

LTF LIFT OFFSET DISC HARROW

OPERATOR'S MANUAL PART IDENTIFICATION



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AMCO MANUFACTURING COMPANY

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FOREWORD

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

For our part, we want to welcome you to the group and thank you for buying an AMCO product.

We hope your new AMCO implement will help you achieve both increased productivity and increased efficiency so that you may generate more profit.

This operator's manual has been designed into five major sections: Foreword, Safety Precautions, Operation, Troubleshooting and Parts Identification.

It is important the owner/operator knows the implement model number and serial number. Write the serial and model number in the space provided and use it in all correspondence when referring to the implement.

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



This **SAFETY ALERT SYMBOL**

indicates important safety messages in the manual. When you see this symbol, be alert to the possibility of **PERSONAL**

INJURY and carefully read the message that follows.

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

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

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

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

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

If you are unable to understand or follow the instructions provided in the publication, consult your local AMCO dealer or contact:

AMCO MANUFACTURING, INC.

662-746-4464 800-748-9022 662-746-6825 (FAX)

Website: www.amcomfg.com E-mail: sales@amcomfg.com parts@amcomfg.com AMCO Manufacturing warrants all products manufactured and sold by it against defects in material. This warranty being expressly limited to replacement at the factory of such parts or products as will appear to be defective after inspection.

This warranty does not obligate the Company to bear cost of labor in replacement of parts. It is the policy of the company to make improvements without incurring obligations to add them to any unit already sold. No warranty is made or authorized to be made, other than herein set forth. This warranty is in effect for one year after purchase.

Model Number:	
Serial Number:	
Dealer:	

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

SAFETY

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

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

WARNING: Denotes a specific potential hazard.

DANGER: Denotes the most serious specific potential hazard.

SAFETY PRECAUTIONS

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



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

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

Do not allow riders on the tractor or implement.

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

Be sure all personnel are clear of the immediate area before operating. Read and understand the operator's manual and require all other persons who will operate the equipment to do the same.

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



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

Beware of towed implement width and allow safe clearance.

FAILURE TO HEED MAY RESULT IN PERSONAL INJURY OR DEATH.

SPECIFICATIONS AND SUGGESTED HORSEPOWER REQUIREMENTS

Small Frame

Model	Cutting Width	No. of Disc Blades	Approx. Engine HP Required*	Approx. Weight lbs**
LTF100-1618	6'	16	32-47	1,600
LTF100-2018	7′3″	20	41-52	1,750

Large Frame

Model	Cutting Width	No. of Disc Blades	Approx. Engine HP Required*	Approx. Weight lbs**
LTF100B-2022	7'3"	20	60	2,450
LTF100B-2422	8'7"	24	80	2,700
LTF100B-2822	10'2"	28	100	2,900
LTF100B-3222	12'	32	110	3,131

Pine Plantation

Model	Cutting Width	No. of Disc Blades	Approx. Engine HP Required*	Approx. Weight lbs**
LTFP100B-2022	7'3"	20	60	2,600



Never operate the disc at excessive ground speed which can cause personal injury or damage to your tractor and disc.

BOLT TORQUE



WARNING

Before making any adjustments, inspections, lubricating or repairing. Slowly lower the Disc until it is firmly in contact with the ground. Before dismounting from the tractor shut off the engine set the parking brake and remove the key.

READ THESE INSTRUCTIONS FIRST:

- 1. Improperly tightened bolts will result in damage, breakage, expense, and down time.
- 2. Always replace bolts with the specified grade and type.
- 3. Torque bolts using a torque wrench properly before first use of the machine and every 2-4 hours of use until you are sure bolts are staying tight.
- 4. The chart below is a guide for proper torque. Use it unless a specified torque is called out elsewhere in the manual.

The following table shows torque in ft. lbs.

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

Shear Metric

WARNING DECALS

Familiarize yourself with the warning decals affixed to the disc. It is important for you to operate the disc safely. Read and follow the safety directions on all warning decals.

- 1. For operator safety make sure all warning decals are clean and legible.
- 2. Immediately replace any damaged or missing warning decals.
- 3. Never cover or obscure a warning decal.
- 4. Refer to the Parts Identification Section of this manual for correct warning decal locations.
- 5. Replacement warning decals can be obtained from your AMCO Dealer or by contacting AMCO at amcomfg.com.

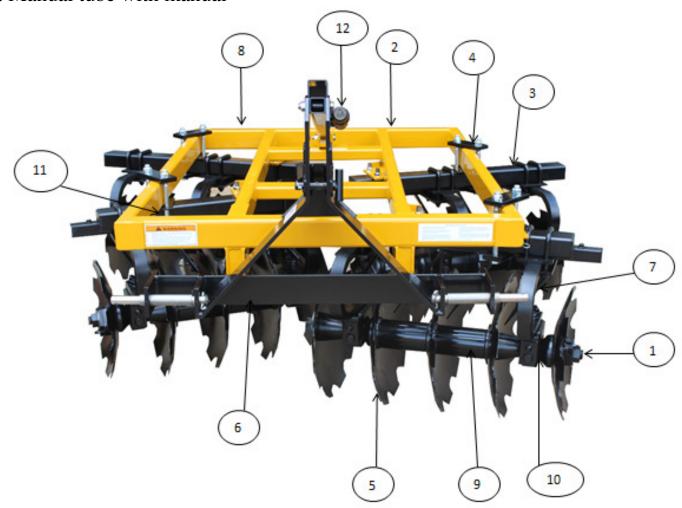
LTF LIFT DISC HARROW SPECIFICATIONS

MODEL "LTF 100" 9" Spacing (F) Series Primary Tillage STANDARD SPECIFICATIONS

AXLES	1-1/2" square, high carbon cold rolled steel	BEARINGS:	Protect-O-Shield® washer bearings
BLADES	18" X 1/4" Cut out blades on small frame 22" x 1/4" Cut out blades on large frame	2 Year Warranty on Bearings	Triple lip sealed, regreaseable
SCRAPERS	High-carbon replaceable blades on heavy duty shanks, mounted with grade 5 bolts on high-grade angle iron bars	BEARING RISERS:	Spring steel shock absorbers
GANGE ANGLE	Adjustable 14º to 18º	SPACING	9"
WEIGHT/BLADE	90-100 lbs. per blade	TRANSPORT	Width same as cutting width plus 6"
FINISH	Powder coated	HITCH:	Small Frame – Cat I and II Large Frame- Cat II and III

LTF DISC HARROW COMPONENTS

- 1. 1 ½" square high carbon steel axles
- 2. Main Frame
- 3. Gang Frame
- 4. All models have adjustable gang angle
- 5. All models equipped with 1/4" cutout blades
- 6. Hitches. LTF 100 Cat. 1 hitch. LTF 100B Cat. 2 and 3 quick hitch compatible
- 7. Spring steel shock absorbers (bearing riser)
- 8. Powder coat finish
- 9. 9" welded spacer spools
- 10. Eight Protect-O-Shield bearings with two year warranty. Greasable with wear guards and zerk guards
- 11. Serial plate
- 12. Manual tube with manual





Never operate the disc at excessive ground speed which can cause personal injury or damage to your tractor and disc.

