

**Operator's and Parts Manual**

***LORENZ***

**3-PT. FIELD CONDITIONER**

**w/Dual Rolling Basket Crumblers**

**w/Single Rolling Basket Crumblers**

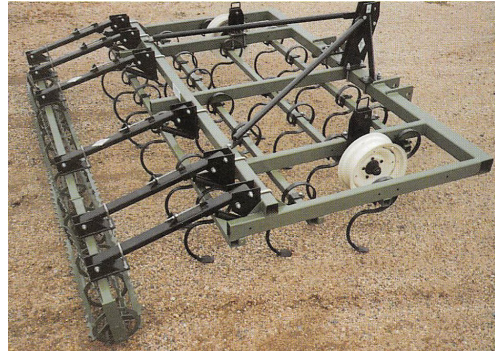
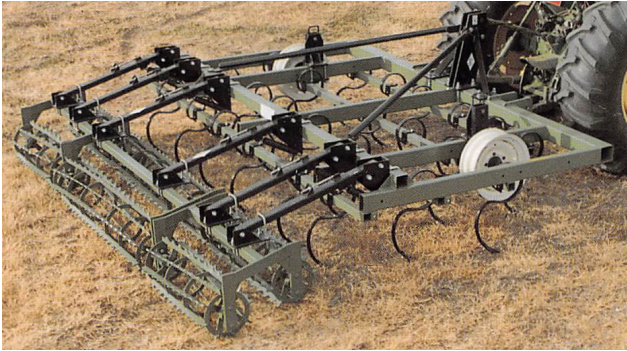
**w/3-Bar Mounted Lift Harrow**

**Models:**

**7T001 – 7'      7T002 – 9'**

**7T003 – 11'    7T067 – 13'**

**7T131 – 15'    7T195 – 17'**



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## **SAFETY**

### **PRECAUTIONS**

All machinery is inherently dangerous to children and persons unfamiliar with its general operation. Lorenz Manufacturing Company strongly recommends that no person, without a complete understanding of how the Lorenz 3-pt. Field Conditioner operates, be permitted to operate the machine. The machine should be operated only by responsible persons who have read the operator's manual, are informed about the machine's use, and are delegated to do so.

Prior to operating the Lorenz 3-pt. Field Conditioner, be sure to read and understand this manual. If there is any portion of this manual you do not understand, or any phase of the machine's operation you do not understand, contact your preferred Lorenz dealer or the Lorenz Manufacturing Company for recommended guidance.

Shields and other safety features are built into the machine whenever possible. However, research has shown that careless use of machinery is the cause of a high percentage of accidents. You can avoid serious accidents by carefully observing the warnings and rules set forth in this manual, and insist they be followed by yourself, and those working with you, and for you.

### **WARNINGS**

Before performing work on the conditioner, shut off the tractor's engine, and set the parking brake.

Do not work under the machine when it is placed in the raised position.

Use adequate weight on the front of the tractor to provide safe steering, and to prevent upset when transporting the field conditioner.

When traveling at road speeds with the field conditioner, use extreme caution, and avoid hard applications of the tractor brakes at high speeds.

## **RULES**

- \*\*\* When descending steep grades, select a sufficiently low gear to maintain control with minimum braking.
- \*\*\* Reduce speed before turning quickly or applying brakes. Couple the brake pedals together when traveling at high speeds. Brake both wheels simultaneously when making an emergency stop. Always drive at speeds slow enough to ensure your safety.
- \*\*\* Always keep the tractor in gear when moving down steep hills or grades.
- \*\*\* When driving out of a ditch or gully, or up a steep hillside, engage the clutch slowly. Be prepared to disengage the clutch promptly, should the front wheels rise off the ground. Observe the same precautions if the rear wheels become mired in soft ground or drop into a hole.
- \*\*\* Do not drive near the edge of a ditch or gully.
- \*\*\* Only one person (the operator) should be permitted on the tractor when it is in operation. Never allow a person to ride on the field conditioner.
- \*\*\* Do not drive on public roads and highways after dark. Use a slow moving vehicle emblem during the daylight hours.
- \*\*\* Whenever the tractor is stopped, place the transmission in the park position, or lock the tractor brakes, before dismounting.
- \*\*\* Be careful to prevent the tractor from tipping sideways if it strikes a hole, ditch, or other irregularity, especially when operating on a hillside.
- \*\*\* Never make an adjustment or lubricate the machine when the tractor is running, or with someone on the tractor.

## SPECIFICATIONS

### Field Conditioner

Model Number	Working Width	No. of Tines	Frame Components Required
7T001	7 ft.	18	7 ft. main frame
7T002	9 ft.	22	9 ft. main frame
7T003	11 ft.	24	11 ft. main frame
7T067	13 ft.	30	11 ft. main frame 1 ft. extension (2)
7T131	15 ft.	34	11 ft. main frame 2 ft. extension (2)
7T195	17 ft.	40	11 ft. main frame 2 ft. extension (2) 1 ft. extension (2)

Two main frame gauge wheels with 15" wheel rims are included as standard equipment with the Lorenz Field Conditioner.

### Rolling Basket Crumblers

Model Number	Field Conditioner Size	Rolling Basket Coverage	Basket Combination	Basket Assembly Order
7T599	7 ft.	7 ft.	3 ft. (1) 4 ft. (1)	3-4
7T600	9 ft.	9 ft.	4 ft. (1) 5 ft. (1)	4-5
7T601	11 ft.	11 ft.	3 ft. (2) 5 ft. (1)	3-5-3
7T607	13 ft.	13 ft.	3 ft. (1) 5 ft. (2)	5-3-5
7T613	15 ft.	15 ft.	5 ft. (3)	5-5-5
7T619	17 ft.	17 ft.	5 ft. (2) 4 ft. (1) 3 ft. (1)	3-5-5-4

## ASSEMBLY INSTRUCTIONS

### 1. General

- A. Left hand or right hand of the machine is determined by standing behind the field conditioner, and facing the direction of the conditioner travel. Your left will indicate the left of the machine.
- B. Lock washers are placed under all nuts unless otherwise indicated.
- C. When assembling the field conditioner, install all fasteners in an assembly first, then draw them together, unless otherwise indicated.
- D. Wherever possible, hold the bolt head and tighten the nut. This generally provides better fastening.

### 2. Field Conditioner Frame Assembly (see correct size frame/figure)

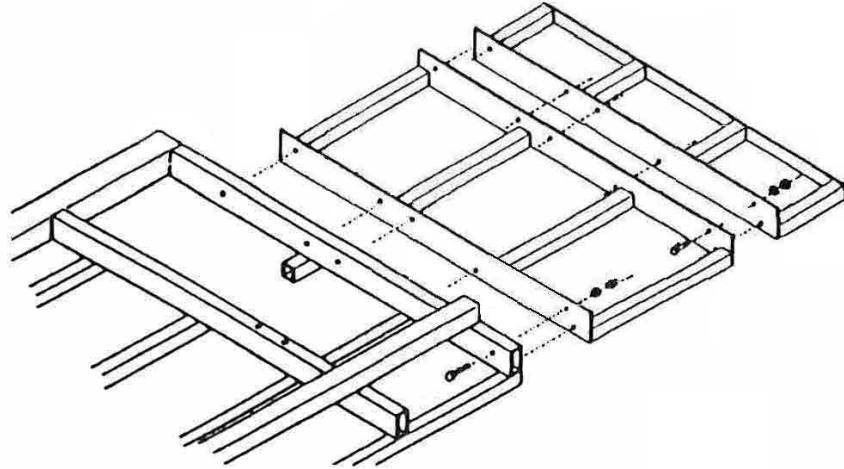
- A. Position the main frame of the field conditioner on two supports approximately 20 inches high (such as sawhorses). Rest the 2"x 2" tubing on the supports. Attach the tines according to figure drawing. If adding extensions, advance to next specific section, otherwise, if finished, remove the main frame from the supports.

