

GLACIER® PRO PLOW FRAME KIT



P/N 2883255

APPLICATION

All 2009 and newer *RANGER®* XP

NOTE

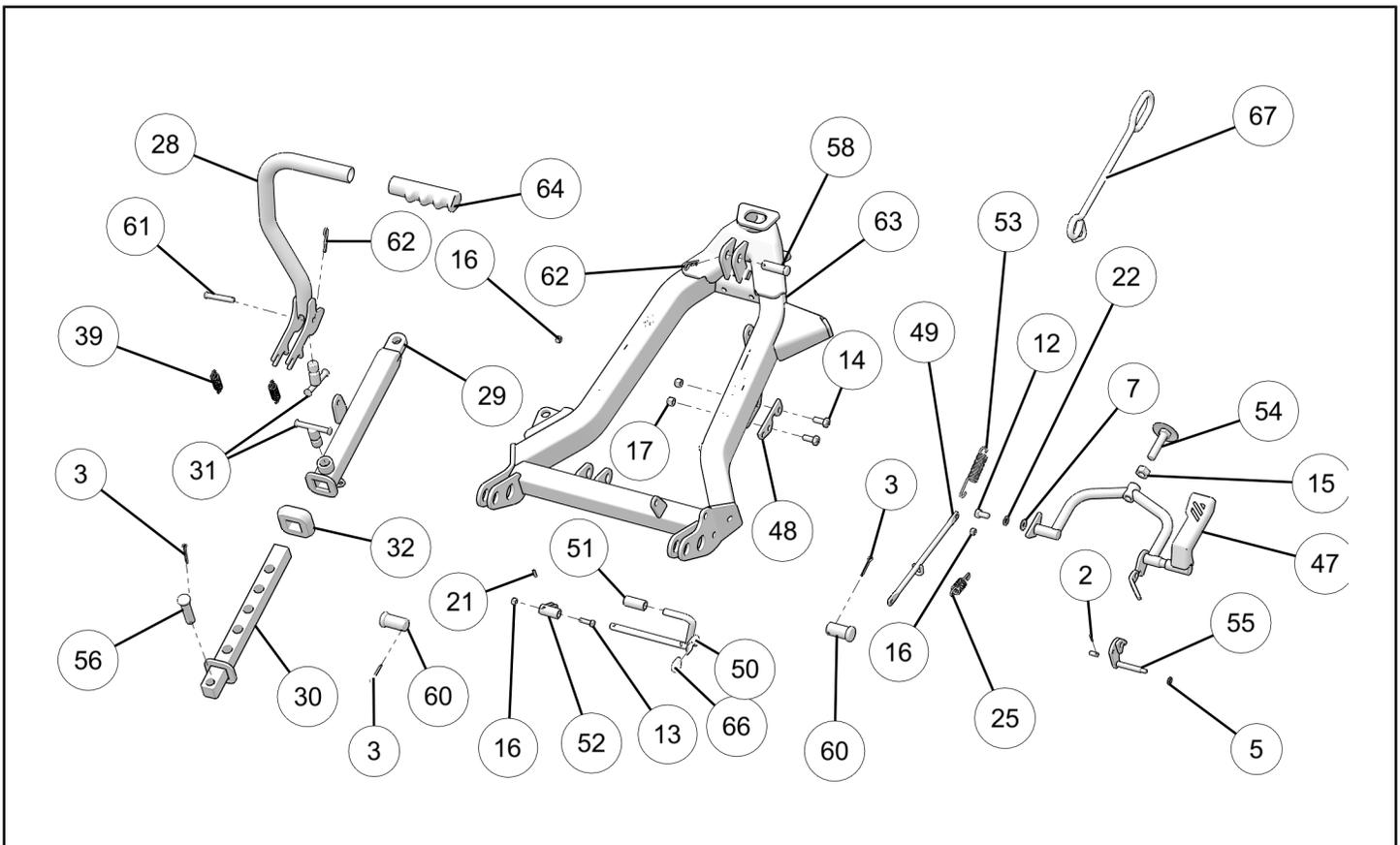
Full installation of the Glacier Pro plow system requires a winch with an auto-stop fairlead and a synthetic winch rope or the Glacier Pro hydraulic lift system. For information on the required components to complete installation see your **Authorized Polaris Dealer** or visit www.polaris.com for details on the required parts to fit your specific year and model of vehicle.

