

SERVICE MANUAL

T7.290 AutoCommand™

T7.315 AutoCommand™

TIER 4B (FINAL)

Tractor

PIN ZFEA01001 and above

Part number 48193174

English

November 2017





SERVICE MANUAL

T7.290 AutoCommand™ Sidewinder II [ZFEA01001 - ZGEA02931], T7.290 AutoCommand™ Sidewinder II [ZGEA02932 - ZGEA04528], T7.290 AutoCommand™ Sidewinder II [ZGEA04529 -], T7.315 AutoCommand™ Sidewinder II [ZFEA01001 - ZGEA02931], T7.315 AutoCommand™ Sidewinder II [ZGEA02932 - ZGEA04528], T7.315 AutoCommand™ Sidewinder II [ZGEA04529 -]

Link Product / Engine

Product	Market Product	Engine
T7.290 AutoCommand™ Sidewinder II [ZFEA01001 - ZGEA02931]	North America	F4DFE617M*B001
T7.290 AutoCommand™ Sidewinder II [ZGEA02932 - ZGEA04528]	North America	F4DFE617M*B001
T7.290 AutoCommand™ Sidewinder II [ZGEA04529 -]	North America	F4DFE617M*B001
T7.315 AutoCommand™ Sidewinder II [ZFEA01001 - ZGEA02931]	North America	F4DFE617L*B002
T7.315 AutoCommand™ Sidewinder II [ZGEA02932 - ZGEA04528]	North America	F4DFE617L*B002
T7.315 AutoCommand™ Sidewinder II [ZGEA04529 -]	North America	F4DFE617L*B002

Contents

INTRODUCTION

Engine.....	10
[10.001] Engine and crankcase	10.1
[10.216] Fuel tanks	10.2
[10.202] Air cleaners and lines	10.3
[10.254] Intake and exhaust manifolds and muffler	10.4
[10.500] Selective Catalytic Reduction (SCR) exhaust treatment.....	10.5
[10.400] Engine cooling system	10.6
[10.414] Fan and drive	10.7
[10.310] Aftercooler.....	10.8
Clutch	18
[18.112] Slip clutch or flywheel damper	18.1
Transmission.....	21
[21.504] Continuously Variable Transmission (CVT)	21.1
[21.505] Continuously Variable Transmission (CVT) external controls.....	21.2
[21.506] Continuously Variable Transmission (CVT) hydraulic components	21.3
[21.507] Continuously Variable Transmission (CVT) internal components.....	21.4
Four-Wheel Drive (4WD) system	23
[23.202] Electro-hydraulic control	23.1
[23.314] Drive shaft.....	23.2
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
[25.122] Axle suspension control.....	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
[31.104] Rear electro-hydraulic control.....	31.1
[31.119] Four-speed rear Power Take-Off (PTO).....	31.2
[31.142] Front Power Take-Off (PTO) control	31.3
[31.146] Front Power Take-Off (PTO)	31.4
Brakes and controls	33
[33.202] Hydraulic service brakes	33.1
[33.110] Parking brake or parking lock	33.2
[33.240] Emergency brake	33.3
[33.220] Trailer brake hydraulic control.....	33.4
[33.224] Trailer brake pneumatic control	33.5
[33.204] Front axle brake	33.6
[33.200] Brake cooling.....	33.7
[33.350] Anti-lock Brake System (ABS)	33.8
Hydraulic systems.....	35
[35.000] Hydraulic systems.....	35.1
[35.300] Reservoir, cooler, and filters.....	35.2
[35.106] Variable displacement pump	35.3
[35.230] Priority valves	35.4
[35.204] Remote control valves	35.5
[35.220] Auxiliary hydraulic pump	35.6
[35.114] Three-point hitch control valve	35.7
[35.116] Three-point hitch cylinder	35.8
[35.124] Three-point hitch hydraulic adjustment	35.9
[35.160] Front hitch controls and lines	35.10