### 3. Mounting 1 ft. Extensions

- A. Mount the 1 ft. extensions to the main frame using four 1/2"x 3 1/2" bolts for the holes in the 2"x 4" member on the ends of the main frame. Use two 1/2"x 1 1/2" bolts for the clips welded on the bottom of the 2"x 4" member on the main frame. Secure with 1/2" lock washers and 1/2" hex nuts. Attach the tines according to figure drawing. If finished, remove the main frame from the supports.

### 4. Mounting 2 ft. Extensions

- A. Mount the 2 ft. extensions to the main frame only. To mount, use four 1/2"x 3 1/2" bolts for the holes in the 2"x 4" member on the ends of the main frame. Use two 1/2"x 1 1/2" bolts for the clips welded on the bottom of the 2"x 4" member on the main frame. Secure with 1/2" lock washers and 1/2" hex nuts. Attach the tines according to figure drawing. If finished, remove the main frame from the supports.



## 5. Tine Positions

Standard tine spacing is 5 inches. Standard shovels are 2  $\frac{3}{4}$ " shovels.

For tine assembly detail see figure 1.

For 7 ft. main frame tine spacing see figure 2.

For 9 ft. main frame tine spacing see figure 3.

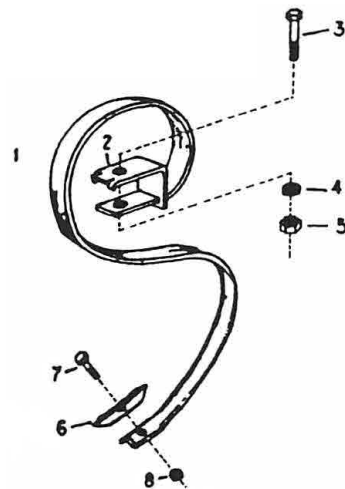
For 11 ft. main frame tine spacing see figure 4.

For 1 ft. extension tine spacing see figure 5.

For 2 ft. extension tine spacing see figure 6.

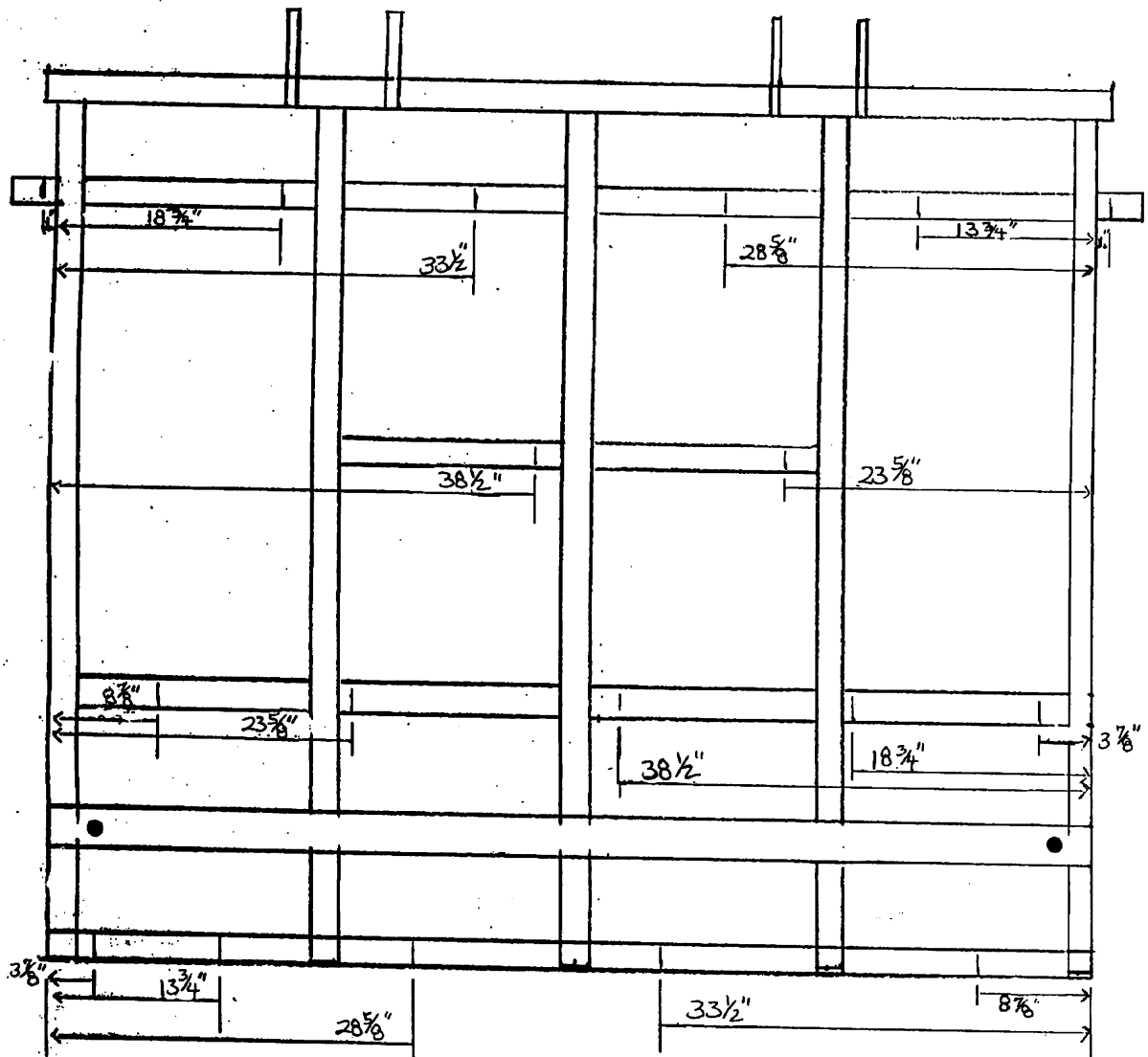
Tine assembly detail.

