

# GLACIER® PRO HD PLOW FRAME KIT



P/N 2889579

## MISSING OR DAMAGED PARTS

Before beginning assembly, inspect the kit and its component(s) to be sure all parts and tools are accounted for and not damaged. If missing parts or parts are damaged, please contact your Selling Dealer for assistance.

If your accessory was purchased online, please contact POLARIS® customer service at **1-800-POLARIS** (US & Canada only).

## APPLICATION

Verify accessory fitment at [www.polaris.com](http://www.polaris.com).

## REQUIRED SOLD SEPARATELY

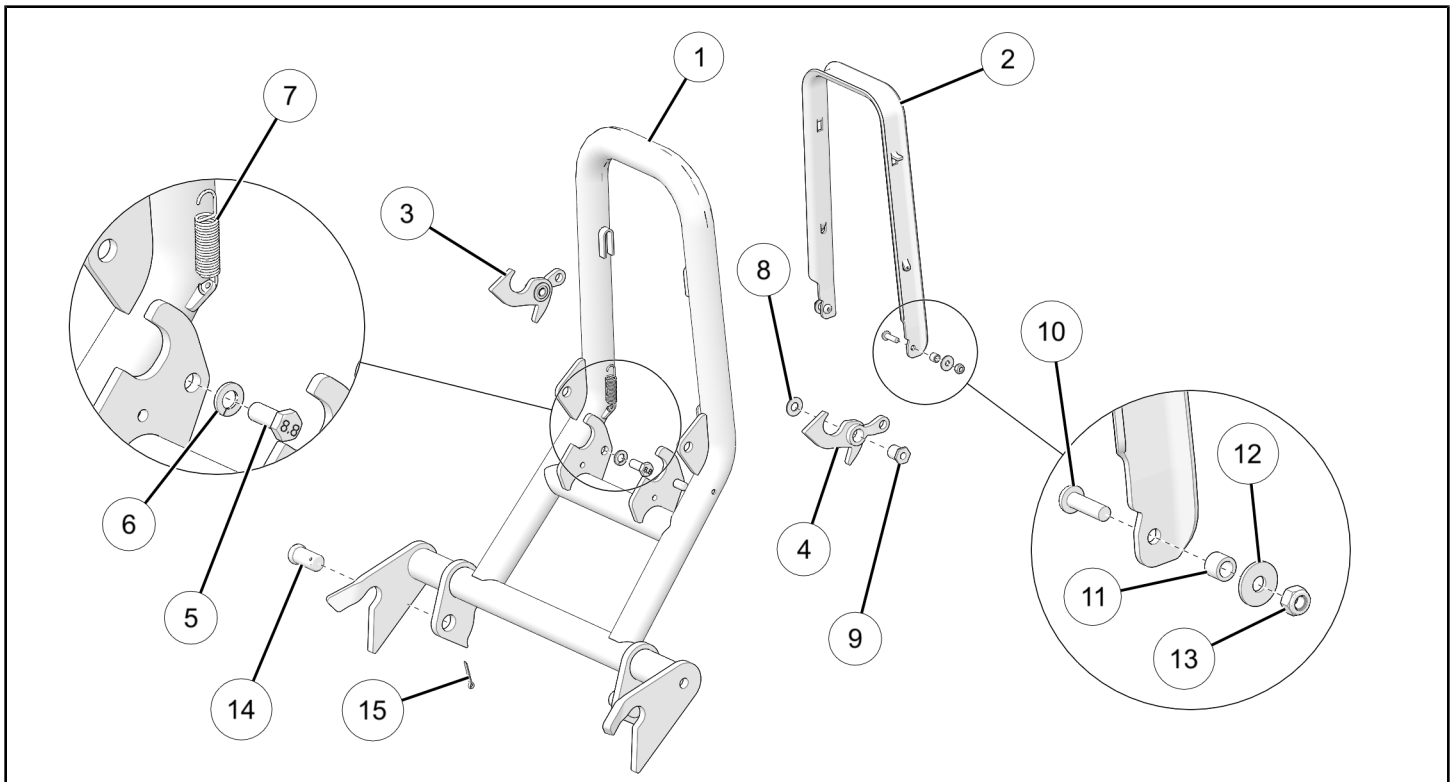
Only parts for installation of the Glacier® Pro HD Plow Frame Kit are included. Prior installation of the following additional kits are also required (sold separately):