HITCHING THE DISC TO THE TRACTOR



WARNING

Before dismounting from the tractor shut off the engine, set the parking brake and remove the key.



WARNING

While backing the tractor to hitch to the disc do not permit anyone to stand behind the tractor or be near the disc. Before operating the hydraulic 3-point lift controls be certain no one is directly behind the tractor or near the disc.

Tractors without 3-point quick hitches

- 1. Check and make certain the tractor drawbar will not come in contact with the disc when it is raised or lowered. If necessary reposition the drawbar or remove it. It is recommended to verify there is ample clearance the first time the disc is raised.
- 2. The three tractor lift links should be connected to the disc hitch.
- 3. After verifying the disc is securely connected to the tractor 3-point hitch slowly raise the disc.

Tractors with 3-point quick hitches

- Check and make certain the tractor drawbar will not come in contact with the disc when it is raised or lowered.
 If necessary reposition the drawbar or remove it. It is recommended to verify there is ample clearance the first time the disc is raised.
- 2. The tractor 3-point hitch lift links should be connected to the disc hitch and lower hook Locks latched.

4. After verifying the tractor 3-point hitch is securely connected to the disc slowly raise the disc.

UNHITCHING THE DISC FROM THE TRACTOR



Before dismounting from the tractor shut off the engine set the parking brake and remove the key.

Tractors without 3-point quick hitches

Prior to unhitching the disc from the tractor at the end of the use season or for an extended time review the Extended Disc Storage Recommendations Section of this manual.

Slowly lower the disc until the blades have come in contact with a firm flat surface.

- 1. Remove the klik pin and pin connecting the tractor 3-point center link to the disc. Place the tractor 3-point center link into its storage position.
- 2. Remove lower 3-point klik pins and hitch pins from lower 3-point clevises.
- 3. Lower the 3-point lift arms below the clevises.
- 4. Use care while driving the tractor away from disc make sure the lower 3-point lift arms are free from the disc and do not pull against it.
- 5. Slowly pull the tractor away from the disc. Before dismounting the tractor shut off the engine set the parking brake and remove the key. Reinstall the disc 3-point hitch pins, bushing, and klik pins.

Tractors with 3-point quick hitches

- 1. Prior to unhitching the disc from the tractor at the end of the use season or for an extended time review the Extended Disc Storage Recommendations Section of this manual.
- 2. Slowly lower the disc until the blades have come in contact with a firm flat surface.
- 3. Release lower hook locks
- 4. Lower the quick hitch until the hitch is free from the disc. Use care while driving the tractor away from the disc. Make sure the quick hitch is lowered so it will not pull against the disc. Slowly pull the tractor away from the disc. Before dismounting the tractor shut off the engine set the parking brake and remove the key

CHECKLIST BEFORE USING THE DISC

- 1. Make sure the disc is properly attached to the tractor
- 2. Read and understand the operator's manual.
- 3. Read and familiarize yourself with the safety and warning decals on the disc.
- 4. Check all bolts to verify proper torque.

 Level the disc see LEVELING THE DISC SECTION of this manual

Check the disc for parts that are broken or have excessive wear. If any are found replace them.

- 1. Check to make sure the tractor 3-point hitch is securely attached to the disc.
- 2. Verify the disc has been properly lubricated.

OPERATING THE DISC



WARNING

Before making any adjustments, inspections, lubricating or repairing. First, find a suitable safe location to park the tractor. Then slowly lower the disc until it is touching the ground. Before dismounting from the tractor shut off the engine set the parking brake and remove the key.



Always wear hand protection such as gloves when working around the disc blades to avoid coming in contact with sharp edges.



Never operate the disc at excessive ground speed which can cause personal injury or damage to your tractor and disc.

1. Before starting to disc, make sure rocks and other debris that could damage the disc have been removed from the area to be worked.

Check the soil moisture content. It is advised not to disc extremely wet soil. A rule of thumb to use is, if soil to be worked sticks to your shoes it is too wet to disc. Wait until the soil dries out.

- 2. The maximum cutting depth of a disc is about one-third the disc blade diameter. For example, the cutting depth of an 18" blade is about 6".
- 3. Slowly starting moving forward while lowering the disc.
 Once the disc blades have engaged the soil to the proper working depth increase your ground speed until the desired soil tillage and finish has been achieved. Achieving the desired soil tillage and finish may require changing the angle of the disc gangs. To change the gang angles please see the Disc Gang Angle Adjustment section of this manual.
- 4. Never turn on corners without lifting the disc out of the soil. Failing to do so can result in damage to the disc. It best to raise the disc and back into tight spots.
- 5. To avoid damaging the disc, never back the disc in reverse while the disc blades are engaging the soil.
- 6. Always approach and cross deep ditches or steep banks on a diagonal. Crossing straight across may result in damage to the disc and/or tractor

TRANSPORTATION



Always comply with all federal, state and local laws when traveling on public roads whether at night or during the day. Use accessory lights and devices for adequate warning to operators of other vehicle

- 1. Raise the disc to highest position possible to clear the ground surface. Make sure there is adequate tractor front end ballast to keep the steering in firm contact with soil surface.
- 2. Be sure to reduce tractor ground speed when turning. Leave enough clearance so that the disc does not contact obstacles such as buildings, trees, or fences.
- 3. Select a safe ground travel speed when transporting from one area to another. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
- 4. When traveling over rough or hilly terrain, shift tractor to a lower gear.

MAINTENANCE & LUBRICATION



Before making any adjustments, inspections, lubricating or repairing. First, find a suitable safe location to park the tractor. Then slowly lower the disc until it is touching the ground. Before dismounting from the tractor shut off the engine set the parking brake and remove the key.



Never clean, adjust or service when the disc is in motion. Block up all elevated components to prevent accidental lowering or lower to rest on the ground when adjusting or repairing.



Replace any missing, illegible or damaged safety decals!



Always wear hand protection such as gloves when working around the disc blades to avoid coming in contact with sharp edges.

MAINTENANCE

Scraper Blades

Bent scraper blades or legs should be replaced or straightened if possible. The blades can be replaced when they wear to the extent they are not performing properly. Keep the blades adjusted 1/4" from the disc blades. The scrapers can be adjusted by loosening the mounting bolt and sliding the scraper to the proper position, then tighten the mounting bolt. For all AMCO products equipped with scraper blades, do not allow the scraper blades to run on the end bells or spacer spools as immediate damage to both will occur.

