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## Service Information Bulletin

SUBJECT	DATE
EPA10/GHG14 Aftertreatment Device Sensor Locations	June 2012

### Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0083	EPA10/ GHG14 DD Platform	EPA10/GHG14 Aftertreatment Device Sensor Locations	Updated information.



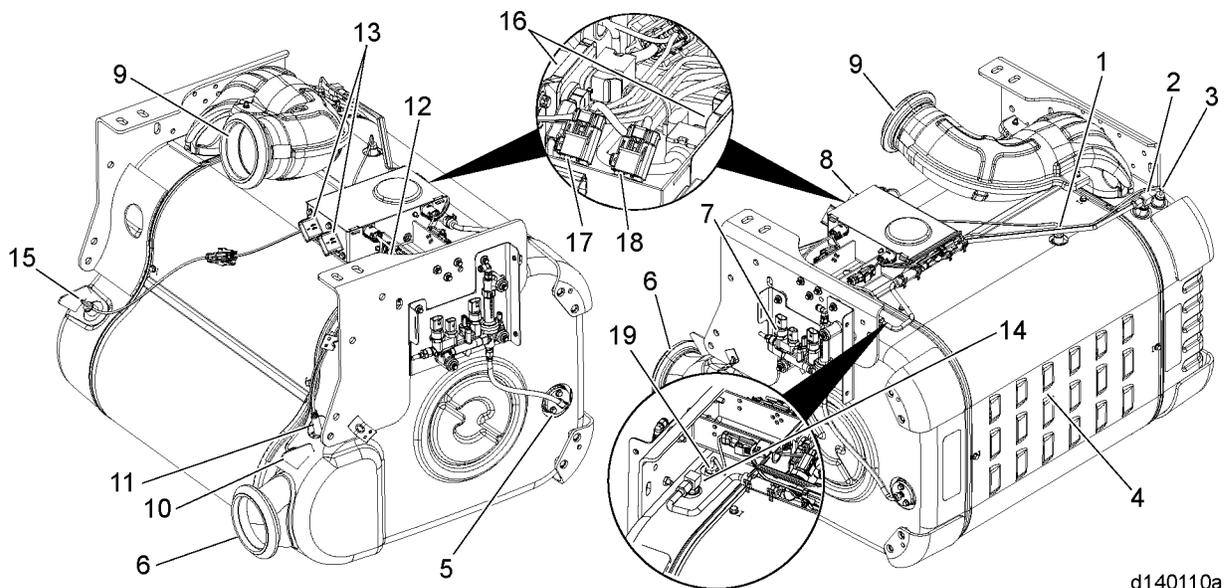
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## 2 EPA10/GHG14 Aftertreatment Device Sensor Locations

The Aftertreatment Control Module (ACM) reads or controls the signals for the following sensors:

