JAGUAR LAND ROVER LIMITED

EXECUTIVE ORDER A 409-0004
New Passenger Cars, Light-Duty Trucks
and Medium-Duty Vehicles
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Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Div. 26, Part 5, Chap. 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515-39516 and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

| MODE | | TEST GROUP | | | VEHICLE TYPE (PC=passenger car; LDT=light-c MDV=medium-duty vehicle; LVI vehicle weight; GVW=gross | STANE (LEV=low of transitions | AUST EMISSION OARD CATEGORY amission vehicle; TLEV: at LEV; ULEV=ultra LEV LEV=super ULEV) | EXHAUST & ORVR / EVAPORATIVE USEFUL LIFE (UL) (miles) | FUEL TYPE (CNG/LNG=compressed/ liquefied natural gas; LPG=liquefied petroleum gas) | | | | | |
|------|----------|--------------------------|-----|----|---|--|--|---|--|--|--|--|--|--|
| 2013 | [| | | | Passenger Car | | Ultra Low Emission cle (LEV II ULEV) | 120K / 150K | Flexible Fuel: Ethanol (E85)/Gasoline (Tier 2 Unleaded) | | | | | |
| No. | | APORATIVE MILY (EVAF) | | No | SPECIAL FEA | | | OC/TWC=oxidizing/3-way cat. ADSTWC=adsorbing TWC WU= warm-up cat. O25/HO2S=oxygen sensor/heated O25 AFS/HAFS=air-fuel ratio sensor/heated AFS EGR=exhaust gas recirculation AIR/PAIR=secondary air injection/pulsed AIR MFUSF | | | | | | |
| 1 | | LXR0160P1Y | | 1 | 2TWC, 2A | NFS, 2HO25 | S(2), DFI, OB | | | | | | | |
| 2 | | * . | | 2 | 2TWC, 2AFS, 2 | 2HO2S(2), 3 | SC, CAC, DF | | | | | | | |
| 3 | | * | | 3 | | | | | CAC=charge air cooler OBD (F) / (P)=full /partial on-board diagnostic prefix 2=parallel (2) suffix=series | | | | | |
| 4 | | • | | | | * | | Guagnustic prenx 2-paramer (2) surfix-series | | | | | | |
| EVAF | EC No | | | | | CLES SUBJECT TO SFTP DARDS ARE <u>UNDERLINED</u> ABBREVIATIONS: | | | | | | | | |
| 1 | 1 | 1 | 5.0 | _ | | | | | | | | | | |
| 1 | 2 | 2 5.0 | | | JAGUAR: XJ 5.0 SU | JAGUAR: XJ 5.0 SUPERCHARGED, XJL 5.0 SUPERCHARGED, XJ 5.0 SUPERSPORT, XJL 5.0 SUPERSPORT | | | | | | | | |
| * | • | • | | | | • | | | | | | | | |

The exhaust and evaporative emission standards (STD), as requested by the manufacturer, and certification emission levels (CERT) for the listed vehicles are as follows (compliance with the 50 °F testing requirement (for TLEV, LEV, ULEV, SULEV) may have been met based on the manufacturer's submitted compliance plan in lieu of testing). Any debit in the manufacturer's "NMOG Fleet Average" (PC and LDT) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required. (For bi-, dual- or flexible-fueled vehicles, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

