

# 25" AVENGER COULTER OPERATORS MANUAL

WITH PARTS IDENTIFICATION 2565-419\_REV\_J © 09/2022

### YETTER MANUFACTURING CO.

FOUNDED 1930

Colchester, IL 62326-0358 Toll free: 800/447-5777

309/776-3222 (Fax)

Website: <a href="www.yetterco.com">www.yetterco.com</a>
E-mail: <a href="mailto:info@yetterco.com">info@yetterco.com</a>



#### **FOREWORD**

You've just joined an exclusive but rapidly growing club.

For our part, we want to welcome you to the group and thank you for buying a Yetter Avenger Coulter.

This is a unique and revolutionary new product.

We hope your new Avenger coulter will help you achieve both increased productivity and increased efficiency so that you may generate more profit. This operator's manual has been designed into four major sections.

Foreword, Safety Precautions, Installation and Operation.

Throughout the manual references may be made to left side and right side. These terms are used as viewed from the operator's seat facing the front of the tractor.

This **SAFETY ALERT SYMBOL** indicates important safety messages in the manual. When you see this symbol, be alert to the possibility of **PERSONAL INJURY** and carefully read the message that follows.

The word **NOTE** is used to convey information that is out of context with the manual text. It contains special information such as specifications, techniques, reference information of a supplementary nature.

The word **IMPORTANT** is used in the text when immediate damage will occur to the machine due to improper technique or operation. Important will apply to the same information as specified by note only of an immediate and urgent nature.

It is the responsibility of the user to read the operator's manual and comply with the safe and correct operating procedure and to lubricate and maintain the product according to the maintenance schedule in the operator's manual.

The user is responsible for inspecting his machine and for having parts repaired or replaced when continued use of the product would cause damage or excessive wear to the other parts.

It is the user's responsibility to deliver his machine to the Yetter dealer who sold him the product for service or replacement of defective parts which are covered by the warranty policy.

**IMPORTANT:** When raising 3 pt. Toolbars watch tractor tire clearance. EXAMPLE: In most cases 3 pt. hitches require a cat. 2 or cat. 3 quick hitch coupler to offset toolbar away from tractor tires.

#### YETTER MANUFACTURING CO.

309/776-4111 800/447-5777 309/776-3222 (FAX)

### **WARRANTY POLICY**

Yetter Manufacturing warrants all products manufactured and sold by it against defects in material. This warranty being expressly limited to replacement at the factory of such parts or products as will appear to be defective after inspection. This warranty does not obligate the Company to bear cost of labor in replacement of parts. It is the policy of the company to make improvements without incurring obligations to add them to any unit already sold. No warranty is made or authorized to be made, other than herein set forth. This warranty is in effect for one year after purchase.

Model Number:	 	
Dealer :	 	

Yetter Manufacturing warrants its own products only and cannot be responsible for damage to equipment on which mounted.

### **SAFETY**

A brief description of signal words that may be used in this manual:

**CAUTION:** Used as a general reminder of good safety practices or to direct attention to unsafe practices.

WARNING: Denotes a specific potential hazard.

**DANGER:** Denotes the most serious specific potential hazard.

#### SAFETY PRECAUTIONS

You can make your farm a safer place to live and work if you observe the safety precautions given. Study these precautions carefully and insist that they be followed by those working with you and for you.

Finally, remember this: an accident is usually caused by someone's carelessness, neglect or oversight.



Never clean, lubricate or adjust a machine that is in motion. Always lower or block the implement before performing service.

If the machine must be serviced in the raised position, jack or block it up to prevent it from accidentally falling and injuring someone.

Do not allow riders on the tractor or implement.

Use speeds and caution dictated by the terrain being traversed. Do not operate on any slope steep enough to cause tipping or loss of control.

Be sure all personnel are clear of the immediate area before operating.

Read and understand the operator's manual and require all other persons who will operate the equipment to do the same.

Be familiar with all tractor and implement controls and be prepared to stop engine and implements quickly in an emergency.



Consult your implement and tractor operator's manual for correct and safe operating practices.

Beware of towed implement width and allow safe clearance.

FAILURE TO HEED MAY RESULT IN PERSONAL INJURY OR DEATH.

### **GENERAL INFORMATION**

Examine all equipment carefully for damage or shortages.

2986-125 Avenger with Standard Mount

2986-124 – Avenger Main Arm Box

2986-126 - Avenger Standard Mount Kit

2571-200 - 25" Coulter Blade

2986-122 Avenger with 4 X 4 Mount

2986-124 – Avenger Main Arm Box

2986-123 - Avenger 4 X 4 Mount Kit

2571-200 - 25" Coulter Blade

NOTE: Right hand coulter can be converted to left hand coulter and left hand coulter can be converted to right hand coulter.

Optional Equipment Available: 2986-108 – Skid Shoe Kit.

2920-012A – 12" Smooth Disc Sealer Kit 2984-005 – 13 5/8" Notched Disc Sealer Kit 2920-016A – 16" Smooth Disc Sealer Kit

2984-009 - Sealing Wheel Kit

2920-016A-N - 16" Notched Disc Sealer Kit

Lubricate all bearings and moving parts as you assemble and see that they work freely.

**NOTE:** When you are behind the coulter looking forward, the right hand coulter is assembled with the blade to the right hand of the arm assembly. The left hand coulter is assembled with the blade to the left hand of the arm assembly.

#### **READ THESE INSTRUCTIONS FIRST:**

- 1. Improperly tightened bolts will result in damage, breakage, expense, and down time.
- 2. Always replace bolts with the specified grade and type.
- Torque properly before first use of the machine and every 2-4 hours of use until you are sure bolts are staying tight.
- 4. The chart below is a guide for proper torque. Use it unless a specified torque is called out elsewhere in the manual.
- 5. Torque is the force you apply to the wrench handle or the cheater bar, times the length of the handle or bar.
- 6. Use a torque wrench whenever possible.

The following table shows torque in ft. lbs.

BOLT DIA. AND THREADS PER INCH		OR (A-325)	
	GRADE 2	GRADE 5 A-325	GRADE 8
1/4	6	10	14
5/16	12	20	30
3/8 -16	25	35	50
7/16 - 14	35	55	80
1/2 - 13	55	85	125
9/16 - 12	75	125	175
5/8 - 11	105	170	235
3/4 - 10	185	305	425
7/8 - 9	170	445	690
1-8	260	670	1030
1 1/8 – 7	365	900	1460
1 1/4 - 7	515	1275	2060
1 3/8 -6	675	1675	2700
1 1/2 - 6	900	2150	3500
1 3/4 - 5	1410	3500	5600

The Avenger coulter is designed to mount to rectangular toolbars in three sizes: 5" x 7", 6" x 6"or 7" x 7".



**WARNING:** Never work under the toolbar while in a raised position without using safety lockups.

WARNING: Use extreme caution, the blade is sharp and may cause bodily injury.

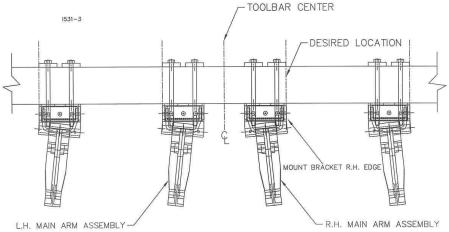
The Avenger coulter can be mounted to the toolbar using different techniques. One way is to mount the main arm assembly to the toolbar and then attach the components one at a time. Another way is to completely assemble the avenger coulter before attaching to the toolbar frame.

**NOTE:** To aid the assembly of the opener, it is recommended that a stand be constructed to temporarily attach the opener and hold it in an upright position.

**CAUTION:** The Avenger coulter and its components are very heavy. Extra attention to lifting techniques while handling and or maneuvering the coulter during assembly is very important.

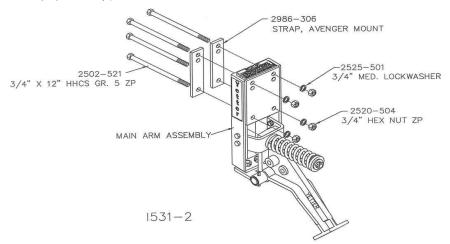
Failure to do so may lead to personal injury or death.

**STEP 1.** Mark the toolbar frame as to the location that each coulter is to be mounted. Right hand assemblies are usually mounted on the right hand side of the toolbar and the left hand assemblies are mounted on the left hand side of the toolbar.

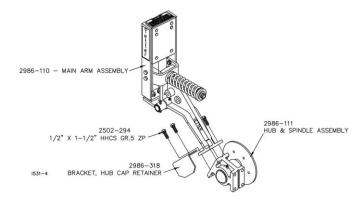


NOTE: The coulter blade is in line with the edge of the mount bracket, for a reference use the edge of the mounting bracket (right hand edge for a right hand and left hand edge for a left hand) to align with the mark on the toolbar so that the coulters are mounted at the desired spacing.

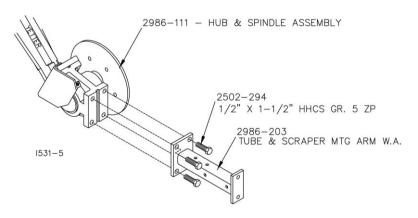
**STEP 2.** Attach the main arm assembly to the toolbar using 2) 2986-306 mounting straps, 4)  $\frac{3}{4}$ " x 12" hex head bolts,  $\frac{3}{4}$ " lock washers and  $\frac{3}{4}$ " hex nuts.



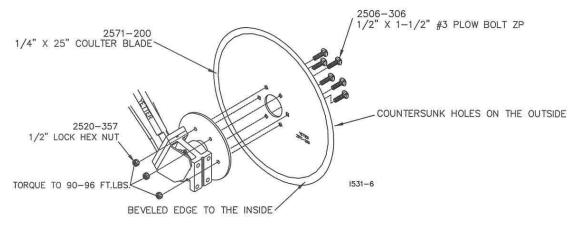
**STEP 3.** Attach the 2986-111 hub and spindle assembly and the 2986-318 hub cap retainer to the 2986-110 main arm assembly using 4)  $\frac{1}{2}$ " x 1-1/2" hex head bolts. The spindle hub will be mounted on the right hand side for a right hand coulter and on the left hand side for a left hand coulter.



