

## 86-95 Suzuki Samurai Distributor Vacuum Advance (SKU# SER-DVA)

### Installation Instructions



To see a video on  
How to test this part click [HERE](#).

Or  
Smart phone users  
scan below.



**CAUTION:** Safety glasses should be worn at all times when working with vehicles and related tools and equipment.



#### Suggested Tools:

- Small Standard Screwdriver
- Pick Tool - Hook
- Phillips Screwdriver
- Needle Nose Pliers
- Socket: 12 mm
- Permanent Marker: White or Black

## Distributor Parts Identification

1. Vacuum controller
2. Distributor cap
3. Seal
4. Distributor housing
5. Distributor driven gear
6. Pin
7. O-ring
8. Rotor
9. Signal generator dust cover
10. Ignitor dust cover
11. Signal generator
12. Ignitor
13. Generator base plate
14. Signal rotor
15. Distributor flange bolt
16. Vacuum controller mount screw

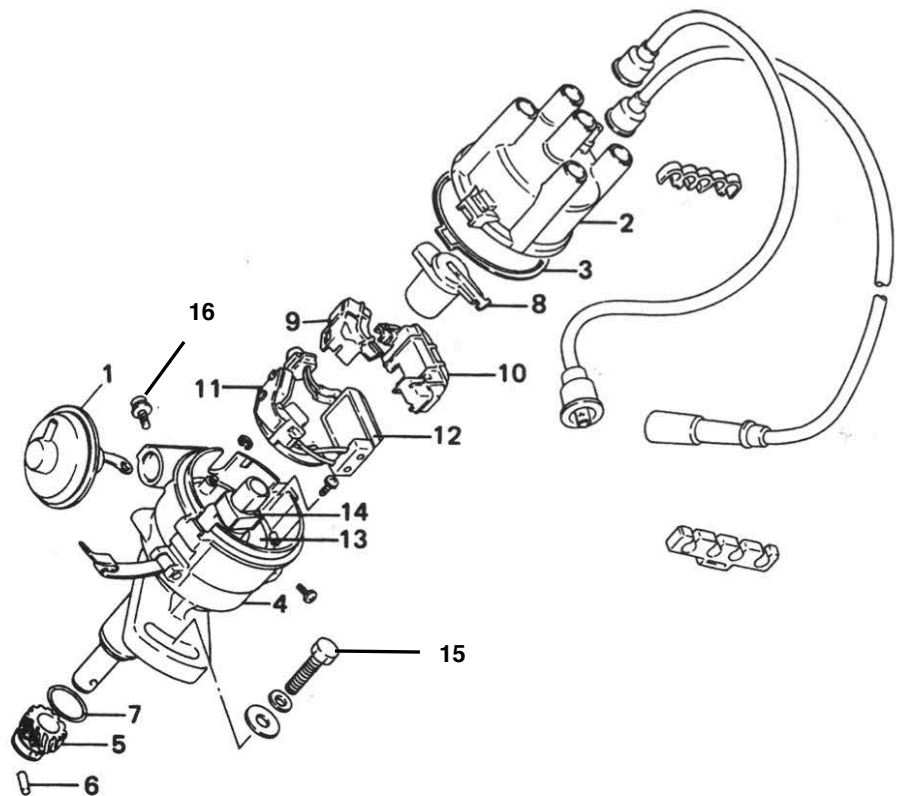
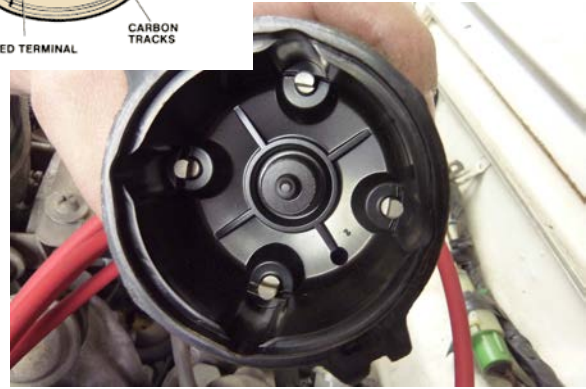
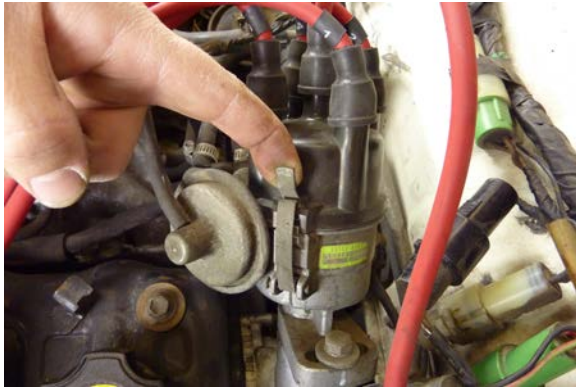
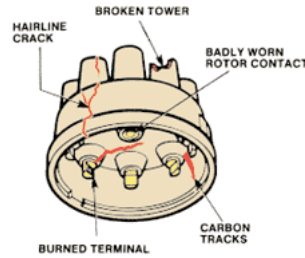


Figure A

**Important Notice and Warning:** It is possible to replace the vacuum controller without removing the distributor. If you chose to do it this way, use steps 1 & 2, 11-24, & 30-32. Be aware, that if you accidentally drop the E-clip down into the working mechanisms of the distributor you will likely have to remove the distributor to get it out.



