

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

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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

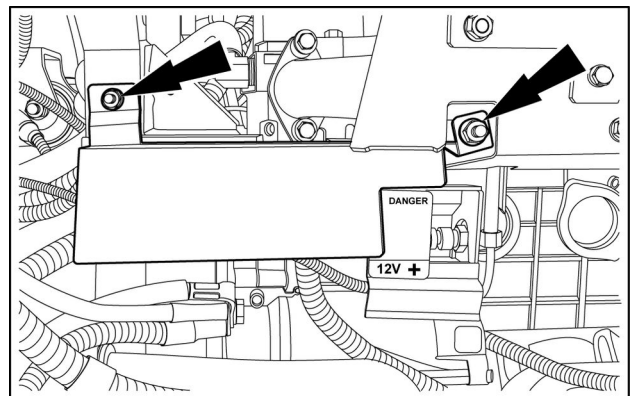
Avoid injury!

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.

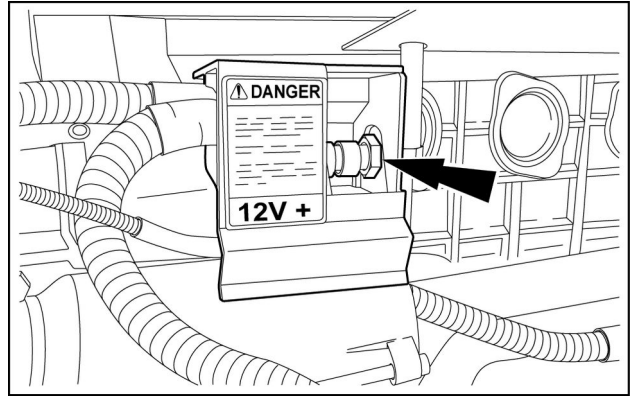
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1. Remove the starter motor shield.



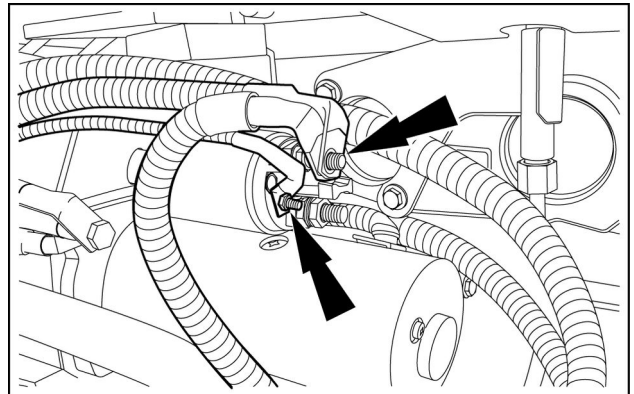
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2. Remove the positive cable cover.



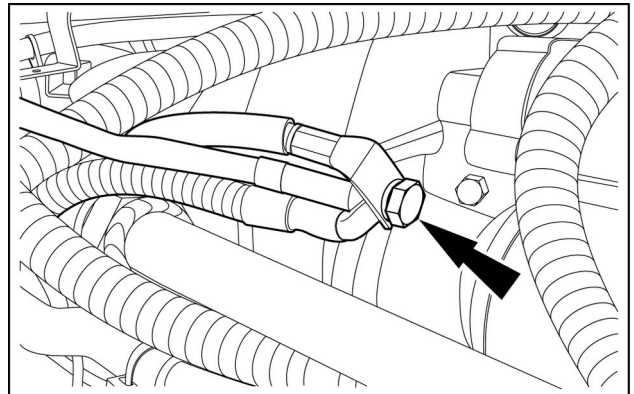
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3. Disconnect the positive connectors.



