

- Tillage
 - Haulage
 - Landscaping
 - Seeding & Plantation
 - Crop Protection
 - Harvest
 - Post Harvest
- Solutions...*



26-3-2019

FIELDKING
USA

Mounted Disc Plow



FIELDKING USA, INC.

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✉ usa@fieldking.com, www.fieldkingusa.com

➤ Operator Manual ➤ Service Manual ➤ Part Catalogue

CONGRATULATIONS!

You have invested in one of the best implements of its type in the market today.

The care you give your “FIELDKING USA” implement will greatly determine your satisfaction with its performance and its service life. A careful study of this manual will give you a thorough understanding of your new implement before operating.

If your manual is lost or destroyed, “FIELDKING USA” will be glad to provide you a new copy. Visit to nearest dealership & get a copy. Most of our manuals can also be downloaded from our website at www.fieldkingusa.com.

As an authorized “FIELDKING USA” dealer, we stock genuine “FIELDKING USA” parts which are manufactured with the same precision and skill as our original equipment. Our trained service persons are well informed on methods required to service “FIELDKING USA” equipments and are ready to help you.

Should you require additional information or assistance, please contact us.

YOUR AUTHORIZED

FIELDKING USA DEALER

BECAUSE “FIELDKING USA” MAINTAINS AN ONGOING PROGRAMME OF PRODUCT IMPROVEMENT, WE RESERVE THE RIGHT TO MAKE IMPROVEMENTS IN DESIGN OR CHANGE IN SPECIFICATION WITHOUT INCURRING ANY OBLIGATION TO INSTALL THEM ON UNITS PREVIOUSLY SOLD. BECAUSE OF THE POSSIBILITY THAT SOME PHOTOGRAPHS IN THIS MANUAL WERE TAKEN OF PROTOTYPE MODELS, PRODUCTION MODELS MAY VARY IN SOME DETAIL. IN ADDITION, SOME PHOTOGRAPHS MAY SHOW SHIELDS REMOVED FOR THE PURPOSE OF CLARITY. NEVER OPERATE THIS IMPLEMENT WITHOUT ALL SHIELDS IN PLACE.

TO THE PURCHASER

This manual contains valuable information about your new “FIELDKING USA” mounted disc plow. It has been carefully prepared to give you helpful suggestions for operating, adjusting, servicing and ordering spare parts.

Keep this manual in a convenient place for quick and easy reference. Study it carefully. You have purchased a dependable and sturdy mounted disc plow but only by proper care and operation you can expect to receive the service and long life designed and built into it.

Sometime in the future your mounted disc plow may need new parts to replace which are worn out or broken. If so, go to your dealer and provide him equipment's detail like model and part number.

CUSTOMER INFORMATION

Name _____

Purchased From _____

Date of Purchase _____

Model No. _____

Serial No. _____

PURCHASER / OPERATOR'S RESPONSIBILITY

1. Read and understand the information contained in this manual.
2. Operate, lubricate, assemble and maintain the equipment in accordance with all instructions and safety procedures in this manual.
3. Inspect the equipment and replace or repair any parts that are damaged or worn out which under continued operation would cause damage, wear to other parts, or cause a safety hazard.
4. Return the equipment or parts to the authorized “FIELDKING USA” dealer, from where it was purchased, for service or replacement of defective parts that are covered by warranty. (The “FIELDKING USA” Factory may inspect equipment or parts before warranty claims are honored.)
5. All costs incurred by the dealer for traveling to or transporting the equipment for warranty inspection and claims will be borne by the customer.

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1. TECHNICAL DATA

1.1 INTRODUCTION

This handbook contains the use and maintenance instructions with a list of the spare parts of the disc plow.

This disc plow is equipped with heavy-duty tubular frame specially designed for deep plowing / land preparation of rough soil.

Regular and satisfactory operations together with economic and long lasting use of the implement depend on the compliance with instructions given in this handbook.

Compliance with the instructions in this handbook is also important since Manufacturer declines all and every responsibility for damage to persons or property caused by negligence and failure to comply with these instructions.

1.2 WARRANTY

When the machine is delivered, check that it has not been subjected to damage during transport and that the accessories are in a perfect condition and complete.

Any claims following the receipt of damaged goods shall be presented in writing within 8 days from the receipt of the goods.

The purchaser may only make the claims under warranty when he has complied with the warranty conditions in the supply contract.

1.3 WHEN THE WARRANTY BECOMES VOID

Besides the cases specified in the supply agreement, the warranty shall in any case become void.

1. When the implement has been used beyond the specified power limit like (Tractor Horse Power)
2. When repairs made by the customer without authorization from the manufacturer or owing to installation of spurious spare parts, the machine is subjected to variations and the damage can be ascribed to these variations.
3. When the user has failed to comply with the instructions in this handbook.
4. If the implement is used in very hard/stony soil no warranty of discs will be given.
5. If the implement is not lifted while taking a turn of the tractor no warranty of any breakage of coulter assembly (coulter bearing and coulter disc) would be allowed.
6. No warranty will be given if the service and greasing is not done on time.

1.4 WARNING SIGNALS

1. Thoroughly read the instruction manual before proceeding with the various operations.
2. Keep maintenance and warranty according to this handbook.

2. USAGE INSTRUCTIONS

2.1 BEFORE USE

Before mounting of disc plow make sure that all nuts and bolts are properly secured.

