



New Jersey Department of Environmental  
Protection  
Division of Air Compliance and Enforcement

NJDEP Air Compliance and Enforcement (ACE) Outreach  
Virtual Seminar Schedule  
May 11 & 12, 2021

## Vehicle Idling and Tampering

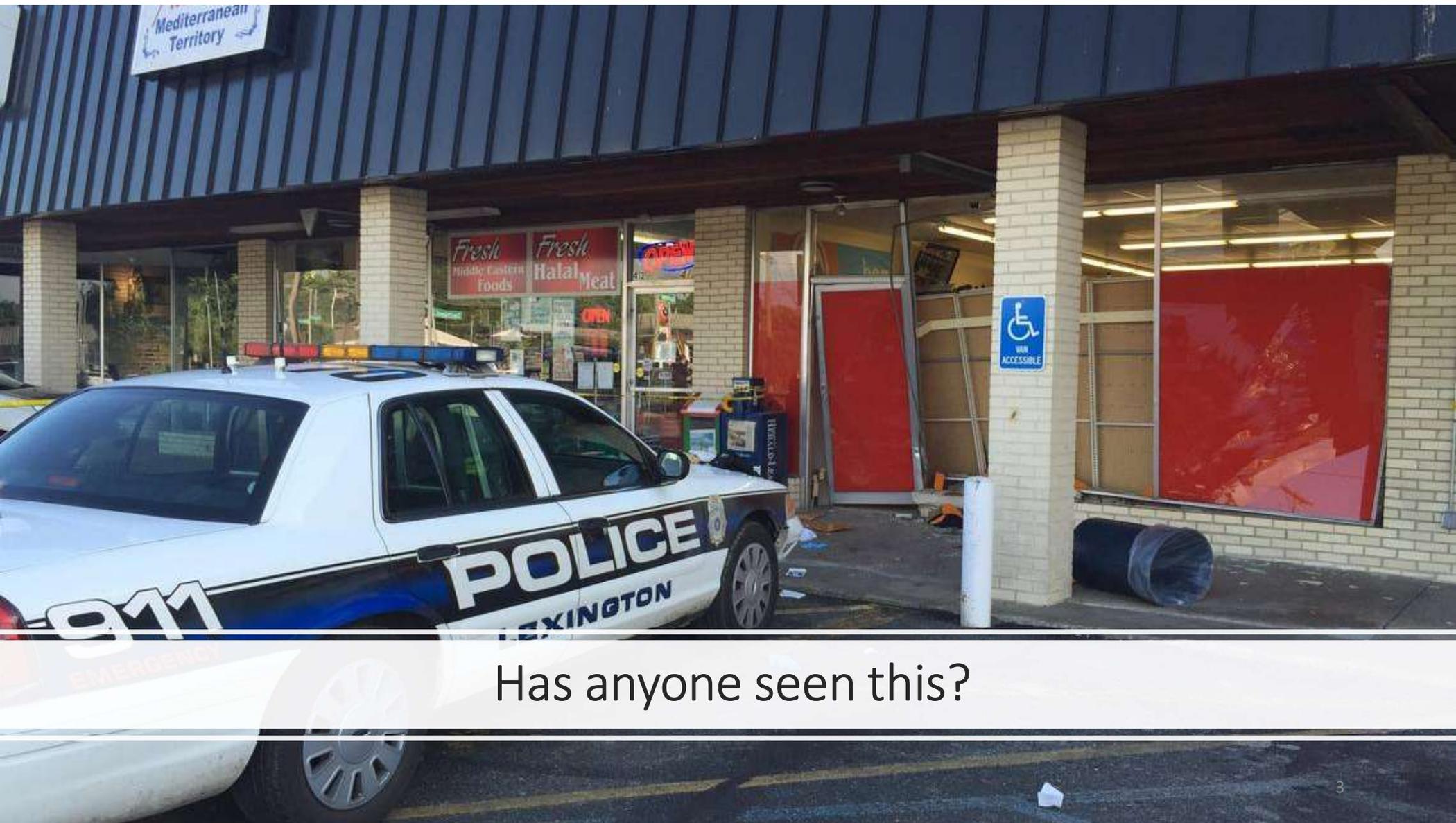
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Presented by

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# Idling Regulations

- Nothing has changed, still limited to three minutes with some exceptions.
- Some issues that has come about with Covid-19 have made enforcement “challenging” including doctor appointments, pop-up drive-in movies, veterinarian visits
- Things will return to normal at some point (right?).
- The following circumstances are still unclear by some regarding the “normal” idling regulations.



Has anyone seen this?

# Emergency Vehicles



These vehicles need to maintain an “at-ready” status and are exempt from the idling regulations.

E290L103@aol.com

Photo Copyright 2012 Michael Martinelli  
1978 Mack CF/1990 Pierce Rehab 1250/1000  
Sayreville, New Jersey Engine 9  
Now @ Middlesex County Fire Academy

# Additional Emergency Vehicles exempted from Idling Regulations (during EMERGENCIES)



# Armored Vehicles – Exempt!



Any vehicle with equipment that requires the main engine to be operating is EXEMPT from the idling regulations



NOT Exempt





## Sleeper Berths

- These vehicles are provided an exemption provided the following conditions are met:

# Sleeper Berth Exemption

Located in a non-residential AREA.

Driver must be inside the vehicle.

MY 2007 or newer and/or a Diesel Particulate Filter (DPF) present.

No working Alternate Power supply.

## ***N.J.A.C. 7:27-14.3(d)***

*In no case shall the provisions of (a) and (b) above relieve any person from compliance with N.J.A.C. 7:27-5, Prohibition of Air Pollution, or any other applicable local, State or Federal law.*

Even if a vehicle is considered exempt from the idling regulations for any of the situations presented, they are still liable for Sub 5 issues as well as other local regulations.

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# Vehicle Tampering

# Background

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- NJDEP issued compliance advisory in November 2017  
<https://www.nj.gov/dep/enforcement/advisories/2017-08.pdf>
- Focus on Medium Duty Diesel Pickup Trucks
  - GVWR between 8,501 and 14,000 pounds
- Since the 1970's, these trucks have not been subject to New Jersey's MVC Inspection & Maintenance Program
- Reasons for tampering a vehicle include: durability, increased MPG, increased HP & torque and lower maintenance costs.
- The number one reason for **not** tampering are the increased emissions.

