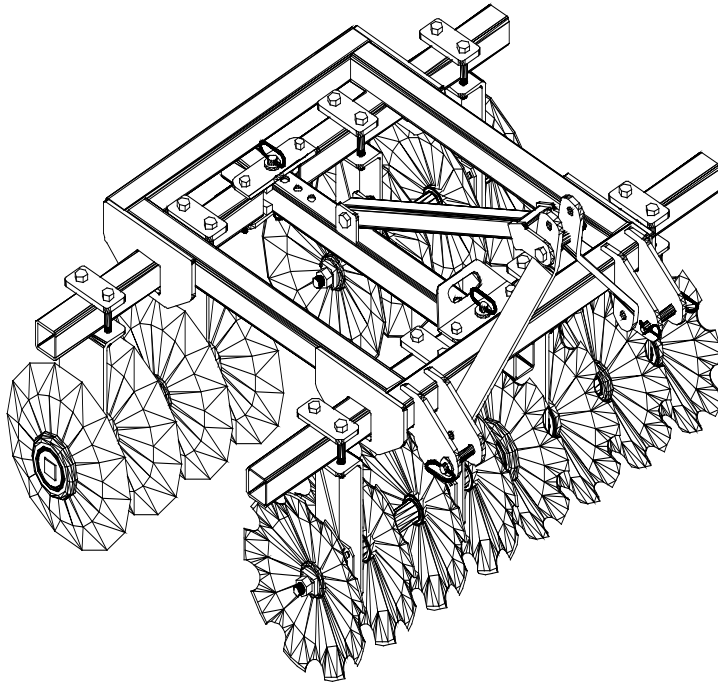




# Disc Harrow

## Owners Manual



### Models

**DH-30-60-18" Disc Blade**

**DH-30-72-18" Disc Blade**

**DH-30-84-18" Disc Blade**

**DH-30-96-18" Disc Blade**

**Operating Instructions**

**Safety Instructions**

**Parts List**

**Warranty Information**

**Maintenance**

## CAUTION

**THE FOLLOWING SAFETY PRECAUTIONS SHOULD BE THOROUGHLY UNDERSTOOD BEFORE ATTEMPTING TO BEGIN ASSEMBLING THIS MACHINE.**

1. Select an area for assembly that is clean and free of any debris which might cause persons working on the assembly to trip.
2. Do not lift heavy parts or assemblies. Use crane, jack, tackle, fork trucks or other mechanical devices.
3. Preview the assembly instructions in your operator's manual before proceeding further.
4. If the assembly instructions call for parts or assemblies to be blocked up, use only blocking material that is in good condition and is capable of handling the weight of the assembly to be blocked. Also insure that the blocking material is on a clean, dry surface.
5. Never put hands, or any part of your body, under blocked up assemblies if at all possible.
6. After completing assembly, thoroughly inspect the Disc Harrow to be sure that all nuts, bolts, or any other fastened assemblies have been tightened.
7. Before operating the machine, thoroughly read the operation section of your operator's manual.
8. Before operating, read the maintenance section of your operator's manual .
9. **Before operating equipment – if you have any questions regarding the proper assembly or operation, contact your dealer or representative.**

### **STATEMENT OF POLICY**

It is our policy of to improve its products where it is possible and practical to do so. The manufacturer reserves the right to make changes or improvements in design and construction at any time, without incurring the obligation to make these changes on previously manufactured units.

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### TO THE OWNER:

Read this manual before using your Disc Harrow. This manual is provided to give you the necessary operating and maintenance instructions for keeping your Disc Harrow in top operating condition. Please read this manual thoroughly. Understand what each control is for and how to use it.

Observe all safety signs on the machine and noted throughout the manual for safe operation of the implement. Keep this manual handy for ready reference.

Like all mechanical products, it will require cleaning and upkeep.

**Use only genuine service parts. Substitute parts will void warranty and may not meet standards required for safe and satisfactory operation.**

### RETAIL CUSTOMER'S RESPONSIBILITY

It is the retail customer and/or Operator's responsibility to read the Operator's Manual, to operate, , maintain, and store the product in accordance with all instructions and safety procedures.

**Failure of the operator to read the Operator's Manual is a misuse of this equipment.**

**It is the retail customer and/or Operator's responsibility to inspect the product and to have any part(s) repaired or replaced when continued operation would cause damage or excessive wear to other parts or cause safety hazard.**

**It is the retail customer and/or Operator's responsibility to deliver the product to the authorized Dealer, from whom it was purchased, for service or replacement of defective parts that are covered by warranty. Repairs to be submitted for warranty consideration must be made within ninety (90) days of failure.**

**It is the retail customer and/or Operator's responsibility for any cost incurred by the Dealer for traveling to or hauling of the product for the purpose of performing a warranty obligation or inspection.**

## **Warranty**

Manufacturer warrants each new implement to be free from defects in material and workmanship under normal use and service for a period of six (6) months from the date of original sale.

This warranty is expressly in lieu of all other warranties and representations, expressed or implied, and all other obligations or liabilities on the part of the Manufacturer.

Manufacturer's liability and obligation is limited to repair or replacement of the product or a refund of purchase price, at Manufacturer's option, provided the purchaser returns the claimed defective product to the Manufacturer, or authorized distributor, with transportation charges prepaid, and an examination by Manufacturer discloses the product is defective.