[35.162] Front hitch cylinders and lines	35.11
Hitches, drawbars, and implement couplings.....	37
[37.100] Drawbars and towing hitches	37.1
[37.106] Automatic pickup hitch	37.2
[37.162] Front hitch	37.3
Frames and ballasting	39
[39.100] Frame	39.1
[39.140] Ballasts and supports	39.2
Steering.....	41
[41.101] Steering control	41.1
[41.106] Tie rods.....	41.2
[41.200] Hydraulic control components.....	41.3
[41.216] Cylinders	41.4
[41.432] Autoguidance steering	41.5
Wheels	44
[44.511] Front wheels.....	44.1
[44.520] Rear wheels	44.2
Cab climate control	50
[50.100] Heating	50.1
[50.104] Ventilation	50.2
[50.200] Air conditioning.....	50.3
Electrical systems	55
[55.045] Front axle control system	55.1
[55.000] Electrical system	55.2
[55.100] Harnesses and connectors.....	55.3
[55.015] Engine control system.....	55.4
[55.301] Alternator.....	55.5

[55.302] Battery.....	55.6
[55.988] Selective Catalytic Reduction (SCR) electrical system	55.7
[55.640] Electronic modules	55.8
[55.513] Cab transmission controls.....	55.9
[55.024] Transmission control system	55.10
[55.020] Transmission speed sensors.....	55.11
[55.021] Transmission pressure sensors	55.12
[55.022] Transmission temperature sensors	55.13
[55.023] Transmission position sensors and switches	55.14
[55.048] Rear Power Take-Off (PTO) control system	55.15
[55.049] Front Power Take-Off (PTO) control system	55.16
[55.519] Cab brake controls	55.17
[55.031] Parking brake electrical system	55.18
[55.512] Cab controls.....	55.19
[55.035] Remote control valve electric control	55.20
[55.051] Cab Heating, Ventilation, and Air-Conditioning (HVAC) controls.....	55.21
[55.050] Heating, Ventilation, and Air-Conditioning (HVAC) control system.....	55.22
[55.047] Steering control system	55.23
[55.130] Rear three-point hitch electronic control system	55.24
[55.160] Front hitch electronic control system.....	55.25
[55.911] Satellite navigation systems.....	55.26
[55.404] External lighting	55.27
[55.510] Cab or platform harnesses and connectors.....	55.28
[55.408] Warning indicators, alarms, and instruments	55.29
[55.550] Tire Pressure Monitoring System (TPMS)	55.30
[55.350] Anti-lock Brake System (ABS) electrical system.....	55.31
[55.DTC] FAULT CODES.....	55.32
Platform, cab, bodywork, and decals	90
[90.150] Cab.....	90.1

[90.156] Cab windshield and windows	90.2
[90.100] Engine hood and panels	90.3



INTRODUCTION

Foreword - How to use and navigate through this manual

This manual has been produced by a new technical information system. This new system is designed to deliver technical information electronically through web delivery (eTIM), DVD, and paper manuals. A coding system called SAP has been developed to link the technical information to other Product Support functions, e.g., Warranty.

Technical information is written to support the maintenance and service of the functions or systems on a customer's machine. When a customer has a concern on their machine it is usually because a function or system on their machine is not working at all, is not working efficiently, or is not responding correctly to their commands. When you refer to the technical information in this manual to resolve that customer's concern, you will find all the information classified using the SAP coding, according to the functions or systems on that machine. Once you have located the technical information for that function or system, you will then find all the mechanical, electrical or hydraulic devices, components, assemblies, and sub assemblies for that function or system. You will also find all the types of information that have been written for that function or system: the technical data (specifications), the functional data (how it works), the diagnostic data (fault codes and troubleshooting), and the service data (remove, install adjust, etc.).

By integrating SAP coding into technical information, you will be able to search and retrieve just the right piece of technical information you need to resolve that customer's concern on his machine. This is made possible by attaching 3 categories to each piece of technical information during the authoring process.

The first category is the Location, the second category is the Information Type and the third category is the Product:

- LOCATION - the component or function on the machine, that the piece of technical information is going to describe (e.g., Fuel tank).
- INFORMATION TYPE - the piece of technical information that has been written for a particular component or function on the machine (e.g., Capacity would be a type of Technical Data describing the amount of fuel held by the fuel tank).
- PRODUCT - the model for which the piece of technical information is written.

Every piece of technical information will have those three categories attached to it. You will be able to use any combination of those categories to find the right piece of technical information you need to resolve that customer's concern on their machine.

