# Model 800 Offset Primary Tillage Disc

# **Owner's Manual**

Models 800-2432B

800-2832B

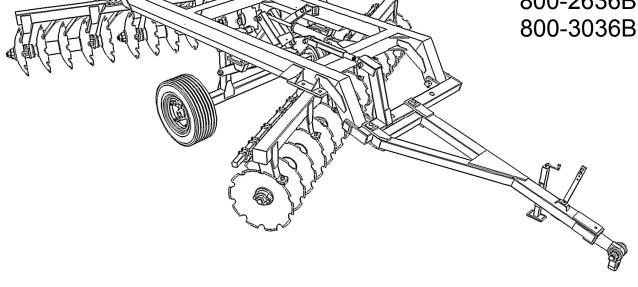
800-3232B

800-3632B

Models 800-2236B

800-2436B

800-2636B





#16 Belich Crescent Red Deer County Alberta Canada T4S 2K5

Phone: (403) 347-9500 Toll Free: (877) 613-9500

#### Introduction

READ THIS MANUAL carefully to learn how to operate and service your machine correctly. Failure to do so could result in personal injury or equipment damage. This manual and safety signs on your machine may be ordered from your Kello-Bilt dealer.

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your machine and should remain with the machine when you sell it.

MEASUREMENTS in this manual are given in customary Imperial units. Only use the correct replacement parts and fasteners.

RIGHT-HAND AND LEFT-HAND sides are determined by facing in the direction the implement will travel when going forward.

WRITE DOWN PRODUCT IDENTIFICATION NUMBERS. Accurately record all the numbers to help in tracing the machine should it be stolen. Your Kello-Bilt dealer also needs these numbers when you order parts. File the identification numbers in a secure place away from the machine.

WARRANTY coverage is provided by Kello-Bilt according to the terms of the Construction, Utility, and Forestry Products Standard Warranty Statement. Carefully read the warranty statement on the back of your original purchase order for details on coverage and limitations of this warranty.

This warranty provides you the assurance that Kello-Bilt will back its products where defects appear within the warranty period. In some circumstances, Kello-Bilt also provides field improvements, often without charge to the customer, even if the product is out of warranty. Should the equipment be abused or modified to change its performance beyond the original factory specifications, or if the equipment is used for a purpose other than that which it was designed for, the warranty will become void and field improvements may be denied.

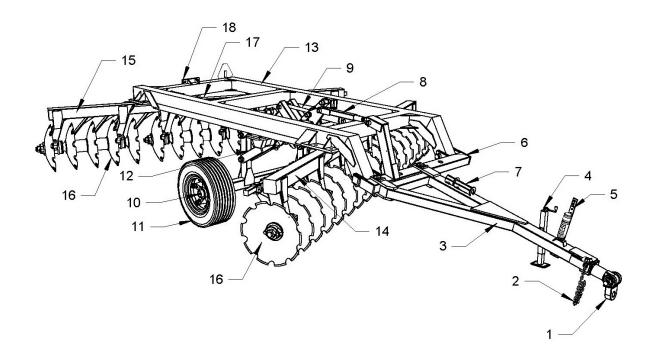
THE TIRE MANUFACTURERS warranty is separate and apart from the equipment warranty and may not apply outside Canada or the U.S.

## **Contents**

Product General Arrangement and Identification	5
General Information	6
Checklists	7
Predelivery Checklist	7
Delivery Checklist	7
After-Sale Checklist	8
Each Day of Operation Checklist	8
Before Each Season Checklist	8
Safety Decal Identification and Placement	9
Safety First Guidelines	10
Attaching the Disc to the Tractor	11
Transporting the Disc	12
Transport Leveling Adjustment	12
Install Transport Stay	13
Transport Safety	13
Operating the Disc	14
General Operating Guidelines	14
Hitch Assembly Adjustments	15
Operating Safety	16
Service and Maintenance Safety	17
Lubricate the Disc	18
Fluid and Fastener Specifications	19
Keep Gang Assemblies Tight	20
Adjusting the Scrapers	21
Repack and Pre-Load Wheel Hub Bearings	21
Check the Oil-Bath Bearings	22
Assembly Safety	22
Disc Gang Assembly Procedure	23
Detailed Parts Diagrams	24
Hitch Assembly	25
Frame Assembly	26
Bridle and Leveling Assembly	27
Parallel Lift Transport	28
Gang Bars and Scrapers	29
Gang Assembly – 14" Spacing	30
Gang Assembly – 17" Spacing	31

14" Oil-Bath Bearing	32
17" Oil-Bath Bearing	33
20" Stroke Hydraulic Cylinder (CTD)	34
20" Stroke Hydraulic Cylinder (RAM)	35
10-Bolt Hub	36
Tire and Wheel Assembly	37
Specifications	38
Storage	39

## PRODUCT GENERAL ARRANGEMENT AND IDENTIFICATION



1	Hitch Tongue	10	10-Bolt Budd Hub
2	Safety Chain	11	Wheel and Tire Assembly
3	Hitch Assembly	12	Parallel Lift Assembly
4	Hitch Jack	13	Main Frame
5	Hose Holder / Manual Canister	14	Front Gang Bar
6	Bridle Assembly	15	Rear Gang Bar
7	Transport Stay (Storage Location)	16	Disc Gang Assemblies
8	Transport Leveling Assembly	17	Gang Wrench (Storage Location)
9	Hydraulic Cylinder	18	Rear Hitch

#### **General Information**

#### TO THE DEALER

Assembly and delivery of this product is the responsibility of the Kello-Bilt dealer. Read manual instructions and safety rules. Make sure all items on the Dealers Pre-Delivery and Delivery Checklists in the Operators Manual are completed before releasing the equipment to the owner.

#### TO THE OWNER

Read this manual before operating your Kello-Bilt equipment. The information presented will prepare you to do a better job. Keep this manual handy for ready reference. Require all operators read this manual carefully and become acquainted with all the adjustment and operating procedures before using the equipment. Replacement manuals can be obtained from your selling dealer.

The equipment you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, it requires cleaning and upkeep. Lubricate the unit as specified. Many of the features of this equipment necessary for it to perform its intended task are inherently dangerous, so please observe all safety information in this manual and safety decals on the equipment.

For service, your authorized Kello-Bilt dealer has trained mechanics, genuine original manufacturer service parts and the necessary tools and equipment to handle your needs.

Use only genuine original manufacturer service parts. Substitute parts will void the warranty and may not meet standards required for safe and satisfactory operation. Record the model number and serial number of your equipment in the spaces provided.

Date of Purchas	e	 		
Model				
Serial Number <sub>-</sub>			_	

Provide this information to your dealer to make a warranty claim or obtain correct repair parts.

#### **Checklists**

PREDELIVERY CHECKLIST: After the disc has been completely assembled and lubricated, inspect it before delivery to the customer to ensure proper operation. Check off each item of inspection in the list as it is found satisfactory. The disc has been assembled according to instructions and all nuts and bolts are present and tight. All grease fittings are installed and the disc has been lubricated. □ Tires are properly inflated and wheel lug nuts are present and properly torqued. Disc gangs rotate freely without dragging on scrapers. Check all pins to make sure retaining hardware is in place. Touch-up paint damage due to shipping and assembly. Connect disc to tractor drawbar, connect hydraulic hoses and check the hydraulic system for leaks and proper operation of the hydraulic cylinder. Safety chain is attached. SMV sign is installed and visible from the rear of disc. Light Kit is installed and operating correctly. All safety decals are present and legible. ☐ This disc has been checked and to the best of my knowledge, is ready for delivery to the customer. Set-Up Date \_\_\_\_\_ Signature of Assembly Person **DELIVERY CHECKLIST:** The following list is a reminder of important information that should be conveyed directly to the customer upon delivery of the disc. Check off each item as it is fully explained. Advise customer the life expectancy and performance of this, like any other machine, is dependent on regular lubrication and maintenance as described in this manual. □ Explain the importance of safe and proper operation of the machine. Point out decals warning the operator of the dangers of unsafe operation procedures and conditions. The customer has been told to keep all bolts tight. □ When the disc is transported on road or highway at night or during the day, accessory lights and devices should be used for adequate warning to operators of other vehicles. Replacement safety lights and safety devices are available from your Kello-Bilt dealer. In this regard, suggest customers check their local governmental regulations. Insure completion of the Delivery Registration forms, listing the Serial Number of the machine. Show the customer how to hitch the machine and operate the controls relating to the machine. Explain the adjustments for proper operation of the disc. Advise use of the safety chain.

Give the Operators Manual to the customer and explain all operating adjustments and lubrication fully.

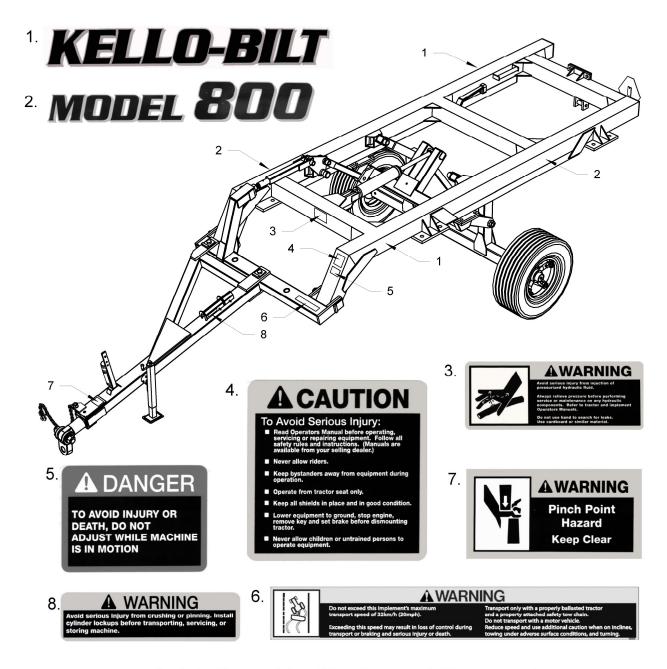
fully informed as to its proper care and operation.

