



Vibration Reduction Kit

Groundsmaster® 3300 Series Traction Unit

Model No. 144-4050

Installation Instructions

Installation

Loose Parts

Use the chart below to verify that all parts have been shipped.

Procedure	Description	Qty.	Use
1	No parts required	–	Prepare the machine.
2	No parts required	–	Remove the attachment (if equipped)
3	Drilling template	1	Use the drilling template to drill holes in the frame.
4	No parts required	–	Remove the existing hydraulic line.
5	Hex-socket screw (5/16 x 1-3/4 inch) Washer (11/16 inch) Nut	2 2 2	Secure the platform to the frame tube.
6	Hydraulic hose Straight fitting 45° fitting	1 1 1	Install the hose to the steering valve and hydraulic pump.
7	Hydraulic-hose guard Hex-socket screw (5/16 x 7/8 inch) Washer (11/16 inch) Nut Carriage bolt Steering-mount bracket Hex-head bolt (5/16 x 1 inch) Washer (3/4 inch)	1 6 6 16 6 1 4 4	Install the hydraulic-hose guard and the stiffener.
8	No parts required	–	Complete the installation.



1

Preparing the Machine

No Parts Required

Procedure

1. Park the machine on a level surface.
2. Engage the parking brake.
3. Lower the attachment.
4. Shut off the engine and remove the key.

2

Removing the Attachment

If Equipped

No Parts Required

Procedure

1. If you have an equipped attachment, remove it; refer to the removal instructions in your traction unit *Operator's Manual*.
2. Use a cord or cable tie to secure the PTO shaft out of the working area.

3

Using the Drilling Template to Drill Holes in the Frame

Parts needed for this procedure:

1	Drilling template
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Procedure

A drilling template is included in the loose parts bag for this kit. Use this template as a guide to drill holes into 2 areas of the operator platform as follows:

1. Remove the stiffener drill-holes template from the drilling template.

Note: You can use scissors to perform this step.