2.2 ATTACHING THE PLOW TO THE TRACTOR

1. Place the plow duly leveled on the flat piece of land.
2. Reverse the tractor to the plow (Do not drag the plow up the tractor)
3. Attach the left arm of the tractor to the plow first.
4. Attach the central arm to the plow. To attach, turn the screws on both sides to an equal length. If the arm is too short or too long, turn the screw to adjust both at the same time until aligned with the hole on the central arm.
5. To attach the lower right arm, turn the screw until the mounting pin is at the same level as the hole on the tractor arm. If the gap between hole and mounting pin is too close or too distant, turn the control arm in or pull it away to an appropriate distance. You may have to adjust both height and distance at the same time. When the hole at tractor arm and mounting pin are even, insert the pin in the hole and lock it with the lynch pin.
6. After attaching the plow lift it and adjust the control arm parallel to the ground. When you look from both rear or sideways, the discs should all be touching the ground uniformly.

2.3 NOTE

1. The plow will work best when the right wheel of the tractor is inside the previously plowed furrow. Readjust the plow alignments again if necessary.
2. To get good results from the plow discs should be replaced when their diameter is reduced to 22".

3. TRACTOR PREPARATION

3.1 INSTRUCTIONS FOR TRACTOR PREPARATION

The following are typical instructions for preparing a tractor for operation.

1. The horsepower of tractor selected should match the implement.

2. Adjust the front and rear wheel track width.
3. Provide adequate front end ballast for tractor stability.
4. Provide proper rear furrow wheel weight.
5. All plow adjustment should be carried out.
6. Select load and depth control setting according to tractor operators manual.

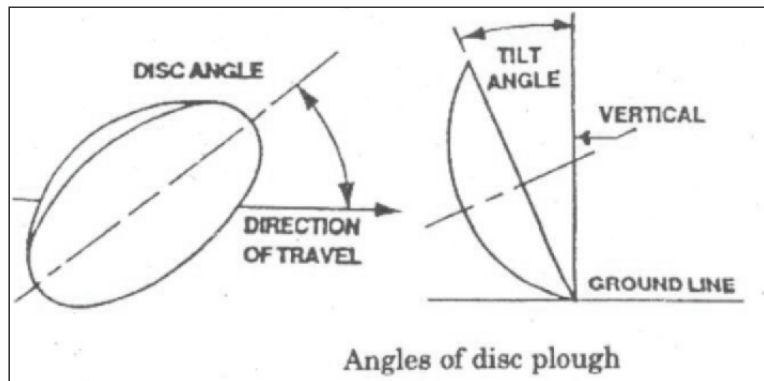
3.2 ADJUSTMENTS

In order to get better results, the following adjustments are necessary:

1. Cutting Angle Adjustments

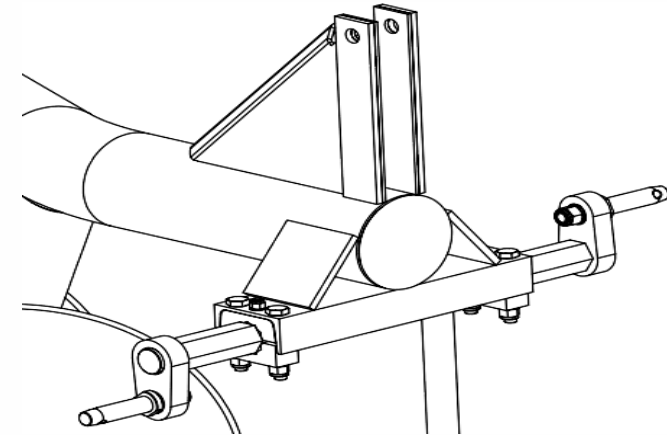
Discs would not cut if they are rolled straight ahead. They must be set at an angle. Provision is made in the plow standard for the adjustment of the horizontal disc angle and vertical tilt angle to obtain optimum disc operation in different soil conditions.

- a) Disc Angle is the angle which the plain of cutting edge makes with the line of travel. It is normally $42^\circ - 47^\circ$. Reducing this angle increases the disc rotation with respect to ground speed and reduces the tendency of the plow to over cut. Increasing the disc angle improves the disc penetration.
- b) Tilt Angle is the angle which the plain of the cutting edge makes with the vertical line. It ranges from $15^\circ - 25^\circ$. Increasing the tilt angle improves disc penetration in heavy, sticky soils. Decreasing the tilt angle improves disc penetration in loose and brittle soils.



2. Width of cut adjustment

Every disc plow has a particular width of cut ranging from 7" - 10" depending on the diameter of the blade. However to suit various draft and penetration requirements the width of the cut for the front disc can be adjusted with the help of drawbar. Drawbar has an index line which can be lined up with different (1, 2, 3) markings on the drawbar carrier as shown.



3. Leveling the plow

The level of the plow is controlled by the tractor top link. If the rear end of the plow beam is higher than the front end of the beam, lengthen the top link. If rear end of the plow beam is lower than the front end, then shorten the top link. Lateral leveling is controlled by adjusting the length of the tractor right lower link. These adjustments must be made with the plow prior to operation.

4. Tightening the bearing

Bearings must be kept tight. Tighten the castle nuts until the disc binds the hub.

5. Scraper adjustments

Scrapers are set low enough to catch and turn the furrow slice before it falls away from the disc. For deeper plowing, the scraper has to be set a little higher. For sticky soils, set them closer to the disc. The research study data reveals that mould board type scraper performs the best, but in sticky soils use of hoe type scraper is better.

