



ISO9001:2015 certified

# **3, 4 & 5 Bar HD Angle Iron Flexible Harrow**

**(3HD, 4HD, 5HD)**



## **Setup/Owner's Manual**

***Our Tradition is Quality Driven and Field Proven***

**Manual # - MAN-345HD-DFC-005**

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## **\*PART DIAGRAMS**

Scan the QR Code or visit our website to view our parts book:

<https://www.remlingerimg.com/agricultural-products/downloads/>





## Warning



Before using this attachment, make certain that every operator:

- Is instructed in safe and proper use of this attachment.
- Reads and understands the manual pertaining to the attachment.
- Reads and understands ALL (if applicable) Safety Decals on the attachment.
- Clears the area of all other people before operating the implement and attachment.
- Learns and practices safe use of the attachment in a safe clear open area before operating the implement and attachment in the field.



This symbol indicates an important Safety Alert Message in this Manual. Carefully read and understand the message that follows. The potential for series injury or death is possible.



## Safety Rules



- Never attempt to operate or adjust the attachment without reading this manual.
- Do not attempt to adjust the attachment while it is in motion.
- The addition of this attachment will make the implement rear-end heavy.
- Caution is required when hooking up or un-hooking the attachment. A rear jack stand is recommended but not provided.
- Always use any transport locks that are provided on the attachment or implement.
- Always place all safety decals and reflectors in their proper locations. Clean and replace as necessary.
- Never allow anyone to ride on the implement or attachment.
- Always slow down when turning and traveling over rough terrain.
- Always support the implement when mounting or working on the attachment.
- Be careful around teeth, tines, sweeps, and blades: they get sharper with wear.

# To the Owner

Your new harrow attachment was carefully designed to give years of dependable service. This manual contains important information about the safe assembly, adjustment, operation, and maintenance of your attachment. To keep it operating efficiently, read the instructions in this manual. Parts of the attachment have been partially assembled at the factory. The use of this manual describes how to complete the remaining assembly. This manual should be considered a permanent part of your implement and should remain with the implement when it is sold. Additional diagrams may also be included for specific applications. Please contact the dealer or Remlinger Manufacturing for any questions at **1-800-537-7370**.

Any unauthorized modification to any part of the attachment could cause serious injury and void any warranty consideration. Please refer to the Warranty Policy referenced below. For additional manuals or to replace a lost or damaged manual, please contact your dealer. The manual number is referenced on the lower right-hand corner of each page.

## Warranty Policy

Remlinger Mfg. will warrant all products against defects in material and workmanship manufactured and sold by it. Warranty will only be granted after examination by appropriate personnel. This warranty is expressly limited to the replacement of defective products. This warranty does not obligate Remlinger Manufacturing to cover cost of labor to replace these parts.

Remlinger Mfg. reserves the right to change specifications, add improvements or discontinue manufacture of any of its equipment without notice or obligation to purchasers of its equipment. This warranty gives you specific legal rights. You may also have other rights which vary according to state or province.

**WARRANTY EXCLUSIONS:** Labor, transportation, or any cost related to a service call is not provided by Remlinger Mfg. This Limited Warranty does not apply to damage resulting from misuse, neglect, normal wear, accident or improper installation or maintenance.

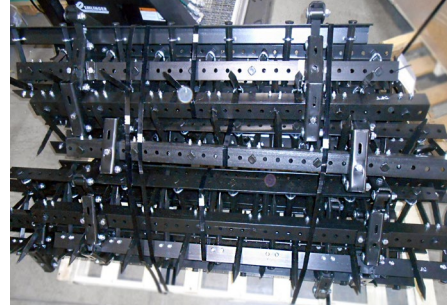
**BASIC WARRANTY:** All Remlinger manufactured products are warranted for one year from date of purchase.

**UNAPPROVED PARTS OR MODIFICATION:** All obligations of Remlinger Mfg. under this Warranty are terminated if unapproved parts are used or if equipment is modified or altered in any way not approved by Remlinger Mfg.