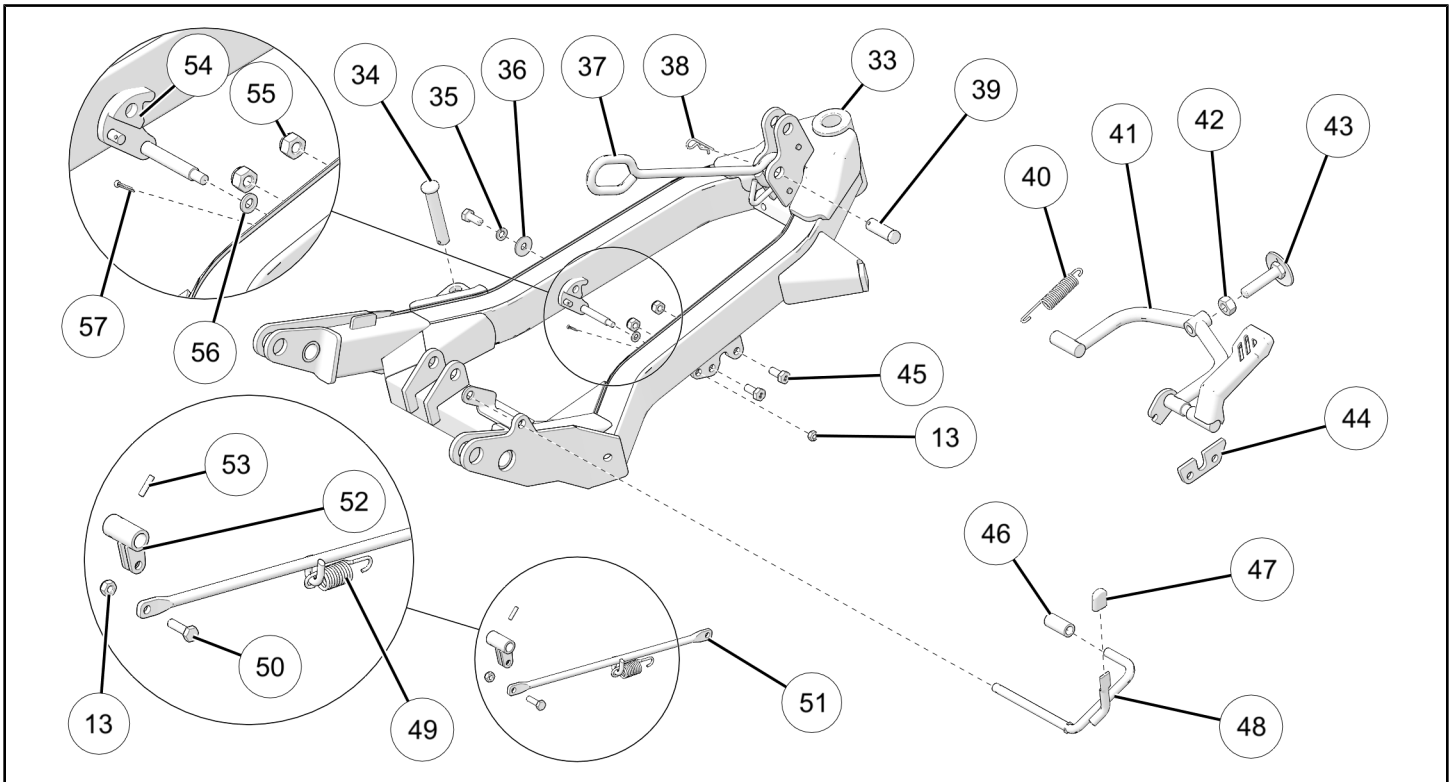
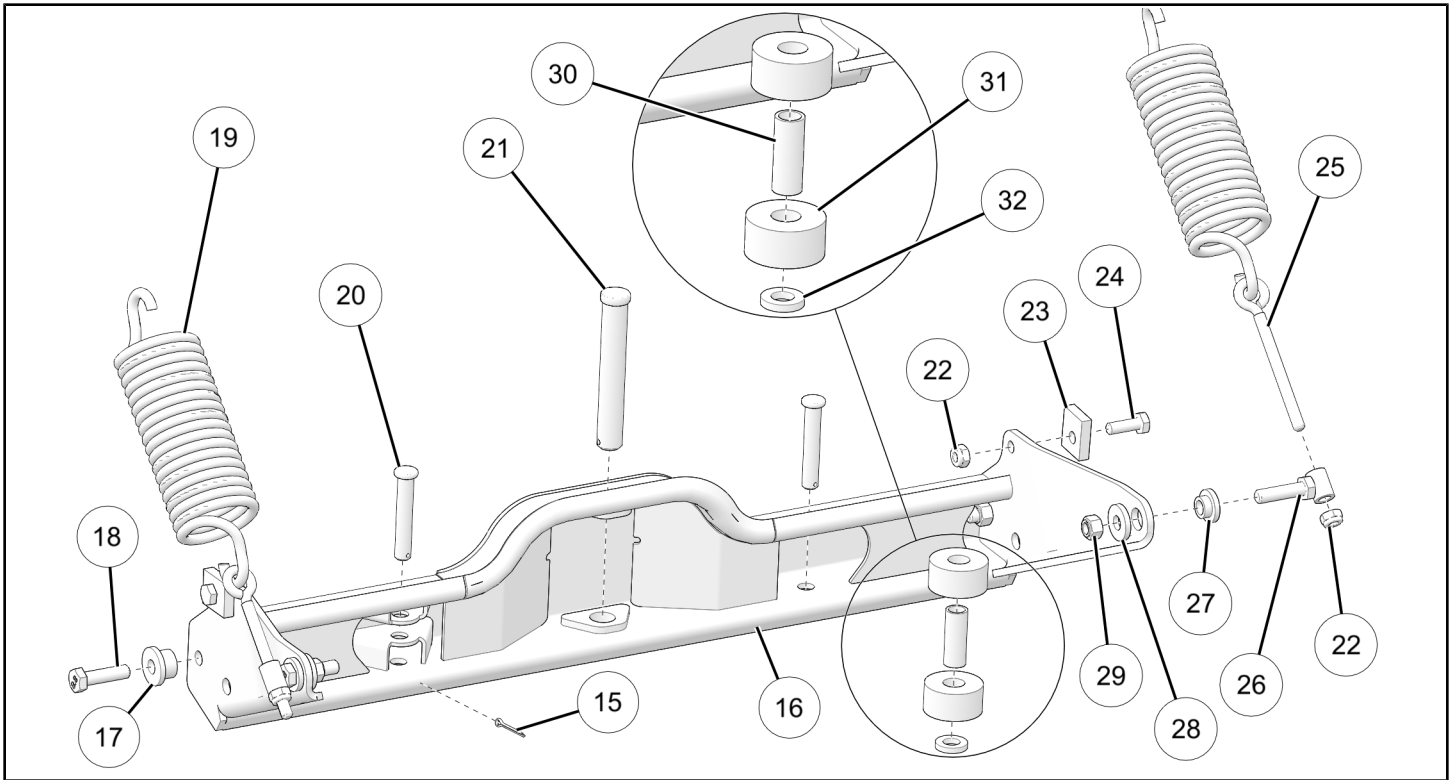
- *Winch Kit*, P/N 2884837, 2884838, or 2884839
- *Bull Bumper Kit*, P/N 2884492 or *HD Front Bumper Kit*, P/N 2884494
- *Snowplow Bumper Mount Kit*, P/N 2889578

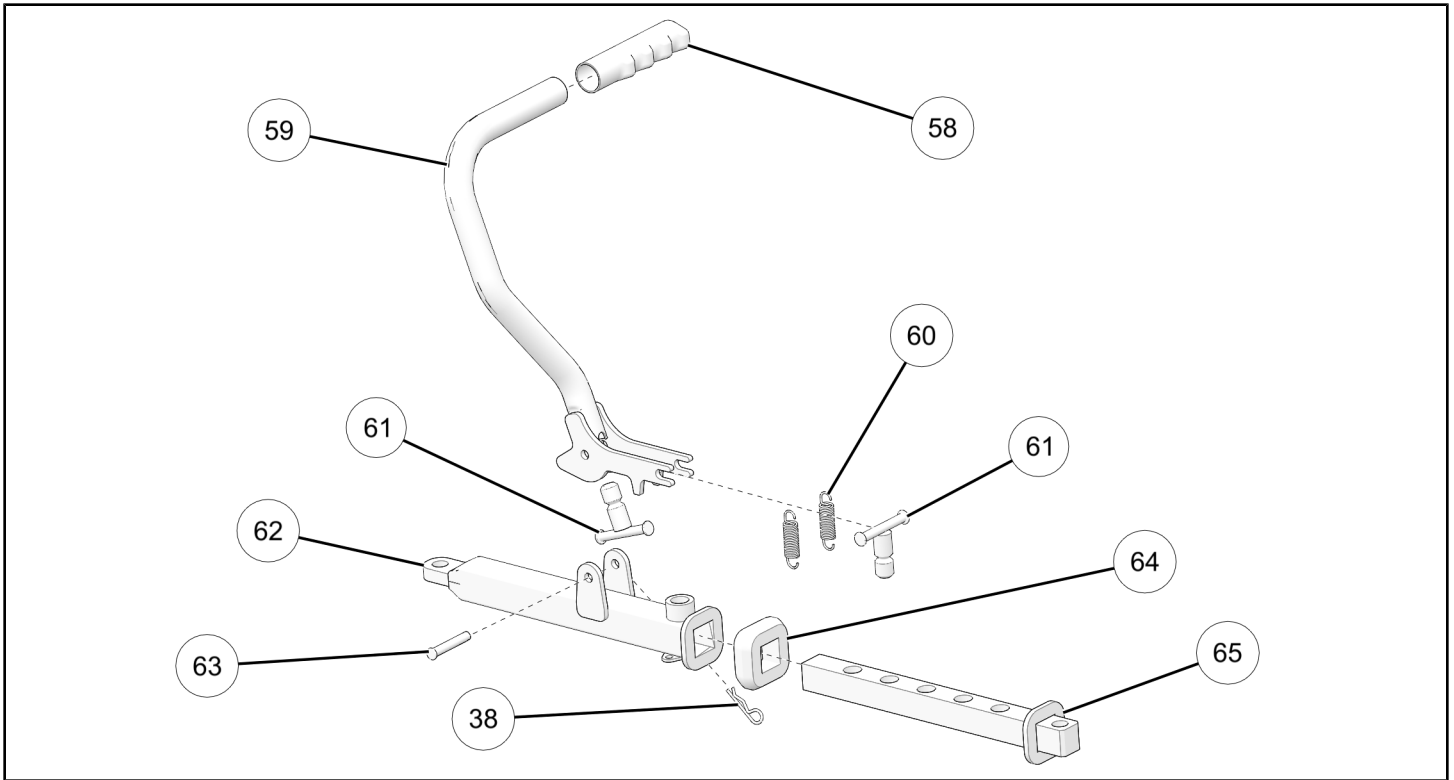
For complete installation, the following additional kit is required (sold separately):

