



# Speed Control Linkage Kit

2009 GrandStand® Mower

Model No. 119-8770

## Installation Instructions

### 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 mower.
<b>2</b>	No parts required	–	Remove the existing controls.
<b>3</b>	Obtain parts from an Authorized Service Dealer	2	Replace the pump arm.
<b>4</b>	Hairpin cotter pin Flat washer Speed control linkage Shoulder hub Flange nut (1/4 inch) Bolt (1/4 x 1-3/8 inch) Rod end ball joint Roller bushing Bolt (1/4 x 2-3/4 inch) Control fork Upper switch lever Plastic cable tie	2 4 2 2 4 2 2 8 2 2 1 1	Install the new controls.
<b>5</b>	Plastic cable tie	1	Adjust the speed control.

# 1

## Preparing the Mower

### No Parts Required

#### Procedure

1. Allow the machine to cool down before installing this kit.
2. Thoroughly clean the machine. All debris must be removed to ensure the kit will fit properly.
3. Repair all bent or damaged areas and replace any missing parts.

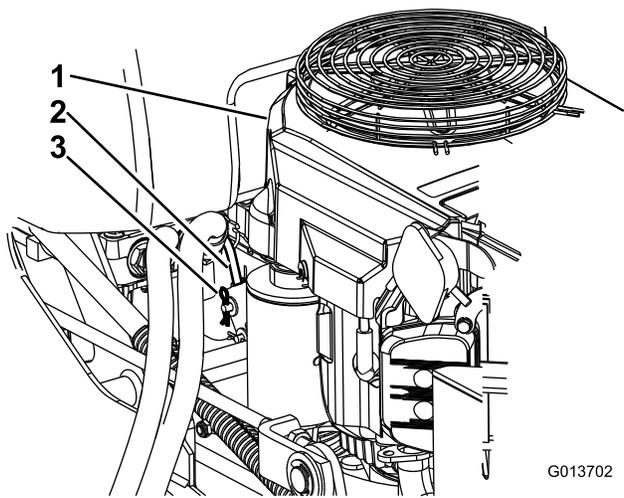
# 2

## Removing the Existing Controls

### No Parts Required

#### Procedure

1. Release the cushion for rear access.
2. From behind the engine, remove the hairpin cotter pin from the existing control linkage and front bracket (Figure 1).

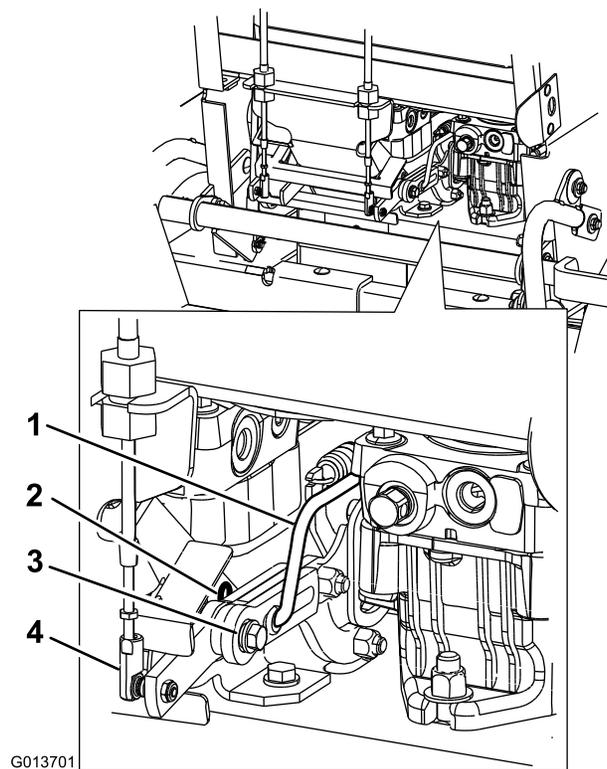


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**Figure 1**

- 1. Engine
- 2. Existing control linkage
- 3. Hairpin cotter pin

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- 3. Remove the hairpin cotter pin and washer from the existing control linkage. Remove the existing control linkage from the forks and pump arm (Figure 2).
  - 4. Remove the cable end from the fork (Figure 2).
  - 5. Remove the cable end from the cable (Figure 2).
  - 6. Remove the bolt, nut, spacer and washers from the fork and the upper and lower switch brackets (Figure 2).