□ To the best of my knowledge, this machine has been delivered ready for use and the customer has been

Set-Up Date \_\_\_\_\_\_ Signature of Delivery Person \_\_\_\_\_

## Checklists

m	onths operation of the disc.
	Check the entire disc for loose or missing hardware.
	Check for broken or damaged parts. Make necessary repairs.
	Re-torque the hardware with special attention to the gang axle nuts and locks.
	Safety chain is properly installed and undamaged.
	If possible, run the disc to insure it is functioning properly.
	Check the bearing wear plates are present and not excessively worn.
	Visually check the oil-bath bearing for leaks. If parked unused for a long period in extreme weathe conditions, there may be seepage due to expansion and contraction of the metal duo-cone seals. This condition will correct itself when the disc is operated. Lost oil should be replaced before operation.
	Review the entire Operators Manual with the customer and stress the importance of proper and regula lubrication and safety precautions.
	Advise the customer of optional attachments that are available.
Da	ate Checked Signature
E	ACH DAY OF OPERATION CHECKLIST
	Lubricate items required daily and those whose lubrication time is due.
	Look for loose or missing bolts and parts.
	Check hydraulic system for leaks and abraded hoses.
	Check tire pressures and wheel lug nuts.
	Check all pins have retaining hardware in place.
	Check all oil-bath bearing assemblies for leaks. Check bearing wear plates are present.
	Be sure all gang components are tight on the axles and axle nuts are tight and axle locks are present.
ВІ	EFORE EACH SEASON CHECKLIST
	Be sure recommended lubrication is performed.
	Inspect all oil-bath bearing assemblies are tight and dry and if wear plates need replacement.
	Check hydraulic system for proper operation and leakage.
	Check tire pressures and wheel lug nuts. Check for end play in wheel bearings and repack if necessary.
	Be sure proper operating adjustments have been made for your conditions.



## Safety Decal Identification and Placement

REF NO	PART NUMBER	DESCRIPTION	NO REQ'D
1	LG2KB	KELLO-BILT Decal	1
2		Model Number Decal	1
3	DWPHF	WARNING – Avoid serious injury from injection of pressurized	2
4	DCASI	CAUTION – To avoid serious injury:	4
5	DDDNA	DANGER – To avoid injury or death, do not adjust	4
6	DWMTS	WARNING – Do not exceed implements maximum transport	2
7	DWPPH	WARNING – Pinch Point Hazard	
8	DWICL	WARNING – Avoid serious injury from crushing or pinning	

### **Safety First Guidelines**

When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Indicates death or serious injury will result if proper precautions are not taken.

Indicates death, serious injury or property damage can result if proper precautions are not taken

Indicates some injury or property damage may result if proper precautions are not taken.



Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your Kello-Bilt dealer.

Learn how to operate the machine and how to use the controls properly. Do not let anyone operate the machine without instruction. Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual and need assistance, contact your Kello-Bilt dealer.

**Prepare for Emergencies:** Keep a first aid kit and a fire extinguisher handy. Keep emergency numbers for doctors, ambulance service, hospital and fire department nearby.

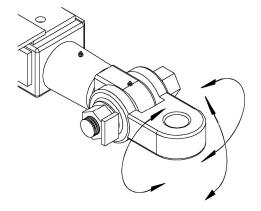
**Wear Protective Clothing:** Wear close fitting clothing and safety equipment appropriate to the job. Operating equipment safely requires the full attention of the operator. Do not wear headphones or use a cell phone while operating the machine.

**Protect Against Noise:** Prolonged exposure to loud noise can cause hearing impairment or loss. Wear suitable hearing protection to prevent damage to your hearing.

**Store Equipment Safely:** Securely store equipment by either lowering to ground or chocking wheels to prevent movement. Do not allow children or others to play on or around equipment.

**Dispose of Waste Properly:** Improperly disposing of waste can threaten the environment and the ecology. Potentially harmful waste used in this equipment includes gear oil in the oil-bath bearings and fluid in the hydraulic system. Use leak proof containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them. Do not pour waste onto the ground, down a drain or into any water source. Obtain information about the proper way to recycle or dispose of waste from your local environmental or recycling center, or from your Kello-Bilt dealer.

#### Attaching the Disc to the Tractor

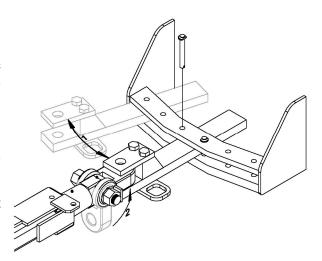


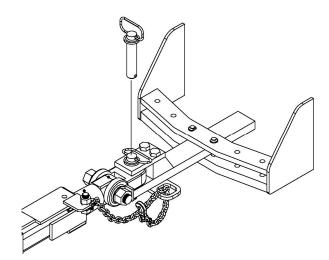
The disc is equipped with a heavy tongue that both flexes and swivels to accommodate the most rugged terrain including large rocks and tree stumps. This is an essential design feature; however it requires extra care when attaching the disc to a tractor.

For best results, the tractor used to pull this unit should be equipped with a swinging drawbar with a clevis end.

The following procedure is recommended.

This procedure is best carried out with the disc in the raised position and the transport lock installed over the hydraulic cylinder. Use the hitch jack to raise or lower the tongue to the level where the tongue will lay on the drawbar. Unpin the swinging drawbar and slide it to one side. Back the tractor to the approximate point where swinging the drawbar back to the center will trap the tongue in the clevis. With the tractor parked and the brake engaged, lift the tongue (2) and swing the drawbar into the center position (1).





Install the drawbar pin and its retaining hardware. This may require moving the tractor forward or backward slightly. An articulated tractor or belted tractor can swing the drawbar side to side by turning the steering wheel slightly. This procedure may take more than one attempt – safety takes time.

Attach the safety chain.

If the tractor is not equipped with a swinging drawbar, it is recommended to fabricate a prop from a length of wood to hold up the tongue while the tractor is backed into place.

#### **CAUTION:**



Do not allow others to stand between the tractor and disc when moving the tractor.

Do not allow someone to hold up the tongue while backing the tractor into place.

Prevent serious injury or death to you or others caused by unexpected movement of the machine. Engage the parking brake and/or place transmission in PARK, shut off engine and remove key before working around hitch.

#### **Transporting the Disc**

Clean both quick disconnects and tractor couplers before connecting. Shut off the tractor engine and move the hydraulic levers back and forth to relieve pressure in the hydraulic system. Connect the hydraulics hoses to the tractor hydraulic couplers. For ease of use it is recommended the hoses be attached in the order which lowers the disc when the hydraulic lever is pushed forward and raises it when the lever is pulled back.

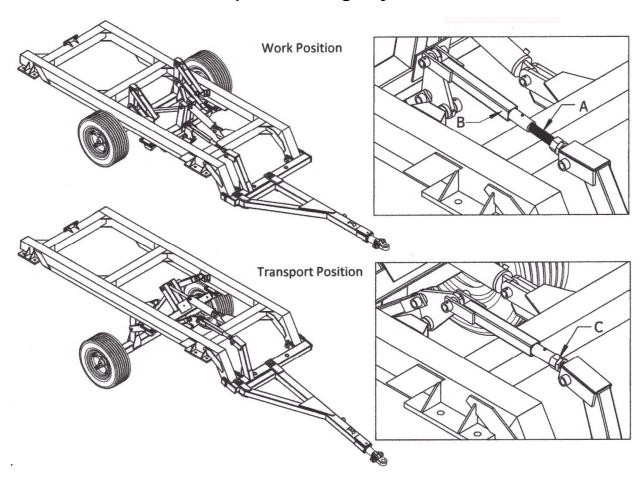


CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid this hazard by relieving the pressure before disconnecting hydraulic or other lines. Tighten all the connections before applying pressure. Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.

- □ Turn jack handle to take weight off hitch jack. Unpin jack, remove pin, swing jack up into transport (i.e. horizontal) position and re-pin.
- □ If the tractor is equipped with a swinging drawbar. Make sure the drawbar is locked in the center position.
- □ Connect warning lights to the tractor outlet and make sure they are functioning properly. Make sure the SMV sign is installed and visible from the rear of the machine.
- □ Check tire pressure and adjust if necessary.

### **Transport Leveling Adjustment**



The implement can be adjusted so the frame is level front to rear for transport and when it is raised out of the ground to turn. This is accomplished by adjusting nuts (C) on eyebolt (A). In the lowered Work Position, the eyebolt (A) slides out of tube (B). This allows the hitch/bridle assembly to "float" while discing. When the implement is raised to Transport Position, the eyebolt (A) slides into tube (B) until the tube contacts the nuts (C). At this point the hitch/bridle assembly no longer "floats" and becomes fixed relative to the frame.

If the frame is lower at the front in the Transport Position: Lower the disc to the work position to take pressure off the nuts (C). Turned the nuts clockwise (viewed from front of disc). Raise the disc back to transport position and check for level. Repeat if necessary and lock the nuts together.

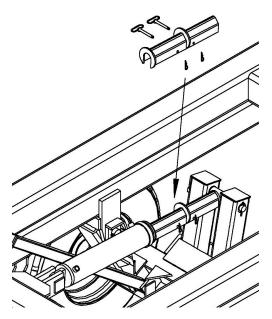
If the frame is higher at the front in the Transport Position: Lower the disc to the work position to take pressure off the nuts (C). Turn the nuts counterclockwise (viewed from front of disc). Raise the disc back to transport position and check for level. Repeat if necessary and lock the nuts together.

