

SERVICE MANUAL

**TS6.110 / TS6.110 HC / TS6.120 /
TS6.120 HC / TS6.130 / TS6.140
Tier 4B (final)
Tractor**

PIN NT00001M and above

Part number 47924635

1st edition English
December 2015





SERVICE MANUAL

TS6.110 110 HP TIER 4B (final) engine, 2WD, and ROPS. , TS6.110 110 HP TIER 4B (final) engine, 2WD, and cab. , TS6.110 110 HP TIER 4B (final) engine, 4WD, and ROPS. , TS6.110 110 HP TIER 4B (final) engine, 4WD, and cab. , TS6.110 HC 110 HP TIER 4B (final) engine, High Clearance (HC), 4WD, and ROPS. , TS6.110 HC 110 HP TIER 4B (final) engine, High Clearance (HC), 4WD, and cab. , TS6.120 119 HP TIER 4B (final) engine, 2WD, and ROPS. , TS6.120 119 HP TIER 4B (final) engine, 2WD, and cab. , TS6.120 119 HP TIER 4B (final) engine, 4WD, and ROPS. , TS6.120 119 HP TIER 4B (final) engine, 4WD, and cab. , TS6.120 HC 119 HP TIER 4B (final) engine, High Clearance (HC), 4WD, and ROPS. , TS6.120 HC 119 HP TIER 4B (final) engine, High Clearance (HC), 4WD, and cab. , TS6.130 130 HP Tier 4B (final) engine, 2WD, and ROPS. , TS6.130 130 HP Tier 4B (final) engine, 2WD, and cab. , TS6.130 130 HP Tier 4B (final) engine, 4WD, and ROPS. , TS6.130 130 HP Tier 4B (final) engine, 4WD, and cab. , TS6.140 139 HP TIER 4B (final) engine, 2WD, and ROPS. , TS6.140 139 HP TIER 4B (final) engine, 2WD, and cab. , TS6.140 139 HP TIER 4B (final) engine, 4WD, and ROPS. , TS6.140 139 HP TIER 4B (final) engine, 4WD, and cab.

Link Product / Engine

Product	Market Product	Engine
TS6.110 110 HP TIER 4B (final) engine, 2WD, and ROPS.	North America	F4DFE413U*B001
TS6.110 110 HP TIER 4B (final) engine, 4WD, and ROPS.	North America	F4DFE413U*B001
TS6.110 110 HP TIER 4B (final) engine, 2WD, and cab.	North America	F4DFE413U*B001
TS6.110 110 HP TIER 4B (final) engine, 4WD, and cab.	North America	F4DFE413U*B001
TS6.110 HC 110 HP TIER 4B (final) engine, High Clearance (HC), 4WD, and ROPS.	North America	F4DFE413U*B001
TS6.110 HC 110 HP TIER 4B (final) engine, High Clearance (HC), 4WD, and cab.	North America	F4DFE413U*B001
TS6.120 119 HP TIER 4B (final) engine, 2WD, and ROPS.	North America	F4DFE413T*B001
TS6.120 119 HP TIER 4B (final) engine, 4WD, and ROPS.	North America	F4DFE413T*B001
TS6.120 119 HP TIER 4B (final) engine, 2WD, and cab.	North America	F4DFE413T*B001
TS6.120 119 HP TIER 4B (final) engine, 4WD, and cab.	North America	F4DFE413T*B001
TS6.120 HC 119 HP TIER 4B (final) engine, High Clearance (HC), 4WD, and ROPS.	North America	F4DFE413T*B001
TS6.120 HC 119 HP TIER 4B (final) engine, High Clearance (HC), 4WD, and cab.	North America	F4DFE413T*B001
TS6.130 130 HP Tier 4B (final) engine, 2WD, and ROPS.	North America	F4DFE413S*B001
TS6.130 130 HP Tier 4B (final) engine, 4WD, and ROPS.	North America	F4DFE413S*B001
TS6.130 130 HP Tier 4B (final) engine, 2WD, and cab.	North America	F4DFE413S*B001
TS6.130 130 HP Tier 4B (final) engine, 4WD, and cab.	North America	F4DFE413S*B001
TS6.140 139 HP TIER 4B (final) engine, 2WD, and ROPS.	North America	F4DFE413R*B001
TS6.140 139 HP TIER 4B (final) engine, 4WD, and ROPS.	North America	F4DFE413R*B001
TS6.140 139 HP TIER 4B (final) engine, 2WD, and cab.	North America	F4DFE413R*B001
TS6.140 139 HP TIER 4B (final) engine, 4WD, and cab.	North America	F4DFE413R*B001

