



# Hydraulic and Electrical Mounting Kit for High Lift Collection

Kubota-Powered Groundsmaster® 360 4-Wheel Drive  
Multi-Purpose Machine

Model No. 30801

## Installation Instructions

### ⚠ WARNING

#### CALIFORNIA Proposition 65 Warning

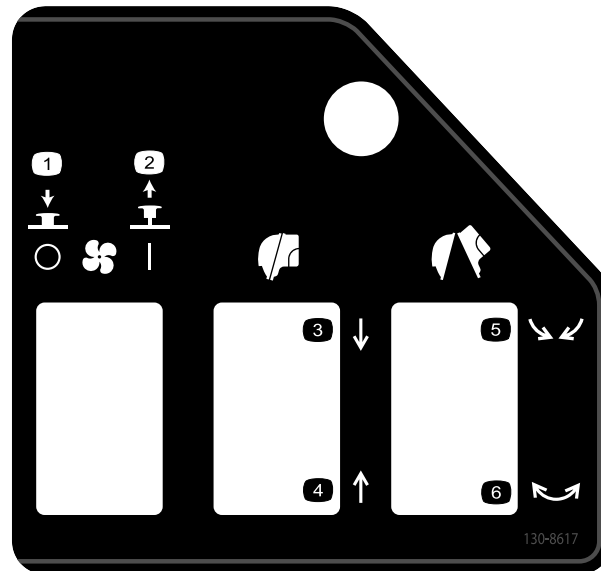
This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects, or reproductive harm.

## Safety

### Safety and Instructional Decals



Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.



130-8617

- |                                   |                     |                     |
|-----------------------------------|---------------------|---------------------|
| 1. Push down to turn the fan off. | 3. Lower the hopper | 5. Close the hopper |
| 2. Pull up to turn the fan on.    | 4. Raise the hopper | 6. Open the hopper  |



# Installation

## Loose Parts

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

Procedure	Description	Qty.	Use
<b>1</b>	No parts required	–	Prepare the machine.
<b>2</b>	Fan spacer Bolt (M6) Pulley Bolt (M10)	1 4 1 3	Mount the fan spacer and pulley.
<b>3</b>	Bracket Gear-pump plate Gear pump Adapter fitting (5/8 x 3/4 inch male) Adapter fitting (5/8 x 5/8 inch male) Bolt (3/8 inch) Tensioner arm Carriage bolt (7/16 inch) Carriage bolt (1/2 inch) Flange nut (3/8 inch) Locknut (1/2 inch) Locknut (7/16 inch) Washer Pulley Set screw (5/16 inch) Belt	1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1	Install the gear-pump assembly.
<b>4</b>	Tee fitting (3/4 x 13/16 inch) Left manifold assembly Adapter fitting (5/8 x 5/8 inch male) Tee-adapter fitting (5/8 inch male) Left manifold-assembly bracket Bolt (1/4 x 2 inch) Nut (1/4 inch) Bolt (5/16-18 x 3/4 inch) Nut (5/16 inch)	1 1 1 1 1 2 2 1 1	Install the right manifold assembly.
<b>5</b>	Filter head Bolt (1/4 inch) Adapter fitting (5/8 x 3/4 inch male) Hydraulic-filter bracket Tee fitting (5/8 x 5/8 x 3/4 inch male) Bolt (1/4 x 2 inches) Nut (1/4 inch) Carriage bolt (5/16 x 2-1/4 inches) Flange nut (5/16 inch) Relay Hex-head bolt Hex nut	1 2 1 1 1 1 1 1 1 1 1 1 1	Install the hydraulic-fluid filter.

Procedure	Description	Qty.	Use
<b>6</b>	Right manifold assembly	1	Install the left-manifold assembly.
	Tee-adaptor fitting (5/8 inch male)	2	
	Right manifold-assembly bracket	1	
	Nut (1/4 inch)	4	
	Bolt (5/16 x 2-3/4 inches)	2	
	Bolt (1/4 x 3/4 inch)	4	
	Spacer	2	
<b>7</b>	Bulkhead plate	1	Install the bulkhead assembly.
	Bulkhead nut (large)	2	
	Bulkhead nut (small)	2	
	Quick-coupling fitting (1/2 female x 1/2 inch male)	1	
	Bulkhead union (2.57 inches)	2	
	Bulkhead coupler (4.02 inches)	1	
	Bulkhead nipple (3.84 inches)	1	
	Quick coupling fitting (1/2 x 1/2 inch female)	1	
	U-bolt	1	
	Flange nut (3/8 inch)	2	
	90° fitting (3/8 x 3/8 inch male)	1	
	90° fitting (3/8 female x 3/8 male x 3/4 inch hose barb)	1	
	45° fitting	1	
<b>8</b>	PTO switch	1	Install the switches.
	Rocker switch	2	
	Decal	1	
<b>9</b>	Hydraulic hose A	1	Install the hoses and wire harness.
	Hydraulic tube B	1	
	Hydraulic hose C	2	
	Hydraulic tube D	1	
	Hydraulic tube E	1	
	Hydraulic hose F	1	
	Hydraulic tube G	1	
	Hydraulic tube H	1	
	Hydraulic tube I	1	
	Temperature sender	1	
	Wire harness	1	
	Cable ties	3	
	Hydraulic filter	1	

# 1

## Preparing the Machine

### No Parts Required

### Procedure

1. Park machine on a level surface, shut off the engine, engage the parking brake, and remove the key from the ignition switch.
2. Disconnect the battery and remove the battery and battery tray from the machine (Figure 1).

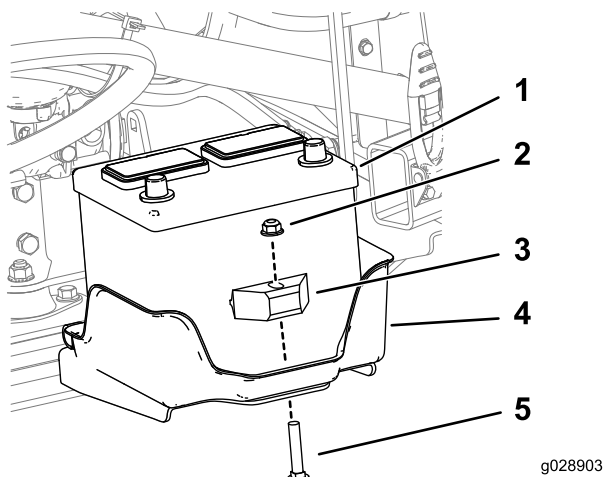


Figure 1

- |            |                 |
|------------|-----------------|
| 1. Battery | 4. Battery tray |
| 2. Nut     | 5. Bolt         |
| 3. Spacer  |                 |
- 
3. Remove the hood assembly of the machine; refer to the *Operator's Manual* for the machine.
  4. Remove the radiator bracket, loosen the fan shroud, and tilt the radiator assembly rearward on its bottom mounts (Figure 2).

