

**Applications:**

AW55-50SN, 09D, 09G, AF21/TF81, TF80 Solenoids

**Contents:**

- Base
- Shell support
- Solenoid opener
- Solenoid upper support
- Crimping tool
- Plug and Spring



**Warning:**

Follow the step by step instructions below to ensure each solenoid is disassembled and reassembled correctly. Wear work gloves to protect your hands. Wear safety glasses to protect your eyes. You need to work on a solid surface such as a work bench typically used by professional mechanics. Perform the work in a well lighted area.

**Step 1**

Mark the position of each solenoid before removing them from the valve body. For future reference, make an alignment mark to realign the solenoid stem and coil connector. Notice the notch.



**Omega Machine & Tool, Inc.**

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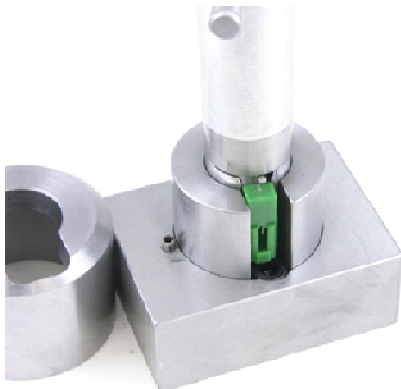
[www.omegamachine.com](http://www.omegamachine.com)

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**Step 2**

Install the solenoid into the shell support with the opening facing you. Place the solenoid opener support over the solenoid. Rotate the support until the notch sets over the pin on the base.



**Step 3**

Align the solenoid opener tool so the leading edge of the opener tool bit sets just to the right of the crimped edge of the solenoid shell. You will be turning the tool in a clockwise direction to open the solenoid.



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**Step 4**

Hold the base securely. Look at the solenoid opener tool bit. Make sure it is just to the right of the crimped lip of the shell. Using your hand, apply downward pressure on the solenoid opener tool and rotate the tool clockwise. Rotate one complete revolution.

**IMPORTANT:** Stop rotating the solenoid opener tool when you have opened up the solenoid lip all the way. STOP!



**Step 5**

With the coil removed from the shell, inspect for any dark or discolored coil which may indicate a bad (overheated) coil. Replace the bushings, making sure the armature shaft slides freely.

Bushings are available from Valve Body Pro at 877-611-7767  
[www.valvebodypros.com](http://www.valvebodypros.com) or [www.solenoidpro.com](http://www.solenoidpro.com)

Part # AW-105K - AW55-50SN

Part # AW-106K - 09D, 09G, AF21/TF781 & TF80

Or from your local distributor.

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**Step 6**

Record the height of the control valve adjustment screw above the tip of its stem. See illustration. Remove the spring clip, adjustment screw and internal valve. Clean and inspect for wear or damage. Reassemble and set adjustment screw back to its original height.





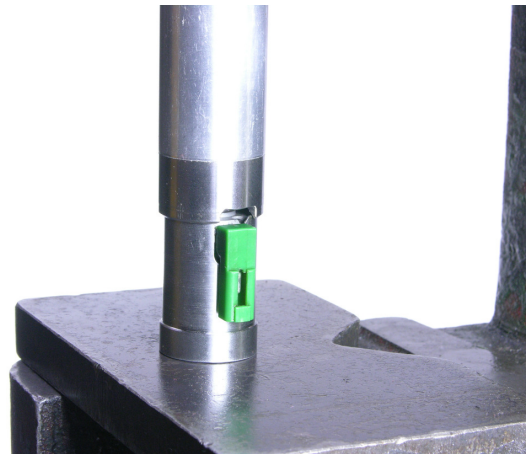
**AW Solenoid Tool**  
**Part # 31333**

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**Step 7**

Reassemble solenoid by installing armature, brass washer and coil into solenoid shell. Align marks made during disassembly and place control valve stem on top of coil. Place long coil spring over stem so that the bottom coil sits on the base of the stem. Place hollow solenoid crimp tool over assembly with aluminum plug sticking through top of crimping tool. Make sure the open notch in crimping tool is lined up with the solenoid electrical connector.



Using an arbor or hydraulic press, press on the end of the aluminum plug and watch for the stem to seat in the solenoid can. Apply just enough force on top of the crimp tool to crimp the lip of the shell over the control valve stem.

**WARNING:** DO NOT hit crimp tool with a hammer. Use a pressing force only.

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