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Service Information Bulletin

SUBJECT	DATE
GHG14 - 1-BOX™ to the vehicle	February 2016

Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0083	DD Platform - GHG14	Installation of the 1-BOX™ to the Vehicle	Added Notice and graphic regarding the step mounting nut change. Deleted graphics from step 13 and 14.



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2 Installation of the GHG14 1-BOX™ to the Vehicle



WARNING: PERSONAL INJURY

To avoid injury when removing or installing a heavy engine component, ensure the component is properly supported and securely attached to an adequate lifting device to prevent the component from falling.



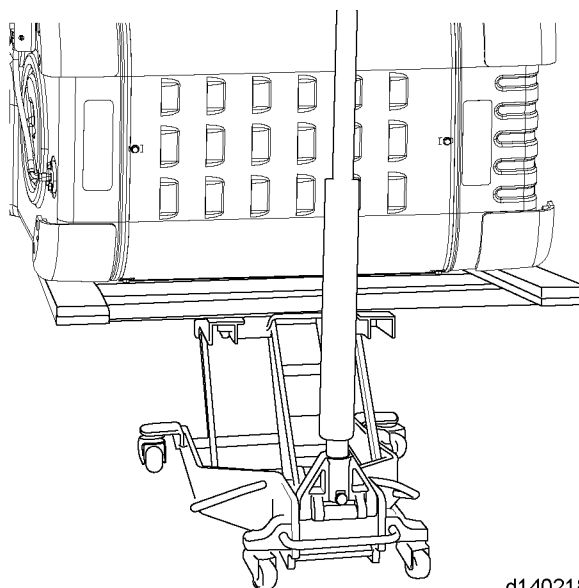
CAUTION: ELECTRICAL SHOCK

To avoid injury from electrical shock, use care when connecting battery cables. The magnetic switch studs are at battery voltage.

Install as follows:

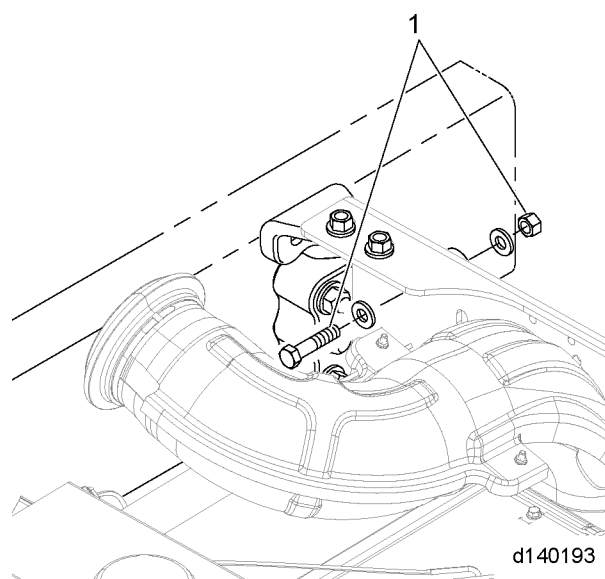
If the 1-BOX™ is being replaced with a new 1-BOX™, perform the following. If not, Go to step 3.

1. Transfer rear mounting bracket over to the new Aftertreatment Device (ATD) and hand-tighten the bolts.
2. Transfer all parts over to new ATD.
 - ATS Harness Bridge and Harness
 - Front Sensor Bracket
 - Temperature, Pressure and NOx Sensors
 - Diesel Exhaust Fluid Dosing Unit
 - ECU Bracket and Cover
 - Diesel Particulate Filters
 - Pressure Sensor Tubes
 - 1-BOX™ Heat Shields
3. Using ATD lifting device W060589003100 , carefully raise the 1-BOX™ to the vehicle frame and align the 1-BOX™ mounting brackets to the holes in the vehicle frame.

