S4B Safety Light Curtain Daily Checkout Procedure



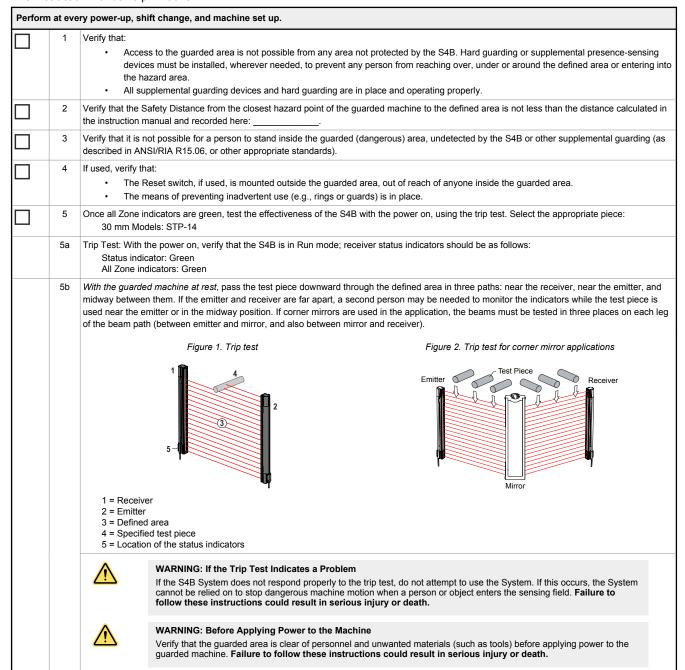
Checkout Procedures

Daily Checkout Procedure

Banner Engineering highly recommends performing the System checkouts as described. However, a Qualified Person (or team) should evaluate these generic recommendations considering their specific application and determine the appropriate frequency of checkouts. This will generally be determined by a risk assessment, such as the one contained in ANSI B11.0. The result of the risk assessment will drive the frequency and content of the periodic checkout procedures and must be followed.

Daily checkout and checkouts after tooling and machine changes must be performed by a Designated Person (appointed and identified in writing by the employer). During continuous machine run periods, this checkout must be performed at regular intervals. A copy of the checkout results should be kept on or near the machine: see OSHA 1910.217(e)(1).

The Instruction Manual is p/n 230287.



| Perform at every power-up, shift change, and machine set up. | | |
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| | 5c | Verify that when the test piece is interrupting the defined area, at least one Zone indicator must be red. Different red Zone indicator(s) will be lit, according to the position of the test piece. |
| | | Note: If beam 1 is blocked, Zone 1 indicator will be red and all other Zone indicators will be off because beam 1 provides the synchronization signal for all the beams. |
| | | The Status indicator must turn red and remain red while the test piece remains in the defined area. If not, the installation has failed the trip test. If all Zone indicators are green or do not follow the position of the test piece, or if the Status indicator turns green while the test piece is interrupting the defined area, the installation has failed the trip test. |
| | | Check for correct sensor orientation, for the presence of reflective surfaces (see below), or for unguarded areas created by the use of blanking. |
| | | Important: Do not continue with this checkout procedure or operate the guarded machine until the situation is corrected and the indicators respond properly as described above. |
| | 5d | Verify that when the test piece is removed from the defined area, the Status indicator and all Zone indicators turn green. |
| | 6 | Initiate machine motion of the guarded machine, and while it is moving, insert the optional test piece into the defined area. Do not attempt to insert the test piece into the dangerous parts of the machine. |
| | | Verify that, when the test piece is in the defined area, the dangerous parts of the machine come to a stop with no apparent delay. Remove the test piece from the defined area and verify that: The machine does not automatically restart, and Initiation devices must be engaged to restart the machine. |
| | 7 | With the guarded machine at rest, insert the test piece into the defined area and verify that the guarded machine cannot be put into motion while the test piece is in the defined area. |
| | 8 | Check carefully for external signs of damage or changes to the S4B, the guarded machine, and their electrical wiring. Any damage or changes found should be immediately reported to management. |
| | | Important: Do not continue operation until the entire checkout procedure is complete and all problems are corrected. |
| | | Eliminating Problems with Reflective Surfaces |
| | | If possible, relocate the emitter and/or receiver to move the defined area away from the reflective surface(s), being careful to maintain adequate separation distance (see step 2). |
| | | Otherwise, if possible, paint, mask or roughen the surface to reduce the reflectivity. |
| | | Where these are not possible (as with a shiny workpiece), include a means of restricting the receiver's field of view or the emitter's spread of light in the sensor mounting. |
| | | Repeat the trip test to verify that these changes have eliminated the problem reflection(s). If the workpiece is especially reflective and comes close to the defined area, perform the trip test with the workpiece in place. |

