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# Pro-Tech Steel Edge Sno Pusher® Owner's Guide

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ISL (loader), ISB (backhoe) and ISS (skidsteer) Models

## **WARNING:**

Do not get under the unit while operating or performing any maintenance on your Sno Pusher. Take precautions to properly secure unit. Do not rely solely upon the hydraulics of your machine.

## **OPERATING THE SNO PUSHER**

To ensure your Sno Pusher will provide you with years of service with minimal maintenance follow these simple instructions:

1. Once the Sno Pusher is properly attached to your machine it **MUST** be leveled **BEFORE** plowing.
2. To level the Sno Pusher set it down and adjust the curl of your bucket, make sure that **BOTH** wear shoes are resting squarely on the plowing surface. In addition, Pro-Tech also sells a level gauge and self-leveling shoes that assist in keeping the Sno Pusher level.
3. To ensure proper surface contact drive the machine forward approximately 20 feet, check plowed surface under the machine to ensure that plowed area is clean. If the plowed area is not completely clear, you can loosen the tension of the binder(s) to allow your Sno Pusher to vertically adjust for maximum surface contact.

**IMPORTANT:** Binders must be properly tightened prior to transportation or high speed use for ISL and ISB models.

4. Do not apply excessive down force to the Sno Pusher while plowing. This will considerably shorten the life of your wear shoes and cutting edge. This is **NOT** necessary for proper plowing.
5. Do not operate your machine in the float position. The Sno Pusher's steel trip mechanism is designed for use with the bucket **NOT** in float. If used in float, the Sno Pusher may not trip properly over obstacles and could result in damage to the pusher and/or the plowing surface.
6. When a cutting edge(s) does trip, it must be reset. To accomplish this, simply lift the Sno Pusher off the plowing surface allowing the cutting edges to return them to pre-trip position and then place the unit back on the ground.

Failure to reset a tripped cutting edge will result in reduced plowing efficiency and potential damage to the Sno Pusher.

## ATTACHING THE SNO PUSHER: ISL and ISB models

Attaching the Sno Pusher to your machine is made easy with Pro-Tech's Quick Change™ Design.

1. Drive the cutting edge of machine's bucket into the post receptacle on the back of the Sno Pusher. (Figure 1)



Figure 1

The bucket will come to rest against the 12" structural steel channel reinforcement. The upper posts will fit inside the bucket and should be centered. The lower posts will be positioned under the bucket.

2. Grab hooks are to be welded to the side or back corners of your machine's bucket.

The location you choose MUST allow chains to be positioned parallel to the ground when attached. This will ensure easy centering of the Sno Pusher to your machine.

3. Attach one section of transport chain to the left side of the Sno Pusher using a 3/8" shackle. (Figure 2a)



Figure 2a

Drop the opposite end of this chain into the grab hook on the right side of the bucket. Leave enough slack in the chain to allow centering of the Sno Pusher.



Figure 2b

4. Attach the additional section of transport chain to the left side of the Sno Pusher using a 3/8" shackle.

Drop the opposite end of this chain into the grab hook on the left side of the bucket. Leave enough slack in the chain to attach the ratchet binder and allow centering of the Sno Pusher. (Figure 2b)

5. Now that both chains are in place, lift the Sno Pusher off the ground by raising the bucket then tighten the ratchet binder.

Add or remove slack in the chains to center the Sno Pusher on your machine. Once centered, chains MUST be tightened with the binder.

**Warning:** Do not use the lift hooks located at the top and rear of the Sno Pusher for chain attachment. These hooks are designed for lifting the Sno Pusher only and not for plowing.

For ISL, Binder Kit Includes:

2 – 10' sections of 3/8" P-43 Transport Chain  
2 – 5/16" Grab Hooks  
1 – 3/8" Heavy Duty Ratchet Binder  
2 – 3/8" Shackles

For ISB, Binder Kit Includes:

2 – 5' sections of 3/8" P-43 Transport Chain  
2 – 5/16" Grab Hooks  
1 – 3/8" Heavy Duty Ratchet Binder  
2 – 3/8" Shackles

## **ATTACHING THE SNO PUSHER: ISS model**

Your Pro-Tech Sno Pusher® Skidsteer Model (ISS) is equipped with a universal quick coupler

1. Remove the bucket from your skid-steer
2. Drive machine into the adapter located on the back of the Sno Pusher. (Figure 3)
3. Engage the locking pins.



