Kello-Bilt Series '225' Offset Disc

Owner's Manual



Manufactured by Kellough Bros. Ltd.

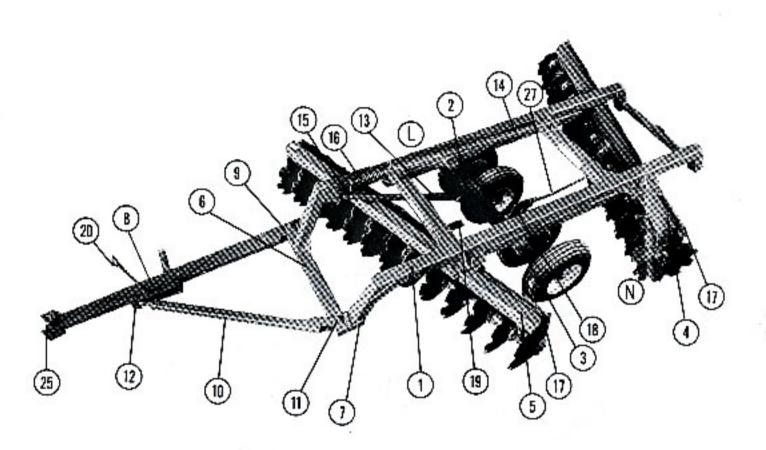
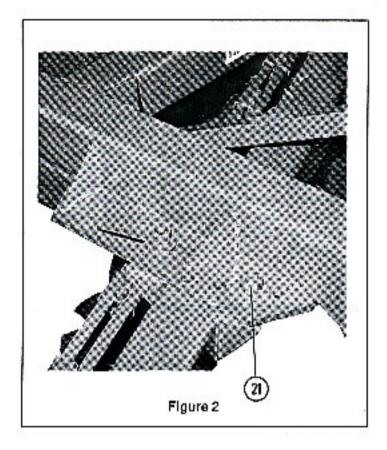
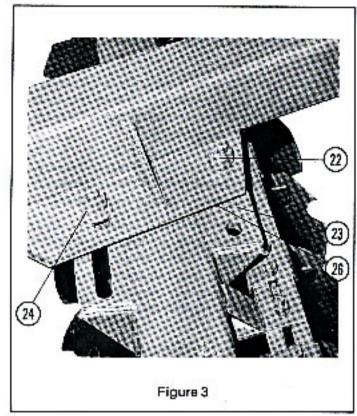


Figure 1





SET-UP INSTRUCTIONS

- 1. To Install Wheel Corriago and Wheels: (Refer to Figure 1) Place wheel carriage(2) under the main frame(1) and attach frame with pine(3). Install 5/16 x 2 lock bolts in pine and tighten lock nuts securely. Install wheels on to hubs with wheel bolts provided and tighten securely.
- 2. To Attach Gang Bars to Frame: (Refer to Figure 1) Bolt roar gang bar(4) to main frame(1) in center set of offsetting holes and in next-to-maximum angle with % x 3% bolts, install leveling washers on top of angling plates on long side of disc(L), install leveling washers between gang bar and angling plates on narrow side of disc(N). Bolt front gang bar(5) to main frame in next to maximum angle with % x 3½ bolts, install leveling washers same as rear gang.
- To Attach Hitch Bridle to Frame: (Refer to Figure 1) Place bridle(8) at front of frame(1) and attach with pins(7). Install lock bolte and tighten nuts securely.
- 4. To Attach Hitch Pole to Bridle: (Refer to Figure 1) Attach main hitch pole(8) to bridle(8) at lead corner(9) with 1 x 6 bolt. Attach hitch side arm(10) to opposite side of bridle(11) with 1 x 6 bolt. Join hitch pole and side arm with 1" pin at adjustable eye bolt(12). Tighten all bolts securely.

- 5. To Attach Fore-Aff Leveling Assembly: (Refer to Figure 1) Install short tube(13) to wheel carriage with 1" pin. Install long tube(14) with 1" pin. Site short fore-aft eye bolt(15) into bottom tube(13) (pinned to wheel carriage) and pin to bottom hole of bridle mast(6). Site long fore-aft eye bott clw spring and washers into top tube(14) (attached to main frame) and pin to top hole of bridle mast(6).
- To Attach Scrapers: (Refer to Figure 1) Attach scraper bars(17) to gang bars (4 & 6) with carriage bottle provided. Attach scrapers to scraper bar with clamps and bottle provided use care to adjust scrapers close to discs but not rubbling.
- 7. To Double Wide Right and Left Hand Offsets: (Refer to Double Wide drawing). Set together following regular instructions except item No. 4 10 attach hitch pole to bridle the hitch pole is attached to the opposite side from the lead corner and the side arm is attached to the lead corner with 1 x 6 bolt. Set left hand disc(1) stationary and pull right hand disc(1) along side leaving front gang of right hand disc behind front gang of left hand disc. Attach rear spreader bar(5) with pins. Attach front spreader bar(5) with pins. Join right hand main hitch pole to left hand main hitch pole(3) with 1½" pin(7). Adjust swivel flapper with 1 x 6 bolt for proper direction(6).

MAINTENANCE

Before operating the disc be certain that:

- 1. All bolts are light.
- 2. The disc axies are tight
 - NOTE Disc gangs must be kept tight at all times!
- Wheel bearings are adjusted properly and lubricated with bearing prease.
- 4. Grease fore-aft tubes each day.

