June 15, 2019 Lit. No. 72788, Rev. 00





# **PILE DRIVER™** Snowplow

# 79800, 79805 Steel Trip Edge Pusher Plow

**Owner's Manual and Installation Instructions** *Original Instructions* 

#### A CAUTION

Read this document before operating or servicing the snowplow.

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Read this document before installing the snowplow.

#### **A** CAUTION

See your WESTERN<sup>®</sup> outlet/website for specific vehicle application recommendations before installation. The Quick Match selection system has specific vehicle and snowplow requirements.

This document supersedes all editions with an earlier date.

## Register your snowplow online at www.westernplows.com

Owner Name:		·····
Date Purchased:		
Outlet Name:	Phone:	
Outlet Address:		
Snowplow Model/Year:		
Snowplow Type/Size:	Weight:	lb/kg
Blade Serial Number:		

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#### SAFETY DEFINITIONS

#### **A** WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious personal injury.

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Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTE: Indicates a situation or action that can lead to damage to your snowplow and vehicle or other property. Other useful information can also be described.

#### SAFETY PRECAUTIONS

Improper installation and operation could cause personal injury and/or equipment and property damage. Read and understand this Owner's Manual before installing, operating, or making adjustments.

- NEVER get under the unit during maintenance procedures without properly securing the unit.
- ALWAYS take a few minutes to properly secure your pusher plow using dunnage or jack stands to ensure safety during maintenance.
- DO NOT rely solely upon the hydraulics of your machine to secure the pusher plow during maintenance.
- NEVER get between the bucket of the machine and the plow box while attaching the unit.
- ALWAYS be sure to keep hands and feet away from designated pinch points.
- DO NOT place hands or feet under the unit or your bucket.
- NEVER stand in front of a pusher plow while machine is in operation.

#### PERSONAL SAFETY

- Remove the ignition key and put the vehicle in PARK or in gear to prevent others from starting the vehicle during installation or service.
- Wear only snug-fitting clothing while working on your vehicle or snowplow.
- Do not wear jewelry or a necktie, and secure long hair.
- Wear safety goggles to protect your eyes from battery acid, gasoline, dirt and dust.
- Avoid touching hot surfaces such as the engine, radiator, hoses and exhaust pipes.
- Always have a fire extinguisher rated BC handy, for flammable liquids and electrical fires.

### **CELL PHONES**

A driver's first responsibility is the safe operation of the vehicle. The most important thing you can do to prevent a crash is to avoid distractions and pay attention to the road. Wait until it is safe to operate Mobile Communication Equipment such as cell phones, text messaging devices, pagers, or two-way radios.

#### NOISE

Airborne noise emission during use is below 70 dB(A) for the snowplow operator.

#### VIBRATION

Operating snowplow vibration does not exceed  $2.5 \text{ m/s}^2$  to the hand-arm or  $0.5 \text{ m/s}^2$  to the whole body.

#### **SNOWPLOW BLADE WEIGHTS**

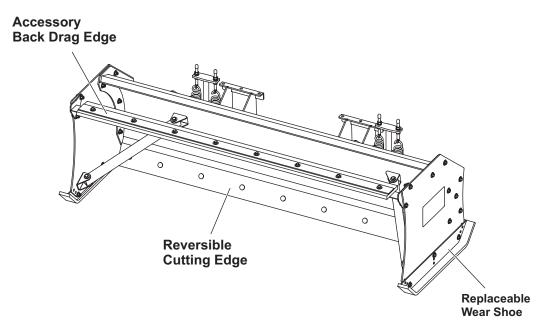
Size	Blade Assembly	Wt (lb)	Wt (kg)
8'	Pusher Plow with Trip Edge	980	445
10'	Pusher Plow with Trip Edge	1110	504

Your pusher plow is designed with several exclusive features to ensure safe and efficient snow removal.

The **steel trip edge** is combined with front- and rear-angled **wear shoes**. This minimizes potential damage to your machine by enabling the pusher plow to move over raised manhole covers, low curbs, and other obstructions. At the same time, you will maintain surface contact close enough for superior snow, flood, and waste water removal purposes.

