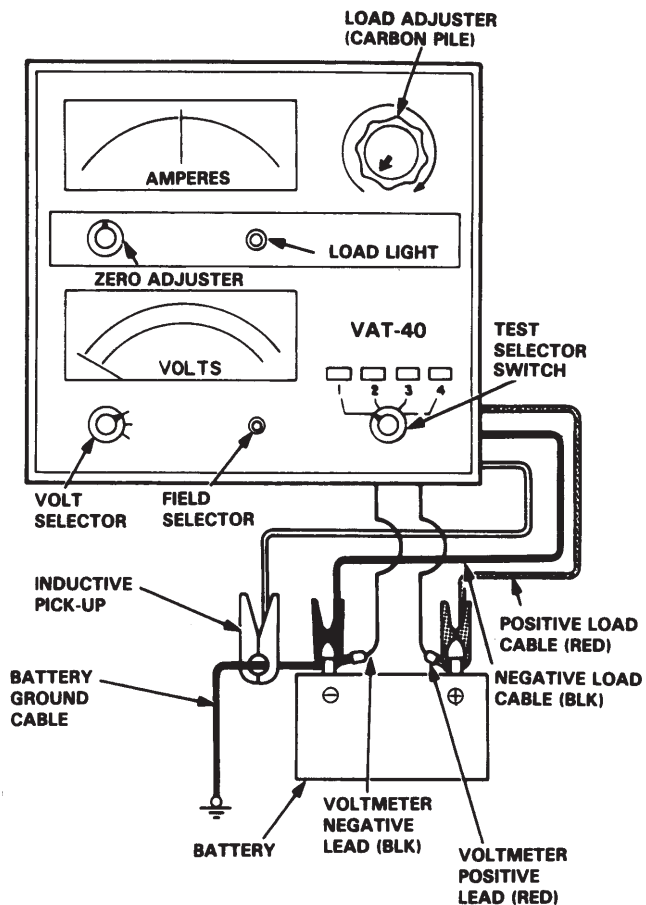
Alternator/Regulator Test

NOTE:

- Be sure the battery is sufficiently charged.
- For testers other than the VAT-40, follow the manufacturer's instructions for the voltage, maximum amperage output, and full-field checks.



(to page 4)



If the battery tested OK (page 1, Corrective Action, step 1), test and repair the alternator (see appropriate S/M).

NOTE: Do not take the amperage reading while the cooling fans are running; the reading will be reduced by the amperage required to run the fans.

(from page 3)

Does the amperage exceed the value for the model tested?*

YES

Charging system is OK.

NO

* Alternator Output Amperage

Model	Year						
	86	87	88	89	90	91	92
Accord	35A	35A	35A	35A	45A	45A	45A
Civic	25A	35A	30A	30A	30A	30A	40A
Prelude	30A	30A	40A	40A	40A	40A	45A

With the engine speed still at 2000 rpm, full-field the alternator.

NOTE: Attach a probe to the VAT-40 full-field test lead and insert the probe into the full-field access hole at the back of the alternator. Switch the field selector to the "A" (Ground) position momentarily and check the amperage reading.

CAUTION: The voltage will rise quickly when the alternator is full-fielded. Do not allow the voltage to exceed 18V or the electrical system may be damaged.

Does the amperage exceed the value for the model tested?

NO

Faulty alternator components. Test and repair the alternator (see appropriate S/M).

YES

Turn the engine off.

Turn the ignition switch on.

Disconnect the 4P connector from the alternator.

Check for voltage on the BLK/YEL wire at the 4P connector.

Is there battery voltage?

NO

Repair open in the BLK/YEL wire.

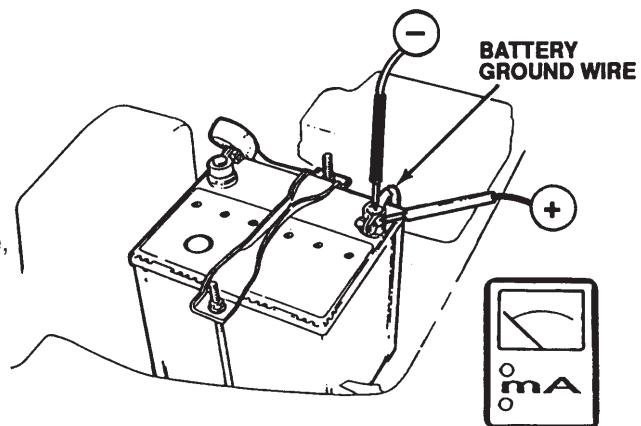
YES

Replace the voltage regulator.

