

Instruction Sheet

Kit Number: 79108300 & 79109000

SUSPENSION FORK KIT



WARNING: FAILURE TO FOLLOW INSTRUCTIONS could result in personal injury and/or damage to unit.
Read, understand, and follow all safety practices in Operator's Manual before beginning.

Package Contents

Check the contents of your kit for the parts listed below
Also see Figure 1.

Item	Description	Qty	AriensCo P/N
1	Red Suspension Fork Assembly (79108300) Orange Suspension Fork Assembly (79109000)	2	See <i>Suspension Fork Kit Parts List</i> on page 7.
2	1.03" x 1.5" x 0.397" Sleeve Spacer (Type I)	2	05501430
3	Axle Bearing Shield (Type I)	2	05198400
4	1/2"-13 x 4 1/2" Hex Bolt	2	05901736

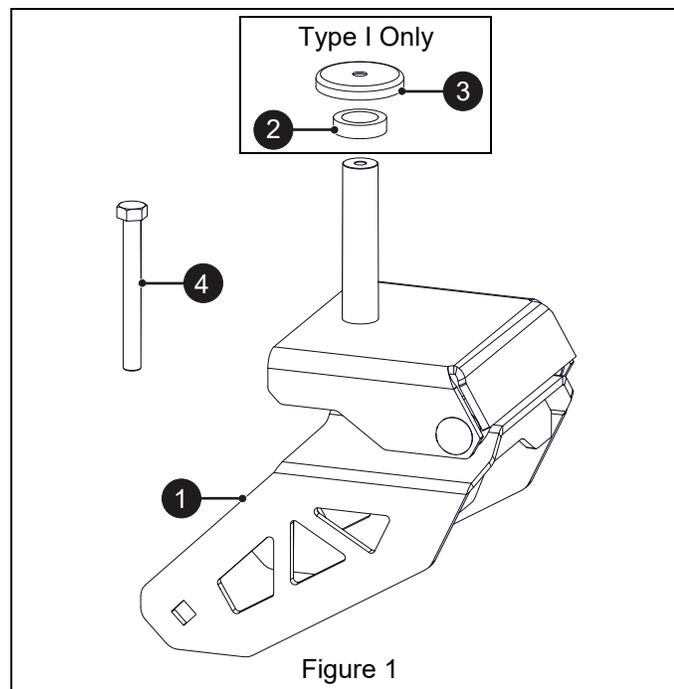


Figure 1

IDENTIFICATION

Kit is designed to fit two different frames. Choose the instructions based on the configuration of your mower. Type I forks have a metal dust cap on top of the caster tube. Type II forks have an external hex bolt retaining the caster fork assembly. See Figure 2.

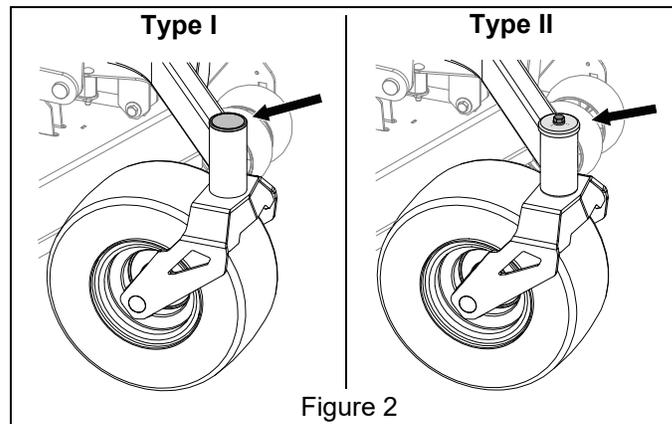


Figure 2

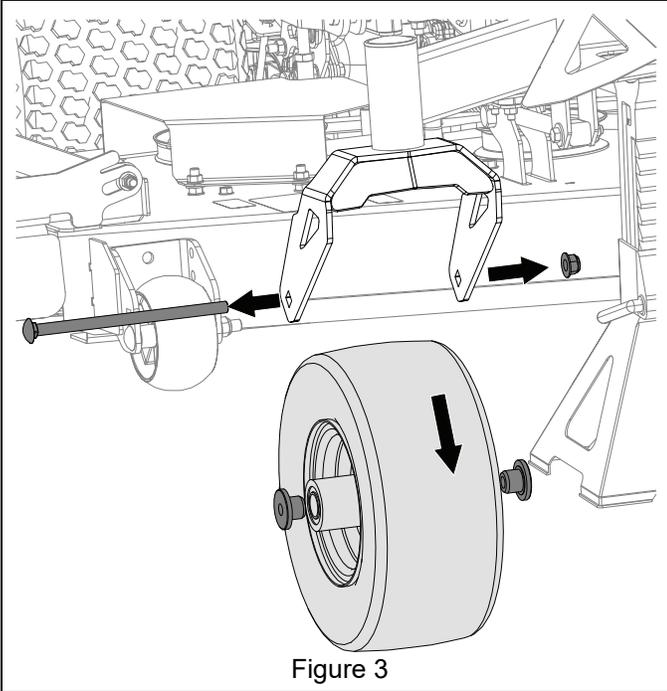
REMOVAL – TYPE I

1. Stop unit and remove key.
2. Wait for all moving parts to stop and for hot parts to cool.
3. Chock rear wheels and lift unit so front caster wheels are off the ground.
4. Securely support front of unit.

