

"GLACIER PRO ATV" PLOW FRAME KIT



P/N 2879630

APPLICATION

All Sportsman models, 2011 and more recent.

ALL XP models, 2010 and more recent.

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.

ATTENTION

Additional accessories required:

- HD 3500 winch with synthetic cable or one of the following winch cable options:
- Synthetic winch cable P/N 2875791
- Plow cable P/N 2878483
- Automatic stop switch P/N 2879149 for winch

Not using the proper winch or winch accessory will lead to premature failure of the winch cable.

TOOLS REQUIRED

- Standard Wrenches and Sockets
- Metric Wrenches and Sockets

- Long Nose Pliers

IMPORTANT

Your Polaris "GLACIER PRO ATV" 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

READ AND UNDERSTAND THE FOLLOWING OPERATING INSTRUCTIONS TO AVOID SEVERE PERSONAL INJURIES OR DEATH.

- BLADE IN UP POSITION. DO NOT ATTEMPT TO RAISE BLADE BY HAND.

COMPLIANCE WITH THESE MEASURES WILL ALSO ENSURE THAT YOUR SNOW PLOW WILL GIVE YOU MANY YEARS OF GOOD USE.

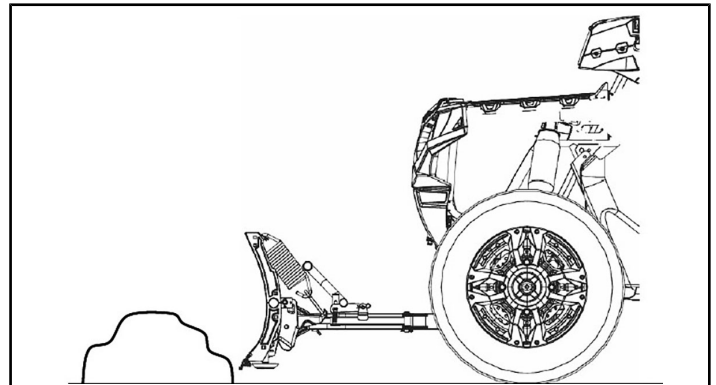
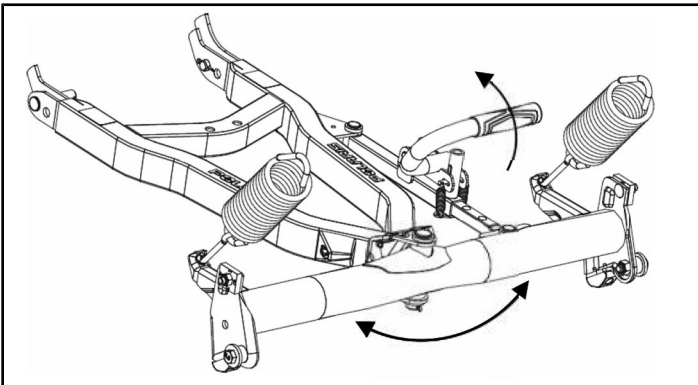
RE-TORQUE ALL BOLTS AND NUTS AFTER THE FIRST 30 MINUTES OF USE.

- DO NOT EXCEED 5 MPH (8 KM/H) WITH THE BLADE INSTALLED.
- OPERATE WITH EXTREME CAUTION 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 THE BLADE INTO THE PILE ** SLOW DOWN BEFORE HITTING A PILE. .**
- BEWARE OF POSSIBLE HIDDEN OBJECTS UNDER SNOW.

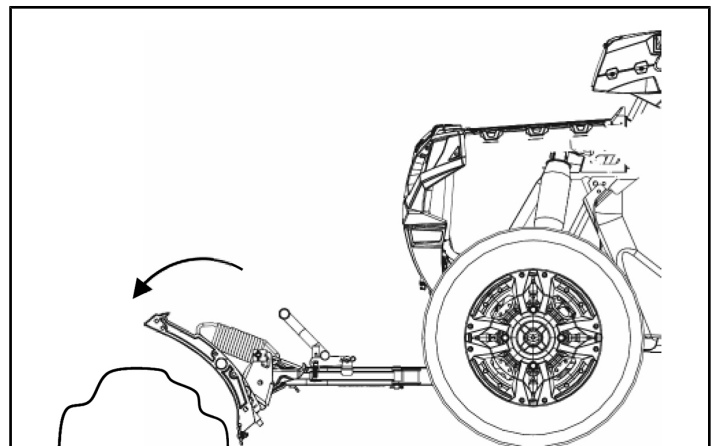
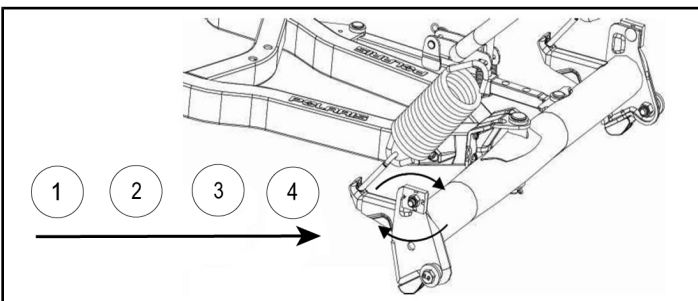
- READ BLADE OWNER'S MANUAL, ATV OPERATOR'S MANUAL, AND SAFETY DECALS BEFORE OPERATING.
- ALWAYS WEAR APPROPRIATE PROTECTIVE CLOTHING AS RECOMMENDED IN ATV OPERATOR'S MANUAL.
- DO NOT ALLOW RIDERS ON BLADE OR ATV.
- KEEP BYSTANDERS AWAY FROM BLADE AND ATV WHILE MOVING.
- BEFORE ADJUSTING BLADE ANGLE: STOP ATV ENGINE, SET AND LOCK BRAKES, RAISE AND LOCK.
- BEFORE ADJUSTING BLADE HEIGHT, LOWER BLADE TO THE DOWN POSITION.
- WHEN BLADE IS NOT IN USE, STOP ATV ENGINE, SET AND LOCK BRAKES AND LOWER BLADE TO DOWN POSITION.
- POLARIS RECOMMENDS TO REMOVE THE BLADE AND THE PLOW FRAME BEFORE TRAIL RIDING.

OPERATION

1. To adjust the angle of the plow so it levels or pushes to the side, lift the plow up with the winch to clear the ground. Push the angle lever forward and pivot plow to the desired angle. Release the angle lever and the plow will lock itself in place at a predetermined angle on either side.
3. The plow is designed to trip forward when it hits a solid object. When the pressure on the plow is released, it will return to its original position by itself. The plow springs may be set stiffer by tightening the self-locking nuts located at the ends of the eye bolts. For less tension, loosen the nuts.