Contents

INTRODUCTION

Engine.....	10
[10.001] Engine and crankcase	10.1
[10.202] Air cleaners and lines	10.2
[10.206] Fuel filters	10.3
[10.216] Fuel tanks	10.4
[10.254] Intake and exhaust manifolds and muffler	10.5
[10.310] Aftercooler.....	10.6
[10.400] Engine cooling system	10.7
[10.414] Fan and drive	10.8
[10.500] Selective Catalytic Reduction (SCR) exhaust treatment.....	10.9
Clutch	18
[18.100] Clutch mechanical release control	18.1
[18.110] Clutch and components	18.2
[18.112] Slip clutch or flywheel damper	18.3
Transmission.....	21
[21.109] Transmission cooler and lines.....	21.1
[21.112] Power shuttle transmission.....	21.2
[21.114] Mechanical transmission	21.3
[21.134] Power shuttle transmission external controls	21.4
[21.154] Power shuttle transmission internal components	21.5
[21.160] Creeper	21.6
Four-Wheel Drive (4WD) system	23
[23.202] Electro-hydraulic control	23.1
[23.304] Four-Wheel Drive (4WD) gearbox	23.2
[23.314] Drive shaft.....	23.3

Front axle system	25
[25.100] Powered front axle	25.1
[25.102] Front bevel gear set and differential	25.2
[25.108] Final drive hub, steering knuckles, and shafts	25.3
[25.400] Non-powered front axle	25.4
Rear axle system.....	27
[27.100] Powered rear axle.....	27.1
[27.106] Rear bevel gear set and differential.....	27.2
[27.120] Planetary and final drives	27.3
Power Take-Off (PTO).....	31
[31.114] Two-speed rear Power Take-Off (PTO)	31.1
Brakes and controls	33
[33.110] Parking brake or parking lock	33.1
[33.202] Hydraulic service brakes	33.2
Hydraulic systems.....	35
[35.000] Hydraulic systems.....	35.1
[35.102] Pump control valves.....	35.2
[35.104] Fixed displacement pump.....	35.3
[35.116] Three-point hitch cylinder	35.4
[35.204] Remote control valves	35.5
[35.304] Combination pump units	35.6
Hitches, drawbars, and implement couplings.....	37
[37.110] Rear three-point hitch	37.1
Steering.....	41
[41.101] Steering control	41.1
[41.106] Tie rods.....	41.2
[41.206] Pump.....	41.3
[41.216] Cylinders	41.4

Cab climate control	50
[50.100] Heating	50.1
[50.200] Air conditioning	50.2
Electrical systems	55
[55.000] Electrical system	55.1
[55.011] Fuel tank system	55.2
[55.014] Engine intake and exhaust system	55.3
[55.015] Engine control system	55.4
[55.024] Transmission control system	55.5
[55.031] Parking brake electrical system	55.6
[55.040] Four-Wheel Drive (4WD) control system	55.7
[55.046] Rear axle control system	55.8
[55.048] Rear Power Take-Off (PTO) control system	55.9
[55.050] Heating, Ventilation, and Air-Conditioning (HVAC) control system	55.10
[55.051] Cab Heating, Ventilation, and Air-Conditioning (HVAC) controls	55.11
[55.100] Harnesses and connectors	55.12
[55.201] Engine starting system	55.13
[55.202] Cold start aid	55.14
[55.301] Alternator	55.15
[55.302] Battery	55.16
[55.404] External lighting	55.17
[55.405] External lighting switches and relays	55.18
[55.408] Warning indicators, alarms, and instruments	55.19
[55.510] Cab or platform harnesses and connectors	55.20
[55.512] Cab controls	55.21
[55.513] Cab transmission controls	55.22
[55.514] Cab lighting	55.23
[55.518] Wiper and washer system	55.24

[55.525] Cab engine controls	55.25
[55.640] Electronic modules	55.26
[55.988] Selective Catalytic Reduction (SCR) electrical system	55.27
[55.DTC] FAULT CODES	55.28
Platform, cab, bodywork, and decals	90
[90.100] Engine hood and panels	90.1
[90.110] Operator platform less cab	90.2
[90.114] Operator protections	90.3
[90.124] Pneumatically-adjusted operator seat	90.4
[90.150] Cab	90.5
[90.151] Cab interior	90.6
[90.154] Cab doors and hatches	90.7
[90.156] Cab glazing	90.8
[90.160] Cab interior trim and panels	90.9



INTRODUCTION

Foreword - Important notice regarding equipment servicing

All repair and maintenance work listed in this manual must be carried out only by qualified dealership personnel, strictly complying with the instructions given, and using, whenever possible, the special tools.

