

LUXSUM™ 100
LUXSUM™ 110
LUXSUM™ 120
Tractor - Stage IV
PIN ZGSK01001 and above

SERVICE MANUAL

Part number 51543529

English

February 2019

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Link Product / Engine

Product	Market Product	Engine
LUXXUM™ 100 Semi Powershift 32x32 [ZGSK01001 -]	Europe	F5GFL413C*B015
LUXXUM™ 110 Semi Powershift 32x32 [ZGSK01001 -]	Europe	F5GFL413B*B017
LUXXUM™ 120 Semi Powershift 32x32 [ZGSK01001 -]	Europe	F5GFL413A*B025

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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

Manual content

This manual is divided into Sections. Each Section is then divided into Chapters. Contents pages are included at the beginning of the manual, then inside every Section and inside every Chapter. An alphabetical Index is included at the end of each Chapter. Page number references are included for every piece of technical information listed in the Chapter Contents or Chapter Index.

Each Chapter is divided into four Information types:

- Technical Data (specifications) for all the mechanical, electrical or hydraulic devices, components, assemblies or sub-assemblies.
- Functional Data (how it works) for all the mechanical, electrical or hydraulic devices, components, assemblies or sub-assemblies.
- Diagnostic Data (fault codes, electrical and hydraulic troubleshooting) for all the mechanical, electrical or hydraulic devices, components, assemblies or sub-assemblies.
- Service Data (remove disassemble, assemble, install) for all the mechanical, electrical or hydraulic devices, components, assemblies or sub-assemblies.

Sections

Sections are grouped according to the main functions or a systems on the machine. Each Section is identified by a number (00, 35, 55, etc.). The Sections included in the manual will depend on the type and function of the machine that the manual is written for. Each Section has a Contents page listed in alphabetic/numeric order. This table illustrates which Sections could be included in a manual for a particular product.

SECTION	PRODUCT				
	Tractors				
	Vehicles with working arms: backhoes, excavators, skid steers,				
	Combines, forage harvesters, balers,				
	Seeding, planting, floating, spraying equipment,				
	Mounted equipment and tools,				
00 - Maintenance	X	X	X	X	X
05 - Machine completion and equipment	X	X	X	X	X
10 - Engine	X	X	X	X	
14 - Main gearbox and drive	X	X	X	X	
18 - Clutch	X	X	X		
21 - Transmission	X	X	X	X	
23 - Four wheel drive (4WD) system	X	X	X	X	
25 - Front axle system	X	X	X	X	
27 - Rear axle system	X	X	X	X	
29 - Hydrostatic drive	X	X	X	X	
31 - Power Take-Off (PTO)	X		X		
33 - Brakes and controls	X	X	X	X	
35 - Hydraulic systems	X	X	X	X	
36 - Pneumatic system	X	X	X	X	
37 - Hitches, drawbars and implement couplings	X		X	X	
39 - Frames and ballasting	X	X	X	X	X
41 - Steering	X	X	X	X	
44 - Wheels	X	X	X	X	
46 - Steering clutches					
48 - Tracks and track suspension	X	X	X		
50 - Cab climate control	X	X	X	X	
55 - Electrical systems	X	X	X	X	X
56 - Grape harvester shaking					
58 - Attachments/headers			X		
60 - Product feeding			X		

INTRODUCTION

61 - Metering system				X	
62 - Pressing - Bale formation			X		
63 - Chemical applicators				X	
64 - Chopping			X		
66 - Threshing			X		
68 - Tying/Wrapping/Twisting			X		
69 - Bale wagons					
70 - Ejection			X		
71 - Lubrication system	X	X	X	X	X
72 - Separation			X		
73 - Residue handling			X		
74 - Cleaning			X		
75 - Soil preparation/Finishing					
76 - Secondary cleaning / Destemmer					
77 - Seeding				X	
78 - Spraying				X	
79 - Planting				X	
80 - Crop storage / Unloading			X		
82 - Front loader and bucket	X	X			
83 - Telescopic single arm	X	X			
84 - Booms, dippers and buckets	X	X			
86 - Dozer blade and arm	X	X			
88 - Accessories	X	X	X	X	X
89 - Tools	X	X	X	X	X
90 - Platform, cab, bodywork and decals	X	X	X	X	