2. Turn adjustable plow stoppers to one of the four positions in order to make the plow more or less aggressive.



In the event of a collision with an obstacle at a speed greater than that recommended for the system, the shear pin of the manual angulation mechanism will break to minimize the force of impact in the frame. If the shear pin is broken, see if another part is damaged. If any part is damaged, the impact velocity was greater than what the system is designed to support. You must then buy a replacement part from your dealer.

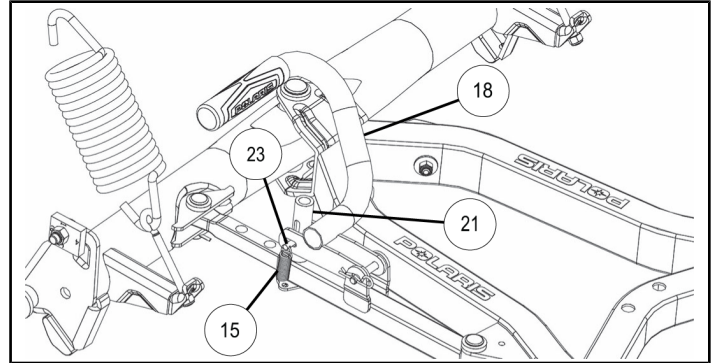
If only the safety pin is broken, follow these steps to change the side of the pin (the pin has two identical ends):

1. Using a long nose pliers, remove the two tension springs ¹⁵ and then remove the pin retaining the angle lever 18.
2. Remove the half-broken shear pin ²¹ and reinsert it upside down. You can get a new spare pin ²³ from your dealer.
3. Put the pin back in place.

4. Put the two tension springs back in place ¹⁵ using the long nose pliers.

NOTE

The shear pin ²¹ is designed only to protect against the impacts affecting right and left ends of the plow. The pin does not protect the system from a central impact.

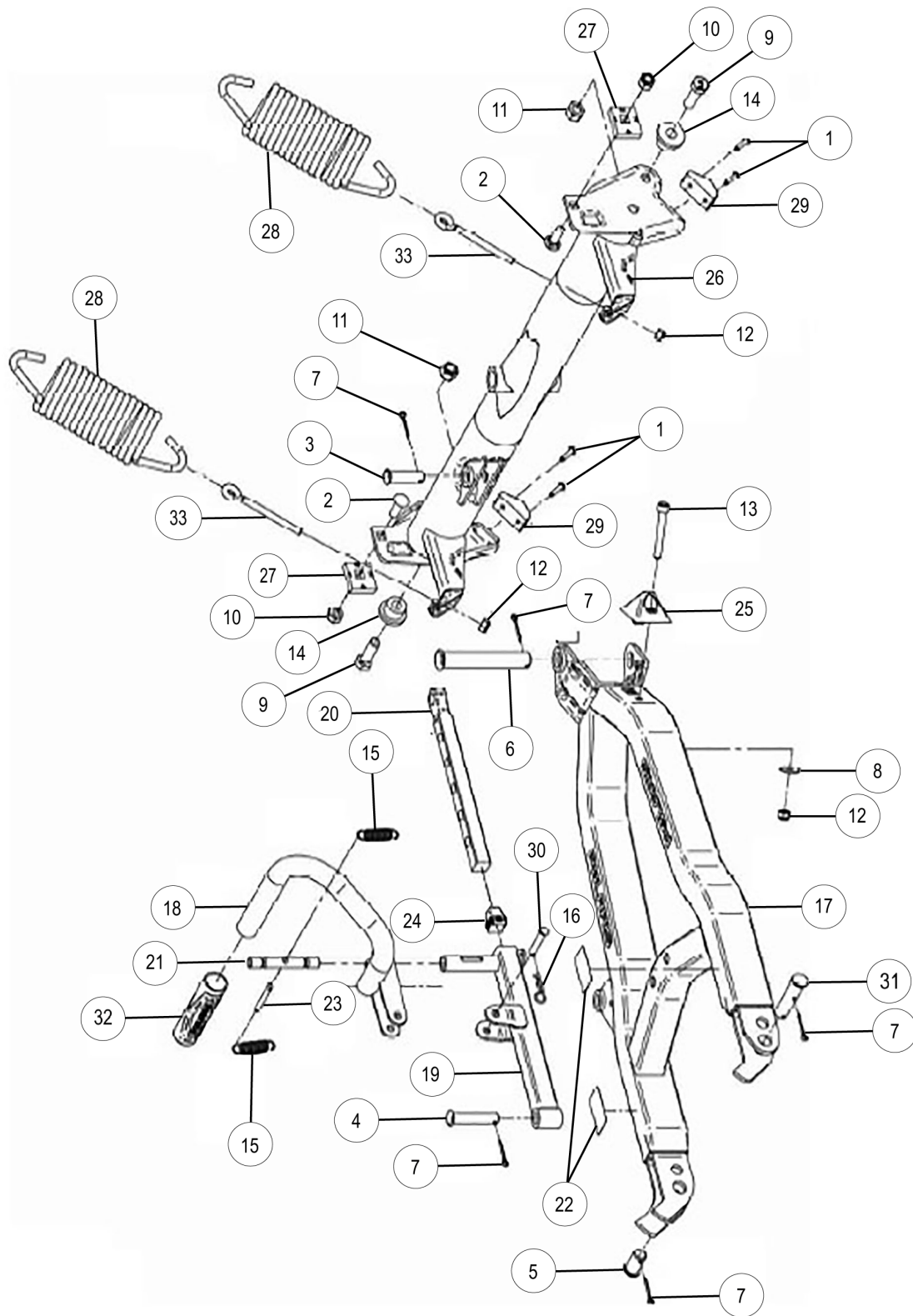


IMPORTANT

Always check the entire system after a failure to ensure that no damage occurred on other parts than on the pin.

