

# SERVICE MANUAL

## **Boomer™ 24** **Tier 4B (final)** Compact Tractor

**Part number 47827505**

1<sup>st</sup> edition English  
January 2016





# **SERVICE MANUAL**

**Boomer™ 24**

# Link Product / Engine

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<b>Product</b>	<b>Market Product</b>	<b>Engine</b>
Boomer™ 24 Boomer 24, 4-Wheel Drive, ROPS, HST	North America	S3L2

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# INTRODUCTION

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## **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**

**Boomer™ 24**

## Engine - 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.

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### ⚠ WARNING

Hot liquid under pressure!

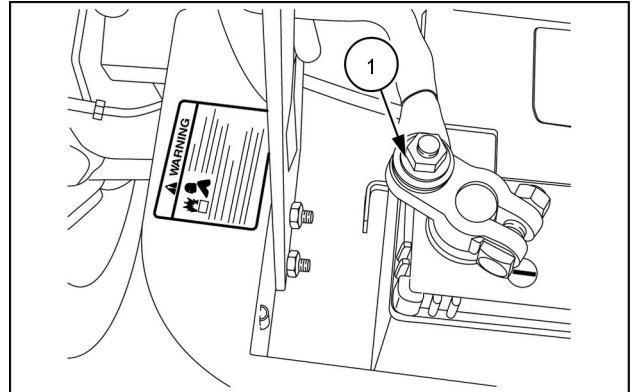
Never remove the filler cap or the recovery tank cap while the engine is running or the coolant is hot. Let the system cool. Turn the filler cap to the first notch and allow any pressure to escape, and then remove the filler cap. Loosen the recovery tank cap slowly to allow any pressure to escape.

Failure to comply could result in death or serious injury.

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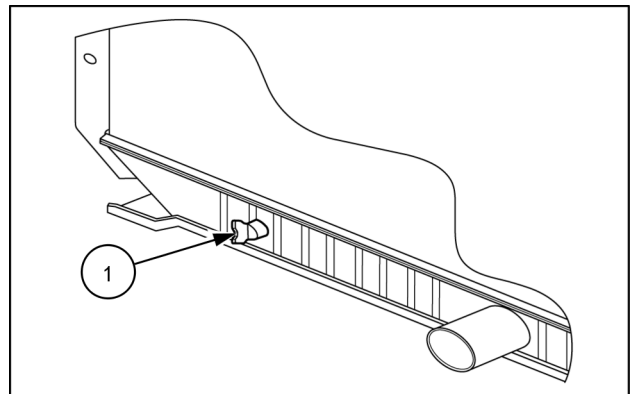
## Engine removal

1. Open the hood and disconnect the negative (-) battery terminal (1).



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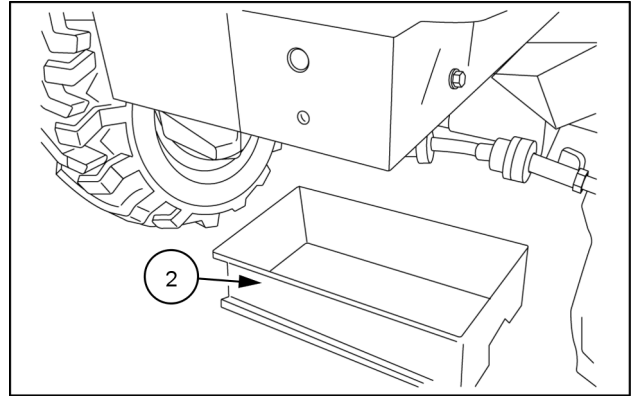
2. Open the drain cock (1) under the left hand side of the radiator.



83118786 2

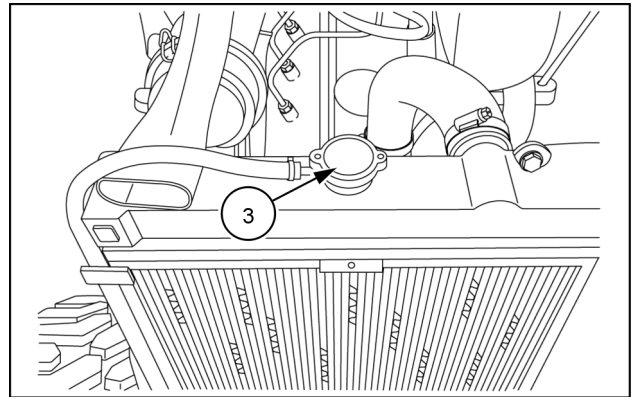
3. Drain the engine coolant into a clean container (2).

