



Backhoe Drive Release Kit

RT600 Traction Unit with Backhoe

Model No. 25433

Model No. 25433E

Installation Instructions

Loose Parts

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

Description	Qty.	Use
Valve assembly	1	Install the valve assembly.
Hydraulic fitting (90 degree)	2	
Elbow fitting (90 degree)	1	
Valve bracket	1	
Flange-head bolt (1/4 x 1-3/4 inches)	2	
Flange nut (1/4 inch)	2	
Flange-head bolt (M8 x 1-1/4 inch)	2	
Orifice (0.080 inch)	1	
Elbow fitting (45 degree)	2	Installing the hydraulic hoses.
Hydraulic hose	2	
Cable tie	5	
Valve switch	1	Install the valve switch.
Switch mounting bracket	1	
Bolt (1/4 x 1/2 inch)	2	
Bolt (5/16 x 1 inch)	2	
Washer	2	
Nut (5/16 inch)	2	
10 Amp fuse	1	
Cable ties	5	

⚠ WARNING

CALIFORNIA Proposition 65 Warning

This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects, or reproductive harm.

1. Park the machine on a firm, level surface.
2. Lower all attachments to the ground.
3. Turn off the engine, remove the key, and allow the machine to cool completely.
4. Remove the left-side, engine cover; refer to the *RT600 Traction Unit Operator's Manual* for instructions.
5. Loosen the 4 bolts securing the access panel in front of the traction unit seat, and remove the panel (Figure 1).

Installing the Valve Assembly

⚠ WARNING

If the engine has been running, the hydraulic fluid and components may be hot and could burn you.

Allow the machine to cool before performing this procedure.



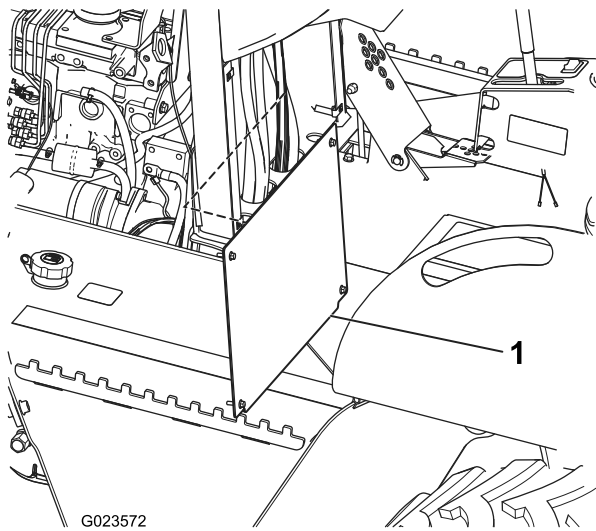


Figure 1

1. Access panel

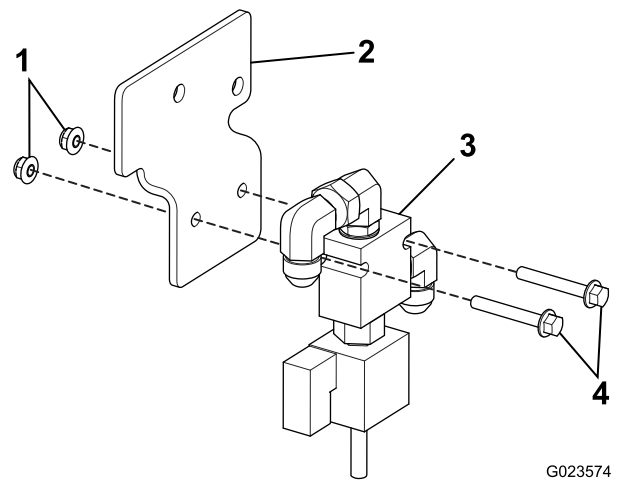


Figure 3

1. Flange nut (1/4 inch)
2. Valve bracket
3. Valve assembly
4. Flange-head bolt (1/4 x 1-3/4 inches)

6. Install the orifice onto the valve assembly as shown in Figure 2 and hand tighten.
7. Install a 90-degree elbow fitting into the side of the valve assembly with the open end pointing down (Figure 2).
8. Install a 90-degree elbow fitting into the top of the valve assembly with the open end pointing to the left (Figure 2).
9. Install a 90-degree hydraulic fitting onto the top, 90-degree, elbow fitting with the open end pointing down (Figure 2).