Figure 1



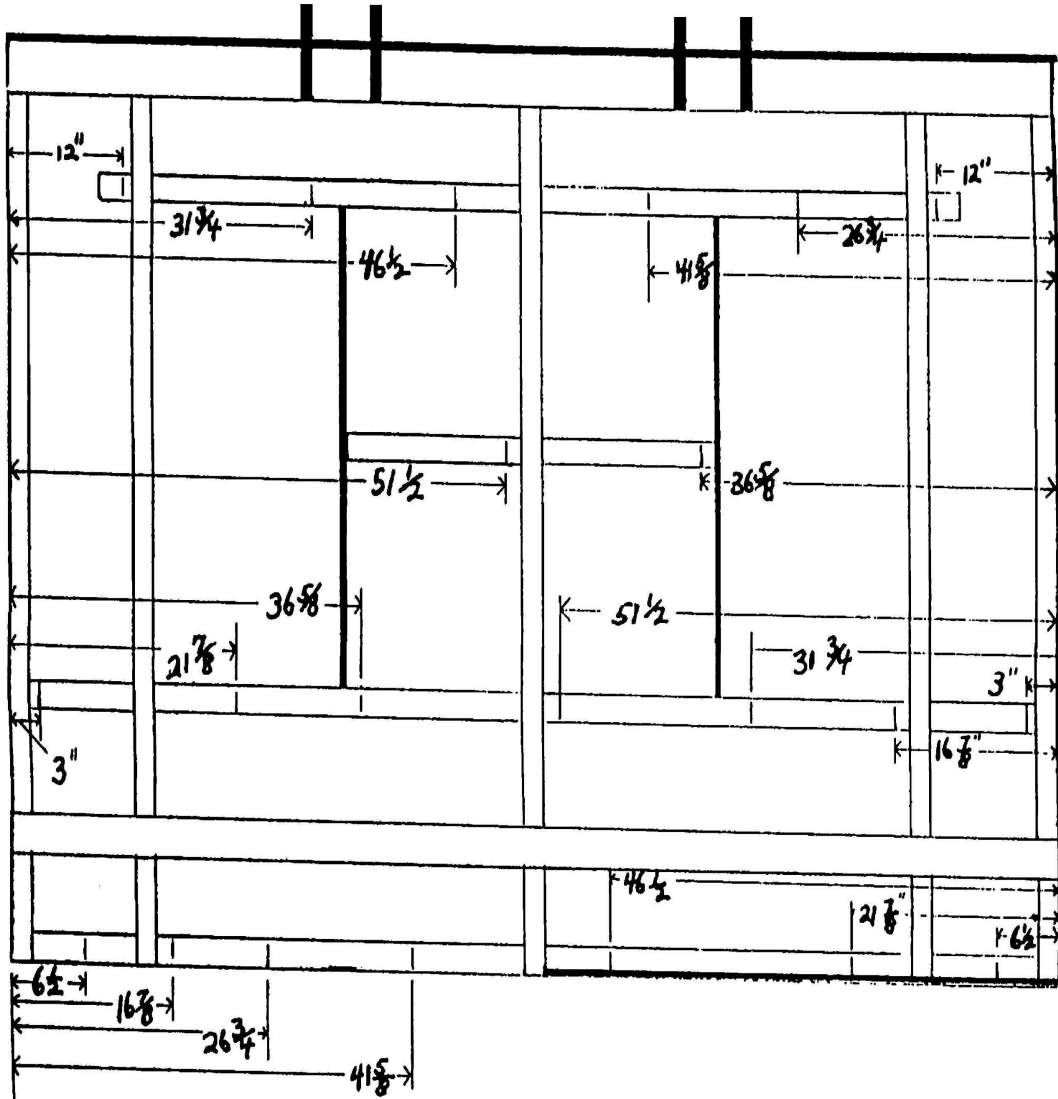
7 ft. main frame 5" tine spacing.

Figure 2



9 ft. main frame 5" tine spacing.

Figure 3





11 ft. main frame 5" tine spacing.

Figure 4

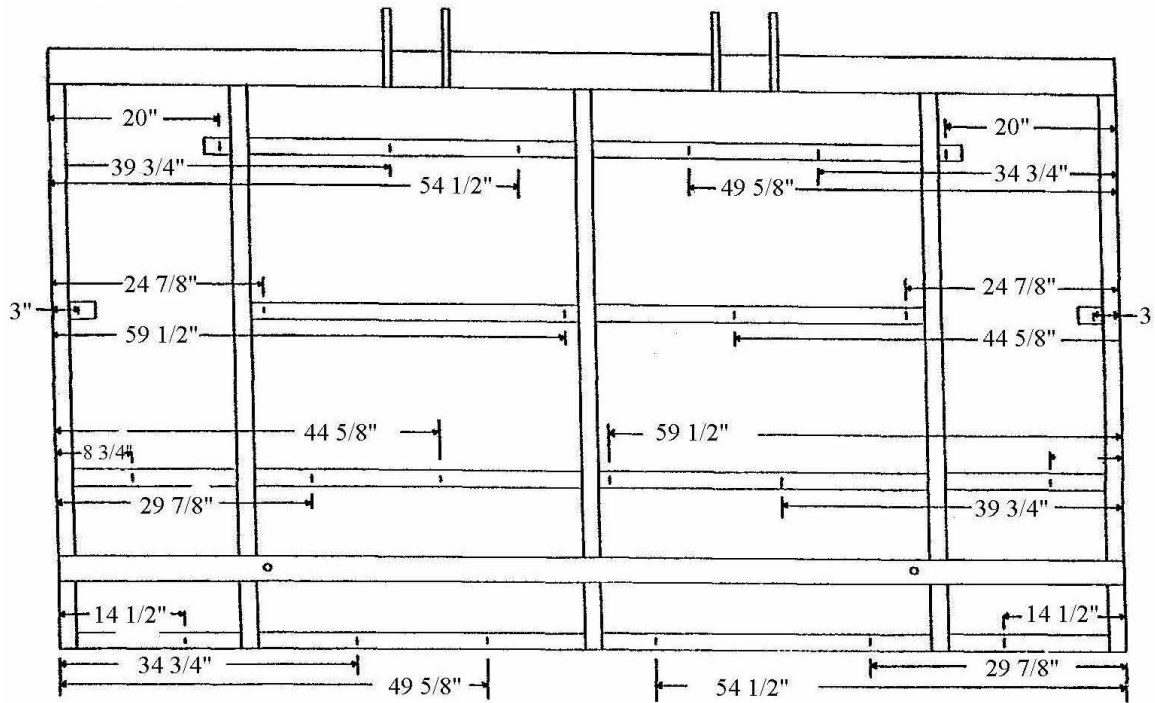


Figure 5

1 Ft. Extension

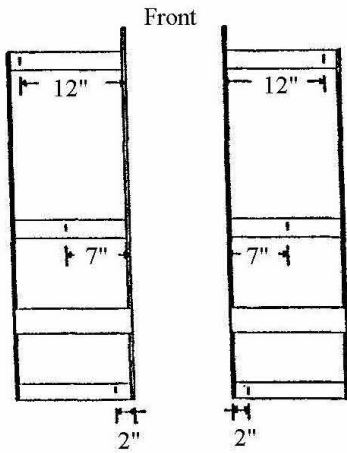
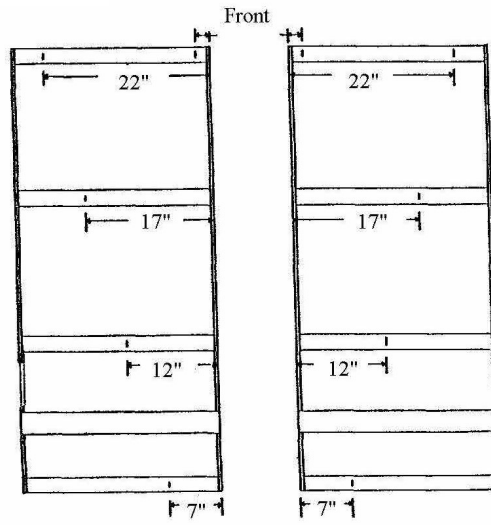