That information could be:

- the procedure for how to remove the cylinder head
- a table of specifications for a hydraulic pump
- a fault code
- a troubleshooting table
- a special tool



SERVICE MANUAL

Engine

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Engine - Remove

Prior operation:

Separate the front axle and front frame from the engine, see **Front frame - Remove (39.100)**.

Prior operation:

Remove the left-hand fuel tank, see **Fuel tank - Remove (10.216)**.

Prior operation:

Remove the selective catalytic reduction (SRC) muffler, see **Selective Catalytic Reduction (SCR) muffler and catalyst - Remove (10.500)**.

Prior operation:

Remove the engine hood, see **Hood - Remove (90.100)**.

⚠ 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

⚠ WARNING

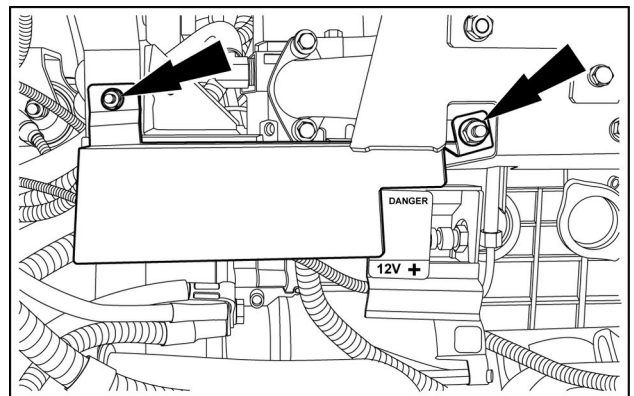
Avoid injury!

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.

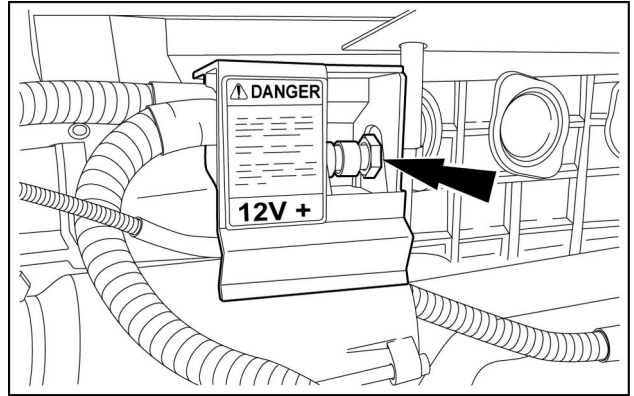
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1. Remove the starter motor shield.



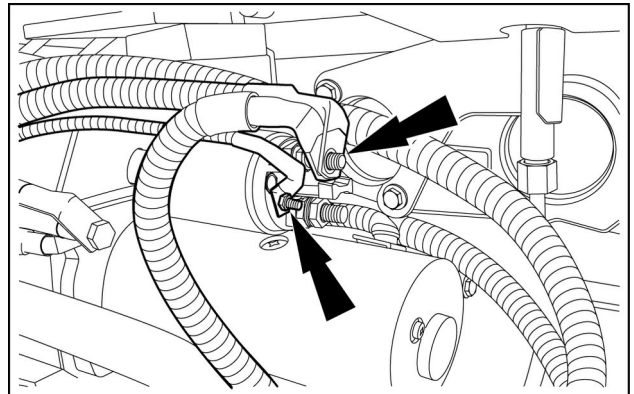
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2. Remove the positive cable cover.



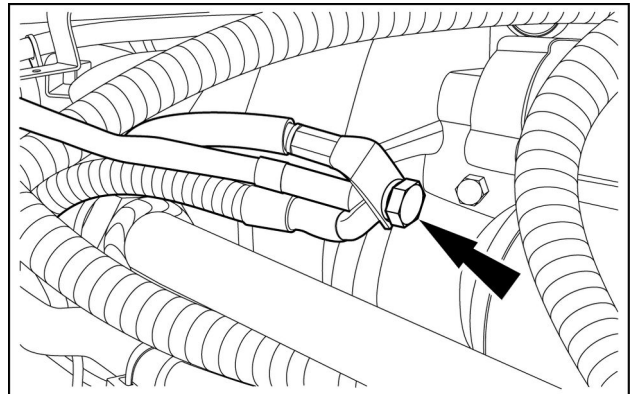
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3. Disconnect the positive connectors.



