



AVALANCHE® BOX PLOW

USER MANUAL

Aug-06

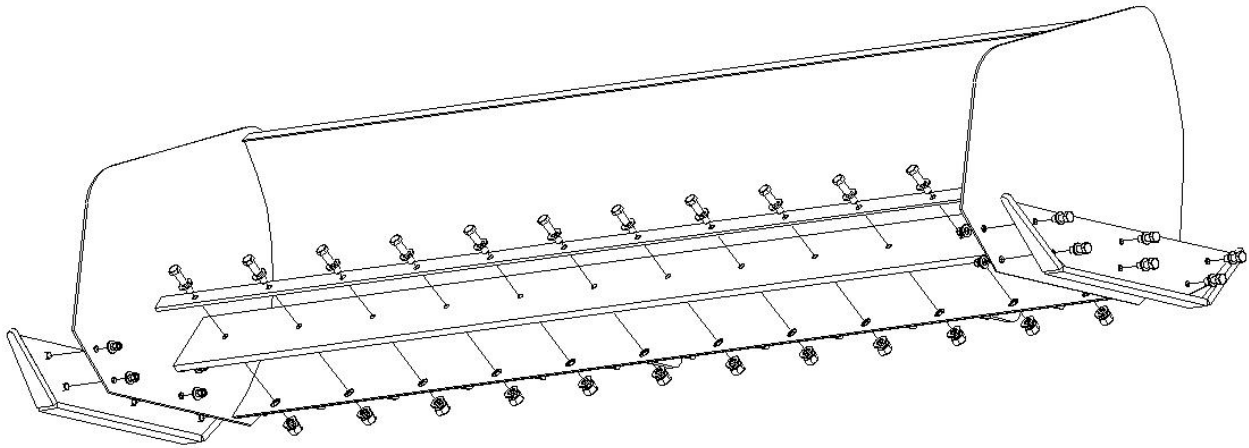




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Questions? Call 1-800-232-6950 or email customer@ledexindustries.com



SAFETY

DANGER!: When detaching Avalanche® plow from vehicle or machine, the Avalanche® may roll back and could cause serious injury or death. Stabilize the Avalanche® plow upon removing it from your vehicle or machine.

WARNING!: Attempting to remove or install springs could cause serious injury or death. Only certified professional personnel should remove or install springs. See an Avalanche® dealer or call 1-800-232-6950 for a qualified technician near you.



HOOK-UP GUIDE

Before you begin: Use 3/8" grade 70-transport chain (Included in the Avalanche® ratchet binder kit). For correct use, ensure that chains are parallel with the ground while plowing.

1. Weld chain brackets or chain hooks to rear of loader bucket. Ensure that brackets are at same height as brackets on the Avalanche® plow in order for chains to be parallel with ground once tightened. (In addition, some plowers also connect chains from the top of the Avalanche® to the top of their loader/backhoe bucket to keep the plow level during transportation or when lifting it off the ground. Use the chain brackets on the Avalanche top channel.)

If you already have chain hooks installed proceed to step 2.

2. Drive your machine into place. If your Avalanche® box plow has a standard bucket mount receiver, ensure that the bucket cutting edge slides in between the receiver plates (slot) and makes contact with the push plates. Proceed to step 3.

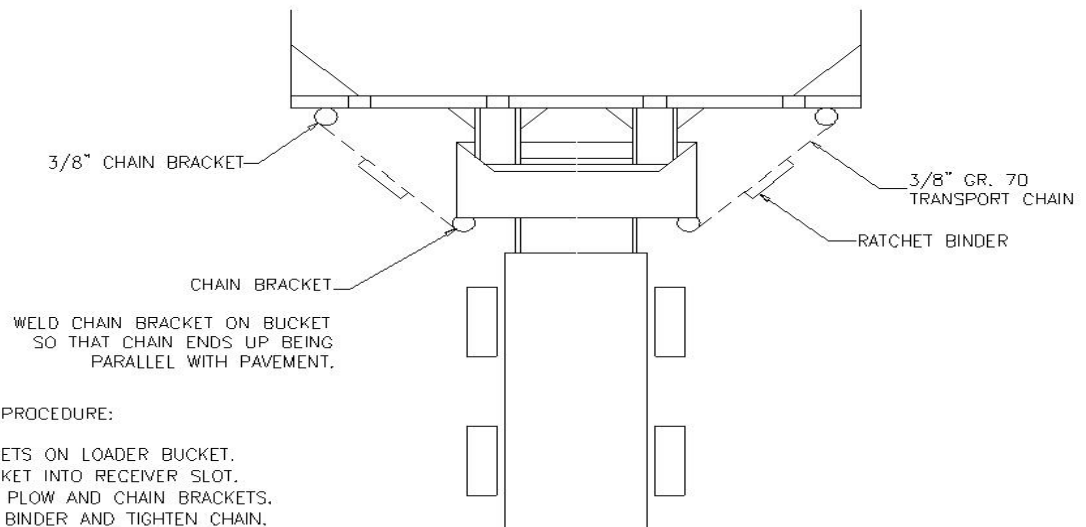
If your Avalanche® box plow has quick coupler blank hooks, drive your machine and connect to hooks as you would with other attachments. (Skip steps 3 & 4.) Now you're ready to plow.

3. Attach chains to chain brackets located at each end of the box plow. Then connect the other ends to the hooks or chain brackets on your bucket.
4. Attach ratchet binders and tighten till there is little or no sag in the chain length. For best results, chains should be parallel with the ground.



Hookup Aerial View

HOW TO HOOK-UP THE AVALANCHE TO YOUR LOADER OR BACKHOE





REPLACING & ADJUSTING THE RUBBER CUTTING EDGE

Before you begin:

Rubber cutting edge & flat bar must be at *room temperature* before adjustment or replacement is done (16-22° Celsius, 61-71° Fahrenheit). This will ensure correct compressing of the rubber while tightening. Failure to let rubber warm up before tightening will result in insufficient clamping force leading to slippage of the rubber edge during plowing. Tighten with Avalanche® grade-8 fasteners for best results.

