

Emission Warranty Information and Reporting Amendments

Field Operations & Warranty Section

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Outline

- ▶ **Emission Warranty Information Reporting (EWIR) program and current requirements**
- ▶ **Need for EWIR amendments**
 - Light-duty vs. heavy-duty recalls
 - Current warranty claim rates
 - Corrective actions taken: light- vs. heavy-duty
- ▶ **Next steps**

Emission Warranty Information Reporting Program

- ▶ Requirements specified in 13 CCR 2141 to 2146
- ▶ Manufacturers submit warranty information on a quarterly basis when claims exceed certain levels
- ▶ Recalls and/or extended warranties based on warranty rates
- ▶ Warranty claims are primarily identified through OBD
- ▶ OBD assists manufacturers in determining component defect root cause
- ▶ Program is intended to force manufacturers to produce quality components
- ▶ Since 2008, 268 ARB–required recalls and 99 extended warranties affecting some 3.8 million CA vehicles mostly for light–duty vehicles

Existing EWIR Requirements

- ▶ **Emissions Warranty Information Report (EWIR)**
 - Required when unscreened warranty claims \geq 1% or 25 parts, whichever is greater
- ▶ **Field Information Report (FIR)**
 - Required when unscreened warranty claims \geq 4% or 50 parts, whichever is greater
- ▶ **Emissions Information Report (EIR)**
 - Required when screened warranty claims \geq 4% or 50 parts, whichever is greater

EWIR Need for Amendments

- ▶ Regulations allow manufacturers to use “engineering judgement” in determining if a defective component will result in emission exceedances
 - Heavy-duty (HD) manufacturers frequently use this provision to assert that component defects do not result in excess emissions; even though
 - Defective components can cause emission levels to increase several times the standard
- ▶ Some defective components can cause emissions levels to increase several times the standard
- ▶ Burden is on ARB to procure and test HD vehicles to prove defective component emissions exceedances

EWIR Need for Amendments cont'd

- ▶ Many HD emission control components have warranty claim rates >20%
- ▶ Despite these high warranty rates, HD recall rates remains low
- ▶ Claim rates are expected to further increase as HD OBD is fully implemented and a future HD I/M program begins
- ▶ Regulations must be changed to more readily enact corrective actions for HD

Recalls

Light-Duty vs Heavy-Duty

▶ Light-duty manufacturers

- Manufacturers aware that ARB can readily procure and test vehicles to prove emissions exceedances
- Take corrective action when the defects threshold has been exceeded

▶ Heavy-duty manufacturers

- Rely on “engineering judgement”
- Know that HD procurement/testing is an expensive and logistical hurdle for ARB
- Rarely take needed corrective action

Examples of High EWIR Warranty Data Submissions

COMPONENT	CUMULATIVE CLAIMS
Turbo	>100%
Exhaust Manifold	>50%
Injector	>50%
EGR Cooler	>50%
DPF	>40%
Fuel Pump	>20%
Catalytic Converter	>10%

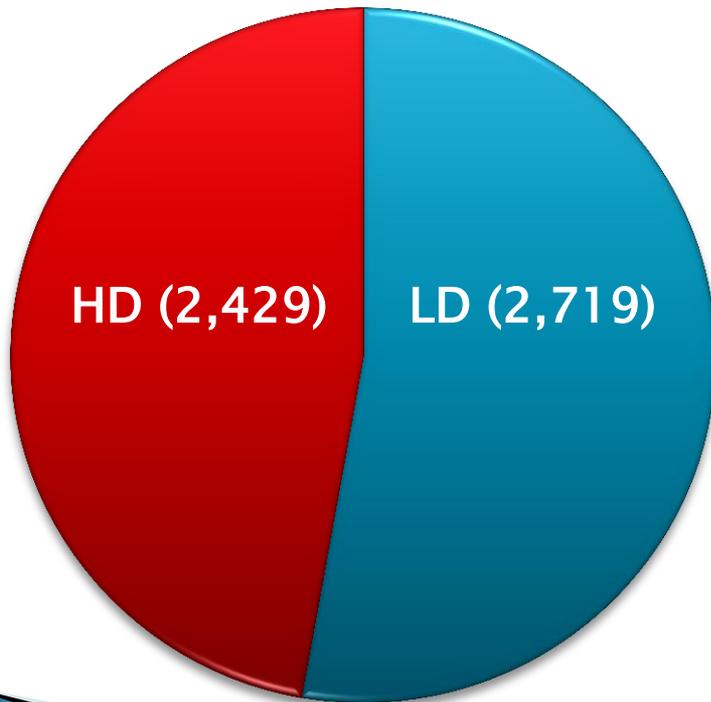
Average HD Warranty Claims Rate

Model Year	HD
2007	12.9%
2008	11.0%
2009	11.6%
2010	14.2%
2011	9.0%
2012	5.7%
2013	5.7%
Total	8.9%*

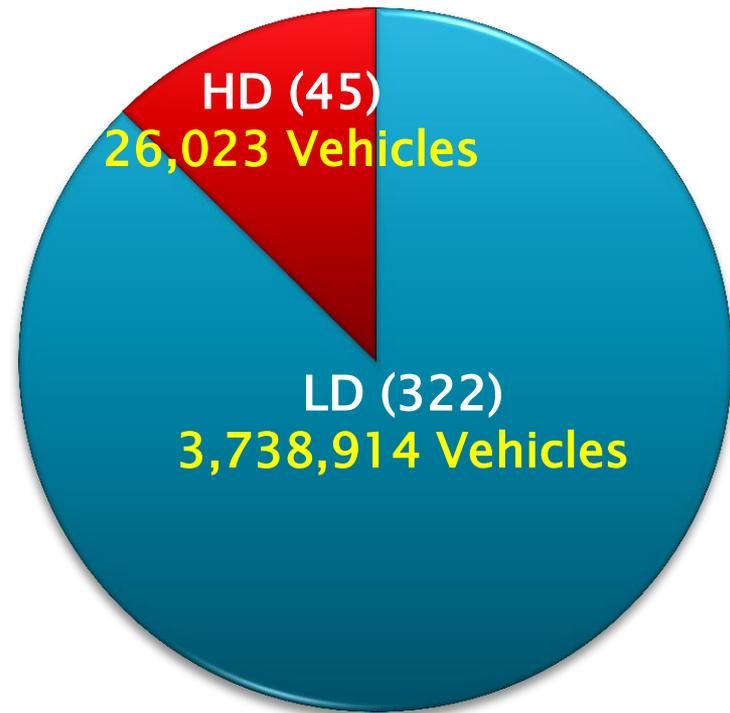
* Engine Families certified to both medium-duty and heavy-duty classes are excluded

Corrective Action Comparison LD vs. HD

of Components with
EWIR rates >4%



of Corrective Actions Taken



Next Steps

- ▶ **Work with industry to amend EWIR to address unique HD concerns**
 - Identify clear triggers for corrective action when unacceptable high warranty rates exists
 - Gather data to support rulemaking

Contact Info/Questions

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