



**Fisher Engineering**

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# **STORM BOXX™**

## **STORM BOXX™ Snowplow** **10' and 12' Box Plow for Backhoe Loaders** **Owner's Manual and Installation Instructions** *Original Instructions*

**⚠ CAUTION**

Read this document before operating or servicing the snowplow.

**⚠ CAUTION**

Read this document before installing the snowplow.

**⚠ CAUTION**

See your FISHER® outlet/Web site for specific vehicle application recommendations before installation. The Kit Selection Guide 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.fisherplows.com](http://www.fisherplows.com)***

Owner Name: \_\_\_\_\_

Date Purchased: \_\_\_\_\_

Outlet Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Outlet Address: \_\_\_\_\_

Snowplow Model/Year: \_\_\_\_\_

Snowplow Type/Size: \_\_\_\_\_ Weight: \_\_\_\_\_ lb/kg

Blade Serial Number: \_\_\_\_\_



# SAFETY

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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.

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## SAFETY PRECAUTIONS

Improper installation and operation could cause personal injury and/or equipment and property damage. Read and understand the 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 box plow using dunnage or jack stands to ensure safety during maintenance.
- DO NOT rely solely upon the hydraulics of your machine to secure the box plow during maintenance.
- NEVER get between the bucket of the machine and the box plow 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 box plow while machine is in operation.

# SAFETY

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## 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.

## SNOWPLOW BLADE WEIGHTS

Size	Blade Assembly	Wt (lb)	Wt (kg)
10'	Backhoe Loader Blade	1030	467
12'	Backhoe Loader Blade	1150	522

## 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.

## GETTING TO KNOW YOUR SNOWPLOW

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The box plow is designed with several exclusive features to ensure safe and efficient snow removal. The heavy duty rubber cutting edge is combined with front and rear angled wear shoes. This minimizes potential damage to your machine by enabling the box 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.

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

1. Once the box plow is properly attached to your machine it **MUST** be leveled **BEFORE** plowing.
2. To level the unit set it down and adjust the curl of your bucket, making sure that **BOTH** wear shoes are resting squarely on your plowing surface. Additional accessories such as a level gauge and self-leveling shoes are available to help keep the unit level.
3. To ensure proper contact drive your machine forward approximately 20', check surface area under your machine to ensure that plowing area is clean. If your plowing area is not completely clear, loosen the tension of binder(s) to allow your box plow to vertically adjust for maximum surface contact. Your box plow will not remove hard-pack, therefore clear this with the steel edge of your bucket after snow removal.

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**NOTE: Binders must be properly tightened prior to transportation or high speed use.**

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4. **DO NOT** apply down force to the unit while plowing. This will considerably shorten the life of your wear shoes and this is **NOT** necessary for proper plowing.



# ATTACHING SNOWPLOW TO VEHICLE

## ATTACHING YOUR BOX PLOW

1. Drive the cutting edge of machine's bucket into the post receptacle on the back of the box plow.



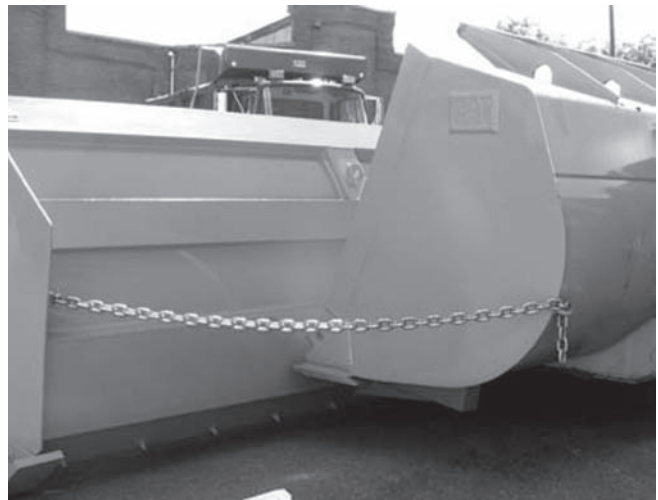
2. The bucket will come to rest against the 12" structural steel channel reinforcement. The upper posts will fit inside the bucket and should be centered. The lower posts will be positioned under the bucket.