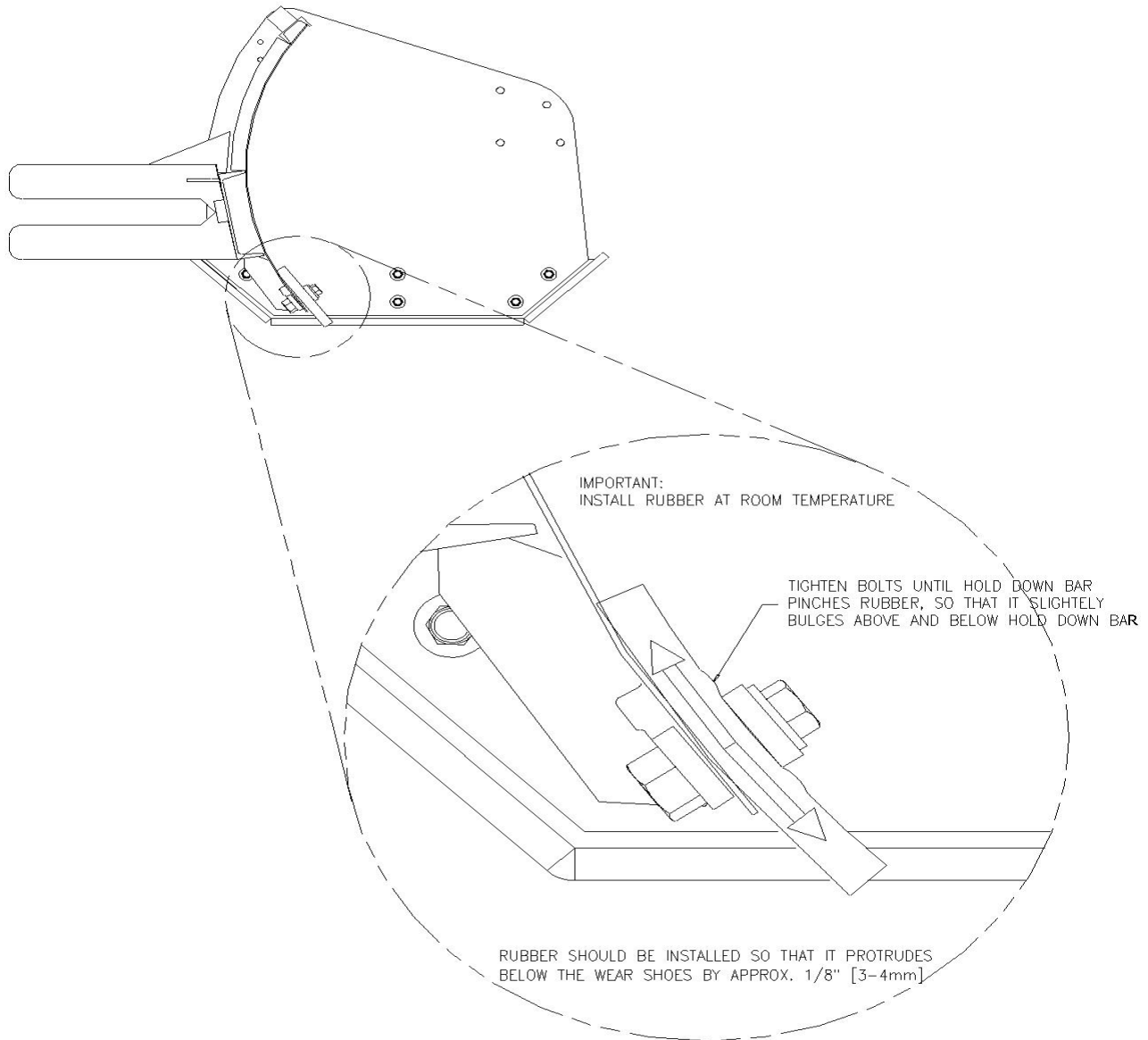
TIP: Use a pneumatic (impact) gun to tighten all fasteners for best results.

Avalanche® recommends using Genuine Avalanche® replacement parts when replacing fasteners, cutting edges and wear shoes.

1. Rubber cutting edge should be installed so that it protrudes approximately 1/8" below the wear shoes.
2. Tighten bolts until hold down bar pinches rubber to the point that the rubber bulges slightly. The bulges should be noticeable above and below the hold down bar.