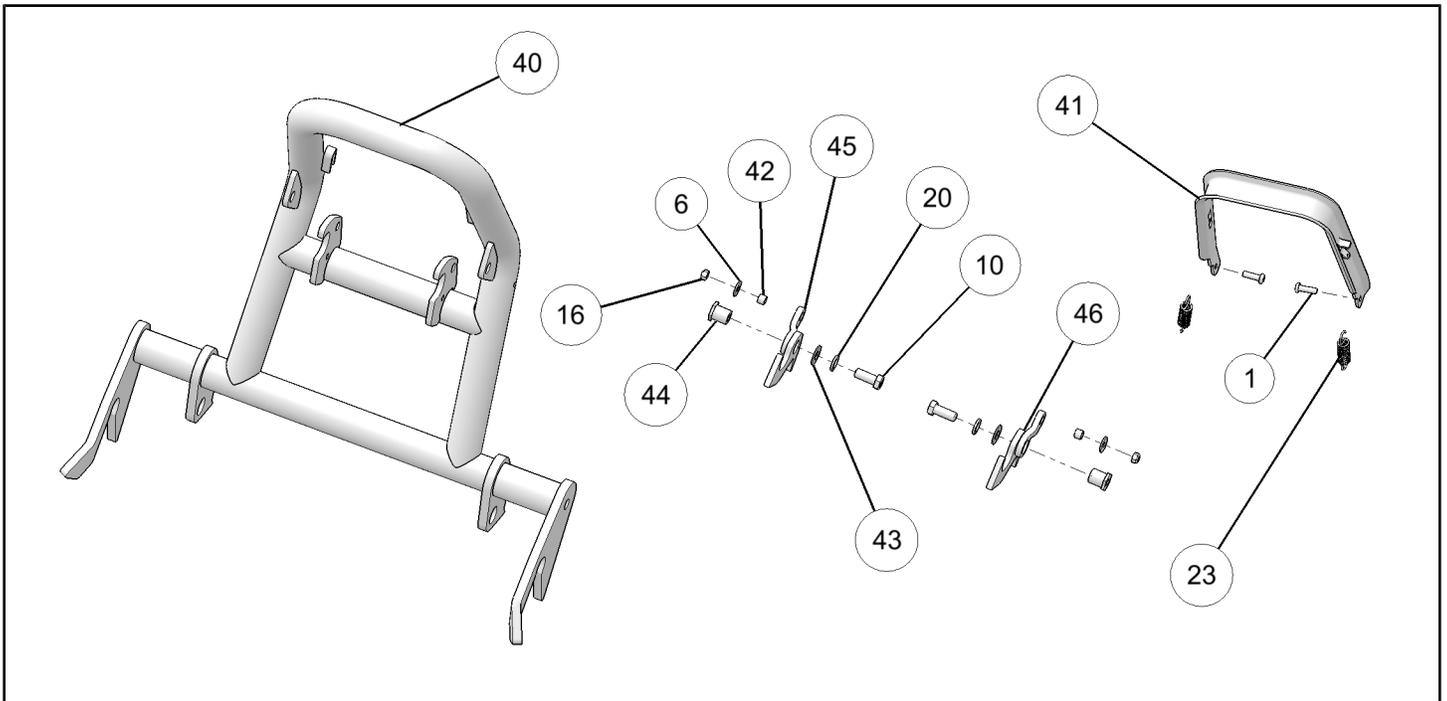
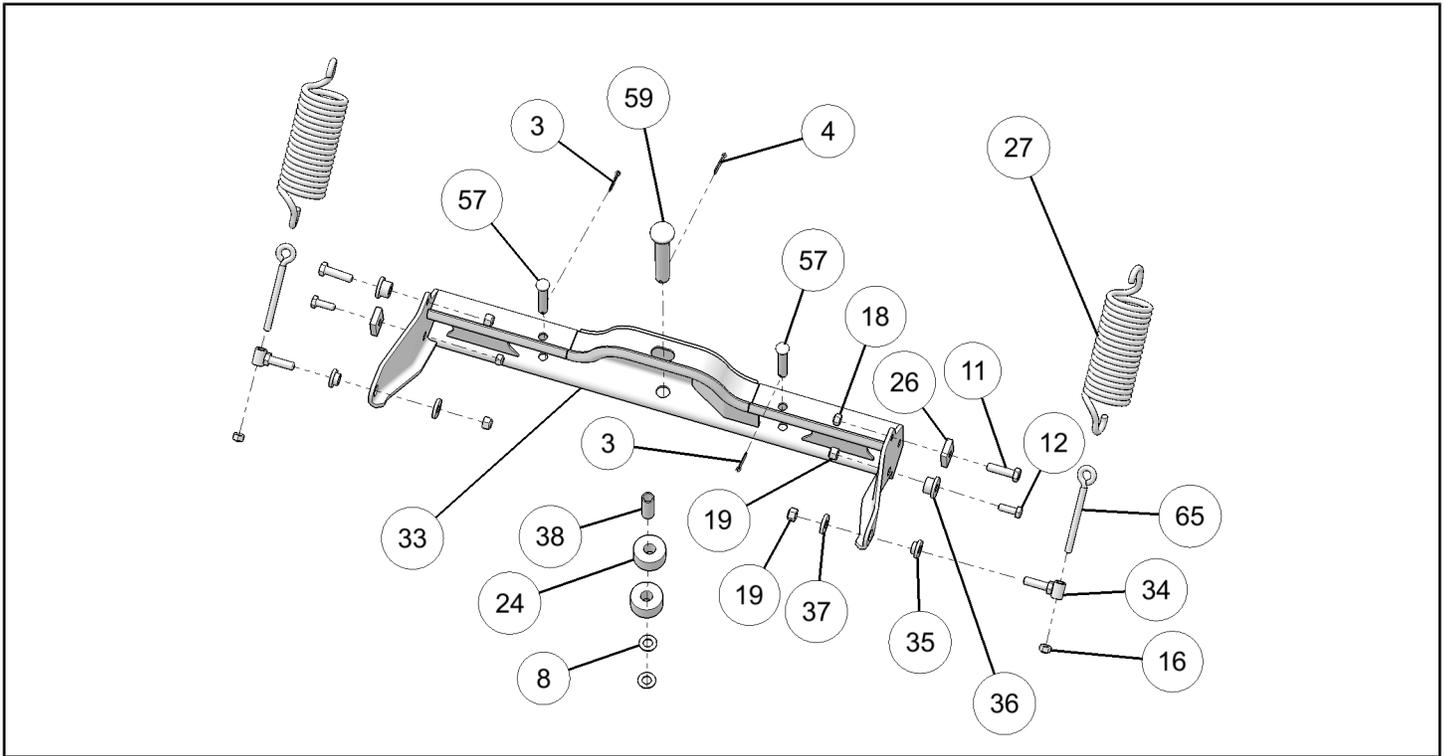
BEFORE YOU BEGIN

Read these instructions and check to be sure all parts and tools are accounted for. Please retain these installation instructions for future reference and parts ordering information.

KIT CONTENTS

This Kit includes:





SPARE KITS

REF	PART DESCRIPTION	PUSHFRAME HARDWARE KIT (2204826)	ANGLE SELECTION KIT (2204827)	PIVOT HARDWARE KIT (2204830)	KICKSTAND KIT (2204833)	CLEVIS PIN KIT (2204892)	RELEASE HANDLE KIT (2204828)	ANGLE SELECTION "T" PIN (2204829)	PUSH FRAME (2206049)	HOOK UP (2205129)	PIVOT (2206050)	LIFT LINK (2204974)
1	Button Head Socket Cap Screw, M6-1.0 X 20 mm	2X					2X					
2	Cotter Pin, 2 mm X 10 mm	1X			1X							
3	Cotter Pin, 3 mm X 25 mm	4X	3X			2X						
4	Cotter Pin, 4 mm X 30 mm	1X										
5	Flat Washer, M6 I.D. X 12 mm O. D.	1X			1X							
6	Flat Washer, M6 I.D. X 18 mm O. D.	2X					2X					
7	Flat Washer, M8 I.D. X 24 mm O. D.	1X			1X							
8	Flat Washer, 14 mm I. D. X 28 mm O.D.		2X									
9	Hex Bolt, M8-1.25 X 16 mm	1X			1X							
10	Hex Bolt, M10-1.5 X 25 mm	2X					2X					
11	Hex Bolt, M10-1.5 X 30 mm	2X		2X								
12	Hex Bolt, M12-1.75 X 45 mm			2X								
13	Hex Bolt, M6-1.0 X 20 mm	1X			1X							

SPARE KITS

REF	PART DESCRIPTION	PUSHFRAME HARDWARE KIT (2204826)	ANGLE SELECTION KIT (2204827)	PIVOT HARDWARE KIT (2204830)	KICKSTAND KIT (2204833)	CLEVIS PIN KIT (2204892)	RELEASE HANDLE KIT (2204828)	ANGLE SELECTION "T" PIN (2204829)	PUSH FRAME (2206049)	HOOK UP (2205129)	PIVOT (2206050)	LIFT LINK (2204974)
14	Hex Bolt, M8-1.25 X 20 mm	2X			2X							
15	Nut, M12-1.75	1X			1X							
16	Nylock Nut, M6-1.0	4X			2X		2X					
17	Nylock Nut, M8-1.25	2X			2X							
18	Nylock Nut, M10-1.5	2X		4X								
19	Nylock Nut, M12-1.75	4X		4X								
20	M10 Lock washer	2X					2X					
21	Spring Pin, 4 mm X 16 mm	1X			1X							
22	M8 Spring Lock Washer , 14.8 X 2 mm	1X			1X							
23	Tension Spring, 13 mm X 58 mm						2X					
24	Rubber Bushing		2X									
25	Exhaust Spring, 16 mm X 63 mm				1X							
26	Blade Stopper			2X								
27	Plow Spring											
28	Angling Handle		1X									
29	Angling Outer Tube		1X									