After First Day of Operation — Tighten all bolts and disc exise, check wheel bearings for adjustment, oil threads on eye bolls and transport rod.

Every Day — Inspect and repair or replace broken or worn parts, theck and/or tighten bolts and disc exies.

Every 100 Hours — Gresse wheel bearings until gresse shows outside wheel seals.

Caution — Wipe grease fitting clean before attaching pressure gun.

Use clean lithium-base bearing grease and keep it clean. Keep three properly inflated for long life but do not exceed 50 pounds pressure for proper flotation and protection of associated parts.

OPERATING INSTRUCTIONS

- Hydraulic Cylinder and Hoses: (Refer to Figure 1) A standard 8" stroke double acting hydraulic cylinder is required to lift disc. Two 18 tt. hydraulic hoses are needed to allow full offsetting and turning without hose damage.
- CAUTION: Be certain the rod or moving end of the cylinder is to the rear(18) with the butt end to the front at main frame(19). Fasten the hoses through hose stand(20) with enough stack to allow tractor to turn, but without enough to let hose drag.
- 2. Angle Changing: (Refer to Figure 1) To change angle. Raise disc on wheels unit discs are clear of ground. Remove bolt(21) and loosen the three remaining bolts. Silde gang bar forward or backward as desired. Replace bolt and tighten all bolts securely. For ordinary conditions set both front and rear gangs in next to maximum angle, increase angles as required to sult conditions.
- 3. Offsetting Rear Gang Bar: (Refer to Figure 3) for ordinary conditions bolt(22) should be in the centre of lateral plate(23). When using disc as a double wide unit the rear gang bar is adjusted to maximum width to fill furrow. Remove two bolts(22), loosen bolt where slots are (24), adjust laterally then retighten all bolts.
- 4. Offsetting The Hitch: (Fieler to Figure 1) This unit is designed to trail straight behind the tractor. Minimum side draft will be obtained when the hitch is in line with outside beam of main trame. If more adjustment is required screw hitch side arm eye bolt(12) to desired position, then retighten jamb nut to reduce pressure on eye bolt thread.
- CAUTION: Tighten the hitch bolts to about 450 ft.fibs. torque (three foot wrench for average man). Loose hitch bolts will result in extensive damage to the hitch pole and hitch bridle.

5. Levelling:

- A. Front to Rear: (Refer to Figure 1) Width disc relead and hitch to tractor, adjust bottom fore-aft eye bolt(15) until main frame is level. Adjust fore-aft apring lock(16) until apring is snug. The top spring should be under some compression when discing, but should never be compressed solidly. NOTE: In general use as little pressure as possible when discing.
- B. Side to Side Levelling: (Refer to Figure 3) in general, adequate levelling from side to side may be obtained by placing leveling washers(26) between angling plate on frame and gang bar. Leveling washers are always used on narrow side(N) of discionly.
- C. Penetration: It is better to reduce the angle of the gangs to decrease panetration rather than to gauge the penetration by use of the wheels. By use of this method, width of cut is increased and draft and fuel consumption in extremely soft or sandy solls, decreased. It may be necessary to use the wheels for additional leveling and gauging.

6. Transporting: (Refer to Figure 1) Disc may be transported without using hydraulic cylinder. Place the rod(27) through the hole in anchor on frame(1) and place clevis over transport block. Raise the disc until the cylinder has reached the end of its stroke. Insert pin in clevis and adjust transport rod nut until there is about 'g'' between nut and transport anchor. Refease pressure on hydraulic cylinder and remove. CAUTION: extreme care should be taken not to collapse the cylinder too much with the transport rod in transport position.

POINTS TO CHECK IN OBTAINING THE BEST PERFORMANCE

1. Side Drail on Tractor.

- A. Adjust hitch for proper line of draft.
- B. Reduce engle of front pang bar.
- C. Increase angle of rear gang bar.
- D. Increase spring pressure slightly.
- E. Put front wheel weights on tractor.
- F. Lower tractor drawbar and/or ralse hitch flapper on disc.

2. Furrow Not Filled:

- A. Increase angle of rear gang bar.
- B. Offset rear gang bar to outside.
- C. Increase spring pressure slightly.
- Put leveling spacer between main frame and gang bar on narrow side of disc.
- Position hitch pole on bridle to move disc in opposite direction.

3. Furrow Overfilled:

A. Adjust opposite to No. 2 above.

4. Ridging on Rear.

- A. Reduce angle of rear drawbar.
- B. Decrease spring pressure.

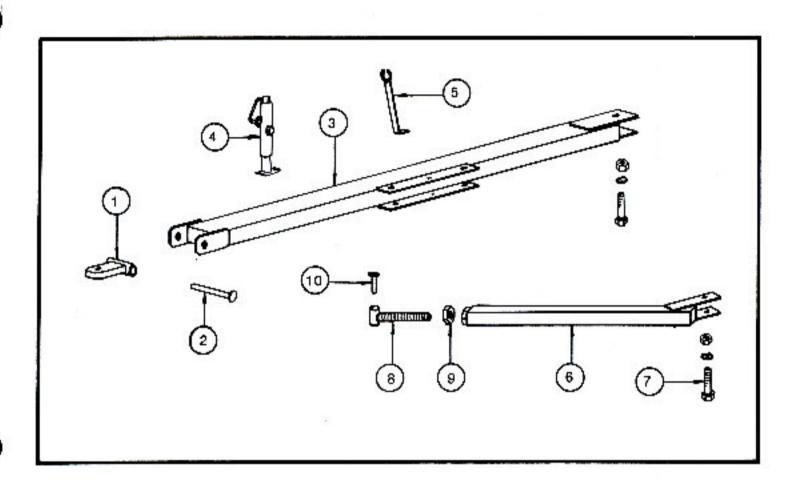
5. Disc Unstable Laterally; (Plowing crocked furrow)

- A. Decrease spring pressure.
- B. Correct drawbar and/or hitch flapper height,
- C. Reduce angle of front geng bar.