The accessory **back drag edge** allows you to use your pusher plow in tight spaces such as dead ends, ramps, and loading docks. Get your jobs done more completely and efficiently by installing a Back Drag Edge on your snowplow. To ensure that your pusher plow will provide years of service with minimal maintenance, follow these simple guidelines:

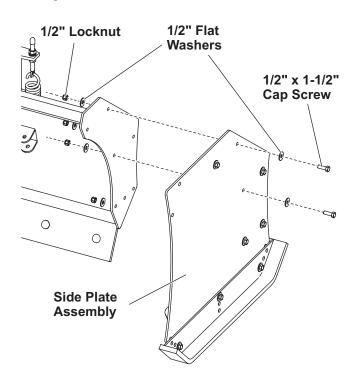
- Once the plow is properly attached to your machine it MUST be leveled BEFORE plowing.
- To level the blade, set it down and adjust the curl of your bucket, making sure that BOTH wear shoes are resting squarely on the plowing surface.
- DO NOT apply down force to the blade while plowing. This will considerably shorten the life of your wear shoes and is NOT necessary for effective snow removal.



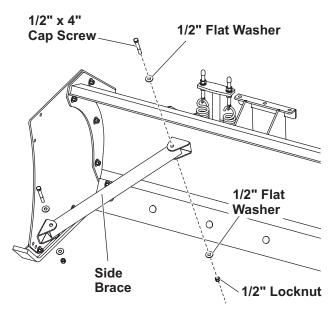
#### PLOW BLADE ASSEMBLY

Your pusher plow ships from the factory with trip edge and cutting edge already installed and the wear shoes preassembled to the side plates. To complete the snowplow assembly follow the steps below.

- 1. Carefully remove the parts box, side plate assemblies, and braces from the shipping pallet and set them aside.
- 2. Safely support the blade while removing the remaining shipping materials.
- Install the side plate assemblies to the blade using six 1/2" x 1-1/2" cap screws, twelve 1/2" flat washers, and six 1/2" locknuts on each side. Tighten fasteners to 75 ft-lb.



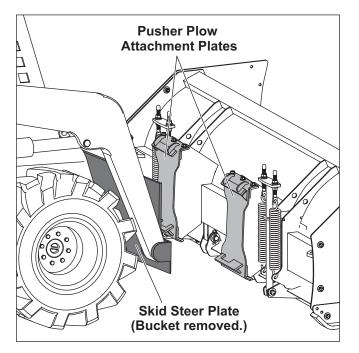
 Install the blade braces using two 1/2" x 4" cap screws, four 1/2" flat washers, and two 1/2" locknuts for each brace, as shown. Tighten fasteners to 75 ft-lb.



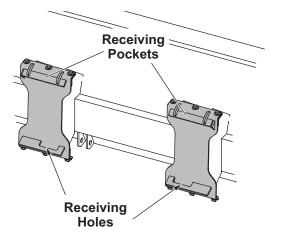
#### ATTACHING SNOWPLOW TO SKID STEER

The pusher plow skid steer attachment plates are designed to work with the vehicle's OEM attachment bracket. If skid steer attachment plates are not already on the pusher plow, install them according to the instructions packed with the plates.

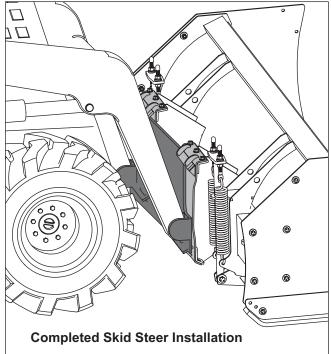
- 1. Remove the bucket from the skid steer loader.
- 2. Position the skid steer close to the snowplow with the mount points on the skid steer plate aligned with the pusher plow attachment plates.



3. Tilt the skid steer plate forward and position the top edge of the plate under the receiving pockets on the attachment plates.



- 4. Slowly raise the arms on the skid steer and tilt the skid steer plate toward the cab until the snowplow mount plates are flush with the skid steer plate. Turn the skid steer engine OFF.
- Engage the locking levers by rotating both handles 90° to a horizontal position. The skid steer locking levers shall insert into the snowplow lever receiving holes.