SERVICE MANUAL

Engine

LUXSUM™ 100 Semi Powershift 32x32 [ZGSK01001 -]
LUXSUM™ 110 Semi Powershift 32x32 [ZGSK01001 -]
LUXSUM™ 120 Semi Powershift 32x32 [ZGSK01001 -]

Fuel tank - Remove

⚠ WARNING

Fuel vapors are explosive and flammable.

Do not smoke while handling fuel. Keep fuel away from flames or sparks. Shut off engine and remove key before servicing. Always work in a well-ventilated area. Clean up spilled fuel immediately. Failure to comply could result in death or serious injury.

W0904A

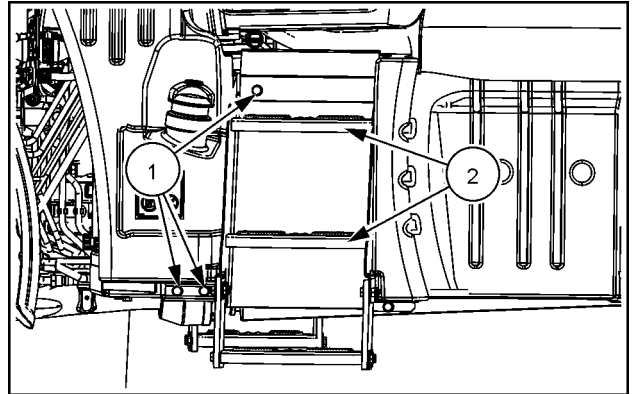
Prior operation:

Remove the battery. See **Battery - Remove (55.302)**.

Drain the engine coolant. See **Radiator - Drain fluid (10.400)**.

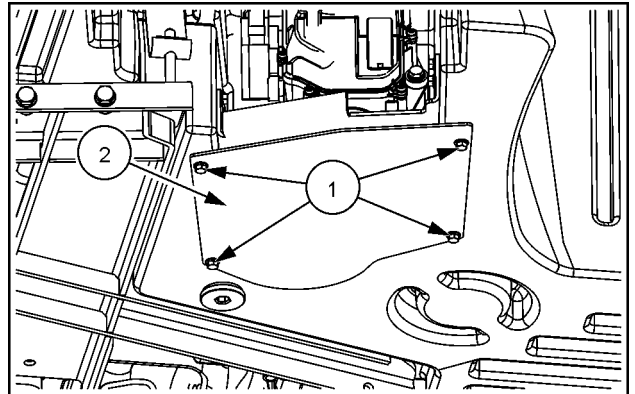
Remove the rear wheel at the left-hand side. See **Rear wheels - Remove (44.520)**.

1. Remove the bolts (1) from the steps at the left-hand side of the tractor.
2. Remove the steps (2).



SVIL15TR02376AA 1

3. Remove the bolts (1).
4. Remove the cover (2).



SVIL15TR02378AA 2

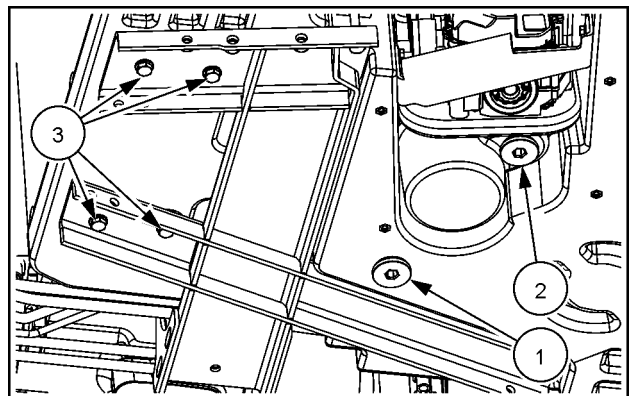
5. Remove the plug (1) and drain the fuel from the fuel tank.