This warranty does not cover said product which has been repaired or altered outside of the factory of Manufacturer in any way as to, in the judgment of the Manufacturer affect the stability, reliability or performance of the product. This warranty does not cover damage or product failure caused by accident, misuse, negligence, tampering, improper attachment or improper maintenance.

This warranty is null and void unless "Warranty Registration Form and Inspection Report" is completed and returned to Manufacturer.

This warranty excludes any and all liability for consequential or incidental damages.

This warranty gives you specific legal rights providing said product is put to its proper designed use.

### **THIS CHECKLIST TO REMAIN IN OWNER'S MANUAL**

#### **Dealer Preparation Check List**

- 1. Assembly Completed
- 2. All fasteners torque to specifications given in Torque Chart
- 3. All decals in place and readable
- 4. All guards in place and in good operating order
- 5. Overall condition good (paint, welds)
- 6. Operator's Manual has been delivered to owner
- 7. Owner has been instructed on the safe and proper use of the implement

Dealer Signature: \_\_\_\_\_

It is the dealer's responsibility to complete the procedures listed above before delivery of this implement to the customer.

## **CHECKLISTS**

### **DELIVERY CHECKLIST**

Inspect the Disc Harrow thoroughly after assembly to be certain it is set up set up properly. The following checklist is a reminder of points to inspect. Check off each as it is found satisfactory or after proper adjustment is made.

Check operator's manual and familiarize the operator with all sections of it.

Check all bolts to be sure they are tight or adjusted properly at hinged locations.

Check that all cotter pins are properly installed.

Check that disc blades have been properly installed. Check gang beam bolts for tightness.

Check Disc Harrow attitude, after mounting on tractor.

Check that all safety signs (decals) are in place and readable.

### **DAILY CHECKLIST**

Check that Disc Harrow is properly and securely attached to tractor.

Check that all nuts and bolts are secure.

It is very important that the axle nut and bearing mount bolts are checked and tightened frequently.

Check condition of discs and security of attachment.

Use a safety chain for precaution if the Disc Harrow should separate from the tractor drawbar.

Make sure disc is raised out of soil before turning tractor. Damage to unit could result

**NOTE: This type of damage is not covered under warranty, as it is totally under the control and the responsibility of the operator.**

## **TO THE OWNER / OPERATOR / DEALER**

All implements with moving parts are potentially hazardous. There is no substitute for a cautious, safe-minded operator who recognizes the potential hazards and follows reasonable safety practices. The manufacturer has designed this implement to be used with all its safety equipment properly attached to minimize the chance of accidents.

### **BEFORE YOU START!!**

**Read the safety messages on the implement and shown in your manual.**

**Observe the rules of safety and common sense!**

**THE SAFETY ALERT SYMBOL IDENTIFIES IMPORTANT SAFETY WARNING MESSAGES. CAREFULLY READ EACH WARNING MESSAGE THAT FOLLOWS. FAILURE TO UNDERSTAND AND OBEY A SAFETY WARNING, OR RECOGNIZE A SAFETY HAZARD, COULD RESULT IN AN INJURY OR DEATH TO YOU OR OTHERS AROUND YOU. THE OPERATOR IS ULTIMATELY RESPONSIBLE FOR THE SAFETY OF HIM/HERSELF, AS WELL AS OTHERS, IN THE OPERATING AREA OF THE EQUIPMENT. UNDERSTAND SIGNAL WORDS.**

A signal word – DANGER, WARNING OR CAUTION- is used with the safety-alert symbol. DANGER identifies the most serious hazards.

DANGER and WARNING safety signs are located near the specific hazard.

CAUTION safety signs list general precautions.

The safety-alert symbol is also used in this manual to call attention to safety messages.

### **IMPORTANT SAFETY INFORMATION!**

Working with unfamiliar equipment can lead to careless injuries. Read this manual, and the manual for your tractor, before assembly or operating, to acquaint yourself with the machines. It is the implement owner's responsibility, if this machine is used by any person other than you, is loaned or rented, to make certain that the operator, prior to operating:

1. Reads and understands the operator's manuals.
2. Is instructed in safe and proper use.

The use of this equipment is subject to certain hazards, which cannot be protected against by mechanical means or product design. All operators of this equipment must read and understand this entire manual, paying particular attention to safety and operating instructions, prior to using. If there is something in this manual you do not understand, ask your supervisor, or dealer, to explain it to you.

Most accidents occur because of neglect or carelessness. Keep all helpers and bystanders' twenty-five feet (25') from an operating Disc Harrow. Only properly trained people should operate this machine. It is recommended the tractor be equipped with Rollover Protection System (ROPS) and a seat belt that is used.

Always stop the tractor, set brake, shut off the tractor engine, remove the tractor key, and lower the implement to the ground before dismounting tractor. Never leave tractor or equipment running while unattended.

Please remember it is important that you read and heed the safety signs on the Disc Harrow, and the safety rules set forth. Clean or replace all safety signs if they cannot be read clearly or understood. They are there for your safety as well as the safety of others.

The safe use of this machine is strictly up to you, the operator.

## **SAFETY INSTRUCTIONS (CONTINUED)** **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 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.

Replace any CAUTION, WARNING, DANGER or instruction safety sign that is not readable or is missing. Location of such safety signs is indicated in this booklet. Never use alcoholic beverages or drugs, which can hinder alertness or coordination while operating this equipment. Consult your doctor about operating this machine while taking prescription medications.