Tampering is common in this class of vehicles  
(Medium Duty Diesel Vehicles - MDDV)

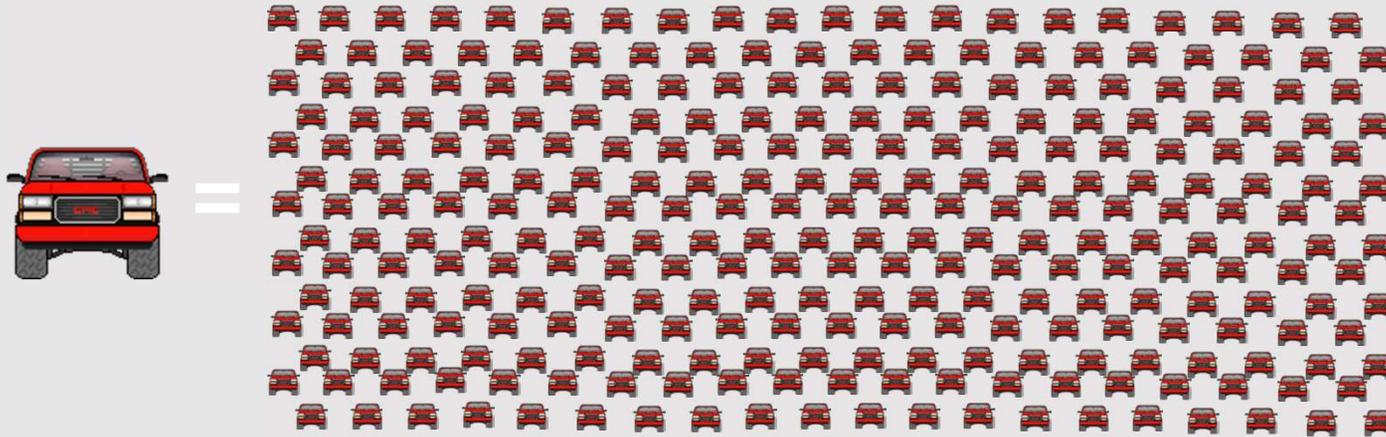
EPA has reported that nationwide over 500,000 trucks have some degree of emission control deletes.\*

The impact of these tampered vehicles is equivalent to adding an additional 9 million more trucks to our roads (this is double the truck sales over the past decade!)\*

\*Phillip Brooks, Director, EPA @ NACAA Workshop 2/2020

# Emissions Increase Due to Full Delete\*

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The impact of tampering becomes apparent when you look at the emission increases on a fully deleted vehicle.

Testing was conducted without the SCR, DPF, DOC and EGR emission controls

NOx increased by approximately 310 times

NMHC increased by approximately 1,140 times

CO increased by approximately 12 times

PM increased by approximately 40 times

\*Source: USEPA, Chief Evan Besler, Vehicle and Engine Enforcement Branch; Summit with NJDEP & EPA Region 2

# NJDEP Diesel Tampering Regulations – N.J.A.C. 7:27-14.3 General Prohibitions

(e) No person shall cause, suffer, allow, or permit any of the following, unless it is performed in accordance with EPA Memorandum 1A or it is exempt from prohibition by CARB Executive Order (information on devices or modifications approved by CARB Executive Order may be obtained from the California Air Resources Board, 1001 "I" Street, PO Box 2815, Sacramento, CA 95812 or at [www.arb.ca.gov](http://www.arb.ca.gov)):

- 1. The disconnection, detachment, deactivation, or any other alteration or modification from the design of the original vehicle manufacturer or an element of design installed on any motor vehicle with a certified configuration or motor vehicle engine with a certified configuration, except temporarily for the purpose of diagnosis, maintenance, repair, or replacement;
- 2. The sale, lease, or offer for sale or lease, of any motor vehicle with a certified configuration or motor vehicle engine with a certified configuration in which any element of design installed on such vehicle has been disconnected, detached, deactivated, or in any other way altered or modified from the design of the original vehicle manufacturer; or
- 3. The sale, or offer for sale, of any device or component as an element of design intended for use with, or as part of, any motor vehicle with a certified configuration or motor vehicle engine with a certified configuration that is not designed to duplicate the function and performance of any element of design installed by the original vehicle manufacturer.

# NJDEP Penalty Schedule

This includes both Diesel & Gas (Sub 14 & 15)

Penalty Category	Class	First Offense	Fourth Offense
Idling	Commercial vehicles	\$250	\$1,000
Tampering of vehicles	Owner of 4 or less vehicles	\$400	\$6,000
	Owner of 5 or more vehicles	\$1,000	\$15,000
Sale, lease, or offer for sale or lease tampered vehicle	Owner of 4 or less vehicles	\$1,000	\$15,000
	Owner of 5 or more vehicles	\$2,000	\$30,000
Sale, or offer for sale any device or component	All vehicles	\$2,000	\$30,000
Does not have a properly functioning and properly maintained emission ctrl apparatus	Offer for Sale/Sale of Device Component	\$2,000	\$30,000
Installing disconnected, detached, deactivate or modified emission control apparatus	Passenger vehicles	\$500	\$7,500
	Commercial vehicle	\$1,000	\$15,000

# Rolling Coal Law – Signed May 5, 2015



## **N.J.S.A. 26:2C-8.57**

No person shall retrofit any diesel-powered vehicle with any device, smoke stack, or other equipment which enhances the vehicle's capacity to emit soot, smoke, or other particulate emissions, or shall purposely release significant quantities of soot, smoke, or other particulate emissions into the air and onto roadways and other vehicles while operating the vehicle, referred to as "coal rolling."

Not just for trucks!



# Common Diesel Control Devices

- EGR (Exhaust Gas Recirculation) *MY 2003+*
- Catalyst (Oxidative Catalyst, OC) controls unburnt hydrocarbons (HC) *MY 2003+*
- DPF (Diesel Particulate Filter) controls particulate matter (PM) *MY 2007+*
- SCR (Selective Catalytic Reduction) controls NOx using diesel exhaust fluid (DEF) *MY 2010+*

## Other Emission Control Devices

- Calibration and on-board diagnostics (OBD)
- Sensors (temperature, pressure, NOx, PM, Oxygen)
- Direct injection (this helps fuel economy & improves emissions)