LUBRICATION SCHEDULE

Gang Bearings

Grease weekly or after (50) hours of operation under normal conditions. It is recommended to grease at the beginning and end of each use season as well. Always clean grease zerks before pumping grease into the bearings. Replace damaged bearings.

LEVELING THE DISC



Before making any adjustments, inspections, lubricating or repairing. First, find a suitable safe location to park the tractor. Then slowly lower the disc until it is touching the ground. Before dismounting from the tractor shut off the engine set the parking brake and remove the key.



Never operate the disc tilted backwards. Operating the disc tilted back will result in excessive wear on the disc blades on the rear gang.

- 1. Leveling the disc front to back is done by adjusting the length of the tractor 3-point center link. For most soil conditions adjust the disc as follows.
- 2. The disc is level if a slight ridge is left in the center behind the rear gangs. A soaking rain will help level it.
- 3. If the disc leaves a substantial ridge in the center behind the rear gangs shorten the tractor 3-point center link until a slight ridge is formed.
- 4. If the disc leaves a furrow in the center behind the rear gangs lengthen the tractor 3-point center link until the furrow is removed and a slight ridge is left.

DISC ANGLE ADJUSMENT



Before making any adjustments, inspections, lubricating or repairing. First, find a suitable safe location to park the tractor. Then slowly lower the disc until it is touching the ground. Before dismounting from the tractor shut off the engine set the parking brake and remove the key.



Never clean, adjust or service when the Disc is in motion. Block up all elevated components to prevent accidental lowering or lower to res on the ground when adjusting or repairing.



Always wear hand protection such as gloves when working around the disc blades to avoid coming in contact with sharp edges.



The hoist lift capacity should be rated at a minimum of one ton.

ALL LTF 100 MODELS

- 1. Find a firm level spot to park the tractor and a hoist required to adjust the gang angles. Lower the Disc to make contact with the soil surface. Set the parking brake, turn the tractor off and remove the key.
- 2. Determine the desired gang angle: LTF 100 models 13-17 degrees. LTFB 100 models 16-24 degrees. Note: The greater the gang angle is set the harder the Disc will pull.
- 3. The front, center and rear gangs should be set at the same angle or the Disc will not perform satisfactorily.
- 4. Securely connect a hoist to the center of the front gang. Use a 11/8" wrench to remove the U-bolts holding the gang to the mainframe. Adjust the gang to the desired angle. Replace the U-bolts and re-tighten to required torque specifications listed in this Bolt Torque Section of this manual.
- 5. Remove the hoist
- 6. Repeat steps 4 and 5 on the rear gang.
- 7. A hoist is not required for this step. Remove the U-bolts on the center gang; slightly loosen the center bolt holding the gang to the mainframe. Adjust the gang to the desired angle. Replace the U-bolts; re-tighten both the center bolt and U-bolts to required torque specifications listed in this Bolt Torque Section of this manual.

ALL LTF 100B MODELS

- 1. Find a firm level spot to park the tractor and a hoist required to adjust the gang angles. Lower the Disc to make contact with the soil surface. Set the parking brake, turn the tractor off and remove the key.
- 2. Determine the desired gang angle: LTF 100 models 13-17 degrees. LTFB 100 models 16-24 degrees. Note: The greater the gang angle is set the harder the Disc will pull.
- 3. All 4 gangs should be set the same angle or the Disc will not perform satisfactorily.
- 4. Securely connect a hoist to the center of one of the front gangs. Use a 15/16" wrench to loosen the bolts on the outer rail of the mainframe. And a 11/8" wrench to loosen the U-bolt on the center rail of the mainframe. It is not necessary to remove any of the bolts of U-bolts. Remove the retainer pin and adjust the gang to the desired angle. Replace the retainer pin and re-tighten all the bolts and U-bolts to required torque specifications listed in this Bolt Torque Section of this manual.
- 5. Remove hoist.
- 6. Repeat Step 4 and 5 on the 3 remaining gangs



Always adjust the both front and rear gang assemblies to the same angle

Adjustments can be made to the disc gang angles by following these instructions

- 1. Activate the 3-point hitch to raise the disc off the ground.
- 2. Remove the gang angle adjusting L pin and klick pin.
- 3. Position the gang assembly to desired position.
- 4. Reinsert gang angle adjusting L pin and klick pin.



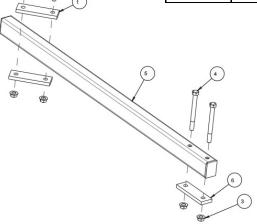


Before dismounting from the tractor shut off the engine set the parking brake and remove the key.

- 1. Before unhitching the disc from the tractor clean off any dirt or debris that may have accumulated on the disc and moving parts. Scrape off any compacted dirt from the disc blades. Then use a power washer to clean the disc.
- 2. Thoroughly inspect the entire disc for missing, worn or damaged parts including decals. Repair or replace parts during the "off season" to assure dependable, trouble-free performance during the use season.
- 3. Lubricate the disc as detailed in the Maintenance & Lubrication section of this manual.
- 4. Apply a protective coating to the disc blades.
- 5. The disc should be stored on a solid flat surface in a dry location. It is best to store the disc inside a storage building. Doing so will reduce future maintenance requirements and prolong the life of the disc.
- 6. To complete unhitching from the tractor follow the instructions in the Unhitching From The Tractor section in this manual.

LTF-100B OUTRIGGER BAR

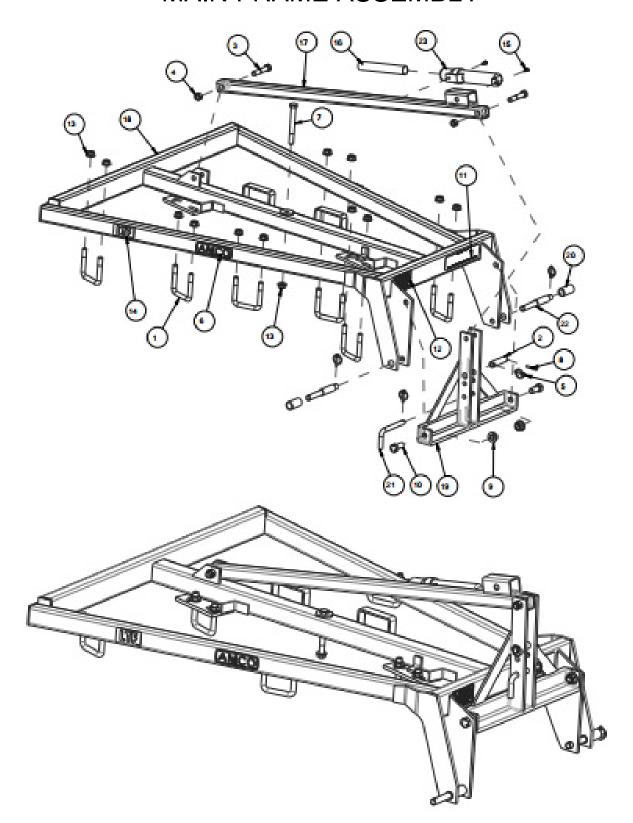
			BUNDLE KIT
		LTF 100-B	BC-01-0084
		OUTRIGGER BAR BUNDLE	32 BLADE
ITEM			
NO.	PART NO.	DESCRIPTION	QTY.
1	9855	ANGLE SET BRACKET	4
2	11102	7/8-9 X 10 HEX CAP SCREW GR 5	4
3	11691	7/8-9 FLANGE LOCK NUT GR G	8
4	12082	7/8-9 X 9 HEX CAP SCREW GR 5	4
5	21080	OUTRIGGER BAR	2
6	100583	STRAP	2