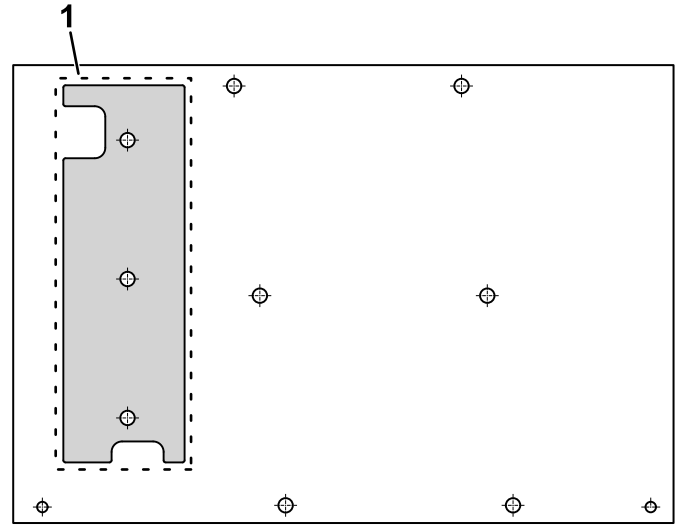


Figure 1

1. Stiffener drill-holes template

2. Loosen the bolts around the steering-column base and raise the base up (Figure 2).

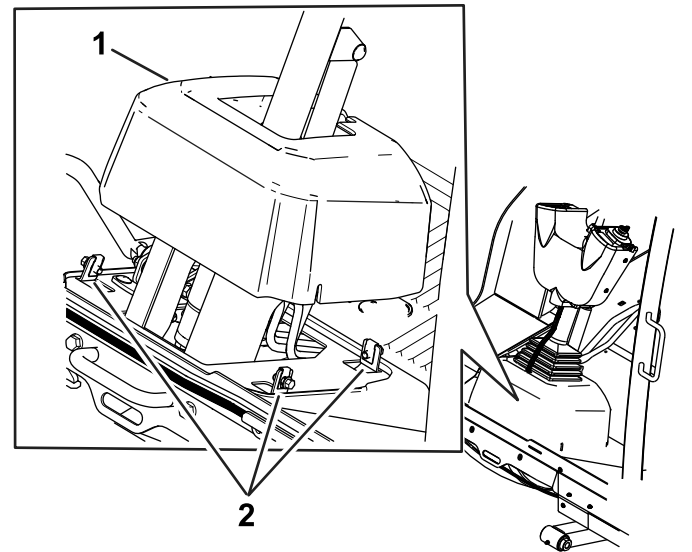


Figure 2

1. Steering-column base
2. Bolts

3. Align the stiffener drill template cut-outs to the platform cut-outs as shown in Figure 3.

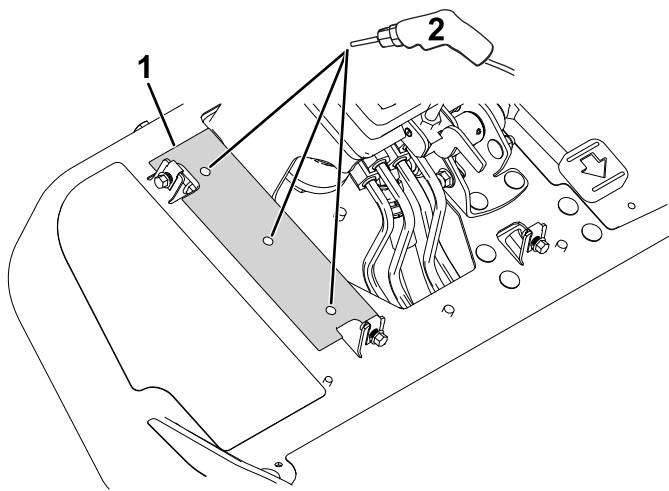


Figure 3

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1. Stiffener drill-holes template
2. Drill 3 holes (3/8 inch).

4. Drill 3 holes (3/8 inch) into the platform as indicated per the holes on the drilling template.
5. Remove the bolt and nut from the traction-cable bracket as shown in [Figure 4](#).