CAUTION: In the Work Position, the tube (B) must not be in contact with the nuts (C). The leveling linkage may be damaged if the hitch/bridle assembly cannot "float" in the Work Position.

## **Install the Transport Stay**

Raise the disc to its maximum height by completely extending the hydraulic cylinder. Install the transport stay over the hydraulic cylinder rod with the plated end against the head gland of the cylinder. Install the pins provided. Switch the tractor off and move the hydraulic lever back and forth, releasing the pressure in the system and allowing the weight of the disc to be taken up by the transport stay.

IMPORTANT: Never transport the disc without the transport stay installed on the hydraulic cylinder.





## Transport Safety /



- Never allow riders on the tractor or disc. Serious injury or death can result from falling in the path of the disc while in operation or transport.
- □ Observe laws and regulations while transporting disc. Never transport disc at speeds greater than 20 mph (32 km/h). Reduce speed and exercise caution on turns, bridges, rough roads, steep grades and other adverse conditions.
- □ Install all locking devices before transporting disc. Without these devices installed, the disc could fall during transport and cause injury or death to the operator or bystanders and/or damage to the disc. tractor and property.
- Always used safety chains to secure the disc to the tractor during transport. Provide only enough slack in chain to permit turning. A safety chain will help control drawn equipment should it accidentally separate from the drawbar.

- □ Ensure the load does not exceed the recommended specifications of the tractor. The tractor must be heavy and powerful enough with adequate braking power for the towed load.
- □ Keep the SMV emblem and side and rear reflectors clean and visible.
- □ Use headlights, flashing warning lights and turn signals day and night. Follow local regulations for equipment lighting and marking. Keep lighting and marking visible and in good working order. Replace or repair lighting or marking that has been damaged or lost.
- □ Use the proper size and grade of pin to attach the disc to the tractor.
- □ If the tractor is equipped with a swinging drawbar, be sure to pin it in the center position before transporting the disc.
- Check wheel lug nuts for tightness and ensure tires are properly inflated and free of damaging cuts and abrasions. The failure of either of these components can cause the disc to swing uncontrollably and make it difficult to control the tractor.
- □ Remove debris and loose soil from the disc before traveling on public roads. Falling debris and soil can be a hazard to following and approaching traffic.
- □ Do not tow another implement behind the disc unless proper modifications have been made and it is permitted by local ordinances.

### **Operating the Disc**

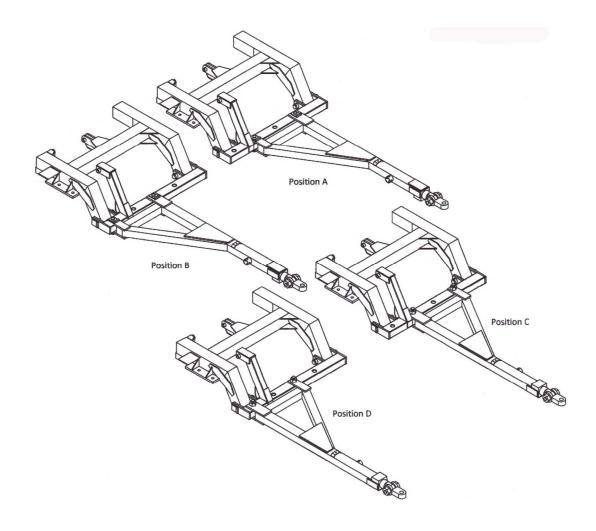
#### **General Operating Guidelines**

- □ Use the recommended size tractor. Weight is as important as horsepower. Too light a tractor will be overpowered by the plowing action of the disc and its front end will be swung to the left, requiring constant steering corrections.
- □ Always raise the disc out of the ground before turning. If pulling a harrow, roller or other toolbar behind the disc, raise the disc just clear of the ground before turning.
- □ In the field do not back-up with the disc in the fully raised position. This will prevent the disc from overbalancing to the rear which may damage the control arms.
- □ Speed, depth and soil type all determine how level the ground left behind the disc. To minimize ridging or gouging, limit the discing speed to 4-6 mph.
- On tractors equipped with a swinging drawbar, allow the drawbar some movement when working in level or gently rolling fields. In severely rocky conditions, heavy clay or tree stumps allow more swing in the drawbar. In all other conditions, lock the drawbar in the center position.
- Pulling a drag or heavy harrow behind the disc can reduce side draft and aid in levelling the soil.

#### **Disc Adjustments**

All single offset discs have a single characteristic in common. Because the front gang of disc blades are set at an angle to their direction of movement and because these blades are working in "new" ground compared to the rear discs which are working in ground already partially tilled by the front blades, a single offset disc tries to rotate clockwise as it is pulled forward through the field. To perform optimally and to reduce stress and premature wear on components, it is desirable that the machine draft in a straight line behind the tractor. As well, the concavity of the disc blades is such that in the center angle setting the blades will accomplish the most tillage with the least horsepower and minimum wear to the blades. When the disc drafts to one side (i.e. "dog tracking" or "crabbing") the gang angles are changed and the quality of the tillage suffers.

### **Hitch Assembly Adjustments**



The draft of the disc can be changed by moving the hitch assembly to one of four positions. Position B is considered the center position and suitable for most conditions. Sliding the hitch to Position A will cause the rear of the disc to move to the left when viewed from the rear looking forward. Flipping the hitch over and attaching in either Position C or D will cause the rear of the disc to move progressively to the right when viewed from the rear looking forward.

**NOTE:** Towing another tool behind the disc will affect its draft.

The Model 800 is designed with a parallel lift undercarriage. The undercarriage is positioned such that the weight of the unit is balanced between the front and rear of the disc. Lifting and lowering the disc does not significantly change this distribution. For this reason the disc does not require a leveling control assembly for field operations.



- Become familiar with the disc and its operation before using the unit. Read this manual carefully and contact your dealer if you have any questions.
- □ Never allow riders on the tractor or disc. Serious injury or death could result from falling in the path of the disc while in operation or transport.
- □ Be sure bystanders are clear of the disc before raising or lowering the disc. Accidental movement of the controls or hydraulic failure could cause the disc to suddenly fall.
- □ Be sure bystanders are clear of the disk before operating the disc. Before entering the tractor, walk around the disc making sure no one is on, under or in front of the disc. Moving the disc while someone is between or in front of the gang assemblies could result in serious injuries or death.
- □ Never work under a raised disc. Always lower the disc to the ground before inspecting or servicing. Never rely on the hydraulic system to hold up the disc.
- □ Use extreme caution when working around disc blades. The blades are sharp and could cut hands, legs, etc. Wear gloves to handle disc blades or gang assemblies.
- Do not operate close to ditches, deep bodies of water or on excessively steep slopes.
- Before dismounting from the tractor to service or make adjustments, always
  - 1. Lower the disc to the ground.
  - 2. Shut the tractor off.
  - 3. Engage the tractor's parking brake or place transmission in park.
  - 4. Relieve the hydraulics by moving the control back and forth.
  - 5. Remove the key.

Unanticipated movement of the disc while working around the disc gangs could result in serious personal injury or death.



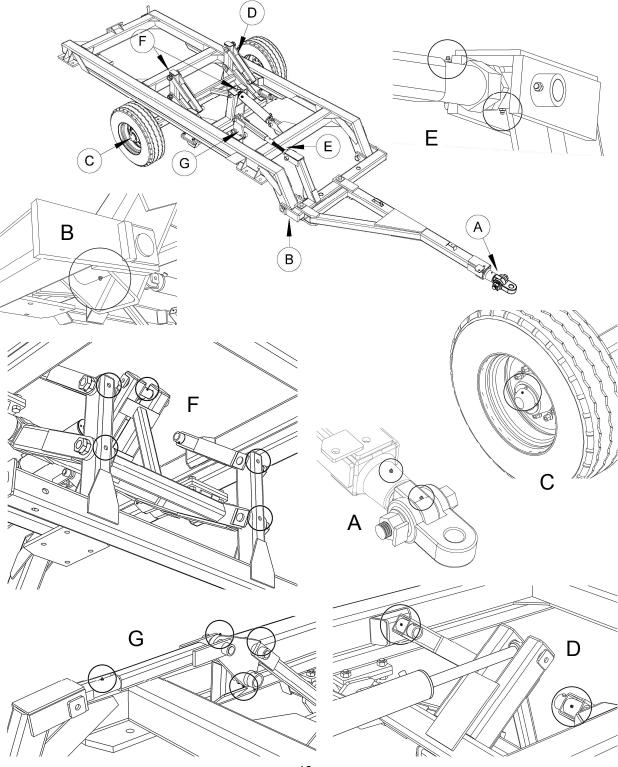
## **Service and Maintenance Safety**



- Before servicing the disc, always:
  - 1. Lower the disc to the ground.
  - 2. Shut the tractor engine off.
  - 3. Engage the tractors parking brake and/or place transmission in park.
  - 4. Relieve the hydraulics by moving the control lever back and forth.
  - 5. Remove the ignition key.
- □ Never work under a raised disc. The disc could fall suddenly causing serious personal injury. Never rely on the hydraulic system to hold the disc up.
- □ Periodically visually inspect the entire disc. Hydraulic fluid leaks and broken, missing or faulty parts can create a hazard. Make necessary repairs.
- □ Use caution when inflating tires. Use a clip-on air chuck, extension hose with gauge, and stand to one side away from the tire when inflating to avoid the possibility of personal injury due to blow-offs, etc. Maintain proper air pressure in the tires. Never exceed the manufacturer's maximum p.s.i. displayed on the sidewall of the tire.
- □ Before disconnecting any hydraulic line relieve the pressure. Escaping hydraulic oil under pressure can have sufficient force to penetrate the skin causing serious personal injury. If injured by escaping hydraulic fluid, obtain medical treatment immediately.
- □ Handle the gang assemblies with care. The disc blades are sharp and can cut or slice skin. Use chock blocks to prevent the gang assemblies from rolling during servicing. Wear gloves when handling the disc blades or gang assemblies.
- After working on the hydraulic cylinder or any other components of the hydraulic system, carefully cycle the hydraulic cylinder several times to purge air from the system and check all components for leaks. Always be sure the hydraulic lines are free of air and do not leak. ORB fittings may not leak even though they are only finger tight tighten with a wrench. Check hydraulic hoses for cuts or abrasions and replace if necessary.
- Securely support any machine elements that must be raised for service work. Use suitable lifting devices and support stands where required. If using chains or straps make sure they are of sufficient strength for the load and are in good repair.
- □ To avoid injury wear gloves, steel-toe boots, safety glasses, hearing protection, safety helmet and other safety equipment where warranted.
- □ Understand the service procedure before doing the required work. Keep the work area clean and dry.