LTF-100 MAIN FRAME ASSEMBLY

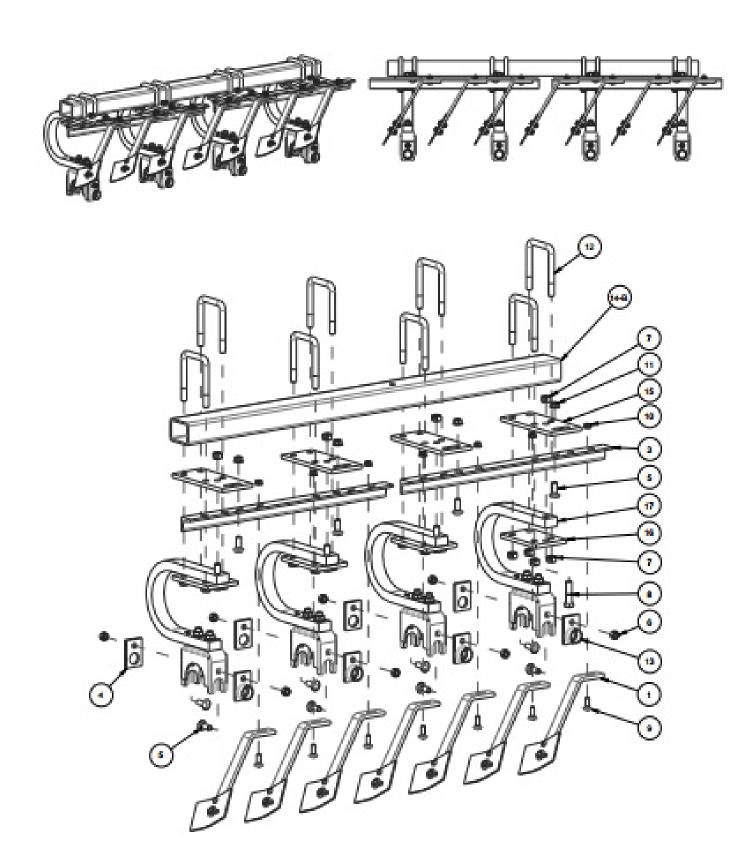
ITEM NO.	PART NO.	DESCRIPTION	QTY
1	7205	3/4-10 U-BOLT	6
2	7397	CONNECTING PIN	1
3	10113	3/4-10 X 4 HEX CAP SCREW GR 8	2
4	10300	3/4-10 LOCK NUT	2
5	10317	KLIK PIN - 1/4"	4
6	10465	AMCO DECAL	3
7	10696	3/4-10 x 7 HEX CAP SCREW GR 5	1
8	10910	5/16 X 2-1/4 ROLL PIN	1
9	11691	7/8-9 FLANGE LOCKNUT GR "G"	2
10	11692	7/8-9 X 2 HEX CAP SCREW GR 5	2
11	11716	MAINTENANCE DECAL	1
12	11741	DECAL "WARNING"	1
13	12069	3/4-10 FLANGE LOCKNUT GR "G"	13
14	12368	LTF DECAL	3
15	19028	1/4" SELF-TAPPING SCREW	2
16	19083	OPERATOR'S MANUAL LTF-100	1
17	20605	BACK BRACE - WELDMENT	1
18	20618	MAIN FRAME - WELDMENT	1
19	20619	A-FRAME HITCH - WELDMENT	1
20	100640	BUSHING	2
21	100683	LOCK PIN	1
22	102602	HITCH PIN	2
23	MT-01-0001	MANUAL TUBE & WARRANTY	1

LTF-100 MAIN FRAME ASSEMBLY

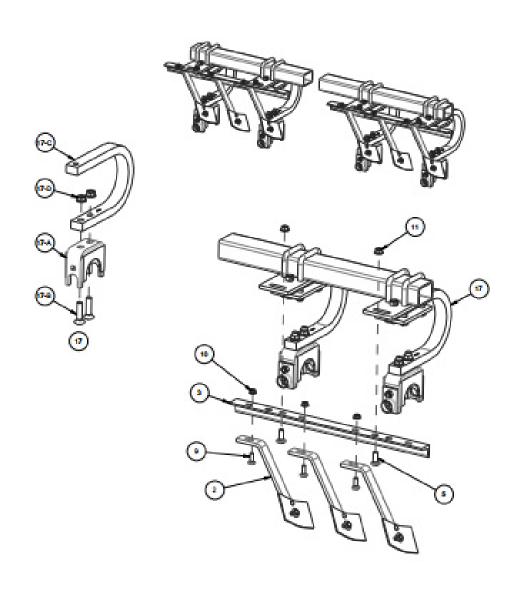


		LTF 100 GANG FRAME PARTS	
		16 BLADE COUNT	
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	0788	SCRAPER - RH	7
2	0789	SCRAPER-LH	6
3	9476	SCRAPER BAR	4
4	9628	TRUNION CLAMP	8
5	10135	5/8-11 X 1-3/4 CARRIAGE BOLT	24
6	10299	5/8-11 LOCK HEX NUT	16
7	10300	3/4-10 LOCK HEX NUT - TOP	40
8	10727	3/4-10 X 3 HEX CAP SCREW GR 5	8
9	10870	1/2-13 X 1-1/2 CARRIAGE BOLT	13
10	11646	1/2-13 FLANGE LOCK NUT GRIG	13
11	11647	5/8-11 FLANGE LOCK NUT GR G	8
12	12335	3/4-10 U-BOLT	16
13	20579	GREASE ZERK GUARD - WELDME	8
14A	102630	FRONT & REAR GANG FRAME	2
14B	102631	CENTER GANG FRAME	1
15	120596	TOP PLATE	8
16	102597	BOTTOMPLATE	8
17	BC-09-000	BEARING RISER ASSEMBLY	8