- Diesel Oxidation Catalyst (DOC) Inlet Temperature Sensor (Located on the Aftertreatment Device).
- Diesel Oxidation Catalyst (DOC) Outlet Temperature Sensor (Located on the Aftertreatment Device).
- Diesel Particulate Filter (DPF) Outlet Temperature Sensor (Located on the Aftertreatment Device).
- Diesel Particulate Filter (DPF) Inlet Pressure Sensor (Located in the Diesel Particulate Filter Sensor Box).
- Diesel Particulate Filter (DPF) Outlet Pressure Sensor (Located in the Diesel Particulate Filter Sensor Box).
- Selective Catalytic Reduction (SCR Catalyst) Inlet Temperature Sensor (Located in the exhaust flow near the Selective Catalytic Reduction).
- Selective Catalyst Reduction (SCR) Outlet Temperature Sensor (Located in the exhaust flow near the Selective Catalytic Reduction).
- Selective Catalytic Reduction (SCR Catalyst) Inlet NOx Sensor (Located in the Diesel Particulate Filter Sensor Box).
- Selective Catalytic Reduction (SCR Catalyst) Outlet NOx Sensor (Located in the Selective Catalytic Reduction Sensor Box).
- Diesel Exhaust Fluid (DEF) Temperature Sensor (Located in the Diesel Exhaust Fluid Tank).
- Diesel Exhaust Fluid (DEF) Level Sensor (Located in the Diesel Exhaust Fluid Tank).
- Diesel Exhaust Fluid (DEF) Temperature Sensor (Located on the Diesel Exhaust Fluid Metering Unit).
- Diesel Exhaust Fluid (DEF) Pressure Sensor (Located on the Diesel Exhaust Fluid Metering Unit).
- Compressed Air Pressure Sensor (Located on the Diesel Exhaust Fluid Metering Unit).
- Diesel Exhaust Fluid (DEF) Injector (Located on the Diesel Exhaust Fluid Metering Unit). The Aftertreatment Control Module controls the Diesel Exhaust Fluid Injector.
- Diffuser Heater (Located on the Diesel Exhaust Fluid Metering Unit). The Aftertreatment Control Module controls the Diffuser Heater.
- Diesel Exhaust Fluid (DEF) Metering Unit heater (Located on the Diesel Exhaust Fluid Metering Unit). The Aftertreatment Control Module controls the Diffuser Heater.
- Diesel Exhaust Fluid (DEF) Pump Module (Located on the back of the Diesel Exhaust Fluid Tank).
- Coolant Valve (Located on the Diesel Exhaust Fluid Tank or remote-mounted depending on Diesel Exhaust Fluid Tank size). The Aftertreatment Control Module controls the Coolant Valve.
- Diesel Exhaust Fluid Line Heaters (4) (Located in the Diesel Exhaust Fluid Lines mounted to the vehicle's frame rail).

