

FCA US LLC

EXECUTIVE ORDER A-009-1498
New Diesel or Incomplete
Medium-Duty Vehicles Using Certified Engines
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Pursuant to the authority vested in California Air Resources Board by Health and Safety Code Division 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 diesel or incomplete medium-duty vehicles (MDV) with a manufacturer's GVWR from 8501 to 14000 pounds are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

| | | | | | E | NGINE DESCR | IPTION | | | | |
|---------------|--|-----------|-----------------------|----------|--------------------------------|-----------------------|-------------|-------------------|---|------------------------------|--|
| | ENGINE FAMILY KCRXE06.45Y6 EXECUTIVE ORDER | | Y | ENGINE | EMISSION | FUEL TYPE | STANDA | ENGINE SIZES | ECS & SPECIAL FEATURES 3 TWC, SFI, HO2S, EGR, | OBD COMPLIANCE OBD (P) | |
| MODEL YEAR | | | 6 MAN | UFACTURE | R STD | Gasoline | & TES | (L) | | | |
| | | | ER | A US LLC | CATEGORY 2 | | PROCEDI | | | | |
| 2019 | A-0 | 09-1491 | | A US LLC | ULEV | | Otto | 6.4 | EGRC | OBD (F) | |
| Gasoline | , LPG or | Alcohol \ | /ehicles Only | Maka | THE REAL PROPERTY. | | VEHICLE | DESCRIPTION | | | |
| EV | EVAPORATIVE | | FUEL TANK CAPACITY | VEHICLE | VEHICLE MAKE & MODELS | | ENGINE SIZE | ENGINE M | ENGINE MODELS / CODES | | |
| FAMILY | | UL (K) | (gallons) | YEAR | VEHICLE MAKE O | VEHICLE MAKE & MODELS | | (rated p | (rated power, in hp) | | |
| LCRXF0205TC0 | | 150 | 22, 52 | 2020 | Ram 3500 Cab Chassis 4x2 / 4x4 | | 6.4 | ESB / AA100, AA15 | OBD (P) | | |
| LCRXF0 | 272TC2 | 150 | 22, 52, 74 | 2020 | Ram 3500 Cab Chas | ssis 4x2 / 4x4 | 6.4 | | 0, AA200, AA250, AA525, '4 for all codes) | OBD (P) | |

* =not applicable; GVWR=gross vehicle weight rating, 13 CCR xyz=Title 13, California Code of Regulations, Section xyz; 40 CFR 86.abc=Title 40, Code of Federal Regulations, Section 86.abc; L=liter, hp=horsepower; kw=kilowatt; (2004may26)

CNG/LNG=compressed/liquefied natural gas; LPG=liquefied petroleum gas; E85=85% ethanol fuel; MF=multi fuel a.k.a BF=bi fuel; DF=dual fuel; FF=flexible fuel;

SULEV / ULEV / LEV=super ultra / ultra / low emission vehicle;

3 ECS=emission control system; TWC/OC=three-way/oxidizing catalyst; WU (prefix) =warm-up catalyst; DPF=diesel particulate filter; HO2S/O2S=heated/oxygen sensor; HAFS/AFS=heated/air-fuel-ratio sensor (a.k.a., universal or linear oxygen sensor); TBI=throttle body fuel injection; SFI/MFI=sequential/multi port fuel injection; DGI=direct gasoline injection; GCARB=gaseous carburetor; IDI/DDI=indirect/direct diesel injection; TC/SC=turbo/super charger; CAC=charge air cooler; EGR / EGRC=exhaust ges recirculation / EGR cooler; PAIR/AIR=pulsed/secondary air injection; SPL=smoke puff limiter; OBD(F) / (P) / (\$)=full / partial with a fine / on-board diagnostic; ECM/PCM=engine/powertrain control module; EM=engine modification; 2 (prefix)=parallel; (2) (suffix)=in series:

Following are: 1) the FTP exhaust emission standards, or family emission limit(s) as applicable, under 13 CCR 1956.8; 2) the SET and NTE limits under the applicable California exhaust emission standards and test procedures for heavy-duty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, for this engine family. "Diesel" CO, SET and NTE certification compliance may have been demonstrated by the manufacturer as provided under the applicable Test Procedures in lieu of testing. (For flexible- and dual-fueled engines, the CERT values in brackets [] are those when tested on conventional test fuel. For multi-fueled engines, the STD and CERT values for default operation permitted in 13 CCR 1956.8 are in parentheses.).

| | NMHC | | NOx | | NMHC+NOx | | CO | | PM | | НСНО | | |
|------|------|-----|------|-----|----------|-----|------|-----|------|-----|-------|-----|--|
| | FTP | SET | FTP | SET | FTP | SET | FTP | SET | FTP | SET | FTP | SET | |
| STD | 0.14 | | 0.20 | | • | | 14.4 | | 0.01 | | 0.01 | | |
| CERT | 0.08 | | 0.10 | | | | 8.6 | • | • | | 0.001 | | |
| NTE | * | | | | | | | | | | | | |

4 g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; SET=Supplemental emission testing; NTE=Not-to-Exceed emission limit; STD=standard or emission test cap; FEL=family emission limit; CERT=certification level; NMHC/HC=non-methane/hydrocarbon; NOx=oxides of nitrogen; CO=carbon monoxide; PM=particulate matter, HCHO=formaldehyde;

BE IT FURTHER RESOLVED: The listed engine family is conditionally certified based on the manufacturer providing data to demonstrate the vehicles using these engines comply with the Otto-cycle fleet average emission standard specified in Title 17 CCR 95336(b)(B) and the incorporated "California Greenhouse Gas Exhaust Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles" (HDV Test Procedures) adopted October 21, 2014, as last amended December 19, 2018 within 90 days after the end of the model year.

BE IT FURTHER RESOLVED: The listed engine models have been certified to the optional emission standards and test procedures in 13 CCR 1956.8 applicable to diesel or incomplete MDV with a 8501-14000 pound GVWR and shall be subject to 13 CCR 2139(c) (in-use testing of engines certified for use in diesel or incomplete MDV with a 8501-14000 pound GVWR).

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), 13 CCR 1968.2 (on-board diagnostic, full or partial compliance), 13 CCR 1976(b)(1)(F) {evaporative emission standards}, 13 CCR 2035 et seq. (emission control warranty), and 13 CCR 2235 [fill pipes and openings of motor vehicle fuel tanks]. (The braces { } are for gasoline, LPG or alcohol fueled vehicles only.)

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



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The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this _

day of December 2019.

Allen Lyons, Chief

Emissions Certification and Compliance Division