# NJDEP Physical Inspection Procedure

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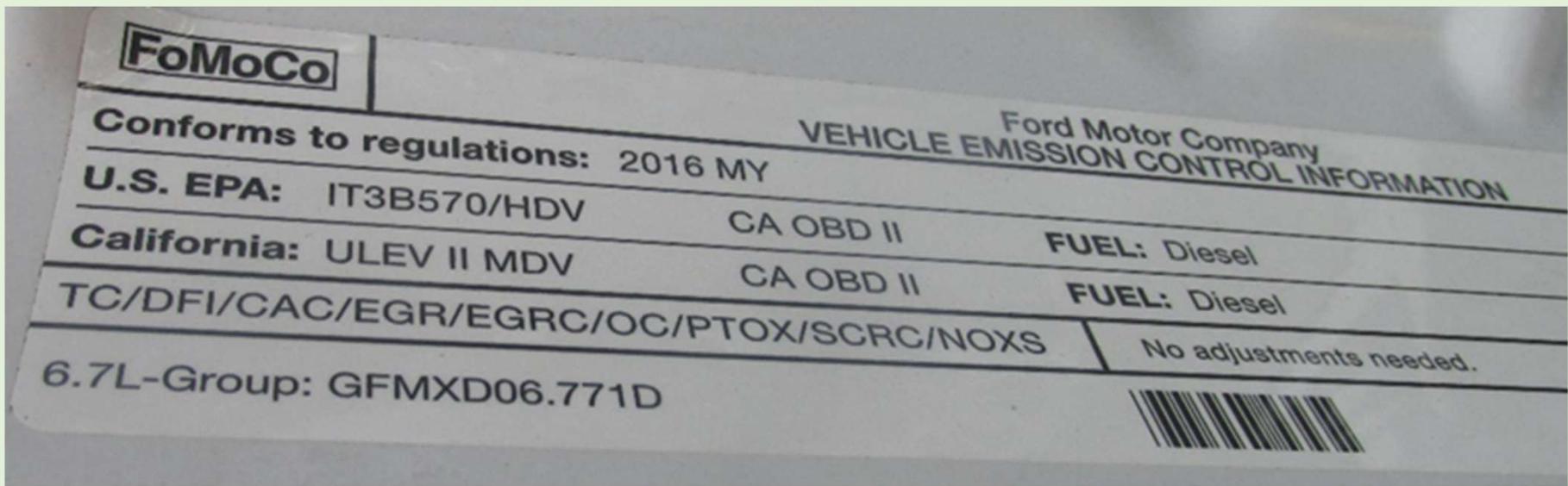
- 1) A picture will be taken of the front of the vehicle
- 2) A picture will be taken of the VIN label located on the driver's side door jamb
- 3) The VECI label will be found in the engine compartment or on the engine itself and inspected to determine what emissions control equipment is present on the vehicle
- 4) Each of the components listed on the VECI label will be located and inspected for signs of physical tampering
- 5) If any signs of missing components or physical tampering are found:
  - a) A picture of the VECI label will be taken
  - b) A picture of the odometer will be taken
  - c) A picture of each of the missing and/or tampered component locations will be taken
  - d) The vehicle's OBD system will be scanned to document eVIN, calibration identification, and calibration verification number for each of the modules present in the vehicle

A102 fx

	A	B	C	D	E	F	G	H	I	J	K
1	VIN	1FT8W3BT0CEB58520									
2	Model Year	2012									
3	Make	Ford									
4	Model	F-350									
5	Body Type	4 Door Cab; Crew									
6	Trim Level	XL, Platinum, XLT, Cavendish, Limited, King Ranch									
7	Engine Type	V8, 6.7L; Turbo									
8	Country	UNITED STATES									
9	Assy. Plant	Jefferson County, KY									
10	Production Seq. Number	B58520									
11	Check Digit	0									
12	Drive Line Type	4WD									
13	GVWR Class	Class 3: 10,001-14,000 lb									
14	Manufacturer	Ford Motor Company									
15	Series	Super Duty									
16	Vehicle Type	Pickup Truck									
17	Vehicle Class	Full-size Pickup									
18	Brake System	Hydraulic									
19	Fuel Type	Diesel									
20	Engine Manufacturer	Ford									
21	Mobile6 Class.	HDDV3									
22	Tonnage	1									
23	DLL Version	4.0.8									
24	Data Version	2021.04.008									
25											
26											



VECI Label can usually be found on the underside of the hood, on the airbox or on engine near the exhaust manifold



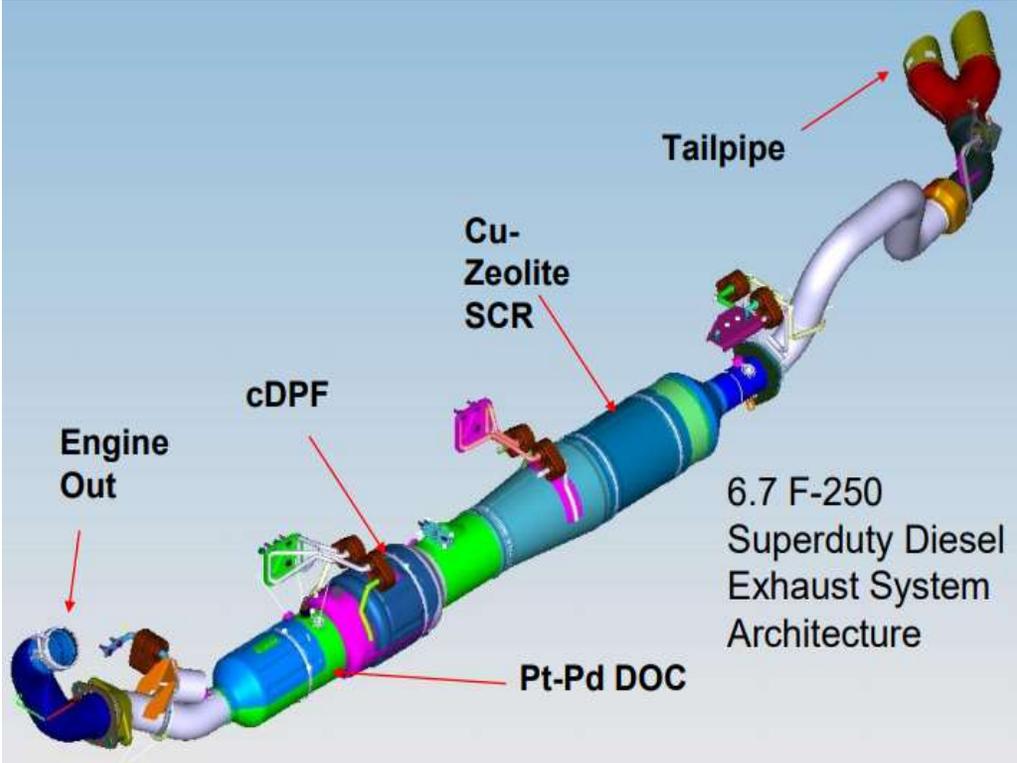
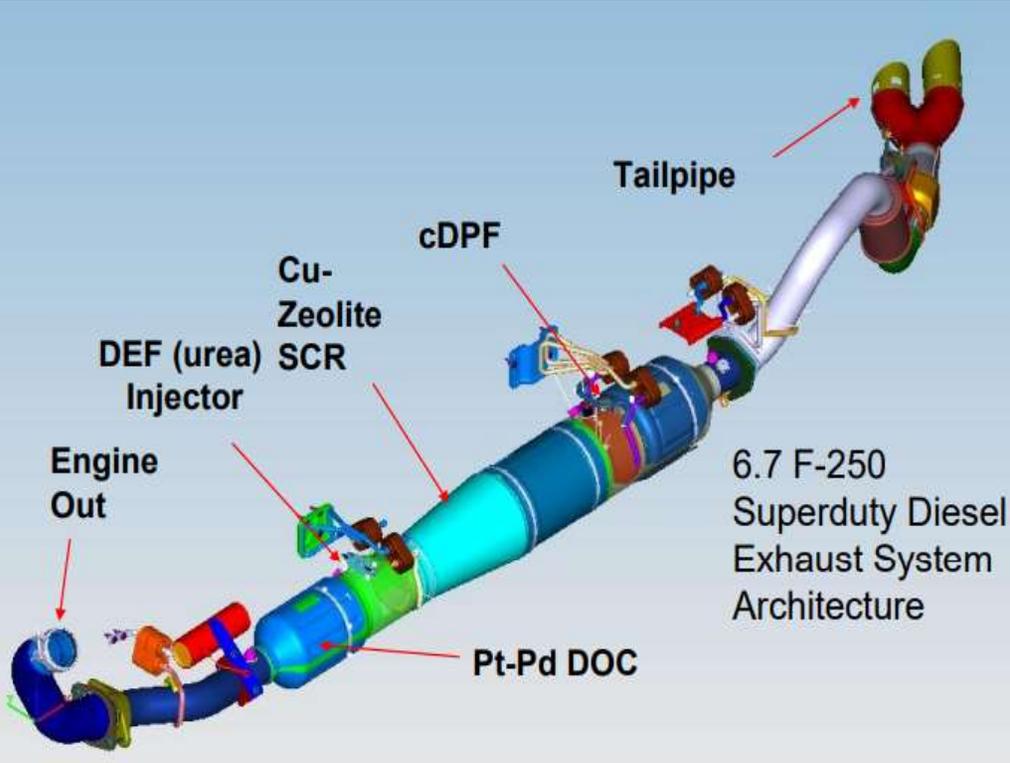
# Acronyms