## Step 1

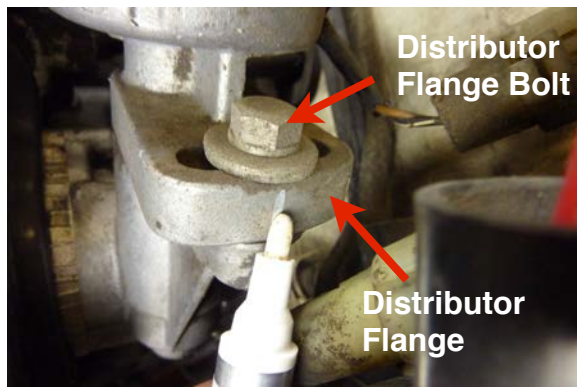
Remove the distributor cap by releasing the (2) clips.

## Step 2

Inspect the cap for cracks, tracking or burned contacts. Replace if needed.

Note: Click [HERE](#) if you are interested in purchasing a new cap.

## Distributor Removal



## Step 3

Mark the location of the distributor flange bolt on the distributor flange.

Note: This is so ignition timing can be returned to the current setting.

## Step 4

Mark the rotor contact position by marking the distributor housing.

Note: The distributor must be replaced with the rotor in the exact same position, or the engine will not run correctly.





### Step 5

Disconnect the distributor wiring harness by lifting up on the tab and pulling the two connectors apart.



### Step 6

Disconnect the vacuum tube.



### Step 7

Remove the distributor flange bolt.



### Step 8

Remove the distributor by lifting upward.

Note: It helps to twist back and forth as you pull up.



### Caution:

**DO NOT** crank the engine (or rotate the engine in any way) while the distributor is out. If the engine is cranked or rotated, the ignition timing will be adversely affected when the distributor is reinstalled.



### Step 9

Inspect the distributor housing O-ring and replace if needed.



### Step 9 Continued

Replacing the distributor housing O-ring.



### Step 10

Place the distributor in a vice or on a workbench.

**Caution:** If placed in a vice, use a cloth to protect the housing and seal. Do **NOT** over tighten the vice. Aluminum is easily damaged.





## Step 11

Remove the rotor by pulling it upward.

Note: Inspect the rotor for burned contacts or any signs of damage and replace if needed. Click [HERE](#) if interested in purchasing a new one.



## Step 12

Using a small screwdriver, remove the igniter dust cover as shown.

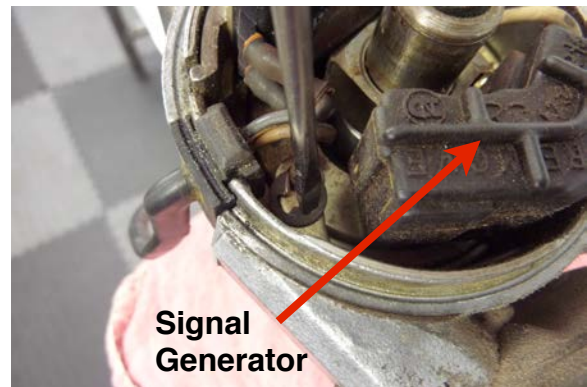
Note: The cover just snaps off with gentle prying.



## Step 13

Using a small standard screwdriver, rotate the E-clip toward the vacuum controller.

Note: The E-clip will likely stick to the pickup coil assembly because the pickup coil assembly is magnetic.



## Step 14

Remove the E-clip from the pin.

Note: When the E-clip detaches it will likely stick to the signal generator because the pickup coil assembly is magnetic.



### Step 15

Using needle nose pliers extract the E-clip.



### Step 16

Remove the vacuum controller mounting screw using a phillips screwdriver.



### Step 17

Using a small hook, lift up (or release) the vacuum controller link from the pin and slide the vacuum controller out.



### Step 18

Install the new vacuum controller.

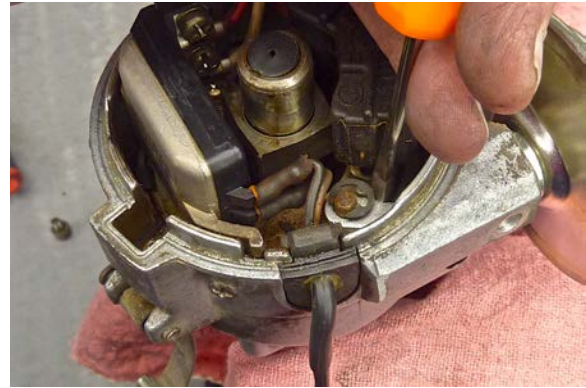
Note: Be sure the vacuum controller link is fitted back on the pin.





### Step 19

Position the E-Clip with needle nose pliers.



### Step 20

Snap the E-Clip into place.



### Step 21

Install the mounting screw and tighten.