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 this unit until they have read this manual and have developed a thorough understanding of the safety precautions and how it works.**

To prevent **injury** or **death**, use a tractor equipped with a Roll-Over Protective System (ROPS). Do not paint over, remove or deface any safety signs or warning signs on your equipment. Observe all safety signs and practice the instruction 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.**

Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.

In addition to the design and configuration of this implement, including Safety Signs and Safety Equipment, hazard control and accident prevention are dependant upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of the machine. Pay close attention to the safety signs attached to the tractor and mower.

Keep safety signs clean and legible at all times.

Replace safety signs that are missing or become illegible.

Replaced parts that displayed a safety sign should also display the current sign.

Safety signs are available from your Distributor or Dealer Parts Department or the Factory.

Safety is a primary concern in the design and manufacture of our products.

Unfortunately, our efforts to provide safe equipment can be wiped out by a single careless act of an operator.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment. It has been said, “the best safety device is an informed, careful operator.” We ask you to be that kind of an operator. It is the operator’s responsibility to read and understand ALL Safety and Operating instructions in the manual and to follow them. Accidents can be avoided.

Working with unfamiliar equipment can lead to careless injuries. Read this manual, and the manual for your tractor, before assembly or operating, to acquaint yourself with the machines. It is the implement owner’s responsibility, if this machine is used by any person other than you, is loaned or rented, to make certain that the operator, prior to operating:

3. Reads and understands the operator’s manuals.
4. Is instructed in safe and proper use.

Know your controls and how to stop the tractor, engine, and mower quickly in an emergency. Read this manual and the one provided with your tractor.

Train all new personnel and review instructions frequently with existing workers. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible **serious injury** or **death**.

**Do not allow children to operate this machine.**

## **PREPARATION**

Never operate the tractor or Disc Harrow until you have read and completely understand this manual, the Tractor Operator’s Manual, and each of the Safety Messages found on the safety signs on the tractor and Disc Harrow.

Personal protection equipment including hard hat, safety glasses, safety shoes, and gloves are recommended during assembly, installation, operation, adjustment, maintaining, repairing, removal, or moving the implement. Do not allow long hair, loose clothes or jewelry to be around moving parts.

## **PROLONGE EXPOSURE TO LOUD NOISE MAY CAUSE PERMANENT HEARING LOSS!**

Tractors with or without implements attached can often be noisy enough to cause permanent, partial hearing loss. We recommend that you wear hearing protection on a full-time basis if the noise in the Operator’s position exceeds 80db. Noise over 85db on a long-term basis can cause severe hearing loss. Noise over 90db adjacent to the operator over a long-term basis may cause permanent, total hearing loss. **NOTE:** hearing loss from loud noise (from tractors, chain saws, radios, and other such sources close to the ear) is cumulative over a lifetime without hope of natural recovery.

Always wear your seatbelt on tractors equipped with ROPS. Serious injury or even death could result from falling off the tractor, particularly during a turn over when the operator could be pinned under the ROPS or the tractor.



Operate only in daylight or good artificial light.  
Ensure Disc Harrow is properly mounted, adjusted and in good operating condition.

## **General Operating Instructions**

Follow all directions on safety labels.

Do not operate or allow anyone to operate this Disc Harrow without proper instruction in safety and operation.

Do not use Disc Harrow for another purpose other than its intended.

Before working the soil make sure you are not working over any underground obstructions. Contact local utility service before discing .

Never carry passengers.

All nuts, bolts, and fasteners should be checked for tightness daily prior to use.

Do not alter Disc Harrow in any way to affect its reliability or performance in any way other than the intended.

## **Transporting**

When driving on public roads comply with all federal, state, and local laws. Use adequate accessory lights and devices for warning operators of other vehicles.

Lift unit as high as tractor will allow during transport being sure unit is clear of ground.

A safe speed should be maintained during transport. Negative front end weight could cause loss of control. **ALWAYS USE CAUTION!**

Reduce speed while turning being cautious of clearance for Disc Harrow turning Radius.

Slow down on rough terrain.

## **Field Operation**

Use caution when handling disc blades, they are sharp. Always wear gloves when working around disc blades.

- 1) After initial hookup to tractor, slightly lift unit off of ground. Always turn tractor off and remove key before adjusting or maintenance Disc Harrow.
- 2) Always block Disc Harrow in lift position before adjusting angle or maintenance. Adjust front and rear gang to desired cutting angle by removing pin from adjustment bracket assembly. Slide adjustment bracket to desired cutting angle. Angle options are as follows:  
0 Deg.-7 Deg.-14 Deg.-21 Deg.

**Note:**

The greater the angle of the gangs, the more aggressive the cut requiring more horsepower.

For a smoother ground finish adjust the rear gangs at a lesser angle than the front.

- 3) Lower Disc Harrow into ground and begin moving forward. Discing action will begin as soon as it touches the ground and the tractor begins moving forward. Travel speed is determined by ground condition.
- 4) When turning lift Disc Harrow out of ground. **Never operate Disc Harrow in reverse. Never cross a ditch at a right angle, always cross diagonally.**
- 5) Upon finishing using your disc, park it on a level surface, clean unit, and prepare it for next use.

## **Maintenance**

Check all nuts and bolts for tightness prior to first use and after first 5 hours of initial use. Check again at regular intervals.