6. Clogging Between Discs:

- A. Adjust scrapers property.
- B. Decrease angle front and/or rear.
- C. Decrease depth of plowing.

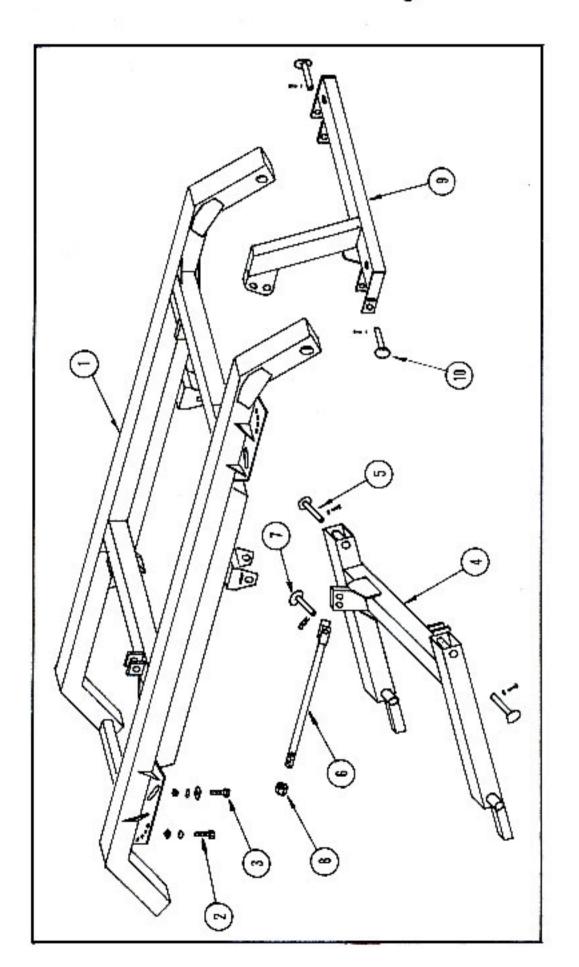
Kello-Bilt Series 225 Offset Disc



Hitch Assembly

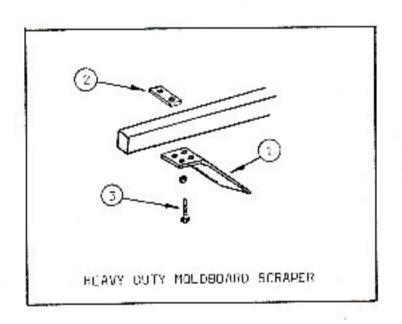
Item No.	Part No.	Quantity	Description
1	22501	1	Hitch Flapper
2	22502	1	Hitch Flapper Pln
3	22503A	1	Main Hitch Pole - 68"
3	22503B	1	Main Hitch Pole - 86"
4	22504	1	Jack
5	22505	1	Hose Holder
6	22506A	1	Hitch Side Arm - 48"
6	22506B	1	Hitch Side Arm - 62"
7	22507	2	1" x 6" Bolt, Lockwasher & Nut
8	22508	1	Hitch Adjustment Eye Bolt
9	22509	1	1½" Jamb Nut
10	22510	1	Hitch Side Arm Pin

