



HAWKINS



TRAILBLAZER™ - STC OWNER'S MANUAL

FOR PART NUMBERS 602408, 602411

REVISED 10.19

TABLE OF CONTENTS



GENERAL INFORMATION

| | |
|-----------------------------------|---|
| HOW TO USE THIS MANUAL..... | 1 |
| WARRANTY INFORMATION | 2 |
| SAFETY | 3 |
| SIGNAL WORDS..... | 3 |
| EQUIPMENT SAFETY GUIDELINES | 4 |

SAFETY

| | |
|----------------------------|---|
| SAFETY SIGN LOCATIONS..... | 5 |
| SAFETY SIGN CARE..... | 6 |
| OPERATIONAL SAFETY | 7 |

INSTALLATION

| | |
|--------------------------|---|
| INSTALLATION GUIDE | 9 |
|--------------------------|---|

OPERATIONS

| | |
|-------------------------------|----|
| WHAT TO EXPECT | 21 |
| ADJUSTMENTS | 22 |
| WEIGHT ADJUSTMENT CHART | 23 |
| TROUBLESHOOTING | 25 |
| BOLT TORQUE CHART | 26 |

PARTS GUIDE

16" NOTCHED BLADE

| | |
|----------------------------|----|
| - LEFT ARM PARTS..... | 27 |
| - RIGHT ARM PARTS | 28 |
| - LEFT ARM ASSEMBLY..... | 29 |
| - RIGHT ARM ASSEMBLY | 30 |
| - BLADE ASSEMBLY..... | 31 |

13" TOOTHED BLADE

| | |
|-----------------------------------|----|
| - LEFT ARM PARTS | 32 |
| - RIGHT ARM PARTS..... | 33 |
| - LEFT ARM ASSEMBLY | 34 |
| - RIGHT ARM ASSEMBLY..... | 35 |
| - LEFT BLADE ASSEMBLY | 36 |
| - RIGHT BLADE ASSEMBLY..... | 37 |
| SINGLE HUB BEARING ASSEMBLY | 38 |

GENERAL INFORMATION



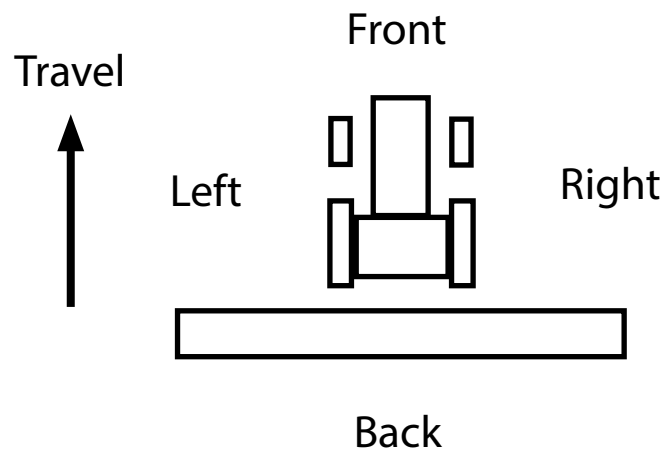
HOW TO USE THIS MANUAL

This manual is divided into sections. The first section contains a Table of Contents, General Information, Installation Guide and a Part Number Index. The remaining sections divide the machine into assemblies and sub-assemblies which illustrate and list all parts.

Hawkins Ag parts in this manual are specially designed for this machine and should be replaced with Hawkins Ag parts only.

Information in this manual was current at time of printing. However, due to Hawkins ongoing product improvement, production changes may cause your machine to appear slightly different in detail. Hawkins Ag reserves the right to change specifications or design without notice and without incurring obligation to install the same on machines previously manufactured.

Right-hand and left-hand as used in this manual are determined by facing the direction the machine will travel while in use.



MANUAL REPLACEMENT INFORMATION

Replacement manuals are available. Call the Hawkins Ag Main Office at 308.708.8185, or download a printable PDF from our website, www.HawkinsAg.com.

MANUAL REVISIONS

When this manual is revised, the modification date is printed on the front cover and on the revised page(s).

TOUCH-UP PAINT

Repaint parts where paint is worn or scratched to prevent rust. Aerosol touch-up paint is available. To order, call Hawkins Ag at 308.708.8185.



INTRODUCTION

Thank you for your purchase of Trailblazer™- STC row units. Putting your trust in our equipment is something we don't take lightly and are humbled that you chose Hawkins Ag. Having designed all of our equipment with farmers like you in mind, we hope you enjoy years of productive use from it. Please read and understand this manual before operation.

WARRANTY INFORMATION

AGROdeviate LLC (AGROdeviate) warrants each Hawkins Ag product it manufactures to be free from defects in material and workmanship for a period not to exceed one (1) year from the date of sale to the original owner. The warranty is valid provided written notice of the alleged defect is received by AGROdeviate during said period and within ten (10) working days after its discovery.

In addition, AGROdeviate warrants each TOOLBAR FRAMEWORK to be free from defects in material and workmanship for a period not to exceed three (3) years from the date of sale to the original owner. The warranty is valid providing written notice of the alleged defect is received by AGROdeviate during said period and within ten (10) working days after its discovery.

This warranty is subject to completion of Product Registration and submission to AGROdeviate. Warranty applies only if product is installed, operated, and maintained according to product manual and instructions. Warranty will be void if the product has been subject to misuse, misapplication, neglect, collision with obstruction, or alteration.

For products, parts, and components NOT manufactured by AGROdeviate, the warranty obligations of AGROdeviate shall be limited to the Original Equipment Manufacturers' warranty. Tires on AGROdeviate equipment are warranted through the respective tire manufacturer and their network of dealers.

All returns must be pre-approved by AGROdeviate and authorization issued before return. All returns must include a copy of the original invoice in order to be processed. Any returns without a copy of the original invoice will not be eligible to receive credit.

If determined that the product is defective in material and/or workmanship, the necessary parts will be replaced and/or repaired. All warranty repair or labor is to be performed by an AGROdeviate authorized party. AGROdeviate obligation under this warranty shall be limited to repairing or replacing parts deemed defective. Warranty does not cover travel expenses. AGROdeviate will bear no other costs including loss, incurred labor, rental fees, nor other.

All returns shall be pre-paid. If warranty is approved by AGROdeviate, return freight will be credited.

This warranty by AGROdeviate LLC is expressly in lieu of all other warranties, expressed or implied, including warranty of merchantability and fitness for use. We neither assume, nor authorize, any other entity to accept for us any liability relating to the sale of our products.



SAFETY

TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.



**THIS SYMBOL MEANS:
-ATTENTION!
-BECOME ALERT!
-YOUR SAFETY IS INVOLVED!**

SIGNAL WORDS:

Note the use of signal words DANGER, WARNING, and CAUTION with the safety messages. The appropriate signal word for each has been selected using the following guidelines:



DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.



WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.



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.

If you have questions not answered in this manual, require additional copies, or the manual is damaged, please contact Hawkins Ag, 2120 4th Ave., Holdrege, NE 68949, 308.708.8185, or visit our website: www.hawkinsag.com.



SAFETY... YOU CAN LIVE WITH IT!



EQUIPMENT SAFETY GUIDELINES

Safety of the operator is one of the main concerns in designing and developing a new piece of equipment. Designers and manufacturers build in as many safety features as possible. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury, study the following precautions and insist those working with you, or for you, follow them.

In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with a safety shield removed. However, equipment should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace the shield prior to use.

Replace any CAUTION, WARNING, DANGER or instruction safety decal that is not readable or is missing. Location of such decals is indicated in this booklet.

Do not attempt to operate this equipment under the influence of drugs or alcohol.

Review the safety instructions with all users annually.

This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar with farm machinery and trained in this equipment's operations. Do not allow persons to operate or assemble the unit until they have read this manual and have developed an understanding of the safety precautions and how it works.

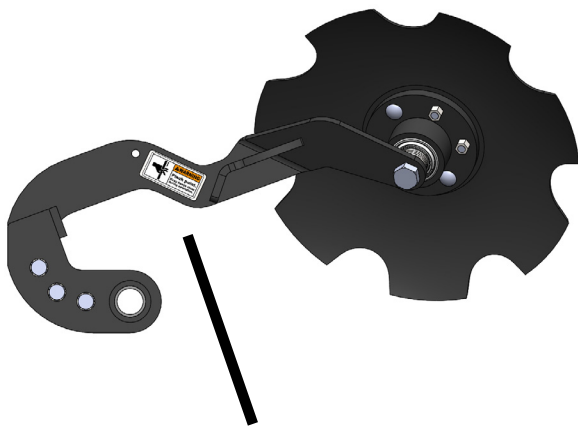
To prevent injury or death, use a tractor with a Rollover Protective Structure (ROPS). Do not paint over, remove or deface any safety signs or warning decals on your equipment. Observe all safety signs and practice the instructions on them.

Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question - DON'T TRY IT.



SAFETY SIGN LOCATIONS

These types of Safety Signs and locations on the equipment are shown in the illustration below. Good safety requires that you familiarize yourself with the various Safety Signs, the type of warning and the area, or particular function related to that area, that require your SAFETY AWARENESS.



461212



461211

REMEMBER: If Safety Signs have been damaged, removed, become illegible or parts replaced without decals, new decals must be applied. New decals are available from Hawkins Ag.

Hawkins Ag
2120 4th Ave.
Holdrege, NE 68949

308.708.8185
www.hawkinsag.com



SAFETY SIGN CARE

- Keep safety signs clean and legible at all times.
- Replace safety signs that are missing or have become illegible.
- Replaced parts that displayed a safety sign should also display the current sign.
- Safety signs are available from Hawkins Ag.

HOW TO INSTALL SAFETY SIGNS

- Be sure that the installation area is clean and dry.
- Decide on the exact position before you remove the backing paper.
- Remove the smallest portion of the split backing paper.
- Align the decal over the specified area and carefully press the small portion with the exposed stick backing in place.
- Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.
- Small air pockets can be pierced with a pin and smoothed out using the piece of decal backing paper.



REMEMBER

Your best assurance against accidents is a careful and responsible operator. If there is any portion of this manual or function you do not understand, contact Hawkins Ag.



BEFORE OPERATION

- Carefully study and understand this manual.
- Do not wear loose-fitting clothing which may catch in moving parts.
- Always wear protective clothing and substantial shoes.
- It is recommended that suitable eye protection be worn.
- The operator may come in contact with certain materials which may require specific safety equipment (ie: extremely dusty, molds, fungus, bulk fertilizers).
- Keep bolts tightened to specific torque listed on page 26.
- Give the unit a visual inspection for any loose bolts, worn parts or cracked welds, and make necessary repairs. Follow the maintenance safety instructions included in this manual.
- Be sure that there are no tools lying on or near the equipment.
- Do not use the unit until you are sure that the area is clear, especially children and animals.
- Because it is possible that this equipment may be used in dry areas or in the presence of combustibles, special precautions should be taken to prevent fires and fire fighting equipment should be readily available.
- Don't hurry the learning process or take the unit for granted. Ease into it and become familiar with your new equipment.
- Practice operation of your equipment and its attachments. Completely familiarize yourself and other operators with its operation before using.



DURING OPERATION

- Keep hands, feet, and clothing clear of moving parts.
- Do not clean, lubricate or adjust your equipment while it is moving.
- Be especially observant of the operating area and terrain - watch for holes, rocks or other hidden hazards. Always inspect the area prior to operation.
- Periodically clear the equipment of brush, twigs or other materials to prevent buildup of dry combustible materials.
- Do not walk or work under raised components or attachments unless securely positioned and blocked.
- Keep all bystanders, pets and livestock clear of the work area.
- Never stand alongside of unit with engine running or attempt to start engine and/or operate machine while standing alongside of unit.
- As a precaution, always recheck the hardware on equipment following every 100 hours of operation. Correct all problems. Follow the maintenance safety procedures.



FOLLOWING OPERATION

- Store the unit in an area away from human activity.
- Do not park equipment where it will be exposed to livestock for long periods of time. Damage and livestock injury could result.
- Do not permit children to play on or around the stored unit.
- Make sure all parked machines are on a hard, level surface.



PERFORMING MAINTENANCE

- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- Before working on this machine, stop the towing vehicle, set the brakes, shut off the engine and remove the ignition keys.
- Be certain all moving parts on attachments have come to a complete stop before attempting to perform maintenance.
- Always use the proper tools or equipment for the job at hand.
- Use extreme caution when making adjustments.
- Follow the torque chart in this manual when tightening bolts.
- Replace all shields and guards after servicing and before moving.
- After servicing, be sure all tools, parts and service equipment are removed.
- Never replace hex bolts with less than Grade 5 bolts unless otherwise specified. Refer to bolt torque chart for head identification marking.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. The manufacturer will not claim responsibility for use of unapproved parts and/or accessories and other damages as a result of their use.
- If equipment has been altered in any way from the original design, the manufacturer does not accept any liability for injury or warranty.
- A first aid kit should be kept readily accessible while performing maintenance on this equipment.