SPARE KITS

REF	PART DESCRIPTION	PUSHFRAME HARDWARE KIT (2204826)	ANGLE SELECTION KIT (2204827)	PIVOT HARDWARE KIT (2204830)	KICKSTAND KIT (2204833)	CLEVIS PIN KIT (2204892)	RELEASE HANDLE KIT (2204828)	ANGLE SELECTION "T" PIN (2204829)	PUSH FRAME (2206049)	HOOK UP (2205129)	PIVOT (2206050)	LIFT LINK (2204974)
30	Angling Inner Tube		1X									
31	Shear Lock		2X					1X				
32	Rubber Stopper		1X									
33	Pivot Member										1X	
34	Eyebolt Holder	2X		2X								
35	Eyebolt Flange Bushing	2X		2X								
36	Pivot Sleeve	2X		2X								
37	Eyebolt Washer	2X		2X								
38	Stopper Sleeve		1X									
39	Tension Spring		2X									
40	Hook Up									1X		
41	Handle						1X					
42	Handle Sleeve	2X					2X					
43	Hook Shim	2X					2X					
44	Hook Bushing	2X					2X					
45	Right Hook Assembly						1X					
46	Left Hook Assembly						1X					
47	Pedal				1X							
48	Kickstand Clamp				1X							
49	Auto-Release Linkage				1X							
50	Auto-Release Arm				1X							

SPARE KITS

REF	PART DESCRIPTION	PUSHFRAME HARDWARE KIT (2204826)	ANGLE SELECTION KIT (2204827)	PIVOT HARDWARE KIT (2204830)	KICKSTAND KIT (2204833)	CLEVIS PIN KIT (2204892)	RELEASE HANDLE KIT (2204828)	ANGLE SELECTION "T" PIN (2204829)	PUSH FRAME (2206049)	HOOK UP (2205129)	PIVOT (2206050)	LIFT LINK (2204974)
51	Plastic Cap				1X							
52	Auto-Release Link				1X							
53	Kickstand Spring				1X							
54	Kickstand Shoe	1X			1X							
55	Kickstand Lock				1X							
56	Short Angling Pin	1X	1X			1X						
57	Long Angling Pin	1X	2X			1X						
58	Winch Link Pin	1X										
59	Main Pin	1X										
60	Hook Up Pin	2X										
61	Handle Angling Pin	1X	1X									
62	"R" Pin Short Zinc Plated	2X	1X									
63	Glacier Pro UTV V2								1X			
64	Red Polyethylene Handle		1X									
65	Eyebolt, M10-1.5 X 110 mm			2X								
66	Plastic Cap				1X							
67	Winch Link, Welded Asm											1X

TOOLS REQUIRED

- Socket Set, Metric
- Wrench Set, Metric
- Pliers, Locking

IMPORTANT

Your GLACIER® PRO 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.

ASSEMBLY TIME

Approximately 30 minutes

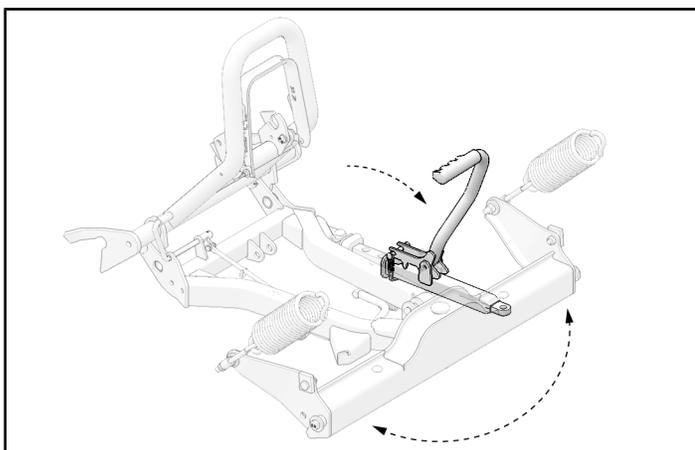
⚠ WARNING

Read and understand the following operating instructions to avoid severe personal injury or death. Compliance with these safety measures will also ensure that your plow system will give you many years of good use. Retorque all bolts and nuts after first 1/2 hour of use.

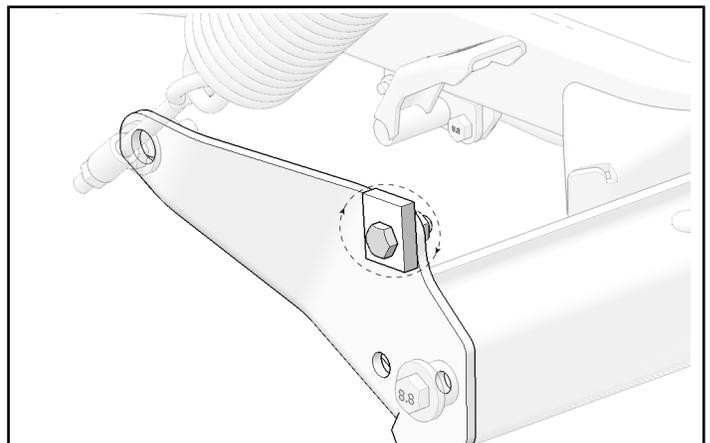
- Do not exceed 5 MPH with blade installed.
- Operate with extreme caution while on slopes, grades and rough terrain.
- Keep away from blade and moving parts during operation.
- When plowing snow or dirt into a pile start backing up before raising the blade.
- Do not ram blade into a snow pile. Slow down before hitting a pile.
- Beware of possible hidden objects under snow.
- Read all plow system related owner's manuals, vehicle operator's manual and all safety decals before operating.
- Always wear appropriate protective clothing as recommended in vehicle operator's manual.
- Do not allow passengers on blade or vehicle while operating the plow system.
- Keep bystanders away from blade and vehicle while moving.
- Before adjusting blade angle: Stop engine, put transmission in park and/or set and lock brakes, raise and lock blade in up position. Do not attempt to raise blade by hand.
- Before adjusting blade height: lower blade to the down position.
- When blade is not in use, stop engine, set and lock brakes and lower blade to down position.
- Polaris recommends removing blade and plow frame before trail riding.