Frame & Wheel Carriage



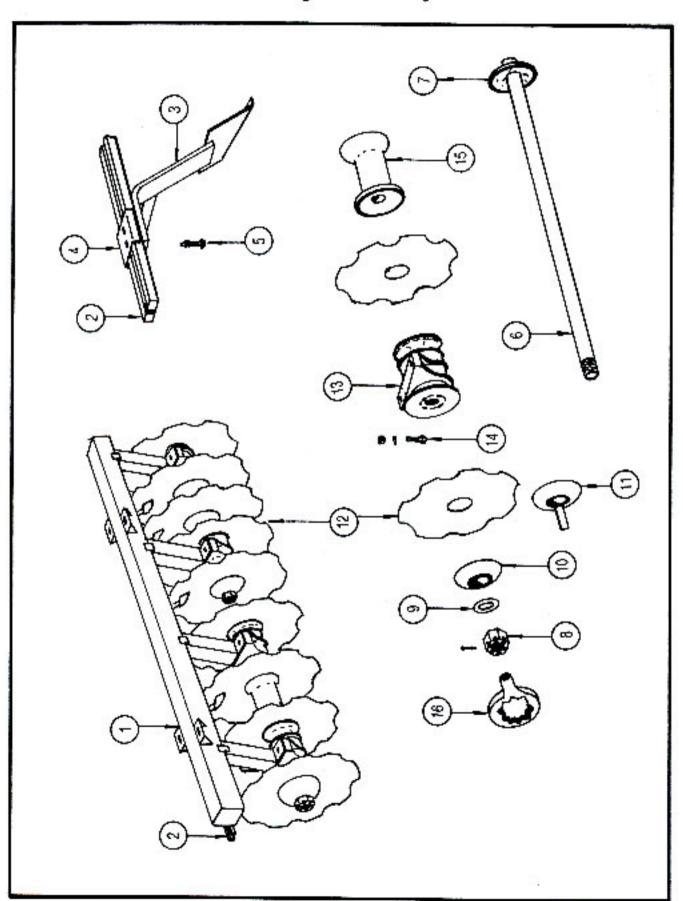
Frame & Wheel Carriage

Item No.	Part No.	Quantity	Description
1	22511	1	Main Frame Assembly
2	22512	4	7/8" x 31/2" Bolt, Washer & Nut
3	22513	4	7/8" x 3½" Bolt, Washer, Nut & Space
4	22514	1	Wheel Carriage Assembly
5	22515	2	Wheel Carrlage Pivot Pin
6	22516	1	Transport Rod
7	22517	1	Transport Rod Pin
8	22518	1	Transport Rod Nut
9	22519	1	Hitch Bridle Assembly
10	22520	2	Hitch Bridle Pins
41			



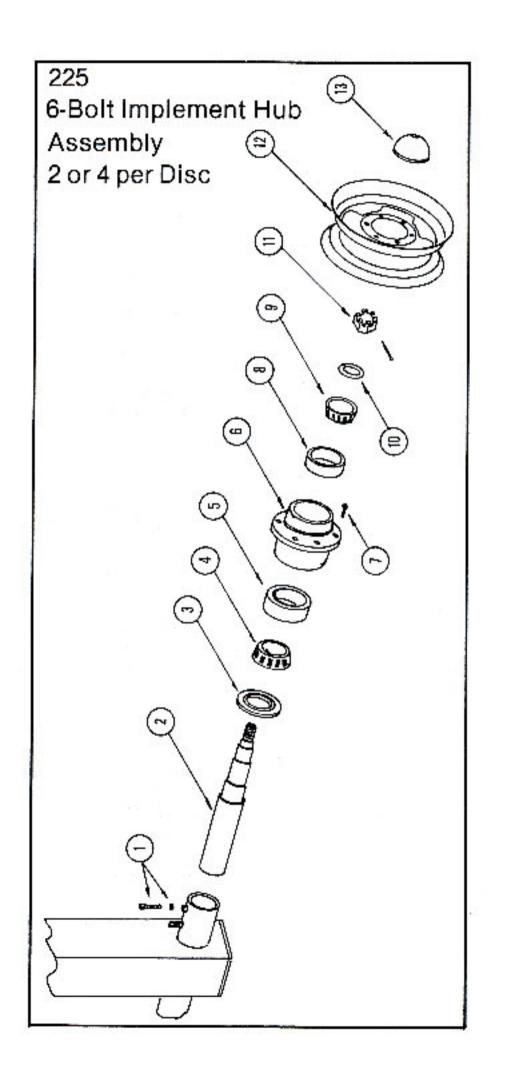
I TEM NO	PART RO	<u>QUANTITY</u>	OC SCRIPTION
1	22589R		Right Hand HD Moldboard Scraper
1	22589L		Left Hand HD Moldboard Scraper
2	22590	2 per	Scraper Clip
2	22591	4 pac	½" x 4" NC Gr5 Bolt, Nut

