Form No. 3370-991 Rev A

Auxiliary Valve Kit

Groundsmaster® 3280-D Traction Unit

Model No. 120-6640

Installation Instructions

Installation

Loose Parts

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

Procedure	Description	Qty.	Use
1	Control-valve assembly	1	Mount the control valve.
	Control-valve handle	1	
	Control valve pivot lever	1	
	Socket-head screw (#10 x 1–1/4 inch)	1	
	Locknut (#10)	1	
	Clevis pin	1	
	Cotter pin	1	
	Hydraulic hose	3	
	Capscrew (1/4 x 2–3/4 inches)	3	
	Flange locknut (1/4 inch)	3	
	Trim piece	1	
2	Hydraulic hoses	2	Connect the hydraulic hoses.
	Protective sleeve	1	
	Retaining ring	1	
	Dust plug	1	
	Dust cap	1	
	Quick disconnect (nipple and coupler)	1	

Media and Additional Parts

Description	Qty.	Use
Installation instructions	1	Use for set up
Parts catalog	1	Use to reference part numbers

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Mounting the Control Valve

Parts needed for this procedure:

1	Control-valve assembly
1	Control-valve handle
1	Control valve pivot lever
1	Socket-head screw (#10 x 1–1/4 inch)
1	Locknut (#10)
1	Clevis pin
1	Cotter pin
3	Hydraulic hose
3	Capscrew (1/4 x 2–3/4 inches)
3	Flange locknut (1/4 inch)
1	Trim piece

Procedure

1. Remove the seat and the seat base from the machine.
2. Loosen the fuel tank mounting fasteners so that the fuel tank can be elevated enough to gain access to the right fender.
3. Locate the 3 holes in the right fender.
   - If the rear hole is located 3.74 inches from the edge of the fender as shown in Figure 1, proceed to step 4.

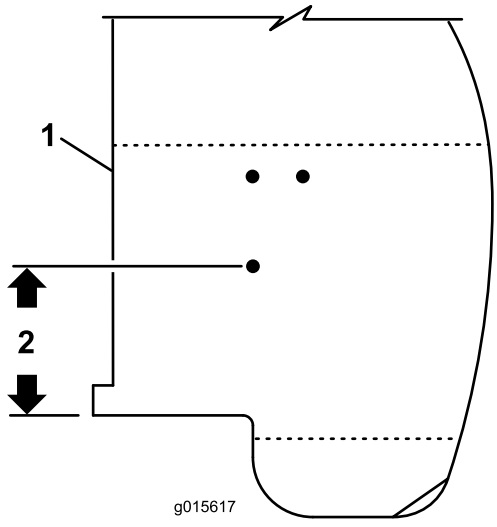


Figure 1

1. Right fender
2. 3.74 inches

   - If the rear hole is located 2.74 inches from the edge of the fender as shown in Figure 2, you must relocate the holes. Use the dimensions in Figure 2 to locate, mark, and drill 3 diameter holes (.344 inch) in the fender.

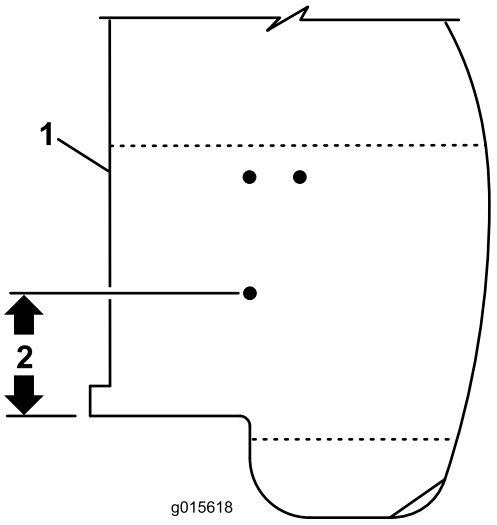


Figure 2

1. Right fender
2. 2.74 inches

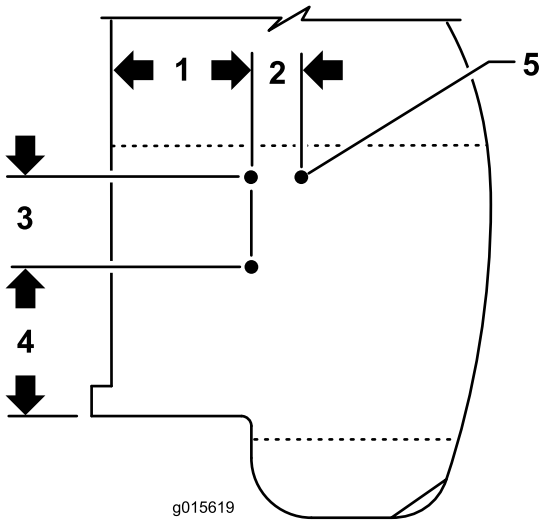


Figure 3

1. 3.50 inches
2. 1.25 inches
3. 2.25 inches
4. 3.74 inches
5. .344 inch diameter

Steps 4 through 8 pertain only to traction units with serial numbers prior to 310999999.