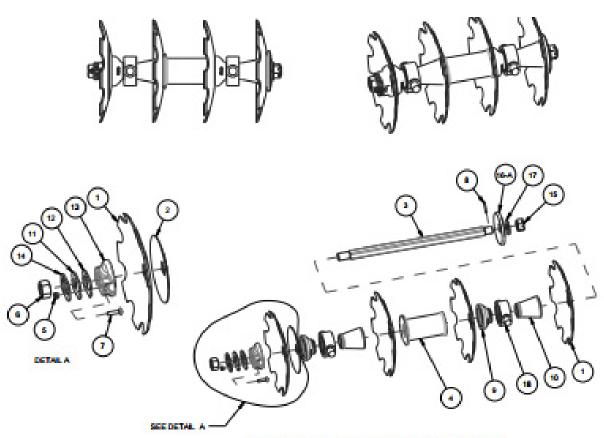
		LTF 100 GANG FRAME PARTS	
		20 BLADE COUNT	
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	0788	SCRAPER-RH	9
2	0789	SCRAPER-LH	8
3	9475	SCRAPER BAR	4
4	9628	TRUNION CLAMP	8
5	10135	5/8-11 X 1-3/4 CARRIAGE BOLT	28
6	10299	5/8-11 LOCK HEX NUT	16
7	10300	3/4-10 LOCK HEX NUT - TOP	40
8	10727	3/4-10 X 3 HEX CAP SCREW GR 5	8
9	10870	1/2-13 X 1-1/2 CARRIAGE BOLT	17
10	11646	1/2-13 FLANGE LOCK NUT GR G	17
11	11647	5/8-11 FLANGE LOCK NUT GR G	8
12	12335	3/4-10 U-BOLT	16
13	20579	GREASE ZERK GUARD - WELDME	8
14	102633	FRONT & REAR GANG FRAME	2
14	102634	CENTER GANG FRAME	1
15	120596	TOPPLATE	8
16	102597	BOTTOMPLATE	8
17	BC-09-000	BEARING RISER ASSEMBLY	8



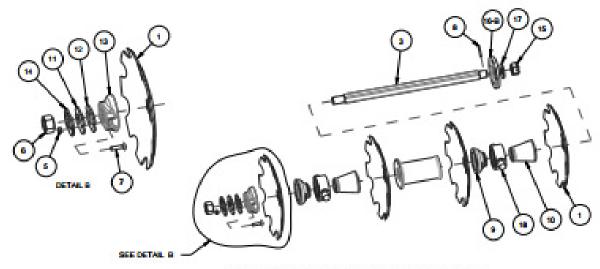
17	BC-09-0001	BEARING RISER ASSEMBLY	QTY.
17-A	0944	TRUNION MOUNT - WELDMENT	1
17-B	10579	3/4-10 X 3 CARRIAGE BOLT	2
17-C	11521A	ROCKFLEX SHANK	1
17-D	12069	3/4-10 FLANGE LOCK NUT GR G	2



			CUTOUT BL	ADE UNIT
			BLADE C	OUNT
ITEM	PART NO.	DESCRIPTION	16	20
1	12219	18 X 1/4 C.O. BLADE, 1-1/2 AXLE	8	10
2	3278	10" PLAIN BLADE, 1-1/2 AXLE	2	2
3	9440	1.50 x 33.625 SQUARE AXLE	4	0
3	9441	1.50 x 43.125 SQUARE AXLE	0	4
4	545	SPACER SPOOL - WELDMENT (9" LF6)	4	8
5	10395	1/2-13 LOCK HEX NUT	4	4
6	10489	1 1/2-12 NF GRADE 8 HEX NUT	4	4
7	10710	1/2-13 X 2 CARRIAGE BOLT	4	4
8	10910	5/16 X 2 1/4 ROLL PIN	4	4
9	17010	END BELL, LARGE	8	8
10	17014	END BELL, SMALL	8	8
11	100098	BEARING PLATE	4	4
12	100099	SPACER PLATE (QTY MAY VARY PER ASM)	4	4
13	1222A	END WASHER	4	4
14	5622A	LOCK PLATE, NUT	4	4
15	10226	1 1/2-12 NF SLOTTED NUT	4	4
16-A	2404	BUMBER WASHER	2	2
16-B	2404A	BUMBER WASHER - THREADED HOLES	2	2
17	10872	1 3/8 FLAT WASHER 7GA	4	4
18	FB-09-0015	BEARING HOUSING ASSEMBLY	8	8