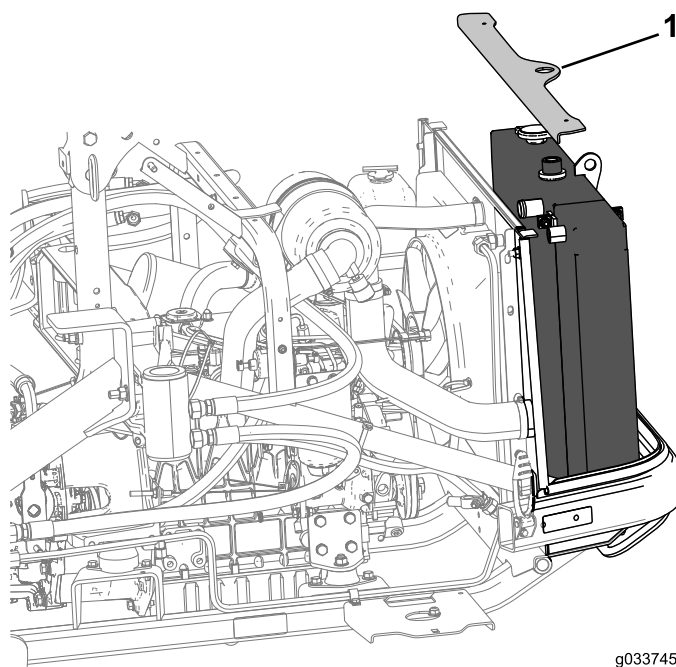


Figure 2

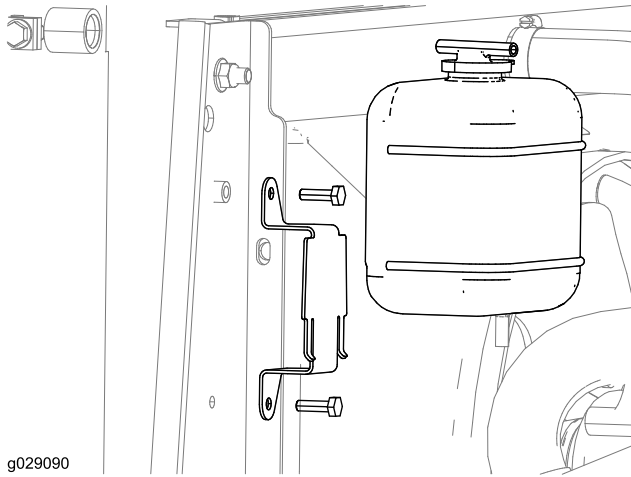
1. Radiator bracket

5. Remove the radiator-overflow tank and bracket from the machine as shown in Figure 3.

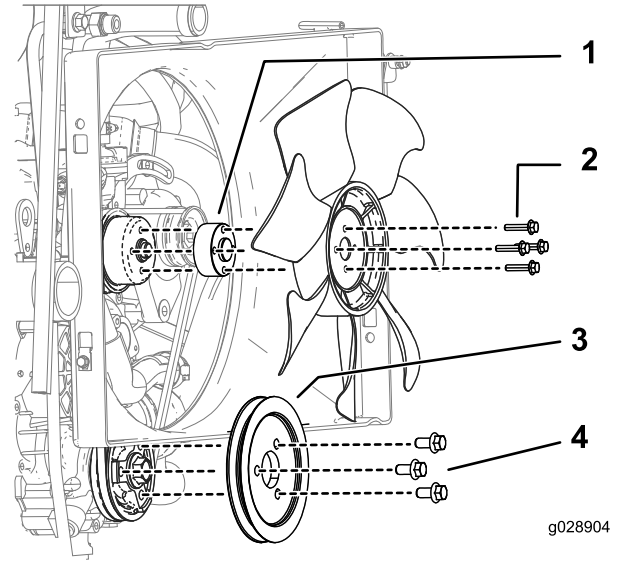
### CAUTION

If the engine has been running, the pressurized, hot coolant can escape and cause burns.

- Do not open the radiator cap.
- Allow the engine to cool at least 15 minutes or until the reserve tank is cool enough to touch without burning your hand.
- Use a rag when opening the reserve-tank cap, and open the cap slowly to allow steam to escape.
- Do not check the coolant level at the radiator; check the coolant level only at the reserve tank.



**Figure 3**



**Figure 4**

- |               |                |
|---------------|----------------|
| 1. Fan spacer | 3. Pulley      |
| 2. Bolts (M6) | 4. Bolts (M10) |

2. Torque the M10 bolts to 10 to 12 N·m (7 to 9 ft-lb).
3. Torque the M6 bolts to 7 to 8 N·m (0.5 to 0.6 ft-lb).

## 2

### Mounting the Fan Spacer and Pulley

#### Parts needed for this procedure:

1	Fan spacer
4	Bolt (M6)
1	Pulley
3	Bolt (M10)

#### Procedure

1. Install the fan spacer and pulley as shown in [Figure 4](#).

# 3

## Installing the Gear-Pump Assembly

### Parts needed for this procedure:

1	Bracket
1	Gear-pump plate
1	Gear pump
1	Adapter fitting (5/8 x 3/4 inch male)
1	Adapter fitting (5/8 x 5/8 inch male)
2	Bolt (3/8 inch)
1	Tensioner arm
2	Carriage bolt (7/16 inch)
1	Carriage bolt (1/2 inch)
2	Flange nut (3/8 inch)
1	Locknut (1/2 inch)
2	Locknut (7/16 inch)
2	Washer
1	Pulley
2	Set screw (5/16 inch)
1	Belt

### Procedure

Use [Figure 5](#) to identify the fittings for this kit.

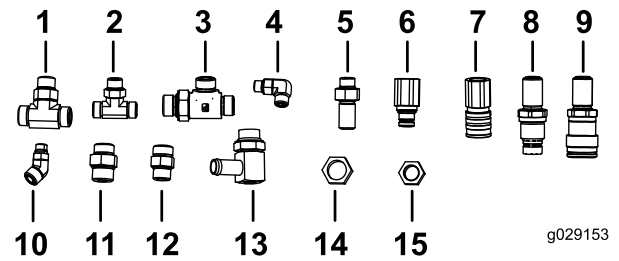


Figure 5

1. Tee-adapter fitting (5/8 inch male) (3)
2. Tee fitting (3/4 x 13/16 inch)
3. Tee fitting (5/8 x 5/8 x 3/4 inch male)
4. 90-degree fitting (3/8 x 3/8 inch male)
5. Bulkhead union (2.57 inch)
6. Quick-coupling fitting (1/2 female x 1/2 inch male)
7. Quick-coupling fitting (1/2 x 1/2 inch female)
8. Bulkhead nipple (3.84 inch)
9. Bulkhead coupler (4.02 inch)
10. 45-degree fitting
11. Adapter fitting (5/8 x 3/4 inch male) (2)
12. Adapter fitting (5/8 x 5/8 inch male) (2)
13. 90-degree fitting (3/8 female x 3/8 male x 3/4 inch hose barb)
14. Bulkhead nut (large)
15. Bulkhead nut (small)

When installing a hydraulic hose, ensure that the hose is straight (not twisted) before tightening the fittings. This can be done by observing the imprint (layline) on the hose. Use 2 wrenches; hold the hose straight with 1 wrench and tighten the hose swivel nut onto the fitting with the other wrench

For additional hydraulic hose information, refer to Toro Service Training Book, *Hydraulic Hose Servicing*.

### ⚠ WARNING

Hydraulic fluid escaping under pressure can penetrate skin and cause injury. Fluid injected into the skin must be surgically removed within a few hours by a doctor familiar with this form of injury or gangrene may result.

- Keep your body and hands away from pin hole leaks or nozzles that eject high-pressure hydraulic fluid.
- Use cardboard or paper to find hydraulic leaks; never use your hands.

1. Make sure that all threads and sealing surfaces of the fitting and component ports are free of burrs, nicks, scratches, or any foreign material.
2. Lightly lubricate the O-ring with clean hydraulic fluid.

**Note:** The fitting threads should be clean, with no lubricant applied.

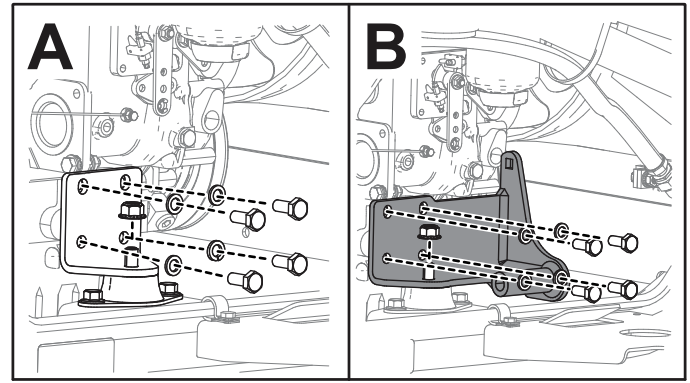
**Important:** Determine the port material before installing the fitting into the port. Torque is reduced if the fitting is installed into an aluminum port.

3. Install the fitting into the port and torque the fitting to the recommended installation torque shown in the table below.

**Note:** Do not use an offset wrench (e.g., crowfoot wrench).

Fitting Dash Size	Fitting Port Side Thread Size	Torque (Steel Port)	Torque (Aluminum Port)
4	7/16 - 20	21 to 25 N·m (15 to 19 ft-lb)	13 to 15 N·m (9 to 11 ft-lb)
5	1/2 - 20	25 to 29 N·m (18 to 22 ft-lb)	15 to 20 N·m (11 to 15 ft-lb)
6	9/16 - 18	47 to 56 N·m (34 to 42 ft-lb)	28 to 35 N·m (20 to 26 ft-lb)
8	3/4 - 16	79 to 97 N·m (58 to 72 ft-lb)	48 to 58 N·m (35 to 43 ft-lb)
10	7/8 - 14	135 to 164 N·m (99 to 121 ft-lb)	82 to 100 N·m (60 to 74 ft-lb)
12	1 1/16 - 12	182 to 222 N·m (134 to 164 ft-lb)	110 to 134 N·m (81 to 99 ft-lb)
14	1 3/16 - 12	217 to 265 N·m (160 to 196 ft-lb)	131 to 160 N·m (96 to 118 ft-lb)
16	1 5/16 - 12	274 to 336 N·m (202 to 248 ft-lb)	165 to 202 N·m (121 to 149 ft-lb)
20	1 5/8 - 12	335 to 410 N·m (247 to 303 ft-lb)	202 to 248 N·m (149 to 183 ft-lb)