INSTALLATION GUIDE



Needed Tools:

- Safety Glasses
- Leather Gloves
- Rubber Mallet
- Impact Driver
- Socket Wrench
- 1-1/8" Impact Socket
- 1-1/8" Combination Wrench
- 3/4" Impact Socket
- 3/4" Combination Wrench

Included Parts:



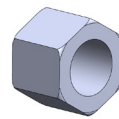
6 x 413508
1/2" Lock Washer



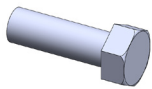
8 x 413117
1 1/4" x 14GA Washer



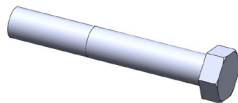
20 x 413072
3/4" Flat Washer SAE



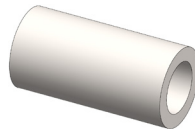
4 x 305101
3/4"-10 Nut Nylon Lock



6 x 411545
1/2"-13 x 1 1/2 GR5 Bolt



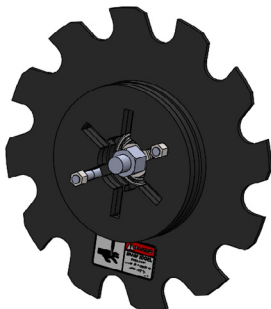
2 x 411594
3/4"-10 x GR5 Bolt



2 x 321523
Crush Sleeve



1 x 305023
3/4"-10 Dual Thread Axle



1 x 305058
13" LH Toothed Blade Assembly



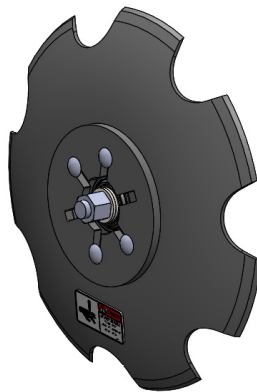
1 x 602406
Left Front Inline Arm



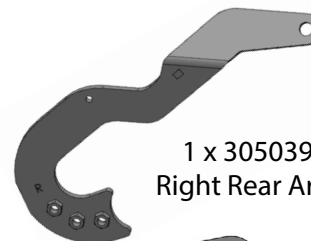
1 x 602407
Right Front Inline Arm



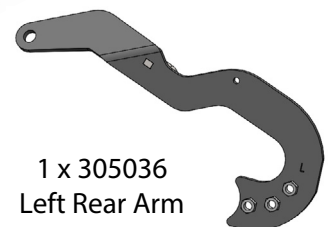
1 x 305059
13" RH Toothed Blade Assembly



1 x 305057
16" Notched Blade Assembly



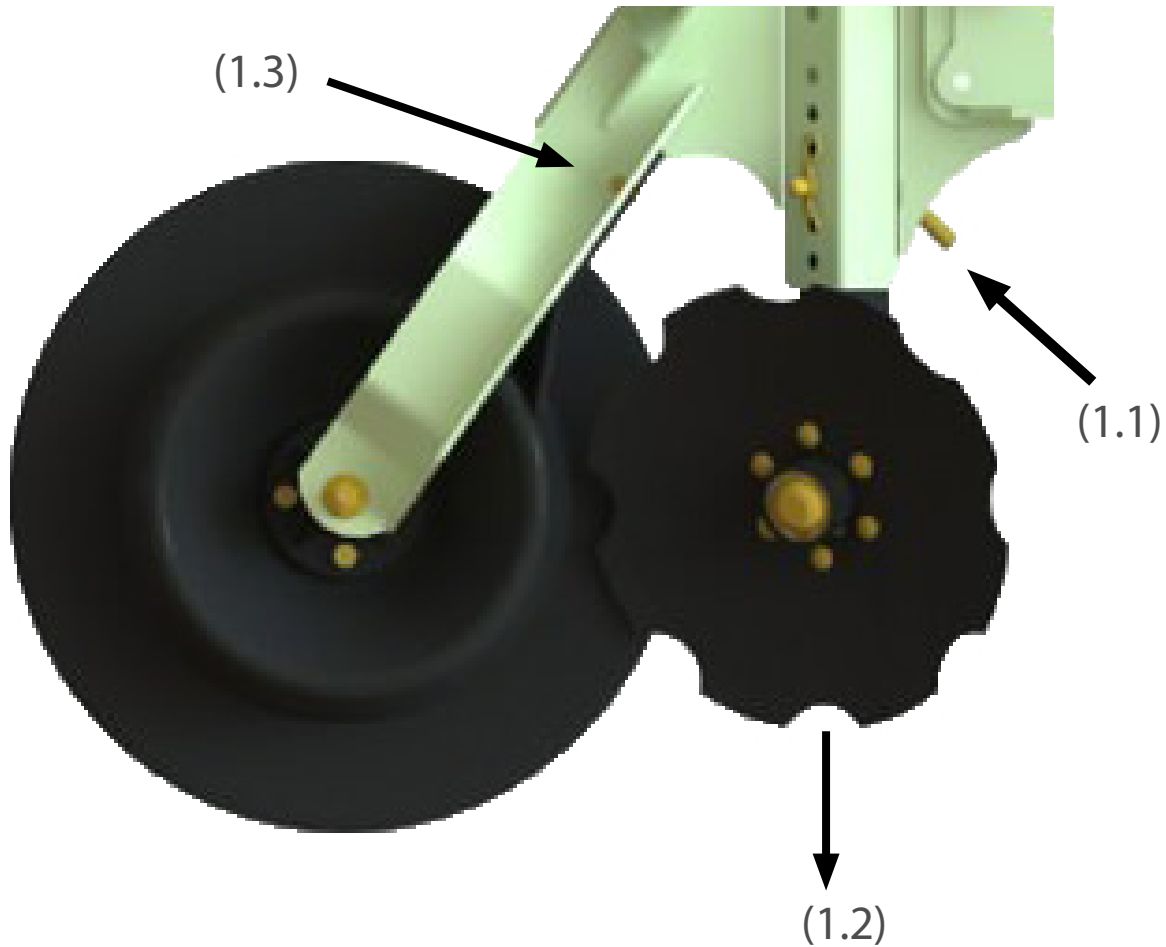
1 x 305039
Right Rear Arm



1 x 305036
Left Rear Arm



(1) Remove Orthman™ 1tRIPr™ Residue Manager



1.1 - Pull pin.

1.2 - Using leather gloves, carefully remove residue manager.

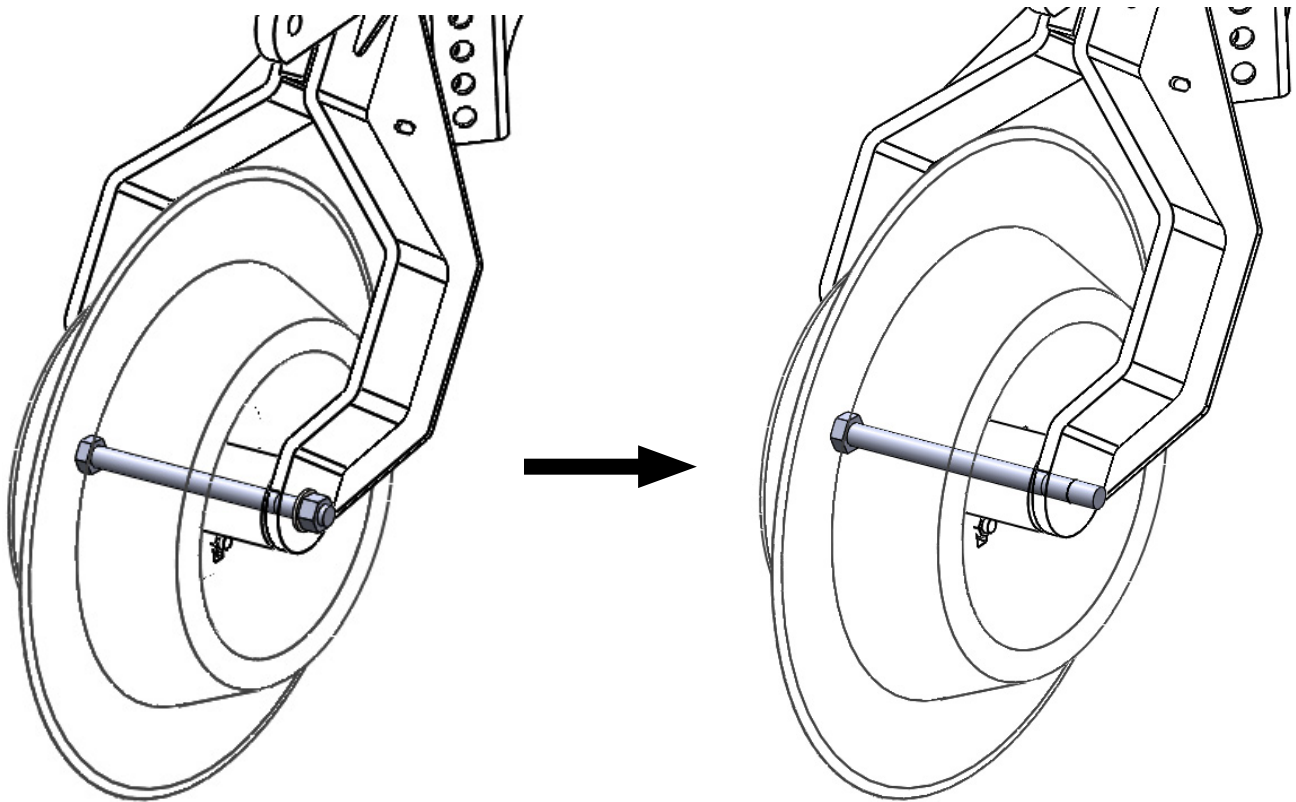
1.3 - Remove the depth band scraper for easier installation of Trailblazer™ - STC.

CAUTION

DO NOT place any body part beneath the residue manager as you remove it.



(2) Remove nut & washer from bolt on depth band

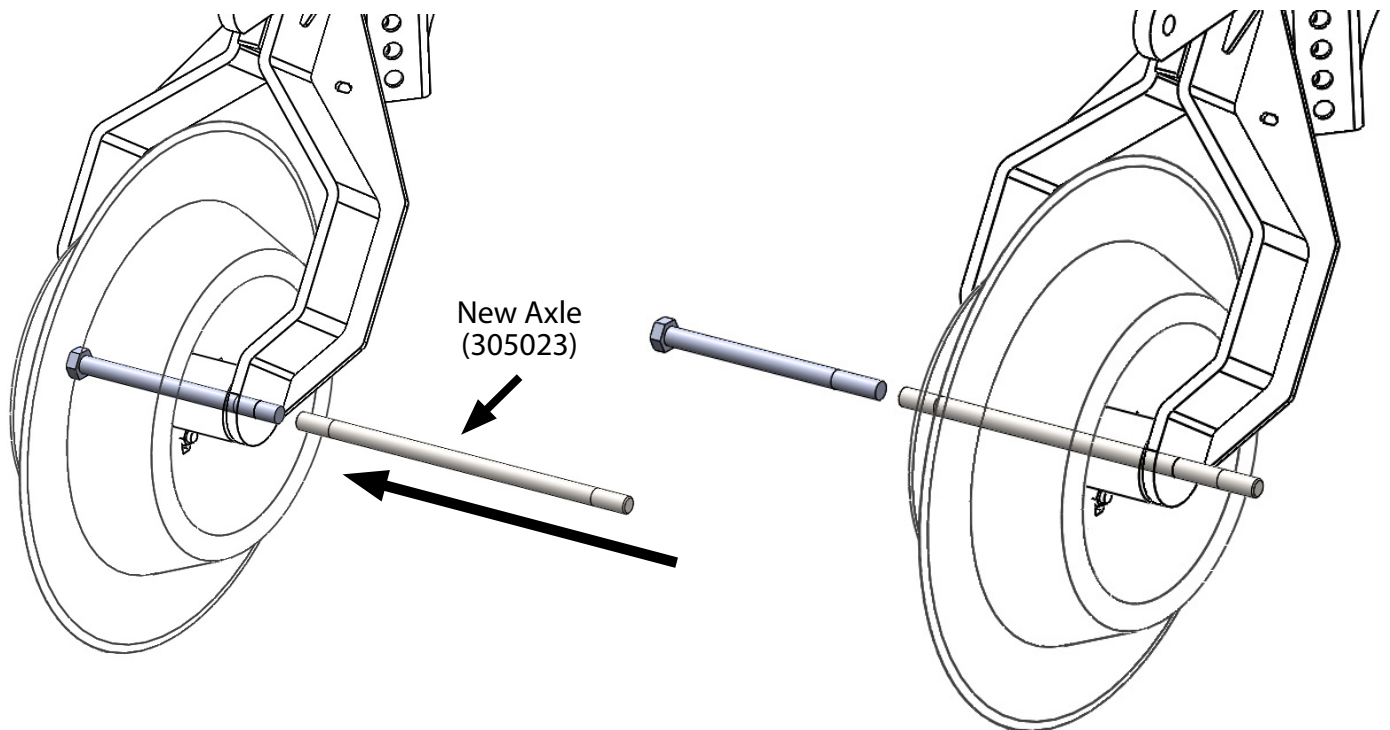


2.1 - Use 1-1/8" Socket and Wrench to loosen nut and washer. Then remove nut and washer.

2.2 - DO NOT remove the bolt from depth band at this time.



(3) - Use new axle & rubber mallet to replace bolt on depth band



3.1 - Aligning the **New Axle (305023)** with the threaded end of the bolt, use rubber mallet to tap in the new axle in place of the bolt. Be careful not to damage the threads on the **New Axle (305023)**.