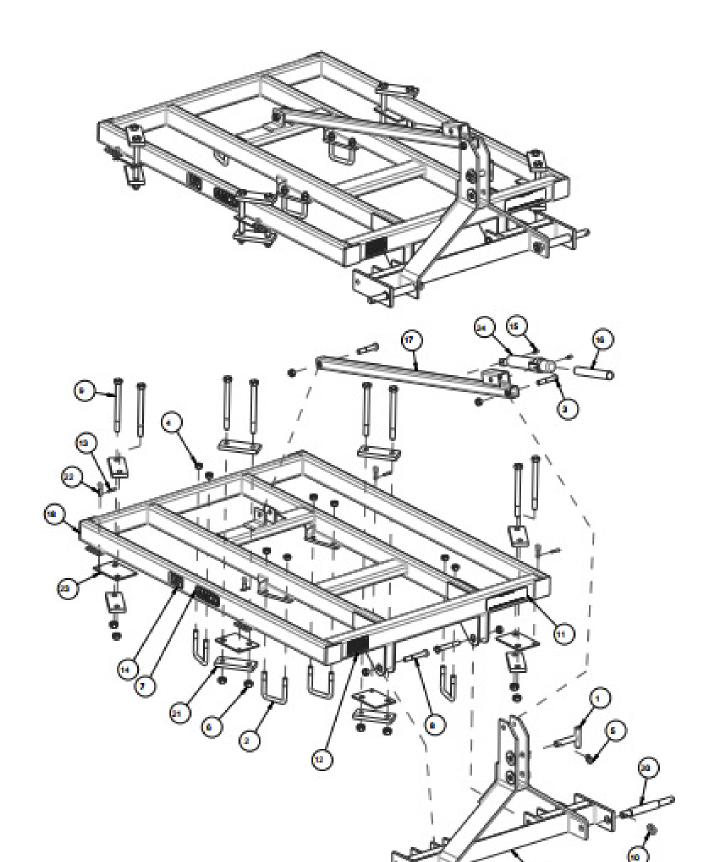
FRONT-LH & CENTER-RH GANG ASSEMBLY



LTF-100B MAIN FRAME ASSEMBLY

ITEM NO.	PART NO.	DESCRIPTION	QTY
1	0871	TRANSPORT PIN	1
2	7205	3/4-10 U-BOLT	4
3	10113	3/4-10 X 4 HEX CAP SCREW GR 8	2
4	10300	3/4-10 LOCK NUT	12
5	10317	KLIK PIN - 1/4"	1
6	10396	7/8-9 LOCK NUT	8
7	10465	AMCO DECAL	3
8	10671	3/4-10 x 5 HEX CAP SCREW GR 5	2
9	11102	7/8-9 X 10 HEX CAP SCREW GR 5	8
10	11697	KLIK PIN - 7/16"	2
11	11716	MAINTENANCE DECAL	1
12	11741	DECAL - "WARNING"	1
13	11967	HAIR PIN - # 19	4
14	12368	LTF DECAL	3
15	19028	1/4" SELF-TAPPING SCREW	2
16	19083	OPERATOR'S MANUAL LTF-100	1
17	20605	BACK BRACE - WELDMENT	1
18	20638	MAIN FRAME - WELDMENT	1
19	21086	A-FRAME HITCH - WELDMENT	1
20	101739	LOWER HITCH PIN	2
21	101936	SET BRACKET	8
22	101967	SET PIN	4
23	102000	SPACER MOUNT	4
24	MT-01-0001	MANUAL TUBE & WARRANTY	1

LTF-100B MAIN FRAME ASSEMBLY



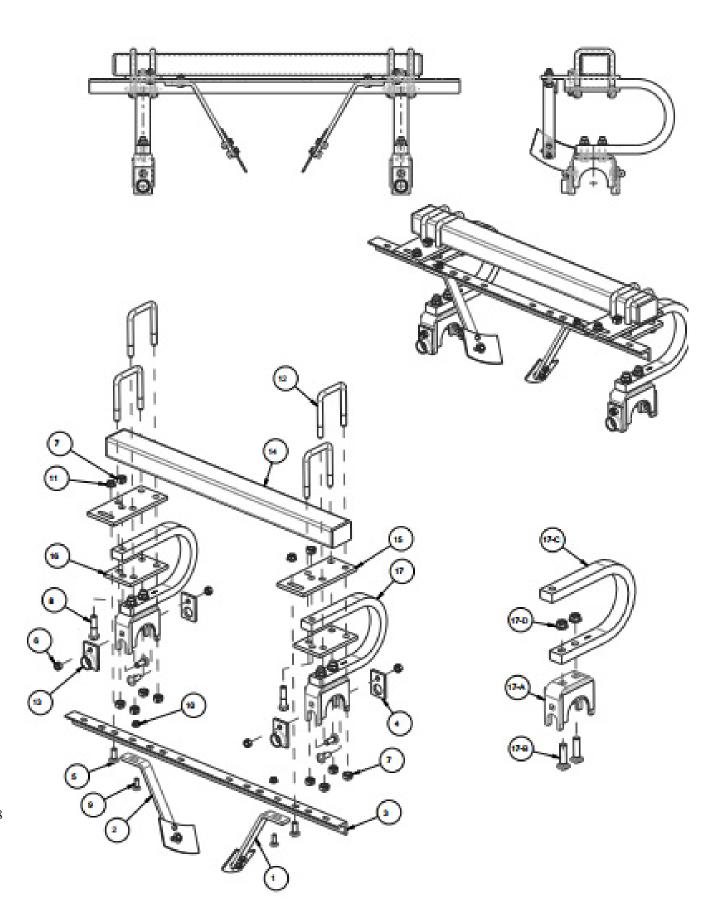
		LTF 100-B	
		20 BLADE COUNT	
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	0788	SCRAPER - RH	8
2	0789	SCRAPER - LH	8
3	9475	SCRAPER BAR	4
4	9628	TRUNION CLAMP	8
5	10135	5/8-11 X 1-3/4 CARRIAGE BOLT	24
6	10299	5/8-11 LOCK HEX NUT	16
7	10300	3/4-10 LOCK HEX NUT - TOP	40
8	10727	3/4-10 X 3 HEX CAP SCREW GR 5	8
9	10870	1/2-13 X 1-1/2 CARRIAGE BOLT	16
10	11646	1/2-11 FLANGE LOCK NUT GR G	16
11	11647	5/8-11 FLANGE LOCK NUT GR G	8
12	12335	3/4-10 U-BOLT	16
13	20579	GREASE ZERK GUARD - WELDMENT	8
14	20608	FRONT GANG FRAME - WELDMENT	2
14	20609	REAR GANG FRAME - WELDMENT	2
15	120596	TOP PLATE	8
16	102597	BOTTOM PLATE	8
17	BC-09-0001	BEARING RISER ASSEMBLY	8

		LTF 100-B	
		24 BLADE COUNT	
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	0788	SCRAPER - RH	10
2	0789	SCRAPER - LH	10
3	9548	SCRAPER BAR	4
4	9628	TRUNION CLAMP	8
5	10135	5/8-11 X 1-3/4 CARRIAGE BOLT	24
6	10299	5/8-11 LOCK HEX NUT	16
7	10300	3/4-10 LOCK HEX NUT - TOP	40
8	10727	3/4-10 X 3 HEX CAP SCREW GR 5	8
9	10870	1/2-13 X 1-1/2 CARRIAGE BOLT	20
10	11646	1/2-11 FLANGE LOCK NUT GR G	20
11	11647	5/8-11 FLANGE LOCK NUT GR G	8
12	12335	3/4-10 U-BOLT	16
13	20579	GREASE ZERK GUARD - WELDMENT	8
14	20609	FRONT GANG FRAME - WELDMENT	2
14	20610	REAR GANG FRAME - WELDMENT	2
15	120596	TOP PLATE	8
16	102597	BOTTOM PLATE	8
17	BC-09-0001	BEARING RISER ASSEMBLY	8

		LTF 100-B		
		28 BLADE COUNT		
ITEM NO.	PART NO.	DESCRIPTION	QTY.	
1	0788	SCRAPER - RH	12	
2	0789	SCRAPER - LH	12	
3	9549	SCRAPER BAR	4	
4	9628	TRUNION CLAMP	8	
5	10135	5/8-11 X 1-3/4 CARRIAGE BOLT	24	
6	10299	5/8-11 LOCK HEX NUT	16	
7	10300	3/4-10 LOCK HEX NUT - TOP	40	
8	10727	3/4-10 X 3 HEX CAP SCREW GR 5	8	
9	10870	1/2-13 X 1-1/2 CARRIAGE BOLT	24	
10	11646	1/2-11 FLANGE LOCK NUT GR G	24	
11	11647	5/8-11 FLANGE LOCK NUT GR G	8	
12	12335	3/4-10 U-BOLT	16	
13	20579	GREASE ZERK GUARD - WELDMENT	8	
14	20610	FRONT GANG FRAME - WELDMENT	2	
14	20611	REAR GANG FRAME - WELDMENT	2	
15	120596	TOP PLATE	8	
16	102597	BOTTOM PLATE	8	
17	BC-09-0001	BEARING RISER ASSEMBLY	8	