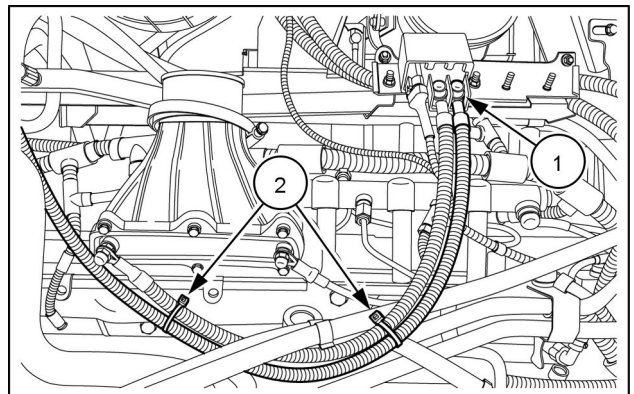
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4. Disconnect the ground connectors.



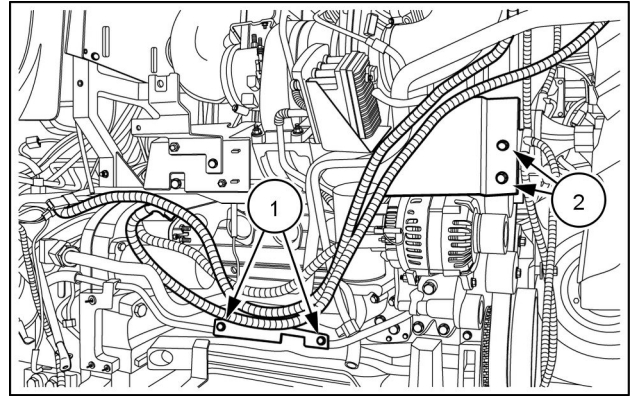
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5. • Disconnect the grid heater relay electrical connector (1).
• Cut the cable ties (2).



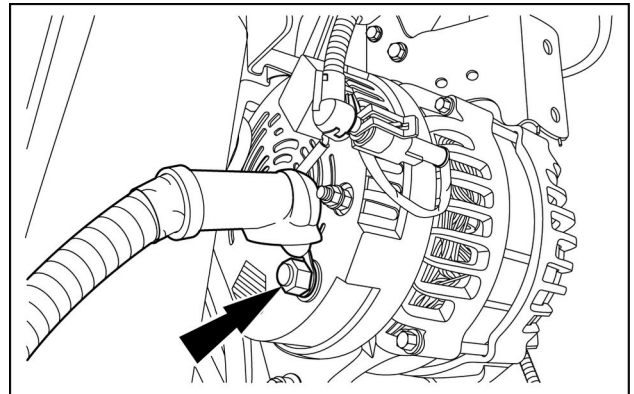
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6. • Detach the wiring harness retaining bracket (1).
• Detach the fuse box (2).



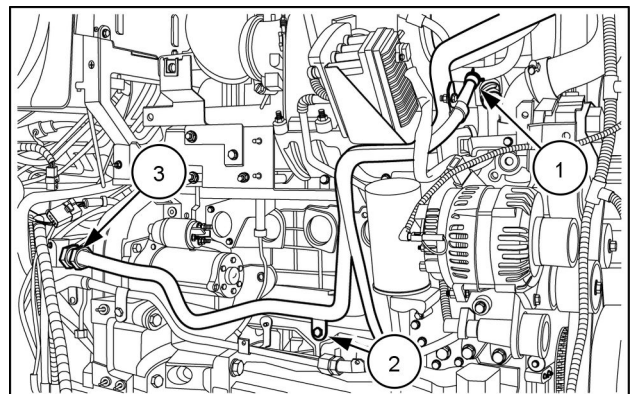
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7. Disconnect the alternator positive cable.