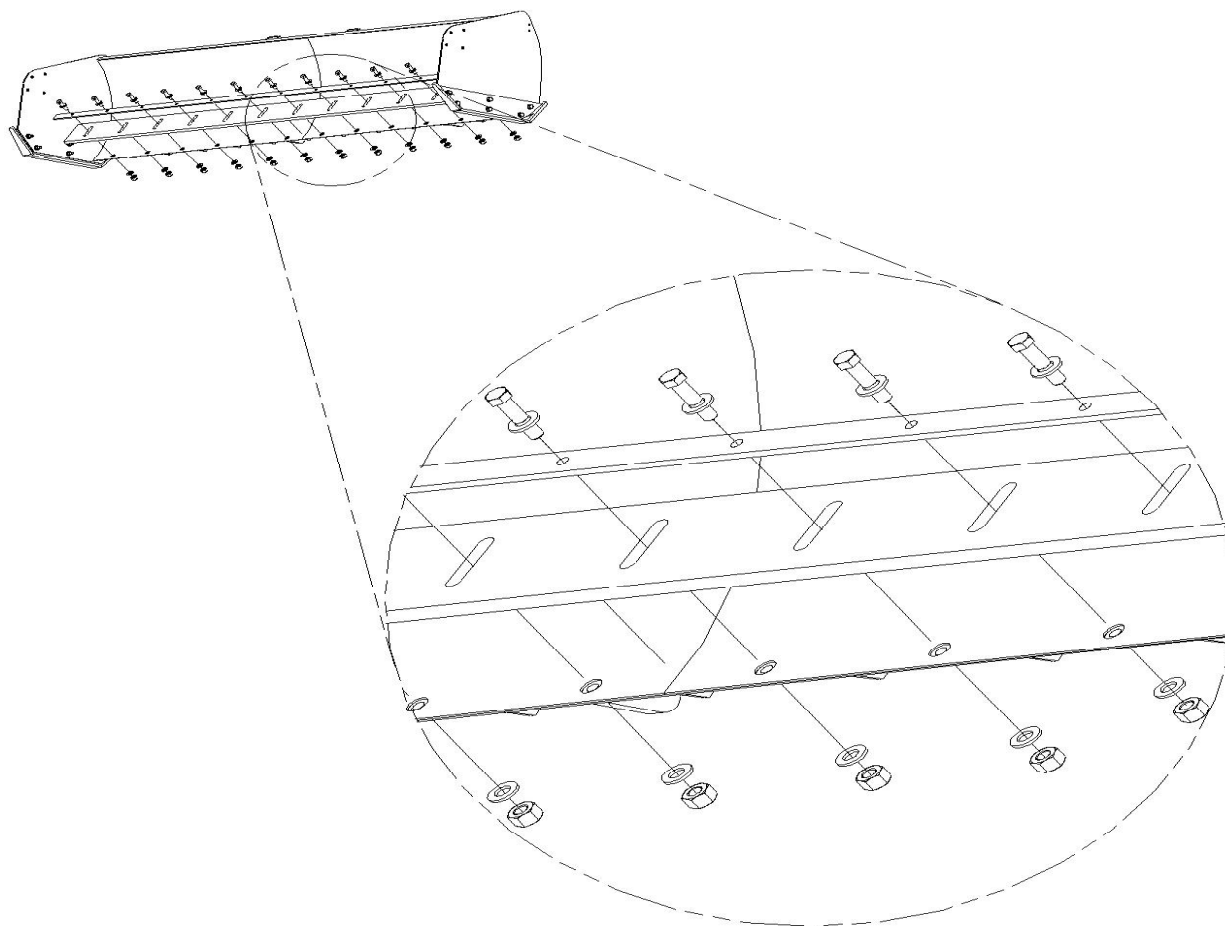


Rubber Cutting Edge Adjustment





Rubber Cutting Edge Replacement





REPLACING & ADJUSTING THE STEEL CUTTING EDGE

TIP: Use a pneumatic (impact) gun to tighten all fasteners for best results.

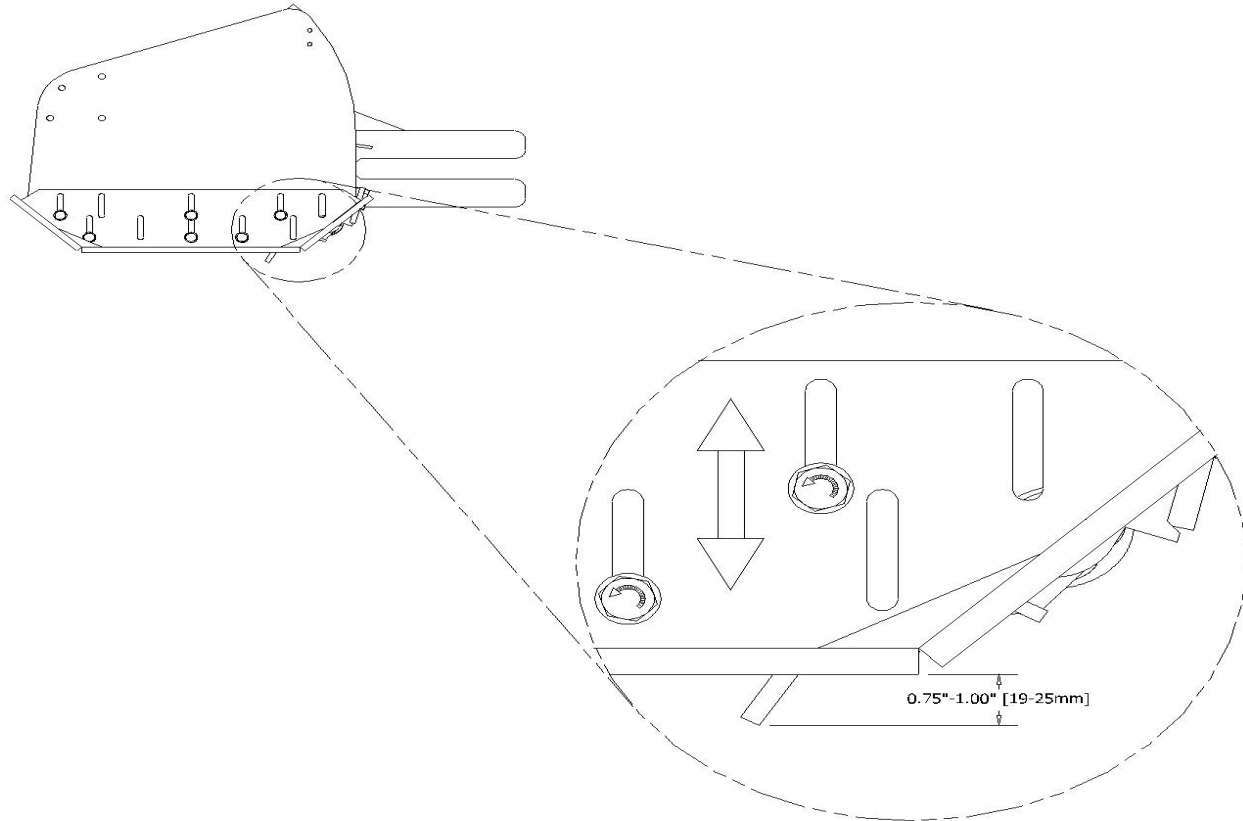
1. Remove old cutting edge(s) by loosening or cutting fasteners. Position new cutting edge(s) and tighten fasteners (Max. 250-ft. lbs. of torque for 5/8" bolts, Max. 1000 ft. lbs. torque for 7/8" bolts).
2. Adjustment for the cutting edge is done at the *wear shoes*. Loosen the wear shoe bolts and sliding the wear shoes up or down as needed. The steel cutting edge should protrude below the wear shoes approximately $\frac{3}{4}$ " to 1". It is important that it protrudes up to 1 full inch because during snow plowing the plow will have a tendency to rise and travel over the snow. Use Avalanche® grade-8 fasteners and metal lock nuts for best results. (Max. 250 ft. lbs. of torque for 5/8" bolts; Max. 1000 ft. lbs. torque for 7/8" bolts)