NOTE: Place a container of suitable capacity below the fuel tank.

6. Remove the plug (2) and drain the DEF/AdBlue® if required.

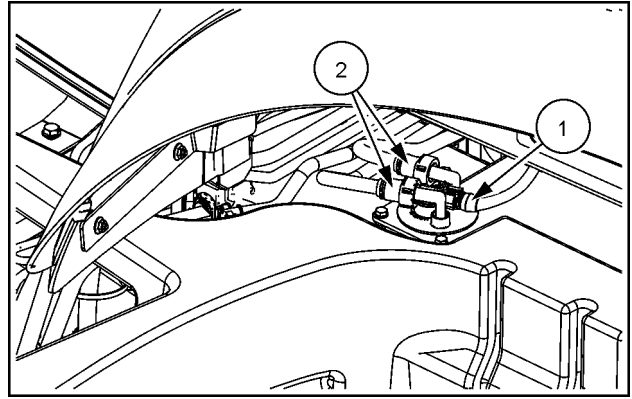
NOTE: Place a suitable container below the DEF/AdBlue® tank.

7. Reinstall the plug (1) and the plug (2) after draining the tanks.
8. Remove the bolts (3) and the bracket for the battery.



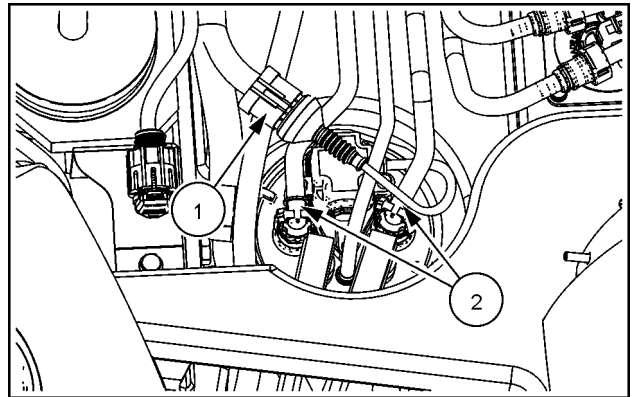
SVIL15TR02379AA 3

9. Disconnect the electrical connector **(1)** from the fuel tank sensor.
10. Disconnect the pipes **(2)**.



SVIL15TR02381AA 4

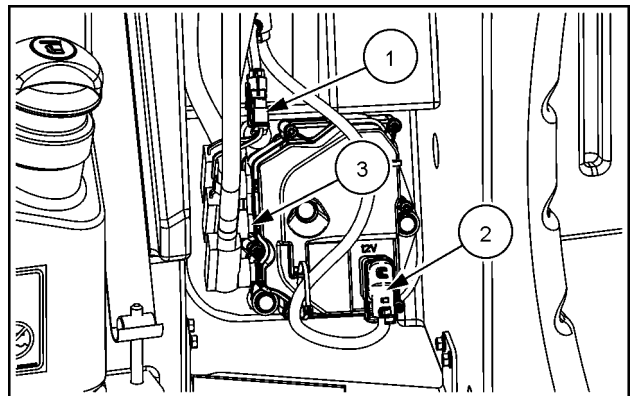
11. Disconnect the electrical connector **(1)**.
12. Disconnect the pipes **(2)** for the engine coolant.



SVIL15TR02382AA 5

13. Disconnect the two electrical connectors **(1)**.
14. Disconnect the electrical connector **(2)**.
15. Disconnect the hose **(3)**.

NOTE: The hose **(3)** is labeled with a black insulating tape.



