SERVICE MANUAL

ISM
Tier 4
Engine

See the following page for engine model numbers

Part number 47632284
2nd edition English
September 2014
Replaces part number 47434934

NEW HOLLAND CONSTRUCTION

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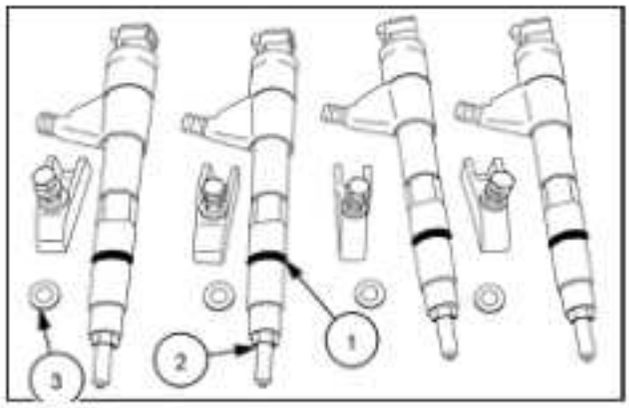
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Fuel injectors - Install

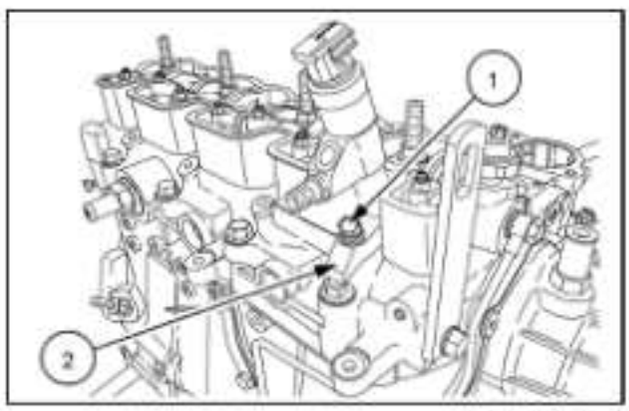
N4LDI-TA-45SL N4LDI-TA-50SL	

1. Install a new O-ring **(1)** on the injector.
2. Install the seal ring **(3)** onto the tip of the injector **(2)**.



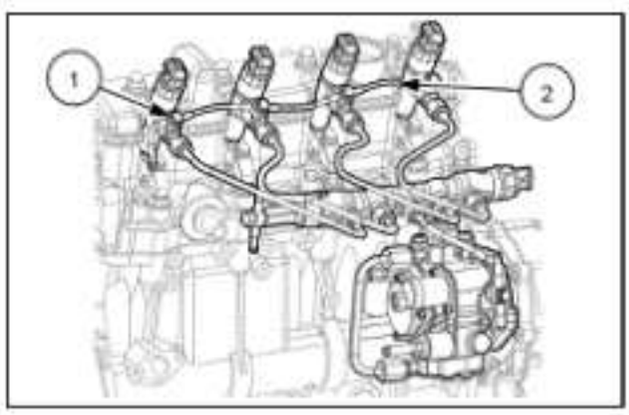
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3. Install the fuel injector in the head until the O-ring seats.
4. Install the injector clamp **(2)** and secure with retaining bolt **(1)**.
5. Torque retaining bolts **(1)** to **22.6 - 28.4 N·m** (**16.7 - 21 lb ft**).



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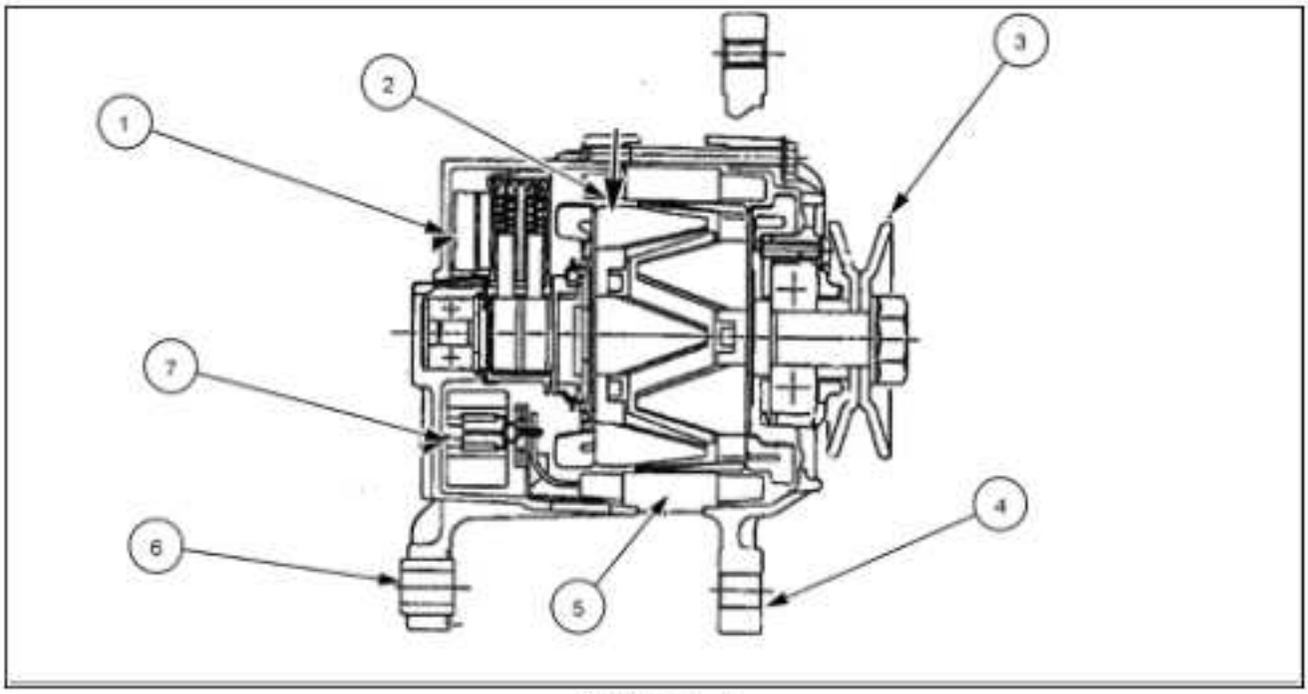
6. Install the fuel return line **(2)** and secure with the banjo bolts **(1)** and washers.
7. Torque banjo bolts **(1)** to **15 - 20 N·m** (**11.1 - 15 lb ft**).