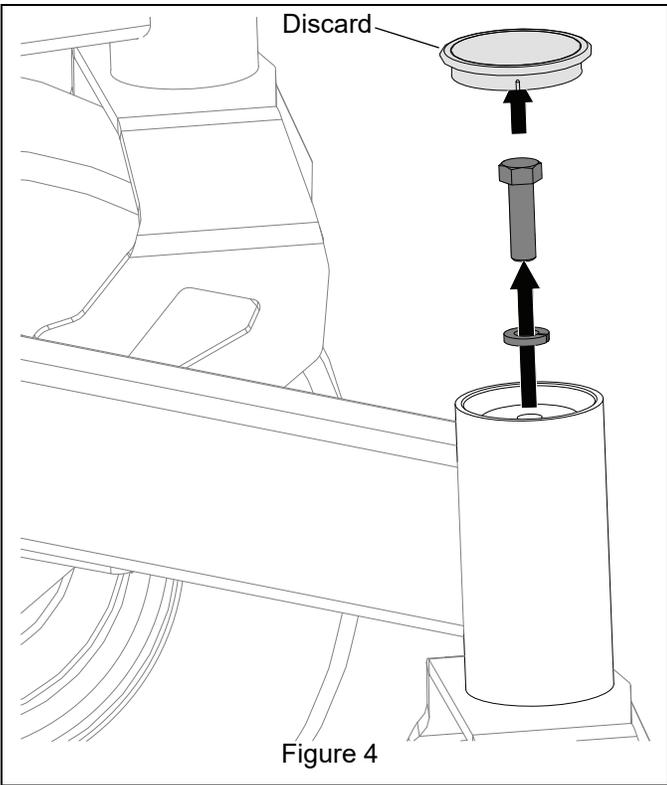


WARNING: AVOID INJURY! ALWAYS ensure that jack stands are secure and strong enough to support weight of unit during maintenance.

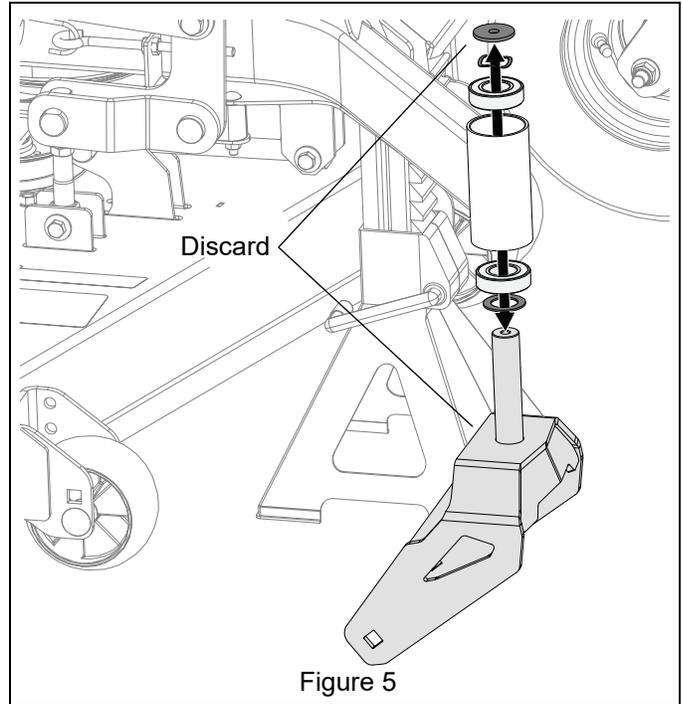
5. Remove and retain round head square neck bolt and flange nut retaining front caster wheel. Remove and retain caster wheel and wheel spacers. See Figure 3.



6. Remove and discard dust cap from top of caster fork tube. Support caster fork and remove and retain hex bolt and locking washer from caster shaft. See Figure 4.