Figure 6

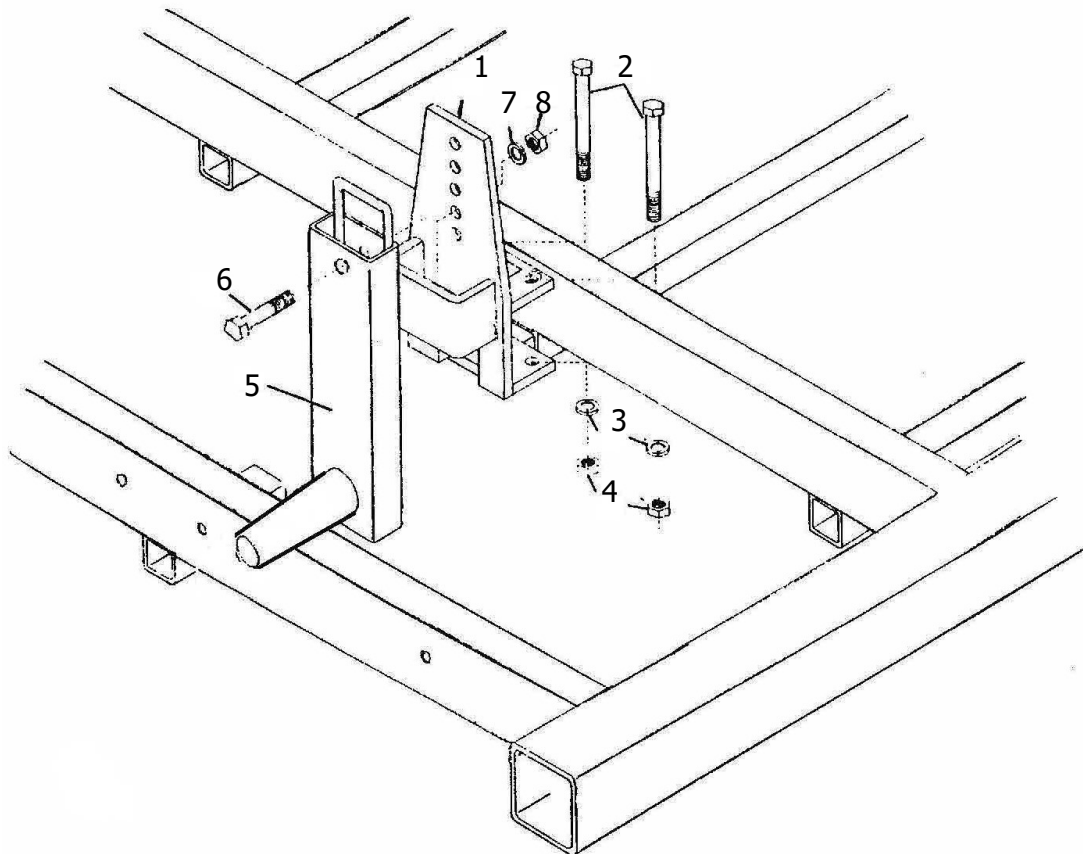
2 Ft. Extension



6. Attach the stationary gauge wheel to the main frame.

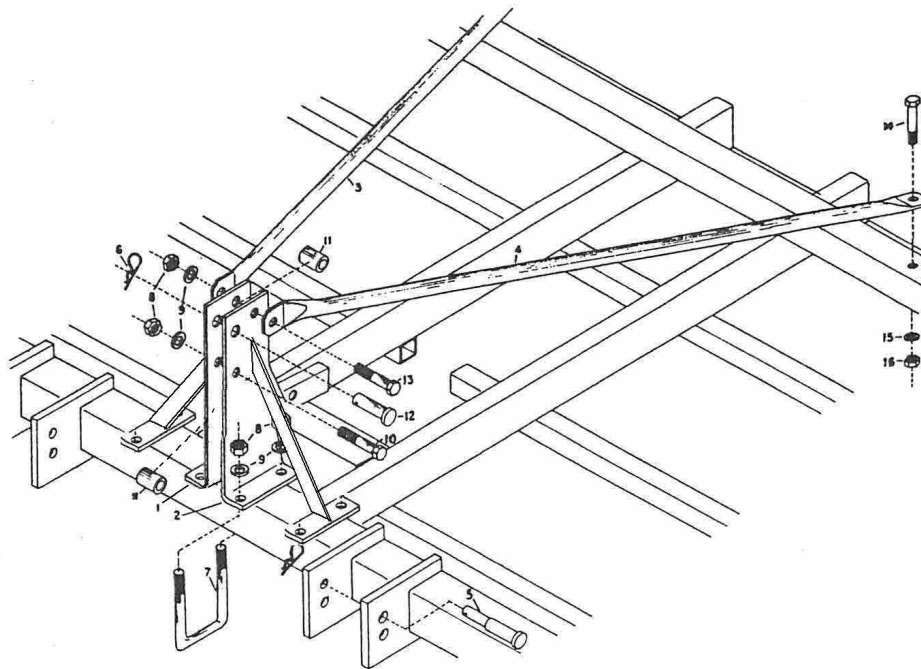
Mount the rim/tire onto the gauge wheel hub before installation. The main frame gauge wheel has a standard size 6.70 or 7.60 x 15 tire.

- A. The stationary gauge wheels are used only on a 3-point mount field conditioner.
- B. Place the stationary gauge wheel mounting bracket (1) over the second 2"x 4" member in from the outside end of the main frame, and ahead of the second 2"x 2" tube from the front of the main frame. The hub must be facing out. Secure with the two 5/8"x 6" bolts (2), 5/8" lock washers (3), and 5/8" hex nuts (4).
- C. Slide the stationary gauge wheel axle beam (5) through the formed piece on the mounting plate from the bottom.
- D. To set the desired working depth, insert a 5/8"x 3 1/2" bolt (6) through one of the holes in the axle beam and mounting bracket. Secure with a 5/8" lock washer (7), and a 5/8" hex nut (8).