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Alternator - Static description



T1553CHARGCIR2 1

Alternator

Description of operation

The **40 A** output alternator is equipped with an integrated circuit (IC) regulator, meaning voltage is regulated internally and electronically within the alternator.

The principle components of the alternator are the stator **(5)** the rotor **(2)** the rectifier assembly **(7)** and the IC regulator **(1)**.

The rectifier assembly **(7)** consist of two heat sinks, one positive (+) and one negative (-) and a diode trio.

The diode trio is used as a field supply diode and is connected to terminal 'L' on the alternator.

The IC regulator **(1)** is a solid state unit and can only be serviced as an assembly.

The internal components of the alternator are housed in a two-piece frame, which is divided into a drive end (front) frame **(4)** and a rear frame **(6)**. The frame contains open slots to allow for cooling of the alternator.

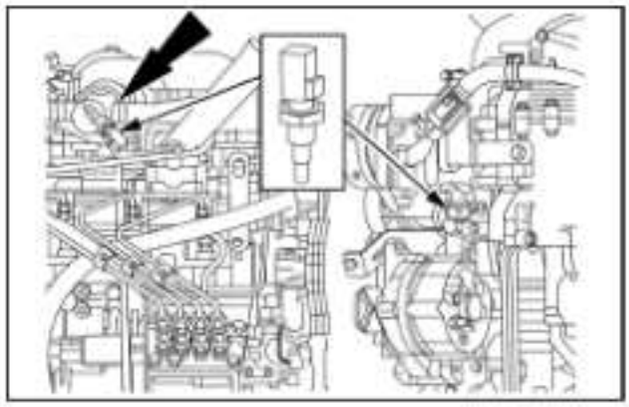
The alternator is rotated in the frame by using a belt-driven pulley **(3)** which is powered off of the engine crankshaft pulley by a belt.

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Inlet air temperature sensor - Inspect

N843LT-F-27	
N843T-F-24	
N844L-F-30	
N844L-F-34	
N844L-F-36SL	
N844LT-F-45SL	

1. Measure the resistance of the inlet air temperature sensor from pin 1 to pin 2.

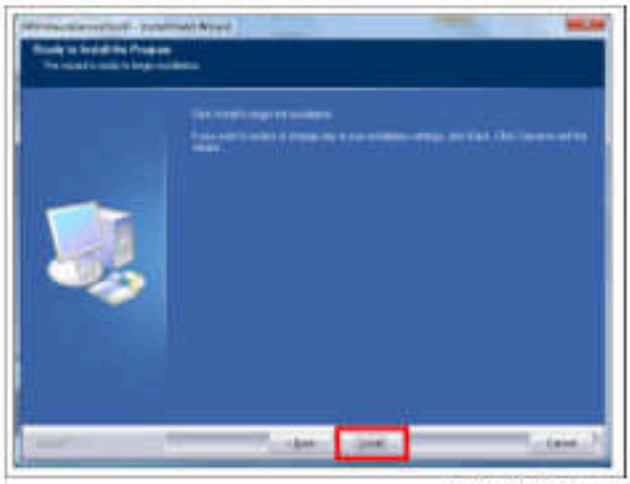


Temperature	Voltage output
0 °C (32 °F)	5.74 Ω
20 °C (68.0 °F)	2.54 Ω
40 °C (104.0 °F)	1.15 Ω
60 °C (140.0 °F)	0.58 Ω
80 °C (176.0 °F)	0.31 Ω