4. Mount the control valve and the pivot lever to the right fender with 3 capscrews (1/4 x 2–3/4 inch) and 1/4-inch flange locknuts as shown in Figure 4.

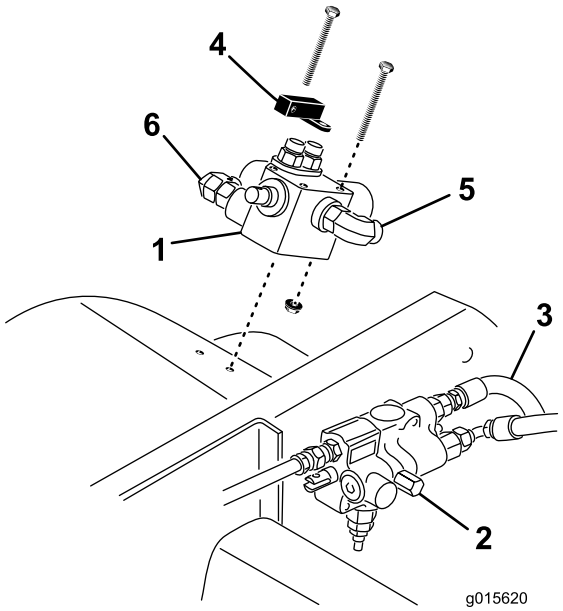


Figure 4

1. Control valve
2. Lift valve
3. Steering hose
4. Pivot lever
5. 90-degree fitting (operator side of valve)
6. 90-degree fitting (outer side of valve)

5. Place a drain pan under the lift valve (Figure 4).
6. Disconnect the steering hose (Figure 4), from the "P" port (upper rear port) of the lift valve (hose comes from the steering valve).

   Note: Make sure that the O-rings are lubricated with hydraulic oil and are in position before making any hydraulic connections.
7. Connect the steering hose (from the lift valve "P" port) to the 90-degree fitting on the operator side of the control valve (Figure 4).
8. Connect the hydraulic hose with a straight fitting and 45-degree fitting (included in the kit) to the "P" port of the lift valve and to the 90-degree fitting on the outer side of the control valve (Figure 4).

   Steps 9 thru 13 pertain only to traction units with serial numbers 311000001 and up.
9. Mount the control valve and the pivot lever to the right fender with 3 capscrews (1/4 x 2–3/4 inch) and flange locknuts (1/4 inch) as shown in (Figure 5).
10. Place a drain pan under the lift manifold (Figure 5).
11. Disconnect the steering hose (Figure 5) from the upper side port of the lift manifold.

    Note: The hose comes from the steering valve.

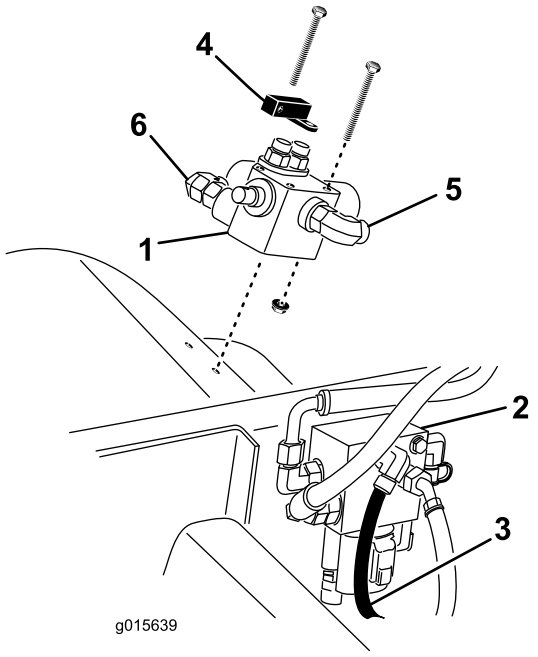


Figure 5

1. Control valve
2. Lift manifold
3. Steering hose
4. Pivot lever
5. 90 degree fitting (operator side of valve)
6. 90 degree fitting (outer side of valve)

Note: Ensure that the O-rings are lubricated with hydraulic oil and are in position before making any hydraulic connections.