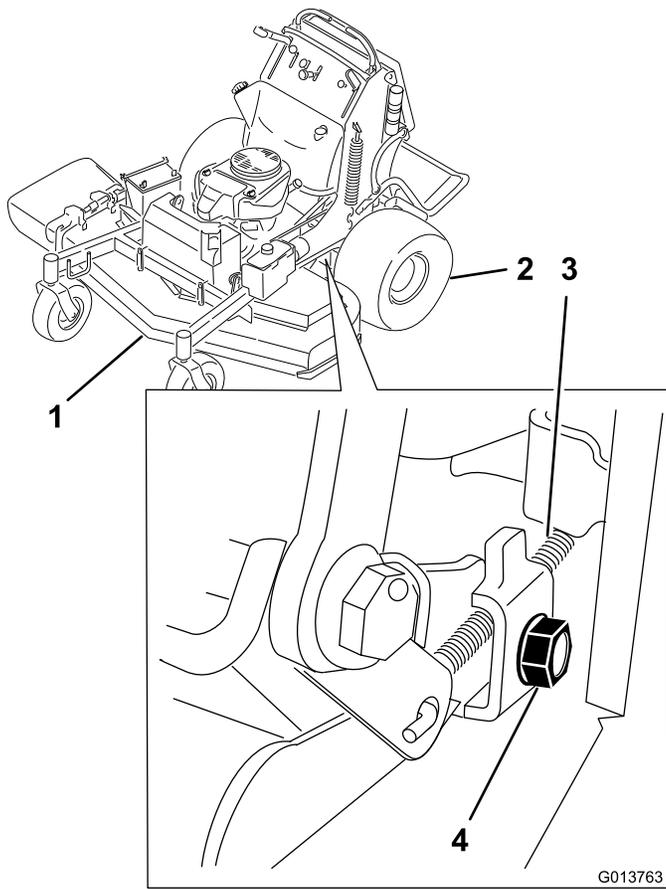


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**Figure 2**

- 1. Existing control linkage
- 2. Hairpin cotter pin
- 3. Bolt and nut in fork and control arm
- 4. Right cable end

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- 7. Loosen the cable clamp securing the speed control cable jacket to the shifter bracket (Figure 3). It is easiest to access this under the lower frame and in front of the left rear wheel.

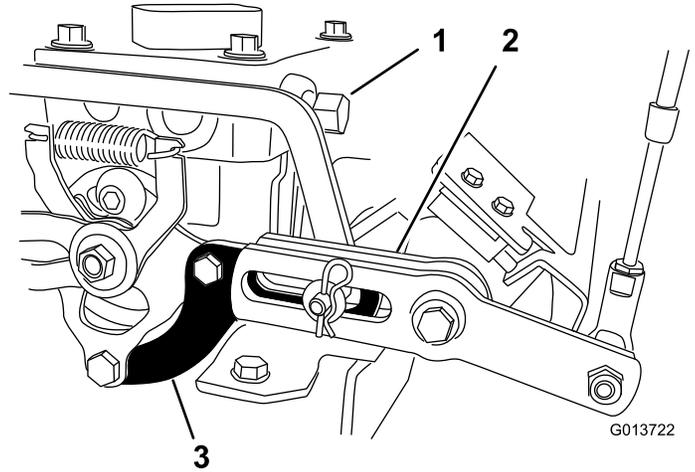


**Figure 3**

- 1. Mower deck
- 2. Left rear tire
- 3. Speed control cable
- 4. Cable clamp

Model Number	Serial Number
74558	290000209 and below
74559	290000156 and below
74568	290000205 and below
74569	290000206 and below

1. Remove the two nuts and bolts attached to the pump arm (Figure 4). Save this hardware.
2. Remove the pump arm from the fork (Figure 4).
3. Install the new pump arm with the existing hardware previously removed.