- *Plow Blade Kit*

## KIT CONTENTS







REF	QT-Y	PART DESCRIPTION	P/N AVAILABLE SEPARATELY	AVAILABLE SERVICE KIT
1	1	Hook Up Frame	n/a	2209778
2	1	Handle	n/a	2209777
3	1	Left Hook Assembly	n/a	2209777
4	1	Right Hook Assembly	n/a	2209777
5	2	Screw, Hex M10 x 1.5 x 25 mm	n/a	2204826 2209777
6	2	Lockwasher M10 mm	n/a	2204826 2209777
7	2	Tension Spring	n/a	2209777
8	2	Hook Shim	n/a	2204826 2209777
9	2	Hook Bushing	n/a	2204826 2209777
10	2	Screw, Button Head M6 x 1.0 x 20 mm	n/a	2204826 2209777
11	2	Handle Sleeve	n/a	2204826 2209777
12	2	Washer, Flat M6 mm	n/a	2204826 2209777
13	4	Nut, Nylon M6 x 1.0 mm	n/a	2204826 2209450 (Qty 2) 2209977 (Qty 2)
14	2	Hook Up Pin	n/a	2204826

REF	QT-Y	PART DESCRIPTION	P/N AVAILABLE SEPARATELY	AVAILABLE SERVICE KIT
15	5	Cotter Pin 3 x 25 mm	n/a	2204826 (Qty 2) 2204827 (Qty 3) 2204892 (Qty 2)
16	1	Pivot	n/a	2206050
17	2	Pivot Sleeve	n/a	2204830
18	2	Screw, Hex M12 x 1.75 x 45 mm	n/a	2204830
19	2	Plow Spring	n/a	2858534
20	2	Long Angling Pin	n/a	2204826 (Qty 1) 2204827 2204892 (Qty 1)
21	1	Main Pin	n/a	2204826
22	4	Nut, Nylon M10 x1.5 mm	n/a	2204830
23	2	Blade Stopper	n/a	2204830
24	2	Screw, Hex M10 x 1.5 x 30 mm	n/a	2204830
25	2	Eyebolt	n/a	2204830
26	2	Eyebolt Holder	n/a	2204830
27	2	Eyebolt Flange Bushing	n/a	2204830
28	2	Eyebolt Washer	n/a	2204830
29	4	Nut, Nylon M12 x 1.75 mm	n/a	2204830
30	1	Stopper Sleeve	n/a	2204827
31	2	Rubber Bushing	n/a	2204827
32	1	Flat Washer	n/a	2204827
33	1	Push Frame	n/a	2209556
34	1	Short Angling Pin	n/a	2204826 2204827 2204892
35	1	Lockwasher 14.8 x 8.2 mm	n/a	2204826 2209450
36	1	Flat Washer 24 x 8.2 mm	n/a	2204826 2209450
37	1	Winch Link	n/a	2204974
38	2	"R" Pin, Short	n/a	2204826 2204827 (Qty 1)
39	1	Winch Link Pin	n/a	2204826
40	1	Kickstand Spring	n/a	2209450
41	1	Pedal	n/a	2209450
42	1	Nut, Hex	n/a	2204826 2209450
43	1	Kickstand Shoe	n/a	2204826 2209450

REF	QT-Y	PART DESCRIPTION	P/N AVAILABLE SEPARATELY	AVAILABLE SERVICE KIT
44	1	Kickstand Clamp	n/a	2209450
45	3	Screw, Hex M8 x 1.25 x 20 mm	n/a	2204826 (Qty 2) 2209450 (Qty 2)
46	1	Plastic Cap	n/a	2209450
47	1	End Cap	n/a	2209450
48	1	Auto Release Arm	n/a	2209450
49	1	Exhaust Spring	n/a	2209450
50	1	Screw, Hex M6 x 1.0 x 20 mm	n/a	2204826 2209450
51	1	Auto Release Linkage	n/a	2209450
52	1	Auto Release Link	n/a	2209450
53	1	Spiral Pin	n/a	2204826 2209450
54	1	Kickstand Lock	n/a	2209450
55	2	Nut, Nylon M8 x 1.25 mm	n/a	2204826 2209450
56	1	Flat Washer 12.0 x 6.40 mm	n/a	2204826 2209450
57	1	Cotter Pin 2.0 x 10 mm	n/a	2204826 2209450
58	1	Red Handle	n/a	2204827
59	1	Angle Handle	n/a	2204827
60	2	Tension Spring	n/a	2204827
61	2	Shear Lock	n/a	2204827 2204829 (Qty 1)
62	1	Angling Outer Tube	n/a	2204827
63	1	Angle Handle Pin	n/a	2204826 2204827
64	1	Rubber Stopper	n/a	2204827
65	1	Angling Inner Tube	n/a	2204827

## TOOLS REQUIRED

- Safety Glasses
- Pliers, Side Cutting
- Socket Set, Metric
- Wrench Set, Metric

## IMPORTANT

Your Glacier® Pro HD Plow Frame Kit is exclusively designed for your vehicle. Please read the installation instructions thoroughly before beginning. Installation is easier if the vehicle is clean and free of debris. For your safety, and to ensure a satisfactory installation, perform all installation steps correctly in the sequence shown.

