



Technical Bulletin

- Place a copy of this bulletin in the front of each Blueprints Manual.
- Redline drawings as needed and include a TB reference note.
- Document TB implementation schedule request and completion:

Date Scheduled _____ Date Completed _____
 Completed by (name) _____

TB Number: 101
Date Issued: 06/30/2015
Expiration Date: None

Subject/Key Words:	GAMA Gantry Robot Reset Procedure; Robot Shroud Sensor Upgrade Kit			
Classification:	<input checked="" type="checkbox"/> Informational	<input type="checkbox"/> Mandatory	<input type="checkbox"/> Safety Alert	<input type="checkbox"/> Preventive Maintenance Impact
	<input type="checkbox"/> Warranty Impact	<input checked="" type="checkbox"/> Purchase Parts	<input type="checkbox"/> No Charge For Parts expires ___ / ___ / ___. Reference this TB# when ordering NC parts.	
Application:	GAMA Wet Stations with Gantry Style Robots			
Parts/Documents:	Robot Shroud Sensor Upgrade Kit 241810-001			

Issue: On GAMA Gantry Robots built prior to 07/01/2015 customers and service technicians sometimes encounter difficulty resetting the robot safety circuit after a robot stop triggered by contact with the robot shroud.

Solution: **Resetting the Safety Circuit on pre- 07/01/15 Gantry Robots.** The safety shroud’s ability to move in relation to the mounting plate assembly is used in the design of the robot safety circuit. Two magnetic safety switches are used to detect movement of the safety shroud and cut 70 VDC power to the robot circuit. One safety switch is located close to the top of the shroud, the other near the bottom. This design ensures at least one of the switches will open if the shroud meets resistance of approximately one pound.

Once the safety circuit is open **both** magnetic safety switches must be manually reset. **Both switches must be reset even if only one is open.** To reset the magnetic switches, both switches must first be open together and then both close within 2 seconds of one another.

To open both switches at the same time, position your hands on the side of the carriage about half way down from the top. Now push the carriage to one side and hold it there for a moment. This should open both switches. Next, release the carriage and allow it to spring back to the center position. This should close both switches within the 2 second time limit. If the safety circuit has been reset, the small green LED on the side of the shroud will be illuminated. If the shroud safety system does not reset and illuminate the green LED, try again – it may take several attempts given the short 2 second window to satisfy the sensors.

Robot Shroud Sensor Upgrade Kit (Akrion PN 241810-001). This kit simplifies resetting the safety circuit by installing a reset button with a LED indicator in the 24VDC line to the safety switch controller.

This Robot Safety Circuit Reset Button is now standard on all new Gantry Style robots shipped after 07/01/15.

Resetting the Safety Circuit on Robots Equipped with a Reset Button. Physically re-center and align the shroud so it is not cocked to one side. Next, press and release the reset button to remove and reapply power to the controller. The green LED should illuminate to indicate the circuit is reset. If it does not, readjust the shroud position and repeat.