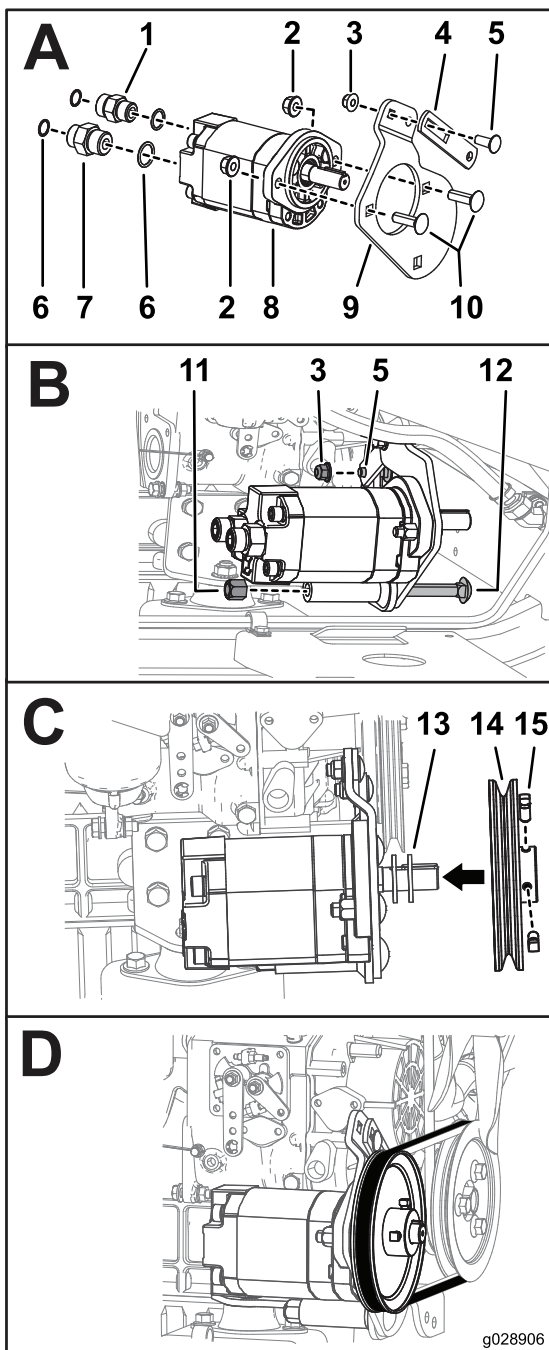
1. Remove the bracket securing the engine to the frame as shown in Box A of [Figure 6](#).



g028905

**Figure 6**

2. Install the gear-pump bracket using the bolts, washers, and nut previously removed as shown in Box B of [Figure 6](#).
3. Install the adapter fitting (5/8 x 3/4 inch male) and O-rings onto the right port on the gear pump (Box A of [Figure 7](#)).



**Figure 7**

- |  |                               |
|--|-------------------------------|
| 1. Adapter fitting (5/8 x 5/8 inch male) | 9. Gear-pump plate            |
| 2. Locknut (7/16 inch)                   | 10. Carriage bolt (7/16 inch) |
| 3. Flange nut (3/8-16 inch)              | 11. Locknut (1/2 inch)        |
| 4. Tensioner arm                         | 12. Carriage bolt (1/2 inch)  |
| 5. Bolt (3/8-16 inch)                    | 13. Washers                   |
| 6. O-rings                               | 14. Pulley                    |
| 7. Adapter fitting (5/8 x 3/4 inch male) | 15. Set screws                |
| 8. Gear pump                             |                               |

- Loosely install the tensioner arm onto the gear-pump plate using 1 bolt (3/8 inch) and 1 flange nut (3/8 inch) (Box A of Figure 7).

**Note:** Do not tighten the nut.

- Install the gear-pump plate onto the gear pump assembly using 2 carriage bolts (7/16 inch) and 2 locknuts (7/16 inch) as shown in Box A of Figure 7.
  - Torque the bolts to 61 to 75 N·m (45 to 55 ft-lb).
  - Loosely Secure the gear-pump assembly onto the bracket using 1 carriage bolt (1/2 inch), 1 locknut (1/2 inch), 1 bolt (3/8 inch) and 1 flange nut (3/8 inch) as shown in Box B of Figure 7.
- Note:** Do not tighten the nuts.
- Place 2 washers on the gear-pump assembly, install the pulley, and secure the pulley with 2 set screws (5/16 inch) as shown in Box C of Figure 7.
  - Install the belt onto the 2 pulleys as shown in Box D of Figure 7.
  - Torque the pump plate with a 3/8 inch ratchet to add tension to the belt.
  - Tighten all of the nuts; torque the bolts to:
    - Bolt (3/8 inch) — 37 to 45 N·m (27 to 33 ft-lb).
    - Carriage bolt (1/4 inch) — 91 to 113 N·m (67 to 83 ft-lb).

## 4

### Installing the Left Manifold Assembly

#### Parts needed for this procedure:

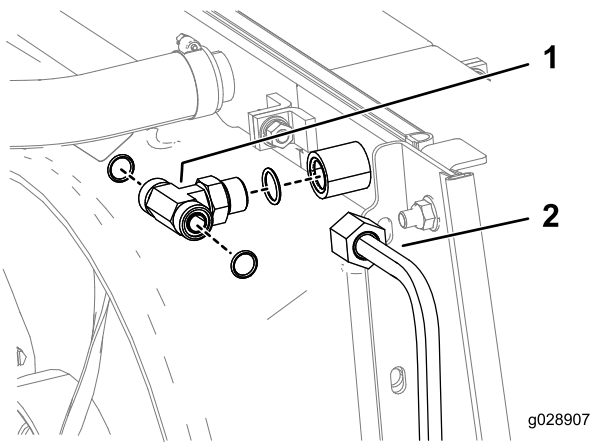
1	Tee fitting (3/4 x 13/16 inch)
1	Left manifold assembly
1	Adapter fitting (5/8 x 5/8 inch male)
1	Tee-adapter fitting (5/8 inch male)
1	Left manifold-assembly bracket
2	Bolt (1/4 x 2 inch)
2	Nut (1/4 inch)
1	Bolt (5/16-18 x 3/4 inch)
1	Nut (5/16 inch)

#### Procedure

- Install the adapter fitting (5/8 x 5/8 inch male) and O-rings onto the left port of the gear pump (Box A of Figure 7).

- If your machine does not have a tee fitting on the left side of the oil cooler, disconnect the hose and fitting and install the tee fitting (Figure 8).