# INSTALLATION INSTRUCTIONS

## VEHICLE PREPARATION

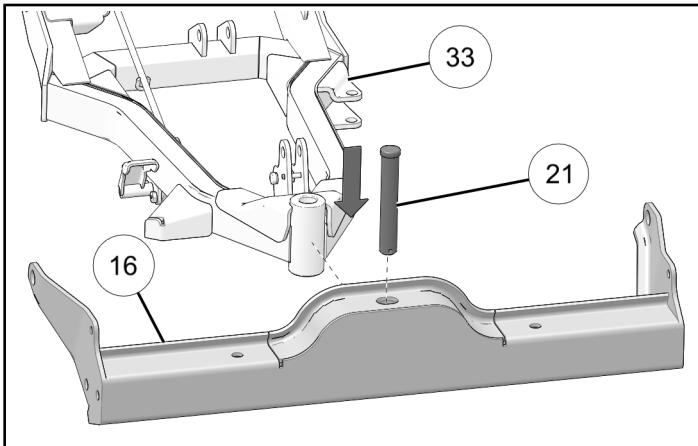
### GENERAL

1. Park vehicle on a flat surface.
2. Shift vehicle into PARK.
3. Turn key to OFF position and remove key.

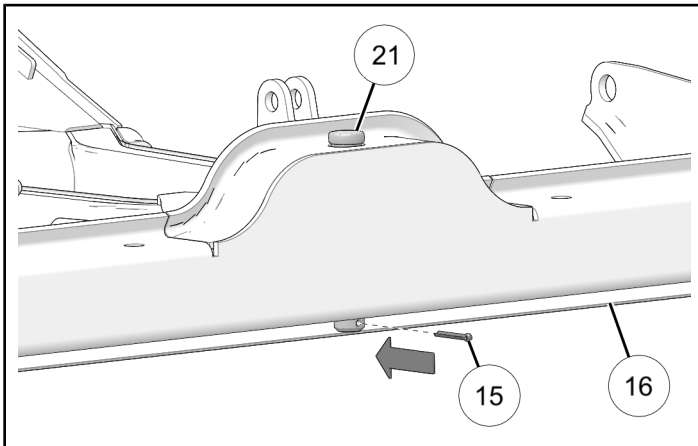
### FRAME ASSEMBLY

#### PIVOT ASSEMBLY

1. Set push frame (33) into middle section of pivot (16). Install main pin (21) from above.



2. Install cotter pin (15) and fold ends so that it can not be removed.

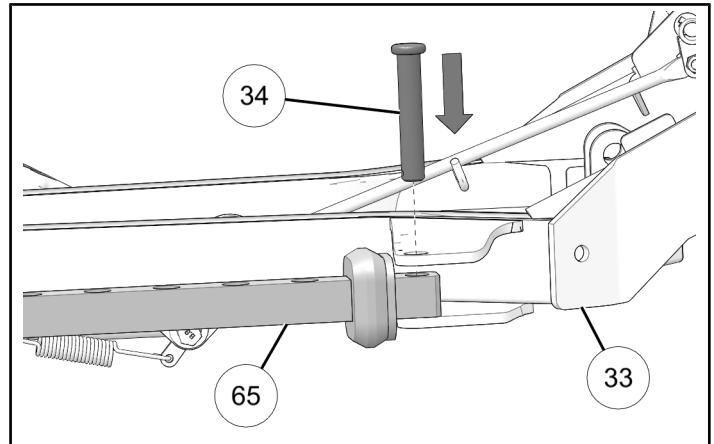


#### MANUAL ANGLE MECHANISM ASSEMBLY

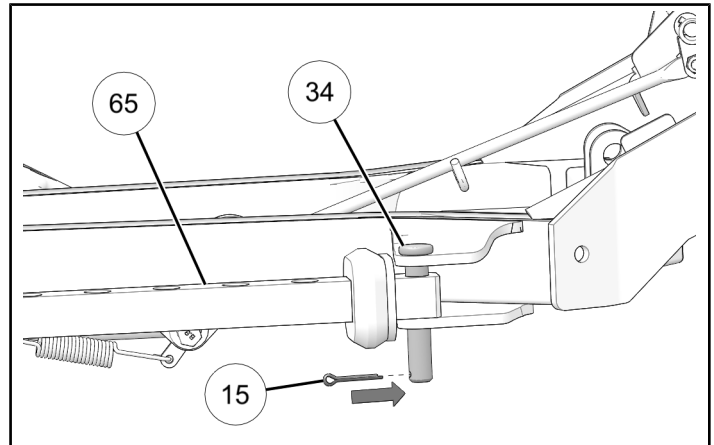
##### NOTICE

If you have purchased *Plow Angle Kit*, P/N 2883409, do not install this manual angle mechanism. Follow instructions provided with *Plow Angle Kit* to install hydraulic angle system.

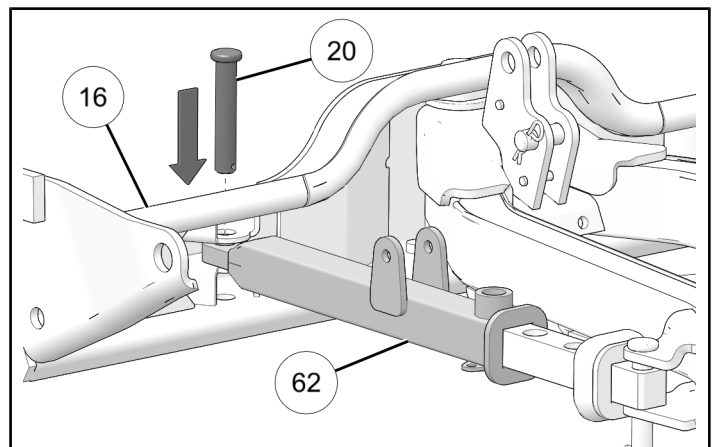
1. Set angling inner tube (65) and install short angling pin (34) through mounting holes of pushframe (33) and through angling inner tube.



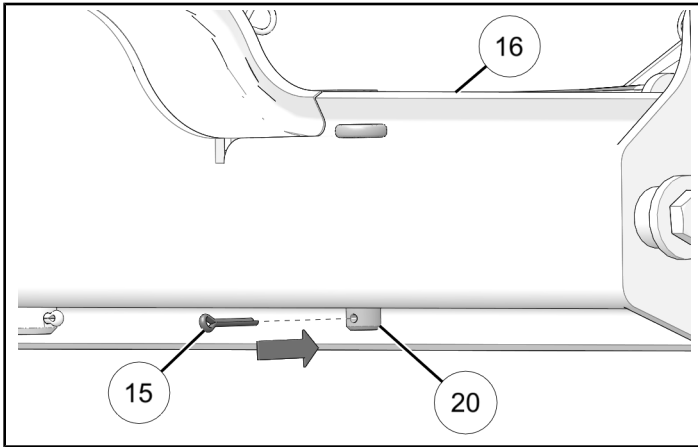
2. Install cotter pin (15) and fold ends so that it can not be removed.



3. Set angling outer tube (62) and install long angling pin (20) through the mounting holes of pivot (16) and through outer angling tube.