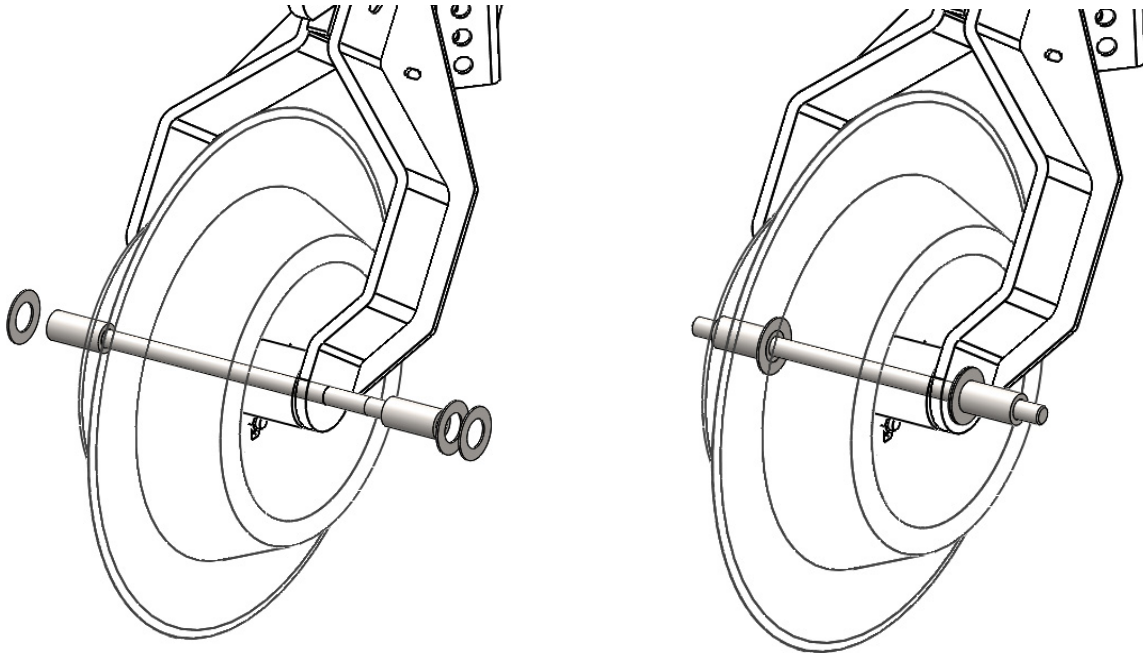
3.2 - Ensure the **New Axle (305023)** is centered, and the same amount of the **New Axle (305023)** is protruding from each side.



DO NOT place any body part beneath the depth band while replacing the bolt



(4) - Add new hardware as shown



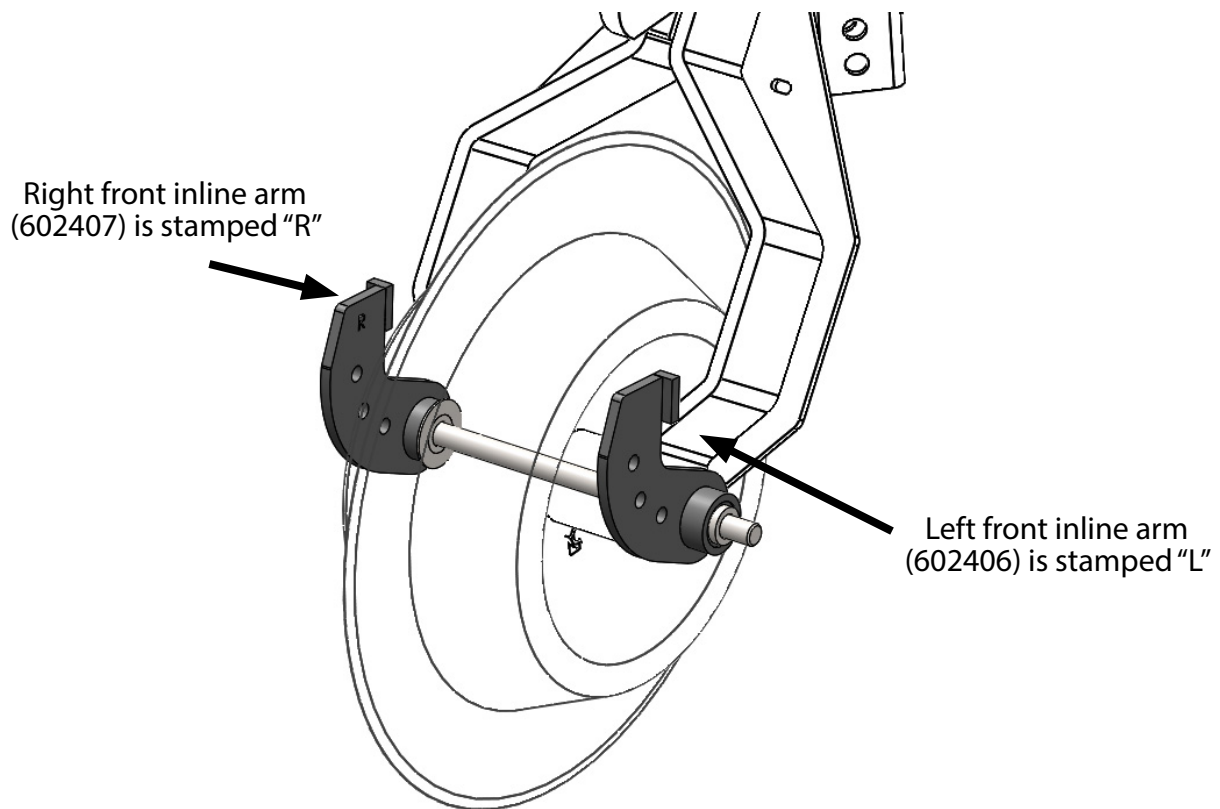
4.1 - Slide one (1) **Crush Sleeve (321523)** over each end of the axle.

4.2 - Slide two (2) **Washers (413117)** over the left crush sleeve, and one (1) **Washer (413117)** over the right crush sleeve.

IMPORTANT: Ensure each **Crush Sleeve (321523)** stays tight against the arm brace and that the **Washer (413117)** fits over the crush sleeve throughout installation. **DO NOT** allow the **Washer (413117)** to slide behind the **Crush Sleeve (321523)**.



(5) - Slide front inline arms over crush sleeve as shown

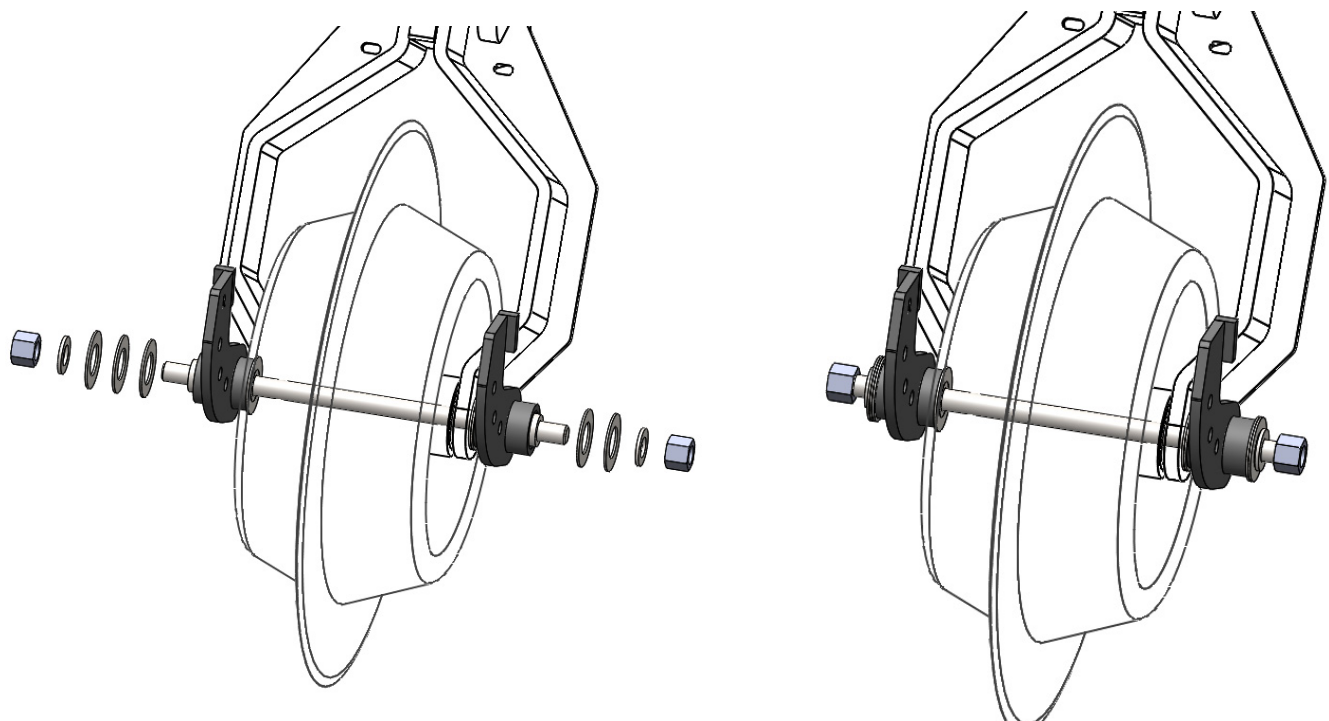


5.1 - Slide **Right Front Inline Arm (602407)** over the **Crush Sleeve (321523)** on the right end of the axle.

5.2 - Slide **Left Front Inline Arm (602406)** over the **Crush Sleeve (321523)** on the left end of the axle.



(6) - Add retaining hardware



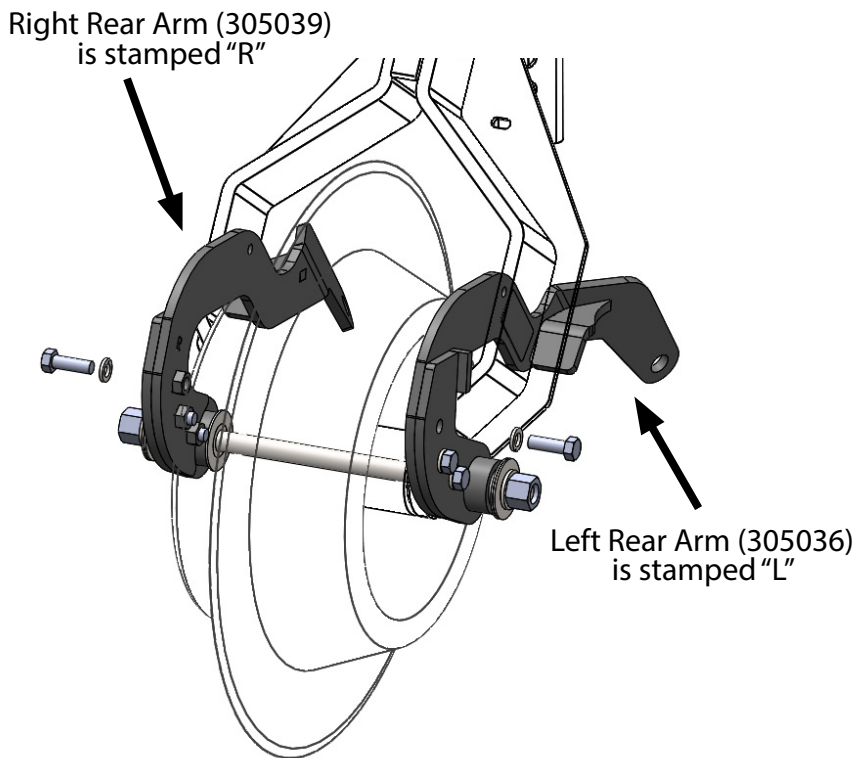
6.1 - Slide three (3) **Washers (413117)** over the right crush sleeve and two (2) **Washers (413117)** over left crush sleeve.

6.2 - Slide one (1) **Washer (413072)** over the right side of the axle and one (1) **Washer (413072)** over the left side of the axle.

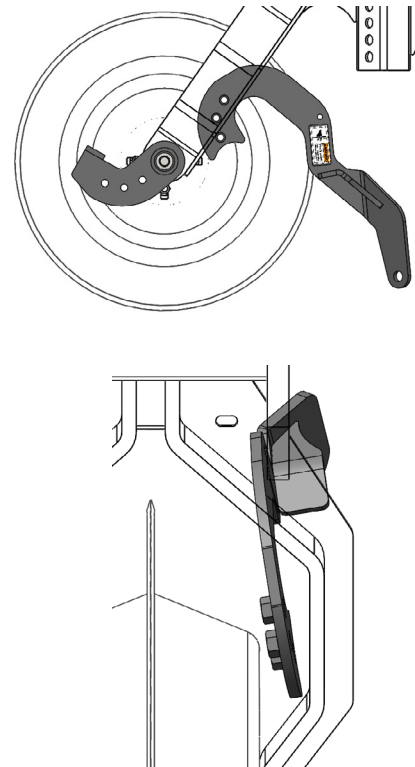
6.3 - Hand-tighten one (1) **Lock Nut (305101)** on the right end of the axle. Hand-tighten one (1) **Lock Nut (305101)** on the left end of the axle. **Leave hand tightened until Step 8.**



(7) - Add rear arms



Slide Rear Arms INSIDE the depth gauge wheel's arm from BEHIND



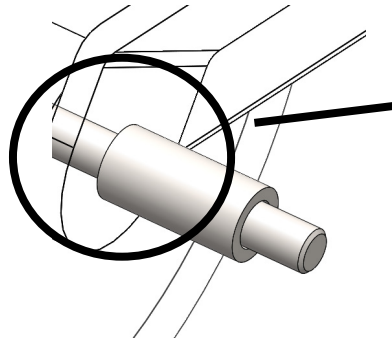
7.1 - Slide **Right Rear Arm (305039)** inside the depth gauge wheel's right arm from behind. Bolt the right front inline arm (already installed) to the **Right Rear Arm (305039)** using three (3) **Bolts (411544)** and three (3) **Lock Washers (413508)**. Tighten Bolts.

7.2 - Slide **Left Rear Arm (305036)** inside the depth gauge wheel's left arm from behind. Bolt the left front inline arm (already installed) to the **Left Rear Arm (305036)** using three (3) **Bolts (411544)** and three (3) **Lock Washers (413508)**. Tighten Bolts.