OPERATION

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

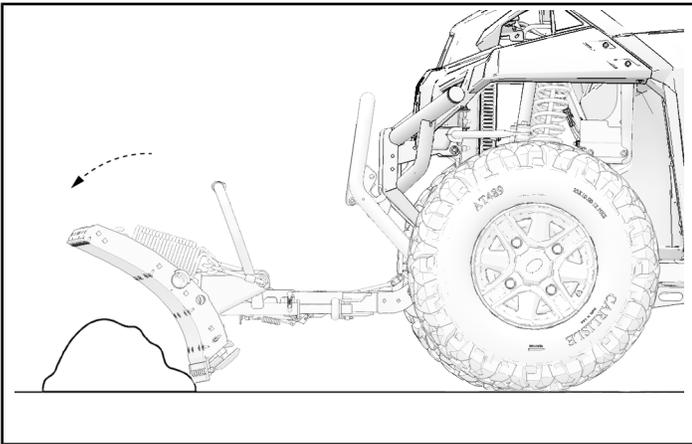
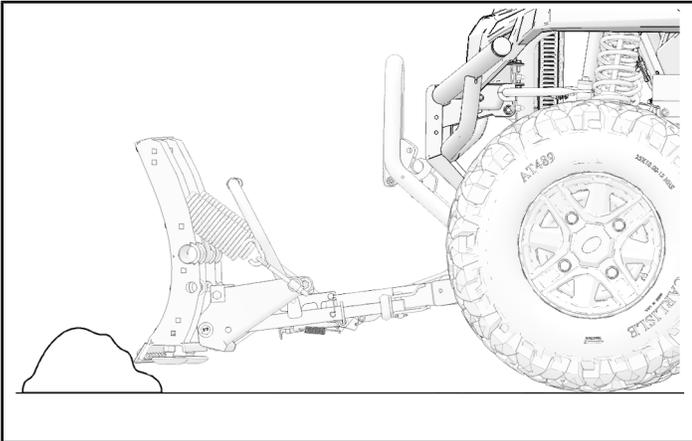


To adjust the blade to be more or less aggressive, turn the four position adjustable blade stops to the desired position making the blade more or less aggressive.



To minimize potential damage from hard impacts while operating the plow, the blade is designed to trip when it hits a solid object or digs in too far. When the pressure is released the blade springs back into

position. Blade spring tension may be increased by tightening the locking nuts on the bottom of the eyebolts. To decrease spring tension, loosen the lock nuts.



In the event of a collision with an obstacle at a speed greater than what the system is rated for, the angle selection "T" pin ③① of the manual angulation mechanism is designed to shear to minimize the force of impact into the pushframe.

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

Should you need to replace the angle selection "T" pin, a spare pin is provided in the angle lever. Follow proceeding steps 1-8 to change the "T" pin:

1. Remove the "R" pin (62) and the clevis pin (61) retaining the angle lever ②⑧ in place.

2. Lift the angle lever ②⑧ and remove the spare "T" pin ③①.

IMPORTANT

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

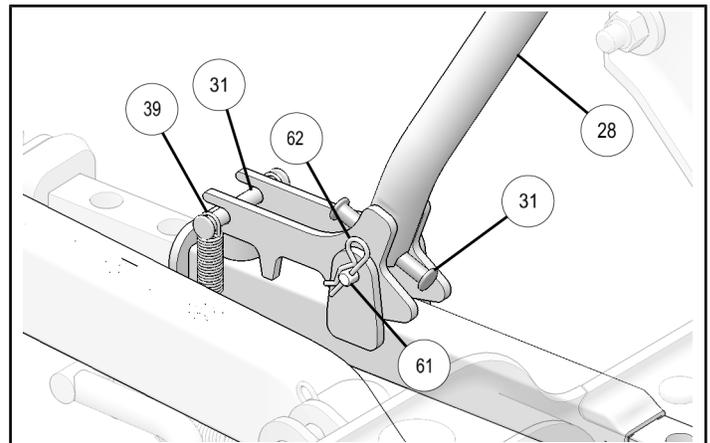
3. Remove the two tension springs (short) ③⑨ retaining the "T" pin ③①.
4. Remove the two pieces of broken "T" pin.
5. Insert the new "T" pin.
6. Replace the angle lever ②⑧.
7. Reinstall the angle lever pin (61) and the "R" pin (63).
8. Replace the two tension springs (short) ③⑨.

NOTE

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

IMPORTANT

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



FRAME ASSEMBLY INSTRUCTIONS

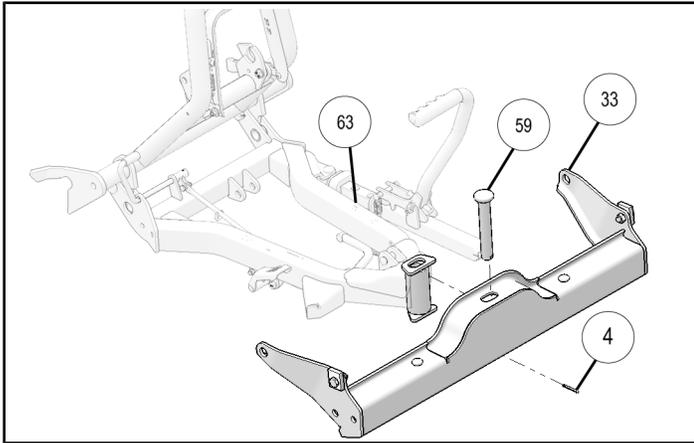
Pivot Assembly

1. Position the pushframe (63) into the middle section of the pivot (33). Insert the pivot pin (59) from above.

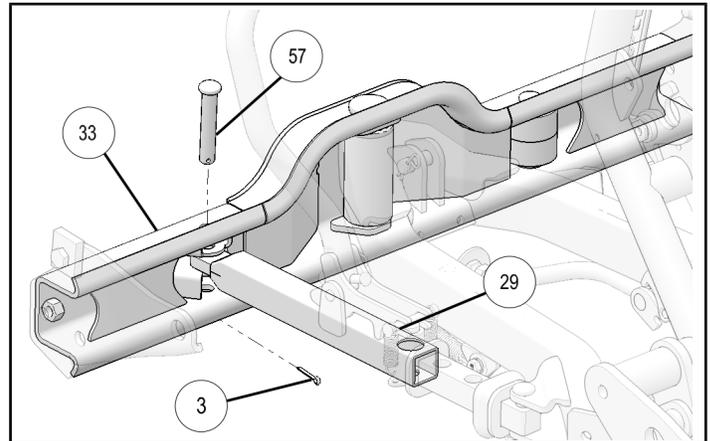
⚠ WARNING

The pivot pin (59) must be aligned to fit between the plow leveling springs and then into the bottom hole of the pivot (33).

2. Insert the 4 mm dia X 30 mm cotter pin (4) and fold the two ends so it can not be removed.



3. Position the other end of the mechanism and insert the angle tube pin (long) (57) into the mounting holes of the pivot (33) and the outer angle tube (29).
4. Insert the 3 mm dia X 25 mm cotter pin (3) and fold the two ends so it can not be removed.