SVIL15TR02377AA 6

16. Put a jack below the fuel tank.
17. Open the clamps **(1)** of the fuel tank.

18. **⚠ WARNING**

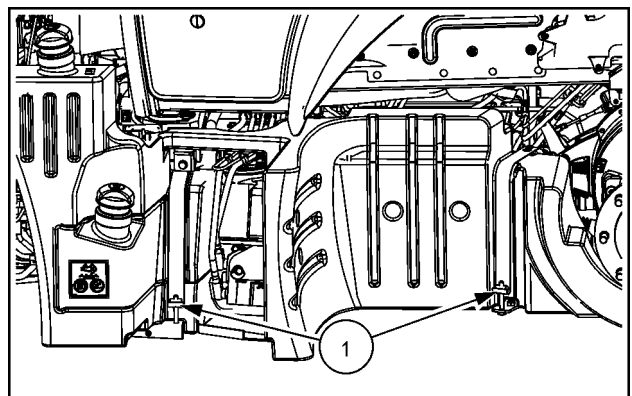
Heavy objects!
Lift and handle all heavy components using lifting equipment with adequate capacity. Always support units or parts with suitable slings or hooks. Make sure the work area is clear of all bystanders. Failure to comply could result in death or serious injury.

W0398A

Carefully remove the fuel tank with the jack.

NOTE: Detach the pipes that are clipped to the fuel tank.

NOTICE: Be sure that no parts are damaged.



SVIL15TR02383AA 7

Fuel tank - Install

⚠ 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

Fuel vapors are explosive and flammable.

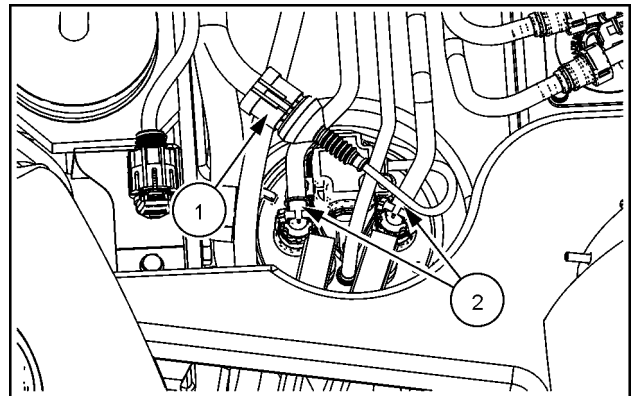
Do not smoke while handling fuel. Keep fuel away from flames or sparks. Shut off engine and remove key before servicing. Always work in a well-ventilated area. Clean up spilled fuel immediately. Failure to comply could result in death or serious injury.

W0904A

Prior operation:

Fuel tank - Remove (10.216)

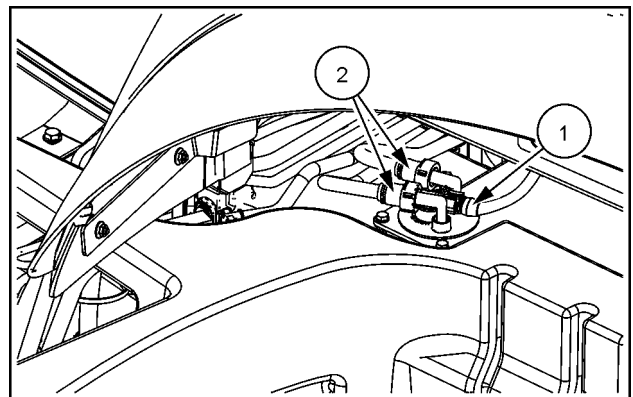
1. Carefully position the fuel tank with a jack.
2. Connect the pipes (2) for the engine coolant.
3. Connect the electrical connector (1).



SVIL15TR02382AA 1

4. Connect the pipes (2).
5. Connect the electrical connector (1) to the fuel tank sensor.

NOTE: Be sure that all pipes are clipped to the fuel tank.