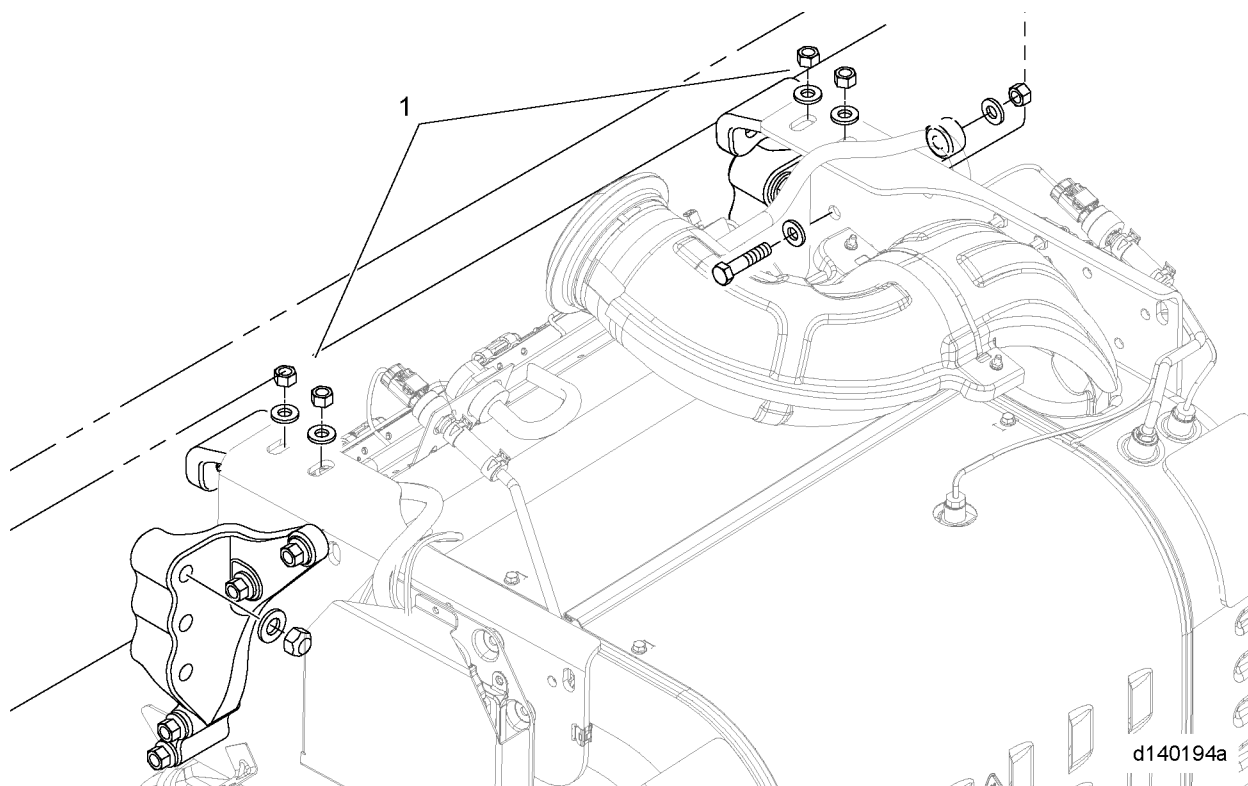


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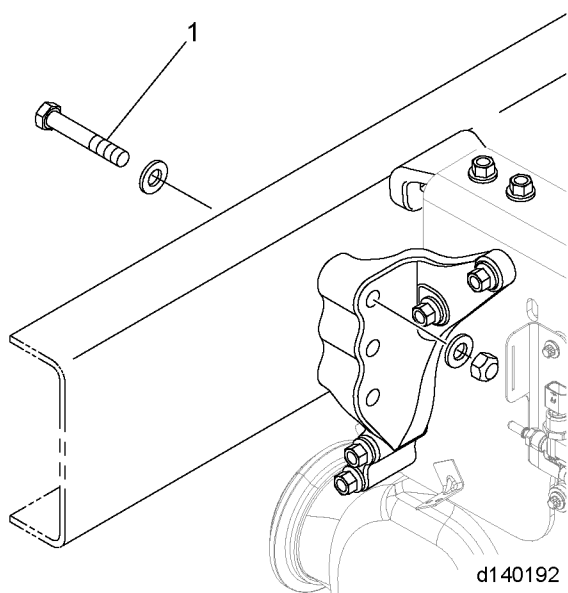
4. Install the four bolts and nuts (1) on the front mounting bracket, attaching the 1-BOX™ to the front mounting bracket. Hand-tighten the bolts.