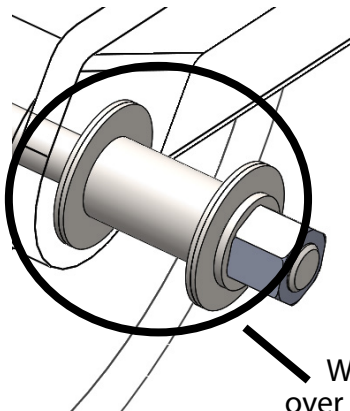


(8) - Tighten axle evenly

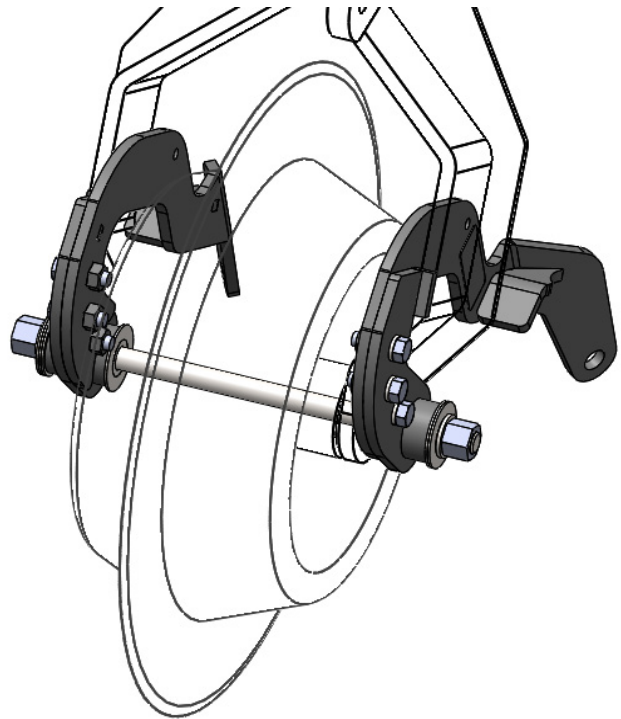
IMPORTANT: Before tightening axle bolts, make sure crush sleeve is in contact with the arm brace and that washers fit over the crush sleeve:



Crush sleeve tight against arm brace.
(Some parts not shown for clarity)



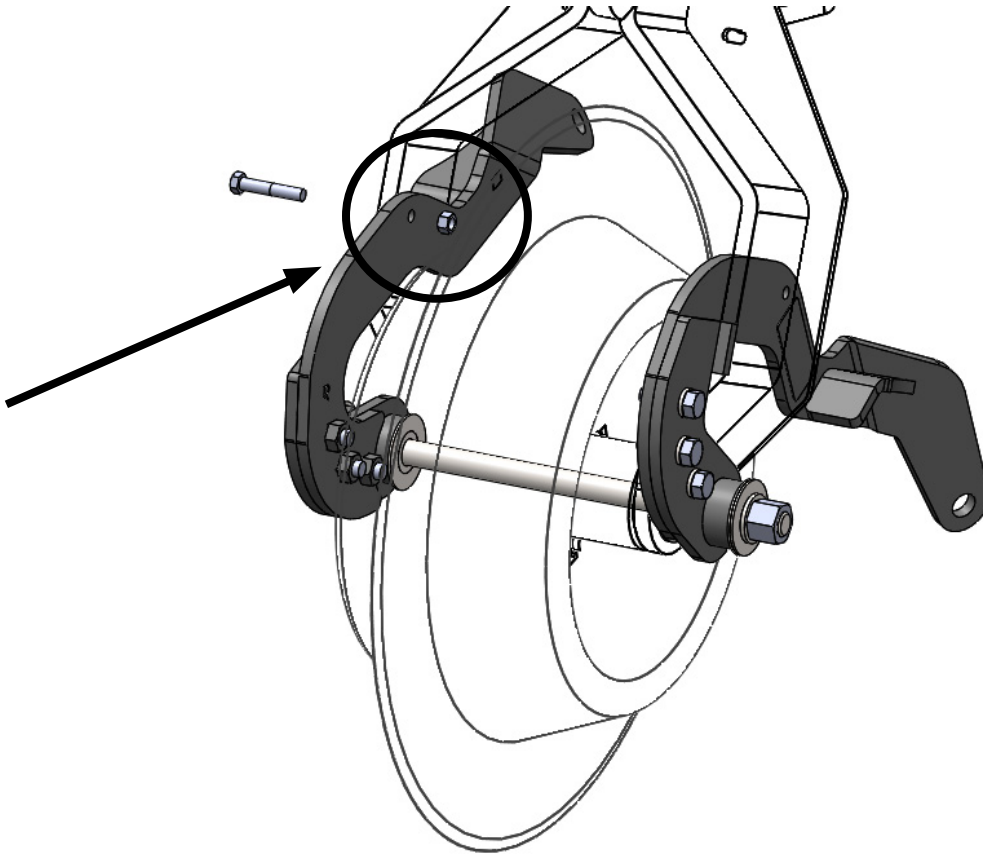
Washers fit over crush sleeve
(Some parts not shown for clarity)



8.1 - Start with 1 1/8" Impact Driver on one side and 1 1/8" Wrench on the other. When the nut on that side is flush, or slightly past flush with end of axle, switch and use the Impact Driver on the opposite side. Arms should move freely. If arms do not move freely, you may need to remove a large washer on side that is not freely rotating. This is a spacer washer that can be moved due to OEM frame variability for proper fit.



(9) - Disengage right arm

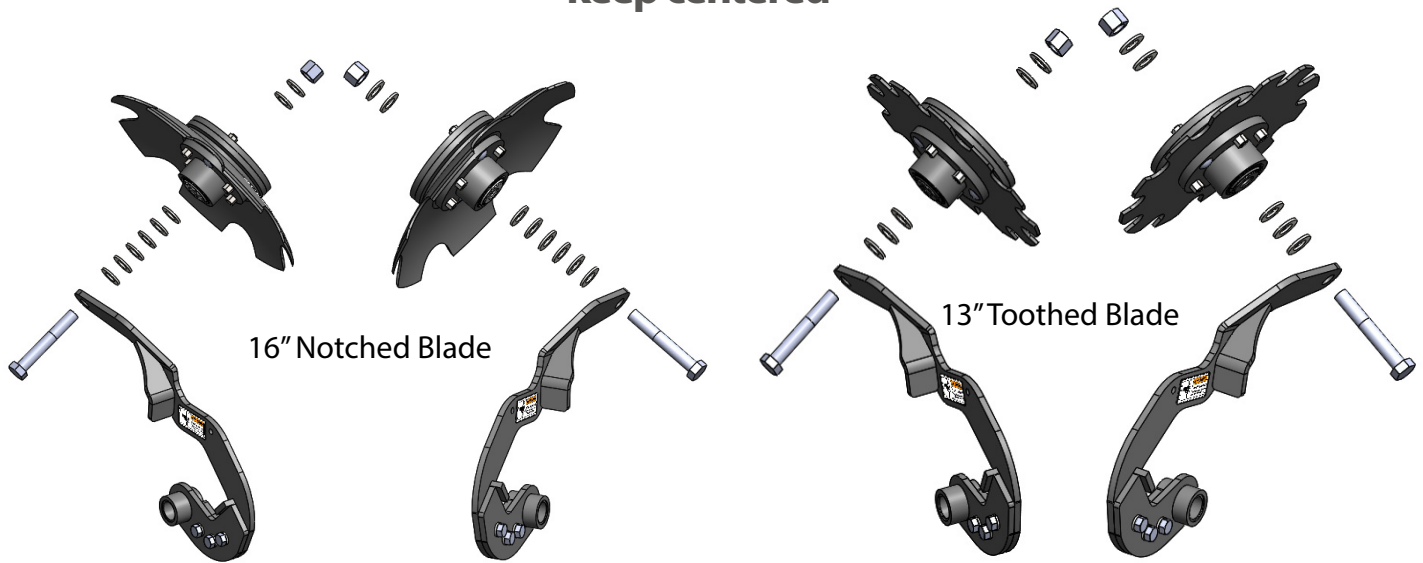


9.1 - Using 3/8" x 2" (or longer) bolt and 3/8" size nut (not included), insert bolt through the disengagement hole in the right arm. Hand tighten nut.

9.2 - Let Right Arm rest against the arm brace.



(10) - Install blade assemblies on each arm using equal numbers of washers to keep centered



10.1 - For Right Blade Assembly, insert **Bolt (411594)**, through right arm.

10.2 - If installing **16\" Notched Coultter Blade (305025)**, slide six (6) **Washers (413072)** over **Bolt (411594)**. If installing **13\" Toothed Blade (305049)**, slide three (3) **Washers (413072)** over **Bolt (411594)**.

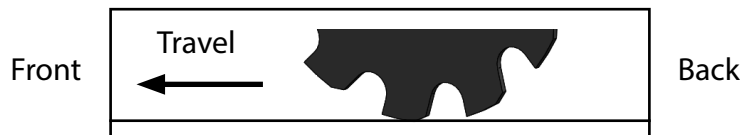
10.3 - Wearing leather gloves, carefully slide **16\" Notched Coultter (305025)**, OR **13\" Toothed Blade (305049)**, over **Bolt (411594)** (as shown).

10.4 - Slide two (2) more **Washers (413072)** over **Bolt (411594)**.

10.5 - Place **Nut (305101)** at end of bolt. Tighten evenly using 1 1/8\" Impact Driver and 1 1/8\" Wrench.

10.6 - Repeat Steps 10.1-10.5 for Left Blade Assembly.

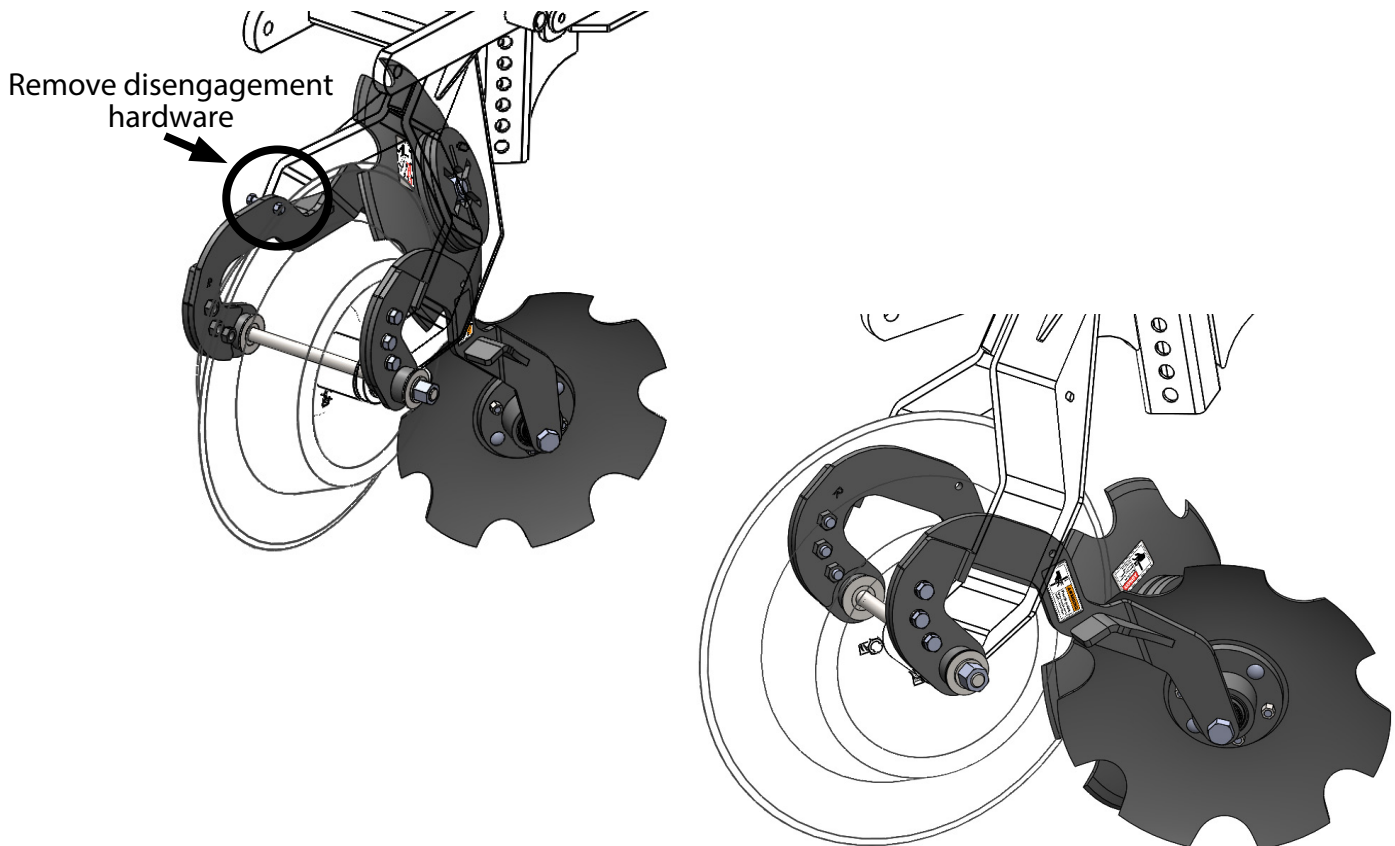
IMPORTANT: With 13\" Toothed Blades, right and left placement will be different. Ensure the Tooth will contact the ground facing forward.



Both 16\" Notched Blades and 13\" Toothed Blades are very sharp. Also, be careful of pinch points between Trailblazer™ - STC and depth gauge wheel arms. Use leather gloves when handling these parts.



(11) - Engage arms



11.1 - Remove disengagement hardware from Right Arm Assembly. Carefully lower the Right Arm Assembly until Arm Rest pushes against depth gauge wheel arm brace.

CAUTION

Both 16" Notched Blade and 13" Toothed Blade are very sharp. Use leather gloves when handling these parts.