**NOTE:** Engine coolant capacity is 3.8 l (1 US gal)



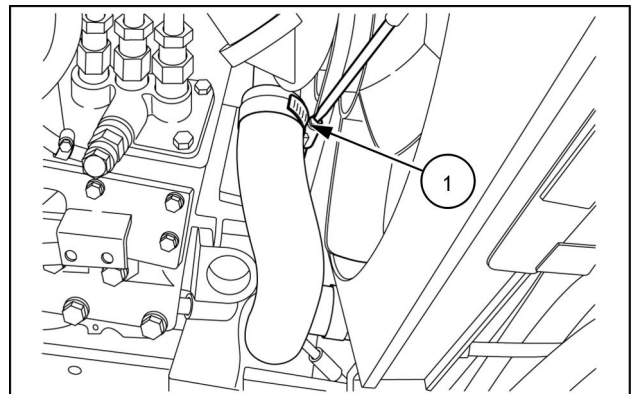
83118785 3

4. Loosen the radiator cap (3) to accelerate draining all of the fluid.



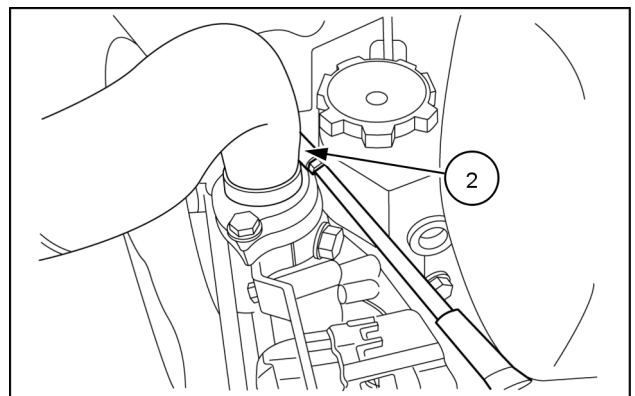
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5. Loosen the hose clamp and disconnect the lower coolant hose (1) located on the right hand side of the engine.



