Posts: 73
Joined: Oct 2009

Ok,
Lets see if I can explain this because I recently replaced my switch. They are not being reproduced that I know of but found one at Stacy Browns (antique auto supply, Texas)
As you look at he back of the switch 3 terminals face the outside of the switch edge and one faces toward the center. So, the one facing the center is the power wire from the ignition switch. Then from that terminal going clockwise looking at the back of the switch with the power terminal at the bottom, the red wire is at 9 o'clock, the yellow wire is at 12 o'clock and the black (or brown) wire is at 3 o'clock. Then with the switch dial off in the center there are 2 clicks left and 2 clicks right, First click to the right is fast fan for heat and one more click to the right is slow fan for heat. Now back to the off position the first click to the left is fast defrost (pull the defrost cable) and reversed the direction of the fan. Second click to the left is slow fan for defrost. When you pull the defrost knob it directs the reversed air up thru the defrost tubes. So, hope this helps, but ask more questions if I have confused you.
No ground needed at the switch.
John

I am looking at a heater switch wiring diagram. There should be four wires coming from the motor. If you look at the back of the switch there are three contacts around the edge and an oddball contact with a resistor.
Starting with the odd contact this is your power wire, it should be red with a black tracer and it goes to the circuit breaker up at the top inside the firewall. For the other three the red wire should be a the nine o'clock position, the yellow wire at the 12 o'clock position, and the brown wire at the three o'clock position. The green wire from the motor should be attached to any convenient grounding spot.

This assumes of course that you either have color coded original wiring or a new motor wiring harness from a reputable vendor. If you have wiring that someone made up you will have to figure out which wire is which. According to the diagram green is the short field wire, red is the forward brush wire, yellow i

from the photo that you posted, the wire from the ignition switch should go to the top terminal. I cannot determine the color coding on the other wires, so I cannot tell you where they belong. Try the following procedure to get the wiring sorted out.

There are 4 wires coming from the motor. The yellow and the green wires come from the field windings and the red and brown wires come from the brushes. If your colors have faded so they all look yellow, I use an ohm meter to make an initial guess as to which wires are from the brushes and which wires are from the field and then I use a battery hooked up to a switch to determine which of the wires used for forward and reverse direction of the motor.

Usually you can see a little of the green cast on the green wire and the red color on the red wire. If you connect your ohm meter between the green wire and the yellow wire, you will have near zero ohms resistance. Any other wire will show an open condition. The reading will not vary when you rotate the motor shaft. When you connect the red and brown wires, you will have more resistance than the field connections showed and it will vary slightly as you turn the motor.

To check the motor out without a switch, connect the green wire to the POS terminal of a 6 volt battery (a lantern battery will work for convenience), then connect the yellow (field) wire with the red (brush) wire together and then the remaining brown (brush) wire to the Neg terminal of the battery the motor should run. If you are using a lantern battery, the motor may require some assistance to start.

Three of the wires from the motor will be attached to the switch according to the colored dots next to the terminals on the switch, the green wire will be attached to ground and the terminal with the black dot will be attached to a 6 volt source. The red and brown wires control the direction of the motor. When the switch is in the HI Direct position the fan should be blowing air through the heater core. On 1940 heaters this means that the motor is turning counter clockwise.

Tom s the long field wire and brown is the reverse brush wire.

Referring to the photo of the back of your switch. Mark is correct this switch is designed for a 4-wire motor (2 wires for the armature and and 2 for the field coils) direction change was made by reversing the polarity of the field coils whilst the armature polarity remained constant.

The top terminal of the switch should be connected to the battery via the ignition switch so that when the Ignition is off so is the heater. The two side contacts are for the field winding's and change polarity

depending if the switch is rotated clockwise or counter clockwise. The 4th wire from the heater motor is connected to ground, usually via one of the heater control panel mounting screws.

You can still use the switch with a 2 wire motor but it will not be reversible. One motor wire goes to ground and the other to the bottom terminal on the switch. This still gives two speeds but only one direction regardless of which way the switch is rotated.