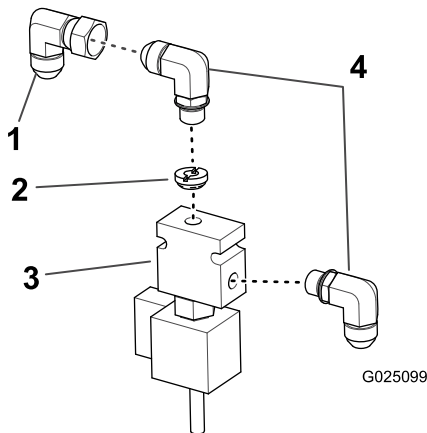


Figure 2

1. 90-degree hydraulic fitting
2. Orifice
3. Valve assembly
4. 90-degree elbow fitting

10. Install the valve assembly to the valve bracket using 2 flange-head bolts (1/4 x 1-3/4 inches) and 2 flange nuts (1/4 inch) (Figure 3).

11. Remove the existing hardware and set aside.

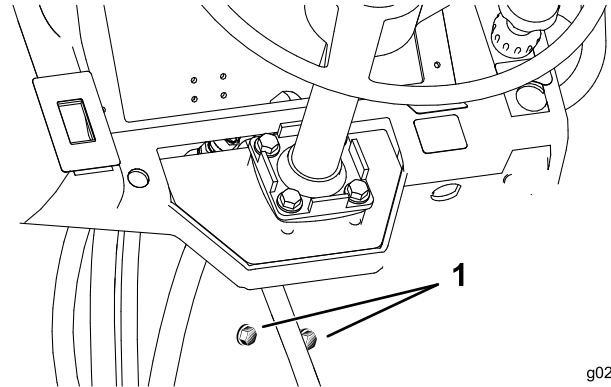


Figure 4

1. Existing hardware

12. Install the valve bracket to the machine frame behind the vertical hoses using 2 flange-head bolts (M8 x 1-1/4 inch) and previously removed nuts as shown in Figure 5.

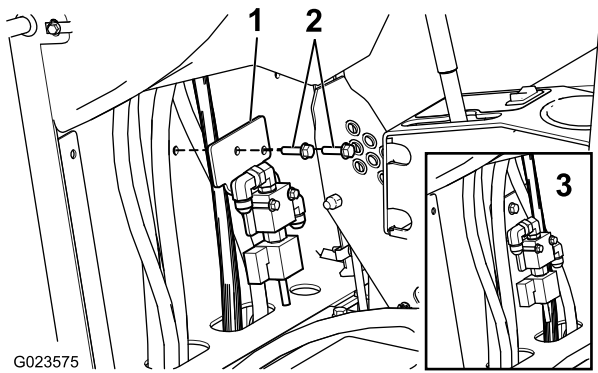


Figure 5

- 1. Valve bracket
- 2. Flange-head bolt (M8 x 1-1/4 inch)
- 3. Install behind the vertical hoses and cables