#### **Lubricate the Disc**

- □ The following illustrations highlight those areas of the disc subject to stress and wear. Unless indicated otherwise, these fittings should be greased daily or after every 10 hours of operation.
- □ Use a pressure lubrication gun and apply a sufficient amount of No. 2 multi-purpose lithium grease or equivalent to flush out the old grease. Wipe the grease fitting clean before greasing.
- □ Grease all fittings before first use of the season and before storage at the end of the season.



#### Fluid and Fastener Specifications

□ DISC GANG ASSEMBLY AXLES: The disc gang assembly axles are 2-1/2" in diameter and are threaded at either end. A 4" heavy cast nut is installed at either end and tightened to complete the rigid gang assembly. To insure proper functioning and maximum durability, the axle nuts should be checked and tightened daily during the first (7) seven days of operation when the disc is new or after replacing any of the gang assembly components. If the gang becomes excessively loose, be sure to clean all mating surfaces before retightening. When installing the nut, apply an anti-seize compound to the threads.

#### Recommended Torque - 3500 ft/lbs

□ FASTENERS: Tighten all fasteners after the first day of operation and seasonally thereafter to the following settings.

Bolt	Torque (ft/lbs)		
Diameter	Grade 5	Grade 8	
3/8"	23	33	
1/2"	57	80	
5/8"	112	159	
3/4"	200	282	
7/8"	322	454	
1"	483	682	
1-1/4"	840	1363	
1-1/2"	1462	2371	

The torque values in table are for plated unlubricated bolts and nuts.







OIL-BATH BEARING OIL: The oil-bath bearing contains back-to-back tapered roller bearings operating in gear oil. The bearing has a check plug on the side of the housing. Oil is filled to the bottom of the check plug hole. Fill oil until it begins to run out the hole.

#### Recommended Gear Oil - SAE 90W (API GL-4)

A heavier weight of gear oil may be used in hot climates where there may be constant temperatures in excess of 90°F.

□ TIRE AND WHEEL SERVICE

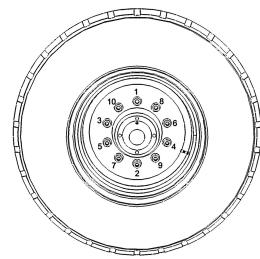
When checking wheel nut for tightness or remounting the wheel, tighten the wheel bolts in the sequence illustrated.

#### Torque wheel nuts to 300 ft/lbs.

Check the tires regularly for cuts or other damage.

Check and adjust tire pressure when tire is cold.

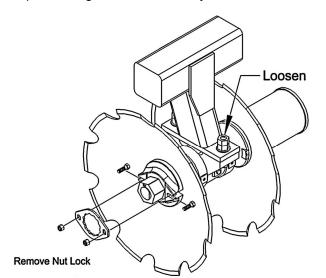
Maintain tire pressure at the manufacturer recommended setting.

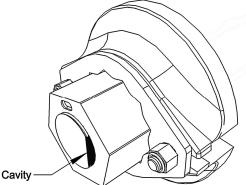


#### **Keep Gang Assemblies Tight**

- □ To ensure proper function and maximum durability, the axle nuts should be checked and tightened daily during the first (7) days of operation when the disc is new or after replacing any of the gang components.
- □ Loose axles may bend or break or cause damage to other components of the gang assembly. Maintaining tight gangs is necessary to ensure maximum bearing life.
- A loose gang assembly is evident when some disc blades stop turning when discing or turn at a different speed than other discs on the same assembly.
- □ To tighten the axle without removing the gang assembly from the disc:

To minimize the possibility of thread damage, clean out the cavity between the inside of the nut and the flat milled surface at the end of the axle. After using compressed air or a pressure washer to remove as much material as possible, pour or spray a light oil or penetrating fluid into the cavity.





Unbolt and remove the nut locks from the end washers on both ends of the axle.

Loosen but do not remove the bolts holding the bearings to the bearing standards.

Place one wrench on an axle nut to prevent the axle from turning.

Use the other wrench and an extension (i.e. 4 to 5 foot length of 2" pipe) or a sledge hammer to tighten the axle nut on the opposite end of the axle. Tighten the nut to approximately 2000-2200 ft/lbs.

Retighten the bearing bolts. If the gang is excessively loose it may be necessary to completely disassemble the entire assembly and clean the mating surfaces between the spools, bearings, end washers and disc blades.

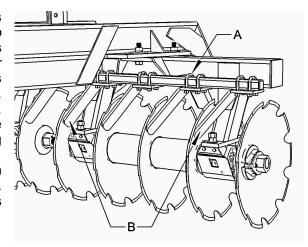
- If it is necessary to remove and disassemble the gang assembly, use suitable lifting devices and supports to prevent injury.
  - With the disc lowered to the ground, first remove the scrapers and then unbolt the bearings from the bearing standards. There are four 1-1/4" x 5" bolts holding each gang assembly to the gang bar. Once the bolts are removed, raise the disc high enough to either roll or pull the assembly from under the disc. Block the gang to prevent it from rolling. Remove the nut locks from both ends of the assembly. Use one wrench to keep the gang from turning while using the other wrench to tighten the nut at the opposite end of the assembly.

It may not be possible to properly tighten the gang if dirt, grit or debris has built-up between the components. In this case remove a nut from one end of the axle, slide off the end washers, bearings, spools and disc blades. Thoroughly clean the mating surfaces between the components and reassemble on the disc gang (see assembly section). Clean the threads on the axle and in the axle nut. Apply an anti-seize compound to the axle threads and reinstall the nut. Tighten the nut and reinstall the nut locks. Place the assembly under the disc and bolt to the gang bar bearing standards. Occasionally turn the gang while tightening the bolts to check the gang turns freely. Retighten the bearing bolts after the first 10-12 hours of operation.

#### **Adjusting the Scrapers**

Adjust the scrapers as close to the disc blades as possible without touching the blades. To move a scraper first loosen equally the u-bolts (A) holding it to the scraper bar. Use a hammer to alternatively tap the top side of the u-bolts and the scraper itself in the required direction. Once in position tighten the u-bolts equally. Turn the blades occasionally while tightening the u-bolts to ensure the scraper is not contacting the disc blade.

In some conditions (e.g. heavy trash or virgin ground) plugging can occur at the bearings. Removing the scrapers (B) at these locations can alleviate the problem.



## Repack and Pre-Load Wheel Hub Bearings

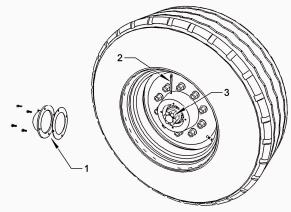
The wheel bearing pre-load should be set periodically or more often if transported frequently. Raise the tire so it can rotate and:

- 1. Remove the dust cap and gasket from hub.
- 2. Remove cotter pin from nut and spindle.
- 3. While turning the tire tighten the castellated nut until there is a slight but noticeable drag on the bearing. Do not back the nut off. Place the cotter pin in the nearest hole to secure the nut. Replace the dust cap and gasket.

Repack the wheel hub bearings yearly by:

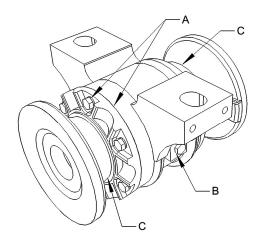
- 1. Remove the tire from the hub.
- 2. Remove the dust cap and gasket.
- 3. Remove the cotter pin and remove the castellated nut from the end of the spindle.
- 4. Slide the hub off the spindle.
- 5. Clean bearing cones, dust cap and nut with kerosene or other appropriate solvent.
- 6. Clean the inside of the hub and inspect the bearing cups and the seal. If they
  - show excessive wear or are damaged, replace both the cups and cones and seal. Though it is not always necessary, it is advisable to replace the seal whenever repacking the hubs.
- 7. Pack the bearing cones and inside cavity of the hub with No. 2 multi-purpose lithium grease or equivalent. Make sure no foreign material contaminates the lubricant.
- 8. Place the rear bearing cone into the back of the hub and press the seal into the hub. Place a light film of grease on the seal surface and carefully slide the hub onto the spindle taking care not to damage the seal.
- 9. Place the outside bearing cone over the spindle and into the hub.
- 10. Install the castellated nut and follow the procedure for setting the pre-load.
- 11. Reinstall the dust cap and tire.

Check the wheel lug nuts and wheel bearing pre-load after the next week of operation.