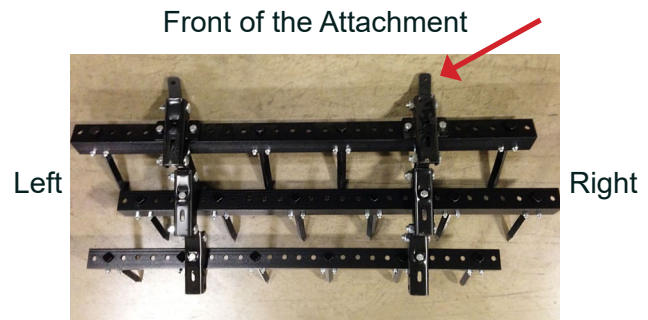
# Mounting the Harrow

## Field Cultivator - Chisel

1. The harrow sections have been factory assembled and rolled into bundles.

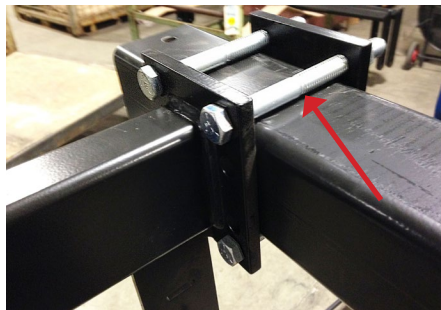


2. Each bundle has the **section size** stenciled on the rear of the last bar. Left hand and right hand sides are determined by standing behind the implement and facing forward. The **chain pulls** on the front of the attachment should face forward, pointing towards the implement.



**\*\* Start at center of the implement and work out from there.**

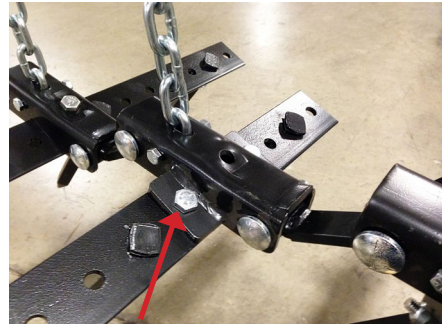
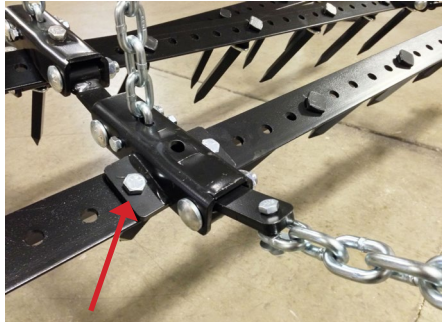
3. Lay the harrow sections out behind the implement. Mount the mounting arms to the rear frame tool. The mounting arm must be directly above the channel brackets on the attachment. Use the **5/8" - 11 x 6 1/2" hex cap bolts** and mounting plates. See common adapters below.







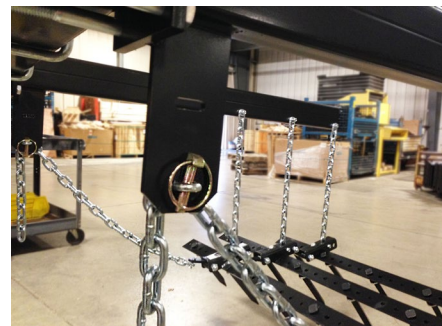
If there are obstacles, mount the lift arm as close to where it needs to be and **move the channel brackets** on the harrow. The channel bracket with 2 ears welded to it doesn't have to be on the front bar.



4. Place the lift chains into the slots in the channel brackets. Use the 7/16" - 14 x 3" hex cap bolts with lock nuts. Next, attach the other end of the lift chain to the mounting arm. Remove any twist in the chain. Use 3/8" - 16 x 3" hex cap bolts with lock nuts. Be certain to use the **3/8" flatwasher** to help hold the chain.



5. Attach the **pull chain to the underside of the chain pull link**. Use the 3/8" - 16 x 1 1/2" hex cap bolts with lock nuts. Again, make certain to use the **3/8" flatwasher** to help hold the chain. Use the 7/16" lynch pin to connect the pull chain to the pull bracket on the mounting arm. Remove any twist in the chain.



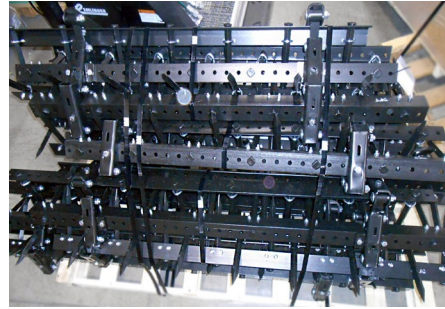
6. Periodically check for loose or worn bolts, replace as necessary. Torque all bolts to recommended torque settings. See chart on [page 10](#).



