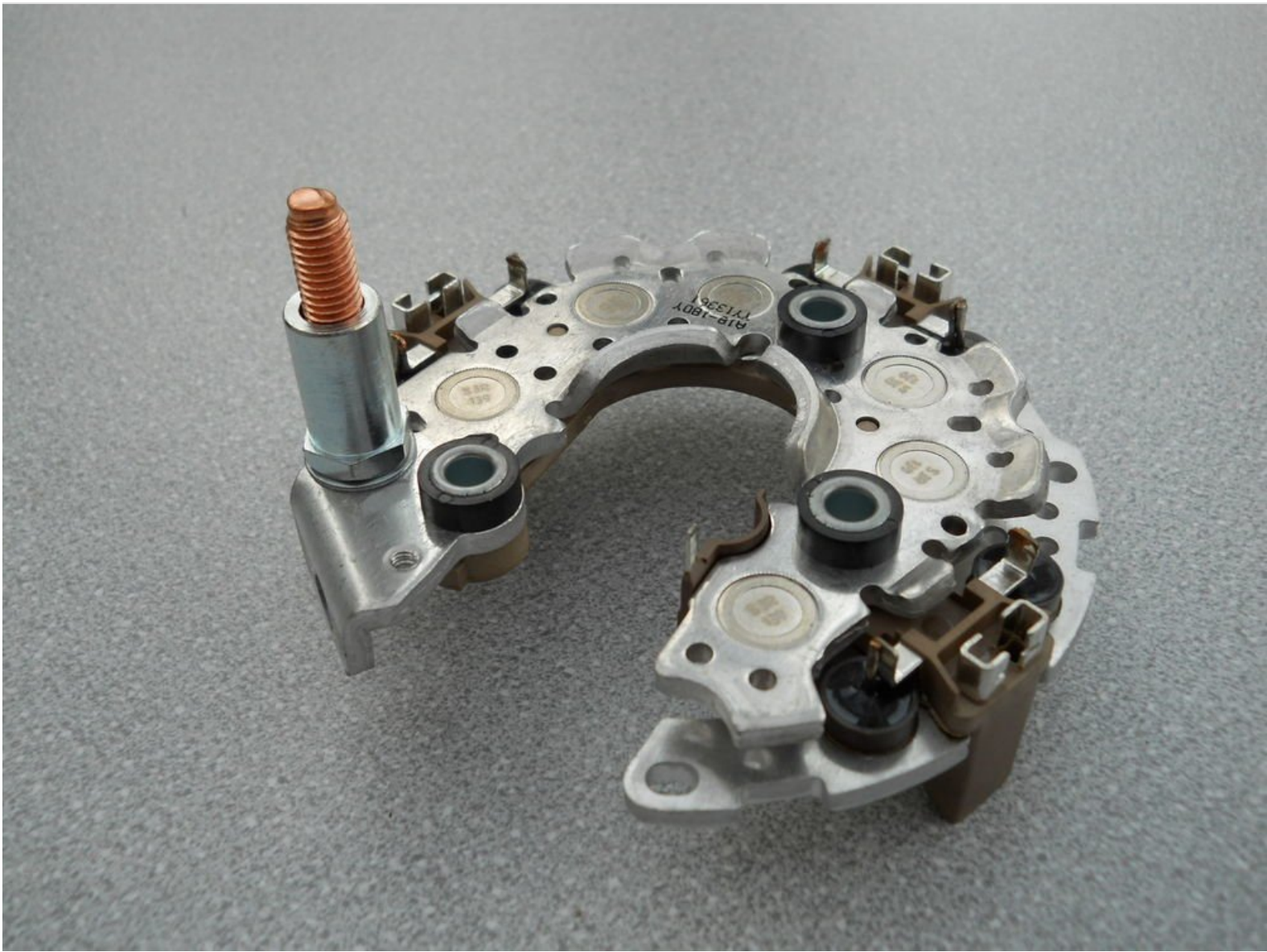




# Honda CSC29 Rectifier Bridge Assembly Replacement

The Rectifier Bridge Assembly is an assembly of one-way diodes (6 to 8) that converts, or rectifies, AC voltage to DC voltage. This guide will describe how to replace a defective bridge assembly of a Honda CSC29 Alternator.