3.3 WARNING FOR DRIVER

1. Before plowing check all nuts and bolts of the disc plow.
2. Don't plow on stony soil.
3. Tractor should be in high first gear.
4. If soil is hard then plow the field at least twice.
5. Make sure that the shocker spring is tight.
6. Lift the disc plow on every turn.
7. Be vigilant about the tree roots and stones.
8. Keep proper distance from disc plow when disc plow is in working.
9. Lift the plow before approaching the road.

3.4 SAFETY

Understanding the Machine Safety Labels



Safety-Alert Symbol

The machine safety labels shown in this section are placed in important areas on your machine to draw attention to potential safety hazards.

On your machine the words DANGER, WARNING and CAUTION are used with this safety-alert symbol. DANGER identifies the most serious hazards.

The operator's manual also explains any potential safety hazards whenever necessary.

➤ Before plowing with mounted disc plow take care that nobody stands near it.



In order to protect yourself always wear adequate clothes and shoes during the operations.



Never allow riders on the tractor or implement unless an additional seat is available.



Be careful when moving around steep gradient to avoid sharp turn.



Never transport the implement on rough roads during the night. When operating, avoid sharp turns that may cause tractor colliding with the implement.

3.5 DRAFT OF DISC PLOW

The disc plow is lighter in draft than the mouldboard plow, turning same volume of soil in similar conditions. In very hard soil, some extra weight is added which increases the draft.

The bearing conditions of the bearing housing will also affect the draft. Keep bearing in smooth conditions i.e. apply the grease whenever necessary.

Draft is also affected by the depth and width of cut per bottom for complete plow. Speed is also another factor which increases the draft, doubling the speed increases the draft by about 20 -25%.

3.6 ADJUSTMENTS FOR DEEPER PLOWING

The depth of the plow can be obtained by the position and draft control levers of the tractor hydraulic system. However more depth can be obtained by.

- Adding extra weight to the plow.
- Reducing the tilt angle. A correctly tilted disc plow tends to penetrate better.
- If the ground is covered with trash, set the disc in almost vertical position and add weight to the plow. In such soils notched disc gives better results.

4. MAINTENANCE

4.1 MAINTENANCE INSTRUCTIONS

If you work the disc plow on stony land then maintenance also increases. Please follow these rules to get the best results.

- If disc plow is new then after first two hours of working tighten all nut bolts.
- Check the plow adjustments if the steering is hard.
- Check the scrapper adjustments frequently.
- If the soil has entered in grease nipple, then change the nipple.
- After every fifty hours grease all greasing points with grease gun and tighten all nuts and bolts.
- After three hundred hours, open the hub of disc plow & cleanse it with diesel oil, pump in new grease & replace its seal.
- Constantly check for loose nuts and bolts.
- Sharpen the disc if the blades are dull. Blunt blades increase the draft considerably.
- When the diameter of disc is reduced to 24" it is desirable to change the degree of hub by loosening the mounting bolts.
- Discs cannot work beyond 22" diameter. They must be replaced for effective plowing.

11. Keep the bearings lubricated as per the instructions given in the manual.
12. Coat the disc blades for rust prevention with the used oil in slack season.

4.2 STORAGE OF MACHINE AFTER WORK

1. Wash the disc plow after work
2. Replace the worn out nuts and bolts.
3. If disc plow has to remain unused for long time then clean it & apply a layer of used oil for rust prevention.

These steps will enhance the life of your disc plow.

4.3 LUBRICATION

Please take care that high quality grease is used in bearing housings, coulter hub & bushes.