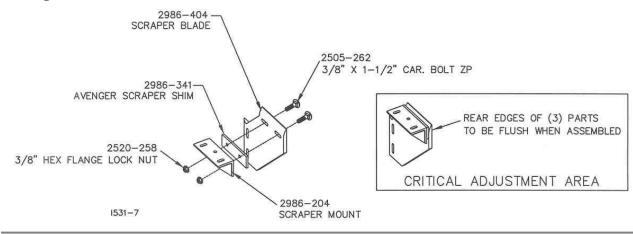
**STEP 4.** Attach the 2986-203 tube and scraper mount arm to the 2986-111 hub assembly using 4)  $\frac{1}{2}$ " x 1-1/2" hex head bolts.



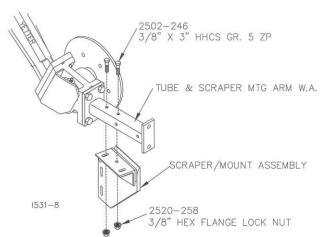
**STEP 5.** Attach the 2571-200 – 25" coulter blade to the 2986-111 hub and spindle using 6)  $\frac{1}{2}$ " x 1  $\frac{1}{2}$ " plow bolts and  $\frac{1}{2}$ " hex lock nuts. Tighten buts to 90-96 ft. lbs. of torque.



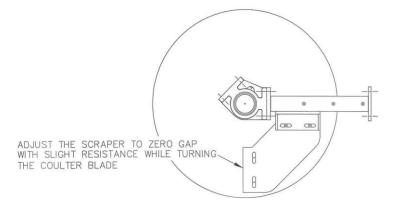
**STEP 6.** Assemble the 2986-404 scraper, 2986-341 shim and 2986-204 scraper mount w.a. using 2) 3/8" x  $1\frac{1}{2}$ " smooth head carriage bolts and 3/8" flanged hex lock nuts. Adjust the scraper to the mount so that the rear edges are flush with each other.



**STEP 7**. Attach the scraper and mount assembly (from step 6) to the scraper mounting arm using 2) 3/8" x 3" bolts and 3/8" flange lock nuts.

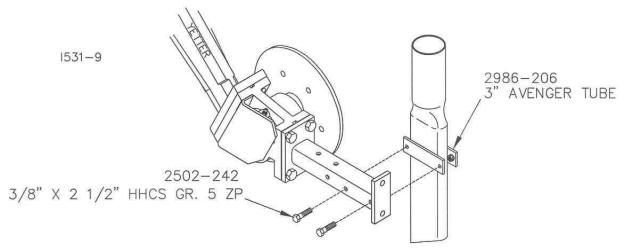


NOTE: Adjust the 2986-404 scraper to the 2571-200 blade. There should be zero tolerance gap between the front edge of the scraper and the blade, but the blade should be able to turn with only slight resistance.

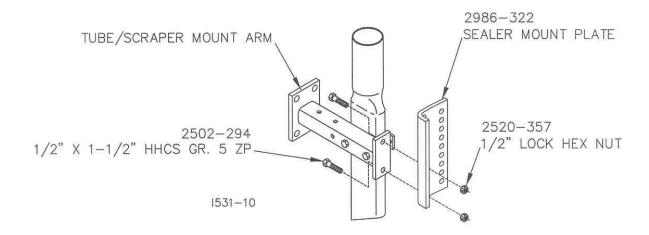


### CRITICAL ADJUSTMENT AREA

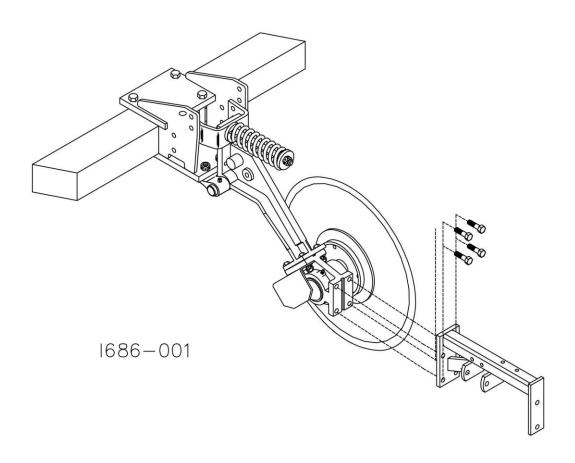
**STEP 8.** Attach the 2986-206 3" Avenger tube to the 2986-203 tube/scraper mount arm using 2) 3/8" x 2 ½" bolts. Insert the bolts through the two most rear holes of the mount arm.



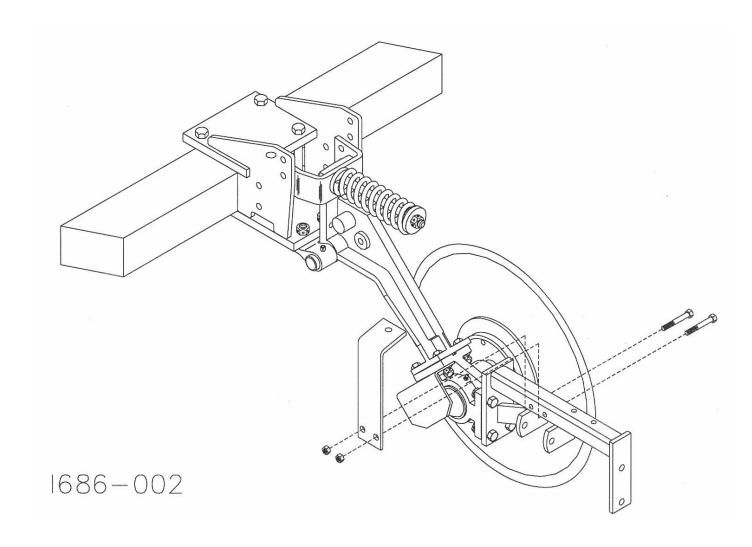
**STEP 9.** Attach the 2986-322 sealer mount plate to the 2986-203 tube scraper mount arm using 2)  $\frac{1}{2}$ " x 1  $\frac{1}{2}$ " hex head bolts and  $\frac{1}{2}$ " lock nuts.



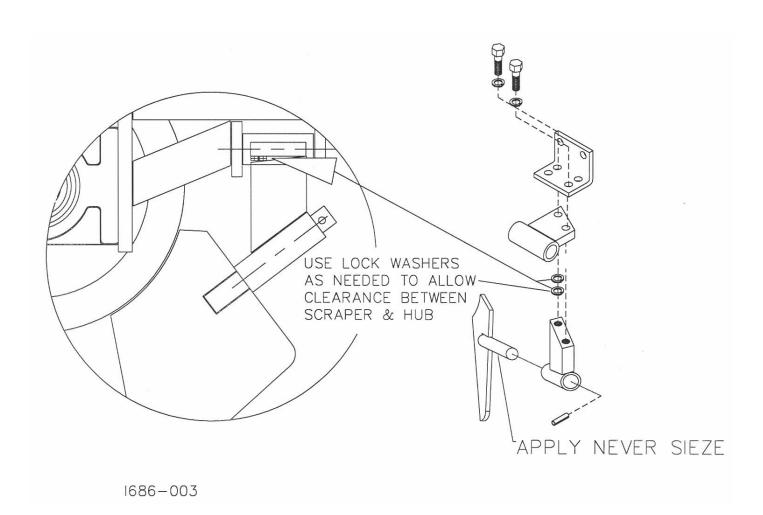
Step 1. Attach the 2986-218 knife arm to the coulter hub using the 4) 1/2" x 1-1/2" bolts.



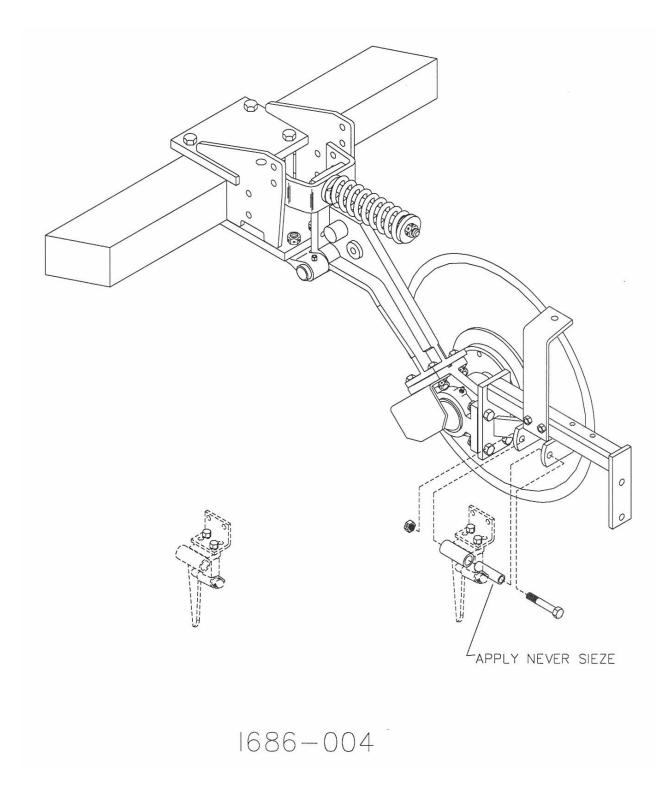
Step 2. Attach the 2986-343 spring adjustment to the knife arm using the 2) 3/8" x 3" bolts and flange nuts.



Step 3. Assemble the 2986-215 scraper blade to the 2986-216 lower pivot, apply never seize to the shaft and secure with the roll pin. Attach the 2986-345 spring anchor and the 2986-217 upper knife pivot to the 2986-216 lower knife pivot using 2) 3/8" x 1-1/2" bolts and lock washers.