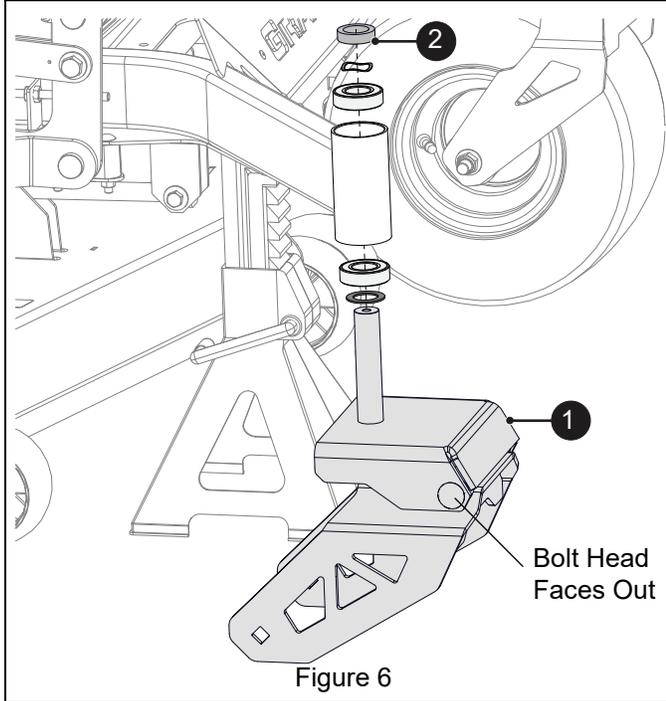
7. Remove and discard caster fork assembly and 3/8" x 1 1/2" flat washer. Remove and retain thrust washer, wave washer and bearings. Inspect all retained parts for wear. See Figure 5.



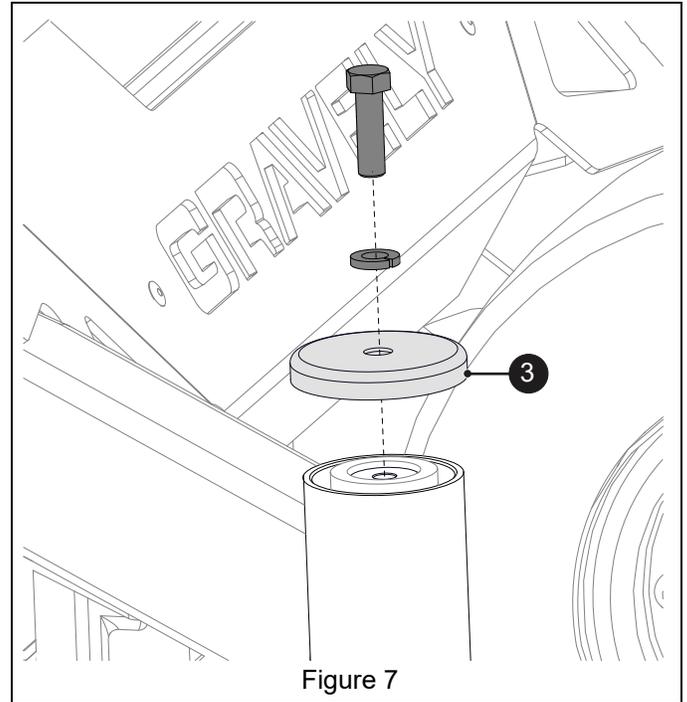
INSTALLATION – TYPE I

See Figure 6.

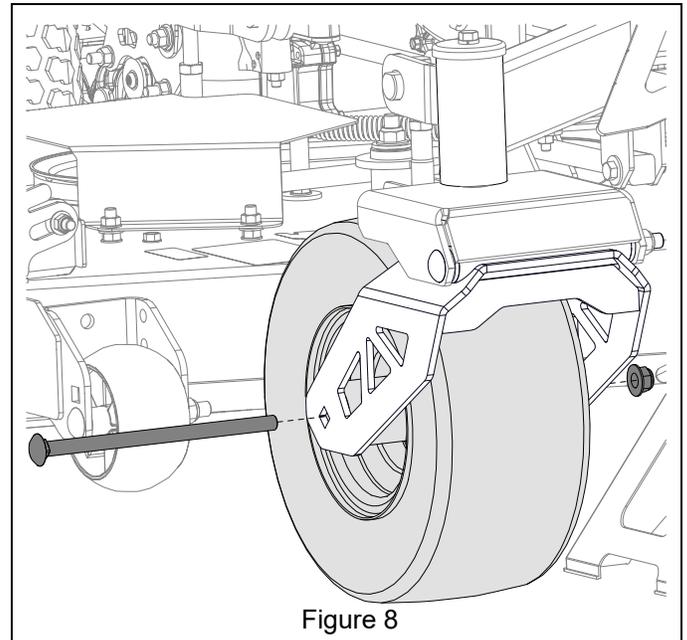
1. Select the fork that positions the hinge bolt head facing out when traveling forward. Install thrust washer and lower bearing on caster fork shaft and insert suspension fork (item 1) into caster fork tube. Round head of pivot bolt faces out. Support fork assembly in position.
2. Position upper bearing, wave washer and sleeve spacer (item 2) in fork tube. Wave washer is positioned below sleeve spacer.