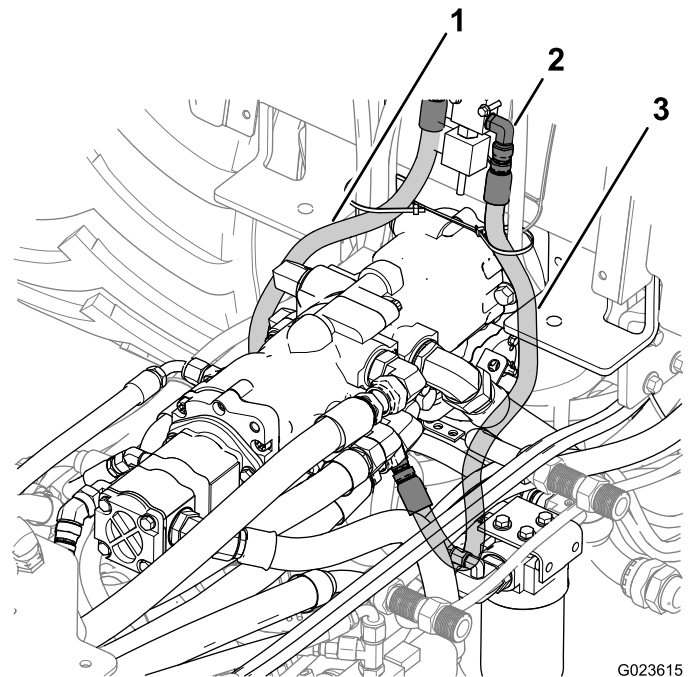


Figure 7
Right View

- 1. Left hydraulic hose
- 2. Valve assembly
- 3. Right hydraulic hose

Installing the Hydraulic Hoses

1. Place a large drain pan under the center of the machine to catch any hydraulic fluid that drains out during this procedure.
2. Remove the floor access panel and foot pedal; refer to the *RT600 Traction Unit Operator's Manual* for instructions.
3. Thread the hydraulic hoses down through the openings in the floor under the valve (Figure 6), routing one on each side of the main hydraulic manifold under the floor.
4. Connect the ends of the hoses to the open ends of the 90-degree fittings on the valve (Figure 6).

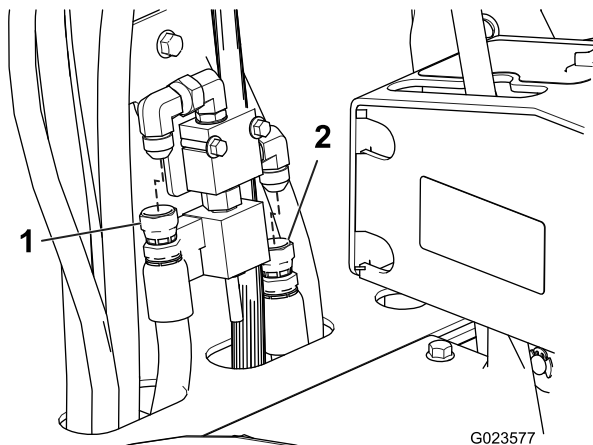


Figure 6

- 1. Hydraulic hose—left
- 2. Hydraulic hose—right

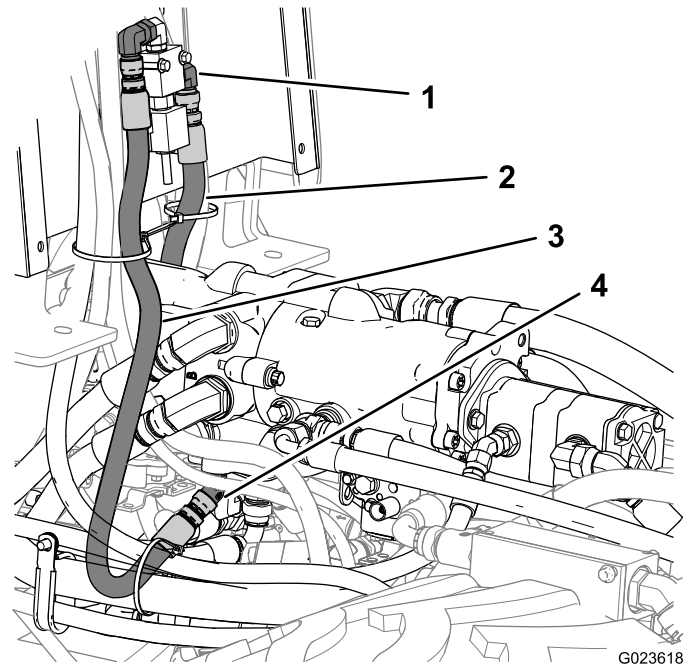


Figure 8
Left View

- 1. Valve assembly
- 2. Right hydraulic hose
- 3. Left hydraulic hose
- 4. 45-degree elbow fitting

5. Route the left hose through the other hoses under the unit to the left plug on the bottom of the main hydraulic manifold (Figure 7 and Figure 8).