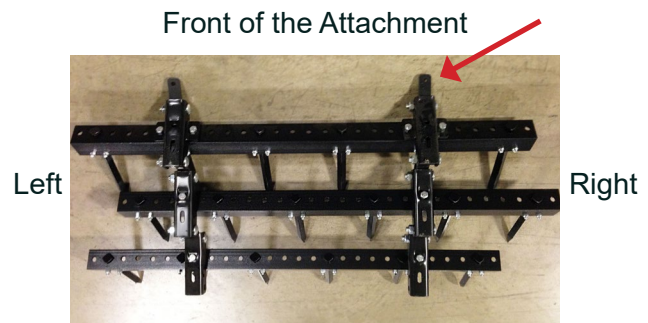
Do not allow the chain to get twisted. Chain twist will cause the inside of the links to rub together. This rubbing will cause the links to wear prematurely and will not be covered by warranty.

# Disk - Disk Chisel

1. The harrow sections have been factory assembled and rolled into bundles.

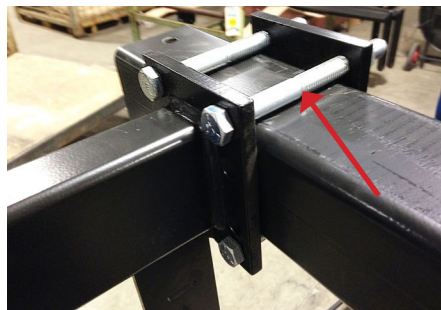


2. Each bundle has the **section size** stenciled on the rear of the last bar. Left hand and right hand sides are determined by standing behind the implement and facing forward. The **chain pulls** on the front of the attachment should face forward, pointing towards the implement.



**\*\* Start at center of the implement and work out from there.**

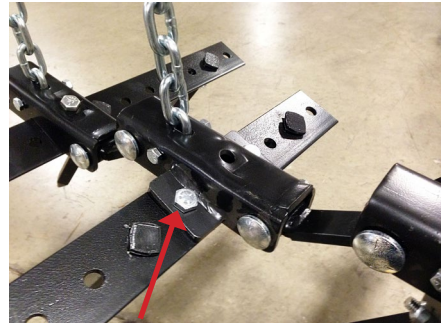
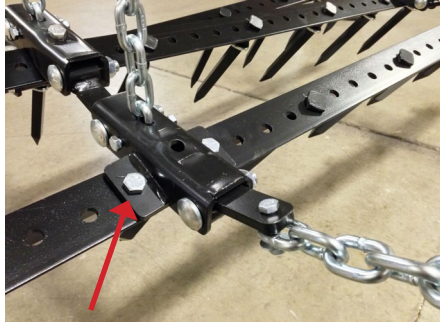
3. Lay the harrow sections out behind the implement. The adapters mount to the rear frame of the implement. The adapter must be mounted directly above the channel brackets on the attachment. Use the 5/8" - 11 x 2" hex caps bolts to attach the mounting arm to the adapter plate.







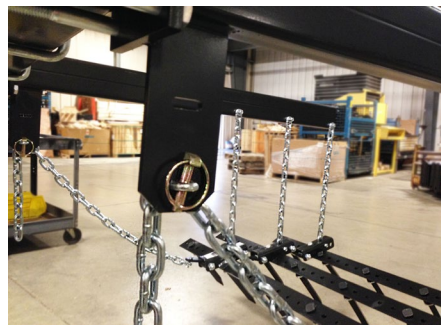
If there are obstacles, mount the lift arm as close to where it needs to be and **move the channel brackets** on the harrow. The channel bracket with 2 ears welded to it doesn't have to be on the front bar.



4. Place the lift chains into the slots in the channel brackets. Use the 7/16" - 14 x 3" hex cap bolts with lock nuts. Next, attach the other end of the lift chain to the mounting arm. Remove any twist in the chain. Use 3/8" - 16 x 3" hex cap bolts with lock nuts. Be certain to use the **3/8" flatwasher** to help hold the chain.