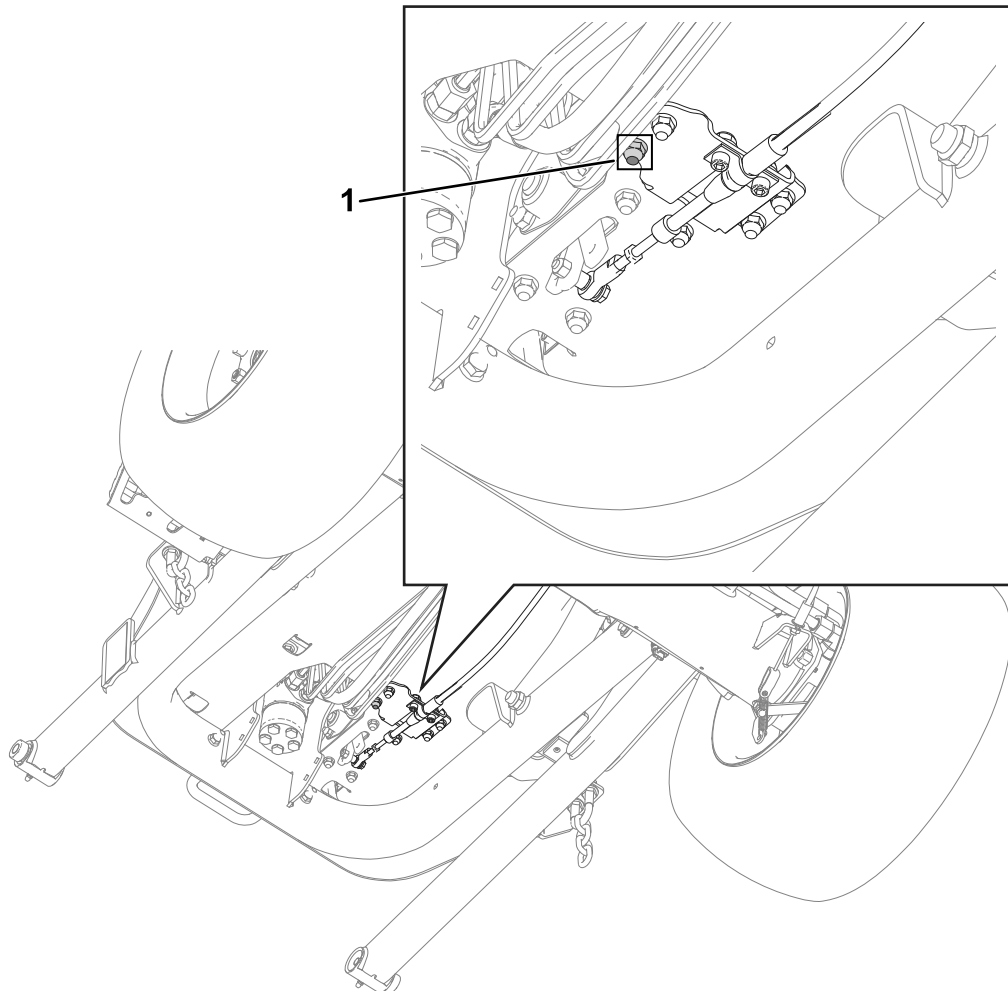


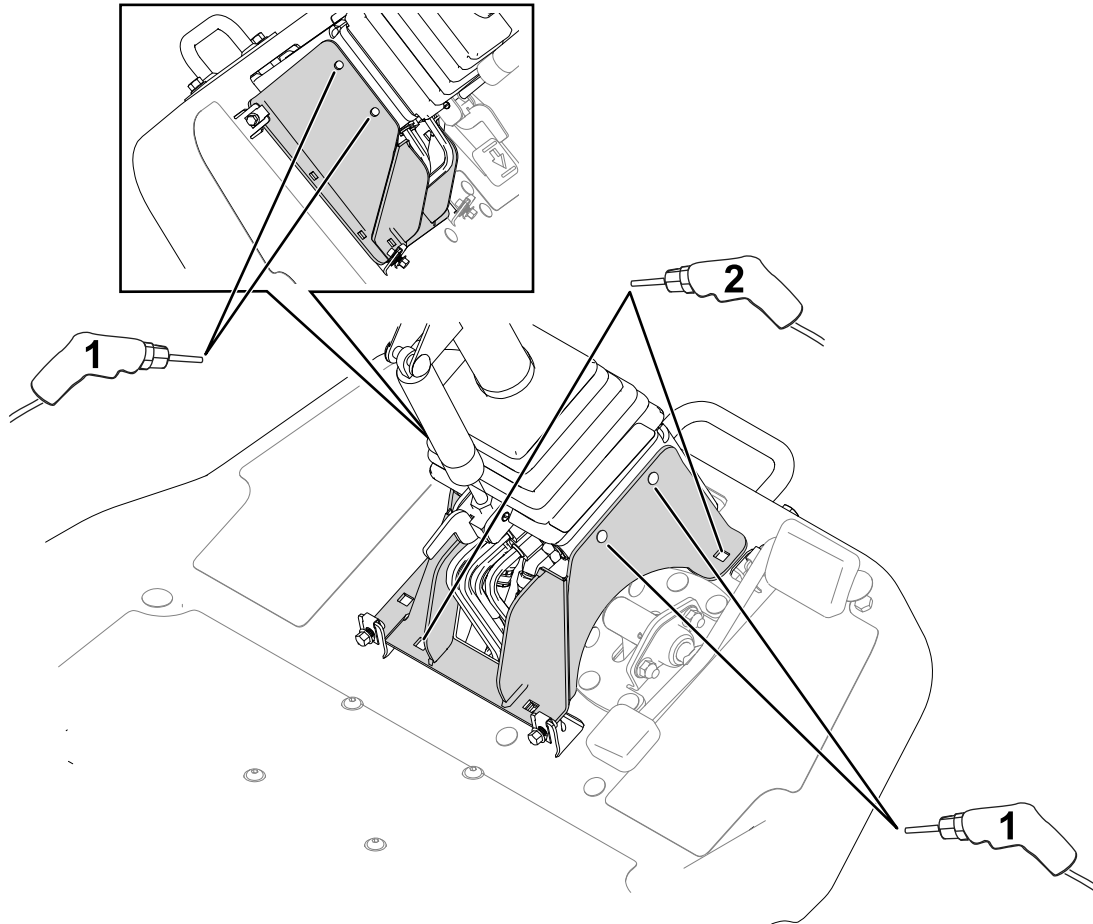
Figure 4

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1. Remove this bolt and nut from the traction-cable bracket.

6. Align the steering-mount bracket to the previously drilled platform holes (shown in [Figure 3](#)).

7. Use the existing bracket holes to drill 2 holes (3/8 inch) into the platform and 4 holes (3/8 inch) into the steering-valve mount bracket ([Figure 5](#))