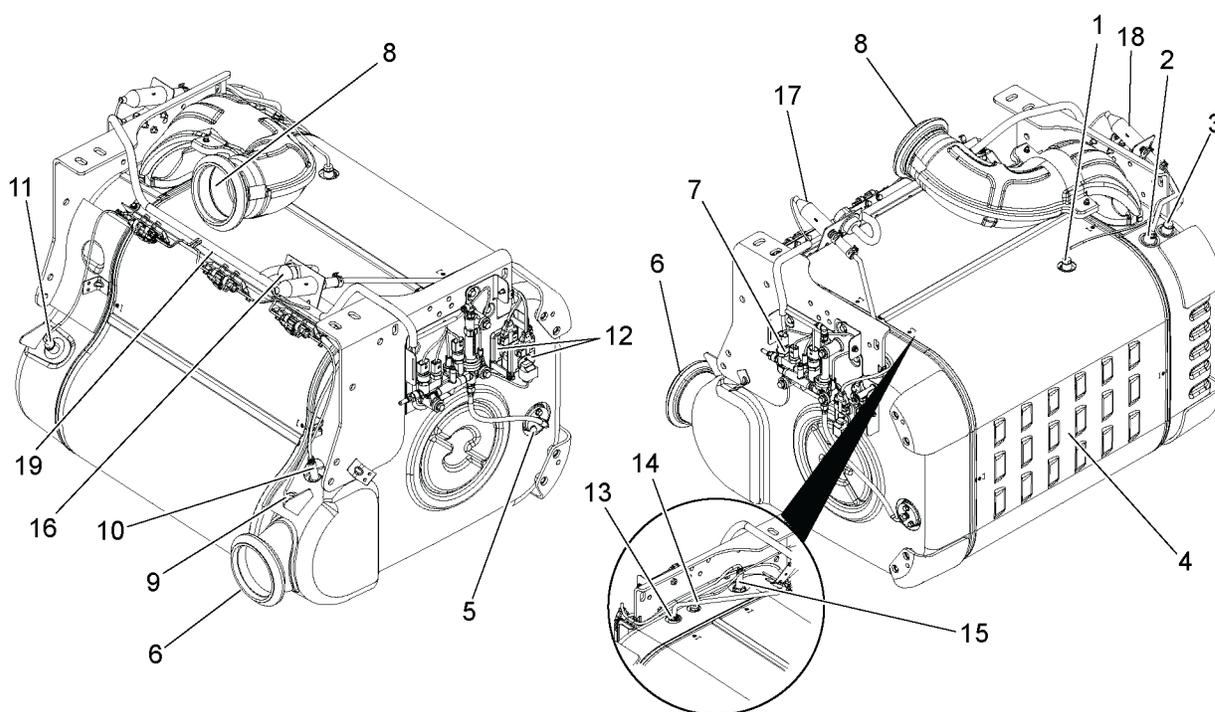
### 1-BOX™ Sensor Locations



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|--|--|
| 1. Diesel Oxidation Catalyst Outlet Temperature Sensor                     | 11. Selective Catalytic Reduction (SCR Catalyst) Outlet NOx Sensor                                     |
| 2. Diesel Oxidation Catalyst Inlet Pressure Sensor Elbow                   | 12. Selective Catalytic Reduction (SCR Catalyst) Inlet NOx Sensor                                      |
| 3. Diesel Oxidation Catalyst Inlet Temperature Sensor                      | 13. 14-Pin Connectors  |
| 4. Front Heat Shield   | 14. Diesel Particulate Filter Outlet Pressure Sensor Elbow   |
| 5. Diesel Exhaust Fluid Nozzle   | 15. Selective Catalytic Reduction (SCR Catalyst) Inlet Temperature Sensor                              |
| 6. Exhaust Outlet  | 16. Selective Catalytic Reduction (SCR Catalyst) Inlet and Outlet NOx Sensors (microprocessor mounted) |
| 7. Diesel Exhaust Fluid Metering Unit                                      | 17. Diesel Particulate Filter Outlet Pressure Sensor   |
| 8. Sensor Box including Pressure Sensors                                   | 18. Diesel Oxidation Catalyst Inlet Pressure Sensor  |
| 9. Exhaust Inlet   | 19. Diesel Particulate Filter Temperature Sensor   |
| 10. Selective Catalytic Reduction (SCR Catalyst) Outlet Temperature Sensor |  |

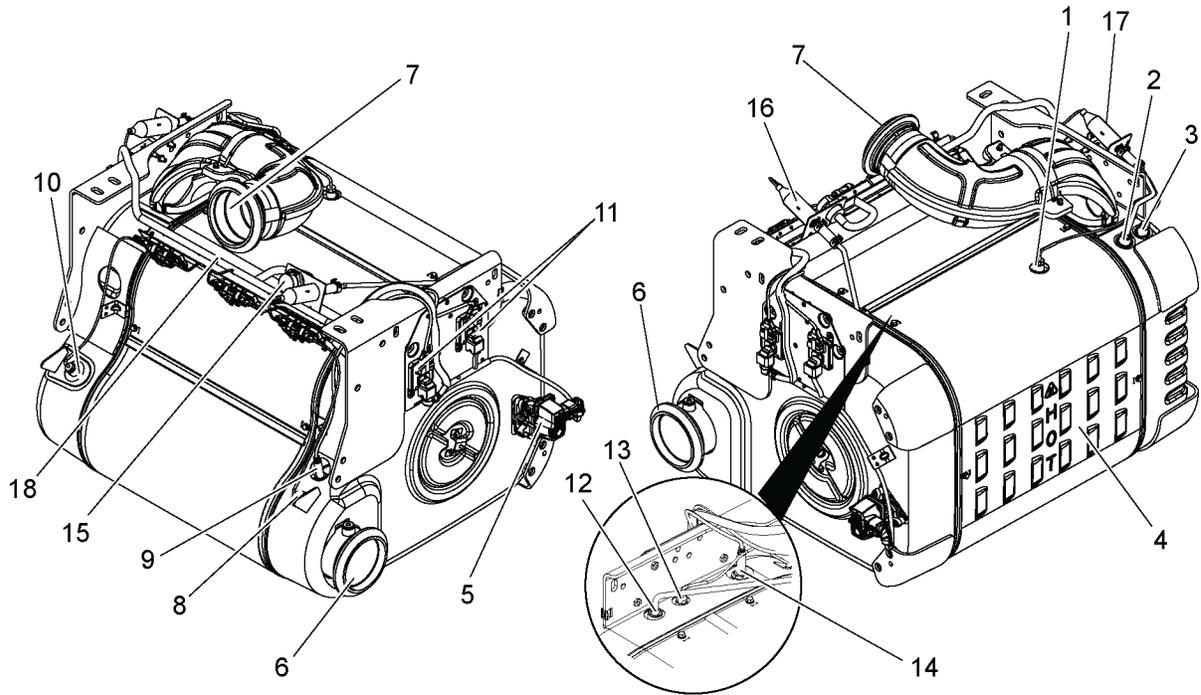
**Figure 1. EPA10 1-BOX™ Configuration**