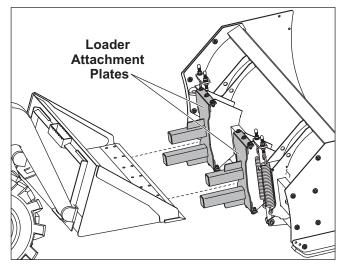


#### ATTACHING SNOWPLOW TO LOADER

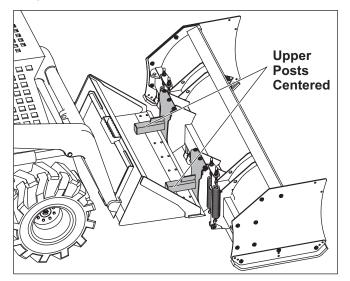
If the loader attachment plates are not already on the pusher plow, install them according to the instructions packed with the plates.

# The Binder Kit (PN 72042, sold separately) must be used for bucket loader installations.

1. Guide the leading edge of the loader bucket into the 2-post receptacles on the attachment plates.



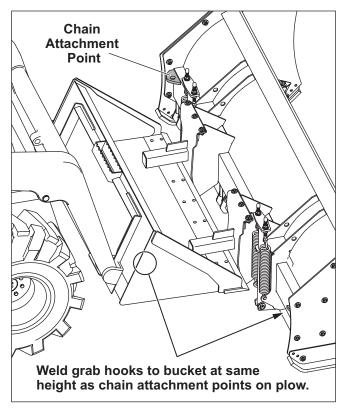
2. The bucket edge will rest against the attachment plates. The upper posts will fit inside the bucket and should be centered. The lower posts will be positioned under the bucket.



3. Attach the chains and ratchet binder to secure the plow to the bucket, as described in the next section.

#### Install Chains and Ratchet Binder

 Weld the two supplied grab hooks onto the sides or back corners of the loader bucket. Make sure to choose locations where the hooks will be level with the chain attachment points on the back of the pusher plow. This will ensure that the installed chains will be parallel to the ground, which makes it easier to center the plow on the loader bucket.



2. Use a supplied clevis attachment to connect one of the supplied chains to the attachment point on one side of the pusher plow. Drop the other end of the chain into the welded-on grab hook. Leave enough slack to allow for centering the pusher plow on the loader bucket.

Repeat on the opposite side of the snowplow using the second length of chain.

- 3. Raise the bucket to lift the plow off the ground. Add or remove slack in the chains as necessary to center the plow on the bucket, making sure one of the chains is pulled taut.
- 4. Using the supplied ratchet binder, take up the remaining slack in the second chain.

Your pusher plow requires only minimal service to remain in top condition. Follow these simple procedures to ensure proper plowing and long life.

## **CUTTING EDGE**

The heavy-duty cutting edge is reversible. When the cutting edge wears down close to the base angle, remove it, flip it over, and reinstall it. Adjust the wear shoes to align with the reversed cutting edge.

#### WEAR SHOES

Every pusher plow is equipped with replaceable high-carbon alloy wear shoes to offer superior protection against wear and tear and provide multiple seasons of use.

When replacement is required, follow these steps.

- 1. Raise the pusher plow off the ground and secure the unit by placing jack stands under the side plate braces and the lower receptacle posts (loader installations) or coupler mounting hubs (skid steer installations).
- 2. Loosen the 1/2" x 1-1/2"cap screws holding the wear shoe to the snowplow. Carefully remove the shoes.

NOTE: Wear shoes are very heavy, please use caution during the removal and installation.

- Install the new wear shoes to the snowplow side plates using the supplied 1/2" x 1-1/2" cap screws, 1/2" washers, and 1/2" locknuts. Tighten the fasteners just enough to ensure that they won't fall off.
- 4. Remove the jack stands and lower the pusher plow onto a level surface. Fully tighten the fasteners to 120 ft-lb.

#### **TRIP SPRINGS**

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Overtightening springs will not increase blade trip force and can damage the springs.

- 1. Check that the trip springs are adjusted correctly by confirming that the coils of the springs are separated slightly.
- 2. To adjust trip spring tension, adjust the eyebolts located at the top of the blade. Loosen the locknut (nut closest to the spring), and tighten the adjusting nut (nut farthest from the spring) until the coils begin to separate. When tension is properly adjusted, a sheet of paper should pass between the second and third coils.
- 3. Once the proper tension is reached, retighten the locknut.



Western Products PO Box 245038 Milwaukee, WI 53224-9538 *www.westernplows.com* 

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# CE

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