		LTF 100-B		
		32 BLADE COUNT		
ITEM NO.	PART NO.	DESCRIPTION	QTY.	
1	0788	SCRAPER - RH	14	
2	0789	SCRAPER - LH	14	
3	9550	SCRAPER BAR	4	
4	9628	TRUNION CLAMP	8	
5	10135	5/8-11 X 1-3/4 CARRIAGE BOLT	24	
6	10299	5/8-11 LOCK HEX NUT	16	
7	10300	3/4-10 LOCK HEX NUT - TOP	40	
8	10727	3/4-10 X 3 HEX CAP SCREW GR 5	8	
9	10870	1/2-13 X 1-1/2 CARRIAGE BOLT	28	
10	11646	1/2-11 FLANGE LOCK NUT GR G	28	
11	11647	5/8-11 FLANGE LOCK NUT GR G	8	
12	12335	3/4-10 U-BOLT	16	
13	20579	GREASE ZERK GUARD - WELDMENT	8	
14	21081	FRONT GANG FRAME - WELDMENT	2	
14	21082	REAR GANG FRAME - WELDMENT	2	
15	120596	TOP PLATE	8	
16	102597	BOTTOM PLATE	8	
17	BC-09-0001	BEARING RISER ASSEMBLY	8	

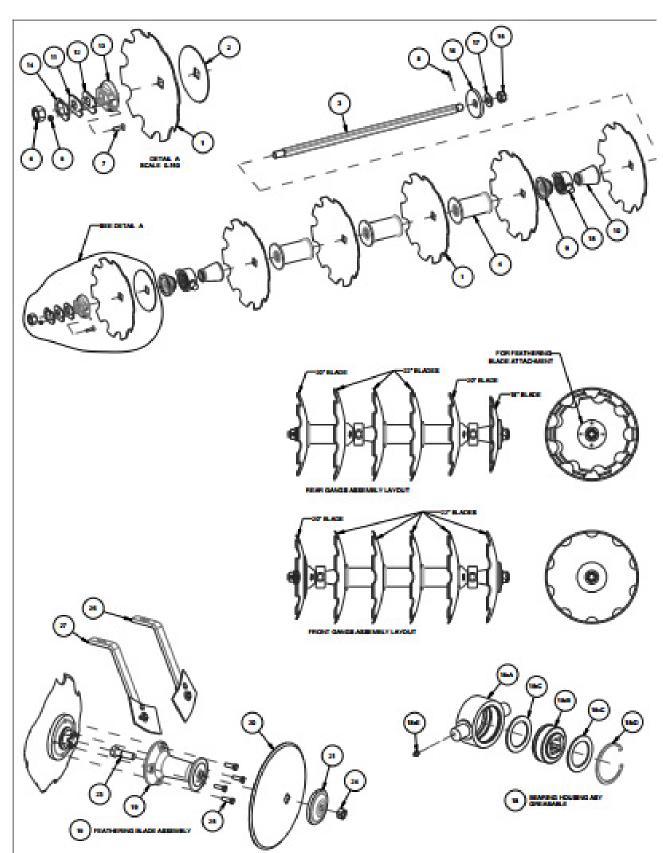
17	BC-09-0001	BEARING RISER ASSEMBLY	QTY.
17-A	0944	TRUNION MOUNT - WELDMENT	1
17-B	10579	3/4-10 X 3 CARRIAGE BOLT	2
17-C	11521A	ROCKFLEX SHANK	1
17-D	12069	3/4-10 FLANGE LOCK NUT GR G	2



LTF-100B GANGS

CUTOUT 4 SMOOTH					CUTOUT Blade unit					
			E	LADE	COUN	IT		BLADE	COUN	IT
PARTNO.	EM PARTI	DESCRIPTION	20	24	28	32	20	24	28	32
3275	1 327!	22 X 1/4 C.O. BLADE, 1-1/2 AXLE	8	10	12	14	12	16	20	ų N
3276	1 327	22 X 1/4 PLAIN BLADE, 1-1/2 AXLE	ч	6	*	10				
9482	1 9483	18 X 1/4 PLAIN BLADE, 1-1/2 AXLE	2	2	2	2				
11588	1 1158	20 X 1/4 PLAIN BLADE, 1-1/2 AXLE	ч	4	4	4				
11589	1 1158	20 X 1/4 C.O. BLADE, 1-1/2 AXLE	2	2	2	2	6.	6.	6	6
12219	1 1221	18 X 1/4 C.O. BLADE, 1-1/2 AXLE					2	2	2	2
3278	2 327:	10" PLAIN BLADE, 1-1/2 AXLE	2	2	2	2	2	2	2	2
9441	3 944	1.50 x 43.125 SQUARE AXLE	ч				4			
9442	3 944:	1.50 x 52.375 SQUARE AXLE		4				4		
9443	3 944:	1.50 × 61.375 SQUARE AXLE			4				4	
9444	3 944	1.50 × 70.625 SQUARE AXLE				4				4
545	4 545	SPACER SPOOL - WELDMENT (9" LF6)	8	12	16	20	*	12	16	20
10395	5 1039	1/2-13 LOCK HEX NUT	4	4	4	4	4	4	4	4
10489	6 1048	11/2-12 NF GRADE 8 HEX NUT	4	4	4	4	4	4	4	4
10710	7 1071	1/2-13X2CARRIAGEBOLT	4	4	4	4	4	4	4	4
10910	8 1091	5/16 X 2 1/4 ROLL PIN	4	4	4	4	4	4	4	4
17010	9 1701	END BELL, LARGE	8	8	8	8	*	*	*	8
17014	10 1701	END BELL, SMALL	8	8	8	8	*	*	*	8
100098	11 1000	BEARING PLATE	4	4	4	4	4	4	4	4
100099	12 1000	SPACER PLATE (QTY MAY VARY PER ASM)	4	4	4	4	4	4	4	4
1222A	13 1222	END WASHER	4	4	4	4	4	4	4	4
5622A	14 5622	LOCKPLATE, NUT	4	4	4	4	4	4	4	4
10226	15 1022	11/2-12 NF SLOTTED NUT	4	4	4	4	4	4	4	4
2404	16 240	BUMBER WASHER	2	2	2	2	2	2	2	2
2404A	16 2404	BUMBER WASHER - THREADED HOLES	2	2	2	2	2	2	2	2
10872	17 1087	13/8 FLAT WASHER 7GA	4	4	4	4	4	4	4	4
FB-09-0015	18 FB-09-	BEARING HOUSING ASSEMBLY	8	8	8	8	8	8	8	8
16003		HOUSING-BEARING (1PC)	8	8	8	8	8	8	8	8
11503	8-B 1150	BEARING, 11/2 INCH SQUAREBORE (1PC)	8	8	8	8	8	8	8	8
100104	8-C 10010	WASHER (2PCS)	16	16	16	16	16	16	16	16
11064	8-D 1106	SNAPRING (1PC)	8	8	8	8	*	*	*	*
12384		1/8 NPT GREASEFITTING, STRT. (1PC)	8	8	8	\$	\$	\$	*	8
FEATH	FFA	RING BLADE OPTION								
		BUNDLE FEATHERING BLADE	1	1	1	1	1	1	1	1
3267		16 X 7 GA PLAINBLADE, 1-1/8 AXLE	2	2	2	2	2	2	2	2
7673		FEATHERING BLADE SPACER	2	2	2	2	2	2	2	2
7801		BLADECAP	2	2	2	2	2	2	2	2
10189									2	2
10396							1			2
10928								i e		3
0788				_	-			<u> </u>		1
0789									-	+
103 109 078	24 103 25 109 26 078	96 28 :3	96 7/8-9 LOCK NUT - TOP 28 1/2-13 X 1-3/4 HEX CAP SCREW GRADE 5 :8 SCRAPER - RH	96 7/%-9LOCK NUT - TOP 2 28 1/2-13 X 1-3/4 HEX CAP SCREW GRADE 5 8 38 SCRAPER - RH 1	96 7/8-9LOCK NUT - TOP 2 2 28 1/2-13 X 1-3/4 HEX CAP SCREW GRADE 5 8 8 38 SCRAPER - RH 1 1	96 7/8-9LOCK NUT-TOP 2 2 2 2 2 2 2 2 2 3 1/2-13 X 1-3/4 HEX CAP SCREW GRADE 5 8 8 8 8 8 8 8 8 8 8 9 1 1 1 1 1 1 1 1 1	96 7/8-9LOCK NUT - TOP 2 2 2 2 2 2 2 2 3 1/2-13 X 1-3/4 HEX CAP SCREW GRADE 5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	96 7/8-9LOCKNUT-TOP 2 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3	96 7/8-9LOCKNUT-TOP 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3	96 7/8-9LOCK NUT - TOP 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