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|---|--|
| 1. Diesel Oxidation Catalyst Outlet Temperature Sensor                    | 11. Selective Catalytic Reduction (SCR Catalyst) Inlet Temperature Sensor                              |
| 2. Diesel Oxidation Catalyst Inlet Pressure Sensor Tube                   | 12. Selective Catalytic Reduction (SCR Catalyst) Inlet and Outlet NOx Sensors (microprocessor mounted) |
| 3. Diesel Oxidation Catalyst Inlet Temperature Sensor                     | 13. Diesel Particulate Filter Outlet Pressure Sensor Tube  |
| 4. Front Heat Shield  | 14. Selective Catalytic Reduction (SCR Catalyst) Inlet Temperature Sensor                              |
| 5. Diesel Exhaust Fluid Nozzle  | 15. Selective Catalytic Reduction (SCR Catalyst) Inlet NOx Sensors                                     |
| 6. Exhaust Outlet   | 16. 47-Pin Connector Harness   |
| 7. Diesel Exhaust Fluid Metering Unit                                     | 17. Diesel Particulate Filter Outlet Pressure Sensor   |
| 8. Exhaust Inlet  | 18. Diesel Oxidation Catalyst Inlet Pressure Sensor  |
| 9. Selective Catalytic Reduction (SCR Catalyst) Outlet Temperature Sensor | 19. Sensor bridge  |
| 10. Selective Catalytic Reduction (SCR Catalyst) Outlet NOx Sensor        |  |