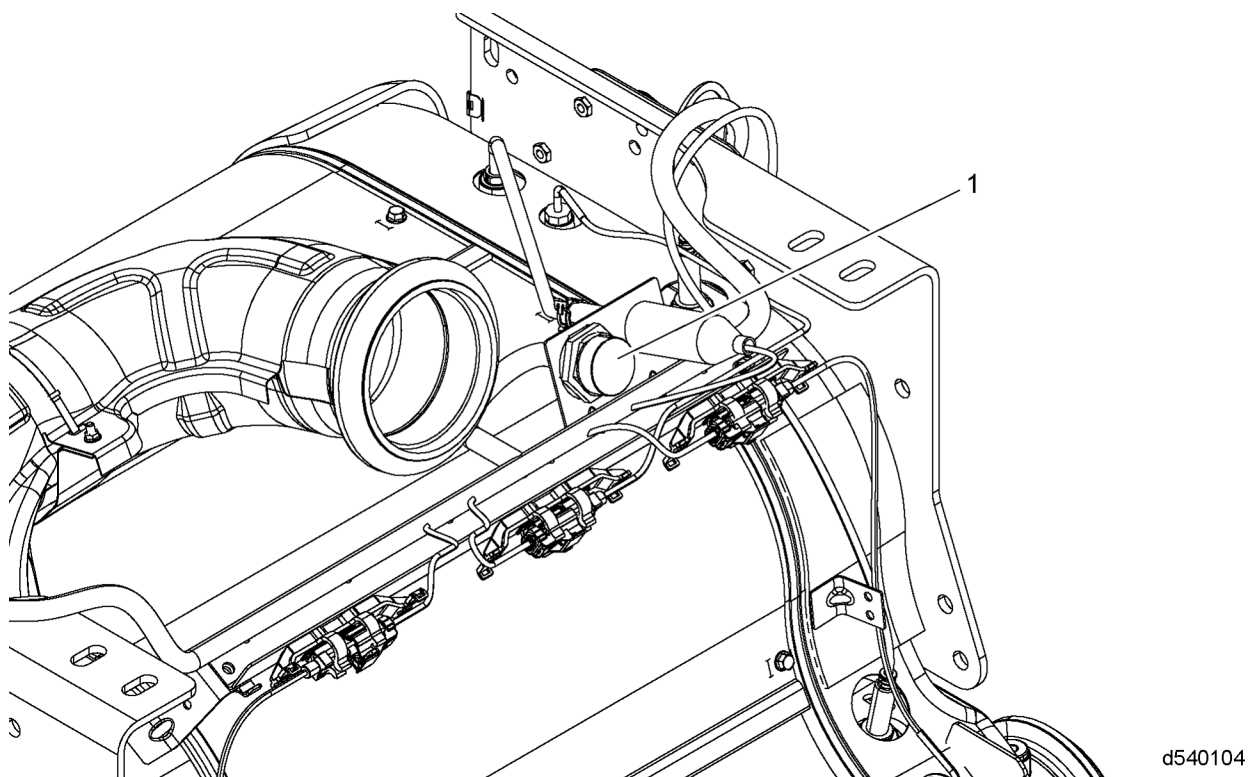
5. Install the four bolts and nuts (1) attaching the 1-BOX™ to the top mounting brackets and hand-tighten.



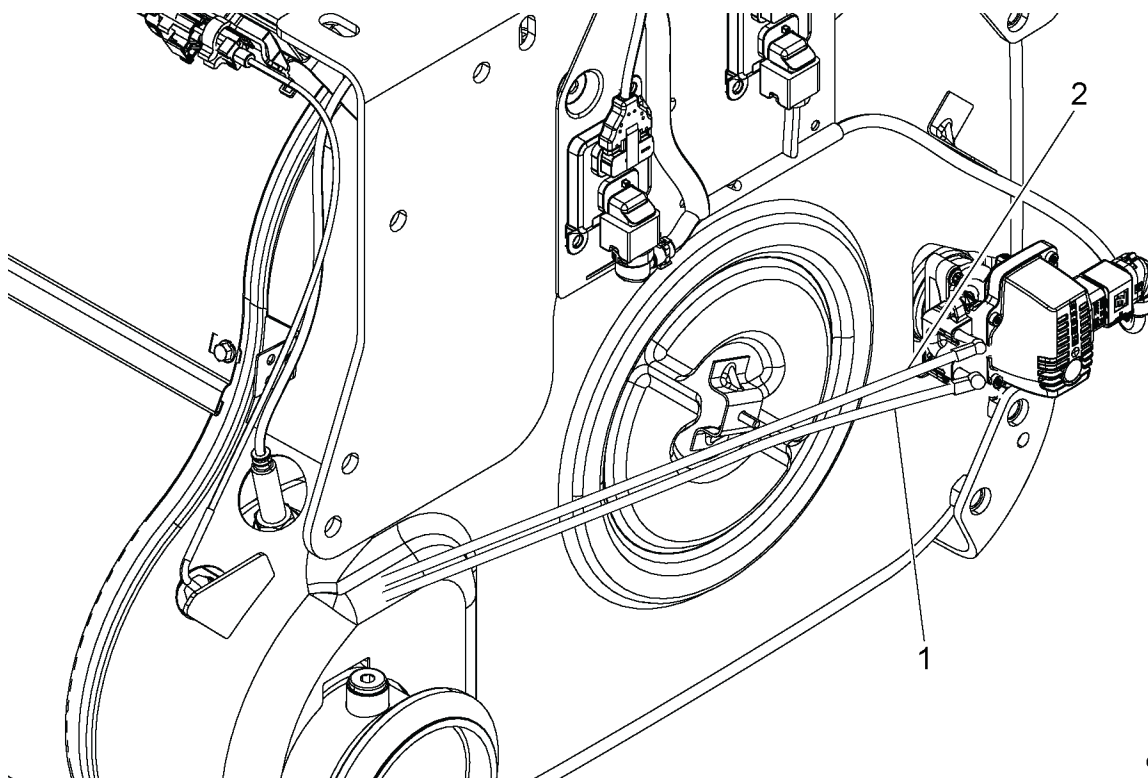
6. Install the three bolts (1) and nuts attaching the rear mounting bracket to the vehicle frame. Torque to 134-169 N·m (99-125 lb·ft).