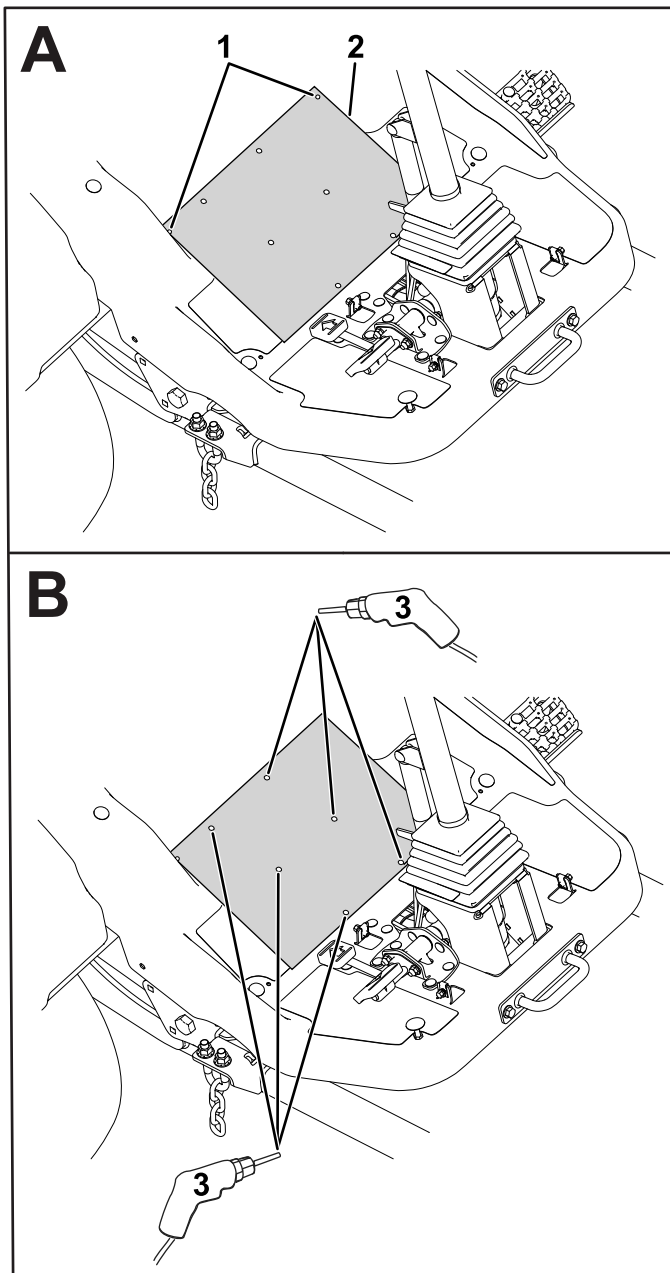
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Figure 5

1. Drill holes (3/8 inch) in the steering-valve mount bracket.

2. Drill holes (3/8 inch) in the platform.

8. Align the drain-hole markings on the drilling template with the platform drain holes.



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Figure 6

1. Template drain holes aligned with the platform drain holes.
2. Drilling template
3. Drill 6 holes (3/8 inch).
9. Drill 6 holes (3/8 inch) into the platform as indicated per the holes on the drilling template.

4

Removing the Existing Hydraulic Line

No Parts Required

Procedure

Remove the existing hard hydraulic line shown in [Figure 7](#).

The hydraulic line is connected to the following ports:

- Steering valve: P
- Hydraulic pump: OUT

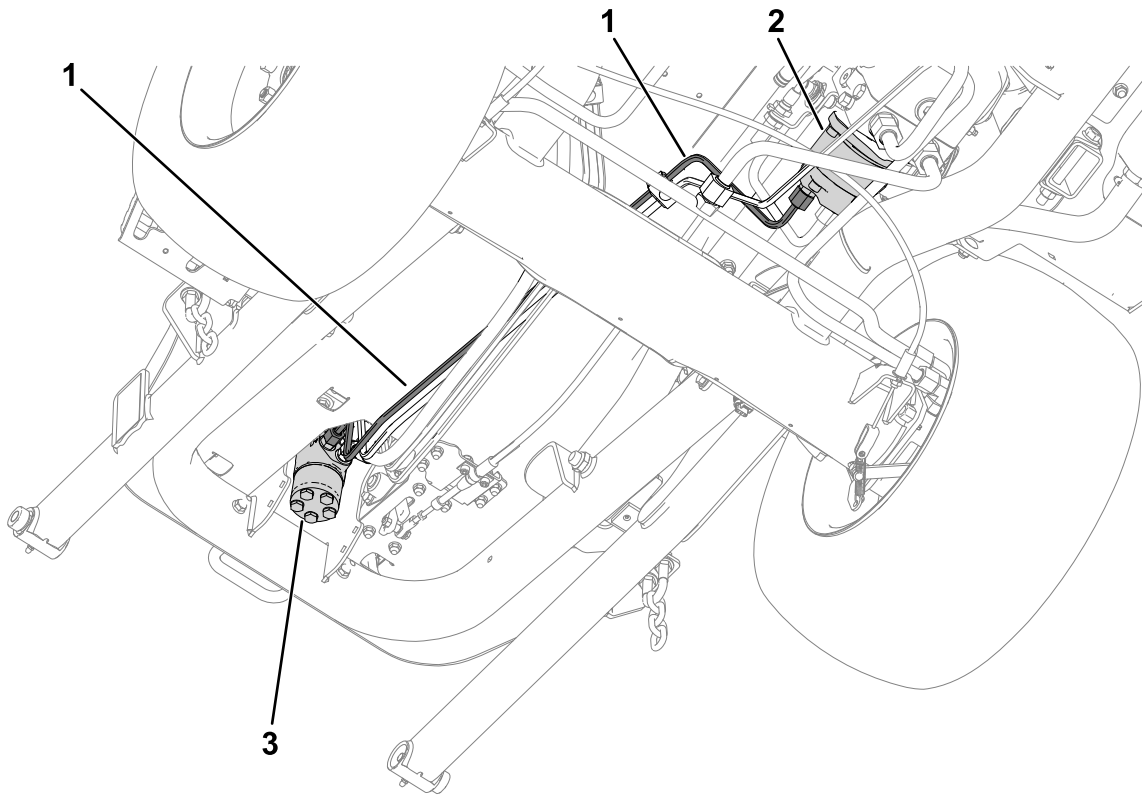


Figure 7

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- 1. Hydraulic line
- 2. Hydraulic pump

- 3. Steering valve

5

Securing the Platform to the Frame Tube

Parts needed for this procedure:

2	Hex-socket screw (5/16 x 1-3/4 inch)
2	Washer (11/16 inch)
2	Nut

Procedure

1. Use a jack to raise the machine; refer to the Raising the Machine procedure in your traction unit *Operator's Manual*.
2. Remove the front right tire (as seen from the operator's position) from the machine.

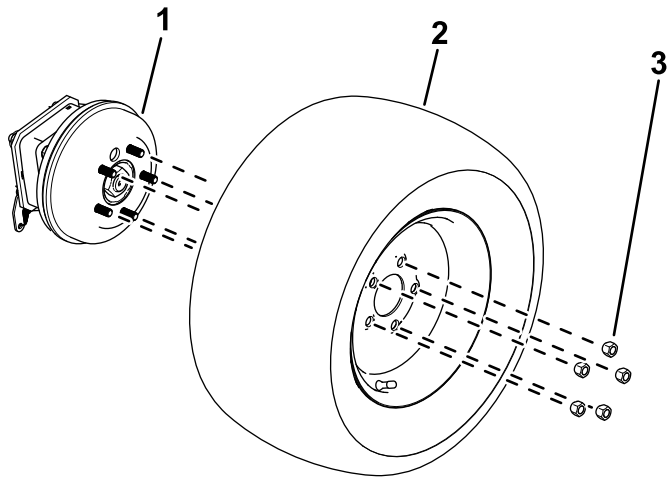


Figure 8

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1. Wheel hub
2. Tire
3. Lug nut

3. Use the existing frame-tube holes to drill 2 holes (11/32 inch or 9 mm) into the platform.

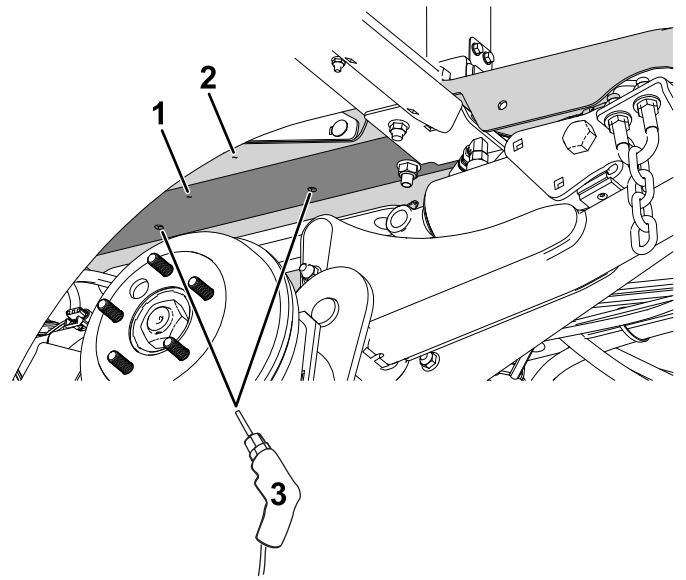


Figure 9

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1. Frame tube
2. Platform
3. Drill holes (9 mm) through the existing frame-tube holes.

4. Use 2 hex-socket screws (5/16 x 1-3/4 inch), 2 washers (11/16 inch), and 2 nuts to secure the platform to the frame tube.