Anyone who performs repair and maintenance operations without complying with the procedures provided herein shall be responsible for any subsequent damages.

The manufacturer and all the organizations of its distribution chain, including - without limitation - national, regional, or local dealers, reject any responsibility for damages caused by parts and/or components not approved by the manufacturer, including those used for the servicing or repair of the product manufactured or marketed by the manufacturer. In any case, no warranty is given or attributed on the product manufactured or marketed by the manufacturer in case of damages caused by parts and/or components not approved by the manufacturer.

The manufacturer reserves the right to make improvements in design and changes in specifications at any time without notice and without incurring any obligation to install them on units previously sold. Specifications, descriptions, and illustrative material herein are as accurate as known at time of publication but are subject to change without notice.

In case of questions, refer to your NEW HOLLAND Sales and Service Networks.

Safety rules

Personal safety



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible death or injury.

Throughout this manual you will find the signal words DANGER, WARNING, and CAUTION followed by special instructions. These precautions are intended for the personal safety of you and those working with you.

Read and understand all the safety messages in this manual before you operate or service the machine.

 DANGER indicates a hazardous situation that, if not avoided, will result in death or serious injury.

 WARNING indicates a hazardous situation that, if not avoided, could result in death or serious injury.

 CAUTION indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

FAILURE TO FOLLOW DANGER, WARNING, AND CAUTION MESSAGES COULD RESULT IN DEATH OR SERIOUS INJURY.

Machine safety

NOTICE: Notice indicates a situation that, if not avoided, could result in machine or property damage.

Throughout this manual you will find the signal word Notice followed by special instructions to prevent machine or property damage. The word Notice is used to address practices not related to personal safety.

Information

NOTE: Note indicates additional information that clarifies steps, procedures, or other information in this manual.

Throughout this manual you will find the word Note followed by additional information about a step, procedure, or other information in the manual. The word Note is not intended to address personal safety or property damage.



SERVICE MANUAL

Engine

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Engine - Remove

⚠ WARNING

Avoid injury!

Handle all parts carefully. Do not place your hands or fingers between parts. Use Personal Protective Equipment (PPE) as indicated in this manual, including protective goggles, gloves, and safety footwear.

Failure to comply could result in death or serious injury.

W0208A

⚠ WARNING

Heavy objects!

Lift and handle all heavy components using lifting equipment with adequate capacity. Always support units or parts with suitable slings or hooks. Make sure the work area is clear of all bystanders.

Failure to comply could result in death or serious injury.

W0398A

Prior operation:

Air conditioning - Recover (50.200)

Prior operation:

Battery - Disconnect (55.302)

Prior operation:

Engine cooling system - Drain fluid (10.400)

Prior operation:

Hood - Remove (90.100)

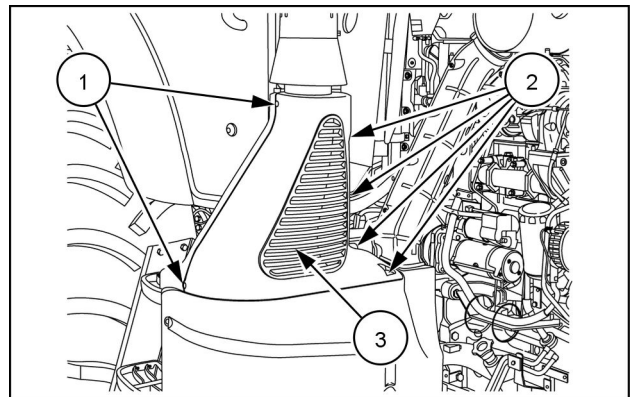
Prior operation:

Axle support - Remove (Front support and front axle) – Standard-duty (25.100)

Prior operation:

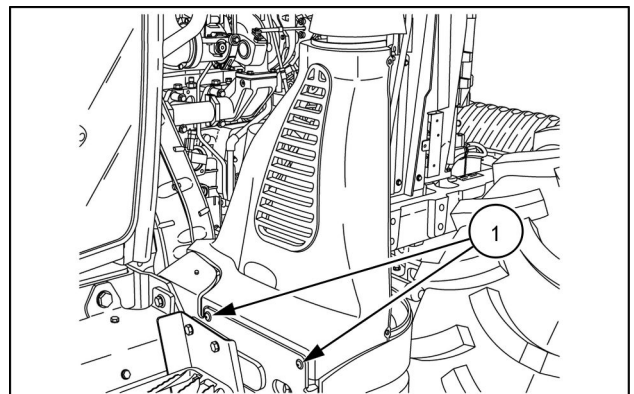
Engine - Disconnect (10.001)

1. Install wheel chocks in front of and behind the rear wheels.
2. Remove the Selective Catalytic Reduction (SCR) muffler and catalyst upper front cover retaining bolts (1) and (2).
3. Remove the SCR muffler and catalyst upper front cover (3).



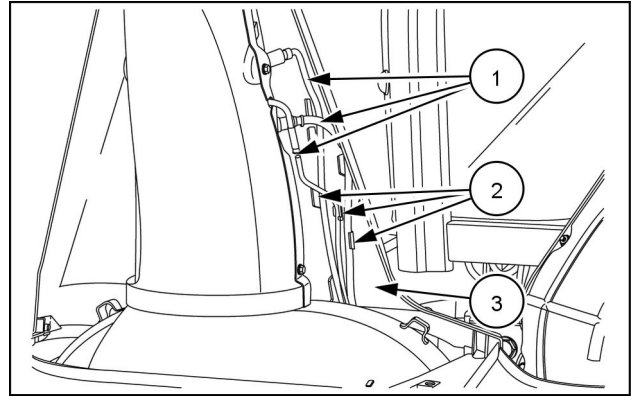
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4. Remove the SCR muffler and catalyst upper rear cover retaining bolts (1).



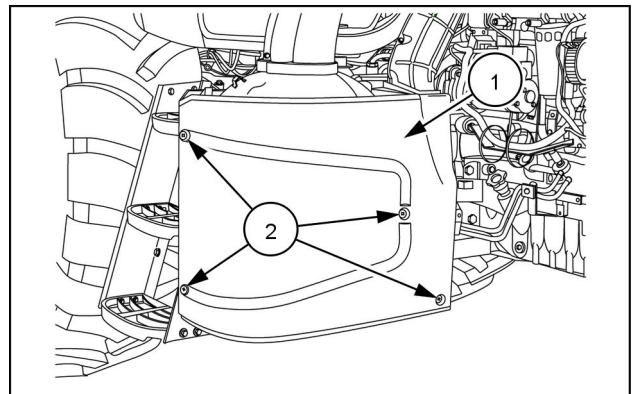
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5. Detach the SCR muffler and catalyst emissions sensors wiring harness (1) from the cover clips (2).
6. Remove the SCR muffler and catalyst upper rear cover (3).



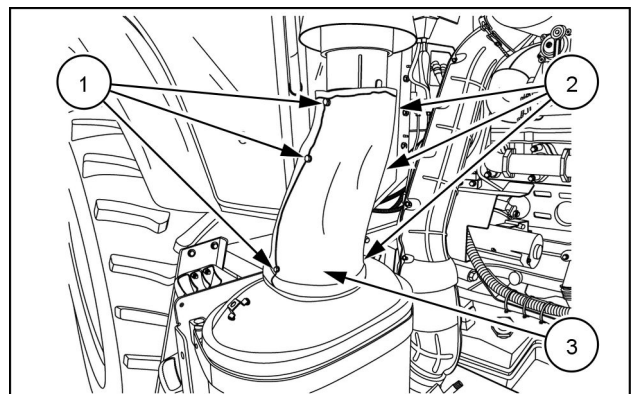
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7. Remove the SCR muffler and catalyst lower cover retaining bolts (2).
8. Remove the SCR muffler and catalyst lower cover (1).