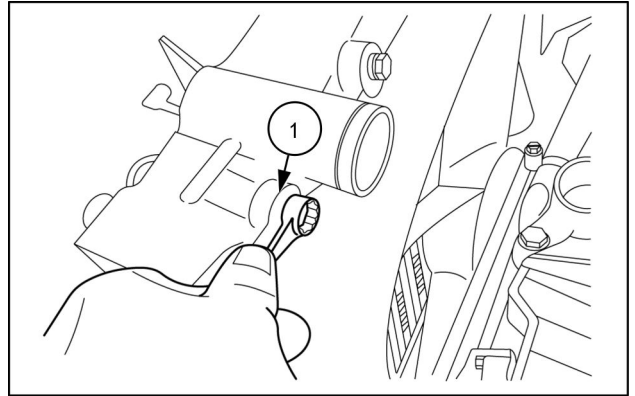
83118788 5

6. Loosen the hose clamp (2) and disconnect the upper coolant hose.



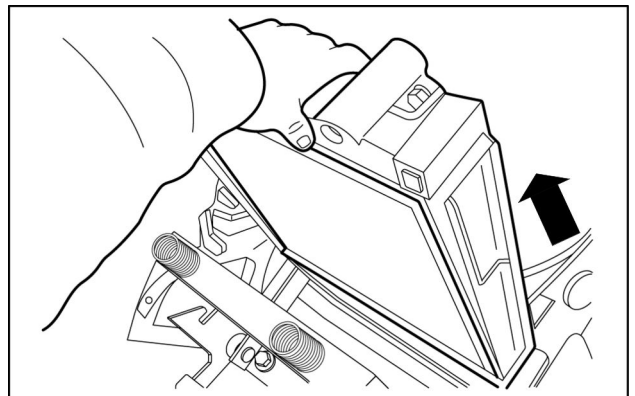
83118789 6

7. Remove the M8 x 16mm radiator retaining bracket bolts (1).



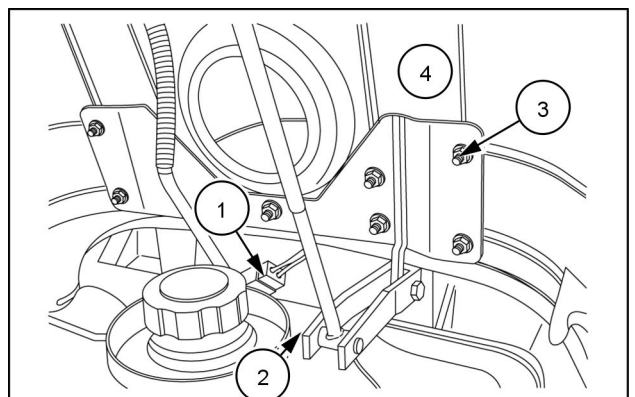
83118790 7

8. Remove the radiator (1) in the direction of the arrow.



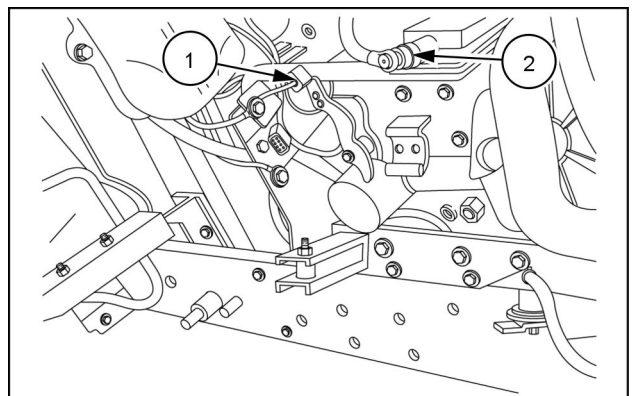
83118791 8

9. Disconnect the electrical connection (1) remove the clip (2).
10. Remove the hood retaining nuts (3).
11. Remove the engine hood (4)



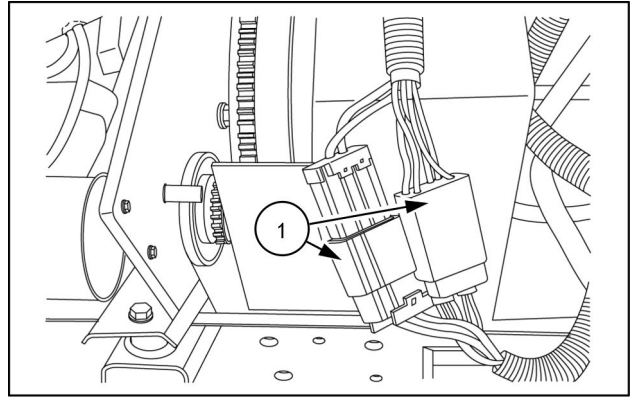
83118792 9

12. Disconnect the throttle cable (1) and the fuel line (2).



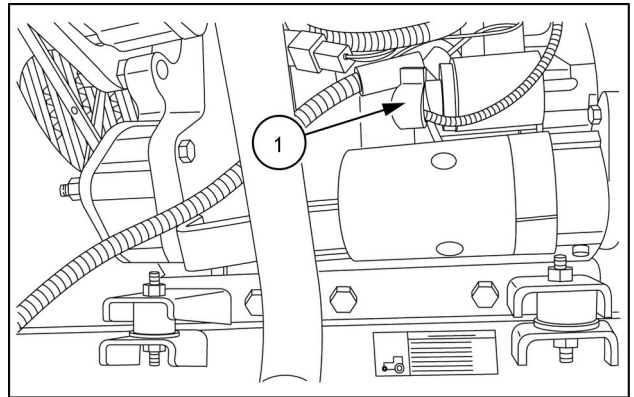
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13. Disconnect the engine electrical connectors (1) located under the left hand side of the instrument panel.



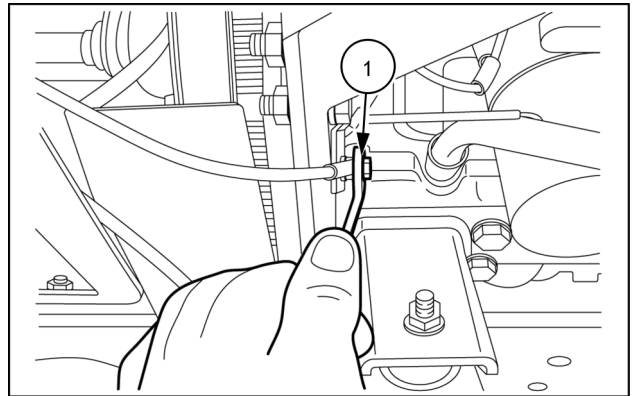
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14. Remove the rubber cover (1), and the M8 nut. Disconnect the positive (+) battery cable from the starter motor.