Torque Axle nuts to 250 ft.lbs. Failure to do so could result in damage to axle and / or disc gang.

Clean unit of trash and dirt after every use.

Inspect all parts for wear, including bearings. Replace as needed.

There are no parts on unit that require lubrication. Bearings are sealed for life of bearing.

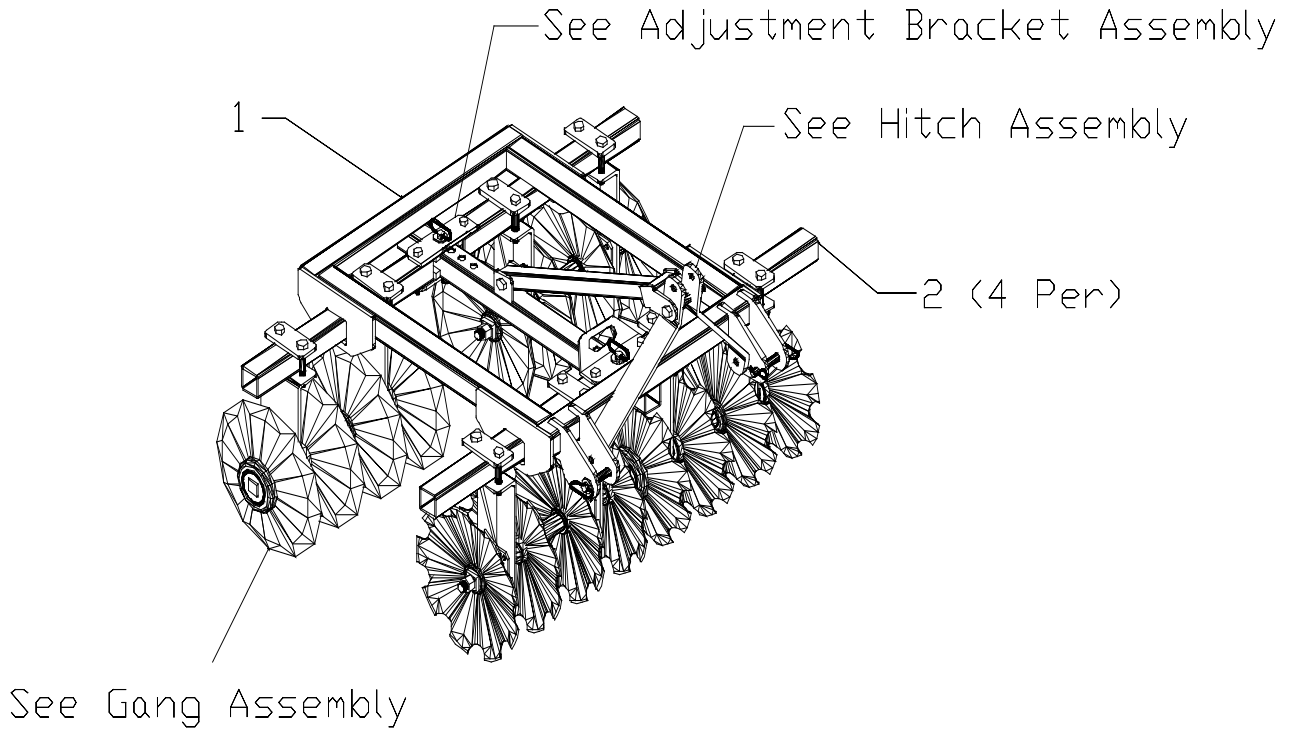
Apply rust prevention or paint to discs to prevent rust.

Replace any missing or deteriorated labels.

# Disc Harrow Specifications

	DH-30-60	DH-30-72	DH-30-84
Hitch	Cat.1 Quick Hitch Compatible		
Max Cutting Width	60"	72"	84"
Height(Add 1" For 20" Disc)	Approximately 41"		
Length	Approximately 53" @ 0 Deg. Adjustment		
Approx. Weight	722 Lbs.	815 Lbs.	908Lbs.
# Of Disc Blades	16	20	24
Blade Spacing	7-1/2"		
Bearing Type	Sealed-Self Aligning		
Bearing Hanger	3/8" Plate / 1/ 2" Top Retaining Plate/ 3/4" Bolts		
Angle Adjustment	0,7,14,21 Deg.		
Frame Tubes	3" Square Tubing		
Gang Tubes	3" Square Tubing		
Axle	1" High Carbon Steel		