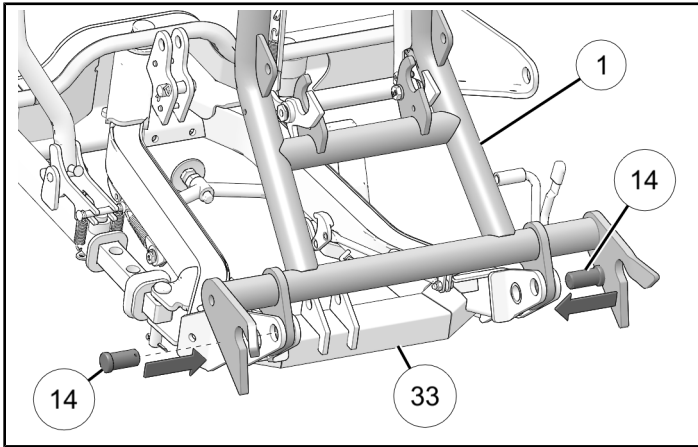


4. Install cotter pin ⑮ and fold ends so that it can not be removed.

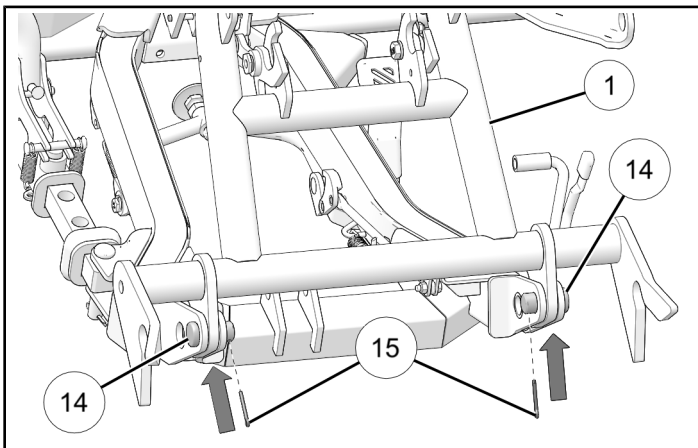


### HOOK UP ASSEMBLY

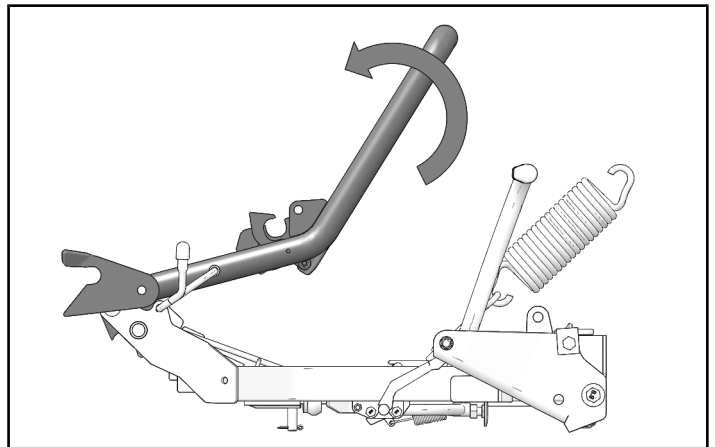
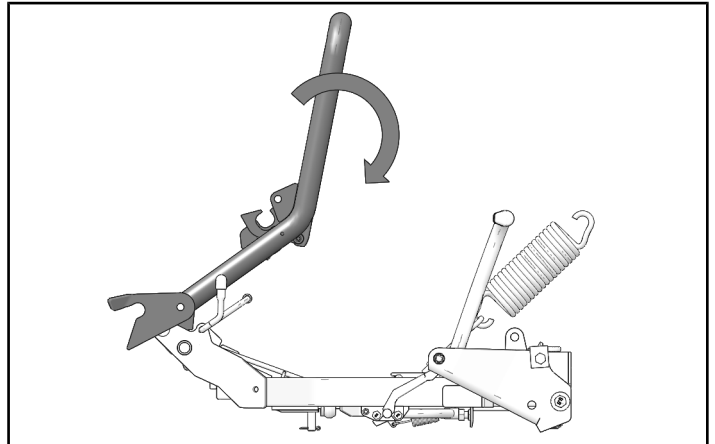
1. Set hook up frame ① into position as shown and install two hook up pins ⑭ through mounting holes of pushframe ③③.



2. Install two cotter pins ⑮ and fold ends so they can not be removed.



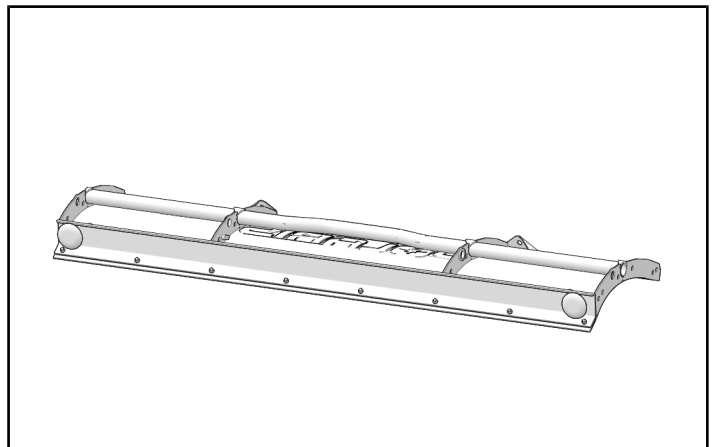
3. Make sure the hook up assembly can rotate freely as shown. If not, remove hook up pins ⑭ and reposition handle so that stoppers allow hook up frame to freely move into correct position.



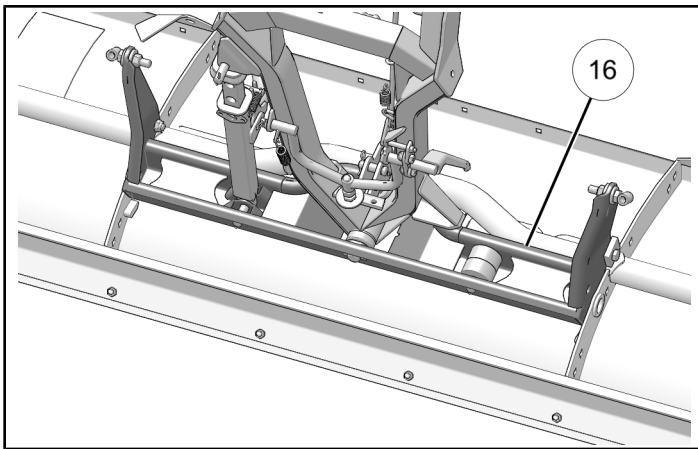
### ACCESSORY INSTALLATION

#### BLADE ASSEMBLY

1. Set front side of blade against ground as shown.



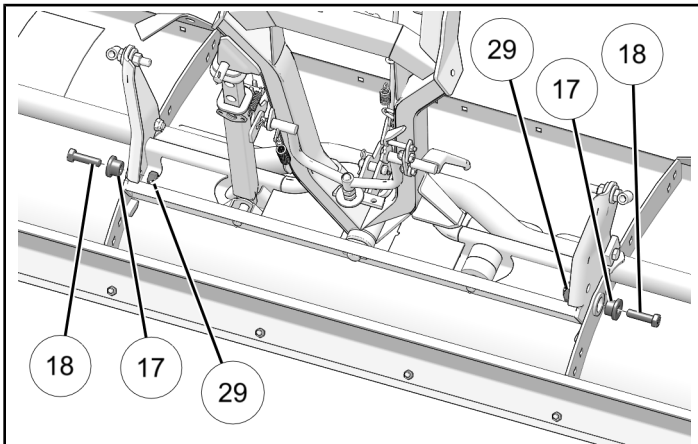
2. Set pivot ⑯ onto center of blade.



3. Install two pivot sleeves ⑰ through mounting holes of blade. Attach with two bolts ⑱ and nuts ㉑. Torque nuts to specification.

#### TORQUE

Nut ㉑:  
65 ft-lbs (88 N·m)



4. Attach one plow spring ⑲ onto upper hole of blade. Attach other end of plow spring to pivot ⑯ using one eyebolt ㉒ and one nut. Repeat this step on other side of frame.

#### IMPORTANT

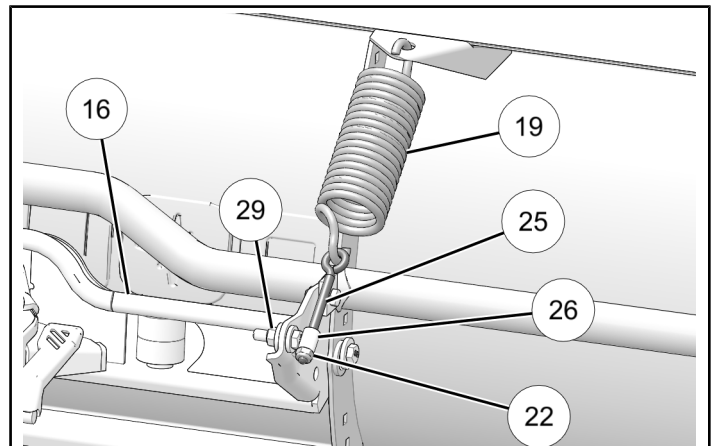
The blade is designed to trip (rotate away from point of impact) when it strikes a solid object or digs in too aggressively. This feature is designed to prevent damage to vehicle and / or plow system in event of excessive force on plow system. When pressure is released, blade springs back into position. Spring tension can be increased by tightening tensioning nuts ㉒ on bottom of eyebolts ㉒. For less spring tension, loosen tensioning nuts ㉒. Always adjust tensioning nuts ㉒ equally on each side.

#### NOTICE

It might be necessary to slightly loosen nut ㉑ that secures eyebolt holder ㉓ if they can not rotate freely.

#### NOTICE

Right side shown; left side similar.