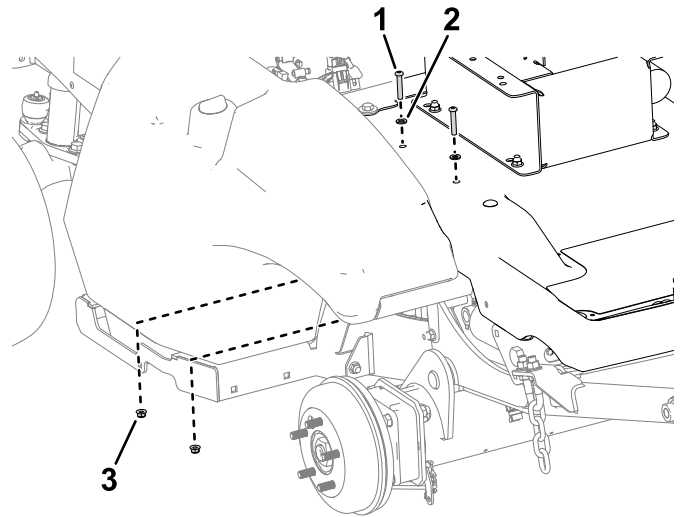


Figure 10

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1. Hex-socket screw
2. Washer (11/16 inch)
3. Nut

5. Install the tire.

6

Installing the Hose

Parts needed for this procedure:

1	Hydraulic hose
1	Straight fitting
1	45° fitting

Procedure

1. Remove the existing fitting from the hydraulic pump and replace it with the straight fitting.
2. Connect the 45° hydraulic-hose fitting to the new straight fitting and orient it at 50° as shown in [Figure 11](#).

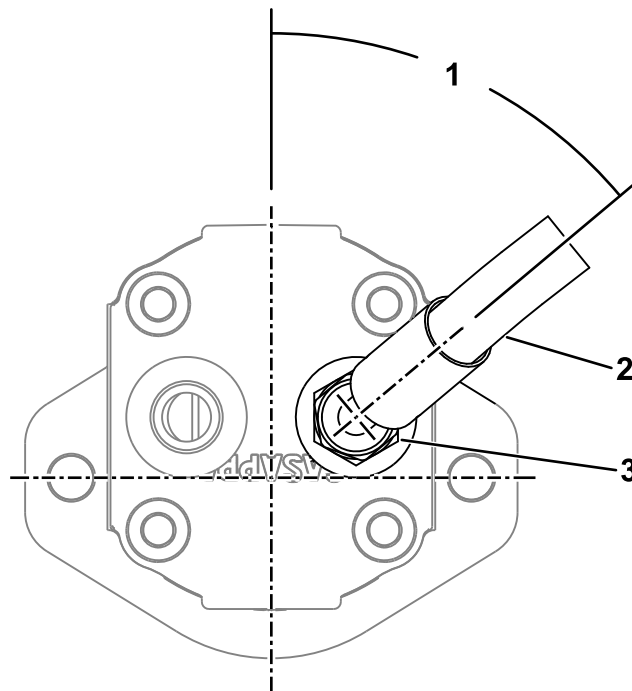


Figure 11

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1. 50°
2. Hydraulic hose with the 45°-fitting end
3. Straight fitting

3. Remove the existing fitting from the steering valve and replace it with the 45° fitting and orient it downwards.
4. Connect the straight hydraulic-hose fitting to the new 45° fitting as shown in [Figure 12](#).

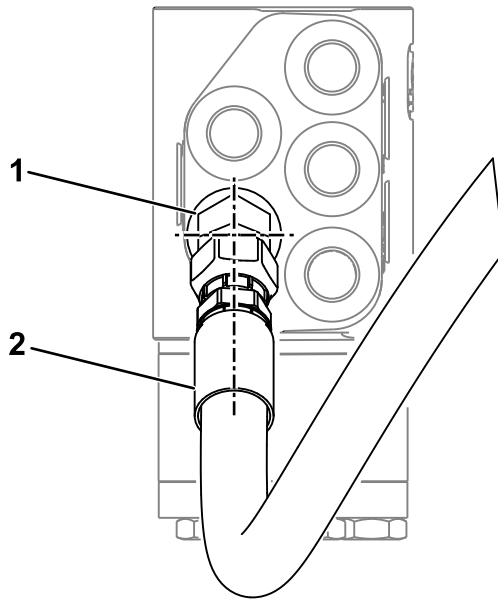


Figure 12

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- 1. 45° fitting
- 2. Hydraulic hose with straight-fitting end