**Figure 2. 2012 1-BOX™ Configuration**



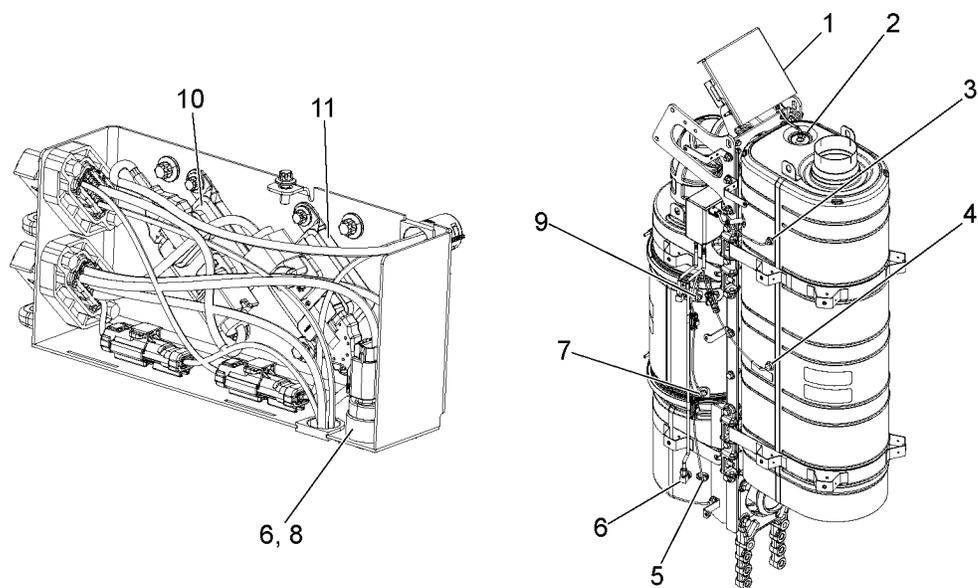
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- |   |  |
|---|--|
| 1. Diesel Oxidation Catalyst Outlet Temperature Sensor                    | 10. Selective Catalytic Reduction (SCR Catalyst) Inlet Temperature Sensor                              |
| 2. Diesel Oxidation Catalyst Inlet Pressure Sensor Tube                   | 11. Selective Catalytic Reduction (SCR Catalyst) Inlet and Outlet NOx Sensors (microprocessor mounted) |
| 3. Diesel Oxidation Catalyst Inlet Temperature Sensor                     | 12. Diesel Particulate Filter Outlet Pressure Sensor Tube  |
| 4. Front Heat Shield  | 13. Selective Catalytic Reduction (SCR Catalyst) Inlet Temperature Sensor                              |
| 5. Diesel Exhaust Fluid Dosing Unit                                       | 14. Selective Catalytic Reduction (SCR Catalyst) Inlet NOx Sensors                                     |
| 6. Exhaust Outlet   | 15. 47-Pin Connector Harness   |
| 7. Exhaust Inlet  | 16. Diesel Particulate Filter Outlet Pressure Sensor   |
| 8. Selective Catalytic Reduction (SCR Catalyst) Outlet Temperature Sensor | 17. Diesel Oxidation Catalyst Inlet Pressure Sensor  |
| 9. Selective Catalytic Reduction (SCR Catalyst) Outlet NOx Sensor         | 18. Sensor bridge  |

**Figure 3. GHG14 1-BOX™ Configuration**

**Diesel Oxidation Catalyst, Diesel Particulate Filter, and Selective Catalytic Reduction (SCR Catalyst) Mounted Vertically**

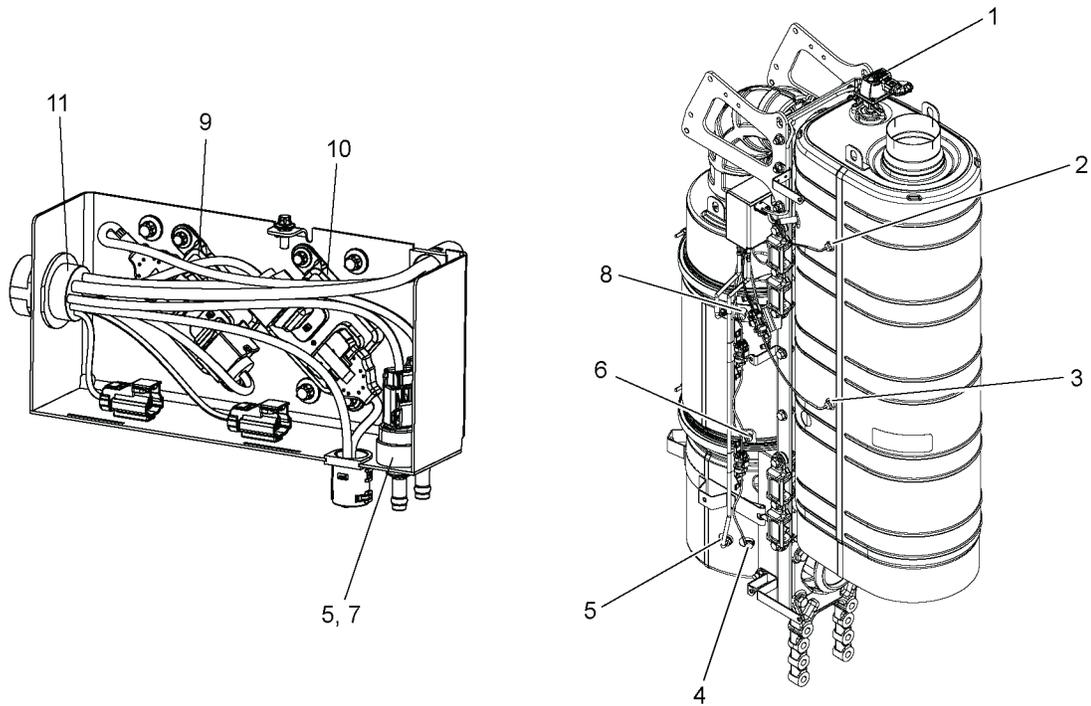
Sensor locations on the Two-Box configuration are shown below:



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- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Diesel Exhaust Fluid Metering Unit</li> <li>2. Diesel Exhaust Fluid Nozzle</li> <li>3. Selective Catalytic Reduction (SCR Catalyst) Outlet Temperature Sensor</li> <li>4. Selective Catalytic Reduction (SCR Catalyst) Inlet Temperature Sensor</li> <li>5. Diesel Oxidation Catalyst Inlet Temperature Sensor</li> <li>6. Diesel Oxidation Catalyst Inlet Pressure Sensor</li> </ol> | <ol style="list-style-type: none"> <li>7. Diesel Particulate Filter Inlet Temperature Sensor</li> <li>8. Diesel Particulate Filter Outlet Pressure Sensor</li> <li>9. Diesel Particulate Filter Outlet Temperature Sensor</li> <li>10. Selective Catalytic Reduction (SCR Catalyst) Outlet NOx Sensor</li> <li>11. Selective Catalytic Reduction (SCR Catalyst) Inlet NOx Sensor</li> </ol> |
|---|---|

**Figure 4. 2V2 Two-Box Configuration**



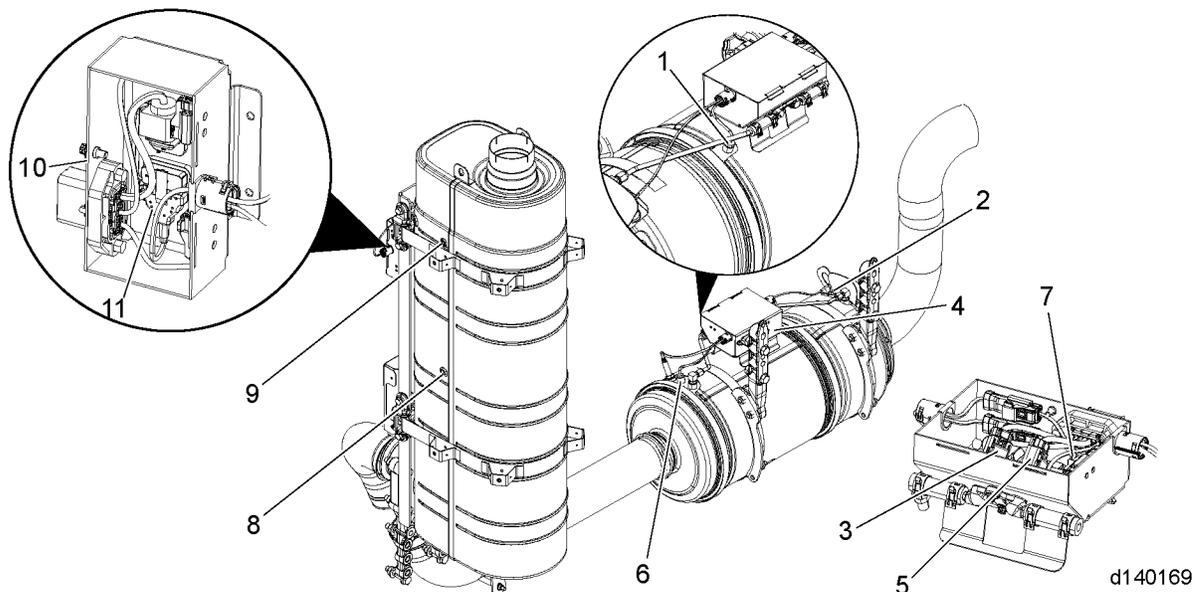
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- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>1. Diesel Exhaust Fluid Doser Unit</li> <li>2. Selective Catalytic Reduction (SCR Catalyst) Outlet Temperature Sensor</li> <li>3. Selective Catalytic Reduction (SCR Catalyst) Inlet Temperature Sensor</li> <li>4. Diesel Oxidation Catalyst Inlet Temperature Sensor</li> <li>5. Diesel Oxidation Catalyst Inlet Pressure Sensor</li> <li>6. Diesel Particulate Filter Inlet Temperature Sensor</li> </ul> | <ul style="list-style-type: none"> <li>7. Diesel Particulate Filter Outlet Pressure Sensor</li> <li>8. Diesel Particulate Filter Outlet Temperature Sensor</li> <li>9. Selective Catalytic Reduction (SCR Catalyst) Outlet NOx Sensor (microprocessor mounted)</li> <li>10. Selective Catalytic Reduction (SCR Catalyst) Inlet NOx Sensor (microprocessor mounted)</li> <li>11. 47 Pin Connector Harness</li> </ul> |
|---|---|