WHAT TO EXPECT IN THE FIELD



- Trailblazer™ - STC operates best at speeds above 4 mph. Failure to operate above this speed will cause residue to not move properly
- When set properly, Trailblazer™ - STC will remove the majority of residue
- Trailblazer™ - STC should move freely up and down (see Troubleshooting Guide (page 25) for issues with movement)
- When not in use, Trailblazer™ - STC can be disengaged and does not need to be uninstalled. To disengage, refer to Adjustments (page 24)

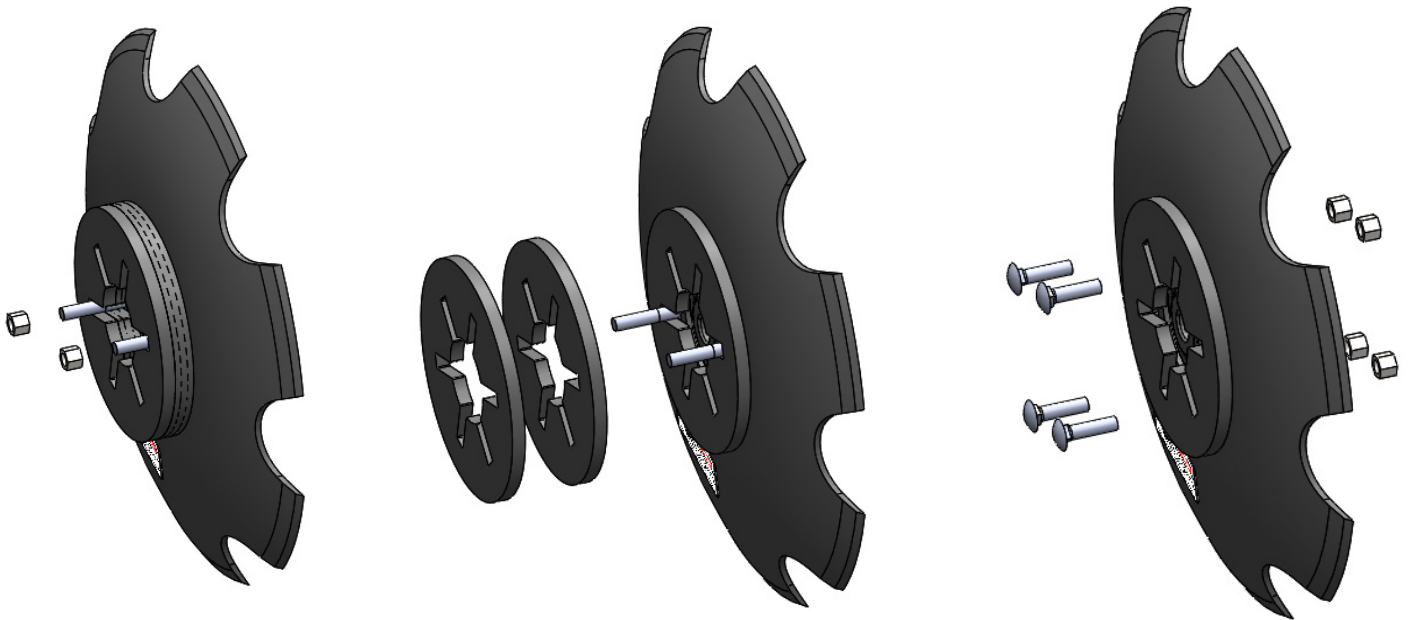
NOTE: These settings are recommendations only. Your soil, moisture, and other variables may require you to adjust slightly differently than recommended.



ADJUSTMENTS

Floating Adjustment

Your Trailblazer™ - STC unit comes equipped with three weights on each arm - each weight is approximately 3 lbs. To move less residue remove one or more weights from each arm.



Adjust blade distance from depth band

You can set the distance of how far away the blade sits from the depth band couler by using fewer washers. It is recommended to use enough washers to avoid the blade interfering with the rear arm assembly.





WEIGHT ADJUSTMENT CHART

Trailblazer™ - STC has three (3) independent weights on each arm assembly. Varying soil and residue conditions will require adjustments of these weights. See chart below for recommendations on settings.

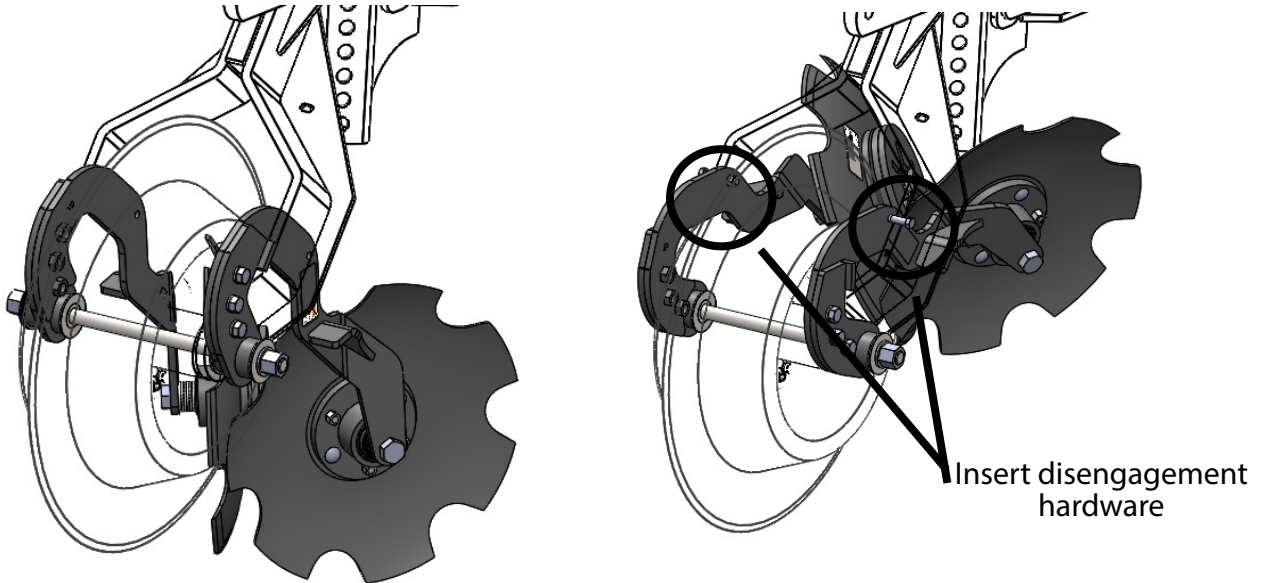
| CROP | SEASON | FIELD CONDITION | # of Weights |
|-----------------|---------------|------------------------|---------------------|
| CORN | FALL | WORKED | 2 |
| | | UNWORKED | 3 |
| | SPRING | WORKED | 1 |
| | | UNWORKED | 2 |
| SOYBEANS | FALL | WORKED | 1 |
| | | UNWORKED | 2 |
| | SPRING | WORKED | 1 |
| | | UNWORKED | 2 |



ADJUSTMENTS

Disengage Trailblazer™ - STC

When field conditions don't require use of the Trailblazer™ - STC, simply place a 3/8" x 2" bolt (or longer) through the disengagement hole on the row cleaner arm on either side of the depth band. Tighten a 3/8" nut on the other side, firmly in place.



Trailblazer™ - STC Do's and Don'ts

- DO NOT operate at low speeds. Ground speed affects how effective Trailblazer™ - STC can manage residue; we recommend operating at 4+ mph to maintain good residue flow.
- DO NOT expect crop residue to be completely cleared. Ground conditions, residue conditions, and ground speed can affect the effectiveness of Trailblazer™ - STC.
- DO work to regularly maintain your Trailblazer™ - STC row units. Keep clean and free of debris, check that bearings move freely and smoothly, and hardware is tight and in good condition. With proper care, you can expect a longer and more effective lifespan for your Hawkins Ag equipment.



TROUBLESHOOTING

| Troubleshooting | | |
|---|---|--|
| Problem | Possible Cause | Solution |
| Blade is not turning | Blade not making contact with the ground. Residue build-up is preventing the blade from turning. Bearing hub bolt is bent or warped. | Adjust weights and spacers on each arm. Remove residue build-up from the row cleaner. Replace bearing hub bolt. |
| Arms are not floating up and down properly | Residue build-up on the residue manager. Hardware is binding. Arm is bent or warped. | Clear residue build-up from the row cleaner. Replace hardware that is binding. Replace arm. |
| Residue is being thrown in the wrong direction or not being thrown at all | Row cleaner arms are installed incorrectly. Blade assembly being prevented from running correctly due to residue build-up, bearing seizure, or bent/warped hardware. | Re-install row cleaner arms using the Installation Guide. Identify issue and either remove residue or replace bearings or hardware. |



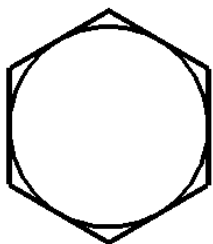
CHECKING BOLT TORQUE

The table shown below gives correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same grade bolt.

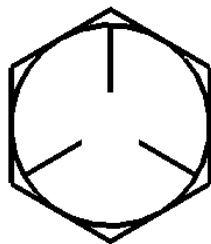
| Torque Specifications | | | | | | |
|-----------------------|--------------|-------|-------------|-------|-------------|--------|
| Bolt Diameter | Bolt Torque* | | | | | |
| | SAE Grade 2 | | SAE Grade 5 | | SAE Grade 8 | |
| INCH | lb-ft | (N.m) | lb-ft | (N.m) | lb-ft | (N.m) |
| 1/4 | 6 | (8) | 9 | (12) | 12 | (17) |
| 5/16 | 10 | (13) | 19 | (25) | 27 | (36) |
| 3/8 | 20 | (27) | 33 | (45) | 45 | (63) |
| 7/16 | 30 | (41) | 53 | (72) | 75 | (100) |
| 1/2 | 45 | (61) | 80 | (110) | 115 | (155) |
| 9/16 | 70 | (95) | 115 | (155) | 165 | (220) |
| 5/8 | 95 | (128) | 160 | (215) | 220 | (305) |
| 3/4 | 165 | (225) | 290 | (390) | 400 | (540) |
| 7/8 | 170 | (230) | 420 | (570) | 650 | (880) |
| 1 | 226 | (345) | 630 | (850) | 970 | (1320) |