Written By: Chad Lagomarsino



## INTRODUCTION

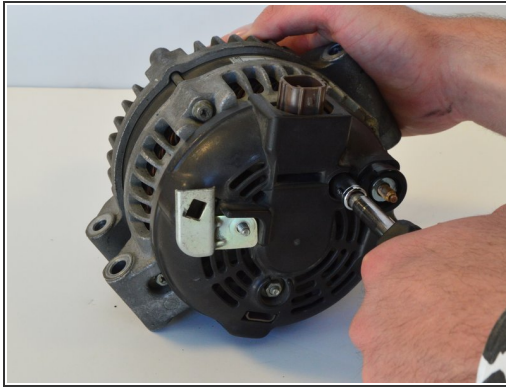
Are you having issues with sluggish electrical components in your Honda? An issue with the Diode Trio on your Alternator's Rectifier Bridge will cause voltage to leak from your car battery, hampering its performance. The diodes act like one-way check valves, splitting AC current into a positive and negative branch that redirected to the positive and ground terminals of the car battery.



### TOOLS:

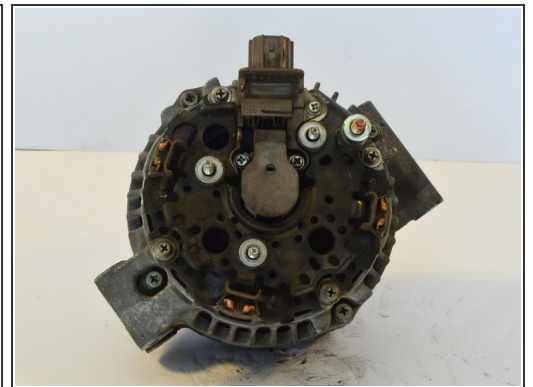
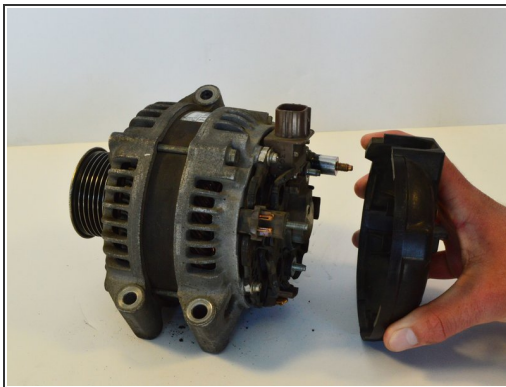
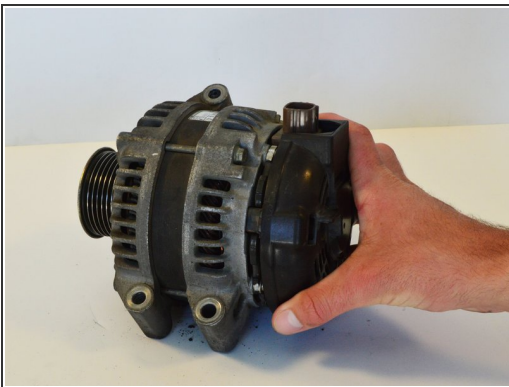
- [Socket Wrench](#) (1)
- [8 mm socket](#) (1)
- [Soldering Iron](#) (1)
- [Pry Bar](#) (1)
- [Flush Wire Cutters](#) (1)
- [Phillips #2 Screwdriver](#) (1)

## Step 1 — Alternator Front Cover



- Remove 4, 7.9mm nuts using a 7.9mm socket driver head
- ⓘ One of the nuts is placed underneath the L-Bracket. Remove the L-Bracket and the 3 circled nuts before attempting to remove the remaining nut
- ⓘ There are two covers that need to be removed from the alternator. This step describes how to remove the back cover.

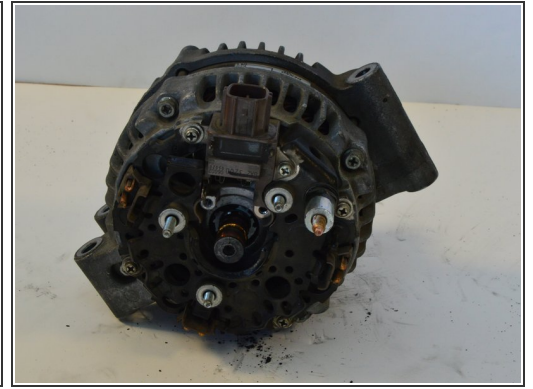
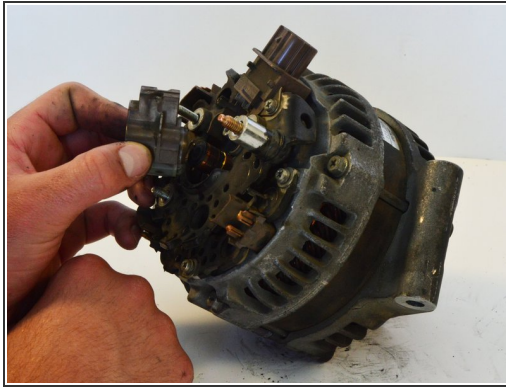
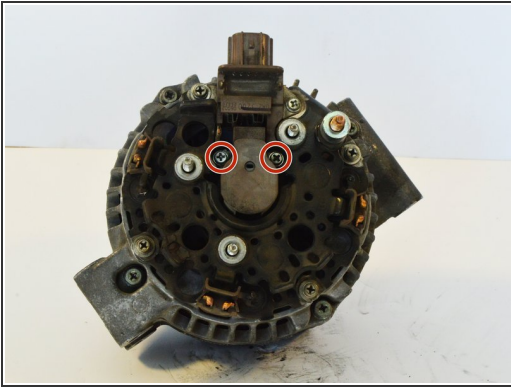
## Step 2