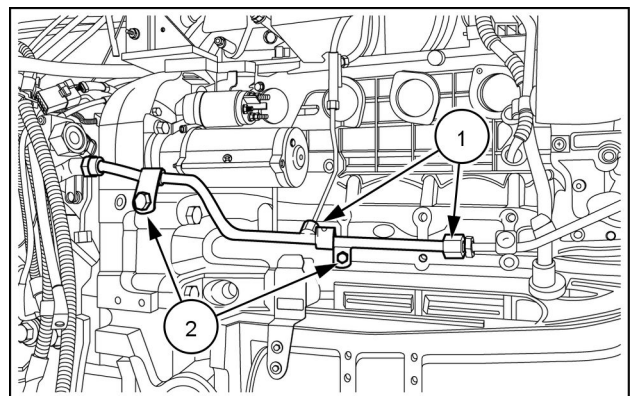
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8. • Disconnect the compressor coolant hose (1).
• Detach the oil cooler pipe retaining bracket (2).
• Disconnect the oil cooler pipe (3).



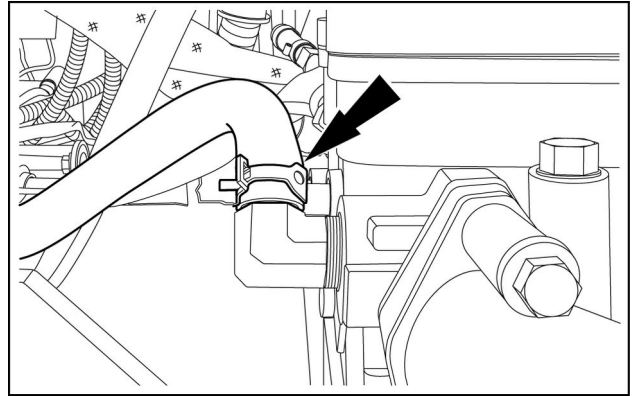
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9. 1. Disconnect the coolant pipe connectors (1).
2. Detach the coolant pipe retaining brackets (2).



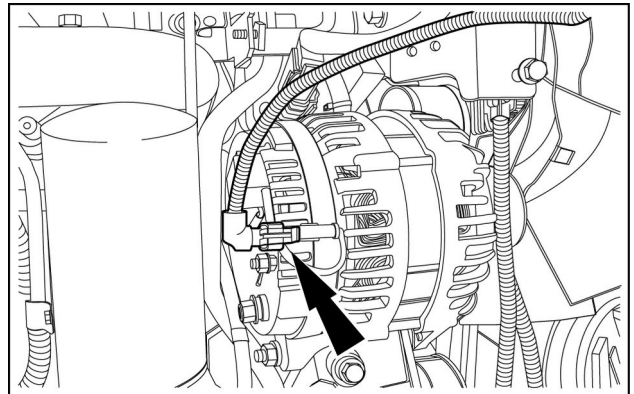
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10. Disconnect the coolant hose from the rear of the cylinder head.



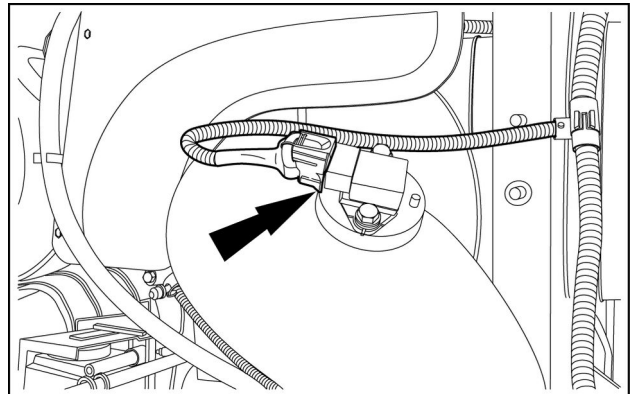
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11. Disconnect the alternator electrical connector.



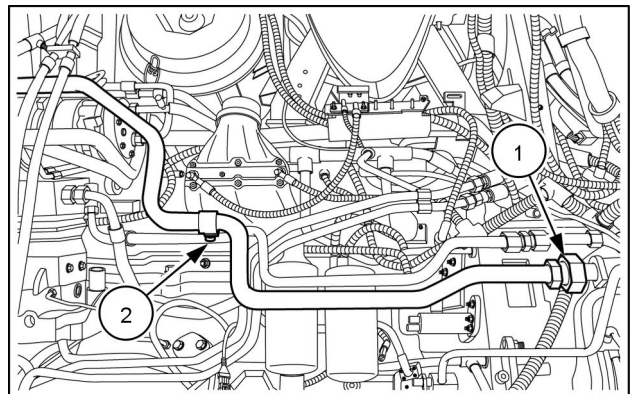
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12. Disconnect the air intake sensor electrical connector.



