

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	VEHICLE MAKE & MODELS
2021	MGUL2VOCVTM5	Vocational/Mixed-Use Vehicle	Heavy HDV	Grove US: TMS500-2

EMISSION CONTROL SYSTEMS

LRRR

*=not applicable; VSL = Vehicle speed limiter; VSLS = "Soft-top" vehicle speed limiter; VSLE = Expiring vehicle speed limiter; VSLED = Vehicle speed limiter with both "soft-top" and expiration; IRT5 = Engine shutoff after 5 minutes or less of idling; IRTE = Expiring engine shutoff; LRRR = 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; ADVQ = 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: 1) The Greenhouse Gas Exhaust Emission Standard (STD) in g/ton-mile and/or the Family Emission Limit(s) (FEL) of the listed vehicle family in g/ton-mile as applicable under 17 CCR 95663; and 2) the Tire Coefficient of Rolling Resistance (CRR) STD and the corresponding CRR value of the listed vehicle family as provided under 17 CCR 95663(d):

	STD	Highest Projected FEL	Lowest Projected FEL
CO ₂ (g/ton-mile)	319	*	*

	STD	Highest Tire CRR Value
Tire CRR (kg/metric ton)	7.6	6.9

BE IT FURTHER RESOLVED: The listed vehicle family is certified to the Optional Phase 2 Custom Chassis CO₂ Emissions Standards as specified in 17 CCR 95663(a)(1)4 and Section 1037.105(h) 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: 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.

Executed on this 24th day of March 2021.



Allen Lyons, Chief
Emissions Certification and Compliance Division

A/C PLATFORM SUMMARY TABLE

Vehicle family	Date	EO
MGUL2VOCVTM5	03/19/2021	A-470-0002

A/C Platform ID	Refrigerant Type	Refrigerant Capacity (g)	STD (HFC (g/year))	Leak Rate (HFC (g/year))
ProAir - Carrier Cab	R134A	2762	41.4	22.8
ProAir-Superstructure Cab	R134A	2536	38.0	19.2