4.4 INSTRUCTION FOR DRIVER

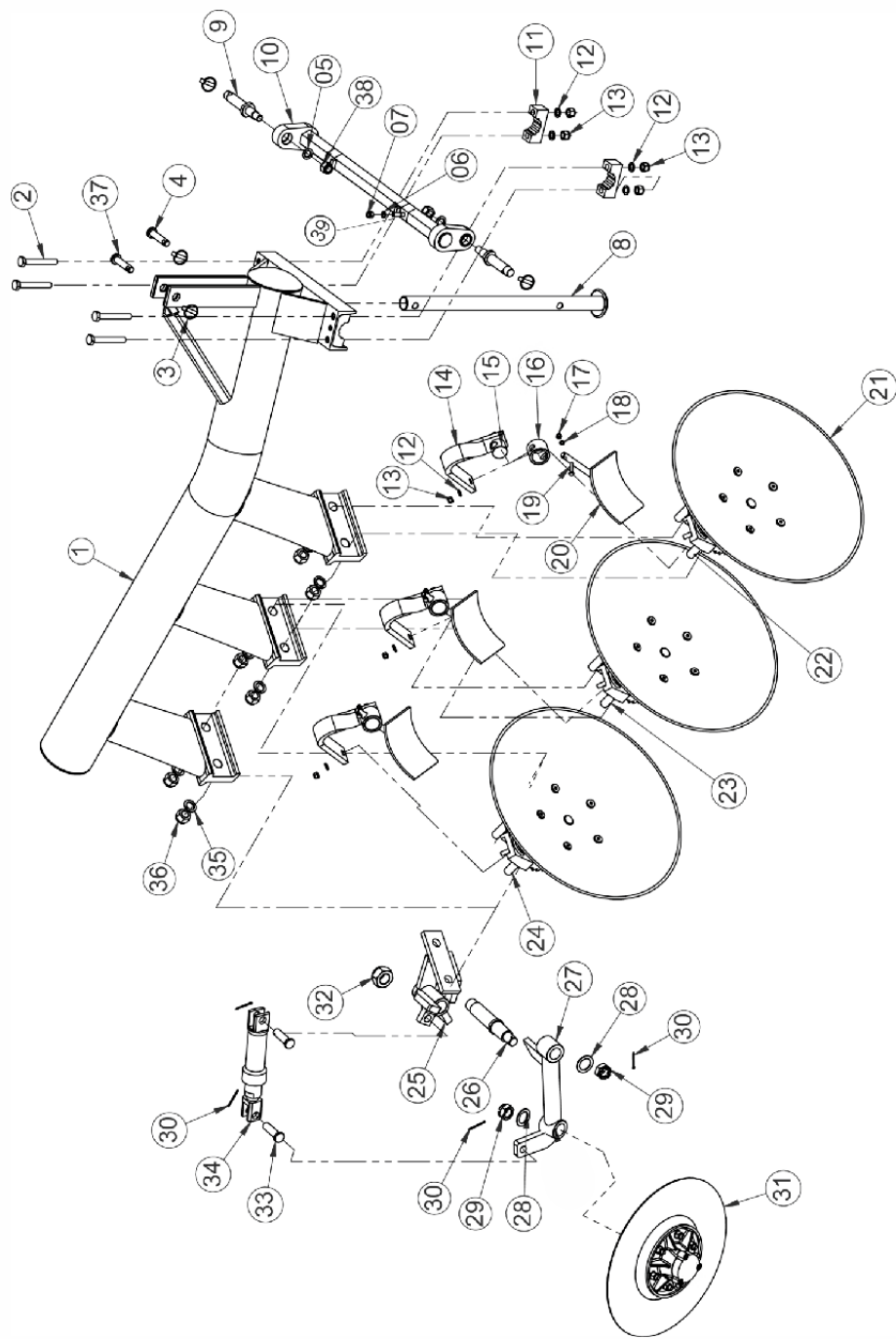
1. When disc plow is ready for use don't stand between disc plow & the tractor.
2. Properly fit the three point linkage as mentioned above & lock with lynch pin.
3. In case of scrapper touching the discs, loosen the scrapper bolt and readjust the scrapper.
4. Never turn the tractor to the right or left when the plow is engaged in the soil.
5. Never reverse the tractor when the plow is engaged in the soil.

5. TROUBLE SHOOTING

TROUBLE SHOOTING			
SR. NO.	DEFECT	REASON	REMEDY
1	LOW PENETRATION	- BLUNT DISC - MORE TILT ANGLE	- SHARPEN THE EDGE - SET THE TILT ANGLE
2	HEAVY DRAFT	- BLUNT DISC - FURROW TOO WIDE	- SHARPEN THE EDGE - REDUCE THE TILT ANGLE
3	EXCESSIVE SIDE DRAFT	- IMPROPER HITCHING	- HITCH PROPERLY
4	LESS SCOURING	- DEFECTIVE SCRAPER - LOOSE BEARING	- ADJUST THE SCRAPER - SET THE BEARING
5	UNEVEN FURROW	- DISC ANGLE NOT UNIFORM - HITCHING DEFECTIVE	- SET THE DISC ANGLE - SET THE HITCHING

