



# **/// POWER PUSHER™**



## **POWER PUSHER™ Snowplow**

**31608, 31612, 31610, 31614**

**Pusher Plow with TRACE Carbide Trip Edge**

**Owner's Manual and Installation Instructions**

*Original Instructions*

**⚠ CAUTION**

Read this manual before operating or servicing the snowplow.

**⚠ CAUTION**

Read this document before installing the snowplow.

**⚠ CAUTION**

See your SnowEx® outlet/website for specific vehicle application recommendations before installation. The Power Match selection system has specific vehicle and snowplow requirements.

This document supersedes all editions with an earlier date.



## OWNER INFORMATION

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***Register your snowplow online at [www.snowexproducts.com](http://www.snowexproducts.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

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## SAFETY DEFINITIONS

### **⚠ WARNING**

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

### **⚠ CAUTION**

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 m/s<sup>2</sup> to the hand-arm or 0.5 m/s<sup>2</sup> to the whole body.

# SAFETY

## TORQUE CHART

### ⚠ CAUTION

Read instructions before assembling. Fasteners should be finger tight until instructed to tighten according to the torque chart. Use standard methods and practices when attaching snowplow, including proper personal protective safety equipment.

#### Recommended Fastener Torque Chart

##### Inch Fasteners Grade 5 and Grade 8

Size	Torque (ft-lb)		Size	Torque (ft-lb)	
	 Grade 5	 Grade 8		 Grade 5	 Grade 8
1/4-20	8.4	11.9	9/16-12	109	154
1/4-28	9.7	13.7	9/16-18	121	171
5/16-18	17.4	24.6	5/8-11	150	212
5/16-24	19.2	27.3	5/8-18	170	240
3/8-16	30.8	43.6	3/4-10	269	376
3/8-24	35.0	49.4	3/4-16	297	420
7/16-14	49.4	69.8	7/8-9	429	606
7/16-20	55.2	77.9	7/8-14	474	669
1/2-13	75.3	106.4	1-8	644	909
1/2-20	85.0	120.0	1-12	704	995

##### Metric Fasteners Class 8.8 and 10.9

Size	Torque (ft-lb)		Size	Torque (ft-lb)	
	 Class 8.8	 Class 10.9		 Class 8.8	 Class 10.9
M6 x 1.00	7.7	11.1	M20 x 2.50	325	450
M8 x 1.25	19.5	26.9	M22 x 2.50	428	613
M10 x 1.50	38.5	53.3	M24 x 3.00	562	778
M12 x 1.75	67	93	M27 x 3.00	796	1139
M14 x 2.00	107	148	M30 x 3.50	1117	1545
M16 x 2.00	167	231	M33 x 3.50	1468	2101
M18 x 2.50	222	318	M36 x 4.00	1952	2701

These torque values apply to fasteners except those noted in the instructions.

## SNOWPLOW BLADE WEIGHTS

Weights are of snowplow only without mounts.

Size	Blade Assembly	Wt (lb)	Wt (kg)
8'	30" Tall Pusher Plow	2127	965
8'	36" Tall Pusher Plow	2221	1007
10'	30" Tall Pusher Plow	2249	1020
10'	36" Tall Pusher Plow	2377	1078