7. Torque the front side mounting bracket bolts and nuts to 134-135 N·m (99-100 lb·ft).
8. Torque the top mounting bracket bolts to the 1-BOX™ to 64-88 N·m (47-65 lb·ft).
9. Install the 47-pin electrical harness connector (1) to the sensor bridge.

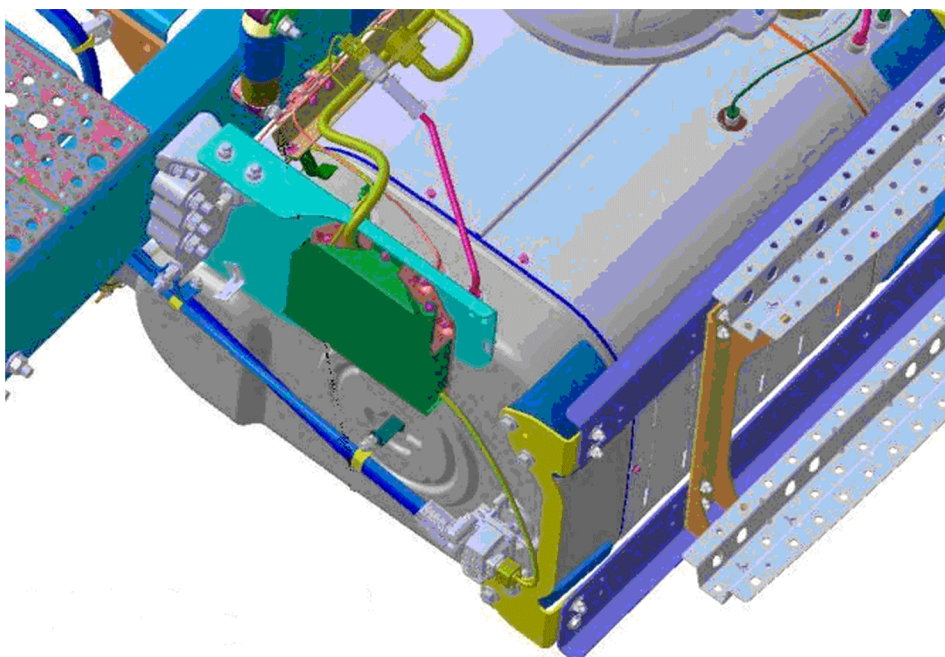


10. Connect the electrical harness connectors to the DEF dosing unit.
11. Connect the DEF feed line (2) and return lines (1) to the DEF dosing unit and to the mounting clips on the 1-BOX™.



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12. Ensure that the DEF feed and return line is routed correctly under the frame rail of the vehicle and is connected to the tabs on the 1-BOX™.