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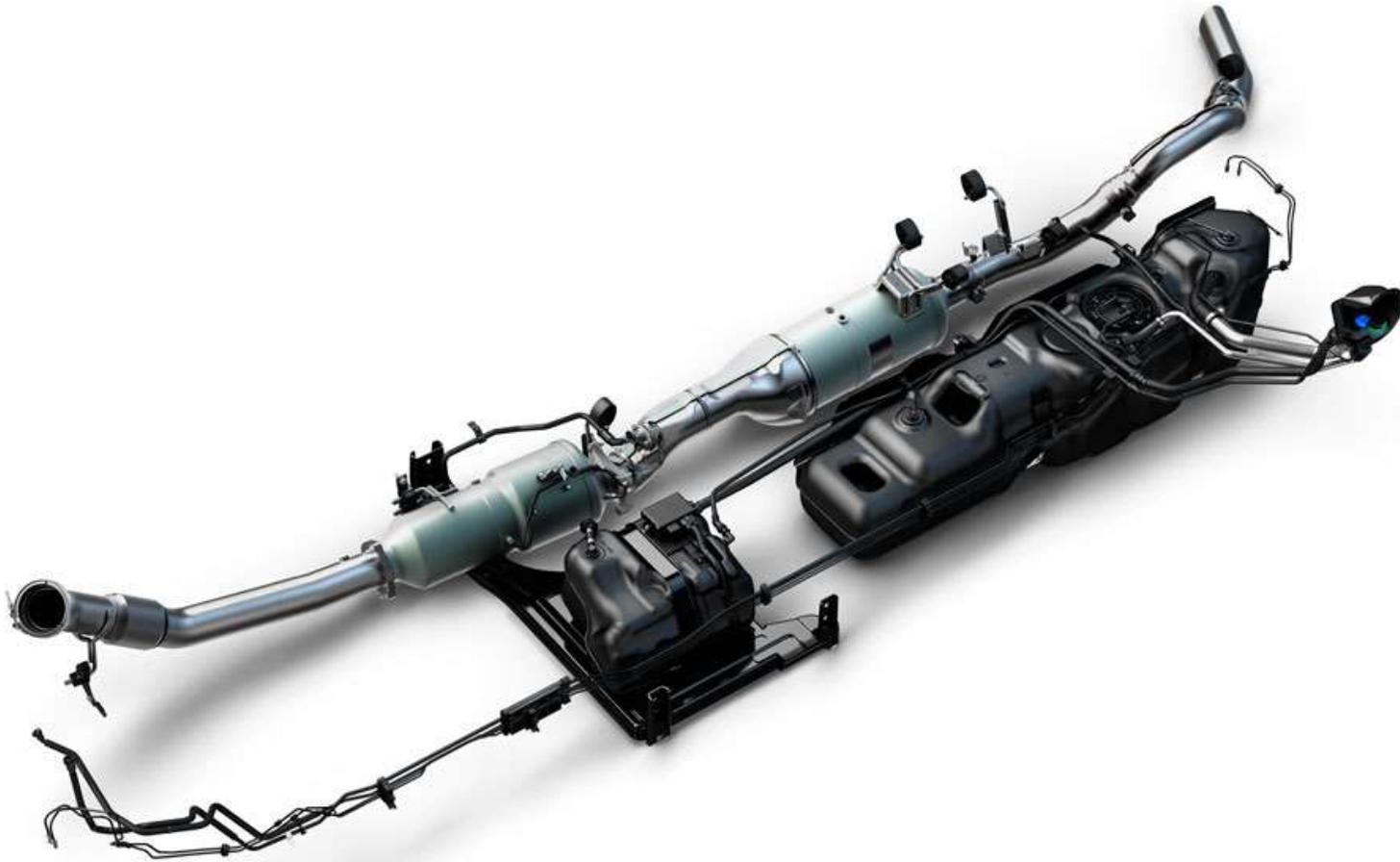
- VECI – Vehicle Emissions Control Identification Label
- DDI – Direct Diesel Injection
- DFI – Direct Fuel Injection
- TC – Turbo Charger
- VGT – Variable Geometry Turbocharger
- CAC – Charge Air Cooler (Intercooler)
- EGR – Exhaust Gas Recirculation
- EGRC – Exhaust Gas Recirculation Cooler
- OC – Diesel Oxidation Catalyst
- DPF – Diesel Particulate Filter
- PTOX – Periodic Trap Oxidizer (DPF)
- SCR – Selective Catalyst Reduction
- RDQS – Reductant Quality Sensor
- NOXS – NOx Sensors
- LRRRA – Low Rolling Resistance Tires (All)