## 7. Assemble the Head Tower

- A. Position the left and right hitch plates (1 and 2) in the center of the front 4"x 4" member on the main frame. Insert the four  $\frac{3}{4}$ "x 6" U-bolts (7) and tighten slightly with the  $\frac{3}{4}$ " lock washers (9), and  $\frac{3}{4}$ " hex nuts (8).
- B. Position the 2  $\frac{1}{8}$ " spacer bushing (11) between the bottom holes of the head tower and insert the  $\frac{3}{4}$ " x 4" bolt (10). Secure with a  $\frac{3}{4}$ " lock washer (9) and  $\frac{3}{4}$ " hex nut (8).
- C. Install the left & right head tower braces (3 & 4). Position the braces on the outside of the head tower plates, aligning the holes in the braces with the smaller top holes in the head tower plates. Position a 2  $\frac{1}{8}$ " spacer bushing (11) between the brace/head tower holes, and insert a  $\frac{3}{4}$ "x 5" bolt (13). Secure with a  $\frac{3}{4}$ " lock washer (9) and  $\frac{3}{4}$ " hex nut (8). Attach the opposite end of the braces to the 3"x 3" rear top bar of the main frame using  $\frac{5}{8}$ "x 5" bolts (14),  $\frac{5}{8}$ " lock washers, (15), and  $\frac{5}{8}$ " hex nuts (16).
- D. After the head tower brace bolts have been tightened, the  $\frac{3}{4}$ " nuts on the  $\frac{3}{4}$ "x 6" U-bolts may be tightened down.
- E. Place the lower 3-pt. pins in the top holes of the field conditioner bottom hitch plates if using a Category II or III quick hitch.



## **OPERATING INSTRUCTIONS**

### 1. Pre-operating Instructions

- A. Before operating the field conditioner be sure to read, understand, and follow the instructions which are listed below.
- B. Read and have a thorough understanding of the operator's manual, especially the section pertaining to machine operation & safety.
- C. Be sure any one who will assist you in the operation of this machine knows how the machine operates.
- D. Know the machine's safety features and understand the safety pointers.
- E. Be sure the machine is hitched properly to the tractor.
- F. Be sure all lubrication points have been lubricated.
- G. Give the machine a thorough "once over" look for any loose bolts. If any are found, be sure to tighten them.
- H. Check gauge wheel tire pressures for firmness.

### 2. Field Operation and Adjustments

- A. **Attach to Tractor.** Hitching the field conditioner correctly to the tractor is a very important part of the field operation of the conditioner and for obtaining a perfect seedbed.

The field conditioner must be level front to back, and side to side. For a 3-point conditioner, level the machine side to side by adjusting the tractor lift arms. To level the machine front to back, put the tines to working depth desired, adjust the upper middle 3-pt. link arm on the tractor until all four rows of tines are at equal working depth.

- B. **Tine Operation and Tips.** The more vibration you have in the tines, the less clogging action as the tines will clean themselves. The back and forth vibration of the tines is so heavy that if you make a sudden stop and examine the ground ahead of the conditioner, you will find that the soil has been loosened 4 to 10 inches ahead of the machine.
  - a. **Clamping Tines.** Tines are fastened to the frame by means of a special bull-nose clamp and bolt. This special clamp exerts pressure on all four sides of the tool bar by tightening the one bolt.

- b. It is very important that the clamp bolt is very tight at all times. After 2 to 3 hours of use, the clamp bolt must be tightened because of the increased tine vibration caused by the Danish springtine.
  - c. A loose tine clamp can cause tine breakage. Tine movement on the tool bar may create an uneven seedbed and/or the loss of a tine.
  - d. Tine Spacing. A 5-inch tine spacing is standard and used under normal conditions. A 7-inch tine spacing may be used for heavy trash conditions.
  - e. Shovels. 2  $\frac{3}{4}$ " shovels are standard and recommended under most conditions.
  - f. Tine Breakage. The foremost cause of tine breakage is a loose tine clamp. A second cause of tine breakage is trying to use the tines at a working depth of more than 5 inches.
- C. Gauge Wheel Operation and Adjustments. The purpose of the gauge wheels is to control the tine working depth and to keep to the field conditioner level. The main frame gauge wheels are adjusted by taking out the bolt, washer, and nut that hold the axle beam up or down to achieve the desired tine working depth. After choosing hole position for desired depth, secure with the bolt, washer and nut.
- D. General Operation. The field conditioner is designed primarily for seedbed preparation and chemical incorporation. The recommended tine penetration for seedbed preparation should be held to a maximum of 4 to 5 inches. For chemical incorporation, the tine depth is usually 1  $\frac{1}{2}$  to 3 inches.

Check the digging depth very carefully. The actual digging depth is deceiving when looking from the tractor seat.

The minimum speed should not be less than 5 miles per hour to get the most action from the tines.

The higher the speed, up to 12 miles per hour, the better the tine action, however, tractor size, ground conditions, and method of use may vary the speed.

If the field conditioner is used for more than one pass on the same field, reset the gauge wheels 1 inch deeper on the second pass to catch new ground. This will cause the tine to vibrate more and create a better seedbed.

Keeping bolts tight is a very important part of the conditioner's performance. When the machine is first used, after one round, check and tighten the tine clamp bolts and the shovel bolts. After a few hours of use, check and tighten all bolts on the conditioner. If a new tine or shovel is attached, make sure these bolts are tightened after a few hours of use.

Check tire pressure frequently. Tire pressure should be 40 psi.

Clean and repack wheel bearings once a season.

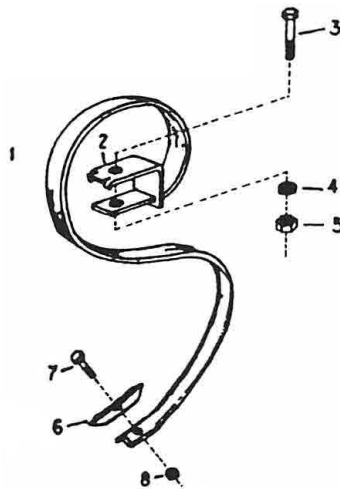
## COMPONENTS PARTS LIST

### Main Field Conditioner Parts List

Item	Part #	Description	Quantity
	6Q510	7 ft. main frame	1
	6Q511	9 ft. main frame	1
	6Q502	11 ft. main frame	1
	6Q504	1 ft. extension frame LH	as required
	6Q508	1 ft. extension frame RH	as required
	6Q505	2 ft. extension frame LH	as required
	6Q509	2 ft. extension frame RH	as required
	1A101	1/2"x 1 1/2" bolt	2 per extension
	1A110	1/2"x 3 1/2" bolt	4 per extension
	1A364	1/2" lock washer	6 per extension
	1A451	1/2" hex nut	6 per extension

### Tine Assembly Parts List

Item	Part #	Description	Quantity
1	5L151	Std. Danish springtine	as required
	5L150	HD Danish springtine	optional
2	4K020	Tine clamp 2"x 2"	1 per tine
3	1A110	1/2" x 3 1/2" bolt	1 per tine
4	1A364	1/2" lock washer	1 per tine
5	1A451	1/2" hex nut	1 per tine
6	5L165	2 3/4" goosefoot shovel	1 per tine
	5L164	1 3/8" reversible point	optional
	5L166	4" shovel	optional
	6P020	7" shovel	optional
7	1A238	Shovel bolt	1 per tine
8	1A492	Shovel bolt nut	1 per tine