KIT CONTENTS

This Kit includes:



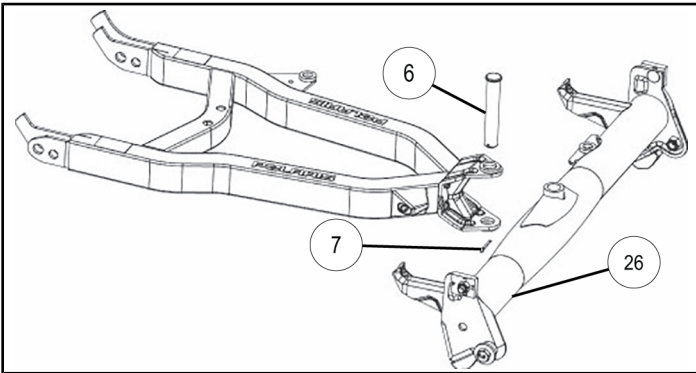
REF	QTY	PART DESCRIPTION	PART NUMBER
1	4	Rivet	—
2	2	CL8.8 M10-1.5 x 30 mm Carriage Bolt	—
3	1	Clevis Pin, Ø14 mm x 45 mm	—
4	1	Clevis Pin, Ø14 mm x 60 mm	—
5	1	Clevis Pin, Ø16 mm x 30 mm	—
6	1	Clevis Pin, Ø20 mm x 115 mm	—
7	5	Cotter Pin, Ø3 x 25 mm	—
8	1	M8 Fender Washer	—
9	2	CL8.8 M12-1.75 x 40 Hexagonal Bolt	—
10	2	M10-1.5 Self-Locking Nut	—
11	2	M12-1.75 Self-Locking Nut	—
12	3	M8-1.25 Self-Locking Nut	—
13	1	M8-1.25 Self-Locking Nut	—
14	2	Plow Pivot Flange Sleeve	—
15	2	Tension Spring	—
16	1	R-Pin	—
17	1	Main Frame	—
18	1	Angle Lever	—
19	1	Angle Outer Tube	—
20	1	Locking Bar	—
21	1	Safety Pin	—
22	2	Warning Decal	—
23	1	Pin	—
24	1	Square Rubber Stopper	—
25	1	Impact Stopper	—
26	1	Plow Pivot	—
27	2	Adjustable Plow Stopper	—
28	2	Plow Tension Spring	—
29	2	Stopper	—
30	1	Clevis Pin, Ø8 mm x 45 mm	—
31	1	Clevis Pin, Ø16 mm x 70 mm	—
32	1	Handle	—

REF	QTY	PART DESCRIPTION	PART NUMBER
33	2	M8-1.25 x 85 mm Eye Bolt	—
	1	Instructions	9924935

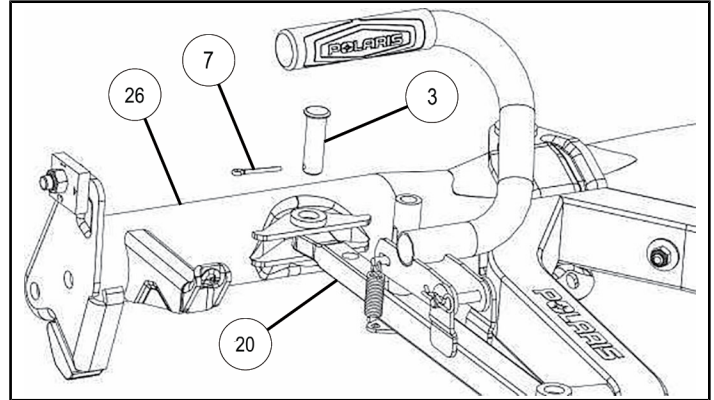
FRAME ASSEMBLY INSTRUCTIONS

PIVOT ASSEMBLY

1. Position the main frame to the center of the plow pivot ²⁶. Insert clevis pin ⁵ of the plow pivot ²⁶ at the top.
2. Insert the cotter pin ⁷ and fold both ends so that it cannot be removed.



4. Insert the cotter pin ⁷ and fold both ends so that it cannot be removed.

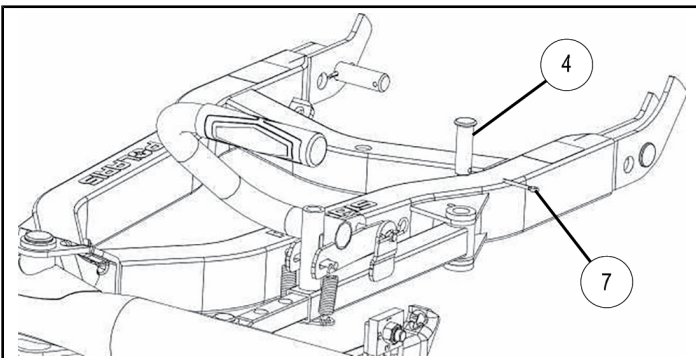


MANUAL ANGLE MECHANISM ASSEMBLY

NOTE

If you have purchased a hydraulic angle system, do not install the manual angle mechanism. You must install the hydraulic angle mechanism at this time by following the instructions provided with the hydraulic angle system.

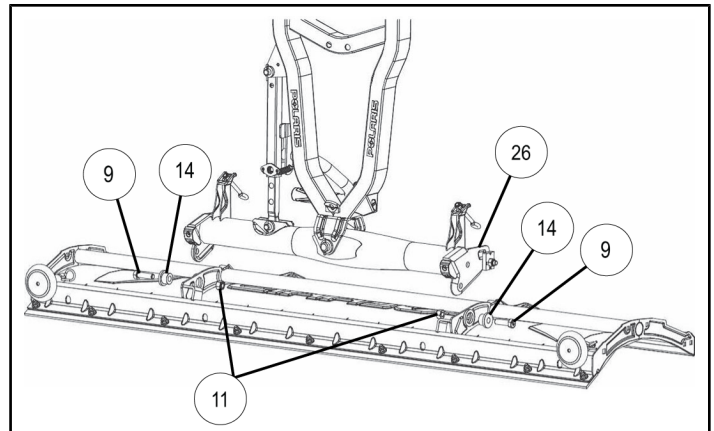
1. Position the mechanism and insert the clevis pin ⁴ in the frame and angle outer tube.
2. Insert the cotter pin ⁷ and fold both ends so that it cannot be removed.



3. Place the other end of the mechanism and insert the clevis pin Ø14 mm x 45 mm ³ in the plow pivot ²⁶ and the locking bar ²⁰.

PLOW INSTRUCTIONS ASSEMBLY

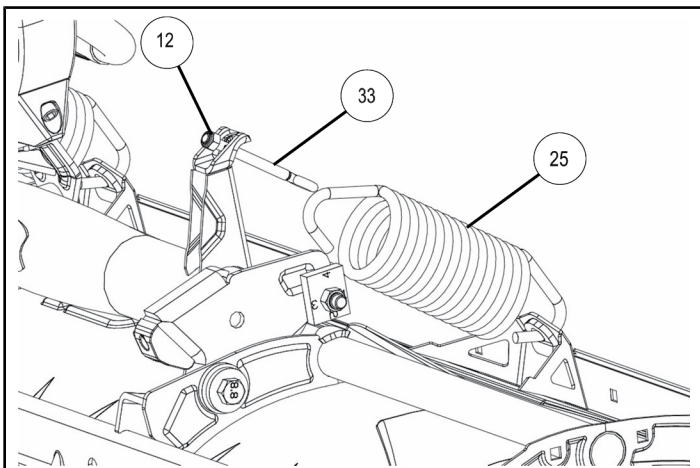
1. Place the plow against the ground.
2. Position the plow pivot ²⁶ at the center of the plow.
3. Install the two flange sleeves ¹⁴ into the holes of the plow with the two M12-1.75 x 40 mm hexagonal bolts ⁹ and tighten the M12-1.75 self-locking nuts ¹¹.