Gang Assembly



Gang Assembly

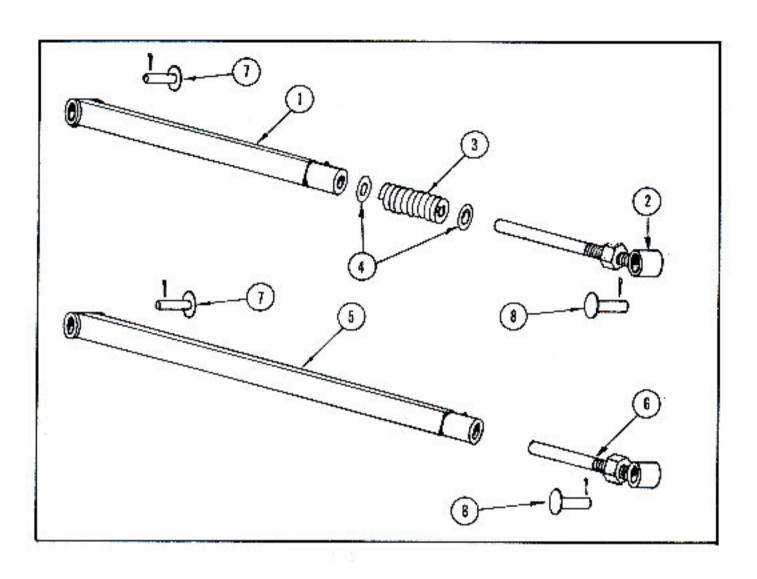
Item No.	Part No.	Quantity	Description
1	22528F-B	1	Front Gang Bar & Ft. Disc
1	22528F-9	1	Front Gang Bar 9 Ft. Disc
1	22528F-10	1	Front Gang Bar 10 Ft. Disc
1	22528F-11	1	Front Gang Bar 11 Ft. Disc
1	22528F-12	1	Front Gang Bar 12 Ft. Disc
1	22528F-14	1	Front Gang Bar 14 Ft. Disc
1	22528A-8	1	Rear Gang Bar 6 Ft. Disc
1	22528R-9	1	Rear Gang Bar 9 Ft. Disc
1	22528R-10	1	Rear Gang Bar 10 Ft. Disc
1	22528R-11	1	Rear Gang Bar 11 Ft. Disc
1	22528R-12	1	Rear Gang Bar 12 Ft. Disc
1	22528R-14	1	Rear Gang Bar 14 Ft. Disc
2	22529	1	B4" Scraper Bar
2	22530	1	90" Scraper Bar
2	22531	1	95" Scraper Bar
2	22532	1	100" Scraper Bar
2	22533	1	105" Scraper Bar
2	22534	1	115" Scraper Bar
2	22535	1	125" Scraper Bar
2	22536	1	135" Scraper Bar
2	22537	1	145" Scraper Bar
2	22538	1	155" Scraper Bar
3	22539R	7-15	Right Hand Scraper
3	22539L	7-15	Left Hand Scraper
4	22540	15-32	Scraper Clip
5	22541	2 Per Scraper	1/2" x 21/5" Carriage Bolt, Nut & Lockwesher
6	22542	1-4	Gang Shaft 40" Long x 2 3/16" Rd.
6	22543	1-4	Gang Shatt 51" Long x 2 3/16" Rd.
6	22544	1-4	Gang Shatt 62" Long x 2 3/16" Rd.
6	22545	1.4	Gang Shaft 72" Long x 2 3/16" Rd.
В	22548	1-4	Gang Shatt 81" Long x 2 3/16 " Rd.
7	22547	4.5	Weld-On Butt Plate
8	22548	4-5	2% "Hex Nut c/w Lock Bolt
9	22549	4-5	2%' Flat Washer
10	22550	4-5	2%" End Washer Spacer
11	22550-D	1	21/11" End Washer Spacer c/w Driver
12	20-6218	9-31	%," x 26" Notched Blade
12	20-5049	1	1/4" x 24" Notched Blade
12	20-4382	1	14" x 22" Notched Blade
13	0501040387	B-10	Oil Bath Double Row Tapered Roller Bearing
14	22557	16-20	"x 4" NC Bolt, Nut, L.W. & F.W.
15	KB1676⊋\$	7-15	101/2" Steel Full Spool
16	22562	1	2%" Gang Wrench



6-Bolt Implement Hub Assembly Capacity 5000 lbs.

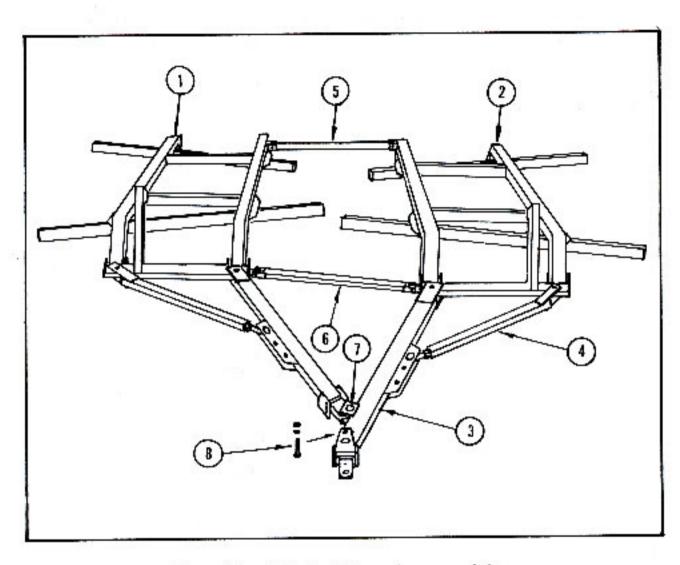
Maximum Speed - 20 m.p.h.

Item No.	Part No.	Quantity	Description
1	22551	2	√2"x2" NC Sq. Head Set Screw
			c/w Half Nut
2	S614-A53	1	2" x 12" C.R. Spindle c/w Nut
3	SE57	1	Seal
4	LM603049	1	Bearing Cone
5	LM603011	1	Bearing Cup
6	HA614-5	1	Hub c/w Grease Zerk
7	WB12	6	9/16"-18 x 11/4" NF Wheel Bolt
8	LM48510	1	Bearing Cup
9	LM48548	1	Bearing Cone
10	WA-13	1	1" SAE Plain Washer
11	WB-33	1	1" NF Castellated Hex Nut
		101	3/16"x11/2" Cotter Pin
12	1581-624-1	1	15"x8"x6 Bolt Imp Rim (White)
13	DC-15	1	Dust Cap
14	HA614-SA53	1	Assembled Hub, Spindle & Bearings