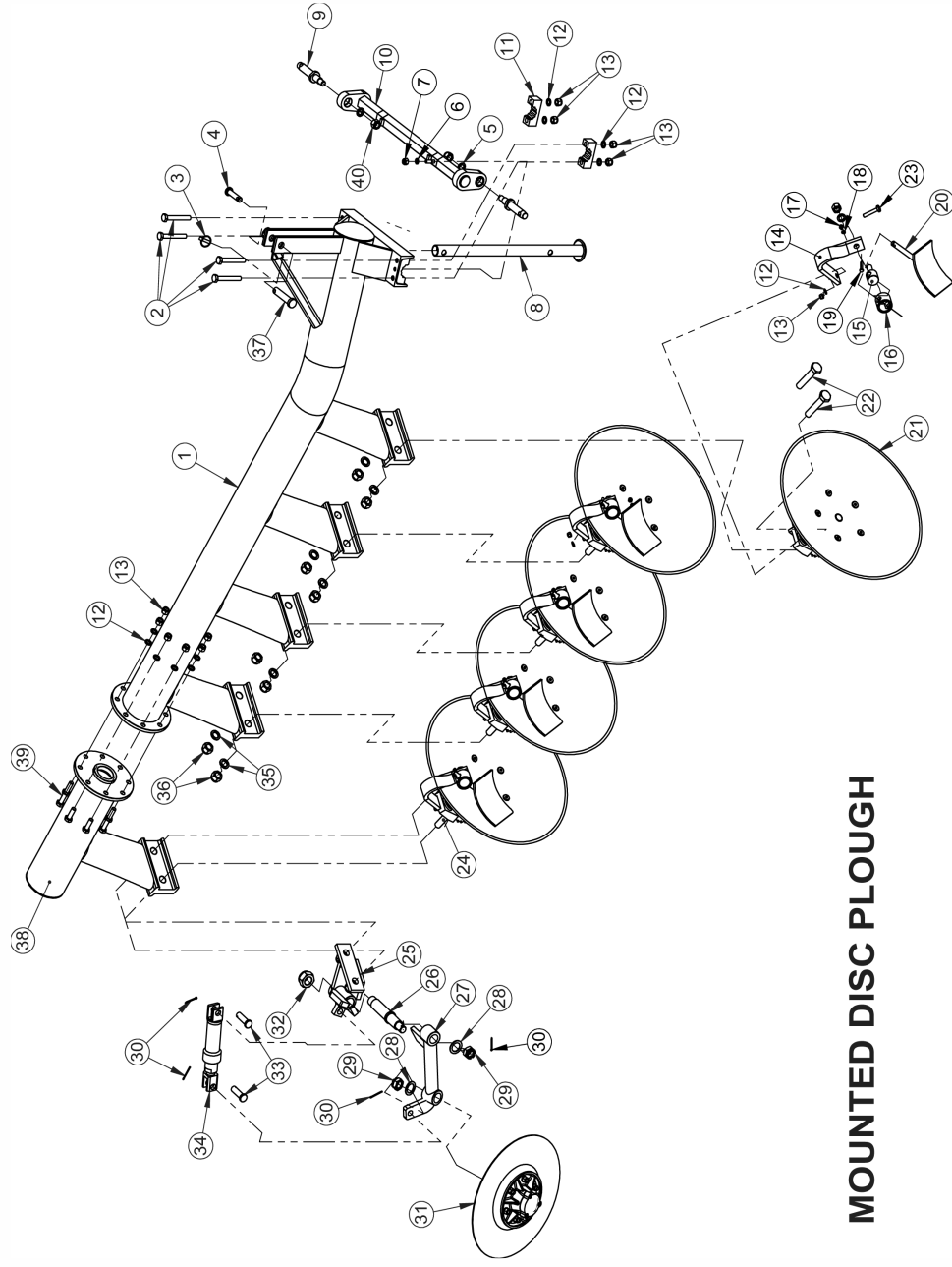


Dear user!
Respect the Ecology.
Do not throw the trash away.
This gesture helps to protect our Environment.



MOUNTED DISC PLOUGH

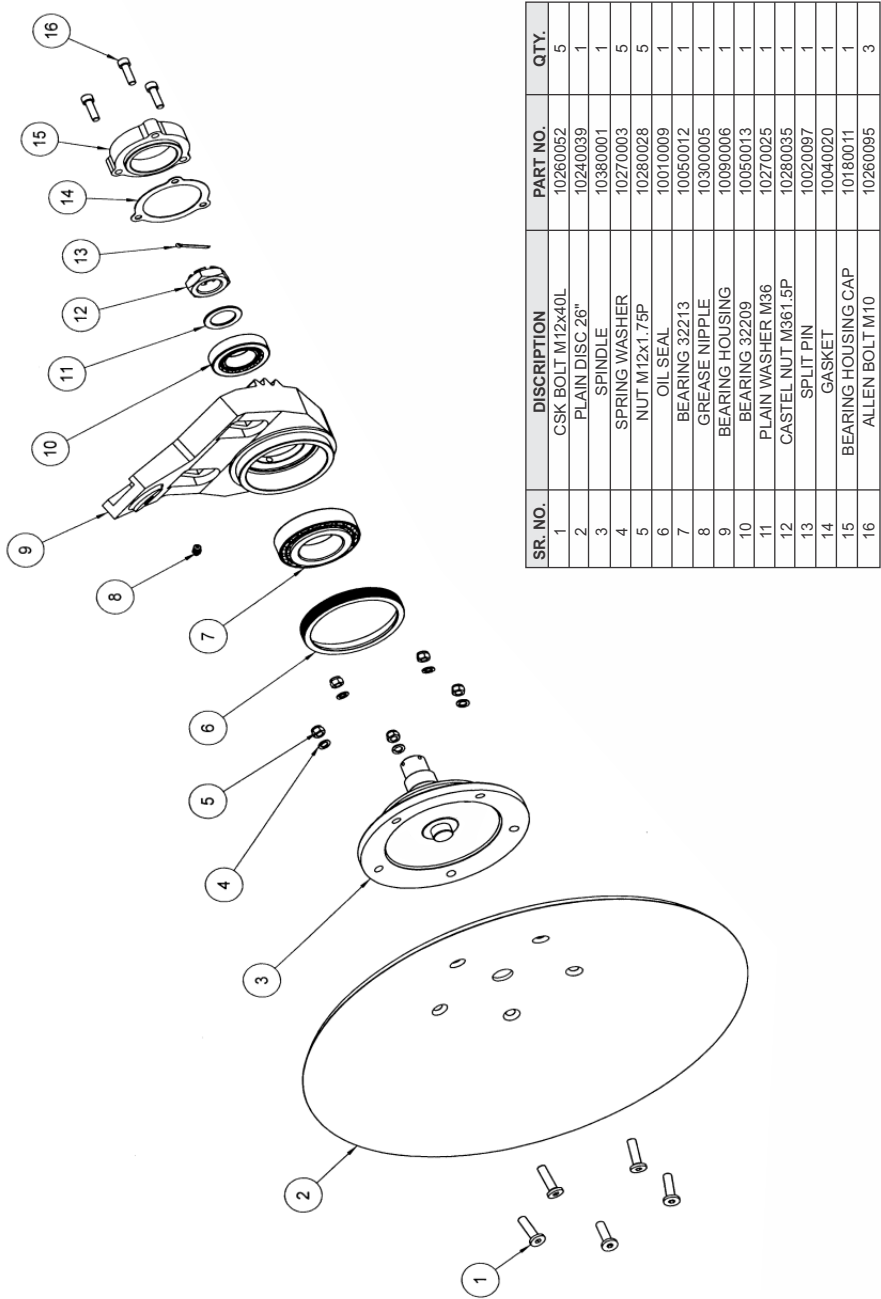
MOUNTED DISC PLOW 2 TO 5 BOTTOM									
SR.NO.	DESCRIPTION	PART NO.			5 BOTTOM	QTY.			
		2 BOTTOM	3 BOTTOM	4 BOTTOM		2 BOTTOM	3 BOTTOM	4 BOTTOM	5 BOTTOM
1	FRAME ASS.	72150001	71270017	71300003	75130001		1		
2	HEX HEAD BOLT M16x140x2P			10260388			4		
3	LINCH PIN 10MM		10020022		-		4		
4	PIN Ø19x90L		10020026		-		1		
5	SPRING WASHER 20MM			10270016			2		
6	SPRING WASHER 12MM		10270003		-		1		
7	NYLOCK NUT M12x1.75P		10280025		-		1		
8	STAND ASS.		72160001		-				
9	HITCH PIN 32MM			10020023			2		
10	LINK DRAW BAR ASS.						1		
11	LOWER U-BLOCK	72170011		72170014			2		
12	SPRING WASHER 16MM		10270005		-	6	7	8	9
13	NYLOCK NUT M16x2P		10280005		-				
14	SCRAPER HOLDING FLAT		71280004		-				
15	SCRAPER BOLT WITH NUT & WASHER		71280003		-				