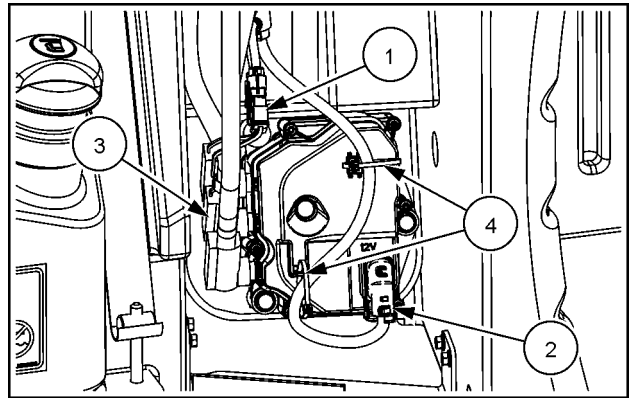
SVIL15TR02381AA 2

6. Connect the electrical connector (2).
7. Fix the harness with cable ties (4).
8. Install the hose (3).

NOTE: The hose (3) is labeled with a black insulating tape.

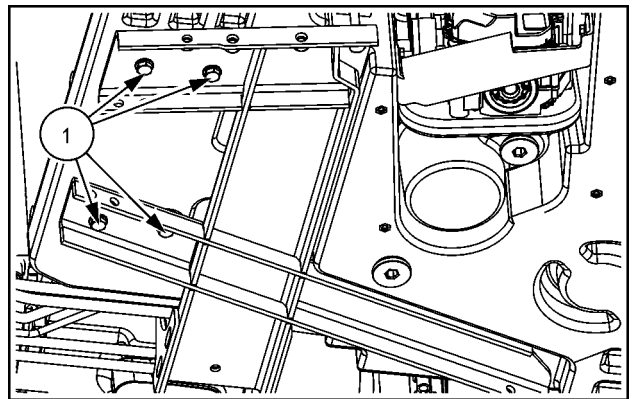
9. Connect the two electrical connectors (1).

NOTE: Be sure that the harness is free of abrasion points. Fix the harness with cable ties if necessary.



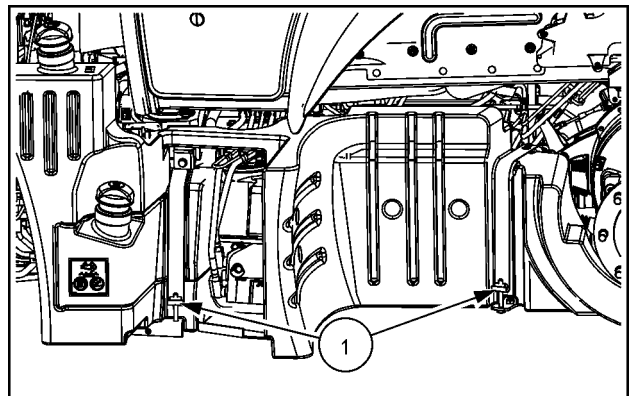
SVIL15TR02377AA 3

10. Install the bracket for the battery with the bolts (1).



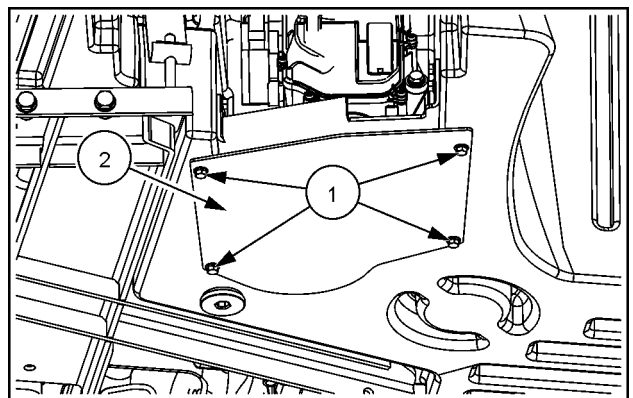
SVIL15TR02379AA 4

11. Fix the fuel tank with the clamps (1).
12. Tighten the bolts of the clamps (1) to 5.0 N·m (3.7 lb ft).
13. Remove the jack.