3. Position bearing shield (item 3) on top of fork tube and retain suspension fork assembly and shield with hex bolt and locking washer removed earlier. See Figure 7.



4. Ensure that wheel spacers are correctly positioned and reinstall caster wheel assembly. See Figure 8.



5. Repeat removal and installation steps on other side of mower.
6. Lower unit to the ground.
7. Replace front mower hanger bolts and level deck.
See *Replace Front Mower Deck Bolts* on page 5.

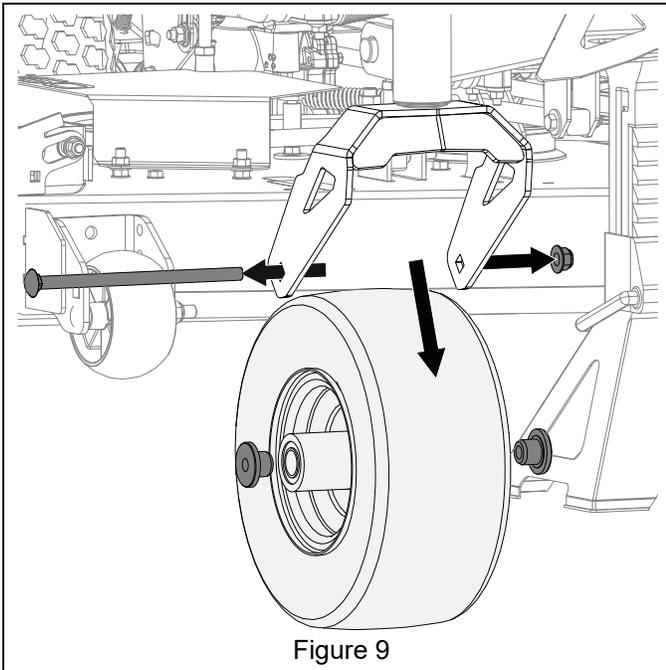
REMOVAL – TYPE II

1. Stop unit and remove key.
2. Wait for all moving parts to stop and for hot parts to cool.
3. Chock rear wheels and lift unit so front caster wheels are off the ground.
4. Securely support front of unit.



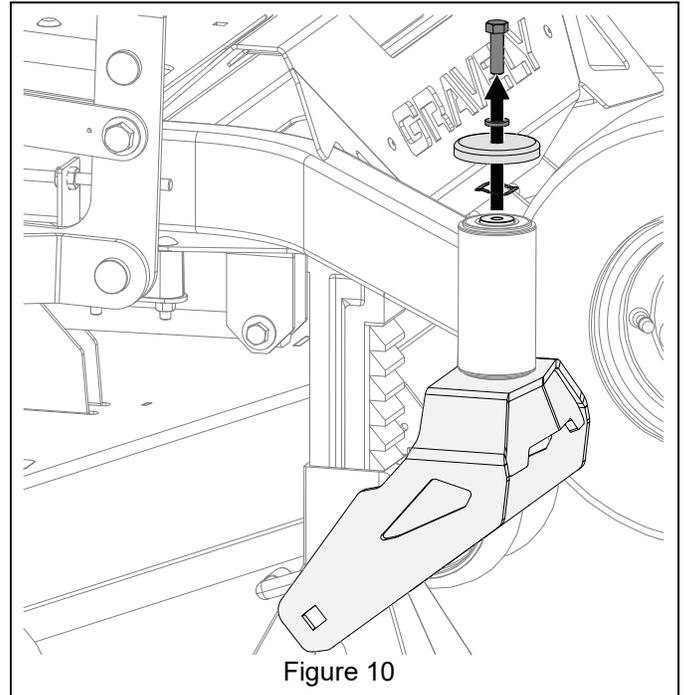
WARNING: AVOID INJURY! ALWAYS ensure that jack stands are secure and strong enough to support weight of unit during maintenance.

5. Remove and retain round head square neck bolt and flange nut retaining front caster wheel. Remove and retain caster wheel and wheel spacers. See Figure 3.