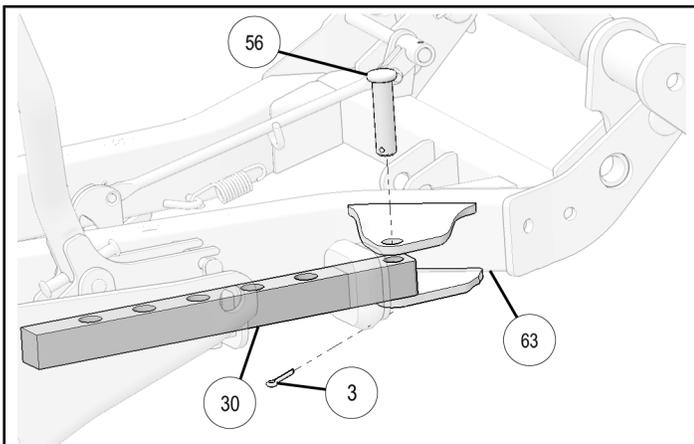


Manual Angulation Mechanism Assembly

NOTE

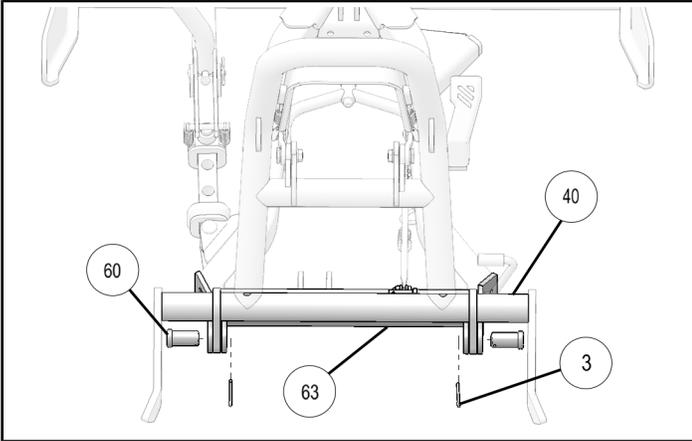
If you have purchased the Glacier Pro HD Plow Hydraulic Angle System, PN 2879224, do not install the manual angulation mechanism. Follow the instructions provided with the Glacier Pro HD Plow Hydraulic Angle System to install the hydraulic angle system.

1. Position the mechanism and insert the angle bar pin (short) (56) into the mounting holes of the pushframe (63) and the inner angle bar (30).
2. Insert the 3 mm dia X 25 mm cotter pin (3) and fold the two ends so it can not be removed.



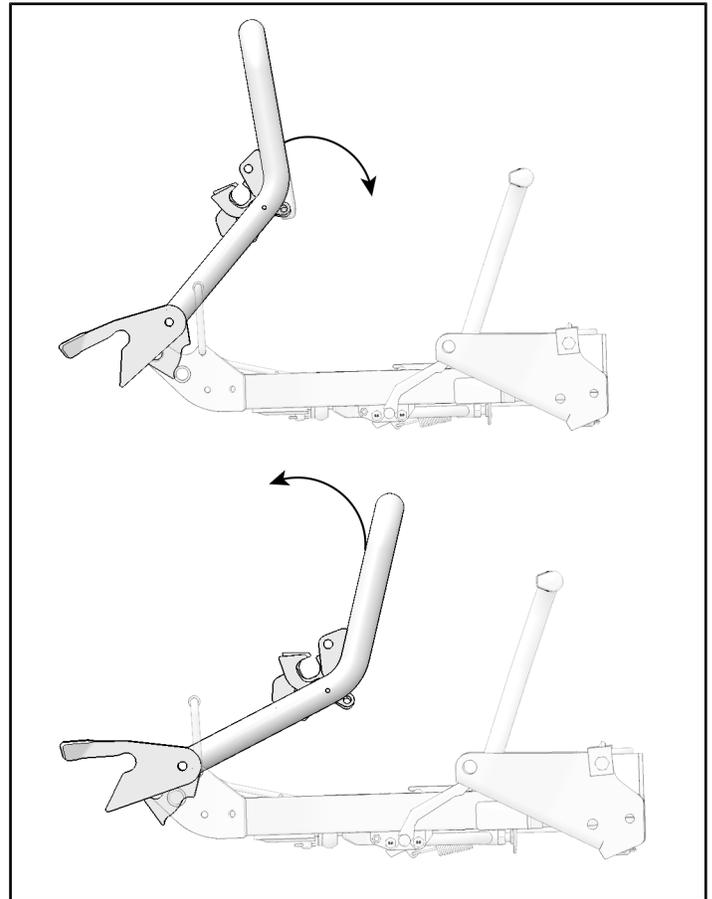
Hook Up Assembly

1. Position the hook up assembly ④ into position as shown and insert the two hook up pins (60) into the mounting holes of the pushframe (63).
2. Insert the two 3 mm dia X 25 mm cotter pins ③ and fold the ends so they can not be removed.



NOTE

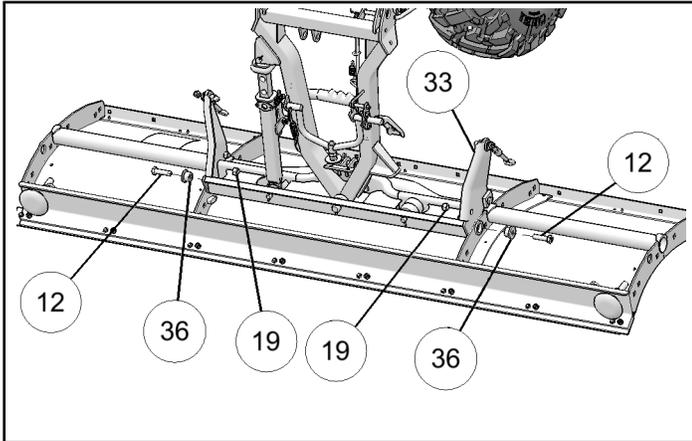
Make sure the hook up assembly can rotate freely as shown in the picture. If not, remove the clevis pins (60) and reposition the handle so that the stoppers allow the hook up assembly to freely move into the correct position.



BLADE ASSEMBLY INSTRUCTIONS

Blade Assembly

1. Place the front side of the blade against the ground as shown.
2. Position the pivot assembly³³ on the center of the blade.
3. Install the two pivot flange sleeves ³⁶ into the mounting holes of the blade. Secure with the provided two M12 - 1.75 X 45 mm hex bolts ¹² and M12 - 1.75 locking nuts ¹⁹.



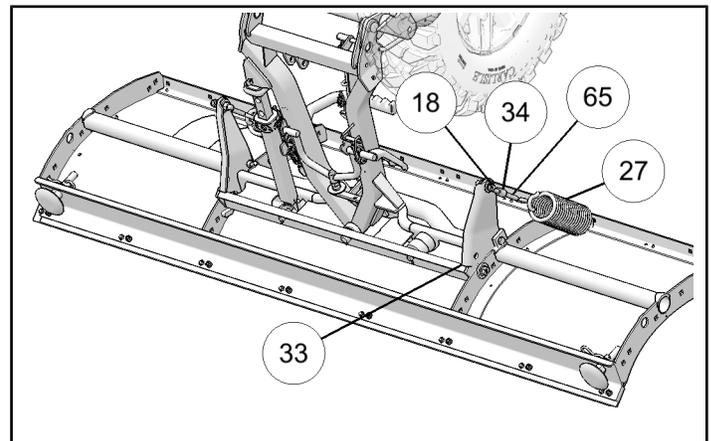
4. Attach the two blade springs ²⁷ onto the upper holes of the blade. Attach the other ends of the blade springs to pivot ³³ using the two M10-1.5 X 110 mm eyebolts (65) and two M10-1.5 nylock nuts ¹⁸.

NOTE

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 the vehicle and /or plow system in the event of excessive force on the plow system. When the pressure is released, the blade springs back into position. The spring tension ²⁷ may be increased by tightening the tensioning nuts ¹⁸ on the bottom of the eyebolts . For less spring tension, loosen the tensioning nuts ¹⁸.

