SERVICE MANUAL

NEF
Tier 4B (final) and Stage IV
Engine

See the following page for engine model numbers

Part number 48076871
1st edition English
November 2016
Replaces part numbers 47606092, 47606102, 47606112, 47606122

MidWestTech | New Holland NEF Tier 4B & Stage IV F4DFE4131*B001, F4DFE4131*B002, F4DFE4131*B007, F4DFE4131*B008, F4DFE4132*B001, F4DFE4132*B002, F4DFE4132*B005, F4DFE4132*B006, F4DFE4133*B001, F4DFE4133*B002, F4DFE4133*B007, F4DFE4133*B008, F4DFE4134*B001, F4DFE4134*B002, F4DFE4134*B005, F4DFE4134*B006, F4DFE413R*B001, F4DFE413S*B001, F4DFE413T*B001, F4DFE413U*B001, F4DFE414B*B001, F4DFE414C*B001, F4DFE414D*B001, F4DFE414E*B001, F4DFE6132*B001, F4DFE6132*B007, F4DFE613B*B001, F4DFE613B*B002, F4DFE613B*B003, F4DFE613B*B...
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Engine - General specification

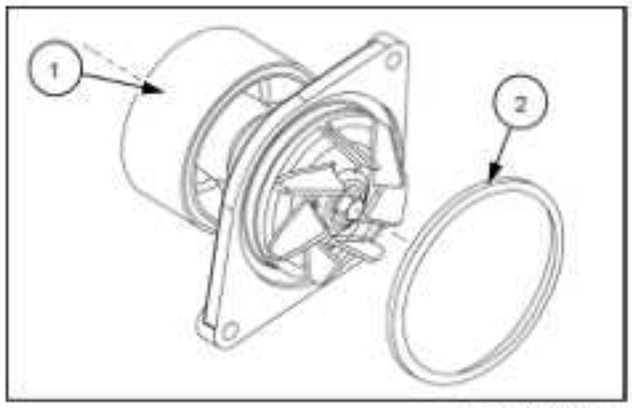
General specifications		
Engine type	4 Cylinders	6 Cylinders
Cycle	Four-Stroke diesel engine	
Power	Turbocharged with intercooler	
Injection	Direct	
Number of cylinders	4	6
Bore	**104 mm (4 in)**	
Stroke	**132 mm (5 in)**	
Total displacement	**4485 cm³**	**6728 cm³**
Timing		
Start before T.D.C.	**18.5 °**	
End after B.D.C.	**29.5 °**	
Start before B.D.C.	**67 °**	
End after T.D.C.	**35 °**	
Valve clearance		
Intake	**0.20 - 0.30 mm (0.008 - 0.012 in)**	
Exhaust	**0.45 - 0.55 mm (0.018 - 0.022 in)**	
Fuel feed		
Injection type	Bosch high pressure common rail	
Control	EDC17 CV41	
Injector	CRIN 2	
Nozzle type	DLLA	
Injection sequence	1-3-4-2	1-5-3-6-2-4
Injection pressure	**250 - 1600 bar (3625 - 23200 psi)**	
Aspiration		
Turbocharging	Intercooled	
Turbocharger type	Honeywell GT25	Holset HX35
Lubrication		
Oil pressure @ low idle	**2.0 bar (29.0 psi)**	
Oil pressure @ fast idle	**4.0 bar (58.0 psi)**	
Oil pan capacity	**15 l (15.85 US qt)**	
Oil filter capacity	**1 l (1.06 US qt)**	
Cooling		
Water pump	Belt driven	
Thermostat	**79 - 83 °C (174 - 181 °F)**	