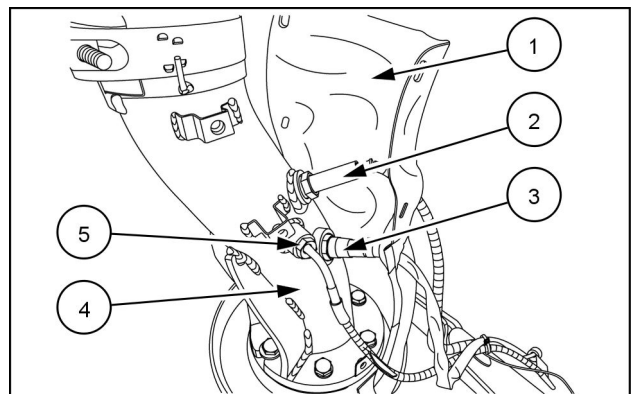
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9. Remove the six SCR muffler and catalyst heat shield retaining bolts (1) and (2).
10. Remove the SCR muffler and catalyst lower heat shield (3).



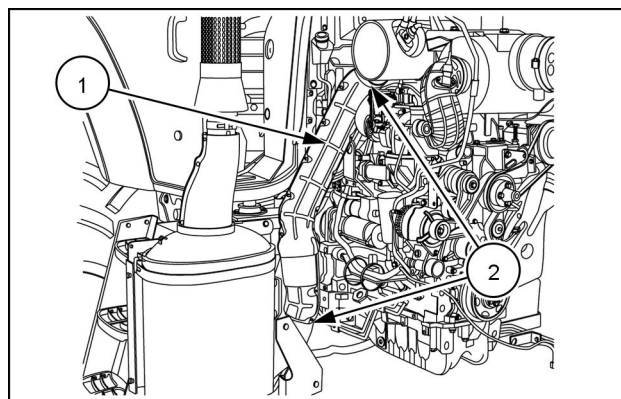
NHIL15TR00089AA 5

11. Move backward the SCR muffler and catalyst upper heat shield (1).
12. Remove the SCR muffler and catalyst emissions sensors from the SCR muffler and catalyst (4), as follows:
 - Remove the downstream Nitrogen oxide (NOx) sensor (2).
 - Remove the Ammonia (NH3) sensor (3).
 - Remove the SCR muffler and catalyst downstream temperature sensor (5).
13. Remove the SCR muffler and catalyst upper heat shield.



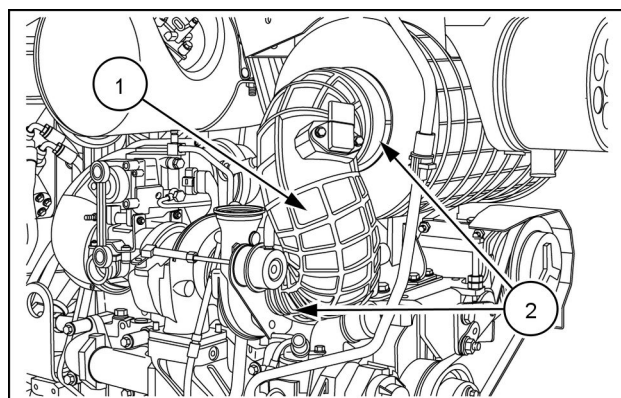
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14. Remove the clamps **(2)** that secure the SCR muffler and catalyst exhaust outlet pipe **(1)**.
15. Remove the SCR muffler and catalyst exhaust outlet pipe.



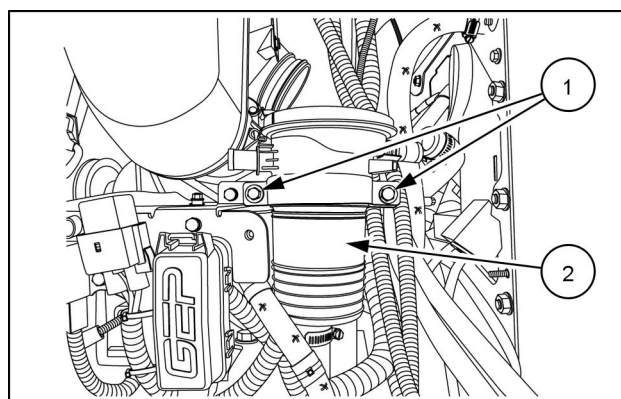
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16. Remove the two clamps **(2)** that secure the air cleaner to turbo air duct **(1)**.
17. Remove the air duct.