- Hook one end of a plow spring ②⑤ to plow upper holes and fix the other end to the plow pivot using two M8 eye bolts ③③ and two M8-1.25 self locking nuts ⑫.

NOTE

The plow is designed to trip forward when it hits a solid object. When the pressure on the plow is released, it will return to its original position by itself. The plow springs may be set stiffer by tightening the self-locking nuts located at the ends of the eye bolts. For less tension, loosen the self locking nuts.



FRAME INSTALLATION AND REMOVAL

NOTE

Frame installation requires a mount plate kit specific to your vehicle. Refer to the instructions provided with the mount plate kit for installation on the frame.

NOTE

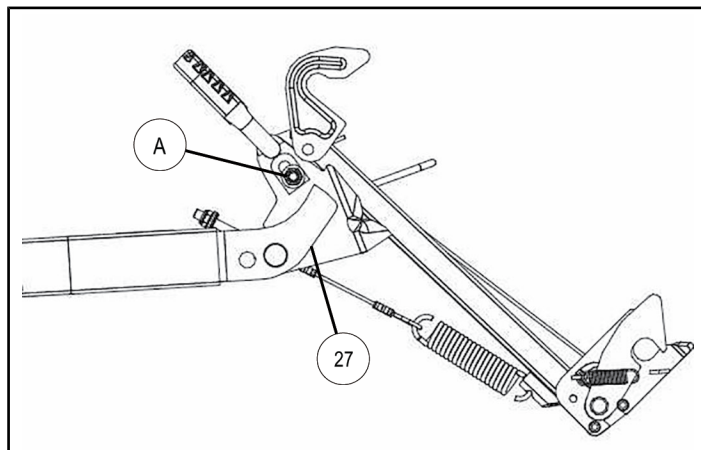
The first installation requires you to adjust the height of the stand (the quick-attach mechanism of your system has been designed to be used as a stand when the system is not used) according to the ground clearance of your vehicle. You may have to repeat these steps if you add accessories to your vehicle that affect ground clearance.

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.

STAND HEIGHT ADJUSTMENT

The stand must maintain the frame raised so that the opening of the upper mounting plates is at the same height as the fastening axes of the attachment plate of the vehicle. The adjustment block (A) can be moved by loosening the nut. Once in the desired position, tighten the nut so that the flat side is in contact with the stopper ②⑦ of the frame.

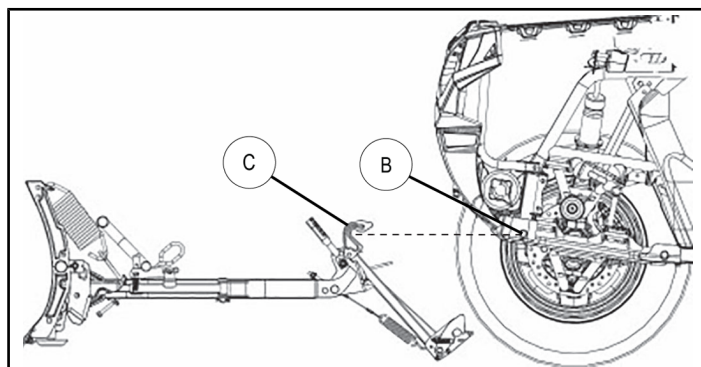


FRAME INSTALLATION

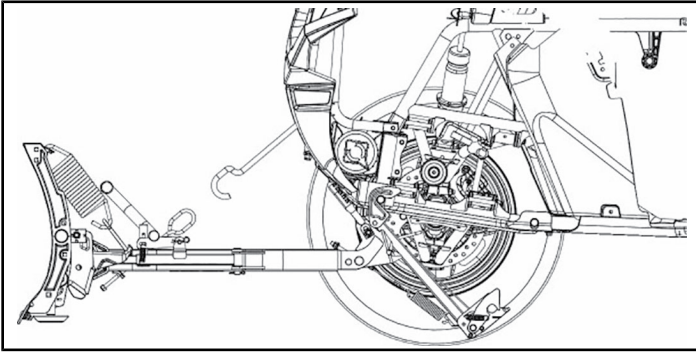
- Move the vehicle towards the frame assembly, taking care to align the vehicle with the axis (B) of the frame.

REF	DESCRIPTION
B	Hook Axis
C	Opening

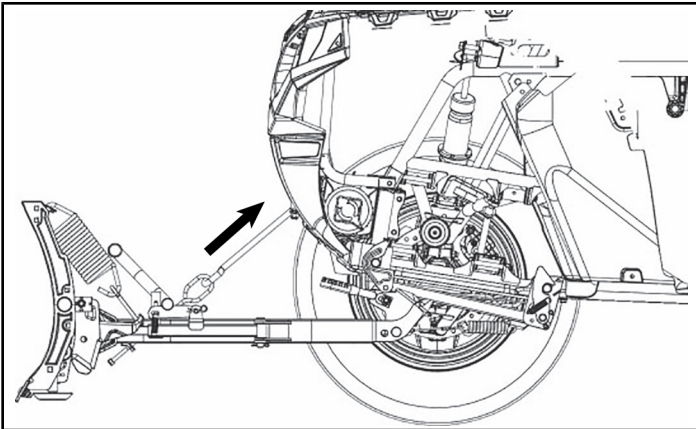
- Make sure the vehicle is fully engaged in the mounting plates on both sides.



3. Connect the winch hook to the winch link (the winch link is provided with the mount plate kit).



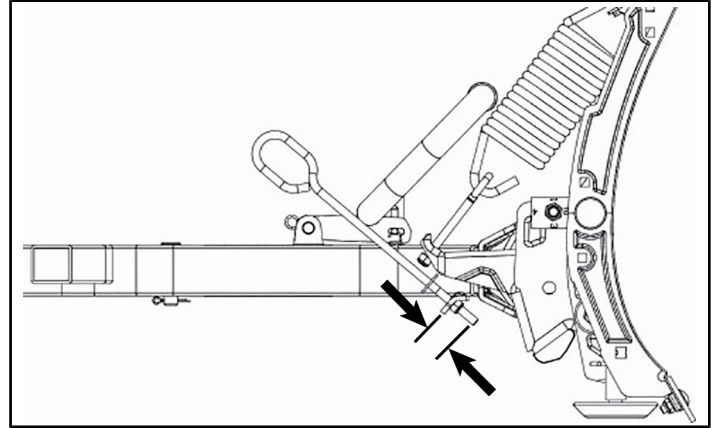
4. Using the winch, lift the frame until the rear hooks of the quick-attach mechanism are engaged in the mounting plate. Make sure that both parts are fully engaged. If the quickattach mechanism does not engage fully, check that the axes of the attachment plates are well positioned in the openings of the quick attach mechanism, and that there is no accumulation of snow or ice that might be blocking the movement of moving parts. You are now ready to use the system.