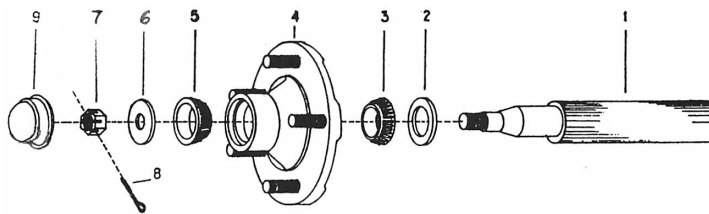


### Stationary Gauge Wheel Mount Parts List

Item	Part #	Description	Quantity
1	5N482	Stationary GW mount	1 per gauge wheel
5	5N483	Stationary GW axle beam	1 per gauge wheel
2	1A138	5/8"x 6" bolt	2 per gauge wheel
3	1A365	5/8" lock washer	3 per gauge wheel
4	1A455	5/8" hex nut	3 per gauge wheel
6	1A134	5/8"x 3 1/2" bolt	1 per gauge wheel

### Stationary Gauge Wheel 5-Bolt Hub and Spindle Parts List

Item	Part #	Description	Quantity
1	3G038	Spindle	1 per gauge wheel
2	2E783	Inside seal (CR16069)	1 per hub
3	2E781	Inner bearing (LM67048)	1 per hub
4	2E779	5-bolt hub	1 per spindle
5	2E782	Outer bearing (LM11949)	1 per hub
6	1A311	Spindle washer	1 per hub
7	1A493	5/8" slotted hex nut	1 per hub
8	1B016	3/16" cotter pin	1 per hub
9	2E780	Dust cap DC-12	1 per hub
	1A491	1/2"-20 wheel nut	5 per hub
	5L204	15" wheel rim 5-bolt	





### Head Tower Parts List

Item	Part #	Description	Quantity
	5N489	Right head tower	1 per cultivator
	5N488	Left head tower	1 per cultivator
	6Q533	Right brace rod	1 per cultivator
	6Q532	Left brace rod	1 per cultivator
	4K260	Lower hitch pin 1 1/8"x 8 1/4"	2 per cultivator
	1B039	7/32" hairpin	2 per cultivator
	5L129	3/4"x 4"x 6" U-bolt	2 per cultivator
	1A462	3/4" hex nuts	6 per cultivator
	1A366	3/4" lock washer	6 per cultivator
	1A165	3/4"x 4" bolt	1 per cultivator
	3H282	2 1/8" long spacer bushing	2 per cultivator
	4K184	Upper hitch pin 1"x 4"	1 per cultivator
	1A167	3/4"x 5" bolt	1 per head tower
	1A136	5/8"x 5" bolt	1 per brace rod
	1A455	5/8" lock washer	1 per brace rod
	1A365	5/8" hex nut	1 per brace rod
	1B038	3/16" hairpin	1 per head tower

## **ROLLING BASKET CRUMBLERS**

The rolling basket crumblers are designed specifically for use with the Lorenz Field Conditioner. The two machines work together as a unit. Used correctly, it will provide the ultimate in seedbed preparation, chemical incorporation, moisture conservation, and leveling.

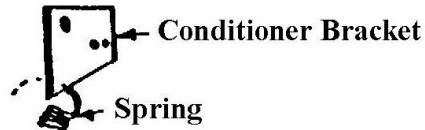
The rotary action of the rolling basket crumblers will accomplish the following:

1. Break up the large clumps of soil.
2. Throw the soil into the air with the larger pieces launched the highest. The finer soil lands first, to form an ideal firm seedbed with no large air pockets. The larger pieces fall last, as a blanket to cover the fine soil in helping prevent moisture loss and wind erosion.
3. The weight of the larger pieces of soil pack the fine soil tightly, creating the necessary capillary action to pull moisture from below the surface to where the seed resides.
4. For chemical incorporation, the rolling basket action compliments the stirring action of the Danish tines on the field conditioner, so there is a thorough mixture of the chemicals with the soil providing ultimate performance of chemicals.
5. The leveling action of the rolling baskets is a must for an even seedbed.
6. The leveling action is also very useful for knocking down beds.

## **ROLLING BASKET ASSEMBLY**

1. Empty all parts bags and boxes so each piece can be easily identified. Refer to Figure 1 for assistance.
2. Position all the Rolling Basket Assemblies behind the field conditioner according to figure 2. The spiral of the front basket blades should all spiral in the same direction.
3. Position the conditioner brackets (4) on the 3"x 3" bar located on the back of the field conditioner according to figure 2. Two conditioner brackets are used for each rolling basket assembly. Each bracket is secured by using a 5/8"x 3"x 4 1/2" U-bolt (3) and two 5/8" lock nuts (7).

4. Hook the end of the spring (1), that is closed the most, to the spring tension slider (2). Thread a  $\frac{1}{2}$ " hex nut (3) half way up the threaded rod on the spring tension slider (2).
5. Hook the remaining end of the spring (1) to the conditioner bracket (4) as the following sketch shows:



6. Determine whether 22" tines or 26" high clearance tines are used on the conditioner. Refer to figure 3 to determine which round hole in the conditioner bracket (4) the  $\frac{5}{8}$ "x 4" bolt (5) should be placed in. Insert the  $\frac{5}{8}$ "x 4" bolt (5) through the decided holes and transport stop bushing (6). Thread a  $\frac{5}{8}$ " lock nut (7) onto the bolt.
7. Insert the arm (8) into the spring tension slider (2) so the bracket on the arm is on top, and the flat side toward the conditioner. Insert the spring tension slider (2) threaded rod through the bracket on the arm. Attach the arm to the conditioner bracket (4) by aligning the bushing in the arm with the slotted holes in the bracket. Insert a  $\frac{5}{8}$ "x 4" bolt (5), and fasten with a  $\frac{5}{8}$ " lock nut (7). Thread a  $\frac{1}{2}$ " hex nut (3) onto the spring tension slider threaded rod.
8. Attach all the arms to the conditioner as described above.
9. Position the basket bracket (9) on top of the basket frame 2"x 2" member. Align the basket bracket with the arm (8), (make sure the arm is perpendicular with the conditioner). Attach the basket bracket using two  $\frac{1}{2}$ "x 2"x  $3\frac{1}{4}$ " U-bolts (10), four  $\frac{1}{2}$ " lock washers (11), and four  $\frac{1}{2}$ " hex nuts (3). (Note: It is easier to tighten the bracket before attaching the arm). Attach the arm (8) to the basket bracket (9) by aligning the bushing in the arm with the slotted holes in the bracket. Insert a  $\frac{5}{8}$ "x 4" bolt (5) and secure with a  $\frac{5}{8}$ " lock nut (7).
10. Tighten all  $\frac{5}{8}$ " bolts and nuts. Make sure there is at least a  $\frac{1}{16}$ " gap between the arm (8) and both brackets (4 and 9).
11. Slide a  $\frac{1}{2}$ "x 2  $\frac{5}{8}$ "x 6  $\frac{1}{2}$ " U-bolt (12) over the top of the arm (8) at the basket mounting bracket (9). Thread a  $\frac{1}{2}$ " hex nut (3) onto each U-bolt leg and insert the U-bolt (12) into the holes in the front of the basket mounting bracket (9). Thread a  $\frac{1}{2}$ " hex nut (3) onto each U-bolt leg. This U-bolt (12) is used to adjust the basket working angle. See figure 3.
12. If you need to replace a part in the factory assembled basket, remove the brackets (1) from the basket frame (2, 3, or 4) by removing the  $\frac{1}{2}$ " carriage bolts (5),  $\frac{1}{2}$ " lock washers (6), and  $\frac{1}{2}$ " hex nuts (7). (See fig. 4)

## **ROLLING BASKET OPERATING INSTRUCTIONS**

When the rolling baskets are operating in the field, the front basket should sit ½ to 1 inch higher than the rear basket. Adjust the basket height by threading the nuts up or down on the U-bolt located on the rear of the arm. Be sure that the U-bolts on each basket's two arms are set equally. Tighten nuts before operating.