5. Ensure that the hydraulic hose is routed as shown in [Figure 13](#).

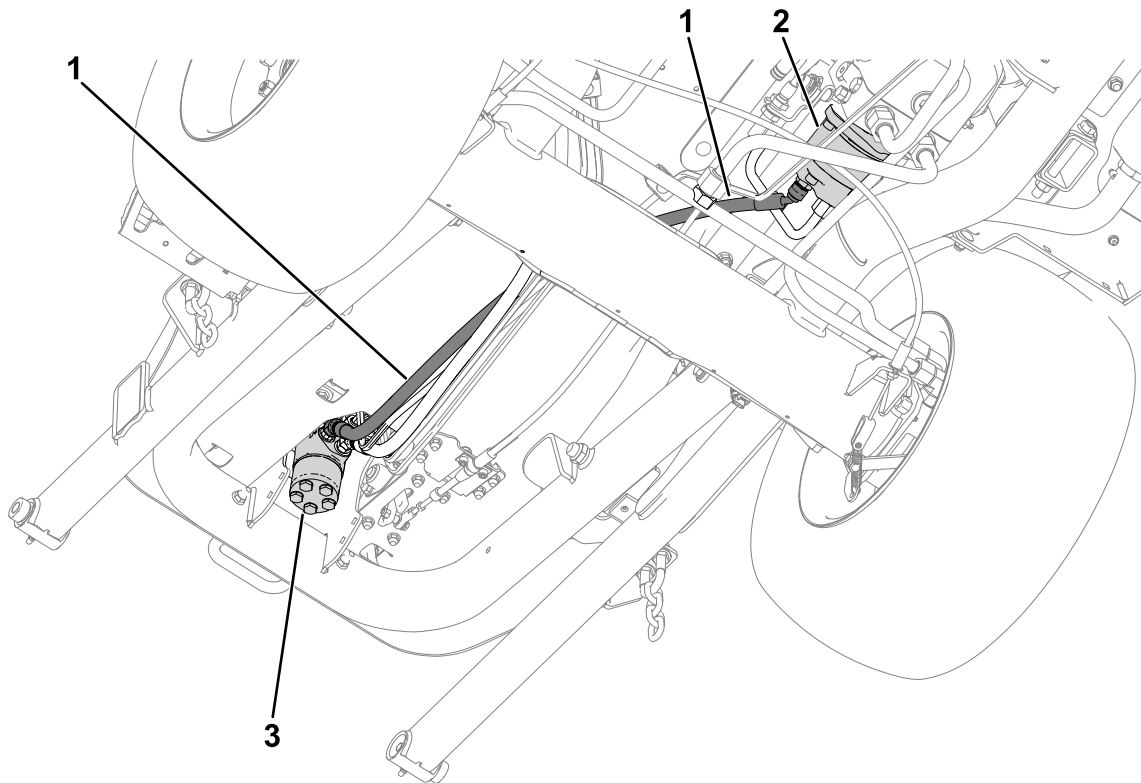


Figure 13

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- 1. Hydraulic hose
- 2. Hydraulic pump
- 3. Steering valve

6. Ensure that the hose and fittings are aligned as shown in [Figure 11](#) and [Figure 12](#) and that there is no twist in the hose when routed next to the existing hydraulic lines.

7

Installing the Hydraulic-Hose Guard and Steering-Mount Bracket

Parts needed for this procedure:

1	Hydraulic-hose guard
6	Hex-socket screw (5/16 x 7/8 inch)
6	Washer (11/16 inch)
16	Nut
6	Carriage bolt
1	Steering-mount bracket
4	Hex-head bolt (5/16 x 1 inch)
4	Washer (3/4 inch)

Procedure

1. Use 6 hex-socket screws (5/16 x 7/8 inch), 6 washers (11/16 inch), and 6 nuts to secure the hose guard to the frame.

Ensure that all hydraulic lines and hoses are contained within the hose guard as shown in [Figure 14](#).