NOTE

It may be necessary to slightly loosen the nut holding the eyebolt supports ³⁴ if they can not rotate freely.



PUSHFRAME INSTALLATION AND REMOVAL

If you have purchased a hydraulic lifting system, refer to installation manual supplied with the hydraulic lift system.

NOTE

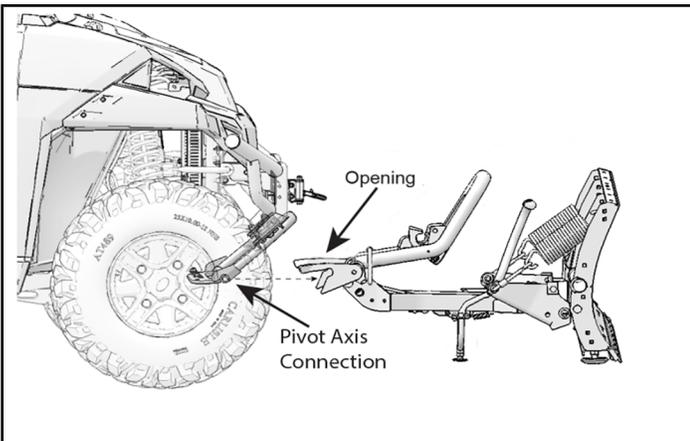
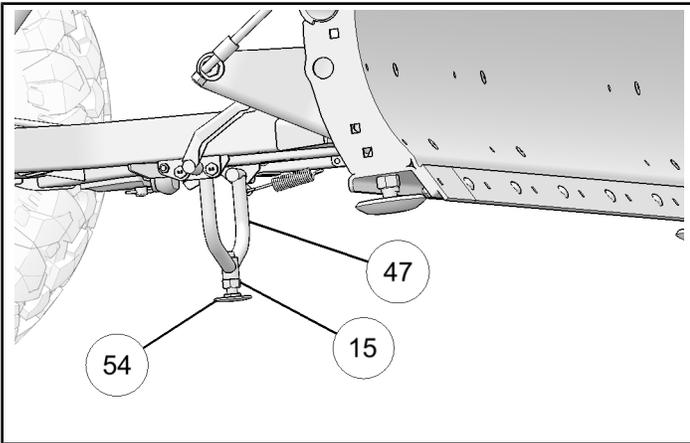
The first installation requires you to adjust the height of the kickstand (47) so that the openings of the attachment plates are horizontally aligned with the vehicles attachment points. It may be necessary to repeat the exercise if you add accessories to your vehicle that affect the ride height of the vehicle.

NOTE

If the vehicle is too low, you may need to adjust the vehicle height by changing the adjustment of the front suspension. Refer to vehicle manual for the adjustment method.

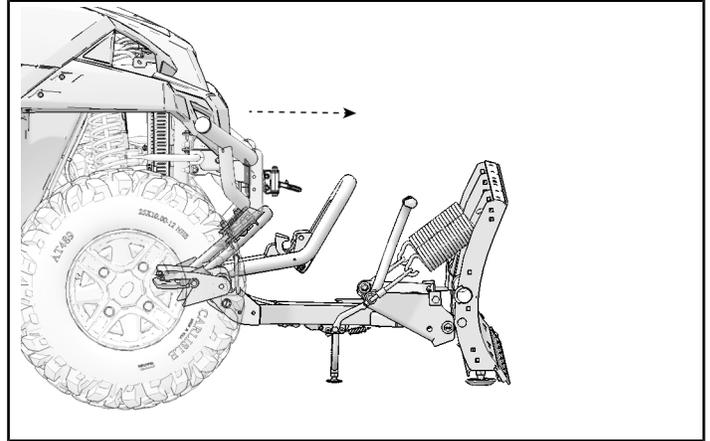
Height Adjustment Of The Kickstand

The kickstand (47) should be adjusted so that when the plow is sitting on level ground, unattached from the vehicle, the opening of the lower attachment plates are of equal height with the connection points on the vehicle. Tighten or loosen the kickstand shoe (54) to raise or lower the plow frame attachment plates and tighten the nut (15) when the height is adjusted properly.



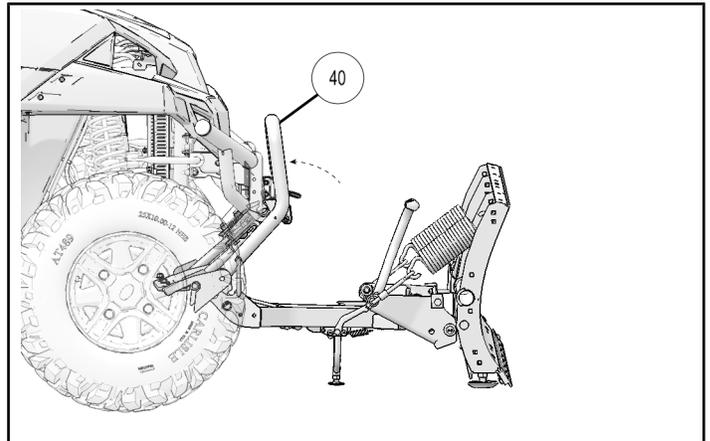
Pushframe Installation

1. Move the vehicle towards the pushframe assembly. Make sure to align the vehicle with the pushframe.
2. Make sure the vehicle is fully engaged in the attachment plates on both sides.



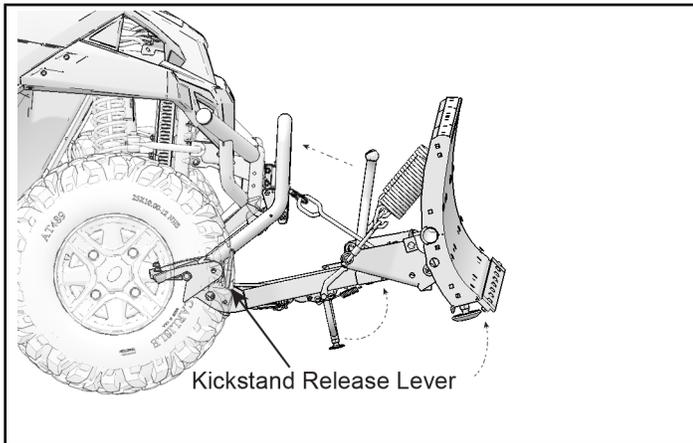
3. Rotate the hook up assembly (40) into position by pulling up towards the vehicle until the latching mechanism on the hook assembly engages the vehicles front attachment mounting tube.