5. Attach the **pull chain to the underside of the chain pull link**. Use the 3/8" - 16 x 1 1/2" hex cap bolts with lock nuts. Again, make certain to use the **3/8" flatwasher** to help hold the chain. Use the 7/16" lynch pin to connect the pull chain to the pull bracket on the mounting arm. Remove any twist in the chain.



6. Periodically check for loose or worn bolts, replace as necessary. Torque all bolts to recommended torque settings. See chart on [page 10](#).



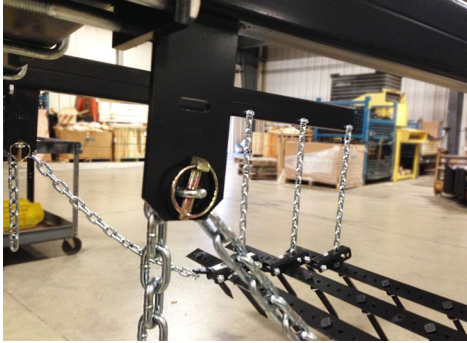
Do not allow the chain to get twisted. Chain twist will cause the inside of the links to rub together. This rubbing will cause the links to wear prematurely and will not be covered by warranty.



# Adjusting the Attachment

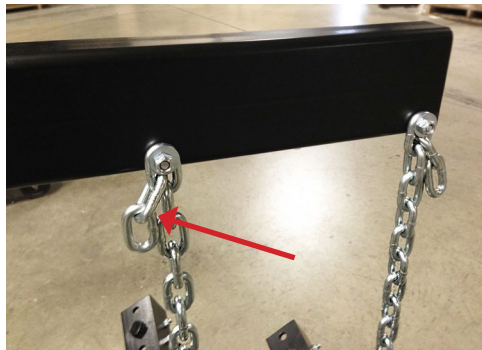
## Pull Chain

- Use the 7/16" Lynch Pin to adjust the chain to the desired length.
- Allow the attachment to float back to a minimum of 10" behind closest blade, sweep or shank.
- The freshly turned soil and residue should come to rest on the ground in front of the attachment bars. Landing on top of the bars may result in plugging.
- Do not allow twist in the chain. Always allow an **even number of links to hang free.**



## Lift Chain

- Use the 3/8" - 16 x 3" Hex Cap Bolt on the mounting arm to adjust the chain to the desired height.
- The attachment teeth should be just touching the ground when the implement is set down on a level surface.
- In normal conditions the lift chains will be loose in the field.
- In heavy residue, the first and/or second chain may need to be shortened to help carry the bar through residue. Normally the first bar causes the plugging issues.
- Carrying the attachment bars in the field with the lift chains may cause premature chain wear.
- Do not allow twist in the chain. Always allow an **even number of links to hang free.**

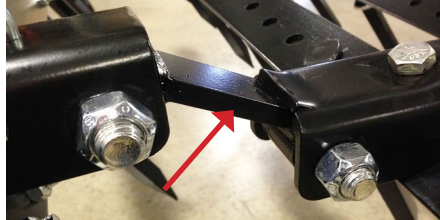


## Pull Link

**Position A** - Allows maximum flexibility in heavy trash conditions (factory set).





**Position B** - Maintains maximum rigidity for better soil shattering.

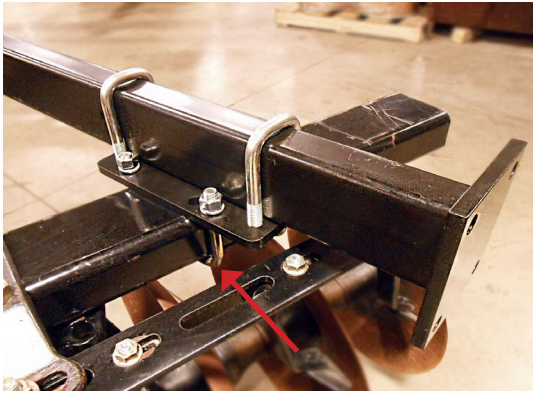


Do not allow the chain to get twisted. Chain twist will cause the inside of the links to rub together. This rubbing will cause the links to wear prematurely and will not be covered by warranty.