**Figure 5. GHG14 2V2 Two-Box Configuration**

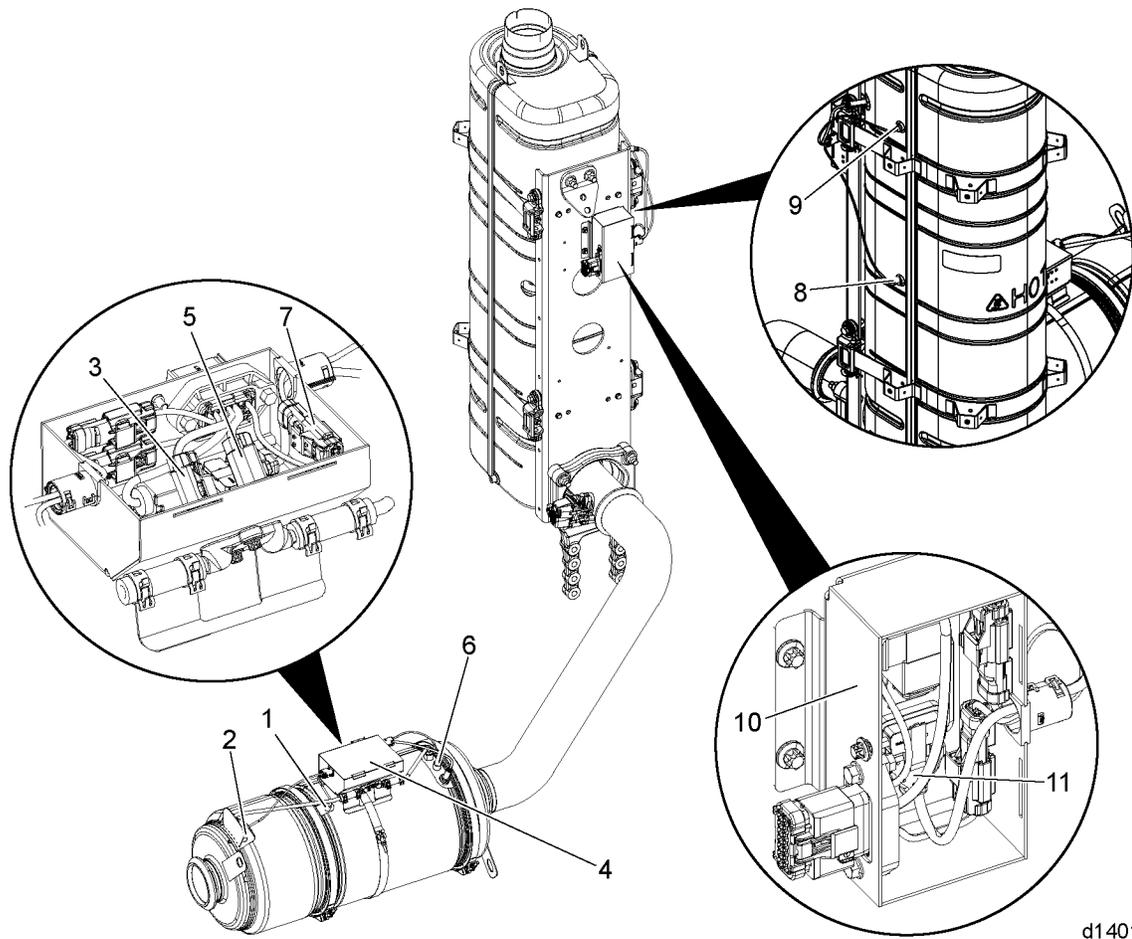
**Diesel Oxidation Catalyst, Diesel Particulate Filter Mounted Horizontally, Selective Catalytic Reduction (SCR Catalyst) Mounted Vertically**

