The Ratchet Rake FS

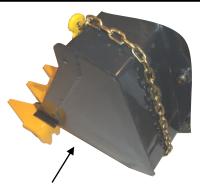
Forestry Service Model

The Ratchet Rake FS attaches to loader buckets with ratcheting load binders that are more resistant to damage from direct contact when pushing logs and heavy tree limbs. This attachment system is only intended for use on skid steer and other heavy duty loader buckets. The Ratchet Rake FS includes 2 ratchet load binders and 4 connection shackles (chain <u>not</u> included). See details below...

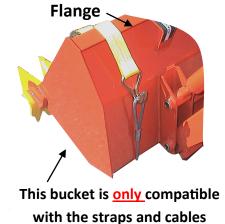


Compatibility #1

The ratcheting binder attachment system is recommended for use on heavy duty loader buckets that are constructed without any protruding flanges that may bend inward when tension is applied to the chain.



This bucket is compatible with the chains & binders



Compatibility #2

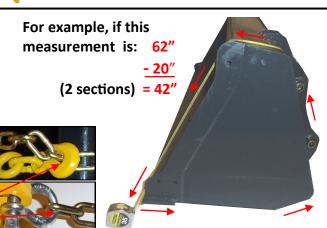
To properly apply tension, the ratcheting load binder must have a minimum of 20 inches of clearance between the tip of the cutting edge and the front top edge of the loader bucket.





Determining chain length:

- 1. Hook a tape measure on your loader buckets cutting edge and measure the entire distance around the bucket.
- 2. Subtract 20 inches from your measurement, you will require 2 sections of chain cut to this length.
- 3. The load binders and shackles are compatible with 1/4 inch chain (grade 70) or 5/16 chain (grade 30 or 43).
- 4. Home centers occasionally mislabel chain. Before you buy the chain, make sure the load binder hook fits <u>around</u> the middle links and the shackle fits <u>through</u> the end link.



Set-Up & Installation:

The Ratchet Rake is compatible with loader bucket cutting edges up to 7/8" thick. Tabs on the upper connection brackets can be trimmed with a hacksaw or hand grinder to accept loader buckets up to 1 3/8 " thick.





- 1. Connect one side of the chain to the rakes lower connection bracket using the gray colored shackles.
- 2. Connect the load binder to the rakes upper bracket using the gray colored shackles. Insert the buckets cutting edge into the space between the upper and lower brackets.
- 3. Route the chain around the back of the bucket toward the load binder in a straight direct line.
 Attach the load binder hook to the other side of the chain.
- 4. With the direction selector flipped to the tightening position, turn the handle back and forth until the chain becomes tight. Flip the direction selector again & turn the handle toward the inside of the bucket.









Maintenance — For smooth operation, apply a light oil to the moving parts of the ratcheting mechanism (especially the spring loaded ball bearing located next to the directional selector).

OPERATING THE RATCHET RAKE

FORWARD OPERATION - The bottom surface of the loader bucket should be orientated parallel with the ground. The operator lowers the bucket to achieve the desired amount of penetration into soil or vegetation.

BACKWARD OPERATION - The bottom surface of the loader bucket should be orientated at a 30 degree to 50 degree angle to the ground which allows both sets of teeth to be utilized simultaneously. The operator lowers the bucket to achieve the desired amount of penetration. This is the most effective bucket position when pulling out rocks or debris from the ground.

IN THICK BRUSH - Limiting passes to 20'-30' is recommended. Lift and shake out rake after operating forward. Then proceed backward on the same track with the bucket tilted to aid in gathering up the loosened brush or vegetation.

SMALLER MACHINES - May be more effective taking passes of only one half bucket width in thick brush.

NEW LAWNS - To achieve a seedbed with a smooth and powder like consistency, the top 2"-3" of soil should be dried out.

WEBSITE VIDEO - We recommend watching the video demonstration at WWW.RATCHETRAKE.COM before using our product.

Safety Precautions

- 1. Persons should never walk underneath or in the path of or ride inside of a loader bucket with the Ratchet Rake attached.
- 2. During Installation, persons should never place any body part directly underneath the loader bucket or the Ratchet Rake.
- 3. The Ratchet Rake should only be installed on loader buckets in good structural condition.
- 4. A 2mph speed limit should be observed in areas that could contain large imbedded rocks or other hidden obstacles.
- 5. Avoid using the Ratchet Rake on steep hillsides where the machine could turn over.
- 6. Follow all of you machines manufacturers' safety warnings.

ONE YEAR LIMITED WARRANTY

Ratchet Rake LLC warrants our products to be free from defects in materials and workmanship for the period of one year.

Ratchet Rake LLC will either repair or replace any damaged or defective rakes or mounting components for the period of one year from the date of purchase.

For warranty claims contact us at:

ratchetrake@comcast.net or phone 888 850-6070 Ratchet Rake LLC 405 N. East St Carlisle, PA 17013

Warranty Limitations: Upon purchase the buyer assumes all liability for personal injury and property damage resulting from the handling, possession or use of the Ratchet Rake.

WWW.RATCHETRAKE.COM