#### **Check the Oil-Bath Bearings**

Visually check the oil-bath bearings daily. Oil-bath bearing assemblies can leak oil from three locations and attention should be paid to these areas. A - Oil can seep from between the bearing



housing and the end cap or from around the bolts that hold the end cap to the housing. This condition is caused by loose bolts or damaged gaskets. Gaskets are placed between the end cap and the housing to preload the taper bearings in the housing. solution is to tighten the bolts (30 ft/lbs) or replace the gaskets. **B** – Oil can seep past the check plugs. Plugs may use a pipe thread. Remove, clean the threads, apply "pipe dope" or Teflon tape and reinstall. C - Oil may seep by the metallic duo-cone seals. This may be caused by worn seals, loose gang axles or extreme temperature fluctuations. Worn seals should be replaced immediately to prevent catastrophic bearing failure. Such a failure will ruin all the other components of the bearing. Loose gang axles can allow the bearing flanges to move outwards and thereby allow the seals to separate. Be sure to keep gang axles tight. Because

the seals are made of metal, they can expand and contract with extreme temperature fluctuations. When they contract the sealing surfaces separate and small amounts of oil can escape. This will normally occur when the disk is in storage. Putting the disc to use will normally allow the seals to reseat themselves. Check the oil and add 90W gear oil if necessary.



## **Assembly Safety**



- □ Wear proper attire when assembling disc. Always wear relatively tight and belted clothing to avoid entanglement in equipment. Wear sturdy, grip work shoes and protective equipment for eyes, hands, hearing and head.
- □ Handle the disc gang components with care during assembly. The disc blades are sharp and can cut hands, feet, etc.
- Disc blade assemblies and disc weldments and components are heavy and awkward. Twoperson assembly is recommended. When working with others, try to maintain visual contact and communicate actions and procedures which may present a danger to them.
- Read assembly instructions thoroughly before beginning.
- □ Use the proper tools and equipment for assembly. Make sure you understand the safe procedures for the motorized equipment and lifting devices you will be using. Make sure tools and equipment are in good repair.
- □ Use proper supports for the job and chock tires or any other components that could roll inadvertently.
- Purge air from hydraulic systems before operation. After connecting the hydraulic lines, carefully cycle the hydraulic cylinder several times to purge air from the system. Visually check all connections for leaks.
- □ Never use your hands to check for hydraulic leaks.

### **Disc Gang Assembly Procedure**

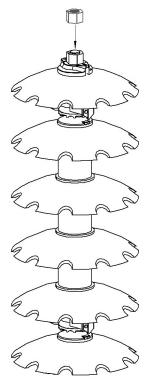
A disc gang consists of an axle on which disc blades, spacer spools and bearings are mounted. The axle is threaded at each end. End washers are then placed on both ends of the axle. Heavy axle nuts are then threaded onto each end and tighted to a recommended torque of 2000-2200 ft/lbs. The axle nuts are locked into place by bolting a nut lock plate around the nut and to the end washers with bolts and lock nuts. The disc blades, spacer spools and bearings have both concave and convex surfaces. Care must be taken to match convex with concave surfaces during assembly. End washers are either concave or convex and the appropriate washer should be placed at each end of the axle.

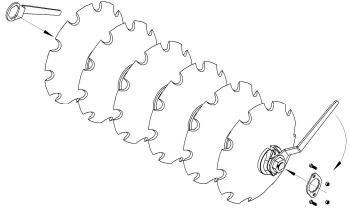
## CAUTION: Gang components are heavy. Two-person assembly is recommended. Follow Safety Guidelines.

To assemble, install the convex end washer and nut on one end of the axle. Slide one blade concave side down the axle against the convex end washer. Next slide a bearing onto the axle, concave end first, against the disk blade. The axle can now be raised to the vertical position and it will stand without being held. In the upright position, the convex end washer should be snug against the underside of the disk blade. If necessary, tilt the axle and disc blade and place a spacer (eg. a length of 1" X 4" wood) between the nut and the floor or ground. This ensures the top threaded end of the axle will be exposed when the gang is completely stacked and the nut can be installed.

With the axle in the upright position, the remaining components can be stacked. Keep all the spacer spools between the bearings with the bearings in the outermost positions on the axle. While stacking the components, make sure all mating surfaces are free of dirt, rust, grease, grit or any other material that interferes with the mating surfaces. After the last disc is in

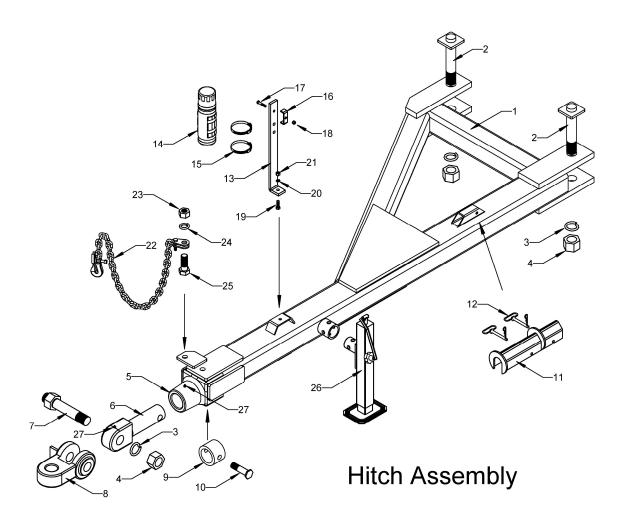
place, drop the concave end washer into place. Apply an anti-seize compound to the axle threads and install the axle nut. Tighten the nut to remove as much slack as possible. Lower the entire assembly to the ground using hoist or forklift and chock both sides of the assembly to prevent it from rolling. Using the gang wrenches provided with the disc, tighten both axle nuts as tight as possible. It may be necessary to use a length of 2" pipe on the wrenches for extra leverage. A sledge hammer may be used to strike the wrench handle for the final adjustment to fit the nut lock plates. Install the nut lock plates over the axle nuts and attach to the end washer with the four bolts and lock nuts provided.



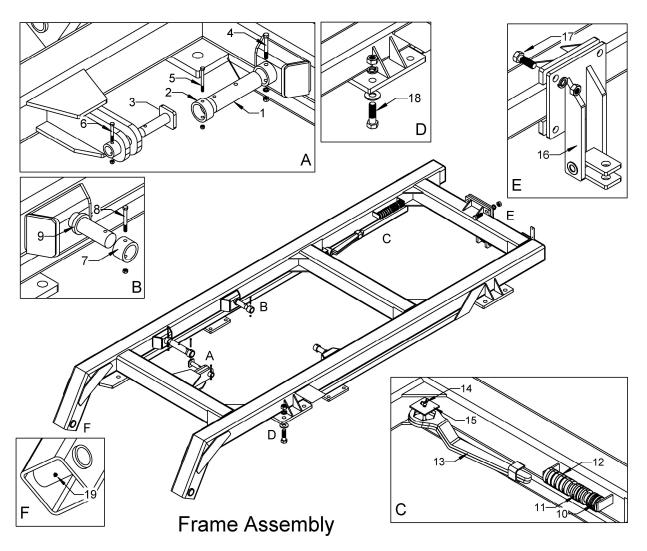


## **Detailed Parts Diagrams**

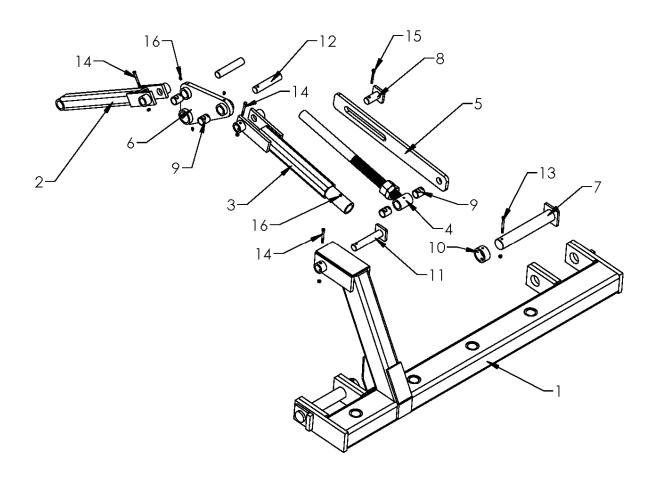
- □ The illustrated parts diagrams will assist in procuring replacement parts from your Kello-Bilt Dealer. However, to be sure of receiving the correct parts, please have the Model Number and Serial Number of your disc available when ordering parts.
- □ In the event the serial number plate is missing the following information can help to identify your disc:
  - the total number of disc blades on the unit.
  - the spacing in inches between the disc blades.
- □ The parts diagrams can also aid in the assembly and maintenance of your disc.