BOLT HEAD IDENTIFICATION

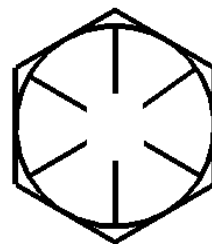
Grade 2



Grade 5

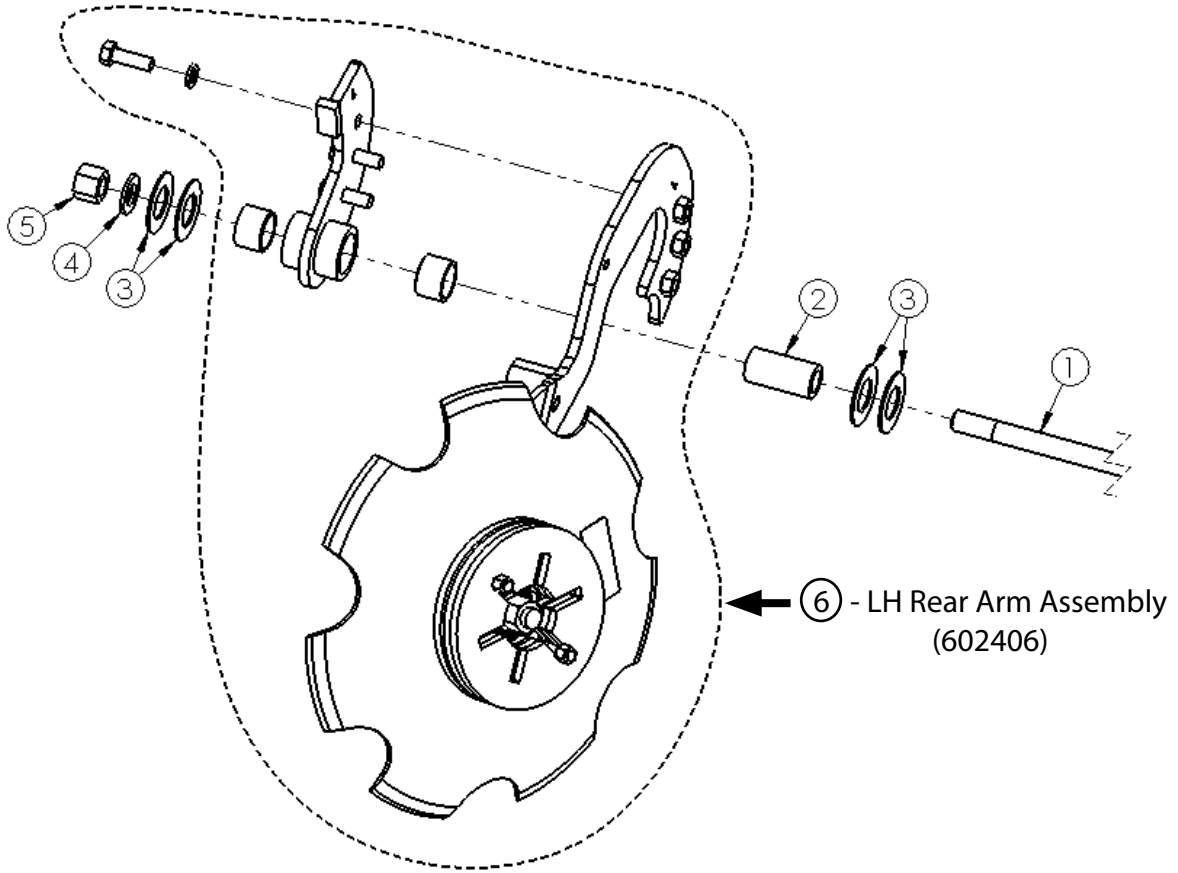


Grade 8





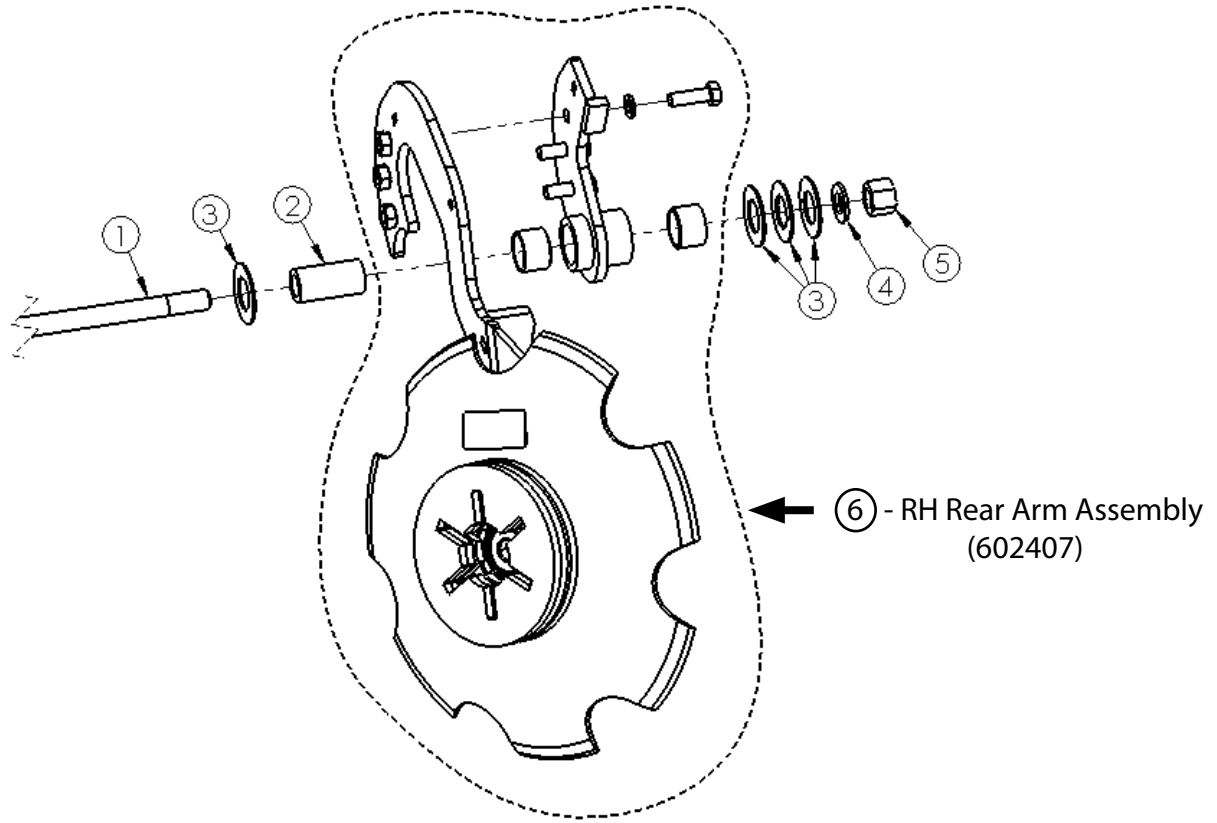
LEFT ARM PARTS - 16" NOTCHED BLADE



| Item Number | Part # | Description | Quantity |
|-------------|--------|-------------------------|----------|
| 1 | 305023 | 3/4-10 Dual Thread Axle | 1 |
| 2 | 321523 | Crush Sleeve | 1 |
| 3 | 413117 | 1 1/4 X 14GA Washer | 4 |
| 4 | 413072 | 3/4 Flat Washer SAE | 1 |
| 5 | 305101 | 3/4-10 Nut Nylon Lock | 1 |
| 6 | 602406 | LH Rear Arm Assembly | 1 |



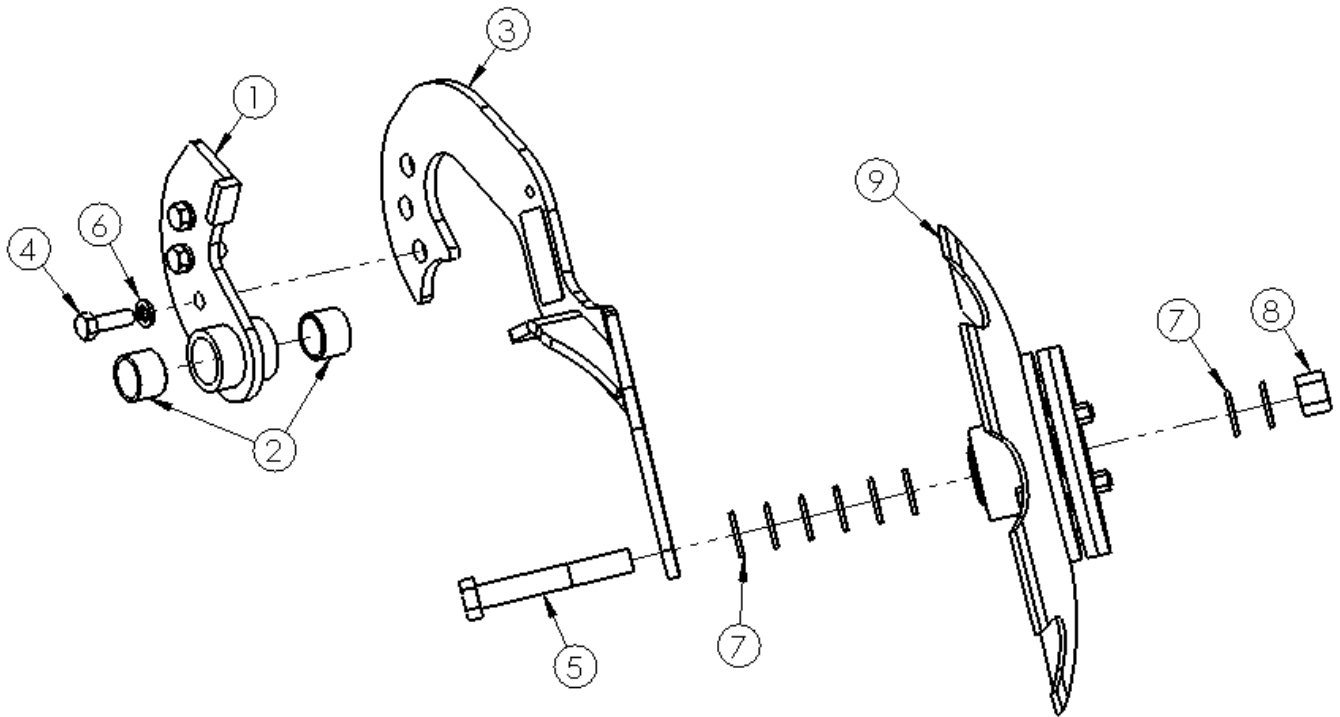
RIGHT ARM PARTS - 16" NOTCHED BLADE



| Item Number | Part # | Description | Quantity |
|-------------|--------|-------------------------|----------|
| 1 | 305023 | 3/4-10 Dual Thread Axle | 1 |
| 2 | 321523 | Crush Sleeve | 1 |
| 3 | 413117 | 1 1/4 X 14GA Washer | 4 |
| 4 | 413072 | 3/4 Flat Washer SAE | 1 |
| 5 | 305101 | 3/4-10 Nut Nylon Lock | 1 |
| 6 | 602407 | RH Rear Arm Assembly | 1 |



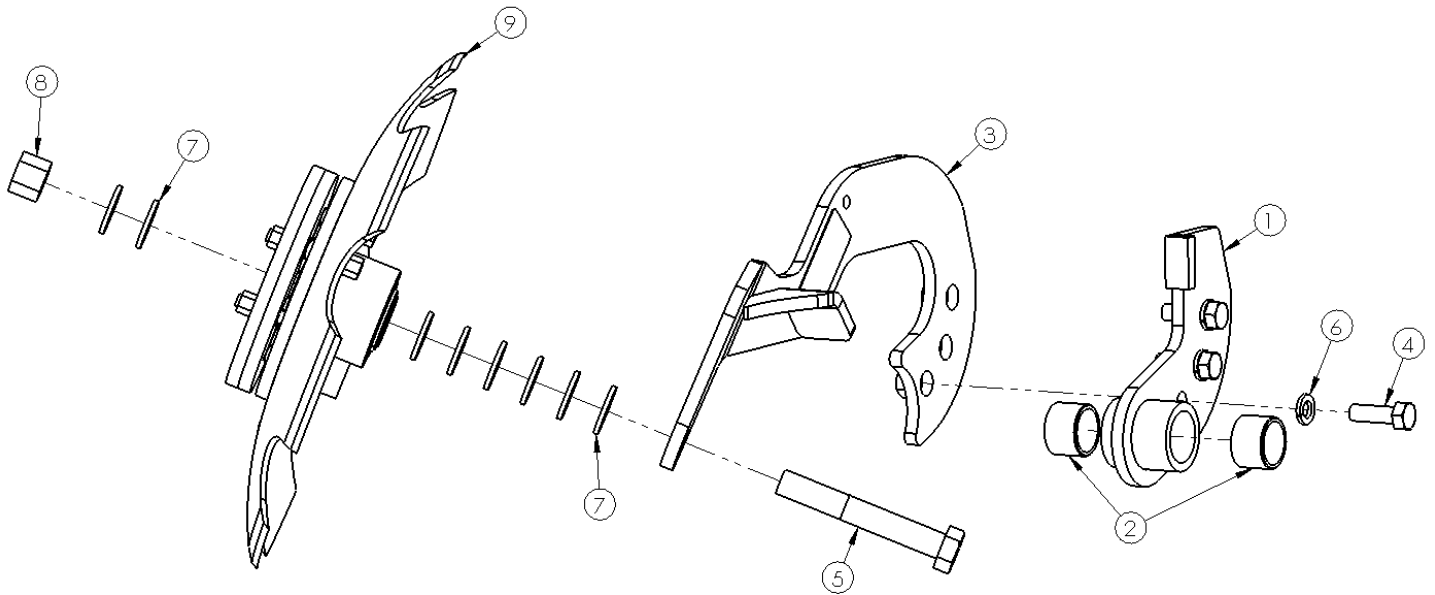
LEFT ARM ASSEMBLY - 16" NOTCHED BLADE



| Item Number | Part # | Description | Quantity |
|-------------|--------|----------------------------|----------|
| 1 | 305031 | LH Inline Arm Weldment | 1 |
| 2 | 305027 | 3/4" Poly Bushing | 2 |
| 3 | 305036 | LH Rear Arm Weldment | 1 |
| 4 | 411545 | 1/2-13 X 1 1/2 GR5 Bolt | 3 |
| 5 | 411594 | 3/4-10 X 5 GR5 Bolt | 1 |
| 6 | 413508 | 1/2 Lock Washer | 3 |
| 7 | 413072 | 3/4 Flat Washers SAE | 8 |
| 8 | 305101 | 3/4-10 Hex Nut Nylon Lock | 1 |
| 9 | 305057 | 16" Notched Blade Assembly | 1 |



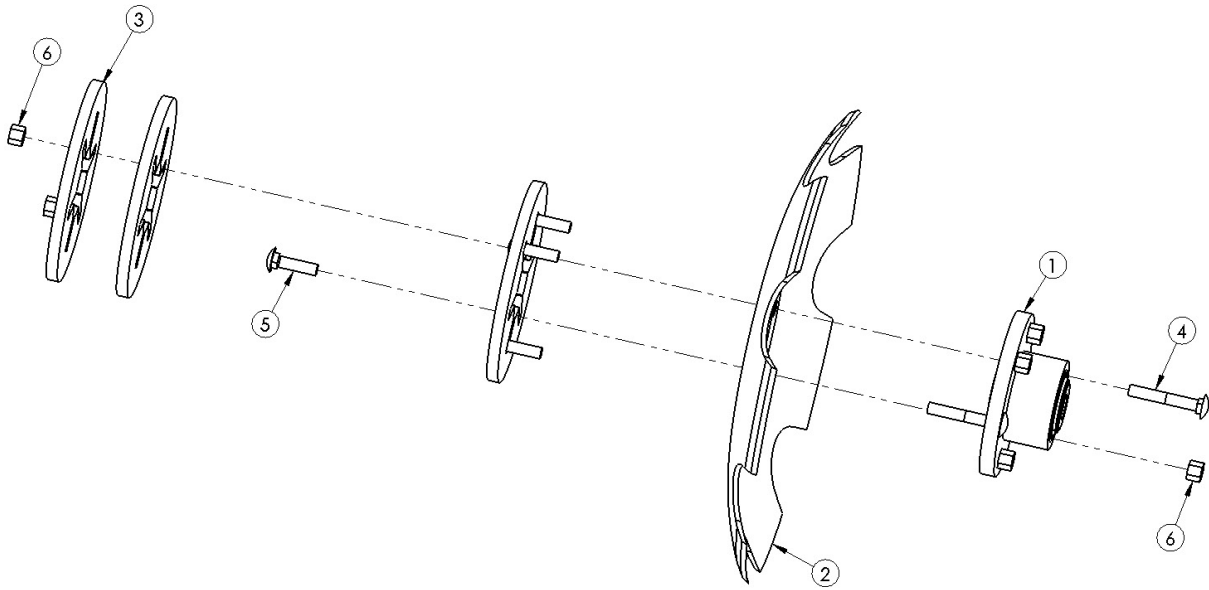
RIGHT ARM ASSEMBLY - 16" NOTCHED BLADE



| Item Number | Part # | Description | Quantity |
|-------------|--------|----------------------------|----------|
| 1 | 305031 | RH Inline Arm Weldment | 1 |
| 2 | 305027 | 3/4" Poly Bushing | 2 |
| 3 | 305036 | RH Rear Arm Weldment | 1 |
| 4 | 411545 | 1/2-13 X 1 1/2 GR5 Bolt | 3 |
| 5 | 411594 | 3/4-10 X 5 GR5 Bolt | 1 |
| 6 | 413508 | 1/2 Lock Washer | 3 |
| 7 | 413072 | 3/4 Flat Washers SAE | 8 |
| 8 | 305101 | 3/4-10 Hex Nut Nylon Lock | 1 |
| 9 | 305057 | 16" Notched Blade Assembly | 1 |