Figure 3

3. Affix steel cutting edge to bottom of poly hinge using 3/4" hardware. Do not tighten hardware at this stage.
4. Begin tightening all hardware using the following procedure and torque specifications (Figure 4)

### Replacing the Poly Hinge, Cutting Edge and Tensioners

1. Affix poly hinge to lower edge of Sno Pusher using 3/4" hardware and 2" wide hold down.
2. Place tensioners in proper locations using 3/4" hardware. Do not tighten any hardware at this stage.

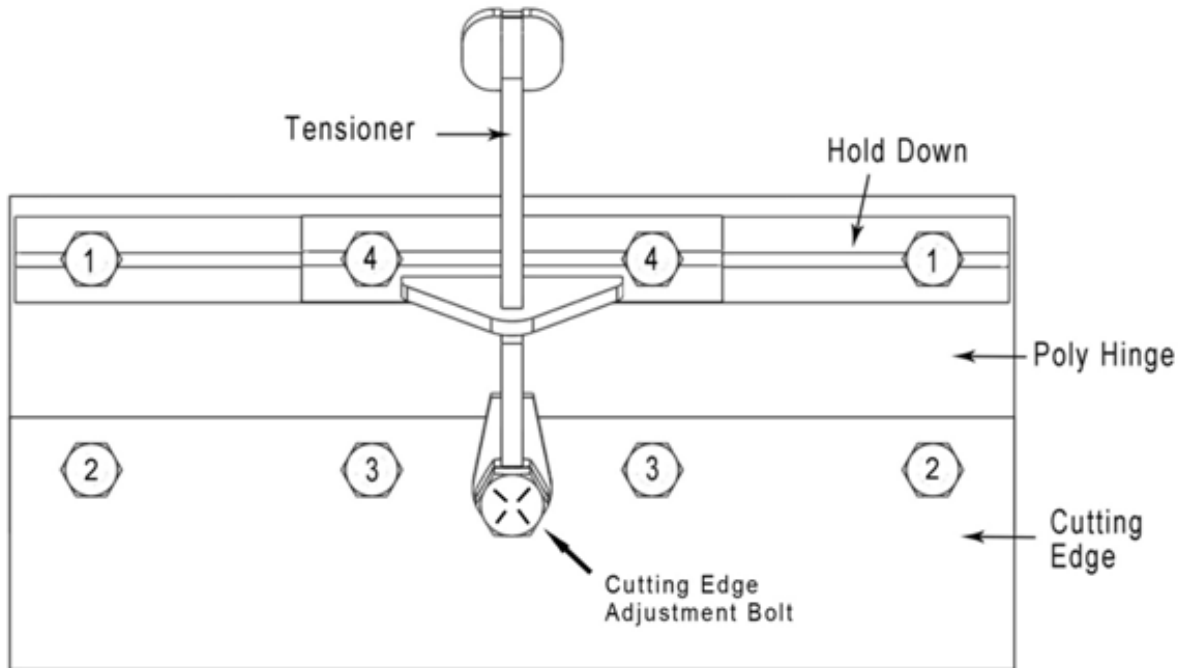


Figure 4

### Torque Sequence

- (1) Tighten first at 130 ft/lb
- (2) Tighten second at 130 ft/lb
- (3) Tighten third at 160 ft/lb
- (4) Tighten fourth at 240 ft/lb

NOTE: Check for proper torque at all locations upon completion of step 4. Especially at locations labeled (1) & (2).

## ADJUSTING THE CUTTING EDGE:

The steel cutting edge comes properly adjusted from the factory. Once cutting edges are broken in, i.e. a sharp leading edge or as cutting edges wear, it may be necessary to re-adjust them to maintain proper cutting edge down pressure.

To adjust the cutting edges, raise and secure the pusher so that the wear shoes are in their unloaded position. On the tensioner, loosen the jam nut and turn the adjusting screw clockwise to force the cutting edge down. Position the leading edge flush with the bottom of the wear shoe (Figure 5). When complete, tighten the jam nut to secure the position.

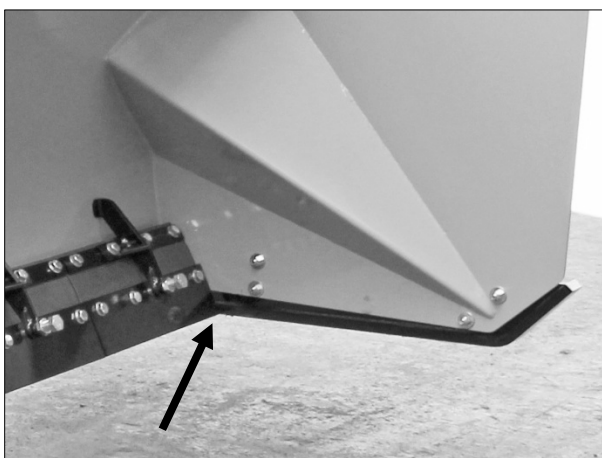


Figure 5

### WARNING:

Ensure that cutting edges are adjusted equally across the entire width of the Sno Pusher.