REF NO	PART NUMBER	DESCRIPTION	NO REQ'D
1	8001004	Hitch Weldment	1
2	8001300	Fabricated Bolt	2
3	LW200	2" Spring Lock Washer	3
4	NC200	2" UNC Hex Nut	3
5	502040245	Weld-in Receiver	1
6	502040264	Plunger	1
7	4561006	Fabricated Bolt	1
8	502040293	Hitch Clevis	1
9	4561007	Collar	1
10	125500MB8	1-1/4" X 5" Modified Bolt	1
11	CTS200	Transport Stay	1
12	44160	Pin c/w Hairpin	2
13	501064054	Hose Holder	1
14	DOCH914	Canister	1
15	HAS64	Screw / Band (Worm Gear) Clamp	2
16	TBX50	Hose Clamp	1
17	038200B5	3/8" X 2" UNC Bolt	1
18	NC0385L	3/8" Nylon Lock Nut	1
19	050150B5	1/2" X 1-1/2" UNC Bolt	1
20	LW050	1/2" Spring Lock Washer	1
21	NC050	1/2" UNC Hex Nut	1
22	PPSC21A	Safety Chain (Cat II)	1
23	NC100	1" UNC Hex Nut	1
24	LW100	1" Spring Lock Washer	1
25	100350B8	1" X 3-1/2" UNC Bolt	1
26	TBX8H	Hitch Jack	1
27	11100	Grease Zerk	2

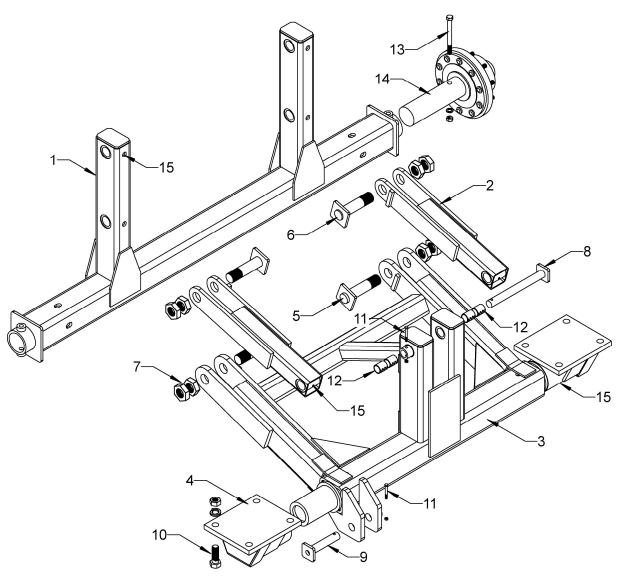


REF NO	PART NUMBER	DESCRIPTION	NO REQ'D
	8001000	Complete Frame	
1	8001107	Pivot Pin	1
2	8001106	Collar	1
3	8001305	Pin	1
4	050400B8C	1/2" X 4" UNC Hex Bolt c/w Nut & Lock Washer	1
5	038400B5C	3/8" X 4" UNC Hex Bolt c/w Lock Nut	1
6	038250B5C	3/8" X 2-1/2" UNC Hex Bolt c/w Lock Nut	1
7	8001102	Collar	2
8	038350B5C	3/8" X 3-1/2" UNC Hex Bolt c/w Lock Nut	2
9	8001334	Spacer	2
10	501043620	1" Rod Stop (Segment)	2
11	501043688	1-1/2" Rod Stop (Segment)	2
12	401045100	2" Rod Stop (Segment)	2
13	2R-81	Axle Wrench	2
14	NC-050-W	1/2" Wing Nut	1
15	3043010	Hold Down Plate	1
16	8001011	Optional Rear Hitch	1
17	125350B8C	1-1/4" X 3-1/2" UNC Hex Bolt c/w Nut & Lock Washer	4
18	150500B8C	1-1/2" X 5" UNC Hex Bolt c/w Nut, Flat Washer & Lock Washer	10
19	11100	Grease Zerk	2



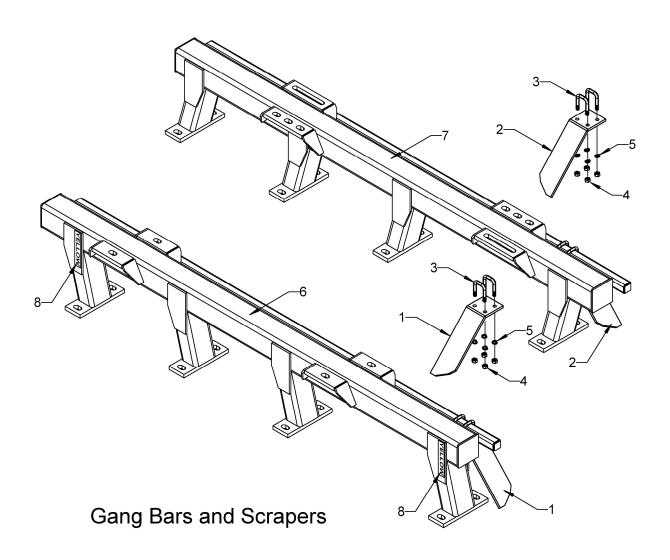
## **Bridle and Levelling Assembly**

REF NO	PART NUMBER	DESCRIPTION	NO REQ'D
1	8001003	Bridle	1
2	8001009	Bottom Levelling Arm	1
3	8001008	Top Levelling Bar	1
4	8001010	Levelling Eyebolt	1
5	8000010	Aft Slide	1
6	8001005	Levelling Pivot	1
7	8001303	Bridle Pin	2
8	8001338	Aft Pin	1
9	175150200	Spring Bushing	5
10	8001106	Pin Collar	2
11	8001307	Bridle Aft Pin	1
12	8001304	Lever Pin	2
13	038400B5	3/8" x 3-1/2" UNC Hex Bolt c/w Lock Nut	3
14	038350B5	3/8" x 4" UNC Hex Bolt c/w Lock Nut	2
15	375300CP	3/8" x 3" Cotter Pin	1
16	11100	Grease Zerk	4



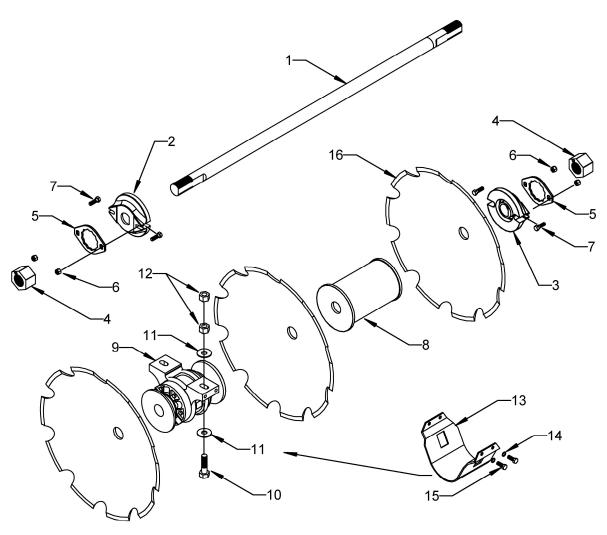
Parallel Lift Transport

REF NO	PART NUMBER	DESCRIPTION	NO REQ'D
1	8001001	Wheel Carrier	1
2	8001007	Transport Link	2
3	8001002	Transport Lever	1
4	8001006	Transport Holder	2
5	8001302	Fabricated Bolt	2
6	8001301	Fabricated Bolt	2
7	NC200J	2" UNC Hex Jam Nut	8
8	8001306	Pin	1
9	8001304	Pin	1
10	125350B8C	1-1/4" X 3-1/2" UNC Hex Nut c/w Nut & Lock Washer	8
11	038300B5C	3/8" X 3" UNC Hex Bolt c/w Lock Nut	2
12	175150200	Spring Bushing	4
13	075800B8C	3/4" X 8" UNC Hex Bolt c/w Nut & Lock Washer	2
14	HSA10B	10 Bolt Budd Hub c/w Spindle	2
15	11100	Grease Zerk	8



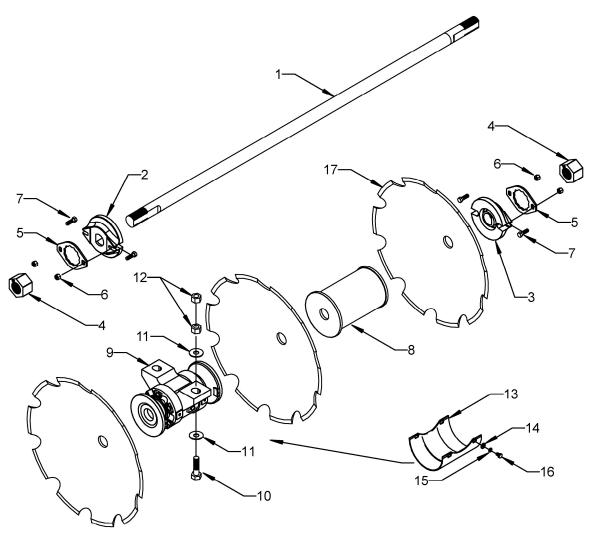
REF NO	PART NUMBER	DESCRIPTION	NO REQ'D
1	K27730	Right Hand Scraper (Front Gang)	1
2	K27700	Left Hand Scraper (Rear Gang)	1
3	3027140	3/4" U-Bolt	2
4	NC075	3/4" Hex Nut	4
5	LW075	3/4" Lock Washer	4
8	456DYR	Yellow Reflector Strip	2

MODEL NO	6 – FRONT GANG	K27730 REQ'D	7 – REAR GANG	K27730 REQ'D
800-2432B	F800242	11	R800242	11
800-2832B	F800282	13	R800282	13
800-3232B	F800322	15	R800322	15
800-3632B	F800362	17	R800362	17
800-2236B	F800226	9	R800226	9
800-2436B	F800246	11	R800246	11
800-2636B	F800266	12	R800266	12
800-3036B	F800306	14	R800306	14