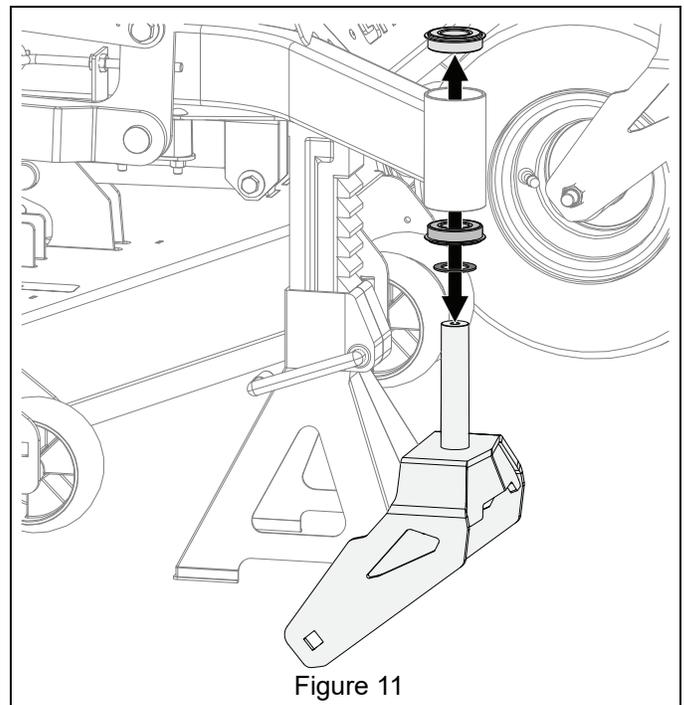


See Figure 10.

6. Support caster fork assembly. Remove and retain hex bolt and locking washer securing bearing shield from top of caster fork tube.
7. Remove and retain wave washer.



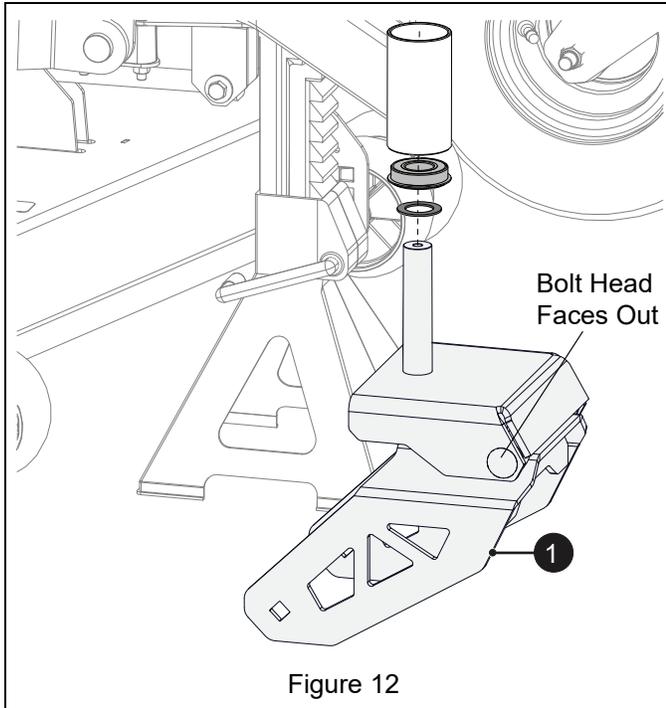
8. Remove and discard caster fork assembly. Remove and retain thrust washer and bearings. Inspect all retained parts for wear. See Figure 11.



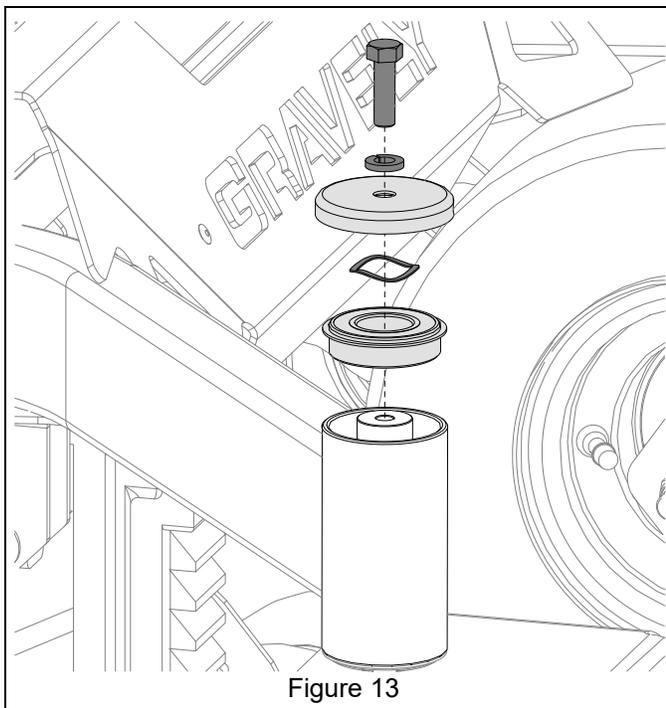
INSTALLATION – TYPE II

See Figure 12.

