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SERVICE BULLETIN

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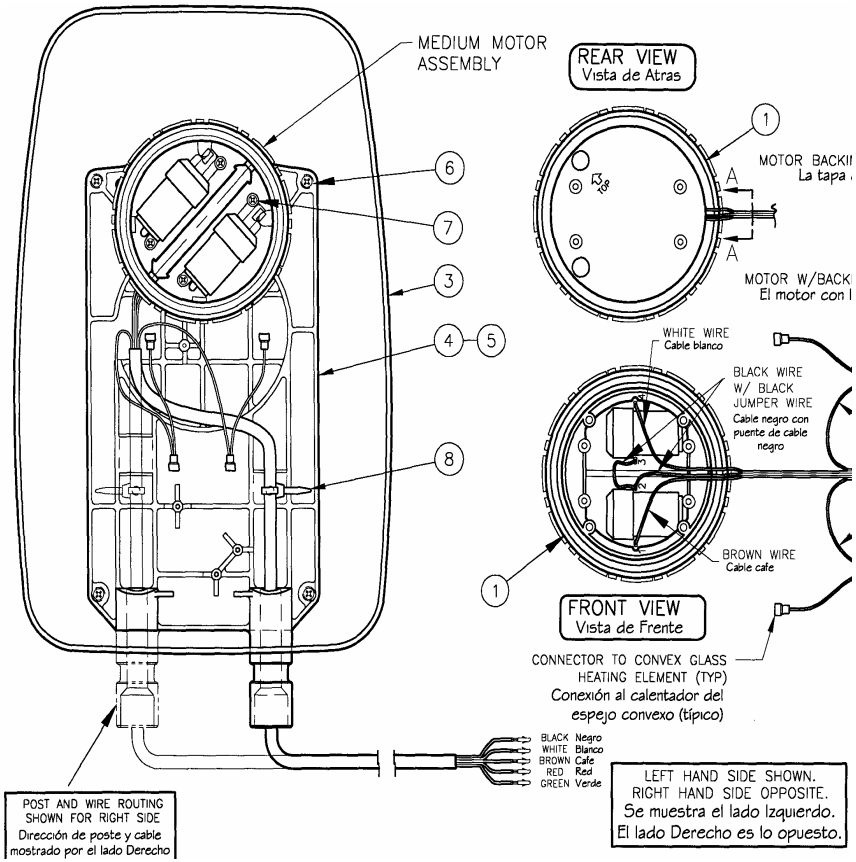
Mirror Wiring- Velvac Basics

<u>The Basics:</u> Velvac motorized mirrors utilize a two motor system enclosed in a motor assembly. The motor assembly is a round pivot mechanism behind the mirror glass inside the mirror head. One motor controls the *vertical* movement of the glass and the other motor controls the *horizontal* movement of the glass. There are three wires going to each mirror motor assembly. Each motor has an individual wire and they share a common wire with the other motor. To change the movements of the mirror from one direction to the other the polarity of the wires are switched.



The drawing on the left is a cutaway view of a common Velvac mirror head. Inside the medium motor assembly are the cylindrical motors. To the right of the head is a rear and front view of the medium motor assembly.

The bottom motor is for <u>horizontal movement</u> of the glass.

- **It has a brown wire and shares a black wire with the top motor.**
- **When the brown wire is positive and the black wire is negative the mirror glass moves to the right.**
- **Attaching the brown wire to negative and the black wire to positive, the mirror glass moves to the left.**

The top motor is for vertical movement of the glass.

- **When its white wire is positive and the black wire is negative the glass moves up.**
- **Switching the polarity with the white wire negative and the black wire positive, the glass moves down.**

The mirror control switch distributes the positive and negative function of electricity to each wire.

Mirror Wiring- Velvac Basics continued . . . .

Trouble shooting tips:

1. **If both the right (passenger) side and left (driver) side mirrors are experiencing the same problem, the switch is generally the cause of the problem. For example, if both mirrors move to the right and up when the switch control is placed in the up position. The contacts are most probably worn or damaged making poor contact resulting in improper movement.**
2. **If a mirror head is suspected of having a problem, swap the mirror heads by replacing the left with the right and the right with the left. If the opposite mirror head functions properly in the same circuit as the questionable mirror head you have found the problem with the original mirror head.**
3. **Start your trouble shooting with the mirror heads using a 12-volt power source. Refer to the technical documents section on the Velvac website, www.velvac.com , for additional assistance to remove the mirror heads from the arms/bases. With the power source check the individual motor operations as described on the first page of this document (The Basics). If the heads are functioning properly, work your way back through the harnesses, then to the switch. If you need additional wiring information refer to the technical documents section on the Velvac website, www.velvac.com .**

For additional technical support material visit Velvac's technical documents section of the web site at www.Velvac.com. The majority of your questions should be answered in one of the technical documents.
Should you need additional assistance you may contact us at:
Technical Support email: technicalsupport@Velvac.com
Phone: 1-800-783-8871 Monday – Friday 7:00am – 4:00pm Central Time
Fax: 1-262-786-4101

Visit our web site for new products and upgrades to your current Velvac mirrors!

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