# Disc Harrow Part Breakdown



## Model DH-30-60

Item #	Description	Part #	Quantity
1	Frame	200401	1
2	Gang Tube	DH30-60-01	4

## Model DH-30-72

Item #	Description	Part #	Quantity
2	Gang Tube	DH30-72-01	4

## Model DH-30-84

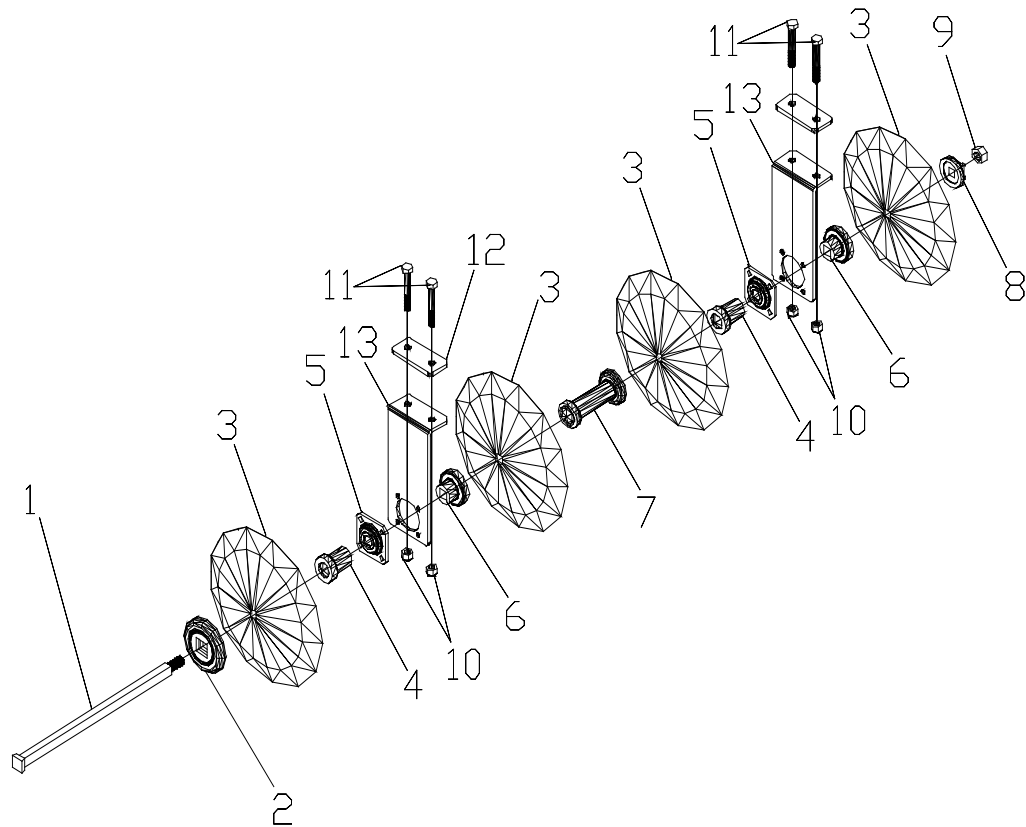
Item #	Description	Part #	Quantity
2	Gang Tube	DH30-84-01	4

## Model DH-30-96

Item #	Description	Part #	Quantity
2	Gang Tube	DH30-96-01	4

# Disc Harrow Gang Assembly

## Model DH-30-60



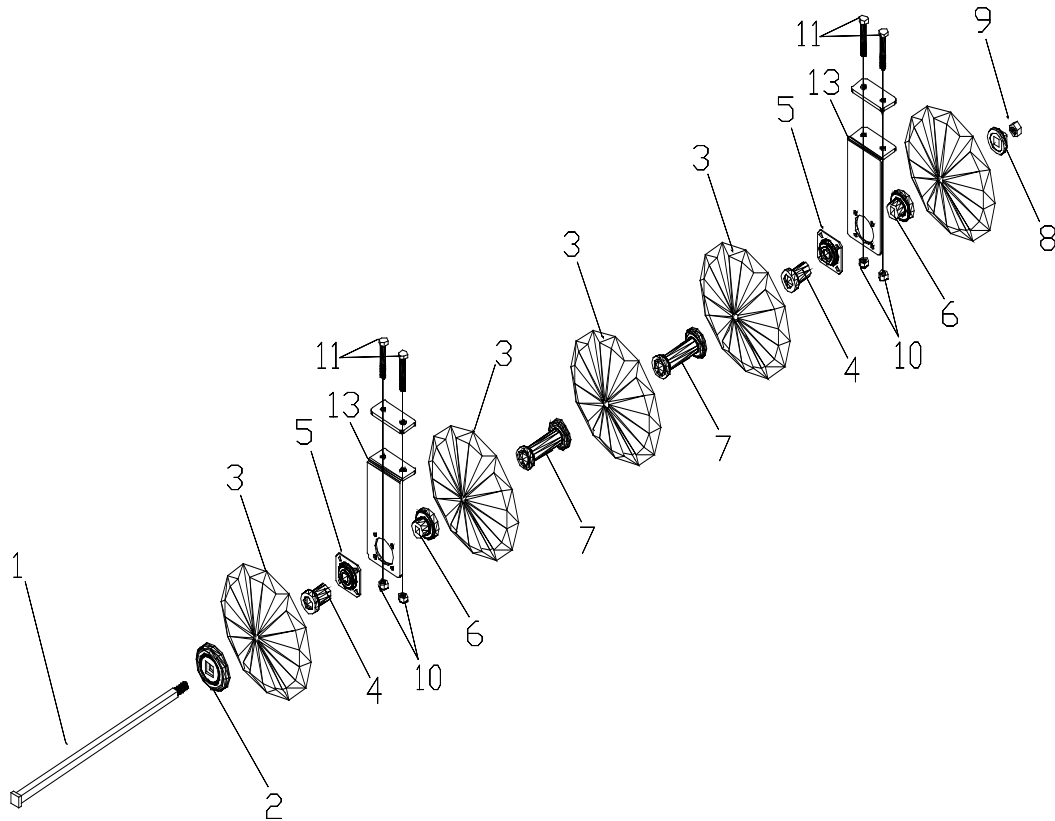
\* Refers to Options on Disc Diameter

Item #	Description	Part #	Quantity
1	26" Axle with Nut	706007	4
2	Large End Cap	706033	4
*3	*18" Plain Disc	706004	8
*3	*18" Notched Disc	706005	8
4	3-5/8 Spacer	706009	8
5	Seal Bearing	706001	8
6	2-3/8 Spacer	706006	8
7	7-7/16" Plain Spool	706025	4
8	Small Washer	706058	4
10	3/4-10 Stover Nut	707026	16
11	3/4-10x5 Hex Bolt	707030	16
12	Bearing Top Plate	200416	8
13	Bearing Mount	700038	8
	3/4-10x6 Hex Screw	707089	1
	3/4-10x2 1/2" Hex Cap	707028	2