Do not over adjust the cutting edges, this drastically changes the angle of attack and could adversely affect the performance of your Sno Pusher.

### WEAR SHOES:

Every Sno Pusher is equipped with two hardened, abrasion resistant, bolt-on wear shoes that are replaceable to provide seasons of use by offering superior protection against wear and tear. When replacement is required, follow these guidelines:

### WARNING:

Wear shoes are extremely heavy, please use caution during the removal and installation process.

1. Lift Sno Pusher off ground and secure before attempting any modifications.
2. Remove existing wear shoes by removing the shoe retaining bolts, lock nuts and collars. Then pull the wear shoe off of the mounting pins.
3. Lubricate all sliding surfaces of the wear shoes, mounting pins, and retaining collars with grease or never-seize.
4. Re-install wear shoes by sliding them over the mounting pins and securing with the shoe retaining bolts, lock nuts and collars. (Figure 6)



Figure 6

## STORAGE & MAINTENANCE:

Your Pro-Tech Sno Pusher® requires only minimal service to remain in top condition. Follow these simple guidelines to ensure proper plowing and long life.

- Wash off any salt and debris
- Check the condition of wear parts. Replace as needed
- Repair any damage to rigid areas.
- Touch-up any bare areas with paint.
- Tighten and secure any loose hardware.
- Lubricate the ratchet binder threads with grease or never-seize.
- Lubricate all sliding surfaces of the wear shoes, mounting pins, and retaining collars with grease.
- Store the Sno Pusher on dry ground.
- To achieve optimum Sno Pusher life, store the unit tarped or away from direct sunlight.

## LIMITED 10 YEAR WARRANTY

We will repair or replace any Pro-Tech Sno Pusher® proven to be defective in materials or workmanship for ten years after the purchase date, in accordance with the following terms and conditions:

1. Pro-Tech reserves the right to determine whether a Sno Pusher will be repaired or replaced.
2. Transfer of ownership to any party other than those mentioned on the original, returned warranty card or online registration will completely void this warranty.
3. All shipping and handling charges for returned Sno Pushers must be prepaid by the owner and received at the Pro-Tech facility FOB.
4. Shipping and handling charges may be avoided by submitting photographic evidence clearly showing the problem area and/or details of mechanical failure. (Note: We reserve the right to have a factory representative evaluate any problem(s) in the field.)

Pro-Tech makes no other warranty of any kind, either expressed or implied, including warranties pertaining to merchantability and fitness for a particular purpose.

This warranty is intended to provide you with specific rights; you may also have other rights which vary both internationally and domestically, as well as from state to state.

### Warranty Coverage Procedure

1. Call Pro-Tech directly to discuss product information:
  - Serial #, Purchase Date, Proof of Purchase, Product Registration; product registered with Pro-Tech
2. Describe the nature of the warranty claim.

3. Provide digital photographs illustrating the failure.
4. Pro-Tech will determine if failure falls within the 10 year warranty. If it does, Pro-Tech will offer corrective options. If it does not, Pro-Tech will offer repair and cost options.

### Exceptions to Warranty

1. Any wear associated with sacrificial parts such as:
  - Wear Shoes, Hardware, Steel Cutting Edges, Rubber Cutting Edges, and any Polyurethane Components
2. Any damage occurring as a result of:
  - Misuse, Negligence, Accidental Impact
3. Any non-factory repair or alteration deemed detrimental to the functionality of the Sno Pusher upon inspection by a Pro-Tech engineer will void all warranties specific or implied.

THE USE OF NON-PRO-TECH REPLACEMENT PARTS, SUCH AS CUTTING EDGES OR WEAR SHOES, WILL VOID ALL WARRANTIES.

4. Pro-Tech will not be held liable for any personal damage that occurs as a result of use. This includes, but is not limited to:
  - Injury, Death, Loss of Use, Income or Profit Loss, Property Loss/Damage

## PRODUCT REGISTRATION

In order for your new Sno Pusher to be covered under warranty you must register it with Pro-Tech. To register:

1. Please visit [www.snopusher.com](http://www.snopusher.com) to register your Sno Pusher online.



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