How To Repair A Solenoid Coil

The solenoid part is the easiest damaged part of a hydraulic valve. The damage may be caused by several reasons. This article teaches you how to repair.

Written By: Jack Huang
**INTRODUCTION**

The [solenoid coil](#) is the key component of a hydraulic valve. Sometimes, the solenoid valve can be broken due to various reasons. This article will analyze all the possible reasons and how to tackle with them.

**TOOLS:**

- Multimeter (1)
Step 1 — Solenoid coil is short circuit or open circuit

- Test the solenoid with a multi-meter, if the resistance is close to zero or infinity, it means that solenoid is either open circuit or broken circuit.

- If open circuit or broken circuit happens, you need to change a new solenoid coil.

Step 2 — Problems with the plug

- If there is a plug on the solenoid valve, you may need to check the metal spring clip inside the socket.

- If this problem happens, modify the wire connection, repair or replace the plug or socket.
Step 3 — Problem with the valve element

- The valve element can be problematic because of too much water in the compressed air or too many foreign particles in the liquid medium.

- Check the valve element and get rid of all the foreign matters.

- If problem still occurs, replace the full valve element.

Step 4 — Solenoid valve won't work after turned on

- bad wiring. Re-connect the wire.

- Regulate voltage to the normal range.

- weld the solenoid coil again.

- regulate the pressure differences.
Step 5 — The solenoid valve cannot close

- replace the sealing parts of broken valve element
- replace the solenoid valve with a suitable one for medium with a higher temperature.
- clean the foreign matters in the valve element.

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