Tightening torque: **14.7 - 19.6 N·m (10.8 - 14.5 lb ft)**

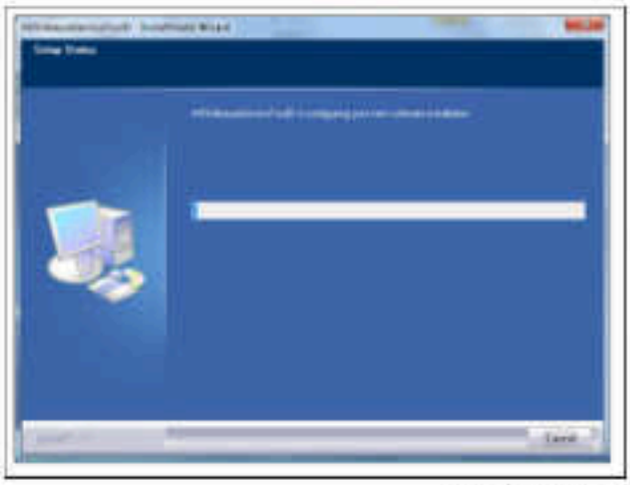
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18. Click the "Install" button.



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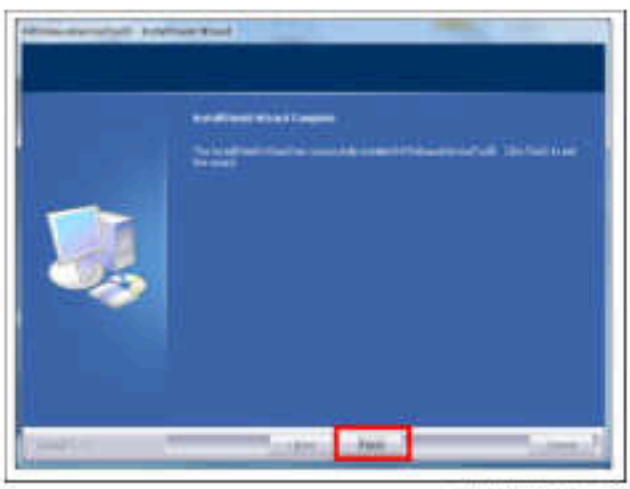
19. Installation progress is shown.



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20. Click the "Finish" button to complete the installation.

NOTE: *To use the Service Tool D, you must first install the communication adapter drivers. Refer to* ***Electrical system Computer support tools - Install - Communication adapter (55.000)*** *for the proper procedure.*



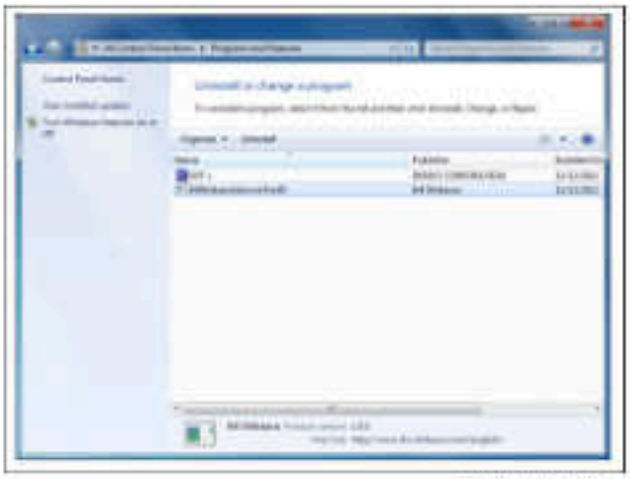
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Electrical system Computer support tools - Remove - Service Tool D

N4LDI-TA-45SL N4LDI-TA-50SL	

1. Open the "Control Panel" by clicking on "Start" > "Control Panel" or "Start" > "Settings" > "Control Panel".
2. In the "Control Panel" select "Programs and Features".
3. From the list of installed applications, select " ServiceToolID" then click on "Uninstall".



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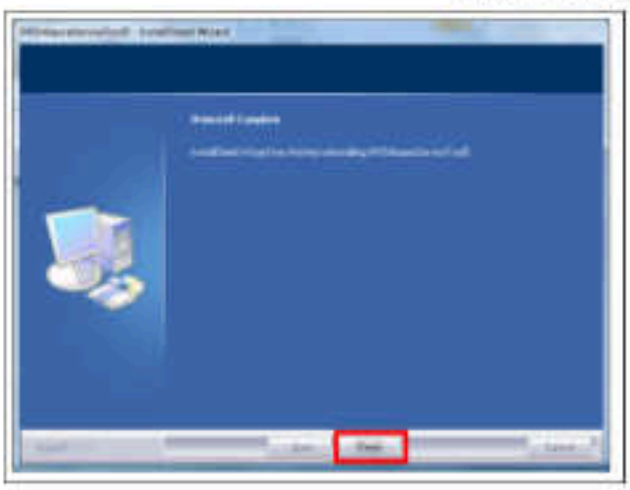
4. A message dialog box to confirm the removal of the diagnostic tool is displayed. Click on "Yes" to uninstall the program.



RAPH13SPT0023AA 2

5. When the uninstall process is complete, the following screen will be displayed.

NOTE: *In some cases you may need to reboot your PC after finishing the uninstall process. If a dialog box appears to requiring your PC to reboot, proceed with the reboot process.*



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