



LIGHTNING EMOTORS, INC.

EXECUTIVE ORDER A-453-0017-2  
New On-Road Heavy-Duty Motor Vehicles

Pursuant to the authority vested in California Air Resources Board by Health and Safety Code Divisions 25.5 and 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-19-095;

**IT IS ORDERED AND RESOLVED:** The following on-road motor vehicles with a manufacturer's GVWR over 10,000 pounds are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	VEHICLE FAMILY NAME	VEHICLE TYPE	VEHICLE SERVICE CLASS	SUBCATEGORY (VEHICLE SIZE / ENGINE CYCLE / DUTY CYCLE)	VEHICLE MAKE & MODELS
2021	MLHL2VOCVLH1	Vocational	Light HDV	Light HDV / Otto / Urban	Lightning eMotors: FF5-128, FF5-160 (Heavy-Duty All Electric Vehicle)

EMISSION CONTROL SYSTEMS

\*

\*=not applicable; VSL = Vehicle speed limiter; VSLS = "Soft-top" vehicle speed limiter; VSLE = Expiring vehicle speed limiter; VSLD = Vehicle speed limiter with both "soft-top" and expiration; IRT5 = Engine shutoff after 5 minutes or less of idling; IRTE = Expiring engine shutoff; LRRA = Low rolling resistance tires (all); LRRD = Low rolling resistance tires (drive); LRRS = Low rolling resistance tires (steer); ATS = Aerodynamic side skirt and/or fuel tank fairing; ARF = Aerodynamic roof fairing; ARFR = Adjustable height aerodynamic roof fairing; TGR = Gap reducing tractor fairing (tractor to trailer gap); ADVH = Vehicle includes advanced hybrid technology components; ADVO = Vehicle includes other advanced-technology components (i.e., non-hybrid system); INV = Vehicle includes innovative (off-cycle) technology components; ATI = Automatic tire inflation system; TPMS = Tire pressure monitoring system; WR = Weight Reduction

Shown below are the CO<sub>2</sub> Greenhouse Gas Exhaust Emission Standard (STD) in g/ton-mile and/or the CO<sub>2</sub> Family Emission Limit(s) (FEL) of the listed vehicle family in g/ton-mile as applicable under 17 CCR 95663:

GVWR (pounds)	STD [CO <sub>2</sub> (in g/ton-mile)]	Highest Projected FEL [CO <sub>2</sub> (in g/ton-mile)]	Lowest Projected FEL [CO <sub>2</sub> (in g/ton-mile)]
10,000 < GVWR ≤ 19,500	461	0	0

**BE IT FURTHER RESOLVED:** The manufacturer has demonstrated certification compliance with the Greenhouse Gas Emission Standards as specified in Title 17 CCR 95663 and the incorporated "California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles" (HDV Test Procedures) adopted October 21, 2014 as last amended June 27, 2019.

**BE IT FURTHER RESOLVED:** For the listed air conditioning platform(s) in the attachment the manufacturer has demonstrated certification compliance with the AC Leakage Standard specified in 17 CCR 95663(a)(1)(B)7 and Section 1037.115 of the incorporated "California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles" (HDV Test Procedures) adopted October 21, 2014, as last amended June 27, 2019.

**BE IT FURTHER RESOLVED:** For the listed vehicle models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), and 13 CCR 2035 et seq. (emission control warranty).

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order hereby supersedes Executive Order A-453-0017-1 dated March 07, 2021.

Executed on this 1st day of September 2021.

Allen Lyons, Chief  
Emissions Certification and Compliance Division

## A/C PLATFORM SUMMARY TABLE

Vehicle family	Date	EO
MLHL2VOCVLH1	08/20/2021	A-453-0017-2

A/C Platform ID	Refrigerant Type	Refrigerant Capacity (g)	STD (HFC (g/year))	Leakage Rate (HFC (g/year))
LS-AC-LH1-01	R134a	767	11.5	5.9