#### KICKSTAND HEIGHT ADJUSTMENT

#### NOTICE

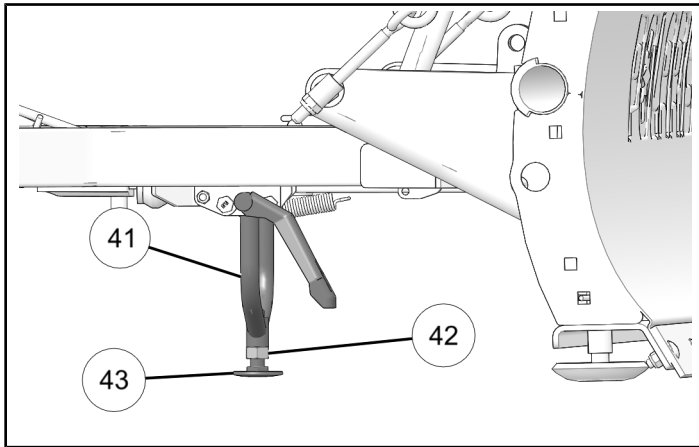
The first installation requires you to adjust height of kickstand ④ so that openings of attachment plates are horizontally aligned with vehicles attachment points. It might be necessary to repeat exercise if you add accessories to your vehicle that affect ride height of vehicle.

#### NOTICE

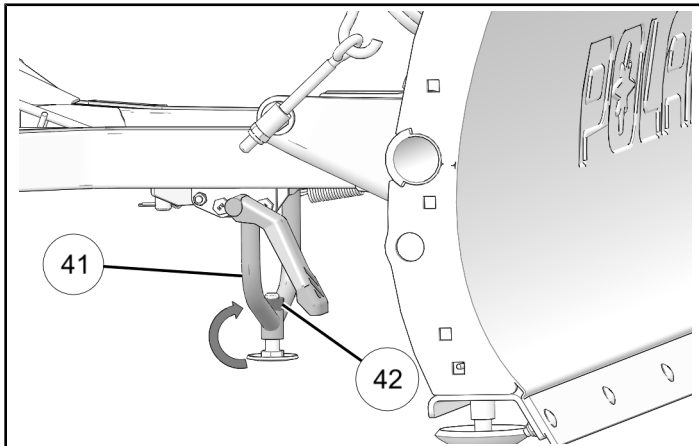
If vehicle is too low, you might need to adjust vehicle height by changing adjustment of front suspension. Refer to vehicle's Owner's Manual for adjustment method.



Kickstand ④① should be adjusted so that when plow is sitting on level ground, unattached from vehicle, opening of lower attachment plates are of equal height with connection points on vehicle. Tighten or loosen kickstand shoe ④③ to raise or lower plow frame attachment plates. Once height is properly adjusted, tighten nut ④② until fully seated.

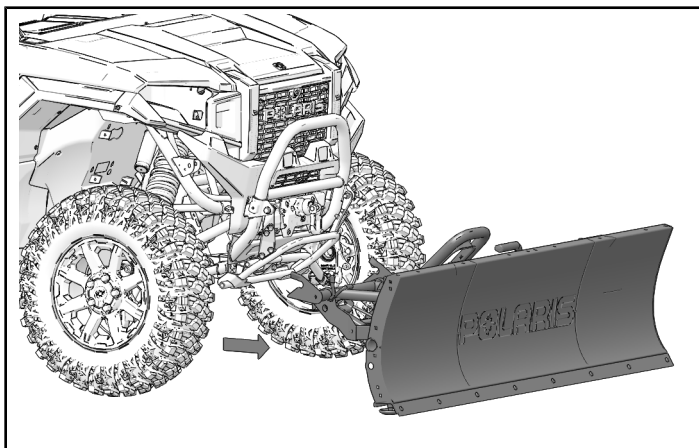


If you need to adjust the kickstand ④① lower to the ground, you can move the nut ④② onto the top of the kickstand.

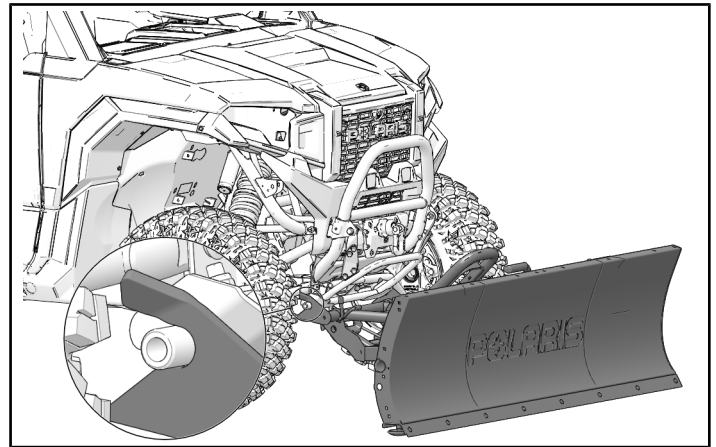


### **PUSHFRAME INSTALLATION**

1. Move vehicle towards push frame assembly. Make sure to align vehicle with pushframe.

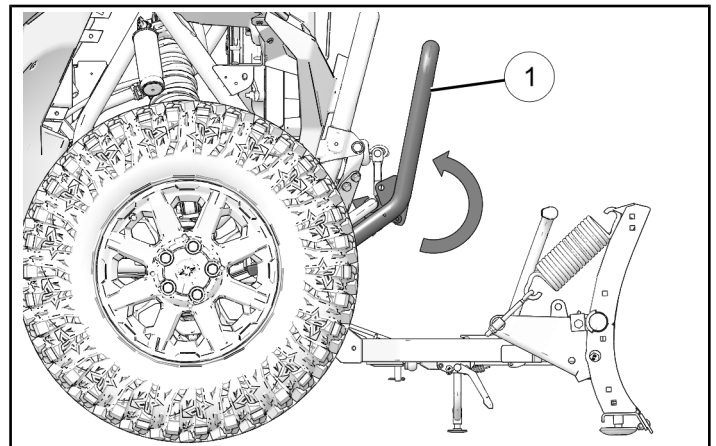


2. Make sure vehicle is fully engaged in attachment plates on both sides.



3. Pull hook up frame ① into position by pulling up towards vehicle until latching mechanism on hook assembly engages vehicle's front attachment mounting tube.

If hook does not engage completely, check that connection points on vehicle are fully seated into attachment plates. Accumulation of snow or ice could prevent push frame from fully engaging connection points on vehicle.

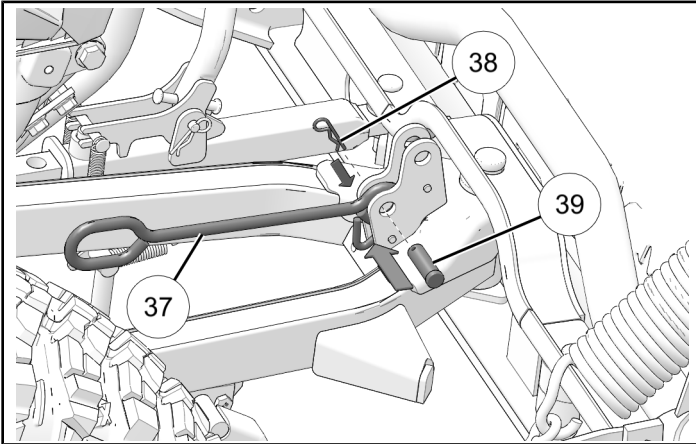


4. Once push frame is attached to vehicle, make sure that kickstand is slightly raised off ground (1 inch recommended). If touching ground, repeat steps of adjusting height of kickstand.