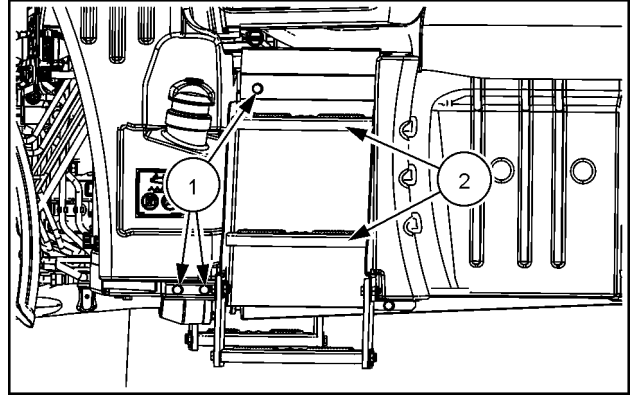
SVIL15TR02383AA 5

14. Install the cover (2) with the bolts (1).



SVIL15TR02378AA 6

15. Install the steps **(2)** with the bolts **(1)**.



SVIL15TR02376AA 7

16. Fill the **DEF/AdBlue®**.
17. Fill the fuel into the fuel tank.

Next operation:

Fill the engine coolant. See **Radiator - Filling (10.400)**.

Install the battery. See **Battery - Install (55.302)**.

Install the rear wheel at the left-hand side. See **Rear wheels - Install (44.520)**.

Air cleaner - Remove

⚠ 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.

W0208A

⚠ WARNING

Electrical shock hazard!

Before working on any part of the electrical system, disconnect the battery ground cable. Complete all electrical work before connecting the cable.

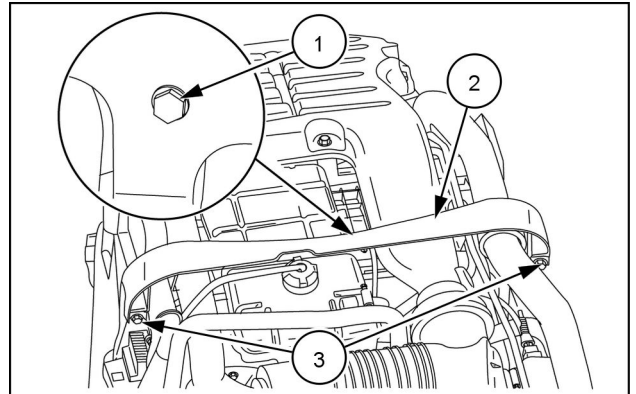
Failure to comply could result in death or serious injury.

W0129A

Prior operation:

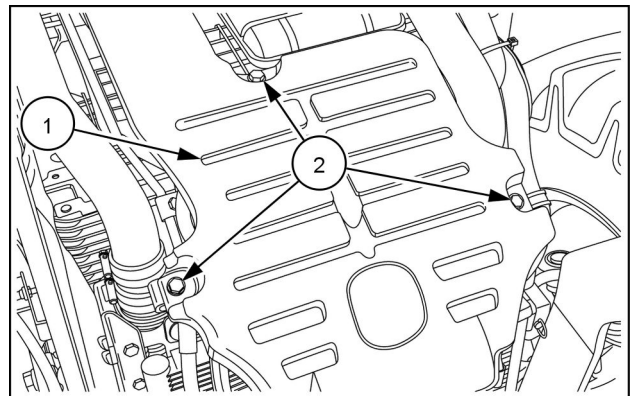
Hood - Remove (90.100)