| NMOG FLEET NMOG @ RAF= * AVERAGE [g/mi] CH4 RAF = * | | | RAF=* | NMOG or NMHC | o Idlumal+hot-soak RL [g/mi]=running loss ORVR [g/gallon dispensed]=on-board refueling vapor recovery gagrain | | | | | | | | | | | | |
|---|----------------------|--|----------------|-----------------|---|---------------------|--------------------------|----------------|---------------------------|----------------------|--------------|--------------------|-----------------------------------|---------------------------|--|---------------------|--|
| CER | RT STD | | NMOG NMHC | | STD | ing-nangram in this | | | | | HCHO [mg/ml] | | SFTP=supplemental fe PM [g/mi] | | Hwy NOx [g/ml] | | |
| 0.04 | 0 | 0.035 | CERT [g/mi] | CERT [g/ml] | [g/mi] | CERT | g/mij STD | CERT | STD | CEF | | STD | CERT | STD | CERT | STD | |
| | | @ 50K | 0.010 | * | 0.040 | 0.2 (0.3) | 1.7 | 0.01 (0.02) | (0.05) | 0.2 | ` | 8 (8) | * | * | 0.003 (0.01) | 0.07 (0.07) | |
| | @ UL | | 0.012 (0.022) | * | 0.055 | 0.2 (0.4) | 2.1 (2.1) | r 50K 0.02) | 0.07 (0.07) | 1 (0.3 | 3) | 11 (11) | 0.002 (0.002) | 0.01 (0.01) | 0.003 (0.01) | 0.09 (0.09) | |
| A.J | @ | 50°F & 4K | 0.040 | * | 0.080 | 0.8 | 1.7 | 0.01 | 0.05 | 0.4 | 4 | 16 | * | * | * | * | |
| CO [g/mi] SFTP 1 = | | | 4K (SULE | V, ULEV, | NMHC+NOx [g/mi] (composite) | | CO [g/mi] (composite) | | NMHC+NOx [g/mi] [US06] | | Ċ | O [g/mi] [US06] | | NMHC+NOx [g/mi] [SC03] | | CO [g/mi] [SC03] | |
| @ 20 50 | K | LEV) or 50K (Tier 1, TLEV) SFTP 2 = @ UL (Tier 1, TLEV) | | CERT | STD | CERT | STD | CERT | STD | CER | T STO | CERT | STD | CERT | STD | | |
| CERT | (3.1) | | SF | TP @ 4K | | * | * | * | (0.02) | (0.14) | (3.8 |) (8.0 |) (0.01) | (0.20) | (0.1) | (2.7) | |
| STD | 10.0 | | SF | TP @ UL | * | * | * | * | * | * | • | * | * | * | * | * | |
| | EVAPORATIVE FAMILY 1 | | | | EVAPORATIVE FAMILY 2 EV | | | | EVAP | EVAPORATIVE FAMILY 3 | | | | EVAPORATIVE FAMILY 4 | | | |
| @ UL | 3-D | 2-D | RL | ORVR | 3-D | 2-D | RL | ORVR | 3-D | 2-D | RL | ORVE | | 2-D | RL | ORVR | |
| CERT | 0.47 | * | 0.001 | 0.001 | * | * | • | * | * | * | * | * | * | * | | <u> </u> | |
| STD | 0.50 | 0.65 | 0.05 | 0.20 | * | * | * | * | * | • | | | * | | <u> </u> | | |

BE IT FURTHER RESOLVED: That for the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 [emission control labels], 1968.2 [on-board diagnostic, full or partial compliance], 2035 et seq. [emission control warranty], 2235 [fuel tank fill pipes and openings] (gasoline and alcohol fueled vehicles only), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model PC, LDT and MDV).

BE IT FURTHER RESOLVED: The test group listed in this Executive Order is certified conditionally on the manufacturer providing data to demonstrate compliance with California's greenhouse gas fleet average emission standard (CA GHG Standard) specified in Title 13, California Code of Regulations, (13 CCR) Section 1961.1 and the incorporated California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, amended March 29, 2010 (CA Test Procedures). The manufacturer has elected, under 13 CCR Section 1961.1.(a)(1)(A)(ii) and under Section E.2.5.1(ii) of the CA Test Procedures, to demonstrate compliance with the CA GHG Standard by demonstrating compliance with the National greenhouse gas program (National GHG Program). Therefore, the test group listed in this Executive Order is certified conditionally further on the manufacturer complying with the requirements specified in said provisions in 13 CCR, and Sections E.2.5.1(ii) and H.4.5(b) and H.4.5(c) of the CA Test Procedures (among other things, concerning data and information submission, timing, and format as specified by the Executive Officer). Failure to comply with the certification requirements to demonstrate compliance with CA GHG Standard by demonstrating compliance with the National GHG Program under said provisions in 13 CCR



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and CA Test Procedures may be cause for the Executive Officer to revoke the Executive Order. Vehicles in the revoked Executive Order shall be deemed uncertified and subject to penalties authorized under California law. Notwithstanding the requirement herein, a manufacturer that becomes, after MY2009, a large-volume manufacturer, as defined in 13 CCR Section 1900, is not required to comply with the CA GHG Standard until the beginning of the fourth model-year from becoming a large-volume manufacturer. Additionally, notwithstanding the requirement herein, a small-volume manufacturer, independent low-volume manufacturer, or intermediate volume-manufacturer, as defined in 13 CCR Section 1900, is not required to comply with CA GHG Standard during model-years (MY) 2012 through 2015.

BE IT FURTHER RESOLVED: These vehicles are certified conditionally upon the manufacturer submiting data for 20F CO tested pursuant to 13 CCR Section 1961(a)(5) when tested on a mixture of gasoline test fuel and ethanol. Failure to submit the required data within 30 days from the date below or failure of the data to demonstrate complinace with the applicable standard shall be cause for the Air Resources Board to revoke this Executive Order and vehicles sold under the revoked conditional certification shall be deemed uncertified.

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

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

Executed at El Monte. California on this

_ day of April 2013.

Erik White, Chief

Mobile Source Operations Division