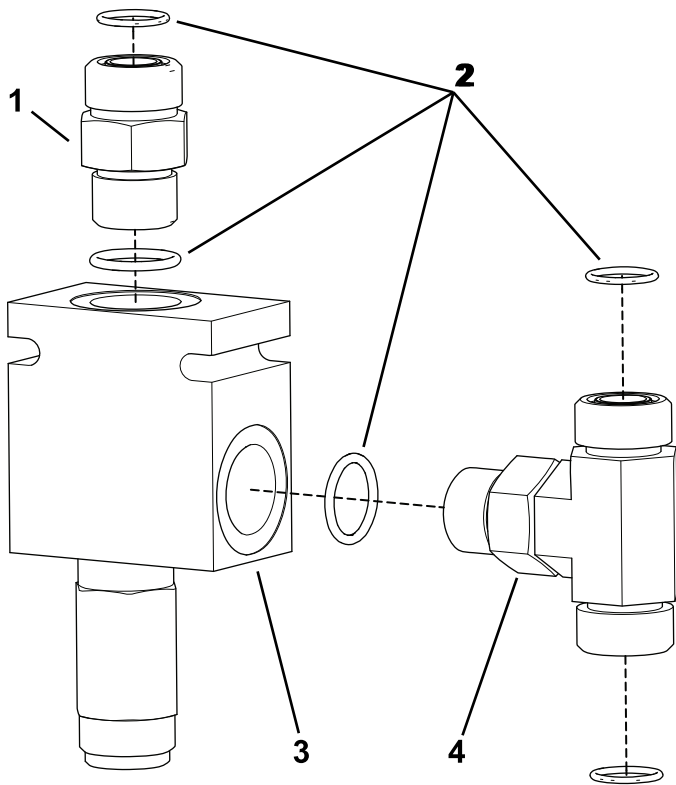




**Figure 8**

1. Tee fitting (3/4 x 13/16 inch)
2. Oil-cooler tube

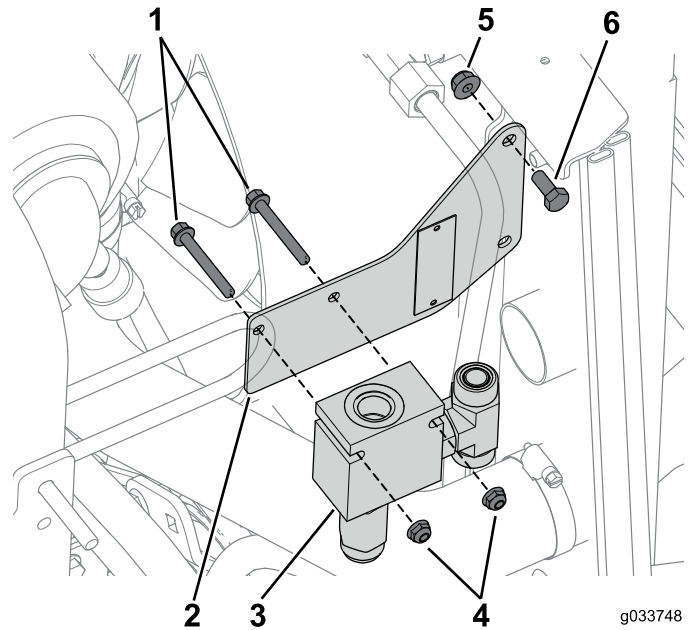
2. Connect the oil-cooler tube to the port on the tee fitting (Figure 8).
3. Install the adapter fitting (5/8 x 5/8 inch male) and tee-adapter fitting (5/8 male) onto the left manifold assembly as shown in Figure 9.



**Figure 9**

1. Adapter fitting (5/8 x 5/8 inch male)
2. O-rings
3. Right manifold assembly
4. Tee-adapter fitting (5/8 inch male)

4. Install the left manifold-assembly bracket using 1 bolt (5/16 x 3/4 inch) and 1 flange nut (5/16 inch) on the top hole of the bracket (Figure 10).



**Figure 10**

1. Bolt (1/4 x 2 inches)
2. Bracket
3. Left manifold assembly
4. Flange nut (1/4 inch)
5. Flange nut (5/16 inch)
6. Bolt (5/16 x 3/4 inch)

5. Secure the bottom part of the bracket using the hardware previously removed from the radiator-fan shroud.
6. Secure the left manifold assembly to the bracket using 2 bolts (1/4 x 2 inches) and 2 nuts (Figure 10).

# 5

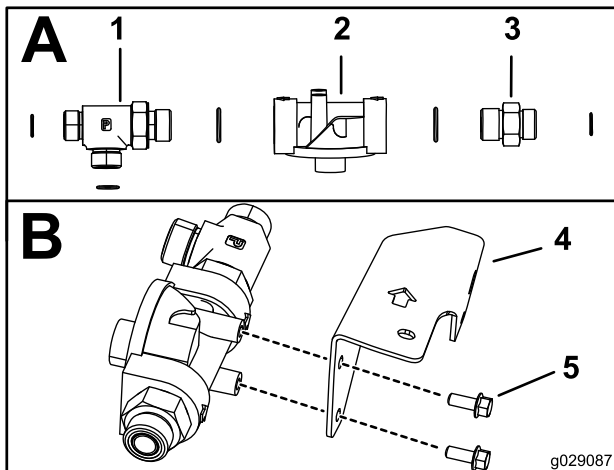
## Installing the Hydraulic-Fluid Filter

### Parts needed for this procedure:

1	Filter head
2	Bolt (1/4 inch)
1	Adapter fitting (5/8 x 3/4 inch male)
1	Hydraulic-filter bracket
1	Tee fitting (5/8 x 5/8 x 3/4 inch male)
1	Bolt (1/4 x 2 inches)
1	Nut (1/4 inch)
1	Carriage bolt (5/16 x 2-1/4 inches)
1	Flange nut (5/16 inch)
1	Relay
1	Hex-head bolt
1	Hex nut

### Procedure

1. Install the tee fitting (5/8 x 5/8 x 3/4 inch male), adapter fitting (5/8 x 3/4 inch male), and O-rings onto the filter-head assembly as shown in Box A, [Figure 11](#).



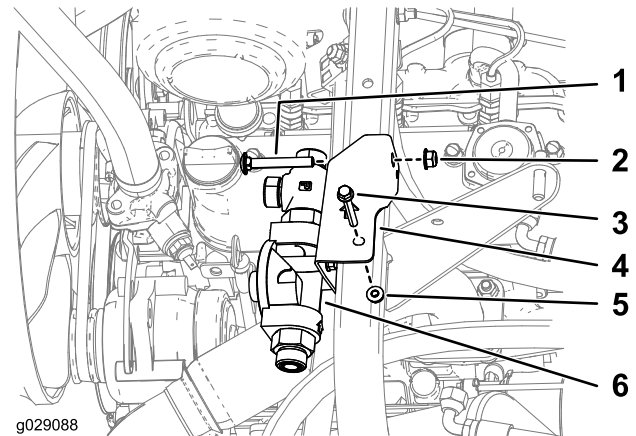
**Figure 11**

1. Tee fitting (5/8 x 5/8 x 3/4 inch male)
2. Filter head
3. Adapter fitting (5/8 x 3/4 inch male)
4. Filter-head bracket
5. Bolt (1/4 inch)

2. Install the filter head onto the filter-head bracket using 2 bolts (1/4 inch) as shown in Box B, [Figure 11](#).

**Note:** For models 2014 and earlier, use the wide bracket without the arrow cutout.

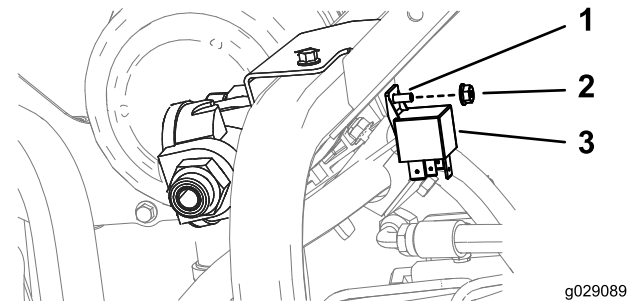
3. Secure the hydraulic-filter assembly to the frame as shown in [Figure 12](#).



**Figure 12**

1. Carriage bolt (5/16-18 x 2-1/4 inches)
2. Flange nut (5/16 inch)
3. Bolt (1/4-20 x 2 inches)
4. Filter-head bracket
5. Nut (1/4 inch)
6. Filter head

4. Install the relay as shown in [Figure 13](#).



**Figure 13**

1. Hex bolt
2. Hex nut
3. Relay

# 6

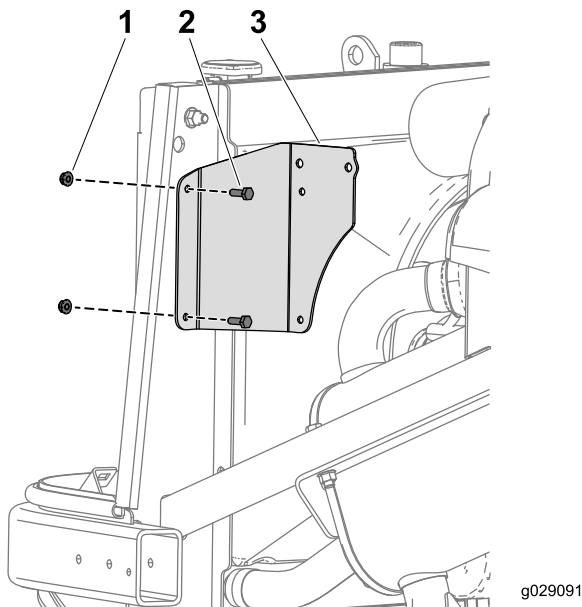
## Installing the Right Manifold Assembly

### Parts needed for this procedure:

1	Right manifold assembly
2	Tee-adapter fitting (5/8 inch male)
1	Right manifold-assembly bracket
4	Nut (1/4 inch)
2	Bolt (5/16 x 2-3/4 inches)
4	Bolt (1/4 x 3/4 inch)
2	Spacer

### Procedure

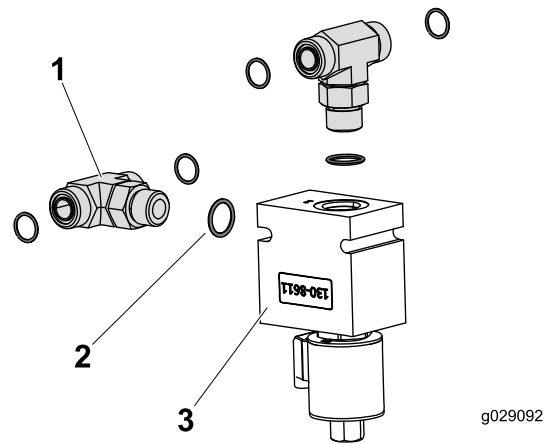
1. Install the bracket using 2 bolts (1/4 x 3/4 inch) and the nuts previously removed from the radiator-overflow bracket (Figure 14).