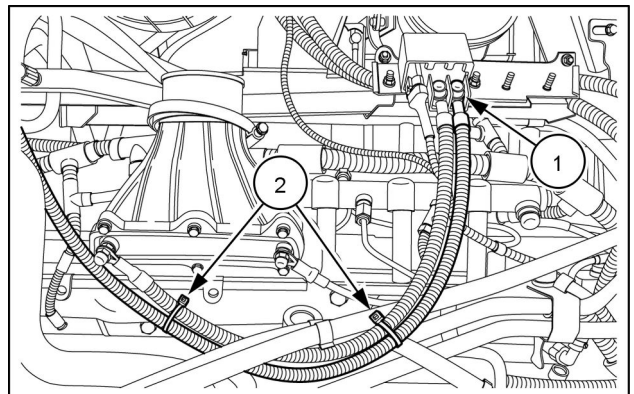
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4. Disconnect the ground connectors.



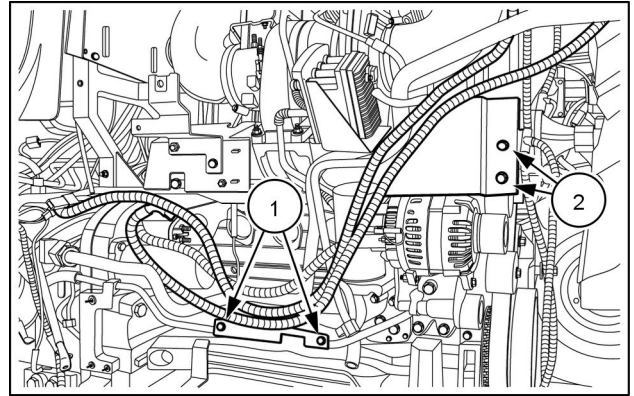
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5.
 - Disconnect the grid heater relay electrical connector (1).
 - Cut the cable ties (2).



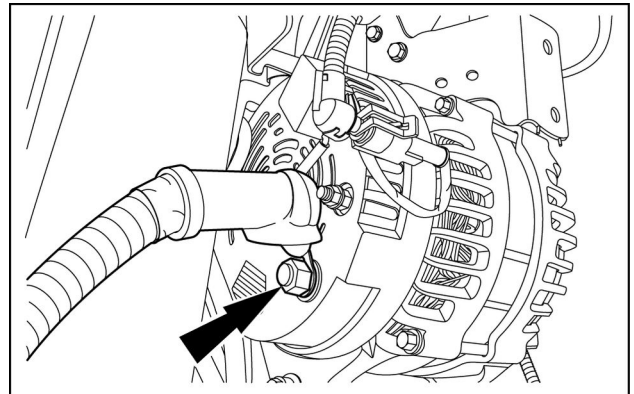
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6. • Detach the wiring harness retaining bracket (1).
- Detach the fuse box (2).



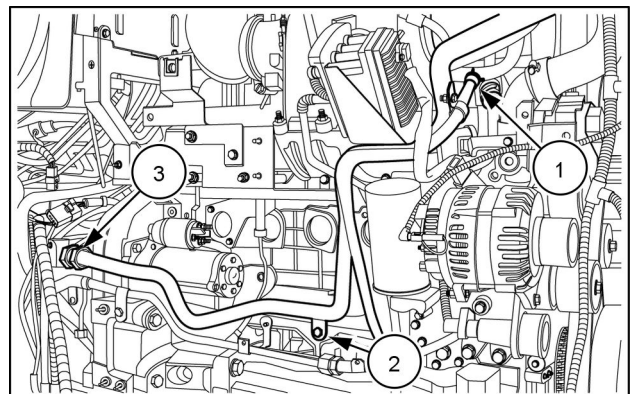
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7. Disconnect the alternator positive cable.



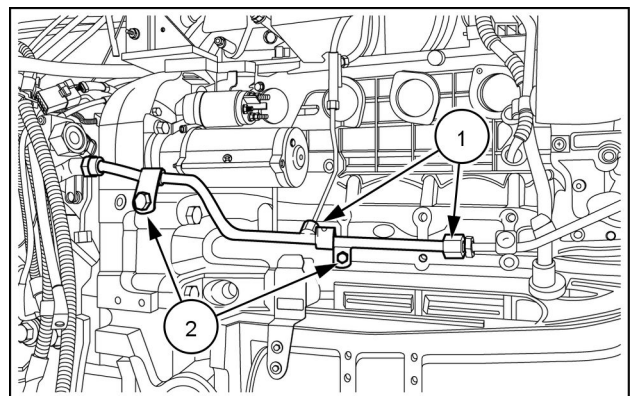
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8. • Disconnect the compressor coolant hose (1).
- Detach the oil cooler pipe retaining bracket (2).
- Disconnect the oil cooler pipe (3).