**Figure 4**

- 1. Left hand pump shown
- 2. Fork
- 3. Pump arm

8. Perform this same procedure for the opposite control.

# 3

## Replacing the Pump Arm

### Parts needed for this procedure:

2	Obtain parts from an Authorized Service Dealer
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### Procedure

**Note:** This procedure is only for certain models of Grandstand mowers with the serial numbers listed.

Pump arms are not included in this kit. Contact an Authorized Service Dealer for the pump arms.

The following table lists the machines that need the pump arms replaced.

# 4

## Installing the New Controls

### Parts needed for this procedure:

2	Hairpin cotter pin
4	Flat washer
2	Speed control linkage
2	Shoulder hub
4	Flange nut (1/4 inch)
2	Bolt (1/4 x 1-3/8 inch)
2	Rod end ball joint
8	Roller bushing
2	Bolt (1/4 x 2-3/4 inch)
2	Control fork
1	Upper switch lever
1	Plastic cable tie

### Procedure

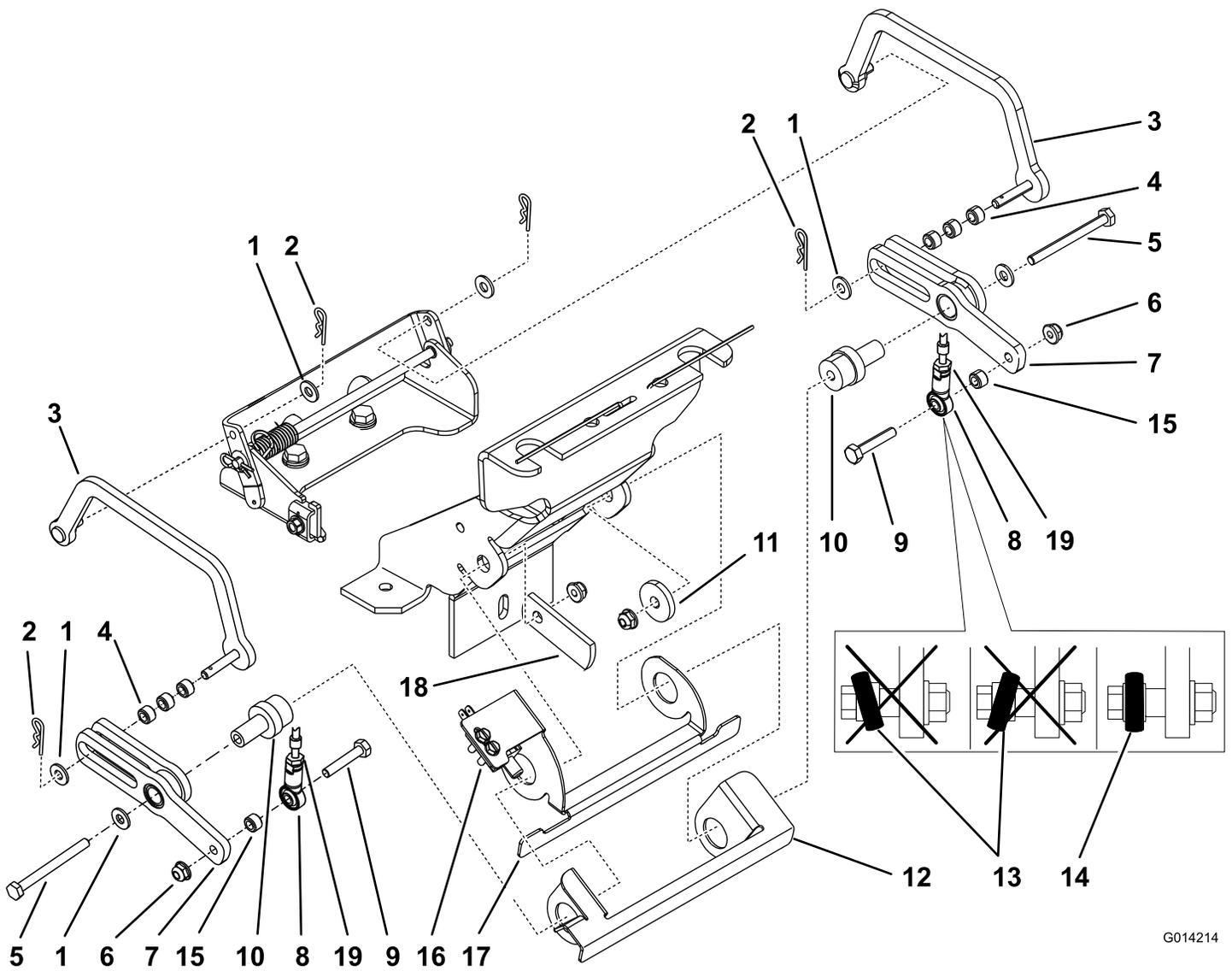
1. Position the new fork with the pump arm in between the fork.
2. Install the new upper switch lever and existing lower switch lever onto the left hand shoulder hub (Figure 5).
3. Install the fork to the rear bracket with a new bolt (1/4 x 2-3/4 inch), washer, shoulder hub and a flange nut (1/4 inch) (Figure 5 and Figure 6). Do not tighten at this time.
4. Install the new speed control linkage to the fork with 3 roller bushings, a flat washer and a hairpin cotter pin (Figure 5).
5. From behind the engine, install the speed control linkage to the front bracket with a flat washer and a hairpin cotter pin (Figure 5 and Figure 6).
6. Thread the rod end ball joint all the way onto the end of the cable and then back it off 2 turns. DO NOT tighten the jam nut at this time.