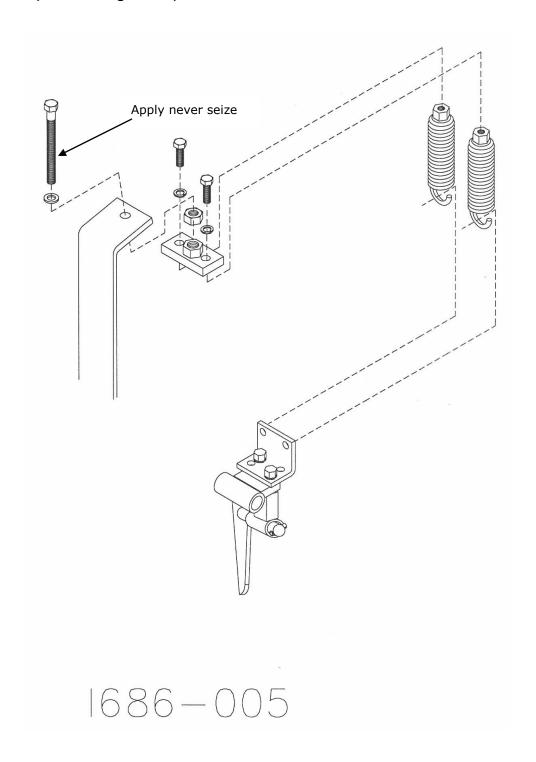


Step 4. Attach the knife assembly to the knife arm using the 1/2" x 4" bolt, 2986-346 bushing and lock nut.



### 2986-120 SPRING LOADED SCRAPER

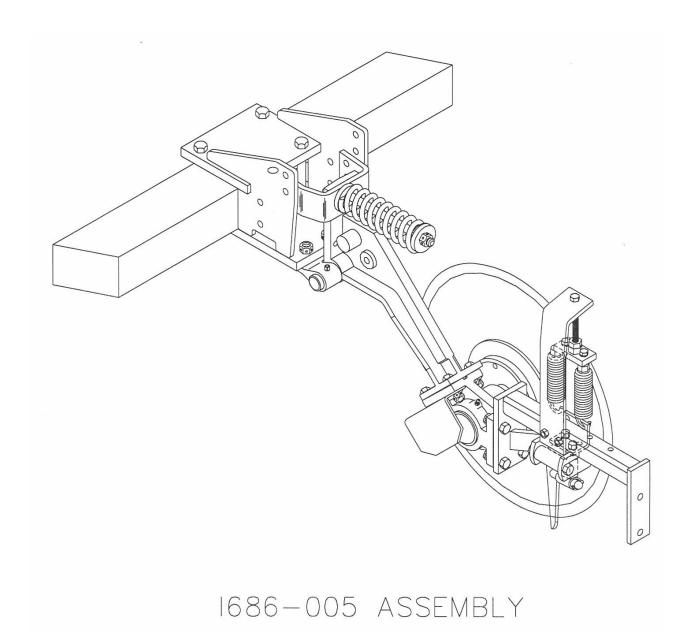
Step 5. Attach the springs to the 2986-221 adjustment block using the 2) 7/16" x 1-1/4" bolts and lock washer. Attach the springs to the knife assembly then attach the spring adjustment assembly to the 2986-343 adjustment plate using the 1) 7/16" x 4-1/2" bolt, washer & hex nut.



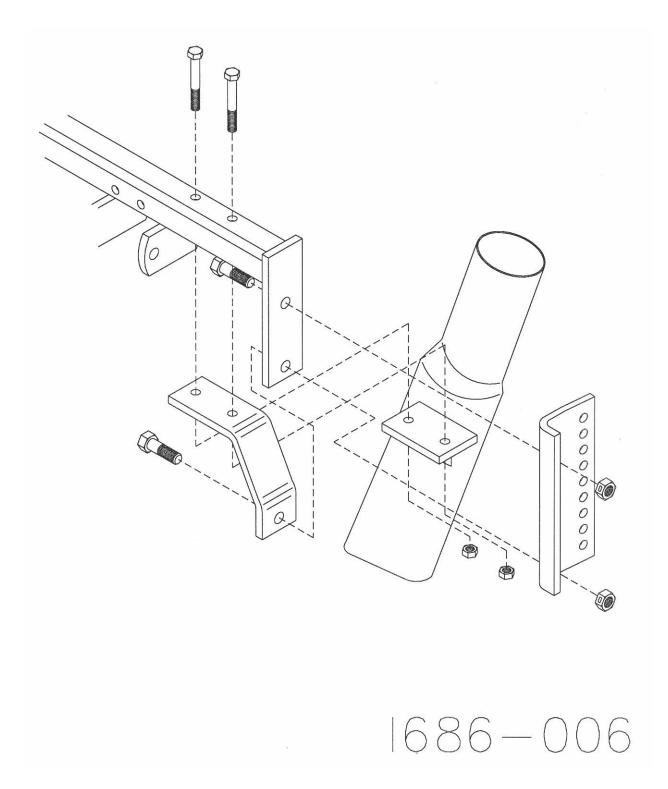
# **ASSEMLBY**

# 2986-120 SPRING LOADED SCRAPER

Step 5A.

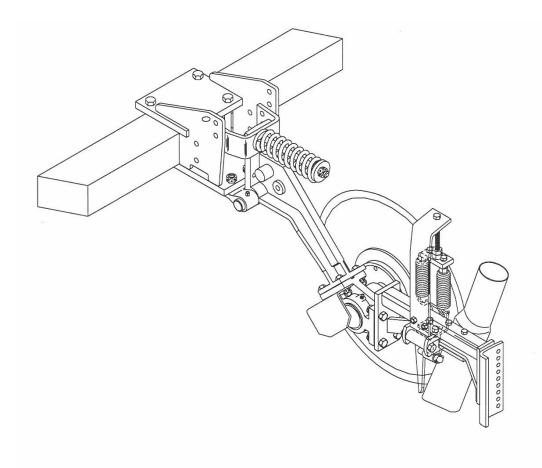


Step 6. Attach the 3" Liquid tube and the 2986-344 knife arm brace to the knife arm using 2) 3/8" x 3-1/4" bolts, 2) 1/2" x 1-3/4" bolts and lock nuts.



# 2986-120 SPRING LOADED SCRAPER

# Step 6A.

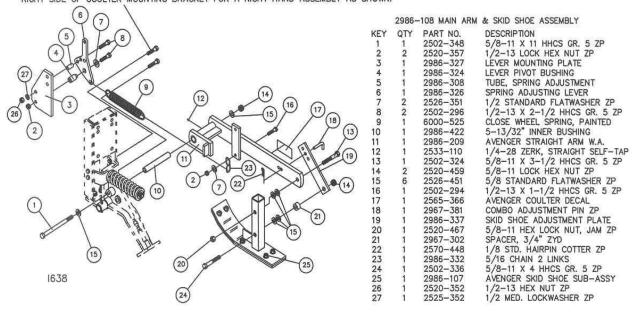


1686-006 ASSEMBLY

#### **OPTIONAL EQUIPMENT**

Assembly of 2986-108 Skid Shoe Kit.

REMOVE THE EXISTING 2" BOLTS OUT OF MOUNTING BRACKET AND INSTALL DETAIL #3 ON THE RIGHT SIDE OF COULTER MOUNTING BRACKET FOR A RIGHT HAND ASSEMBLY AS SHOWN.



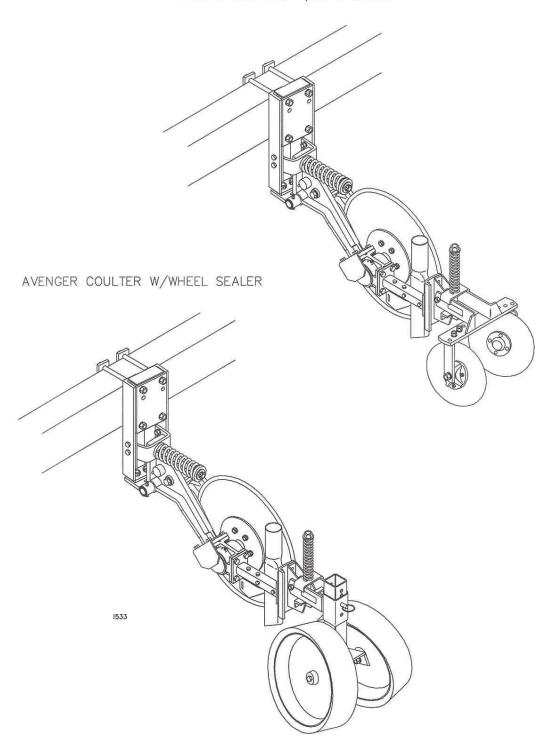
The Skid Shoe can be attached to both R.H. and L.H. coulter assemblies. Begin by removing (2)  $\frac{1}{2}$ " x 2" bolts from the 2986-423 spring stop and save for the next step. Remove the bolts from the R.H. side when working on a R.H. coulter or the bolts from the L.H. side when working on a L.H. coulter. Attach the 2986-327 to the spring stop using (2)  $\frac{1}{2}$ " x 2" hex head bolts and reusing the locknuts that were saved from the previous step. Next, attach the grease zerk 2533-110 to the arm 2986-209 and also insert bushing 2986-422 (**pre-lube bushing before installing**) and attach to the 25" Coulter assembly using (1)  $\frac{5}{8}$ " x 11" hex head bolt, (2)  $\frac{5}{8}$ " flat washers and  $\frac{5}{8}$ " hex lock nut. Attach the chain to the lower hole in the arm using (1)  $\frac{1}{2}$ " x 1  $\frac{1}{2}$ " hex head bolt,  $\frac{1}{2}$ " flat washer and  $\frac{1}{2}$ " hex lock nut. Hook the 6000-525 spring to the chain link and hook the other end into 2986-326 Spring Adjust Lever. Attach the adjustment lever to Lever Mounting Plate first using a  $\frac{1}{2}$ " x 2  $\frac{1}{2}$ " hex head bolt, 2986-324 bushing and  $\frac{1}{2}$ " hex lock nut in the lower hole and using a  $\frac{1}{2}$ " x 2  $\frac{1}{2}$ " bolt, tube spacer and  $\frac{1}{2}$ " lock nut in the upper hole. Now attach the Skid Shoe adjustment plate 2986-337 to the Skid Shoe Assembly 2987-107 using (1)  $\frac{5}{8}$ " x 4" hex head bolt, (2)  $\frac{5}{8}$ " flat washers,  $\frac{3}{4}$ " spacer and (1)  $\frac{5}{8}$ " hex lock nut. Fasten the Skid Shoe Assembly to the arm 2986-209 using (1)  $\frac{5}{8}$ " x 3  $\frac{1}{2}$ " hex head bolt, (2)  $\frac{5}{8}$ " flat washers and (1)  $\frac{5}{8}$ " hex lock jam nut.

