

## **How to Check Limit Switch Adjustment** **600amp to 1200amp Delay units**

1. With the ATS unit in the Normal Position, locate the SN micro switch. Check continuity from “Com” to “NO” connection and there should be a closure. “Com” to “NC” should be reading open. When the ATS unit is switched to the Neutral Position, the “Com” to “NO” connection will read open and the “COM” to “NC” will now be reading closed.
  
2. With the ATS unit in the Normal Position, locate the SNO micro switch. Check continuity from “Com” to “NO” connection and there should be no closure. “Com” to “NC” should be reading closed. When the ATS unit is switched to the Neutral Position, the “Com” to “NO” connection will read closed and the “COM” to “NC” will now be reading open.
  
3. With the ATS unit in the Emergency Position, locate the SE micro switch. Check continuity from “Com” to “NO” connection and there should be a closure. “Com” to “NC” should be reading open. When the ATS unit is switched to the Neutral Position, the “Com” to “NO” connection will read open and the “COM” to “NC” will now be reading closed.
  
4. With the ATS unit in the Emergency Position, locate the SEO micro switch. Check continuity from “Com” to “NO” connection and there should be no closure. “Com” to “NC” should be reading closed. When the ATS unit is switched to the Neutral Position, the “Com” to “NO” connection will read closed and the “COM” to “NC” will now be reading open.

If these checks are made and you get the correct results, no further action is needed. If a step fails go to the adjustment section.

## **(CONT.) Making Adjustments to Limit Switches**

The SN & SNO limit switches work together and the SE & SEO limit switches work together because they are mounted to the same bracket. So when adjusting keep in mind that if you lower the bracket too much the bottom micro switch will not be activated, if you raise it too high the top switch will not be activated.

Determine which switch in the pair failed the previous continuity check. If the SN was reading closed but the SNO was not closed in the Neutral position, loosen the mounting screws enough where the bracket can move by tapping on it with the handle in of the screwdriver. Then tap the bracket up so the SNO switch clicks and it is now reading closed. Now tighten the mounting screws back and transfer the ATS back to the Normal Position and confirm the SN still closes. Then move the ATS back to the Neutral position and confirm the SNO is reading closed.

Repeat the same steps for the SE and the SEO micro switch if one of the switches was not reading close in the Emergency position or the Neutral position. Once all 4 switches are confirmed to be working properly by manual operation, you are ready to apply power to do an electrical transfer test.<sup>1</sup>

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<sup>1</sup> 2/17/11 (QB) rev.a