1. Remove the bolt (1) and the bolts (3).
2. Remove the bracket (2).



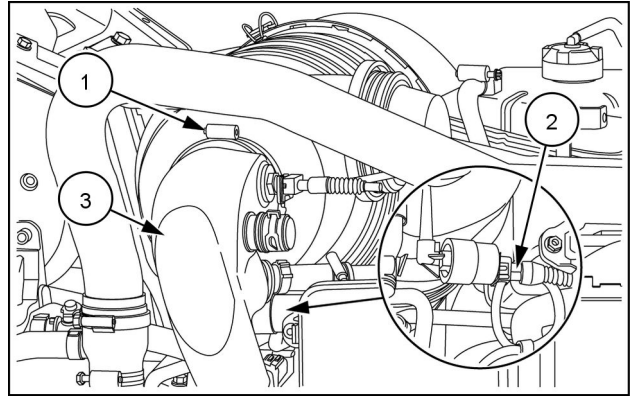
MOIL15TR00550AB 1

3. Remove the retaining bolts (2).
4. Remove the suction duct (1).



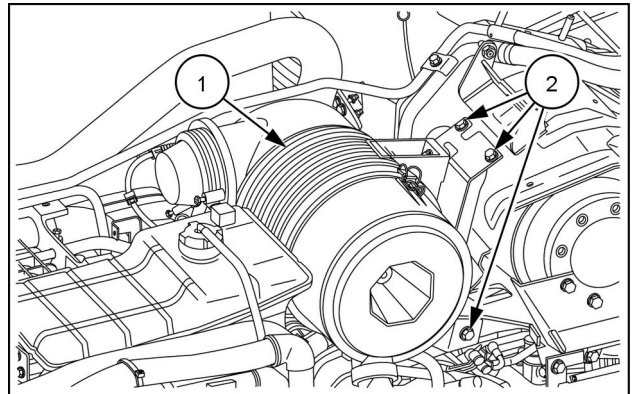
MOIL16TR02081AA 2

5. Remove the clamp (1) of the line (3) between the air cleaner housing and the turbocharger.
6. Disconnect the electrical connector of the air cleaner restriction switch (2).



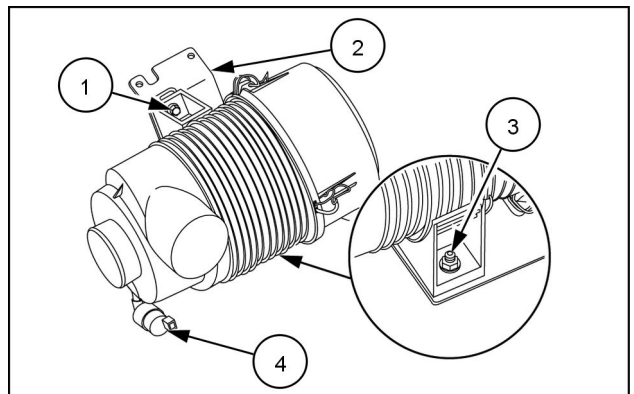
MOIL15TR00736AB 3

7. Remove the bolts (2).
8. Remove the air cleaner (1) together with the bracket and the air cleaner restriction switch.



MOIL15TR00737AA 4

9. Remove the retaining bolt (1) and the retaining bolt (3).
10. Remove the bracket (2).
11. Remove the air cleaner restriction switch (4).



MOIL15TR00738AB 5

Next operation:
Air cleaner - Install (10.202)

Air cleaner - Install

⚠ 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.

W0208A

⚠ WARNING

Electrical shock hazard!

Before working on any part of the electrical system, disconnect the battery ground cable. Complete all electrical work before connecting the cable.

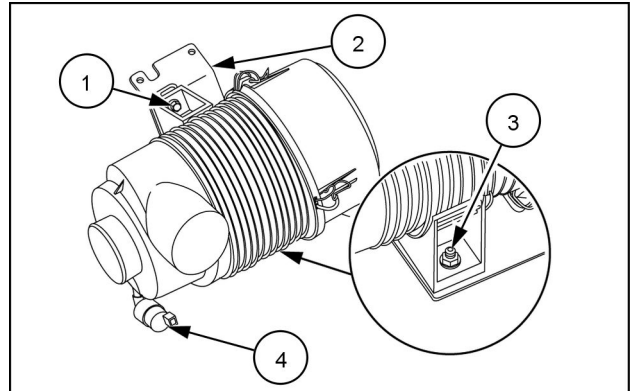
Failure to comply could result in death or serious injury.

