

Aerial Bucket Indicator Lights



Description

The Aerial Bucket Indicator Lights innovation is a fully automatic system that activates the lights anytime the bucket is raised more than three inches off the truck bed or ground. It deactivates by using a photoelectric distance sensor when the bucket is stowed. A master power switch can deactivate the system if needing to raise the bucket to work off the back of a truck. There is a function that tests the lights during the morning truck check. The system also has a push-to-check voltage system to monitor the battery life. By using a solar panel mounted on the rear of the bucket control guard, the battery can remain fully charged, eliminating wires or cables running through the boom. The system is self-contained with no drilling into or through the bucket or guards. The light channels and electronic enclosure are adhered to the bucket with silicone.

Benefit

The Aerial Bucket Indicator Lights innovation simplifies work and improves motorists and workers safety by increasing the visibility of the bucket when used near traffic.

Materials and Labor

32 hours of staff time with \$670 in materials. Cost breakdown on back page.

For More Information Contact:

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Additional photos or videos can be seen by accessing the Innovations Challenge SharePoint page at: <http://sharepoint/systemdelivery/TP/Documents/InnovationsChallenge.aspx>.

Aerial Bucket Indicator Lighting Materials and Cost Breakdown

Materials and cost breakdown:						
Item Description	Brand	Vender	Quantity	Price each	Total price	
Flash Controller	Maxxima	AW Direct	1	\$44.95	\$44.95	
LED Light (Green)	Maxxima	AW Direct	8	\$10.95	\$87.60	
LED Light (Blue)	Maxxima	AW Direct	8	\$10.95	\$87.60	
Aluminum C-Channel, 1-1/4 X 1-1/4 X 1/8	N/A	Metals Depot	8 feet	\$2.96 per foot price	\$23.68	
Aluminum C-Channel, 1 X 1/2 X 1/8	N/A	Metals Depot	8 feet	\$1.52 per foot price	\$12.16	
Low Voltage Battery Disconnect	Electronics-Salon	Amazon	1	\$9.99	\$9.99	
Water-Proof Buttons	Blo vess	Amazon	2	\$5.89	\$11.78	
Water-Pr of Toggle Switch	Baomain	Oreily's	1	\$8.49	\$4.39	
Water-Proof Charging Socket	BANDC	Amazon	1	\$7.99	\$7.99	
Water-Proof Digital Voltmeter	MICTUNING® Direct	Amazon	1	\$9.50	\$9.50	
Enclosure, class 3 Water-Proof	Hubbell-Wiegmann	AutomationDirect	1	\$56.00	\$56.00	
Subpanel for enclosure	Hubbell-Wiegmann	AutomationDirect	1	\$9.50	\$9.50	
Photoelectric sensor	AutomationDirect	AutomationDirect	1	\$66.00	\$66.00	
Cable for Photoeectric Sensor	AutomationDirect	AutomationDirect	1	\$12.50	\$12.50	
Solid State Relay	AutomationDirect	AutomationDirect	1	\$17.25	\$17.25	
Battery	Power Sonic	Wholesale Bateries	1	\$18.40	\$18.40	
Solar Panel	Battery Tender	Amazon	1	\$60.22	\$60.22	
Battery Charger	Power Sonic	Wholesale Batteries	1	\$29.95	\$29.95	
Misc Small parts (Screws, nuts etc). Also includes funds for overages.	various	various	1	\$100.00	\$100.00	
Grand Total:					\$669.46	