# 2014 Ford 6.7L Exhaust Components

Both of these are Certified Configuration

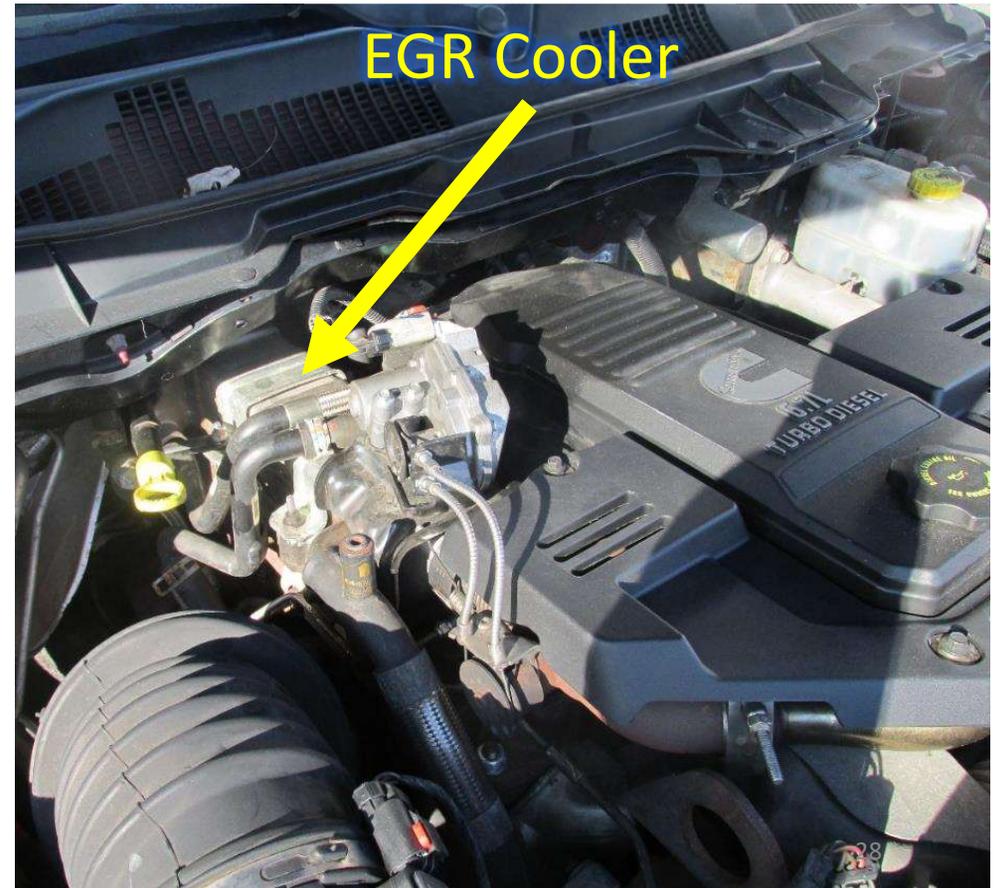






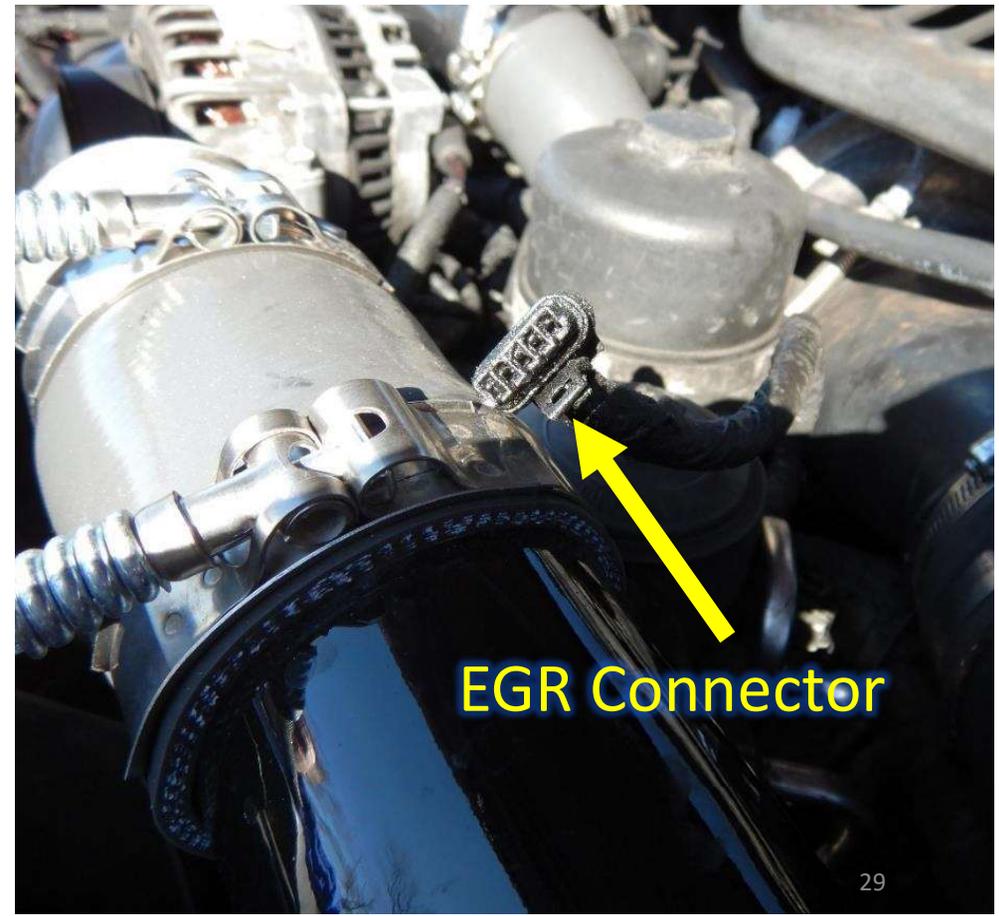
# Case Examples

2011 Ram L6 6.7L