- Pull cover off the body of the alternator
- Once you have done this, you should be able to see the internal components of the alternator, particularly the bridge assembly that houses the rectifier, voltage regulator and brushes.



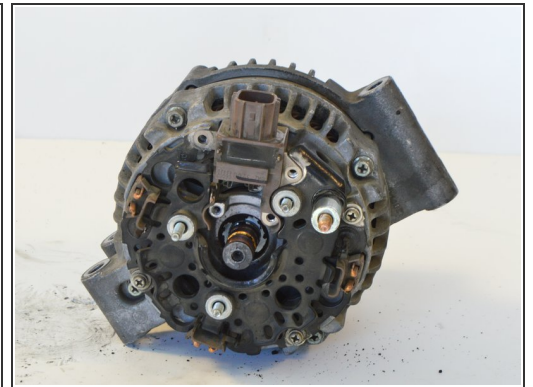
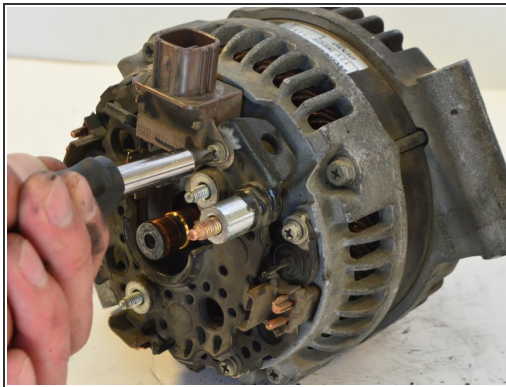
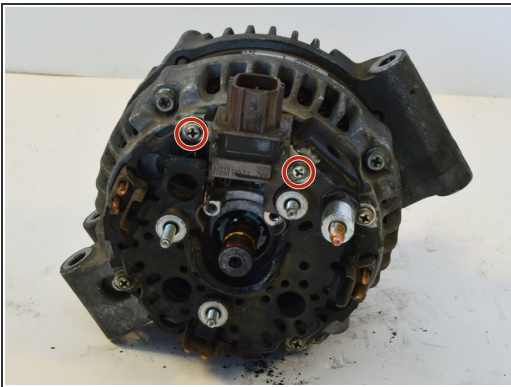
### Step 3 — Removing the brush assembly.



- With the alternator cover removed, use a #2 Phillips screwdriver to remove the two, 6 mm screws that hold the brush cover in place.
- Remove the brush cover assembly from the alternator. You might need to insert a needle in the small hole to separate the brushes from the rotor. Pull it out without using much force to avoid damage.

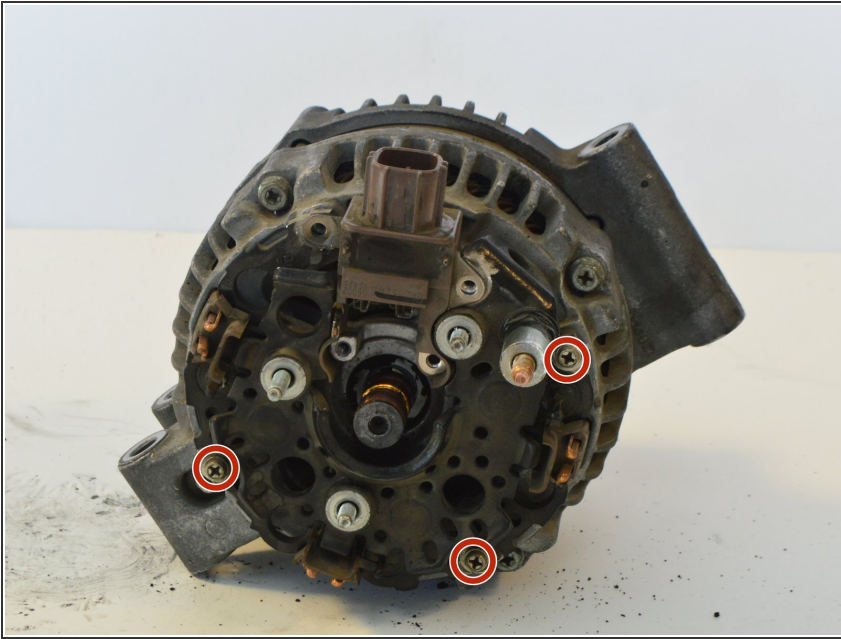
⚠ Avoid disconnecting wires unless otherwise specified!