**Adjust.** Set the shoe to the blade, equally front and back. Start with no gap between the blade and shoe. Set the shoe just touching the blade.

### **OPTIONAL EQUIPMENT**

Attach optional sealing equipment to the Avenger at the sealer mount bracket using hardware that is supplied with the sealing equipment kit. For proper operation of the closing system in field adjustments will be required initially and as soil conditions change.

AVENGER COULTER W/DISC SEALER



### **OPERATION**

Yetter Model 2986 25" coulter is designed to inject liquid material 4"-8" deep below the surface. Depth of operation of the coulter will vary depending on your particular application.

IMPORTANT: For proper operation, the toolbar frame must operate level (for and aft) and at the correct height, usually 22" – 25" while in operation.

In hard no-till conditions the desired operating depth may not be possible. Tighten the spring pressure adjustment to obtain maximum depth if spring is flexing rather than lower the toolbar frame below the 22" minimum recommended setting.

Toolbar weight may limit operating depth in hard soil conditions, ballast weight can be added to the toolbar frame. Example, 200 lb. per coulter may be required to get desired depth and obtain toolbar frame height of 22"-25".

Coulter operating depth is affected by spring tension, toolbar height, levelness of toolbar and soil conditions. As soil conditions change, toolbar settings and coulter adjustments will need to be changed as well.

<u>Toolbar gauge wheel kits are recommended</u> for use with the Avenger coulter because of toolbar frame height being very critical.

- 1. Set/mount coulter blades to run vertical to the soil. Operation depth and blade wear can be affected if coulter is mounted crooked or if toolbar is not level side to side.
- 2. After a few hours use, check all bolts and setscrews for tightness and proper torque settings.
- 3. After a day of use (10-12 hours), check coulter hubs for loose bearings. There should be no end play in the hub bearings to allow it to wobble. If necessary, remove hub cap and cotter pin, adjust slotted nut to remove wobble, recommended torque of 13 ft/lbs, re-insert cotter pin and replace hub cap. If the wobble or looseness can not be corrected, the bearings, cups and seal will need to be replaced. DO NOT RE-USE WORN OR DAMAGED PARTS.

### **OPERATION**

### **TOOLBAR FRAME HEIGHT ADJUSTMENT**

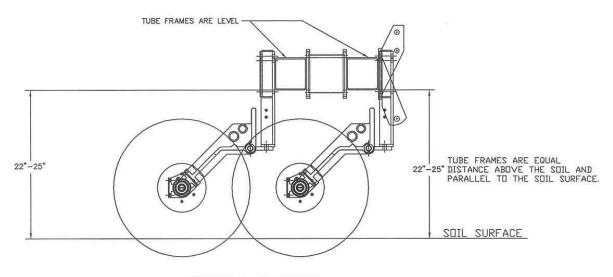
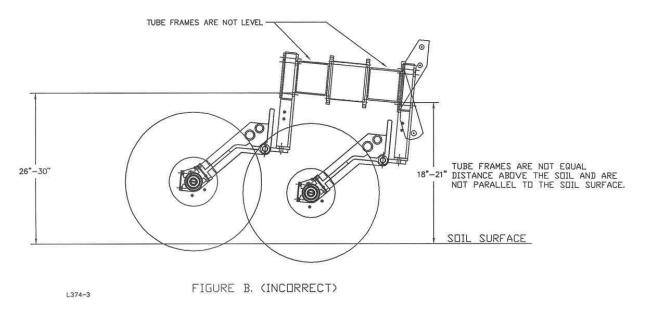


FIGURE A. (CORRECT)



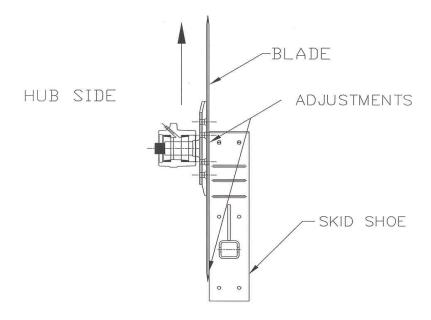
**Figure A.** The toolbar frames are equally 22"-25" off the ground. To ensure that frame heights are equal, it is important that measurements are taken. The tube frames should be parallel with the soil surface.

Figure B. The hitch is set too low while the toolbar frames are not equal distance from the soil surface.

NOTE: The illustrations are intended to show that the settings are critical. **Tool frame levelness and** height adjustment are very important settings for correct performance of the coulters.

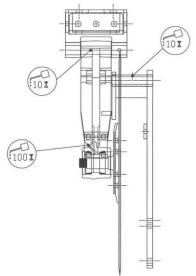
### **OPERATION INSTRUCTIONS**

# RIGHT HAND ASSEMBLY DIRECTION OF TRAVEL



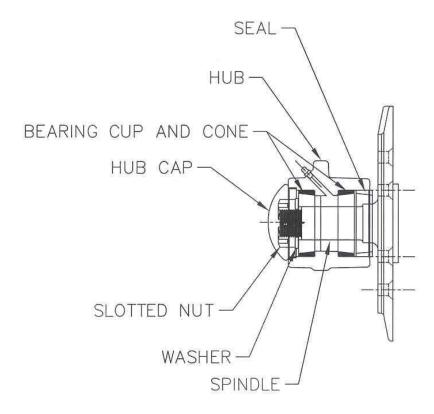
- 1. Adjust the shoe the same front and back.
- 2. Start with no gap between the blade and shoe.
- 3. Set the shoe just touching the blade.

### **OPERATION MAINTENANCE**



**LUBRICATION:** Each coulter is equipped with (3) grease zerks. To ensure longevity and reliability of the coulter, the recommended lubrication schedule should be followed using general purpose grease at hourly intervals indicated on symbol.

### **OPERATION MAINTENANCE**



#### **BEARING ADJUSTMENT:**

- Raise the toolbar until the blade is clear of the ground. Place a safety stand under the toolbar. Remove the blade. Remove the hub cap, cotter pin, slotted nut, washer and spacer from the spindle shaft assembly.
- 2. Pull the coulter spindle shaft assembly from the hub. Remove bearing cones and seal.
- 3. Wash the old grease from the hub, bearing cups, coulter spindle shaft, seal and bearing cones. Inspect the condition of bearing cups, cones and seal. Replace if necessary.
- 4. Apply #2 multi-purpose lithium grease on each bearing. Make sure the space around each roller is filled. Lubricate the bearing cups.
- 5. Position the bearing in the cup and install the seal. Lubricate the seal lips and proceed with reassembly of the removed parts including the blade. Blade bolt torque is 90 to 96 ft/lbs.
- 6. Tighten the slotted nut to 10 to 15 ft/lbs. or until a definite drag is felt when the blade is turned by hand. Back off the nut one slot position to line up the cotter pin hole with a slot. Secure the nut with a new cotter pin.

#### **SCRAPER WEAR:**

The lower portion of the scraper and tube are subject to wear during operation. The rate of wear will depend on a variety of factors and in abrasive hard soil conditions the wear will be more rapid. NOTE: In certain areas, replacement scrapers should be kept in stock, replacing worn scrapers as needed.

### **MAINTENANCE**

# BEARING ASSEMBLY AND LUBRICATION MANUFACTURED PRIOR TO 06/2021

### **Practice Safety**

Understand and practice safe service procedures before doing work. Follow ALL the operating, maintenance and safety information in the equipment operator manual. Clear the area of bystanders, especially small children, when performing any maintenance or adjustments. Keep work area clean and dry. Use adequate lighting for the job. Use only tools, jacks and hoists of sufficient capacity for the job.

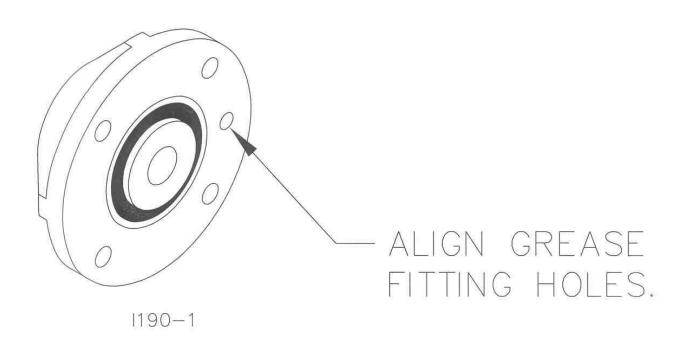
Never lubricate, service, or adjust machine while it is moving. Keep hands, feet, and clothing from power-driven moving and rotating parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground and stop the engine. Remove the key. Wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.

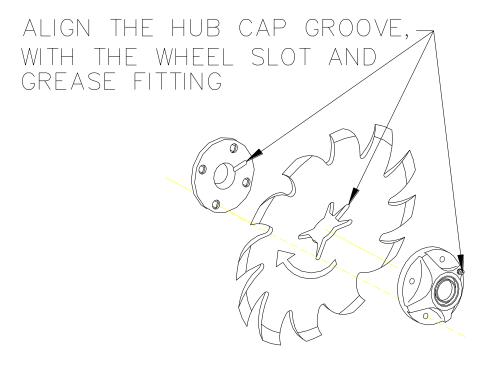
Securely support any machine elements with blocks or safety stands that must be raised for service work.