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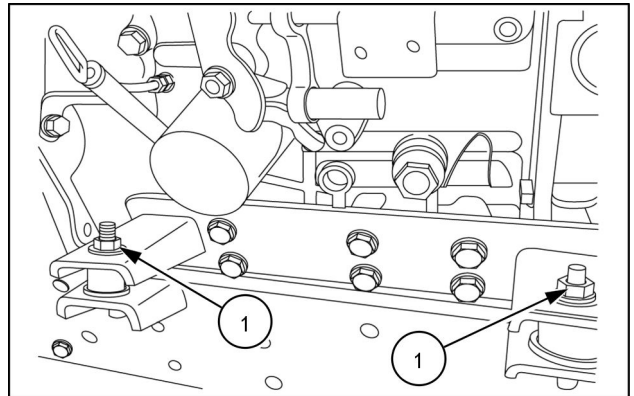
15. Disconnect the negative (-) ground cable by removing bolt (1).



83118796 13

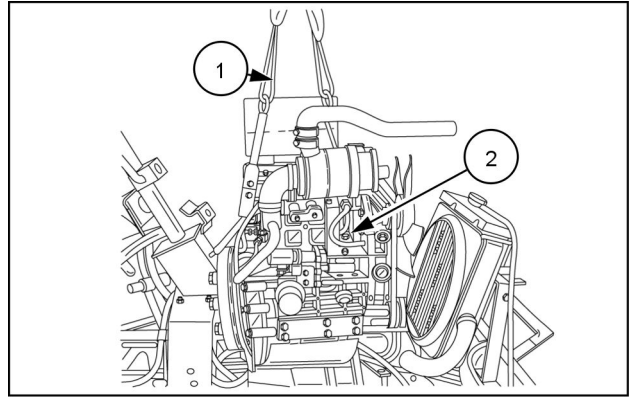
**NOTICE:** Insure that all necessary tubes, hoses and electrical connectors have been disconnected . It may also be necessary to disconnect additional items due to other optional systems being installed on the tractor.

16. Remove the four M14 engine mount retaining nuts (1).



83118797 14

17. Use an overhead hoist **(1)** to lift the engine **(2)**. Place engine on a suitable stand.



83118798 15

## Engine - 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.

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### ⚠ WARNING

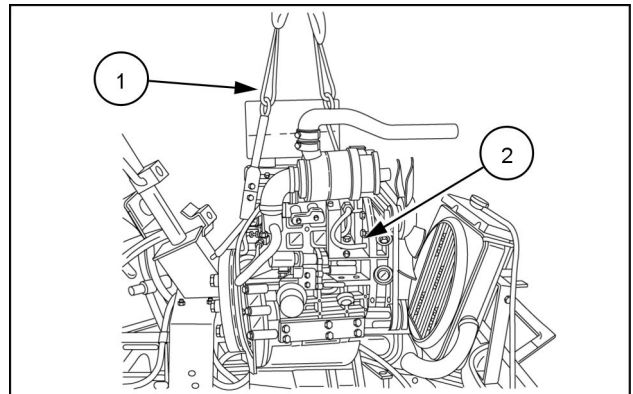
#### Hot liquid under pressure!

Never remove the filler cap or the recovery tank cap while the engine is running or the coolant is hot. Let the system cool. Turn the filler cap to the first notch and allow any pressure to escape, and then remove the filler cap. Loosen the recovery tank cap slowly to allow any pressure to escape.

Failure to comply could result in death or serious injury.

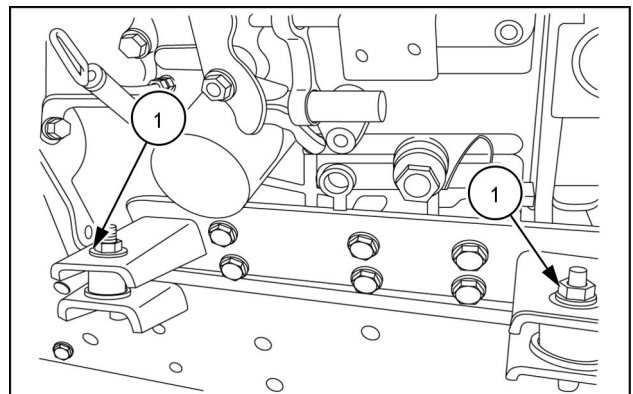
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1. Use an overhead hoist (1) to lift the engine (2).
2. Place the engine on the chassis mounts.