16	SCRAPER BUSH		10070032		-				
17	NYLOCK NUT M8x1.25P		10280027		-				
18	SPRING WASHER 8MM		10270001		-				
19	HEX HEAD BOLT M8x40x1.28P		10260373		-				
20	SCRAPER WITH SCRAPER ROD ASS.		71280005		-				
21	SPINDLE ASS.		72180001		-				
22	HEX HEAD BOLT M24x110x3P		10260417		-				
23	HEX HEAD BOLT M16x65x2P		10260378		-	2	4	6	8
24	HEX HEAD BOLT M24x130x3P		10260416		-	2	3	4	6
25	SHOKER BUSH ASS.		71290009		-				
26	SHOCKER ROD		71290005		-				
27	TAPER BUSH ROD ASS.		72190001		-				
28	PLAIN WASHER 28MM		10270015		-				
29	CASTEL NUT 28x12G		10280015		-				
30	SPLIT PIN 4x45L		10020054		-				
31	COLTER HUB ASS.		72200001		-				
32	NYLOCK NUT M36x2P		10280040		-				
33	SHOCKER PIN Ø22x76L		10020025		-				
34	SHOCKER ASS.		72210001		-				
35	SPRING WASHER 24MM		10270027		-				
36	PLAIN NUT M24x3P		10280044		-	4	6	8	10
37	PIN 25x125L		10020070		-				
38	NYLOCK NUT M20x2.5P		10280021		-				
39	STUD BOLT M12x1.75Px65L		10260488		-				