Keep all parts in good condition and properly installed. Fix damaged equipment immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

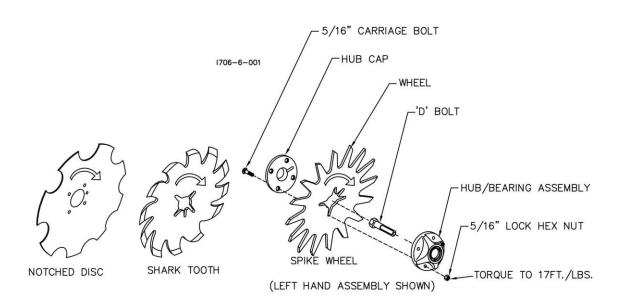
Make sure all guards are in place and properly secured when maintenance work is completed.

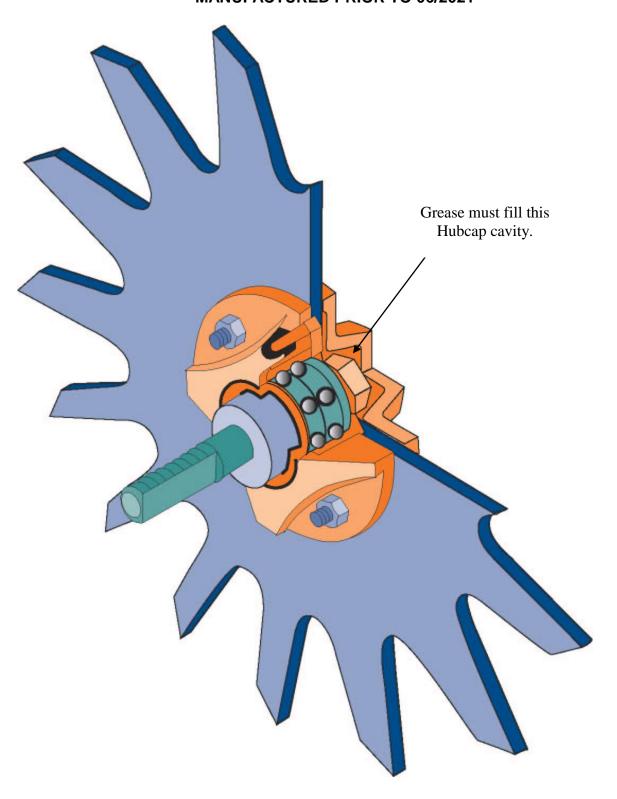
### **Assembly**





**NOTE:** Be certain to align the grease fitting with the slot in the wheel and the hubcap so that the grease can flow freely.





### Lubrication

CAUTION: To help prevent serious injury or death to you or others caused by unexpected movement, service machine on a level surface. Lower machine to ground or sufficiently lock or block raised machine before servicing. If machine is connected to tractor, engage parking brake and place transmission in "PARK", shut off engine and remove key. If machine is detached from tractor, block wheels and use shop stands to prevent movement.



CAUTION: Do not clean, lubricate, or adjust machine while in motion.

Use grease based on NLGI consistency numbers and the expected air temperature range during the service interval.

Use a multi-purpose polyurea, water resistant, moderate speed, and NLGI grade #2 grease.

Other greases may be used if they meet the following **NLGI Performance** 

**Classification: GC-LB** 

IMPORTANT: Some types of grease thickener are not compatible with others.

Consult your grease supplier before mixing different types of grease.

### **Alternative Lubricants**

Conditions in certain geographical areas may require special lubricants and lubrication practices which do not appear in the operator's manual. If there are any questions, consult Yetter Manufacturing Co. to obtain latest information and recommendation.

PART#	DESCRIPTION	OUNCES OF GREASE
2967-404	13" TAPER TOOTH R.M. WHEEL	1.12 OZ
2967-602	13" SHARK TOOTH R.M. WHEEL	1.12 OZ
2967-186	FLOATER WHEEL KIT W/R.M. WHEEL	2.08 OZ
	BEVEL R.M. WHEEL W/ FLOATER	2.40 OZ
	WHEEL KIT	

### **Storing Lubricants**

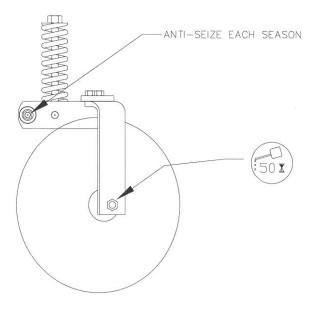
Your machine can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants.

Store them in an area protected from dust, moisture and other contaminants.

### **Lubrication Symbols**

Lubricate with grease at hourly interval indicated on symbol.

### **Lubrication Intervals**



S422-7-LUBRICATION

# IMPORTANT: The recommended service intervals are based on normal conditions; severe or unusual conditions may require more frequent lubrication.

Perform each lubrication and service procedure at the beginning and end of each season.

Clean grease fittings before using grease gun, to avoid injecting dirt and grit into the bearing. Replace any lost or broken fittings immediately. If a fitting fails to take grease, remove and clean thoroughly, replace fitting if necessary. Also check for failure of adjoining parts.

### **BEARING REPLACEMENT INSTALLATION**

- 1. When assembling the spoke wheels, bearing assembly and hubcap, be sure to align the grease transfer hole in the spoke wheel with the groove in the hubcap and hole in the hub to allow grease passage.
- 2. Assemble the wheels, hubs and caps
- Grease the wheel/hub/bearing assembly.

### **MAINTENANCE**

### **Storing the Equipment**

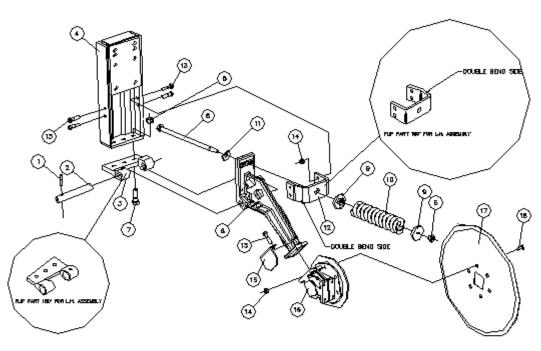
Store the machine in an area away from human activity Store machine in RAISED position.

Install service locks on all wheel cylinders.

At the end of the season, the machine should be thoroughly inspected and prepared for storage. Repair or replace any worn or damaged components to prevent down time at the start of the next season. Store machine under cover with all parts in operating condition.

- Clean machine thoroughly to remove all dirt, debris and crop residue, which would hold moisture and cause rusting.
- Inspect machine for worn or broken parts. See your Yetter Farm Equipment dealer during the off-season so that parts or service can be acquired when machine is not needed in the field.
- Lubricate bearings as outlined in the Lubrication section
- Paint all parts which are chipped or worn and require repainting.
- Store machine in a clean, dry place with the planting unit out of the sun.
- If the machine cannot be stored inside, cover with a waterproof tarpaulin and tie securely in place.

Do not allow children to play on or around the machine



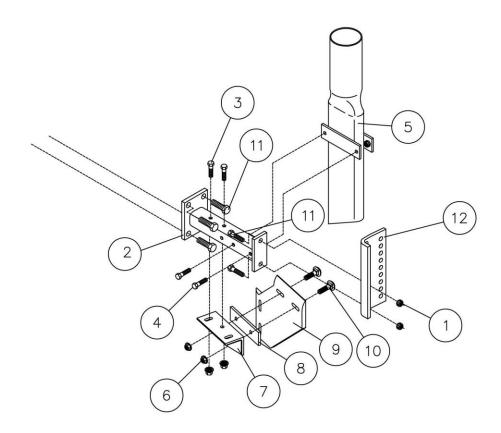
2986-125 AVENGER ASSEMBLY

153B-AVENGER

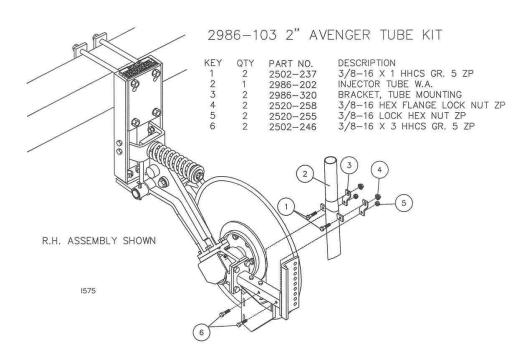
DET 1 2 3 4	QTY 1 1 1	PART NO. 2530-214 2988-305 2988-225 2986-200	DESCRIPTION  3/9 X 2-1/4 ROLL PIN PIN, MTG. BRACKET PIVOT PIVOT MOUNTING BRACKET WELDED MOUNTING BRACKET W.A.  (22)
5	4	2520-515	3/4-10 HEX LOCK NUT (21)
6	1	2502-523	3/4-10 X 15-1/2 HHCS GR. 5
7	3	2502-407	3/4-10 X 2-1/2 HHCS GR. 5
θ	1	2986-401	MOUNTING ARM
_	1	2533-110	1/4-28 ZEK STRAIGHT SELF-TAP  DI CHURA COPPARA  (20)
9	2	2986—405	BUSHING, SPRING
1D	1	2988-342	COMPRESSION SPRING (9)
11	1	252B-501	3/4 STANDARD FLATWASHER
12	1	2986-315	SPRING BRACKET
13	8	2502-294	1/2-13 X 1-1/2 HHCS GR. 5
14	14	<b>2520</b> –357	1/2-13 LOCK HEX NUT
15	1	2984-318	BRACKET, HUB CAP RETAINER
16	1	298B-111	HUB & SPINDLE ASSEMBLY
17	1	2571-200	25" COULTER BLADE
18 19	- 6	2506-306	1/2-13 X 1-1/2 #3PLOM9OLT GR.5
19	4	2502-521	3/4-10 X 12 HHCS GR. 5 (7X7 TOOLBAR)
20	2	2988-306	MOUNT CLAMP STRAP 4"- 6"-7"
21	4	2525-501	3/4" LOCKWASHER
22	4	2520-504	3/4-10 HEX NUT