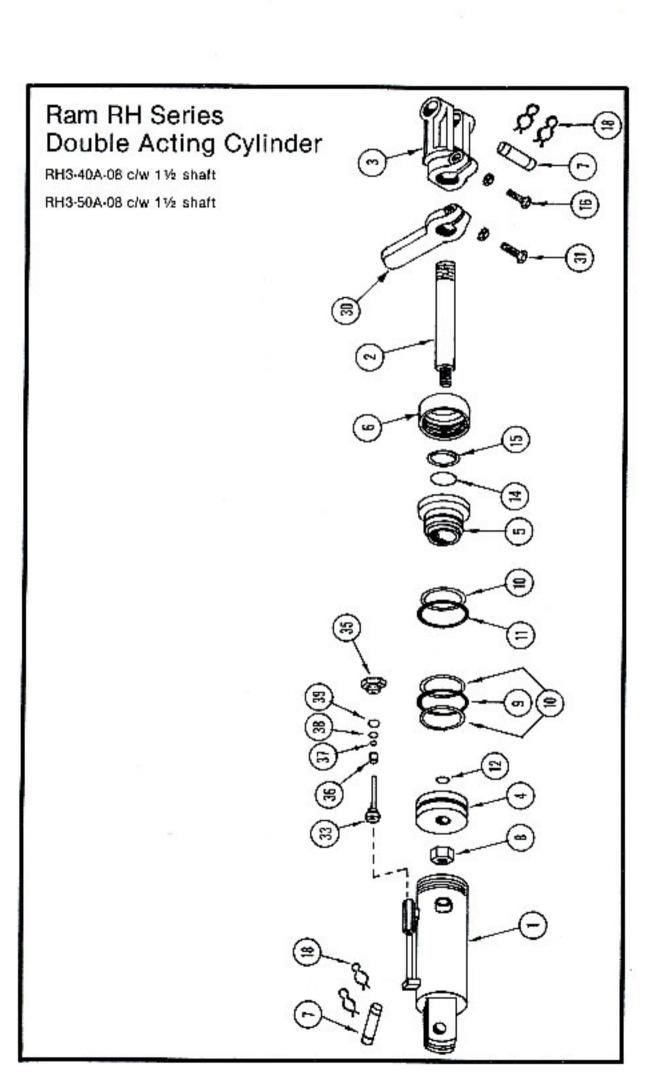
Fore Aft Control Assembly

Item No.	Part No.	Quantity	Description
1	22521	1	Top Fore Aft Tube
2	22522	1	Top For Aft Eye Bolt
3	RWU65	11	Spring
4	22523	2	11/4" Flat Washer
5	22524	1	Bottom Fore Aft Tube
6	22525	1	Bottom Fore Aft Eye Bolt
7	22526	2	1" x 5" Pin c/w Cotter Pin
8	22527	2	1" x 4" Pin c/w Cotter Pin



Double Wide Disc Assembly

Item No.	Part No.	Quantity	Description
1	22511	1	Alght Hand Main Frame Assembly
2	22511	1	Left Hand Main Frame Assembly
3	22503DWA	1	Main Hitch Pole 16' - 22' DW
3	22503DWB	1	Main Hitch Pole 24' - 28' DW
4	22506	2	Hitch Side Arm
5	22552R-30	1	Rear Spreader Bar c/w Plns 16' - 18' DW
5	22552R-38	1	Rear Spreader Bar c/w Pins 20' DW
5	22552R-48	1	Rear Spreader Bar c/w Pins 22' DW
5	22552R-60	1	Rear Spreader Bar c/w Pins 24' DW
5	22552R-80	1	Rear Spreader Bar c/w Pins 28' DW
6	22553F-33	1	Front Spreader Bar c/w Pins 16' - 18' DW
6	22553F-42	1	Front Spreader Bar c/w Pins 20' DW
6	22553F-51	1	Front Spreader Bar c/w Pins 22' DW
6	22553F-61	1	Front Spreader Bar c/w Pins 24' DW
6	22553F-81	1	Front Spreader Bar c/w Pins 28' DW
7	22554	1	Flapper Pin
8	22555	1	1" x 6" Bolt, Lockwesher & Nut



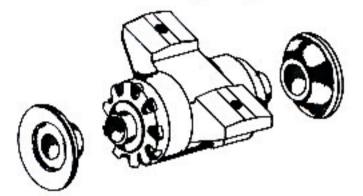
RH3-40KB - 8 c/w 1½" Shaft Ram Cylinder 4" x 8" c/w Hydraulic Depth Control

Item No.	Part No.	Quantity	Description
1	R-1273A	1	Barrel S.A.
2	R-1946	1	1 1⁄2" diameter Shaft
3	R-4100	1	Shaft Clevis
4	R-3525	1	Piston
5	R-2000	1	Gland
6	H-3000	1	Retaining Nut
7	R-5914	2	1" diameter Pin
8		1	%" Locknut
9		1	O-Ring #342 3%" x 4" Duro 70
10		3	Back-up Washer #342
11		1	O-Ring #342 3%" x 4" Duro 90
12		1	O-Ring #D18 ¾" x ¼" Duro 70
14		1	Shaft Seal 11/2" x 1%" x 1/6"
15	20	1	Wiper 11/2" x 1%" x 1/6" Cased
16		1	%" x 2" UNC Bolt c/w Nut
18		4	Hair Pin Clip
22	R-3K-40-1.5		Cylinder Repair Kit (No's. 9, 10, 11, 12, 14, 15)
30	R-6004	1	Shaft Clamp
31	T	1	%" x 2" UNC Bolt c/w Nut
33	H-6008	1	Valve Stem & Poppet
35	R-6006	1	Valve Head
36	P-6007	1	Valve Sleave
37		1	O-Ring #009 ½2" x 1½2" Duro 70
38		1	Back-up Washer #009
39		1	O-Ring #114 %" x %6" Duro 70
40	R-6005A		D.C. Replacement Kit (No's. 33, 35, 36, 37, 38, 39)
N/5	KB216	2	Hydraulic Hose - 18'
N/S	KB228	2	Hydraulic Hose - 19'