IMPORTANT!

Inspect and tighten all fasteners after every 8 hours of service. Failure to inspect and tighten fasteners at this interval may result in premature wear and failure of wear shoes, cutting edges, couplers, and fasteners. Failures of this nature are not covered under the Limited Warranty. To download the Avalanche Limited Warranty and other support articles, please go to www.avalancheplow.com. To speak with an Avalanche representative call 1-800-232-6950.

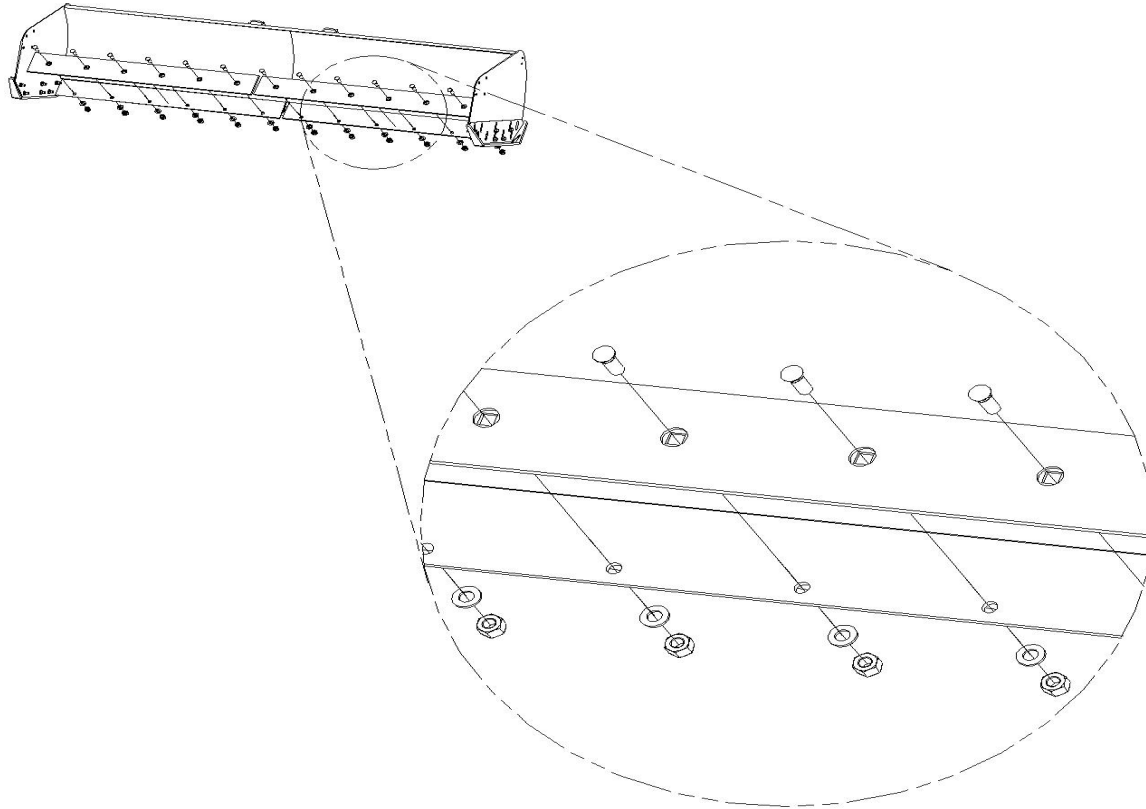


Steel Cutting Edge Adjustment





Steel Cutting Edge Replacement