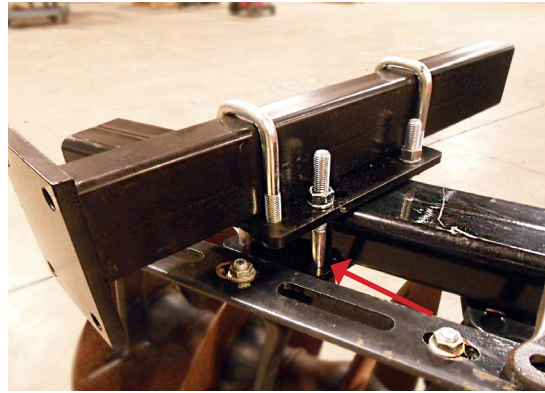
## Recommended Torque Specifications

SAE Grade No.	5		8	
Bolt Head Identification				
Bolt Size	Lb - Ft	N - m	Lb - Ft	N - m
1/4"	9 - 11	12 - 15	12 - 15	16 - 20
5/16"	17 - 20.5	23 - 28	24 - 29	33 - 39
3/8"	35 - 42	48 - 57	45 - 54	61 - 73
7/16"	54 - 64	73 - 87	70 - 84	95 - 114
1/2"	80 - 96	109 - 130	110 - 132	149 - 179
5/8"	150 - 180	203 - 244	220 - 264	298 - 358
3/4"	270 - 324	366 - 439	380 - 456	515 - 618
7/8"	400 - 480	542 - 651	600 - 720	814 - 976
1"	580 - 696	787 - 944	900 - 1080	1220 - 1464
1-1/8"	800 - 880	1085 - 1193	1280 - 1440	1736 - 1953
1-1/4"	1120 - 1240	1519 - 1681	1820 - 2000	2468 - 2712
1-3/8"	1460 - 1680	1980 - 2278	2380 - 2720	3227 - 3688
1-1/2"	1940 - 2200	2631 - 2983	3160 - 3560	4285 - 4827

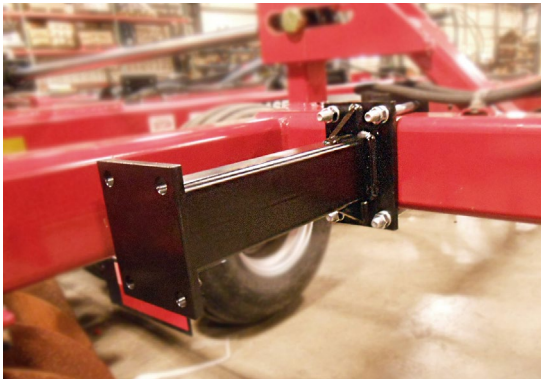
# Common Adapter Mounts



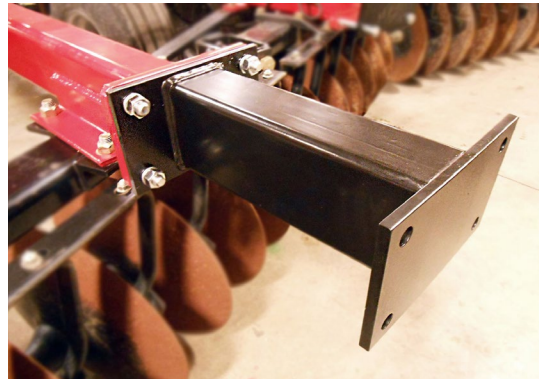
Universal Adapter - Disk Gang (U-Bolt)



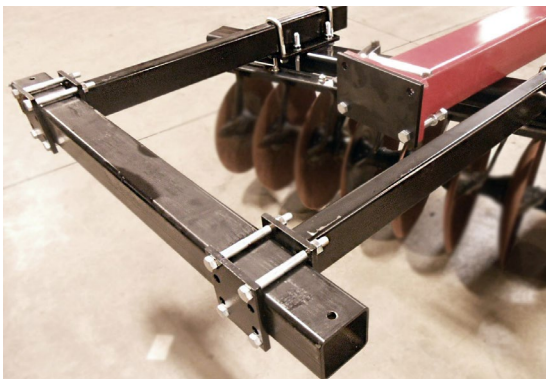
Universal Adapter - Disk Gang (U-Plate)