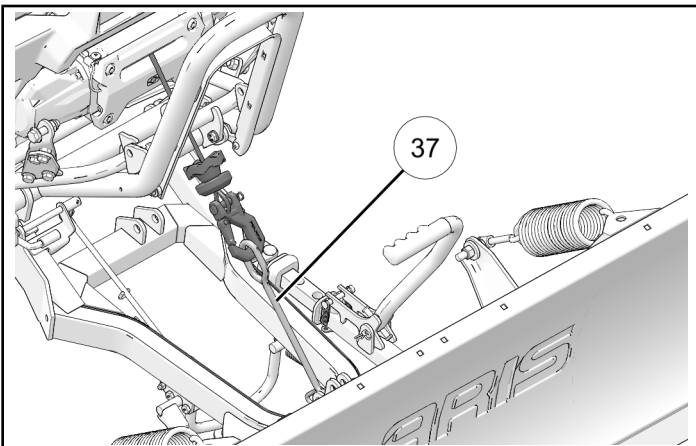
- Connect one end of winch link ⑳ that was supplied with your kit to front of push frame. Attach winch link to push frame with one winch link pin ㉑ and one "R" pin ㉒.

**NOTICE**

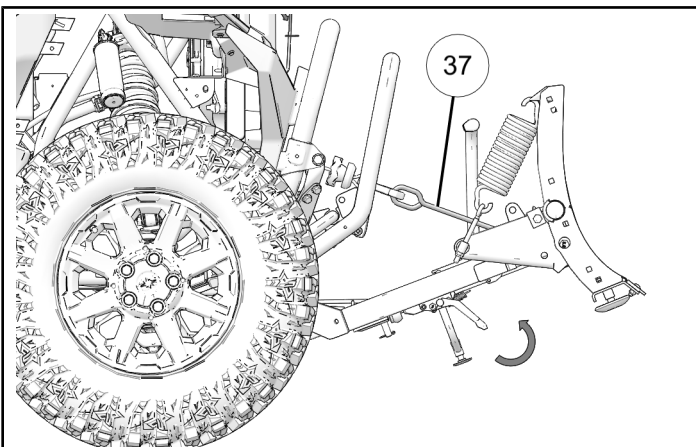
Install winch link pin ㉑ and "R" pin ㉒ through lower hole on pushframe.



- Connect winch hook to other end of winch link ㉒.

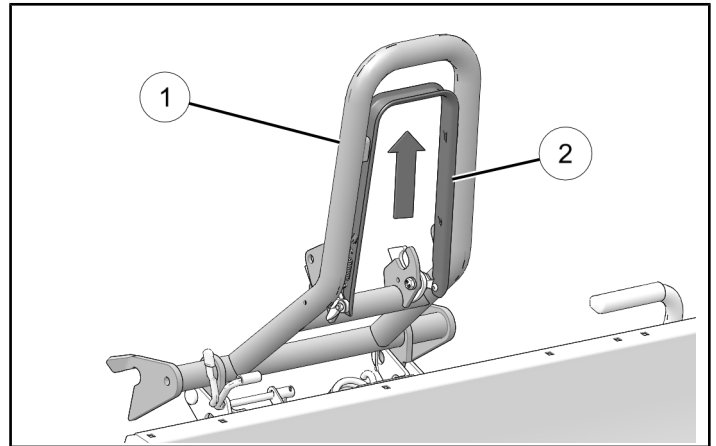


- Using winch, raise push frame until kickstand release lever engages and kickstand is lifted automatically. Blade should be about halfway up when kickstand is released.

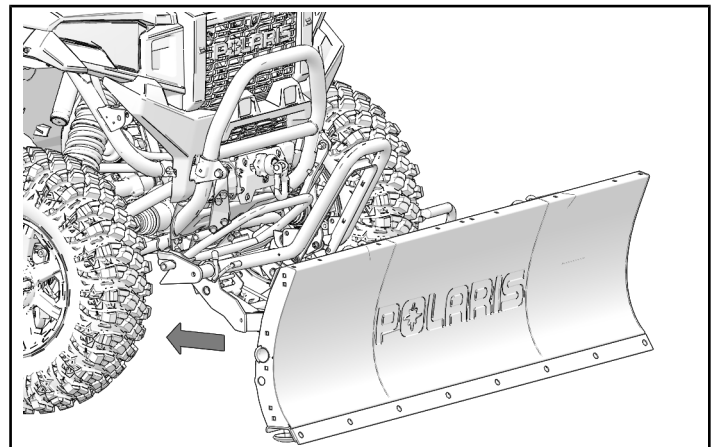


**PUSHFRAME REMOVAL**

- Lower push frame using winch until blade touches ground and winch cable tension is fully released. Remove hook of winch from winch link ㉒.
- Lower kickstand until locking mechanism engages. At that time, kickstand shoe should not touch ground. If it touches ground, height of kickstand must be adjusted.
- Pull release handle ① upwards and hold handle up while rotating hook up frame ② forward and down. System should now be disengaged from vehicle.



- Retract winch cable back into fully retracted position.
- Slowly back vehicle up until it is no longer in contact with push frame.



# OPERATION

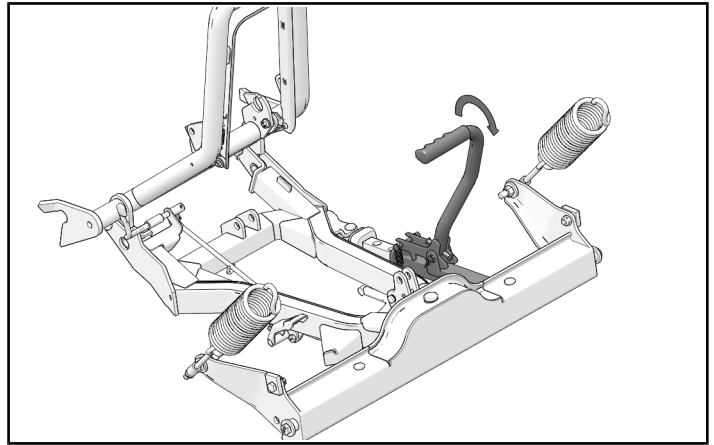
## IMPORTANT

Read and understand the following operating instructions to avoid severe personal injury or death. Compliance with these measures will also ensure that your snow plow will give you many years of good use.

1. Re-torque all bolts and nuts after first 30 minutes of use.
2. Do not exceed 5 mph (8 km/h) with blade installed.
3. Operate with extreme caution on slopes, grades, and rough terrain.
4. Keep bystanders away from blade and vehicle while in motion.
5. Do not allow riders on blade or vehicle when plowing.
6. When plowing snow or dirt into a pile, start backing up before raising blade.
7. Do not ram blade into a snow pile. Slow down before hitting a pile.
8. Be aware of possible hidden objects under snow.
9. Read blade Owner's Manual, vehicle's Owner's Manual, and Safety Decals prior to operation.
10. Always wear appropriate protective clothing as recommended in your vehicle's Owner's Manual.
11. Before you adjust blade angle: stop engine, set and lock brakes, and raise blade with winch. Do not attempt to raise blade by hand.
12. Lower blade to down position when blade and vehicle are not in use.
13. Polaris recommends that you remove blade and plow frame from vehicle before you ride.

## BLADE ADJUSTMENT

To adjust blade angle for plowing to side, raise blade just enough to clear ground. Pull angle lever forward and pivot blade to desired position. Angle lever will lock into place when blade is at correct angle.