### Step 4



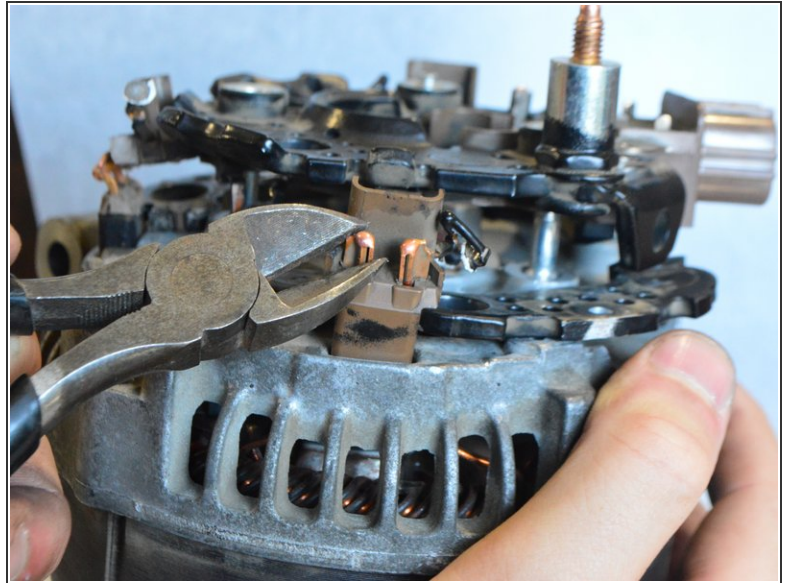
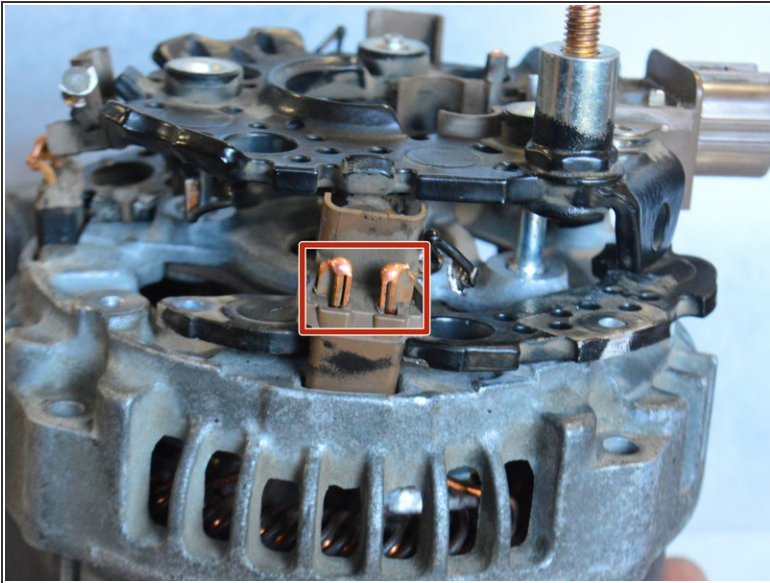
- Use a #2 Phillips screwdriver to remove the two 6mm screws holding down the voltage regulator
- ⓘ There are three screws that attach the voltage regulator to the bridge assembly. One of these screws was removed in the previous step.

## Step 5



- Locate and unscrew the 3, 6mm screws holding the bridge assembly in place
- ⓘ There are 4 screws attaching the bridge assembly to the alternator. One of these screws were removed in the previous step.