**Note:** Ensure the ball joints are installed on the inside of the forks (Figure 6).

7. Install the rod end ball joint to the fork with a bolt (1/4 x 1-3/8 inch), roller bushing and flange nut (1/4 inch).
8. Hold the rod end ball joint perpendicular to the bolt when tightening the flange nut and bolt. This

ensures the fork and cable will travel without binding (Figure 5).

9. Tighten the existing jam nut on the rod end ball joint. Make sure the cable does not have a twist in it.



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**Figure 5**

- |                            |                            |  |  |
|----------------------------|----------------------------|--|--|
| 1. Flat washer             | 6. Flange nut (1/4 inch)   | 11. Existing large washer used on right side only (shown here for illustrative purposes) | 16. Do not remove the existing switch                              |
| 2. Hairpin cotter pin      | 7. Fork                    | 12. New upper switch lever   | 17. Use existing lower switch lever                                |
| 3. Speed control linkage   | 8. Rod end ball joint      | 13. Wrong position for the rod end ball joint (topview)                                  | 18. Existing neutral stop arm on left side only                    |
| 4. Roller bushing          | 9. Bolt (1/4 x 1-3/8 inch) | 14. Correct position of rod end ball joint (topview)                                     | 19. Existing jam nut (tighten after installing rod end ball joint) |
| 5. Bolt (1/4 x 2-3/4 inch) | 10. Shoulder hub           | 15. Roller bushing   |  |

# 5

## Adjusting the Speed Control

### Parts needed for this procedure:

1	Plastic cable tie
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### Procedure

1. Set the HOC lever to 2 inches and move the speed control lever to the FAST position.
2. Ensure the cable clamp securing the speed control cable jacket to the shifter bracket is loose (Figure 10).
3. Loosen the bolt that goes through the center of the left hand shoulder hub and control fork (Figure 8).
4. Remove the hairpin cotter pin and washer from the end of the left hand speed control linkage assembly (Figure 8).