Adjust working pressure on the rolling baskets by adjusting the ½" hex nuts on the spring tension slider. Down pressure is changed by applying more or less tension to the spring. Pressure may be adjusted according to varying field conditions.

Figure 1  
Basket Arm Assembly

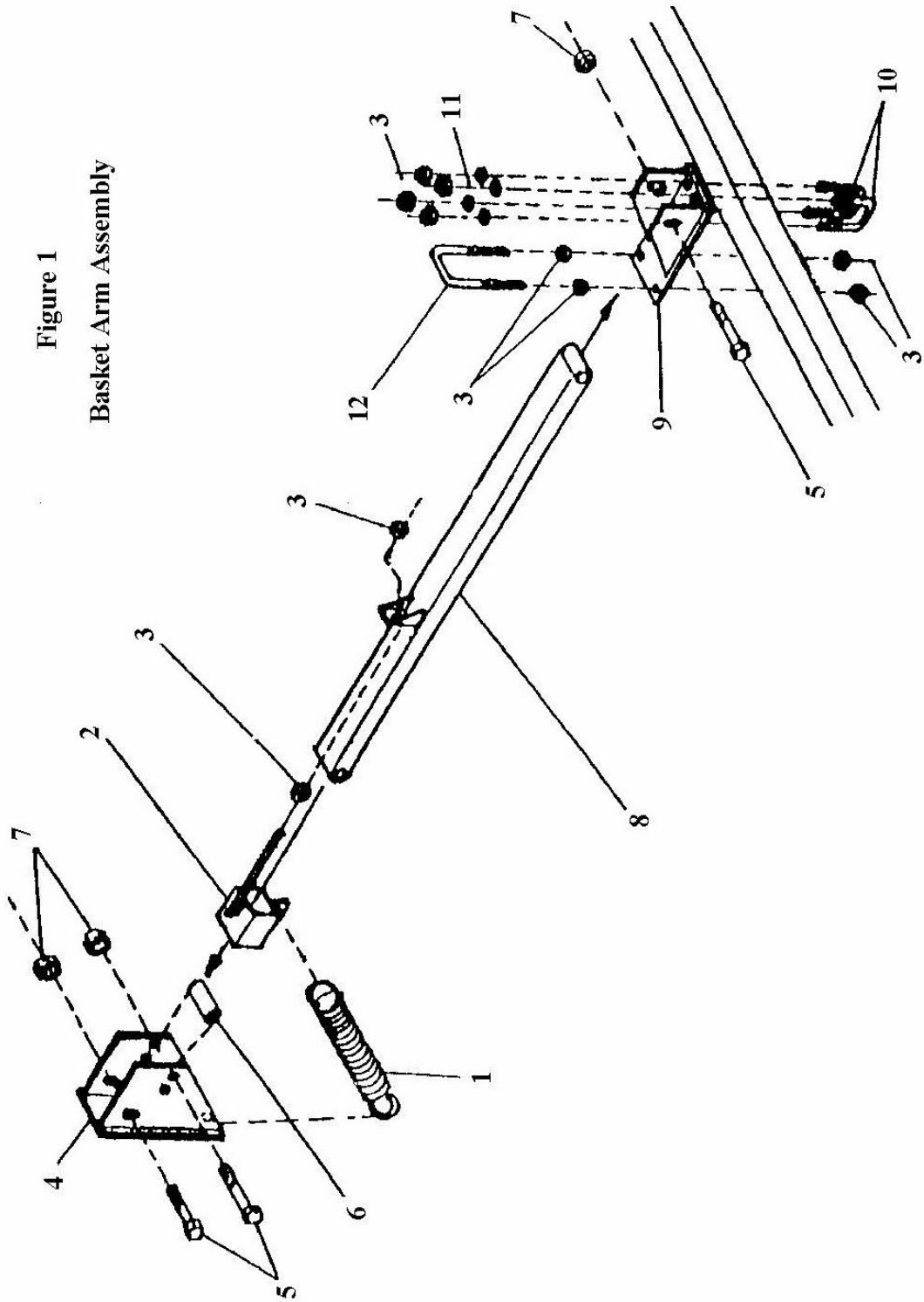


Figure 2

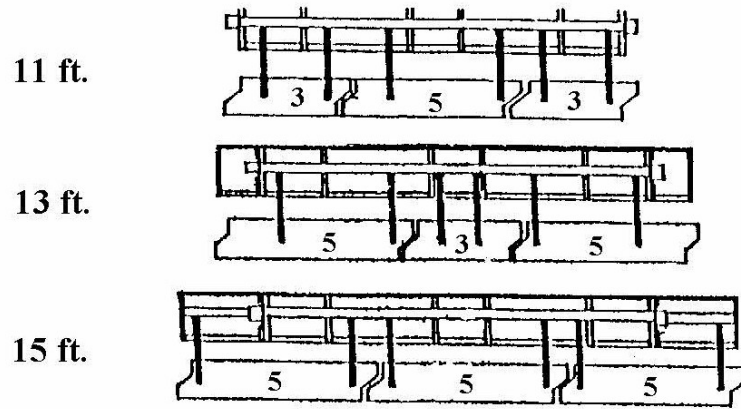


Figure 3

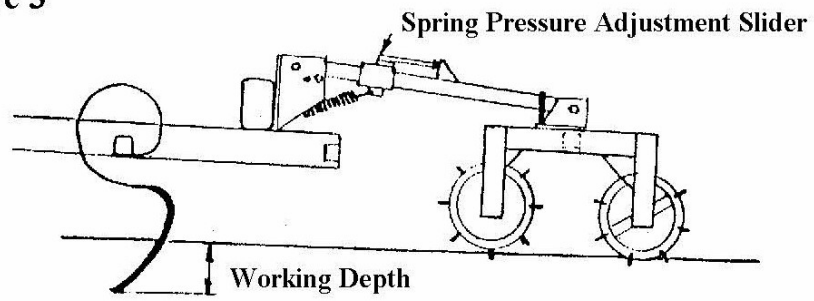
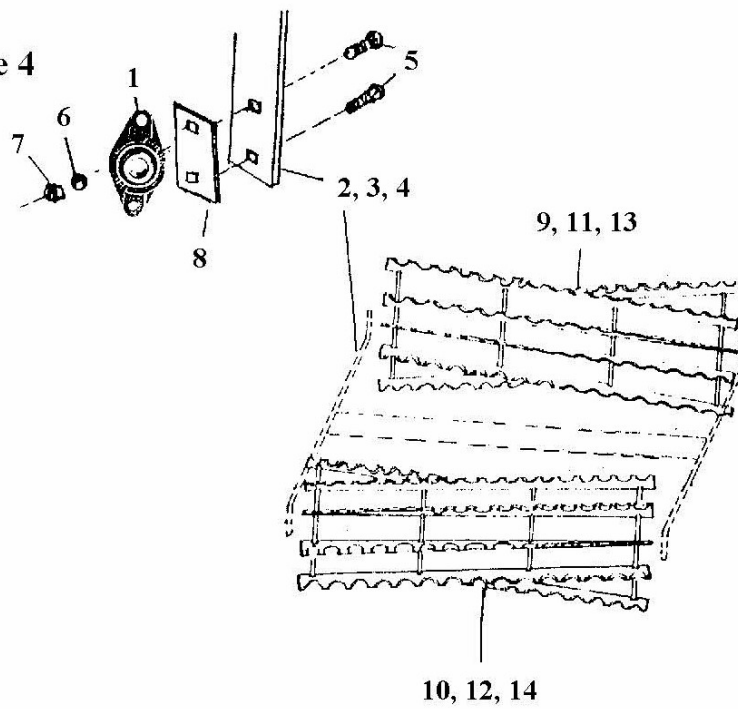


Figure 4



## COMPONENTS PARTS LIST

Basket Arm Assembly Parts List (Fig. 1)

Item	Part #	Description	Quantity
1	4K069	Spring	1 per arm
2	5N137	Spring tension slider	1 per arm
3	1A451	½" hex nut	10 per arm
4	5N178	Conditioner mount bracket	1 per arm
5	1A135	5/8"x 4 ½" bolt	3 per arm
6	3H337	Stop bushing	1 per arm
7	1A457	5/8" lock nut	5 per arm
8	5N139	Drawbar arm	1 per arm
9	5N138	Basket mounting bracket	1 per arm
10	5L135	½"x 2"x 3 ¼" U-bolt	2 per arm
11	1A364	½" lock washer	4 per arm
12	5L109	½"x 2 5/8"x 6 ½" U-bolt	1 per arm
13	5L108	5/8"x 3"x 4 ½" U-bolt	1 per arm

Basket Assembly Parts List (Fig. 4)

Item	Part #	Description	Quantity
1	2E666	2-bolt flange bearing assy.	4 per dual basket assy.
2	4K171	3 ft. basket frame	as required
3	4K172	4 ft. basket frame	as required
4	4K173	5 ft. basket frame	as required
	4K987	3 ft. single basket frame	as required
	4K988	4 ft. single basket frame	as required
	4K989	5 ft. single basket frame	as required
5	1A119	½"x 2 ¼" carriage bolt	8 per dual basket assy.
6	1A364	½" lock washer	8 per dual basket assy.
7	1A451	½" hex nut	8 per dual basket assy.
8	4K170	Bearing spacer plate	4 per dual basket assy.
9	2E811L	3 ft. basket barrel – LH	as required
10	2E811R	3 ft. basket barrel – RH	as required
11	2E812L	4 ft. basket barrel – LH	as required
12	2E812R	4 ft. basket barrel – RH	as required
13	2E813L	5 ft. basket barrel – LH	as required
14	2E813R	5 ft. basket barrel – RH	as required

# Limited Warranty

**Introduction** This warranty policy and procedures guide is prepared for the use and guidance of authorized Lorenz Manufacturing Company dealers and distributors in handling matters of warranty and service of all products sold by Lorenz Manufacturing Company of South Dakota.

**Product Warranty** Lorenz Manufacturing Company warrants each new Lorenz product to be free from defects in material and workmanship. This warranty is for normal service life of the product, machine or parts involved and not to exceed six (6) consecutive months from the date of delivery of the Lorenz product to the purchaser-user.

Under no circumstances does the warranty cover any merchandise or component parts which, in the opinion of the company, have been subject to negligent use, misuse, alteration, accident, or if repairs have been made with parts other than those manufactured and obtainable from Lorenz Manufacturing Company.

Our obligation under this warranty is limited to repairing or replacing free of charge to the original purchaser-user any part that in our judgment shows evidence of defect or improper workmanship, provided the part is returned to Lorenz manufacturing Company within thirty (30) days of the failure. Parts must be returned through the selling dealer and distributor, transportation charges prepaid.