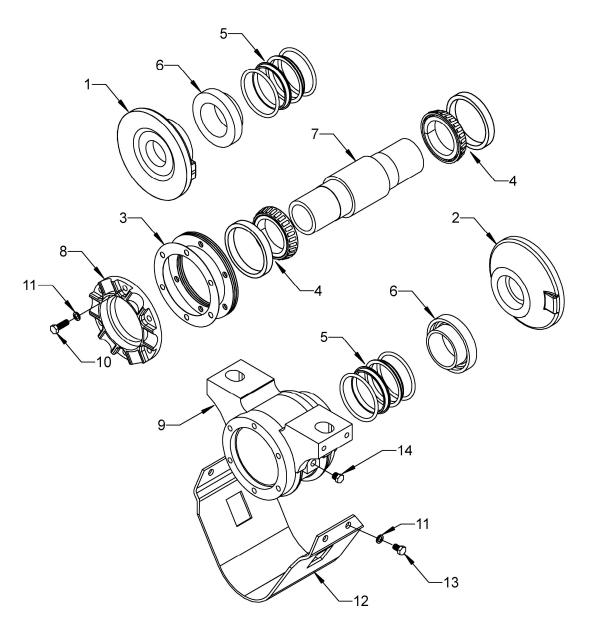
Gang Assembly - 14" Spacing

REF NO	PART NUMBER	DESCRIPTION	NO REQ'D (per Assembly)
1	511018625	Axle 2-1/2" dia X 68-5/8" (5 Blades)	1
1	511018626	Axle 2-1/2" dia X 83-1/4" (6 Blades)	1
1	511018627	Axle 2-1/2" dia X 97-5/8" (7 Blades)	1
2	502010592	Convex End Washer	1
3	502010593	Concave End Washer	1
4	4N225	Hex Nut	2
5	501010348	Nut Lock	2
6	NC0635L	5/8" Nylon Lock Hex Nut	4
7	063200B5	5/8" X 2" UNC Bolt	4
8	501068330	14" Spacer Spool	2/3/4
9	501047190	Oil-Bath Bearing Assembly	2
10	125500B8	1-1/4" X 5" UNC Bolt	4
11	FW125H	Hardened Flat Washer	8
12	NC125	1-1/4" Hex Nut	8
13	511016372	Replaceable Bearing Wear Plate	2
14	LW050	1/2" Lock Washer	8
15	050075B	1/2" X 3/4" UNC Bolt	8
16	602044163	1/2" X 32" Notched Disc Blade	
16	602048045	1/2" X 36" Notched Disc Blade	



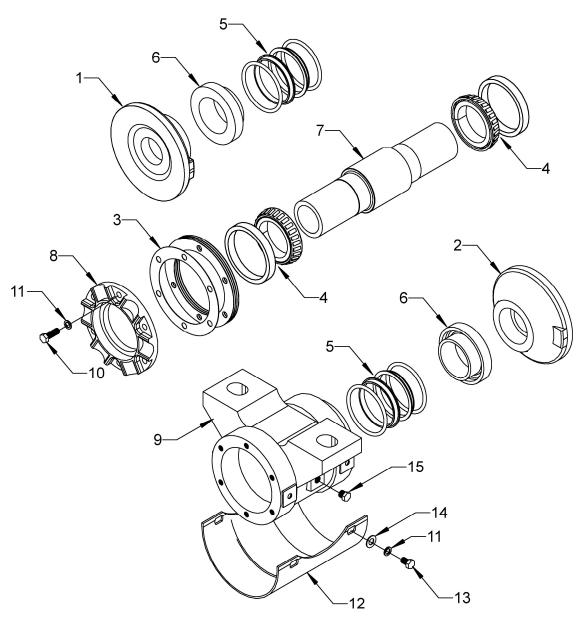
Gang Assembly - 17" Spacing

REF NO	PART NUMBER	DESCRIPTION	NO REQ'D (per Assembly)
1	501010358	Axle 2-1/2" dia X 63-1/4" (4 Blades)	1
1	501010357	Axle 2-1/2" dia X 80-1/2" (5 Blades)	1
1	501010359	Axle 2-1/2" dia X 98" (6 Blades)	1
2	502010592	Convex End Washer	1
3	502010593	Concave End Washer	1
4	4N225	Hex Nut	2
5	501010348	Nut Lock	2
6	NC0635L	5/8" Nylon Lock Hex Nut	4
7	063200B5	5/8" X 2" UNC Bolt	4
8	501068331	17" Spacer Spool	1/2/3
9	501047191	Oil-Bath Bearing Assembly	2
10	125500B8	1-1/4" X 5" UNC Bolt	4
11	FW125H	Hardened Flat Washer	8
12	NC125	1-1/4" Hex Nut	8
13	501018437	Replaceable Bearing Wear Plate	2
14	FW050	1/2" Flat Washer	8
15	LW050	1/2" Lock Washer	8
16	050075B	1/2" X 3/4" UNC Bolt	8
17	602048045	1/2" X 36" Notched Disc Blade	



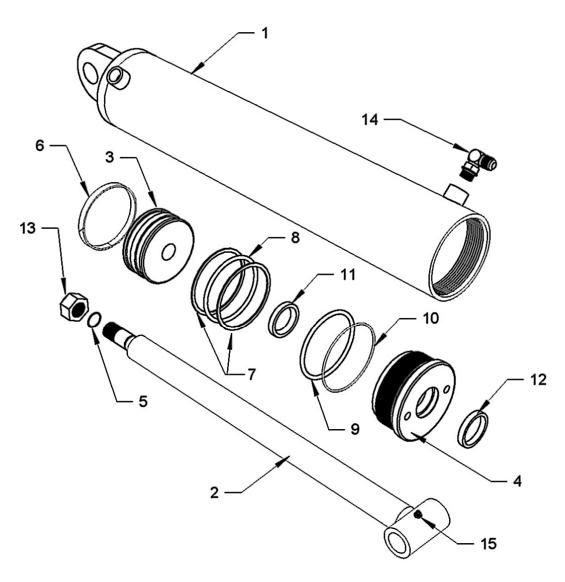
501047190 - 14" Oil-Bath Bearing Assembly

REF NO	PART NUMBER	DESCRIPTION	NO REQ'D
1	502040167	Concave Flange	1
2	502040168	Convex Flange	1
3	503030687	0.10 mm Gasket (Shim)	
3	503030537	0.40 mm Gasket (Shim)	
4	503010482	Bearing, Cup and Cone	2
5	503030029	Duo-Cone Seal	2
6	502040119	Seal Retainer	2
7	502040204	Bearing Axial	1
8	502010644	End Cap	1
9	502011685	Bearing Housing	1
10	050150B5	1/2" X 1-1/2" UNC Bolt	6
11	LW050	1/2" Lock Washer	10
12	511016372	Wear Plate	1
13	050075B	1/2" X 3/4" UNC Bolt	4
14	503010856	Check Plug	2



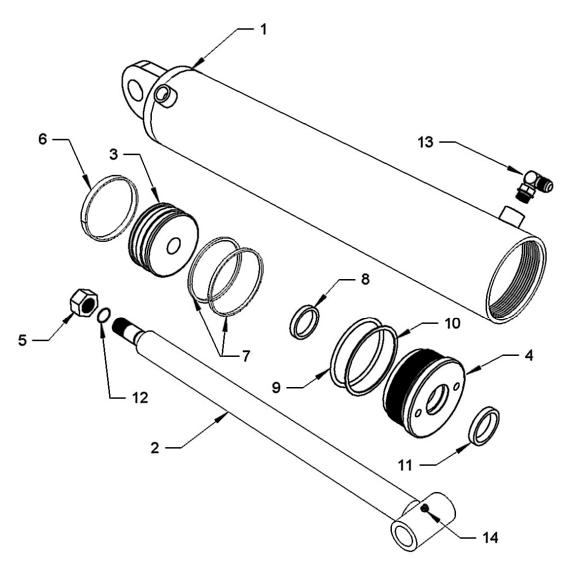
501047191 - 17 " Oil-Bath Bearing Assembly

REF NO	PART NUMBER	DESCRIPTION	NO REQ'D
1	502040164	Concave Flange	1
2	502040165	Convex Flange	1
3	503030687	0.10 mm Gasket (Shim)	
3	503030537	0.40 mm Gasket (Shim)	
4	32218	Bearing, Cup and Cone	2
5	503030029	Duo-Cone Seal	2
6	502040119	Seal Retainer	2
7	502040039	Bearing Axial	1
8	502010644	End Cap	1
9	502010747	Bearing Housing	1
10	050150B5	1/2" X 1-1/2" UNC Bolt	6
11	LW050	1/2" Lock Washer	10
12	501018437	Wear Plate	1
13	050075B	1/2" X 3/4" UNC Bolt	4
14	FW050	1/2" Flat Washer	4
15	503010856	Check Plug	2



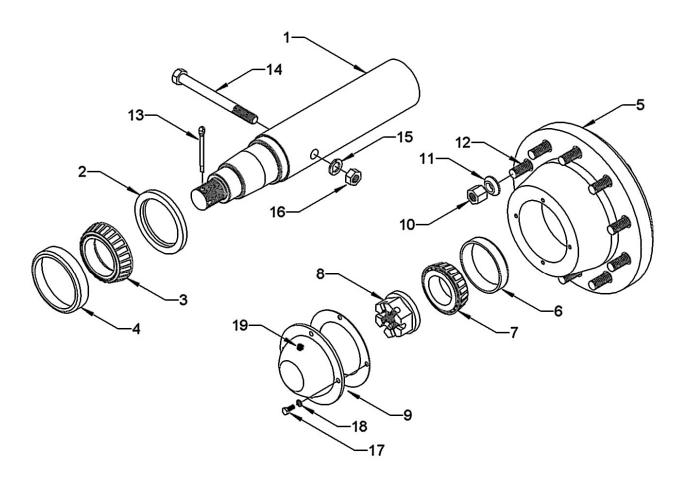
20" Hydraulic Cylinder - 5004974 (CTD - Canadian Tool & Die - C50-158A)