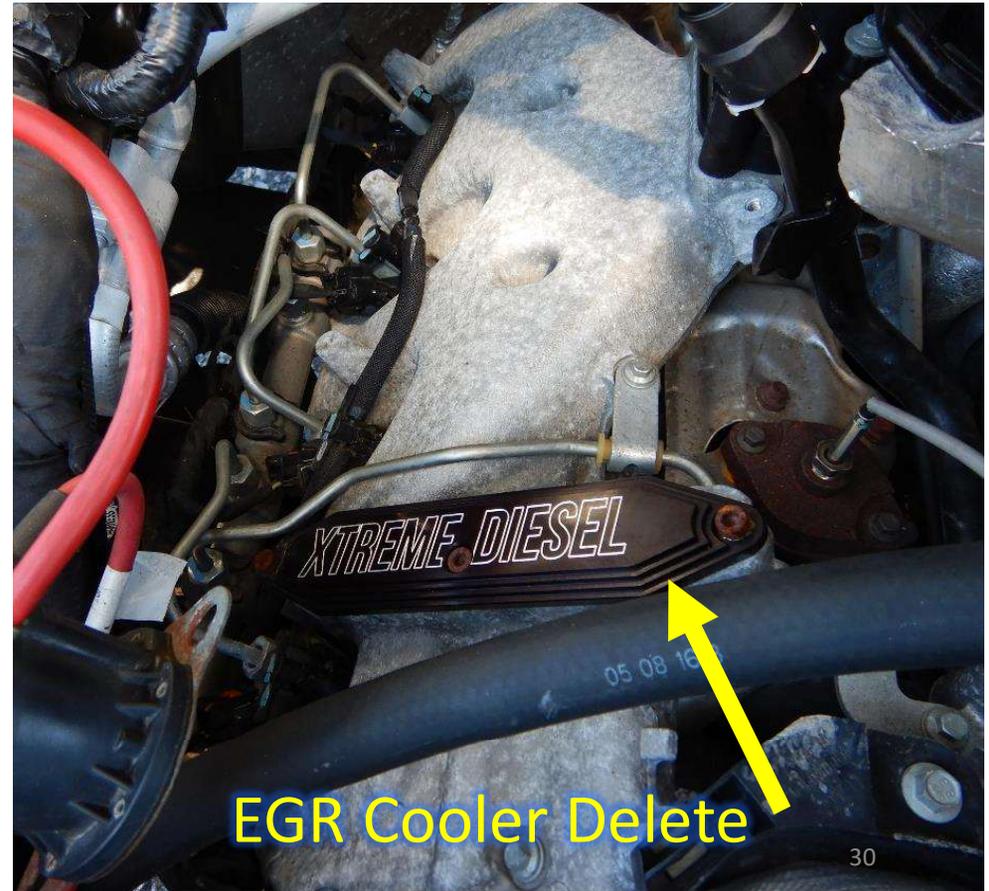
# Case Examples

## 2005 Ford 6.0L Powerstroke



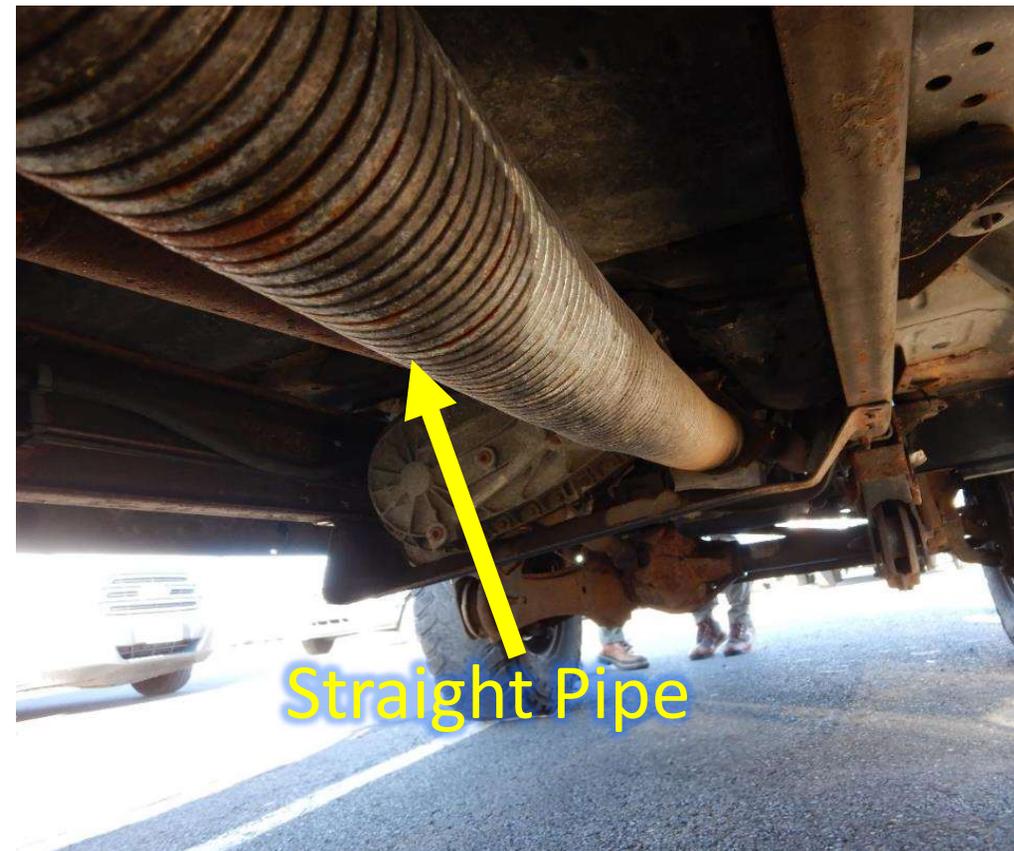
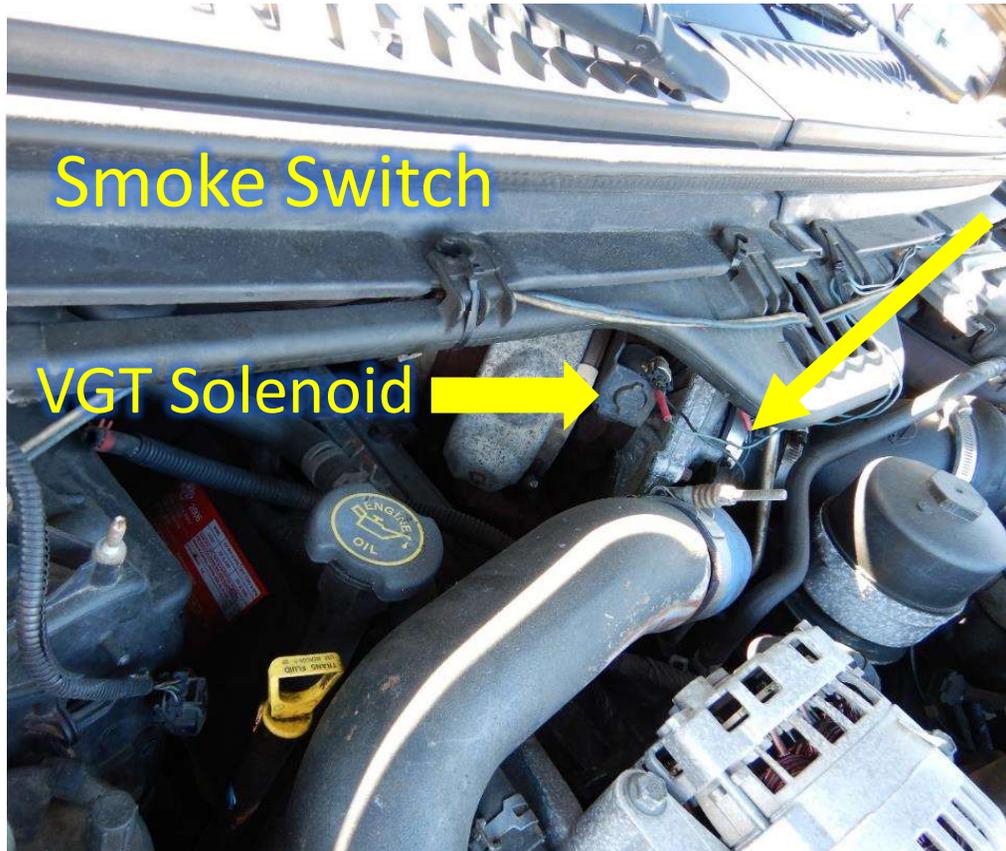
# Case Examples