12. Connect the 12-inch hose (included in the kit) to the disconnected steering hose and to the 90-degree fitting on the operator side of the control valve (Figure 5).
13. Connect the longer hydraulic hose with the straight fittings (included in the kit) to the vacated port on the lift manifold and to the 90-degree fitting on the outer side of the control valve (Figure 5).
14. Connect the 2 hydraulic hose assemblies to the fittings on the top of the control valve (Figure 6).

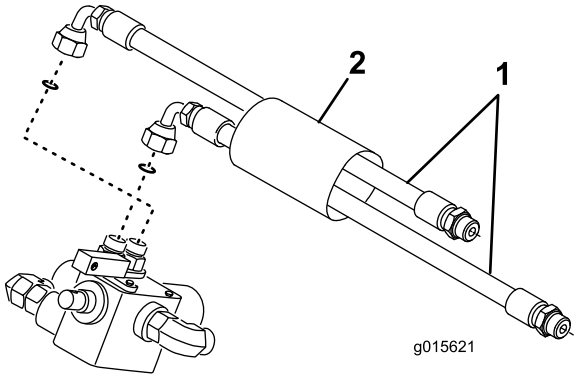


Figure 6

1. Hydraulic hoses
2. Protective sleeve

Note: Ensure that the 2 hydraulic hoses are oriented so that they point straight out the left side of the control valve as shown in Figure 7. This will eliminate the chance of the hoses interfering with the fuel tank.

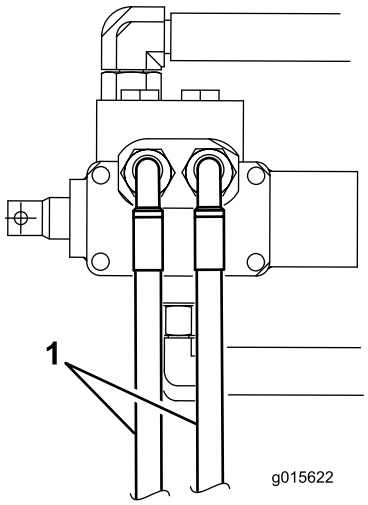


Figure 7

1. Hydraulic hose (2)

15. Install the protective sleeve over the hoses (Figure 6).
16. Remove the drain pan from under machine.
17. Remove the knock-out plug (located under the decal) in the lower control panel (Figure 8 and Figure 9).

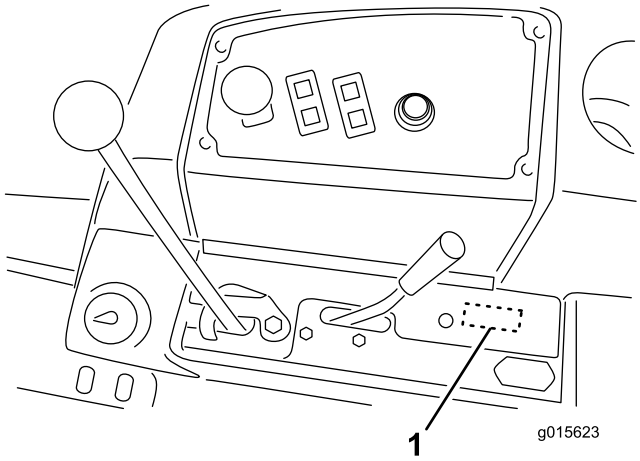


Figure 8

1. Knock-out plug location

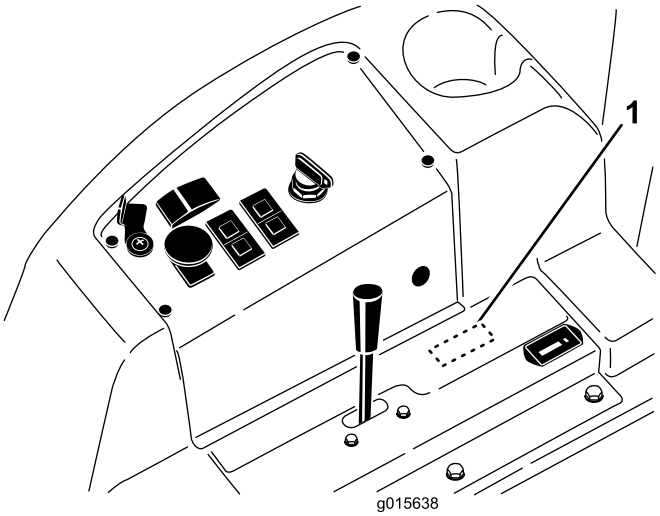


Figure 9

1. Knock-out plug location

18. Mount the control-valve handle to the valve spool with a clevis pin and cotter pin.
19. Mount the pivot lever to the handle with a socket head screw and locknut (Figure 10).