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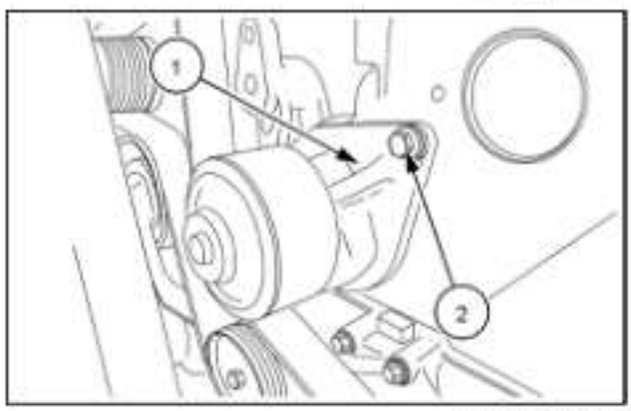
Water pump - Install

Prior operation:
Water pump - Remove (10.400)

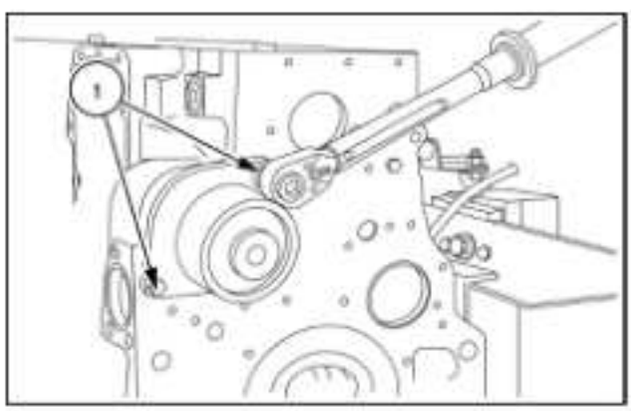
1. Install a new sealing ring **(2)** on the water pump **(1)**.



2. Use the two mounting bolts **(2)** to install the water pump **(1)** onto the engine block



3. Torque the water pump mounting bolts **(1)** to **20 - 28 N·m (15 - 21 lb ft)**.



Next operation:
If you need to install the belt, see **Belt - Install (10.414)**.

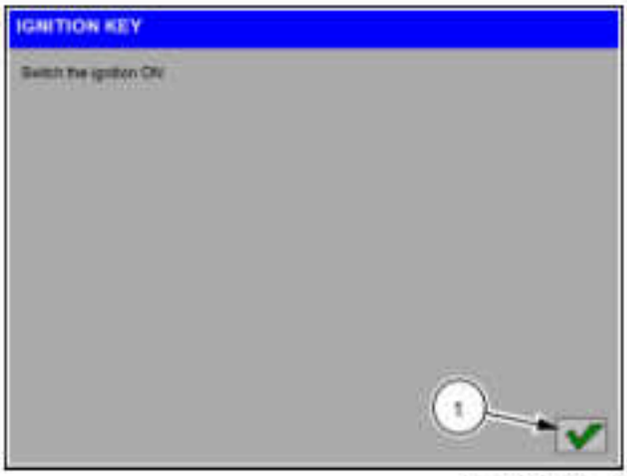
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Engine wiring harness - Disconnect

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F4DFE4131*B002	
F4DFE4131*B007	
F4DFE4131*B008	
F4DFE4132*B001	
F4DFE4132*B002	
F4DFE4132*B005	
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F4DFE4134*B001	
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F4DFE4134*B005	
F4DFE4134*B006	
F4DFE413R*B001	
F4DFE413S*B001	
F4DFE413T*B001	
F4DFE413U*B001	
F4DFE414B*B001	
F4DFE414C*B001	
F4DFE414D*B001	
F4DFE414E*B001	
F4DFE6132*B001	
F4DFE6132*B007	
F4DFE613B*B001	
F4DFE613B*B002	
F4DFE613B*B003	
F4DFE613B*B005	
F4DFE613B*B006	
F4DFE613H*B001	
F4DFE613H*B002	
F4DFE613H*B003	
F4DFE613J*B001	
F4DFE613J*B002	
F4DFE613J*B003	
F4DFE613J*B005	
F4DFE613J*B006	
F4DFE613K*B001	
F4DFE613K*B002	
F4DFE613K*B003	
F4DFE613K*B004	
F4DFE613K*B006	
F4DFE613K*B007	
F4DFE613K*B008	
F4DFE613L*B001	
F4DFE613M*B001	
F4DFE613M*B002	
F4DFE613M*B003	
F4DFE613N*B001	
F4DFE613N*B002	
F4DFE613N*B003	
F4DFE613N*B005	
F4DFE613N*B006	
F4DFE613P*B001	
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F4DFE617L*B002	
F4DFE617M*B001	