Sensor locations on the Two-Box configuration are shown below:



- |  |   |
|--|---|
| 1. Diesel Particulate Filter Inlet Temperature Sensor  | 7. Selective Catalytic Reduction (SCR Catalyst) Outlet NOx Sensor (microprocessor mounted)  |
| 2. Diesel Oxidation Catalyst Inlet Temperature Sensor  | 8. Selective Catalytic Reduction (SCR Catalyst) Inlet Temperature Sensor Port               |
| 3. Diesel Oxidation Catalyst Inlet Pressure Sensor     | 9. Selective Catalytic Reduction (SCR Catalyst) Outlet Temperature Sensor Port              |
| 4. Diesel Particulate Filter Sensor Box                | 10. Selective Catalytic Reduction (SCR Catalyst) Sensor Box                                 |
| 5. Diesel Particulate Filter Outlet Pressure Sensor    | 11. Selective Catalytic Reduction (SCR Catalyst) Outlet NOx Sensor (microprocessor mounted) |
| 6. Diesel Particulate Filter Outlet Temperature Sensor |   |

**Figure 6. 2HV Two-Box Configuration**



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- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>1. Diesel Particulate Filter Inlet Temperature Sensor</li> <li>2. Diesel Oxidation Catalyst Inlet Temperature Sensor</li> <li>3. Diesel Oxidation Catalyst Inlet Pressure Sensor</li> <li>4. Diesel Particulate Filter Sensor Box</li> <li>5. Diesel Particulate Filter Outlet Pressure Sensor</li> <li>6. Diesel Particulate Filter Outlet Temperature Sensor</li> </ul> | <ul style="list-style-type: none"> <li>7. Selective Catalytic Reduction (SCR Catalyst) Outlet NOx Sensor (microprocessor mounted)</li> <li>8. Selective Catalytic Reduction (SCR Catalyst) Inlet Temperature Sensor Port</li> <li>9. Selective Catalytic Reduction (SCR Catalyst) Outlet Temperature Sensor Port</li> <li>10. Selective Catalytic Reduction (SCR Catalyst) Sensor Box</li> <li>11. Selective Catalytic Reduction (SCR Catalyst) Outlet NOx Sensor (microprocessor mounted)</li> </ul> |
|--|---|

**Figure 7. GHG14 2HV Two-Box Configuration**