# GETTING TO KNOW YOUR SNOWPLOW

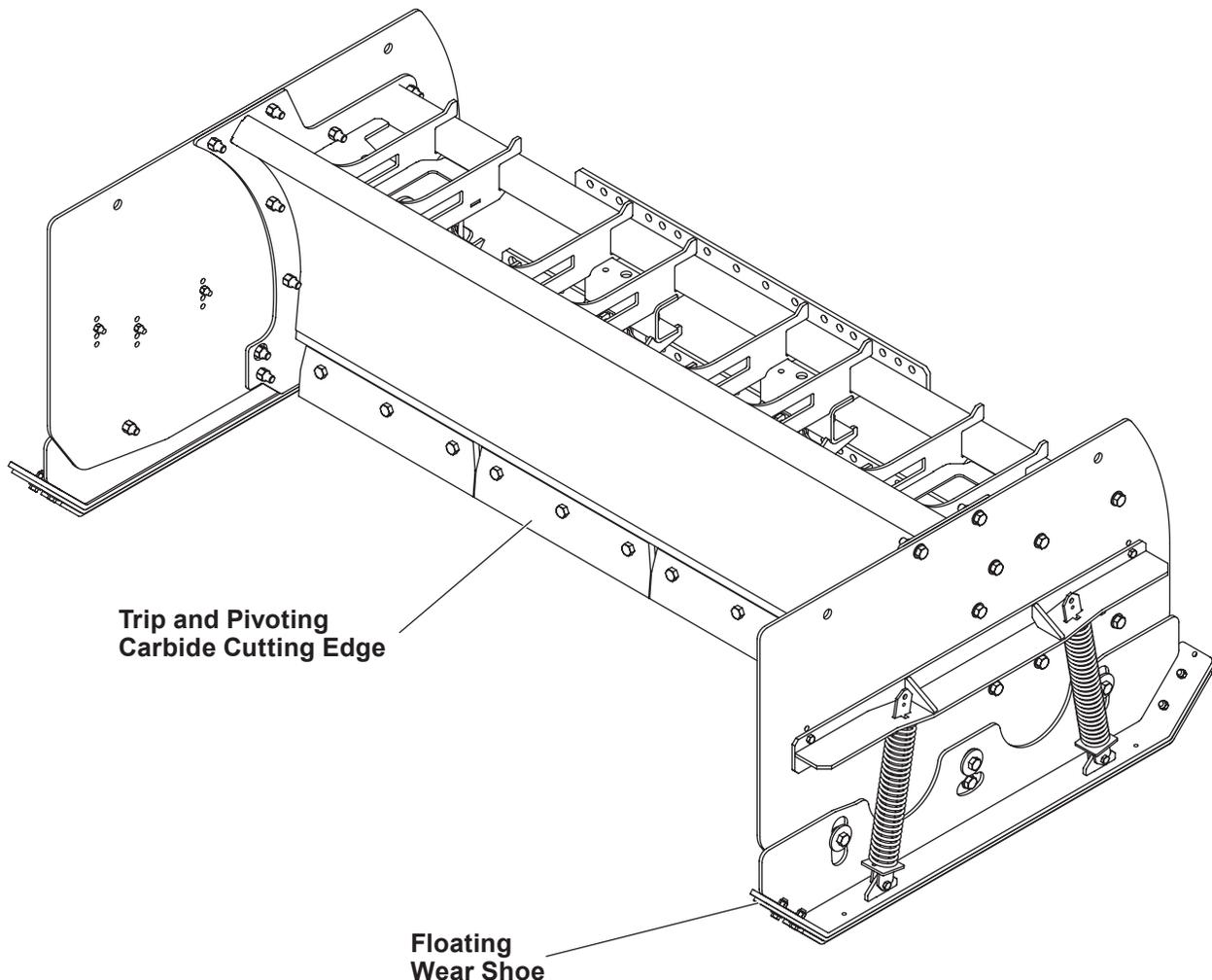
Your pusher plow is designed with several exclusive features to ensure safe and efficient snow removal.

Floating carbide cutting edges are combined with front- and rear-angled wear shoes. The cutting edges feature a trip and pivoting mechanism that minimizes potential damage to your machine by enabling the snowplow to move over raised manhole covers, low curbs, and other obstructions.

The floating wear shoes on the ends of the snowplow allow the cutting edges to better contour to the surface and give the operator more control to maintain surface contact close enough for superior snow, flood, and waste water removal purposes.

**To ensure that your pusher plow will provide years of service with minimal maintenance, follow these simple guidelines:**