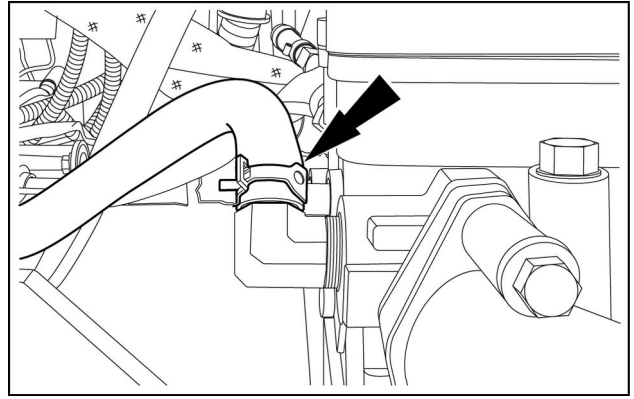
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9. 1. Disconnect the coolant pipe connectors (1).
2. Detach the coolant pipe retaining brackets (2).



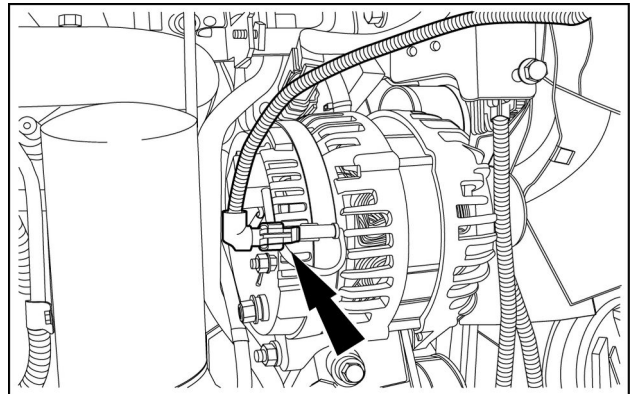
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10. Disconnect the coolant hose from the rear of the cylinder head.



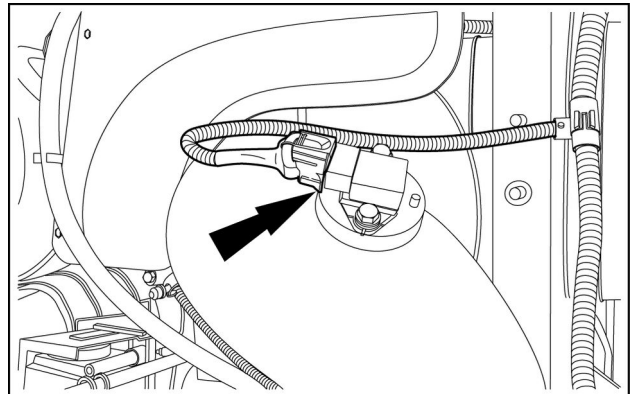
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11. Disconnect the alternator electrical connector.



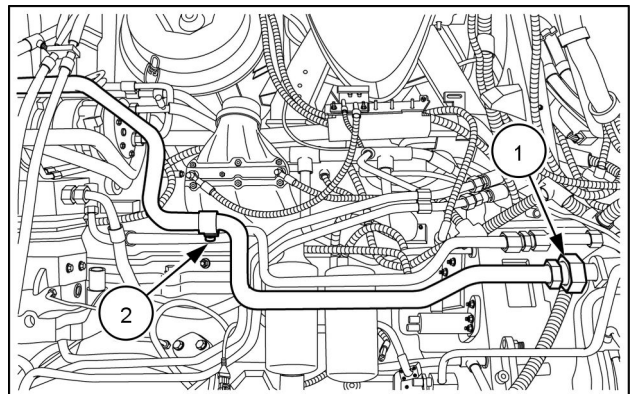
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12. Disconnect the air intake sensor electrical connector.