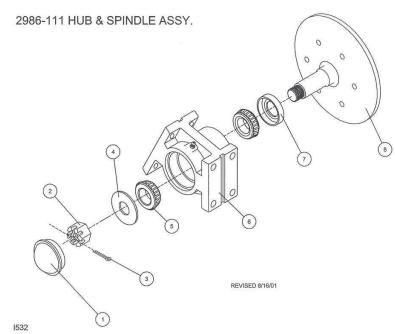
RIGHT HAND ASSEMBLY SHOWN

08/25/2022



KEY	QTY	PART NO.	DESCRIPTION
1	6	2520-357	1/2-13 LOCK HEX NUT ZYD
2	1	2986-203	TUBE & SCRAPER MOUNT WA.
3	2	2502-246	3/8-16 X 3" HHCS GR. 5 ZP
4	2	2502-242	3/8-16 X 2-1/2 HHCS GR. 5 ZP
5	1	2986-206	3" AVENGER TUBE
6	4	2520-258	3/8-16 HEX FLANGE LOCK NUT
7	1	2986-204	SCRAPER MOUNT
8	1	2986-341	AVENGER SCRAPER SHIM
9	1	2986-404	SCRAPER BLADE
10	2	2505-262	3/8-16 X 1-1/2 CAR. BOLT GR. 5 ZP
11	6	2502-294	1/2-13 X 1-1/2 HHCS GR. 5 ZP
12	1	2986-322	PLATE, SEALER MOUNT ADAPTER



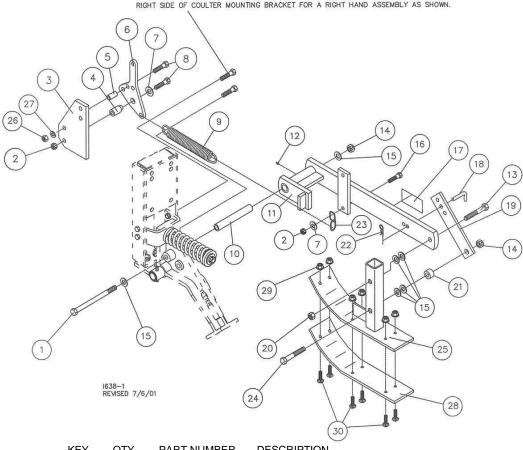


KEY	QTY.	PART NUMBER	DESCRIPTION
1	1	2550-065	HUB CAP, WILTON #909912-1
2	1	2986-329	MACH. CASTLE NUT 1 1/4-12
3	1	2531-124	3/16 X 2 COTTER PIN
4	1	2526-562	1 17/64 ID X 2 ¼ OD X 10 GA. MB BLK
5	2	2550-057	BEARING, KOYO #2788R
6	1	2986-403	MOUNTING HUB
	1	2533-110	1/4-28 ZERK STRAIGHT SELF-TAP
	2	2550-056	CUP, KOYO #2729
7	1	2550-058	SEAL, CR #17699
8	1	2986-402	25" COULTER SPINDLE

NOTE: Detail #2 is to be torqued to between 12 and 15 ft/lbs.

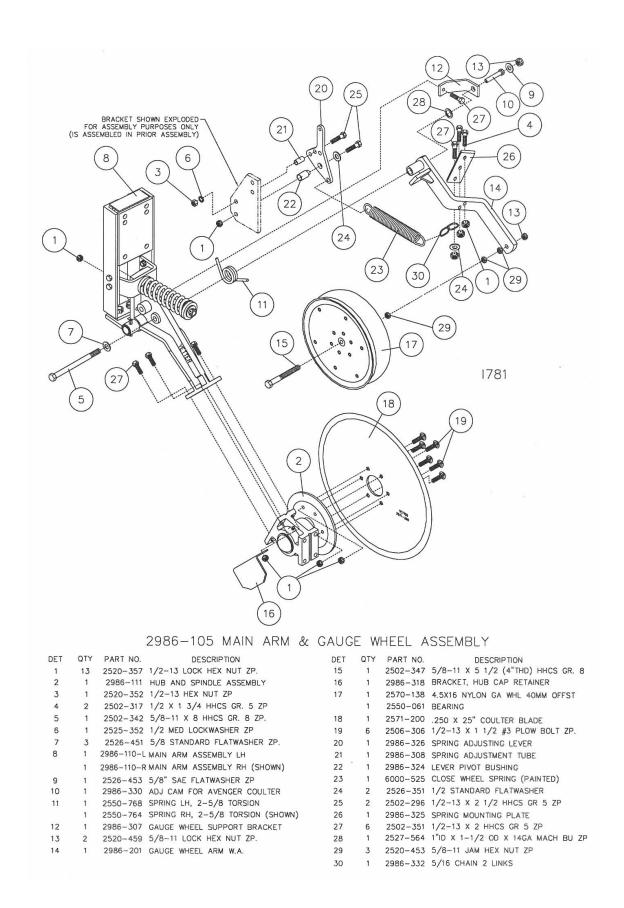
### 2986-108 MAIN ARM & SKID SHOE ASSEMBLY

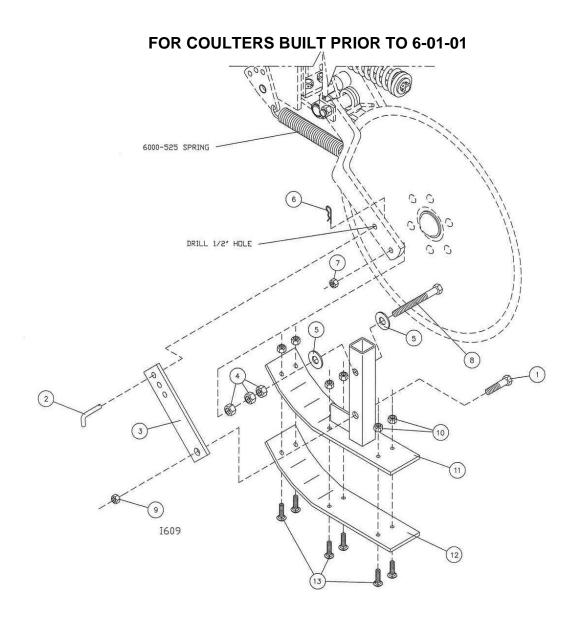
NOTE: REMOVE THE EXISTING 2" BOLTS OUT OF MOUNTING BRACKET AND INSTALL DETAIL #3 ON THE RIGHT SIDE OF COULTER MOUNTING BRACKET FOR A RIGHT HAND ASSEMBLY AS SHOWN.



KEY	QTY.	PART NUMBER	DESCRIPTION
1	1	2502-348	5/8-11 X 11 HHCS GR 5 ZYD
2	2	2520-357	1/2-13 HEX LOCK NUT ZYD
3	1	2986-327	LEVER MOUNTING PLATE
4	1	2986-324	LEVER PIVOT BUSHING
5	1	2986-308	TUBE, SPRING ADJUSTMENT
6	1	2986-326	SPRING ADJUSTING LEVER
7	2	2526-351	1/2 STANDARD FLAT WASHER ZYD
8	2	2502-296	1/2-13 X 2 1/2 HHCS GR 5 ZYD
9	1	6000-525	CLOSE WHEEL SPRING, PAINTED
10	1	2986-422	5 13/32" INNER BUSHING
11	1	2986-209	AVENGER STRAIGHT ARM W.A.
12	1	2533-110	1/4-28 ZERK, STRAIGHT SEFL-TAP
13	1	2502-324	5/8-11 X 3 1/2 HHCS GR 5 ZYD
14	2	2520-459	5/8-11 HEX LOCK NUT ZYD
15	6	2526-451	5/8 STANDARD FLAT WASHER ZYD
16	1	2502-294	1/2-13 X 1 1/2 HHCS GR 5 ZYD
17	1	2565-366	AVENGER COULTER DECAL
18	1	2967-381	COMBO ADJUSTMENT PIN ZYD
19	1	2986-337	SKID SHOE ADJUSTMENT PLATE
20	1	2520-467	5/8-11 HEX LOCK JAM NUT ZYD
21	1	2967-302	SPACER, ¾ ZYD
22	1	2570-448	1/8 STD. HAIRPIN COTTER ZYD
23	1	2986-332	5/16 CHAIN 2 LINKS
24	1	2502-336	5/8-11 X 4 HHCS GR 5 ZYD
25	1	2986-208	AVENGER SKID SHOE W.A.
26	1	2520-352	1/2-13 HEX NUT ZYD
27	1	2525-352	1/2 MED. LOCK WASHER ZYD
28	1	2986-340	4 1/4" POLY SKID SHOE
29	6	2520-206	5/16-18 FLANGE LOCK NUT
30	6	2505-206	5/16-16 X 1 CAR BOLT GR 5 ZYD

### FOR COULTERS BUILT PRIOR TO 6-01-01

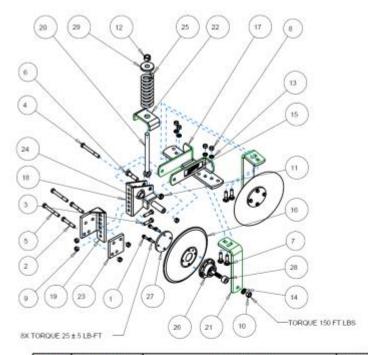




### 2986-104 AVENGER SKID SHOE

Key	Qty.	Part No.	Description
1	1	2502-324	5/8-11 x 3-1/2 HHCS Gr. 5 ZP
2	1	2965-305	Pin, Furrowing Attachment ZYD
3	1	2986-337	Skid Shoe Adjustment Plate
4	3	2520-453	5/8-11 Jam Hex Nut ZP
5	2	2526-451	5/8 Std. Flat washer ZP
6	1	2570-448	1/8 Std. Hairpin Cotter ZP
7	1	2520-467	5/8-11 Hex Locknut, Jam ZP
8	1	2502-347	5/8-11 x 5-1/2 HHCS Gr. 8, 4"Thd.
9	1	2520-459	5/8-11 Lock Hex Nut ZP
10	6	2520-206	5/16-18 Flange Lock Nut
11	1	2986-208	Avenger Skid Shoe W.A.
12	1	2986-340	4-1/4" Poly Skid Shoe
13	6	2505-206	5/16-18 x 1 Car. Bolt Gr. 5 ZP