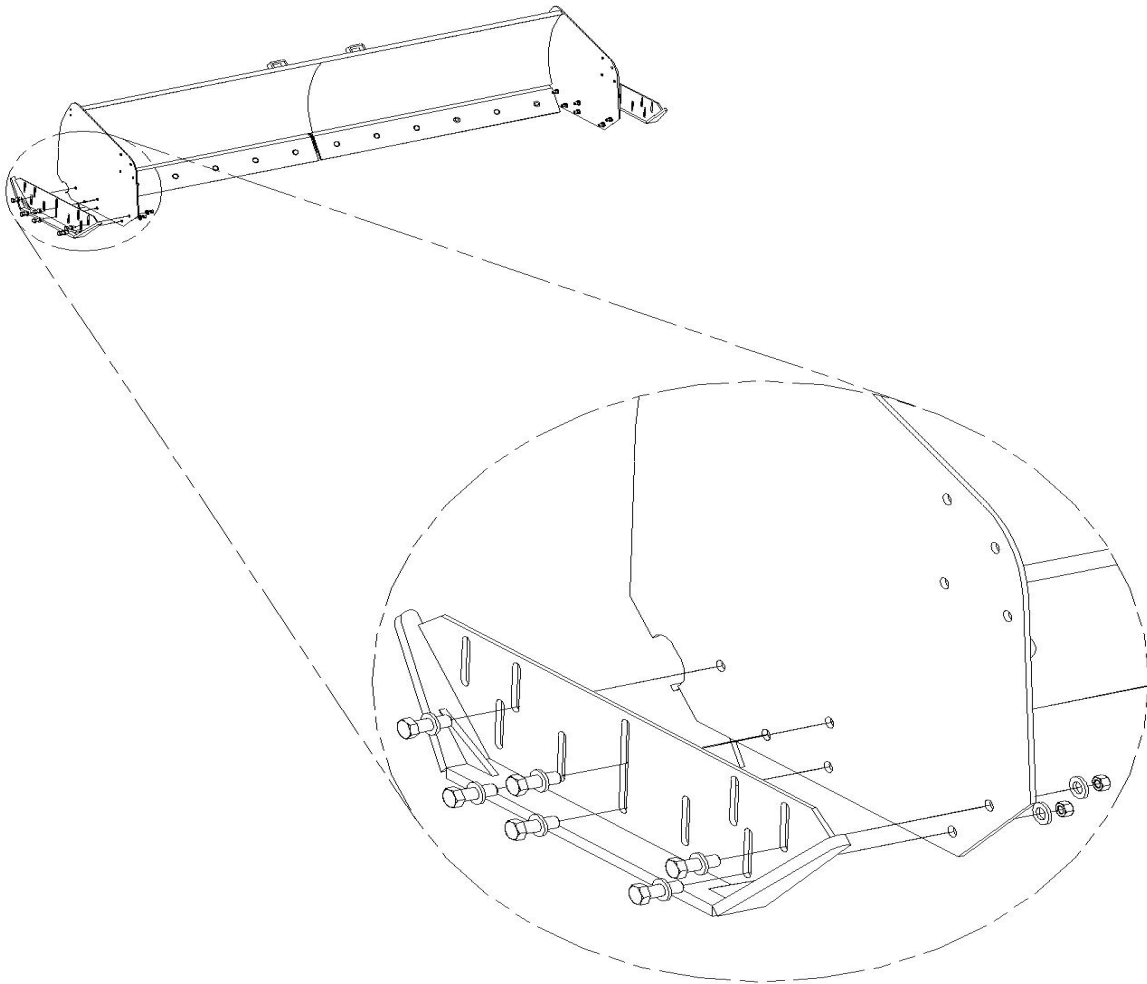
REPLACING THE WEAR SHOES

1. Loosen or remove fasteners.
2. Position new wear shoes over hole pattern.
3. On rubber edge Avalanche® models, tighten the fasteners (Max. 250-ft. lbs. of torque for 5/8" bolts).
4. If you have a steel trip edge Avalanche®, refer to "Replacing or Adjusting the Steel Cutting Edge" on the previous page.

TIP: Use a pneumatic (impact) gun to tighten all fasteners for best results. Use only grade-8 ASTN bolts.

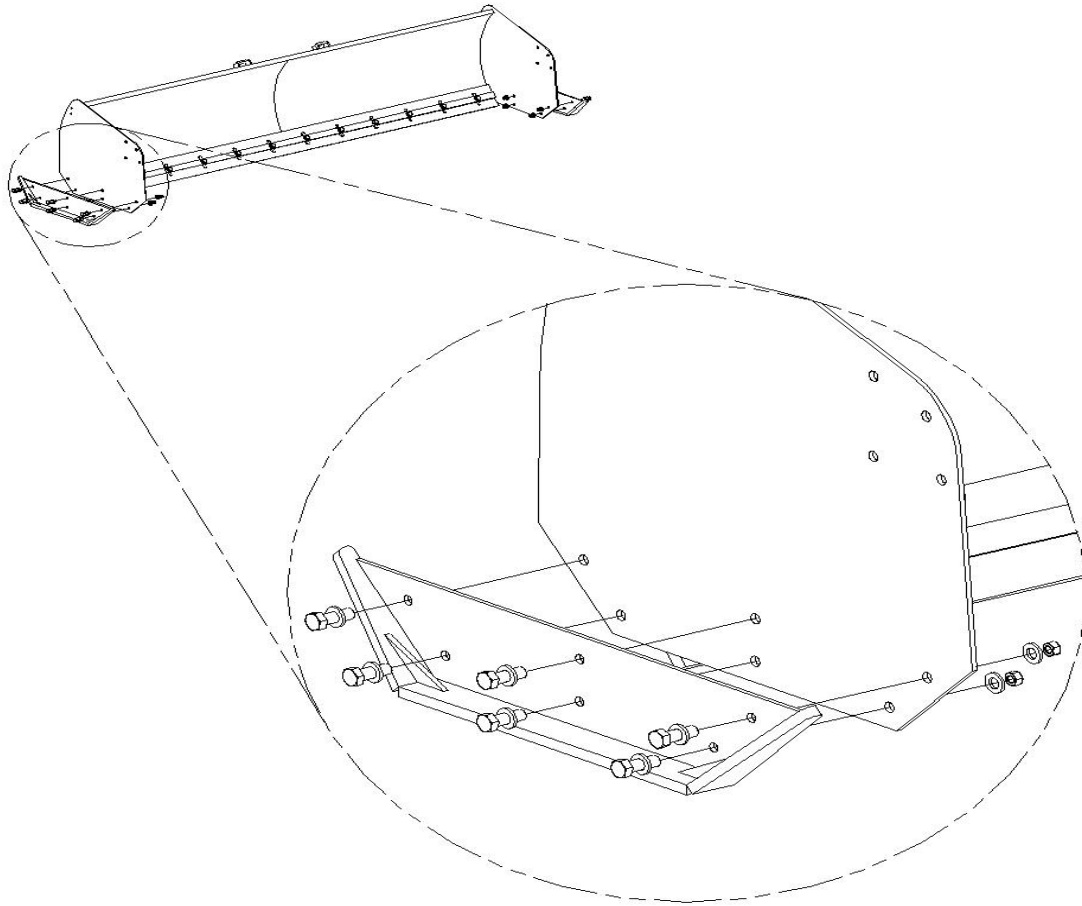


Wear Shoe Replacement (Steel Trip Edge Plows)