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3. Install four M14 engine mount retaining nuts (1).



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**NOTICE:** Ensure that all necessary tubes, hoses and electrical connectors have been connected. It may also be necessary to connect additional items due to other optional systems being installed on the tractor.



**Suggest:**

**If the above button click is invalid.**

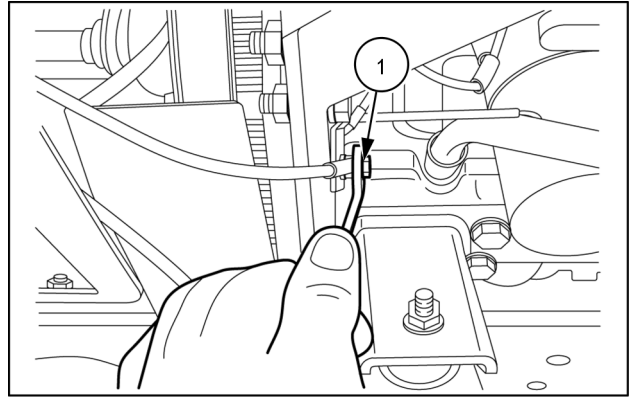
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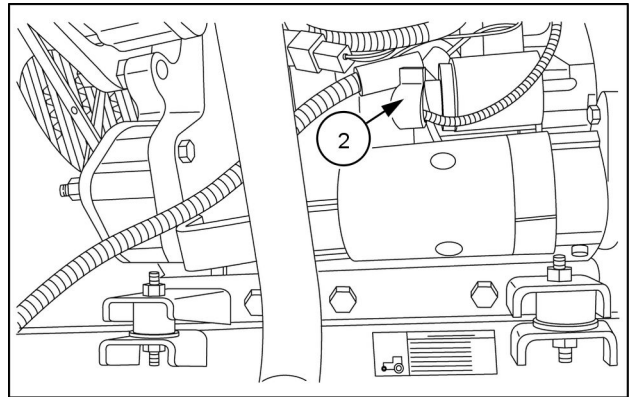
**Thank you so much for reading**

4. Connect the negative (-) ground cable by installing bolt **(1)**.



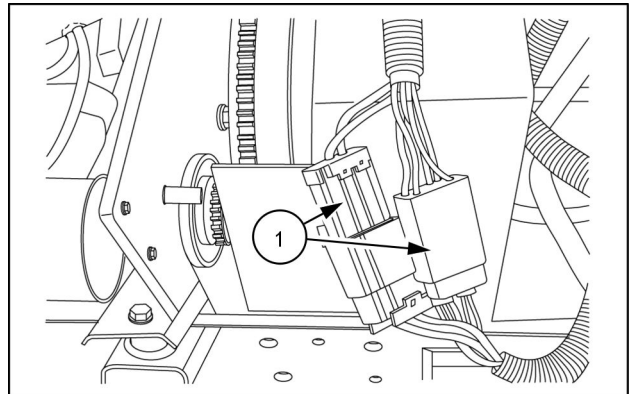
83118796 3

5. Connect the positive (+) battery cable to the starter motor. Install the M8 nut and the rubber cover **(2)**.



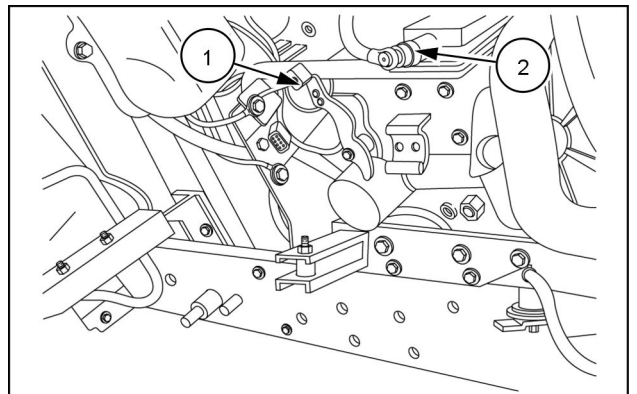
83118795 4

6. Connect the engine electrical connectors **(1)** located under the left hand side of the instrument panel.



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7. Connect the throttle cable **(1)** and the fuel line **(2)**.



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