	3/4"-10x4 Hex Screw	707091	1
	7/8"x4 1/4" Hitch /Hair Pin	706024	4
	3" Square Black End Cap	706034	6
	1/2"-13x1 1/2" Carriage Bolt	707012	32
	5/8"-11x5" Hex Screw	707052	4
	1/2" Split Lock Washer	707021	32
	1/2"-13 Hex Finish Nut	707020	32
	5/8"-11 Stover Nut	707045	4
	3/4" Flat Washer	707031	4
	1"-8 Jam Nut	707001	4

# Disc Harrow Gang Assembly

## Model DH-30-72

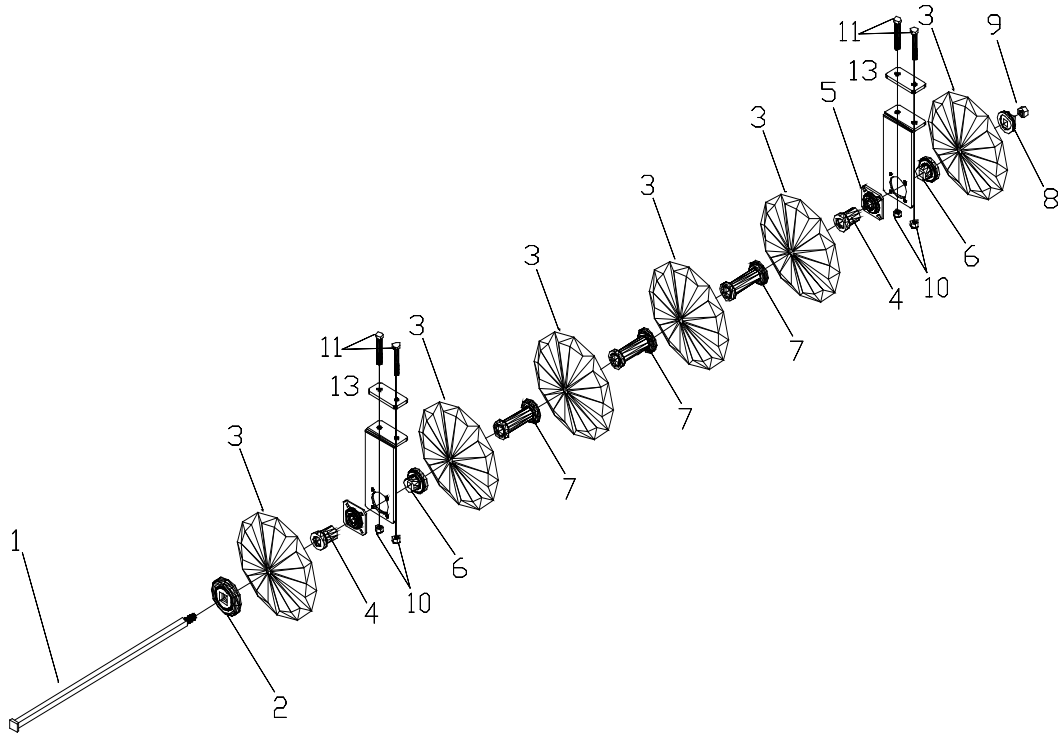


Item #	Description	Part #	Quantity
1	34" Axle with Nut	706008	4
2	Large End Cap	706033	4
*3	*18" Plain Disc	706004	8
*3	*18" Notched Disc	706005	8
4	3-5/8 Spacer	706009	8
5	Seal Bearing	706001	8
6	2-3/8 Spacer	706006	8
7	7-7/16" Plain Spool	706025	4
8	Small Washer	706058	4
10	3/4-10 Stover Nut	707026	16
11	3/4-10x5 Hex Bolt	707030	16
12	Bearing Top Plate	200416	8
13	Bearing Mount	700038	8

	3/4-10x2 1/2" Hex Cap	707028	2
	7/8"x4 1/4" Hitch /Hair Pin	706024	4
	3" Square Black End Cap	706034	6
	1/2"-13x1 1/2" Carriage Bolt	707012	32
	5/8"-11x5" Hex Screw	707052	4
	1/2" Split Lock Washer	707021	32
	1/2"-13 Hex Finish Nut	707020	32
	5/8"-11 Stover Nut	707045	4
	3/4" Flat Washer	707031	4
	1"-8 Jam Nut	707001	4