Butt-up Adapter - Straight Rear Frame



Butt-up Adapter - Welded Rear Plate



Universal Adapter - Rear Mount Frame



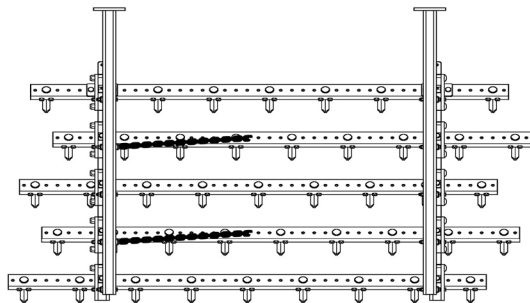
Butt-up Adapter - Rear Mount Frame

# Optional Harrow Accessory Kits

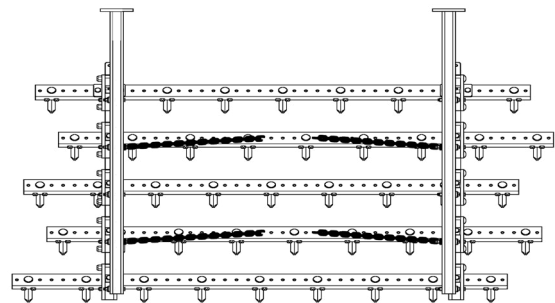
## Cross Chains for Flat Fold & 5 Section Double Fold Wing Implements Only (Optional Kit)

Cross Chains are required on Flat Folding and Double Wing Folding Implements. The chains retain the harrow sections while the wing folds for transport on flat fold models and the harrow sections while the secondary wing folds for transport. These chains are only required on the outside arm on each wing for flat folding wings and only required on the secondary wing on 5 section double fold models.

**Note: Views are shown from standing behind the implement!**

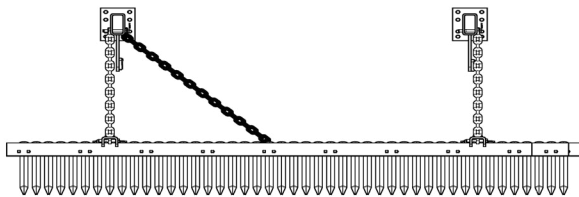


Flat Fold (LH Wing Shown)

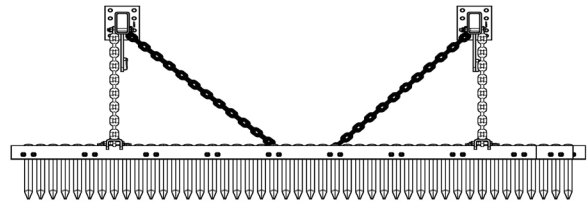


Double Fold (Outer Wing Shown)

The diagram above shows the location of the cross chains on a 5 Bar Harrow section (2nd & 4th Bars). On the 3 & 4 Bar Harrow sections, place the chains on the 1st & 3rd bars. The cross chain kit contains (8) 31 links of chain and required hardware needed within the complete harrow kit for implements using this kit.



Flat Fold (LH Wing Shown)



Double Fold (Outer Wing Shown)

The final diagram shows where to attach the cross chains. Remove the 3/8" x 3" bolt that attaches the lift chain to the mounting arm (see top diagram for proper location). Place the cross chain on the side opposite of the lift (inside position). Use the 3/8" x 3 1/2" bolt, locknut and two flat washers. Place the flat washers to the outside to help hold both chains. Attach other end of the cross chain to the corresponding bar. Use 1/2" x 1 1/4" bolt, lock nut and flat washer. When attaching the remaining end, stretch chain towards the center of the harrow section. The chains should not move the section left or right. The lift chains should still hang straight down.