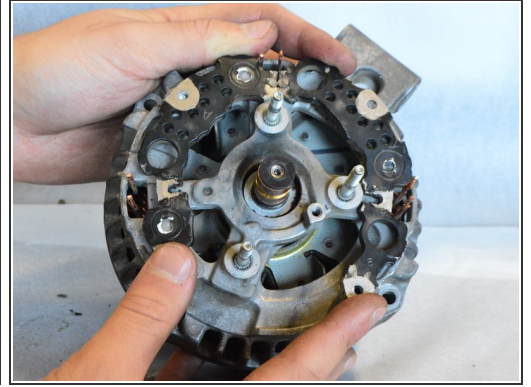
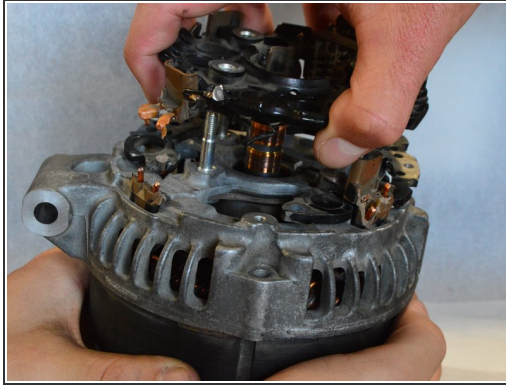
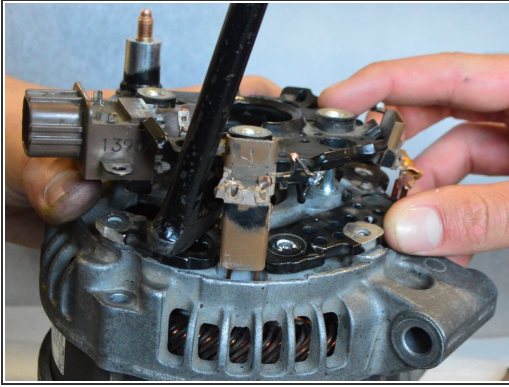
## Step 6



- Locate the copper leads connecting the stator to the bridge assembly. There are 3 sets of 2 leads on the perimeter of the bridge, making 6 leads total.
- ⚠ These leads must be cut in order to remove the bridge from the alternator. These leads will have to be soldered back together on reassembly. Keep the cut as clean as possible.
- Use wire cutters to cut all 6 of the leads on the perimeter of the bridge.

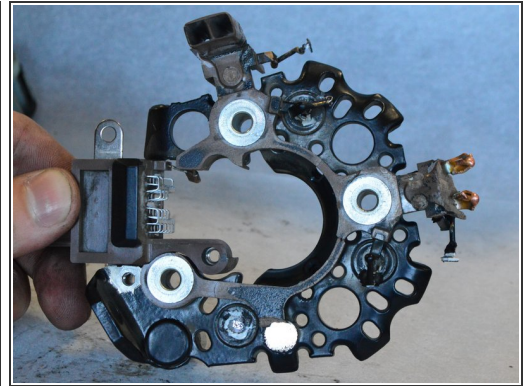
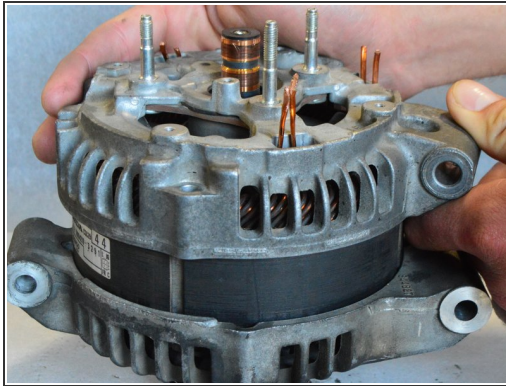
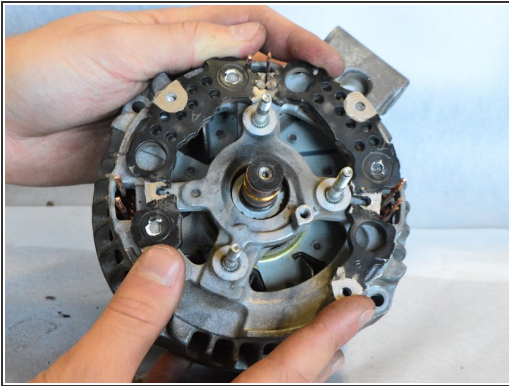


## Step 7



- If necessary, use a pry bar to gently raise the top of the bridge assembly off the alternator
- ⚠ Be extremely careful with the pry bar. Excessive force will damage the bridge assembly.
- ⓘ Make sure the cut ends of the copper leads are straight to make bridge assembly easier to pull off.

## Step 8



- Remove the lower section of the bridge assembly
- ⓘ Use of a pry bar may be necessary. Be gentle.

To reassemble your device, follow these instructions in reverse order.