RH3-50A c/w 1½" Shaft Ram Cylinder 5" x 8" c/w Hydraulic Depth Control

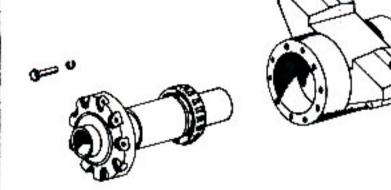
Item No.	Parl No.	Quantity	Description
1	R-1274A	1	Barrel S.A.
2	R-1730	1	1 1/2" diameter Shaft
3	R-4100	1	Shaft Clevis
4	R-3590	1	Piston
5	R-2015	1	Gland
6	R-3009	1	Retaining Nut
7	R-5914	2	1" diameter Pin
8		1	1%" Locknut
8		1	O-Ring #425 4½" x 5" Duro 70
10		3	Back-up Washer ≠425
11		1	O-Ring ≠425 4½" x 5" Duro 90
12		1	O-Ring #022 1" x 1%" Duro 70
14		1	Shaft Seal 11/2" x 11/4"x 1/4"x 1/4"
15		1	Wiper 1½" x 1¾" x ¾ _a " Cased
16		1	%" UNC Bolt c/w Nut
18		4	Hair Pin Clip
22	R-3K-50-1.5		Repair Kit (No's. 9, 10, 11, 12, 14, 15)
30	R-6004	1	Shaft Clamp
31		1	%" UNC Bolt c/w Nut
33	R-6008	1	Valve Stem & Poppet
35	R-6006	1	Valve Head
36	R-6007	1	Valve Sleave
37		1	O-Ring #009 ½2" x '½2" Duro 70
38		1	Back-up Washer ≠009
39		11	O-Ring #114 %" x %6" Duro 70
40	R-6005A		D.C. Replacement Kit (No's. 33, 35, 36, 37, 38, 39)
N/S	KB216	2	Hydraulic Hose - 18'
N/S	KB228	2	Hydraulic Hose - 19'

Bearing Replacement Procedure

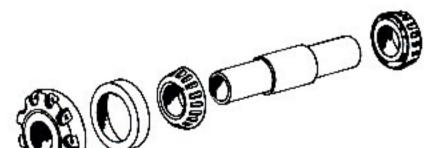


Remove Half Spools

Drain oil from unit. Half spools are pressed onto ends of interior housing. Apply pressure evenly when removing to avoid damage.



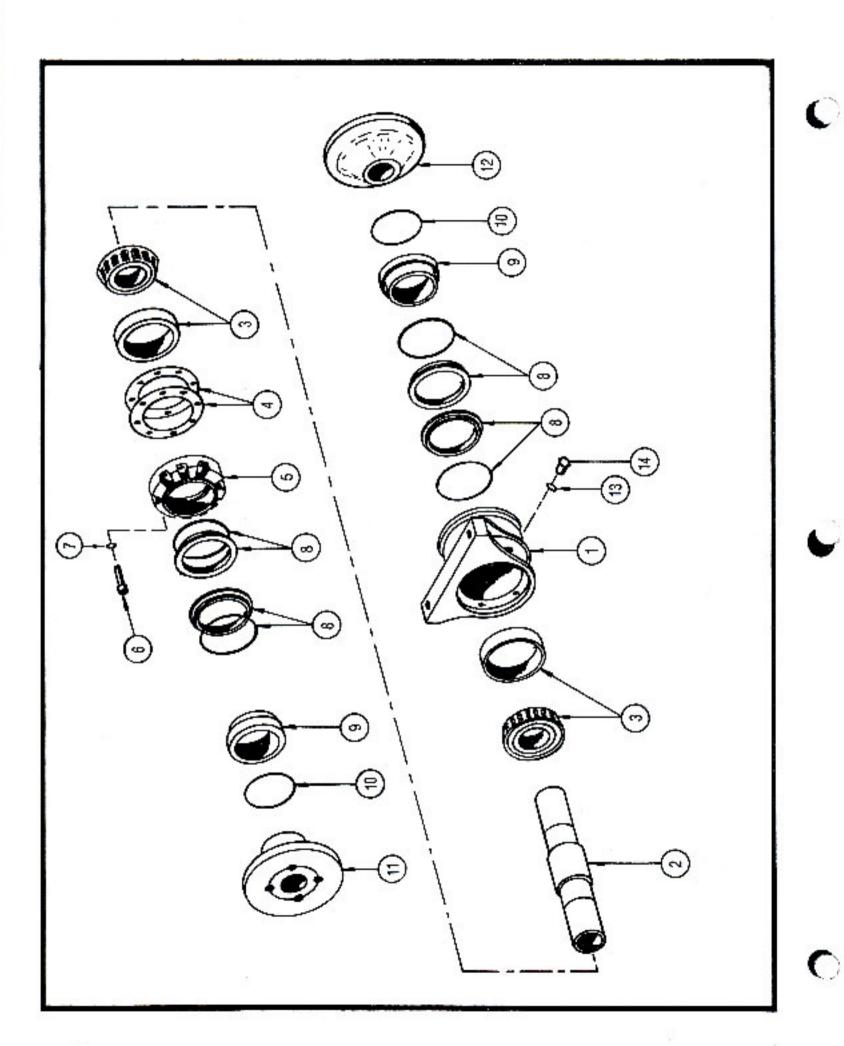
Extract Interior Housing
Remove bolts from End Cap.
Press out interior housing.



Remove End Cap

Remove cones from interior housing. Replace and reassemble. Refill unit with specified new oil.

NOTE: It is recommended that new O-Rings, Gaskets and Seals be installed when replacing bearings. See Parts Diagram.



