

BODY LIFT INDICATOR WITH HUMAN VOICE ALERT “डाला ऊपर है”



**AUTOMATION
CONTROLS**

An ISO 9001 : 2015 Company

Model: “BLI 01”, Part No.: 1524000066

Operators of HEMM, 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 lifting Indicator in every vehicle.

To avoid accident, we have developed an electronic safety device “**BODY LIFT INDICATOR** which gives indication to the operator and also alert in HUMAN VOICE i.e. “डाला ऊपर है”

Salient Features of “Body Lift Indicator” “डाला ऊपर है”



1. Controller unit: A Microcontroller unit is installed in the cabin of the dumper. When it receives signal from sensor about lifting of body, it gives information to the dumper operator in Human voice i.e. “डाला ऊपर है” 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 waterproof, 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 Lift Indicator

- 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 Lift Indicator alerts the operator.
- 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 in human voice that “डाला ऊपर है”, easily understands that body is lifted position and takes all necessary precautions to avoid accident.

TECHNICAL SPECIFICATION:

AUDIO ALERT	85 dB human voice announcement in HINDI “डाला ऊपर है” (Option of other language can also be made if required in quantity)
CONTROLLER UNIT	Input voltage 24 ± 2 V.DC.is required for Controller Unit. Optional 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.
COLOR	Black

Special Feature: As soon as operator lifts the body to high position, Body Lifting Indicator immediately alert in human voice “डाला ऊपर है” This alarm continues for eight seconds. Since such voice 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 human voice stops, whereas LED blinking continue till body is lowered to the normal position.

A button to mute the human voice announcement is also provided in the equipment. Through which operator can mute the announcement, if he desires so.



Manufacturer of Safety Equipments as per D.G.M.S. Circulars

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