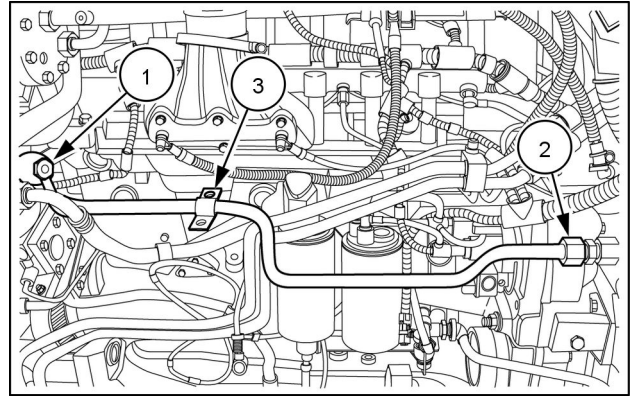
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13. Remove the left-hand oil cooler pipe:
A. Disconnect the hydraulic pipe (1).
B. Detach the hydraulic pipe retaining bracket (2).



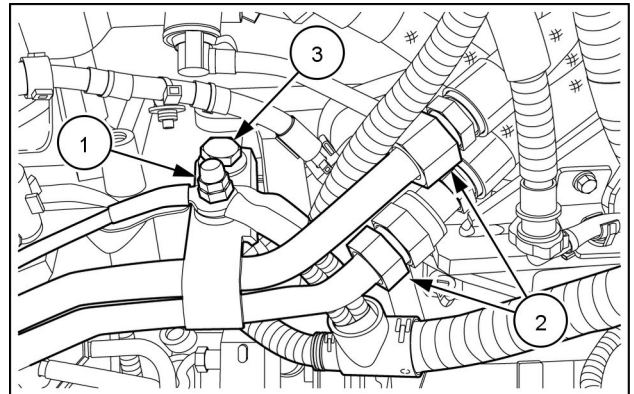
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14. Remove the air compressor outlet pipe:
- A. Disconnect the air compressor banjo connector **(1)**.
 - B. Disconnect the in-line connector **(2)**.
 - C. Detach the pipe retaining bracket **(3)**.



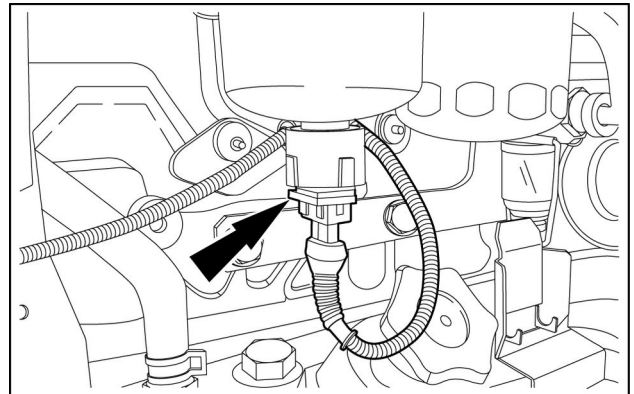
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15. 1. Disconnect the ground connections **(1)**.
2. Disconnect the steering motor hoses **(2)**.
3. Detach the steering pipe retaining bracket **(3)**.



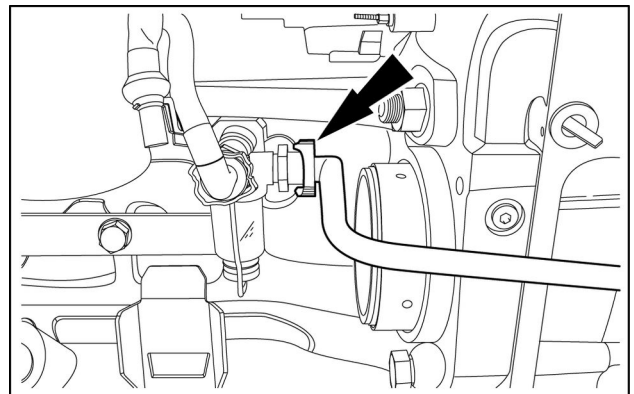
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16. Disconnect the water in fuel sensor electrical connector.