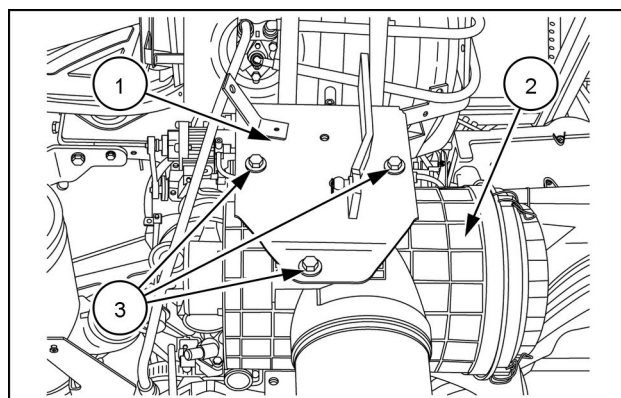
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18. Remove the two bolts **(1)** from the Crank Case Ventilation (CCV) filter **(2)**.
19. Remove the CCV filter.



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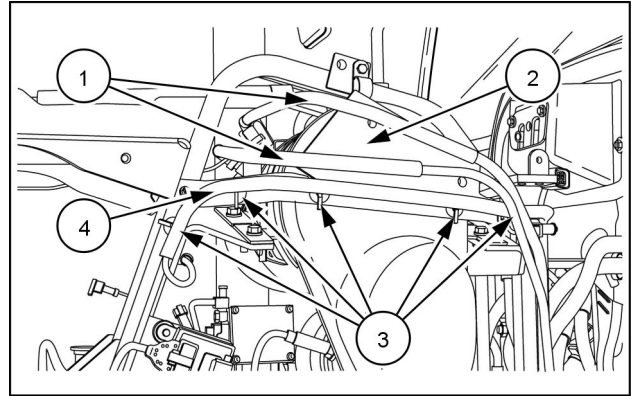
20. Remove the three air cleaner retaining bolts **(3)**.
21. Remove the air cleaner **(2)** from the hood support **(1)**.



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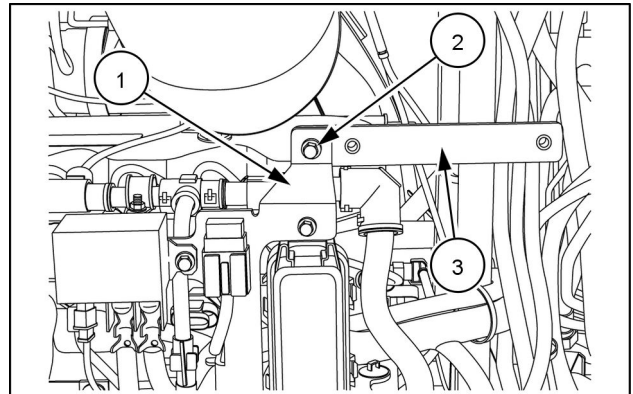
22. Remove the wiring harness (4) and the **DIESEL EXHAUST FLUID (DEF)/AdBLUE®** and coolant lines (1) from the hood support (2).

NOTE: Some cable ties (3) need to be removed before removing the wiring harness and the **DEF/AdBLUE®** and coolant lines.



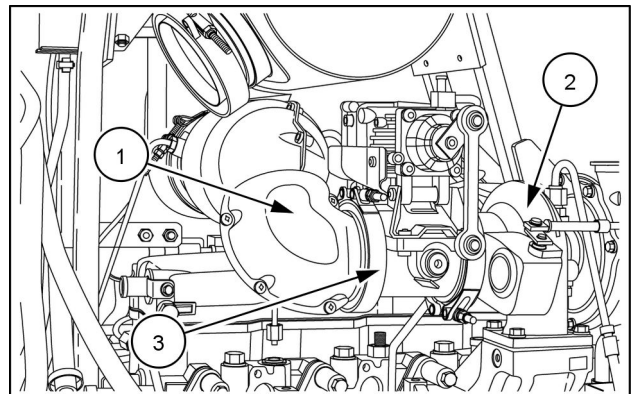
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23. Remove the fuse holder support retaining bolt (2).
24. Remove the fuse holder support (1) from the hood support (3).