Wear Shoe Replacement (Rubber Edge Plows)





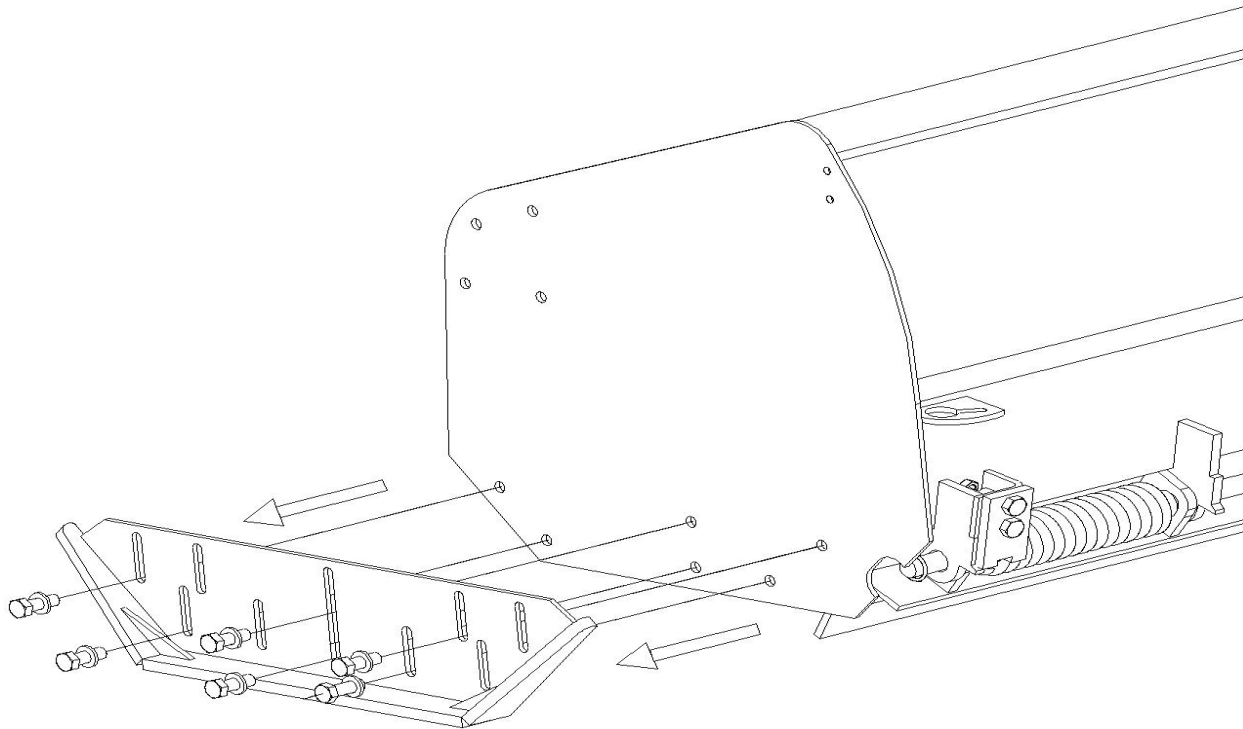
REPLACING THE TORSION SPRINGS

REMOVING & INSTALLING

1. Tilt the box plow forward so that it comes to rest on the front portion of the side panels.
SAFETY: Secure box plow with stationary stands under channel.
2. Support the T-Bar/Cutting Edge assembly with a jack stand.
3. Uninstall the wear shoes.
4. Slide a lever pipe over the spring tip and pull it off the preload plate. Hold this position.
5. Loosen nuts on the preload plate and remove the plate.
6. Slowly relax the tension (release) you have on the spring using the pipe. Do not let go of the spring suddenly, as this may cause injury to yourself or others.
7. Repeat the above steps for each spring.
8. Remove the lynch pins from the hinge rod.
9. Slide out the hinge rod and spacers.
10. Discard used up springs.
11. Position the new springs.
12. Slide the hinge rod and spacers through each spring and into position.
13. Install the lynch pins to lock the bar in place.
14. Slide lever pipe over tip of spring and pull back.
15. Reattach preload plate and/or retighten the loosened nuts with an impact gun.
16. Slowly release the pipe to let spring tip push on the preload plate.
17. Reinstall the wear shoes.