### PARTS IDENTIFICATION 2920-012A DISC SEALER



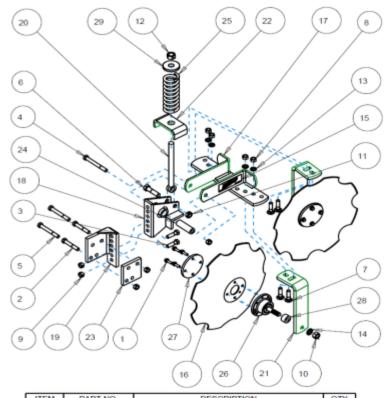
ITEM	PART NO.	DESCRIPTION	QTY
1	2502-221	5/16-18 X 1 HHFS GR5 ZP	- 8
2	2502-313	1/2-13 X 3 HHCS GR 5 ZP	2
3	2502-317	1/2-13 X 1-3/4 HHCS GR5 ZP	2
4	2502-363	1/2-13 X 4-1/2 HHCS GR5 ZP	1
5	2502-364	1/2-13 X 4 HHCS GR. 5 ZP	2
6	2502-393	5/8-11 X 2 1/2 HHCS GR5 ZP	1
7	2505-345	1/2-13 X 2 CAR BLT GR5 ZP	4
8	2520-352	1/2-13 HEX NUT ZP	4
9	2520-357	1/2-13 LOCK HEX NUT, GR A, ZP	- 5
10	2520-452	5/8-11 HEX NUT GR 8 ZP	2
11	2520-467	5/8-11 HEX LOCKNUT JAM ZP	1
12	2520-515	3/4-10 LOCK HEX NUT, GR A, ZP	1
13	2525-352	1/2 MED LOCKWASHER ZP.	4
14	2525-451	5/8 MED. LOCKWASHER ZP.	2
15	2565-162	YETTER DECAL	2
16	2571-181	.098 X 12" DISC, 4 BOLT	2
17	2920-209	DISC SEALER ARM W.A.	1
18	2920-210	MOUNTING BRACKET W.A.	1
19	2920-211	SHANK MOUNTING BRACKET W.A.	- 1
20	2920-324	3/4" DIA. EYEBOLT, 5/8 EYE ZP	1.
21	2920-329	DISC SEALER ARM	2
22	2920-330	DISC SEALER SPRING BRACKET	- 31
23	2920-339	PLATE, SHANK MOUNTING CLAMP	1
24	2920-342	INNER PIVOT BUSHING	- 1
25	2920-350	COMP SPRING, 393 WIRE, 1 5/8 ID	1
26	2965-501	HUB ASSEMBLY, 2.406 SPINDLE	2
27	2965-503	HUB CAP	2
28	2967-302	SPACER, 3/4° PLATED	2
29	2975-302	2975 SPRING BUSHING "PAINTED"	1

### MANUFACTURED 06/2021 - PRESENT

#### PARTS IDENTIFICATION 2920-016A DISC SEALER 29 17 20 8 13 4 15 24 11 18 3 5 7 28 14 19 23 27 16 26 21 10 ITEM PART NO. DESCRIPTION QTY 5/16-18 X 1 HHFS GR5 ZP 2502-313 2502-317 1/2-13 X 3 HHCS GR 5 ZP 1/2-13 X 1-3/4 HHCS GR5 ZP 1/2-13 X 4-1/2 HHCS GR5 ZP 2502-363 1/2-13 X 4 HHCS GR. 5 ZP 5/8-11 X 2 1/2 HHCS GR5 ZP 2502-393 1/2-13 X 2 CAR BLT GR5 ZP 1/2-13 HEX NUT ZP 1/2-13 LOCK HEX NUT, GR A, ZP 2520-452 5/8-11 HEX NUT GR 8 ZP 11 2520-467 5/8-11 HEX LOCKNUT JAM ZP 2520-515 3/4-10 LOCK HEX NUT, GR A, ZP 13 2525-352 1/2 MED LOCKWASHER ZP 4 2525-451 5/8 MED. LOCKWASHER ZP 14 2565-162 2571-173 YETTER DECAL 15 DISC, .138 GA X 16", 4 BOLT 16 17 DISC SEALER ARM W.A. 2920-209 18 MOUNTING BRACKET W.A 2920-210 2920-211 2920-324 SHANK MOUNTING BRACKET W.A. 19 3/4" DIA. EYEBOLT, 5/8 EYE ZP DISC SEALER ARM 2920-330 2920-339 DISC SEALER SPRING BRACKET PLATE, SHANK MOUNTING CLAMP 2920-342 2920-350 24 INNER PIVOT BUSHING COMP SPRING, 393 WIRE, 1 5/8 ID HUB ASSEMBLY, 2.406 SPINDLE HUB CAP 2965-501 2965-603 SPACER, 3/4" PLATED 2975 SPRING BUSHING "PAINTED" 2967-302 2975-302

**MANUFACTURED 06/2021 - PRESENT** 

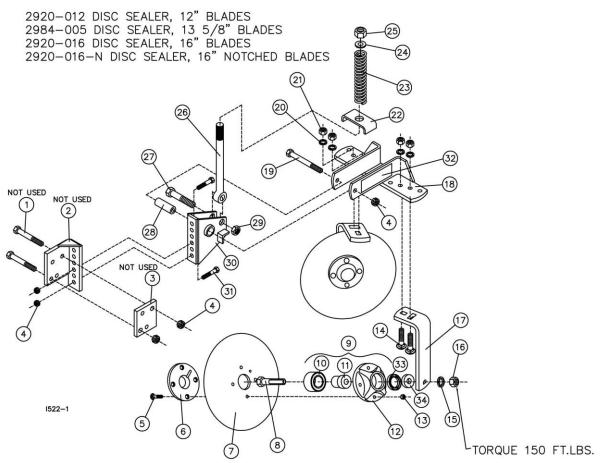
### PARTS IDENTIFICATION 2920-016A-N DISC SEALER



ITEM	PART NO.	DESCRIPTION			
1	2502-221	5/16-18 X 1 HHFS GR5 ZP	8		
2	2502-313	1/2-13 X 3 HHCS GR 5 ZP	2		
3	2502-317	1/2-13 X 1-3/4 HHCS GR5 ZP	2		
4	2502-363	1/2-13 X 4-1/2 HHCS GR5 ZP	1		
5	2502-364	1/2-13 X 4 HHCS GR. 5 ZP	2		
6	2502-393	5/8-11 X 2 1/2 HHCS GR5 ZP	- 1		
7	2505-345	1/2-13 X 2 CAR BLT GR5 ZP	4		
8	2520-352	1/2-13 HEX NUT ZP	4		
9	2520-357	1/2-13 LOCK HEX NUT, GR A, ZP	- 5		
10	2520-452	5/8-11 HEX NUT GR 8 ZP	2		
11	2520-467	5/8-11 HEX LOCKNUT JAM ZP	1		
12	2520-515	3/4-10 LOCK HEX NUT, GR A, ZP	- 1		
13	2525-352	1/2 MED LOCKWASHER ZP.	4		
14	2525-451	5/8 MED. LOCKWASHER ZP.	2		
15	2565-162	YETTER DECAL	2		
16	2571-187	16" NOTCHED SEALER BLADE	2		
17	2920-209	DISC SEALER ARM W.A.	1		
18	2920-210	MOUNTING BRACKET W.A.	- 1		
19	2920-211	SHANK MOUNTING BRACKET W.A.	1		
20	2920-324	3/4" DIA. EYEBOLT, 5/8 EYE ZP	- 1		
21	2920-329	DISC SEALER ARM	2		
22	2920-330	DISC SEALER SPRING BRACKET	1		
23	2920-339	PLATE, SHANK MOUNTING CLAMP	- 1		
24	2920-342	INNER PIVOT BUSHING	- 1		
25	2920-350	COMP SPRING, .393 WIRE, 1 5/8 ID	1		
26	2965-501	HUB ASSEMBLY, 2.406 SPINDLE	2		
27	2965-503	HUB CAP	2		
28	2967-302	SPACER, 3/4" PLATED	2		
29	2975-302	2975 SPRING BUSHING "PAINTED"	-1		

### MANUFACTURED 06/2021 - PRESENT

# PARTS IDENTIFICATION MANUFACTURED PRIOR TO 06/2021

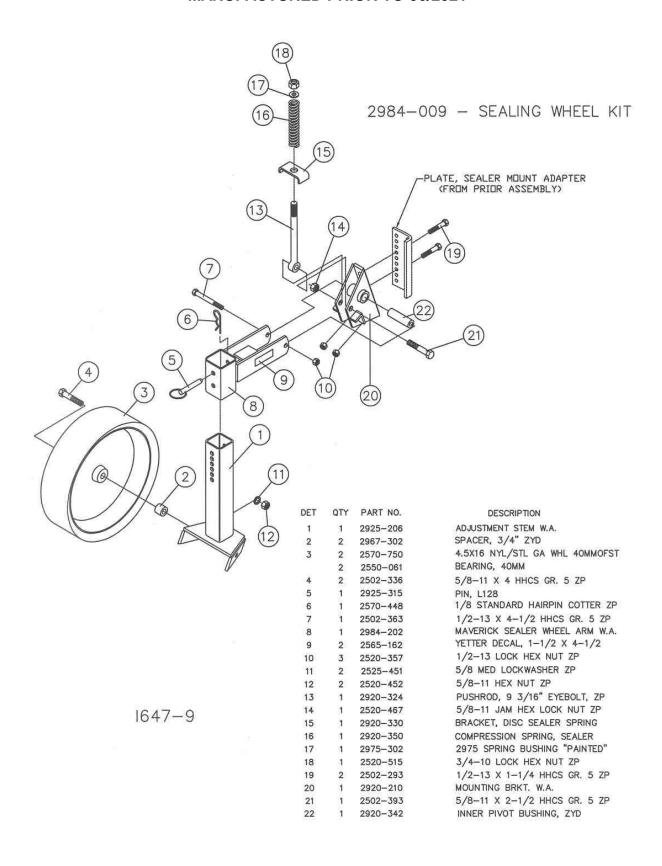


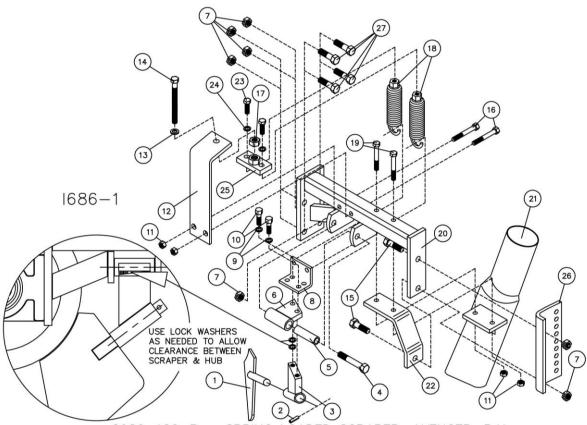
\*NOTE: ITEMS #1,#2 AND #3 ARE NOT USED ON THE 25" AVENGER COULTER

