



LOW MATERIAL LEVEL ALARM

Item #109821

INSTRUCTION MANUAL



December 2023
IMS Company
10373 Stafford Road
Chagrin Falls, OH 44023-5296

Telephone: (440) 543-1615
Fax: (440) 543-1069
Email: sales@imscompany.com
Website: www.imscompany.com

DESCRIPTION

The IMS Low Material Level Alarm uses a proximity sensor to monitor the material level in a hopper. If the material level falls below the sensor, a loud alarm sounds and a red indicator lights to alert the operator.

INSTALLATION

1. Lock out and tag out power to machine where you are going to install alarm

DANGER
 INJECTION MACHINES could cause DEATH, SHOCK OR INJURY.

Lock out and tag out power to machine before you install alarm.

Follow safety steps in machine manual when installing or adjusting alarm.

2. Decide on lowest level material should reach in your hopper. Mark a convenient spot 2" or more above that level to mount the sensor. The higher you mount the sensor, the more time there will be to react to the alarm before the hopper runs out of material.
3. Punch or drill 1/4" hole at point marked on hopper. If drilling, keep chips out of feed throat.
4. Thread one nut onto sensor and turn until it reaches at least half way down the sensor.
5. Insert sensor into hole. Sensor must be inserted deep enough that you can thread at least one nut on the front of the sensor inside of the hopper.
6. Adjust to desired depth by using both the inside nut and outside nut to secure in place. Tighten nuts securely.

NOTE: If the Low Material Level Alarm will be installed on a material hopper where the resin or internal hopper temperature is above 158° F, you must install an insulating sensor holder. (IMS #163468)

The temperature limit with the Insulating Sensor Holder is 475° F.

Install Insulating Sensor Holder on Hopper – Hole must be big enough to accommodate a 1-1/4" NPT Thread. Remove nut from holder and leave high-temp O-ring in place. Slide holder into hole and then reattach the previous removed nut. After securing, thread proximity sensor into holder. You may discard the plastic nuts that came with the sensor.

7. Install alarm box in convenient place. Make sure it will not get wet and is not in the way of any machine movement. Remember that the standard sensor cord is 78" long.
8. Route sensor cord to box. Keep cord away from heat and moving parts.

INSTALLATION (continued)

9. Install male Hubbell● plug on end of cord. Use outer terminals of plug; polarity does not matter. Extend cord, if needed, using barrel lugs
10. Insert and twist Hubbell plug into alarm control box.
11. Plug box into grounded 115/60/1 outlet.

DANGER

There is 110 Volt AC electrical current exposed inside the panel box.

Do not open the panel box.

There are no user serviceable parts inside.

SENSOR ADJUSTMENT

The IMS Low Material Level Alarm requires the proximity sensor to operate as Normally Closed (N/C). If the supplied sensor has the ability to be changed, ensure the switch is set to N/C. If the sensor has it, the slot will point to the label N/C position if correct. Make certain you are not attempting to adjust the proximity sensors sensitivity. The Normally Open/Normally Closed option will always be labeled on the switch if it has the ability to be switched. Adjust sensor at installation and at material changes.

1. Fill hopper with enough plastic resin material via loader or manually to cover the entire switch which is protruding into the hopper.
2. Turn alarm power on.
3. Locate sensor sensitivity adjustment. See switch instruction sheet if you have trouble determining its location. Some sensors require a screw cover plug to be removed first.
4. Slowly turn adjusting screw counterclockwise just until alarm sounds.
5. Once alarm sounds, slowly turn screw clockwise just until alarm turns off.
6. Test operation of alarm by allowing material to drop below sensor level. Alarm should sound.
7. Readjust if needed repeating steps 4 and 5.

REPLACEMENT PARTS

DESCRIPTION	OLD IMS #	NEW IMS #
Insulating Sensor Holder (175° F Limit)	113567	163468
Hubbell● Plug, 2-Prong Sensor (158° F Limit)	COZZ-7465	104179
Fuse Holder	MHZZ-CS20HT	112094
Fuse (1/8 Amp)	COZZ-FH-MS	101344
Relay	132805	162071
Alarm Horn	121530	162085
Mounting Foot (Set of 2)		159520
		147582