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

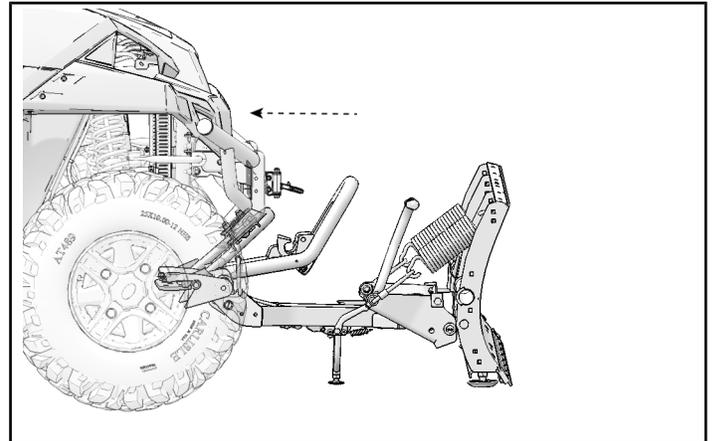


4. Once the pushframe is attached to the vehicle, ensure that the kickstand is slightly raised off the ground (1+” recommended). If touching the ground, repeat steps of adjusting the height of the kickstand.
5. Connect the hook of the winch onto the winch link (67) that was supplied with your kit.

- Using the winch, raise the pushframe until the kickstand release lever engages and the kickstand is lifted automatically. The blade should be about halfway up when the kickstand is released.

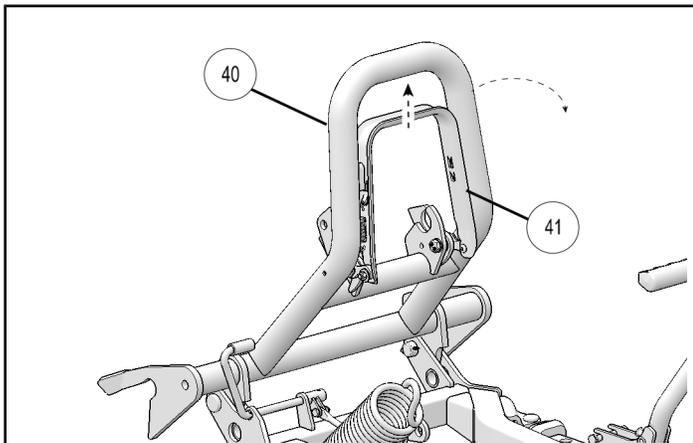


- Retract the winch cable back into the fully retracted position.
- Slowly back the vehicle up until it is no longer in contact with the pushframe.



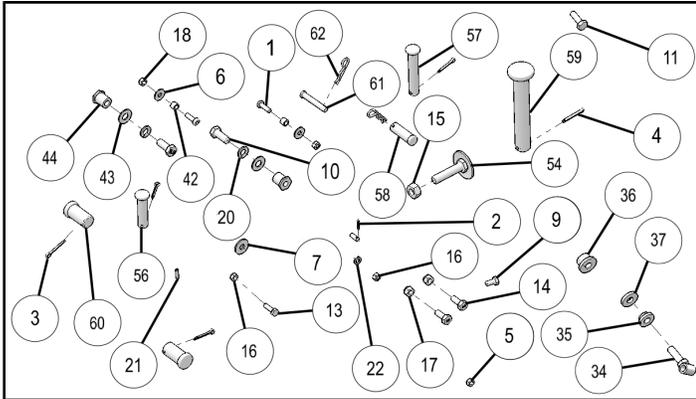
Pushframe Removal

- Lower the pushframe using the winch until the blade touches the ground and the winch cable tension is fully released. Remove the hook of the winch from the winch link (67).
- Lower the kickstand until the locking mechanism engages. At that time, the kickstand shoe should not touch the ground. If it touches the ground, the height of the kickstand must be adjusted.
- Pull the release handle (41) upwards and hold the handle up while rotating the hookup assembly (40) forward and down. The system should now be disengaged from the vehicle.

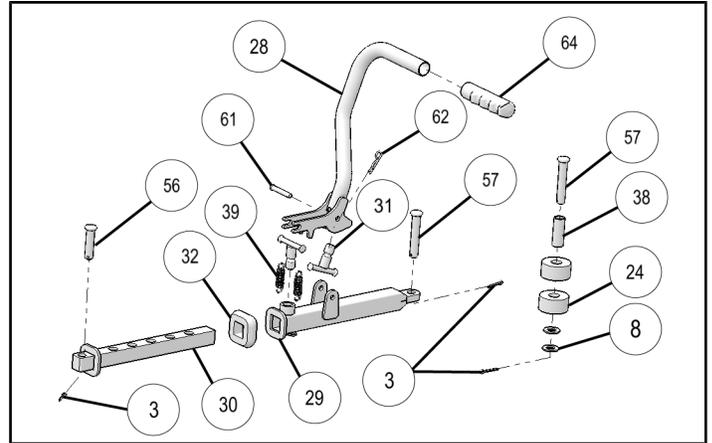


SPARE KITS

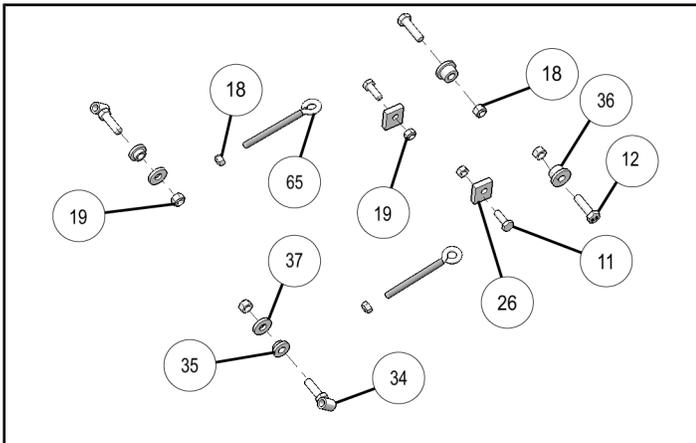
Pushframe Hardware Kit (P/N 2204826)



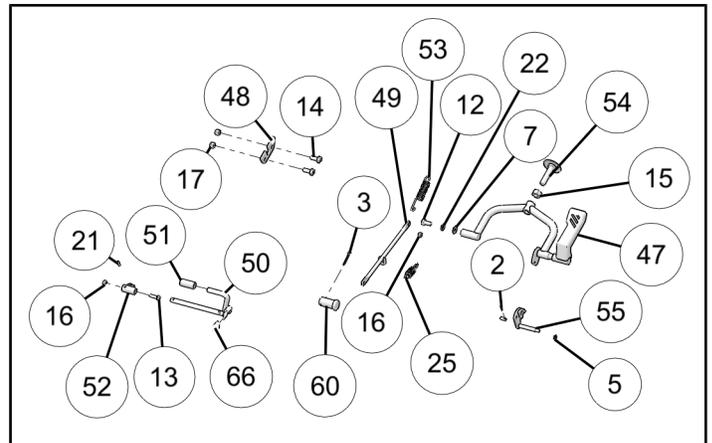
Angle Selection Kit (P/N 2204827)