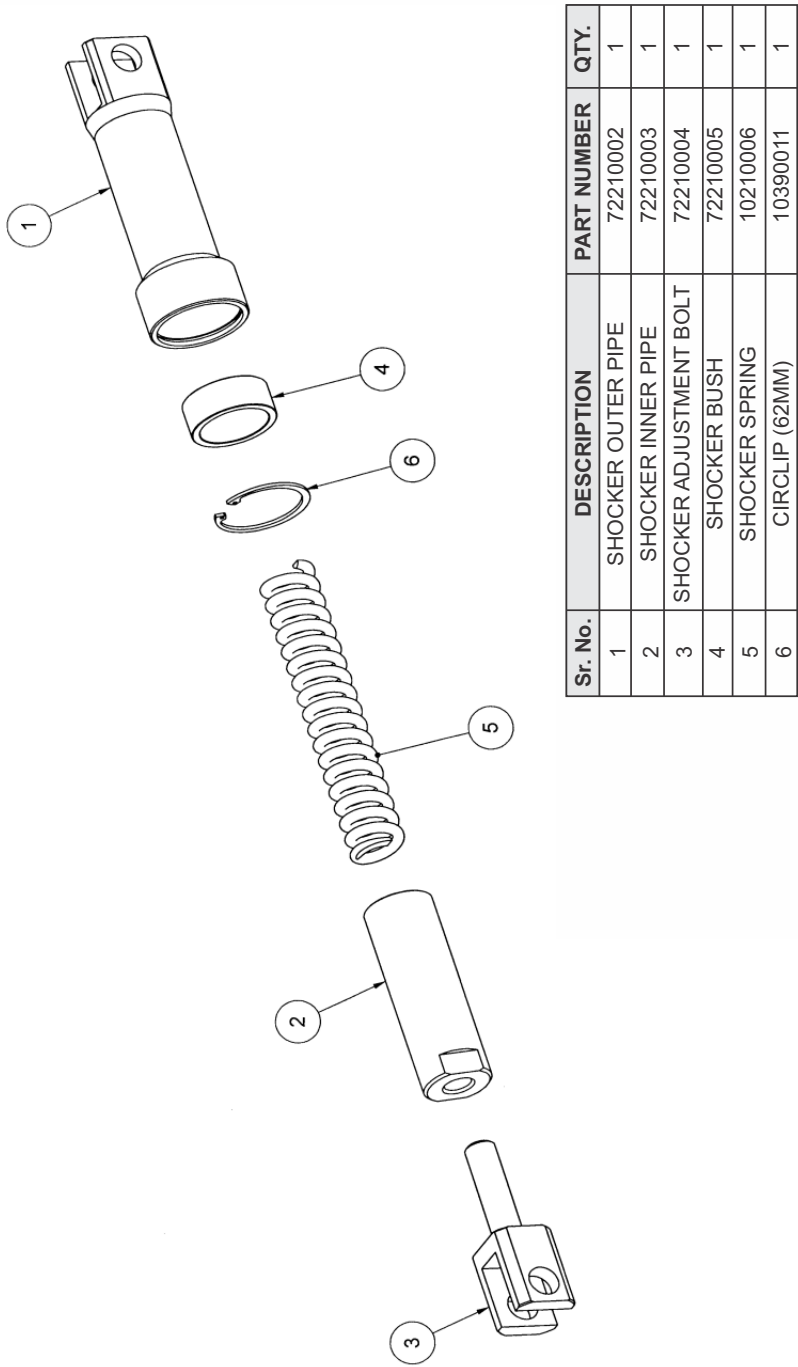
MOUNTED DISC PLOUGH

MOUNTED DISC PLOW 3+1 TO 4+1 BOTTOM						
SR.NO.	DESCRIPTION	3+1 BOTTOM	4+1 BOTTOM	3+1 BOTTOM	4+1 BOTTOM	QTY.
1	MAIN FRAME ASS.	76720001	77830001	1		1
2	HEX HEAD BOLT M16x140x2P		10260388			4
3	LINCH PIN 10MM		10020022			4
4	PIN Ø19x90L		10020026			
5	SPRING WASHER 20MM		10270016			1
6	SPRING WASHER 12MM		10270003			
7	NYLOCK NUT M12		10280025			
8	STAND ASS.		72160001			2
9	HITCH PIN 28x125L		10020095			1
10	LINK DRAW BAR ASS.	72170011	72170014			2
11	LOWER U-BLOCK		72150011			
12	SPRING WASHER 16MM		10270005	16	17	
13	NYLOCK NUT M16x2P		10280005			
14	SCRAPER HOLDING FLAT		71280004			
15	SCRAPER BOLT WITH NUT & WASHER		71280003			
16	SCRAPER BUSH		10070032			
17	NYLOCK NUT M8x1.25P		10280027			
18	SPRING WASHER 8MM		10270001			
19	HEX HEAD BOLT M8x40x1.25P		10260373			
20	SCRAPER WITH SCRAPER ROD ASS.		71280005	4	5	
21	SPINDLE ASS.		72180001			
22	HEX HEAD BOLT M24x110x3P		10260042			
23	HEX HEAD BOLT M16x65x2P		10260017	6	8	
24	HEX HEAD BOLT M24x130x3P		10260041	4	6	
25	SHOCKER BUSH ASS.		71290009			
26	SHOCKER ROD		71290005			1
27	TAPER BUSH ROD ASS.		72190001			
28	PLAIN WASHER 28MM		10270015			
29	CASTEL NUT 28x12G		10280015			2
30	SPLIT PIN 4x45L		10020054			4
31	COLTER HUB ASS.		72200001			1
32	NYLOCK NUT M36x2P		10280040			
33	SHOCKER PIN Ø22x76L		10020025			2
34	SHOCKER ASS.		72210001			1
35	SPRING WASHER 24MM		10270027			
36	PLAIN NUT M24x3P		10280044	8	10	
37	PIN 25x120L		10020035			1
38	REAR FRAME PIPE ASSY.		76740001			1
39	HEX HEAD BOLT M16x50x2P		10260078			8
40	NYLOCK NUT M20x2.5P		10280021			2
41	STUD BOLT M12x65x1.75P		10260468			1