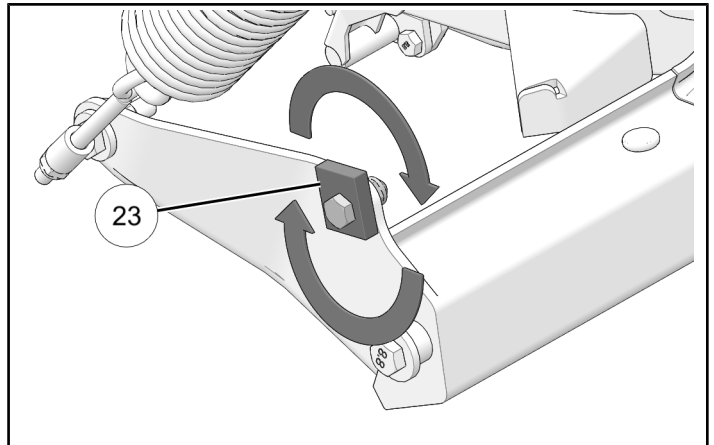
To adjust blade to be more or less aggressive, turn four-position adjustable blade stops ②③ to desired position. Torque blade stop nut to specification.

## TORQUE

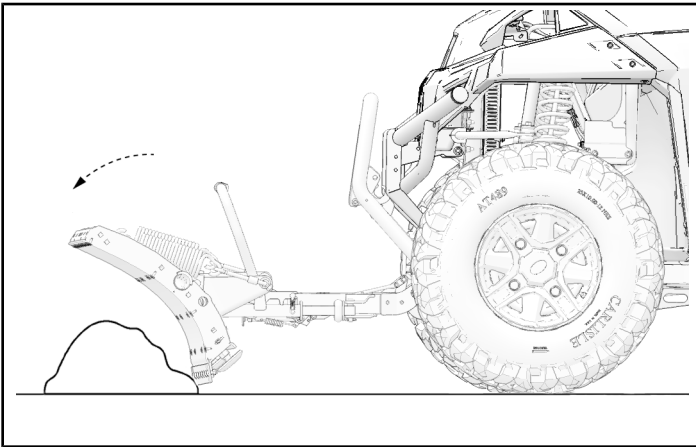
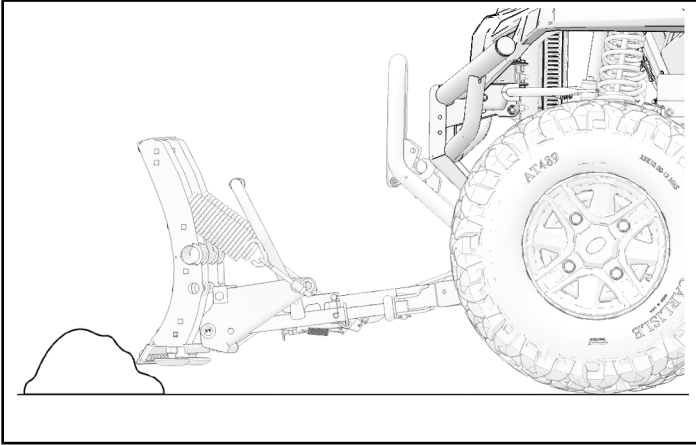
Blade Stop Nut:  
**35 ft-lbs (47 N·m)**

## NOTICE

Always adjust blade stops ②③ equally on each side.



To minimize potential damage from hard impacts while operating plow, blade is designed to trip when it hits a solid object or digs in too far. When pressure is released blade springs back into position. Blade spring tension may be increased by tightening locking nuts on bottom of eyebolts. To decrease spring tension, loosen lock nuts.



In event of a collision with an obstacle at a speed greater than what system is rated for, shear lock “T” pin 61 of manual angle mechanism is designed to shear to minimize force of impact into push frame.

If shear lock “T” pin is broken, inspect all components of plow system to see if any other system components have been damaged. If a part is damaged, impact speed was greater than what system is designed to support. You must then buy a replacement from your dealer.

Should you need to replace shear lock “T” pin, a spare pin is provided in angle handle 59. Follow proceeding steps to change “T” pin:

1. Remove “R” pin 38 and angle handle pin 63 that secures angle handle 59 in place.
2. Lift angle handle 59 and remove the spare “T” pin 61.

### IMPORTANT

Visit your **Authorized Polaris Dealer** to order a new “T” pin and replace original spare you just removed in event of an additional hard impact failure.

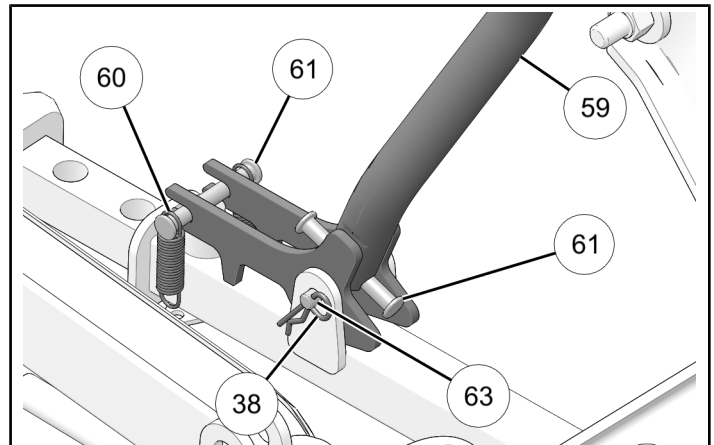
3. Remove two tension springs 60 that secure “T” pin 61.
4. Remove two pieces of broken “T” pin.
5. Install new “T” pin.
6. Replace angle lever 59.
7. Reinstall angle handle pin 63 and “R” pin 38.
8. Replace two tension springs 60.

### NOTICE

“T” pin is designed only to protect against impacts affecting right and left ends of blade. “T” pin does not protect system from a central impact.

### IMPORTANT

Always inspect entire system in event of a hard impact to ensure that no damage occurred to any system components other than “T” pin.



## BLADE LEVELING

Plow blade should be positioned so that bottom of plow shoe **A** is parallel with ground surface. To adjust blade, loosen screw **24**. Turn blade stopper **23** to position that allows best angle for plow shoe. Then torque screw **24** to specification.

### NOTICE

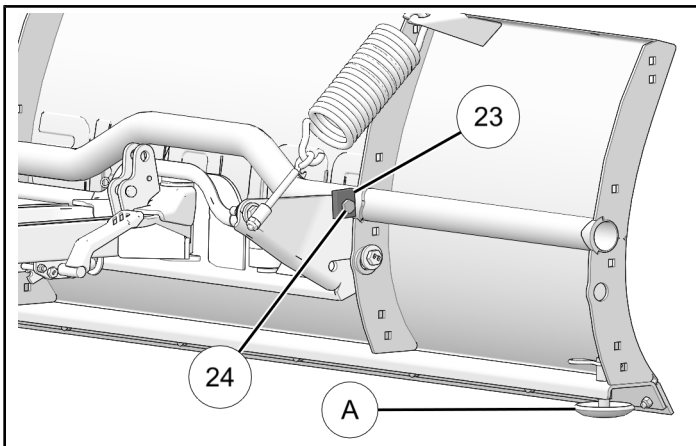
Right side shown; left side similar.

### TORQUE

Screw **24**:  
**35 ft-lbs (47 N·m)**

### NOTICE

Make sure that blade stoppers on both sides are set to same position.



## PLOW SHOE HEIGHT ADJUSTMENT

When plowing asphalt or concrete surfaces, raise plow shoes to highest position. This will allow plow wear bar to rest on surface, and completely remove snow from surface.

When plowing gravel, dirt, or grass surface, lower plow shoes to desired position. This will allow a space between wear bar and plowed surface, preventing bar from digging in to surface.

### NOTICE

Make sure that left and right shoes are adjusted equally.