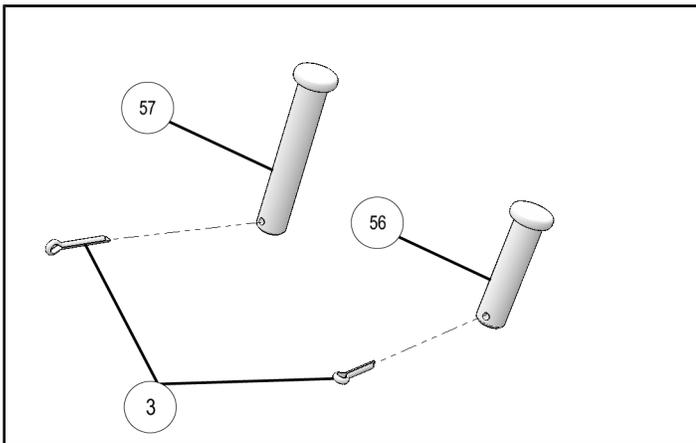
Pivot Hardware Kit (P/N 2204830)



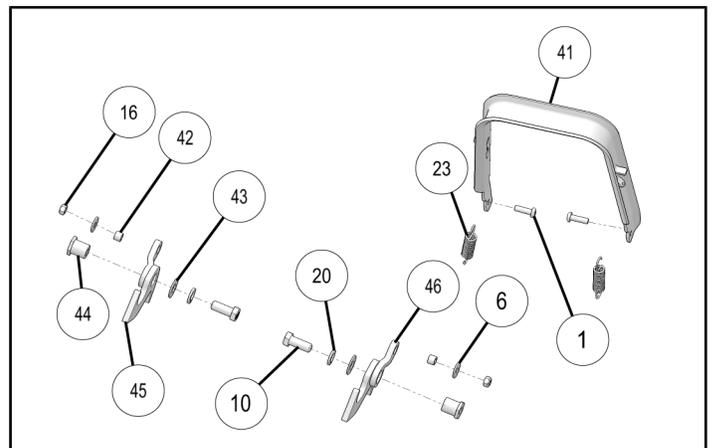
Kickstand Kit (P/N 2204833)



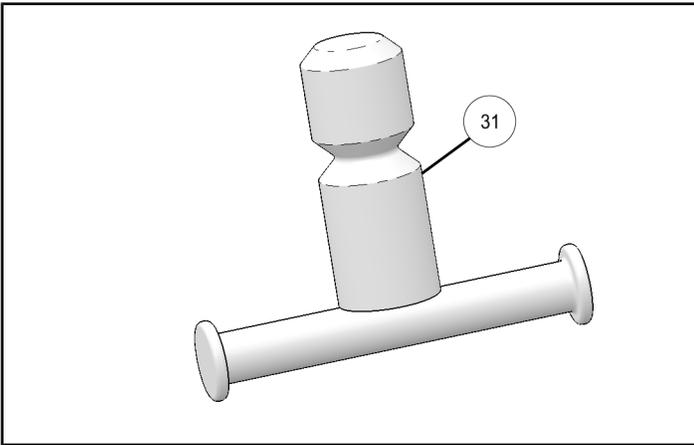
Clevis Pin Kit (P/N 2204892)



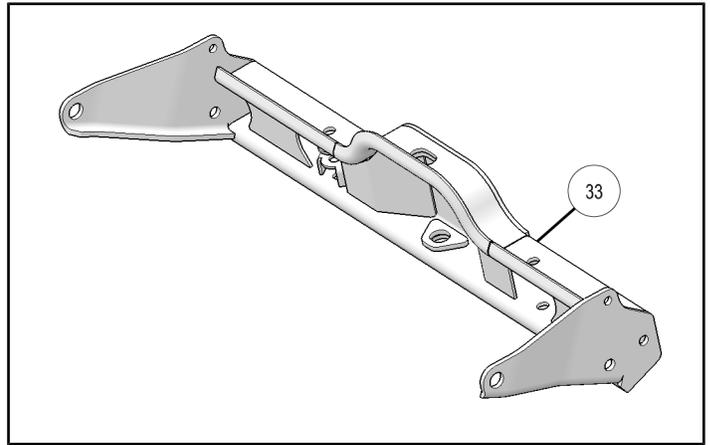
Release Handle Kit (P/N 2204828)



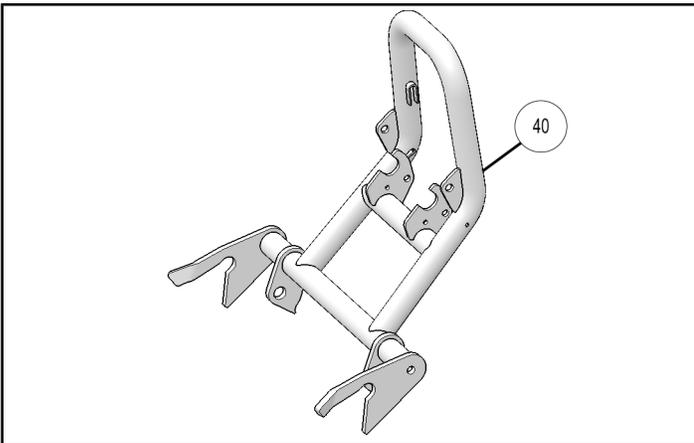
Angle Selection "T" Pin (P/N 2204829)



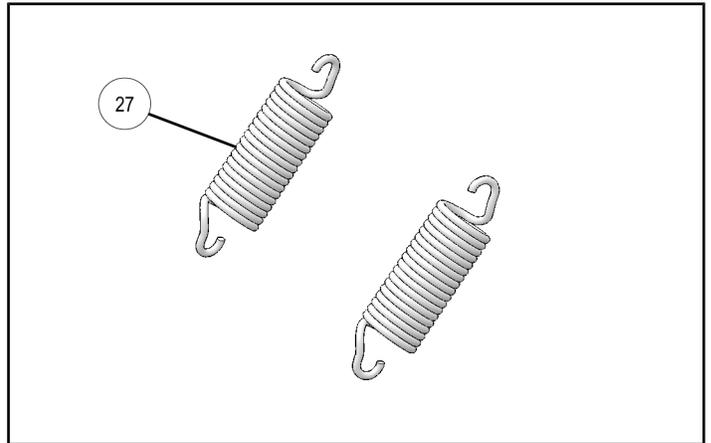
Pivot (P/N 2206050)



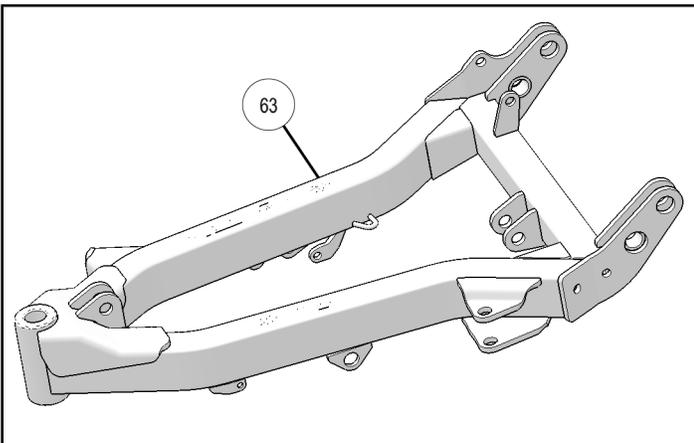
Hook Up (P/N 2205129)



Plow Spring (P/N 2858534)



Pushframe (P/N 2206049)



Plow Link (P/N 2204974)