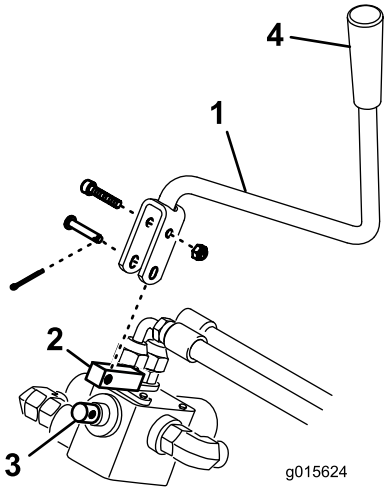


Figure 10

1. Control valve handle
2. Pivot lever
3. Valve spool
4. Control knob

20. Install the control knob to the handle (Figure 10).
21. Secure the coupler bracket to the right-hand lift arm with 2 U-bolts, 4 spacers, and 4 flange nuts as shown in Figure 11.

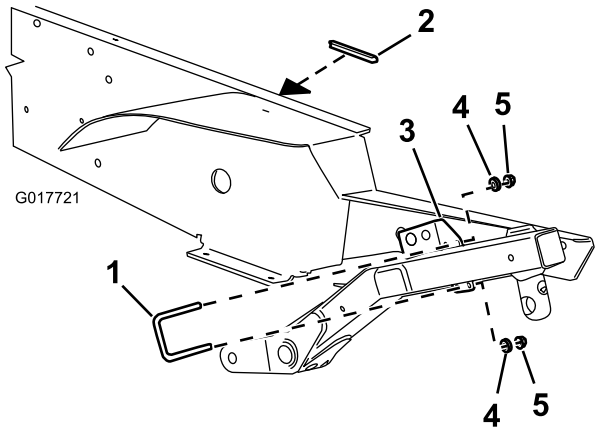


Figure 11

1. U-bolt (2)
2. Trim piece
3. Coupler bracket
4. Spacer (4)
5. Flange nut (4)

22. Route the hoses over the frame rail toward the right-hand lift arm.
23. Install the trim piece on the top frame rail under the hoses (Figure 11).
24. Install the fuel tank fasteners.
25. Install the seat base and the seat.

2

Connecting the Hydraulic Hoses

Parts needed for this procedure:

2	Hydraulic hoses
1	Protective sleeve
1	Retaining ring
1	Dust plug
1	Dust cap
1	Quick disconnect (nipple and coupler)

Procedure

1. Slide the loop end of the dust plug over the end of hydraulic hose from front valve fitting.
2. Insert the female coupler through the bottom hole in the coupler bracket and secure it with a retaining ring.
3. Secure the hose assembly to the female coupler (Figure 12).
4. Slide the loop end of the dust cap (Figure 12) over the end of the hydraulic hose coming from the rear valve fitting.
5. Install the male nipple to the hose end.
6. Insert the end of the hose through the top hole in the coupler bracket (Figure 12).

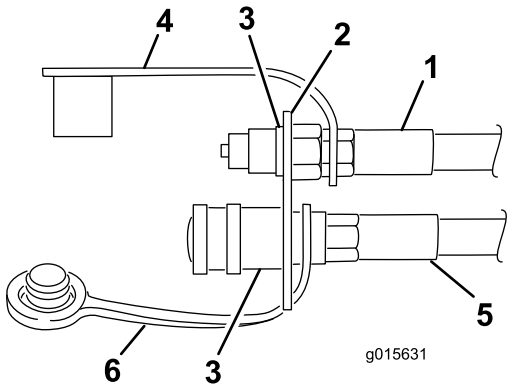


Figure 12

1. Top hydraulic hose
2. Coupler bracket
3. Retaining ring
4. Dust cap
5. Bottom hydraulic hose
6. Dust plug

7. Secure the hose assembly to the bracket with a retaining ring.

Notes:

Notes:



Count on it.