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-14-012;

IT IS ORDERED AND RESOLVED: The engine and emission control systems produced by the manufacturer are certified as described below for use in on-road motor vehicles with a manufacturer's GVWR over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

### MODEL ENGINE FUEL TYPE

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ENGINE FAMILY</th>
<th>ENGINE SIZE (L)</th>
<th>FUEL TYPE</th>
<th>STANDARDS &amp; TEST PROCEDURE</th>
<th>INTENDED SERVICE CLASS</th>
<th>ECS &amp; SPECIAL FEATURES</th>
<th>DIAGNOSTIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>KDDXH15.6GED-004</td>
<td>15.6</td>
<td>Diesel</td>
<td>Diesel</td>
<td>HDD</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### ENGINE MODELS / CODES (rated power, in hp)

<table>
<thead>
<tr>
<th>MODEL ENGINE FUEL TYPE</th>
<th>PRIMARY EMISIONS CONTROL</th>
<th>ADDITIONAL EMISONS CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIESEL</td>
<td>30g</td>
<td>N/A</td>
</tr>
</tbody>
</table>

1. **ECS & SPECIAL FEATURES**

- STD: standard or emission test cap
- FEL: family emission limit
- DDT, TC, CAC, ECM, EGR, OC, PTOX, SRR-U, AMOX
- OBD($)

2. **Diagnostic**

- PM: Particulate Matter
- CO: Carbon Monoxide
- CH: Carbon Dioxide
- NOx: Oxides of Nitrogen
- NMHC: Non-Methane Hydrocarbons
- HO: Hydrocarbons

3. **ENGINE FAMILY & TEST SERVICE**

- ENGINE'S IDLE
- MODEL ENGINE FUEL TYPE
- PRIMARY INTENDED SERVICE CLASS
- TRACTOR/VOCATIONAL

4. **Exempt**

- Exempted per 13 CCR 1956.8(a)(3)(D)
- Exempted per 13 CCR 1956.8(a)(3)(D) for CNG/LNG fuel systems
- NIA: Not Applicable (e.g., Otto engines and vehicles)
- EMD: Engine Manufacturer Diagnostic System

5. **FEL**

- Family Emission Limit

6. **EPA CERTIFICATE OF CONFORMITY**

- KDDXH15.6GED-004

7. **PRIMARY INTENDED SERVICE CLASS**

- TRACTOR/VOCATIONAL

BE IT FURTHER RESOLVED: The manufacturer has demonstrated compliance with the Greenhouse Gas Emission Standards as specified in Title 13 CCR 1956.8 and the incorporated “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy Duty Diesel-Engines and Vehicles” (HDDE Test Procedures) adopted December 12, 2002, as last amended September 1, 2017 using the 2014 model year National Heavy-Duty Engine and Vehicle Greenhouse Gas Program as specified in Section 1036.108 of the HDDE Test Procedures. The manufacturer has submitted the required information and therefore has met the criteria necessary to receive a California Executive Order based on the Environmental Protection Agency’s Certificate of Conformity for the above listed engine family.
BE IT FURTHER RESOLVED: Except in vehicle applications exempted per 13 CCR 1956.8(e)(6)(B), engines in this engine family certified under 13 CCR 1956.8(e)(6)(C) [30 g/hr NOx] and section 35.8.4 of the incorporated "California Exhaust Emissions Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles" (HDDE Test Procedures) adopted December 12, 2002, as last amended September 1, 2017, shall be provided with an approved "Certified Clean Idle" label that shall be affixed to the vehicle into which the engine is installed.

BE IT FURTHER RESOLVED: Certification to the FEL(s) / FCL(s) listed above, as applicable, is subject to the following terms, limitations and conditions. The FEL(s) / FCL(s) is the emission level declared by the manufacturer and serves in lieu of an emission standard for certification purposes in any averaging, banking, or trading (ABT) programs. It will be used for determining compliance of any engine in this family and compliance with such ABT programs.

BE IT FURTHER RESOLVED: The listed engine models are certified in accordance with 13 CCR Section 1971.1(k) (deficiency and fines provisions for certification of malfunction and diagnostic system) because the heavy-duty on-board diagnostic (HD OBD) system of the listed engine models has been determined to have three deficiencies. The listed engine models are approved subject to the manufacturer paying a fine of $25 per engine for the third deficiency in the listed engine family that is produced and delivered for sale in California. On a quarterly basis, the manufacturer shall submit to the California Air Resources Board reports of the number of engines produced and delivered for sale in California and pay the full fine owed for that quarter pursuant to this certification. Payment shall be made payable to the State Treasurer for deposit in the Air Pollution Control Fund no later than thirty (30) days after the end of each calendar quarter during the 2019 model-year production period. Failure to pay the quarterly fine, in full, in the time provided, may be cause for the Executive Officer to rescind this certification, effective from the start of the quarter in question, in which case all engines covered under this certification for that quarter and all future quarters would be deemed uncertified and subject to a civil penalty of up to $37,500 per engine pursuant to HSC Section 43154.

BE IT FURTHER RESOLVED: For the listed engine models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 1971.1 (on-board diagnostic, full or partial compliance) and 13 CCR 2035 et seq. (emission control warranty).

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

This Executive Order hereby supersedes Executive Order A-290-0170 dated December 3, 2018.

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

Executed at El Monte, California on this 16 day of January 2019.

Annette Hebert, Chief
Emissions Compliance, Automotive Regulations and Science Division
<table>
<thead>
<tr>
<th>Engine Family</th>
<th>1. Engine Code</th>
<th>2. Engine Model</th>
<th>3. BHP@RPM (SAE Gross)</th>
<th>4. Fuel Rate: mm/stroke @ peak HP (for diesel only)</th>
<th>5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)</th>
<th>6. Torque@RPM mm/stroke@peak torque</th>
<th>7. Fuel Rate: mm/stroke@peak torque</th>
<th>8. Fuel Rate: (lbs/hr)@peak torque</th>
<th>9. Emission Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>KDDXH15.6GED</td>
<td>I</td>
<td>DD16</td>
<td>500@1800</td>
<td>267.9</td>
<td>160.0</td>
<td>1850@1120</td>
<td>316.6</td>
<td>118.5</td>
<td>ECM, TC, CAC</td>
</tr>
<tr>
<td>KDDXH15.6GED</td>
<td>II</td>
<td>DD16</td>
<td>530@1800</td>
<td>283.5</td>
<td>169.3</td>
<td>1850@1120</td>
<td>316.6</td>
<td>118.5</td>
<td>DDI, OC</td>
</tr>
<tr>
<td>KDDXH15.6GED</td>
<td>III</td>
<td>DD16</td>
<td>600@1800</td>
<td>320.4</td>
<td>191.6</td>
<td>1850@1120</td>
<td>316.6</td>
<td>118.5</td>
<td>AMOX, SCR-U</td>
</tr>
<tr>
<td>KDDXH15.6GED</td>
<td>IV</td>
<td>DD16</td>
<td>560@1800</td>
<td>299.3</td>
<td>178.9</td>
<td>2050@1120</td>
<td>353.0</td>
<td>132.2</td>
<td>(all ratings)</td>
</tr>
<tr>
<td>KDDXH15.6GED</td>
<td>V</td>
<td>DD16</td>
<td>600@1800</td>
<td>320.4</td>
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