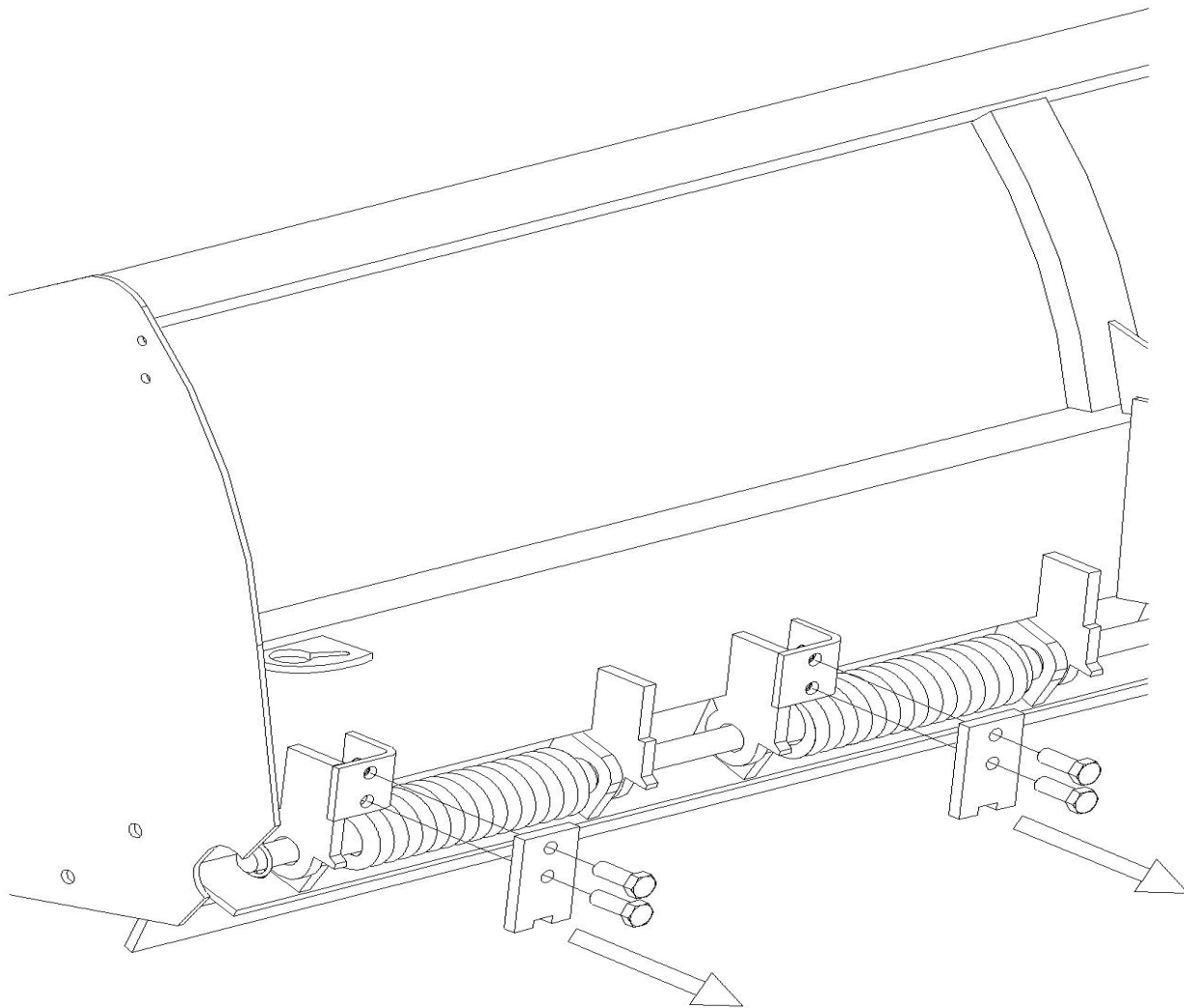


Torsion Spring Replacement – Step 1



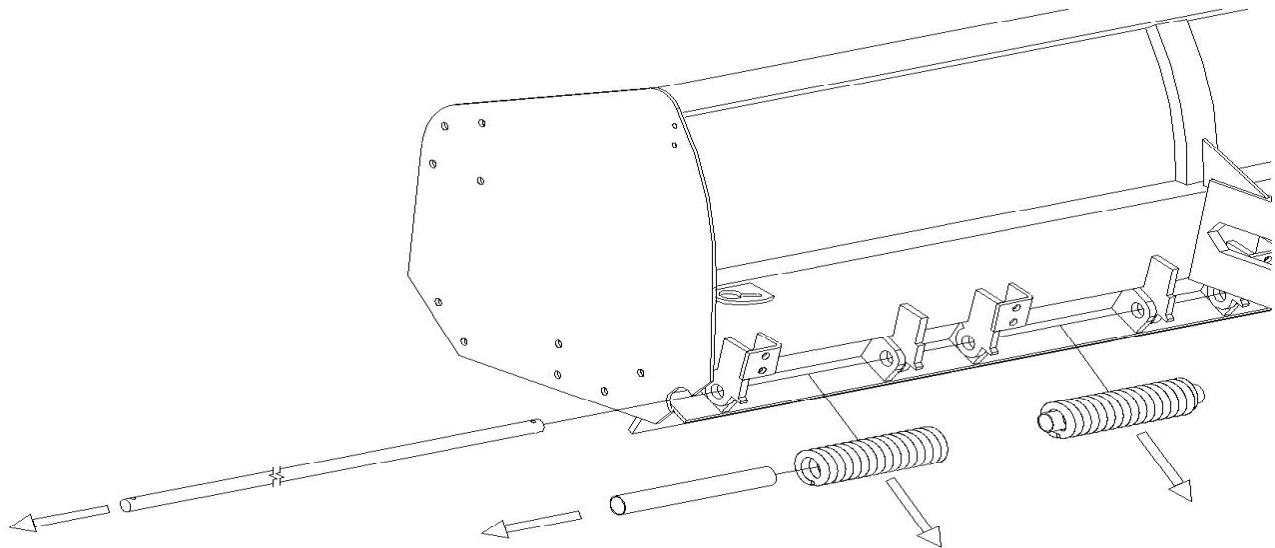


Torsion Spring Replacement – Step 2





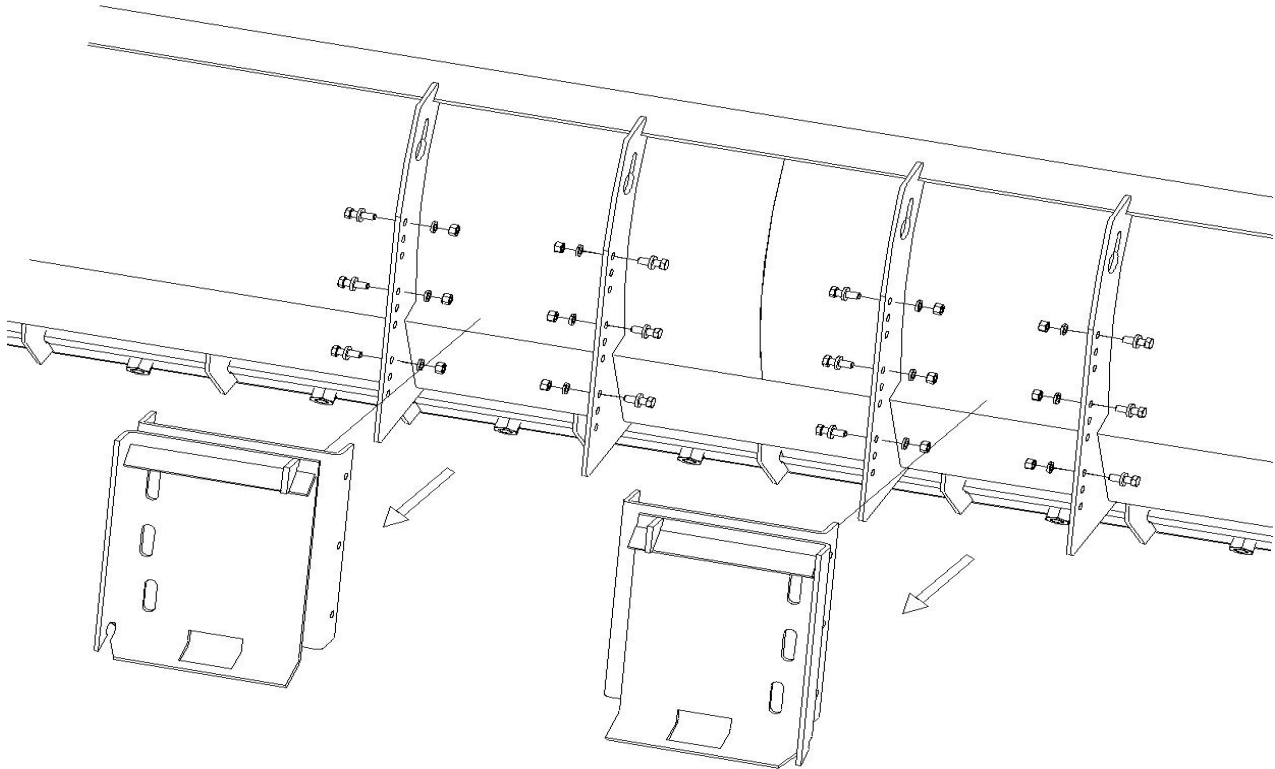
Torsion Spring Replacement – Step 3





REPLACING THE SSA-100 & CTA-SC QUICK COUPLER

Quick Coupler Replacement





TIPS & BEST PRACTICES

1. Keep attachment chains ***parallel to the ground***.
2. Plow snow with the wear shoes riding flat with the ground surface. Tilting the box plow forward or up will cause uneven wear on the wear shoes and possibly the lower receiver plate. Take advantage of the Avalanche® Avalevel® level indicator to make sure that you are keeping the box plow as level as possible.
3. If snow builds up in the corners of the box plow between the moldboard and the side braces, toggle the tilt adjustment of your machine a few times and the snow will shake free.



WARRANTY POLICY “A”

FIXED RUBBER EDGE BOX PLOWS

Important: To activate your warranty, you must mail, fax, or email to us a copy of your Warranty Activation form.

Avalanche® snow and ice control products indicated above are guaranteed to be free from defects in material and workmanship for the lifetime of the plow from date of delivery to original purchaser. All items manufactured are wearable and expendable.

It will be our opinion to replace or repair without charge to the customer, any part(s) according to the following terms:

Any plow or part(s) claimed to be defective are to be returned freight prepaid to the factory for our inspection.

Any warranty work done by others must be authorized in writing by an official of Avalanche® Snowplows, and billed for the total amount agreed upon before the work is started.