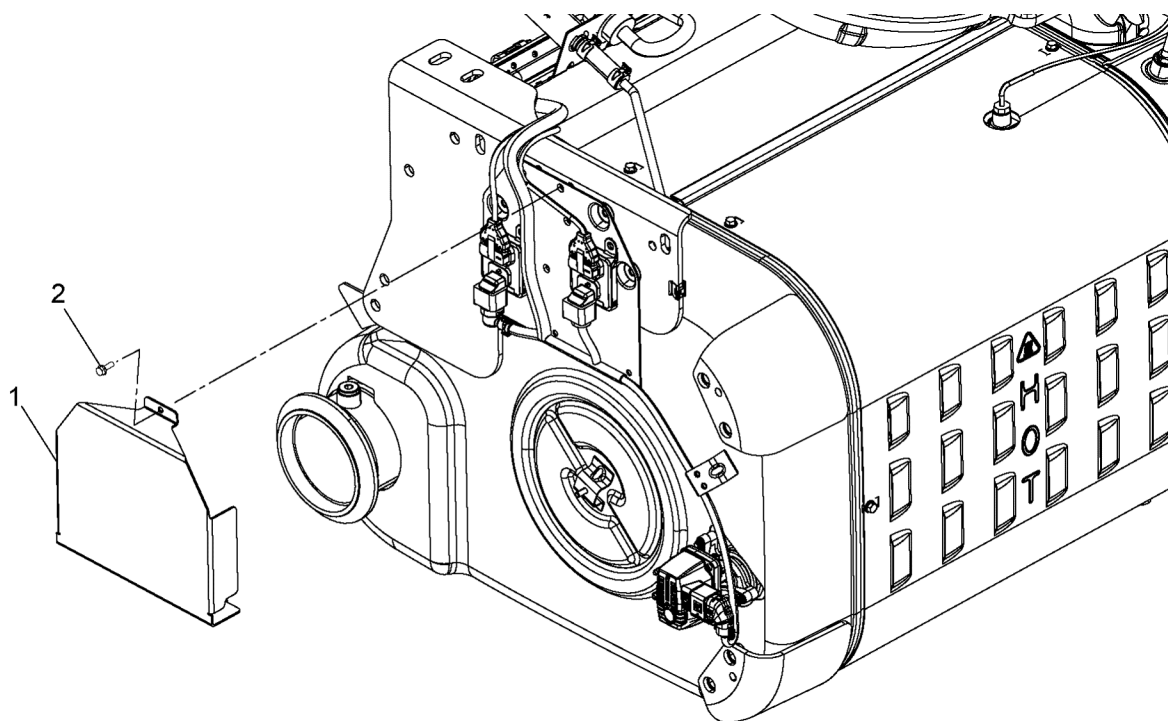


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NOTE: The exhaust system outlet pipe clamps are directional; verify correct installation.

13. Install a new gasket (1) onto the 1-BOX™ exhaust outlet and then connect the exhaust system outlet pipe by installing the clamp. Torque to 9-10 N·m (79-88 lb·in.).

14. Install a new gasket (1) onto the 1-BOX™ exhaust inlet and then connect the exhaust system inlet pipe by installing the clamp. Torque to 9-10 N·m (79-88 lb·in.).
15. Install the ECU unit cover (1) and torque bolt 9-10 N·m (7 lb·in.).

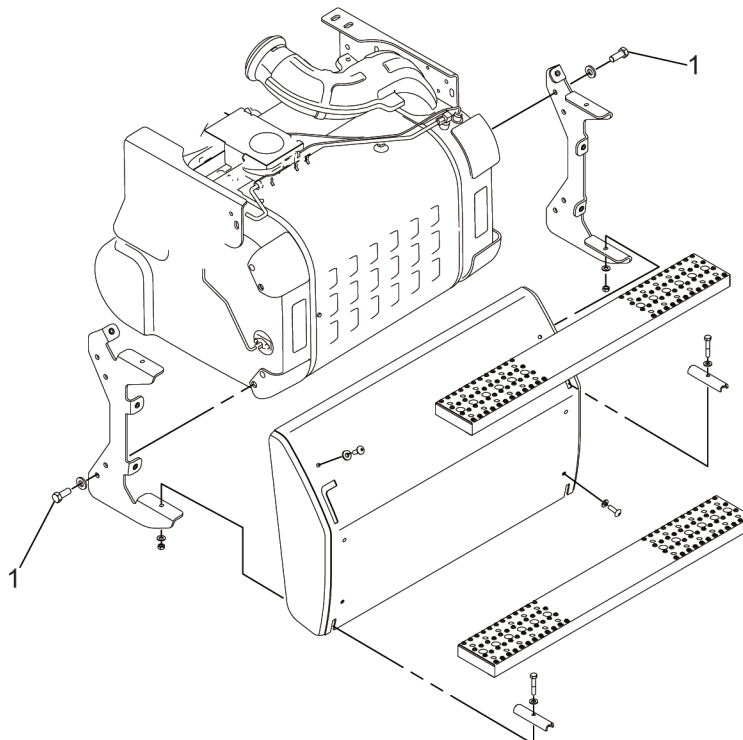


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16. Connect the batteries.
17. Check for any leaks.

Table 1.

NOTICE: The 1-BOX welded step mounting nuts have changed from standard to metric. If a new service replacement 1-BOX is being installed and the serial number is 12400004909082 or greater, all eight step mounting bolts (1) will need to be replaced with Class 10.9 (M12 X 1.5 X 30) bolts, part number 23-14065-030. The washers have NOT changed.



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18. If removed, install the passenger side fairing. Refer to OEM procedures.