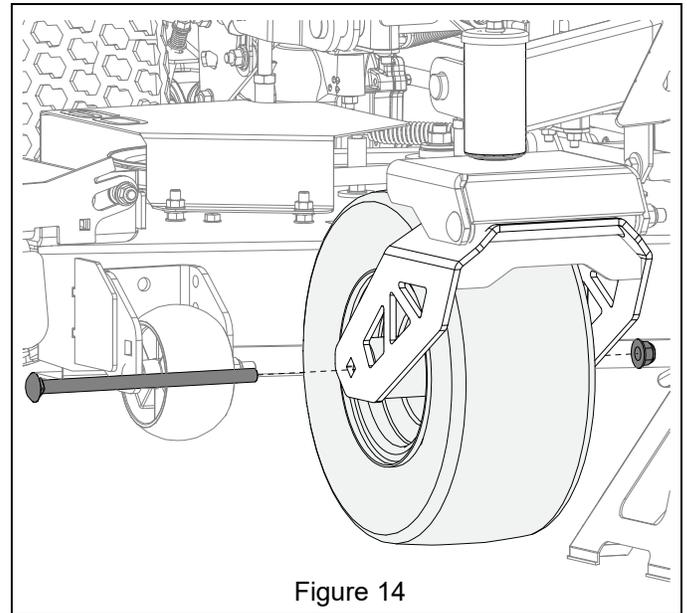
1. Select the fork that positions the hinge bolt head facing out when traveling forward. Install thrust washer and lower bearing on caster fork shaft and insert suspension fork (item 1) into caster fork tube. Support fork assembly in position.



2. Install upper bearing in fork tube. Position wave washer on top of bearing and bearing shield on top of fork tube. Retain all parts with hex bolt and locking washer removed earlier. See Figure 13.



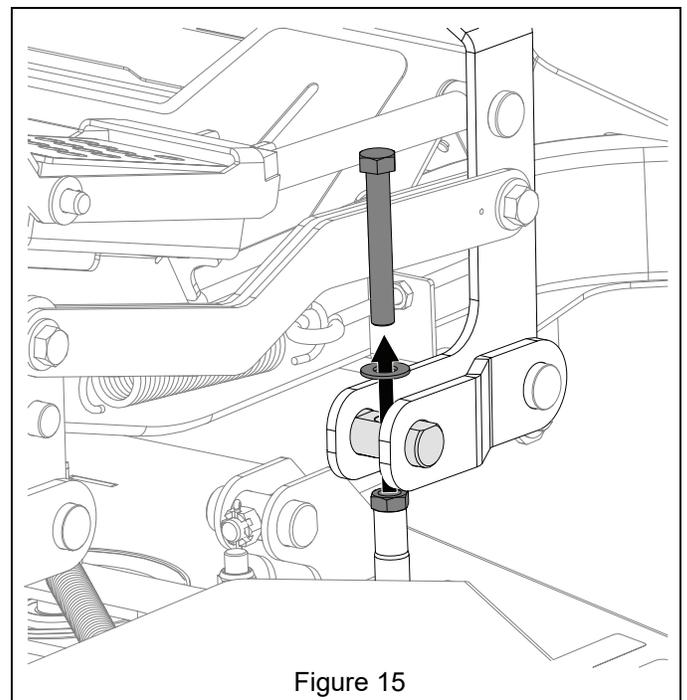
3. Ensure that wheel spacers are correctly positioned and reinstall caster wheel assembly. See Figure 14.



4. Repeat removal and installation steps on other side of mower.
5. Lower unit to the ground.
6. Replace front mower hanger bolts. See *Replace Front Mower Deck Bolts* below.

REPLACE FRONT MOWER DECK BOLTS

1. Park mower on a flat level surface.
2. Position desired-height blocks under front corners of front deck edge so that deck is supported.
3. Loosen jam nut and remove front deck hanger bolt and flat washer from deck-lift link and pin. See Figure 15.



4. Position flat washer on deck lift pin and install one 1/2" x 4 1/2" hex bolt (item 4) through pin and into deck-lift link. Do not tighten jam nut. See Figure 16.