## 2013 Ford 6.7L Powerstroke



# Case Examples

2007 Ford 6.0L Powerstroke



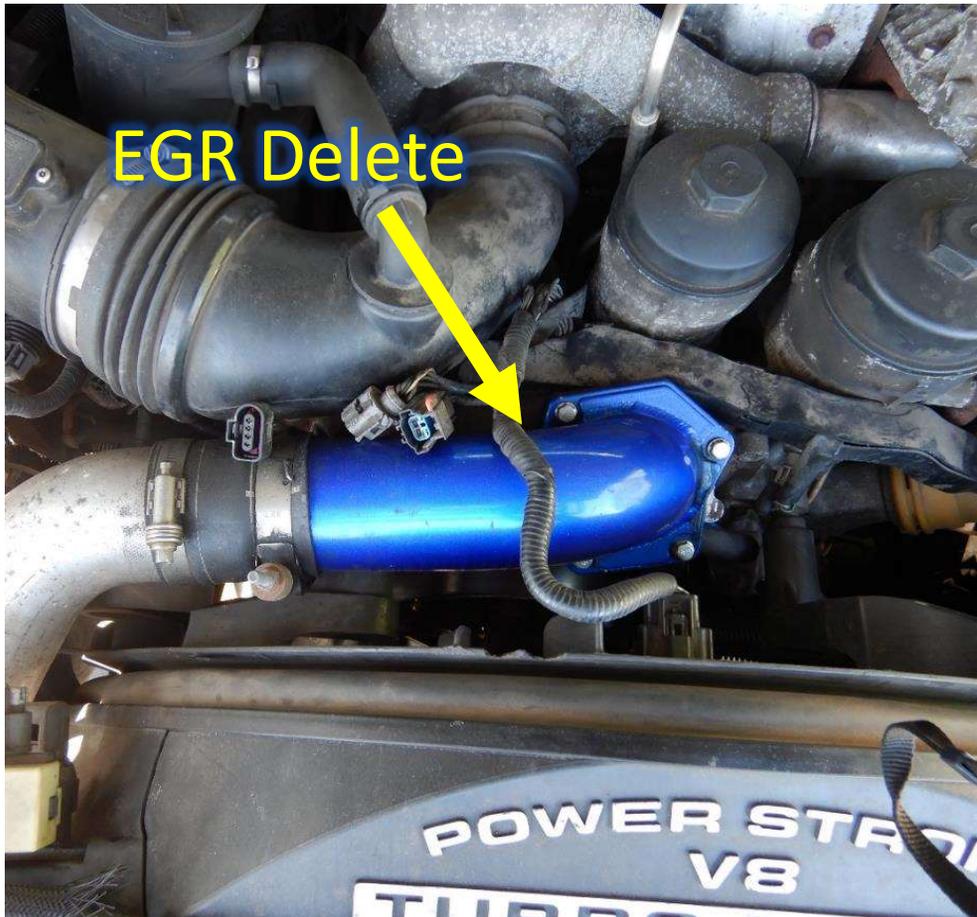
# Case Examples

2008 Ford 6.4L Powerstroke



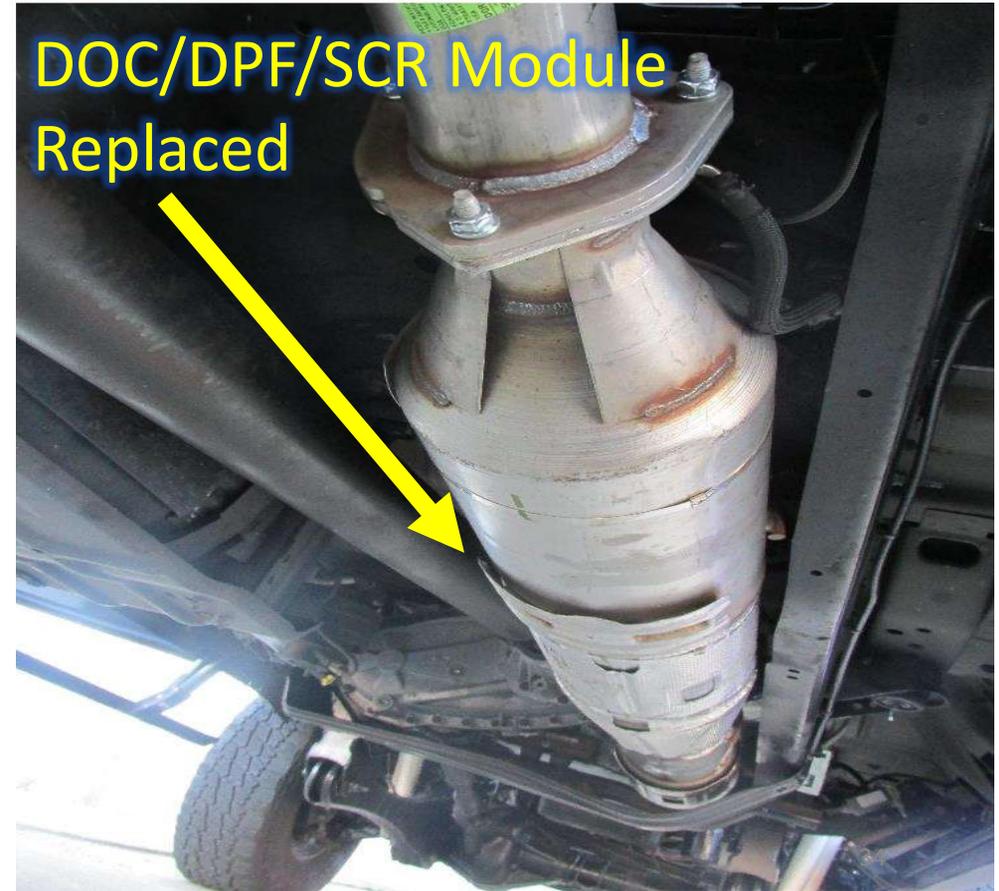
# Case Examples

2008 Ford 6.4L Powerstroke



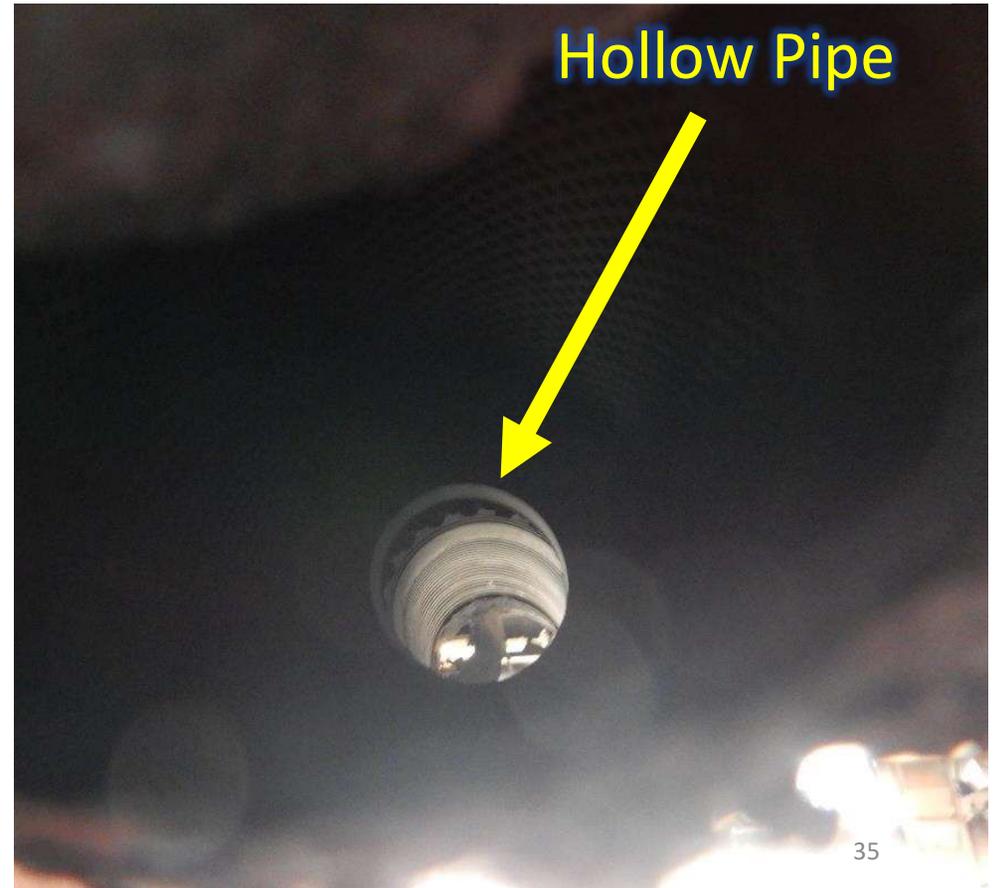
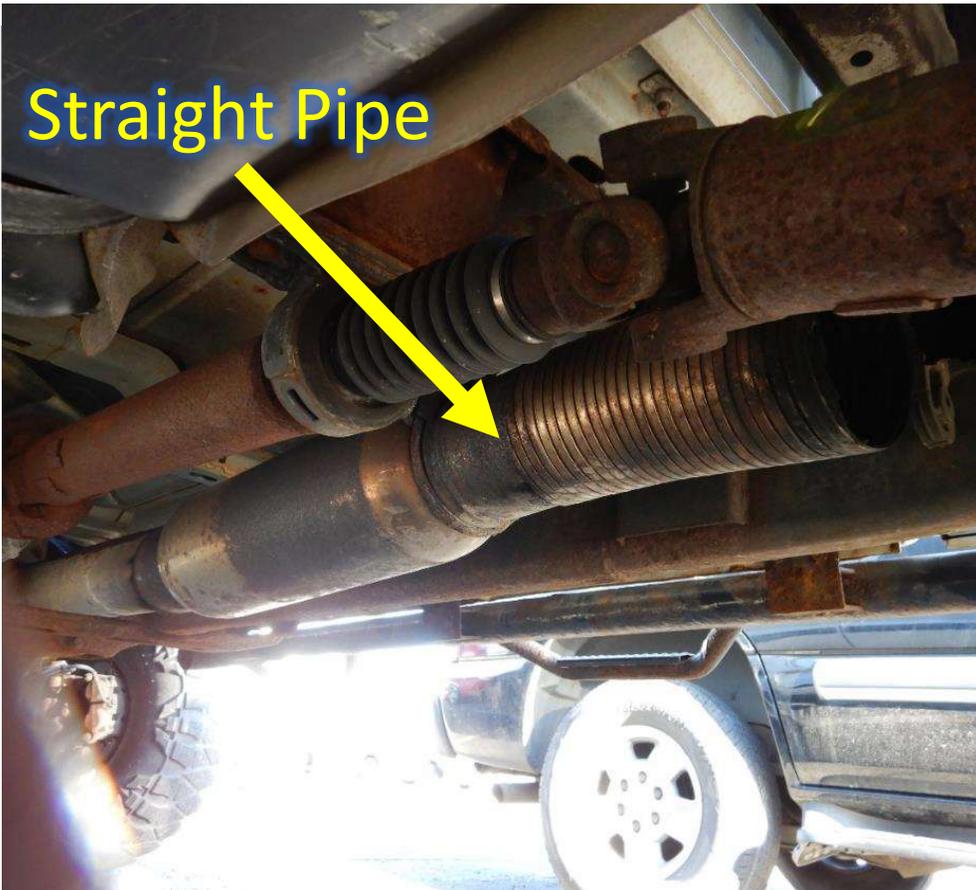
# Case Examples

2013 Ford 6.7L Powerstroke



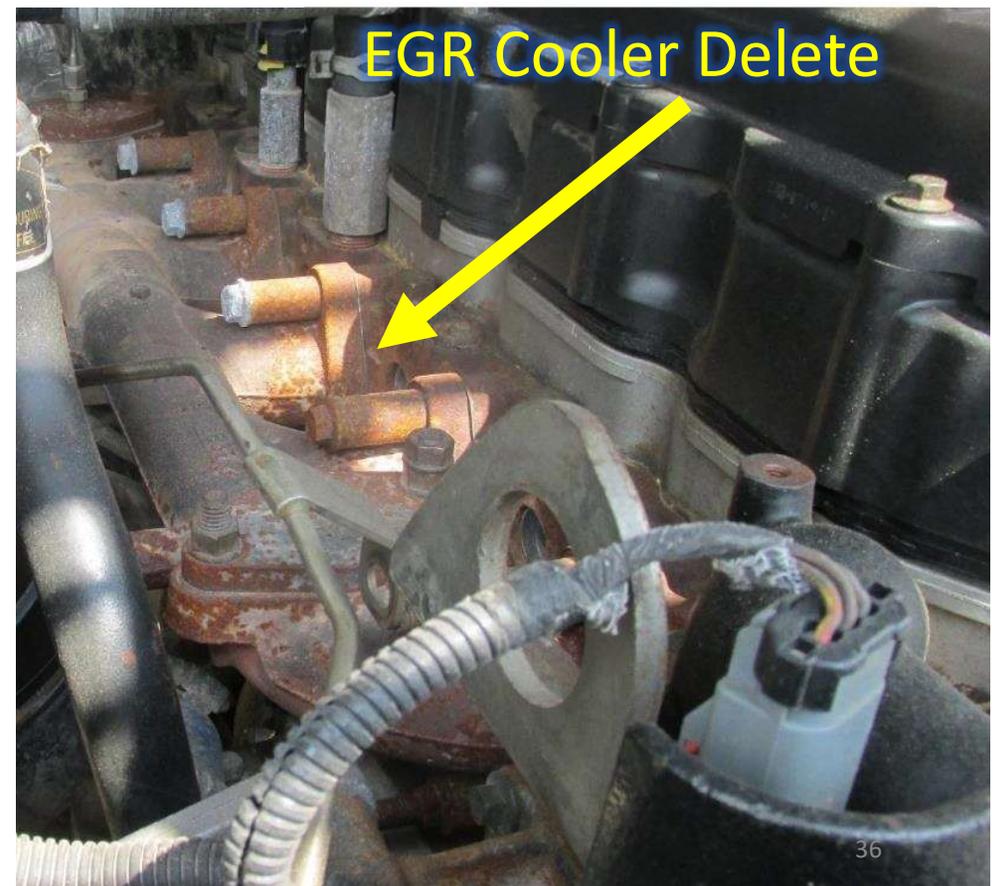
# Case Examples

2005 Ram L6 5.9L



# Case Examples

2008 Ram L6 6.7L



# What's Ahead

- NJ is currently making changes to the diesel tampering regulations including clarify applicability and looking at penalty amounts for tampering and Rollin' Coal.
- We were set to begin our roadside inspection pilot in mid-March 2020.
- Online vehicle sales including eBAY and Craigslist.
- Continue investigations at auctions and dealerships.
- NJPACT – In an effort to help curtail tampering and in conformance with NJ's Master Energy Plan trying to get these MDDV into the inspection program – PIF's.

# Questions / Comments

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# ACE Academy Training

May 2021