**Figure 14**

1. Locknut (1/4 inch)
2. Bolt (1/4 x 3/4 inch)
3. Radiator-overflow bracket

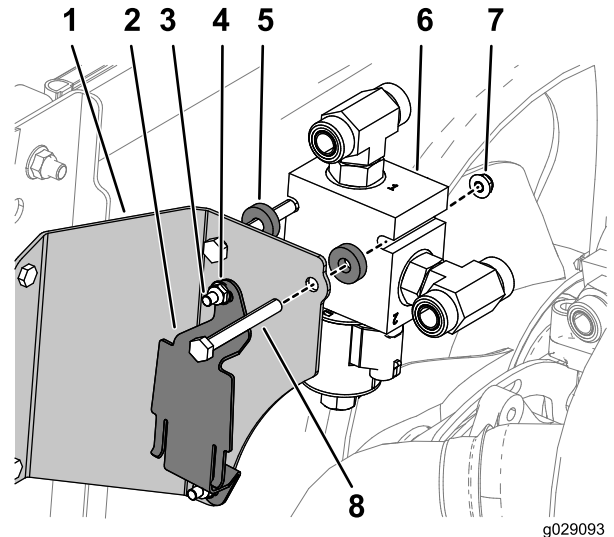
2. Install the 2 tee fittings and O-rings onto the manifold valve as shown in Figure 15.



**Figure 15**

1. Tee fitting
2. O-ring
3. Manifold valve

3. Install the radiator-overflow-tank bracket onto the manifold-assembly bracket using 2 bolts (1/4 x 3/4 inch) and 2 nuts (1/4 inch) as shown in Figure 16.



**Figure 16**

1. Manifold-assembly bracket
2. Radiator overflow-tank bracket
3. Bolt (1/4 x 3/4 inch)
4. Nut (1/4-20 inch)
5. Spacers
6. Manifold assembly
7. Nut (5/16-18 inch)
8. Bolt (5/16 x 2-3/4 inches)

4. Torque the bolts to 10 to 12 N·m (8 to 9 ft-lb).
5. Install the manifold assembly onto the bracket using 2 bolts (5/16 x 2-3/4 inch), 2 spacers, and 2 nuts as shown in Figure 16.
6. Torque the bolts to 20 to 25 N·m (15 to 18 ft-lb).

# 7

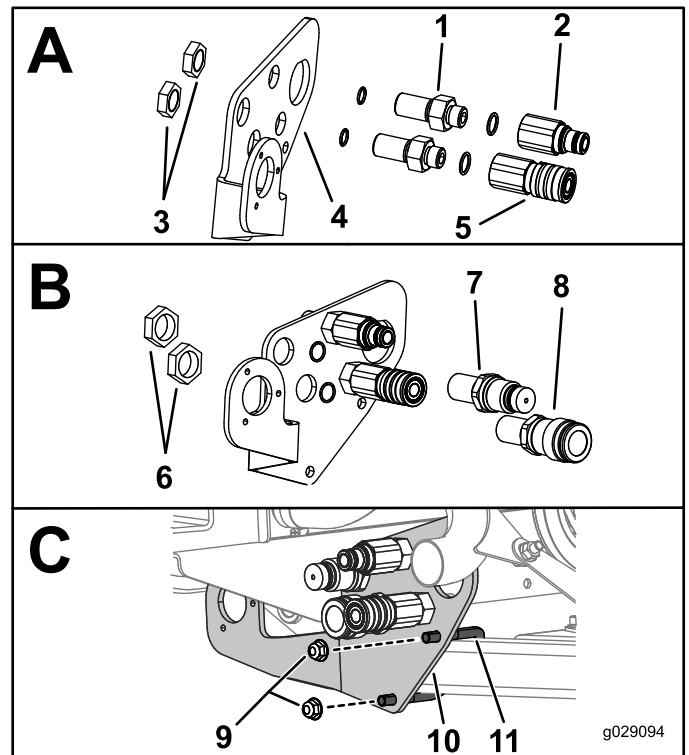
## Installing the Bulkhead Assembly

### Parts needed for this procedure:

1	Bulkhead plate
2	Bulkhead nut (large)
2	Bulkhead nut (small)
1	Quick-coupling fitting (1/2 female x 1/2 inch male)
2	Bulkhead union (2.57 inches)
1	Bulkhead coupler (4.02 inches)
1	Bulkhead nipple (3.84 inches)
1	Quick coupling fitting (1/2 x 1/2 inch female)
1	U-bolt
2	Flange nut (3/8 inch)
1	90° fitting (3/8 x 3/8 inch male)
1	90° fitting (3/8 female x 3/8 male x 3/4 inch hose barb)
1	45° fitting

### Procedure

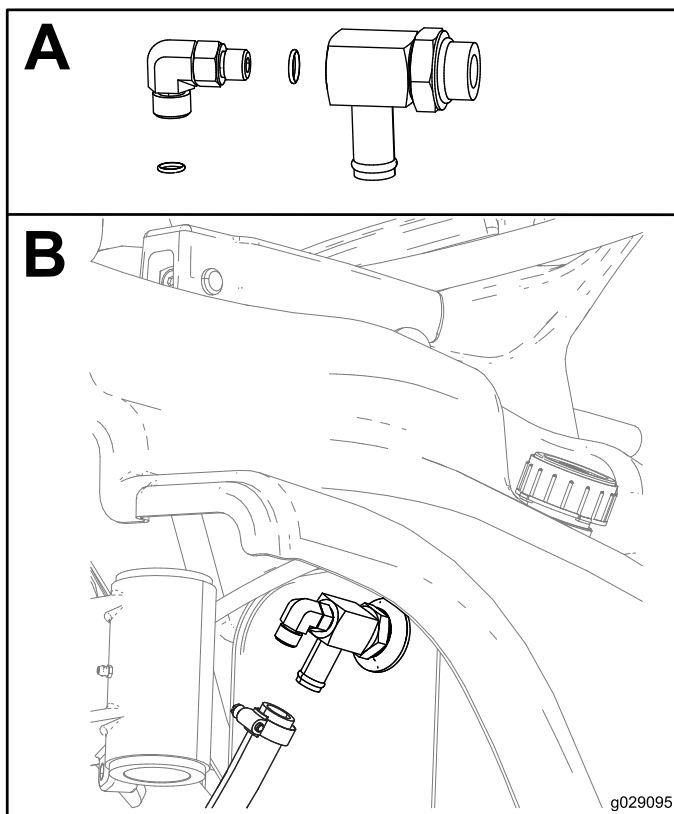
1. Install the fittings onto the bulkhead plate as shown in [Figure 17](#).



**Figure 17**

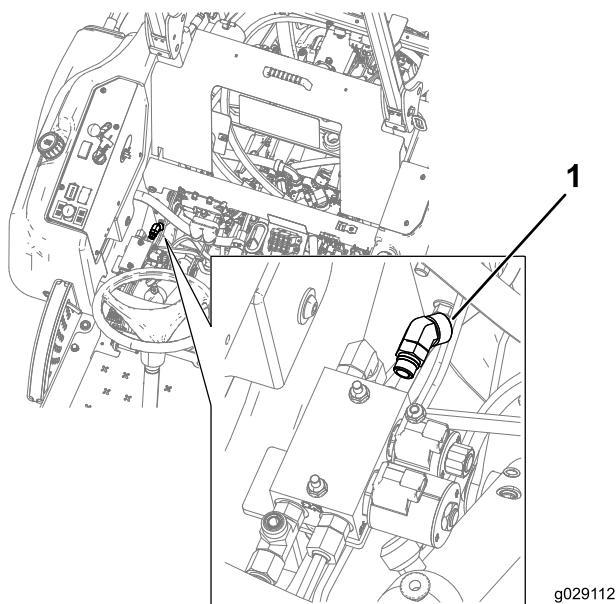
- |  |                                   |
|--|-----------------------------------|
| 1. Bulkhead union (2.57 inches)                        | 7. Bulkhead nipple (3.84 inches)  |
| 2. Quick-coupling fitting (1/2 female x 1/2 inch male) | 8. Bulkhead coupler (4.02 inches) |
| 3. Bulkhead nut (small)                                | 9. Flange nut (3/8 inch)          |
| 4. Bulkhead plate                                      | 10. Bulkhead assembly             |
| 5. Quick-coupling fitting (1/2 x 1/2 inch female)      | 11. U-bolt                        |
| 6. Bulkhead nut (large)                                |                                   |

2. Loosely secure the bulkhead plate to the frame using the U-bolt and 2 flange nuts (3/8 inch) as shown in Box C of [Figure 17](#).
3. Install the 90° fitting (3/8 x 3/8 inch male) onto the 90° fitting (3/8 female x 3/8 male x 3/4 inch hose barb) as shown in box A of [Figure 18](#).