6. Ensure that the hose does not contact any hard surfaces, and secure it to the other hoses at the level of the floor plate with a cable tie (Figure 7 and Figure 8).

7. Remove the left plug and allow any escaping hydraulic fluid to drain into the pan (Figure 9).
8. Install a 45-degree elbow fitting into the opening, and connect the left hydraulic hose to the fitting (Figure 9).
9. Repeat steps 5 through 8 for the right hydraulic hose, replacing the right plug on the bottom of the main hydraulic manifold.

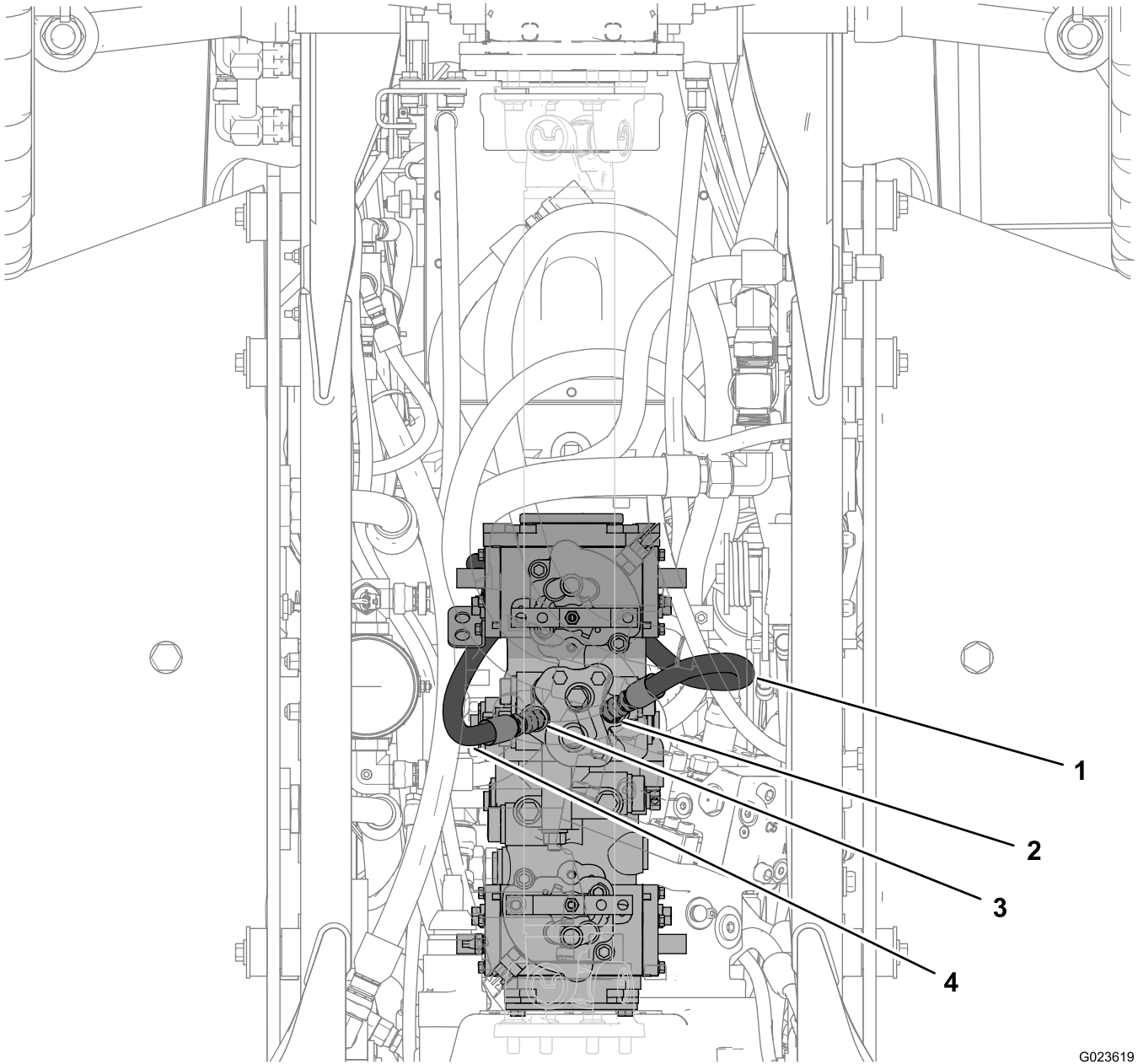


Figure 9

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- | | |
|------------------------|-------------------------|
| 1. Left hydraulic hose | 3. Right manifold port |
| 2. Left manifold port | 4. Right hydraulic hose |

Installing the Valve Switch