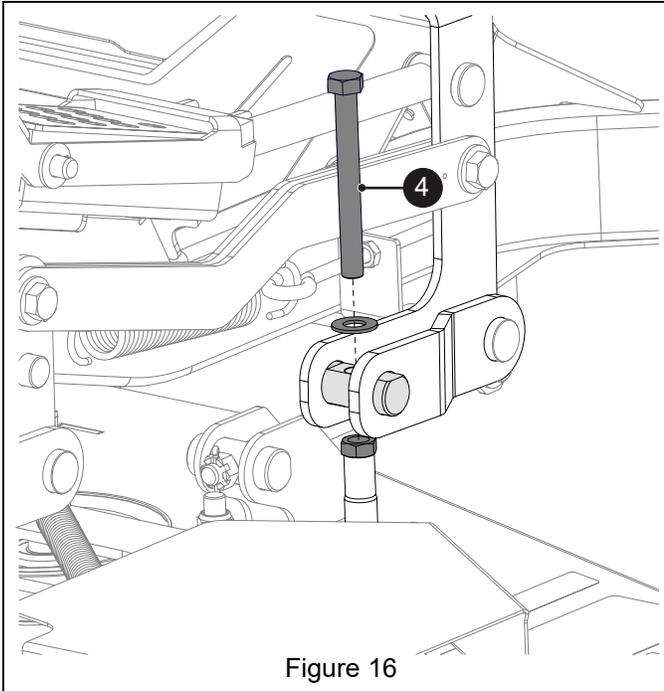


Figure 16

5. Repeat steps 3 and 4 on other side of deck.
6. Remove blocks.

LEVEL AND PITCH MOWER DECK

IMPORTANT: Make sure unit is on a flat, level surface and that tires are inflated to the recommended pressures.

Check Blade Level and Pitch

1. Raise deck to 3 1/2" (8.9 cm) cutting height.
 2. Engage parking brake.
- See Figure 17.
3. Position mower blades so ends point left to right across the width of the deck.
 4. Measure the distance between the ground and the cutting edge of the left and right blades. If the measurements are not within 4.7 mm (3/16") of each other, level the deck. See *Level Mower Deck* on page 6.

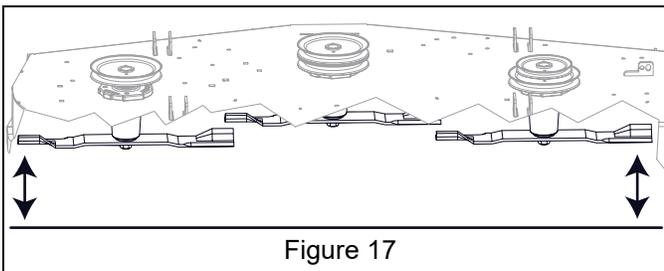


Figure 17

See Figure 18.

5. Position mower blades so ends point front to back and measure the following:
 - At the front of the deck, measure the distance between the ground and the cutting edge of the middle blade.
 - At the rear of the deck, measure the distance between the ground and the cutting edge of the left and the right blades.

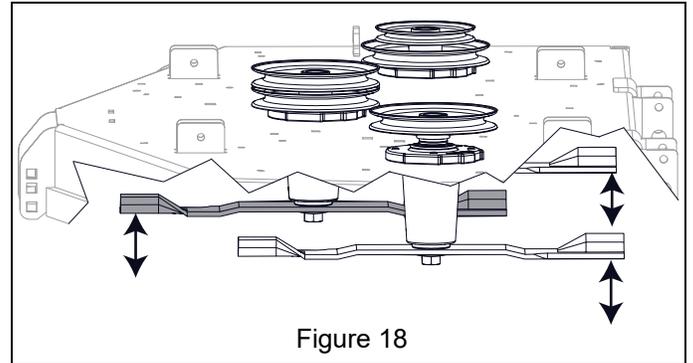


Figure 18

If the front measurement is not 3.2 mm (1/8") lower than the rear measurements, adjust the blade pitch. See *Adjust Blade Pitch* on page 7.

Level Mower Deck

See Figure 19.

1. Lower the high side of deck:
 - a. Loosen jam nuts against deck-leveling links.
 - b. Turn adjustment bolts counterclockwise.
 - c. Measure distance between the ground and cutting edges of left and right blades. Continue adjustment if necessary.
 - d. Tighten jam nuts against deck-leveling links.
2. Raise the low side of deck:
 - a. Loosen jam nuts against deck-leveling links.
 - b. Turn adjustment bolts clockwise.
 - c. Measure distance between the ground and cutting edges of left and right blades. Continue adjustment if necessary.
 - d. Tighten jam nuts against deck-leveling links.