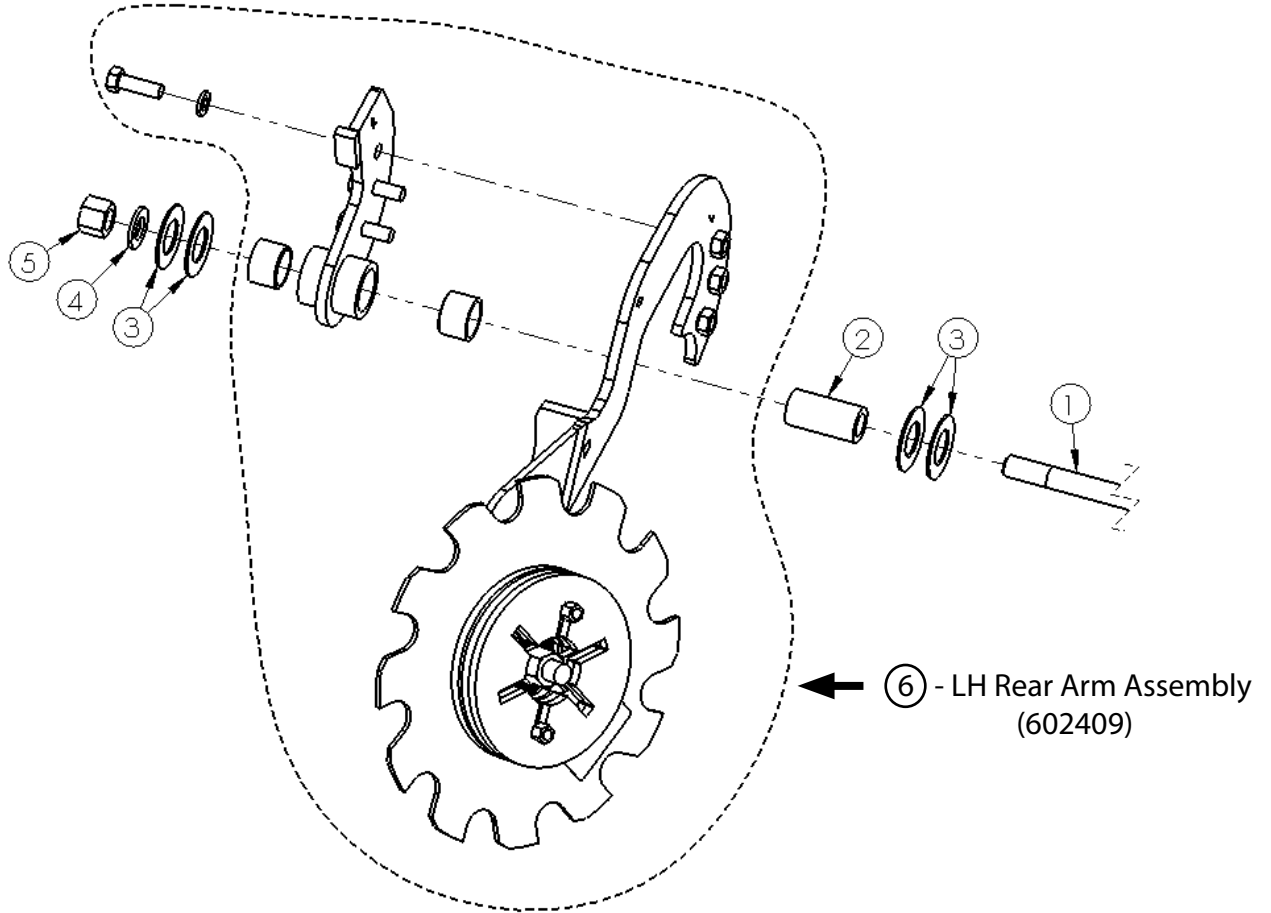
16" NOTCHED BLADE ASSEMBLY



| Item Number | Part # | Description | Quantity |
|-------------|--------|------------------------------|----------|
| 1 | 305008 | Single Hub Bearing Assembly | 1 |
| 2 | 305025 | 16" Concaved Notched Blade | 1 |
| 3 | 305048 | Blade Weight | 3 |
| 4 | 305104 | 3/8-16 X 2 1/2 Carriage Bolt | 2 |
| 5 | 305105 | 3/8-16 X 1 1/2 Carriage Bolt | 4 |
| 6 | 305106 | 3/8-16 Nyloc Nut, ZC | 6 |



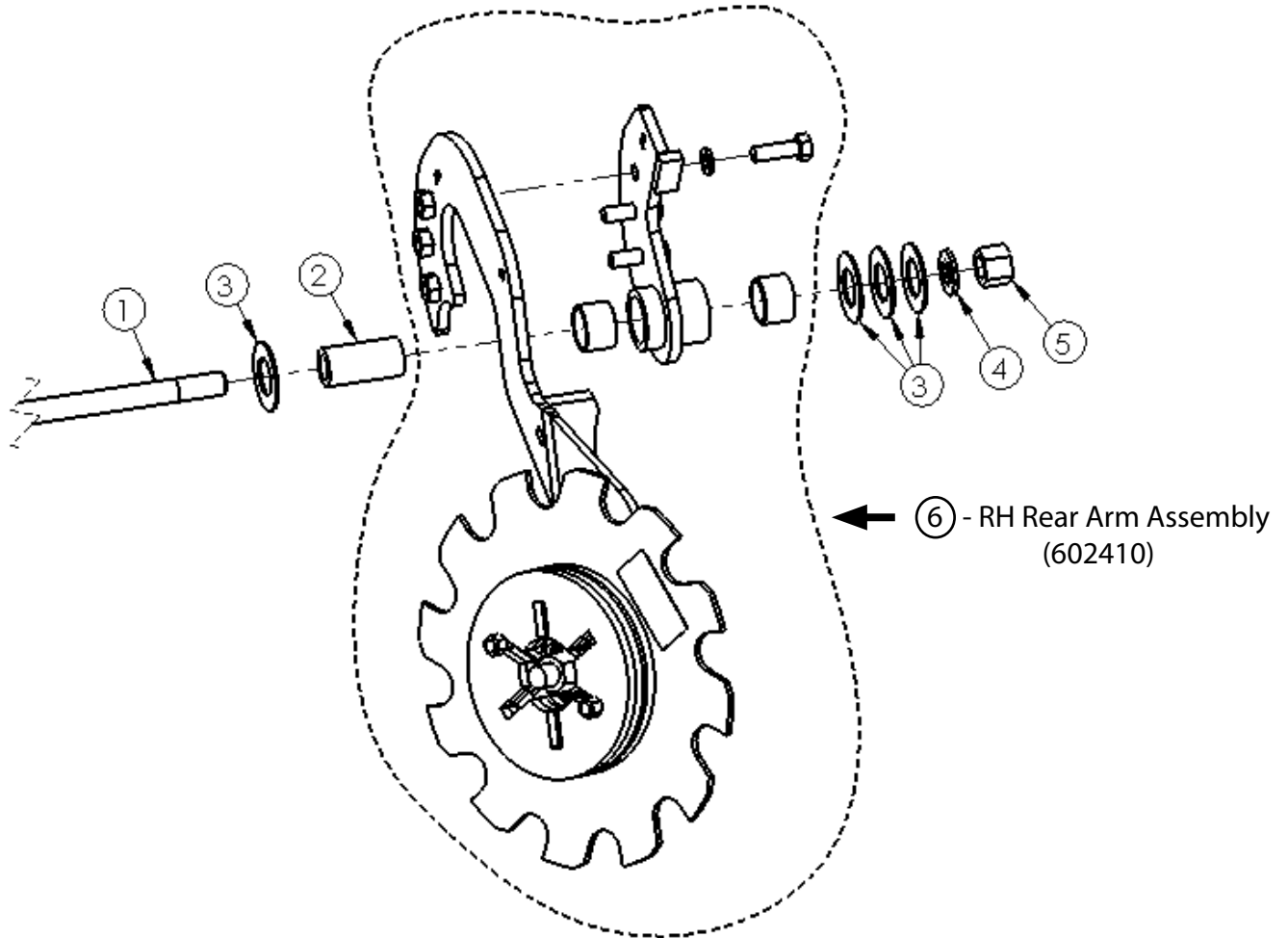
LEFT ARM PARTS - 13" TOOTHED BLADE



| Item Number | Part # | Description | Quantity |
|-------------|--------|----------------------------------|----------|
| 1 | 305023 | 3/4-10 Dual Thread Axle | 1 |
| 2 | 321523 | Crush Sleeve | 1 |
| 3 | 413117 | 1 1/4 X 14GA Washer | 4 |
| 4 | 413072 | 3/4 Flat Washer SAE | 1 |
| 5 | 305101 | 3/4-10 Nut Nylon Lock | 1 |
| 6 | 602409 | Rear Row Cleaner Toothed LH Assy | 1 |



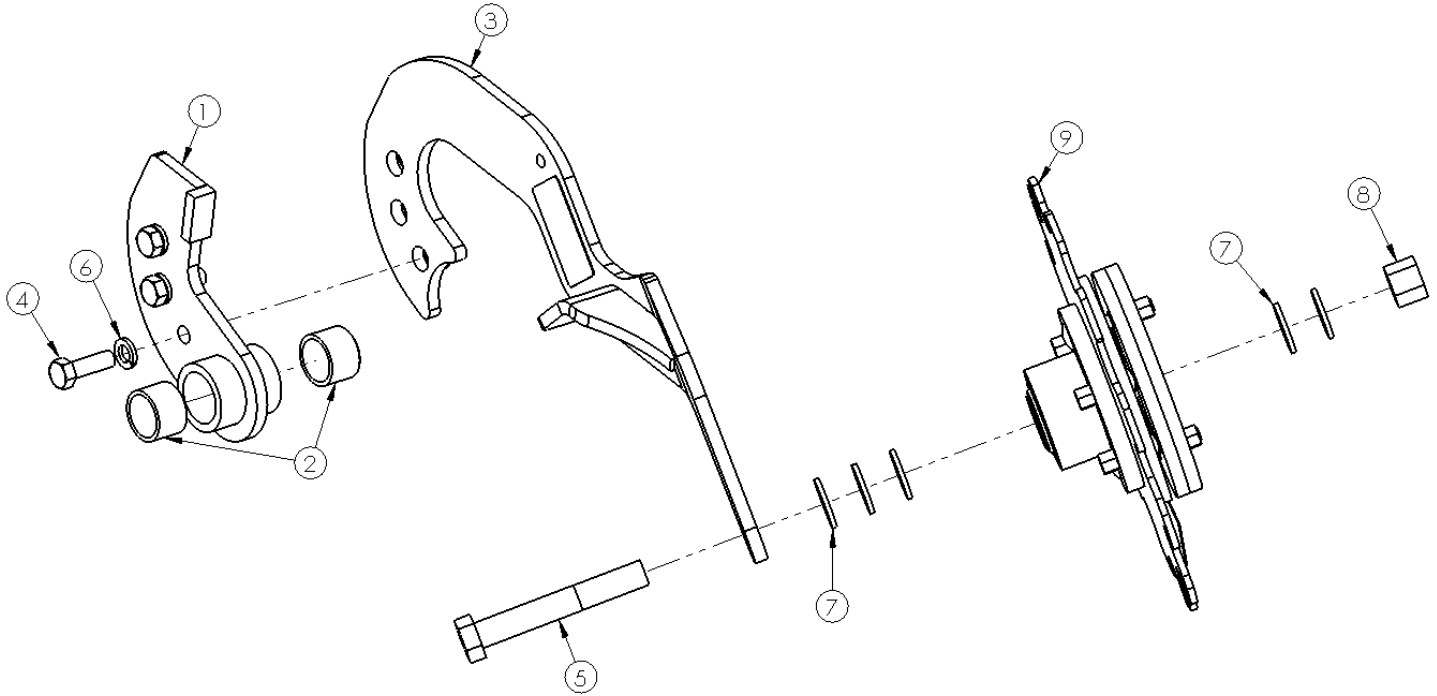
RIGHT ARM PARTS - 13" TOOTHED BLADE



| Item Number | Part # | Description | Quantity |
|-------------|--------|----------------------------------|----------|
| 1 | 305023 | 3/4-10 Dual Thread Axle | 1 |
| 2 | 321523 | Crush Sleeve | 1 |
| 3 | 413117 | 1 1/4 X 14GA Washer | 4 |
| 4 | 413072 | 3/4 Flat Washer SAE | 1 |
| 5 | 305101 | 3/4-10 Nut Nylon Lock | 1 |
| 6 | 602410 | Rear Row Cleaner Toothed RH Assy | 1 |