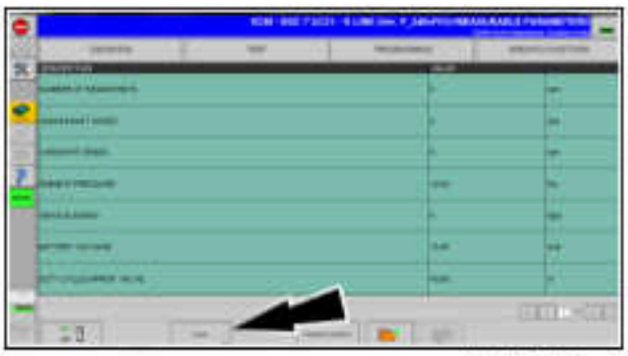
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6. Ignition Key "on" then click the check mark **(1)**.



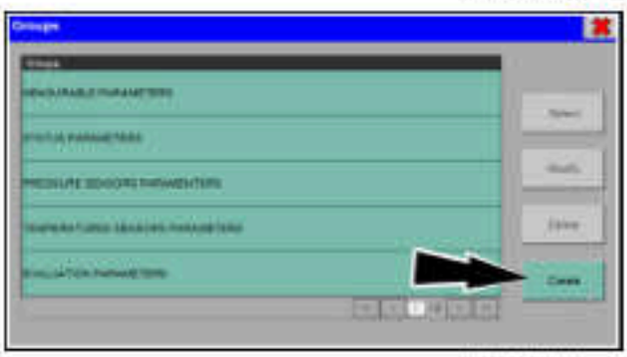
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7. Click on "Groups".



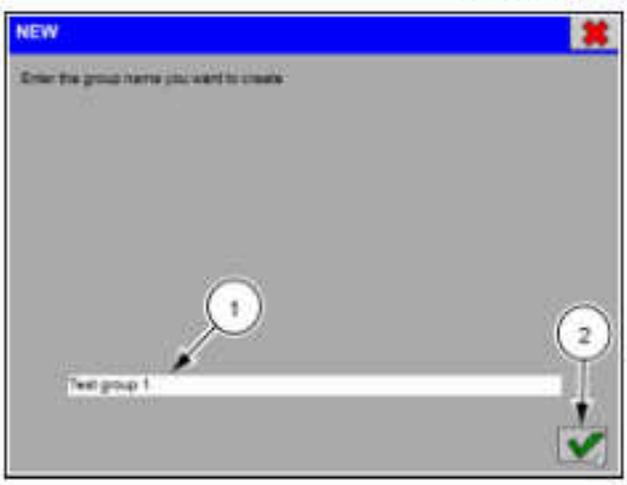
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8. Click on "Create" to build a custom list of engine operating parameters to view.