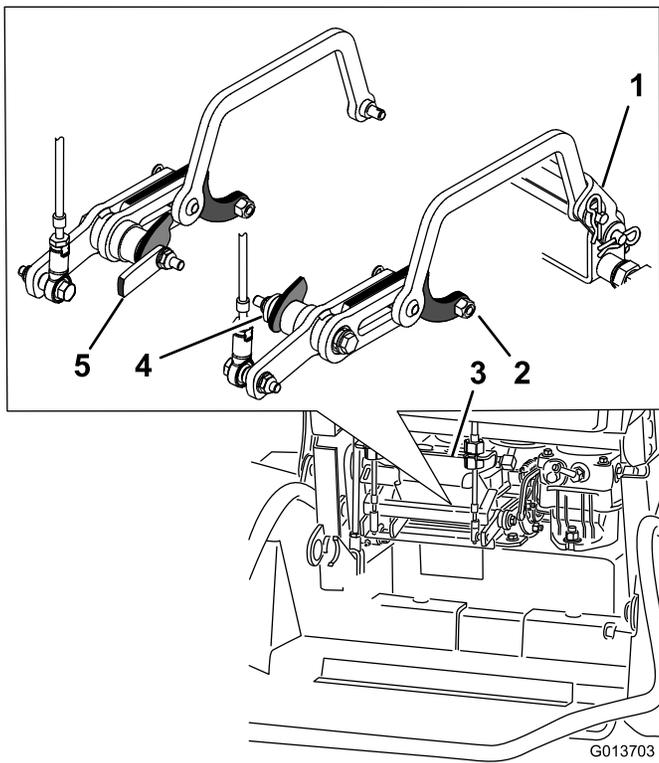


Figure 6

1. Front bracket
2. Pump control arm
3. Rear bracket
4. Existing large washer used on right side only
5. Existing neutral stop arm on left side only