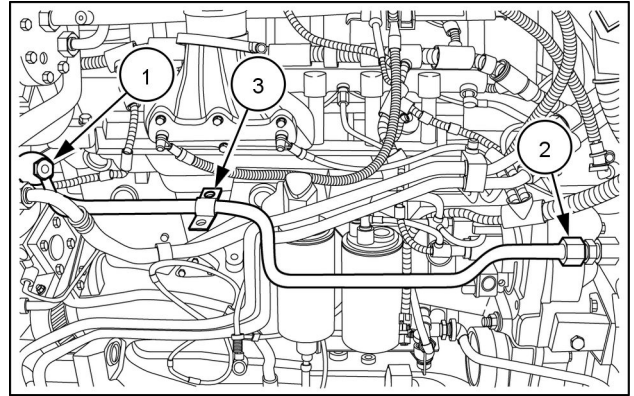
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13. Remove the left-hand oil cooler pipe:
A. Disconnect the hydraulic pipe (1).
B. Detach the hydraulic pipe retaining bracket (2).



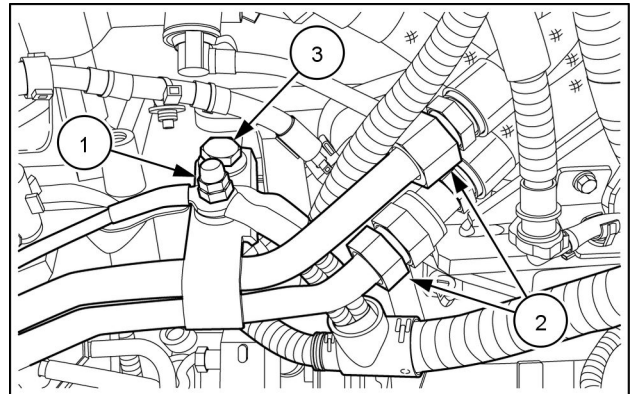
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14. Remove the air compressor outlet pipe:
- Disconnect the air compressor banjo connector **(1)**.
 - Disconnect the in-line connector **(2)**.
 - Detach the pipe retaining bracket **(3)**.



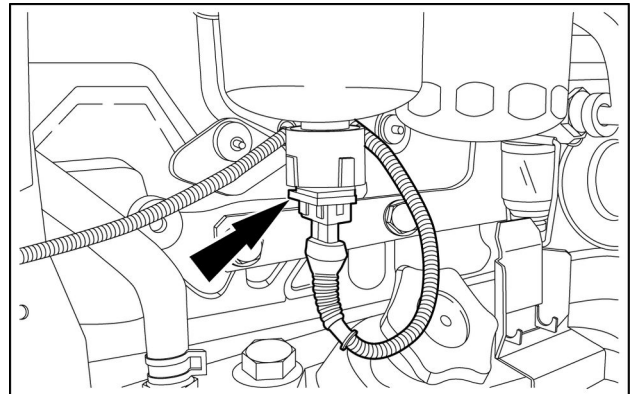
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15. 1. Disconnect the ground connections **(1)**.
2. Disconnect the steering motor hoses **(2)**.
3. Detach the steering pipe retaining bracket **(3)**.



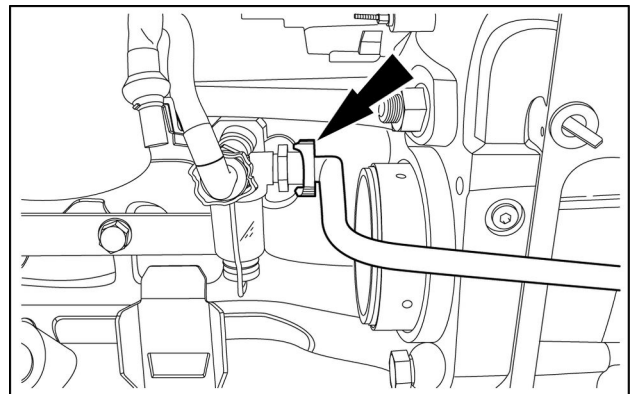
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16. Disconnect the water in fuel sensor electrical connector.