1. Install the valve switch on to the switch mounting bracket with 2 bolts (1/4 x 1/2 inch) as shown in figure Figure 10.

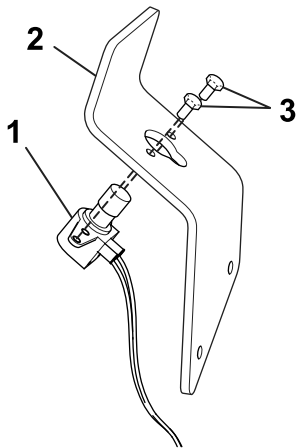


Figure 10

1. Valve switch
2. Switch mounting bracket
3. Bolt (1/4 x 1/2 inch)

2. Install the switch mounting bracket to the backhoe frame to the left of the control panel using 2 bolts (5/15 x 1 inch), 2 washers, and 2 nuts (5/16 inch).



Figure 12
Top view of machine

Important: Ensure that you do not pinch the wires from the switch between the frame and the bracket.

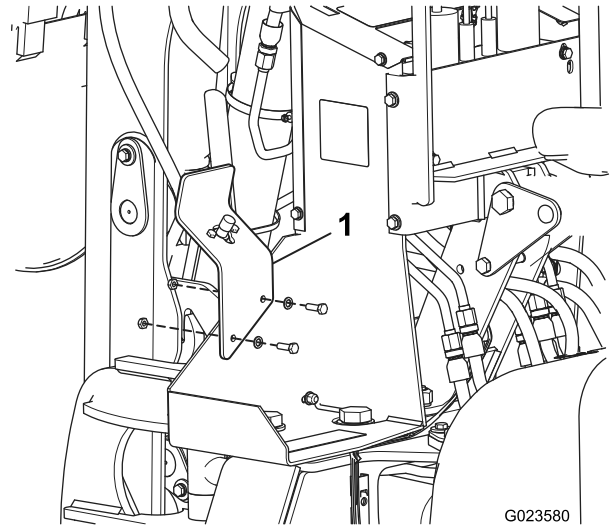


Figure 11

1. Switch mounting bracket

3. Route the wires from the switch behind and under the backhoe, along the side of the traction unit, into the engine compartment along with the current wiring harness, and up into the control console of the traction unit as shown in Figure 12 and Figure 13.