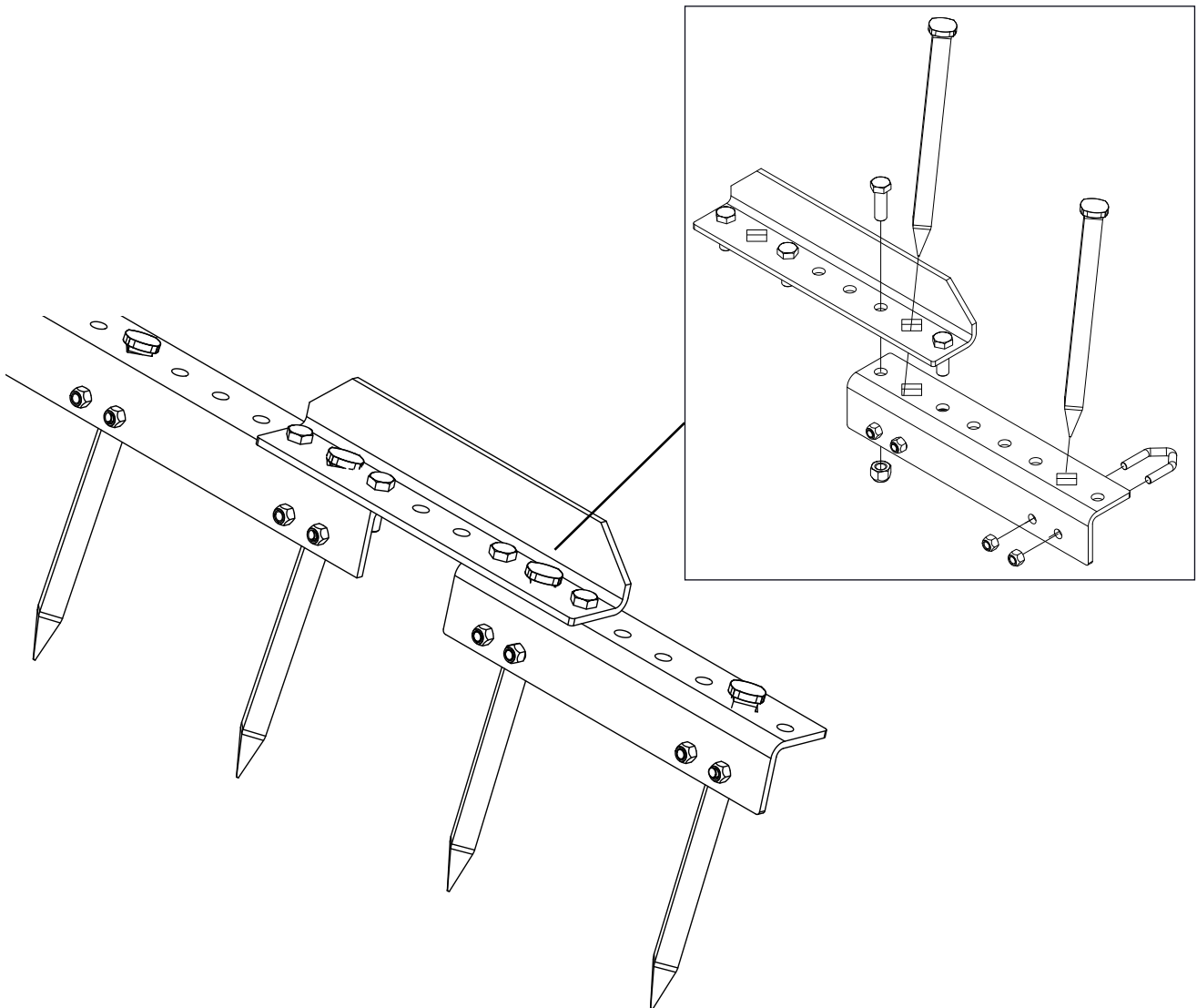


## Bolt - On 18" & 36" Extension Kit Optional Kit - Required to Extend an Existing Harrow

The extension is added when standard size harrow sections will not appropriately cover the cut of the implement. The extension comes in 18" or 36" lengths. The 18" extension provides an additional 9" per side. The 36" extension (shown) provides an additional 18" per side. The extension bolts to any existing 3, 4 or 5 bar HD Angle Iron Flexible Harrow.

**Extension Kit (Rigid):** Remove the outside tooth from one end of each bar. Use (2) 1/2" x 1 1/2" hex head bolts with locknuts to attach the L-A0055 connecting bracket to the end of each bar as shown. Again use (2) 1/2" x 1 1/2" hex head bolts with locknuts to attach extension to each connecting bracket as shown. Finally, replace the teeth and tighten them into place using the special "V" shaped U-bolt.

**Note:** Also can be used to connect (2) complete sections together if mounting arm confliction arises when attaching complete harrow kit to your machine.





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Parts Book



Email Tech Support