3. Attach the chains and binders to secure the box plow to your machine.

## INSTALLING THE BINDER KIT

1. 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 box plow to your machine.
2. Attach one section of transport chain to the left side of the box plow using a 3/8" clevis. Drop opposite end of this chain into grab hook on the left side of the bucket. Leave enough slack in the chain to allow centering of the unit.
3. Attach additional section of transport chain to the right side of the box plow using a 3/8" clevis.



Drop opposite end of this chain into grab hook on the right side of the bucket. Leave enough slack in the chain to attach the ratchet binder and allow centering of the unit.

4. With both chains in place, lift the box plow off the ground by raising the bucket then tighten the ratchet binder. Add or remove slack in the chains to center the box plow on your machine. Once centered, chains **MUST** be tightened with the binders.

### **⚠ CAUTION**

**Do not use the lift hooks located at the top and rear of the box plow for chain attachment. These hooks are designed for lifting the unit only and not for plowing.**

# MAINTENANCE

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

## RUBBER CUTTING EDGE

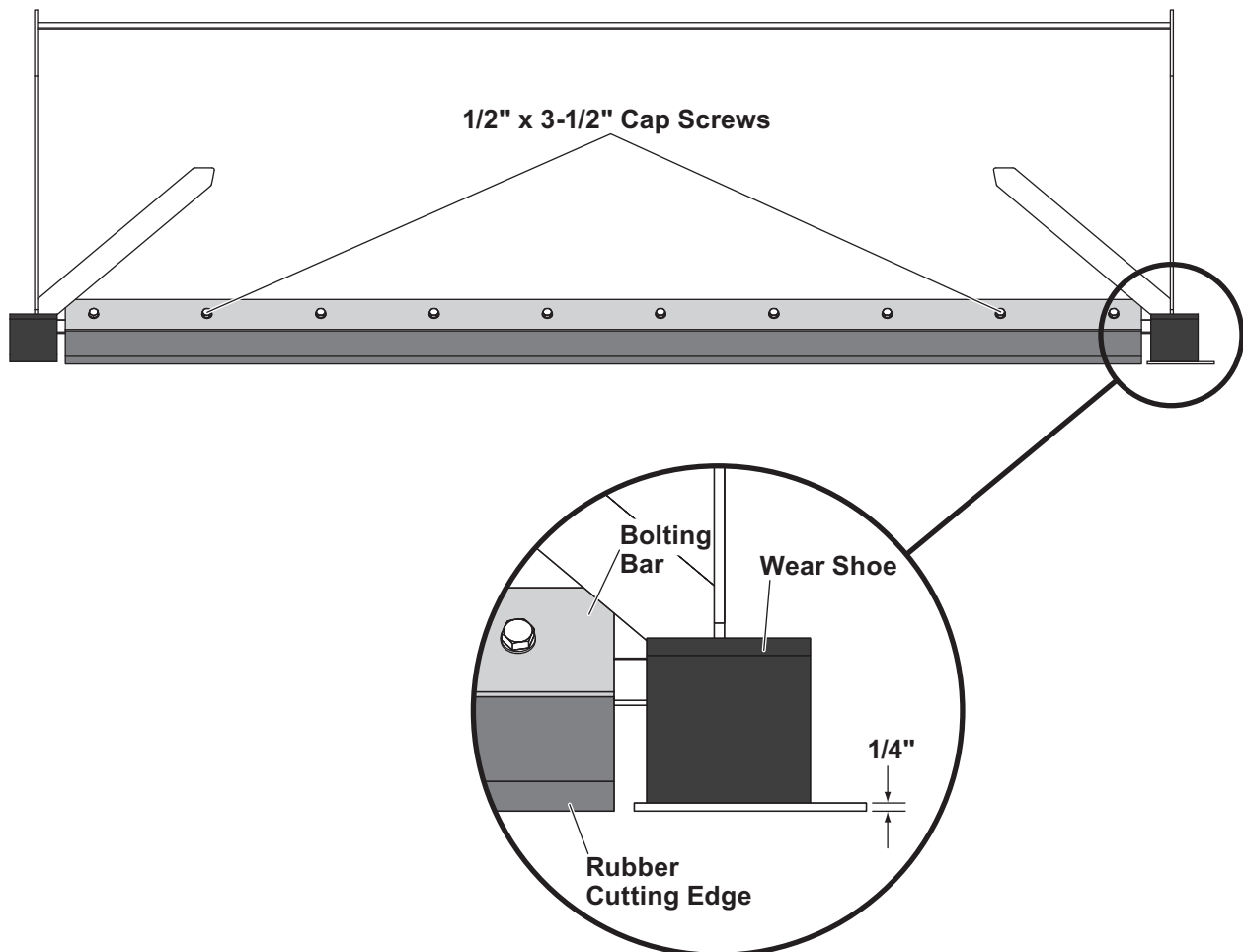
The heavy duty rubber cutting edge on every box plow is both reversible and adjustable. This rubber is 1-1/2" x 10" thick. To ensure several years of service perform periodic inspections and adjustments following these simple guidelines:

**NOTE: A warm piece of rubber is much easier to adjust than one that is cold. It is highly recommended that your machine be placed in a warm place whenever making adjustments.**

1. Park the machine on a smooth, level, hard surface, such as concrete. Raise the plow a few inches. Place a 1/4"-thick object under each wear shoe. Lower the blade to rest on the objects.

2. Loosen all cap screws holding the bolting bar and cutting edge. It is NOT necessary to completely remove the fasteners.
3. Using a large mallet or pry bar, adjust the cutting edge so that the rear, bottom edge *just* touches the ground.
4. Once the cutting edge is properly positioned, tighten the fasteners. Starting in the center, work toward the side plates tightening the cap screws enough to create a substantial bow in the 4" bolting bar.

**NOTE: We recommend using a 3/4" impact gun to ensure proper fastener torque (120 ft-lb).**



# MAINTENANCE

## WEAR SHOES

Every box plow is equipped with two replaceable high-carbon alloy wear shoes to provide seasons of use by offering superior protection against wear and tear. When replacement is required, follow these guidelines:

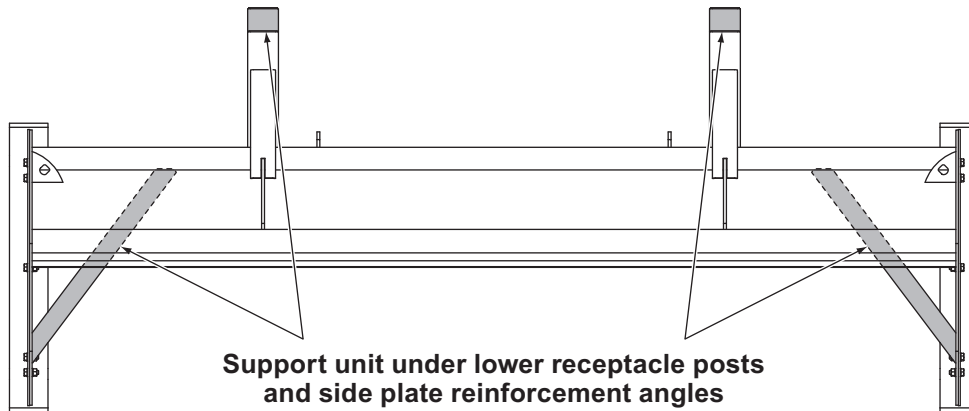
1. Raise your box plow off the ground and secure the unit under the lower, rear receptacle posts and the side plate reinforcement angles using dunnage or jack standards.
2. Loosen all six cap screws fastening the wear shoe to the unit and carefully remove.

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

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3. Position new wear shoe on left side and right side.
4. Install cap screws, washers and locknuts. Tighten cap screws slightly, only enough to ensure that they won't fall off.
5. Lower unit on level surface and torque fasteners (120 ft-lb) securely into place.





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