**Figure 18**

4. Remove the current elbow fitting from the rear of the hydraulic tank on the right side of the machine and install the 90° fitting and adapter and connect the hose as shown in Box B of [Figure 18](#).
5. Lift the seat on the machine and install the 45° fitting as shown in [Figure 19](#).



**Figure 19**

1. 45° fitting

# 8

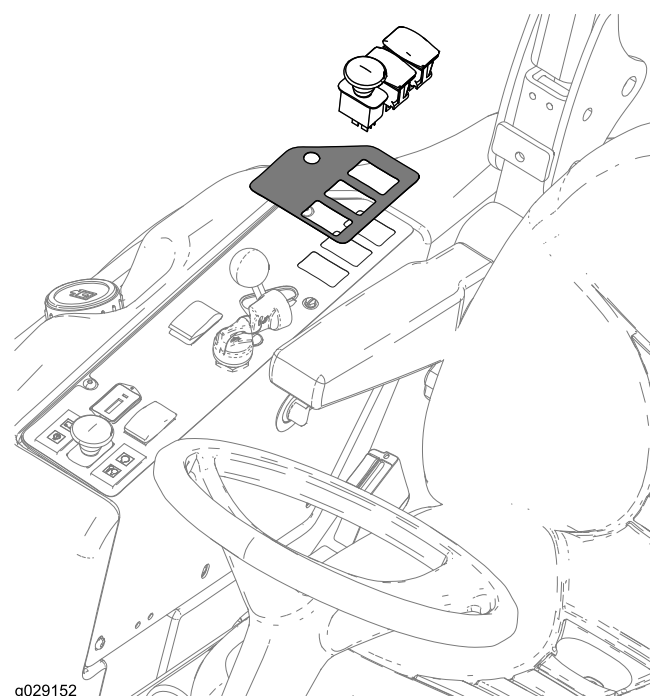
## Installing the Switches

**Parts needed for this procedure:**

1	PTO switch
2	Rocker switch
1	Decal

### Procedure

1. On the underside of the control panel, locate and remove the 3 tabs where you will install the switches ([Figure 20](#)).



**Figure 20**

2. Cut the same holes in the control-panel decal ([Figure 20](#)).
3. Install the decal and switches as shown in [Figure 20](#).

# 9

## Installing the Hoses and Wire Harness

### Parts needed for this procedure:

1	Hydraulic hose A
1	Hydraulic tube B
2	Hydraulic hose C
1	Hydraulic tube D
1	Hydraulic tube E
1	Hydraulic hose F
1	Hydraulic tube G
1	Hydraulic tube H
1	Hydraulic tube I
1	Temperature sender
1	Wire harness
3	Cable ties
1	Hydraulic filter

### Routing the Hoses

Use [Figure 21](#) as a guide to installing the hydraulic hoses.

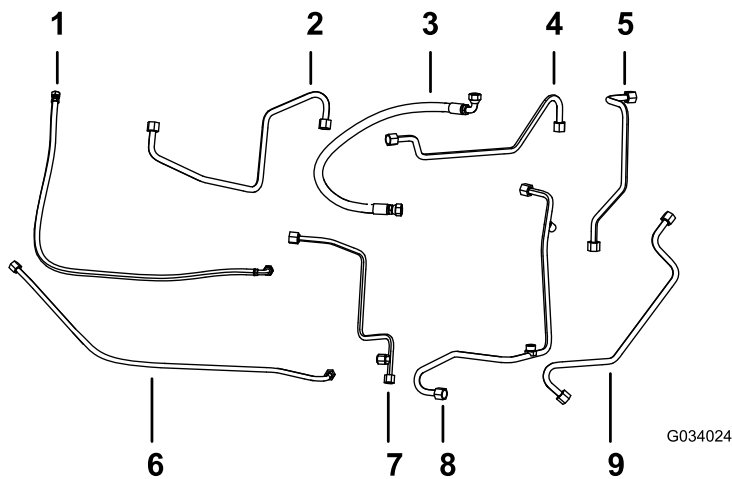


Figure 21

- |                         |                     |
|-------------------------|---------------------|
| 1. Hydraulic hose A     | 6. Hydraulic hose F |
| 2. Hydraulic tube B     | 7. Hydraulic tube G |
| 3. Hydraulic hose C (2) | 8. Hydraulic tube H |
| 4. Hydraulic tube D     | 9. Hydraulic tube I |
| 5. Hydraulic tube E     |                     |

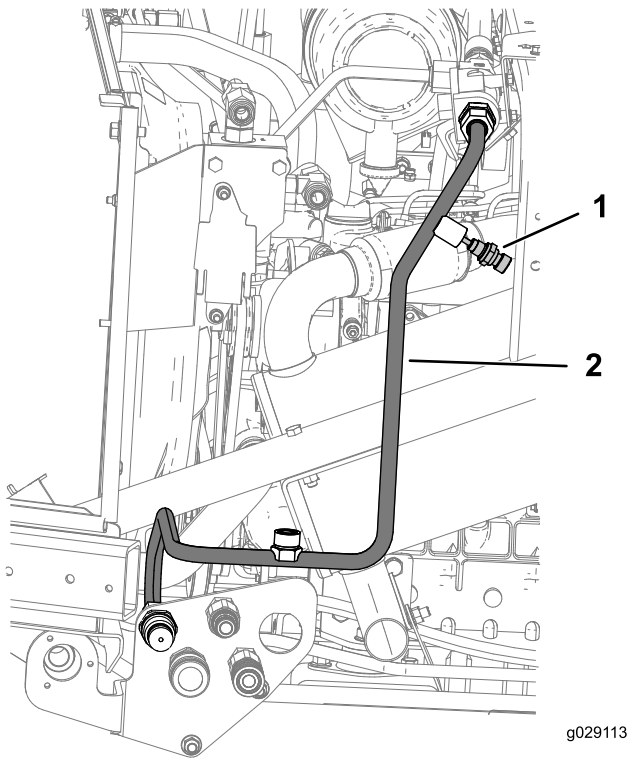
1. Ensure that the threads and sealing surfaces of the hose/tube and the fitting are free of burrs, nicks, scratches, or any foreign material.
2. Place the hose/tube against the fitting body so that the flat face of the hose/tube sleeve fully contacts the O-ring in the fitting.
3. Thread the swivel nut onto the fitting by hand. While holding the hose/tube with a wrench, use a torque wrench to tighten the swivel nut to the recommended installation torque shown in the table below.

**Note:** Do not use an offset wrench (e.g., crowfoot wrench).

Fitting Dash Size	Hose/Tube Thread Size	Torque
4	9/16 - 18	25 to 29 N·m (18 to 22 ft-lb)
6	11/16 - 16	37 to 44 N·m (27 to 33 ft-lb)
8	13/16 - 16	51 to 63 N·m (37 to 47 ft-lb)
10	1 - 14	82 to 100 N·m (60 to 74 ft-lb)
12	1 3/16 - 12	116 to 142 N·m (85 to 105 ft-lb)
16	1 7/16 - 12	150 to 184 N·m (110 to 136 ft-lb)
20	1 11/16 - 12	190 to 2,339 N·m (140 to 172 ft-lb)

1. Install the hose hydraulic tube H from the adapter fitting (5/8 x 3/4 inch male) on the filter-head assembly to the bulkhead nipple (3.84 inches) on the bulkhead assembly as shown in [Figure 22](#).