NOTE

For the first installation, adjust the length of the winch link (provided with the mount plate kit) depending on the winch assembly used on your vehicle.

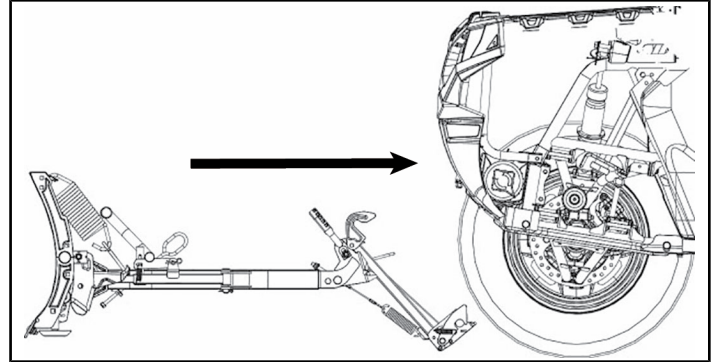
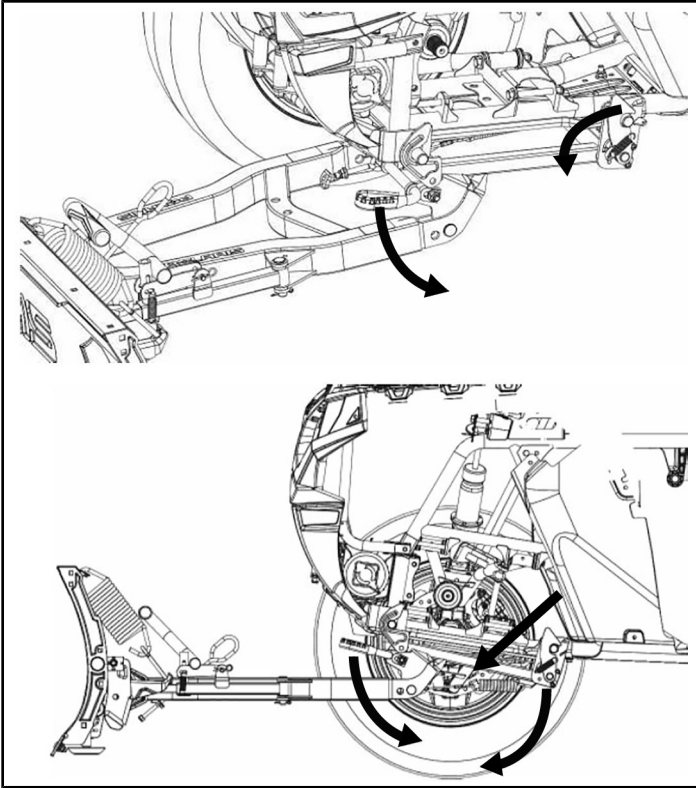
5. The winch link must be adjusted to get the full lifting height of the system. Follow these instructions for proper adjustment:
- Install winch link (provided in the mount plate kit) with the threaded nut until only two threads are showing after the nut.
 - Lift the frame using the winch until the winch stops itself (if you use a winch with an automatic stop switch) or until the winch hook comes into contact with the roller fairlead.



- Try to lift the blade by hand. If the blade can be lifted, the nut must be tightened. Tighten until the blade is at the maximum height (maximum height is reached when the upper part of the tube is in contact with the plates of the quick-attach mechanism).

FRAME REMOVAL

1. Lower the frame using the winch until the blade touches the ground and the winch cable tension is fully released. Remove the winch hook of the winch link (the winch link is provided in the fastener assembly).
2. Retract the winch cable in position.
3. Push down the release pedal so that the rear hooks open; the quick-attach mechanism will fall on the ground. At this point, the system is disengaged from the vehicle.
4. Slowly back up the vehicle in a straight line until it is no longer in contact with the frame.