Oil Bath Double Row Tapered Roller Bearing

TEM No.	PART No.	QUANTITY	DESCRIPTION
1	0502010293	1	Bearing Housing
2	0502040185	1	Bearing Axle
3	0503010107	2	Roller Bearing
4	0503030300	2	Gasket
5	0502010294	1	End Cap
6	0503010025	8	%" Spring Washer
7	0501010175	8	%" x114" Socket Head Cap Screws
8	0503030028	2	Duo-Cone Seal
9	0502040198	2	Seal Support with Bushing
10	0503010354	2	O-Ring
11	0502040185	1	Concave Half Spool
12	0502040196	1	Convex Half Spool
13	05D3030172	S10	Washer
14	0501010903	1	Plug

Maintenance

Oil level should reach bottom of plug when unit is level.

Check oil level after first 8 hours of operation and weekly thereafter.

Change oil every 1500 Hrs. Use only a quality Sae 90 Oil.

Compression on the roller bearings is accomplished through the use of Gaskets (Part No. 0503030034). Remove gaskets to eliminate excessive play and insert gaskets to increase pressure on bearings.

Kello-Bilt Warranty Information

To The Purchaser

Kello-Bilt industries Ltd. warrants its products to the original owner for a period of one year from date of purchase. All matters related with the warranty of our products must be handled through the authorized selling dealer. Warranty does not cover normal wear of the disc components or damages caused by lack of maintenance or misuse, and is subject to the following provisions;

SUBJECT TO THE LIMITATIONS HEREINAFTER CONTAINED, overy new Farm implement is a defined in The Farm implement Acc, Chapter 20 8.A. 1987 and amendments thereig! If described in this parts manual and if purchased by a farmer for his own use, is covered by the warranties hereinafter made, and referred to in the said ACT AND NO OTHER.

LIMITATIONS OF WARRANTY

- Original Purchaser Only: This said warranty is to the original purchaser only and to no other person.
- Duration: The duration of time limit of the said warranty (harafrafter called the warranty ported) shall be one (1) year from the data that the new farm implement is first used within the first normal season of use for its intended purpose.
- 3. Replacement or Repeir Only: The sole liability for broach of the sole warranty shall be to replace or repair free of charge including installation, at the Setler's place of buildings, any parts which prove to be defective within the warranty period, under teasonable upstalling conditions and proper use, cere and maintenance; the sole defective part or parts are to be returned to the Setler within 30 days of being found defective; IN NO EVENT shall there be any liability for any consocuential damages such as damages for loss of use or loss of profit or expenses, out of pocket or otherwise.
 - 4. Replacement Parts: Will be warranteed for a period of 90 days.
- Labor: Any lebour subject to warranty must be authorized by a Kello-Bill Industries.
 Ltd. representative before work is started. Warranty lebour allowance & rates will be handled according to established Service Warranty Policy.
- Werranty Parts: Detective parts are to be stored at the decierable 5 warranty will be subject to inspection by a Kello-Bill Industries Ltd. representative in whipped prepaid to Storilor, Alberta, Canada.
- Warranty on Nachines Used For Cystom Work, Remail or industrial/Construction
 Use: Warranty on cloce used for gustom work, nontal or industrial/construction use shall be
 histor Delaw, with the exception that it shall be for a period of 90 days only.
 - Overnment Legislation: Warranty forms & conditions are subject to previncial or are legislation.

- Werrenty Will be Void: If any disc component is aftered or modified, unless written suthorization is granted by Kello-Bill Industries 1,65.
- 10. Notice of Claim; The Purchaser shall instruct after any alleged breach of werenty within the warranty period, notify in writing the perticulars of the Purchaser's claim by registered mall addressed to the Seller and the Manufacturer at their respective addresses, giving a description of the new Form Implement and the return address of the Purchaser.
- 11. No Other Warranties, Conditions or Representations: Purchaser ecknowledges that this agreement constitutes the entire contract and there are no other representations, warranties or conditions, expressed or implied, statutory or otherwise, other than as contained herein or delivered in writing herewith. Without limiting the generality of the longering, Purchaser agrees that there is no warranty as to the year and model, even if stated herein.
 - 2. Time: Time shall strictly be of the casence.
- 13. No Warranty on Tites Tubes Accessories: No warranty whatsower is given as to this and tubes or as to accessories unless each accessories are new and are manufactured by the manufacturer named on the reverse side hereof and such accessories are sole as part of the said new Farm Implement.
- Dies Blade Warrenty: (1) Full warranty will be given for one year from date of purchase for a straight directional break or solli dies caused by faulty or defective material.
- (2) 50 per cert werrenty will be given for one year from data of purchase for the following:
- (a) Pregular breaks, tear type fractures, chipped or dented edges resulting from use in severe eress such as rocks or stumps, (b) Contro broken out — caused by rock or stump conditions, excessive floring of class or loose gang botts.
- (3) Warranty limited to disc replacement upon return of damaged disc, prepaid to Stettler, Alberta, Canada.
- Warranty Property Other than New Ferm Implements
 (Set forth above, warranty, if any, on property other than New Ferm Implements, such warranty to be honoured only at Stattler's place of business).
- I haveby with reviewed are receipt of a true copy of this Agreement and that I am the Purchaser named therein.

Because we are constantly striving to improve our products, we reserve the right to incorporate any changes related to design, materials and specifications at any time, without notice or obligation.