Normal wear through usage will not be considered a defect. This warranty covers only parts manufactured by Avalanche® Snowplows/Ledex Industries and is in lieu of all other warranties, expressed or implied. We are not responsible or liable for any consequential damage or contingent liability. This warranty is void if part(s) damaged is the result of negligent or malicious use beyond the rated capacities of the part(s): any modification or unauthorized repair of the part(s).

This warranty does not cover consumable parts such as rubber cutting edges, wear shoes, or fasteners.

February 1, 2006



WARRANTY POLICY “B”

STEEL TRIP EDGE BOX PLOWS & ANGLE PLOWS

Important: To activate your warranty, you must mail, fax, or email to us a copy of your Warranty Activation form.

Avalanche® snow and ice control products indicated above are guaranteed to be free from defects in material and workmanship for the lifetime of the plow from date of delivery to the original purchaser. All items manufactured are wearable and expendable.

It will be our opinion to replace or repair without charge to the customer, any part(s) according to the following terms:

Any plow or part(s) claimed to be defective are to be returned freight prepaid to the factory for our inspection.

Any warranty work done by others must be authorized in writing by an official of Avalanche® Snowplows, and billed for the total amount agreed upon before the work is started.

Normal wear through usage will not be considered a defect. This warranty covers only parts manufactured by Avalanche® snowplows/Ledex Industries and is in lieu of all other warranties, expressed or implied. We are not responsible or liable for any consequential damage or contingent liability. This warranty is void if part(s) damaged is the result of negligent or malicious use beyond the rated capacities of the part(s): any modification or unauthorized repair of the part(s).

This warranty does not cover consumable parts such as steel cutting edges, wear shoes, or fasteners.

February 1, 2006



CONTACT INFORMATION

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