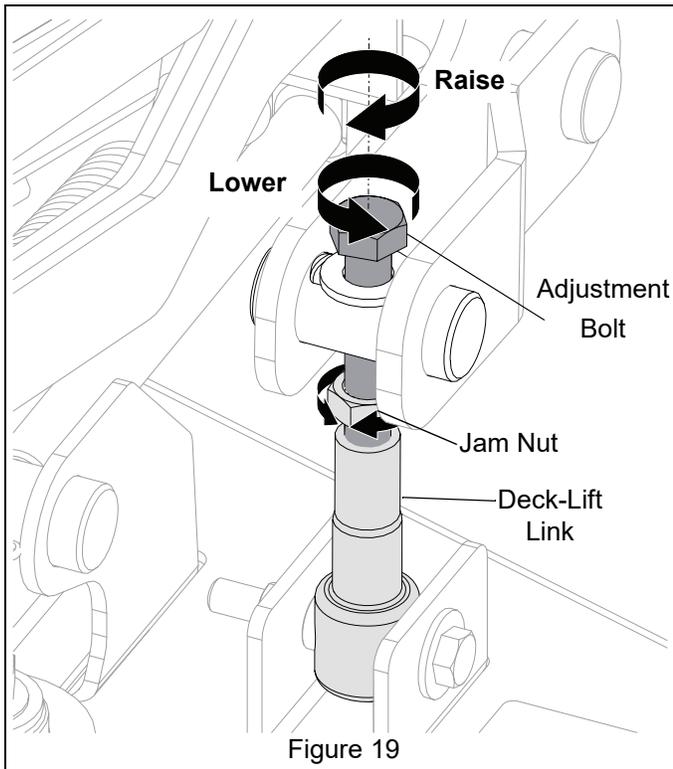


Figure 19

Adjust Blade Pitch

IMPORTANT: Side-to-side deck heights **MUST** remain level even after completing pitch adjustment.

IMPORTANT: Pitching the front of the blades lower than the rear provides a balance between cut quality and the power needed to cut grass. Certain cutting conditions require the deck rear to be pitched lower than the front. Positioning the deck this way requires more engine power but can provide better cut quality.

1. Increase forward pitch:
 - a. Loosen jam nuts against all deck-leveling links.
 - b. Turn front adjustment bolts counterclockwise to lower deck front.
 - c. Turn rear adjustment bolts clockwise to raise deck rear.
 - d. Check adjustment. See *Check Blade Level and Pitch* on page 6.
 - e. Tighten jam nuts against deck-leveling links.
2. Decrease forward pitch:
 - a. Loosen jam nuts against all deck-leveling links.
 - b. Turn front adjustment bolts clockwise to raise deck front.
 - c. Turn rear adjustment bolts counterclockwise to lower deck rear.
 - d. Check adjustment. See *Check Blade Level and Pitch* on page 6.
 - e. Tighten jam nuts against deck-leveling links.

SUSPENSION FORK KIT PARTS LIST

See Figure 20. Quantities are per side.

Item	Description	Qty	AriensCo P/N
5	Red Upper Suspension Weldment (79108300)	1	09360653
	Orange Upper Suspension Weldment (79109000)	1	09360659
6	Red Lower Suspension Weldment (79108300)	1	09360553
	Orange Lower Suspension Weldment (79109000)	1	09360559
7	Rubber Suspension Spacer	1	09361200
8	3/4" x 3/4" x 1" Flange Bushing	2	03985500
9	1/2"-13 x 8 1/2" Hex Bolt	1	06200321
10	Fork Pivot Rod	1	09361100
11	1/2"-13 Nylon Flange Nut	1	06500810
12	1/2"-13 x 1" Hex Bolt	1	05901715

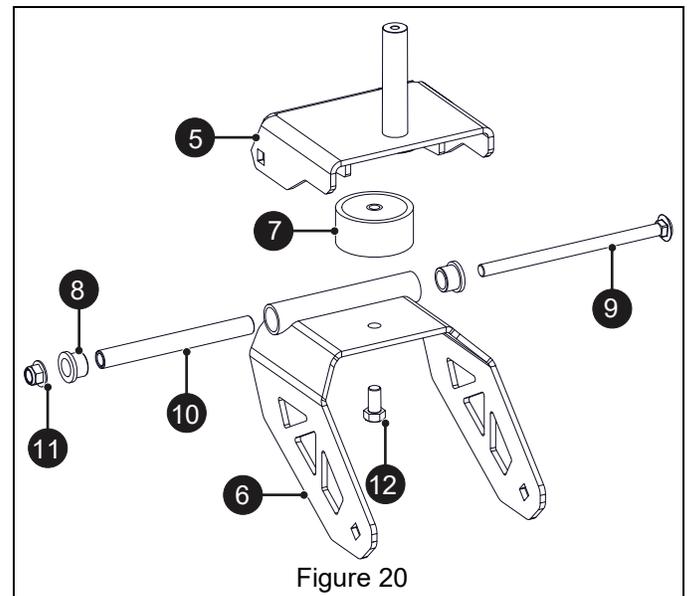


Figure 20

NOTICE: Refer to the parts catalog for your model for all other caster fork parts.