DET	QTY	PART NO.	DESCRIPTION	DET	QTY	PART NO.	DESCRIPTION
*1	2	2502-313	1/2-13 X 3 HHCS GR. 5 ZP.	16	2	2520-452	5/8-11 HEX NUT ZP.
*2	1	2920-211	SHANK MTG. BRACKET W.A.	17	2	2920-329	DISC SEALER BRACKET
*3	1	2920-339	SHANK MTG. CLAMP PLATE	18	1	2920-209	DISC SEALER ARM W.A.
4	5	2520-357	1/2-13 HEX LOCK NUT ZP.	19	1	2502-363	1/2-13 X 4 1/2 HHCS GR. 5 ZP.
5	8	2505-207	5/16-18 X 1 1/4 CAR. BLT. GR. 5 ZP.	20	4	2525-352	1/2 MED LOCKWASHER ZP.
6	2	2965-352-DISC	HUB CAP CASTING, 4 BOLT, BLACK	21	4	2520-352	1/2-13 HEX NUT ZP.
7	2	2571-173	.138 X 16" DISC, 4 BOLT	22	1	2920-330	DISC SEALER SPRING BRACKET
	2	2571-181	.098 x 12" DISC, 4 BOLT	23	1	2920-350	COMP. SPRING, .393 W, 1 5/8" ID
	2	2571-174	.098 X 13.62" NOTCH DISC. 4 BOLT	24	1	2975-302	2975 SPRING BUSHING
	2	2571-187	16" NOTCHED SEALER BLADE	25	1	2520-515	3/4-10 LOCK HEX NUT ZP.
8	2	2570-742	D-BOLT, FLANGE 5/8-11 X 4" GR. 8 ZYD	26	1	2920-324	PUSHROD, 9-3/16" EYEBOLT, ZP.
9	2	2965-128	HUB AND BEARING ASS'Y., 4 BOLT	27	1	2502-393	5/8-11 X 2 1/2 HHCS GR. 5 ZP.
10	2	2570-594	BEARING, 2 ROW NTN# DF0654LU	28	1	2920-342	INNER PIVOT BUSHING, ZP.
11	2	2570-715	BEARING INSERT, TRASHMASTER	29	1	2520-467	5/8-11 JAM HEX LOCK NUT ZP.
12	2	2965-351	HUB CAST., MACHINED, 4 BOLT	30	1	2920-210	MTG. BRACKET W.A.
13	8	2520-206	5/16-18 FLANGE LOCK NUT	31	2	2502-317	1/2-13 X 1 3/4 HHCS GR. 5 ZP.
14	4	2505-345	1/2-13 X 2 CAR. BLT. GR. 5 ZP.	32	2	2565-162	YETTER DECAL, 1 1/2 X 4 1/2
15	2	2525-451	5/8 MED LOCKWASHER	33	2	2550-069	SEAL, TRIPLE LIP, NTI# 1812-5
				34	2	2967-302	SPACER, 3/4", ZP

REVISED 10/27/16

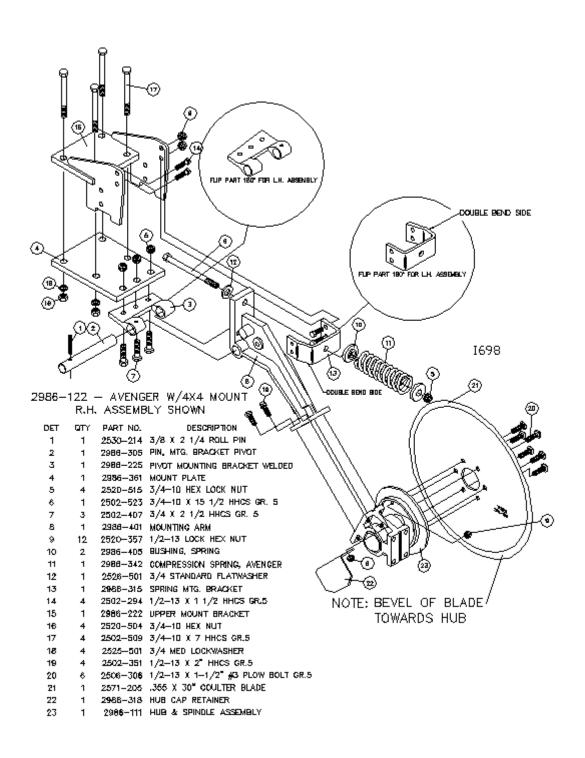
# PARTS IDENTIFICATION MANUFACTURED PRIOR TO 06/2021





2986-120-R - SPRING LOADED SCRAPER, AVENGER, R.H.

DET	QTY	PART NO.	DESCRIPTION	DET	QTY	PART NO.	DESCRIPTION
1	1	2986-215	SCRAPER BLADE W.A.	14	1	2502-282	7/16-14 X 4-1/2 FULL THREAD
2	1	2530-155	1/4 X 1-1/4 ROLL PIN ZP.	15	2	2502-317	1/2-13 x 1-3/4 HHCS GR.5 ZP
3	1	2986-216	LOWER KNIFE PIVOT W.A	16	2	2502-246	3/8-16 X 3 HHCS GR.5 ZP.
4	1	2502-364	1/2-13 X 4" HHCS GR.5 ZP.	17	1	2520-303	7/16-14 HEX NUT ZP.
5	1	2986-346	INNER PIVOT BUSHING	18	2	6000-400	CLOSE WHEEL SPRING ASS'Y.
6	1	2986-217	UPPER KNIFE PIVOT W.A.	19	2	2502-233	3/8-16 X 3-1/4 HHCS GR.5 ZP
7	6	2520-357	1/2-13 LOCK HEX NUT ZP.	20	1	2986-218	KNIFE ARM PIVOT W.A.
8	1	2986-345	DOUBLE SPRING ANCHOR	21	1	2986-220	3" LIQ. TUBE W.A., R.H. (SHOWN)
9	2	2525-251	3/8 MED. LOCKWASHER		1	2986-219	3" LIQ. TUBE W.A., L.H.
10	2	2502-232	3/8-16 X 1-1/2 HHCS GR.5 ZP	22	1	2986-344	KNIFE ARM BRACE
11	4	2520-258	3/8-16 HEX FLANGE NUT	23	2	2502-285	7/16-14 X 1 1/4 HHCS GR 5 ZYD
12	1	2986-343	SPRING ADJ. BAR	24	2	2525-301	7/16 MED LOCK WASHER ZYD
13	1	2526-301	7/16 STD. FLATWASHER	25	1	2986-221	DOUBLE SPRING ADJ BLOCK W.A.
				26	1	2986-322	PLATE, SEALER ADAPTER
				27	4	2502-294	1/2-13 X 1-1/2 HHCS GR5 YD



# **TROUBLESHOOTING**

Problem	Solution
25" coulter blade creates soil disruption.	Add optional skid shoe kit 2986-108
	Increase skid shoe spring tension.
Slot cut by 25" coulter blade fills and overflows with material.	Make sure maximum coulter operating depth is reached (8").
	Cut back volume of the material which is being applied.
	Increase ground speed.
Inadequate 25" coulter blade depth.	Tighten down pressure spring.
	Add 2550-771 10" poly helper spring.
	Add additional ballast. Example: 200# per coulter. Operate toolbar height 22"-25"
Slot made by 25" blade remains open.	Install optional disc sealer 12" 2920-012, 16" 2930-012, 2920-016, 2920-016-N, or optional wheel sealer 2984-009.
Optional sealer forces liquid out of trench.	Decrease disc sealer spring tension.
	Readjust blade angle.
	Adjust disc arm side to side to space disc blade further from trench.
Inadequate slot being made by 25" coulter blade.	Increase depth of the 25" blade.
Coulter plugging.	Sharpen or replace 25" coulter blade.
	Adjust scraper to touch flat against the blade. Replace scraper
Breakage or excessive damage to blades.	Avoid turning with blades in the ground.
	Avoid operating in frozen ground.
	Reduce speed in rocks or other adverse conditions.

# **NOTES**

# Our name Is getting known

Just a few years ago, Yetter products were sold primarily to the Midwest only. Then we embarked on a program of expansion and moved into the East, the South, the West and now north into Canada. We're even getting orders from as far away as Australia and Africa.

So, when you buy Yetter products . . .you're buying a name that's recognized. A name that's known and respected. A name that's become a part of American agriculture and has become synonymous with quality and satisfaction in the field of conservation tillage.

Thank you.

### YETTER MANUFACTURING CO.

Colchester, IL 62326-0358 309/776-4111 Toll Free 800/447-5777 Fax 309/776-3222

Website: www.yetterco.com

E-mail: info@yetterco.com

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