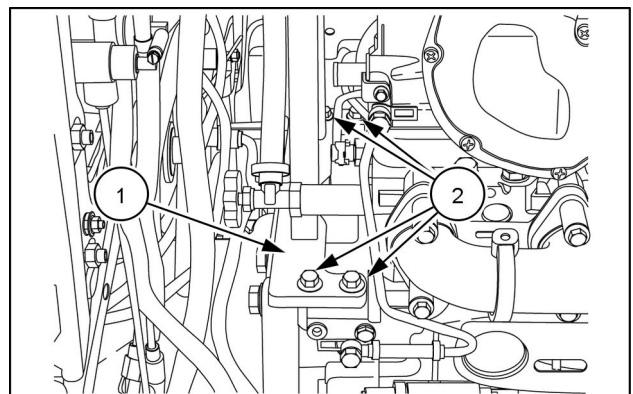
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25. Remove the clamp (3) from the exhaust pipe (1).
26. Disconnect the exhaust pipe from the exhaust flap (2).



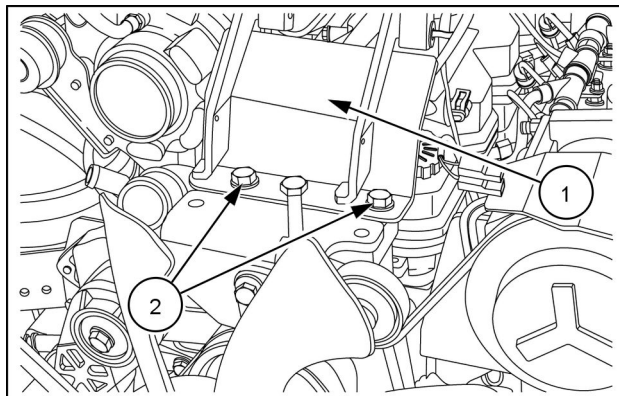
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27. Remove the four retaining bolts (2) from the rear part of the hood support (1).



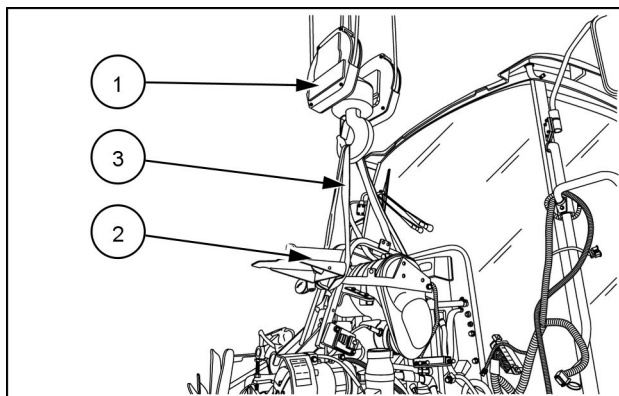
NHIL15TR00047AA 14

28. Remove the two retaining bolts **(2)** from the front part of the hood support **(1)**.



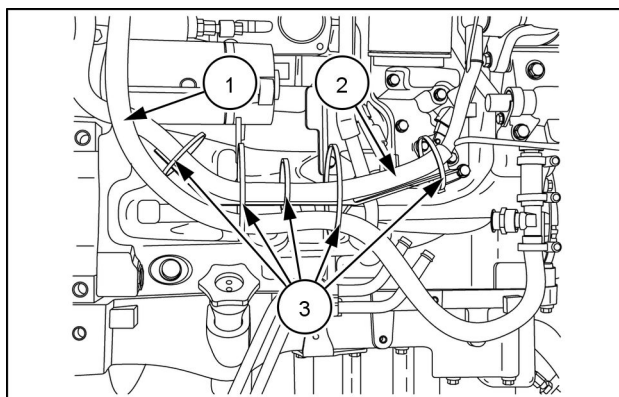
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29. Use a suitable lifting device **(1)** and a suitable sling **(3)** to remove the hood support with the Diesel Oxidation Catalyst (DOC) assembly **(2)**.



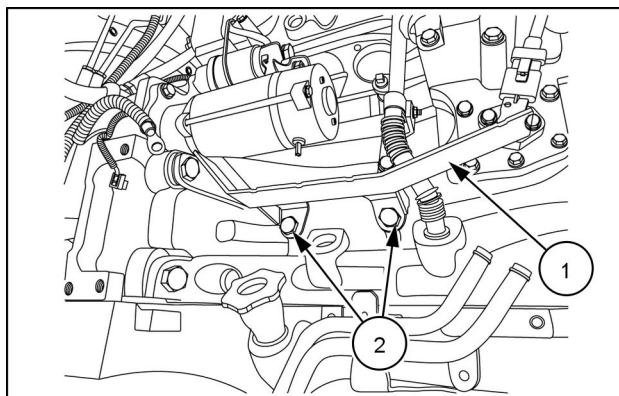
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30. Cut the cable ties **(3)** that secure the wiring harness **(2)** and the heating return hose **(1)**.
31. Remove the wire harness and the hose from the support.