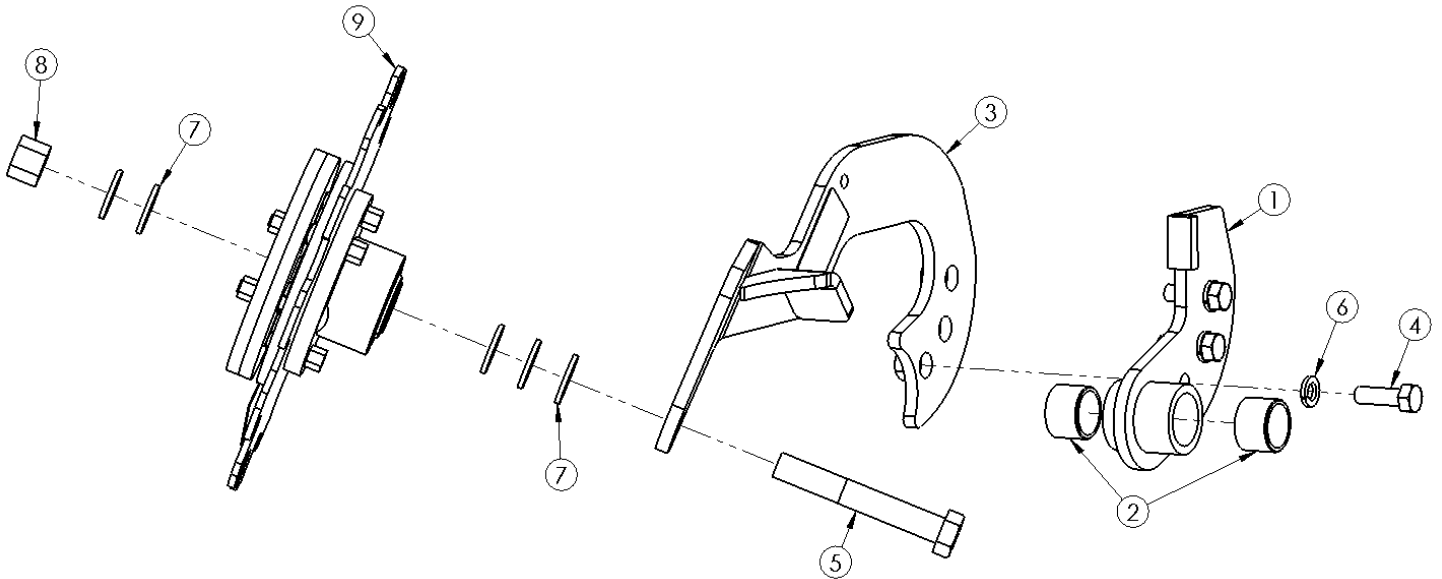
LEFT ARM ASSEMBLY - 13" TOOTHED BLADE



| Item Number | Part # | Description | Quantity |
|-------------|--------|--------------------------------------|----------|
| 1 | 305031 | LH Inline Arm Weldment | 1 |
| 2 | 305027 | 3/4" Poly Bushing | 2 |
| 3 | 305036 | LH Rear Arm Weldment | 1 |
| 4 | 411545 | 1/2-13 X 1 1/2 GR5 Bolt | 3 |
| 5 | 411594 | 3/4-10 X 5 GR5 Bolt | 1 |
| 6 | 413508 | 1/2 Lock Washer | 3 |
| 7 | 413072 | 3/4 Flat Washer SAE | 5 |
| 8 | 305101 | 3/4-10 Hex Nut Nylon Lock | 1 |
| 9 | 305058 | 13" Toothed Blade Left Hand Assembly | 1 |



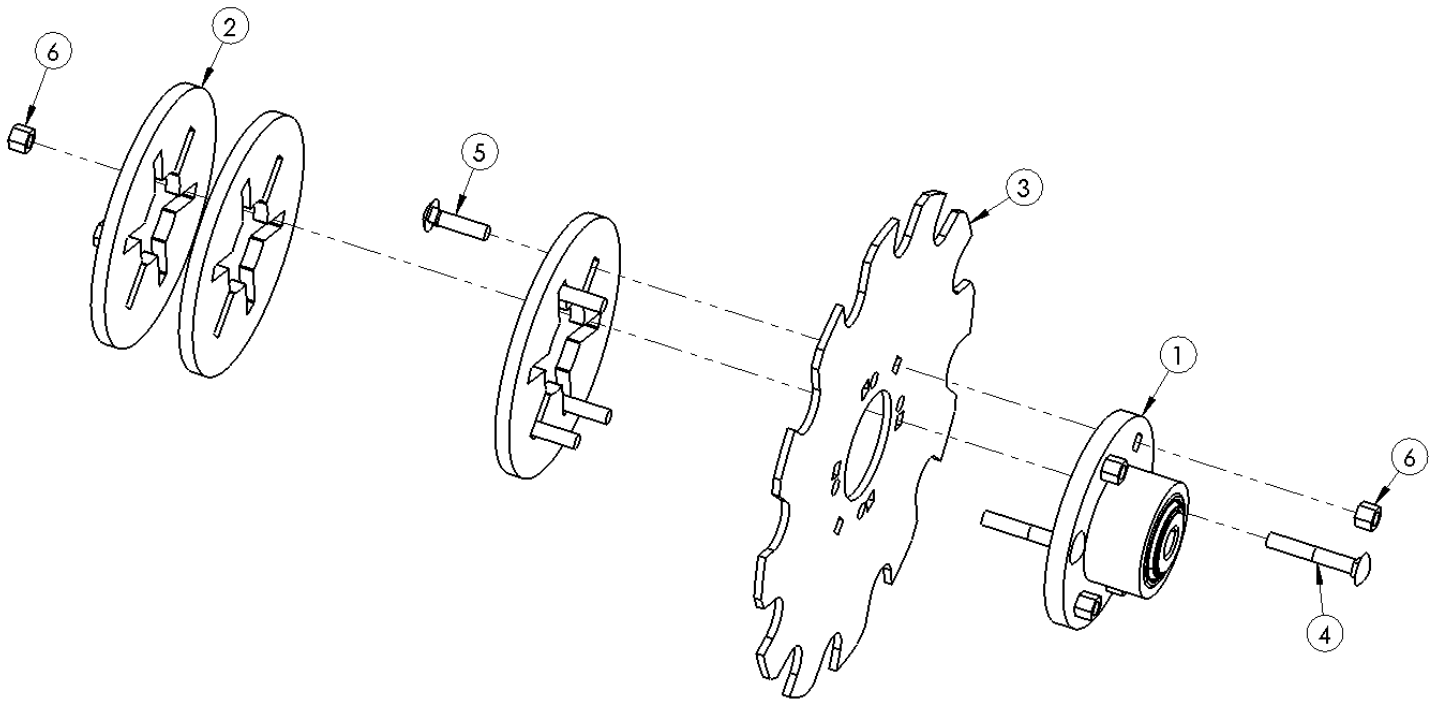
RIGHT ARM ASSEMBLY - 13" TOOTHED BLADE



| Item Number | Part # | Description | Quantity |
|-------------|--------|---------------------------------------|----------|
| 1 | 305031 | LH Inline Arm Weldment | 1 |
| 2 | 305027 | 3/4" Poly Bushing | 2 |
| 3 | 305036 | LH Rear Arm Weldment | 1 |
| 4 | 411545 | 1/2-13 X 1 1/2 GR5 Bolt | 3 |
| 5 | 411594 | 3/4-10 X 5 GR5 Bolt | 1 |
| 6 | 413508 | 1/2 Lock Washer | 3 |
| 7 | 413072 | 3/4 Flat Washer SAE | 5 |
| 8 | 305101 | 3/4-10 Hex Nut Nylon Lock | 1 |
| 9 | 305059 | 13" Toothed Blade Right Hand Assembly | 1 |



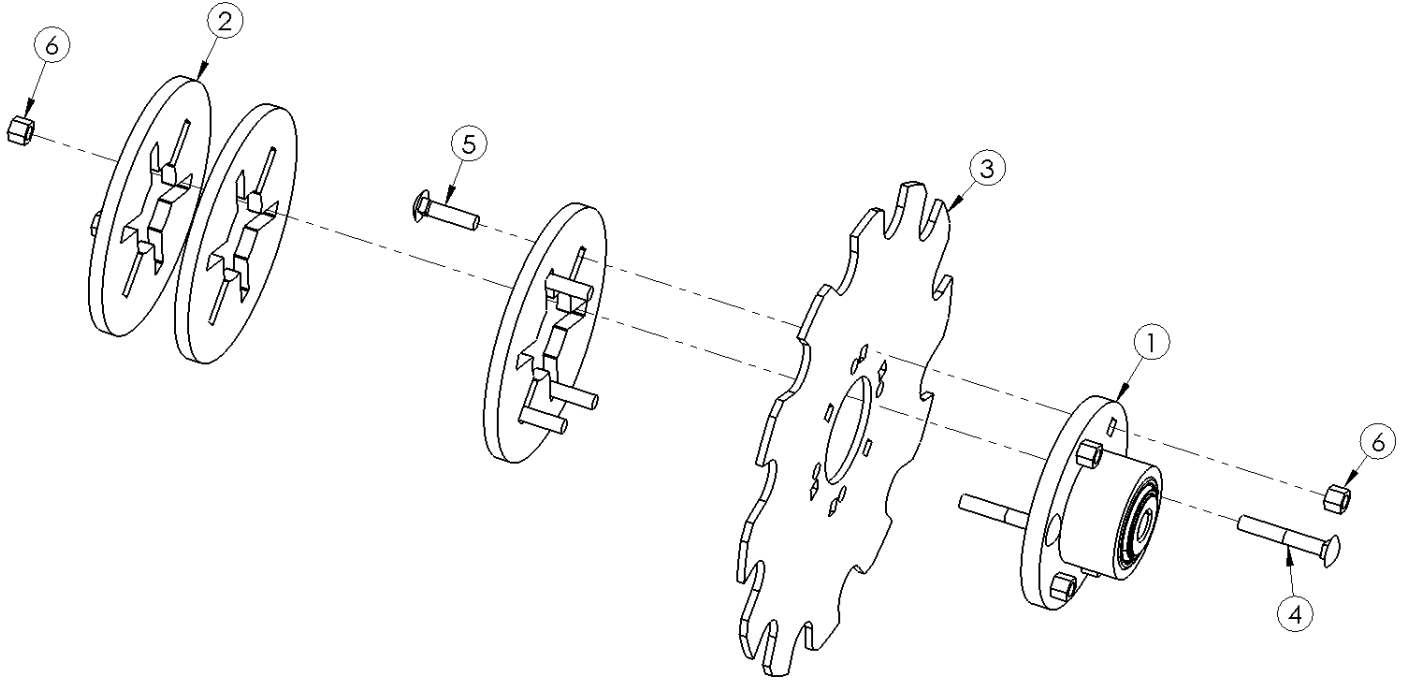
13" TOOTHED BLADE - LEFT ASSEMBLY



| Item Number | Part # | Description | Quantity |
|-------------|--------|------------------------------|----------|
| 1 | 305008 | Single Hub Bearing Assembly | 1 |
| 2 | 305048 | Blade Weight | 3 |
| 3 | 305049 | 13" Toothed Blade | 1 |
| 4 | 305104 | 3/8-16 X 2 1/2 Carriage Bolt | 2 |
| 5 | 305105 | 3/8-16 X 1 1/2 Carriage Bolt | 4 |
| 6 | 305106 | 3/8-16 Hex Nut Nylon Lock | 6 |



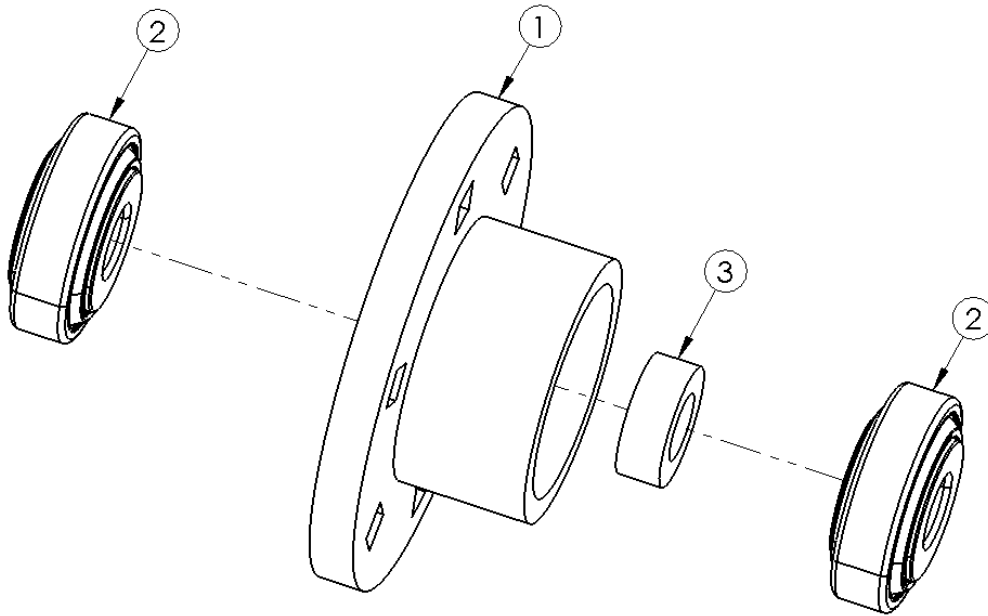
13" TOOTHED BLADE - RIGHT ASSEMBLY



| Item Number | Part # | Description | Quantity |
|-------------|--------|------------------------------|----------|
| 1 | 305008 | Single Hub Bearing Assembly | 1 |
| 2 | 305048 | Blade Weight | 3 |
| 3 | 305049 | 13" Toothed Blade | 1 |
| 4 | 305104 | 3/8-16 X 2 1/2 Carriage Bolt | 2 |
| 5 | 305105 | 3/8-16 X 1 1/2 Carriage Bolt | 4 |
| 6 | 305106 | 3/8-16 Hex Nut Nylon Lock | 6 |



SINGLE HUB BEARING ASSEMBLY



| Item Number | Part # | Description | Quantity |
|-------------|--------|---------------------|----------|
| 1 | 305006 | Single Hub | 1 |
| 2 | 305017 | 3/4" ID Bearing | 2 |
| 3 | 305015 | 3/4" Bearing Spacer | 1 |



HAWKINS

308.708.8185 | HAWKINSAG.COM
2120 4TH AVE, HOLDREGE, NE 68949