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17. Disconnect the fuel line from the water trap.



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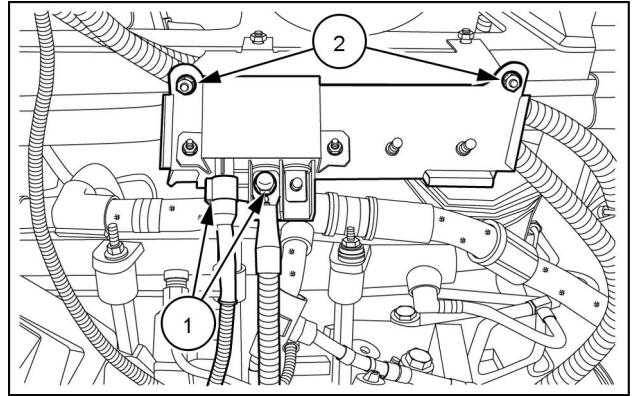
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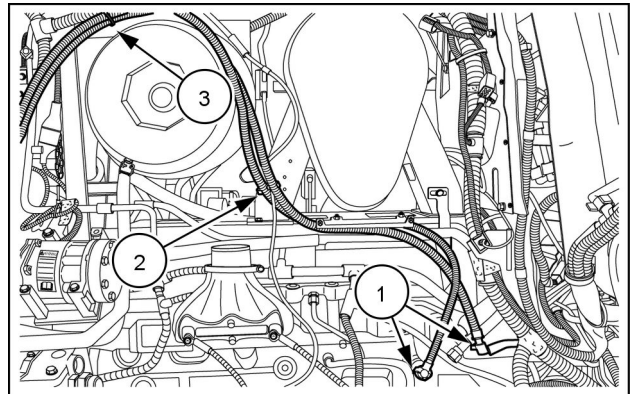
Thank you so much for reading

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



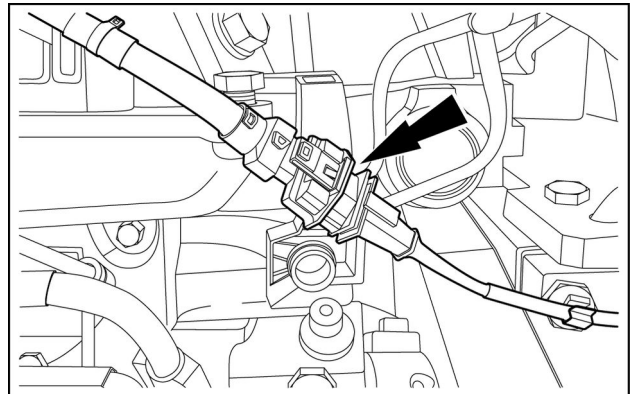
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19. Remove the fuel lines:
- Disconnect the in-line connectors **(1)**.
 - Detach the fuel lines from the clips **(2)**.
 - Cut the cable tie **(3)**.



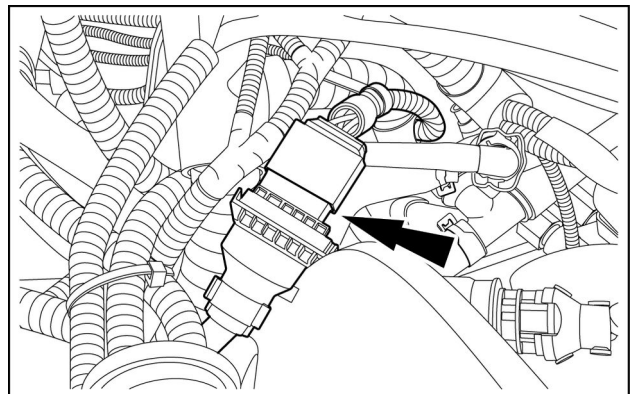
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20. Disconnect the flywheel speed sensor electrical connector.



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



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