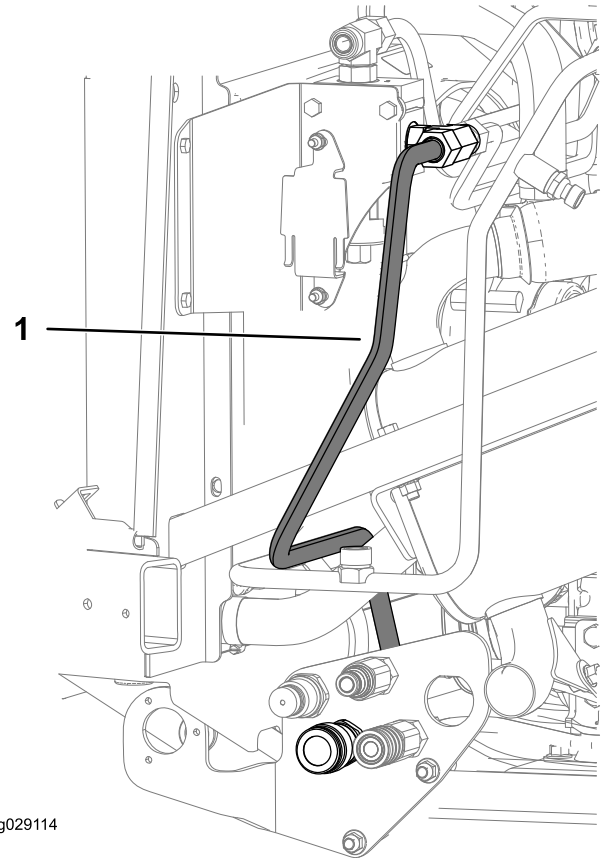


**Figure 22**

1. Temperature sender      2. Hydraulic tube H

2. Install the temperature sender on the upper port on the hydraulic tube H as shown in [Figure 22](#).

3. Install the hydraulic tube B from the tee adapter fitting (5/8 inch male) on the right manifold assembly to the bulkhead coupler (4.02 inches) on the bulkhead assembly as shown in [Figure 23](#).

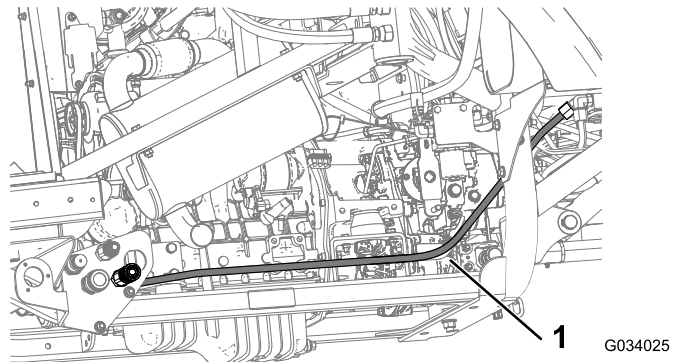


**Figure 23**

1. Hydraulic tube B

4. Install the hydraulic hose F from the 45° fitting to the bulkhead union (2.57 inches) on the quick-coupling fitting (1/2 x 1/2 inch female) on the bulkhead assembly as shown in [Figure 24](#).

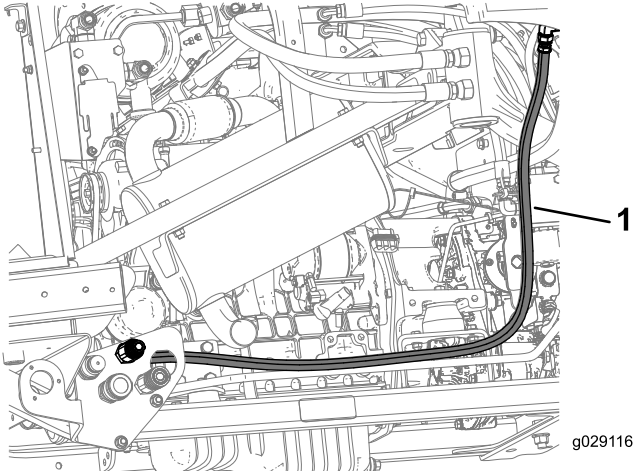
**Note:** Secure the hose to the machine, away from moving parts, using cable ties.



**Figure 24**

1. Hydraulic hose F

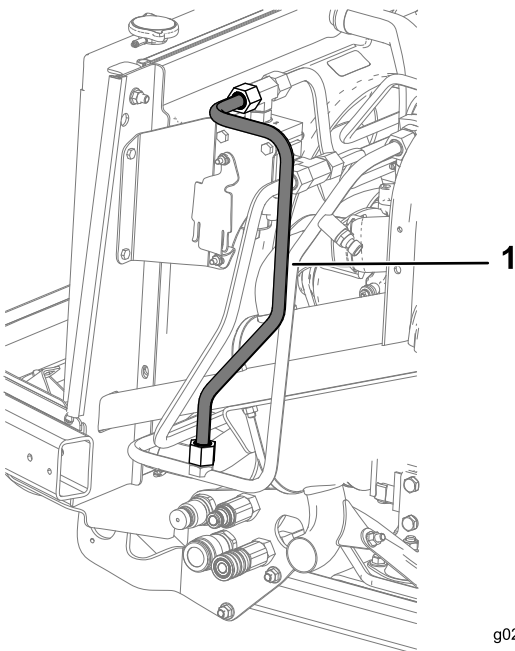
5. Install the hydraulic hose A from the 90° fitting (3/8 x 3/8 inch male) to the bulkhead union (2.57 inches) on the quick-coupling fitting (1/2 female x 1/2 inch male) on the bulkhead assembly as shown in [Figure 25](#).



**Figure 25**

1. Hydraulic hose A

6. Install the hydraulic tube E from the hydraulic tube H to the tee-adapter fitting (5/8 inch male) on the right manifold assembly as shown in [Figure 26](#).

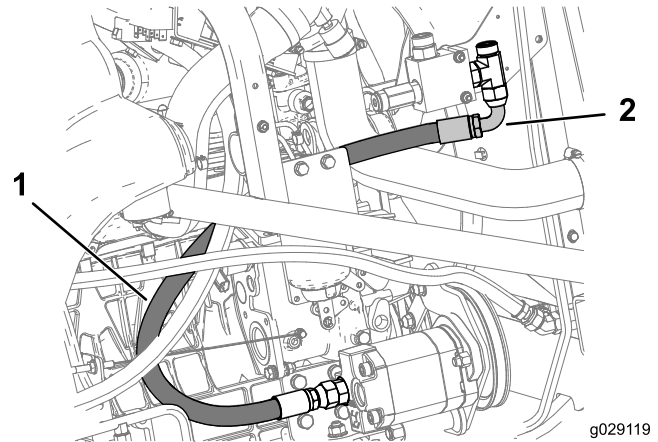


**Figure 26**

1. Hydraulic tube E

7. Install the other hydraulic hose C from the tee-adapter fitting (5/8 inch male) on the left hydraulic-manifold assembly to the adapter fitting (5/8 x 5/8 inch male) on the gear-pump assembly as shown in [Figure 27](#).

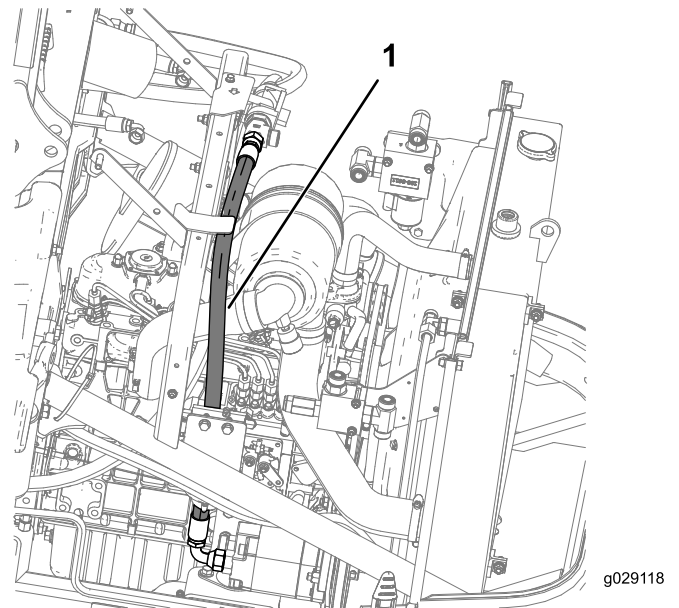
**Important:** Rotate the upper fitting to ensure that the hose does not rub against the edges of the fuel filter.



**Figure 27**

1. Hydraulic hose C
2. Adjust the fitting here so that the hose does not rub against the fuel filter.

8. Install the hydraulic hose C from the tee fitting (5/8 x 5/8 x 3/4 inch male) on the filter-head assembly to the adapter fitting (5/8 x 3/4 inch male) on the gear-pump assembly as shown in [Figure 28](#).