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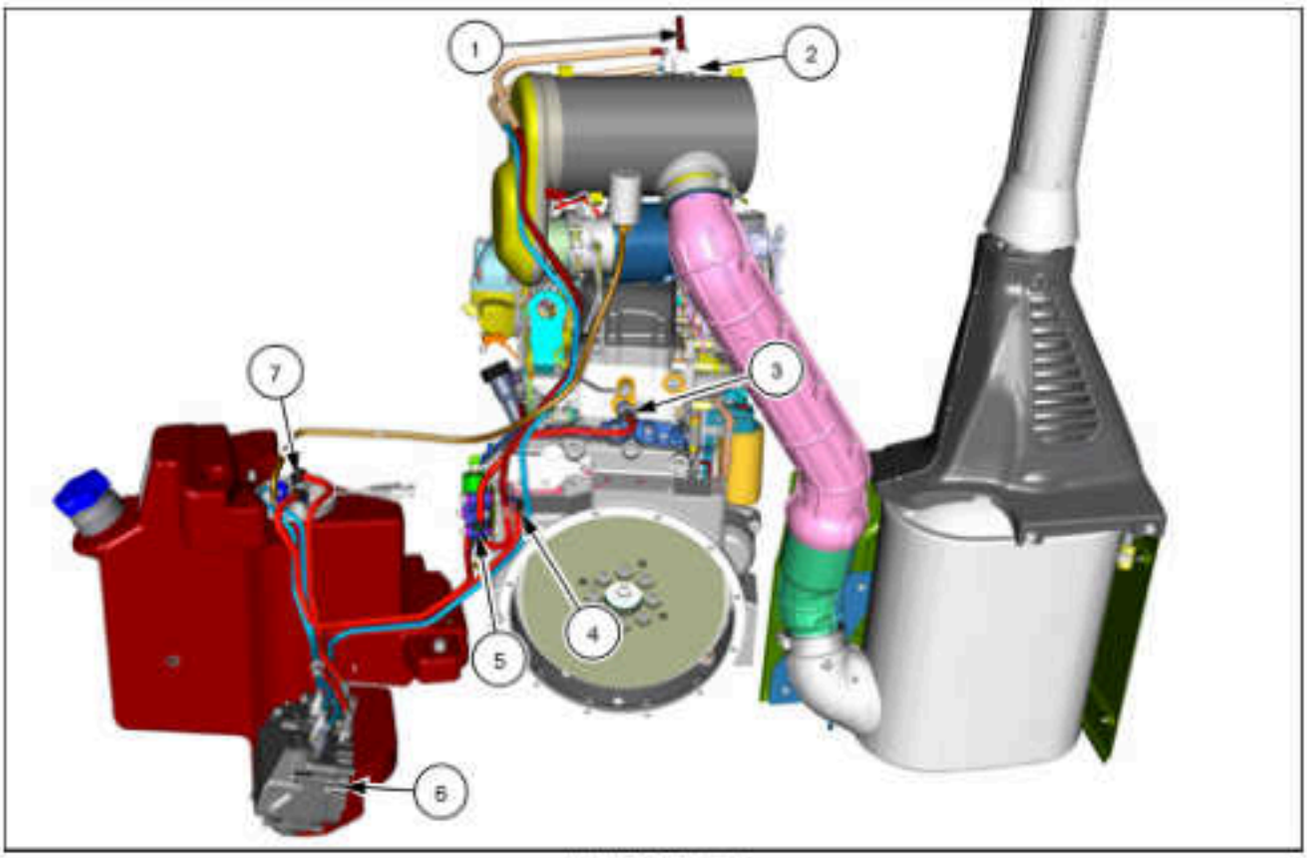
9. Enter a name **(1)** for the custom list, then click check mark **(2)**.



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Defrosting / Heating Flow



MHWM14DsG12K0FA 3

The defrosting flow goes from the:

- Engine **(3)** to the coolant control valve **(5)**
- Coolant control valve to the tank spiral **(7)** (fluid level and temperature sending unit)
- Tank spiral to the supply module **(6)**
- Supply module 'T' connection **(4)** to the dosing module **(2)**
- Dosing module back to the engine **(1)**

DEF/AdBlue® heating control - Defrosting state

- Supply pump is not running to avoid damage of system components.
- System is heating up until "Defrosting OFF" thresholds for all heating circuits have been reached.

NOTICE: *Even if condition "DEFROSTING OFF" was not reached, the system will try to start-up after* ***68 min*** *defrosting time has elapsed.*

Signal	Threshold	
	ON	OFF
Fluid tank temperature	Less than **-10.0 °C (14.0 °F)**	Greater than **-8.0 °C (17.6 °F)**
Supply module temperature	Less than **-4.0 °C (24.8 °F)**	Greater than **-4.0 °C (24.8 °F)**

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