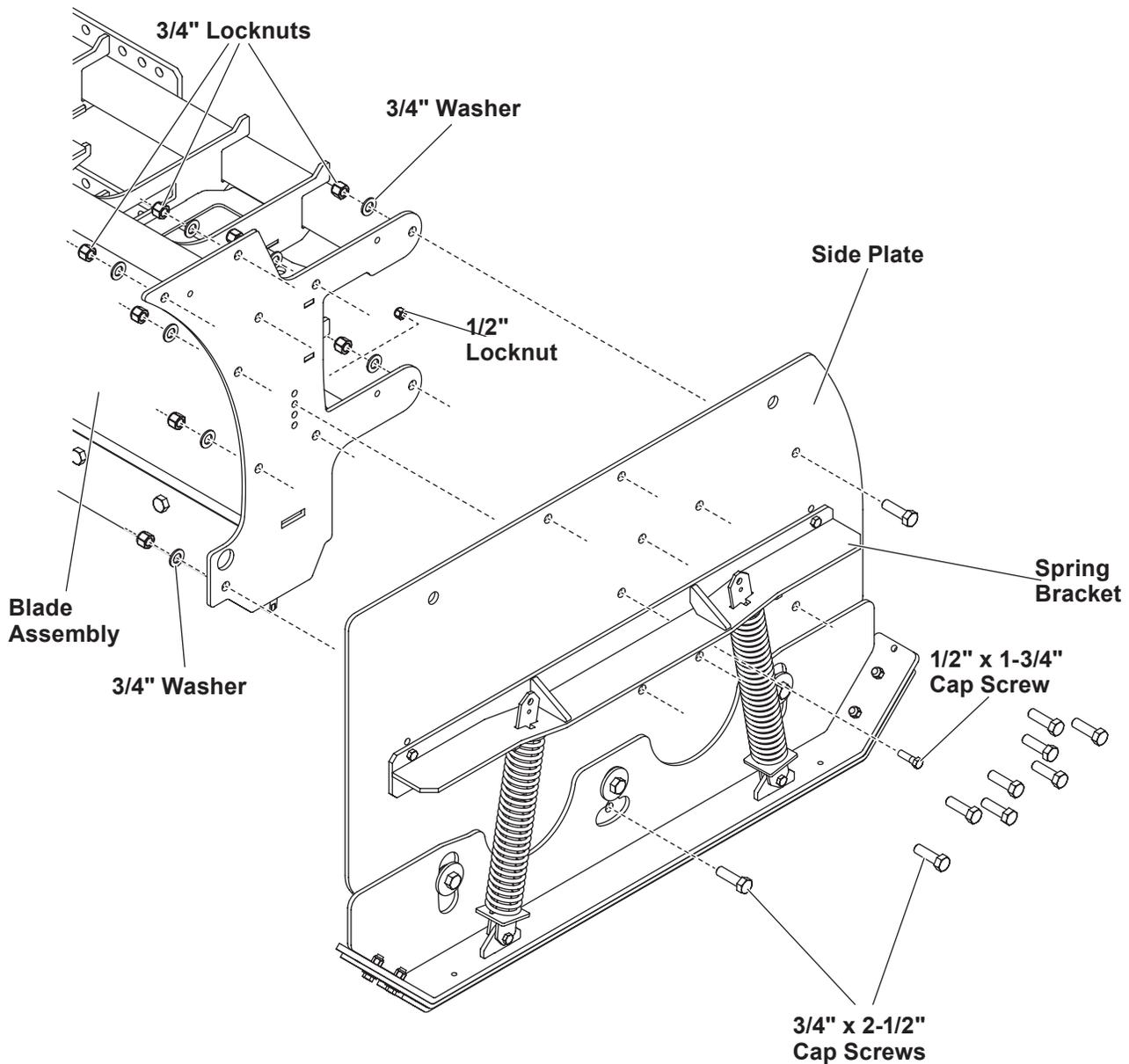
- Once the plow is properly attached to your machine it **MUST** be leveled **BEFORE** plowing.
- To level the blade, set it down and adjust the curl of your bucket, making sure that **BOTH** wear shoes are resting squarely on the plowing surface.
- **DO NOT** apply down force to the blade while plowing.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



# ASSEMBLY INSTRUCTIONS

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

1. Carefully remove the bolt bag, side plate assemblies, and braces from the shipping pallet and set them aside.
2. Safely support the blade assembly while removing the remaining shipping materials.
3. Install each side plate to the blade assembly with ten 3/4" x 2-1/2" cap screws, ten 3/4" flat washers, and ten 3/4" locknuts. Install one 1/2" x 1-3/4" cap screw and one 1/2" locknut through the hole in the spring bracket and the blade assembly on each side. Tighten according to the torque chart.
4. Refer to the instructions packed with the attachment device to install it to your pusher plow and connect it to your vehicle.



# MAINTENANCE

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

## **LONG LASTING CUTTING EDGES**

The carbide cutting edge segments may be replaced individually when worn. Refer to the instructions included with the replacement service parts. Adjust the wear shoes to align with the new cutting edge.

## **WEAR SHOES**

The pusher plow is equipped with replaceable high-carbon alloy wear shoes to offer superior protection against wear and tear. Refer to the instructions included with the replacement service parts.





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*This product conforms to EU Machinery Directive 2006/42/EC, The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment - Directive 2011/65/EU (RoHS2), and UNECE R10.05.*



*This product conforms to the UK Supply of Machinery (Safety) Regulations 2008, The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (RoHS2), and UNECE R10.05.*

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