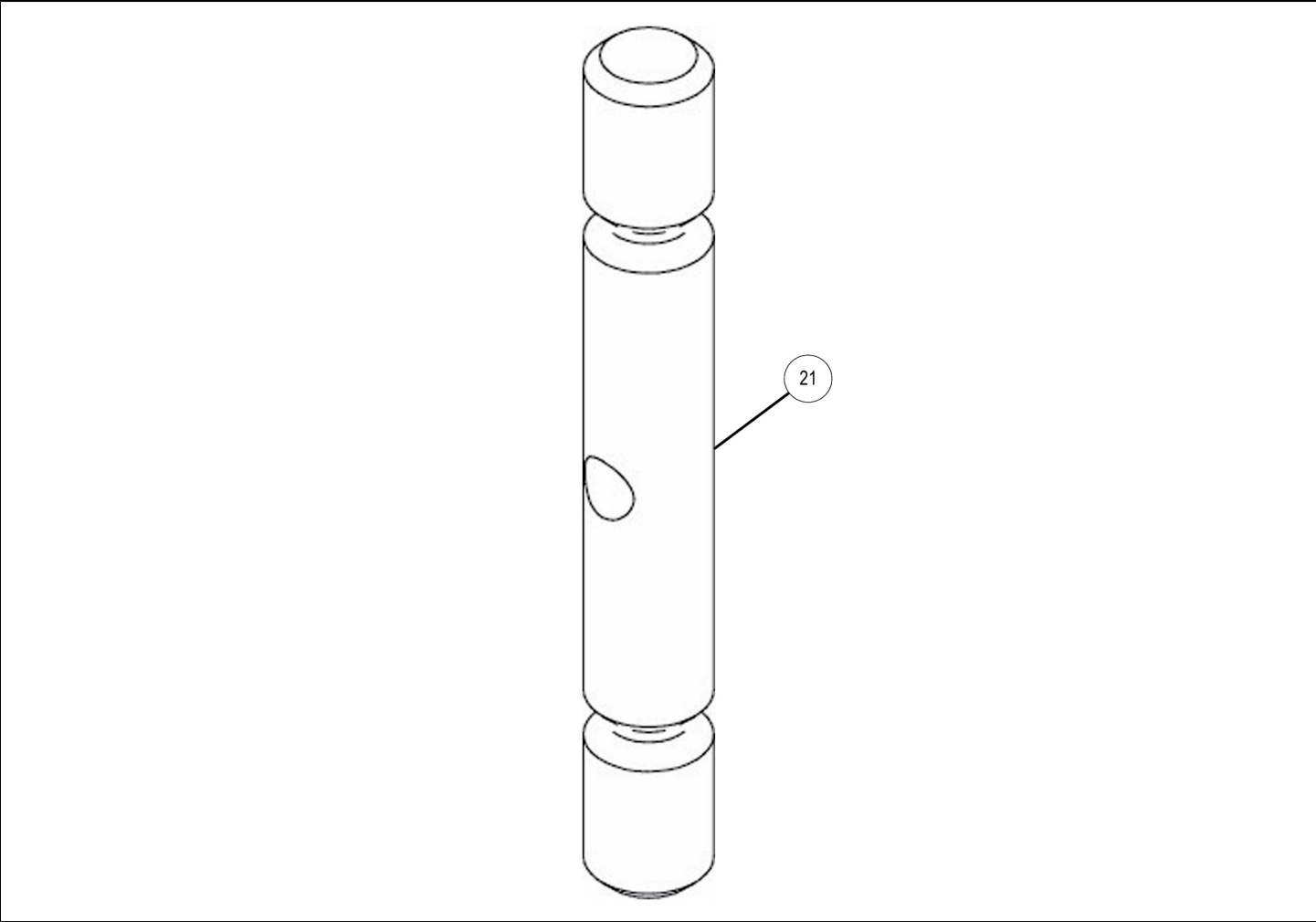
SPARE KITS

REF	DESCRIPTION	SAFETY PIN (PN 2205063)	CLEVIS PIN KIT (PN 2205068)	PLOW SPRING KIT 2205382	BUMPERS KIT (PN 2205381)	PIVOT HARDWARE KIT (PN 2205380)	PLOW PIVOT KIT (PN 2205379)	ANGLE SELECTION KIT (PN 2205064)	GLACIER PRO ATV LINKS KIT (PN 2205062)
1	Rivet				4x		4x		
2	CL8.8 M10-1.5 x 30 mm Carriage Bolt					2x			
3	Clevis Pin, Ø14 mm x 45 mm		1x					1x	1x
4	Clevis Pin, Ø14 mm x 60 mm		1x					1x	1x
5	Clevis Pin, Ø16 mm x 30 mm								1x
6	Clevis Pin, Ø20 mm x 115 mm								1x
7	Cotter Pin, Ø3 x 25 mm		2x					2x	5x
8	M8 Fender Washer				1x				
9	CL8.8 M12-1.75 x 40 Hexagonal Bolt					2x			
10	M10-1.5 Self-Locking Nut					2x			
11	M12-1.75 Self-Locking Nut					2x			
12	M8-1.25 Self-Locking Nut				1x	2x			
13	M8-1.25 Self-Locking Nut				1x				
14	Plow Pivot Flange Sleeve					2x			
15	Tension Spring							2x	2x
16	R-Pin							1x	1x
17	Main Frame								
18	Angle Lever							1x	
19	Angle Outer Tube							1x	
20	Locking Bar							1x	
21	Safety Pin	1x						1x	1x
22	Warning Decal								
23	Pin							1x	1x
24	Square Rubber Stopper							1x	

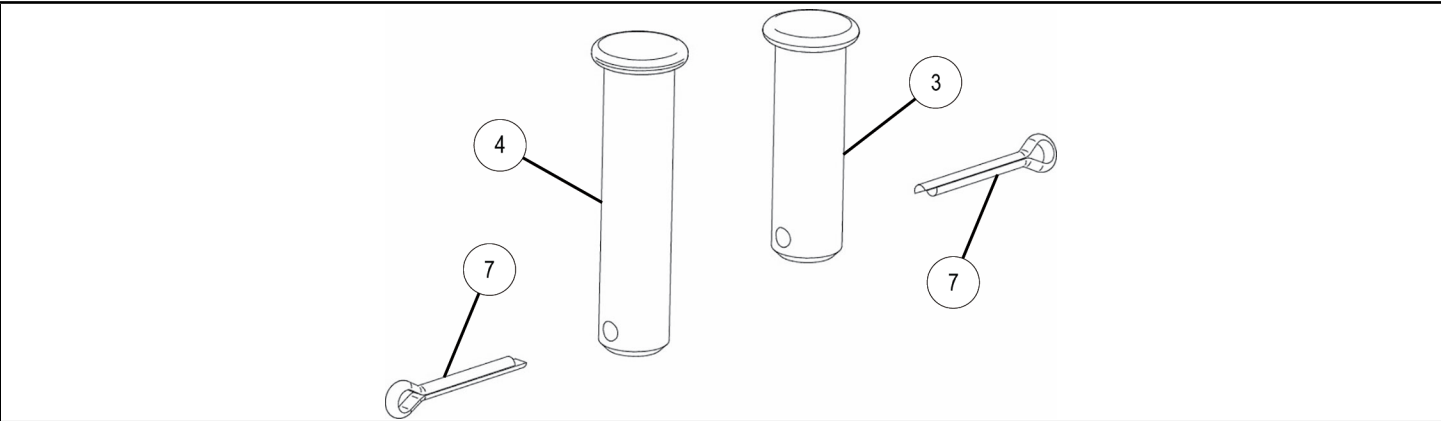
REF	DESCRIPTION	SAFETY PIN (PN 2205063)	CLEVIS PIN KIT (PN 2205068)	PLOW SPRING KIT 2205382	BUMPERS KIT (PN 2205381)	PIVOT HARDWARE KIT (PN 2205380)	PLOW PIVOT KIT (PN 2205379)	ANGLE SELECTION KIT (PN 2205064)	GLACIER PRO ATV LINKS KIT (PN 2205062)
25	Impact Stopper				1x				
26	Plow Pivot						1x		
27	Adjustable Plow Stopper					2x			
28	Plow Tension Spring			2x					
29	Stopper				2x		2x		
30	Clevis Pin, Ø8 mm x 45 mm							1x	1x
31	Clevis Pin, Ø16 mm x 70 mm								1x
32	Handle							1x	1x
33	M8-1.25 x 85 mm Eye Bolt					2x			

See the above table for a full description.