# Disc Harrow Gang Assembly Model DH-30-84



Item #	Description	Part #	Quantity
1	41" Axle with Nut	706002	4
2	Large End Cap	706033	4
*3	*18" Plain Disc	706004	8
*3	*18" Notched Disc	706005	8
4	3-5/8 Spacer	706009	8
5	Seal Bearing	706001	8
6	2-3/8 Spacer	706006	8
7	7-7/16" Plain Spool	706025	4
8	Small Washer	706058	4
10	3/4-10 Stover Nut	707026	16
11	3/4-10x5 Hex Bolt	707030	16
12	Bearing Top Plate	200416	8
13	Bearing Mount	700038	8
	3/4-10x2 1/2" Hex Cap	707028	2
	7/8"x4 1/4" Hitch /Hair Pin	706024	4

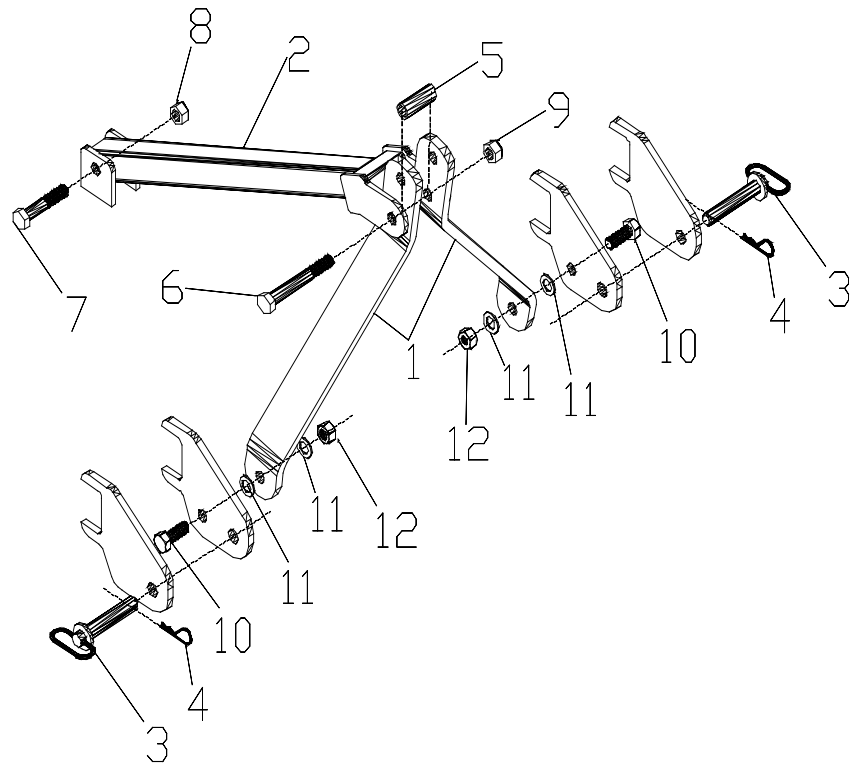
	3" Square Black End Cap	706034	6
	1/2"-13x1 1/2" Carriage Bolt	707012	32
	5/8"-11x5" Hex Screw	707052	4
	1/2" Split Lock Washer	707021	32
	1/2"-13 Hex Finish Nut	707020	32
	5/8"-11 Stover Nut	707045	4
	3/4" Flat Washer	707031	4
	1"-8 Jam Nut	707001	4

# Disc Harrow Gang Assembly

## Model DH30-96

Item #	Description	Part #	Quantity
1	1"x49 1/2" Axle with Nut	706003	4
2	Large End Cap	706033	4
*3	*18" Plain Disc	706004	8
*3	*18" Notched Disc	706005	8
4	3-5/8 Spacer	706009	8
5	Seal Bearing	706001	8
6	2-3/8 Spacer	706006	8
7	7-7/16" Plain Spool	706025	4
8	Small Washer	706058	4
10	3/4-10 Stover Nut	707026	16
11	3/4-10x5 Hex Bolt	707030	16
12	Bearing Top Plate	200416	8
13	Bearing Mount	700038	8
	3/4-10x2 1/2" Hex Cap	707028	2
	7/8"x4 1/4" Hitch /Hair Pin	706024	4
	3" Square Black End Cap	706034	6
	1/2"-13x1 1/2" Carriage Bolt	707012	32
	5/8"-11x5" Hex Screw	707052	4
	1/2" Split Lock Washer	707021	32
	1/2"-13 Hex Finish Nut	707020	32
	5/8"-11 Stover Nut	707045	4
	3/4" Flat Washer	707031	4
	1"-8 Jam Nut	707001	4

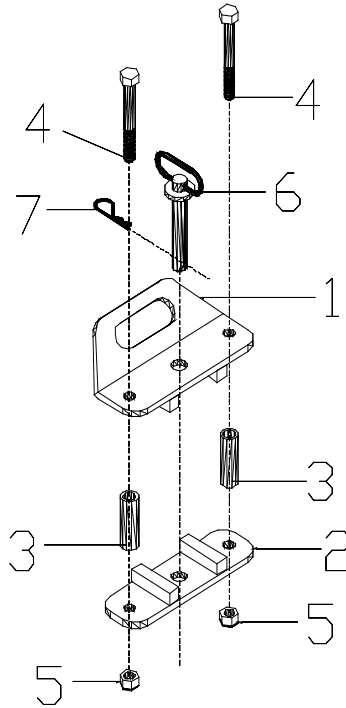
# Disc Harrow Hitch Assembly



Item #	Description	Part #	Quantity
1	Top Link	200426	2
2	Top Link Brace	200420	1
3	7/8"x4-1/4 Pin	706024	2
5	Bushing	DH30-00-19	1
6	3/4-10x6" Hex Bolt	707089	1
7	3/4-10x5 Hex Bolt	707030	1
8	3/4-10 Stover Nut	707026	1
10	3/4-10x2.5 Hex Bolt	707028	2
11	3/4" Flat Washer	707031	4