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32. Remove the two bolts **(2)** from the support **(1)**.
33. Remove the support from the engine.



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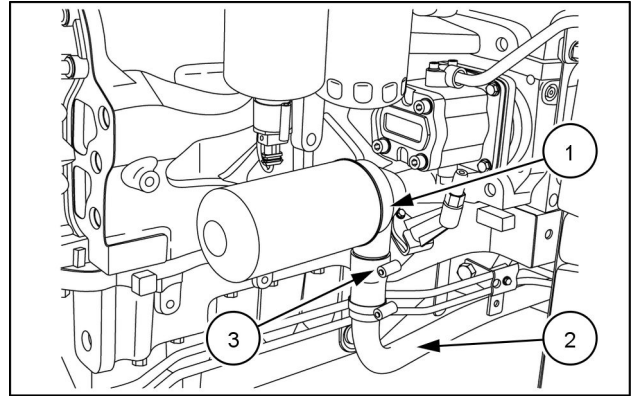


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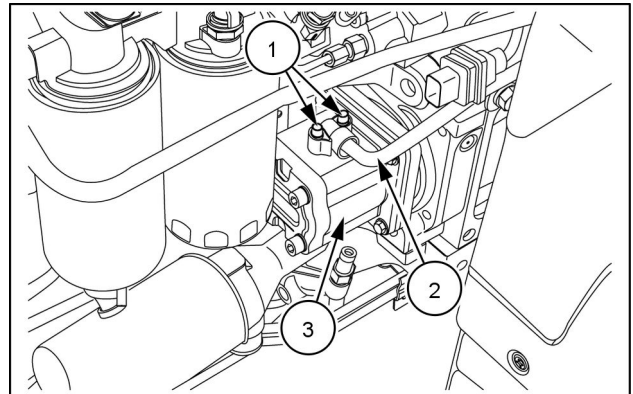
Thank you so much for reading.

34. Remove the clamp **(3)** that secures the hydraulic tube **(2)** to the auxiliary pump **(1)**.
35. Remove the hydraulic tube.



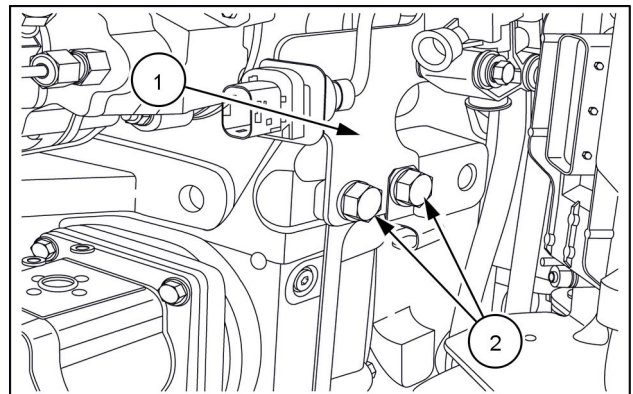
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36. Remove the two hydraulic tube retaining bolts **(1)**.
37. Remove the hydraulic tube **(2)** from the auxiliary pump **(3)**.



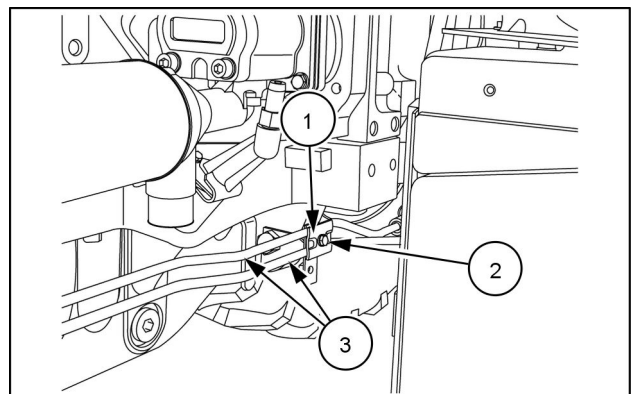
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38. Remove the two coolant control valve support retaining bolts **(2)**.
39. Remove the support **(1)** with the coolant control valve assembly.



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40. Remove the bolt **(2)** from the clamp **(1)** that secure the steering pump pipes **(3)**.



NHIL15TR00053AA 22