10. Using the plastic tie, fasten the speed control cable to the right control cable (Figure 7).

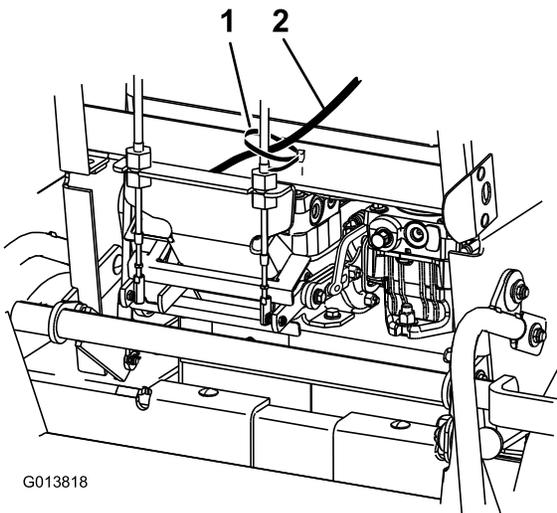


Figure 7

1. Plastic cable tie
2. Speed control cable

11. Perform this same procedure for the opposite control.

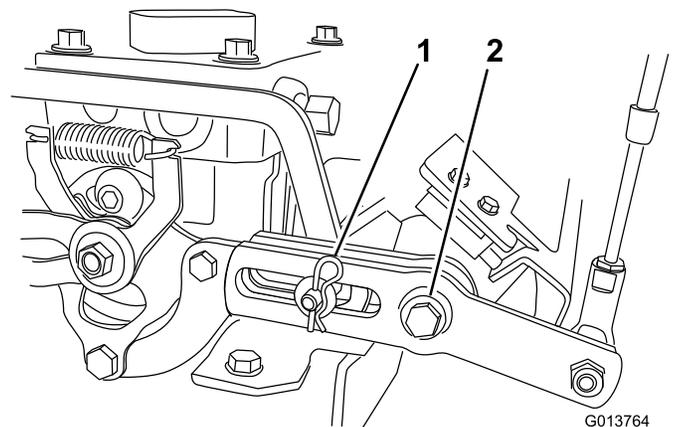
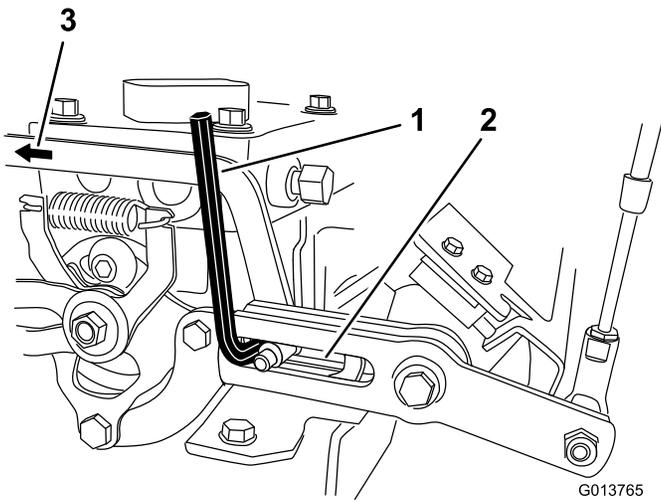


Figure 8

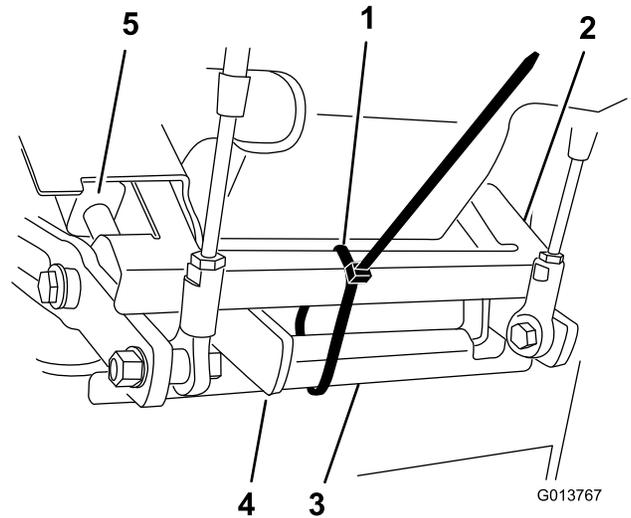
1. Hairpin cotter pin and flat washer
  2. Loosen this bolt washer
5. In front of the left hand speed control linkage rollers, insert a 7/32nd inch allen wrench into the slots of the control fork and control arm (Figure 9).
  6. Push the speed control linkage forward, and tighten the clamp securing the speed control cable jacket to the shifter bracket (Figure 9 and Figure 10).