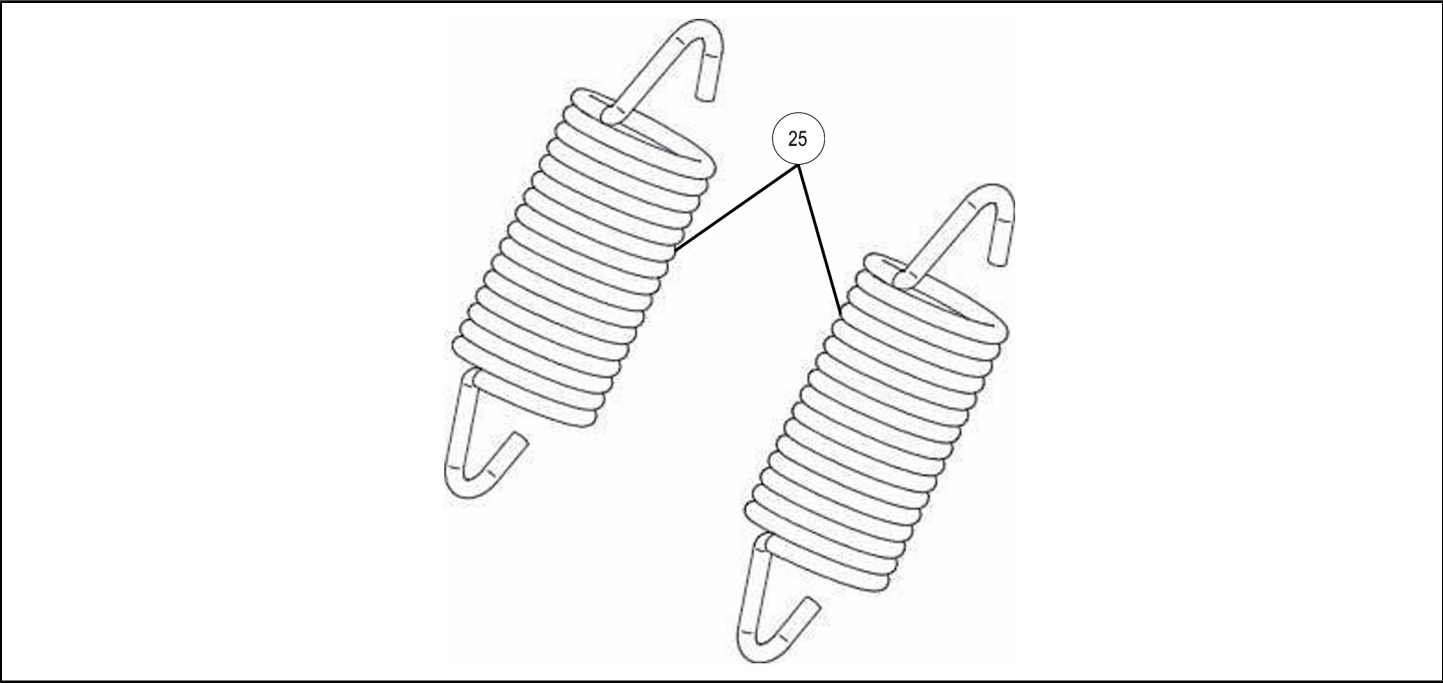
Shear Pin (PN 2205063)



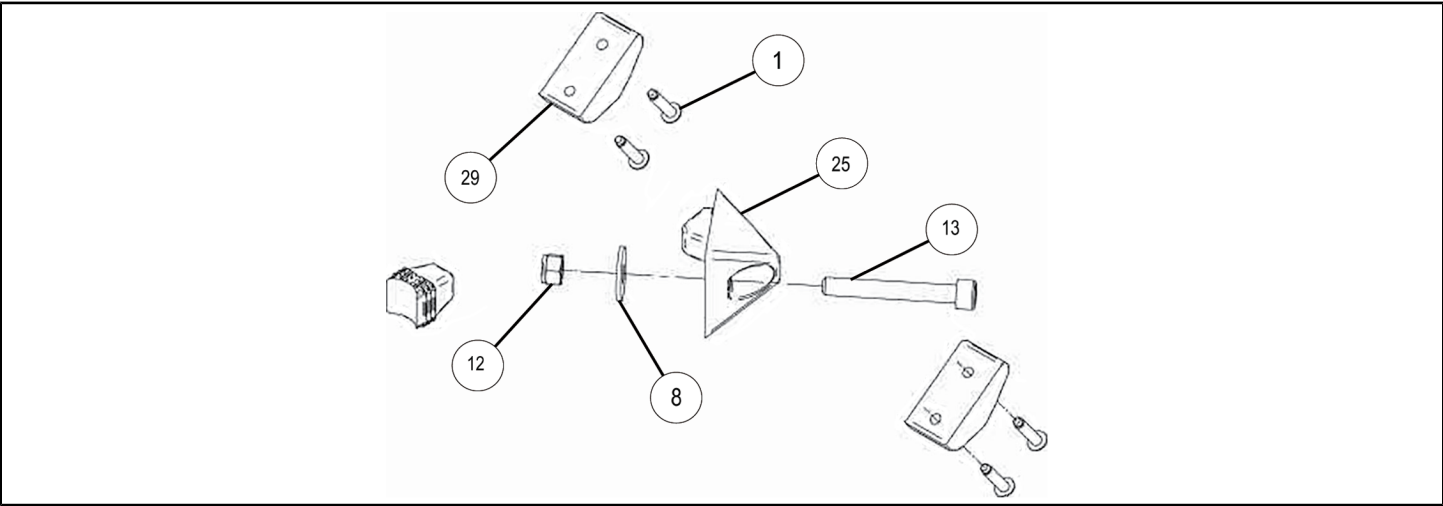
Clevis Pin Kit (PN 2205068)



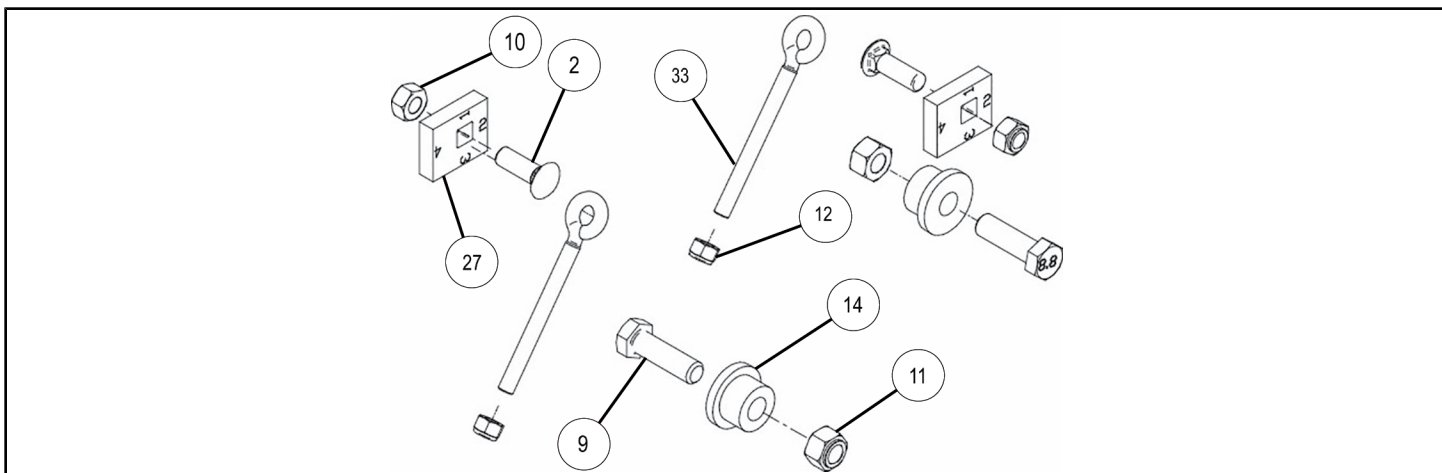
Plow Springs Kit (PN 2205382)