W0129A

Prior operation:

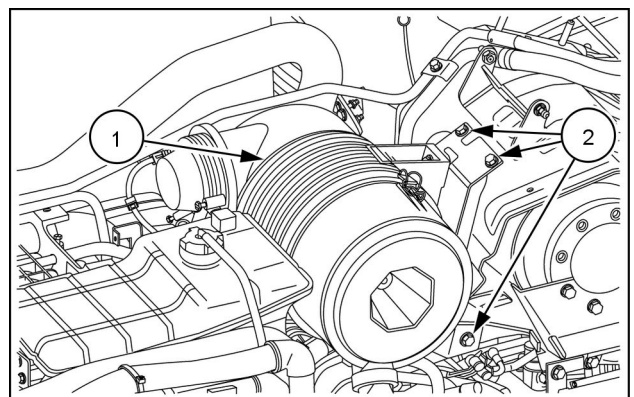
Air cleaner - Remove (10.202)

1. Install the air cleaner restriction switch (4).
2. Install the bracket (2).
3. Install the retaining bolt (1) and the retaining bolt (3).



MOIL15TR00738AB 1

4. Install the air cleaner (1) with the retaining bolts (2).



MOIL15TR00737AA 2



Suggest:

If the above button click is invalid.

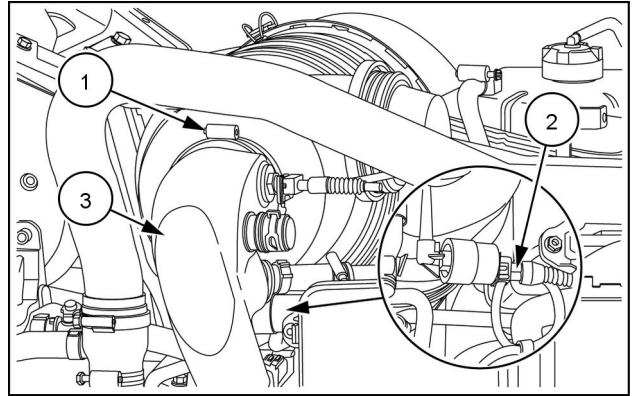
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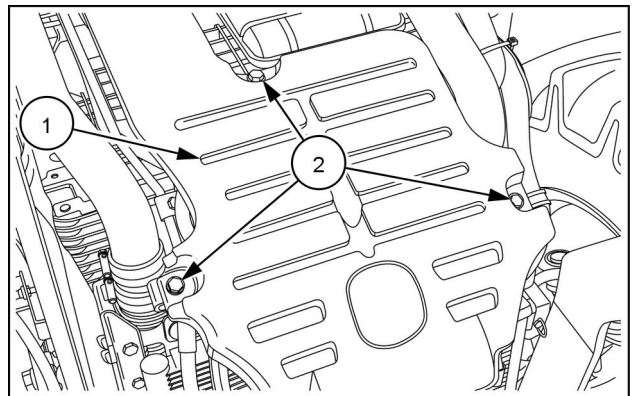
Thank you so much for reading

5. Connect the electrical connector of the air cleaner restriction switch (2).
6. Install the clamp (1) that connects the line (3) between the air cleaner housing and the turbocharger.



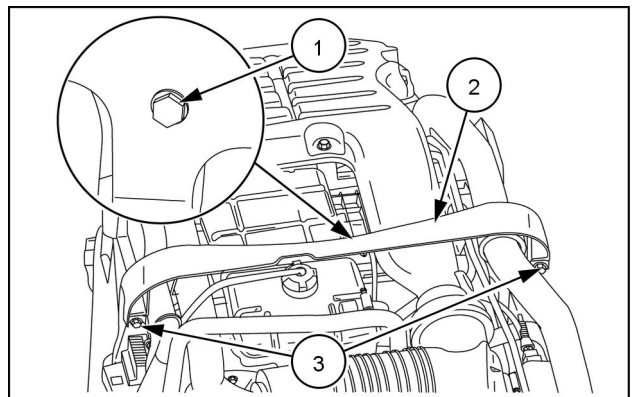
MOIL15TR00736AB 3

7. Install the air intake line (1).
8. Tighten the bolts (2).



MOIL16TR02081AA 4

9. Install the bracket (2).
10. Tighten the bolt (1) and the bolts (3).



MOIL15TR00550AB 5

Next operation:
Hood - Install (90.100)

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