### Step 22

Install the Igniter dust cover.

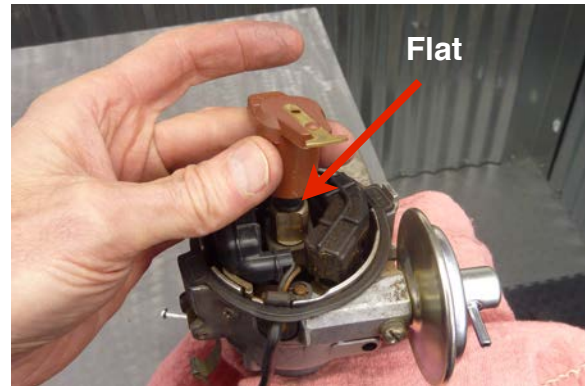




### Step 23

Install the distributor cap gasket, if removed earlier.

Note: Replace this gasket if it is damaged or has become brittle. Click [HERE](#) if interested in purchasing a new one.

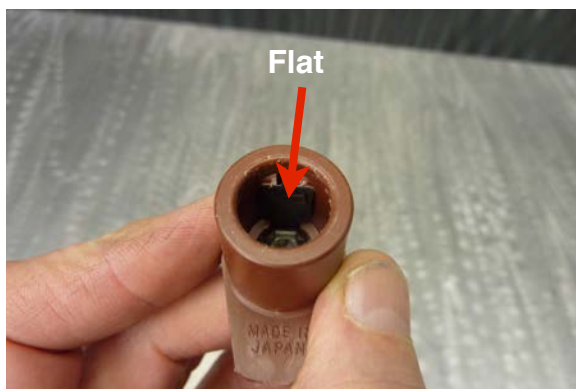


### Step 24

Install the rotor.

Note: Be sure it seats all the way down.

## Distributor Installation



### Tech Tip

The flat in the rotor must be positioned on the flat of the distributor shaft.



### Step 25

Install the distributor back in the engine.

Note: If a new O-ring was installed, wipe a little oil on the seal to protect it and make the installation go easier.



## Step 26

And make certain the distributor flange is in the exact same position as before.



## Step 26 Continued

At the same time make certain the rotor is oriented (pointing) in the exact same positions as before.



## Tech Tip

This picture shows the distributor installed with the driven gear of the distributor "off" by one tooth. This distributor needs be removed and reinstalled.

## Step 27

Install the distributor flange bolt.

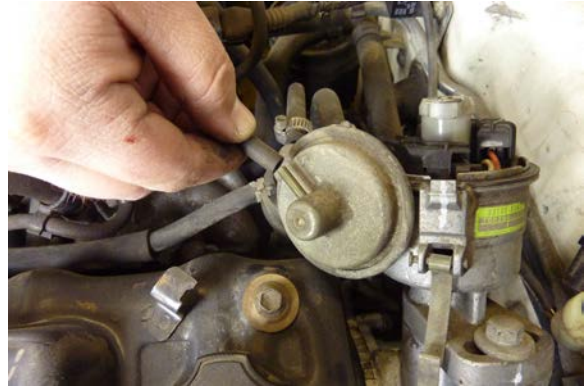




## Step 28

Connect the wiring connector.

Note: Push connectors together till it snaps into place.



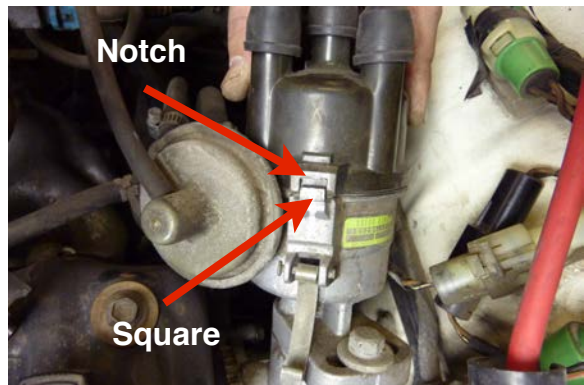
## Step 29

Connect the vacuum advance hose.



## Step 30

Install the distributor cap.



## Tech Tip

The distributor cap will only install in one position. Be sure the notch on the cap is positioned on the square of the distributor.





### Step 31

Be sure all (4) plug wires are seated properly in the cap. Check the coil wire as well.



### Step 32

Start the engine and check for smooth operation..



### Step 33

We recommend that you check and set ignition timing after removing and replacing a distributor. For a video on "How to Check and Set Ignition Timing" click [HERE](#).

Or

Smart Phone users scan below.



As always, If you experience any difficulty during the installation of this product please contact Low Range Off-Road Technical Support at 801-805-6644 M-F 8am-5pm MST. Thank you for purchasing from Low Range Off-Road.



These instructions are designed as a general installation guide. Installation of many Low Range Off-Road products require specialized skills such as metal fabrication, welding and mechanical trouble shooting. If you have any questions or are unsure about how to proceed, please contact our shop at 801-805-6644 or seek help from a competent fabricator. Using fabrication tools such as welders, torches and grinders can cause serious bodily harm and death. Please operate equipment carefully and observe proper safety procedures.

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