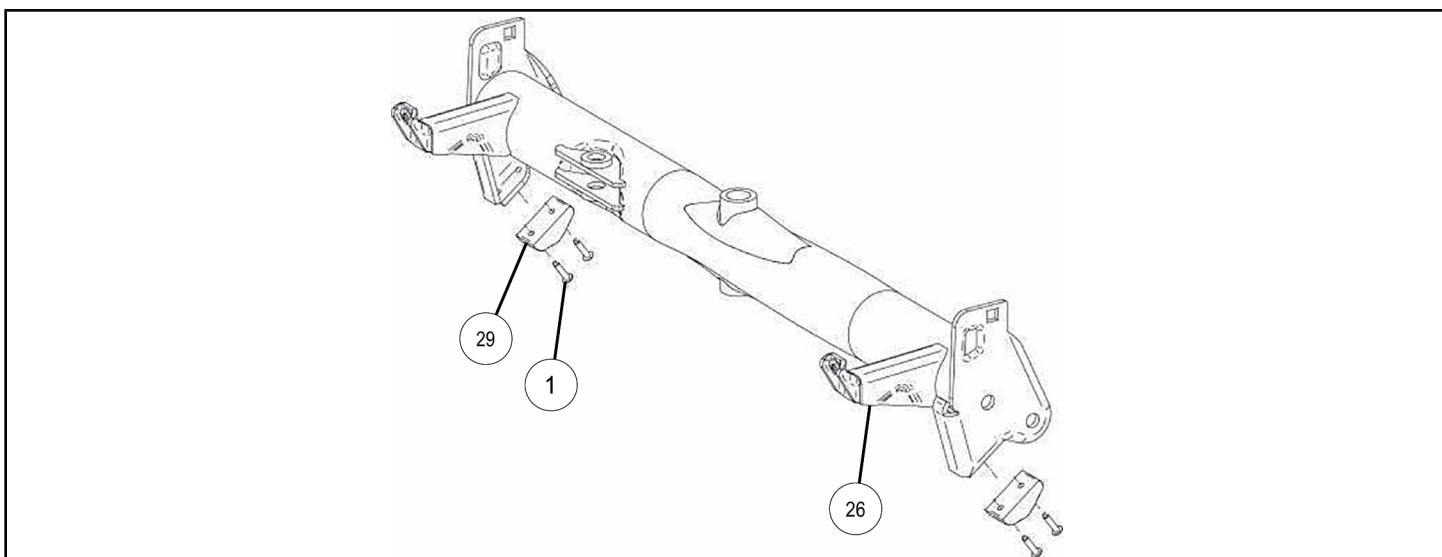
Bumper Kit (PN 2205381)



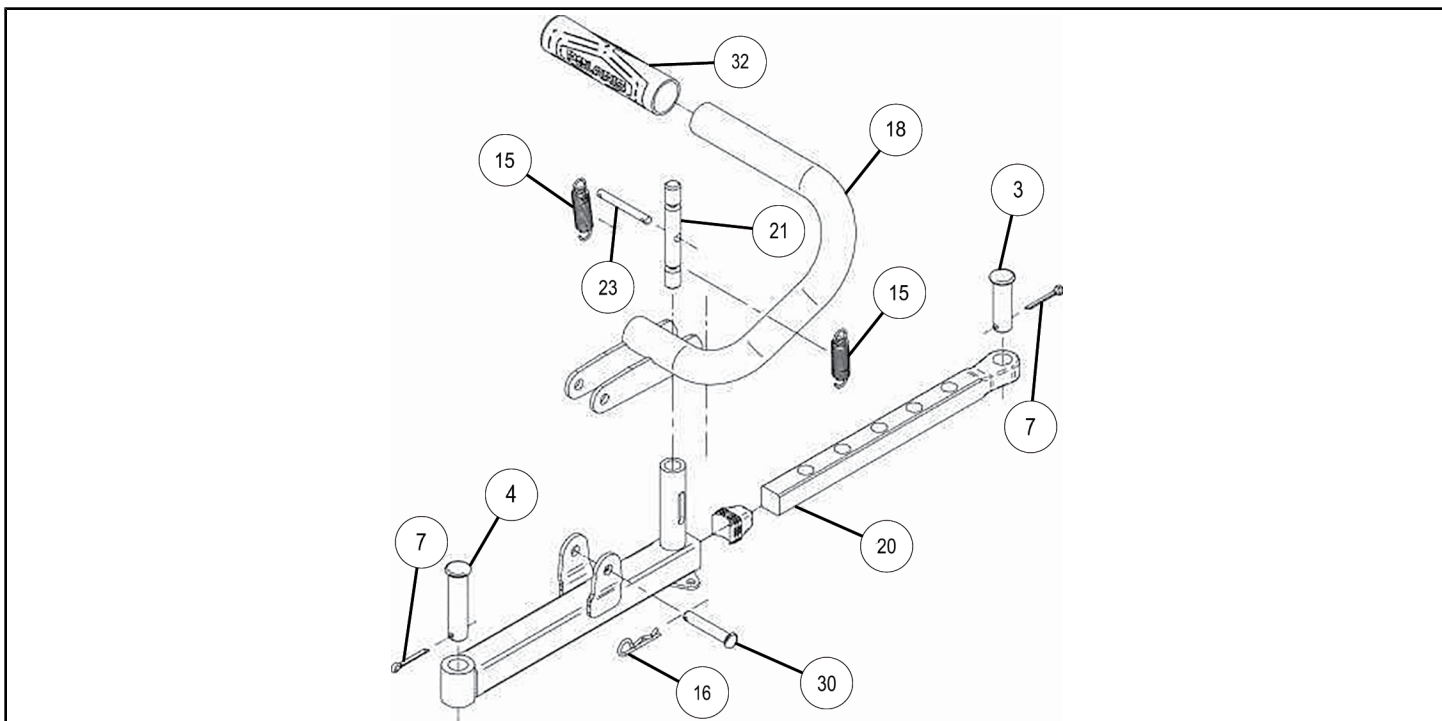
Pivot Hardware Kit (PN 2205380)



Plow Pivot Kit (PN 2205379)



Angle Selection Kit (PN 2205064)



Glacier Pro ATV Pins Kit (PN 2205062)