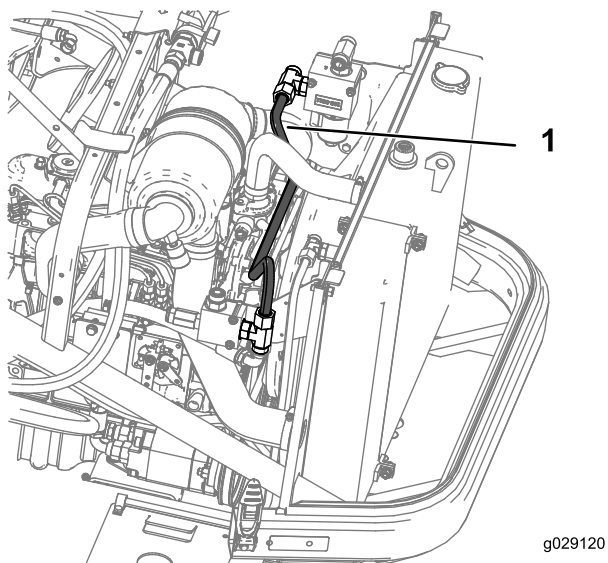


**Figure 28**

1. Hydraulic hose C

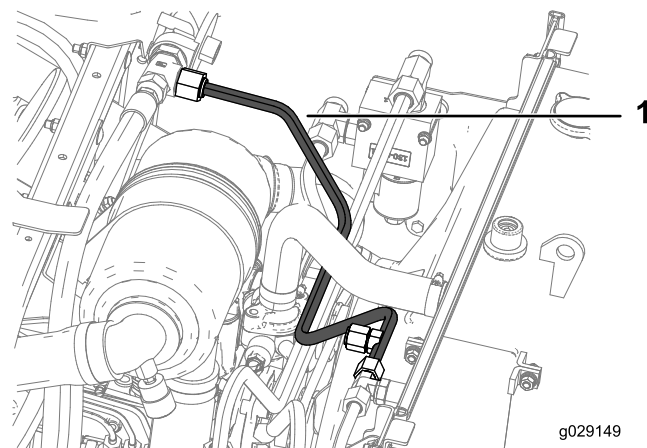
9. Install the hydraulic tube D from the tee-adapter fitting (5/8 inch male) on the right manifold assembly to the tee-adapter fitting (5/8 inch male) on the left manifold assembly as shown in [Figure 29](#).





**Figure 29**

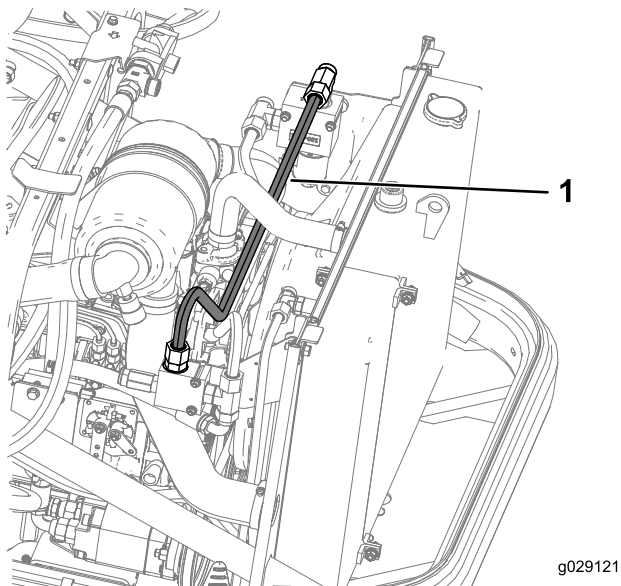
1. Hydraulic tube D



**Figure 31**

1. Hydraulic tube G

10. Install the hydraulic tube I from the adapter fitting (5/8 x 5/8 inch male) on the right manifold assembly to the tee-adapter fitting (5/8 inch male) on the left manifold assembly as shown in [Figure 30](#).



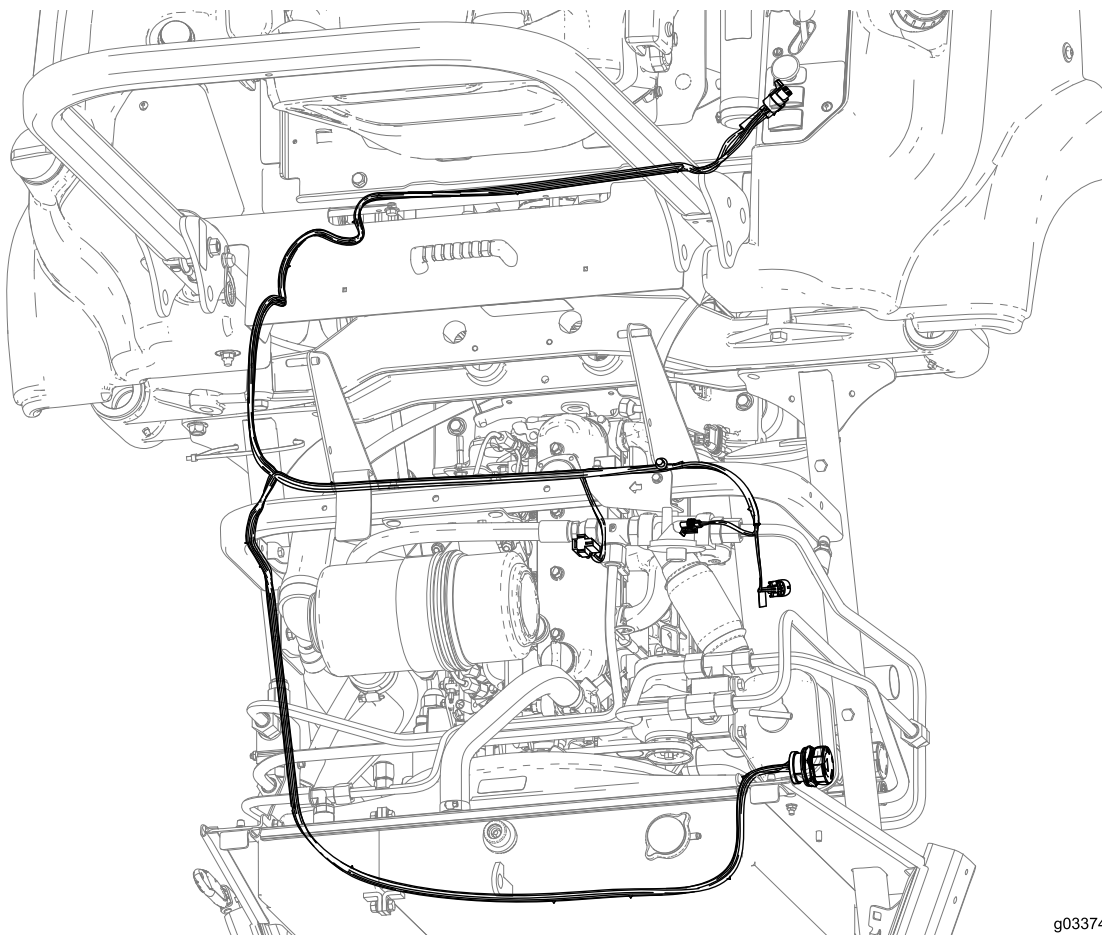
**Figure 30**

1. Hydraulic tube I

11. Install the hydraulic tube G from the tee fitting (5/8 x 5/8 x 3/4 inch male) on the filter-head assembly to the tee fitting (3/4 x 13/16 inch) near the radiator-fan shroud as shown in [Figure 31](#).

## Routing the Wire Harness

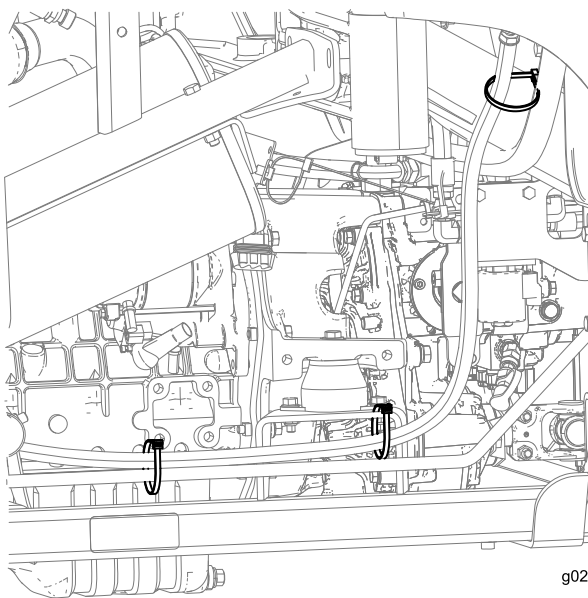
1. Route the wire harness as shown in [Figure 32](#).



g033746

**Figure 32**

2. Use the 3 cable ties to secure the components as shown [Figure 33](#).



g029151

**Figure 33**

3. Tighten the nuts on the U-bolt on the bulkhead assembly.
4. Install the hydraulic-fluid filter onto the filter head and radiator-overflow tank.
5. Install the fan shroud, radiator bracket, battery tray, battery, and hood assembly on the machine.

**Notes:**



**Count on it.**