

BODY UP INDICATOR

Model – BUI02

Mfgd.as per DGMS
Guidelines

(Tub High Indicator / Canopy Up Alarm)

Operator of H.E.M.M., while operation, doesn't know the position of the dump body, whether it is in high or low position. If dumper moves in body lift position, overhead HT Lines may break or hydraulic system may collide and cause fatal accident. Therefore in order to indicate that the body is in lifted position, Director General Mines Safety vide circular No 5 of 2010 has instructed to install Body Up Indicator in every vehicle.

To avoid accident, We have developed an electronic safety device called "BODY UP INDICATOR" which gives indication to the operator and also alert in Beep sound.

Salient Features of Body Up Indicator -

a) Controller Unit : A Microcontroller unit is installed in the cabin of the dumper. When it receive signal from sensor about lifting of body, it gives information to the dumper operator in Beep Sound i.e. Indication is also made through bright LED. Controller unit is installed in such a way that driver can see and hear the voice clearly. The reset button is also provided on the controlling unit to mute the voice, but LED indication will continue till the body return back into normal (Rest) position.



2. Sensor : Non-contact Magnetic sensors are used to sense the body position. These sensors are Water Proof, Dust Proof, Vibration Proof and made to use in mining environment. It is installed in such a way that when body is in normal (rest) position, it will sense its position through magnetic sensor and continue to send signal to the controller unit. There is no mechanical contact between the body and sensor therefore the life of the sensor is very high.

3. Harness : A good quality harness suitable for system to connect Controller Unit & Sensor is available as optional.

Advantages of using Body Up Indicator -

- 1) When body is in high position and the dumper moves, it may break the overhead HT line and cause fatal accident. To avoid this situation, Body Up Indicator alerts the operator.
- 2) When body is in high position, it exerts heavy pressure on hydraulic system and if dumper moves, hydraulic system may fail. The dumper operator when listen the Beep Sound, he understands that body is in up position and takes all necessary precautions to avoid accident.

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| AUDIO ALERT | 85 dB " BEEP" Alert Sound |
| CONTROLLER UNIT | Input voltage 24 ± 2 V.DC is required for Controller Unit, option at 12 ± 2 V. DC is also available. |
| SENSOR | To protect from dust & moisture Sensor are sealed with chemicals. |
| TIMER | To avoid irritation to operator, a timer defined in 'Special Feature' as below is Provided. |
| COLOUR | Black / Grey |

Special Feature : As soon as operator lifts the body to high position, Body Up Indicator immediately alert. This alarm continues for eight seconds, Since such alarm should not disturb the operator, it discontinue for one minute. This cycle is repeated for 5 times for a period of approximately 5 minutes and then Beep stops, whereas LED blinking continue till body is lowered to the normal position. A button to mute the Beep Sound is also provided in the equipment, through which operator can mute the announcement, if he desires so.