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17. Disconnect the fuel line from the water trap.



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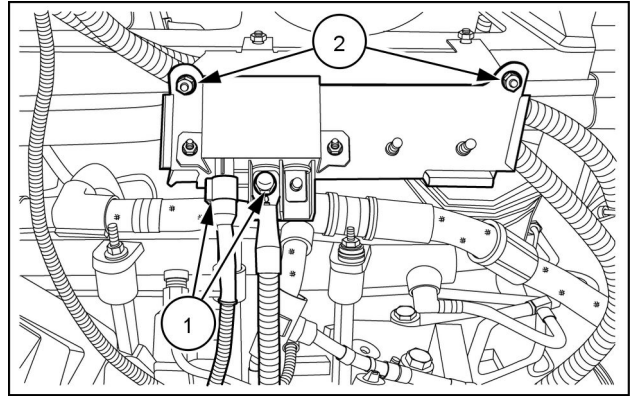


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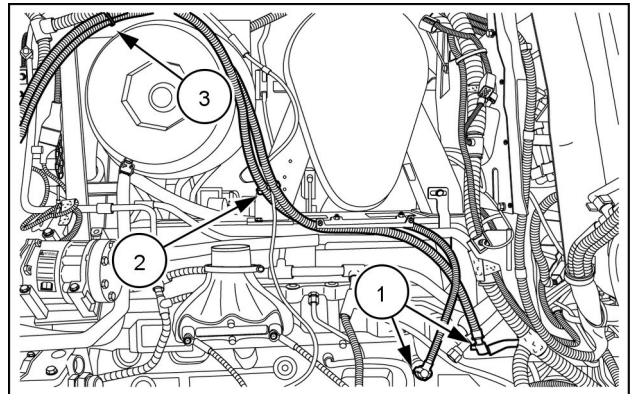
Thank you so much for reading.

18. 1. Disconnect the grid heater relay electrical connectors **(1)**.
2. Detach the grid heater relay bracket **(2)**.



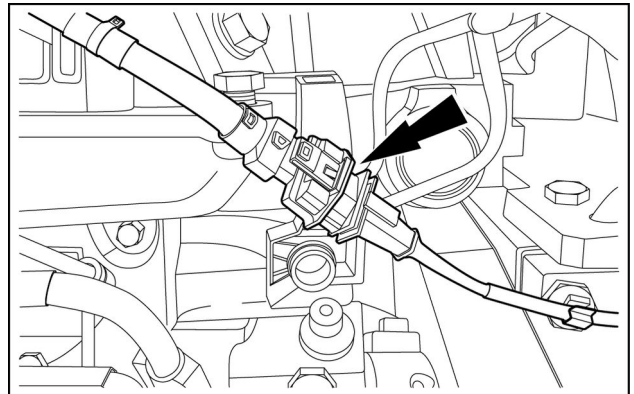
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19. Remove the fuel lines:
- Disconnect the in-line connectors **(1)**.
 - Detach the fuel lines from the clips **(2)**.
 - Cut the cable tie **(3)**.



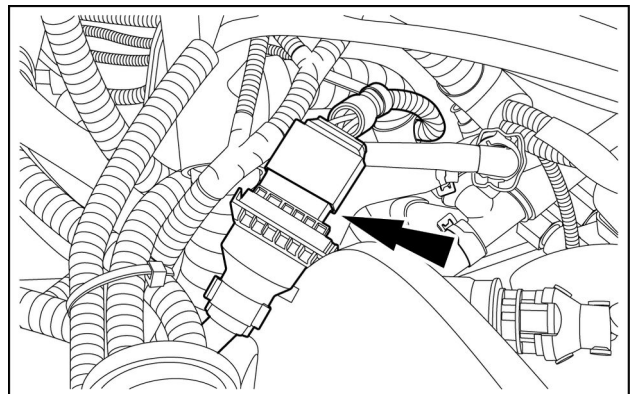
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20. Disconnect the flywheel speed sensor electrical connector.



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21. Disconnect the engine wiring harness in-line electrical connector.



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