



# Replacing the Switch Mechanism

## General Instructions

SOR® Level Controls are designed for easy replacement of the switch mechanism without removing the control from the process. The following steps are recommended for proper replacement.



***Electrical power must be disconnected from explosion proof models before the cover is removed. Failure to do so could result in severe personal injury or substantial property damage.***

- ❶ Disconnect the external wiring at the terminal block, noting the position of each wire.
- ❷ Mark the location of each switch mechanism on the enclosing tube. Loosen the clamping screw closest to terminal block. Remove the switch mechanism(s) from the enclosing tube.
- ❸ Clamp each replacement switch mechanism on the enclosing tube according to the marks from step 2. If applicable, interlock the lowest switch mechanism with the baffle plate.



***To avoid a significant calibration shift, each replacement switch mechanism must be installed to match the position of the original switch mechanism on the enclosing tube.***

- ❹ Actuate the switch mechanism. Check continuity to verify switch actuation.
- ❺ Reconnect the external wiring to the terminal block.
- ❻ Arrange the external wiring to avoid interference with the movement of the switch mechanism or housing cover.
- ❼ Replace the housing cover.



***Each switch mechanism is factory adjusted for optimal actuation/de-actuation. Do not adjust the switch mechanism without factory instructions.***

Ensure that wiring conforms to all applicable local and national electrical codes and install unit(s) according to relevant national and local safety codes.

***NOTE: If you suspect that a product is defective, contact the factory or the SOR Representative in your area for a return authorization number (RMA). This product should only be installed by trained and competent personnel.***

*Design and specifications are subject to change without notice.  
For latest revision, go to [sorinc.com](http://sorinc.com)*

**NOTE: UL Listed or CSA, ATEX and SAA Certified Level Controls.**

The original switch mechanism must be replaced with an identical switch mechanism. Installation of a non-identical switching mechanism will void agency listing/certification.

Part No.	Description	
3160016	Dry Contact -SPDT	Type A1
3160021	Dry Contact -DPDT	Type A4
3160216	Dry Contact -SPDT (high-temperature)	Type B1
3160221	Dry Contact -DPDT (high-temperature)	Type B4
3160030	Dry Contact -SPDT (anti-vibration)	Type D1
3160033	Dry Contact -DPDT (anti-vibration)	Type D4
3160087	Dry Contact -SPDT (hermetically sealed)	Type F1
3160093	Dry Contact -DPDT (hermetically sealed)	Type F4
3160010	Dry Contact -SPDT (hermetically sealed)	Type L1
3160015	Dry Contact -DPDT (hermetically sealed)	Type L4
†3160307	Dry Contact -SPDT (extra high-temperature)	Type Y1
†3160306	Dry Contact -DPDT (extra high-temperature)	Type Y4

**NOTE: DPDT mechanisms consist of two SPDT elements working in tandem.**

† Type Y1 and Y4 switch mechanisms are not stackable.  
E-Tube should be isolated from the process and brought to ambient temperature before installing Y1 and Y4 type switches.





Printed in USA

[sorinc.com](http://sorinc.com)

---

14685 West 105th Street, Lenexa, KS 66215 ■ 913-888-2630 ■ 800-676-6794 USA ■ Fax 913-888-0767

---

**4/4** Registered Quality System to ISO 9001

Form 448 (05.13) ©SOR Inc.