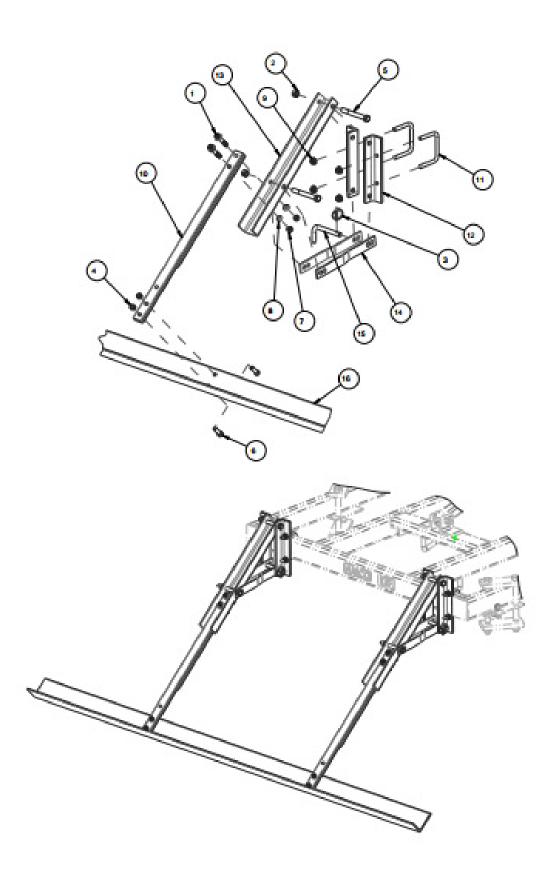
LTF-100B GANGS



DRAG BOARD ASSEMBLY

				BUNDLE KITS	
		LTF 100-B	BH-01-0033	BH-01-0037	BH-01-0038
			20 & 24	20 & 24	
		DRAG BOARD ASSEMBLY	BLADE	BLADE	28 BLADE
ITEM					
NO.	PART NO.	DESCRIPTION	QTY.	QTY.	QTY.
1	10097	1/2-13 X 2-1/2 HEX CAP SCREW GR 5	4		4
2	10299	5/8-11 LOCK HEX NUT	4		4
3	10317	KLIK PIN 1/4"	2		2
4	10395	1/2-13 LOCK HEX NUT	8	4	8
5	10666	5/8-11 X 5 HEX CAP SCREW GR 5	4		4
6	10785	1/2-13 X 1-1/2 HEX CAP SCREW GR 5	4	4	4
7	10787	1/2-13 HEX NUT	4		4
8	10886	1/2 SPLIT WASHER	4		4
9	11646	1/2-13 FLANGE LOCK NUT GR G	8		8
10	12143	LEAF - SPRING	2		2
11	12349	1/2-13 U-BOLT	4		4
12	102591	STOP	4		4
13	102592	SPRING MOUNT BAR	2		2
14	102593	LINKAGE	4		4
15	120601	PIN	2		2
16	103418	LTF DRAGBOARD	1	1	
16	103477	LTF DRAGBOARD			1

DRAG BOARD ASSEMBLY



TROUBLE SHOOTING

Problem	Solution
Disc blades will not penetrate the soil to desired operation depth	Gang angles not set properly - Reset gang angle to a lesser angle
desired operation depth	angle to a lesser angle
	The soil may be to dry - Wait for adequate soil moisture
Disc is leaving substantial ridge behind the rear gangs	Disc is not properly set and the disc blades are moving excel soil to the center of the disc – Shorten 3 point center link until a slight ridge is formed behind the rear gangs. Slower tractor ground seed will reduce the amount of excess soil.
The disc leaves a furrow in the center behind the rear gangs	Disc is not properly set and the disc blades are moving enough soil to the center of the disc — Lengthen the tractor 3-point center link until the furrow is removed and a slight ridge is left
Disc does not pull straight and walks side- to-side	Front gangs are running deeper than the rear gangs. Front and rear gangs are not set at the same angle or front and/or rear gangs are not centered on the dis frame – Adjust the front gangs to a shallower setting by lengthening the tractor 3-point center link. Set front and rear gangs to operate at the same angle. Center front and/or rear gangs on the disc frame.