# Disc Harrow Adjustment Bracket

## Assembly



Item #	Description	Part #	Quantity
1	Top Adjustment Brk	200421	2
2	Bottom Adj. Brk.	200422	2
3	Bushing	DH30-00-19	4
4	5/8"-11x5 Hex Bolt	707052	4
5	5/8-11 Stover Nut	707045	4
6	7/8"x4-1/4 Pin	706024	2

## **LIMITED WARRANTY**

The Manufacturer warrants to the original purchaser of any new Disc Harrow, that the equipment be free from defects in material and workmanship for a period of ninety (90) days from the date of retail sale.

Replacement or repair parts installed on the equipment covered by this warranty are warranted for ninety (90) days from the date of purchase of such part or to the expiration of the applicable new equipment warranty period, whichever ever occurs later.

Such parts shall be provided at no cost to the original owner during regular working hours. The Manufacturer reserves the right to inspect any equipment or parts which are claimed to have been defective in material and workmanship. This warranty applies only to the repair or replacement of said part, solely at the manufacturer's discretion.

### **DISCLAIMER OF IMPLIED WARRANTIES & CONSEQUENTIAL DAMAGES**

The Manufacturer obligation under this warranty, to the extent allowed by law, is in lieu of all warranties, implied or expressed, including implied warranties of merchantability and fitness for a particular purpose and any liability for incidental and consequential damages with respect to the sale or use of the items warranted. Such incidental and consequential damages shall include but not be limited to: transportation charges other than normal freight charges; cost of installation other than cost approved by the manufacturer; duty; taxes; charges for normal service or adjustments; loss of crops or any other loss of income; rental of substitute equipment, expenses due to loss, damage, detention or delay in delivery of equipment or parts resulting from acts beyond the control of the Manufacturer.

THIS WARRANTY SHALL NOT APPLY:

1. To vendor items which carry their own warranties, such as hydraulic cylinders, and tires.
2. If the unit has been subjected to misapplication, abuse, misuse, negligence, fire of other accident.
3. If parts not made or supplied by the manufacturer have been used in connection with the unit, if, in sole judgment of the manufacturer such affects its performance, stability, or reliability.
4. If the unit has been altered or repaired outside an authorized original manufacturer dealership in a manner which, in the sole judgment of the manufacturer such affects its performance, stability, or reliability.
5. To normal maintenance service and normal replacement items such as gearbox lubricant, hydraulic fluid, worn blades, or to normal deterioration of such things as belts and exterior finish, due to use or sun exposure.
6. To expendable or wear items such as teeth, chains, sprockets, belts, springs and other items that in the company's sole judgement is a wear item.

NO EMPLOYEE OR REPRESENTATIVE OF THE MANUFACTURER IS AUTHORIZED TO CHANGE THIS WARRANTY IN ANY WAY OR GRANT ANY OTHER WARRANTY UNLESS SUCH CHANGE IS MADE IN WRITING. THE MANUFACTURER RESERVES THE RIGHT, AT OUR DISCRETION, TO MODIFY, AMEND, OR ALTER THIS WARRANTY POLICY, WITHOUT PRIOR NOTICE, AT ANY TIME.

## **Safety precautions**

**Most accidents occur because of neglect or carelessness.**

**Avoid needless accidents by following all of the safety precautions listed below.**

Machinery should be operated only by those who are responsible and are authorized to do so.

Stop the engine, lower all equipment, lock the brakes, and remove the ignition key before dismounting from the tractor.

Never stand between tractor and implement while tractor is being backed to hitch.

Loose fitting clothing should not be worn, to avoid catching on various parts.

Detach implement in area where children normally do not play.

When performing adjustments or maintenance on an implement, first lower it to the ground or block it securely at a workable height.

Only a qualified operator should be permitted on tractor when in operation; no riders allowed.

Make certain everyone is in the clear before starting tractor or raising or lowering equipment.

Operate the tractor and implement only while in driver's seat.

Reduce speed when transporting mounted implements to avoid bouncing and momentary loss of steering control.

A heavy load can cause instability of the tractor. Use extreme care during road travel.

Slow down on turns and watch out for bumps. Tractor may need front counter-weights to counter-balance the weight of the implement.

Reduce speed on hillsides or curves so there is no danger of tipping.

Avoid driving too close to the edge of ditches or creeks.

Do not transport implement on public roads without reflectors and slow moving vehicle emblem in daylight and with approved warning lights at night and other periods of poor visibility.

Due to the width of some implements, use extra caution on highways, farm roads, and when approaching gates.

Always be sure the implement is in the proper position for transport.

Keep alert and watch the front as well as the rear when working with the implement.

**KEEP CHILDREN AWAY FROM DANGER ALL DAY, EVERY DAY.**

**EQUIP TRACTORS WITH ROLLOVER PROTECTION (ROPS) AND KEEP ALL MACHINERY GUARDS IN PLACE.**

**PLEASE WORK, DRIVE, PLAY, AND LIVE EACH DAY WITH CARE AND CONCERN FOR YOUR SAFETY AND THAT OF YOUR FAMILY AND FELLOW CITIZENS**