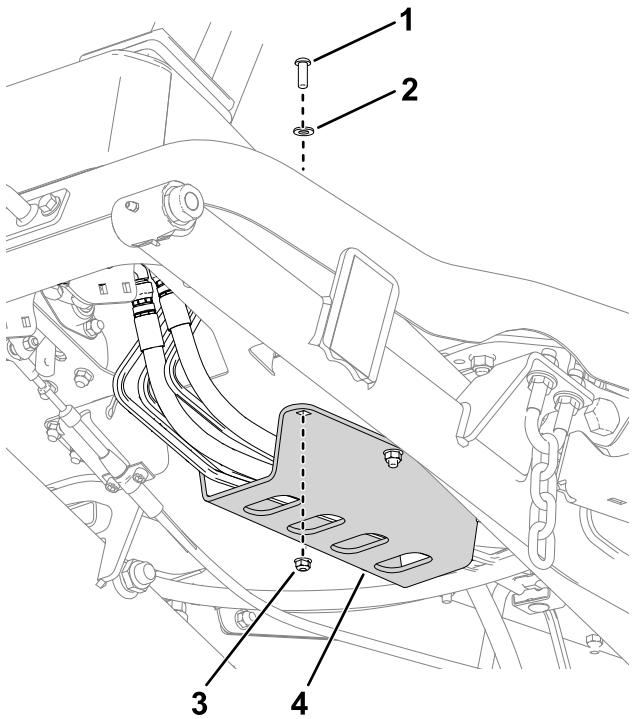


Figure 14

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1. Hex-socket screw (5/16 x 7/8 inch)
2. Washer (11/16 inch)
3. Nut
4. Hose guard

2. Use 6 carriage bolts and 6 nuts to secure the steering-mount bracket to the frame ([Figure 15](#)).

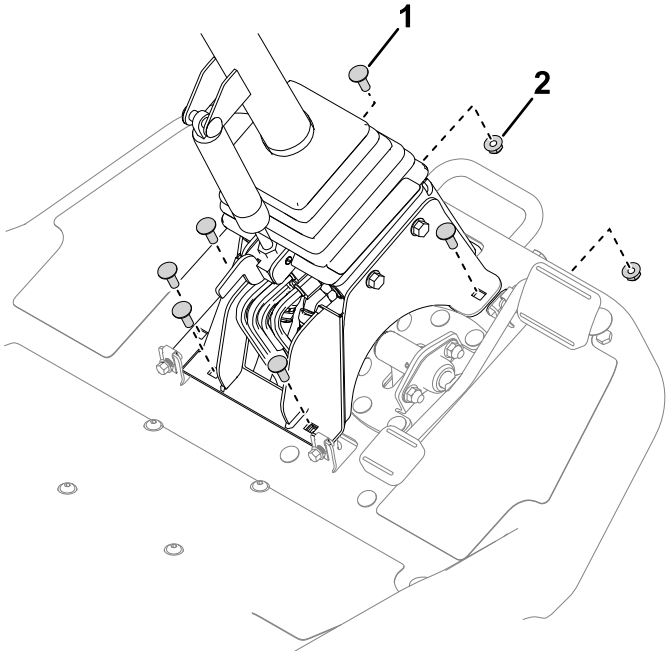


Figure 15

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1. Carriage bolt
2. Nut
3. Use 4 hex-head bolts (5/16 x 1 inch), 4 washers (3/4 inch), and 4 nuts to secure the

steering-mount bracket to the steering-valve mount bracket (Figure 16).

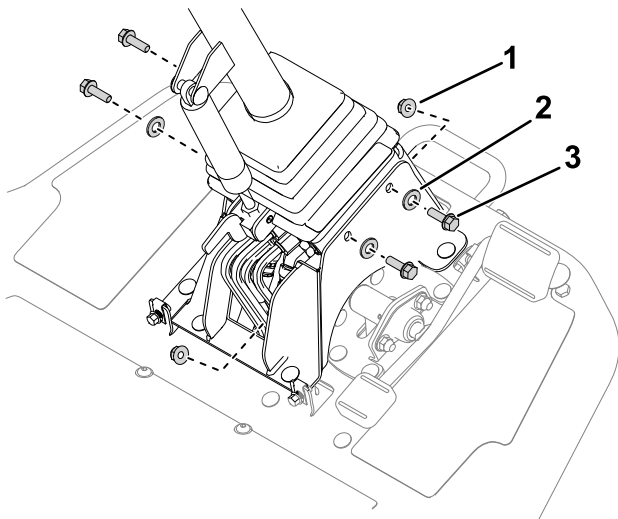


Figure 16

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- | | |
|----------------------|----------------------------------|
| 1. Nut | 3. Hex-head bolt (5/16 x 1 inch) |
| 2. Washer (3/4 inch) | |

8

Completing the Installation

No Parts Required

Procedure

1. Lower the machine off of the jackstands.
2. Install an attachment; refer to the installation instructions in your traction unit *Operator's Manual*.
3. Perform the following steps to purge air from the hydraulic system:
 - Fully lower and raise the attachment.
 - Cycle steering wheel all-the-way to the left and the right.



Count on it.