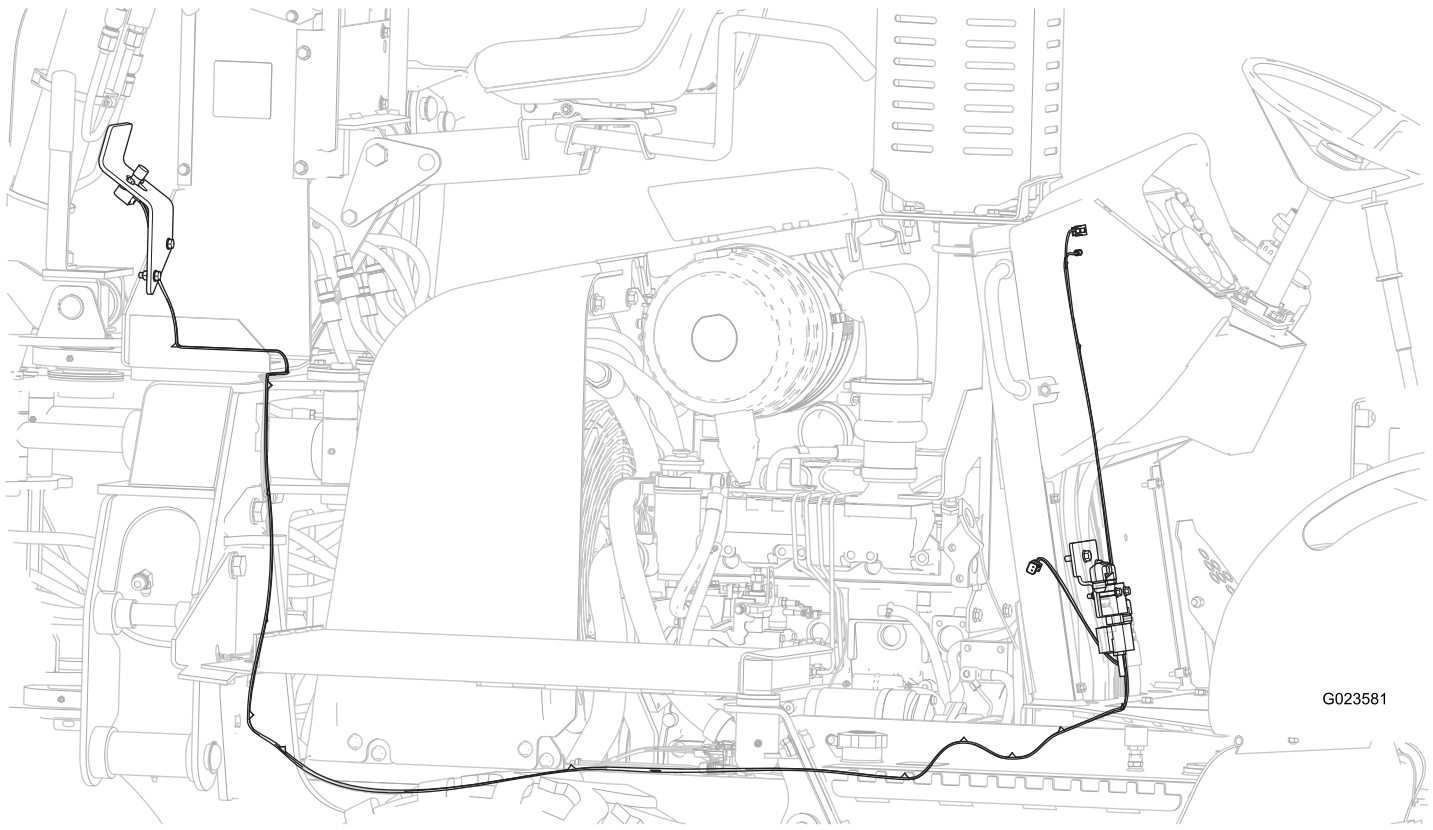


Figure 13
Side view of machine

4. Secure harness using provided cable ties.
- Important: Make sure to avoid sharp edges and moving parts.**
5. Connect the two-pin connector from the kit harness to the previously installed valve.
 6. Connect the spade terminal at the end of the harness to the mating connector at the fuse block.
 7. Install the 10 Amp fuse into the appropriate open position in the fuse block.
 8. Attach the ring terminal to the ground block near the fuse block.
 9. Install the foot pedal and floor access panel.

Operation

Using the Valve

Opening the valve allows hydraulic fluid to bypass the traction–unit drive system, allowing you to move the machine using the backhoe dipper stick and bucket, as follows:

1. Raise the backhoe stabilizers.
2. Press and hold the valve switch button to release the parking brake.

Important: Releasing the valve switch *does not* engage the parking brake.

Press the emergency stop button if the machine begins to roll down a hill.

3. Use the backhoe dipper stick and the bucket to move the machine into position.
4. Release the valve switch to close the valve, locking the traction–unit drive system.
5. Lower the backhoe stabilizers.

⚠ WARNING

If you dig with the backhoe with the stabilizers raised and the valve open, the traction unit could move or tip, seriously injuring you or bystanders.

Always close the valve and lower the stabilizers before digging with the backhoe.



Count on it.