REF NO	PART NUMBER	DESCRIPTION	DESCRIPTION		
1	TUW5096	Barrel		1	
2	RODW5096	Rod		1	
3	5005032	Piston		1	
4	5005022	Gland		1	
5	5005014	Locknut		1	
6		Wear Ring		1	
7		Back-up Ring		2	
8		O-Ring (White)		1	
9		O-Ring (Black)	-use either 9 or 10 depending	1	
10		O-Ring (White)	on fitment to the gland.	1	
11		Rod Seal (Blue)		1	
12		Rod Wiper		1	
13		O-ring	O-ring		
14	5000611	90 degree Elbow	2		
15	11100	Grease Zerk	Grease Zerk		
	SKC5086AK	Seal Kit (Nos. 6,7,	8,9,10,11,12,13)		



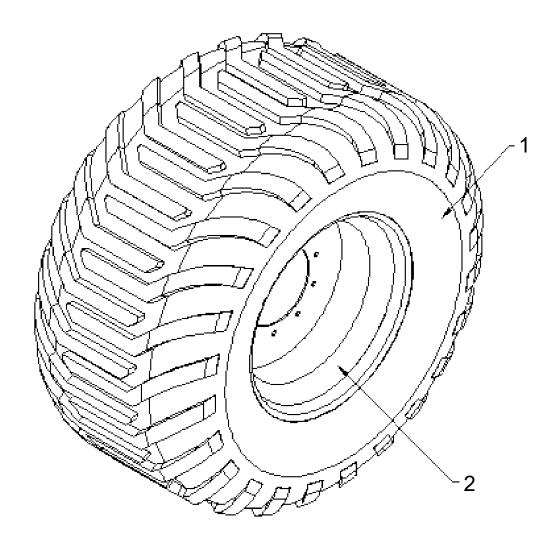
20" Hydraulic Cylinder - R4507785 (RAM Industries - R4507785)

REF NO	PART NUMBER	DESCRIPTION	NO REQ'D
1	R5507785	Barrel	1
2	R4207785	Rod	1
3	R4607782	Piston	1
4	R4707782	Gland	1
5	R3005009	Locknut	1
6		Wear Ring	1
7		Piston Seal (2 piece)	2
8		Rod Seal	1
9		O-Ring	1
10		Back-up Ring	1
11		Rod Wiper	1
12		O-Ring	1
13	5000611	90 degree Elbow Fitting	2
14	11100	Grease Zerk	1
	R3607782	Seal Kit (Nos. 6,7,8,9,10,11,12,13)	



## 10 Bolt Hub Assembly

REF NO	PART NUMBER	DESCRIPTION	NO REQ'D
1	910691	Spindle c/w Nut/Washer (914969)	1
2	910698	Seal	1
3	914695	Inner Cone	1
4	914697	Inner Cup	1
5	912686	Hub c/w Wheel Studs	1
6	914696	Outer Cup	1
7	910615	Outer Cone	1
8	914969	Nut / Washer	1
9	910694	Cap / Gasket	1
10	912707	Lug Nut	10
11	W750	Taper Washer	10
12	912711	Press-in Stud	10
13	VS201HP	Cotter Key	1
14	075800B8	Bolt	1
15	LW075	Lock Washer	1
16	NC075	Hex Nut	1
17	031075B5	Bolt	4
18	LW031	Lock Washer	4
19	11100	Grease Zerk	1



## **Tire and Wheel Assembly**

REF NO PART NUMBER		DESCRIPTION	NO REQ'D
1	60050X22	600/50-22.5 Flotation Tire	1
2	93238700	10 Bolt Steel Wheel	1

#### **Specifications**

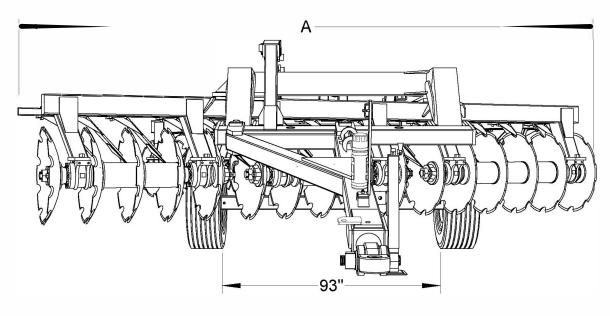
#### STANDARD EQUIPMENT AND FEATURES

- Oil-Bath Bearings with back-to-back tapered roller bearings in a ductile cast housing sealed with metal industrial cone seals. Two bearings per disk gang assembly and four disk gang assemblies per machine.
- Replaceable bearing wear plates.
- Adjustable disk blade scrapers.
- □ 2-1/2" diameter alloy gang axles threaded at each end.
- Heavy duty fabricated steel spacer spools.
- □ Transport leveling control. Parallel lift undercarriage eliminates fore/aft leveling.
- □ Hydraulic control group includes 20" stroke welded 5" diameter hydraulic cylinder with 2" rod, hose holder, hoses with fittings and quick disconnects to reach tractor couplers.
- □ Flex / Swivel tongue hook-up to minimize torsional stress in extreme working environments.
- □ 60050X22 Flotation tires on 10-bolt wheels and hubs.
- □ Major fasteners minimum Grade 8 plated.
- Two fabricated steel gang axle wrenches.
- □ Hitch jack, safety chain and transport stay.
- □ Safety decals, mounted SMV sign.

MODEL	Cut Width	Trans Width (A)	Blade Size	No of Blades	Blade Spacing	Weight - lbs	D.B.H.P.*
800-2432B	13'	14'2"	1⁄2" X 32"	24	14"	17400	180+
800-2832B	15'	16"4"	1⁄2" X 32"	28	14"	18200	200+
800-3232B	17'6"	18'6"	1⁄2" X 32"	32	14"	19000	250+
800-3632B	20'	20'8"	1⁄2" X 32"	36	14"	19800	300+
800-2236B	14'6"	15'6"	1⁄2" X 36"	22	17"	17900	220+
800-2436B	16'	16'8"	1⁄2" X 36"	24	17"	18500	240+
800-2636B	17'6"	18'0"	1⁄2" X 36"	26	17"	19300	280+
800-3036B	20'	20'8"	1⁄2" X 36"	30	17"	20700	320+

<sup>\*</sup> Drawbar Horsepower requirements vary with soil conditions, topography, weight added to the disk and tractor type (e.g. rubber track, rubber wheel, straight frame, articulated).

Note: The manufacturer reserves the right to make improvements and modifications which may, without notice, change these specifications.



#### **Storage**

At the end of the season and when putting the disc into storage:

- □ Clean dirt and debris from around moving parts and from the top of the frame, gang bars, hitch and bridle.
- □ Pay special attention to cleaning the area around the bearings. Spray a light coating of oil or rust preventative around the seal area of the bearings.
- □ Lubricate all grease fittings to prevent moisture infiltration.
- It is recommended to park with the disk in the raised position, coat the exposed hydraulic cylinder rod with grease, install the transport stay and relieve the hydraulic pressure. Place a block under the hitch jack to prevent it from sinking into the ground and be sure the tires are properly inflated. Chock the tires front and rear.
- Clean disk blades to minimize rust.
- □ Coat the guick disconnects in grease and wrap in plastic to prevent rust.
- Make a final inspection for worn, damaged or missing parts and make necessary repairs before the next season.

#### WARRANTY

KELLO-BILT INCORPORATED warrants its products to be free of defects in material and workmanship for a period of six (6) months from the date of first use by the original purchaser at retail, under normal use and service. Defective parts must be returned to KELLO-BILT INCORPORATED at owner's expense for inspection. The obligation of KELLO-BILT INCORPORATED under this warranty shall be limited to shipment, to the original purchaser at retail, of the parts of the equipment intended to replace the part or parts acknowledged by KELLO-BILT INCORPORATED to be defective in material or workmanship and does not include any installation or transportation costs. No warranty is made with respect to items made by others, since such items are warranted by their respective makers. No liability is assumed for expenses or damages resulting from the malfunction or interruption in operation of equipment. This warranty shall not apply to any equipment, or any part thereof, which has been damaged in any accident, or by fire, flood, or Acts of God, or abused or misused, or which has been altered elsewhere than at the place of manufacture, or in which the original purchaser thereof, at retail, has used or allowed to be used, parts not made or supplied by KELLO-BILT INCORPORATED. KELLO-BILT INCORPORATED reserves the right at any time to make changes in the design, material, or specifications of machinery, equipment or parts without thereby becoming liable then make similar changes in machinery, equipment or parts previously manufactured.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHER WARRANTY OF QUALITY, WHETHER EXPRESSED OR IMPLIED.

#### DISCLAIMER OF WARRANTY AND LIMITATIONS OF LIABILITY

- Except for the expressed warranty stated above, **KELLO-BILT INC.** grants no warranties, either expressed or implied regarding products furnished hereunder, including all implied warranties.
- The sole liability of KELLO-BILT INC. with respect to any contract or sale or anything done in connection therewith is to repair or replace the defective parts or machines it has provided. The liability of KELLO-BILT INC. for any claim of any kind shall not exceed the purchase price of the machine or part sold which gives rise to the claim. Except for repair or replacement of the defective part or machine, KELLO-BILT INC. shall have no liability for damages resulting from breach of contract, breach of expressed or implied warranty, negligence or result from the design, manufacture sales delivery, resale, inspection or repair of any machine or part.
- KELLO-BILT INC. shall not be liable in any event for special, indirect, incidental or consequential damages resulting from any breach of contract, breach of expressed or implied warranty, negligence or strict liability in tort, including, by the way of example but not limitation, loss of profits or revenue, loss of use of the machine or parts or
  associated equipment, expediting expenses, or cost of substitute equipment.



Kello-Bilt Inc.

#16 Belich Crescent

Red Deer County, Alberta

Canada T4S 2K5

Phone: (403) 347-9500

Email: info@kello-bilt.com

Website: www.kello-bilt.com