Parasitic Draw Test

Before testing:

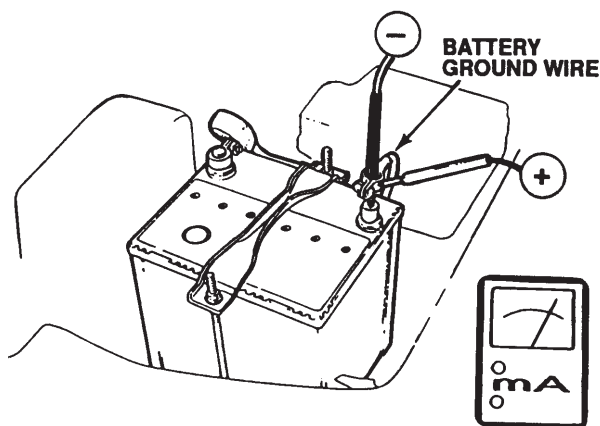
- Turn the ignition switch off.
- Close all doors and the trunk or hatch.
- Turn all electrical equipment off.
- Disconnect any non-factory-installed accessories that affect parasitic draw (security system, cellular telephone, etc.), except genuine Honda clocks and audio units.



Loosen, but do not remove, the negative battery terminal.

With your ammeter on the 10A scale, connect it in series between the negative cable and the battery as shown. Wait five minutes for timers to reset.

Adjust the ammeter down one scale at a time until it reaches the 200 mA scale, provided that the draw does not surpass the upper limit of each scale.



Does the parasitic draw exceed the expected range?*

NO → Parasitic draw is normal.

YES → Remove the fuses one at a time until the parasitic draw is within the expected range.

Does removing one particular fuse bring the parasitic draw within the expected range?

NO → B (to page 6)

YES → Reinstall that fuse and begin disconnecting components on that fused circuit until the parasitic draw is within the expected range.

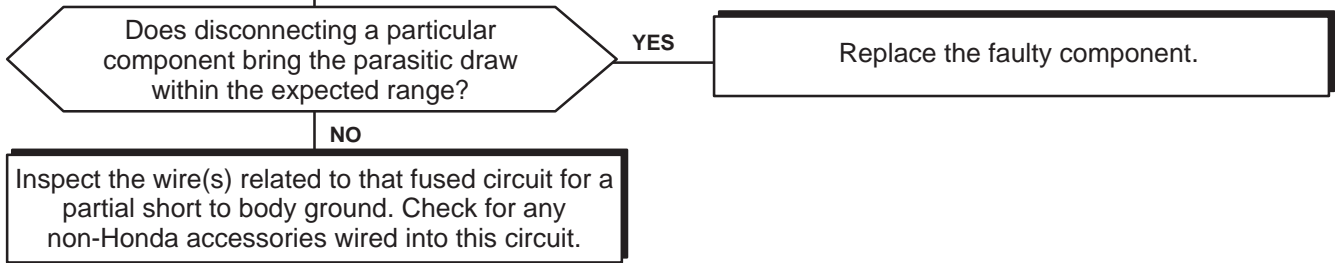
A
(to page 6)

* Expected Parasitic Draw (milliamps)

Model	Year						
	86	87	88	89	90	91	92
Accord DX/LX	10-15	10-15	10-15	10-15	15-25	15-25	15-25
Accord LXi/Ex	15-25	15-25	15-25	15-25	15-25	15-25	15-25
Accord Wagon LX	-	-	-	-	-	15-25	15-25
Accord Wagon EX	-	-	-	-	-	30-35	30-35
Civic	8-15	8-15	8-15	8-15	8-15	8-15	5-15
Prelude S	10-15	10-15	10-15	10-15	10-15	-	8-15
Prelude Si	15-25	15-25	15-25	15-25	15-25	15-25	8-15

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A



(from page 5)

B