**Figure 9**

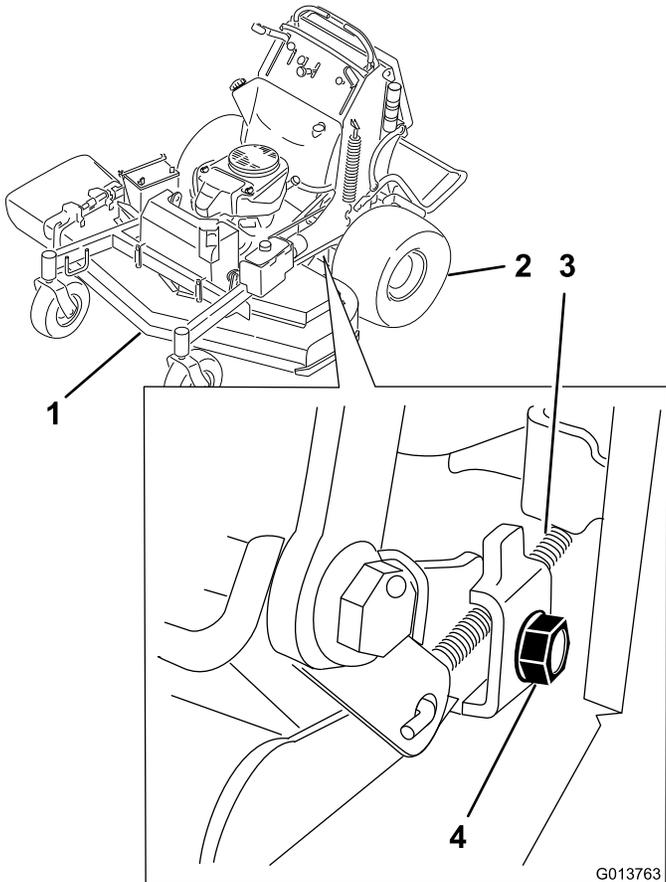
- 1. 7/32nd inch allen wrench
- 2. Slots
- 3. Push the speed control linkage forward

(Figure 11). Do not force the neutral assembly together.



**Figure 11**

- 1. Plastic cable tie
- 2. Upper switch lever
- 3. Lower switch lever
- 4. Neutral stop arm
- 5. Switch (Do not remove)



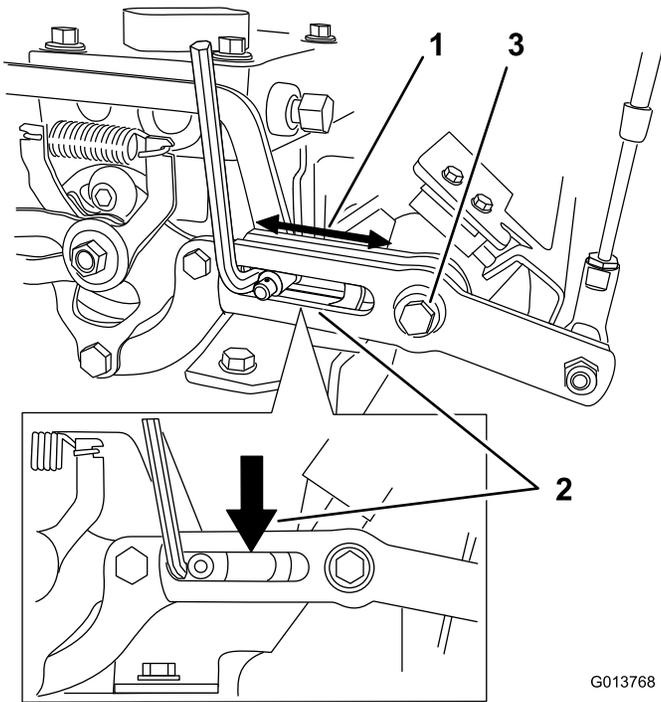
**Figure 10**

- 1. Mower deck
- 2. Left rear tire
- 3. Speed control cable
- 4. Cable clamp

- 8. While pulling the control fork assembly rearward (not so hard that the speed control linkage moves) tighten the screw that goes through the center of the left hand shoulder hub (Figure 12).

**Note:** It is important to keep the pump control arm and control fork slots are in line with each other. This can be achieved by making sure the top of the pump control arm and control fork are parallel to each other.

- 7. The switch stop arm must be aligned with the cable end of the control fork. Using a cable tie, secure the neutral assembly to align the components



**Figure 12**

- 1. Movement of control arm
- 2. Slots are aligned
- 3. Tighten this bolt

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- 9. Remove the allen wrench from slots of the control fork and control arm slots and cut the cable tie from the neutral assembly.
  - 10. Install the washer and hair pin to the end of the speed control linkage.
  - 11. Repeat steps 3 through 10 (do not do step 7) on the right hand side.