This warranty shall not be interpreted to render Lorenz Manufacturing Company liable for injury or damages of any kind, direct, consequential, contingent to persons or property. Furthermore, this warranty does not extend to loss of crops, losses caused by harvest delays or any expense or loss for labor, supplies, rent machinery or for any other reason.

There are no warranties, either express or implied, of merchantability or fitness for particular purpose intended or fitness for any other reason.

This warranty cannot guarantee that existing conditions beyond the control of Lorenz Manufacturing Company will not affect our ability to obtain materials or to manufacture necessary replacement parts.

Lorenz Manufacturing Company reserves the right to make design changes, improve design or change specifications at any time, without any contingent obligation to purchasers of machines and parts previously sold.

No one is authorized to alter, modify or change this warranty in any way.

**Warranty Period** This warranty is effective for only the normal service life of component parts of the product, not to exceed six (6) consecutive calendar months. Warranty period begins on the day the product is delivered to the original purchaser-user (confirmed by copies of sales invoice signed and returned to Lorenz Manufacturing Company).

**Wear** Under no circumstances are component parts warranted against wear that is not related to defective materials or workmanship. Wear is a normal thing to any moving part. Use varies greatly from customer to customer within the same product line making it impossible to consider any guarantee against wear and tear.

**Replacement Parts Warranty** All replacement parts have a maximum ninety (90) day warranty. No parts warranty will be honored where parts are not returned within thirty (30) days of replacement. Copy of sales invoice on which parts were purchased must accompany claim.

**Warranted Parts Replacement** Parts replaced under warranty are guaranteed only until the expiration of the original six-month warranty of the product. Under no circumstances or conditions by alteration or replacement of parts is the warranty extended beyond its original termination date. Copy of sales invoice on which unit was purchased must accompany claim.

## Procedure in Handling Warranty Claim

1. Confirm the product is within the warranty period. Check sales slip, warranty registration copies, etc. to confirm.
2. Carefully examine the parts claimed under warranty. Check all circumstances and facts related to the failure. The warranty is not designed to recondition worn out parts.
3. If the part has obviously failed because of defective material or poor workmanship, it will be replaced under warranty. If the part is simply worn out with no evidence of defect, advise the customer immediately and deny the warranty claim.
4. The dealer must complete the warranty claim giving all pertinent information requested. See procedure for returned merchandise.
5. No consideration will be given warranty claims where dealers fail to follow procedures noted in 1 through 4 above.
6. After the service department approves the warranty claim, the dealer will receive credit or replacement as applicable for the parts warranted. If the claim is rejected, the dealer will receive proper notification from the service department why claim was not approved.
7. Warranty claims not submitted within thirty (30) days of the date of failure will not be accepted.