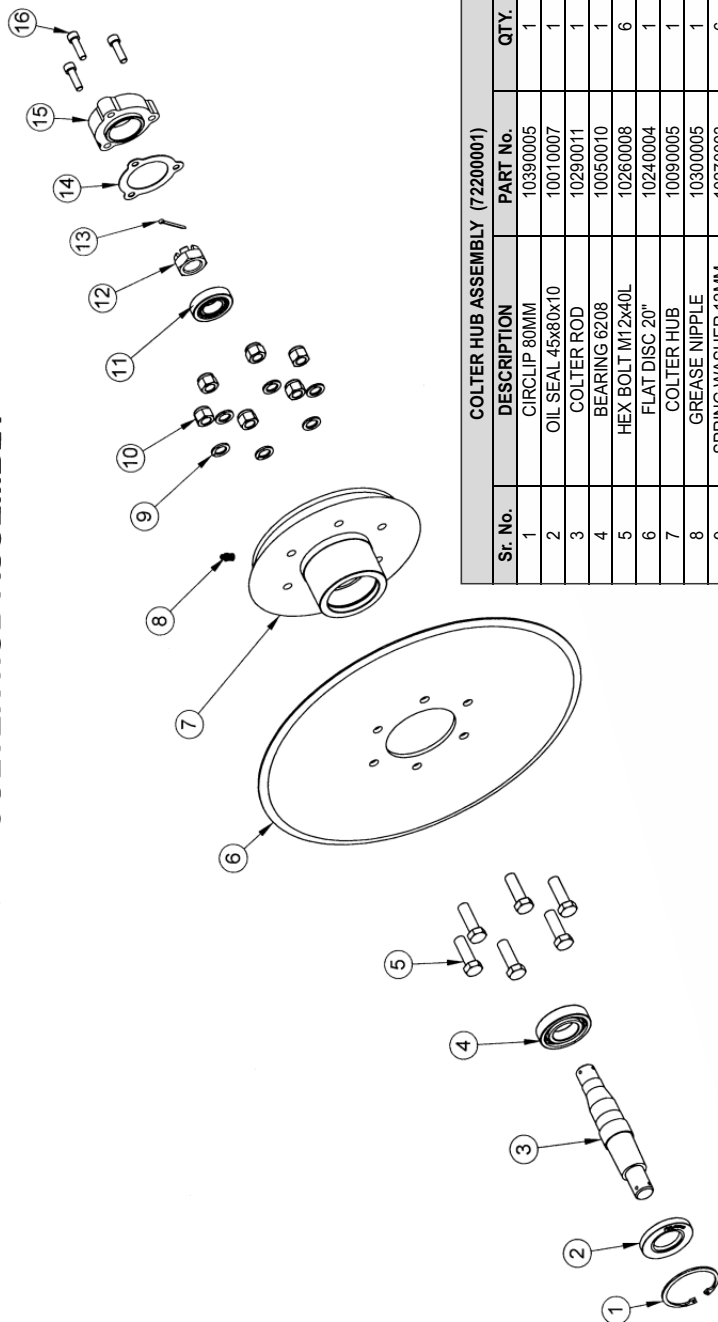
SPINDLE ASSEMBLY-10260468



SHOCKER ASSEMBLY



COLTER HUB ASSEMBLY



COLTER HUB ASSEMBLY (72200001)			
Sr. No.	DESCRIPTION	PART No.	QTY.
1	CIRCLIP 80MM	10390005	1
2	OIL SEAL 45x80x10	10010007	1
3	COLTER ROD	10290011	1
4	BEARING 6208	10050010	1
5	HEX BOLT M12x40L	10260008	6
6	FLAT DISC 20"	10240004	1
7	COLTER HUB	10090005	1
8	GREASE NIPPLE	10300005	1
9	SPRING WASHER 12MM	10270003	6
10	NYLOCK NUT M12x1.75P	10280025	6
11	BEARING 30206	10050035	1
12	CASTLE NUT 28x12G	10280015	1
13	SPLIT PIN	10020074	1
14	COLTER HUB GASKET	10040027	1
15	COLTER HUB CAP	10180005	1
16	ALLEN BOLT M10x35	10260093	3

DELIVERY CHECKLIST

Dealer Pre-Delivery (Please Tick)

1. Dealer Pre-Delivery Checklist

1. The customer or person responsible has been given the operator's manual.
2. The customer undertakes to read the complete operator's manual and understands all aspects of the manual before operation of the machine.
3. All safety, operational and maintenance information have been explained and demonstrated.
4. All greasing and oil points, stickers, guarding and ID plate have been identified and physically pointed out.
5. The customer agrees that it is his responsibility to read and carry out the safety, maintenance and operation as per this operator's manual.

Customer Delivery (Please Tick)

2. Customer Delivery Checklist

1. The customer or person responsible has been given the operator's manual.
2. The customer undertakes to read the complete operator's manual and understands all aspects of the manual before operation of the machine.
3. All safety, operational and maintenance information have been explained and demonstrated.
4. All greasing and oil points, stickers, guarding and ID plate have been identified and physically pointed out.
5. The customer agrees that it is his responsibility to read and carry out the safety, maintenance and operation as per this operator's manual.

Please Complete all Dealer information Below

Dealer Information

Dealer's Name.....

Address.....

State..... Postcode.....

Phone..... Fax.....

Email.....

Service Person.....

I confirm that the pre-delivery service was performed on this machine.

Signature.....

Date.....

Comments.....

Please Complete all Customer Information Below

Customer Information

Customer's Name.....

Address.....

State..... Postcode.....

Phone..... Fax.....

Email.....

Delivery Person.....

I confirm that all of the delivery checks were explained and performed.

Signature.....

Delivery Date.....

Comments.....



WARRANTY CARD
Customer Copy

CUSTOMER NAME Mr./ Mrs :

ADDRESS :

MOBILE NO. :

Email :

NAME OF IMPLEMENT :

MODEL NO. :

YEAR OF Mfg. :

SERIAL NO. :

REGISTRATION NO. :

DATE OF PURCHASING :

NAME OF DEALER :

Customer`s Signature

Dealer`s Signature

FIELDKING USA, INC.

960 Holmdel Road Suite 2-02, Holmdel, NJ 07733, USA

✉ usa@fieldking.com, 🌐 www.fieldkingusa.com



WARRANTY CARD
Company Copy

CUSTOMER NAME Mr./ Mrs :

ADDRESS :

MOBILE NO. :

Email :

NAME OF IMPLEMENT :

MODEL NO. :

YEAR OF Mfg. :

SERIAL NO. :

REGISTRATION NO. :

DATE OF PURCHASING :

NAME OF DEALER :

Customer`s Signature

Dealer`s Signature

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WARRANTY CARD
Dealer Copy

CUSTOMER NAME Mr./ Mrs :

ADDRESS :

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NAME OF IMPLEMENT :

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